SDG # 8304622

Close Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

Tronox LLC, Henderson

SDG: 8304622
Lots #: D9H040187, D9H040190, D9H050230 and D9H050234

Frank Hagar

Northgate Environmental Management, Inc.
1100 Quail Street
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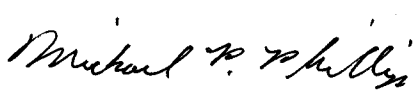
TestAmerica Laboratories, Inc.



Michael P. Phillips
Project Manager

August 20, 2009

Case Narrative
SDG 8304622

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

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

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

Sample Receiving

Two samples were received under chain of custody at a temperature of 2.5°C on August 4, 2009, and were logged under lot D9H040187. One sample was received under chain of custody at a temperature of 2.5°C on August 4, 2009, and was logged under lot D9H040190. The chain-of-custody indicated that the lab should have received two samples (M-50B and M-50BDISS); however, no sample volume was received for M-50BDISS. The client was notified on August 5, 2009 and the lab was advised to cancel sample M-50BDISS and that the field crew would re-sample. One sample was received under chain of custody at a temperature of 0.5°C on August 5, 2009, and was logged under lot D9H050230. One sample was received under chain of custody at a temperature of 0.5°C on August 5, 2009, and was logged under lot D9H050234. These lots are reported here under SDG 8304622.

GC Semivolatiles / Organophosphorus Pesticides – SW846 Method 8141A

The method required MS/MSD could not be performed for QC batch 9217511 due to insufficient sample volume; however, method precision and accuracy were demonstrated with acceptable LCS/LCSD data.

The Continuing Calibration Verification (CCV) standard(s) associated with the samples in QC batch 9217511 exhibited %Difference values out of range for several compounds. The overall mean %Differences were within control limits; therefore, method criteria were met and corrective action was deemed unnecessary. In addition, none of these compounds were detected in the associated samples.

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

Each sample is analyzed to achieve the lowest possible reporting limits within the constraints of the methods. Samples D9H040187-001 (M-31AB), D9H040187-002 (M-31ABDISS), and D9H040190-001 (M-50B) were analyzed for Arsenic and Selenium at dilutions of 10X or 20X 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 9217132 using sample D9H040187-001 (M-31AB), and all results were in control.

The method required MS/MSD was performed for Total Metals QC batch 9218437 using sample D9H050230-001 (M-21B), and all results were in control.

The method required MS/MSD was performed for Dissolved Metals QC batch 9217128 using sample D9H040187-002 (M-31ABDISS), and all results were in control.

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

8304622 : D9H040187

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-31AB 08/03/09 09:15 001				
Arsenic	100	50	ug/L	SW846 6020
Selenium	9.6 B	50	ug/L	SW846 6020
M-31ABDISS 08/03/09 09:15 002				
Arsenic - DISSOLVED	110	50	ug/L	SW846 6020
Selenium - DISSOLVED	16 B	50	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304622 : D9H040190

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-50B 08/03/09 12:05 001				
Arsenic	81 B	100	ug/L	SW846 6020

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

8304622 : D9H050230

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
M-21B 08/04/09 09:30 001				
Arsenic	93	5.0	ug/L	SW846 6020
Selenium	5.6	5.0	ug/L	SW846 6020

EXECUTIVE SUMMARY - Detection Highlights

D9H050234

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
NO DETECTABLE PARAMETERS				

METHODS SUMMARY

8304622

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

References:

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

METHOD / ANALYST SUMMARY

8304622

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

8304622 : D9H040187

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LHG1P	001	M-31AB	08/03/09	09:15
LHG1R	002	M-31ABDISS	08/03/09	09:15

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

8304622 : D9H040190

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LHG21	001	M-50B	08/03/09	12:05

NOTE(S):

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SAMPLE SUMMARY

8304622 : D9H050230

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LHJ5J	001	M-21B	08/04/09	09:30

NOTE(S):

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- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

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SAMPLE SUMMARY

8304622 : D9H050234

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LHJ51	001	FB080409-GW	08/04/09	11:00

NOTE(S):

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- 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

D9H040187

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9217132	9217084
002	WATER	SW846 6020		9217128	9217081

QC DATA ASSOCIATION SUMMARY

D9H040190

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9217132	9217084

QC DATA ASSOCIATION SUMMARY

D9H050230

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9218437	9218274

QC DATA ASSOCIATION SUMMARY

D9H050234

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 6020		9218437	9218274
	WATER	SW846 8141A		9217511	

TestAmerica

Semivolatile GC

CLP-Like Forms

Lot ID: D9H050234

Client: Northgate/Tronox

Method: SW846 8141A

Associated Samples: 001

Batch: 9217511

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Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	FB080409-GW
Lot/SDG Number:	8304622	**Lab Sample ID:**	D9H050234-001
Matrix:	WATER	**Lab WorkOrder:**	LHJ511AA
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 11:00
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 19:24
Sample Aliquot:	1056 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

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	FB080409-GW
Lot/SDG Number:	8304622	**Lab Sample ID:**	D9H050234-001
Matrix:	WATER	**Lab WorkOrder:**	LHJ511AA
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 11:00
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 19:24
Sample Aliquot:	1056 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	81	60	154	
24934-91-6	Chlormefos	60	49	171	

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Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304622	**Lab Sample ID:**	D9H050000-511B
Matrix:	WATER	**Lab WorkOrder:**	LHK3A1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 16:58
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

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	8304622	**Lab Sample ID:**	D9H050000-511B
Matrix:	WATER	**Lab WorkOrder:**	LHK3A1AA
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 16:58
Sample Aliquot:	1000 mL	**Instrument ID:**	D
Dilution Factor:	1		

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	79	60	154	
24934-91-6	Chlormefos	69	49	171	

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THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Surrogate Recovery Summary

Lab Name: TESTAMERICA DENVER **Extraction** I09P29H
Lot/SDG Number: 8304622 **QC Batch ID:** 9217511

Client ID	Work Order	SRG1	SRG2	SRG3	SRG4	SRG5	SRG6	SRG7	SRG8	TOT OUT
FB080409-GW	LHJ511AA	60	81							0
INTRA-LAB BLANK	LHK3A1AA	69	79							0
CHECK SAMPLE	LHK3A1AC	79	87							0
DUPLICATE CHECK	LHK3A1AD	74	83							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:	8304622	**Lab Sample ID:**	D9H050000-511C
Matrix:	WATER	**Lab WorkOrder:**	LHK3A1AC
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 17:35
Sample Aliquot:	1000 mL	**Instrument ID:**	D
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Dichlorvos	4.00	4.16	104		40 - 193
Thionazin	4.00	3.43	86		39 - 180
Dimethoate	4.00	3.17	79		33 - 139
Disulfoton	4.00	3.28	82		44 - 139
EPN	4.00	3.20	80		50 - 150
Ethoprop	4.00	3.41	85		43 - 165
Famphur	8.00	6.78	85		51 - 131
Fensulfothion	4.00	3.50	87		46 - 115
Fenthion	4.00	3.36	84		63 - 128
Malathion	4.00	2.97	74		53 - 137
Merphos	4.00	3.14	78		50 - 150
Methyl parathion	4.00	3.56	89		55 - 131
Azinphos-methyl	4.00	3.24	81		42 - 125
Mevinphos	4.00	3.23	81		39 - 175
Ethyl parathion	4.00	3.24	81		47 - 142
Phorate	4.00	2.52	63		46 - 142
Ronnel	4.00	3.46	86		43 - 115
Sulfotepp	4.00	2.81	70		29 - 166
Trichloronate	4.00	3.02	75		60 - 115
Chlorpyrifos	4.00	3.46	86		60 - 120
Coumaphos	4.00	3.15	79		61 - 115
Diazinon	4.00	3.57	89		47 - 149

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	87	60	154	
24934-91-6	Chlormefos	79	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:	8304622	**Lab Sample ID:**	D9H050000-511L
Matrix:	WATER	**Lab WorkOrder:**	LHK3A1AD
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	8141A	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 22:00
QC Batch ID:	9217511	**Date/Time Analyzed:**	08/09/09 18:11
Sample Aliquot:	1000 mL	**Instrument ID:**	D
Dilution Factor:	1		

Analyte	True	Found	C	% Rec	Q	RPD	Q	QC Limits	
								% Rec	RPD
Dichlorvos	4.00	3.99		100		4.1		40 - 193	49
Thionazin	4.00	3.26		81		5.0		39 - 180	40
Dimethoate	4.00	3.11		78		1.9		33 - 139	50
Disulfoton	4.00	3.06		76		6.8		44 - 139	40
EPN	4.00	3.14		79		2.0		50 - 150	50
Ethoprop	4.00	3.25		81		4.8		43 - 165	36
Famphur	8.00	6.62		83		2.4		51 - 131	88
Fensulfothion	4.00	3.68		92		5.0		46 - 115	62
Fenthion	4.00	3.22		81		4.1		63 - 128	41
Malathion	4.00	2.89		72		2.7		53 - 137	28
Merphos	4.00	3.08		77		1.9		50 - 150	50
Methyl parathion	4.00	3.44		86		3.5		55 - 131	30
Azinphos-methyl	4.00	3.11		78		3.8		42 - 125	36
Mevinphos	4.00	3.09		77		4.4		39 - 175	40
Ethyl parathion	4.00	3.06		76		5.6		47 - 142	40
Phorate	4.00	2.33		58		7.8		46 - 142	40
Ronnel	4.00	3.28		82		5.4		43 - 115	39
Sulfotepp	4.00	2.63		66		6.7		29 - 166	40
Trichloronate	4.00	2.85		71		5.6		60 - 115	38
Chlorpyrifos	4.00	3.42		86		1.0		60 - 120	34
Coumaphos	4.00	3.08		77		2.3		61 - 115	43
Diazinon	4.00	3.46		87		3.0		47 - 149	40

CAS No.	Surrogate	% Rec	Lower Limit	Upper Limit	Q
115-86-6	Triphenyl phosphate	83	60	154	
24934-91-6	Chlormefos	74	49	171	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Method Blank Summary

Lab Name:	TESTAMERICA DENVER	**Lab File ID:**	047F4701.
Lot/SDG Number:	8304622	**Lab Sample ID:**	D9H050000-511B
Matrix:	WATER	**Lab Work Order:**	LHK3A1AA
Analysis Method:	8141A	**Date/Time Extracted:**	08/05/09 22:00
Extraction Method:	I09P29H	**Date/Time Analyzed:**	08/09/09 16:58
QC Batch ID:	9217511	**Instrument ID:**	D

Client ID	Sample Work Order #	Lab File ID	Date Analyzed	Time Analyzed
FB080409-GW	LHJ511AA	047F4701.	08/09/09	19:24
CHECK SAMPLE	LHK3A1AC C	044F4401.	08/09/09	17:35
DUPLICATE CHECK	LHK3A1AD L	045F4501.	08/09/09	18:11

Report Date : 07-Aug-2009 13:50 Page 1

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Last Edit : 07-Aug-2009 13:45 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.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	182432	420455	908197	1806303	2678940	3532965					
	4488963						QUAD	-0.00185	0.46722	0.02869	0.99856
2 Dichlorvos	0.88775	0.82394	0.83968	0.86756	0.82268	0.85000					
	0.80012						AVRG		0.84168		3.52069
3 Mevinphos	+++++	31592	111446	356823	596188	830977					
	1152906						LINR	0.20087	0.46926		0.99901
5 Thionazin	61338	194202	544011	1140983	1718412	2252008					
	2920220						WLINR	0.03379	1.18951		0.99527

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

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
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Quant Method : ISTD
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Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Last Edit : 07-Aug-2009 13:45 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											
6 Demeton-O	30299	63511	157798	301922	460549	581572						
	761277						WLINR	-0.00975	0.92539		0.99395	
7 Ethoprop	42588	199533	491981	1004283	1510941	1955169						
	2505899						WLINR	0.04409	1.07839		0.99207	
8 Naled	9478	41661	162318	361004	602529	777472						
	1127359						QUAD	0.08662	2.45165	-0.13780	0.99888	
10 Sulfotepp	1.56280	1.44519	1.65714	1.68788	1.57081	1.56396						
	1.47299						AVRG		1.56582		5.61879	
11 Phorate	1.13644	0.95432	1.14044	1.07117	0.99690	0.98879						
	0.92922						AVRG		1.03104		8.29536	
12 Dimethoate	+++++	59892	356039	877602	1446366	1934346						
	2590760						WLINR	0.17667	1.10316		0.99682	
13 Demeton-S	421	101878	285098	598857	888508	1152288						
	1490677						LINR	0.00806	0.86060		0.99287	<-

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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	+++++	48256	174622	313833	493520	631700					
	804726						QUAD	0.10651	2.04581	1.46981	0.99811
15 Atrazine	+++++	56963	206785	417568	667495	887166					
	1175975						WLINR	0.09612	0.48853		0.99171
16 propazine	+++++	0.35592	0.47135	0.45861	0.45434	0.46102					
	0.44356						AVRG		0.44080		9.65392
17 Disulfoton	48155	167271	445811	956556	1440699	1882342					
	2454335						WLINR	0.04123	1.45920		0.99632
18 Diazinon	122906	248611	519628	1016692	1526415	1969776					
	2542893						WLINR	-0.05341	1.44136		0.99767
19 Methyl Parathion	40155	137375	334656	727074	1132305	1471875					
	1968772						WLINR	0.03631	1.12970		0.99901
20 Ronnel	1.03546	1.01940	1.14102	1.20523	1.19683	1.22965					
	1.20553						AVRG		1.14759		7.53685

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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	0.86188	0.91387	1.07877	1.08977	1.04406	1.03997						
	0.98036						AVRG		1.00124		8.61800	
22 Fenthion	49230	134570	363139	790291	1222175	1589817						
	2105793						WLINR	0.02987	1.20261		0.99507	
23 Parathion	+++++	117278	333400	780379	1232087	1621434						
	2156342						WLINR	0.09066	1.27814		0.99835	
24 Chlorpyrifos	+++++	265889	506108	926482	1387727	1798423						
	2373426						WLINR	-0.10926	1.27881		0.99829	
25 Trichloronate	1.46832	1.29281	1.40677	1.46387	1.44859	1.47665						
	1.43014						AVRG		1.42673		4.47196	
26 Anilazine	413	937	23197	62364	109906	153137						
	224347						LINR	0.20138	0.12922		0.99583	<-
27 Merphos-A (Merphos)	27686	102703	274971	619861	975630	1320113						
	1714293						WLINR	0.05196	0.98235		0.99735	

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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)	27000	86949	229899	510754	821547	1111793					
	1539127						WLINR	0.04531	0.82719		0.99642
29 Tokuthion	1.37786	1.22539	1.38006	1.40966	1.37398	1.39384					
	1.33792						AVRG		1.35696		4.56962
30 Merphos-B (Merphos Oxone)	49732	78157	159629	271041	371990	422425					
	528766						QUAD	0.06346	0.59850	3.86180	0.99854
31 Carbophenothion-methyl	29119	99151	280480	618555	972242	1285762					
	1741313						WLINR	0.04987	0.97720		0.99632
32 Fensulfothion	+++++	53776	214899	563535	876396	1172734					
	1592051						WLINR	0.15154	0.96497		0.99770
33 Bolstar / Famphur	97513	282731	741469	1568236	2416510	3128382					
	4156553						WLINR	0.05716	1.19757		0.99670
34 Carbophenothion	1.08187	1.03600	1.15360	1.13412	1.10854	1.10645					
	1.06490						AVRG		1.09793		3.67689

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INITIAL CALIBRATION DATA

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Last Edit : 07-Aug-2009 13:45 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 Phosmet	25548	91979	268843	595984	916951	1218253					
		1647305						WLINR	0.05412	0.93334		0.99580
	37 EPN	1.04741	1.13202	1.22186	1.20575	1.11750	1.12936					
		1.05270						AVRG		1.12952		5.95345
	38 Azinphos-methyl	25233	73949	233826	545683	862799	1158610					
		1592084						LINR	0.07569	0.89630		0.99930
	40 Azinphos-ethyl	1.20072	0.93049	1.06940	1.04526	1.02814	1.02319					
		0.97822						AVRG		1.03935		8.14067
	41 Coumaphos	33445	95853	261325	569489	895805	1188819					
		1602651						WLINR	0.03646	0.89074		0.99560
M	42 Total Demeton	30720	165389	442896	900779	1349057	1733860					
		2251954						WLINR	0.05788	1.41556		0.99198
M	43 Merphos	1.39750	1.23094	1.38907	1.38298	1.31717	1.31436					
		1.21510						AVRG		1.32102		5.67433

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Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Last Edit : 07-Aug-2009 13:45 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										
$ 4 Chlormefos	1.70854	1.55109	1.63649	1.61328	1.45247	1.46197					
	1.36788						AVRG		1.54167		7.79134
$ 35 Triphenyl phosphate	0.74982	0.81969	0.94206	0.95098	0.90064	0.90309					
	0.84340						AVRG		0.87281		8.28995

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Last Edit : 07-Aug-2009 13:45 GC_D.i

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

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Report Date: 07-Aug-2009 13:50

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Start Cal Date: 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-AUG-2009 18:34	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
06-AUG-2009 17:58	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
06-AUG-2009 17:21	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
06-AUG-2009 15:32	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
06-AUG-2009 14:56	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

06-AUG-2009 19:10	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\010F1001.D
07-AUG-2009 06:42	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\029F2901.D
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D

Report Date : 07-Aug-2009 13:44 Page 1

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INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.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	2.29043	1.90123	1.95130	1.88382	1.73356	1.73918					
	1.59199						AVRG		1.87022		11.90741
2 Dichlorvos	0.89869	0.78758	0.82805	0.86014	0.82558	0.85108					
	0.78454						AVRG		0.83367		4.86412
4 Mevinphos	26181	90159	249277	555210	847872	1096662					
	1418878						LINR	0.02241	0.52291		0.99690
5 Demeton-O	0.74959	0.68467	0.79510	0.82182	0.78659	0.77064					
	0.74831						AVRG		0.76525		5.74609

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

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INITIAL CALIBRATION DATA

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Last Edit : 07-Aug-2009 13:44 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										
6 Thionazin	1.14565	1.08329	1.20126	1.20198	1.13145	1.12656					
	1.04660						AVRG		1.13382		5.03485
8 Ethoprop	150814	267910	555560	1095403	1622717	2051405					
	2583304						WLINR	-0.08621	0.93634		0.99376
9 Naled	12427	47634	159760	373106	617906	787967					
	1131291						QUAD	0.08493	2.59831	-0.16856	0.99915
10 Sulfotepp	1.76900	1.56005	1.81850	1.75939	1.64614	1.63203					
	1.51002						AVRG		1.67073		6.89125
11 Phorate	1.08434	0.83104	0.84616	0.84084	0.79408	0.78203					
	0.73702						AVRG		0.84507		13.29300
12 Demeton-S	0.62408	0.72296	0.82414	0.81846	0.80405	0.81520					
	0.76672						AVRG		0.76794		9.50535
13 Simazine	6499	15934	82213	217050	364617	492868					
	674577						LINR	0.14352	0.25284		0.99829

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INITIAL CALIBRATION DATA

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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	0.45307	0.43687	0.46450	0.46986	0.45749	0.47026					
	0.46112						AVRG		0.45903		2.52599
15 Dimethoate	62417	178809	484895	1037511	1616390	2052825					
	2698083						WLINR	0.03026	1.00403		0.99496
16 Diazinon	1.12790	0.98078	1.05404	1.02017	0.94993	0.93374					
	0.87260						AVRG		0.99131		8.50540
17 Disulfoton	1.04034	0.96498	1.05301	1.04708	0.99340	0.98440					
	0.92562						AVRG		1.00126		4.77046
18 Methyl Parathion	40092	130034	351856	753320	1163940	1488025					
	1936768						WLINR	0.04327	0.99949		0.99615
19 Ronnel	1.29240	1.09578	1.15751	1.15464	1.14108	1.15310					
	1.09180						AVRG		1.15519		5.76214
20 Malathion	52293	150756	354820	728530	1103657	1406900					
	1824966						WLINR	0.01814	0.94549		0.99782

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7										
21 Chlorpyrifos	60489	169871	394413	832490	1290170	1671357					
	2210724						WLINR	0.02011	1.09999		0.99883
22 Trichloronate	66017	196799	455989	1021736	1622974	2093978					
	2890038						WLINR	0.03235	1.38094		0.99763
23 Parathion	66767	175066	440954	893471	1339063	1741701					
	2140679						QUAD	0.06563	0.65024	0.10357	0.99479
24 Fenthion	89878	206817	455004	922040	1408001	1789955					
	2341329						WLINR	-0.01244	1.16987		0.99827
25 Merphos-A (Merphos)	23197	104851	277563	631476	1003697	1339983					
	1728719						WLINR	0.06365	0.87639		0.99746
26 Anilazine	3273	10789	27039	64885	101616	129151					
	195793						WLINR	0.06368	0.09179		0.99697
27 Tetrachlorvinphos (stirophos)	35965	97796	256768	576694	925221	1220938					
	1682420						WLINR	0.03907	0.79183		0.99222

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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	1.22601	1.12742	1.27127	1.32225	1.30944	1.33086					
	1.26727						AVRG		1.26493		5.59788
29 Merphos-B (Merphos oxone)	58022	96740	174313	293170	395538	439795					
	547067						QUAD	0.06477	0.52377	4.80248	0.99795
30 Carbophenothion methyl	0.75736	0.75717	0.89847	0.94809	0.94520	0.96010					
	0.92358						AVRG		0.88428		10.06653
31 Fensulfothion	31957	101238	280688	603115	932760	1195644					
	1541611						WLINR	0.04406	0.79919		0.99507
32 Bolstar	1.35003	1.19068	1.27553	1.24212	1.18136	1.16644					
	1.06951						AVRG		1.21081		7.36840
33 Carbophenothion	0.99270	0.91157	1.03031	1.05279	1.04016	1.05422					
	1.00258						AVRG		1.01205		4.96052
34 Famphur	0.81755	0.80571	0.96709	1.00392	0.96583	0.98385					
	0.92956						AVRG		0.92479		8.70957

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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	1.02676	0.93500	1.04721	1.04625	0.99870	0.98619					
		0.90816						AVRG		0.99261		5.44915
	37 Phosmet	42368	114720	302493	636769	974935	1249688					
		1655568						WLINR	0.02810	0.83340		0.99564
	39 Azinphos-methyl	37094	89923	240868	524807	823806	1072140					
		1429834						WLINR	0.02728	0.69625		0.99187
	40 Azinphos-ethyl	0.69495	0.65912	0.76659	0.77776	0.74616	0.73804					
		0.69568						AVRG		0.72547		5.96411
	41 Coumaphos	37102	91236	236130	504566	780746	1021332					
		1373774						WLINR	0.02252	0.66605		0.99432
M	42 Total Demeton	56597	167552	404997	836927	1295869	1672111					
		2162260						WLINR	0.02537	1.10859		0.99819
M	43 Merphos	81219	201591	451876	924646	1399235	1779778					
		2275786						WLINR	-0.00193	1.17315		0.99761

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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	118440	285008	643087	1328045	2008587	2624051					
	3329933						LINR	-0.03570	1.20195		0.99676
$ 35 Triphenyl phosphate	0.91508	0.82368	0.91619	0.91274	0.86631	0.85066					
	0.77349						AVRG		0.86545		6.27482

TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 GC_D.i

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

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Report Date: 07-Aug-2009 13:44

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Start Cal Date: 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-AUG-2009 18:34	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
06-AUG-2009 17:58	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
06-AUG-2009 17:21	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
06-AUG-2009 15:32	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
06-AUG-2009 14:56	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

06-AUG-2009 19:10	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\010F1001.D
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.2402	12.0	15.0	
2	Dichlorvos	2.0000	2.0361	1.8	15.0	
3	Mevinphos	2.0000	1.5564	22.2	15.0	<-
4	Chlormefos	2.0000	1.7365	13.2	15.0	
5	Thionazin	2.0000	2.2350	11.8	15.0	
6	Demeton-O	0.6500	2.0253	211.6	15.0	<- ok, see total demeton
7	Ethoprop	2.0000	1.9936	0.3	15.0	
8	Naled	2.0000	1.7057	14.7	15.0	
9	Sulfotepp	2.0000	1.9680	1.6	15.0	
10	Phorate	2.0000	1.6336	18.3	15.0	<-
11	Dimethoate	2.0000	2.1822	9.1	15.0	
12	Demeton-S	1.3600	0.2056	84.9	15.0	<- ok, see total demeton
13	Simazine	2.0000	2.4694	23.5	15.0	<-
14	Atrazine	2.0000	2.1611	8.1	15.0	
15	propazine	2.0000	2.1931	9.7	15.0	
17	Disulfoton	2.0000	1.9744	1.3	15.0	
16	Diazinon	2.0000	1.8671	6.6	15.0	
18	Methyl Parathion	2.0000	1.9703	1.5	15.0	
19	Ronnel	2.0000	2.0637	3.2	15.0	
20	Malathion	2.0000	1.9362	3.2	15.0	
21	Fenthion	2.0000	1.9060	4.7	15.0	
22	Parathion	2.0000	2.0598	3.0	15.0	
23	Chlorpyrifos	2.0000	1.9775	1.1	15.0	
24	Trichloronate	2.0000	1.8094	9.5	15.0	
25	Anilazine	2.0000	1.2499	37.5	15.0	<-
148	Merphos-A (Merphos)	2.0000	0.2980	85.1	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	1.8887	5.6	15.0	
28	Tokuthion	2.0000	1.9432	2.8	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	11.8778	493.9	999.0	
29	Carbophenothion-methyl	2.0000	1.3305	33.5	15.0	<-
29	Fensulfothion	2.0000	1.9661	1.7	15.0	
30	Bolstar / Famphur	4.0000	4.2423	6.1	15.0	
32	Carbophenothion	2.0000	2.1165	5.8	15.0	
31	Triphenyl phosphate	2.0000	1.8485	7.6	15.0	
34	Phosmet	2.0000	2.2723	13.6	15.0	
32	EPN	2.0000	2.2096	10.5	15.0	
33	Azinphos-methyl	2.0000	1.8506	7.5	15.0	
38	Azinphos-ethyl	2.0000	2.0552	2.8	15.0	
36	Coumaphos	2.0000	1.9367	3.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.2310	11.5	15.0
27 Merphos	2.0000	1.8981	5.1	15.0

Average %D = 29.5

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.1425	7.1	15.0	
2	Dichlorvos	2.0000	1.9878	0.6	15.0	
3	Chlormefos	2.0000	1.6927	15.4	15.0	<- OK
4	Mevinphos	2.0000	1.5781	21.1	15.0	<-
5	Demeton-O	0.6500	2.0683	218.2	15.0	<- ok, see total demeton
6	Thionazin	2.0000	2.2135	10.7	15.0	
7	Ethoprop	2.0000	1.9677	1.6	15.0	
10	Naled	2.0000	1.6813	15.9	15.0	<-
145	Sulfotepp	2.0000	1.8424	7.9	15.0	
8	Phorate	2.0000	1.6013	19.9	15.0	<-
15	Demeton-S	1.3600	0.0935	93.1	15.0	<- ok, see total demeton
10	Simazine	2.0000	2.7702	38.5	15.0	<-
13	Atrazine / Propazine	4.0000	4.2316	5.8	15.0	
16	Dimethoate	2.0000	2.1608	8.0	15.0	
11	Diazinon	2.0000	1.8234	8.8	15.0	
14	Disulfoton	2.0000	1.9546	2.3	15.0	
23	Methyl Parathion	2.0000	1.9650	1.7	15.0	
17	Ronnel	2.0000	1.9361	3.2	15.0	
24	Malathion	2.0000	1.8572	7.1	15.0	
18	Chlorpyrifos	2.0000	1.9742	1.3	15.0	
20	Trichloronate	2.0000	1.7303	13.5	15.0	
26	Parathion	2.0000	2.0441	2.2	15.0	
19	Fenthion	2.0000	1.9107	4.5	15.0	
151	Merphos-A (Merphos)	2.0000	0.2815	85.9	999.0	
21	Anilazine	2.0000	0.8232	58.8	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.0000	1.8642	6.8	15.0	
25	Tokuthion	2.0000	1.9613	1.9	15.0	
148	Merphos-B (Merphos oxone)	2.0000	11.9171	495.9	999.0	
28	Carbophenothion methyl	2.0000	1.3477	32.6	15.0	<-
30	Fensulfothion	2.0000	1.9468	2.7	15.0	
28	Bolstar	2.0000	1.9885	0.6	15.0	
30	Carbophenothion	2.0000	2.1111	5.6	15.0	
33	Famphur	2.0000	2.2821	14.1	15.0	
29	Triphenyl phosphate	2.0000	1.7892	10.5	15.0	
32	EPN	2.0000	2.1924	9.6	15.0	
34	Phosmet	2.0000	2.2747	13.7	15.0	
34	Azinphos-methyl	2.0000	1.8178	9.1	15.0	
35	Azinphos-ethyl	2.0000	2.1653	8.3	15.0	
36	Coumaphos	2.0000	1.8960	5.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1617	8.1	15.0
22 Merphos	2.0000	1.9093	4.5	15.0

Average %D = 31.3

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2258	11.0	15.0	
2	Dichlorvos	2.5000	2.7870	11.5	15.0	
3	Mevinphos	2.5000	2.7443	9.8	15.0	
4	Chlormefos	2.5000	2.0479	18.1	15.0	<-
5	Thionazin	2.5000	2.3435	6.3	15.0	
6	Demeton-O	0.8125	0.7897	2.8	15.0	
7	Ethoprop	2.5000	2.3220	7.1	15.0	
8	Naled	2.5000	1.9523	21.9	15.0	<-
9	Sulfotepp	2.5000	2.2640	9.4	15.0	
10	Phorate	2.5000	2.2807	8.8	15.0	
11	Dimethoate	2.5000	2.4396	2.4	15.0	
12	Demeton-S	1.7000	1.6288	4.2	15.0	
13	Simazine	2.5000	2.3033	7.9	15.0	
14	Atrazine	2.5000	2.2355	10.6	15.0	
15	propazine	2.5000	2.3108	7.6	15.0	
17	Disulfoton	2.5000	2.2697	9.2	15.0	
16	Diazinon	2.5000	2.4458	2.2	15.0	
18	Methyl Parathion	2.5000	2.3951	4.2	15.0	
19	Ronnel	2.5000	2.3906	4.4	15.0	
20	Malathion	2.5000	2.4038	3.8	15.0	
21	Fenthion	2.5000	2.3642	5.4	15.0	
22	Parathion	2.5000	2.3705	5.2	15.0	
23	Chlorpyrifos	2.5000	2.3100	7.6	15.0	
24	Trichloronate	2.5000	2.3144	7.4	15.0	
25	Anilazine	2.5000	1.5045	39.8	15.0	<-
148	Merphos-A (Merphos)	2.5000	0.6130	75.5	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.2778	8.9	15.0	
28	Tokuthion	2.5000	2.3012	8.0	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	9.1868	267.5	999.0	
29	Carbophenothion-methyl	2.5000	2.3650	5.4	15.0	
29	Fensulfothion	2.5000	2.4549	1.8	15.0	
30	Bolstar / Famphur	5.0000	4.6225	7.5	15.0	
32	Carbophenothion	2.5000	2.3569	5.7	15.0	
31	Triphenyl phosphate	2.5000	2.4113	3.5	15.0	
34	Phosmet	2.5000	2.3251	7.0	15.0	
32	EPN	2.5000	2.2961	8.2	15.0	
33	Azinphos-methyl	2.5000	2.4104	3.6	15.0	
38	Azinphos-ethyl	2.5000	2.3407	6.4	15.0	
36	Coumaphos	2.5000	2.3321	6.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	2.5000	2.4185	3.3	15.0	
27 Merphos	2.5000	1.9052	23.8	15.0	<-

Average %D = 16.4

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.1948	12.2	15.0	
2	Dichlorvos	2.5000	3.0343	21.4	15.0	<-
3	Chlormefos	2.5000	2.2956	8.2	15.0	
4	Mevinphos	2.5000	2.7154	8.6	15.0	
5	Demeton-O	0.8125	0.7742	4.7	15.0	
6	Thionazin	2.5000	2.3959	4.2	15.0	
7	Ethoprop	2.5000	2.4346	2.6	15.0	
10	Naled	2.5000	2.0025	19.9	15.0	<-
145	Sulfotepp	2.5000	2.2144	11.4	15.0	
8	Phorate	2.5000	2.2619	9.5	15.0	
15	Demeton-S	1.7000	1.6662	2.0	15.0	
10	Simazine	2.5000	2.1943	12.2	15.0	
13	Atrazine / Propazine	5.0000	4.5293	9.4	15.0	
16	Dimethoate	2.5000	2.4449	2.2	15.0	
11	Diazinon	2.5000	2.2232	11.1	15.0	
14	Disulfoton	2.5000	2.2446	10.2	15.0	
23	Methyl Parathion	2.5000	2.5244	1.0	15.0	
17	Ronnel	2.5000	2.3201	7.2	15.0	
24	Malathion	2.5000	2.2455	10.2	15.0	
18	Chlorpyrifos	2.5000	2.3252	7.0	15.0	
20	Trichloronate	2.5000	2.1289	14.8	15.0	
26	Parathion	2.5000	2.2843	8.6	15.0	
19	Fenthion	2.5000	2.4066	3.7	15.0	
151	Merphos-A (Merphos)	2.5000	1.0970	56.1	999.0	
21	Anilazine	2.5000	0.5874	76.5	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2471	10.1	15.0	
25	Tokuthion	2.5000	2.2469	10.1	15.0	
148	Merphos-B (Merphos oxone)	2.5000	10.0626	302.5	999.0	
28	Carbophenothion methyl	2.5000	2.5167	0.7	15.0	
30	Fensulfothion	2.5000	2.3383	6.5	15.0	
28	Bolstar	2.5000	2.2277	10.9	15.0	
30	Carbophenothion	2.5000	2.3228	7.1	15.0	
33	Famphur	2.5000	2.4400	2.4	15.0	
29	Triphenyl phosphate	2.5000	2.3228	7.1	15.0	
32	EPN	2.5000	2.3319	6.7	15.0	
34	Phosmet	2.5000	2.2755	9.0	15.0	
34	Azinphos-methyl	2.5000	2.4504	2.0	15.0	
35	Azinphos-ethyl	2.5000	2.4370	2.5	15.0	
36	Coumaphos	2.5000	2.2424	10.3	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4404	2.4	15.0
22 Merphos	2.5000	2.3638	5.4	15.0

Average %D = 17.8

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3366	6.5	15.0	
2	Dichlorvos	2.5000	2.7926	11.7	15.0	
3	Mevinphos	2.5000	2.8105	12.4	15.0	
4	Chlormefos	2.5000	2.1455	14.2	15.0	
5	Thionazin	2.5000	2.4577	1.7	15.0	
6	Demeton-O	0.8125	0.7711	5.1	15.0	
7	Ethoprop	2.5000	2.3853	4.6	15.0	
8	Naled	2.5000	1.8917	24.3	15.0	<-
9	Sulfotepp	2.5000	2.3936	4.3	15.0	
10	Phorate	2.5000	2.3231	7.1	15.0	
11	Dimethoate	2.5000	2.4617	1.5	15.0	
12	Demeton-S	1.7000	1.6981	0.1	15.0	
13	Simazine	2.5000	2.3610	5.6	15.0	
14	Atrazine	2.5000	2.3957	4.2	15.0	
15	propazine	2.5000	2.4797	0.8	15.0	
17	Disulfoton	2.5000	2.3369	6.5	15.0	
16	Diazinon	2.5000	2.4742	1.0	15.0	
18	Methyl Parathion	2.5000	2.4393	2.4	15.0	
19	Ronnel	2.5000	2.3569	5.7	15.0	
20	Malathion	2.5000	2.3811	4.8	15.0	
21	Fenthion	2.5000	2.3570	5.7	15.0	
22	Parathion	2.5000	2.3366	6.5	15.0	
23	Chlorpyrifos	2.5000	2.2921	8.3	15.0	
24	Trichloronate	2.5000	2.2284	10.9	15.0	
25	Anilazine	2.5000	1.3600	45.6	15.0	<-
148	Merphos-A (Merphos)	2.5000	1.0816	56.7	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.1967	12.1	15.0	
28	Tokuthion	2.5000	2.2720	9.1	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	10.0910	303.6	999.0	
29	Carbophenothion-methyl	2.5000	2.3476	6.1	15.0	
29	Fensulfothion	2.5000	2.4620	1.5	15.0	
30	Bolstar / Famphur	5.0000	4.6721	6.6	15.0	
32	Carbophenothion	2.5000	2.3723	5.1	15.0	
31	Triphenyl phosphate	2.5000	2.4591	1.6	15.0	
34	Phosmet	2.5000	2.2985	8.1	15.0	
32	EPN	2.5000	2.3327	6.7	15.0	
33	Azinphos-methyl	2.5000	2.3458	6.2	15.0	
38	Azinphos-ethyl	2.5000	2.3038	7.8	15.0	
36	Coumaphos	2.5000	2.2047	11.8	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4692	1.2	15.0
27 Merphos	2.5000	2.3333	6.7	15.0

Average %D = 15.9

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3083	7.7	15.0	
2	Dichlorvos	2.5000	3.1206	24.8	15.0	<-
3	Chlormefos	2.5000	2.3838	4.6	15.0	
4	Mevinphos	2.5000	2.8646	14.6	15.0	
5	Demeton-O	0.8125	0.8017	1.3	15.0	
6	Thionazin	2.5000	2.5263	1.1	15.0	
7	Ethoprop	2.5000	2.5050	0.2	15.0	
10	Naled	2.5000	2.1149	15.4	15.0	<-
145	Sulfotepp	2.5000	2.3218	7.1	15.0	
8	Phorate	2.5000	2.3044	7.8	15.0	
15	Demeton-S	1.7000	1.6959	0.2	15.0	
10	Simazine	2.5000	2.2676	9.3	15.0	
13	Atrazine / Propazine	5.0000	4.7470	5.1	15.0	
16	Dimethoate	2.5000	2.6299	5.2	15.0	
11	Diazinon	2.5000	2.3437	6.3	15.0	
14	Disulfoton	2.5000	2.2859	8.6	15.0	
23	Methyl Parathion	2.5000	2.6211	4.8	15.0	
17	Ronnel	2.5000	2.3959	4.2	15.0	
24	Malathion	2.5000	2.3378	6.5	15.0	
18	Chlorpyrifos	2.5000	2.3965	4.1	15.0	
20	Trichloronate	2.5000	2.1863	12.5	15.0	
26	Parathion	2.5000	2.3639	5.4	15.0	
19	Fenthion	2.5000	2.4501	2.0	15.0	
151	Merphos-A (Merphos)	2.5000	1.0763	56.9	999.0	
21	Anilazine	2.5000	0.8307	66.8	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2724	9.1	15.0	
25	Tokuthion	2.5000	2.2652	9.4	15.0	
148	Merphos-B (Merphos oxone)	2.5000	11.2942	351.8	999.0	
28	Carbophenothion methyl	2.5000	2.5115	0.5	15.0	
30	Fensulfothion	2.5000	2.3747	5.0	15.0	
28	Bolstar	2.5000	2.2463	10.1	15.0	
30	Carbophenothion	2.5000	2.3237	7.1	15.0	
33	Famphur	2.5000	2.5782	3.1	15.0	
29	Triphenyl phosphate	2.5000	2.4132	3.5	15.0	
32	EPN	2.5000	2.3664	5.3	15.0	
34	Phosmet	2.5000	2.3119	7.5	15.0	
34	Azinphos-methyl	2.5000	2.3745	5.0	15.0	
35	Azinphos-ethyl	2.5000	2.4542	1.8	15.0	
36	Coumaphos	2.5000	2.2102	11.6	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\080

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4977	0.1	15.0
22 Merphos	2.5000	2.4525	1.9	15.0

Average %D = 17.4

EQUENCE\D080609.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 GSV82609				
4	Vial 4	8141 L6 GSV87009				
5	Vial 5	8141 L5 GSV87109				
6	Vial 6	8141 L4 GSV87209				
7	Vial 7	8141 L3 GSV87309				
8	Vial 8	8141 L2 GSV87409				
9	Vial 9	8141 L1 GSV87509				
10	Vial 10	8141 SS GSV87609				
11	Vial 11	GSV0893-09 SURR				
12	Vial 12	GSV0883-09 SPK				
13	Vial 13	LG1WM1AA,MB				
14	Vial 14	LG1WM1AC,LCS				
15	Vial 15	LG1WM1AD,LCSD				
16	Vial 16	LGX0F1AE,167-1				
17	Vial 17	LGX1P1AN,167-2				
18	Vial 18	LG34K1AA,MB				
19	Vial 19	LG34K1AC,LCS				
20	Vial 20	LG34K1AD,LCSD				
21	Vial 21	LG2X51AA,280-1				
22	Vial 22	LG20H1AA,280-2				
23	Vial 23	LG20J1AA,280-3				
24	Vial 24	LG20L1AA,280-4				
25	Vial 25	LG20N1AA,280-5				
26	Vial 26	LG29G1AA,313-1				
27	Vial 27	LG3WP1AA,149-1				
28	Vial 28	LG3XR1AA,158-1				
29	Vial 29	8141 CCV GSV861				
30	Vial 30	LHA0K1AA,MB				
31	Vial 31	LHA0K1AC,LCS				
32	Vial 32	LHA0K1AD,LCSD				
33	Vial 33	LG7XK1AA,180-1				
34	Vial 34	LG7XP1AA,180-2				
35	Vial 35	LG7XQ1AA,180-3				
36	Vial 36	LG7XQ1AC,180-3S				
37	Vial 37	LG7XQ1AD,180-3D				
38	Vial 38	LG7XW1AA,180-4				
39	Vial 39	LG70G1AA,185-1				
40	Vial 40	LHA0P1AA,MB				
41	Vial 41	LHA0P1AC,LCS				
42	Vial 42	LHA0P1AD,LCSD				
43	Vial 43	LG7N31CC,159-1				
44	Vial 44	LG48D1AA,MB				
45	Vial 45	LG48D1AC,LCS				
46	Vial 46	LG48D1AD,LCSD				
47	Vial 47	LG3F51AD,333-9				
48	Vial 48	LG4761AA,MB				
49	Vial 49	LG4761AC,LCS				
50	Vial 50	LG4761AD,LCSD				
51	Vial 51	LG4XL1AA,133-1				
52	Vial 52	8141 CCV GSV861				
53	Vial 53	LG8X21AA,MB				
54	Vial 54	LG8X21AC,LCS				
55	Vial 55	LG8X21AD,LCSD				
56	Vial 56	LG1TK1AA,108-21				
57	Vial 57	LG8TT1AA,MB				
58	Vial 58	LG8TT1AC,LCS				
59	Vial 59	LG2971AA,314-1				

9205278

9206112

9211421

9211426

9208406

9208402

9210504

Sequence: C:\HPCHEM\2\SEQUENCE\D080609.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LG3AD1AA,314-2				
61	Vial 61	LG3VM1AA,139-1				
62	Vial 62	LG3VM1AD,139-1S				
63	Vial 63	LG3VM1AE,139-1D				
64	Vial 64	LG3VP1AA,139-2				
65	Vial 65	LG3VR1AA,139-3				
66	Vial 66	8141 CCV GSV861				
67	Vial 67	LG3W11AA,150-1				
68	Vial 68	LG3W21AA,150-2				
69	Vial 69	LG3W31AA,150-3				
70	Vial 70	LG3W51AA,150-4				
71	Vial 71	LHFXR1AA,MB				
72	Vial 72	LHFXR1AC,LCS				
73	Vial 73	LGN2D1CQ,316-5S				
74	Vial 74	LGN2D1CR,316-5D				
75	Vial 75	LGN2D2CN,316-5				
76	Vial 76	LGN2J2CN,316-10				
77	Vial 77	8141 CCV GSV861				
78	Vial 2	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

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 GSV861				
4	Vial 4	LG34C1AA,MB				
5	Vial 5	LGW541AA,293-1				
6	Vial 6	LGW551AA,293-2				
7	Vial 7	LGW561AA,293-3				
8	Vial 8	LGW571AA,293-4				
9	Vial 9	LG8TE1AA,MB				
10	Vial 10	LGW581AA,293-5				
11	Vial 11	LGW591AA,293-6				
12	Vial 12	LGW6A1AA,293-7				
13	Vial 13	LGW6C1AA,293-8				
14	Vial 14	8141 CCV GSV861				
15	Vial 15	LHF291AA,MB				
16	Vial 16	LHF291AC,LCS				
17	Vial 17	LHF291AD,LCSD				
18	Vial 18	LG7QW1AA,166-1				
19	Vial 19	LHCVW1AA,166-2				
20	Vial 20	LHCX51AA,185-1				
21	Vial 21	LHF3A1AA,MB				
22	Vial 22	LHF3A1AC,LCS				
23	Vial 23	LHF3A1AD,LCSD				
24	Vial 24	LHC3A1AA,193-1				
25	Vial 25	LHC3E1AA,193-2				
26	Vial 26	LHC3G1AA,193-3				
27	Vial 27	LHC3J1AA,193-4				
28	Vial 28	LHC3M1AA,193-5				
29	Vial 29	LHC3P1AA,193-6				
30	Vial 30	LHC3Q1AA,193-7				
31	Vial 31	8141 CCV GSV861				
32	Vial 32	LHKE31AA,MB				
33	Vial 33	LHK3E1AC,LCS				
34	Vial 34	LHK3E1AD,LCSD				
35	Vial 35	LHHN71AA,268-1				
36	Vial 36	LHHN81AA,268-2				
37	Vial 37	LHHN91AA,268-3				
38	Vial 38	LHHPA1AA,268-4				
39	Vial 39	LHHPC1AA,268-5				
40	Vial 40	LHHPD1AA,268-6				
41	Vial 41	LHHPE1AA,268-7				
42	Vial 42	LHHPF1AA,268-8				
43	Vial 43	LHK3A1AA,MB				
44	Vial 44	LHK3A1AC,LCS				
45	Vial 45	LHK3A1AD,LCSD				
46	Vial 46	LHG7R1AA,197-1				
47	Vial 47	LHJ511AA,234-1				
48	Vial 48	8141 CCV GSV861				
49	Vial 49	LHFXQ1AA,MB				
50	Vial 50	LHFXQ1AC,LCS				
51	Vial 51	LHA071AA,332-1				
52	Vial 52	LHA071AD,332-1S				
53	Vial 53	LHA071AE,332-1D				
54	Vial 54	LHA081AA,332-2				
55	Vial 55	LHC041AA,187-1				
56	Vial 56	LHC1K1AA,187-2				
57	Vial 57	8141 CCV GSV861				
58	Vial 58	8141 L1 GSV862				
59	Vial 59	LG2M71AA,MB				

Sequence: C:\HPCHEM\1\SEQUENCE\D080809.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LG2M71AC,LCS				
61	Vial 61	LGQ171AQ,204-2				
62	Vial 62	LGQ171D0,204-2S				
63	Vial 63	LGQ171D1,204-2D				
64	Vial 64	LGQ2E1AQ,204-7				
65	Vial 65	LGQ2F1AQ,204-8				
66	Vial 66	LGQ2G1AQ,204-9				
67	Vial 67	LGQ2H1AQ,204-10				
68	Vial 68	LGQ2J1AQ,204-11				
69	Vial 69	8141 CCV GSV861				
70	Vial 70	LGQ2K1AQ,204-12				
71	Vial 71	LGQ2L1AQ,204-13				
72	Vial 72	LGQ2M1AQ,204-14				
73	Vial 73	LGQ2N1AQ,204-15				
74	Vial 74	LGT191AT,319-17				
75	Vial 75	LGT2A1A5,319-18				
76	Vial 76	LGT2C1A5,319-19				
77	Vial 77	LGT2D1AG,319-20				
78	Vial 78	LGT2F1AG,319-22				
79	Vial 79	8141 CCV GSV861				
80	Vial 80	8141 L1 GSV862				
81	Vial 2	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

TestAmerica

Total Metals

CLP-Like Forms

Lot ID: D9H040187

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.: D9H040187

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-31AB	D9H040187-001
M-31AB MS	D9H040187-001S
M-31AB MSD	D9H040187-001SD

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: 8/14/09 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-31AB
Lot/SDG Number:	D9H040187	**Lab Sample ID:**	D9H040187-001
Matrix:	WATER	**Lab WorkOrder:**	LHG1P
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:38
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**100**	2.1	50	
7782-49-2	Selenium	**9.6**	7.0	50	B

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	40.0	100.0	50.0	49.2	98.4	49.3	98.6	M
Selenium	40.0	41.9	104.8	50.0	48.4	96.8	50.0	100.0	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.: D9H040187

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	49.6	99.2	49.3	98.6	M
Selenium				50.0	50.0	100.0	51.8	103.6	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.: D9H040187

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	49.8	99.6	49.1	98.2	M
Selenium				50.0	50.7	101.4	48.8	97.6	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.: D9H040187

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	1.020	102.0		
Selenium				1.00	1.298	129.8		

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:	D9H040187	**Lab Sample ID:**	D9H050000-132B
Matrix:	WATER	**Lab WorkOrder:**	LHH8T
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:32
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.: D9H040187

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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			M
Selenium			0.700	U	0.700	U	0.700	U			M

Comments:

Total Metals Analvsis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	0.41	100.70	100.7	0.40	104.70	104.7
Selenium	0.0	100.0	0.04	104.50	104.5	0.69	113.30	113.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-31AB
Lot/SDG Number:	D9H040187	**MS Lab Sample ID:**	D9H040187-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LHG1P
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:46
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	100		150		116		85 - 117
Selenium	40.0	9.6	B	54.7		113		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-31AB
Lot/SDG Number:	D9H040187	**MSD Lab Sample ID:**	D9H040187-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LHG1P
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:49
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	100		148		110		1.5		85 - 117	20
Selenium	40.0	9.6	B	53.8		111		1.6		77 - 122	20

TestAmerica

Total Metals Analvsis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-31AB PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	214.600		10.380		200.00	102.1		M
Selenium	75 - 125	202.900		0.958	B	200.00	101.0		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:	D9H040187	**Lab Sample ID:**	D9H050000-132C
Matrix:	WATER	**Lab WorkOrder:**	LHH8T
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:35
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.4	99		85 - 117
Selenium	40.0	39.1	98		77 - 122

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-31AB SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	10.380		10.750	B	3.6		M
Selenium	0.958	B	3.500	U	100.0		M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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.: D9H040187

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

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

Comments: _____

Form XII - IN

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-31AB	8/5/2009	50.0	50.0
M-31AB MS	8/5/2009	50.0	50.0
M-31AB MSD	8/5/2009	50.0	50.0
MB9217132	8/5/2009	50.0	50.0
Check Sample	8/5/2009	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.: D9H040187

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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	18:06				X															X						
100 PPB	1.00	18:09				X															X						
ICV	1.00	18:12				X															X						
ICB	1.00	18:17				X															X						
RL STD	1.00	18:20				X															X						
ICSA	1.00	18:28				X															X						
ICSAB	1.00	18:31				X															X						
RINSE	1.00	18:34				X															X						
LR	1.00	18:36				X															X						
RINSE	1.00	18:39				X															X						
CCV	1.00	18:42				X															X						
CCB	1.00	18:45				X															X						
CAL BLANK	1.00	21:53				X															X						
100 PPB	1.00	21:56				X															X						
CCV	1.00	21:58				X															X						
CCB	1.00	22:01				X															X						
ICSA	1.00	22:07				X															X						
ICSAB	1.00	22:09				X															X						
WASH	1.00	22:12				X															X						
CCV	1.00	22:15				X															X						
CCB	1.00	22:18				X															X						
CAL BLANK	1.00	23:51				X															X						
100 PPB	1.00	23:54				X															X						
CCV	1.00	23:56				X															X						
CCB	1.00	23:59				X															X						
CCV	1.00	00:24				X															X						
CCB	1.00	00:27				X															X						
MB9217132	1.00	00:32				X															X						
Check Sample	1.00	00:35				X															X						
M-31AB	10.00	00:38				X															X						
M-31AB SER	50.00	00:41				X															X						
M-31AB PDS	1.00	00:43				X															X						
M-31AB MS	10.00	00:46				X															X						

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

Total Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H040187

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
M-31AB MSD	10.00	00:49				X														X						
CCV	1.00	00:54				X														X						
CCB	1.00	00:57				X														X						

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

TestAmerica

Dissolved Metals

CLP-Like Forms

Lot ID: D9H040187

Client: Northgate/Tronox

Method: SW846 6020/Collision Cell

Associated Sample: 002

TestAmerica

Dissolved Metals Analysis

COVER PAGE - INORGANIC ANALYSIS DATA PACKAGE

Contract: Northgate Environmental Management, Inc. SDG No.: D9H040187

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-31ABDISS	D9H040187-002
M-31ABDISS MS	D9H040187-002S
M-31ABDISS MSD	D9H040187-002SD

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: 8/14/09 Title: Metals Analyst

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-31ABDISS
Lot/SDG Number:	D9H040187	**Lab Sample ID:**	D9H040187-002
Matrix:	WATER	**Lab WorkOrder:**	LHG1R
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217128	**Date/Time Analyzed:**	08/11/09 00:10
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	10		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**110**	2.1	50	
7782-49-2	Selenium	**16**	7.0	50	B

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	40.0	100.0	50.0	49.2	98.4	49.3	98.6	M
Selenium	40.0	41.9	104.8	50.0	48.4	96.8	50.0	100.0	M

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

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	49.6	99.2	49.3	98.6	M
Selenium				50.0	50.0	100.0	51.8	103.6	M

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

Dissolved Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	49.8	99.6			M
Selenium				50.0	50.7	101.4			M

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

TestAmerica

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H040187

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	1.020	102.0		
Selenium				1.00	1.298	129.8		

Comments:

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9H040187	**Lab Sample ID:**	D9H050000-128B
Matrix:	WATER	**Lab WorkOrder:**	LHH8K
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217128	**Date/Time Analyzed:**	08/11/09 00:05
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

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

TestAmerica

Dissolved Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

TestAmerica

Dissolved Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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					M
Selenium			0.700	U	0.700	U					M

Comments:

Dissolved Metals Analysis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	0.41	100.70	100.7	0.40	104.70	104.7
Selenium	0.0	100.0	0.04	104.50	104.5	0.69	113.30	113.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-31ABDISS
Lot/SDG Number:	D9H040187	**MS Lab Sample ID:**	D9H040187-002S
Matrix:	WATER	**MS Lab WorkOrder:**	LHG1R
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217128	**Date/Time Analyzed:**	08/11/09 00:18
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	110		150		96		85 - 117
Selenium	40.0	16	B	53.4		95		77 - 122

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-31ABDISS
Lot/SDG Number:	D9H040187	**MSD Lab Sample ID:**	D9H040187-002D
Matrix:	WATER	**MSD Lab WorkOrder:**	LHG1R
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217128	**Date/Time Analyzed:**	08/11/09 00:21
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	110		154		104		2.0		85 - 117	20
Selenium	40.0	16	B	48.1		81		10		77 - 122	20

TestAmerica

Dissolved Metals Analysis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-31ABDISS PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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	217.500		11.190		200.00	103.2		M
Selenium	75 - 125	211.900		1.555	B	200.00	105.2		M

Comments: _____

Form V (PART 2) - IN

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Dissolved Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	
Lot/SDG Number:	D9H040187	**Lab Sample ID:**	D9H050000-128C
Matrix:	WATER	**Lab WorkOrder:**	LHH8K
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217128	**Date/Time Analyzed:**	08/11/09 00:07
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

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

Dissolved Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-31ABDISS SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Arsenic	11.190		10.725	B	4.2		M
Selenium	1.555	B	3.813	B	145.2		M

Comments: _____

TestAmerica

Dissolved Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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

Flame AA ID Number: _____

Furnace AA ID Number:

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

Comments: _____

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

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

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

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

Comments: _____

Form XII - IN

TestAmerica

Dissolved Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040187

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-31ABDISS	8/5/2009	50.0	50.0
M-31ABDISS MS	8/5/2009	50.0	50.0
M-31ABDISS MSD	8/5/2009	50.0	50.0
MB9217128	8/5/2009	50.0	50.0
Check Sample	8/5/2009	50.0	50.0

Comments:

Dissolved Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H040187

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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	18:06				X															X						
100 PPB	1.00	18:09				X															X						
ICV	1.00	18:12				X															X						
ICB	1.00	18:17				X															X						
RL STD	1.00	18:20				X															X						
ICSA	1.00	18:28				X															X						
ICSAB	1.00	18:31				X															X						
RINSE	1.00	18:34				X															X						
LR	1.00	18:36				X															X						
RINSE	1.00	18:39				X															X						
CCV	1.00	18:42				X															X						
CCB	1.00	18:45				X															X						
CAL BLANK	1.00	21:53				X															X						
100 PPB	1.00	21:56				X															X						
CCV	1.00	21:58				X															X						
CCB	1.00	22:01				X															X						
ICSA	1.00	22:07				X															X						
ICSAB	1.00	22:09				X															X						
WASH	1.00	22:12				X															X						
CCV	1.00	22:15				X															X						
CCB	1.00	22:18				X															X						
CAL BLANK	1.00	23:51				X															X						
100 PPB	1.00	23:54				X															X						
CCV	1.00	23:56				X															X						
CCB	1.00	23:59				X															X						
MB9217128	1.00	00:05				X															X						
Check Sample	1.00	00:07				X															X						
M-31ABDISS	10.00	00:10				X															X						
M-31ABDISS SER	50.00	00:13				X															X						
M-31ABDISS PDS	1.00	00:16				X															X						
M-31ABDISS MS	10.00	00:18				X															X						
M-31ABDISS MSD	10.00	00:21				X															X						
CCV	1.00	00:24				X															X						

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

Dissolved Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H040187

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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				
CCB	1.00	00:27				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: D9H040190

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.: D9H040190

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-50B	D9H040190-001

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: 8/14/09 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-50B
Lot/SDG Number:	D9H040190	**Lab Sample ID:**	D9H040190-001
Matrix:	WATER	**Lab WorkOrder:**	LHG21
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 12:05
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:51
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	20		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**81**	4.2	100	B
7782-49-2	Selenium	14	14	100	U

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

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	40.0	100.0	50.0	49.2	98.4	49.3	98.6	M
Selenium	40.0	41.9	104.8	50.0	48.4	96.8	50.0	100.0	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.: D9H040190

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	49.6	99.2	49.3	98.6	M
Selenium				50.0	50.0	100.0	51.8	103.6	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.: D9H040190

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	49.8	99.6	49.1	98.2	M
Selenium				50.0	50.7	101.4	48.8	97.6	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.: D9H040190

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	1.020	102.0		
Selenium				1.00	1.298	129.8		

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:	D9H040190	**Lab Sample ID:**	D9H050000-132B
Matrix:	WATER	**Lab WorkOrder:**	LHH8T
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:32
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.: D9H040190

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

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			M
Selenium			0.700	U	0.700	U	0.700	U			M

Comments:

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:	D9H040190	**MS Lab Sample ID:**	D9H040187-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LHG1P
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:46
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	100		150		116		85 - 117
Selenium	40.0	9.6	B	54.7		113		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:	D9H040190	**MSD Lab Sample ID:**	D9H040187-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LHG1P
% Moisture:	N/A	**Date/Time Collected:**	08/03/09 09:15
Basis:	Wet	**Date/Time Received:**	08/04/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:49
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	10		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	100		148		110		1.5		85 - 117	20
Selenium	40.0	9.6	B	53.8		111		1.6		77 - 122	20

Total Metals Analysis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: INTRA-LAB QC PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

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	214.600		10.380		200.00	102.1		M
Selenium	75 - 125	202.900		0.958	B	200.00	101.0		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:	D9H040190	**Lab Sample ID:**	D9H050000-132C
Matrix:	WATER	**Lab WorkOrder:**	LHH8T
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/05/09 13:00
QC Batch ID:	9217132	**Date/Time Analyzed:**	08/11/09 00:35
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.4	99		85 - 117
Selenium	40.0	39.1	98		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.: D9H040190

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	10.380		10.750	B	3.6		M
Selenium	0.958	B	3.500	U	100.0		M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

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 Analvsis
-12-
ICP LINEAR RANGES (QUARTERLY)

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

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 Analvsis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H040190

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	8/5/2009	50.0	50.0
LAB MS/MSD MS	8/5/2009	50.0	50.0
LAB MS/MSD MSD	8/5/2009	50.0	50.0
M-50B	8/5/2009	50.0	50.0
MB9217132	8/5/2009	50.0	50.0
Check Sample	8/5/2009	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.: D9H040190

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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	18:06				X															X						
100 PPB	1.00	18:09				X															X						
ICV	1.00	18:12				X															X						
ICB	1.00	18:17				X															X						
RL STD	1.00	18:20				X															X						
ICSA	1.00	18:28				X															X						
ICSAB	1.00	18:31				X															X						
RINSE	1.00	18:34				X															X						
LR	1.00	18:36				X															X						
RINSE	1.00	18:39				X															X						
CCV	1.00	18:42				X															X						
CCB	1.00	18:45				X															X						
CAL BLANK	1.00	21:53				X															X						
100 PPB	1.00	21:56				X															X						
CCV	1.00	21:58				X															X						
CCB	1.00	22:01				X															X						
ICSA	1.00	22:07				X															X						
ICSAB	1.00	22:09				X															X						
WASH	1.00	22:12				X															X						
CCV	1.00	22:15				X															X						
CCB	1.00	22:18				X															X						
CAL BLANK	1.00	23:51				X															X						
100 PPB	1.00	23:54				X															X						
CCV	1.00	23:56				X															X						
CCB	1.00	23:59				X															X						
CCV	1.00	00:24				X															X						
CCB	1.00	00:27				X															X						
MB9217132	1.00	00:32				X															X						
Check Sample	1.00	00:35				X															X						
INTRA-LAB QC	10.00	00:38				X															X						
INTRA-LAB QC SER	50.00	00:41				X															X						
INTRA-LAB QC PDS	1.00	00:43				X															X						
LAB MS/MSD MS	10.00	00:46				X															X						

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

Total Metals Analvsis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H040190

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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
LAB MS/MSD MSD	10.00	00:49				X															X						
M-50B	20.00	00:51				X															X						
CCV	1.00	00:54				X															X						
CCB	1.00	00:57				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: D9H050230

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.: D9H050230

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

SOW No.: _____

Sample ID.	Lab Sample No.
M-21B	D9H050230-001
M-21B MS	D9H050230-001S
M-21B MSD	D9H050230-001SD

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: 8/14/09 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-21B
Lot/SDG Number:	D9H050230	**Lab Sample ID:**	D9H050230-001
Matrix:	WATER	**Lab WorkOrder:**	LHJ5J
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 09:30
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:08
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

CAS No.	Analyte	Conc.	MDL	RL	Q
7440-38-2	Arsenic	**93**	0.21	5.0	
7782-49-2	Selenium	**5.6**	0.70	5.0	

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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	40.0	100.0	50.0	49.2	98.4	49.3	98.6	M
Selenium	40.0	41.9	104.8	50.0	48.4	96.8	50.0	100.0	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.: D9H050230

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	49.6	99.2	49.3	98.6	M
Selenium				50.0	50.0	100.0	51.8	103.6	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.: D9H050230

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	49.1	98.2	49.1	98.2	M
Selenium				50.0	48.8	97.6	49.0	98.0	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.: D9H050230

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	1.020	102.0		
Selenium				1.00	1.298	129.8		

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:	D9H050230	**Lab Sample ID:**	D9H060000-437B
Matrix:	WATER	**Lab WorkOrder:**	LHQK3
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:03
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.: D9H050230

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

TestAmerica

Total Metals Analysis

-3-

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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			M
Selenium			0.700	U	0.700	U	0.700	U			M

Comments:

Total Metals Analvsis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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	0.41	100.70	100.7	0.40	104.70	104.7
Selenium	0.0	100.0	0.04	104.50	104.5	0.69	113.30	113.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	M-21B
Lot/SDG Number:	D9H050230	**MS Lab Sample ID:**	D9H050230-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LHJ5J
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 09:30
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:16
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	93		136		108		85 - 117
Selenium	40.0	5.6		51.7		115		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-21B
Lot/SDG Number:	D9H050230	**MSD Lab Sample ID:**	D9H050230-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LHJ5J
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 09:30
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:19
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	93		136		107		0.22		85 - 117	20
Selenium	40.0	5.6		52.1		116		0.67		77 - 122	20

TestAmerica

Total Metals Analvsis
-5B-

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.: M-21B PDS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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	294.500		92.870		200.00	100.8		M
Selenium	75 - 125	230.400		5.643		200.00	112.4		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:	D9H050230	**Lab Sample ID:**	D9H060000-437C
Matrix:	WATER	**Lab WorkOrder:**	LHQK3
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:05
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.0	97		85 - 117
Selenium	40.0	39.6	99		77 - 122

Total Metals Analysis

-9-

ICP SERIAL DILUTIONS

SAMPLE NO.

M-21B SER

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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	92.870		93.200		0.4		M
Selenium	5.643		6.980	B	23.7		M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

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.: D9H050230

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: _____

TestAmerica

Total Metals Analysis

-13-

PREPARATION LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050230

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
M-21B	8/7/2009	50.0	50.0
M-21B MS	8/7/2009	50.0	50.0
M-21B MSD	8/7/2009	50.0	50.0
MB9218437	8/7/2009	50.0	50.0
Check Sample	8/7/2009	50.0	50.0

Comments:

Total Metals Analysis
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H050230

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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	18:06				X															X						
100 PPB	1.00	18:09				X															X						
ICV	1.00	18:12				X															X						
ICB	1.00	18:17				X															X						
RL STD	1.00	18:20				X															X						
ICSA	1.00	18:28				X															X						
ICSAB	1.00	18:31				X															X						
RINSE	1.00	18:34				X															X						
LR	1.00	18:36				X															X						
RINSE	1.00	18:39				X															X						
CCV	1.00	18:42				X															X						
CCB	1.00	18:45				X															X						
CAL BLANK	1.00	21:53				X															X						
100 PPB	1.00	21:56				X															X						
CCV	1.00	21:58				X															X						
CCB	1.00	22:01				X															X						
ICSA	1.00	22:07				X															X						
ICSAB	1.00	22:09				X															X						
WASH	1.00	22:12				X															X						
CCV	1.00	22:15				X															X						
CCB	1.00	22:18				X															X						
CAL BLANK	1.00	23:51				X															X						
100 PPB	1.00	23:54				X															X						
CCV	1.00	23:56				X															X						
CCB	1.00	23:59				X															X						
CCV	1.00	00:54				X															X						
CCB	1.00	00:57				X															X						
MB9218437	1.00	01:03				X															X						
Check Sample	1.00	01:05				X															X						
M-21B	1.00	01:08				X															X						
M-21B SER	5.00	01:11				X															X						
M-21B PDS	1.00	01:14				X															X						
M-21B MS	1.00	01:16				X															X						

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

Total Metals Analysis

-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H050230

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

Sample ID.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
M-21B MSD	1.00	01:19				X															X						
CCV	1.00	01:25				X															X						
CCB	1.00	01:27				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: D9H050234

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.: D9H050234

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

SOW No.: _____

Sample ID.	Lab Sample No.
FB080409-GW	D9H050234-001

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: 8/14/09 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:**	FB080409-GW
Lot/SDG Number:	D9H050234	**Lab Sample ID:**	D9H050234-001
Matrix:	WATER	**Lab WorkOrder:**	LHJ51
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 11:00
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:22
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

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

Total Metals Analysis

-2A-

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050234

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	40.0	100.0	50.0	49.2	98.4	49.3	98.6	M
Selenium	40.0	41.9	104.8	50.0	48.4	96.8	50.0	100.0	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.: D9H050234

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	49.6	99.2	49.3	98.6	M
Selenium				50.0	50.0	100.0	51.8	103.6	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.: D9H050234

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	49.1	98.2	49.1	98.2	M
Selenium				50.0	48.8	97.6	49.0	98.0	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.: D9H050234

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	1.020	102.0		
Selenium				1.00	1.298	129.8		

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:	D9H050234	**Lab Sample ID:**	D9H060000-437B
Matrix:	WATER	**Lab WorkOrder:**	LHQK3
% Moisture:		**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:03
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.: D9H050234

Preparation Blank Matrix (soil/water): WATER

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

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

Comments:

Total Metals Analysis

BLANKS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050234

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			M
Selenium			0.700	U	0.700	U	0.700	U			M

Comments:

TestAmerica

Total Metals Analvsis

-4-

ICP INTERFERENCE CHECK SAMPLE

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050234

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	0.41	100.70	100.7	0.40	104.70	104.7
Selenium	0.0	100.0	0.04	104.50	104.5	0.69	113.30	113.3

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Northgate Environmental Management, Inc.

Total Metals Analysis Data Sheet

Lab Name:	TESTAMERICA DENVER	**Client Sample ID:**	LAB MS/MSD
Lot/SDG Number:	D9H050234	**MS Lab Sample ID:**	D9H050230-001S
Matrix:	WATER	**MS Lab WorkOrder:**	LHJ5J
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 09:30
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:16
MS Sample Aliquot:	50 mL	**Instrument ID:**	024
MS Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MS Result	C	% Rec	Q	QC Limit
Arsenic	40.0	93		136		108		85 - 117
Selenium	40.0	5.6		51.7		115		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:	D9H050234	**MSD Lab Sample ID:**	D9H050230-001D
Matrix:	WATER	**MSD Lab WorkOrder:**	LHJ5J
% Moisture:	N/A	**Date/Time Collected:**	08/04/09 09:30
Basis:	Wet	**Date/Time Received:**	08/05/09 08:45
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:19
MSD Sample Aliquot:	50 mL	**Instrument ID:**	024
MSD Dilution Factor:	1		

Analyte	Spike Amount	Sample Result	C	MSD Result	C	% Rec	Q	RPD	Q	QC Limits	
										% Rec	RPD
Arsenic	40.0	93		136		107		0.22		85 - 117	20
Selenium	40.0	5.6		52.1		116		0.67		77 - 122	20

TestAmerica

Total Metals Analvsis
-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.: D9H050234

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	294.500		92.870		200.00	100.8		M
Selenium	75 - 125	230.400		5.643		200.00	112.4		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:	D9H050234	**Lab Sample ID:**	D9H060000-437C
Matrix:	WATER	**Lab WorkOrder:**	LHQK3
% Moisture:	N/A	**Date/Time Collected:**	
Basis:	Wet	**Date/Time Received:**	
Analysis Method:	6020	**Date Leached:**	
Unit:	ug/L	**Date/Time Extracted:**	08/07/09 07:00
QC Batch ID:	9218437	**Date/Time Analyzed:**	08/11/09 01:05
Sample Aliquot:	50 mL	**Instrument ID:**	024
Dilution Factor:	1		

Analyte	True	Found	%Rec	Q	Limits
Arsenic	40.0	39.0	97		85 - 117
Selenium	40.0	39.6	99		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.: D9H050234

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	92.870		93.200		0.4		M
Selenium	5.643		6.980	B	23.7		M

Comments: _____

TestAmerica

Total Metals Analysis

-10-

DETECTION LIMITS

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG NO.: D9H050234

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.: D9H050234

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.: D9H050234

Method: MS Prep Method: _____

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
INTRA-LAB QC	8/7/2009	50.0	50.0
LAB MS/MSD MS	8/7/2009	50.0	50.0
LAB MS/MSD MSD	8/7/2009	50.0	50.0
FB080409-GW	8/7/2009	50.0	50.0
MB9218437	8/7/2009	50.0	50.0
Check Sample	8/7/2009	50.0	50.0

Comments:

Total Metals Analysis
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H050234

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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	18:06				X															X						
100 PPB	1.00	18:09				X															X						
ICV	1.00	18:12				X															X						
ICB	1.00	18:17				X															X						
RL STD	1.00	18:20				X															X						
ICSA	1.00	18:28				X															X						
ICSAB	1.00	18:31				X															X						
RINSE	1.00	18:34				X															X						
LR	1.00	18:36				X															X						
RINSE	1.00	18:39				X															X						
CCV	1.00	18:42				X															X						
CCB	1.00	18:45				X															X						
CAL BLANK	1.00	21:53				X															X						
100 PPB	1.00	21:56				X															X						
CCV	1.00	21:58				X															X						
CCB	1.00	22:01				X															X						
ICSA	1.00	22:07				X															X						
ICSAB	1.00	22:09				X															X						
WASH	1.00	22:12				X															X						
CCV	1.00	22:15				X															X						
CCB	1.00	22:18				X															X						
CAL BLANK	1.00	23:51				X															X						
100 PPB	1.00	23:54				X															X						
CCV	1.00	23:56				X															X						
CCB	1.00	23:59				X															X						
CCV	1.00	00:54				X															X						
CCB	1.00	00:57				X															X						
MB9218437	1.00	01:03				X															X						
Check Sample	1.00	01:05				X															X						
INTRA-LAB QC	1.00	01:08				X															X						
INTRA-LAB QC SER	5.00	01:11				X															X						
INTRA-LAB QC PDS	1.00	01:14				X															X						
LAB MS/MSD MS	1.00	01:16				X															X						

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

Total Metals Analysis
-14-

ANALYSIS RUN LOG

Contract: Northgate Environmental Management, Inc.

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: D9H050234

Instrument ID Number: Agilent 7500 Method: M

Start Date: 8/10/2009 End Date: 8/11/2009

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
LAB MS/MSD MSD	1.00	01:19				X														X						
FB080409-GW	1.00	01:22				X														X						
CCV	1.00	01:25				X														X						
CCB	1.00	01:27				X														X						

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

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. 2027.001.00336
Page: 1 of 1
Cooler # 1 of 1

Required Ship to Lab:

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

Required Project Information:

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

Required Invoice Information:

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

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

Valid Matrix Codes: DRINKING WATER WP; GROUND WATER WG; WASTE WATER WW; FREE PRODUCT LF; SOIL SO; OIL OL; WIPE WI; AMBIENT AIR AE; SVE AIR SA; SOIL GAS GS; 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 8020/Collison Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-31AB	WG	G	8/3/2009	9:15 AM	1	N			X						X		500 ml Plastic
2	M-31ABDISS	WG	G	8/3/2009	9:15 AM	1	Y			X						X		500 ml Plastic
3																		
4																		
5																		
6	DRB																	
7	8/3/09																	
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

- Use only by collison cell
- Final 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 BROWN, NGEM	8/3/09	14:00	GFES	8/3	1400
GFES	8/3	1600	Lisa Miller TAD Denver	8/4/09	0845

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

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dana Brown

SIGNATURE of SAMPLER:

DATE Signed 8/3/2009 Time: 14:00

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 Denver

Sample Receiving Checklist

Lot #: D9H040187 Date/Time Received: 8/4/09 0845

Company Name & Sampling Site: Northgate - TRONOX

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

Residual chlorine check required: ❑ ☒ Quarantined : ❑ ☒

Quote #: 83016

Special Instructions:

Time Zone:

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

Unpacking Checks:

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

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

N/A	*Yes*	*No*		*Initials*
❑	☑	❑	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	CHK
	☑	❑	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 # D9H040181

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.	AM.
☒	☐	☐	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?	AM
	☑	☐	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).

2.0 <handwritten>
8/4/09
IR1

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. 2027.001.00339
Page: 1 of 1
Cooler # 1 of 1

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

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

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

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-50B	WG	G	8/3/2009	12:05 PM	1	N			X						X		500 ml Plastic
2	M-50BDISS	WG	G	8/3/2009	12:05 PM	1	Y			X						X		500 ml Plastic
3																		
4																		
5	DRB																	
6	8/3/09																	
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:
s Se only by collison cell
ll PDF reports and EDDs will be uploaded to:
orthgate Environmental Management, Inc.
TP site address provided to labs
otifications provided to:
indy.arnold@ngem.com
ank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] DANA BROWN, NGEM	8/3/09	14:00	[signature] GES	8/3	1400
[signature] GES	8/3	1600	[signature] TA Denver	8/4/09	0845

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER: [signature] DATE Signed 8/3/2009 Time: 14:00

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 0C	Samples on Ice?	Sample intact?	Trip Blank?

Phillips, Michael

From: Vivian Willis [vivian.willis@verdant-solutions.com]
Sent: Tuesday, August 04, 2009 3:21 PM
To: Dana.Brown@ngem.com; Brendan Mulholland
Cc: Middleditch, Eric; Phillips, Michael; carnold@ngem.com; Frank.Hagar@ngem.com; Derrick.Willis@ngem.com; 'Victoria Hansen'
Subject: RE: TRONOX reciept discrepancies - August 4, 2009

1) Volume was not received to perform the dissolved metals analysis of sample M-50BDISS. COC No is 2027.001300339

Missing bottle for Dissolved metals for the Northgate crew.

Vivian Willis

VERDANT

From: Phillips, Michael [mailto:Michael.Phillips@testamericainc.com]
Sent: Tuesday, August 04, 2009 12:46 PM
To: carnold@ngem.com; Frank.Hagar@ngem.com; Derrick.Willis@ngem.com; Vivian Willis; Victoria Hansen
Cc: Middleditch, Eric
Subject: FW: TRONOX reciept discrepancies - August 4, 2009

All,

Please see item 1) and 3) in Eric Middleditch's message below for issues with the samples received today, 8-4-09. These will need to be resolved before we can log in the samples.

For item 2) below, it appears that you have sent replacement samples for the samples originally received on Saturday, 8-1-09 (RSAJ3-10B and RSAJ3-29B), since the sample ids are the same and the COC is the same (2027.001.00490). For the samples received today, we have sufficient volume (two 4 oz jars). So, should we discard the samples received on Saturday, 8-1-09? Also note that the COC we received today only shows one 4 oz jar rather than two and the sample ids do not include "SPLP". Please confirm that this is correct and we will proceed.

For FB072909-SO for 8141A (COC# 2027.001.00468) that we received on 7/31/09, the note in the lower left hand corner says that this FB is associated with Area II samples. The soil samples we received last week are RSAU4-20, RSAU4-50, SA73-0.5B, and SA73-30B. Should FB072909-SO be associated in the same SDG with these soil samples? Please confirm.

Thanks.

MICHAEL P. PHILLIPS
Project Manager
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4955 Yarrow Street
Arvada, CO 80002
Tel 303-736-0157 | Fax 303-432-8925
www.testamericainc.com

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: *Project Feedback*

From: Middleditch, Eric
Sent: Tuesday, August 04, 2009 1:19 PM
To: Phillips, Michael
Subject: TRONOX reciept discrepancies - August 4, 2009

<<TRONOX COCs - August 4, 2009.pdf>>

1) Volume was not received to perform the dissolved metals analysis of sample M-50BDISS. COC No is 2027.001300339

2) According to COC No 2027.001.00490, samples RSAJ3-10B and RSAJ3-29B are to be analyzed for 8141 OP-Pest using a SPLP prep. Sufficient volume was received (2 4oz jars for each sample) in order to perform the requested analysis/SPLP prep however the COC only indicates that 1 4oz jar was to be received and "SPLP" does not appear in the sample ID.

3) Sample EB080309-SO arrived at TestAmerica Denver but did not appear on any of the chains of custody. According to the bottle label, the intended laboratory is "CASK" for Metals/6010B analysis.

I've attached copies of COC No 2027.001300339 and 2027.001.00490 for your reference. Please note that additional samples arrived at TestAmerica Denver, however I've only mentioned the samples/COCs that had discrepancies upon reciept.

Thanks,
ERIC MIDDLEDITCH
Project Management Assistant
TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
4955 Yarrow Street
Arvada, CO 80002
Tel 303.736.0100 ext. 165
www.testamericainc.com

the sender immediately. We appreciate your cooperation.
Please consider the environment before printing this e-mail.

TestAmerica Denver
Condition Upon Receipt Anomaly Report (CUR)

Lot No : D9H040190 Date/Time: 8/4/09 0845
Client : Northgate Tronox Initiated by: LM
Affected Samples COC#____

Client ID	Lab ID	Analyses Requested

CONDITION/ANOMALY/VARIANCE (CHECK ALL THAT APPLY):

❑ **COOLERS**
- ❑ Received, No Chain of Custody (COC)
- ❑ Not Received but COC(s) Available
- ❑ Leaking
- ❑ Other:

❑ **TEMPERATURE (greater than 6° C)**
- ❑ Cooler Temp
- ❑ Temperature Blank

❑ **CONTAINERS**
- ❑ Leaking
- ❑ Broken
- ❑ Extra
- ❑ Without Labels
- ❑ VOA Vials with Headspace ____ mm
- ❑ Other:

❑ **CUSTODY SEALS (COOLER(S)/CONTAINER(S)**
- ❑ None
- ❑ Not Intact
- ❑ Other:

❑ **CHAIN OF CUSTODY (COCs)**
- ❑ Not relinquished by Client; No date/time Relinq.
- ❑ Incomplete Information
- ❑ Other:

❑ **CONTAINER LABELS**
- ❑ Not the same ID/info as in COC
- ❑ Incomplete
- ❑ ID COLLECTION ❑ Time ❑ Date ❑ PRESERVATIVE
- ❑ Markings/Info smeared or illegible
- ❑ Torn
- ❑ Other:

☒ **SAMPLES**
- ☒ Samples NOT RECEIVED but listed on COC ------
- ❑ Samples received but NOT LISTED on COC
- ❑ Logged based on Label Information
- ❑ Logged based on info from other samples on COC
- ❑ Logged according to Work Plan
- ❑ Logged on HOLD UNTIL FURTHER NOTICE
- ❑ Other:
- ❑ will be noted on COC Client to send samples with new COC
- ❑ Trip Blank received, not on COC, ____ vials received
- ❑ Mislabeled as to tests, preservatives, etc.
- ❑ Holding time expired
- ❑ Improper container used
- ❑ Not preserved / Improper preservative used
- ❑ Improper pH ____ Lab to preserve sample
- ❑ Insufficient quantities for analysis

Comments: Did not receive volume for sample M-50B Diss.

Corrective Action:
- ☒ Client Informed: verbally on: ____ By: ____ : In writing on: 8/5/09 By: GM
- ❑ Sample(s) processed "as is".
- ❑ Sample(s) on hold until: ____ If released, notify: ____

Sample Control Supervisor Review: Lisa Muller Date: 8/4/09
Project Management Review: [signature] Date: 8/5/09

SIGNED ORIGINAL MUST BE RETAINED IN THE PROJECT FILE

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9H040190 Date/Time Received: 8/4/09 8:45

Company Name & Sampling Site: Northgate - TRONOX

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

Quote #: 83046

Special Instructions:

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

Unpacking Checks:

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

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

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	CLK
	☑	☐	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 # D9HD4C1910

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).

0.5 RL
8/5/09 IR1

179

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. 2027.001.00523
Page: 1 of 1
Cooler # 1 of 1

Required Ship to Lab:

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

Required Project Information:

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

Required Invoice Information:

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

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

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

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE)	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analyses: EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	M-21B	WG	G	8/4/2009	9:30 AM	1	N			X						X		500 ml Plastic
2																		
3																		
4	DRS																	
5	8-4-09																	
6																		
7																		
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

- s Se only by collison cell
- l PDF reports and EDDs will be uploaded to:
- orthgate Environmental Management, Inc.
- TP site address provided to labs
- otifications provided to:
- ndy.arnold@ngem.com
- ank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
DANA BROWN NGEM	8/4/09	15:20	GES	8/4	1520
GES	8/4	1600	TA Den	8/5/09	0845

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER:
DATE Signed 8/4/2009
Time: 15:20

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 #: D9H050230 Date/Time Received: 8/5/09 0845

Company Name & Sampling Site: Northgate - TRONOX

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

Quote #: 83046

Special Instructions:

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

Unpacking Checks:

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

Temperatures (°C): 0.5°C _____ _____ _____ _____ _____ _____ _____

N/A	*Yes*	*No*		*Initials*
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	JC
	☑	☐	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 # D9H050230

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.	JM.
☑	☐	☐	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?	CMP
	☑	☐	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).

0.5 ℓℓ
8/5/09
IRI

182

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. 2027.001.00527
Page: 1 of 1
Cooler # 1 of 1

Required Ship to Lab:

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

Required Project Information:

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

Required Invoice Information:

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

TAT: Standard 30 day		Rush	X Mark One
If Rush, Date due	ASAP - DI Source		
QC level Required: Standard		Special	Mark one
NJ Reduced Deliverable Package?			
MA MCP Cert?		CT RCP Cert?	Mark One

Lab Project ID (lab use)

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

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE	MATRIX CODE	SAMPLE TYPE G=GRAB C=COMP	SAMPLE DATE	SAMPLE TIME	#OF CONTAINERS	FIELD FILTERED? (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Requested Analyses: EPA 6020/Collision Cell	EPA 8141A OPP Pest	Comments/Lab Sample I.D.
1	FB080409-GW	W	G	8/4/2009	11:00	1	N			X						X		500 ml Plastic
2	FB080409-GW	W	G	8/4/2009	11:00	2	N	X									X	2 x 1 Liter Amber Glass
3																		
4																		
5																		
6	DRB																	
7	8-4-09																	
8																		
9																		
10																		
11																		
12																		

Additional Comments/Special Instructions:

USH Analyses!
eolia laboratory source water. Check with Cindy Arnold for
eporting requirements.

s & Se only by Collision Cell
ll PDF reports and EDDs will be uploaded to:
orthgate Environmental Management, Inc.
TP site address provided to labs
otifications provided to:
ndy.arnold@ngem.com & frank.hagar@ngem.com

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
DANA BROWN, NGEM	8/4/09	15:20	GES	8/4	1520
GES	8/4	1640	TA Den	8/5/09	0845

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

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Dana Brown
SIGNATURE of SAMPLER:
DATE Signed 8/4/2009
Time: 15:20

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

TestAmerica

Table of Contents

TestAmerica Denver

Sample Receiving Checklist

Lot #: D9H050234 Date/Time Received: 8/5/09 0845

Company Name & Sampling Site: Northgate - TRONOX

PM to Complete This Section:

	Yes	No
Residual chlorine check required:	☐	☒
Quarantined :	☐	☒

Quote #: 83046

Special Instructions:

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

Unpacking Checks:

Cooler #(s): ________

Temperatures (°C): 0.5

N/A	Yes	No	Check	Initials
☐	☑	☐	1. Cooler seals intact? (N/A if hand delivered) If no, document on CUR.	[illegible]
	☑	☐	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 # D9H050234

Login Checks:

Initials: JM.

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? 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: YC

☒	☐	☐	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).

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9H040187

Client: Northgate Environmental

Batch(es) #: 9217132, 9217128

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: 8/11/09

Metals Raw Data RoadMap

LotID			*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9H040187	1	D	SE	LHG1P1AH	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	1	S	SE	LHG1P1AG	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	1	D	AS	LHG1P1AF	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	1	S	AS	LHG1P1AE	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	1		SE	LHG1P1AC	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	1		AS	LHG1P1AA	20090811	6020TOTA	9217132	AG081009A	024
D9H040187	2	D	SE	LHG1R1AG	20090811	6020DSVD	9217128	AG081009A	024
D9H040187	2	D	AS	LHG1R1AE	20090811	6020DSVD	9217128	AG081009A	024
D9H040187	2	S	AS	LHG1R1AD	20090811	6020DSVD	9217128	AG081009A	024
D9H040187	2	S	SE	LHG1R1AF	20090811	6020DSVD	9217128	AG081009A	024
D9H040187	2		SE	LHG1R1AC	20090811	6020DSVD	9217128	AG081009A	024
D9H040187	2		AS	LHG1R1AA	20090811	6020DSVD	9217128	AG081009A	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9217128**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JRW

Prep Date: 08/05/09
Due Date: 08/17/09

Lot	Work Order			Initial Weight/Volume
D9H050000 Water	**LHH8K**	B	Due Date: SDG:	50 mL
D9H050000 Water	**LHH8K**	C	Due Date: SDG:	50 mL
D9H040187 Water	**LHG1R** Dissolved		Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1R** Dissolved	S	Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1R** Dissolved	D	Due Date: 08/17/09 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 8/10/09

8/11/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

DISSOLVED WATER DIGESTION FOR ICPMS (Prep code MD)

BATCH # 9217128 **ALLIQUOTTED BY:** KS
PREP DATE: 8/5/2009 **DIGESTED BY:** JRW

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

Were samples filtered in the lab? ☐ Yes ☒ No

If "yes", then the method blank and the LCS were filtered prior to digestion.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-3775-09	6/23/10	100uL	15
2008Cal-2	STD-2637-09	5/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	2

TEMPERATURE CYCLES

Thermometer ID: 3967 Block & Cup # : 9/2

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3/HCl	1300	95	1800	95

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: Jy Wilk ***Date:*** 8/5/09

Batch Number: **9217132**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JRW

Prep Date: 08/05/09
Due Date: 08/17/09

Lot	Work Order			Initial Weight/Volume
D9H050000 Water	**LHH8T**	B	Due Date: SDG:	50 mL
D9H050000 Water	**LHH8T**	C	Due Date: SDG:	50 mL
D9H040187 Water	**LHG1P** Total		Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1P** Total	S	Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1P** Total	D	Due Date: 08/17/09 SDG:	50 mL
D9H040190 Water	**LHG21** Total		Due Date: 08/17/09 SDG:	50 mL
~~D9H040197~~ Water	~~**LHG7R**~~ Total		~~Due Date: 08/17/09~~ SDG:	50 mL
~~D9H040202~~ Water	~~**LHG9J**~~ Total		~~Due Date: 08/17/09~~ SDG:	~~50 mL~~

8/7/09 client deleted.

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 8/10/09

8/11/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9217132 **ALLIQUOTTED BY:** KS
PREP DATE: 8/5/2009 **DIGESTED BY:** JRW

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☐ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-3775-09	6/23/10	100uL	15
2008Cal-2	STD-2637-09	5/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 4110 Block & Cup # : 3/30

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	1300	93	1745 + 700 8/5/09 JRW	96
HNO3	1730	96	1800	96
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: JRW ***Date:*** 8/5/09

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

Aug-10-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

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

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

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

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

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

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

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

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD4601-09, ICP-MS (024) INT STD BRC — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 08-03-2009
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

STD4712-09, ICP-MS BLANK

Analyst: DIAZL

Solvent: Water Volume (ml): 1,000.0
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4711-09, NITRIC ACID Aliquot Amount (ml): 50.000

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

STD4713-09, ICP-MS 10 ppm Sn

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4714-09, ICP-MS 100 ppb cal

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Expires(2): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3773-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: 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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4715-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	2,500.0

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4716-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn Aliquot Amount (ml): 0.0900

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

Parent Std No.: STD4714-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 08-11-2009

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

STD4717-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022

Volume (ml): 10.000

Date Prep./Opened: 08-10-2009

Date Expires(1): 08-11-2009 (2 Days)

pipettes: Met 20 and Met 8

Parent Std No.: STD4716-09, ICP-MS RL STD

Aliquot Amount (ml): 2.0000

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

STD4718-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (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

STD4719-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4720-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4721-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4722-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4723-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

Reviewed By: LRD 08/10/2009 File AG0810009A

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	08/10/09 18:06		☐
4	100 ppb				1.0	08/10/09 18:09		☐
5	ICV				1.0	08/10/09 18:12		☐
6	RLIV				1.0	08/10/09 18:15		☐
7	ICB				1.0	08/10/09 18:17		☐
8	RL STD				1.0	08/10/09 18:20		☐
9	AFCEE RL				1.0	08/10/09 18:23		☐
10	ALTSe				1.0	08/10/09 18:26		☐
11	ICSA				1.0	08/10/09 18:28		☐
12	ICSAB				1.0	08/10/09 18:31		☐
13	RINSE				1.0	08/10/09 18:34		☐
14	LR				1.0	08/10/09 18:36		☐
15	RINSE				1.0	08/10/09 18:39		☐
16	CCV				1.0	08/10/09 18:42		☐
17	CCB				1.0	08/10/09 18:45		☐
18	RLCV				1.0	08/10/09 18:47		☐
19	~~LG9KP~~	~~D9G300165-1~~	~~9215182~~	~~04~~	~~1.0~~	~~08/10/09 18:50~~	KF 8/11/09 Did not use.	☐
20	CCV				1.0	08/10/09 18:53		☐
21	CCB				1.0	08/10/09 18:55		☐
22	RLCV				1.0	08/10/09 18:58		☐
23	LG8F7	D9G290252-1	9212201	46	1.0	08/10/09 19:01		☐
24	LG8F7P5	D9G290252	9212201		5.0	08/10/09 19:04		☐
25	LG8F7Z	D9G290252-1	9212201		1.0	08/10/09 19:06		☐
26	LG8F7S	D9G290252-1	9212201	46	1.0	08/10/09 19:09		☐
27	LG8F7D	D9G290252-1	9212201	46	1.0	08/10/09 19:12		☐
28	CCV				1.0	08/10/09 19:15		☐
29	CCB				1.0	08/10/09 19:17		☐
30	RLCV				1.0	08/10/09 19:20		☐
31	~~LHFL0B~~	~~D9H030000~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:23~~		☐
32	LHFL0C	D9H030000	9215265	46	1.0	08/10/09 19:26		☐
33	~~LHA17~~	~~D9G300337-1~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:28~~	KF 8/11/09 Did not use.	☐
34	CCV				1.0	08/10/09 19:31		☐
35	CCB				1.0	08/10/09 19:34		☐
36	RLCV				1.0	08/10/09 19:37		☐
37	LG86WB	D9G300000	9211083	04	1.0	08/10/09 19:39		☐
38	LG86WC	D9G300000	9211083	04	1.0	08/10/09 19:42		☐
39	LG8K3	D9G290261-1	9211083	04	1.0	08/10/09 19:45		☐
40	LG8LE	D9G290261-3	9211083	04	1.0	08/10/09 19:48		☐
41	LG8LF	D9G290261-4	9211083	04	1.0	08/10/09 19:50		☐
42	LG8LH	D9G290261-5	9211083	04	1.0	08/10/09 19:53		☐
43	LG8LJ	D9G290261-6	9211083	04	1.0	08/10/09 19:56		☐
44	LG8LK	D9G290261-7	9211083	04	1.0	08/10/09 19:59		☐
45	CCV				1.0	08/10/09 20:01		☐
46	CCB				1.0	08/10/09 20:04		☐
47	RLCV				1.0	08/10/09 20:07		☐
48	LG8LKP5	D9G290261	9211083		5.0	08/10/09 20:10		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LG8LKZ	D9G290261-7	9211083		1.0	08/10/09 20:12		
50	LG8LKS	D9G290261-7	9211083	04	1.0	08/10/09 20:15		
51	LG8LKD	D9G290261-7	9211083	04	1.0	08/10/09 20:18		
52	LG8LL	D9G290261-8	9211083	04	1.0	08/10/09 20:20		
53	LG8LM	D9G290261-9	9211083	04	1.0	08/10/09 20:23		
54	LG8LN	D9G290261-10	9211083	04	1.0	08/10/09 20:26		
55	LG8LP	D9G290261-11	9211083	04	1.0	08/10/09 20:29		
56	CCV				1.0	08/10/09 20:32		
57	CCB				1.0	08/10/09 20:34		
58	RLCV				1.0	08/10/09 20:37		
59	LG7LLB	D9G290000	9210208	46	1.0	08/10/09 20:40		
60	LG7LLC	D9G290000	9210208	46	1.0	08/10/09 20:42		
61	LG3FP	D9G240333-2	9210208	U1	1.0	08/10/09 20:45		
62	LG3FR	D9G240333-3	9210209	U1	1.0	08/10/09 20:48		
63	LG3FRP5	D9G240333	9210209		5.0	08/10/09 20:51		
64	LG3FRZ	D9G240333-3	9210209		1.0	08/10/09 20:53		
65	LG3FRS	D9G240333-3	9210209	U1	1.0	08/10/09 20:56		
66	CCV				1.0	08/10/09 20:59		
67	CCB				1.0	08/10/09 21:01		
68	RLCV				1.0	08/10/09 21:04		
69	LG3FRD	D9G240333-3	9210209	U1	1.0	08/10/09 21:07		
70	LG3FV	D9G240333-4	9210208	U1	1.0	08/10/09 21:09		
71	LG3FX	D9G240333-5	9210208	U1	1.0	08/10/09 21:12		
72	LG6XM	D9G240333-12	9210209	U1	1.0	08/10/09 21:15		
73	LG6XV	D9G240333-13	9210209	U1	1.0	08/10/09 21:18		
74	LG6XW	D9G240333-14	9210208	U1	1.0	08/10/09 21:20		
75	LG6X0	D9G240333-15	9210208	U1	1.0	08/10/09 21:23		
76	CCV				1.0	08/10/09 21:26		
77	CCB				1.0	08/10/09 21:28		
78	RLCV				1.0	08/10/09 21:31		
79	RINSE				1.0	08/10/09 21:34		
80	RINSE				1.0	08/10/09 21:37		
81	RINSE				1.0	08/10/09 21:39		
82	RINSE				1.0	08/10/09 21:42		
83	RINSE				1.0	08/10/09 21:45		
84	RINSE				1.0	08/10/09 21:48		
85	Cal Blank				1.0	08/10/09 21:50		
86	Cal Blank				1.0	08/10/09 21:53		
87	100 ppb				1.0	08/10/09 21:56		
88	CCV				1.0	08/10/09 21:58		
89	CCB				1.0	08/10/09 22:01		
90	RLCV				1.0	08/10/09 22:04		
91	ICSA				1.0	08/10/09 22:07		
92	ICSAB				1.0	08/10/09 22:09		
93	WASH				1.0	08/10/09 22:12		
94	CCV				1.0	08/10/09 22:15		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	CCB				1.0	08/10/09 22:18		
96	RLCV				1.0	08/10/09 22:20		
97	LHFD8B	D9H030000	9215165	MS	1.0	08/10/09 22:23		
98	LHFD8C	D9H030000	9215165	MS	1.0	08/10/09 22:26		
99	LHEPK	D9H010152-2	9215165	MS	1.0	08/10/09 22:29		
100	LHEPKP5	D9H010152	9215165		5.0	08/10/09 22:31		
101	LHEPKZ	D9H010152-2	9215165		1.0	08/10/09 22:34		
102	LHEPL	D9H010152-3	9215165	MS	1.0	08/10/09 22:37		
103	LHEPM	D9H010152-4	9215165	MS	1.0	08/10/09 22:39		
104	CCV				1.0	08/10/09 22:42		
105	CCB				1.0	08/10/09 22:45		
106	RLCV				1.0	08/10/09 22:48		
107	~~LHH8KBF~~	~~D9H050000~~	~~9217128~~	~~MD~~	~~1.0~~	~~08/10/09 22:51~~		
108	LHH8KCF	D9H050000	9217128	MD	1.0	08/10/09 22:53		
109	LHG1RF	D9H040187-2	9217128	MD	1.0	08/10/09 22:56		
110	LHG1RP5F	D9H040187	9217128		5.0	08/10/09 22:59		
111	LHG1RZF	D9H040187-2	9217128		1.0	08/10/09 23:02		
112	LHG1RSF	D9H040187-2	9217128	MD	1.0	08/10/09 23:04		
113	LHG1RDF	D9H040187-2	9217128	MD	1.0	08/10/09 23:07		
114	CCV				1.0	08/10/09 23:10		
115	CCB				1.0	08/10/09 23:13		
116	RLCV				1.0	08/10/09 23:15		
117	LHH8TB	D9H050000	9217132	MS	1.0	08/10/09 23:18		
118	LHH8TC	D9H050000	9217132	MS	1.0	08/10/09 23:21		
119	LHG1P 5X	D9H040187-1	9217132	MS	5.0	08/10/09 23:24		
120	LHG1PP25	D9H040187	9217132		25.0	08/10/09 23:26		
121	RINSE				1.0	08/10/09 23:32		
122	RINSE				1.0	08/10/09 23:34		
123	RINSE				1.0	08/10/09 23:37		
124	RINSE				1.0	08/10/09 23:40		
125	RINSE				1.0	08/10/09 23:43		
126	RINSE				1.0	08/10/09 23:45		
127	~~Cal Blank~~				~~1.0~~	~~08/10/09 23:48~~	KF 8/11/09 Did not use.	
128	Cal Blank				1.0	08/10/09 23:51		
129	100 ppb				1.0	08/10/09 23:54		
130	CCV				1.0	08/10/09 23:56		
131	CCB				1.0	08/10/09 23:59		
132	RLCV				1.0	08/11/09 00:02		
133	LHH8KBF	D9H050000	9217128	MD	1.0	08/11/09 00:05		
134	LHH8KCF	D9H050000	9217128	MD	1.0	08/11/09 00:07		
135	LHG1RF 10X	D9H040187-2	9217128	MD	10.0	08/11/09 00:10		
136	LHG1RP50F	D9H040187	9217128		50.0	08/11/09 00:13		
137	LHG1RZF	D9H040187-2	9217128		1.0	08/11/09 00:16		
138	LHG1RSF 10	D9H040187-2	9217128	MD	10.0	08/11/09 00:18		
139	LHG1RDF 10	D9H040187-2	9217128	MD	10.0	08/11/09 00:21		
140	CCV				1.0	08/11/09 00:24		

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RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	CCB				1.0	08/11/09 00:27		
142	RLCV				1.0	08/11/09 00:29		
143	LHH8TB	D9H050000	9217132	MS	1.0	08/11/09 00:32		
144	LHH8TC	D9H050000	9217132	MS	1.0	08/11/09 00:35		
145	LHG1P 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:38		
146	LHG1PP50	D9H040187	9217132		50.0	08/11/09 00:41		
147	LHG1PZ	D9H040187-1	9217132		1.0	08/11/09 00:43		
148	LHG1PS 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:46		
149	LHG1PD 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:49		
150	LHG21 20X	D9H040190-1	9217132	MS	20.0	08/11/09 00:51		
151	CCV				1.0	08/11/09 00:54		
152	CCB				1.0	08/11/09 00:57		
153	RLCV				1.0	08/11/09 01:00		
154	LHQK3B	D9H060000	9218437	MS	1.0	08/11/09 01:03		
155	LHQK3C	D9H060000	9218437	MS	1.0	08/11/09 01:05		
156	LHJ5J	D9H050230-1	9218437	MS	1.0	08/11/09 01:08		
157	LHJ5JP5	D9H050230	9218437		5.0	08/11/09 01:11		
158	LHJ5JZ	D9H050230-1	9218437		1.0	08/11/09 01:14		
159	LHJ5JS	D9H050230-1	9218437	MS	1.0	08/11/09 01:16		
160	LHJ5JD	D9H050230-1	9218437	MS	1.0	08/11/09 01:19		
161	LHJ51	D9H050234-1	9218437	MS	1.0	08/11/09 01:22		
162	CCV				1.0	08/11/09 01:25		
163	CCB				1.0	08/11/09 01:27		
164	RLCV				1.0	08/11/09 01:30		
165	~~RINSE~~				1.0	~~08/11/09 01:33~~		
166	RINSE				1.0	~~08/11/09~~ 01:35		
167	RINSE				1.0	08/11/09 01:38		
168	RINSE				1.0	08/11/09 01:41		
169	RINSE				1.0	08/11/09 01:44		
170	RINSE				1.0	08/11/09 01:46		
171	~~Cal Blank~~				1.0	~~08/11/09 01:49~~	KS 8/11/09	
172	Cal Blank				1.0	08/11/09 01:52		
173	100 ppb				1.0	08/11/09 01:55		
174	CCV				1.0	08/11/09 01:57		
175	CCB				1.0	08/11/09 02:00		
176	RLCV				1.0	08/11/09 02:03		
177	LHT80BF	D9H080000	9220058	MD	1.0	08/11/09 02:06		
178	LHT80CF	D9H080000	9220058	MD	1.0	08/11/09 02:08		
179	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:11		
180	LHQGCP5F	D9H060361	9220058		5.0	08/11/09 02:14		
181	LHQGCZF	D9H060361-2	9220058		1.0	08/11/09 02:17		
182	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:19		
183	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:22		
184	CCV				1.0	08/11/09 02:25		
185	CCB				1.0	08/11/09 02:28		
186	RLCV				1.0	08/11/09 02:30		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:33	For confirmation only. EF 8/11/09	☐
188	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:36		☐
189	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:39		☐
190	CCV				1.0	08/11/09 02:41		☐
191	CCB				1.0	08/11/09 02:44		☐
192	RLCV				1.0	08/11/09 02:47		☐
193	~~LHTW6B~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:50~~		☐
194	~~LHTW6C~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:52~~	EF 8/11/09 Did not use.	☐
195	LHTW6B	D9H080000	9220029	MS	1.0	08/11/09 02:55		☐
196	LHTW6C	D9H080000	9220029	MS	1.0	08/11/09 02:58		☐
197	CCV				1.0	08/11/09 03:01		☐
198	CCB				1.0	08/11/09 03:04		☐
199	RLCV				1.0	08/11/09 03:06		☐
200	LHLPQ	D9H060174-1	9220029	MS	1.0	08/11/09 03:09		☐
201	LHLP9	D9H060174-2	9220029	MS	1.0	08/11/09 03:12		☐
202	LHLQF	D9H060174-3	9220029	MS	1.0	08/11/09 03:15		☐
203	LHLQG	D9H060174-4	9220029	MS	1.0	08/11/09 03:17		☐
204	LHLQH	D9H060174-5	9220029	MS	1.0	08/11/09 03:20		☐
205	LHLQJ	D9H060174-6	9220029	MS	1.0	08/11/09 03:23		☐
206	CCV				1.0	08/11/09 03:26		☐
207	CCB				1.0	08/11/09 03:29		☐
208	RLCV				1.0	08/11/09 03:31		☐
209	LHREN	D9H070161-1	9220029	MS	1.0	08/11/09 03:34		☐
210	LHRENP5	D9H070161	9220029		5.0	08/11/09 03:37		☐
211	LHRENZ	D9H070161-1	9220029		1.0	08/11/09 03:40		☐
212	LHRENS	D9H070161-1	9220029	MS	1.0	08/11/09 03:42		☐
213	LHREND	D9H070161-1	9220029	MS	1.0	08/11/09 03:45		☐
214	LHRFD	D9H070161-2	9220029	MS	1.0	08/11/09 03:48		☐
215	LHRFF	D9H070161-3	9220029	MS	1.0	08/11/09 03:51		☐
216	LHRGP	D9H070161-4	9220029	MS	1.0	08/11/09 03:53		☐
217	CCV				1.0	08/11/09 03:56		☐
218	CCB				1.0	08/11/09 03:59		☐
219	RLCV				1.0	08/11/09 04:02		☐
220	LHRGR	D9H070161-5	9220029	MS	1.0	08/11/09 04:05		☐
221	LHRGV	D9H070161-6	9220029	MS	1.0	08/11/09 04:07		☐
222	LHRGW	D9H070161-7	9220029	MS	1.0	08/11/09 04:10		☐
223	LHRGX	D9H070161-8	9220029	MS	1.0	08/11/09 04:13		☐
224	LHRG1	D9H070161-9	9220029	MS	1.0	08/11/09 04:16		☐
225	LHRG2	D9H070161-10	9220029	MS	1.0	08/11/09 04:19		☐
226	LHRG6	D9H070161-11	9220029	MS	1.0	08/11/09 04:21		☐
227	CCV				1.0	08/11/09 04:24		☐
228	CCB				1.0	08/11/09 04:27		☐
229	RLCV				1.0	08/11/09 04:30		☐
230	~~RINSE~~				~~1.0~~	~~08/11/09 04:32~~		☐
231	RINSE				1.0	08/11/09 04:35		☐
232	~~RINSE~~				~~1.0~~	~~08/11/09 04:38~~	EF 8/11/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
233	~~RINSE~~				~~1.0~~	~~08/11/09 04:41~~		
234	RINSE				1.0	08/11/09 04:43		
235	RINSE				1.0	08/11/09 04:46		
236	~~Cal Blank~~				~~1.0~~	~~08/11/09 04:49~~	KT 8/11/09	
237	Cal Blank				1.0	08/11/09 04:52		
238	100 ppb				1.0	08/11/09 04:54		
239	CCV				1.0	08/11/09 04:57		
240	CCB				1.0	08/11/09 05:00		
241	RLCV				1.0	08/11/09 05:03		
242	LHT3RBF	D9H080000	9220042	MD	1.0	08/11/09 05:05		
243	LHT3RCF	D9H080000	9220042	MD	1.0	08/11/09 05:08		
244	LHJ0JF	D9H050209-1	9220042	MD	1.0	08/11/09 05:11		
245	LHJ02F	D9H050209-2	9220042	MD	1.0	08/11/09 05:14		
246	LHJ02P5F	D9H050209	9220042		5.0	08/11/09 05:17		
247	LHJ02ZF	D9H050209-2	9220042		1.0	08/11/09 05:19		
248	LHJ02SF	D9H050209-2	9220042	MD	1.0	08/11/09 05:22		
249	LHJ02DF	D9H050209-2	9220042	MD	1.0	08/11/09 05:25		
250	LHKEWF	D9H050209-4	9220042	MD	1.0	08/11/09 05:28		
251	CCV				1.0	08/11/09 05:30		
252	CCB				1.0	08/11/09 05:33		
253	RLCV				1.0	08/11/09 05:36		
254	LHT4NB	D9H080000	9220047	MS	1.0	08/11/09 05:39		
255	LHT4NC	D9H080000	9220047	MS	1.0	08/11/09 05:42		
256	LHJ08	D9H050209-3	9220047	MS	1.0	08/11/09 05:44		
257	LHKE1	D9H050209-5	9220047	MS	1.0	08/11/09 05:47		
258	LHKE1P5	D9H050209	9220047		5.0	08/11/09 05:50		
259	LHKE1Z	D9H050209-5	9220047		1.0	08/11/09 05:53		
260	LHKE1S	D9H050209-5	9220047	MS	1.0	08/11/09 05:55		
261	LHKE1D	D9H050209-5	9220047	MS	1.0	08/11/09 05:58		
262	CCV				1.0	08/11/09 06:01		
263	CCB				1.0	08/11/09 06:04		
264	RLCV				1.0	08/11/09 06:06		
265	LHT9RB	D9H080000	9220064	04	1.0	08/11/09 06:09		
266	LHT9RC	D9H080000	9220064	04	1.0	08/11/09 06:12		
267	LHJGD	D9H050137-5	9220064	04	1.0	08/11/09 06:15		
268	LHJGDP5	D9H050137	9220064		5.0	08/11/09 06:18		
269	LHJGDZ	D9H050137-5	9220064		1.0	08/11/09 06:20		
270	LHJGDS	D9H050137-5	9220064	04	1.0	08/11/09 06:23		
271	LHJGDD	D9H050137-5	9220064	04	1.0	08/11/09 06:26		
272	LHR5A	D9H070252-1	9220064	04	1.0	08/11/09 06:29		
273	CCV				1.0	08/11/09 06:31		
274	CCB				1.0	08/11/09 06:34		
275	RLCV				1.0	08/11/09 06:37		
276	~~LHT0GB~~	~~D9H080000~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:40~~		
277	LHT0GC	D9H080000	9220033	MS	1.0	08/11/09 06:43		
278	~~LHMHR~~	~~D9H060214-1~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:45~~	KT 8/11/09 Did not use R.	

Denver

RUN SUMMARY

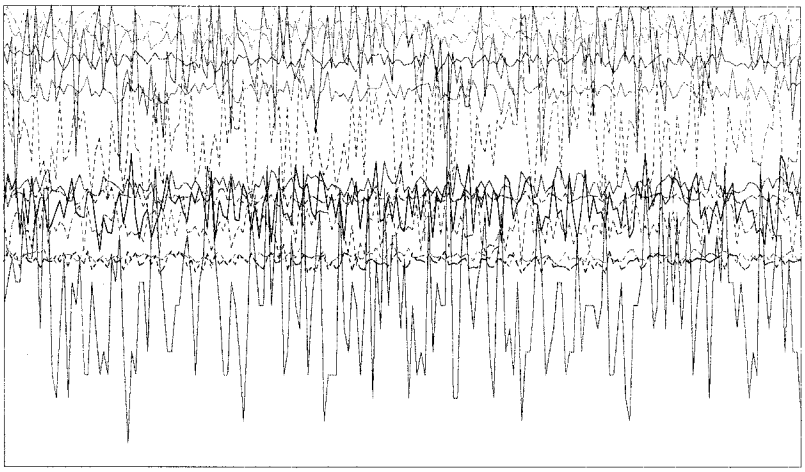
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
279	~~LHMLH~~	~~D9H060214-2~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:48~~		☐
280	LHMN6	D9H060214-3	9220033	MS	1.0	08/11/09 06:51		☐
281	LHTDQ	D9H070289-1	9220033	MS	1.0	08/11/09 06:54		☐
282	LHTDW	D9H070289-2	9220033	MS	1.0	08/11/09 06:57		☐
283	CCV				1.0	08/11/09 06:59		☐
284	CCB				1.0	08/11/09 07:02		☐
285	RLCV				1.0	08/11/09 07:05		☐
286	LHTD0	D9H070289-3	9220033	MS	1.0	08/11/09 07:08		☐
287	LHTD0P5	D9H070289	9220033		5.0	08/11/09 07:10		☐
288	LHTD0Z	D9H070289-3	9220033		1.0	08/11/09 07:13		☐
289	LHTD0S	D9H070289-3	9220033	MS	1.0	08/11/09 07:16		☐
290	LHTD0D	D9H070289-3	9220033	MS	1.0	08/11/09 07:19		☐
291	LHTD1	D9H070289-4	9220033	MS	1.0	08/11/09 07:22		☐
292	CCV				1.0	08/11/09 07:24		☐
293	CCB				1.0	08/11/09 07:27		☐
294	~~RLCV~~				~~1.0~~	~~08/11/09 07:30~~	KF 8/11/09 Did not use.	☐

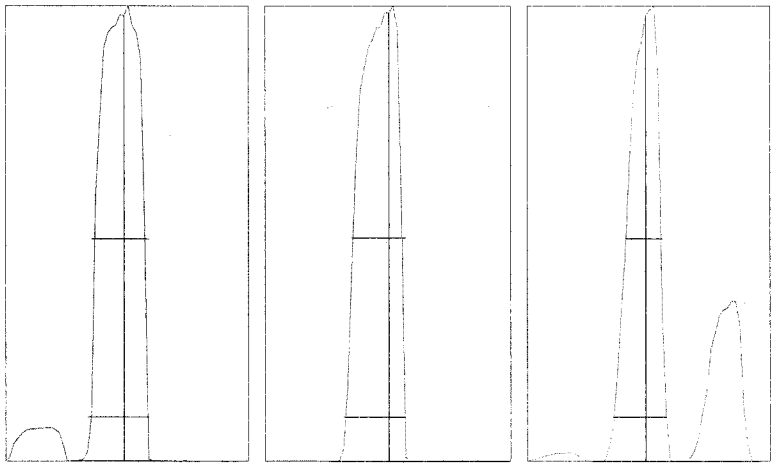
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 1.280%
Doubly Charged: 70/140 1.306%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1277.0	1212.6	3.29	2.10
7	20,000	16661.0	16295.0	2.25	1.60
59	20,000	18792.0	18605.1	2.34	0.90
63	100	91.0	90.0	11.00	1.10
70	500	302.0	283.2	7.74	1.50
75	20	2.0	7.2	40.14	1.20
78	500	273.0	260.8	6.33	1.50
89	50,000	22278.0	22756.3	1.97	2.30
115	20,000	19390.0	19268.7	1.88	2.60
118	100	77.0	72.2	12.54	2.60
137	5,000	2253.0	2223.9	2.70	2.80
205	20,000	11452.0	11648.2	1.84	3.60
238	20,000	17180.0	17622.9	1.55	4.60
156/140	2	1.240%	1.301%	7.97	
70/140	2	1.528%	1.441%	7.98	



m/z:	7	89	205
Height:	16,281	23,001	11,900
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.65	0.45
W-10%:	0.7500	0.7500	0.6500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===				===Ion Lenses===				===Q-Pole Parameters===			
RF Power	:	1550	W	Extract 1	:	0	V	AMU Gain	:	133	
RF Matching	:	1.7	V	Extract 2	:	-175	V	AMU Offset	:	123	
Smpl Depth	:	7.5	mm	Omega Bias-ce	:	-34	V	Axis Gain	:	1.0006	
Torch-H	:	-0.8	mm	Omega Lens-ce	:	1	V	Axis Offset	:	-0.03	
Torch-V	:	-0.3	mm	Cell Entrance	:	-30	V	QP Bias	:	-1	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	:	1720	V
Sample Pump	:	---	rps	OctP RF	:	180	V	Pulse HV	:	1390	V
S/C Temp	:	2	degC	OctP Bias	:	-18	V				

===Reaction Cell===

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

P/A Factor Tuning Report

Acquired:Aug 10 2009 05:25 pm

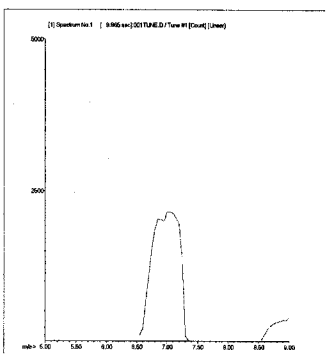
Mass[amu]	Element	P/A Factor
6	Li	0.059224
7	(Li)	Sensitivity too low
9	Be	0.065939
45	Sc	0.077958
51	V	0.079670
52	Cr	0.081495
53	(Cr)	Sensitivity too low
55	Mn	0.082881
59	Co	0.084650
60	Ni	0.085888
63	Cu	0.087500
66	Zn	0.087183
72	Ge	0.086826
75	As	0.086085
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.087962
98	(Mo)	0.087439
99	(Mo)	0.088211
106	(Cd)	0.090424
107	Ag	Sensitivity too low
108	(Cd)	0.090963
111	Cd	0.090902
114	Cd	0.090659
115	In	0.089830
118	Sn	0.090118
121	Sb	0.090217
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.095902
206	(Pb)	0.095184
207	(Pb)	0.095217
208	Pb	0.094502
232	Th	0.093768
238	U	0.093910

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

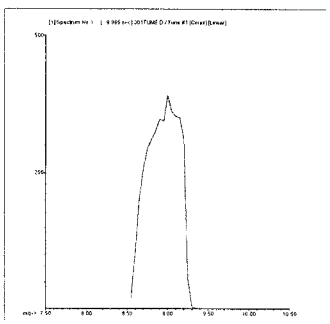
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D
Date Acquired: Aug 10 2009 06:01 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	23394	23373	23283	23262	23454	23596	0.58	5.00	
9 Be	4040	4033	4013	4046	4048	4060	0.44	5.00	
24 Mg	27733	27886	27740	27593	28101	27346	1.03	5.00	
59 Co	126100	128137	127946	123341	126160	124916	1.61	5.00	
115 In	1508105	1512323	1511531	1497483	1509610	1509575	0.40	5.00	
208 Pb	69191	70426	69382	67952	68926	69270	1.29	5.00	
238 U	126765	128734	126188	125493	127220	126189	1.00	5.00	

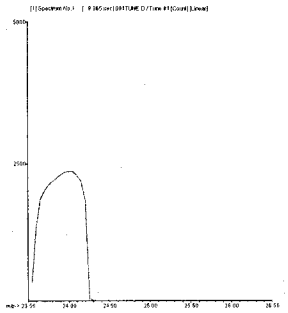


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D



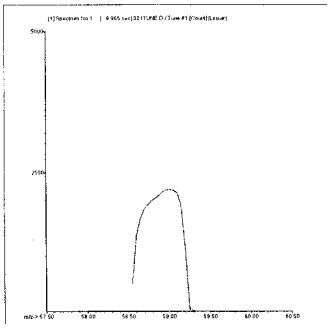
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



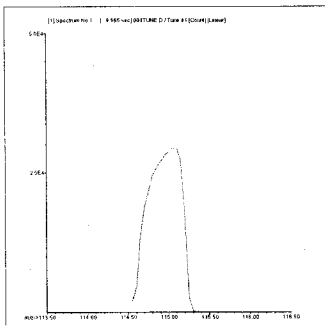
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



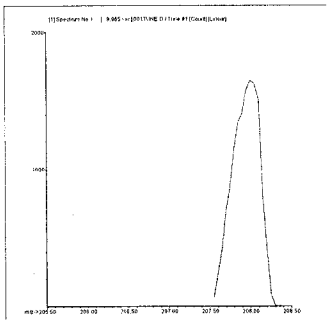
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



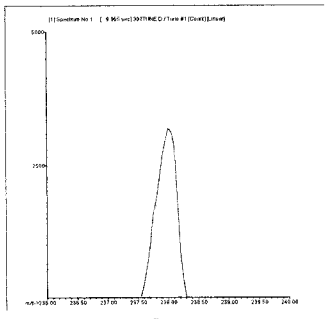
208 Pb

Mass Calib.

Actual: 208.00
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 238.00
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\002CALB.D\002CALB.D#
Date Acquired: Aug 10 2009 06:04 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	354	31.69
52	Cr	72	1	4124	6.07
55	Mn	72	1	670	21.99
59	Co	72	1	70	14.29
60	Ni	72	1	117	21.57
63	Cu	72	1	557	9.22
66	Zn	72	1	2610	2.26
75	As	72	1	71	6.54
78	Se	72	1	770	11.10
95	Mo	72	1	70	37.80
107	Ag	115	1	17	34.64
111	Cd	115	1	30	71.04
118	Sn	115	1	417	12.08
121	Sb	115	1	17	34.64
137	Ba	115	1	41	16.88
205	Tl	165	1	118	27.20
208	Pb	165	1	282	3.80
232	Th	165	1	200	5.00
238	U	165	1	113	5.88

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	392728	0.47
45	Sc	1	2428129	0.41
72	Ge	1	1115573	2.35
115	In	1	2711701	0.96
165	Ho	1	3799176	0.71

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

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#
Date Acquired: Aug 10 2009 06:06 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	1017.20
52	Cr	72	1	3697	2.89
55	Mn	72	1	787	17.81
59	Co	72	1	37	56.77
60	Ni	72	1	467	11.80
63	Cu	72	1	650	9.23
66	Zn	72	1	885	2.73
75	As	72	1	65	15.87
78	Se	72	1	777	16.10
95	Mo	72	1	40	43.30
107	Ag	115	1	3	173.21
111	Cd	115	1	23	56.18
118	Sn	115	1	1010	5.24
121	Sb	115	1	28	48.50
137	Ba	115	1	14	70.50
205	Tl	165	1	81	10.34
208	Pb	165	1	252	5.34
232	Th	165	1	177	8.65
238	U	165	1	26	7.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	394687	0.94
45	Sc	1	2446753	1.77
72	Ge	1	1125847	1.05
115	In	1	2719186	2.09
165	Ho	1	3817349	0.25

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\AG081009A.B\004ICAL.D\004ICAL.D#
Date Acquired: Aug 10 2009 06:09 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: Aug 10 2009 06:07 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	65842	1.17
51	V	72	1	1535619	1.04
52	Cr	72	1	1532297	0.65
55	Mn	72	1	1633772	1.58
59	Co	72	1	1921710	0.85
60	Ni	72	1	447209	0.74
63	Cu	72	1	1073527	1.19
66	Zn	72	1	208832	1.11
75	As	72	1	179835	0.69
78	Se	72	1	30180	2.46
95	Mo	72	1	467956	0.64
107	Ag	115	1	1296538	0.46
111	Cd	115	1	242181	1.30
118	Sn	115	1	666189	0.27
121	Sb	115	1	760929	0.70
137	Ba	115	1	315160	1.02
205	Tl	165	1	1960793	0.44
208	Pb	165	1	2698115	0.18
232	Th	165	1	2387349	2.74
238	U	165	1	2722294	0.55

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	387659	0.67	394687	98.2	30 - 120	
45	Sc	1	2412509	0.93	2446753	98.6	30 - 120	
72	Ge	1	1107652	0.44	1125847	98.4	30 - 120	
115	In	1	2709456	1.18	2719186	99.6	30 - 120	
165	Ho	1	3829303	0.52	3817349	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\AG081009A.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\AG081009A.B\005 ICV.D\005 ICV.D#
Date Acquired: Aug 10 2009 06:12 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: Aug 10 2009 06:10 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	40.48	ppb	1.00	40	101.2	90 - 110	
51 V	72	1	39.31	ppb	0.98	40	98.3	90 - 110	
52 Cr	72	1	39.86	ppb	0.82	40	99.7	90 - 110	
55 Mn	72	1	39.36	ppb	0.49	40	98.4	90 - 110	
59 Co	72	1	39.81	ppb	1.21	40	99.5	90 - 110	
60 Ni	72	1	40.33	ppb	1.20	40	100.8	90 - 110	
63 Cu	72	1	39.84	ppb	0.87	40	99.6	90 - 110	
66 Zn	72	1	40.26	ppb	0.39	40	100.7	90 - 110	
75 As	72	1	39.99	ppb	0.13	40	100.0	90 - 110	
78 Se	72	1	41.87	ppb	3.08	40	104.7	90 - 110	
95 Mo	72	1	39.49	ppb	0.68	40	98.7	90 - 110	
107 Ag	115	1	39.86	ppb	0.43	40	99.7	90 - 110	
111 Cd	115	1	40.83	ppb	1.84	40	102.1	90 - 110	
118 Sn	115	1	39.26	ppb	1.02	40	98.2	90 - 110	
121 Sb	115	1	39.12	ppb	1.36	40	97.8	90 - 110	
137 Ba	115	1	40.11	ppb	0.69	40	100.3	90 - 110	
205 Tl	165	1	40.87	ppb	1.42	40	102.2	90 - 110	
208 Pb	165	1	40.72	ppb	1.25	40	101.8	90 - 110	
232 Th	165	1	44.35	ppb	1.41	40	110.9	90 - 110	Fail
238 U	165	1	40.53	ppb	0.56	40	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	386356	0.92	394687	97.9	30 - 120	
45 Sc	1	2392521	0.40	2446753	97.8	30 - 120	
72 Ge	1	1110457	0.44	1125847	98.6	30 - 120	
115 In	1	2702975	0.93	2719186	99.4	30 - 120	
165 Ho	1	3868261	0.70	3817349	101.3	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\AG081009A.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\AG081009A.B\006WASH.D\006WASH.D#
Date Acquired: Aug 10 2009 06:15 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: Aug 10 2009 06:10 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	0.962 ppb	11.83	1.30	
51 V	72	1	5.098 ppb	0.72	6.50	
52 Cr	72	1	2.153 ppb	0.77	2.60	
55 Mn	72	1	1.013 ppb	1.93	1.30	
59 Co	72	1	1.046 ppb	1.77	1.30	
60 Ni	72	1	2.036 ppb	1.65	2.60	
63 Cu	72	1	2.079 ppb	2.63	2.60	
66 Zn	72	1	10.260 ppb	0.96	13.00	
75 As	72	1	5.112 ppb	0.38	6.50	
78 Se	72	1	4.868 ppb	3.66	6.50	
95 Mo	72	1	2.199 ppb	4.71	2.60	
107 Ag	115	1	5.190 ppb	1.63	6.50	
111 Cd	115	1	1.068 ppb	0.77	1.30	
118 Sn	115	1	10.230 ppb	1.10	13.00	
121 Sb	115	1	2.192 ppb	0.80	2.60	
137 Ba	115	1	1.075 ppb	3.75	1.30	
205 Tl	165	1	1.158 ppb	2.36	1.30	
208 Pb	165	1	1.072 ppb	0.99	1.30	
232 Th	165	1	3.344 ppb	3.13	2.60	
238 U	165	1	1.105 ppb	2.11	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	389518	0.53	394687	98.7	30 - 120	
45 Sc	1	2376989	0.76	2446753	97.1	30 - 120	
72 Ge	1	1099932	0.58	1125847	97.7	30 - 120	
115 In	1	2703766	0.89	2719186	99.4	30 - 120	
165 Ho	1	3816929	0.48	3817349	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\AG081009A.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\AG081009A.B\007 ICB.D\007 ICB.D#
Date Acquired: Aug 10 2009 06:17 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: Aug 10 2009 06:10 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.01	ppb	173.20	1.00	
51 V	72	1	-0.02	ppb	72.65	1.00	
52 Cr	72	1	-0.01	ppb	390.62	1.00	
55 Mn	72	1	0.00	ppb	32.99	1.00	
59 Co	72	1	0.00	ppb	37.13	1.00	
60 Ni	72	1	-0.06	ppb	2.11	1.00	
63 Cu	72	1	0.01	ppb	55.65	1.00	
66 Zn	72	1	-0.22	ppb	10.19	1.00	
75 As	72	1	0.00	ppb	277.73	1.00	
78 Se	72	1	0.20	ppb	31.96	1.00	
95 Mo	72	1	0.02	ppb	49.17	1.00	
107 Ag	115	1	0.01	ppb	24.84	1.00	
111 Cd	115	1	-0.01	ppb	156.27	1.00	
118 Sn	115	1	-0.04	ppb	6.62	1.00	
121 Sb	115	1	0.07	ppb	2.93	1.00	
137 Ba	115	1	0.00	ppb	145.27	1.00	
205 Tl	165	1	0.03	ppb	8.41	1.00	
208 Pb	165	1	0.00	ppb	703.02	1.00	
232 Th	165	1	0.28	ppb	10.49	1.00	
238 U	165	1	0.00	ppb	52.16	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382040	1.21	394687	96.8	30 - 120	
45 Sc	1	2367707	0.91	2446753	96.8	30 - 120	
72 Ge	1	1105088	0.25	1125847	98.2	30 - 120	
115 In	1	2665218	1.25	2719186	98.0	30 - 120	
165 Ho	1	3811931	1.62	3817349	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\AG081009A.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\AG081009A.B\008RLST.D\008RLST.D#
Date Acquired: Aug 10 2009 06:20 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: Aug 10 2009 06:10 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1.00	ppb	5.38	1	100.4	50 - 150	
51 V	72	1	0.95	ppb	4.78	1	95.5	50 - 150	
52 Cr	72	1	1.03	ppb	4.50	1	103.1	50 - 150	
55 Mn	72	1	0.99	ppb	2.06	1	99.4	50 - 150	
59 Co	72	1	1.02	ppb	1.61	1	102.4	50 - 150	
60 Ni	72	1	0.92	ppb	5.43	1	92.3	50 - 150	
63 Cu	72	1	1.06	ppb	1.60	1	106.0	50 - 150	
66 Zn	72	1	10.99	ppb	2.05	10	109.9	50 - 150	
75 As	72	1	1.02	ppb	3.26	1	102.0	50 - 150	
78 Se	72	1	1.30	ppb	8.14	1	129.8	50 - 150	
95 Mo	72	1	1.03	ppb	3.66	1	102.8	50 - 150	
107 Ag	115	1	1.04	ppb	2.89	1	103.6	50 - 150	
111 Cd	115	1	1.00	ppb	3.57	1	99.8	50 - 150	
118 Sn	115	1	10.84	ppb	1.34	10	108.4	50 - 150	
121 Sb	115	1	1.08	ppb	1.30	1	107.6	50 - 150	
137 Ba	115	1	1.08	ppb	3.66	1	107.6	50 - 150	
205 Tl	165	1	1.08	ppb	3.38	1	107.8	50 - 150	
208 Pb	165	1	1.04	ppb	0.90	1	104.2	50 - 150	
232 Th	165	1	1.14	ppb	2.04	1	113.7	50 - 150	
238 U	165	1	1.07	ppb	1.31	1	107.4	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381160	1.69	394687	96.6	30 - 120	
45 Sc	1	2348126	1.16	2446753	96.0	30 - 120	
72 Ge	1	1102409	1.34	1125847	97.9	30 - 120	
115 In	1	2670308	0.31	2719186	98.2	30 - 120	
165 Ho	1	3800403	0.92	3817349	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\AG081009A.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\AG081009A.B\009AFCE.D\009AFCE.D#
Date Acquired: Aug 10 2009 06:23 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: Aug 10 2009 06:10 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	0.21 ppb	37.49	0	104.1	80 - 120	
51 V	72	1	0.18 ppb	11.11	0	93.6	80 - 120	
52 Cr	72	1	0.20 ppb	4.41	0	95.1	80 - 120	
55 Mn	72	1	0.18 ppb	9.10	0	92.5	80 - 120	
59 Co	72	1	0.20 ppb	7.26	0	99.2	80 - 120	
60 Ni	72	1	0.12 ppb	37.55	0	65.1	80 - 120	
63 Cu	72	1	0.21 ppb	5.84	0	97.8	80 - 120	
66 Zn	72	1	2.00 ppb	2.60	2	90.9	80 - 120	
75 As	72	1	0.21 ppb	3.29	0	102.2	80 - 120	
78 Se	72	1	0.57 ppb	37.21	0	218.1	80 - 120	
95 Mo	72	1	0.23 ppb	17.06	0	112.2	80 - 120	
107 Ag	115	1	0.19 ppb	8.42	0	91.3	80 - 120	
111 Cd	115	1	0.18 ppb	11.73	0	92.5	80 - 120	
118 Sn	115	1	2.13 ppb	0.61	2	98.2	80 - 120	
121 Sb	115	1	0.22 ppb	3.38	0	102.6	80 - 120	
137 Ba	115	1	0.20 ppb	2.70	0	94.9	80 - 120	
205 Tl	165	1	0.23 ppb	1.38	0	107.1	80 - 120	
208 Pb	165	1	0.21 ppb	2.17	0	102.0	80 - 120	
232 Th	165	1	0.27 ppb	6.02	0	120.0	80 - 120	
238 U	165	1	0.21 ppb	3.48	0	97.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384831	0.38	394687	97.5	30 - 120	
45 Sc	1	2381074	1.35	2446753	97.3	30 - 120	
72 Ge	1	1108278	1.30	1125847	98.4	30 - 120	
115 In	1	2695785	0.35	2719186	99.1	30 - 120	
165 Ho	1	3782218	0.41	3817349	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\AG081009A.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\AG081009A.B\010SMPL.D\010SMPL.D#
Date Acquired: Aug 10 2009 06:26 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-0.01	-0.01	ppb	153.00	3600	
52 Cr	72	1	0.00	0.00	ppb	726.14	3600	
55 Mn	72	1	-0.01	-0.01	ppb	114.24	3600	
59 Co	72	1	0.00	0.00	ppb	103.96	3600	
60 Ni	72	1	-0.03	-0.03	ppb	15.09	3600	
63 Cu	72	1	0.00	0.00	ppb	118.88	3600	
66 Zn	72	1	-0.11	-0.11	ppb	3.22	3600	
75 As	72	1	0.01	0.01	ppb	74.91	3600	
78 Se	72	1	2.14	2.14	ppb	18.71	3600	
95 Mo	72	1	0.01	0.01	ppb	88.11	3600	
107 Ag	115	1	0.00	0.00	ppb	18.18	3600	
111 Cd	115	1	0.00	0.00	ppb	245.41	3600	
118 Sn	115	1	-0.05	-0.05	ppb	21.00	3600	
121 Sb	115	1	0.02	0.02	ppb	14.62	3600	
137 Ba	115	1	0.00	0.00	ppb	77.19	3600	
205 Tl	165	1	0.02	0.02	ppb	18.17	3600	
208 Pb	165	1	0.00	0.00	ppb	132.48	3600	
232 Th	165	1	0.05	0.05	ppb	10.43	1000	
238 U	165	1	0.00	0.00	ppb	1446.10	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384420	0.66	394687	97.4	30 - 120	
45 Sc	1	2363773	0.07	2446753	96.6	30 - 120	
72 Ge	1	1095031	0.87	1125847	97.3	30 - 120	
115 In	1	2709116	0.72	2719186	99.6	30 - 120	
165 Ho	1	3806731	0.23	3817349	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\AG081009A.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\AG081009A.B\011ICSA.D\011ICSA.D#
Date Acquired: Aug 10 2009 06:28 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: Aug 10 2009 06:10 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.01 ppb	173.20	1.00	
51 V	72	1	-0.28 ppb	16.13	1.00	
52 Cr	72	1	0.68 ppb	7.15	1.00	
55 Mn	72	1	3.37 ppb	3.01	1.00	
59 Co	72	1	1.52 ppb	1.80	1.00	
60 Ni	72	1	1.33 ppb	7.03	1.00	
63 Cu	72	1	1.39 ppb	1.64	1.00	
66 Zn	72	1	2.60 ppb	3.64	10.00	
75 As	72	1	0.41 ppb	4.62	1.00	
78 Se	72	1	0.04 ppb	875.93	1.00	
95 Mo	72	1	2011.00 ppb	2.30	2000.00	
107 Ag	115	1	0.04 ppb	6.23	1.00	
111 Cd	115	1	0.24 ppb	38.98	1.00	
118 Sn	115	1	0.01 ppb	102.51	10.00	
121 Sb	115	1	0.27 ppb	5.72	1.00	
137 Ba	115	1	0.07 ppb	17.98	1.00	
205 Tl	165	1	0.04 ppb	40.80	1.00	
208 Pb	165	1	0.14 ppb	3.56	1.00	
232 Th	165	1	0.10 ppb	13.38	1.00	
238 U	165	1	0.00 ppb	19.44	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	339249	1.40	394687	86.0	30 - 120	
45 Sc	1	2070580	0.61	2446753	84.6	30 - 120	
72 Ge	1	927464	2.03	1125847	82.4	30 - 120	
115 In	1	2246349	1.22	2719186	82.6	30 - 120	
165 Ho	1	3443563	1.20	3817349	90.2	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\AG081009A.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\AG081009A.B\012ICSB.D\012ICSB.D#
Date Acquired: Aug 10 2009 06:31 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: Aug 10 2009 06:10 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	100.10	1.69	100	100.1	80 - 120	
51 V	72		1	99.46	1.23	100	99.5	80 - 120	
52 Cr	72		1	97.53	1.45	100	97.5	80 - 120	
55 Mn	72		1	98.48	0.44	100	98.5	80 - 120	
59 Co	72		1	96.28	1.69	100	96.3	80 - 120	
60 Ni	72		1	90.67	1.41	100	90.7	80 - 120	
63 Cu	72		1	88.16	1.53	100	88.2	80 - 120	
66 Zn	72		1	97.40	1.57	100	97.4	80 - 120	
75 As	72		1	100.70	1.43	100	100.7	80 - 120	
78 Se	72		1	104.50	2.15	100	104.5	80 - 120	
95 Mo	72		1	2111.00	0.32	2100	100.5	80 - 120	
107 Ag	115		1	89.84	3.58	100	89.8	80 - 120	
111 Cd	115		1	97.00	1.54	100	97.0	80 - 120	
118 Sn	115		1	102.10	1.27	100	102.1	80 - 120	
121 Sb	115		1	105.00	1.34	100	105.0	80 - 120	
137 Ba	115		1	104.10	0.70	100	104.1	80 - 120	
205 Tl	165		1	95.41	2.04	100	95.4	80 - 120	
208 Pb	165		1	93.29	0.93	100	93.3	80 - 120	
232 Th	165		1	107.70	1.56	100	107.7	80 - 120	
238 U	165		1	100.40	1.15	100	100.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	337656	1.15	394687	85.6	30 - 120	
45 Sc	1	2028207	1.22	2446753	82.9	30 - 120	
72 Ge	1	942107	0.47	1125847	83.7	30 - 120	
115 In	1	2256634	0.18	2719186	83.0	30 - 120	
165 Ho	1	3514456	0.98	3817349	92.1	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\AG081009A.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\AG081009A.B\013SMPL.D\013SMPL.D#
Date Acquired: Aug 10 2009 06:34 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	1356.30	3600	
52 Cr	72	1	0.02	0.02	ppb	126.42	3600	
55 Mn	72	1	0.00	0.00	ppb	97.83	3600	
59 Co	72	1	0.01	0.01	ppb	17.25	3600	
60 Ni	72	1	-0.06	-0.06	ppb	24.77	3600	
63 Cu	72	1	0.00	0.00	ppb	68.55	3600	
66 Zn	72	1	0.82	0.82	ppb	5.26	3600	
75 As	72	1	0.01	0.01	ppb	65.52	3600	
78 Se	72	1	0.35	0.35	ppb	98.25	3600	
95 Mo	72	1	1.75	1.75	ppb	4.87	3600	
107 Ag	115	1	0.02	0.02	ppb	59.60	3600	
111 Cd	115	1	0.00	0.00	ppb	178.39	3600	
118 Sn	115	1	-0.02	-0.02	ppb	44.11	3600	
121 Sb	115	1	0.04	0.04	ppb	18.60	3600	
137 Ba	115	1	0.01	0.01	ppb	49.69	3600	
205 Tl	165	1	0.01	0.01	ppb	15.49	3600	
208 Pb	165	1	0.01	0.01	ppb	21.27	3600	
232 Th	165	1	0.96	0.96	ppb	17.84	1000	
238 U	165	1	0.02	0.02	ppb	8.06	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	417953	1.05	394687	105.9	30 - 120	
45 Sc	1	2370217	1.00	2446753	96.9	30 - 120	
72 Ge	1	1125021	0.71	1125847	99.9	30 - 120	
115 In	1	2769043	1.00	2719186	101.8	30 - 120	
165 Ho	1	3993502	0.73	3817349	104.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#

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

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\014 LR.D\014 LR.D#
Date Acquired: Aug 10 2009 06:36 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1004.00 ppb	0.66	1000	100.4	90 - 110	
51 V	72	1	923.60 ppb	1.56	1000	92.4	90 - 110	
52 Cr	72	1	957.30 ppb	0.88	1000	95.7	90 - 110	
55 Mn	72	1	944.20 ppb	0.62	1000	94.4	90 - 110	
59 Co	72	1	962.70 ppb	1.17	1000	96.3	90 - 110	
60 Ni	72	1	978.20 ppb	1.60	1000	97.8	90 - 110	
63 Cu	72	1	945.60 ppb	1.33	1000	94.6	90 - 110	
66 Zn	72	1	1015.00 ppb	2.51	1000	101.5	90 - 110	
75 As	72	1	1015.00 ppb	0.37	1000	101.5	90 - 110	
78 Se	72	1	1044.00 ppb	1.38	1000	104.4	90 - 110	
95 Mo	72	1	984.90 ppb	1.46	1000	98.5	90 - 110	
107 Ag	115	1	952.90 ppb	1.27	1000	95.3	90 - 110	
111 Cd	115	1	989.60 ppb	0.87	1000	99.0	90 - 110	
118 Sn	115	1	964.00 ppb	0.79	1000	96.4	90 - 110	
121 Sb	115	1	971.00 ppb	0.56	1000	97.1	90 - 110	
137 Ba	115	1	991.30 ppb	1.54	1000	99.1	90 - 110	
205 Tl	165	1	963.90 ppb	1.23	1000	96.4	90 - 110	
208 Pb	165	1	945.40 ppb	1.22	1000	94.5	90 - 110	
232 Th	165	1	1050.00 ppb	0.83	1000	105.0	90 - 110	
238 U	165	1	967.10 ppb	0.90	1000	96.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	396227	0.55	394687	100.4	30 - 120	
45 Sc	1	2360026	1.45	2446753	96.5	30 - 120	
72 Ge	1	1098700	1.12	1125847	97.6	30 - 120	
115 In	1	2734512	0.49	2719186	100.6	30 - 120	
165 Ho	1	3971158	0.63	3817349	104.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\015SMPL.D\015SMPL.D#
Date Acquired: Aug 10 2009 06:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 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	11.29	3600	
51 V	72	1	0.07	0.07	ppb	49.92	3600	
52 Cr	72	1	0.08	0.08	ppb	3.05	3600	
55 Mn	72	1	0.07	0.07	ppb	11.75	3600	
59 Co	72	1	0.08	0.08	ppb	22.22	3600	
60 Ni	72	1	-0.01	-0.01	ppb	189.04	3600	
63 Cu	72	1	0.07	0.07	ppb	14.57	3600	
66 Zn	72	1	0.90	0.90	ppb	4.20	3600	
75 As	72	1	0.12	0.12	ppb	13.74	3600	
78 Se	72	1	0.56	0.56	ppb	13.28	3600	
95 Mo	72	1	0.99	0.99	ppb	7.52	3600	
107 Ag	115	1	0.11	0.11	ppb	9.78	3600	
111 Cd	115	1	0.09	0.09	ppb	18.21	3600	
118 Sn	115	1	1.04	1.04	ppb	13.89	3600	
121 Sb	115	1	0.46	0.46	ppb	3.67	3600	
137 Ba	115	1	0.07	0.07	ppb	29.33	3600	
205 Tl	165	1	0.24	0.24	ppb	12.29	3600	
208 Pb	165	1	0.09	0.09	ppb	17.25	3600	
232 Th	165	1	6.26	6.26	ppb	20.02	1000	
238 U	165	1	0.15	0.15	ppb	1.91	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406521	1.45	394687	103.0	30 - 120	
45 Sc	1	2437916	0.81	2446753	99.6	30 - 120	
72 Ge	1	1134540	0.61	1125847	100.8	30 - 120	
115 In	1	2782594	0.81	2719186	102.3	30 - 120	
165 Ho	1	3984640	0.83	3817349	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\016 CCV.D\016 CCV.D#
Date Acquired: Aug 10 2009 06:42 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: Aug 10 2009 06:10 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.23	ppb	1.97	50	98.5	90 - 110	
51 V	72	1	48.18	ppb	3.03	50	96.4	90 - 110	
52 Cr	72	1	49.10	ppb	2.47	50	98.2	90 - 110	
55 Mn	72	1	48.34	ppb	2.30	50	96.7	90 - 110	
59 Co	72	1	50.75	ppb	1.62	50	101.5	90 - 110	
60 Ni	72	1	49.33	ppb	1.83	50	98.7	90 - 110	
63 Cu	72	1	48.69	ppb	2.92	50	97.4	90 - 110	
66 Zn	72	1	52.56	ppb	1.77	50	105.1	90 - 110	
75 As	72	1	49.20	ppb	2.24	50	98.4	90 - 110	
78 Se	72	1	48.36	ppb	4.30	50	96.7	90 - 110	
95 Mo	72	1	50.11	ppb	1.65	50	100.2	90 - 110	
107 Ag	115	1	49.41	ppb	0.58	50	98.8	90 - 110	
111 Cd	115	1	49.05	ppb	0.87	50	98.1	90 - 110	
118 Sn	115	1	50.05	ppb	1.70	50	100.1	90 - 110	
121 Sb	115	1	49.82	ppb	1.05	50	99.6	90 - 110	
137 Ba	115	1	49.79	ppb	0.54	50	99.6	90 - 110	
205 Tl	165	1	50.63	ppb	1.41	50	101.3	90 - 110	
208 Pb	165	1	50.26	ppb	0.23	50	100.5	90 - 110	
232 Th	165	1	52.23	ppb	3.29	50	104.5	90 - 110	
238 U	165	1	50.28	ppb	1.54	50	100.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	398790	1.16	394687	101.0	30 - 120	
45 Sc	1	2428065	0.52	2446753	99.2	30 - 120	
72 Ge	1	1132154	1.68	1125847	100.6	30 - 120	
115 In	1	2783451	0.38	2719186	102.4	30 - 120	
165 Ho	1	3944703	1.21	3817349	103.3	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\AG081009A.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\AG081009A.B\017 CCB.D\017 CCB.D#
Date Acquired: Aug 10 2009 06:45 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: Aug 10 2009 06:10 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	0.029	ppb	50.02	1.00	
51 V	72	1	0.019	ppb	104.60	1.00	
52 Cr	72	1	0.033	ppb	99.12	1.00	
55 Mn	72	1	0.000	ppb	2663.10	1.00	
59 Co	72	1	0.016	ppb	6.13	1.00	
60 Ni	72	1	-0.070	ppb	15.94	1.00	
63 Cu	72	1	0.009	ppb	119.60	1.00	
66 Zn	72	1	-0.124	ppb	10.27	1.00	
75 As	72	1	0.017	ppb	49.87	1.00	
78 Se	72	1	0.100	ppb	304.64	1.00	
95 Mo	72	1	0.179	ppb	6.53	1.00	
107 Ag	115	1	0.018	ppb	20.56	1.00	
111 Cd	115	1	0.001	ppb	1567.90	1.00	
118 Sn	115	1	0.177	ppb	26.58	1.00	
121 Sb	115	1	0.101	ppb	8.06	1.00	
137 Ba	115	1	0.018	ppb	26.37	1.00	
205 Tl	165	1	0.073	ppb	5.05	1.00	
208 Pb	165	1	0.011	ppb	12.50	1.00	
232 Th	165	1	1.499	ppb	14.31	1.00	Fail
238 U	165	1	0.023	ppb	2.40	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406279	0.13	394687	102.9	30 - 120	
45 Sc	1	2409755	0.92	2446753	98.5	30 - 120	
72 Ge	1	1118502	1.15	1125847	99.3	30 - 120	
115 In	1	2746559	0.29	2719186	101.0	30 - 120	
165 Ho	1	3925108	0.26	3817349	102.8	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\AG081009A.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\AG081009A.B\018WASH.D\018WASH.D#
Date Acquired: Aug 10 2009 06:47 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 06:10 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.105 ppb	6.50	1.30	
51 V	72	1	5.087 ppb	3.62	6.50	
52 Cr	72	1	2.163 ppb	2.98	2.60	
55 Mn	72	1	1.000 ppb	2.91	1.30	
59 Co	72	1	1.065 ppb	2.44	1.30	
60 Ni	72	1	2.023 ppb	1.63	2.60	
63 Cu	72	1	2.091 ppb	1.36	2.60	
66 Zn	72	1	10.460 ppb	2.37	13.00	
75 As	72	1	5.273 ppb	1.62	6.50	
78 Se	72	1	5.734 ppb	6.76	6.50	
95 Mo	72	1	2.210 ppb	2.32	2.60	
107 Ag	115	1	5.205 ppb	1.43	6.50	
111 Cd	115	1	1.050 ppb	4.55	1.30	
118 Sn	115	1	10.450 ppb	1.08	13.00	
121 Sb	115	1	2.010 ppb	2.30	2.60	
137 Ba	115	1	1.109 ppb	3.21	1.30	
205 Tl	165	1	1.150 ppb	1.01	1.30	
208 Pb	165	1	1.076 ppb	0.61	1.30	
232 Th	165	1	2.636 ppb	1.22	2.60	
238 U	165	1	1.112 ppb	1.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	404611	0.96	394687	102.5	30 - 120	
45 Sc	1	2418551	0.39	2446753	98.8	30 - 120	
72 Ge	1	1116189	1.64	1125847	99.1	30 - 120	
115 In	1	2767098	0.92	2719186	101.8	30 - 120	
165 Ho	1	3902436	1.37	3817349	102.2	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\AG081009A.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: 08/10/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#
Date Acquired: Aug 10 2009 09:53 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: Aug 10 2009 09:51 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	359	49.21
52	Cr	72	1	3327	12.19
55	Mn	72	1	673	7.00
59	Co	72	1	63	23.12
60	Ni	72	1	473	1.82
63	Cu	72	1	697	6.65
66	Zn	72	1	5275	0.36
75	As	72	1	61	14.81
78	Se	72	1	797	7.38
95	Mo	72	1	473	9.18
107	Ag	115	1	17	69.77
111	Cd	115	1	-4	468.40
118	Sn	115	1	883	12.90
121	Sb	115	1	41	5.27
137	Ba	115	1	28	7.48
205	Tl	165	1	71	17.08
208	Pb	165	1	277	1.82
232	Th	165	1	177	27.11
238	U	165	1	33	9.30

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	367189	0.76
45	Sc	1	2198650	1.42
72	Ge	1	1047607	1.49
115	In	1	2618639	1.31
165	Ho	1	3698894	0.81

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\AG081009A.B\087ICAL.D\087ICAL.D#
Date Acquired: Aug 10 2009 09:56 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: Aug 10 2009 09:54 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57454	2.68
51	V	72	1	1384602	1.93
52	Cr	72	1	1372006	0.28
55	Mn	72	1	1464416	1.26
59	Co	72	1	1764191	0.16
60	Ni	72	1	409818	1.72
63	Cu	72	1	979076	1.00
66	Zn	72	1	190440	1.50
75	As	72	1	169475	1.58
78	Se	72	1	28790	1.31
95	Mo	72	1	438801	1.48
107	Ag	115	1	1212795	1.22
111	Cd	115	1	227416	1.07
118	Sn	115	1	638283	0.63
121	Sb	115	1	733198	0.80
137	Ba	115	1	310900	0.47
205	Tl	165	1	1935696	0.85
208	Pb	165	1	2637712	0.66
232	Th	165	1	2426931	3.16
238	U	165	1	2684142	1.00

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357017	0.84	367189	97.2	30 - 120	
45	Sc	1	2175000	2.00	2198650	98.9	30 - 120	
72	Ge	1	1036228	0.96	1047607	98.9	30 - 120	
115	In	1	2589357	0.36	2618639	98.9	30 - 120	
165	Ho	1	3695829	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\088 CCV.D\088 CCV.D#
Date Acquired: Aug 10 2009 09:58 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.65	ppb	0.92	50	99.3	90 - 110	
51 V	72	1	49.06	ppb	0.95	50	98.1	90 - 110	
52 Cr	72	1	49.92	ppb	0.60	50	99.8	90 - 110	
55 Mn	72	1	49.36	ppb	0.14	50	98.7	90 - 110	
59 Co	72	1	50.34	ppb	0.60	50	100.7	90 - 110	
60 Ni	72	1	49.67	ppb	0.42	50	99.3	90 - 110	
63 Cu	72	1	49.63	ppb	0.70	50	99.3	90 - 110	
66 Zn	72	1	52.10	ppb	0.54	50	104.2	90 - 110	
75 As	72	1	49.34	ppb	0.43	50	98.7	90 - 110	
78 Se	72	1	50.04	ppb	4.56	50	100.1	90 - 110	
95 Mo	72	1	49.69	ppb	0.55	50	99.4	90 - 110	
107 Ag	115	1	49.28	ppb	0.25	50	98.6	90 - 110	
111 Cd	115	1	49.24	ppb	0.70	50	98.5	90 - 110	
118 Sn	115	1	49.32	ppb	0.50	50	98.6	90 - 110	
121 Sb	115	1	49.29	ppb	0.48	50	98.6	90 - 110	
137 Ba	115	1	49.29	ppb	0.72	50	98.6	90 - 110	
205 Tl	165	1	49.61	ppb	2.22	50	99.2	90 - 110	
208 Pb	165	1	49.80	ppb	0.99	50	99.6	90 - 110	
232 Th	165	1	51.14	ppb	2.51	50	102.3	90 - 110	
238 U	165	1	50.39	ppb	1.56	50	100.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	351371	1.00	367189	95.7	30 - 120	
45 Sc	1	2164138	0.74	2198650	98.4	30 - 120	
72 Ge	1	1029321	0.36	1047607	98.3	30 - 120	
115 In	1	2597133	0.22	2618639	99.2	30 - 120	
165 Ho	1	3706192	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\089 CCB.D\089 CCB.D#
Date Acquired: Aug 10 2009 10:01 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: Aug 10 2009 09:56 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.009	ppb	338.45	1.00	
52 Cr	72	1	0.012	ppb	59.28	1.00	
55 Mn	72	1	0.022	ppb	43.47	1.00	
59 Co	72	1	0.010	ppb	28.80	1.00	
60 Ni	72	1	-0.073	ppb	8.59	1.00	
63 Cu	72	1	0.010	ppb	144.48	1.00	
66 Zn	72	1	-2.512	ppb	0.84	1.00	
75 As	72	1	0.021	ppb	33.66	1.00	
78 Se	72	1	0.361	ppb	104.40	1.00	
95 Mo	72	1	0.004	ppb	623.22	1.00	
107 Ag	115	1	0.021	ppb	6.66	1.00	
111 Cd	115	1	0.018	ppb	60.33	1.00	
118 Sn	115	1	0.058	ppb	14.07	1.00	
121 Sb	115	1	0.062	ppb	11.03	1.00	
137 Ba	115	1	0.017	ppb	12.47	1.00	
205 Tl	165	1	0.050	ppb	6.12	1.00	
208 Pb	165	1	0.014	ppb	17.03	1.00	
232 Th	165	1	1.175	ppb	19.44	1.00	Fail
238 U	165	1	0.018	ppb	4.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	354938	0.52	367189	96.7	30 - 120	
45 Sc	1	2151415	1.57	2198650	97.9	30 - 120	
72 Ge	1	1014505	0.33	1047607	96.8	30 - 120	
115 In	1	2580961	0.71	2618639	98.6	30 - 120	
165 Ho	1	3627865	0.73	3698894	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\090WASH.D\090WASH.D#
Date Acquired: Aug 10 2009 10:04 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	16.54	1.30	
51 V	72	1	5.138 ppb	2.71	6.50	
52 Cr	72	1	2.154 ppb	2.58	2.60	
55 Mn	72	1	1.034 ppb	3.82	1.30	
59 Co	72	1	1.063 ppb	0.98	1.30	
60 Ni	72	1	2.069 ppb	2.67	2.60	
63 Cu	72	1	2.077 ppb	4.34	2.60	
66 Zn	72	1	8.295 ppb	0.25	13.00	
75 As	72	1	5.196 ppb	0.91	6.50	
78 Se	72	1	5.418 ppb	18.66	6.50	
95 Mo	72	1	2.025 ppb	0.52	2.60	
107 Ag	115	1	5.220 ppb	3.85	6.50	
111 Cd	115	1	1.108 ppb	1.99	1.30	
118 Sn	115	1	10.370 ppb	3.55	13.00	
121 Sb	115	1	1.946 ppb	3.35	2.60	
137 Ba	115	1	1.029 ppb	4.99	1.30	
205 Tl	165	1	1.117 ppb	0.99	1.30	
208 Pb	165	1	1.077 ppb	3.12	1.30	
232 Th	165	1	2.386 ppb	1.30	2.60	
238 U	165	1	1.118 ppb	1.09	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	357020	1.30	367189	97.2	30 - 120	
45 Sc	1	2160440	1.21	2198650	98.3	30 - 120	
72 Ge	1	1029685	0.36	1047607	98.3	30 - 120	
115 In	1	2599204	1.03	2618639	99.3	30 - 120	
165 Ho	1	3673409	1.01	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\091ICSA.D\091ICSA.D#
Date Acquired: Aug 10 2009 10:07 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: Aug 10 2009 09:56 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	0.00 ppb	0.00	1.00	
51 V	72	1	-0.25 ppb	33.72	1.00	
52 Cr	72	1	0.68 ppb	2.34	1.00	
55 Mn	72	1	3.51 ppb	0.92	1.00	
59 Co	72	1	1.54 ppb	4.46	1.00	
60 Ni	72	1	1.54 ppb	3.35	1.00	
63 Cu	72	1	1.42 ppb	2.18	1.00	
66 Zn	72	1	0.44 ppb	30.29	10.00	
75 As	72	1	0.40 ppb	6.23	1.00	
78 Se	72	1	0.69 ppb	56.98	1.00	
95 Mo	72	1	2004.00 ppb	1.89	2000.00	
107 Ag	115	1	0.04 ppb	16.72	1.00	
111 Cd	115	1	0.32 ppb	32.82	1.00	
118 Sn	115	1	0.08 ppb	26.70	10.00	
121 Sb	115	1	0.28 ppb	3.97	1.00	
137 Ba	115	1	0.07 ppb	7.46	1.00	
205 Tl	165	1	0.05 ppb	45.56	1.00	
208 Pb	165	1	0.13 ppb	2.60	1.00	
232 Th	165	1	0.24 ppb	29.64	1.00	
238 U	165	1	0.00 ppb	29.69	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	326427	1.11	367189	88.9	30 - 120	
45 Sc	1	1913508	1.00	2198650	87.0	30 - 120	
72 Ge	1	902523	1.26	1047607	86.2	30 - 120	
115 In	1	2206404	0.65	2618639	84.3	30 - 120	
165 Ho	1	3333118	1.23	3698894	90.1	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\092ICSB.D\092ICSB.D#
Date Acquired: Aug 10 2009 10:09 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: Aug 10 2009 09:56 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	99.06	1.64	100	99.1	80 - 120	
51 V	72	1	104.40	0.92	100	104.4	80 - 120	
52 Cr	72	1	101.90	0.77	100	101.9	80 - 120	
55 Mn	72	1	104.20	0.96	100	104.2	80 - 120	
59 Co	72	1	100.30	0.98	100	100.3	80 - 120	
60 Ni	72	1	95.98	1.20	100	96.0	80 - 120	
63 Cu	72	1	92.71	1.33	100	92.7	80 - 120	
66 Zn	72	1	101.10	1.14	100	101.1	80 - 120	
75 As	72	1	104.70	0.73	100	104.7	80 - 120	
78 Se	72	1	113.30	0.82	100	113.3	80 - 120	
95 Mo	72	1	2162.00	1.87	2100	103.0	80 - 120	
107 Ag	115	1	82.22	3.89	100	82.2	80 - 120	
111 Cd	115	1	96.12	2.03	100	96.1	80 - 120	
118 Sn	115	1	100.50	2.06	100	100.5	80 - 120	
121 Sb	115	1	102.50	1.80	100	102.5	80 - 120	
137 Ba	115	1	102.20	1.70	100	102.2	80 - 120	
205 Tl	165	1	94.99	0.97	100	95.0	80 - 120	
208 Pb	165	1	93.26	0.57	100	93.3	80 - 120	
232 Th	165	1	105.90	2.13	100	105.9	80 - 120	
238 U	165	1	99.43	0.45	100	99.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	327794	0.59	367189	89.3	30 - 120	
45 Sc	1	1916330	0.56	2198650	87.2	30 - 120	
72 Ge	1	875267	0.68	1047607	83.5	30 - 120	
115 In	1	2211280	1.50	2618639	84.4	30 - 120	
165 Ho	1	3358970	0.46	3698894	90.8	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\093WASH.D\093WASH.D#
Date Acquired: Aug 10 2009 10:12 pm
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 09:56 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	0.006 ppb	173.19	1.30	
51 V	72	1	-0.034 ppb	135.22	6.50	
52 Cr	72	1	0.000 ppb	5464.80	2.60	
55 Mn	72	1	0.019 ppb	10.91	1.30	
59 Co	72	1	0.009 ppb	18.44	1.30	
60 Ni	72	1	-0.069 ppb	6.69	2.60	
63 Cu	72	1	0.016 ppb	51.79	2.60	
66 Zn	72	1	-1.678 ppb	2.09	13.00	
75 As	72	1	0.020 ppb	87.04	6.50	
78 Se	72	1	0.273 ppb	159.00	6.50	
95 Mo	72	1	1.722 ppb	10.74	2.60	
107 Ag	115	1	0.016 ppb	7.48	6.50	
111 Cd	115	1	0.027 ppb	39.87	1.30	
118 Sn	115	1	0.008 ppb	139.77	13.00	
121 Sb	115	1	0.031 ppb	10.67	2.60	
137 Ba	115	1	0.014 ppb	37.96	1.30	
205 Tl	165	1	0.019 ppb	7.24	1.30	
208 Pb	165	1	0.014 ppb	25.78	1.30	
232 Th	165	1	1.029 ppb	17.84	2.60	
238 U	165	1	0.020 ppb	2.81	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	366369	0.31	367189	99.8	30 - 120	
45 Sc	1	2076235	0.60	2198650	94.4	30 - 120	
72 Ge	1	994316	1.14	1047607	94.9	30 - 120	
115 In	1	2560866	0.59	2618639	97.8	30 - 120	
165 Ho	1	3648181	1.84	3698894	98.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\094 CCV.D\094 CCV.D#
Date Acquired: Aug 10 2009 10:15 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.46	ppb	4.16	50	98.9	90 - 110	
51 V	72	1	48.94	ppb	0.53	50	97.9	90 - 110	
52 Cr	72	1	50.07	ppb	1.20	50	100.1	90 - 110	
55 Mn	72	1	49.34	ppb	1.59	50	98.7	90 - 110	
59 Co	72	1	50.31	ppb	1.34	50	100.6	90 - 110	
60 Ni	72	1	50.23	ppb	2.45	50	100.5	90 - 110	
63 Cu	72	1	49.54	ppb	2.01	50	99.1	90 - 110	
66 Zn	72	1	52.03	ppb	1.37	50	104.1	90 - 110	
75 As	72	1	49.61	ppb	1.73	50	99.2	90 - 110	
78 Se	72	1	50.01	ppb	0.38	50	100.0	90 - 110	
95 Mo	72	1	50.34	ppb	1.73	50	100.7	90 - 110	
107 Ag	115	1	49.34	ppb	1.02	50	98.7	90 - 110	
111 Cd	115	1	49.64	ppb	0.95	50	99.3	90 - 110	
118 Sn	115	1	49.84	ppb	1.63	50	99.7	90 - 110	
121 Sb	115	1	49.47	ppb	0.88	50	98.9	90 - 110	
137 Ba	115	1	49.80	ppb	0.36	50	99.6	90 - 110	
205 Tl	165	1	50.15	ppb	0.99	50	100.3	90 - 110	
208 Pb	165	1	50.50	ppb	1.80	50	101.0	90 - 110	
232 Th	165	1	50.90	ppb	3.30	50	101.8	90 - 110	
238 U	165	1	51.21	ppb	1.74	50	102.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358196	0.69	367189	97.6	30 - 120	
45 Sc	1	2129878	1.22	2198650	96.9	30 - 120	
72 Ge	1	1014484	1.02	1047607	96.8	30 - 120	
115 In	1	2569748	0.08	2618639	98.1	30 - 120	
165 Ho	1	3684571	0.80	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\095 CCB.D\095 CCB.D#
Date Acquired: Aug 10 2009 10:18 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: Aug 10 2009 09:56 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	0.028	ppb	125.04	1.00	
51 V	72	1	-0.023	ppb	143.33	1.00	
52 Cr	72	1	-0.002	ppb	923.90	1.00	
55 Mn	72	1	0.028	ppb	32.43	1.00	
59 Co	72	1	0.009	ppb	26.21	1.00	
60 Ni	72	1	-0.067	ppb	9.77	1.00	
63 Cu	72	1	0.012	ppb	106.20	1.00	
66 Zn	72	1	-2.522	ppb	0.45	1.00	
75 As	72	1	0.008	ppb	139.22	1.00	
78 Se	72	1	-0.028	ppb	2465.70	1.00	
95 Mo	72	1	0.131	ppb	6.13	1.00	
107 Ag	115	1	0.017	ppb	9.39	1.00	
111 Cd	115	1	0.021	ppb	62.04	1.00	
118 Sn	115	1	0.019	ppb	40.06	1.00	
121 Sb	115	1	0.056	ppb	6.71	1.00	
137 Ba	115	1	0.019	ppb	11.10	1.00	
205 Tl	165	1	0.030	ppb	5.43	1.00	
208 Pb	165	1	0.013	ppb	16.52	1.00	
232 Th	165	1	1.108	ppb	18.47	1.00	Fail
238 U	165	1	0.017	ppb	5.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365426	0.22	367189	99.5	30 - 120	
45 Sc	1	2161178	2.00	2198650	98.3	30 - 120	
72 Ge	1	1023099	0.56	1047607	97.7	30 - 120	
115 In	1	2603761	0.60	2618639	99.4	30 - 120	
165 Ho	1	3680889	1.54	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\096WASH.D\096WASH.D#
Date Acquired: Aug 10 2009 10:20 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.079 ppb	10.92	1.30	
51 V	72	1	5.130 ppb	1.45	6.50	
52 Cr	72	1	2.157 ppb	4.54	2.60	
55 Mn	72	1	1.063 ppb	4.53	1.30	
59 Co	72	1	1.050 ppb	1.09	1.30	
60 Ni	72	1	2.074 ppb	4.23	2.60	
63 Cu	72	1	2.123 ppb	1.17	2.60	
66 Zn	72	1	8.217 ppb	1.74	13.00	
75 As	72	1	5.217 ppb	0.89	6.50	
78 Se	72	1	5.154 ppb	5.40	6.50	
95 Mo	72	1	2.220 ppb	6.77	2.60	
107 Ag	115	1	5.308 ppb	1.41	6.50	
111 Cd	115	1	1.070 ppb	1.11	1.30	
118 Sn	115	1	10.290 ppb	0.24	13.00	
121 Sb	115	1	2.012 ppb	3.04	2.60	
137 Ba	115	1	1.086 ppb	2.73	1.30	
205 Tl	165	1	1.124 ppb	1.17	1.30	
208 Pb	165	1	1.090 ppb	1.55	1.30	
232 Th	165	1	2.384 ppb	1.99	2.60	
238 U	165	1	1.125 ppb	2.15	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	362803	1.37	367189	98.8	30 - 120	
45 Sc	1	2155781	1.24	2198650	98.1	30 - 120	
72 Ge	1	1022103	1.11	1047607	97.6	30 - 120	
115 In	1	2573971	0.56	2618639	98.3	30 - 120	
165 Ho	1	3674326	0.25	3698894	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\AG081009A.B\086CALB.D\086CALB.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: 08/10/2009

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#
Date Acquired:	Aug 10 2009 11:51 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:	Aug 10 2009 11:49 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-204	211.14
52	Cr	72	1	2947	6.78
55	Mn	72	1	517	14.80
59	Co	72	1	33	35.39
60	Ni	72	1	87	45.12
63	Cu	72	1	677	10.89
66	Zn	72	1	237	18.82
75	As	72	1	69	15.74
78	Se	72	1	613	7.25
95	Mo	72	1	487	21.90
107	Ag	115	1	7	86.63
111	Cd	115	1	9	55.22
118	Sn	115	1	527	25.33
121	Sb	115	1	46	21.06
137	Ba	115	1	21	55.68
205	Tl	165	1	54	35.92
208	Pb	165	1	217	1.32
232	Th	165	1	210	24.29
238	U	165	1	58	9.14

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	298913	0.41
45	Sc	1	1771505	1.08
72	Ge	1	851994	1.37
115	In	1	2290579	0.24
165	Ho	1	3269618	1.10

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\AG081009A.B\129ICAL.D\129ICAL.D#
Date Acquired: Aug 10 2009 11:54 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: Aug 10 2009 11:52 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	44626	1.86
51	V	72	1	1103412	1.83
52	Cr	72	1	1112907	2.35
55	Mn	72	1	1182637	1.64
59	Co	72	1	1406971	1.17
60	Ni	72	1	322074	1.24
63	Cu	72	1	765226	0.44
66	Zn	72	1	149309	0.51
75	As	72	1	135226	0.52
78	Se	72	1	23661	3.26
95	Mo	72	1	358767	0.65
107	Ag	115	1	1018041	1.08
111	Cd	115	1	189633	1.01
118	Sn	115	1	539808	0.91
121	Sb	115	1	608141	0.64
137	Ba	115	1	268515	0.48
205	Tl	165	1	1732019	1.28
208	Pb	165	1	2365674	0.82
232	Th	165	1	2194146	3.15
238	U	165	1	2441986	1.18

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	289713	1.35	298913	96.9	30 - 120	
45	Sc	1	1702546	1.03	1771505	96.1	30 - 120	
72	Ge	1	813760	0.90	851994	95.5	30 - 120	
115	In	1	2210431	0.19	2290579	96.5	30 - 120	
165	Ho	1	3250286	0.48	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\130 CCV.D\130 CCV.D#
Date Acquired: Aug 10 2009 11:56 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: Aug 10 2009 11:54 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.24	ppb	2.69	50	98.5	90 - 110	
51 V	72	1	48.00	ppb	0.71	50	96.0	90 - 110	
52 Cr	72	1	48.06	ppb	0.44	50	96.1	90 - 110	
55 Mn	72	1	48.06	ppb	0.53	50	96.1	90 - 110	
59 Co	72	1	49.30	ppb	0.89	50	98.6	90 - 110	
60 Ni	72	1	50.11	ppb	1.48	50	100.2	90 - 110	
63 Cu	72	1	49.80	ppb	0.70	50	99.6	90 - 110	
66 Zn	72	1	53.20	ppb	1.85	50	106.4	90 - 110	
75 As	72	1	49.30	ppb	0.12	50	98.6	90 - 110	
78 Se	72	1	51.84	ppb	3.80	50	103.7	90 - 110	
95 Mo	72	1	49.84	ppb	0.82	50	99.7	90 - 110	
107 Ag	115	1	48.57	ppb	0.91	50	97.1	90 - 110	
111 Cd	115	1	49.00	ppb	0.65	50	98.0	90 - 110	
118 Sn	115	1	48.97	ppb	0.11	50	97.9	90 - 110	
121 Sb	115	1	49.39	ppb	0.33	50	98.8	90 - 110	
137 Ba	115	1	49.11	ppb	0.94	50	98.2	90 - 110	
205 Tl	165	1	50.36	ppb	1.01	50	100.7	90 - 110	
208 Pb	165	1	50.41	ppb	1.00	50	100.8	90 - 110	
232 Th	165	1	52.89	ppb	2.77	50	105.8	90 - 110	
238 U	165	1	51.25	ppb	0.93	50	102.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	286336	1.45	298913	95.8	30 - 120	
45 Sc	1	1694301	0.70	1771505	95.6	30 - 120	
72 Ge	1	807041	0.62	851994	94.7	30 - 120	
115 In	1	2219249	0.11	2290579	96.9	30 - 120	
165 Ho	1	3221461	0.39	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\131 CCB.D\131 CCB.D#
Date Acquired: Aug 10 2009 11:59 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: Aug 10 2009 11:54 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	0.007	ppb	173.23	1.00	
51 V	72	1	0.027	ppb	52.26	1.00	
52 Cr	72	1	0.022	ppb	96.05	1.00	
55 Mn	72	1	0.093	ppb	16.51	1.00	
59 Co	72	1	0.013	ppb	10.56	1.00	
60 Ni	72	1	0.031	ppb	15.88	1.00	
63 Cu	72	1	0.039	ppb	36.46	1.00	
66 Zn	72	1	0.568	ppb	5.54	1.00	
75 As	72	1	0.016	ppb	167.31	1.00	
78 Se	72	1	0.407	ppb	77.30	1.00	
95 Mo	72	1	-0.004	ppb	423.30	1.00	
107 Ag	115	1	0.018	ppb	31.54	1.00	
111 Cd	115	1	0.010	ppb	43.83	1.00	
118 Sn	115	1	0.075	ppb	23.85	1.00	
121 Sb	115	1	0.059	ppb	6.87	1.00	
137 Ba	115	1	0.017	ppb	19.95	1.00	
205 Tl	165	1	0.053	ppb	9.73	1.00	
208 Pb	165	1	0.016	ppb	6.36	1.00	
232 Th	165	1	1.410	ppb	17.65	1.00	Fail
238 U	165	1	0.018	ppb	20.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293448	0.70	298913	98.2	30 - 120	
45 Sc	1	1702764	0.71	1771505	96.1	30 - 120	
72 Ge	1	833810	0.47	851994	97.9	30 - 120	
115 In	1	2223577	1.33	2290579	97.1	30 - 120	
165 Ho	1	3240597	0.45	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\132WASH.D\132WASH.D#
Date Acquired:	Aug 11 2009 12:02 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:	Aug 10 2009 11:54 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	0.899 ppb	14.08	1.30	
51 V	72	1	4.971 ppb	1.08	6.50	
52 Cr	72	1	1.987 ppb	1.47	2.60	
55 Mn	72	1	1.001 ppb	2.00	1.30	
59 Co	72	1	1.052 ppb	4.51	1.30	
60 Ni	72	1	2.068 ppb	5.49	2.60	
63 Cu	72	1	2.048 ppb	1.81	2.60	
66 Zn	72	1	10.340 ppb	0.83	13.00	
75 As	72	1	5.128 ppb	2.68	6.50	
78 Se	72	1	4.579 ppb	16.89	6.50	
95 Mo	72	1	2.046 ppb	2.72	2.60	
107 Ag	115	1	5.235 ppb	2.60	6.50	
111 Cd	115	1	1.066 ppb	2.10	1.30	
118 Sn	115	1	10.190 ppb	0.75	13.00	
121 Sb	115	1	1.946 ppb	1.04	2.60	
137 Ba	115	1	1.082 ppb	1.38	1.30	
205 Tl	165	1	1.105 ppb	0.56	1.30	
208 Pb	165	1	1.062 ppb	0.76	1.30	
232 Th	165	1	2.471 ppb	1.77	2.60	
238 U	165	1	1.103 ppb	0.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291146	0.69	298913	97.4	30 - 120	
45 Sc	1	1730528	0.89	1771505	97.7	30 - 120	
72 Ge	1	836746	1.09	851994	98.2	30 - 120	
115 In	1	2252218	0.93	2290579	98.3	30 - 120	
165 Ho	1	3295222	0.70	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

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

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\133 BLK.D\133 BLK.D#
Date Acquired: Aug 11 2009 12:05 am
Operator: TEL
Sample Name: LHH8KBF
Misc Info: BLANK 9217128 6020
Vial Number: 3207
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 pm
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	0.016 ppb	169.94	2.00	
52 Cr	72	1	-0.022 ppb	31.14	2.00	
55 Mn	72	1	0.488 ppb	3.97	2.00	
59 Co	72	1	0.004 ppb	60.55	2.00	
60 Ni	72	1	0.020 ppb	36.21	2.00	
63 Cu	72	1	0.029 ppb	57.87	2.00	
66 Zn	72	1	1.073 ppb	2.75	2.00	
75 As	72	1	0.006 ppb	105.05	2.00	
78 Se	72	1	0.353 ppb	126.52	2.00	
95 Mo	72	1	-0.097 ppb	13.86	2.00	
107 Ag	115	1	0.006 ppb	41.54	2.00	
111 Cd	115	1	0.004 ppb	55.93	2.00	
118 Sn	115	1	0.031 ppb	61.67	2.00	
121 Sb	115	1	0.032 ppb	12.41	2.00	
137 Ba	115	1	0.023 ppb	14.76	2.00	
205 Tl	165	1	0.033 ppb	9.59	2.00	
208 Pb	165	1	0.021 ppb	11.63	2.00	
232 Th	165	1	0.153 ppb	5.30	2.00	
238 U	165	1	0.002 ppb	16.67	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297346	0.28	298913	99.5	30 - 120	
45 Sc	1	1743723	0.20	1771505	98.4	30 - 120	
72 Ge	1	848769	0.67	851994	99.6	30 - 120	
115 In	1	2277973	0.80	2290579	99.4	30 - 120	
165 Ho	1	3303534	0.51	3269618	101.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\134 LCS.D\134 LCS.D#
Date Acquired:	Aug 11 2009 12:07 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHH8KCF
Misc Info:	LCS
Vial Number:	3208
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 11:54 pm
Sample Type:	LCS
Prep Dil. Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	40.09	1.85	40	100.2	80 - 120	
51 V	72	1	39.09	1.39	40	97.7	80 - 120	
52 Cr	72	1	38.83	1.41	40	97.1	80 - 120	
55 Mn	72	1	39.05	0.87	40	97.6	80 - 120	
59 Co	72	1	40.09	0.32	40	100.2	80 - 120	
60 Ni	72	1	40.62	0.75	40	101.6	80 - 120	
63 Cu	72	1	40.90	0.30	40	102.3	80 - 120	
66 Zn	72	1	41.58	1.03	40	104.0	80 - 120	
75 As	72	1	40.88	0.56	40	102.2	80 - 120	
78 Se	72	1	40.89	7.26	40	102.2	80 - 120	
95 Mo	72	1	39.21	2.04	40	98.0	80 - 120	
107 Ag	115	1	39.57	0.22	40	98.9	80 - 120	
111 Cd	115	1	40.35	0.28	40	100.9	80 - 120	
118 Sn	115	1	0.02	99.32	40	0.0	80 - 120	
121 Sb	115	1	39.17	0.32	40	97.9	80 - 120	
137 Ba	115	1	39.65	0.63	40	99.1	80 - 120	
205 Tl	165	1	41.13	1.04	40	102.8	80 - 120	
208 Pb	165	1	41.09	1.49	40	102.7	80 - 120	
232 Th	165	1	39.89	2.05	40	99.7	80 - 120	
238 U	165	1	42.57	1.00	40	106.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295320	0.98	298913	98.8	30 - 120	
45 Sc	1	1731359	1.02	1771505	97.7	30 - 120	
72 Ge	1	827918	0.67	851994	97.2	30 - 120	
115 In	1	2273151	0.86	2290579	99.2	30 - 120	
165 Ho	1	3283703	0.21	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\135AREF.D\135AREF.D#
Date Acquired: Aug 11 2009 12:10 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1RF 10X
Misc Info: D9H040187
Vial Number: 3209
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: AllRef
Dilution Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.15	0.02	ppb	173.17	3600	
51 V	72	1	-359.50	-35.95	ppb	20.55	3600	
52 Cr	72	1	10,280.00	1028.00	ppb	1.50	3600	
55 Mn	72	1	68.88	6.89	ppb	1.96	3600	
59 Co	72	1	1.14	0.11	ppb	7.12	3600	
60 Ni	72	1	7.62	0.76	ppb	4.30	3600	
63 Cu	72	1	0.70	0.07	ppb	31.42	3600	
66 Zn	72	1	1.49	0.15	ppb	15.11	3600	
75 As	72	1	111.90	11.19	ppb	0.68	3600	
78 Se	72	1	15.55	1.56	ppb	14.11	3600	
95 Mo	72	1	11.33	1.13	ppb	1.96	3600	
107 Ag	115	1	0.11	0.01	ppb	39.75	3600	
111 Cd	115	1	0.13	0.01	ppb	101.56	3600	
118 Sn	115	1	0.42	0.04	ppb	65.96	3600	
121 Sb	115	1	0.45	0.04	ppb	8.45	3600	
137 Ba	115	1	33.64	3.36	ppb	2.20	3600	
205 Tl	165	1	0.64	0.06	ppb	26.61	3600	
208 Pb	165	1	0.13	0.01	ppb	16.86	3600	
232 Th	165	1	13.01	1.30	ppb	18.39	1000	
238 U	165	1	35.63	3.56	ppb	0.88	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	288674	0.39	298913	96.6	30 - 120	
45 Sc	1	1700043	0.94	1771505	96.0	30 - 120	
72 Ge	1	786593	0.30	851994	92.3	30 - 120	
115 In	1	2077889	1.31	2290579	90.7	30 - 120	
165 Ho	1	3159328	0.84	3269618	96.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\136SDIL.D\136SDIL.D#
Date Acquired: Aug 11 2009 12:13 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1RP50F
Misc Info: SERIAL DILUTION
Vial Number: 3210
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\135AREF.D\135AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.01	ppb	86.60	0.00	475.8	90 - 110	
51 V	72	1	-4.23	ppb	12.71	-7.19	58.8	90 - 110	
52 Cr	72	1	205.10	ppb	1.11	205.60	99.8	90 - 110	
55 Mn	72	1	1.43	ppb	1.50	1.38	103.7	90 - 110	
59 Co	72	1	0.03	ppb	28.77	0.02	121.2	90 - 110	
60 Ni	72	1	0.31	ppb	6.02	0.15	201.0	90 - 110	
63 Cu	72	1	0.02	ppb	15.63	0.01	130.1	90 - 110	
66 Zn	72	1	0.11	ppb	14.81	0.03	354.4	90 - 110	
75 As	72	1	2.15	ppb	0.86	2.24	95.8	90 - 110	
78 Se	72	1	0.76	ppb	17.10	0.31	245.2	90 - 110	
95 Mo	72	1	0.12	ppb	23.67	0.23	53.7	90 - 110	
107 Ag	115	1	0.00	ppb	57.57	0.00	120.6	90 - 110	
111 Cd	115	1	0.00	ppb	242.92	0.00	-97.7	90 - 110	
118 Sn	115	1	0.08	ppb	14.99	0.01	926.3	90 - 110	
121 Sb	115	1	0.01	ppb	24.84	0.01	132.7	90 - 110	
137 Ba	115	1	0.74	ppb	7.84	0.67	110.3	90 - 110	
205 Tl	165	1	0.01	ppb	22.05	0.01	81.1	90 - 110	
208 Pb	165	1	0.00	ppb	14.37	0.00	180.2	90 - 110	
232 Th	165	1	0.26	ppb	12.59	0.26	101.6	90 - 110	
238 U	165	1	0.72	ppb	2.27	0.71	100.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	303081	0.86	298913	101.4	30 - 120	
45 Sc	1	1760611	0.30	1771505	99.4	30 - 120	
72 Ge	1	840140	0.39	851994	98.6	30 - 120	
115 In	1	2223697	0.85	2290579	97.1	30 - 120	
165 Ho	1	3254927	0.81	3269618	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\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 10:34:16

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1RP50F** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG081009A # 136
Acquired: 08/11/2009 00:13:00
Calibrated: 08/10/2009 23:51:00

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	7	0.71650	0.15060	376		*	
7440-62-2	Vanadium	51	-48404	-211.45	-359.50			*	
7440-47-3	Chromium	52	2354230	10255	10280	0.243		*	
7439-96-5	Manganese	55	17949	71.450	68.880	3.73		*	
7440-48-4	Cobalt	59	433	1.3775	1.1370	21.2		*	
7440-02-0	Nickel	60	1103	15.305	7.6160	101		*	
7440-50-8	Copper	63	810	0.90750	0.69740	30.1		*	
7440-66-6	Zinc	66	397	5.2950	1.4940	254		*	
7440-38-2	Arsenic	75	3060	107.25	111.90	4.16	0.21	NC	☑
7782-49-2	Selenium	78	787	38.130	15.550	145	0.70	NC	☑
7439-98-7	Molybdenum	95	930	6.0850	11.330	46.3		*	
7440-22-4	Silver	107	33	0.13140	0.10900	20.6		*	
7440-43-9	Cadmium	111	4	-0.12570	0.12860	198		*	
7440-31-5	Tin	118	930	3.8590	0.41660	826		*	
7440-36-0	Antimony	121	117	0.59250	0.44640	32.7		*	
7440-39-3	Barium	137	2025	37.105	33.640	10.3		*	
7440-28-0	Thallium	205	234	0.51950	0.64030	18.9		*	
7439-92-1	Lead	208	326	0.23205	0.12880	80.2		*	
7440-61-1	Uranium	238	17646	35.965	35.630	0.940		*	
7440-29-1	Thorium	232	6012	13.215	13.010	1.58		*	
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: [signature] Date: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\137PDS.D\137PDS.D#
Date Acquired: Aug 11 2009 12:16 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1RZF
Misc Info: POST DIGESTION SPIKE
Vial Number: 3211
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
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	208.60	0.02	ppb	1.04	200	104.3	75 - 125	
51 V	72	1	161.60	-35.95	ppb	3.19	200	98.5	75 - 125	
52 Cr	72	1	1208.00	1028.00	ppb	0.84	200	98.4	75 - 125	
55 Mn	72	1	205.10	6.89	ppb	1.28	200	99.1	75 - 125	
59 Co	72	1	197.00	0.11	ppb	0.75	200	98.4	75 - 125	
60 Ni	72	1	193.80	0.76	ppb	0.02	200	96.5	75 - 125	
63 Cu	72	1	192.40	0.07	ppb	0.65	200	96.2	75 - 125	
66 Zn	72	1	196.80	0.15	ppb	0.57	200	98.3	75 - 125	
75 As	72	1	217.50	11.19	ppb	0.63	200	103.0	75 - 125	
78 Se	72	1	211.90	1.55	ppb	0.83	200	105.1	75 - 125	
95 Mo	72	1	209.60	1.13	ppb	0.43	200	104.2	75 - 125	
107 Ag	115	1	45.55	0.01	ppb	2.11	50	91.1	75 - 125	
111 Cd	115	1	197.50	0.01	ppb	1.44	200	98.7	75 - 125	
118 Sn	115	1	185.00	0.04	ppb	0.63	200	92.5	75 - 125	
121 Sb	115	1	207.10	0.04	ppb	0.87	200	103.5	75 - 125	
137 Ba	115	1	203.30	3.36	ppb	1.27	200	100.0	75 - 125	
205 Tl	165	1	188.50	0.06	ppb	0.54	200	94.2	75 - 125	
208 Pb	165	1	186.60	0.01	ppb	0.49	200	93.3	75 - 125	
232 Th	165	1	0.16	1.30	ppb	4.56	200	0.1	75 - 125	
238 U	165	1	199.50	3.56	ppb	0.14	200	98.0	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	290559	0.61	298913	97.2	30 - 120	
45 Sc	1	1724423	0.63	1771505	97.3	30 - 120	
72 Ge	1	779035	0.44	851994	91.4	30 - 120	
115 In	1	2091756	1.00	2290579	91.3	30 - 120	
165 Ho	1	3176211	0.55	3269618	97.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 08/11/09 10:34:20

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1RZF** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500** | Channel 272
File: AG081009A # 137 | Method 6020_
Acquired: 08/11/2009 00:16:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 08/10/2009 23:51:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	93358	208.60	0.01506	104	200		☑
7440-62-2	Vanadium	51	1707340	161.60	-35.950	80.8	200		☐
7440-47-3	Chromium	52	12844600	1208.0	1028.0	90.0	200	*	☑
7439-96-5	Manganese	55	2321980	205.10	6.8880	99.1	200		☑
7440-48-4	Cobalt	59	2653690	197.00	0.11370	98.4	200		☑
7440-02-0	Nickel	60	597370	193.80	0.76160	96.5	200		☑
7440-50-8	Copper	63	1408570	192.40	0.06974	96.2	200		☑
7440-66-6	Zinc	66	281140	196.80	0.14940	98.3	200		☑
7440-38-2	Arsenic	75	281430	217.50	11.190	103	200		☑
7782-49-2	Selenium	78	47388	211.90	1.5550	105	200		☑
7439-98-7	Molybdenum	95	719378	209.60	1.1330	104	200		☐
7440-22-4	Silver	107	438859	45.550	0.01090	91.1	50.0		☑
7440-43-9	Cadmium	111	354316	197.50	0.01286	98.7	200		☑
7440-31-5	Tin	118	944801	185.00	0.04166	92.5	200		☐
7440-36-0	Antimony	121	1191550	207.10	0.04464	104	200		☑
7440-39-3	Barium	137	516422	203.30	3.3640	100	200		☑
7440-28-0	Thallium	205	3191110	188.50	0.06403	94.2	200		☑
7439-92-1	Lead	208	4313160	186.60	0.01288	93.3	200		☑
7440-61-1	Uranium	238	4761170	199.50	3.5630	98.0	200		☑
7440-29-1	Thorium	232	3577	0.15730	1.3010				
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				

AS, Se only.

Reviewed by: [signature] Date: 8/11/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\138_MS.D\138_MS.D#
Date Acquired: Aug 11 2009 12:18 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1RSF 10X
Misc Info: MATRIX SPIKE
Vial Number: 3212
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.34	0.02	ppb	1.39	40	10.9	50 - 150	
51 V	72	1	-29.54	-35.95	ppb	5.58	40	-729.4	50 - 150	
52 Cr	72	1	1006.00	1028.00	ppb	0.95	40	94.2	50 - 150	
55 Mn	72	1	10.55	6.89	ppb	0.81	40	22.5	50 - 150	
59 Co	72	1	4.11	0.11	ppb	0.86	40	10.2	50 - 150	
60 Ni	72	1	4.68	0.76	ppb	0.70	40	11.5	50 - 150	
63 Cu	72	1	3.91	0.07	ppb	3.36	40	9.8	50 - 150	
66 Zn	72	1	4.07	0.15	ppb	3.02	40	10.1	50 - 150	
75 As	72	1	15.05	11.19	ppb	1.25	40	29.4	50 - 150	
78 Se	72	1	5.34	1.55	ppb	19.30	40	12.9	50 - 150	
95 Mo	72	1	5.40	1.13	ppb	1.03	40	13.1	50 - 150	
107 Ag	115	1	3.85	0.01	ppb	2.24	40	9.6	50 - 150	
111 Cd	115	1	4.07	0.01	ppb	0.93	40	10.2	50 - 150	
118 Sn	115	1	0.31	0.04	ppb	15.33	40	0.8	50 - 150	
121 Sb	115	1	4.30	0.04	ppb	2.59	40	10.7	50 - 150	
137 Ba	115	1	7.45	3.36	ppb	1.76	40	17.2	50 - 150	
205 Tl	165	1	3.95	0.06	ppb	1.36	40	9.8	50 - 150	
208 Pb	165	1	3.86	0.01	ppb	0.72	40	9.6	50 - 150	
232 Th	165	1	4.05	1.30	ppb	0.61	40	9.8	50 - 150	
238 U	165	1	7.71	3.56	ppb	0.86	40	17.7	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	294536	1.32	298913	98.5	30 - 120	
45 Sc	1	1721555	1.03	1771505	97.2	30 - 120	
72 Ge	1	797501	0.57	851994	93.6	30 - 120	
115 In	1	2127971	0.76	2290579	92.9	30 - 120	
165 Ho	1	3213207	0.25	3269618	98.3	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\139 MSD.D\139 MSD.D#
Date Acquired: Aug 11 2009 12:21 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1RDF 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3301
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MSD
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\138 MS.D\138 MS.D#

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.11	ppb	3.03	4.34	5.42	20	
51 V	72	1	-33.95	ppb	1.30	-29.54	-13.89	20	
52 Cr	72	1	1019.00	ppb	1.46	1006.00	1.28	20	
55 Mn	72	1	10.70	ppb	0.58	10.55	1.41	20	
59 Co	72	1	4.18	ppb	0.79	4.11	1.78	20	
60 Ni	72	1	4.81	ppb	4.05	4.68	2.78	20	
63 Cu	72	1	4.04	ppb	1.43	3.91	3.19	20	
66 Zn	72	1	4.12	ppb	2.92	4.07	1.17	20	
75 As	72	1	15.36	ppb	1.43	15.05	2.04	20	
78 Se	72	1	4.81	ppb	5.28	5.34	10.42	20	
95 Mo	72	1	5.31	ppb	0.38	5.40	1.64	20	
107 Ag	115	1	3.81	ppb	1.46	3.85	1.02	20	
111 Cd	115	1	4.10	ppb	5.78	4.07	0.88	20	
118 Sn	115	1	0.14	ppb	3.29	0.31	76.41	20	
121 Sb	115	1	4.29	ppb	2.17	4.30	0.21	20	
137 Ba	115	1	7.49	ppb	0.84	7.45	0.59	20	
205 Tl	165	1	3.95	ppb	1.07	3.94	0.00	20	
208 Pb	165	1	3.89	ppb	1.44	3.86	0.90	20	
232 Th	165	1	4.20	ppb	1.76	4.05	3.78	20	
238 U	165	1	7.77	ppb	1.39	7.71	0.74	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297807	0.51	298913	99.6	30 - 120	
45 Sc	1	1748575	0.25	1771505	98.7	30 - 120	
72 Ge	1	807272	0.71	851994	94.8	30 - 120	
115 In	1	2159329	0.36	2290579	94.3	30 - 120	
165 Ho	1	3240007	0.85	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\140 CCV.D\140 CCV.D#
Date Acquired: Aug 11 2009 12:24 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: Aug 10 2009 11:54 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	48.05	ppb	2.14	50	96.1	90 - 110	
51 V	72	1	48.28	ppb	0.55	50	96.6	90 - 110	
52 Cr	72	1	48.47	ppb	0.34	50	96.9	90 - 110	
55 Mn	72	1	48.51	ppb	0.05	50	97.0	90 - 110	
59 Co	72	1	49.83	ppb	0.58	50	99.7	90 - 110	
60 Ni	72	1	50.62	ppb	0.97	50	101.2	90 - 110	
63 Cu	72	1	50.13	ppb	0.91	50	100.3	90 - 110	
66 Zn	72	1	53.11	ppb	0.29	50	106.2	90 - 110	
75 As	72	1	49.76	ppb	0.62	50	99.5	90 - 110	
78 Se	72	1	50.67	ppb	2.65	50	101.3	90 - 110	
95 Mo	72	1	50.03	ppb	1.07	50	100.1	90 - 110	
107 Ag	115	1	48.74	ppb	0.67	50	97.5	90 - 110	
111 Cd	115	1	48.95	ppb	0.40	50	97.9	90 - 110	
118 Sn	115	1	48.81	ppb	0.82	50	97.6	90 - 110	
121 Sb	115	1	49.01	ppb	0.27	50	98.0	90 - 110	
137 Ba	115	1	48.39	ppb	0.16	50	96.8	90 - 110	
205 Tl	165	1	49.86	ppb	1.47	50	99.7	90 - 110	
208 Pb	165	1	49.79	ppb	1.49	50	99.6	90 - 110	
232 Th	165	1	49.69	ppb	4.24	50	99.4	90 - 110	
238 U	165	1	51.43	ppb	0.98	50	102.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296315	1.12	298913	99.1	30 - 120	
45 Sc	1	1724753	0.27	1771505	97.4	30 - 120	
72 Ge	1	814095	0.60	851994	95.6	30 - 120	
115 In	1	2276199	1.01	2290579	99.4	30 - 120	
165 Ho	1	3333127	1.63	3269618	101.9	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\141 CCB.D\141 CCB.D#
Date Acquired: Aug 11 2009 12:27 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: Aug 10 2009 11:54 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	0.007	ppb	173.26	1.00	
51 V	72	1	0.030	ppb	63.24	1.00	
52 Cr	72	1	0.046	ppb	35.83	1.00	
55 Mn	72	1	0.078	ppb	12.97	1.00	
59 Co	72	1	0.011	ppb	22.44	1.00	
60 Ni	72	1	0.043	ppb	33.11	1.00	
63 Cu	72	1	0.021	ppb	14.28	1.00	
66 Zn	72	1	0.534	ppb	2.13	1.00	
75 As	72	1	0.013	ppb	84.72	1.00	
78 Se	72	1	0.498	ppb	74.36	1.00	
95 Mo	72	1	-0.057	ppb	32.06	1.00	
107 Ag	115	1	0.020	ppb	15.86	1.00	
111 Cd	115	1	0.008	ppb	84.67	1.00	
118 Sn	115	1	0.095	ppb	31.36	1.00	
121 Sb	115	1	0.049	ppb	9.27	1.00	
137 Ba	115	1	0.020	ppb	30.44	1.00	
205 Tl	165	1	0.033	ppb	11.13	1.00	
208 Pb	165	1	0.015	ppb	14.76	1.00	
232 Th	165	1	1.225	ppb	15.25	1.00	Fail
238 U	165	1	0.016	ppb	2.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299079	0.77	298913	100.1	30 - 120	
45 Sc	1	1736434	1.52	1771505	98.0	30 - 120	
72 Ge	1	843836	0.86	851994	99.0	30 - 120	
115 In	1	2269332	0.97	2290579	99.1	30 - 120	
165 Ho	1	3307967	0.93	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\142WASH.D\142WASH.D#
Date Acquired: Aug 11 2009 12:29 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: Aug 10 2009 11:54 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	0.997 ppb	19.94	1.30	
51 V	72	1	4.993 ppb	2.41	6.50	
52 Cr	72	1	1.979 ppb	2.89	2.60	
55 Mn	72	1	0.999 ppb	2.38	1.30	
59 Co	72	1	1.029 ppb	4.27	1.30	
60 Ni	72	1	2.155 ppb	3.61	2.60	
63 Cu	72	1	2.009 ppb	3.95	2.60	
66 Zn	72	1	10.210 ppb	0.70	13.00	
75 As	72	1	5.007 ppb	0.90	6.50	
78 Se	72	1	5.391 ppb	9.51	6.50	
95 Mo	72	1	1.897 ppb	2.43	2.60	
107 Ag	115	1	5.135 ppb	0.72	6.50	
111 Cd	115	1	0.982 ppb	3.08	1.30	
118 Sn	115	1	10.370 ppb	3.90	13.00	
121 Sb	115	1	1.993 ppb	3.72	2.60	
137 Ba	115	1	1.033 ppb	2.27	1.30	
205 Tl	165	1	1.104 ppb	2.04	1.30	
208 Pb	165	1	1.077 ppb	1.00	1.30	
232 Th	165	1	2.396 ppb	2.33	2.60	
238 U	165	1	1.105 ppb	0.89	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297355	0.58	298913	99.5	30 - 120	
45 Sc	1	1763171	1.88	1771505	99.5	30 - 120	
72 Ge	1	841859	0.41	851994	98.8	30 - 120	
115 In	1	2276749	1.44	2290579	99.4	30 - 120	
165 Ho	1	3305076	1.92	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\143 BLK.D\143 BLK.D#
Date Acquired: Aug 11 2009 12:32 am
Operator: TEL
Sample Name: LHH8TB
Misc Info: BLANK 9217132 6020
Vial Number: 3302
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 pm
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	0.007 ppb	173.16	2.00	
51 V	72	1	0.028 ppb	44.06	2.00	
52 Cr	72	1	0.098 ppb	25.54	2.00	
55 Mn	72	1	0.161 ppb	11.76	2.00	
59 Co	72	1	0.001 ppb	222.94	2.00	
60 Ni	72	1	0.014 ppb	57.90	2.00	
63 Cu	72	1	0.044 ppb	38.85	2.00	
66 Zn	72	1	0.451 ppb	1.38	2.00	
75 As	72	1	0.001 ppb	129.52	2.00	
78 Se	72	1	0.007 ppb	5104.40	2.00	
95 Mo	72	1	-0.097 ppb	12.34	2.00	
107 Ag	115	1	0.005 ppb	61.20	2.00	
111 Cd	115	1	-0.001 ppb	565.62	2.00	
118 Sn	115	1	0.049 ppb	24.21	2.00	
121 Sb	115	1	0.027 ppb	23.10	2.00	
137 Ba	115	1	0.031 ppb	11.89	2.00	
205 Tl	165	1	0.038 ppb	25.33	2.00	
208 Pb	165	1	0.009 ppb	10.73	2.00	
232 Th	165	1	0.269 ppb	20.08	2.00	
238 U	165	1	0.001 ppb	68.12	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293359	0.79	298913	98.1	30 - 120	
45 Sc	1	1723460	0.92	1771505	97.3	30 - 120	
72 Ge	1	822004	0.58	851994	96.5	30 - 120	
115 In	1	2237686	1.60	2290579	97.7	30 - 120	
165 Ho	1	3301972	1.13	3269618	101.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\144 LCS.D\144 LCS.D#
Date Acquired:	Aug 11 2009 12:35 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHH8TC
Misc Info:	LCS
Vial Number:	3303
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 11:54 pm
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	39.52	0.45	40	98.8	80 - 120	
51 V	72	1	40.16	1.91	40	100.4	80 - 120	
52 Cr	72	1	40.10	0.58	40	100.3	80 - 120	
55 Mn	72	1	40.63	0.62	40	101.6	80 - 120	
59 Co	72	1	41.15	0.61	40	102.9	80 - 120	
60 Ni	72	1	41.30	0.45	40	103.3	80 - 120	
63 Cu	72	1	41.85	0.82	40	104.6	80 - 120	
66 Zn	72	1	40.31	0.46	40	100.8	80 - 120	
75 As	72	1	39.43	0.93	40	98.6	80 - 120	
78 Se	72	1	39.07	3.52	40	97.7	80 - 120	
95 Mo	72	1	39.27	0.57	40	98.2	80 - 120	
107 Ag	115	1	39.99	2.12	40	100.0	80 - 120	
111 Cd	115	1	39.63	1.74	40	99.1	80 - 120	
118 Sn	115	1	0.03	81.05	40	0.1	80 - 120	
121 Sb	115	1	37.15	1.53	40	92.9	80 - 120	
137 Ba	115	1	40.21	0.45	40	100.5	80 - 120	
205 Tl	165	1	41.60	1.30	40	104.0	80 - 120	
208 Pb	165	1	41.36	1.36	40	103.4	80 - 120	
232 Th	165	1	43.21	0.89	40	108.0	80 - 120	
238 U	165	1	42.46	0.25	40	106.2	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	288494	0.58	298913	96.5	30 - 120	
45 Sc	1	1693916	0.66	1771505	95.6	30 - 120	
72 Ge	1	796858	0.68	851994	93.5	30 - 120	
115 In	1	2230409	0.66	2290579	97.4	30 - 120	
165 Ho	1	3279872	0.76	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\145AREF.D\145AREF.D#
Date Acquired:	Aug 11 2009 12:38 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHG1P 10X
Misc Info:	D9H040187
Vial Number:	3304
Current Method:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update:	Aug 11 2009 11:17 am
Sample Type:	AllRef
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.22	0.02	ppb	0.87	3600	
51 V	72	1	-294.30	-29.43	ppb	11.86	3600	
52 Cr	72	1	10,010.00	1001.00	ppb	1.56	3600	
55 Mn	72	1	187.90	18.79	ppb	1.48	3600	
59 Co	72	1	2.72	0.27	ppb	3.00	3600	
60 Ni	72	1	9.98	1.00	ppb	3.77	3600	
63 Cu	72	1	2.78	0.28	ppb	5.35	3600	
66 Zn	72	1	6.16	0.62	ppb	4.82	3600	
75 As	72	1	103.80	10.38	ppb	2.97	3600	
78 Se	72	1	9.58	0.96	ppb	39.88	3600	
95 Mo	72	1	10.60	1.06	ppb	4.27	3600	
107 Ag	115	1	0.15	0.01	ppb	26.09	3600	
111 Cd	115	1	-0.25	-0.02	ppb	120.06	3600	
118 Sn	115	1	0.90	0.09	ppb	10.49	3600	
121 Sb	115	1	0.42	0.04	ppb	15.94	3600	
137 Ba	115	1	47.83	4.78	ppb	0.99	3600	
205 Tl	165	1	0.56	0.06	ppb	23.64	3600	
208 Pb	165	1	1.10	0.11	ppb	10.44	3600	
232 Th	165	1	9.62	0.96	ppb	14.60	1000	
238 U	165	1	32.70	3.27	ppb	2.38	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291486	0.87	298913	97.5	30 - 120	
45 Sc	1	1704287	0.82	1771505	96.2	30 - 120	
72 Ge	1	790412	0.97	851994	92.8	30 - 120	
115 In	1	2089228	1.06	2290579	91.2	30 - 120	
165 Ho	1	3175531	1.19	3269618	97.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\146SDIL.D\146SDIL.D#
Date Acquired: Aug 11 2009 12:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PP50
Misc Info: SERIAL DILUTION
Vial Number: 3305
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\145AREF.D\145AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.01	ppb	173.20	0.00	157.5	90 - 110	
51 V	72	1	-4.74	ppb	27.41	-5.89	80.4	90 - 110	
52 Cr	72	1	209.10	ppb	2.09	200.20	104.4	90 - 110	
55 Mn	72	1	3.99	ppb	1.35	3.76	106.3	90 - 110	
59 Co	72	1	0.07	ppb	7.44	0.05	137.7	90 - 110	
60 Ni	72	1	0.36	ppb	7.71	0.20	182.1	90 - 110	
63 Cu	72	1	0.07	ppb	27.15	0.06	131.4	90 - 110	
66 Zn	72	1	0.34	ppb	3.20	0.12	275.1	90 - 110	
75 As	72	1	2.15	ppb	1.39	2.08	103.6	90 - 110	
78 Se	72	1	0.59	ppb	15.55	0.19	310.4	90 - 110	
95 Mo	72	1	0.13	ppb	14.27	0.21	60.7	90 - 110	
107 Ag	115	1	0.00	ppb	86.62	0.00	156.8	90 - 110	
111 Cd	115	1	0.01	ppb	94.23	0.00	-131.7	90 - 110	
118 Sn	115	1	0.19	ppb	16.09	0.02	1058.0	90 - 110	
121 Sb	115	1	0.01	ppb	28.22	0.01	160.2	90 - 110	
137 Ba	115	1	1.00	ppb	4.46	0.96	104.3	90 - 110	
205 Tl	165	1	0.01	ppb	9.99	0.01	87.7	90 - 110	
208 Pb	165	1	0.03	ppb	3.55	0.02	120.7	90 - 110	
232 Th	165	1	0.20	ppb	9.18	0.19	105.3	90 - 110	
238 U	165	1	0.68	ppb	2.62	0.65	103.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	304886	1.09	298913	102.0	30 - 120	
45 Sc	1	1751561	0.53	1771505	98.9	30 - 120	
72 Ge	1	840273	0.94	851994	98.6	30 - 120	
115 In	1	2233781	0.77	2290579	97.5	30 - 120	
165 Ho	1	3301214	0.88	3269618	101.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 11:23:44

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1PP50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG081009A # 146
Acquired: 08/11/2009 00:41:00
Calibrated: 08/10/2009 23:51:00

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	0.35075	0.22270	57.5		*	
7440-62-2	Vanadium	51	-54238	-236.75	-294.30			*	
7440-47-3	Chromium	52	2399990	10455	10010	4.45		*	
7439-96-5	Manganese	55	49257	199.65	187.90	6.25		*	
7440-48-4	Cobalt	59	1120	3.7405	2.7170	37.7		*	
7440-02-0	Nickel	60	1293	18.170	9.9780	82.1		*	
7440-50-8	Copper	63	1243	3.6495	2.7780	31.4		*	
7440-66-6	Zinc	66	757	16.960	6.1640	175		*	
7440-38-2	Arsenic	75	3068	107.50	103.80	3.56	0.21	NC	☑
7782-49-2	Selenium	78	747	29.725	9.5770	210	0.70	NC	☑
7439-98-7	Molybdenum	95	957	6.4350	10.600	39.3		*	
7440-22-4	Silver	107	53	0.22870	0.14590	56.8		*	
7440-43-9	Cadmium	111	22	0.32770	-0.24880			*	
7440-31-5	Tin	118	1547	9.4800	0.89600	958		*	
7440-36-0	Antimony	121	127	0.66850	0.41720	60.2		*	
7440-39-3	Barium	137	2727	49.880	47.830	4.29		*	
7440-28-0	Thallium	205	228	0.49135	0.56000	12.3		*	
7439-92-1	Lead	208	856	1.3255	1.0980	20.7		*	
7440-61-1	Uranium	238	16907	33.970	32.700	3.88		*	
7440-29-1	Thorium	232	4731	10.135	9.6220	5.33		*	
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%)

AS ce only

Reviewed by: [signature] Date: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\147PDS.D\147PDS.D#
Date Acquired:	Aug 11 2009 12:43 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHG1PZ
Misc Info:	POST DIGESTION SPIKE
Vial Number:	3306
Current Method:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update:	Aug 11 2009 11:17 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	204.50	0.02	ppb	0.59	200	102.2	75 - 125	
51 V	72	1	166.20	-29.43	ppb	2.27	200	97.4	75 - 125	
52 Cr	72	1	1200.00	1001.00	ppb	0.44	200	99.9	75 - 125	
55 Mn	72	1	216.10	18.79	ppb	0.15	200	98.8	75 - 125	
59 Co	72	1	194.20	0.27	ppb	1.05	200	97.0	75 - 125	
60 Ni	72	1	191.30	1.00	ppb	0.57	200	95.2	75 - 125	
63 Cu	72	1	189.70	0.28	ppb	0.61	200	94.7	75 - 125	
66 Zn	72	1	195.80	0.62	ppb	0.85	200	97.6	75 - 125	
75 As	72	1	214.60	10.38	ppb	0.19	200	102.0	75 - 125	
78 Se	72	1	202.90	0.96	ppb	0.68	200	101.0	75 - 125	
95 Mo	72	1	207.00	1.06	ppb	0.49	200	103.0	75 - 125	
107 Ag	115	1	45.53	0.01	ppb	1.28	50	91.0	75 - 125	
111 Cd	115	1	196.00	-0.02	ppb	1.23	200	98.0	75 - 125	
118 Sn	115	1	183.90	0.09	ppb	0.30	200	91.9	75 - 125	
121 Sb	115	1	202.00	0.04	ppb	0.42	200	101.0	75 - 125	
137 Ba	115	1	202.90	4.78	ppb	0.89	200	99.1	75 - 125	
205 Tl	165	1	186.10	0.06	ppb	1.28	200	93.0	75 - 125	
208 Pb	165	1	183.50	0.11	ppb	2.11	200	91.7	75 - 125	
232 Th	165	1	0.19	0.96	ppb	3.36	200	0.1	75 - 125	
238 U	165	1	197.00	3.27	ppb	2.90	200	96.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	295091	0.20	298913	98.7	30 - 120	
45 Sc	1	1732131	0.88	1771505	97.8	30 - 120	
72 Ge	1	785574	0.24	851994	92.2	30 - 120	
115 In	1	2104929	0.73	2290579	91.9	30 - 120	
165 Ho	1	3206450	1.77	3269618	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 11:23:48

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1PZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG081009A # 147
Acquired: 08/11/2009 00:43:00
Calibrated: 08/10/2009 23:51:00

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	92945	204.50	0.02227	102	200		☑
7440-62-2	Vanadium	51	1770840	166.20	-29.430	83.1	200		☐
7440-47-3	Chromium	52	12859300	1200.0	1001.0	99.5	200	*	☑
7439-96-5	Manganese	55	2466560	216.10	18.790	98.7	200		☑
7440-48-4	Cobalt	59	2637930	194.20	0.27170	97.0	200		☑
7440-02-0	Nickel	60	594594	191.30	0.99780	95.2	200		☑
7440-50-8	Copper	63	1400850	189.70	0.27780	94.7	200		☑
7440-66-6	Zinc	66	281975	195.80	0.61640	97.6	200		☑
7440-38-2	Arsenic	75	280069	214.60	10.380	102	200		☑
7782-49-2	Selenium	78	45766	202.90	0.95770	101	200		☑
7439-98-7	Molybdenum	95	716407	207.00	1.0600	103	200		☐
7440-22-4	Silver	107	441342	45.530	0.01459	91.0	50.0		☑
7440-43-9	Cadmium	111	353875	196.00	-0.02488	98.0	200		☑
7440-31-5	Tin	118	944944	183.90	0.08960	91.9	200		☐
7440-36-0	Antimony	121	1169940	202.00	0.04172	101	200		☑
7440-39-3	Barium	137	518739	202.90	4.7830	99.1	200		☑
7440-28-0	Thallium	205	3178780	186.10	0.05600	93.0	200		☑
7439-92-1	Lead	208	4281670	183.50	0.10980	91.7	200		☑
7440-61-1	Uranium	238	4743130	197.00	3.2700	96.9	200		☑
7440-29-1	Thorium	232	4391	0.19330	0.96220				
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				

AS Seconly

Reviewed by: [signature] Date: 8/11/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\148_MS.D\148_MS.D#
Date Acquired: Aug 11 2009 12:46 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PS 10X
Misc Info: MATRIX SPIKE
Vial Number: 3307
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.16	0.02	ppb	2.40	40	10.4	50 - 150	
51 V	72	1	-28.11	-29.43	ppb	12.97	40	-265.9	50 - 150	
52 Cr	72	1	1050.00	1001.00	ppb	1.04	40	100.9	50 - 150	
55 Mn	72	1	23.23	18.79	ppb	0.29	40	39.5	50 - 150	
59 Co	72	1	4.33	0.27	ppb	0.48	40	10.7	50 - 150	
60 Ni	72	1	4.83	1.00	ppb	2.51	40	11.8	50 - 150	
63 Cu	72	1	4.22	0.28	ppb	0.74	40	10.5	50 - 150	
66 Zn	72	1	4.65	0.62	ppb	1.25	40	11.4	50 - 150	
75 As	72	1	15.00	10.38	ppb	0.39	40	29.8	50 - 150	
78 Se	72	1	5.47	0.96	ppb	9.23	40	13.3	50 - 150	
95 Mo	72	1	5.36	1.06	ppb	2.81	40	13.0	50 - 150	
107 Ag	115	1	3.77	0.01	ppb	3.49	40	9.4	50 - 150	
111 Cd	115	1	4.07	-0.02	ppb	5.34	40	10.2	50 - 150	
118 Sn	115	1	0.32	0.09	ppb	8.08	40	0.8	50 - 150	
121 Sb	115	1	4.14	0.04	ppb	1.05	40	10.3	50 - 150	
137 Ba	115	1	9.08	4.78	ppb	1.76	40	20.3	50 - 150	
205 Tl	165	1	3.95	0.06	ppb	1.09	40	9.9	50 - 150	
208 Pb	165	1	3.98	0.11	ppb	1.44	40	9.9	50 - 150	
232 Th	165	1	4.15	0.96	ppb	1.22	40	10.1	50 - 150	
238 U	165	1	7.60	3.27	ppb	1.43	40	17.6	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	296357	0.18	298913	99.1	30 - 120	
45 Sc	1	1737871	1.01	1771505	98.1	30 - 120	
72 Ge	1	801876	0.98	851994	94.1	30 - 120	
115 In	1	2121247	1.84	2290579	92.6	30 - 120	
165 Ho	1	3218159	0.78	3269618	98.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\149 MSD.D\149 MSD.D#
Date Acquired: Aug 11 2009 12:49 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3308
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: MSD
Dilution Factor: 10.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\148 MS.D\148 MS.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.55	ppb	4.23	4.16	8.77	20	
51 V	72	1	-31.67	ppb	14.32	-28.11	-11.91	20	
52 Cr	72	1	1016.00	ppb	0.90	1050.00	3.29	20	
55 Mn	72	1	22.90	ppb	1.21	23.23	1.43	20	
59 Co	72	1	4.31	ppb	1.12	4.32	0.35	20	
60 Ni	72	1	4.94	ppb	3.50	4.83	2.38	20	
63 Cu	72	1	4.17	ppb	2.39	4.22	1.24	20	
66 Zn	72	1	4.65	ppb	1.55	4.65	0.04	20	
75 As	72	1	14.78	ppb	0.93	15.00	1.48	20	
78 Se	72	1	5.38	ppb	1.66	5.47	1.59	20	
95 Mo	72	1	5.28	ppb	1.82	5.36	1.49	20	
107 Ag	115	1	3.86	ppb	0.90	3.77	2.38	20	
111 Cd	115	1	4.17	ppb	2.34	4.07	2.45	20	
118 Sn	115	1	0.15	ppb	19.73	0.32	74.38	20	
121 Sb	115	1	4.11	ppb	2.91	4.14	0.70	20	
137 Ba	115	1	8.91	ppb	1.96	9.08	1.86	20	
205 Tl	165	1	3.97	ppb	2.35	3.95	0.66	20	
208 Pb	165	1	4.03	ppb	2.45	3.97	1.35	20	
232 Th	165	1	4.33	ppb	1.92	4.15	4.30	20	
238 U	165	1	7.53	ppb	2.93	7.59	0.82	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300459	0.38	298913	100.5	30 - 120	
45 Sc	1	1761713	0.96	1771505	99.4	30 - 120	
72 Ge	1	808902	0.89	851994	94.9	30 - 120	
115 In	1	2136314	0.89	2290579	93.3	30 - 120	
165 Ho	1	3222274	2.08	3269618	98.6	30 - 120	

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

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\150SMPL.D\150SMPL.D#
Date Acquired: Aug 11 2009 12:51 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG21 20X
Misc Info: D9H040190
Vial Number: 3309
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: SA
Dilution Factor: 20.00
Autodil Factor: Undiluted
Final Dil Factor: 20.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.30	0.01	ppb	86.60	3600	
51 V	72	1	-1,221.00	-61.05	ppb	7.14	3600	
52 Cr	72	1	37,340.00	1867.00	ppb	1.46	3600	
55 Mn	72	1	38.66	1.93	ppb	1.87	3600	
59 Co	72	1	1.28	0.06	ppb	12.84	3600	
60 Ni	72	1	10.10	0.51	ppb	2.46	3600	
63 Cu	72	1	1.62	0.08	ppb	14.06	3600	
66 Zn	72	1	3.44	0.17	ppb	12.90	3600	
75 As	72	1	81.02	4.05	ppb	3.03	3600	
78 Se	72	1	12.12	0.61	ppb	85.72	3600	
95 Mo	72	1	32.44	1.62	ppb	7.03	3600	
107 Ag	115	1	0.15	0.01	ppb	36.04	3600	
111 Cd	115	1	-2.89	-0.14	ppb	50.48	3600	
118 Sn	115	1	1.48	0.07	ppb	9.61	3600	
121 Sb	115	1	0.55	0.03	ppb	27.63	3600	
137 Ba	115	1	68.84	3.44	ppb	1.42	3600	
205 Tl	165	1	0.44	0.02	ppb	14.59	3600	
208 Pb	165	1	0.85	0.04	ppb	4.09	3600	
232 Th	165	1	3.46	0.17	ppb	6.71	1000	
238 U	165	1	43.40	2.17	ppb	0.57	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291191	1.20	298913	97.4	30 - 120	
45 Sc	1	1704318	1.32	1771505	96.2	30 - 120	
72 Ge	1	791982	0.63	851994	93.0	30 - 120	
115 In	1	2092951	0.24	2290579	91.4	30 - 120	
165 Ho	1	3157899	0.71	3269618	96.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\151 CCV.D\151 CCV.D#
Date Acquired: Aug 11 2009 12:54 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: Aug 10 2009 11:54 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	50.31	ppb	1.79	50	100.6	90 - 110	
51 V	72	1	47.72	ppb	0.57	50	95.4	90 - 110	
52 Cr	72	1	48.34	ppb	0.27	50	96.7	90 - 110	
55 Mn	72	1	48.11	ppb	0.40	50	96.2	90 - 110	
59 Co	72	1	49.47	ppb	0.66	50	98.9	90 - 110	
60 Ni	72	1	50.01	ppb	1.09	50	100.0	90 - 110	
63 Cu	72	1	49.70	ppb	0.74	50	99.4	90 - 110	
66 Zn	72	1	52.91	ppb	0.63	50	105.8	90 - 110	
75 As	72	1	49.12	ppb	0.02	50	98.2	90 - 110	
78 Se	72	1	48.81	ppb	3.68	50	97.6	90 - 110	
95 Mo	72	1	49.73	ppb	0.70	50	99.5	90 - 110	
107 Ag	115	1	49.12	ppb	0.72	50	98.2	90 - 110	
111 Cd	115	1	50.09	ppb	0.40	50	100.2	90 - 110	
118 Sn	115	1	48.97	ppb	0.36	50	97.9	90 - 110	
121 Sb	115	1	49.59	ppb	0.64	50	99.2	90 - 110	
137 Ba	115	1	49.21	ppb	0.73	50	98.4	90 - 110	
205 Tl	165	1	50.40	ppb	1.40	50	100.8	90 - 110	
208 Pb	165	1	50.34	ppb	1.31	50	100.7	90 - 110	
232 Th	165	1	49.83	ppb	3.41	50	99.7	90 - 110	
238 U	165	1	51.61	ppb	1.72	50	103.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298153	1.60	298913	99.7	30 - 120	
45 Sc	1	1730257	0.51	1771505	97.7	30 - 120	
72 Ge	1	823986	1.07	851994	96.7	30 - 120	
115 In	1	2255073	0.60	2290579	98.4	30 - 120	
165 Ho	1	3304129	1.16	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\152 CCB.D\152 CCB.D#
Date Acquired: Aug 11 2009 12:57 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: Aug 10 2009 11:54 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	0.007	ppb	173.19	1.00	
51 V	72	1	0.010	ppb	756.86	1.00	
52 Cr	72	1	0.074	ppb	27.75	1.00	
55 Mn	72	1	0.077	ppb	12.16	1.00	
59 Co	72	1	0.014	ppb	33.69	1.00	
60 Ni	72	1	0.033	ppb	8.70	1.00	
63 Cu	72	1	0.015	ppb	93.89	1.00	
66 Zn	72	1	0.514	ppb	6.53	1.00	
75 As	72	1	0.008	ppb	121.93	1.00	
78 Se	72	1	0.477	ppb	100.92	1.00	
95 Mo	72	1	-0.063	ppb	25.38	1.00	
107 Ag	115	1	0.013	ppb	37.30	1.00	
111 Cd	115	1	0.020	ppb	88.08	1.00	
118 Sn	115	1	0.084	ppb	22.47	1.00	
121 Sb	115	1	0.051	ppb	1.64	1.00	
137 Ba	115	1	0.017	ppb	21.12	1.00	
205 Tl	165	1	0.032	ppb	6.00	1.00	
208 Pb	165	1	0.011	ppb	13.50	1.00	
232 Th	165	1	1.203	ppb	14.49	1.00	Fail
238 U	165	1	0.014	ppb	5.01	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299841	0.83	298913	100.3	30 - 120	
45 Sc	1	1753527	0.56	1771505	99.0	30 - 120	
72 Ge	1	853516	0.19	851994	100.2	30 - 120	
115 In	1	2301995	0.44	2290579	100.5	30 - 120	
165 Ho	1	3384139	1.05	3269618	103.5	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\153WASH.D\153WASH.D#
Date Acquired: Aug 11 2009 01:00 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: Aug 10 2009 11:54 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.060 ppb	9.90	1.30	
51 V	72	1	5.022 ppb	1.13	6.50	
52 Cr	72	1	2.068 ppb	0.61	2.60	
55 Mn	72	1	0.987 ppb	1.84	1.30	
59 Co	72	1	1.023 ppb	1.68	1.30	
60 Ni	72	1	2.082 ppb	4.09	2.60	
63 Cu	72	1	2.089 ppb	1.60	2.60	
66 Zn	72	1	10.410 ppb	0.53	13.00	
75 As	72	1	5.031 ppb	1.06	6.50	
78 Se	72	1	5.439 ppb	8.08	6.50	
95 Mo	72	1	1.962 ppb	2.26	2.60	
107 Ag	115	1	5.147 ppb	1.92	6.50	
111 Cd	115	1	1.088 ppb	3.58	1.30	
118 Sn	115	1	10.280 ppb	1.11	13.00	
121 Sb	115	1	1.935 ppb	1.15	2.60	
137 Ba	115	1	1.067 ppb	5.26	1.30	
205 Tl	165	1	1.098 ppb	2.04	1.30	
208 Pb	165	1	1.070 ppb	1.69	1.30	
232 Th	165	1	2.403 ppb	2.53	2.60	
238 U	165	1	1.104 ppb	0.39	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300232	0.96	298913	100.4	30 - 120	
45 Sc	1	1774194	0.66	1771505	100.2	30 - 120	
72 Ge	1	859087	0.54	851994	100.8	30 - 120	
115 In	1	2320421	0.48	2290579	101.3	30 - 120	
165 Ho	1	3355379	1.38	3269618	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\AG081009A.B\128CALB.D\128CALB.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: D9H040190

Client: Northgate Environmental

Batch(es) #: 9217132

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: 8/11/09

Metals Raw Data RoadMap

LotID		Metal	WorkOrder	Anal Date	TestDesc	Batch	File Id	Instr
D9H040190	1	SE	LHG211AC	20090811	6020TOTA	9217132	AG081009A	024
D9H040190	1	AS	LHG211AA	20090811	6020TOTA	9217132	AG081009A	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9217132**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JRW

Prep Date: 08/05/09
Due Date: 08/17/09

Lot	Work Order			Initial Weight/Volume
D9H050000 Water	**LHH8T**	B	Due Date: SDG:	50 mL
D9H050000 Water	**LHH8T**	C	Due Date: SDG:	50 mL
D9H040187 Water	**LHG1P** Total		Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1P** Total	S	Due Date: 08/17/09 SDG:	50 mL
D9H040187 Water	**LHG1P** Total	D	Due Date: 08/17/09 SDG:	50 mL
D9H040190 Water	**LHG21** Total		Due Date: 08/17/09 SDG:	50 mL
~~D9H040197~~ Water	~~**LHG7R**~~ Total		~~Due Date: 08/17/09~~ SDG:	50 mL
~~D9H040202~~ Water	~~**LHG9J**~~ Total		~~Due Date: 08/17/09~~ SDG:	~~50 mL~~

8/7/09 client deleted.

Comments:

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

checked 8/10/09

ICPMS ELEMENTS WITHIN THE BATCH:

AS SE

8/11/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9217132 **ALLIQUOTTED BY:** KS
PREP DATE: 8/5/2009 **DIGESTED BY:** JRW

CONSUMABLES USED

Digestion Cups: **Manufacturer:** Environmental Express **Lot #:** A901LS267

One or more samples were filtered prior to analysis at the instrument. ☐ Yes ☐ No

If "yes", then the method blank and the LCS were also filtered in the same manner using the same type of filter.

Analyst(s) Initials:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-3775-09	6/23/10	100uL	15
2008Cal-2	STD-2637-09	5/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 4110 Block & Cup # : 3/30

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	1300	93	1745 + 700 8/5/09 JRW	96
HNO3	1730	96	1800	96
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: JRW ***Date:*** 8/5/09

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

Aug-10-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

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

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

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

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

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

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

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

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD4601-09, ICP-MS (024) INT STD BRC — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 08-03-2009
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

STD4712-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4711-09, NITRIC ACID — Aliquot Amount (ml): 50.000

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

STD4713-09, ICP-MS 10 ppm Sn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4714-09, ICP-MS 100 ppb cal — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Expires(2): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3773-09, ICPMS 2008CAL-1 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: 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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4715-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	2,500.0

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4716-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn Aliquot Amount (ml): 0.0900

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

Parent Std No.: STD4714-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 08-11-2009

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

STD4717-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022

Volume (ml): 10.000

Date Prep./Opened: 08-10-2009

Date Expires(1): 08-11-2009 (2 Days)

pipettes: Met 20 and Met 8

Parent Std No.: STD4716-09, ICP-MS RL STD

Aliquot Amount (ml): 2.0000

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

STD4718-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (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

STD4719-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4720-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4721-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4722-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4723-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

Reviewed By: LRD 08/10/2009 File AG0810009A

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	08/10/09 18:06		☐
4	100 ppb				1.0	08/10/09 18:09		☐
5	ICV				1.0	08/10/09 18:12		☐
6	RLIV				1.0	08/10/09 18:15		☐
7	ICB				1.0	08/10/09 18:17		☐
8	RL STD				1.0	08/10/09 18:20		☐
9	AFCEE RL				1.0	08/10/09 18:23		☐
10	ALTSe				1.0	08/10/09 18:26		☐
11	ICSA				1.0	08/10/09 18:28		☐
12	ICSAB				1.0	08/10/09 18:31		☐
13	RINSE				1.0	08/10/09 18:34		☐
14	LR				1.0	08/10/09 18:36		☐
15	RINSE				1.0	08/10/09 18:39		☐
16	CCV				1.0	08/10/09 18:42		☐
17	CCB				1.0	08/10/09 18:45		☐
18	RLCV				1.0	08/10/09 18:47		☐
19	~~LG9KP~~	~~D9G300165-1~~	~~9215182~~	~~04~~	~~1.0~~	~~08/10/09 18:50~~	KF 8/11/09 Did not use.	☐
20	CCV				1.0	08/10/09 18:53		☐
21	CCB				1.0	08/10/09 18:55		☐
22	RLCV				1.0	08/10/09 18:58		☐
23	LG8F7	D9G290252-1	9212201	46	1.0	08/10/09 19:01		☐
24	LG8F7P5	D9G290252	9212201		5.0	08/10/09 19:04		☐
25	LG8F7Z	D9G290252-1	9212201		1.0	08/10/09 19:06		☐
26	LG8F7S	D9G290252-1	9212201	46	1.0	08/10/09 19:09		☐
27	LG8F7D	D9G290252-1	9212201	46	1.0	08/10/09 19:12		☐
28	CCV				1.0	08/10/09 19:15		☐
29	CCB				1.0	08/10/09 19:17		☐
30	RLCV				1.0	08/10/09 19:20		☐
31	~~LHFL0B~~	~~D9H030000~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:23~~		☐
32	LHFL0C	D9H030000	9215265	46	1.0	08/10/09 19:26		☐
33	~~LHA17~~	~~D9G300337-1~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:28~~	KF 8/11/09 Did not use.	☐
34	CCV				1.0	08/10/09 19:31		☐
35	CCB				1.0	08/10/09 19:34		☐
36	RLCV				1.0	08/10/09 19:37		☐
37	LG86WB	D9G300000	9211083	04	1.0	08/10/09 19:39		☐
38	LG86WC	D9G300000	9211083	04	1.0	08/10/09 19:42		☐
39	LG8K3	D9G290261-1	9211083	04	1.0	08/10/09 19:45		☐
40	LG8LE	D9G290261-3	9211083	04	1.0	08/10/09 19:48		☐
41	LG8LF	D9G290261-4	9211083	04	1.0	08/10/09 19:50		☐
42	LG8LH	D9G290261-5	9211083	04	1.0	08/10/09 19:53		☐
43	LG8LJ	D9G290261-6	9211083	04	1.0	08/10/09 19:56		☐
44	LG8LK	D9G290261-7	9211083	04	1.0	08/10/09 19:59		☐
45	CCV				1.0	08/10/09 20:01		☐
46	CCB				1.0	08/10/09 20:04		☐
47	RLCV				1.0	08/10/09 20:07		☐
48	LG8LKP5	D9G290261	9211083		5.0	08/10/09 20:10		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LG8LKZ	D9G290261-7	9211083		1.0	08/10/09 20:12		
50	LG8LKS	D9G290261-7	9211083	04	1.0	08/10/09 20:15		
51	LG8LKD	D9G290261-7	9211083	04	1.0	08/10/09 20:18		
52	LG8LL	D9G290261-8	9211083	04	1.0	08/10/09 20:20		
53	LG8LM	D9G290261-9	9211083	04	1.0	08/10/09 20:23		
54	LG8LN	D9G290261-10	9211083	04	1.0	08/10/09 20:26		
55	LG8LP	D9G290261-11	9211083	04	1.0	08/10/09 20:29		
56	CCV				1.0	08/10/09 20:32		
57	CCB				1.0	08/10/09 20:34		
58	RLCV				1.0	08/10/09 20:37		
59	LG7LLB	D9G290000	9210208	46	1.0	08/10/09 20:40		
60	LG7LLC	D9G290000	9210208	46	1.0	08/10/09 20:42		
61	LG3FP	D9G240333-2	9210208	U1	1.0	08/10/09 20:45		
62	LG3FR	D9G240333-3	9210209	U1	1.0	08/10/09 20:48		
63	LG3FRP5	D9G240333	9210209		5.0	08/10/09 20:51		
64	LG3FRZ	D9G240333-3	9210209		1.0	08/10/09 20:53		
65	LG3FRS	D9G240333-3	9210209	U1	1.0	08/10/09 20:56		
66	CCV				1.0	08/10/09 20:59		
67	CCB				1.0	08/10/09 21:01		
68	RLCV				1.0	08/10/09 21:04		
69	LG3FRD	D9G240333-3	9210209	U1	1.0	08/10/09 21:07		
70	LG3FV	D9G240333-4	9210208	U1	1.0	08/10/09 21:09		
71	LG3FX	D9G240333-5	9210208	U1	1.0	08/10/09 21:12		
72	LG6XM	D9G240333-12	9210209	U1	1.0	08/10/09 21:15		
73	LG6XV	D9G240333-13	9210209	U1	1.0	08/10/09 21:18		
74	LG6XW	D9G240333-14	9210208	U1	1.0	08/10/09 21:20		
75	LG6X0	D9G240333-15	9210208	U1	1.0	08/10/09 21:23		
76	CCV				1.0	08/10/09 21:26		
77	CCB				1.0	08/10/09 21:28		
78	RLCV				1.0	08/10/09 21:31		
79	RINSE				1.0	08/10/09 21:34		
80	RINSE				1.0	08/10/09 21:37		
81	RINSE				1.0	08/10/09 21:39		
82	RINSE				1.0	08/10/09 21:42		
83	RINSE				1.0	08/10/09 21:45		
84	RINSE				1.0	08/10/09 21:48		
85	Cal Blank				1.0	08/10/09 21:50		
86	Cal Blank				1.0	08/10/09 21:53		
87	100 ppb				1.0	08/10/09 21:56		
88	CCV				1.0	08/10/09 21:58		
89	CCB				1.0	08/10/09 22:01		
90	RLCV				1.0	08/10/09 22:04		
91	ICSA				1.0	08/10/09 22:07		
92	ICSAB				1.0	08/10/09 22:09		
93	WASH				1.0	08/10/09 22:12		
94	CCV				1.0	08/10/09 22:15		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	CCB				1.0	08/10/09 22:18		
96	RLCV				1.0	08/10/09 22:20		
97	LHFD8B	D9H030000	9215165	MS	1.0	08/10/09 22:23		
98	LHFD8C	D9H030000	9215165	MS	1.0	08/10/09 22:26		
99	LHEPK	D9H010152-2	9215165	MS	1.0	08/10/09 22:29		
100	LHEPKP5	D9H010152	9215165		5.0	08/10/09 22:31		
101	LHEPKZ	D9H010152-2	9215165		1.0	08/10/09 22:34		
102	LHEPL	D9H010152-3	9215165	MS	1.0	08/10/09 22:37		
103	LHEPM	D9H010152-4	9215165	MS	1.0	08/10/09 22:39		
104	CCV				1.0	08/10/09 22:42		
105	CCB				1.0	08/10/09 22:45		
106	RLCV				1.0	08/10/09 22:48		
107	~~LHH8KBF~~	~~D9H050000~~	~~9217128~~	~~MD~~	~~1.0~~	~~08/10/09 22:51~~		
108	LHH8KCF	D9H050000	9217128	MD	1.0	08/10/09 22:53		
109	LHG1RF	D9H040187-2	9217128	MD	1.0	08/10/09 22:56		
110	LHG1RP5F	D9H040187	9217128		5.0	08/10/09 22:59		
111	LHG1RZF	D9H040187-2	9217128		1.0	08/10/09 23:02		
112	LHG1RSF	D9H040187-2	9217128	MD	1.0	08/10/09 23:04		
113	LHG1RDF	D9H040187-2	9217128	MD	1.0	08/10/09 23:07		
114	CCV				1.0	08/10/09 23:10		
115	CCB				1.0	08/10/09 23:13		
116	RLCV				1.0	08/10/09 23:15		
117	LHH8TB	D9H050000	9217132	MS	1.0	08/10/09 23:18		
118	LHH8TC	D9H050000	9217132	MS	1.0	08/10/09 23:21		
119	LHG1P 5X	D9H040187-1	9217132	MS	5.0	08/10/09 23:24		
120	LHG1PP25	D9H040187	9217132		25.0	08/10/09 23:26		
121	RINSE				1.0	08/10/09 23:32		
122	RINSE				1.0	08/10/09 23:34		
123	RINSE				1.0	08/10/09 23:37		
124	RINSE				1.0	08/10/09 23:40		
125	RINSE				1.0	08/10/09 23:43		
126	RINSE				1.0	08/10/09 23:45		
127	~~Cal Blank~~				~~1.0~~	~~08/10/09 23:48~~	KF 8/11/09 Did not use.	
128	Cal Blank				1.0	08/10/09 23:51		
129	100 ppb				1.0	08/10/09 23:54		
130	CCV				1.0	08/10/09 23:56		
131	CCB				1.0	08/10/09 23:59		
132	RLCV				1.0	08/11/09 00:02		
133	LHH8KBF	D9H050000	9217128	MD	1.0	08/11/09 00:05		
134	LHH8KCF	D9H050000	9217128	MD	1.0	08/11/09 00:07		
135	LHG1RF 10X	D9H040187-2	9217128	MD	10.0	08/11/09 00:10		
136	LHG1RP50F	D9H040187	9217128		50.0	08/11/09 00:13		
137	LHG1RZF	D9H040187-2	9217128		1.0	08/11/09 00:16		
138	LHG1RSF 10	D9H040187-2	9217128	MD	10.0	08/11/09 00:18		
139	LHG1RDF 10	D9H040187-2	9217128	MD	10.0	08/11/09 00:21		
140	CCV				1.0	08/11/09 00:24		

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RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	CCB				1.0	08/11/09 00:27		
142	RLCV				1.0	08/11/09 00:29		
143	LHH8TB	D9H050000	9217132	MS	1.0	08/11/09 00:32		
144	LHH8TC	D9H050000	9217132	MS	1.0	08/11/09 00:35		
145	LHG1P 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:38		
146	LHG1PP50	D9H040187	9217132		50.0	08/11/09 00:41		
147	LHG1PZ	D9H040187-1	9217132		1.0	08/11/09 00:43		
148	LHG1PS 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:46		
149	LHG1PD 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:49		
150	LHG21 20X	D9H040190-1	9217132	MS	20.0	08/11/09 00:51		
151	CCV				1.0	08/11/09 00:54		
152	CCB				1.0	08/11/09 00:57		
153	RLCV				1.0	08/11/09 01:00		
154	LHQK3B	D9H060000	9218437	MS	1.0	08/11/09 01:03		
155	LHQK3C	D9H060000	9218437	MS	1.0	08/11/09 01:05		
156	LHJ5J	D9H050230-1	9218437	MS	1.0	08/11/09 01:08		
157	LHJ5JP5	D9H050230	9218437		5.0	08/11/09 01:11		
158	LHJ5JZ	D9H050230-1	9218437		1.0	08/11/09 01:14		
159	LHJ5JS	D9H050230-1	9218437	MS	1.0	08/11/09 01:16		
160	LHJ5JD	D9H050230-1	9218437	MS	1.0	08/11/09 01:19		
161	LHJ51	D9H050234-1	9218437	MS	1.0	08/11/09 01:22		
162	CCV				1.0	08/11/09 01:25		
163	CCB				1.0	08/11/09 01:27		
164	RLCV				1.0	08/11/09 01:30		
165	~~RINSE~~				1.0	~~08/11/09 01:33~~		
166	RINSE				1.0	~~08/11/09~~ 01:35		
167	RINSE				1.0	08/11/09 01:38		
168	RINSE				1.0	08/11/09 01:41		
169	RINSE				1.0	08/11/09 01:44		
170	RINSE				1.0	08/11/09 01:46		
171	~~Cal Blank~~				1.0	~~08/11/09 01:49~~	KS 8/11/09	
172	Cal Blank				1.0	08/11/09 01:52		
173	100 ppb				1.0	08/11/09 01:55		
174	CCV				1.0	08/11/09 01:57		
175	CCB				1.0	08/11/09 02:00		
176	RLCV				1.0	08/11/09 02:03		
177	LHT80BF	D9H080000	9220058	MD	1.0	08/11/09 02:06		
178	LHT80CF	D9H080000	9220058	MD	1.0	08/11/09 02:08		
179	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:11		
180	LHQGCP5F	D9H060361	9220058		5.0	08/11/09 02:14		
181	LHQGCZF	D9H060361-2	9220058		1.0	08/11/09 02:17		
182	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:19		
183	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:22		
184	CCV				1.0	08/11/09 02:25		
185	CCB				1.0	08/11/09 02:28		
186	RLCV				1.0	08/11/09 02:30		

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RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:33	For confirmation only. FF 8/11/09	☐
188	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:36		☐
189	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:39		☐
190	CCV				1.0	08/11/09 02:41		☐
191	CCB				1.0	08/11/09 02:44		☐
192	RLCV				1.0	08/11/09 02:47		☐
193	~~LHTW6B~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:50~~		☐
194	~~LHTW6C~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:52~~	FF 8/11/09 Did not use.	☐
195	LHTW6B	D9H080000	9220029	MS	1.0	08/11/09 02:55		☐
196	LHTW6C	D9H080000	9220029	MS	1.0	08/11/09 02:58		☐
197	CCV				1.0	08/11/09 03:01		☐
198	CCB				1.0	08/11/09 03:04		☐
199	RLCV				1.0	08/11/09 03:06		☐
200	LHLPQ	D9H060174-1	9220029	MS	1.0	08/11/09 03:09		☐
201	LHLP9	D9H060174-2	9220029	MS	1.0	08/11/09 03:12		☐
202	LHLQF	D9H060174-3	9220029	MS	1.0	08/11/09 03:15		☐
203	LHLQG	D9H060174-4	9220029	MS	1.0	08/11/09 03:17		☐
204	LHLQH	D9H060174-5	9220029	MS	1.0	08/11/09 03:20		☐
205	LHLQJ	D9H060174-6	9220029	MS	1.0	08/11/09 03:23		☐
206	CCV				1.0	08/11/09 03:26		☐
207	CCB				1.0	08/11/09 03:29		☐
208	RLCV				1.0	08/11/09 03:31		☐
209	LHREN	D9H070161-1	9220029	MS	1.0	08/11/09 03:34		☐
210	LHRENP5	D9H070161	9220029		5.0	08/11/09 03:37		☐
211	LHRENZ	D9H070161-1	9220029		1.0	08/11/09 03:40		☐
212	LHRENS	D9H070161-1	9220029	MS	1.0	08/11/09 03:42		☐
213	LHREND	D9H070161-1	9220029	MS	1.0	08/11/09 03:45		☐
214	LHRFD	D9H070161-2	9220029	MS	1.0	08/11/09 03:48		☐
215	LHRFF	D9H070161-3	9220029	MS	1.0	08/11/09 03:51		☐
216	LHRGP	D9H070161-4	9220029	MS	1.0	08/11/09 03:53		☐
217	CCV				1.0	08/11/09 03:56		☐
218	CCB				1.0	08/11/09 03:59		☐
219	RLCV				1.0	08/11/09 04:02		☐
220	LHRGR	D9H070161-5	9220029	MS	1.0	08/11/09 04:05		☐
221	LHRGV	D9H070161-6	9220029	MS	1.0	08/11/09 04:07		☐
222	LHRGW	D9H070161-7	9220029	MS	1.0	08/11/09 04:10		☐
223	LHRGX	D9H070161-8	9220029	MS	1.0	08/11/09 04:13		☐
224	LHRG1	D9H070161-9	9220029	MS	1.0	08/11/09 04:16		☐
225	LHRG2	D9H070161-10	9220029	MS	1.0	08/11/09 04:19		☐
226	LHRG6	D9H070161-11	9220029	MS	1.0	08/11/09 04:21		☐
227	CCV				1.0	08/11/09 04:24		☐
228	CCB				1.0	08/11/09 04:27		☐
229	RLCV				1.0	08/11/09 04:30		☐
230	~~RINSE~~				~~1.0~~	~~08/11/09 04:32~~		☐
231	RINSE				1.0	08/11/09 04:35		☐
232	~~RINSE~~				~~1.0~~	~~08/11/09 04:38~~	FF 8/11/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
233	~~RINSE~~				1.0	~~08/11/09 04:41~~		
234	RINSE				1.0	08/11/09 04:43		
235	RINSE				1.0	08/11/09 04:46		
236	~~Cal Blank~~				1.0	~~08/11/09 04:49~~	KF 8/11/09	
237	Cal Blank				1.0	08/11/09 04:52		
238	100 ppb				1.0	08/11/09 04:54		
239	CCV				1.0	08/11/09 04:57		
240	CCB				1.0	08/11/09 05:00		
241	RLCV				1.0	08/11/09 05:03		
242	LHT3RBF	D9H080000	9220042	MD	1.0	08/11/09 05:05		
243	LHT3RCF	D9H080000	9220042	MD	1.0	08/11/09 05:08		
244	LHJ0JF	D9H050209-1	9220042	MD	1.0	08/11/09 05:11		
245	LHJ02F	D9H050209-2	9220042	MD	1.0	08/11/09 05:14		
246	LHJ02P5F	D9H050209	9220042		5.0	08/11/09 05:17		
247	LHJ02ZF	D9H050209-2	9220042		1.0	08/11/09 05:19		
248	LHJ02SF	D9H050209-2	9220042	MD	1.0	08/11/09 05:22		
249	LHJ02DF	D9H050209-2	9220042	MD	1.0	08/11/09 05:25		
250	LHKEWF	D9H050209-4	9220042	MD	1.0	08/11/09 05:28		
251	CCV				1.0	08/11/09 05:30		
252	CCB				1.0	08/11/09 05:33		
253	RLCV				1.0	08/11/09 05:36		
254	LHT4NB	D9H080000	9220047	MS	1.0	08/11/09 05:39		
255	LHT4NC	D9H080000	9220047	MS	1.0	08/11/09 05:42		
256	LHJ08	D9H050209-3	9220047	MS	1.0	08/11/09 05:44		
257	LHKE1	D9H050209-5	9220047	MS	1.0	08/11/09 05:47		
258	LHKE1P5	D9H050209	9220047		5.0	08/11/09 05:50		
259	LHKE1Z	D9H050209-5	9220047		1.0	08/11/09 05:53		
260	LHKE1S	D9H050209-5	9220047	MS	1.0	08/11/09 05:55		
261	LHKE1D	D9H050209-5	9220047	MS	1.0	08/11/09 05:58		
262	CCV				1.0	08/11/09 06:01		
263	CCB				1.0	08/11/09 06:04		
264	RLCV				1.0	08/11/09 06:06		
265	LHT9RB	D9H080000	9220064	04	1.0	08/11/09 06:09		
266	LHT9RC	D9H080000	9220064	04	1.0	08/11/09 06:12		
267	LHJGD	D9H050137-5	9220064	04	1.0	08/11/09 06:15		
268	LHJGDP5	D9H050137	9220064		5.0	08/11/09 06:18		
269	LHJGDZ	D9H050137-5	9220064		1.0	08/11/09 06:20		
270	LHJGDS	D9H050137-5	9220064	04	1.0	08/11/09 06:23		
271	LHJGDD	D9H050137-5	9220064	04	1.0	08/11/09 06:26		
272	LHR5A	D9H070252-1	9220064	04	1.0	08/11/09 06:29		
273	CCV				1.0	08/11/09 06:31		
274	CCB				1.0	08/11/09 06:34		
275	RLCV				1.0	08/11/09 06:37		
276	~~LHT0GB~~	~~D9H080000~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:40~~		
277	LHT0GC	D9H080000	9220033	MS	1.0	08/11/09 06:43		
278	~~LHMHR~~	~~D9H060214-1~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:45~~	KF 8/11/09 Did not use R.	

Denver

RUN SUMMARY

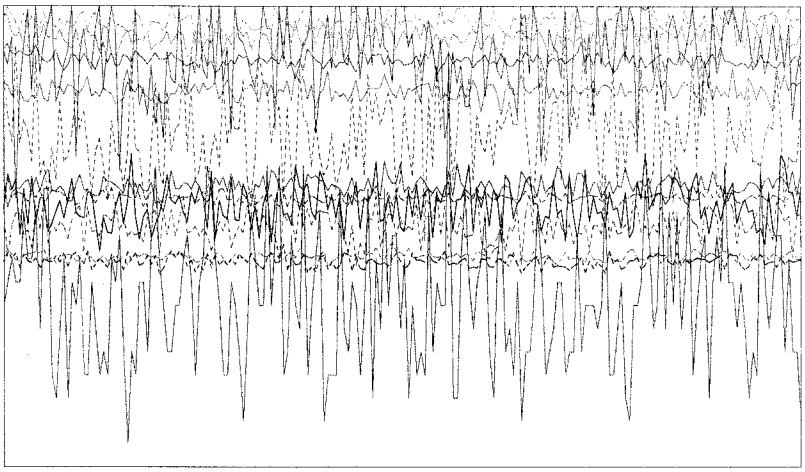
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
279	~~LHMLH~~	~~D9H060214-2~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:48~~		☐
280	LHMN6	D9H060214-3	9220033	MS	1.0	08/11/09 06:51		☐
281	LHTDQ	D9H070289-1	9220033	MS	1.0	08/11/09 06:54		☐
282	LHTDW	D9H070289-2	9220033	MS	1.0	08/11/09 06:57		☐
283	CCV				1.0	08/11/09 06:59		☐
284	CCB				1.0	08/11/09 07:02		☐
285	RLCV				1.0	08/11/09 07:05		☐
286	LHTD0	D9H070289-3	9220033	MS	1.0	08/11/09 07:08		☐
287	LHTD0P5	D9H070289	9220033		5.0	08/11/09 07:10		☐
288	LHTD0Z	D9H070289-3	9220033		1.0	08/11/09 07:13		☐
289	LHTD0S	D9H070289-3	9220033	MS	1.0	08/11/09 07:16		☐
290	LHTD0D	D9H070289-3	9220033	MS	1.0	08/11/09 07:19		☐
291	LHTD1	D9H070289-4	9220033	MS	1.0	08/11/09 07:22		☐
292	CCV				1.0	08/11/09 07:24		☐
293	CCB				1.0	08/11/09 07:27		☐
294	~~RLCV~~				~~1.0~~	~~08/11/09 07:30~~	KF 8/11/09 Did not use.	☐

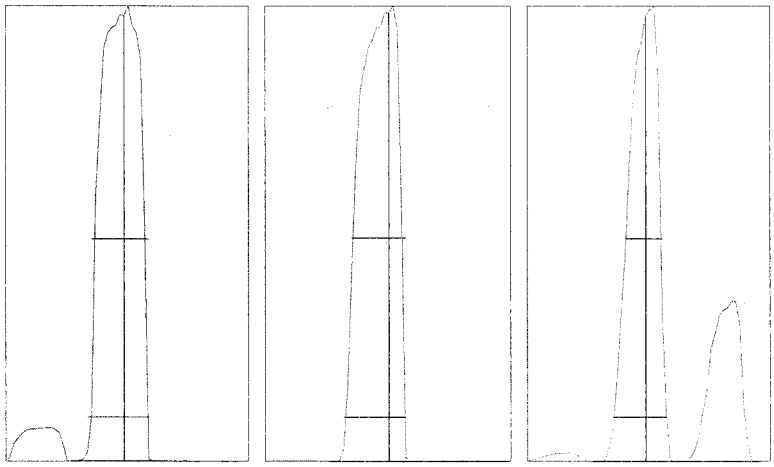
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 1.280%
Doubly Charged: 70/140 1.306%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1277.0	1212.6	3.29	2.10
7	20,000	16661.0	16295.0	2.25	1.60
59	20,000	18792.0	18605.1	2.34	0.90
63	100	91.0	90.0	11.00	1.10
70	500	302.0	283.2	7.74	1.50
75	20	2.0	7.2	40.14	1.20
78	500	273.0	260.8	6.33	1.50
89	50,000	22278.0	22756.3	1.97	2.30
115	20,000	19390.0	19268.7	1.88	2.60
118	100	77.0	72.2	12.54	2.60
137	5,000	2253.0	2223.9	2.70	2.80
205	20,000	11452.0	11648.2	1.84	3.60
238	20,000	17180.0	17622.9	1.55	4.60
156/140	2	1.240%	1.301%	7.97	
70/140	2	1.528%	1.441%	7.98	



m/z:	7	89	205
Height:	16,281	23,001	11,900
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.65	0.45
W-10%:	0.7500	0.7500	0.6500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===				===Ion Lenses===				===Q-Pole Parameters===			
RF Power	:	1550	W	Extract 1	:	0	V	AMU Gain	:	133	
RF Matching	:	1.7	V	Extract 2	:	-175	V	AMU Offset	:	123	
Smpl Depth	:	7.5	mm	Omega Bias-ce	:	-34	V	Axis Gain	:	1.0006	
Torch-H	:	-0.8	mm	Omega Lens-ce	:	1	V	Axis Offset	:	-0.03	
Torch-V	:	-0.3	mm	Cell Entrance	:	-30	V	QP Bias	:	-1	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	:	1720	V
Sample Pump	:	---	rps	OctP RF	:	180	V	Pulse HV	:	1390	V
S/C Temp	:	2	degC	OctP Bias	:	-18	V				

===Reaction Cell===

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

P/A Factor Tuning Report

Acquired:Aug 10 2009 05:25 pm

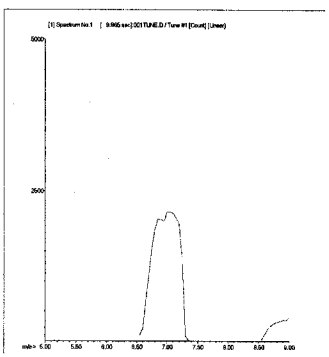
Mass[amu]	Element	P/A Factor
6	Li	0.059224
7	(Li)	Sensitivity too low
9	Be	0.065939
45	Sc	0.077958
51	V	0.079670
52	Cr	0.081495
53	(Cr)	Sensitivity too low
55	Mn	0.082881
59	Co	0.084650
60	Ni	0.085888
63	Cu	0.087500
66	Zn	0.087183
72	Ge	0.086826
75	As	0.086085
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.087962
98	(Mo)	0.087439
99	(Mo)	0.088211
106	(Cd)	0.090424
107	Ag	Sensitivity too low
108	(Cd)	0.090963
111	Cd	0.090902
114	Cd	0.090659
115	In	0.089830
118	Sn	0.090118
121	Sb	0.090217
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.095902
206	(Pb)	0.095184
207	(Pb)	0.095217
208	Pb	0.094502
232	Th	0.093768
238	U	0.093910

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

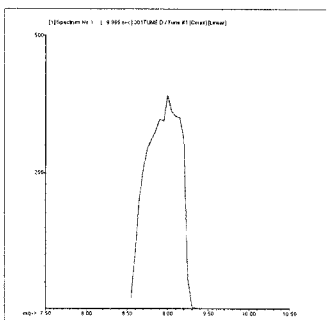
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D
Date Acquired: Aug 10 2009 06:01 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	23394	23373	23283	23262	23454	23596	0.58	5.00	
9 Be	4040	4033	4013	4046	4048	4060	0.44	5.00	
24 Mg	27733	27886	27740	27593	28101	27346	1.03	5.00	
59 Co	126100	128137	127946	123341	126160	124916	1.61	5.00	
115 In	1508105	1512323	1511531	1497483	1509610	1509575	0.40	5.00	
208 Pb	69191	70426	69382	67952	68926	69270	1.29	5.00	
238 U	126765	128734	126188	125493	127220	126189	1.00	5.00	

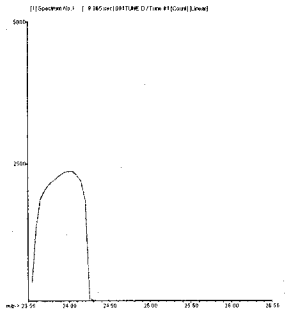


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D



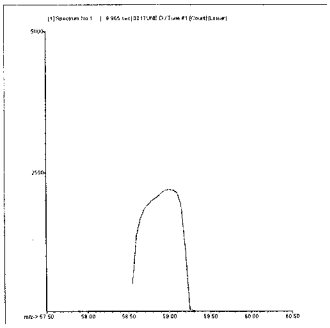
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



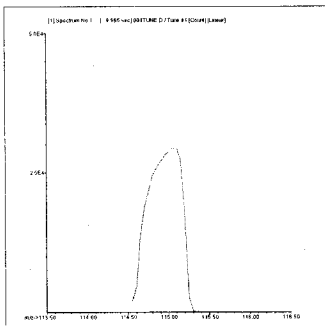
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



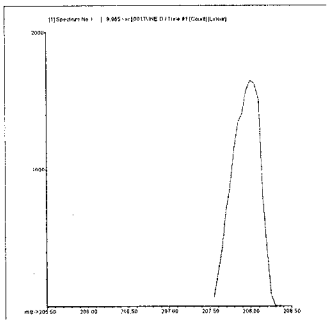
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



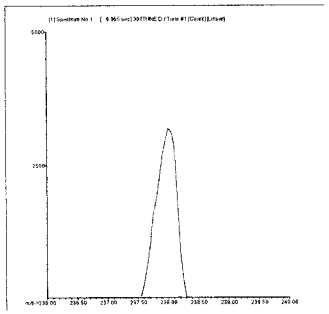
208 Pb

Mass Calib.

Actual: 208.00
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 238.00
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\002CALB.D\002CALB.D#
Date Acquired: Aug 10 2009 06:04 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	354	31.69
52	Cr	72	1	4124	6.07
55	Mn	72	1	670	21.99
59	Co	72	1	70	14.29
60	Ni	72	1	117	21.57
63	Cu	72	1	557	9.22
66	Zn	72	1	2610	2.26
75	As	72	1	71	6.54
78	Se	72	1	770	11.10
95	Mo	72	1	70	37.80
107	Ag	115	1	17	34.64
111	Cd	115	1	30	71.04
118	Sn	115	1	417	12.08
121	Sb	115	1	17	34.64
137	Ba	115	1	41	16.88
205	Tl	165	1	118	27.20
208	Pb	165	1	282	3.80
232	Th	165	1	200	5.00
238	U	165	1	113	5.88

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	392728	0.47
45	Sc	1	2428129	0.41
72	Ge	1	1115573	2.35
115	In	1	2711701	0.96
165	Ho	1	3799176	0.71

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

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#
Date Acquired: Aug 10 2009 06:06 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	1017.20
52	Cr	72	1	3697	2.89
55	Mn	72	1	787	17.81
59	Co	72	1	37	56.77
60	Ni	72	1	467	11.80
63	Cu	72	1	650	9.23
66	Zn	72	1	885	2.73
75	As	72	1	65	15.87
78	Se	72	1	777	16.10
95	Mo	72	1	40	43.30
107	Ag	115	1	3	173.21
111	Cd	115	1	23	56.18
118	Sn	115	1	1010	5.24
121	Sb	115	1	28	48.50
137	Ba	115	1	14	70.50
205	Tl	165	1	81	10.34
208	Pb	165	1	252	5.34
232	Th	165	1	177	8.65
238	U	165	1	26	7.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	394687	0.94
45	Sc	1	2446753	1.77
72	Ge	1	1125847	1.05
115	In	1	2719186	2.09
165	Ho	1	3817349	0.25

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\AG081009A.B\004ICAL.D\004ICAL.D#
Date Acquired: Aug 10 2009 06:09 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: Aug 10 2009 06:07 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	65842	1.17
51	V	72	1	1535619	1.04
52	Cr	72	1	1532297	0.65
55	Mn	72	1	1633772	1.58
59	Co	72	1	1921710	0.85
60	Ni	72	1	447209	0.74
63	Cu	72	1	1073527	1.19
66	Zn	72	1	208832	1.11
75	As	72	1	179835	0.69
78	Se	72	1	30180	2.46
95	Mo	72	1	467956	0.64
107	Ag	115	1	1296538	0.46
111	Cd	115	1	242181	1.30
118	Sn	115	1	666189	0.27
121	Sb	115	1	760929	0.70
137	Ba	115	1	315160	1.02
205	Tl	165	1	1960793	0.44
208	Pb	165	1	2698115	0.18
232	Th	165	1	2387349	2.74
238	U	165	1	2722294	0.55

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	387659	0.67	394687	98.2	30 - 120	
45	Sc	1	2412509	0.93	2446753	98.6	30 - 120	
72	Ge	1	1107652	0.44	1125847	98.4	30 - 120	
115	In	1	2709456	1.18	2719186	99.6	30 - 120	
165	Ho	1	3829303	0.52	3817349	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\AG081009A.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\AG081009A.B\005 ICV.D\005 ICV.D#
Date Acquired: Aug 10 2009 06:12 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: Aug 10 2009 06:10 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	40.48	ppb	1.00	40	101.2	90 - 110	
51 V	72	1	39.31	ppb	0.98	40	98.3	90 - 110	
52 Cr	72	1	39.86	ppb	0.82	40	99.7	90 - 110	
55 Mn	72	1	39.36	ppb	0.49	40	98.4	90 - 110	
59 Co	72	1	39.81	ppb	1.21	40	99.5	90 - 110	
60 Ni	72	1	40.33	ppb	1.20	40	100.8	90 - 110	
63 Cu	72	1	39.84	ppb	0.87	40	99.6	90 - 110	
66 Zn	72	1	40.26	ppb	0.39	40	100.7	90 - 110	
75 As	72	1	39.99	ppb	0.13	40	100.0	90 - 110	
78 Se	72	1	41.87	ppb	3.08	40	104.7	90 - 110	
95 Mo	72	1	39.49	ppb	0.68	40	98.7	90 - 110	
107 Ag	115	1	39.86	ppb	0.43	40	99.7	90 - 110	
111 Cd	115	1	40.83	ppb	1.84	40	102.1	90 - 110	
118 Sn	115	1	39.26	ppb	1.02	40	98.2	90 - 110	
121 Sb	115	1	39.12	ppb	1.36	40	97.8	90 - 110	
137 Ba	115	1	40.11	ppb	0.69	40	100.3	90 - 110	
205 Tl	165	1	40.87	ppb	1.42	40	102.2	90 - 110	
208 Pb	165	1	40.72	ppb	1.25	40	101.8	90 - 110	
232 Th	165	1	44.35	ppb	1.41	40	110.9	90 - 110	Fail
238 U	165	1	40.53	ppb	0.56	40	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	386356	0.92	394687	97.9	30 - 120	
45 Sc	1	2392521	0.40	2446753	97.8	30 - 120	
72 Ge	1	1110457	0.44	1125847	98.6	30 - 120	
115 In	1	2702975	0.93	2719186	99.4	30 - 120	
165 Ho	1	3868261	0.70	3817349	101.3	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\AG081009A.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\AG081009A.B\006WASH.D\006WASH.D#
Date Acquired: Aug 10 2009 06:15 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: Aug 10 2009 06:10 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	0.962 ppb	11.83	1.30	
51 V	72	1	5.098 ppb	0.72	6.50	
52 Cr	72	1	2.153 ppb	0.77	2.60	
55 Mn	72	1	1.013 ppb	1.93	1.30	
59 Co	72	1	1.046 ppb	1.77	1.30	
60 Ni	72	1	2.036 ppb	1.65	2.60	
63 Cu	72	1	2.079 ppb	2.63	2.60	
66 Zn	72	1	10.260 ppb	0.96	13.00	
75 As	72	1	5.112 ppb	0.38	6.50	
78 Se	72	1	4.868 ppb	3.66	6.50	
95 Mo	72	1	2.199 ppb	4.71	2.60	
107 Ag	115	1	5.190 ppb	1.63	6.50	
111 Cd	115	1	1.068 ppb	0.77	1.30	
118 Sn	115	1	10.230 ppb	1.10	13.00	
121 Sb	115	1	2.192 ppb	0.80	2.60	
137 Ba	115	1	1.075 ppb	3.75	1.30	
205 Tl	165	1	1.158 ppb	2.36	1.30	
208 Pb	165	1	1.072 ppb	0.99	1.30	
232 Th	165	1	3.344 ppb	3.13	2.60	
238 U	165	1	1.105 ppb	2.11	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	389518	0.53	394687	98.7	30 - 120	
45 Sc	1	2376989	0.76	2446753	97.1	30 - 120	
72 Ge	1	1099932	0.58	1125847	97.7	30 - 120	
115 In	1	2703766	0.89	2719186	99.4	30 - 120	
165 Ho	1	3816929	0.48	3817349	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\AG081009A.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\AG081009A.B\007 ICB.D\007 ICB.D#
Date Acquired: Aug 10 2009 06:17 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: Aug 10 2009 06:10 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.01	ppb	173.20	1.00	
51 V	72	1	-0.02	ppb	72.65	1.00	
52 Cr	72	1	-0.01	ppb	390.62	1.00	
55 Mn	72	1	0.00	ppb	32.99	1.00	
59 Co	72	1	0.00	ppb	37.13	1.00	
60 Ni	72	1	-0.06	ppb	2.11	1.00	
63 Cu	72	1	0.01	ppb	55.65	1.00	
66 Zn	72	1	-0.22	ppb	10.19	1.00	
75 As	72	1	0.00	ppb	277.73	1.00	
78 Se	72	1	0.20	ppb	31.96	1.00	
95 Mo	72	1	0.02	ppb	49.17	1.00	
107 Ag	115	1	0.01	ppb	24.84	1.00	
111 Cd	115	1	-0.01	ppb	156.27	1.00	
118 Sn	115	1	-0.04	ppb	6.62	1.00	
121 Sb	115	1	0.07	ppb	2.93	1.00	
137 Ba	115	1	0.00	ppb	145.27	1.00	
205 Tl	165	1	0.03	ppb	8.41	1.00	
208 Pb	165	1	0.00	ppb	703.02	1.00	
232 Th	165	1	0.28	ppb	10.49	1.00	
238 U	165	1	0.00	ppb	52.16	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382040	1.21	394687	96.8	30 - 120	
45 Sc	1	2367707	0.91	2446753	96.8	30 - 120	
72 Ge	1	1105088	0.25	1125847	98.2	30 - 120	
115 In	1	2665218	1.25	2719186	98.0	30 - 120	
165 Ho	1	3811931	1.62	3817349	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\AG081009A.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\AG081009A.B\008RLST.D\008RLST.D#
Date Acquired: Aug 10 2009 06:20 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: Aug 10 2009 06:10 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1.00	ppb	5.38	1	100.4	50 - 150	
51 V	72	1	0.95	ppb	4.78	1	95.5	50 - 150	
52 Cr	72	1	1.03	ppb	4.50	1	103.1	50 - 150	
55 Mn	72	1	0.99	ppb	2.06	1	99.4	50 - 150	
59 Co	72	1	1.02	ppb	1.61	1	102.4	50 - 150	
60 Ni	72	1	0.92	ppb	5.43	1	92.3	50 - 150	
63 Cu	72	1	1.06	ppb	1.60	1	106.0	50 - 150	
66 Zn	72	1	10.99	ppb	2.05	10	109.9	50 - 150	
75 As	72	1	1.02	ppb	3.26	1	102.0	50 - 150	
78 Se	72	1	1.30	ppb	8.14	1	129.8	50 - 150	
95 Mo	72	1	1.03	ppb	3.66	1	102.8	50 - 150	
107 Ag	115	1	1.04	ppb	2.89	1	103.6	50 - 150	
111 Cd	115	1	1.00	ppb	3.57	1	99.8	50 - 150	
118 Sn	115	1	10.84	ppb	1.34	10	108.4	50 - 150	
121 Sb	115	1	1.08	ppb	1.30	1	107.6	50 - 150	
137 Ba	115	1	1.08	ppb	3.66	1	107.6	50 - 150	
205 Tl	165	1	1.08	ppb	3.38	1	107.8	50 - 150	
208 Pb	165	1	1.04	ppb	0.90	1	104.2	50 - 150	
232 Th	165	1	1.14	ppb	2.04	1	113.7	50 - 150	
238 U	165	1	1.07	ppb	1.31	1	107.4	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381160	1.69	394687	96.6	30 - 120	
45 Sc	1	2348126	1.16	2446753	96.0	30 - 120	
72 Ge	1	1102409	1.34	1125847	97.9	30 - 120	
115 In	1	2670308	0.31	2719186	98.2	30 - 120	
165 Ho	1	3800403	0.92	3817349	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\AG081009A.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\AG081009A.B\009AFCE.D\009AFCE.D#
Date Acquired: Aug 10 2009 06:23 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: Aug 10 2009 06:10 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	0.21 ppb	37.49	0	104.1	80 - 120	
51 V	72	1	0.18 ppb	11.11	0	93.6	80 - 120	
52 Cr	72	1	0.20 ppb	4.41	0	95.1	80 - 120	
55 Mn	72	1	0.18 ppb	9.10	0	92.5	80 - 120	
59 Co	72	1	0.20 ppb	7.26	0	99.2	80 - 120	
60 Ni	72	1	0.12 ppb	37.55	0	65.1	80 - 120	
63 Cu	72	1	0.21 ppb	5.84	0	97.8	80 - 120	
66 Zn	72	1	2.00 ppb	2.60	2	90.9	80 - 120	
75 As	72	1	0.21 ppb	3.29	0	102.2	80 - 120	
78 Se	72	1	0.57 ppb	37.21	0	218.1	80 - 120	
95 Mo	72	1	0.23 ppb	17.06	0	112.2	80 - 120	
107 Ag	115	1	0.19 ppb	8.42	0	91.3	80 - 120	
111 Cd	115	1	0.18 ppb	11.73	0	92.5	80 - 120	
118 Sn	115	1	2.13 ppb	0.61	2	98.2	80 - 120	
121 Sb	115	1	0.22 ppb	3.38	0	102.6	80 - 120	
137 Ba	115	1	0.20 ppb	2.70	0	94.9	80 - 120	
205 Tl	165	1	0.23 ppb	1.38	0	107.1	80 - 120	
208 Pb	165	1	0.21 ppb	2.17	0	102.0	80 - 120	
232 Th	165	1	0.27 ppb	6.02	0	120.0	80 - 120	
238 U	165	1	0.21 ppb	3.48	0	97.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384831	0.38	394687	97.5	30 - 120	
45 Sc	1	2381074	1.35	2446753	97.3	30 - 120	
72 Ge	1	1108278	1.30	1125847	98.4	30 - 120	
115 In	1	2695785	0.35	2719186	99.1	30 - 120	
165 Ho	1	3782218	0.41	3817349	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\AG081009A.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\AG081009A.B\010SMPL.D\010SMPL.D#
Date Acquired:	Aug 10 2009 06:26 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:	Aug 10 2009 06:10 pm
Sample Type:	SA
Dilution Factor:	1.00
Autodil Factor:	Undiluted
Final Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-0.01	-0.01	ppb	153.00	3600	
52 Cr	72	1	0.00	0.00	ppb	726.14	3600	
55 Mn	72	1	-0.01	-0.01	ppb	114.24	3600	
59 Co	72	1	0.00	0.00	ppb	103.96	3600	
60 Ni	72	1	-0.03	-0.03	ppb	15.09	3600	
63 Cu	72	1	0.00	0.00	ppb	118.88	3600	
66 Zn	72	1	-0.11	-0.11	ppb	3.22	3600	
75 As	72	1	0.01	0.01	ppb	74.91	3600	
78 Se	72	1	2.14	2.14	ppb	18.71	3600	
95 Mo	72	1	0.01	0.01	ppb	88.11	3600	
107 Ag	115	1	0.00	0.00	ppb	18.18	3600	
111 Cd	115	1	0.00	0.00	ppb	245.41	3600	
118 Sn	115	1	-0.05	-0.05	ppb	21.00	3600	
121 Sb	115	1	0.02	0.02	ppb	14.62	3600	
137 Ba	115	1	0.00	0.00	ppb	77.19	3600	
205 Tl	165	1	0.02	0.02	ppb	18.17	3600	
208 Pb	165	1	0.00	0.00	ppb	132.48	3600	
232 Th	165	1	0.05	0.05	ppb	10.43	1000	
238 U	165	1	0.00	0.00	ppb	1446.10	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384420	0.66	394687	97.4	30 - 120	
45 Sc	1	2363773	0.07	2446753	96.6	30 - 120	
72 Ge	1	1095031	0.87	1125847	97.3	30 - 120	
115 In	1	2709116	0.72	2719186	99.6	30 - 120	
165 Ho	1	3806731	0.23	3817349	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\AG081009A.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\AG081009A.B\011ICSA.D\011ICSA.D#
Date Acquired: Aug 10 2009 06:28 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: Aug 10 2009 06:10 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.01 ppb	173.20	1.00	
51 V	72	1	-0.28 ppb	16.13	1.00	
52 Cr	72	1	0.68 ppb	7.15	1.00	
55 Mn	72	1	3.37 ppb	3.01	1.00	
59 Co	72	1	1.52 ppb	1.80	1.00	
60 Ni	72	1	1.33 ppb	7.03	1.00	
63 Cu	72	1	1.39 ppb	1.64	1.00	
66 Zn	72	1	2.60 ppb	3.64	10.00	
75 As	72	1	0.41 ppb	4.62	1.00	
78 Se	72	1	0.04 ppb	875.93	1.00	
95 Mo	72	1	2011.00 ppb	2.30	2000.00	
107 Ag	115	1	0.04 ppb	6.23	1.00	
111 Cd	115	1	0.24 ppb	38.98	1.00	
118 Sn	115	1	0.01 ppb	102.51	10.00	
121 Sb	115	1	0.27 ppb	5.72	1.00	
137 Ba	115	1	0.07 ppb	17.98	1.00	
205 Tl	165	1	0.04 ppb	40.80	1.00	
208 Pb	165	1	0.14 ppb	3.56	1.00	
232 Th	165	1	0.10 ppb	13.38	1.00	
238 U	165	1	0.00 ppb	19.44	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	339249	1.40	394687	86.0	30 - 120	
45 Sc	1	2070580	0.61	2446753	84.6	30 - 120	
72 Ge	1	927464	2.03	1125847	82.4	30 - 120	
115 In	1	2246349	1.22	2719186	82.6	30 - 120	
165 Ho	1	3443563	1.20	3817349	90.2	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\AG081009A.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\AG081009A.B\012ICSB.D\012ICSB.D#
Date Acquired: Aug 10 2009 06:31 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: Aug 10 2009 06:10 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	100.10	1.69	100	100.1	80 - 120	
51 V	72		1	99.46	1.23	100	99.5	80 - 120	
52 Cr	72		1	97.53	1.45	100	97.5	80 - 120	
55 Mn	72		1	98.48	0.44	100	98.5	80 - 120	
59 Co	72		1	96.28	1.69	100	96.3	80 - 120	
60 Ni	72		1	90.67	1.41	100	90.7	80 - 120	
63 Cu	72		1	88.16	1.53	100	88.2	80 - 120	
66 Zn	72		1	97.40	1.57	100	97.4	80 - 120	
75 As	72		1	100.70	1.43	100	100.7	80 - 120	
78 Se	72		1	104.50	2.15	100	104.5	80 - 120	
95 Mo	72		1	2111.00	0.32	2100	100.5	80 - 120	
107 Ag	115		1	89.84	3.58	100	89.8	80 - 120	
111 Cd	115		1	97.00	1.54	100	97.0	80 - 120	
118 Sn	115		1	102.10	1.27	100	102.1	80 - 120	
121 Sb	115		1	105.00	1.34	100	105.0	80 - 120	
137 Ba	115		1	104.10	0.70	100	104.1	80 - 120	
205 Tl	165		1	95.41	2.04	100	95.4	80 - 120	
208 Pb	165		1	93.29	0.93	100	93.3	80 - 120	
232 Th	165		1	107.70	1.56	100	107.7	80 - 120	
238 U	165		1	100.40	1.15	100	100.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	337656	1.15	394687	85.6	30 - 120	
45 Sc	1	2028207	1.22	2446753	82.9	30 - 120	
72 Ge	1	942107	0.47	1125847	83.7	30 - 120	
115 In	1	2256634	0.18	2719186	83.0	30 - 120	
165 Ho	1	3514456	0.98	3817349	92.1	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\AG081009A.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\AG081009A.B\013SMPL.D\013SMPL.D#
Date Acquired: Aug 10 2009 06:34 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	1356.30	3600	
52 Cr	72	1	0.02	0.02	ppb	126.42	3600	
55 Mn	72	1	0.00	0.00	ppb	97.83	3600	
59 Co	72	1	0.01	0.01	ppb	17.25	3600	
60 Ni	72	1	-0.06	-0.06	ppb	24.77	3600	
63 Cu	72	1	0.00	0.00	ppb	68.55	3600	
66 Zn	72	1	0.82	0.82	ppb	5.26	3600	
75 As	72	1	0.01	0.01	ppb	65.52	3600	
78 Se	72	1	0.35	0.35	ppb	98.25	3600	
95 Mo	72	1	1.75	1.75	ppb	4.87	3600	
107 Ag	115	1	0.02	0.02	ppb	59.60	3600	
111 Cd	115	1	0.00	0.00	ppb	178.39	3600	
118 Sn	115	1	-0.02	-0.02	ppb	44.11	3600	
121 Sb	115	1	0.04	0.04	ppb	18.60	3600	
137 Ba	115	1	0.01	0.01	ppb	49.69	3600	
205 Tl	165	1	0.01	0.01	ppb	15.49	3600	
208 Pb	165	1	0.01	0.01	ppb	21.27	3600	
232 Th	165	1	0.96	0.96	ppb	17.84	1000	
238 U	165	1	0.02	0.02	ppb	8.06	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	417953	1.05	394687	105.9	30 - 120	
45 Sc	1	2370217	1.00	2446753	96.9	30 - 120	
72 Ge	1	1125021	0.71	1125847	99.9	30 - 120	
115 In	1	2769043	1.00	2719186	101.8	30 - 120	
165 Ho	1	3993502	0.73	3817349	104.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#

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

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\014 LR.D\014 LR.D#
Date Acquired: Aug 10 2009 06:36 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1004.00 ppb	0.66	1000	100.4	90 - 110	
51 V	72	1	923.60 ppb	1.56	1000	92.4	90 - 110	
52 Cr	72	1	957.30 ppb	0.88	1000	95.7	90 - 110	
55 Mn	72	1	944.20 ppb	0.62	1000	94.4	90 - 110	
59 Co	72	1	962.70 ppb	1.17	1000	96.3	90 - 110	
60 Ni	72	1	978.20 ppb	1.60	1000	97.8	90 - 110	
63 Cu	72	1	945.60 ppb	1.33	1000	94.6	90 - 110	
66 Zn	72	1	1015.00 ppb	2.51	1000	101.5	90 - 110	
75 As	72	1	1015.00 ppb	0.37	1000	101.5	90 - 110	
78 Se	72	1	1044.00 ppb	1.38	1000	104.4	90 - 110	
95 Mo	72	1	984.90 ppb	1.46	1000	98.5	90 - 110	
107 Ag	115	1	952.90 ppb	1.27	1000	95.3	90 - 110	
111 Cd	115	1	989.60 ppb	0.87	1000	99.0	90 - 110	
118 Sn	115	1	964.00 ppb	0.79	1000	96.4	90 - 110	
121 Sb	115	1	971.00 ppb	0.56	1000	97.1	90 - 110	
137 Ba	115	1	991.30 ppb	1.54	1000	99.1	90 - 110	
205 Tl	165	1	963.90 ppb	1.23	1000	96.4	90 - 110	
208 Pb	165	1	945.40 ppb	1.22	1000	94.5	90 - 110	
232 Th	165	1	1050.00 ppb	0.83	1000	105.0	90 - 110	
238 U	165	1	967.10 ppb	0.90	1000	96.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	396227	0.55	394687	100.4	30 - 120	
45 Sc	1	2360026	1.45	2446753	96.5	30 - 120	
72 Ge	1	1098700	1.12	1125847	97.6	30 - 120	
115 In	1	2734512	0.49	2719186	100.6	30 - 120	
165 Ho	1	3971158	0.63	3817349	104.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\015SMPL.D\015SMPL.D#
Date Acquired: Aug 10 2009 06:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 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	11.29	3600	
51 V	72	1	0.07	0.07	ppb	49.92	3600	
52 Cr	72	1	0.08	0.08	ppb	3.05	3600	
55 Mn	72	1	0.07	0.07	ppb	11.75	3600	
59 Co	72	1	0.08	0.08	ppb	22.22	3600	
60 Ni	72	1	-0.01	-0.01	ppb	189.04	3600	
63 Cu	72	1	0.07	0.07	ppb	14.57	3600	
66 Zn	72	1	0.90	0.90	ppb	4.20	3600	
75 As	72	1	0.12	0.12	ppb	13.74	3600	
78 Se	72	1	0.56	0.56	ppb	13.28	3600	
95 Mo	72	1	0.99	0.99	ppb	7.52	3600	
107 Ag	115	1	0.11	0.11	ppb	9.78	3600	
111 Cd	115	1	0.09	0.09	ppb	18.21	3600	
118 Sn	115	1	1.04	1.04	ppb	13.89	3600	
121 Sb	115	1	0.46	0.46	ppb	3.67	3600	
137 Ba	115	1	0.07	0.07	ppb	29.33	3600	
205 Tl	165	1	0.24	0.24	ppb	12.29	3600	
208 Pb	165	1	0.09	0.09	ppb	17.25	3600	
232 Th	165	1	6.26	6.26	ppb	20.02	1000	
238 U	165	1	0.15	0.15	ppb	1.91	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406521	1.45	394687	103.0	30 - 120	
45 Sc	1	2437916	0.81	2446753	99.6	30 - 120	
72 Ge	1	1134540	0.61	1125847	100.8	30 - 120	
115 In	1	2782594	0.81	2719186	102.3	30 - 120	
165 Ho	1	3984640	0.83	3817349	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\016 CCV.D\016 CCV.D#
Date Acquired: Aug 10 2009 06:42 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: Aug 10 2009 06:10 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.23	ppb	1.97	50	98.5	90 - 110	
51 V	72	1	48.18	ppb	3.03	50	96.4	90 - 110	
52 Cr	72	1	49.10	ppb	2.47	50	98.2	90 - 110	
55 Mn	72	1	48.34	ppb	2.30	50	96.7	90 - 110	
59 Co	72	1	50.75	ppb	1.62	50	101.5	90 - 110	
60 Ni	72	1	49.33	ppb	1.83	50	98.7	90 - 110	
63 Cu	72	1	48.69	ppb	2.92	50	97.4	90 - 110	
66 Zn	72	1	52.56	ppb	1.77	50	105.1	90 - 110	
75 As	72	1	49.20	ppb	2.24	50	98.4	90 - 110	
78 Se	72	1	48.36	ppb	4.30	50	96.7	90 - 110	
95 Mo	72	1	50.11	ppb	1.65	50	100.2	90 - 110	
107 Ag	115	1	49.41	ppb	0.58	50	98.8	90 - 110	
111 Cd	115	1	49.05	ppb	0.87	50	98.1	90 - 110	
118 Sn	115	1	50.05	ppb	1.70	50	100.1	90 - 110	
121 Sb	115	1	49.82	ppb	1.05	50	99.6	90 - 110	
137 Ba	115	1	49.79	ppb	0.54	50	99.6	90 - 110	
205 Tl	165	1	50.63	ppb	1.41	50	101.3	90 - 110	
208 Pb	165	1	50.26	ppb	0.23	50	100.5	90 - 110	
232 Th	165	1	52.23	ppb	3.29	50	104.5	90 - 110	
238 U	165	1	50.28	ppb	1.54	50	100.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	398790	1.16	394687	101.0	30 - 120	
45 Sc	1	2428065	0.52	2446753	99.2	30 - 120	
72 Ge	1	1132154	1.68	1125847	100.6	30 - 120	
115 In	1	2783451	0.38	2719186	102.4	30 - 120	
165 Ho	1	3944703	1.21	3817349	103.3	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\AG081009A.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\AG081009A.B\017 CCB.D\017 CCB.D#
Date Acquired: Aug 10 2009 06:45 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: Aug 10 2009 06:10 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	0.029	ppb	50.02	1.00	
51 V	72	1	0.019	ppb	104.60	1.00	
52 Cr	72	1	0.033	ppb	99.12	1.00	
55 Mn	72	1	0.000	ppb	2663.10	1.00	
59 Co	72	1	0.016	ppb	6.13	1.00	
60 Ni	72	1	-0.070	ppb	15.94	1.00	
63 Cu	72	1	0.009	ppb	119.60	1.00	
66 Zn	72	1	-0.124	ppb	10.27	1.00	
75 As	72	1	0.017	ppb	49.87	1.00	
78 Se	72	1	0.100	ppb	304.64	1.00	
95 Mo	72	1	0.179	ppb	6.53	1.00	
107 Ag	115	1	0.018	ppb	20.56	1.00	
111 Cd	115	1	0.001	ppb	1567.90	1.00	
118 Sn	115	1	0.177	ppb	26.58	1.00	
121 Sb	115	1	0.101	ppb	8.06	1.00	
137 Ba	115	1	0.018	ppb	26.37	1.00	
205 Tl	165	1	0.073	ppb	5.05	1.00	
208 Pb	165	1	0.011	ppb	12.50	1.00	
232 Th	165	1	1.499	ppb	14.31	1.00	Fail
238 U	165	1	0.023	ppb	2.40	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406279	0.13	394687	102.9	30 - 120	
45 Sc	1	2409755	0.92	2446753	98.5	30 - 120	
72 Ge	1	1118502	1.15	1125847	99.3	30 - 120	
115 In	1	2746559	0.29	2719186	101.0	30 - 120	
165 Ho	1	3925108	0.26	3817349	102.8	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\AG081009A.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\AG081009A.B\018WASH.D\018WASH.D#
Date Acquired: Aug 10 2009 06:47 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 06:10 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.105 ppb	6.50	1.30	
51 V	72	1	5.087 ppb	3.62	6.50	
52 Cr	72	1	2.163 ppb	2.98	2.60	
55 Mn	72	1	1.000 ppb	2.91	1.30	
59 Co	72	1	1.065 ppb	2.44	1.30	
60 Ni	72	1	2.023 ppb	1.63	2.60	
63 Cu	72	1	2.091 ppb	1.36	2.60	
66 Zn	72	1	10.460 ppb	2.37	13.00	
75 As	72	1	5.273 ppb	1.62	6.50	
78 Se	72	1	5.734 ppb	6.76	6.50	
95 Mo	72	1	2.210 ppb	2.32	2.60	
107 Ag	115	1	5.205 ppb	1.43	6.50	
111 Cd	115	1	1.050 ppb	4.55	1.30	
118 Sn	115	1	10.450 ppb	1.08	13.00	
121 Sb	115	1	2.010 ppb	2.30	2.60	
137 Ba	115	1	1.109 ppb	3.21	1.30	
205 Tl	165	1	1.150 ppb	1.01	1.30	
208 Pb	165	1	1.076 ppb	0.61	1.30	
232 Th	165	1	2.636 ppb	1.22	2.60	
238 U	165	1	1.112 ppb	1.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	404611	0.96	394687	102.5	30 - 120	
45 Sc	1	2418551	0.39	2446753	98.8	30 - 120	
72 Ge	1	1116189	1.64	1125847	99.1	30 - 120	
115 In	1	2767098	0.92	2719186	101.8	30 - 120	
165 Ho	1	3902436	1.37	3817349	102.2	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\AG081009A.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: 08/10/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#
Date Acquired: Aug 10 2009 09:53 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: Aug 10 2009 09:51 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	359	49.21
52	Cr	72	1	3327	12.19
55	Mn	72	1	673	7.00
59	Co	72	1	63	23.12
60	Ni	72	1	473	1.82
63	Cu	72	1	697	6.65
66	Zn	72	1	5275	0.36
75	As	72	1	61	14.81
78	Se	72	1	797	7.38
95	Mo	72	1	473	9.18
107	Ag	115	1	17	69.77
111	Cd	115	1	-4	468.40
118	Sn	115	1	883	12.90
121	Sb	115	1	41	5.27
137	Ba	115	1	28	7.48
205	Tl	165	1	71	17.08
208	Pb	165	1	277	1.82
232	Th	165	1	177	27.11
238	U	165	1	33	9.30

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	367189	0.76
45	Sc	1	2198650	1.42
72	Ge	1	1047607	1.49
115	In	1	2618639	1.31
165	Ho	1	3698894	0.81

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\AG081009A.B\087ICAL.D\087ICAL.D#
Date Acquired: Aug 10 2009 09:56 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: Aug 10 2009 09:54 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57454	2.68
51	V	72	1	1384602	1.93
52	Cr	72	1	1372006	0.28
55	Mn	72	1	1464416	1.26
59	Co	72	1	1764191	0.16
60	Ni	72	1	409818	1.72
63	Cu	72	1	979076	1.00
66	Zn	72	1	190440	1.50
75	As	72	1	169475	1.58
78	Se	72	1	28790	1.31
95	Mo	72	1	438801	1.48
107	Ag	115	1	1212795	1.22
111	Cd	115	1	227416	1.07
118	Sn	115	1	638283	0.63
121	Sb	115	1	733198	0.80
137	Ba	115	1	310900	0.47
205	Tl	165	1	1935696	0.85
208	Pb	165	1	2637712	0.66
232	Th	165	1	2426931	3.16
238	U	165	1	2684142	1.00

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357017	0.84	367189	97.2	30 - 120	
45	Sc	1	2175000	2.00	2198650	98.9	30 - 120	
72	Ge	1	1036228	0.96	1047607	98.9	30 - 120	
115	In	1	2589357	0.36	2618639	98.9	30 - 120	
165	Ho	1	3695829	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\088 CCV.D\088 CCV.D#
Date Acquired: Aug 10 2009 09:58 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.65	ppb	0.92	50	99.3	90 - 110	
51 V	72	1	49.06	ppb	0.95	50	98.1	90 - 110	
52 Cr	72	1	49.92	ppb	0.60	50	99.8	90 - 110	
55 Mn	72	1	49.36	ppb	0.14	50	98.7	90 - 110	
59 Co	72	1	50.34	ppb	0.60	50	100.7	90 - 110	
60 Ni	72	1	49.67	ppb	0.42	50	99.3	90 - 110	
63 Cu	72	1	49.63	ppb	0.70	50	99.3	90 - 110	
66 Zn	72	1	52.10	ppb	0.54	50	104.2	90 - 110	
75 As	72	1	49.34	ppb	0.43	50	98.7	90 - 110	
78 Se	72	1	50.04	ppb	4.56	50	100.1	90 - 110	
95 Mo	72	1	49.69	ppb	0.55	50	99.4	90 - 110	
107 Ag	115	1	49.28	ppb	0.25	50	98.6	90 - 110	
111 Cd	115	1	49.24	ppb	0.70	50	98.5	90 - 110	
118 Sn	115	1	49.32	ppb	0.50	50	98.6	90 - 110	
121 Sb	115	1	49.29	ppb	0.48	50	98.6	90 - 110	
137 Ba	115	1	49.29	ppb	0.72	50	98.6	90 - 110	
205 Tl	165	1	49.61	ppb	2.22	50	99.2	90 - 110	
208 Pb	165	1	49.80	ppb	0.99	50	99.6	90 - 110	
232 Th	165	1	51.14	ppb	2.51	50	102.3	90 - 110	
238 U	165	1	50.39	ppb	1.56	50	100.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	351371	1.00	367189	95.7	30 - 120	
45 Sc	1	2164138	0.74	2198650	98.4	30 - 120	
72 Ge	1	1029321	0.36	1047607	98.3	30 - 120	
115 In	1	2597133	0.22	2618639	99.2	30 - 120	
165 Ho	1	3706192	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\089 CCB.D\089 CCB.D#
Date Acquired: Aug 10 2009 10:01 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: Aug 10 2009 09:56 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.009	ppb	338.45	1.00	
52 Cr	72	1	0.012	ppb	59.28	1.00	
55 Mn	72	1	0.022	ppb	43.47	1.00	
59 Co	72	1	0.010	ppb	28.80	1.00	
60 Ni	72	1	-0.073	ppb	8.59	1.00	
63 Cu	72	1	0.010	ppb	144.48	1.00	
66 Zn	72	1	-2.512	ppb	0.84	1.00	
75 As	72	1	0.021	ppb	33.66	1.00	
78 Se	72	1	0.361	ppb	104.40	1.00	
95 Mo	72	1	0.004	ppb	623.22	1.00	
107 Ag	115	1	0.021	ppb	6.66	1.00	
111 Cd	115	1	0.018	ppb	60.33	1.00	
118 Sn	115	1	0.058	ppb	14.07	1.00	
121 Sb	115	1	0.062	ppb	11.03	1.00	
137 Ba	115	1	0.017	ppb	12.47	1.00	
205 Tl	165	1	0.050	ppb	6.12	1.00	
208 Pb	165	1	0.014	ppb	17.03	1.00	
232 Th	165	1	1.175	ppb	19.44	1.00	Fail
238 U	165	1	0.018	ppb	4.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	354938	0.52	367189	96.7	30 - 120	
45 Sc	1	2151415	1.57	2198650	97.9	30 - 120	
72 Ge	1	1014505	0.33	1047607	96.8	30 - 120	
115 In	1	2580961	0.71	2618639	98.6	30 - 120	
165 Ho	1	3627865	0.73	3698894	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\090WASH.D\090WASH.D#
Date Acquired: Aug 10 2009 10:04 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	16.54	1.30	
51 V	72	1	5.138 ppb	2.71	6.50	
52 Cr	72	1	2.154 ppb	2.58	2.60	
55 Mn	72	1	1.034 ppb	3.82	1.30	
59 Co	72	1	1.063 ppb	0.98	1.30	
60 Ni	72	1	2.069 ppb	2.67	2.60	
63 Cu	72	1	2.077 ppb	4.34	2.60	
66 Zn	72	1	8.295 ppb	0.25	13.00	
75 As	72	1	5.196 ppb	0.91	6.50	
78 Se	72	1	5.418 ppb	18.66	6.50	
95 Mo	72	1	2.025 ppb	0.52	2.60	
107 Ag	115	1	5.220 ppb	3.85	6.50	
111 Cd	115	1	1.108 ppb	1.99	1.30	
118 Sn	115	1	10.370 ppb	3.55	13.00	
121 Sb	115	1	1.946 ppb	3.35	2.60	
137 Ba	115	1	1.029 ppb	4.99	1.30	
205 Tl	165	1	1.117 ppb	0.99	1.30	
208 Pb	165	1	1.077 ppb	3.12	1.30	
232 Th	165	1	2.386 ppb	1.30	2.60	
238 U	165	1	1.118 ppb	1.09	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	357020	1.30	367189	97.2	30 - 120	
45 Sc	1	2160440	1.21	2198650	98.3	30 - 120	
72 Ge	1	1029685	0.36	1047607	98.3	30 - 120	
115 In	1	2599204	1.03	2618639	99.3	30 - 120	
165 Ho	1	3673409	1.01	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\091ICSA.D\091ICSA.D#
Date Acquired: Aug 10 2009 10:07 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: Aug 10 2009 09:56 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	0.00 ppb	0.00	1.00	
51 V	72	1	-0.25 ppb	33.72	1.00	
52 Cr	72	1	0.68 ppb	2.34	1.00	
55 Mn	72	1	3.51 ppb	0.92	1.00	
59 Co	72	1	1.54 ppb	4.46	1.00	
60 Ni	72	1	1.54 ppb	3.35	1.00	
63 Cu	72	1	1.42 ppb	2.18	1.00	
66 Zn	72	1	0.44 ppb	30.29	10.00	
75 As	72	1	0.40 ppb	6.23	1.00	
78 Se	72	1	0.69 ppb	56.98	1.00	
95 Mo	72	1	2004.00 ppb	1.89	2000.00	
107 Ag	115	1	0.04 ppb	16.72	1.00	
111 Cd	115	1	0.32 ppb	32.82	1.00	
118 Sn	115	1	0.08 ppb	26.70	10.00	
121 Sb	115	1	0.28 ppb	3.97	1.00	
137 Ba	115	1	0.07 ppb	7.46	1.00	
205 Tl	165	1	0.05 ppb	45.56	1.00	
208 Pb	165	1	0.13 ppb	2.60	1.00	
232 Th	165	1	0.24 ppb	29.64	1.00	
238 U	165	1	0.00 ppb	29.69	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	326427	1.11	367189	88.9	30 - 120	
45 Sc	1	1913508	1.00	2198650	87.0	30 - 120	
72 Ge	1	902523	1.26	1047607	86.2	30 - 120	
115 In	1	2206404	0.65	2618639	84.3	30 - 120	
165 Ho	1	3333118	1.23	3698894	90.1	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\092ICSB.D\092ICSB.D#
Date Acquired: Aug 10 2009 10:09 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: Aug 10 2009 09:56 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	99.06	1.64	100	99.1	80 - 120	
51 V	72	1	104.40	0.92	100	104.4	80 - 120	
52 Cr	72	1	101.90	0.77	100	101.9	80 - 120	
55 Mn	72	1	104.20	0.96	100	104.2	80 - 120	
59 Co	72	1	100.30	0.98	100	100.3	80 - 120	
60 Ni	72	1	95.98	1.20	100	96.0	80 - 120	
63 Cu	72	1	92.71	1.33	100	92.7	80 - 120	
66 Zn	72	1	101.10	1.14	100	101.1	80 - 120	
75 As	72	1	104.70	0.73	100	104.7	80 - 120	
78 Se	72	1	113.30	0.82	100	113.3	80 - 120	
95 Mo	72	1	2162.00	1.87	2100	103.0	80 - 120	
107 Ag	115	1	82.22	3.89	100	82.2	80 - 120	
111 Cd	115	1	96.12	2.03	100	96.1	80 - 120	
118 Sn	115	1	100.50	2.06	100	100.5	80 - 120	
121 Sb	115	1	102.50	1.80	100	102.5	80 - 120	
137 Ba	115	1	102.20	1.70	100	102.2	80 - 120	
205 Tl	165	1	94.99	0.97	100	95.0	80 - 120	
208 Pb	165	1	93.26	0.57	100	93.3	80 - 120	
232 Th	165	1	105.90	2.13	100	105.9	80 - 120	
238 U	165	1	99.43	0.45	100	99.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	327794	0.59	367189	89.3	30 - 120	
45 Sc	1	1916330	0.56	2198650	87.2	30 - 120	
72 Ge	1	875267	0.68	1047607	83.5	30 - 120	
115 In	1	2211280	1.50	2618639	84.4	30 - 120	
165 Ho	1	3358970	0.46	3698894	90.8	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\093WASH.D\093WASH.D#
Date Acquired: Aug 10 2009 10:12 pm
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 09:56 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	0.006 ppb	173.19	1.30	
51 V	72	1	-0.034 ppb	135.22	6.50	
52 Cr	72	1	0.000 ppb	5464.80	2.60	
55 Mn	72	1	0.019 ppb	10.91	1.30	
59 Co	72	1	0.009 ppb	18.44	1.30	
60 Ni	72	1	-0.069 ppb	6.69	2.60	
63 Cu	72	1	0.016 ppb	51.79	2.60	
66 Zn	72	1	-1.678 ppb	2.09	13.00	
75 As	72	1	0.020 ppb	87.04	6.50	
78 Se	72	1	0.273 ppb	159.00	6.50	
95 Mo	72	1	1.722 ppb	10.74	2.60	
107 Ag	115	1	0.016 ppb	7.48	6.50	
111 Cd	115	1	0.027 ppb	39.87	1.30	
118 Sn	115	1	0.008 ppb	139.77	13.00	
121 Sb	115	1	0.031 ppb	10.67	2.60	
137 Ba	115	1	0.014 ppb	37.96	1.30	
205 Tl	165	1	0.019 ppb	7.24	1.30	
208 Pb	165	1	0.014 ppb	25.78	1.30	
232 Th	165	1	1.029 ppb	17.84	2.60	
238 U	165	1	0.020 ppb	2.81	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	366369	0.31	367189	99.8	30 - 120	
45 Sc	1	2076235	0.60	2198650	94.4	30 - 120	
72 Ge	1	994316	1.14	1047607	94.9	30 - 120	
115 In	1	2560866	0.59	2618639	97.8	30 - 120	
165 Ho	1	3648181	1.84	3698894	98.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\094 CCV.D\094 CCV.D#
Date Acquired: Aug 10 2009 10:15 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.46	ppb	4.16	50	98.9	90 - 110	
51 V	72	1	48.94	ppb	0.53	50	97.9	90 - 110	
52 Cr	72	1	50.07	ppb	1.20	50	100.1	90 - 110	
55 Mn	72	1	49.34	ppb	1.59	50	98.7	90 - 110	
59 Co	72	1	50.31	ppb	1.34	50	100.6	90 - 110	
60 Ni	72	1	50.23	ppb	2.45	50	100.5	90 - 110	
63 Cu	72	1	49.54	ppb	2.01	50	99.1	90 - 110	
66 Zn	72	1	52.03	ppb	1.37	50	104.1	90 - 110	
75 As	72	1	49.61	ppb	1.73	50	99.2	90 - 110	
78 Se	72	1	50.01	ppb	0.38	50	100.0	90 - 110	
95 Mo	72	1	50.34	ppb	1.73	50	100.7	90 - 110	
107 Ag	115	1	49.34	ppb	1.02	50	98.7	90 - 110	
111 Cd	115	1	49.64	ppb	0.95	50	99.3	90 - 110	
118 Sn	115	1	49.84	ppb	1.63	50	99.7	90 - 110	
121 Sb	115	1	49.47	ppb	0.88	50	98.9	90 - 110	
137 Ba	115	1	49.80	ppb	0.36	50	99.6	90 - 110	
205 Tl	165	1	50.15	ppb	0.99	50	100.3	90 - 110	
208 Pb	165	1	50.50	ppb	1.80	50	101.0	90 - 110	
232 Th	165	1	50.90	ppb	3.30	50	101.8	90 - 110	
238 U	165	1	51.21	ppb	1.74	50	102.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358196	0.69	367189	97.6	30 - 120	
45 Sc	1	2129878	1.22	2198650	96.9	30 - 120	
72 Ge	1	1014484	1.02	1047607	96.8	30 - 120	
115 In	1	2569748	0.08	2618639	98.1	30 - 120	
165 Ho	1	3684571	0.80	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\095 CCB.D\095 CCB.D#
Date Acquired: Aug 10 2009 10:18 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: Aug 10 2009 09:56 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	0.028	ppb	125.04	1.00	
51 V	72	1	-0.023	ppb	143.33	1.00	
52 Cr	72	1	-0.002	ppb	923.90	1.00	
55 Mn	72	1	0.028	ppb	32.43	1.00	
59 Co	72	1	0.009	ppb	26.21	1.00	
60 Ni	72	1	-0.067	ppb	9.77	1.00	
63 Cu	72	1	0.012	ppb	106.20	1.00	
66 Zn	72	1	-2.522	ppb	0.45	1.00	
75 As	72	1	0.008	ppb	139.22	1.00	
78 Se	72	1	-0.028	ppb	2465.70	1.00	
95 Mo	72	1	0.131	ppb	6.13	1.00	
107 Ag	115	1	0.017	ppb	9.39	1.00	
111 Cd	115	1	0.021	ppb	62.04	1.00	
118 Sn	115	1	0.019	ppb	40.06	1.00	
121 Sb	115	1	0.056	ppb	6.71	1.00	
137 Ba	115	1	0.019	ppb	11.10	1.00	
205 Tl	165	1	0.030	ppb	5.43	1.00	
208 Pb	165	1	0.013	ppb	16.52	1.00	
232 Th	165	1	1.108	ppb	18.47	1.00	Fail
238 U	165	1	0.017	ppb	5.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365426	0.22	367189	99.5	30 - 120	
45 Sc	1	2161178	2.00	2198650	98.3	30 - 120	
72 Ge	1	1023099	0.56	1047607	97.7	30 - 120	
115 In	1	2603761	0.60	2618639	99.4	30 - 120	
165 Ho	1	3680889	1.54	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\096WASH.D\096WASH.D#
Date Acquired: Aug 10 2009 10:20 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.079 ppb	10.92	1.30	
51 V	72	1	5.130 ppb	1.45	6.50	
52 Cr	72	1	2.157 ppb	4.54	2.60	
55 Mn	72	1	1.063 ppb	4.53	1.30	
59 Co	72	1	1.050 ppb	1.09	1.30	
60 Ni	72	1	2.074 ppb	4.23	2.60	
63 Cu	72	1	2.123 ppb	1.17	2.60	
66 Zn	72	1	8.217 ppb	1.74	13.00	
75 As	72	1	5.217 ppb	0.89	6.50	
78 Se	72	1	5.154 ppb	5.40	6.50	
95 Mo	72	1	2.220 ppb	6.77	2.60	
107 Ag	115	1	5.308 ppb	1.41	6.50	
111 Cd	115	1	1.070 ppb	1.11	1.30	
118 Sn	115	1	10.290 ppb	0.24	13.00	
121 Sb	115	1	2.012 ppb	3.04	2.60	
137 Ba	115	1	1.086 ppb	2.73	1.30	
205 Tl	165	1	1.124 ppb	1.17	1.30	
208 Pb	165	1	1.090 ppb	1.55	1.30	
232 Th	165	1	2.384 ppb	1.99	2.60	
238 U	165	1	1.125 ppb	2.15	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	362803	1.37	367189	98.8	30 - 120	
45 Sc	1	2155781	1.24	2198650	98.1	30 - 120	
72 Ge	1	1022103	1.11	1047607	97.6	30 - 120	
115 In	1	2573971	0.56	2618639	98.3	30 - 120	
165 Ho	1	3674326	0.25	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\097 BLK.D\097 BLK.D#
Date Acquired: Aug 10 2009 10:23 pm
Operator: TEL
Sample Name: LHFD8B
Misc Info: BLANK 9215165 6020
Vial Number: 3112
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 09:56 pm
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	-0.013 ppb	47.09	2.00	
52 Cr	72	1	0.091 ppb	15.26	2.00	
55 Mn	72	1	0.058 ppb	9.49	2.00	
59 Co	72	1	0.003 ppb	73.26	2.00	
60 Ni	72	1	-0.037 ppb	58.05	2.00	
63 Cu	72	1	0.037 ppb	56.54	2.00	
66 Zn	72	1	-1.739 ppb	4.72	2.00	
75 As	72	1	-0.003 ppb	249.30	2.00	
78 Se	72	1	0.229 ppb	140.11	2.00	
95 Mo	72	1	-0.013 ppb	91.84	2.00	
107 Ag	115	1	0.008 ppb	23.30	2.00	
111 Cd	115	1	0.002 ppb	33.52	2.00	
118 Sn	115	1	0.086 ppb	14.54	2.00	
121 Sb	115	1	0.033 ppb	10.77	2.00	
137 Ba	115	1	0.294 ppb	7.24	2.00	
205 Tl	165	1	0.031 ppb	32.53	2.00	
208 Pb	165	1	0.012 ppb	5.47	2.00	
232 Th	165	1	0.208 ppb	23.61	2.00	
238 U	165	1	0.003 ppb	13.22	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	367638	1.02	367189	100.1	30 - 120	
45 Sc	1	2176245	1.61	2198650	99.0	30 - 120	
72 Ge	1	1014753	1.63	1047607	96.9	30 - 120	
115 In	1	2604410	0.66	2618639	99.5	30 - 120	
165 Ho	1	3654702	2.13	3698894	98.8	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\098 LCS.D\098 LCS.D#
Date Acquired:	Aug 10 2009 10:26 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHFD8C
Misc Info:	LCS
Vial Number:	3201
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 09:56 pm
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	41.63	3.12	40	104.1	80 - 120	
51 V	72	1	42.05	0.80	40	105.1	80 - 120	
52 Cr	72	1	42.79	0.58	40	107.0	80 - 120	
55 Mn	72	1	42.45	0.34	40	106.1	80 - 120	
59 Co	72	1	42.67	0.73	40	106.7	80 - 120	
60 Ni	72	1	42.21	1.32	40	105.5	80 - 120	
63 Cu	72	1	42.64	1.29	40	106.6	80 - 120	
66 Zn	72	1	39.46	1.14	40	98.7	80 - 120	
75 As	72	1	40.59	0.23	40	101.5	80 - 120	
78 Se	72	1	40.74	1.82	40	101.9	80 - 120	
95 Mo	72	1	42.55	1.19	40	106.4	80 - 120	
107 Ag	115	1	41.91	2.02	40	104.8	80 - 120	
111 Cd	115	1	41.04	1.22	40	102.6	80 - 120	
118 Sn	115	1	0.00	690.58	40	0.0	80 - 120	
121 Sb	115	1	40.63	1.34	40	101.6	80 - 120	
137 Ba	115	1	41.89	0.97	40	104.7	80 - 120	
205 Tl	165	1	42.71	0.72	40	106.8	80 - 120	
208 Pb	165	1	42.45	0.51	40	106.1	80 - 120	
232 Th	165	1	44.22	2.03	40	110.6	80 - 120	
238 U	165	1	42.90	0.94	40	107.3	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	359835	0.58	367189	98.0	30 - 120	
45 Sc	1	2149601	2.15	2198650	97.8	30 - 120	
72 Ge	1	1011383	0.79	1047607	96.5	30 - 120	
115 In	1	2582099	1.24	2618639	98.6	30 - 120	
165 Ho	1	3667504	0.24	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\099AREF.D\099AREF.D#
Date Acquired: Aug 10 2009 10:29 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHEPK
Misc Info: D9H010152
Vial Number: 3202
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 09:56 pm
Sample Type: AllRef
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	0.72	0.72	ppb	16.58	3600	
51 V	72	1	25.25	25.25	ppb	1.56	3600	
52 Cr	72	1	40.50	40.50	ppb	0.73	3600	
55 Mn	72	1	238.90	238.90	ppb	1.36	3600	
59 Co	72	1	14.68	14.68	ppb	0.50	3600	
60 Ni	72	1	20.79	20.79	ppb	0.77	3600	
63 Cu	72	1	11.38	11.38	ppb	1.03	3600	
66 Zn	72	1	401.70	401.70	ppb	0.39	3600	
75 As	72	1	44.05	44.05	ppb	0.53	3600	
78 Se	72	1	2.41	2.41	ppb	22.70	3600	
95 Mo	72	1	14.82	14.82	ppb	0.91	3600	
107 Ag	115	1	0.25	0.25	ppb	7.94	3600	
111 Cd	115	1	0.45	0.45	ppb	6.13	3600	
118 Sn	115	1	0.49	0.49	ppb	2.28	3600	
121 Sb	115	1	0.32	0.32	ppb	5.06	3600	
137 Ba	115	1	125.50	125.50	ppb	0.33	3600	
205 Tl	165	1	0.40	0.40	ppb	4.57	3600	
208 Pb	165	1	6.78	6.78	ppb	1.32	3600	
232 Th	165	1	6.17	6.17	ppb	5.39	1000	
238 U	165	1	3.77	3.77	ppb	1.05	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	338269	0.71	367189	92.1	30 - 120	
45 Sc	1	2037586	0.28	2198650	92.7	30 - 120	
72 Ge	1	914358	0.84	1047607	87.3	30 - 120	
115 In	1	2282908	0.65	2618639	87.2	30 - 120	
165 Ho	1	3370529	0.23	3698894	91.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#

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

Dilution Sample QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\100SDIL.D\100SDIL.D#
Date Acquired:	Aug 10 2009 10:31 pm
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHEPKP5
Misc Info:	SERIAL DILUTION
Vial Number:	3203
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 09:56 pm
Sample Type:	SDIL
Dilution Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\099AREF.D\099AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.14	ppb	12.58	0.14	96.7	90 - 110	
51 V	72	1	5.04	ppb	2.74	5.05	99.8	90 - 110	
52 Cr	72	1	8.56	ppb	1.80	8.10	105.7	90 - 110	
55 Mn	72	1	50.04	ppb	0.72	47.78	104.7	90 - 110	
59 Co	72	1	3.09	ppb	1.37	2.94	105.1	90 - 110	
60 Ni	72	1	4.62	ppb	3.50	4.16	111.1	90 - 110	
63 Cu	72	1	2.46	ppb	0.73	2.28	107.9	90 - 110	
66 Zn	72	1	87.04	ppb	0.80	80.34	108.3	90 - 110	
75 As	72	1	9.33	ppb	1.43	8.81	105.9	90 - 110	
78 Se	72	1	0.80	ppb	58.22	0.48	165.5	90 - 110	
95 Mo	72	1	2.94	ppb	1.81	2.96	99.3	90 - 110	
107 Ag	115	1	0.05	ppb	1.31	0.05	108.1	90 - 110	
111 Cd	115	1	0.10	ppb	20.67	0.09	113.8	90 - 110	
118 Sn	115	1	0.13	ppb	32.78	0.10	127.8	90 - 110	
121 Sb	115	1	0.07	ppb	6.35	0.06	106.1	90 - 110	
137 Ba	115	1	25.55	ppb	1.41	25.10	101.8	90 - 110	
205 Tl	165	1	0.08	ppb	11.96	0.08	100.7	90 - 110	
208 Pb	165	1	1.45	ppb	2.47	1.36	107.2	90 - 110	
232 Th	165	1	1.17	ppb	2.07	1.23	94.5	90 - 110	
238 U	165	1	0.77	ppb	1.83	0.75	102.2	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358785	0.17	367189	97.7	30 - 120	
45 Sc	1	2062742	0.44	2198650	93.8	30 - 120	
72 Ge	1	966302	0.64	1047607	92.2	30 - 120	
115 In	1	2459182	1.17	2618639	93.9	30 - 120	
165 Ho	1	3579354	0.91	3698894	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\AG081009A.B\086CALB.D\086CALB.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: 08/11/09 10:33:52

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHEPKP5** | Serial Dilution: **5.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500**
File: AG081009A # 100
Acquired: 08/10/2009 22:31:00
Calibrated: 08/10/2009 21:53:00

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	80	0.69300	0.71700	3.35		*	
7440-62-2	Vanadium	51	65375	25.190	25.250	0.238		*	
7440-47-3	Chromium	52	112315	42.795	40.500	5.67	0.50	NC	☑
7439-96-5	Manganese	55	683663	250.20	238.90	4.73		*	
7440-48-4	Cobalt	59	50826	15.430	14.680	5.11		*	
7440-02-0	Nickel	60	18072	23.100	20.790	11.1		*	
7440-50-8	Copper	63	23056	12.280	11.380	7.91		*	
7440-66-6	Zinc	66	155215	435.20	401.70	8.34		*	
7440-38-2	Arsenic	75	14799	46.655	44.050	5.91	0.21	5.9	☑
7782-49-2	Selenium	78	943	3.9895	2.4110	65.5	0.70	NC	☑
7439-98-7	Molybdenum	95	12469	14.715	14.820	0.709		*	
7440-22-4	Silver	107	643	0.27245	0.25210	8.07	0.015	NC	☑
7440-43-9	Cadmium	111	215	0.50750	0.44600	13.8	0.040	NC	☑
7440-31-5	Tin	118	1587	0.62700	0.49080	27.8		*	
7440-36-0	Antimony	121	510	0.33855	0.31920	6.06		*	
7440-39-3	Barium	137	75457	127.75	125.50	1.79	0.29	1.8	☑
7440-28-0	Thallium	205	1563	0.39890	0.39620	0.681		*	
7439-92-1	Lead	208	37413	7.2700	6.7830	7.18	0.18	NC	☑
7440-61-1	Uranium	238	20044	3.8495	3.7670	2.19		*	
7440-29-1	Thorium	232	27564	5.8300	6.1680	5.48		*	
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: [signature] Date: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\101PDS.D\101PDS.D#
Date Acquired: Aug 10 2009 10:34 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHEPKZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 09:56 pm
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	191.10	0.72	ppb	2.31	200	95.2	75 - 125	
51 V	72	1	233.20	25.25	ppb	1.13	200	103.5	75 - 125	
52 Cr	72	1	248.20	40.50	ppb	1.18	200	103.2	75 - 125	
55 Mn	72	1	434.90	238.90	ppb	1.21	200	99.1	75 - 125	
59 Co	72	1	210.60	14.68	ppb	0.09	200	98.1	75 - 125	
60 Ni	72	1	211.20	20.79	ppb	0.60	200	95.7	75 - 125	
63 Cu	72	1	198.00	11.38	ppb	0.66	200	93.7	75 - 125	
66 Zn	72	1	609.50	401.70	ppb	0.87	200	101.3	75 - 125	
75 As	72	1	244.90	44.05	ppb	0.55	200	100.3	75 - 125	
78 Se	72	1	205.30	2.41	ppb	1.54	200	101.4	75 - 125	
95 Mo	72	1	226.90	14.82	ppb	0.09	200	105.6	75 - 125	
107 Ag	115	1	44.96	0.25	ppb	0.74	50	89.5	75 - 125	
111 Cd	115	1	186.80	0.45	ppb	1.22	200	93.2	75 - 125	
118 Sn	115	1	180.00	0.49	ppb	0.51	200	89.8	75 - 125	
121 Sb	115	1	195.20	0.32	ppb	1.18	200	97.4	75 - 125	
137 Ba	115	1	317.50	125.50	ppb	0.81	200	97.5	75 - 125	
205 Tl	165	1	186.90	0.40	ppb	0.49	200	93.3	75 - 125	
208 Pb	165	1	191.60	6.78	ppb	0.81	200	92.7	75 - 125	
232 Th	165	1	5.20	6.17	ppb	0.67	200	2.5	75 - 125	
238 U	165	1	198.30	3.77	ppb	1.26	200	97.3	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	337919	0.72	367189	92.0	30 - 120	
45 Sc	1	1961949	0.36	2198650	89.2	30 - 120	
72 Ge	1	850557	0.87	1047607	81.2	30 - 120	
115 In	1	2250315	0.55	2618639	85.9	30 - 120	
165 Ho	1	3339306	0.18	3698894	90.3	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\AG081009A.B\086CALB.D\086CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 08/11/09 10:33:56

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHEPKZ** | Spike Dilution: **1.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500**
File: AG081009A # 101
Acquired: 08/10/2009 22:34:00
Calibrated: 08/10/2009 21:53:00

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	103925	191.10	0.71700	95.2	200		☑
7440-62-2	Vanadium	51	2650010	233.20	25.250	104	200		☐
7440-47-3	Chromium	52	2790950	248.20	40.500	104	200		☑
7439-96-5	Manganese	55	5226550	434.90	238.90	98.0	200		☑
7440-48-4	Cobalt	59	3049980	210.60	14.680	98.0	200		☑
7440-02-0	Nickel	60	710210	211.20	20.790	95.2	200		☑
7440-50-8	Copper	63	1590720	198.00	11.380	93.3	200		☑
7440-66-6	Zinc	66	931017	609.50	401.70	104	200		☑
7440-38-2	Arsenic	75	340705	244.90	44.050	100	200		☑
7782-49-2	Selenium	78	47822	205.30	2.4110	101	200		☑
7439-98-7	Molybdenum	95	816892	226.90	14.820	106	200		☐
7440-22-4	Silver	107	473946	44.960	0.25210	89.4	50.0		☑
7440-43-9	Cadmium	111	369149	186.80	0.44600	93.2	200		☑
7440-31-5	Tin	118	997803	180.00	0.49080	89.8	200		☐
7440-36-0	Antimony	121	1243930	195.20	0.31920	97.4	200		☑
7440-39-3	Barium	137	857662	317.50	125.50	96.0	200		☑
7440-28-0	Thallium	205	3268410	186.90	0.39620	93.3	200		☑
7439-92-1	Lead	208	4566480	191.60	6.7830	92.4	200		☑
7440-61-1	Uranium	238	4810080	198.30	3.7670	97.3	200		☑
7440-29-1	Thorium	232	114180	5.2000	6.1680				
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: [signature] Date: 8/11/09

Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\102SMPL.D\102SMPL.D#
Date Acquired: Aug 10 2009 10:37 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHEPL
Misc Info: D9H010152
Vial Number: 3205
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 09:56 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	0.20	0.20	ppb	19.70	3600	
51 V	72	1	10.78	10.78	ppb	2.66	3600	
52 Cr	72	1	15.58	15.58	ppb	1.72	3600	
55 Mn	72	1	90.20	90.20	ppb	1.68	3600	
59 Co	72	1	1.50	1.50	ppb	0.11	3600	
60 Ni	72	1	5.19	5.19	ppb	1.50	3600	
63 Cu	72	1	4.16	4.16	ppb	1.76	3600	
66 Zn	72	1	13.62	13.62	ppb	0.86	3600	
75 As	72	1	17.17	17.17	ppb	1.30	3600	
78 Se	72	1	5.66	5.66	ppb	28.91	3600	
95 Mo	72	1	11.24	11.24	ppb	2.70	3600	
107 Ag	115	1	0.02	0.02	ppb	17.93	3600	
111 Cd	115	1	0.15	0.15	ppb	19.93	3600	
118 Sn	115	1	0.44	0.44	ppb	4.38	3600	
121 Sb	115	1	0.30	0.30	ppb	6.74	3600	
137 Ba	115	1	38.92	38.92	ppb	1.90	3600	
205 Tl	165	1	0.12	0.12	ppb	7.52	3600	
208 Pb	165	1	2.18	2.18	ppb	0.10	3600	
232 Th	165	1	2.18	2.18	ppb	1.60	1000	
238 U	165	1	3.91	3.91	ppb	0.81	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	347406	1.57	367189	94.6	30 - 120	
45 Sc	1	1985497	2.22	2198650	90.3	30 - 120	
72 Ge	1	864573	0.99	1047607	82.5	30 - 120	
115 In	1	2217506	0.87	2618639	84.7	30 - 120	
165 Ho	1	3346482	0.37	3698894	90.5	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\103SMPL.D\103SMPL.D#
Date Acquired: Aug 10 2009 10:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHEPM
Misc Info: D9H010152
Vial Number: 3206
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 09:56 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	0.24	0.24	ppb	55.22	3600	
51 V	72	1	12.48	12.48	ppb	2.03	3600	
52 Cr	72	1	14.96	14.96	ppb	1.17	3600	
55 Mn	72	1	62.54	62.54	ppb	1.91	3600	
59 Co	72	1	1.53	1.53	ppb	0.47	3600	
60 Ni	72	1	5.54	5.54	ppb	3.28	3600	
63 Cu	72	1	4.04	4.04	ppb	1.07	3600	
66 Zn	72	1	173.00	173.00	ppb	1.36	3600	
75 As	72	1	33.98	33.98	ppb	1.79	3600	
78 Se	72	1	2.69	2.69	ppb	9.08	3600	
95 Mo	72	1	23.70	23.70	ppb	2.05	3600	
107 Ag	115	1	0.14	0.14	ppb	3.73	3600	
111 Cd	115	1	0.14	0.14	ppb	23.77	3600	
118 Sn	115	1	0.46	0.46	ppb	7.95	3600	
121 Sb	115	1	0.34	0.34	ppb	1.96	3600	
137 Ba	115	1	50.29	50.29	ppb	1.09	3600	
205 Tl	165	1	0.10	0.10	ppb	8.64	3600	
208 Pb	165	1	2.89	2.89	ppb	1.73	3600	
232 Th	165	1	1.94	1.94	ppb	2.53	1000	
238 U	165	1	2.87	2.87	ppb	2.21	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	350704	1.84	367189	95.5	30 - 120	
45 Sc	1	1963247	0.88	2198650	89.3	30 - 120	
72 Ge	1	875162	1.54	1047607	83.5	30 - 120	
115 In	1	2292225	0.77	2618639	87.5	30 - 120	
165 Ho	1	3434666	1.31	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\104 CCV.D\104 CCV.D#
Date Acquired: Aug 10 2009 10:42 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: Aug 10 2009 09:56 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	47.35	ppb	1.58	50	94.7	90 - 110	
51 V	72	1	48.79	ppb	0.45	50	97.6	90 - 110	
52 Cr	72	1	49.86	ppb	0.74	50	99.7	90 - 110	
55 Mn	72	1	49.41	ppb	0.53	50	98.8	90 - 110	
59 Co	72	1	49.75	ppb	1.02	50	99.5	90 - 110	
60 Ni	72	1	49.54	ppb	1.59	50	99.1	90 - 110	
63 Cu	72	1	49.55	ppb	0.53	50	99.1	90 - 110	
66 Zn	72	1	51.97	ppb	1.18	50	103.9	90 - 110	
75 As	72	1	49.47	ppb	1.48	50	98.9	90 - 110	
78 Se	72	1	48.73	ppb	2.92	50	97.5	90 - 110	
95 Mo	72	1	50.50	ppb	0.60	50	101.0	90 - 110	
107 Ag	115	1	48.55	ppb	1.56	50	97.1	90 - 110	
111 Cd	115	1	48.80	ppb	1.45	50	97.6	90 - 110	
118 Sn	115	1	48.99	ppb	1.79	50	98.0	90 - 110	
121 Sb	115	1	48.96	ppb	1.31	50	97.9	90 - 110	
137 Ba	115	1	49.39	ppb	1.45	50	98.8	90 - 110	
205 Tl	165	1	50.28	ppb	1.34	50	100.6	90 - 110	
208 Pb	165	1	50.39	ppb	1.44	50	100.8	90 - 110	
232 Th	165	1	50.90	ppb	1.82	50	101.8	90 - 110	
238 U	165	1	52.02	ppb	1.74	50	104.0	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	361919	1.09	367189	98.6	30 - 120	
45 Sc	1	1999922	0.32	2198650	91.0	30 - 120	
72 Ge	1	957227	0.81	1047607	91.4	30 - 120	
115 In	1	2495390	0.78	2618639	95.3	30 - 120	
165 Ho	1	3577083	0.69	3698894	96.7	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\105 CCB.D\105 CCB.D#
Date Acquired: Aug 10 2009 10:45 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: Aug 10 2009 09:56 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.019	ppb	201.79	1.00	
52 Cr	72	1	0.001	ppb	1631.50	1.00	
55 Mn	72	1	0.076	ppb	8.14	1.00	
59 Co	72	1	0.009	ppb	31.80	1.00	
60 Ni	72	1	-0.064	ppb	29.74	1.00	
63 Cu	72	1	0.020	ppb	119.79	1.00	
66 Zn	72	1	-2.234	ppb	0.51	1.00	
75 As	72	1	0.024	ppb	40.35	1.00	
78 Se	72	1	0.280	ppb	59.17	1.00	
95 Mo	72	1	-0.034	ppb	27.82	1.00	
107 Ag	115	1	0.015	ppb	19.73	1.00	
111 Cd	115	1	0.022	ppb	78.13	1.00	
118 Sn	115	1	0.058	ppb	33.89	1.00	
121 Sb	115	1	0.050	ppb	10.20	1.00	
137 Ba	115	1	0.019	ppb	19.25	1.00	
205 Tl	165	1	0.029	ppb	23.83	1.00	
208 Pb	165	1	0.012	ppb	11.39	1.00	
232 Th	165	1	0.981	ppb	15.41	1.00	
238 U	165	1	0.016	ppb	9.45	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358497	1.03	367189	97.6	30 - 120	
45 Sc	1	2022509	1.01	2198650	92.0	30 - 120	
72 Ge	1	965419	0.65	1047607	92.2	30 - 120	
115 In	1	2455095	0.15	2618639	93.8	30 - 120	
165 Ho	1	3584825	0.74	3698894	96.9	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\106WASH.D\106WASH.D#
Date Acquired: Aug 10 2009 10:48 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.014 ppb	15.35	1.30	
51 V	72	1	5.159 ppb	0.41	6.50	
52 Cr	72	1	2.136 ppb	0.56	2.60	
55 Mn	72	1	1.093 ppb	3.79	1.30	
59 Co	72	1	1.035 ppb	3.06	1.30	
60 Ni	72	1	2.046 ppb	3.09	2.60	
63 Cu	72	1	2.079 ppb	1.08	2.60	
66 Zn	72	1	8.314 ppb	1.46	13.00	
75 As	72	1	5.253 ppb	1.26	6.50	
78 Se	72	1	5.122 ppb	10.78	6.50	
95 Mo	72	1	2.067 ppb	3.76	2.60	
107 Ag	115	1	5.235 ppb	0.83	6.50	
111 Cd	115	1	1.052 ppb	2.06	1.30	
118 Sn	115	1	10.350 ppb	1.73	13.00	
121 Sb	115	1	1.972 ppb	0.57	2.60	
137 Ba	115	1	1.069 ppb	4.11	1.30	
205 Tl	165	1	1.124 ppb	0.22	1.30	
208 Pb	165	1	1.103 ppb	1.00	1.30	
232 Th	165	1	2.378 ppb	1.43	2.60	
238 U	165	1	1.134 ppb	1.07	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	359568	0.53	367189	97.9	30 - 120	
45 Sc	1	2010524	1.26	2198650	91.4	30 - 120	
72 Ge	1	957577	0.64	1047607	91.4	30 - 120	
115 In	1	2477115	0.96	2618639	94.6	30 - 120	
165 Ho	1	3513890	0.33	3698894	95.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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: 08/10/2009

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#
Date Acquired:	Aug 10 2009 11:51 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:	Aug 10 2009 11:49 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-204	211.14
52	Cr	72	1	2947	6.78
55	Mn	72	1	517	14.80
59	Co	72	1	33	35.39
60	Ni	72	1	87	45.12
63	Cu	72	1	677	10.89
66	Zn	72	1	237	18.82
75	As	72	1	69	15.74
78	Se	72	1	613	7.25
95	Mo	72	1	487	21.90
107	Ag	115	1	7	86.63
111	Cd	115	1	9	55.22
118	Sn	115	1	527	25.33
121	Sb	115	1	46	21.06
137	Ba	115	1	21	55.68
205	Tl	165	1	54	35.92
208	Pb	165	1	217	1.32
232	Th	165	1	210	24.29
238	U	165	1	58	9.14

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	298913	0.41
45	Sc	1	1771505	1.08
72	Ge	1	851994	1.37
115	In	1	2290579	0.24
165	Ho	1	3269618	1.10

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\AG081009A.B\129ICAL.D\129ICAL.D#
Date Acquired:	Aug 10 2009 11:54 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:	Aug 10 2009 11:52 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	44626	1.86
51	V	72	1	1103412	1.83
52	Cr	72	1	1112907	2.35
55	Mn	72	1	1182637	1.64
59	Co	72	1	1406971	1.17
60	Ni	72	1	322074	1.24
63	Cu	72	1	765226	0.44
66	Zn	72	1	149309	0.51
75	As	72	1	135226	0.52
78	Se	72	1	23661	3.26
95	Mo	72	1	358767	0.65
107	Ag	115	1	1018041	1.08
111	Cd	115	1	189633	1.01
118	Sn	115	1	539808	0.91
121	Sb	115	1	608141	0.64
137	Ba	115	1	268515	0.48
205	Tl	165	1	1732019	1.28
208	Pb	165	1	2365674	0.82
232	Th	165	1	2194146	3.15
238	U	165	1	2441986	1.18

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	289713	1.35	298913	96.9	30 - 120	
45	Sc	1	1702546	1.03	1771505	96.1	30 - 120	
72	Ge	1	813760	0.90	851994	95.5	30 - 120	
115	In	1	2210431	0.19	2290579	96.5	30 - 120	
165	Ho	1	3250286	0.48	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\130 CCV.D\130 CCV.D#
Date Acquired: Aug 10 2009 11:56 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: Aug 10 2009 11:54 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.24	ppb	2.69	50	98.5	90 - 110	
51 V	72	1	48.00	ppb	0.71	50	96.0	90 - 110	
52 Cr	72	1	48.06	ppb	0.44	50	96.1	90 - 110	
55 Mn	72	1	48.06	ppb	0.53	50	96.1	90 - 110	
59 Co	72	1	49.30	ppb	0.89	50	98.6	90 - 110	
60 Ni	72	1	50.11	ppb	1.48	50	100.2	90 - 110	
63 Cu	72	1	49.80	ppb	0.70	50	99.6	90 - 110	
66 Zn	72	1	53.20	ppb	1.85	50	106.4	90 - 110	
75 As	72	1	49.30	ppb	0.12	50	98.6	90 - 110	
78 Se	72	1	51.84	ppb	3.80	50	103.7	90 - 110	
95 Mo	72	1	49.84	ppb	0.82	50	99.7	90 - 110	
107 Ag	115	1	48.57	ppb	0.91	50	97.1	90 - 110	
111 Cd	115	1	49.00	ppb	0.65	50	98.0	90 - 110	
118 Sn	115	1	48.97	ppb	0.11	50	97.9	90 - 110	
121 Sb	115	1	49.39	ppb	0.33	50	98.8	90 - 110	
137 Ba	115	1	49.11	ppb	0.94	50	98.2	90 - 110	
205 Tl	165	1	50.36	ppb	1.01	50	100.7	90 - 110	
208 Pb	165	1	50.41	ppb	1.00	50	100.8	90 - 110	
232 Th	165	1	52.89	ppb	2.77	50	105.8	90 - 110	
238 U	165	1	51.25	ppb	0.93	50	102.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	286336	1.45	298913	95.8	30 - 120	
45 Sc	1	1694301	0.70	1771505	95.6	30 - 120	
72 Ge	1	807041	0.62	851994	94.7	30 - 120	
115 In	1	2219249	0.11	2290579	96.9	30 - 120	
165 Ho	1	3221461	0.39	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\131 CCB.D\131 CCB.D#
Date Acquired: Aug 10 2009 11:59 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: Aug 10 2009 11:54 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	0.007	ppb	173.23	1.00	
51 V	72	1	0.027	ppb	52.26	1.00	
52 Cr	72	1	0.022	ppb	96.05	1.00	
55 Mn	72	1	0.093	ppb	16.51	1.00	
59 Co	72	1	0.013	ppb	10.56	1.00	
60 Ni	72	1	0.031	ppb	15.88	1.00	
63 Cu	72	1	0.039	ppb	36.46	1.00	
66 Zn	72	1	0.568	ppb	5.54	1.00	
75 As	72	1	0.016	ppb	167.31	1.00	
78 Se	72	1	0.407	ppb	77.30	1.00	
95 Mo	72	1	-0.004	ppb	423.30	1.00	
107 Ag	115	1	0.018	ppb	31.54	1.00	
111 Cd	115	1	0.010	ppb	43.83	1.00	
118 Sn	115	1	0.075	ppb	23.85	1.00	
121 Sb	115	1	0.059	ppb	6.87	1.00	
137 Ba	115	1	0.017	ppb	19.95	1.00	
205 Tl	165	1	0.053	ppb	9.73	1.00	
208 Pb	165	1	0.016	ppb	6.36	1.00	
232 Th	165	1	1.410	ppb	17.65	1.00	Fail
238 U	165	1	0.018	ppb	20.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293448	0.70	298913	98.2	30 - 120	
45 Sc	1	1702764	0.71	1771505	96.1	30 - 120	
72 Ge	1	833810	0.47	851994	97.9	30 - 120	
115 In	1	2223577	1.33	2290579	97.1	30 - 120	
165 Ho	1	3240597	0.45	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\132WASH.D\132WASH.D#
Date Acquired: Aug 11 2009 12:02 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: Aug 10 2009 11:54 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	0.899 ppb	14.08	1.30	
51 V	72	1	4.971 ppb	1.08	6.50	
52 Cr	72	1	1.987 ppb	1.47	2.60	
55 Mn	72	1	1.001 ppb	2.00	1.30	
59 Co	72	1	1.052 ppb	4.51	1.30	
60 Ni	72	1	2.068 ppb	5.49	2.60	
63 Cu	72	1	2.048 ppb	1.81	2.60	
66 Zn	72	1	10.340 ppb	0.83	13.00	
75 As	72	1	5.128 ppb	2.68	6.50	
78 Se	72	1	4.579 ppb	16.89	6.50	
95 Mo	72	1	2.046 ppb	2.72	2.60	
107 Ag	115	1	5.235 ppb	2.60	6.50	
111 Cd	115	1	1.066 ppb	2.10	1.30	
118 Sn	115	1	10.190 ppb	0.75	13.00	
121 Sb	115	1	1.946 ppb	1.04	2.60	
137 Ba	115	1	1.082 ppb	1.38	1.30	
205 Tl	165	1	1.105 ppb	0.56	1.30	
208 Pb	165	1	1.062 ppb	0.76	1.30	
232 Th	165	1	2.471 ppb	1.77	2.60	
238 U	165	1	1.103 ppb	0.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291146	0.69	298913	97.4	30 - 120	
45 Sc	1	1730528	0.89	1771505	97.7	30 - 120	
72 Ge	1	836746	1.09	851994	98.2	30 - 120	
115 In	1	2252218	0.93	2290579	98.3	30 - 120	
165 Ho	1	3295222	0.70	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\140 CCV.D\140 CCV.D#
Date Acquired: Aug 11 2009 12:24 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: Aug 10 2009 11:54 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	48.05	ppb	2.14	50	96.1	90 - 110	
51 V	72	1	48.28	ppb	0.55	50	96.6	90 - 110	
52 Cr	72	1	48.47	ppb	0.34	50	96.9	90 - 110	
55 Mn	72	1	48.51	ppb	0.05	50	97.0	90 - 110	
59 Co	72	1	49.83	ppb	0.58	50	99.7	90 - 110	
60 Ni	72	1	50.62	ppb	0.97	50	101.2	90 - 110	
63 Cu	72	1	50.13	ppb	0.91	50	100.3	90 - 110	
66 Zn	72	1	53.11	ppb	0.29	50	106.2	90 - 110	
75 As	72	1	49.76	ppb	0.62	50	99.5	90 - 110	
78 Se	72	1	50.67	ppb	2.65	50	101.3	90 - 110	
95 Mo	72	1	50.03	ppb	1.07	50	100.1	90 - 110	
107 Ag	115	1	48.74	ppb	0.67	50	97.5	90 - 110	
111 Cd	115	1	48.95	ppb	0.40	50	97.9	90 - 110	
118 Sn	115	1	48.81	ppb	0.82	50	97.6	90 - 110	
121 Sb	115	1	49.01	ppb	0.27	50	98.0	90 - 110	
137 Ba	115	1	48.39	ppb	0.16	50	96.8	90 - 110	
205 Tl	165	1	49.86	ppb	1.47	50	99.7	90 - 110	
208 Pb	165	1	49.79	ppb	1.49	50	99.6	90 - 110	
232 Th	165	1	49.69	ppb	4.24	50	99.4	90 - 110	
238 U	165	1	51.43	ppb	0.98	50	102.9	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	296315	1.12	298913	99.1	30 - 120	
45 Sc	1	1724753	0.27	1771505	97.4	30 - 120	
72 Ge	1	814095	0.60	851994	95.6	30 - 120	
115 In	1	2276199	1.01	2290579	99.4	30 - 120	
165 Ho	1	3333127	1.63	3269618	101.9	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\141 CCB.D\141 CCB.D#
Date Acquired: Aug 11 2009 12:27 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: Aug 10 2009 11:54 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	0.007	ppb	173.26	1.00	
51 V	72	1	0.030	ppb	63.24	1.00	
52 Cr	72	1	0.046	ppb	35.83	1.00	
55 Mn	72	1	0.078	ppb	12.97	1.00	
59 Co	72	1	0.011	ppb	22.44	1.00	
60 Ni	72	1	0.043	ppb	33.11	1.00	
63 Cu	72	1	0.021	ppb	14.28	1.00	
66 Zn	72	1	0.534	ppb	2.13	1.00	
75 As	72	1	0.013	ppb	84.72	1.00	
78 Se	72	1	0.498	ppb	74.36	1.00	
95 Mo	72	1	-0.057	ppb	32.06	1.00	
107 Ag	115	1	0.020	ppb	15.86	1.00	
111 Cd	115	1	0.008	ppb	84.67	1.00	
118 Sn	115	1	0.095	ppb	31.36	1.00	
121 Sb	115	1	0.049	ppb	9.27	1.00	
137 Ba	115	1	0.020	ppb	30.44	1.00	
205 Tl	165	1	0.033	ppb	11.13	1.00	
208 Pb	165	1	0.015	ppb	14.76	1.00	
232 Th	165	1	1.225	ppb	15.25	1.00	Fail
238 U	165	1	0.016	ppb	2.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299079	0.77	298913	100.1	30 - 120	
45 Sc	1	1736434	1.52	1771505	98.0	30 - 120	
72 Ge	1	843836	0.86	851994	99.0	30 - 120	
115 In	1	2269332	0.97	2290579	99.1	30 - 120	
165 Ho	1	3307967	0.93	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\142WASH.D\142WASH.D#
Date Acquired:	Aug 11 2009 12:29 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:	Aug 10 2009 11:54 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	0.997 ppb	19.94	1.30	
51 V	72	1	4.993 ppb	2.41	6.50	
52 Cr	72	1	1.979 ppb	2.89	2.60	
55 Mn	72	1	0.999 ppb	2.38	1.30	
59 Co	72	1	1.029 ppb	4.27	1.30	
60 Ni	72	1	2.155 ppb	3.61	2.60	
63 Cu	72	1	2.009 ppb	3.95	2.60	
66 Zn	72	1	10.210 ppb	0.70	13.00	
75 As	72	1	5.007 ppb	0.90	6.50	
78 Se	72	1	5.391 ppb	9.51	6.50	
95 Mo	72	1	1.897 ppb	2.43	2.60	
107 Ag	115	1	5.135 ppb	0.72	6.50	
111 Cd	115	1	0.982 ppb	3.08	1.30	
118 Sn	115	1	10.370 ppb	3.90	13.00	
121 Sb	115	1	1.993 ppb	3.72	2.60	
137 Ba	115	1	1.033 ppb	2.27	1.30	
205 Tl	165	1	1.104 ppb	2.04	1.30	
208 Pb	165	1	1.077 ppb	1.00	1.30	
232 Th	165	1	2.396 ppb	2.33	2.60	
238 U	165	1	1.105 ppb	0.89	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297355	0.58	298913	99.5	30 - 120	
45 Sc	1	1763171	1.88	1771505	99.5	30 - 120	
72 Ge	1	841859	0.41	851994	98.8	30 - 120	
115 In	1	2276749	1.44	2290579	99.4	30 - 120	
165 Ho	1	3305076	1.92	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\143 BLK.D\143 BLK.D#
Date Acquired: Aug 11 2009 12:32 am
Operator: TEL
Sample Name: LHH8TB
Misc Info: BLANK 9217132 6020
Vial Number: 3302
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 pm
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	0.007 ppb	173.16	2.00	
51 V	72	1	0.028 ppb	44.06	2.00	
52 Cr	72	1	0.098 ppb	25.54	2.00	
55 Mn	72	1	0.161 ppb	11.76	2.00	
59 Co	72	1	0.001 ppb	222.94	2.00	
60 Ni	72	1	0.014 ppb	57.90	2.00	
63 Cu	72	1	0.044 ppb	38.85	2.00	
66 Zn	72	1	0.451 ppb	1.38	2.00	
75 As	72	1	0.001 ppb	129.52	2.00	
78 Se	72	1	0.007 ppb	5104.40	2.00	
95 Mo	72	1	-0.097 ppb	12.34	2.00	
107 Ag	115	1	0.005 ppb	61.20	2.00	
111 Cd	115	1	-0.001 ppb	565.62	2.00	
118 Sn	115	1	0.049 ppb	24.21	2.00	
121 Sb	115	1	0.027 ppb	23.10	2.00	
137 Ba	115	1	0.031 ppb	11.89	2.00	
205 Tl	165	1	0.038 ppb	25.33	2.00	
208 Pb	165	1	0.009 ppb	10.73	2.00	
232 Th	165	1	0.269 ppb	20.08	2.00	
238 U	165	1	0.001 ppb	68.12	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293359	0.79	298913	98.1	30 - 120	
45 Sc	1	1723460	0.92	1771505	97.3	30 - 120	
72 Ge	1	822004	0.58	851994	96.5	30 - 120	
115 In	1	2237686	1.60	2290579	97.7	30 - 120	
165 Ho	1	3301972	1.13	3269618	101.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\144 LCS.D\144 LCS.D#
Date Acquired: Aug 11 2009 12:35 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHH8TC
Misc Info: LCS
Vial Number: 3303
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
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	39.52	0.45	40	98.8	80 - 120	
51 V	72	1	40.16	1.91	40	100.4	80 - 120	
52 Cr	72	1	40.10	0.58	40	100.3	80 - 120	
55 Mn	72	1	40.63	0.62	40	101.6	80 - 120	
59 Co	72	1	41.15	0.61	40	102.9	80 - 120	
60 Ni	72	1	41.30	0.45	40	103.3	80 - 120	
63 Cu	72	1	41.85	0.82	40	104.6	80 - 120	
66 Zn	72	1	40.31	0.46	40	100.8	80 - 120	
75 As	72	1	39.43	0.93	40	98.6	80 - 120	
78 Se	72	1	39.07	3.52	40	97.7	80 - 120	
95 Mo	72	1	39.27	0.57	40	98.2	80 - 120	
107 Ag	115	1	39.99	2.12	40	100.0	80 - 120	
111 Cd	115	1	39.63	1.74	40	99.1	80 - 120	
118 Sn	115	1	0.03	81.05	40	0.1	80 - 120	
121 Sb	115	1	37.15	1.53	40	92.9	80 - 120	
137 Ba	115	1	40.21	0.45	40	100.5	80 - 120	
205 Tl	165	1	41.60	1.30	40	104.0	80 - 120	
208 Pb	165	1	41.36	1.36	40	103.4	80 - 120	
232 Th	165	1	43.21	0.89	40	108.0	80 - 120	
238 U	165	1	42.46	0.25	40	106.2	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	288494	0.58	298913	96.5	30 - 120	
45 Sc	1	1693916	0.66	1771505	95.6	30 - 120	
72 Ge	1	796858	0.68	851994	93.5	30 - 120	
115 In	1	2230409	0.66	2290579	97.4	30 - 120	
165 Ho	1	3279872	0.76	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\145AREF.D\145AREF.D#
Date Acquired:	Aug 11 2009 12:38 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHG1P 10X
Misc Info:	D9H040187
Vial Number:	3304
Current Method:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File:	C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update:	Aug 11 2009 11:17 am
Sample Type:	AllRef
Dilution Factor:	10.00
Autodil Factor:	Undiluted
Final Dil Factor:	10.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.22	0.02	ppb	0.87	3600	
51 V	72	1	-294.30	-29.43	ppb	11.86	3600	
52 Cr	72	1	10,010.00	1001.00	ppb	1.56	3600	
55 Mn	72	1	187.90	18.79	ppb	1.48	3600	
59 Co	72	1	2.72	0.27	ppb	3.00	3600	
60 Ni	72	1	9.98	1.00	ppb	3.77	3600	
63 Cu	72	1	2.78	0.28	ppb	5.35	3600	
66 Zn	72	1	6.16	0.62	ppb	4.82	3600	
75 As	72	1	103.80	10.38	ppb	2.97	3600	
78 Se	72	1	9.58	0.96	ppb	39.88	3600	
95 Mo	72	1	10.60	1.06	ppb	4.27	3600	
107 Ag	115	1	0.15	0.01	ppb	26.09	3600	
111 Cd	115	1	-0.25	-0.02	ppb	120.06	3600	
118 Sn	115	1	0.90	0.09	ppb	10.49	3600	
121 Sb	115	1	0.42	0.04	ppb	15.94	3600	
137 Ba	115	1	47.83	4.78	ppb	0.99	3600	
205 Tl	165	1	0.56	0.06	ppb	23.64	3600	
208 Pb	165	1	1.10	0.11	ppb	10.44	3600	
232 Th	165	1	9.62	0.96	ppb	14.60	1000	
238 U	165	1	32.70	3.27	ppb	2.38	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291486	0.87	298913	97.5	30 - 120	
45 Sc	1	1704287	0.82	1771505	96.2	30 - 120	
72 Ge	1	790412	0.97	851994	92.8	30 - 120	
115 In	1	2089228	1.06	2290579	91.2	30 - 120	
165 Ho	1	3175531	1.19	3269618	97.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\146SDIL.D\146SDIL.D#
Date Acquired: Aug 11 2009 12:41 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PP50
Misc Info: SERIAL DILUTION
Vial Number: 3305
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: SDIL
Dilution Factor: 10.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\145AREF.D\145AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.01	ppb	173.20	0.00	157.5	90 - 110	
51 V	72	1	-4.74	ppb	27.41	-5.89	80.4	90 - 110	
52 Cr	72	1	209.10	ppb	2.09	200.20	104.4	90 - 110	
55 Mn	72	1	3.99	ppb	1.35	3.76	106.3	90 - 110	
59 Co	72	1	0.07	ppb	7.44	0.05	137.7	90 - 110	
60 Ni	72	1	0.36	ppb	7.71	0.20	182.1	90 - 110	
63 Cu	72	1	0.07	ppb	27.15	0.06	131.4	90 - 110	
66 Zn	72	1	0.34	ppb	3.20	0.12	275.1	90 - 110	
75 As	72	1	2.15	ppb	1.39	2.08	103.6	90 - 110	
78 Se	72	1	0.59	ppb	15.55	0.19	310.4	90 - 110	
95 Mo	72	1	0.13	ppb	14.27	0.21	60.7	90 - 110	
107 Ag	115	1	0.00	ppb	86.62	0.00	156.8	90 - 110	
111 Cd	115	1	0.01	ppb	94.23	0.00	-131.7	90 - 110	
118 Sn	115	1	0.19	ppb	16.09	0.02	1058.0	90 - 110	
121 Sb	115	1	0.01	ppb	28.22	0.01	160.2	90 - 110	
137 Ba	115	1	1.00	ppb	4.46	0.96	104.3	90 - 110	
205 Tl	165	1	0.01	ppb	9.99	0.01	87.7	90 - 110	
208 Pb	165	1	0.03	ppb	3.55	0.02	120.7	90 - 110	
232 Th	165	1	0.20	ppb	9.18	0.19	105.3	90 - 110	
238 U	165	1	0.68	ppb	2.62	0.65	103.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	304886	1.09	298913	102.0	30 - 120	
45 Sc	1	1751561	0.53	1771505	98.9	30 - 120	
72 Ge	1	840273	0.94	851994	98.6	30 - 120	
115 In	1	2233781	0.77	2290579	97.5	30 - 120	
165 Ho	1	3301214	0.88	3269618	101.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 11:23:44

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1PP50** | Serial Dilution: **50.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG081009A # 146
Acquired: 08/11/2009 00:41:00
Calibrated: 08/10/2009 23:51:00

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	0.35075	0.22270	57.5		*	
7440-62-2	Vanadium	51	-54238	-236.75	-294.30			*	
7440-47-3	Chromium	52	2399990	10455	10010	4.45		*	
7439-96-5	Manganese	55	49257	199.65	187.90	6.25		*	
7440-48-4	Cobalt	59	1120	3.7405	2.7170	37.7		*	
7440-02-0	Nickel	60	1293	18.170	9.9780	82.1		*	
7440-50-8	Copper	63	1243	3.6495	2.7780	31.4		*	
7440-66-6	Zinc	66	757	16.960	6.1640	175		*	
7440-38-2	Arsenic	75	3068	107.50	103.80	3.56	0.21	NC	☑
7782-49-2	Selenium	78	747	29.725	9.5770	210	0.70	NC	☑
7439-98-7	Molybdenum	95	957	6.4350	10.600	39.3		*	
7440-22-4	Silver	107	53	0.22870	0.14590	56.8		*	
7440-43-9	Cadmium	111	22	0.32770	-0.24880			*	
7440-31-5	Tin	118	1547	9.4800	0.89600	958		*	
7440-36-0	Antimony	121	127	0.66850	0.41720	60.2		*	
7440-39-3	Barium	137	2727	49.880	47.830	4.29		*	
7440-28-0	Thallium	205	228	0.49135	0.56000	12.3		*	
7439-92-1	Lead	208	856	1.3255	1.0980	20.7		*	
7440-61-1	Uranium	238	16907	33.970	32.700	3.88		*	
7440-29-1	Thorium	232	4731	10.135	9.6220	5.33		*	
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%)

AS ce only

Reviewed by: [signature] Date: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\147PDS.D\147PDS.D#
Date Acquired: Aug 11 2009 12:43 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3306
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 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	204.50	0.02	ppb	0.59	200	102.2	75 - 125	
51 V	72	1	166.20	-29.43	ppb	2.27	200	97.4	75 - 125	
52 Cr	72	1	1200.00	1001.00	ppb	0.44	200	99.9	75 - 125	
55 Mn	72	1	216.10	18.79	ppb	0.15	200	98.8	75 - 125	
59 Co	72	1	194.20	0.27	ppb	1.05	200	97.0	75 - 125	
60 Ni	72	1	191.30	1.00	ppb	0.57	200	95.2	75 - 125	
63 Cu	72	1	189.70	0.28	ppb	0.61	200	94.7	75 - 125	
66 Zn	72	1	195.80	0.62	ppb	0.85	200	97.6	75 - 125	
75 As	72	1	214.60	10.38	ppb	0.19	200	102.0	75 - 125	
78 Se	72	1	202.90	0.96	ppb	0.68	200	101.0	75 - 125	
95 Mo	72	1	207.00	1.06	ppb	0.49	200	103.0	75 - 125	
107 Ag	115	1	45.53	0.01	ppb	1.28	50	91.0	75 - 125	
111 Cd	115	1	196.00	-0.02	ppb	1.23	200	98.0	75 - 125	
118 Sn	115	1	183.90	0.09	ppb	0.30	200	91.9	75 - 125	
121 Sb	115	1	202.00	0.04	ppb	0.42	200	101.0	75 - 125	
137 Ba	115	1	202.90	4.78	ppb	0.89	200	99.1	75 - 125	
205 Tl	165	1	186.10	0.06	ppb	1.28	200	93.0	75 - 125	
208 Pb	165	1	183.50	0.11	ppb	2.11	200	91.7	75 - 125	
232 Th	165	1	0.19	0.96	ppb	3.36	200	0.1	75 - 125	
238 U	165	1	197.00	3.27	ppb	2.90	200	96.9	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	295091	0.20	298913	98.7	30 - 120	
45 Sc	1	1732131	0.88	1771505	97.8	30 - 120	
72 Ge	1	785574	0.24	851994	92.2	30 - 120	
115 In	1	2104929	0.73	2290579	91.9	30 - 120	
165 Ho	1	3206450	1.77	3269618	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 11:23:48

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHG1PZ** | Spike Dilution: **1.00** | Sample Dilution: **10.00**

Instrument: **Agilent7500**
File: AG081009A # 147
Acquired: 08/11/2009 00:43:00
Calibrated: 08/10/2009 23:51:00

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	92945	204.50	0.02227	102	200		☑
7440-62-2	Vanadium	51	1770840	166.20	-29.430	83.1	200		☐
7440-47-3	Chromium	52	12859300	1200.0	1001.0	99.5	200	*	☑
7439-96-5	Manganese	55	2466560	216.10	18.790	98.7	200		☑
7440-48-4	Cobalt	59	2637930	194.20	0.27170	97.0	200		☑
7440-02-0	Nickel	60	594594	191.30	0.99780	95.2	200		☑
7440-50-8	Copper	63	1400850	189.70	0.27780	94.7	200		☑
7440-66-6	Zinc	66	281975	195.80	0.61640	97.6	200		☑
7440-38-2	Arsenic	75	280069	214.60	10.380	102	200		☑
7782-49-2	Selenium	78	45766	202.90	0.95770	101	200		☑
7439-98-7	Molybdenum	95	716407	207.00	1.0600	103	200		☐
7440-22-4	Silver	107	441342	45.530	0.01459	91.0	50.0		☑
7440-43-9	Cadmium	111	353875	196.00	-0.02488	98.0	200		☑
7440-31-5	Tin	118	944944	183.90	0.08960	91.9	200		☐
7440-36-0	Antimony	121	1169940	202.00	0.04172	101	200		☑
7440-39-3	Barium	137	518739	202.90	4.7830	99.1	200		☑
7440-28-0	Thallium	205	3178780	186.10	0.05600	93.0	200		☑
7439-92-1	Lead	208	4281670	183.50	0.10980	91.7	200		☑
7440-61-1	Uranium	238	4743130	197.00	3.2700	96.9	200		☑
7440-29-1	Thorium	232	4391	0.19330	0.96220				
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				

AS Seconly

Reviewed by: [signature] Date: 8/11/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\148_MS.D\148_MS.D#
Date Acquired: Aug 11 2009 12:46 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PS 10X
Misc Info: MATRIX SPIKE
Vial Number: 3307
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: MS
Prep Dil. Factor: 10.00
Autodil Factor: Undiluted
Final Dil Factor: 10.00

Spike Ref. File: ---

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	Ref Conc		RSD(%)	Spk Amt	Rec(%)	QC Range(%)	QC Flag
9 Be	6	1	4.16	0.02	ppb	2.40	40	10.4	50 - 150	
51 V	72	1	-28.11	-29.43	ppb	12.97	40	-265.9	50 - 150	
52 Cr	72	1	1050.00	1001.00	ppb	1.04	40	100.9	50 - 150	
55 Mn	72	1	23.23	18.79	ppb	0.29	40	39.5	50 - 150	
59 Co	72	1	4.33	0.27	ppb	0.48	40	10.7	50 - 150	
60 Ni	72	1	4.83	1.00	ppb	2.51	40	11.8	50 - 150	
63 Cu	72	1	4.22	0.28	ppb	0.74	40	10.5	50 - 150	
66 Zn	72	1	4.65	0.62	ppb	1.25	40	11.4	50 - 150	
75 As	72	1	15.00	10.38	ppb	0.39	40	29.8	50 - 150	
78 Se	72	1	5.47	0.96	ppb	9.23	40	13.3	50 - 150	
95 Mo	72	1	5.36	1.06	ppb	2.81	40	13.0	50 - 150	
107 Ag	115	1	3.77	0.01	ppb	3.49	40	9.4	50 - 150	
111 Cd	115	1	4.07	-0.02	ppb	5.34	40	10.2	50 - 150	
118 Sn	115	1	0.32	0.09	ppb	8.08	40	0.8	50 - 150	
121 Sb	115	1	4.14	0.04	ppb	1.05	40	10.3	50 - 150	
137 Ba	115	1	9.08	4.78	ppb	1.76	40	20.3	50 - 150	
205 Tl	165	1	3.95	0.06	ppb	1.09	40	9.9	50 - 150	
208 Pb	165	1	3.98	0.11	ppb	1.44	40	9.9	50 - 150	
232 Th	165	1	4.15	0.96	ppb	1.22	40	10.1	50 - 150	
238 U	165	1	7.60	3.27	ppb	1.43	40	17.6	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	296357	0.18	298913	99.1	30 - 120	
45 Sc	1	1737871	1.01	1771505	98.1	30 - 120	
72 Ge	1	801876	0.98	851994	94.1	30 - 120	
115 In	1	2121247	1.84	2290579	92.6	30 - 120	
165 Ho	1	3218159	0.78	3269618	98.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\149 MSD.D\149 MSD.D#
Date Acquired: Aug 11 2009 12:49 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG1PD 10X
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3308
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: MSD
Dilution Factor: 10.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\148 MS.D\148 MS.D#

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Ref Conc	Differ(%)	High Limit	Flag
9 Be	6	1	4.55	ppb	4.23	4.16	8.77	20	
51 V	72	1	-31.67	ppb	14.32	-28.11	-11.91	20	
52 Cr	72	1	1016.00	ppb	0.90	1050.00	3.29	20	
55 Mn	72	1	22.90	ppb	1.21	23.23	1.43	20	
59 Co	72	1	4.31	ppb	1.12	4.32	0.35	20	
60 Ni	72	1	4.94	ppb	3.50	4.83	2.38	20	
63 Cu	72	1	4.17	ppb	2.39	4.22	1.24	20	
66 Zn	72	1	4.65	ppb	1.55	4.65	0.04	20	
75 As	72	1	14.78	ppb	0.93	15.00	1.48	20	
78 Se	72	1	5.38	ppb	1.66	5.47	1.59	20	
95 Mo	72	1	5.28	ppb	1.82	5.36	1.49	20	
107 Ag	115	1	3.86	ppb	0.90	3.77	2.38	20	
111 Cd	115	1	4.17	ppb	2.34	4.07	2.45	20	
118 Sn	115	1	0.15	ppb	19.73	0.32	74.38	20	
121 Sb	115	1	4.11	ppb	2.91	4.14	0.70	20	
137 Ba	115	1	8.91	ppb	1.96	9.08	1.86	20	
205 Tl	165	1	3.97	ppb	2.35	3.95	0.66	20	
208 Pb	165	1	4.03	ppb	2.45	3.97	1.35	20	
232 Th	165	1	4.33	ppb	1.92	4.15	4.30	20	
238 U	165	1	7.53	ppb	2.93	7.59	0.82	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300459	0.38	298913	100.5	30 - 120	
45 Sc	1	1761713	0.96	1771505	99.4	30 - 120	
72 Ge	1	808902	0.89	851994	94.9	30 - 120	
115 In	1	2136314	0.89	2290579	93.3	30 - 120	
165 Ho	1	3222274	2.08	3269618	98.6	30 - 120	

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

ISTD Ref. File :C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\150SMPL.D\150SMPL.D#
Date Acquired: Aug 11 2009 12:51 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHG21 20X
Misc Info: D9H040190
Vial Number: 3309
Current Method: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.M
Calibration File: C:\ICPCHEM\1\DATA\AG081009A.B\NormISIS.C
Last Cal. Update: Aug 11 2009 11:17 am
Sample Type: SA
Dilution Factor: 20.00
Autodil Factor: Undiluted
Final Dil Factor: 20.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.30	0.01	ppb	86.60	3600	
51 V	72	1	-1,221.00	-61.05	ppb	7.14	3600	
52 Cr	72	1	37,340.00	1867.00	ppb	1.46	3600	
55 Mn	72	1	38.66	1.93	ppb	1.87	3600	
59 Co	72	1	1.28	0.06	ppb	12.84	3600	
60 Ni	72	1	10.10	0.51	ppb	2.46	3600	
63 Cu	72	1	1.62	0.08	ppb	14.06	3600	
66 Zn	72	1	3.44	0.17	ppb	12.90	3600	
75 As	72	1	81.02	4.05	ppb	3.03	3600	
78 Se	72	1	12.12	0.61	ppb	85.72	3600	
95 Mo	72	1	32.44	1.62	ppb	7.03	3600	
107 Ag	115	1	0.15	0.01	ppb	36.04	3600	
111 Cd	115	1	-2.89	-0.14	ppb	50.48	3600	
118 Sn	115	1	1.48	0.07	ppb	9.61	3600	
121 Sb	115	1	0.55	0.03	ppb	27.63	3600	
137 Ba	115	1	68.84	3.44	ppb	1.42	3600	
205 Tl	165	1	0.44	0.02	ppb	14.59	3600	
208 Pb	165	1	0.85	0.04	ppb	4.09	3600	
232 Th	165	1	3.46	0.17	ppb	6.71	1000	
238 U	165	1	43.40	2.17	ppb	0.57	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291191	1.20	298913	97.4	30 - 120	
45 Sc	1	1704318	1.32	1771505	96.2	30 - 120	
72 Ge	1	791982	0.63	851994	93.0	30 - 120	
115 In	1	2092951	0.24	2290579	91.4	30 - 120	
165 Ho	1	3157899	0.71	3269618	96.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\151 CCV.D\151 CCV.D#
Date Acquired: Aug 11 2009 12:54 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: Aug 10 2009 11:54 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	50.31	ppb	1.79	50	100.6	90 - 110	
51 V	72	1	47.72	ppb	0.57	50	95.4	90 - 110	
52 Cr	72	1	48.34	ppb	0.27	50	96.7	90 - 110	
55 Mn	72	1	48.11	ppb	0.40	50	96.2	90 - 110	
59 Co	72	1	49.47	ppb	0.66	50	98.9	90 - 110	
60 Ni	72	1	50.01	ppb	1.09	50	100.0	90 - 110	
63 Cu	72	1	49.70	ppb	0.74	50	99.4	90 - 110	
66 Zn	72	1	52.91	ppb	0.63	50	105.8	90 - 110	
75 As	72	1	49.12	ppb	0.02	50	98.2	90 - 110	
78 Se	72	1	48.81	ppb	3.68	50	97.6	90 - 110	
95 Mo	72	1	49.73	ppb	0.70	50	99.5	90 - 110	
107 Ag	115	1	49.12	ppb	0.72	50	98.2	90 - 110	
111 Cd	115	1	50.09	ppb	0.40	50	100.2	90 - 110	
118 Sn	115	1	48.97	ppb	0.36	50	97.9	90 - 110	
121 Sb	115	1	49.59	ppb	0.64	50	99.2	90 - 110	
137 Ba	115	1	49.21	ppb	0.73	50	98.4	90 - 110	
205 Tl	165	1	50.40	ppb	1.40	50	100.8	90 - 110	
208 Pb	165	1	50.34	ppb	1.31	50	100.7	90 - 110	
232 Th	165	1	49.83	ppb	3.41	50	99.7	90 - 110	
238 U	165	1	51.61	ppb	1.72	50	103.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298153	1.60	298913	99.7	30 - 120	
45 Sc	1	1730257	0.51	1771505	97.7	30 - 120	
72 Ge	1	823986	1.07	851994	96.7	30 - 120	
115 In	1	2255073	0.60	2290579	98.4	30 - 120	
165 Ho	1	3304129	1.16	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\152 CCB.D\152 CCB.D#
Date Acquired: Aug 11 2009 12:57 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: Aug 10 2009 11:54 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	0.007	ppb	173.19	1.00	
51 V	72	1	0.010	ppb	756.86	1.00	
52 Cr	72	1	0.074	ppb	27.75	1.00	
55 Mn	72	1	0.077	ppb	12.16	1.00	
59 Co	72	1	0.014	ppb	33.69	1.00	
60 Ni	72	1	0.033	ppb	8.70	1.00	
63 Cu	72	1	0.015	ppb	93.89	1.00	
66 Zn	72	1	0.514	ppb	6.53	1.00	
75 As	72	1	0.008	ppb	121.93	1.00	
78 Se	72	1	0.477	ppb	100.92	1.00	
95 Mo	72	1	-0.063	ppb	25.38	1.00	
107 Ag	115	1	0.013	ppb	37.30	1.00	
111 Cd	115	1	0.020	ppb	88.08	1.00	
118 Sn	115	1	0.084	ppb	22.47	1.00	
121 Sb	115	1	0.051	ppb	1.64	1.00	
137 Ba	115	1	0.017	ppb	21.12	1.00	
205 Tl	165	1	0.032	ppb	6.00	1.00	
208 Pb	165	1	0.011	ppb	13.50	1.00	
232 Th	165	1	1.203	ppb	14.49	1.00	Fail
238 U	165	1	0.014	ppb	5.01	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299841	0.83	298913	100.3	30 - 120	
45 Sc	1	1753527	0.56	1771505	99.0	30 - 120	
72 Ge	1	853516	0.19	851994	100.2	30 - 120	
115 In	1	2301995	0.44	2290579	100.5	30 - 120	
165 Ho	1	3384139	1.05	3269618	103.5	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\153WASH.D\153WASH.D#
Date Acquired: Aug 11 2009 01:00 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: Aug 10 2009 11:54 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.060 ppb	9.90	1.30	
51 V	72	1	5.022 ppb	1.13	6.50	
52 Cr	72	1	2.068 ppb	0.61	2.60	
55 Mn	72	1	0.987 ppb	1.84	1.30	
59 Co	72	1	1.023 ppb	1.68	1.30	
60 Ni	72	1	2.082 ppb	4.09	2.60	
63 Cu	72	1	2.089 ppb	1.60	2.60	
66 Zn	72	1	10.410 ppb	0.53	13.00	
75 As	72	1	5.031 ppb	1.06	6.50	
78 Se	72	1	5.439 ppb	8.08	6.50	
95 Mo	72	1	1.962 ppb	2.26	2.60	
107 Ag	115	1	5.147 ppb	1.92	6.50	
111 Cd	115	1	1.088 ppb	3.58	1.30	
118 Sn	115	1	10.280 ppb	1.11	13.00	
121 Sb	115	1	1.935 ppb	1.15	2.60	
137 Ba	115	1	1.067 ppb	5.26	1.30	
205 Tl	165	1	1.098 ppb	2.04	1.30	
208 Pb	165	1	1.070 ppb	1.69	1.30	
232 Th	165	1	2.403 ppb	2.53	2.60	
238 U	165	1	1.104 ppb	0.39	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300232	0.96	298913	100.4	30 - 120	
45 Sc	1	1774194	0.66	1771505	100.2	30 - 120	
72 Ge	1	859087	0.54	851994	100.8	30 - 120	
115 In	1	2320421	0.48	2290579	101.3	30 - 120	
165 Ho	1	3355379	1.38	3269618	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\AG081009A.B\128CALB.D\128CALB.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: D9H050230

Client: Northgate Environmental

Batch(es) #: 9218437

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: 8/11/09

Metals Raw Data RoadMap

LotID		Metal	WorkOrder	Anal Date	TestDesc	Batch	File Id	Instr
D9H050230	1 D	SE	LHJ5J1AH	20090811	6020TOTA	9218437	AG081009A	024
D9H050230	1 S	SE	LHJ5J1AG	20090811	6020TOTA	9218437	AG081009A	024
D9H050230	1 D	AS	LHJ5J1AF	20090811	6020TOTA	9218437	AG081009A	024
D9H050230	1 S	AS	LHJ5J1AE	20090811	6020TOTA	9218437	AG081009A	024
D9H050230	1	SE	LHJ5J1AC	20090811	6020TOTA	9218437	AG081009A	024
D9H050230	1	AS	LHJ5J1AA	20090811	6020TOTA	9218437	AG081009A	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9218437**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JRW

Prep Date: ~~08/06/09~~ 8/7/09 JRW

Due Date: 08/17/09

Lot	Work Order			Initial Weight/Volume
D9H060000 Water	**LHQK3**	B	Due Date: SDG:	50 mL
D9H060000 Water	**LHQK3**	C	Due Date: SDG:	50 mL
D9H050230 Water	**LHJ5J** Total		Due Date: 08/17/09 SDG:	50 mL
D9H050230 Water	**LHJ5J** Total	S	Due Date: 08/17/09 SDG:	50 mL
D9H050230 Water	**LHJ5J** Total	D	Due Date: 08/17/09 SDG:	50 mL
D9H050234 Water	**LHJ51** Total		Due Date: 08/17/09 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 8/10/09

8/11/09

METALS PREP SHEET

SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9218437 **ALLIQUOTTED BY:** JRW

PREP DATE: 8/7/2009 **DIGESTED BY:** JRW

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:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-3775-09	6/23/10	100uL	15
2008Cal-2	STD-2637-09	5/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 410 Block & Cup # : 3/22

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	700	93	1115	92
HNO3	1130	92	1200	96
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: JRW **Date:** 8/7/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

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

All units are ug/L.

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

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Aug-10-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

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

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

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

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

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

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

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

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD4601-09, ICP-MS (024) INT STD BRC — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 08-03-2009
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

STD4712-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4711-09, NITRIC ACID — Aliquot Amount (ml): 50.000

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

STD4713-09, ICP-MS 10 ppm Sn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4714-09, ICP-MS 100 ppb cal — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Expires(2): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3773-09, ICPMS 2008CAL-1 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: 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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4715-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	2,500.0

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4716-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn Aliquot Amount (ml): 0.0900

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

Parent Std No.: STD4714-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 08-11-2009

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

STD4717-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022

Volume (ml): 10.000

Date Prep./Opened: 08-10-2009

Date Expires(1): 08-11-2009 (2 Days)

pipettes: Met 20 and Met 8

Parent Std No.: STD4716-09, ICP-MS RL STD

Aliquot Amount (ml): 2.0000

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

STD4718-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (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

STD4719-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4720-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4721-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4722-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4723-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

Reviewed By: LRD 08/10/2009 File AG0810009A

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	08/10/09 18:06		☐
4	100 ppb				1.0	08/10/09 18:09		☐
5	ICV				1.0	08/10/09 18:12		☐
6	RLIV				1.0	08/10/09 18:15		☐
7	ICB				1.0	08/10/09 18:17		☐
8	RL STD				1.0	08/10/09 18:20		☐
9	AFCEE RL				1.0	08/10/09 18:23		☐
10	ALTSe				1.0	08/10/09 18:26		☐
11	ICSA				1.0	08/10/09 18:28		☐
12	ICSAB				1.0	08/10/09 18:31		☐
13	RINSE				1.0	08/10/09 18:34		☐
14	LR				1.0	08/10/09 18:36		☐
15	RINSE				1.0	08/10/09 18:39		☐
16	CCV				1.0	08/10/09 18:42		☐
17	CCB				1.0	08/10/09 18:45		☐
18	RLCV				1.0	08/10/09 18:47		☐
19	~~LG9KP~~	~~D9G300165-1~~	~~9215182~~	~~04~~	~~1.0~~	~~08/10/09 18:50~~	KF 8/11/09 Did not use.	☐
20	CCV				1.0	08/10/09 18:53		☐
21	CCB				1.0	08/10/09 18:55		☐
22	RLCV				1.0	08/10/09 18:58		☐
23	LG8F7	D9G290252-1	9212201	46	1.0	08/10/09 19:01		☐
24	LG8F7P5	D9G290252	9212201		5.0	08/10/09 19:04		☐
25	LG8F7Z	D9G290252-1	9212201		1.0	08/10/09 19:06		☐
26	LG8F7S	D9G290252-1	9212201	46	1.0	08/10/09 19:09		☐
27	LG8F7D	D9G290252-1	9212201	46	1.0	08/10/09 19:12		☐
28	CCV				1.0	08/10/09 19:15		☐
29	CCB				1.0	08/10/09 19:17		☐
30	RLCV				1.0	08/10/09 19:20		☐
31	~~LHFL0B~~	~~D9H030000~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:23~~		☐
32	LHFL0C	D9H030000	9215265	46	1.0	08/10/09 19:26		☐
33	~~LHA17~~	~~D9G300337-1~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:28~~	KF 8/11/09 Did not use.	☐
34	CCV				1.0	08/10/09 19:31		☐
35	CCB				1.0	08/10/09 19:34		☐
36	RLCV				1.0	08/10/09 19:37		☐
37	LG86WB	D9G300000	9211083	04	1.0	08/10/09 19:39		☐
38	LG86WC	D9G300000	9211083	04	1.0	08/10/09 19:42		☐
39	LG8K3	D9G290261-1	9211083	04	1.0	08/10/09 19:45		☐
40	LG8LE	D9G290261-3	9211083	04	1.0	08/10/09 19:48		☐
41	LG8LF	D9G290261-4	9211083	04	1.0	08/10/09 19:50		☐
42	LG8LH	D9G290261-5	9211083	04	1.0	08/10/09 19:53		☐
43	LG8LJ	D9G290261-6	9211083	04	1.0	08/10/09 19:56		☐
44	LG8LK	D9G290261-7	9211083	04	1.0	08/10/09 19:59		☐
45	CCV				1.0	08/10/09 20:01		☐
46	CCB				1.0	08/10/09 20:04		☐
47	RLCV				1.0	08/10/09 20:07		☐
48	LG8LKP5	D9G290261	9211083		5.0	08/10/09 20:10		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LG8LKZ	D9G290261-7	9211083		1.0	08/10/09 20:12		
50	LG8LKS	D9G290261-7	9211083	04	1.0	08/10/09 20:15		
51	LG8LKD	D9G290261-7	9211083	04	1.0	08/10/09 20:18		
52	LG8LL	D9G290261-8	9211083	04	1.0	08/10/09 20:20		
53	LG8LM	D9G290261-9	9211083	04	1.0	08/10/09 20:23		
54	LG8LN	D9G290261-10	9211083	04	1.0	08/10/09 20:26		
55	LG8LP	D9G290261-11	9211083	04	1.0	08/10/09 20:29		
56	CCV				1.0	08/10/09 20:32		
57	CCB				1.0	08/10/09 20:34		
58	RLCV				1.0	08/10/09 20:37		
59	LG7LLB	D9G290000	9210208	46	1.0	08/10/09 20:40		
60	LG7LLC	D9G290000	9210208	46	1.0	08/10/09 20:42		
61	LG3FP	D9G240333-2	9210208	U1	1.0	08/10/09 20:45		
62	LG3FR	D9G240333-3	9210209	U1	1.0	08/10/09 20:48		
63	LG3FRP5	D9G240333	9210209		5.0	08/10/09 20:51		
64	LG3FRZ	D9G240333-3	9210209		1.0	08/10/09 20:53		
65	LG3FRS	D9G240333-3	9210209	U1	1.0	08/10/09 20:56		
66	CCV				1.0	08/10/09 20:59		
67	CCB				1.0	08/10/09 21:01		
68	RLCV				1.0	08/10/09 21:04		
69	LG3FRD	D9G240333-3	9210209	U1	1.0	08/10/09 21:07		
70	LG3FV	D9G240333-4	9210208	U1	1.0	08/10/09 21:09		
71	LG3FX	D9G240333-5	9210208	U1	1.0	08/10/09 21:12		
72	LG6XM	D9G240333-12	9210209	U1	1.0	08/10/09 21:15		
73	LG6XV	D9G240333-13	9210209	U1	1.0	08/10/09 21:18		
74	LG6XW	D9G240333-14	9210208	U1	1.0	08/10/09 21:20		
75	LG6X0	D9G240333-15	9210208	U1	1.0	08/10/09 21:23		
76	CCV				1.0	08/10/09 21:26		
77	CCB				1.0	08/10/09 21:28		
78	RLCV				1.0	08/10/09 21:31		
79	RINSE				1.0	08/10/09 21:34		
80	RINSE				1.0	08/10/09 21:37		
81	RINSE				1.0	08/10/09 21:39		
82	RINSE				1.0	08/10/09 21:42		
83	RINSE				1.0	08/10/09 21:45		
84	RINSE				1.0	08/10/09 21:48		
85	Cal Blank				1.0	08/10/09 21:50		
86	Cal Blank				1.0	08/10/09 21:53		
87	100 ppb				1.0	08/10/09 21:56		
88	CCV				1.0	08/10/09 21:58		
89	CCB				1.0	08/10/09 22:01		
90	RLCV				1.0	08/10/09 22:04		
91	ICSA				1.0	08/10/09 22:07		
92	ICSAB				1.0	08/10/09 22:09		
93	WASH				1.0	08/10/09 22:12		
94	CCV				1.0	08/10/09 22:15		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	CCB				1.0	08/10/09 22:18		☐
96	RLCV				1.0	08/10/09 22:20		☐
97	LHFD8B	D9H030000	9215165	MS	1.0	08/10/09 22:23		☐
98	LHFD8C	D9H030000	9215165	MS	1.0	08/10/09 22:26		☐
99	LHEPK	D9H010152-2	9215165	MS	1.0	08/10/09 22:29		☐
100	LHEPKP5	D9H010152	9215165		5.0	08/10/09 22:31		☐
101	LHEPKZ	D9H010152-2	9215165		1.0	08/10/09 22:34		☐
102	LHEPL	D9H010152-3	9215165	MS	1.0	08/10/09 22:37		☐
103	LHEPM	D9H010152-4	9215165	MS	1.0	08/10/09 22:39		☐
104	CCV				1.0	08/10/09 22:42		☐
105	CCB				1.0	08/10/09 22:45		☐
106	RLCV				1.0	08/10/09 22:48		☐
107	~~LHH8KBF~~	~~D9H050000~~	~~9217128~~	~~MD~~	~~1.0~~	~~08/10/09 22:51~~		☐
108	LHH8KCF	D9H050000	9217128	MD	1.0	08/10/09 22:53		☐
109	LHG1RF	D9H040187-2	9217128	MD	1.0	08/10/09 22:56		☐
110	LHG1RP5F	D9H040187	9217128		5.0	08/10/09 22:59		☐
111	LHG1RZF	D9H040187-2	9217128		1.0	08/10/09 23:02		☐
112	LHG1RSF	D9H040187-2	9217128	MD	1.0	08/10/09 23:04		☐
113	LHG1RDF	D9H040187-2	9217128	MD	1.0	08/10/09 23:07		☐
114	CCV				1.0	08/10/09 23:10		☐
115	CCB				1.0	08/10/09 23:13		☐
116	RLCV				1.0	08/10/09 23:15		☐
117	LHH8TB	D9H050000	9217132	MS	1.0	08/10/09 23:18		☐
118	LHH8TC	D9H050000	9217132	MS	1.0	08/10/09 23:21		☐
119	LHG1P 5X	D9H040187-1	9217132	MS	5.0	08/10/09 23:24		☐
120	LHG1PP25	D9H040187	9217132		25.0	08/10/09 23:26		☐
121	RINSE				1.0	08/10/09 23:32		☐
122	RINSE				1.0	08/10/09 23:34		☐
123	RINSE				1.0	08/10/09 23:37		☐
124	RINSE				1.0	08/10/09 23:40		☐
125	RINSE				1.0	08/10/09 23:43		☐
126	RINSE				1.0	08/10/09 23:45		☐
127	~~Cal Blank~~				~~1.0~~	~~08/10/09 23:48~~	RF 8/11/09 Did not use.	☐
128	Cal Blank				1.0	08/10/09 23:51		☐
129	100 ppb				1.0	08/10/09 23:54		☐
130	CCV				1.0	08/10/09 23:56		☐
131	CCB				1.0	08/10/09 23:59		☐
132	RLCV				1.0	08/11/09 00:02		☐
133	LHH8KBF	D9H050000	9217128	MD	1.0	08/11/09 00:05		☐
134	LHH8KCF	D9H050000	9217128	MD	1.0	08/11/09 00:07		☐
135	LHG1RF 10X	D9H040187-2	9217128	MD	10.0	08/11/09 00:10		☐
136	LHG1RP50F	D9H040187	9217128		50.0	08/11/09 00:13		☐
137	LHG1RZF	D9H040187-2	9217128		1.0	08/11/09 00:16		☐
138	LHG1RSF 1(	D9H040187-2	9217128	MD	10.0	08/11/09 00:18		☐
139	LHG1RDF 1(	D9H040187-2	9217128	MD	10.0	08/11/09 00:21		☐
140	CCV				1.0	08/11/09 00:24		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	CCB				1.0	08/11/09 00:27		
142	RLCV				1.0	08/11/09 00:29		
143	LHH8TB	D9H050000	9217132	MS	1.0	08/11/09 00:32		
144	LHH8TC	D9H050000	9217132	MS	1.0	08/11/09 00:35		
145	LHG1P 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:38		
146	LHG1PP50	D9H040187	9217132		50.0	08/11/09 00:41		
147	LHG1PZ	D9H040187-1	9217132		1.0	08/11/09 00:43		
148	LHG1PS 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:46		
149	LHG1PD 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:49		
150	LHG21 20X	D9H040190-1	9217132	MS	20.0	08/11/09 00:51		
151	CCV				1.0	08/11/09 00:54		
152	CCB				1.0	08/11/09 00:57		
153	RLCV				1.0	08/11/09 01:00		
154	LHQK3B	D9H060000	9218437	MS	1.0	08/11/09 01:03		
155	LHQK3C	D9H060000	9218437	MS	1.0	08/11/09 01:05		
156	LHJ5J	D9H050230-1	9218437	MS	1.0	08/11/09 01:08		
157	LHJ5JP5	D9H050230	9218437		5.0	08/11/09 01:11		
158	LHJ5JZ	D9H050230-1	9218437		1.0	08/11/09 01:14		
159	LHJ5JS	D9H050230-1	9218437	MS	1.0	08/11/09 01:16		
160	LHJ5JD	D9H050230-1	9218437	MS	1.0	08/11/09 01:19		
161	LHJ51	D9H050234-1	9218437	MS	1.0	08/11/09 01:22		
162	CCV				1.0	08/11/09 01:25		
163	CCB				1.0	08/11/09 01:27		
164	RLCV				1.0	08/11/09 01:30		
165	~~RINSE~~				1.0	~~08/11/09 01:33~~		
166	RINSE				1.0	~~08/11/09~~ 01:35		
167	RINSE				1.0	08/11/09 01:38		
168	RINSE				1.0	08/11/09 01:41		
169	RINSE				1.0	08/11/09 01:44		
170	RINSE				1.0	08/11/09 01:46		
171	~~Cal Blank~~				1.0	~~08/11/09 01:49~~	KS 8/11/09	
172	Cal Blank				1.0	08/11/09 01:52		
173	100 ppb				1.0	08/11/09 01:55		
174	CCV				1.0	08/11/09 01:57		
175	CCB				1.0	08/11/09 02:00		
176	RLCV				1.0	08/11/09 02:03		
177	LHT80BF	D9H080000	9220058	MD	1.0	08/11/09 02:06		
178	LHT80CF	D9H080000	9220058	MD	1.0	08/11/09 02:08		
179	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:11		
180	LHQGCP5F	D9H060361	9220058		5.0	08/11/09 02:14		
181	LHQGCZF	D9H060361-2	9220058		1.0	08/11/09 02:17		
182	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:19		
183	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:22		
184	CCV				1.0	08/11/09 02:25		
185	CCB				1.0	08/11/09 02:28		
186	RLCV				1.0	08/11/09 02:30		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:33	For confirmation only. FF 8/11/09	☐
188	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:36		☐
189	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:39		☐
190	CCV				1.0	08/11/09 02:41		☐
191	CCB				1.0	08/11/09 02:44		☐
192	RLCV				1.0	08/11/09 02:47		☐
193	~~LHTW6B~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:50~~		☐
194	~~LHTW6C~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:52~~	FF 8/11/09 Did not use.	☐
195	LHTW6B	D9H080000	9220029	MS	1.0	08/11/09 02:55		☐
196	LHTW6C	D9H080000	9220029	MS	1.0	08/11/09 02:58		☐
197	CCV				1.0	08/11/09 03:01		☐
198	CCB				1.0	08/11/09 03:04		☐
199	RLCV				1.0	08/11/09 03:06		☐
200	LHLPQ	D9H060174-1	9220029	MS	1.0	08/11/09 03:09		☐
201	LHLP9	D9H060174-2	9220029	MS	1.0	08/11/09 03:12		☐
202	LHLQF	D9H060174-3	9220029	MS	1.0	08/11/09 03:15		☐
203	LHLQG	D9H060174-4	9220029	MS	1.0	08/11/09 03:17		☐
204	LHLQH	D9H060174-5	9220029	MS	1.0	08/11/09 03:20		☐
205	LHLQJ	D9H060174-6	9220029	MS	1.0	08/11/09 03:23		☐
206	CCV				1.0	08/11/09 03:26		☐
207	CCB				1.0	08/11/09 03:29		☐
208	RLCV				1.0	08/11/09 03:31		☐
209	LHREN	D9H070161-1	9220029	MS	1.0	08/11/09 03:34		☐
210	LHRENP5	D9H070161	9220029		5.0	08/11/09 03:37		☐
211	LHRENZ	D9H070161-1	9220029		1.0	08/11/09 03:40		☐
212	LHRENS	D9H070161-1	9220029	MS	1.0	08/11/09 03:42		☐
213	LHREND	D9H070161-1	9220029	MS	1.0	08/11/09 03:45		☐
214	LHRFD	D9H070161-2	9220029	MS	1.0	08/11/09 03:48		☐
215	LHRFF	D9H070161-3	9220029	MS	1.0	08/11/09 03:51		☐
216	LHRGP	D9H070161-4	9220029	MS	1.0	08/11/09 03:53		☐
217	CCV				1.0	08/11/09 03:56		☐
218	CCB				1.0	08/11/09 03:59		☐
219	RLCV				1.0	08/11/09 04:02		☐
220	LHRGR	D9H070161-5	9220029	MS	1.0	08/11/09 04:05		☐
221	LHRGV	D9H070161-6	9220029	MS	1.0	08/11/09 04:07		☐
222	LHRGW	D9H070161-7	9220029	MS	1.0	08/11/09 04:10		☐
223	LHRGX	D9H070161-8	9220029	MS	1.0	08/11/09 04:13		☐
224	LHRG1	D9H070161-9	9220029	MS	1.0	08/11/09 04:16		☐
225	LHRG2	D9H070161-10	9220029	MS	1.0	08/11/09 04:19		☐
226	LHRG6	D9H070161-11	9220029	MS	1.0	08/11/09 04:21		☐
227	CCV				1.0	08/11/09 04:24		☐
228	CCB				1.0	08/11/09 04:27		☐
229	RLCV				1.0	08/11/09 04:30		☐
230	~~RINSE~~				~~1.0~~	~~08/11/09 04:32~~		☐
231	RINSE				1.0	08/11/09 04:35		☐
232	~~RINSE~~				~~1.0~~	~~08/11/09 04:38~~	FF 8/11/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
233	~~RINSE~~				1.0	~~08/11/09 04:41~~		
234	RINSE				1.0	08/11/09 04:43		
235	RINSE				1.0	08/11/09 04:46		
236	~~Cal Blank~~				1.0	~~08/11/09 04:49~~	KT 8/11/09	
237	Cal Blank				1.0	08/11/09 04:52		
238	100 ppb				1.0	08/11/09 04:54		
239	CCV				1.0	08/11/09 04:57		
240	CCB				1.0	08/11/09 05:00		
241	RLCV				1.0	08/11/09 05:03		
242	LHT3RBF	D9H080000	9220042	MD	1.0	08/11/09 05:05		
243	LHT3RCF	D9H080000	9220042	MD	1.0	08/11/09 05:08		
244	LHJ0JF	D9H050209-1	9220042	MD	1.0	08/11/09 05:11		
245	LHJ02F	D9H050209-2	9220042	MD	1.0	08/11/09 05:14		
246	LHJ02P5F	D9H050209	9220042		5.0	08/11/09 05:17		
247	LHJ02ZF	D9H050209-2	9220042		1.0	08/11/09 05:19		
248	LHJ02SF	D9H050209-2	9220042	MD	1.0	08/11/09 05:22		
249	LHJ02DF	D9H050209-2	9220042	MD	1.0	08/11/09 05:25		
250	LHKEWF	D9H050209-4	9220042	MD	1.0	08/11/09 05:28		
251	CCV				1.0	08/11/09 05:30		
252	CCB				1.0	08/11/09 05:33		
253	RLCV				1.0	08/11/09 05:36		
254	LHT4NB	D9H080000	9220047	MS	1.0	08/11/09 05:39		
255	LHT4NC	D9H080000	9220047	MS	1.0	08/11/09 05:42		
256	LHJ08	D9H050209-3	9220047	MS	1.0	08/11/09 05:44		
257	LHKE1	D9H050209-5	9220047	MS	1.0	08/11/09 05:47		
258	LHKE1P5	D9H050209	9220047		5.0	08/11/09 05:50		
259	LHKE1Z	D9H050209-5	9220047		1.0	08/11/09 05:53		
260	LHKE1S	D9H050209-5	9220047	MS	1.0	08/11/09 05:55		
261	LHKE1D	D9H050209-5	9220047	MS	1.0	08/11/09 05:58		
262	CCV				1.0	08/11/09 06:01		
263	CCB				1.0	08/11/09 06:04		
264	RLCV				1.0	08/11/09 06:06		
265	LHT9RB	D9H080000	9220064	04	1.0	08/11/09 06:09		
266	LHT9RC	D9H080000	9220064	04	1.0	08/11/09 06:12		
267	LHJGD	D9H050137-5	9220064	04	1.0	08/11/09 06:15		
268	LHJGDP5	D9H050137	9220064		5.0	08/11/09 06:18		
269	LHJGDZ	D9H050137-5	9220064		1.0	08/11/09 06:20		
270	LHJGDS	D9H050137-5	9220064	04	1.0	08/11/09 06:23		
271	LHJGDD	D9H050137-5	9220064	04	1.0	08/11/09 06:26		
272	LHR5A	D9H070252-1	9220064	04	1.0	08/11/09 06:29		
273	CCV				1.0	08/11/09 06:31		
274	CCB				1.0	08/11/09 06:34		
275	RLCV				1.0	08/11/09 06:37		
276	~~LHT0GB~~	~~D9H080000~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:40~~		
277	LHT0GC	D9H080000	9220033	MS	1.0	08/11/09 06:43		
278	~~LHMHR~~	~~D9H060214-1~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:45~~	KT 8/11/09 Did not use R.	

Denver

RUN SUMMARY

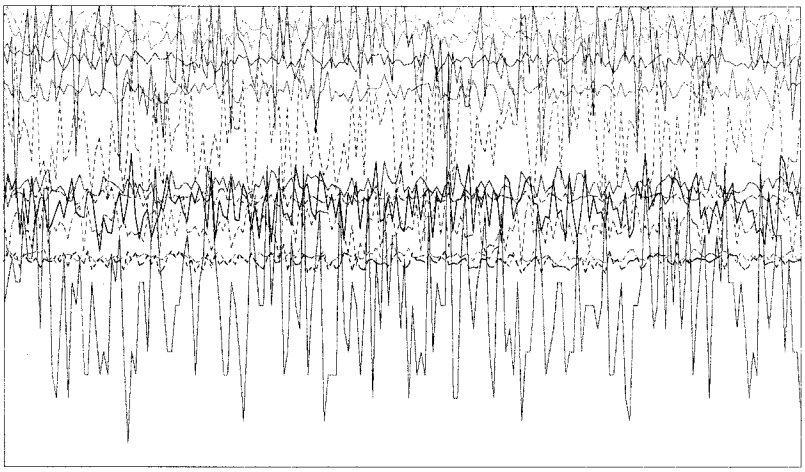
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
279	~~LHMLH~~	~~D9H060214-2~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:48~~		☐
280	LHMN6	D9H060214-3	9220033	MS	1.0	08/11/09 06:51		☐
281	LHTDQ	D9H070289-1	9220033	MS	1.0	08/11/09 06:54		☐
282	LHTDW	D9H070289-2	9220033	MS	1.0	08/11/09 06:57		☐
283	CCV				1.0	08/11/09 06:59		☐
284	CCB				1.0	08/11/09 07:02		☐
285	RLCV				1.0	08/11/09 07:05		☐
286	LHTD0	D9H070289-3	9220033	MS	1.0	08/11/09 07:08		☐
287	LHTD0P5	D9H070289	9220033		5.0	08/11/09 07:10		☐
288	LHTD0Z	D9H070289-3	9220033		1.0	08/11/09 07:13		☐
289	LHTD0S	D9H070289-3	9220033	MS	1.0	08/11/09 07:16		☐
290	LHTD0D	D9H070289-3	9220033	MS	1.0	08/11/09 07:19		☐
291	LHTD1	D9H070289-4	9220033	MS	1.0	08/11/09 07:22		☐
292	CCV				1.0	08/11/09 07:24		☐
293	CCB				1.0	08/11/09 07:27		☐
294	~~RLCV~~				~~1.0~~	~~08/11/09 07:30~~	KF 8/11/09 Did not use.	☐

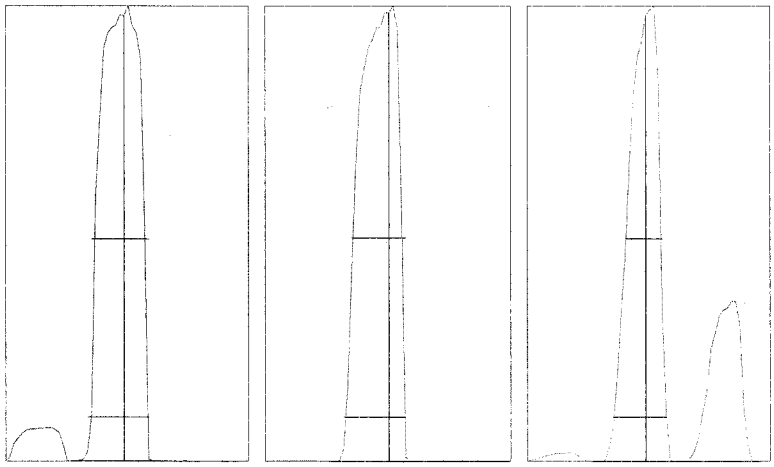
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 1.280%
Doubly Charged: 70/140 1.306%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1277.0	1212.6	3.29	2.10
7	20,000	16661.0	16295.0	2.25	1.60
59	20,000	18792.0	18605.1	2.34	0.90
63	100	91.0	90.0	11.00	1.10
70	500	302.0	283.2	7.74	1.50
75	20	2.0	7.2	40.14	1.20
78	500	273.0	260.8	6.33	1.50
89	50,000	22278.0	22756.3	1.97	2.30
115	20,000	19390.0	19268.7	1.88	2.60
118	100	77.0	72.2	12.54	2.60
137	5,000	2253.0	2223.9	2.70	2.80
205	20,000	11452.0	11648.2	1.84	3.60
238	20,000	17180.0	17622.9	1.55	4.60
156/140	2	1.240%	1.301%	7.97	
70/140	2	1.528%	1.441%	7.98	



m/z:	7	89	205
Height:	16,281	23,001	11,900
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.65	0.45
W-10%:	0.7500	0.7500	0.6500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===				===Ion Lenses===				===Q-Pole Parameters===			
RF Power	:	1550	W	Extract 1	:	0	V	AMU Gain	:	133	
RF Matching	:	1.7	V	Extract 2	:	-175	V	AMU Offset	:	123	
Smpl Depth	:	7.5	mm	Omega Bias-ce	:	-34	V	Axis Gain	:	1.0006	
Torch-H	:	-0.8	mm	Omega Lens-ce	:	1	V	Axis Offset	:	-0.03	
Torch-V	:	-0.3	mm	Cell Entrance	:	-30	V	QP Bias	:	-1	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	:	1720	V
Sample Pump	:	---	rps	OctP RF	:	180	V	Pulse HV	:	1390	V
S/C Temp	:	2	degC	OctP Bias	:	-18	V				

===Reaction Cell===

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

P/A Factor Tuning Report

Acquired:Aug 10 2009 05:25 pm

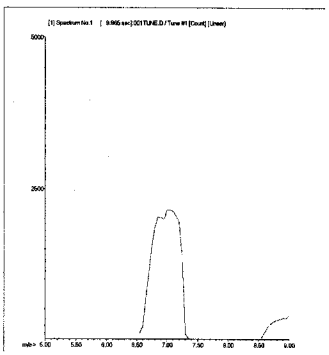
Mass[amu]	Element	P/A Factor
6	Li	0.059224
7	(Li)	Sensitivity too low
9	Be	0.065939
45	Sc	0.077958
51	V	0.079670
52	Cr	0.081495
53	(Cr)	Sensitivity too low
55	Mn	0.082881
59	Co	0.084650
60	Ni	0.085888
63	Cu	0.087500
66	Zn	0.087183
72	Ge	0.086826
75	As	0.086085
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.087962
98	(Mo)	0.087439
99	(Mo)	0.088211
106	(Cd)	0.090424
107	Ag	Sensitivity too low
108	(Cd)	0.090963
111	Cd	0.090902
114	Cd	0.090659
115	In	0.089830
118	Sn	0.090118
121	Sb	0.090217
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.095902
206	(Pb)	0.095184
207	(Pb)	0.095217
208	Pb	0.094502
232	Th	0.093768
238	U	0.093910

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

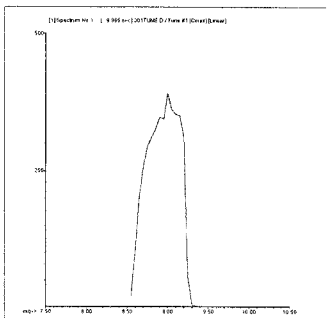
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D
Date Acquired: Aug 10 2009 06:01 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	23394	23373	23283	23262	23454	23596	0.58	5.00	
9 Be	4040	4033	4013	4046	4048	4060	0.44	5.00	
24 Mg	27733	27886	27740	27593	28101	27346	1.03	5.00	
59 Co	126100	128137	127946	123341	126160	124916	1.61	5.00	
115 In	1508105	1512323	1511531	1497483	1509610	1509575	0.40	5.00	
208 Pb	69191	70426	69382	67952	68926	69270	1.29	5.00	
238 U	126765	128734	126188	125493	127220	126189	1.00	5.00	

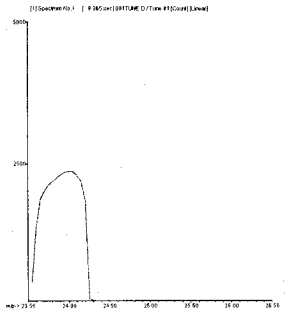


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D



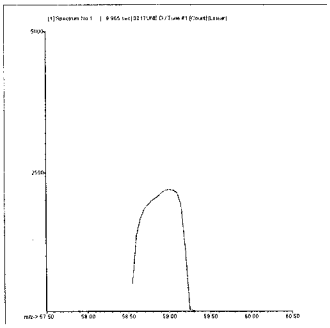
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



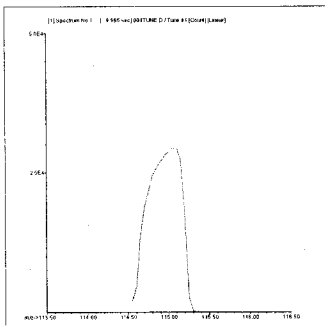
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



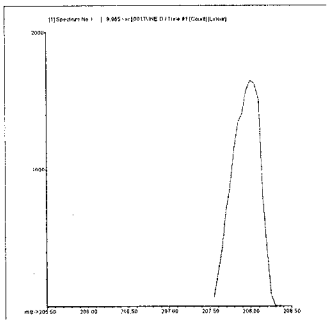
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



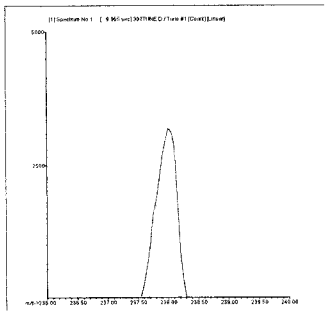
208 Pb

Mass Calib.

Actual: 208.00
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 238.00
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\002CALB.D\002CALB.D#
Date Acquired:	Aug 10 2009 06:04 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:	Aug 10 2009 06:04 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	354	31.69
52	Cr	72	1	4124	6.07
55	Mn	72	1	670	21.99
59	Co	72	1	70	14.29
60	Ni	72	1	117	21.57
63	Cu	72	1	557	9.22
66	Zn	72	1	2610	2.26
75	As	72	1	71	6.54
78	Se	72	1	770	11.10
95	Mo	72	1	70	37.80
107	Ag	115	1	17	34.64
111	Cd	115	1	30	71.04
118	Sn	115	1	417	12.08
121	Sb	115	1	17	34.64
137	Ba	115	1	41	16.88
205	Tl	165	1	118	27.20
208	Pb	165	1	282	3.80
232	Th	165	1	200	5.00
238	U	165	1	113	5.88

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	392728	0.47
45	Sc	1	2428129	0.41
72	Ge	1	1115573	2.35
115	In	1	2711701	0.96
165	Ho	1	3799176	0.71

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

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#
Date Acquired: Aug 10 2009 06:06 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	1017.20
52	Cr	72	1	3697	2.89
55	Mn	72	1	787	17.81
59	Co	72	1	37	56.77
60	Ni	72	1	467	11.80
63	Cu	72	1	650	9.23
66	Zn	72	1	885	2.73
75	As	72	1	65	15.87
78	Se	72	1	777	16.10
95	Mo	72	1	40	43.30
107	Ag	115	1	3	173.21
111	Cd	115	1	23	56.18
118	Sn	115	1	1010	5.24
121	Sb	115	1	28	48.50
137	Ba	115	1	14	70.50
205	Tl	165	1	81	10.34
208	Pb	165	1	252	5.34
232	Th	165	1	177	8.65
238	U	165	1	26	7.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	394687	0.94
45	Sc	1	2446753	1.77
72	Ge	1	1125847	1.05
115	In	1	2719186	2.09
165	Ho	1	3817349	0.25

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\AG081009A.B\004ICAL.D\004ICAL.D#
Date Acquired: Aug 10 2009 06:09 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: Aug 10 2009 06:07 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	65842	1.17
51	V	72	1	1535619	1.04
52	Cr	72	1	1532297	0.65
55	Mn	72	1	1633772	1.58
59	Co	72	1	1921710	0.85
60	Ni	72	1	447209	0.74
63	Cu	72	1	1073527	1.19
66	Zn	72	1	208832	1.11
75	As	72	1	179835	0.69
78	Se	72	1	30180	2.46
95	Mo	72	1	467956	0.64
107	Ag	115	1	1296538	0.46
111	Cd	115	1	242181	1.30
118	Sn	115	1	666189	0.27
121	Sb	115	1	760929	0.70
137	Ba	115	1	315160	1.02
205	Tl	165	1	1960793	0.44
208	Pb	165	1	2698115	0.18
232	Th	165	1	2387349	2.74
238	U	165	1	2722294	0.55

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	387659	0.67	394687	98.2	30 - 120	
45	Sc	1	2412509	0.93	2446753	98.6	30 - 120	
72	Ge	1	1107652	0.44	1125847	98.4	30 - 120	
115	In	1	2709456	1.18	2719186	99.6	30 - 120	
165	Ho	1	3829303	0.52	3817349	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\AG081009A.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\AG081009A.B\005 ICV.D\005 ICV.D#
Date Acquired: Aug 10 2009 06:12 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: Aug 10 2009 06:10 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	40.48	ppb	1.00	40	101.2	90 - 110	
51 V	72	1	39.31	ppb	0.98	40	98.3	90 - 110	
52 Cr	72	1	39.86	ppb	0.82	40	99.7	90 - 110	
55 Mn	72	1	39.36	ppb	0.49	40	98.4	90 - 110	
59 Co	72	1	39.81	ppb	1.21	40	99.5	90 - 110	
60 Ni	72	1	40.33	ppb	1.20	40	100.8	90 - 110	
63 Cu	72	1	39.84	ppb	0.87	40	99.6	90 - 110	
66 Zn	72	1	40.26	ppb	0.39	40	100.7	90 - 110	
75 As	72	1	39.99	ppb	0.13	40	100.0	90 - 110	
78 Se	72	1	41.87	ppb	3.08	40	104.7	90 - 110	
95 Mo	72	1	39.49	ppb	0.68	40	98.7	90 - 110	
107 Ag	115	1	39.86	ppb	0.43	40	99.7	90 - 110	
111 Cd	115	1	40.83	ppb	1.84	40	102.1	90 - 110	
118 Sn	115	1	39.26	ppb	1.02	40	98.2	90 - 110	
121 Sb	115	1	39.12	ppb	1.36	40	97.8	90 - 110	
137 Ba	115	1	40.11	ppb	0.69	40	100.3	90 - 110	
205 Tl	165	1	40.87	ppb	1.42	40	102.2	90 - 110	
208 Pb	165	1	40.72	ppb	1.25	40	101.8	90 - 110	
232 Th	165	1	44.35	ppb	1.41	40	110.9	90 - 110	Fail
238 U	165	1	40.53	ppb	0.56	40	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	386356	0.92	394687	97.9	30 - 120	
45 Sc	1	2392521	0.40	2446753	97.8	30 - 120	
72 Ge	1	1110457	0.44	1125847	98.6	30 - 120	
115 In	1	2702975	0.93	2719186	99.4	30 - 120	
165 Ho	1	3868261	0.70	3817349	101.3	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\AG081009A.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\AG081009A.B\006WASH.D\006WASH.D#
Date Acquired: Aug 10 2009 06:15 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: Aug 10 2009 06:10 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	0.962 ppb	11.83	1.30	
51 V	72	1	5.098 ppb	0.72	6.50	
52 Cr	72	1	2.153 ppb	0.77	2.60	
55 Mn	72	1	1.013 ppb	1.93	1.30	
59 Co	72	1	1.046 ppb	1.77	1.30	
60 Ni	72	1	2.036 ppb	1.65	2.60	
63 Cu	72	1	2.079 ppb	2.63	2.60	
66 Zn	72	1	10.260 ppb	0.96	13.00	
75 As	72	1	5.112 ppb	0.38	6.50	
78 Se	72	1	4.868 ppb	3.66	6.50	
95 Mo	72	1	2.199 ppb	4.71	2.60	
107 Ag	115	1	5.190 ppb	1.63	6.50	
111 Cd	115	1	1.068 ppb	0.77	1.30	
118 Sn	115	1	10.230 ppb	1.10	13.00	
121 Sb	115	1	2.192 ppb	0.80	2.60	
137 Ba	115	1	1.075 ppb	3.75	1.30	
205 Tl	165	1	1.158 ppb	2.36	1.30	
208 Pb	165	1	1.072 ppb	0.99	1.30	
232 Th	165	1	3.344 ppb	3.13	2.60	
238 U	165	1	1.105 ppb	2.11	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	389518	0.53	394687	98.7	30 - 120	
45 Sc	1	2376989	0.76	2446753	97.1	30 - 120	
72 Ge	1	1099932	0.58	1125847	97.7	30 - 120	
115 In	1	2703766	0.89	2719186	99.4	30 - 120	
165 Ho	1	3816929	0.48	3817349	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\AG081009A.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\AG081009A.B\007 ICB.D\007 ICB.D#
Date Acquired: Aug 10 2009 06:17 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: Aug 10 2009 06:10 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.01	ppb	173.20	1.00	
51 V	72	1	-0.02	ppb	72.65	1.00	
52 Cr	72	1	-0.01	ppb	390.62	1.00	
55 Mn	72	1	0.00	ppb	32.99	1.00	
59 Co	72	1	0.00	ppb	37.13	1.00	
60 Ni	72	1	-0.06	ppb	2.11	1.00	
63 Cu	72	1	0.01	ppb	55.65	1.00	
66 Zn	72	1	-0.22	ppb	10.19	1.00	
75 As	72	1	0.00	ppb	277.73	1.00	
78 Se	72	1	0.20	ppb	31.96	1.00	
95 Mo	72	1	0.02	ppb	49.17	1.00	
107 Ag	115	1	0.01	ppb	24.84	1.00	
111 Cd	115	1	-0.01	ppb	156.27	1.00	
118 Sn	115	1	-0.04	ppb	6.62	1.00	
121 Sb	115	1	0.07	ppb	2.93	1.00	
137 Ba	115	1	0.00	ppb	145.27	1.00	
205 Tl	165	1	0.03	ppb	8.41	1.00	
208 Pb	165	1	0.00	ppb	703.02	1.00	
232 Th	165	1	0.28	ppb	10.49	1.00	
238 U	165	1	0.00	ppb	52.16	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382040	1.21	394687	96.8	30 - 120	
45 Sc	1	2367707	0.91	2446753	96.8	30 - 120	
72 Ge	1	1105088	0.25	1125847	98.2	30 - 120	
115 In	1	2665218	1.25	2719186	98.0	30 - 120	
165 Ho	1	3811931	1.62	3817349	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\AG081009A.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\AG081009A.B\008RLST.D\008RLST.D#
Date Acquired:	Aug 10 2009 06:20 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:	Aug 10 2009 06:10 pm
Sample Type:	RLSTD
Total Dil Factor:	1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1.00	ppb	5.38	1	100.4	50 - 150	
51 V	72	1	0.95	ppb	4.78	1	95.5	50 - 150	
52 Cr	72	1	1.03	ppb	4.50	1	103.1	50 - 150	
55 Mn	72	1	0.99	ppb	2.06	1	99.4	50 - 150	
59 Co	72	1	1.02	ppb	1.61	1	102.4	50 - 150	
60 Ni	72	1	0.92	ppb	5.43	1	92.3	50 - 150	
63 Cu	72	1	1.06	ppb	1.60	1	106.0	50 - 150	
66 Zn	72	1	10.99	ppb	2.05	10	109.9	50 - 150	
75 As	72	1	1.02	ppb	3.26	1	102.0	50 - 150	
78 Se	72	1	1.30	ppb	8.14	1	129.8	50 - 150	
95 Mo	72	1	1.03	ppb	3.66	1	102.8	50 - 150	
107 Ag	115	1	1.04	ppb	2.89	1	103.6	50 - 150	
111 Cd	115	1	1.00	ppb	3.57	1	99.8	50 - 150	
118 Sn	115	1	10.84	ppb	1.34	10	108.4	50 - 150	
121 Sb	115	1	1.08	ppb	1.30	1	107.6	50 - 150	
137 Ba	115	1	1.08	ppb	3.66	1	107.6	50 - 150	
205 Tl	165	1	1.08	ppb	3.38	1	107.8	50 - 150	
208 Pb	165	1	1.04	ppb	0.90	1	104.2	50 - 150	
232 Th	165	1	1.14	ppb	2.04	1	113.7	50 - 150	
238 U	165	1	1.07	ppb	1.31	1	107.4	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381160	1.69	394687	96.6	30 - 120	
45 Sc	1	2348126	1.16	2446753	96.0	30 - 120	
72 Ge	1	1102409	1.34	1125847	97.9	30 - 120	
115 In	1	2670308	0.31	2719186	98.2	30 - 120	
165 Ho	1	3800403	0.92	3817349	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\AG081009A.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\AG081009A.B\009AFCE.D\009AFCE.D#
Date Acquired: Aug 10 2009 06:23 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: Aug 10 2009 06:10 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	0.21 ppb	37.49	0	104.1	80 - 120	
51 V	72	1	0.18 ppb	11.11	0	93.6	80 - 120	
52 Cr	72	1	0.20 ppb	4.41	0	95.1	80 - 120	
55 Mn	72	1	0.18 ppb	9.10	0	92.5	80 - 120	
59 Co	72	1	0.20 ppb	7.26	0	99.2	80 - 120	
60 Ni	72	1	0.12 ppb	37.55	0	65.1	80 - 120	
63 Cu	72	1	0.21 ppb	5.84	0	97.8	80 - 120	
66 Zn	72	1	2.00 ppb	2.60	2	90.9	80 - 120	
75 As	72	1	0.21 ppb	3.29	0	102.2	80 - 120	
78 Se	72	1	0.57 ppb	37.21	0	218.1	80 - 120	
95 Mo	72	1	0.23 ppb	17.06	0	112.2	80 - 120	
107 Ag	115	1	0.19 ppb	8.42	0	91.3	80 - 120	
111 Cd	115	1	0.18 ppb	11.73	0	92.5	80 - 120	
118 Sn	115	1	2.13 ppb	0.61	2	98.2	80 - 120	
121 Sb	115	1	0.22 ppb	3.38	0	102.6	80 - 120	
137 Ba	115	1	0.20 ppb	2.70	0	94.9	80 - 120	
205 Tl	165	1	0.23 ppb	1.38	0	107.1	80 - 120	
208 Pb	165	1	0.21 ppb	2.17	0	102.0	80 - 120	
232 Th	165	1	0.27 ppb	6.02	0	120.0	80 - 120	
238 U	165	1	0.21 ppb	3.48	0	97.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384831	0.38	394687	97.5	30 - 120	
45 Sc	1	2381074	1.35	2446753	97.3	30 - 120	
72 Ge	1	1108278	1.30	1125847	98.4	30 - 120	
115 In	1	2695785	0.35	2719186	99.1	30 - 120	
165 Ho	1	3782218	0.41	3817349	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\AG081009A.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\AG081009A.B\010SMPL.D\010SMPL.D#
Date Acquired: Aug 10 2009 06:26 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-0.01	-0.01	ppb	153.00	3600	
52 Cr	72	1	0.00	0.00	ppb	726.14	3600	
55 Mn	72	1	-0.01	-0.01	ppb	114.24	3600	
59 Co	72	1	0.00	0.00	ppb	103.96	3600	
60 Ni	72	1	-0.03	-0.03	ppb	15.09	3600	
63 Cu	72	1	0.00	0.00	ppb	118.88	3600	
66 Zn	72	1	-0.11	-0.11	ppb	3.22	3600	
75 As	72	1	0.01	0.01	ppb	74.91	3600	
78 Se	72	1	2.14	2.14	ppb	18.71	3600	
95 Mo	72	1	0.01	0.01	ppb	88.11	3600	
107 Ag	115	1	0.00	0.00	ppb	18.18	3600	
111 Cd	115	1	0.00	0.00	ppb	245.41	3600	
118 Sn	115	1	-0.05	-0.05	ppb	21.00	3600	
121 Sb	115	1	0.02	0.02	ppb	14.62	3600	
137 Ba	115	1	0.00	0.00	ppb	77.19	3600	
205 Tl	165	1	0.02	0.02	ppb	18.17	3600	
208 Pb	165	1	0.00	0.00	ppb	132.48	3600	
232 Th	165	1	0.05	0.05	ppb	10.43	1000	
238 U	165	1	0.00	0.00	ppb	1446.10	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384420	0.66	394687	97.4	30 - 120	
45 Sc	1	2363773	0.07	2446753	96.6	30 - 120	
72 Ge	1	1095031	0.87	1125847	97.3	30 - 120	
115 In	1	2709116	0.72	2719186	99.6	30 - 120	
165 Ho	1	3806731	0.23	3817349	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\AG081009A.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\AG081009A.B\011ICSA.D\011ICSA.D#
Date Acquired: Aug 10 2009 06:28 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: Aug 10 2009 06:10 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.01 ppb	173.20	1.00	
51 V	72	1	-0.28 ppb	16.13	1.00	
52 Cr	72	1	0.68 ppb	7.15	1.00	
55 Mn	72	1	3.37 ppb	3.01	1.00	
59 Co	72	1	1.52 ppb	1.80	1.00	
60 Ni	72	1	1.33 ppb	7.03	1.00	
63 Cu	72	1	1.39 ppb	1.64	1.00	
66 Zn	72	1	2.60 ppb	3.64	10.00	
75 As	72	1	0.41 ppb	4.62	1.00	
78 Se	72	1	0.04 ppb	875.93	1.00	
95 Mo	72	1	2011.00 ppb	2.30	2000.00	
107 Ag	115	1	0.04 ppb	6.23	1.00	
111 Cd	115	1	0.24 ppb	38.98	1.00	
118 Sn	115	1	0.01 ppb	102.51	10.00	
121 Sb	115	1	0.27 ppb	5.72	1.00	
137 Ba	115	1	0.07 ppb	17.98	1.00	
205 Tl	165	1	0.04 ppb	40.80	1.00	
208 Pb	165	1	0.14 ppb	3.56	1.00	
232 Th	165	1	0.10 ppb	13.38	1.00	
238 U	165	1	0.00 ppb	19.44	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	339249	1.40	394687	86.0	30 - 120	
45 Sc	1	2070580	0.61	2446753	84.6	30 - 120	
72 Ge	1	927464	2.03	1125847	82.4	30 - 120	
115 In	1	2246349	1.22	2719186	82.6	30 - 120	
165 Ho	1	3443563	1.20	3817349	90.2	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\AG081009A.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\AG081009A.B\012ICSB.D\012ICSB.D#
Date Acquired: Aug 10 2009 06:31 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: Aug 10 2009 06:10 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	100.10	1.69	100	100.1	80 - 120	
51 V	72		1	99.46	1.23	100	99.5	80 - 120	
52 Cr	72		1	97.53	1.45	100	97.5	80 - 120	
55 Mn	72		1	98.48	0.44	100	98.5	80 - 120	
59 Co	72		1	96.28	1.69	100	96.3	80 - 120	
60 Ni	72		1	90.67	1.41	100	90.7	80 - 120	
63 Cu	72		1	88.16	1.53	100	88.2	80 - 120	
66 Zn	72		1	97.40	1.57	100	97.4	80 - 120	
75 As	72		1	100.70	1.43	100	100.7	80 - 120	
78 Se	72		1	104.50	2.15	100	104.5	80 - 120	
95 Mo	72		1	2111.00	0.32	2100	100.5	80 - 120	
107 Ag	115		1	89.84	3.58	100	89.8	80 - 120	
111 Cd	115		1	97.00	1.54	100	97.0	80 - 120	
118 Sn	115		1	102.10	1.27	100	102.1	80 - 120	
121 Sb	115		1	105.00	1.34	100	105.0	80 - 120	
137 Ba	115		1	104.10	0.70	100	104.1	80 - 120	
205 Tl	165		1	95.41	2.04	100	95.4	80 - 120	
208 Pb	165		1	93.29	0.93	100	93.3	80 - 120	
232 Th	165		1	107.70	1.56	100	107.7	80 - 120	
238 U	165		1	100.40	1.15	100	100.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	337656	1.15	394687	85.6	30 - 120	
45 Sc	1	2028207	1.22	2446753	82.9	30 - 120	
72 Ge	1	942107	0.47	1125847	83.7	30 - 120	
115 In	1	2256634	0.18	2719186	83.0	30 - 120	
165 Ho	1	3514456	0.98	3817349	92.1	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\AG081009A.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\AG081009A.B\013SMPL.D\013SMPL.D#
Date Acquired: Aug 10 2009 06:34 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	1356.30	3600	
52 Cr	72	1	0.02	0.02	ppb	126.42	3600	
55 Mn	72	1	0.00	0.00	ppb	97.83	3600	
59 Co	72	1	0.01	0.01	ppb	17.25	3600	
60 Ni	72	1	-0.06	-0.06	ppb	24.77	3600	
63 Cu	72	1	0.00	0.00	ppb	68.55	3600	
66 Zn	72	1	0.82	0.82	ppb	5.26	3600	
75 As	72	1	0.01	0.01	ppb	65.52	3600	
78 Se	72	1	0.35	0.35	ppb	98.25	3600	
95 Mo	72	1	1.75	1.75	ppb	4.87	3600	
107 Ag	115	1	0.02	0.02	ppb	59.60	3600	
111 Cd	115	1	0.00	0.00	ppb	178.39	3600	
118 Sn	115	1	-0.02	-0.02	ppb	44.11	3600	
121 Sb	115	1	0.04	0.04	ppb	18.60	3600	
137 Ba	115	1	0.01	0.01	ppb	49.69	3600	
205 Tl	165	1	0.01	0.01	ppb	15.49	3600	
208 Pb	165	1	0.01	0.01	ppb	21.27	3600	
232 Th	165	1	0.96	0.96	ppb	17.84	1000	
238 U	165	1	0.02	0.02	ppb	8.06	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	417953	1.05	394687	105.9	30 - 120	
45 Sc	1	2370217	1.00	2446753	96.9	30 - 120	
72 Ge	1	1125021	0.71	1125847	99.9	30 - 120	
115 In	1	2769043	1.00	2719186	101.8	30 - 120	
165 Ho	1	3993502	0.73	3817349	104.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#

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

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\014 LR.D\014 LR.D#
Date Acquired: Aug 10 2009 06:36 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1004.00 ppb	0.66	1000	100.4	90 - 110	
51 V	72	1	923.60 ppb	1.56	1000	92.4	90 - 110	
52 Cr	72	1	957.30 ppb	0.88	1000	95.7	90 - 110	
55 Mn	72	1	944.20 ppb	0.62	1000	94.4	90 - 110	
59 Co	72	1	962.70 ppb	1.17	1000	96.3	90 - 110	
60 Ni	72	1	978.20 ppb	1.60	1000	97.8	90 - 110	
63 Cu	72	1	945.60 ppb	1.33	1000	94.6	90 - 110	
66 Zn	72	1	1015.00 ppb	2.51	1000	101.5	90 - 110	
75 As	72	1	1015.00 ppb	0.37	1000	101.5	90 - 110	
78 Se	72	1	1044.00 ppb	1.38	1000	104.4	90 - 110	
95 Mo	72	1	984.90 ppb	1.46	1000	98.5	90 - 110	
107 Ag	115	1	952.90 ppb	1.27	1000	95.3	90 - 110	
111 Cd	115	1	989.60 ppb	0.87	1000	99.0	90 - 110	
118 Sn	115	1	964.00 ppb	0.79	1000	96.4	90 - 110	
121 Sb	115	1	971.00 ppb	0.56	1000	97.1	90 - 110	
137 Ba	115	1	991.30 ppb	1.54	1000	99.1	90 - 110	
205 Tl	165	1	963.90 ppb	1.23	1000	96.4	90 - 110	
208 Pb	165	1	945.40 ppb	1.22	1000	94.5	90 - 110	
232 Th	165	1	1050.00 ppb	0.83	1000	105.0	90 - 110	
238 U	165	1	967.10 ppb	0.90	1000	96.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	396227	0.55	394687	100.4	30 - 120	
45 Sc	1	2360026	1.45	2446753	96.5	30 - 120	
72 Ge	1	1098700	1.12	1125847	97.6	30 - 120	
115 In	1	2734512	0.49	2719186	100.6	30 - 120	
165 Ho	1	3971158	0.63	3817349	104.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\015SMPL.D\015SMPL.D#
Date Acquired: Aug 10 2009 06:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 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	11.29	3600	
51 V	72	1	0.07	0.07	ppb	49.92	3600	
52 Cr	72	1	0.08	0.08	ppb	3.05	3600	
55 Mn	72	1	0.07	0.07	ppb	11.75	3600	
59 Co	72	1	0.08	0.08	ppb	22.22	3600	
60 Ni	72	1	-0.01	-0.01	ppb	189.04	3600	
63 Cu	72	1	0.07	0.07	ppb	14.57	3600	
66 Zn	72	1	0.90	0.90	ppb	4.20	3600	
75 As	72	1	0.12	0.12	ppb	13.74	3600	
78 Se	72	1	0.56	0.56	ppb	13.28	3600	
95 Mo	72	1	0.99	0.99	ppb	7.52	3600	
107 Ag	115	1	0.11	0.11	ppb	9.78	3600	
111 Cd	115	1	0.09	0.09	ppb	18.21	3600	
118 Sn	115	1	1.04	1.04	ppb	13.89	3600	
121 Sb	115	1	0.46	0.46	ppb	3.67	3600	
137 Ba	115	1	0.07	0.07	ppb	29.33	3600	
205 Tl	165	1	0.24	0.24	ppb	12.29	3600	
208 Pb	165	1	0.09	0.09	ppb	17.25	3600	
232 Th	165	1	6.26	6.26	ppb	20.02	1000	
238 U	165	1	0.15	0.15	ppb	1.91	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406521	1.45	394687	103.0	30 - 120	
45 Sc	1	2437916	0.81	2446753	99.6	30 - 120	
72 Ge	1	1134540	0.61	1125847	100.8	30 - 120	
115 In	1	2782594	0.81	2719186	102.3	30 - 120	
165 Ho	1	3984640	0.83	3817349	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\016 CCV.D\016 CCV.D#
Date Acquired: Aug 10 2009 06:42 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: Aug 10 2009 06:10 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.23	ppb	1.97	50	98.5	90 - 110	
51 V	72	1	48.18	ppb	3.03	50	96.4	90 - 110	
52 Cr	72	1	49.10	ppb	2.47	50	98.2	90 - 110	
55 Mn	72	1	48.34	ppb	2.30	50	96.7	90 - 110	
59 Co	72	1	50.75	ppb	1.62	50	101.5	90 - 110	
60 Ni	72	1	49.33	ppb	1.83	50	98.7	90 - 110	
63 Cu	72	1	48.69	ppb	2.92	50	97.4	90 - 110	
66 Zn	72	1	52.56	ppb	1.77	50	105.1	90 - 110	
75 As	72	1	49.20	ppb	2.24	50	98.4	90 - 110	
78 Se	72	1	48.36	ppb	4.30	50	96.7	90 - 110	
95 Mo	72	1	50.11	ppb	1.65	50	100.2	90 - 110	
107 Ag	115	1	49.41	ppb	0.58	50	98.8	90 - 110	
111 Cd	115	1	49.05	ppb	0.87	50	98.1	90 - 110	
118 Sn	115	1	50.05	ppb	1.70	50	100.1	90 - 110	
121 Sb	115	1	49.82	ppb	1.05	50	99.6	90 - 110	
137 Ba	115	1	49.79	ppb	0.54	50	99.6	90 - 110	
205 Tl	165	1	50.63	ppb	1.41	50	101.3	90 - 110	
208 Pb	165	1	50.26	ppb	0.23	50	100.5	90 - 110	
232 Th	165	1	52.23	ppb	3.29	50	104.5	90 - 110	
238 U	165	1	50.28	ppb	1.54	50	100.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	398790	1.16	394687	101.0	30 - 120	
45 Sc	1	2428065	0.52	2446753	99.2	30 - 120	
72 Ge	1	1132154	1.68	1125847	100.6	30 - 120	
115 In	1	2783451	0.38	2719186	102.4	30 - 120	
165 Ho	1	3944703	1.21	3817349	103.3	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\AG081009A.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\AG081009A.B\017 CCB.D\017 CCB.D#
Date Acquired: Aug 10 2009 06:45 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: Aug 10 2009 06:10 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	0.029	ppb	50.02	1.00	
51 V	72	1	0.019	ppb	104.60	1.00	
52 Cr	72	1	0.033	ppb	99.12	1.00	
55 Mn	72	1	0.000	ppb	2663.10	1.00	
59 Co	72	1	0.016	ppb	6.13	1.00	
60 Ni	72	1	-0.070	ppb	15.94	1.00	
63 Cu	72	1	0.009	ppb	119.60	1.00	
66 Zn	72	1	-0.124	ppb	10.27	1.00	
75 As	72	1	0.017	ppb	49.87	1.00	
78 Se	72	1	0.100	ppb	304.64	1.00	
95 Mo	72	1	0.179	ppb	6.53	1.00	
107 Ag	115	1	0.018	ppb	20.56	1.00	
111 Cd	115	1	0.001	ppb	1567.90	1.00	
118 Sn	115	1	0.177	ppb	26.58	1.00	
121 Sb	115	1	0.101	ppb	8.06	1.00	
137 Ba	115	1	0.018	ppb	26.37	1.00	
205 Tl	165	1	0.073	ppb	5.05	1.00	
208 Pb	165	1	0.011	ppb	12.50	1.00	
232 Th	165	1	1.499	ppb	14.31	1.00	Fail
238 U	165	1	0.023	ppb	2.40	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406279	0.13	394687	102.9	30 - 120	
45 Sc	1	2409755	0.92	2446753	98.5	30 - 120	
72 Ge	1	1118502	1.15	1125847	99.3	30 - 120	
115 In	1	2746559	0.29	2719186	101.0	30 - 120	
165 Ho	1	3925108	0.26	3817349	102.8	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\AG081009A.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\AG081009A.B\018WASH.D\018WASH.D#
Date Acquired: Aug 10 2009 06:47 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 06:10 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.105 ppb	6.50	1.30	
51 V	72	1	5.087 ppb	3.62	6.50	
52 Cr	72	1	2.163 ppb	2.98	2.60	
55 Mn	72	1	1.000 ppb	2.91	1.30	
59 Co	72	1	1.065 ppb	2.44	1.30	
60 Ni	72	1	2.023 ppb	1.63	2.60	
63 Cu	72	1	2.091 ppb	1.36	2.60	
66 Zn	72	1	10.460 ppb	2.37	13.00	
75 As	72	1	5.273 ppb	1.62	6.50	
78 Se	72	1	5.734 ppb	6.76	6.50	
95 Mo	72	1	2.210 ppb	2.32	2.60	
107 Ag	115	1	5.205 ppb	1.43	6.50	
111 Cd	115	1	1.050 ppb	4.55	1.30	
118 Sn	115	1	10.450 ppb	1.08	13.00	
121 Sb	115	1	2.010 ppb	2.30	2.60	
137 Ba	115	1	1.109 ppb	3.21	1.30	
205 Tl	165	1	1.150 ppb	1.01	1.30	
208 Pb	165	1	1.076 ppb	0.61	1.30	
232 Th	165	1	2.636 ppb	1.22	2.60	
238 U	165	1	1.112 ppb	1.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	404611	0.96	394687	102.5	30 - 120	
45 Sc	1	2418551	0.39	2446753	98.8	30 - 120	
72 Ge	1	1116189	1.64	1125847	99.1	30 - 120	
115 In	1	2767098	0.92	2719186	101.8	30 - 120	
165 Ho	1	3902436	1.37	3817349	102.2	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\AG081009A.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: 08/10/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#
Date Acquired: Aug 10 2009 09:53 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: Aug 10 2009 09:51 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	359	49.21
52	Cr	72	1	3327	12.19
55	Mn	72	1	673	7.00
59	Co	72	1	63	23.12
60	Ni	72	1	473	1.82
63	Cu	72	1	697	6.65
66	Zn	72	1	5275	0.36
75	As	72	1	61	14.81
78	Se	72	1	797	7.38
95	Mo	72	1	473	9.18
107	Ag	115	1	17	69.77
111	Cd	115	1	-4	468.40
118	Sn	115	1	883	12.90
121	Sb	115	1	41	5.27
137	Ba	115	1	28	7.48
205	Tl	165	1	71	17.08
208	Pb	165	1	277	1.82
232	Th	165	1	177	27.11
238	U	165	1	33	9.30

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	367189	0.76
45	Sc	1	2198650	1.42
72	Ge	1	1047607	1.49
115	In	1	2618639	1.31
165	Ho	1	3698894	0.81

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\AG081009A.B\087ICAL.D\087ICAL.D#
Date Acquired: Aug 10 2009 09:56 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: Aug 10 2009 09:54 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57454	2.68
51	V	72	1	1384602	1.93
52	Cr	72	1	1372006	0.28
55	Mn	72	1	1464416	1.26
59	Co	72	1	1764191	0.16
60	Ni	72	1	409818	1.72
63	Cu	72	1	979076	1.00
66	Zn	72	1	190440	1.50
75	As	72	1	169475	1.58
78	Se	72	1	28790	1.31
95	Mo	72	1	438801	1.48
107	Ag	115	1	1212795	1.22
111	Cd	115	1	227416	1.07
118	Sn	115	1	638283	0.63
121	Sb	115	1	733198	0.80
137	Ba	115	1	310900	0.47
205	Tl	165	1	1935696	0.85
208	Pb	165	1	2637712	0.66
232	Th	165	1	2426931	3.16
238	U	165	1	2684142	1.00

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357017	0.84	367189	97.2	30 - 120	
45	Sc	1	2175000	2.00	2198650	98.9	30 - 120	
72	Ge	1	1036228	0.96	1047607	98.9	30 - 120	
115	In	1	2589357	0.36	2618639	98.9	30 - 120	
165	Ho	1	3695829	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\088 CCV.D\088 CCV.D#
Date Acquired: Aug 10 2009 09:58 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.65	ppb	0.92	50	99.3	90 - 110	
51 V	72	1	49.06	ppb	0.95	50	98.1	90 - 110	
52 Cr	72	1	49.92	ppb	0.60	50	99.8	90 - 110	
55 Mn	72	1	49.36	ppb	0.14	50	98.7	90 - 110	
59 Co	72	1	50.34	ppb	0.60	50	100.7	90 - 110	
60 Ni	72	1	49.67	ppb	0.42	50	99.3	90 - 110	
63 Cu	72	1	49.63	ppb	0.70	50	99.3	90 - 110	
66 Zn	72	1	52.10	ppb	0.54	50	104.2	90 - 110	
75 As	72	1	49.34	ppb	0.43	50	98.7	90 - 110	
78 Se	72	1	50.04	ppb	4.56	50	100.1	90 - 110	
95 Mo	72	1	49.69	ppb	0.55	50	99.4	90 - 110	
107 Ag	115	1	49.28	ppb	0.25	50	98.6	90 - 110	
111 Cd	115	1	49.24	ppb	0.70	50	98.5	90 - 110	
118 Sn	115	1	49.32	ppb	0.50	50	98.6	90 - 110	
121 Sb	115	1	49.29	ppb	0.48	50	98.6	90 - 110	
137 Ba	115	1	49.29	ppb	0.72	50	98.6	90 - 110	
205 Tl	165	1	49.61	ppb	2.22	50	99.2	90 - 110	
208 Pb	165	1	49.80	ppb	0.99	50	99.6	90 - 110	
232 Th	165	1	51.14	ppb	2.51	50	102.3	90 - 110	
238 U	165	1	50.39	ppb	1.56	50	100.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	351371	1.00	367189	95.7	30 - 120	
45 Sc	1	2164138	0.74	2198650	98.4	30 - 120	
72 Ge	1	1029321	0.36	1047607	98.3	30 - 120	
115 In	1	2597133	0.22	2618639	99.2	30 - 120	
165 Ho	1	3706192	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\089 CCB.D\089 CCB.D#
Date Acquired: Aug 10 2009 10:01 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: Aug 10 2009 09:56 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.009	ppb	338.45	1.00	
52 Cr	72	1	0.012	ppb	59.28	1.00	
55 Mn	72	1	0.022	ppb	43.47	1.00	
59 Co	72	1	0.010	ppb	28.80	1.00	
60 Ni	72	1	-0.073	ppb	8.59	1.00	
63 Cu	72	1	0.010	ppb	144.48	1.00	
66 Zn	72	1	-2.512	ppb	0.84	1.00	
75 As	72	1	0.021	ppb	33.66	1.00	
78 Se	72	1	0.361	ppb	104.40	1.00	
95 Mo	72	1	0.004	ppb	623.22	1.00	
107 Ag	115	1	0.021	ppb	6.66	1.00	
111 Cd	115	1	0.018	ppb	60.33	1.00	
118 Sn	115	1	0.058	ppb	14.07	1.00	
121 Sb	115	1	0.062	ppb	11.03	1.00	
137 Ba	115	1	0.017	ppb	12.47	1.00	
205 Tl	165	1	0.050	ppb	6.12	1.00	
208 Pb	165	1	0.014	ppb	17.03	1.00	
232 Th	165	1	1.175	ppb	19.44	1.00	Fail
238 U	165	1	0.018	ppb	4.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	354938	0.52	367189	96.7	30 - 120	
45 Sc	1	2151415	1.57	2198650	97.9	30 - 120	
72 Ge	1	1014505	0.33	1047607	96.8	30 - 120	
115 In	1	2580961	0.71	2618639	98.6	30 - 120	
165 Ho	1	3627865	0.73	3698894	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\090WASH.D\090WASH.D#
Date Acquired: Aug 10 2009 10:04 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	16.54	1.30	
51 V	72	1	5.138 ppb	2.71	6.50	
52 Cr	72	1	2.154 ppb	2.58	2.60	
55 Mn	72	1	1.034 ppb	3.82	1.30	
59 Co	72	1	1.063 ppb	0.98	1.30	
60 Ni	72	1	2.069 ppb	2.67	2.60	
63 Cu	72	1	2.077 ppb	4.34	2.60	
66 Zn	72	1	8.295 ppb	0.25	13.00	
75 As	72	1	5.196 ppb	0.91	6.50	
78 Se	72	1	5.418 ppb	18.66	6.50	
95 Mo	72	1	2.025 ppb	0.52	2.60	
107 Ag	115	1	5.220 ppb	3.85	6.50	
111 Cd	115	1	1.108 ppb	1.99	1.30	
118 Sn	115	1	10.370 ppb	3.55	13.00	
121 Sb	115	1	1.946 ppb	3.35	2.60	
137 Ba	115	1	1.029 ppb	4.99	1.30	
205 Tl	165	1	1.117 ppb	0.99	1.30	
208 Pb	165	1	1.077 ppb	3.12	1.30	
232 Th	165	1	2.386 ppb	1.30	2.60	
238 U	165	1	1.118 ppb	1.09	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	357020	1.30	367189	97.2	30 - 120	
45 Sc	1	2160440	1.21	2198650	98.3	30 - 120	
72 Ge	1	1029685	0.36	1047607	98.3	30 - 120	
115 In	1	2599204	1.03	2618639	99.3	30 - 120	
165 Ho	1	3673409	1.01	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\091ICSA.D\091ICSA.D#
Date Acquired: Aug 10 2009 10:07 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: Aug 10 2009 09:56 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	0.00 ppb	0.00	1.00	
51 V	72	1	-0.25 ppb	33.72	1.00	
52 Cr	72	1	0.68 ppb	2.34	1.00	
55 Mn	72	1	3.51 ppb	0.92	1.00	
59 Co	72	1	1.54 ppb	4.46	1.00	
60 Ni	72	1	1.54 ppb	3.35	1.00	
63 Cu	72	1	1.42 ppb	2.18	1.00	
66 Zn	72	1	0.44 ppb	30.29	10.00	
75 As	72	1	0.40 ppb	6.23	1.00	
78 Se	72	1	0.69 ppb	56.98	1.00	
95 Mo	72	1	2004.00 ppb	1.89	2000.00	
107 Ag	115	1	0.04 ppb	16.72	1.00	
111 Cd	115	1	0.32 ppb	32.82	1.00	
118 Sn	115	1	0.08 ppb	26.70	10.00	
121 Sb	115	1	0.28 ppb	3.97	1.00	
137 Ba	115	1	0.07 ppb	7.46	1.00	
205 Tl	165	1	0.05 ppb	45.56	1.00	
208 Pb	165	1	0.13 ppb	2.60	1.00	
232 Th	165	1	0.24 ppb	29.64	1.00	
238 U	165	1	0.00 ppb	29.69	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	326427	1.11	367189	88.9	30 - 120	
45 Sc	1	1913508	1.00	2198650	87.0	30 - 120	
72 Ge	1	902523	1.26	1047607	86.2	30 - 120	
115 In	1	2206404	0.65	2618639	84.3	30 - 120	
165 Ho	1	3333118	1.23	3698894	90.1	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\092ICSB.D\092ICSB.D#
Date Acquired: Aug 10 2009 10:09 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: Aug 10 2009 09:56 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	99.06	1.64	100	99.1	80 - 120	
51 V	72	1	104.40	0.92	100	104.4	80 - 120	
52 Cr	72	1	101.90	0.77	100	101.9	80 - 120	
55 Mn	72	1	104.20	0.96	100	104.2	80 - 120	
59 Co	72	1	100.30	0.98	100	100.3	80 - 120	
60 Ni	72	1	95.98	1.20	100	96.0	80 - 120	
63 Cu	72	1	92.71	1.33	100	92.7	80 - 120	
66 Zn	72	1	101.10	1.14	100	101.1	80 - 120	
75 As	72	1	104.70	0.73	100	104.7	80 - 120	
78 Se	72	1	113.30	0.82	100	113.3	80 - 120	
95 Mo	72	1	2162.00	1.87	2100	103.0	80 - 120	
107 Ag	115	1	82.22	3.89	100	82.2	80 - 120	
111 Cd	115	1	96.12	2.03	100	96.1	80 - 120	
118 Sn	115	1	100.50	2.06	100	100.5	80 - 120	
121 Sb	115	1	102.50	1.80	100	102.5	80 - 120	
137 Ba	115	1	102.20	1.70	100	102.2	80 - 120	
205 Tl	165	1	94.99	0.97	100	95.0	80 - 120	
208 Pb	165	1	93.26	0.57	100	93.3	80 - 120	
232 Th	165	1	105.90	2.13	100	105.9	80 - 120	
238 U	165	1	99.43	0.45	100	99.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	327794	0.59	367189	89.3	30 - 120	
45 Sc	1	1916330	0.56	2198650	87.2	30 - 120	
72 Ge	1	875267	0.68	1047607	83.5	30 - 120	
115 In	1	2211280	1.50	2618639	84.4	30 - 120	
165 Ho	1	3358970	0.46	3698894	90.8	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\093WASH.D\093WASH.D#
Date Acquired: Aug 10 2009 10:12 pm
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 09:56 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	0.006 ppb	173.19	1.30	
51 V	72	1	-0.034 ppb	135.22	6.50	
52 Cr	72	1	0.000 ppb	5464.80	2.60	
55 Mn	72	1	0.019 ppb	10.91	1.30	
59 Co	72	1	0.009 ppb	18.44	1.30	
60 Ni	72	1	-0.069 ppb	6.69	2.60	
63 Cu	72	1	0.016 ppb	51.79	2.60	
66 Zn	72	1	-1.678 ppb	2.09	13.00	
75 As	72	1	0.020 ppb	87.04	6.50	
78 Se	72	1	0.273 ppb	159.00	6.50	
95 Mo	72	1	1.722 ppb	10.74	2.60	
107 Ag	115	1	0.016 ppb	7.48	6.50	
111 Cd	115	1	0.027 ppb	39.87	1.30	
118 Sn	115	1	0.008 ppb	139.77	13.00	
121 Sb	115	1	0.031 ppb	10.67	2.60	
137 Ba	115	1	0.014 ppb	37.96	1.30	
205 Tl	165	1	0.019 ppb	7.24	1.30	
208 Pb	165	1	0.014 ppb	25.78	1.30	
232 Th	165	1	1.029 ppb	17.84	2.60	
238 U	165	1	0.020 ppb	2.81	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	366369	0.31	367189	99.8	30 - 120	
45 Sc	1	2076235	0.60	2198650	94.4	30 - 120	
72 Ge	1	994316	1.14	1047607	94.9	30 - 120	
115 In	1	2560866	0.59	2618639	97.8	30 - 120	
165 Ho	1	3648181	1.84	3698894	98.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\094 CCV.D\094 CCV.D#
Date Acquired: Aug 10 2009 10:15 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.46	ppb	4.16	50	98.9	90 - 110	
51 V	72	1	48.94	ppb	0.53	50	97.9	90 - 110	
52 Cr	72	1	50.07	ppb	1.20	50	100.1	90 - 110	
55 Mn	72	1	49.34	ppb	1.59	50	98.7	90 - 110	
59 Co	72	1	50.31	ppb	1.34	50	100.6	90 - 110	
60 Ni	72	1	50.23	ppb	2.45	50	100.5	90 - 110	
63 Cu	72	1	49.54	ppb	2.01	50	99.1	90 - 110	
66 Zn	72	1	52.03	ppb	1.37	50	104.1	90 - 110	
75 As	72	1	49.61	ppb	1.73	50	99.2	90 - 110	
78 Se	72	1	50.01	ppb	0.38	50	100.0	90 - 110	
95 Mo	72	1	50.34	ppb	1.73	50	100.7	90 - 110	
107 Ag	115	1	49.34	ppb	1.02	50	98.7	90 - 110	
111 Cd	115	1	49.64	ppb	0.95	50	99.3	90 - 110	
118 Sn	115	1	49.84	ppb	1.63	50	99.7	90 - 110	
121 Sb	115	1	49.47	ppb	0.88	50	98.9	90 - 110	
137 Ba	115	1	49.80	ppb	0.36	50	99.6	90 - 110	
205 Tl	165	1	50.15	ppb	0.99	50	100.3	90 - 110	
208 Pb	165	1	50.50	ppb	1.80	50	101.0	90 - 110	
232 Th	165	1	50.90	ppb	3.30	50	101.8	90 - 110	
238 U	165	1	51.21	ppb	1.74	50	102.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358196	0.69	367189	97.6	30 - 120	
45 Sc	1	2129878	1.22	2198650	96.9	30 - 120	
72 Ge	1	1014484	1.02	1047607	96.8	30 - 120	
115 In	1	2569748	0.08	2618639	98.1	30 - 120	
165 Ho	1	3684571	0.80	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\095 CCB.D\095 CCB.D#
Date Acquired: Aug 10 2009 10:18 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: Aug 10 2009 09:56 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	0.028	ppb	125.04	1.00	
51 V	72	1	-0.023	ppb	143.33	1.00	
52 Cr	72	1	-0.002	ppb	923.90	1.00	
55 Mn	72	1	0.028	ppb	32.43	1.00	
59 Co	72	1	0.009	ppb	26.21	1.00	
60 Ni	72	1	-0.067	ppb	9.77	1.00	
63 Cu	72	1	0.012	ppb	106.20	1.00	
66 Zn	72	1	-2.522	ppb	0.45	1.00	
75 As	72	1	0.008	ppb	139.22	1.00	
78 Se	72	1	-0.028	ppb	2465.70	1.00	
95 Mo	72	1	0.131	ppb	6.13	1.00	
107 Ag	115	1	0.017	ppb	9.39	1.00	
111 Cd	115	1	0.021	ppb	62.04	1.00	
118 Sn	115	1	0.019	ppb	40.06	1.00	
121 Sb	115	1	0.056	ppb	6.71	1.00	
137 Ba	115	1	0.019	ppb	11.10	1.00	
205 Tl	165	1	0.030	ppb	5.43	1.00	
208 Pb	165	1	0.013	ppb	16.52	1.00	
232 Th	165	1	1.108	ppb	18.47	1.00	Fail
238 U	165	1	0.017	ppb	5.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365426	0.22	367189	99.5	30 - 120	
45 Sc	1	2161178	2.00	2198650	98.3	30 - 120	
72 Ge	1	1023099	0.56	1047607	97.7	30 - 120	
115 In	1	2603761	0.60	2618639	99.4	30 - 120	
165 Ho	1	3680889	1.54	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\096WASH.D\096WASH.D#
Date Acquired: Aug 10 2009 10:20 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.079 ppb	10.92	1.30	
51 V	72	1	5.130 ppb	1.45	6.50	
52 Cr	72	1	2.157 ppb	4.54	2.60	
55 Mn	72	1	1.063 ppb	4.53	1.30	
59 Co	72	1	1.050 ppb	1.09	1.30	
60 Ni	72	1	2.074 ppb	4.23	2.60	
63 Cu	72	1	2.123 ppb	1.17	2.60	
66 Zn	72	1	8.217 ppb	1.74	13.00	
75 As	72	1	5.217 ppb	0.89	6.50	
78 Se	72	1	5.154 ppb	5.40	6.50	
95 Mo	72	1	2.220 ppb	6.77	2.60	
107 Ag	115	1	5.308 ppb	1.41	6.50	
111 Cd	115	1	1.070 ppb	1.11	1.30	
118 Sn	115	1	10.290 ppb	0.24	13.00	
121 Sb	115	1	2.012 ppb	3.04	2.60	
137 Ba	115	1	1.086 ppb	2.73	1.30	
205 Tl	165	1	1.124 ppb	1.17	1.30	
208 Pb	165	1	1.090 ppb	1.55	1.30	
232 Th	165	1	2.384 ppb	1.99	2.60	
238 U	165	1	1.125 ppb	2.15	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	362803	1.37	367189	98.8	30 - 120	
45 Sc	1	2155781	1.24	2198650	98.1	30 - 120	
72 Ge	1	1022103	1.11	1047607	97.6	30 - 120	
115 In	1	2573971	0.56	2618639	98.3	30 - 120	
165 Ho	1	3674326	0.25	3698894	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\AG081009A.B\086CALB.D\086CALB.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: 08/10/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#
Date Acquired: Aug 10 2009 11:51 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: Aug 10 2009 11:49 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-204	211.14
52	Cr	72	1	2947	6.78
55	Mn	72	1	517	14.80
59	Co	72	1	33	35.39
60	Ni	72	1	87	45.12
63	Cu	72	1	677	10.89
66	Zn	72	1	237	18.82
75	As	72	1	69	15.74
78	Se	72	1	613	7.25
95	Mo	72	1	487	21.90
107	Ag	115	1	7	86.63
111	Cd	115	1	9	55.22
118	Sn	115	1	527	25.33
121	Sb	115	1	46	21.06
137	Ba	115	1	21	55.68
205	Tl	165	1	54	35.92
208	Pb	165	1	217	1.32
232	Th	165	1	210	24.29
238	U	165	1	58	9.14

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	298913	0.41
45	Sc	1	1771505	1.08
72	Ge	1	851994	1.37
115	In	1	2290579	0.24
165	Ho	1	3269618	1.10

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\AG081009A.B\129ICAL.D\129ICAL.D#
Date Acquired:	Aug 10 2009 11:54 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:	Aug 10 2009 11:52 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	44626	1.86
51	V	72	1	1103412	1.83
52	Cr	72	1	1112907	2.35
55	Mn	72	1	1182637	1.64
59	Co	72	1	1406971	1.17
60	Ni	72	1	322074	1.24
63	Cu	72	1	765226	0.44
66	Zn	72	1	149309	0.51
75	As	72	1	135226	0.52
78	Se	72	1	23661	3.26
95	Mo	72	1	358767	0.65
107	Ag	115	1	1018041	1.08
111	Cd	115	1	189633	1.01
118	Sn	115	1	539808	0.91
121	Sb	115	1	608141	0.64
137	Ba	115	1	268515	0.48
205	Tl	165	1	1732019	1.28
208	Pb	165	1	2365674	0.82
232	Th	165	1	2194146	3.15
238	U	165	1	2441986	1.18

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	289713	1.35	298913	96.9	30 - 120	
45	Sc	1	1702546	1.03	1771505	96.1	30 - 120	
72	Ge	1	813760	0.90	851994	95.5	30 - 120	
115	In	1	2210431	0.19	2290579	96.5	30 - 120	
165	Ho	1	3250286	0.48	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\130 CCV.D\130 CCV.D#
Date Acquired: Aug 10 2009 11:56 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: Aug 10 2009 11:54 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.24	ppb	2.69	50	98.5	90 - 110	
51 V	72	1	48.00	ppb	0.71	50	96.0	90 - 110	
52 Cr	72	1	48.06	ppb	0.44	50	96.1	90 - 110	
55 Mn	72	1	48.06	ppb	0.53	50	96.1	90 - 110	
59 Co	72	1	49.30	ppb	0.89	50	98.6	90 - 110	
60 Ni	72	1	50.11	ppb	1.48	50	100.2	90 - 110	
63 Cu	72	1	49.80	ppb	0.70	50	99.6	90 - 110	
66 Zn	72	1	53.20	ppb	1.85	50	106.4	90 - 110	
75 As	72	1	49.30	ppb	0.12	50	98.6	90 - 110	
78 Se	72	1	51.84	ppb	3.80	50	103.7	90 - 110	
95 Mo	72	1	49.84	ppb	0.82	50	99.7	90 - 110	
107 Ag	115	1	48.57	ppb	0.91	50	97.1	90 - 110	
111 Cd	115	1	49.00	ppb	0.65	50	98.0	90 - 110	
118 Sn	115	1	48.97	ppb	0.11	50	97.9	90 - 110	
121 Sb	115	1	49.39	ppb	0.33	50	98.8	90 - 110	
137 Ba	115	1	49.11	ppb	0.94	50	98.2	90 - 110	
205 Tl	165	1	50.36	ppb	1.01	50	100.7	90 - 110	
208 Pb	165	1	50.41	ppb	1.00	50	100.8	90 - 110	
232 Th	165	1	52.89	ppb	2.77	50	105.8	90 - 110	
238 U	165	1	51.25	ppb	0.93	50	102.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	286336	1.45	298913	95.8	30 - 120	
45 Sc	1	1694301	0.70	1771505	95.6	30 - 120	
72 Ge	1	807041	0.62	851994	94.7	30 - 120	
115 In	1	2219249	0.11	2290579	96.9	30 - 120	
165 Ho	1	3221461	0.39	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\131 CCB.D\131 CCB.D#
Date Acquired: Aug 10 2009 11:59 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: Aug 10 2009 11:54 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	0.007	ppb	173.23	1.00	
51 V	72	1	0.027	ppb	52.26	1.00	
52 Cr	72	1	0.022	ppb	96.05	1.00	
55 Mn	72	1	0.093	ppb	16.51	1.00	
59 Co	72	1	0.013	ppb	10.56	1.00	
60 Ni	72	1	0.031	ppb	15.88	1.00	
63 Cu	72	1	0.039	ppb	36.46	1.00	
66 Zn	72	1	0.568	ppb	5.54	1.00	
75 As	72	1	0.016	ppb	167.31	1.00	
78 Se	72	1	0.407	ppb	77.30	1.00	
95 Mo	72	1	-0.004	ppb	423.30	1.00	
107 Ag	115	1	0.018	ppb	31.54	1.00	
111 Cd	115	1	0.010	ppb	43.83	1.00	
118 Sn	115	1	0.075	ppb	23.85	1.00	
121 Sb	115	1	0.059	ppb	6.87	1.00	
137 Ba	115	1	0.017	ppb	19.95	1.00	
205 Tl	165	1	0.053	ppb	9.73	1.00	
208 Pb	165	1	0.016	ppb	6.36	1.00	
232 Th	165	1	1.410	ppb	17.65	1.00	Fail
238 U	165	1	0.018	ppb	20.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293448	0.70	298913	98.2	30 - 120	
45 Sc	1	1702764	0.71	1771505	96.1	30 - 120	
72 Ge	1	833810	0.47	851994	97.9	30 - 120	
115 In	1	2223577	1.33	2290579	97.1	30 - 120	
165 Ho	1	3240597	0.45	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\132WASH.D\132WASH.D#
Date Acquired:	Aug 11 2009 12:02 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:	Aug 10 2009 11:54 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	0.899 ppb	14.08	1.30	
51 V	72	1	4.971 ppb	1.08	6.50	
52 Cr	72	1	1.987 ppb	1.47	2.60	
55 Mn	72	1	1.001 ppb	2.00	1.30	
59 Co	72	1	1.052 ppb	4.51	1.30	
60 Ni	72	1	2.068 ppb	5.49	2.60	
63 Cu	72	1	2.048 ppb	1.81	2.60	
66 Zn	72	1	10.340 ppb	0.83	13.00	
75 As	72	1	5.128 ppb	2.68	6.50	
78 Se	72	1	4.579 ppb	16.89	6.50	
95 Mo	72	1	2.046 ppb	2.72	2.60	
107 Ag	115	1	5.235 ppb	2.60	6.50	
111 Cd	115	1	1.066 ppb	2.10	1.30	
118 Sn	115	1	10.190 ppb	0.75	13.00	
121 Sb	115	1	1.946 ppb	1.04	2.60	
137 Ba	115	1	1.082 ppb	1.38	1.30	
205 Tl	165	1	1.105 ppb	0.56	1.30	
208 Pb	165	1	1.062 ppb	0.76	1.30	
232 Th	165	1	2.471 ppb	1.77	2.60	
238 U	165	1	1.103 ppb	0.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291146	0.69	298913	97.4	30 - 120	
45 Sc	1	1730528	0.89	1771505	97.7	30 - 120	
72 Ge	1	836746	1.09	851994	98.2	30 - 120	
115 In	1	2252218	0.93	2290579	98.3	30 - 120	
165 Ho	1	3295222	0.70	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

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

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\151 CCV.D\151 CCV.D#
Date Acquired: Aug 11 2009 12:54 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: Aug 10 2009 11:54 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	50.31	ppb	1.79	50	100.6	90 - 110	
51 V	72	1	47.72	ppb	0.57	50	95.4	90 - 110	
52 Cr	72	1	48.34	ppb	0.27	50	96.7	90 - 110	
55 Mn	72	1	48.11	ppb	0.40	50	96.2	90 - 110	
59 Co	72	1	49.47	ppb	0.66	50	98.9	90 - 110	
60 Ni	72	1	50.01	ppb	1.09	50	100.0	90 - 110	
63 Cu	72	1	49.70	ppb	0.74	50	99.4	90 - 110	
66 Zn	72	1	52.91	ppb	0.63	50	105.8	90 - 110	
75 As	72	1	49.12	ppb	0.02	50	98.2	90 - 110	
78 Se	72	1	48.81	ppb	3.68	50	97.6	90 - 110	
95 Mo	72	1	49.73	ppb	0.70	50	99.5	90 - 110	
107 Ag	115	1	49.12	ppb	0.72	50	98.2	90 - 110	
111 Cd	115	1	50.09	ppb	0.40	50	100.2	90 - 110	
118 Sn	115	1	48.97	ppb	0.36	50	97.9	90 - 110	
121 Sb	115	1	49.59	ppb	0.64	50	99.2	90 - 110	
137 Ba	115	1	49.21	ppb	0.73	50	98.4	90 - 110	
205 Tl	165	1	50.40	ppb	1.40	50	100.8	90 - 110	
208 Pb	165	1	50.34	ppb	1.31	50	100.7	90 - 110	
232 Th	165	1	49.83	ppb	3.41	50	99.7	90 - 110	
238 U	165	1	51.61	ppb	1.72	50	103.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298153	1.60	298913	99.7	30 - 120	
45 Sc	1	1730257	0.51	1771505	97.7	30 - 120	
72 Ge	1	823986	1.07	851994	96.7	30 - 120	
115 In	1	2255073	0.60	2290579	98.4	30 - 120	
165 Ho	1	3304129	1.16	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\152 CCB.D\152 CCB.D#
Date Acquired: Aug 11 2009 12:57 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: Aug 10 2009 11:54 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	0.007	ppb	173.19	1.00	
51 V	72	1	0.010	ppb	756.86	1.00	
52 Cr	72	1	0.074	ppb	27.75	1.00	
55 Mn	72	1	0.077	ppb	12.16	1.00	
59 Co	72	1	0.014	ppb	33.69	1.00	
60 Ni	72	1	0.033	ppb	8.70	1.00	
63 Cu	72	1	0.015	ppb	93.89	1.00	
66 Zn	72	1	0.514	ppb	6.53	1.00	
75 As	72	1	0.008	ppb	121.93	1.00	
78 Se	72	1	0.477	ppb	100.92	1.00	
95 Mo	72	1	-0.063	ppb	25.38	1.00	
107 Ag	115	1	0.013	ppb	37.30	1.00	
111 Cd	115	1	0.020	ppb	88.08	1.00	
118 Sn	115	1	0.084	ppb	22.47	1.00	
121 Sb	115	1	0.051	ppb	1.64	1.00	
137 Ba	115	1	0.017	ppb	21.12	1.00	
205 Tl	165	1	0.032	ppb	6.00	1.00	
208 Pb	165	1	0.011	ppb	13.50	1.00	
232 Th	165	1	1.203	ppb	14.49	1.00	Fail
238 U	165	1	0.014	ppb	5.01	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299841	0.83	298913	100.3	30 - 120	
45 Sc	1	1753527	0.56	1771505	99.0	30 - 120	
72 Ge	1	853516	0.19	851994	100.2	30 - 120	
115 In	1	2301995	0.44	2290579	100.5	30 - 120	
165 Ho	1	3384139	1.05	3269618	103.5	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\153WASH.D\153WASH.D#
Date Acquired: Aug 11 2009 01:00 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: Aug 10 2009 11:54 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.060 ppb	9.90	1.30	
51 V	72	1	5.022 ppb	1.13	6.50	
52 Cr	72	1	2.068 ppb	0.61	2.60	
55 Mn	72	1	0.987 ppb	1.84	1.30	
59 Co	72	1	1.023 ppb	1.68	1.30	
60 Ni	72	1	2.082 ppb	4.09	2.60	
63 Cu	72	1	2.089 ppb	1.60	2.60	
66 Zn	72	1	10.410 ppb	0.53	13.00	
75 As	72	1	5.031 ppb	1.06	6.50	
78 Se	72	1	5.439 ppb	8.08	6.50	
95 Mo	72	1	1.962 ppb	2.26	2.60	
107 Ag	115	1	5.147 ppb	1.92	6.50	
111 Cd	115	1	1.088 ppb	3.58	1.30	
118 Sn	115	1	10.280 ppb	1.11	13.00	
121 Sb	115	1	1.935 ppb	1.15	2.60	
137 Ba	115	1	1.067 ppb	5.26	1.30	
205 Tl	165	1	1.098 ppb	2.04	1.30	
208 Pb	165	1	1.070 ppb	1.69	1.30	
232 Th	165	1	2.403 ppb	2.53	2.60	
238 U	165	1	1.104 ppb	0.39	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300232	0.96	298913	100.4	30 - 120	
45 Sc	1	1774194	0.66	1771505	100.2	30 - 120	
72 Ge	1	859087	0.54	851994	100.8	30 - 120	
115 In	1	2320421	0.48	2290579	101.3	30 - 120	
165 Ho	1	3355379	1.38	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\154 BLK.D\154 BLK.D#
Date Acquired: Aug 11 2009 01:03 am
Operator: TEL
Sample Name: LHQK3B
Misc Info: BLANK 9218437 6020
Vial Number: 3310
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 pm
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	0.024 ppb	51.22	2.00	
52 Cr	72	1	0.093 ppb	26.90	2.00	
55 Mn	72	1	0.035 ppb	2.81	2.00	
59 Co	72	1	0.000 ppb	4119.30	2.00	
60 Ni	72	1	0.012 ppb	100.08	2.00	
63 Cu	72	1	0.027 ppb	16.09	2.00	
66 Zn	72	1	1.101 ppb	0.97	2.00	
75 As	72	1	0.002 ppb	745.48	2.00	
78 Se	72	1	0.588 ppb	93.05	2.00	
95 Mo	72	1	-0.103 ppb	5.18	2.00	
107 Ag	115	1	0.005 ppb	75.82	2.00	
111 Cd	115	1	-0.002 ppb	430.98	2.00	
118 Sn	115	1	0.113 ppb	31.18	2.00	
121 Sb	115	1	0.028 ppb	10.91	2.00	
137 Ba	115	1	0.019 ppb	26.98	2.00	
205 Tl	165	1	0.041 ppb	43.48	2.00	
208 Pb	165	1	0.005 ppb	12.88	2.00	
232 Th	165	1	0.258 ppb	20.31	2.00	
238 U	165	1	0.000 ppb	129.33	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298312	0.78	298913	99.8	30 - 120	
45 Sc	1	1756308	0.68	1771505	99.1	30 - 120	
72 Ge	1	842165	0.39	851994	98.8	30 - 120	
115 In	1	2267067	0.90	2290579	99.0	30 - 120	
165 Ho	1	3375860	0.76	3269618	103.2	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\155 LCS.D\155 LCS.D#
Date Acquired: Aug 11 2009 01:05 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHQK3C
Misc Info: LCS
Vial Number: 3311
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	38.88	1.99	40	97.2	80 - 120	
51 V	72	1	40.21	0.82	40	100.5	80 - 120	
52 Cr	72	1	40.03	1.69	40	100.1	80 - 120	
55 Mn	72	1	40.22	0.64	40	100.6	80 - 120	
59 Co	72	1	40.96	0.98	40	102.4	80 - 120	
60 Ni	72	1	41.32	1.78	40	103.3	80 - 120	
63 Cu	72	1	41.48	0.21	40	103.7	80 - 120	
66 Zn	72	1	39.63	0.64	40	99.1	80 - 120	
75 As	72	1	38.99	0.16	40	97.5	80 - 120	
78 Se	72	1	39.62	3.95	40	99.1	80 - 120	
95 Mo	72	1	40.65	1.13	40	101.6	80 - 120	
107 Ag	115	1	40.06	0.99	40	100.2	80 - 120	
111 Cd	115	1	39.40	0.64	40	98.5	80 - 120	
118 Sn	115	1	0.04	26.89	40	0.1	80 - 120	
121 Sb	115	1	39.07	1.40	40	97.7	80 - 120	
137 Ba	115	1	40.34	0.59	40	100.9	80 - 120	
205 Tl	165	1	41.23	0.76	40	103.1	80 - 120	
208 Pb	165	1	41.06	1.12	40	102.7	80 - 120	
232 Th	165	1	42.93	1.91	40	107.3	80 - 120	
238 U	165	1	42.30	1.12	40	105.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297384	0.11	298913	99.5	30 - 120	
45 Sc	1	1725208	0.25	1771505	97.4	30 - 120	
72 Ge	1	808629	0.60	851994	94.9	30 - 120	
115 In	1	2260003	0.86	2290579	98.7	30 - 120	
165 Ho	1	3313254	0.19	3269618	101.3	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\156AREF.D\156AREF.D#
Date Acquired:	Aug 11 2009 01:08 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHJ5J
Misc Info:	D9H050230
Vial Number:	3312
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 11:54 pm
Sample Type:	AllRef
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	0.03	0.03	ppb	114.88	3600	
51 V	72	1	-9.90	-9.90	ppb	25.72	3600	
52 Cr	72	1	1,007.00	1007.00	ppb	0.85	3600	
55 Mn	72	1	19.64	19.64	ppb	0.70	3600	
59 Co	72	1	0.55	0.55	ppb	7.19	3600	
60 Ni	72	1	3.96	3.96	ppb	3.51	3600	
63 Cu	72	1	0.90	0.90	ppb	3.77	3600	
66 Zn	72	1	1.17	1.17	ppb	3.46	3600	
75 As	72	1	92.87	92.87	ppb	0.39	3600	
78 Se	72	1	5.64	5.64	ppb	12.40	3600	
95 Mo	72	1	24.86	24.86	ppb	0.30	3600	
107 Ag	115	1	0.02	0.02	ppb	31.93	3600	
111 Cd	115	1	0.01	0.01	ppb	403.77	3600	
118 Sn	115	1	0.03	0.03	ppb	82.59	3600	
121 Sb	115	1	0.21	0.21	ppb	9.47	3600	
137 Ba	115	1	19.51	19.51	ppb	1.51	3600	
205 Tl	165	1	0.08	0.08	ppb	19.57	3600	
208 Pb	165	1	0.24	0.24	ppb	2.63	3600	
232 Th	165	1	1.10	1.10	ppb	40.15	1000	
238 U	165	1	36.88	36.88	ppb	0.69	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295625	0.47	298913	98.9	30 - 120	
45 Sc	1	1742767	1.62	1771505	98.4	30 - 120	
72 Ge	1	723920	0.41	851994	85.0	30 - 120	
115 In	1	1949293	1.02	2290579	85.1	30 - 120	
165 Ho	1	2964923	0.45	3269618	90.7	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\AG081009A.B\128CALB.D\128CALB.D#

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

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\157SDIL.D\157SDIL.D#
Date Acquired: Aug 11 2009 01:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JP5
Misc Info: SERIAL DILUTION
Vial Number: 3401
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: SDIL
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\156AREF.D\156AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.02	ppb	173.22	0.01	345.9	90 - 110	
51 V	72	1	1.19	ppb	77.76	-1.98	-60.2	90 - 110	
52 Cr	72	1	203.30	ppb	1.15	201.40	100.9	90 - 110	
55 Mn	72	1	4.07	ppb	1.14	3.93	103.5	90 - 110	
59 Co	72	1	0.12	ppb	3.86	0.11	108.4	90 - 110	
60 Ni	72	1	1.06	ppb	5.25	0.79	133.4	90 - 110	
63 Cu	72	1	0.20	ppb	1.14	0.18	112.3	90 - 110	
66 Zn	72	1	0.43	ppb	6.92	0.23	184.9	90 - 110	
75 As	72	1	18.64	ppb	0.50	18.57	100.4	90 - 110	
78 Se	72	1	1.40	ppb	65.32	1.13	123.7	90 - 110	
95 Mo	72	1	4.85	ppb	2.17	4.97	97.5	90 - 110	
107 Ag	115	1	0.00	ppb	30.74	0.00	85.3	90 - 110	
111 Cd	115	1	0.02	ppb	5.15	0.00	2042.1	90 - 110	
118 Sn	115	1	0.08	ppb	17.82	0.01	1290.1	90 - 110	
121 Sb	115	1	0.05	ppb	1.78	0.04	112.1	90 - 110	
137 Ba	115	1	4.06	ppb	3.06	3.90	104.1	90 - 110	
205 Tl	165	1	0.01	ppb	15.54	0.02	76.8	90 - 110	
208 Pb	165	1	0.05	ppb	4.33	0.05	112.9	90 - 110	
232 Th	165	1	0.09	ppb	13.25	0.22	39.3	90 - 110	
238 U	165	1	7.96	ppb	2.44	7.38	107.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	320819	0.37	298913	107.3	30 - 120	
45 Sc	1	1834250	2.10	1771505	103.5	30 - 120	
72 Ge	1	842554	0.30	851994	98.9	30 - 120	
115 In	1	2234431	0.67	2290579	97.5	30 - 120	
165 Ho	1	3347473	1.35	3269618	102.4	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\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 10:34:35

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHJ5JP5** | Serial Dilution: **5.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500**
File: AG081009A # 157
Acquired: 08/11/2009 01:11:00
Calibrated: 08/10/2009 23:51:00

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	10	0.10155	0.02936	246		*	
7440-62-2	Vanadium	51	13417	5.9650	-9.9020			*	
7440-47-3	Chromium	52	2339430	1016.5	1007.0	0.943		*	
7439-96-5	Manganese	55	50277	20.330	19.640	3.51		*	
7440-48-4	Cobalt	59	1777	0.59850	0.55220	8.38		*	
7440-02-0	Nickel	60	3607	5.2800	3.9580	33.4		*	
7440-50-8	Copper	63	2274	1.0135	0.90230	12.3		*	
7440-66-6	Zinc	66	905	2.1710	1.1740	84.9		*	
7440-38-2	Arsenic	75	26156	93.200	92.870	0.355	0.21	0.4	☑
7782-49-2	Selenium	78	940	6.9800	5.6430	23.7	0.70	NC	☑
7439-98-7	Molybdenum	95	18463	24.235	24.860	2.51		*	
7440-22-4	Silver	107	43	0.01788	0.02095	14.7		*	
7440-43-9	Cadmium	111	50	0.10515	0.00515	1940		*	
7440-31-5	Tin	118	963	0.41270	0.03199	1190		*	
7440-36-0	Antimony	121	334	0.23590	0.21050	12.1		*	
7440-39-3	Barium	137	11042	20.305	19.510	4.07		*	
7440-28-0	Thallium	205	272	0.06065	0.07902	23.2		*	
7439-92-1	Lead	208	1559	0.27445	0.24300	12.9		*	
7440-61-1	Uranium	238	200257	39.810	36.880	7.94		*	
7440-29-1	Thorium	232	2157	0.42985	1.0950	60.7		*	
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: [signature] Date: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\158PDS.D\158PDS.D#
Date Acquired: Aug 11 2009 01:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3402
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
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	190.20	0.03	ppb	1.01	200	95.1	75 - 125	
51 V	72	1	201.90	-9.90	ppb	2.77	200	106.2	75 - 125	
52 Cr	72	1	1215.00	1007.00	ppb	0.86	200	100.7	75 - 125	
55 Mn	72	1	222.50	19.64	ppb	1.95	200	101.3	75 - 125	
59 Co	72	1	196.80	0.55	ppb	0.59	200	98.1	75 - 125	
60 Ni	72	1	190.90	3.96	ppb	0.82	200	93.6	75 - 125	
63 Cu	72	1	186.60	0.90	ppb	0.27	200	92.9	75 - 125	
66 Zn	72	1	180.70	1.17	ppb	0.48	200	89.8	75 - 125	
75 As	72	1	294.50	92.87	ppb	0.32	200	100.6	75 - 125	
78 Se	72	1	230.40	5.64	ppb	1.20	200	112.0	75 - 125	
95 Mo	72	1	236.40	24.86	ppb	0.88	200	105.1	75 - 125	
107 Ag	115	1	42.46	0.02	ppb	0.68	50	84.9	75 - 125	
111 Cd	115	1	178.90	0.01	ppb	1.22	200	89.4	75 - 125	
118 Sn	115	1	175.20	0.03	ppb	0.96	200	87.6	75 - 125	
121 Sb	115	1	192.40	0.21	ppb	0.92	200	96.1	75 - 125	
137 Ba	115	1	213.80	19.51	ppb	0.80	200	97.4	75 - 125	
205 Tl	165	1	173.20	0.08	ppb	1.27	200	86.6	75 - 125	
208 Pb	165	1	168.90	0.24	ppb	0.70	200	84.3	75 - 125	
232 Th	165	1	0.16	1.10	ppb	11.34	200	0.1	75 - 125	
238 U	165	1	214.20	36.88	ppb	0.92	200	90.4	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	296347	0.77	298913	99.1	30 - 120	
45 Sc	1	1782879	1.26	1771505	100.6	30 - 120	
72 Ge	1	721654	0.61	851994	84.7	30 - 120	
115 In	1	1942489	0.60	2290579	84.8	30 - 120	
165 Ho	1	2974004	0.68	3269618	91.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 08/11/09 10:34:38

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHJ5JZ** | Spike Dilution: **1.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500** | Channel 272
File: AG081009A # 158 | Method 6020_
Acquired: 08/11/2009 01:14:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 08/10/2009 23:51:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	86801	190.20	0.02936	95.1	200		☑
7440-62-2	Vanadium	51	1975700	201.90	-9.9020	101	200		☐
7440-47-3	Chromium	52	11968700	1215.0	1007.0	104	200	*	☑
7439-96-5	Manganese	55	2333050	222.50	19.640	101	200		☑
7440-48-4	Cobalt	59	2456120	196.80	0.55220	98.1	200		☑
7440-02-0	Nickel	60	545083	190.90	3.9580	93.5	200		☑
7440-50-8	Copper	63	1265700	186.60	0.90230	92.8	200		☑
7440-66-6	Zinc	66	239105	180.70	1.1740	89.8	200		☑
7440-38-2	Arsenic	75	353047	294.50	92.870	101	200		☑
7782-49-2	Selenium	78	47672	230.40	5.6430	112	200		☑
7439-98-7	Molybdenum	95	751723	236.40	24.860	106	200		☐
7440-22-4	Silver	107	379825	42.460	0.02095	84.9	50.0		☑
7440-43-9	Cadmium	111	298050	178.90	0.00515	89.4	200		☑
7440-31-5	Tin	118	830836	175.20	0.03199	87.6	200		☐
7440-36-0	Antimony	121	1028040	192.40	0.21050	96.1	200		☑
7440-39-3	Barium	137	504526	213.80	19.510	97.1	200		☑
7440-28-0	Thallium	205	2744850	173.20	0.07902	86.6	200		☑
7439-92-1	Lead	208	3655250	168.90	0.24300	84.3	200		☑
7440-61-1	Uranium	238	4786410	214.20	36.880	88.7	200		☑
7440-29-1	Thorium	232	3334	0.15660	1.0950				
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				

As secondary

8/11/09

Reviewed by: [signature] Date: 8/11/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\159_MS.D\159_MS.D#
Date Acquired: Aug 11 2009 01:16 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JS
Misc Info: MATRIX SPIKE
Vial Number: 3403
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MS
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	39.12	0.03	ppb	1.92	40	97.7	50 - 150	
51 V	72	1	34.65	-9.90	ppb	1.03	40	115.1	50 - 150	
52 Cr	72	1	1074.00	1007.00	ppb	0.91	40	102.6	50 - 150	
55 Mn	72	1	60.83	19.64	ppb	0.86	40	102.0	50 - 150	
59 Co	72	1	40.96	0.55	ppb	0.44	40	101.0	50 - 150	
60 Ni	72	1	52.86	3.96	ppb	0.74	40	120.3	50 - 150	
63 Cu	72	1	38.62	0.90	ppb	1.06	40	94.4	50 - 150	
66 Zn	72	1	37.97	1.17	ppb	0.50	40	92.2	50 - 150	
75 As	72	1	135.90	92.87	ppb	0.44	40	102.3	50 - 150	
78 Se	72	1	51.74	5.64	ppb	0.84	40	113.4	50 - 150	
95 Mo	72	1	69.83	24.86	ppb	1.17	40	107.7	50 - 150	
107 Ag	115	1	34.87	0.02	ppb	1.26	40	87.1	50 - 150	
111 Cd	115	1	36.74	0.01	ppb	1.70	40	91.8	50 - 150	
118 Sn	115	1	0.17	0.03	ppb	19.14	40	0.4	50 - 150	
121 Sb	115	1	40.55	0.21	ppb	0.68	40	100.8	50 - 150	
137 Ba	115	1	59.52	19.51	ppb	0.80	40	100.0	50 - 150	
205 Tl	165	1	36.14	0.08	ppb	0.76	40	90.2	50 - 150	
208 Pb	165	1	35.29	0.24	ppb	0.83	40	87.7	50 - 150	
232 Th	165	1	40.88	1.10	ppb	1.40	40	99.5	50 - 150	
238 U	165	1	73.60	36.88	ppb	0.75	40	95.7	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	301894	0.73	298913	101.0	30 - 120	
45 Sc	1	1788975	0.02	1771505	101.0	30 - 120	
72 Ge	1	731996	0.44	851994	85.9	30 - 120	
115 In	1	1975332	0.66	2290579	86.2	30 - 120	
165 Ho	1	3014503	0.31	3269618	92.2	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\160 MSD.D\160 MSD.D#
Date Acquired: Aug 11 2009 01:19 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JD
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3404
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MSD
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\159 MS.D\159 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	40.08	ppb	2.47	39.12	2.42	20	
51 V	72	1	34.64	ppb	7.93	34.65	0.03	20	
52 Cr	72	1	1085.00	ppb	1.12	1074.00	1.02	20	
55 Mn	72	1	61.13	ppb	0.49	60.83	0.49	20	
59 Co	72	1	41.42	ppb	0.47	40.96	1.12	20	
60 Ni	72	1	42.24	ppb	0.79	52.86	22.33	20	
63 Cu	72	1	38.88	ppb	0.95	38.62	0.67	20	
66 Zn	72	1	38.05	ppb	0.87	37.97	0.21	20	
75 As	72	1	135.60	ppb	0.93	135.90	0.22	20	
78 Se	72	1	52.09	ppb	3.73	51.74	0.67	20	
95 Mo	72	1	69.20	ppb	0.72	69.83	0.91	20	
107 Ag	115	1	35.10	ppb	0.69	34.87	0.66	20	
111 Cd	115	1	37.15	ppb	0.83	36.74	1.11	20	
118 Sn	115	1	0.05	ppb	29.44	0.17	106.27	20	
121 Sb	115	1	39.99	ppb	1.01	40.55	1.39	20	
137 Ba	115	1	60.09	ppb	0.32	59.52	0.95	20	
205 Tl	165	1	36.12	ppb	1.29	36.14	0.06	20	
208 Pb	165	1	35.41	ppb	1.60	35.29	0.34	20	
232 Th	165	1	42.20	ppb	0.57	40.88	3.18	20	
238 U	165	1	74.47	ppb	0.77	73.60	1.18	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	301657	1.03	298913	100.9	30 - 120	
45 Sc	1	1761698	0.65	1771505	99.4	30 - 120	
72 Ge	1	720894	0.59	851994	84.6	30 - 120	
115 In	1	1941748	0.34	2290579	84.8	30 - 120	
165 Ho	1	2997870	0.50	3269618	91.7	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\161SMPL.D\161SMPL.D#
Date Acquired: Aug 11 2009 01:22 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ51
Misc Info: D9H050234
Vial Number: 3405
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 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	86.61	3600	
51 V	72	1	0.03	0.03	ppb	145.91	3600	
52 Cr	72	1	0.16	0.16	ppb	13.00	3600	
55 Mn	72	1	0.07	0.07	ppb	5.40	3600	
59 Co	72	1	0.00	0.00	ppb	48.84	3600	
60 Ni	72	1	0.01	0.01	ppb	55.92	3600	
63 Cu	72	1	0.05	0.05	ppb	35.99	3600	
66 Zn	72	1	0.48	0.48	ppb	0.86	3600	
75 As	72	1	0.03	0.03	ppb	25.80	3600	
78 Se	72	1	0.61	0.61	ppb	22.38	3600	
95 Mo	72	1	-0.03	-0.03	ppb	77.59	3600	
107 Ag	115	1	0.01	0.01	ppb	34.85	3600	
111 Cd	115	1	0.01	0.01	ppb	103.89	3600	
118 Sn	115	1	0.00	0.00	ppb	2703.00	3600	
121 Sb	115	1	0.03	0.03	ppb	39.95	3600	
137 Ba	115	1	0.04	0.04	ppb	21.19	3600	
205 Tl	165	1	0.01	0.01	ppb	35.84	3600	
208 Pb	165	1	0.01	0.01	ppb	14.01	3600	
232 Th	165	1	0.85	0.85	ppb	22.73	1000	
238 U	165	1	0.02	0.02	ppb	7.71	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	341797	0.74	298913	114.3	30 - 120	
45 Sc	1	1954779	1.15	1771505	110.3	30 - 120	
72 Ge	1	915682	0.57	851994	107.5	30 - 120	
115 In	1	2469041	1.05	2290579	107.8	30 - 120	
165 Ho	1	3544555	0.50	3269618	108.4	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\162 CCV.D\162 CCV.D#
Date Acquired: Aug 11 2009 01:25 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 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	48.27 ppb	4.39	50	96.5	90 - 110	
51 V	72	1	48.33 ppb	0.92	50	96.7	90 - 110	
52 Cr	72	1	48.60 ppb	0.67	50	97.2	90 - 110	
55 Mn	72	1	48.58 ppb	0.51	50	97.2	90 - 110	
59 Co	72	1	49.74 ppb	0.40	50	99.5	90 - 110	
60 Ni	72	1	50.63 ppb	1.30	50	101.3	90 - 110	
63 Cu	72	1	50.73 ppb	0.91	50	101.5	90 - 110	
66 Zn	72	1	52.89 ppb	0.03	50	105.8	90 - 110	
75 As	72	1	49.08 ppb	0.23	50	98.2	90 - 110	
78 Se	72	1	49.04 ppb	5.02	50	98.1	90 - 110	
95 Mo	72	1	50.09 ppb	0.48	50	100.2	90 - 110	
107 Ag	115	1	49.07 ppb	1.64	50	98.1	90 - 110	
111 Cd	115	1	49.16 ppb	0.69	50	98.3	90 - 110	
118 Sn	115	1	49.21 ppb	0.88	50	98.4	90 - 110	
121 Sb	115	1	48.96 ppb	1.24	50	97.9	90 - 110	
137 Ba	115	1	49.26 ppb	1.17	50	98.5	90 - 110	
205 Tl	165	1	49.83 ppb	0.99	50	99.7	90 - 110	
208 Pb	165	1	49.58 ppb	1.03	50	99.2	90 - 110	
232 Th	165	1	48.98 ppb	3.84	50	98.0	90 - 110	
238 U	165	1	50.12 ppb	0.85	50	100.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315547	0.53	298913	105.6	30 - 120	
45 Sc	1	1781709	0.85	1771505	100.6	30 - 120	
72 Ge	1	851013	0.92	851994	99.9	30 - 120	
115 In	1	2337704	0.88	2290579	102.1	30 - 120	
165 Ho	1	3412389	0.60	3269618	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\163 CCB.D\163 CCB.D#
Date Acquired: Aug 11 2009 01:27 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: Aug 10 2009 11:54 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.020	ppb	100.15	1.00	
51 V	72	1	0.021	ppb	50.63	1.00	
52 Cr	72	1	0.033	ppb	46.89	1.00	
55 Mn	72	1	0.076	ppb	2.39	1.00	
59 Co	72	1	0.013	ppb	20.92	1.00	
60 Ni	72	1	0.030	ppb	38.08	1.00	
63 Cu	72	1	0.022	ppb	44.15	1.00	
66 Zn	72	1	0.476	ppb	12.78	1.00	
75 As	72	1	-0.004	ppb	98.42	1.00	
78 Se	72	1	0.595	ppb	13.67	1.00	
95 Mo	72	1	-0.056	ppb	29.24	1.00	
107 Ag	115	1	0.013	ppb	11.48	1.00	
111 Cd	115	1	0.020	ppb	28.22	1.00	
118 Sn	115	1	0.095	ppb	23.08	1.00	
121 Sb	115	1	0.048	ppb	4.98	1.00	
137 Ba	115	1	0.019	ppb	36.45	1.00	
205 Tl	165	1	0.031	ppb	9.59	1.00	
208 Pb	165	1	0.013	ppb	7.84	1.00	
232 Th	165	1	1.255	ppb	14.06	1.00	Fail
238 U	165	1	0.016	ppb	14.36	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	320735	0.46	298913	107.3	30 - 120	
45 Sc	1	1822900	0.60	1771505	102.9	30 - 120	
72 Ge	1	877256	0.79	851994	103.0	30 - 120	
115 In	1	2371725	0.81	2290579	103.5	30 - 120	
165 Ho	1	3421991	0.96	3269618	104.7	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\164WASH.D\164WASH.D#
Date Acquired: Aug 11 2009 01:30 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: Aug 10 2009 11:54 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	0.918 ppb	9.59	1.30	
51 V	72	1	4.944 ppb	1.70	6.50	
52 Cr	72	1	2.036 ppb	2.70	2.60	
55 Mn	72	1	1.004 ppb	2.24	1.30	
59 Co	72	1	1.034 ppb	3.53	1.30	
60 Ni	72	1	2.145 ppb	4.40	2.60	
63 Cu	72	1	2.011 ppb	3.99	2.60	
66 Zn	72	1	10.360 ppb	1.18	13.00	
75 As	72	1	5.021 ppb	2.56	6.50	
78 Se	72	1	6.213 ppb	5.56	6.50	
95 Mo	72	1	2.018 ppb	5.46	2.60	
107 Ag	115	1	5.178 ppb	3.40	6.50	
111 Cd	115	1	1.081 ppb	6.58	1.30	
118 Sn	115	1	10.290 ppb	1.81	13.00	
121 Sb	115	1	1.925 ppb	2.85	2.60	
137 Ba	115	1	1.049 ppb	4.83	1.30	
205 Tl	165	1	1.117 ppb	1.04	1.30	
208 Pb	165	1	1.062 ppb	1.56	1.30	
232 Th	165	1	2.407 ppb	0.53	2.60	
238 U	165	1	1.103 ppb	2.19	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	318356	0.12	298913	106.5	30 - 120	
45 Sc	1	1828409	0.73	1771505	103.2	30 - 120	
72 Ge	1	879735	0.27	851994	103.3	30 - 120	
115 In	1	2379297	0.71	2290579	103.9	30 - 120	
165 Ho	1	3392920	0.86	3269618	103.8	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\AG081009A.B\128CALB.D\128CALB.D#

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

Semivolatile GC

Supporting Documentation

Sample Sequence, Chromatograms

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9H050234

Client: Northgate

Method: 8141

Associated Samples: 1

Batch #(s): 9217511

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

Signature/Date: 8-18-09

GC SEMIVOLATILE ORGANIC EXTRACTION LOG SHEETS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

RQC058

TestAmerica Laboratories, Inc.
EXTRACTION BENCH WORKSHEET

Run Date: 8/06/09
Time: 17:58:56

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: 009580 David Bourgery
000452 Aaron S. Johnson

Concentrationist: 004788 Tegan Moore

****
* *
* **QC BATCH: 9217511** *
* *
****

PREP DATE: 8/05/09 22:00
COMP DATE: 8/06/09 18:00

Reviewer/Date: MOORET / 8/06/09

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	PH"S INIT	ADJ1	ADJ2	SOLVENTS EXTRACTION	VOL	EXCHANGE	VOL	SPIKE STANDARD/ SURROGATE ID
8/10/09	8/17/09	D9H040197-001 **LHG7R-1-AA**	DR	09	P2	WATER	**1050mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0893 7.30.09
COMMENTS:															
8/11/09	8/17/09	D9H050234-001 **LHJ51-1-AA**	DR	09	P2	WATER	**1056mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0893 7.30.09
COMMENTS:															
8/10/09	0/00/00	D9H050000-511 **LHK3A-1-AA**B		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0893 7.30.09
COMMENTS:															
8/10/09	0/00/00	D9H050000-511 **LHK3A-1-AC**C		09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0883 7.28.09 1ML GSV0893 7.30.09
COMMENTS:															
8/10/09	0/00/00	D9H050000-511 **LHK3A-1-AD**L	R	09	P2	WATER	**1000mL** 2.00mL	7.0	NA	NA	MECL2	180.0	HEXANE	50.0	1ML GSV0883 7.28.09 1ML GSV0893 7.30.09
COMMENTS:															

DV-OP-0006/7 BAL:M27955 NA2SO4:H09600 ELGA WATER+NACL:G47617 MECL2:H29J00
S/S:AJ-F W:DB SHARE QC:511/512 TURBOVAP B/C:40C HEXANE:H08E12 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

QUENCE\D080809.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 GSV861				
4	Vial 4	LG34C1AA,MB				
5	Vial 5	LGW541AA,293-1				
6	Vial 6	LGW551AA,293-2				
7	Vial 7	LGW561AA,293-3				
8	Vial 8	LGW571AA,293-4				
9	Vial 9	LG8TE1AA,MB				
10	Vial 10	LGW581AA,293-5				
11	Vial 11	LGW591AA,293-6				
12	Vial 12	LGW6A1AA,293-7				
13	Vial 13	LGW6C1AA,293-8				
14	Vial 14	8141 CCV GSV861				
15	Vial 15	LHF291AA,MB				
16	Vial 16	LHF291AC,LCS				
17	Vial 17	LHF291AD,LCSD				
18	Vial 18	LG7QW1AA,166-1				
19	Vial 19	LHCVW1AA,166-2				
20	Vial 20	LHCX51AA,185-1				
21	Vial 21	LHF3A1AA,MB				
22	Vial 22	LHF3A1AC,LCS				
23	Vial 23	LHF3A1AD,LCSD				
24	Vial 24	LHC3A1AA,193-1				
25	Vial 25	LHC3E1AA,193-2				
26	Vial 26	LHC3G1AA,193-3				
27	Vial 27	LHC3J1AA,193-4				
28	Vial 28	LHC3M1AA,193-5				
29	Vial 29	LHC3P1AA,193-6				
30	Vial 30	LHC3Q1AA,193-7				
31	Vial 31	8141 CCV GSV861				
32	Vial 32	LHKE31AA,MB				
33	Vial 33	LHK3E1AC,LCS				
34	Vial 34	LHK3E1AD,LCSD				
35	Vial 35	LHHN71AA,268-1				
36	Vial 36	LHHN81AA,268-2				
37	Vial 37	LHHN91AA,268-3				
38	Vial 38	LHHPA1AA,268-4				
39	Vial 39	LHHPC1AA,268-5				
40	Vial 40	LHHPD1AA,268-6				
41	Vial 41	LHHPE1AA,268-7				
42	Vial 42	LHHPF1AA,268-8				
43	Vial 43	LHK3A1AA,MB				
44	Vial 44	LHK3A1AC,LCS				
45	Vial 45	LHK3A1AD,LCSD				
46	Vial 46	LHG7R1AA,197-1				
47	Vial 47	LHJ511AA,234-1				
48	Vial 48	8141 CCV GSV861				
49	Vial 49	LHFXQ1AA,MB				
50	Vial 50	LHFXQ1AC,LCS				
51	Vial 51	LHA071AA,332-1				
52	Vial 52	LHA071AD,332-1S				
53	Vial 53	LHA071AE,332-1D				
54	Vial 54	LHA081AA,332-2				
55	Vial 55	LHC041AA,187-1				
56	Vial 56	LHC1K1AA,187-2				
57	Vial 57	8141 CCV GSV861				
58	Vial 58	8141 L1 GSV862				
59	Vial 59	LG2M71AA,MB				

...QUENCE\D080809.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LG2M71AC,LCS				
61	Vial 61	LGQ171AQ,204-2				
62	Vial 62	LGQ171D0,204-2S				
63	Vial 63	LGQ171D1,204-2D				
64	Vial 64	LGQ2E1AQ,204-7				
65	Vial 65	LGQ2F1AQ,204-8				
66	Vial 66	LGQ2G1AQ,204-9				
67	Vial 67	LGQ2H1AQ,204-10				
68	Vial 68	LGQ2J1AQ,204-11				
69	Vial 69	8141 CCV GSV861				
70	Vial 70	LGQ2K1AQ,204-12				
71	Vial 71	LGQ2L1AQ,204-13				
72	Vial 72	LGQ2M1AQ,204-14				
73	Vial 73	LGQ2N1AQ,204-15				
74	Vial 74	LGT191AT,319-17				
75	Vial 75	LGT2A1A5,319-18				
76	Vial 76	LGT2C1A5,319-19				
77	Vial 77	LGT2D1AG,319-20				
78	Vial 78	LGT2F1AG,319-22				
79	Vial 79	8141 CCV GSV861				
80	Vial 80	8141 L1 GSV862				
81	Vial 2	HEXANE/ACETONE				

Sequence Table (Back Injector):

No entries - empty table!

GC SEMIVOLATILE
CONTINUING CALIBRATION DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.2258	11.0	15.0	
2	Dichlorvos	2.5000	2.7870	11.5	15.0	
3	Mevinphos	2.5000	2.7443	9.8	15.0	
4	Chlormefos	2.5000	2.0479	18.1	15.0	<-
5	Thionazin	2.5000	2.3435	6.3	15.0	
6	Demeton-O	0.8125	0.7897	2.8	15.0	
7	Ethoprop	2.5000	2.3220	7.1	15.0	
8	Naled	2.5000	1.9523	21.9	15.0	<-
9	Sulfotepp	2.5000	2.2640	9.4	15.0	
10	Phorate	2.5000	2.2807	8.8	15.0	
11	Dimethoate	2.5000	2.4396	2.4	15.0	
12	Demeton-S	1.7000	1.6288	4.2	15.0	
13	Simazine	2.5000	2.3033	7.9	15.0	
14	Atrazine	2.5000	2.2355	10.6	15.0	
15	propazine	2.5000	2.3108	7.6	15.0	
17	Disulfoton	2.5000	2.2697	9.2	15.0	
16	Diazinon	2.5000	2.4458	2.2	15.0	
18	Methyl Parathion	2.5000	2.3951	4.2	15.0	
19	Ronnel	2.5000	2.3906	4.4	15.0	
20	Malathion	2.5000	2.4038	3.8	15.0	
21	Fenthion	2.5000	2.3642	5.4	15.0	
22	Parathion	2.5000	2.3705	5.2	15.0	
23	Chlorpyrifos	2.5000	2.3100	7.6	15.0	
24	Trichloronate	2.5000	2.3144	7.4	15.0	
25	Anilazine	2.5000	1.5045	39.8	15.0	<-
148	Merphos-A (Merphos)	2.5000	0.6130	75.5	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.2778	8.9	15.0	
28	Tokuthion	2.5000	2.3012	8.0	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	9.1868	267.5	999.0	
29	Carbophenothion-methyl	2.5000	2.3650	5.4	15.0	
29	Fensulfothion	2.5000	2.4549	1.8	15.0	
30	Bolstar / Famphur	5.0000	4.6225	7.5	15.0	
32	Carbophenothion	2.5000	2.3569	5.7	15.0	
31	Triphenyl phosphate	2.5000	2.4113	3.5	15.0	
34	Phosmet	2.5000	2.3251	7.0	15.0	
32	EPN	2.5000	2.2961	8.2	15.0	
33	Azinphos-methyl	2.5000	2.4104	3.6	15.0	
38	Azinphos-ethyl	2.5000	2.3407	6.4	15.0	
36	Coumaphos	2.5000	2.3321	6.7	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	2.5000	2.4185	3.3	15.0	
27 Merphos	2.5000	1.9052	23.8	15.0	<-

Average %D = 16.4

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\031F3101.D
Lab Smp Id: 8141 CCV GSV861 Client Smp ID: 8141 CCV GSV861
Inj Date : 09-AUG-2009 09:41
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV861
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:50 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 31 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	4.276	4.267	(0.312)	1511498	2.50000	2.226
	2 Dichlorvos	5.855	5.865	(0.427)	839402	2.50000	2.787
	3 Mevinphos	9.395	9.407	(0.685)	393355	2.50000	2.744
$	4 Chlormefos	9.510	9.502	(0.693)	1129772	2.50000	2.048
	5 Thionazin	12.627	12.625	(0.920)	968769	2.50000	2.344
	6 Demeton-O	12.886	12.876	(0.939)	267963	0.81250	0.7897
	7 Ethoprop	13.207	13.205	(0.963)	862019	2.50000	2.322
	8 Naled	13.483	13.482	(0.983)	265195	2.50000	1.952
*	9 Tributylphosphate	13.721	13.714	(1.000)	715675	2.00000	
	10 Sulfotepp	14.151	14.143	(1.031)	1268566	2.50000	2.264
	11 Phorate	14.236	14.227	(1.038)	841468	2.50000	2.281
	12 Dimethoate	14.407	14.416	(1.050)	823573	2.50000	2.440
	13 Demeton-S	14.685	14.682	(1.070)	496632	1.70000	1.629
	14 Simazine	14.786	14.783	(1.078)	284410	2.50000	2.303
	15 Atrazine	15.003	14.997	(1.093)	357193	2.50000	2.236
	16 propazine	15.188	15.178	(1.107)	364498	2.50000	2.311
	17 Disulfoton	15.872	15.866	(0.586)	754464	2.50000	2.270
	18 Diazinon	15.939	15.934	(0.589)	869762	2.50000	2.446
	19 Methyl Parathion	16.841	16.829	(0.622)	620219	2.50000	2.395
	20 Ronnel	17.466	17.456	(0.645)	648531	2.50000	2.391
	21 Malathion	18.140	18.134	(0.670)	568931	2.50000	2.404
	22 Fenthion	18.296	18.284	(0.676)	655118	2.50000	2.364
	23 Parathion	18.401	18.392	(0.679)	661454	2.50000	2.370
	24 Chlorpyrifos	18.461	18.451	(0.682)	764368	2.50000	2.310
	25 Trichloronate	18.968	18.958	(0.700)	780571	2.50000	2.314
	26 Anilazine	19.363	19.345	(0.715)	33653	2.50000	1.504
	27 Merphos-A (Merphos)	19.811	19.804	(0.732)	118219	2.50000	0.6130
	28 Tetrachlorvinphos (Stirophos)	20.538	20.532	(0.758)	427681	2.50000	2.278
	29 Tokuthion	21.290	21.278	(0.786)	738148	2.50000	2.301
	30 Merphos-B (Merphos Oxone)	21.546	21.536	(0.796)	476723	2.50000	9.187(A)
	31 Carbophenothion-methyl	22.270	22.254	(0.822)	523271	2.50000	2.365
	32 Fensulfothion	22.470	22.465	(0.830)	490847	2.50000	2.455
	33 Bolstar / Famphur	23.642	23.627	(0.873)	1276242	5.00000	4.622

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.962	23.947	(0.885)	611712	2.50000	2.357
$	35 Triphenyl phosphate	25.286	25.270	(0.934)	497509	2.50000	2.411(A)
	36 Phosmet	25.783	25.769	(0.952)	489114	2.50000	2.325
	37 EPN	26.107	26.097	(0.964)	613089	2.50000	2.296
	38 Azinphos-methyl	26.593	26.584	(0.982)	478641	2.50000	2.410
*	39 TOCP	27.082	27.076	(1.000)	472782	2.00000	
	40 Azinphos-ethyl	27.178	27.172	(1.004)	575092	2.50000	2.341
	41 Coumaphos	27.698	27.694	(1.023)	475708	2.50000	2.332
M	42 Total Demeton				764595	2.50000	2.418
M	43 Merphos				594942	2.50000	1.905

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

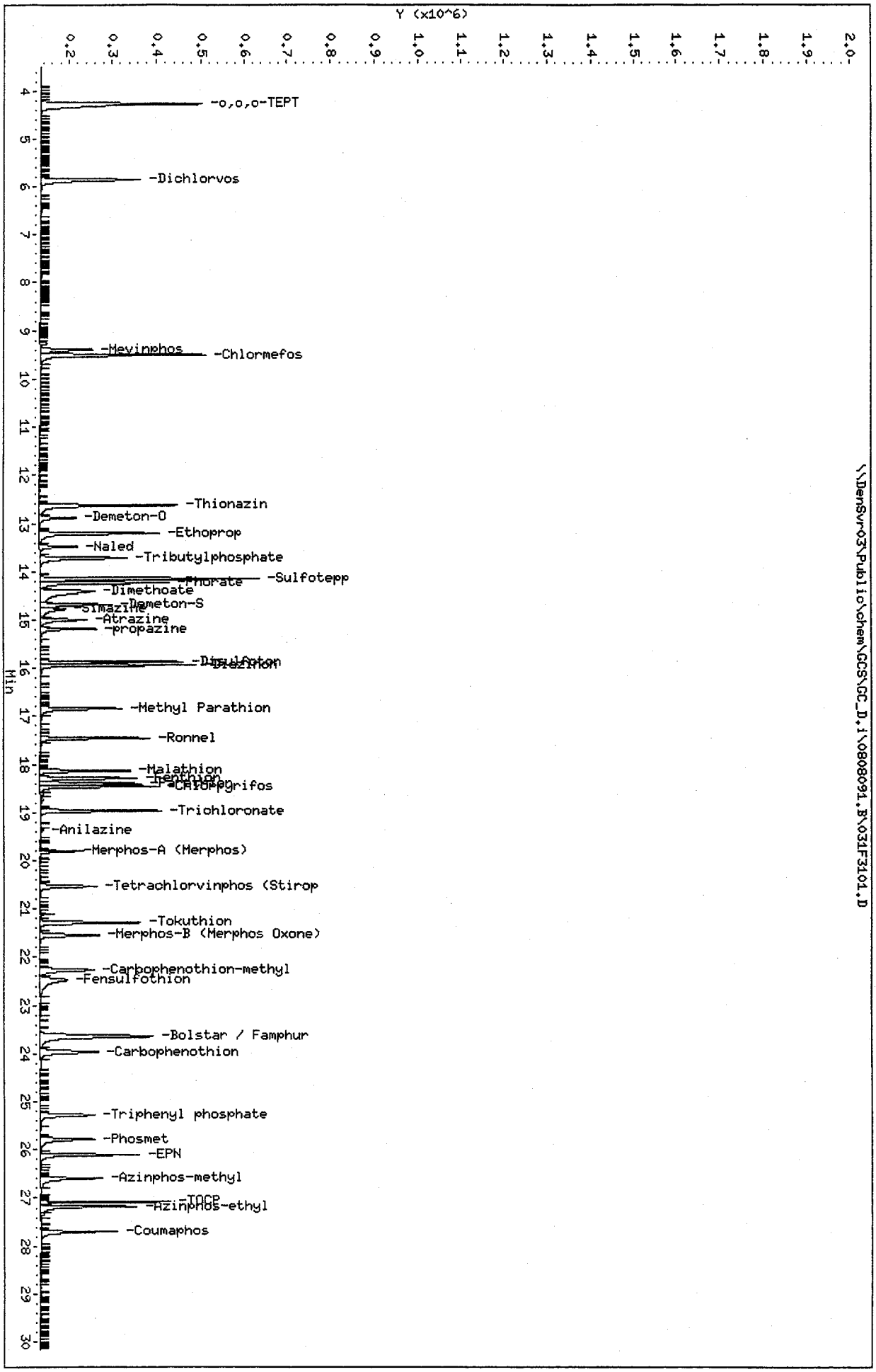
Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Lab Smp Id: 8141 CCV GSV861
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 08-AUG-2009
Calibration Time: 23:23
Client Smp ID: 8141 CCV GSV861
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	630137	315069	1260274	715675	13.57
39 TOCP	431059	215530	862118	472782	9.68

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.68	13.18	14.18	13.72	0.29
39 TOCP	27.08	26.58	27.58	27.08	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\0808091,B\031F3101,D
Date : 09-AUG-2009 09:41
Client ID: 8141 CCV GSV861
Sample Info: 8141 CCV GSV861
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.1948	12.2	15.0	
2	Dichlorvos	2.5000	3.0343	21.4	15.0	<-
3	Chlormefos	2.5000	2.2956	8.2	15.0	
4	Mevinphos	2.5000	2.7154	8.6	15.0	
5	Demeton-O	0.8125	0.7742	4.7	15.0	
6	Thionazin	2.5000	2.3959	4.2	15.0	
7	Ethoprop	2.5000	2.4346	2.6	15.0	
10	Naled	2.5000	2.0025	19.9	15.0	<-
145	Sulfotepp	2.5000	2.2144	11.4	15.0	
8	Phorate	2.5000	2.2619	9.5	15.0	
15	Demeton-S	1.7000	1.6662	2.0	15.0	
10	Simazine	2.5000	2.1943	12.2	15.0	
13	Atrazine / Propazine	5.0000	4.5293	9.4	15.0	
16	Dimethoate	2.5000	2.4449	2.2	15.0	
11	Diazinon	2.5000	2.2232	11.1	15.0	
14	Disulfoton	2.5000	2.2446	10.2	15.0	
23	Methyl Parathion	2.5000	2.5244	1.0	15.0	
17	Ronnel	2.5000	2.3201	7.2	15.0	
24	Malathion	2.5000	2.2455	10.2	15.0	
18	Chlorpyrifos	2.5000	2.3252	7.0	15.0	
20	Trichloronate	2.5000	2.1289	14.8	15.0	
26	Parathion	2.5000	2.2843	8.6	15.0	
19	Fenthion	2.5000	2.4066	3.7	15.0	
151	Merphos-A (Merphos)	2.5000	1.0970	56.1	999.0	
21	Anilazine	2.5000	0.5874	76.5	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2471	10.1	15.0	
25	Tokuthion	2.5000	2.2469	10.1	15.0	
148	Merphos-B (Merphos oxone)	2.5000	10.0626	302.5	999.0	
28	Carbophenothion methyl	2.5000	2.5167	0.7	15.0	
30	Fensulfothion	2.5000	2.3383	6.5	15.0	
28	Bolstar	2.5000	2.2277	10.9	15.0	
30	Carbophenothion	2.5000	2.3228	7.1	15.0	
33	Famphur	2.5000	2.4400	2.4	15.0	
29	Triphenyl phosphate	2.5000	2.3228	7.1	15.0	
32	EPN	2.5000	2.3319	6.7	15.0	
34	Phosmet	2.5000	2.2755	9.0	15.0	
34	Azinphos-methyl	2.5000	2.4504	2.0	15.0	
35	Azinphos-ethyl	2.5000	2.4370	2.5	15.0	
36	Coumaphos	2.5000	2.2424	10.3	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/031F3101.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 09:41
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4404	2.4	15.0
22 Merphos	2.5000	2.3638	5.4	15.0

Average %D = 17.8

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\031F3101.D
Lab Smp Id: 8141 CCV GSV861 Client Smp ID: 8141 CCV GSV861
Inj Date : 09-AUG-2009 09:41
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV861
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 31 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	6.768	6.758	(0.418)	1783995	2.50000	2.195
	2 Dichlorvos	8.961	8.952	(0.553)	1099384	2.50000	3.034
$	3 Chlormefos	12.894	12.885	(0.796)	1236467	2.50000	2.296
	4 Mevinphos	13.012	13.006	(0.803)	606917	2.50000	2.715
	5 Demeton-O	15.946	15.939	(0.984)	257493	0.81250	0.7742
	6 Thionazin	16.076	16.067	(0.992)	1180641	2.50000	2.396
*	7 Tributylphosphate	16.207	16.193	(1.000)	869227	2.00000	
	8 Ethoprop	16.344	16.332	(1.008)	1060919	2.50000	2.435
	9 Naled	16.930	16.921	(1.045)	313904	2.50000	2.002
	10 Sulfotepp	17.241	17.234	(1.064)	1607889	2.50000	2.214
	11 Phorate	17.277	17.268	(1.066)	830747	2.50000	2.262
	12 Demeton-S	17.976	17.962	(1.109)	556101	1.70000	1.666
	13 Simazine	18.377	18.368	(1.134)	209581	2.50000	2.194
	14 Atrazine / Propazine	18.446	18.434	(1.138)	903586	5.00000	4.529
	15 Dimethoate	18.580	18.569	(1.146)	1040465	2.50000	2.445
	16 Diazinon	18.976	18.967	(1.171)	957851	2.50000	2.223
	17 Disulfoton	19.239	19.231	(1.187)	976770	2.50000	2.245
	18 Methyl Parathion	21.144	21.132	(0.736)	767635	2.50000	2.524(A)
	19 Ronnel	21.232	21.222	(0.740)	844352	2.50000	2.320
	20 Malathion	22.506	22.492	(0.784)	658062	2.50000	2.246
	21 Chlorpyrifos	22.655	22.644	(0.789)	791840	2.50000	2.325
	22 Trichloronate	22.829	22.819	(0.795)	898043	2.50000	2.129
	23 Parathion	22.880	22.866	(0.797)	857351	2.50000	2.284
	24 Fenthion	22.954	22.942	(0.800)	896128	2.50000	2.406
	25 Merphos-A (Merphos)	23.487	23.472	(0.818)	267733	2.50000	1.097
	26 Anilazine	24.466	24.451	(0.852)	13303	2.50000	0.5874
	27 Tetrachlorvinphos (stirophos)	25.878	25.869	(0.901)	541066	2.50000	2.247
	28 Tokuthion	26.051	26.043	(0.907)	895411	2.50000	2.247
	29 Merphos-B (Merphos oxone)	26.185	26.176	(0.912)	607315	2.50000	10.06(A)
	30 Carbophenothion methyl	27.005	26.999	(0.941)	701117	2.50000	2.517
	31 Fensulfothion	27.243	27.237	(0.949)	566550	2.50000	2.338
	32 Bolstar	27.351	27.347	(0.953)	849759	2.50000	2.228
	33 Carbophenothion	27.464	27.460	(0.957)	740588	2.50000	2.323

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.649	27.644	(0.963)	710879	2.50000	2.440
$	35 Triphenyl phosphate	27.938	27.932	(0.973)	633318	2.50000	2.323
	36 EPN	28.243	28.240	(0.984)	729226	2.50000	2.332
	37 Phosmet	28.371	28.366	(0.988)	582690	2.50000	2.276
*	38 TOCP	28.709	28.705	(1.000)	630081	2.00000	
	39 Azinphos-methyl	28.821	28.816	(1.004)	525509	2.50000	2.450
	40 Azinphos-ethyl	29.131	29.127	(1.015)	556988	2.50000	2.437
	41 Coumaphos	29.458	29.453	(1.026)	461082	2.50000	2.242
M	42 Total Demeton				813594	2.50000	2.440
M	43 Merphos				875048	2.50000	2.364(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

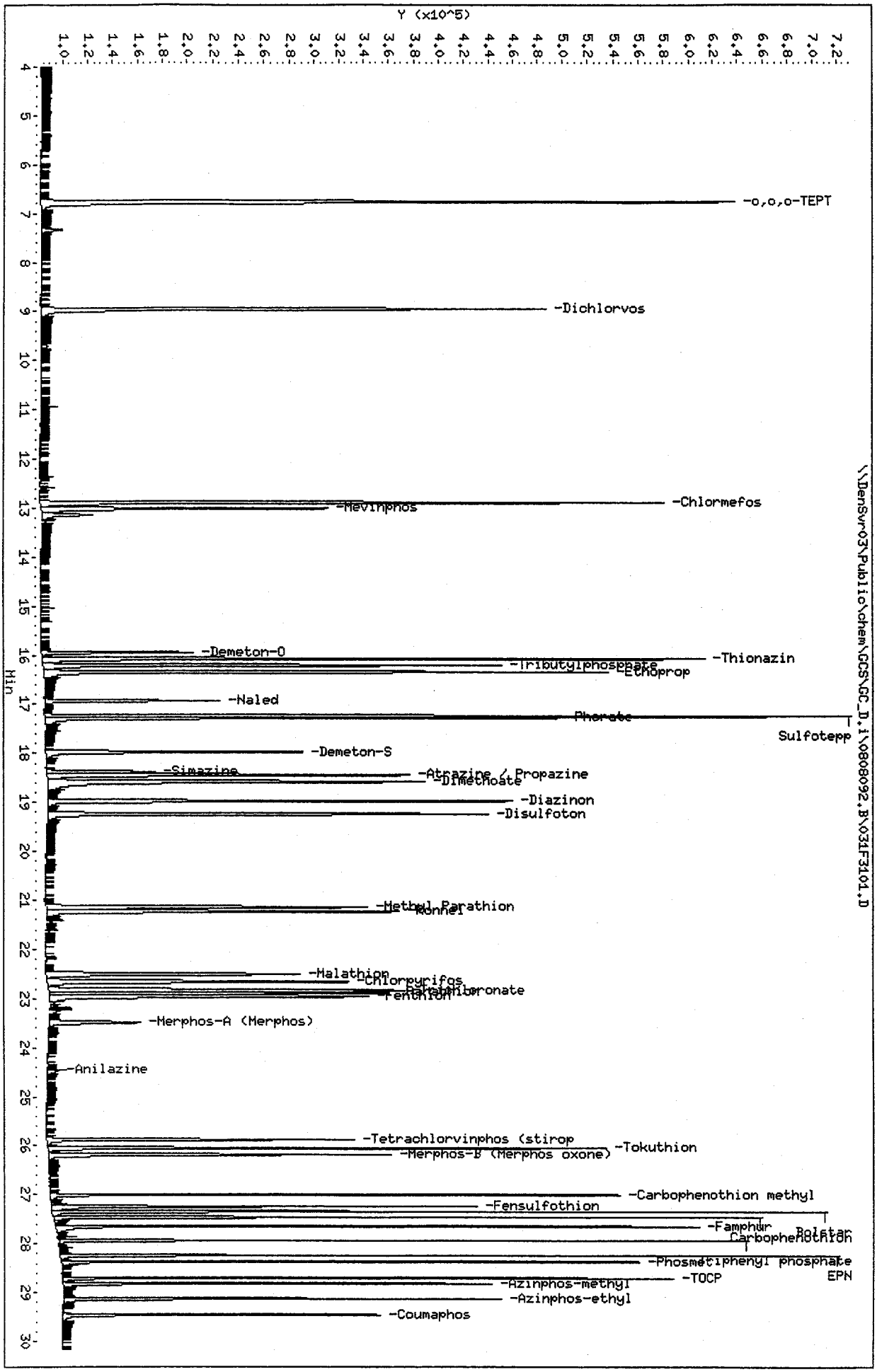
Instrument ID: GC_D.i
Lab File ID: 031F3101.D
Lab Smp Id: 8141 CCV GSV861
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 08-AUG-2009
Calibration Time: 23:23
Client Smp ID: 8141 CCV GSV861
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	742473	371237	1484946	869227	17.07
38 TOCP	535756	267878	1071512	630081	17.61

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.21	0.13
38 TOCP	28.71	28.21	29.21	28.71	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\0808092.B\031F3101.D
Date : 09-AUG-2009 09:41
Client ID: 8141 CCV GSV861
Sample Info: 8141 CCV GSV861
Column phase: RTx-OPPest

Instrument: GC_D.i
Operator: MPK/TLM
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3366	6.5	15.0	
2	Dichlorvos	2.5000	2.7926	11.7	15.0	
3	Mevinphos	2.5000	2.8105	12.4	15.0	
4	Chlormefos	2.5000	2.1455	14.2	15.0	
5	Thionazin	2.5000	2.4577	1.7	15.0	
6	Demeton-O	0.8125	0.7711	5.1	15.0	
7	Ethoprop	2.5000	2.3853	4.6	15.0	
8	Naled	2.5000	1.8917	24.3	15.0	<-
9	Sulfotepp	2.5000	2.3936	4.3	15.0	
10	Phorate	2.5000	2.3231	7.1	15.0	
11	Dimethoate	2.5000	2.4617	1.5	15.0	
12	Demeton-S	1.7000	1.6981	0.1	15.0	
13	Simazine	2.5000	2.3610	5.6	15.0	
14	Atrazine	2.5000	2.3957	4.2	15.0	
15	propazine	2.5000	2.4797	0.8	15.0	
17	Disulfoton	2.5000	2.3369	6.5	15.0	
16	Diazinon	2.5000	2.4742	1.0	15.0	
18	Methyl Parathion	2.5000	2.4393	2.4	15.0	
19	Ronnel	2.5000	2.3569	5.7	15.0	
20	Malathion	2.5000	2.3811	4.8	15.0	
21	Fenthion	2.5000	2.3570	5.7	15.0	
22	Parathion	2.5000	2.3366	6.5	15.0	
23	Chlorpyrifos	2.5000	2.2921	8.3	15.0	
24	Trichloronate	2.5000	2.2284	10.9	15.0	
25	Anilazine	2.5000	1.3600	45.6	15.0	<-
148	Merphos-A (Merphos)	2.5000	1.0816	56.7	999.0	
26	Tetrachlorvinphos (Stirophos)	2.5000	2.1967	12.1	15.0	
28	Tokuthion	2.5000	2.2720	9.1	15.0	
149	Merphos-B (Merphos Oxone)	2.5000	10.0910	303.6	999.0	
29	Carbophenothion-methyl	2.5000	2.3476	6.1	15.0	
29	Fensulfothion	2.5000	2.4620	1.5	15.0	
30	Bolstar / Famphur	5.0000	4.6721	6.6	15.0	
32	Carbophenothion	2.5000	2.3723	5.1	15.0	
31	Triphenyl phosphate	2.5000	2.4591	1.6	15.0	
34	Phosmet	2.5000	2.2985	8.1	15.0	
32	EPN	2.5000	2.3327	6.7	15.0	
33	Azinphos-methyl	2.5000	2.3458	6.2	15.0	
38	Azinphos-ethyl	2.5000	2.3038	7.8	15.0	
36	Coumaphos	2.5000	2.2047	11.8	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4692	1.2	15.0
27 Merphos	2.5000	2.3333	6.7	15.0

Average %D = 15.9

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\048F4801.D
Lab Smp Id: 8141 CCV GSV861 Client Smp ID: 8141 CCV GSV861
Inj Date : 09-AUG-2009 20:00
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV861
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:51 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 48 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	4.280	4.267	(0.312)	1844066	2.50000	2.337 (M)
	2 Dichlorvos	5.869	5.865	(0.428)	982521	2.50000	2.793
	3 Mevinphos	9.406	9.407	(0.686)	472488	2.50000	2.810
$	4 Chlormefos	9.515	9.502	(0.694)	1382633	2.50000	2.145
	5 Thionazin	12.631	12.625	(0.921)	1188408	2.50000	2.458
	6 Demeton-O	12.887	12.876	(0.939)	305818	0.81250	0.7711
	7 Ethoprop	13.208	13.205	(0.963)	1035510	2.50000	2.385
	8 Naled	13.485	13.482	(0.983)	299016	2.50000	1.892
*	9 Tributylphosphate	13.718	13.714	(1.000)	836019	2.00000	
	10 Sulfotepp	14.154	14.143	(1.032)	1566684	2.50000	2.394
	11 Phorate	14.237	14.227	(1.038)	1001240	2.50000	2.323
	12 Dimethoate	14.410	14.416	(1.050)	972237	2.50000	2.462
	13 Demeton-S	14.684	14.682	(1.070)	605079	1.70000	1.698
	14 Simazine	14.786	14.783	(1.078)	339710	2.50000	2.361
	15 Atrazine	15.003	14.997	(1.094)	449977	2.50000	2.396
	16 propazine	15.186	15.178	(1.107)	456914	2.50000	2.480
	17 Disulfoton	15.874	15.866	(0.586)	913689	2.50000	2.337
	18 Diazinon	15.941	15.934	(0.589)	1033260	2.50000	2.474
	19 Methyl Parathion	16.843	16.829	(0.622)	742581	2.50000	2.439
	20 Ronnel	17.467	17.456	(0.645)	751232	2.50000	2.357
	21 Malathion	18.144	18.134	(0.670)	662142	2.50000	2.381
	22 Fenthion	18.296	18.284	(0.676)	767309	2.50000	2.357
	23 Parathion	18.403	18.392	(0.680)	765118	2.50000	2.337
	24 Chlorpyrifos	18.461	18.451	(0.682)	891732	2.50000	2.292
	25 Trichloronate	18.970	18.958	(0.701)	883058	2.50000	2.228
	26 Anilazine	19.369	19.345	(0.715)	34354	2.50000	1.360
	27 Merphos-A (Merphos)	19.812	19.804	(0.732)	266759	2.50000	1.082
	28 Tetrachlorvinphos (Stirophos)	20.539	20.532	(0.758)	483880	2.50000	2.197
	29 Tokuthion	21.292	21.278	(0.786)	856302	2.50000	2.272
	30 Merphos-B (Merphos Oxone)	21.547	21.536	(0.796)	589354	2.50000	10.09 (A)
	31 Carbophenothion-methyl	22.271	22.254	(0.822)	610084	2.50000	2.348
	32 Fensulfothion	22.480	22.465	(0.830)	578608	2.50000	2.462
	33 Bolstar / Famphur	23.641	23.627	(0.873)	1515983	5.00000	4.672

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.969	23.947	(0.885)	723410	2.50000	2.372
$	35 Triphenyl phosphate	25.286	25.270	(0.934)	596126	2.50000	2.459(A)
	36 Phosmet	25.786	25.769	(0.952)	567789	2.50000	2.298
	37 EPN	26.109	26.097	(0.964)	731808	2.50000	2.333
	38 Azinphos-methyl	26.598	26.584	(0.982)	546280	2.50000	2.346
*	39 TOCP	27.081	27.076	(1.000)	555487	2.00000	
	40 Azinphos-ethyl	27.179	27.172	(1.004)	665056	2.50000	2.304
	41 Coumaphos	27.705	27.694	(1.023)	527387	2.50000	2.205
M	42 Total Demeton				910897	2.50000	2.469
M	43 Merphos				856113	2.50000	2.333

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

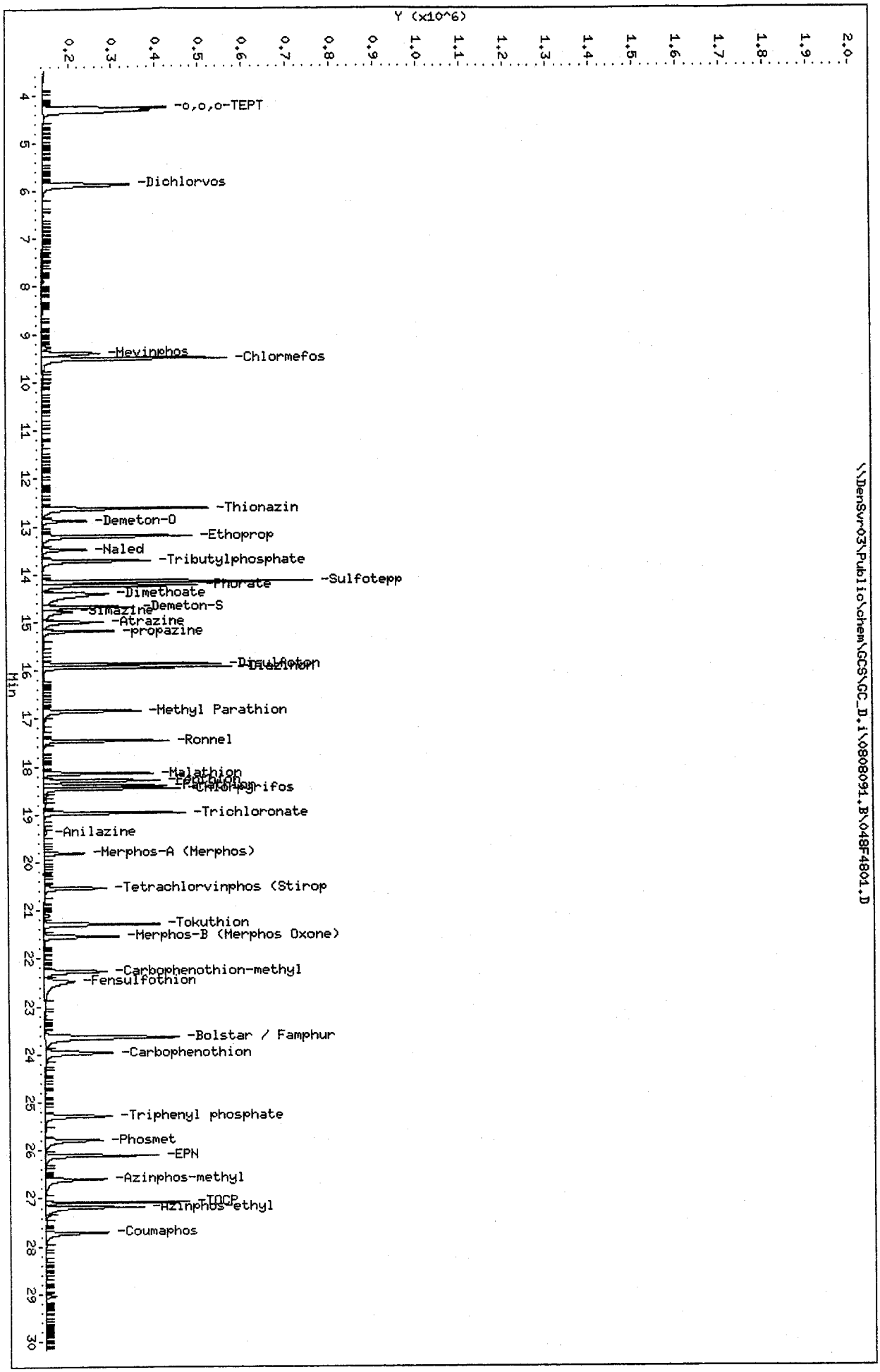
Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Lab Smp Id: 8141 CCV GSV861
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: 8141 CCV GSV861
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	715675	357838	1431350	836019	16.82
39 TOCP	472782	236391	945564	555487	17.49

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.72	13.22	14.22	13.72	-0.02
39 TOCP	27.08	26.58	27.58	27.08	-0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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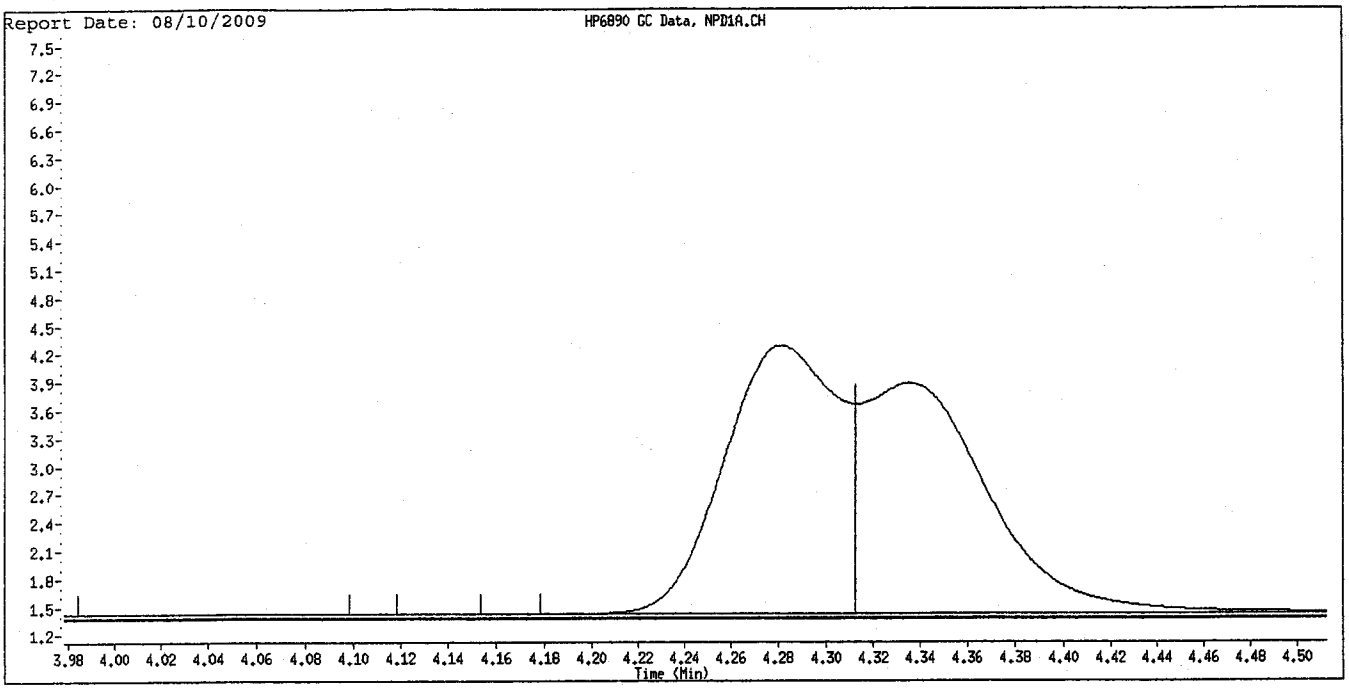
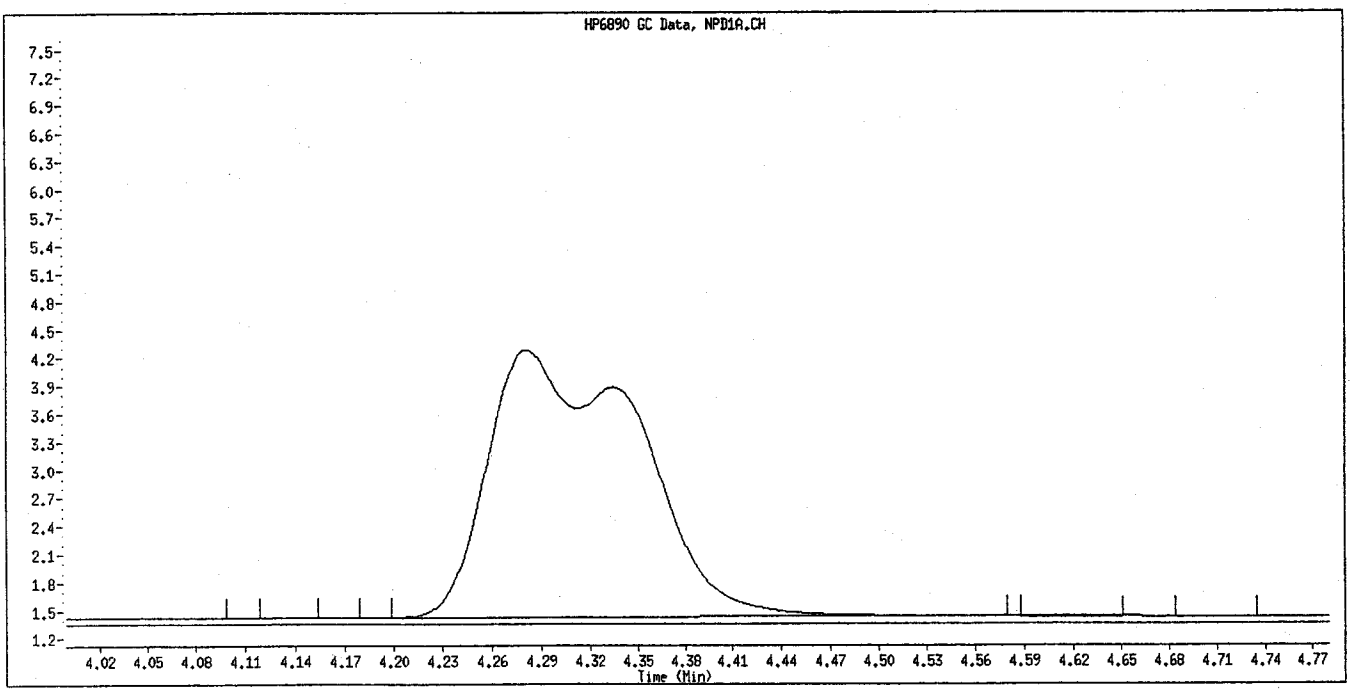
Date : 09-AUG-2009 20:00
Client ID: 8141 CCV GSV861
Sample Info: 8141 CCV GSV861
Column phase: RTx-1MS
Instrument: GC_D.i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\048F4801.D
Y (x10^6)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Tributylphosphate
-Phorate
-Sulfotepp
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-propazine
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-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

Data File Name: 048F4801.D
Inj. Date and Time: 09-AUG-2009 20:00
Instrument ID: GC_D.i
Client ID: 8141 CCV GSV861
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

JC 8/16/09

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.5000	2.3083	7.7	15.0	
2	Dichlorvos	2.5000	3.1206	24.8	15.0	<-
3	Chlormefos	2.5000	2.3838	4.6	15.0	
4	Mevinphos	2.5000	2.8646	14.6	15.0	
5	Demeton-O	0.8125	0.8017	1.3	15.0	
6	Thionazin	2.5000	2.5263	1.1	15.0	
7	Ethoprop	2.5000	2.5050	0.2	15.0	
10	Naled	2.5000	2.1149	15.4	15.0	<-
145	Sulfotepp	2.5000	2.3218	7.1	15.0	
8	Phorate	2.5000	2.3044	7.8	15.0	
15	Demeton-S	1.7000	1.6959	0.2	15.0	
10	Simazine	2.5000	2.2676	9.3	15.0	
13	Atrazine / Propazine	5.0000	4.7470	5.1	15.0	
16	Dimethoate	2.5000	2.6299	5.2	15.0	
11	Diazinon	2.5000	2.3437	6.3	15.0	
14	Disulfoton	2.5000	2.2859	8.6	15.0	
23	Methyl Parathion	2.5000	2.6211	4.8	15.0	
17	Ronnel	2.5000	2.3959	4.2	15.0	
24	Malathion	2.5000	2.3378	6.5	15.0	
18	Chlorpyrifos	2.5000	2.3965	4.1	15.0	
20	Trichloronate	2.5000	2.1863	12.5	15.0	
26	Parathion	2.5000	2.3639	5.4	15.0	
19	Fenthion	2.5000	2.4501	2.0	15.0	
151	Merphos-A (Merphos)	2.5000	1.0763	56.9	999.0	
21	Anilazine	2.5000	0.8307	66.8	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.5000	2.2724	9.1	15.0	
25	Tokuthion	2.5000	2.2652	9.4	15.0	
148	Merphos-B (Merphos oxone)	2.5000	11.2942	351.8	999.0	
28	Carbophenothion methyl	2.5000	2.5115	0.5	15.0	
30	Fensulfothion	2.5000	2.3747	5.0	15.0	
28	Bolstar	2.5000	2.2463	10.1	15.0	
30	Carbophenothion	2.5000	2.3237	7.1	15.0	
33	Famphur	2.5000	2.5782	3.1	15.0	
29	Triphenyl phosphate	2.5000	2.4132	3.5	15.0	
32	EPN	2.5000	2.3664	5.3	15.0	
34	Phosmet	2.5000	2.3119	7.5	15.0	
34	Azinphos-methyl	2.5000	2.3745	5.0	15.0	
35	Azinphos-ethyl	2.5000	2.4542	1.8	15.0	
36	Coumaphos	2.5000	2.2102	11.6	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B/048F4801.D
Report Date: 08/10/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Analysis Type: NONE

Injection Date: 09-AUG-2009 20:00
Lab Sample ID: 8141 CCV GSV861
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.5000	2.4977	0.1	15.0
22 Merphos	2.5000	2.4525	1.9	15.0

Average %D = 17.4

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\048F4801.D
Lab Smp Id: 8141 CCV GSV861 Client Smp ID: 8141 CCV GSV861
Inj Date : 09-AUG-2009 20:00
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 CCV GSV861
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 48 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	6.779	6.758	(0.418)	2031389	2.50000	2.308
	2 Dichlorvos	8.965	8.952	(0.553)	1224135	2.50000	3.120
$	3 Chlormefos	12.896	12.885	(0.796)	1388626	2.50000	2.384
	4 Mevinphos	13.014	13.006	(0.803)	693817	2.50000	2.865
	5 Demeton-O	15.947	15.939	(0.984)	288693	0.81250	0.8017
	6 Thionazin	16.075	16.067	(0.992)	1347804	2.50000	2.526
*	7 Tributylphosphate	16.203	16.193	(1.000)	941095	2.00000	
	8 Ethoprop	16.342	16.332	(1.009)	1179632	2.50000	2.505
	9 Naled	16.929	16.921	(1.045)	361228	2.50000	2.115
	10 Sulfotepp	17.242	17.234	(1.064)	1825339	2.50000	2.322
	11 Phorate	17.279	17.268	(1.066)	916348	2.50000	2.304
	12 Demeton-S	17.972	17.962	(1.109)	612831	1.70000	1.696
	13 Simazine	18.378	18.368	(1.134)	235631	2.50000	2.268
	14 Atrazine / Propazine	18.443	18.434	(1.138)	1025328	5.00000	4.747
	15 Dimethoate	18.579	18.569	(1.147)	1213873	2.50000	2.630
	16 Diazinon	18.977	18.967	(1.171)	1093243	2.50000	2.344
	17 Disulfoton	19.240	19.231	(1.187)	1076999	2.50000	2.286
	18 Methyl Parathion	21.143	21.132	(0.736)	863303	2.50000	2.621(A)
	19 Ronnel	21.232	21.222	(0.740)	943200	2.50000	2.396
	20 Malathion	22.504	22.492	(0.784)	741572	2.50000	2.338
	21 Chlorpyrifos	22.658	22.644	(0.789)	883285	2.50000	2.396
	22 Trichloronate	22.834	22.819	(0.795)	998443	2.50000	2.186
	23 Parathion	22.879	22.866	(0.797)	956382	2.50000	2.364
	24 Fenthion	22.954	22.942	(0.800)	986732	2.50000	2.450
	25 Merphos-A (Merphos)	23.485	23.472	(0.818)	283430	2.50000	1.076
	26 Anilazine	24.470	24.451	(0.852)	22002	2.50000	0.8307
	27 Tetrachlorvinphos (stirophos)	25.876	25.869	(0.901)	592117	2.50000	2.272
	28 Tokuthion	26.050	26.043	(0.907)	976463	2.50000	2.265
	29 Merphos-B (Merphos oxone)	26.182	26.176	(0.912)	698615	2.50000	11.29(A)
	30 Carbophenothion methyl	27.004	26.999	(0.941)	756864	2.50000	2.512
	31 Fensulfothion	27.242	27.237	(0.949)	622777	2.50000	2.375
	32 Bolstar	27.350	27.347	(0.953)	926919	2.50000	2.246
	33 Carbophenothion	27.463	27.460	(0.957)	801430	2.50000	2.324

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.648	27.644	(0.963)	812540	2.50000	2.578
$	35 Triphenyl phosphate	27.937	27.932	(0.973)	711749	2.50000	2.413
	36 EPN	28.242	28.240	(0.984)	800476	2.50000	2.366
	37 Phosmet	28.369	28.366	(0.988)	640656	2.50000	2.312
*	38 TOCP	28.708	28.705	(1.000)	681586	2.00000	
	39 Azinphos-methyl	28.820	28.816	(1.004)	550457	2.50000	2.374
	40 Azinphos-ethyl	29.133	29.127	(1.015)	606771	2.50000	2.454
	41 Coumaphos	29.460	29.453	(1.026)	491471	2.50000	2.210
M	42 Total Demeton				901524	2.50000	2.498
M	43 Merphos				982045	2.50000	2.452(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

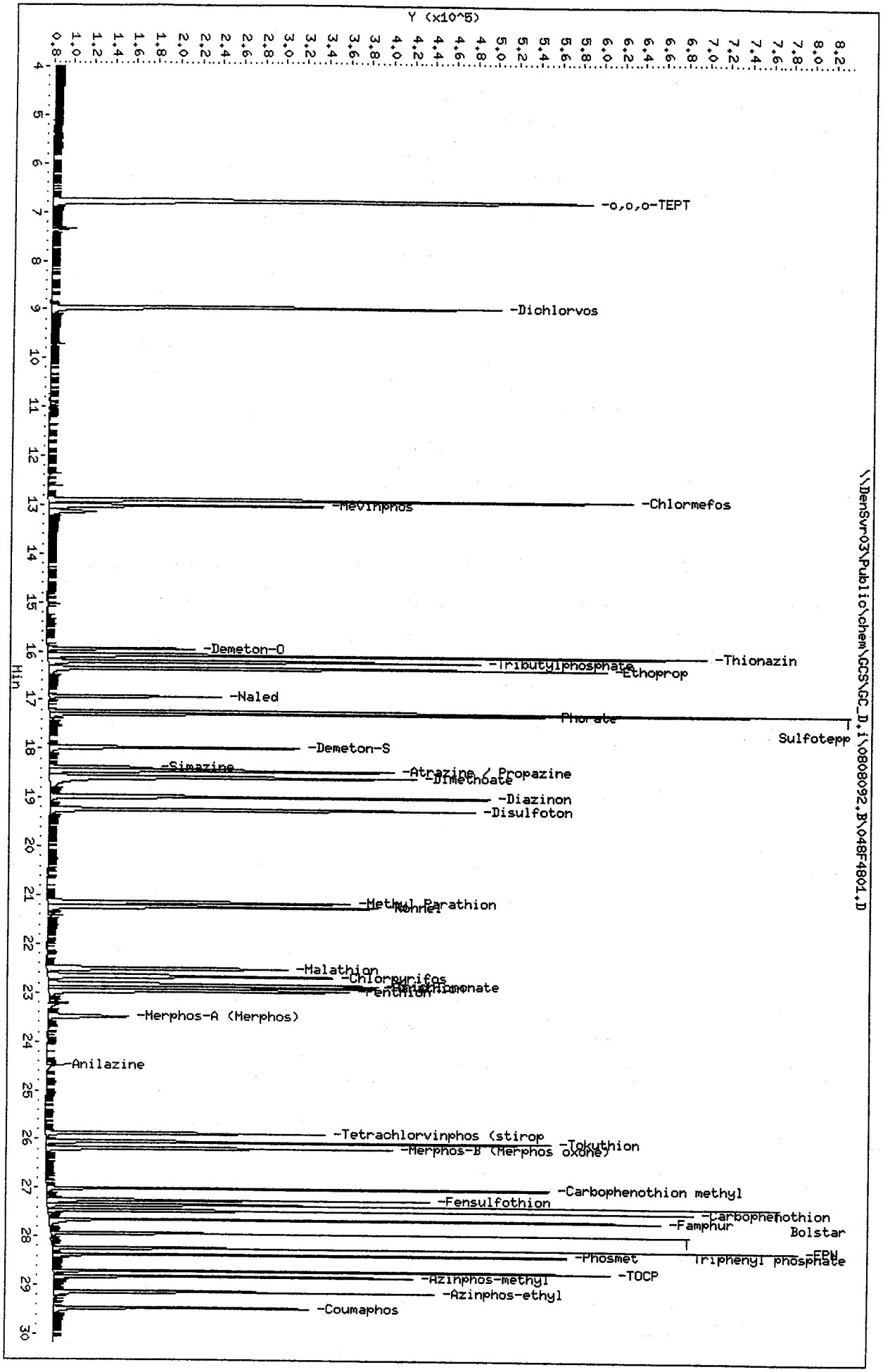
Instrument ID: GC_D.i
Lab File ID: 048F4801.D
Lab Smp Id: 8141 CCV GSV861
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: 8141 CCV GSV861
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	869227	434614	1738454	941095	8.27
38 TOCP	630081	315041	1260162	681586	8.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.21	15.71	16.71	16.20	-0.03
38 TOCP	28.71	28.21	29.21	28.71	-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\0808092,B\048F4801,D
Date : 09-AUG-2009 20:00
Client ID: 8141 CCV GSV861
Sample Info: 8141 CCV GSV861
Column phase: RTx-OPPest

Instrument: GC_D,i
Operator: MPK/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\0808091.B\043F4301.D
Lab Smp Id: LHK3A1AA Client Smp ID: BLANK
Inj Date : 09-AUG-2009 16:58
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AA,MB
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:50 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 43 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	9.403	9.407	(0.684)	305	0.40322	0.8064
$ 4	Chlormefos	9.511	9.502	(0.692)	471071	0.69108	1.382
5	Thionazin	12.638	12.625	(0.920)	71	0.06772	0.1354
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	13.148	13.205	(0.957)	286	0.08878	0.1776
8	Naled	13.514	13.482	(0.984)	182	0.17425	0.3485
* 9	Tributylphosphate	13.738	13.714	(1.000)	884286	2.00000	
10	Sulfotepp	Compound Not Detected.					
11	Phorate	Compound Not Detected.					
12	Dimethoate	14.407	14.416	(1.049)	1387	0.35618	0.7124
13	Demeton-S	Compound Not Detected.					
14	Simazine	Compound Not Detected.					
15	Atrazine	15.035	14.997	(1.094)	456	0.19435	0.3887
16	propazine	Compound Not Detected.					
17	Disulfoton	15.854	15.866	(0.585)	272	0.08306	0.1661
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	Compound Not Detected.					
	25 Trichloronate	Compound Not Detected.					
	26 Anilazine	19.359	19.345	(0.715)	194	0.40764	0.8153
	27 Merphos-A (Merphos)	19.796	19.804	(0.731)	137	0.10438	0.2088
	28 Tetrachlorvinphos (Stirophos)	20.537	20.532	(0.758)	208	0.09143	0.1828
	29 Tokuthion	Compound Not Detected.					
	30 Merphos-B (Merphos Oxone)	21.543	21.536	(0.795)	231	0.12736	0.2547
	31 Carbophenothion-methyl	22.258	22.254	(0.822)	121	0.10015	0.2003
	32 Fensulfothion	22.470	22.465	(0.829)	173	0.30365	0.6073
	33 Bolstar / Famphur	23.628	23.627	(0.872)	153	0.11473	0.2294
	34 Carbophenothion	Compound Not Detected.					
$	35 Triphenyl phosphate	25.320	25.270	(0.935)	211239	0.78651	1.573
	36 Phosmet	25.783	25.769	(0.952)	1021	0.11180	0.2236
	37 EPN	Compound Not Detected.					
	38 Azinphos-methyl	Compound Not Detected.					
*	39 TOCP	27.089	27.076	(1.000)	615429	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos				368	9e-004	0.001810

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 043F4301.D
Lab Smp Id: LHK3A1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	715675	357838	1431350	884286	23.56
39 TOCP	472782	236391	945564	615429	30.17

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.72	13.22	14.22	13.74	0.13
39 TOCP	27.08	26.58	27.58	27.09	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.

TestAmerica

RECOVERY REPORT

Client Name:
Client SDG: D9H050000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LHK3A1AA
Client Smp ID: BLANK
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: BLANK
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

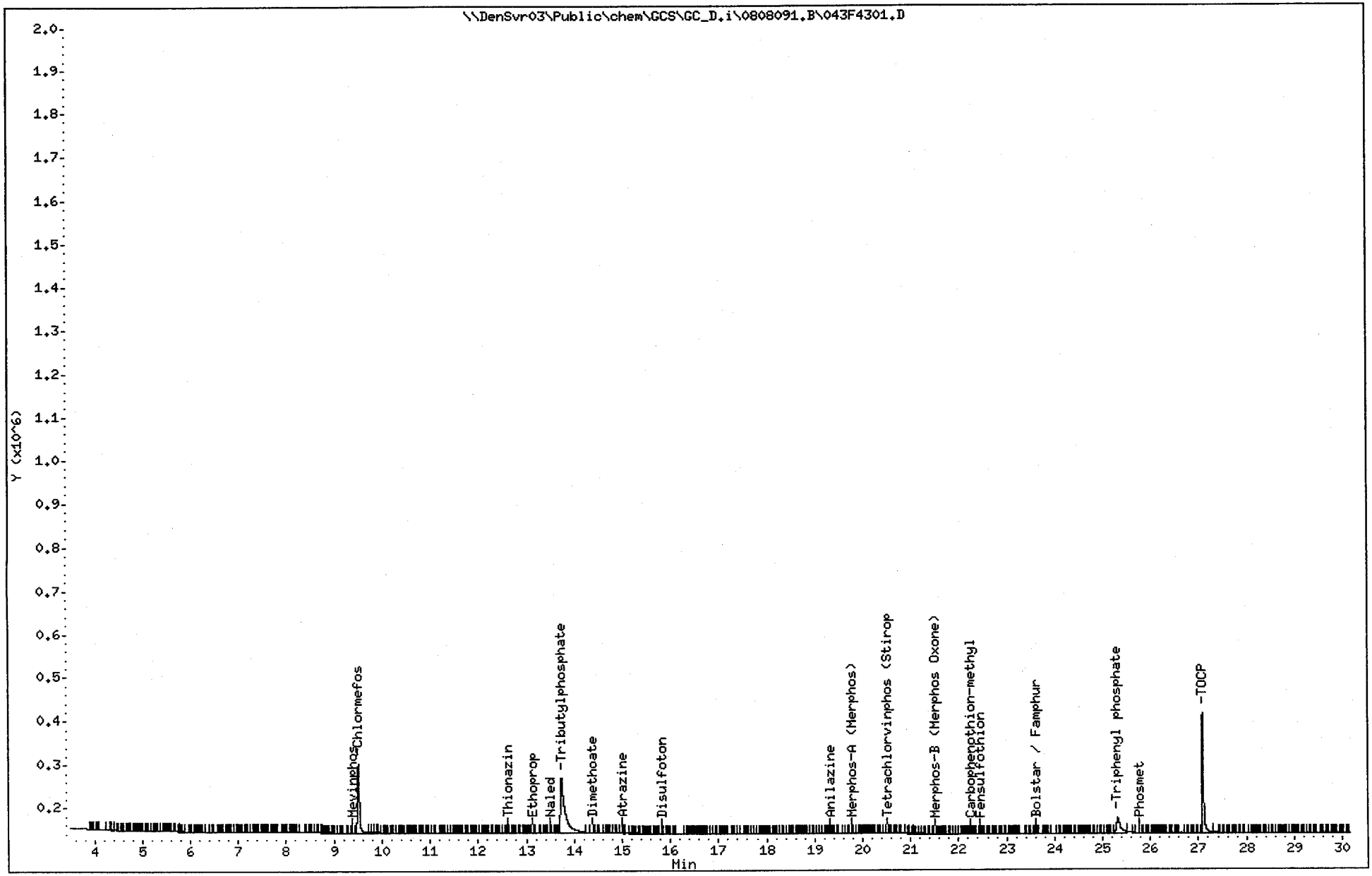
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.382	69.11	48-114
$ 35 Triphenyl phosphat	2.000	1.573	78.65	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\043F4301.D
Date : 09-AUG-2009 16:58
Client ID: BLANK
Sample Info: LHK3A1AA,MB

Instrument: GC_D.i

Operator: MPK/TLW
Column diameter: 0.32

Column phase: RTx-1MS



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\043F4301.D
Lab Smp Id: LHK3A1AA Client Smp ID: BLANK
Inj Date : 09-AUG-2009 16:58
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AA,MB
Misc Info :
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 43 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	12.895	12.885	(0.795)	536754	0.81679	1.634
4	Mevinphos	12.997	13.006	(0.802)	1667	0.05116	0.1023
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
* 7	Tributylphosphate	16.213	16.193	(1.000)	1005567	2.00000	
8	Ethoprop	Compound Not Detected.					
9	Naled	16.944	16.921	(1.045)	62	0.17018	0.3404
10	Sulfotepp	17.260	17.234	(1.065)	83	1e-004	0.0001976(a)
11	Phorate	Compound Not Detected.					
12	Demeton-S	Compound Not Detected.					
13	Simazine	18.384	18.368	(1.134)	73	0.28761	0.5752
14	Atrazine / Propazine	Compound Not Detected.					
15	Dimethoate	Compound Not Detected.					
16	Diazinon	Compound Not Detected.					
17	Disulfoton	Compound Not Detected.					
18	Methyl Parathion	21.163	21.132	(0.737)	82	0.08676	0.1735(a)
19	Ronnel	Compound Not Detected.					
20	Malathion	22.485	22.492	(0.783)	67	0.03648	0.07296(a)
21	Chlorpyrifos	Compound Not Detected.					
22	Trichloronate	22.852	22.819	(0.796)	93	0.06488	0.1298

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.860	22.866	(0.796)	62	0.13136	0.2627(a)
	24 Fenthion	Compound Not Detected.					
	25 Merphos-A (Merphos)	23.493	23.472	(0.818)	76	0.12753	0.2551
	26 Anilazine	Compound Not Detected.					
	27 Tetrachlorvinphos (stirophos)	Compound Not Detected.					
	28 Tokuthion	Compound Not Detected.					
	29 Merphos-B (Merphos oxone)	26.138	26.176	(0.910)	69	0.12963	0.2592(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	27.942	27.932	(0.973)	291932	0.91141	1.823
	36 EPN	Compound Not Detected.					
	37 Phosmet	28.366	28.366	(0.988)	79	0.05645	0.1129
*	38 TOCP	28.713	28.705	(1.000)	740213	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: 043F4301.D
Lab Smp Id: LHK3A1AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: BLANK
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	869227	434614	1738454	1005567	15.69
38 TOCP	630081	315041	1260162	740213	17.48

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.21	15.71	16.71	16.21	0.03
38 TOCP	28.71	28.21	29.21	28.71	0.01

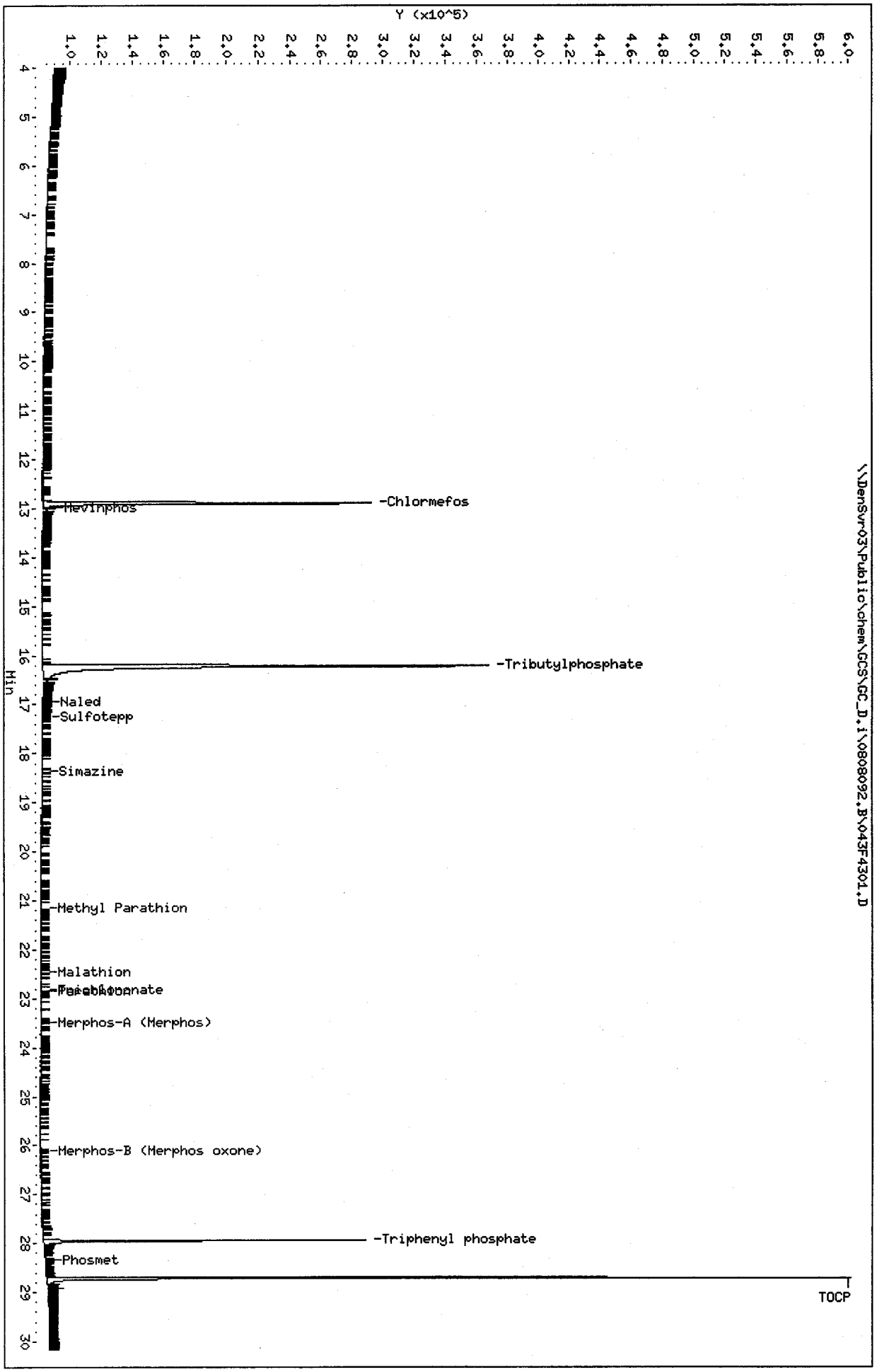
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9H050000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LHK3A1AA Client Smp ID: BLANK
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: BLANK
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	2.000	1.634	81.68	48-114
$ 35 Triphenyl phosphat	2.000	1.823	91.14	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\043F4301.D
Date : 09-AUG-2009 16:58
Client ID: BLANK
Sample Info: LHK3A1AA,MB
Column phase: RTx-OPPest

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

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\044F4401.D
Lab Smp Id: LHK3A1AC Client Smp ID: LCS
Inj Date : 09-AUG-2009 17:35
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AC,LCS
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:50 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 44 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	4.292	4.267	(0.313)	1772769	1.90236	3.805
	2 Dichlorvos	5.876	5.865	(0.428)	845923	2.07884	4.158
	3 Mevinphos	9.416	9.407	(0.686)	275053	1.61413	3.228
$	4 Chlormefos	9.516	9.502	(0.693)	587269	0.78791	1.576
	5 Thionazin	12.633	12.625	(0.921)	946539	1.71348	3.427
	6 Demeton-O	12.888	12.876	(0.939)	613458	1.35167	2.703
	7 Ethoprop	13.212	13.205	(0.963)	843756	1.70654	3.413
	8 Naled	13.489	13.482	(0.983)	239637	1.37151	2.743
*	9 Tributylphosphate	13.724	13.714	(1.000)	966932	2.00000	
	10 Sulfotepp	14.155	14.143	(1.031)	1063521	1.40487	2.810
	11 Phorate	14.238	14.227	(1.037)	627606	1.25906	2.518
	12 Dimethoate	14.427	14.416	(1.051)	657291	1.58574	3.171
	13 Demeton-S	14.693	14.682	(1.071)	61125	0.16303	0.3261(R)
	14 Simazine	14.794	14.783	(1.078)	303275	1.78552	3.571
	15 Atrazine	15.008	14.997	(1.094)	367747	1.74926	3.498
	16 propazine	15.190	15.178	(1.107)	373984	1.75487	3.510
	17 Disulfoton	15.876	15.866	(0.586)	671807	1.63782	3.276
	18 Diazinon	15.943	15.934	(0.589)	806913	1.78445	3.569
	19 Methyl Parathion	16.847	16.829	(0.622)	571146	1.78063	3.561
	20 Ronnel	17.468	17.456	(0.645)	587313	1.72897	3.458
	21 Malathion	18.146	18.134	(0.670)	440745	1.48714	2.974
	22 Fenthion	18.297	18.284	(0.676)	576641	1.67964	3.359

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	18.406	18.392	(0.680)	543443	1.61773	3.235
	24 Chlorpyrifos	18.466	18.451	(0.682)	737111	1.72876	3.458
	25 Trichloronate	18.973	18.958	(0.701)	636806	1.50788	3.016
	26 Anilazine	19.373	19.345	(0.715)	29181	1.16569	2.331
	27 Merphos-A (Merphos)	19.805	19.804	(0.731)	760	0.10654	0.2131
	28 Tetrachlorvinphos (Stirophos)	20.547	20.532	(0.759)	360805	1.56417	3.128
	29 Tokuthion	21.296	21.278	(0.786)	651344	1.62161	3.243
	30 Merphos-B (Merphos Oxone)	21.550	21.536	(0.796)	612230	9.62509	19.25(A)
	31 Carbophenothion-methyl	22.282	22.254	(0.823)	426101	1.57285	3.146
	32 Fensulfothion	22.491	22.465	(0.830)	412985	1.74893	3.498
	33 Bolstar / Famphur	23.650	23.627	(0.873)	1161797	3.39174	6.783
	34 Carbophenothion	23.971	23.947	(0.885)	536606	1.65114	3.302
$	35 Triphenyl phosphate	25.291	25.270	(0.934)	223761	0.86610	1.732
	36 Phosmet	25.791	25.769	(0.952)	441698	1.70702	3.414
	37 EPN	26.113	26.097	(0.964)	535566	1.60186	3.204
	38 Azinphos-methyl	26.603	26.584	(0.982)	389129	1.61809	3.236
*	39 TOCP	27.083	27.076	(1.000)	592007	2.00000	
	40 Azinphos-ethyl	27.184	27.172	(1.004)	476204	1.54787	3.096
	41 Coumaphos	27.706	27.694	(1.023)	395600	1.57333	3.147
M	42 Total Demeton				674583	1.51470	3.029
M	43 Merphos				612990	1.56765	3.135

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 044F4401.D
Lab Smp Id: LHK3A1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	715675	357838	1431350	966932	35.11
39 TOCP	472782	236391	945564	592007	25.22

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.72	13.22	14.22	13.72	0.03
39 TOCP	27.08	26.58	27.58	27.08	0.00

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

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9H050000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LHK3A1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

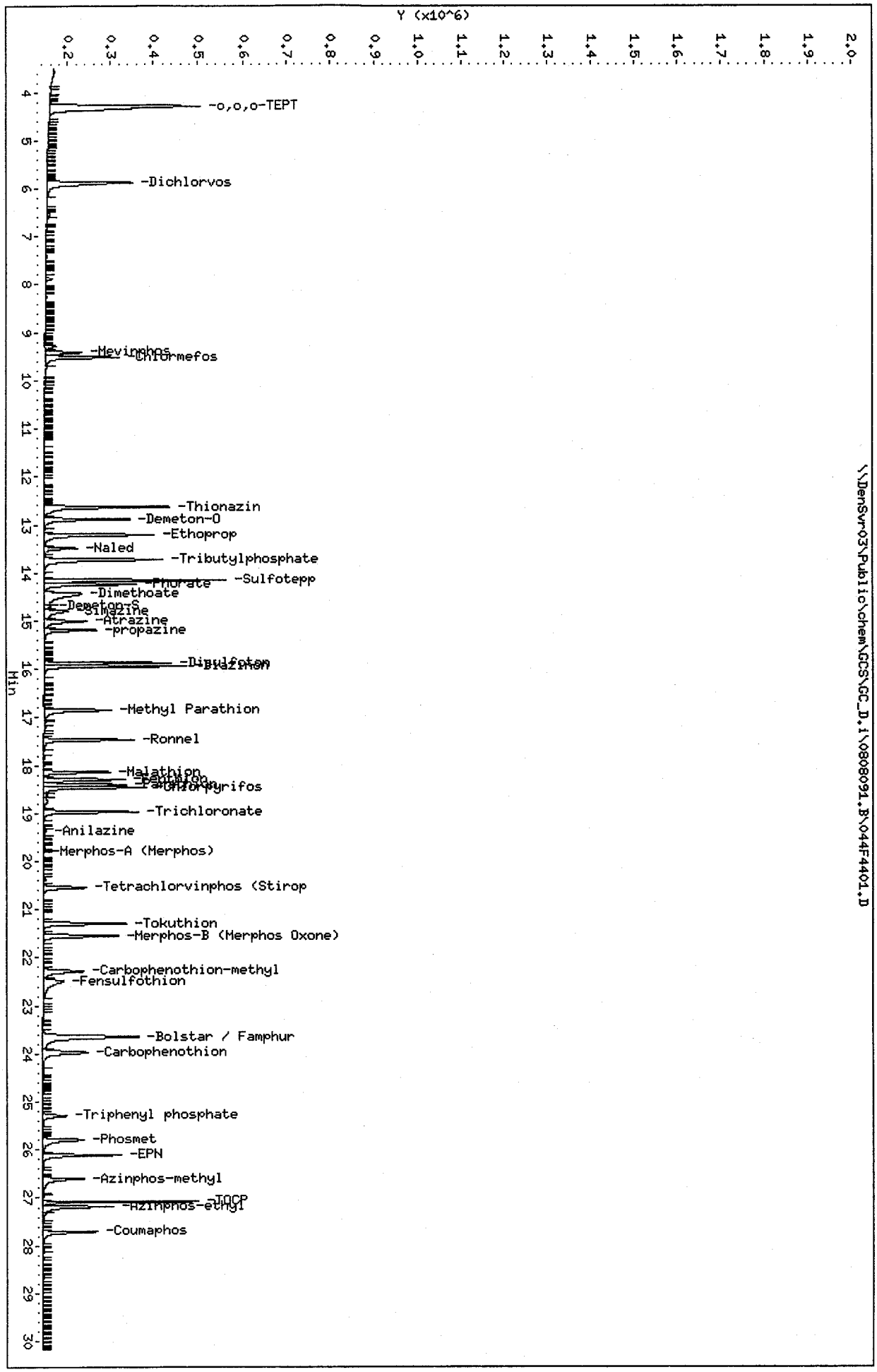
	SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1	o,o,o-TEPT	4.000	3.805	95.12	36-119
	2	Dichlorvos	4.000	4.158	103.94	50-120
	3	Mevinphos	4.000	3.228	80.71	35-108
$	4	Chlormefos	2.000	1.576	78.79	48-114
	5	Thionazin	4.000	3.427	85.67	65-116
	6	Demeton-O	2.792	2.703	96.82	36-119
	7	Ethoprop	4.000	3.413	85.33	65-108
	8	Naled	4.000	2.743	68.58	36-119
	10	Sulfotepp	4.000	2.810	70.24	69-103
	11	Phorate	4.000	2.518	62.95	62-104
	12	Dimethoate	4.000	3.171	79.29	28-115
	13	Demeton-S	1.208	0.3261	26.99*	36-119
	14	Simazine	4.000	3.571	89.28	47-109
	15	Atrazine	4.000	3.498	87.46	36-119
	16	propazine	4.000	3.510	87.74	36-119
	17	Disulfoton	4.000	3.276	81.89	36-119
	18	Diazinon	4.000	3.569	89.22	36-119
	19	Methyl Parathion	4.000	3.561	89.03	68-119
	20	Ronnel	4.000	3.458	86.45	62-115
	21	Malathion	4.000	2.974	74.36	67-115
	22	Fenthion	4.000	3.359	83.98	36-119
	23	Parathion	4.000	3.235	80.89	36-119
	25	Trichloronate	4.000	3.016	75.39	36-119
	24	Chlorpyrifos	4.000	3.458	86.44	36-119
	26	Anilazine	4.000	2.331	58.28	47-115
	28	Tetrachlorvinphos	4.000	3.128	78.21	36-119
	29	Tokuthion	4.000	3.243	81.08	36-119
	32	Fensulfothion	4.000	3.498	87.45	61-115
	33	Bolstar / Famphur	8.000	6.783	84.79	36-119
	34	Carbophenothion	4.000	3.302	82.56	50-150
$	35	Triphenyl phosphat	2.000	1.732	86.61	50-150
	36	Phosmet	4.000	3.414	85.35	50-150
	37	EPN	4.000	3.204	80.09	36-119
	38	Azinphos-methyl	4.000	3.236	80.90	55-115
	41	Coumaphos	4.000	3.147	78.67	62-115
M	42	Total Demeton	4.000	3.029	75.74	47-115
M	43	Merphos	4.000	3.135	78.38	36-119

TestAmerica

RECOVERY REPORT

Client Name:
Client SDG: D9H050000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LHK3A1AC
Client Smp ID: LCS
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: LCS
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.576	78.79	48-114
$ 35 Triphenyl phosphat	2.000	1.732	86.61	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\044F4401.D
Date : 09-AUG-2009 17:35
Client ID: LCS
Sample Info: LHK3A1AC,LCS
Column phase: RTx-1MS

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

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\044F4401.D
Lab Smp Id: LHK3A1AC Client Smp ID: LCS
Inj Date : 09-AUG-2009 17:35
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AC,LCS
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 44 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	6.779	6.758	(0.418)	1734354	1.69259	3.385
	2 Dichlorvos	8.968	8.952	(0.553)	997993	2.18495	4.370
$	3 Chlormefos	12.897	12.885	(0.796)	527632	0.72982	1.460
	4 Mevinphos	13.018	13.006	(0.803)	414257	1.49076	2.982
	5 Demeton-O	15.948	15.939	(0.984)	590559	1.40854	2.817
	6 Thionazin	16.076	16.067	(0.992)	1094489	1.76186	3.524
*	7 Tributylphosphate	16.205	16.193	(1.000)	1095781	2.00000	
	8 Ethoprop	16.345	16.332	(1.009)	947566	1.67465	3.349
	9 Naled	16.931	16.921	(1.045)	283738	1.49285	2.986
	10 Sulfotepp	17.242	17.234	(1.064)	1256863	1.37305	2.746
	11 Phorate	17.280	17.268	(1.066)	553973	1.19646	2.393
	12 Demeton-S	17.978	17.962	(1.109)	28314	0.06729	0.1346(R)
	13 Simazine	18.381	18.368	(1.134)	250145	2.09277	4.186
	14 Atrazine / Propazine	18.445	18.434	(1.138)	882665	3.50966	7.019
	15 Dimethoate	18.585	18.569	(1.147)	856470	1.61744	3.235
	16 Diazinon	18.978	18.967	(1.171)	838245	1.54336	3.087
	17 Disulfoton	19.242	19.231	(1.187)	807532	1.47204	2.944
	18 Methyl Parathion	21.147	21.132	(0.737)	667257	1.91930	3.839
	19 Ronnel	21.234	21.222	(0.740)	753290	1.79019	3.580
	20 Malathion	22.506	22.492	(0.784)	483544	1.44029	2.880
	21 Chlorpyrifos	22.660	22.644	(0.789)	679971	1.73725	3.474
	22 Trichloronate	22.833	22.819	(0.795)	696080	1.44851	2.897

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.883	22.866	(0.797)	701737	1.57611	3.152
	24 Fenthion	22.957	22.942	(0.800)	733915	1.69738	3.395
	25 Merphos-A (Merphos)	23.483	23.472	(0.818)	98	0.12760	0.2552
	26 Anilazine	Compound Not Detected.					
	27 Tetrachlorvinphos (stirophos)	25.880	25.869	(0.901)	425616	1.55376	3.108
	28 Tokuthion	26.053	26.043	(0.907)	737526	1.60067	3.201
	29 Merphos-B (Merphos oxone)	26.185	26.176	(0.912)	670718	9.23531	18.47(A)
	30 Carbophenothion methyl	27.006	26.999	(0.941)	535684	1.66306	3.326
	31 Fensulfothion	27.246	27.237	(0.949)	443940	1.61310	3.226
	32 Bolstar	27.353	27.347	(0.953)	724952	1.64370	3.287
	33 Carbophenothion	27.466	27.460	(0.957)	569810	1.54568	3.091
	34 Famphur	27.651	27.644	(0.963)	604291	1.79389	3.588
$	35 Triphenyl phosphate	27.939	27.932	(0.973)	278406	0.88314	1.766
	36 EPN	28.246	28.240	(0.984)	591922	1.63710	3.274
	37 Phosmet	28.373	28.366	(0.988)	497230	1.69412	3.388
*	38 TOCP	28.711	28.705	(1.000)	728517	2.00000	
	39 Azinphos-methyl	28.824	28.816	(1.004)	399626	1.63028	3.260
	40 Azinphos-ethyl	29.136	29.127	(1.015)	434413	1.64389	3.288
	41 Coumaphos	29.463	29.453	(1.026)	369051	1.56618	3.132
M	42 Total Demeton				618873	1.47583	2.952
M	43 Merphos				670816	1.56592	3.132

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 044F4401.D
Lab Smp Id: LHK3A1AC
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: LCS
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	869227	434614	1738454	1095781	26.06
38 TOCP	630081	315041	1260162	728517	15.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.21	15.71	16.71	16.21	-0.01
38 TOCP	28.71	28.21	29.21	28.71	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.

Report Date: 10-Aug-2009 13:57

TestAmerica

RECOVERY REPORT

Client Name: Client SDG: D9H050000
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LHK3A1AC Client Smp ID: LCS
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: LCS
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

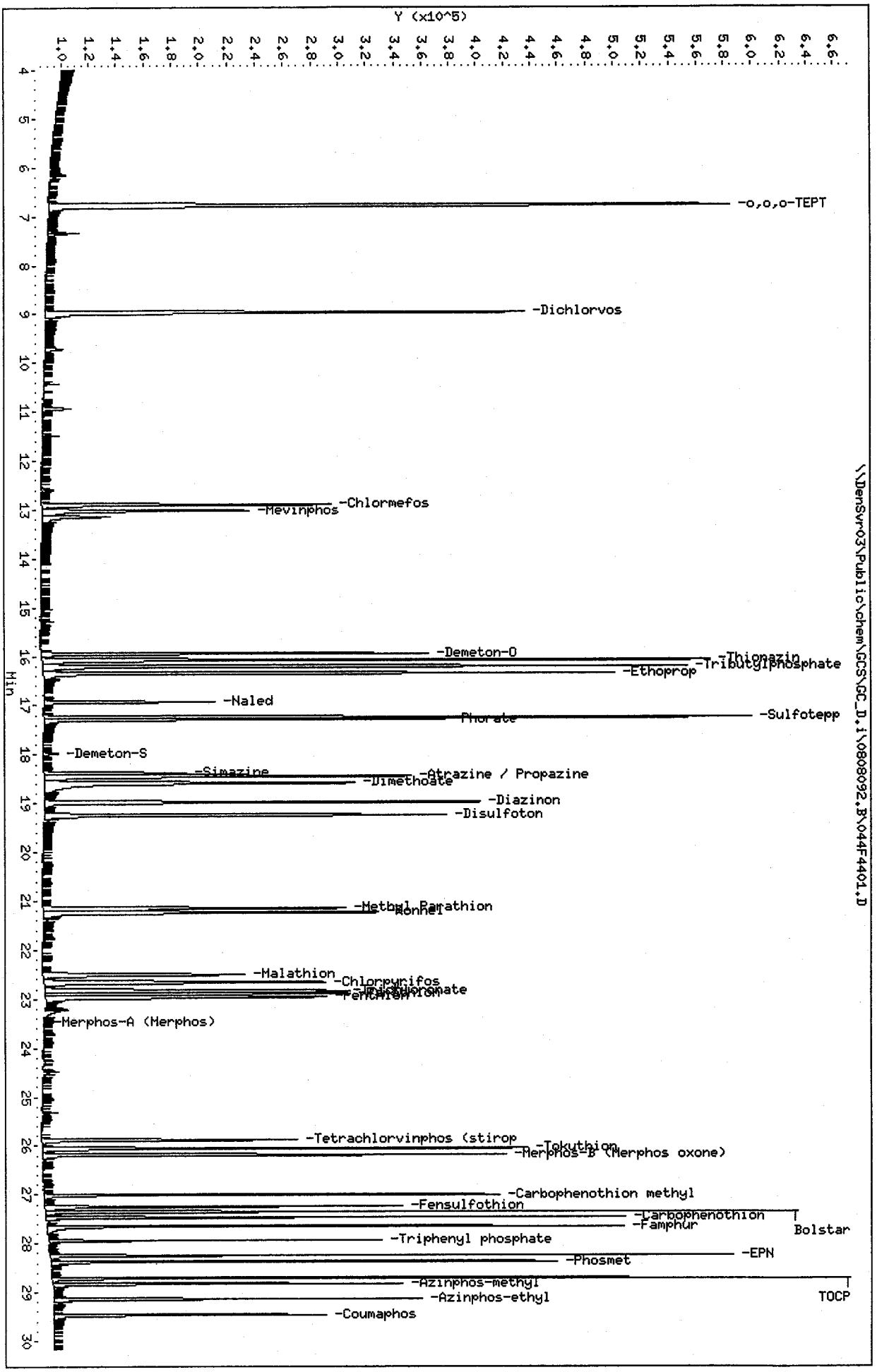
	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 o,o,o-TEPT	4.000	3.385	84.63	36-119
	2 Dichlorvos	4.000	4.370	109.25	50-120
$	3 Chlormefos	2.000	1.460	72.98	58-114
	4 Mevinphos	4.000	2.982	74.54	35-108
	5 Demeton-O	2.800	2.817	100.61	36-119
	6 Thionazin	4.000	3.524	88.09	65-116
	8 Ethoprop	4.000	3.349	83.73	36-119
	11 Phorate	4.000	2.393	59.82	36-119
	13 Simazine	4.000	4.186	104.64	36-119
	16 Diazinon	4.000	3.087	77.17	36-119
	17 Disulfoton	4.000	2.944	73.60	61-103
	12 Demeton-S	1.200	0.1346	11.22*	36-119
	15 Dimethoate	4.000	3.235	80.87	28-82
	19 Ronnel	4.000	3.580	89.51	62-99
	21 Chlorpyrifos	4.000	3.474	86.86	66-101
	24 Fenthion	4.000	3.395	84.87	36-119
	22 Trichloronate	4.000	2.897	72.43	36-119
	26 Anilazine	4.000	0.0000	*	36-119
M	43 Merphos	4.000	3.132	78.30	36-119
	18 Methyl Parathion	4.000	3.839	95.97	36-119
	20 Malathion	4.000	2.880	72.01	36-119
	28 Tokuthion	4.000	3.201	80.03	36-119
	23 Parathion	4.000	3.152	78.81	36-119
	27 Tetrachlorvinphos	4.000	3.108	77.69	36-119
	32 Bolstar	4.000	3.287	82.19	36-119
$	35 Triphenyl phosphat	2.000	1.766	88.31	36-119
	31 Fensulfothion	4.000	3.226	80.66	20-105
	36 EPN	4.000	3.274	81.86	36-119
	34 Famphur	4.000	3.588	89.69	61-108
	39 Azinphos-methyl	4.000	3.260	81.51	55-103
	41 Coumaphos	4.000	3.132	78.31	36-119
M	42 Total Demeton	4.000	2.952	73.79	47-100

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$	3 Chlormefos	2.000	1.460	72.98	48-114

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 35 Triphenyl phosphat	2.000	1.766	88.31	50-150

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\044F4401.D
Date : 09-AUG-2009 17:35
Client ID: LCS
Sample Info: LHK3A1AC,LCS
Column phase: RTx-OPPest

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



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\045F4501.D
Lab Smp Id: LHK3A1AD Client Smp ID: LCSD
Inj Date : 09-AUG-2009 18:11
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AD,LCSD
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:50 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 45 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

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

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	4.287	4.267	(0.312)	1557617	1.72452	3.449(M)
	2 Dichlorvos	5.876	5.865	(0.428)	780122	1.99560	3.991
	3 Mevinphos	9.417	9.407	(0.686)	249117	1.54476	3.090
$	4 Chlormefos	9.516	9.502	(0.693)	533522	0.74510	1.490
	5 Thionazin	12.635	12.625	(0.921)	862654	1.62902	3.258
	6 Demeton-O	12.888	12.876	(0.939)	545574	1.24985	2.500
	7 Ethoprop	13.213	13.205	(0.963)	770311	1.62614	3.252
	8 Naled	13.490	13.482	(0.983)	220080	1.31947	2.639
*	9 Tributylphosphate	13.724	13.714	(1.000)	928911	2.00000	
	10 Sulfotepp	14.155	14.143	(1.031)	955296	1.31356	2.627(R)
	11 Phorate	14.240	14.227	(1.038)	557529	1.16425	2.328(R)
	12 Dimethoate	14.430	14.416	(1.051)	615988	1.55557	3.111
	13 Demeton-S	14.696	14.682	(1.071)	57499	0.15997	0.3199(R)
	14 Simazine	14.796	14.783	(1.078)	278482	1.70386	3.408
	15 Atrazine	15.008	14.997	(1.094)	344380	1.71000	3.420
	16 propazine	15.190	15.178	(1.107)	355462	1.73623	3.472
	17 Disulfoton	15.876	15.866	(0.586)	591704	1.52949	3.059
	18 Diazinon	15.943	15.934	(0.589)	742717	1.73198	3.464
	19 Methyl Parathion	16.850	16.829	(0.622)	521146	1.71884	3.438
	20 Ronnel	17.471	17.456	(0.645)	526551	1.63735	3.275
	21 Malathion	18.145	18.134	(0.670)	405933	1.44679	2.894
	22 Fenthion	18.300	18.284	(0.676)	523050	1.61180	3.224

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	18.409	18.392	(0.680)	483078	1.53005	3.060
	24 Chlorpyrifos	18.466	18.451	(0.682)	691523	1.71116	3.422
	25 Trichloronate	18.971	18.958	(0.700)	569937	1.42551	2.851
	26 Anilazine	19.365	19.345	(0.715)	27292	1.15647	2.313
	27 Merphos-A (Merphos)	19.790	19.804	(0.731)	1063	0.10779	0.2156
	28 Tetrachlorvinphos (Stirophos)	20.544	20.532	(0.759)	335722	1.53892	3.078
	29 Tokuthion	21.295	21.278	(0.786)	590742	1.55353	3.107
	30 Merphos-B (Merphos Oxone)	21.553	21.536	(0.796)	568383	9.28444	18.57(A)
	31 Carbophenothion-methyl	22.282	22.254	(0.823)	390989	1.52756	3.055
	32 Fensulfothion	22.499	22.465	(0.831)	415135	1.83827	3.676
	33 Bolstar / Famphur	23.650	23.627	(0.873)	1072838	3.31116	6.622
	34 Carbophenothion	23.973	23.947	(0.885)	489566	1.59120	3.182
$	35 Triphenyl phosphate	25.294	25.270	(0.934)	203527	0.83212	1.664
	36 Phosmet	25.799	25.769	(0.953)	406357	1.66190	3.324
	37 EPN	26.115	26.097	(0.964)	497265	1.57102	3.142
	38 Azinphos-methyl	26.607	26.584	(0.982)	353058	1.55704	3.114
*	39 TOCP	27.084	27.076	(1.000)	560457	2.00000	
	40 Azinphos-ethyl	27.186	27.172	(1.004)	439315	1.50835	3.017
	41 Coumaphos	27.710	27.694	(1.023)	365532	1.53733	3.075
M	42 Total Demeton				603073	1.40982	2.820
M	43 Merphos				569446	1.53827	3.076

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 045F4501.D
Lab Smp Id: LHK3A1AD
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: LCSD
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	715675	357838	1431350	928911	29.80
39 TOCP	472782	236391	945564	560457	18.54

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.72	13.22	14.22	13.72	0.02
39 TOCP	27.08	26.58	27.58	27.08	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: D9H050000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LHK3A1AD
Client Smp ID: LCSD
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: LCSD
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

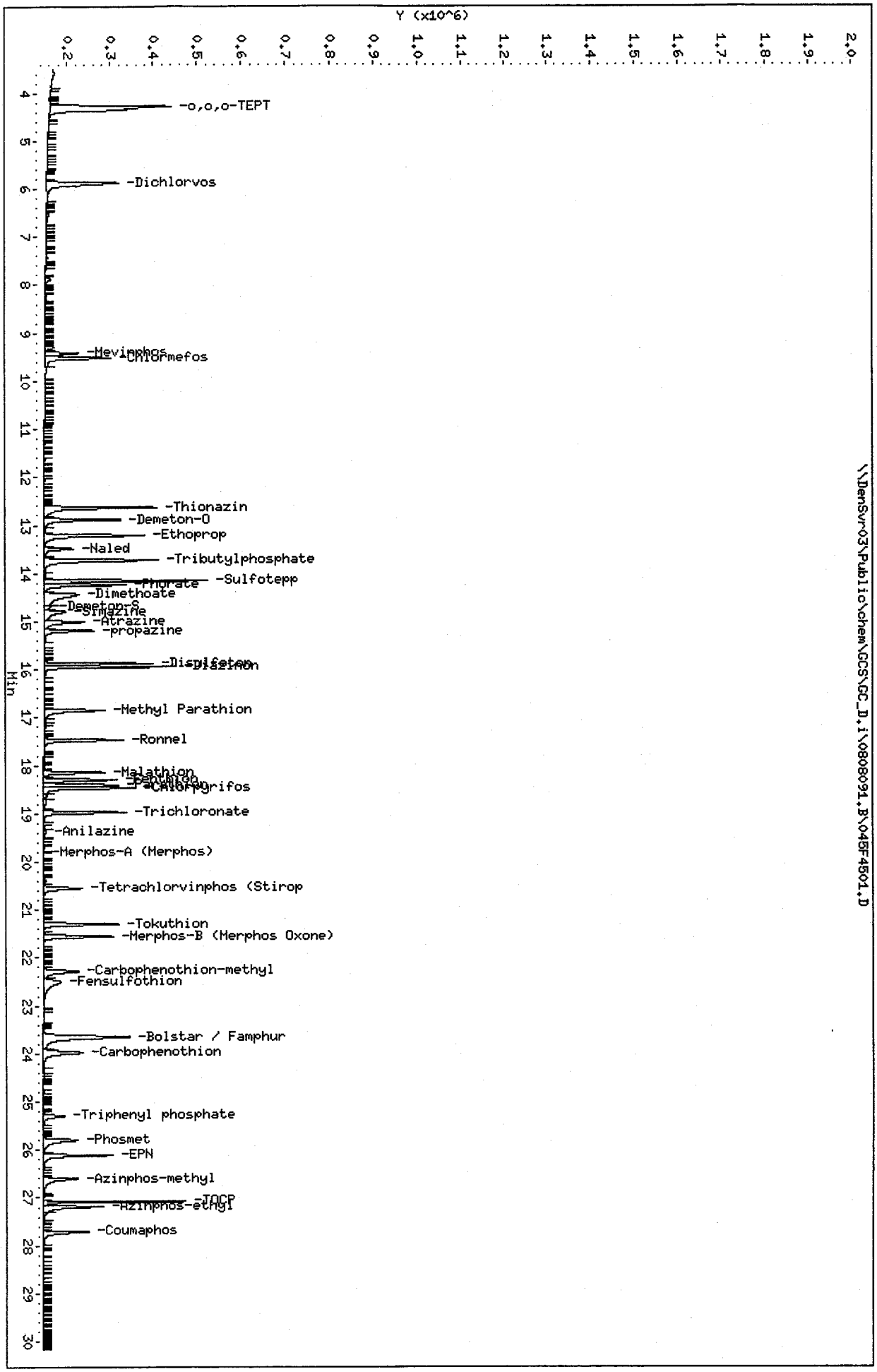
	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 o,o,o-TEPT	4.000	3.449	86.23	36-119
	2 Dichlorvos	4.000	3.991	99.78	50-120
	3 Mevinphos	4.000	3.090	77.24	35-108
$	4 Chlormefos	2.000	1.490	74.51	48-114
	5 Thionazin	4.000	3.258	81.45	65-116
	6 Demeton-O	2.792	2.500	89.53	36-119
	7 Ethoprop	4.000	3.252	81.31	65-108
	8 Naled	4.000	2.639	65.97	36-119
	10 Sulfotepp	4.000	2.627	65.68*	69-103
	11 Phorate	4.000	2.328	58.21*	62-104
	12 Dimethoate	4.000	3.111	77.78	28-115
	13 Demeton-S	1.208	0.3199	26.49*	36-119
	14 Simazine	4.000	3.408	85.19	47-109
	15 Atrazine	4.000	3.420	85.50	36-119
	16 propazine	4.000	3.472	86.81	36-119
	17 Disulfoton	4.000	3.059	76.47	36-119
	18 Diazinon	4.000	3.464	86.60	36-119
	19 Methyl Parathion	4.000	3.438	85.94	68-119
	20 Ronnel	4.000	3.275	81.87	62-115
	21 Malathion	4.000	2.894	72.34	67-115
	22 Fenthion	4.000	3.224	80.59	36-119
	23 Parathion	4.000	3.060	76.50	36-119
	25 Trichloronate	4.000	2.851	71.28	36-119
	24 Chlorpyrifos	4.000	3.422	85.56	36-119
	26 Anilazine	4.000	2.313	57.82	47-115
	28 Tetrachlorvinphos	4.000	3.078	76.95	36-119
	29 Tokuthion	4.000	3.107	77.68	36-119
	32 Fensulfothion	4.000	3.676	91.91	61-115
	33 Bolstar / Famphur	8.000	6.622	82.78	36-119
	34 Carbophenothion	4.000	3.182	79.56	50-150
$	35 Triphenyl phosphat	2.000	1.664	83.21	50-150
	36 Phosmet	4.000	3.324	83.10	50-150
	37 EPN	4.000	3.142	78.55	36-119
	38 Azinphos-methyl	4.000	3.114	77.85	55-115
	41 Coumaphos	4.000	3.075	76.87	62-115
M	42 Total Demeton	4.000	2.820	70.49	47-115
M	43 Merphos	4.000	3.076	76.91	36-119

TestAmerica

RECOVERY REPORT

Client Name:
Client SDG: D9H050000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LHK3A1AD
Client Smp ID: LCSD
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: LCSD
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	2.000	1.490	74.51	48-114
$ 35 Triphenyl phosphat	2.000	1.664	83.21	50-150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Date : 09-AUG-2009 18:11
Client ID: LCSD
Sample Info: LHK3A1AD,LCSD
Column phase: RTx-1MS
Instrument: GC_D.i
Operator: MPK/TLW
Column diameter: 0.32
Page 6
Y (x10^6)
Min
-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlormefos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Tributylphosphate
-Phorate
-Sulfotepp
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-propazine
-Disulfoton
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-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
\\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\045F4501.D

Data File Name: 045F4501.D
Inj. Date and Time: 09-AUG-2009 18:11
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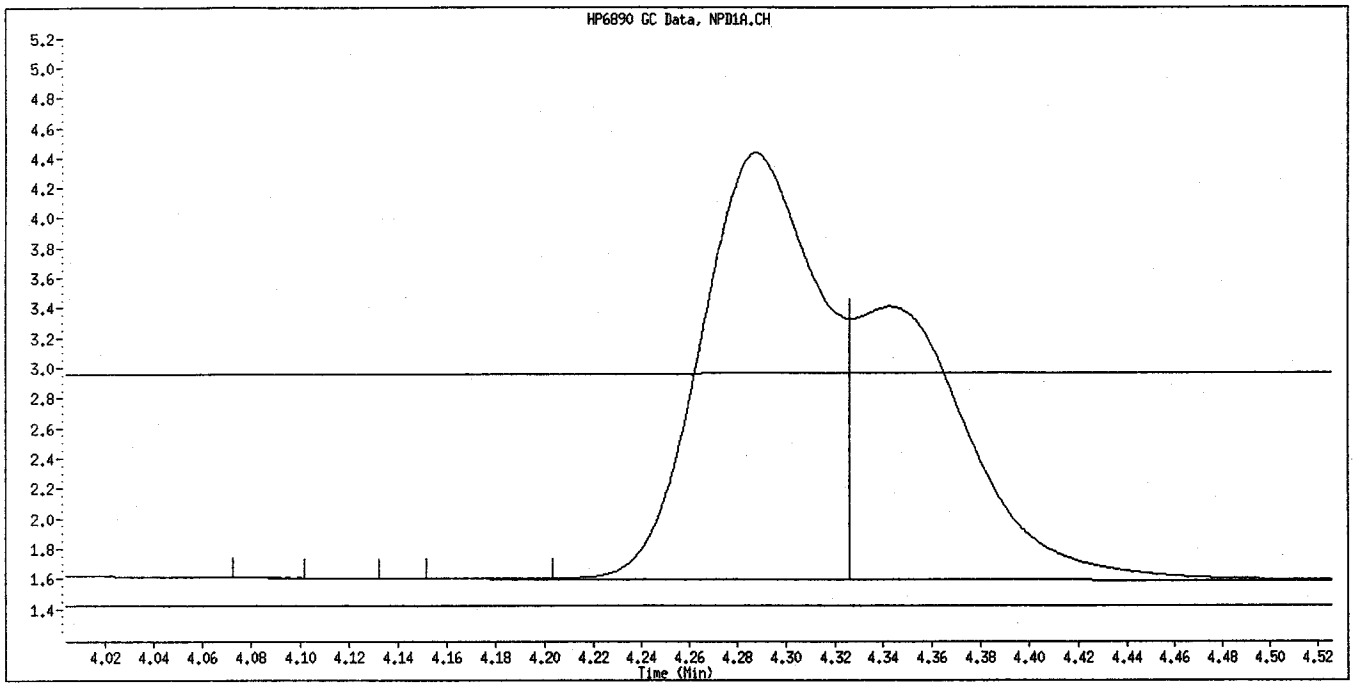
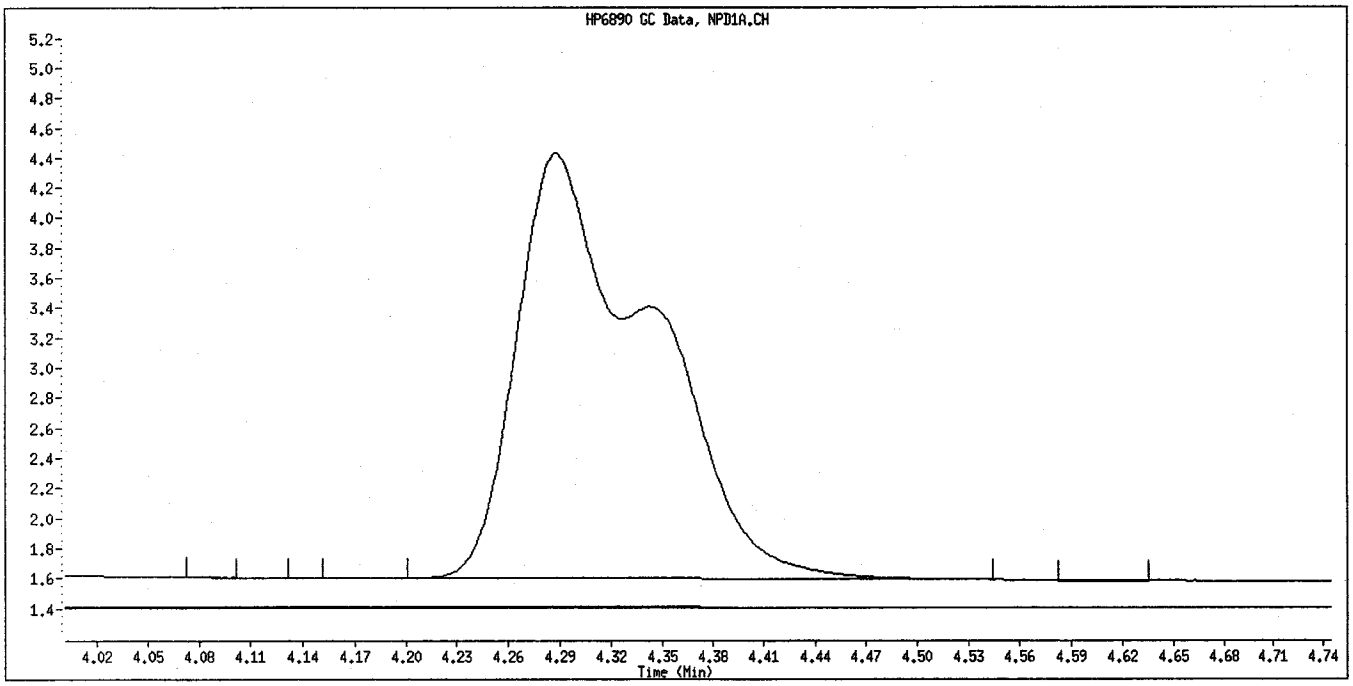
Client ID: LCSD
Compound Name: o,o,o-TEPT
CAS #:
Report Date: 08/10/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

8/14/09

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\045F4501.D
Lab Smp Id: LHK3A1AD Client Smp ID: LCSD
Inj Date : 09-AUG-2009 18:11
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHK3A1AD,LCSD
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 45 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

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

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

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 o,o,o-TEPT	6.780	6.758	(0.418)	1542393	1.58370	3.167
	2 Dichlorvos	8.969	8.952	(0.553)	918728	2.11623	4.232
$	3 Chlormefos	12.896	12.885	(0.796)	468510	0.67712	1.354
	4 Mevinphos	13.019	13.006	(0.803)	380269	1.44130	2.882
	5 Demeton-O	15.949	15.939	(0.984)	521777	1.30934	2.619
	6 Thionazin	16.076	16.067	(0.992)	988881	1.67482	3.350
*	7 Tributylphosphate	16.205	16.193	(1.000)	1041503	2.00000	
	8 Ethoprop	16.345	16.332	(1.009)	858834	1.58893	3.178
	9 Naled	16.931	16.921	(1.045)	257413	1.43364	2.867
	10 Sulfotepp	17.244	17.234	(1.064)	1158978	1.33210	2.664
	11 Phorate	17.278	17.268	(1.066)	446700	1.01506	2.030
	12 Demeton-S	17.977	17.962	(1.109)	23141	0.05787	0.1157(R)
	13 Simazine	18.381	18.368	(1.134)	218434	1.94603	3.892
	14 Atrazine / Propazine	18.446	18.434	(1.138)	813753	3.40428	6.808
	15 Dimethoate	18.584	18.569	(1.147)	814025	1.61740	3.235
	16 Diazinon	18.979	18.967	(1.171)	764169	1.48030	2.961
	17 Disulfoton	19.244	19.231	(1.187)	709684	1.36109	2.722
	18 Methyl Parathion	21.149	21.132	(0.737)	603930	1.84839	3.697
	19 Ronnel	21.235	21.222	(0.740)	673255	1.69937	3.399
	20 Malathion	22.507	22.492	(0.784)	444504	1.40710	2.814
	21 Chlorpyrifos	22.661	22.644	(0.789)	614452	1.66898	3.338
	22 Trichloronate	22.835	22.819	(0.795)	569904	1.26804	2.536

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	23 Parathion	22.883	22.866	(0.797)	691818	1.65363	3.307
	24 Fenthion	22.958	22.942	(0.800)	663140	1.62794	3.256
	25 Merphos-A (Merphos)	23.472	23.472	(0.818)	142	0.12777	0.2555
	26 Anilazine	24.469	24.451	(0.852)	6058	0.31980	0.6396(R)
	27 Tetrachlorvinphos (stirophos)	25.880	25.869	(0.901)	393566	1.52739	3.055
	28 Tokuthion	26.053	26.043	(0.907)	664693	1.53219	3.064
	29 Merphos-B (Merphos oxone)	26.185	26.176	(0.912)	613694	8.75558	17.51(A)
	30 Carbophenothion methyl	27.007	26.999	(0.941)	490629	1.61779	3.236
	31 Fensulfothion	27.245	27.237	(0.949)	423236	1.63228	3.264
	32 Bolstar	27.354	27.347	(0.953)	659014	1.58700	3.174
	33 Carbophenothion	27.466	27.460	(0.957)	516446	1.48793	2.976
	34 Famphur	27.650	27.644	(0.963)	560108	1.76600	3.532
$	35 Triphenyl phosphate	27.939	27.932	(0.973)	253742	0.85489	1.710
	36 EPN	28.245	28.240	(0.984)	542337	1.59313	3.186
	37 Phosmet	28.373	28.366	(0.988)	461542	1.67099	3.342
*	38 TOCP	28.710	28.705	(1.000)	685915	2.00000	
	39 Azinphos-methyl	28.824	28.816	(1.004)	371360	1.60978	3.220
	40 Azinphos-ethyl	29.136	29.127	(1.015)	411787	1.65506	3.310
	41 Coumaphos	29.464	29.453	(1.026)	338532	1.52705	3.054
M	42 Total Demeton				544918	1.36721	2.734
M	43 Merphos				613836	1.52180	3.044

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 045F4501.D
Lab Smp Id: LHK3A1AD
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: LCSD
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	869227	434614	1738454	1041503	19.82
38 TOCP	630081	315041	1260162	685915	8.86

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.21	15.71	16.71	16.21	-0.01
38 TOCP	28.71	28.21	29.21	28.71	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

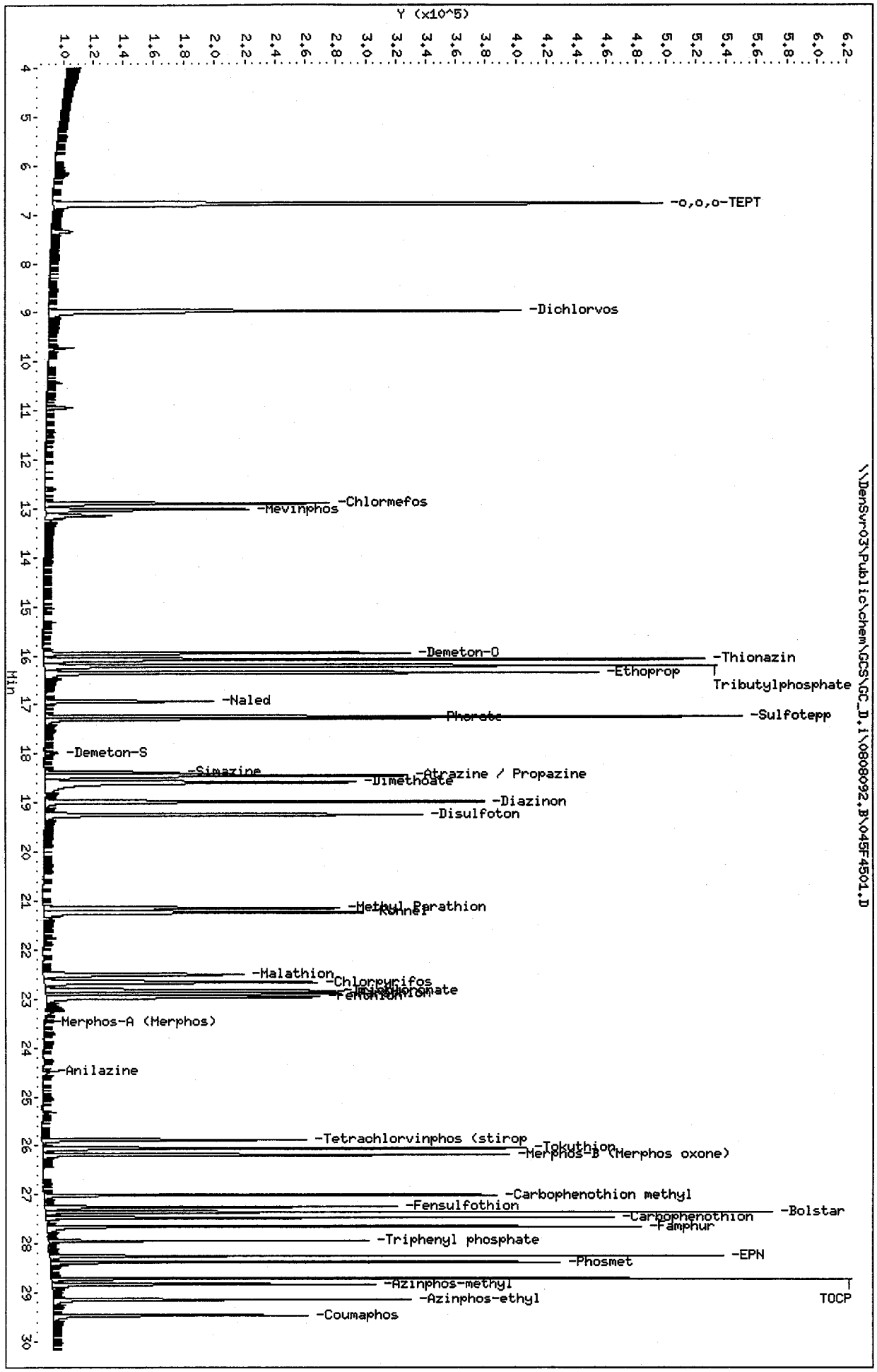
RECOVERY REPORT

Client Name:
Client SDG: D9H050000
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: LHK3A1AD
Client Smp ID: LCSD
Level: LOW
Operator: MPK/TLW
Data Type: GC DATA
SampleType: LCSD
SpikeList File: fullDFCwater.spk
Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
	1 o,o,o-TEPT	4.000	3.167	79.18	36-119
	2 Dichlorvos	4.000	4.232	105.81	50-120
$	3 Chlormefos	2.000	1.354	67.71	58-114
	4 Mevinphos	4.000	2.882	72.06	35-108
	5 Demeton-O	2.800	2.619	93.52	36-119
	6 Thionazin	4.000	3.350	83.74	65-116
	8 Ethoprop	4.000	3.178	79.45	36-119
	11 Phorate	4.000	2.030	50.75	36-119
	13 Simazine	4.000	3.892	97.30	36-119
	16 Diazinon	4.000	2.961	74.02	36-119
	17 Disulfoton	4.000	2.722	68.05	61-103
	12 Demeton-S	1.200	0.1157	9.64*	36-119
	15 Dimethoate	4.000	3.235	80.87	28-82
	19 Ronnel	4.000	3.399	84.97	62-99
	21 Chlorpyrifos	4.000	3.338	83.45	66-101
	24 Fenthion	4.000	3.256	81.40	36-119
	22 Trichloronate	4.000	2.536	63.40	36-119
	26 Anilazine	4.000	0.6396	15.99*	36-119
M	43 Merphos	4.000	3.044	76.09	36-119
	18 Methyl Parathion	4.000	3.697	92.42	36-119
	20 Malathion	4.000	2.814	70.36	36-119
	28 Tokuthion	4.000	3.064	76.61	36-119
	23 Parathion	4.000	3.307	82.68	36-119
	27 Tetrachlorvinphos	4.000	3.055	76.37	36-119
	32 Bolstar	4.000	3.174	79.35	36-119
$	35 Triphenyl phosphat	2.000	1.710	85.49	36-119
	31 Fensulfothion	4.000	3.264	81.61	20-105
	36 EPN	4.000	3.186	79.66	36-119
	34 Famphur	4.000	3.532	88.30	61-108
	39 Azinphos-methyl	4.000	3.220	80.49	55-103
	41 Coumaphos	4.000	3.054	76.35	36-119
M	42 Total Demeton	4.000	2.734	68.36	47-100

	SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$	3 Chlormefos	2.000	1.354	67.71	48-114

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 35 Triphenyl phosphat	2.000	1.710	85.49	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\045F4501.D
Date : 09-AUG-2009 18:11
Client ID: LCSD
Sample Info: LHK3A1AD,LCSD
Column phase: RTx-OPPest
Instrument: GC_D.i
Operator: MPK/TLW
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\047F4701.D
Lab Smp Id: LHJ511AA Client Smp ID: FB080409-GW
Inj Date : 09-AUG-2009 19:24
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHJ511AA,234-1
Misc Info :
Comment   :
Method   : \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Meth Date : 10-Aug-2009 13:50 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 47
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	1056.000	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	9.424	9.407	(0.686)	105	0.40223	0.7628 NC
$ 4	Chlormefos	9.516	9.502	(0.693)	434277	0.60363	1.143
5	Thionazin	12.623	12.625	(0.919)	495	0.06848	0.1297
6	Demeton-O	Compound Not Detected.					
7	Ethoprop	13.208	13.205	(0.962)	96	0.08837	0.1674
8	Naled	13.443	13.482	(0.979)	141	0.17398	0.3295 NAP
* 9	Tributylphosphate	13.729	13.714	(1.000)	933331	2.00000	
10	Sulfotepp	Compound Not Detected.					
11	Phorate	Compound Not Detected.					
12	Dimethoate	14.385	14.416	(1.048)	1780	0.35679	0.6757 NC
13	Demeton-S	Compound Not Detected.					
14	Simazine	Compound Not Detected.					
15	Atrazine	15.022	14.997	(1.094)	176	0.19301	0.3655
16	propazine	Compound Not Detected.					
17	Disulfoton	15.901	15.866	(0.587)	2865	0.08908	0.1687
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	18.393	18.392	(0.679)	114	0.18162	0.3440 NAP
	24 Chlorpyrifos	Compound Not Detected.					
	25 Trichloronate	Compound Not Detected.					
	26 Anilazine	19.307	19.345	(0.713)	176	0.40736	0.7715
	27 Merphos-A (Merphos)	19.804	19.804	(0.731)	246	0.10477	0.1984
	28 Tetrachlorvinphos (Stirophos)	20.552	20.532	(0.759)	274	0.09173	0.1737 NC
	29 Tokuthion	Compound Not Detected.					
	30 Merphos-B (Merphos Oxone)	21.564	21.536	(0.796)	122	0.12716	0.2408
	31 Carbophenothion-methyl	22.245	22.254	(0.821)	122	0.10017	0.1897
	32 Fensulfothion	22.472	22.465	(0.830)	63	0.30329	0.5744 NC
	33 Bolstar / Famphur	23.631	23.627	(0.872)	63	0.11449	0.2168 NC
	34 Carbophenothion	Compound Not Detected.					
$	35 Triphenyl phosphate	25.308	25.270	(0.934)	208587	0.80647	1.527
	36 Phosmet	25.793	25.769	(0.952)	673	0.11068	0.2096
	37 EPN	Compound Not Detected.					
	38 Azinphos-methyl	Compound Not Detected.					
*	39 TOCP	27.086	27.076	(1.000)	592664	2.00000	
	40 Azinphos-ethyl	Compound Not Detected.					
	41 Coumaphos	Compound Not Detected.					
M	42 Total Demeton	Compound Not Detected.					
M	43 Merphos				368	0.00094	0.001780

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 047F4701.D
Lab Smp Id: LHJ511AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: FB080409-GW
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	715675	357838	1431350	933331	30.41
39 TOCP	472782	236391	945564	592664	25.36

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.72	13.22	14.22	13.73	0.06
39 TOCP	27.08	26.58	27.58	27.09	0.01

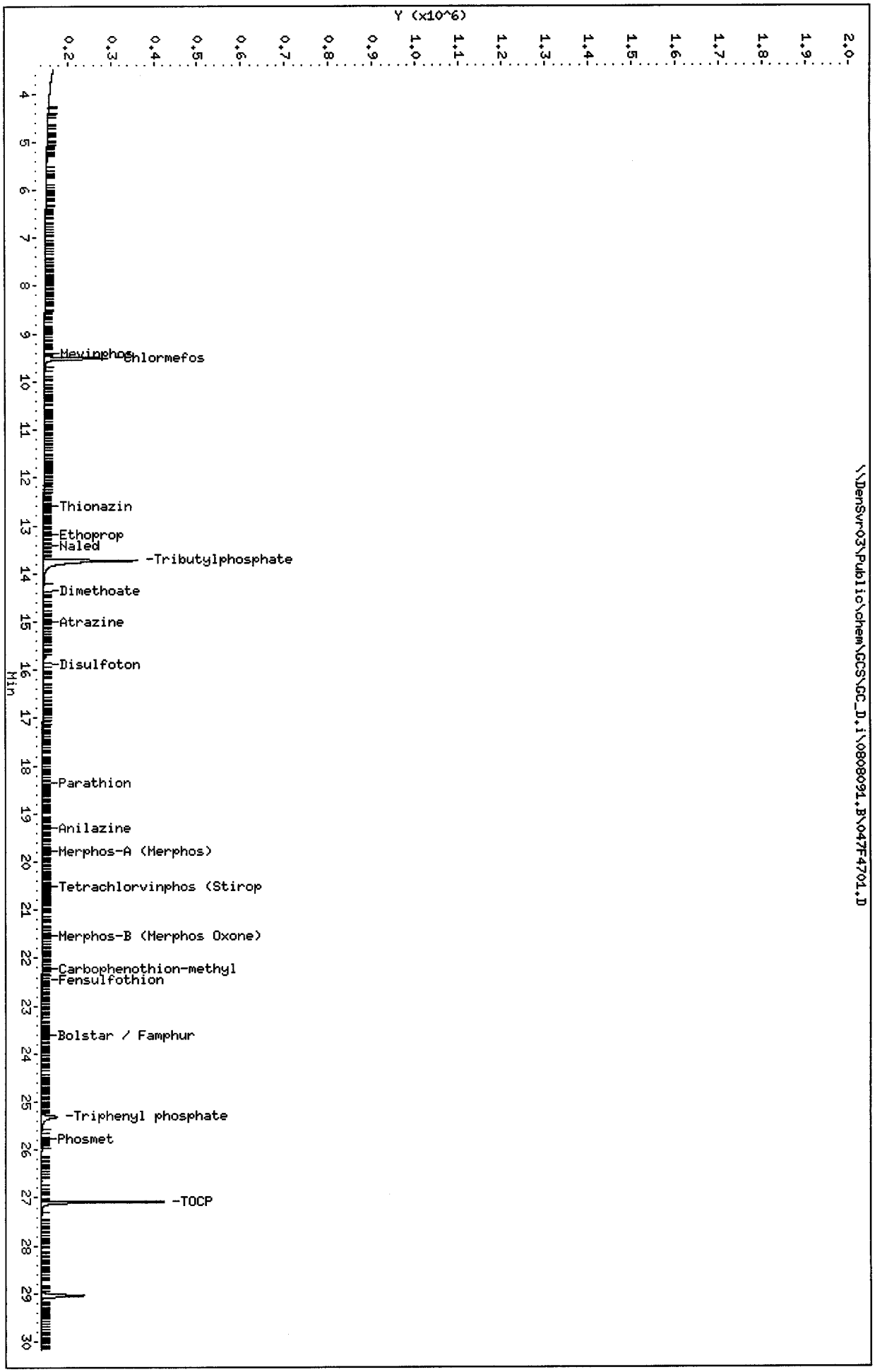
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen05-AUG-2009 00:00 Client SDG: D9H0502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LHJ511AA Client Smp ID: FB080409-GW
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: SAMPLE
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\8141A-1.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 4 Chlormefos	1.894	1.143	60.36	48-114
$ 35 Triphenyl phosphat	1.894	1.527	80.65	50-150


Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\047F4701.D
Date : 09-AUG-2009 19:24
Client ID: FB080409-GW
Sample Info: LHJ511AA,234-1
Column phase: RTx-1MS
Instrument: GC_D.i
Operator: MPK/TLW
Column diameter: 0.32
\\DenSvr03\Public\chem\GCS\GC_D.i\0808091.B\047F4701.D
Y (x10^6)
Min
Mevinphos
Chlormefos
Thionazin
Ethoprop
Naled
-Tributylphosphate
Dimethoate
Atrazine
Disulfoton
Parathion
Anilazine
Merphos-A (Merphos)
Tetrachlorvinphos (Stirop
Merphos-B (Merphos Oxone)
Carbophenothion-methyl
Fensulfothion
Bolstar / Famphur
-Triphenyl phosphate
Phosmet
-TOCP

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\047F4701.D
Lab Smp Id: LHJ511AA Client Smp ID: FB080409-GW
Inj Date : 09-AUG-2009 19:24
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : LHJ511AA,234-1
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Meth Date : 10-Aug-2009 13:57 williamst Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 47
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	1056.000	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	12.897	12.885	(0.796)	483661	0.71973	1.363
4	Mevinphos	13.011	13.006	(0.803)	1579	0.05076	0.09613
5	Demeton-O	Compound Not Detected.					
6	Thionazin	Compound Not Detected.					
* 7	Tributylphosphate	16.208	16.193	(1.000)	1017272	2.00000	
8	Ethoprop	Compound Not Detected.					
9	Naled	16.942	16.921	(1.045)	121	0.17048	0.3229
10	Sulfotepp	17.252	17.234	(1.064)	94	1e-004	0.0002095(a)
11	Phorate	Compound Not Detected.					
12	Demeton-S	Compound Not Detected.					
13	Simazine	18.338	18.368	(1.131)	54	0.28745	0.5444
14	Atrazine / Propazine	Compound Not Detected.					
15	Dimethoate	Compound Not Detected.					
16	Diazinon	Compound Not Detected.					
17	Disulfoton	Compound Not Detected.					
18	Methyl Parathion	21.118	21.132	(0.736)	52	0.08669	0.1642(a)
19	Ronnel	Compound Not Detected.					
20	Malathion	22.487	22.492	(0.783)	70	0.03650	0.06913(a)
21	Chlorpyrifos	Compound Not Detected.					
22	Trichloronate	22.817	22.819	(0.795)	52	0.06481	0.1227

	Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
23	Parathion	22.862	22.866	(0.796)	80	0.13140	0.2489(a)
24	Fenthion	Compound Not Detected.					
25	Merphos-A (Merphos)	23.474	23.472	(0.818)	52	0.12747	0.2414
26	Anilazine	Compound Not Detected.					
27	Tetrachlorvinphos (stirophos)	Compound Not Detected.					
28	Tokuthion	Compound Not Detected.					
29	Merphos-B (Merphos oxone)	26.213	26.176	(0.913)	61	0.12962	0.2455(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	27.941	27.932	(0.973)	263714	0.86805	1.644
36	EPN	Compound Not Detected.					
37	Phosmet	28.369	28.366	(0.988)	60	0.05640	0.1068
* 38	TOCP	28.711	28.705	(1.000)	702064	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: 047F4701.D
Lab Smp Id: LHJ511AA
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

Calibration Date: 09-AUG-2009
Calibration Time: 09:41
Client Smp ID: FB080409-GW
Level: LOW
Sample Type: WATER

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	869227	434614	1738454	1017272	17.03
38 TOCP	630081	315041	1260162	702064	11.42

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.21	15.71	16.71	16.21	0.00
38 TOCP	28.71	28.21	29.21	28.71	0.01

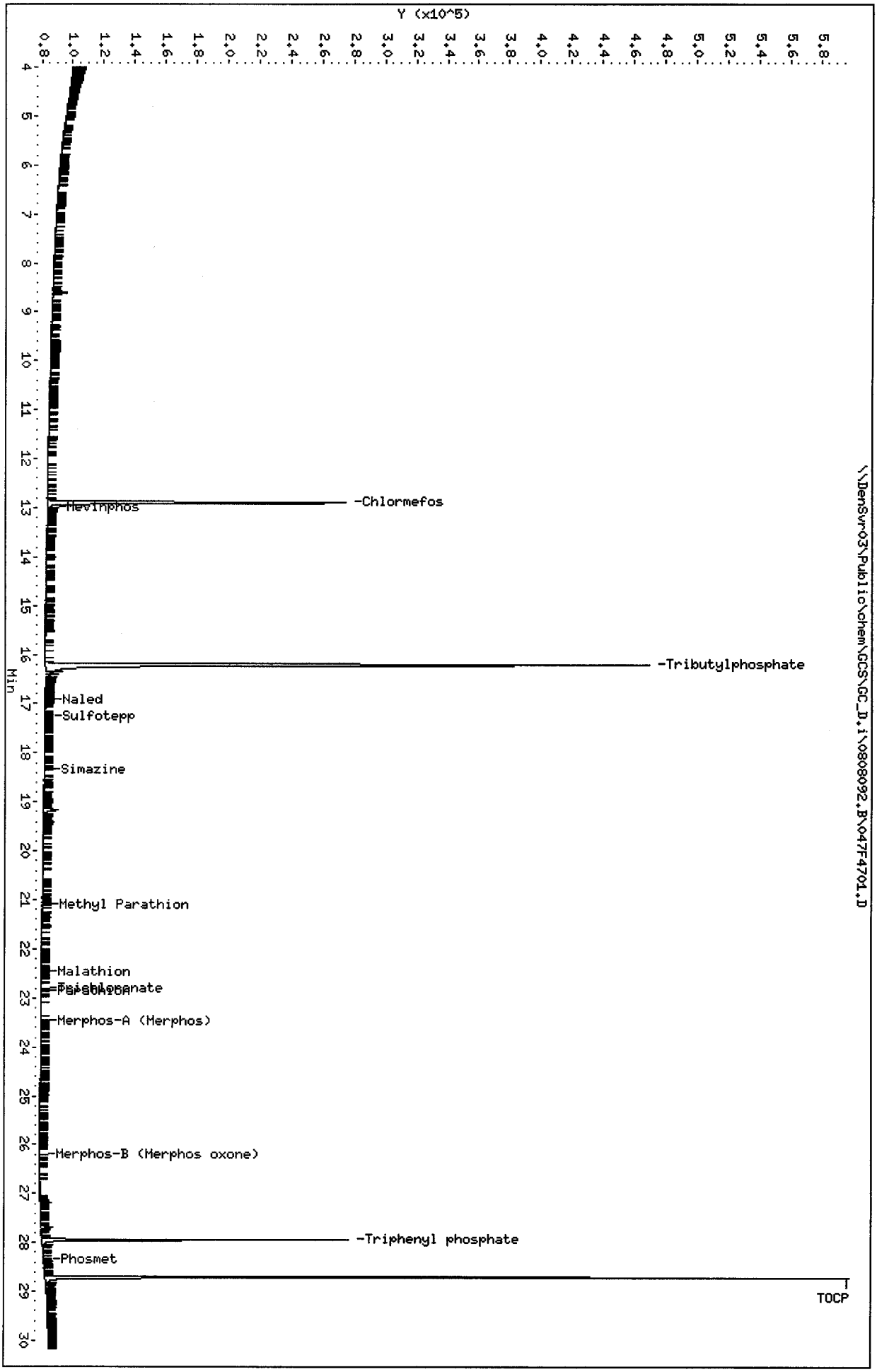
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

TestAmerica

RECOVERY REPORT

Client Name: Northgate Environmen05-AUG-2009 00:00 Client SDG: D9H0502
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: LHJ511AA Client Smp ID: FB080409-GW
Level: LOW Operator: MPK/TLW
Data Type: GC DATA SampleType: SAMPLE
SpikeList File: fullDFCwater.spk Quant Type: ISTD
Sublist File: 8141A.sub
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0808092.B\8141A-2.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 3 Chlormefos	1.894	1.363	71.97	48-114
$ 35 Triphenyl phosphat	1.894	1.644	86.81	50-150



Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0808092,B\047F4701,D
Date : 09-AUG-2009 19:24
Client ID: FB080409-GW
Sample Info: LHJ511AA,234-1
Column phase: RTx-OPPest

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

GC SEMIVOLATILE
INITIAL CALIBRATION DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

GC and HPLC ICAL Review Checklist

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

530

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: 080609
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
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%?			✓	✓	
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%? 8/7/09	✗	✓		✓	Primary Include %R Mevinphos -22.2%, Phorate -18.3%, Simazine +23.5%, Anilazine -37.5%, Carbophenothion-methyl @-33.5% Secondary Include %R Mevinphos -21.1%, Naled -15.9%, Phorate -19.9%, Simazine +38.5%, Anilazine -58.8%, Carbophenothion-methyl -32.6%

1st Level Reviewer: Jessica L. Williams Date: 8/7/09
2nd Level Reviewer: [signature] Date: 8/8/09

Sequence: C:\HPCHEM\2\SEQUENCE\D080609.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 GSV82609				
4	Vial 4	8141 L6 GSV87009				
5	Vial 5	8141 L5 GSV87109				
6	Vial 6	8141 L4 GSV87209				
7	Vial 7	8141 L3 GSV87309				
8	Vial 8	8141 L2 GSV87409				
9	Vial 9	8141 L1 GSV87509				
10	Vial 10	8141 SS GSV87609				
11	Vial 11	GSV0893-09 SURR				
12	Vial 12	GSV0883-09 SPK				
13	Vial 13	LG1WM1AA,MB				
14	Vial 14	LG1WM1AC,LCS				
15	Vial 15	LG1WM1AD,LCSD				
16	Vial 16	LGX0F1AE,167-1				
17	Vial 17	LGX1P1AN,167-2				
18	Vial 18	LG34K1AA,MB				
19	Vial 19	LG34K1AC,LCS				
20	Vial 20	LG34K1AD,LCSD				
21	Vial 21	LG2X51AA,280-1				
22	Vial 22	LG20H1AA,280-2				
23	Vial 23	LG20J1AA,280-3				
24	Vial 24	LG20L1AA,280-4				
25	Vial 25	LG20N1AA,280-5				
26	Vial 26	LG29G1AA,313-1				
27	Vial 27	LG3WP1AA,149-1				
28	Vial 28	LG3XR1AA,158-1				
29	Vial 29	8141 CCV GSV861				
30	Vial 30	LHA0K1AA,MB				
31	Vial 31	LHA0K1AC,LCS				
32	Vial 32	LHA0K1AD,LCSD				
33	Vial 33	LG7XK1AA,180-1				
34	Vial 34	LG7XP1AA,180-2				
35	Vial 35	LG7XQ1AA,180-3				
36	Vial 36	LG7XQ1AC,180-3S				
37	Vial 37	LG7XQ1AD,180-3D				
38	Vial 38	LG7XW1AA,180-4				
39	Vial 39	LG70G1AA,185-1				
40	Vial 40	LHA0P1AA,MB				
41	Vial 41	LHA0P1AC,LCS				
42	Vial 42	LHA0P1AD,LCSD				
43	Vial 43	LG7N31CC,159-1				
44	Vial 44	LG48D1AA,MB				
45	Vial 45	LG48D1AC,LCS				
46	Vial 46	LG48D1AD,LCSD				
47	Vial 47	LG3F51AD,333-9				
48	Vial 48	LG4761AA,MB				
49	Vial 49	LG4761AC,LCS				
50	Vial 50	LG4761AD,LCSD				
51	Vial 51	LG4XL1AA,133-1				
52	Vial 52	8141 CCV GSV861				
53	Vial 53	LG8X21AA,MB				
54	Vial 54	LG8X21AC,LCS				
55	Vial 55	LG8X21AD,LCSD				
56	Vial 56	LG1TK1AA,108-21				
57	Vial 57	LG8TT1AA,MB				
58	Vial 58	LG8TT1AC,LCS				
59	Vial 59	LG2971AA,314-1				

9205278

9206117

9211421

9211426

9208406

9208402

9210504

Sequence: C:\HPCHEM\2\SEQUENCE\D080609.S

Line	Location	SampleName	SampleAmount	ISTDAmt	Multiplier	Dilution
60	Vial 60	LG3AD1AA,314-2				
61	Vial 61	LG3VM1AA,139-1				
62	Vial 62	LG3VM1AD,139-1S				
63	Vial 63	LG3VM1AE,139-1D				
64	Vial 64	LG3VP1AA,139-2				
65	Vial 65	LG3VR1AA,139-3				
66	Vial 66	8141 CCV GSV861				
67	Vial 67	LG3W11AA,150-1				
68	Vial 68	LG3W21AA,150-2				
69	Vial 69	LG3W31AA,150-3				
70	Vial 70	LG3W51AA,150-4				
71	Vial 71	LHFXR1AA,MB				
72	Vial 72	LHFXR1AC,LCS				
73	Vial 73	LGN2D1CQ,316-5S				
74	Vial 74	LGN2D1CR,316-5D				
75	Vial 75	LGN2D2CN,316-5				
76	Vial 76	LGN2J2CN,316-10				
77	Vial 77	8141 CCV GSV861				
78	Vial 2	HEXANE/ACETONE				

9210468

9215328

Sequence Table (Back Injector):

No entries - empty table!

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INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Last Edit : 07-Aug-2009 13:45 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.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	182432	420455	908197	1806303	2678940	3532965					
	4488963						QUAD	-0.00185	0.46722	0.02869	0.99856
2 Dichlorvos	0.88775	0.82394	0.83968	0.86756	0.82268	0.85000					
	0.80012						AVRG		0.84168		3.52069
3 Mevinphos	+++++	31592	111446	356823	596188	830977					
	1152906						LINR	0.20087	0.46926		0.99901
5 Thionazin	61338	194202	544011	1140983	1718412	2252008					
	2920220						WLINR	0.03379	1.18951		0.99527

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

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INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
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Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	5.0000 Level 7											
6 Demeton-O	30299	63511	157798	301922	460549	581572						
	761277						WLINR	-0.00975	0.92539		0.99395	
7 Ethoprop	42588	199533	491981	1004283	1510941	1955169						
	2505899						WLINR	0.04409	1.07839		0.99207	
8 Naled	9478	41661	162318	361004	602529	777472						
	1127359						QUAD	0.08662	2.45165	-0.13780	0.99888	
10 Sulfotepp	1.56280	1.44519	1.65714	1.68788	1.57081	1.56396						
	1.47299						AVRG		1.56582		5.61879	
11 Phorate	1.13644	0.95432	1.14044	1.07117	0.99690	0.98879						
	0.92922						AVRG		1.03104		8.29536	
12 Dimethoate	+++++	59892	356039	877602	1446366	1934346						
	2590760						WLINR	0.17667	1.10316		0.99682	
13 Demeton-S	421	101878	285098	598857	888508	1152288						
	1490677						LINR	0.00806	0.86060		0.99287	<-

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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	+++++	48256	174622	313833	493520	631700					
	804726						QUAD	0.10651	2.04581	1.46981	0.99811
15 Atrazine	+++++	56963	206785	417568	667495	887166					
	1175975						WLINR	0.09612	0.48853		0.99171
16 propazine	+++++	0.35592	0.47135	0.45861	0.45434	0.46102					
	0.44356						AVRG		0.44080		9.65392
17 Disulfoton	48155	167271	445811	956556	1440699	1882342					
	2454335						WLINR	0.04123	1.45920		0.99632
18 Diazinon	122906	248611	519628	1016692	1526415	1969776					
	2542893						WLINR	-0.05341	1.44136		0.99767
19 Methyl Parathion	40155	137375	334656	727074	1132305	1471875					
	1968772						WLINR	0.03631	1.12970		0.99901
20 Ronnel	1.03546	1.01940	1.14102	1.20523	1.19683	1.22965					
	1.20553						AVRG		1.14759		7.53685

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	3.0000 Level 5	4.0000 Level 6	5.0000 Level 7	Curve	Coefficients b	m1	m2	%RSD or R^2	
21 Malathion	0.86188	0.91387	1.07877	1.08977	1.04406	1.03997	0.98036	AVRG		1.00124		8.61800	
22 Fenthion	49230	134570	363139	790291	1222175	1589817	2105793	WLINR	0.02987	1.20261		0.99507	
23 Parathion	+++++	117278	333400	780379	1232087	1621434	2156342	WLINR	0.09066	1.27814		0.99835	
24 Chlorpyrifos	+++++	265889	506108	926482	1387727	1798423	2373426	WLINR	-0.10926	1.27881		0.99829	
25 Trichloronate	1.46832	1.29281	1.40677	1.46387	1.44859	1.47665	1.43014	AVRG		1.42673		4.47196	
26 Anilazine	413	937	23197	62364	109906	153137	224347	LINR	0.20138	0.12922		0.99583	<-
27 Merphos-A (Merphos)	27686	102703	274971	619861	975630	1320113	1714293	WLINR	0.05196	0.98235		0.99735	

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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
28 Tetrachlorvinphos (Stirophos)	27000	86949	229899	510754	821547	1111793					
	1539127						WLINR	0.04531	0.82719		0.99642
29 Tokuthion	1.37786	1.22539	1.38006	1.40966	1.37398	1.39384					
	1.33792						AVRG		1.35696		4.56962
30 Merphos-B (Merphos Oxone)	49732	78157	159629	271041	371990	422425					
	528766						QUAD	0.06346	0.59850	3.86180	0.99854
31 Carbophenothion-methyl	29119	99151	280480	618555	972242	1285762					
	1741313						WLINR	0.04987	0.97720		0.99632
32 Fensulfothion	+++++	53776	214899	563535	876396	1172734					
	1592051						WLINR	0.15154	0.96497		0.99770
33 Bolstar / Famphur	97513	282731	741469	1568236	2416510	3128382					
	4156553						WLINR	0.05716	1.19757		0.99670
34 Carbophenothion	1.08187	1.03600	1.15360	1.13412	1.10854	1.10645					
	1.06490						AVRG		1.09793		3.67689

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Last Edit : 07-Aug-2009 13:45 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 Phosmet	25548	91979	268843	595984	916951	1218253					
	1647305						WLINR	0.05412	0.93334		0.99580
37 EPN	1.04741	1.13202	1.22186	1.20575	1.11750	1.12936					
	1.05270						AVRG		1.12952		5.95345
38 Azinphos-methyl	25233	73949	233826	545683	862799	1158610					
	1592084						LINR	0.07569	0.89630		0.99930
40 Azinphos-ethyl	1.20072	0.93049	1.06940	1.04526	1.02814	1.02319					
	0.97822						AVRG		1.03935		8.14067
41 Coumaphos	33445	95853	261325	569489	895805	1188819					
	1602651						WLINR	0.03646	0.89074		0.99560
M 42 Total Demeton	30720	165389	442896	900779	1349057	1733860					
	2251954						WLINR	0.05788	1.41556		0.99198
M 43 Merphos	1.39750	1.23094	1.38907	1.38298	1.31717	1.31436					
	1.21510						AVRG		1.32102		5.67433

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Last Edit : 07-Aug-2009 13:45 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										
$ 4 Chlormefos	1.70854	1.55109	1.63649	1.61328	1.45247	1.46197					
	1.36788						AVRG		1.54167		7.79134
$ 35 Triphenyl phosphate	0.74982	0.81969	0.94206	0.95098	0.90064	0.90309					
	0.84340						AVRG		0.87281		8.28995

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INITIAL CALIBRATION DATA

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Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
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Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Wt Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

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Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Start Cal Date: 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-AUG-2009 18:34	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
06-AUG-2009 17:58	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
06-AUG-2009 17:21	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
06-AUG-2009 15:32	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
06-AUG-2009 14:56	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

06-AUG-2009 19:10	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\010F1001.D
07-AUG-2009 06:42	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\029F2901.D
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D

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Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 GC_D.i

Calibration File Names:
Level 1: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\009F0901.D
Level 2: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\008F0801.D
Level 3: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\007F0701.D
Level 4: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D
Level 5: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\005F0501.D
Level 6: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\004F0401.D
Level 7: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.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	2.29043	1.90123	1.95130	1.88382	1.73356	1.73918	1.59199	AVRG		1.87022		11.90741
2 Dichlorvos	0.89869	0.78758	0.82805	0.86014	0.82558	0.85108	0.78454	AVRG		0.83367		4.86412
4 Mevinphos	26181	90159	249277	555210	847872	1096662	1418878	LINR	0.02241	0.52291		0.99690
5 Demeton-O	0.74959	0.68467	0.79510	0.82182	0.78659	0.77064	0.74831	AVRG		0.76525		5.74609

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

TestAmerica

INITIAL CALIBRATION DATA

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Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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										
6 Thionazin	1.14565	1.08329	1.20126	1.20198	1.13145	1.12656					
	1.04660						AVRG		1.13382		5.03485
8 Ethoprop	150814	267910	555560	1095403	1622717	2051405					
	2583304						WLINR	-0.08621	0.93634		0.99376
9 Naled	12427	47634	159760	373106	617906	787967					
	1131291						QUAD	0.08493	2.59831	-0.16856	0.99915
10 Sulfotepp	1.76900	1.56005	1.81850	1.75939	1.64614	1.63203					
	1.51002						AVRG		1.67073		6.89125
11 Phorate	1.08434	0.83104	0.84616	0.84084	0.79408	0.78203					
	0.73702						AVRG		0.84507		13.29300
12 Demeton-S	0.62408	0.72296	0.82414	0.81846	0.80405	0.81520					
	0.76672						AVRG		0.76794		9.50535
13 Simazine	6499	15934	82213	217050	364617	492868					
	674577						LINR	0.14352	0.25284		0.99829

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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	0.45307	0.43687	0.46450	0.46986	0.45749	0.47026					
	0.46112						AVRG		0.45903		2.52599
15 Dimethoate	62417	178809	484895	1037511	1616390	2052825					
	2698083						WLINR	0.03026	1.00403		0.99496
16 Diazinon	1.12790	0.98078	1.05404	1.02017	0.94993	0.93374					
	0.87260						AVRG		0.99131		8.50540
17 Disulfoton	1.04034	0.96498	1.05301	1.04708	0.99340	0.98440					
	0.92562						AVRG		1.00126		4.77046
18 Methyl Parathion	40092	130034	351856	753320	1163940	1488025					
	1936768						WLINR	0.04327	0.99949		0.99615
19 Ronnel	1.29240	1.09578	1.15751	1.15464	1.14108	1.15310					
	1.09180						AVRG		1.15519		5.76214
20 Malathion	52293	150756	354820	728530	1103657	1406900					
	1824966						WLINR	0.01814	0.94549		0.99782

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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	60489	169871	394413	832490	1290170	1671357	2210724	WLINR	0.02011	1.09999		0.99883
22 Trichloronate	66017	196799	455989	1021736	1622974	2093978	2890038	WLINR	0.03235	1.38094		0.99763
23 Parathion	66767	175066	440954	893471	1339063	1741701	2140679	QUAD	0.06563	0.65024	0.10357	0.99479
24 Fenthion	89878	206817	455004	922040	1408001	1789955	2341329	WLINR	-0.01244	1.16987		0.99827
25 Merphos-A (Merphos)	23197	104851	277563	631476	1003697	1339983	1728719	WLINR	0.06365	0.87639		0.99746
26 Anilazine	3273	10789	27039	64885	101616	129151	195793	WLINR	0.06368	0.09179		0.99697
27 Tetrachlorvinphos (stirophos)	35965	97796	256768	576694	925221	1220938	1682420	WLINR	0.03907	0.79183		0.99222

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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
28 Tokuthion	1.22601	1.12742	1.27127	1.32225	1.30944	1.33086	1.26727	AVRG		1.26493		5.59788
29 Merphos-B (Merphos oxone)	58022	96740	174313	293170	395538	439795	547067	QUAD	0.06477	0.52377	4.80248	0.99795
30 Carbophenothion methyl	0.75736	0.75717	0.89847	0.94809	0.94520	0.96010	0.92358	AVRG		0.88428		10.06653
31 Fensulfothion	31957	101238	280688	603115	932760	1195644	1541611	WLINR	0.04406	0.79919		0.99507
32 Bolstar	1.35003	1.19068	1.27553	1.24212	1.18136	1.16644	1.06951	AVRG		1.21081		7.36840
33 Carbophenothion	0.99270	0.91157	1.03031	1.05279	1.04016	1.05422	1.00258	AVRG		1.01205		4.96052
34 Famphur	0.81755	0.80571	0.96709	1.00392	0.96583	0.98385	0.92956	AVRG		0.92479		8.70957

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
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Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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	1.02676	0.93500	1.04721	1.04625	0.99870	0.98619					
	0.90816						AVRG		0.99261		5.44915
37 Phosmet	42368	114720	302493	636769	974935	1249688					
	1655568						WLINR	0.02810	0.83340		0.99564
39 Azinphos-methyl	37094	89923	240868	524807	823806	1072140					
	1429834						WLINR	0.02728	0.69625		0.99187
40 Azinphos-ethyl	0.69495	0.65912	0.76659	0.77776	0.74616	0.73804					
	0.69568						AVRG		0.72547		5.96411
41 Coumaphos	37102	91236	236130	504566	780746	1021332					
	1373774						WLINR	0.02252	0.66605		0.99432
M 42 Total Demeton	56597	167552	404997	836927	1295869	1672111					
	2162260						WLINR	0.02537	1.10859		0.99819
M 43 Merphos	81219	201591	451876	924646	1399235	1779778					
	2275786						WLINR	-0.00193	1.17315		0.99761

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TestAmerica

INITIAL CALIBRATION DATA

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Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 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	118440	285008	643087	1328045	2008587	2624051					
	3329933						LINR	-0.03570	1.20195		0.99676
$ 35 Triphenyl phosphate	0.91508	0.82368	0.91619	0.91274	0.86631	0.85066					
	0.77349						AVRG		0.86545		6.27482

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TestAmerica

INITIAL CALIBRATION DATA

Start Cal Date : 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Quant Method : ISTD
Target Version : 4.14
Integrator : Falcon
Method file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Last Edit : 07-Aug-2009 13:44 GC_D.i

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

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Report Date: 07-Aug-2009 13:44

Calibration History

Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Start Cal Date: 06-AUG-2009 14:56
End Cal Date : 06-AUG-2009 18:34
Last Cal Level: 1
Last Cal Type : Continuing Calibration

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.20000		
06-AUG-2009 18:34	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\009F0901.D
Cal Level: 2 , Cal Amount: 0.50000		
06-AUG-2009 17:58	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\008F0801.D
Cal Level: 3 , Cal Amount: 1.00000		
06-AUG-2009 17:21	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\007F0701.D
Cal Level: 4 , Cal Amount: 2.00000		
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D
Cal Level: 5 , Cal Amount: 3.00000		
06-AUG-2009 16:08	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\005F0501.D
Cal Level: 6 , Cal Amount: 4.00000		
06-AUG-2009 15:32	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\004F0401.D
Cal Level: 7 , Cal Amount: 5.00000		
06-AUG-2009 14:56	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\003F0301.D

Continuing Calibration

Ccal Level Mode: BY SAMPLE

06-AUG-2009 19:10	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\010F1001.D
06-AUG-2009 16:45	8141A	\\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.2402	12.0	15.0	
2	Dichlorvos	2.0000	2.0361	1.8	15.0	
3	Mevinphos	2.0000	1.5564	22.2	15.0	<-
4	Chlormefos	2.0000	1.7365	13.2	15.0	
5	Thionazin	2.0000	2.2350	11.8	15.0	
6	Demeton-O	0.6500	2.0253	211.6	15.0	<- ok, see total demeton
7	Ethoprop	2.0000	1.9936	0.3	15.0	
8	Naled	2.0000	1.7057	14.7	15.0	
9	Sulfotepp	2.0000	1.9680	1.6	15.0	
10	Phorate	2.0000	1.6336	18.3	15.0	<-
11	Dimethoate	2.0000	2.1822	9.1	15.0	
12	Demeton-S	1.3600	0.2056	84.9	15.0	<- ok, see total demeton
13	Simazine	2.0000	2.4694	23.5	15.0	<-
14	Atrazine	2.0000	2.1611	8.1	15.0	
15	propazine	2.0000	2.1931	9.7	15.0	
17	Disulfoton	2.0000	1.9744	1.3	15.0	
16	Diazinon	2.0000	1.8671	6.6	15.0	
18	Methyl Parathion	2.0000	1.9703	1.5	15.0	
19	Ronnel	2.0000	2.0637	3.2	15.0	
20	Malathion	2.0000	1.9362	3.2	15.0	
21	Fenthion	2.0000	1.9060	4.7	15.0	
22	Parathion	2.0000	2.0598	3.0	15.0	
23	Chlorpyrifos	2.0000	1.9775	1.1	15.0	
24	Trichloronate	2.0000	1.8094	9.5	15.0	
25	Anilazine	2.0000	1.2499	37.5	15.0	<-
148	Merphos-A (Merphos)	2.0000	0.2980	85.1	999.0	
26	Tetrachlorvinphos (Stirophos)	2.0000	1.8887	5.6	15.0	
28	Tokuthion	2.0000	1.9432	2.8	15.0	
149	Merphos-B (Merphos Oxone)	2.0000	11.8778	493.9	999.0	
29	Carbophenothion-methyl	2.0000	1.3305	33.5	15.0	<-
29	Fensulfothion	2.0000	1.9661	1.7	15.0	
30	Bolstar / Famphur	4.0000	4.2423	6.1	15.0	
32	Carbophenothion	2.0000	2.1165	5.8	15.0	
31	Triphenyl phosphate	2.0000	1.8485	7.6	15.0	
34	Phosmet	2.0000	2.2723	13.6	15.0	
32	EPN	2.0000	2.2096	10.5	15.0	
33	Azinphos-methyl	2.0000	1.8506	7.5	15.0	
38	Azinphos-ethyl	2.0000	2.0552	2.8	15.0	
36	Coumaphos	2.0000	1.9367	3.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.2310	11.5	15.0
27 Merphos	2.0000	1.8981	5.1	15.0

Average %D = 29.5

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	2.0000	2.1425	7.1	15.0	
2	Dichlorvos	2.0000	1.9878	0.6	15.0	
3	Chlormefos	2.0000	1.6927	15.4	15.0	<- OK
4	Mevinphos	2.0000	1.5781	21.1	15.0	<-
5	Demeton-O	0.6500	2.0683	218.2	15.0	<- ok, see total demeton
6	Thionazin	2.0000	2.2135	10.7	15.0	
7	Ethoprop	2.0000	1.9677	1.6	15.0	
10	Naled	2.0000	1.6813	15.9	15.0	<-
145	Sulfotepp	2.0000	1.8424	7.9	15.0	
8	Phorate	2.0000	1.6013	19.9	15.0	<-
15	Demeton-S	1.3600	0.0935	93.1	15.0	<- ok, see total demeton
10	Simazine	2.0000	2.7702	38.5	15.0	<-
13	Atrazine / Propazine	4.0000	4.2316	5.8	15.0	
16	Dimethoate	2.0000	2.1608	8.0	15.0	
11	Diazinon	2.0000	1.8234	8.8	15.0	
14	Disulfoton	2.0000	1.9546	2.3	15.0	
23	Methyl Parathion	2.0000	1.9650	1.7	15.0	
17	Ronnel	2.0000	1.9361	3.2	15.0	
24	Malathion	2.0000	1.8572	7.1	15.0	
18	Chlorpyrifos	2.0000	1.9742	1.3	15.0	
20	Trichloronate	2.0000	1.7303	13.5	15.0	
26	Parathion	2.0000	2.0441	2.2	15.0	
19	Fenthion	2.0000	1.9107	4.5	15.0	
151	Merphos-A (Merphos)	2.0000	0.2815	85.9	999.0	
21	Anilazine	2.0000	0.8232	58.8	15.0	<-
27	Tetrachlorvinphos (stirophos)	2.0000	1.8642	6.8	15.0	
25	Tokuthion	2.0000	1.9613	1.9	15.0	
148	Merphos-B (Merphos oxone)	2.0000	11.9171	495.9	999.0	
28	Carbophenothion methyl	2.0000	1.3477	32.6	15.0	<-
30	Fensulfothion	2.0000	1.9468	2.7	15.0	
28	Bolstar	2.0000	1.9885	0.6	15.0	
30	Carbophenothion	2.0000	2.1111	5.6	15.0	
33	Famphur	2.0000	2.2821	14.1	15.0	
29	Triphenyl phosphate	2.0000	1.7892	10.5	15.0	
32	EPN	2.0000	2.1924	9.6	15.0	
34	Phosmet	2.0000	2.2747	13.7	15.0	
34	Azinphos-methyl	2.0000	1.8178	9.1	15.0	
35	Azinphos-ethyl	2.0000	2.1653	8.3	15.0	
36	Coumaphos	2.0000	1.8960	5.2	15.0	

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B/010F1001.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 19:10
Lab Sample ID: 8141 SS GSV87609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	2.0000	2.1617	8.1	15.0
22 Merphos	2.0000	1.9093	4.5	15.0

Average %D = 31.3

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\003F0301.D
Lab Smp Id: 8141 L7 GSV82609 Client Smp ID: 8141 L7 GSV82609
Inj Date : 06-AUG-2009 14:56
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L7 GSV82609
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 Cal File: 009F0901.D
Als bottle: 3 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 8141A.sub
Target Version: 4.14
Processing Host: DENPC075

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 o,o,o-TEPT	4.337	4.267	(0.316)	4488963	5.00000	4.934(M)
	2 Dichlorvos	5.900	5.865	(0.430)	2137554	5.00000	4.753
	3 Mevinphos	9.419	9.407	(0.687)	1152906	5.00000	5.000(A)
$	4 Chlormefos	9.511	9.502	(0.694)	3654328	5.00000	4.436
	5 Thionazin	12.625	12.625	(0.921)	2920220	5.00000	4.662
	6 Demeton-O	12.876	12.876	(0.939)	761277	1.62500	1.520
	7 Ethoprop	13.201	13.205	(0.963)	2505899	5.00000	4.437
	8 Naled	13.481	13.482	(0.983)	1127359	5.00000	5.039(A)
*	9 Tributylphosphate	13.709	13.714	(1.000)	1068614	2.00000	
	10 Sulfotepp	14.143	14.143	(1.032)	3935138	5.00000	4.704
	11 Phorate	14.227	14.227	(1.038)	2482436	5.00000	4.506
	12 Dimethoate	14.399	14.416	(1.050)	2590760	5.00000	4.749
	13 Demeton-S	14.679	14.682	(1.071)	1490677	3.40000	3.258
	14 Simazine	14.779	14.783	(1.078)	804726	5.00000	4.961
	15 Atrazine	14.996	14.997	(1.094)	1175975	5.00000	4.697
	16 propazine	15.177	15.178	(1.107)	1184985	5.00000	5.031(A)
	17 Disulfoton	15.864	15.866	(0.586)	2454335	5.00000	4.638
	18 Diazinon	15.933	15.934	(0.588)	2542893	5.00000	4.672
	19 Methyl Parathion	16.827	16.829	(0.622)	1968772	5.00000	4.793
	20 Ronnel	17.454	17.456	(0.645)	2225399	5.00000	5.252(A)
	21 Malathion	18.133	18.134	(0.670)	1809734	5.00000	4.896
	22 Fenthion	18.283	18.284	(0.675)	2105793	5.00000	4.802
	23 Parathion	18.389	18.392	(0.679)	2156342	5.00000	4.751
	24 Chlorpyrifos	18.450	18.451	(0.681)	2373426	5.00000	4.808
	25 Trichloronate	18.957	18.958	(0.700)	2640021	5.00000	5.012(A)
	26 Anilazine	19.339	19.345	(0.714)	224347	5.00000	5.105(A)
	27 Merphos-A (Merphos)	19.800	19.804	(0.731)	1714293	5.00000	4.831
	28 Tetrachlorvinphos (Stirophos)	20.527	20.532	(0.758)	1539127	5.00000	5.130(A)
	29 Tokuthion	21.278	21.278	(0.786)	2469788	5.00000	4.930
	30 Merphos-B (Merphos Oxone)	21.532	21.536	(0.795)	528766	5.00000	4.945
	31 Carbophenothion-methyl	22.252	22.254	(0.822)	1741313	5.00000	4.926
	32 Fensulfothion	22.449	22.465	(0.829)	1592051	5.00000	4.772
	33 Bolstar / Famphur	23.624	23.627	(0.873)	4156553	10.0000	9.716

						AMOUNTS	
						CAL-AMT	ON-COL
	Compounds	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34 Carbophenothion	23.946	23.947	(0.884)	1965799	5.00000	4.850
$	35 Triphenyl phosphate	25.268	25.270	(0.933)	1556913	5.00000	4.832(A)
	36 Phosmet	25.764	25.769	(0.952)	1647305	5.00000	4.889
	37 EPN	26.095	26.097	(0.964)	1943280	5.00000	4.660
	38 Azinphos-methyl	26.579	26.584	(0.982)	1592084	5.00000	4.962
*	39 TOCP	27.074	27.076	(1.000)	738395	2.00000	
	40 Azinphos-ethyl	27.167	27.172	(1.003)	1805786	5.00000	4.706
	41 Coumaphos	27.689	27.694	(1.023)	1602651	5.00000	4.946
M	42 Total Demeton				2251954	5.00000	4.778
M	43 Merphos				2243059	5.00000	4.599

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

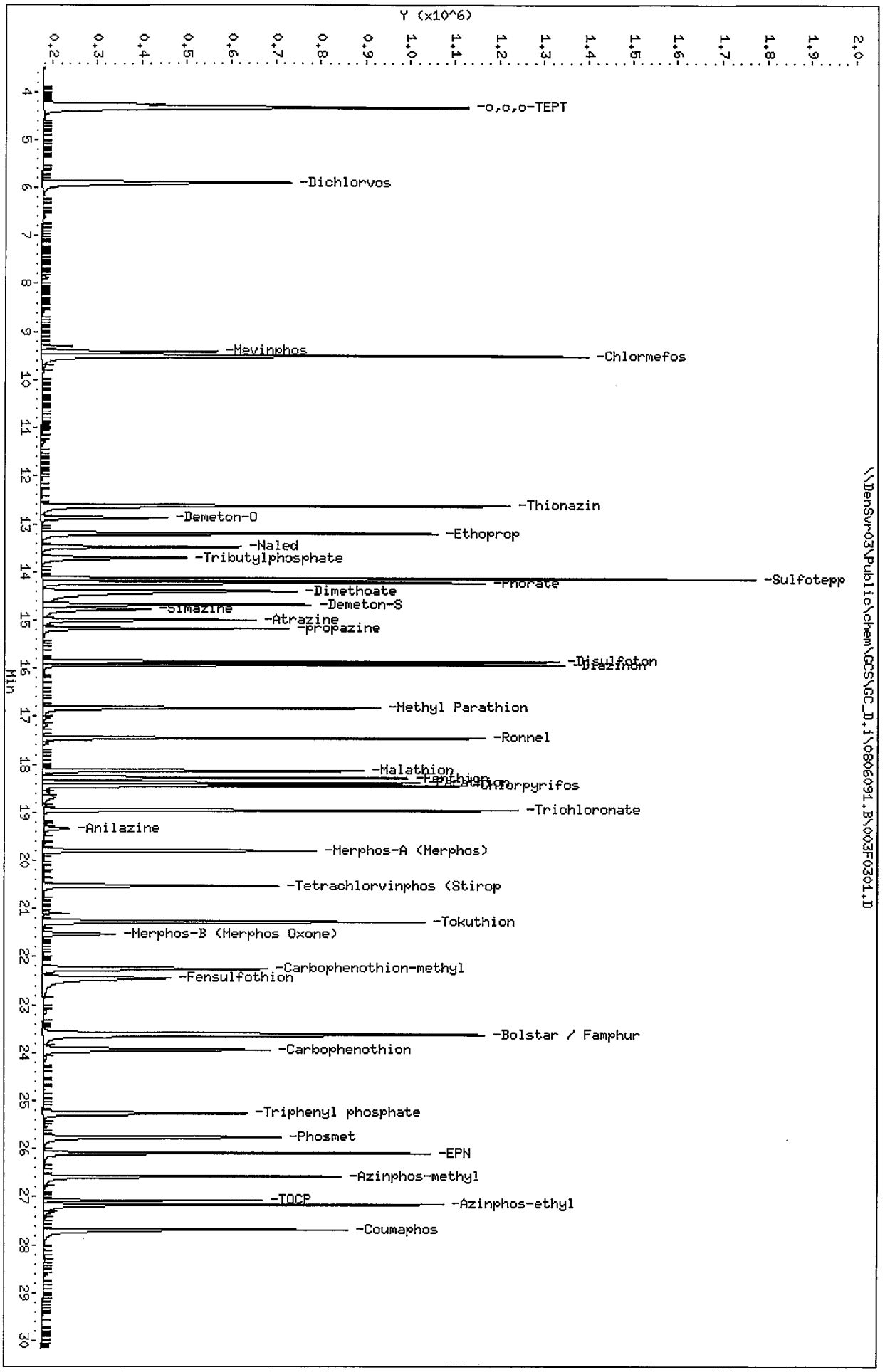
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 L7 GSV82609
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L7 GSV8260
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	1068614	3.32
39 TOCP	695324	347662	1390648	738395	6.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.71	0.08
39 TOCP	27.08	26.58	27.58	27.07	-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\0806091,B\003F0301,D
Date : 06-AUG-2009 14:56
Client ID: 8141 L7 GSV82609
Sample Info: 8141 L7 GSV82609
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/003F0301.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 14:56
Lab Sample ID: 8141 L7 GSV82609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	4.3142	43.8	15.0	<-
2	Dichlorvos	3.0000	4.7548	58.5	15.0	<-
3	Mevinphos	3.0000	5.2491	75.0	15.0	<-
4	Chlormefos	3.0000	4.3776	45.9	15.0	<-
5	Thionazin	3.0000	4.6629	55.4	15.0	<-
6	Demeton-O	0.9750	1.4314	46.8	15.0	<-
7	Ethoprop	3.0000	4.4386	48.0	15.0	<-
8	Naled	3.0000	5.2235	74.1	15.0	<-
9	Sulfotepp	3.0000	4.7291	57.6	15.0	<-
10	Phorate	3.0000	4.7224	57.4	15.0	<-
11	Dimethoate	3.0000	4.9039	63.5	15.0	<-
12	Demeton-S	2.0400	3.8555	89.0	15.0	<-
13	Simazine	3.0000	4.5722	52.4	15.0	<-
14	Atrazine	3.0000	4.8477	61.6	15.0	<-
15	propazine	3.0000	4.8465	61.5	15.0	<-
17	Disulfoton	3.0000	4.7214	57.4	15.0	<-
16	Diazinon	3.0000	4.1907	39.7	15.0	<-
18	Methyl Parathion	3.0000	4.7872	59.6	15.0	<-
19	Ronnel	3.0000	4.9720	65.7	15.0	<-
20	Malathion	3.0000	4.8957	63.2	15.0	<-
21	Fenthion	3.0000	4.8025	60.1	15.0	<-
22	Parathion	3.0000	4.7976	59.9	15.0	<-
23	Chlorpyrifos	3.0000	4.8434	61.4	15.0	<-
24	Trichloronate	3.0000	4.9307	64.4	15.0	<-
25	Anilazine	3.0000	4.9899	66.3	15.0	<-
148	Merphos-A (Merphos)	3.0000	4.9039	63.5	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	4.9673	65.6	15.0	<-
28	Tokuthion	3.0000	4.9299	64.3	15.0	<-
149	Merphos-B (Merphos Oxone)	3.0000	3.0113	0.4	999.0	
29	Carbophenothion-methyl	3.0000	4.7224	57.4	15.0	<-
29	Fensulfothion	3.0000	4.8806	62.7	15.0	<-
30	Bolstar / Famphur	6.0000	11.5025	91.7	15.0	<-
32	Carbophenothion	3.0000	4.8378	61.3	15.0	<-
31	Triphenyl phosphate	3.0000	4.8315	61.1	15.0	<-
34	Phosmet	3.0000	6.9503	131.7	15.0	<-
32	EPN	3.0000	4.6600	55.3	15.0	<-
33	Azinphos-methyl	3.0000	4.9247	64.2	15.0	<-
38	Azinphos-ethyl	3.0000	4.8442	61.5	15.0	<-
36	Coumaphos	3.0000	6.0607	102.0	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/003F0301.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

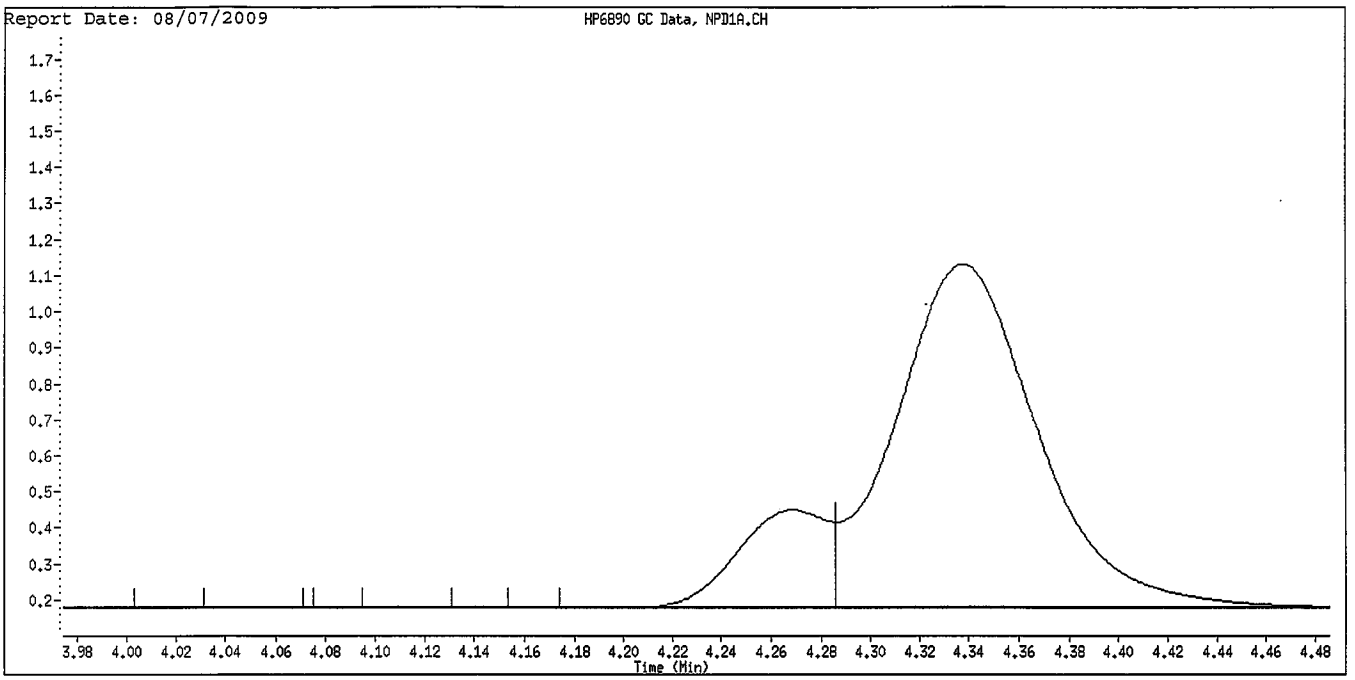
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 14:56
Lab Sample ID: 8141 L7 GSV82609
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

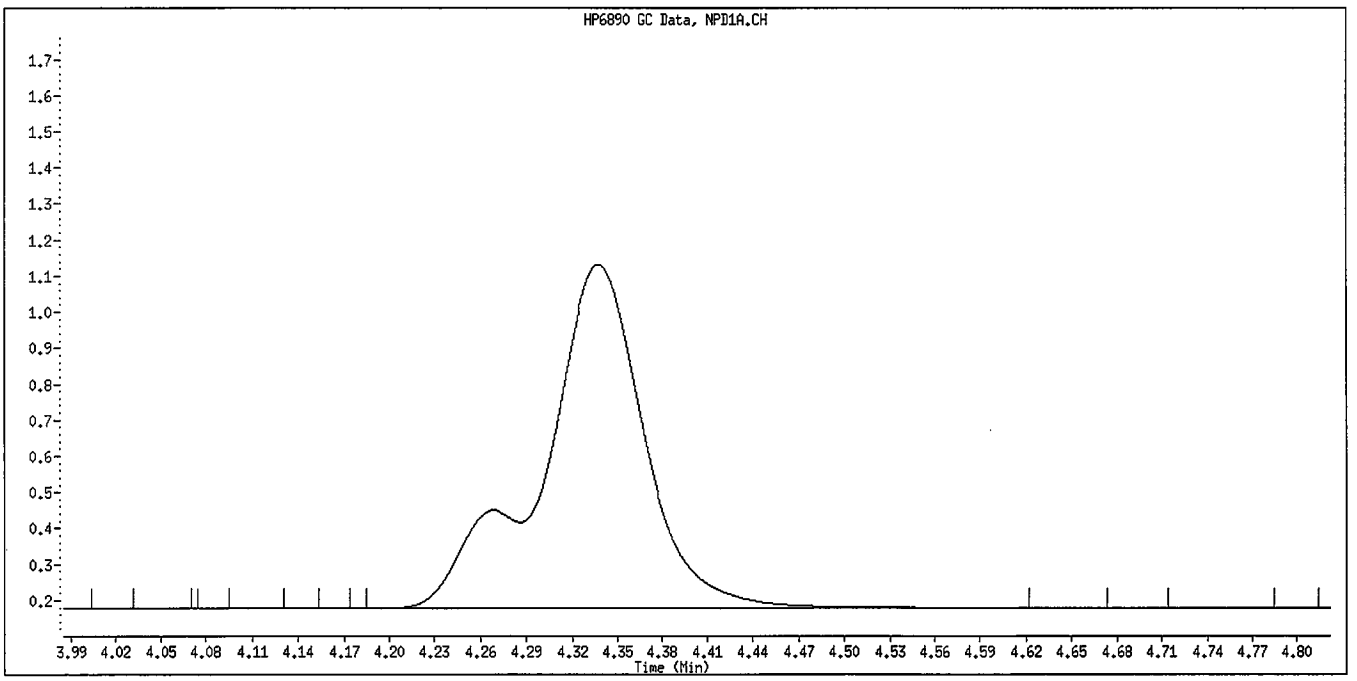
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	5.2869	76.2	15.0	<-
27 Merphos	3.0000	4.5897	53.0	15.0	<-

Average %D = 62.4

Data File Name: 003F0301.D
Inj. Date and Time: 06-AUG-2009 14:56
Instrument ID: GC_D.i
Client ID: 8141 L7 GSV82609
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\004F0401.D
Lab Smp Id: 8141 L6 GSV87009 Client Smp ID: 8141 L6 GSV87009
Inj Date : 06-AUG-2009 15:32
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L6 GSV87009
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 14:56 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	4.267	(0.311)	3532965	4.00000	4.127(M)
	2 Dichlorvos	5.865	5.865	(0.428)	1660351	4.00000	4.040
	3 Mevinphos	9.405	9.407	(0.686)	830977	4.00000	4.028
$	4 Chlormefos	9.502	9.502	(0.693)	2855746	4.00000	3.793
	5 Thionazin	12.623	12.625	(0.921)	2252008	4.00000	3.944
	6 Demeton-O	12.876	12.876	(0.939)	581572	1.30000	1.267
	7 Ethoprop	13.201	13.205	(0.963)	1955169	4.00000	3.801
	8 Naled	13.480	13.482	(0.983)	777472	4.00000	3.902
*	9 Tributylphosphate	13.712	13.714	(1.000)	976680	2.00000	
	10 Sulfotepp	14.142	14.143	(1.031)	3054969	4.00000	3.995
	11 Phorate	14.227	14.227	(1.038)	1931467	4.00000	3.836
	12 Dimethoate	14.402	14.416	(1.050)	1934346	4.00000	3.944
	13 Demeton-S	14.677	14.682	(1.070)	1152288	2.72000	2.758
	14 Simazine	14.777	14.783	(1.078)	631700	4.00000	4.089
	15 Atrazine	14.995	14.997	(1.094)	887166	4.00000	3.911
	16 propazine	15.177	15.178	(1.107)	900547	4.00000	4.184
	17 Disulfoton	15.864	15.866	(0.586)	1882342	4.00000	3.974
	18 Diazinon	15.932	15.934	(0.588)	1969776	4.00000	4.016
	19 Methyl Parathion	16.828	16.829	(0.622)	1471875	4.00000	4.004
	20 Ronnel	17.454	17.456	(0.645)	1630230	4.00000	4.286
	21 Malathion	18.132	18.134	(0.670)	1378757	4.00000	4.155
	22 Fenthion	18.282	18.284	(0.675)	1589817	4.00000	4.048
	23 Parathion	18.388	18.392	(0.679)	1621434	4.00000	4.009
	24 Chlorpyrifos	18.448	18.451	(0.681)	1798423	4.00000	4.024
	25 Trichloronate	18.957	18.958	(0.700)	1957701	4.00000	4.140
	26 Anilazine	19.340	19.345	(0.714)	153137	4.00000	3.978
	27 Merphos-A (Merphos)	19.800	19.804	(0.731)	1320113	4.00000	4.158
	28 Tetrachlorvinphos (Stirophos)	20.527	20.532	(0.758)	1111793	4.00000	4.146
	29 Tokuthion	21.277	21.278	(0.786)	1847909	4.00000	4.109
	30 Merphos-B (Merphos Oxone)	21.532	21.536	(0.795)	422425	4.00000	4.026
	31 Carbophenothion-methyl	22.252	22.254	(0.822)	1285762	4.00000	4.070
	32 Fensulfothion	22.458	22.465	(0.829)	1172734	4.00000	3.970
	33 Bolstar / Famphur	23.623	23.627	(0.872)	3128382	8.00000	7.996

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.944	23.947	(0.884)	1466904	4.00000	4.031
$	35 Triphenyl phosphate	25.271	25.270	(0.933)	1197295	4.00000	4.139(A)
	36 Phosmet	25.766	25.769	(0.952)	1218253	4.00000	4.046
	37 EPN	26.097	26.097	(0.964)	1497280	4.00000	3.999
	38 Azinphos-methyl	26.581	26.584	(0.982)	1158610	4.00000	4.051
*	39 TOCP	27.076	27.076	(1.000)	662886	2.00000	
	40 Azinphos-ethyl	27.169	27.172	(1.003)	1356516	4.00000	3.938
	41 Coumaphos	27.690	27.694	(1.023)	1188819	4.00000	4.100
M	42 Total Demeton				1733860	4.00000	4.025
M	43 Merphos				1742538	4.00000	3.980

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

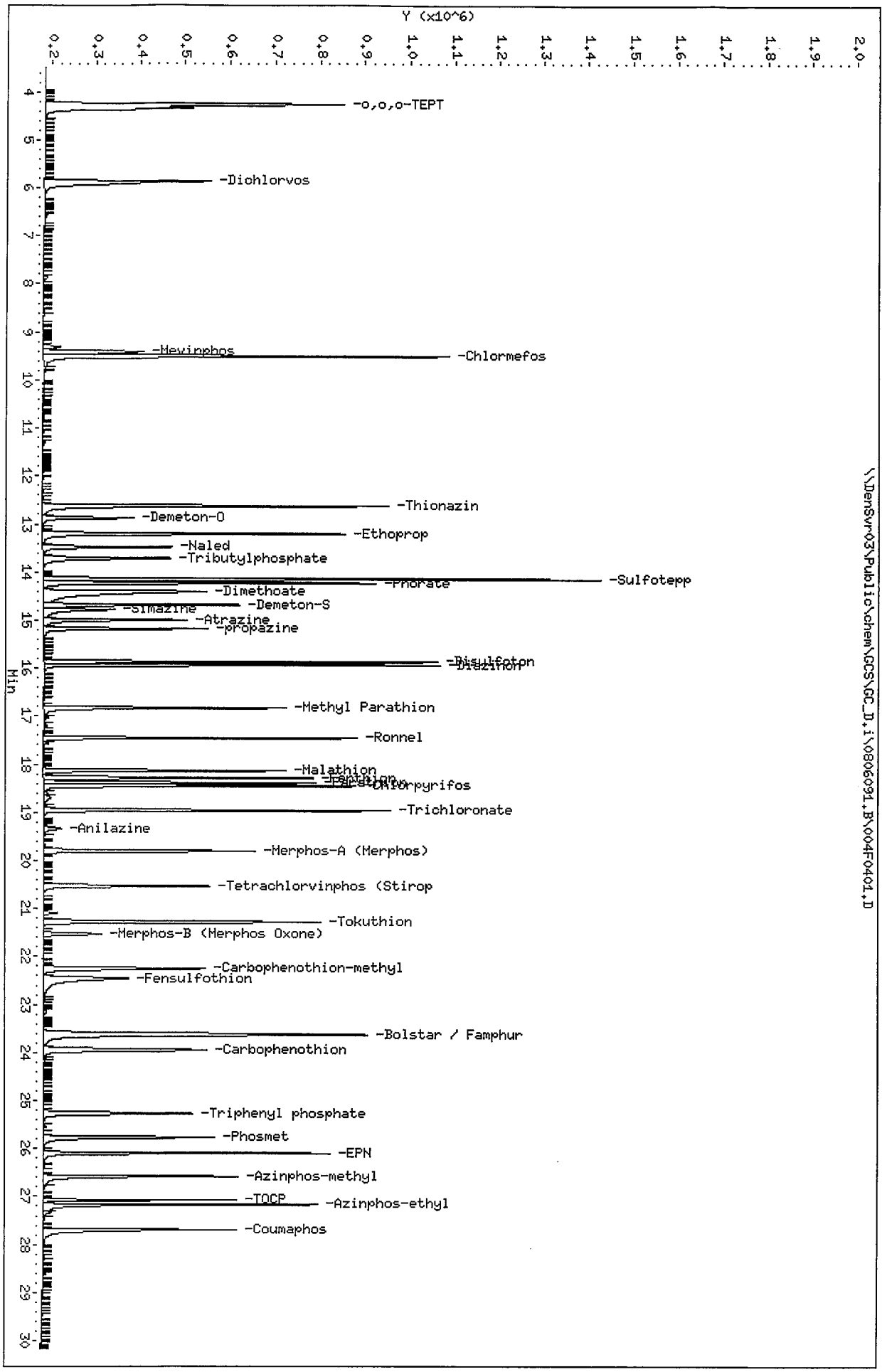
Instrument ID: GC_D.i
Lab File ID: 004F0401.D
Lab Smp Id: 8141 L6 GSV87009
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L6 GSV8700
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	976680	-5.57
39 TOCP	695324	347662	1390648	662886	-4.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.71	0.10
39 TOCP	27.08	26.58	27.58	27.08	-0.00

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



Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806091,B\004F0401,D
Date : 06-AUG-2009 15:32
Client ID: 8141 L6 GSV87009
Sample Info: 8141 L6 GSV87009
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/004F0401.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

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

Injection Date: 06-AUG-2009 15:32
Lab Sample ID: 8141 L6 GSV87009
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1 o,o,o-TEPT	3.0000	3.7272	24.2	15.0	<-
2 Dichlorvos	3.0000	4.0433	34.8	15.0	<-
3 Mevinphos	3.0000	4.1986	40.0	15.0	<-
4 Chlormefos	3.0000	3.7459	24.9	15.0	<-
5 Thionazin	3.0000	3.9478	31.6	15.0	<-
6 Demeton-O	0.9750	1.1973	22.8	15.0	<-
7 Ethoprop	3.0000	3.8052	26.8	15.0	<-
8 Naled	3.0000	3.9829	32.8	15.0	<-
9 Sulfotepp	3.0000	4.0186	34.0	15.0	<-
10 Phorate	3.0000	4.0020	33.4	15.0	<-
11 Dimethoate	3.0000	4.0344	34.5	15.0	<-
12 Demeton-S	2.0400	3.2574	59.7	15.0	<-
13 Simazine	3.0000	3.9165	30.5	15.0	<-
14 Atrazine	3.0000	4.0098	33.7	15.0	<-
15 propazine	3.0000	4.0316	34.4	15.0	<-
17 Disulfoton	3.0000	4.0431	34.8	15.0	<-
16 Diazinon	3.0000	3.6165	20.5	15.0	<-
18 Methyl Parathion	3.0000	4.0079	33.6	15.0	<-
19 Ronnel	3.0000	4.0651	35.5	15.0	<-
20 Malathion	3.0000	4.1529	38.4	15.0	<-
21 Fenthion	3.0000	4.0455	34.9	15.0	<-
22 Parathion	3.0000	4.0375	34.6	15.0	<-
23 Chlorpyrifos	3.0000	4.0299	34.3	15.0	<-
24 Trichloronate	3.0000	4.0755	35.8	15.0	<-
25 Anilazine	3.0000	4.0456	34.9	15.0	<-
148 Merphos-A (Merphos)	3.0000	4.1603	38.7	999.0	
26 Tetrachlorvinphos (Stirophos)	3.0000	4.0360	34.5	15.0	<-
28 Tokuthion	3.0000	4.1080	36.9	15.0	<-
149 Merphos-B (Merphos Oxone)	3.0000	2.6792	10.7	999.0	
29 Carbophenothion-methyl	3.0000	3.9176	30.6	15.0	<-
29 Fensulfothion	3.0000	4.0266	34.2	15.0	<-
30 Bolstar / Famphur	6.0000	9.6457	60.8	15.0	<-
32 Carbophenothion	3.0000	4.0246	34.2	15.0	<-
31 Triphenyl phosphate	3.0000	4.1371	37.9	15.0	<-
34 Phosmet	3.0000	5.7287	91.0	15.0	<-
32 EPN	3.0000	4.0029	33.4	15.0	<-
33 Azinphos-methyl	3.0000	4.0338	34.5	15.0	<-
38 Azinphos-ethyl	3.0000	4.0493	35.0	15.0	<-
36 Coumaphos	3.0000	5.0072	66.9	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/004F0401.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

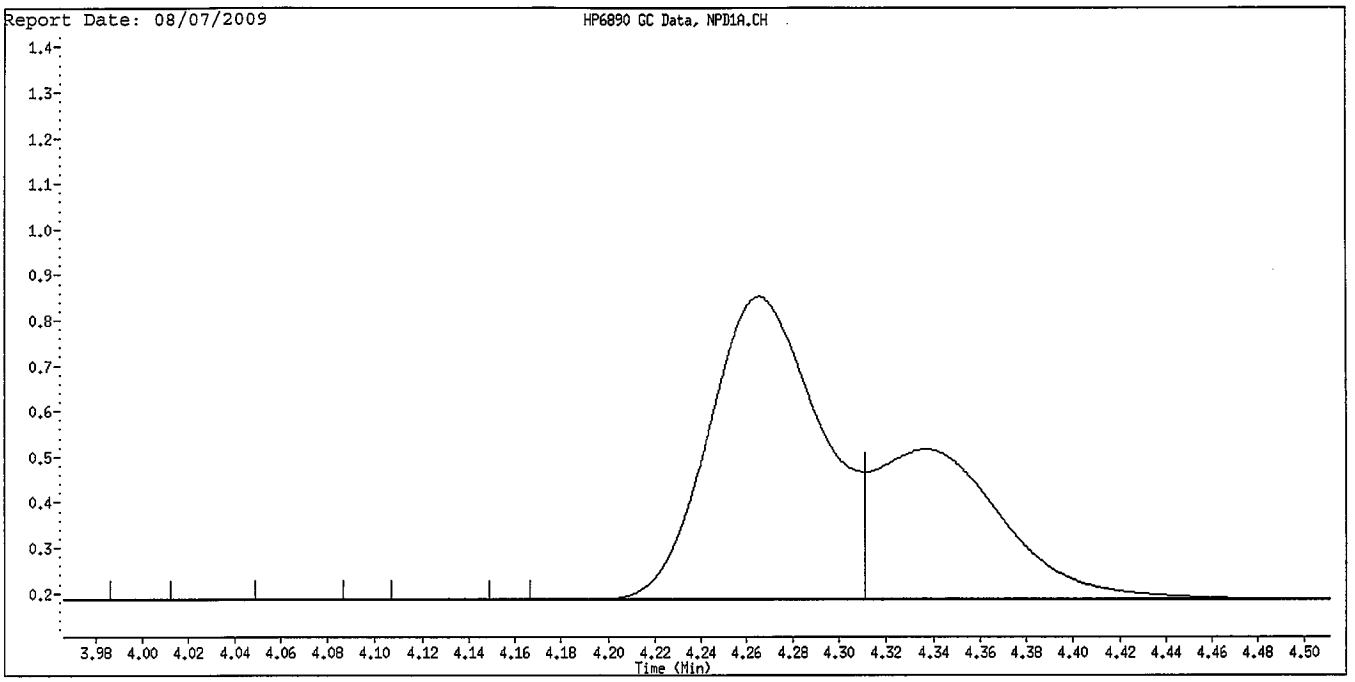
Instrument ID: GC_D.i
Lab File ID: 004F0401.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 15:32
Lab Sample ID: 8141 L6 GSV87009
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

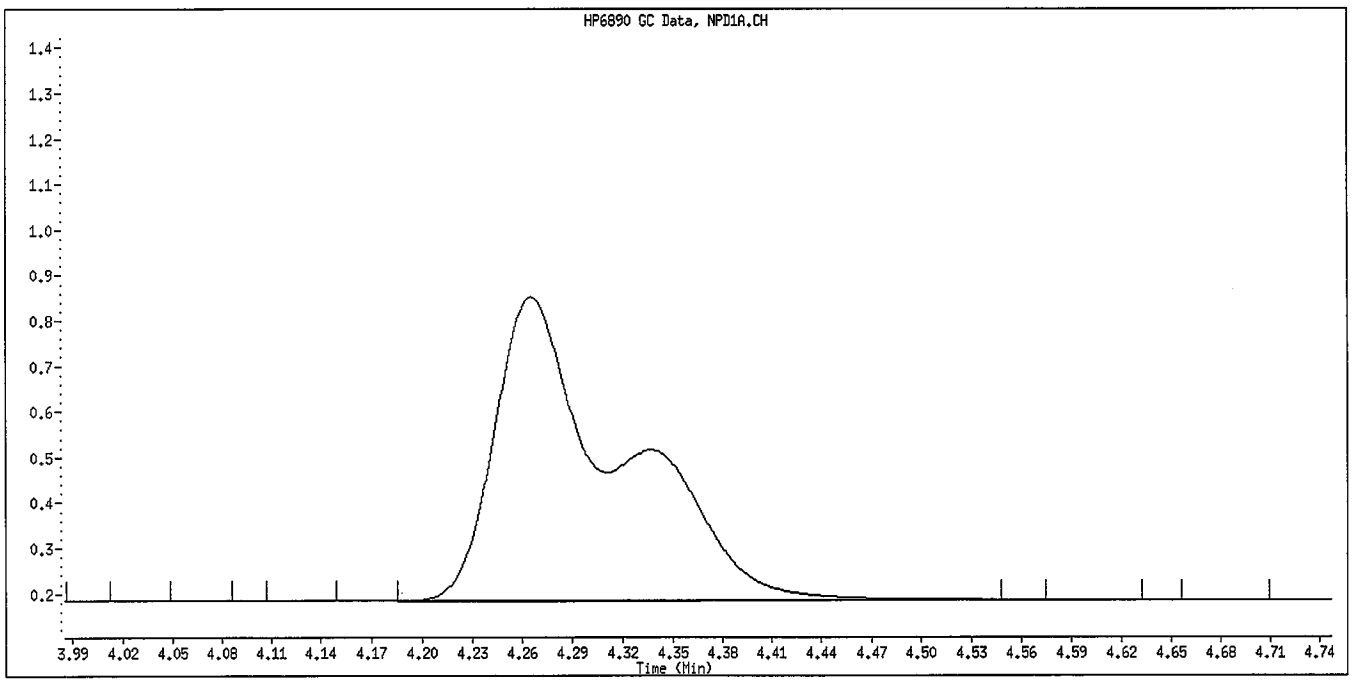
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	4.4546	48.5	15.0	<-
27 Merphos	3.0000	3.9712	32.4	15.0	<-

Average %D = 36.5

Data File Name: 004F0401.D
Inj. Date and Time: 06-AUG-2009 15:32
Instrument ID: GC_D.i
Client ID: 8141 L6 GSV87009
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\005F0501.D
Lab Smp Id: 8141 L5 GSV87109 Client Smp ID: 8141 L5 GSV87109
Inj Date : 06-AUG-2009 16:08
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L5 GSV87109
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 15:32 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	4.266	4.267	(0.311)	2678940	3.00000	2.919(M)
	2 Dichlorvos	5.864	5.865	(0.428)	1231344	3.00000	2.932
	3 Mevinphos	9.406	9.407	(0.686)	596188	3.00000	2.948
$	4 Chlormefos	9.501	9.502	(0.693)	2173979	3.00000	2.826
	5 Thionazin	12.624	12.625	(0.921)	1718412	3.00000	2.963
	6 Demeton-O	12.875	12.876	(0.939)	460549	0.97500	0.9780
	7 Ethoprop	13.204	13.205	(0.963)	1510941	3.00000	2.896
	8 Naled	13.482	13.482	(0.983)	602529	3.00000	3.034
*	9 Tributylphosphate	13.714	13.714	(1.000)	997831	2.00000	
	10 Sulfotepp	14.143	14.143	(1.031)	2351109	3.00000	3.010
	11 Phorate	14.227	14.227	(1.037)	1492108	3.00000	2.901
	12 Dimethoate	14.415	14.416	(1.051)	1446366	3.00000	2.981
	13 Demeton-S	14.681	14.682	(1.071)	888508	2.04000	2.085
	14 Simazine	14.783	14.783	(1.078)	493520	3.00000	2.956
	15 Atrazine	14.997	14.997	(1.094)	667495	3.00000	2.931
	16 propazine	15.178	15.178	(1.107)	680031	3.00000	3.092
	17 Disulfoton	15.865	15.866	(0.586)	1440699	3.00000	2.977
	18 Diazinon	15.934	15.934	(0.588)	1526415	3.00000	2.998
	19 Methyl Parathion	16.829	16.829	(0.622)	1132305	3.00000	3.012
	20 Ronnel	17.455	17.456	(0.645)	1224497	3.00000	3.129
	21 Malathion	18.134	18.134	(0.670)	1068194	3.00000	3.128
	22 Fenthion	18.284	18.284	(0.675)	1222175	3.00000	3.040
	23 Parathion	18.392	18.392	(0.679)	1232087	3.00000	3.008
	24 Chlorpyrifos	18.450	18.451	(0.681)	1387727	3.00000	2.963
	25 Trichloronate	18.958	18.958	(0.700)	1482082	3.00000	3.046
	26 Anilazine	19.344	19.345	(0.714)	109906	3.00000	2.897
	27 Merphos-A (Merphos)	19.804	19.804	(0.731)	975630	3.00000	3.016
	28 Tetrachlorvinphos (Stirophos)	20.531	20.532	(0.758)	821547	3.00000	3.003
	29 Tokuthion	21.278	21.278	(0.786)	1405740	3.00000	3.038
	30 Merphos-B (Merphos Oxone)	21.535	21.536	(0.795)	371990	3.00000	3.077
	31 Carbophenothion-methyl	22.254	22.254	(0.822)	972242	3.00000	3.017
	32 Fensulfothion	22.464	22.465	(0.830)	876396	3.00000	2.966
	33 Bolstar / Famphur	23.626	23.627	(0.873)	2416510	6.00000	6.031

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.946	23.947	(0.884)	1134170	3.00000	3.029
$	35 Triphenyl phosphate	25.269	25.270	(0.933)	921466	3.00000	3.096(A)
	36 Phosmet	25.769	25.769	(0.952)	916951	3.00000	2.989
	37 EPN	26.097	26.097	(0.964)	1143331	3.00000	2.968
	38 Azinphos-methyl	26.584	26.584	(0.982)	862799	3.00000	2.974
*	39 TOCP	27.075	27.076	(1.000)	682079	2.00000	
	40 Azinphos-ethyl	27.172	27.172	(1.004)	1051907	3.00000	2.968
	41 Coumaphos	27.694	27.694	(1.023)	895805	3.00000	3.022
M	42 Total Demeton				1349057	3.00000	3.063
M	43 Merphos				1347620	3.00000	2.991

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

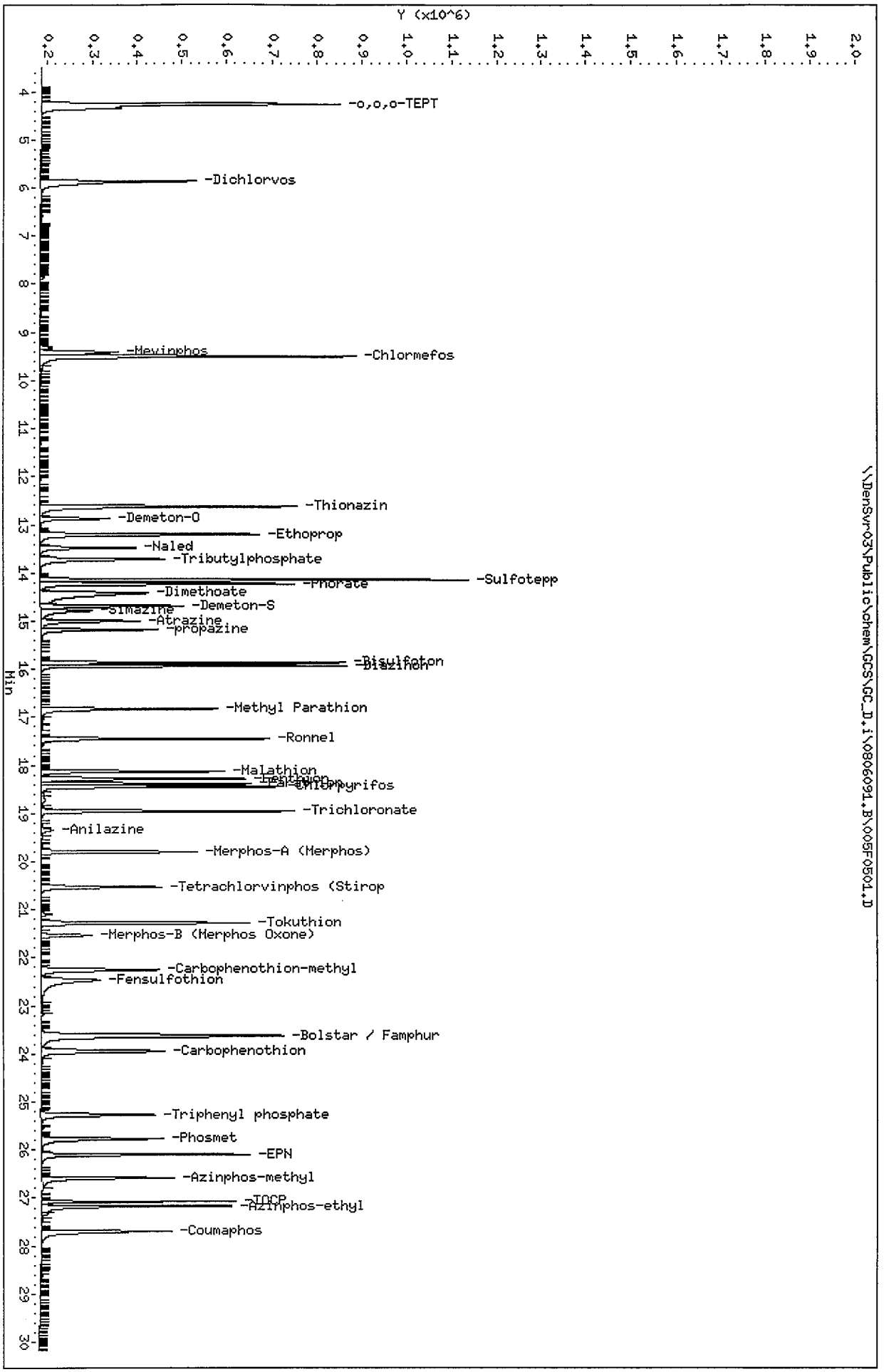
Instrument ID: GC_D.i
Lab File ID: 005F0501.D
Lab Smp Id: 8141 L5 GSV87109
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L5 GSV8710
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	997831	-3.53
39 TOCP	695324	347662	1390648	682079	-1.90

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.71	0.11
39 TOCP	27.08	26.58	27.58	27.08	-0.00

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



Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806091,B\005F0501,D
Date : 06-AUG-2009 16:08
Client ID: 8141 L5 GSV87109
Sample Info: 8141 L5 GSV87109
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/005F0501.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 005F0501.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 16:08
Lab Sample ID: 8141 L5 GSV87109
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	2.7636	7.9	15.0	
2	Dichlorvos	3.0000	2.9290	2.4	15.0	
3	Mevinphos	3.0000	3.0125	0.4	15.0	
4	Chlormefos	3.0000	2.7879	7.1	15.0	
5	Thionazin	3.0000	2.9596	1.3	15.0	
6	Demeton-O	0.9750	0.9278	4.8	15.0	
7	Ethoprop	3.0000	2.8961	3.5	15.0	
8	Naled	3.0000	3.0574	1.9	15.0	
9	Sulfotepp	3.0000	3.0223	0.7	15.0	
10	Phorate	3.0000	2.9926	0.2	15.0	
11	Dimethoate	3.0000	3.0085	0.3	15.0	
12	Demeton-S	2.0400	2.4547	20.3	15.0	<-
13	Simazine	3.0000	3.0267	0.9	15.0	
14	Atrazine	3.0000	2.9854	0.5	15.0	
15	propazine	3.0000	2.9986	0.0	15.0	
17	Disulfoton	3.0000	3.0245	0.8	15.0	
16	Diazinon	3.0000	2.7242	9.2	15.0	
18	Methyl Parathion	3.0000	3.0262	0.9	15.0	
19	Ronnel	3.0000	2.9794	0.7	15.0	
20	Malathion	3.0000	3.1262	4.2	15.0	
21	Fenthion	3.0000	3.0366	1.2	15.0	
22	Parathion	3.0000	3.0160	0.5	15.0	
23	Chlorpyrifos	3.0000	2.9344	2.2	15.0	
24	Trichloronate	3.0000	3.0033	0.1	15.0	
25	Anilazine	3.0000	3.0359	1.2	15.0	
148	Merphos-A (Merphos)	3.0000	2.9498	1.7	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	2.9549	1.5	15.0	
28	Tokuthion	3.0000	3.0365	1.2	15.0	
149	Merphos-B (Merphos Oxone)	3.0000	2.2946	23.5	999.0	
29	Carbophenothion-methyl	3.0000	2.9308	2.3	15.0	
29	Fensulfothion	3.0000	2.9992	0.0	15.0	
30	Bolstar / Famphur	6.0000	7.2483	20.8	15.0	<-
32	Carbophenothion	3.0000	3.0304	1.0	15.0	
31	Triphenyl phosphate	3.0000	3.0967	3.2	15.0	
34	Phosmet	3.0000	4.1916	39.7	15.0	<-
32	EPN	3.0000	2.9730	0.9	15.0	
33	Azinphos-methyl	3.0000	2.9802	0.7	15.0	
38	Azinphos-ethyl	3.0000	3.0463	1.5	15.0	
36	Coumaphos	3.0000	3.6741	22.5	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/005F0501.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

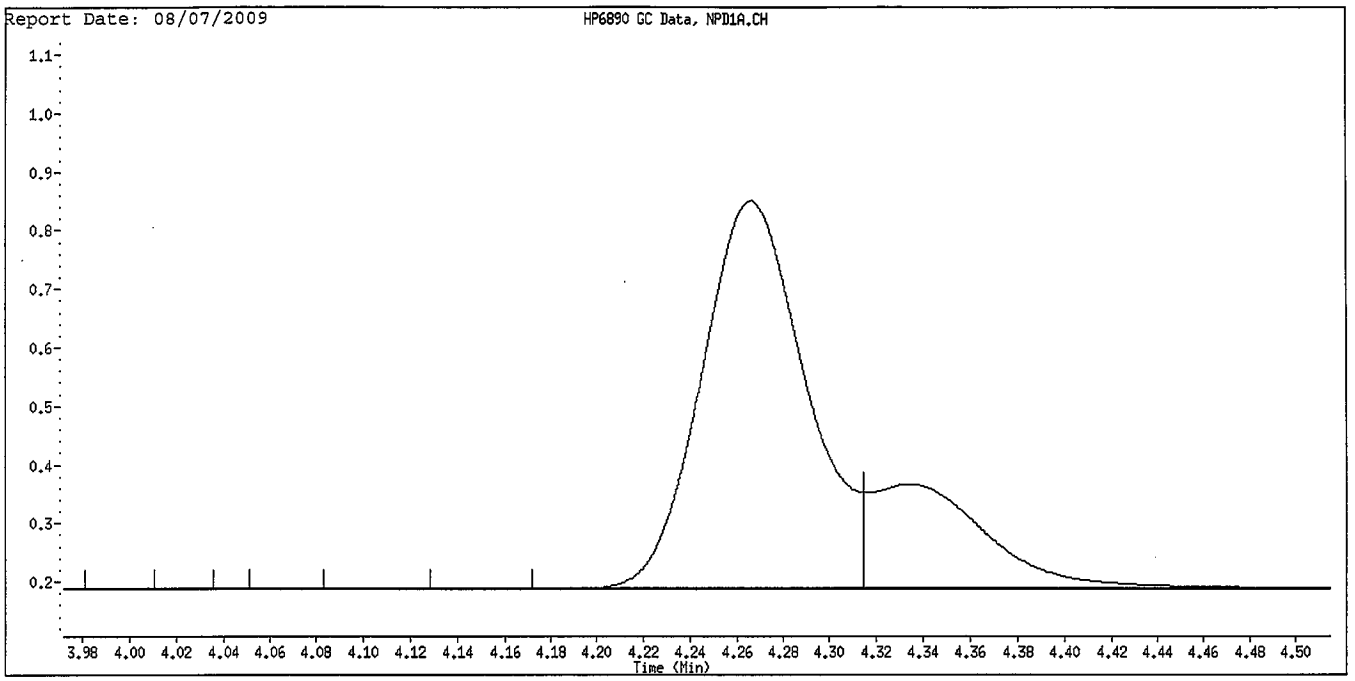
Instrument ID: GC_D.i
Lab File ID: 005F0501.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 16:08
Lab Sample ID: 8141 L5 GSV87109
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

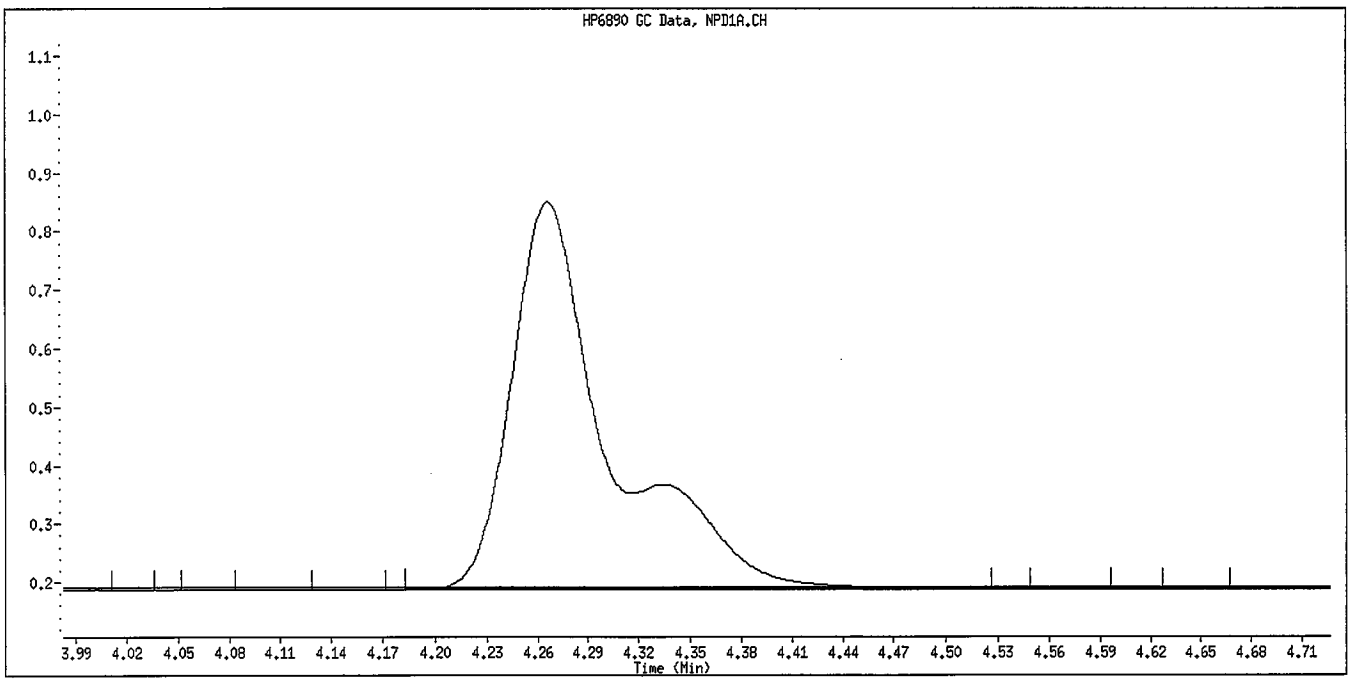
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D
40 Total Demeton	3.0000	3.3824	12.7	15.0
27 Merphos	3.0000	2.9860	0.5	15.0

Average %D = 5.05

Data File Name: 005F0501.D
Inj. Date and Time: 06-AUG-2009 16:08
Instrument ID: GC_D.i
Client ID: 8141 L5 GSV87109
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\006F0601.D
Lab Smp Id: 8141 L4 GSV87209 Client Smp ID: 8141 L4 GSV87209
Inj Date : 06-AUG-2009 16:45
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L4 GSV87209
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 16:08 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	4.266	4.267	(0.311)	1806303	2.00000	2.027(M)
	2 Dichlorvos	5.871	5.865	(0.428)	806939	2.00000	2.062
	3 Mevinphos	9.425	9.407	(0.687)	356823	2.00000	2.037
$	4 Chlormefos	9.504	9.502	(0.693)	1500556	2.00000	2.093
	5 Thionazin	12.627	12.625	(0.920)	1140983	2.00000	2.130
	6 Demeton-O	12.879	12.876	(0.939)	301922	0.65000	0.6820
	7 Ethoprop	13.210	13.205	(0.963)	1004283	2.00000	2.091
	8 Naled	13.485	13.482	(0.983)	361004	2.00000	2.035
*	9 Tributylphosphate	13.719	13.714	(1.000)	930125	2.00000	
	10 Sulfotepp	14.145	14.143	(1.031)	1569936	2.00000	2.156
	11 Phorate	14.230	14.227	(1.037)	996323	2.00000	2.078
	12 Dimethoate	14.429	14.416	(1.052)	877602	2.00000	2.064
	13 Demeton-S	14.688	14.682	(1.071)	598857	1.36000	1.512
	14 Simazine	14.790	14.783	(1.078)	313833	2.00000	1.928
	15 Atrazine	15.002	14.997	(1.094)	417568	2.00000	2.030
	16 propazine	15.182	15.178	(1.107)	426561	2.00000	2.081
	17 Disulfoton	15.867	15.866	(0.586)	956556	2.00000	2.118
	18 Diazinon	15.935	15.934	(0.589)	1016692	2.00000	2.083
	19 Methyl Parathion	16.834	16.829	(0.622)	727074	2.00000	2.071
	20 Ronnel	17.457	17.456	(0.645)	776395	2.00000	2.100
	21 Malathion	18.136	18.134	(0.670)	702019	2.00000	2.177
	22 Fenthion	18.286	18.284	(0.675)	790291	2.00000	2.100
	23 Parathion	18.393	18.392	(0.679)	780379	2.00000	2.077
	24 Chlorpyrifos	18.453	18.451	(0.681)	926482	2.00000	2.031
	25 Trichloronate	18.960	18.958	(0.700)	943008	2.00000	2.052
	26 Anilazine	19.355	19.345	(0.715)	62364	2.00000	1.901
	27 Merphos-A (Merphos)	19.804	19.804	(0.731)	619861	2.00000	2.063
	28 Tetrachlorvinphos (Stirophos)	20.534	20.532	(0.758)	510754	2.00000	2.008
	29 Tokuthion	21.280	21.278	(0.786)	908087	2.00000	2.078
	30 Merphos-B (Merphos Oxone)	21.536	21.536	(0.795)	271041	2.00000	1.998
	31 Carbophenothion-methyl	22.260	22.254	(0.822)	618555	2.00000	2.065
	32 Fensulfothion	22.489	22.465	(0.831)	563535	2.00000	2.116
	33 Bolstar / Famphur	23.631	23.627	(0.873)	1568236	4.00000	4.180

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.954	23.947	(0.885)	730586	2.00000	2.066
$	35 Triphenyl phosphate	25.274	25.270	(0.933)	612613	2.00000	2.179(A)
	36 Phosmet	25.779	25.769	(0.952)	595984	2.00000	2.091
	37 EPN	26.101	26.097	(0.964)	776730	2.00000	2.135
	38 Azinphos-methyl	26.591	26.584	(0.982)	545683	2.00000	2.042
*	39 TOCP	27.078	27.076	(1.000)	644188	2.00000	
	40 Azinphos-ethyl	27.175	27.172	(1.004)	673342	2.00000	2.011
	41 Coumaphos	27.700	27.694	(1.023)	569489	2.00000	2.058
M	42 Total Demeton				900779	2.00000	2.194
M	43 Merphos				890902	2.00000	2.094

QC Flag Legend

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

TestAmerica

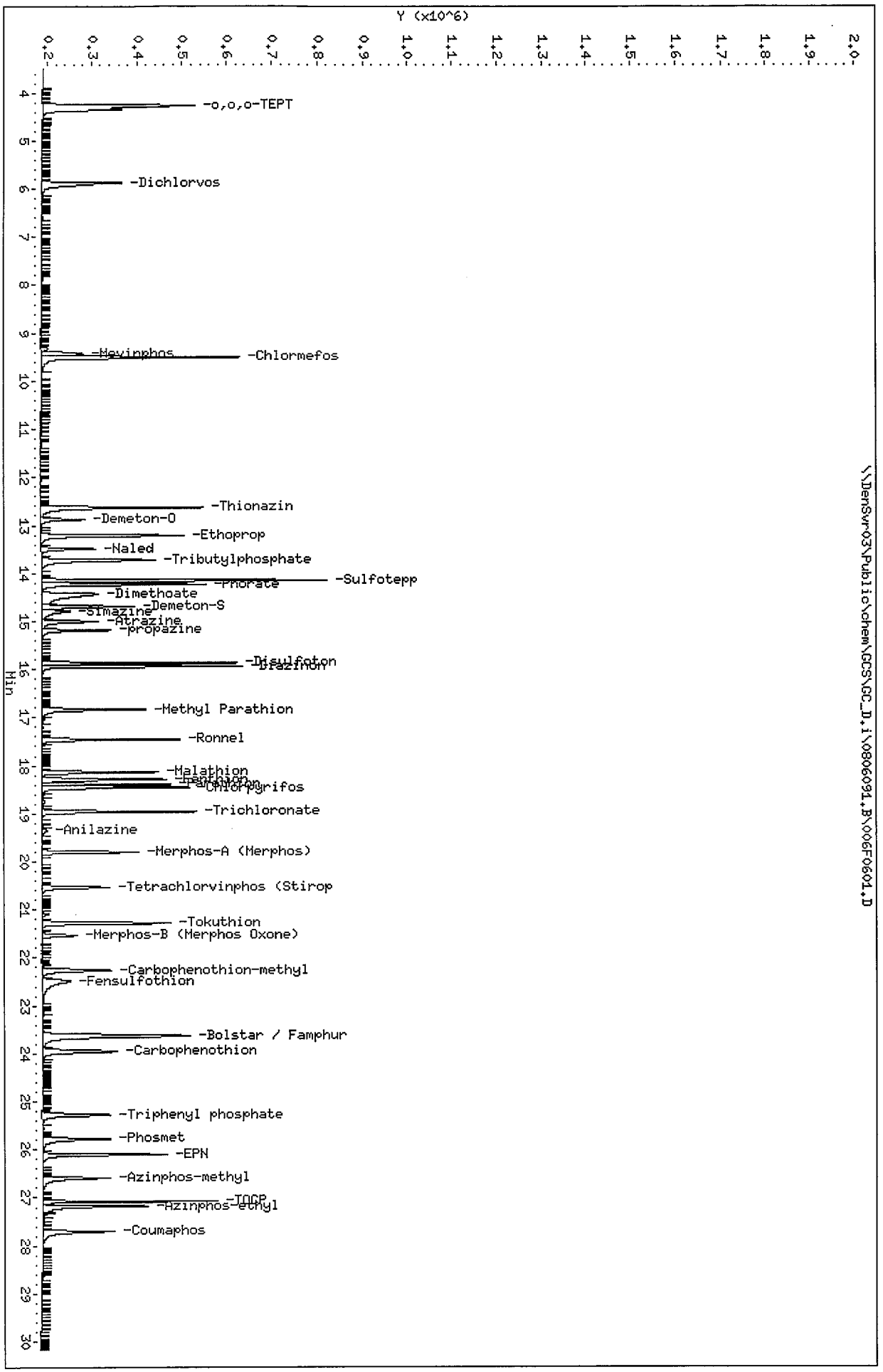
INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Lab Smp Id: 8141 L4 GSV87209
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L4 GSV8720
Level:
Sample Type:
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	930125	-10.07
39 TOCP	695324	347662	1390648	644188	-7.35

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.72	0.15
39 TOCP	27.08	26.58	27.58	27.08	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: \\DenSvr-03\Public\chem\GCS\GC_D,i\0806091,B\006F0601.D
Date : 06-AUG-2009 16:45
Client ID: 8141 L4 GSV87209
Sample Info: 8141 L4 GSV87209
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/006F0601.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 16:45
Lab Sample ID: 8141 L4 GSV87209
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	1.9938	33.5	15.0	<-
2	Dichlorvos	3.0000	2.0526	31.6	15.0	<-
3	Mevinphos	3.0000	2.0152	32.8	15.0	<-
4	Chlormefos	3.0000	2.0593	31.4	15.0	<-
5	Thionazin	3.0000	2.1200	29.3	15.0	<-
6	Demeton-O	0.9750	0.6516	33.2	15.0	<-
7	Ethoprop	3.0000	2.0852	30.5	15.0	<-
8	Naled	3.0000	2.0194	32.7	15.0	<-
9	Sulfotepp	3.0000	2.1590	28.0	15.0	<-
10	Phorate	3.0000	2.1074	29.8	15.0	<-
11	Dimethoate	3.0000	2.0394	32.0	15.0	<-
12	Demeton-S	2.0400	1.7726	13.1	15.0	
13	Simazine	3.0000	2.1187	29.4	15.0	<-
14	Atrazine	3.0000	2.0503	31.7	15.0	<-
15	propazine	3.0000	2.0478	31.7	15.0	<-
17	Disulfoton	3.0000	2.1468	28.4	15.0	<-
16	Diazinon	3.0000	1.9214	36.0	15.0	<-
18	Methyl Parathion	3.0000	2.0960	30.1	15.0	<-
19	Ronnel	3.0000	2.0156	32.8	15.0	<-
20	Malathion	3.0000	2.1763	27.5	15.0	<-
21	Fenthion	3.0000	2.0998	30.0	15.0	<-
22	Parathion	3.0000	2.0692	31.0	15.0	<-
23	Chlorpyrifos	3.0000	1.9760	34.1	15.0	<-
24	Trichloronate	3.0000	2.0310	32.3	15.0	<-
25	Anilazine	3.0000	2.0249	32.5	15.0	<-
148	Merphos-A (Merphos)	3.0000	1.9887	33.7	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	2.0099	33.0	15.0	<-
28	Tokuthion	3.0000	2.0766	30.8	15.0	<-
149	Merphos-B (Merphos Oxone)	3.0000	1.7700	41.0	999.0	
29	Carbophenothion-methyl	3.0000	2.0367	32.1	15.0	<-
29	Fensulfothion	3.0000	2.1116	29.6	15.0	<-
30	Bolstar / Famphur	6.0000	4.9812	17.0	15.0	<-
32	Carbophenothion	3.0000	2.0681	31.1	15.0	<-
31	Triphenyl phosphate	3.0000	2.1787	27.4	15.0	<-
34	Phosmet	3.0000	2.8772	4.1	15.0	
32	EPN	3.0000	2.1359	28.8	15.0	<-
33	Azinphos-methyl	3.0000	2.0652	31.2	15.0	<-
38	Azinphos-ethyl	3.0000	2.0564	31.5	15.0	<-
36	Coumaphos	3.0000	2.4739	17.5	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/006F0601.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

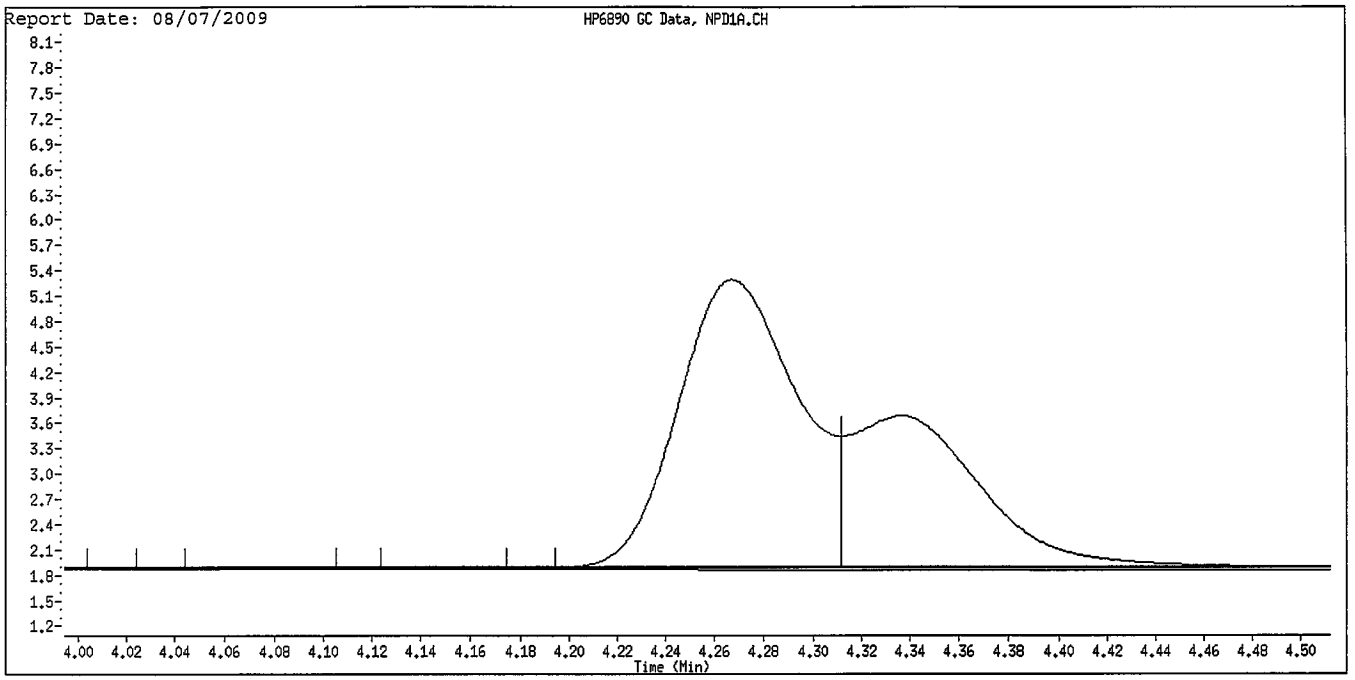
Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 16:45
Lab Sample ID: 8141 L4 GSV87209
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

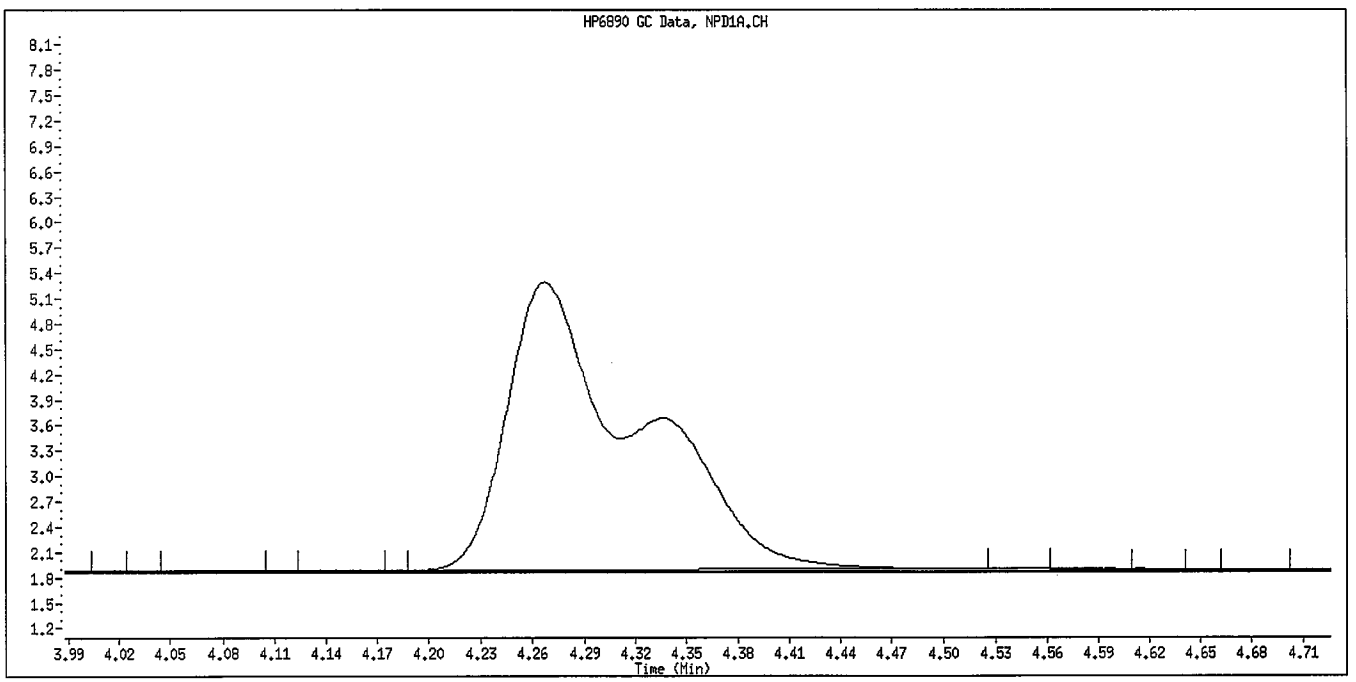
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	2.4243	19.2	15.0	<-
27 Merphos	3.0000	2.0898	30.3	15.0	<-

Average %D = 29.4

Data File Name: 006F0601.D
Inj. Date and Time: 06-AUG-2009 16:45
Instrument ID: GC_D.i
Client ID: 8141 L4 GSV87209
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\007F0701.D
Lab Smp Id: 8141 L3 GSV87309 Client Smp ID: 8141 L3 GSV87309
Inj Date : 06-AUG-2009 17:21
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L3 GSV87309
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 16:45 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	4.266	4.267	(0.311)	908197	1.00000	0.9830(M)
	2 Dichlorvos	5.871	5.865	(0.428)	383146	1.00000	0.9976
	3 Mevinphos	9.426	9.407	(0.687)	111446	1.00000	0.9222
$	4 Chlormefos	9.501	9.502	(0.692)	746730	1.00000	1.062
	5 Thionazin	12.631	12.625	(0.920)	544011	1.00000	1.070
	6 Demeton-O	12.879	12.876	(0.938)	157798	0.32500	0.3542
	7 Ethoprop	13.218	13.205	(0.963)	491981	1.00000	1.088
	8 Naled	13.491	13.482	(0.983)	162318	1.00000	1.037
*	9 Tributylphosphate	13.726	13.714	(1.000)	912600	2.00000	
	10 Sulfotepp	14.145	14.143	(1.030)	756152	1.00000	1.058
	11 Phorate	14.230	14.227	(1.037)	520383	1.00000	1.106
	12 Dimethoate	14.479	14.416	(1.055)	356039	1.00000	1.061
	13 Demeton-S	14.703	14.682	(1.071)	285098	0.68000	0.7421
	14 Simazine	14.806	14.783	(1.079)	174622	1.00000	1.104
	15 Atrazine	15.012	14.997	(1.094)	206785	1.00000	1.120
	16 propazine	15.190	15.178	(1.107)	215077	1.00000	1.069
	17 Disulfoton	15.870	15.866	(0.586)	445811	1.00000	1.059
	18 Diazinon	15.940	15.934	(0.589)	519628	1.00000	1.045
	19 Methyl Parathion	16.843	16.829	(0.622)	334656	1.00000	1.019
	20 Ronnel	17.463	17.456	(0.645)	356993	1.00000	0.9943
	21 Malathion	18.142	18.134	(0.670)	337515	1.00000	1.077
	22 Fenthion	18.292	18.284	(0.675)	363139	1.00000	1.025
	23 Parathion	18.402	18.392	(0.680)	333400	1.00000	1.015
	24 Chlorpyrifos	18.453	18.451	(0.681)	506108	1.00000	1.046
	25 Trichloronate	18.963	18.958	(0.700)	440136	1.00000	0.9860
	26 Anilazine	19.375	19.345	(0.715)	23197	1.00000	0.9765
	27 Merphos-A (Merphos)	19.806	19.804	(0.731)	274971	1.00000	0.9986
	28 Tetrachlorvinphos (Stirophos)	20.544	20.532	(0.759)	229899	1.00000	0.9789
	29 Tokuthion	21.287	21.278	(0.786)	431780	1.00000	1.017
	30 Merphos-B (Merphos Oxone)	21.546	21.536	(0.796)	159629	1.00000	0.9349
	31 Carbophenothion-methyl	22.274	22.254	(0.823)	280480	1.00000	1.017
	32 Fensulfothion	22.535	22.465	(0.832)	214899	1.00000	1.015
	33 Bolstar / Famphur	23.638	23.627	(0.873)	741469	2.00000	2.093

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.958	23.947	(0.885)	360929	1.00000	1.051
$	35 Triphenyl phosphate	25.290	25.270	(0.934)	294744	1.00000	1.079
	36 Phosmet	25.796	25.769	(0.953)	268843	1.00000	1.029
	37 EPN	26.110	26.097	(0.964)	382286	1.00000	1.082
	38 Azinphos-methyl	26.602	26.584	(0.982)	233826	1.00000	0.9852
*	39 TOCP	27.080	27.076	(1.000)	625742	2.00000	
	40 Azinphos-ethyl	27.185	27.172	(1.004)	334585	1.00000	1.029
	41 Coumaphos	27.712	27.694	(1.023)	261325	1.00000	1.011
M	42 Total Demeton				442896	1.00000	1.096
M	43 Merphos				434600	1.00000	1.052

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 GSV87309
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L3 GSV8730
Level:
Sample Type:

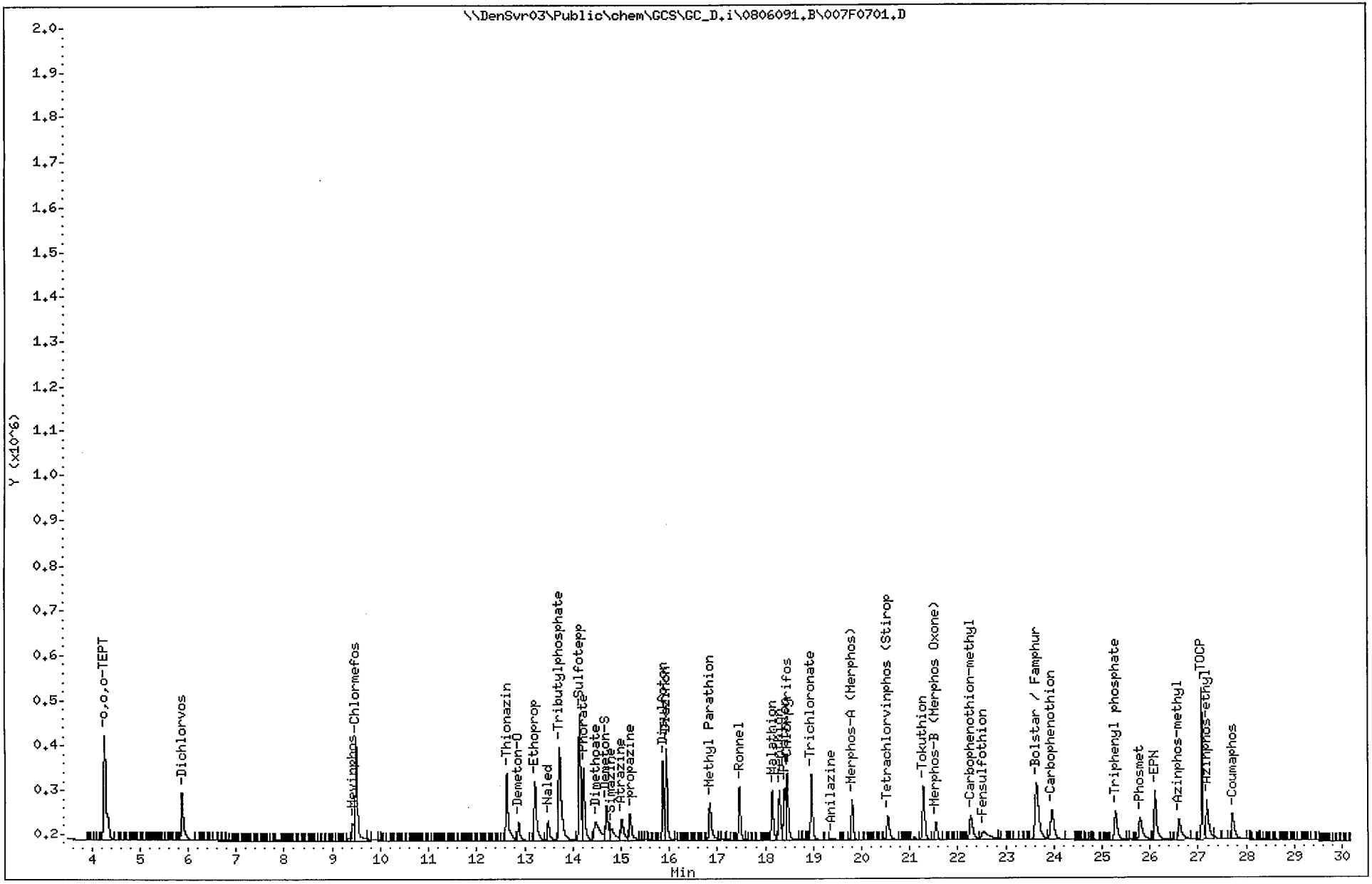
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	912600	-11.77
39 TOCP	695324	347662	1390648	625742	-10.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.73	0.20
39 TOCP	27.08	26.58	27.58	27.08	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\0806091.B\007F0701.D
Date : 06-AUG-2009 17:21
Client ID: 8141 L3 GSV87309
Sample Info: 8141 L3 GSV87309

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



Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/007F0701.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 007F0701.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 17:21
Lab Sample ID: 8141 L3 GSV87309
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1 o,o,o-TEPT	3.0000	1.0210	66.0	15.0	<-
2 Dichlorvos	3.0000	0.9935	66.9	15.0	<-
3 Mevinphos	3.0000	0.8088	73.0	15.0	<-
4 Chlormefos	3.0000	1.0451	65.2	15.0	<-
5 Thionazin	3.0000	1.0649	64.5	15.0	<-
6 Demeton-O	0.9750	0.3464	64.5	15.0	<-
7 Ethoprop	3.0000	1.0846	63.8	15.0	<-
8 Naled	3.0000	1.0092	66.4	15.0	<-
9 Sulfotepp	3.0000	1.0593	64.7	15.0	<-
10 Phorate	3.0000	1.0691	64.4	15.0	<-
11 Dimethoate	3.0000	0.9789	67.4	15.0	<-
12 Demeton-S	2.0400	0.8594	57.9	15.0	<-
13 Simazine	3.0000	1.2619	57.9	15.0	<-
14 Atrazine	3.0000	1.1022	63.3	15.0	<-
15 propazine	3.0000	1.0880	63.7	15.0	<-
17 Disulfoton	3.0000	1.0668	64.4	15.0	<-
16 Diazinon	3.0000	1.0123	66.3	15.0	<-
18 Methyl Parathion	3.0000	1.0577	64.7	15.0	<-
19 Ronnel	3.0000	0.9790	67.4	15.0	<-
20 Malathion	3.0000	1.0769	64.1	15.0	<-
21 Fenthion	3.0000	1.0244	65.9	15.0	<-
22 Parathion	3.0000	0.9861	67.1	15.0	<-
23 Chlorpyrifos	3.0000	0.9598	68.0	15.0	<-
24 Trichloronate	3.0000	0.9814	67.3	15.0	<-
25 Anilazine	3.0000	0.9337	68.9	15.0	<-
148 Merphos-A (Merphos)	3.0000	0.9686	67.7	999.0	
26 Tetrachlorvinphos (Stirophos)	3.0000	1.0308	65.6	15.0	<-
28 Tokuthion	3.0000	1.0171	66.1	15.0	<-
149 Merphos-B (Merphos Oxone)	3.0000	1.0771	64.1	999.0	
29 Carbophenothion-methyl	3.0000	1.0574	64.8	15.0	<-
29 Fensulfothion	3.0000	0.9968	66.8	15.0	<-
30 Bolstar / Famphur	6.0000	2.4229	59.6	15.0	<-
32 Carbophenothion	3.0000	1.0500	65.0	15.0	<-
31 Triphenyl phosphate	3.0000	1.0793	64.0	15.0	<-
34 Phosmet	3.0000	1.3381	55.4	15.0	<-
32 EPN	3.0000	1.0834	63.9	15.0	<-
33 Azinphos-methyl	3.0000	1.0322	65.6	15.0	<-
38 Azinphos-ethyl	3.0000	1.0390	65.4	15.0	<-
36 Coumaphos	3.0000	1.1700	61.0	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/007F0701.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

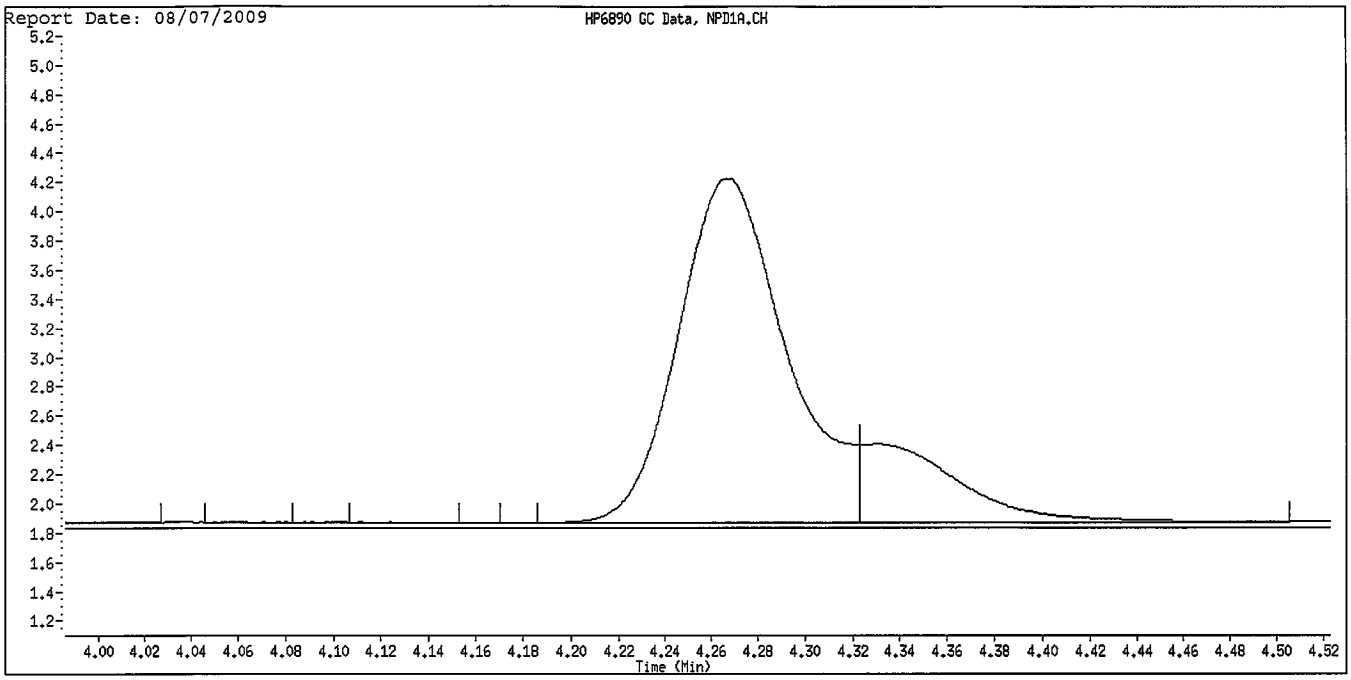
Instrument ID: GC_D.i
Lab File ID: 007F0701.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 17:21
Lab Sample ID: 8141 L3 GSV87309
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

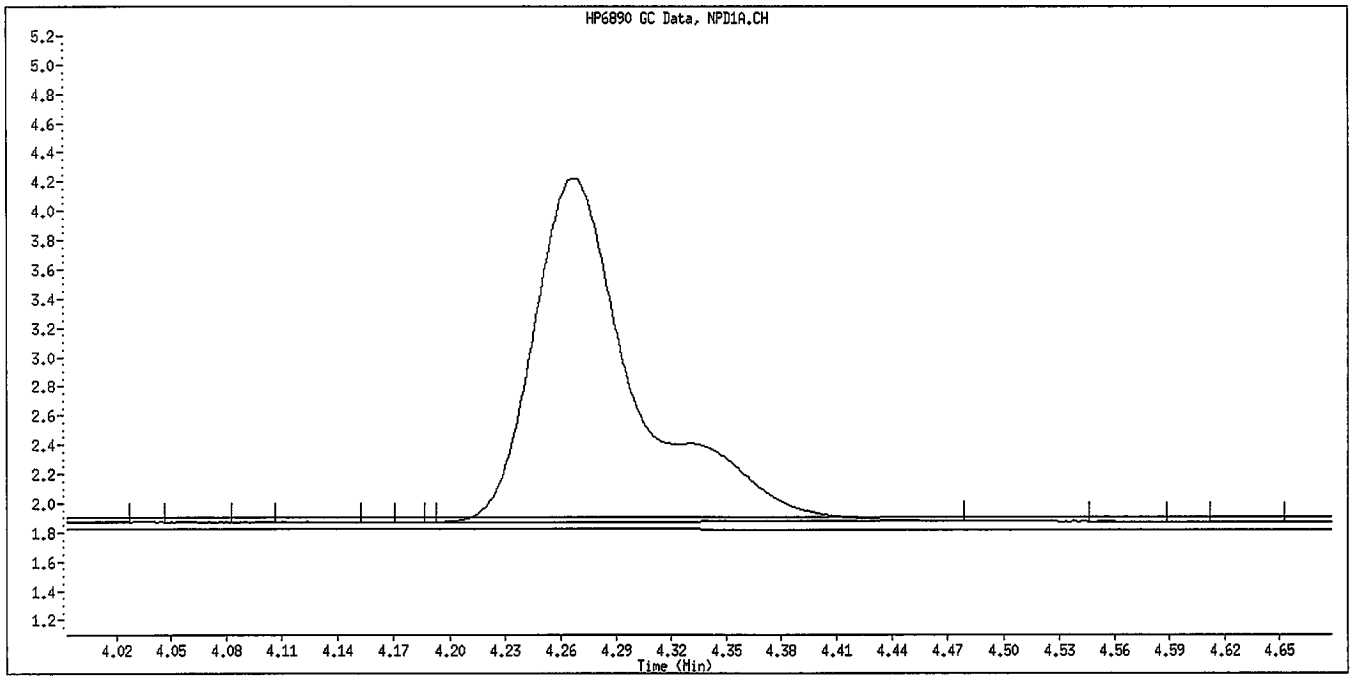
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	1.2058	59.8	15.0	<-
27 Merphos	3.0000	1.0508	65.0	15.0	<-

Average %D = 64.7

Data File Name: 007F0701.D
Inj. Date and Time: 06-AUG-2009 17:21
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV87309
Compound Name: o,o,o-TEPT
CAS #:



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\008F0801.D
Lab Smp Id: 8141 L2 GSV87409 Client Smp ID: 8141 L2 GSV87409
Inj Date : 06-AUG-2009 17:58
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L2 GSV87409
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 17:21 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	4.269	4.267	(0.311)	420455	0.50000	0.4867
	2 Dichlorvos	5.877	5.865	(0.428)	170191	0.50000	0.4895
	3 Mevinphos	9.457	9.407	(0.688)	31592	0.50000	0.5647 (M)
$	4 Chlormefos	9.500	9.502	(0.692)	320391	0.50000	0.5030 (M)
	5 Thionazin	12.635	12.625	(0.920)	194202	0.50000	0.4628
	6 Demeton-O	12.879	12.876	(0.938)	63511	0.16250	0.1466
	7 Ethoprop	13.227	13.205	(0.963)	199533	0.50000	0.5361
	8 Naled	13.501	13.482	(0.983)	41661	0.50000	0.4198
*	9 Tributylphosphate	13.737	13.714	(1.000)	826235	2.00000	
	10 Sulfotepp	14.148	14.143	(1.030)	298517	0.50000	0.4615
	11 Phorate	14.231	14.227	(1.036)	197124	0.50000	0.4628 (M)
	12 Dimethoate	14.585	14.416	(1.062)	59892	0.50000	0.4848 (M)
	13 Demeton-S	14.721	14.682	(1.072)	101878	0.34000	0.3027
	14 Simazine	14.825	14.783	(1.079)	48256	0.50000	0.4620
	15 Atrazine	15.038	14.997	(1.095)	56963	0.50000	0.4745
	16 propazine	15.207	15.178	(1.107)	73519	0.50000	0.4037
	17 Disulfoton	15.877	15.866	(0.586)	167271	0.50000	0.4726
	18 Diazinon	15.946	15.934	(0.589)	248611	0.50000	0.4801
	19 Methyl Parathion	16.864	16.829	(0.623)	137375	0.50000	0.4864
	20 Ronnel	17.474	17.456	(0.645)	149779	0.50000	0.4441
	21 Malathion	18.154	18.134	(0.670)	134273	0.50000	0.4564
	22 Fenthion	18.305	18.284	(0.676)	134570	0.50000	0.4405
	23 Parathion	18.434	18.392	(0.681)	117278	0.50000	0.4936 (M)
	24 Chlorpyrifos	18.462	18.451	(0.682)	265889	0.50000	0.4890 (M)
	25 Trichloronate	18.973	18.958	(0.701)	189950	0.50000	0.4531
	26 Anilazine	19.389	19.345	(0.716)	937	0.50000	0.4274
	27 Merphos-A (Merphos)	19.814	19.804	(0.732)	102703	0.50000	0.4597
	28 Tetrachlorvinphos (Stirophos)	20.572	20.532	(0.760)	86949	0.50000	0.4483
	29 Tokuthion	21.301	21.278	(0.787)	180045	0.50000	0.4515
	30 Merphos-B (Merphos Oxone)	21.559	21.536	(0.796)	78157	0.50000	0.4227
	31 Carbophenothion-methyl	22.303	22.254	(0.824)	99151	0.50000	0.4450
	32 Fensulfothion	22.660	22.465	(0.837)	53776	0.50000	0.4927 (M)
	33 Bolstar / Famphur	23.664	23.627	(0.874)	282731	1.00000	0.9177

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.989	23.947	(0.886)	152218	0.50000	0.4718
$	35 Triphenyl phosphate	25.306	25.270	(0.934)	120436	0.50000	0.4696
	36 Phosmet	25.828	25.769	(0.954)	91979	0.50000	0.4436 (M)
	37 EPN	26.119	26.097	(0.964)	166326	0.50000	0.5011
	38 Azinphos-methyl	26.630	26.584	(0.983)	73949	0.50000	0.4321 (M)
*	39 TOCP	27.083	27.076	(1.000)	587714	2.00000	
	40 Azinphos-ethyl	27.199	27.172	(1.004)	136716	0.50000	0.4476
	41 Coumaphos	27.732	27.694	(1.024)	95853	0.50000	0.4391
M	42 Total Demeton				165389	0.50000	0.4493
M	43 Merphos				180860	0.50000	0.4659

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

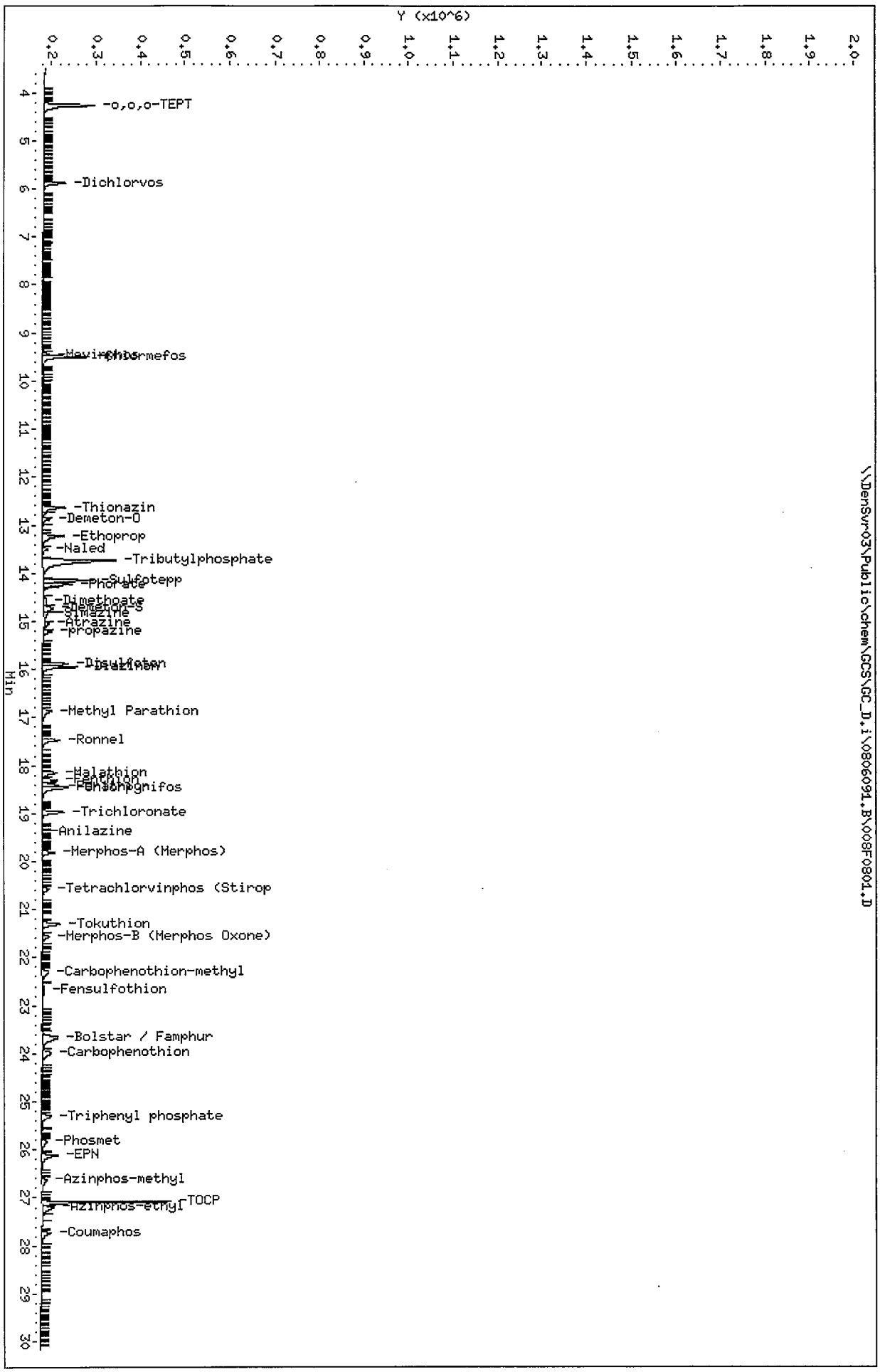
Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Lab Smp Id: 8141 L2 GSV87409
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L2 GSV8740
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	826235	-20.12
39 TOCP	695324	347662	1390648	587714	-15.48

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.74	0.28
39 TOCP	27.08	26.58	27.58	27.08	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.


Y (x10^6)
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0.3
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1.0
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1.2
1.3
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-o,o,o-TEPT
-Dichlorvos
-Mevinphos
-Chlorpyrifos-methyl
-Chlorpyrifos
-Thionazin
-Demeton-O
-Ethoprop
-Naled
-Tributylphosphate
-Sulfotepp
-Phorate
-Dimethoate
-Demeton-S
-Simazine
-Atrazine
-propazine
-Disulfoton
-Diazinon
-Methyl Parathion
-Ronnel
-Malathion
-Fenthion
-Fenchlorphos
-Trichloronate
-Anilazine
-Merphos-A (Merphos)
-Tetrachlorvinphos (Stirop
-Tokuthion
-Merphos-B (Merphos Oxone)
-Carbophenothion-methyl
-Fensulfothion
-Bolstar / Famphur
-Carbophenothion
-Triphenyl phosphate
-Phosmet
-EPN
-Azinphos-methyl
-Azinphos-ethyl
TOCP
-Coumaphos
\\DenSvr03\Public\chem\GCS\GC_D,i\0806091.B\008F0801.D
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806091.B\008F0801.D
Date : 06-AUG-2009 17:58
Client ID: 8141 L2 GSV87409
Sample Info: 8141 L2 GSV87409
Column phase: RTx-1MS
Instrument: GC_D,i
Operator: MPK/TLW
Column diameter: 0.32

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/008F0801.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 17:58
Lab Sample ID: 8141 L2 GSV87409
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

	COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1	o,o,o-TEPT	3.0000	0.5224	82.6	15.0	<-
2	Dichlorvos	3.0000	0.4895	83.7	15.0	<-
3	Mevinphos	3.0000	0.4029	86.6	15.0	<-
4	Chlormefos	3.0000	0.5031	83.2	15.0	<-
5	Thionazin	3.0000	0.4628	84.6	15.0	<-
6	Demeton-O	0.9750	0.1544	84.2	15.0	<-
7	Ethoprop	3.0000	0.5361	82.1	15.0	<-
8	Naled	3.0000	0.3978	86.7	15.0	<-
9	Sulfotepp	3.0000	0.4615	84.6	15.0	<-
10	Phorate	3.0000	0.3876	87.1	15.0	<-
11	Dimethoate	3.0000	0.4615	84.6	15.0	<-
12	Demeton-S	2.0400	0.3345	83.6	15.0	<-
13	Simazine	3.0000	0.4714	84.3	15.0	<-
14	Atrazine	3.0000	0.4306	85.6	15.0	<-
15	propazine	3.0000	0.4543	84.9	15.0	<-
17	Disulfoton	3.0000	0.4683	84.4	15.0	<-
16	Diazinon	3.0000	0.5148	82.8	15.0	<-
18	Methyl Parathion	3.0000	0.5302	82.3	15.0	<-
19	Ronnel	3.0000	0.4635	84.6	15.0	<-
20	Malathion	3.0000	0.4564	84.8	15.0	<-
21	Fenthion	3.0000	0.4405	85.3	15.0	<-
22	Parathion	3.0000	0.4936	83.5	15.0	<-
23	Chlorpyrifos	3.0000	0.4548	84.8	15.0	<-
24	Trichloronate	3.0000	0.4588	84.7	15.0	<-
25	Anilazine	3.0000	0.3635	87.9	15.0	<-
148	Merphos-A (Merphos)	3.0000	0.4768	84.1	999.0	
26	Tetrachlorvinphos (Stirophos)	3.0000	0.5256	82.5	15.0	<-
28	Tokuthion	3.0000	0.4515	84.9	15.0	<-
149	Merphos-B (Merphos Oxone)	3.0000	0.5592	81.4	999.0	
29	Carbophenothion-methyl	3.0000	0.5189	82.7	15.0	<-
29	Fensulfothion	3.0000	0.4752	84.2	15.0	<-
30	Bolstar / Famphur	6.0000	0.9830	83.6	15.0	<-
32	Carbophenothion	3.0000	0.4707	84.3	15.0	<-
31	Triphenyl phosphate	3.0000	0.4696	84.3	15.0	<-
34	Phosmet	3.0000	0.4280	85.7	15.0	<-
32	EPN	3.0000	0.5011	83.3	15.0	<-
33	Azinphos-methyl	3.0000	0.4583	84.7	15.0	<-
38	Azinphos-ethyl	3.0000	0.4369	85.4	15.0	<-
36	Coumaphos	3.0000	0.4554	84.8	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/008F0801.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

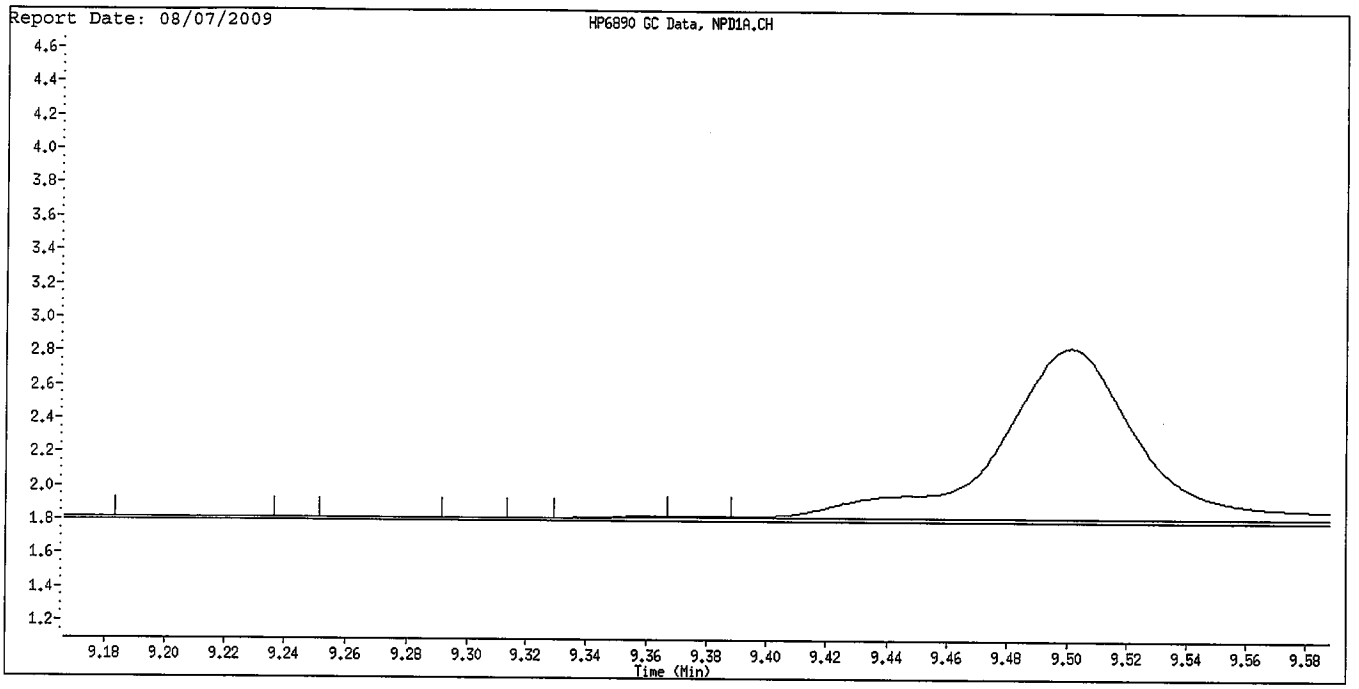
Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 17:58
Lab Sample ID: 8141 L2 GSV87409
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

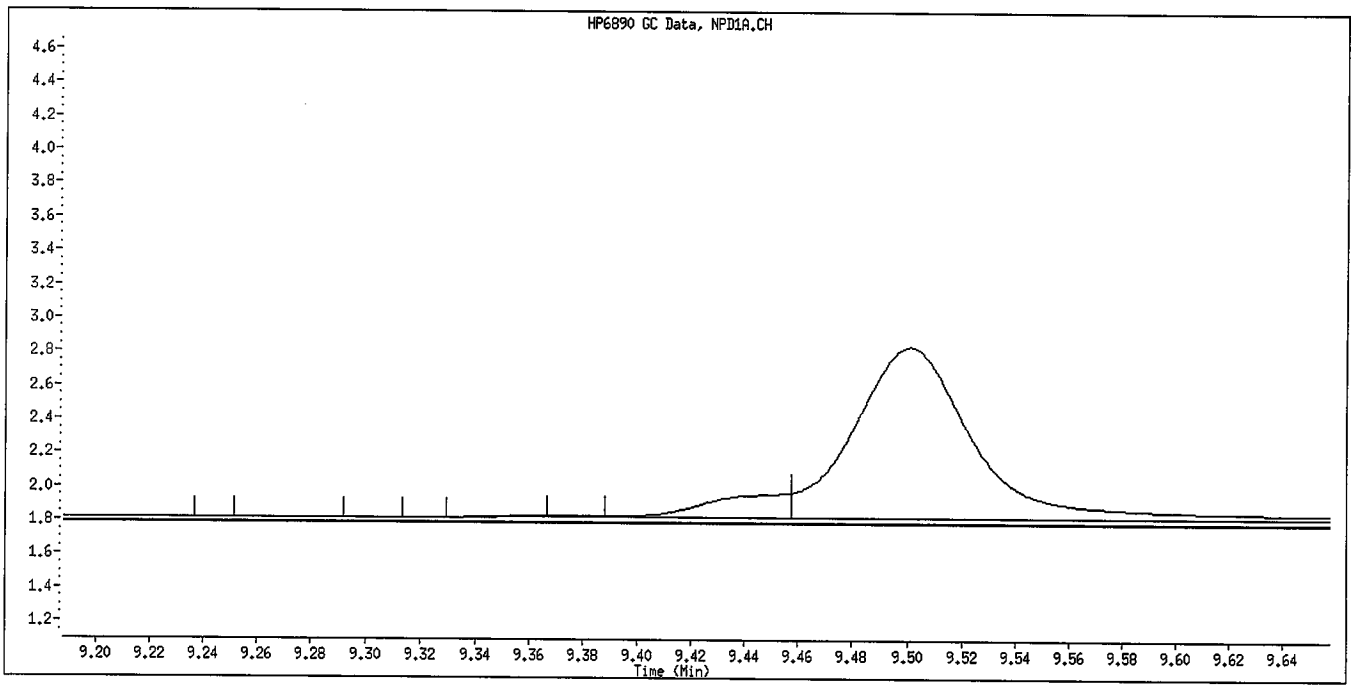
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	0.4889	83.7	15.0	<-
27 Merphos	3.0000	0.4704	84.3	15.0	<-

Average %D = 84.3

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Mevinphos
CAS #:



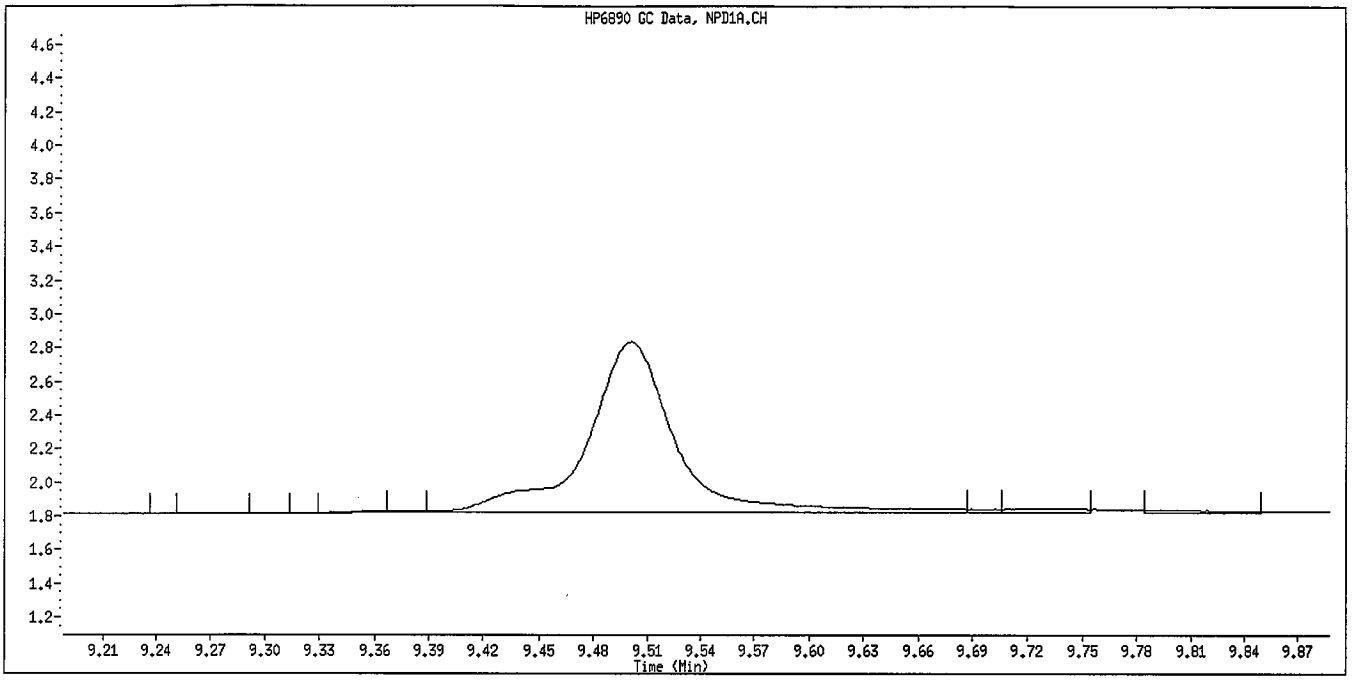
Original Integration



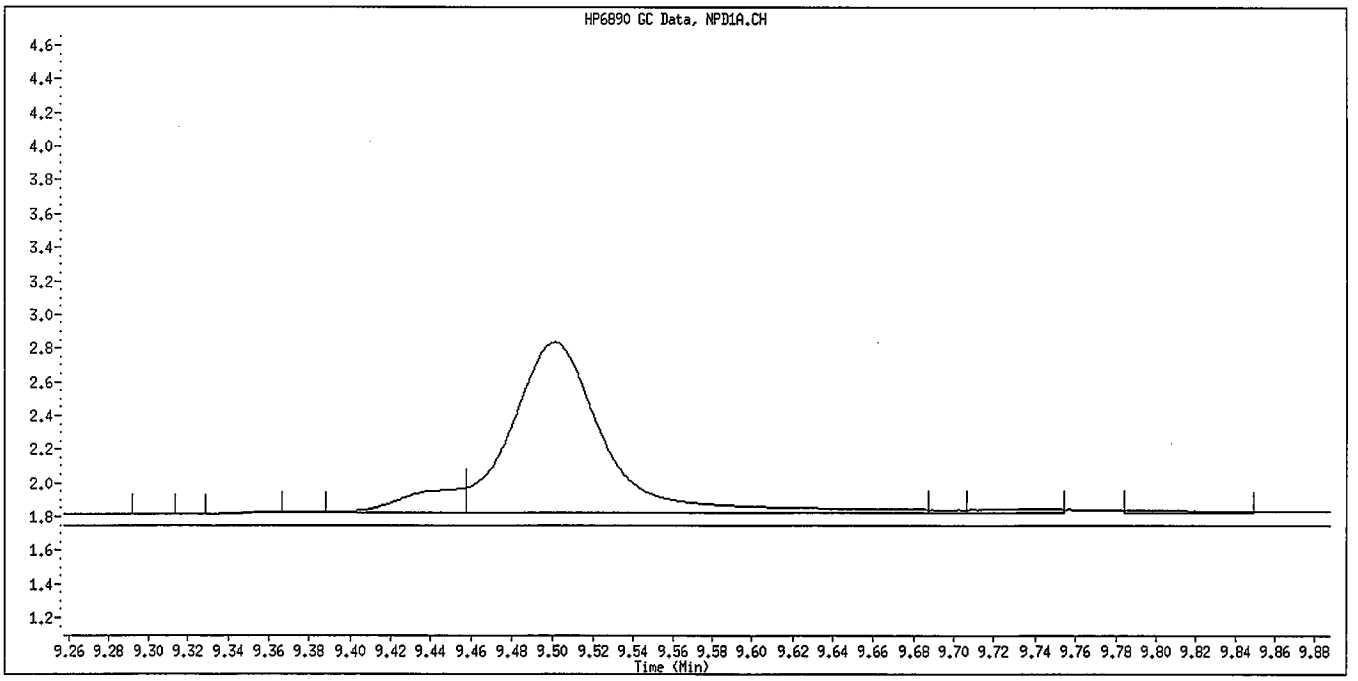
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Chlormefos
CAS #: 24934-91-6
Report Date: 08/07/2009



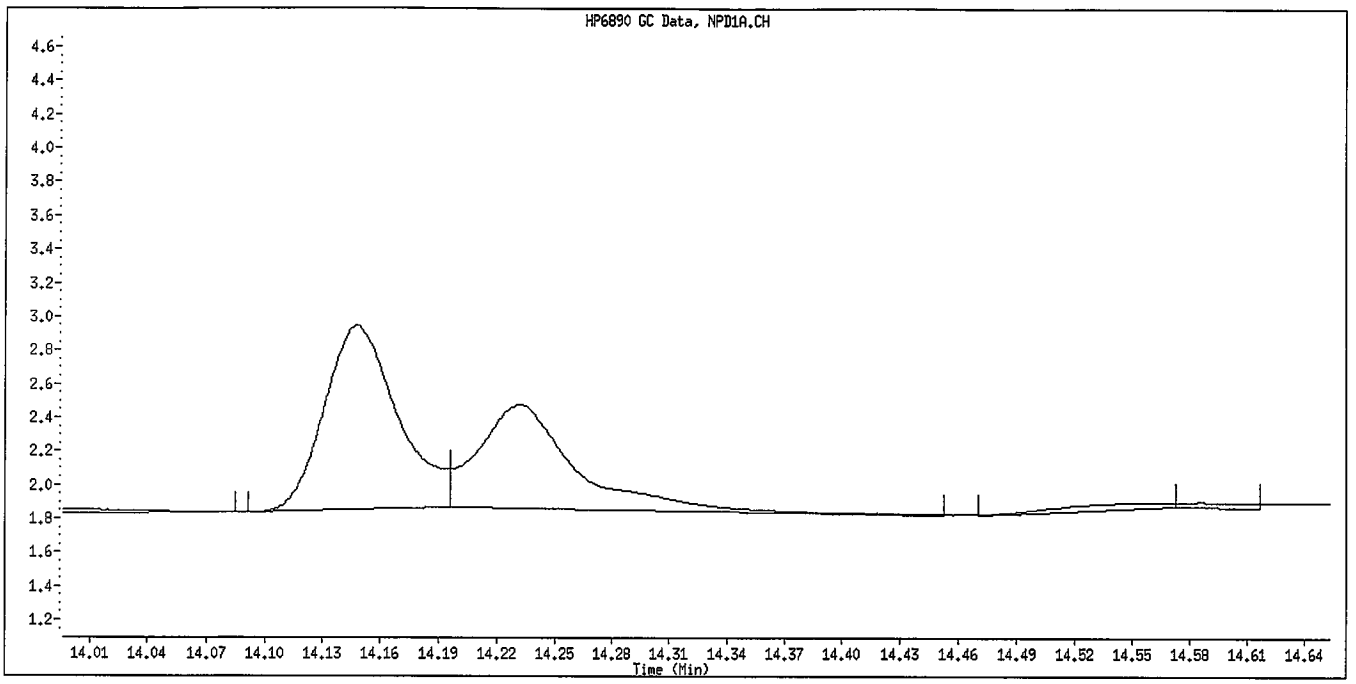
Original Integration



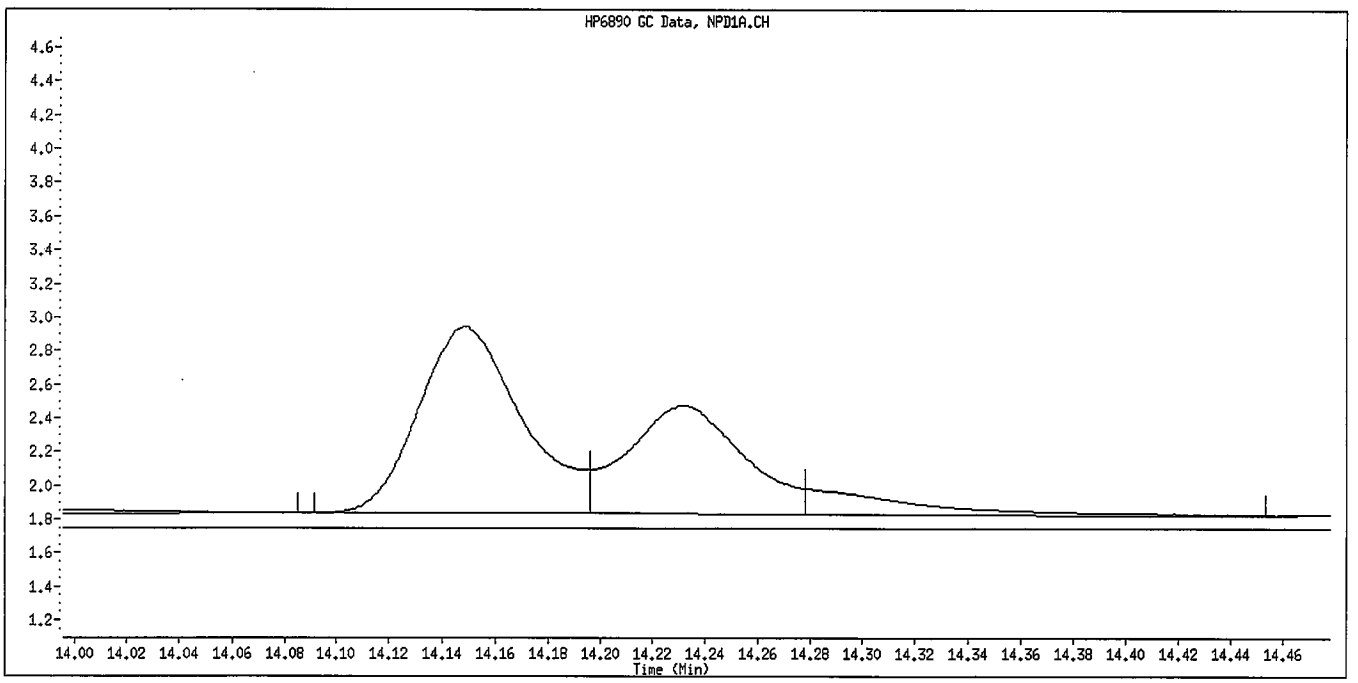
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Phorate
CAS #: 298-02-2
Report Date: 08/07/2009



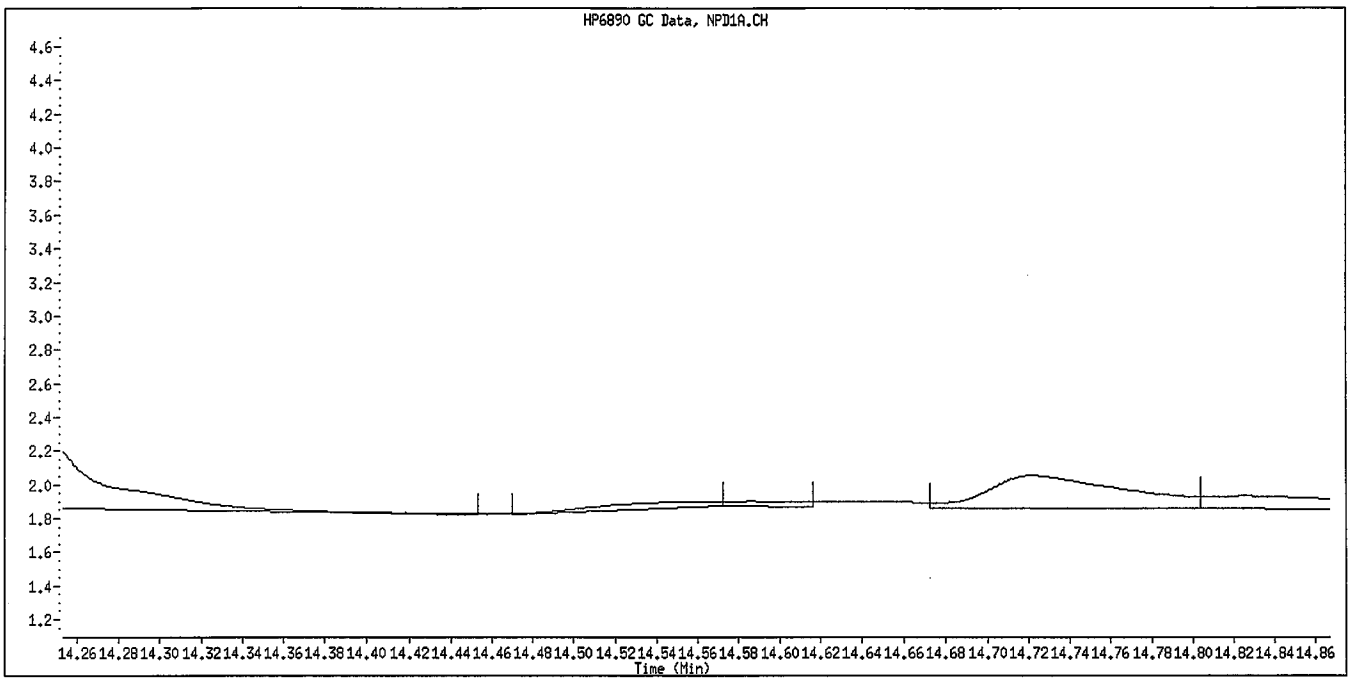
Original Integration



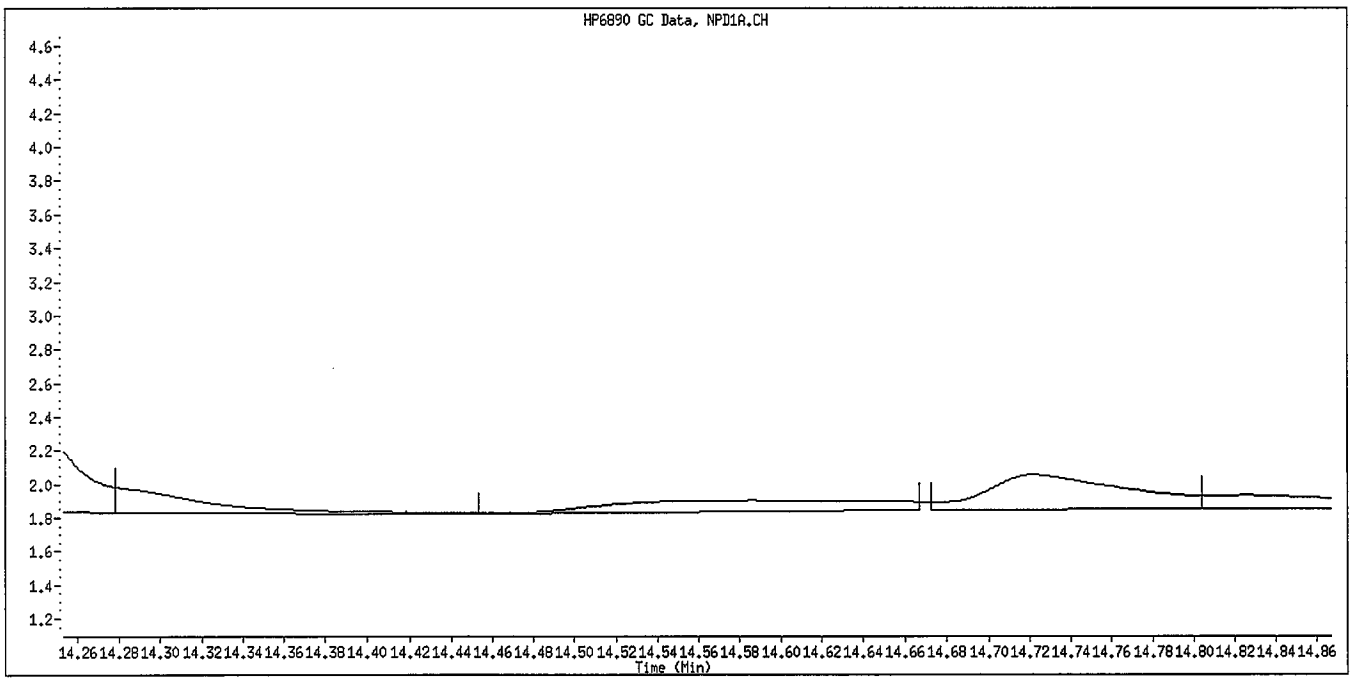
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Dimethoate
CAS #:
Report Date: 08/07/2009



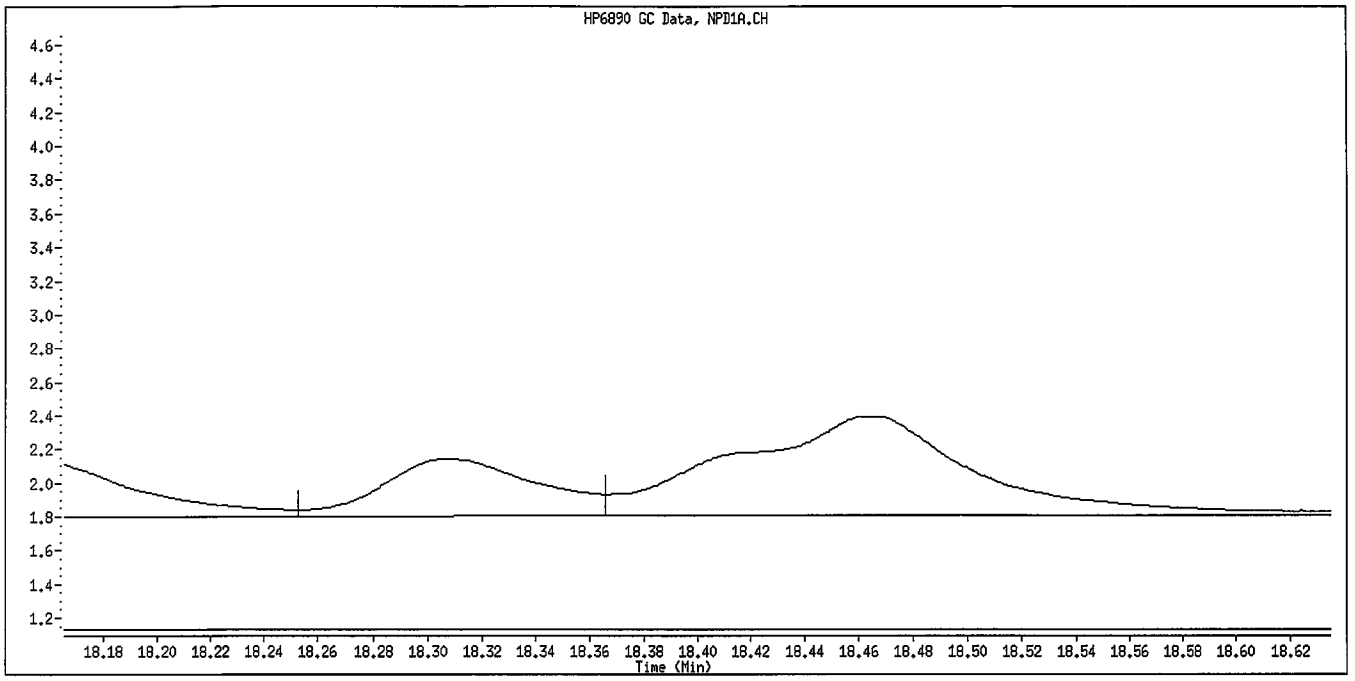
Original Integration



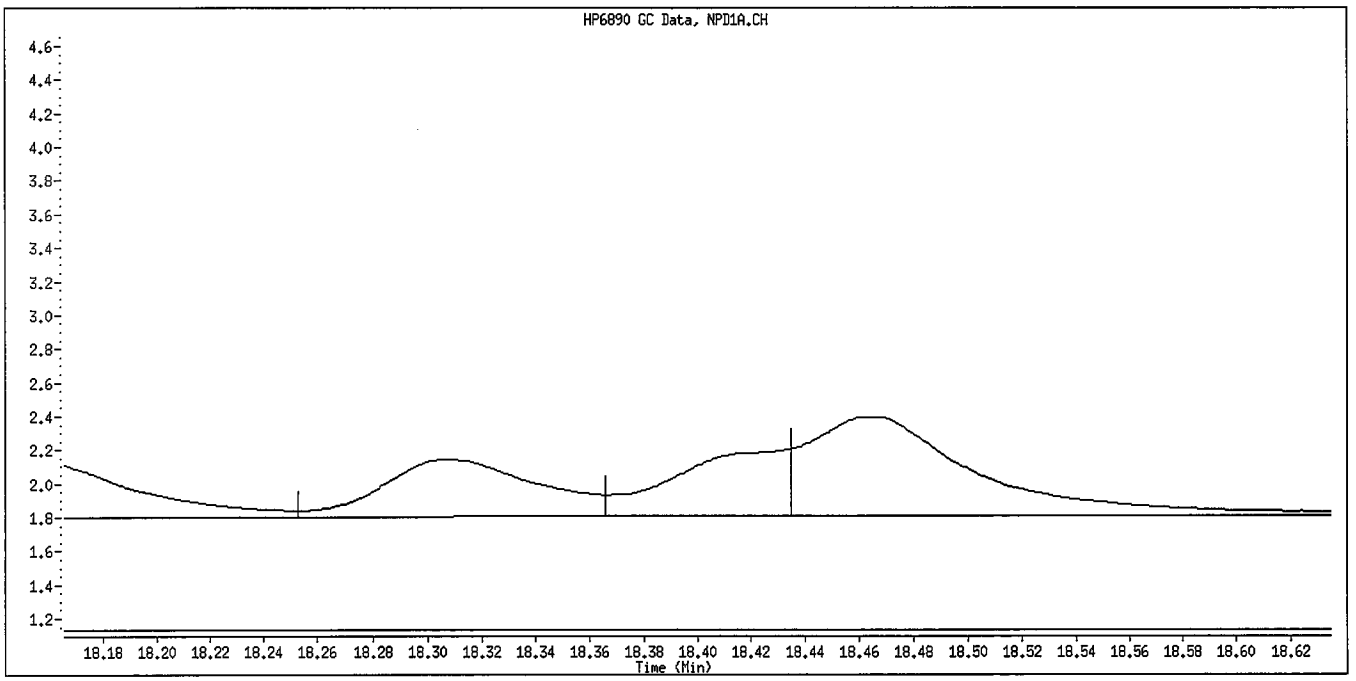
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Parathion
CAS #:
Report Date: 08/07/2009



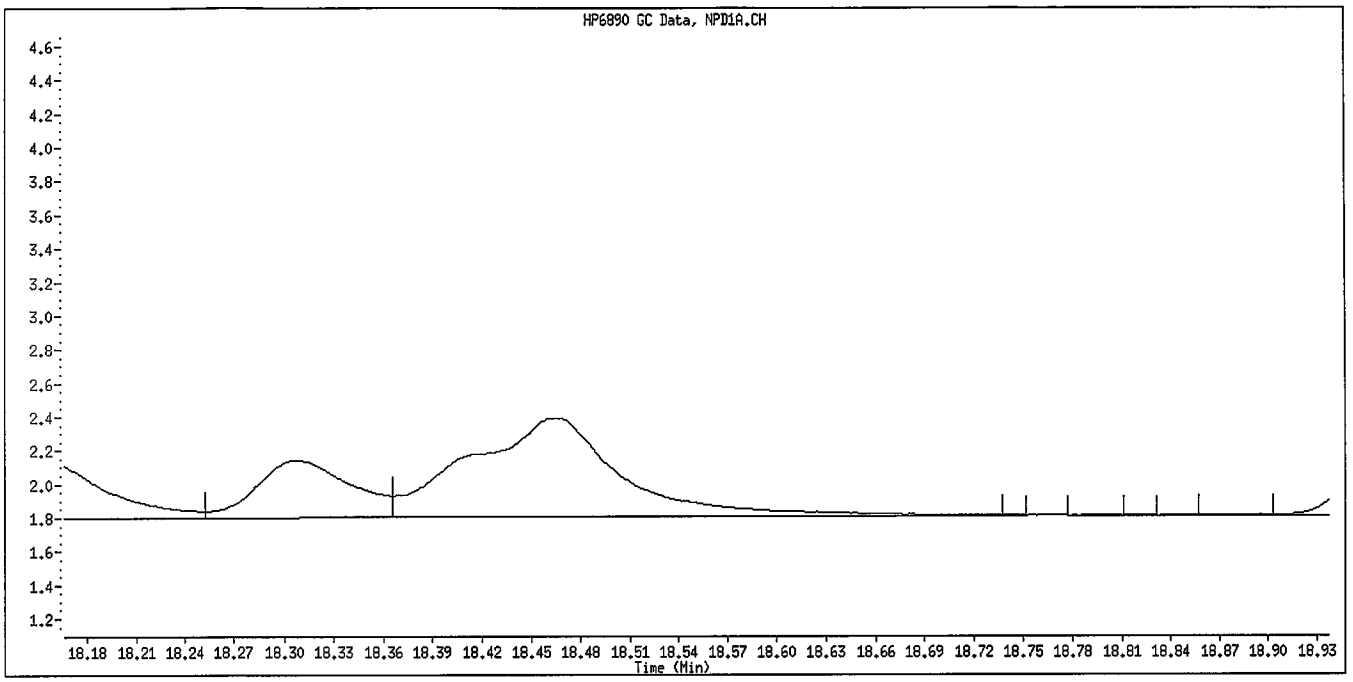
Original Integration



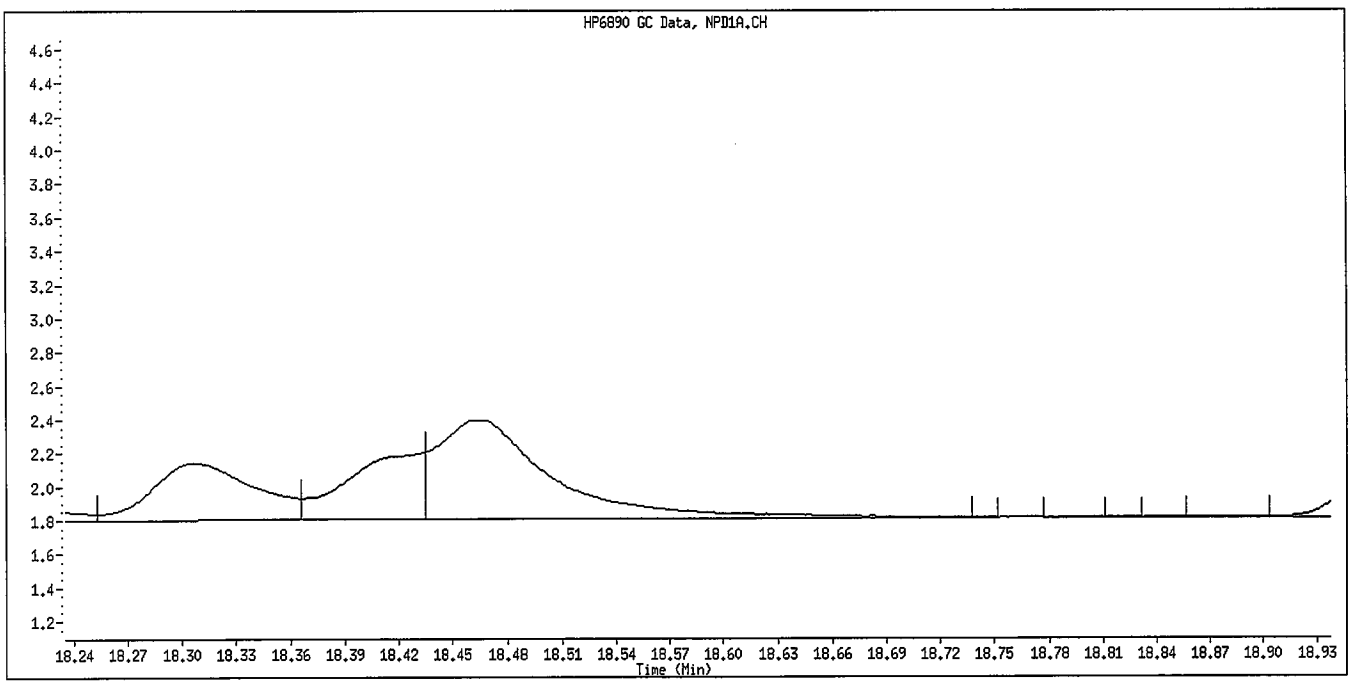
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Chlorpyrifos
CAS #:
Report Date: 08/07/2009



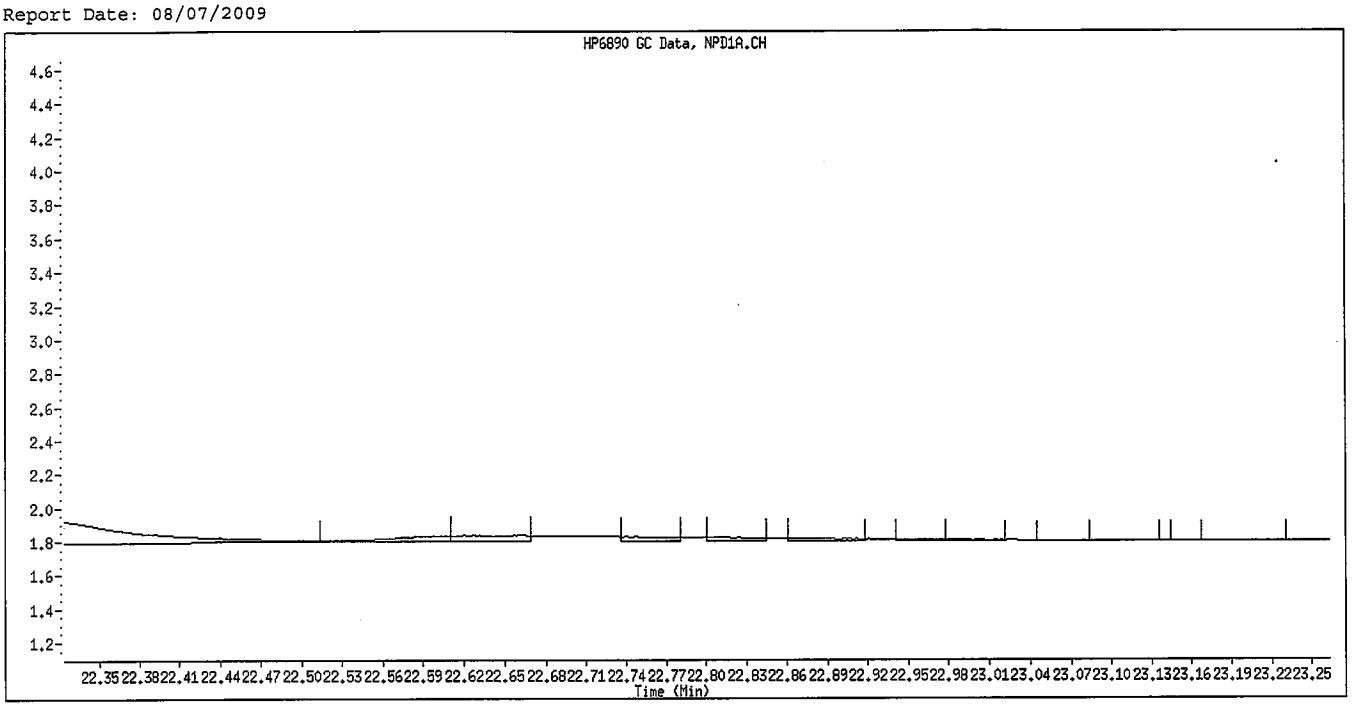
Original Integration



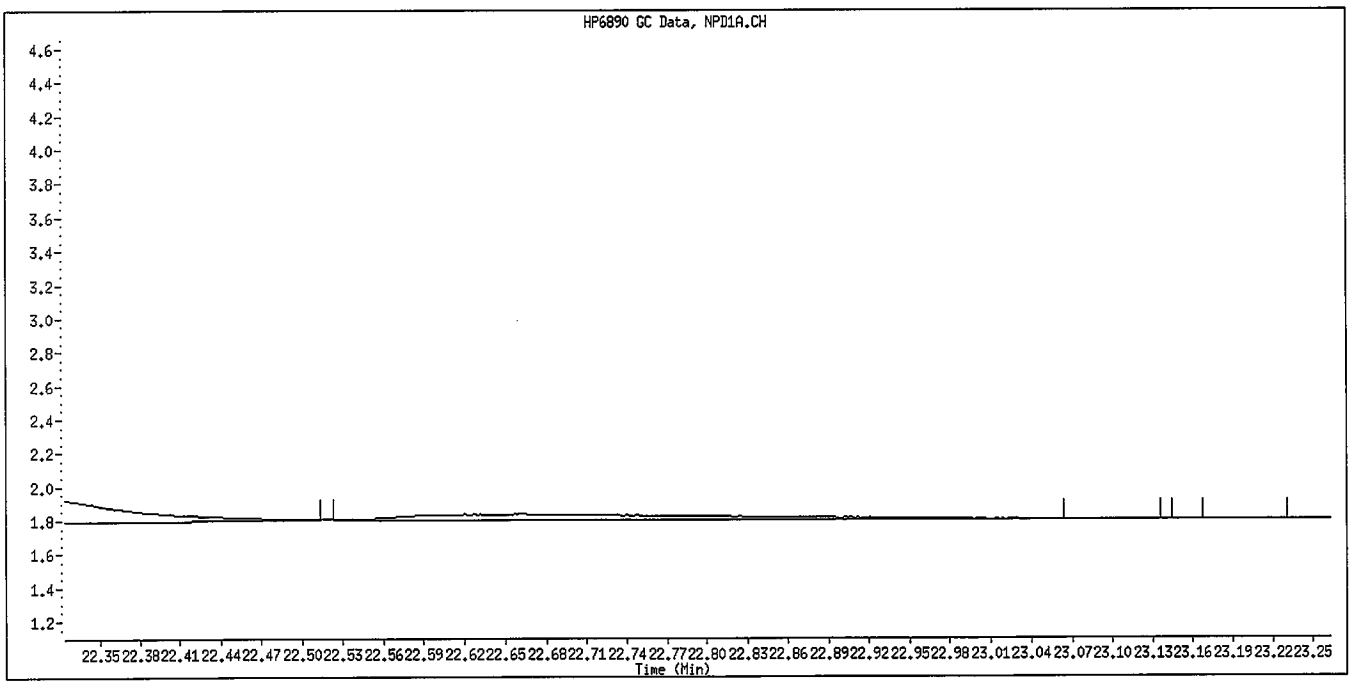
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Fensulfothion
CAS #:
Report Date: 08/07/2009



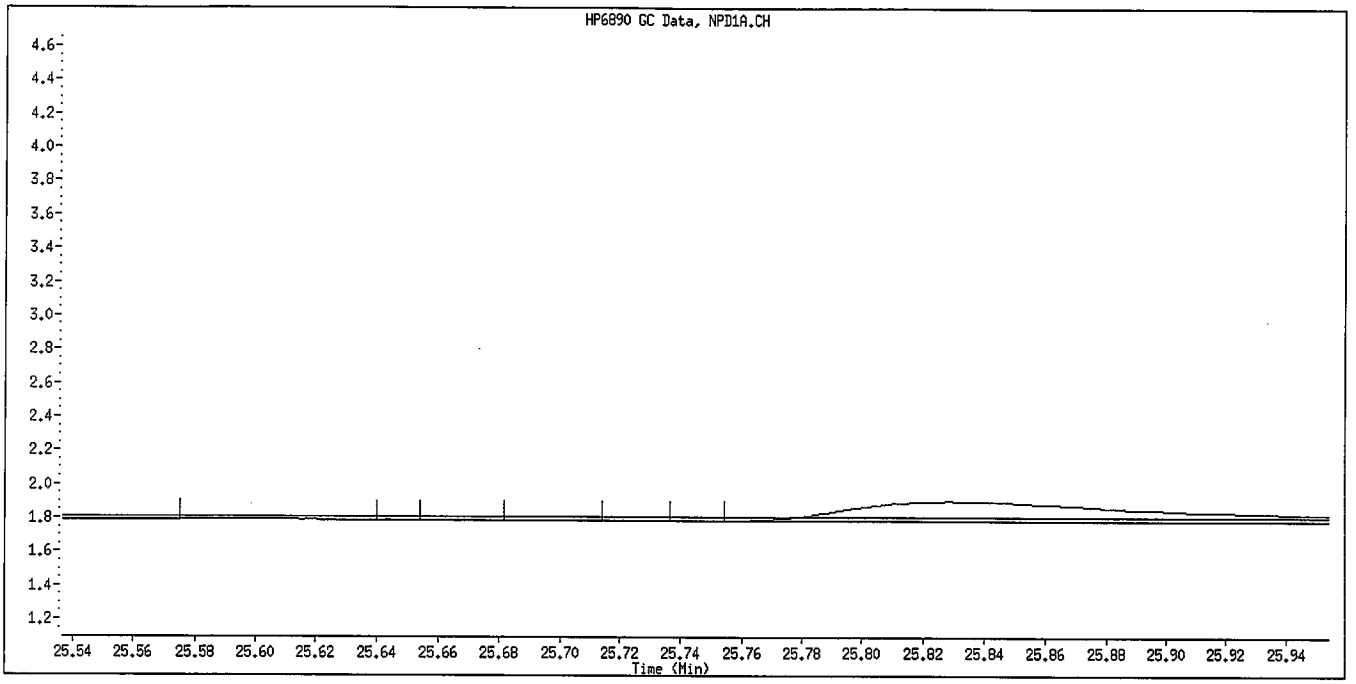
Original Integration



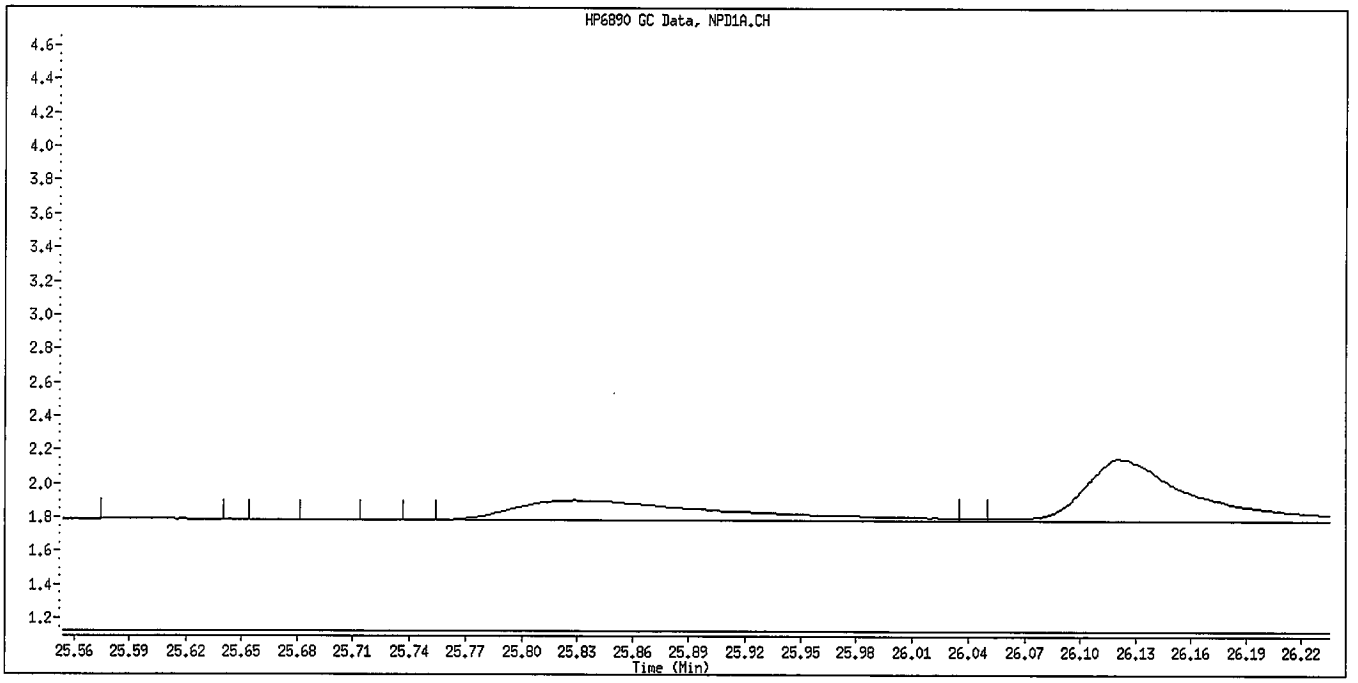
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Phosmet
CAS #:
Report Date: 08/07/2009



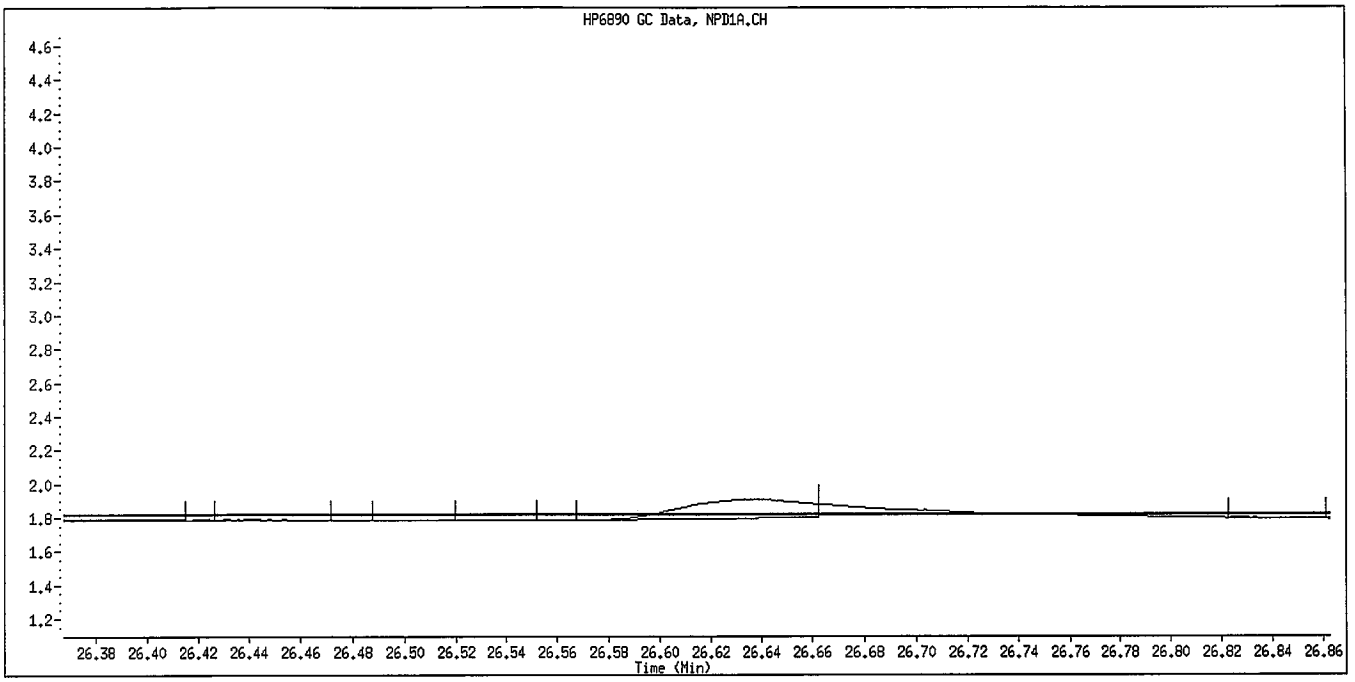
Original Integration



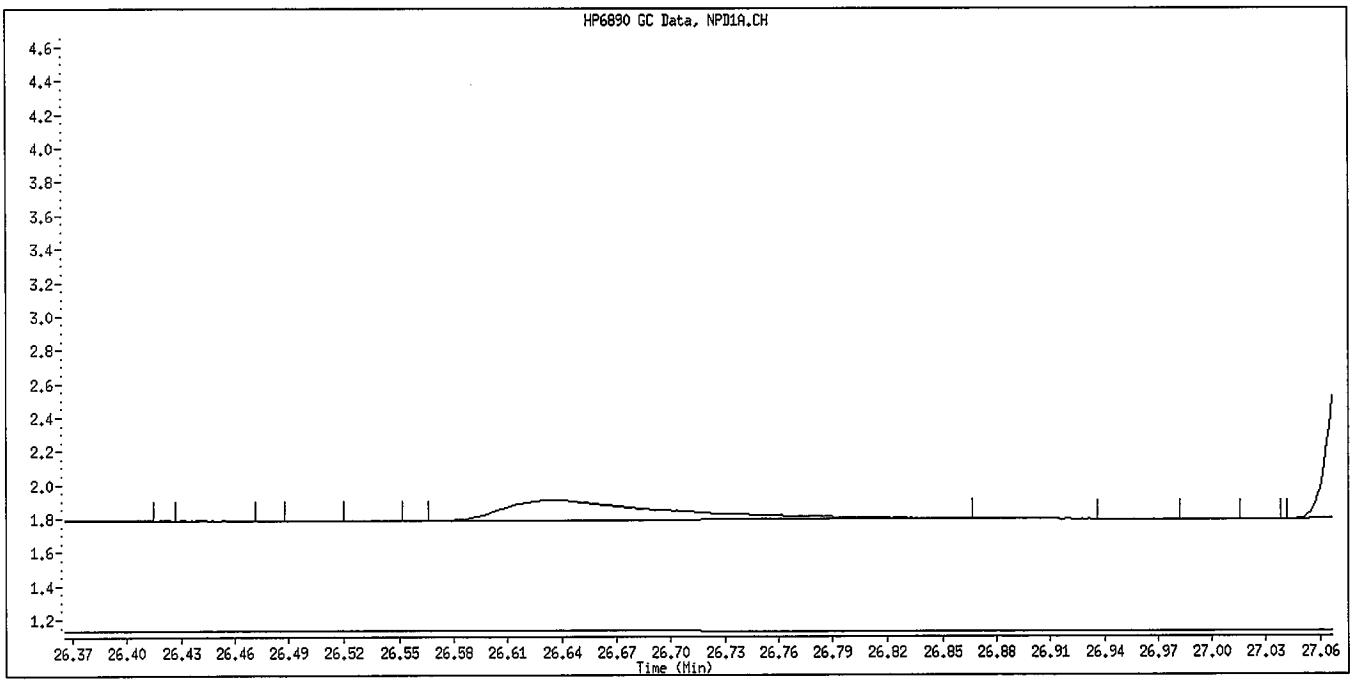
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Azinphos-methyl
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\009F0901.D
Lab Smp Id: 8141 L1 GSV87509 Client Smp ID: 8141 L1 GSV87509
Inj Date : 06-AUG-2009 18:34
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L1 GSV87509
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 17:58 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	4.270	4.267	(0.311)	182432	0.20000	0.2229
	2 Dichlorvos	5.885	5.865	(0.428)	67759	0.20000	0.2109
	3 Mevinphos	9.401	9.407	(0.684)	91	0.20000	0.4022
$	4 Chlormefos	9.501	9.502	(0.691)	130407	0.20000	0.2216
	5 Thionazin	12.642	12.625	(0.919)	61338	0.20000	0.2027
	6 Demeton-O	12.879	12.876	(0.937)	30299	0.06500	0.06629
	7 Ethoprop	13.241	13.205	(0.963)	42588	0.20000	0.1917
	8 Naled	13.512	13.482	(0.983)	9478	0.20000	0.2341
*	9 Tributylphosphate	13.749	13.714	(1.000)	763264	2.00000	
	10 Sulfotepp	14.151	14.143	(1.029)	119283	0.20000	0.1996
	11 Phorate	14.230	14.227	(1.035)	86740	0.20000	0.2204 (M)
	12 Dimethoate	Compound Not Detected.					
	13 Demeton-S	14.678	14.682	(1.068)	421	0.13600	0.01740
	14 Simazine	14.839	14.783	(1.079)	4949	0.20000	0.2397
	15 Atrazine	15.066	14.997	(1.096)	12533	0.20000	0.2594
	16 propazine	Compound Not Detected.					
	17 Disulfoton	15.894	15.866	(0.587)	48155	0.20000	0.2016
	18 Diazinon	15.954	15.934	(0.589)	122906	0.20000	0.2010
	19 Methyl Parathion	16.903	16.829	(0.624)	40155	0.20000	0.2010 (M)
	20 Ronnel	17.489	17.456	(0.646)	57362	0.20000	0.1804
	21 Malathion	18.182	18.134	(0.671)	47746	0.20000	0.1722
	22 Fenthion	18.329	18.284	(0.677)	49230	0.20000	0.2075
	23 Parathion	Compound Not Detected.					
	24 Chlorpyrifos	18.476	18.451	(0.682)	166108	0.20000	0.2504
	25 Trichloronate	18.987	18.958	(0.701)	81341	0.20000	0.2058
	26 Anilazine	19.337	19.345	(0.714)	413	0.20000	0.4143
	27 Merphos-A (Merphos)	19.827	19.804	(0.732)	27686	0.20000	0.2057
	28 Tetrachlorvinphos (Stirophos)	20.614	20.532	(0.761)	27000	0.20000	0.2084 (M)
	29 Tokuthion	21.318	21.278	(0.787)	76330	0.20000	0.2031
	30 Merphos-B (Merphos Oxone)	21.581	21.536	(0.797)	49732	0.20000	0.2966
	31 Carbophenothion-methyl	22.342	22.254	(0.825)	29119	0.20000	0.2073 (M)
	32 Fensulfothion	Compound Not Detected.					
	33 Bolstar / Famphur	23.694	23.627	(0.875)	97513	0.40000	0.4083 (M)

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	24.017	23.947	(0.887)	59933	0.20000	0.1971(M)
$	35 Triphenyl phosphate	25.327	25.270	(0.935)	41538	0.20000	0.1718
	36 Phosmet	25.860	25.769	(0.955)	25548	0.20000	0.2071(M)
	37 EPN	26.132	26.097	(0.965)	58024	0.20000	0.1855
	38 Azinphos-methyl	26.645	26.584	(0.984)	25233	0.20000	0.2530(M)
*	39 TOCP	27.086	27.076	(1.000)	553974	2.00000	
	40 Azinphos-ethyl	27.219	27.172	(1.005)	66517	0.20000	0.2310
	41 Coumaphos	27.740	27.694	(1.024)	33445	0.20000	0.2085(M)
M	42 Total Demeton				30720	0.20000	0.08369
M	43 Merphos				77418	0.20000	0.2116

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

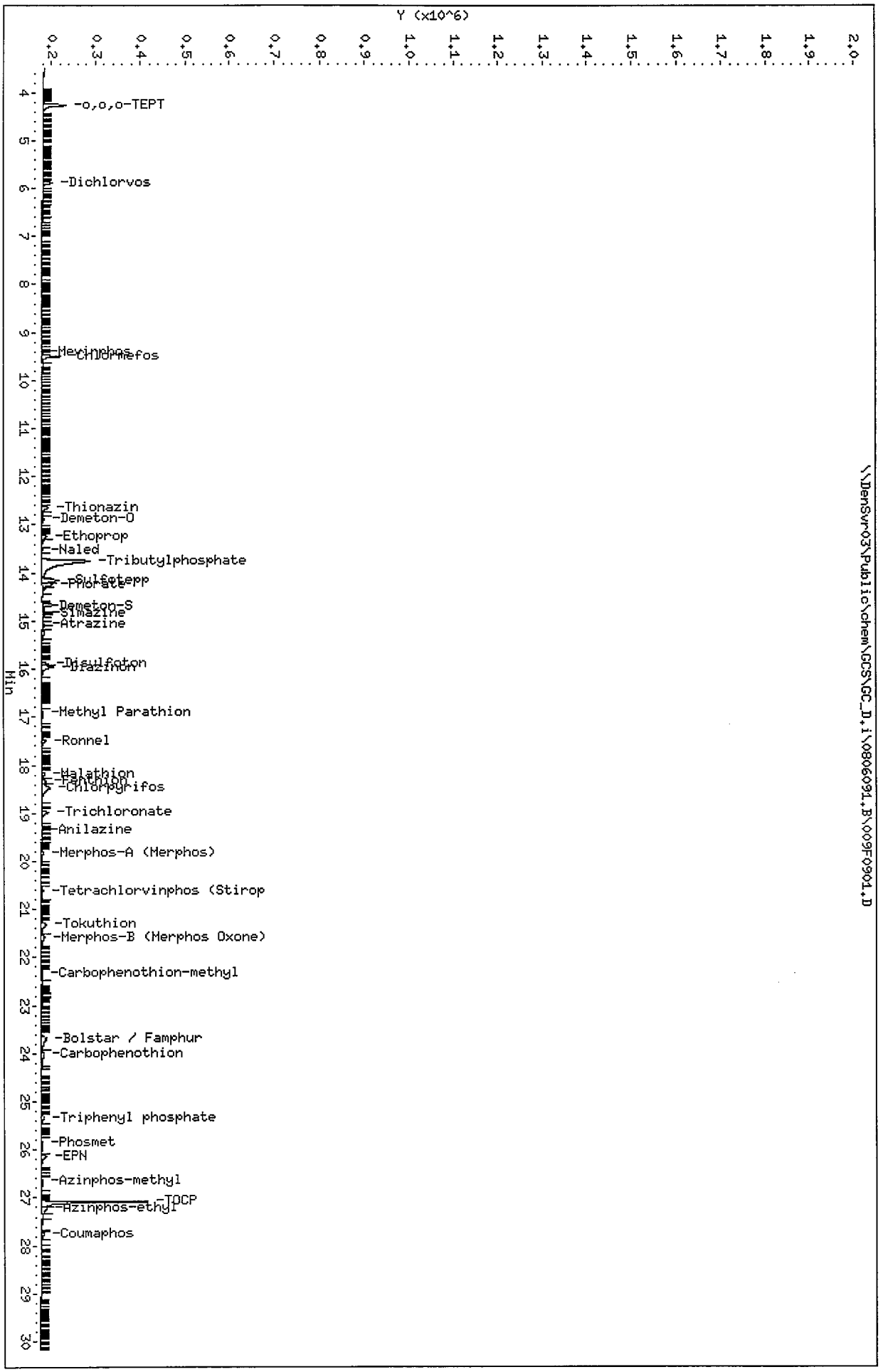
Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Lab Smp Id: 8141 L1 GSV87509
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 L1 GSV8750
Level:
Sample Type:

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	763264	-26.21
39 TOCP	695324	347662	1390648	553974	-20.33

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.75	0.37
39 TOCP	27.08	26.58	27.58	27.09	0.04

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\0806091,B\009F0901,D
Date : 06-AUG-2009 18:34
Client ID: 8141 L1 GSV87509
Sample Info: 8141 L1 GSV87509
Column phase: RTx-1MS

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/009F0901.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 18:34
Lab Sample ID: 8141 L1 GSV87509
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
1 o,o,o-TEPT	3.0000	0.2454	91.8	15.0	<-
2 Dichlorvos	3.0000	0.2109	93.0	15.0	<-
3 Mevinphos	3.0000	0.2214	92.6	15.0	<-
4 Chlormefos	3.0000	0.2216	92.6	15.0	<-
5 Thionazin	3.0000	0.2027	93.2	15.0	<-
6 Demeton-O	0.9750	0.0797	91.8	15.0	<-
7 Ethoprop	3.0000	0.1917	93.6	15.0	<-
8 Naled	3.0000	0.2152	92.8	15.0	<-
9 Sulfotepp	3.0000	0.1996	93.3	15.0	<-
10 Phorate	3.0000	0.2032	93.2	15.0	<-
11 Dimethoate	3.0000	0.0000	100.0	15.0	<-
12 Demeton-S	2.0400	0.0015	99.9	15.0	<-
13 Simazine	3.0000	0.1647	94.5	15.0	<-
14 Atrazine	3.0000	0.2057	93.1	15.0	<-
15 propazine	3.0000	0.0000	100.0	15.0	<-
17 Disulfoton	3.0000	0.1917	93.6	15.0	<-
16 Diazinon	3.0000	0.2700	91.0	15.0	<-
18 Methyl Parathion	3.0000	0.1960	93.5	15.0	<-
19 Ronnel	3.0000	0.2162	92.8	15.0	<-
20 Malathion	3.0000	0.1722	94.3	15.0	<-
21 Fenthion	3.0000	0.2075	93.1	15.0	<-
22 Parathion	3.0000	0.0000	100.0	15.0	<-
23 Chlorpyrifos	3.0000	0.2100	93.0	15.0	<-
24 Trichloronate	3.0000	0.2163	92.8	15.0	<-
25 Anilazine	3.0000	0.3483	88.4	15.0	<-
148 Merphos-A (Merphos)	3.0000	0.2490	91.7	999.0	
26 Tetrachlorvinphos (Stirophos)	3.0000	0.2225	92.6	15.0	<-
28 Tokuthion	3.0000	0.2031	93.2	15.0	<-
149 Merphos-B (Merphos Oxone)	3.0000	0.3775	87.4	999.0	
29 Carbophenothion-methyl	3.0000	0.2073	93.1	15.0	<-
29 Fensulfothion	3.0000	0.0000	100.0	15.0	<-
30 Bolstar / Famphur	6.0000	0.3188	94.7	15.0	<-
32 Carbophenothion	3.0000	0.1971	93.4	15.0	<-
31 Triphenyl phosphate	3.0000	0.1718	94.3	15.0	<-
34 Phosmet	3.0000	0.1157	96.1	15.0	<-
32 EPN	3.0000	0.1855	93.8	15.0	<-
33 Azinphos-methyl	3.0000	0.2350	92.2	15.0	<-
38 Azinphos-ethyl	3.0000	0.2128	92.9	15.0	<-
36 Coumaphos	3.0000	0.1505	95.0	15.0	<-

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B/009F0901.D
Report Date: 08/07/2009

CONTINUING CALIBRATION COMPOUNDS
PERCENT DRIFT REPORT

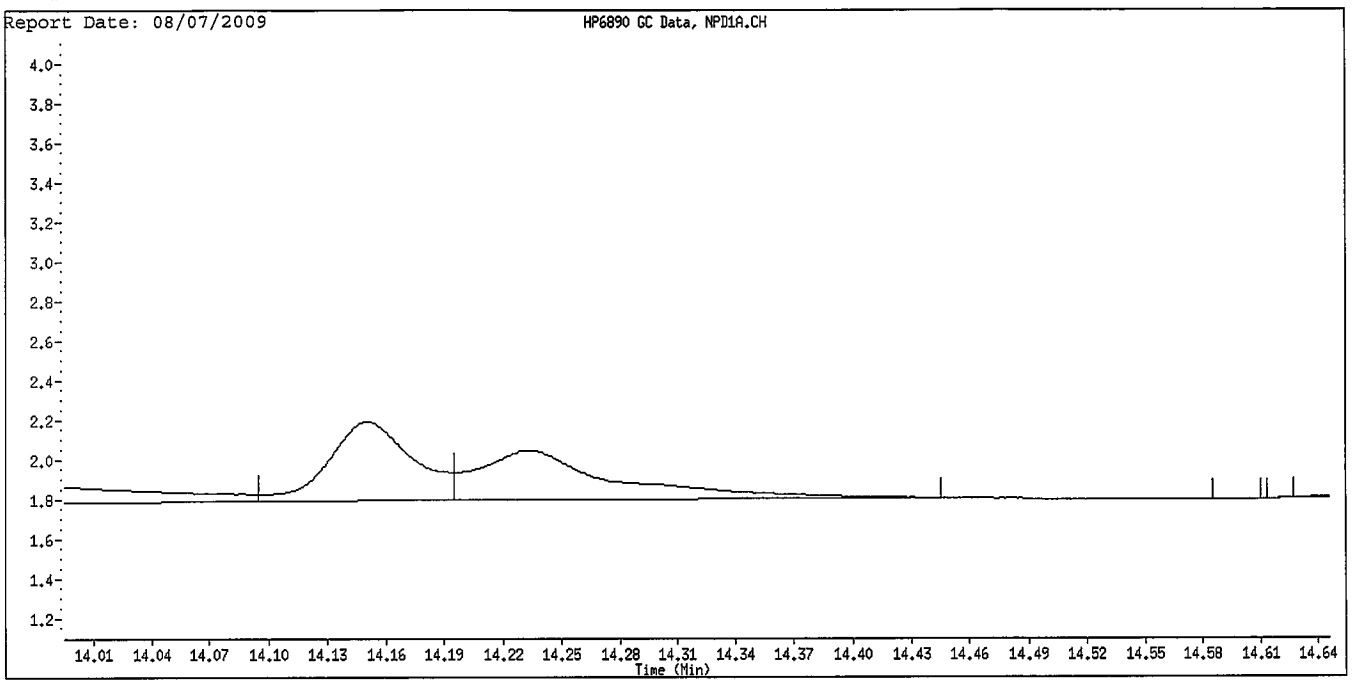
Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Analysis Type: NONE

Injection Date: 06-AUG-2009 18:34
Lab Sample ID: 8141 L1 GSV87509
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i

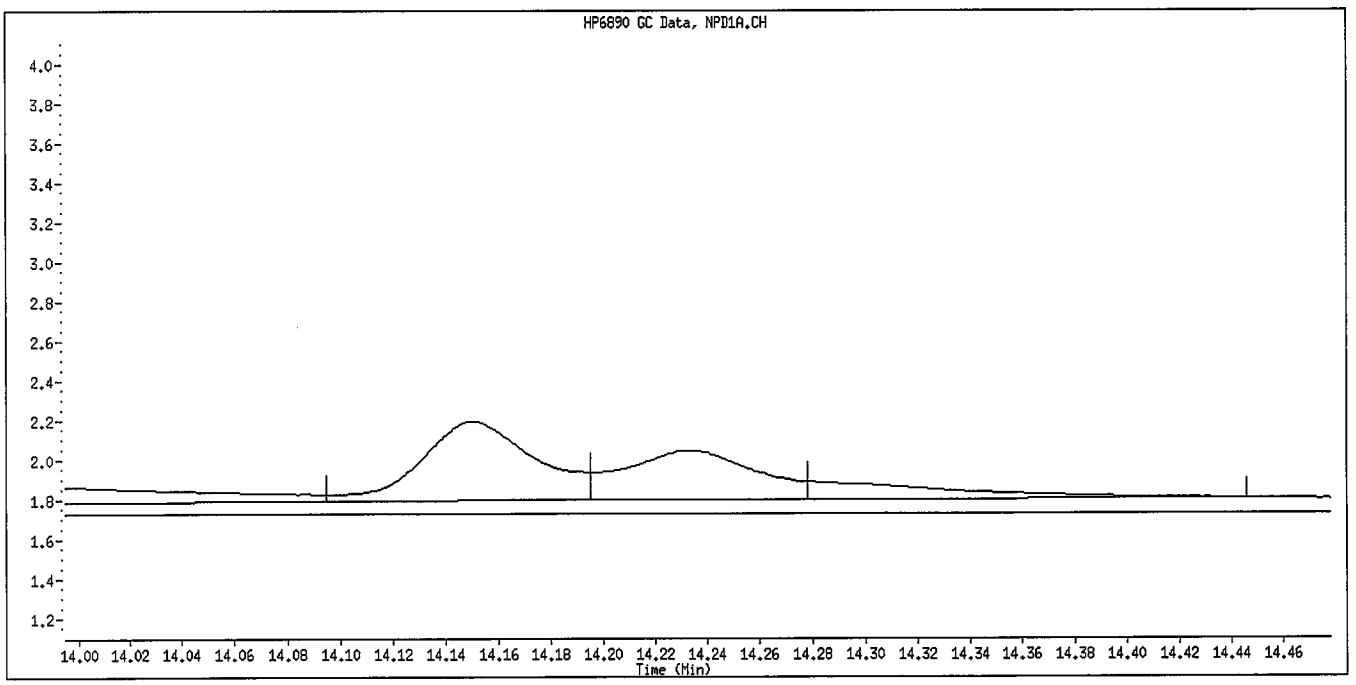
COMPOUND	EXPECTED CONC.	MEASURED CONC.	%D	MAX %D	
40 Total Demeton	3.0000	0.0812	97.3	15.0	<-
27 Merphos	3.0000	0.2116	92.9	15.0	<-

Average %D = 93.9

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Phorate
CAS #: 298-02-2



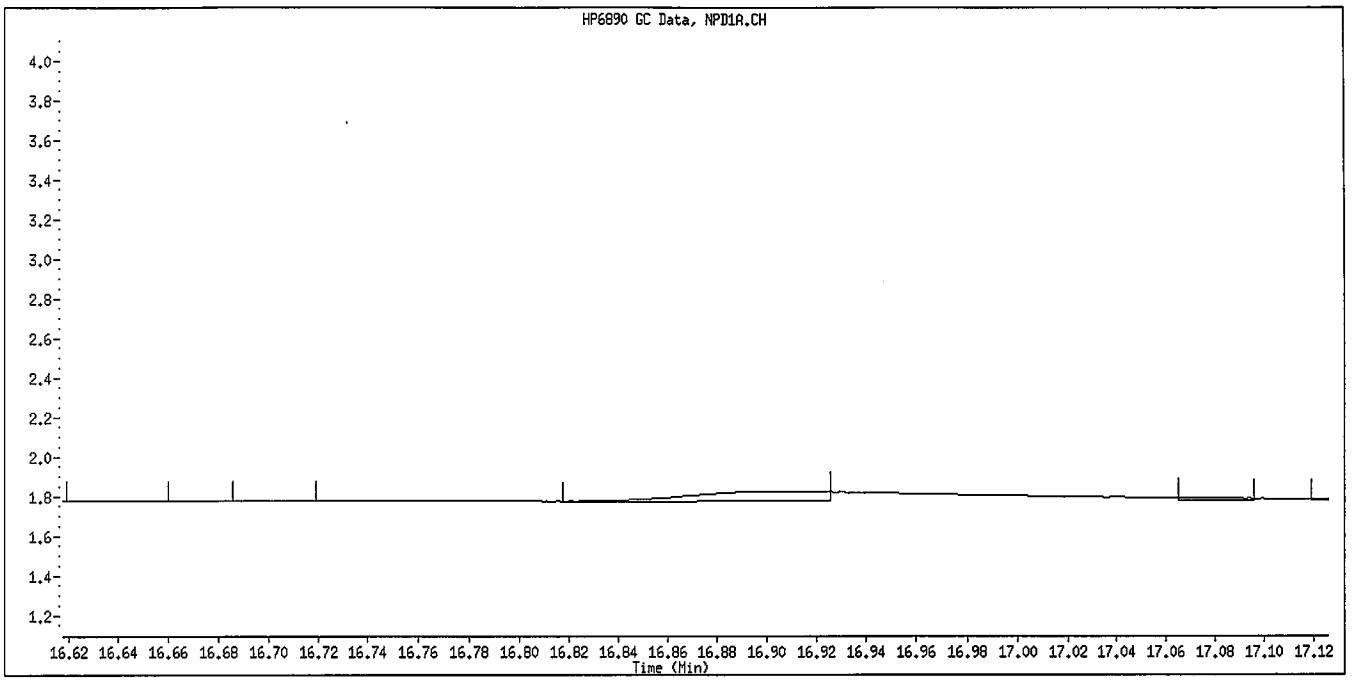
Original Integration



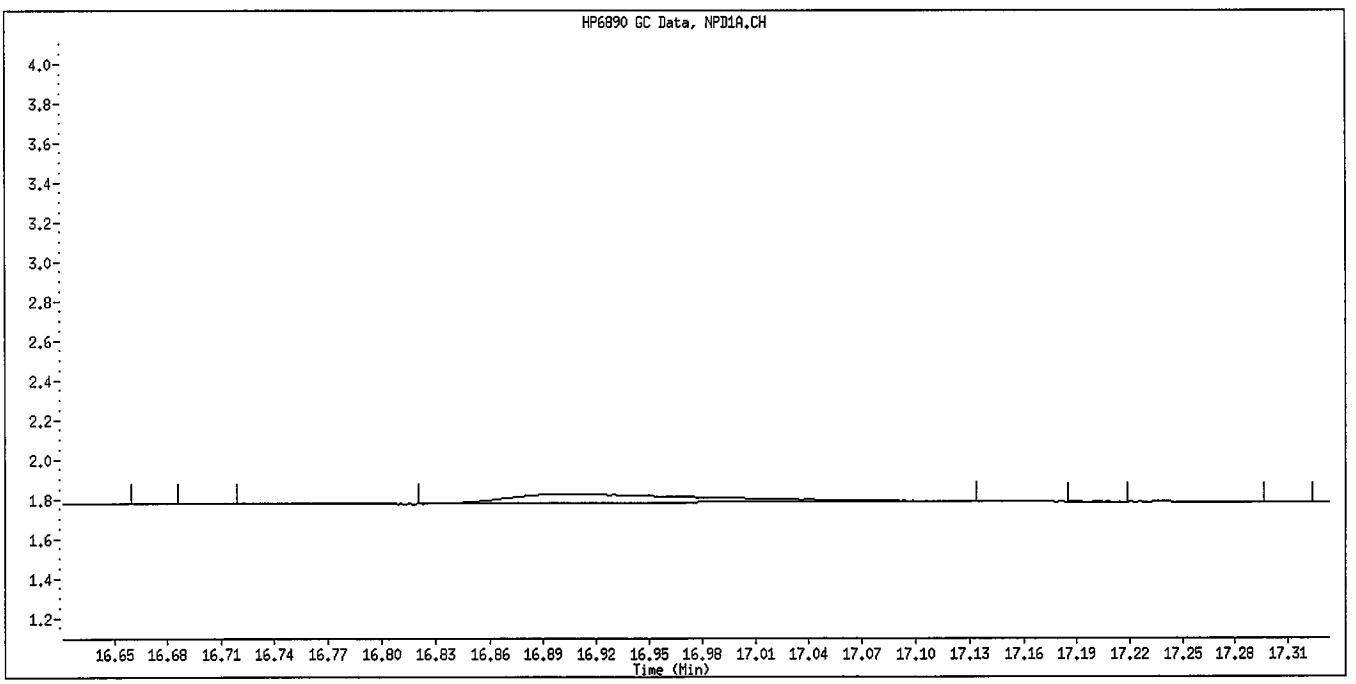
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Methyl Parathion
CAS #: 298-00-0
Report Date: 08/07/2009



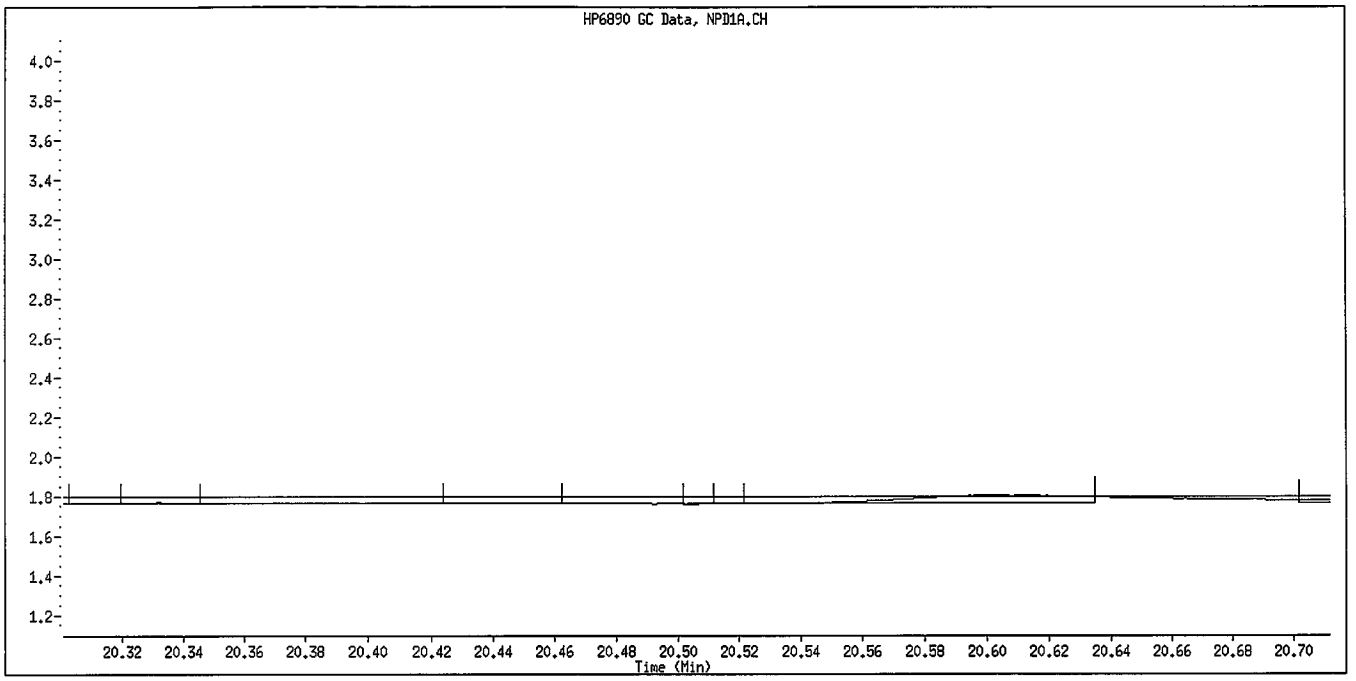
Original Integration



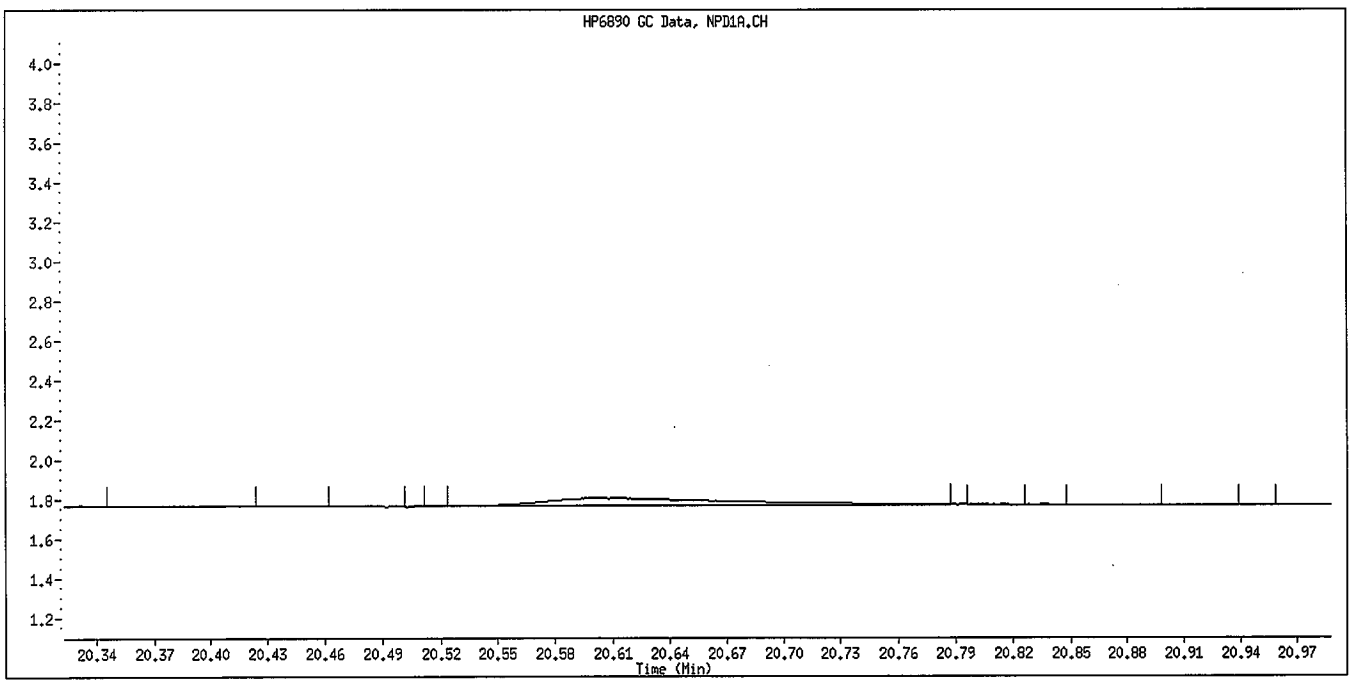
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Tetrachlorvinphos (Stirophos)
CAS #:
Report Date: 08/07/2009



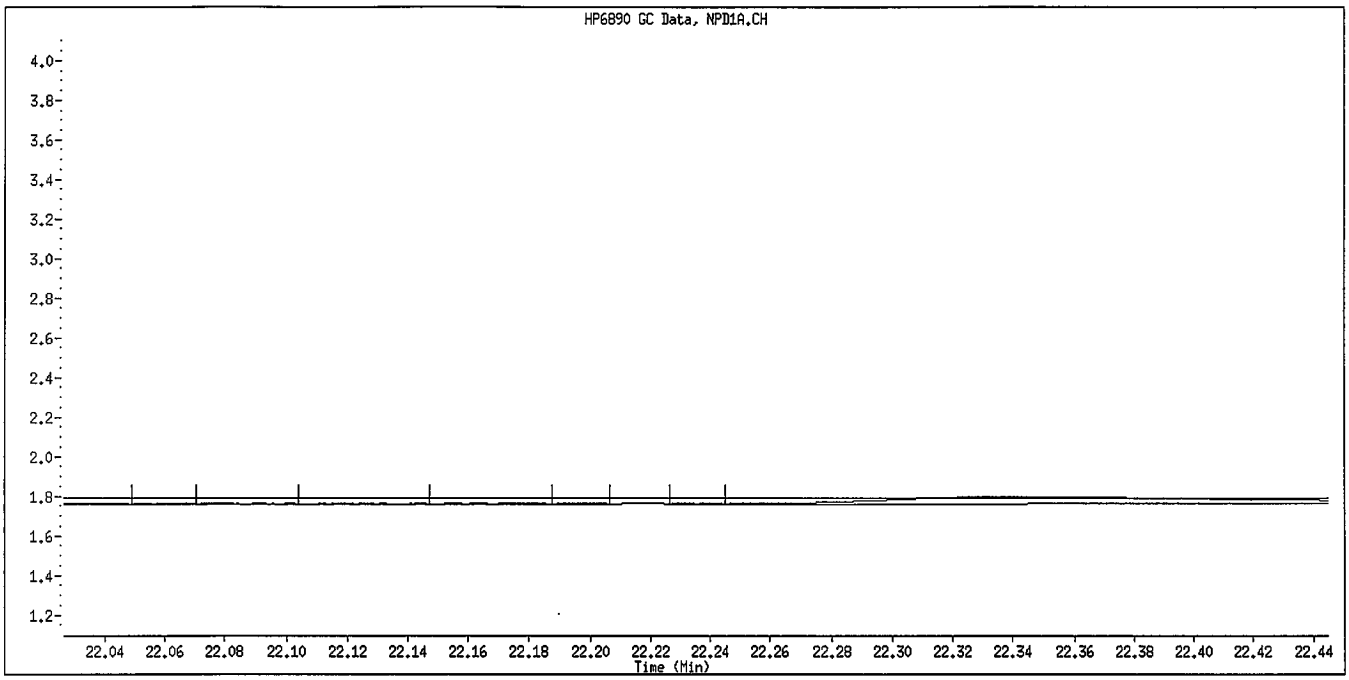
Original Integration



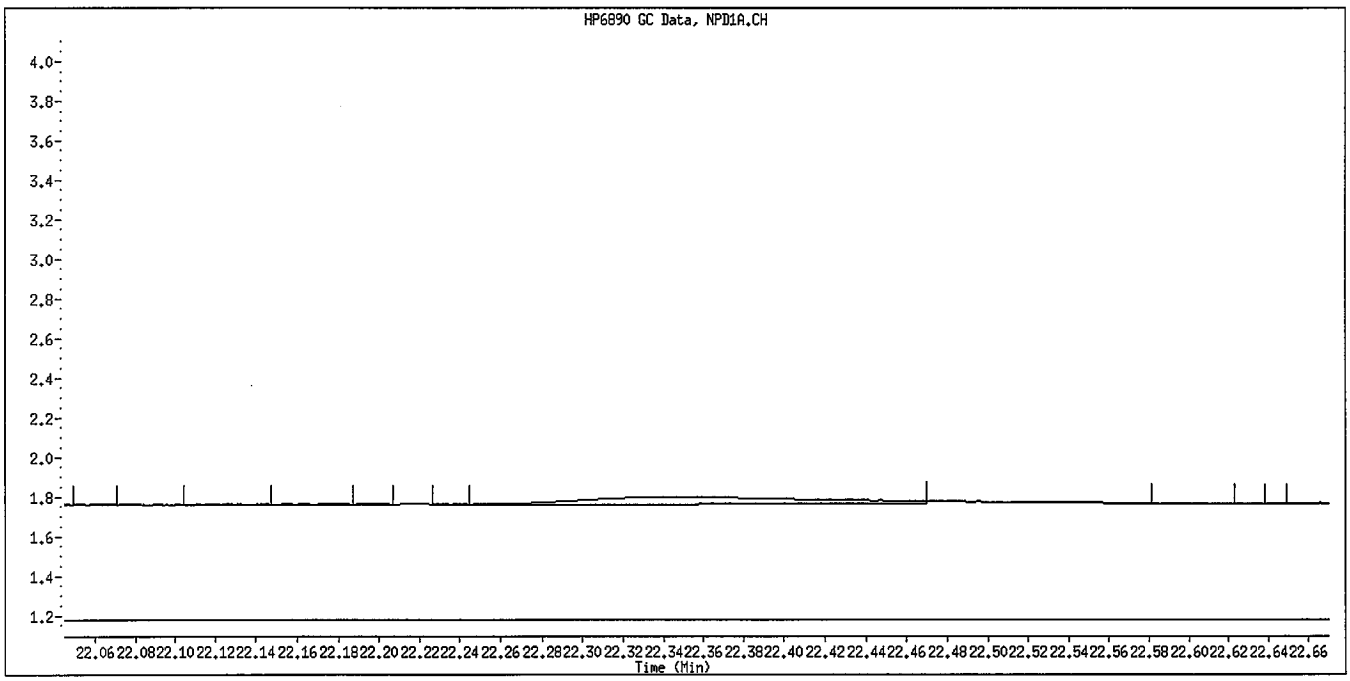
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Carbophenothion-methyl
CAS #:
Report Date: 08/07/2009



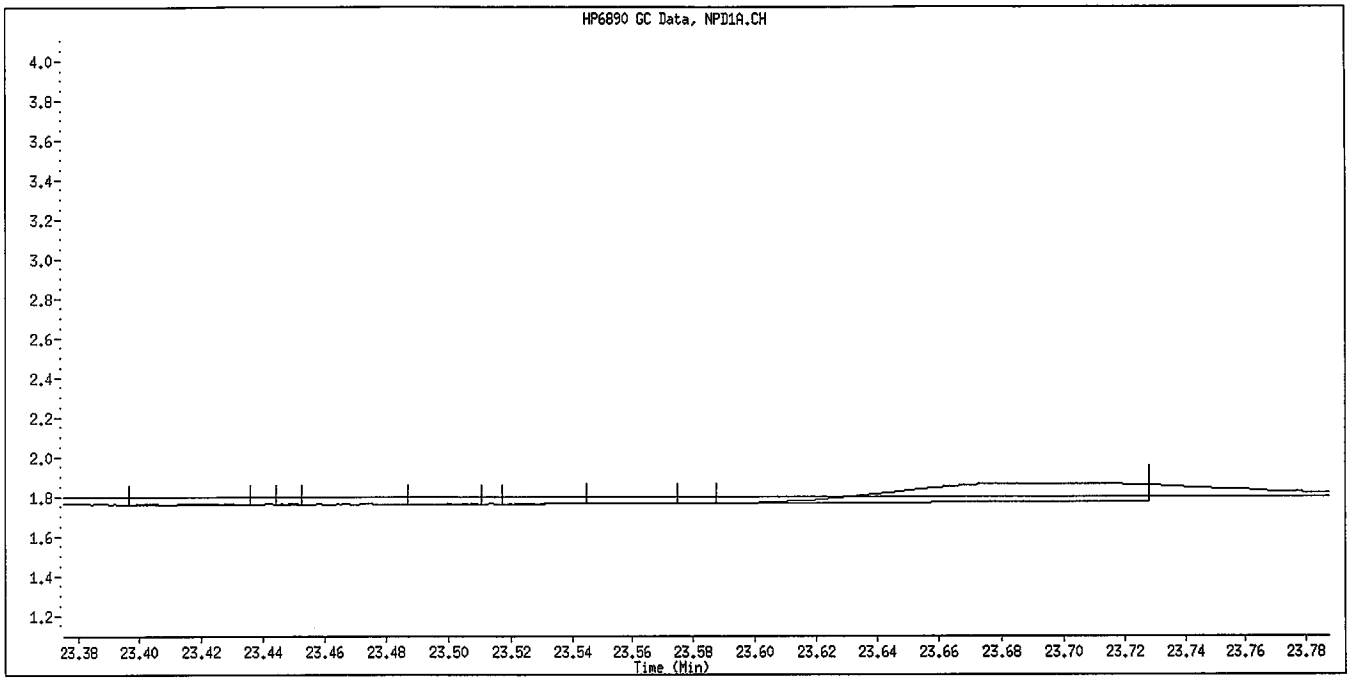
Original Integration



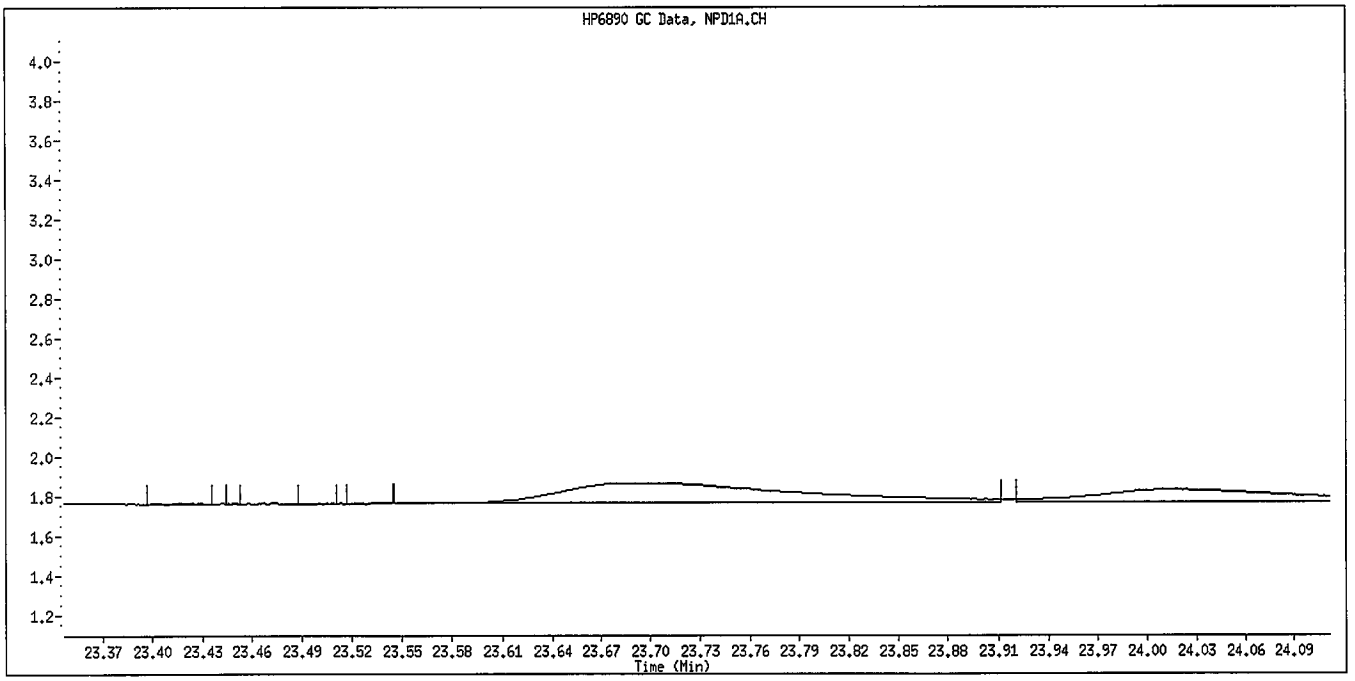
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Bolstar / Famphur
CAS #:
Report Date: 08/07/2009



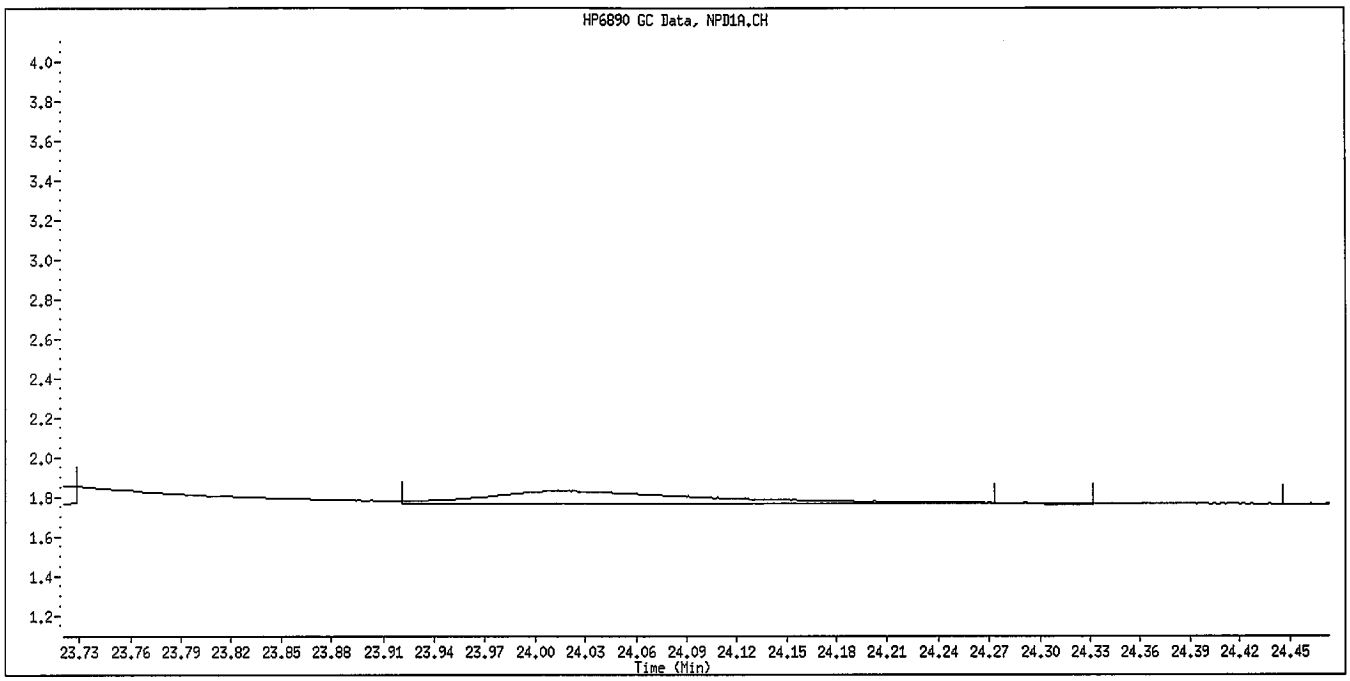
Original Integration



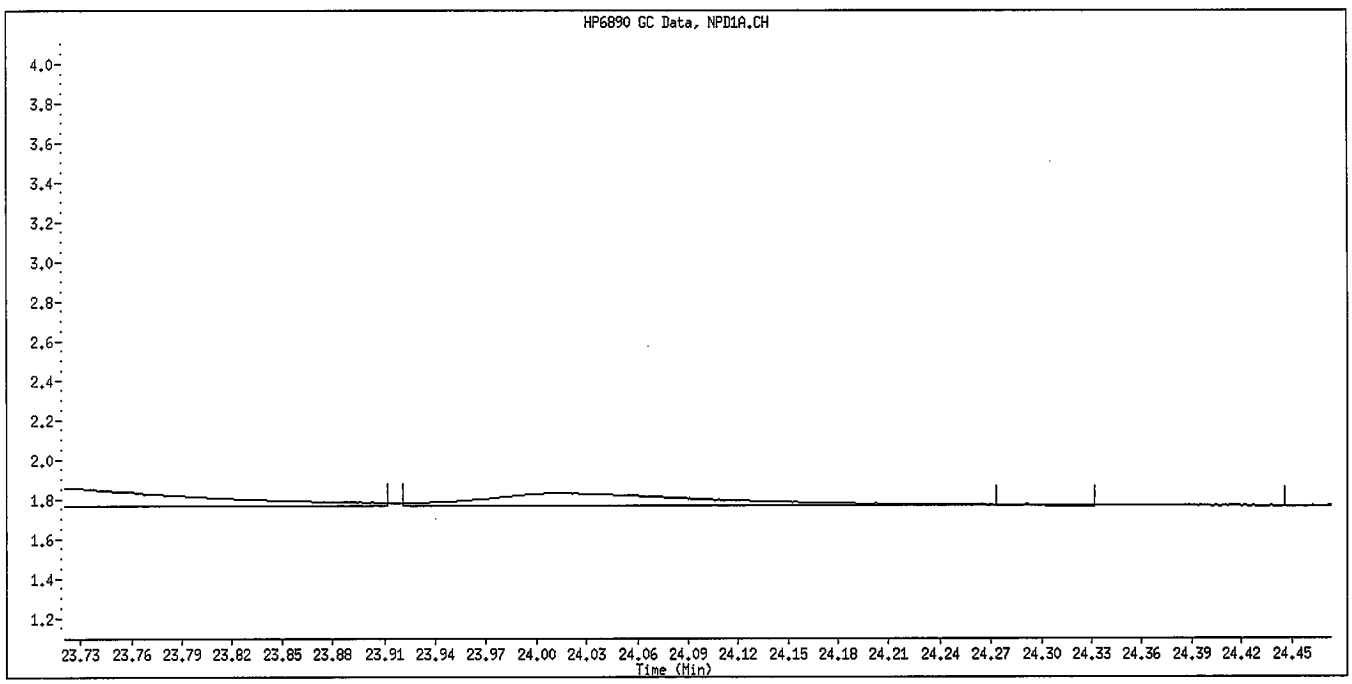
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Carbophenothion
CAS #:
Report Date: 08/07/2009



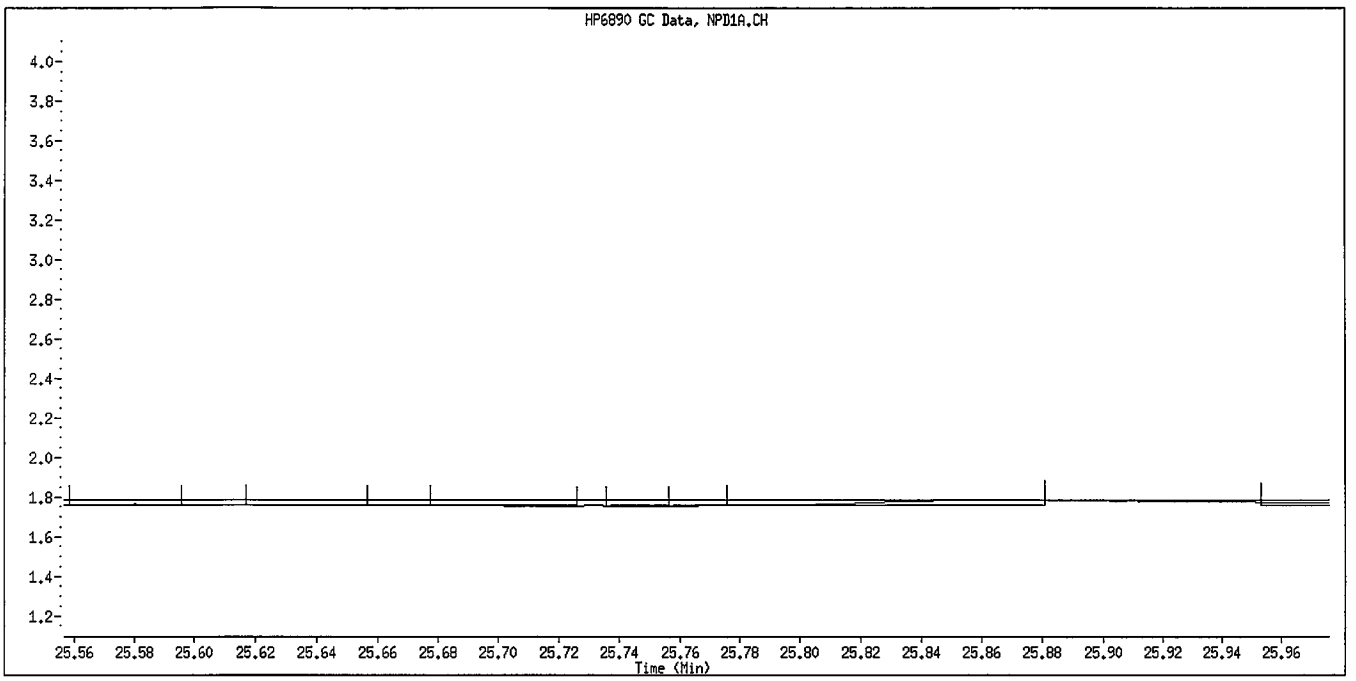
Original Integration



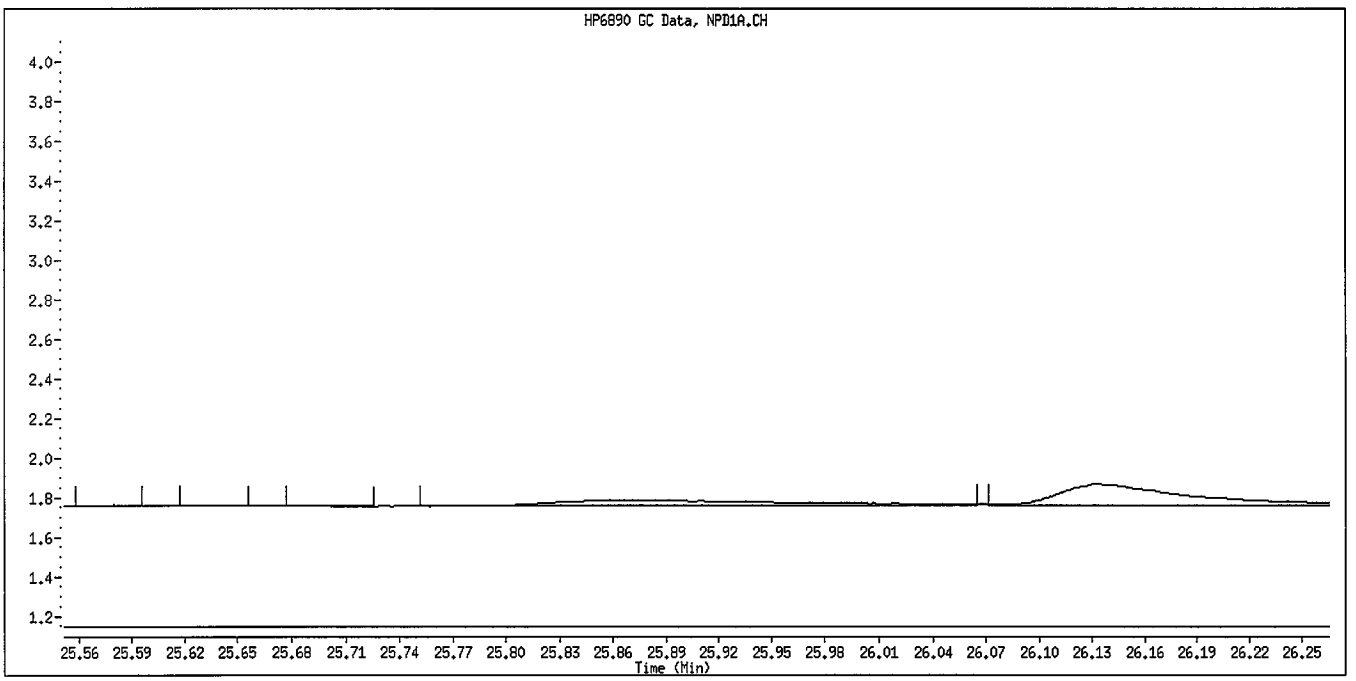
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Phosmet
CAS #:
Report Date: 08/07/2009



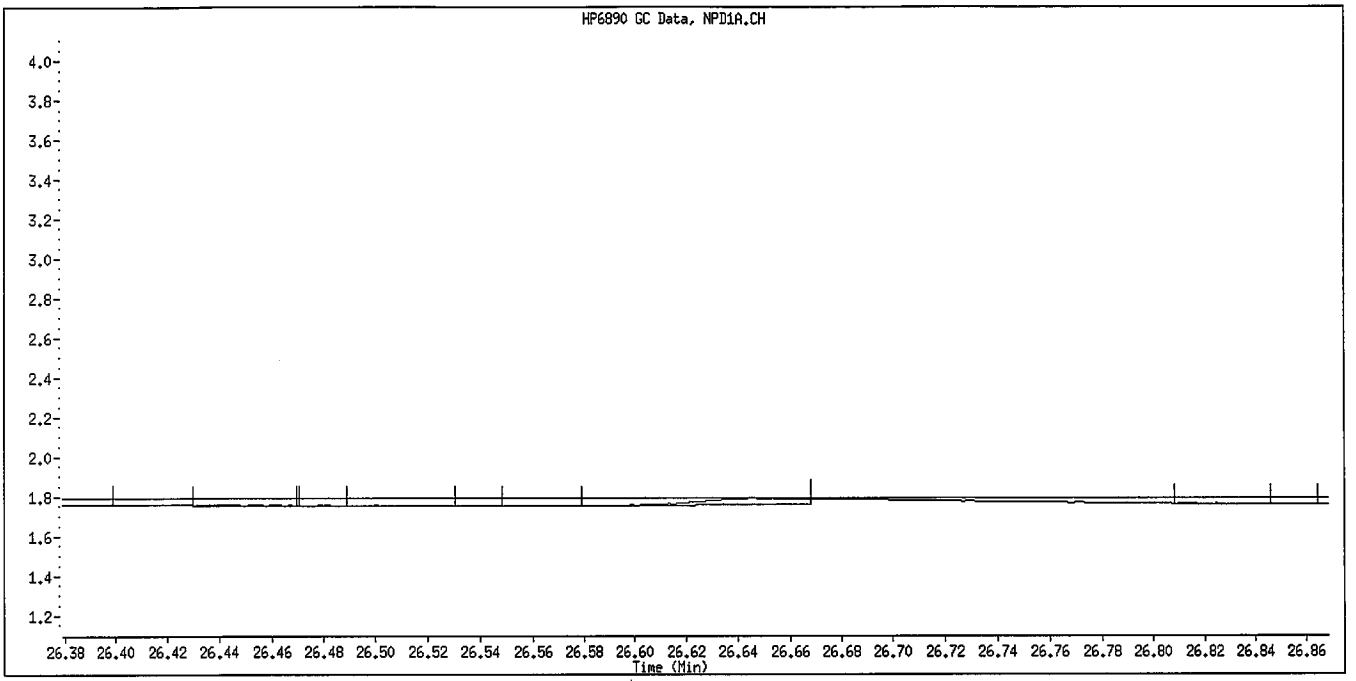
Original Integration



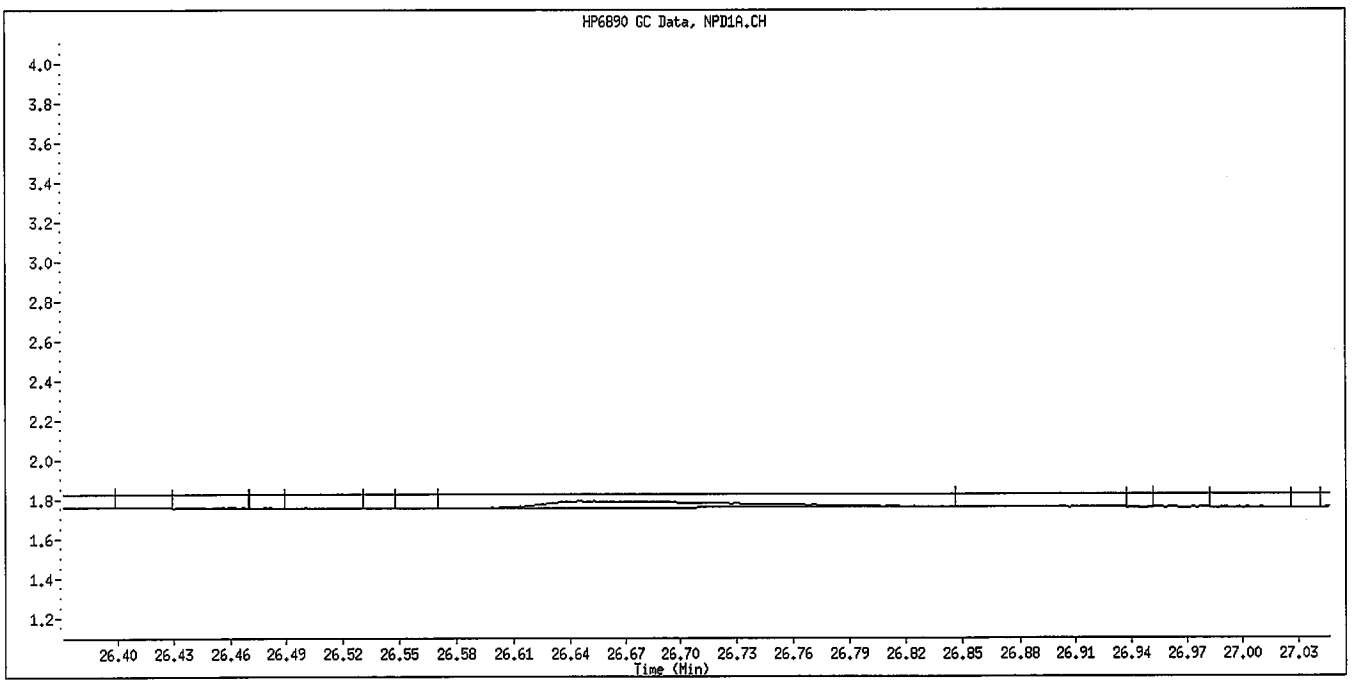
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Azinphos-methyl
CAS #:
Report Date: 08/07/2009



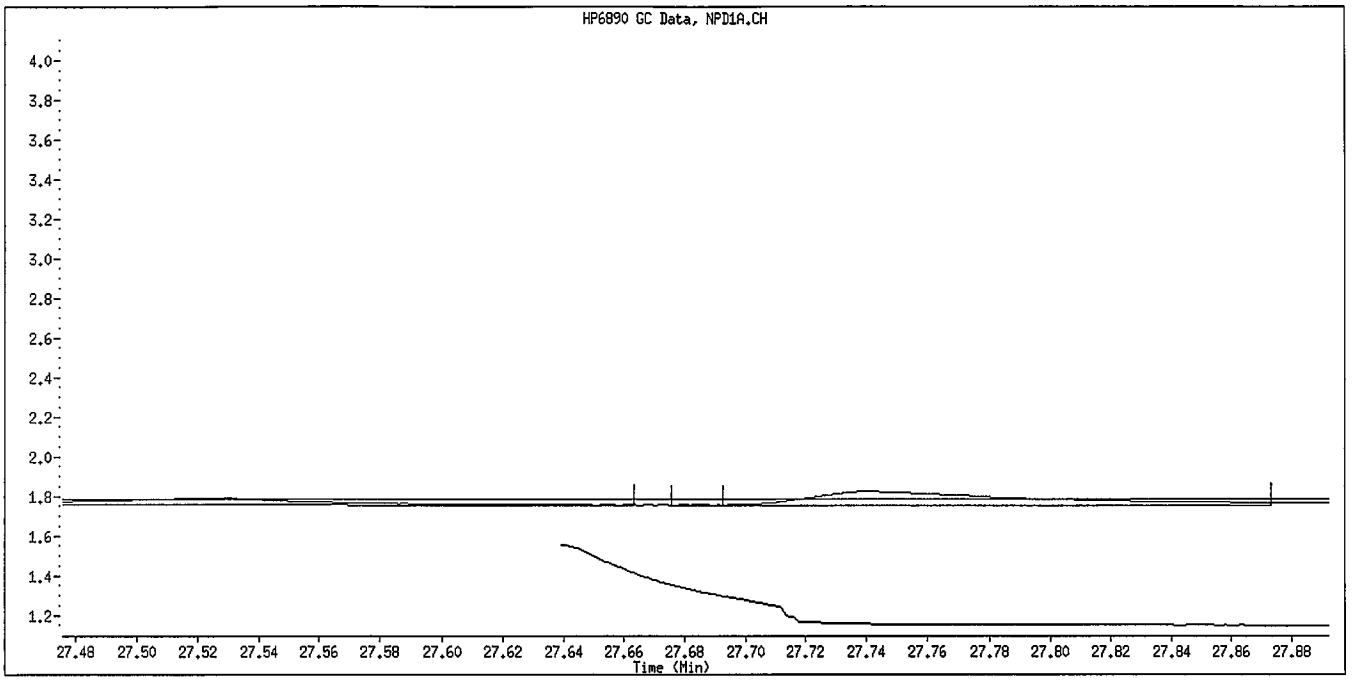
Original Integration



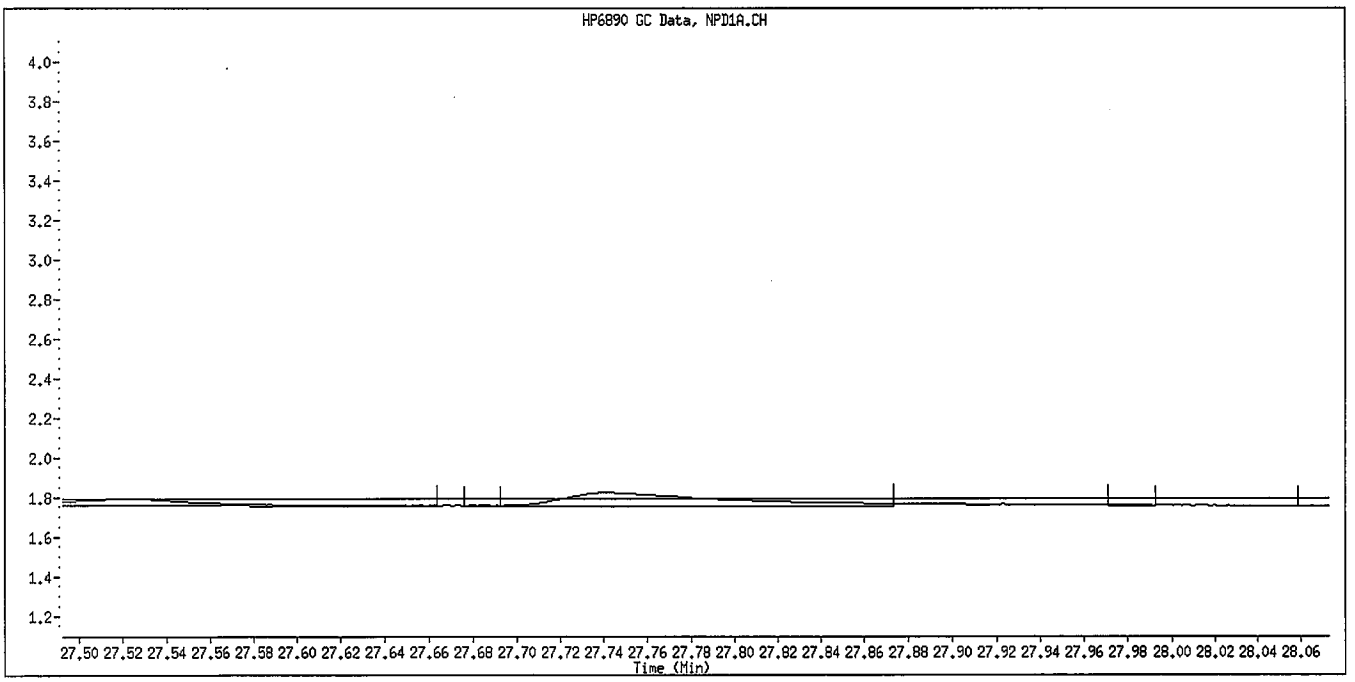
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Coumaphos
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

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

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\010F1001.D
Lab Smp Id: 8141 SS GSV87609 Client Smp ID: 8141 SS GSV87609
Inj Date : 06-AUG-2009 19:10
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 SS GSV87609
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Meth Date : 07-Aug-2009 13:45 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 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	4.268	4.267	(0.311)	1843004	2.00000	2.240
	2 Dichlorvos	5.867	5.865	(0.428)	743410	2.00000	2.036
	3 Mevinphos	9.417	9.407	(0.687)	235044	2.00000	1.556
$	4 Chlormefos	9.499	9.502	(0.693)	1161313	2.00000	1.736
	5 Thionazin	12.624	12.625	(0.920)	1118392	2.00000	2.235
	6 Demeton-O	12.875	12.876	(0.939)	820859	0.65000	2.025
	7 Ethoprop	13.208	13.205	(0.963)	891351	2.00000	1.994
	8 Naled	13.484	13.482	(0.983)	276089	2.00000	1.706
*	9 Tributylphosphate	13.717	13.714	(1.000)	867584	2.00000	
	10 Sulfotepp	14.143	14.143	(1.031)	1336752	2.00000	1.968
	11 Phorate	14.226	14.227	(1.037)	730629	2.00000	1.634
	12 Dimethoate	14.431	14.416	(1.052)	875203	2.00000	2.182
	13 Demeton-S	14.693	14.682	(1.071)	70754	1.36000	0.2056
	14 Simazine	14.788	14.783	(1.078)	366944	2.00000	2.469
	15 Atrazine	15.000	14.997	(1.094)	417241	2.00000	2.161
	16 propazine	15.181	15.178	(1.107)	419363	2.00000	2.193
	17 Disulfoton	15.867	15.866	(0.586)	846309	2.00000	1.974
	18 Diazinon	15.933	15.934	(0.588)	872162	2.00000	1.867
	19 Methyl Parathion	16.833	16.829	(0.622)	657192	2.00000	1.970
	20 Ronnel	17.458	17.456	(0.645)	726001	2.00000	2.064
	21 Malathion	18.135	18.134	(0.670)	594268	2.00000	1.936
	22 Fenthion	18.287	18.284	(0.675)	680633	2.00000	1.906
	23 Parathion	18.392	18.392	(0.679)	735997	2.00000	2.060
	24 Chlorpyrifos	18.450	18.451	(0.681)	860875	2.00000	1.977
	25 Trichloronate	18.959	18.958	(0.700)	791359	2.00000	1.809
	26 Anilazine	19.352	19.345	(0.715)	33556	2.00000	1.250
	27 Merphos-A (Merphos)	19.802	19.804	(0.731)	58433	2.00000	0.2980
	28 Tetrachlorvinphos (Stirophos)	20.536	20.532	(0.758)	455941	2.00000	1.889
	29 Tokuthion	21.279	21.278	(0.786)	808333	2.00000	1.943
	30 Merphos-B (Merphos Oxone)	21.536	21.536	(0.795)	710217	2.00000	11.88(A)
	31 Carbophenothion-methyl	22.261	22.254	(0.822)	368687	2.00000	1.330
	32 Fensulfothion	22.488	22.465	(0.831)	491939	2.00000	1.966
	33 Bolstar / Famphur	23.631	23.627	(0.873)	1504693	4.00000	4.213

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Carbophenothion	23.951	23.947	(0.885)	712364	2.00000	2.116
$	35 Triphenyl phosphate	25.278	25.270	(0.934)	494576	2.00000	1.848
	36 Phosmet	25.773	25.769	(0.952)	619156	2.00000	2.272
	37 EPN	26.102	26.097	(0.964)	765092	2.00000	2.210
	38 Azinphos-methyl	26.589	26.584	(0.982)	466871	2.00000	1.850
*	39 TOCP	27.076	27.076	(1.000)	613099	2.00000	
	40 Azinphos-ethyl	27.176	27.172	(1.004)	654822	2.00000	2.055
	41 Coumaphos	27.701	27.694	(1.023)	508925	2.00000	1.937
M	42 Total Demeton				891613	2.00000	2.231
M	43 Merphos				768650	2.00000	1.898

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: 010F1001.D
Lab Smp Id: 8141 SS GSV87609
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\8141A-1.m
Misc Info:

Calibration Date: 07-AUG-2009
Calibration Time: 06:42
Client Smp ID: 8141 SS GSV8760
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	1034306	517153	2068612	867584	-16.12
39 TOCP	695324	347662	1390648	613099	-11.83

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
9 Tributylphosphate	13.70	13.20	14.20	13.72	0.13
39 TOCP	27.08	26.58	27.58	27.08	-0.00

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

Data File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806091.B\010F1001.D
Date : 06-AUG-2009 19:10
Client ID: 8141 SS GSV87609
Sample Info: 8141 SS GSV87609

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

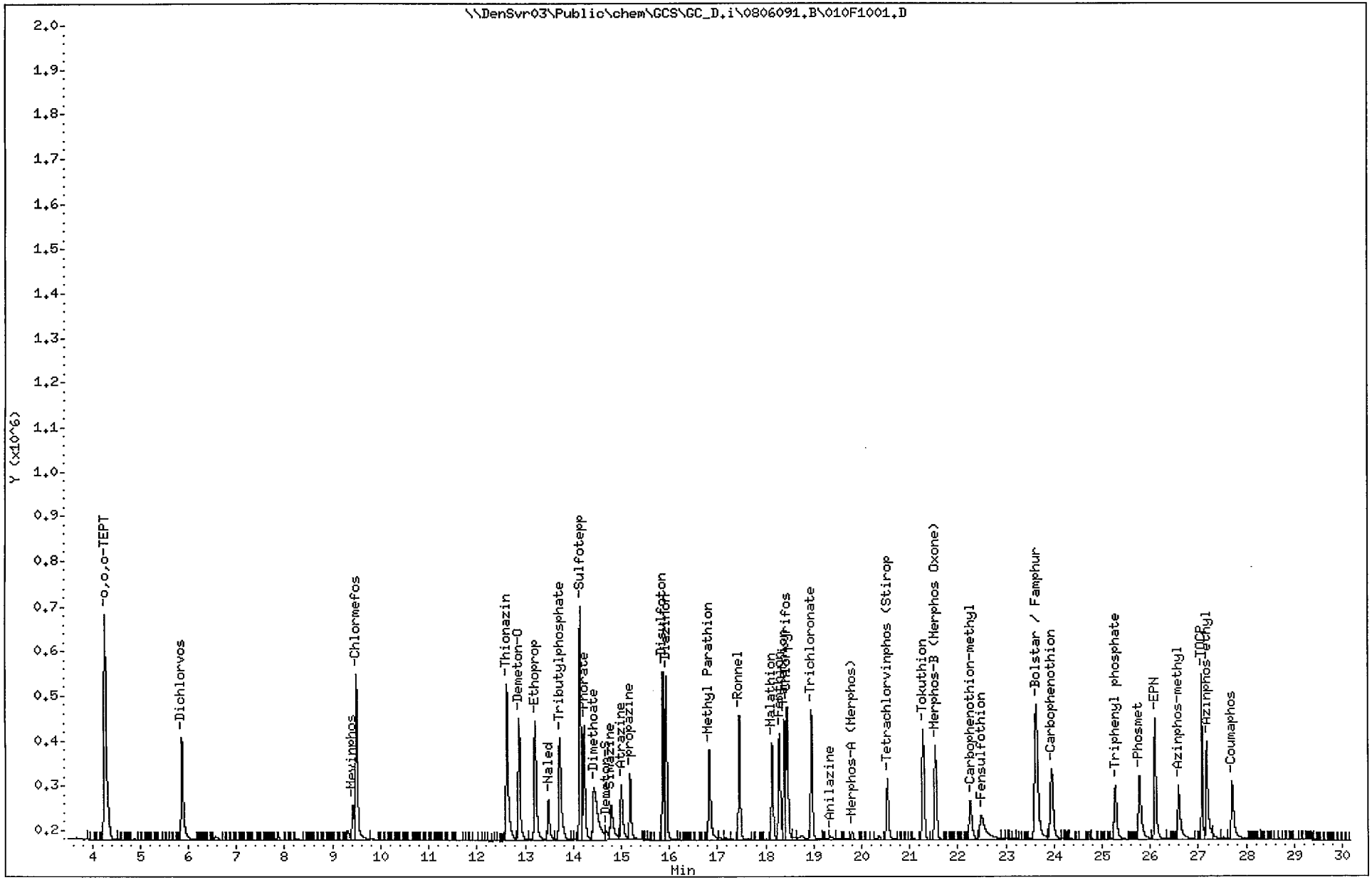


Table of Contents

TestAmerica

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Lab Smp Id: 8141 L7 GSV82609 Client Smp ID: 8141 L7 GSV82609
Inj Date : 06-AUG-2009 14:56
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L7 GSV82609
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 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	6.790	6.758	(0.419)	4502240	5.00000	4.256
	2 Dichlorvos	8.964	8.952	(0.554)	2218734	5.00000	4.705
$	3 Chlormefos	12.887	12.885	(0.796)	3329933	5.00000	4.827
	4 Mevinphos	13.005	13.006	(0.803)	1418878	5.00000	4.842
	5 Demeton-O	15.939	15.939	(0.985)	687790	1.62500	1.589
	6 Thionazin	16.067	16.067	(0.992)	2959832	5.00000	4.615
*	7 Tributylphosphate	16.190	16.193	(1.000)	1131223	2.00000	
	8 Ethoprop	16.333	16.332	(1.009)	2583304	5.00000	4.705
	9 Naled	16.921	16.921	(1.045)	1131291	5.00000	5.030(A)
	10 Sulfotepp	17.234	17.234	(1.064)	4270412	5.00000	4.519
	11 Phorate	17.269	17.268	(1.067)	2084335	5.00000	4.361
	12 Demeton-S	17.961	17.962	(1.109)	1474470	3.40000	3.394
	13 Simazine	18.366	18.368	(1.134)	674577	5.00000	5.004(A)
	14 Atrazine / Propazine	18.434	18.434	(1.139)	2608160	10.0000	10.04(A)
	15 Dimethoate	18.566	18.569	(1.147)	2698083	5.00000	4.812
	16 Diazinon	18.966	18.967	(1.171)	2467752	5.00000	4.401
	17 Disulfoton	19.229	19.231	(1.188)	2617710	5.00000	4.622
	18 Methyl Parathion	21.131	21.132	(0.736)	1936768	5.00000	4.722(A)
	19 Ronnel	21.220	21.222	(0.739)	2282209	5.00000	4.726
	20 Malathion	22.495	22.492	(0.784)	1824966	5.00000	4.653
	21 Chlorpyrifos	22.646	22.644	(0.789)	2210724	5.00000	4.848
	22 Trichloronate	22.819	22.819	(0.795)	2890038	5.00000	5.071(A)
	23 Parathion	22.866	22.866	(0.797)	2140679	5.00000	4.818
	24 Fenthion	22.940	22.942	(0.799)	2341329	5.00000	4.762
	25 Merphos-A (Merphos)	23.475	23.472	(0.818)	1728719	5.00000	4.846
	26 Anilazine	24.446	24.451	(0.852)	195793	5.00000	5.229(A)
	27 Tetrachlorvinphos (stirophos)	25.869	25.869	(0.901)	1682420	5.00000	5.160(A)
	28 Tokuthion	26.044	26.043	(0.907)	2649007	5.00000	5.009(A)
	29 Merphos-B (Merphos oxone)	26.174	26.176	(0.912)	547067	5.00000	4.927
	30 Carbophenothion methyl	26.998	26.999	(0.941)	1930580	5.00000	5.222(A)
	31 Fensulfothion	27.236	27.237	(0.949)	1541611	5.00000	4.702
	32 Bolstar	27.347	27.347	(0.953)	2235624	5.00000	4.416
	33 Carbophenothion	27.459	27.460	(0.957)	2095716	5.00000	4.953

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.644	27.644	(0.963)	1943080	5.00000	5.026(A)
$	35 Triphenyl phosphate	27.933	27.932	(0.973)	1616846	5.00000	4.469
	36 EPN	28.241	28.240	(0.984)	1898338	5.00000	4.574
	37 Phosmet	28.367	28.366	(0.988)	1655568	5.00000	4.808
*	38 TOCP	28.705	28.705	(1.000)	836128	2.00000	
	39 Azinphos-methyl	28.816	28.816	(1.004)	1429834	5.00000	4.967
	40 Azinphos-ethyl	29.128	29.127	(1.015)	1454184	5.00000	4.795
	41 Coumaphos	29.454	29.453	(1.026)	1373774	5.00000	4.979
M	42 Total Demeton				2162260	5.00000	4.984
M	43 Merphos				2275786	5.00000	4.636(A)

QC Flag Legend

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

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

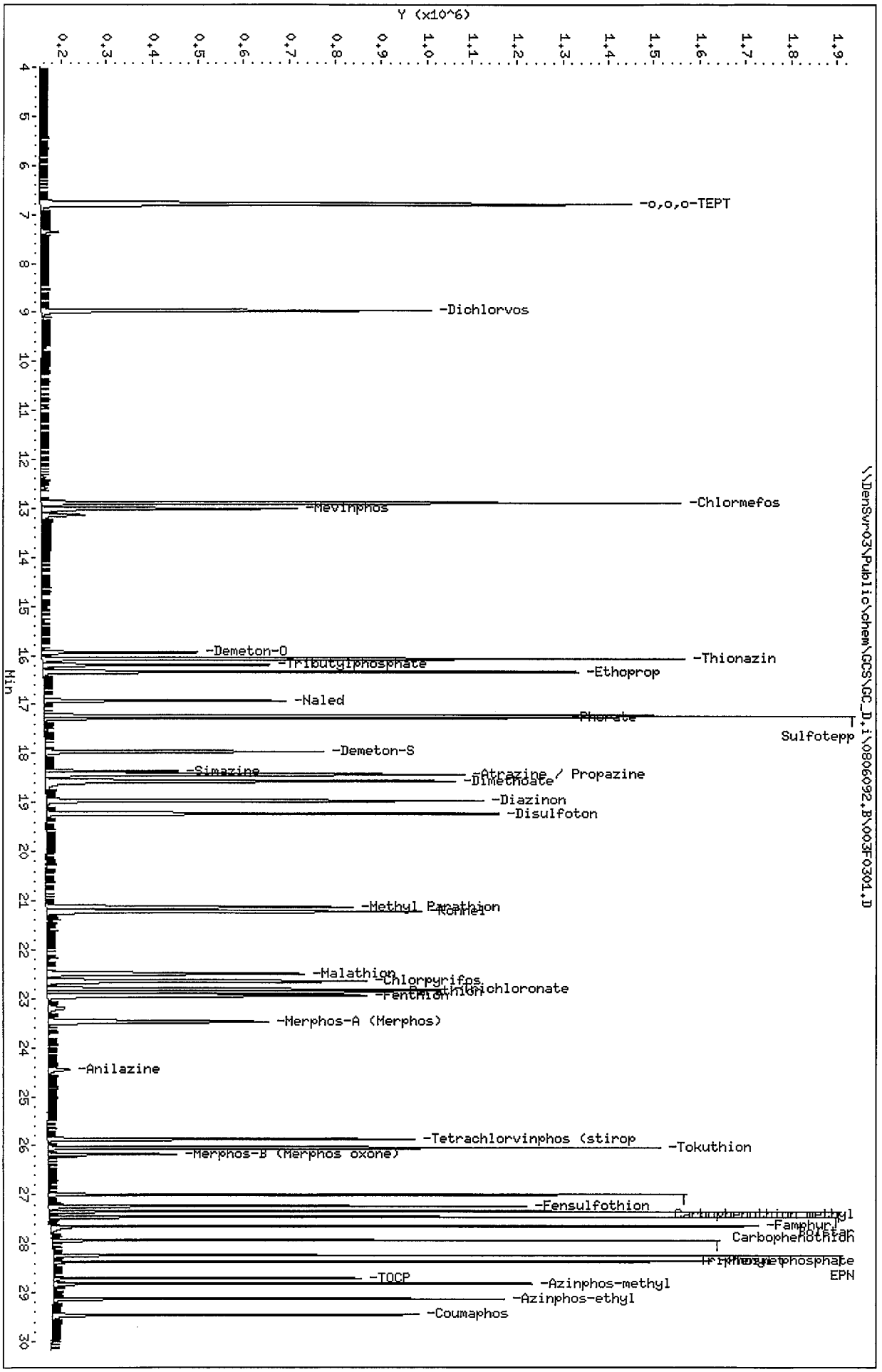
Instrument ID: GC_D.i
Lab File ID: 003F0301.D
Lab Smp Id: 8141 L7 GSV82609
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L7 GSV8260
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	1131223	14.29
38 TOCP	732545	366273	1465090	836128	14.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.19	-0.02
38 TOCP	28.70	28.20	29.20	28.71	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\0806092.B\003F0301.D
Date : 06-AUG-2009 14:56
Client ID: 8141 L7 GSV82609
Sample Info: 8141 L7 GSV82609
Column phase: RTx-OPPest

Instrument: GC_D,i
Operator: MPK/TLH
Column diameter: 0.32

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\004F0401.D
Lab Smp Id: 8141 L6 GSV87009 Client Smp ID: 8141 L6 GSV87009
Inj Date : 06-AUG-2009 15:32
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L6 GSV87009
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 14:56 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	6.760	6.758	(0.417)	3613463	4.00000	3.720
	2 Dichlorvos	8.953	8.952	(0.553)	1768273	4.00000	4.084
$	3 Chlormefos	12.886	12.885	(0.796)	2624051	4.00000	4.132
	4 Mevinphos	13.004	13.006	(0.803)	1096662	4.00000	4.082
	5 Demeton-O	15.939	15.939	(0.984)	520374	1.30000	1.309
	6 Thionazin	16.067	16.067	(0.992)	2340635	4.00000	3.974
*	7 Tributylphosphate	16.192	16.193	(1.000)	1038841	2.00000	
	8 Ethoprop	16.332	16.332	(1.009)	2051405	4.00000	4.045
	9 Naled	16.921	16.921	(1.045)	787967	4.00000	3.918
	10 Sulfotepp	17.233	17.234	(1.064)	3390840	4.00000	3.907
	11 Phorate	17.269	17.268	(1.066)	1624819	4.00000	3.702
	12 Demeton-S	17.961	17.962	(1.109)	1151737	2.72000	2.887
	13 Simazine	18.367	18.368	(1.134)	492868	4.00000	4.040
	14 Atrazine / Propazine	18.432	18.434	(1.138)	1954099	8.00000	8.196(A)
	15 Dimethoate	18.566	18.569	(1.147)	2052825	4.00000	3.997
	16 Diazinon	18.967	18.967	(1.171)	1940014	4.00000	3.768
	17 Disulfoton	19.229	19.231	(1.188)	2045262	4.00000	3.933
	18 Methyl Parathion	21.130	21.132	(0.736)	1488025	4.00000	4.044(A)
	19 Ronnel	21.221	21.222	(0.739)	1735137	4.00000	3.993
	20 Malathion	22.494	22.492	(0.784)	1406900	4.00000	3.992
	21 Chlorpyrifos	22.644	22.644	(0.789)	1671357	4.00000	4.079
	22 Trichloronate	22.819	22.819	(0.795)	2093978	4.00000	4.095
	23 Parathion	22.865	22.866	(0.797)	1741701	4.00000	4.252
	24 Fenthion	22.942	22.942	(0.799)	1789955	4.00000	4.042
	25 Merphos-A (Merphos)	23.473	23.472	(0.818)	1339983	4.00000	4.192
	26 Anilazine	24.451	24.451	(0.852)	129151	4.00000	3.867(M)
	27 Tetrachlorvinphos (stirophos)	25.870	25.869	(0.901)	1220938	4.00000	4.177
	28 Tokuthion	26.046	26.043	(0.907)	2002622	4.00000	4.208
	29 Merphos-B (Merphos oxone)	26.175	26.176	(0.912)	439795	4.00000	4.024
	30 Carbophenothion methyl	26.999	26.999	(0.941)	1444721	4.00000	4.343
	31 Fensulfothion	27.237	27.237	(0.949)	1195644	4.00000	4.065
	32 Bolstar	27.347	27.347	(0.953)	1755208	4.00000	3.853
	33 Carbophenothion	27.460	27.460	(0.957)	1586342	4.00000	4.167

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.644	27.644	(0.963)	1480451	4.00000	4.255
$	35 Triphenyl phosphate	27.932	27.932	(0.973)	1280032	4.00000	3.932
	36 EPN	28.239	28.240	(0.984)	1483979	4.00000	3.974
	37 Phosmet	28.366	28.366	(0.988)	1249688	4.00000	4.042
*	38 TOCP	28.705	28.705	(1.000)	752380	2.00000	
	39 Azinphos-methyl	28.816	28.816	(1.004)	1072140	4.00000	4.148
	40 Azinphos-ethyl	29.127	29.127	(1.015)	1110566	4.00000	4.069
	41 Coumaphos	29.452	29.453	(1.026)	1021332	4.00000	4.121
M	42 Total Demeton				1672111	4.00000	4.196
M	43 Merphos				1779778	4.00000	4.029(A)

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

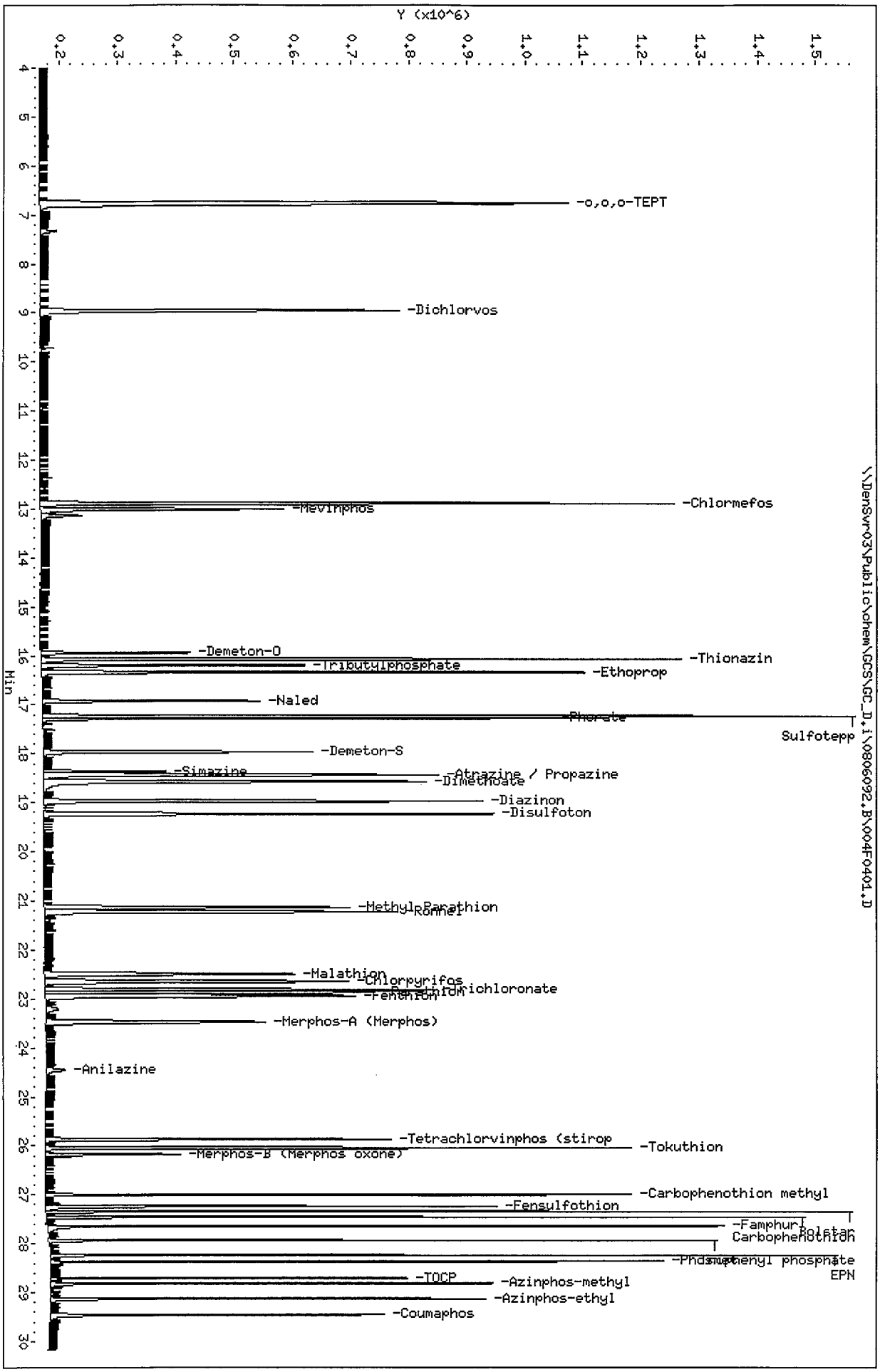
Instrument ID: GC_D.i
Lab File ID: 004F0401.D
Lab Smp Id: 8141 L6 GSV87009
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L6 GSV8700
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	1038841	4.96
38 TOCP	732545	366273	1465090	752380	2.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.19	-0.01
38 TOCP	28.70	28.20	29.20	28.71	0.00

AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.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-o,o,o-TEPT
-Dichlorvos
-Chlormefos
-Mevinphos
-Demeton-O
-Thionazin
-Tributylphosphate
-Ethoprop
-Naled
-Phorate
Sulfotepp
-Demeton-S
-Simazine
-Atrazine / Propazine
-Dimethoate
-Diazinon
-Disulfoton
-Methyl Parathion
Ronnel
-Malathion
-Chlorpyrifos
-Fenthion
-Merphos-A (Merphos)
-Anilazine
-Tetrachlorvinphos (stirop
-Tokuthion
-Merphos-B (Merphos oxone)
-Carbophenothion methyl
-Fensulfothion
-Famphur
Carbophenothion
-Phosphorothioic acid, O-ethyl O-phenyl phosphate
EPN
-TOCP
-Azinphos-methyl
-Azinphos-ethyl
-Coumaphos
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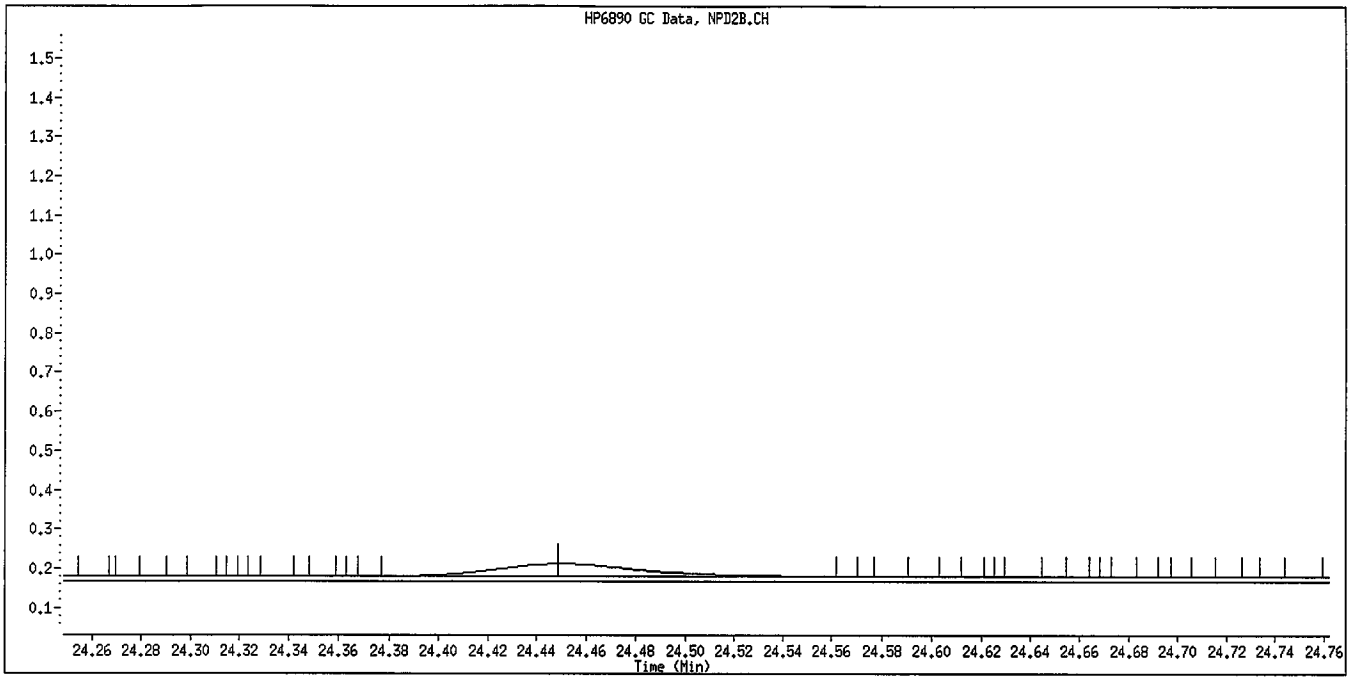
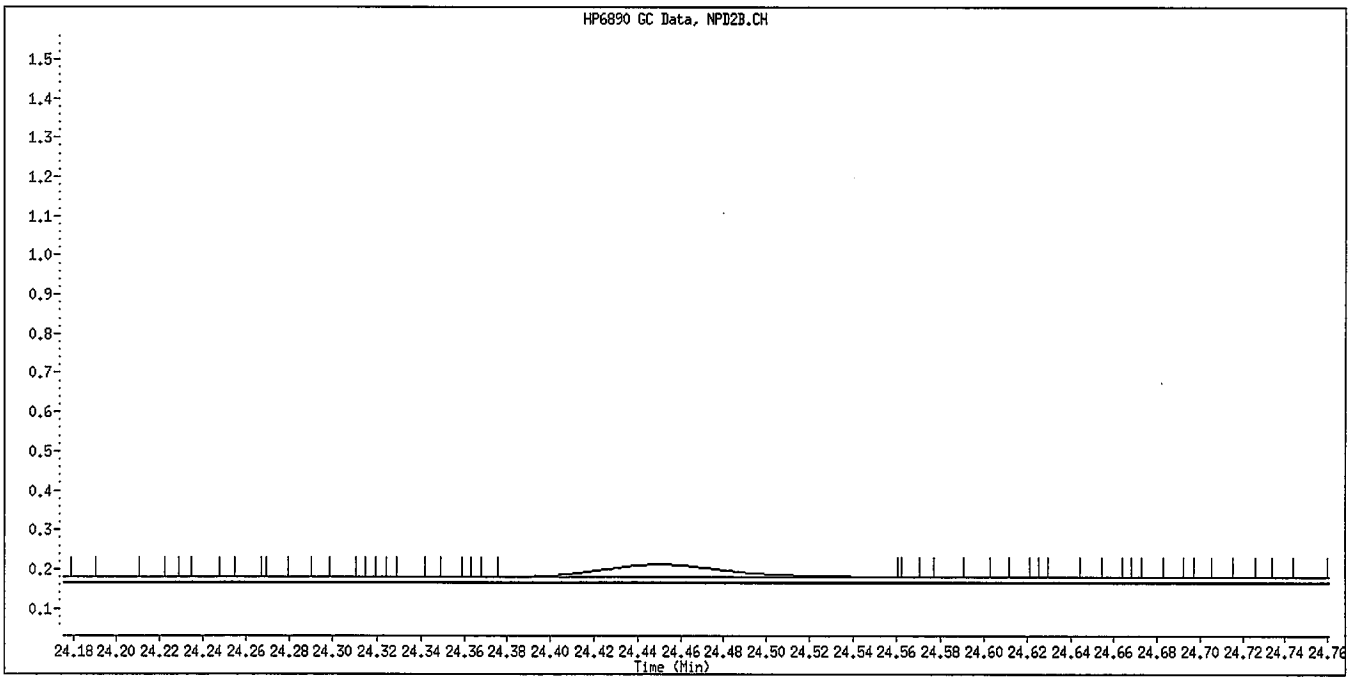
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806092.B\004F0401.D
Date : 06-AUG-2009 15:32
Client ID: 8141 L6 GSV87009
Sample Info: 8141 L6 GSV87009
Column phase: RTx-OPPest
Instrument: GC_D,i
Operator: MPK/TLW
Column diameter: 0.32
Page 4

Data File Name: 004F0401.D
Inj. Date and Time: 06-AUG-2009 15:32
Instrument ID: GC_D.i
Client ID: 8141 L6 GSV87009
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\005F0501.D
Lab Smp Id: 8141 L5 GSV87109 Client Smp ID: 8141 L5 GSV87109
Inj Date : 06-AUG-2009 16:08
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L5 GSV87109
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 15:32 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	6.758	6.758	(0.417)	2799704	3.00000	2.781
	2 Dichlorvos	8.952	8.952	(0.553)	1333315	3.00000	2.971
$	3 Chlormefos	12.884	12.885	(0.796)	2008587	3.00000	3.033
	4 Mevinphos	13.005	13.006	(0.803)	847872	3.00000	3.057
	5 Demeton-O	15.939	15.939	(0.984)	412863	0.97500	1.002
	6 Thionazin	16.067	16.067	(0.992)	1827286	3.00000	2.994
*	7 Tributylphosphate	16.193	16.193	(1.000)	1076666	2.00000	
	8 Ethoprop	16.333	16.332	(1.009)	1622717	3.00000	3.047
	9 Naled	16.920	16.921	(1.045)	617906	3.00000	3.041
	10 Sulfotepp	17.234	17.234	(1.064)	2658508	3.00000	2.956
	11 Phorate	17.269	17.268	(1.066)	1282443	3.00000	2.819
	12 Demeton-S	17.962	17.962	(1.109)	883006	2.04000	2.136
	13 Simazine	18.368	18.368	(1.134)	364617	3.00000	2.966
	14 Atrazine / Propazine	18.434	18.434	(1.138)	1477699	6.00000	5.980(A)
	15 Dimethoate	18.569	18.569	(1.147)	1616390	3.00000	3.051
	16 Diazinon	18.967	18.967	(1.171)	1534143	3.00000	2.875
	17 Disulfoton	19.230	19.231	(1.188)	1604334	3.00000	2.976
	18 Methyl Parathion	21.131	21.132	(0.736)	1163940	3.00000	3.065(A)
	19 Ronnel	21.222	21.222	(0.739)	1338480	3.00000	2.963
	20 Malathion	22.492	22.492	(0.784)	1103657	3.00000	3.022
	21 Chlorpyrifos	22.644	22.644	(0.789)	1290170	3.00000	3.040
	22 Trichloronate	22.819	22.819	(0.795)	1622974	3.00000	3.070
	23 Parathion	22.865	22.866	(0.797)	1339063	3.00000	2.965
	24 Fenthion	22.941	22.942	(0.799)	1408001	3.00000	3.053
	25 Merphos-A (Merphos)	23.472	23.472	(0.818)	1003697	3.00000	3.056
	26 Anilazine	24.450	24.451	(0.852)	101616	3.00000	2.958
	27 Tetrachlorvinphos (stirophos)	25.869	25.869	(0.901)	925221	3.00000	3.066
	28 Tokuthion	26.043	26.043	(0.907)	1535968	3.00000	3.106
	29 Merphos-B (Merphos oxone)	26.175	26.176	(0.912)	395538	3.00000	3.117
	30 Carbophenothion methyl	26.999	26.999	(0.941)	1108708	3.00000	3.207
	31 Fensulfothion	27.237	27.237	(0.949)	932760	3.00000	3.073
	32 Bolstar	27.346	27.347	(0.953)	1385729	3.00000	2.927
	33 Carbophenothion	27.459	27.460	(0.957)	1220101	3.00000	3.083

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.644	27.644	(0.963)	1132909	3.00000	3.133
$	35 Triphenyl phosphate	27.932	27.932	(0.973)	1016178	3.00000	3.003
	36 EPN	28.239	28.240	(0.984)	1171469	3.00000	3.018
	37 Phosmet	28.365	28.366	(0.988)	974935	3.00000	3.048
*	38 TOCP	28.704	28.705	(1.000)	781995	2.00000	
	39 Azinphos-methyl	28.815	28.816	(1.004)	823806	3.00000	3.081
	40 Azinphos-ethyl	29.127	29.127	(1.015)	875242	3.00000	3.086
	41 Coumaphos	29.453	29.453	(1.026)	780746	3.00000	3.043
M	42 Total Demeton				1295869	3.00000	3.138
M	43 Merphos				1399235	3.00000	3.046(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 GSV87109
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L5 GSV8710
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	1076666	8.78
38 TOCP	732545	366273	1465090	781995	6.75

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.19	-0.01
38 TOCP	28.70	28.20	29.20	28.70	0.00

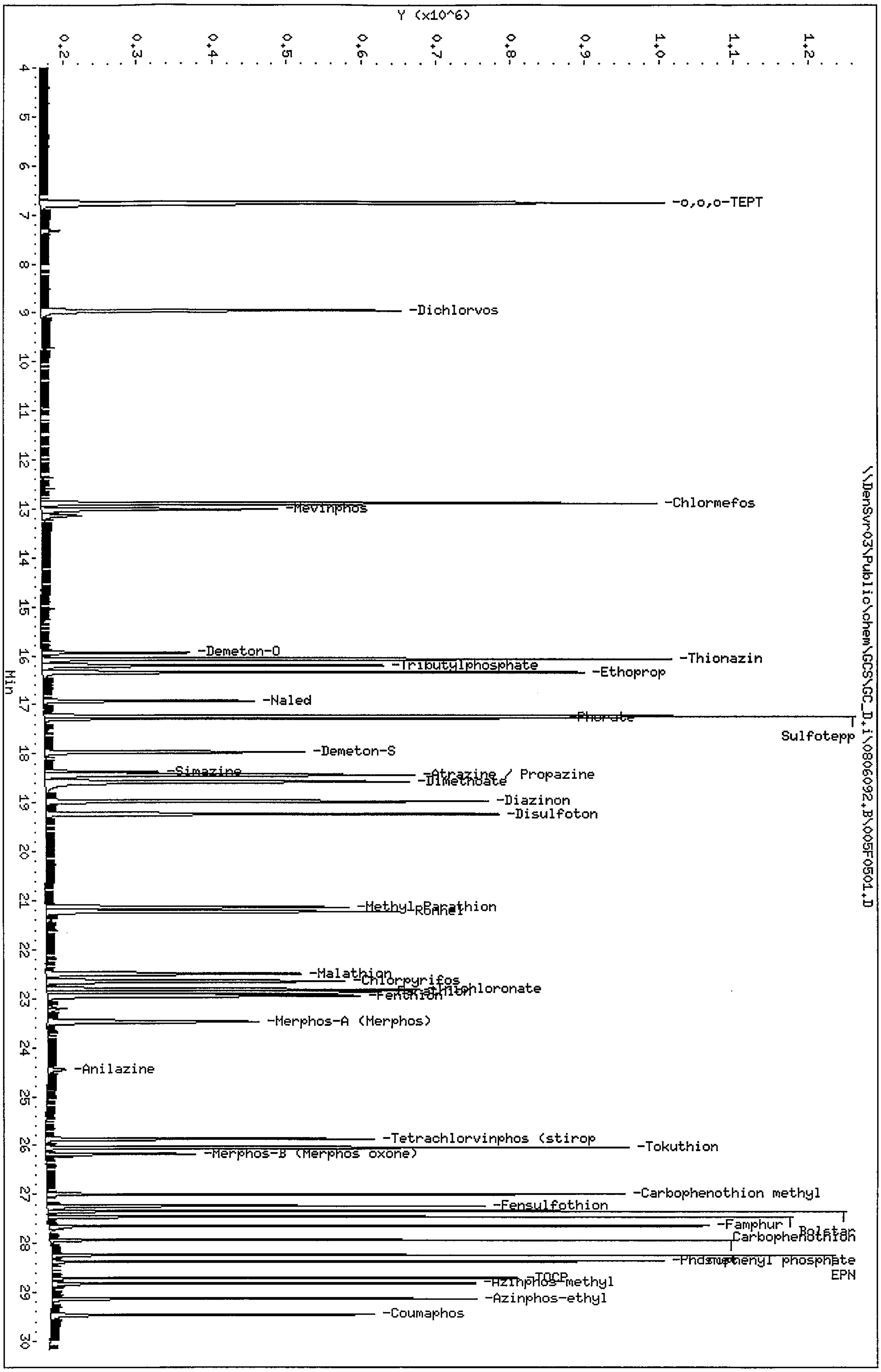
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Table of Contents

Data File: \\DenSvr03\Public\chem\GC5\GC_D.i\0806092.B\005F0501.D
Date : 06-AUG-2009 16:08
Client ID: 8141 L5 GSV87109
Sample Info: 8141 L5 GSV87109
Column phase: RTx-OPPest

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

Page 4



TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\006F0601.D
Lab Smp Id: 8141 L4 GSV87209 Client Smp ID: 8141 L4 GSV87209
Inj Date : 06-AUG-2009 16:45
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L4 GSV87209
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 16:08 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	6.762	6.758	(0.418)	1914198	2.00000	2.014
	2 Dichlorvos	8.958	8.952	(0.553)	874015	2.00000	2.064
$	3 Chlormefos	12.887	12.885	(0.796)	1328045	2.00000	2.103
	4 Mevinphos	13.009	13.006	(0.803)	555210	2.00000	2.135
	5 Demeton-O	15.940	15.939	(0.984)	271398	0.65000	0.6980
	6 Thionazin	16.069	16.067	(0.992)	1221359	2.00000	2.120
*	7 Tributylphosphate	16.195	16.193	(1.000)	1016126	2.00000	
	8 Ethoprop	16.335	16.332	(1.009)	1095403	2.00000	2.130
	9 Naled	16.922	16.921	(1.045)	373106	2.00000	2.032
	10 Sulfotepp	17.235	17.234	(1.064)	1787767	2.00000	2.106
	11 Phorate	17.268	17.268	(1.066)	854395	2.00000	1.990
	12 Demeton-S	17.965	17.962	(1.109)	565529	1.36000	1.449
	13 Simazine	18.371	18.368	(1.134)	217050	2.00000	1.977
	14 Atrazine / Propazine	18.435	18.434	(1.138)	954882	4.00000	4.094
	15 Dimethoate	18.574	18.569	(1.147)	1037511	2.00000	2.094
	16 Diazinon	18.969	18.967	(1.171)	1036618	2.00000	2.058
	17 Disulfoton	19.231	19.231	(1.188)	1063966	2.00000	2.092
	18 Methyl Parathion	21.134	21.132	(0.736)	753320	2.00000	2.090(A)
	19 Ronnel	21.221	21.222	(0.739)	868895	2.00000	1.999
	20 Malathion	22.495	22.492	(0.784)	728530	2.00000	2.084
	21 Chlorpyrifos	22.645	22.644	(0.789)	832490	2.00000	2.052
	22 Trichloronate	22.819	22.819	(0.795)	1021736	2.00000	2.031
	23 Parathion	22.866	22.866	(0.797)	893471	2.00000	1.967
	24 Fenthion	22.943	22.942	(0.799)	922040	2.00000	2.070
	25 Merphos-A (Merphos)	23.475	23.472	(0.818)	631476	2.00000	2.042
	26 Anilazine	24.455	24.451	(0.852)	64885	2.00000	2.006(M)
	27 Tetrachlorvinphos (stirophos)	25.870	25.869	(0.901)	576694	2.00000	2.014
	28 Tokuthion	26.044	26.043	(0.907)	995028	2.00000	2.091
	29 Merphos-B (Merphos oxone)	26.176	26.176	(0.912)	293170	2.00000	1.995
	30 Carbophenothion methyl	27.000	26.999	(0.941)	713460	2.00000	2.144
	31 Fensulfothion	27.240	27.237	(0.949)	603115	2.00000	2.094
	32 Bolstar	27.347	27.347	(0.953)	934727	2.00000	2.052
	33 Carbophenothion	27.460	27.460	(0.957)	792249	2.00000	2.080

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.645	27.644	(0.963)	755474	2.00000	2.171
$	35 Triphenyl phosphate	27.934	27.932	(0.973)	686859	2.00000	2.109
	36 EPN	28.240	28.240	(0.984)	787334	2.00000	2.108
	37 Phosmet	28.367	28.366	(0.988)	636769	2.00000	2.087
*	38 TOCP	28.705	28.705	(1.000)	752526	2.00000	
	39 Azinphos-methyl	28.817	28.816	(1.004)	524807	2.00000	2.058
	40 Azinphos-ethyl	29.129	29.127	(1.015)	585286	2.00000	2.144
	41 Coumaphos	29.456	29.453	(1.026)	504566	2.00000	2.058
M	42 Total Demeton				836927	2.00000	2.148
M	43 Merphos				924646	2.00000	2.091(A)

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

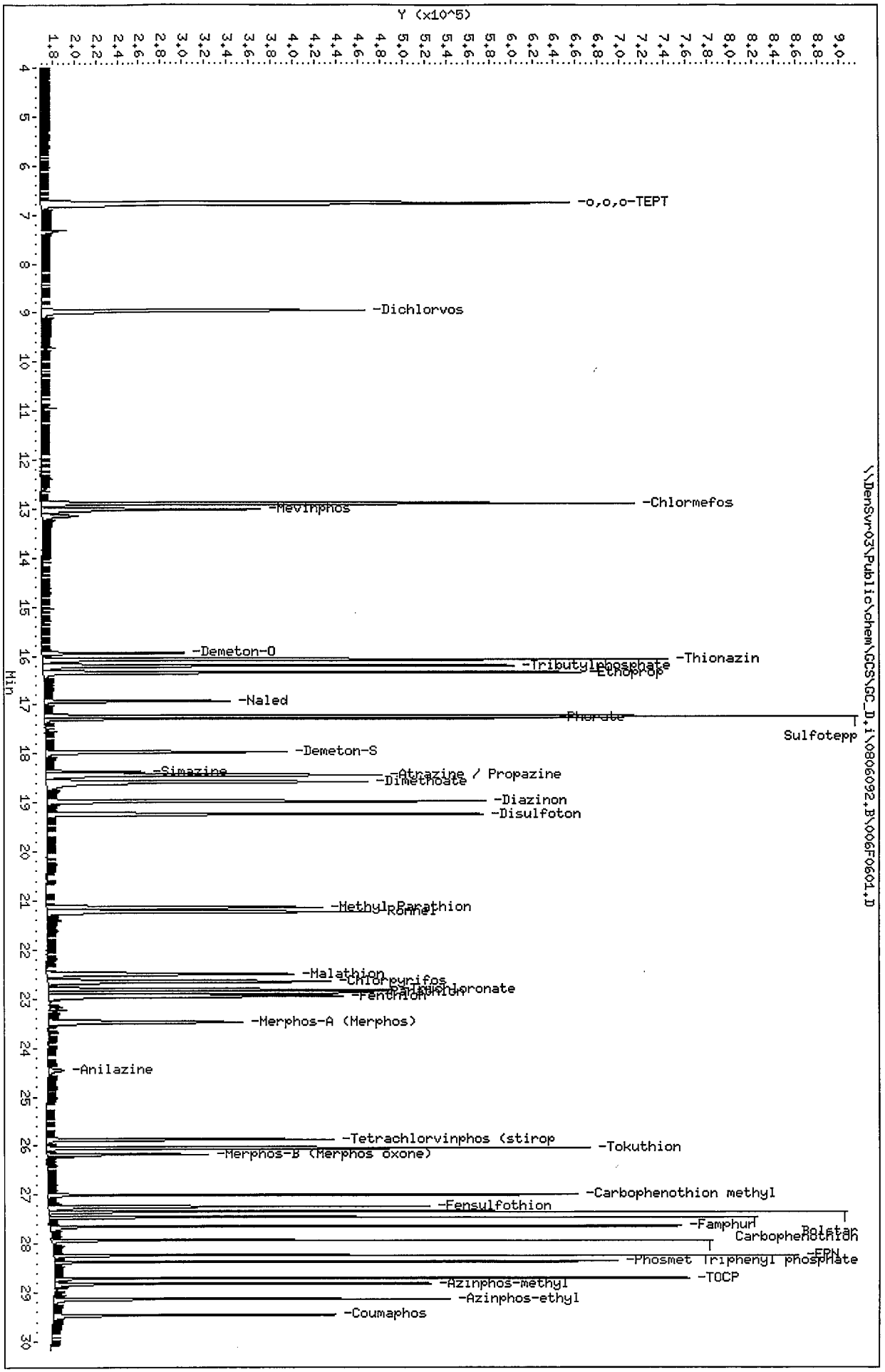
Instrument ID: GC_D.i
Lab File ID: 006F0601.D
Lab Smp Id: 8141 L4 GSV87209
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L4 GSV8720
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	1016126	2.66
38 TOCP	732545	366273	1465090	752526	2.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.20	0.00
38 TOCP	28.70	28.20	29.20	28.71	0.00

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



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Date : 06-AUG-2009 16:45
Client ID: 8141 L4 GSV87209
Sample Info: 8141 L4 GSV87209
Column phase: RTx-OPPest

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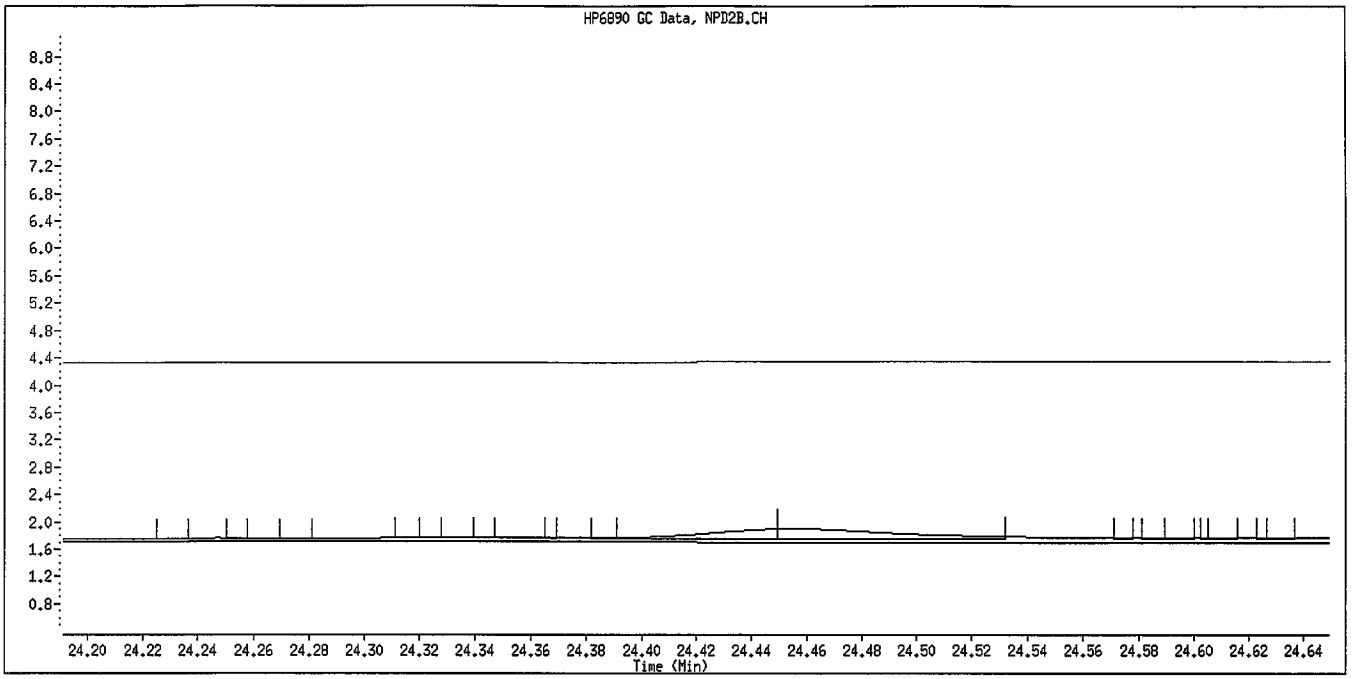
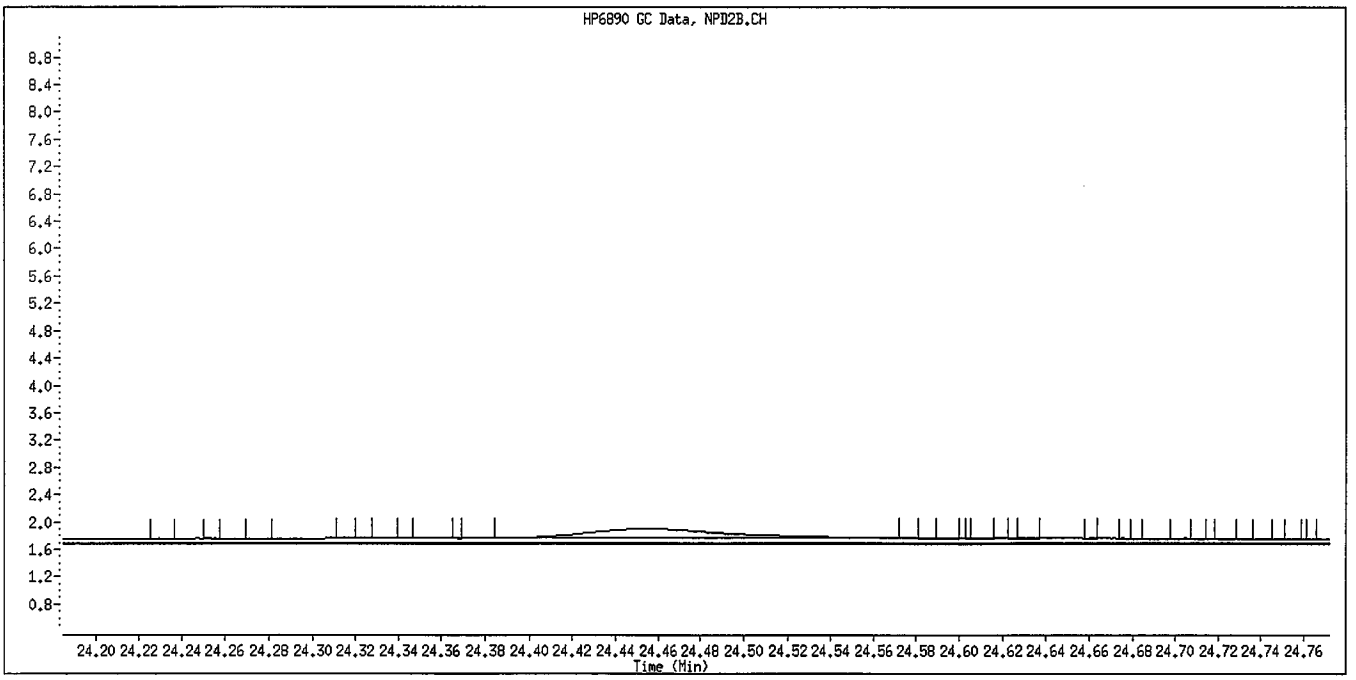
Instrument: GC_D,i
Operator: MPK/TLW
Column diameter: 0.32

Data File Name: 006F0601.D
Inj. Date and Time: 06-AUG-2009 16:45
Instrument ID: GC_D.i
Client ID: 8141 L4 GSV87209
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\007F0701.D
Lab Smp Id: 8141 L3 GSV87309 Client Smp ID: 8141 L3 GSV87309
Inj Date : 06-AUG-2009 17:21
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L3 GSV87309
Misc Info :
Comment :
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Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 16:45 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	6.759	6.758	(0.417)	965130	1.00000	1.043
	2 Dichlorvos	8.955	8.952	(0.553)	409559	1.00000	0.9932
$	3 Chlormefos	12.886	12.885	(0.796)	643087	1.00000	1.010
	4 Mevinphos	13.013	13.006	(0.803)	249277	1.00000	1.009
	5 Demeton-O	15.940	15.939	(0.984)	127811	0.32500	0.3377
	6 Thionazin	16.070	16.067	(0.992)	594152	1.00000	1.059
*	7 Tributylphosphate	16.198	16.193	(1.000)	989216	2.00000	
	8 Ethoprop	16.338	16.332	(1.009)	555560	1.00000	1.027
	9 Naled	16.925	16.921	(1.045)	159760	1.00000	1.000
	10 Sulfotepp	17.236	17.234	(1.064)	899443	1.00000	1.088
	11 Phorate	17.269	17.268	(1.066)	418518	1.00000	1.001
	12 Demeton-S	17.970	17.962	(1.109)	277186	0.68000	0.7298
	13 Simazine	18.376	18.368	(1.134)	82213	1.00000	0.9444
	14 Atrazine / Propazine	18.438	18.434	(1.138)	459489	2.00000	2.024
	15 Dimethoate	18.584	18.569	(1.147)	484895	1.00000	1.037
	16 Diazinon	18.970	18.967	(1.171)	521338	1.00000	1.063
	17 Disulfoton	19.232	19.231	(1.187)	520826	1.00000	1.052
	18 Methyl Parathion	21.136	21.132	(0.736)	351856	1.00000	1.028
	19 Ronnel	21.224	21.222	(0.739)	432694	1.00000	1.002
	20 Malathion	22.495	22.492	(0.784)	354820	1.00000	1.040
	21 Chlorpyrifos	22.646	22.644	(0.789)	394413	1.00000	0.9994
	22 Trichloronate	22.821	22.819	(0.795)	455989	1.00000	0.9480
	23 Parathion	22.868	22.866	(0.797)	440954	1.00000	0.9703
	24 Fenthion	22.945	22.942	(0.799)	455004	1.00000	1.016
	25 Merphos-A (Merphos)	23.476	23.472	(0.818)	277563	1.00000	0.9745
	26 Anilazine	24.465	24.451	(0.852)	27039	1.00000	0.9154(M)
	27 Tetrachlorvinphos (stirophos)	25.873	25.869	(0.901)	256768	1.00000	0.9456
	28 Tokuthion	26.046	26.043	(0.907)	475219	1.00000	1.005
	29 Merphos-B (Merphos oxone)	26.177	26.176	(0.912)	174313	1.00000	0.8959
	30 Carbophenothion methyl	27.001	26.999	(0.941)	335861	1.00000	1.016
	31 Fensulfothion	27.245	27.237	(0.949)	280688	1.00000	1.028
	32 Bolstar	27.348	27.347	(0.953)	476810	1.00000	1.053
	33 Carbophenothion	27.461	27.460	(0.957)	385145	1.00000	1.018

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.646	27.644	(0.963)	361510	1.00000	1.046
$	35 Triphenyl phosphate	27.935	27.932	(0.973)	342483	1.00000	1.059
	36 EPN	28.241	28.240	(0.984)	391460	1.00000	1.055
	37 Phosmet	28.369	28.366	(0.988)	302493	1.00000	1.027
*	38 TOCP	28.706	28.705	(1.000)	747627	2.00000	
	39 Azinphos-methyl	28.819	28.816	(1.004)	240868	1.00000	0.9800
	40 Azinphos-ethyl	29.131	29.127	(1.015)	286560	1.00000	1.057
	41 Coumaphos	29.459	29.453	(1.026)	236130	1.00000	0.9934
M	42 Total Demeton				404997	1.00000	1.067
M	43 Merphos				451876	1.00000	1.026

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

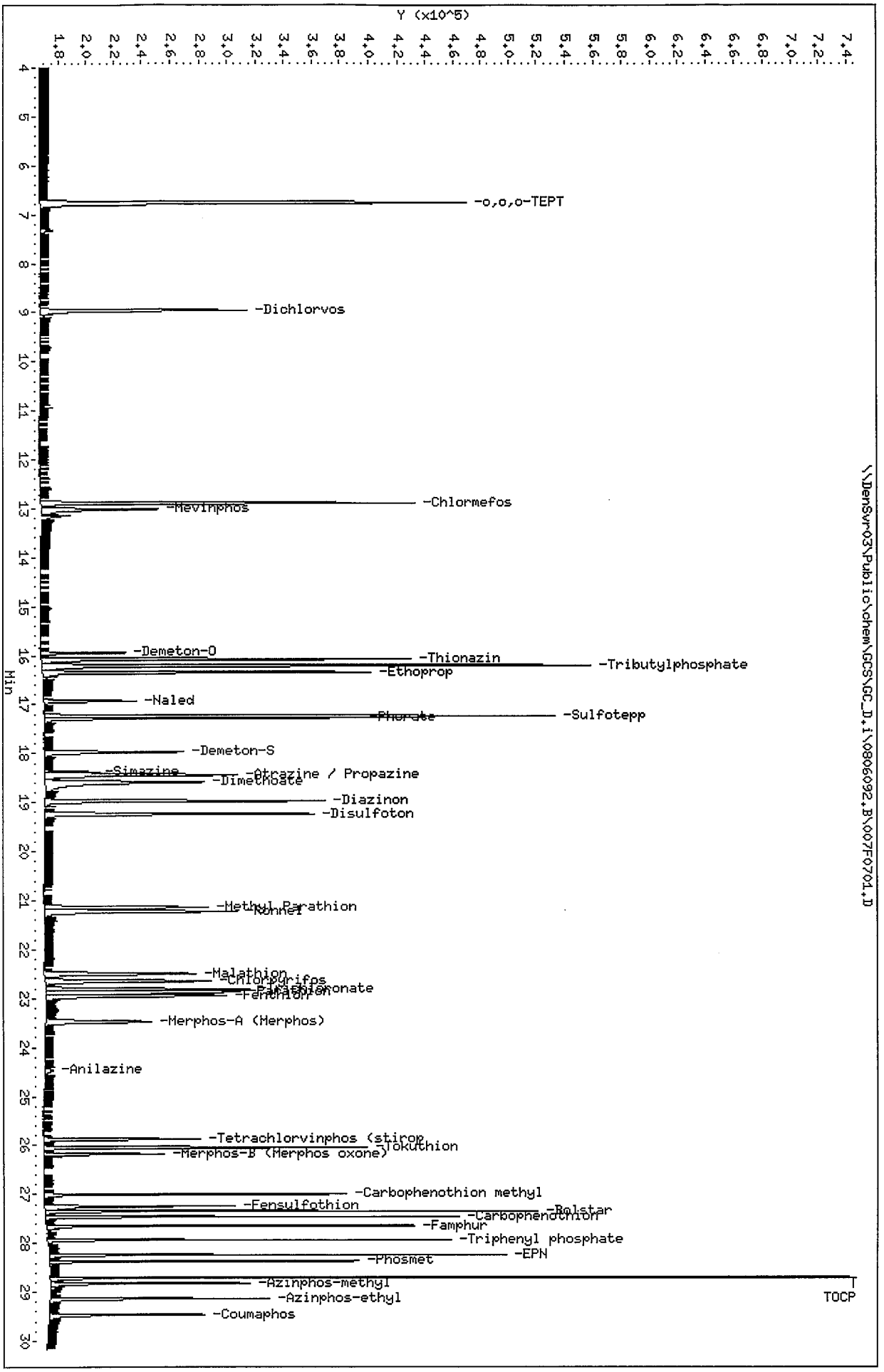
Instrument ID: GC_D.i
Lab File ID: 007F0701.D
Lab Smp Id: 8141 L3 GSV87309
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L3 GSV8730
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	989216	-0.06
38 TOCP	732545	366273	1465090	747627	2.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.20	0.02
38 TOCP	28.70	28.20	29.20	28.71	0.00

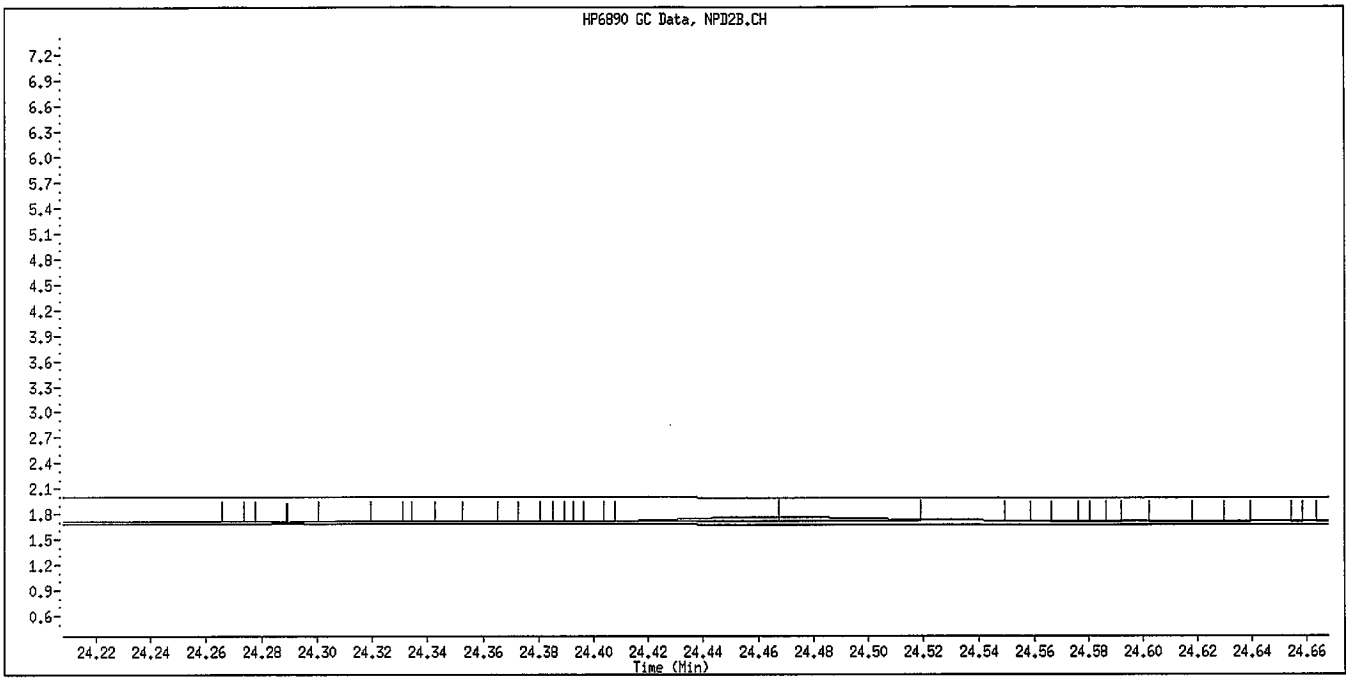
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



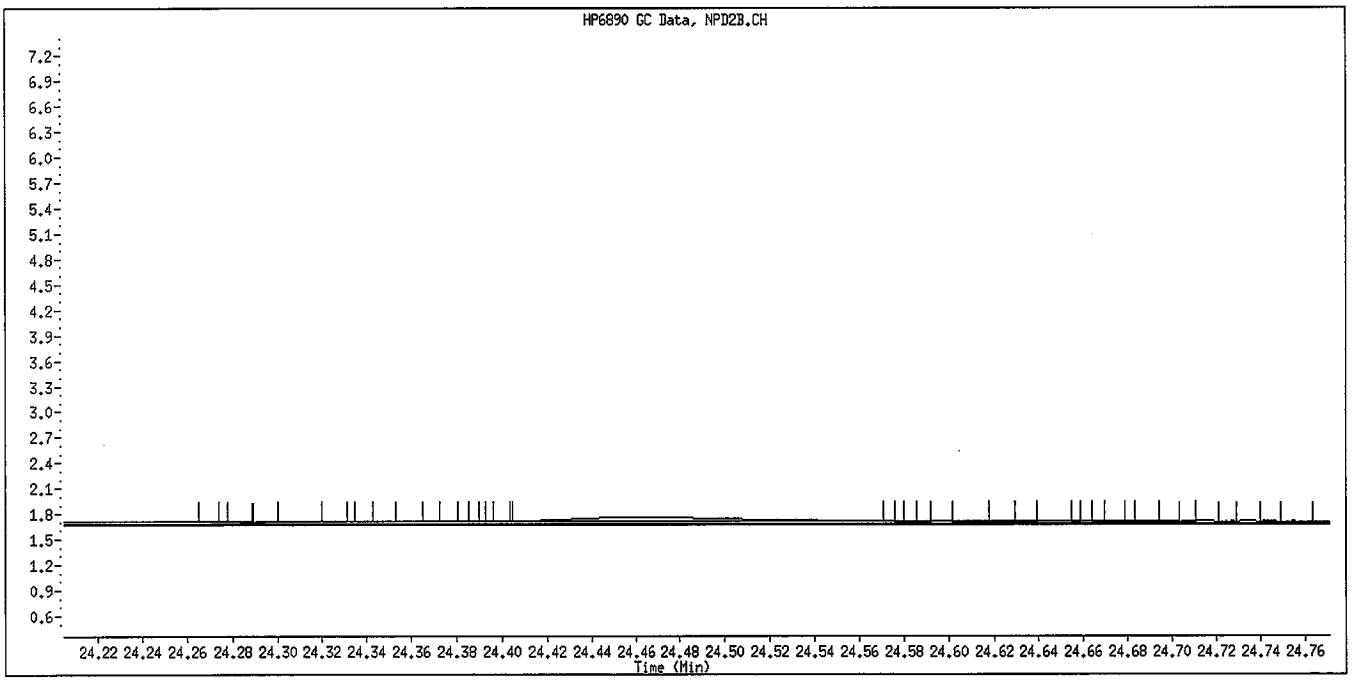
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806092,B\007F0701,D
Date : 06-AUG-2009 17:21
Client ID: 8141 L3 GSV87309
Sample Info: 8141 L3 GSV87309
Column phase: RTx-OPPest

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

Data File Name: 007F0701.D
Inj. Date and Time: 06-AUG-2009 17:21
Instrument ID: GC_D.i
Client ID: 8141 L3 GSV87309
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\008F0801.D
Lab Smp Id: 8141 L2 GSV87409 Client Smp ID: 8141 L2 GSV87409
Inj Date : 06-AUG-2009 17:58
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L2 GSV87409
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:43 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 17:21 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	6.760	6.758	(0.417)	446074	0.50000	0.5083
	2 Dichlorvos	8.957	8.952	(0.553)	184786	0.50000	0.4724
$	3 Chlormefos	12.887	12.885	(0.795)	285008	0.50000	0.4339
	4 Mevinphos	13.017	13.006	(0.803)	90159	0.50000	0.4122
	5 Demeton-O	15.943	15.939	(0.984)	52208	0.16250	0.1454
	6 Thionazin	16.072	16.067	(0.992)	254165	0.50000	0.4777
*	7 Tributylphosphate	16.203	16.193	(1.000)	938496	2.00000	
	8 Ethoprop	16.341	16.332	(1.009)	267910	0.50000	0.4373
	9 Naled	16.928	16.921	(1.045)	47634	0.50000	0.4328
	10 Sulfotepp	17.237	17.234	(1.064)	366024	0.50000	0.4669 (M)
	11 Phorate	17.263	17.268	(1.065)	194983	0.50000	0.4917 (M)
	12 Demeton-S	17.980	17.962	(1.110)	115344	0.34000	0.3201
	13 Simazine	18.389	18.368	(1.135)	15934	0.50000	0.4213
	14 Atrazine / Propazine	18.447	18.434	(1.139)	205001	1.00000	0.9517
	15 Dimethoate	18.611	18.569	(1.149)	178809	0.50000	0.4400 (M)
	16 Diazinon	18.974	18.967	(1.171)	230115	0.50000	0.4947
	17 Disulfoton	19.237	19.231	(1.187)	226407	0.50000	0.4819
	18 Methyl Parathion	21.146	21.132	(0.737)	130034	0.50000	0.4531
	19 Ronnel	21.229	21.222	(0.740)	194447	0.50000	0.4743
	20 Malathion	22.504	22.492	(0.784)	150756	0.50000	0.4856
	21 Chlorpyrifos	22.650	22.644	(0.789)	169871	0.50000	0.4753
	22 Trichloronate	22.826	22.819	(0.795)	196799	0.50000	0.4662
	23 Parathion	22.878	22.866	(0.797)	175066	0.50000	0.4646
	24 Fenthion	22.949	22.942	(0.799)	206817	0.50000	0.4732
	25 Merphos-A (Merphos)	23.483	23.472	(0.818)	104851	0.50000	0.4644
	26 Anilazine	24.499	24.451	(0.853)	10789	0.50000	0.4585 (M)
	27 Tetrachlorvinphos (stirophos)	25.879	25.869	(0.902)	97796	0.50000	0.4261
	28 Tokuthion	26.051	26.043	(0.907)	200061	0.50000	0.4456
	29 Merphos-B (Merphos oxone)	26.183	26.176	(0.912)	96740	0.50000	0.4507
	30 Carbophenothion methyl	27.005	26.999	(0.941)	134360	0.50000	0.4281
	31 Fensulfothion	27.255	27.237	(0.949)	101238	0.50000	0.4451
	32 Bolstar	27.351	27.347	(0.953)	211287	0.50000	0.4917
	33 Carbophenothion	27.464	27.460	(0.957)	161758	0.50000	0.4504

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.649	27.644	(0.963)	142973	0.50000	0.4356
$	35 Triphenyl phosphate	27.936	27.932	(0.973)	146162	0.50000	0.4759
	36 EPN	28.243	28.240	(0.984)	165917	0.50000	0.4710
	37 Phosmet	28.373	28.366	(0.988)	114720	0.50000	0.4440
*	38 TOCP	28.707	28.705	(1.000)	709802	2.00000	
	39 Azinphos-methyl	28.825	28.816	(1.004)	89923	0.50000	0.4185
	40 Azinphos-ethyl	29.136	29.127	(1.015)	116961	0.50000	0.4543
	41 Coumaphos	29.465	29.453	(1.026)	91236	0.50000	0.4310
M	42 Total Demeton				167552	0.50000	0.4655
M	43 Merphos				201591	0.50000	0.4803

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

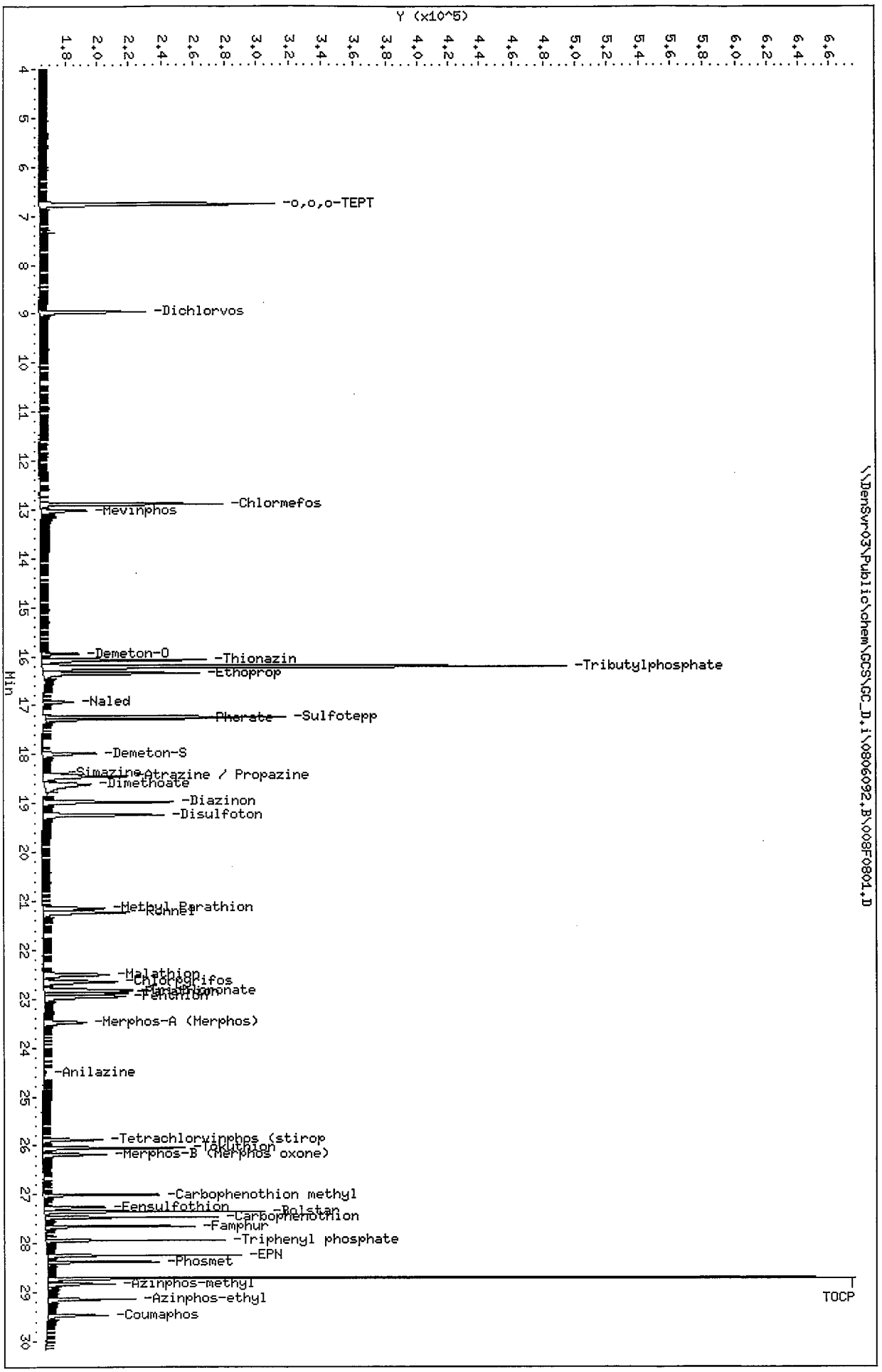
Instrument ID: GC_D.i
Lab File ID: 008F0801.D
Lab Smp Id: 8141 L2 GSV87409
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L2 GSV8740
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	938496	-5.18
38 TOCP	732545	366273	1465090	709802	-3.10

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.20	0.05
38 TOCP	28.70	28.20	29.20	28.71	0.01

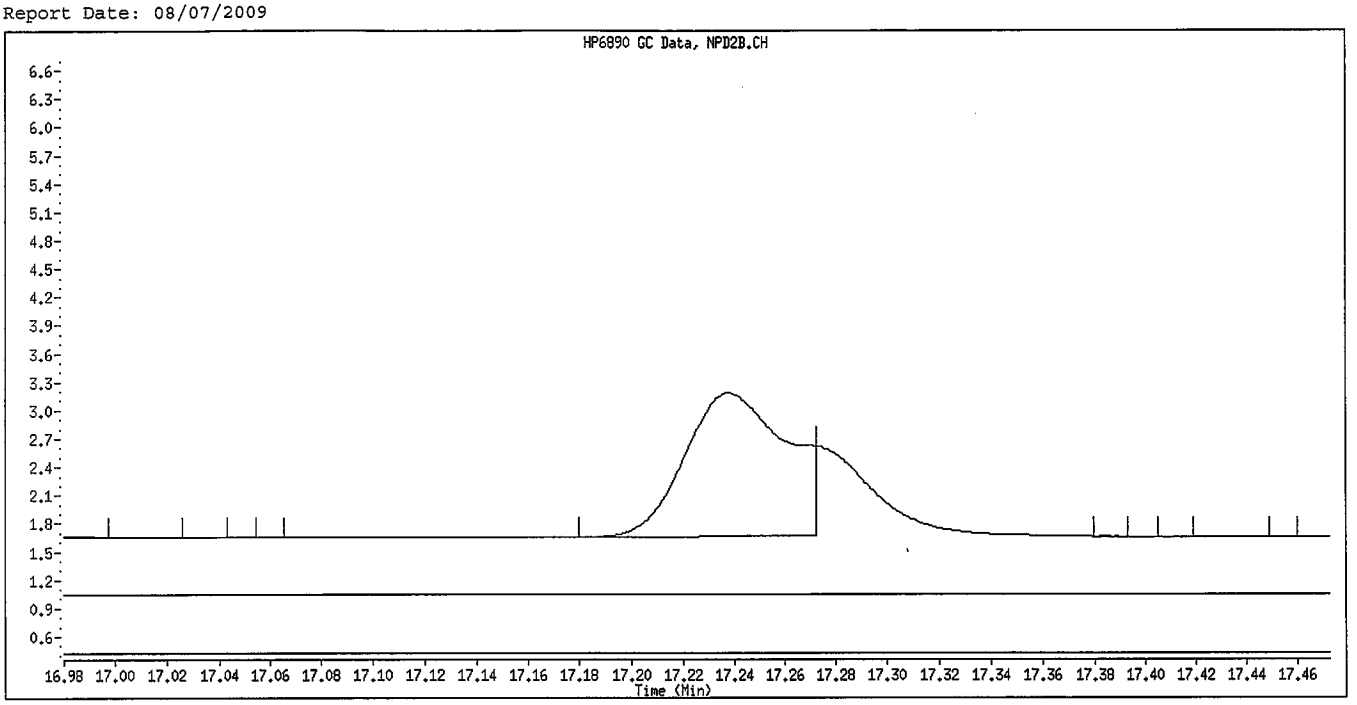
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



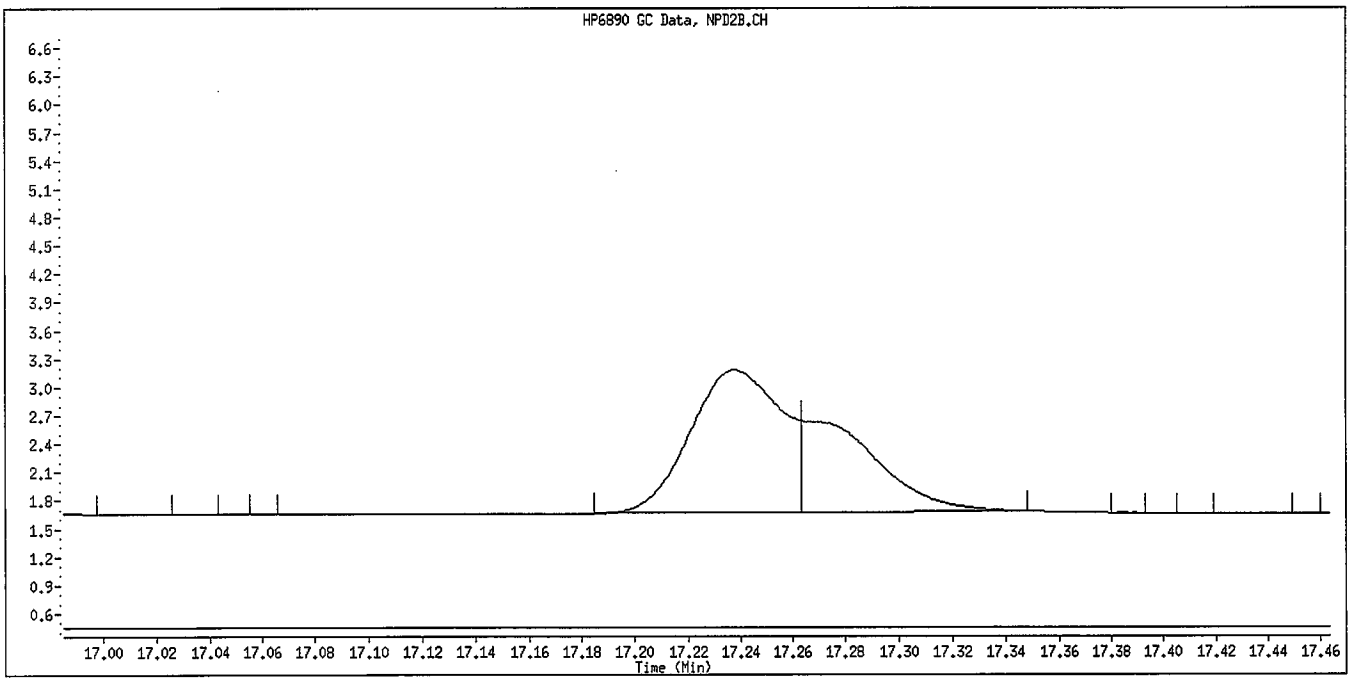
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806092,B\008F0801,D
Date : 06-AUG-2009 17:58
Client ID: 8141 L2 GSV87409
Sample Info: 8141 L2 GSV87409
Column phase: RTx-OPPest

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

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Sulfotepp
CAS #:
Report Date: 08/07/2009



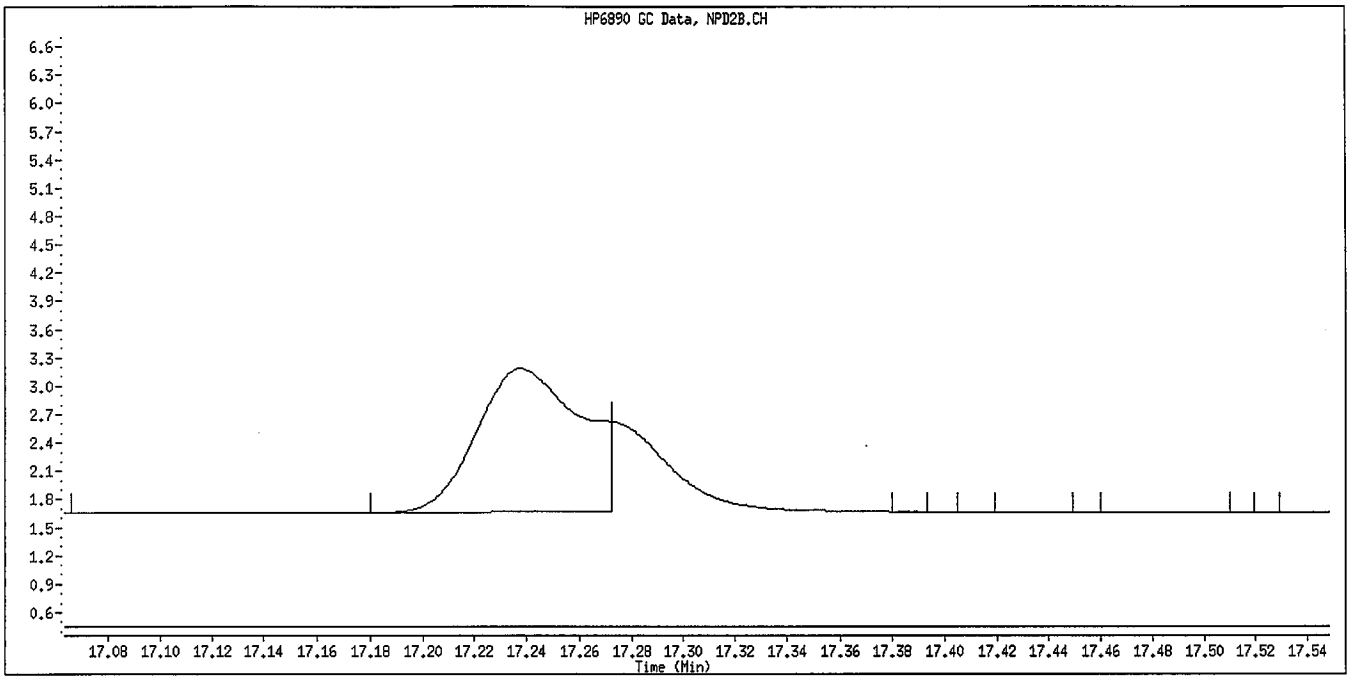
Original Integration



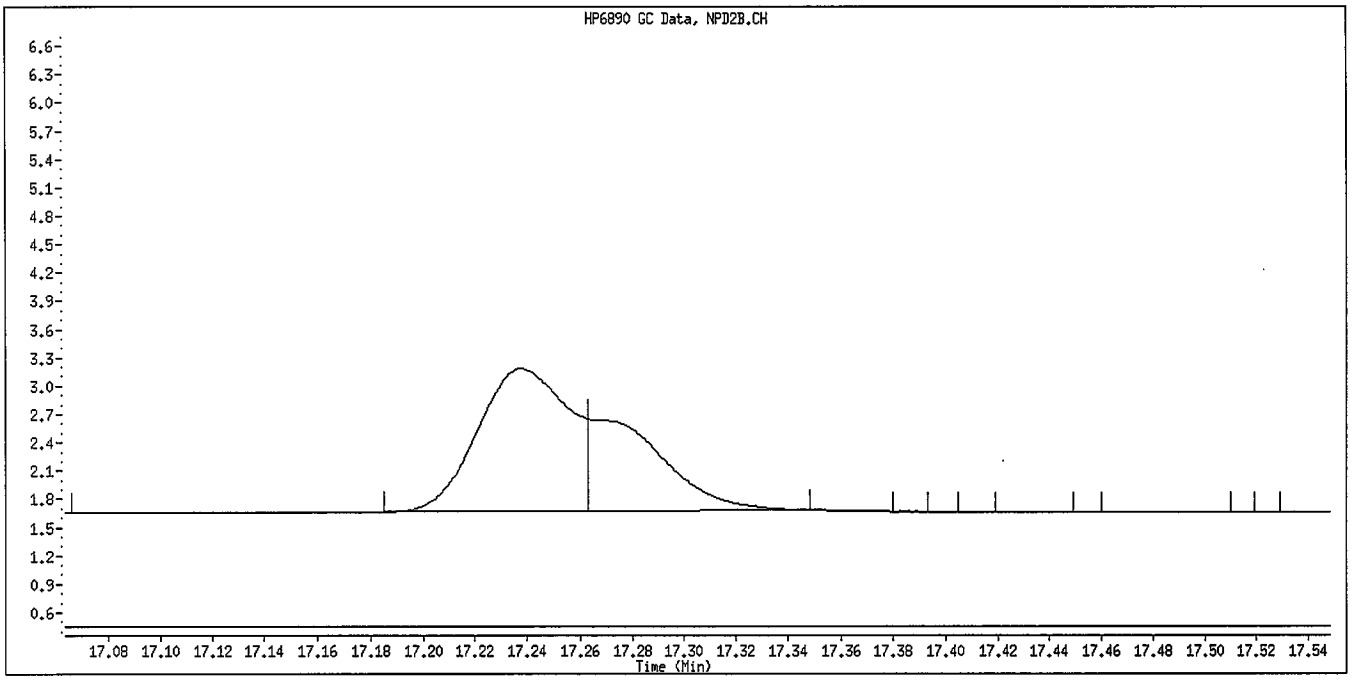
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Phorate
CAS #:
Report Date: 08/07/2009



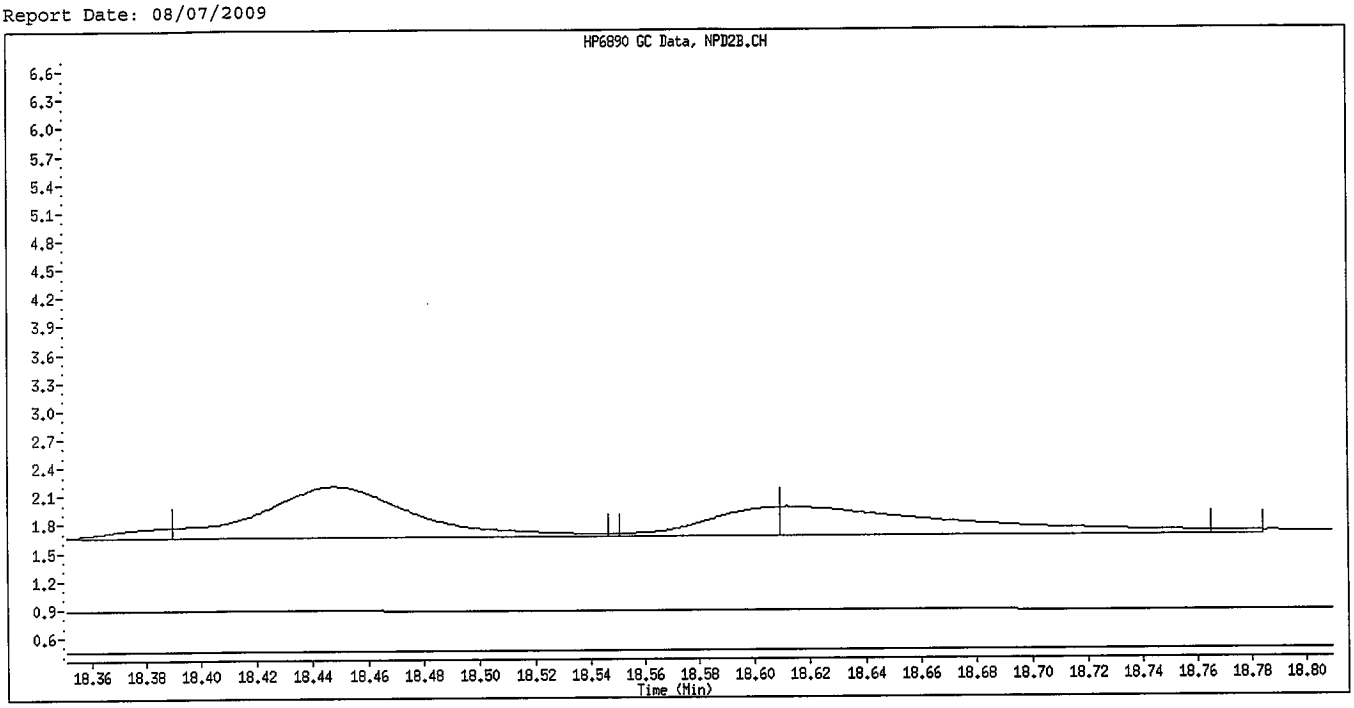
Original Integration



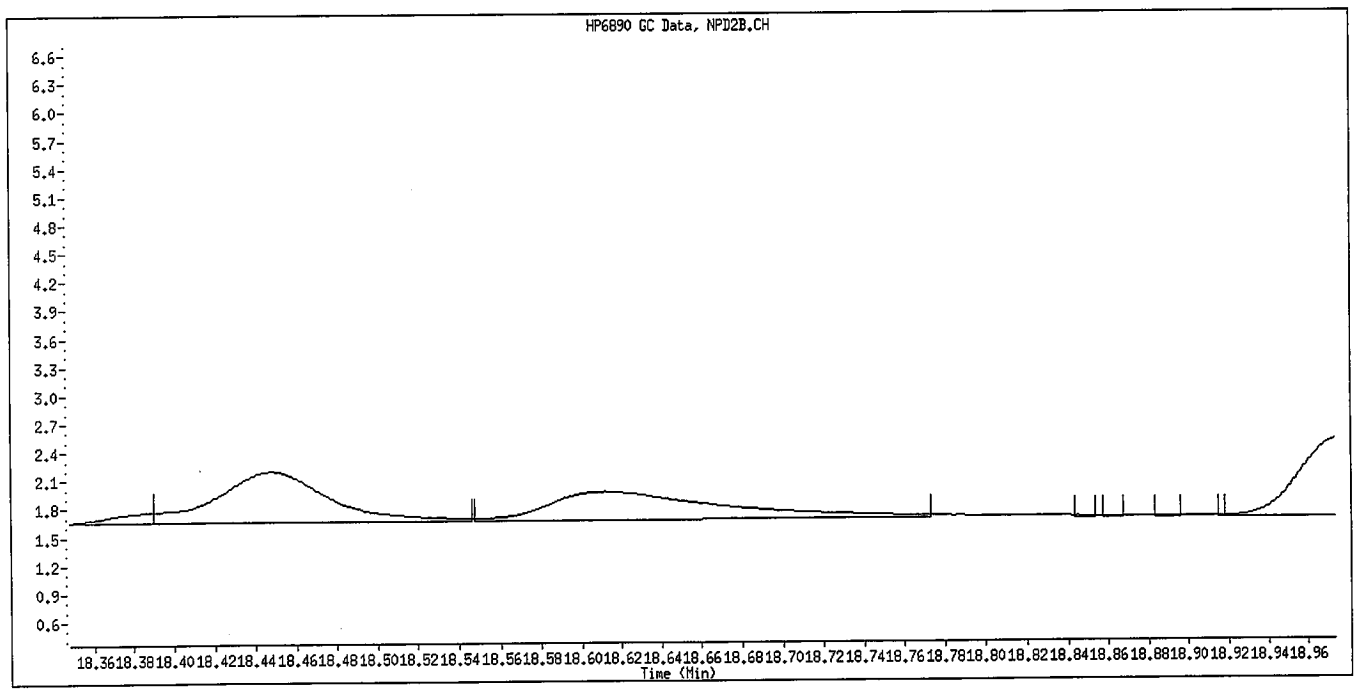
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Dimethoate
CAS #:
Report Date: 08/07/2009



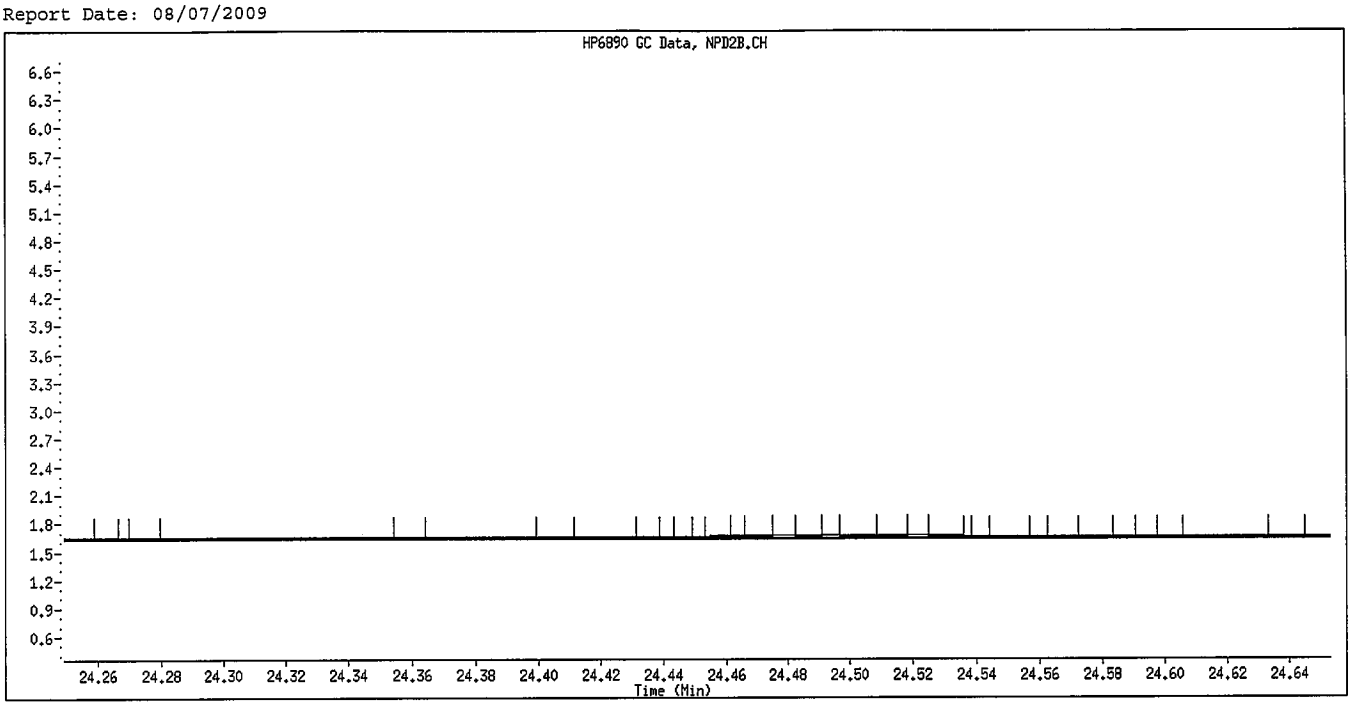
Original Integration



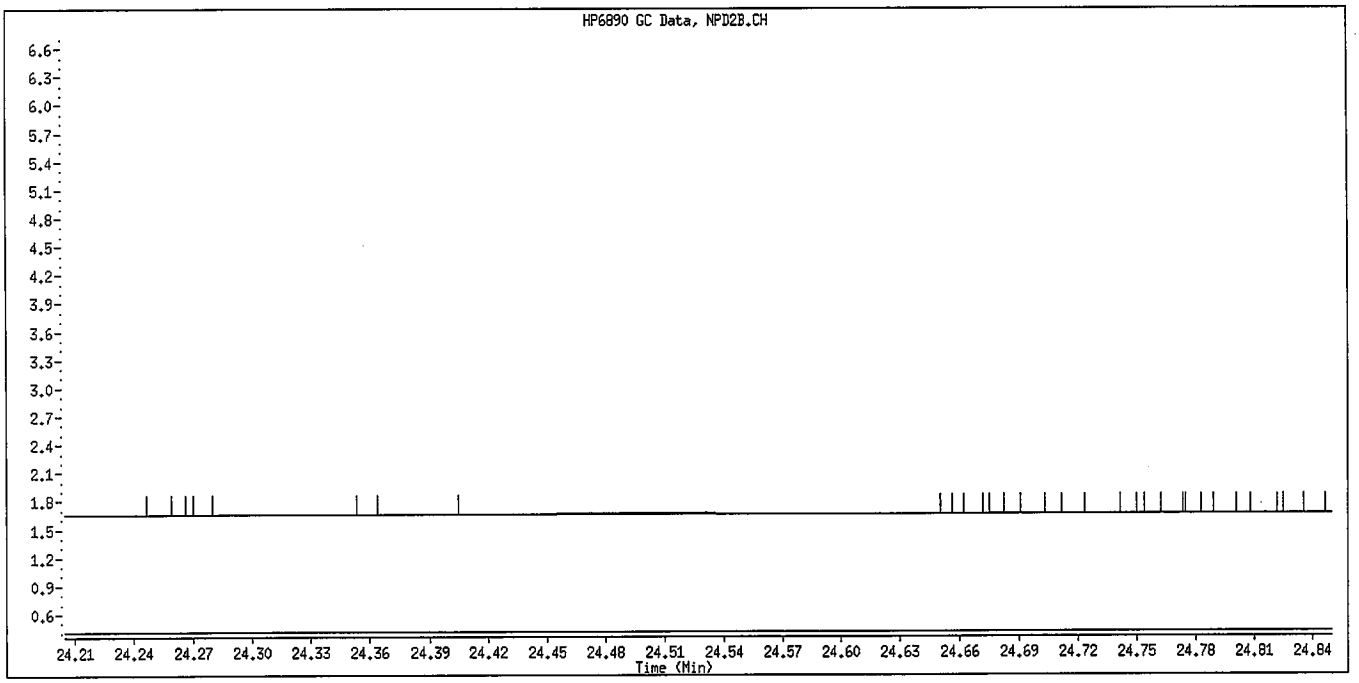
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 008F0801.D
Inj. Date and Time: 06-AUG-2009 17:58
Instrument ID: GC_D.i
Client ID: 8141 L2 GSV87409
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\009F0901.D
Lab Smp Id: 8141 L1 GSV87509 Client Smp ID: 8141 L1 GSV87509
Inj Date : 06-AUG-2009 18:34
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 L1 GSV87509
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:44 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 17:58 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	6.759	6.758	(0.417)	194063	0.20000	0.2449
	2 Dichlorvos	8.959	8.952	(0.553)	76144	0.20000	0.2156
$	3 Chlormefos	12.885	12.885	(0.795)	118440	0.20000	0.1612
	4 Mevinphos	13.026	13.006	(0.804)	26181	0.20000	0.1630 (M)
	5 Demeton-O	15.943	15.939	(0.984)	20641	0.06500	0.06367
	6 Thionazin	16.074	16.067	(0.992)	97068	0.20000	0.2021
*	7 Tributylphosphate	16.208	16.193	(1.000)	847277	2.00000	
	8 Ethoprop	16.346	16.332	(1.009)	150814	0.20000	0.2078
	9 Naled	16.933	16.921	(1.045)	12427	0.20000	0.2460 (M)
	10 Sulfotepp	17.239	17.234	(1.064)	149883	0.20000	0.2118 (M)
	11 Phorate	17.264	17.268	(1.065)	91874	0.20000	0.2566 (M)
	12 Demeton-S	17.989	17.962	(1.110)	35956	0.13600	0.1105
	13 Simazine	18.413	18.368	(1.136)	6499	0.20000	0.3477 (M)
	14 Atrazine / Propazine	18.459	18.434	(1.139)	76775	0.40000	0.3948 (M)
	15 Dimethoate	18.648	18.569	(1.151)	62417	0.20000	0.2072 (M)
	16 Diazinon	18.976	18.967	(1.171)	95564	0.20000	0.2276
	17 Disulfoton	19.239	19.231	(1.187)	88146	0.20000	0.2078
	18 Methyl Parathion	21.160	21.132	(0.737)	40092	0.20000	0.2055 (M)
	19 Ronnel	21.234	21.222	(0.740)	87144	0.20000	0.2238
	20 Malathion	22.514	22.492	(0.784)	52293	0.20000	0.2003 (M)
	21 Chlorpyrifos	22.658	22.644	(0.789)	60489	0.20000	0.2033 (M)
	22 Trichloronate	22.829	22.819	(0.795)	66017	0.20000	0.2065 (M)
	23 Parathion	22.885	22.866	(0.797)	66767	0.20000	0.2620 (M)
	24 Fenthion	22.959	22.942	(0.800)	89878	0.20000	0.2030 (M)
	25 Merphos-A (Merphos)	23.486	23.472	(0.818)	23197	0.20000	0.2058 (M)
	26 Anilazine	24.549	24.451	(0.855)	3273	0.20000	0.2331 (M)
	27 Tetrachlorvinphos (stirophos)	25.888	25.869	(0.902)	35965	0.20000	0.2129
	28 Tokuthion	26.052	26.043	(0.907)	82667	0.20000	0.1938
	29 Merphos-B (Merphos oxone)	26.184	26.176	(0.912)	58022	0.20000	0.2908
	30 Carbophenothion methyl	27.010	26.999	(0.941)	51067	0.20000	0.1713
	31 Fensulfothion	27.272	27.237	(0.950)	31957	0.20000	0.2067
	32 Bolstar	27.353	27.347	(0.953)	91030	0.20000	0.2230
	33 Carbophenothion	27.467	27.460	(0.957)	66936	0.20000	0.1962

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.653	27.644	(0.963)	55126	0.20000	0.1768
$	35 Triphenyl phosphate	27.938	27.932	(0.973)	61702	0.20000	0.2115
	36 EPN	28.244	28.240	(0.984)	69232	0.20000	0.2069
	37 Phosmet	28.378	28.366	(0.989)	42368	0.20000	0.2070
*	38 TOCP	28.708	28.705	(1.000)	674279	2.00000	
	39 Azinphos-methyl	28.830	28.816	(1.004)	37094	0.20000	0.2126
	40 Azinphos-ethyl	29.140	29.127	(1.015)	46859	0.20000	0.1916
	41 Coumaphos	29.468	29.453	(1.026)	37102	0.20000	0.2102
M	42 Total Demeton				56597	0.20000	0.1742
M	43 Merphos				81219	0.20000	0.2015

QC Flag Legend

M - Compound response manually integrated.

TestAmerica

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

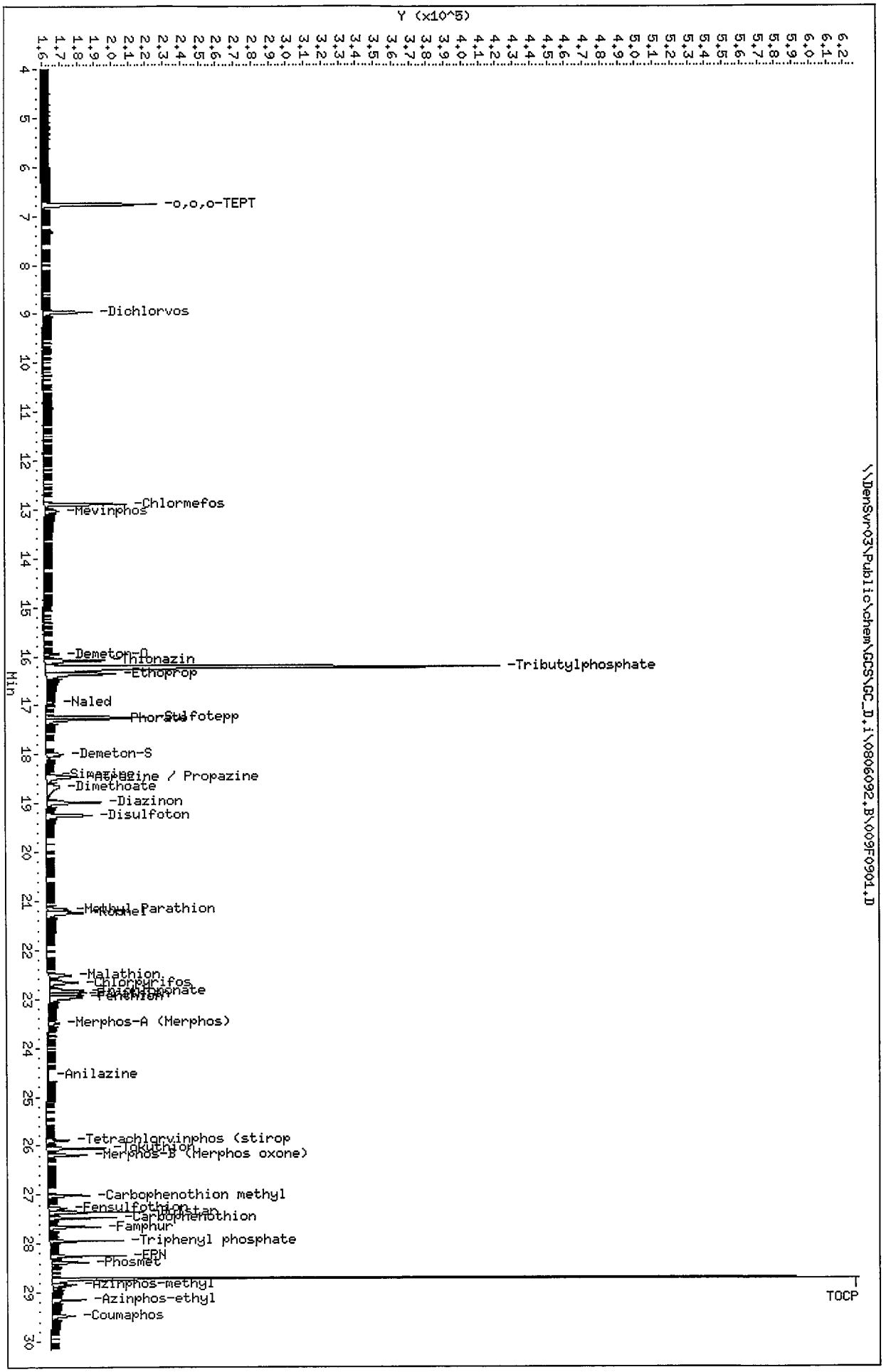
Instrument ID: GC_D.i
Lab File ID: 009F0901.D
Lab Smp Id: 8141 L1 GSV87509
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 19:10
Client Smp ID: 8141 L1 GSV8750
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	989795	494898	1979590	847277	-14.40
38 TOCP	732545	366273	1465090	674279	-7.95

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.19	15.69	16.69	16.21	0.08
38 TOCP	28.70	28.20	29.20	28.71	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.

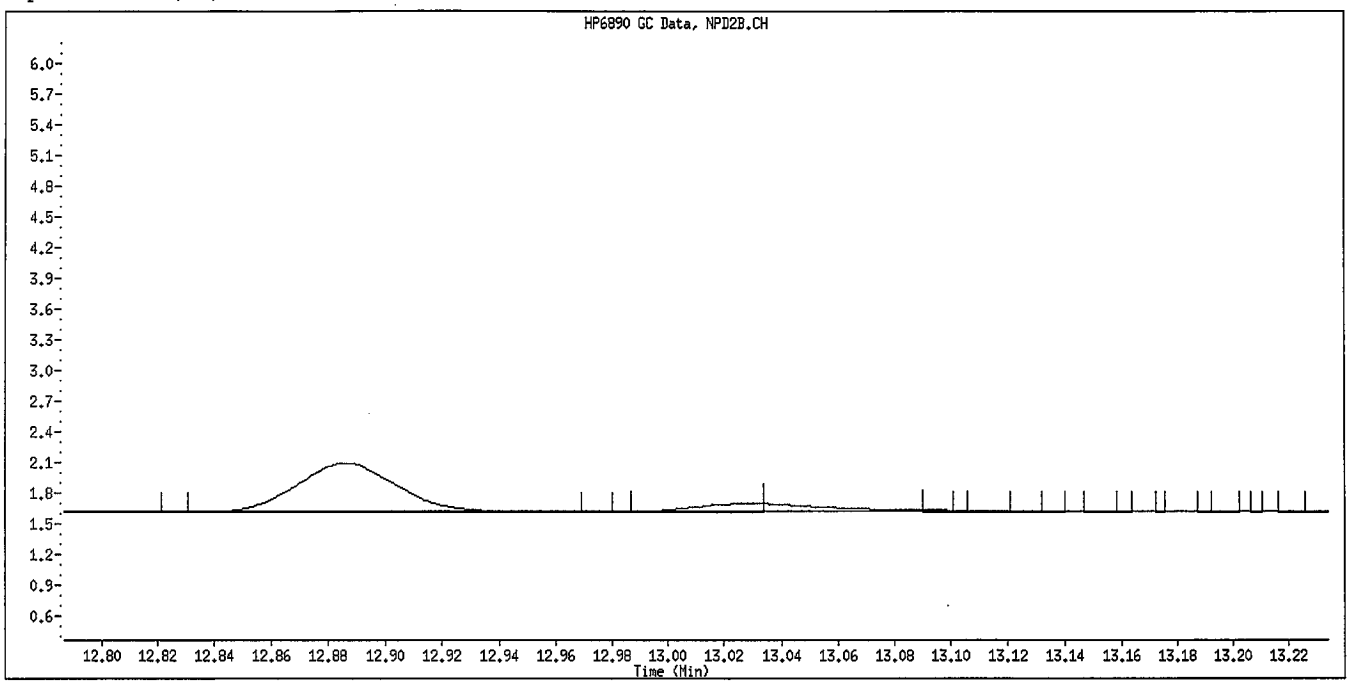


Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806092,B\009F0901.D
Date : 06-AUG-2009 18:34
Client ID: 8141 L1 GSV87509
Sample Info: 8141 L1 GSV87509
Column phase: RTx-OPPest

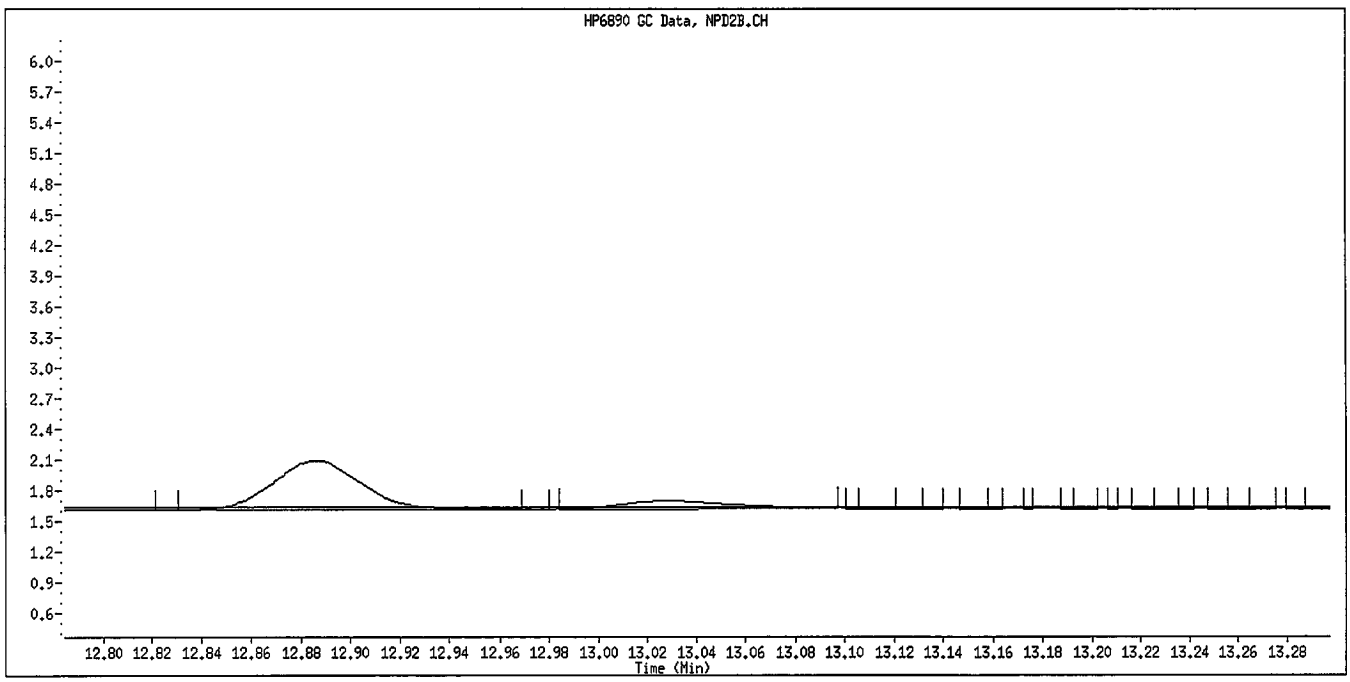
Instrument: GC_D,i
Operator: MPK/TLW
Column diameter: 0.32

\\DenSvr03\Public\chem\GCS\GC_D,i\0806092,B\009F0901.D

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Mevinphos
CAS #:
Report Date: 08/07/2009



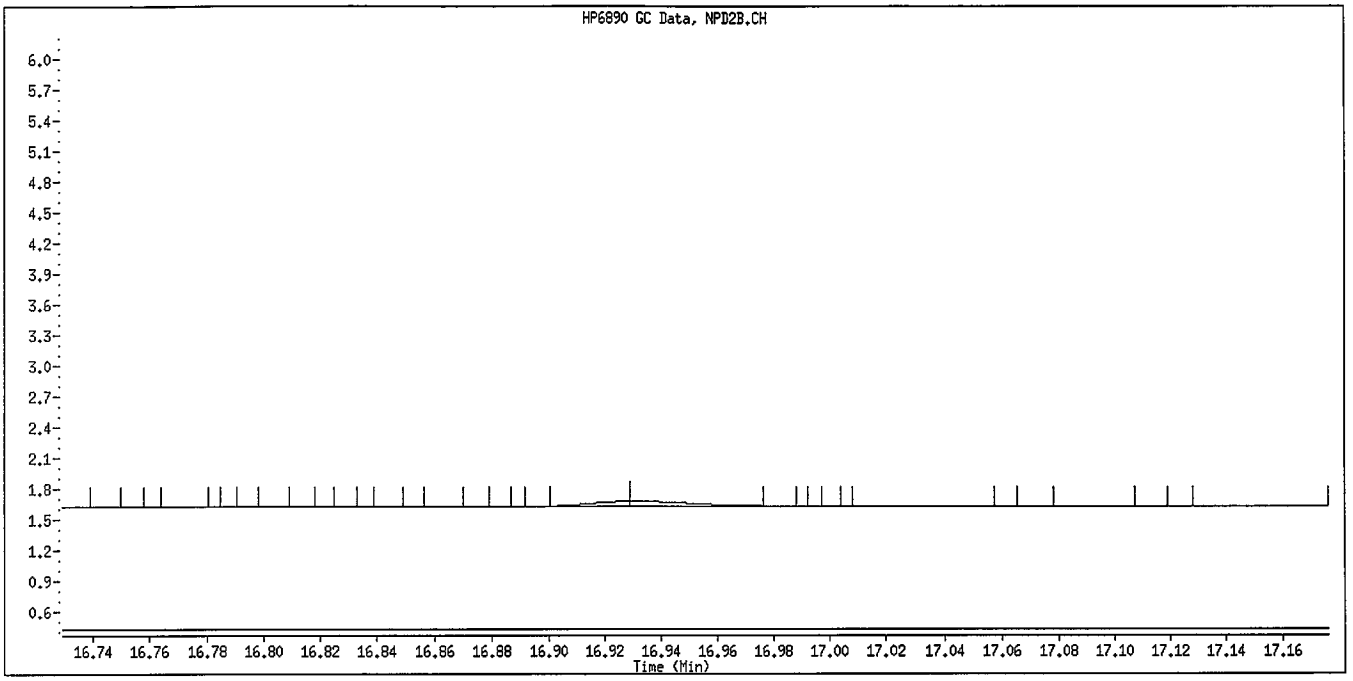
Original Integration



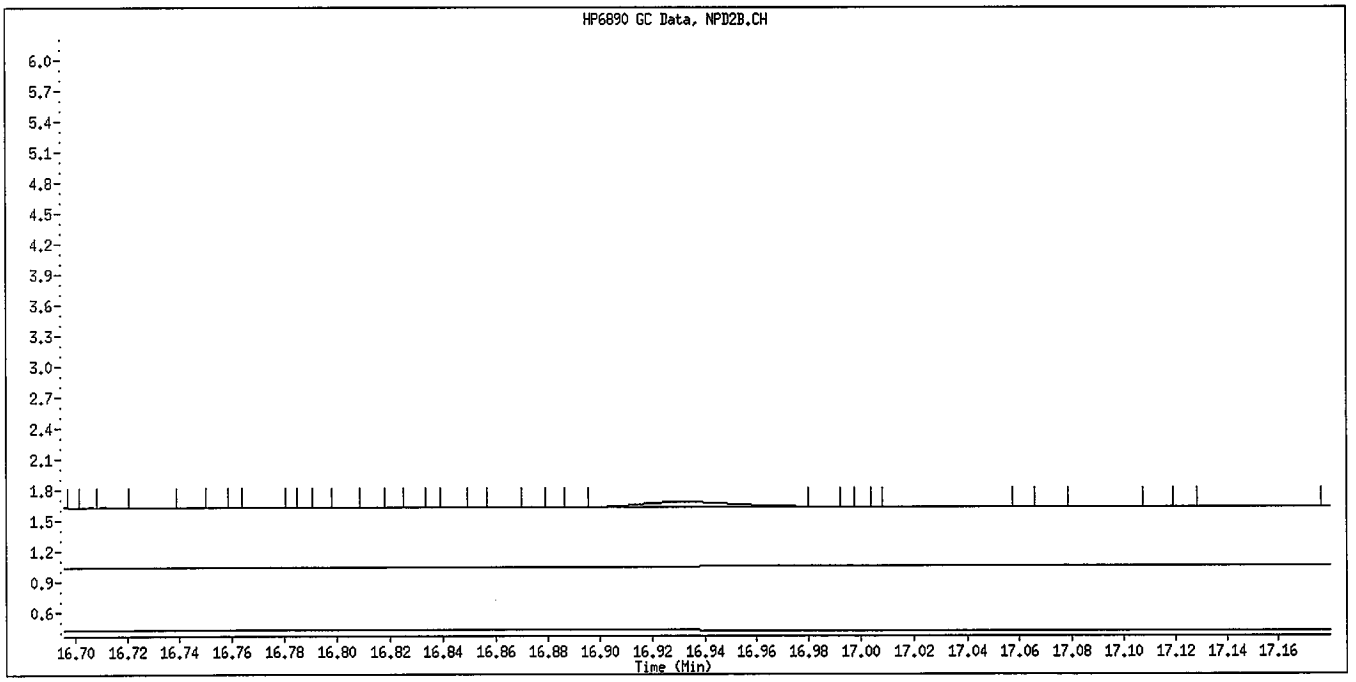
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Naled
CAS #:
Report Date: 08/07/2009



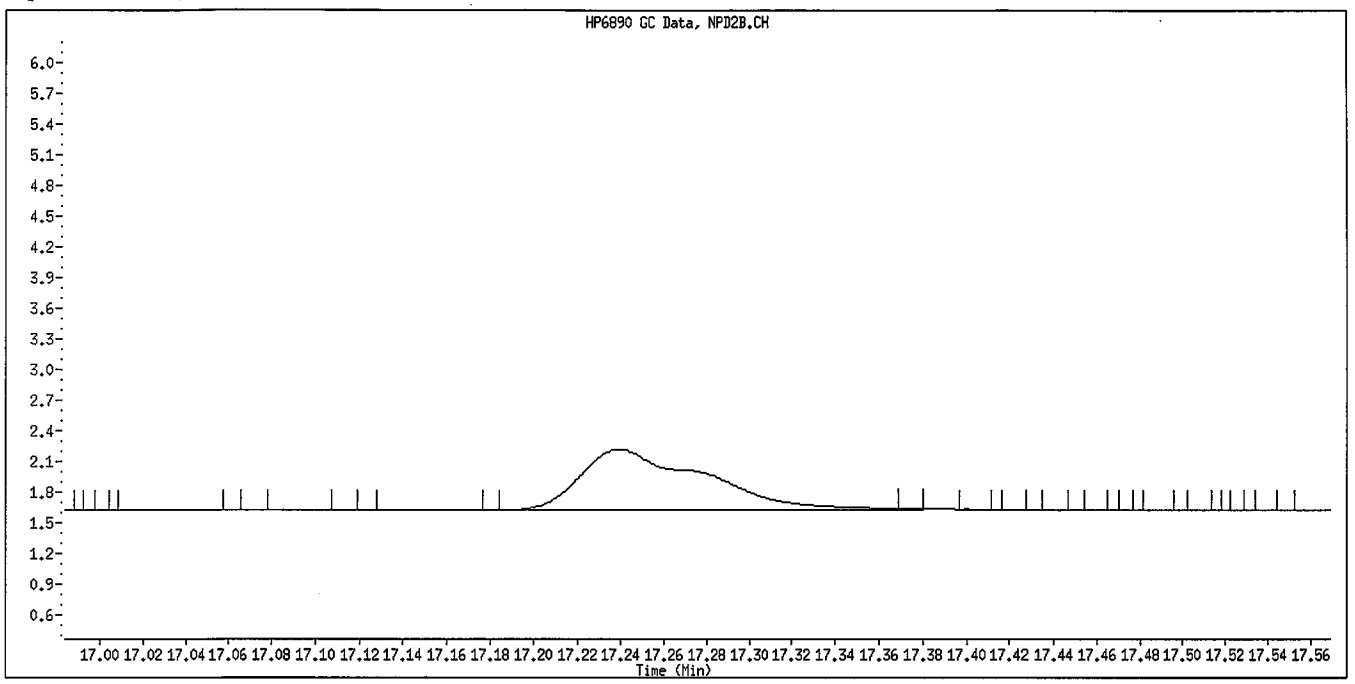
Original Integration



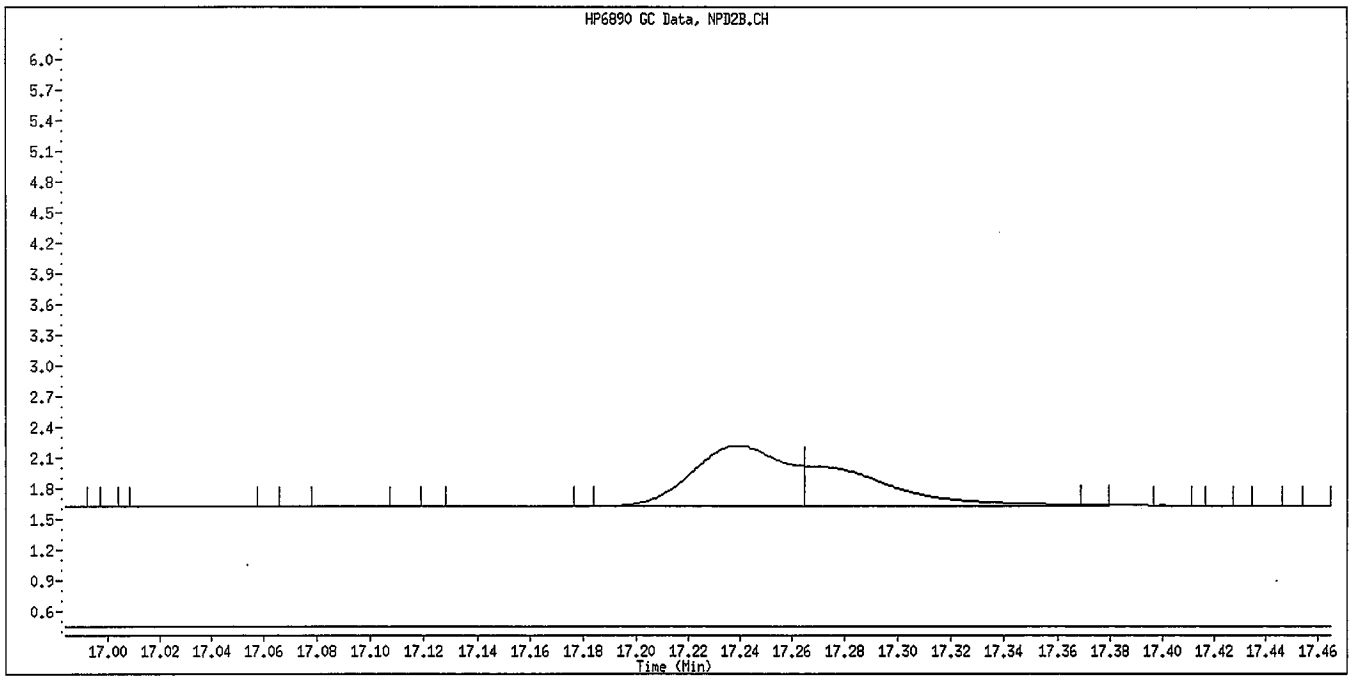
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Sulfotepp
CAS #:
Report Date: 08/07/2009



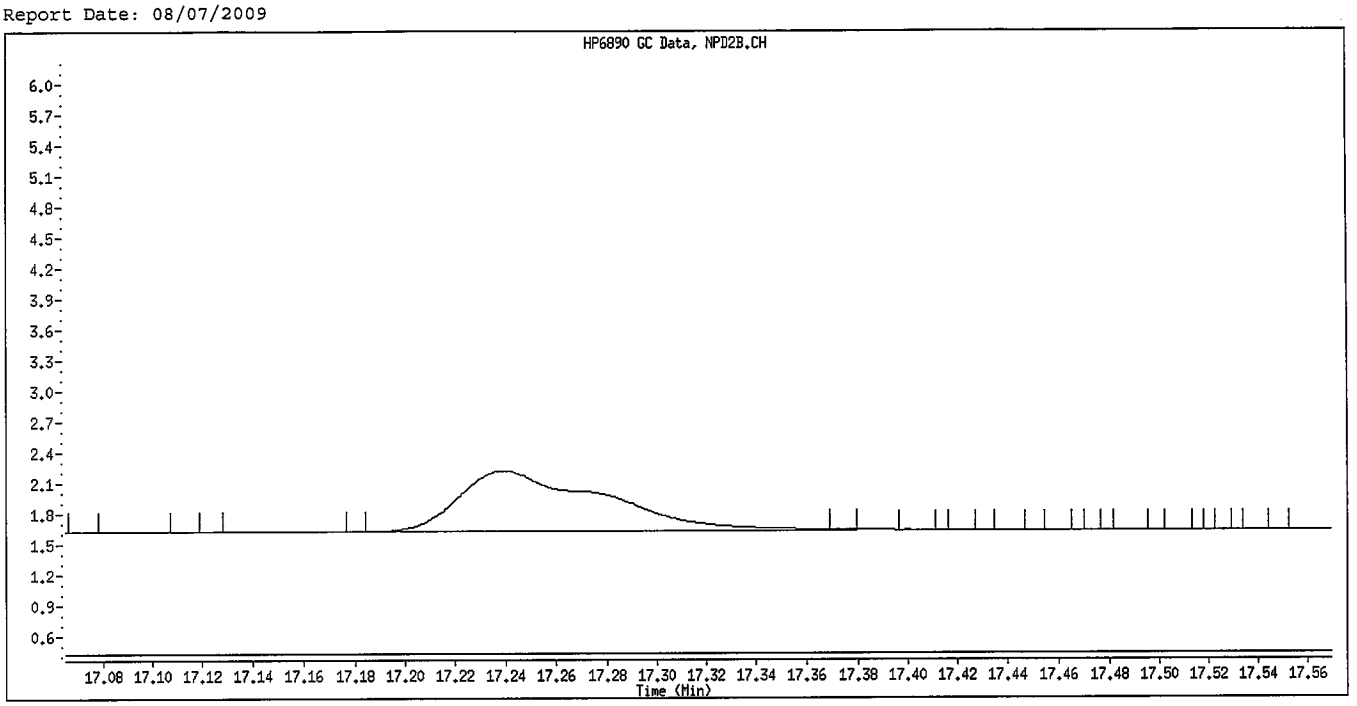
Original Integration



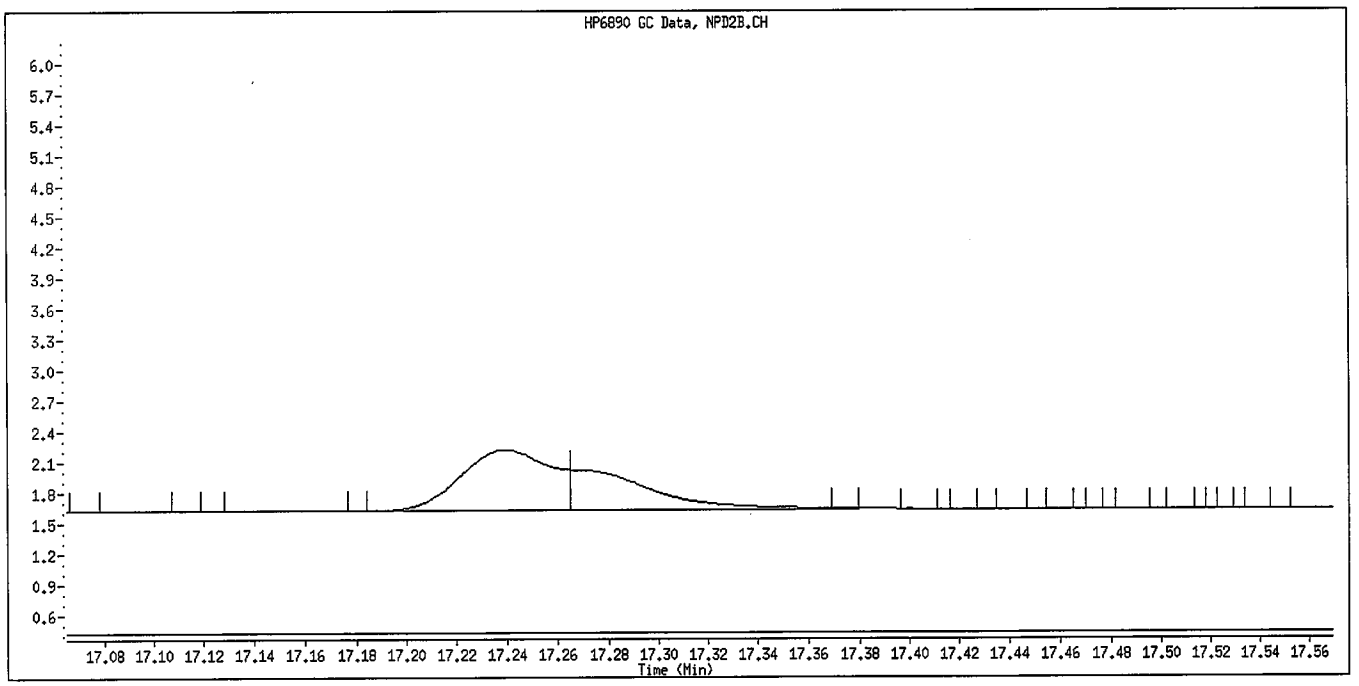
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Phorate
CAS #:
Report Date: 08/07/2009



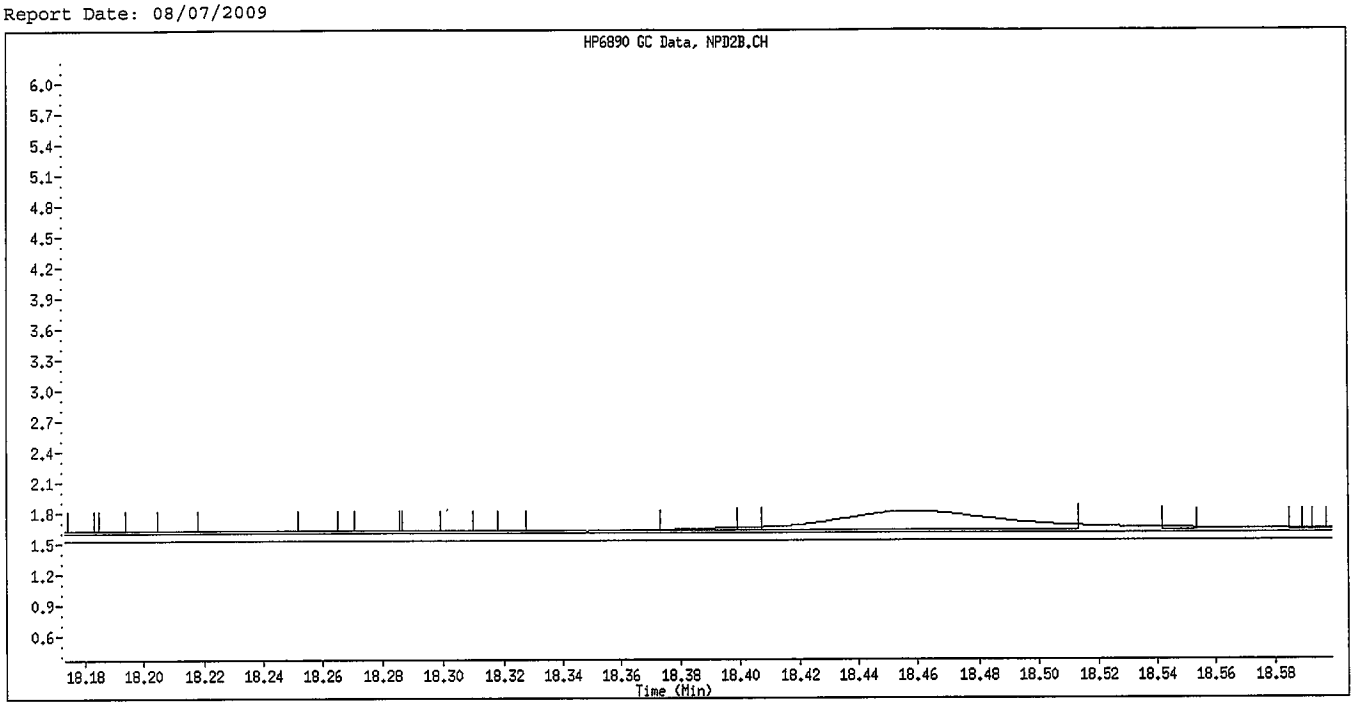
Original Integration



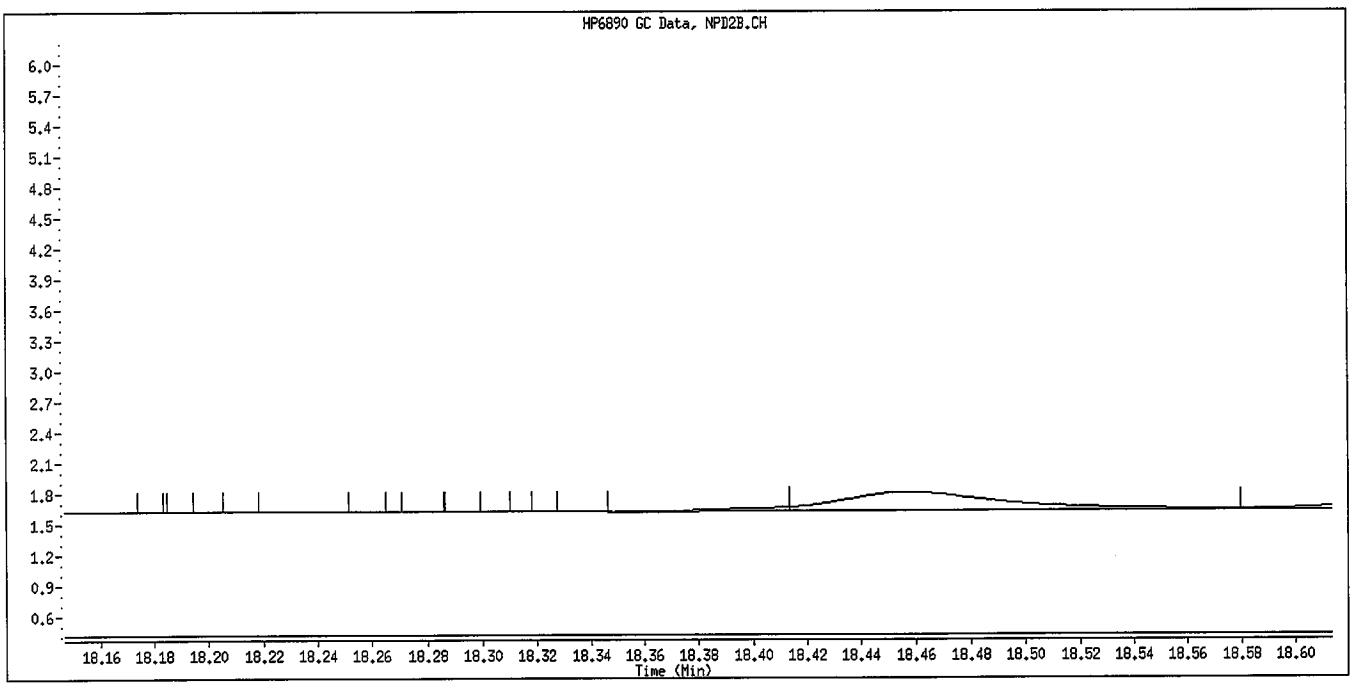
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Simazine
CAS #:
Report Date: 08/07/2009



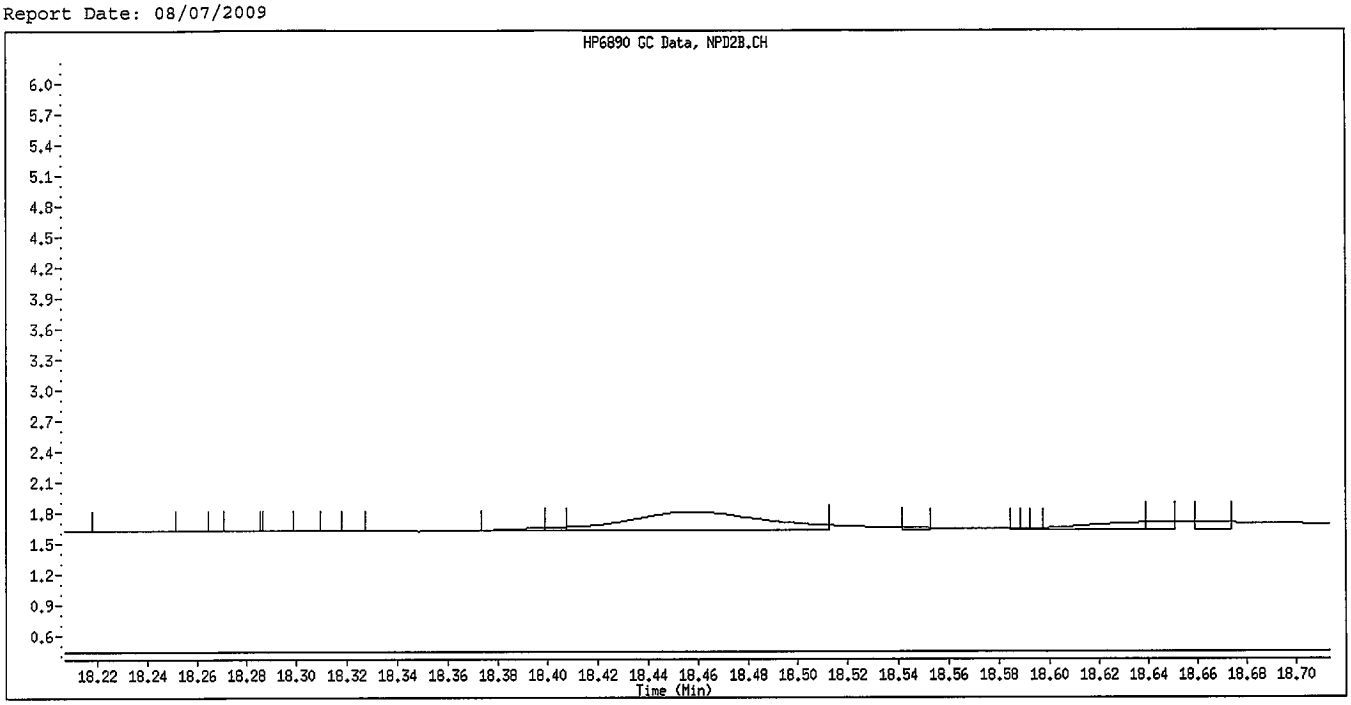
Original Integration



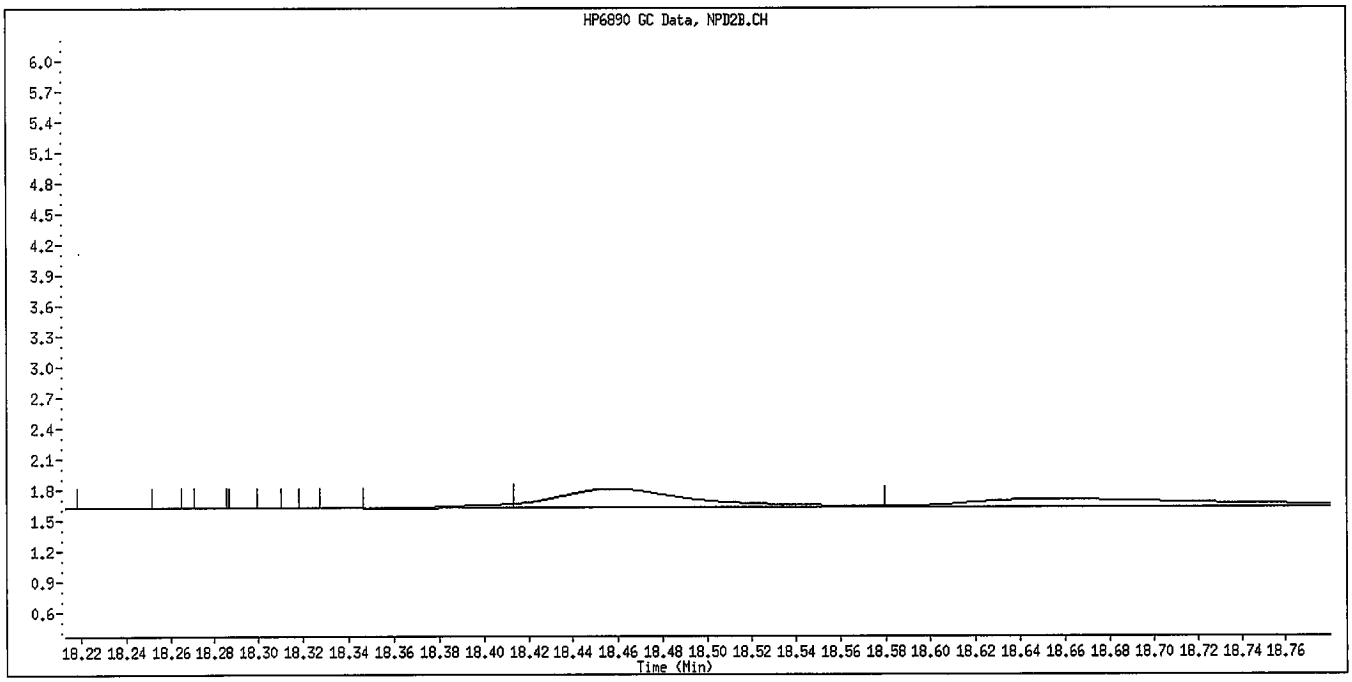
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Atrazine / Propazine
CAS #:
Report Date: 08/07/2009



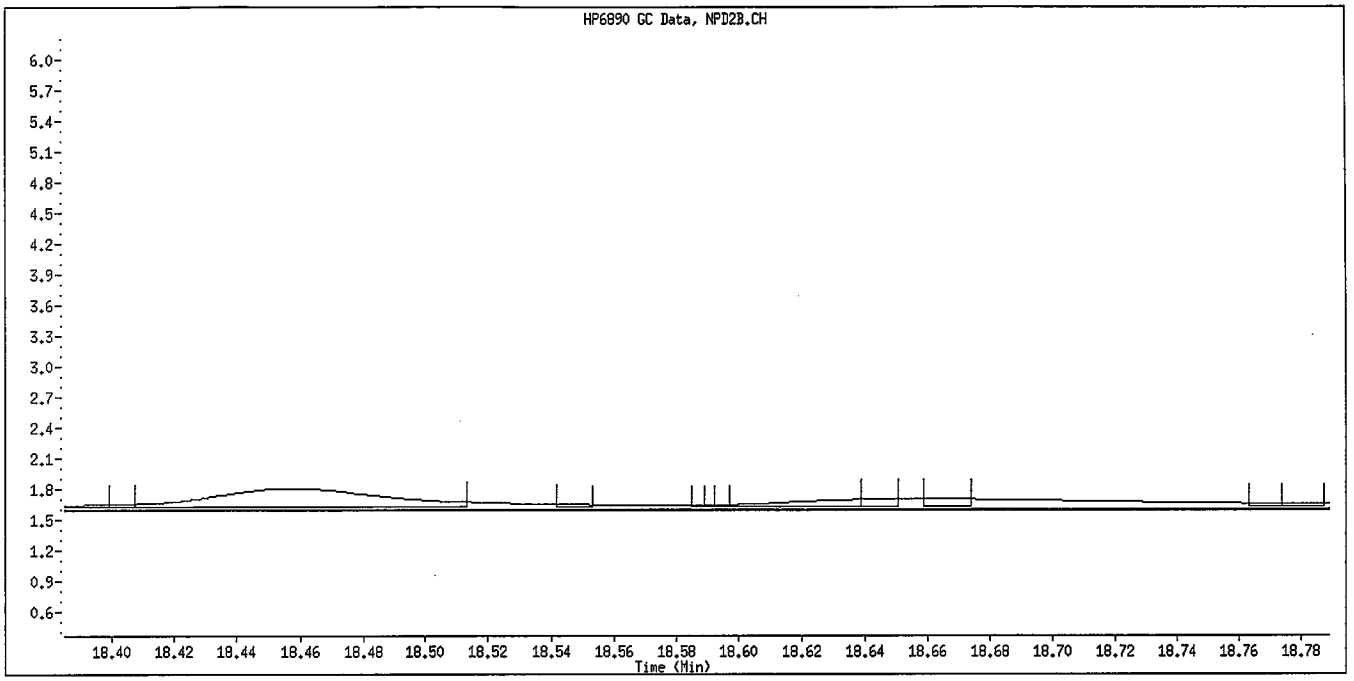
Original Integration



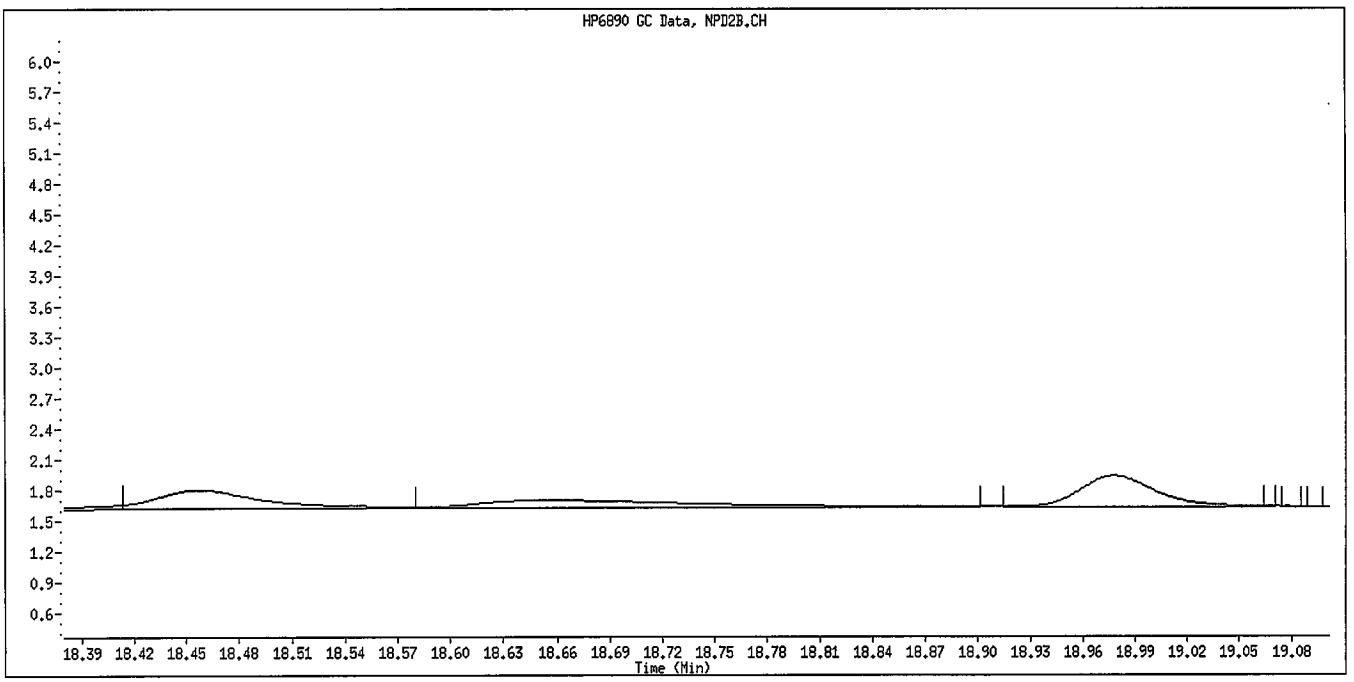
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Dimethoate
CAS #:
Report Date: 08/07/2009



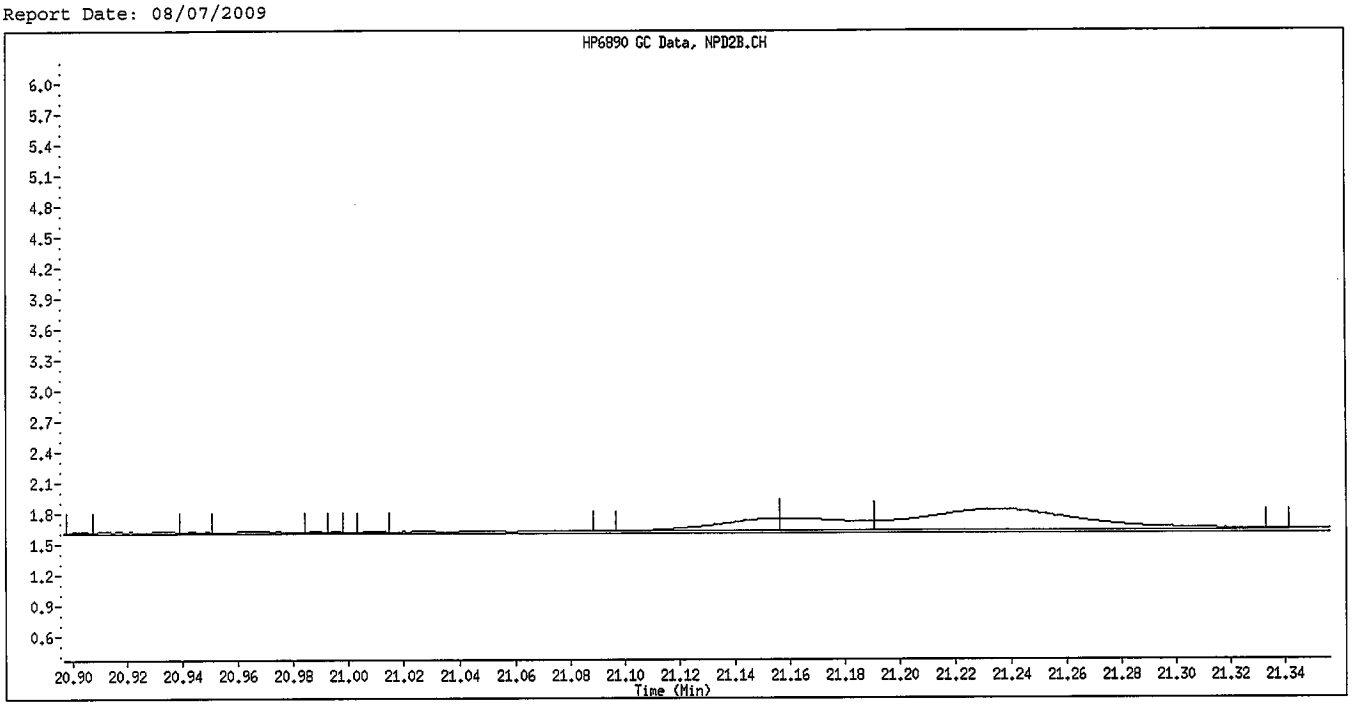
Original Integration



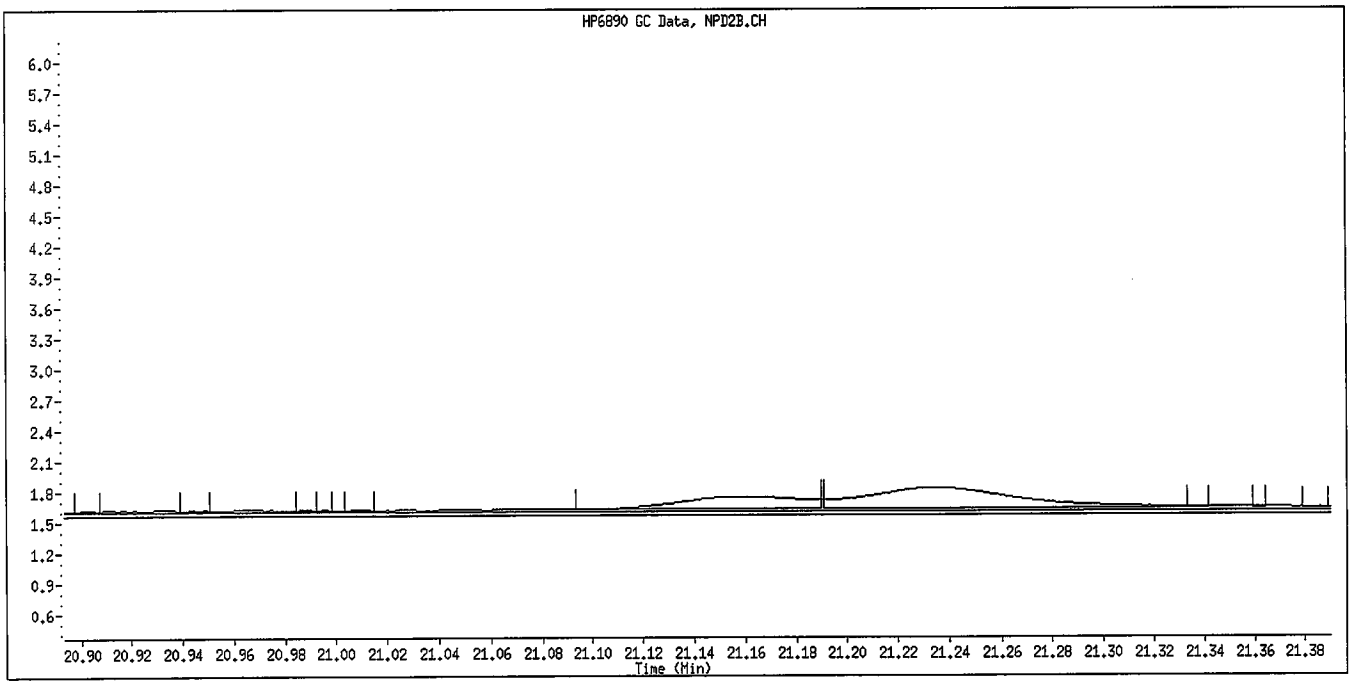
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Methyl Parathion
CAS #: 298-00-0
Report Date: 08/07/2009



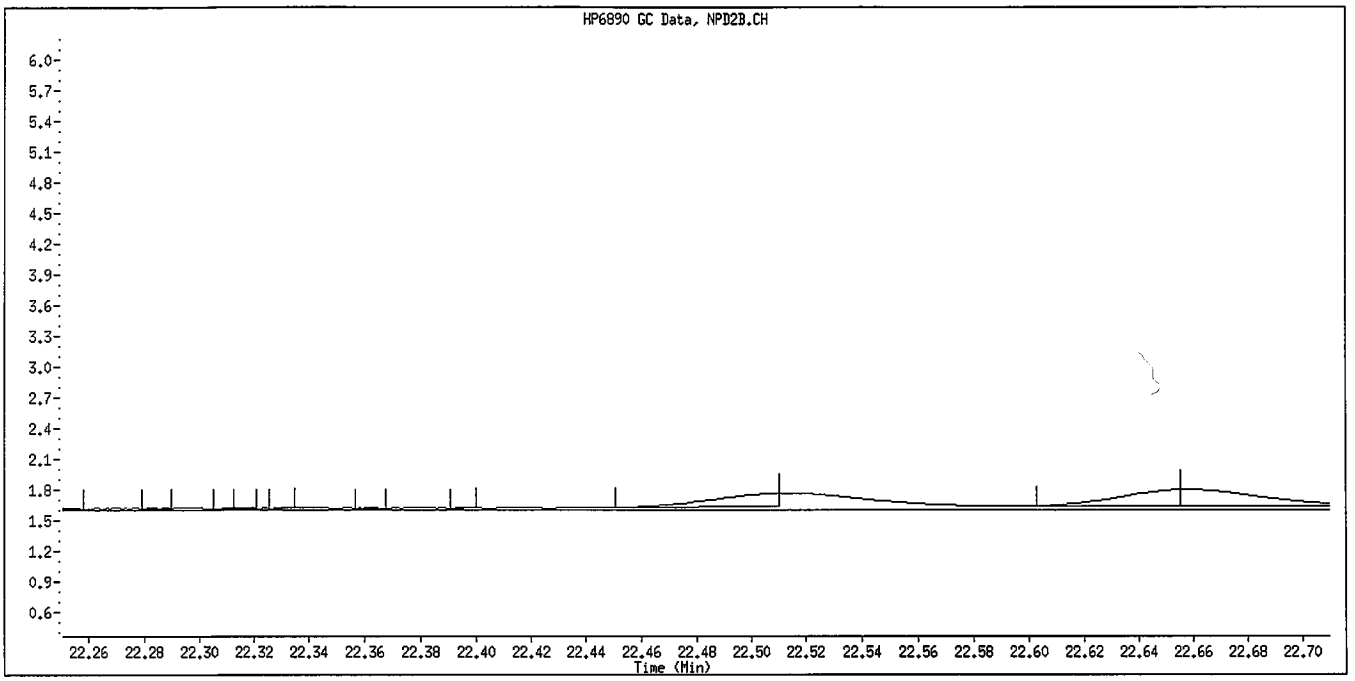
Original Integration



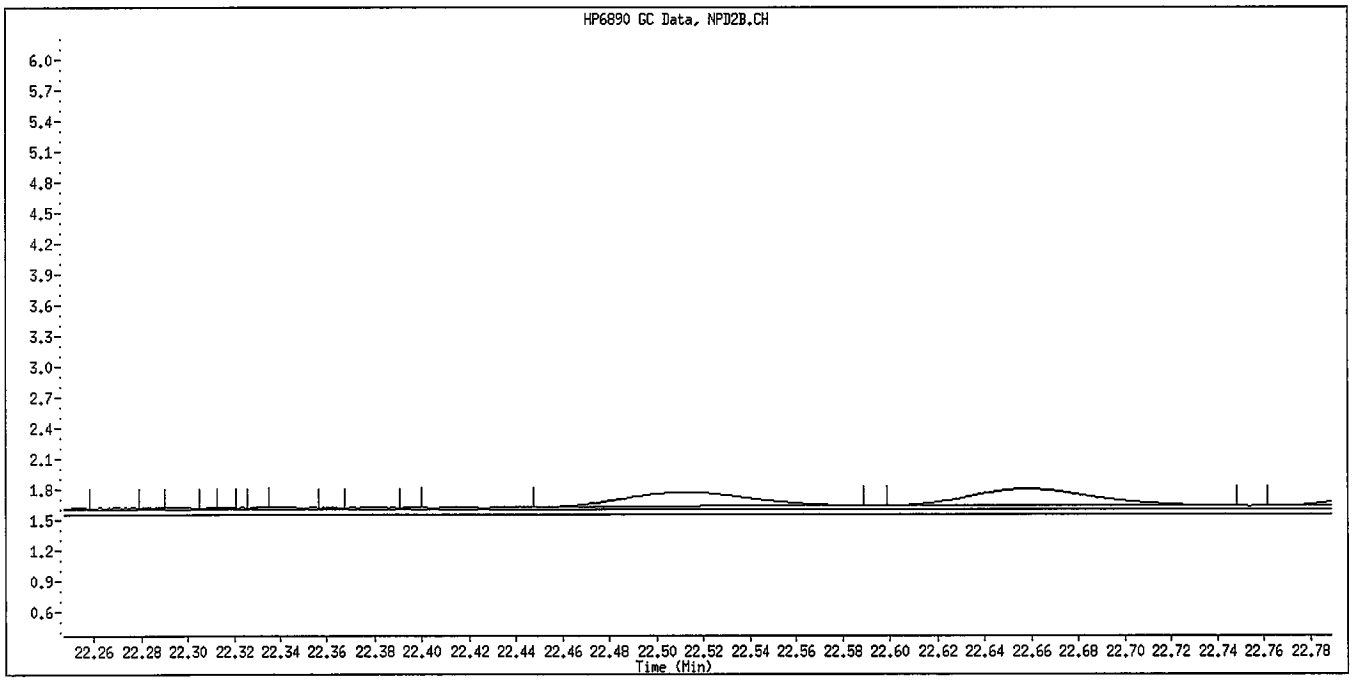
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Malathion
CAS #:
Report Date: 08/07/2009



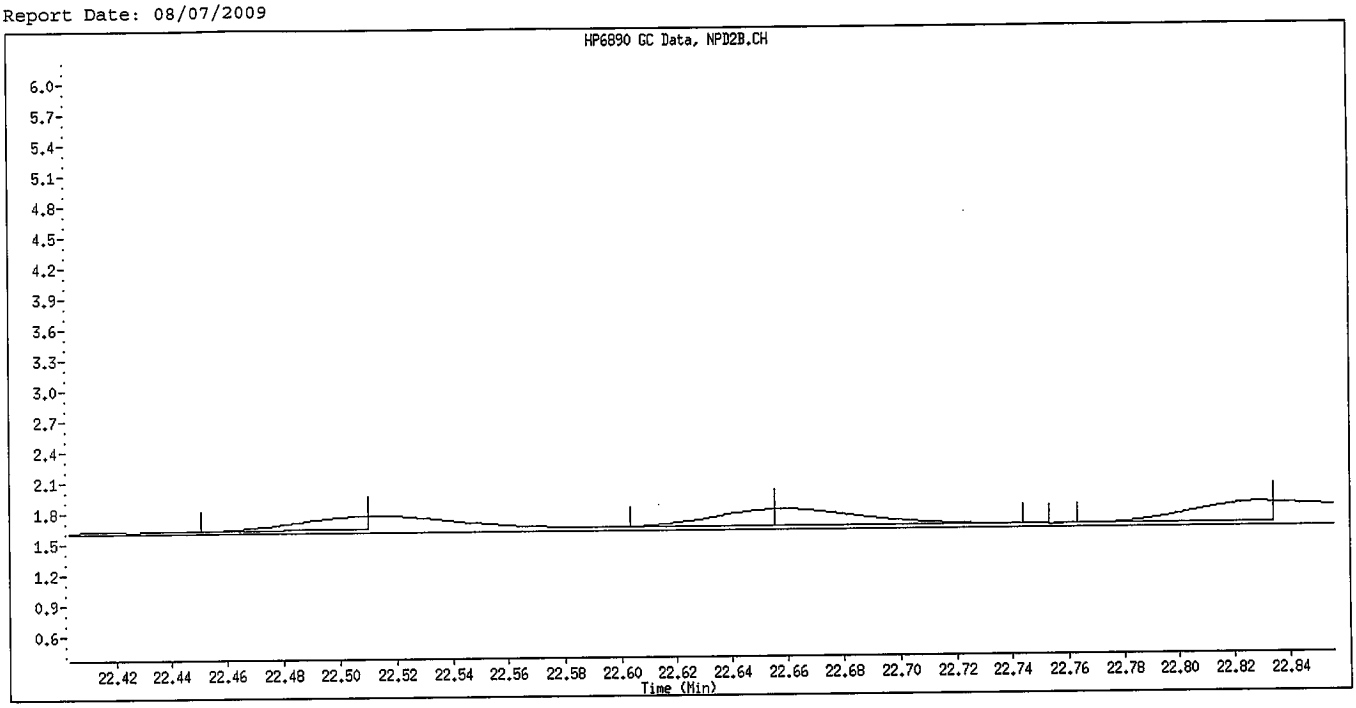
Original Integration



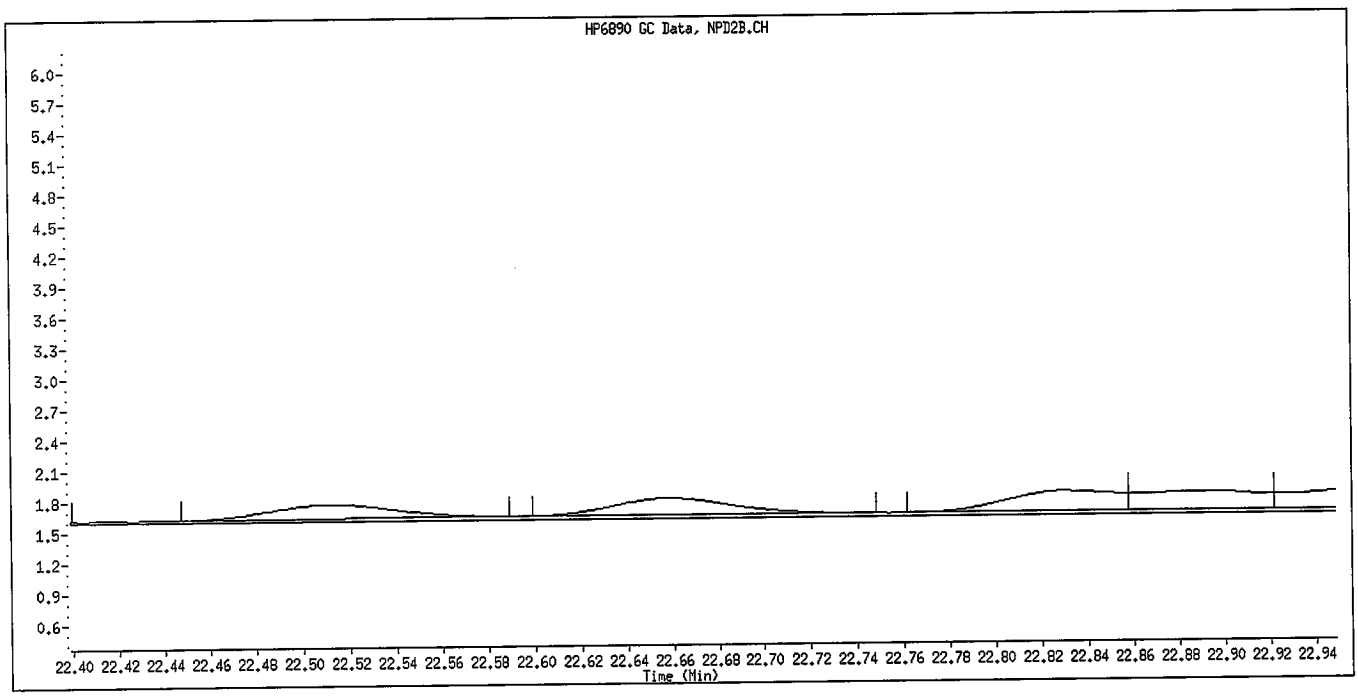
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Chlorpyrifos
CAS #:
Report Date: 08/07/2009



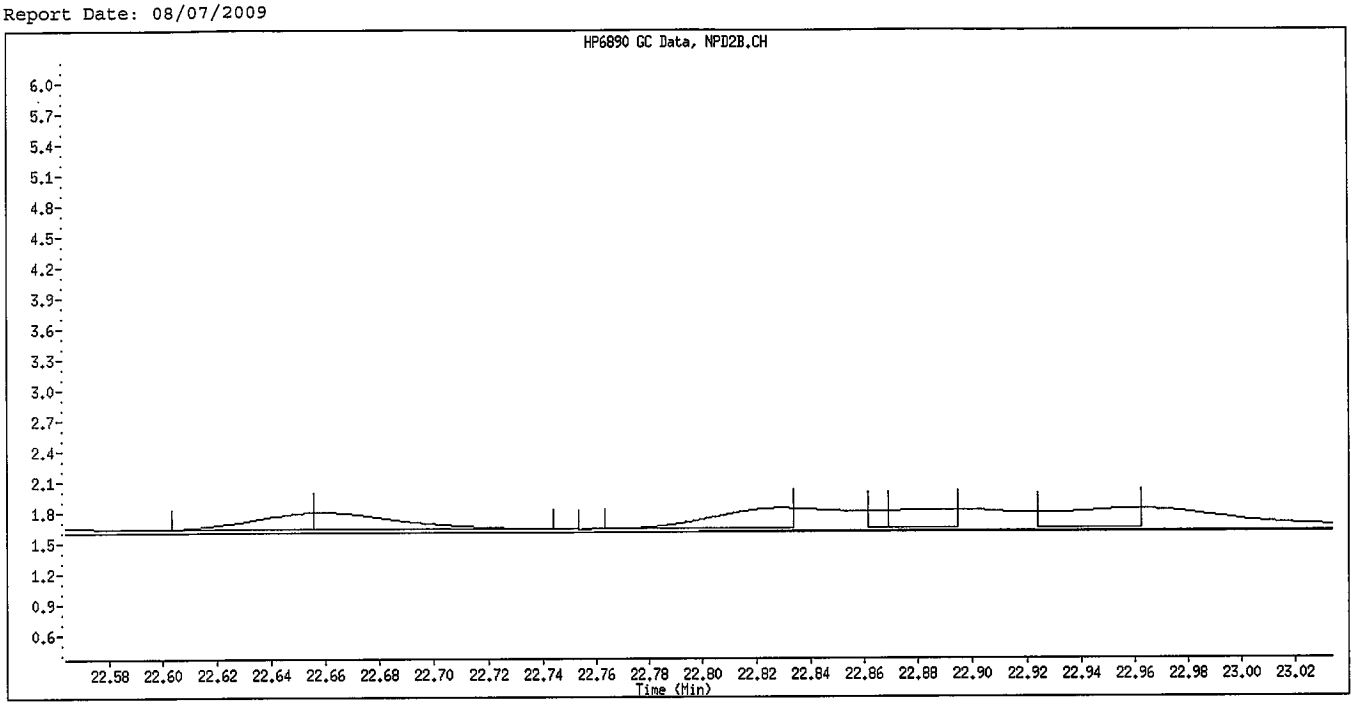
Original Integration



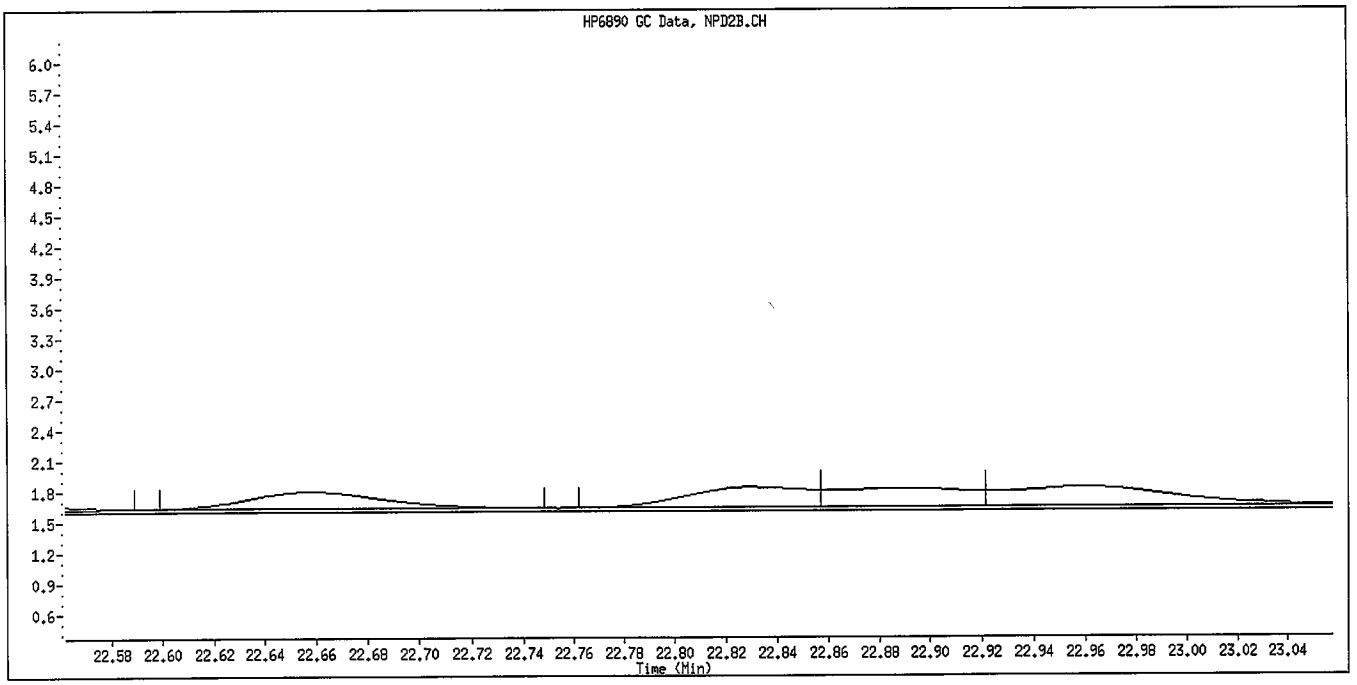
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Trichloronate
CAS #:
Report Date: 08/07/2009



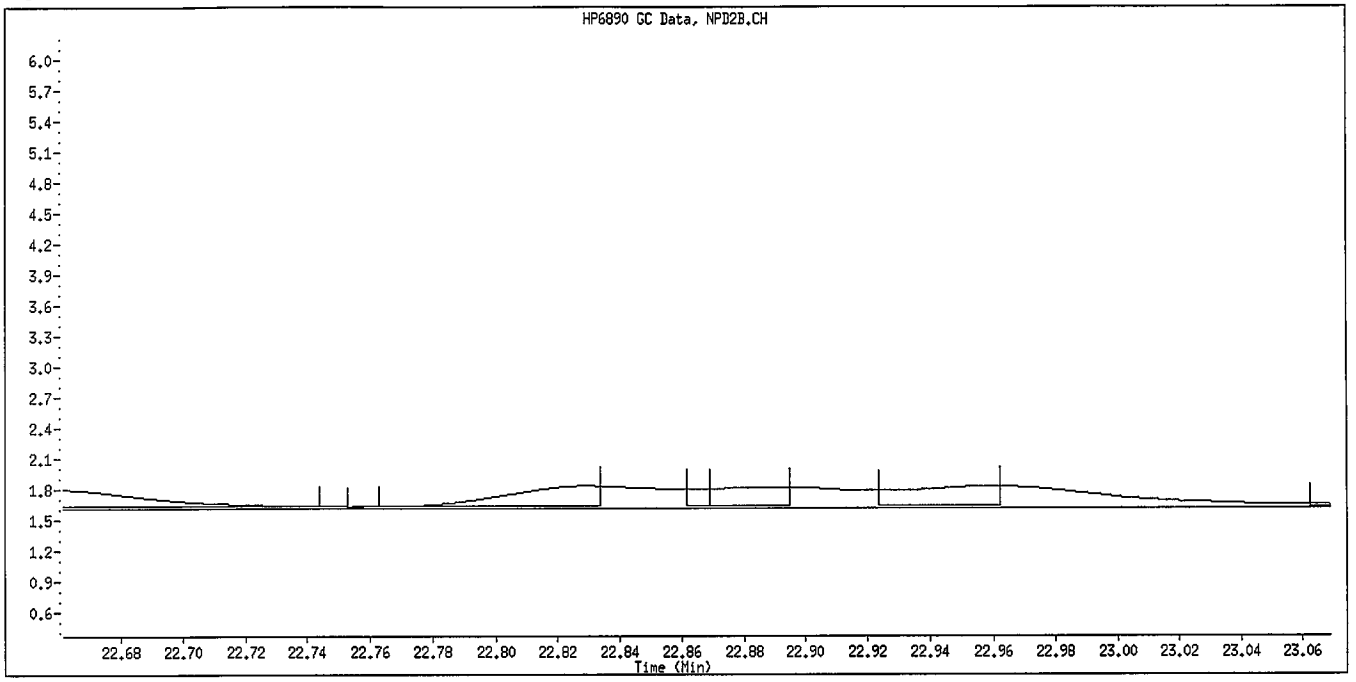
Original Integration



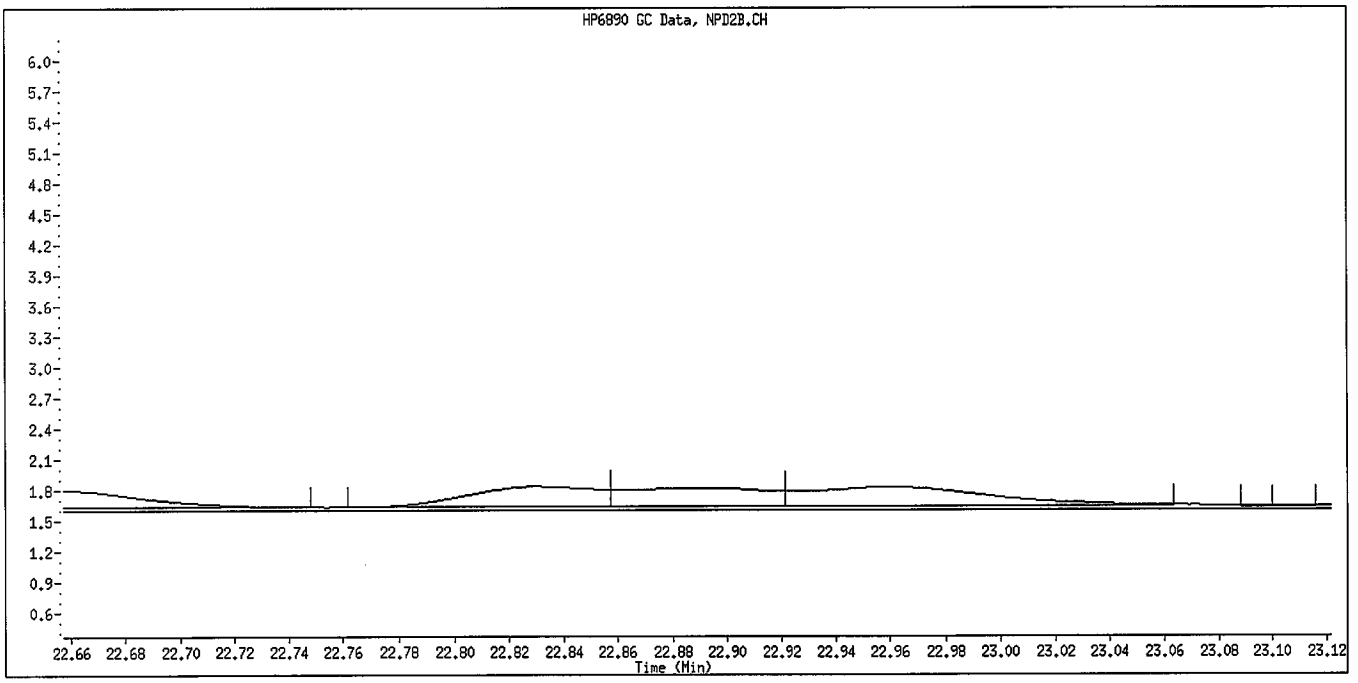
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Parathion
CAS #:
Report Date: 08/07/2009



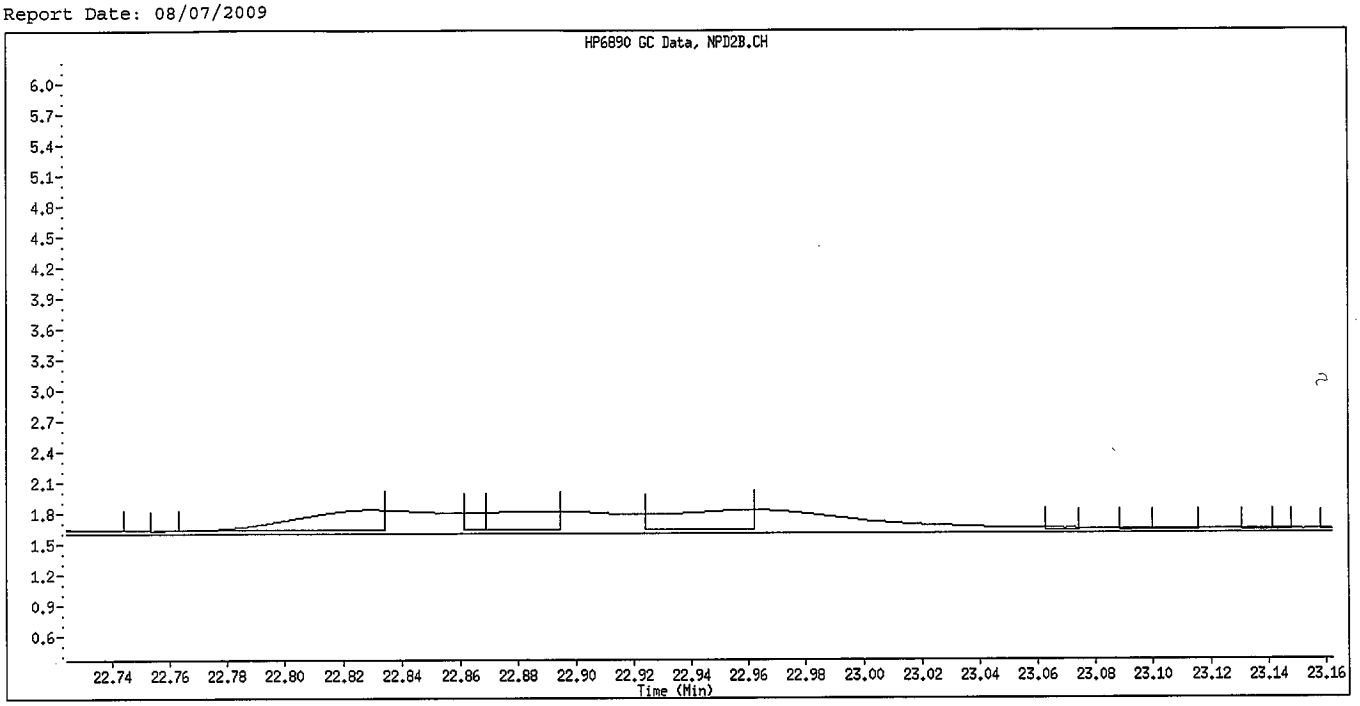
Original Integration



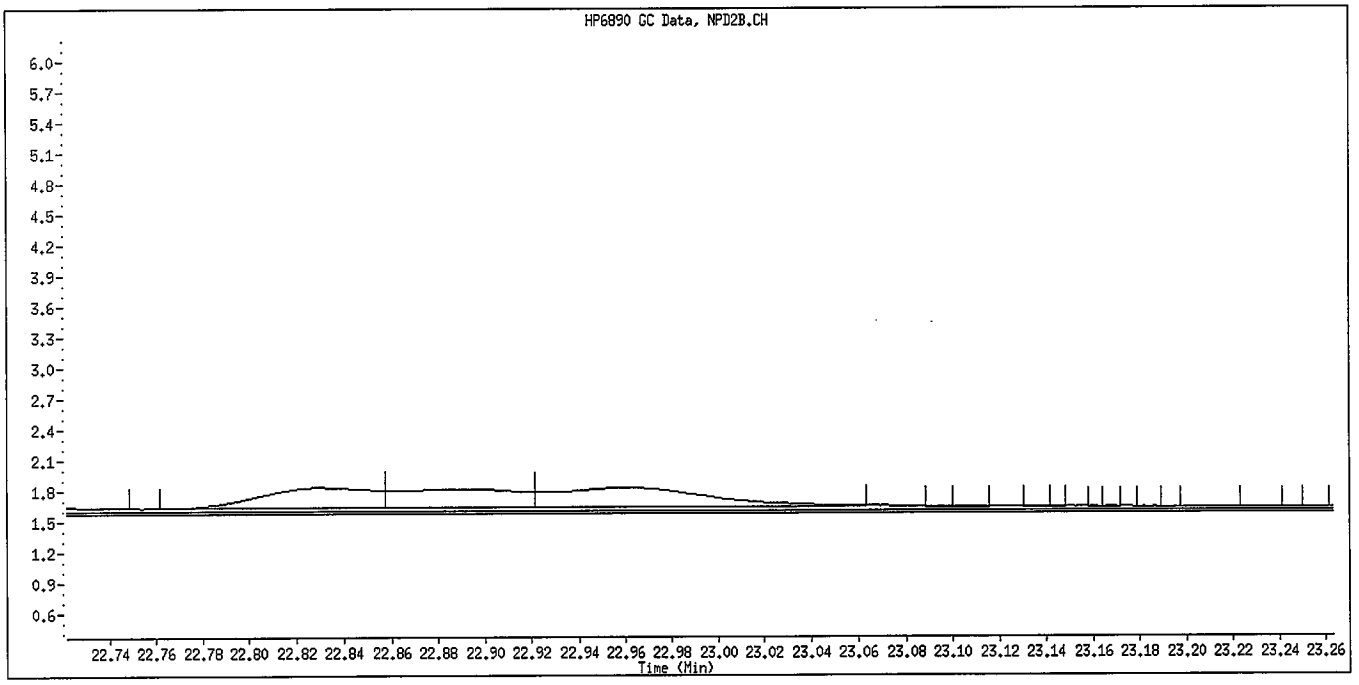
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Fenthion
CAS #:
Report Date: 08/07/2009



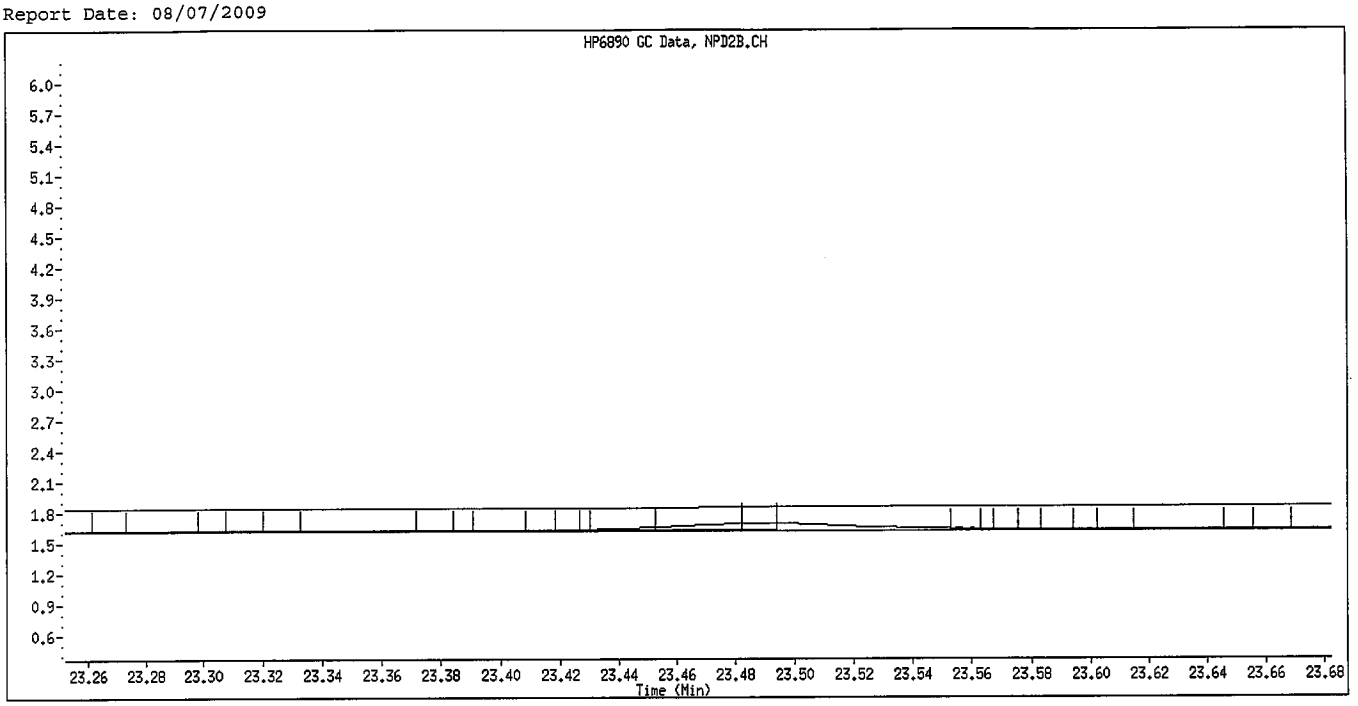
Original Integration



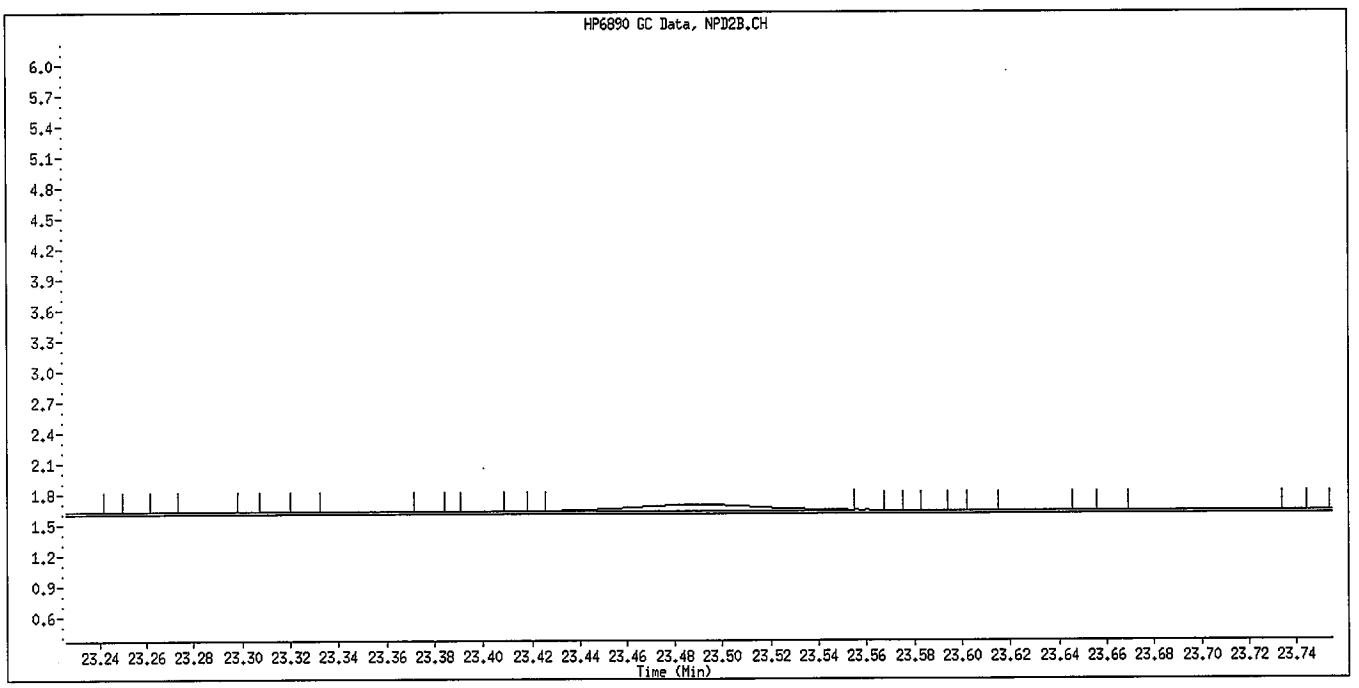
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Merphos-A (Merphos)
CAS #:
Report Date: 08/07/2009



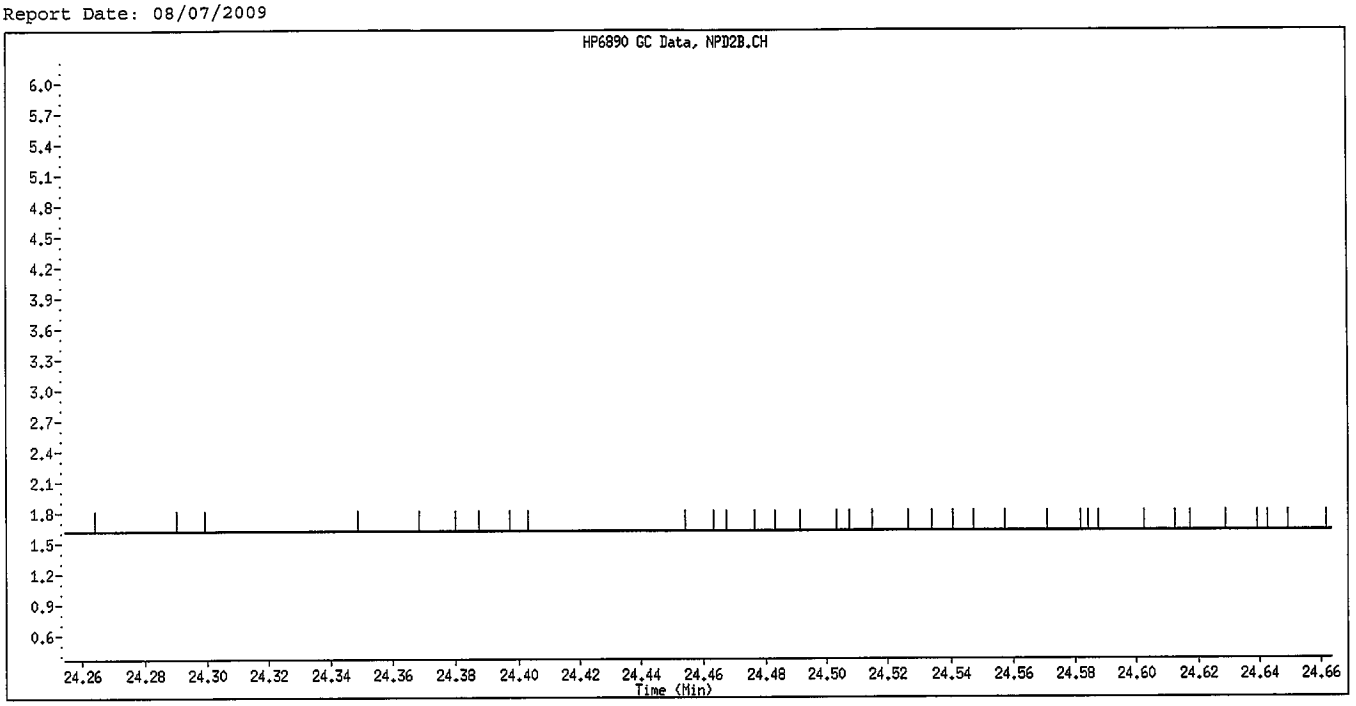
Original Integration



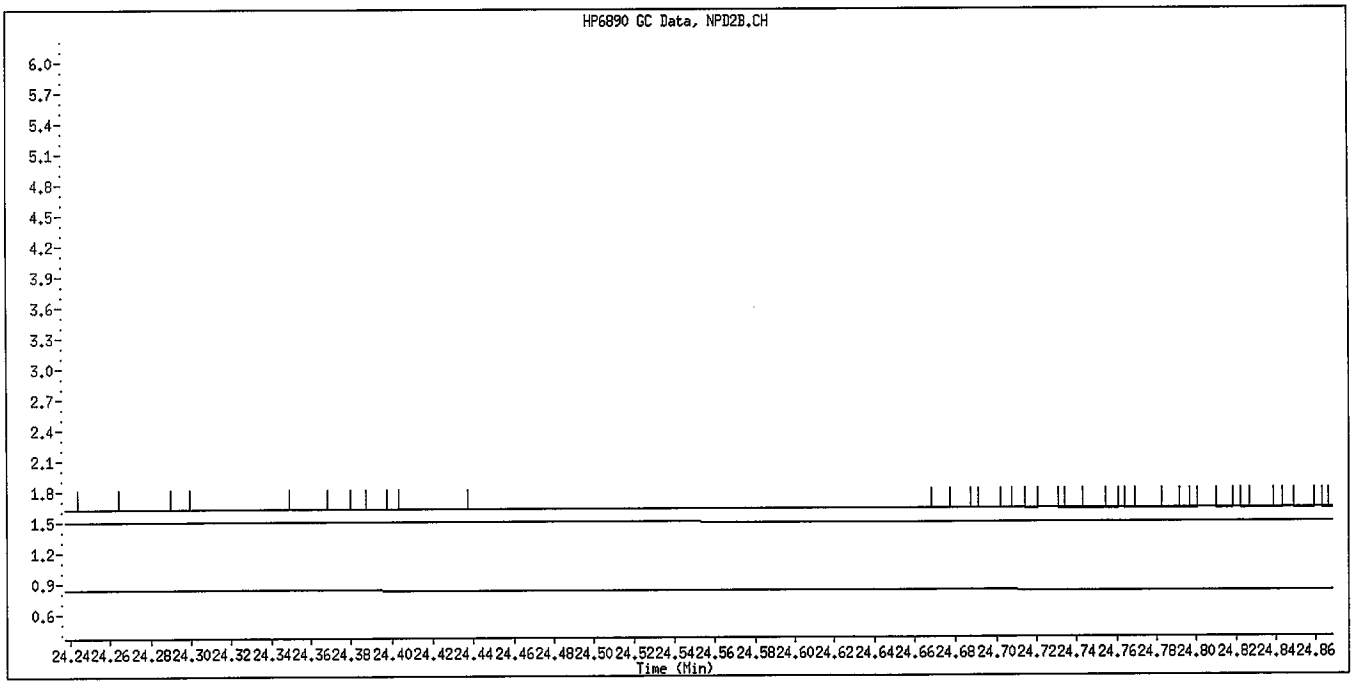
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Unknown

Data File Name: 009F0901.D
Inj. Date and Time: 06-AUG-2009 18:34
Instrument ID: GC_D.i
Client ID: 8141 L1 GSV87509
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

TestAmerica

Data file : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\010F1001.D
Lab Smp Id: 8141 SS GSV87609 Client Smp ID: 8141 SS GSV87609
Inj Date : 06-AUG-2009 19:10
Operator : MPK/TLW Inst ID: GC_D.i
Smp Info : 8141 SS GSV87609
Misc Info :
Comment :
Method : \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Meth Date : 07-Aug-2009 13:44 GC_D.i Quant Type: ISTD
Cal Date : 06-AUG-2009 18:34 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	6.759	6.758	(0.417)	1982981	2.00000	2.142
	2 Dichlorvos	8.952	8.952	(0.553)	820110	2.00000	1.988
$	3 Chlormefos	12.884	12.885	(0.796)	1049387	2.00000	1.693
	4 Mevinphos	13.007	13.006	(0.803)	396793	2.00000	1.578
	5 Demeton-O	15.938	15.939	(0.984)	783301	0.65000	2.068
	6 Thionazin	16.068	16.067	(0.992)	1242073	2.00000	2.214
*	7 Tributylphosphate	16.194	16.193	(1.000)	989795	2.00000	
	8 Ethoprop	16.334	16.332	(1.009)	991713	2.00000	1.968
	9 Naled	16.922	16.921	(1.045)	293536	2.00000	1.681
	10 Sulfotepp	17.234	17.234	(1.064)	1523384	2.00000	1.842(M)
	11 Phorate	17.259	17.268	(1.066)	669687	2.00000	1.601(M)
	12 Demeton-S	17.967	17.962	(1.109)	35517	1.36000	0.09345
	13 Simazine	18.368	18.368	(1.134)	310718	2.00000	2.770
	14 Atrazine / Propazine	18.433	18.434	(1.138)	961286	4.00000	4.232
	15 Dimethoate	18.572	18.569	(1.147)	1043639	2.00000	2.161
	16 Diazinon	18.968	18.967	(1.171)	894541	2.00000	1.823
	17 Disulfoton	19.229	19.231	(1.187)	968530	2.00000	1.954
	18 Methyl Parathion	21.132	21.132	(0.736)	687687	2.00000	1.965
	19 Ronnel	21.221	21.222	(0.739)	819203	2.00000	1.936
	20 Malathion	22.493	22.492	(0.784)	630611	2.00000	1.857
	21 Chlorpyrifos	22.644	22.644	(0.789)	779213	2.00000	1.974
	22 Trichloronate	22.818	22.819	(0.795)	842452	2.00000	1.730
	23 Parathion	22.866	22.866	(0.797)	901002	2.00000	2.044
	24 Fenthion	22.941	22.942	(0.799)	829378	2.00000	1.911
	25 Merphos-A (Merphos)	23.474	23.472	(0.818)	49502	2.00000	0.2815
	26 Anilazine	24.453	24.451	(0.852)	23396	2.00000	0.8232(M)
	27 Tetrachlorvinphos (stirophos)	25.868	25.869	(0.901)	517991	2.00000	1.864
	28 Tokuthion	26.043	26.043	(0.907)	908701	2.00000	1.961
	29 Merphos-B (Merphos oxone)	26.175	26.176	(0.912)	772553	2.00000	11.92(A)
	30 Carbophenothion methyl	26.998	26.999	(0.941)	436501	2.00000	1.348
	31 Fensulfothion	27.238	27.237	(0.949)	544086	2.00000	1.947
	32 Bolstar	27.346	27.347	(0.953)	881894	2.00000	1.988
	33 Carbophenothion	27.458	27.460	(0.957)	782536	2.00000	2.111

	Compounds	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	34 Famphur	27.643	27.644	(0.963)	772985	2.00000	2.282
$	35 Triphenyl phosphate	27.933	27.932	(0.973)	567174	2.00000	1.789
	36 EPN	28.238	28.240	(0.984)	797078	2.00000	2.192
	37 Phosmet	28.366	28.366	(0.988)	677199	2.00000	2.275
*	38 TOCP	28.704	28.705	(1.000)	732545	2.00000	
	39 Azinphos-methyl	28.815	28.816	(1.004)	449646	2.00000	1.818
	40 Azinphos-ethyl	29.128	29.127	(1.015)	575359	2.00000	2.165
	41 Coumaphos	29.454	29.453	(1.026)	451547	2.00000	1.896
M	42 Total Demeton				818818	2.00000	2.162
M	43 Merphos				822055	2.00000	1.909

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

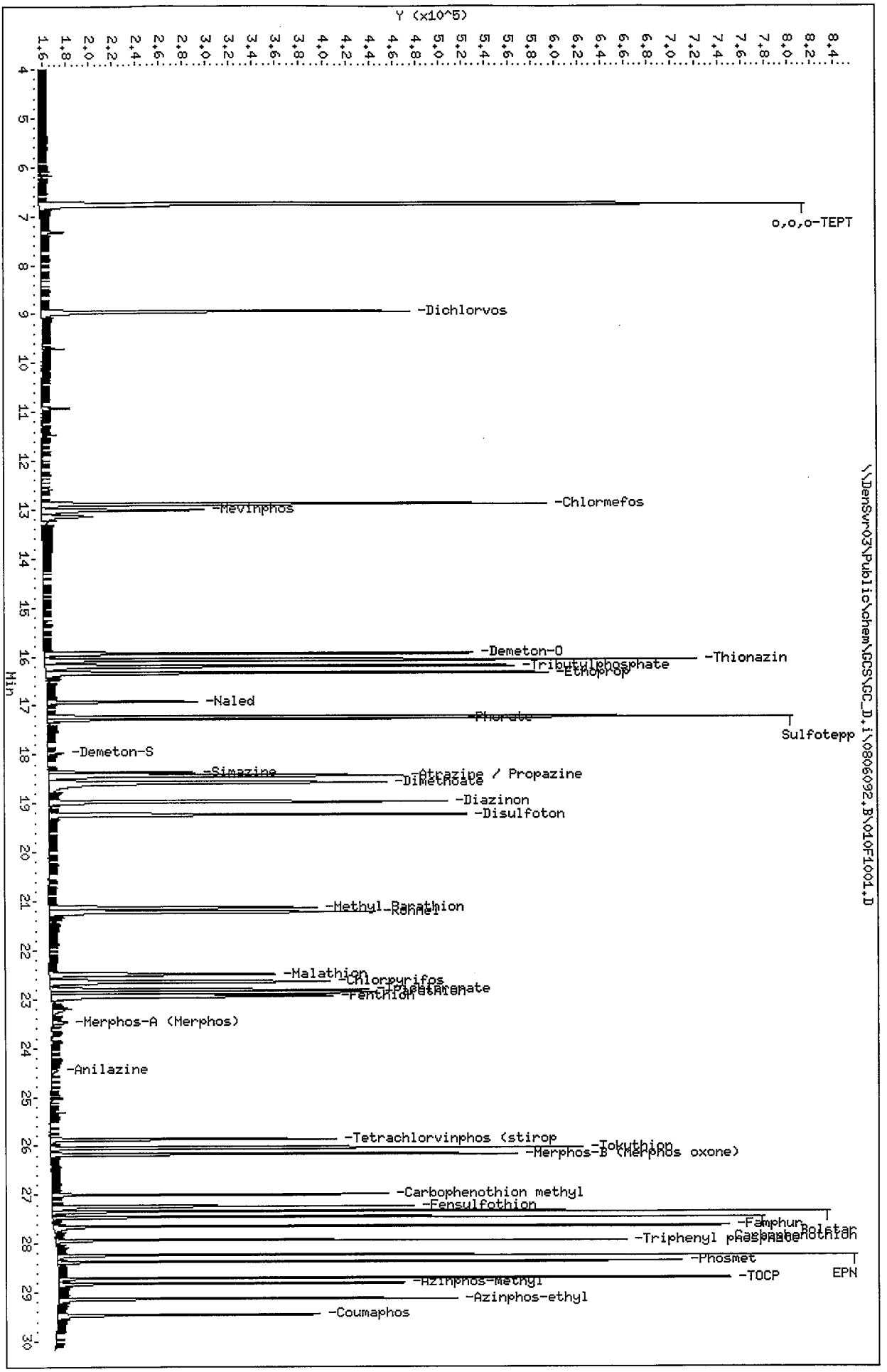
Instrument ID: GC_D.i
Lab File ID: 010F1001.D
Lab Smp Id: 8141 SS GSV87609
Analysis Type: SV
Quant Type: ISTD
Operator: MPK/TLW
Method File: \\DenSvr03\Public\chem\GCS\GC_D.i\0806092.B\8141A-2.m
Misc Info:

Calibration Date: 06-AUG-2009
Calibration Time: 16:45
Client Smp ID: 8141 SS GSV8760
Level:
Sample Type:

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	1016126	508063	2032252	989795	-2.59
38 TOCP	752526	376263	1505052	732545	-2.66

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
7 Tributylphosphate	16.20	15.70	16.70	16.19	-0.00
38 TOCP	28.71	28.21	29.21	28.70	-0.00

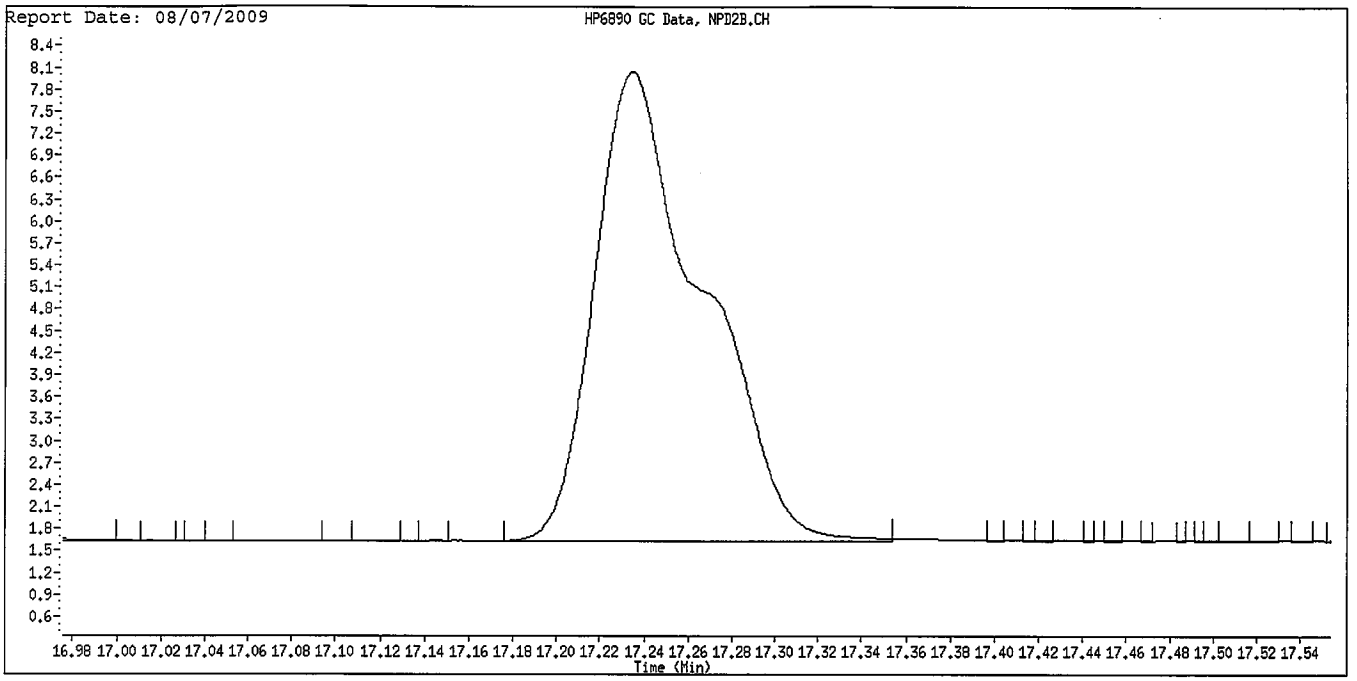
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.



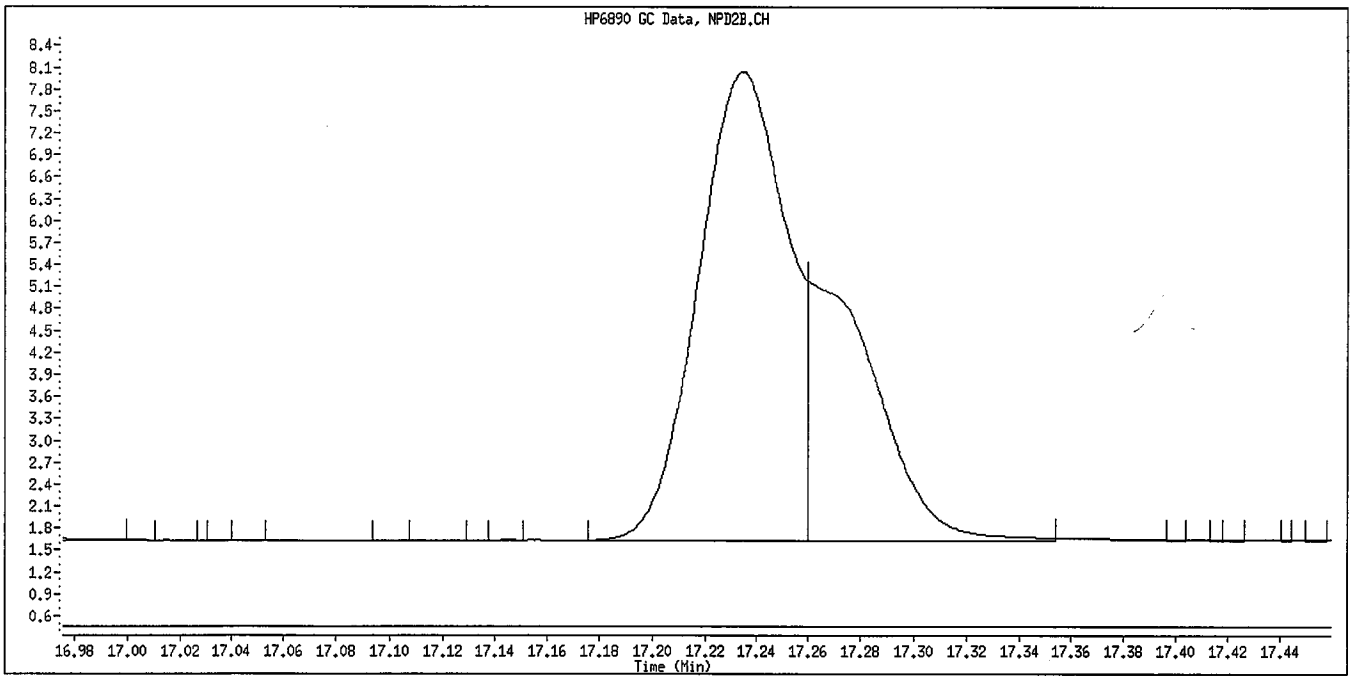
Data File: \\DenSvr03\Public\chem\GCS\GC_D,i\0806092,B\010F1001,D
Date : 06-AUG-2009 19:10
Client ID: 8141 SS GSV87609
Sample Info: 8141 SS GSV87609
Column phase: RTx-OPPest

Instrument: GC_D,i
Operator: MPK/TLN
Column diameter: 0.32

Data File Name: 010F1001.D
Inj. Date and Time: 06-AUG-2009 19:10
Instrument ID: GC_D.i
Client ID: 8141 SS GSV87609
Compound Name: Sulfotepp
CAS #:



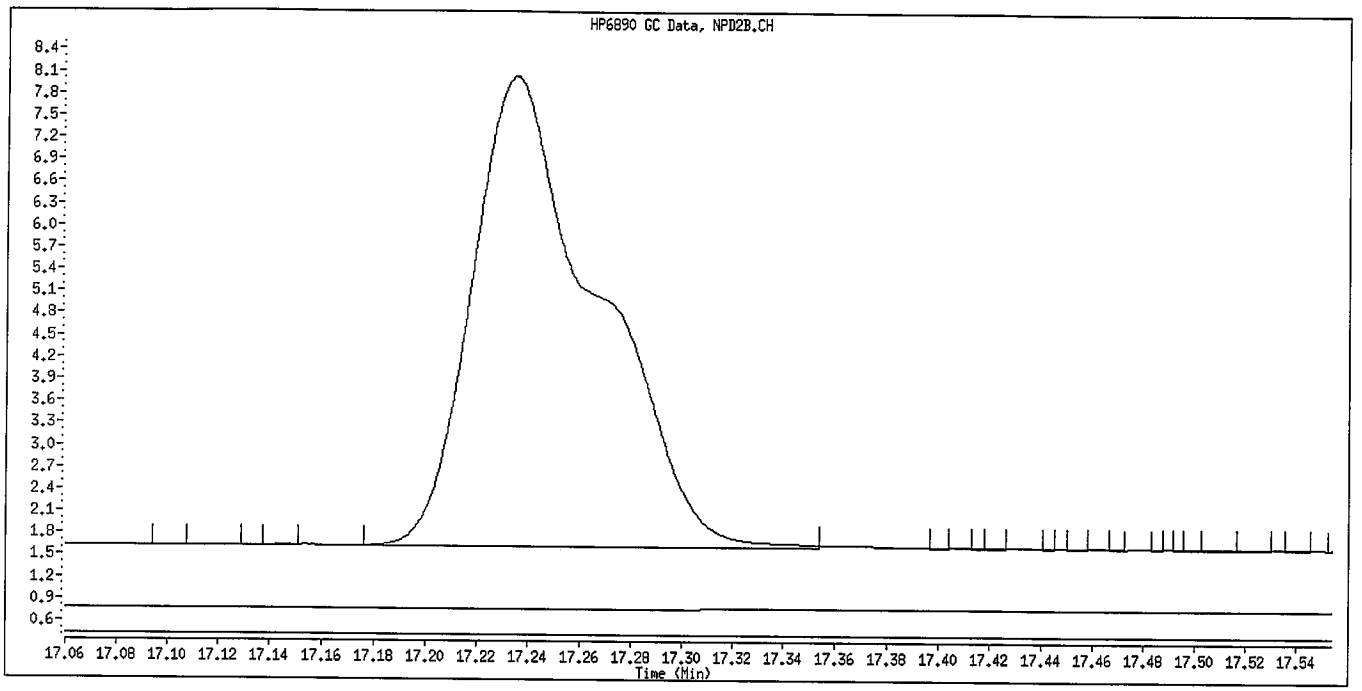
Original Integration



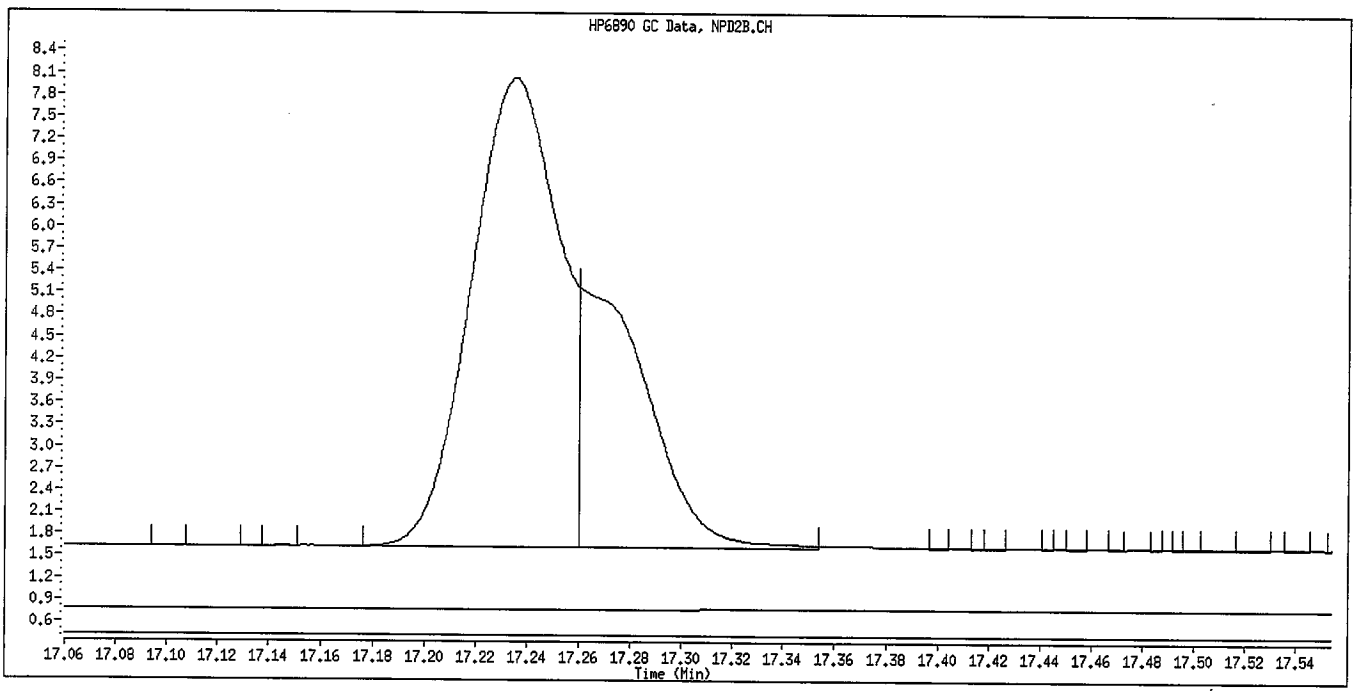
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 010F1001.D
Inj. Date and Time: 06-AUG-2009 19:10
Instrument ID: GC_D.i
Client ID: 8141 SS GSV87609
Compound Name: Phorate
CAS #:
Report Date: 08/07/2009



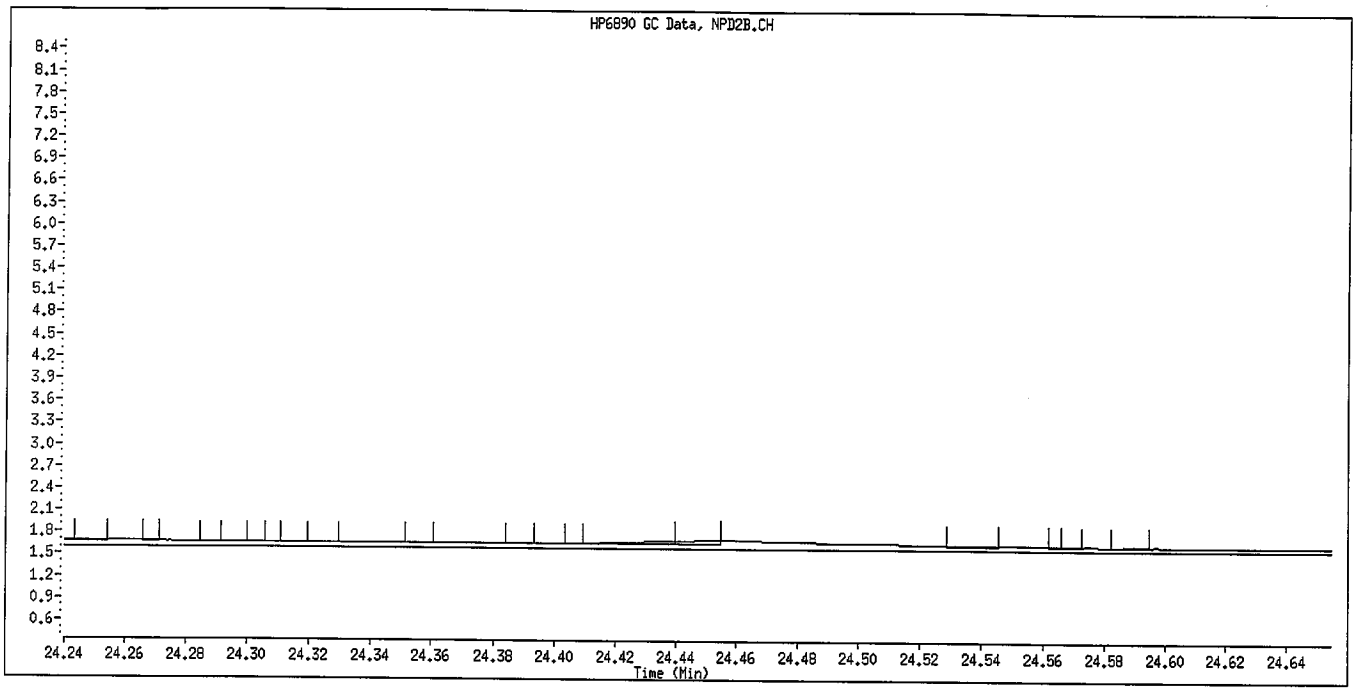
Original Integration



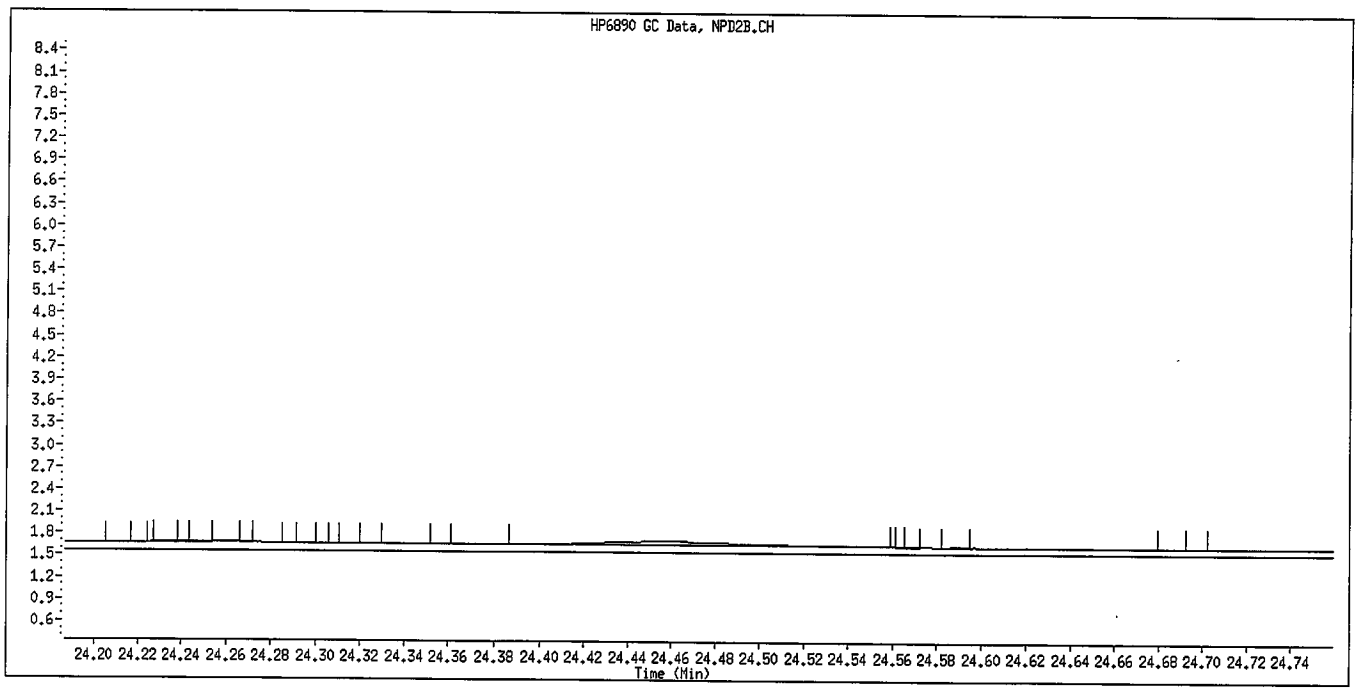
Manual Integration

Manually Integrated By: williamst
Manual Integration Reason: Baseline Event

Data File Name: 010F1001.D
Inj. Date and Time: 06-AUG-2009 19:10
Instrument ID: GC_D.i
Client ID: 8141 SS GSV87609
Compound Name: Anilazine
CAS #:
Report Date: 08/07/2009



Original Integration



Manual Integration

Metals

Supporting Documentation

Sample Sequence, Instrument Printouts

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot ID: D9H050234

Client: Northgate Environmental

Batch(es) #: 9218437

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: 8/11/09

Metals Raw Data RoadMap

LotID		*Metal*	*WorkOrder*	*Anal Date*	*TestDesc*	*Batch*	*File Id*	*Instr*
D9H050234	1	SE	LHJ511AD	20090811	6020TOTA	9218437	AG081009A	024
D9H050234	1	AS	LHJ511AC	20090811	6020TOTA	9218437	AG081009A	024

METALS
PREPARATION LOGS
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Batch Number: **9218437**

TestAmerica Laboratories, Inc.
Metals Prep Log/ Batch Summary

Prepared By: JRW

Prep Date: ~~08/06/09~~ 8/7/09 JRW

Due Date: 08/17/09

Lot	Work Order			Initial Weight/Volume
D9H060000 Water	**LHQK3**	B	Due Date: SDG:	50 mL
D9H060000 Water	**LHQK3**	C	Due Date: SDG:	50 mL
D9H050230 Water	**LHJ5J** Total		Due Date: 08/17/09 SDG:	50 mL
D9H050230 Water	**LHJ5J** Total	S	Due Date: 08/17/09 SDG:	50 mL
D9H050230 Water	**LHJ5J** Total	D	Due Date: 08/17/09 SDG:	50 mL
D9H050234 Water	**LHJ51** Total		Due Date: 08/17/09 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 8/10/09

8/11/09

METALS PREP SHEET
SOP: DEN-IP-0014

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Denver

TOTAL WATER DIGESTION FOR ICPMS (Prep code MS)

BATCH # 9218437 **ALLIQUOTTED BY:** JRW
PREP DATE: 8/7/2009 **DIGESTED BY:** JRW

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:

STANDARDS USED

Standard ID	Verification #	Exp. Date	Spike Amount	Pipette ID
2008Cal-1	STD-3775-09	6/23/10	100uL	15
2008Cal-2	STD-2637-09	5/1/10	100uL	15

REAGENTS USED

Reagent	Manufacturer	Lot #	Volume Used (mL)
HNO_3	JT Baker	H12022	3

TEMPERATURE CYCLES

Thermometer ID: 410 Block & Cup # : 3/22

Cycle	Start Time	Temperature (°C)	End Time	Temperature (°C)
HNO3	700	93	1115	92
HNO3	1130	92	1200	96
HNO3				

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

COMMENTS:

I certify that all information above is correct and complete.

Signature: JRW ***Date:*** 8/7/09

METALS
SAMPLE DATA
ICP-MS

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ICP-MS Standard and Spike True Values

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

All units are ug/L.

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

Quality Control Standards

ICV = Initial Calibration Verification (Second Source)
CCV = Continuing Calibration Verification
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank

TestAmerica Denver

Standards Preparation Logbook Record

Aug-10-2009

Logbook: \\Densvr06\StdsLog\metals.std

STD4841-08, 1000 Zn (Inorganic Ventures)

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-ZN02045 Vendor's Expiration Date: 10-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 09-04-2008 Date Received: 09-04-2008
Date Expires(1): 10-01-2009 (None)
Date Expires(2): 10-01-2009 (None)
(METALS)-Inventory ID: 779

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

STD6653-08, 1000 Se

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SE02003 Vendor's Expiration Date: 12-01-2009
Solvent: 2% HNO3
Date Prep./Opened: 11-25-2008 Date Received: 11-25-2008
Date Expires(1): 12-01-2009 (None)
Date Expires(2): 12-01-2009 (None)
(METALS)-Inventory ID: 803

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

STD1198-09, 1000 mg/L Sn

Analyst: trudelll

Vendor: Inorganic Ventures Lot No.: B2-SN02016 Vendor's Expiration Date: 03-01-2010
Solvent: 1% HNO3
Date Prep./Opened: 03-02-2009 Date Received: 03-02-2009
Date Expires(1): 03-01-2010 (None)
Date Expires(2): 03-01-2010 (None)
(METALS)-Inventory ID: 833

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

STD1853-09, 1 mg/l Se

Analyst: DIAZL

Solvent: 5% HN03 Lot No.: H02026 Volume (ml): 100.00
Date Prep./Opened: 04-01-2009
Date Expires(1): 12-01-2009 (1 Year)
pipette: Met 21

Parent Std No.: STD6653-08, 1000 Se — Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 12-01-2009 Parent Date Expires(2): 12-01-2009

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

STD3611-09, ICP-MS 1ppm Sn/Zn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 06-16-2009
Date Expires(1): 10-01-2009 (1 Year)

Parent Std No.: STD3609-09, ICP-MS 10 ppm Zn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 10-01-2009 Parent Date Expires(2): 10-01-2009

Component	Initial Conc (mg/L)	Final Conc (mg/L)
1000 Zn	10.000	1.0000

Parent Std No.: STD3610-09, ICP-MS 10 ppm Sn — Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 03-01-2010 Parent Date Expires(2): 03-01-2010

Component	Initial Conc (mg/L)	Final Conc (mg/L)
Sn	10.000	1.0000

STD4601-09, ICP-MS (024) INT STD BRC — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 250.00
Date Prep./Opened: 08-03-2009
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

STD4712-09, ICP-MS BLANK — Analyst: DIAZL

Solvent: Water — Volume (ml): 1,000.0
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (1 Month)
Date Verified: 12-31--4714 by - (Verification ID: 0)

Parent Std No.: STD4711-09, NITRIC ACID — Aliquot Amount (ml): 50.000

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

STD4713-09, ICP-MS 10 ppm Sn — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4714-09, ICP-MS 100 ppb cal — Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 — Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Expires(2): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3773-09, ICPMS 2008CAL-1 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures — Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: 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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4715-09, ICP-MS CCV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.2500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	50.000
Sb	20.000	50.000

Parent Std No.: STD3862-09, Iron Stock Aliquot Amount (ml): 0.2500

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Fe	1,000.0	2,500.0

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4716-09, ICP-MS RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
pipettes: Met 21 and Met 8

Parent Std No.: STD3611-09, ICP-MS 1ppm Sn/Zn Aliquot Amount (ml): 0.0900

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

Parent Std No.: STD4714-09, ICP-MS 100 ppb cal Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 08-11-2009

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

STD4717-09, ICP-MS AFCEE RL STD

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022

Volume (ml): 10.000

Date Prep./Opened: 08-10-2009

Date Expires(1): 08-11-2009 (2 Days)

pipettes: Met 20 and Met 8

Parent Std No.: STD4716-09, ICP-MS RL STD

Aliquot Amount (ml): 2.0000

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

STD4718-09, ICP-MS ICSA

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 09-10-2009 (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

STD4719-09, ICP-MS ICSAB

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 21, Met 20, and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.0500
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

Component	Initial Conc (mg/L)	Final Conc (ug/L)
Mo	20.000	100.00
Sb	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.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 0.1000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4720-09, ICPMS LR STD 1000 ppb

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (1 Day)
Date Verified: 12-31--4714 by - (Verification ID: 0)
pipettes: Met 20 and Met 8

Parent Std No.: STD3774-09, ICPMS 2008CAL-2 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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.: STD3775-09, ICPMS 2008CAL-1 Inorganic Ventures Aliquot Amount (ml): 0.5000
Parent Date Expires(1): 06-23-2010 Parent Date Expires(2): 07-01-2010

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

Parent Std No.: STD4713-09, ICP-MS 10 ppm Sn Aliquot Amount (ml): 1.0000
Parent Date Expires(1): 08-11-2009 Parent Date Expires(2): 03-01-2010

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

STD4721-09, ICPMS ICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 10.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4722-09, ALTSe

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 50.000
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

STD4723-09, LLCCV/RLICV

Analyst: DIAZL

Solvent: 5% HNO3 Lot No.: H12022 Volume (ml): 100.00
Date Prep./Opened: 08-10-2009
Date Expires(1): 08-11-2009 (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

Reviewed By: LRD 08/10/2009 File AG0810009A

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
3	Cal Blank				1.0	08/10/09 18:06		☐
4	100 ppb				1.0	08/10/09 18:09		☐
5	ICV				1.0	08/10/09 18:12		☐
6	RLIV				1.0	08/10/09 18:15		☐
7	ICB				1.0	08/10/09 18:17		☐
8	RL STD				1.0	08/10/09 18:20		☐
9	AFCEE RL				1.0	08/10/09 18:23		☐
10	ALTSe				1.0	08/10/09 18:26		☐
11	ICSA				1.0	08/10/09 18:28		☐
12	ICSAB				1.0	08/10/09 18:31		☐
13	RINSE				1.0	08/10/09 18:34		☐
14	LR				1.0	08/10/09 18:36		☐
15	RINSE				1.0	08/10/09 18:39		☐
16	CCV				1.0	08/10/09 18:42		☐
17	CCB				1.0	08/10/09 18:45		☐
18	RLCV				1.0	08/10/09 18:47		☐
19	~~LG9KP~~	~~D9G300165-1~~	~~9215182~~	~~04~~	~~1.0~~	~~08/10/09 18:50~~	KF 8/11/09 Did not use.	☐
20	CCV				1.0	08/10/09 18:53		☐
21	CCB				1.0	08/10/09 18:55		☐
22	RLCV				1.0	08/10/09 18:58		☐
23	LG8F7	D9G290252-1	9212201	46	1.0	08/10/09 19:01		☐
24	LG8F7P5	D9G290252	9212201		5.0	08/10/09 19:04		☐
25	LG8F7Z	D9G290252-1	9212201		1.0	08/10/09 19:06		☐
26	LG8F7S	D9G290252-1	9212201	46	1.0	08/10/09 19:09		☐
27	LG8F7D	D9G290252-1	9212201	46	1.0	08/10/09 19:12		☐
28	CCV				1.0	08/10/09 19:15		☐
29	CCB				1.0	08/10/09 19:17		☐
30	RLCV				1.0	08/10/09 19:20		☐
31	~~LHFL0B~~	~~D9H030000~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:23~~		☐
32	LHFL0C	D9H030000	9215265	46	1.0	08/10/09 19:26		☐
33	~~LHA17~~	~~D9G300337-1~~	~~9215265~~	~~46~~	~~1.0~~	~~08/10/09 19:28~~	KF 8/11/09 Did not use.	☐
34	CCV				1.0	08/10/09 19:31		☐
35	CCB				1.0	08/10/09 19:34		☐
36	RLCV				1.0	08/10/09 19:37		☐
37	LG86WB	D9G300000	9211083	04	1.0	08/10/09 19:39		☐
38	LG86WC	D9G300000	9211083	04	1.0	08/10/09 19:42		☐
39	LG8K3	D9G290261-1	9211083	04	1.0	08/10/09 19:45		☐
40	LG8LE	D9G290261-3	9211083	04	1.0	08/10/09 19:48		☐
41	LG8LF	D9G290261-4	9211083	04	1.0	08/10/09 19:50		☐
42	LG8LH	D9G290261-5	9211083	04	1.0	08/10/09 19:53		☐
43	LG8LJ	D9G290261-6	9211083	04	1.0	08/10/09 19:56		☐
44	LG8LK	D9G290261-7	9211083	04	1.0	08/10/09 19:59		☐
45	CCV				1.0	08/10/09 20:01		☐
46	CCB				1.0	08/10/09 20:04		☐
47	RLCV				1.0	08/10/09 20:07		☐
48	LG8LKP5	D9G290261	9211083		5.0	08/10/09 20:10		☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
49	LG8LKZ	D9G290261-7	9211083		1.0	08/10/09 20:12		
50	LG8LKS	D9G290261-7	9211083	04	1.0	08/10/09 20:15		
51	LG8LKD	D9G290261-7	9211083	04	1.0	08/10/09 20:18		
52	LG8LL	D9G290261-8	9211083	04	1.0	08/10/09 20:20		
53	LG8LM	D9G290261-9	9211083	04	1.0	08/10/09 20:23		
54	LG8LN	D9G290261-10	9211083	04	1.0	08/10/09 20:26		
55	LG8LP	D9G290261-11	9211083	04	1.0	08/10/09 20:29		
56	CCV				1.0	08/10/09 20:32		
57	CCB				1.0	08/10/09 20:34		
58	RLCV				1.0	08/10/09 20:37		
59	LG7LLB	D9G290000	9210208	46	1.0	08/10/09 20:40		
60	LG7LLC	D9G290000	9210208	46	1.0	08/10/09 20:42		
61	LG3FP	D9G240333-2	9210208	U1	1.0	08/10/09 20:45		
62	LG3FR	D9G240333-3	9210209	U1	1.0	08/10/09 20:48		
63	LG3FRP5	D9G240333	9210209		5.0	08/10/09 20:51		
64	LG3FRZ	D9G240333-3	9210209		1.0	08/10/09 20:53		
65	LG3FRS	D9G240333-3	9210209	U1	1.0	08/10/09 20:56		
66	CCV				1.0	08/10/09 20:59		
67	CCB				1.0	08/10/09 21:01		
68	RLCV				1.0	08/10/09 21:04		
69	LG3FRD	D9G240333-3	9210209	U1	1.0	08/10/09 21:07		
70	LG3FV	D9G240333-4	9210208	U1	1.0	08/10/09 21:09		
71	LG3FX	D9G240333-5	9210208	U1	1.0	08/10/09 21:12		
72	LG6XM	D9G240333-12	9210209	U1	1.0	08/10/09 21:15		
73	LG6XV	D9G240333-13	9210209	U1	1.0	08/10/09 21:18		
74	LG6XW	D9G240333-14	9210208	U1	1.0	08/10/09 21:20		
75	LG6X0	D9G240333-15	9210208	U1	1.0	08/10/09 21:23		
76	CCV				1.0	08/10/09 21:26		
77	CCB				1.0	08/10/09 21:28		
78	RLCV				1.0	08/10/09 21:31		
79	RINSE				1.0	08/10/09 21:34		
80	RINSE				1.0	08/10/09 21:37		
81	RINSE				1.0	08/10/09 21:39		
82	RINSE				1.0	08/10/09 21:42		
83	RINSE				1.0	08/10/09 21:45		
84	RINSE				1.0	08/10/09 21:48		
85	Cal Blank				1.0	08/10/09 21:50	K.L. 8/11/09	
86	Cal Blank				1.0	08/10/09 21:53		
87	100 ppb				1.0	08/10/09 21:56		
88	CCV				1.0	08/10/09 21:58		
89	CCB				1.0	08/10/09 22:01		
90	RLCV				1.0	08/10/09 22:04		
91	ICSA				1.0	08/10/09 22:07		
92	ICSAB				1.0	08/10/09 22:09		
93	WASH				1.0	08/10/09 22:12		
94	CCV				1.0	08/10/09 22:15		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 10:33:12

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
95	CCB				1.0	08/10/09 22:18		
96	RLCV				1.0	08/10/09 22:20		
97	LHFD8B	D9H030000	9215165	MS	1.0	08/10/09 22:23		
98	LHFD8C	D9H030000	9215165	MS	1.0	08/10/09 22:26		
99	LHEPK	D9H010152-2	9215165	MS	1.0	08/10/09 22:29		
100	LHEPKP5	D9H010152	9215165		5.0	08/10/09 22:31		
101	LHEPKZ	D9H010152-2	9215165		1.0	08/10/09 22:34		
102	LHEPL	D9H010152-3	9215165	MS	1.0	08/10/09 22:37		
103	LHEPM	D9H010152-4	9215165	MS	1.0	08/10/09 22:39		
104	CCV				1.0	08/10/09 22:42		
105	CCB				1.0	08/10/09 22:45		
106	RLCV				1.0	08/10/09 22:48		
107	~~LHH8KBF~~	~~D9H050000~~	~~9217128~~	~~MD~~	~~1.0~~	~~08/10/09 22:51~~		
108	LHH8KCF	D9H050000	9217128	MD	1.0	08/10/09 22:53		
109	LHG1RF	D9H040187-2	9217128	MD	1.0	08/10/09 22:56		
110	LHG1RP5F	D9H040187	9217128		5.0	08/10/09 22:59		
111	LHG1RZF	D9H040187-2	9217128		1.0	08/10/09 23:02		
112	LHG1RSF	D9H040187-2	9217128	MD	1.0	08/10/09 23:04		
113	LHG1RDF	D9H040187-2	9217128	MD	1.0	08/10/09 23:07		
114	CCV				1.0	08/10/09 23:10		
115	CCB				1.0	08/10/09 23:13		
116	RLCV				1.0	08/10/09 23:15		
117	LHH8TB	D9H050000	9217132	MS	1.0	08/10/09 23:18		
118	LHH8TC	D9H050000	9217132	MS	1.0	08/10/09 23:21		
119	LHG1P 5X	D9H040187-1	9217132	MS	5.0	08/10/09 23:24		
120	LHG1PP25	D9H040187	9217132		25.0	08/10/09 23:26		
121	RINSE				1.0	08/10/09 23:32		
122	RINSE				1.0	08/10/09 23:34		
123	RINSE				1.0	08/10/09 23:37		
124	RINSE				1.0	08/10/09 23:40		
125	RINSE				1.0	08/10/09 23:43		
126	RINSE				1.0	08/10/09 23:45		
127	~~Cal Blank~~				~~1.0~~	~~08/10/09 23:48~~	KF 8/11/09 Did not use.	
128	Cal Blank				1.0	08/10/09 23:51		
129	100 ppb				1.0	08/10/09 23:54		
130	CCV				1.0	08/10/09 23:56		
131	CCB				1.0	08/10/09 23:59		
132	RLCV				1.0	08/11/09 00:02		
133	LHH8KBF	D9H050000	9217128	MD	1.0	08/11/09 00:05		
134	LHH8KCF	D9H050000	9217128	MD	1.0	08/11/09 00:07		
135	LHG1RF 10X	D9H040187-2	9217128	MD	10.0	08/11/09 00:10		
136	LHG1RP50F	D9H040187	9217128		50.0	08/11/09 00:13		
137	LHG1RZF	D9H040187-2	9217128		1.0	08/11/09 00:16		
138	LHG1RSF 1(	D9H040187-2	9217128	MD	10.0	08/11/09 00:18		
139	LHG1RDF 1(	D9H040187-2	9217128	MD	10.0	08/11/09 00:21		
140	CCV				1.0	08/11/09 00:24		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst: TEL**

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
141	CCB				1.0	08/11/09 00:27		
142	RLCV				1.0	08/11/09 00:29		
143	LHH8TB	D9H050000	9217132	MS	1.0	08/11/09 00:32		
144	LHH8TC	D9H050000	9217132	MS	1.0	08/11/09 00:35		
145	LHG1P 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:38		
146	LHG1PP50	D9H040187	9217132		50.0	08/11/09 00:41		
147	LHG1PZ	D9H040187-1	9217132		1.0	08/11/09 00:43		
148	LHG1PS 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:46		
149	LHG1PD 10X	D9H040187-1	9217132	MS	10.0	08/11/09 00:49		
150	LHG21 20X	D9H040190-1	9217132	MS	20.0	08/11/09 00:51		
151	CCV				1.0	08/11/09 00:54		
152	CCB				1.0	08/11/09 00:57		
153	RLCV				1.0	08/11/09 01:00		
154	LHQK3B	D9H060000	9218437	MS	1.0	08/11/09 01:03		
155	LHQK3C	D9H060000	9218437	MS	1.0	08/11/09 01:05		
156	LHJ5J	D9H050230-1	9218437	MS	1.0	08/11/09 01:08		
157	LHJ5JP5	D9H050230	9218437		5.0	08/11/09 01:11		
158	LHJ5JZ	D9H050230-1	9218437		1.0	08/11/09 01:14		
159	LHJ5JS	D9H050230-1	9218437	MS	1.0	08/11/09 01:16		
160	LHJ5JD	D9H050230-1	9218437	MS	1.0	08/11/09 01:19		
161	LHJ51	D9H050234-1	9218437	MS	1.0	08/11/09 01:22		
162	CCV				1.0	08/11/09 01:25		
163	CCB				1.0	08/11/09 01:27		
164	RLCV				1.0	08/11/09 01:30		
165	~~RINSE~~				1.0	~~08/11/09 01:33~~		
166	RINSE				1.0	~~08/11/09~~ 01:35		
167	RINSE				1.0	08/11/09 01:38		
168	RINSE				1.0	08/11/09 01:41		
169	RINSE				1.0	08/11/09 01:44		
170	RINSE				1.0	08/11/09 01:46		
171	~~Cal Blank~~				1.0	~~08/11/09 01:49~~	KS 8/11/09	
172	Cal Blank				1.0	08/11/09 01:52		
173	100 ppb				1.0	08/11/09 01:55		
174	CCV				1.0	08/11/09 01:57		
175	CCB				1.0	08/11/09 02:00		
176	RLCV				1.0	08/11/09 02:03		
177	LHT80BF	D9H080000	9220058	MD	1.0	08/11/09 02:06		
178	LHT80CF	D9H080000	9220058	MD	1.0	08/11/09 02:08		
179	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:11		
180	LHQGCP5F	D9H060361	9220058		5.0	08/11/09 02:14		
181	LHQGCZF	D9H060361-2	9220058		1.0	08/11/09 02:17		
182	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:19		
183	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:22		
184	CCV				1.0	08/11/09 02:25		
185	CCB				1.0	08/11/09 02:28		
186	RLCV				1.0	08/11/09 02:30		

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
187	LHQGCF	D9H060361-2	9220058	MD	1.0	08/11/09 02:33	For confirmation only. FF 8/11/09	☐
188	LHQGCSF	D9H060361-2	9220058	MD	1.0	08/11/09 02:36		☐
189	LHQGCDF	D9H060361-2	9220058	MD	1.0	08/11/09 02:39		☐
190	CCV				1.0	08/11/09 02:41		☐
191	CCB				1.0	08/11/09 02:44		☐
192	RLCV				1.0	08/11/09 02:47		☐
193	~~LHTW6B~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:50~~		☐
194	~~LHTW6C~~	~~D9H080000~~	~~9220029~~	~~MS~~	~~1.0~~	~~08/11/09 02:52~~	FF 8/11/09 Did not use.	☐
195	LHTW6B	D9H080000	9220029	MS	1.0	08/11/09 02:55		☐
196	LHTW6C	D9H080000	9220029	MS	1.0	08/11/09 02:58		☐
197	CCV				1.0	08/11/09 03:01		☐
198	CCB				1.0	08/11/09 03:04		☐
199	RLCV				1.0	08/11/09 03:06		☐
200	LHLPQ	D9H060174-1	9220029	MS	1.0	08/11/09 03:09		☐
201	LHLP9	D9H060174-2	9220029	MS	1.0	08/11/09 03:12		☐
202	LHLQF	D9H060174-3	9220029	MS	1.0	08/11/09 03:15		☐
203	LHLQG	D9H060174-4	9220029	MS	1.0	08/11/09 03:17		☐
204	LHLQH	D9H060174-5	9220029	MS	1.0	08/11/09 03:20		☐
205	LHLQJ	D9H060174-6	9220029	MS	1.0	08/11/09 03:23		☐
206	CCV				1.0	08/11/09 03:26		☐
207	CCB				1.0	08/11/09 03:29		☐
208	RLCV				1.0	08/11/09 03:31		☐
209	LHREN	D9H070161-1	9220029	MS	1.0	08/11/09 03:34		☐
210	LHRENP5	D9H070161	9220029		5.0	08/11/09 03:37		☐
211	LHRENZ	D9H070161-1	9220029		1.0	08/11/09 03:40		☐
212	LHRENS	D9H070161-1	9220029	MS	1.0	08/11/09 03:42		☐
213	LHREND	D9H070161-1	9220029	MS	1.0	08/11/09 03:45		☐
214	LHRFD	D9H070161-2	9220029	MS	1.0	08/11/09 03:48		☐
215	LHRFF	D9H070161-3	9220029	MS	1.0	08/11/09 03:51		☐
216	LHRGP	D9H070161-4	9220029	MS	1.0	08/11/09 03:53		☐
217	CCV				1.0	08/11/09 03:56		☐
218	CCB				1.0	08/11/09 03:59		☐
219	RLCV				1.0	08/11/09 04:02		☐
220	LHRGR	D9H070161-5	9220029	MS	1.0	08/11/09 04:05		☐
221	LHRGV	D9H070161-6	9220029	MS	1.0	08/11/09 04:07		☐
222	LHRGW	D9H070161-7	9220029	MS	1.0	08/11/09 04:10		☐
223	LHRGX	D9H070161-8	9220029	MS	1.0	08/11/09 04:13		☐
224	LHRG1	D9H070161-9	9220029	MS	1.0	08/11/09 04:16		☐
225	LHRG2	D9H070161-10	9220029	MS	1.0	08/11/09 04:19		☐
226	LHRG6	D9H070161-11	9220029	MS	1.0	08/11/09 04:21		☐
227	CCV				1.0	08/11/09 04:24		☐
228	CCB				1.0	08/11/09 04:27		☐
229	RLCV				1.0	08/11/09 04:30		☐
230	~~RINSE~~				~~1.0~~	~~08/11/09 04:32~~		☐
231	RINSE				1.0	08/11/09 04:35		☐
232	~~RINSE~~				~~1.0~~	~~08/11/09 04:38~~	FF 8/11/09	☐

Denver

RUN SUMMARY

Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
233	~~RINSE~~				1.0	~~08/11/09 04:41~~		
234	RINSE				1.0	08/11/09 04:43		
235	RINSE				1.0	08/11/09 04:46		
236	~~Cal Blank~~				1.0	~~08/11/09 04:49~~	KT 8/11/09	
237	Cal Blank				1.0	08/11/09 04:52		
238	100 ppb				1.0	08/11/09 04:54		
239	CCV				1.0	08/11/09 04:57		
240	CCB				1.0	08/11/09 05:00		
241	RLCV				1.0	08/11/09 05:03		
242	LHT3RBF	D9H080000	9220042	MD	1.0	08/11/09 05:05		
243	LHT3RCF	D9H080000	9220042	MD	1.0	08/11/09 05:08		
244	LHJ0JF	D9H050209-1	9220042	MD	1.0	08/11/09 05:11		
245	LHJ02F	D9H050209-2	9220042	MD	1.0	08/11/09 05:14		
246	LHJ02P5F	D9H050209	9220042		5.0	08/11/09 05:17		
247	LHJ02ZF	D9H050209-2	9220042		1.0	08/11/09 05:19		
248	LHJ02SF	D9H050209-2	9220042	MD	1.0	08/11/09 05:22		
249	LHJ02DF	D9H050209-2	9220042	MD	1.0	08/11/09 05:25		
250	LHKEWF	D9H050209-4	9220042	MD	1.0	08/11/09 05:28		
251	CCV				1.0	08/11/09 05:30		
252	CCB				1.0	08/11/09 05:33		
253	RLCV				1.0	08/11/09 05:36		
254	LHT4NB	D9H080000	9220047	MS	1.0	08/11/09 05:39		
255	LHT4NC	D9H080000	9220047	MS	1.0	08/11/09 05:42		
256	LHJ08	D9H050209-3	9220047	MS	1.0	08/11/09 05:44		
257	LHKE1	D9H050209-5	9220047	MS	1.0	08/11/09 05:47		
258	LHKE1P5	D9H050209	9220047		5.0	08/11/09 05:50		
259	LHKE1Z	D9H050209-5	9220047		1.0	08/11/09 05:53		
260	LHKE1S	D9H050209-5	9220047	MS	1.0	08/11/09 05:55		
261	LHKE1D	D9H050209-5	9220047	MS	1.0	08/11/09 05:58		
262	CCV				1.0	08/11/09 06:01		
263	CCB				1.0	08/11/09 06:04		
264	RLCV				1.0	08/11/09 06:06		
265	LHT9RB	D9H080000	9220064	04	1.0	08/11/09 06:09		
266	LHT9RC	D9H080000	9220064	04	1.0	08/11/09 06:12		
267	LHJGD	D9H050137-5	9220064	04	1.0	08/11/09 06:15		
268	LHJGDP5	D9H050137	9220064		5.0	08/11/09 06:18		
269	LHJGDZ	D9H050137-5	9220064		1.0	08/11/09 06:20		
270	LHJGDS	D9H050137-5	9220064	04	1.0	08/11/09 06:23		
271	LHJGDD	D9H050137-5	9220064	04	1.0	08/11/09 06:26		
272	LHR5A	D9H070252-1	9220064	04	1.0	08/11/09 06:29		
273	CCV				1.0	08/11/09 06:31		
274	CCB				1.0	08/11/09 06:34		
275	RLCV				1.0	08/11/09 06:37		
276	~~LHT0GB~~	~~D9H080000~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:40~~		
277	LHT0GC	D9H080000	9220033	MS	1.0	08/11/09 06:43		
278	~~LHMHR~~	~~D9H060214-1~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:45~~	KT 8/11/09 Did not use R.	

Denver

RUN SUMMARY

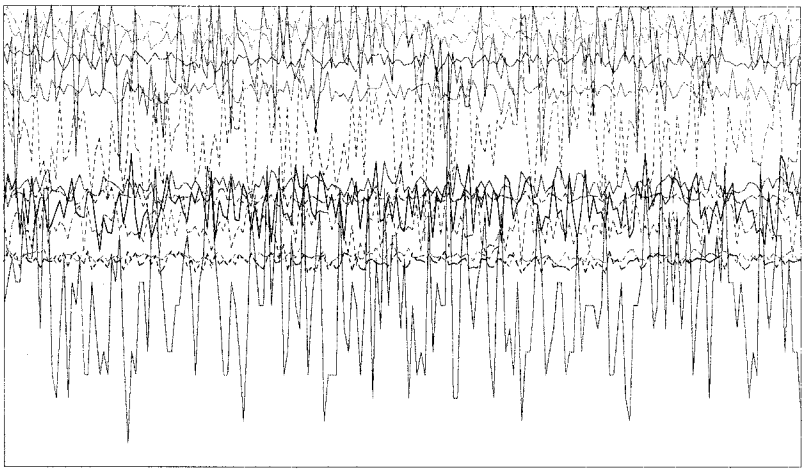
Method: 6020 (ICP/MS) | ICPMS_024 (024) | Reported: 08/11/09 11:25:08

File ID: AG081009A **Analyst:** TEL

#	Sample ID	Lot No.	Batch		DF	Analyzed Date	Comment	Q
279	~~LHMLH~~	~~D9H060214-2~~	~~9220033~~	~~MS~~	~~1.0~~	~~08/11/09 06:48~~		☐
280	LHMN6	D9H060214-3	9220033	MS	1.0	08/11/09 06:51		☐
281	LHTDQ	D9H070289-1	9220033	MS	1.0	08/11/09 06:54		☐
282	LHTDW	D9H070289-2	9220033	MS	1.0	08/11/09 06:57		☐
283	CCV				1.0	08/11/09 06:59		☐
284	CCB				1.0	08/11/09 07:02		☐
285	RLCV				1.0	08/11/09 07:05		☐
286	LHTD0	D9H070289-3	9220033	MS	1.0	08/11/09 07:08		☐
287	LHTD0P5	D9H070289	9220033		5.0	08/11/09 07:10		☐
288	LHTD0Z	D9H070289-3	9220033		1.0	08/11/09 07:13		☐
289	LHTD0S	D9H070289-3	9220033	MS	1.0	08/11/09 07:16		☐
290	LHTD0D	D9H070289-3	9220033	MS	1.0	08/11/09 07:19		☐
291	LHTD1	D9H070289-4	9220033	MS	1.0	08/11/09 07:22		☐
292	CCV				1.0	08/11/09 07:24		☐
293	CCB				1.0	08/11/09 07:27		☐
294	~~RLCV~~				~~1.0~~	~~08/11/09 07:30~~	KF 8/11/09 Did not use.	☐

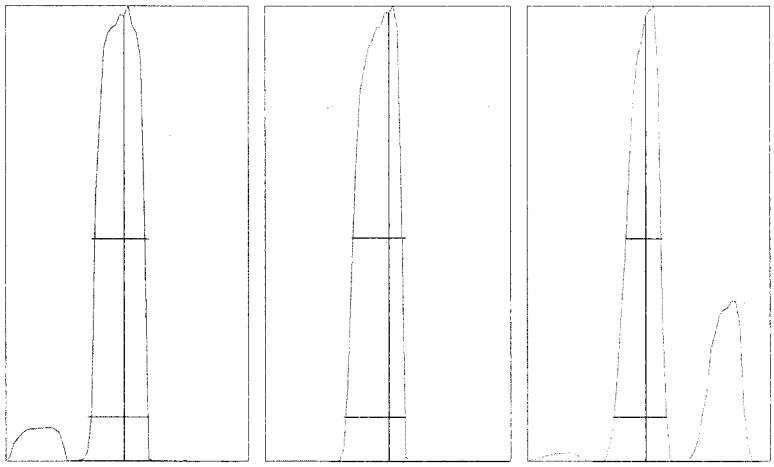
Tune Report

Tune File : NORM.U
Comment :



Integration Time: 0.1000 sec
Sampling Period: 1.5300 sec
n: 200
Oxide: 156/140 1.280%
Doubly Charged: 70/140 1.306%

m/z	Range	Count	Mean	RSD%	Background
6	2,000	1277.0	1212.6	3.29	2.10
7	20,000	16661.0	16295.0	2.25	1.60
59	20,000	18792.0	18605.1	2.34	0.90
63	100	91.0	90.0	11.00	1.10
70	500	302.0	283.2	7.74	1.50
75	20	2.0	7.2	40.14	1.20
78	500	273.0	260.8	6.33	1.50
89	50,000	22278.0	22756.3	1.97	2.30
115	20,000	19390.0	19268.7	1.88	2.60
118	100	77.0	72.2	12.54	2.60
137	5,000	2253.0	2223.9	2.70	2.80
205	20,000	11452.0	11648.2	1.84	3.60
238	20,000	17180.0	17622.9	1.55	4.60
156/140	2	1.240%	1.301%	7.97	
70/140	2	1.528%	1.441%	7.98	



m/z:	7	89	205
Height:	16,281	23,001	11,900
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.65	0.45
W-10%:	0.7500	0.7500	0.6500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : NORM.U
Comment :

Tuning Parameters

===Plasma Condition===				===Ion Lenses===				===Q-Pole Parameters===			
RF Power	:	1550	W	Extract 1	:	0	V	AMU Gain	:	133	
RF Matching	:	1.7	V	Extract 2	:	-175	V	AMU Offset	:	123	
Smpl Depth	:	7.5	mm	Omega Bias-ce	:	-34	V	Axis Gain	:	1.0006	
Torch-H	:	-0.8	mm	Omega Lens-ce	:	1	V	Axis Offset	:	-0.03	
Torch-V	:	-0.3	mm	Cell Entrance	:	-30	V	QP Bias	:	-1	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	:	1720	V
Sample Pump	:	---	rps	OctP RF	:	180	V	Pulse HV	:	1390	V
S/C Temp	:	2	degC	OctP Bias	:	-18	V				

===Reaction Cell===

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

P/A Factor Tuning Report

Acquired:Aug 10 2009 05:25 pm

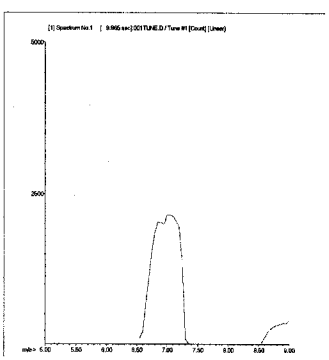
Mass[amu]	Element	P/A Factor
6	Li	0.059224
7	(Li)	Sensitivity too low
9	Be	0.065939
45	Sc	0.077958
51	V	0.079670
52	Cr	0.081495
53	(Cr)	Sensitivity too low
55	Mn	0.082881
59	Co	0.084650
60	Ni	0.085888
63	Cu	0.087500
66	Zn	0.087183
72	Ge	0.086826
75	As	0.086085
77	(Se)	Sensitivity too low
78	Se	Sensitivity too low
82	(Se)	Sensitivity too low
83	(Se)	Sensitivity too low
95	Mo	0.087962
98	(Mo)	0.087439
99	(Mo)	0.088211
106	(Cd)	0.090424
107	Ag	Sensitivity too low
108	(Cd)	0.090963
111	Cd	0.090902
114	Cd	0.090659
115	In	0.089830
118	Sn	0.090118
121	Sb	0.090217
137	Ba	Sensitivity too low
165	Ho	Sensitivity too low
205	Tl	0.095902
206	(Pb)	0.095184
207	(Pb)	0.095217
208	Pb	0.094502
232	Th	0.093768
238	U	0.093910

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

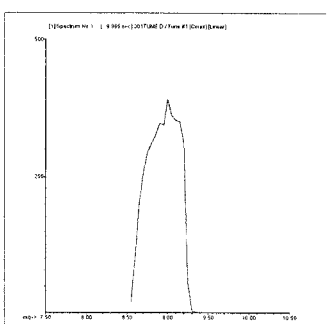
200.8 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D
Date Acquired: Aug 10 2009 06:01 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	23394	23373	23283	23262	23454	23596	0.58	5.00	
9 Be	4040	4033	4013	4046	4048	4060	0.44	5.00	
24 Mg	27733	27886	27740	27593	28101	27346	1.03	5.00	
59 Co	126100	128137	127946	123341	126160	124916	1.61	5.00	
115 In	1508105	1512323	1511531	1497483	1509610	1509575	0.40	5.00	
208 Pb	69191	70426	69382	67952	68926	69270	1.29	5.00	
238 U	126765	128734	126188	125493	127220	126189	1.00	5.00	

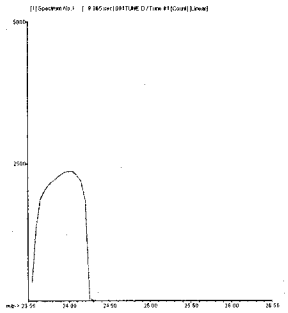


7 Li
Mass Calib.
Actual: 7.05
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



9 Be
Mass Calib.
Actual: 9.05
Required: 8.90 - 9.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:

C:\ICPCHEM\1\DATA\AG081009A.B\001TUNE.D



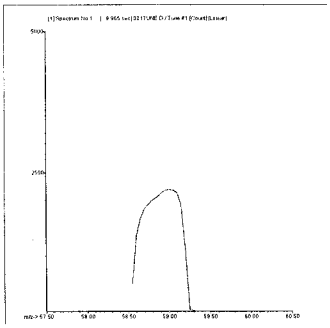
24 Mg

Mass Calib.

Actual: 24.00
Required: 23.90 - 24.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



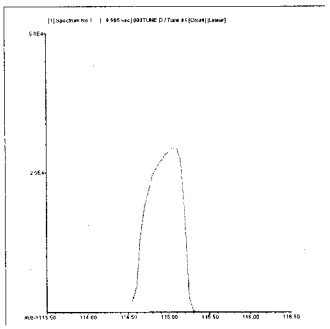
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



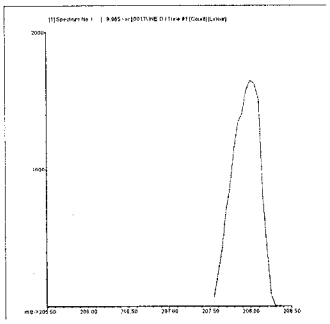
115 In

Mass Calib.

Actual: 115.05
Required: 114.90 - 115.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



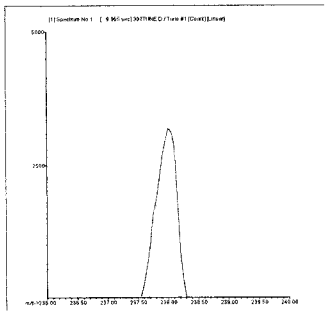
208 Pb

Mass Calib.

Actual: 208.00
Required: 207.90 - 208.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



238 U

Mass Calib.

Actual: 238.00
Required: 237.90 - 238.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:

Tune Result: Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\002CALB.D\002CALB.D#
Date Acquired: Aug 10 2009 06:04 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	354	31.69
52	Cr	72	1	4124	6.07
55	Mn	72	1	670	21.99
59	Co	72	1	70	14.29
60	Ni	72	1	117	21.57
63	Cu	72	1	557	9.22
66	Zn	72	1	2610	2.26
75	As	72	1	71	6.54
78	Se	72	1	770	11.10
95	Mo	72	1	70	37.80
107	Ag	115	1	17	34.64
111	Cd	115	1	30	71.04
118	Sn	115	1	417	12.08
121	Sb	115	1	17	34.64
137	Ba	115	1	41	16.88
205	Tl	165	1	118	27.20
208	Pb	165	1	282	3.80
232	Th	165	1	200	5.00
238	U	165	1	113	5.88

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	392728	0.47
45	Sc	1	2428129	0.41
72	Ge	1	1115573	2.35
115	In	1	2711701	0.96
165	Ho	1	3799176	0.71

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

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#
Date Acquired: Aug 10 2009 06:06 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: Aug 10 2009 06:04 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	27	1017.20
52	Cr	72	1	3697	2.89
55	Mn	72	1	787	17.81
59	Co	72	1	37	56.77
60	Ni	72	1	467	11.80
63	Cu	72	1	650	9.23
66	Zn	72	1	885	2.73
75	As	72	1	65	15.87
78	Se	72	1	777	16.10
95	Mo	72	1	40	43.30
107	Ag	115	1	3	173.21
111	Cd	115	1	23	56.18
118	Sn	115	1	1010	5.24
121	Sb	115	1	28	48.50
137	Ba	115	1	14	70.50
205	Tl	165	1	81	10.34
208	Pb	165	1	252	5.34
232	Th	165	1	177	8.65
238	U	165	1	26	7.53

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	394687	0.94
45	Sc	1	2446753	1.77
72	Ge	1	1125847	1.05
115	In	1	2719186	2.09
165	Ho	1	3817349	0.25

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\AG081009A.B\004ICAL.D\004ICAL.D#
Date Acquired: Aug 10 2009 06:09 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: Aug 10 2009 06:07 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	65842	1.17
51	V	72	1	1535619	1.04
52	Cr	72	1	1532297	0.65
55	Mn	72	1	1633772	1.58
59	Co	72	1	1921710	0.85
60	Ni	72	1	447209	0.74
63	Cu	72	1	1073527	1.19
66	Zn	72	1	208832	1.11
75	As	72	1	179835	0.69
78	Se	72	1	30180	2.46
95	Mo	72	1	467956	0.64
107	Ag	115	1	1296538	0.46
111	Cd	115	1	242181	1.30
118	Sn	115	1	666189	0.27
121	Sb	115	1	760929	0.70
137	Ba	115	1	315160	1.02
205	Tl	165	1	1960793	0.44
208	Pb	165	1	2698115	0.18
232	Th	165	1	2387349	2.74
238	U	165	1	2722294	0.55

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	387659	0.67	394687	98.2	30 - 120	
45	Sc	1	2412509	0.93	2446753	98.6	30 - 120	
72	Ge	1	1107652	0.44	1125847	98.4	30 - 120	
115	In	1	2709456	1.18	2719186	99.6	30 - 120	
165	Ho	1	3829303	0.52	3817349	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\AG081009A.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\AG081009A.B\005 ICV.D\005 ICV.D#
Date Acquired: Aug 10 2009 06:12 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: Aug 10 2009 06:10 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	40.48	ppb	1.00	40	101.2	90 - 110	
51 V	72	1	39.31	ppb	0.98	40	98.3	90 - 110	
52 Cr	72	1	39.86	ppb	0.82	40	99.7	90 - 110	
55 Mn	72	1	39.36	ppb	0.49	40	98.4	90 - 110	
59 Co	72	1	39.81	ppb	1.21	40	99.5	90 - 110	
60 Ni	72	1	40.33	ppb	1.20	40	100.8	90 - 110	
63 Cu	72	1	39.84	ppb	0.87	40	99.6	90 - 110	
66 Zn	72	1	40.26	ppb	0.39	40	100.7	90 - 110	
75 As	72	1	39.99	ppb	0.13	40	100.0	90 - 110	
78 Se	72	1	41.87	ppb	3.08	40	104.7	90 - 110	
95 Mo	72	1	39.49	ppb	0.68	40	98.7	90 - 110	
107 Ag	115	1	39.86	ppb	0.43	40	99.7	90 - 110	
111 Cd	115	1	40.83	ppb	1.84	40	102.1	90 - 110	
118 Sn	115	1	39.26	ppb	1.02	40	98.2	90 - 110	
121 Sb	115	1	39.12	ppb	1.36	40	97.8	90 - 110	
137 Ba	115	1	40.11	ppb	0.69	40	100.3	90 - 110	
205 Tl	165	1	40.87	ppb	1.42	40	102.2	90 - 110	
208 Pb	165	1	40.72	ppb	1.25	40	101.8	90 - 110	
232 Th	165	1	44.35	ppb	1.41	40	110.9	90 - 110	Fail
238 U	165	1	40.53	ppb	0.56	40	101.3	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	386356	0.92	394687	97.9	30 - 120	
45 Sc	1	2392521	0.40	2446753	97.8	30 - 120	
72 Ge	1	1110457	0.44	1125847	98.6	30 - 120	
115 In	1	2702975	0.93	2719186	99.4	30 - 120	
165 Ho	1	3868261	0.70	3817349	101.3	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\AG081009A.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\AG081009A.B\006WASH.D\006WASH.D#
Date Acquired: Aug 10 2009 06:15 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: Aug 10 2009 06:10 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	0.962 ppb	11.83	1.30	
51 V	72	1	5.098 ppb	0.72	6.50	
52 Cr	72	1	2.153 ppb	0.77	2.60	
55 Mn	72	1	1.013 ppb	1.93	1.30	
59 Co	72	1	1.046 ppb	1.77	1.30	
60 Ni	72	1	2.036 ppb	1.65	2.60	
63 Cu	72	1	2.079 ppb	2.63	2.60	
66 Zn	72	1	10.260 ppb	0.96	13.00	
75 As	72	1	5.112 ppb	0.38	6.50	
78 Se	72	1	4.868 ppb	3.66	6.50	
95 Mo	72	1	2.199 ppb	4.71	2.60	
107 Ag	115	1	5.190 ppb	1.63	6.50	
111 Cd	115	1	1.068 ppb	0.77	1.30	
118 Sn	115	1	10.230 ppb	1.10	13.00	
121 Sb	115	1	2.192 ppb	0.80	2.60	
137 Ba	115	1	1.075 ppb	3.75	1.30	
205 Tl	165	1	1.158 ppb	2.36	1.30	
208 Pb	165	1	1.072 ppb	0.99	1.30	
232 Th	165	1	3.344 ppb	3.13	2.60	
238 U	165	1	1.105 ppb	2.11	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	389518	0.53	394687	98.7	30 - 120	
45 Sc	1	2376989	0.76	2446753	97.1	30 - 120	
72 Ge	1	1099932	0.58	1125847	97.7	30 - 120	
115 In	1	2703766	0.89	2719186	99.4	30 - 120	
165 Ho	1	3816929	0.48	3817349	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\AG081009A.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\AG081009A.B\007 ICB.D\007 ICB.D#
Date Acquired: Aug 10 2009 06:17 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: Aug 10 2009 06:10 pm
Sample Type: ICB
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.01	ppb	173.20	1.00	
51 V	72	1	-0.02	ppb	72.65	1.00	
52 Cr	72	1	-0.01	ppb	390.62	1.00	
55 Mn	72	1	0.00	ppb	32.99	1.00	
59 Co	72	1	0.00	ppb	37.13	1.00	
60 Ni	72	1	-0.06	ppb	2.11	1.00	
63 Cu	72	1	0.01	ppb	55.65	1.00	
66 Zn	72	1	-0.22	ppb	10.19	1.00	
75 As	72	1	0.00	ppb	277.73	1.00	
78 Se	72	1	0.20	ppb	31.96	1.00	
95 Mo	72	1	0.02	ppb	49.17	1.00	
107 Ag	115	1	0.01	ppb	24.84	1.00	
111 Cd	115	1	-0.01	ppb	156.27	1.00	
118 Sn	115	1	-0.04	ppb	6.62	1.00	
121 Sb	115	1	0.07	ppb	2.93	1.00	
137 Ba	115	1	0.00	ppb	145.27	1.00	
205 Tl	165	1	0.03	ppb	8.41	1.00	
208 Pb	165	1	0.00	ppb	703.02	1.00	
232 Th	165	1	0.28	ppb	10.49	1.00	
238 U	165	1	0.00	ppb	52.16	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	382040	1.21	394687	96.8	30 - 120	
45 Sc	1	2367707	0.91	2446753	96.8	30 - 120	
72 Ge	1	1105088	0.25	1125847	98.2	30 - 120	
115 In	1	2665218	1.25	2719186	98.0	30 - 120	
165 Ho	1	3811931	1.62	3817349	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\AG081009A.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\AG081009A.B\008RLST.D\008RLST.D#
Date Acquired: Aug 10 2009 06:20 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: Aug 10 2009 06:10 pm
Sample Type: RLSTD
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1.00	ppb	5.38	1	100.4	50 - 150	
51 V	72	1	0.95	ppb	4.78	1	95.5	50 - 150	
52 Cr	72	1	1.03	ppb	4.50	1	103.1	50 - 150	
55 Mn	72	1	0.99	ppb	2.06	1	99.4	50 - 150	
59 Co	72	1	1.02	ppb	1.61	1	102.4	50 - 150	
60 Ni	72	1	0.92	ppb	5.43	1	92.3	50 - 150	
63 Cu	72	1	1.06	ppb	1.60	1	106.0	50 - 150	
66 Zn	72	1	10.99	ppb	2.05	10	109.9	50 - 150	
75 As	72	1	1.02	ppb	3.26	1	102.0	50 - 150	
78 Se	72	1	1.30	ppb	8.14	1	129.8	50 - 150	
95 Mo	72	1	1.03	ppb	3.66	1	102.8	50 - 150	
107 Ag	115	1	1.04	ppb	2.89	1	103.6	50 - 150	
111 Cd	115	1	1.00	ppb	3.57	1	99.8	50 - 150	
118 Sn	115	1	10.84	ppb	1.34	10	108.4	50 - 150	
121 Sb	115	1	1.08	ppb	1.30	1	107.6	50 - 150	
137 Ba	115	1	1.08	ppb	3.66	1	107.6	50 - 150	
205 Tl	165	1	1.08	ppb	3.38	1	107.8	50 - 150	
208 Pb	165	1	1.04	ppb	0.90	1	104.2	50 - 150	
232 Th	165	1	1.14	ppb	2.04	1	113.7	50 - 150	
238 U	165	1	1.07	ppb	1.31	1	107.4	50 - 150	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	381160	1.69	394687	96.6	30 - 120	
45 Sc	1	2348126	1.16	2446753	96.0	30 - 120	
72 Ge	1	1102409	1.34	1125847	97.9	30 - 120	
115 In	1	2670308	0.31	2719186	98.2	30 - 120	
165 Ho	1	3800403	0.92	3817349	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\AG081009A.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\AG081009A.B\009AFCE.D\009AFCE.D#
Date Acquired: Aug 10 2009 06:23 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: Aug 10 2009 06:10 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	0.21 ppb	37.49	0	104.1	80 - 120	
51 V	72	1	0.18 ppb	11.11	0	93.6	80 - 120	
52 Cr	72	1	0.20 ppb	4.41	0	95.1	80 - 120	
55 Mn	72	1	0.18 ppb	9.10	0	92.5	80 - 120	
59 Co	72	1	0.20 ppb	7.26	0	99.2	80 - 120	
60 Ni	72	1	0.12 ppb	37.55	0	65.1	80 - 120	
63 Cu	72	1	0.21 ppb	5.84	0	97.8	80 - 120	
66 Zn	72	1	2.00 ppb	2.60	2	90.9	80 - 120	
75 As	72	1	0.21 ppb	3.29	0	102.2	80 - 120	
78 Se	72	1	0.57 ppb	37.21	0	218.1	80 - 120	
95 Mo	72	1	0.23 ppb	17.06	0	112.2	80 - 120	
107 Ag	115	1	0.19 ppb	8.42	0	91.3	80 - 120	
111 Cd	115	1	0.18 ppb	11.73	0	92.5	80 - 120	
118 Sn	115	1	2.13 ppb	0.61	2	98.2	80 - 120	
121 Sb	115	1	0.22 ppb	3.38	0	102.6	80 - 120	
137 Ba	115	1	0.20 ppb	2.70	0	94.9	80 - 120	
205 Tl	165	1	0.23 ppb	1.38	0	107.1	80 - 120	
208 Pb	165	1	0.21 ppb	2.17	0	102.0	80 - 120	
232 Th	165	1	0.27 ppb	6.02	0	120.0	80 - 120	
238 U	165	1	0.21 ppb	3.48	0	97.7	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384831	0.38	394687	97.5	30 - 120	
45 Sc	1	2381074	1.35	2446753	97.3	30 - 120	
72 Ge	1	1108278	1.30	1125847	98.4	30 - 120	
115 In	1	2695785	0.35	2719186	99.1	30 - 120	
165 Ho	1	3782218	0.41	3817349	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\AG081009A.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\AG081009A.B\010SMPL.D\010SMPL.D#
Date Acquired: Aug 10 2009 06:26 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	0.00	3600	
51 V	72	1	-0.01	-0.01	ppb	153.00	3600	
52 Cr	72	1	0.00	0.00	ppb	726.14	3600	
55 Mn	72	1	-0.01	-0.01	ppb	114.24	3600	
59 Co	72	1	0.00	0.00	ppb	103.96	3600	
60 Ni	72	1	-0.03	-0.03	ppb	15.09	3600	
63 Cu	72	1	0.00	0.00	ppb	118.88	3600	
66 Zn	72	1	-0.11	-0.11	ppb	3.22	3600	
75 As	72	1	0.01	0.01	ppb	74.91	3600	
78 Se	72	1	2.14	2.14	ppb	18.71	3600	
95 Mo	72	1	0.01	0.01	ppb	88.11	3600	
107 Ag	115	1	0.00	0.00	ppb	18.18	3600	
111 Cd	115	1	0.00	0.00	ppb	245.41	3600	
118 Sn	115	1	-0.05	-0.05	ppb	21.00	3600	
121 Sb	115	1	0.02	0.02	ppb	14.62	3600	
137 Ba	115	1	0.00	0.00	ppb	77.19	3600	
205 Tl	165	1	0.02	0.02	ppb	18.17	3600	
208 Pb	165	1	0.00	0.00	ppb	132.48	3600	
232 Th	165	1	0.05	0.05	ppb	10.43	1000	
238 U	165	1	0.00	0.00	ppb	1446.10	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	384420	0.66	394687	97.4	30 - 120	
45 Sc	1	2363773	0.07	2446753	96.6	30 - 120	
72 Ge	1	1095031	0.87	1125847	97.3	30 - 120	
115 In	1	2709116	0.72	2719186	99.6	30 - 120	
165 Ho	1	3806731	0.23	3817349	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\AG081009A.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\AG081009A.B\011ICSA.D\011ICSA.D#
Date Acquired: Aug 10 2009 06:28 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: Aug 10 2009 06:10 pm
Sample Type: ICSA
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit ppb	Flag
9 Be	6	1	0.01 ppb	173.20	1.00	
51 V	72	1	-0.28 ppb	16.13	1.00	
52 Cr	72	1	0.68 ppb	7.15	1.00	
55 Mn	72	1	3.37 ppb	3.01	1.00	
59 Co	72	1	1.52 ppb	1.80	1.00	
60 Ni	72	1	1.33 ppb	7.03	1.00	
63 Cu	72	1	1.39 ppb	1.64	1.00	
66 Zn	72	1	2.60 ppb	3.64	10.00	
75 As	72	1	0.41 ppb	4.62	1.00	
78 Se	72	1	0.04 ppb	875.93	1.00	
95 Mo	72	1	2011.00 ppb	2.30	2000.00	
107 Ag	115	1	0.04 ppb	6.23	1.00	
111 Cd	115	1	0.24 ppb	38.98	1.00	
118 Sn	115	1	0.01 ppb	102.51	10.00	
121 Sb	115	1	0.27 ppb	5.72	1.00	
137 Ba	115	1	0.07 ppb	17.98	1.00	
205 Tl	165	1	0.04 ppb	40.80	1.00	
208 Pb	165	1	0.14 ppb	3.56	1.00	
232 Th	165	1	0.10 ppb	13.38	1.00	
238 U	165	1	0.00 ppb	19.44	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	339249	1.40	394687	86.0	30 - 120	
45 Sc	1	2070580	0.61	2446753	84.6	30 - 120	
72 Ge	1	927464	2.03	1125847	82.4	30 - 120	
115 In	1	2246349	1.22	2719186	82.6	30 - 120	
165 Ho	1	3443563	1.20	3817349	90.2	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\AG081009A.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\AG081009A.B\012ICSB.D\012ICSB.D#
Date Acquired: Aug 10 2009 06:31 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: Aug 10 2009 06:10 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	100.10	1.69	100	100.1	80 - 120	
51 V	72		1	99.46	1.23	100	99.5	80 - 120	
52 Cr	72		1	97.53	1.45	100	97.5	80 - 120	
55 Mn	72		1	98.48	0.44	100	98.5	80 - 120	
59 Co	72		1	96.28	1.69	100	96.3	80 - 120	
60 Ni	72		1	90.67	1.41	100	90.7	80 - 120	
63 Cu	72		1	88.16	1.53	100	88.2	80 - 120	
66 Zn	72		1	97.40	1.57	100	97.4	80 - 120	
75 As	72		1	100.70	1.43	100	100.7	80 - 120	
78 Se	72		1	104.50	2.15	100	104.5	80 - 120	
95 Mo	72		1	2111.00	0.32	2100	100.5	80 - 120	
107 Ag	115		1	89.84	3.58	100	89.8	80 - 120	
111 Cd	115		1	97.00	1.54	100	97.0	80 - 120	
118 Sn	115		1	102.10	1.27	100	102.1	80 - 120	
121 Sb	115		1	105.00	1.34	100	105.0	80 - 120	
137 Ba	115		1	104.10	0.70	100	104.1	80 - 120	
205 Tl	165		1	95.41	2.04	100	95.4	80 - 120	
208 Pb	165		1	93.29	0.93	100	93.3	80 - 120	
232 Th	165		1	107.70	1.56	100	107.7	80 - 120	
238 U	165		1	100.40	1.15	100	100.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	337656	1.15	394687	85.6	30 - 120	
45 Sc	1	2028207	1.22	2446753	82.9	30 - 120	
72 Ge	1	942107	0.47	1125847	83.7	30 - 120	
115 In	1	2256634	0.18	2719186	83.0	30 - 120	
165 Ho	1	3514456	0.98	3817349	92.1	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\AG081009A.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\AG081009A.B\013SMPL.D\013SMPL.D#
Date Acquired: Aug 10 2009 06:34 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: Aug 10 2009 06:10 pm
Sample Type: SA
Dilution Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Corr Conc	Raw Conc	Units	RSD(%)	High Limit	Flag
9 Be	6	1	0.00	0.00	ppb	173.21	3600	
51 V	72	1	0.00	0.00	ppb	1356.30	3600	
52 Cr	72	1	0.02	0.02	ppb	126.42	3600	
55 Mn	72	1	0.00	0.00	ppb	97.83	3600	
59 Co	72	1	0.01	0.01	ppb	17.25	3600	
60 Ni	72	1	-0.06	-0.06	ppb	24.77	3600	
63 Cu	72	1	0.00	0.00	ppb	68.55	3600	
66 Zn	72	1	0.82	0.82	ppb	5.26	3600	
75 As	72	1	0.01	0.01	ppb	65.52	3600	
78 Se	72	1	0.35	0.35	ppb	98.25	3600	
95 Mo	72	1	1.75	1.75	ppb	4.87	3600	
107 Ag	115	1	0.02	0.02	ppb	59.60	3600	
111 Cd	115	1	0.00	0.00	ppb	178.39	3600	
118 Sn	115	1	-0.02	-0.02	ppb	44.11	3600	
121 Sb	115	1	0.04	0.04	ppb	18.60	3600	
137 Ba	115	1	0.01	0.01	ppb	49.69	3600	
205 Tl	165	1	0.01	0.01	ppb	15.49	3600	
208 Pb	165	1	0.01	0.01	ppb	21.27	3600	
232 Th	165	1	0.96	0.96	ppb	17.84	1000	
238 U	165	1	0.02	0.02	ppb	8.06	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	417953	1.05	394687	105.9	30 - 120	
45 Sc	1	2370217	1.00	2446753	96.9	30 - 120	
72 Ge	1	1125021	0.71	1125847	99.9	30 - 120	
115 In	1	2769043	1.00	2719186	101.8	30 - 120	
165 Ho	1	3993502	0.73	3817349	104.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\003CALB.D\003CALB.D#

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

Linear Dynamic Range Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\014 LR.D\014 LR.D#
Date Acquired: Aug 10 2009 06:36 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LR
Misc Info:
Vial Number: 2110
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 pm
Sample Type: LR
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	1004.00 ppb	0.66	1000	100.4	90 - 110	
51 V	72	1	923.60 ppb	1.56	1000	92.4	90 - 110	
52 Cr	72	1	957.30 ppb	0.88	1000	95.7	90 - 110	
55 Mn	72	1	944.20 ppb	0.62	1000	94.4	90 - 110	
59 Co	72	1	962.70 ppb	1.17	1000	96.3	90 - 110	
60 Ni	72	1	978.20 ppb	1.60	1000	97.8	90 - 110	
63 Cu	72	1	945.60 ppb	1.33	1000	94.6	90 - 110	
66 Zn	72	1	1015.00 ppb	2.51	1000	101.5	90 - 110	
75 As	72	1	1015.00 ppb	0.37	1000	101.5	90 - 110	
78 Se	72	1	1044.00 ppb	1.38	1000	104.4	90 - 110	
95 Mo	72	1	984.90 ppb	1.46	1000	98.5	90 - 110	
107 Ag	115	1	952.90 ppb	1.27	1000	95.3	90 - 110	
111 Cd	115	1	989.60 ppb	0.87	1000	99.0	90 - 110	
118 Sn	115	1	964.00 ppb	0.79	1000	96.4	90 - 110	
121 Sb	115	1	971.00 ppb	0.56	1000	97.1	90 - 110	
137 Ba	115	1	991.30 ppb	1.54	1000	99.1	90 - 110	
205 Tl	165	1	963.90 ppb	1.23	1000	96.4	90 - 110	
208 Pb	165	1	945.40 ppb	1.22	1000	94.5	90 - 110	
232 Th	165	1	1050.00 ppb	0.83	1000	105.0	90 - 110	
238 U	165	1	967.10 ppb	0.90	1000	96.7	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	396227	0.55	394687	100.4	30 - 120	
45 Sc	1	2360026	1.45	2446753	96.5	30 - 120	
72 Ge	1	1098700	1.12	1125847	97.6	30 - 120	
115 In	1	2734512	0.49	2719186	100.6	30 - 120	
165 Ho	1	3971158	0.63	3817349	104.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\015SMPL.D\015SMPL.D#
Date Acquired: Aug 10 2009 06:39 pm
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: RINSE
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 06:10 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	11.29	3600	
51 V	72	1	0.07	0.07	ppb	49.92	3600	
52 Cr	72	1	0.08	0.08	ppb	3.05	3600	
55 Mn	72	1	0.07	0.07	ppb	11.75	3600	
59 Co	72	1	0.08	0.08	ppb	22.22	3600	
60 Ni	72	1	-0.01	-0.01	ppb	189.04	3600	
63 Cu	72	1	0.07	0.07	ppb	14.57	3600	
66 Zn	72	1	0.90	0.90	ppb	4.20	3600	
75 As	72	1	0.12	0.12	ppb	13.74	3600	
78 Se	72	1	0.56	0.56	ppb	13.28	3600	
95 Mo	72	1	0.99	0.99	ppb	7.52	3600	
107 Ag	115	1	0.11	0.11	ppb	9.78	3600	
111 Cd	115	1	0.09	0.09	ppb	18.21	3600	
118 Sn	115	1	1.04	1.04	ppb	13.89	3600	
121 Sb	115	1	0.46	0.46	ppb	3.67	3600	
137 Ba	115	1	0.07	0.07	ppb	29.33	3600	
205 Tl	165	1	0.24	0.24	ppb	12.29	3600	
208 Pb	165	1	0.09	0.09	ppb	17.25	3600	
232 Th	165	1	6.26	6.26	ppb	20.02	1000	
238 U	165	1	0.15	0.15	ppb	1.91	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406521	1.45	394687	103.0	30 - 120	
45 Sc	1	2437916	0.81	2446753	99.6	30 - 120	
72 Ge	1	1134540	0.61	1125847	100.8	30 - 120	
115 In	1	2782594	0.81	2719186	102.3	30 - 120	
165 Ho	1	3984640	0.83	3817349	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.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\AG081009A.B\016 CCV.D\016 CCV.D#
Date Acquired: Aug 10 2009 06:42 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: Aug 10 2009 06:10 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.23	ppb	1.97	50	98.5	90 - 110	
51 V	72	1	48.18	ppb	3.03	50	96.4	90 - 110	
52 Cr	72	1	49.10	ppb	2.47	50	98.2	90 - 110	
55 Mn	72	1	48.34	ppb	2.30	50	96.7	90 - 110	
59 Co	72	1	50.75	ppb	1.62	50	101.5	90 - 110	
60 Ni	72	1	49.33	ppb	1.83	50	98.7	90 - 110	
63 Cu	72	1	48.69	ppb	2.92	50	97.4	90 - 110	
66 Zn	72	1	52.56	ppb	1.77	50	105.1	90 - 110	
75 As	72	1	49.20	ppb	2.24	50	98.4	90 - 110	
78 Se	72	1	48.36	ppb	4.30	50	96.7	90 - 110	
95 Mo	72	1	50.11	ppb	1.65	50	100.2	90 - 110	
107 Ag	115	1	49.41	ppb	0.58	50	98.8	90 - 110	
111 Cd	115	1	49.05	ppb	0.87	50	98.1	90 - 110	
118 Sn	115	1	50.05	ppb	1.70	50	100.1	90 - 110	
121 Sb	115	1	49.82	ppb	1.05	50	99.6	90 - 110	
137 Ba	115	1	49.79	ppb	0.54	50	99.6	90 - 110	
205 Tl	165	1	50.63	ppb	1.41	50	101.3	90 - 110	
208 Pb	165	1	50.26	ppb	0.23	50	100.5	90 - 110	
232 Th	165	1	52.23	ppb	3.29	50	104.5	90 - 110	
238 U	165	1	50.28	ppb	1.54	50	100.6	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	398790	1.16	394687	101.0	30 - 120	
45 Sc	1	2428065	0.52	2446753	99.2	30 - 120	
72 Ge	1	1132154	1.68	1125847	100.6	30 - 120	
115 In	1	2783451	0.38	2719186	102.4	30 - 120	
165 Ho	1	3944703	1.21	3817349	103.3	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\AG081009A.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\AG081009A.B\017 CCB.D\017 CCB.D#
Date Acquired: Aug 10 2009 06:45 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: Aug 10 2009 06:10 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	0.029	ppb	50.02	1.00	
51 V	72	1	0.019	ppb	104.60	1.00	
52 Cr	72	1	0.033	ppb	99.12	1.00	
55 Mn	72	1	0.000	ppb	2663.10	1.00	
59 Co	72	1	0.016	ppb	6.13	1.00	
60 Ni	72	1	-0.070	ppb	15.94	1.00	
63 Cu	72	1	0.009	ppb	119.60	1.00	
66 Zn	72	1	-0.124	ppb	10.27	1.00	
75 As	72	1	0.017	ppb	49.87	1.00	
78 Se	72	1	0.100	ppb	304.64	1.00	
95 Mo	72	1	0.179	ppb	6.53	1.00	
107 Ag	115	1	0.018	ppb	20.56	1.00	
111 Cd	115	1	0.001	ppb	1567.90	1.00	
118 Sn	115	1	0.177	ppb	26.58	1.00	
121 Sb	115	1	0.101	ppb	8.06	1.00	
137 Ba	115	1	0.018	ppb	26.37	1.00	
205 Tl	165	1	0.073	ppb	5.05	1.00	
208 Pb	165	1	0.011	ppb	12.50	1.00	
232 Th	165	1	1.499	ppb	14.31	1.00	Fail
238 U	165	1	0.023	ppb	2.40	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	406279	0.13	394687	102.9	30 - 120	
45 Sc	1	2409755	0.92	2446753	98.5	30 - 120	
72 Ge	1	1118502	1.15	1125847	99.3	30 - 120	
115 In	1	2746559	0.29	2719186	101.0	30 - 120	
165 Ho	1	3925108	0.26	3817349	102.8	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\AG081009A.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\AG081009A.B\018WASH.D\018WASH.D#
Date Acquired: Aug 10 2009 06:47 pm
Operator: TEL
Sample Name: RLCV
Misc Info:
Vial Number: 1204
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 06:10 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.105 ppb	6.50	1.30	
51 V	72	1	5.087 ppb	3.62	6.50	
52 Cr	72	1	2.163 ppb	2.98	2.60	
55 Mn	72	1	1.000 ppb	2.91	1.30	
59 Co	72	1	1.065 ppb	2.44	1.30	
60 Ni	72	1	2.023 ppb	1.63	2.60	
63 Cu	72	1	2.091 ppb	1.36	2.60	
66 Zn	72	1	10.460 ppb	2.37	13.00	
75 As	72	1	5.273 ppb	1.62	6.50	
78 Se	72	1	5.734 ppb	6.76	6.50	
95 Mo	72	1	2.210 ppb	2.32	2.60	
107 Ag	115	1	5.205 ppb	1.43	6.50	
111 Cd	115	1	1.050 ppb	4.55	1.30	
118 Sn	115	1	10.450 ppb	1.08	13.00	
121 Sb	115	1	2.010 ppb	2.30	2.60	
137 Ba	115	1	1.109 ppb	3.21	1.30	
205 Tl	165	1	1.150 ppb	1.01	1.30	
208 Pb	165	1	1.076 ppb	0.61	1.30	
232 Th	165	1	2.636 ppb	1.22	2.60	
238 U	165	1	1.112 ppb	1.72	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	404611	0.96	394687	102.5	30 - 120	
45 Sc	1	2418551	0.39	2446753	98.8	30 - 120	
72 Ge	1	1116189	1.64	1125847	99.1	30 - 120	
115 In	1	2767098	0.92	2719186	101.8	30 - 120	
165 Ho	1	3902436	1.37	3817349	102.2	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\AG081009A.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: 08/10/2009

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#
Date Acquired: Aug 10 2009 09:53 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: Aug 10 2009 09:51 pm
Sample Type: CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	359	49.21
52	Cr	72	1	3327	12.19
55	Mn	72	1	673	7.00
59	Co	72	1	63	23.12
60	Ni	72	1	473	1.82
63	Cu	72	1	697	6.65
66	Zn	72	1	5275	0.36
75	As	72	1	61	14.81
78	Se	72	1	797	7.38
95	Mo	72	1	473	9.18
107	Ag	115	1	17	69.77
111	Cd	115	1	-4	468.40
118	Sn	115	1	883	12.90
121	Sb	115	1	41	5.27
137	Ba	115	1	28	7.48
205	Tl	165	1	71	17.08
208	Pb	165	1	277	1.82
232	Th	165	1	177	27.11
238	U	165	1	33	9.30

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	367189	0.76
45	Sc	1	2198650	1.42
72	Ge	1	1047607	1.49
115	In	1	2618639	1.31
165	Ho	1	3698894	0.81

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\AG081009A.B\087ICAL.D\087ICAL.D#
Date Acquired:	Aug 10 2009 09:56 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:	Aug 10 2009 09:54 pm
Sample Type:	ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	57454	2.68
51	V	72	1	1384602	1.93
52	Cr	72	1	1372006	0.28
55	Mn	72	1	1464416	1.26
59	Co	72	1	1764191	0.16
60	Ni	72	1	409818	1.72
63	Cu	72	1	979076	1.00
66	Zn	72	1	190440	1.50
75	As	72	1	169475	1.58
78	Se	72	1	28790	1.31
95	Mo	72	1	438801	1.48
107	Ag	115	1	1212795	1.22
111	Cd	115	1	227416	1.07
118	Sn	115	1	638283	0.63
121	Sb	115	1	733198	0.80
137	Ba	115	1	310900	0.47
205	Tl	165	1	1935696	0.85
208	Pb	165	1	2637712	0.66
232	Th	165	1	2426931	3.16
238	U	165	1	2684142	1.00

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	357017	0.84	367189	97.2	30 - 120	
45	Sc	1	2175000	2.00	2198650	98.9	30 - 120	
72	Ge	1	1036228	0.96	1047607	98.9	30 - 120	
115	In	1	2589357	0.36	2618639	98.9	30 - 120	
165	Ho	1	3695829	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.D#

0 :Element Failures	0
0 :ISTD Failures	0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\088 CCV.D\088 CCV.D#
Date Acquired: Aug 10 2009 09:58 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.65 ppb	0.92	50	99.3	90 - 110	
51 V	72	1	49.06 ppb	0.95	50	98.1	90 - 110	
52 Cr	72	1	49.92 ppb	0.60	50	99.8	90 - 110	
55 Mn	72	1	49.36 ppb	0.14	50	98.7	90 - 110	
59 Co	72	1	50.34 ppb	0.60	50	100.7	90 - 110	
60 Ni	72	1	49.67 ppb	0.42	50	99.3	90 - 110	
63 Cu	72	1	49.63 ppb	0.70	50	99.3	90 - 110	
66 Zn	72	1	52.10 ppb	0.54	50	104.2	90 - 110	
75 As	72	1	49.34 ppb	0.43	50	98.7	90 - 110	
78 Se	72	1	50.04 ppb	4.56	50	100.1	90 - 110	
95 Mo	72	1	49.69 ppb	0.55	50	99.4	90 - 110	
107 Ag	115	1	49.28 ppb	0.25	50	98.6	90 - 110	
111 Cd	115	1	49.24 ppb	0.70	50	98.5	90 - 110	
118 Sn	115	1	49.32 ppb	0.50	50	98.6	90 - 110	
121 Sb	115	1	49.29 ppb	0.48	50	98.6	90 - 110	
137 Ba	115	1	49.29 ppb	0.72	50	98.6	90 - 110	
205 Tl	165	1	49.61 ppb	2.22	50	99.2	90 - 110	
208 Pb	165	1	49.80 ppb	0.99	50	99.6	90 - 110	
232 Th	165	1	51.14 ppb	2.51	50	102.3	90 - 110	
238 U	165	1	50.39 ppb	1.56	50	100.8	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	351371	1.00	367189	95.7	30 - 120	
45 Sc	1	2164138	0.74	2198650	98.4	30 - 120	
72 Ge	1	1029321	0.36	1047607	98.3	30 - 120	
115 In	1	2597133	0.22	2618639	99.2	30 - 120	
165 Ho	1	3706192	0.53	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\089 CCB.D\089 CCB.D#
Date Acquired: Aug 10 2009 10:01 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: Aug 10 2009 09:56 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.000	ppb	0.00	1.00	
51 V	72	1	-0.009	ppb	338.45	1.00	
52 Cr	72	1	0.012	ppb	59.28	1.00	
55 Mn	72	1	0.022	ppb	43.47	1.00	
59 Co	72	1	0.010	ppb	28.80	1.00	
60 Ni	72	1	-0.073	ppb	8.59	1.00	
63 Cu	72	1	0.010	ppb	144.48	1.00	
66 Zn	72	1	-2.512	ppb	0.84	1.00	
75 As	72	1	0.021	ppb	33.66	1.00	
78 Se	72	1	0.361	ppb	104.40	1.00	
95 Mo	72	1	0.004	ppb	623.22	1.00	
107 Ag	115	1	0.021	ppb	6.66	1.00	
111 Cd	115	1	0.018	ppb	60.33	1.00	
118 Sn	115	1	0.058	ppb	14.07	1.00	
121 Sb	115	1	0.062	ppb	11.03	1.00	
137 Ba	115	1	0.017	ppb	12.47	1.00	
205 Tl	165	1	0.050	ppb	6.12	1.00	
208 Pb	165	1	0.014	ppb	17.03	1.00	
232 Th	165	1	1.175	ppb	19.44	1.00	Fail
238 U	165	1	0.018	ppb	4.03	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	354938	0.52	367189	96.7	30 - 120	
45 Sc	1	2151415	1.57	2198650	97.9	30 - 120	
72 Ge	1	1014505	0.33	1047607	96.8	30 - 120	
115 In	1	2580961	0.71	2618639	98.6	30 - 120	
165 Ho	1	3627865	0.73	3698894	98.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.D#

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

Wash QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\090WASH.D\090WASH.D#
Date Acquired: Aug 10 2009 10:04 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.015 ppb	16.54	1.30	
51 V	72	1	5.138 ppb	2.71	6.50	
52 Cr	72	1	2.154 ppb	2.58	2.60	
55 Mn	72	1	1.034 ppb	3.82	1.30	
59 Co	72	1	1.063 ppb	0.98	1.30	
60 Ni	72	1	2.069 ppb	2.67	2.60	
63 Cu	72	1	2.077 ppb	4.34	2.60	
66 Zn	72	1	8.295 ppb	0.25	13.00	
75 As	72	1	5.196 ppb	0.91	6.50	
78 Se	72	1	5.418 ppb	18.66	6.50	
95 Mo	72	1	2.025 ppb	0.52	2.60	
107 Ag	115	1	5.220 ppb	3.85	6.50	
111 Cd	115	1	1.108 ppb	1.99	1.30	
118 Sn	115	1	10.370 ppb	3.55	13.00	
121 Sb	115	1	1.946 ppb	3.35	2.60	
137 Ba	115	1	1.029 ppb	4.99	1.30	
205 Tl	165	1	1.117 ppb	0.99	1.30	
208 Pb	165	1	1.077 ppb	3.12	1.30	
232 Th	165	1	2.386 ppb	1.30	2.60	
238 U	165	1	1.118 ppb	1.09	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	357020	1.30	367189	97.2	30 - 120	
45 Sc	1	2160440	1.21	2198650	98.3	30 - 120	
72 Ge	1	1029685	0.36	1047607	98.3	30 - 120	
115 In	1	2599204	1.03	2618639	99.3	30 - 120	
165 Ho	1	3673409	1.01	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\091ICSA.D\091ICSA.D#
Date Acquired: Aug 10 2009 10:07 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: Aug 10 2009 09:56 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	0.00 ppb	0.00	1.00	
51 V	72	1	-0.25 ppb	33.72	1.00	
52 Cr	72	1	0.68 ppb	2.34	1.00	
55 Mn	72	1	3.51 ppb	0.92	1.00	
59 Co	72	1	1.54 ppb	4.46	1.00	
60 Ni	72	1	1.54 ppb	3.35	1.00	
63 Cu	72	1	1.42 ppb	2.18	1.00	
66 Zn	72	1	0.44 ppb	30.29	10.00	
75 As	72	1	0.40 ppb	6.23	1.00	
78 Se	72	1	0.69 ppb	56.98	1.00	
95 Mo	72	1	2004.00 ppb	1.89	2000.00	
107 Ag	115	1	0.04 ppb	16.72	1.00	
111 Cd	115	1	0.32 ppb	32.82	1.00	
118 Sn	115	1	0.08 ppb	26.70	10.00	
121 Sb	115	1	0.28 ppb	3.97	1.00	
137 Ba	115	1	0.07 ppb	7.46	1.00	
205 Tl	165	1	0.05 ppb	45.56	1.00	
208 Pb	165	1	0.13 ppb	2.60	1.00	
232 Th	165	1	0.24 ppb	29.64	1.00	
238 U	165	1	0.00 ppb	29.69	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	326427	1.11	367189	88.9	30 - 120	
45 Sc	1	1913508	1.00	2198650	87.0	30 - 120	
72 Ge	1	902523	1.26	1047607	86.2	30 - 120	
115 In	1	2206404	0.65	2618639	84.3	30 - 120	
165 Ho	1	3333118	1.23	3698894	90.1	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\092ICSB.D\092ICSB.D#
Date Acquired: Aug 10 2009 10:09 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: Aug 10 2009 09:56 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	99.06	1.64	100	99.1	80 - 120	
51 V	72	1	104.40	0.92	100	104.4	80 - 120	
52 Cr	72	1	101.90	0.77	100	101.9	80 - 120	
55 Mn	72	1	104.20	0.96	100	104.2	80 - 120	
59 Co	72	1	100.30	0.98	100	100.3	80 - 120	
60 Ni	72	1	95.98	1.20	100	96.0	80 - 120	
63 Cu	72	1	92.71	1.33	100	92.7	80 - 120	
66 Zn	72	1	101.10	1.14	100	101.1	80 - 120	
75 As	72	1	104.70	0.73	100	104.7	80 - 120	
78 Se	72	1	113.30	0.82	100	113.3	80 - 120	
95 Mo	72	1	2162.00	1.87	2100	103.0	80 - 120	
107 Ag	115	1	82.22	3.89	100	82.2	80 - 120	
111 Cd	115	1	96.12	2.03	100	96.1	80 - 120	
118 Sn	115	1	100.50	2.06	100	100.5	80 - 120	
121 Sb	115	1	102.50	1.80	100	102.5	80 - 120	
137 Ba	115	1	102.20	1.70	100	102.2	80 - 120	
205 Tl	165	1	94.99	0.97	100	95.0	80 - 120	
208 Pb	165	1	93.26	0.57	100	93.3	80 - 120	
232 Th	165	1	105.90	2.13	100	105.9	80 - 120	
238 U	165	1	99.43	0.45	100	99.4	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	327794	0.59	367189	89.3	30 - 120	
45 Sc	1	1916330	0.56	2198650	87.2	30 - 120	
72 Ge	1	875267	0.68	1047607	83.5	30 - 120	
115 In	1	2211280	1.50	2618639	84.4	30 - 120	
165 Ho	1	3358970	0.46	3698894	90.8	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\093WASH.D\093WASH.D#
Date Acquired: Aug 10 2009 10:12 pm
Operator: TEL
Sample Name: WASH
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 09:56 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	0.006 ppb	173.19	1.30	
51 V	72	1	-0.034 ppb	135.22	6.50	
52 Cr	72	1	0.000 ppb	5464.80	2.60	
55 Mn	72	1	0.019 ppb	10.91	1.30	
59 Co	72	1	0.009 ppb	18.44	1.30	
60 Ni	72	1	-0.069 ppb	6.69	2.60	
63 Cu	72	1	0.016 ppb	51.79	2.60	
66 Zn	72	1	-1.678 ppb	2.09	13.00	
75 As	72	1	0.020 ppb	87.04	6.50	
78 Se	72	1	0.273 ppb	159.00	6.50	
95 Mo	72	1	1.722 ppb	10.74	2.60	
107 Ag	115	1	0.016 ppb	7.48	6.50	
111 Cd	115	1	0.027 ppb	39.87	1.30	
118 Sn	115	1	0.008 ppb	139.77	13.00	
121 Sb	115	1	0.031 ppb	10.67	2.60	
137 Ba	115	1	0.014 ppb	37.96	1.30	
205 Tl	165	1	0.019 ppb	7.24	1.30	
208 Pb	165	1	0.014 ppb	25.78	1.30	
232 Th	165	1	1.029 ppb	17.84	2.60	
238 U	165	1	0.020 ppb	2.81	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	366369	0.31	367189	99.8	30 - 120	
45 Sc	1	2076235	0.60	2198650	94.4	30 - 120	
72 Ge	1	994316	1.14	1047607	94.9	30 - 120	
115 In	1	2560866	0.59	2618639	97.8	30 - 120	
165 Ho	1	3648181	1.84	3698894	98.6	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\094 CCV.D\094 CCV.D#
Date Acquired: Aug 10 2009 10:15 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: Aug 10 2009 09:56 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.46	ppb	4.16	50	98.9	90 - 110	
51 V	72	1	48.94	ppb	0.53	50	97.9	90 - 110	
52 Cr	72	1	50.07	ppb	1.20	50	100.1	90 - 110	
55 Mn	72	1	49.34	ppb	1.59	50	98.7	90 - 110	
59 Co	72	1	50.31	ppb	1.34	50	100.6	90 - 110	
60 Ni	72	1	50.23	ppb	2.45	50	100.5	90 - 110	
63 Cu	72	1	49.54	ppb	2.01	50	99.1	90 - 110	
66 Zn	72	1	52.03	ppb	1.37	50	104.1	90 - 110	
75 As	72	1	49.61	ppb	1.73	50	99.2	90 - 110	
78 Se	72	1	50.01	ppb	0.38	50	100.0	90 - 110	
95 Mo	72	1	50.34	ppb	1.73	50	100.7	90 - 110	
107 Ag	115	1	49.34	ppb	1.02	50	98.7	90 - 110	
111 Cd	115	1	49.64	ppb	0.95	50	99.3	90 - 110	
118 Sn	115	1	49.84	ppb	1.63	50	99.7	90 - 110	
121 Sb	115	1	49.47	ppb	0.88	50	98.9	90 - 110	
137 Ba	115	1	49.80	ppb	0.36	50	99.6	90 - 110	
205 Tl	165	1	50.15	ppb	0.99	50	100.3	90 - 110	
208 Pb	165	1	50.50	ppb	1.80	50	101.0	90 - 110	
232 Th	165	1	50.90	ppb	3.30	50	101.8	90 - 110	
238 U	165	1	51.21	ppb	1.74	50	102.4	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	358196	0.69	367189	97.6	30 - 120	
45 Sc	1	2129878	1.22	2198650	96.9	30 - 120	
72 Ge	1	1014484	1.02	1047607	96.8	30 - 120	
115 In	1	2569748	0.08	2618639	98.1	30 - 120	
165 Ho	1	3684571	0.80	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\095 CCB.D\095 CCB.D#
Date Acquired: Aug 10 2009 10:18 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: Aug 10 2009 09:56 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	0.028	ppb	125.04	1.00	
51 V	72	1	-0.023	ppb	143.33	1.00	
52 Cr	72	1	-0.002	ppb	923.90	1.00	
55 Mn	72	1	0.028	ppb	32.43	1.00	
59 Co	72	1	0.009	ppb	26.21	1.00	
60 Ni	72	1	-0.067	ppb	9.77	1.00	
63 Cu	72	1	0.012	ppb	106.20	1.00	
66 Zn	72	1	-2.522	ppb	0.45	1.00	
75 As	72	1	0.008	ppb	139.22	1.00	
78 Se	72	1	-0.028	ppb	2465.70	1.00	
95 Mo	72	1	0.131	ppb	6.13	1.00	
107 Ag	115	1	0.017	ppb	9.39	1.00	
111 Cd	115	1	0.021	ppb	62.04	1.00	
118 Sn	115	1	0.019	ppb	40.06	1.00	
121 Sb	115	1	0.056	ppb	6.71	1.00	
137 Ba	115	1	0.019	ppb	11.10	1.00	
205 Tl	165	1	0.030	ppb	5.43	1.00	
208 Pb	165	1	0.013	ppb	16.52	1.00	
232 Th	165	1	1.108	ppb	18.47	1.00	Fail
238 U	165	1	0.017	ppb	5.32	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	365426	0.22	367189	99.5	30 - 120	
45 Sc	1	2161178	2.00	2198650	98.3	30 - 120	
72 Ge	1	1023099	0.56	1047607	97.7	30 - 120	
115 In	1	2603761	0.60	2618639	99.4	30 - 120	
165 Ho	1	3680889	1.54	3698894	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\AG081009A.B\086CALB.D\086CALB.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\AG081009A.B\096WASH.D\096WASH.D#
Date Acquired: Aug 10 2009 10:20 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: Aug 10 2009 09:56 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.079 ppb	10.92	1.30	
51 V	72	1	5.130 ppb	1.45	6.50	
52 Cr	72	1	2.157 ppb	4.54	2.60	
55 Mn	72	1	1.063 ppb	4.53	1.30	
59 Co	72	1	1.050 ppb	1.09	1.30	
60 Ni	72	1	2.074 ppb	4.23	2.60	
63 Cu	72	1	2.123 ppb	1.17	2.60	
66 Zn	72	1	8.217 ppb	1.74	13.00	
75 As	72	1	5.217 ppb	0.89	6.50	
78 Se	72	1	5.154 ppb	5.40	6.50	
95 Mo	72	1	2.220 ppb	6.77	2.60	
107 Ag	115	1	5.308 ppb	1.41	6.50	
111 Cd	115	1	1.070 ppb	1.11	1.30	
118 Sn	115	1	10.290 ppb	0.24	13.00	
121 Sb	115	1	2.012 ppb	3.04	2.60	
137 Ba	115	1	1.086 ppb	2.73	1.30	
205 Tl	165	1	1.124 ppb	1.17	1.30	
208 Pb	165	1	1.090 ppb	1.55	1.30	
232 Th	165	1	2.384 ppb	1.99	2.60	
238 U	165	1	1.125 ppb	2.15	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	362803	1.37	367189	98.8	30 - 120	
45 Sc	1	2155781	1.24	2198650	98.1	30 - 120	
72 Ge	1	1022103	1.11	1047607	97.6	30 - 120	
115 In	1	2573971	0.56	2618639	98.3	30 - 120	
165 Ho	1	3674326	0.25	3698894	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\AG081009A.B\086CALB.D\086CALB.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: 08/10/2009

Calibration Blank QC Report

Data File:	C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#
Date Acquired:	Aug 10 2009 11:51 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:	Aug 10 2009 11:49 pm
Sample Type:	CalBlk

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	0	0.00
51	V	72	1	-204	211.14
52	Cr	72	1	2947	6.78
55	Mn	72	1	517	14.80
59	Co	72	1	33	35.39
60	Ni	72	1	87	45.12
63	Cu	72	1	677	10.89
66	Zn	72	1	237	18.82
75	As	72	1	69	15.74
78	Se	72	1	613	7.25
95	Mo	72	1	487	21.90
107	Ag	115	1	7	86.63
111	Cd	115	1	9	55.22
118	Sn	115	1	527	25.33
121	Sb	115	1	46	21.06
137	Ba	115	1	21	55.68
205	Tl	165	1	54	35.92
208	Pb	165	1	217	1.32
232	Th	165	1	210	24.29
238	U	165	1	58	9.14

Internal Standard Elements

Element		Tune	CPS Mean	RSD(%)
6	Li	1	298913	0.41
45	Sc	1	1771505	1.08
72	Ge	1	851994	1.37
115	In	1	2290579	0.24
165	Ho	1	3269618	1.10

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\AG081009A.B\129ICAL.D\129ICAL.D#
Date Acquired: Aug 10 2009 11:54 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: Aug 10 2009 11:52 pm
Sample Type: ICAL

QC Elements

Element		IS Ref	Tune	CPS Mean	RSD(%)
9	Be	6	1	44626	1.86
51	V	72	1	1103412	1.83
52	Cr	72	1	1112907	2.35
55	Mn	72	1	1182637	1.64
59	Co	72	1	1406971	1.17
60	Ni	72	1	322074	1.24
63	Cu	72	1	765226	0.44
66	Zn	72	1	149309	0.51
75	As	72	1	135226	0.52
78	Se	72	1	23661	3.26
95	Mo	72	1	358767	0.65
107	Ag	115	1	1018041	1.08
111	Cd	115	1	189633	1.01
118	Sn	115	1	539808	0.91
121	Sb	115	1	608141	0.64
137	Ba	115	1	268515	0.48
205	Tl	165	1	1732019	1.28
208	Pb	165	1	2365674	0.82
232	Th	165	1	2194146	3.15
238	U	165	1	2441986	1.18

ISTD Elements

Element		Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	1	289713	1.35	298913	96.9	30 - 120	
45	Sc	1	1702546	1.03	1771505	96.1	30 - 120	
72	Ge	1	813760	0.90	851994	95.5	30 - 120	
115	In	1	2210431	0.19	2290579	96.5	30 - 120	
165	Ho	1	3250286	0.48	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

0 :Element Failures 0
0 :ISTD Failures 0

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\130 CCV.D\130 CCV.D#
Date Acquired: Aug 10 2009 11:56 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: Aug 10 2009 11:54 pm
Sample Type: CCV
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	49.24	ppb	2.69	50	98.5	90 - 110	
51 V	72	1	48.00	ppb	0.71	50	96.0	90 - 110	
52 Cr	72	1	48.06	ppb	0.44	50	96.1	90 - 110	
55 Mn	72	1	48.06	ppb	0.53	50	96.1	90 - 110	
59 Co	72	1	49.30	ppb	0.89	50	98.6	90 - 110	
60 Ni	72	1	50.11	ppb	1.48	50	100.2	90 - 110	
63 Cu	72	1	49.80	ppb	0.70	50	99.6	90 - 110	
66 Zn	72	1	53.20	ppb	1.85	50	106.4	90 - 110	
75 As	72	1	49.30	ppb	0.12	50	98.6	90 - 110	
78 Se	72	1	51.84	ppb	3.80	50	103.7	90 - 110	
95 Mo	72	1	49.84	ppb	0.82	50	99.7	90 - 110	
107 Ag	115	1	48.57	ppb	0.91	50	97.1	90 - 110	
111 Cd	115	1	49.00	ppb	0.65	50	98.0	90 - 110	
118 Sn	115	1	48.97	ppb	0.11	50	97.9	90 - 110	
121 Sb	115	1	49.39	ppb	0.33	50	98.8	90 - 110	
137 Ba	115	1	49.11	ppb	0.94	50	98.2	90 - 110	
205 Tl	165	1	50.36	ppb	1.01	50	100.7	90 - 110	
208 Pb	165	1	50.41	ppb	1.00	50	100.8	90 - 110	
232 Th	165	1	52.89	ppb	2.77	50	105.8	90 - 110	
238 U	165	1	51.25	ppb	0.93	50	102.5	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	286336	1.45	298913	95.8	30 - 120	
45 Sc	1	1694301	0.70	1771505	95.6	30 - 120	
72 Ge	1	807041	0.62	851994	94.7	30 - 120	
115 In	1	2219249	0.11	2290579	96.9	30 - 120	
165 Ho	1	3221461	0.39	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\131 CCB.D\131 CCB.D#
Date Acquired: Aug 10 2009 11:59 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: Aug 10 2009 11:54 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	0.007	ppb	173.23	1.00	
51 V	72	1	0.027	ppb	52.26	1.00	
52 Cr	72	1	0.022	ppb	96.05	1.00	
55 Mn	72	1	0.093	ppb	16.51	1.00	
59 Co	72	1	0.013	ppb	10.56	1.00	
60 Ni	72	1	0.031	ppb	15.88	1.00	
63 Cu	72	1	0.039	ppb	36.46	1.00	
66 Zn	72	1	0.568	ppb	5.54	1.00	
75 As	72	1	0.016	ppb	167.31	1.00	
78 Se	72	1	0.407	ppb	77.30	1.00	
95 Mo	72	1	-0.004	ppb	423.30	1.00	
107 Ag	115	1	0.018	ppb	31.54	1.00	
111 Cd	115	1	0.010	ppb	43.83	1.00	
118 Sn	115	1	0.075	ppb	23.85	1.00	
121 Sb	115	1	0.059	ppb	6.87	1.00	
137 Ba	115	1	0.017	ppb	19.95	1.00	
205 Tl	165	1	0.053	ppb	9.73	1.00	
208 Pb	165	1	0.016	ppb	6.36	1.00	
232 Th	165	1	1.410	ppb	17.65	1.00	Fail
238 U	165	1	0.018	ppb	20.10	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	293448	0.70	298913	98.2	30 - 120	
45 Sc	1	1702764	0.71	1771505	96.1	30 - 120	
72 Ge	1	833810	0.47	851994	97.9	30 - 120	
115 In	1	2223577	1.33	2290579	97.1	30 - 120	
165 Ho	1	3240597	0.45	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\132WASH.D\132WASH.D#
Date Acquired: Aug 11 2009 12:02 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: Aug 10 2009 11:54 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	0.899 ppb	14.08	1.30	
51 V	72	1	4.971 ppb	1.08	6.50	
52 Cr	72	1	1.987 ppb	1.47	2.60	
55 Mn	72	1	1.001 ppb	2.00	1.30	
59 Co	72	1	1.052 ppb	4.51	1.30	
60 Ni	72	1	2.068 ppb	5.49	2.60	
63 Cu	72	1	2.048 ppb	1.81	2.60	
66 Zn	72	1	10.340 ppb	0.83	13.00	
75 As	72	1	5.128 ppb	2.68	6.50	
78 Se	72	1	4.579 ppb	16.89	6.50	
95 Mo	72	1	2.046 ppb	2.72	2.60	
107 Ag	115	1	5.235 ppb	2.60	6.50	
111 Cd	115	1	1.066 ppb	2.10	1.30	
118 Sn	115	1	10.190 ppb	0.75	13.00	
121 Sb	115	1	1.946 ppb	1.04	2.60	
137 Ba	115	1	1.082 ppb	1.38	1.30	
205 Tl	165	1	1.105 ppb	0.56	1.30	
208 Pb	165	1	1.062 ppb	0.76	1.30	
232 Th	165	1	2.471 ppb	1.77	2.60	
238 U	165	1	1.103 ppb	0.44	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	291146	0.69	298913	97.4	30 - 120	
45 Sc	1	1730528	0.89	1771505	97.7	30 - 120	
72 Ge	1	836746	1.09	851994	98.2	30 - 120	
115 In	1	2252218	0.93	2290579	98.3	30 - 120	
165 Ho	1	3295222	0.70	3269618	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\AG081009A.B\128CALB.D\128CALB.D#

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

Continuing Calibration Verification (CCV) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\151 CCV.D\151 CCV.D#
Date Acquired: Aug 11 2009 12:54 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: Aug 10 2009 11:54 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	50.31	ppb	1.79	50	100.6	90 - 110	
51 V	72	1	47.72	ppb	0.57	50	95.4	90 - 110	
52 Cr	72	1	48.34	ppb	0.27	50	96.7	90 - 110	
55 Mn	72	1	48.11	ppb	0.40	50	96.2	90 - 110	
59 Co	72	1	49.47	ppb	0.66	50	98.9	90 - 110	
60 Ni	72	1	50.01	ppb	1.09	50	100.0	90 - 110	
63 Cu	72	1	49.70	ppb	0.74	50	99.4	90 - 110	
66 Zn	72	1	52.91	ppb	0.63	50	105.8	90 - 110	
75 As	72	1	49.12	ppb	0.02	50	98.2	90 - 110	
78 Se	72	1	48.81	ppb	3.68	50	97.6	90 - 110	
95 Mo	72	1	49.73	ppb	0.70	50	99.5	90 - 110	
107 Ag	115	1	49.12	ppb	0.72	50	98.2	90 - 110	
111 Cd	115	1	50.09	ppb	0.40	50	100.2	90 - 110	
118 Sn	115	1	48.97	ppb	0.36	50	97.9	90 - 110	
121 Sb	115	1	49.59	ppb	0.64	50	99.2	90 - 110	
137 Ba	115	1	49.21	ppb	0.73	50	98.4	90 - 110	
205 Tl	165	1	50.40	ppb	1.40	50	100.8	90 - 110	
208 Pb	165	1	50.34	ppb	1.31	50	100.7	90 - 110	
232 Th	165	1	49.83	ppb	3.41	50	99.7	90 - 110	
238 U	165	1	51.61	ppb	1.72	50	103.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298153	1.60	298913	99.7	30 - 120	
45 Sc	1	1730257	0.51	1771505	97.7	30 - 120	
72 Ge	1	823986	1.07	851994	96.7	30 - 120	
115 In	1	2255073	0.60	2290579	98.4	30 - 120	
165 Ho	1	3304129	1.16	3269618	101.1	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\152 CCB.D\152 CCB.D#
Date Acquired: Aug 11 2009 12:57 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: Aug 10 2009 11:54 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	0.007	ppb	173.19	1.00	
51 V	72	1	0.010	ppb	756.86	1.00	
52 Cr	72	1	0.074	ppb	27.75	1.00	
55 Mn	72	1	0.077	ppb	12.16	1.00	
59 Co	72	1	0.014	ppb	33.69	1.00	
60 Ni	72	1	0.033	ppb	8.70	1.00	
63 Cu	72	1	0.015	ppb	93.89	1.00	
66 Zn	72	1	0.514	ppb	6.53	1.00	
75 As	72	1	0.008	ppb	121.93	1.00	
78 Se	72	1	0.477	ppb	100.92	1.00	
95 Mo	72	1	-0.063	ppb	25.38	1.00	
107 Ag	115	1	0.013	ppb	37.30	1.00	
111 Cd	115	1	0.020	ppb	88.08	1.00	
118 Sn	115	1	0.084	ppb	22.47	1.00	
121 Sb	115	1	0.051	ppb	1.64	1.00	
137 Ba	115	1	0.017	ppb	21.12	1.00	
205 Tl	165	1	0.032	ppb	6.00	1.00	
208 Pb	165	1	0.011	ppb	13.50	1.00	
232 Th	165	1	1.203	ppb	14.49	1.00	Fail
238 U	165	1	0.014	ppb	5.01	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	299841	0.83	298913	100.3	30 - 120	
45 Sc	1	1753527	0.56	1771505	99.0	30 - 120	
72 Ge	1	853516	0.19	851994	100.2	30 - 120	
115 In	1	2301995	0.44	2290579	100.5	30 - 120	
165 Ho	1	3384139	1.05	3269618	103.5	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\153WASH.D\153WASH.D#
Date Acquired: Aug 11 2009 01:00 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: Aug 10 2009 11:54 pm
Sample Type: WASH
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	1.060 ppb	9.90	1.30	
51 V	72	1	5.022 ppb	1.13	6.50	
52 Cr	72	1	2.068 ppb	0.61	2.60	
55 Mn	72	1	0.987 ppb	1.84	1.30	
59 Co	72	1	1.023 ppb	1.68	1.30	
60 Ni	72	1	2.082 ppb	4.09	2.60	
63 Cu	72	1	2.089 ppb	1.60	2.60	
66 Zn	72	1	10.410 ppb	0.53	13.00	
75 As	72	1	5.031 ppb	1.06	6.50	
78 Se	72	1	5.439 ppb	8.08	6.50	
95 Mo	72	1	1.962 ppb	2.26	2.60	
107 Ag	115	1	5.147 ppb	1.92	6.50	
111 Cd	115	1	1.088 ppb	3.58	1.30	
118 Sn	115	1	10.280 ppb	1.11	13.00	
121 Sb	115	1	1.935 ppb	1.15	2.60	
137 Ba	115	1	1.067 ppb	5.26	1.30	
205 Tl	165	1	1.098 ppb	2.04	1.30	
208 Pb	165	1	1.070 ppb	1.69	1.30	
232 Th	165	1	2.403 ppb	2.53	2.60	
238 U	165	1	1.104 ppb	0.39	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	300232	0.96	298913	100.4	30 - 120	
45 Sc	1	1774194	0.66	1771505	100.2	30 - 120	
72 Ge	1	859087	0.54	851994	100.8	30 - 120	
115 In	1	2320421	0.48	2290579	101.3	30 - 120	
165 Ho	1	3355379	1.38	3269618	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\154 BLK.D\154 BLK.D#
Date Acquired: Aug 11 2009 01:03 am
Operator: TEL
Sample Name: LHQK3B
Misc Info: BLANK 9218437 6020
Vial Number: 3310
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 pm
Sample Type: BLK
Total Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	1	0.000 ppb	0.00	2.00	
51 V	72	1	0.024 ppb	51.22	2.00	
52 Cr	72	1	0.093 ppb	26.90	2.00	
55 Mn	72	1	0.035 ppb	2.81	2.00	
59 Co	72	1	0.000 ppb	4119.30	2.00	
60 Ni	72	1	0.012 ppb	100.08	2.00	
63 Cu	72	1	0.027 ppb	16.09	2.00	
66 Zn	72	1	1.101 ppb	0.97	2.00	
75 As	72	1	0.002 ppb	745.48	2.00	
78 Se	72	1	0.588 ppb	93.05	2.00	
95 Mo	72	1	-0.103 ppb	5.18	2.00	
107 Ag	115	1	0.005 ppb	75.82	2.00	
111 Cd	115	1	-0.002 ppb	430.98	2.00	
118 Sn	115	1	0.113 ppb	31.18	2.00	
121 Sb	115	1	0.028 ppb	10.91	2.00	
137 Ba	115	1	0.019 ppb	26.98	2.00	
205 Tl	165	1	0.041 ppb	43.48	2.00	
208 Pb	165	1	0.005 ppb	12.88	2.00	
232 Th	165	1	0.258 ppb	20.31	2.00	
238 U	165	1	0.000 ppb	129.33	2.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	298312	0.78	298913	99.8	30 - 120	
45 Sc	1	1756308	0.68	1771505	99.1	30 - 120	
72 Ge	1	842165	0.39	851994	98.8	30 - 120	
115 In	1	2267067	0.90	2290579	99.0	30 - 120	
165 Ho	1	3375860	0.76	3269618	103.2	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\155 LCS.D\155 LCS.D#
Date Acquired: Aug 11 2009 01:05 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHQK3C
Misc Info: LCS
Vial Number: 3311
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: LCS
Prep Dil. Factor: 1.00
Autodil Factor: Undiluted
Final Dil Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Analyte Elements

Element	IS Ref	Tune	Conc. ppb	RSD(%)	Expected	Rec(%)	QC Range(%)	Flag
9 Be	6	1	38.88	1.99	40	97.2	80 - 120	
51 V	72	1	40.21	0.82	40	100.5	80 - 120	
52 Cr	72	1	40.03	1.69	40	100.1	80 - 120	
55 Mn	72	1	40.22	0.64	40	100.6	80 - 120	
59 Co	72	1	40.96	0.98	40	102.4	80 - 120	
60 Ni	72	1	41.32	1.78	40	103.3	80 - 120	
63 Cu	72	1	41.48	0.21	40	103.7	80 - 120	
66 Zn	72	1	39.63	0.64	40	99.1	80 - 120	
75 As	72	1	38.99	0.16	40	97.5	80 - 120	
78 Se	72	1	39.62	3.95	40	99.1	80 - 120	
95 Mo	72	1	40.65	1.13	40	101.6	80 - 120	
107 Ag	115	1	40.06	0.99	40	100.2	80 - 120	
111 Cd	115	1	39.40	0.64	40	98.5	80 - 120	
118 Sn	115	1	0.04	26.89	40	0.1	80 - 120	
121 Sb	115	1	39.07	1.40	40	97.7	80 - 120	
137 Ba	115	1	40.34	0.59	40	100.9	80 - 120	
205 Tl	165	1	41.23	0.76	40	103.1	80 - 120	
208 Pb	165	1	41.06	1.12	40	102.7	80 - 120	
232 Th	165	1	42.93	1.91	40	107.3	80 - 120	
238 U	165	1	42.30	1.12	40	105.8	80 - 120	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	297384	0.11	298913	99.5	30 - 120	
45 Sc	1	1725208	0.25	1771505	97.4	30 - 120	
72 Ge	1	808629	0.60	851994	94.9	30 - 120	
115 In	1	2260003	0.86	2290579	98.7	30 - 120	
165 Ho	1	3313254	0.19	3269618	101.3	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\156AREF.D\156AREF.D#
Date Acquired:	Aug 11 2009 01:08 am
Acq. Method:	NormISIS.M
Operator:	TEL
Sample Name:	LHJ5J
Misc Info:	D9H050230
Vial Number:	3312
Current Method:	C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File:	C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update:	Aug 10 2009 11:54 pm
Sample Type:	AllRef
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	0.03	0.03	ppb	114.88	3600	
51 V	72	1	-9.90	-9.90	ppb	25.72	3600	
52 Cr	72	1	1,007.00	1007.00	ppb	0.85	3600	
55 Mn	72	1	19.64	19.64	ppb	0.70	3600	
59 Co	72	1	0.55	0.55	ppb	7.19	3600	
60 Ni	72	1	3.96	3.96	ppb	3.51	3600	
63 Cu	72	1	0.90	0.90	ppb	3.77	3600	
66 Zn	72	1	1.17	1.17	ppb	3.46	3600	
75 As	72	1	92.87	92.87	ppb	0.39	3600	
78 Se	72	1	5.64	5.64	ppb	12.40	3600	
95 Mo	72	1	24.86	24.86	ppb	0.30	3600	
107 Ag	115	1	0.02	0.02	ppb	31.93	3600	
111 Cd	115	1	0.01	0.01	ppb	403.77	3600	
118 Sn	115	1	0.03	0.03	ppb	82.59	3600	
121 Sb	115	1	0.21	0.21	ppb	9.47	3600	
137 Ba	115	1	19.51	19.51	ppb	1.51	3600	
205 Tl	165	1	0.08	0.08	ppb	19.57	3600	
208 Pb	165	1	0.24	0.24	ppb	2.63	3600	
232 Th	165	1	1.10	1.10	ppb	40.15	1000	
238 U	165	1	36.88	36.88	ppb	0.69	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	295625	0.47	298913	98.9	30 - 120	
45 Sc	1	1742767	1.62	1771505	98.4	30 - 120	
72 Ge	1	723920	0.41	851994	85.0	30 - 120	
115 In	1	1949293	1.02	2290579	85.1	30 - 120	
165 Ho	1	2964923	0.45	3269618	90.7	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\AG081009A.B\128CALB.D\128CALB.D#

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

Dilution Sample QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\157SDIL.D\157SDIL.D#
Date Acquired: Aug 11 2009 01:11 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JP5
Misc Info: SERIAL DILUTION
Vial Number: 3401
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: SDIL
Dilution Factor: 1.00

QC Summary:
Analytes: Pass
ISTD: Pass

Dilution Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\156AREF.D\156AREF.D#

QC elements

Element	IS Ref	Tune	Conc.ppb		RSD(%)	Ref Conc.	Actual(%)	QC Range(%)	Flag
9 Be	6	1	0.02	ppb	173.22	0.01	345.9	90 - 110	
51 V	72	1	1.19	ppb	77.76	-1.98	-60.2	90 - 110	
52 Cr	72	1	203.30	ppb	1.15	201.40	100.9	90 - 110	
55 Mn	72	1	4.07	ppb	1.14	3.93	103.5	90 - 110	
59 Co	72	1	0.12	ppb	3.86	0.11	108.4	90 - 110	
60 Ni	72	1	1.06	ppb	5.25	0.79	133.4	90 - 110	
63 Cu	72	1	0.20	ppb	1.14	0.18	112.3	90 - 110	
66 Zn	72	1	0.43	ppb	6.92	0.23	184.9	90 - 110	
75 As	72	1	18.64	ppb	0.50	18.57	100.4	90 - 110	
78 Se	72	1	1.40	ppb	65.32	1.13	123.7	90 - 110	
95 Mo	72	1	4.85	ppb	2.17	4.97	97.5	90 - 110	
107 Ag	115	1	0.00	ppb	30.74	0.00	85.3	90 - 110	
111 Cd	115	1	0.02	ppb	5.15	0.00	2042.1	90 - 110	
118 Sn	115	1	0.08	ppb	17.82	0.01	1290.1	90 - 110	
121 Sb	115	1	0.05	ppb	1.78	0.04	112.1	90 - 110	
137 Ba	115	1	4.06	ppb	3.06	3.90	104.1	90 - 110	
205 Tl	165	1	0.01	ppb	15.54	0.02	76.8	90 - 110	
208 Pb	165	1	0.05	ppb	4.33	0.05	112.9	90 - 110	
232 Th	165	1	0.09	ppb	13.25	0.22	39.3	90 - 110	
238 U	165	1	7.96	ppb	2.44	7.38	107.9	90 - 110	

ISTD elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	320819	0.37	298913	107.3	30 - 120	
45 Sc	1	1834250	2.10	1771505	103.5	30 - 120	
72 Ge	1	842554	0.30	851994	98.9	30 - 120	
115 In	1	2234431	0.67	2290579	97.5	30 - 120	
165 Ho	1	3347473	1.35	3269618	102.4	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\AG081009A.B\128CALB.D\128CALB.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: 08/11/09 10:34:35

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHJ5JP5** | Serial Dilution: **5.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500**
File: AG081009A # 157
Acquired: 08/11/2009 01:11:00
Calibrated: 08/10/2009 23:51:00

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	10	0.10155	0.02936	246		*	
7440-62-2	Vanadium	51	13417	5.9650	-9.9020			*	
7440-47-3	Chromium	52	2339430	1016.5	1007.0	0.943		*	
7439-96-5	Manganese	55	50277	20.330	19.640	3.51		*	
7440-48-4	Cobalt	59	1777	0.59850	0.55220	8.38		*	
7440-02-0	Nickel	60	3607	5.2800	3.9580	33.4		*	
7440-50-8	Copper	63	2274	1.0135	0.90230	12.3		*	
7440-66-6	Zinc	66	905	2.1710	1.1740	84.9		*	
7440-38-2	Arsenic	75	26156	93.200	92.870	0.355	0.21	0.4	☑
7782-49-2	Selenium	78	940	6.9800	5.6430	23.7	0.70	NC	☑
7439-98-7	Molybdenum	95	18463	24.235	24.860	2.51		*	
7440-22-4	Silver	107	43	0.01788	0.02095	14.7		*	
7440-43-9	Cadmium	111	50	0.10515	0.00515	1940		*	
7440-31-5	Tin	118	963	0.41270	0.03199	1190		*	
7440-36-0	Antimony	121	334	0.23590	0.21050	12.1		*	
7440-39-3	Barium	137	11042	20.305	19.510	4.07		*	
7440-28-0	Thallium	205	272	0.06065	0.07902	23.2		*	
7439-92-1	Lead	208	1559	0.27445	0.24300	12.9		*	
7440-61-1	Uranium	238	200257	39.810	36.880	7.94		*	
7440-29-1	Thorium	232	2157	0.42985	1.0950	60.7		*	
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: 8/11/09

Post Digestion Spiked Sample (PDS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\158PDS.D\158PDS.D#
Date Acquired: Aug 11 2009 01:14 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JZ
Misc Info: POST DIGESTION SPIKE
Vial Number: 3402
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
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	190.20	0.03	ppb	1.01	200	95.1	75 - 125	
51 V	72	1	201.90	-9.90	ppb	2.77	200	106.2	75 - 125	
52 Cr	72	1	1215.00	1007.00	ppb	0.86	200	100.7	75 - 125	
55 Mn	72	1	222.50	19.64	ppb	1.95	200	101.3	75 - 125	
59 Co	72	1	196.80	0.55	ppb	0.59	200	98.1	75 - 125	
60 Ni	72	1	190.90	3.96	ppb	0.82	200	93.6	75 - 125	
63 Cu	72	1	186.60	0.90	ppb	0.27	200	92.9	75 - 125	
66 Zn	72	1	180.70	1.17	ppb	0.48	200	89.8	75 - 125	
75 As	72	1	294.50	92.87	ppb	0.32	200	100.6	75 - 125	
78 Se	72	1	230.40	5.64	ppb	1.20	200	112.0	75 - 125	
95 Mo	72	1	236.40	24.86	ppb	0.88	200	105.1	75 - 125	
107 Ag	115	1	42.46	0.02	ppb	0.68	50	84.9	75 - 125	
111 Cd	115	1	178.90	0.01	ppb	1.22	200	89.4	75 - 125	
118 Sn	115	1	175.20	0.03	ppb	0.96	200	87.6	75 - 125	
121 Sb	115	1	192.40	0.21	ppb	0.92	200	96.1	75 - 125	
137 Ba	115	1	213.80	19.51	ppb	0.80	200	97.4	75 - 125	
205 Tl	165	1	173.20	0.08	ppb	1.27	200	86.6	75 - 125	
208 Pb	165	1	168.90	0.24	ppb	0.70	200	84.3	75 - 125	
232 Th	165	1	0.16	1.10	ppb	11.34	200	0.1	75 - 125	
238 U	165	1	214.20	36.88	ppb	0.92	200	90.4	75 - 125	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	296347	0.77	298913	99.1	30 - 120	
45 Sc	1	1782879	1.26	1771505	100.6	30 - 120	
72 Ge	1	721654	0.61	851994	84.7	30 - 120	
115 In	1	1942489	0.60	2290579	84.8	30 - 120	
165 Ho	1	2974004	0.68	3269618	91.0	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Denver

SAMPLE SPIKE

Method: 6020 (ICP/MS) | ICPMS_024 | Reported: 08/11/09 10:34:38

Department: 090 (Metals) | Source: Spreadsheet

Sample: **LHJ5JZ** | Spike Dilution: **1.00** | Sample Dilution: **1.00**

Instrument: **Agilent7500** | Channel 272
File: AG081009A # 158 | Method 6020_
Acquired: 08/11/2009 01:14:00 | ICPMS_024 | Matrix: AQUEOUS
Calibrated: 08/10/2009 23:51:00 | Units: ug/L

CASN	Analyte Name	M/S	Area	Amount	Sample	%Rec.	Spike	Flag	Q
7440-41-7	Beryllium	9	86801	190.20	0.02936	95.1	200		☑
7440-62-2	Vanadium	51	1975700	201.90	-9.9020	101	200		☐
7440-47-3	Chromium	52	11968700	1215.0	1007.0	104	200	*	☑
7439-96-5	Manganese	55	2333050	222.50	19.640	101	200		☑
7440-48-4	Cobalt	59	2456120	196.80	0.55220	98.1	200		☑
7440-02-0	Nickel	60	545083	190.90	3.9580	93.5	200		☑
7440-50-8	Copper	63	1265700	186.60	0.90230	92.8	200		☑
7440-66-6	Zinc	66	239105	180.70	1.1740	89.8	200		☑
7440-38-2	Arsenic	75	353047	294.50	92.870	101	200		☑
7782-49-2	Selenium	78	47672	230.40	5.6430	112	200		☑
7439-98-7	Molybdenum	95	751723	236.40	24.860	106	200		☐
7440-22-4	Silver	107	379825	42.460	0.02095	84.9	50.0		☑
7440-43-9	Cadmium	111	298050	178.90	0.00515	89.4	200		☑
7440-31-5	Tin	118	830836	175.20	0.03199	87.6	200		☐
7440-36-0	Antimony	121	1028040	192.40	0.21050	96.1	200		☑
7440-39-3	Barium	137	504526	213.80	19.510	97.1	200		☑
7440-28-0	Thallium	205	2744850	173.20	0.07902	86.6	200		☑
7439-92-1	Lead	208	3655250	168.90	0.24300	84.3	200		☑
7440-61-1	Uranium	238	4786410	214.20	36.880	88.7	200		☑
7440-29-1	Thorium	232	3334	0.15660	1.0950				
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				

As secondary

8/11/09

Reviewed by: [signature] Date: 8/11/09

Spiked Sample (MS) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\159_MS.D\159_MS.D#
Date Acquired: Aug 11 2009 01:16 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JS
Misc Info: MATRIX SPIKE
Vial Number: 3403
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MS
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	39.12	0.03	ppb	1.92	40	97.7	50 - 150	
51 V	72	1	34.65	-9.90	ppb	1.03	40	115.1	50 - 150	
52 Cr	72	1	1074.00	1007.00	ppb	0.91	40	102.6	50 - 150	
55 Mn	72	1	60.83	19.64	ppb	0.86	40	102.0	50 - 150	
59 Co	72	1	40.96	0.55	ppb	0.44	40	101.0	50 - 150	
60 Ni	72	1	52.86	3.96	ppb	0.74	40	120.3	50 - 150	
63 Cu	72	1	38.62	0.90	ppb	1.06	40	94.4	50 - 150	
66 Zn	72	1	37.97	1.17	ppb	0.50	40	92.2	50 - 150	
75 As	72	1	135.90	92.87	ppb	0.44	40	102.3	50 - 150	
78 Se	72	1	51.74	5.64	ppb	0.84	40	113.4	50 - 150	
95 Mo	72	1	69.83	24.86	ppb	1.17	40	107.7	50 - 150	
107 Ag	115	1	34.87	0.02	ppb	1.26	40	87.1	50 - 150	
111 Cd	115	1	36.74	0.01	ppb	1.70	40	91.8	50 - 150	
118 Sn	115	1	0.17	0.03	ppb	19.14	40	0.4	50 - 150	
121 Sb	115	1	40.55	0.21	ppb	0.68	40	100.8	50 - 150	
137 Ba	115	1	59.52	19.51	ppb	0.80	40	100.0	50 - 150	
205 Tl	165	1	36.14	0.08	ppb	0.76	40	90.2	50 - 150	
208 Pb	165	1	35.29	0.24	ppb	0.83	40	87.7	50 - 150	
232 Th	165	1	40.88	1.10	ppb	1.40	40	99.5	50 - 150	
238 U	165	1	73.60	36.88	ppb	0.75	40	95.7	50 - 150	

ISTD Elements

Element	Tune	Counts	RSD(%)	Ref. Counts	Rec(%)	QC Range(%)	QC Flag
6 Li	1	301894	0.73	298913	101.0	30 - 120	
45 Sc	1	1788975	0.02	1771505	101.0	30 - 120	
72 Ge	1	731996	0.44	851994	85.9	30 - 120	
115 In	1	1975332	0.66	2290579	86.2	30 - 120	
165 Ho	1	3014503	0.31	3269618	92.2	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.D#

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

Duplicate Spike (MSD) QC Report

Data File: C:\ICPCHEM\1\DATA\AG081009A.B\160 MSD.D\160 MSD.D#
Date Acquired: Aug 11 2009 01:19 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ5JD
Misc Info: MATRIX SPIKE DUPLICATE
Vial Number: 3404
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 pm
Sample Type: MSD
Dilution Factor: 1.00

Duplicate Ref File: C:\ICPCHEM\1\DATA\AG081009A.B\159 MS.D\159 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	40.08	ppb	2.47	39.12	2.42	20	
51 V	72	1	34.64	ppb	7.93	34.65	0.03	20	
52 Cr	72	1	1085.00	ppb	1.12	1074.00	1.02	20	
55 Mn	72	1	61.13	ppb	0.49	60.83	0.49	20	
59 Co	72	1	41.42	ppb	0.47	40.96	1.12	20	
60 Ni	72	1	42.24	ppb	0.79	52.86	22.33	20	
63 Cu	72	1	38.88	ppb	0.95	38.62	0.67	20	
66 Zn	72	1	38.05	ppb	0.87	37.97	0.21	20	
75 As	72	1	135.60	ppb	0.93	135.90	0.22	20	
78 Se	72	1	52.09	ppb	3.73	51.74	0.67	20	
95 Mo	72	1	69.20	ppb	0.72	69.83	0.91	20	
107 Ag	115	1	35.10	ppb	0.69	34.87	0.66	20	
111 Cd	115	1	37.15	ppb	0.83	36.74	1.11	20	
118 Sn	115	1	0.05	ppb	29.44	0.17	106.27	20	
121 Sb	115	1	39.99	ppb	1.01	40.55	1.39	20	
137 Ba	115	1	60.09	ppb	0.32	59.52	0.95	20	
205 Tl	165	1	36.12	ppb	1.29	36.14	0.06	20	
208 Pb	165	1	35.41	ppb	1.60	35.29	0.34	20	
232 Th	165	1	42.20	ppb	0.57	40.88	3.18	20	
238 U	165	1	74.47	ppb	0.77	73.60	1.18	20	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	301657	1.03	298913	100.9	30 - 120	
45 Sc	1	1761698	0.65	1771505	99.4	30 - 120	
72 Ge	1	720894	0.59	851994	84.6	30 - 120	
115 In	1	1941748	0.34	2290579	84.8	30 - 120	
165 Ho	1	2997870	0.50	3269618	91.7	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\161SMPL.D\161SMPL.D#
Date Acquired: Aug 11 2009 01:22 am
Acq. Method: NormISIS.M
Operator: TEL
Sample Name: LHJ51
Misc Info: D9H050234
Vial Number: 3405
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal. Update: Aug 10 2009 11:54 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	86.61	3600	
51 V	72	1	0.03	0.03	ppb	145.91	3600	
52 Cr	72	1	0.16	0.16	ppb	13.00	3600	
55 Mn	72	1	0.07	0.07	ppb	5.40	3600	
59 Co	72	1	0.00	0.00	ppb	48.84	3600	
60 Ni	72	1	0.01	0.01	ppb	55.92	3600	
63 Cu	72	1	0.05	0.05	ppb	35.99	3600	
66 Zn	72	1	0.48	0.48	ppb	0.86	3600	
75 As	72	1	0.03	0.03	ppb	25.80	3600	
78 Se	72	1	0.61	0.61	ppb	22.38	3600	
95 Mo	72	1	-0.03	-0.03	ppb	77.59	3600	
107 Ag	115	1	0.01	0.01	ppb	34.85	3600	
111 Cd	115	1	0.01	0.01	ppb	103.89	3600	
118 Sn	115	1	0.00	0.00	ppb	2703.00	3600	
121 Sb	115	1	0.03	0.03	ppb	39.95	3600	
137 Ba	115	1	0.04	0.04	ppb	21.19	3600	
205 Tl	165	1	0.01	0.01	ppb	35.84	3600	
208 Pb	165	1	0.01	0.01	ppb	14.01	3600	
232 Th	165	1	0.85	0.85	ppb	22.73	1000	
238 U	165	1	0.02	0.02	ppb	7.71	3600	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	341797	0.74	298913	114.3	30 - 120	
45 Sc	1	1954779	1.15	1771505	110.3	30 - 120	
72 Ge	1	915682	0.57	851994	107.5	30 - 120	
115 In	1	2469041	1.05	2290579	107.8	30 - 120	
165 Ho	1	3544555	0.50	3269618	108.4	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\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\162 CCV.D\162 CCV.D#
Date Acquired: Aug 11 2009 01:25 am
Operator: TEL
Sample Name: CCV
Misc Info:
Vial Number: 1107
Current Method: C:\ICPCHEM\1\METHODS\NormISIS.M
Calibration File: C:\ICPCHEM\1\CALIB\NormISIS.C
Last Cal Update: Aug 10 2009 11:54 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	48.27 ppb	4.39	50	96.5	90 - 110	
51 V	72	1	48.33 ppb	0.92	50	96.7	90 - 110	
52 Cr	72	1	48.60 ppb	0.67	50	97.2	90 - 110	
55 Mn	72	1	48.58 ppb	0.51	50	97.2	90 - 110	
59 Co	72	1	49.74 ppb	0.40	50	99.5	90 - 110	
60 Ni	72	1	50.63 ppb	1.30	50	101.3	90 - 110	
63 Cu	72	1	50.73 ppb	0.91	50	101.5	90 - 110	
66 Zn	72	1	52.89 ppb	0.03	50	105.8	90 - 110	
75 As	72	1	49.08 ppb	0.23	50	98.2	90 - 110	
78 Se	72	1	49.04 ppb	5.02	50	98.1	90 - 110	
95 Mo	72	1	50.09 ppb	0.48	50	100.2	90 - 110	
107 Ag	115	1	49.07 ppb	1.64	50	98.1	90 - 110	
111 Cd	115	1	49.16 ppb	0.69	50	98.3	90 - 110	
118 Sn	115	1	49.21 ppb	0.88	50	98.4	90 - 110	
121 Sb	115	1	48.96 ppb	1.24	50	97.9	90 - 110	
137 Ba	115	1	49.26 ppb	1.17	50	98.5	90 - 110	
205 Tl	165	1	49.83 ppb	0.99	50	99.7	90 - 110	
208 Pb	165	1	49.58 ppb	1.03	50	99.2	90 - 110	
232 Th	165	1	48.98 ppb	3.84	50	98.0	90 - 110	
238 U	165	1	50.12 ppb	0.85	50	100.2	90 - 110	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	315547	0.53	298913	105.6	30 - 120	
45 Sc	1	1781709	0.85	1771505	100.6	30 - 120	
72 Ge	1	851013	0.92	851994	99.9	30 - 120	
115 In	1	2337704	0.88	2290579	102.1	30 - 120	
165 Ho	1	3412389	0.60	3269618	104.4	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\163 CCB.D\163 CCB.D#
Date Acquired: Aug 11 2009 01:27 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: Aug 10 2009 11:54 pm
Sample Type: CCB
Total Dil Factor: 1.00

QC Summary:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.		RSD(%)	High Limit	Flag
9 Be	6	1	0.020	ppb	100.15	1.00	
51 V	72	1	0.021	ppb	50.63	1.00	
52 Cr	72	1	0.033	ppb	46.89	1.00	
55 Mn	72	1	0.076	ppb	2.39	1.00	
59 Co	72	1	0.013	ppb	20.92	1.00	
60 Ni	72	1	0.030	ppb	38.08	1.00	
63 Cu	72	1	0.022	ppb	44.15	1.00	
66 Zn	72	1	0.476	ppb	12.78	1.00	
75 As	72	1	-0.004	ppb	98.42	1.00	
78 Se	72	1	0.595	ppb	13.67	1.00	
95 Mo	72	1	-0.056	ppb	29.24	1.00	
107 Ag	115	1	0.013	ppb	11.48	1.00	
111 Cd	115	1	0.020	ppb	28.22	1.00	
118 Sn	115	1	0.095	ppb	23.08	1.00	
121 Sb	115	1	0.048	ppb	4.98	1.00	
137 Ba	115	1	0.019	ppb	36.45	1.00	
205 Tl	165	1	0.031	ppb	9.59	1.00	
208 Pb	165	1	0.013	ppb	7.84	1.00	
232 Th	165	1	1.255	ppb	14.06	1.00	Fail
238 U	165	1	0.016	ppb	14.36	1.00	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	320735	0.46	298913	107.3	30 - 120	
45 Sc	1	1822900	0.60	1771505	102.9	30 - 120	
72 Ge	1	877256	0.79	851994	103.0	30 - 120	
115 In	1	2371725	0.81	2290579	103.5	30 - 120	
165 Ho	1	3421991	0.96	3269618	104.7	30 - 120	

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

ISTD Ref File : C:\ICPCHEM\1\DATA\AG081009A.B\128CALB.D\128CALB.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\AG081009A.B\164WASH.D\164WASH.D#
Date Acquired: Aug 11 2009 01:30 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: Aug 10 2009 11:54 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	0.918 ppb	9.59	1.30	
51 V	72	1	4.944 ppb	1.70	6.50	
52 Cr	72	1	2.036 ppb	2.70	2.60	
55 Mn	72	1	1.004 ppb	2.24	1.30	
59 Co	72	1	1.034 ppb	3.53	1.30	
60 Ni	72	1	2.145 ppb	4.40	2.60	
63 Cu	72	1	2.011 ppb	3.99	2.60	
66 Zn	72	1	10.360 ppb	1.18	13.00	
75 As	72	1	5.021 ppb	2.56	6.50	
78 Se	72	1	6.213 ppb	5.56	6.50	
95 Mo	72	1	2.018 ppb	5.46	2.60	
107 Ag	115	1	5.178 ppb	3.40	6.50	
111 Cd	115	1	1.081 ppb	6.58	1.30	
118 Sn	115	1	10.290 ppb	1.81	13.00	
121 Sb	115	1	1.925 ppb	2.85	2.60	
137 Ba	115	1	1.049 ppb	4.83	1.30	
205 Tl	165	1	1.117 ppb	1.04	1.30	
208 Pb	165	1	1.062 ppb	1.56	1.30	
232 Th	165	1	2.407 ppb	0.53	2.60	
238 U	165	1	1.103 ppb	2.19	1.30	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1	318356	0.12	298913	106.5	30 - 120	
45 Sc	1	1828409	0.73	1771505	103.2	30 - 120	
72 Ge	1	879735	0.27	851994	103.3	30 - 120	
115 In	1	2379297	0.71	2290579	103.9	30 - 120	
165 Ho	1	3392920	0.86	3269618	103.8	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\AG081009A.B\128CALB.D\128CALB.D#

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