TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 160-437-1

Job Description: West Lake Landfill

For:
Engineering Management Support, Inc.
7220 W. Jefferson AVE
Suite 406
Lakewood, CO 80235

Attention: Mr. Paul Rosasco

Approved for release.
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09/20/2012
Revision: 1

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. Pursuant to NELAP, this report shall not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager.

The Lab Certification ID# is E87689.

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CASE NARRATIVE
Client: Engineering Management Support, Inc.
Project: West Lake Landfill
Report Number: 160-437-1

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/09/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8), DUP 05 (160-437-9) and TRIP BLANK (160-437-10) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/14/2012 and 08/16/2012.

1,2,4-Trichlorobenzene and Bromomethane were detected in method blank MB 160-9262/3 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

In the original analysis, the surrogate associated with this analyte (Toluene-d8) was below the QC limit; the surrogate is within the QC limits in the re-analysis. All analytes associated with Toluene-d8 are reported from the re-analysis.

The laboratory control sample (LCS) for batch 9262 exceeded control limits for the following analytes: Acrolein and Carbon disulfide. These analytes were biased high in the LCS and were not detected above the reporting limit in the associated samples; therefore, the data have been reported.

The matrix spike(MS) recovery of Tetrahydrofuran for batch 9262 was outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Dichlorodifluoromethane failed the recovery criteria low for the MS/MSD of sample 160-468-1 in batch 160-9490.

The continuing calibration verification (CCV) for analytical batch 9262 exceeded control criteria for Acrolein and 2-Nitropropane. The data have been qualified and reported. CCV exceedances for non-requested analytes do not impact data quality.

The continuing calibration verification (CCV) for Dichlorodifluoromethane, Vinyl chloride and Carbon disulfide associated with batch 9262 recovered above the upper control limit. These analytes were not detected above the reporting limit in the associated samples; therefore, the data have been reported.

According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Sample was analyzed within the 7 day,

unpreserved, holding time. (PZ-207-AS (160-437-5) and PZ-305-AI (160-437-7))

Additionally, the surrogate compounds (Dibromofluoromethane, 1,2-Dichloroethane, Toluene-d8, and 4-Bromofluorobenzene) were not spiked at the initial calibration highest point because the recoveries do not warrant the high concentration.

No other difficulties were encountered during the VOCs analyses.

SEMIVOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for semivolatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 08/13/2012 and analyzed on 08/15/2012, 08/16/2012 and 08/22/2012.

Sample PZ-112-AS (160-437-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Hexachlorocyclopentadiene recovered high in the ICV giving this compound a potential high bias in the samples associated with this ICV. This compound did not recover above the RL in the associated samples, therefore this excursion does not adversely affect the data. The data is reported with this narrative.

The continuing calibration verification (CCV) for N-Nitrosodimethylamine and Pyridine associated with batch 9331 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

1,4-Dioxane recovered above the upper QC limit in the CCV. The client is not looking for this compound, therefore this excursion does not adversely affect the data. The data is reported with this narrative.

No difficulties were encountered during the SVOCs analyses.

METALS

When analyzing a sample for total and dissolved metals, it is expected that the dissolved metals concentrations would be less then the total. The accuracy of the results depends on a combination of random and systemic bias due to sub-sampling, sample preparation and analytical operations. When samples are processed under sufficiently uniform conditions, bias is controlled though the use of quality control indicators, such as; method blanks, laboratory control samples (LCS), calibration checks, sample duplicates, matrix spikes and internal standards.

A sample analyzed for total and dissolved metals, where the metals concentrations are indistinguishably different (i.e., metals present in the sample are 100% dissolved), may have slightly different concentrations due to the normal variations in the analytical process. Slightly higher concentrations present in dissolved versus total analysis can occur even though all quality controls are acceptable.

Variations for duplicate samples for metals are controlled using the relative percent difference (RPD) at 20%. The RDP between total and dissolved results can be used to evaluate if the concentrations are statistically in distinguishable. The samples in this job were evaluated and meet this criteria.

DISSOLVED METALS (ICP)

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/23/2012 and analyzed on 08/27/2012 and 08/28/2012.

The following samples were diluted to bring the concentration of target analytes within the calibration range: (160-437-1 MS), (160-437-1 MSD), (160-437-1 SD), D-12 (160-437-6), D-3 (160-437-2), DUP 05 (160-437-9), I-11 (160-437-4), PZ-112-AS (160-437-3), PZ-113-AS (160-437-1), PZ-207-AS (160-437-5), PZ-305-AI (160-437-7), S-10 (160-437-8). Elevated reporting limits (RLs) are provided.

Due to the high concentration of calcium, magnesium, manganese, and sodium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 9563 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for potassium in batch 9563 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount

.No other difficulties were encountered during the ICP analyses.

TOTAL METALS (ICP)

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/10/2012 and analyzed on 08/21/2012 and 08/22/2012.

Zinc was detected in method blank MB 160-8952/1-A at a level exceeding the reporting limit. If the associated sample reported a result

above the MDL and/or RL, the result has been “B” flagged. Zinc was detected in method blank MB 160-9563/1-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

Due to the high concentration of calcium and magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for batch 8952 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Due to the high concentration of iron, the matrix spike / matrix spike duplicate (MS/MSD) for batch 8952 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

The matrix spike / matrix spike duplicate (MS/MSD) accuracy and precision for aluminum in batch 8952 was outside control limits. The MS/MSD precision for all other analytes were within control limits, indicating that this failure is due to a possible matrix interference. The associated laboratory control sample(LCS) accuracy met acceptance criteria.

Samples PZ-113-AS (160-437-1)[5X], D-3 (160-437-2)[10X], D-3 (160-437-2)[5X], PZ-112-AS (160-437-3)[5X], I-11 (160-437-4)[5X], PZ-207-AS (160-437-5)[5X], D-12 (160-437-6)[20X], D-12 (160-437-6)[5X], PZ-305-AI (160-437-7)[10X], PZ-305-AI (160-437-7)[5X], S-10 (160-437-8)[10X], S-10 (160-437-8)[5X], DUP 05 (160-437-9)[10X] and DUP 05 (160-437-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

No other difficulties were encountered during the metals analyses.

DISSOLVED MERCURY (CVAA)

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/16/2012.

No difficulties were encountered during the mercury analyses.

TOTAL MERCURY

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 08/14/2012.

The matrix spike duplicate (MSD) for batch 9032 and 8920 were outside control limits. The RPD is within method criteria indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries. no further action is required.

No other difficulties were encountered during the mercury analyses.

ANIONS

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 08/14/2012 and 08/17/2012.

The following matrix spike / matrix spike duplicate (MS/MSD) recoveries for Bromide batch 9484 were outside control limits. The associated laboratory control sample (LCS) recoveries met acceptance criteria.

Samples D-3 (160-437-2)[5X], PZ-207-AS (160-437-5)[5X], D-12 (160-437-6)[5X] and DUP 05 (160-437-9)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the anions analyses.

ALKALINITY

Samples PZ-113-AS (160-437-1), D-3 (160-437-2), PZ-112-AS (160-437-3), I-11 (160-437-4), PZ-207-AS (160-437-5), D-12 (160-437-6), PZ-305-AI (160-437-7), S-10 (160-437-8) and DUP 05 (160-437-9) were analyzed for alkalinity in accordance with EPA Method 310.1. The samples were analyzed on 08/22/2012.

Alkalinity was detected in method blank MB 160-9518/1 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

Samples D-3 (160-437-2)[2X], PZ-112-AS (160-437-3)[2X], PZ-207-AS (160-437-5)[2X] and DUP 05 (160-437-9)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the alkalinity analyses.

All other quality control parameters were within the acceptance limits.

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSZ Analysis Batch Number: 9019

Lab Sample ID: ICV 160-9019/10 Client Sample ID:

Date Analyzed: 08/13/12 11:33 Lab File ID: ZICV1083.D GC Column: RTX-VMS40 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	2.99	Baseline Event	bonkoskig	08/13/12 23:37
4-Methyl-2-pentanone (MIBK)	10.71	Analyte not Identified by the Data System	bonkoskig	08/13/12 23:23

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Analysis Batch Number: 7404

Lab Sample ID: ICIS 160-7404/2 Client Sample ID:

Date Analyzed: 07/24/12 13:09 Lab File ID: JICL2872.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibenz(a,h)anthracene	24.44	Incomplete Integration	kuessnerm	07/25/12 09:55

Lab Sample ID: STD160 160-7404/3 IC Client Sample ID:

Date Analyzed: 07/24/12 13:42 Lab File ID: JICL2873.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.57	Incomplete Integration	kuessnerm	07/25/12 09:59
Benzoic acid	7.52	Incomplete Integration	kuessnerm	07/25/12 09:59
4-Bromophenyl phenyl ether	12.73	Analyte not Identified by the Data System	kuessnerm	07/25/12 10:00

Lab Sample ID: STD120 160-7404/4 IC Client Sample ID:

Date Analyzed: 07/24/12 14:16 Lab File ID: JICL2874.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.53	Incomplete Integration	kuessnerm	07/25/12 10:02
Benzoic acid	7.50	Incomplete Integration	kuessnerm	07/25/12 10:03

Lab Sample ID: STD080 160-7404/5 IC Client Sample ID:

Date Analyzed: 07/24/12 14:49 Lab File ID: JICL2875.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.43	Incomplete Integration	kuessnerm	07/25/12 10:03
Benzoic acid	7.45	Incomplete Integration	kuessnerm	07/25/12 10:04

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Analysis Batch Number: 7404

Lab Sample ID: STD020 160-7404/6 IC Client Sample ID:

Date Analyzed: 07/24/12 15:23 Lab File ID: JICL2876.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.43	Incomplete Integration	kuessnerm	07/25/12 10:05
Dibenz(a,h)anthracene	24.39	Incomplete Integration	kuessnerm	07/25/12 10:05

Lab Sample ID: STD010 160-7404/7 IC Client Sample ID:

Date Analyzed: 07/24/12 15:56 Lab File ID: JICL2877.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.45	Incomplete Integration	kuessnerm	07/25/12 10:06
Dimethyl phthalate	10.27	Analyte not Identified by the Data System	kuessnerm	07/25/12 10:06
Dibenz(a,h)anthracene	24.44	Incomplete Integration	kuessnerm	07/25/12 10:07

Lab Sample ID: STD005 160-7404/8 IC Client Sample ID:

Date Analyzed: 07/24/12 16:30 Lab File ID: JICL2878.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.46	Incomplete Integration	kuessnerm	07/25/12 10:07
Dimethyl phthalate	10.26	Analyte not Identified by the Data System	kuessnerm	07/25/12 10:08

Lab Sample ID: ICV 160-7404/16 Client Sample ID:

Date Analyzed: 07/24/12 17:04 Lab File ID: JICV2879.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dibenz(a,h)anthracene	24.47	Incomplete Integration	kuessnerm	07/25/12 11:56

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Analysis Batch Number: 9331

Lab Sample ID: 160-437-1 Client Sample ID: PZ-113-AS

Date Analyzed: 08/15/12 21:09 Lab File ID: JSMP3413.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethyl phthalate	9.94	Analyte not Identified by the Data System	kuessnerm	08/16/12 16:57

Lab Sample ID: 160-437-3 Client Sample ID: PZ-112-AS

Date Analyzed: 08/15/12 22:13 Lab File ID: JSMP3415.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Fluorophenol (Surr)	4.30	Analyte Misidentified by the Data System	kuessnerm	08/17/12 04:35

Lab Sample ID: 160-437-6 Client Sample ID: D-12

Date Analyzed: 08/15/12 23:49 Lab File ID: JSMP3418.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethyl phthalate	9.93	Analyte not Identified by the Data System	kuessnerm	08/16/12 17:07

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Analysis Batch Number: 9562

Lab Sample ID: STD160 160-9562/3 IC Client Sample ID:

Date Analyzed: 08/22/12 10:32 Lab File ID: JICL3490.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.58	Incomplete Integration	kuessnerm	08/22/12 11:53

Lab Sample ID: STD120 160-9562/4 IC Client Sample ID:

Date Analyzed: 08/22/12 11:06 Lab File ID: JICL3491.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.45	Incomplete Integration	kuessnerm	08/22/12 11:56

Lab Sample ID: STD080 160-9562/5 IC Client Sample ID:

Date Analyzed: 08/22/12 11:40 Lab File ID: JICL3492.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dimethylformamide	3.43	Incomplete Integration	kuessnerm	08/22/12 12:50

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Analysis Batch Number: 9564

Lab Sample ID: 160-437-3 Client Sample ID: PZ-112-AS

Date Analyzed: 08/22/12 22:13 Lab File ID: JSMP3512.D GC Column: RXI5SiiMS ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2-Fluorophenol (Surr)	4.51	Analyte Misidentified by the Data System	winklerj	08/23/12 14:09

SAMPLE SUMMARY

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
160-437-1	PZ-113-AS	Water	08/08/2012 0935	08/09/2012 0810
160-437-2	D-3	Water	08/08/2012 1000	08/09/2012 0810
160-437-3	PZ-112-AS	Water	08/08/2012 1048	08/09/2012 0810
160-437-4	I-11	Water	08/08/2012 1143	08/09/2012 0810
160-437-5	PZ-207-AS	Water	08/08/2012 1255	08/09/2012 0810
160-437-6	D-12	Water	08/08/2012 1416	08/09/2012 0810
160-437-7	PZ-305-AI	Water	08/08/2012 1430	08/09/2012 0810
160-437-8	S-10	Water	08/08/2012 1502	08/09/2012 0810
160-437-9FD	DUP 05	Water	08/08/2012 0000	08/09/2012 0810
160-437-10TB	TRIP BLANK	Water	08/08/2012 0000	08/09/2012 0810

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-1	**PZ-113-AS**					
Benzene		0.33	J	5.0	ug/L	8260C
Dichlorodifluoromethane		0.65	J	10	ug/L	8260C
Methyl tert-butyl ether		1.5	J	5.0	ug/L	8260C
Dimethyl phthalate		1.8	J	9.5	ug/L	8270D
Antimony		4.9	J	10	ug/L	6010C
Arsenic		12		10	ug/L	6010C
Barium		740		50	ug/L	6010C
Calcium		190000		5000	ug/L	6010C
Cobalt		11	J	50	ug/L	6010C
Iron		7500		100	ug/L	6010C
Lead		2.3	J	10	ug/L	6010C
Magnesium		54000		5000	ug/L	6010C
Manganese		6400		15	ug/L	6010C
Nickel		29	J	40	ug/L	6010C
Potassium		6800		5000	ug/L	6010C
Selenium		3.9	J	15	ug/L	6010C
Sodium		50000		1000	ug/L	6010C
Thallium		5.8	J	20	ug/L	6010C
Zinc		9.9	J B	20	ug/L	6010C
Bromide		0.98		0.25	mg/L	300.0
Iodide		0.51	J	1.0	mg/L	300.0
Alkalinity		650	B *	5.0	mg/L	310.1
Dissolved						
Barium		740		250	ug/L	6010C
Calcium		180000		5000	ug/L	6010C
Iron		6700		500	ug/L	6010C
Magnesium		51000		5000	ug/L	6010C
Manganese		6400		75	ug/L	6010C
Sodium		50000		5000	ug/L	6010C
Thallium		20	J	100	ug/L	6010C
Zinc		33	J B	100	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-2	**D-3**					
1,2,4-Trichlorobenzene		0.63	J B	5.0	ug/L	8260C
Acetone		10	J	20	ug/L	8260C
Benzene		0.50	J	5.0	ug/L	8260C
Bromomethane		1.0	J B	10	ug/L	8260C
Chlorobenzene		2.4	J	5.0	ug/L	8260C
Methyl tert-butyl ether		0.50	J	5.0	ug/L	8260C
Barium		2100		50	ug/L	6010C
Calcium		260000		10000	ug/L	6010C
Cobalt		4.9	J	50	ug/L	6010C
Iron		31000		100	ug/L	6010C
Lead		1.7	J	10	ug/L	6010C
Magnesium		83000		5000	ug/L	6010C
Manganese		470		15	ug/L	6010C
Nickel		18	J	40	ug/L	6010C
Potassium		21000		5000	ug/L	6010C
Sodium		290000		5000	ug/L	6010C
Zinc		5.5	J B	20	ug/L	6010C
Bromide		8.4		1.3	mg/L	300.0
Iodide		0.28	J	1.0	mg/L	300.0
Alkalinity		1100	B *	10	mg/L	310.1
Dissolved						
Arsenic		13	J	50	ug/L	6010C
Barium		1800		250	ug/L	6010C
Calcium		230000		5000	ug/L	6010C
Iron		27000		500	ug/L	6010C
Potassium		18000	J	25000	ug/L	6010C
Magnesium		73000		5000	ug/L	6010C
Manganese		410		75	ug/L	6010C
Sodium		280000		5000	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-3	**PZ-112-AS**					
1,2-Dichlorobenzene		19		5.0	ug/L	8260C
1,4-Dichlorobenzene		17		5.0	ug/L	8260C
Acetone		7.2	J	20	ug/L	8260C
Benzene		58		5.0	ug/L	8260C
Bromomethane		0.83	J B	10	ug/L	8260C
Chlorobenzene		2800		100	ug/L	8260C
Methyl tert-butyl ether		0.56	J	5.0	ug/L	8260C
m-Xylene & p-Xylene		1.3	J	5.0	ug/L	8260C
o-Xylene		0.67	J	5.0	ug/L	8260C
2-Chlorophenol		9.8		9.5	ug/L	8270D
1,4-Dichlorobenzene		11		9.5	ug/L	8270D
Naphthalene		220		47	ug/L	8270D
Aluminum		300		200	ug/L	6010C
Arsenic		190		10	ug/L	6010C
Barium		2200		50	ug/L	6010C
Calcium		150000		5000	ug/L	6010C
Chromium		3.2	J	10	ug/L	6010C
Copper		6.1	J	25	ug/L	6010C
Iron		44000		100	ug/L	6010C
Lead		4.4	J	10	ug/L	6010C
Magnesium		90000		5000	ug/L	6010C
Manganese		280		15	ug/L	6010C
Nickel		16	J	40	ug/L	6010C
Potassium		46000		5000	ug/L	6010C
Sodium		110000		5000	ug/L	6010C
Vanadium		7.5	J	50	ug/L	6010C
Zinc		14	J B	20	ug/L	6010C
Bromide		0.46		0.25	mg/L	300.0
Alkalinity		1100	B *	10	mg/L	310.1
Dissolved						
Arsenic		170		50	ug/L	6010C
Barium		1800		250	ug/L	6010C
Calcium		120000		5000	ug/L	6010C
Iron		37000		500	ug/L	6010C
Potassium		39000		25000	ug/L	6010C
Magnesium		73000		5000	ug/L	6010C
Manganese		220		75	ug/L	6010C
Sodium		98000		5000	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-4	**I-11**					
1,1-Dichloroethane		0.61	J	5.0	ug/L	8260C
Bromomethane		0.65	J B	10	ug/L	8260C
Chlorobenzene		19		5.0	ug/L	8260C
Chloroethane		4.0	J	10	ug/L	8260C
cis-1,2-Dichloroethene		1.9	J	5.0	ug/L	8260C
Methyl tert-butyl ether		0.55	J	5.0	ug/L	8260C
Arsenic		15		10	ug/L	6010C
Barium		860		50	ug/L	6010C
Calcium		210000		5000	ug/L	6010C
Iron		25000		100	ug/L	6010C
Magnesium		76000		5000	ug/L	6010C
Manganese		1300		15	ug/L	6010C
Nickel		13	J	40	ug/L	6010C
Potassium		22000		5000	ug/L	6010C
Sodium		110000		5000	ug/L	6010C
Vanadium		6.8	J	50	ug/L	6010C
Zinc		6.1	J B	20	ug/L	6010C
Bromide		1.8		0.25	mg/L	300.0
Iodide		0.21	J	1.0	mg/L	300.0
Alkalinity		830	B *	5.0	mg/L	310.1
Dissolved						
Arsenic		15	J	50	ug/L	6010C
Barium		760		250	ug/L	6010C
Calcium		190000		5000	ug/L	6010C
Iron		22000		500	ug/L	6010C
Potassium		20000	J	25000	ug/L	6010C
Magnesium		64000		5000	ug/L	6010C
Manganese		1200		75	ug/L	6010C
Sodium		100000		5000	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-5	**PZ-207-AS**					
1,2-Dichlorobenzene		0.49	J	5.0	ug/L	8260C
1,4-Dichlorobenzene		3.0	J	5.0	ug/L	8260C
Acetone		15	J	20	ug/L	8260C
Benzene		1.6	J	5.0	ug/L	8260C
Bromomethane		0.49	J B	10	ug/L	8260C
Chlorobenzene		13		5.0	ug/L	8260C
Dichlorodifluoromethane		6.1	J	10	ug/L	8260C
Isopropylbenzene		4.0	J	5.0	ug/L	8260C
Methyl tert-butyl ether		1.0	J	5.0	ug/L	8260C
Bis(2-ethylhexyl) phthalate		28		9.5	ug/L	8270D
1,4-Dichlorobenzene		2.4	J	9.5	ug/L	8270D
N-Nitrosodiphenylamine		1.9	J	9.5	ug/L	8270D
Aluminum		110	J	200	ug/L	6010C
Arsenic		5.4	J	10	ug/L	6010C
Barium		700		50	ug/L	6010C
Calcium		150000		5000	ug/L	6010C
Chromium		3.4	J	10	ug/L	6010C
Cobalt		5.9	J	50	ug/L	6010C
Copper		6.3	J	25	ug/L	6010C
Iron		22000		100	ug/L	6010C
Lead		4.9	J	10	ug/L	6010C
Magnesium		96000		5000	ug/L	6010C
Manganese		71		15	ug/L	6010C
Nickel		40		40	ug/L	6010C
Potassium		75000		5000	ug/L	6010C
Sodium		290000		5000	ug/L	6010C
Vanadium		4.7	J	50	ug/L	6010C
Zinc		63	B	20	ug/L	6010C
Mercury		0.16	J	0.20	ug/L	7470A
Bromide		3.0		1.3	mg/L	300.0
Iodide		0.25	J	1.0	mg/L	300.0
Alkalinity		1300	B *	10	mg/L	310.1
Dissolved						
Arsenic		12	J	50	ug/L	6010C
Barium		660		250	ug/L	6010C
Calcium		140000		5000	ug/L	6010C
Iron		19000		500	ug/L	6010C
Potassium		74000		25000	ug/L	6010C
Magnesium		90000		5000	ug/L	6010C
Manganese		66	J	75	ug/L	6010C
Sodium		290000		5000	ug/L	6010C
Nickel		200		200	ug/L	6010C
Thallium		22	J	100	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-6	**D-12**					
Acetone		11	J	20	ug/L	8260C
Bromomethane		0.60	J B	10	ug/L	8260C
Chlorobenzene		1.2	J	5.0	ug/L	8260C
cis-1,2-Dichloroethene		0.44	J	5.0	ug/L	8260C
Methyl tert-butyl ether		0.52	J	5.0	ug/L	8260C
Dimethyl phthalate		1.8	J	9.5	ug/L	8270D
Aluminum		230		200	ug/L	6010C
Barium		490		50	ug/L	6010C
Calcium		660000		20000	ug/L	6010C
Iron		15000		100	ug/L	6010C
Lead		2.3	J	10	ug/L	6010C
Magnesium		67000		5000	ug/L	6010C
Manganese		1100		15	ug/L	6010C
Potassium		13000		5000	ug/L	6010C
Sodium		170000		5000	ug/L	6010C
Zinc		10	J B	20	ug/L	6010C
Bromide		4.8		1.3	mg/L	300.0
Iodide		0.20	J	1.0	mg/L	300.0
Alkalinity		960	B *	5.0	mg/L	310.1
Dissolved						
Barium		470		250	ug/L	6010C
Calcium		510000		20000	ug/L	6010C
Iron		11000		500	ug/L	6010C
Potassium		12000	J	25000	ug/L	6010C
Magnesium		61000		5000	ug/L	6010C
Manganese		1100		75	ug/L	6010C
Sodium		170000		5000	ug/L	6010C
Lead		11	J	50	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-7	**PZ-305-AI**					
Benzene		1.4	J	5.0	ug/L	8260C
Chlorobenzene		4.6	J	5.0	ug/L	8260C
Aluminum		980		200	ug/L	6010C
Arsenic		26		10	ug/L	6010C
Barium		670		50	ug/L	6010C
Calcium		300000		10000	ug/L	6010C
Copper		5.6	J	25	ug/L	6010C
Iron		44000		100	ug/L	6010C
Lead		3.8	J	10	ug/L	6010C
Magnesium		87000		5000	ug/L	6010C
Manganese		4100		15	ug/L	6010C
Potassium		6900		5000	ug/L	6010C
Sodium		19000		1000	ug/L	6010C
Vanadium		8.5	J	50	ug/L	6010C
Zinc		22	B	20	ug/L	6010C
Bromide		0.49		0.25	mg/L	300.0
Iodide		0.36	J	1.0	mg/L	300.0
Alkalinity		990	B *	5.0	mg/L	310.1
Dissolved						
Arsenic		36	J	50	ug/L	6010C
Barium		610		250	ug/L	6010C
Calcium		260000		10000	ug/L	6010C
Iron		38000		500	ug/L	6010C
Magnesium		82000		5000	ug/L	6010C
Manganese		4000		75	ug/L	6010C
Sodium		19000		5000	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-8	**S-10**					
1,1-Dichloroethane		0.81	J	5.0	ug/L	8260C
1,2-Dichlorobenzene		0.29	J	5.0	ug/L	8260C
1,4-Dichlorobenzene		0.76	J	5.0	ug/L	8260C
Acetone		8.0	J	20	ug/L	8260C
Benzene		3.2	J	5.0	ug/L	8260C
Bromomethane		0.44	J B	10	ug/L	8260C
Chlorobenzene		5.5		5.0	ug/L	8260C
Chloroethane		4.6	J	10	ug/L	8260C
cis-1,2-Dichloroethene		1.9	J	5.0	ug/L	8260C
Methyl tert-butyl ether		0.66	J	5.0	ug/L	8260C
Methylcyclohexane		0.58	J	10	ug/L	8260C
Vinyl chloride		1.1	J	5.0	ug/L	8260C
Aluminum		790		200	ug/L	6010C
Arsenic		36		10	ug/L	6010C
Barium		110		50	ug/L	6010C
Calcium		360000		10000	ug/L	6010C
Iron		65000		100	ug/L	6010C
Lead		1.8	J	10	ug/L	6010C
Magnesium		170000		5000	ug/L	6010C
Manganese		3100		15	ug/L	6010C
Nickel		18	J	40	ug/L	6010C
Potassium		44000		5000	ug/L	6010C
Sodium		190000		5000	ug/L	6010C
Vanadium		11	J	50	ug/L	6010C
Bromide		2.0		0.25	mg/L	300.0
Iodide		0.31	J	1.0	mg/L	300.0
Alkalinity		800	B *	5.0	mg/L	310.1
Dissolved						
Aluminum		590	J	1000	ug/L	6010C
Arsenic		36	J	50	ug/L	6010C
Barium		100	J	250	ug/L	6010C
Calcium		320000		10000	ug/L	6010C
Iron		61000		500	ug/L	6010C
Potassium		40000		25000	ug/L	6010C
Magnesium		150000		5000	ug/L	6010C
Manganese		2800		75	ug/L	6010C
Sodium		180000		5000	ug/L	6010C

EXECUTIVE SUMMARY - Detections

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Sample ID / Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
160-437-9FD	**DUP 05**					
Acetone		11	J	20	ug/L	8260C
Benzene		0.53	J	5.0	ug/L	8260C
Bromomethane		0.53	J B	10	ug/L	8260C
Chlorobenzene		5.1		5.0	ug/L	8260C
Methyl tert-butyl ether		0.51	J	5.0	ug/L	8260C
Antimony		4.5	J	10	ug/L	6010C
Barium		2100		50	ug/L	6010C
Calcium		270000		10000	ug/L	6010C
Cobalt		4.6	J	50	ug/L	6010C
Iron		31000		100	ug/L	6010C
Magnesium		80000		5000	ug/L	6010C
Manganese		470		15	ug/L	6010C
Nickel		17	J	40	ug/L	6010C
Potassium		21000		5000	ug/L	6010C
Sodium		290000		5000	ug/L	6010C
Vanadium		5.1	J	50	ug/L	6010C
Zinc		5.8	J B	20	ug/L	6010C
Bromide		8.1		1.3	mg/L	300.0
Iodide		0.30	J	1.0	mg/L	300.0
Alkalinity		1100	B	10	mg/L	310.1
Dissolved						
Barium		2000		250	ug/L	6010C
Calcium		240000		5000	ug/L	6010C
Iron		31000		500	ug/L	6010C
Potassium		20000	J	25000	ug/L	6010C
Magnesium		82000		5000	ug/L	6010C
Manganese		460		75	ug/L	6010C
Sodium		310000		5000	ug/L	6010C
160-437-10TB	**TRIP BLANK**					
Bromomethane		0.47	J B	10	ug/L	8260C

METHOD SUMMARY

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Description	Lab Location	Method	Preparation Method
Matrix: Water			
Volatile Organic Compounds by GC/MS	TAL SL	SW846 8260C	
Purge and Trap	TAL SL		SW846 5030C
TCL Semivolatile Compounds (OLM04.2)	TAL SL	SW846 8270D	
Liquid-Liquid Extraction (Separatory Funnel)	TAL SL		SW846 3510C
Metals (ICP)	TAL SL	SW846 6010C	
Preparation, Total Metals	TAL SL		SW846 3010A
Metals (ICP)	TAL SL	SW846 6010C	
Preparation, Total Metals	TAL SL		SW846 3010A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL SL	SW846 7470A	
Preparation, Mercury	TAL SL		SW846 7470A
Mercury (CVAA)	TAL SL	SW846 7470A	
Preparation, Mercury	TAL SL		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Anions, Ion Chromatography	TAL SL	MCAWW 300.0	
Alkalinity	TAL SL	MCAWW 310.1	

Lab References:

TAL SL = TestAmerica St. Louis

Method References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method	Analyst	Analyst ID
SW846 8260C	Hann, John	JH
SW846 8270D	Kuessner, Melissa	MK
SW846 8270D	Winkler, Jeff	JW
SW846 6010C	Buffington, Cory	CB
SW846 7470A	Smith, Chris	CS
MCAWW 300.0	Boyd, Jacob	JB
MCAWW 310.1	Clarke, Jill	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1972.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0639			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0639				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	0.33	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	ND		0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	ND		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	0.65	J	0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	1.5	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1972.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0639			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0639				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	109		85 - 115
Dibromofluoromethane (Surr)	106		85 - 119
4-Bromofluorobenzene (Surr)	112		82 - 121
1,2-Dichloroethane-d4 (Surr)	112		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1976.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0819			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0819				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	0.63	J B	0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	10	J	6.7	20
Benzene	0.50	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	1.0	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	2.4	J	0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.50	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1976.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0819			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0819				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	103		85 - 115
Dibromofluoromethane (Surr)	94		85 - 119
4-Bromofluorobenzene (Surr)	107		82 - 121
1,2-Dichloroethane-d4 (Surr)	109		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1977.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0844			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0844				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	19		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	17		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
Acetone	7.2	J	6.7	20
Benzene	58		0.25	5.0
Bromomethane	0.83	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.56	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	1.3	J	0.57	5.0
o-Xylene	0.67	J	0.32	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
Trichloroethene	ND		0.29	5.0
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	82	X	85 - 115
Dibromofluoromethane (Surr)	101		85 - 119
4-Bromofluorobenzene (Surr)	114		82 - 121
1,2-Dichloroethane-d4 (Surr)	109		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9490	Instrument ID:	MSZ
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	ZSMP1173.D
Dilution:	1.0			Initial Weight/Volume:	0.25 mL
Analysis Date:	08/16/2012 2015			Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 2015				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,2-Trichloroethane	ND		11	100
2-Hexanone	ND		12	400
4-Methyl-2-pentanone (MIBK)	ND		6.6	400
Bromoform	ND		7.4	100
Chlorobenzene	2800		7.6	100
Dibromochloromethane	ND		6.6	100
Ethylbenzene	ND		6.0	100
Isopropylbenzene	ND		5.2	100
Styrene	ND		7.0	100
Tetrachloroethene	ND		5.6	100
Toluene	ND		20	100
trans-1,3-Dichloropropene	ND		7.0	100
Xylenes, Total	ND		17	200

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	99		85 - 115
Dibromofluoromethane (Surr)	105		85 - 119
4-Bromofluorobenzene (Surr)	98		82 - 121
1,2-Dichloroethane-d4 (Surr)	103		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1978.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0909			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0909				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	0.61	J	0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	ND		0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.65	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	19		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	4.0	J	0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	1.9	J	0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.55	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1978.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0909			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0909				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	104		85 - 115
Dibromofluoromethane (Surr)	102		85 - 119
4-Bromofluorobenzene (Surr)	111		82 - 121
1,2-Dichloroethane-d4 (Surr)	106		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1983.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1154			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1154				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	0.49	J	0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	3.0	J	0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	15	J	6.7	20
Benzene	1.6	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.49	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	13		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	6.1	J	0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	4.0	J	0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	1.0	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1983.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1154			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1154				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	105		85 - 115
Dibromofluoromethane (Surr)	103		85 - 119
4-Bromofluorobenzene (Surr)	109		82 - 121
1,2-Dichloroethane-d4 (Surr)	115		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1980.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1022			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1022				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	11	J	6.7	20
Benzene	ND		0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.60	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	1.2	J	0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	0.44	J	0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.52	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1980.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1022			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1022				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	106		85 - 115
Dibromofluoromethane (Surr)	104		85 - 119
4-Bromofluorobenzene (Surr)	103		82 - 121
1,2-Dichloroethane-d4 (Surr)	110		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1981.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1047			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1047				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	1.4	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	ND		0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	4.6	J	0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	ND		0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1981.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1047			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1047				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	102		85 - 115
Dibromofluoromethane (Surr)	95		85 - 119
4-Bromofluorobenzene (Surr)	103		82 - 121
1,2-Dichloroethane-d4 (Surr)	109		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1982.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1112			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1112				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	0.81	J	0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	0.29	J	0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	0.76	J	0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	8.0	J	6.7	20
Benzene	3.2	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.44	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	5.5		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	4.6	J	0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	1.9	J	0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.66	J	0.40	5.0
Methylcyclohexane	0.58	J	0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1982.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 1112			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 1112				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	1.1	J	0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	101		85 - 115
Dibromofluoromethane (Surr)	98		85 - 119
4-Bromofluorobenzene (Surr)	101		82 - 121
1,2-Dichloroethane-d4 (Surr)	112		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1979.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0934			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0934				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	11	J	6.7	20
Benzene	0.53	J	0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.53	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	5.1		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	0.51	J	0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1979.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0934			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0934				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	108		85 - 115
Dibromofluoromethane (Surr)	99		85 - 119
4-Bromofluorobenzene (Surr)	106		82 - 121
1,2-Dichloroethane-d4 (Surr)	113		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 160-437-10TB Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1970.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0549			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0549				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	ND		0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	0.47	J B	0.40	10
Carbon disulfide	ND	*	0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	ND		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	ND		0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0
Trichloroethene	ND		0.29	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **TRIP BLANK**

Lab Sample ID: 160-437-10TB Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	160-9262	Instrument ID:	MSM
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	MSMP1970.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0549			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0549				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	%Rec	Qualifier	Acceptance Limits
Toluene-d8 (Surr)	105		85 - 115
Dibromofluoromethane (Surr)	94		85 - 119
4-Bromofluorobenzene (Surr)	106		82 - 121
1,2-Dichloroethane-d4 (Surr)	101		82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3413.D
Dilution:	1.0			Initial Weight/Volume:	1054.6 mL
Analysis Date:	08/15/2012 2109			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	1.8	J	0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3413.D
Dilution:	1.0			Initial Weight/Volume:	1054.6 mL
Analysis Date:	08/15/2012 2109			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	46		21 - 85
2,4,6-Tribromophenol (Surr)	78		46 - 118
Nitrobenzene-d5 (Surr)	81		45 - 99
Phenol-d5 (Surr)	35		10 - 70
Terphenyl-d14 (Surr)	84		53 - 126
2-Fluorobiphenyl (Surr)	75		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3414.D
Dilution:	1.0			Initial Weight/Volume:	1059.1 mL
Analysis Date:	08/15/2012 2141			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.94	9.4
Acenaphthylene	ND		0.94	9.4
Anthracene	ND		0.94	9.4
Benzo[a]anthracene	ND		0.94	9.4
Benzo[b]fluoranthene	ND		0.94	9.4
Benzo[k]fluoranthene	ND		0.94	9.4
Benzo[g,h,i]perylene	ND		0.94	9.4
Benzo[a]pyrene	ND		0.94	9.4
Bis(2-chloroethoxy)methane	ND		0.94	9.4
Bis(2-chloroethyl)ether	ND		0.94	9.4
Bis(2-ethylhexyl) phthalate	ND		0.94	9.4
4-Bromophenyl phenyl ether	ND		0.94	9.4
Butyl benzyl phthalate	ND		0.94	9.4
Carbazole	ND		0.94	9.4
4-Chloroaniline	ND		2.1	9.4
4-Chloro-3-methylphenol	ND		0.94	9.4
2-Chloronaphthalene	ND		0.94	9.4
2-Chlorophenol	ND		0.94	9.4
4-Chlorophenyl phenyl ether	ND		0.94	9.4
Chrysene	ND		0.94	9.4
Dibenz(a,h)anthracene	ND		0.94	9.4
Dibenzofuran	ND		0.94	9.4
Di-n-butyl phthalate	ND		0.94	9.4
1,2-Dichlorobenzene	ND		0.94	9.4
1,3-Dichlorobenzene	ND		0.94	9.4
1,4-Dichlorobenzene	ND		0.94	9.4
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.4
Diethyl phthalate	ND		0.94	9.4
2,4-Dimethylphenol	ND		0.94	9.4
Dimethyl phthalate	ND		0.94	9.4
4,6-Dinitro-2-methylphenol	ND		0.94	9.4
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.94	9.4
2,6-Dinitrotoluene	ND		2.0	9.4
Di-n-octyl phthalate	ND		0.94	9.4
Fluoranthene	ND		0.94	9.4
Fluorene	ND		0.94	9.4
Hexachlorobenzene	ND		0.94	9.4
Hexachlorobutadiene	ND		0.94	9.4
Hexachlorocyclopentadiene	ND		0.94	9.4
Hexachloroethane	ND		0.94	9.4
Indeno[1,2,3-cd]pyrene	ND		0.94	9.4
Isophorone	ND		0.94	9.4
2-Methylnaphthalene	ND		0.94	9.4
2-Methylphenol	ND		0.94	9.4

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3414.D
Dilution:	1.0			Initial Weight/Volume:	1059.1 mL
Analysis Date:	08/15/2012 2141			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.94	9.4
2-Nitroaniline	ND		0.94	9.4
3-Nitroaniline	ND		0.94	9.4
4-Nitroaniline	ND		0.94	9.4
Nitrobenzene	ND		1.0	9.4
2-Nitrophenol	ND		0.94	9.4
4-Nitrophenol	ND		1.9	9.4
N-Nitrosodiphenylamine	ND		0.94	9.4
N-Nitrosodi-n-propylamine	ND		0.94	9.4
2,2'-oxybis[1-chloropropane]	ND		0.94	9.4
Pentachlorophenol	ND		1.2	9.4
Phenanthrene	ND		0.94	9.4
Phenol	ND		1.9	9.4
Pyrene	ND		0.94	9.4
1,2,4-Trichlorobenzene	ND		0.94	9.4
2,4,5-Trichlorophenol	ND		0.94	9.4
2,4,6-Trichlorophenol	ND		0.94	9.4

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	43		21 - 85
2,4,6-Tribromophenol (Surr)	85		46 - 118
Nitrobenzene-d5 (Surr)	81		45 - 99
Phenol-d5 (Surr)	27		10 - 70
Terphenyl-d14 (Surr)	84		53 - 126
2-Fluorobiphenyl (Surr)	71		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3415.D
Dilution:	1.0			Initial Weight/Volume:	1054.3 mL
Analysis Date:	08/15/2012 2213			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	9.8		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	11		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3415.D
Dilution:	1.0			Initial Weight/Volume:	1054.3 mL
Analysis Date:	08/15/2012 2213			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	43		21 - 85
2,4,6-Tribromophenol (Surr)	81		46 - 118
Nitrobenzene-d5 (Surr)	78		45 - 99
Phenol-d5 (Surr)	27		10 - 70
Terphenyl-d14 (Surr)	81		53 - 126
2-Fluorobiphenyl (Surr)	70		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9564	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3512.D
Dilution:	5.0			Initial Weight/Volume:	1054.3 mL
Analysis Date:	08/22/2012 2213			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Naphthalene	220		4.7	47

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	40		21 - 85
2,4,6-Tribromophenol (Surr)	77		46 - 118
Nitrobenzene-d5 (Surr)	71		45 - 99
Phenol-d5 (Surr)	25		10 - 70
Terphenyl-d14 (Surr)	85		53 - 126
2-Fluorobiphenyl (Surr)	73		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3416.D
Dilution:	1.0			Initial Weight/Volume:	1057.8 mL
Analysis Date:	08/15/2012 2245			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3416.D
Dilution:	1.0			Initial Weight/Volume:	1057.8 mL
Analysis Date:	08/15/2012 2245			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	44		21 - 85
2,4,6-Tribromophenol (Surr)	81		46 - 118
Nitrobenzene-d5 (Surr)	83		45 - 99
Phenol-d5 (Surr)	27		10 - 70
Terphenyl-d14 (Surr)	84		53 - 126
2-Fluorobiphenyl (Surr)	71		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3417.D
Dilution:	1.0			Initial Weight/Volume:	1054.7 mL
Analysis Date:	08/15/2012 2317			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	28		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	2.4	J	0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3417.D
Dilution:	1.0			Initial Weight/Volume:	1054.7 mL
Analysis Date:	08/15/2012 2317			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	1.9	J	0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	44		21 - 85
2,4,6-Tribromophenol (Surr)	85		46 - 118
Nitrobenzene-d5 (Surr)	83		45 - 99
Phenol-d5 (Surr)	27		10 - 70
Terphenyl-d14 (Surr)	80		53 - 126
2-Fluorobiphenyl (Surr)	74		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3418.D
Dilution:	1.0			Initial Weight/Volume:	1055.1 mL
Analysis Date:	08/15/2012 2349			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	1.8	J	0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3418.D
Dilution:	1.0			Initial Weight/Volume:	1055.1 mL
Analysis Date:	08/15/2012 2349			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	46		21 - 85
2,4,6-Tribromophenol (Surr)	80		46 - 118
Nitrobenzene-d5 (Surr)	84		45 - 99
Phenol-d5 (Surr)	27		10 - 70
Terphenyl-d14 (Surr)	83		53 - 126
2-Fluorobiphenyl (Surr)	70		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3419.D
Dilution:	1.0			Initial Weight/Volume:	1057.1 mL
Analysis Date:	08/16/2012 0021			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3419.D
Dilution:	1.0			Initial Weight/Volume:	1057.1 mL
Analysis Date:	08/16/2012 0021			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	41		21 - 85
2,4,6-Tribromophenol (Surr)	74		46 - 118
Nitrobenzene-d5 (Surr)	79		45 - 99
Phenol-d5 (Surr)	26		10 - 70
Terphenyl-d14 (Surr)	81		53 - 126
2-Fluorobiphenyl (Surr)	68		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3420.D
Dilution:	1.0			Initial Weight/Volume:	1058.2 mL
Analysis Date:	08/16/2012 0054			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3420.D
Dilution:	1.0			Initial Weight/Volume:	1058.2 mL
Analysis Date:	08/16/2012 0054			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	50		21 - 85
2,4,6-Tribromophenol (Surr)	81		46 - 118
Nitrobenzene-d5 (Surr)	84		45 - 99
Phenol-d5 (Surr)	43		10 - 70
Terphenyl-d14 (Surr)	83		53 - 126
2-Fluorobiphenyl (Surr)	71		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3421.D
Dilution:	1.0			Initial Weight/Volume:	1056.8 mL
Analysis Date:	08/16/2012 0126			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
Acenaphthene	ND		0.95	9.5
Acenaphthylene	ND		0.95	9.5
Anthracene	ND		0.95	9.5
Benzo[a]anthracene	ND		0.95	9.5
Benzo[b]fluoranthene	ND		0.95	9.5
Benzo[k]fluoranthene	ND		0.95	9.5
Benzo[g,h,i]perylene	ND		0.95	9.5
Benzo[a]pyrene	ND		0.95	9.5
Bis(2-chloroethoxy)methane	ND		0.95	9.5
Bis(2-chloroethyl)ether	ND		0.95	9.5
Bis(2-ethylhexyl) phthalate	ND		0.95	9.5
4-Bromophenyl phenyl ether	ND		0.95	9.5
Butyl benzyl phthalate	ND		0.95	9.5
Carbazole	ND		0.95	9.5
4-Chloroaniline	ND		2.1	9.5
4-Chloro-3-methylphenol	ND		0.95	9.5
2-Chloronaphthalene	ND		0.95	9.5
2-Chlorophenol	ND		0.95	9.5
4-Chlorophenyl phenyl ether	ND		0.95	9.5
Chrysene	ND		0.95	9.5
Dibenz(a,h)anthracene	ND		0.95	9.5
Dibenzofuran	ND		0.95	9.5
Di-n-butyl phthalate	ND		0.95	9.5
1,2-Dichlorobenzene	ND		0.95	9.5
1,3-Dichlorobenzene	ND		0.95	9.5
1,4-Dichlorobenzene	ND		0.95	9.5
3,3'-Dichlorobenzidine	ND		1.2	47
2,4-Dichlorophenol	ND		1.0	9.5
Diethyl phthalate	ND		0.95	9.5
2,4-Dimethylphenol	ND		0.95	9.5
Dimethyl phthalate	ND		0.95	9.5
4,6-Dinitro-2-methylphenol	ND		0.95	9.5
2,4-Dinitrophenol	ND		1.9	47
2,4-Dinitrotoluene	ND		0.95	9.5
2,6-Dinitrotoluene	ND		2.0	9.5
Di-n-octyl phthalate	ND		0.95	9.5
Fluoranthene	ND		0.95	9.5
Fluorene	ND		0.95	9.5
Hexachlorobenzene	ND		0.95	9.5
Hexachlorobutadiene	ND		0.95	9.5
Hexachlorocyclopentadiene	ND		0.95	9.5
Hexachloroethane	ND		0.95	9.5
Indeno[1,2,3-cd]pyrene	ND		0.95	9.5
Isophorone	ND		0.95	9.5
2-Methylnaphthalene	ND		0.95	9.5
2-Methylphenol	ND		0.95	9.5

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

8270D TCL Semivolatile Compounds (OLM04.2)

Analysis Method:	8270D	Analysis Batch:	160-9331	Instrument ID:	MSJ
Prep Method:	3510C	Prep Batch:	160-8998	Lab File ID:	JSMP3421.D
Dilution:	1.0			Initial Weight/Volume:	1056.8 mL
Analysis Date:	08/16/2012 0126			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1355			Injection Volume:	1 uL

Analyte	Result (ug/L)	Qualifier	MDL	RL
3 & 4 Methylphenol	ND		1.9	19
Naphthalene	ND		0.95	9.5
2-Nitroaniline	ND		0.95	9.5
3-Nitroaniline	ND		0.95	9.5
4-Nitroaniline	ND		0.95	9.5
Nitrobenzene	ND		1.0	9.5
2-Nitrophenol	ND		0.95	9.5
4-Nitrophenol	ND		1.9	9.5
N-Nitrosodiphenylamine	ND		0.95	9.5
N-Nitrosodi-n-propylamine	ND		0.95	9.5
2,2'-oxybis[1-chloropropane]	ND		0.95	9.5
Pentachlorophenol	ND		1.2	9.5
Phenanthrene	ND		0.95	9.5
Phenol	ND		1.9	9.5
Pyrene	ND		0.95	9.5
1,2,4-Trichlorobenzene	ND		0.95	9.5
2,4,5-Trichlorophenol	ND		0.95	9.5
2,4,6-Trichlorophenol	ND		0.95	9.5

Surrogate	%Rec	Qualifier	Acceptance Limits
2-Fluorophenol (Surr)	64		21 - 85
2,4,6-Tribromophenol (Surr)	83		46 - 118
Nitrobenzene-d5 (Surr)	81		45 - 99
Phenol-d5 (Surr)	46		10 - 70
Terphenyl-d14 (Surr)	81		53 - 126
2-Fluorobiphenyl (Surr)	71		46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1410			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		80	200
Antimony	4.9	J	4.0	10
Arsenic	12		2.0	10
Barium	740		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	11	J	4.0	50
Copper	ND		4.6	25
Iron	7500		28	100
Lead	2.3	J	1.5	10
Manganese	6400		3.3	15
Nickel	29	J	13	40
Potassium	6800		1700	5000
Selenium	3.9	J	2.7	15
Silver	ND		6.0	10
Sodium	50000		320	1000
Thallium	5.8	J	4.0	20
Vanadium	ND		4.1	50
Zinc	9.9	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1258			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	190000		530	5000
Magnesium	54000		660	5000

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1614			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	ND		9.9	50
Barium	740		20	250

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Beryllium	ND		3.1	25
Calcium	180000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	6700		140	500
Potassium	ND		8300	25000
Magnesium	51000		660	5000
Manganese	6400		17	75
Sodium	50000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	20	J	20	100
Vanadium	ND		20	250
Zinc	33	J B	26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1343			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1437			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1414			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		80	200
Antimony	ND		4.0	10
Arsenic	ND		2.0	10
Barium	2100		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	4.9	J	4.0	50
Copper	ND		4.6	25
Iron	31000		28	100
Lead	1.7	J	1.5	10
Manganese	470		3.3	15
Nickel	18	J	13	40
Potassium	21000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	ND		4.1	50
Zinc	5.5	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1302			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Magnesium	83000		660	5000
Sodium	290000		1600	5000

Analysis Method:	6010C	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082212C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 0926			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	260000		1100	10000

6010C Metals (ICP)-Dissolved

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1636			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	13	J	9.9	50
Barium	1800		20	250
Beryllium	ND		3.1	25
Calcium	230000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	27000		140	500
Potassium	18000	J	8300	25000
Magnesium	73000		660	5000
Manganese	410		17	75
Sodium	280000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1350			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1439			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

7470A Mercury (CVAA)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1417			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	300		80	200
Antimony	ND		4.0	10
Arsenic	190		2.0	10
Barium	2200		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	3.2	J	3.1	10
Cobalt	ND		4.0	50
Copper	6.1	J	4.6	25
Iron	44000		28	100
Lead	4.4	J	1.5	10
Manganese	280		3.3	15
Nickel	16	J	13	40
Potassium	46000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	7.5	J	4.1	50
Zinc	14	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1306			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	150000		530	5000
Magnesium	90000		660	5000
Sodium	110000		1600	5000

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1639			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	170		9.9	50
Barium	1800		20	250

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Beryllium	ND		3.1	25
Calcium	120000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	37000		140	500
Potassium	39000		8300	25000
Magnesium	73000		660	5000
Manganese	220		17	75
Sodium	98000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1352			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1441			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1421			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		80	200
Antimony	ND		4.0	10
Arsenic	15		2.0	10
Barium	860		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	ND		4.0	50
Copper	ND		4.6	25
Iron	25000		28	100
Lead	ND		1.5	10
Manganese	1300		3.3	15
Nickel	13	J	13	40
Potassium	22000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	6.8	J	4.1	50
Zinc	6.1	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1309			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	210000		530	5000
Magnesium	76000		660	5000
Sodium	110000		1600	5000

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1643			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	15	J	9.9	50
Barium	760		20	250

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Beryllium	ND		3.1	25
Calcium	190000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	22000		140	500
Potassium	20000	J	8300	25000
Magnesium	64000		660	5000
Manganese	1200		17	75
Sodium	100000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1354			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1442			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1424			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	110	J	80	200
Antimony	ND		4.0	10
Arsenic	5.4	J	2.0	10
Barium	700		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	3.4	J	3.1	10
Cobalt	5.9	J	4.0	50
Copper	6.3	J	4.6	25
Iron	22000		28	100
Lead	4.9	J	1.5	10
Manganese	71		3.3	15
Nickel	40		13	40
Potassium	75000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	4.7	J	4.1	50
Zinc	63	B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1313			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	150000		530	5000
Magnesium	96000		660	5000
Sodium	290000		1600	5000

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1647			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	12	J	9.9	50
Barium	660		20	250

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Beryllium	ND		3.1	25
Calcium	140000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	19000		140	500
Potassium	74000		8300	25000
Magnesium	90000		660	5000
Manganese	66	J	17	75
Sodium	290000		1600	5000
Nickel	200		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	22	J	20	100
Vanadium	ND		20	250
Zinc	ND		26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1355			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.16	J	0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1444			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1428			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	230		80	200
Antimony	ND		4.0	10
Arsenic	ND		2.0	10
Barium	490		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	ND		4.0	50
Copper	ND		4.6	25
Iron	15000		28	100
Lead	2.3	J	1.5	10
Manganese	1100		3.3	15
Nickel	ND		13	40
Potassium	13000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	ND		4.1	50
Zinc	10	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1324			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Magnesium	67000		660	5000
Sodium	170000		1600	5000

Analysis Method:	6010C	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082212C1.asc
Dilution:	20			Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 0936			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	660000		2100	20000

6010C Metals (ICP)-Dissolved

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1650			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	ND		9.9	50
Barium	470		20	250
Beryllium	ND		3.1	25
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	11000		140	500
Potassium	12000	J	8300	25000
Magnesium	61000		660	5000
Manganese	1100		17	75
Sodium	170000		1600	5000
Nickel	ND		67	200
Lead	11	J	7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

Analysis Method:	6010C	Analysis Batch:	160-9847	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082812C1.asc
Dilution:	20			Initial Weight/Volume:	50 mL
Analysis Date:	08/28/2012 0945			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	510000		2100	20000

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1357			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1445			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1432			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	980		80	200
Antimony	ND		4.0	10
Arsenic	26		2.0	10
Barium	670		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	ND		4.0	50
Copper	5.6	J	4.6	25
Iron	44000		28	100
Lead	3.8	J	1.5	10
Manganese	4100		3.3	15
Nickel	ND		13	40
Potassium	6900		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Sodium	19000		320	1000
Thallium	ND		4.0	20
Vanadium	8.5	J	4.1	50
Zinc	22	B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1327			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Magnesium	87000		660	5000

Analysis Method:	6010C	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082212C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 0940			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	300000		1100	10000

6010C Metals (ICP)-Dissolved

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1654			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	36	J	9.9	50
Barium	610		20	250
Beryllium	ND		3.1	25
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	38000		140	500
Potassium	ND		8300	25000
Magnesium	82000		660	5000
Manganese	4000		17	75
Sodium	19000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

Analysis Method:	6010C	Analysis Batch:	160-9847	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082812C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/28/2012 0949			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	260000		1100	10000

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1359			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430
Client Matrix: Water Date Received: 08/09/2012 0810

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1447			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1436			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	790		80	200
Antimony	ND		4.0	10
Arsenic	36		2.0	10
Barium	110		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	ND		4.0	50
Copper	ND		4.6	25
Iron	65000		28	100
Lead	1.8	J	1.5	10
Manganese	3100		3.3	15
Nickel	18	J	13	40
Potassium	44000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	11	J	4.1	50
Zinc	ND		5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1331			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Magnesium	170000		660	5000
Sodium	190000		1600	5000

Analysis Method:	6010C	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082212C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 0944			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	360000		1100	10000

6010C Metals (ICP)-Dissolved

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1657			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	590	J	400	1000
Arsenic	36	J	9.9	50
Barium	100	J	20	250
Beryllium	ND		3.1	25
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	61000		140	500
Potassium	40000		8300	25000
Magnesium	150000		660	5000
Manganese	2800		17	75
Sodium	180000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

Analysis Method:	6010C	Analysis Batch:	160-9847	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082812C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/28/2012 0953			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	320000		1100	10000

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1404			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502
Client Matrix: Water Date Received: 08/09/2012 0810

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1452			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1439			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Aluminum	ND		80	200
Antimony	4.5	J	4.0	10
Arsenic	ND		2.0	10
Barium	2100		4.0	50
Beryllium	ND		0.61	5.0
Cadmium	ND		0.91	5.0
Chromium	ND		3.1	10
Cobalt	4.6	J	4.0	50
Copper	ND		4.6	25
Iron	31000		28	100
Lead	ND		1.5	10
Manganese	470		3.3	15
Nickel	17	J	13	40
Potassium	21000		1700	5000
Selenium	ND		2.7	15
Silver	ND		6.0	10
Thallium	ND		4.0	20
Vanadium	5.1	J	4.1	50
Zinc	5.8	J B	5.2	20

Analysis Method:	6010C	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1334			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Magnesium	80000		660	5000
Sodium	290000		1600	5000

Analysis Method:	6010C	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-8952	Lab File ID:	082212C1.asc
Dilution:	10			Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 0947			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1337				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Calcium	270000		1100	10000

6010C Metals (ICP)-Dissolved

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

6010C Metals (ICP)-Dissolved

Analysis Method:	6010C	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Prep Method:	3010A	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0			Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1701			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	ND		30	50
Aluminum	ND		400	1000
Arsenic	ND		9.9	50
Barium	2000		20	250
Beryllium	ND		3.1	25
Calcium	240000		530	5000
Cadmium	ND		4.6	25
Cobalt	ND		20	250
Chromium	ND		16	50
Copper	ND		23	130
Iron	31000		140	500
Potassium	20000	J	8300	25000
Magnesium	82000		660	5000
Manganese	460		17	75
Sodium	310000		1600	5000
Nickel	ND		67	200
Lead	ND		7.5	50
Antimony	ND		20	50
Selenium	ND		13	75
Thallium	ND		20	100
Vanadium	ND		20	250
Zinc	ND		26	100

7470A Mercury (CVAA)

Analysis Method:	7470A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1406			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Prep Method:	7470A	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0			Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1454			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				

Analyte	Result (ug/L)	Qualifier	MDL	RL

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000
Client Matrix: Water Date Received: 08/09/2012 0810

7470A Mercury (CVAA)-Dissolved

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	ND		0.060	0.20

General Chemistry

Client Sample ID: **PZ-113-AS**

Lab Sample ID: 160-437-1 Date Sampled: 08/08/2012 0935

Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	0.98		mg/L	0.025	0.25	1.0	300.0
Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1419						
Iodide	0.51	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0055						
Alkalinity	650	B *	mg/L	0.54	5.0	1.0	310.1
Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1529						

General Chemistry

Client Sample ID: **D-3**

Lab Sample ID: 160-437-2 Date Sampled: 08/08/2012 1000
Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	8.4		mg/L	0.13	1.3	5.0	300.0
Run Type: DL Analysis Batch: 160-9484 Analysis Date: 08/17/2012 1525							
Iodide	0.28	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057 Analysis Date: 08/14/2012 0136							
Alkalinity	1100	B *	mg/L	1.1	10	2.0	310.1
Run Type: DL Analysis Batch: 160-9518 Analysis Date: 08/22/2012 1529							

General Chemistry

Client Sample ID: **PZ-112-AS**

Lab Sample ID: 160-437-3 Date Sampled: 08/08/2012 1048
Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	0.46		mg/L	0.025	0.25	1.0	300.0
Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1541						
Iodide	ND		mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0216						
Alkalinity	1100	B *	mg/L	1.1	10	2.0	310.1
Run Type: DL Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1529						

General Chemistry

Client Sample ID: **I-11**

Lab Sample ID: 160-437-4 Date Sampled: 08/08/2012 1143

Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	1.8		mg/L	0.025	0.25	1.0	300.0
Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1614						
Iodide	0.21	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0229						
Alkalinity	830	B *	mg/L	0.54	5.0	1.0	310.1
Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1529						

General Chemistry

Client Sample ID: **PZ-207-AS**

Lab Sample ID: 160-437-5 Date Sampled: 08/08/2012 1255
Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	3.0		mg/L	0.13	1.3	5.0	300.0
Run Type: DL Analysis Batch: 160-9484 Analysis Date: 08/17/2012 1736							
Iodide	0.25	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057 Analysis Date: 08/14/2012 0243							
Alkalinity	1300	B *	mg/L	1.1	10	2.0	310.1
Run Type: DL Analysis Batch: 160-9518 Analysis Date: 08/22/2012 1529							

General Chemistry

Client Sample ID: **D-12**

Lab Sample ID: 160-437-6 Date Sampled: 08/08/2012 1416
Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	4.8		mg/L	0.13	1.3	5.0	300.0
Run Type: DL Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1809						
Iodide	0.20	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0256						
Alkalinity	960	B *	mg/L	0.54	5.0	1.0	310.1
Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1529						

General Chemistry

Client Sample ID: **PZ-305-AI**

Lab Sample ID: 160-437-7 Date Sampled: 08/08/2012 1430

Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	0.49		mg/L	0.025	0.25	1.0	300.0
Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1825						
Iodide	0.36	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0309						
Alkalinity	990	B *	mg/L	0.54	5.0	1.0	310.1
Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1529						

General Chemistry

Client Sample ID: **S-10**

Lab Sample ID: 160-437-8 Date Sampled: 08/08/2012 1502

Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	2.0		mg/L	0.025	0.25	1.0	300.0
Analysis Batch: 160-9484	Analysis Date: 08/17/2012 1858						
Iodide	0.31	J	mg/L	0.10	1.0	1.0	300.0
Analysis Batch: 160-9057	Analysis Date: 08/14/2012 0323						
Alkalinity	800	B *	mg/L	0.54	5.0	1.0	310.1
Analysis Batch: 160-9518	Analysis Date: 08/22/2012 1733						

General Chemistry

Client Sample ID: **DUP 05**

Lab Sample ID: 160-437-9FD Date Sampled: 08/08/2012 0000

Client Matrix: Water Date Received: 08/09/2012 0810

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Bromide	8.1		mg/L	0.13	1.3	5.0	300.0
Run Type: DL	Analysis Batch: 160-9484		Analysis Date: 08/17/2012 1948				
Iodide	0.30	J	mg/L	0.10	1.0	1.0	300.0
	Analysis Batch: 160-9057		Analysis Date: 08/14/2012 0336				
Alkalinity	1100	B	mg/L	1.1	10	2.0	310.1
Run Type: DL	Analysis Batch: 160-9518		Analysis Date: 08/22/2012 1733				

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Surrogate Recovery Report

8260C Volatile Organic Compounds by GC/MS

Client Matrix: Water

Lab Sample ID	Client Sample ID	DBFM %Rec	DCA %Rec	TOL %Rec	BFB %Rec
160-437-1	PZ-113-AS	106	112	109	112
160-437-2	D-3	94	109	103	107
160-437-3	PZ-112-AS	101	109	82X	114
160-437-3	PZ-112-AS	105	103	99	98
160-437-4	I-11	102	106	104	111
160-437-5	PZ-207-AS	103	115	105	109
160-437-6	D-12	104	110	106	103
160-437-7	PZ-305-AI	95	109	102	103
160-437-8	S-10	98	112	101	101
160-437-9	DUP 05	99	113	108	106
160-437-10	TRIP BLANK	94	101	105	106
MB 160-9262/3		98	109	113	120
MB 160-9490/3		101	99	93	93
LCS 160-9262/4		101	101	104	111
LCS 160-9490/4		103	100	96	97
160-437-1 MS	PZ-113-AS MS	102	102	95	101
160-468-F-1 MS		102	100	98	95
160-437-1 MSD	PZ-113-AS MSD	100	98	99	106
160-468-F-1 MSD		105	102	102	100

Surrogate	Acceptance Limits
DBFM = Dibromofluoromethane (Surr)	85-119
DCA = 1,2-Dichloroethane-d4 (Surr)	82-132
TOL = Toluene-d8 (Surr)	85-115
BFB = 4-Bromofluorobenzene (Surr)	82-121

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Surrogate Recovery Report

8270D TCL Semivolatile Compounds (OLM04.2)

Client Matrix: Water

Lab Sample ID	Client Sample ID	2FP %Rec	PHL %Rec	NBZ %Rec	FBP %Rec	TBP %Rec	TPH %Rec
160-437-1	PZ-113-AS	46	35	81	75	78	84
160-437-2	D-3	43	27	81	71	85	84
160-437-3	PZ-112-AS	43	27	78	70	81	81
160-437-3	PZ-112-AS	40	25	71	73	77	85
160-437-4	I-11	44	27	83	71	81	84
160-437-5	PZ-207-AS	44	27	83	74	85	80
160-437-6	D-12	46	27	84	70	80	83
160-437-7	PZ-305-AI	41	26	79	68	74	81
160-437-8	S-10	50	43	84	71	81	83
160-437-9	DUP 05	64	46	81	71	83	81
MB 160-8998/1-A		55	34	87	79	71	98
LCS 160-8998/2-A		58	36	88	76	81	91
160-428-A-6-B MS		46	29	86	77	86	86
160-428-A-6-C MSD		45	27	87	75	84	85

Surrogate	Acceptance Limits
2FP = 2-Fluorophenol (Surr)	21-85
PHL = Phenol-d5 (Surr)	10-70
NBZ = Nitrobenzene-d5 (Surr)	45-99
FBP = 2-Fluorobiphenyl (Surr)	46-99
TBP = 2,4,6-Tribromophenol (Surr)	46-118
TPH = Terphenyl-d14 (Surr)	53-126

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9262

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 160-9262/3	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MBLK1969.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0524	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0524				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	0.684	J	0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	ND		0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	1.08	J	0.40	10
Carbon disulfide	ND		0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	ND		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	ND		0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9262

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 160-9262/3	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MBLK1969.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0524	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0524				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Trichloroethene	ND		0.29	5.0
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	113	85 - 115
Dibromofluoromethane (Surr)	98	85 - 119
4-Bromofluorobenzene (Surr)	120	82 - 121
1,2-Dichloroethane-d4 (Surr)	109	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-9262

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 160-9262/4	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MLCS1967.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0433	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0433				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	50.0	51.1	102	85 - 115	
1,1,2,2-Tetrachloroethane	50.0	54.4	109	84 - 115	
1,1,2-Trichloroethane	50.0	52.9	106	85 - 115	
1,1-Dichloroethane	50.0	51.1	102	85 - 115	
1,1-Dichloroethene	50.0	51.3	103	85 - 118	
1,2,4-Trichlorobenzene	50.0	49.7	99	75 - 124	
1,2-Dibromo-3-Chloropropane	50.0	49.8	100	71 - 123	
1,2-Dichlorobenzene	50.0	49.2	98	85 - 115	
1,2-Dichloroethane	50.0	51.0	102	79 - 122	
1,2-Dichloropropane	50.0	50.5	101	85 - 115	
1,3-Dichlorobenzene	50.0	48.8	98	85 - 115	
1,4-Dichlorobenzene	50.0	51.2	102	85 - 115	
2-Butanone (MEK)	50.0	51.6	103	71 - 123	
2-Hexanone	50.0	52.2	104	66 - 121	
4-Methyl-2-pentanone (MIBK)	50.0	54.5	109	74 - 123	
Acetone	50.0	53.0	106	51 - 140	
Benzene	50.0	53.5	107	85 - 115	
Bromoform	50.0	57.0	114	85 - 115	
Bromomethane	50.0	44.2	88	70 - 135	
Carbon disulfide	50.0	62.5	125	85 - 123	*
Carbon tetrachloride	50.0	50.9	102	85 - 118	
Chlorobenzene	50.0	47.7	95	85 - 115	
Dibromochloromethane	50.0	52.8	106	85 - 115	
Chloroethane	50.0	47.8	96	75 - 125	
Chloroform	50.0	50.8	102	85 - 115	
Chloromethane	50.0	42.9	86	73 - 132	
cis-1,2-Dichloroethene	50.0	50.9	102	85 - 115	
cis-1,3-Dichloropropene	50.0	57.0	114	85 - 127	
Cyclohexane	50.0	50.3	101	73 - 115	
Bromodichloromethane	50.0	51.4	103	85 - 117	
Dichlorodifluoromethane	50.0	37.5	75	62 - 115	
Ethylbenzene	50.0	50.7	101	85 - 115	
1,2-Dibromoethane (EDB)	50.0	51.6	103		
Isopropylbenzene	50.0	59.8	120	85 - 124	
Methyl acetate	50.0	51.4	103	73 - 135	
Methyl tert-butyl ether	50.0	52.5	105	73 - 115	
Methylcyclohexane	50.0	48.9	98	85 - 134	
Methylene Chloride	50.0	49.7	99	84 - 115	
m-Xylene & p-Xylene	100	99.0	99	85 - 115	
o-Xylene	50.0	50.4	101	85 - 115	
Styrene	50.0	54.9	110	85 - 115	
Tetrachloroethene	50.0	48.9	98	85 - 115	
Toluene	50.0	51.8	104	85 - 115	
trans-1,2-Dichloroethene	50.0	49.6	99	85 - 115	
trans-1,3-Dichloropropene	50.0	59.0	118	85 - 123	
Trichloroethene	50.0	52.1	104	85 - 115	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-9262

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 160-9262/4	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MLCS1967.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0433	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0433				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Trichlorofluoromethane	50.0	53.9	108	85 - 116	
Vinyl chloride	50.0	47.8	96	68 - 133	
Xylenes, Total	150	149	100		

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	104	85 - 115
Dibromofluoromethane (Surr)	101	85 - 119
4-Bromofluorobenzene (Surr)	111	82 - 121
1,2-Dichloroethane-d4 (Surr)	101	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9262

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MSMP1973.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0704			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0704				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MSMP1974.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0729			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0729				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	100	102	85 - 118	2	20		
1,1,2,2-Tetrachloroethane	104	104	85 - 116	1	20		
1,1,2-Trichloroethane	102	104	85 - 115	2	20		
1,1-Dichloroethane	106	102	85 - 115	4	20		
1,1-Dichloroethene	99	101	85 - 118	3	20		
1,2,4-Trichlorobenzene	105	107	75 - 124	2	20		
1,2-Dibromo-3-Chloropropane	97	95	71 - 123	2	20		
1,2-Dichlorobenzene	92	97	84 - 115	6	20		
1,2-Dichloroethane	105	102	80 - 125	4	20		
1,2-Dichloropropane	105	102	85 - 117	3	20		
1,3-Dichlorobenzene	91	95	84 - 115	5	20		
1,4-Dichlorobenzene	98	103	85 - 115	5	20		
2-Butanone (MEK)	100	91	73 - 133	9	20		
2-Hexanone	103	101	66 - 121	2	20		
4-Methyl-2-pentanone (MIBK)	110	102	77 - 134	8	20		
Acetone	95	81	38 - 150	16	20		
Benzene	107	107	85 - 115	0	20		
Bromoform	105	104	84 - 116	1	20		
Bromomethane	89	97	70 - 135	9	20		
Carbon disulfide	121	124	85 - 127	2	20		
Carbon tetrachloride	104	103	85 - 121	2	20		
Chlorobenzene	94	97	85 - 115	3	20		
Dibromochloromethane	103	102	85 - 115	0	20		
Chloroethane	112	106	73 - 123	5	20		
Chloroform	100	100	85 - 115	1	20		
Chloromethane	88	94	67 - 130	7	20		
cis-1,2-Dichloroethene	100	101	80 - 116	1	20		
cis-1,3-Dichloropropene	116	115	85 - 124	1	20		
Cyclohexane	99	98	73 - 115	1	20		
Bromodichloromethane	108	106	56 - 119	2	20		
Dichlorodifluoromethane	89	101	85 - 119	12	20		
Ethylbenzene	99	101	85 - 115	1	20		
1,2-Dibromoethane (EDB)	99	100	85 - 115	1	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9262

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MSMP1973.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0704			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0704				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9262	Instrument ID:	MSM
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	MSMP1974.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/14/2012 0729			Final Weight/Volume:	5 mL
Prep Date:	08/14/2012 0729				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Isopropylbenzene	111	116	85 - 124	4	20		
Methyl acetate	105	93	49 - 150	12	20		
Methyl tert-butyl ether	109	101	75 - 115	7	20		
Methylcyclohexane	103	101	85 - 137	2	20		
Methylene Chloride	96	95	85 - 115	1	20		
m-Xylene & p-Xylene	96	98	85 - 115	1	20		
o-Xylene	94	97	85 - 118	3	20		
Styrene	105	111	85 - 115	5	20		
Tetrachloroethene	94	98	85 - 118	4	20		
Toluene	98	104	85 - 118	6	20		
trans-1,2-Dichloroethene	98	98	84 - 115	1	20		
trans-1,3-Dichloropropene	114	115	85 - 127	2	20		
Trichloroethene	93	98	85 - 115	5	20		
Trichlorofluoromethane	106	107	85 - 115	1	20		
Vinyl chloride	100	102	63 - 129	3	20		
Xylenes, Total	96	97	70 - 130	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	95	99	85 - 115
Dibromofluoromethane (Surr)	102	100	85 - 119
4-Bromofluorobenzene (Surr)	101	106	82 - 121
1,2-Dichloroethane-d4 (Surr)	102	98	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9262

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-437-1	Units: ug/L	MSD Lab Sample ID:	160-437-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/14/2012 0704		Analysis Date:	08/14/2012 0729	
Prep Date:	08/14/2012 0704		Prep Date:	08/14/2012 0729	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
1,1,1-Trichloroethane	ND		50.0	50.0	50.2	51.0
1,1,2,2-Tetrachloroethane	ND		50.0	50.0	52.0	52.2
1,1,2-Trichloroethane	ND		50.0	50.0	50.8	51.8
1,1-Dichloroethane	ND		50.0	50.0	52.8	50.9
1,1-Dichloroethene	ND		50.0	50.0	49.3	50.7
1,2,4-Trichlorobenzene	ND		50.0	50.0	52.5	53.6
1,2-Dibromo-3-Chloropropane	ND		50.0	50.0	48.3	47.4
1,2-Dichlorobenzene	ND		50.0	50.0	45.9	48.6
1,2-Dichloroethane	ND		50.0	50.0	52.7	50.8
1,2-Dichloropropane	ND		50.0	50.0	52.6	51.2
1,3-Dichlorobenzene	ND		50.0	50.0	45.3	47.6
1,4-Dichlorobenzene	ND		50.0	50.0	48.8	51.3
2-Butanone (MEK)	ND		50.0	50.0	49.8	45.5
2-Hexanone	ND		50.0	50.0	51.6	50.7
4-Methyl-2-pentanone (MIBK)	ND		50.0	50.0	55.1	51.0
Acetone	ND		50.0	50.0	47.7	40.6
Benzene	0.33	J	50.0	50.0	53.9	53.8
Bromoform	ND		50.0	50.0	52.3	51.9
Bromomethane	ND		50.0	50.0	44.3	48.4
Carbon disulfide	ND		50.0	50.0	60.5	61.9
Carbon tetrachloride	ND		50.0	50.0	52.2	51.3
Chlorobenzene	ND		50.0	50.0	47.1	48.5
Dibromochloromethane	ND		50.0	50.0	51.3	51.2
Chloroethane	ND		50.0	50.0	55.9	53.0
Chloroform	ND		50.0	50.0	50.2	49.8
Chloromethane	ND		50.0	50.0	43.9	47.1
cis-1,2-Dichloroethene	ND		50.0	50.0	49.8	50.3
cis-1,3-Dichloropropene	ND		50.0	50.0	58.0	57.4
Cyclohexane	ND		50.0	50.0	49.4	48.8
Bromodichloromethane	ND		50.0	50.0	53.9	53.0
Dichlorodifluoromethane	0.65	J	50.0	50.0	45.3	51.3
Ethylbenzene	ND		50.0	50.0	49.7	50.3
1,2-Dibromoethane (EDB)	ND		50.0	50.0	49.3	49.8
Isopropylbenzene	ND		50.0	50.0	55.3	57.8
Methyl acetate	ND		50.0	50.0	52.3	46.5
Methyl tert-butyl ether	1.5	J	50.0	50.0	55.9	51.9
Methylcyclohexane	ND		50.0	50.0	51.6	50.6
Methylene Chloride	ND		50.0	50.0	48.2	47.7
m-Xylene & p-Xylene	ND		100	100	96.3	97.6
o-Xylene	ND		50.0	50.0	47.0	48.5
Styrene	ND		50.0	50.0	52.6	55.3
Tetrachloroethene	ND		50.0	50.0	47.1	49.2
Toluene	ND		50.0	50.0	48.9	51.9

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9262

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-437-1	Units: ug/L	MSD Lab Sample ID:	160-437-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/14/2012 0704		Analysis Date:	08/14/2012 0729	
Prep Date:	08/14/2012 0704		Prep Date:	08/14/2012 0729	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
trans-1,2-Dichloroethene	ND	50.0	50.0	49.1	48.8
trans-1,3-Dichloropropene	ND	50.0	50.0	56.8	57.7
Trichloroethene	ND	50.0	50.0	46.6	48.9
Trichlorofluoromethane	ND	50.0	50.0	53.1	53.6
Vinyl chloride	ND	50.0	50.0	49.8	51.2
Xylenes, Total	ND	150	150	143	146

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9490

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 160-9490/3	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZBLK1170.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 1905	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 1905				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
1,1,1-Trichloroethane	ND		0.29	5.0
1,1,2,2-Tetrachloroethane	ND		0.43	5.0
1,1,2-Trichloroethane	ND		0.57	5.0
1,1-Dichloroethane	ND		0.39	5.0
1,1-Dichloroethene	ND		0.37	5.0
1,2,4-Trichlorobenzene	ND		0.55	5.0
1,2-Dibromo-3-Chloropropane	ND		1.2	10
1,2-Dichlorobenzene	ND		0.28	5.0
1,2-Dichloroethane	ND		0.37	5.0
1,2-Dichloropropane	ND		0.32	5.0
1,3-Dichlorobenzene	ND		0.23	5.0
1,4-Dichlorobenzene	ND		0.35	5.0
2-Butanone (MEK)	ND		0.39	20
2-Hexanone	ND		0.59	20
4-Methyl-2-pentanone (MIBK)	ND		0.33	20
Acetone	ND		6.7	20
Benzene	ND		0.25	5.0
Bromoform	ND		0.37	5.0
Bromomethane	ND		0.40	10
Carbon disulfide	ND		0.37	5.0
Carbon tetrachloride	ND		0.36	5.0
Chlorobenzene	ND		0.38	5.0
Dibromochloromethane	ND		0.33	5.0
Chloroethane	ND		0.38	10
Chloroform	ND		0.15	5.0
Chloromethane	ND		0.55	10
cis-1,2-Dichloroethene	ND		0.16	5.0
cis-1,3-Dichloropropene	ND		0.34	5.0
Cyclohexane	ND		0.36	10
Bromodichloromethane	ND		0.25	5.0
Dichlorodifluoromethane	ND		0.45	10
Ethylbenzene	ND		0.30	5.0
1,2-Dibromoethane (EDB)	ND		0.44	5.0
Isopropylbenzene	ND		0.26	5.0
Methyl acetate	ND		2.3	5.0
Methyl tert-butyl ether	ND		0.40	5.0
Methylcyclohexane	ND		0.26	10
Methylene Chloride	ND		1.7	5.0
m-Xylene & p-Xylene	ND		0.57	5.0
o-Xylene	ND		0.32	5.0
Styrene	ND		0.35	5.0
Tetrachloroethene	ND		0.28	5.0
Toluene	ND		1.0	5.0
trans-1,2-Dichloroethene	ND		0.18	5.0
trans-1,3-Dichloropropene	ND		0.35	5.0

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9490

Method: 8260C
Preparation: 5030C

Lab Sample ID:	MB 160-9490/3	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZBLK1170.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 1905	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 1905				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Trichloroethene	ND		0.29	5.0
Trichlorofluoromethane	ND		0.22	5.0
Vinyl chloride	ND		0.43	5.0
Xylenes, Total	ND		0.85	10

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	93	85 - 115
Dibromofluoromethane (Surr)	101	85 - 119
4-Bromofluorobenzene (Surr)	93	82 - 121
1,2-Dichloroethane-d4 (Surr)	99	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-9490

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 160-9490/4	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZLCS1168.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 1817	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 1817				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
1,1,1-Trichloroethane	50.0	49.7	99	85 - 115	
1,1,2,2-Tetrachloroethane	50.0	51.0	102	84 - 115	
1,1,2-Trichloroethane	50.0	48.9	98	85 - 115	
1,1-Dichloroethane	50.0	48.3	97	85 - 115	
1,1-Dichloroethene	50.0	46.8	94	85 - 118	
1,2,4-Trichlorobenzene	50.0	41.4	83	75 - 124	
1,2-Dibromo-3-Chloropropane	50.0	45.6	91	71 - 123	
1,2-Dichlorobenzene	50.0	48.4	97	85 - 115	
1,2-Dichloroethane	50.0	49.3	99	79 - 122	
1,2-Dichloropropane	50.0	48.6	97	85 - 115	
1,3-Dichlorobenzene	50.0	48.6	97	85 - 115	
1,4-Dichlorobenzene	50.0	48.6	97	85 - 115	
2-Butanone (MEK)	50.0	54.5	109	71 - 123	
2-Hexanone	50.0	48.5	97	66 - 121	
4-Methyl-2-pentanone (MIBK)	50.0	48.5	97	74 - 123	
Acetone	50.0	51.4	103	51 - 140	
Benzene	50.0	43.8	88	85 - 115	
Bromoform	50.0	51.4	103	85 - 115	
Bromomethane	50.0	45.8	92	70 - 135	
Carbon disulfide	50.0	47.9	96	85 - 123	
Carbon tetrachloride	50.0	47.0	94	85 - 118	
Chlorobenzene	50.0	48.4	97	85 - 115	
Dibromochloromethane	50.0	50.3	101	85 - 115	
Chloroethane	50.0	45.3	91	75 - 125	
Chloroform	50.0	46.6	93	85 - 115	
Chloromethane	50.0	45.6	91	73 - 132	
cis-1,2-Dichloroethene	50.0	47.6	95	85 - 115	
cis-1,3-Dichloropropene	50.0	50.2	100	85 - 127	
Cyclohexane	50.0	47.3	95	73 - 115	
Bromodichloromethane	50.0	49.1	98	85 - 117	
Dichlorodifluoromethane	50.0	46.9	94	62 - 115	
Ethylbenzene	50.0	42.6	85	85 - 115	
1,2-Dibromoethane (EDB)	50.0	49.7	99		
Isopropylbenzene	50.0	45.6	91	85 - 124	
Methyl acetate	50.0	51.6	103	73 - 135	
Methyl tert-butyl ether	50.0	52.1	104	73 - 115	
Methylcyclohexane	50.0	47.0	94	85 - 134	
Methylene Chloride	50.0	50.5	101	84 - 115	
m-Xylene & p-Xylene	100	91.8	92	85 - 115	
o-Xylene	50.0	46.2	92	85 - 115	
Styrene	50.0	49.5	99	85 - 115	
Tetrachloroethene	50.0	45.3	91	85 - 115	
Toluene	50.0	46.6	93	85 - 115	
trans-1,2-Dichloroethene	50.0	46.1	92	85 - 115	
trans-1,3-Dichloropropene	50.0	50.3	101	85 - 123	
Trichloroethene	50.0	48.3	97	85 - 115	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-9490

Method: 8260C
Preparation: 5030C

Lab Sample ID:	LCS 160-9490/4	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZLCS1168.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 1817	Units:	ug/L	Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 1817				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Trichlorofluoromethane	50.0	48.5	97	85 - 116	
Vinyl chloride	50.0	43.7	87	68 - 133	
Xylenes, Total	150	138	92		

Surrogate	% Rec	Acceptance Limits
Toluene-d8 (Surr)	96	85 - 115
Dibromofluoromethane (Surr)	103	85 - 119
4-Bromofluorobenzene (Surr)	97	82 - 121
1,2-Dichloroethane-d4 (Surr)	100	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9490

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-468-F-1 MS	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZSMP1176.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 2137			Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 2137				
Leach Date:	N/A				

MSD Lab Sample ID:	160-468-F-1 MSD	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZSMP1177.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 2201			Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 2201				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
1,1,1-Trichloroethane	97	100	85 - 118	3	20		
1,1,2,2-Tetrachloroethane	93	95	85 - 116	1	20		
1,1,2-Trichloroethane	95	95	85 - 115	0	20		
1,1-Dichloroethane	98	99	85 - 115	2	20		
1,1-Dichloroethene	95	97	85 - 118	2	20		
1,2,4-Trichlorobenzene	93	91	75 - 124	3	20		
1,2-Dibromo-3-Chloropropane	87	84	71 - 123	4	20		
1,2-Dichlorobenzene	91	94	84 - 115	3	20		
1,2-Dichloroethane	96	97	80 - 125	1	20		
1,2-Dichloropropane	97	97	85 - 117	0	20		
1,3-Dichlorobenzene	91	94	84 - 115	2	20		
1,4-Dichlorobenzene	98	98	85 - 115	0	20		
2-Butanone (MEK)	96	98	73 - 133	2	20		
2-Hexanone	90	87	66 - 121	3	20		
4-Methyl-2-pentanone (MIBK)	91	89	77 - 134	2	20		
Acetone	79	68	38 - 150	13	20		
Benzene	89	90	85 - 115	1	20		
Bromoform	96	97	84 - 116	0	20		
Bromomethane	82	84	70 - 135	2	20		
Carbon disulfide	102	103	85 - 127	2	20		
Carbon tetrachloride	95	96	85 - 121	1	20		
Chlorobenzene	93	95	85 - 115	2	20		
Dibromochloromethane	98	97	85 - 115	2	20		
Chloroethane	87	94	73 - 123	8	20		
Chloroform	100	96	85 - 115	4	20		
Chloromethane	82	80	67 - 130	3	20		
cis-1,2-Dichloroethene	98	98	80 - 116	0	20		
cis-1,3-Dichloropropene	104	103	85 - 124	1	20		
Cyclohexane	93	97	73 - 115	3	20		
Bromodichloromethane	100	101	56 - 119	1	20		
Dichlorodifluoromethane	75	74	85 - 119	1	20	F	F
Ethylbenzene	87	89	85 - 115	2	20		
1,2-Dibromoethane (EDB)	97	95	85 - 115	3	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9490

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-468-F-1 MS	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZSMP1176.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 2137			Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 2137				
Leach Date:	N/A				

MSD Lab Sample ID:	160-468-F-1 MSD	Analysis Batch:	160-9490	Instrument ID:	MSZ
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	ZSMP1177.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	5 mL
Analysis Date:	08/16/2012 2201			Final Weight/Volume:	5 mL
Prep Date:	08/16/2012 2201				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Isopropylbenzene	96	101	85 - 124	4	20		
Methyl acetate	93	91	49 - 150	2	20		
Methyl tert-butyl ether	98	95	75 - 115	3	20		
Methylcyclohexane	92	94	85 - 137	2	20		
Methylene Chloride	97	97	85 - 115	0	20		
m-Xylene & p-Xylene	91	93	85 - 115	2	20		
o-Xylene	89	91	85 - 118	2	20		
Styrene	101	101	85 - 115	0	20		
Tetrachloroethene	95	95	85 - 118	1	20		
Toluene	94	96	85 - 118	3	20		
trans-1,2-Dichloroethene	94	94	84 - 115	0	20		
trans-1,3-Dichloropropene	102	101	85 - 127	1	20		
Trichloroethene	96	96	85 - 115	0	20		
Trichlorofluoromethane	96	97	85 - 115	1	20		
Vinyl chloride	80	82	63 - 129	2	20		
Xylenes, Total	91	92	70 - 130	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8 (Surr)	98	102	85 - 115
Dibromofluoromethane (Surr)	102	105	85 - 119
4-Bromofluorobenzene (Surr)	95	100	82 - 121
1,2-Dichloroethane-d4 (Surr)	100	102	82 - 132

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9490

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-468-F-1 MS	Units: ug/L	MSD Lab Sample ID:	160-468-F-1 MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/16/2012 2137		Analysis Date:	08/16/2012 2201	
Prep Date:	08/16/2012 2137		Prep Date:	08/16/2012 2201	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
1,1,1-Trichloroethane	ND		50.0	50.0	48.7		50.2	
1,1,2,2-Tetrachloroethane	ND		50.0	50.0	46.7		47.4	
1,1,2-Trichloroethane	ND		50.0	50.0	47.4		47.3	
1,1-Dichloroethane	0.96	J	50.0	50.0	49.8		50.5	
1,1-Dichloroethene	ND		50.0	50.0	47.5		48.3	
1,2,4-Trichlorobenzene	ND		50.0	50.0	46.7		45.3	
1,2-Dibromo-3-Chloropropane	ND		50.0	50.0	43.5		42.0	
1,2-Dichlorobenzene	ND		50.0	50.0	45.6		47.0	
1,2-Dichloroethane	ND		50.0	50.0	48.1		48.6	
1,2-Dichloropropane	ND		50.0	50.0	48.7		48.5	
1,3-Dichlorobenzene	ND		50.0	50.0	45.7		46.8	
1,4-Dichlorobenzene	ND		50.0	50.0	49.0		49.0	
2-Butanone (MEK)	ND		50.0	50.0	48.1		49.2	
2-Hexanone	ND		50.0	50.0	45.1		43.6	
4-Methyl-2-pentanone (MIBK)	ND		50.0	50.0	45.3		44.3	
Acetone	8.3	J	50.0	50.0	47.8		42.2	
Benzene	0.68	J	50.0	50.0	45.2		45.7	
Bromoform	ND		50.0	50.0	48.1		48.3	
Bromomethane	ND		50.0	50.0	41.1		42.0	
Carbon disulfide	ND		50.0	50.0	50.8		51.5	
Carbon tetrachloride	ND		50.0	50.0	47.6		48.2	
Chlorobenzene	ND		50.0	50.0	46.7		47.5	
Dibromochloromethane	ND		50.0	50.0	49.2		48.5	
Chloroethane	ND		50.0	50.0	43.3		46.9	
Chloroform	ND		50.0	50.0	50.1		48.2	
Chloromethane	ND		50.0	50.0	41.1		40.0	
cis-1,2-Dichloroethene	5.4		50.0	50.0	54.5		54.2	
cis-1,3-Dichloropropene	ND		50.0	50.0	52.0		51.7	
Cyclohexane	ND		50.0	50.0	46.7		48.3	
Bromodichloromethane	ND		50.0	50.0	50.1		50.6	
Dichlorodifluoromethane	ND		50.0	50.0	37.7	F	37.2	F
Ethylbenzene	ND		50.0	50.0	43.4		44.4	
1,2-Dibromoethane (EDB)	ND		50.0	50.0	48.6		47.4	
Isopropylbenzene	ND		50.0	50.0	48.1		50.3	
Methyl acetate	ND		50.0	50.0	46.5		45.4	
Methyl tert-butyl ether	ND		50.0	50.0	49.1		47.7	
Methylcyclohexane	ND		50.0	50.0	46.0		46.8	
Methylene Chloride	2.1	J	50.0	50.0	50.4		50.5	
m-Xylene & p-Xylene	ND		100	100	91.1		93.0	
o-Xylene	ND		50.0	50.0	44.7		45.4	
Styrene	ND		50.0	50.0	50.6		50.7	
Tetrachloroethene	ND		50.0	50.0	47.4		47.7	
Toluene	ND		50.0	50.0	46.9		48.2	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9490

Method: 8260C
Preparation: 5030C

MS Lab Sample ID:	160-468-F-1 MS	Units:	ug/L	MSD Lab Sample ID:	160-468-F-1 MSD
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	08/16/2012 2137			Analysis Date:	08/16/2012 2201
Prep Date:	08/16/2012 2137			Prep Date:	08/16/2012 2201
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
trans-1,2-Dichloroethene	ND		50.0	50.0	46.9	46.9
trans-1,3-Dichloropropene	ND		50.0	50.0	51.2	50.6
Trichloroethene	ND		50.0	50.0	47.8	47.9
Trichlorofluoromethane	ND		50.0	50.0	48.0	48.4
Vinyl chloride	4.4	J	50.0	50.0	44.3	45.3
Xylenes, Total	ND		150	150	136	138

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-8998

Method: 8270D
Preparation: 3510C

Lab Sample ID:	MB 160-8998/1-A	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JBLK3402.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/15/2012 1515	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Acenaphthene	ND		1.0	10
Acenaphthylene	ND		1.0	10
Anthracene	ND		1.0	10
Benzo[a]anthracene	ND		1.0	10
Benzo[b]fluoranthene	ND		1.0	10
Benzo[k]fluoranthene	ND		1.0	10
Benzo[g,h,i]perylene	ND		1.0	10
Benzo[a]pyrene	ND		1.0	10
Bis(2-chloroethoxy)methane	ND		1.0	10
Bis(2-chloroethyl)ether	ND		1.0	10
Bis(2-ethylhexyl) phthalate	ND		1.0	10
4-Bromophenyl phenyl ether	ND		1.0	10
Butyl benzyl phthalate	ND		1.0	10
Carbazole	ND		1.0	10
4-Chloroaniline	ND		2.2	10
4-Chloro-3-methylphenol	ND		1.0	10
2-Chloronaphthalene	ND		1.0	10
2-Chlorophenol	ND		1.0	10
4-Chlorophenyl phenyl ether	ND		1.0	10
Chrysene	ND		1.0	10
Dibenz(a,h)anthracene	ND		1.0	10
Dibenzofuran	ND		1.0	10
Di-n-butyl phthalate	ND		1.0	10
1,2-Dichlorobenzene	ND		1.0	10
1,3-Dichlorobenzene	ND		1.0	10
1,4-Dichlorobenzene	ND		1.0	10
3,3'-Dichlorobenzidine	ND		1.3	50
2,4-Dichlorophenol	ND		1.1	10
Diethyl phthalate	ND		1.0	10
2,4-Dimethylphenol	ND		1.0	10
Dimethyl phthalate	ND		1.0	10
4,6-Dinitro-2-methylphenol	ND		1.0	10
2,4-Dinitrophenol	ND		2.0	50
2,4-Dinitrotoluene	ND		1.0	10
2,6-Dinitrotoluene	ND		2.2	10
Di-n-octyl phthalate	ND		1.0	10
Fluoranthene	ND		1.0	10
Fluorene	ND		1.0	10
Hexachlorobenzene	ND		1.0	10
Hexachlorobutadiene	ND		1.0	10
Hexachlorocyclopentadiene	ND		1.0	10
Hexachloroethane	ND		1.0	10
Indeno[1,2,3-cd]pyrene	ND		1.0	10
Isophorone	ND		1.0	10
2-Methylnaphthalene	ND		1.0	10

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-8998

Method: 8270D
Preparation: 3510C

Lab Sample ID:	MB 160-8998/1-A	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JBLK3402.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/15/2012 1515	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
2-Methylphenol	ND		1.0	10
3 & 4 Methylphenol	ND		2.0	20
Naphthalene	ND		1.0	10
2-Nitroaniline	ND		1.0	10
3-Nitroaniline	ND		1.0	10
4-Nitroaniline	ND		1.0	10
Nitrobenzene	ND		1.1	10
2-Nitrophenol	ND		1.0	10
4-Nitrophenol	ND		2.0	10
N-Nitrosodiphenylamine	ND		1.0	10
N-Nitrosodi-n-propylamine	ND		1.0	10
2,2'-oxybis[1-chloropropane]	ND		1.0	10
Pentachlorophenol	ND		1.3	10
Phenanthrene	ND		1.0	10
Phenol	ND		2.0	10
Pyrene	ND		1.0	10
1,2,4-Trichlorobenzene	ND		1.0	10
2,4,5-Trichlorophenol	ND		1.0	10
2,4,6-Trichlorophenol	ND		1.0	10

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol (Surr)	55	21 - 85
2,4,6-Tribromophenol (Surr)	71	46 - 118
Nitrobenzene-d5 (Surr)	87	45 - 99
Phenol-d5 (Surr)	34	10 - 70
Terphenyl-d14 (Surr)	98	53 - 126
2-Fluorobiphenyl (Surr)	79	46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-8998

Method: 8270D
Preparation: 3510C

Lab Sample ID:	LCS 160-8998/2-A	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JLCS3403.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/15/2012 1547	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Acenaphthene	100	82.5	82	56 - 91	
Acenaphthylene	100	83.9	84	56 - 92	
Anthracene	100	84.8	85	59 - 94	
Benzo[a]anthracene	100	97.5	98	69 - 107	
Benzo[b]fluoranthene	100	87.7	88	67 - 101	
Benzo[k]fluoranthene	100	91.3	91	66 - 104	
Benzo[g,h,i]perylene	100	99.0	99	65 - 109	
Benzo[a]pyrene	100	85.3	85	60 - 97	
Bis(2-chloroethoxy)methane	100	83.3	83	51 - 95	
Bis(2-chloroethyl)ether	100	86.9	87	49 - 99	
Bis(2-ethylhexyl) phthalate	100	90.0	90	61 - 103	
4-Bromophenyl phenyl ether	100	84.3	84	61 - 98	
Butyl benzyl phthalate	100	85.8	86	60 - 101	
Carbazole	99.9	87.7	88	60 - 98	
4-Chloroaniline	100	55.7	56	24 - 70	
4-Chloro-3-methylphenol	100	75.2	75	49 - 90	
2-Chloronaphthalene	100	80.2	80	52 - 90	
2-Chlorophenol	100	77.6	78	47 - 90	
4-Chlorophenyl phenyl ether	100	80.8	81	56 - 93	
Chrysene	100	86.5	86	61 - 97	
Dibenz(a,h)anthracene	100	99.1	99	60 - 111	
Dibenzofuran	100	80.3	80	54 - 88	
Di-n-butyl phthalate	100	87.3	87	59 - 99	
1,2-Dichlorobenzene	100	77.3	77	45 - 91	
1,3-Dichlorobenzene	100	75.8	76	40 - 89	
1,4-Dichlorobenzene	100	75.1	75	43 - 87	
3,3'-Dichlorobenzidine	100	67.7	68	33 - 82	
2,4-Dichlorophenol	100	76.1	76	54 - 88	
Diethyl phthalate	100	83.8	84	58 - 96	
2,4-Dimethylphenol	100	78.3	78	48 - 88	
Dimethyl phthalate	100	83.0	83	60 - 94	
4,6-Dinitro-2-methylphenol	100	80.1	80	57 - 99	
2,4-Dinitrophenol	100	71.3	71	34 - 100	
2,4-Dinitrotoluene	100	87.0	87	58 - 99	
2,6-Dinitrotoluene	100	84.1	84	61 - 94	
Di-n-octyl phthalate	100	91.2	91	60 - 105	
Fluoranthene	100	88.7	89	59 - 99	
Fluorene	100	81.5	82	57 - 94	
Hexachlorobenzene	100	83.7	84	60 - 100	
Hexachlorobutadiene	100	75.3	75	33 - 96	
Hexachlorocyclopentadiene	100	97.7	98	40 - 121	
Hexachloroethane	100	79.8	80	38 - 92	
Indeno[1,2,3-cd]pyrene	100	88.4	88	57 - 122	
Isophorone	100	79.8	80	43 - 105	
2-Methylnaphthalene	100	78.1	78	48 - 88	
2-Methylphenol	100	68.8	69	46 - 80	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-8998

Method: 8270D
Preparation: 3510C

Lab Sample ID:	LCS 160-8998/2-A	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JLCS3403.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1000 mL
Analysis Date:	08/15/2012 1547	Units:	ug/L	Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
3 & 4 Methylphenol	100	69.9	70	48 - 84	
Naphthalene	100	78.4	78	50 - 88	
2-Nitroaniline	100	86.2	86	55 - 97	
3-Nitroaniline	100	70.5	70	34 - 85	
4-Nitroaniline	100	78.7	79	51 - 90	
Nitrobenzene	100	85.3	85	49 - 99	
2-Nitrophenol	100	80.2	80	51 - 95	
4-Nitrophenol	100	32.4	32	17 - 42	
N-Nitrosodiphenylamine	100	107	107	68 - 121	
N-Nitrosodi-n-propylamine	100	89.4	89	53 - 106	
2,2'-oxybis[1-chloropropane]	100	83.5	84	44 - 103	
Pentachlorophenol	100	70.9	71	56 - 97	
Phenanthrene	100	84.2	84	59 - 94	
Phenol	100	34.8	35	21 - 50	
Pyrene	100	82.4	82	62 - 101	
1,2,4-Trichlorobenzene	99.9	76.4	76	46 - 89	
2,4,5-Trichlorophenol	100	77.5	78	58 - 95	
2,4,6-Trichlorophenol	100	76.6	77	54 - 93	

Surrogate	% Rec	Acceptance Limits
2-Fluorophenol (Surr)	58	21 - 85
2,4,6-Tribromophenol (Surr)	81	46 - 118
Nitrobenzene-d5 (Surr)	88	45 - 99
Phenol-d5 (Surr)	36	10 - 70
Terphenyl-d14 (Surr)	91	53 - 126
2-Fluorobiphenyl (Surr)	76	46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8998

Method: 8270D
Preparation: 3510C

MS Lab Sample ID:	160-428-A-6-B MS	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JSMP3409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1057.8 mL
Analysis Date:	08/15/2012 1900			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	160-428-A-6-C MSD	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JSMP3410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1057.9 mL
Analysis Date:	08/15/2012 1932			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Acenaphthene	84	80	49 - 97	4	20		
Acenaphthylene	85	83	49 - 98	3	20		
Anthracene	83	81	49 - 103	2	20		
Benzo[a]anthracene	94	93	52 - 117	1	20		
Benzo[b]fluoranthene	84	84	50 - 110	0	20		
Benzo[k]fluoranthene	86	84	53 - 111	2	20		
Benzo[g,h,i]perylene	96	96	44 - 125	0	20		
Benzo[a]pyrene	82	82	47 - 107	1	20		
Bis(2-chloroethoxy)methane	82	82	46 - 98	0	20		
Bis(2-chloroethyl)ether	85	83	40 - 99	2	20		
Bis(2-ethylhexyl) phthalate	88	85	47 - 111	4	20		
4-Bromophenyl phenyl ether	82	80	49 - 108	3	20		
Butyl benzyl phthalate	84	81	44 - 113	3	20		
Carbazole	87	85	48 - 104	2	20		
4-Chloroaniline	53	52	25 - 73	2	20		
4-Chloro-3-methylphenol	71	70	42 - 100	1	20		
2-Chloronaphthalene	81	77	45 - 96	4	20		
2-Chlorophenol	68	66	37 - 99	4	20		
4-Chlorophenyl phenyl ether	82	78	50 - 101	5	20		
Chrysene	83	82	48 - 111	1	20		
Dibenz(a,h)anthracene	96	95	26 - 126	1	20		
Dibenzofuran	81	79	47 - 94	3	20		
Di-n-butyl phthalate	87	84	47 - 107	3	20		
1,2-Dichlorobenzene	77	73	36 - 92	5	20		
1,3-Dichlorobenzene	75	73	32 - 92	4	20		
1,4-Dichlorobenzene	75	72	33 - 89	4	20		
3,3'-Dichlorobenzidine	54	54	23 - 89	0	20		
2,4-Dichlorophenol	72	72	42 - 98	0	20		
Diethyl phthalate	86	83	50 - 104	4	20		
2,4-Dimethylphenol	74	73	39 - 97	1	20		
Dimethyl phthalate	87	83	50 - 103	4	20		
4,6-Dinitro-2-methylphenol	82	79	36 - 119	4	20		
2,4-Dinitrophenol	79	76	22 - 121	4	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8998

Method: 8270D
Preparation: 3510C

MS Lab Sample ID:	160-428-A-6-B MS	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JSMP3409.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1057.8 mL
Analysis Date:	08/15/2012 1900			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

MSD Lab Sample ID:	160-428-A-6-C MSD	Analysis Batch:	160-9331	Instrument ID:	MSJ
Client Matrix:	Water	Prep Batch:	160-8998	Lab File ID:	JSMP3410.D
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1057.9 mL
Analysis Date:	08/15/2012 1932			Final Weight/Volume:	1 mL
Prep Date:	08/13/2012 1221			Injection Volume:	1 uL
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
2,4-Dinitrotoluene	91	87	51 - 107	6	20		
2,6-Dinitrotoluene	86	83	50 - 107	4	20		
Di-n-octyl phthalate	90	87	47 - 115	3	20		
Fluoranthene	88	85	50 - 108	3	20		
Fluorene	84	80	51 - 102	5	20		
Hexachlorobenzene	81	81	50 - 113	1	20		
Hexachlorobutadiene	75	73	31 - 100	2	20		
Hexachlorocyclopentadiene	98	97	10 - 122	2	20		
Hexachloroethane	80	76	29 - 92	5	20		
Indeno[1,2,3-cd]pyrene	87	86	48 - 128	1	20		
Isophorone	80	80	43 - 115	0	20		
2-Methylnaphthalene	78	77	40 - 91	2	20		
2-Methylphenol	59	57	32 - 96	3	20		
3 & 4 Methylphenol	59	56	30 - 103	5	20		
Naphthalene	78	77	41 - 94	1	20		
2-Nitroaniline	87	84	45 - 101	4	20		
3-Nitroaniline	67	66	34 - 87	1	20		
4-Nitroaniline	79	76	40 - 103	3	20		
Nitrobenzene	85	84	43 - 96	1	20		
2-Nitrophenol	78	77	42 - 99	1	20		
4-Nitrophenol	32	30	10 - 69	7	20		
N-Nitrosodiphenylamine	105	102	59 - 129	2	20		
N-Nitrosodi-n-propylamine	87	85	44 - 109	2	20		
2,2'-oxybis[1-chloropropane]	81	79	33 - 100	3	20		
Pentachlorophenol	81	78	38 - 119	4	20		
Phenanthrene	83	81	49 - 102	2	20		
Phenol	28	26	10 - 68	6	20		
Pyrene	78	77	45 - 112	2	20		
1,2,4-Trichlorobenzene	77	75	39 - 92	2	20		
2,4,5-Trichlorophenol	77	75	48 - 102	3	20		
2,4,6-Trichlorophenol	78	76	45 - 99	3	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2-Fluorophenol (Surr)	46	45	21 - 85

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
2,4,6-Tribromophenol (Surr)	86	84	46 - 118
Nitrobenzene-d5 (Surr)	86	87	45 - 99
Phenol-d5 (Surr)	29	27	10 - 70
Terphenyl-d14 (Surr)	86	85	53 - 126
2-Fluorobiphenyl (Surr)	77	75	46 - 99

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8998

Method: 8270D
Preparation: 3510C

MS Lab Sample ID:	160-428-A-6-B MS	Units: ug/L	MSD Lab Sample ID:	160-428-A-6-C MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/15/2012 1900		Analysis Date:	08/15/2012 1932	
Prep Date:	08/13/2012 1221		Prep Date:	08/13/2012 1221	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Acenaphthene	ND	94.5	94.5	79.1	76.0
Acenaphthylene	ND	94.5	94.5	80.8	78.2
Anthracene	ND	94.5	94.5	78.4	76.8
Benzo[a]anthracene	ND	94.5	94.5	88.7	87.7
Benzo[b]fluoranthene	ND	94.5	94.5	79.3	79.3
Benzo[k]fluoranthene	ND	94.5	94.5	80.8	79.3
Benzo[g,h,i]perylene	ND	94.5	94.5	91.0	90.8
Benzo[a]pyrene	ND	94.5	94.5	77.7	77.1
Bis(2-chloroethoxy)methane	ND	94.5	94.5	77.8	77.5
Bis(2-chloroethyl)ether	ND	94.5	94.5	80.3	78.7
Bis(2-ethylhexyl) phthalate	ND	94.5	94.5	82.9	79.9
4-Bromophenyl phenyl ether	ND	94.5	94.5	77.9	75.3
Butyl benzyl phthalate	ND	94.5	94.5	79.0	76.7
Carbazole	ND	94.5	94.4	82.0	80.4
4-Chloroaniline	ND	94.5	94.5	49.9	48.9
4-Chloro-3-methylphenol	ND	94.5	94.5	66.7	66.1
2-Chloronaphthalene	ND	94.5	94.5	76.4	73.2
2-Chlorophenol	ND	94.5	94.5	64.7	62.2
4-Chlorophenyl phenyl ether	ND	94.5	94.5	77.9	74.2
Chrysene	ND	94.5	94.5	78.1	77.5
Dibenz(a,h)anthracene	ND	94.5	94.5	90.8	89.7
Dibenzofuran	ND	94.5	94.5	76.9	74.6
Di-n-butyl phthalate	ND	94.5	94.5	82.4	79.8
1,2-Dichlorobenzene	ND	94.5	94.5	72.5	69.1
1,3-Dichlorobenzene	ND	94.5	94.5	71.3	68.7
1,4-Dichlorobenzene	ND	94.5	94.5	71.3	68.3
3,3'-Dichlorobenzidine	ND	94.5	94.5	51.2	51.4
2,4-Dichlorophenol	ND	94.5	94.5	68.4	68.1
Diethyl phthalate	ND	94.5	94.5	81.3	78.4
2,4-Dimethylphenol	ND	94.5	94.5	69.7	68.9
Dimethyl phthalate	ND	94.5	94.5	81.8	78.3
4,6-Dinitro-2-methylphenol	ND	94.5	94.5	77.4	74.6
2,4-Dinitrophenol	ND	94.5	94.5	74.5	71.8
2,4-Dinitrotoluene	ND	94.5	94.5	86.5	81.8
2,6-Dinitrotoluene	ND	94.5	94.5	81.5	78.3
Di-n-octyl phthalate	ND	94.5	94.5	84.8	82.2
Fluoranthene	ND	94.5	94.5	83.1	80.7
Fluorene	ND	94.5	94.5	79.1	75.4
Hexachlorobenzene	ND	94.5	94.5	76.5	76.1
Hexachlorobutadiene	ND	94.5	94.5	70.7	69.4
Hexachlorocyclopentadiene	ND	94.5	94.5	92.9	91.3
Hexachloroethane	ND	94.5	94.5	75.6	72.2
Indeno[1,2,3-cd]pyrene	ND	94.5	94.5	82.3	81.2

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8998

Method: 8270D
Preparation: 3510C

MS Lab Sample ID:	160-428-A-6-B MS	Units: ug/L	MSD Lab Sample ID:	160-428-A-6-C MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/15/2012 1900		Analysis Date:	08/15/2012 1932	
Prep Date:	08/13/2012 1221		Prep Date:	08/13/2012 1221	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Isophorone	ND	94.5	94.5	75.4	75.8
2-Methylnaphthalene	ND	94.5	94.5	73.7	72.5
2-Methylphenol	ND	94.5	94.5	55.4	53.9
3 & 4 Methylphenol	ND	94.5	94.5	55.8	53.1
Naphthalene	ND	94.5	94.5	73.7	73.2
2-Nitroaniline	ND	94.5	94.5	82.6	79.2
3-Nitroaniline	ND	94.5	94.5	62.9	62.3
4-Nitroaniline	ND	94.5	94.5	74.3	71.8
Nitrobenzene	ND	94.5	94.5	80.5	79.8
2-Nitrophenol	ND	94.5	94.5	73.7	73.0
4-Nitrophenol	ND	94.5	94.5	30.1	28.0
N-Nitrosodiphenylamine	ND	94.5	94.5	99.0	96.9
N-Nitrosodi-n-propylamine	ND	94.5	94.5	82.5	80.5
2,2'-oxybis[1-chloropropane]	ND	94.5	94.5	76.6	74.4
Pentachlorophenol	ND	94.5	94.5	76.9	73.7
Phenanthrene	ND	94.5	94.5	78.1	76.4
Phenol	ND	94.5	94.5	26.5	25.0
Pyrene	ND	94.5	94.5	74.0	72.4
1,2,4-Trichlorobenzene	ND	94.5	94.4	72.3	70.8
2,4,5-Trichlorophenol	ND	94.5	94.5	72.9	70.8
2,4,6-Trichlorophenol	ND	94.5	94.5	74.0	71.8

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-8952

Method: 6010C
Preparation: 3010A

Lab Sample ID:	MB 160-8952/1-A	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1219	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	ND		80	200
Arsenic	ND		2.0	10
Barium	ND		4.0	50
Beryllium	ND		0.61	5.0
Calcium	ND		110	1000
Cadmium	ND		0.91	5.0
Cobalt	ND		4.0	50
Chromium	ND		3.1	10
Copper	ND		4.6	25
Iron	ND		28	100
Magnesium	ND		130	1000
Manganese	ND		3.3	15
Nickel	ND		13	40
Potassium	ND		1700	5000
Lead	ND		1.5	10
Silver	ND		6.0	10
Antimony	ND		4.0	10
Selenium	ND		2.7	15
Sodium	ND		320	1000
Thallium	ND		4.0	20
Vanadium	ND		4.1	50
Zinc	6.40	J	5.2	20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-8952

Method: 6010C
Preparation: 3010A

Lab Sample ID:	LCS 160-8952/2-A	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1223	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	10000	10500	105	80 - 120	
Arsenic	1000	1010	101	80 - 120	
Barium	1000	1020	102	80 - 120	
Beryllium	1000	1020	102	80 - 120	
Calcium	10000	10500	105	80 - 120	
Cadmium	1000	1060	106	80 - 120	
Cobalt	1000	1030	103	80 - 120	
Chromium	1000	1060	106	80 - 120	
Copper	1000	1080	108	80 - 120	
Iron	10000	10300	103	80 - 120	
Magnesium	10000	10600	106	80 - 120	
Manganese	1000	1060	106	80 - 120	
Nickel	1000	1110	111	80 - 120	
Potassium	10000	9860	99	80 - 120	
Lead	1000	1080	108	80 - 120	
Silver	100	102	102	80 - 120	
Antimony	500	532	106	80 - 120	
Selenium	1000	996	100	80 - 120	
Sodium	10000	9710	97	80 - 120	
Thallium	200	217	109	80 - 120	
Vanadium	1000	964	96	80 - 120	
Zinc	1000	1030	103	80 - 120	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8952

Method: 6010C
Preparation: 3010A

MS Lab Sample ID:	160-420-D-1-E MS	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1241			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

MSD Lab Sample ID:	160-420-D-1-F MSD	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1244			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Calcium	154	182	75 - 125	2	20	4	4
Magnesium	125	181	75 - 125	9	20	4	4

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8952

Method: 6010C
Preparation: 3010A

MS Lab Sample ID:	160-420-D-1-E MS	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1345			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

MSD Lab Sample ID:	160-420-D-1-F MSD	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1348			Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aluminum	155	230	75 - 125	25	20	F	F
Arsenic	98	94	75 - 125	3	20		
Barium	108	116	75 - 125	4	20		
Beryllium	101	98	75 - 125	3	20		
Cadmium	100	95	75 - 125	4	20		
Chromium	97	94	75 - 125	3	20		
Cobalt	91	88	75 - 125	4	20		
Copper	100	96	75 - 125	4	20		
Iron	96	134	75 - 125	5	20	4	4
Manganese	101	98	75 - 125	1	20		
Nickel	99	96	75 - 125	3	20		
Potassium	112	125	75 - 125	7	20		
Lead	95	91	75 - 125	4	20		
Antimony	100	94	75 - 125	7	20		
Silver	97	94	75 - 125	3	20		
Selenium	93	88	75 - 125	5	20		
Sodium	105	100	75 - 125	1	20	4	4
Thallium	95	90	75 - 125	5	20		
Vanadium	96	94	75 - 125	2	20		
Zinc	95	92	75 - 125	3	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8952

Method: 6010C
Preparation: 3010A

MS Lab Sample ID:	160-420-D-1-E MS	Units: ug/L	MSD Lab Sample ID:	160-420-D-1-F MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	5.0		Dilution:	5.0	
Analysis Date:	08/21/2012 1241		Analysis Date:	08/21/2012 1244	
Prep Date:	08/10/2012 1336		Prep Date:	08/10/2012 1336	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Calcium	150000	10000	10000	169000	4	172000	4
Magnesium	50000	10000	10000	62800	4	68500	4

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-8952

Method: 6010C
Preparation: 3010A

MS Lab Sample ID:	160-420-D-1-E MS	Units: ug/L	MSD Lab Sample ID:	160-420-D-1-F MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/21/2012 1345		Analysis Date:	08/21/2012 1348	
Prep Date:	08/10/2012 1336		Prep Date:	08/10/2012 1336	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Aluminum	11000		10000	10000	26400	F	33900	F
Arsenic	120		1000	1000	1100		1060	
Barium	1100		1000	1000	2140		2220	
Beryllium	ND		1000	1000	1010		978	
Cadmium	ND		1000	1000	996		954	
Chromium	16		1000	1000	986		954	
Cobalt	69		1000	1000	984		948	
Copper	22	J	1000	1000	1020		979	
Iron	69000		10000	10000	78200	4	82000	4
Manganese	2300		1000	1000	3290		3260	
Nickel	93		1000	1000	1080		1050	
Potassium	7300		10000	10000	18500		19800	
Lead	25		1000	1000	973		938	
Antimony	ND		500	500	502		469	
Silver	ND		100	100	96.8		94.1	
Selenium	ND		1000	1000	927		881	
Sodium	61000		10000	10000	71200	4	70600	4
Thallium	ND		200	200	190		180	
Vanadium	32	J	1000	1000	990		969	
Zinc	150		1000	1000	1100		1070	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Serial Dilution - Batch: 160-8952

Method: 6010C
Preparation: 3010A

Lab Sample ID:	160-420-D-1-D SD	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	25	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1230	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Calcium	150000	167000	8.2	10	
Magnesium	50000	57200	14	10	V

Serial Dilution - Batch: 160-8952

Method: 6010C
Preparation: 3010A

Lab Sample ID:	160-420-D-1-D SD	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-8952	Lab File ID:	082112C1a.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/21/2012 1341	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/10/2012 1336				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Aluminum	11000		11100	2.1	10	
Arsenic	120		127	4.7	10	
Barium	1100		1090	2.3	10	
Beryllium	ND		ND	NC	10	
Cadmium	ND		ND	NC	10	
Cobalt	69		74.5	NC	10	J
Chromium	16		ND	NC	10	
Copper	22	J	29.0	NC	10	J
Iron	69000		71900	4.7	10	
Manganese	2300		2380	4.7	10	
Nickel	93		102	NC	10	J
Potassium	7300		ND	NC	10	
Lead	25		25.0	NC	10	J
Silver	ND		ND	NC	10	
Antimony	ND		ND	NC	10	
Selenium	ND		ND	NC	10	
Sodium	61000		61900	2.0	10	
Thallium	ND		ND	NC	10	
Vanadium	32	J	21.5	NC	10	J
Zinc	150		175	NC	10	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Linear Range Check Standard - Batch: 160-9492

Method: 6010C
Preparation: N/A

Lab Sample ID:	LRC 160-9492/11	Analysis Batch:	160-9492	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	082112C1a.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	08/21/2012 0925	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	100000	99500	100	90 - 110	
Arsenic	10000	9900	99	90 - 110	
Barium	10000	9930	99	90 - 110	
Beryllium	10000	9910	99	90 - 110	
Calcium	50000	49100	98	90 - 110	
Cadmium	10000	9910	99	90 - 110	
Cobalt	10000	9850	98	90 - 110	
Chromium	10000	9880	99	90 - 110	
Copper	10000	9880	99	90 - 110	
Iron	100000	98800	99	90 - 110	
Magnesium	50000	49300	99	90 - 110	
Manganese	10000	9890	99	90 - 110	
Nickel	10000	9810	98	90 - 110	
Potassium	100000	99900	100	90 - 110	
Lead	10000	9810	98	90 - 110	
Silver	2000	2020	101	90 - 110	
Antimony	2000	2000	100	90 - 110	
Selenium	10000	9890	99	90 - 110	
Sodium	100000	99800	100	90 - 110	
Thallium	10000	9730	97	90 - 110	
Vanadium	10000	9960	100	90 - 110	
Zinc	10000	9900	99	90 - 110	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Linear Range Check Standard - Batch: 160-9505

Method: 6010C
Preparation: N/A

Lab Sample ID:	LRC 160-9505/11	Analysis Batch:	160-9505	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	082212C1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	08/22/2012 0830	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	100000	101000	101	90 - 110	
Arsenic	10000	9920	99	90 - 110	
Barium	10000	9930	99	90 - 110	
Beryllium	10000	9900	99	90 - 110	
Calcium	50000	48700	97	90 - 110	
Cadmium	10000	9870	99	90 - 110	
Cobalt	10000	9820	98	90 - 110	
Chromium	10000	9900	99	90 - 110	
Copper	10000	9830	98	90 - 110	
Iron	100000	99700	100	90 - 110	
Magnesium	50000	50100	100	90 - 110	
Manganese	10000	9990	100	90 - 110	
Nickel	10000	9800	98	90 - 110	
Potassium	100000	101000	101	90 - 110	
Lead	10000	9750	98	90 - 110	
Silver	2000	2000	100	90 - 110	
Antimony	2000	1990	99	90 - 110	
Selenium	10000	9890	99	90 - 110	
Sodium	100000	100000	100	90 - 110	
Thallium	10000	9650	97	90 - 110	
Vanadium	10000	9960	100	90 - 110	
Zinc	10000	9810	98	90 - 110	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9563

Method: 6010C
Preparation: 3010A

Lab Sample ID:	MB 160-9563/1-A	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1607	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Aluminum	ND		80	200
Arsenic	ND		2.0	10
Barium	ND		4.0	50
Beryllium	ND		0.61	5.0
Calcium	ND		110	1000
Cadmium	ND		0.91	5.0
Cobalt	ND		4.0	50
Chromium	ND		3.1	10
Copper	ND		4.6	25
Iron	ND		28	100
Magnesium	ND		130	1000
Manganese	ND		3.3	15
Nickel	ND		13	40
Potassium	ND		1700	5000
Lead	ND		1.5	10
Silver	ND		6.0	10
Antimony	ND		4.0	10
Selenium	ND		2.7	15
Sodium	ND		320	1000
Thallium	ND		4.0	20
Vanadium	ND		4.1	50
Zinc	6.70	J	5.2	20

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Control Sample - Batch: 160-9563

Method: 6010C
Preparation: 3010A

Lab Sample ID:	LCS 160-9563/2-A	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1611	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	10000	9960	100	80 - 120	
Arsenic	1000	979	98	80 - 120	
Barium	1000	998	100	80 - 120	
Beryllium	1000	984	98	80 - 120	
Calcium	10000	10100	101	80 - 120	
Cadmium	1000	989	99	80 - 120	
Cobalt	1000	1020	102	80 - 120	
Chromium	1000	1020	102	80 - 120	
Copper	1000	1010	101	80 - 120	
Iron	10000	10200	102	80 - 120	
Magnesium	10000	10000	100	80 - 120	
Manganese	1000	1010	101	80 - 120	
Nickel	1000	1040	104	80 - 120	
Potassium	10000	9820	98	80 - 120	
Lead	1000	1020	102	80 - 120	
Silver	100	105	105	80 - 120	
Antimony	500	513	103	80 - 120	
Selenium	1000	977	98	80 - 120	
Sodium	10000	9690	97	80 - 120	
Thallium	200	216	108	80 - 120	
Vanadium	1000	985	99	80 - 120	
Zinc	1000	997	100	80 - 120	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9563

Method: 6010C
Preparation: 3010A
Dissolved

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1622			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1625			Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Aluminum	93	98	75 - 125	6	20		
Arsenic	95	100	75 - 125	5	20		
Barium	87	95	75 - 125	5	20		
Beryllium	92	98	75 - 125	6	20		
Cadmium	95	98	75 - 125	4	20		
Calcium	-6	28	75 - 125	2	20	4	4
Chromium	95	99	75 - 125	3	20		
Cobalt	98	102	75 - 125	4	20		
Copper	95	100	75 - 125	6	20		
Iron	90	99	75 - 125	6	20		
Magnesium	55	79	75 - 125	4	20	4	4
Manganese	48	76	75 - 125	4	20	4	4
Nickel	101	106	75 - 125	4	20		
Potassium	156	163	75 - 125	5	20	J F	J F
Lead	97	102	75 - 125	5	20		
Antimony	98	102	75 - 125	4	20		
Silver	97	104	75 - 125	6	20		
Selenium	95	97	75 - 125	2	20		
Sodium	60	81	75 - 125	4	20	4	4
Thallium	103	106	75 - 125	3	20		
Vanadium	91	96	75 - 125	5	20		
Zinc	93	97	75 - 125	5	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9563

Method: 6010C
Preparation: 3010A
Dissolved

MS Lab Sample ID:	160-437-1	Units: ug/L	MSD Lab Sample ID:	160-437-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	5.0		Dilution:	5.0	
Analysis Date:	08/27/2012 1622		Analysis Date:	08/27/2012 1625	
Prep Date:	08/23/2012 1440		Prep Date:	08/23/2012 1440	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Aluminum	ND		10000	10000	9260		9830	
Arsenic	ND		1000	1000	947		997	
Barium	740		1000	1000	1600		1690	
Beryllium	ND		1000	1000	922		978	
Cadmium	ND		1000	1000	947		982	
Calcium	180000		10000	10000	183000	4	186000	4
Chromium	ND		1000	1000	952		985	
Cobalt	ND		1000	1000	979		1020	
Copper	ND		1000	1000	948		1000	
Iron	6700		10000	10000	15600		16500	
Magnesium	51000		10000	10000	56900	4	59300	4
Manganese	6400		1000	1000	6870	4	7140	4
Nickel	ND		1000	1000	1010		1060	
Potassium	ND		10000	10000	15600	J F	16300	J F
Lead	ND		1000	1000	968		1020	
Antimony	ND		500	500	490		512	
Silver	ND		100	100	97.0		104	
Selenium	ND		1000	1000	952		970	
Sodium	50000		10000	10000	55800	4	57900	4
Thallium	20	J	200	200	226		232	
Vanadium	ND		1000	1000	914		964	
Zinc	33	J	1000	1000	960		1000	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Serial Dilution - Batch: 160-9563

Method: 6010C
Preparation: 3010A
Dissolved

Lab Sample ID:	160-437-1	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	160-9563	Lab File ID:	082712C2.asc
Dilution:	25	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/27/2012 1618	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	08/23/2012 1440				
Leach Date:	N/A				

Analyte	Sample Result/Qual		Result	%Diff	Limit	Qual
Aluminum	ND		ND	NC	10	
Arsenic	ND		70.0	NC	10	J
Barium	740		663	NC	10	J
Beryllium	ND		ND	NC	10	
Calcium	180000		167000	9.1	10	
Cadmium	ND		ND	NC	10	
Cobalt	ND		ND	NC	10	
Chromium	ND		ND	NC	10	
Copper	ND		ND	NC	10	
Iron	6700		6020	NC	10	
Magnesium	51000		46900	8.8	10	
Manganese	6400		5780	9.6	10	
Nickel	ND		ND	NC	10	
Potassium	ND		ND	NC	10	
Lead	ND		ND	NC	10	
Silver	ND		ND	NC	10	
Antimony	ND		ND	NC	10	
Selenium	ND		ND	NC	10	
Sodium	50000		45100	NC	10	
Thallium	20	J	ND	NC	10	
Vanadium	ND		ND	NC	10	
Zinc	33	J	145	NC	10	J

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Linear Range Check Standard - Batch: 160-9840

Method: 6010C
Preparation: N/A

Lab Sample ID:	LRC 160-9840/11	Analysis Batch:	160-9840	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	082712C2.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	08/27/2012 1408	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Aluminum	100000	99900	100	90 - 110	
Arsenic	10000	9860	99	90 - 110	
Barium	10000	10200	102	90 - 110	
Beryllium	10000	9920	99	90 - 110	
Calcium	50000	48400	97	90 - 110	
Cadmium	10000	9790	98	90 - 110	
Cobalt	10000	9710	97	90 - 110	
Chromium	10000	9820	98	90 - 110	
Copper	10000	9770	98	90 - 110	
Iron	100000	100000	100	90 - 110	
Magnesium	50000	49800	100	90 - 110	
Manganese	10000	9950	99	90 - 110	
Nickel	10000	9730	97	90 - 110	
Potassium	100000	101000	101	90 - 110	
Lead	10000	9720	97	90 - 110	
Silver	2000	2010	100	90 - 110	
Antimony	2000	1970	99	90 - 110	
Selenium	10000	9890	99	90 - 110	
Sodium	100000	100000	100	90 - 110	
Thallium	10000	9710	97	90 - 110	
Vanadium	10000	10100	101	90 - 110	
Zinc	10000	9800	98	90 - 110	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Linear Range Check Standard - Batch: 160-9847

Method: 6010C
Preparation: N/A

Lab Sample ID:	LRC 160-9847/11	Analysis Batch:	160-9847	Instrument ID:	ICP6500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	082812C1.asc
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	1.0 mL
Analysis Date:	08/28/2012 0855	Units:	ug/L	Final Weight/Volume:	1.0 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Calcium	50000	48200	96	90 - 110	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9032

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 160-9032/1-A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1335	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.060	0.20

Lab Control Sample - Batch: 160-9032

Method: 7470A
Preparation: 7470A

Lab Sample ID:	LCS 160-9032/2-A	Analysis Batch:	160-9162	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1337	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	1.00	1.01	101	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9032

Method: 7470A
Preparation: 7470A

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9162	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1346			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9162	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1348			Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	81	75	80 - 120	9	20		F

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9032

Method: 7470A
Preparation: 7470A

MS Lab Sample ID:	160-437-1	Units: ug/L	MSD Lab Sample ID:	160-437-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/14/2012 1346		Analysis Date:	08/14/2012 1348	
Prep Date:	08/14/2012 0904		Prep Date:	08/14/2012 0904	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual	
Mercury	ND	1.00	1.00	0.813	0.746	F

Serial Dilution - Batch: 160-9032

Method: 7470A
Preparation: 7470A

Lab Sample ID:	160-437-1	Analysis Batch:	160-9162	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9032	Lab File ID:	HAA081412A1.CSV
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/14/2012 1345	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/14/2012 0904				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Mercury	ND	ND	NC	10	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9305

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 160-9305/1-A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1414	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	ND		0.060	0.20

Lab Control Sample - Batch: 160-9305

Method: 7470A
Preparation: 7470A

Lab Sample ID:	LCS 160-9305/2-A	Analysis Batch:	160-9325	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1415	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	1.00	1.00	100	80 - 120	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9305

Method: 7470A
Preparation: 7470A
Dissolved

MS Lab Sample ID:	160-428-E-6-B MS	Analysis Batch:	160-9325	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1426			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				
Leach Date:	N/A				

MSD Lab Sample ID:	160-428-E-6-C MSD	Analysis Batch:	160-9325	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1432			Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	96	92	80 - 120	4	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9305

Method: 7470A
Preparation: 7470A
Dissolved

MS Lab Sample ID:	160-428-E-6-B MS	Units: ug/L	MSD Lab Sample ID:	160-428-E-6-C MSD	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/16/2012 1426		Analysis Date:	08/16/2012 1432	
Prep Date:	08/16/2012 1003		Prep Date:	08/16/2012 1003	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	ND	1.00	1.00	0.957	0.922

Serial Dilution - Batch: 160-9305

Method: 7470A
Preparation: 7470A
Dissolved

Lab Sample ID:	160-428-E-6-A SD	Analysis Batch:	160-9325	Instrument ID:	HAA2
Client Matrix:	Water	Prep Batch:	160-9305	Lab File ID:	HAA081612A.CSV
Dilution:	5.0	Leach Batch:	N/A	Initial Weight/Volume:	30 mL
Analysis Date:	08/16/2012 1425	Units:	ug/L	Final Weight/Volume:	30 mL
Prep Date:	08/16/2012 1003				
Leach Date:	N/A				

Analyte	Sample Result/Qual	Result	%Diff	Limit	Qual
Mercury	ND	ND	NC	10	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9057

Method: 300.0
Preparation: N/A

Lab Sample ID:	MB 160-9057/25	Analysis Batch:	160-9057	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	124.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/14/2012 0029	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Iodide	ND		0.10	1.0

Lab Control Sample - Batch: 160-9057

Method: 300.0
Preparation: N/A

Lab Sample ID:	LCS 160-9057/26	Analysis Batch:	160-9057	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	125.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/14/2012 0042	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Iodide	4.00	3.89	97	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9057

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9057	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	127.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/14/2012 0109			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9057	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	128.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/14/2012 0122			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Iodide	96	96	90 - 110	0	20		

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9057

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	160-437-1	Units:	mg/L	MSD Lab Sample ID:	160-437-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	08/14/2012 0109			Analysis Date:	08/14/2012 0122
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Iodide	0.51	J	4.00	4.00	4.34	4.36

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9484

Method: 300.0
Preparation: N/A

Lab Sample ID:	MB 160-9484/9	Analysis Batch:	160-9484	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	108.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/17/2012 1340	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Bromide	ND		0.025	0.25

Lab Control Sample - Batch: 160-9484

Method: 300.0
Preparation: N/A

Lab Sample ID:	LCS 160-9484/10	Analysis Batch:	160-9484	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	109.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/17/2012 1357	Units:	mg/L	Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Bromide	2.00	1.96	98	90 - 110	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9484

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9484	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	111.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/17/2012 1436			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9484	Instrument ID:	IC1500
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	112.TXT
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	
Analysis Date:	08/17/2012 1452			Final Weight/Volume:	5 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Bromide	89	87	90 - 110	1	20	F	F

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9484

Method: 300.0
Preparation: N/A

MS Lab Sample ID:	160-437-1	Units: mg/L	MSD Lab Sample ID:	160-437-1	
Client Matrix:	Water		Client Matrix:	Water	
Dilution:	1.0		Dilution:	1.0	
Analysis Date:	08/17/2012 1436		Analysis Date:	08/17/2012 1452	
Prep Date:	N/A		Prep Date:	N/A	
Leach Date:	N/A		Leach Date:	N/A	

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Bromide	0.98	2.00	2.00	2.75	F	2.72	F

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Method Blank - Batch: 160-9518

Method: 310.1
Preparation: N/A

Lab Sample ID:	MB 160-9518/1	Analysis Batch:	160-9518	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	200 mL
Analysis Date:	08/22/2012 1529	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Alkalinity	0.750	J	0.14	1.3

Lab Control Sample - Batch: 160-9518

Method: 310.1
Preparation: N/A

Lab Sample ID:	LCS 160-9518/3	Analysis Batch:	160-9518	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 1529	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	400	372	93	90 - 110	

Low Level Control Sample - Batch: 160-9518

Method: 310.1
Preparation: N/A

Lab Sample ID:	LLCS 160-9518/2	Analysis Batch:	160-9518	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 1529	Units:	mg/L	Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Alkalinity	200	188	94	90 - 110	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9518

Method: 310.1
Preparation: N/A

MS Lab Sample ID:	160-437-1	Analysis Batch:	160-9518	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 1733			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

MSD Lab Sample ID:	160-437-1	Analysis Batch:	160-9518	Instrument ID:	No Equipment
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	08/22/2012 1738			Final Weight/Volume:	50 mL
Prep Date:	N/A				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Alkalinity	100	120	80 - 120	1	20	4	4

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 160-9518

Method: 310.1
Preparation: N/A

MS Lab Sample ID:	160-437-1	Units:	mg/L	MSD Lab Sample ID:	160-437-1
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	08/22/2012 1733			Analysis Date:	08/22/2012 1738
Prep Date:	N/A			Prep Date:	N/A
Leach Date:	N/A			Leach Date:	N/A

Analyte	Sample Result/Qual	MS Spike Amount	MSD Spike Amount	MS Result/Qual		MSD Result/Qual	
Alkalinity	650	20.0	20.0	666	4	670	4

DATA REPORTING QUALIFIERS

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Lab Section	Qualifier	Description
GC/MS VOA		
	B	Compound was found in the blank and sample.
	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	X	Surrogate is outside control limits
GC/MS Semi VOA		
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
Metals		
	B	Compound was found in the blank and sample.
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
	F	RPD of the MS and MSD exceeds the control limits
	V	Serial Dilution exceeds the control limits
General Chemistry		
	B	Compound was found in the blank and sample.
	*	LCS or LCSD exceeds the control limits
	F	MS or MSD exceeds the control limits
	4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS VOA					
Analysis Batch:160-9262					
LCS 160-9262/4	Lab Control Sample	T	Water	8260C	
MB 160-9262/3	Method Blank	T	Water	8260C	
160-437-1	PZ-113-AS	T	Water	8260C	
160-437-1MS	Matrix Spike	T	Water	8260C	
160-437-1MSD	Matrix Spike Duplicate	T	Water	8260C	
160-437-2	D-3	T	Water	8260C	
160-437-3	PZ-112-AS	T	Water	8260C	
160-437-4	I-11	T	Water	8260C	
160-437-5	PZ-207-AS	T	Water	8260C	
160-437-6	D-12	T	Water	8260C	
160-437-7	PZ-305-AI	T	Water	8260C	
160-437-8	S-10	T	Water	8260C	
160-437-9FD	DUP 05	T	Water	8260C	
160-437-10TB	TRIP BLANK	T	Water	8260C	
Analysis Batch:160-9490					
LCS 160-9490/4	Lab Control Sample	T	Water	8260C	
MB 160-9490/3	Method Blank	T	Water	8260C	
160-437-3	PZ-112-AS	T	Water	8260C	
160-468-F-1 MS	Matrix Spike	T	Water	8260C	
160-468-F-1 MSD	Matrix Spike Duplicate	T	Water	8260C	

Report Basis
T = Total

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC/MS Semi VOA					
Prep Batch: 160-8998					
LCS 160-8998/2-A	Lab Control Sample	T	Water	3510C	
MB 160-8998/1-A	Method Blank	T	Water	3510C	
160-428-A-6-B MS	Matrix Spike	T	Water	3510C	
160-428-A-6-C MSD	Matrix Spike Duplicate	T	Water	3510C	
160-437-1	PZ-113-AS	T	Water	3510C	
160-437-2	D-3	T	Water	3510C	
160-437-3	PZ-112-AS	T	Water	3510C	
160-437-4	I-11	T	Water	3510C	
160-437-5	PZ-207-AS	T	Water	3510C	
160-437-6	D-12	T	Water	3510C	
160-437-7	PZ-305-AI	T	Water	3510C	
160-437-8	S-10	T	Water	3510C	
160-437-9FD	DUP 05	T	Water	3510C	
Analysis Batch:160-9331					
LCS 160-8998/2-A	Lab Control Sample	T	Water	8270D	160-8998
MB 160-8998/1-A	Method Blank	T	Water	8270D	160-8998
160-428-A-6-B MS	Matrix Spike	T	Water	8270D	160-8998
160-428-A-6-C MSD	Matrix Spike Duplicate	T	Water	8270D	160-8998
160-437-1	PZ-113-AS	T	Water	8270D	160-8998
160-437-2	D-3	T	Water	8270D	160-8998
160-437-3	PZ-112-AS	T	Water	8270D	160-8998
160-437-4	I-11	T	Water	8270D	160-8998
160-437-5	PZ-207-AS	T	Water	8270D	160-8998
160-437-6	D-12	T	Water	8270D	160-8998
160-437-7	PZ-305-AI	T	Water	8270D	160-8998
160-437-8	S-10	T	Water	8270D	160-8998
160-437-9FD	DUP 05	T	Water	8270D	160-8998
Analysis Batch:160-9564					
160-437-3	PZ-112-AS	T	Water	8270D	160-8998

Report Basis
T = Total

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 160-8952					
LCS 160-8952/2-A	Lab Control Sample	T	Water	3010A	
MB 160-8952/1-A	Method Blank	T	Water	3010A	
160-420-D-1-E MS	Matrix Spike	T	Water	3010A	
160-420-D-1-F MSD	Matrix Spike Duplicate	T	Water	3010A	
160-437-1	PZ-113-AS	T	Water	3010A	
160-437-2	D-3	T	Water	3010A	
160-437-3	PZ-112-AS	T	Water	3010A	
160-437-4	I-11	T	Water	3010A	
160-437-5	PZ-207-AS	T	Water	3010A	
160-437-6	D-12	T	Water	3010A	
160-437-7	PZ-305-AI	T	Water	3010A	
160-437-8	S-10	T	Water	3010A	
160-437-9FD	DUP 05	T	Water	3010A	
Prep Batch: 160-9032					
LCS 160-9032/2-A	Lab Control Sample	T	Water	7470A	
MB 160-9032/1-A	Method Blank	T	Water	7470A	
160-437-1	PZ-113-AS	T	Water	7470A	
160-437-1MS	Matrix Spike	T	Water	7470A	
160-437-1MSD	Matrix Spike Duplicate	T	Water	7470A	
160-437-2	D-3	T	Water	7470A	
160-437-3	PZ-112-AS	T	Water	7470A	
160-437-4	I-11	T	Water	7470A	
160-437-5	PZ-207-AS	T	Water	7470A	
160-437-6	D-12	T	Water	7470A	
160-437-7	PZ-305-AI	T	Water	7470A	
160-437-8	S-10	T	Water	7470A	
160-437-9FD	DUP 05	T	Water	7470A	
Analysis Batch:160-9162					
LCS 160-9032/2-A	Lab Control Sample	T	Water	7470A	160-9032
MB 160-9032/1-A	Method Blank	T	Water	7470A	160-9032
160-437-1	PZ-113-AS	T	Water	7470A	160-9032
160-437-1MS	Matrix Spike	T	Water	7470A	160-9032
160-437-1MSD	Matrix Spike Duplicate	T	Water	7470A	160-9032
160-437-2	D-3	T	Water	7470A	160-9032
160-437-3	PZ-112-AS	T	Water	7470A	160-9032
160-437-4	I-11	T	Water	7470A	160-9032
160-437-5	PZ-207-AS	T	Water	7470A	160-9032
160-437-6	D-12	T	Water	7470A	160-9032
160-437-7	PZ-305-AI	T	Water	7470A	160-9032
160-437-8	S-10	T	Water	7470A	160-9032
160-437-9FD	DUP 05	T	Water	7470A	160-9032

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 160-9305					
LCS 160-9305/2-A	Lab Control Sample	T	Water	7470A	
MB 160-9305/1-A	Method Blank	T	Water	7470A	
160-428-E-6-B MS	Matrix Spike	D	Water	7470A	
160-428-E-6-C MSD	Matrix Spike Duplicate	D	Water	7470A	
160-437-1	PZ-113-AS	D	Water	7470A	
160-437-2	D-3	D	Water	7470A	
160-437-3	PZ-112-AS	D	Water	7470A	
160-437-4	I-11	D	Water	7470A	
160-437-5	PZ-207-AS	D	Water	7470A	
160-437-6	D-12	D	Water	7470A	
160-437-7	PZ-305-AI	D	Water	7470A	
160-437-8	S-10	D	Water	7470A	
160-437-9FD	DUP 05	D	Water	7470A	
Analysis Batch:160-9325					
LCS 160-9305/2-A	Lab Control Sample	T	Water	7470A	160-9305
MB 160-9305/1-A	Method Blank	T	Water	7470A	160-9305
160-428-E-6-B MS	Matrix Spike	D	Water	7470A	160-9305
160-428-E-6-C MSD	Matrix Spike Duplicate	D	Water	7470A	160-9305
160-437-1	PZ-113-AS	D	Water	7470A	160-9305
160-437-2	D-3	D	Water	7470A	160-9305
160-437-3	PZ-112-AS	D	Water	7470A	160-9305
160-437-4	I-11	D	Water	7470A	160-9305
160-437-5	PZ-207-AS	D	Water	7470A	160-9305
160-437-6	D-12	D	Water	7470A	160-9305
160-437-7	PZ-305-AI	D	Water	7470A	160-9305
160-437-8	S-10	D	Water	7470A	160-9305
160-437-9FD	DUP 05	D	Water	7470A	160-9305
Analysis Batch:160-9492					
LCS 160-8952/2-A	Lab Control Sample	T	Water	6010C	160-8952
MB 160-8952/1-A	Method Blank	T	Water	6010C	160-8952
160-420-D-1-E MS	Matrix Spike	T	Water	6010C	160-8952
160-420-D-1-F MSD	Matrix Spike Duplicate	T	Water	6010C	160-8952
160-437-1	PZ-113-AS	T	Water	6010C	160-8952
160-437-2	D-3	T	Water	6010C	160-8952
160-437-3	PZ-112-AS	T	Water	6010C	160-8952
160-437-4	I-11	T	Water	6010C	160-8952
160-437-5	PZ-207-AS	T	Water	6010C	160-8952
160-437-6	D-12	T	Water	6010C	160-8952
160-437-7	PZ-305-AI	T	Water	6010C	160-8952
160-437-8	S-10	T	Water	6010C	160-8952
160-437-9FD	DUP 05	T	Water	6010C	160-8952

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:160-9505					
160-437-2	D-3	T	Water	6010C	160-8952
160-437-6	D-12	T	Water	6010C	160-8952
160-437-7	PZ-305-AI	T	Water	6010C	160-8952
160-437-8	S-10	T	Water	6010C	160-8952
160-437-9FD	DUP 05	T	Water	6010C	160-8952
Prep Batch: 160-9563					
LCS 160-9563/2-A	Lab Control Sample	T	Water	3010A	
MB 160-9563/1-A	Method Blank	T	Water	3010A	
160-437-1	PZ-113-AS	D	Water	3010A	
160-437-1MS	Matrix Spike	D	Water	3010A	
160-437-1MSD	Matrix Spike Duplicate	D	Water	3010A	
160-437-2	D-3	D	Water	3010A	
160-437-3	PZ-112-AS	D	Water	3010A	
160-437-4	I-11	D	Water	3010A	
160-437-5	PZ-207-AS	D	Water	3010A	
160-437-6	D-12	D	Water	3010A	
160-437-7	PZ-305-AI	D	Water	3010A	
160-437-8	S-10	D	Water	3010A	
160-437-9FD	DUP 05	D	Water	3010A	
Analysis Batch:160-9840					
LCS 160-9563/2-A	Lab Control Sample	T	Water	6010C	160-9563
MB 160-9563/1-A	Method Blank	T	Water	6010C	160-9563
160-437-1	PZ-113-AS	D	Water	6010C	160-9563
160-437-1MS	Matrix Spike	D	Water	6010C	160-9563
160-437-1MSD	Matrix Spike Duplicate	D	Water	6010C	160-9563
160-437-2	D-3	D	Water	6010C	160-9563
160-437-3	PZ-112-AS	D	Water	6010C	160-9563
160-437-4	I-11	D	Water	6010C	160-9563
160-437-5	PZ-207-AS	D	Water	6010C	160-9563
160-437-6	D-12	D	Water	6010C	160-9563
160-437-7	PZ-305-AI	D	Water	6010C	160-9563
160-437-8	S-10	D	Water	6010C	160-9563
160-437-9FD	DUP 05	D	Water	6010C	160-9563
Analysis Batch:160-9847					
160-437-6	D-12	D	Water	6010C	160-9563
160-437-7	PZ-305-AI	D	Water	6010C	160-9563
160-437-8	S-10	D	Water	6010C	160-9563

Report Basis
D = Dissolved
T = Total

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:160-9057					
LCS 160-9057/26	Lab Control Sample	T	Water	300.0	
MB 160-9057/25	Method Blank	T	Water	300.0	
160-437-1	PZ-113-AS	T	Water	300.0	
160-437-1MS	Matrix Spike	T	Water	300.0	
160-437-1MSD	Matrix Spike Duplicate	T	Water	300.0	
160-437-2	D-3	T	Water	300.0	
160-437-3	PZ-112-AS	T	Water	300.0	
160-437-4	I-11	T	Water	300.0	
160-437-5	PZ-207-AS	T	Water	300.0	
160-437-6	D-12	T	Water	300.0	
160-437-7	PZ-305-AI	T	Water	300.0	
160-437-8	S-10	T	Water	300.0	
160-437-9FD	DUP 05	T	Water	300.0	
Analysis Batch:160-9484					
LCS 160-9484/10	Lab Control Sample	T	Water	300.0	
MB 160-9484/9	Method Blank	T	Water	300.0	
160-437-1	PZ-113-AS	T	Water	300.0	
160-437-1MS	Matrix Spike	T	Water	300.0	
160-437-1MSD	Matrix Spike Duplicate	T	Water	300.0	
160-437-2	D-3	T	Water	300.0	
160-437-2DL	D-3	T	Water	300.0	
160-437-3	PZ-112-AS	T	Water	300.0	
160-437-3DL	PZ-112-AS	T	Water	300.0	
160-437-4	I-11	T	Water	300.0	
160-437-4DL	I-11	T	Water	300.0	
160-437-5	PZ-207-AS	T	Water	300.0	
160-437-5DL	PZ-207-AS	T	Water	300.0	
160-437-6	D-12	T	Water	300.0	
160-437-6DL	D-12	T	Water	300.0	
160-437-7	PZ-305-AI	T	Water	300.0	
160-437-7DL	PZ-305-AI	T	Water	300.0	
160-437-8	S-10	T	Water	300.0	
160-437-8DL	S-10	T	Water	300.0	
160-437-9FD	DUP 05	T	Water	300.0	
160-437-9FDDL	DUP 05	T	Water	300.0	

Client: Engineering Management Support, Inc. Job Number: 160-437-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Analysis Batch:160-9518					
LCS 160-9518/3	Lab Control Sample	T	Water	310.1	
LLCS 160-9518/2	Low Level Control Sample	T	Water	310.1	
MB 160-9518/1	Method Blank	T	Water	310.1	
160-437-1	PZ-113-AS	T	Water	310.1	
160-437-1MS	Matrix Spike	T	Water	310.1	
160-437-1MSD	Matrix Spike Duplicate	T	Water	310.1	
160-437-2DL	D-3	T	Water	310.1	
160-437-3DL	PZ-112-AS	T	Water	310.1	
160-437-4	I-11	T	Water	310.1	
160-437-5DL	PZ-207-AS	T	Water	310.1	
160-437-6	D-12	T	Water	310.1	
160-437-7	PZ-305-AI	T	Water	310.1	
160-437-8	S-10	T	Water	310.1	
160-437-9FDDL	DUP 05	T	Water	310.1	

Report Basis
T = Total

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-1 **Client ID: PZ-113-AS**

Sample Date/Time: 08/08/2012 09:35 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-1		160-9262		08/14/2012 06:39	1	TAL SL	JH
A:8260C	160-437-F-1		160-9262		08/14/2012 06:39	1	TAL SL	JH
P:3510C	160-437-A-1-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-1-A		160-9331	160-8998	08/15/2012 21:09	1	TAL SL	MK
P:3010A	160-437-D-1-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-1-A		160-9492	160-8952	08/21/2012 12:58	5	TAL SL	CB
P:3010A	160-437-D-1-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-1-A		160-9492	160-8952	08/21/2012 14:10	1	TAL SL	CB
P:3010A	160-437-E-1-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-1-B		160-9840	160-9563	08/27/2012 16:14	5	TAL SL	CB
P:7470A	160-437-D-1-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-1-B		160-9162	160-9032	08/14/2012 13:43	1	TAL SL	CS
P:7470A	160-437-E-1-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-1-A		160-9325	160-9305	08/16/2012 14:37	1	TAL SL	CS
A:300.0	160-437-B-1		160-9057		08/14/2012 00:55	1	TAL SL	JB
A:300.0	160-437-B-1		160-9484		08/17/2012 14:19	1	TAL SL	JB
A:310.1	160-437-C-1		160-9518		08/22/2012 15:29	1	TAL SL	JC

Lab ID: 160-437-1 MS **Client ID: PZ-113-AS**

Sample Date/Time: 08/08/2012 09:35 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-1 MS		160-9262		08/14/2012 07:04	1	TAL SL	JH
A:8260C	160-437-F-1 MS		160-9262		08/14/2012 07:04	1	TAL SL	JH
P:3010A	160-437-E-1-C MS		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-1-C MS		160-9840	160-9563	08/27/2012 16:22	5	TAL SL	CB
P:7470A	160-437-D-1-C MS		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-1-C MS		160-9162	160-9032	08/14/2012 13:46	1	TAL SL	CS
A:300.0	160-437-B-1 MS		160-9057		08/14/2012 01:09	1	TAL SL	JB
A:300.0	160-437-B-1 MS		160-9484		08/17/2012 14:36	1	TAL SL	JB
A:310.1	160-437-C-1 MS		160-9518		08/22/2012 17:33	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-1 MSD **Client ID:** PZ-113-AS

Sample Date/Time: 08/08/2012 09:35 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-1 MSD		160-9262		08/14/2012 07:29	1	TAL SL	JH
A:8260C	160-437-F-1 MSD		160-9262		08/14/2012 07:29	1	TAL SL	JH
P:3010A	160-437-E-1-D MSD		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-1-D MSD		160-9840	160-9563	08/27/2012 16:25	5	TAL SL	CB
P:7470A	160-437-D-1-D MSD		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-1-D MSD		160-9162	160-9032	08/14/2012 13:48	1	TAL SL	CS
A:300.0	160-437-B-1 MSD		160-9057		08/14/2012 01:22	1	TAL SL	JB
A:300.0	160-437-B-1 MSD		160-9484		08/17/2012 14:52	1	TAL SL	JB
A:310.1	160-437-C-1 MSD		160-9518		08/22/2012 17:38	1	TAL SL	JC

Lab ID: 160-437-1 SD **Client ID:** PZ-113-AS

Sample Date/Time: 08/08/2012 09:35 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	160-437-E-1-B SD		160-9840	160-9563	08/23/2012 14:40	25	TAL SL	RW
A:6010C	160-437-E-1-B SD		160-9840	160-9563	08/27/2012 16:18	25	TAL SL	CB
P:7470A	160-437-D-1-B SD		160-9162	160-9032	08/14/2012 09:04	5	TAL SL	CS
A:7470A	160-437-D-1-B SD		160-9162	160-9032	08/14/2012 13:45	5	TAL SL	CS

Lab ID: 160-437-2 **Client ID:** D-3

Sample Date/Time: 08/08/2012 10:00 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-2		160-9262		08/14/2012 08:19	1	TAL SL	JH
A:8260C	160-437-F-2		160-9262		08/14/2012 08:19	1	TAL SL	JH
P:3510C	160-437-A-2-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-2-A		160-9331	160-8998	08/15/2012 21:41	1	TAL SL	MK
P:3010A	160-437-D-2-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-2-A		160-9492	160-8952	08/21/2012 13:02	5	TAL SL	CB
P:3010A	160-437-D-2-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-2-A		160-9492	160-8952	08/21/2012 14:14	1	TAL SL	CB
P:3010A	160-437-D-2-A		160-9505	160-8952	08/10/2012 13:36	10	TAL SL	RW
A:6010C	160-437-D-2-A		160-9505	160-8952	08/22/2012 09:26	10	TAL SL	CB
P:3010A	160-437-E-2-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-2-B		160-9840	160-9563	08/27/2012 16:36	5	TAL SL	CB
P:7470A	160-437-D-2-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-2-B		160-9162	160-9032	08/14/2012 13:50	1	TAL SL	CS
P:7470A	160-437-E-2-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-2-A		160-9325	160-9305	08/16/2012 14:39	1	TAL SL	CS
A:300.0	160-437-B-2		160-9057		08/14/2012 01:36	1	TAL SL	JB
A:300.0	160-437-B-2 ^5	DL	160-9484		08/17/2012 15:25	5	TAL SL	JB
A:310.1	160-437-C-2	DL	160-9518		08/22/2012 15:29	2	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-3 **Client ID: PZ-112-AS**

Sample Date/Time: 08/08/2012 10:48 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-3		160-9262		08/14/2012 08:44	1	TAL SL	JH
A:8260C	160-437-F-3		160-9262		08/14/2012 08:44	1	TAL SL	JH
P:5030C	160-437-H-3		160-9490		08/16/2012 20:15	1	TAL SL	JH
A:8260C	160-437-H-3		160-9490		08/16/2012 20:15	1	TAL SL	JH
P:3510C	160-437-A-3-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-3-A		160-9331	160-8998	08/15/2012 22:13	1	TAL SL	MK
P:3510C	160-437-A-3-A		160-9564	160-8998	08/13/2012 13:55	5	TAL SL	SB
A:8270D	160-437-A-3-A		160-9564	160-8998	08/22/2012 22:13	5	TAL SL	JW
P:3010A	160-437-D-3-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-3-A		160-9492	160-8952	08/21/2012 13:06	5	TAL SL	CB
P:3010A	160-437-D-3-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-3-A		160-9492	160-8952	08/21/2012 14:17	1	TAL SL	CB
P:3010A	160-437-E-3-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-3-B		160-9840	160-9563	08/27/2012 16:39	5	TAL SL	CB
P:7470A	160-437-D-3-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-3-B		160-9162	160-9032	08/14/2012 13:52	1	TAL SL	CS
P:7470A	160-437-E-3-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-3-A		160-9325	160-9305	08/16/2012 14:41	1	TAL SL	CS
A:300.0	160-437-B-3		160-9057		08/14/2012 02:16	1	TAL SL	JB
A:300.0	160-437-B-3		160-9484		08/17/2012 15:41	1	TAL SL	JB
A:310.1	160-437-C-3	DL	160-9518		08/22/2012 15:29	2	TAL SL	JC

Lab ID: 160-437-4 **Client ID: I-11**

Sample Date/Time: 08/08/2012 11:43 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-4		160-9262		08/14/2012 09:09	1	TAL SL	JH
A:8260C	160-437-F-4		160-9262		08/14/2012 09:09	1	TAL SL	JH
P:3510C	160-437-A-4-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-4-A		160-9331	160-8998	08/15/2012 22:45	1	TAL SL	MK
P:3010A	160-437-D-4-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-4-A		160-9492	160-8952	08/21/2012 13:09	5	TAL SL	CB
P:3010A	160-437-D-4-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-4-A		160-9492	160-8952	08/21/2012 14:21	1	TAL SL	CB
P:3010A	160-437-E-4-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-4-B		160-9840	160-9563	08/27/2012 16:43	5	TAL SL	CB
P:7470A	160-437-D-4-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-4-B		160-9162	160-9032	08/14/2012 13:54	1	TAL SL	CS
P:7470A	160-437-E-4-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-4-A		160-9325	160-9305	08/16/2012 14:42	1	TAL SL	CS
A:300.0	160-437-B-4		160-9057		08/14/2012 02:29	1	TAL SL	JB
A:300.0	160-437-B-4		160-9484		08/17/2012 16:14	1	TAL SL	JB
A:310.1	160-437-C-4		160-9518		08/22/2012 15:29	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-5 **Client ID: PZ-207-AS**

Sample Date/Time: 08/08/2012 12:55 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-5		160-9262		08/14/2012 11:54	1	TAL SL	JH
A:8260C	160-437-F-5		160-9262		08/14/2012 11:54	1	TAL SL	JH
P:3510C	160-437-A-5-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-5-A		160-9331	160-8998	08/15/2012 23:17	1	TAL SL	MK
P:3010A	160-437-D-5-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-5-A		160-9492	160-8952	08/21/2012 13:13	5	TAL SL	CB
P:3010A	160-437-D-5-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-5-A		160-9492	160-8952	08/21/2012 14:24	1	TAL SL	CB
P:3010A	160-437-E-5-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-5-B		160-9840	160-9563	08/27/2012 16:47	5	TAL SL	CB
P:7470A	160-437-D-5-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-5-B		160-9162	160-9032	08/14/2012 13:55	1	TAL SL	CS
P:7470A	160-437-E-5-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-5-A		160-9325	160-9305	08/16/2012 14:44	1	TAL SL	CS
A:300.0	160-437-B-5		160-9057		08/14/2012 02:43	1	TAL SL	JB
A:300.0	160-437-B-5 ^5	DL	160-9484		08/17/2012 17:36	5	TAL SL	JB
A:310.1	160-437-C-5	DL	160-9518		08/22/2012 15:29	2	TAL SL	JC

Lab ID: 160-437-6 **Client ID: D-12**

Sample Date/Time: 08/08/2012 14:16 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-6		160-9262		08/14/2012 10:22	1	TAL SL	JH
A:8260C	160-437-F-6		160-9262		08/14/2012 10:22	1	TAL SL	JH
P:3510C	160-437-A-6-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-6-A		160-9331	160-8998	08/15/2012 23:49	1	TAL SL	MK
P:3010A	160-437-D-6-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-6-A		160-9492	160-8952	08/21/2012 13:24	5	TAL SL	CB
P:3010A	160-437-D-6-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-6-A		160-9492	160-8952	08/21/2012 14:28	1	TAL SL	CB
P:3010A	160-437-D-6-A		160-9505	160-8952	08/10/2012 13:36	20	TAL SL	RW
A:6010C	160-437-D-6-A		160-9505	160-8952	08/22/2012 09:36	20	TAL SL	CB
P:3010A	160-437-E-6-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-6-B		160-9840	160-9563	08/27/2012 16:50	5	TAL SL	CB
P:3010A	160-437-E-6-B		160-9847	160-9563	08/23/2012 14:40	20	TAL SL	RW
A:6010C	160-437-E-6-B		160-9847	160-9563	08/28/2012 09:45	20	TAL SL	CB
P:7470A	160-437-D-6-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-6-B		160-9162	160-9032	08/14/2012 13:57	1	TAL SL	CS
P:7470A	160-437-E-6-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-6-A		160-9325	160-9305	08/16/2012 14:45	1	TAL SL	CS
A:300.0	160-437-B-6		160-9057		08/14/2012 02:56	1	TAL SL	JB
A:300.0	160-437-B-6 ^5	DL	160-9484		08/17/2012 18:09	5	TAL SL	JB
A:310.1	160-437-C-6		160-9518		08/22/2012 15:29	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-7 **Client ID:** PZ-305-AI

Sample Date/Time: 08/08/2012 14:30 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-7		160-9262		08/14/2012 10:47	1	TAL SL	JH
A:8260C	160-437-F-7		160-9262		08/14/2012 10:47	1	TAL SL	JH
P:3510C	160-437-A-7-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-7-A		160-9331	160-8998	08/16/2012 00:21	1	TAL SL	MK
P:3010A	160-437-D-7-A		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-437-D-7-A		160-9492	160-8952	08/21/2012 13:27	5	TAL SL	CB
P:3010A	160-437-D-7-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-437-D-7-A		160-9492	160-8952	08/21/2012 14:32	1	TAL SL	CB
P:3010A	160-437-D-7-A		160-9505	160-8952	08/10/2012 13:36	10	TAL SL	RW
A:6010C	160-437-D-7-A		160-9505	160-8952	08/22/2012 09:40	10	TAL SL	CB
P:3010A	160-437-E-7-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-7-B		160-9840	160-9563	08/27/2012 16:54	5	TAL SL	CB
P:3010A	160-437-E-7-B		160-9847	160-9563	08/23/2012 14:40	10	TAL SL	RW
A:6010C	160-437-E-7-B		160-9847	160-9563	08/28/2012 09:49	10	TAL SL	CB
P:7470A	160-437-D-7-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-7-B		160-9162	160-9032	08/14/2012 13:59	1	TAL SL	CS
P:7470A	160-437-E-7-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-7-A		160-9325	160-9305	08/16/2012 14:47	1	TAL SL	CS
A:300.0	160-437-B-7		160-9057		08/14/2012 03:09	1	TAL SL	JB
A:300.0	160-437-B-7		160-9484		08/17/2012 18:25	1	TAL SL	JB
A:310.1	160-437-C-7		160-9518		08/22/2012 15:29	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-8 **Client ID:** S-10

Sample Date/Time: 08/08/2012 15:02 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-8		160-9262		08/14/2012 11:12	1	TAL SL	JH
A:8260C	160-437-F-8		160-9262		08/14/2012 11:12	1	TAL SL	JH
P:3510C	160-437-A-8-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-8-A		160-9331	160-8998	08/16/2012 00:54	1	TAL SL	MK
P:3010A	160-437-D-8-A		160-9492	160-8952	08/10/2012 13:37	5	TAL SL	RW
A:6010C	160-437-D-8-A		160-9492	160-8952	08/21/2012 13:31	5	TAL SL	CB
P:3010A	160-437-D-8-A		160-9492	160-8952	08/10/2012 13:37	1	TAL SL	RW
A:6010C	160-437-D-8-A		160-9492	160-8952	08/21/2012 14:36	1	TAL SL	CB
P:3010A	160-437-D-8-A		160-9505	160-8952	08/10/2012 13:37	10	TAL SL	RW
A:6010C	160-437-D-8-A		160-9505	160-8952	08/22/2012 09:44	10	TAL SL	CB
P:3010A	160-437-E-8-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-8-B		160-9840	160-9563	08/27/2012 16:57	5	TAL SL	CB
P:3010A	160-437-E-8-B		160-9847	160-9563	08/23/2012 14:40	10	TAL SL	RW
A:6010C	160-437-E-8-B		160-9847	160-9563	08/28/2012 09:53	10	TAL SL	CB
P:7470A	160-437-D-8-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-8-B		160-9162	160-9032	08/14/2012 14:04	1	TAL SL	CS
P:7470A	160-437-E-8-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-8-A		160-9325	160-9305	08/16/2012 14:52	1	TAL SL	CS
A:300.0	160-437-B-8		160-9057		08/14/2012 03:23	1	TAL SL	JB
A:300.0	160-437-B-8		160-9484		08/17/2012 18:58	1	TAL SL	JB
A:310.1	160-437-B-8		160-9518		08/22/2012 17:33	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: 160-437-9 **Client ID: DUP 05**

Sample Date/Time: 08/08/2012 00:00 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-F-9		160-9262		08/14/2012 09:34	1	TAL SL	JH
A:8260C	160-437-F-9		160-9262		08/14/2012 09:34	1	TAL SL	JH
P:3510C	160-437-A-9-A		160-9331	160-8998	08/13/2012 13:55	1	TAL SL	SB
A:8270D	160-437-A-9-A		160-9331	160-8998	08/16/2012 01:26	1	TAL SL	MK
P:3010A	160-437-D-9-A		160-9492	160-8952	08/10/2012 13:37	5	TAL SL	RW
A:6010C	160-437-D-9-A		160-9492	160-8952	08/21/2012 13:34	5	TAL SL	CB
P:3010A	160-437-D-9-A		160-9492	160-8952	08/10/2012 13:37	1	TAL SL	RW
A:6010C	160-437-D-9-A		160-9492	160-8952	08/21/2012 14:39	1	TAL SL	CB
P:3010A	160-437-D-9-A		160-9505	160-8952	08/10/2012 13:37	10	TAL SL	RW
A:6010C	160-437-D-9-A		160-9505	160-8952	08/22/2012 09:47	10	TAL SL	CB
P:3010A	160-437-E-9-B		160-9840	160-9563	08/23/2012 14:40	5	TAL SL	RW
A:6010C	160-437-E-9-B		160-9840	160-9563	08/27/2012 17:01	5	TAL SL	CB
P:7470A	160-437-D-9-B		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	160-437-D-9-B		160-9162	160-9032	08/14/2012 14:06	1	TAL SL	CS
P:7470A	160-437-E-9-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-437-E-9-A		160-9325	160-9305	08/16/2012 14:54	1	TAL SL	CS
A:300.0	160-437-B-9		160-9057		08/14/2012 03:36	1	TAL SL	JB
A:300.0	160-437-B-9 ^5	DL	160-9484		08/17/2012 19:48	5	TAL SL	JB
A:310.1	160-437-C-9	DL	160-9518		08/22/2012 17:33	2	TAL SL	JC

Lab ID: 160-437-10 **Client ID: TRIP BLANK**

Sample Date/Time: 08/08/2012 00:00 Received Date/Time: 08/09/2012 08:10

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-437-A-10		160-9262		08/14/2012 05:49	1	TAL SL	JH
A:8260C	160-437-A-10		160-9262		08/14/2012 05:49	1	TAL SL	JH

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	MB 160-9262/3		160-9262		08/14/2012 05:24	1	TAL SL	JH
A:8260C	MB 160-9262/3		160-9262		08/14/2012 05:24	1	TAL SL	JH
P:5030C	MB 160-9490/3		160-9490		08/16/2012 19:05	1	TAL SL	JH
A:8260C	MB 160-9490/3		160-9490		08/16/2012 19:05	1	TAL SL	JH
P:3510C	MB 160-8998/1-A		160-9331	160-8998	08/13/2012 12:21	1	TAL SL	SB
A:8270D	MB 160-8998/1-A		160-9331	160-8998	08/15/2012 15:15	1	TAL SL	MK
P:3010A	MB 160-8952/1-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	MB 160-8952/1-A		160-9492	160-8952	08/21/2012 12:19	1	TAL SL	CB
P:3010A	MB 160-9563/1-A		160-9840	160-9563	08/23/2012 14:40	1	TAL SL	RW
A:6010C	MB 160-9563/1-A		160-9840	160-9563	08/27/2012 16:07	1	TAL SL	CB
P:7470A	MB 160-9032/1-A		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	MB 160-9032/1-A		160-9162	160-9032	08/14/2012 13:35	1	TAL SL	CS
P:7470A	MB 160-9305/1-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	MB 160-9305/1-A		160-9325	160-9305	08/16/2012 14:14	1	TAL SL	CS
A:300.0	MB 160-9057/25		160-9057		08/14/2012 00:29	1	TAL SL	JB
A:300.0	MB 160-9484/9		160-9484		08/17/2012 13:40	1	TAL SL	JB
A:310.1	MB 160-9518/1		160-9518		08/22/2012 15:29	1	TAL SL	JC

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	LCS 160-9262/4		160-9262		08/14/2012 04:33	1	TAL SL	JH
A:8260C	LCS 160-9262/4		160-9262		08/14/2012 04:33	1	TAL SL	JH
P:5030C	LCS 160-9490/4		160-9490		08/16/2012 18:17	1	TAL SL	JH
A:8260C	LCS 160-9490/4		160-9490		08/16/2012 18:17	1	TAL SL	JH
P:3510C	LCS 160-8998/2-A		160-9331	160-8998	08/13/2012 12:21	1	TAL SL	SB
A:8270D	LCS 160-8998/2-A		160-9331	160-8998	08/15/2012 15:47	1	TAL SL	MK
P:3010A	LCS 160-8952/2-A		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	LCS 160-8952/2-A		160-9492	160-8952	08/21/2012 12:23	1	TAL SL	CB
P:3010A	LCS 160-9563/2-A		160-9840	160-9563	08/23/2012 14:40	1	TAL SL	RW
A:6010C	LCS 160-9563/2-A		160-9840	160-9563	08/27/2012 16:11	1	TAL SL	CB
P:7470A	LCS 160-9032/2-A		160-9162	160-9032	08/14/2012 09:04	1	TAL SL	CS
A:7470A	LCS 160-9032/2-A		160-9162	160-9032	08/14/2012 13:37	1	TAL SL	CS
P:7470A	LCS 160-9305/2-A		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	LCS 160-9305/2-A		160-9325	160-9305	08/16/2012 14:15	1	TAL SL	CS
A:300.0	LCS 160-9057/26		160-9057		08/14/2012 00:42	1	TAL SL	JB
A:300.0	LCS 160-9484/10		160-9484		08/17/2012 13:57	1	TAL SL	JB
A:310.1	LCS 160-9518/3		160-9518		08/22/2012 15:29	1	TAL SL	JC

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: LLCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
A:310.1	LLCS 160-9518/2		160-9518		08/22/2012 15:29	1	TAL SL	JC

Lab ID: MS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-468-F-1 MS		160-9490		08/16/2012 21:37	1	TAL SL	JH
A:8260C	160-468-F-1 MS		160-9490		08/16/2012 21:37	1	TAL SL	JH
P:3510C	160-428-A-6-B MS		160-9331	160-8998	08/13/2012 12:21	1	TAL SL	SB
A:8270D	160-428-A-6-B MS		160-9331	160-8998	08/15/2012 19:00	1	TAL SL	MK
P:3010A	160-420-D-1-E MS		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-420-D-1-E MS		160-9492	160-8952	08/21/2012 12:41	5	TAL SL	CB
P:3010A	160-420-D-1-E MS		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-420-D-1-E MS		160-9492	160-8952	08/21/2012 13:45	1	TAL SL	CB
P:7470A	160-428-E-6-B MS		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-428-E-6-B MS		160-9325	160-9305	08/16/2012 14:26	1	TAL SL	CS

Lab ID: MSD **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:5030C	160-468-F-1 MSD		160-9490		08/16/2012 22:01	1	TAL SL	JH
A:8260C	160-468-F-1 MSD		160-9490		08/16/2012 22:01	1	TAL SL	JH
P:3510C	160-428-A-6-C MSD		160-9331	160-8998	08/13/2012 12:21	1	TAL SL	SB
A:8270D	160-428-A-6-C MSD		160-9331	160-8998	08/15/2012 19:32	1	TAL SL	MK
P:3010A	160-420-D-1-F MSD		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-420-D-1-F MSD		160-9492	160-8952	08/21/2012 12:44	5	TAL SL	CB
P:3010A	160-420-D-1-F MSD		160-9492	160-8952	08/10/2012 13:36	1	TAL SL	RW
A:6010C	160-420-D-1-F MSD		160-9492	160-8952	08/21/2012 13:48	1	TAL SL	CB
P:7470A	160-428-E-6-C MSD		160-9325	160-9305	08/16/2012 10:03	1	TAL SL	CS
A:7470A	160-428-E-6-C MSD		160-9325	160-9305	08/16/2012 14:32	1	TAL SL	CS

Client: Engineering Management Support, Inc. Job Number: 160-437-1

Laboratory Chronicle

Lab ID: SD **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3010A	160-420-D-1-D SD		160-9492	160-8952	08/10/2012 13:36	25	TAL SL	RW
A:6010C	160-420-D-1-D SD		160-9492	160-8952	08/21/2012 12:30	25	TAL SL	CB
P:3010A	160-420-D-1-D SD		160-9492	160-8952	08/10/2012 13:36	5	TAL SL	RW
A:6010C	160-420-D-1-D SD		160-9492	160-8952	08/21/2012 13:41	5	TAL SL	CB
P:7470A	160-428-E-6-A SD		160-9325	160-9305	08/16/2012 10:03	5	TAL SL	CS
A:7470A	160-428-E-6-A SD		160-9325	160-9305	08/16/2012 14:25	5	TAL SL	CS

Lab References:
TAL SL = TestAmerica St. Louis

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
10 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.05 mL	1,4-Dioxane	10 ppm
							2,4,5-Trichlorophenol	10 ppm
							2,4,6-Trichlorophenol	10 ppm
							2,4-Dichlorophenol	10 ppm
							2,4-Dimethylphenol	10 ppm
							2,4-Dinitrophenol	10 ppm
							2-Chlorophenol	10 ppm
							2-Methylphenol	10 ppm
							2-Nitrophenol	10 ppm
							4,6-Dinitro-2-methylphenol	10 ppm
							4-Chloro-3-methylphenol	10 ppm
							4-Nitrophenol	10 ppm
							Benzoic acid	10 ppm
							Pentachlorophenol	10 ppm
							Phenol	10 ppm
							2,4,6-Tribromophenol (Surr)	10 ppm
							2-Fluorophenol (Surr)	10 ppm
							Phenol-d5 (Surr)	10 ppm
							3,3'-Dichlorobenzidine	10 ppm
							1,2,4-Trichlorobenzene	10 ppm
							1,2-Dichlorobenzene	10 ppm
							1,3-Dichlorobenzene	10 ppm
							1,4-Dichlorobenzene	10 ppm
							2,2'-oxybis[1-chloropropane]	10 ppm
							2,4-Dinitrotoluene	10 ppm
							2,6-Dinitrotoluene	10 ppm
							2-Chloronaphthalene	10 ppm
							4-Bromophenyl phenyl ether	10 ppm
							4-Chlorophenyl phenyl ether	10 ppm
							Acenaphthene	10 ppm
							Acenaphthylene	10 ppm
							Anthracene	10 ppm
							Azobenzene	10 ppm
							Benzo[a]anthracene	10 ppm
							Benzo[a]pyrene	10 ppm
							Benzo[b]fluoranthene	10 ppm
							Benzo[g,h,i]perylene	10 ppm
							Benzo[k]fluoranthene	10 ppm
							Bis(2-chloroethoxy)methane	10 ppm
							Bis(2-chloroethyl)ether	10 ppm
							Bis(2-ethylhexyl) phthalate	10 ppm
							Butyl benzyl phthalate	10 ppm
							Chrysene	10 ppm
							Di-n-butyl phthalate	10 ppm
							Di-n-octyl phthalate	10 ppm
							Dibenz(a,h)anthracene	10 ppm
							Diethyl phthalate	10 ppm
							Dimethyl phthalate	10 ppm
							Fluoranthene	10 ppm
							Fluorene	10 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	10 ppm
							Hexachlorobutadiene	10 ppm
							Hexachlorocyclopentadiene	10 ppm
							Hexachloroethane	10 ppm
							Indeno[1,2,3-cd]pyrene	10 ppm
							Isophorone	10 ppm
							N-Nitrosodi-n-propylamine	10 ppm
							N-Nitrosodimethylamine	10 ppm
							N-Nitrosodiphenylamine	10 ppm
							Naphthalene	10 ppm
							Nitrobenzene	10 ppm
							Phenanthrene	10 ppm
							Pyrene	10 ppm
							2-Fluorobiphenyl (Surr)	10 ppm
							Nitrobenzene-d5 (Surr)	10 ppm
							Terphenyl-d14 (Surr)	10 ppm
							2-Methylnaphthalene	10 ppm
							2-Nitroaniline	10 ppm
							3-Nitroaniline	10 ppm
							4-Chloroaniline	10 ppm
							4-Nitroaniline	10 ppm
							Benzyl alcohol	10 ppm
							Carbazole	10 ppm
							Dibenzofuran	10 ppm
							Pyridine	10 ppm
							Cyclohexanol	10 ppm
							Dimethylformamide	10 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15		Restek, Lot A078356		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14		Accustandard, Lot 211011319		(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13		Ultra Scientific, Lot CF-5141		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13		Supelco, Lot LB79050		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13		Accustandard, Lot 211071031		(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeC12, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
10 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.05 mL	3,3'-Dimethylbenzidine	10 ppm
							Aniline	10 ppm
							Benzidine	10 ppm
							3 & 4 Methylphenol	20 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
120 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.6 mL	1,4-Dioxane	120 ppm
							2,4,5-Trichlorophenol	120 ppm
							2,4,6-Trichlorophenol	120 ppm
							2,4-Dichlorophenol	120 ppm
							2,4-Dimethylphenol	120 ppm
							2,4-Dinitrophenol	120 ppm
							2-Chlorophenol	120 ppm
							2-Methylphenol	120 ppm
							2-Nitrophenol	120 ppm
							4,6-Dinitro-2-methylphenol	120 ppm
							4-Chloro-3-methylphenol	120 ppm
							4-Nitrophenol	120 ppm
							Benzoic acid	120 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	120 ppm
							Phenol	120 ppm
							2,4,6-Tribromophenol (Surr)	120 ppm
							2-Fluorophenol (Surr)	120 ppm
							Phenol-d5 (Surr)	120 ppm
							3,3'-Dichlorobenzidine	120 ppm
							1,2,4-Trichlorobenzene	120 ppm
							1,2-Dichlorobenzene	120 ppm
							1,3-Dichlorobenzene	120 ppm
							1,4-Dichlorobenzene	120 ppm
							2,2'-oxybis[1-chloropropane]	120 ppm
							2,4-Dinitrotoluene	120 ppm
							2,6-Dinitrotoluene	120 ppm
							2-Chloronaphthalene	120 ppm
							4-Bromophenyl phenyl ether	120 ppm
							4-Chlorophenyl phenyl ether	120 ppm
							Acenaphthene	120 ppm
							Acenaphthylene	120 ppm
							Anthracene	120 ppm
							Azobenzene	120 ppm
							Benzo[a]anthracene	120 ppm
							Benzo[a]pyrene	120 ppm
							Benzo[b]fluoranthene	120 ppm
							Benzo[g,h,i]perylene	120 ppm
							Benzo[k]fluoranthene	120 ppm
							Bis(2-chloroethoxy)methane	120 ppm
							Bis(2-chloroethyl)ether	120 ppm
							Bis(2-ethylhexyl) phthalate	120 ppm
							Butyl benzyl phthalate	120 ppm
							Chrysene	120 ppm
							Di-n-butyl phthalate	120 ppm
							Di-n-octyl phthalate	120 ppm
							Dibenz(a,h)anthracene	120 ppm
							Diethyl phthalate	120 ppm
							Dimethyl phthalate	120 ppm
							Fluoranthene	120 ppm
							Fluorene	120 ppm
							Hexachlorobenzene	120 ppm
							Hexachlorobutadiene	120 ppm
							Hexachlorocyclopentadiene	120 ppm
							Hexachloroethane	120 ppm
							Indeno[1,2,3-cd]pyrene	120 ppm
							Isophorone	120 ppm
							N-Nitrosodi-n-propylamine	120 ppm
							N-Nitrosodimethylamine	120 ppm
							N-Nitrosodiphenylamine	120 ppm
							Naphthalene	120 ppm
							Nitrobenzene	120 ppm
							Phenanthrene	120 ppm
							Pyrene	120 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	120 ppm
							Nitrobenzene-d5 (Surr)	120 ppm
							Terphenyl-d14 (Surr)	120 ppm
							2-Methylnaphthalene	120 ppm
							2-Nitroaniline	120 ppm
							3-Nitroaniline	120 ppm
							4-Chloroaniline	120 ppm
							4-Nitroaniline	120 ppm
							Benzyl alcohol	120 ppm
							Carbazole	120 ppm
							Dibenzofuran	120 ppm
							Pyridine	120 ppm
							Cyclohexanol	120 ppm
							Dimethylformamide	120 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					DMF_00001	0.4 mL	Dimethylformamide	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..1_4_Dioxane_00001	12/31/15		Restek, Lot A078356		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14		Accustandard, Lot 211011319		(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13		Ultra Scientific, Lot CF-5141		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13		Supelco, Lot LB79050		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13		Accustandard, Lot 211071031		(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
120 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.6 mL	3,3'-Dimethylbenzidine	120 ppm
							Aniline	120 ppm
							Benzidine	120 ppm
							3 & 4 Methylphenol	240 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
160 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.8 mL	1,4-Dioxane	160 ppm
							2,4,5-Trichlorophenol	160 ppm
							2,4,6-Trichlorophenol	160 ppm
							2,4-Dichlorophenol	160 ppm
							2,4-Dimethylphenol	160 ppm
							2,4-Dinitrophenol	160 ppm
							2-Chlorophenol	160 ppm
							2-Methylphenol	160 ppm
							2-Nitrophenol	160 ppm
							4,6-Dinitro-2-methylphenol	160 ppm
							4-Chloro-3-methylphenol	160 ppm
							4-Nitrophenol	160 ppm
							Benzoic acid	160 ppm
							Pentachlorophenol	160 ppm
							Phenol	160 ppm
							2,4,6-Tribromophenol (Surr)	160 ppm
							2-Fluorophenol (Surr)	160 ppm
							Phenol-d5 (Surr)	160 ppm
							3,3'-Dichlorobenzidine	160 ppm
							1,2,4-Trichlorobenzene	160 ppm
							1,2-Dichlorobenzene	160 ppm
							1,3-Dichlorobenzene	160 ppm
							1,4-Dichlorobenzene	160 ppm
							2,2'-oxybis[1-chloropropane]	160 ppm
							2,4-Dinitrotoluene	160 ppm
							2,6-Dinitrotoluene	160 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	160 ppm
							4-Bromophenyl phenyl ether	160 ppm
							4-Chlorophenyl phenyl ether	160 ppm
							Acenaphthene	160 ppm
							Acenaphthylene	160 ppm
							Anthracene	160 ppm
							Azobenzene	160 ppm
							Benzo[a]anthracene	160 ppm
							Benzo[a]pyrene	160 ppm
							Benzo[b]fluoranthene	160 ppm
							Benzo[g,h,i]perylene	160 ppm
							Benzo[k]fluoranthene	160 ppm
							Bis(2-chloroethoxy)methane	160 ppm
							Bis(2-chloroethyl)ether	160 ppm
							Bis(2-ethylhexyl) phthalate	160 ppm
							Butyl benzyl phthalate	160 ppm
							Chrysene	160 ppm
							Di-n-butyl phthalate	160 ppm
							Di-n-octyl phthalate	160 ppm
							Dibenz(a,h)anthracene	160 ppm
							Diethyl phthalate	160 ppm
							Dimethyl phthalate	160 ppm
							Fluoranthene	160 ppm
							Fluorene	160 ppm
							Hexachlorobenzene	160 ppm
							Hexachlorobutadiene	160 ppm
							Hexachlorocyclopentadiene	160 ppm
							Hexachloroethane	160 ppm
							Indeno[1,2,3-cd]pyrene	160 ppm
							Isophorone	160 ppm
							N-Nitrosodi-n-propylamine	160 ppm
							N-Nitrosodimethylamine	160 ppm
							N-Nitrosodiphenylamine	160 ppm
							Naphthalene	160 ppm
							Nitrobenzene	160 ppm
							Phenanthrene	160 ppm
							Pyrene	160 ppm
							2-Fluorobiphenyl (Surr)	160 ppm
							Nitrobenzene-d5 (Surr)	160 ppm
							Terphenyl-d14 (Surr)	160 ppm
							2-Methylnaphthalene	160 ppm
							2-Nitroaniline	160 ppm
							3-Nitroaniline	160 ppm
							4-Chloroaniline	160 ppm
							4-Nitroaniline	160 ppm
							Benzyl alcohol	160 ppm
							Carbazole	160 ppm
							Dibenzofuran	160 ppm
							Pyridine	160 ppm
							Cyclohexanol	160 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethylformamide	160 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15		Restek, Lot A078356		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14		Accustandard, Lot 211011319		(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13		Ultra Scientific, Lot CF-5141		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13		Supelco, Lot LB79050		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13		Accustandard, Lot 211071031		(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..BN Surrogates_00003	08/31/13	Ultra Scientific, Lot CG-2463			(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13	Ultra Scientific, Lot CG-2463			(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12	Accustandard, Lot 210101376			(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13	Accustandard, Lot 210031091			(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13	Accustandard, Lot 210021264			(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
160 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.8 mL	3,3'-Dimethylbenzidine	160 ppm
							Aniline	160 ppm
							Benzidine	160 ppm
							3 & 4 Methylphenol	320 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
20 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.1 mL	1,4-Dioxane	20 ppm
							2,4,5-Trichlorophenol	20 ppm
							2,4,6-Trichlorophenol	20 ppm
							2,4-Dichlorophenol	20 ppm
							2,4-Dimethylphenol	20 ppm
							2,4-Dinitrophenol	20 ppm
							2-Chlorophenol	20 ppm
							2-Methylphenol	20 ppm
							2-Nitrophenol	20 ppm
							4,6-Dinitro-2-methylphenol	20 ppm
							4-Chloro-3-methylphenol	20 ppm
							4-Nitrophenol	20 ppm
							Benzoic acid	20 ppm
							Pentachlorophenol	20 ppm
							Phenol	20 ppm
							2,4,6-Tribromophenol (Surr)	20 ppm
							2-Fluorophenol (Surr)	20 ppm
							Phenol-d5 (Surr)	20 ppm
							3,3'-Dichlorobenzidine	20 ppm
							1,2,4-Trichlorobenzene	20 ppm
							1,2-Dichlorobenzene	20 ppm
							1,3-Dichlorobenzene	20 ppm
							1,4-Dichlorobenzene	20 ppm
							2,2'-oxybis[1-chloropropane]	20 ppm
							2,4-Dinitrotoluene	20 ppm
							2,6-Dinitrotoluene	20 ppm
							2-Chloronaphthalene	20 ppm
							4-Bromophenyl phenyl ether	20 ppm
							4-Chlorophenyl phenyl ether	20 ppm
							Acenaphthene	20 ppm
							Acenaphthylene	20 ppm
							Anthracene	20 ppm
							Azobenzene	20 ppm
							Benzo[a]anthracene	20 ppm
							Benzo[a]pyrene	20 ppm
							Benzo[b]fluoranthene	20 ppm
							Benzo[g,h,i]perylene	20 ppm
							Benzo[k]fluoranthene	20 ppm
							Bis(2-chloroethoxy)methane	20 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	20 ppm
							Bis(2-ethylhexyl) phthalate	20 ppm
							Butyl benzyl phthalate	20 ppm
							Chrysene	20 ppm
							Di-n-butyl phthalate	20 ppm
							Di-n-octyl phthalate	20 ppm
							Dibenz(a,h)anthracene	20 ppm
							Diethyl phthalate	20 ppm
							Dimethyl phthalate	20 ppm
							Fluoranthene	20 ppm
							Fluorene	20 ppm
							Hexachlorobenzene	20 ppm
							Hexachlorobutadiene	20 ppm
							Hexachlorocyclopentadiene	20 ppm
							Hexachloroethane	20 ppm
							Indeno[1,2,3-cd]pyrene	20 ppm
							Isophorone	20 ppm
							N-Nitrosodi-n-propylamine	20 ppm
							N-Nitrosodimethylamine	20 ppm
							N-Nitrosodiphenylamine	20 ppm
							Naphthalene	20 ppm
							Nitrobenzene	20 ppm
							Phenanthrene	20 ppm
							Pyrene	20 ppm
							2-Fluorobiphenyl (Surr)	20 ppm
							Nitrobenzene-d5 (Surr)	20 ppm
							Terphenyl-d14 (Surr)	20 ppm
							2-Methylnaphthalene	20 ppm
							2-Nitroaniline	20 ppm
							3-Nitroaniline	20 ppm
							4-Chloroaniline	20 ppm
							4-Nitroaniline	20 ppm
							Benzyl alcohol	20 ppm
							Carbazole	20 ppm
							Dibenzofuran	20 ppm
							Pyridine	20 ppm
							Cyclohexanol	20 ppm
							Dimethylformamide	20 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15		Restek, Lot A078356		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14		Accustandard, Lot 211011319		(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13		Ultra Scientific, Lot CF-5141		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13		Supelco, Lot LB79050		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13		Accustandard, Lot 211071031		(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13	Accustandard, Lot 210031091			(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13	Accustandard, Lot 210021264			(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
20 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.1 mL	3,3'-Dimethylbenzidine	20 ppm
							Aniline	20 ppm
							Benzidine	20 ppm
							3 & 4 Methylphenol	40 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
5 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.025 mL	1,4-Dioxane	5 ppm
							2,4,5-Trichlorophenol	5 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	5 ppm
							2,4-Dichlorophenol	5 ppm
							2,4-Dimethylphenol	5 ppm
							2,4-Dinitrophenol	5 ppm
							2-Chlorophenol	5 ppm
							2-Methylphenol	5 ppm
							2-Nitrophenol	5 ppm
							4,6-Dinitro-2-methylphenol	5 ppm
							4-Chloro-3-methylphenol	5 ppm
							4-Nitrophenol	5 ppm
							Benzoic acid	5 ppm
							Pentachlorophenol	5 ppm
							Phenol	5 ppm
							2,4,6-Tribromophenol (Surr)	5 ppm
							2-Fluorophenol (Surr)	5 ppm
							Phenol-d5 (Surr)	5 ppm
							3,3'-Dichlorobenzidine	5 ppm
							1,2,4-Trichlorobenzene	5 ppm
							1,2-Dichlorobenzene	5 ppm
							1,3-Dichlorobenzene	5 ppm
							1,4-Dichlorobenzene	5 ppm
							2,2'-oxybis[1-chloropropane]	5 ppm
							2,4-Dinitrotoluene	5 ppm
							2,6-Dinitrotoluene	5 ppm
							2-Chloronaphthalene	5 ppm
							4-Bromophenyl phenyl ether	5 ppm
							4-Chlorophenyl phenyl ether	5 ppm
							Acenaphthene	5 ppm
							Acenaphthylene	5 ppm
							Anthracene	5 ppm
							Azobenzene	5 ppm
							Benzo[a]anthracene	5 ppm
							Benzo[a]pyrene	5 ppm
							Benzo[b]fluoranthene	5 ppm
							Benzo[g,h,i]perylene	5 ppm
							Benzo[k]fluoranthene	5 ppm
							Bis(2-chloroethoxy)methane	5 ppm
							Bis(2-chloroethyl)ether	5 ppm
							Bis(2-ethylhexyl) phthalate	5 ppm
							Butyl benzyl phthalate	5 ppm
							Chrysene	5 ppm
							Di-n-butyl phthalate	5 ppm
							Di-n-octyl phthalate	5 ppm
							Dibenz(a,h)anthracene	5 ppm
							Diethyl phthalate	5 ppm
							Dimethyl phthalate	5 ppm
							Fluoranthene	5 ppm
							Fluorene	5 ppm
							Hexachlorobenzene	5 ppm
							Hexachlorobutadiene	5 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	5 ppm
							Hexachloroethane	5 ppm
							Indeno[1,2,3-cd]pyrene	5 ppm
							Isophorone	5 ppm
							N-Nitrosodi-n-propylamine	5 ppm
							N-Nitrosodimethylamine	5 ppm
							N-Nitrosodiphenylamine	5 ppm
							Naphthalene	5 ppm
							Nitrobenzene	5 ppm
							Phenanthrene	5 ppm
							Pyrene	5 ppm
							2-Fluorobiphenyl (Surr)	5 ppm
							Nitrobenzene-d5 (Surr)	5 ppm
							Terphenyl-d14 (Surr)	5 ppm
							2-Methylnaphthalene	5 ppm
							2-Nitroaniline	5 ppm
							3-Nitroaniline	5 ppm
							4-Chloroaniline	5 ppm
							4-Nitroaniline	5 ppm
							Benzyl alcohol	5 ppm
							Carbazole	5 ppm
							Dibenzofuran	5 ppm
							Pyridine	5 ppm
							Cyclohexanol	5 ppm
							Dimethylformamide	5 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15	Restek, Lot A078356			(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14	Accustandard, Lot 211011319			(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13	Ultra Scientific, Lot CF-5141			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13	Supelco, Lot LB79050			(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13	Accustandard, Lot 211071031			(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
5 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.025 mL	3,3'-Dimethylbenzidine	5 ppm
							Aniline	5 ppm
							Benzidine	5 ppm
							3 & 4 Methylphenol	10 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
50 ppm 8270_00015	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.25 mL	1,4-Dioxane	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylphenol	50 ppm
							2-Nitrophenol	50 ppm
							4,6-Dinitro-2-methylphenol	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Nitrophenol	50 ppm
							Benzoic acid	50 ppm
							Pentachlorophenol	50 ppm
							Phenol	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Tribromophenol (Surr)	50 ppm
							2-Fluorophenol (Surr)	50 ppm
							Phenol-d5 (Surr)	50 ppm
							3,3'-Dichlorobenzidine	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2'-oxybis[1-chloropropane]	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							4-Bromophenyl phenyl ether	50 ppm
							4-Chlorophenyl phenyl ether	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Azobenzene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							N-Nitrosodiphenylamine	50 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							Phenanthrene	50 ppm
							Pyrene	50 ppm
							2-Fluorobiphenyl (Surr)	50 ppm
							Nitrobenzene-d5 (Surr)	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Terphenyl-d14 (Surr)	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							3-Nitroaniline	50 ppm
							4-Chloroaniline	50 ppm
							4-Nitroaniline	50 ppm
							Benzyl alcohol	50 ppm
							Carbazole	50 ppm
							Dibenzofuran	50 ppm
							Pyridine	50 ppm
							Cyclohexanol	50 ppm
							Dimethylformamide	50 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15		Restek, Lot A078356		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14		Accustandard, Lot 2110113		(Purchased Reagent)		2,4,5-Trichlorophenol	200 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13		Ultra Scientific, Lot CF-5141		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13		Supelco, Lot LB79050		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13		Accustandard, Lot 211071031		(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
50 ppm 8270_00017	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.25 mL	1,4-Dioxane	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylphenol	50 ppm
							2-Nitrophenol	50 ppm
							4,6-Dinitro-2-methylphenol	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	50 ppm
							4-Nitrophenol	50 ppm
							Benzoic acid	50 ppm
							Pentachlorophenol	50 ppm
							Phenol	50 ppm
							2,4,6-Tribromophenol (Surr)	50 ppm
							2-Fluorophenol (Surr)	50 ppm
							Phenol-d5 (Surr)	50 ppm
							3,3'-Dichlorobenzidine	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2'-oxybis[1-chloropropane]	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							4-Bromophenyl phenyl ether	50 ppm
							4-Chlorophenyl phenyl ether	50 ppm
							Acenaphthene	50 ppm
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Azobenzene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							N-Nitrosodimethylamine	50 ppm
							N-Nitrosodiphenylamine	50 ppm
							Naphthalene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nitrobenzene	50 ppm
							Phenanthrene	50 ppm
							Pyrene	50 ppm
							2-Fluorobiphenyl (Surr)	50 ppm
							Nitrobenzene-d5 (Surr)	50 ppm
							Terphenyl-d14 (Surr)	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Nitroaniline	50 ppm
							3-Nitroaniline	50 ppm
							4-Chloroaniline	50 ppm
							4-Nitroaniline	50 ppm
							Benzyl alcohol	50 ppm
							Carbazole	50 ppm
							Dibenzofuran	50 ppm
							Pyridine	50 ppm
							Cyclohexanol	50 ppm
							Dimethylformamide	50 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15	Restek, Lot A078356			(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14	Accustandard, Lot 211011319			(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13	Ultra Scientific, Lot CF-5141			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13	Supelco, Lot LB79050			(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13	Accustandard, Lot 211071031			(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
50 ppm 8270B_00032	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.25 mL	3,3'-Dimethylbenzidine	50 ppm
							Aniline	50 ppm
							Benzidine	50 ppm
							3 & 4 Methylphenol	100 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
50 ppm 8270B_00033	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.25 mL	Aniline	50 ppm
							3 & 4 Methylphenol	100 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	Aniline_00001	0.4 mL	Aniline	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
50 ppm 8270B_00034	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.25 mL	3,3'-Dimethylbenzidine	50 ppm
							Aniline	50 ppm
							Benzidine	50 ppm
							3 & 4 Methylphenol	100 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..3_3_DMB_00001	08/24/13		Accustandard, Lot 210081282		(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14		Supelco, Lot LB85728		(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13		Accustandard, Lot 211011047		(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14		Ultra Scientific, Lot CG-2138		(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15		Ultra Scientific, Lot CH-1823		(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
50 ppm 8270BI_00003	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270I_00002	0.25 mL	Aniline	50 ppm
.200 ppm 8270I_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	8270 Megamix_00001	1 mL	Aniline	200 ppm
					8270 Megamix_00002	1 mL	Aniline	200 ppm
..8270 Megamix_00001	12/31/12		Restek, Lot A082598		(Purchased Reagent)		Aniline	1000 ppm
..8270 Megamix_00002	12/31/12		Restek, Lot A082598		(Purchased Reagent)		Aniline	1000 ppm
50 ppm 8270I_00003	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270I_00002	0.25 mL	1,4-Dioxane	50 ppm
							1,2,4-Trichlorobenzene	50 ppm
							1,2-Dichlorobenzene	50 ppm
							1,3-Dichlorobenzene	50 ppm
							1,4-Dichlorobenzene	50 ppm
							2,2'-oxybis[1-chloropropane]	50 ppm
							2,4,5-Trichlorophenol	50 ppm
							2,4,6-Trichlorophenol	50 ppm
							2,4-Dichlorophenol	50 ppm
							2,4-Dimethylphenol	50 ppm
							2,4-Dinitrophenol	50 ppm
							2,4-Dinitrotoluene	50 ppm
							2,6-Dinitrotoluene	50 ppm
							2-Chloronaphthalene	50 ppm
							2-Chlorophenol	50 ppm
							2-Methylnaphthalene	50 ppm
							2-Methylphenol	50 ppm
							2-Nitroaniline	50 ppm
							2-Nitrophenol	50 ppm
							3-Nitroaniline	50 ppm
							4,6-Dinitro-2-methylphenol	50 ppm
							4-Bromophenyl phenyl ether	50 ppm
							4-Chloro-3-methylphenol	50 ppm
							4-Chloroaniline	50 ppm
							4-Chlorophenyl phenyl ether	50 ppm
							4-Nitroaniline	50 ppm
							4-Nitrophenol	50 ppm
							Acenaphthene	50 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthylene	50 ppm
							Anthracene	50 ppm
							Benzo[a]anthracene	50 ppm
							Benzo[a]pyrene	50 ppm
							Benzo[b]fluoranthene	50 ppm
							Benzo[g,h,i]perylene	50 ppm
							Benzo[k]fluoranthene	50 ppm
							Benzyl alcohol	50 ppm
							Bis(2-chloroethoxy)methane	50 ppm
							Bis(2-chloroethyl)ether	50 ppm
							Bis(2-ethylhexyl) phthalate	50 ppm
							Butyl benzyl phthalate	50 ppm
							Carbazole	50 ppm
							Chrysene	50 ppm
							Di-n-butyl phthalate	50 ppm
							Di-n-octyl phthalate	50 ppm
							Dibenz(a,h)anthracene	50 ppm
							Dibenzofuran	50 ppm
							Diethyl phthalate	50 ppm
							Dimethyl phthalate	50 ppm
							Fluoranthene	50 ppm
							Fluorene	50 ppm
							Hexachlorobenzene	50 ppm
							Hexachlorobutadiene	50 ppm
							Hexachlorocyclopentadiene	50 ppm
							Hexachloroethane	50 ppm
							Indeno[1,2,3-cd]pyrene	50 ppm
							Isophorone	50 ppm
							N-Nitrosodi-n-propylamine	50 ppm
							Naphthalene	50 ppm
							Nitrobenzene	50 ppm
							Pentachlorophenol	50 ppm
							Phenanthrene	50 ppm
							Phenol	50 ppm
							Pyrene	50 ppm
							Pyridine	50 ppm
							3,3'-Dichlorobenzidine	50 ppm
.200 ppm 8270I_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	14_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					8270 Megamix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Benzyl alcohol	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	200 ppm
					8270 Megamix_00002	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm
							2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylnaphthalene	200 ppm
							2-Methylphenol	200 ppm
							2-Nitroaniline	200 ppm
							2-Nitrophenol	200 ppm
							3-Nitroaniline	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Chloroaniline	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							4-Nitroaniline	200 ppm
							4-Nitrophenol	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Benzyl alcohol	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Carbazole	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Dibenzofuran	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Pentachlorophenol	200 ppm
							Phenanthrene	200 ppm
							Phenol	200 ppm
							Pyrene	200 ppm
							Pyridine	200 ppm
					Benz Mix 2_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
..14_Dioxane_00001	01/31/14		Supelco, Lot LB81910		(Purchased Reagent)		1,4-Dioxane	2000 ppm
..8270 Megamix_00001	12/31/12		Restek, Lot A082598		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ppm
							1,2-Dichlorobenzene	1000 ppm
							1,3-Dichlorobenzene	1000 ppm
							1,4-Dichlorobenzene	1000 ppm
							2,2'-oxybis[1-chloropropane]	1000 ppm
							2,4,5-Trichlorophenol	1000 ppm
							2,4,6-Trichlorophenol	1000 ppm
							2,4-Dichlorophenol	1000 ppm
							2,4-Dimethylphenol	1000 ppm
							2,4-Dinitrophenol	1000 ppm
							2,4-Dinitrotoluene	1000 ppm
							2,6-Dinitrotoluene	1000 ppm
							2-Chloronaphthalene	1000 ppm
							2-Chlorophenol	1000 ppm
							2-Methylnaphthalene	1000 ppm
							2-Methylphenol	1000 ppm
							2-Nitroaniline	1000 ppm
							2-Nitrophenol	1000 ppm
							3-Nitroaniline	1000 ppm
							4,6-Dinitro-2-methylphenol	1000 ppm
							4-Bromophenyl phenyl ether	1000 ppm
							4-Chloro-3-methylphenol	1000 ppm
							4-Chloroaniline	1000 ppm
							4-Chlorophenyl phenyl ether	1000 ppm
							4-Nitroaniline	1000 ppm
							4-Nitrophenol	1000 ppm
							Acenaphthene	1000 ppm
							Acenaphthylene	1000 ppm
							Anthracene	1000 ppm
							Benzo[a]anthracene	1000 ppm
							Benzo[a]pyrene	1000 ppm
							Benzo[b]fluoranthene	1000 ppm
							Benzo[g,h,i]perylene	1000 ppm
							Benzo[k]fluoranthene	1000 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	1000 ppm
							Bis(2-chloroethoxy)methane	1000 ppm
							Bis(2-chloroethyl)ether	1000 ppm
							Bis(2-ethylhexyl) phthalate	1000 ppm
							Butyl benzyl phthalate	1000 ppm
							Carbazole	1000 ppm
							Chrysene	1000 ppm
							Di-n-butyl phthalate	1000 ppm
							Di-n-octyl phthalate	1000 ppm
							Dibenz(a,h)anthracene	1000 ppm
							Dibenzofuran	1000 ppm
							Diethyl phthalate	1000 ppm
							Dimethyl phthalate	1000 ppm
							Fluoranthene	1000 ppm
							Fluorene	1000 ppm
							Hexachlorobenzene	1000 ppm
							Hexachlorobutadiene	1000 ppm
							Hexachlorocyclopentadiene	1000 ppm
							Hexachloroethane	1000 ppm
							Indeno[1,2,3-cd]pyrene	1000 ppm
							Isophorone	1000 ppm
							N-Nitrosodi-n-propylamine	1000 ppm
							Naphthalene	1000 ppm
							Nitrobenzene	1000 ppm
							Pentachlorophenol	1000 ppm
							Phenanthrene	1000 ppm
							Phenol	1000 ppm
							Pyrene	1000 ppm
							Pyridine	1000 ppm
..8270 Megamix_00002	12/31/12		Restek, Lot A082598		(Purchased Reagent)		1,2,4-Trichlorobenzene	1000 ppm
							1,2-Dichlorobenzene	1000 ppm
							1,3-Dichlorobenzene	1000 ppm
							1,4-Dichlorobenzene	1000 ppm
							2,2'-oxybis[1-chloropropane]	1000 ppm
							2,4,5-Trichlorophenol	1000 ppm
							2,4,6-Trichlorophenol	1000 ppm
							2,4-Dichlorophenol	1000 ppm
							2,4-Dimethylphenol	1000 ppm
							2,4-Dinitrophenol	1000 ppm
							2,4-Dinitrotoluene	1000 ppm
							2,6-Dinitrotoluene	1000 ppm
							2-Chloronaphthalene	1000 ppm
							2-Chlorophenol	1000 ppm
							2-Methylnaphthalene	1000 ppm
							2-Methylphenol	1000 ppm
							2-Nitroaniline	1000 ppm
							2-Nitrophenol	1000 ppm
							3-Nitroaniline	1000 ppm
							4,6-Dinitro-2-methylphenol	1000 ppm
							4-Bromophenyl phenyl ether	1000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	1000 ppm
							4-Chloroaniline	1000 ppm
							4-Chlorophenyl phenyl ether	1000 ppm
							4-Nitroaniline	1000 ppm
							4-Nitrophenol	1000 ppm
							Acenaphthene	1000 ppm
							Acenaphthylene	1000 ppm
							Anthracene	1000 ppm
							Benzo[a]anthracene	1000 ppm
							Benzo[a]pyrene	1000 ppm
							Benzo[b]fluoranthene	1000 ppm
							Benzo[g,h,i]perylene	1000 ppm
							Benzo[k]fluoranthene	1000 ppm
							Benzyl alcohol	1000 ppm
							Bis(2-chloroethoxy)methane	1000 ppm
							Bis(2-chloroethyl)ether	1000 ppm
							Bis(2-ethylhexyl) phthalate	1000 ppm
							Butyl benzyl phthalate	1000 ppm
							Carbazole	1000 ppm
							Chrysene	1000 ppm
							Di-n-butyl phthalate	1000 ppm
							Di-n-octyl phthalate	1000 ppm
							Dibenz(a,h)anthracene	1000 ppm
							Dibenzofuran	1000 ppm
							Diethyl phthalate	1000 ppm
							Dimethyl phthalate	1000 ppm
							Fluoranthene	1000 ppm
							Fluorene	1000 ppm
							Hexachlorobenzene	1000 ppm
							Hexachlorobutadiene	1000 ppm
							Hexachlorocyclopentadiene	1000 ppm
							Hexachloroethane	1000 ppm
							Indeno[1,2,3-cd]pyrene	1000 ppm
							Isophorone	1000 ppm
							N-Nitrosodi-n-propylamine	1000 ppm
							Naphthalene	1000 ppm
							Nitrobenzene	1000 ppm
							Pentachlorophenol	1000 ppm
							Phenanthrene	1000 ppm
							Phenol	1000 ppm
							Pyrene	1000 ppm
							Pyridine	1000 ppm
..Benz Mix 2_00001	04/30/19		Restek, Lot A080670		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
80 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270_00002	0.4 mL	1,4-Dioxane	80 ppm
							2,4,5-Trichlorophenol	80 ppm
							2,4,6-Trichlorophenol	80 ppm
							2,4-Dichlorophenol	80 ppm
							2,4-Dimethylphenol	80 ppm
							2,4-Dinitrophenol	80 ppm
							2-Chlorophenol	80 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylphenol	80 ppm
							2-Nitrophenol	80 ppm
							4,6-Dinitro-2-methylphenol	80 ppm
							4-Chloro-3-methylphenol	80 ppm
							4-Nitrophenol	80 ppm
							Benzoic acid	80 ppm
							Pentachlorophenol	80 ppm
							Phenol	80 ppm
							2,4,6-Tribromophenol (Surr)	80 ppm
							2-Fluorophenol (Surr)	80 ppm
							Phenol-d5 (Surr)	80 ppm
							3,3'-Dichlorobenzidine	80 ppm
							1,2,4-Trichlorobenzene	80 ppm
							1,2-Dichlorobenzene	80 ppm
							1,3-Dichlorobenzene	80 ppm
							1,4-Dichlorobenzene	80 ppm
							2,2'-oxybis[1-chloropropane]	80 ppm
							2,4-Dinitrotoluene	80 ppm
							2,6-Dinitrotoluene	80 ppm
							2-Chloronaphthalene	80 ppm
							4-Bromophenyl phenyl ether	80 ppm
							4-Chlorophenyl phenyl ether	80 ppm
							Acenaphthene	80 ppm
							Acenaphthylene	80 ppm
							Anthracene	80 ppm
							Azobenzene	80 ppm
							Benzo[a]anthracene	80 ppm
							Benzo[a]pyrene	80 ppm
							Benzo[b]fluoranthene	80 ppm
							Benzo[g,h,i]perylene	80 ppm
							Benzo[k]fluoranthene	80 ppm
							Bis(2-chloroethoxy)methane	80 ppm
							Bis(2-chloroethyl)ether	80 ppm
							Bis(2-ethylhexyl) phthalate	80 ppm
							Butyl benzyl phthalate	80 ppm
							Chrysene	80 ppm
							Di-n-butyl phthalate	80 ppm
							Di-n-octyl phthalate	80 ppm
							Dibenz(a,h)anthracene	80 ppm
							Diethyl phthalate	80 ppm
							Dimethyl phthalate	80 ppm
							Fluoranthene	80 ppm
							Fluorene	80 ppm
							Hexachlorobenzene	80 ppm
							Hexachlorobutadiene	80 ppm
							Hexachlorocyclopentadiene	80 ppm
							Hexachloroethane	80 ppm
							Indeno[1,2,3-cd]pyrene	80 ppm
							Isophorone	80 ppm
							N-Nitrosodi-n-propylamine	80 ppm

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	80 ppm
							N-Nitrosodiphenylamine	80 ppm
							Naphthalene	80 ppm
							Nitrobenzene	80 ppm
							Phenanthrene	80 ppm
							Pyrene	80 ppm
							2-Fluorobiphenyl (Surr)	80 ppm
							Nitrobenzene-d5 (Surr)	80 ppm
							Terphenyl-d14 (Surr)	80 ppm
							2-Methylnaphthalene	80 ppm
							2-Nitroaniline	80 ppm
							3-Nitroaniline	80 ppm
							4-Chloroaniline	80 ppm
							4-Nitroaniline	80 ppm
							Benzyl alcohol	80 ppm
							Carbazole	80 ppm
							Dibenzofuran	80 ppm
							Pyridine	80 ppm
							Cyclohexanol	80 ppm
							Dimethylformamide	80 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270_00002	11/01/12	06/04/12	MeCl2, Lot L08E15	10 mL	1_4_Dioxane_00001	1 mL	1,4-Dioxane	200 ppm
					Acid Comp Mix_00001	1 mL	2,4,5-Trichlorophenol	200 ppm
							2,4,6-Trichlorophenol	200 ppm
							2,4-Dichlorophenol	200 ppm
							2,4-Dimethylphenol	200 ppm
							2,4-Dinitrophenol	200 ppm
							2-Chlorophenol	200 ppm
							2-Methylphenol	200 ppm
							2-Nitrophenol	200 ppm
							4,6-Dinitro-2-methylphenol	200 ppm
							4-Chloro-3-methylphenol	200 ppm
							4-Nitrophenol	200 ppm
							Benzoic acid	200 ppm
							Pentachlorophenol	200 ppm
							Phenol	200 ppm
					Acid Surr_00001	1 mL	2,4,6-Tribromophenol (Surr)	200 ppm
							2-Fluorophenol (Surr)	200 ppm
							Phenol-d5 (Surr)	200 ppm
					Benzidines_00001	1 mL	3,3'-Dichlorobenzidine	200 ppm
					BN Comp Mix_00001	1 mL	1,2,4-Trichlorobenzene	200 ppm
							1,2-Dichlorobenzene	200 ppm
							1,3-Dichlorobenzene	200 ppm
							1,4-Dichlorobenzene	200 ppm
							2,2'-oxybis[1-chloropropane]	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dinitrotoluene	200 ppm
							2,6-Dinitrotoluene	200 ppm
							2-Chloronaphthalene	200 ppm
							4-Bromophenyl phenyl ether	200 ppm
							4-Chlorophenyl phenyl ether	200 ppm
							Acenaphthene	200 ppm
							Acenaphthylene	200 ppm
							Anthracene	200 ppm
							Azobenzene	200 ppm
							Benzo[a]anthracene	200 ppm
							Benzo[a]pyrene	200 ppm
							Benzo[b]fluoranthene	200 ppm
							Benzo[g,h,i]perylene	200 ppm
							Benzo[k]fluoranthene	200 ppm
							Bis(2-chloroethoxy)methane	200 ppm
							Bis(2-chloroethyl)ether	200 ppm
							Bis(2-ethylhexyl) phthalate	200 ppm
							Butyl benzyl phthalate	200 ppm
							Chrysene	200 ppm
							Di-n-butyl phthalate	200 ppm
							Di-n-octyl phthalate	200 ppm
							Dibenz(a,h)anthracene	200 ppm
							Diethyl phthalate	200 ppm
							Dimethyl phthalate	200 ppm
							Fluoranthene	200 ppm
							Fluorene	200 ppm
							Hexachlorobenzene	200 ppm
							Hexachlorobutadiene	200 ppm
							Hexachlorocyclopentadiene	200 ppm
							Hexachloroethane	200 ppm
							Indeno[1,2,3-cd]pyrene	200 ppm
							Isophorone	200 ppm
							N-Nitrosodi-n-propylamine	200 ppm
							N-Nitrosodimethylamine	200 ppm
							N-Nitrosodiphenylamine	200 ppm
							Naphthalene	200 ppm
							Nitrobenzene	200 ppm
							Phenanthrene	200 ppm
							Pyrene	200 ppm
					BN Surrogates_00003	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					BN Surrogates_00004	1 mL	2-Fluorobiphenyl (Surr)	200 ppm
							Nitrobenzene-d5 (Surr)	200 ppm
							Terphenyl-d14 (Surr)	200 ppm
					Comp Mix 3_00001	1 mL	2-Methylnaphthalene	200 ppm
							2-Nitroaniline	200 ppm
							3-Nitroaniline	200 ppm
							4-Chloroaniline	200 ppm
							4-Nitroaniline	200 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzyl alcohol	200 ppm
							Carbazole	200 ppm
							Dibenzofuran	200 ppm
							Pyridine	200 ppm
					Cyclohexanol_00002	1 mL	Cyclohexanol	200 ppm
					NN_DMF_00001	0.4 mL	Dimethylformamide	200 ppm
..1_4_Dioxane_00001	12/31/15	Restek, Lot A078356			(Purchased Reagent)		1,4-Dioxane	2000 ppm
..Acid Comp Mix_00001	02/01/14	Accustandard, Lot 211011319			(Purchased Reagent)		2,4,5-Trichlorophenol	2000 ppm
							2,4,6-Trichlorophenol	2000 ppm
							2,4-Dichlorophenol	2000 ppm
							2,4-Dimethylphenol	2000 ppm
							2,4-Dinitrophenol	2000 ppm
							2-Chlorophenol	2000 ppm
							2-Methylphenol	2000 ppm
							2-Nitrophenol	2000 ppm
							4,6-Dinitro-2-methylphenol	2000 ppm
							4-Chloro-3-methylphenol	2000 ppm
							4-Nitrophenol	2000 ppm
							Benzoic acid	2000 ppm
							Pentachlorophenol	2000 ppm
							Phenol	2000 ppm
..Acid Surr_00001	01/31/13	Ultra Scientific, Lot CF-5141			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	2000 ppm
							2-Fluorophenol (Surr)	2000 ppm
							Phenol-d5 (Surr)	2000 ppm
..Benzidines_00001	09/30/13	Supelco, Lot LB79050			(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ppm
..BN Comp Mix_00001	07/12/13	Accustandard, Lot 211071031			(Purchased Reagent)		1,2,4-Trichlorobenzene	2000 ppm
							1,2-Dichlorobenzene	2000 ppm
							1,3-Dichlorobenzene	2000 ppm
							1,4-Dichlorobenzene	2000 ppm
							2,2'-oxybis[1-chloropropane]	2000 ppm
							2,4-Dinitrotoluene	2000 ppm
							2,6-Dinitrotoluene	2000 ppm
							2-Chloronaphthalene	2000 ppm
							4-Bromophenyl phenyl ether	2000 ppm
							4-Chlorophenyl phenyl ether	2000 ppm
							Acenaphthene	2000 ppm
							Acenaphthylene	2000 ppm
							Anthracene	2000 ppm
							Azobenzene	2000 ppm
							Benzo[a]anthracene	2000 ppm
							Benzo[a]pyrene	2000 ppm
							Benzo[b]fluoranthene	2000 ppm
							Benzo[g,h,i]perylene	2000 ppm
							Benzo[k]fluoranthene	2000 ppm
							Bis(2-chloroethoxy)methane	2000 ppm
							Bis(2-chloroethyl)ether	2000 ppm
							Bis(2-ethylhexyl) phthalate	2000 ppm
							Butyl benzyl phthalate	2000 ppm
							Chrysene	2000 ppm
							Di-n-butyl phthalate	2000 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-octyl phthalate	2000 ppm
							Dibenz(a,h)anthracene	2000 ppm
							Diethyl phthalate	2000 ppm
							Dimethyl phthalate	2000 ppm
							Fluoranthene	2000 ppm
							Fluorene	2000 ppm
							Hexachlorobenzene	2000 ppm
							Hexachlorobutadiene	2000 ppm
							Hexachlorocyclopentadiene	2000 ppm
							Hexachloroethane	2000 ppm
							Indeno[1,2,3-cd]pyrene	2000 ppm
							Isophorone	2000 ppm
							N-Nitrosodi-n-propylamine	2000 ppm
							N-Nitrosodimethylamine	2000 ppm
							N-Nitrosodiphenylamine	2000 ppm
							Naphthalene	2000 ppm
							Nitrobenzene	2000 ppm
							Phenanthrene	2000 ppm
							Pyrene	2000 ppm
..BN Surrogates_00003	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..BN Surrogates_00004	08/31/13		Ultra Scientific, Lot CG-2463		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	1000 ppm
							Nitrobenzene-d5 (Surr)	1000 ppm
							Terphenyl-d14 (Surr)	1000 ppm
..Comp Mix 3_00001	11/01/12		Accustandard, Lot 210101376		(Purchased Reagent)		2-Methylnaphthalene	2000 ppm
							2-Nitroaniline	2000 ppm
							3-Nitroaniline	2000 ppm
							4-Chloroaniline	2000 ppm
							4-Nitroaniline	2000 ppm
							Benzyl alcohol	2000 ppm
							Carbazole	2000 ppm
							Dibenzofuran	2000 ppm
							Pyridine	2000 ppm
..Cyclohexanol_00002	03/08/13		Accustandard, Lot 210031091		(Purchased Reagent)		Cyclohexanol	2000 ppm
..NN_DMF_00001	02/19/13		Accustandard, Lot 210021264		(Purchased Reagent)		Dimethylformamide	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19		Restek, Lot A086066		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
80 ppm 8270B_00002	12/04/12	06/05/12	MeCl2, Lot L08E15	1 mL	200 ppm 8270B_00002	0.4 mL	3,3'-Dimethylbenzidine	80 ppm
							Aniline	80 ppm

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	80 ppm
							3 & 4 Methylphenol	160 ppm
					800 ppm I Std_00013	0.05 mL	1,4-Dichlorobenzene-d4	40 ppm
							Acenaphthene-d10	40 ppm
							Chrysene-d12	40 ppm
							Naphthalene-d8	40 ppm
							Perylene-d12	40 ppm
							Phenanthrene-d10	40 ppm
.200 ppm 8270B_00002	12/05/12	06/05/12	MeCl2, Lot L08E15	10 mL	3_3_DMB_00001	1 mL	3,3'-Dimethylbenzidine	200 ppm
					Aniline_00001	0.4 mL	Aniline	200 ppm
					Benz_3_3_DCB_00001	1 mL	Benzidine	200 ppm
					m-Cresol_00001	0.4 mL	3 & 4 Methylphenol	400 ppm
					p_Cresol_00002	0.4 mL	3 & 4 Methylphenol	400 ppm
..3_3_DMB_00001	08/24/13	Accustandard, Lot 210081282			(Purchased Reagent)		3,3'-Dimethylbenzidine	2000 ppm
..Aniline_00001	07/31/14	Supelco, Lot LB85728			(Purchased Reagent)		Aniline	5000 ppm
..Benz_3_3_DCB_00001	01/07/13	Accustandard, Lot 211011047			(Purchased Reagent)		Benzidine	2000 ppm
..m-Cresol_00001	07/31/14	Ultra Scientific, Lot CG-2138			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
..p_Cresol_00002	07/31/15	Ultra Scientific, Lot CH-1823			(Purchased Reagent)		3 & 4 Methylphenol	5000 ppm
.800 ppm I Std_00013	12/04/12	06/04/12	MeCl2, Lot L08E15	2.5 mL	SV IS Mix_00019	1 mL	1,4-Dichlorobenzene-d4	800 ppm
							Acenaphthene-d10	800 ppm
							Chrysene-d12	800 ppm
							Naphthalene-d8	800 ppm
							Perylene-d12	800 ppm
							Phenanthrene-d10	800 ppm
..SV IS Mix_00019	02/28/19	Restek, Lot A086066			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ppm
							Acenaphthene-d10	2000 ppm
							Chrysene-d12	2000 ppm
							Naphthalene-d8	2000 ppm
							Perylene-d12	2000 ppm
							Phenanthrene-d10	2000 ppm
8260 ICV-LCS_00021	08/19/12	08/12/12	Methanol, Lot DG596	5 mL	8260Addition2_00006	62.5 uL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							Carbon disulfide	25 ug/mL
					Custom VOA 2_00009	62.5 uL	Cyclohexane	25 ug/mL
							Methyl acetate	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
					VOA Gases2_00037	62.5 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOC-Liquids2_00008	62.5 uL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Benzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	25 ug/mL
							o-Xylene	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	75 ug/mL
.8260Addition2_00006	09/12/12		Supelco, Lot LB91881		(Purchased Reagent)		2-Butanone (MEK)	2000 ug/mL
							2-Hexanone	2000 ug/mL
							4-Methyl-2-pentanone (MIBK)	2000 ug/mL
							Acetone	2000 ug/mL
							Carbon disulfide	2000 ug/mL
.Custom VOA 2_00009	09/05/12		Accustandard, Lot 212061346		(Purchased Reagent)		Cyclohexane	2000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
.VOA Gases2_00037	08/19/12		AccuStandard, Lot 212011067		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOC-Liquids2_00008	09/12/12		AccuStandard, Lot 212041356		(Purchased Reagent)		1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	4000 ug/mL
							Methylene Chloride	2000 ug/mL
							o-Xylene	2000 ug/mL
							Styrene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	6000 ug/mL
8260 Surr 25_00009	08/15/12	07/15/12	Methanol, Lot DF700	25 mL	8260 Surr_00008	250 uL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.8260 Surr_00008	08/15/12		Ultra Scientific, Lot CG-3959		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260 Surr 25_00010	09/01/12	08/10/12	Methanol, Lot DG596	25 mL	8260 Surr_00009	250 uL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.8260 Surr_00009	09/01/12		Ultra Scientific, Lot CG-3959		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
8260 WK Mix_00024	08/12/12	08/05/12	Methanol, Lot DG256	10 mL	8260 Addition_00006	125 uL	2-Butanone (MEK)	25 ug/mL
							2-Chloroethyl vinyl ether	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	25 ug/mL
							Iodomethane	25 ug/mL
							Vinyl acetate	25 ug/mL
					Acrolein-Acry_00006	125 uL	Acrolein	125 ug/mL
							Acrylonitrile	125 ug/mL
					Custom VOA_00010	125 uL	1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2-Chloro-1,3-butadiene	25 ug/mL
							2-Nitropropane	50 ug/mL
							3-Chloro-1-propene	25 ug/mL
							Acetonitrile	125 ug/mL
							Cyclohexane	25 ug/mL
							Cyclohexanone	250 ug/mL
							Ethyl acetate	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	25 ug/mL
							Hexane	25 ug/mL
							Isobutyl alcohol	500 ug/mL
							Methacrylonitrile	125 ug/mL
							Methyl acetate	25 ug/mL
							Methyl methacrylate	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							n-Butanol	250 ug/mL
							n-Nonyl Aldehyde	25 ug/mL
							Propionitrile	125 ug/mL
							Tetrahydrofuran	125 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
					VOA Gases_00025	125 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOC-Liquids_00008	125 uL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
.8260 Addition_00006	08/15/12		Supelco, Lot LB83423		(Purchased Reagent)		2-Butanone (MEK)	2000 ug/mL
							2-Chloroethyl vinyl ether	2000 ug/mL
							2-Hexanone	2000 ug/mL
							4-Methyl-2-pentanone (MIBK)	2000 ug/mL
							Acetone	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Iodomethane	2000 ug/mL
							Vinyl acetate	2000 ug/mL
.Acrolein-Acry_00006	08/15/12		O2SI, Lot 192667		(Purchased Reagent)		Acrolein	10000 ug/mL
							Acrylonitrile	2000 ug/mL

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.Custom VOA_00010	09/05/12		AccuStandard, Lot 212051005		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2-Chloro-1,3-butadiene	2000 ug/mL
							2-Nitropropane	4000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							Acetonitrile	10000 ug/mL
							Cyclohexane	2000 ug/mL
							Cyclohexanone	20000 ug/mL
							Ethyl acetate	4000 ug/mL
							Ethyl ether	4000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Hexane	2000 ug/mL
							Isobutyl alcohol	40000 ug/mL
							Methacrylonitrile	10000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl methacrylate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							n-Butanol	20000 ug/mL
							n-Nonyl Aldehyde	2000 ug/mL
							Propionitrile	10000 ug/mL
							Tetrahydrofuran	10000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
.VOA Gases_00025	08/12/12		AccuStandard, Lot 212021011		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOC-Liquids_00008	08/15/12		AccuStandard, Lot 210101038		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromodichloromethane	2000 ug/mL
							Bromoform	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	4000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
8260 WK Mix_00025	08/19/12	08/12/12	Methanol, Lot DG596	10 mL	8260 Addition_00007	125 uL	2-Butanone (MEK)	25 ug/mL
							2-Chloroethyl vinyl ether	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							Carbon disulfide	25 ug/mL
							Iodomethane	25 ug/mL
							Vinyl acetate	25 ug/mL
					Acrolein-Acry_00007	125 uL	Acrolein	125 ug/mL
							Acrylonitrile	125 ug/mL
					Custom VOA_00010	125 uL	1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	25 ug/mL
							1,4-Dioxane	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloro-1,3-butadiene	25 ug/mL
							2-Nitropropane	50 ug/mL
							3-Chloro-1-propene	25 ug/mL
							Acetonitrile	125 ug/mL
							Cyclohexane	25 ug/mL
							Cyclohexanone	250 ug/mL
							Ethyl acetate	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	25 ug/mL
							Hexane	25 ug/mL
							Isobutyl alcohol	500 ug/mL
							Methacrylonitrile	125 ug/mL
							Methyl acetate	25 ug/mL
							Methyl methacrylate	25 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							n-Butanol	250 ug/mL
							n-Nonyl Aldehyde	25 ug/mL
							Propionitrile	125 ug/mL
							Tetrahydrofuran	125 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
					VOA Gases_00026	125 uL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOC-Liquids_00009	125 uL	1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dibromoethane (EDB)	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							4-Chlorotoluene	25 ug/mL

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Isopropyltoluene	25 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromodichloromethane	25 ug/mL
							Bromoform	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Dibromochloromethane	25 ug/mL
							Dibromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	75 ug/mL
.8260 Addition_00007	09/12/12		Supelco, Lot LB83423		(Purchased Reagent)		2-Butanone (MEK)	2000 ug/mL
							2-Chloroethyl vinyl ether	2000 ug/mL
							2-Hexanone	2000 ug/mL
							4-Methyl-2-pentanone (MIBK)	2000 ug/mL
							Acetone	2000 ug/mL
							Carbon disulfide	2000 ug/mL
							Iodomethane	2000 ug/mL
							Vinyl acetate	2000 ug/mL
.Acrolein-Acry_00007	09/12/12		O2SI, Lot 194031		(Purchased Reagent)		Acrolein	10000 ug/mL
							Acrylonitrile	10000 ug/mL
.Custom VOA_00010	09/05/12		AccuStandard, Lot 212051005		(Purchased Reagent)		1,1,2-Trichloro-1,2,2-trifluoroethane	2000 ug/mL
							1,2-Dichloro-1,1,2,2-tetrafluoroethane	2000 ug/mL
							1,4-Dioxane	40000 ug/mL
							2-Chloro-1,3-butadiene	2000 ug/mL
							2-Nitropropane	4000 ug/mL
							3-Chloro-1-propene	2000 ug/mL
							Acetonitrile	10000 ug/mL

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	2000 ug/mL
							Cyclohexanone	20000 ug/mL
							Ethyl acetate	4000 ug/mL
							Ethyl ether	4000 ug/mL
							Ethyl methacrylate	2000 ug/mL
							Hexane	2000 ug/mL
							Isobutyl alcohol	40000 ug/mL
							Methacrylonitrile	10000 ug/mL
							Methyl acetate	2000 ug/mL
							Methyl methacrylate	2000 ug/mL
							Methyl tert-butyl ether	2000 ug/mL
							Methylcyclohexane	2000 ug/mL
							n-Butanol	20000 ug/mL
							n-Nonyl Aldehyde	2000 ug/mL
							Propionitrile	10000 ug/mL
							Tetrahydrofuran	10000 ug/mL
							trans-1,4-Dichloro-2-butene	2000 ug/mL
.VOA Gases_00026	08/19/12		AccuStandard, Lot 212021011		(Purchased Reagent)		Bromomethane	2000 ug/mL
							Chloroethane	2000 ug/mL
							Chloromethane	2000 ug/mL
							Dichlorodifluoromethane	2000 ug/mL
							Trichlorofluoromethane	2000 ug/mL
							Vinyl chloride	2000 ug/mL
.VOC-Liquids_00009	09/12/12		AccuStandard, Lot 210101038		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2000 ug/mL
							1,1,1-Trichloroethane	2000 ug/mL
							1,1,2,2-Tetrachloroethane	2000 ug/mL
							1,1,2-Trichloroethane	2000 ug/mL
							1,1-Dichloroethane	2000 ug/mL
							1,1-Dichloroethene	2000 ug/mL
							1,1-Dichloropropene	2000 ug/mL
							1,2,3-Trichlorobenzene	2000 ug/mL
							1,2,3-Trichloropropane	2000 ug/mL
							1,2,4-Trichlorobenzene	2000 ug/mL
							1,2,4-Trimethylbenzene	2000 ug/mL
							1,2-Dibromo-3-Chloropropane	2000 ug/mL
							1,2-Dibromoethane (EDB)	2000 ug/mL
							1,2-Dichlorobenzene	2000 ug/mL
							1,2-Dichloroethane	2000 ug/mL
							1,2-Dichloropropane	2000 ug/mL
							1,3,5-Trimethylbenzene	2000 ug/mL
							1,3-Dichlorobenzene	2000 ug/mL
							1,3-Dichloropropane	2000 ug/mL
							1,4-Dichlorobenzene	2000 ug/mL
							2,2-Dichloropropane	2000 ug/mL
							2-Chlorotoluene	2000 ug/mL
							4-Chlorotoluene	2000 ug/mL
							4-Isopropyltoluene	2000 ug/mL
							Benzene	2000 ug/mL
							Bromobenzene	2000 ug/mL
							Bromodichloromethane	2000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	2000 ug/mL
							Carbon tetrachloride	2000 ug/mL
							Chlorobenzene	2000 ug/mL
							Chlorobromomethane	2000 ug/mL
							Chloroform	2000 ug/mL
							cis-1,2-Dichloroethene	2000 ug/mL
							cis-1,3-Dichloropropene	2000 ug/mL
							Dibromochloromethane	2000 ug/mL
							Dibromomethane	2000 ug/mL
							Ethylbenzene	2000 ug/mL
							Hexachlorobutadiene	2000 ug/mL
							Isopropylbenzene	2000 ug/mL
							m-Xylene & p-Xylene	4000 ug/mL
							Methylene Chloride	2000 ug/mL
							n-Butylbenzene	2000 ug/mL
							N-Propylbenzene	2000 ug/mL
							Naphthalene	2000 ug/mL
							o-Xylene	2000 ug/mL
							sec-Butylbenzene	2000 ug/mL
							Styrene	2000 ug/mL
							tert-Butylbenzene	2000 ug/mL
							Tetrachloroethene	2000 ug/mL
							Toluene	2000 ug/mL
							trans-1,2-Dichloroethene	2000 ug/mL
							trans-1,3-Dichloropropene	2000 ug/mL
							Trichloroethene	2000 ug/mL
							Xylenes, Total	6000 ug/mL
Alk Int._00002	01/19/13	07/19/12	DI Water, Lot 071912	1000 mL	Sodium Carb_00001	1 g	Alkalinity	1000 mg/L
.Sodium Carb_00001	12/08/16		Malinckrodt, Lot K13607		(Purchased Reagent)		Alkalinity	100 %
BNA Surrogate_00005	04/01/13		Supelco, Lot LB88729		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	150 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	150 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	150 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
BNASpike_00009	08/07/13		Restek, Lot A089779		(Purchased Reagent)		1,2,4-Trichlorobenzene	99.91 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	100 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3,3'-Dichlorobenzidine	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	100 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Methylphenol	100 ug/mL
							4-Nitroaniline	100 ug/mL
							4-Nitrophenol	100 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo(a)anthracene-d12	100 ug/mL
							Benzo(a)pyrene-d12	100 ug/mL
							Benzo(b)fluoranthene-d12	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	99.91 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							Pentachlorophenol	100 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
HG CCV W_00060	08/15/12	08/14/12	2% Nitric Acid, Lot NA	30 mL	Hg QC Int._00078	1.5 mL	Mercury	5 ug/L
.Hg QC Int._00078	08/15/12	08/14/12	2% Nitric Acid, Lot NA	100 mL	HG QC_00001	0.1 mL	Mercury	0.1 ug/mL
..HG QC_00001	10/05/12		Leeman, Lot 1187201		(Purchased Reagent)		Mercury	100 ug/mL
HG CCV W_00062	08/17/12	08/16/12	2% Nitric Acid, Lot NA	30 mL	Hg QC Int._00080	1.5 mL	Mercury	5 ug/L
.Hg QC Int._00080	08/17/12	08/16/12	2% Nitric Acid, Lot NA	100 mL	HG QC_00001	0.1 mL	Mercury	0.1 ug/mL
..HG QC_00001	10/05/12		Leeman, Lot 1187201		(Purchased Reagent)		Mercury	100 ug/mL
Hg Curve Int._00081	08/15/12	08/14/12	2% Nitric Acid, Lot NA	100 mL	HG CAL_00003	0.1 mL	Mercury	0.1 ug/mL
.HG CAL_00003	10/15/12		Spex, Lot 17-24HG		(Purchased Reagent)		Mercury	100 ug/mL
Hg Curve Int._00083	08/17/12	08/16/12	2% Nitric Acid, Lot NA	100 mL	HG CAL_00003	0.1 mL	Mercury	0.1 ug/mL
.HG CAL_00003	10/15/12		Spex, Lot 17-24HG		(Purchased Reagent)		Mercury	100 ug/mL
HG ICV W_00063	08/15/12	08/14/12	2% Nitric Acid, Lot NA	30 mL	Hg QC Int._00078	0.75 mL	Mercury	2.5 ug/L
.Hg QC Int._00078	08/15/12	08/14/12	2% Nitric Acid, Lot NA	100 mL	HG QC_00001	0.1 mL	Mercury	0.1 ug/mL
..HG QC_00001	10/05/12		Leeman, Lot 1187201		(Purchased Reagent)		Mercury	100 ug/mL
HG ICV W_00065	08/17/12	08/16/12	2% Nitric Acid, Lot NA	30 mL	Hg QC Int._00080	0.75 mL	Mercury	2.5 ug/L
.Hg QC Int._00080	08/17/12	08/16/12	2% Nitric Acid, Lot NA	100 mL	HG QC_00001	0.1 mL	Mercury	0.1 ug/mL
..HG QC_00001	10/05/12		Leeman, Lot 1187201		(Purchased Reagent)		Mercury	100 ug/mL
I.S. Working_00014	09/06/12	08/06/12	Methanol, Lot DG265	25 mL	8260 IS_00011	250 uL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene	25 ug/mL
.8260 IS_00011	09/06/12		Ultra Scientific, Lot CH-3660		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
IC 2nd Source_00001	12/01/12		Inorganic Ventures, Lot D2-MEB328112		(Purchased Reagent)		Bromide	5000 ug/L
IC Cal High_00006	06/28/13		Inorganic Ventures, Lot E2-MEB380092		(Purchased Reagent)		Bromide	5000 ug/L
IC Iodide Cal_00002	04/18/13		Inorganic Ventures, Lot D2-IOD01026		(Purchased Reagent)		Iodide	1000 ug/mL
IC Iodide QC_00002	04/20/13		SCP Science, Lot S120220011		(Purchased Reagent)		Iodide	1000 ug/mL
IC MS Soln_00002	02/07/13		Inorganic Ventures, Lot F2-MEB408149		(Purchased Reagent)		Bromide	100 ug/mL
ICPC MIX AB_00011	08/24/12	07/24/12	5% HCl /5%HN03, Lot 2/1/12	1000 mL	ICP AB 1_00001	10 mL	Arsenic	1 ug/mL
							B	1 ug/mL
							Barium	0.5 ug/mL
							Beryllium	0.5 ug/mL
							Bi	1 ug/mL
							Cadmium	1 ug/mL
							Chromium	0.5 ug/mL
							Cobalt	0.5 ug/mL
							Copper	0.5 ug/mL
							Lead	1 ug/mL
							Li	1 ug/mL
							Manganese	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Nickel	1 ug/mL
							P	0.5 ug/mL
							Potassium	20 ug/mL
							Selenium	1 ug/mL
							Sodium	20 ug/mL
							Sr	1 ug/mL
							Th	1 ug/mL
							Thallium	1 ug/mL
							U	1 ug/mL
							Vanadium	0.5 ug/mL
							Zinc	1 ug/mL
					ICP AB 2_00001	10 mL	Antimony	1 ug/mL
							Mo	1 ug/mL
							Si	1 ug/mL
							Silver	1 ug/mL
							Sn	1 ug/mL
							Ti	0.5 ug/mL
					ICPC A_00003	20 mL	Aluminum	100 ug/mL
							Calcium	50 ug/mL
							Iron	100 ug/mL
							Magnesium	100 ug/mL
					STD S 10K_00001	2 mL	Sulfur	20 ug/mL
.ICP AB 1_00001	01/03/13	INORGANIC VENTRES, Lot E2-MEB406066			(Purchased Reagent)		Arsenic	100 ug/mL
							B	100 ug/mL
							Barium	50 ug/mL
							Beryllium	50 ug/mL
							Bi	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	50 ug/mL
							Cobalt	50 ug/mL
							Copper	50 ug/mL
							Lead	100 ug/mL
							Li	100 ug/mL
							Manganese	50 ug/mL
							Nickel	100 ug/mL
							P	50 ug/mL
							Potassium	2000 ug/mL
							Selenium	100 ug/mL
							Sodium	2000 ug/mL
							Sr	100 ug/mL
							Th	100 ug/mL
							Thallium	100 ug/mL
							U	100 ug/mL
							Vanadium	50 ug/mL
							Zinc	100 ug/mL
.ICP AB 2_00001	01/03/13	INORGANIC VENTURES, Lot E2-MEB406067			(Purchased Reagent)		Antimony	100 ug/mL
							Mo	100 ug/mL
							Si	100 ug/mL
							Silver	100 ug/mL
							Sn	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ti	50 ug/mL
.ICPC A_00003	05/09/13	INORGANIC VENTURES, Lot F2-MEB420140			(Purchased Reagent)		Aluminum	5000 ug/mL
							Calcium	2500 ug/mL
							Iron	5000 ug/mL
							Magnesium	5000 ug/mL
.STD S 10K_00001	09/07/12	INORGANIC VENTURES, Lot C2-S01104			(Purchased Reagent)		Sulfur	10000 ug/mL
ICPC MIX AB_00012	09/23/12	08/23/12	5% HCl /5%HN03, Lot 2/1/12	1000 mL	ICP AB 1_00001	10 mL	Arsenic	1 ug/mL
							B	1 ug/mL
							Barium	0.5 ug/mL
							Beryllium	0.5 ug/mL
							Bi	1 ug/mL
							Cadmium	1 ug/mL
							Chromium	0.5 ug/mL
							Cobalt	0.5 ug/mL
							Copper	0.5 ug/mL
							Lead	1 ug/mL
							Li	1 ug/mL
							Manganese	0.5 ug/mL
							Nickel	1 ug/mL
							P	0.5 ug/mL
							Potassium	20 ug/mL
							Selenium	1 ug/mL
							Sodium	20 ug/mL
							Sr	1 ug/mL
							Th	1 ug/mL
							Thallium	1 ug/mL
							U	1 ug/mL
							Vanadium	0.5 ug/mL
							Zinc	1 ug/mL
					ICP AB 2_00001	10 mL	Antimony	1 ug/mL
							Mo	1 ug/mL
							Si	1 ug/mL
							Silver	1 ug/mL
							Sn	1 ug/mL
							Ti	0.5 ug/mL
					ICPC A_00003	20 mL	Aluminum	100 ug/mL
							Calcium	50 ug/mL
							Iron	100 ug/mL
							Magnesium	100 ug/mL
					STD S 10K_00002	2 mL	Sulfur	20 ug/mL
.ICP AB 1_00001	01/03/13	INORGANIC VENTRES, Lot E2-MEB406066			(Purchased Reagent)		Arsenic	100 ug/mL
							B	100 ug/mL
							Barium	50 ug/mL
							Beryllium	50 ug/mL
							Bi	100 ug/mL
							Cadmium	100 ug/mL
							Chromium	50 ug/mL
							Cobalt	50 ug/mL
							Copper	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Lead	100 ug/mL
							Li	100 ug/mL
							Manganese	50 ug/mL
							Nickel	100 ug/mL
							P	50 ug/mL
							Potassium	2000 ug/mL
							Selenium	100 ug/mL
							Sodium	2000 ug/mL
							Sr	100 ug/mL
							Th	100 ug/mL
							Thallium	100 ug/mL
							U	100 ug/mL
							Vanadium	50 ug/mL
							Zinc	100 ug/mL
.ICP AB 2_00001	01/03/13	INORGANIC VENTURES, Lot E2-MEB406067			(Purchased Reagent)		Antimony	100 ug/mL
							Mo	100 ug/mL
							Si	100 ug/mL
							Silver	100 ug/mL
							Sn	100 ug/mL
							Ti	50 ug/mL
.ICPC A_00003	05/09/13	INORGANIC VENTURES, Lot F2-MEB420140			(Purchased Reagent)		Aluminum	5000 ug/mL
							Calcium	2500 ug/mL
							Iron	5000 ug/mL
							Magnesium	5000 ug/mL
.STD S 10K_00002	06/13/13	INORGANIC VENTURES, Lot E2-S01120			(Purchased Reagent)		Sulfur	10000 ug/mL
ICPC MIX CAL1_00019	09/13/12	08/13/12	5% HCl/5%HN03, Lot 1/18/12	1000 mL	ICPC LLC 2_00003	5 mL	Aluminum	0.2 ug/mL
							Antimony	0.01 ug/mL
							Arsenic	0.01 ug/mL
							Barium	0.05 ug/mL
							Beryllium	0.005 ug/mL
							Cadmium	0.005 ug/mL
							Calcium	1 ug/mL
							Chromium	0.01 ug/mL
							Cobalt	0.05 ug/mL
							Copper	0.025 ug/mL
							Iron	0.1 ug/mL
							Lead	0.01 ug/mL
							Magnesium	1 ug/mL
							Manganese	0.015 ug/mL
							Nickel	0.04 ug/mL
							Potassium	5 ug/mL
							Selenium	0.015 ug/mL
							Silver	0.01 ug/mL
							Sodium	1 ug/mL
							Thallium	0.02 ug/mL
							Vanadium	0.05 ug/mL
							Zinc	0.02 ug/mL
.ICPC LLC 2_00003	04/16/13	ACCU SCIENCE, Lot 1035225			(Purchased Reagent)		Aluminum	40 ug/mL
							Antimony	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Arsenic	2 ug/mL
							Barium	10 ug/mL
							Beryllium	1 ug/mL
							Cadmium	1 ug/mL
							Calcium	200 ug/mL
							Chromium	2 ug/mL
							Cobalt	10 ug/mL
							Copper	5 ug/mL
							Iron	20 ug/mL
							Lead	2 ug/mL
							Magnesium	200 ug/mL
							Manganese	3 ug/mL
							Nickel	8 ug/mL
							Potassium	1000 ug/mL
							Selenium	3 ug/mL
							Silver	2 ug/mL
							Sodium	200 ug/mL
							Thallium	4 ug/mL
							Vanadium	10 ug/mL
							Zinc	4 ug/mL
ICPC MIX CAL3_00018	09/13/12	08/13/12	5% HCl /5%HN03, Lot 01-18-12	1000 mL	ICPC CAL A_00002	10 mL	Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	25 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	50 ug/mL
							Lead	5 ug/mL
							Magnesium	25 ug/mL
							Manganese	5 ug/mL
							Nickel	5 ug/mL
							Potassium	50 ug/mL
							Selenium	5 ug/mL
							Sodium	50 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
					ICPC CAL B_00002	10 mL	Antimony	1 ug/mL
							Silver	1 ug/mL
.ICPC CAL A_00002	03/21/13		ACCU SCIENCE, Lot 1034727		(Purchased Reagent)		Aluminum	5000 ug/mL
							Arsenic	500 ug/mL
							Barium	500 ug/mL
							Beryllium	500 ug/mL
							Cadmium	500 ug/mL
							Calcium	2500 ug/mL
							Chromium	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cobalt	500 ug/mL
							Copper	500 ug/mL
							Iron	5000 ug/mL
							Lead	500 ug/mL
							Magnesium	2500 ug/mL
							Manganese	500 ug/mL
							Nickel	500 ug/mL
							Potassium	5000 ug/mL
							Selenium	500 ug/mL
							Sodium	5000 ug/mL
							Thallium	500 ug/mL
							Vanadium	500 ug/mL
							Zinc	500 ug/mL
.ICPC CAL B_00002	03/21/13		ACCU SCIENCE, Lot 1034727		(Purchased Reagent)		Antimony	100 ug/mL
							Silver	100 ug/mL
ICPC MIX CAL3_00020	09/23/12	08/23/12	5% HCl /5%HN03, Lot 01-18-12	1000 mL	ICPC CAL A_00002	10 mL	Aluminum	50 ug/mL
							Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Calcium	25 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Iron	50 ug/mL
							Lead	5 ug/mL
							Magnesium	25 ug/mL
							Manganese	5 ug/mL
							Nickel	5 ug/mL
							Potassium	50 ug/mL
							Selenium	5 ug/mL
							Sodium	50 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
					ICPC CAL B_00002	10 mL	Antimony	1 ug/mL
							Silver	1 ug/mL
.ICPC CAL A_00002	03/21/13		ACCU SCIENCE, Lot 1034727		(Purchased Reagent)		Aluminum	5000 ug/mL
							Arsenic	500 ug/mL
							Barium	500 ug/mL
							Beryllium	500 ug/mL
							Cadmium	500 ug/mL
							Calcium	2500 ug/mL
							Chromium	500 ug/mL
							Cobalt	500 ug/mL
							Copper	500 ug/mL
							Iron	5000 ug/mL
							Lead	500 ug/mL
							Magnesium	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Manganese	500 ug/mL
							Nickel	500 ug/mL
							Potassium	5000 ug/mL
							Selenium	500 ug/mL
							Sodium	5000 ug/mL
							Thallium	500 ug/mL
							Vanadium	500 ug/mL
							Zinc	500 ug/mL
.ICPC CAL B_00002	03/21/13		ACCU SCIENCE, Lot 1034727		(Purchased Reagent)		Antimony	100 ug/mL
							Silver	100 ug/mL
ICPC MIX CAL4_00012	09/13/12	08/13/12	5%HCL 5% HN03, Lot 2/1/2012	1000 mL	ICPC CAL A_00002	20 mL	Aluminum	100 ug/mL
							Arsenic	10 ug/mL
							Barium	10 ug/mL
							Beryllium	10 ug/mL
							Cadmium	10 ug/mL
							Calcium	50 ug/mL
							Chromium	10 ug/mL
							Cobalt	10 ug/mL
							Copper	10 ug/mL
							Iron	100 ug/mL
							Lead	10 ug/mL
							Magnesium	50 ug/mL
							Manganese	10 ug/mL
							Nickel	10 ug/mL
							Potassium	100 ug/mL
							Selenium	10 ug/mL
							Sodium	100 ug/mL
							Thallium	10 ug/mL
							Vanadium	10 ug/mL
							Zinc	10 ug/mL
					ICPC CAL B_00002	20 mL	Antimony	2 ug/mL
							Silver	2 ug/mL
.ICPC CAL A_00002	03/21/13		ACCU SCIENCE, Lot 1034727		(Purchased Reagent)		Aluminum	5000 ug/mL
							Arsenic	500 ug/mL
							Barium	500 ug/mL
							Beryllium	500 ug/mL
							Cadmium	500 ug/mL
							Calcium	2500 ug/mL
							Chromium	500 ug/mL
							Cobalt	500 ug/mL
							Copper	500 ug/mL
							Iron	5000 ug/mL
							Lead	500 ug/mL
							Magnesium	2500 ug/mL
							Manganese	500 ug/mL
							Nickel	500 ug/mL
							Potassium	5000 ug/mL
							Selenium	500 ug/mL
							Sodium	5000 ug/mL

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Thallium	500 ug/mL
							Vanadium	500 ug/mL
							Zinc	500 ug/mL
.ICPC CAL B_00002	03/21/13	ACCU SCIENCE, Lot 1034727			(Purchased Reagent)		Antimony	100 ug/mL
							Silver	100 ug/mL
ICPC MIX ICSA_00009	08/24/12	07/24/12	5% HCl/5%HN03, Lot 01-18-12	1000 mL	ICPC A_00003	20 mL	Aluminum	100 ug/mL
							Calcium	50 ug/mL
							Iron	100 ug/mL
							Magnesium	100 ug/mL
.ICPC A_00003	05/09/13	INORGANIC VENTURES, Lot F2-MEB420140			(Purchased Reagent)		Aluminum	5000 ug/mL
							Calcium	2500 ug/mL
							Iron	5000 ug/mL
							Magnesium	5000 ug/mL
ICPC MIX ICSA_00010	09/23/12	08/23/12	5% HCl/5%HN03, Lot 01-18-12	1000 mL	ICPC A_00003	20 mL	Aluminum	100 ug/mL
							Calcium	50 ug/mL
							Iron	100 ug/mL
							Magnesium	100 ug/mL
.ICPC A_00003	05/09/13	INORGANIC VENTURES, Lot F2-MEB420140			(Purchased Reagent)		Aluminum	5000 ug/mL
							Calcium	2500 ug/mL
							Iron	5000 ug/mL
							Magnesium	5000 ug/mL
ICPC MIX ICV_00010	08/24/12	07/24/12	5% HCl/5%HN03, Lot 1-18-12	1000 mL	ICP CAL1-1_00001	1 ug/mL	Antimony	1 ug/mL
					ICP CAL1-2_00001	5 ug/mL	Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Lead	5 ug/mL
							Manganese	5 ug/mL
							Nickel	5 ug/mL
							Selenium	5 ug/mL
							Silver	1 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
					ICP CAL2_00001	5 ug/mL	Aluminum	50 ug/mL
							Calcium	25 ug/mL
							Iron	50 ug/mL
							Magnesium	25 ug/mL
							Potassium	50 ug/mL
							Sodium	50 ug/mL
.ICP CAL1-1_00001	11/15/12	SPEX, Lot 5-24YP			(Purchased Reagent)		Antimony	1000 ug/mL
.ICP CAL1-2_00001	11/15/12	SPEX, Lot 5-25YP			(Purchased Reagent)		Arsenic	1000 ug/mL
							Barium	1000 ug/mL
							Beryllium	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cadmium	1000 ug/mL
							Chromium	1000 ug/mL
							Cobalt	1000 ug/mL
							Copper	1000 ug/mL
							Lead	1000 ug/mL
							Manganese	1000 ug/mL
							Nickel	1000 ug/mL
							Selenium	1000 ug/mL
							Silver	200 ug/mL
							Thallium	1000 ug/mL
							Vanadium	1000 ug/mL
							Zinc	1000 ug/mL
.ICP CAL2_00001	11/15/12		SPEX, Lot 5-27YP		(Purchased Reagent)		Aluminum	10000 ug/mL
							Calcium	5000 ug/mL
							Iron	10000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	10000 ug/mL
							Sodium	10000 ug/mL
ICPC MIX ICV_00011	09/15/12	08/15/12	5% HCl/5%HN03, Lot 1-18-12	1000 mL	ICP CAL1-1_00001	1 mL	Antimony	1 ug/mL
					ICP CAL1-2_00001	5 mL	Arsenic	5 ug/mL
							Barium	5 ug/mL
							Beryllium	5 ug/mL
							Cadmium	5 ug/mL
							Chromium	5 ug/mL
							Cobalt	5 ug/mL
							Copper	5 ug/mL
							Lead	5 ug/mL
							Manganese	5 ug/mL
							Nickel	5 ug/mL
							Selenium	5 ug/mL
							Silver	1 ug/mL
							Thallium	5 ug/mL
							Vanadium	5 ug/mL
							Zinc	5 ug/mL
					ICP CAL2_00001	5 mL	Aluminum	50 ug/mL
							Calcium	25 ug/mL
							Iron	50 ug/mL
							Magnesium	25 ug/mL
							Potassium	50 ug/mL
							Sodium	50 ug/mL
.ICP CAL1-1_00001	11/15/12		SPEX, Lot 5-24YP		(Purchased Reagent)		Antimony	1000 ug/mL
.ICP CAL1-2_00001	11/15/12		SPEX, Lot 5-25YP		(Purchased Reagent)		Arsenic	1000 ug/mL
							Barium	1000 ug/mL
							Beryllium	1000 ug/mL
							Cadmium	1000 ug/mL
							Chromium	1000 ug/mL
							Cobalt	1000 ug/mL
							Copper	1000 ug/mL
							Lead	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Manganese	1000 ug/mL
							Nickel	1000 ug/mL
							Selenium	1000 ug/mL
							Silver	200 ug/mL
							Thallium	1000 ug/mL
							Vanadium	1000 ug/mL
							Zinc	1000 ug/mL
.ICP CAL2_00001	11/15/12		SPEX, Lot 5-27YP		(Purchased Reagent)		Aluminum	10000 ug/mL
							Calcium	5000 ug/mL
							Iron	10000 ug/mL
							Magnesium	5000 ug/mL
							Potassium	10000 ug/mL
							Sodium	10000 ug/mL
PR_Spike_1_00005	06/13/13		Inorganic Ventures, Lot E2-MEB360037		(Purchased Reagent)		Antimony	100 ug/mL
							Arsenic	200 ug/mL
							B	200 ug/mL
							Mo	200 ug/mL
							Nb	50 ug/mL
							P	200 ug/mL
							Silver	20 ug/mL
							Sn	200 ug/mL
							Sulfur	2000 ug/mL
							Ti	200 ug/mL
							W	200 ug/mL
							Zr	200 ug/mL
PR_Spike_4_00005	07/02/13		Inorganic Ventures, Lot F2-MEB420055		(Purchased Reagent)		Aluminum	2000 ug/mL
							Barium	200 ug/mL
							Beryllium	200 ug/mL
							Bi	200 ug/mL
							Cadmium	200 ug/mL
							Calcium	2000 ug/mL
							Chromium	200 ug/mL
							Cobalt	200 ug/mL
							Copper	200 ug/mL
							Iron	2000 ug/mL
							Lead	200 ug/mL
							Li	200 ug/mL
							Magnesium	2000 ug/mL
							Manganese	200 ug/mL
							Nickel	200 ug/mL
							Potassium	2000 ug/mL
							Selenium	200 ug/mL
							Sm	200 ug/mL
							Sodium	2000 ug/mL
							Sr	200 ug/mL
							Th	200 ug/mL
							Thallium	40 ug/mL
							U	200 ug/mL
							Vanadium	200 ug/mL
							Zinc	200 ug/mL

Certificate of Analysis

5/14/12

BNA_SUT LB88729

Vials # 10503 - 10506

DESCRIPTION: Semi-volatile Acid/Base Surrogate Spike (Low)

CATALOG NO.: 861143 MFG DATE: Nov-2011

LOT NO.: LB88729 EXPIRATION DATE: Nov-2014

SOLVENT: METHANOL:METHYLENE CHLORIDE(90:10)

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
NITROBENZENE-D5	4165-60-0	99.9	100.0	101.2	+/-	1.15	LB47918
P-TERPHENYL-D14	1718-51-0	99.9	100.0	100.8	+/-	1.02	LB77930
PHENOL-D6	13127-88-3	99.9	150.0	151.5	+/-	1.54	LB77381
1,2-DICHLOROBENZENE-D4	2199-69-1	99.9	100.0	100.4	+/-	0.71	LB83146
2-CHLOROPHENOL D4	93951-73-6	99.4	150.0	151.1	+/-	0.77	LB74323
2-FLUOROBIPHENYL	321-60-8	99.9	100.0	101.1	+/-	0.68	LB83498
2-FLUOROPHENOL	367-12-4	99.9	150.0	151.3	+/-	1.01	LB83825
2,4,6-TRIBROMOPHENOL	118-79-6	99.9	150.0	158.1	+/-	2.33	LB81262

(1) Listed in alphabetical order.

(2) Determined by capillary GC-FID, unless otherwise noted.

(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware. Weights are corrected for analytes less than 98% pure.

(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

Elwood Doughty
Quality Control Supervisor

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.

SUPELCO® Analytical
595 North Harrison Road
Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

HG02722-11
Curve Stock
demagek
5% HNO3
Prep/Opened 11/3/2011
Exp(1): 10/15/2012
Exp(2): 10/15/2012

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Reference Materials Producer
CERT #2495.01
Chemical Testing
CERT #2495.02

Catalog Number: PLHG2-1X/1Y/1Z **Lot No.** 17-24HG

Description: 100 mg/L Mercury

Matrix: 5% HNO_3

12438
ID: HG CAL_00003
Exp 10/15/12 Prpd CS Open 11/03/11
Hg CAL 100PPM

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Value: 99.9 mg/L

Uncertainty Associated with Measurement: ±0.3 mg/L

Certified Value is Traceable to: 3133*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

The CRM is prepared gravimetrically using high purity Mercury Metal, Lot# 07101A. The certified value listed is the average of values obtained by classical wet assay and ICP spectrometer analysis.

Refer to side 2 for details of measurement uncertainties.

Classical Wet Assay: 100 mg/L

Method: This value was derived from dilution calculations of a Titrimetry analysis result of a Mercury concentrate. The concentrate was analyzed by EDTA titration using Ammonium Thiocyanate with Ferric Nitrate as indicator.

Instrumental Analysis by ICP Spectrometer: 99.9 mg/L

Uncertified Properties

Density: 1.025 g/mL @ 20.0°C

Trace Metallic Impurities in the Actual Solution via ICP/ICP-MS Analysis:

Element	mg/L	Element	mg/L	Element	mg/L	Element	mg/L	Element	mg/L	Element	mg/L
Ag	0.002	Bi	<0.001	Fe	0.02	Mn	<0.001	Rb	<0.001	Ti	<0.001
Al	0.03	Ca	<0.1	Ga	<0.001	Mo	0.005	Re	<0.001	Tl	<0.001
As	<0.001	Cd	<0.1	In	<0.001	Na	0.007	Sb	<0.001	V	<0.001
B	0.02	Co	<0.001	K	<0.1	Ni	<0.001	Si	<0.1	Zn	0.04
Ba	<0.001	Cr	0.002	Li	<0.001	Pb	<0.001	Sr	<0.001	Zr	<0.001
Be	<0.001	Cu	<0.001	Mg	0.02						

Balances are calibrated regularly with weight sets traceable to NIST #32856, #32857 and others. This CRM is guaranteed stable and accurate to +/- 0.5% of the certified value. This includes uncertainty components due to preparation, homogeneity by the most precise method, short term and long term stability as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly closed and stored under ambient laboratory conditions.

Date of Certification: ~~OCT~~ 2011 Certifying Officer: Vanaja Sivakumar

©2009 SPEX CertiPrep, Inc.

HG02389-11
QC Stock
Hemagek
5% HNO3
Prep/Opened: 10/5/2011
Exp(1): 10/5/2012
Exp(2): 10/5/2012

PLASMA-PURE ™

Standard Certificate

318
ID: HG QC_00001
Exp: 10/05/12 Prod: FC Open: 10/05/11
HG QC 100PPM

Catalog Number: 602-00064 **Lot Number:** 1187201

Starting Material: 99.9999% purity Hg metal **Diluent/Matrix:** 5% HNO_3

Preparation Date: Oct-11 **Expiration Date:** Oct-13

Element	Concentration
Hg	100.0 ± 0.2 µg/ml

Residual Impurities *	Concentration
None Detected	

* Impurities were determined via ICP Emission Spectroscopy. Only elements detected are reported.

Traceability

1. This standard is certified using wet chemistry assay procedures and/or plasma emission spectroscopy, traceable to primary or well-characterized secondary standards. Traceable to: NIST SRM 3133, Hg Lot#991304
2. Analytical balances are routinely calibrated using NIST weight sets.

Certification

Leeman Labs, Inc. certifies that PLASMA-PURE Standards have been formulated to the concentrations listed above (±0.5% of reported value). This certification does not apply and will be considered null and void if PLASMA-PURE Standards are used in a manner or in an environment not consistent with their intended purpose or are modified by the Customer in any manner.

Limitations

THE ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MECHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Limitation of Liability

In no event shall Leeman Labs, Inc. be liable for any indirect, incidental, special, or consequential damages, including loss of profits, revenue, or used incurred by Customer or any third party, whether in an action in contract or tort. Leeman Labs Inc's liability for damages hereunder shall in no event exceed the amounts paid for the PLASMA-PURE Standards.

QC Analyst: SMS

Date: October 3, 2011

NSAI ISO 9001:2000 QUALITY

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tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

CERTIFICATE OF ANALYSIS

8453
ID: IC Iodide Cal_00002
Exp: 04/18/13 Prpd: JB Open: 04/18/12
IC Iodide Cal

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01 ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** **Ion Chromatography 1000 µg/mL Iodide in H2O**

Catalog Number:	ICI1-1 and ICI1-5
Lot Number:	**E2-IOD01026**
Starting Material:	NH4I
Starting Material Purity (%):	99.0000
Starting Material Lot No.:	DQ08313TN
Matrix:	H2O

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1,000 ± 5 µg/mL - weighted mean

Certified Density: 1.000 g/mL (measured at 20 ± 1°C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = \frac{2\,[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 **TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1 **Assay Method #1** **999 ± 2 µg/mL**
Volhard NIST SRM 999b Lot Number: 999b

Assay Method #2 **1,001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

SCP SCIENCE

Providing Innovative Solutions to Analytical Chemists

ACCREDITED
Testing Laboratory CERT#2885.01

Certificate of Analysis

8620
ID: IC Iodide QC_00002
IC Iodide QC

1.0 DESCRIPTION:

	***Accu*SPEC – IC Standard – Iodide 1000 µg/ml**
Catalogue Number:	250-220-73x
Starting Material:	Potassium Iodide, ACS
Lot Number:	**S120220011**
Expiration Date:	**May 2013**
	(or 12 months after bottle is opened, whichever comes first)

2.0 CERTIFIED VALUES AND ASSOCIATED UNCERTAINTY:

Certified Value:	**999 µg/ml**
Method of analysis:	Iodometric Titration
Traceability:	NIST Standard Reference Materials: 136e

Note: The uncertainty of the certified value has been calculated from applicable uncertainty contributors (u_i) including uncertainty established during characterization of the material (u_{char}), the between bottle variation (u_{bb}), short-term stability (u_{sts}) and long-term stability (u_{lts}) according to the model $uc = \sqrt{(u_{char}^2 + u_{bb}^2 + u_{sts}^2 + u_{lts}^2)}$. This combined uncertainty has been further multiplied by a coverage factor (k) of 2 to provide a 95% confidence interval.

3.0 REFERENCE VALUES:

None to report.

4.0 APPROVAL AND DATE OF CERTIFICATION:

Certification Approval:	Daniel Boisvert, chemist
Certification Date:	February 23, 2012.

Daniel Boisvert

INORGANIC VENTURES™
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CERTIFICATE OF ANALYSIS

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1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 663.01 ACCREDITED Reference Material Producer Certificate 663.02

2.0 **DESCRIPTION OF CRM** Custom Solution

368
ID ICP AB 2_00001
Exp 01/01/13 Prep/Opened 01/03/12
ICP AB 2

MT00013-12
ICP CAL 7 conc.
buffingtonc
5% HNO3, 1.1% HF
Prep/Opened: 1/3/2012
Exp(1): 1/3/2013
Exp(2): 2/1/2013

Catalog No.: STLMO-CAL-7

Lot Number: **E2-MEB406067**

Matrix: 1.1% HF(v/v), 5% HNO3(v/v)

100 µg/mL ea:
Ag, Mo, Nb, Sb, Si, Sn, Zr,

50 µg/mL ea:
Ti, W

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	**100.0 ± 0.8 µg/mL**	**Molybdenum, Mo**	**100.0 ± 0.6 µg/mL**	**Niobium, Nb**	**100.0 ± 1.0 µg/mL**
Silicon, Si	**100.0 ± 0.5 µg/mL**	**Silver, Ag**	**100.0 ± 0.6 µg/mL**	**Tin, Sn**	**100.0 ± 0.7 µg/mL**
Titanium, Ti	**50.04 ± 0.34 µg/mL**	**Tungsten, W**	**50.03 ± 0.30 µg/mL**	**Zirconium, Zr**	**100.0 ± 0.7 µg/mL**

Certified Density: 1.031 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = \frac{2\,[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors
(Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 **TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Calculated		See Sec. 4.2	Ag	ICP Assay	3151	992212
Mo	Calculated		See Sec. 4.2	Mo	ICP Assay	3134	891307
Nb	Gravimetric		See Sec. 4.2	Nb	ICP Assay	3137	991810
Sb	Calculated		See Sec. 4.2	Sb	ICP Assay	3102A	061229
Si	Calculated		See Sec. 4.2	Si	ICP Assay	3150	071204
Sn	Calculated		See Sec. 4.2	Sn	ICP Assay	3161a	070330
Ti	Calculated		See Sec. 4.2	Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2	W	ICP Assay	3163	080331
Zr	Calculated		See Sec. 4.2	Zr	ICP Assay	3169	071226

4.2 BALANCE CALIBRATION - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 THERMOMETER CALIBRATION - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 GLASSWARE CALIBRATION - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to in-house procedure IV-MPM-004 and is guaranteed to be homogeneous.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI Certificate Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: December 28, 2011

Expiration Date: EXPIRES 01 FEB 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Danny Feeny, Product Documentation Technician

Certificate Approved By: Brian Alexander, PhD., Quality Control Supervisor

Certifying Officer: Paul Gaines, PhD., Senior Technical Director

584

ID: ICP CAL1-1_00001

Exp: 11/15/1 / Prpd: 11/ Open: 11/20/11

61T

MT02686-11
ICP NEW CAL 1 33
buffingtonc
2%HNO3 Tf. Tart. Aci
Prep/Opened: 11/20/2011
Exp(1): 11/15/2012
Exp(2): 11/15/2012

SPEXertificate®

Certificate of Reference Material

ACCREDITED

Reference Materials Producer
CERT #2495.01
Chemical Testing
CERT #2495.02

Catalog Number: XITMO-33 **Lot No.** 5-24YP

Description: Custom Assurance Standard

Matrix: 2% HNO_3 / Tr. Tart. Acid / Tr. HF

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM
Sb	1000 mg/L	±5 mg/L	3102a*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# MULTI1LE

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly closed and stored under ambient laboratory conditions.

Date of Certification: NOV 2011 Certifying Officer: Vanaja Sivakumar

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Report of Certification

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 quality system consistent with the following guides:

- ISO 9001: Quality management systems – Requirements – certified by UL-DQS
- ISO 17025: General requirements for the competence of testing and calibration laboratories – accredited by A2LA
- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where x=measured value, U=expanded uncertainty
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
  U_c is obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:

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www.spexcertiprep.com • E-mail: crmsales@spexcsp.com
Phone: 1-800-LAB-SPEX • Fax: 732-603-9647

Accredited to 17025 & Guide 34 ISO Certified to 9001

585
ID: ICP CAL1-2_00001
Exp: 11/15/12 Post EV Open: 11/20/11
61T

MT02689-11
ICP NEW CAL 1 34
buffingtono
10% HNO3
Prep/Opened: 11/20/2011
Exp(1): 11/15/2012
Exp(2): 11/15/2012

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Certificate of Reference Material

ACCREDITED
Reference Materials Producer
CERT #2495.01
Chemical Testing
CERT #2495.02

Catalog Number: XITMO-34 **Lot No.** 5-25YP

Description: Custom Assurance Standard

Matrix: 10% HNO_3

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
As	1000 mg/L	±5 mg/L	3103a*	Ni	1000 mg/L	±5 mg/L	3136*
Ba	1000 mg/L	±5 mg/L	3104a*	Pb	1000 mg/L	±5 mg/L	3128*
Be	1000 mg/L	±5 mg/L	3105a*	Se	1000 mg/L	±5 mg/L	3149*
Cd	1000 mg/L	±5 mg/L	3108*	Tl	1000 mg/L	±5 mg/L	3158*
Co	1000 mg/L	±5 mg/L	3113*	V	1000 mg/L	±5 mg/L	3165*
Cr	1000 mg/L	±5 mg/L	3112a*	Zn	1000 mg/L	±5 mg/L	3168a*
Cu	1000 mg/L	±5 mg/L	3114*	Ag	200 mg/L	±1 mg/L	3151*
Mn	1000 mg/L	±5 mg/L	3132*				

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# MULTI1LE

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly closed and stored under ambient laboratory conditions.

Date of Certification: NOV 2011 Certifying Officer: Vanaja Sivakumar

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Report of Certification

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- ISO Guide 31: Reference Materials – Contents of certificates and labels
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Instructions for Use:

Primary usage of this CRM is in neat form or diluted serially with matrix of a purity at or greater than the purity of the original matrix solution. If dilution is required the diluent must be compatible with all certified analytes and contain stabilizers appropriate for the period of intended use. The CRM can also be used as a spike or with a spike, again with appropriate compatibility considerations. All solutions should be thoroughly mixed, by shaking, prior to use and never pipetted directly from the bottle. All surfaces that come in contact with the solution must be thoroughly cleaned and leached prior to use. Dilutions should be performed only with Class A volumetric glassware.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where x=measured value, U=expanded uncertainty
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
  U_c is obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

586
ID: ICP CAL2_00001
Exp: 11/15/12 Opd: PV Open: 11/20/11
61T

MT02690-11
ICP NEW CAL 2 35
buffingtonc
10% HNO3
Prep/Opened: 11/20/2011
Exp(1): 11/15/2012
Exp(2): 11/15/2012

SPEXertificate®

Certificate of Reference Material

ACCREDITED
Reference Materials Producer
CERT #2495.01
Chemical Testing
CERT #2495.02

Catalog Number: XITMO-35 **Lot No.** 5-27YP

Description: Custom Assurance Standard

Matrix: 10% HNO_3

This **ASSURANCE®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for inorganic spectroscopic instrumentation such as ICP-OES, DCP, AA, ICP-MS, and XRF. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

The CRM is prepared from high purity single element concentrates of individual elements using Class A laboratory ware to give precise concentrations.

Instrumental Analysis by ICP Spectrometer:

Analyte	Labeled	Uncertainty	SRM	Analyte	Labeled	Uncertainty	SRM
Al	10000 mg/L	±50 mg/L	3101a*	Na	10000 mg/L	±50 mg/L	3152a*
Fe	10000 mg/L	±50 mg/L	3126a*	Ca	5000 mg/L	±30 mg/L	3109a*
K	10000 mg/L	±50 mg/L	3141a*	Mg	5000 mg/L	±30 mg/L	3131a*

* - indicates NIST SRM † - indicates SPEX CertiPrep CRM (when NIST SRM is not available)

SPEX CertiPrep Reference Multi: Lot# MULTI1LE

Balances are calibrated regularly with weight sets traceable to NIST#s 32856, 32867 and others. This CRM is guaranteed stable and accurate to ±0.5% of the labeled value. This includes uncertainty components due to preparation, measurement, homogeneity, short-term and long-term stability, as well as transpiration loss. This guarantee is valid for a period of one year from the date of certification only when the material is kept tightly closed and stored under ambient laboratory conditions.

Date of Certification: NOV 2011 Certifying Officer: Vanaja Sivakumar

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- ISO Guide 34: General requirements for the competence of reference material producers – accredited by A2LA
- ISO Guide 31: Reference Materials – Contents of certificates and labels
- Guide To The Expression Of Uncertainty In Measurement 1997
- EURACHEM/CITAC Guide: Quantifying Uncertainty in Analytical Measurement – Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference materials producers
- ISO/REMCO N280

Material Source:

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Instructions for Use:

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Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, analytical instrumentation and personnel have been qualified prior to use. The highest purity acids applicable, 18 megohm, double deionized water, acid-leached triple-rinsed bottles (where appropriate), and Class A/calibrated volumetrics have been used in all preparations.

Homogeneity:

The homogeneity of the CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4600-HOMOGEN-1A. Since the product is highly homogeneous, any sample size taken for analysis would be within the uncertainty budget. This is consistent with the intended use of the CRM.

Statistical Estimator and Confidence Limits:

The certified value 'X' listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where x=measured value, U=expanded uncertainty
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
  U_c is obtained by combining the individual element standard uncertainty components u_i, and $u_c = \sqrt{\sum u_i^2}$

Certification Traveler Report:

All certified values reported were derived from the Traveler Report (SPEX CertiPrep's traceability documentation) identified by the lot number of this CRM. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further assistance, please contact the Sales Support Department at crmsales@spexcsp.com.

Legal Notice:

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Accredited to 17025 & Guide 34 ISO Certified to 9001

INORGANIC VENTURES™
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CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 **DESCRIPTION OF CRM** Custom Solution

Catalog No.: ICSA-6500

Lot Number: **F2-MEB420140**

Matrix: 5% HNO3(v/v)

9991
ID: ICPC A_00003
Exp: 05/09/13 Prpd: CB Open: 05/09/12
6500

5,000 µg/mL ea:
Al, Fe, Mg,

2,500 µg/mL ea:
Ca

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Aluminum, Al	5,000 ± 35 µg/mL	Calcium, Ca	2,501 ± 16 µg/mL	Iron, Fe	5,000 ± 34 µg/mL
Magnesium, Mg	5,000 ± 33 µg/mL				

Certified Density: 1.110 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	060502	Al	EDTA	928	928
Ca	ICP Assay	3109a	050825	Ca	EDTA	928	928
Fe	ICP Assay	3126a	051031	Fe	EDTA	928	928
Mg	ICP Assay	3131a	050302	Mg	EDTA	928	928

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: May 03, 2012

Expiration Date: EXPIRES 01-2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Donna Senn
Product Documentation Technician

Certificate Approved By: Brian Alexander
PhD., Quality Control Supervisor

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

6116
ID: ICPC CAL A_00002
Exp: 03/21/13 Prpd: CB Open: 03/21/12
6500

MT00641-12
ICP 6500 CAL234 A
buffingtonc
5% HNO3
Prep/Opened: 3/21/2012
Exp(1): 3/21/2013
Exp(2): 4/1/2013

AccuScience
15520 Oakwood Street
Pierrefonds QC Canada H9H1Y2
877-723-2220
www.accuscience.com

6117
ID: ICPC CAL B_00002
Exp: 03/21/13 Prpd: CB Open: 03/21/12
6500

MT00642-12
ICP 6500 CAL234 B
buffingtonc
5% HNO3
Prep/Opened: 3/21/2012
Exp(1): 3/21/2013
Exp(2): 4/1/2013

Certificate of Analysis

Rev

Description: Custom Mix, CAL234 6500, 500 ml

S, Sb, Ag, Mo, Si, Sn, and Ti shipped separately

Catalog No:	Matrix:	Lot No:	Storage:	Exp. Date:	Date Received:
ACSM1268-01-500ML	5% HNO3	1034727	Ambient	4/1/2013	

Element	Symbol	CAS No	Purity %	Source Lot No	Concentration mg/L
Arsenic	As	7440-38-2	99.999	7002.46.2	500
Barium	Ba	7440-39-3	99.999	7004.29.1	500
Beryllium	Be	7440-41-7	99.999	7005.46.4	500
Bismuth	Bi	7440-69-9	99.999	7040.46.2	500
Boron	B	7440-42-8	99.999	7003.46.4	500
Cadmium	Cd	7440-43-9	99.999	7007.46.2	500
Chromium	Cr	7440-47-3	99.998	7009.46.2	500
Cobalt	Co	7440-48-4	99.999	7008.46.7	500
Copper	Cu	7440-50-8	99.9999	7011.46.2	500
Lead	Pb	7439-92-1	99.999	7023.29.1	500
Lithium	Li	7439-93-2	99.999	7015.46.4	500
Manganese	Mn	7439-96-5	99.99	7017.46.2	500
Nickel	Ni	7440-02-0	99.999	7021.46.7	500
Phosphorus	P	7723-14-0	99.999	7022.46.9	500
Selenium	Se	7782-49-2	99.999	7027.46.4	500
Strontium	Sr	7440-24-6	99.999	7030.46.2	500
Thallium	Tl	7440-28-0	99.999	7034.29.1	500
Thorium	Th	7440-29-1	99.99	7031.46.2	500
Uranium	U	7440-61-1	99.8	7035.330.1	500
Vanadium	V	7440-62-2	99.999	7036.46.3	500
Zinc	Zn	7440-66-6	99.999	7037.46.2	500
Calcium	Ca	7440-70-2	99.997	7006.29.1	2500
Magnesium	Mg	7439-95-4	99.99	7016.46.4	2500
Aluminum	Al	7429-90-5	99.999	7001.46.5	5000
Potassium	K	7440-09-7	99.999	7013.46.8	5000
Iron	Fe	7439-89-6	99.995	7012.46.11	5000
Antimony	Sb	7440-36-0	99.999	7026.46.3	100
Silver	Ag	7440-22-4	99.9999	7278.46.1	100

Certified By: Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

Molybdenum	Mo	7439-98-7	99.999	7018.29.2	500
Silicon	Si	7440-21-3	99.999	7028.46.11	500
Tin	Sn	7440-31-5	99.999	7029.46.2	500
Titanium	Ti	7440-32-6	99.995	7033.38.3	500
Sulfur	S	7704-34-9	95.9	7025.43.5	5000
Sodium	Na	7440-23-5	99.999	7019.46.4	5000

Certified By: Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricllly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

6116
ID: ICPC CAL A_00002
Exp: 03/21/13 Prpd: CB Open: 03/21/12
6500

MT00641-12
ICP 6500 CAL234 A
buffingtonc
5% HNO3
Prep/Opened: 3/21/2012
Exp(1): 3/21/2013
Exp(2): 4/1/2013

AccuScience
15520 Oakwood Street
Pierrefonds QC Canada H9H1Y2
877-723-2220
www.accuscience.com

6117
ID: ICPC CAL B_00002
Exp: 03/21/13 Prpd: CB Open: 03/21/12
6500

MT00642-12
ICP 6500 CAL234 B
buffingtonc
5% HNO3
Prep/Opened: 3/21/2012
Exp(1): 3/21/2013
Exp(2): 4/1/2013

Certificate of Analysis

Rev

Description: Custom Mix, CAL234 6500, 500 ml

S, Sb, Ag, Mo, Si, Sn, and Ti shipped separately

Catalog No:	Matrix:	Lot No:	Storage:	Exp. Date:	Date Received:
ACSM1268-01-500ML	5% HNO3	1034727	Ambient	4/1/2013	

Element	Symbol	CAS No	Purity %	Source Lot No	Concentration mg/L
Arsenic	As	7440-38-2	99.999	7002.46.2	500
Barium	Ba	7440-39-3	99.999	7004.29.1	500
Beryllium	Be	7440-41-7	99.999	7005.46.4	500
Bismuth	Bi	7440-69-9	99.999	7040.46.2	500
Boron	B	7440-42-8	99.999	7003.46.4	500
Cadmium	Cd	7440-43-9	99.999	7007.46.2	500
Chromium	Cr	7440-47-3	99.998	7009.46.2	500
Cobalt	Co	7440-48-4	99.999	7008.46.7	500
Copper	Cu	7440-50-8	99.9999	7011.46.2	500
Lead	Pb	7439-92-1	99.999	7023.29.1	500
Lithium	Li	7439-93-2	99.999	7015.46.4	500
Manganese	Mn	7439-96-5	99.99	7017.46.2	500
Nickel	Ni	7440-02-0	99.999	7021.46.7	500
Phosphorus	P	7723-14-0	99.999	7022.46.9	500
Selenium	Se	7782-49-2	99.999	7027.46.4	500
Strontium	Sr	7440-24-6	99.999	7030.46.2	500
Thallium	Tl	7440-28-0	99.999	7034.29.1	500
Thorium	Th	7440-29-1	99.99	7031.46.2	500
Uranium	U	7440-61-1	99.8	7035.330.1	500
Vanadium	V	7440-62-2	99.999	7036.46.3	500
Zinc	Zn	7440-66-6	99.999	7037.46.2	500
Calcium	Ca	7440-70-2	99.997	7006.29.1	2500
Magnesium	Mg	7439-95-4	99.99	7016.46.4	2500
Aluminum	Al	7429-90-5	99.999	7001.46.5	5000
Potassium	K	7440-09-7	99.999	7013.46.8	5000
Iron	Fe	7439-89-6	99.995	7012.46.11	5000
Antimony	Sb	7440-36-0	99.999	7026.46.3	100
Silver	Ag	7440-22-4	99.9999	7278.46.1	100

Certified By: Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

Molybdenum	Mo	7439-98-7	99.999	7018.29.2	500
Silicon	Si	7440-21-3	99.999	7028.46.11	500
Tin	Sn	7440-31-5	99.999	7029.46.2	500
Titanium	Ti	7440-32-6	99.995	7033.38.3	500
Sulfur	S	7704-34-9	95.9	7025.43.5	5000
Sodium	Na	7440-23-5	99.999	7019.46.4	5000

Certified By: Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricllly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

7972
ID: ICPC LLC 2_00003
Exp: 04/16/13 Prpd: RV Open: 04/16/12
6500

7971
ID: ICPC LLC 1_00002
Exp: 04/16/13 Prpd: RV Open: 04/16/12
6500

AccuScience
15520 Oakwood Street
Pierrefonds QC Canada H9H1Y2
877-723-2220
www.accuscience.com

Certificate of Analysis

Rev 0

Description: LLC-6500, #[illegible], Various Concentrations, 500 ml
S shipped separately

Catalog No:	Matrix:	Lot No:	Storage:	Exp. Date:	Date Received:
ACSS1143-01-500ML	2% HNO3 + Tr HF	1035225	Ambient	5/1/2013	

Element	Symbol	CAS No	Purity %	Source Lot No	Concentration mg/L
Beryllium	Be	7440-41-7	99.999	7005.46.4	1
Cadmium	Cd	7440-43-9	99.999	7007.46.2	1
Strontium	Sr	7440-24-6	99.999	7030.46.2	1
Silver	Ag	7440-22-4	99.9999	7278.46.1	2
Arsenic	As	7440-38-2	99.999	7002.46.4	2
Chromium	Cr	7440-47-3	99.998	7009.46.2	2
Lead	Pb	7439-92-1	99.999	7023.29.1	2
Antimony	Sb	7440-36-0	99.999	7026.46.2	2
Manganese	Mn	7439-96-5	99.99	7017.46.2	3
Selenium	Se	7782-49-2	99.999	7027.46.3	3
Titanium	Ti	7440-32-6	99.995	7033.38.2	4
Thallium	Tl	7440-28-0	99.999	7034.29.1	4
Zinc	Zn	7440-66-6	99.999	7037.46.4	4
Copper	Cu	7440-50-8	99.9999	7011.46.3	5
Molybdenum	Mo	7439-98-7	99.999	7018.29.1	8
Nickel	Ni	7440-02-0	99.999	7021.46.7	8
Barium	Ba	7440-39-3	99.999	7004.29.1	10
Cobalt	Co	7440-48-4	99.999	7008.46.6	10
Lithium	Li	7439-93-2	99.999	7015.46.5	10
Vanadium	V	7440-62-2	99.999	7036.46.3	10
Boron	B	7440-42-8	99.999	7003.46.4	20
Iron	Fe	7439-89-6	99.998	7012.29.4	20
Tin	Sn	7440-31-5	99.999	7029.46.2	20
Aluminum	Al	7429-90-5	99.9995	7001.46.7	40
Bismuth	Bi	7440-69-9	99.999	7040.46.2	40
Thorium	Th	7440-29-1	99.99	7031.46.2	40
Phosphorus	P	7723-14-0	99.999	7022.46.9	50
Silicon	Si	7440-21-3	99.999	7028.46.11	80

Certified By: Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

Uranium	U	7440-61-1	99.8	7035.330.1	100
Calcium	Ca	7440-70-2	99.997	7006.29.1	200
Magnesium	Mg	7439-95-4	99.99	7016.46.4	200
Sodium	Na	7440-23-5	99.999	7020.46.4	200
Potassium	K	7440-09-7	99.999	7013.46.8	1000
Sulfur	S	7704-34-9	95.9	7025.43.5	1000

Certified By: Amber Woods

Amber Woods

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricllly.

Manufacturer's Quality System
Audited & Registered
by NSF-ISR to ISO 9001:2000

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 • USA
inorganicventures.com

12364
ID: PR_Spike_1_00005
Exp: 09/13/13 Prod: RW Open 06/13/12
Spike 1

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 **DESCRIPTION OF CRM** Custom Solution

Catalog No.: TA-PREP-1-REV2

Lot Number: **F2-MEB425090**

Matrix: 1.3% HF(v/v), 5% HNO3(v/v)

2,000 µg/mL ea:
S,

200 µg/mL ea:
As, B, Mo, P, Sn, Ti, W, Zr,

100 µg/mL ea:
Sb,

50 µg/mL ea:
Nb,

20 µg/mL ea:
Ag

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE	ELEMENT	CERTIFIED VALUE
Antimony, Sb	100.0 ± 0.8 µg/mL	Arsenic, As	200.0 ± 1.3 µg/mL	Boron, B	200.1 ± 1.4 µg/mL
Molybdenum, Mo	200.0 ± 1.5 µg/mL	Niobium, Nb	49.99 ± 0.49 µg/mL	Phosphorus, P	200.0 ± 1.3 µg/mL
Silver, Ag	20.00 ± 0.13 µg/mL	Sulfur, S	2,000 ± 11 µg/mL	Tin, Sn	200.2 ± 1.3 µg/mL
Titanium, Ti	200.1 ± 1.3 µg/mL	Tungsten, W	200.1 ± 1.1 µg/mL	Zirconium, Zr	200.0 ± 1.3 µg/mL

Certified Density: 1.033 g/mL (measured at 20 ± 1° C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = 2\,[\,\Sigma(s_i)^2\,]^{1/2}$$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements
2 = the coverage factor.
$[\,\Sigma(s_i)^2\,]^{1/2}$ = The square root of the sum of the squares of the most common errors (where 's' stands for the standard deviation) from instrumental measurement, density, NIST SRM uncertainty, weighing, dilution to volume, homogeneity, long term stability and short term stability.

4.0 TRACEBILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1 ASSAY INFORMATION

ELEMENT	METHOD	NIST SRM#	SRM LOT#	ELEMENT	METHOD	NIST SRM#	SRM LOT#
Ag	Calculated		See Sec. 4.2	Ag	ICP Assay	3151	992212
As	Calculated		See Sec. 4.2	As	ICP Assay	3103a	010713
B	ICP Assay	3107	070514	Mo	Calculated		See Sec. 4.2
Mo	ICP Assay	3134	891307	Nb	Gravimetric		See Sec. 4.2
Nb	ICP Assay	3137	991810	P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L	S	ICP Assay	3154	892205
S	Acidimetric	84k	84k	Sb	Calculated		See Sec. 4.2
Sb	ICP Assay	3102A	061229	Sn	Calculated		See Sec. 4.2
Sn	ICP Assay	3161a	070330	Ti	ICP Assay	3162a	060808
W	Calculated		See Sec. 4.2	W	ICP Assay	3163	080331
Zr	Calculated		See Sec. 4.2	Zr	ICP Assay	3169	071226

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES IN µg/mL - N/A

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Electrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep **Tightly** sealed when not in use. Store and use at 20 ± 4°C. **Do Not** pipette from the container. **Do Not** return portions removed from pipetting to container.

Element Specific Information - For specific information regarding any element: Contact technical staff.

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

HF Note: This standard should not be prepared or stored in glass.

Low Silver Note: This solution contains "LOW" levels of Silver. Please store this entire bottle inside a sealed glass jar.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous.

Inorganic Ventures homogeneity data indicate that the end user should take a minimum sample size of 0.2mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 **ISO 9001 Quality Management System Registration**
- QMI File Number 010105

10.2 **ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"**
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 **ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"**
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 **10CFR50 Appendix B - Nuclear Regulatory Commission**
- Domestic Licensing of Production and Utilization Facilities

10.5 **10CFR21 - Nuclear Regulatory Commission**
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability. Transpiration studies of chemically-stable solutions performed at the manufacturer's facility show a CRM shelf-life of twenty one months for solutions packaged in 125-mL low density polyethylene bottles. When stored under special conditions that minimize transpiration and instability, the shelf life can be extended past this limit.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: June 08, 2012

Expiration Date: EXPIRES 01-2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By: Christy Shortridge
Product Documentation Technician

Christy Shortridge

Certificate Approved By: Brian Alexander
PhD., Quality Control Supervisor

Brian Alexander

Certifying Officer: Paul Gaines
PhD., Senior Technical Director

Paul R Gaines

INORGANIC VENTURES™
300 Technology Drive
Christiansburg, VA 24073 • USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 • 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34 "General Requirements for the Competence of Reference Material Producers" and ISO 9001 registered manufacturer. Our manufacturing laboratory is accredited to ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories."

ACCREDITED Testing Laboratory Certificate 883.01

ACCREDITED Reference Material Producer Certificate 883.02

2.0 DESCRIPTION OF CRM **10000 µg/mL Sulfur in H2O**

Catalog Number:	CGS10-1, CGS10-2 and CGS10-5
Lot Number:	**E2-S01120**
Starting Material:	H2SO4
Starting Material Purity (%):	100.0000
Starting Material Lot No:	H44F03
Matrix:	H2O

12507
ID: STD S 10K_00002
Exp: 06/13/13 Prod: KE Open: 06/13/12
S 10,000PPM

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Concentration: 10,031 ± 58 µg/mL - weighted mean

Certified Density: 1.018 g/mL (measured at 20 ± 1°C)

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n}$$

$$\text{Uncertainty } (\pm) = \frac{2\,[(\sum s_i)^2]^{1/2}}{(n)^{1/2}}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume and the fixed error reported on the NIST SRM certificate of analysis)

4.0 TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS

· "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)

· This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

4.1 **Assay Method #1** **10,026 ± 20 µg/mL**
Acidimetric NIST SRM 84L Lot Number: 84L

Assay Method #2 **10,032 ± 44 µg/mL**
ICP Assay NIST SRM 3154 Lot Number: 892205

4.2 **BALANCE CALIBRATION** - All analytical balances are calibrated yearly by an A2LA accredited calibration laboratory and are traceable to a class E 2 analytical weight set with NIST Traceability. All balances are checked daily using an in-house procedure. The weights used for testing are annually compared to master weights and are traceable to the National Institute of Standards and Technology (NIST).

4.3 **THERMOMETER CALIBRATION** - All thermometers are NIST traceable through thermometers that are calibrated by an A2LA accredited calibration laboratory.

4.4 **GLASSWARE CALIBRATION** - An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM's.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP/MS AND ICP-OES IN µg/mL

CRM's solutions are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Al	0.000101	M	Dy < 0.000060	O	Li < 0.000160	M	Pr < 0.000003	M	Te < 0.000300
M	Sb < 0.000005	M	Er < 0.000050	M	Lu < 0.000004	M	Re < 0.000010	M	Tb < 0.000003	
M	As < 0.000100	M	Eu < 0.000030	O	Mg < 0.000040	M	Rh < 0.000010	M	Tl < 0.000010	
M	Ba < 0.000100	M	Gd < 0.000010	M	Mn < 0.000040	M	Rb < 0.000010	M	Th < 0.000010	
O	Be < 0.002000	M	Ga < 0.000010	O	Hg < 0.011000	M	Ru < 0.000020	M	Tm < 0.000004	
M	Bi < 0.000004	M	Ge < 0.000060	M	Mo < 0.000020	M	Sm < 0.000010	M	Sn < 0.000050	
O	B < 0.009900	M	Au < 0.000030	M	Nd < 0.000020	M	Sc < 0.000100	M	Ti < 0.000500	
M	Cd < 0.000030	M	Hf < 0.000020	O	Ni < 0.002300	O	Se < 0.006200	M	W < 0.000100	
O	Ca	0.000084	M	Ho < 0.000005	M	Nb < 0.000005	O	Si < 0.004100	M	U < 0.000020
M	Ce < 0.000050	M	In < 0.000100	n	Os	M	Ag < 0.000020	M	V < 0.000020	
M	Cs < 0.000003	M	Ir < 0.000050	M	Pd < 0.000050	O	Na	0.000101	M	Yb < 0.000010
M	Cr < 0.000050	O	Fe < 0.001100	O	P < 0.004800	M	Sr < 0.000005	M	Y < 0.000400	
M	Co < 0.000030	M	La < 0.000005	M	Pt < 0.000020	s	S	O	Zn < 0.000400	
M	Cu < 0.000060	M	Pb < 0.000030	O	K < 0.001700	M	Ta < 0.000070	M	Zr < 0.000050	

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

For the calibration of analytical instruments including but not limited to the following:
HPLC, IC, TLC, ISE, IR, NMR, UV/VIS, MS, Capillary Eletrophoresis, Potentiometry, Wet Chemistry and Voltammetry
For the validation of analytical methods
For the preparation of "working reference samples"
For interference studies and the determination of correction coefficients
For detection limit and linearity studies
For additional intended uses, contact Technical Staff

This CRM was manufactured using 18 megohm doubly deionized water that has been filtered through a 0.2 micron filter.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

Storage & Handling - Keep tightly sealed when not in use. Store and use at 20 ± 4°C. Do not pipet from container. Do not return portions removed for pipetting to container.

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 32.066; +6; 6; (O=)2 S(OH)2

Chemical Compatibility - Soluble in HCl, HNO3, H3PO4 and HF aqueous matrices water and NH4OH . Stable with all metals and inorganic anions at low to moderate ppm levels under acidic conditions except Ba and Pb and to a lesser extent Sr, and Ca.

Stability - 2-100 ppb levels- stability unknown- in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in LDPE container.

S Containing Samples (Preparation and Solution) - We most often get questions about the determination of S in Rocks, Silicates and insoluble sulfates (the finely powered sample is fused in a Pt0 crucible with $6 times its weight of Na2CO3 + 0.5 grams KNO3. The fuseate is extracted with water. Any BaSO4 present in the sample is transposed by the carbonate fusion to the BaCO3 which is left behind in the water-insoluble residue. If PbSO4 is present the fuseate should be boiled with a sodium carbonate saturated with CO2 solution for 1 hour or more where the PbSO4 will be transposed to the water insoluble carbonate which can be filtered off. Boiling the fuseate with a saturated carbonate solution is good insurance for samples containing Ba, Sr, and Ca. The Ba, Pb, Sr, Ca, free filtrate can be acidified and measured by ICP.)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	Estimated D.L.	Order	Type	Interferences (underlined indicates severe)
ICP-OES 166.669nm	0.2 / 0.19 µg/mL	1	atom	Si, B
ICP-OES 182.034 nm	0.3 / 0.024 µg/mL	1	atom	
ICP-OES 143.328 nm	0.4 / 0.035 µg/mL	1	atom	
ICP-MS 32 amu	30,000 ppt	n/a	M+	16O2, 14N18O, 15N17O, 14N17O1H, 15N16O1H

Uranium Note: If uranium is present in this standard, it is natural abundance unless specified in Section 3.0.

8.0 HAZARDOUS INFORMATION - Please refer to the enclosed Material Safety Data sheet for information regarding this CRM.

9.0 HOMOGENEITY - This solution was mixed according to an in house procedure and is guaranteed to be homogeneous.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration
- QMI File Number 010105

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration"
- Chemical Testing - Accredited A2LA Certificate Number 883.01

10.3 ISO/IEC Guide 34 "General Requirements for the Competence of Reference Material Producers"
- Reference Materials Production - Accredited A2LA Certificate Number 883.02

10.4 10CFR50 Appendix B - Nuclear Regulatory Commission
- Domestic Licensing of Production and Utilization Facilities

10.5 10CFR21 - Nuclear Regulatory Commission
- Reporting Defects and Non-Compliance

11.0 DATE OF CERTIFICATION AND PERIOD OF VALIDITY

11.1 Shelf Life - The period of time during which the concentration of the analyte(s) in a properly packaged, unopened, and unused standard stored under environmentally controlled and monitored conditions will remain within the specified uncertainty range. Shelf life is limited primarily by transpiration (loss of water from the solution) and infrequently, by chemical instability.

11.2 Expiration Date - The date after which a CRM should not be used. Routine laboratory use of a CRM increases transpiration losses and the chance of contamination which affect the integrity of the CRM and limit its useful life. Manufacturer concurs with state and federal regulatory agencies' recommendations that solution standards be assigned a one-year expiration date.

11.3 Chemical Stability - Studies have been conducted on this or similar CRMs and it has been demonstrated that this CRM is chemically stable for a period of not less than two years provided the "Storage & Handling" conditions are followed that are described in section 7.0.

Certification Date: November 11, 2011

Expiration Date:

EXPIRES
01 2013

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:	Danny Feeny Product Documentation Technician	
Certificate Approved By:	Brian Alexander PhD., Quality Control Supervisor	
Certifying Officer:	Paul Gaines PhD., Senior Technical Director	

Certification Summary

Client: Engineering Management Support, Inc.
Project/Site: West Lake Landfill

TestAmerica Job ID: 160-437-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica St. Louis	Alaska	State Program	10	MO54-08
TestAmerica St. Louis	California	NELAC	9	2542
TestAmerica St. Louis	Connecticut	State Program	1	PH-0241
TestAmerica St. Louis	Florida	NELAC	4	E87689
TestAmerica St. Louis	Illinois	NELAC	5	200023
TestAmerica St. Louis	Iowa	State Program	7	373
TestAmerica St. Louis	Kansas	NELAC	7	E-10236
TestAmerica St. Louis	Kentucky	State Program	4	90125
TestAmerica St. Louis	L-A-B	DoD ELAP		L2305
TestAmerica St. Louis	Louisiana	NELAC	6	106151
TestAmerica St. Louis	Louisiana	NELAC	6	LA070016
TestAmerica St. Louis	Maryland	State Program	3	310
TestAmerica St. Louis	Missouri	State Program	7	780
TestAmerica St. Louis	Nevada	State Program	9	MO000542009A
TestAmerica St. Louis	New Jersey	NELAC	2	MO002
TestAmerica St. Louis	New York	NELAC	2	11616
TestAmerica St. Louis	NRC	NRC		24-24817-01
TestAmerica St. Louis	Pennsylvania	NELAC	3	68-00540
TestAmerica St. Louis	South Carolina	State Program	4	85002
TestAmerica St. Louis	Texas	NELAC	6	T104704193-08A-TX
TestAmerica St. Louis	USDA	Federal		P330-07-00122
TestAmerica St. Louis	USEPA Reg V SDWA	Federal	1	N/A
TestAmerica St. Louis	Utah	NELAC	8	QUAN4
TestAmerica St. Louis	Virginia	NELAC	3	460230
TestAmerica St. Louis	Washington	State Program	10	C1310
TestAmerica St. Louis	West Virginia DEP	State Program	3	381

Accreditation may not be offered or required for all methods and analytes reported in this package Please contact your project manager for the laboratory's current list of certified methods and analytes.

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RTX-VMS40 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
PZ-113-AS	160-437-1	106	112	109	112
D-3	160-437-2	94	109	103	107
PZ-112-AS	160-437-3	101	109	82 X	114
PZ-112-AS	160-437-3	105	103	99	98
I-11	160-437-4	102	106	104	111
PZ-207-AS	160-437-5	103	115	105	109
D-12	160-437-6	104	110	106	103
PZ-305-AI	160-437-7	95	109	102	103
S-10	160-437-8	98	112	101	101
DUP 05	160-437-9	99	113	108	106
TRIP BLANK	160-437-10	94	101	105	106
	MB 160-9262/3	98	109	113	120
	MB 160-9490/3	101	99	93	93
	LCS 160-9262/4	101	101	104	111
	LCS 160-9490/4	103	100	96	97
PZ-113-AS MS	160-437-1 MS	102	102	95	101
	160-468-F-1 MS	102	100	98	95
PZ-113-AS MSD	160-437-1 MSD	100	98	99	106
	160-468-F-1 MSD	105	102	102	100

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	85-119
DCA = 1,2-Dichloroethane-d4 (Surr)	82-132
TOL = Toluene-d8 (Surr)	85-115
BFB = 4-Bromofluorobenzene (Surr)	82-121

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MLCS1967.D

Lab ID: LCS 160-9262/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	51.1	102	85-115	
1,1,2,2-Tetrachloroethane	50.0	54.4	109	84-115	
1,1,2-Trichloroethane	50.0	52.9	106	85-115	
1,1-Dichloroethane	50.0	51.1	102	85-115	
1,1-Dichloroethene	50.0	51.3	103	85-118	
1,2,4-Trichlorobenzene	50.0	49.7	99	75-124	
1,2-Dibromo-3-Chloropropane	50.0	49.8	100	71-123	
1,2-Dichlorobenzene	50.0	49.2	98	85-115	
1,2-Dichloroethane	50.0	51.0	102	79-122	
1,2-Dichloropropane	50.0	50.5	101	85-115	
1,3-Dichlorobenzene	50.0	48.8	98	85-115	
1,4-Dichlorobenzene	50.0	51.2	102	85-115	
2-Butanone (MEK)	50.0	51.6	103	71-123	
2-Hexanone	50.0	52.2	104	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	54.5	109	74-123	
Acetone	50.0	53.0	106	51-140	
Benzene	50.0	53.5	107	85-115	
Bromoform	50.0	57.0	114	85-115	
Bromomethane	50.0	44.2	88	70-135	
Carbon disulfide	50.0	62.5	125	85-123	*
Carbon tetrachloride	50.0	50.9	102	85-118	
Chlorobenzene	50.0	47.7	95	85-115	
Dibromochloromethane	50.0	52.8	106	85-115	
Chloroethane	50.0	47.8	96	75-125	
Chloroform	50.0	50.8	102	85-115	
Chloromethane	50.0	42.9	86	73-132	
cis-1,2-Dichloroethene	50.0	50.9	102	85-115	
cis-1,3-Dichloropropene	50.0	57.0	114	85-127	
Cyclohexane	50.0	50.3	101	73-115	
Bromodichloromethane	50.0	51.4	103	85-117	
Dichlorodifluoromethane	50.0	37.5	75	62-115	
Ethylbenzene	50.0	50.7	101	85-115	
1,2-Dibromoethane (EDB)	50.0	51.6	103		
Isopropylbenzene	50.0	59.8	120	85-124	
Methyl acetate	50.0	51.4	103	73-135	
Methyl tert-butyl ether	50.0	52.5	105	73-115	
Methylcyclohexane	50.0	48.9	98	85-134	
Methylene Chloride	50.0	49.7	99	84-115	
m-Xylene & p-Xylene	100	99.0	99	85-115	
o-Xylene	50.0	50.4	101	85-115	
Styrene	50.0	54.9	110	85-115	
Tetrachloroethene	50.0	48.9	98	85-115	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MLCS1967.D

Lab ID: LCS 160-9262/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	51.8	104	85-115	
trans-1,2-Dichloroethene	50.0	49.6	99	85-115	
trans-1,3-Dichloropropene	50.0	59.0	118	85-123	
Trichloroethene	50.0	52.1	104	85-115	
Trichlorofluoromethane	50.0	53.9	108	85-116	
Vinyl chloride	50.0	47.8	96	68-133	
Xylenes, Total	150	149	100		

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZLCS1168.D

Lab ID: LCS 160-9490/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	49.7	99	85-115	
1,1,2,2-Tetrachloroethane	50.0	51.0	102	84-115	
1,1,2-Trichloroethane	50.0	48.9	98	85-115	
1,1-Dichloroethane	50.0	48.3	97	85-115	
1,1-Dichloroethene	50.0	46.8	94	85-118	
1,2,4-Trichlorobenzene	50.0	41.4	83	75-124	
1,2-Dibromo-3-Chloropropane	50.0	45.6	91	71-123	
1,2-Dichlorobenzene	50.0	48.4	97	85-115	
1,2-Dichloroethane	50.0	49.3	99	79-122	
1,2-Dichloropropane	50.0	48.6	97	85-115	
1,3-Dichlorobenzene	50.0	48.6	97	85-115	
1,4-Dichlorobenzene	50.0	48.6	97	85-115	
2-Butanone (MEK)	50.0	54.5	109	71-123	
2-Hexanone	50.0	48.5	97	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	48.5	97	74-123	
Acetone	50.0	51.4	103	51-140	
Benzene	50.0	43.8	88	85-115	
Bromoform	50.0	51.4	103	85-115	
Bromomethane	50.0	45.8	92	70-135	
Carbon disulfide	50.0	47.9	96	85-123	
Carbon tetrachloride	50.0	47.0	94	85-118	
Chlorobenzene	50.0	48.4	97	85-115	
Dibromochloromethane	50.0	50.3	101	85-115	
Chloroethane	50.0	45.3	91	75-125	
Chloroform	50.0	46.6	93	85-115	
Chloromethane	50.0	45.6	91	73-132	
cis-1,2-Dichloroethene	50.0	47.6	95	85-115	
cis-1,3-Dichloropropene	50.0	50.2	100	85-127	
Cyclohexane	50.0	47.3	95	73-115	
Bromodichloromethane	50.0	49.1	98	85-117	
Dichlorodifluoromethane	50.0	46.9	94	62-115	
Ethylbenzene	50.0	42.6	85	85-115	
1,2-Dibromoethane (EDB)	50.0	49.7	99		
Isopropylbenzene	50.0	45.6	91	85-124	
Methyl acetate	50.0	51.6	103	73-135	
Methyl tert-butyl ether	50.0	52.1	104	73-115	
Methylcyclohexane	50.0	47.0	94	85-134	
Methylene Chloride	50.0	50.5	101	84-115	
m-Xylene & p-Xylene	100	91.8	92	85-115	
o-Xylene	50.0	46.2	92	85-115	
Styrene	50.0	49.5	99	85-115	
Tetrachloroethene	50.0	45.3	91	85-115	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZLCS1168.D

Lab ID: LCS 160-9490/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	50.0	46.6	93	85-115	
trans-1,2-Dichloroethene	50.0	46.1	92	85-115	
trans-1,3-Dichloropropene	50.0	50.3	101	85-123	
Trichloroethene	50.0	48.3	97	85-115	
Trichlorofluoromethane	50.0	48.5	97	85-116	
Vinyl chloride	50.0	43.7	87	68-133	
Xylenes, Total	150	138	92		

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MSMP1973.D

Lab ID: 160-437-1 MS Client ID: PZ-113-AS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	ND	50.2	100	85-118	
1,1,2,2-Tetrachloroethane	50.0	ND	52.0	104	85-116	
1,1,2-Trichloroethane	50.0	ND	50.8	102	85-115	
1,1-Dichloroethane	50.0	ND	52.8	106	85-115	
1,1-Dichloroethene	50.0	ND	49.3	99	85-118	
1,2,4-Trichlorobenzene	50.0	ND	52.5	105	75-124	
1,2-Dibromo-3-Chloropropane	50.0	ND	48.3	97	71-123	
1,2-Dichlorobenzene	50.0	ND	45.9	92	84-115	
1,2-Dichloroethane	50.0	ND	52.7	105	80-125	
1,2-Dichloropropane	50.0	ND	52.6	105	85-117	
1,3-Dichlorobenzene	50.0	ND	45.3	91	84-115	
1,4-Dichlorobenzene	50.0	ND	48.8	98	85-115	
2-Butanone (MEK)	50.0	ND	49.8	100	73-133	
2-Hexanone	50.0	ND	51.6	103	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	ND	55.1	110	77-134	
Acetone	50.0	ND	47.7	95	38-150	
Benzene	50.0	0.33 J	53.9	107	85-115	
Bromoform	50.0	ND	52.3	105	84-116	
Bromomethane	50.0	ND	44.3	89	70-135	
Carbon disulfide	50.0	ND	60.5	121	85-127	
Carbon tetrachloride	50.0	ND	52.2	104	85-121	
Chlorobenzene	50.0	ND	47.1	94	85-115	
Dibromochloromethane	50.0	ND	51.3	103	85-115	
Chloroethane	50.0	ND	55.9	112	73-123	
Chloroform	50.0	ND	50.2	100	85-115	
Chloromethane	50.0	ND	43.9	88	67-130	
cis-1,2-Dichloroethene	50.0	ND	49.8	100	80-116	
cis-1,3-Dichloropropene	50.0	ND	58.0	116	85-124	
Cyclohexane	50.0	ND	49.4	99	73-115	
Bromodichloromethane	50.0	ND	53.9	108	56-119	
Dichlorodifluoromethane	50.0	0.65 J	45.3	89	85-119	
Ethylbenzene	50.0	ND	49.7	99	85-115	
1,2-Dibromoethane (EDB)	50.0	ND	49.3	99	85-115	
Isopropylbenzene	50.0	ND	55.3	111	85-124	
Methyl acetate	50.0	ND	52.3	105	49-150	
Methyl tert-butyl ether	50.0	1.5 J	55.9	109	75-115	
Methylcyclohexane	50.0	ND	51.6	103	85-137	
Methylene Chloride	50.0	ND	48.2	96	85-115	
m-Xylene & p-Xylene	100	ND	96.3	96	85-115	
o-Xylene	50.0	ND	47.0	94	85-118	
Styrene	50.0	ND	52.6	105	85-115	
Tetrachloroethene	50.0	ND	47.1	94	85-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MSMP1973.D

Lab ID: 160-437-1 MS Client ID: PZ-113-AS MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	50.0	ND	48.9	98	85-118	
trans-1,2-Dichloroethene	50.0	ND	49.1	98	84-115	
trans-1,3-Dichloropropene	50.0	ND	56.8	114	85-127	
Trichloroethene	50.0	ND	46.6	93	85-115	
Trichlorofluoromethane	50.0	ND	53.1	106	85-115	
Vinyl chloride	50.0	ND	49.8	100	63-129	
Xylenes, Total	150	ND	143	96	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZSMP1176.D

Lab ID: 160-468-F-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	ND	48.7	97	85-118	
1,1,2,2-Tetrachloroethane	50.0	ND	46.7	93	85-116	
1,1,2-Trichloroethane	50.0	ND	47.4	95	85-115	
1,1-Dichloroethane	50.0	0.96 J	49.8	98	85-115	
1,1-Dichloroethene	50.0	ND	47.5	95	85-118	
1,2,4-Trichlorobenzene	50.0	ND	46.7	93	75-124	
1,2-Dibromo-3-Chloropropane	50.0	ND	43.5	87	71-123	
1,2-Dichlorobenzene	50.0	ND	45.6	91	84-115	
1,2-Dichloroethane	50.0	ND	48.1	96	80-125	
1,2-Dichloropropane	50.0	ND	48.7	97	85-117	
1,3-Dichlorobenzene	50.0	ND	45.7	91	84-115	
1,4-Dichlorobenzene	50.0	ND	49.0	98	85-115	
2-Butanone (MEK)	50.0	ND	48.1	96	73-133	
2-Hexanone	50.0	ND	45.1	90	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	ND	45.3	91	77-134	
Acetone	50.0	8.3 J	47.8	79	38-150	
Benzene	50.0	0.68 J	45.2	89	85-115	
Bromoform	50.0	ND	48.1	96	84-116	
Bromomethane	50.0	ND	41.1	82	70-135	
Carbon disulfide	50.0	ND	50.8	102	85-127	
Carbon tetrachloride	50.0	ND	47.6	95	85-121	
Chlorobenzene	50.0	ND	46.7	93	85-115	
Dibromochloromethane	50.0	ND	49.2	98	85-115	
Chloroethane	50.0	ND	43.3	87	73-123	
Chloroform	50.0	ND	50.1	100	85-115	
Chloromethane	50.0	ND	41.1	82	67-130	
cis-1,2-Dichloroethene	50.0	5.4	54.5	98	80-116	
cis-1,3-Dichloropropene	50.0	ND	52.0	104	85-124	
Cyclohexane	50.0	ND	46.7	93	73-115	
Bromodichloromethane	50.0	ND	50.1	100	56-119	
Dichlorodifluoromethane	50.0	ND	37.7	75	85-119	F
Ethylbenzene	50.0	ND	43.4	87	85-115	
1,2-Dibromoethane (EDB)	50.0	ND	48.6	97	85-115	
Isopropylbenzene	50.0	ND	48.1	96	85-124	
Methyl acetate	50.0	ND	46.5	93	49-150	
Methyl tert-butyl ether	50.0	ND	49.1	98	75-115	
Methylcyclohexane	50.0	ND	46.0	92	85-137	
Methylene Chloride	50.0	2.1 J	50.4	97	85-115	
m-Xylene & p-Xylene	100	ND	91.1	91	85-115	
o-Xylene	50.0	ND	44.7	89	85-118	
Styrene	50.0	ND	50.6	101	85-115	
Tetrachloroethene	50.0	ND	47.4	95	85-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZSMP1176.D

Lab ID: 160-468-F-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	50.0	ND	46.9	94	85-118	
trans-1,2-Dichloroethene	50.0	ND	46.9	94	84-115	
trans-1,3-Dichloropropene	50.0	ND	51.2	102	85-127	
Trichloroethene	50.0	ND	47.8	96	85-115	
Trichlorofluoromethane	50.0	ND	48.0	96	85-115	
Vinyl chloride	50.0	4.4 J	44.3	80	63-129	
Xylenes, Total	150	ND	136	91	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MSMP1974.D

Lab ID: 160-437-1 MSD Client ID: PZ-113-AS MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	51.0	102	2	20	85-118	
1,1,2,2-Tetrachloroethane	50.0	52.2	104	1	20	85-116	
1,1,2-Trichloroethane	50.0	51.8	104	2	20	85-115	
1,1-Dichloroethane	50.0	50.9	102	4	20	85-115	
1,1-Dichloroethene	50.0	50.7	101	3	20	85-118	
1,2,4-Trichlorobenzene	50.0	53.6	107	2	20	75-124	
1,2-Dibromo-3-Chloropropane	50.0	47.4	95	2	20	71-123	
1,2-Dichlorobenzene	50.0	48.6	97	6	20	84-115	
1,2-Dichloroethane	50.0	50.8	102	4	20	80-125	
1,2-Dichloropropane	50.0	51.2	102	3	20	85-117	
1,3-Dichlorobenzene	50.0	47.6	95	5	20	84-115	
1,4-Dichlorobenzene	50.0	51.3	103	5	20	85-115	
2-Butanone (MEK)	50.0	45.5	91	9	20	73-133	
2-Hexanone	50.0	50.7	101	2	20	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	51.0	102	8	20	77-134	
Acetone	50.0	40.6	81	16	20	38-150	
Benzene	50.0	53.8	107	0	20	85-115	
Bromoform	50.0	51.9	104	1	20	84-116	
Bromomethane	50.0	48.4	97	9	20	70-135	
Carbon disulfide	50.0	61.9	124	2	20	85-127	
Carbon tetrachloride	50.0	51.3	103	2	20	85-121	
Chlorobenzene	50.0	48.5	97	3	20	85-115	
Dibromochloromethane	50.0	51.2	102	0	20	85-115	
Chloroethane	50.0	53.0	106	5	20	73-123	
Chloroform	50.0	49.8	100	1	20	85-115	
Chloromethane	50.0	47.1	94	7	20	67-130	
cis-1,2-Dichloroethene	50.0	50.3	101	1	20	80-116	
cis-1,3-Dichloropropene	50.0	57.4	115	1	20	85-124	
Cyclohexane	50.0	48.8	98	1	20	73-115	
Bromodichloromethane	50.0	53.0	106	2	20	56-119	
Dichlorodifluoromethane	50.0	51.3	101	12	20	85-119	
Ethylbenzene	50.0	50.3	101	1	20	85-115	
1,2-Dibromoethane (EDB)	50.0	49.8	100	1	20	85-115	
Isopropylbenzene	50.0	57.8	116	4	20	85-124	
Methyl acetate	50.0	46.5	93	12	20	49-150	
Methyl tert-butyl ether	50.0	51.9	101	7	20	75-115	
Methylcyclohexane	50.0	50.6	101	2	20	85-137	
Methylene Chloride	50.0	47.7	95	1	20	85-115	
m-Xylene & p-Xylene	100	97.6	98	1	20	85-115	
o-Xylene	50.0	48.5	97	3	20	85-118	
Styrene	50.0	55.3	111	5	20	85-115	
Tetrachloroethene	50.0	49.2	98	4	20	85-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: MSMP1974.D

Lab ID: 160-437-1 MSD Client ID: PZ-113-AS MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	51.9	104	6	20	85-118	
trans-1,2-Dichloroethene	50.0	48.8	98	1	20	84-115	
trans-1,3-Dichloropropene	50.0	57.7	115	2	20	85-127	
Trichloroethene	50.0	48.9	98	5	20	85-115	
Trichlorofluoromethane	50.0	53.6	107	1	20	85-115	
Vinyl chloride	50.0	51.2	102	3	20	63-129	
Xylenes, Total	150	146	97	2	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZSMP1177.D

Lab ID: 160-468-F-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	50.0	50.2	100	3	20	85-118	
1,1,2,2-Tetrachloroethane	50.0	47.4	95	1	20	85-116	
1,1,2-Trichloroethane	50.0	47.3	95	0	20	85-115	
1,1-Dichloroethane	50.0	50.5	99	2	20	85-115	
1,1-Dichloroethene	50.0	48.3	97	2	20	85-118	
1,2,4-Trichlorobenzene	50.0	45.3	91	3	20	75-124	
1,2-Dibromo-3-Chloropropane	50.0	42.0	84	4	20	71-123	
1,2-Dichlorobenzene	50.0	47.0	94	3	20	84-115	
1,2-Dichloroethane	50.0	48.6	97	1	20	80-125	
1,2-Dichloropropane	50.0	48.5	97	0	20	85-117	
1,3-Dichlorobenzene	50.0	46.8	94	2	20	84-115	
1,4-Dichlorobenzene	50.0	49.0	98	0	20	85-115	
2-Butanone (MEK)	50.0	49.2	98	2	20	73-133	
2-Hexanone	50.0	43.6	87	3	20	66-121	
4-Methyl-2-pentanone (MIBK)	50.0	44.3	89	2	20	77-134	
Acetone	50.0	42.2	68	13	20	38-150	
Benzene	50.0	45.7	90	1	20	85-115	
Bromoform	50.0	48.3	97	0	20	84-116	
Bromomethane	50.0	42.0	84	2	20	70-135	
Carbon disulfide	50.0	51.5	103	2	20	85-127	
Carbon tetrachloride	50.0	48.2	96	1	20	85-121	
Chlorobenzene	50.0	47.5	95	2	20	85-115	
Dibromochloromethane	50.0	48.5	97	2	20	85-115	
Chloroethane	50.0	46.9	94	8	20	73-123	
Chloroform	50.0	48.2	96	4	20	85-115	
Chloromethane	50.0	40.0	80	3	20	67-130	
cis-1,2-Dichloroethene	50.0	54.2	98	0	20	80-116	
cis-1,3-Dichloropropene	50.0	51.7	103	1	20	85-124	
Cyclohexane	50.0	48.3	97	3	20	73-115	
Bromodichloromethane	50.0	50.6	101	1	20	56-119	
Dichlorodifluoromethane	50.0	37.2	74	1	20	85-119	F
Ethylbenzene	50.0	44.4	89	2	20	85-115	
1,2-Dibromoethane (EDB)	50.0	47.4	95	3	20	85-115	
Isopropylbenzene	50.0	50.3	101	4	20	85-124	
Methyl acetate	50.0	45.4	91	2	20	49-150	
Methyl tert-butyl ether	50.0	47.7	95	3	20	75-115	
Methylcyclohexane	50.0	46.8	94	2	20	85-137	
Methylene Chloride	50.0	50.5	97	0	20	85-115	
m-Xylene & p-Xylene	100	93.0	93	2	20	85-115	
o-Xylene	50.0	45.4	91	2	20	85-118	
Styrene	50.0	50.7	101	0	20	85-115	
Tetrachloroethene	50.0	47.7	95	1	20	85-118	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: ZSMP1177.D

Lab ID: 160-468-F-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	50.0	48.2	96	3	20	85-118	
trans-1,2-Dichloroethene	50.0	46.9	94	0	20	84-115	
trans-1,3-Dichloropropene	50.0	50.6	101	1	20	85-127	
Trichloroethene	50.0	47.9	96	0	20	85-115	
Trichlorofluoromethane	50.0	48.4	97	1	20	85-115	
Vinyl chloride	50.0	45.3	82	2	20	63-129	
Xylenes, Total	150	138	92	2	20	70-130	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: MBLK1969.D Lab Sample ID: MB 160-9262/3

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: MSM Date Analyzed: 08/14/2012 05:24

GC Column: RTX-VMS40 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 160-9262/4	MLCS1967.D	08/14/2012 04:33
TRIP BLANK	160-437-10	MSMP1970.D	08/14/2012 05:49
PZ-113-AS	160-437-1	MSMP1972.D	08/14/2012 06:39
PZ-113-AS MS	160-437-1 MS	MSMP1973.D	08/14/2012 07:04
PZ-113-AS MSD	160-437-1 MSD	MSMP1974.D	08/14/2012 07:29
D-3	160-437-2	MSMP1976.D	08/14/2012 08:19
PZ-112-AS	160-437-3	MSMP1977.D	08/14/2012 08:44
I-11	160-437-4	MSMP1978.D	08/14/2012 09:09
DUP 05	160-437-9	MSMP1979.D	08/14/2012 09:34
D-12	160-437-6	MSMP1980.D	08/14/2012 10:22
PZ-305-AI	160-437-7	MSMP1981.D	08/14/2012 10:47
S-10	160-437-8	MSMP1982.D	08/14/2012 11:12
PZ-207-AS	160-437-5	MSMP1983.D	08/14/2012 11:54

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: ZBLK1170.D Lab Sample ID: MB 160-9490/3

Matrix: Water Heated Purge:(Y/N) Y

Instrument ID: MSZ Date Analyzed: 08/16/2012 19:05

GC Column: RTX-VMS40 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 160-9490/4	ZLCS1168.D	08/16/2012 18:17
PZ-112-AS	160-437-3	ZSMP1173.D	08/16/2012 20:15
	160-468-F-1 MS	ZSMP1176.D	08/16/2012 21:37
	160-468-F-1 MSD	ZSMP1177.D	08/16/2012 22:01

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: MBFB1795.D BFB Injection Date: 08/08/2012

Instrument ID: MSM BFB Injection Time: 08:59

Analysis Batch No.: 8911

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.3	
75	30.0 - 60.0 % of mass 95	43.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	88.6	
175	5.0 - 9.0 % of mass 174	6.9	(7.8)1
176	95.0 - 101.0 % of mass 174	86.0	(97.0)1
177	5.0 - 9.0 % of mass 176	6.0	(7.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 160-8911/2	MICL1797.D	08/08/2012	10:15
	IC 160-8911/3	MICL1798.D	08/08/2012	10:40
	IC 160-8911/4	MICL1799.D	08/08/2012	11:05
	IC 160-8911/5	MICL1800.D	08/08/2012	11:30
	IC 160-8911/6	MICL1801.D	08/08/2012	11:55
	ICIS 160-8911/7	MICL1802.D	08/08/2012	12:20
	IC 160-8911/8	MICL1803.D	08/08/2012	12:45
	IC 160-8911/9	MICL1804.D	08/08/2012	13:11

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: MBFB1964.D BFB Injection Date: 08/14/2012

Instrument ID: MSM BFB Injection Time: 02:41

Analysis Batch No.: 9262

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.7	
75	30.0 - 60.0 % of mass 95	39.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.4	(0.5)1
174	50.0 - 120.00 % of mass 95	80.7	
175	5.0 - 9.0 % of mass 174	5.8	(7.2)1
176	95.0 - 101.0 % of mass 174	76.7	(95.0)1
177	5.0 - 9.0 % of mass 176	4.6	(6.0)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 160-9262/2	MCCV1966.D	08/14/2012	03:56
	LCS 160-9262/4	MLCS1967.D	08/14/2012	04:33
	MB 160-9262/3	MBLK1969.D	08/14/2012	05:24
TRIP BLANK	160-437-10	MSMP1970.D	08/14/2012	05:49
PZ-113-AS	160-437-1	MSMP1972.D	08/14/2012	06:39
PZ-113-AS MS	160-437-1 MS	MSMP1973.D	08/14/2012	07:04
PZ-113-AS MSD	160-437-1 MSD	MSMP1974.D	08/14/2012	07:29
D-3	160-437-2	MSMP1976.D	08/14/2012	08:19
PZ-112-AS	160-437-3	MSMP1977.D	08/14/2012	08:44
I-11	160-437-4	MSMP1978.D	08/14/2012	09:09
DUP 05	160-437-9	MSMP1979.D	08/14/2012	09:34
D-12	160-437-6	MSMP1980.D	08/14/2012	10:22
PZ-305-AI	160-437-7	MSMP1981.D	08/14/2012	10:47
S-10	160-437-8	MSMP1982.D	08/14/2012	11:12
PZ-207-AS	160-437-5	MSMP1983.D	08/14/2012	11:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: ZBFB1071.D BFB Injection Date: 08/13/2012

Instrument ID: MSZ BFB Injection Time: 06:52

Analysis Batch No.: 9019

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	47.0	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.3	(0.4)1
174	50.0 - 120.00 % of mass 95	78.7	
175	5.0 - 9.0 % of mass 174	5.5	(7.0)1
176	95.0 - 101.0 % of mass 174	77.9	(99.0)1
177	5.0 - 9.0 % of mass 176	5.2	(6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 160-9019/2	ZICL1073.D	08/13/2012	07:37
	IC 160-9019/3	ZICL1074.D	08/13/2012	08:00
	IC 160-9019/4	ZICL1075.D	08/13/2012	08:24
	IC 160-9019/5	ZICL1076.D	08/13/2012	08:47
	IC 160-9019/6	ZICL1077.D	08/13/2012	09:11
	ICIS 160-9019/7	ZICL1078.D	08/13/2012	09:35
	IC 160-9019/8	ZICL1079.D	08/13/2012	09:58
	IC 160-9019/9	ZICL1080.D	08/13/2012	10:22
	ICV 160-9019/10	ZICV1083.D	08/13/2012	11:33

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: ZBFB1166.D BFB Injection Date: 08/16/2012

Instrument ID: MSZ BFB Injection Time: 17:20

Analysis Batch No.: 9490

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	46.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.2	(0.3)1
174	50.0 - 120.00 % of mass 95	80.8	
175	5.0 - 9.0 % of mass 174	5.4	(6.6)1
176	95.0 - 101.0 % of mass 174	78.7	(97.4)1
177	5.0 - 9.0 % of mass 176	5.7	(7.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 160-9490/2	ZCCV1167.D	08/16/2012	17:54
	LCS 160-9490/4	ZLCS1168.D	08/16/2012	18:17
	MB 160-9490/3	ZBLK1170.D	08/16/2012	19:05
PZ-112-AS	160-437-3	ZSMP1173.D	08/16/2012	20:15
	160-468-F-1 MS	ZSMP1176.D	08/16/2012	21:37
	160-468-F-1 MSD	ZSMP1177.D	08/16/2012	22:01

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9262/2 Date Analyzed: 08/14/2012 03:56

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm)

Lab File ID (Standard): MCCV1966.D Heated Purge: (Y/N) N

Calibration ID: 725

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1742874	9.26	1187234	12.10	586237	14.28
UPPER LIMIT		3485748	9.76	2374468	12.60	1172474	14.78
LOWER LIMIT		871437	8.76	593617	11.60	293119	13.78
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 160-9262/4		1872394	9.26	1241211	12.10	616037	14.28
MB 160-9262/3		1734908	9.26	1093419	12.10	502061	14.28
160-437-10	TRIP BLANK	1608527	9.26	1049830	12.10	502967	14.28
160-437-1	PZ-113-AS	1358351	9.26	907744	12.10	440355	14.28
160-437-1 MS	PZ-113-AS MS	1498601	9.26	1074835	12.10	551857	14.28
160-437-1 MSD	PZ-113-AS MSD	1669540	9.26	1126425	12.10	570756	14.28
160-437-2	D-3	1569361	9.26	1009734	12.10	488944	14.28
160-437-3	PZ-112-AS	1453314	9.26	1273022	12.11	467642	14.28
160-437-4	I-11	1421403	9.26	963649	12.10	445947	14.28
160-437-9	DUP 05	1337618	9.26	878967	12.10	435966	14.28
160-437-6	D-12	1371360	9.26	908044	12.10	447776	14.28
160-437-7	PZ-305-AI	1283510	9.26	875105	12.10	424254	14.28
160-437-8	S-10	1278219	9.26	891026	12.10	434781	14.28
160-437-5	PZ-207-AS	1270436	9.26	878324	12.10	428016	14.28

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: ICIS 160-9019/7 Date Analyzed: 08/13/2012 09:35

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm)

Lab File ID (Standard): ZICL1078.D Heated Purge: (Y/N) Y

Calibration ID: 759

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		2128499	8.91	1512958	11.78	706302	13.95
UPPER LIMIT		4256998	9.41	3025916	12.28	1412604	14.45
LOWER LIMIT		1064250	8.41	756479	11.28	353151	13.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 160-9019/10		2137137	8.91	1508583	11.77	693600	13.95

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9490/2 Date Analyzed: 08/16/2012 17:54

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm)

Lab File ID (Standard): ZCCV1167.D Heated Purge: (Y/N) Y

Calibration ID: 759

		FB		CBZ		DCB	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		2289369	8.91	1627295	11.77	772178	13.95
UPPER LIMIT		4578738	9.41	3254590	12.27	1544356	14.45
LOWER LIMIT		1144685	8.41	813648	11.27	386089	13.45
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 160-9490/4		2242503	8.91	1601953	11.77	751465	13.95
MB 160-9490/3		2243165	8.91	1655471	11.77	767557	13.95
160-437-3	PZ-112-AS	2118317	8.92	1503201	11.77	720451	13.95
160-468-F-1 MS		2077363	8.91	1495970	11.77	728494	13.95
160-468-F-1 MSD		2031330	8.91	1454571	11.77	685390	13.95

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS | Lab Sample ID: 160-437-1

Matrix: Water | Lab File ID: MSMP1972.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 06:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	0.33	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	ND		10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	ND		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	0.65	J	10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	1.5	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS | Lab Sample ID: 160-437-1

Matrix: Water | Lab File ID: MSMP1972.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 06:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	109		85-115
1868-53-7	Dibromofluoromethane (Surr)	106		85-119
460-00-4	4-Bromofluorobenzene (Surr)	112		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1972.D
Report Date: 15-Aug-2012 15:13

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1972.D
Lab Smp Id: 160-437-F-1 Client Smp ID: PZ-113-AS
Inj Date : 14-AUG-2012 06:39
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-1
Misc Info : 160-437-F-1
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:00 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.367	3.298	(0.364)	4297	0.65030	0.6503(a)
8	Diethyl ether	74	5.448	5.449	(0.588)	31901	9.41755	9.418
20	MTBE	73	6.873	6.873	(0.742)	18668	1.50866	1.509(a)
$ 35	Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	305218	52.8321	52.83
40	Benzene	78	8.884	8.884	(0.959)	9153	0.33158	0.3316(a)
$ 43	1,2-Dichloroethane-d4 (Surr)	65	9.009	9.010	(0.973)	266324	55.9793	55.98
* 46	Fluorobenzene	96	9.261	9.261	(1.000)	1358351	50.0000	
$ 57	Toluene-d8 (Surr)	98	10.685	10.686	(0.883)	1248657	54.3990	54.40
* 70	Chlorobenzene-d5	117	12.096	12.096	(1.000)	907744	50.0000	
$ 79	4-Bromofluorobenzene (Surr)	95	13.199	13.200	(0.925)	390246	56.0523	56.05
* 95	1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	440355	50.0000	
106	1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	931	0.37590	0.3759(a)

QC Flag Legend

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

Data File: MSMP1972.D

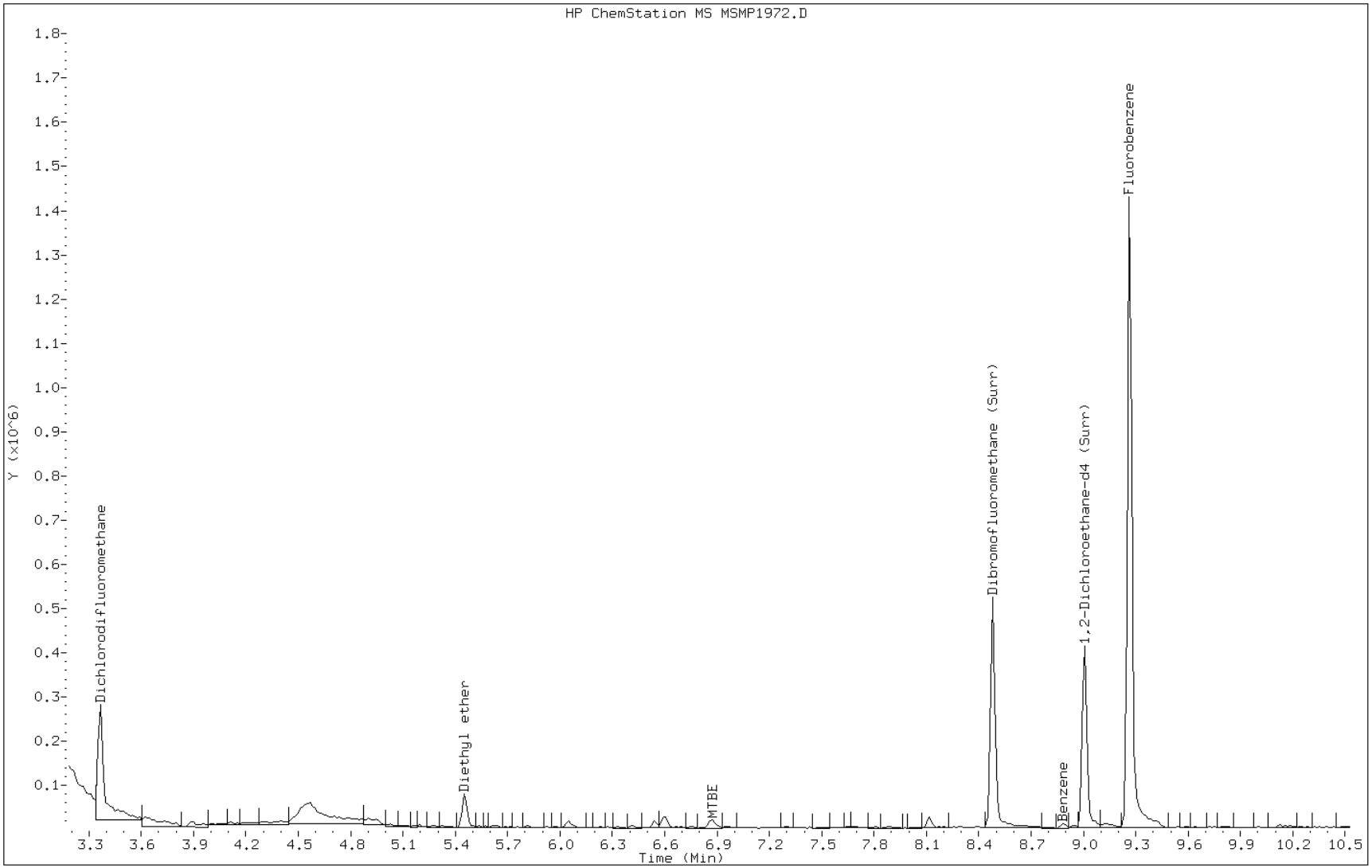
Date: 14-AUG-2012 06:39

Client ID: PZ-113-AS

Instrument: MSM.i

Sample Info: 160-437-F-1

Operator: JDH



Data File: MSMP1972.D

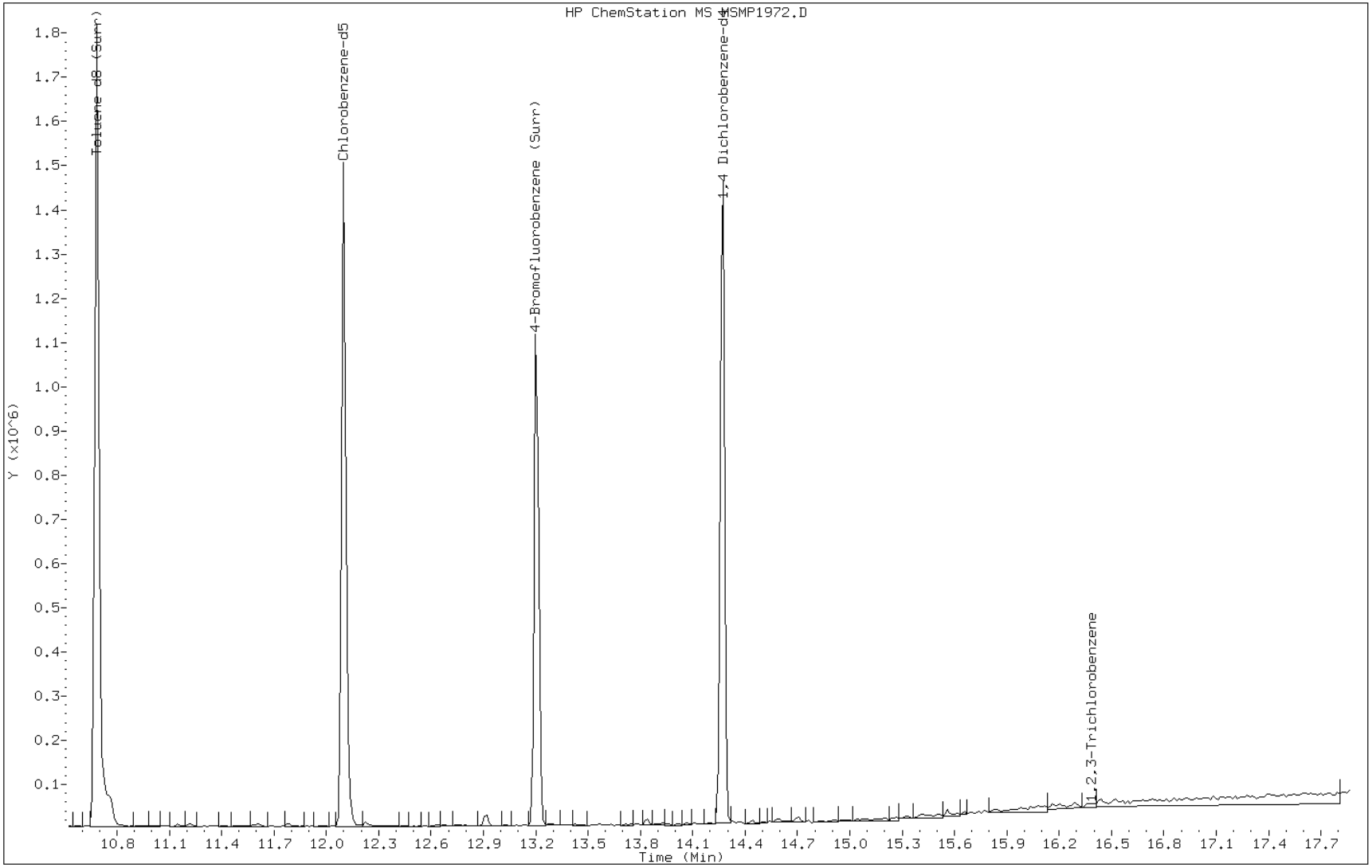
Date: 14-AUG-2012 06:39

Client ID: PZ-113-AS

Instrument: MSM.i

Sample Info: 160-437-F-1

Operator: JDH



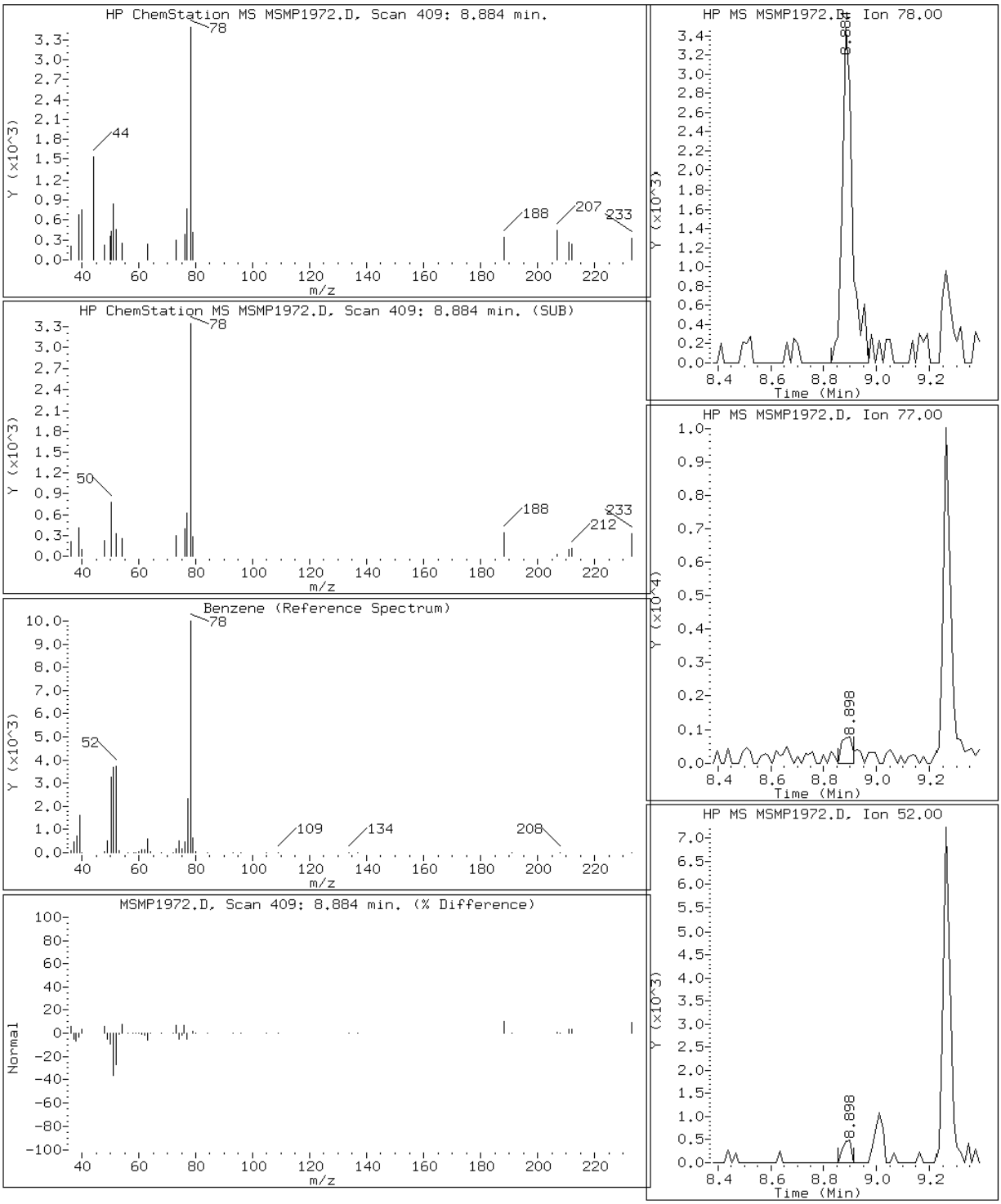
Data File: MSMP1972.D

Date: 14-AUG-2012 06:39

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 Operator: JDH

40 Benzene



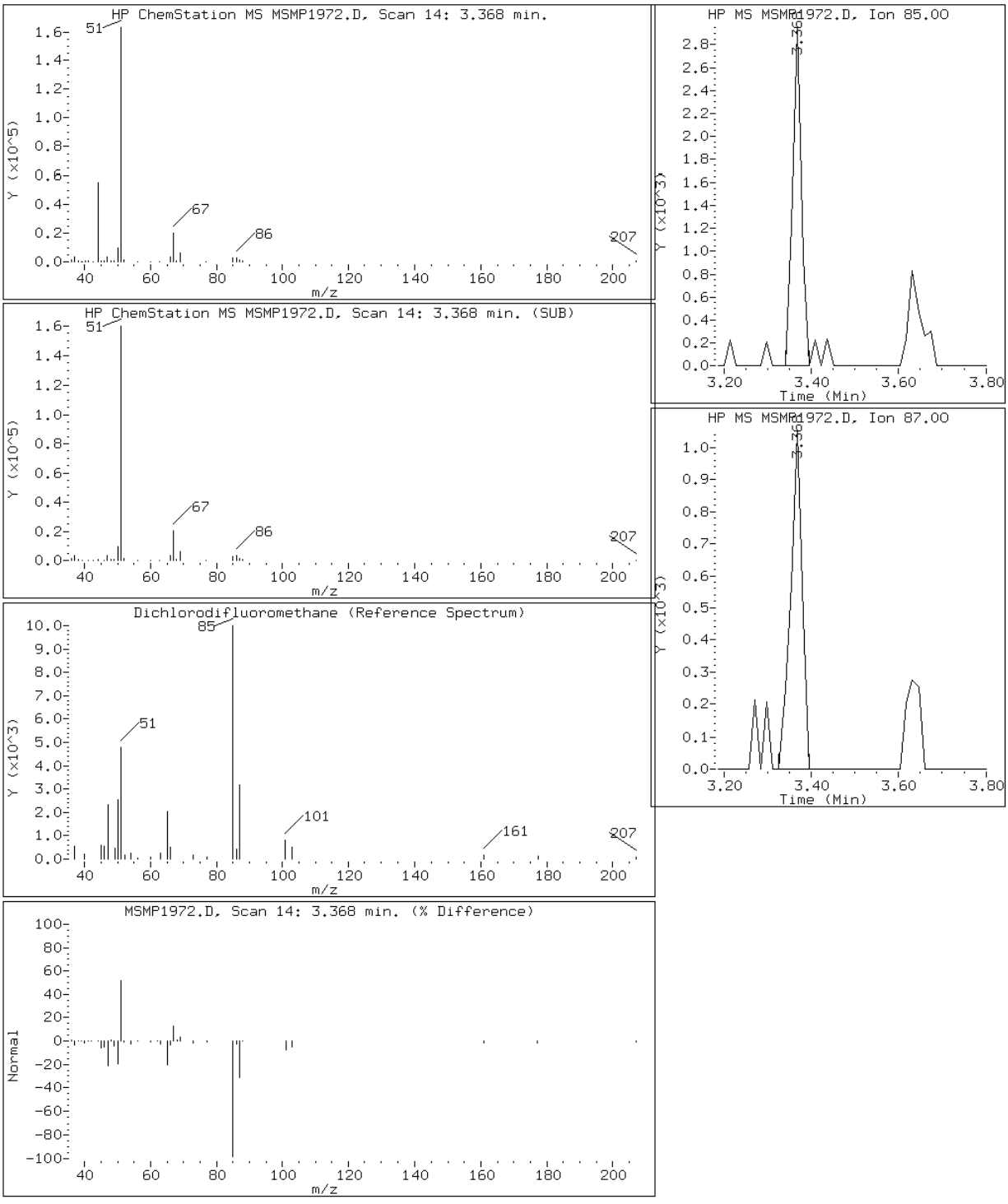
Data File: MSMP1972.D

Date: 14-AUG-2012 06:39

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 Operator: JDH

1 Dichlorodifluoromethane



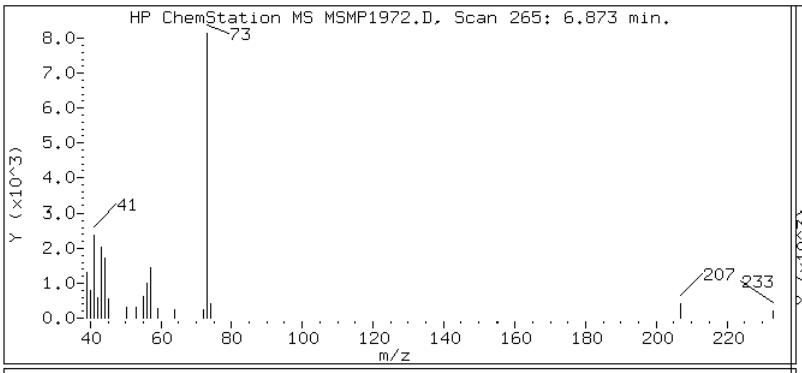
Data File: MSMP1972.D

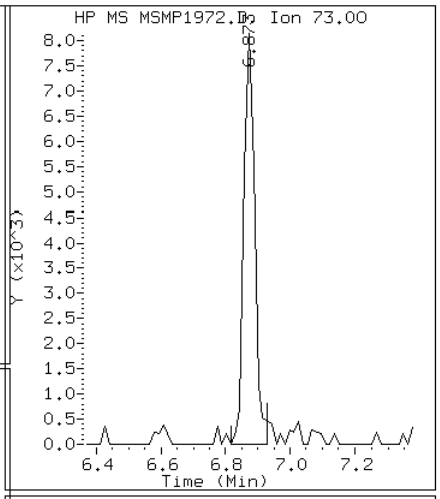
Date: 14-AUG-2012 06:39

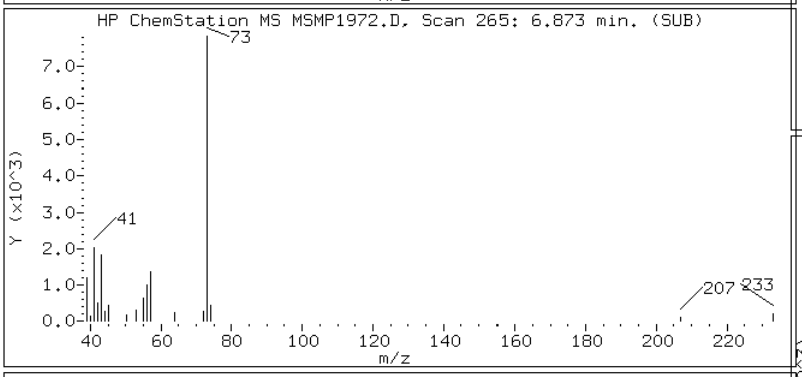
Client ID: PZ-113-AS Instrument: MSM.i

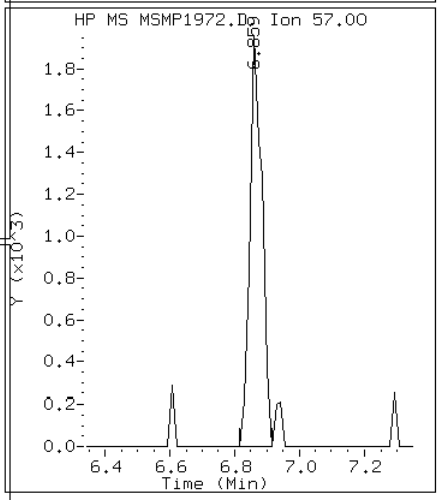
Sample Info: 160-437-F-1 Operator: JDH

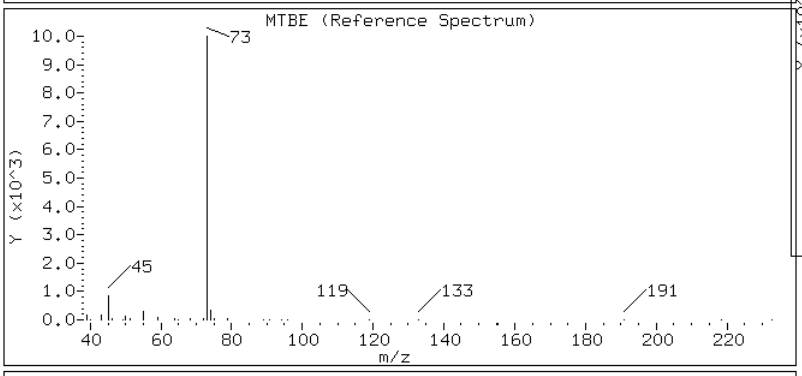
20 MTBE

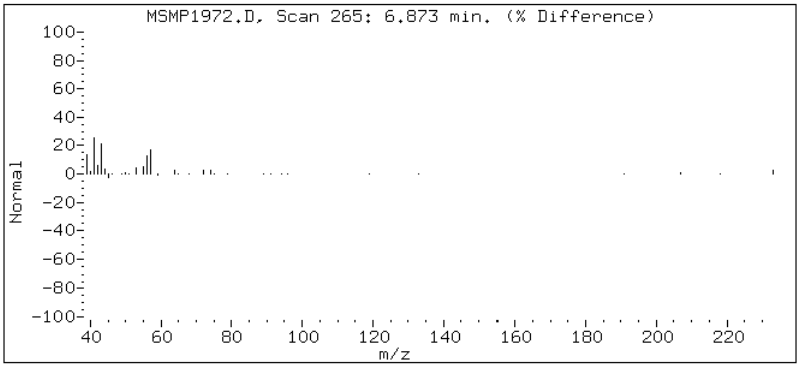












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Matrix: Water | Lab File ID: MSMP1976.D

Analysis Method: 8260C | Date Collected: 08/08/2012 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 08:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	0.63	J B	5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	10	J	20	6.7
71-43-2	Benzene	0.50	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	1.0	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	2.4	J	5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.50	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Matrix: Water | Lab File ID: MSMP1976.D

Analysis Method: 8260C | Date Collected: 08/08/2012 10:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 08:19

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	103		85-115
1868-53-7	Dibromofluoromethane (Surr)	94		85-119
460-00-4	4-Bromofluorobenzene (Surr)	107		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1976.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1976.D
Lab Smp Id: 160-437-F-2 Client Smp ID: D-3
Inj Date : 14-AUG-2012 08:19
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-2
Misc Info : 160-437-F-2
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	7325	1.00189	1.002(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	80908	20.6735	20.67
	12 Iodomethane	142	5.965	5.965	(0.644)	5605	4.25747	4.257
	16 Acetone	43	6.608	6.594	(0.713)	18373	10.2954	10.30
	20 MTBE	73	6.873	6.873	(0.742)	7191	0.50300	0.5030(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	19957	42.0583	42.06
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	312224	46.7782	46.78
	40 Benzene	78	8.884	8.884	(0.959)	16075	0.50403	0.5040(a)
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	299589	54.5045	54.50
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1569361	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1320317	51.7110	51.71
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1009734	50.0000	
	71 Chlorobenzene	112	12.110	12.110	(1.001)	48113	2.35222	2.352
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	415491	53.7477	53.75
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	488944	50.0000	
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	3270	0.62598	0.6260(a)
	105 Naphthalene	128	16.524	16.524	(1.158)	6347	1.30478	1.305(a)

QC Flag Legend

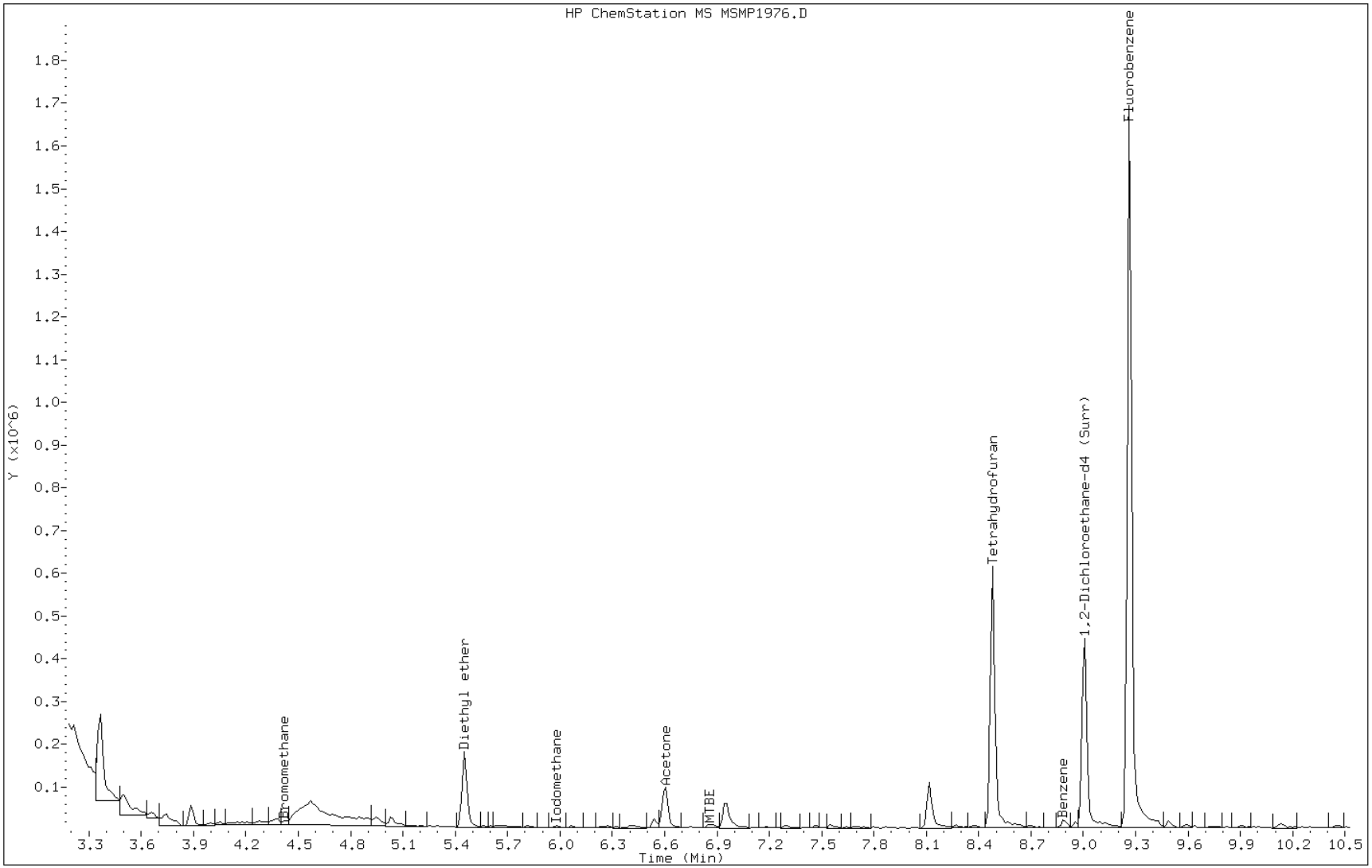
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MSMP1976.D

Date: 14-AUG-2012 08:19

Client ID: D-3 Instrument: MSM.i

Sample Info: 160-437-F-2 Operator: JDH

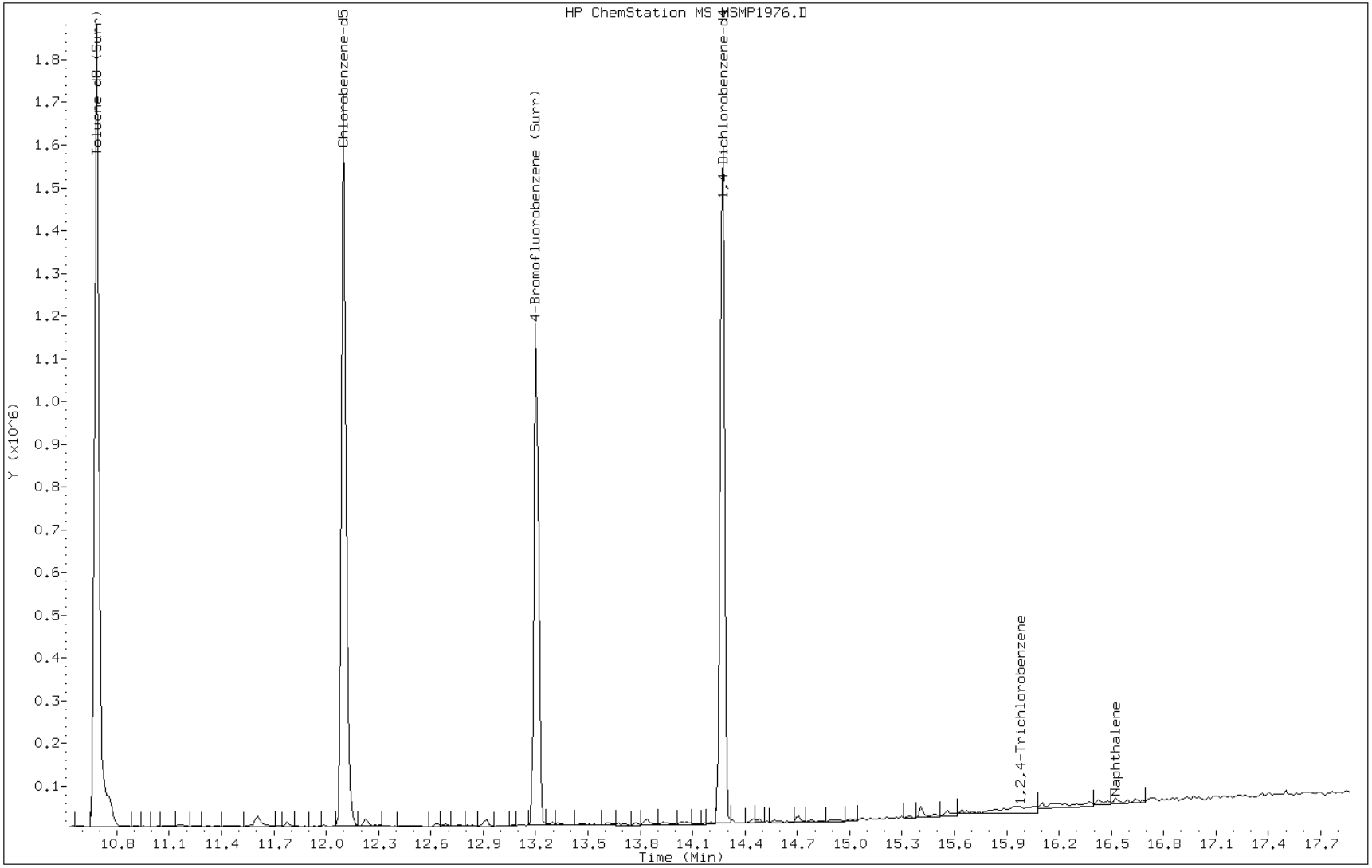


Data File: MSMP1976.D

Date: 14-AUG-2012 08:19

Client ID: D-3 Instrument: MSM.i

Sample Info: 160-437-F-2 Operator: JDH



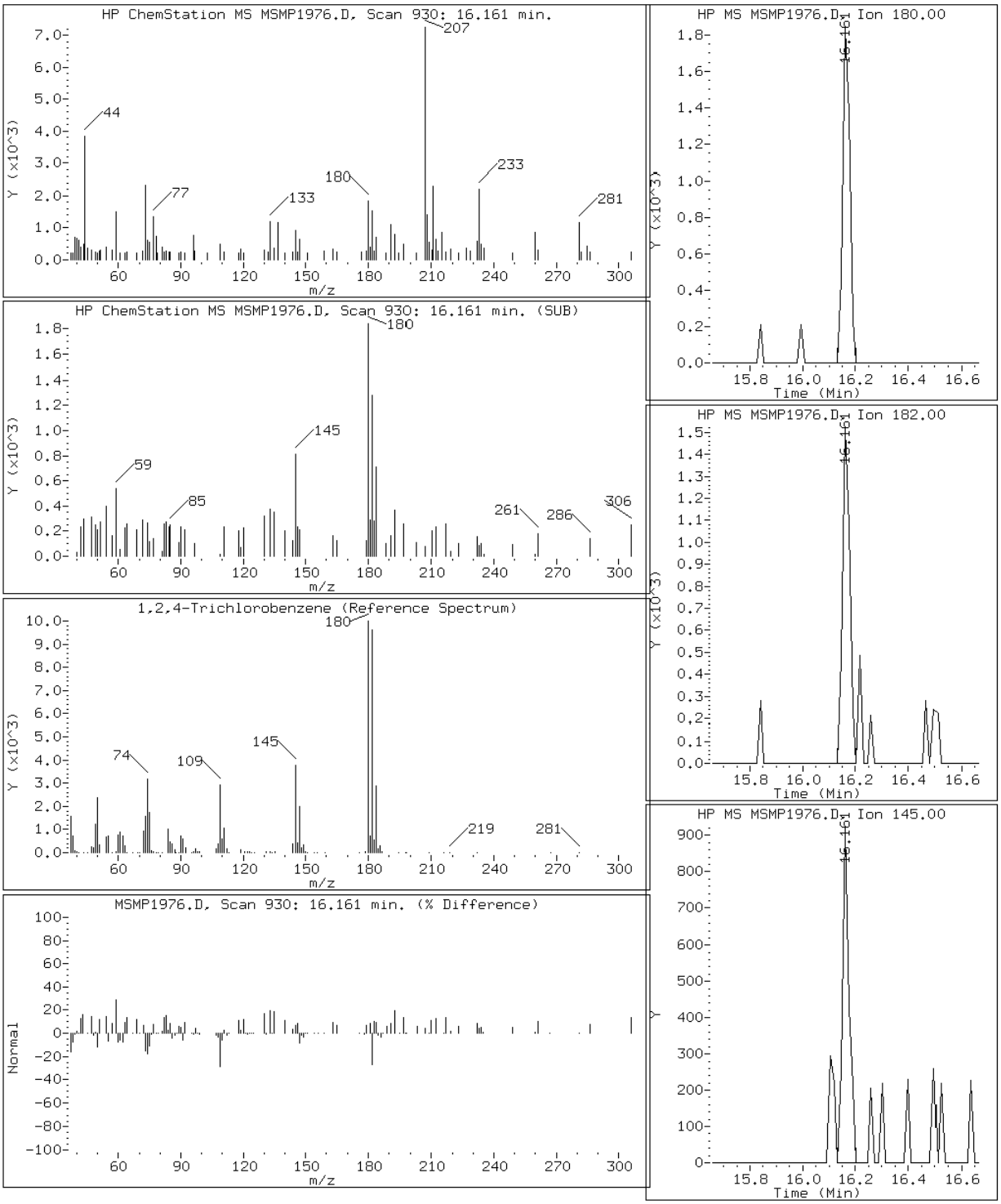
Data File: MSMP1976.D

Date: 14-AUG-2012 08:19

Client ID: D-3 Instrument: MSM.i

Sample Info: 160-437-F-2 Operator: JDH

104 1,2,4-Trichlorobenzene



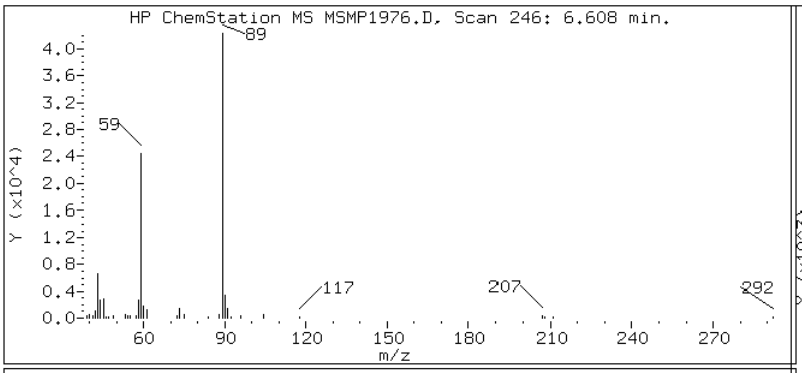
Data File: MSMP1976.D

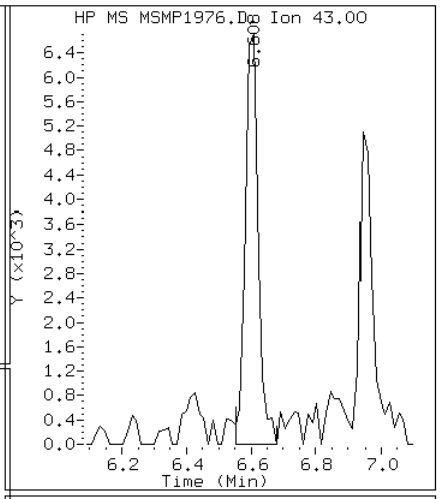
Date: 14-AUG-2012 08:19

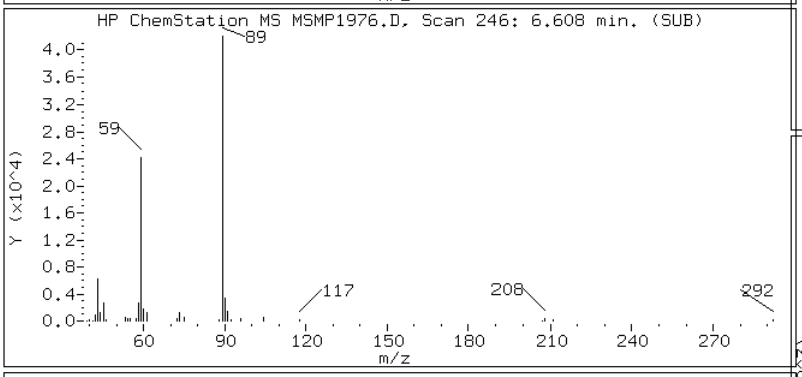
Client ID: D-3 Instrument: MSM.i

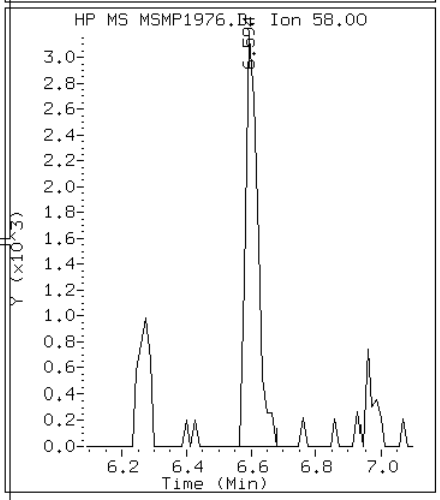
Sample Info: 160-437-F-2 Operator: JDH

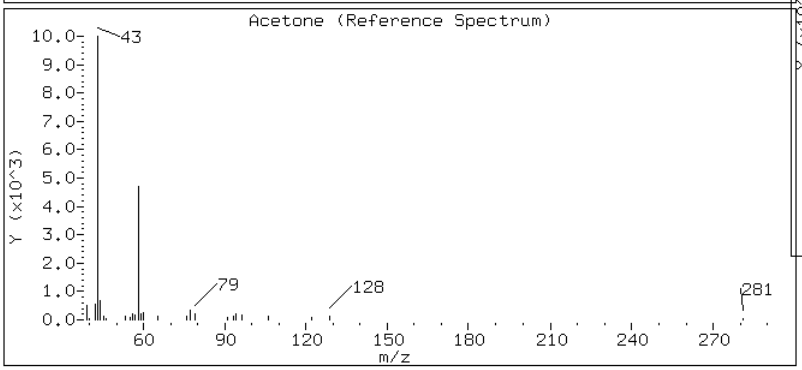
16 Acetone

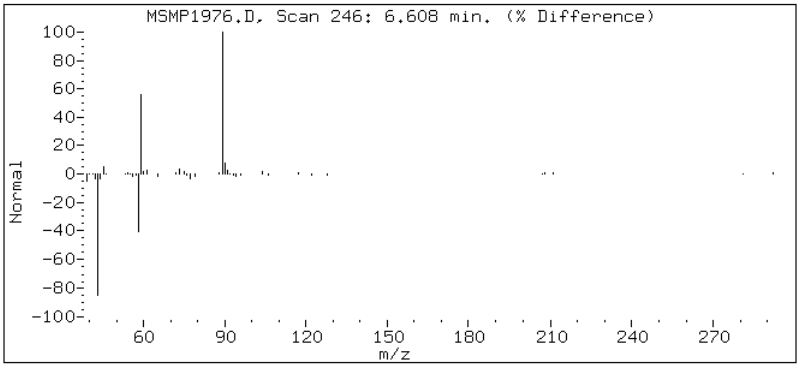












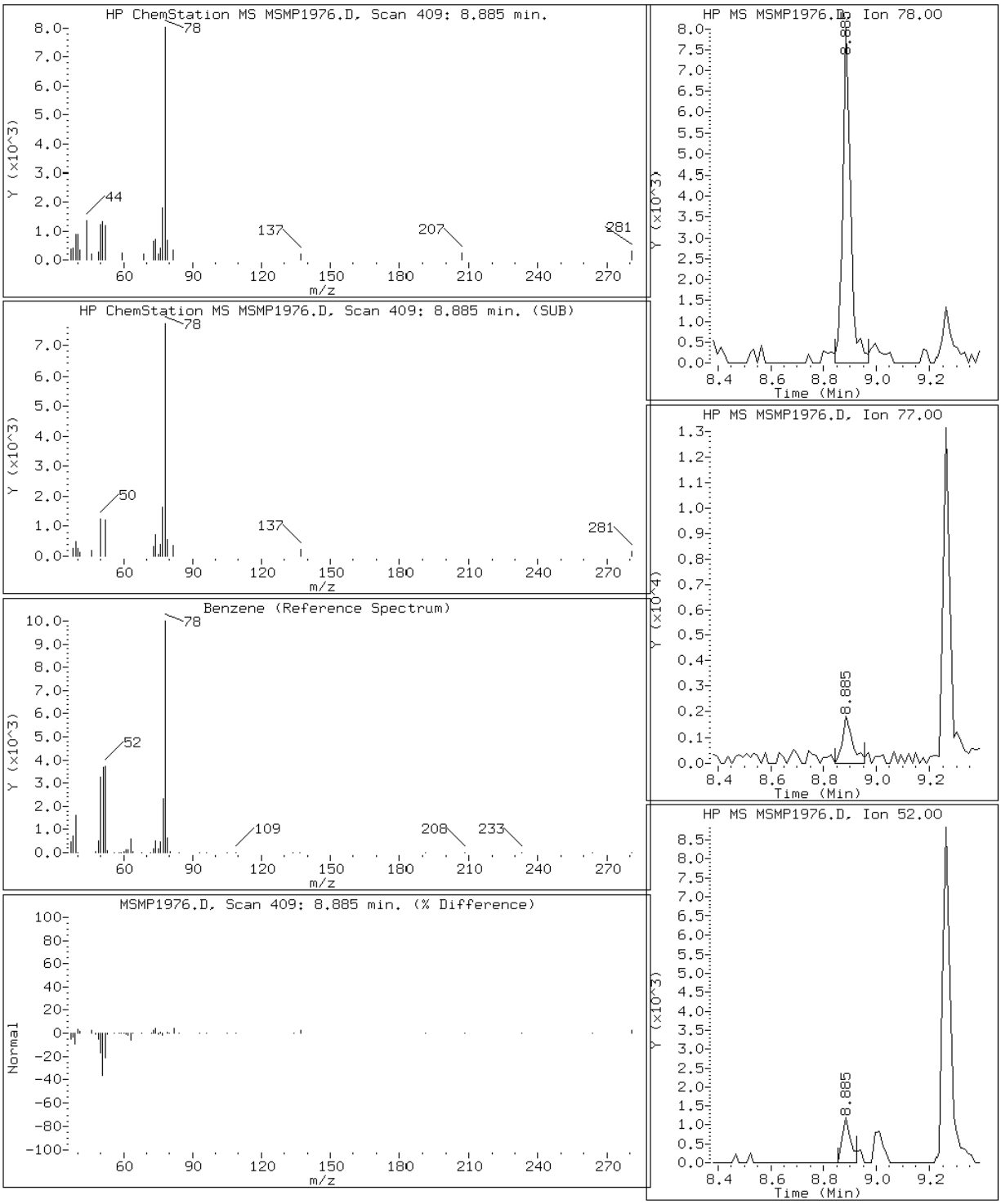
Data File: MSMP1976.D

Date: 14-AUG-2012 08:19

Client ID: D-3 Instrument: MSM.i

Sample Info: 160-437-F-2 Operator: JDH

40 Benzene



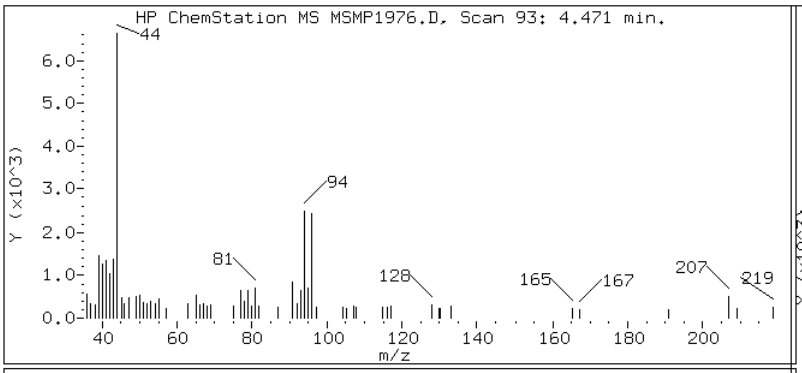
Data File: MSMP1976.D

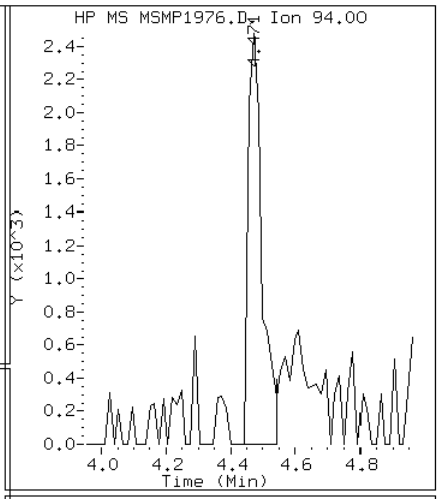
Date: 14-AUG-2012 08:19

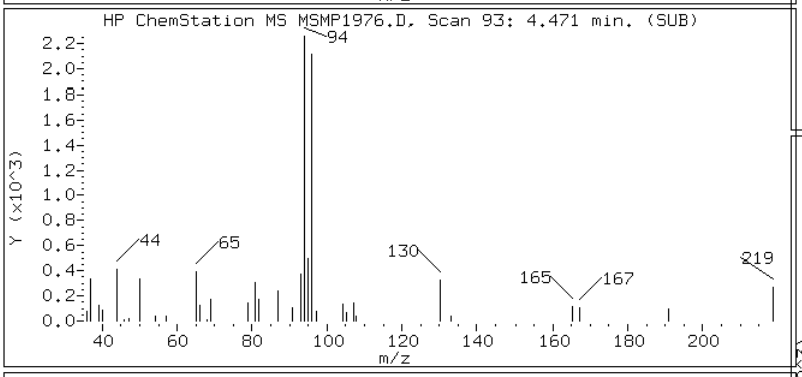
Client ID: D-3 Instrument: MSM.i

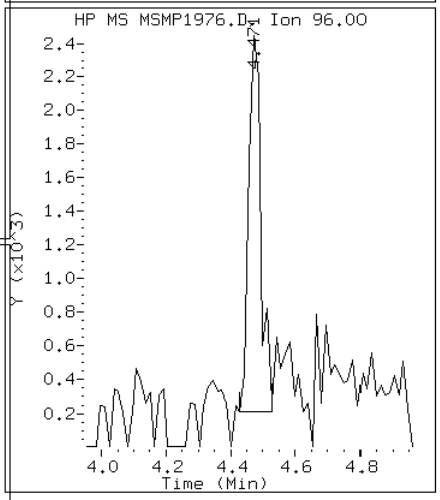
Sample Info: 160-437-F-2 Operator: JDH

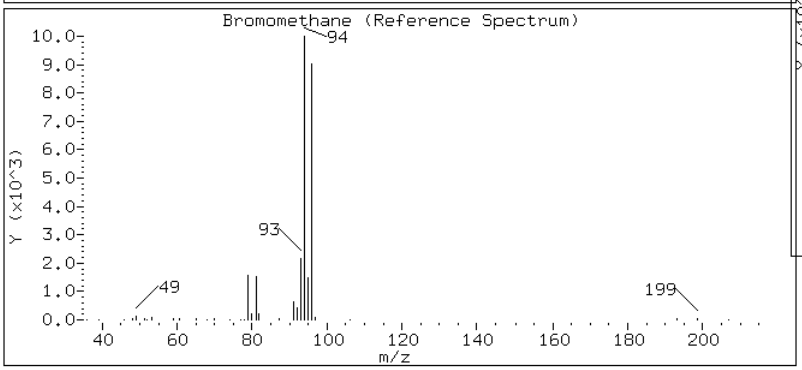
5 Bromomethane

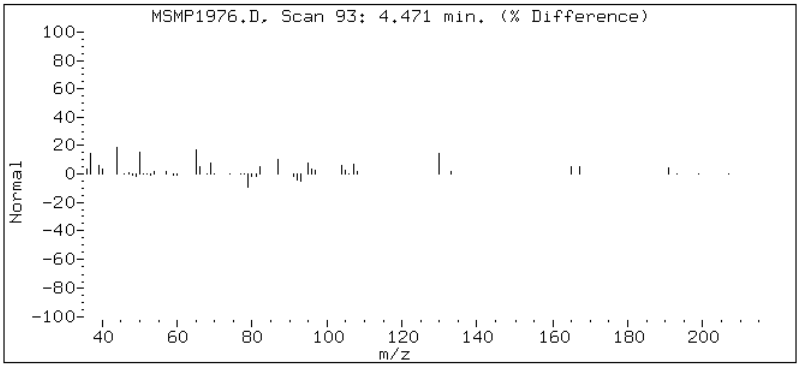












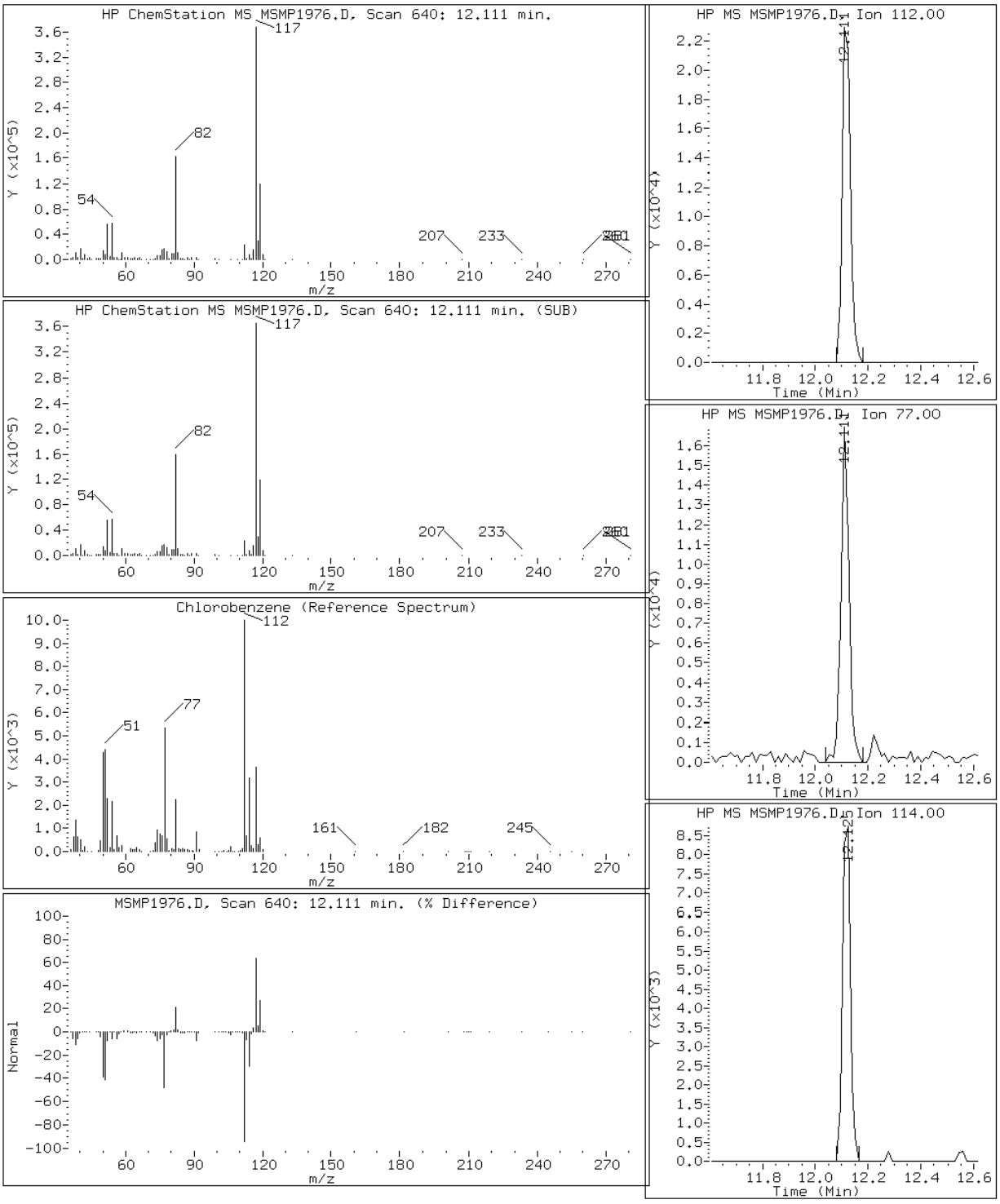
Data File: MSMP1976.D

Date: 14-AUG-2012 08:19

Client ID: D-3 Instrument: MSM.i

Sample Info: 160-437-F-2 Operator: JDH

71 Chlorobenzene



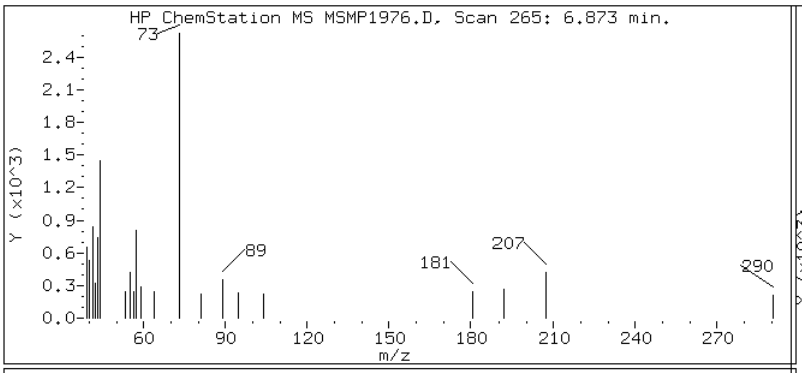
Data File: MSMP1976.D

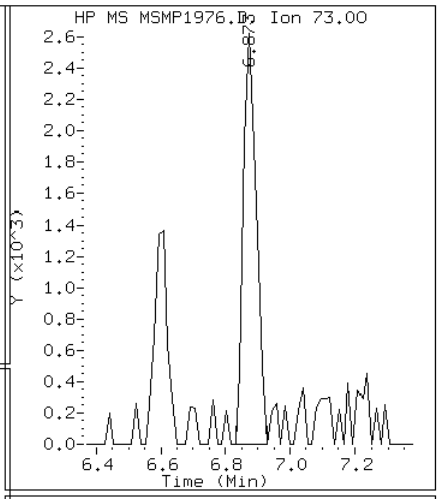
Date: 14-AUG-2012 08:19

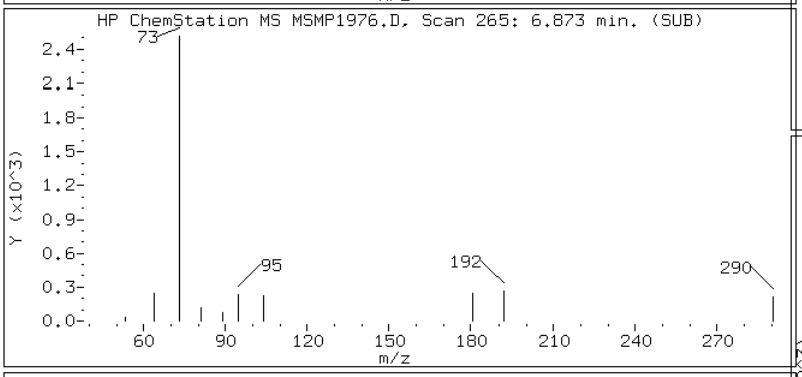
Client ID: D-3 Instrument: MSM.i

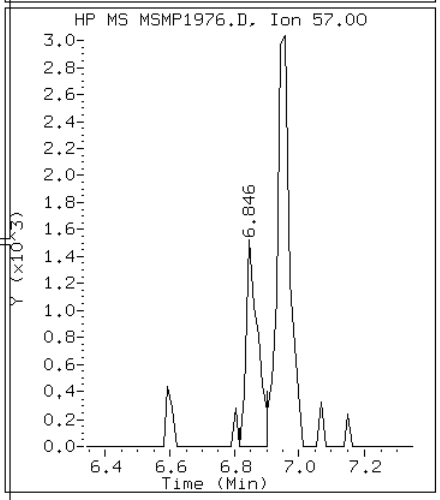
Sample Info: 160-437-F-2 Operator: JDH

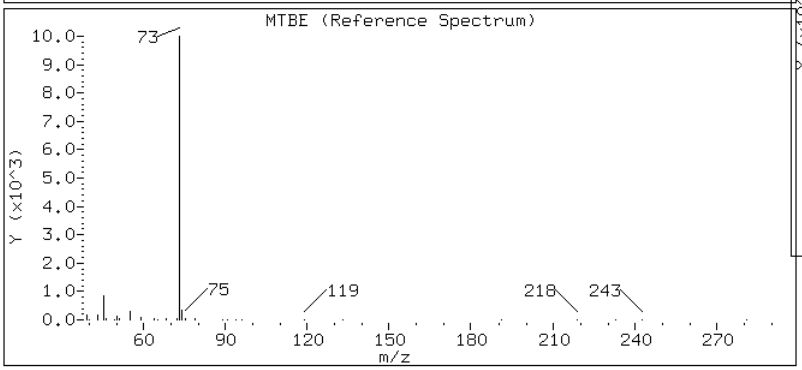
20 MTBE

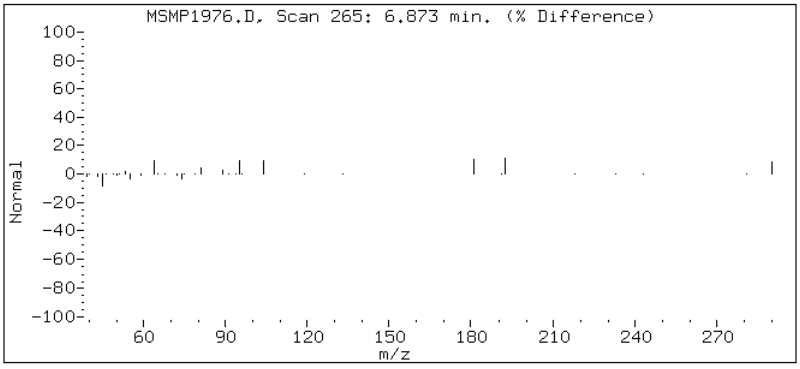












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: MSMP1977.D

Analysis Method: 8260C | Date Collected: 08/08/2012 10:48

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 08:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	19		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	17		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
67-64-1	Acetone	7.2	J	20	6.7
71-43-2	Benzene	58		5.0	0.25
74-83-9	Bromomethane	0.83	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.56	J	5.0	0.40
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	1.3	J	5.0	0.57
95-47-6	o-Xylene	0.67	J	5.0	0.32
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS Lab Sample ID: 160-437-3

Matrix: Water Lab File ID: MSMP1977.D

Analysis Method: 8260C Date Collected: 08/08/2012 10:48

Sample wt/vol: 5(mL) Date Analyzed: 08/14/2012 08:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 9262 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	82	X	85-115
1868-53-7	Dibromofluoromethane (Surr)	101		85-119
460-00-4	4-Bromofluorobenzene (Surr)	114		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1977.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1977.D
Lab Smp Id: 160-437-F-3 Client Smp ID: PZ-112-AS
Inj Date : 14-AUG-2012 08:44
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-3
Misc Info : 160-437-F-3
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	5637	0.83257	0.8326(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	39365	10.8617	10.86
	12 Iodomethane	142	5.979	5.965	(0.646)	4920	4.21981	4.220
	16 Acetone	43	6.608	6.594	(0.713)	12278	7.22986	7.230
	20 MTBE	73	6.873	6.873	(0.742)	7449	0.56266	0.5626(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	12147	27.6432	27.64
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	312407	50.5430	50.54
	40 Benzene	78	8.884	8.884	(0.959)	1723581	58.3584	58.36
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	278634	54.7399	54.74
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1453314	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.882)	1315128	40.8548	40.85
*	70 Chlorobenzene-d5	117	12.110	12.096	(1.000)	1273022	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.000)	41555	0.94969	0.9497(a)
	71 Chlorobenzene	112	12.124	12.110	(1.001)	19077539	739.790	739.8(A)
	74 m,p-Xylenes	106	12.236	12.222	(1.010)	23674	1.31711	1.317(a)
	75 o-Xylene	106	12.627	12.627	(1.043)	10938	0.67043	0.6704(a)
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	60986	2.46320	2.463
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	421738	57.0410	57.04
	81 n-Propylbenzene	91	13.297	13.298	(0.931)	49115	1.43224	1.432(a)
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	467642	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	248724	16.7131	16.71
	99 1,2-Dichlorobenzene	146	14.289	14.708	(1.001)	248724	19.4707	19.47

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1977.D
Report Date: 21-Aug-2012 17:18

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
105 Naphthalene	128	16.524	16.524	(1.158)	1601538	344.231	344.2(A)
M 107 Xylenes (total)	106				34612	1.98754	1.988(a)

QC Flag Legend

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

Data File: MSMP1977.D

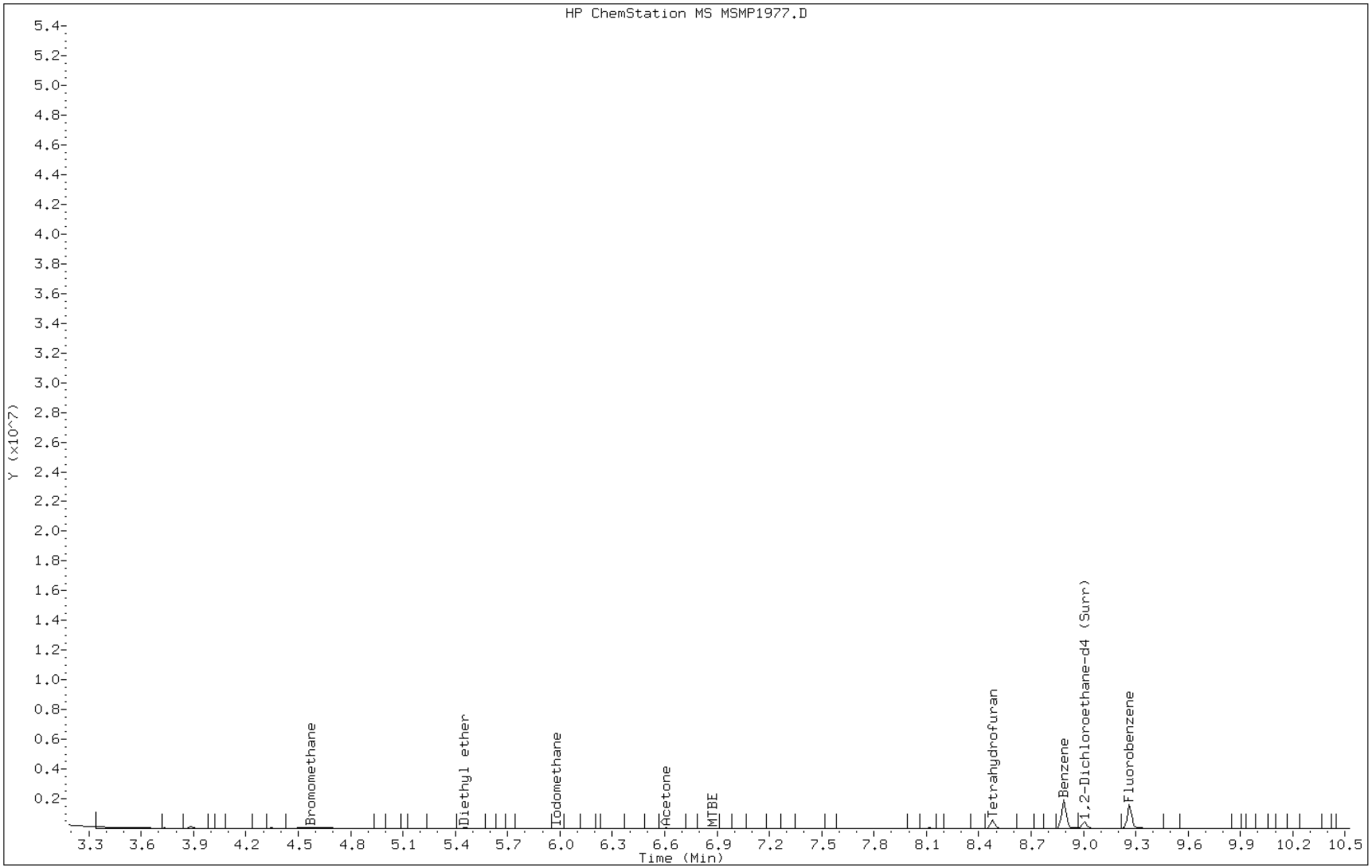
Date: 14-AUG-2012 08:44

Client ID: PZ-112-AS

Instrument: MSM.i

Sample Info: 160-437-F-3

Operator: JDH



Data File: MSMP1977.D

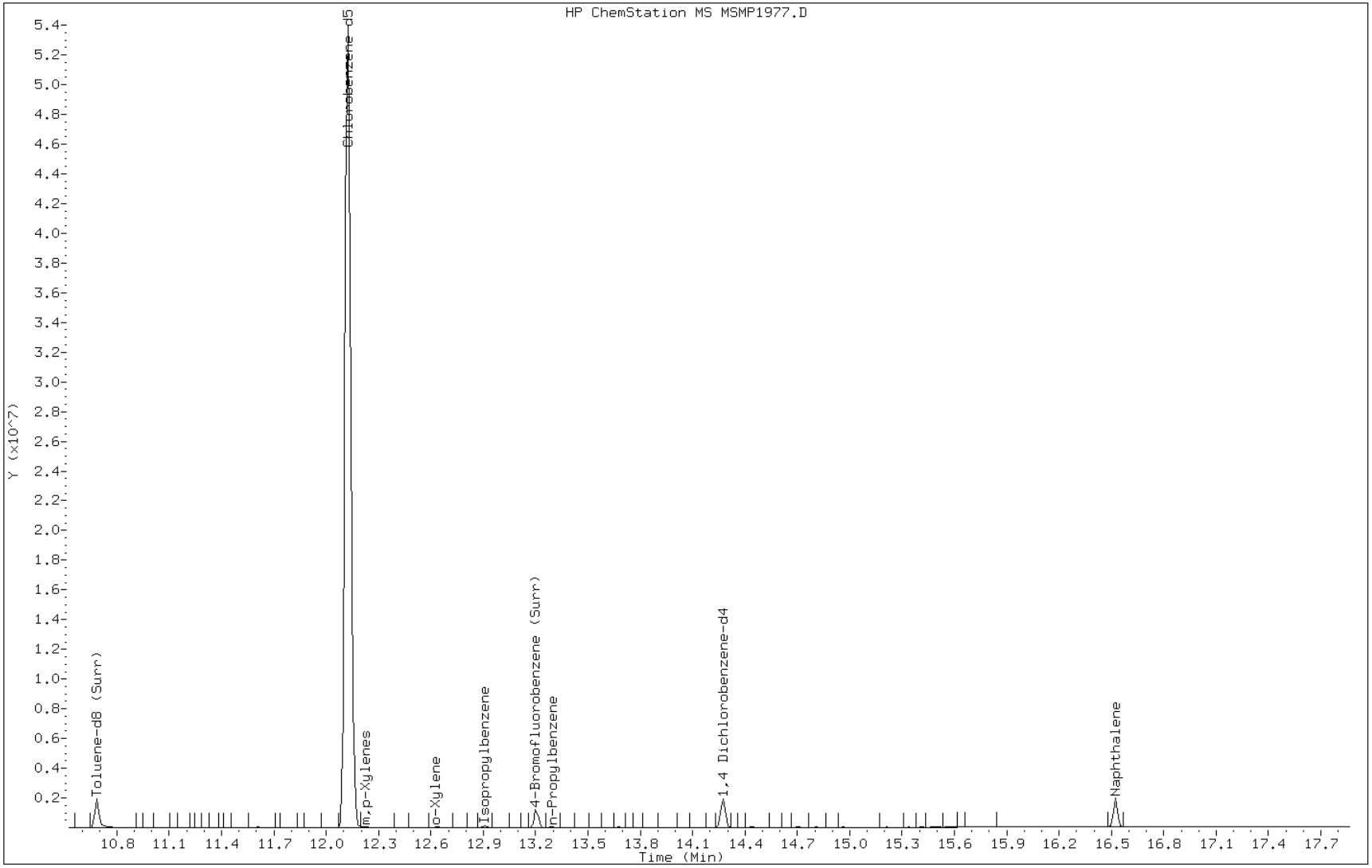
Date: 14-AUG-2012 08:44

Client ID: PZ-112-AS

Instrument: MSM.i

Sample Info: 160-437-F-3

Operator: JDH



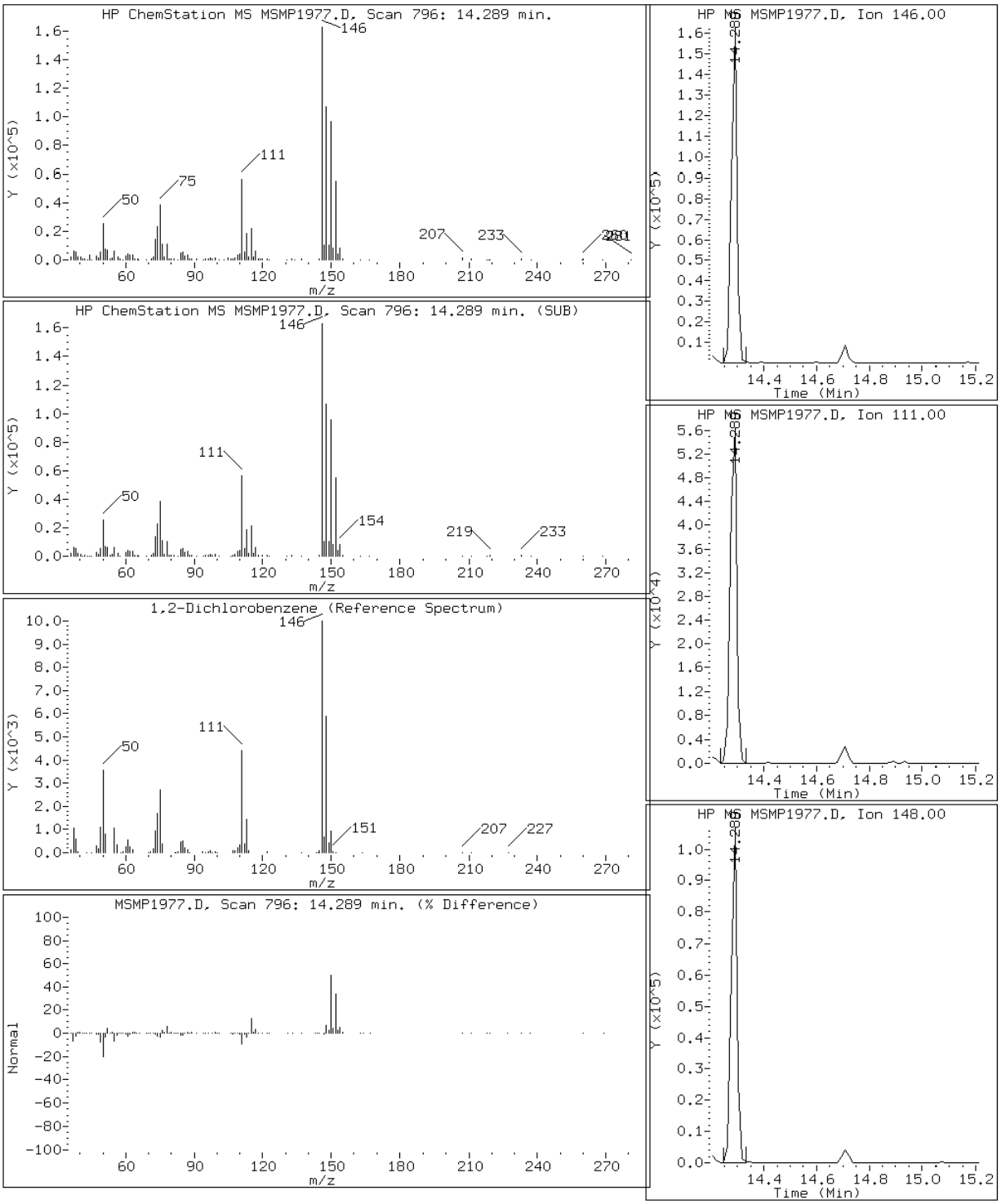
Data File: MSMP1977.D

Date: 14-AUG-2012 08:44

Client ID: PZ-112-AS Instrument: MSM.i

Sample Info: 160-437-F-3 Operator: JDH

99 1,2-Dichlorobenzene



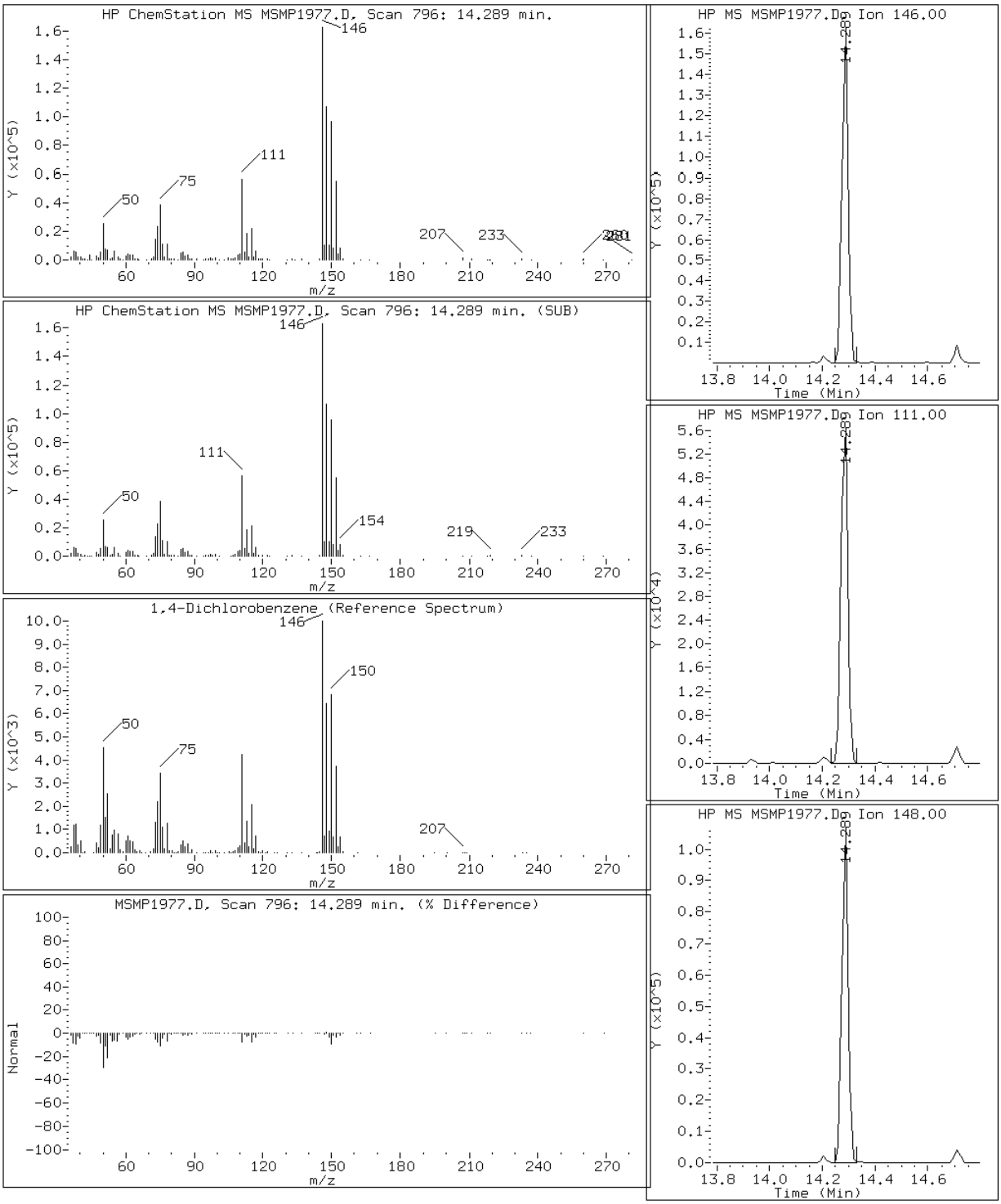
Data File: MSMP1977.D

Date: 14-AUG-2012 08:44

Client ID: PZ-112-AS Instrument: MSM.i

Sample Info: 160-437-F-3 Operator: JDH

96 1,4-Dichlorobenzene



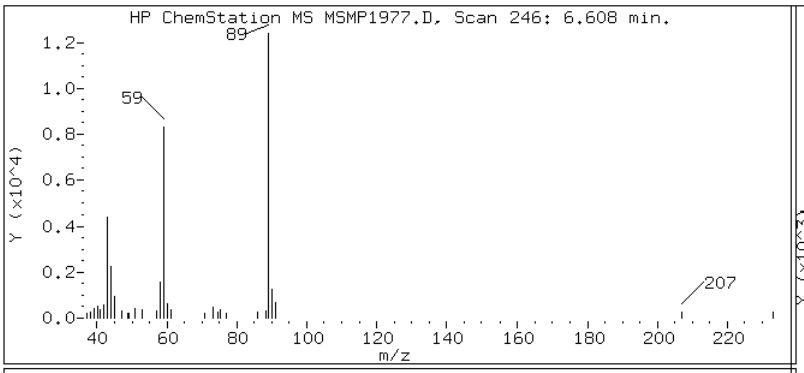
Data File: MSMP1977.D

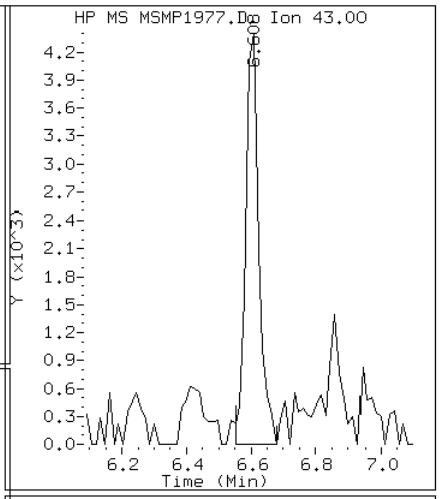
Date: 14-AUG-2012 08:44

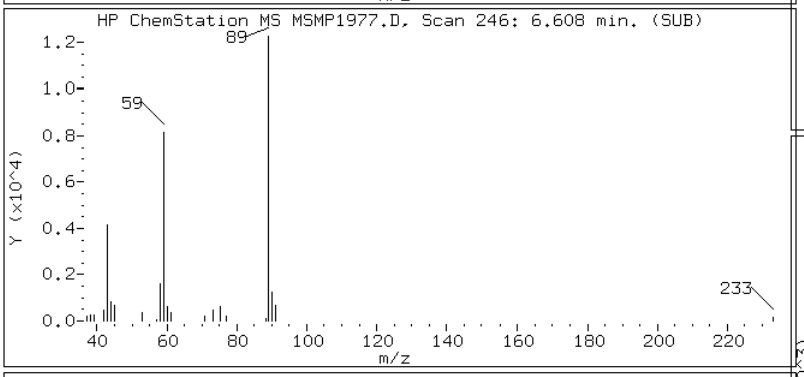
Client ID: PZ-112-AS Instrument: MSM.i

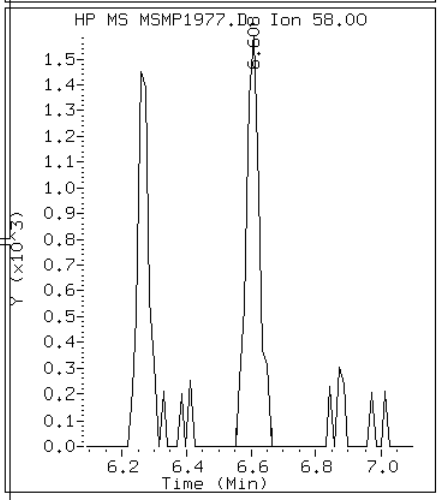
Sample Info: 160-437-F-3 Operator: JDH

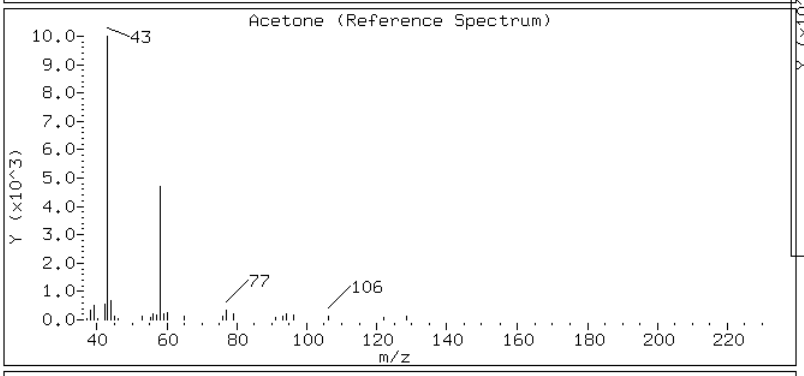
16 Acetone

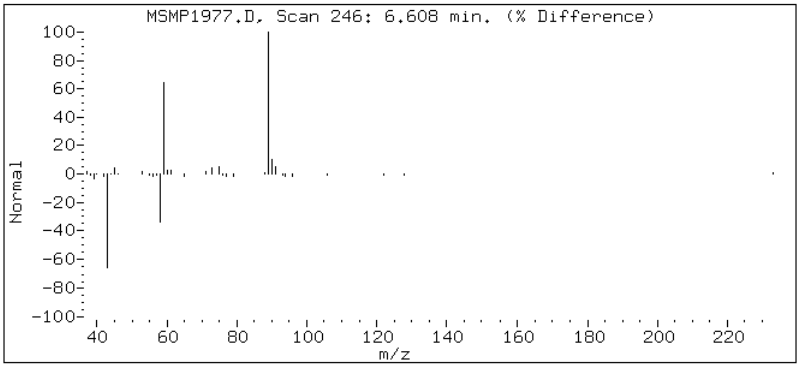












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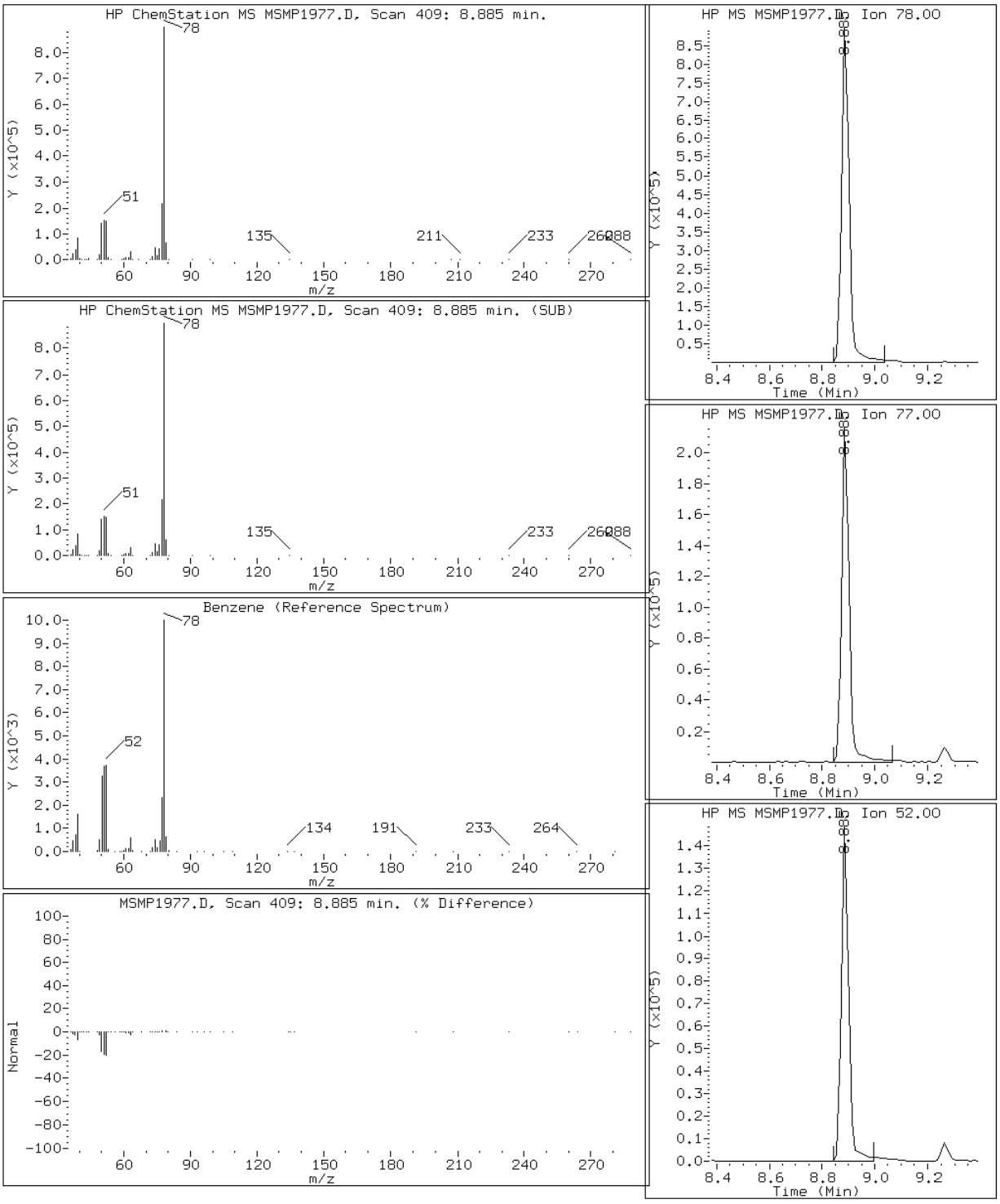
Date: 14-AUG-2012 08:44

Client ID: PZ-112-AS Instrument: MSM.i

Sample Info: 160-437-F-3 Operator: JDH

40 Benzene



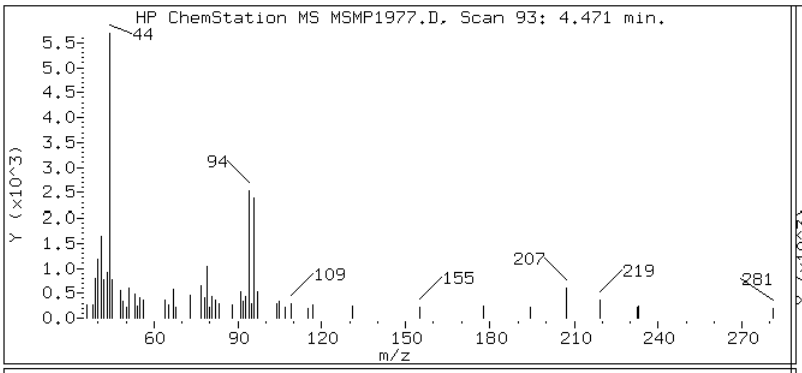
Data File: MSMP1977.D

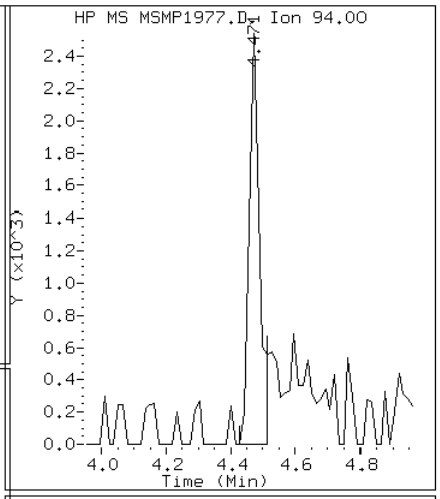
Date: 14-AUG-2012 08:44

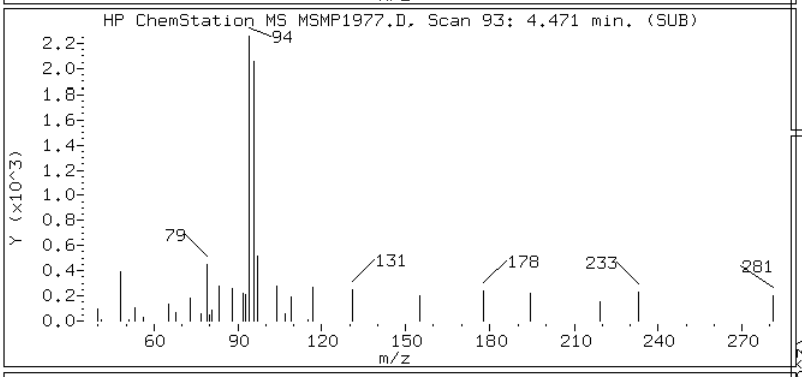
Client ID: PZ-112-AS Instrument: MSM.i

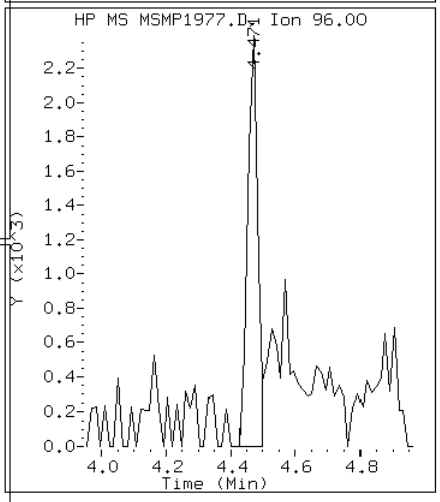
Sample Info: 160-437-F-3 Operator: JDH

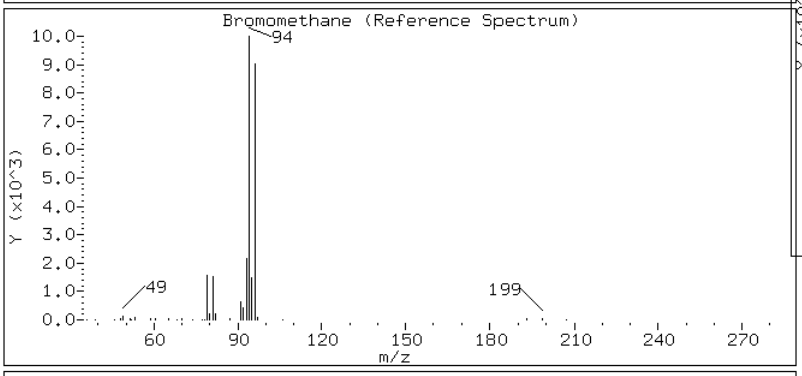
5 Bromomethane

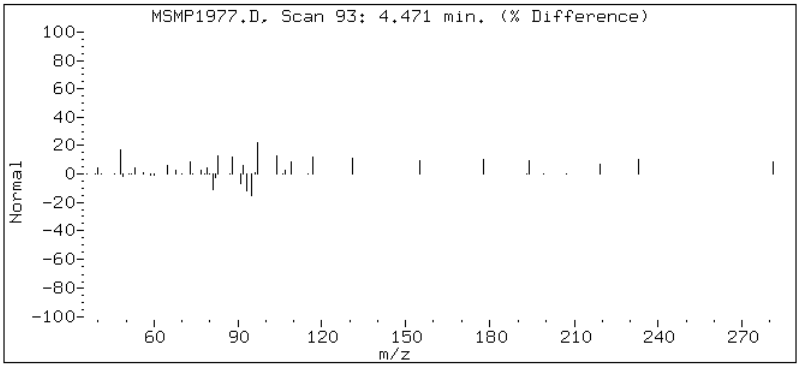












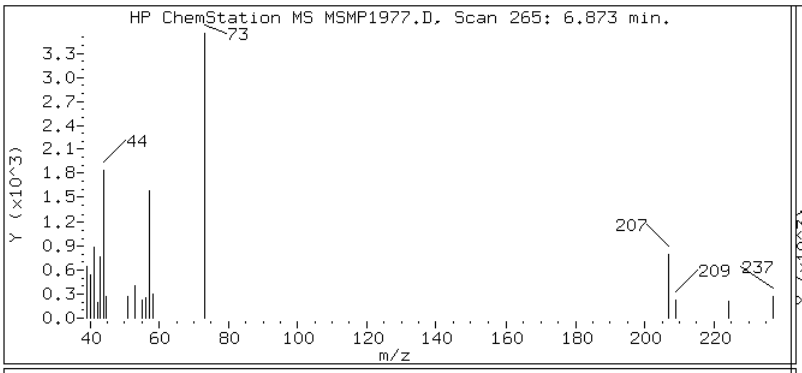
Data File: MSMP1977.D

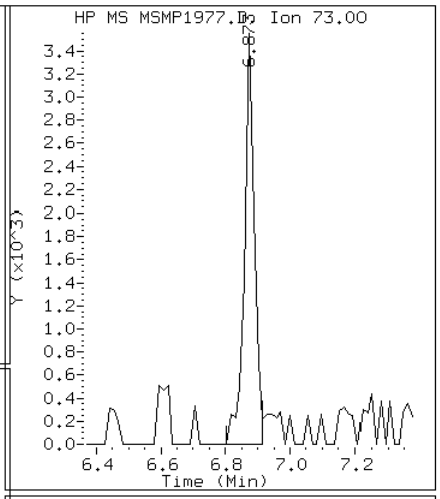
Date: 14-AUG-2012 08:44

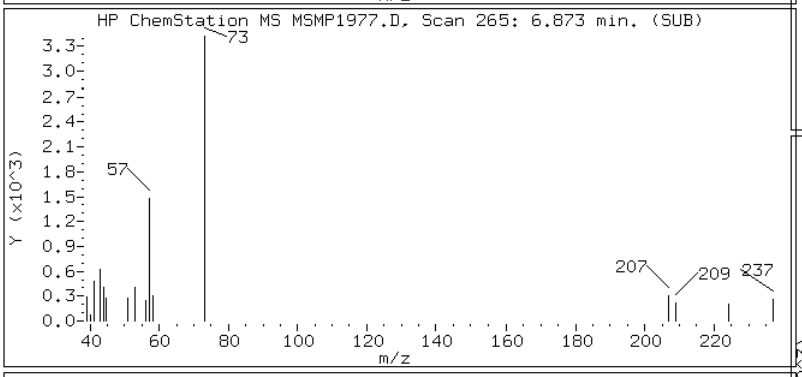
Client ID: PZ-112-AS Instrument: MSM.i

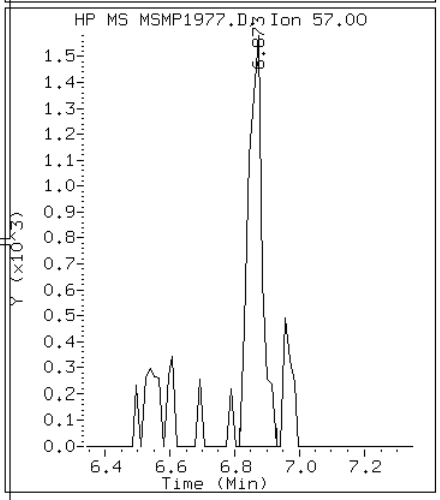
Sample Info: 160-437-F-3 Operator: JDH

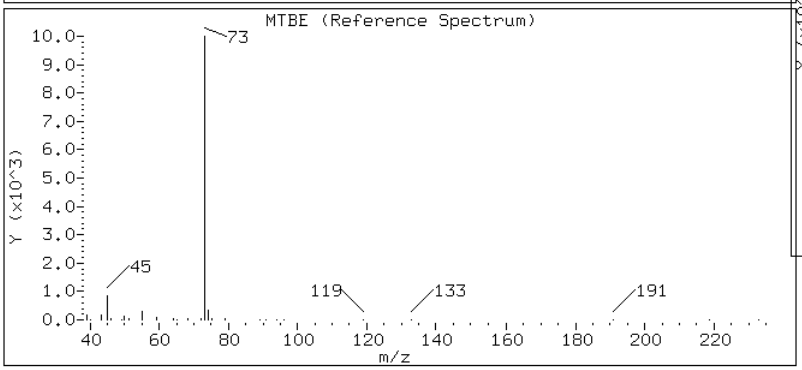
20 MTBE

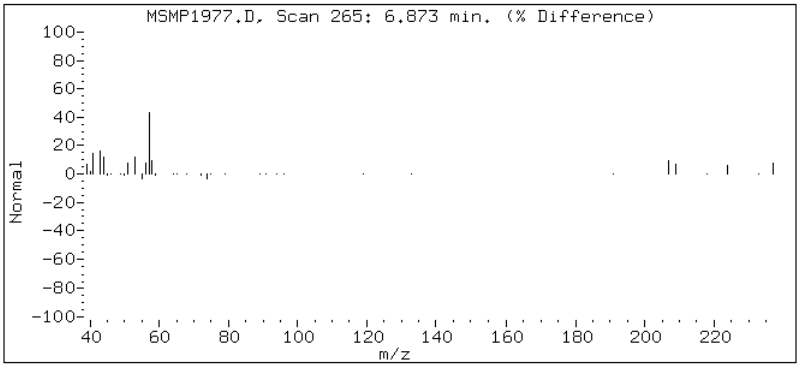












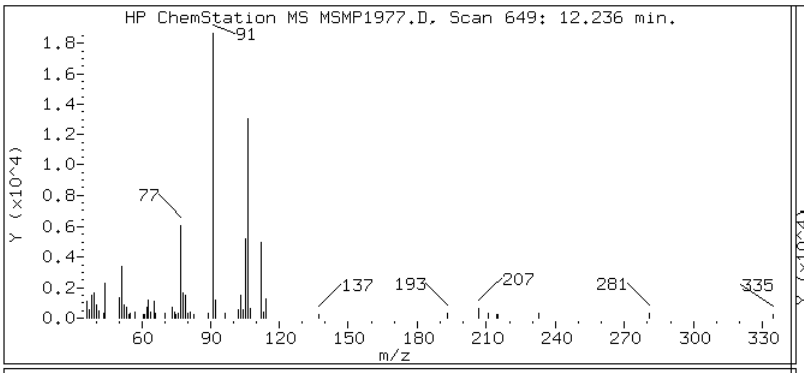
Data File: MSMP1977.D

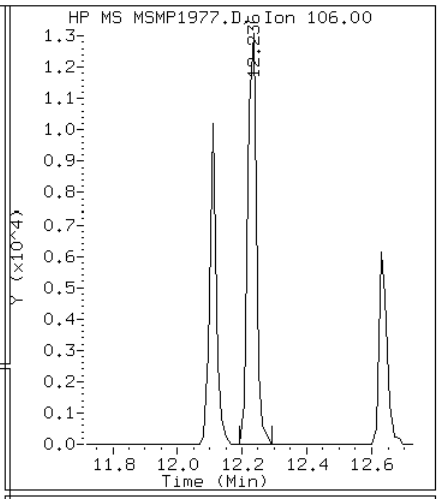
Date: 14-AUG-2012 08:44

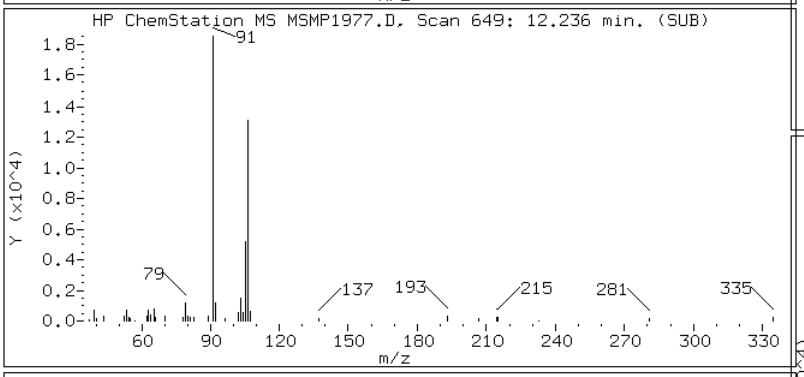
Client ID: PZ-112-AS Instrument: MSM.i

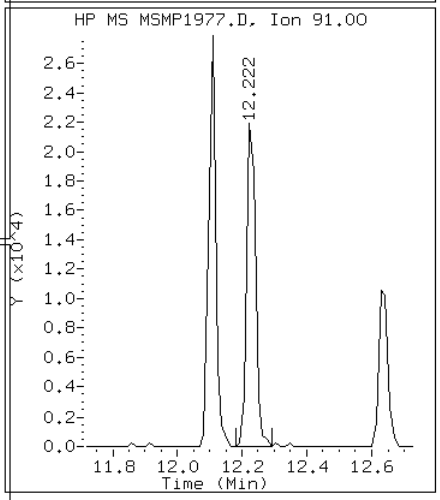
Sample Info: 160-437-F-3 Operator: JDH

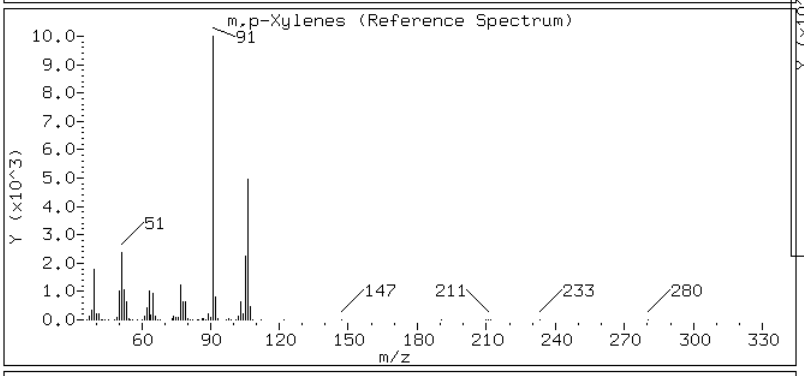
74 m,p-Xylenes

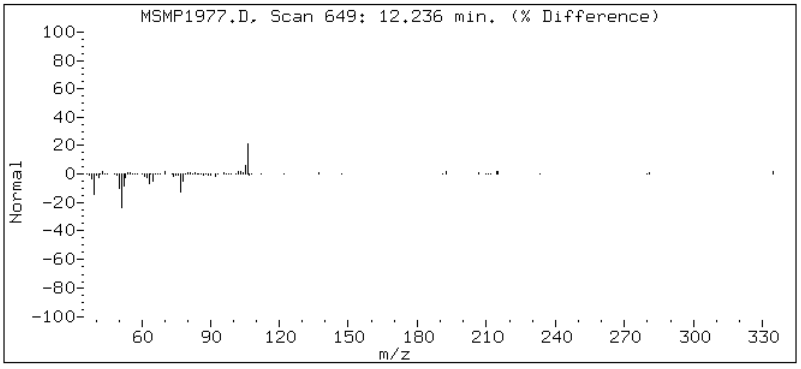












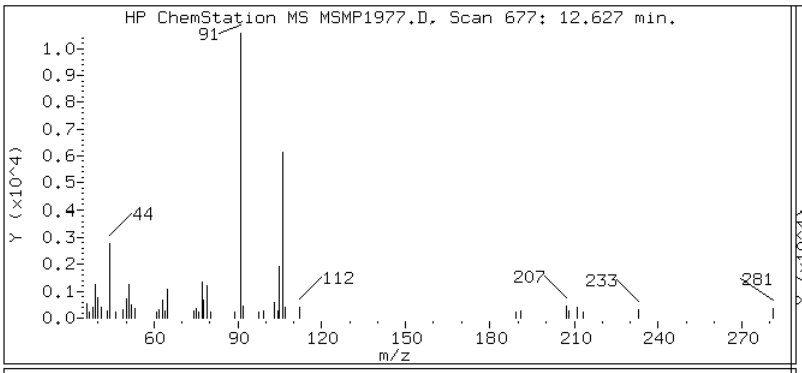
Data File: MSMP1977.D

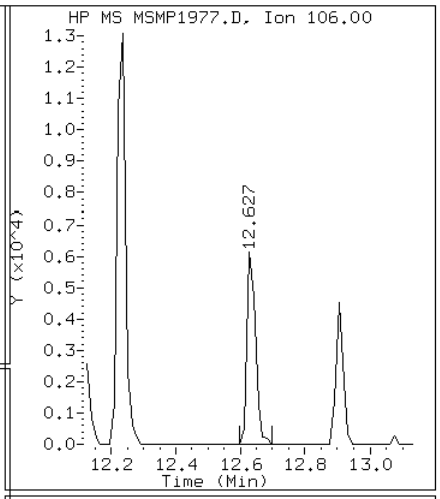
Date: 14-AUG-2012 08:44

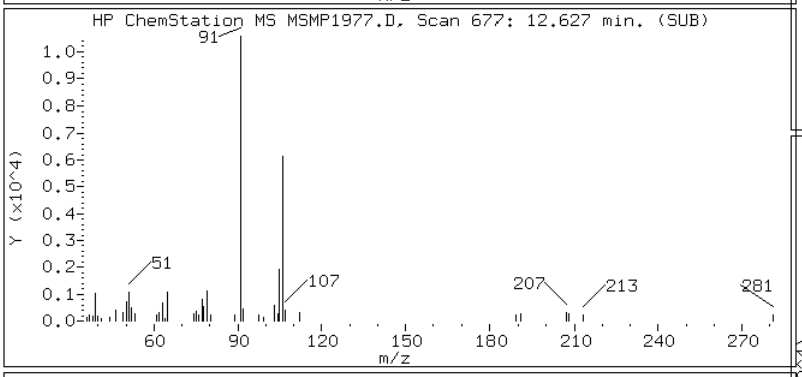
Client ID: PZ-112-AS Instrument: MSM.i

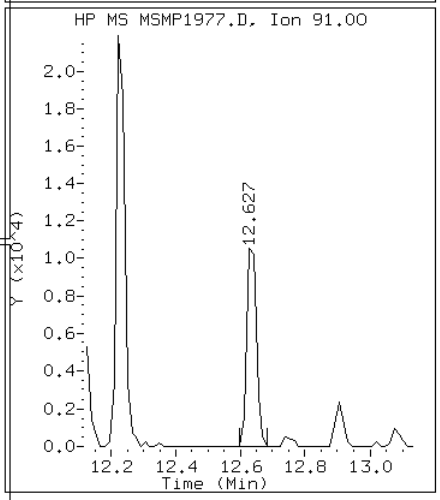
Sample Info: 160-437-F-3 Operator: JDH

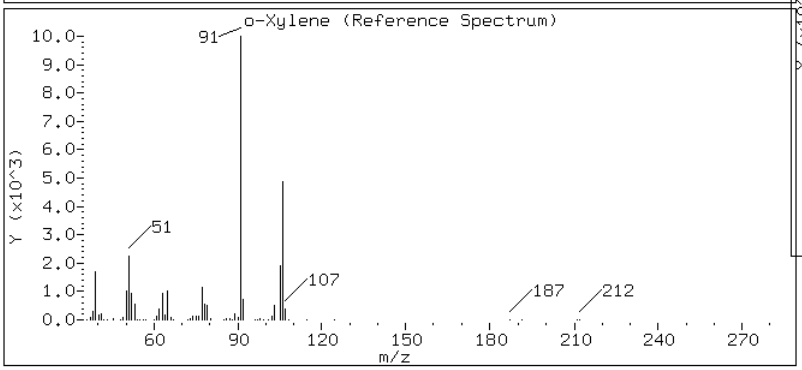
75 o-Xylene

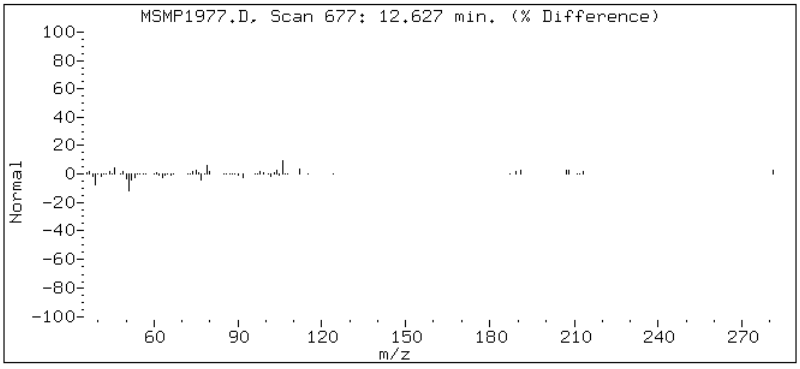












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: ZSMP1173.D

Analysis Method: 8260C | Date Collected: 08/08/2012 10:48

Sample wt/vol: 0.25(mL) | Date Analyzed: 08/16/2012 20:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-00-5	1,1,2-Trichloroethane	ND		100	11
591-78-6	2-Hexanone	ND		400	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		400	6.6
75-25-2	Bromoform	ND		100	7.4
108-90-7	Chlorobenzene	2800		100	7.6
124-48-1	Dibromochloromethane	ND		100	6.6
100-41-4	Ethylbenzene	ND		100	6.0
98-82-8	Isopropylbenzene	ND		100	5.2
100-42-5	Styrene	ND		100	7.0
127-18-4	Tetrachloroethene	ND		100	5.6
108-88-3	Toluene	ND		100	20
10061-02-6	trans-1,3-Dichloropropene	ND		100	7.0
1330-20-7	Xylenes, Total	ND		200	17

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		85-115
1868-53-7	Dibromofluoromethane (Surr)	105		85-119
460-00-4	4-Bromofluorobenzene (Surr)	98		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		82-132

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1173.D
Report Date: 21-Aug-2012 22:55

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1173.D
Lab Smp Id: 160-437-H-3 Client Smp ID: PZ-112-AS
Inj Date : 16-AUG-2012 20:15
Operator : JDH Inst ID: MSZ.i
Smp Info : 160-437-H-3
Misc Info : 160-437-H-3
Comment : NONE
Method : \\Slsvr01\Chem\MSZ.i\Z120816D.b\8260C-Z5mL.m
Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.25000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	8 Diethyl ether	74	5.041	5.028	(0.565)	10037	1.82782	36.56(a)
$	35 Dibromofluoromethane (surr)	113	8.128	8.129	(0.911)	529379	52.4567	1049
	40 Benzene	78	8.533	8.534	(0.956)	132187	2.57304	51.46
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.970)	447263	51.7106	1034
*	46 Fluorobenzene	96	8.924	8.911	(1.000)	2118317	50.0000	
$	57 Toluene-d8 (surr)	98	10.348	10.349	(0.879)	1998425	49.5274	990.5
*	70 Chlorobenzene-d5	117	11.773	11.774	(1.000)	1503201	50.0000	
	71 Chlorobenzene	112	11.787	11.788	(1.001)	4476932	138.360	2767
$	79 4-Bromofluorobenzene (surr)	95	12.876	12.891	(0.923)	762818	48.7802	975.6
*	95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	720451	50.0000	
	96 1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	20289	0.85562	17.11(a)
	105 Naphthalene	128	16.186	16.201	(1.160)	205646	16.8395	336.8

QC Flag Legend

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

Data File: ZSMP1173.D

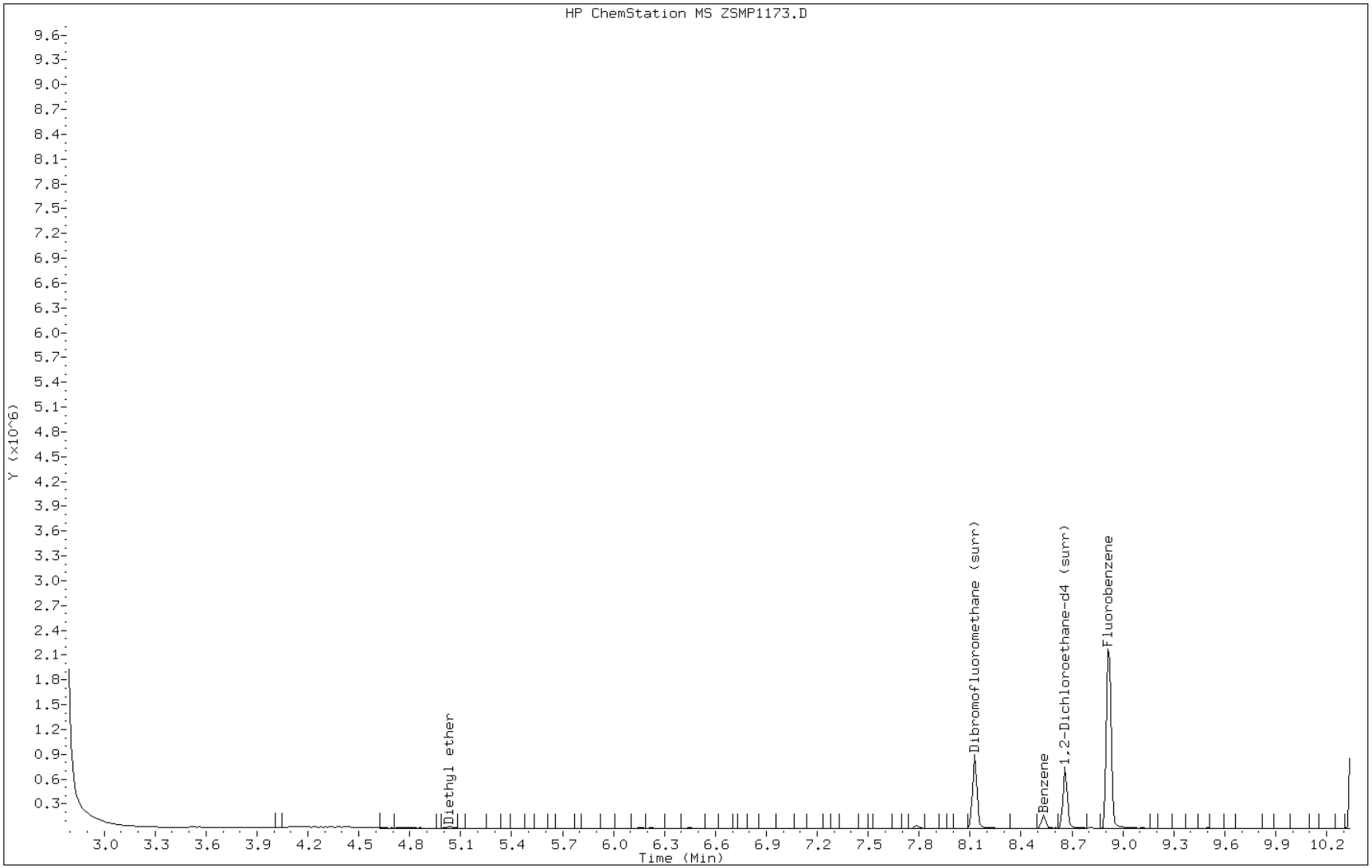
Date: 16-AUG-2012 20:15

Client ID: PZ-112-AS

Instrument: MSZ.i

Sample Info: 160-437-H-3

Operator: JDH



Data File: ZSMP1173.D

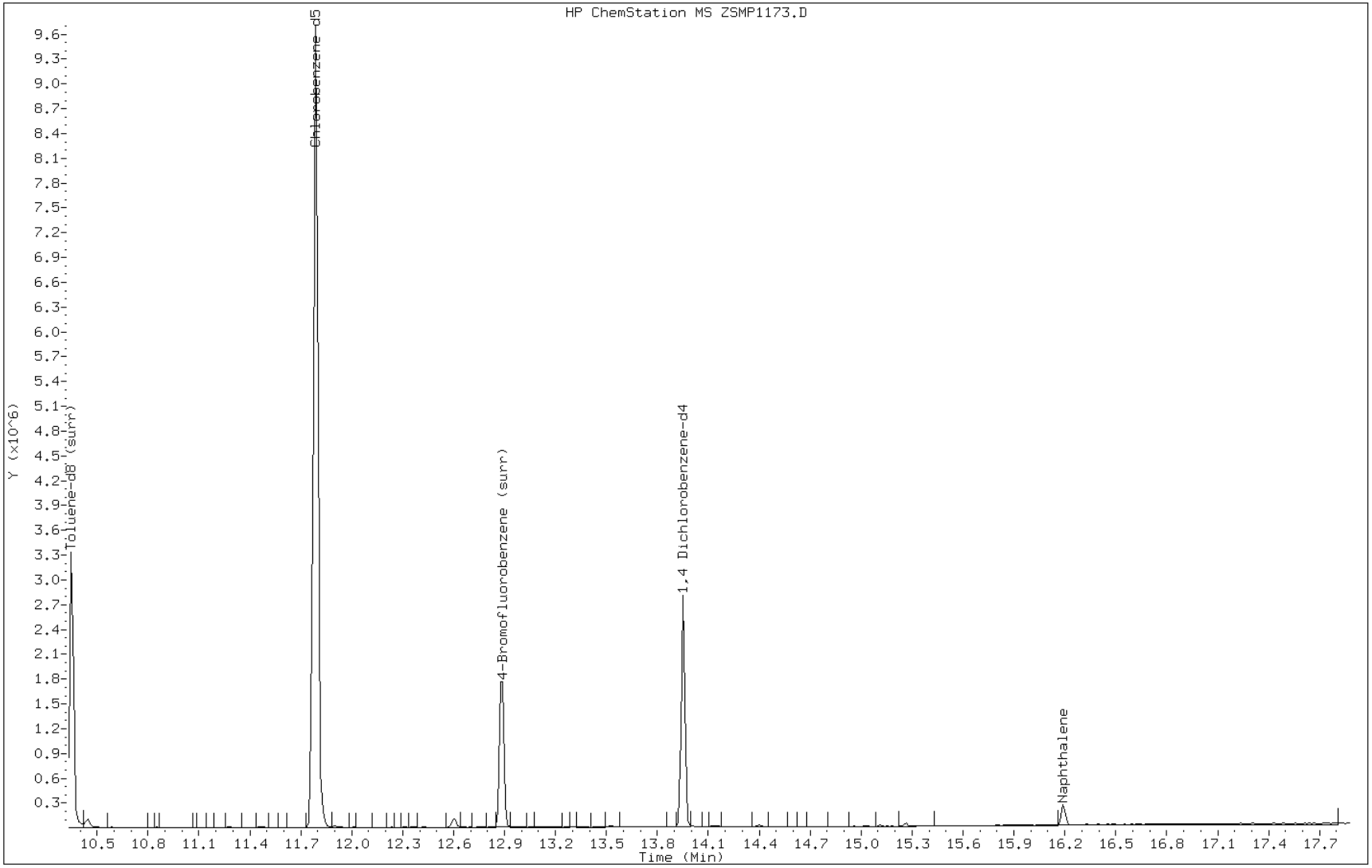
Date: 16-AUG-2012 20:15

Client ID: PZ-112-AS

Instrument: MSZ.i

Sample Info: 160-437-H-3

Operator: JDH



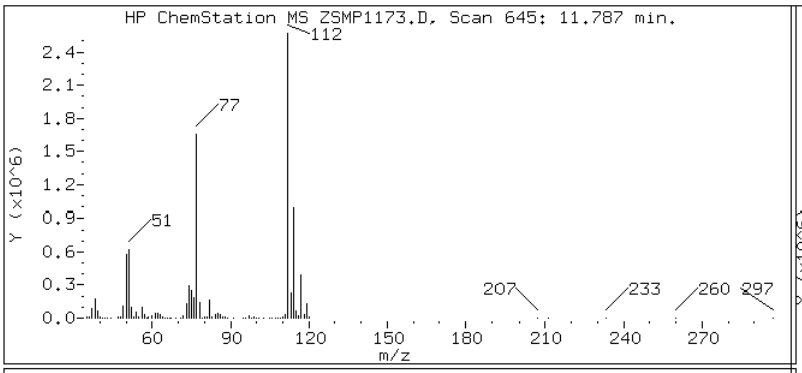
Data File: ZSMP1173.D

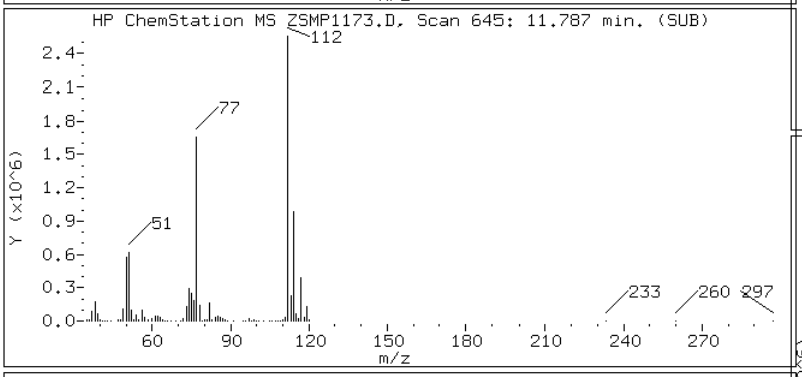
Date: 16-AUG-2012 20:15

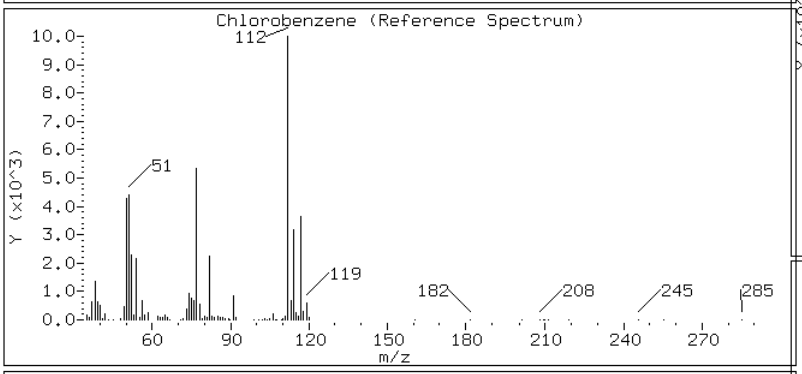
Client ID: PZ-112-AS Instrument: MSZ.i

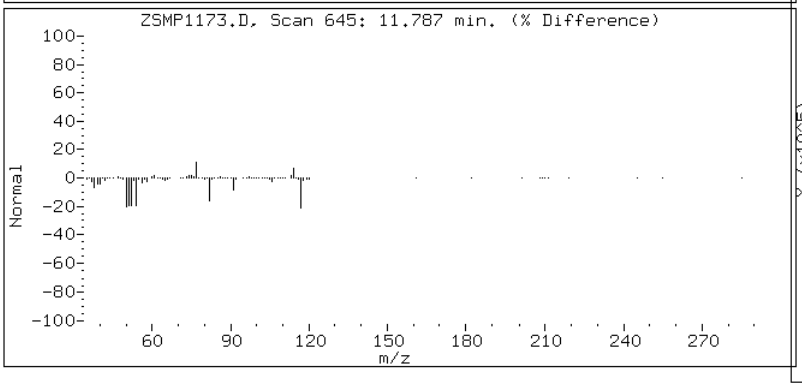
Sample Info: 160-437-H-3 Operator: JDH

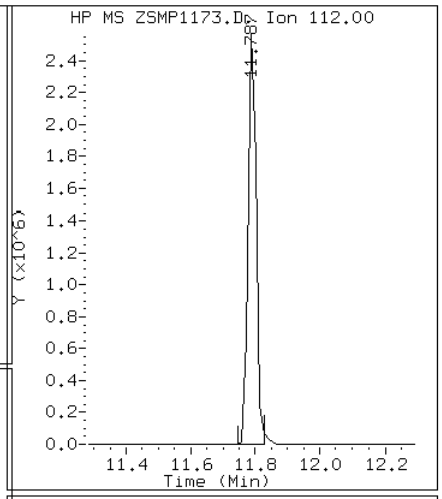
71 Chlorobenzene

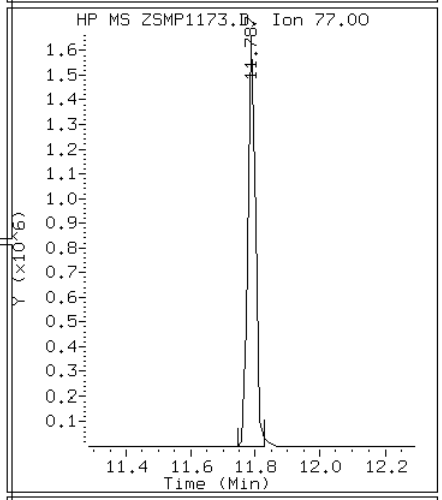


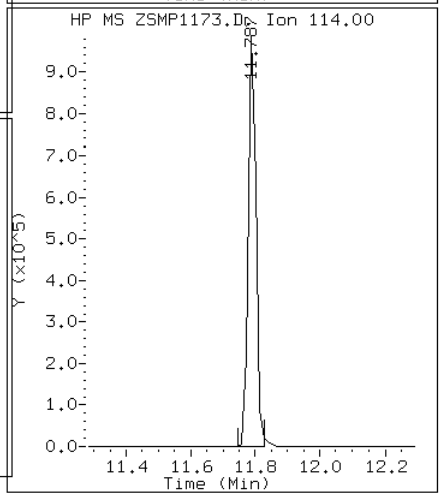












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Matrix: Water | Lab File ID: MSMP1978.D

Analysis Method: 8260C | Date Collected: 08/08/2012 11:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 09:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	0.61	J	5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	ND		5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.65	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	19		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	4.0	J	10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	1.9	J	5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.55	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Matrix: Water | Lab File ID: MSMP1978.D

Analysis Method: 8260C | Date Collected: 08/08/2012 11:43

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 09:09

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	104		85-115
1868-53-7	Dibromofluoromethane (Surr)	102		85-119
460-00-4	4-Bromofluorobenzene (Surr)	111		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1978.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1978.D
Lab Smp Id: 160-437-F-4 Client Smp ID: I-11
Inj Date : 14-AUG-2012 09:09
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-4
Misc Info : 160-437-F-4
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.470	4.457	(0.483)	4302	0.64966	0.6497(a)
	6 Chloroethane	64	4.694	4.694	(0.507)	27013	4.04166	4.042
M	26 1,2-Dichloroethene (total)	96				15429	1.88954	1.890(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	90907	25.6464	25.65
	12 Iodomethane	142	5.979	5.965	(0.646)	4079	4.11548	4.115
	20 MTBE	73	6.873	6.873	(0.742)	7121	0.54996	0.5500(a)
	23 1,1-Dichloroethane	63	7.459	7.460	(0.805)	7887	0.60505	0.6050(aH)
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	15429	1.88954	1.890(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	7521	17.5000	17.50
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	309737	51.2361	51.24
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	264831	53.1963	53.20
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1421403	50.0000	
$	57 Toluene-d8 (Surr)	98	10.685	10.686	(0.883)	1268159	52.0435	52.04
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	963649	50.0000	
	71 Chlorobenzene	112	12.124	12.110	(1.002)	363366	18.6143	18.61
$	79 4-Bromofluorobenzene (Surr)	95	13.199	13.200	(0.925)	389805	55.2868	55.29
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	445947	50.0000	
	105 Naphthalene	128	16.523	16.524	(1.158)	80855	18.2243	18.22

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1978.D
Report Date: 21-Aug-2012 17:18

QC Flag Legend

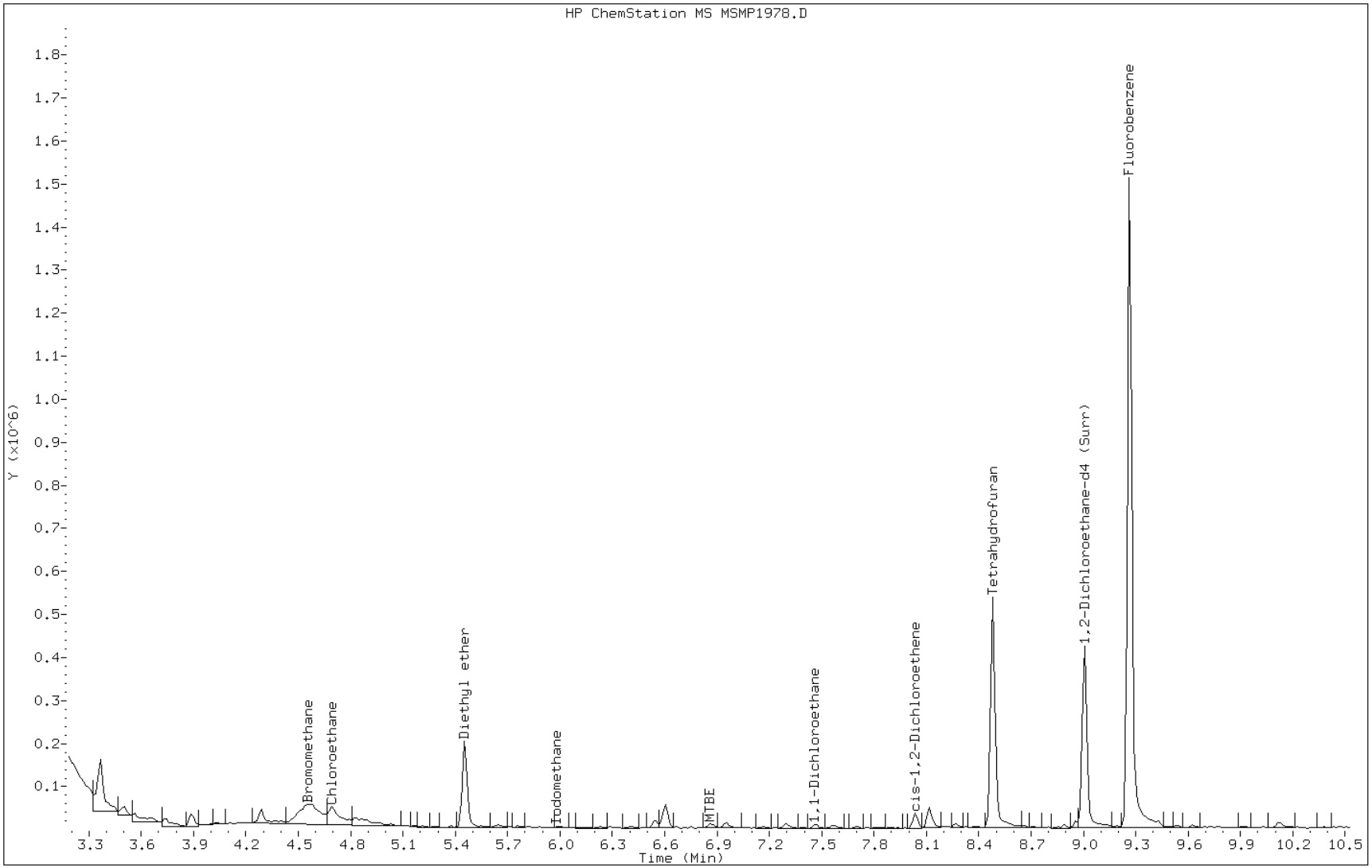
a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: MSMP1978.D

Date: 14-AUG-2012 09:09

Client ID: I-11 Instrument: MSM.i

Sample Info: 160-437-F-4 Operator: JDH

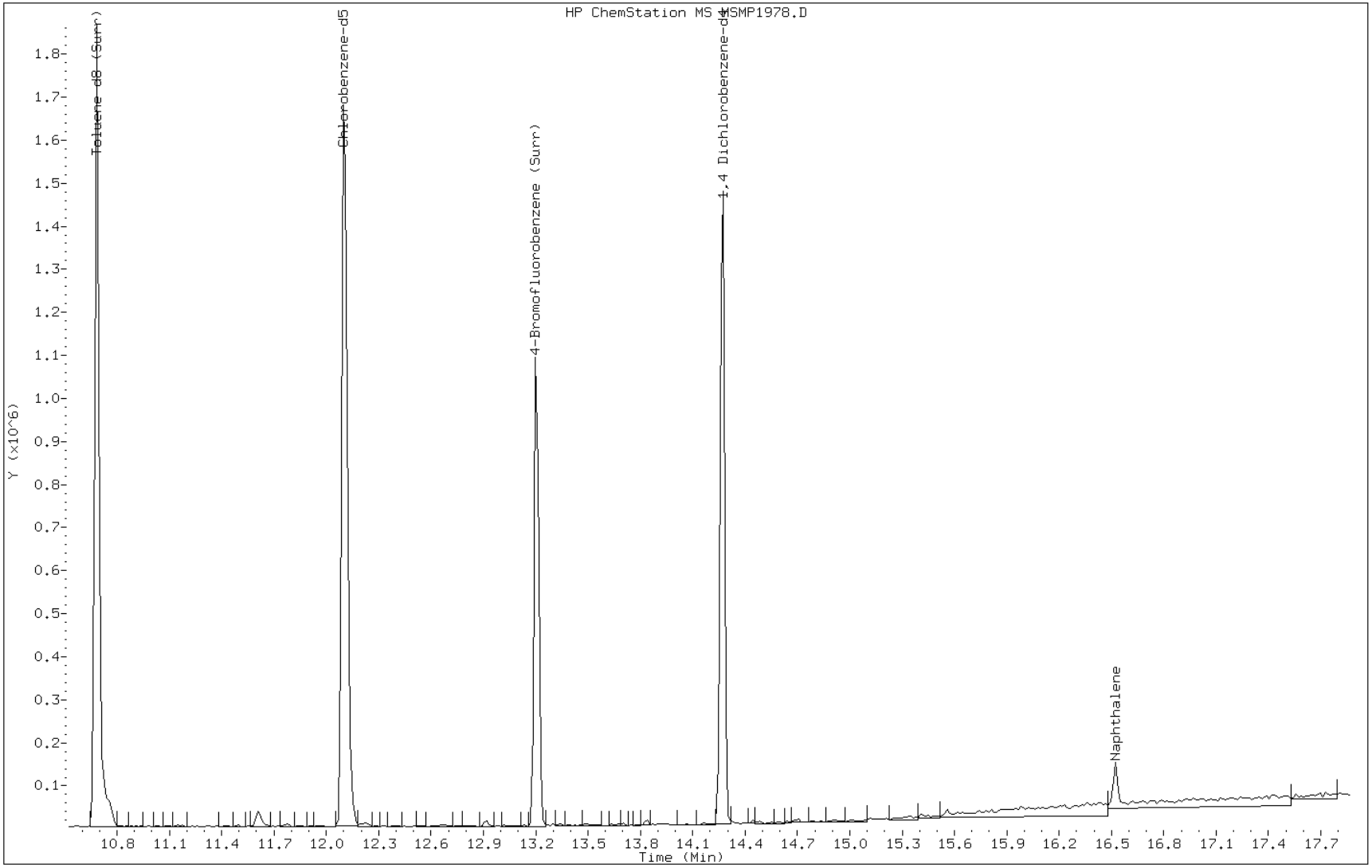


Data File: MSMP1978.D

Date: 14-AUG-2012 09:09

Client ID: I-11 Instrument: MSM.i

Sample Info: 160-437-F-4 Operator: JDH



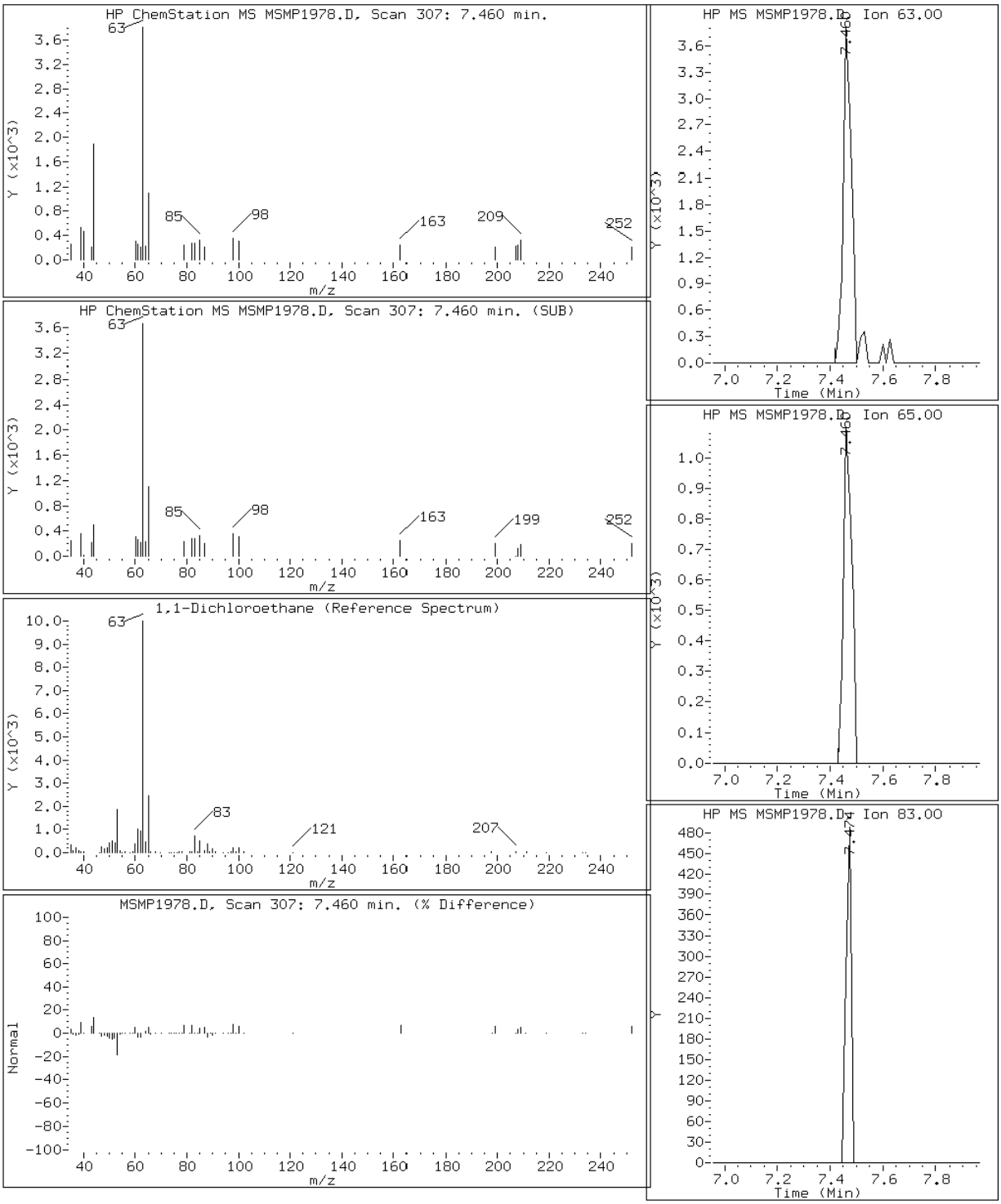
Data File: MSMP1978.D

Date: 14-AUG-2012 09:09

Client ID: I-11 Instrument: MSM.i

Sample Info: 160-437-F-4 Operator: JDH

23 1,1-Dichloroethane



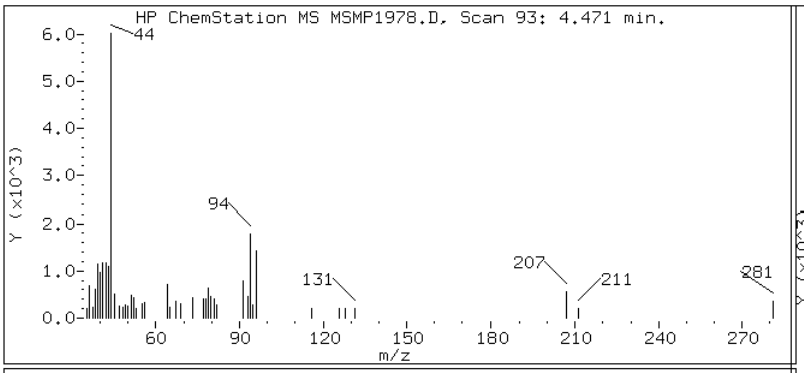
Data File: MSMP1978.D

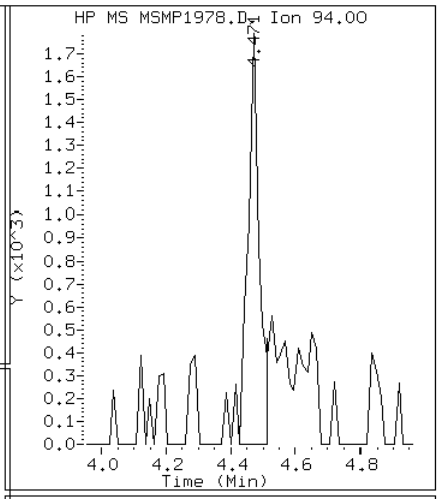
Date: 14-AUG-2012 09:09

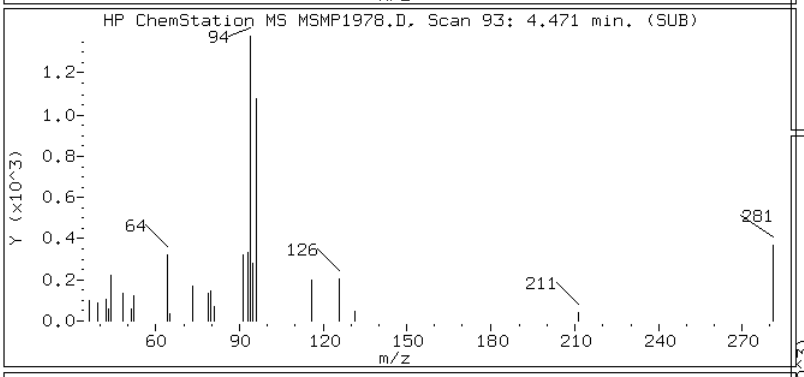
Client ID: I-11 Instrument: MSM.i

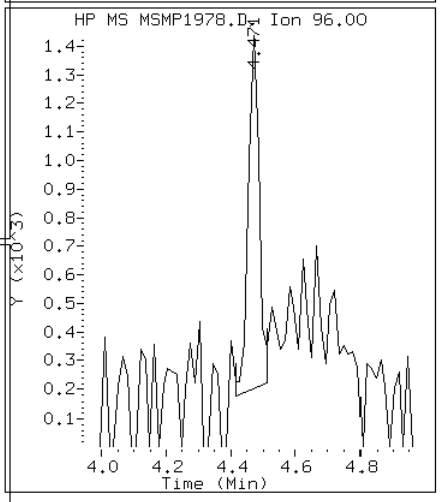
Sample Info: 160-437-F-4 Operator: JDH

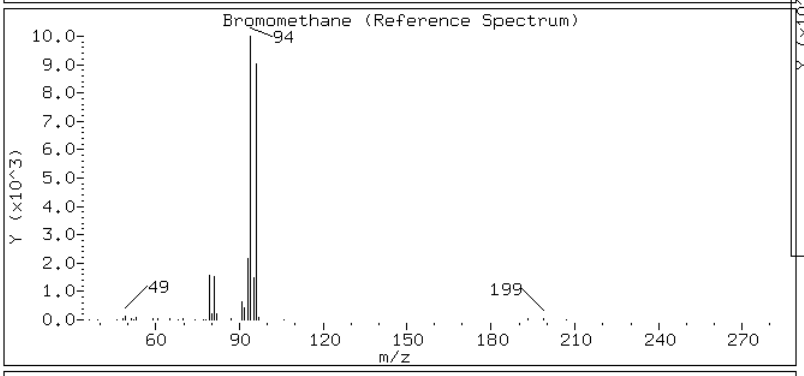
5 Bromomethane

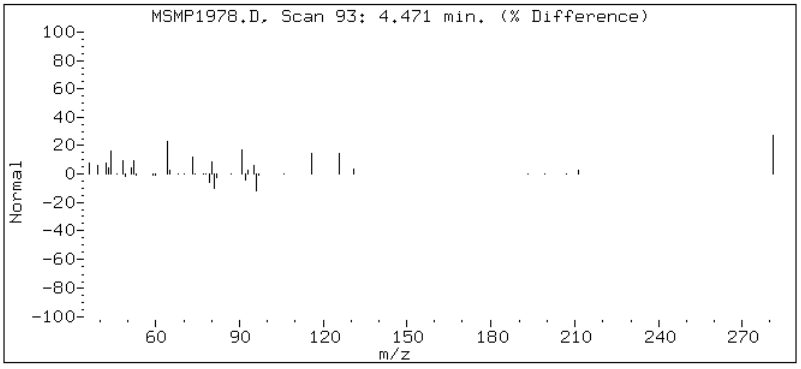












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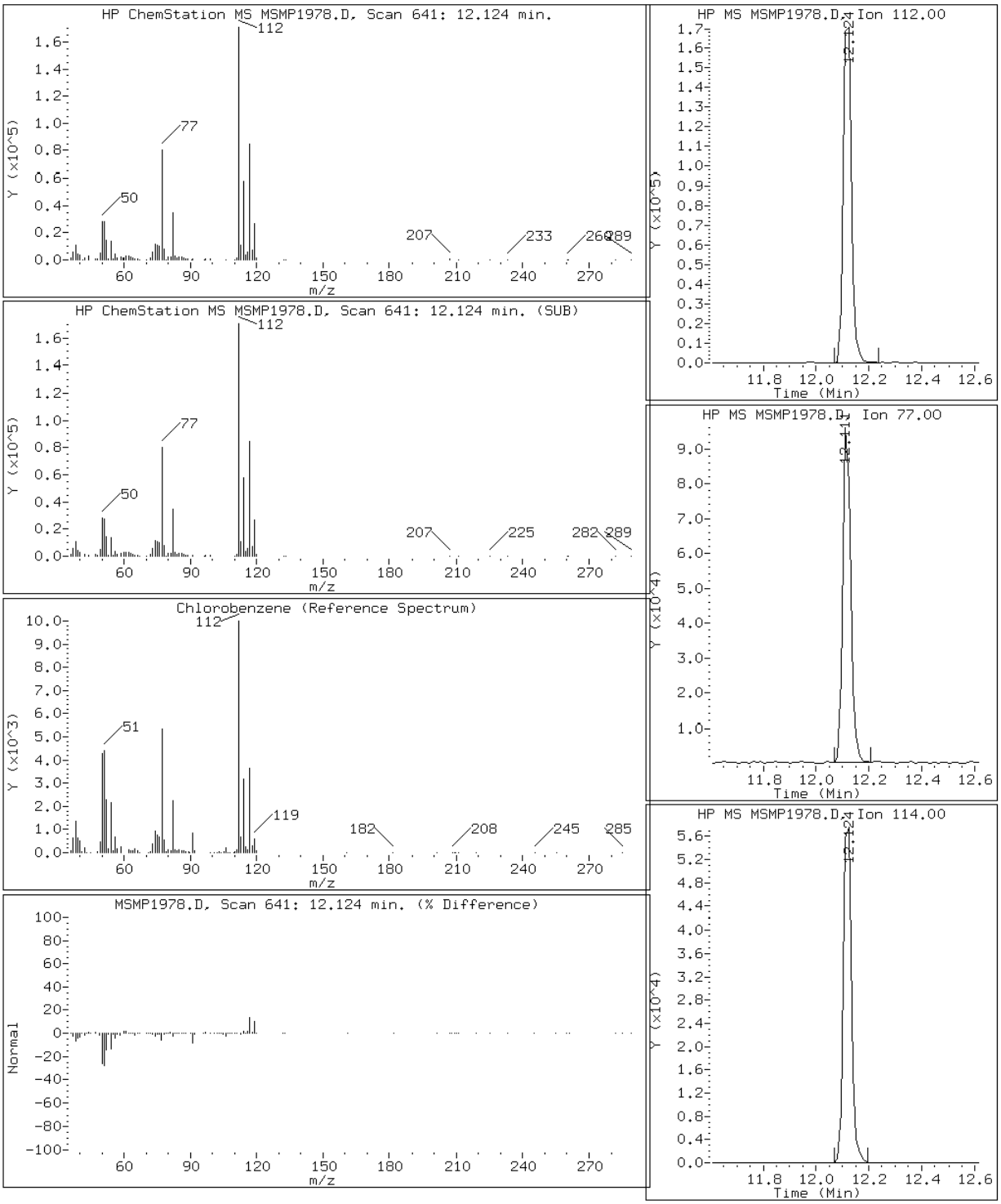
Date: 14-AUG-2012 09:09

Client ID: I-11 Instrument: MSM.i

Sample Info: 160-437-F-4 Operator: JDH

71 Chlorobenzene



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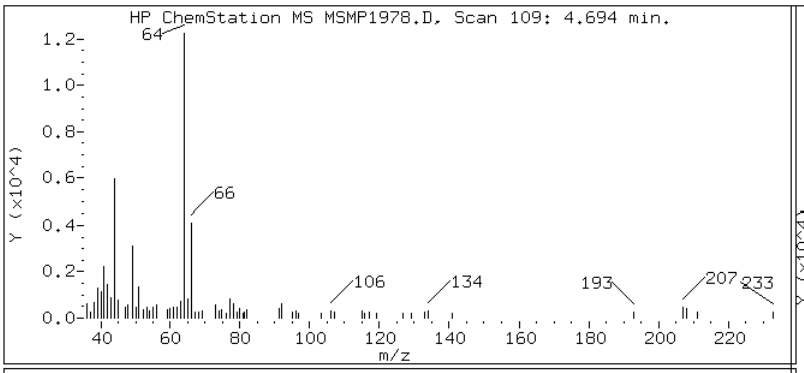
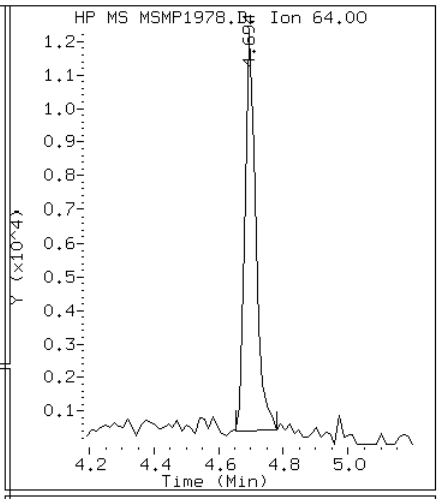
Date: 14-AUG-2012 09:09

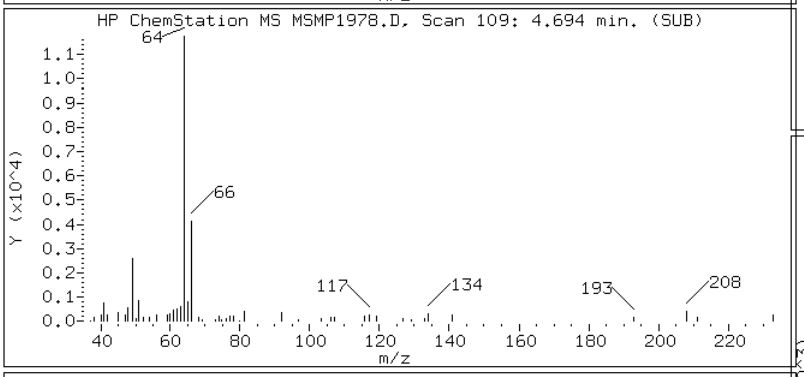
Client ID: I-11 Instrument: MSM.i

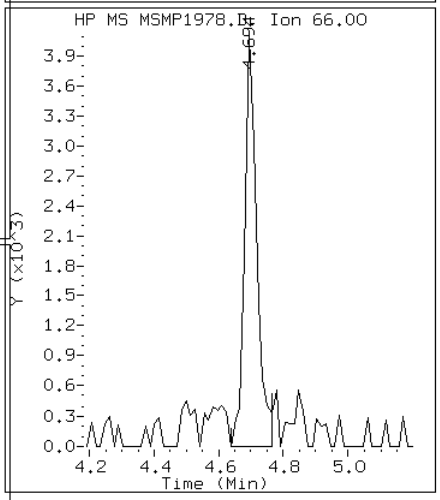
Sample Info: 160-437-F-4 Operator: JDH

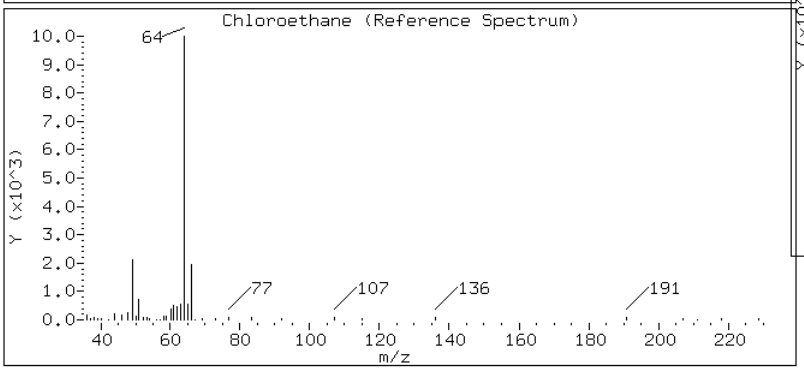
6 Chloroethane

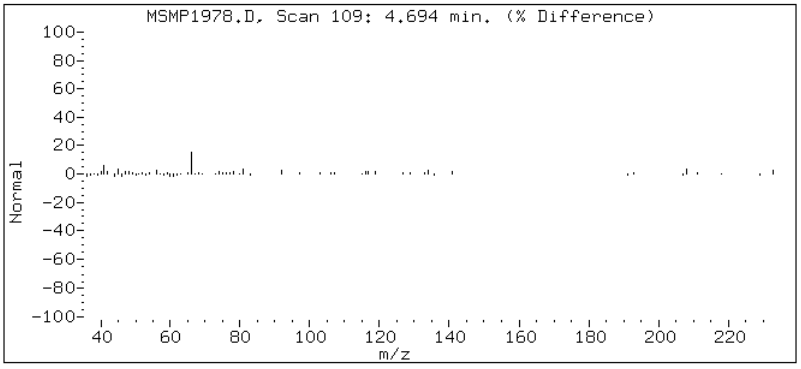












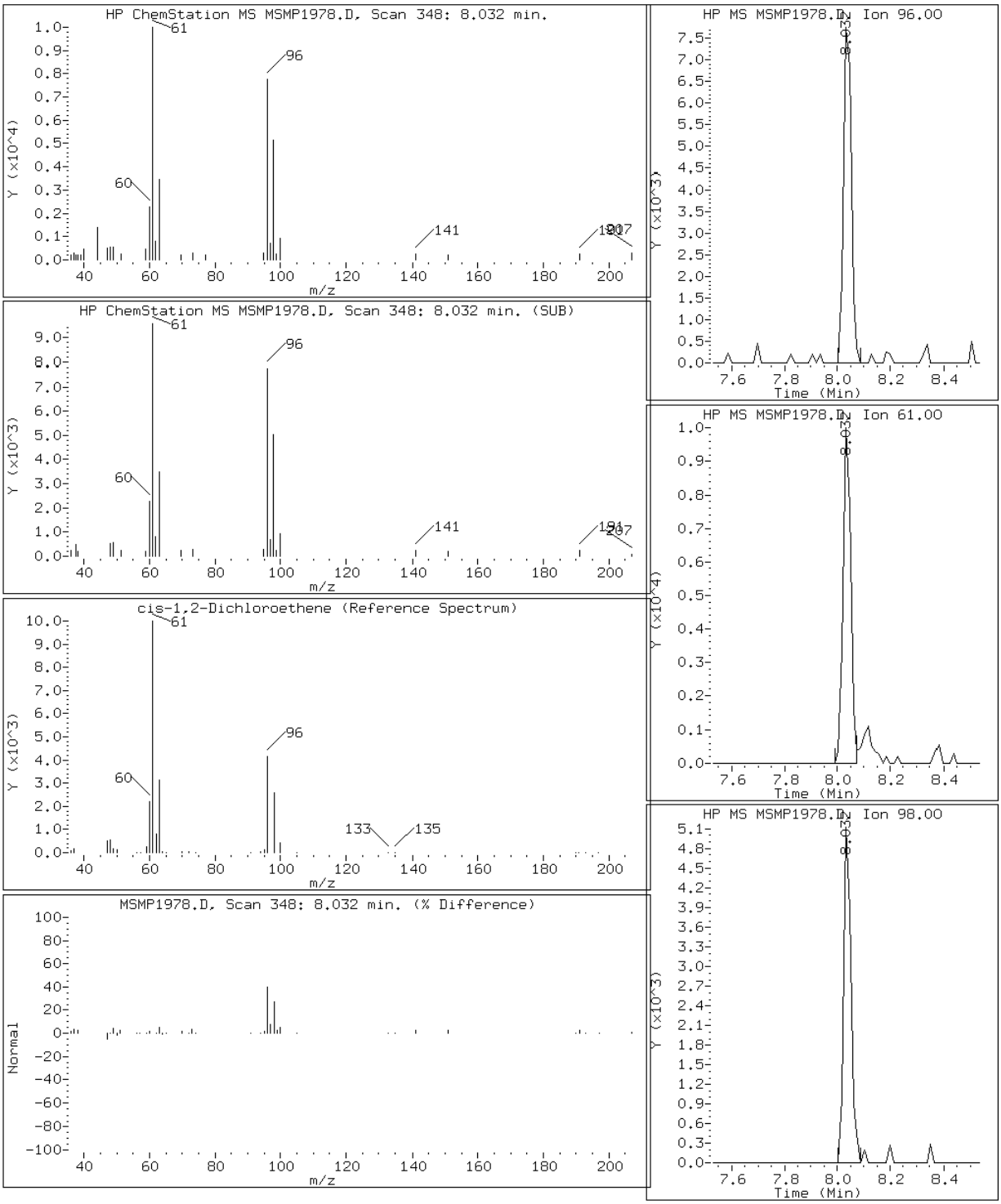
Data File: MSMP1978.D

Date: 14-AUG-2012 09:09

Client ID: I-11 Instrument: MSM.i

Sample Info: 160-437-F-4 Operator: JDH

27 cis-1,2-Dichloroethene



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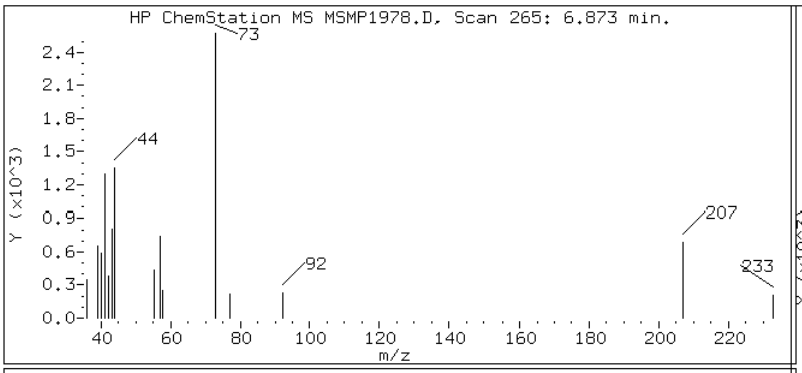
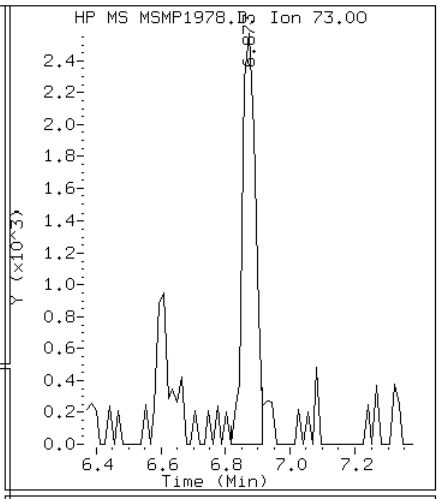
Date: 14-AUG-2012 09:09

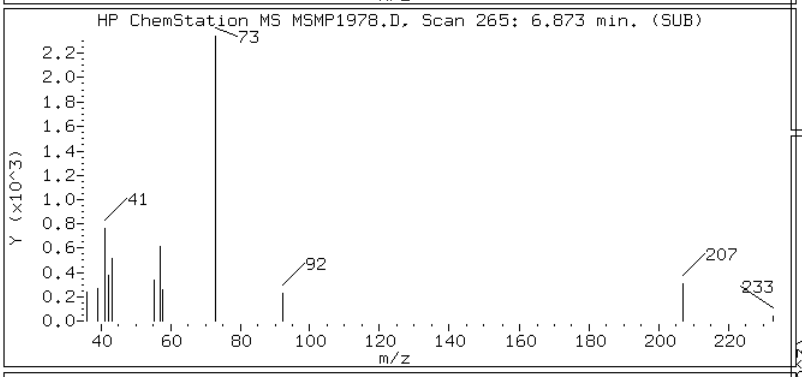
Client ID: I-11 Instrument: MSM.i

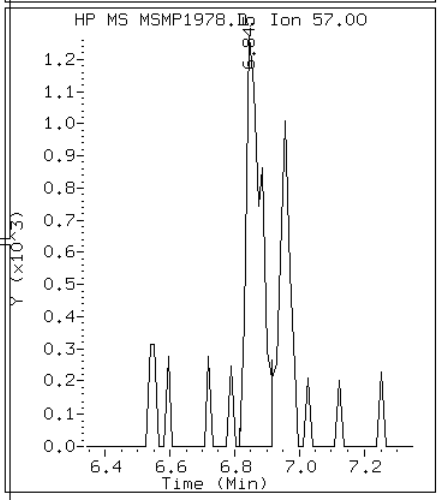
Sample Info: 160-437-F-4 Operator: JDH

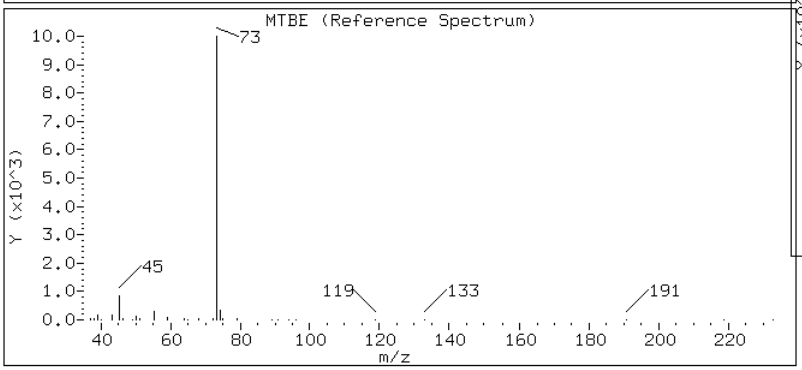
20 MTBE

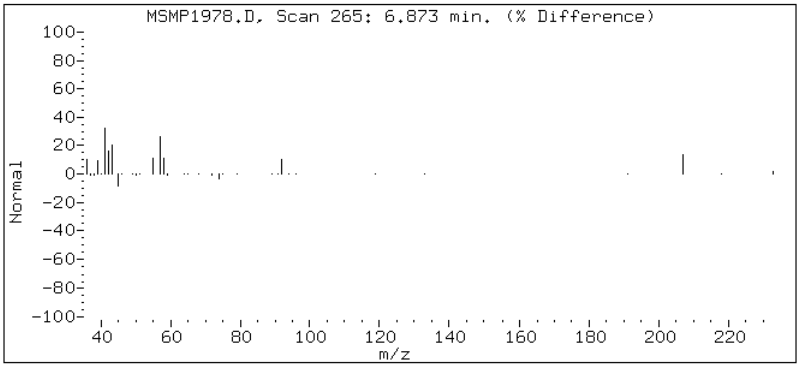












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-207-AS | Lab Sample ID: 160-437-5

Matrix: Water | Lab File ID: MSMP1983.D

Analysis Method: 8260C | Date Collected: 08/08/2012 12:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	0.49	J	5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	3.0	J	5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	15	J	20	6.7
71-43-2	Benzene	1.6	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.49	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	13		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	6.1	J	10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	4.0	J	5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	1.0	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-207-AS | Lab Sample ID: 160-437-5

Matrix: Water | Lab File ID: MSMP1983.D

Analysis Method: 8260C | Date Collected: 08/08/2012 12:55

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 11:54

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	105		85-115
1868-53-7	Dibromofluoromethane (Surr)	103		85-119
460-00-4	4-Bromofluorobenzene (Surr)	109		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	115		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1983.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1983.D
Lab Smp Id: 160-437-F-5 Client Smp ID: PZ-207-AS
Inj Date : 14-AUG-2012 11:54
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-5
Misc Info : 160-437-F-5
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	1 Dichlorodifluoromethane	85	3.297	3.298	(0.356)	37722	6.10387	6.104
	5 Bromomethane	94	4.470	4.457	(0.483)	2922	0.49370	0.4937(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	85605	27.0204	27.02
	12 Iodomethane	142	5.965	5.965	(0.644)	2012	3.85530	3.855
	16 Acetone	43	6.593	6.594	(0.712)	20536	14.6812	14.68
	20 MTBE	73	6.873	6.873	(0.742)	11890	1.02739	1.027(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	32355	84.2301	84.23
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	277072	51.2790	51.28
	40 Benzene	78	8.884	8.884	(0.959)	40793	1.58003	1.580(a)
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.009	9.010	(0.973)	255131	57.3377	57.34
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1270436	50.0000	
$	57 Toluene-d8 (Surr)	98	10.685	10.686	(0.883)	1163004	52.3646	52.36
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	878324	50.0000	
	71 Chlorobenzene	112	12.110	12.110	(1.001)	236723	13.3048	13.30
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	91372	4.03214	4.032
$	79 4-Bromofluorobenzene (Surr)	95	13.199	13.200	(0.925)	367990	54.3793	54.38
	81 n-Propylbenzene	91	13.297	13.298	(0.931)	33938	1.08129	1.081(a)
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	17313	0.78577	0.7858(a)
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	18045	0.61996	0.6200(a)
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	428016	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	40793	2.99487	2.995
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	5743	0.49120	0.4912(a)

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1983.D
Report Date: 21-Aug-2012 17:18

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
105 Naphthalene	128	16.523	16.524	(1.158)	4480	1.05207	1.052(a)

QC Flag Legend

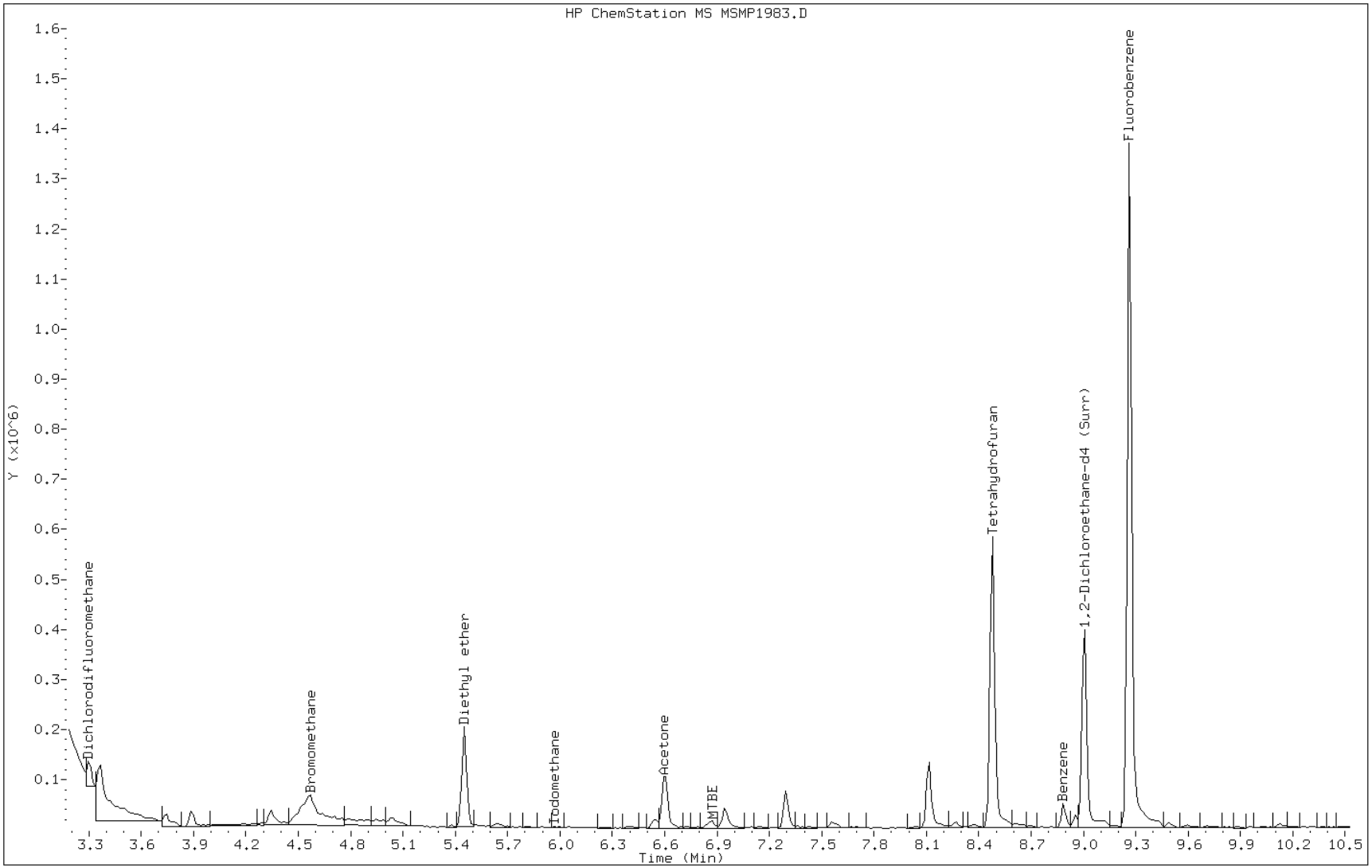
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MSMP1983.D

Date: 14-AUG-2012 11:54

Client ID: PZ-207-AS Instrument: MSM.i

Sample Info: 160-437-F-5 Operator: JDH



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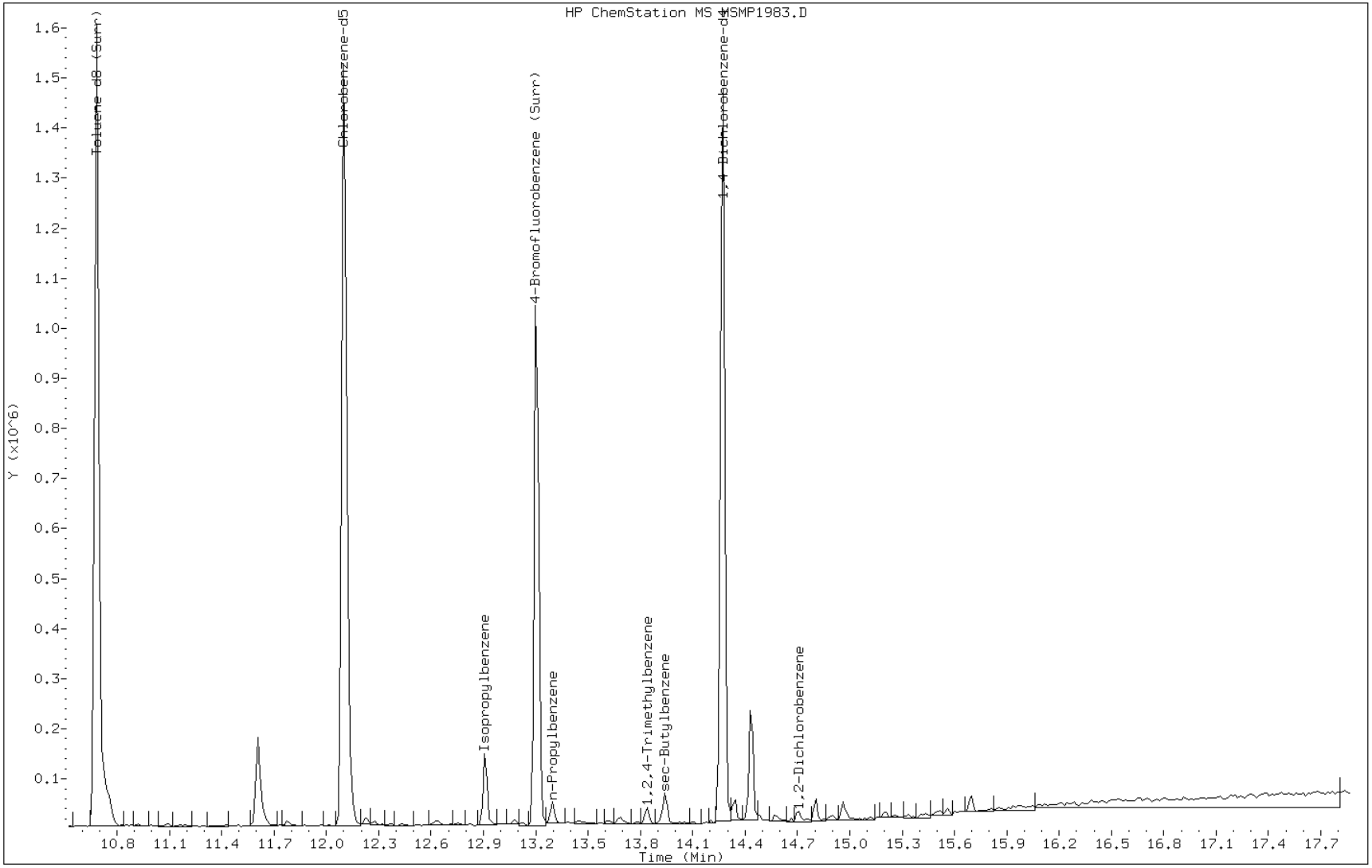
Date: 14-AUG-2012 11:54

Client ID: PZ-207-AS

Instrument: MSM.i

Sample Info: 160-437-F-5

Operator: JDH



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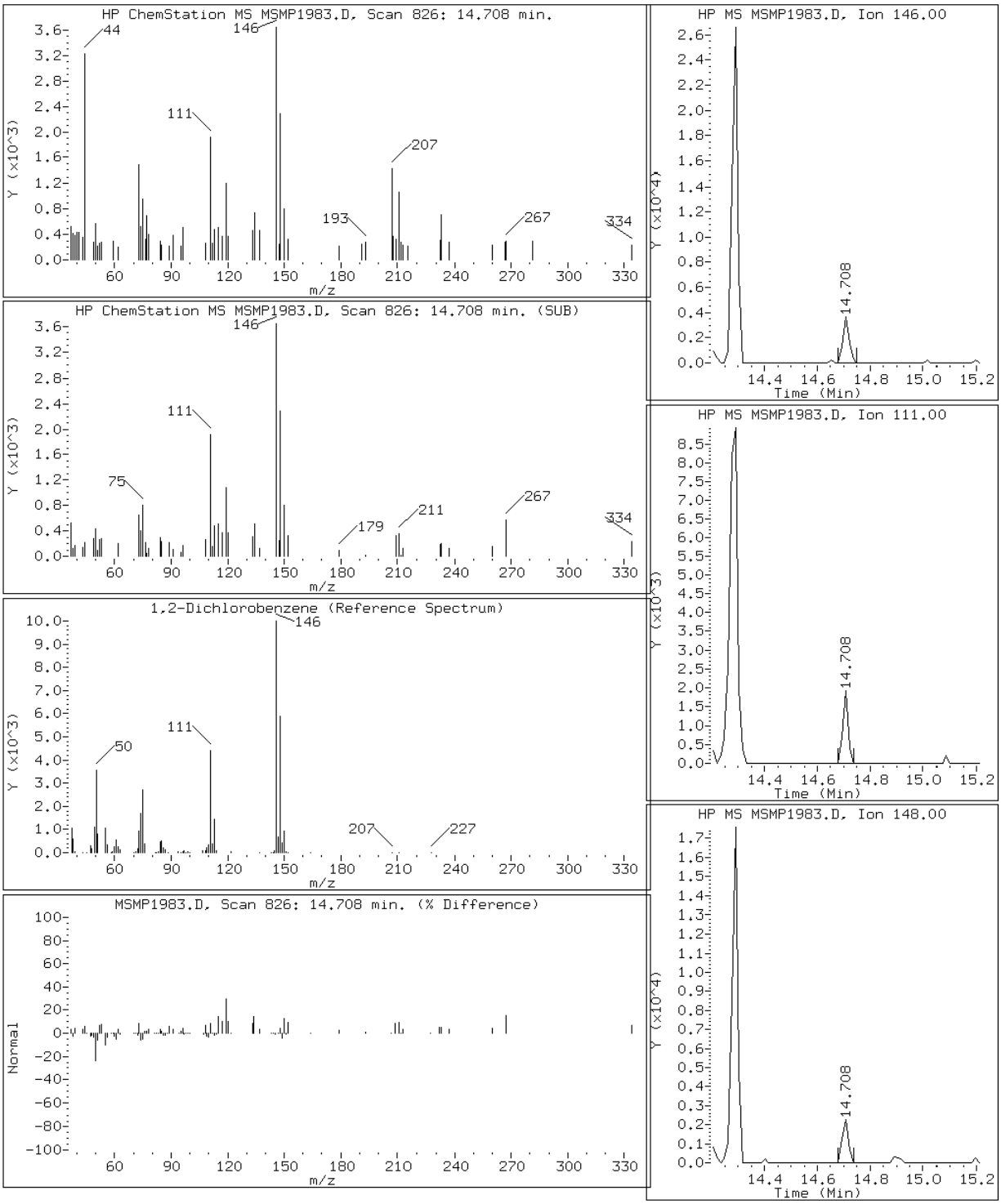
Sample Info: 160-437-F-5 Operator: JDH

99 1,2-Dichlorobenzene



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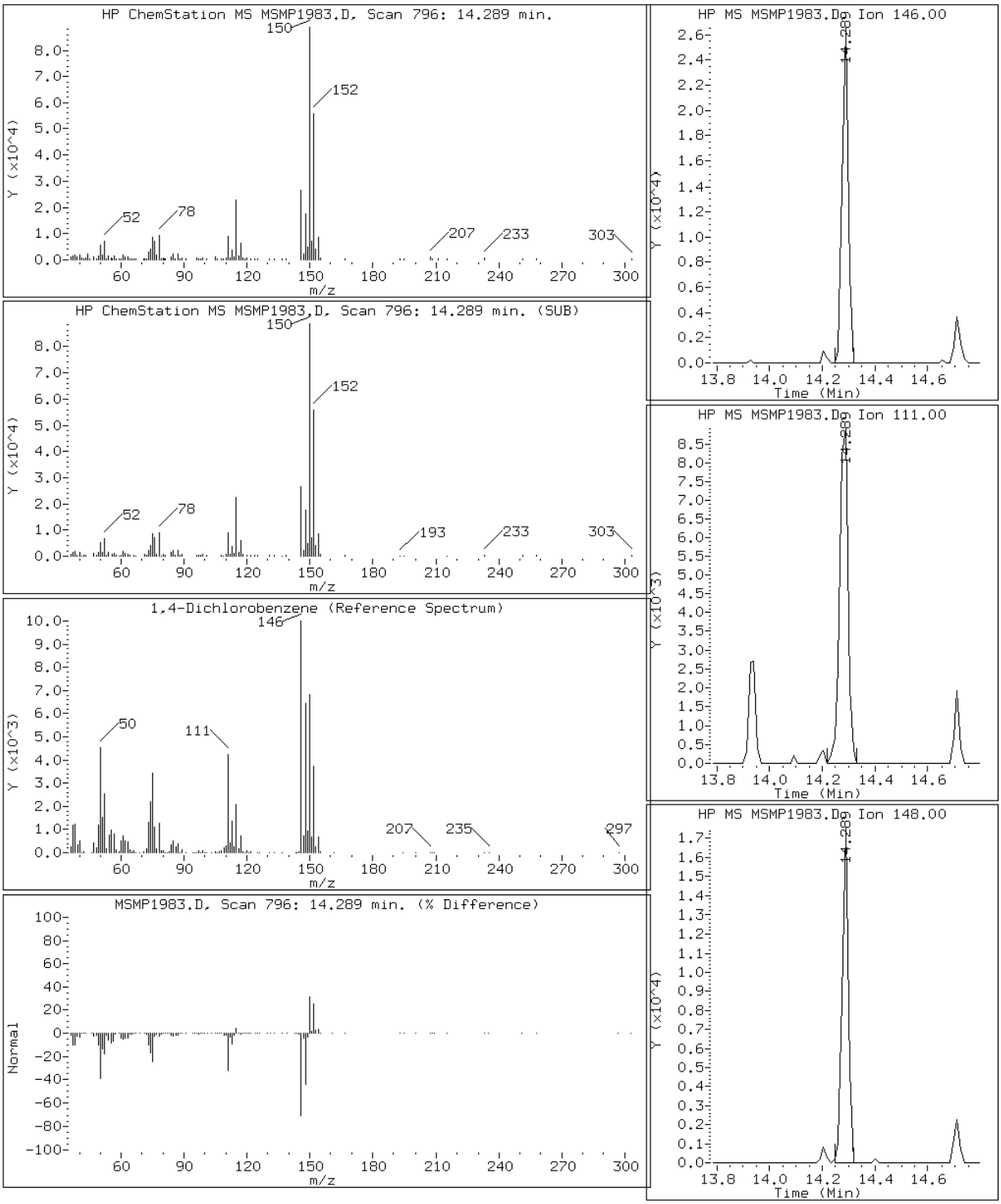
Client ID: PZ-207-AS Instrument: MSM.i

Sample Info: 160-437-F-5 Operator: JDH

96 1,4-Dichlorobenzene



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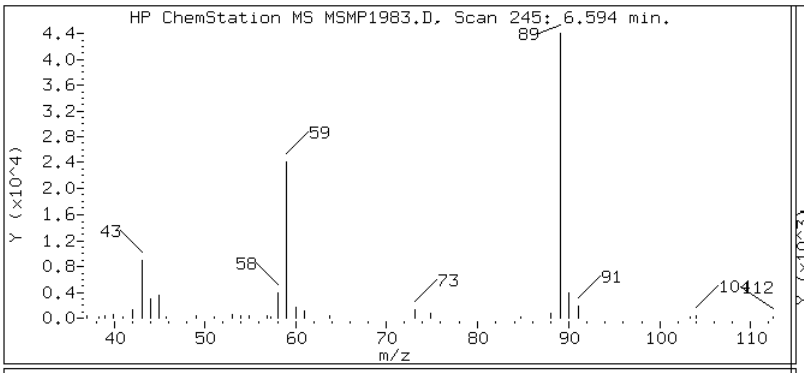
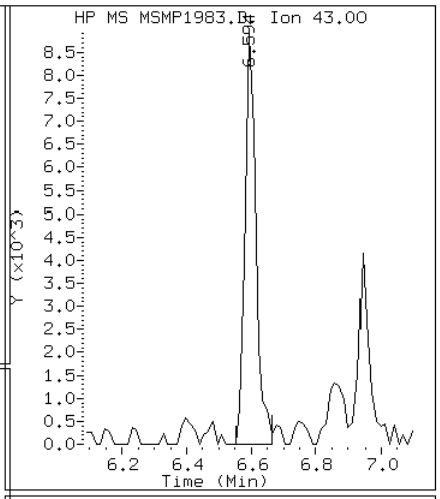
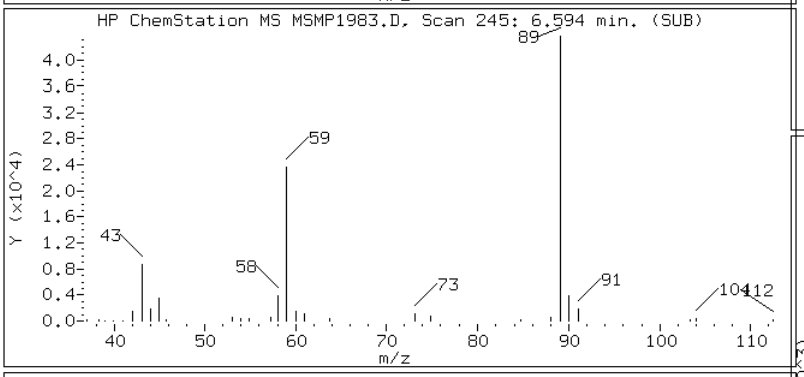
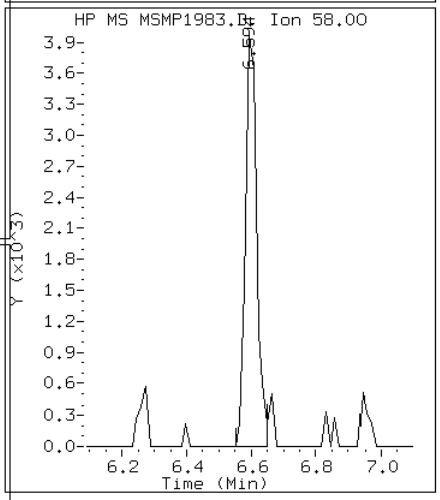
Sample Info: 160-437-F-5 Operator: JDH

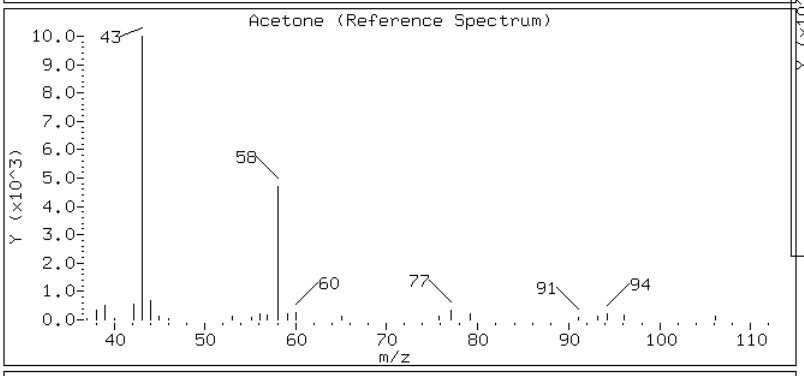
16 Acetone

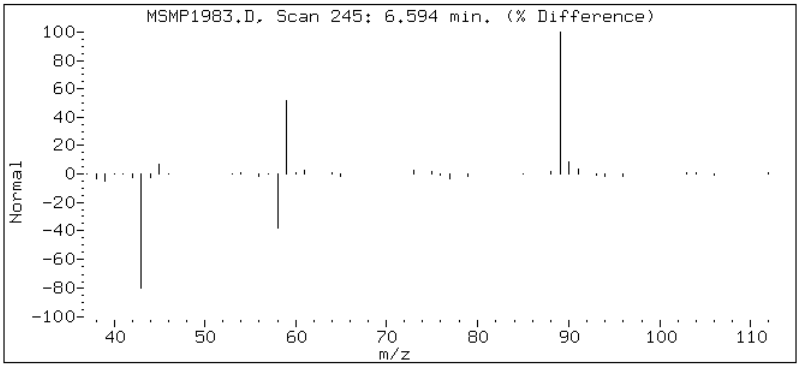












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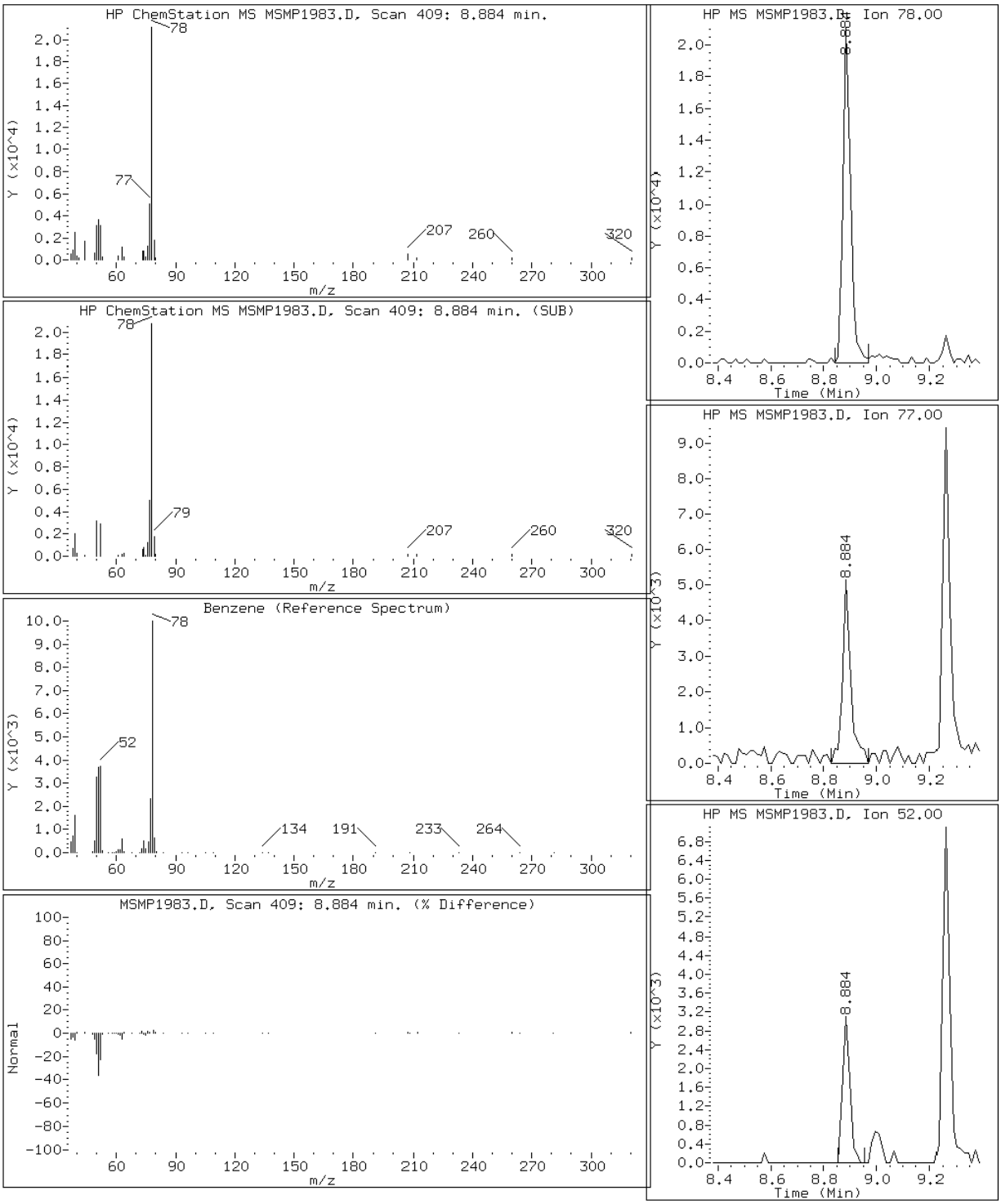
40 Benzene



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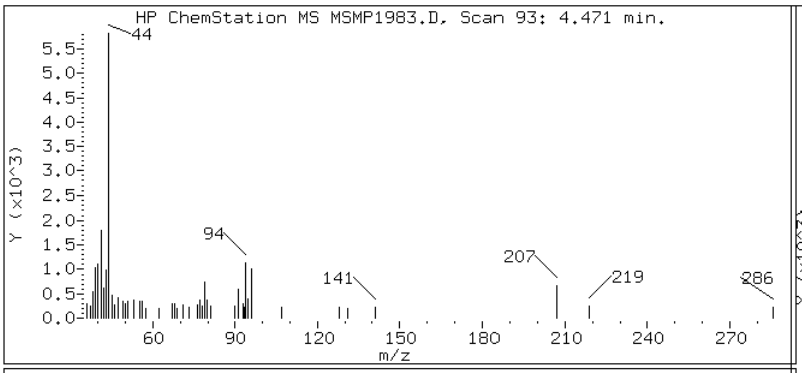
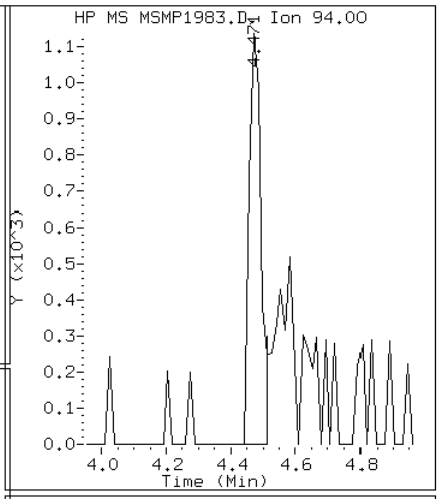
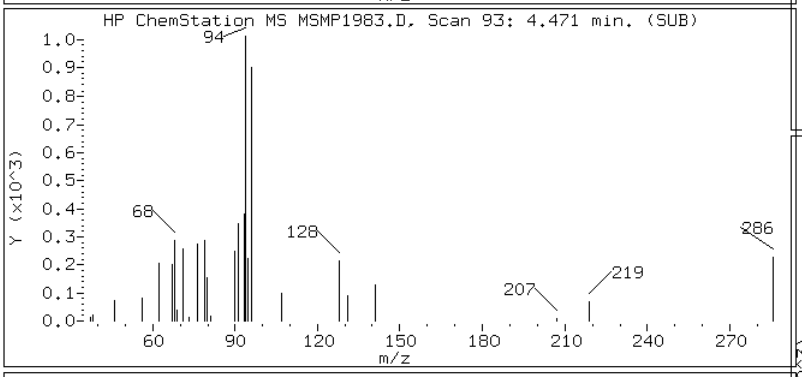
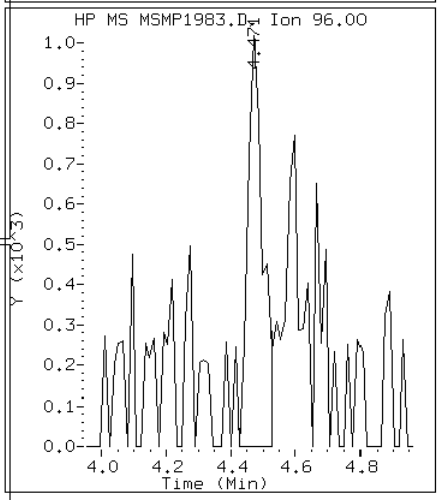
Sample Info: 160-437-F-5 Operator: JDH

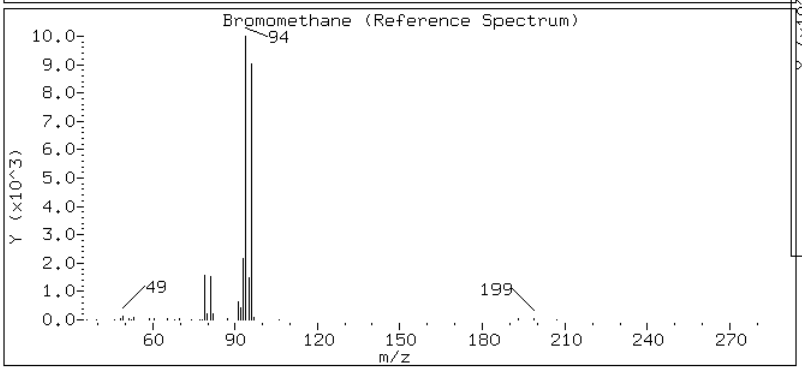
5 Bromomethane

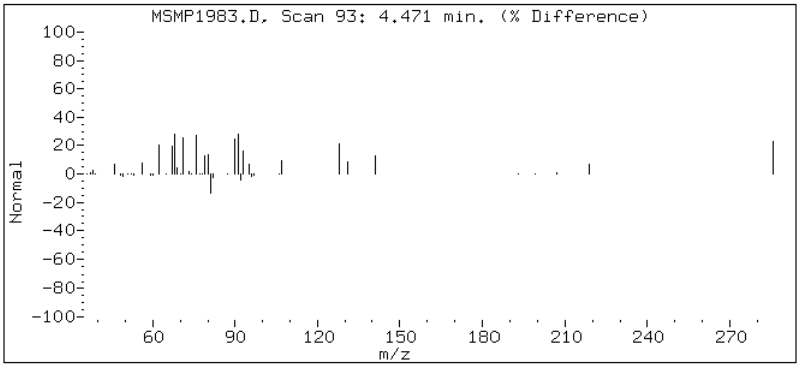












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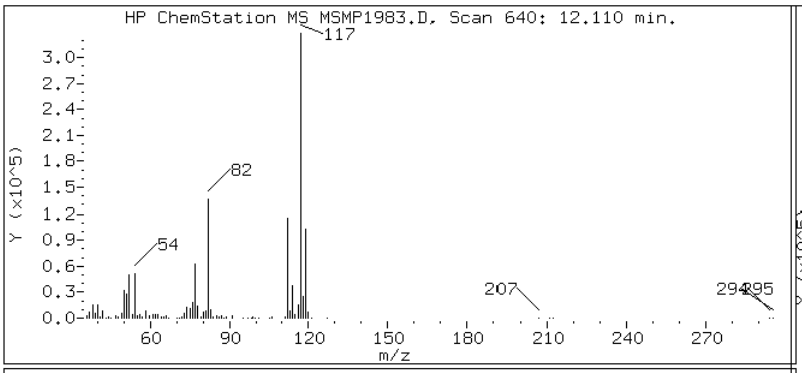
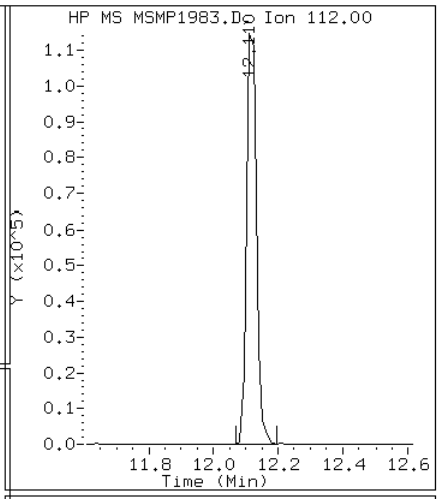
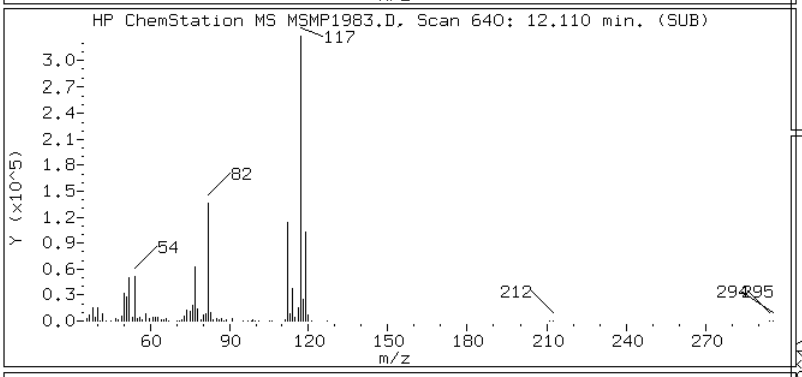
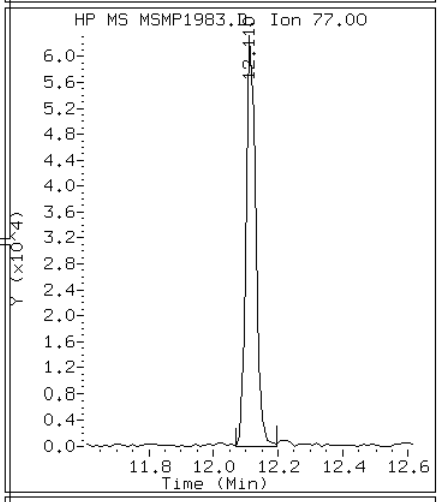
Sample Info: 160-437-F-5 Operator: JDH

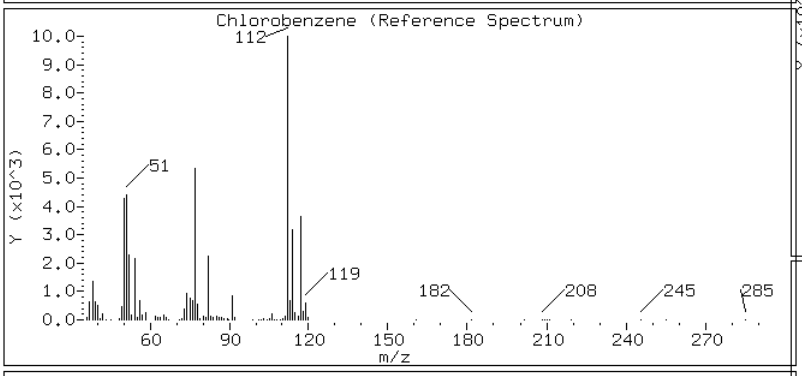
71 Chlorobenzene

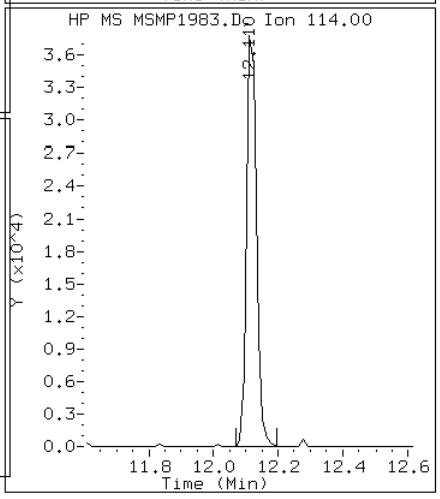


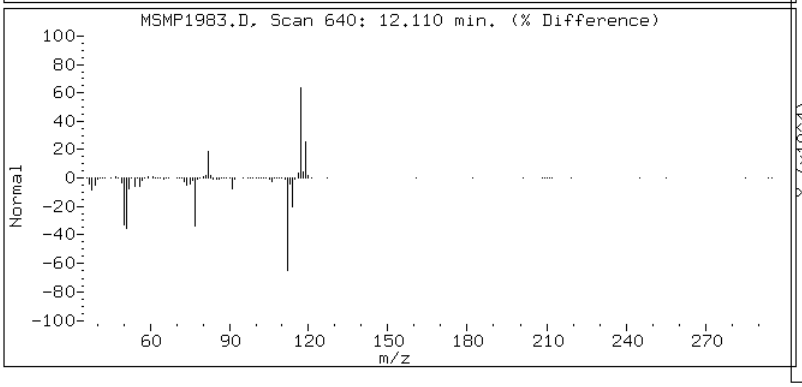












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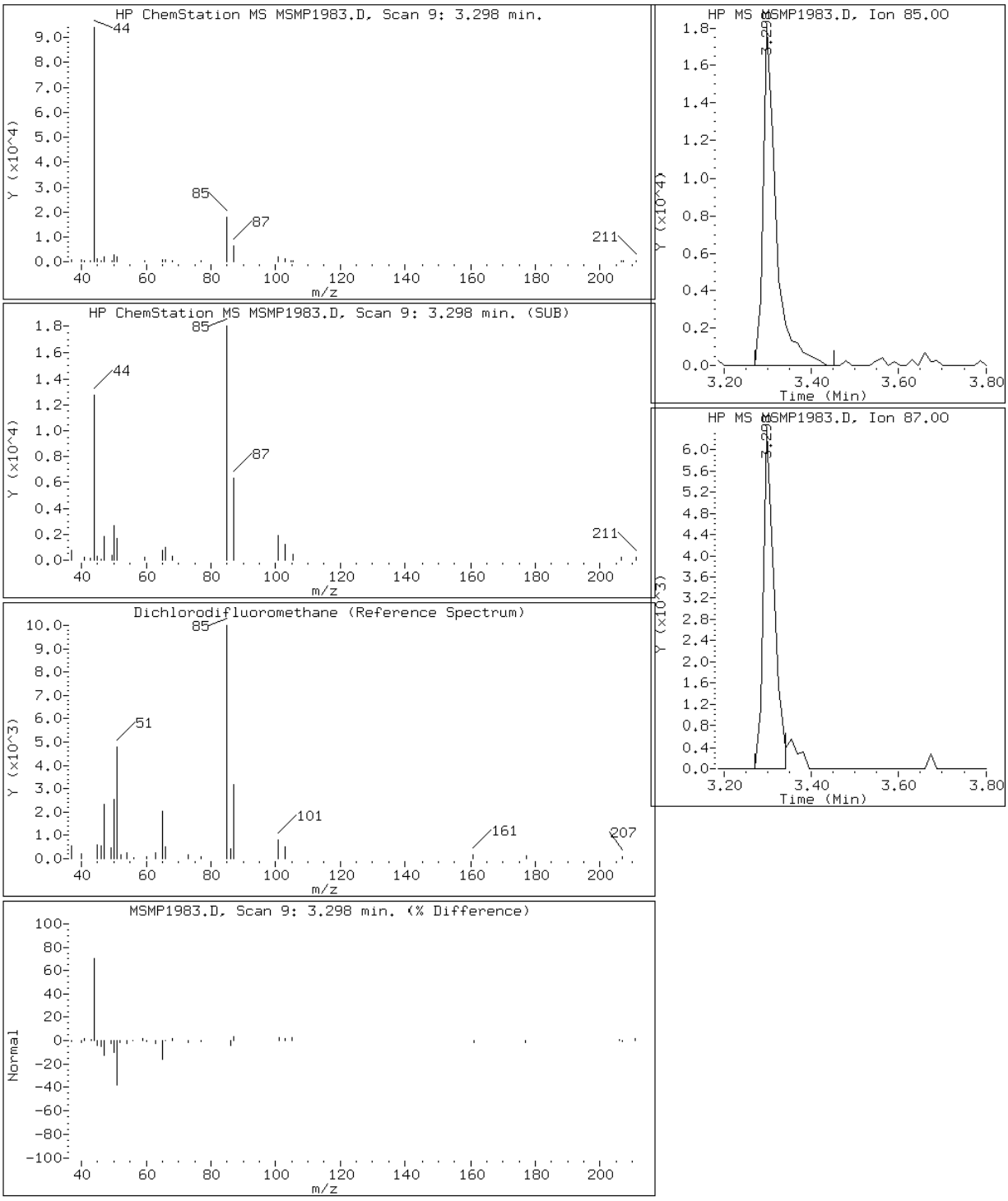
Sample Info: 160-437-F-5 Operator: JDH

1 Dichlorodifluoromethane



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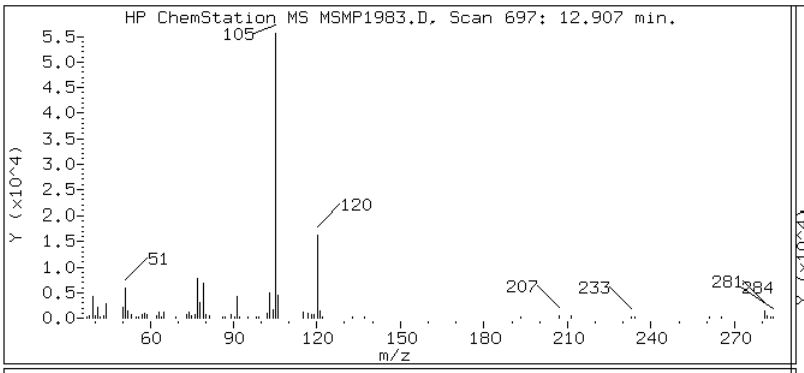
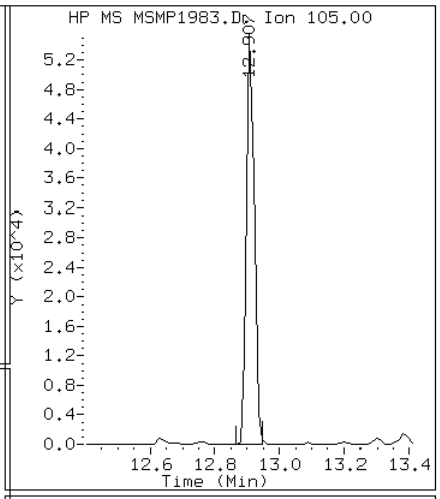
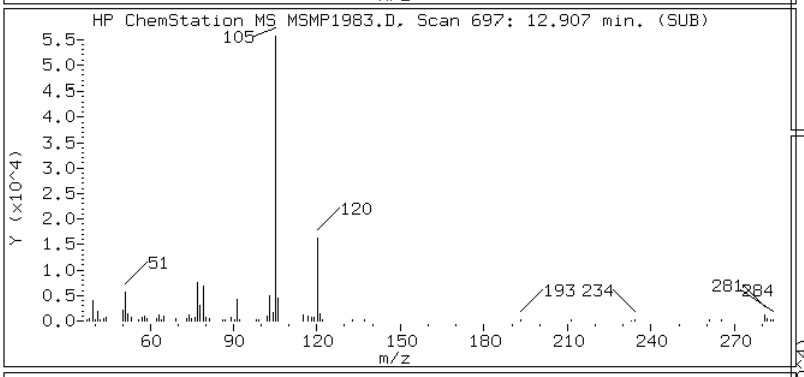
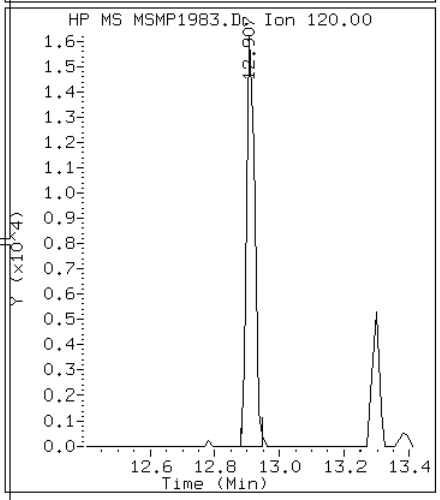
Sample Info: 160-437-F-5 Operator: JDH

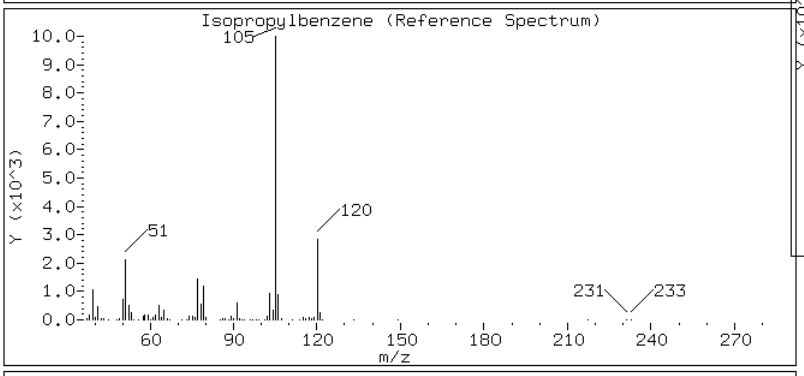
78 Isopropylbenzene

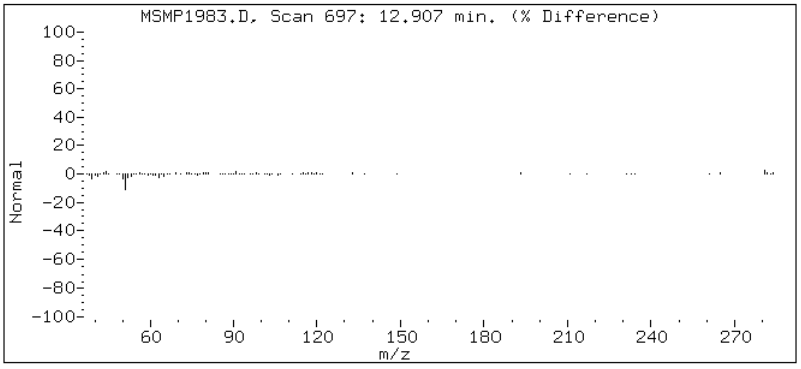












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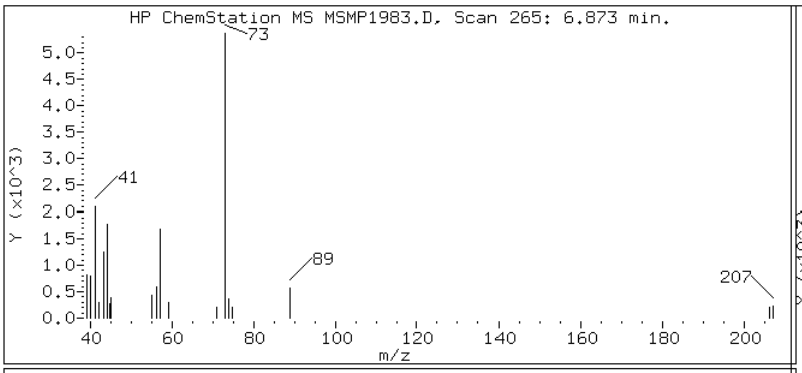
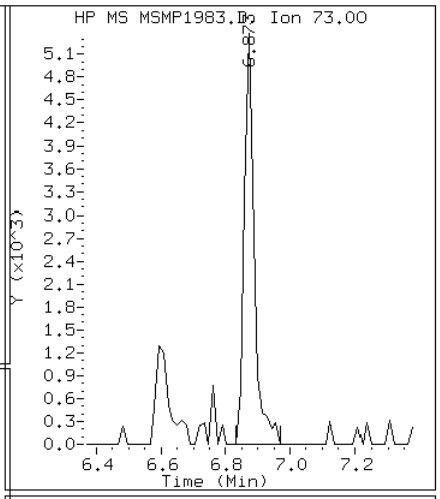
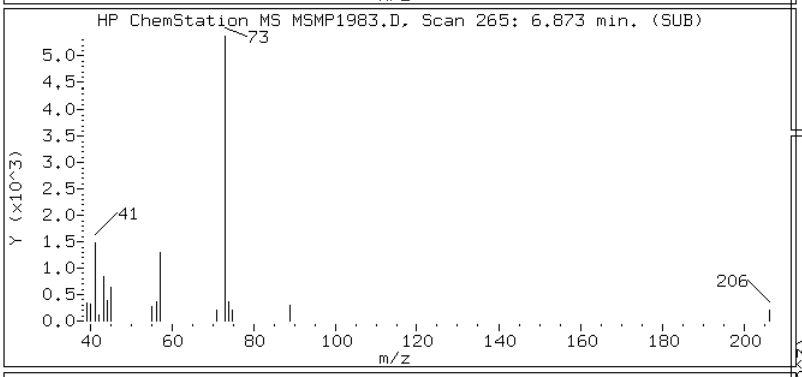
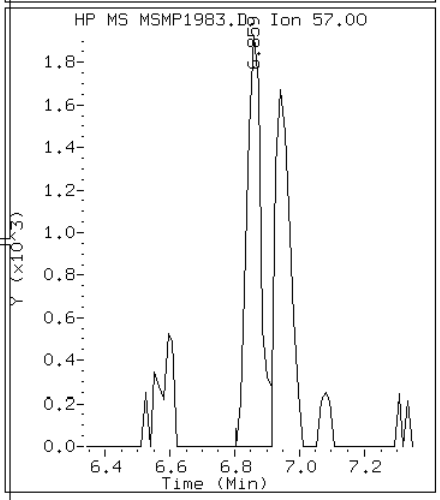
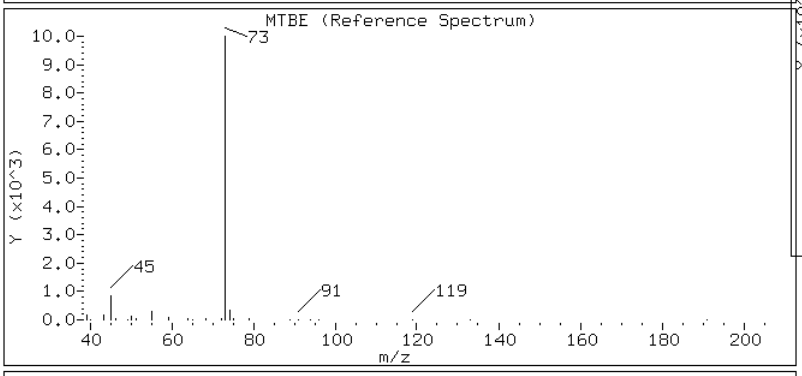
20 MTBE

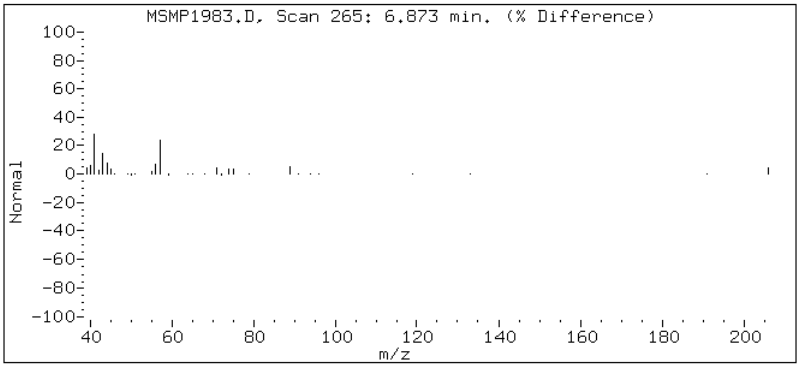












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Matrix: Water | Lab File ID: MSMP1980.D

Analysis Method: 8260C | Date Collected: 08/08/2012 14:16

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 10:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	11	J	20	6.7
71-43-2	Benzene	ND		5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.60	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	1.2	J	5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	0.44	J	5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.52	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Matrix: Water | Lab File ID: MSMP1980.D

Analysis Method: 8260C | Date Collected: 08/08/2012 14:16

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 10:22

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	106		85-115
1868-53-7	Dibromofluoromethane (Surr)	104		85-119
460-00-4	4-Bromofluorobenzene (Surr)	103		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	110		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1980.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1980.D
Lab Smp Id: 160-437-F-6 Client Smp ID: D-12
Inj Date : 14-AUG-2012 10:22
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-6
Misc Info : 160-437-F-6
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	3850	0.60262	0.6026(a)
M	26 1,2-Dichloroethene (total)	96				3445	0.43729	0.4373(a)
	8 Diethyl ether	74	5.449	5.449	(0.588)	60820	17.7845	17.78
	12 Iodomethane	142	5.979	5.965	(0.646)	3906	4.11114	4.111
	16 Acetone	43	6.594	6.594	(0.712)	17198	11.0986	11.10
	20 MTBE	73	6.873	6.873	(0.742)	6556	0.52480	0.5248(a)
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	3445	0.43729	0.4373(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	10562	25.4726	25.47
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	303291	52.0006	52.00
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	264989	55.1704	55.17
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1371360	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1215342	52.9301	52.93
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	908044	50.0000	
	71 Chlorobenzene	112	12.110	12.110	(1.001)	21784	1.18428	1.184(a)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	365991	51.6972	51.70
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	447776	50.0000	
	105 Naphthalene	128	16.524	16.524	(1.158)	10663	2.39357	2.394

QC Flag Legend

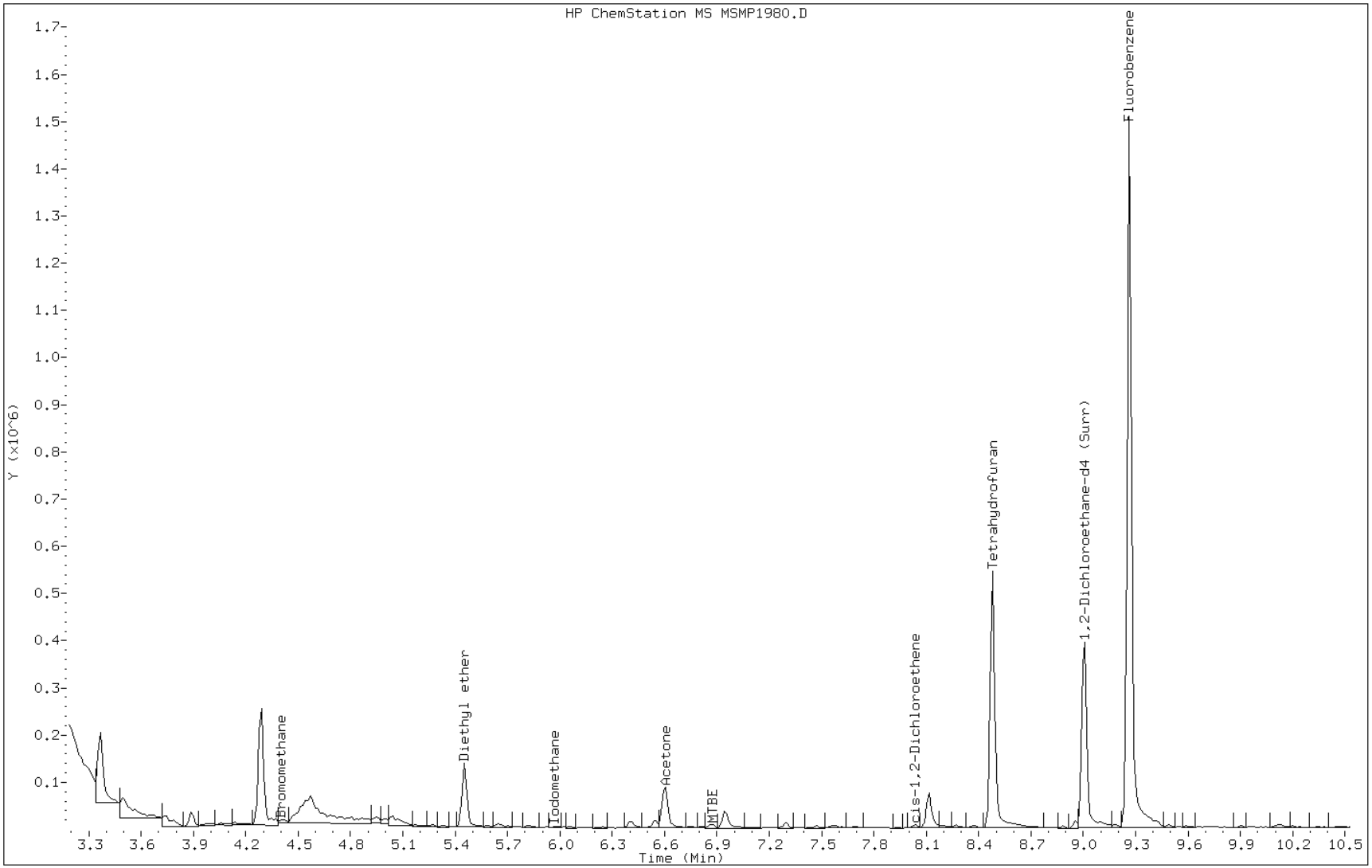
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MSMP1980.D

Date: 14-AUG-2012 10:22

Client ID: D-12 Instrument: MSM.i

Sample Info: 160-437-F-6 Operator: JDH



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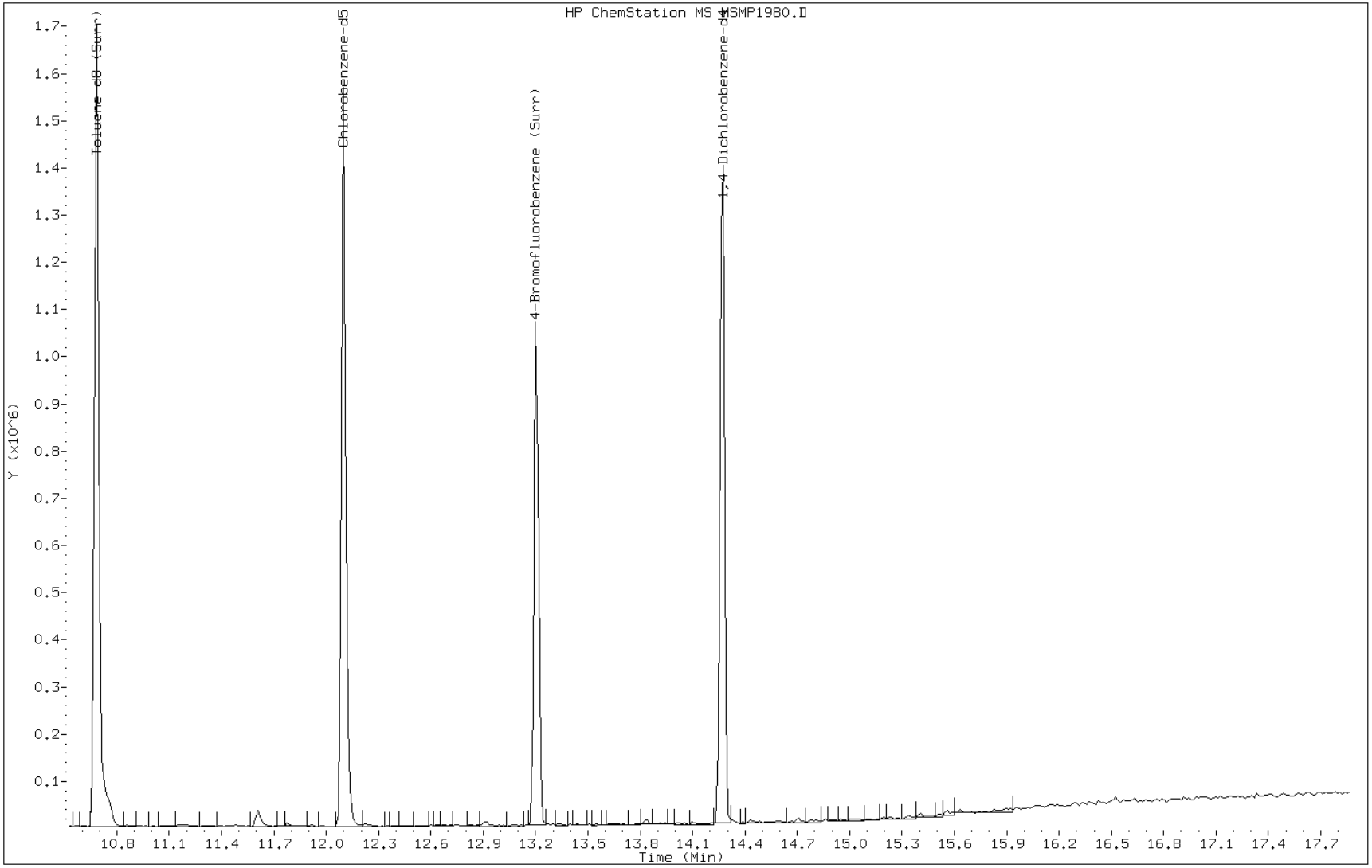
Date: 14-AUG-2012 10:22

Client ID: D-12 Instrument: MSM.i

Sample Info: 160-437-F-6 Operator: JDH



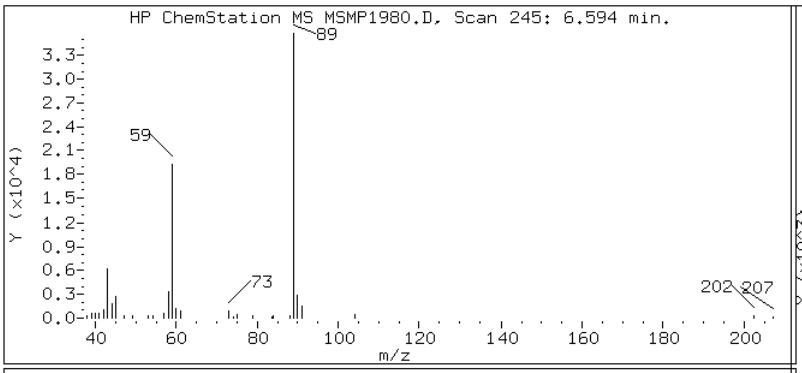
Data File: MSMP1980.D

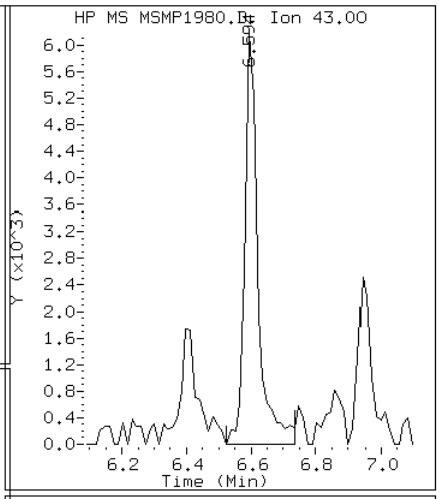
Date: 14-AUG-2012 10:22

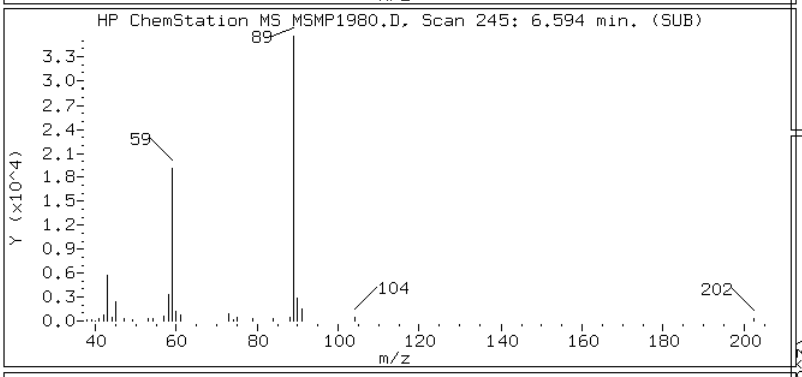
Client ID: D-12 Instrument: MSM.i

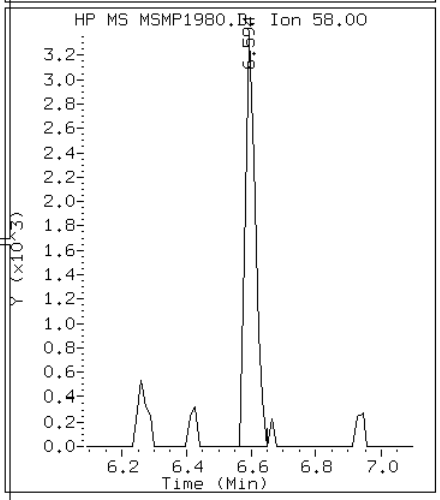
Sample Info: 160-437-F-6 Operator: JDH

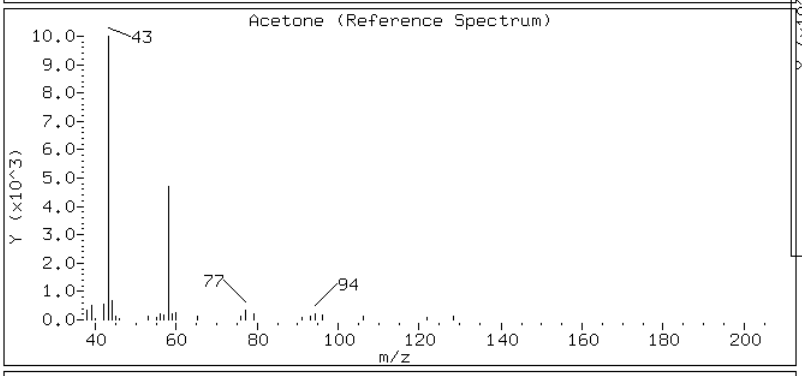
16 Acetone

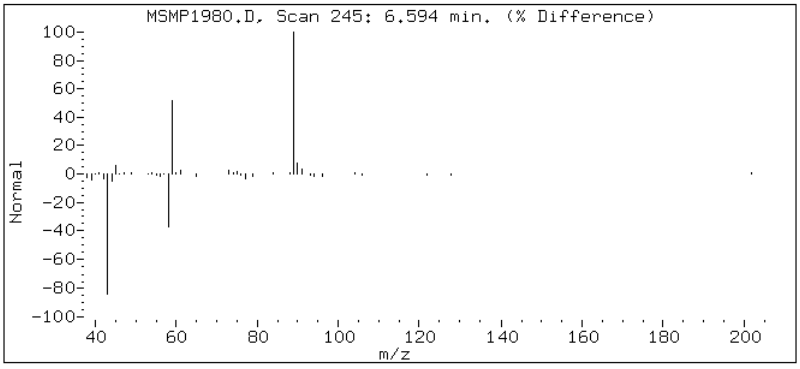












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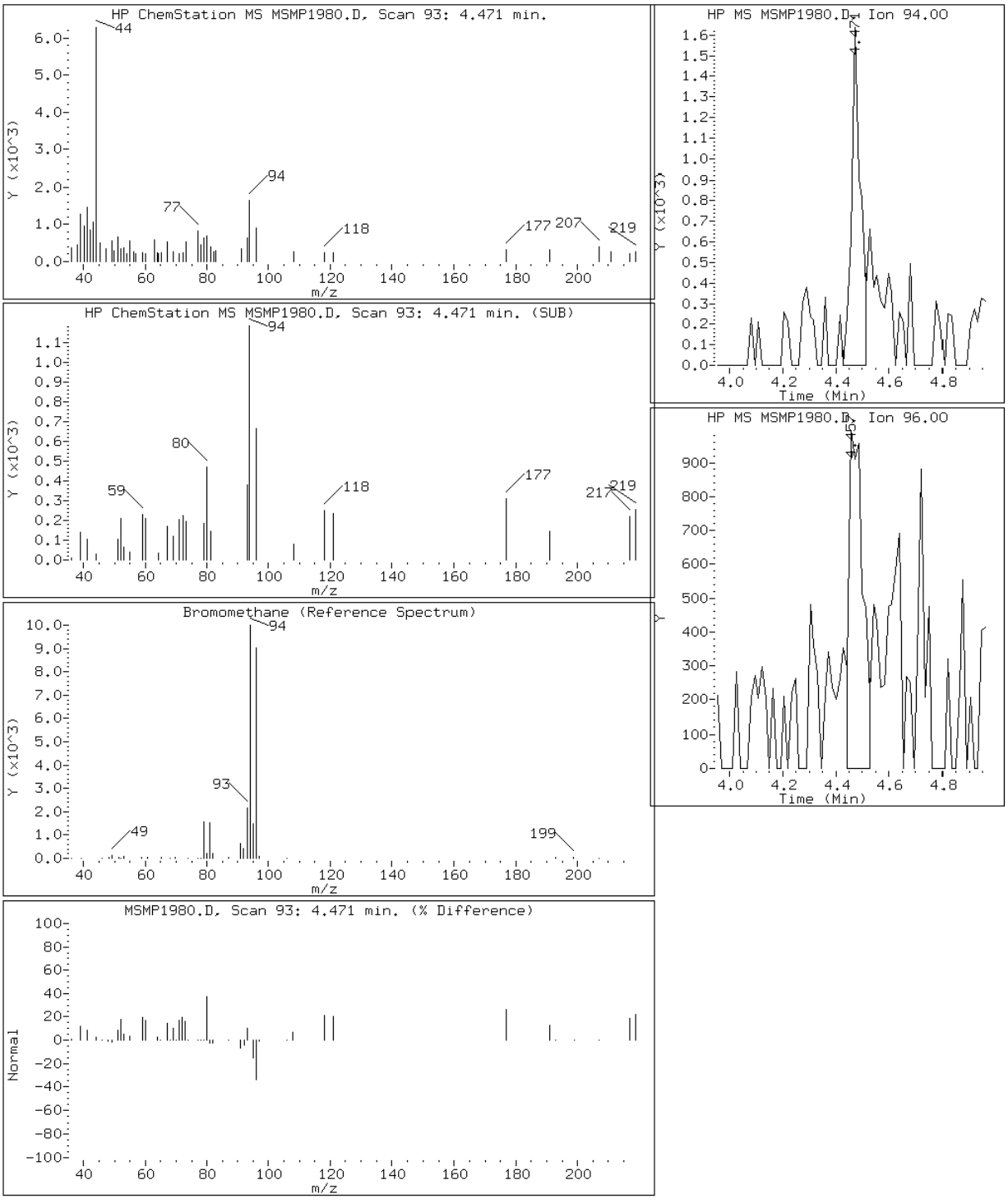
Date: 14-AUG-2012 10:22

Client ID: D-12 Instrument: MSM.i

Sample Info: 160-437-F-6 Operator: JDH

5 Bromomethane



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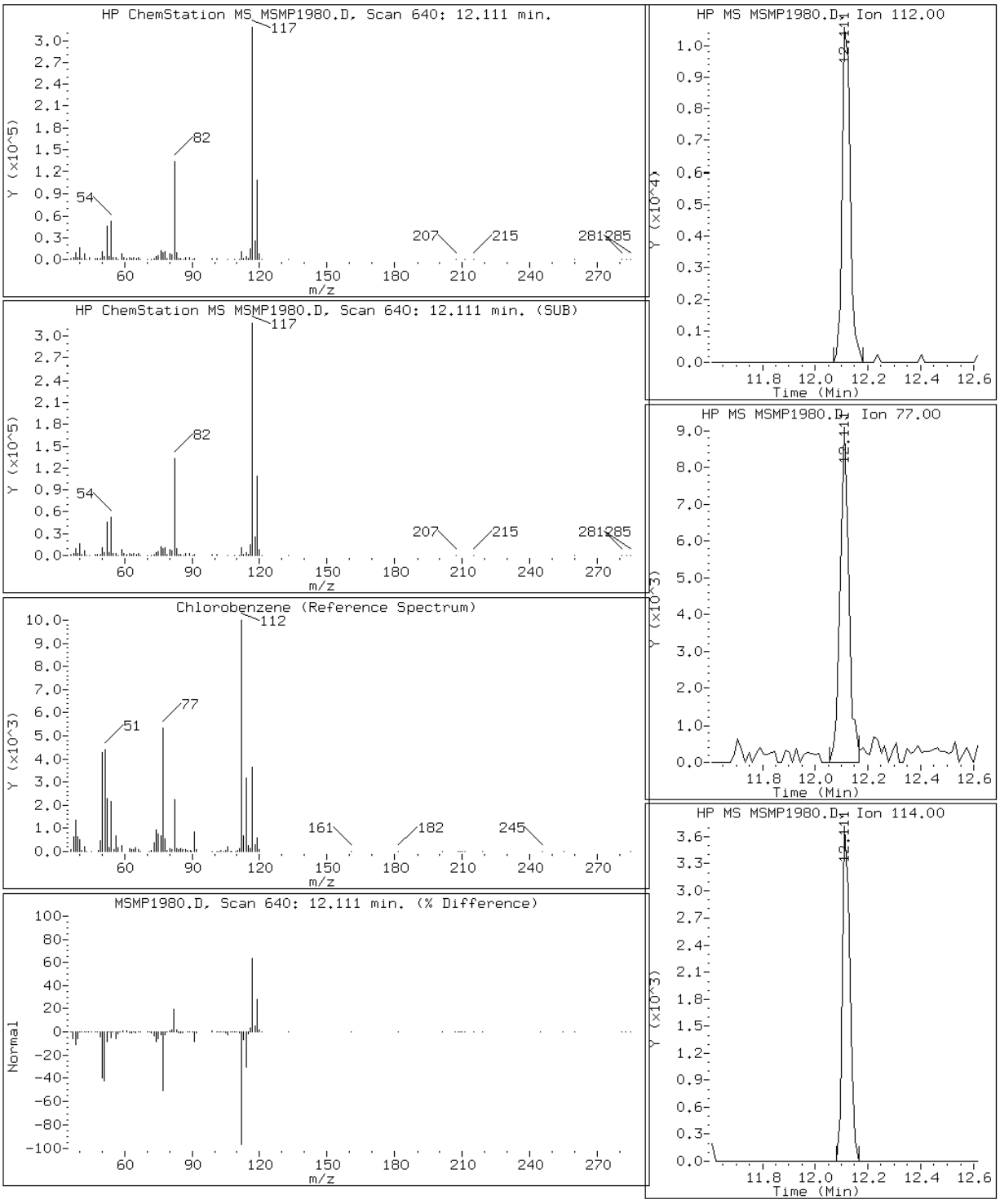
Date: 14-AUG-2012 10:22

Client ID: D-12 Instrument: MSM.i

Sample Info: 160-437-F-6 Operator: JDH

71 Chlorobenzene



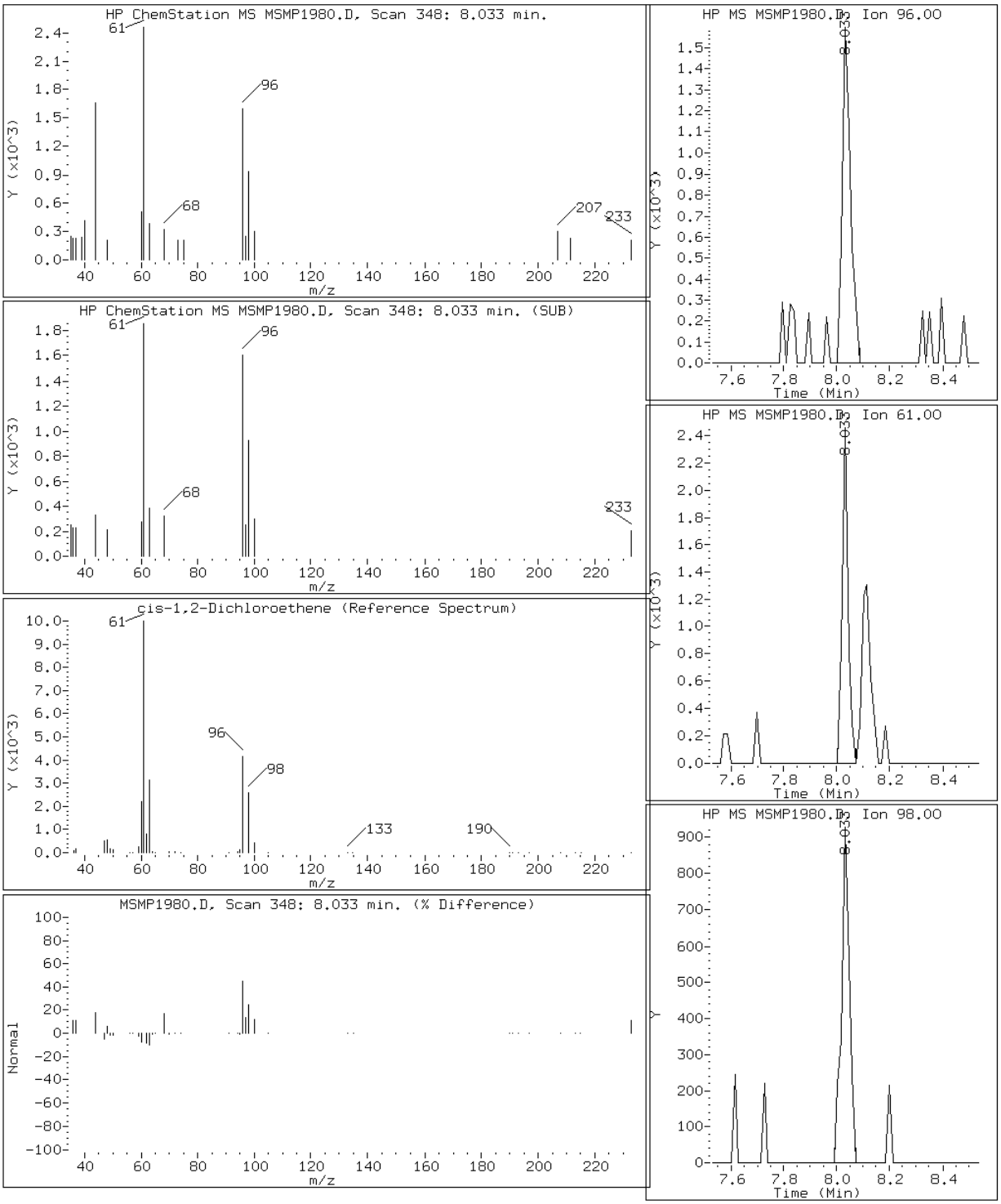
Data File: MSMP1980.D

Date: 14-AUG-2012 10:22

Client ID: D-12 Instrument: MSM.i

Sample Info: 160-437-F-6 Operator: JDH

27 cis-1,2-Dichloroethene



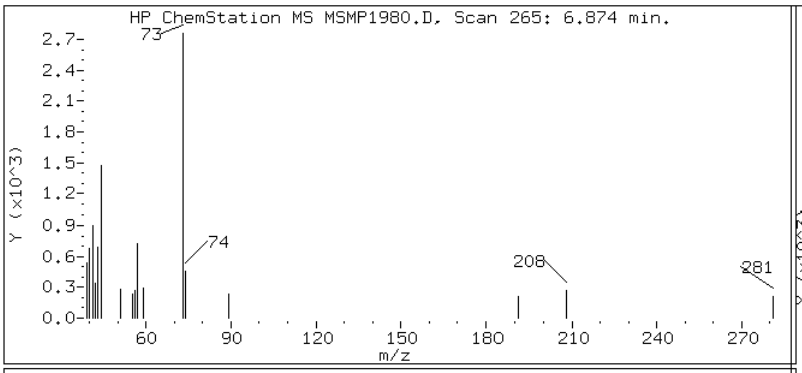
Data File: MSMP1980.D

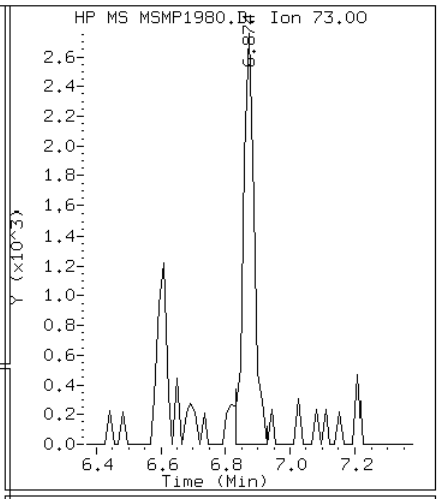
Date: 14-AUG-2012 10:22

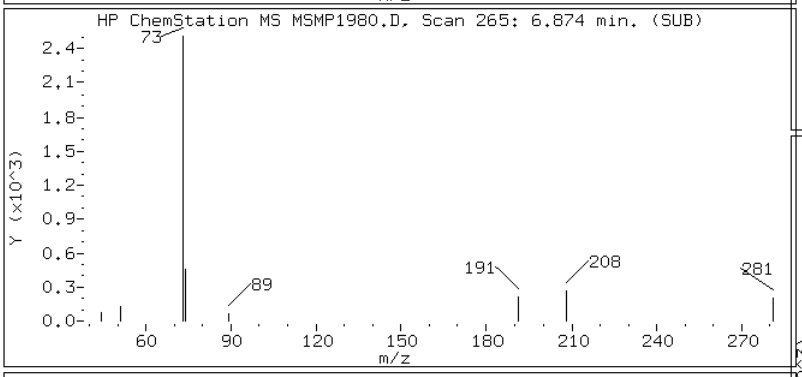
Client ID: D-12 Instrument: MSM.i

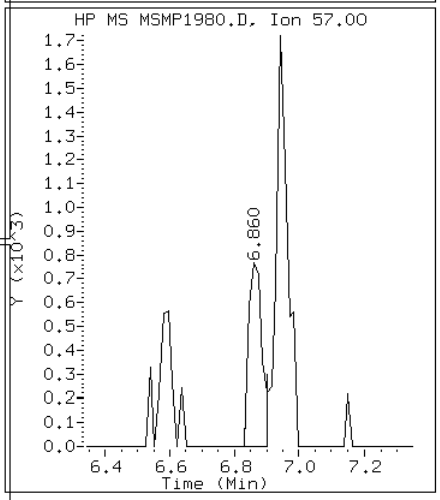
Sample Info: 160-437-F-6 Operator: JDH

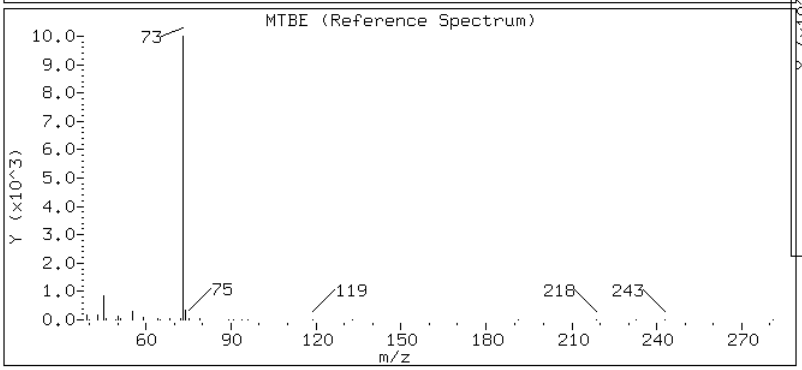
20 MTBE

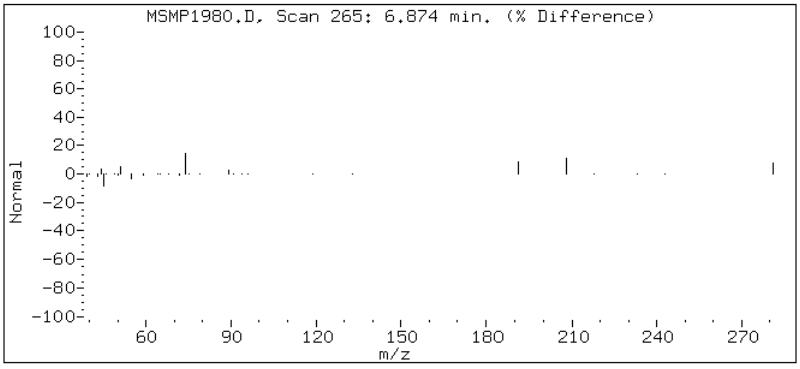












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-305-AI | Lab Sample ID: 160-437-7

Matrix: Water | Lab File ID: MSMP1981.D

Analysis Method: 8260C | Date Collected: 08/08/2012 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 10:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	1.4	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	ND		10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	4.6	J	5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-305-AI | Lab Sample ID: 160-437-7

Matrix: Water | Lab File ID: MSMP1981.D

Analysis Method: 8260C | Date Collected: 08/08/2012 14:30

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 10:47

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		85-115
1868-53-7	Dibromofluoromethane (Surr)	95		85-119
460-00-4	4-Bromofluorobenzene (Surr)	103		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1981.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1981.D
Lab Smp Id: 160-437-F-7 Client Smp ID: PZ-305-AI
Inj Date : 14-AUG-2012 10:47
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-7
Misc Info : 160-437-F-7
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	260586	47.7366	47.74
40 Benzene	78	8.884	8.884	(0.959)	35285	1.35277	1.353(a)
$ 43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	244361	54.3578	54.36
* 46 Fluorobenzene	96	9.261	9.261	(1.000)	1283510	50.0000	
$ 57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1125914	50.8811	50.88
* 70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	875105	50.0000	
71 Chlorobenzene	112	12.110	12.110	(1.001)	81203	4.58072	4.581
$ 79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	346131	51.6027	51.60
* 95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	424254	50.0000	
105 Naphthalene	128	16.524	16.524	(1.158)	4934	1.16896	1.169(a)

QC Flag Legend

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

Data File: MSMP1981.D

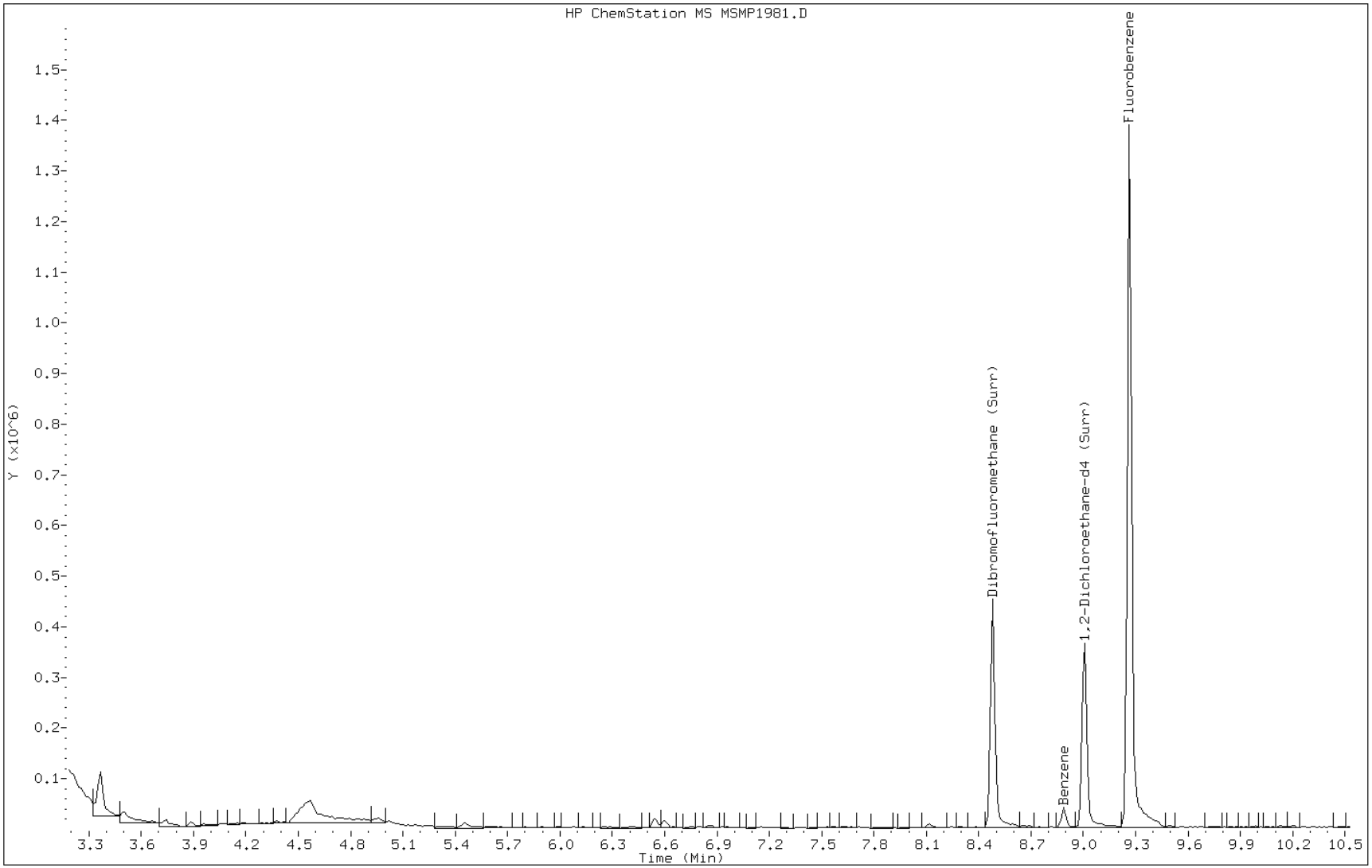
Date: 14-AUG-2012 10:47

Client ID: PZ-305-AI

Instrument: MSM.i

Sample Info: 160-437-F-7

Operator: JDH



Data File: MSMP1981.D

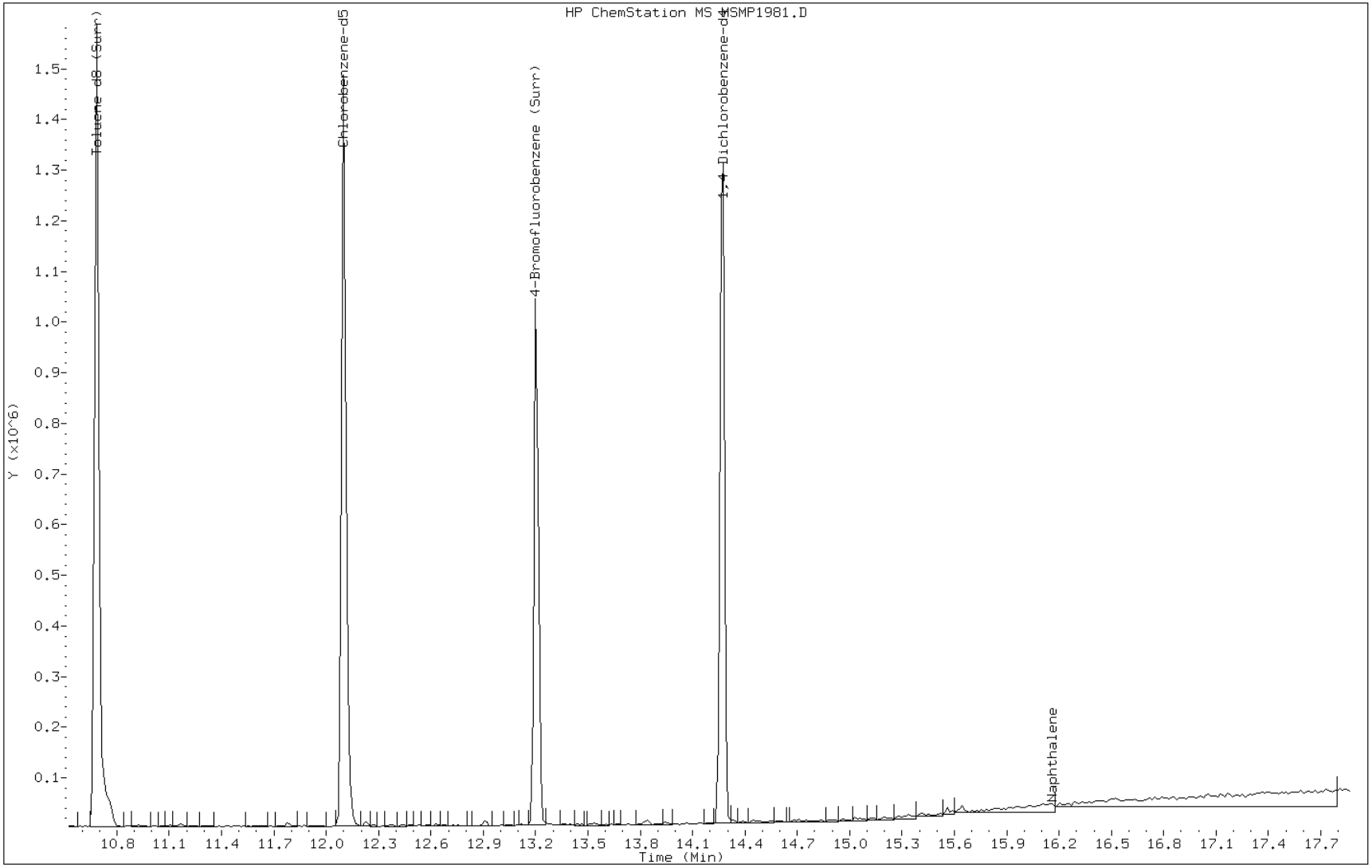
Date: 14-AUG-2012 10:47

Client ID: PZ-305-AI

Instrument: MSM.i

Sample Info: 160-437-F-7

Operator: JDH



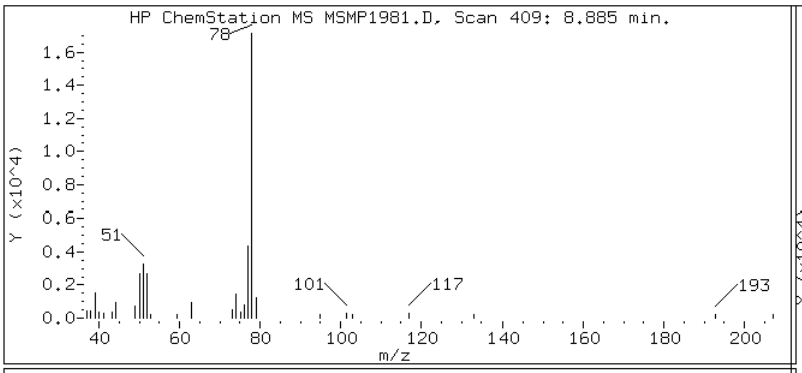
Data File: MSMP1981.D

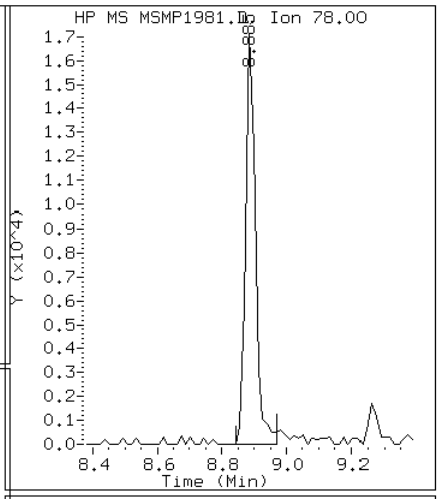
Date: 14-AUG-2012 10:47

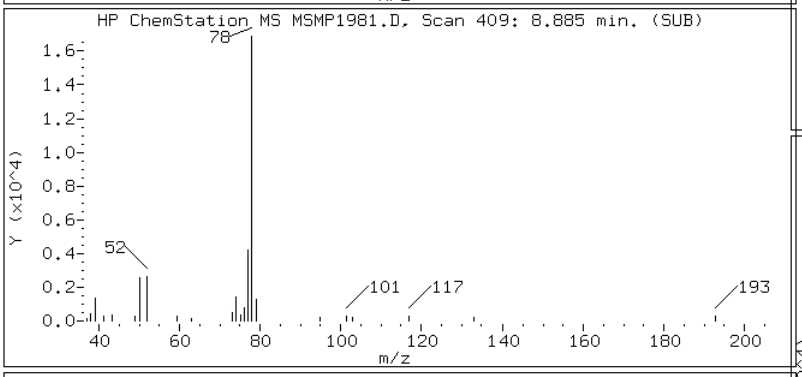
Client ID: PZ-305-AI Instrument: MSM.i

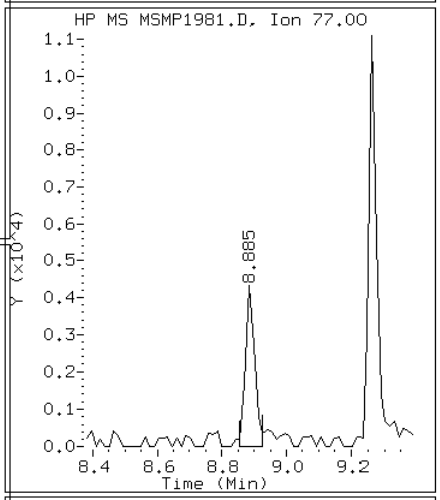
Sample Info: 160-437-F-7 Operator: JDH

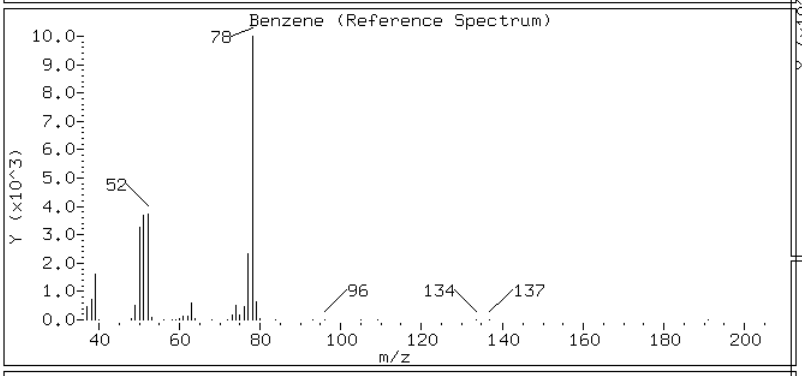
40 Benzene

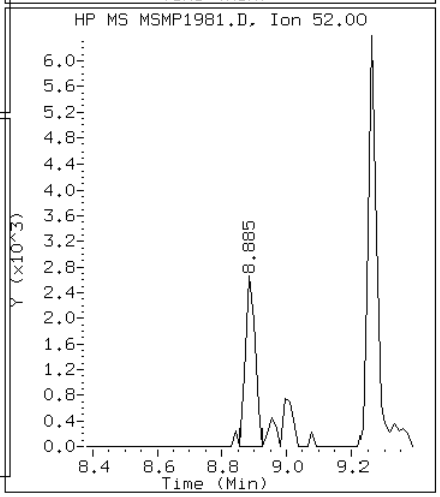


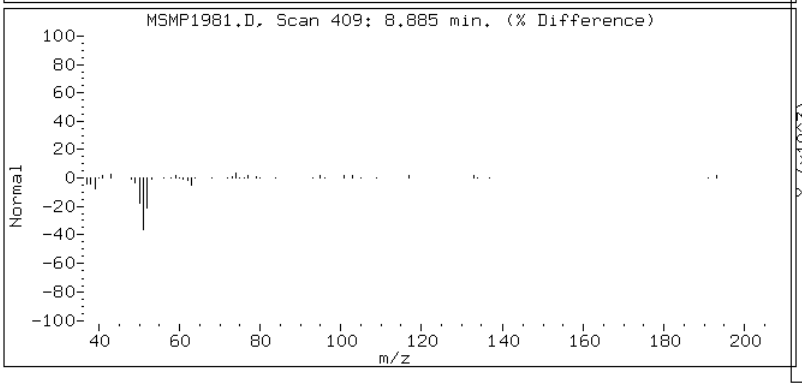












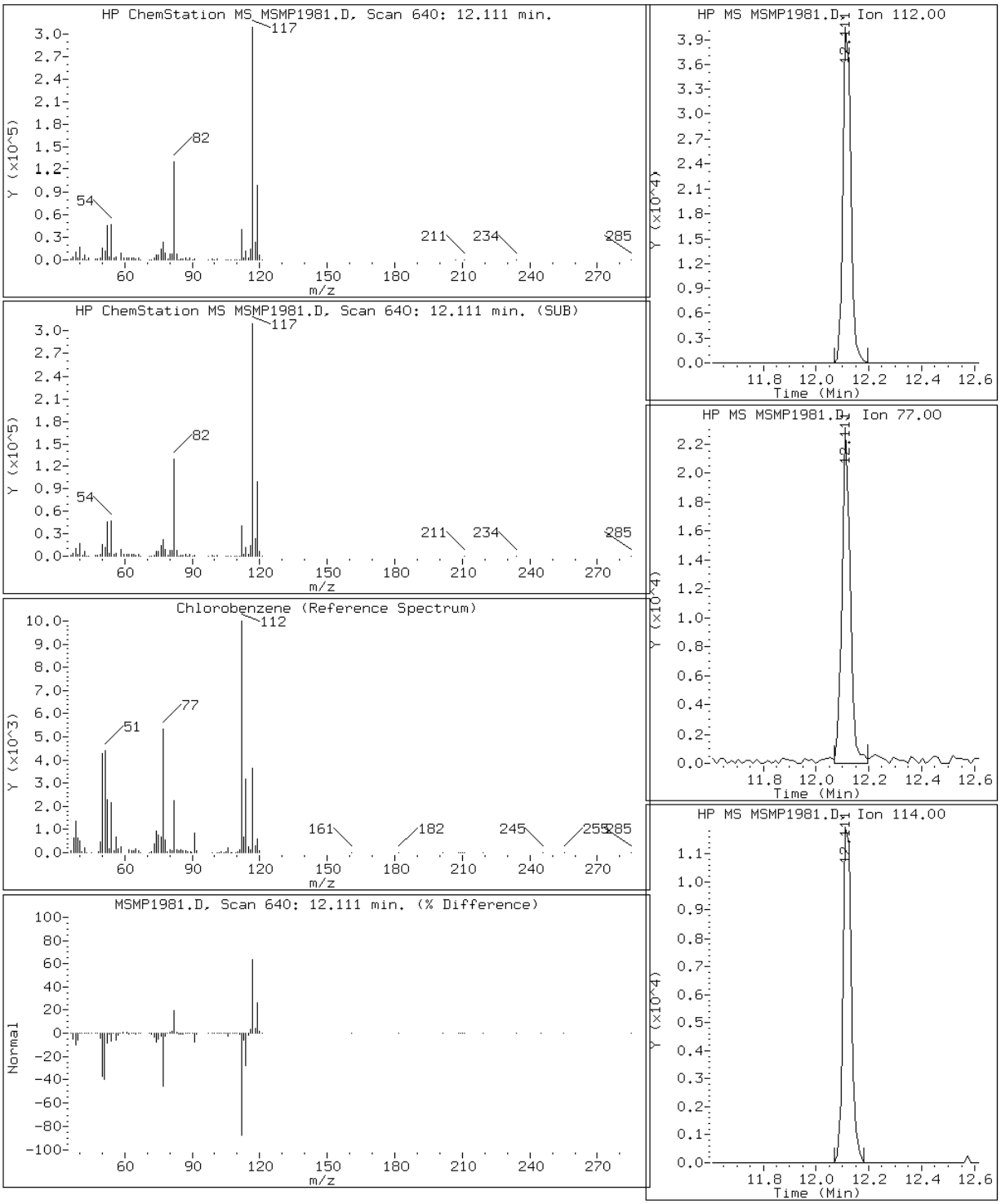
Data File: MSMP1981.D

Date: 14-AUG-2012 10:47

Client ID: PZ-305-AI Instrument: MSM.i

Sample Info: 160-437-F-7 Operator: JDH

71 Chlorobenzene



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Matrix: Water | Lab File ID: MSMP1982.D

Analysis Method: 8260C | Date Collected: 08/08/2012 15:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 11:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	0.81	J	5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	0.29	J	5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	0.76	J	5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	8.0	J	20	6.7
71-43-2	Benzene	3.2	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.44	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	5.5		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	4.6	J	10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	1.9	J	5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.66	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Matrix: Water | Lab File ID: MSMP1982.D

Analysis Method: 8260C | Date Collected: 08/08/2012 15:02

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 11:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	0.58	J	10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	1.1	J	5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	101		85-115
1868-53-7	Dibromofluoromethane (Surr)	98		85-119
460-00-4	4-Bromofluorobenzene (Surr)	101		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	112		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1982.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1982.D
Lab Smp Id: 160-437-F-8 Client Smp ID: S-10
Inj Date : 14-AUG-2012 11:12
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-8
Misc Info : 160-437-F-8
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	4 Vinyl Chloride	62	3.842	3.842	(0.415)	10999	1.06434	1.064(a)
	5 Bromomethane	94	4.471	4.457	(0.483)	2629	0.44149	0.4415(a)
	6 Chloroethane	64	4.694	4.694	(0.507)	27615	4.59456	4.594
M	26 1,2-Dichloroethene (total)	96				13942	1.89869	1.899(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	100081	31.3973	31.40
	16 Acetone	43	6.593	6.594	(0.712)	11885	8.01773	8.018
	20 MTBE	73	6.873	6.873	(0.742)	7640	0.65613	0.6561(a)
	23 1,1-Dichloroethane	63	7.459	7.460	(0.805)	9471	0.80795	0.8080(a)
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	13942	1.89869	1.899(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	8848	22.8938	22.89
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	265407	48.8211	48.82
	40 Benzene	78	8.884	8.884	(0.959)	83819	3.22678	3.227
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	250647	55.9869	55.99
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1278219	50.0000	
	47 Methylcyclohexane	55	9.443	9.429	(1.020)	4179	0.58378	0.5838(a)
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1138148	50.5149	50.51
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	891026	50.0000	
	71 Chlorobenzene	112	12.110	12.110	(1.001)	98750	5.47103	5.471
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	346818	50.4532	50.45
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	434781	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	10552	0.76263	0.7626(a)
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	3496	0.29436	0.2944(a)

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1982.D
Report Date: 21-Aug-2012 17:18

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
105 Naphthalene	128	16.523	16.524	(1.158)	4696	1.08564	1.086(a)

QC Flag Legend

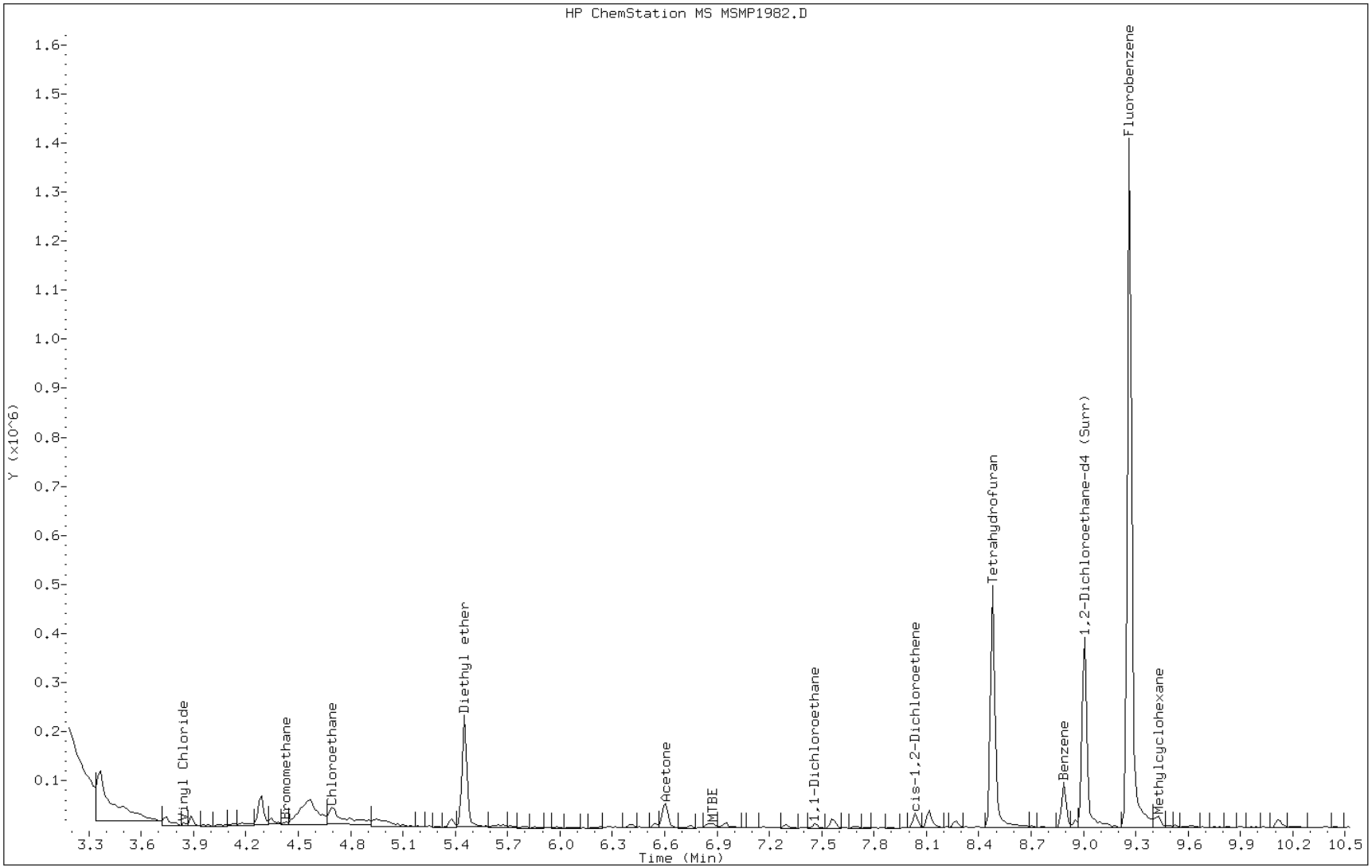
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH



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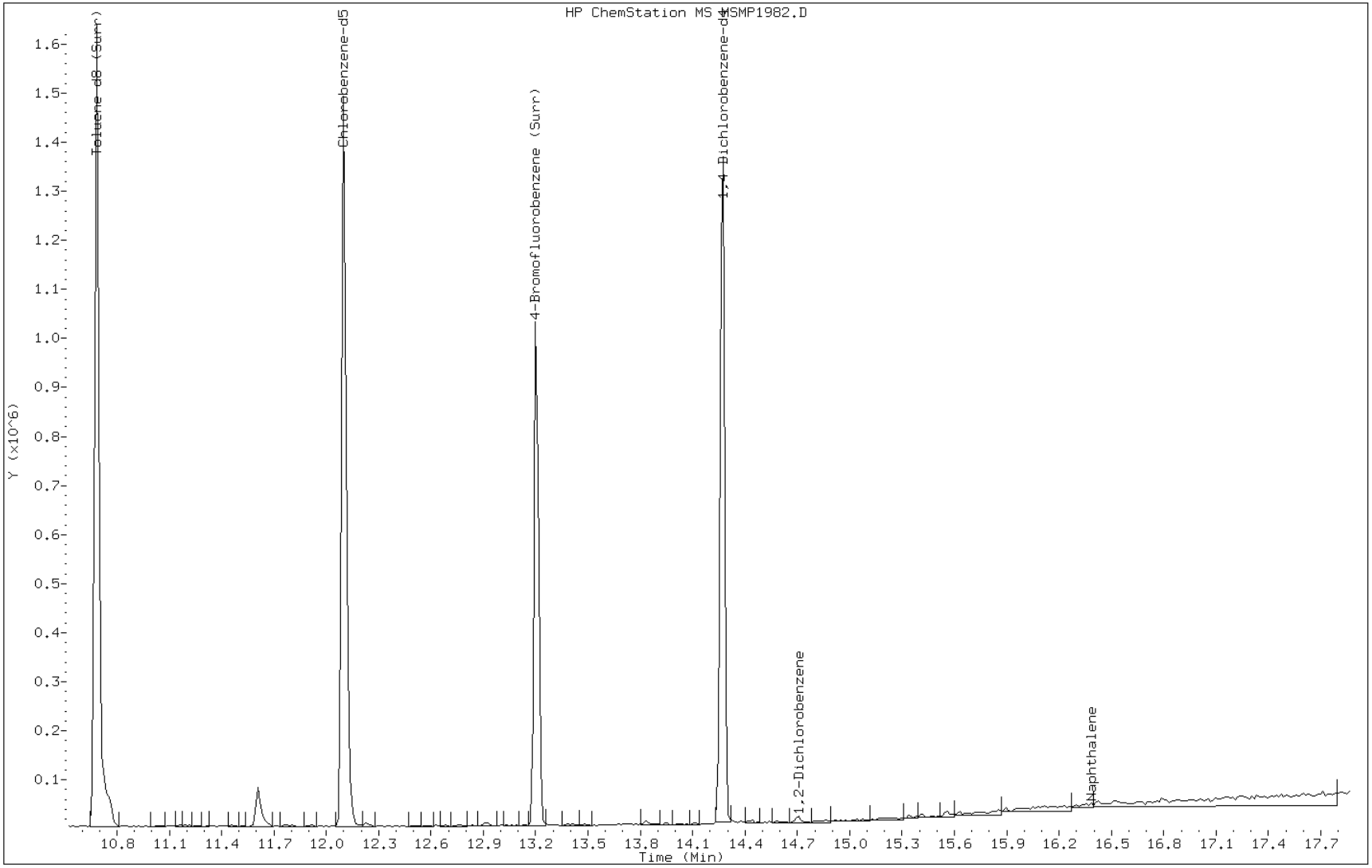
Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH



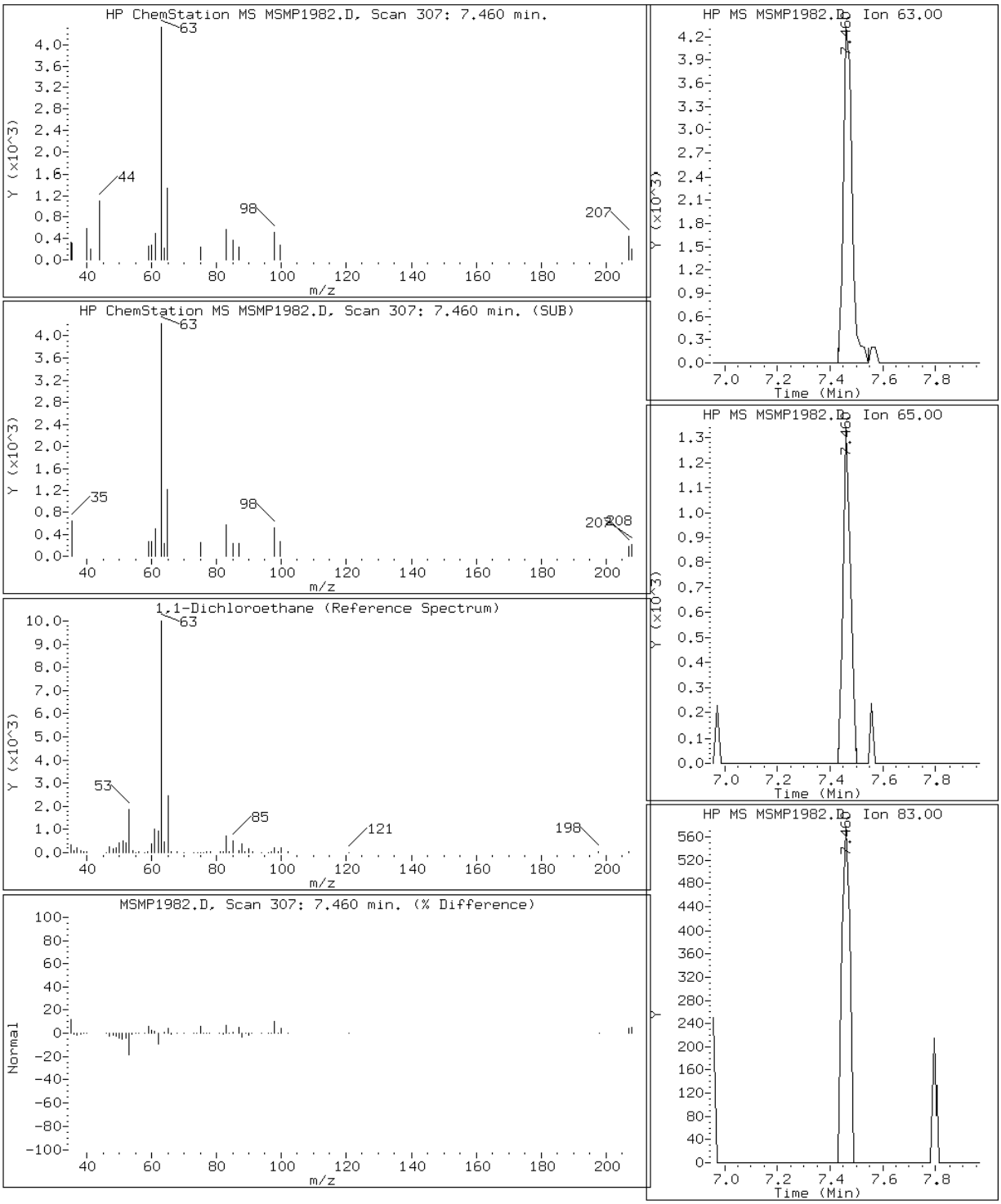
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

23 1,1-Dichloroethane



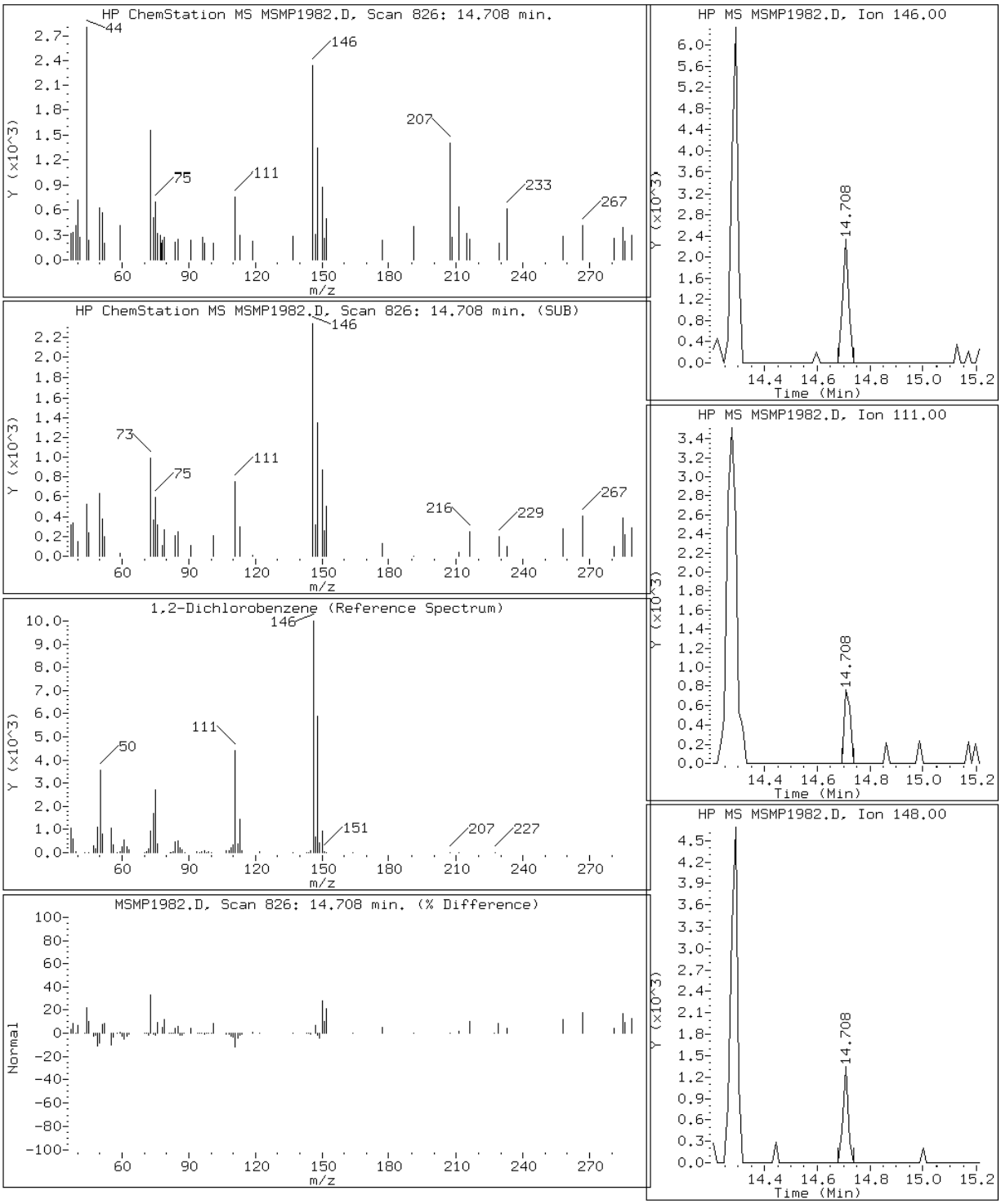
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

99 1,2-Dichlorobenzene



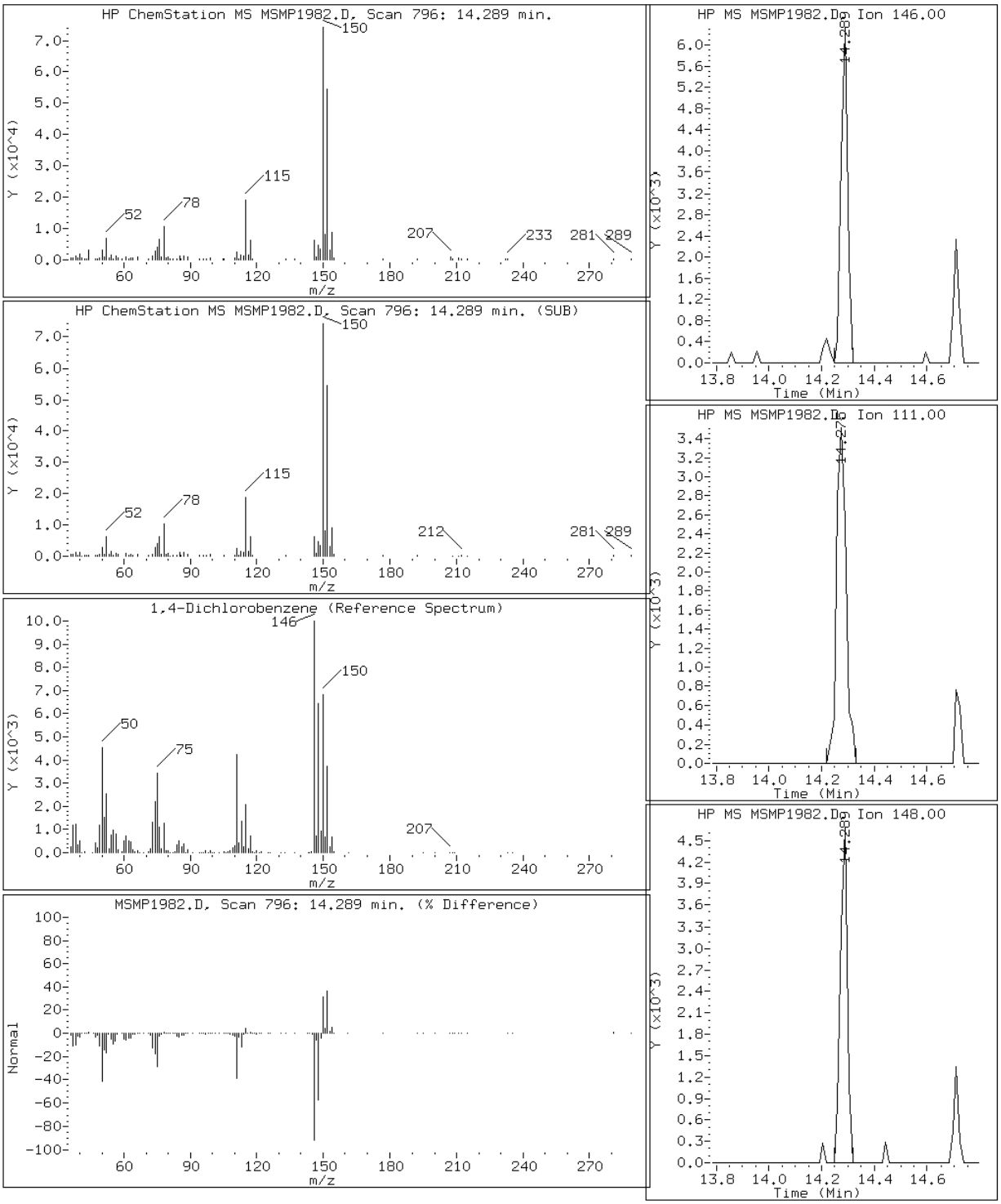
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

96 1,4-Dichlorobenzene



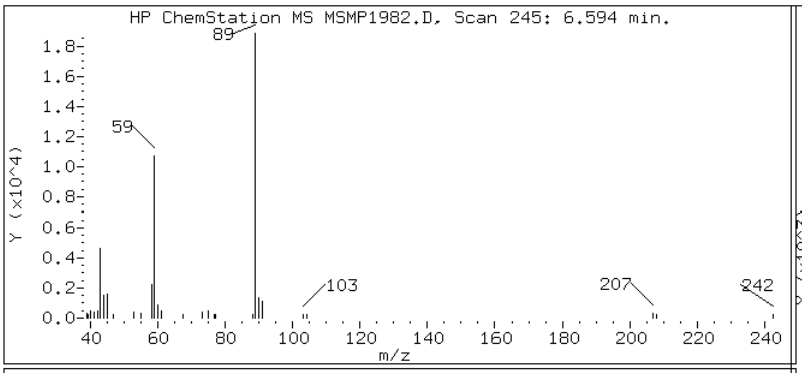
Data File: MSMP1982.D

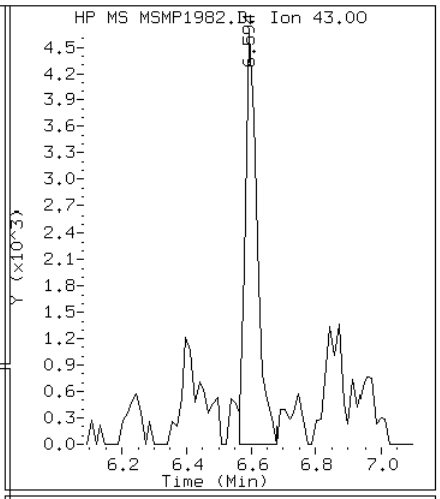
Date: 14-AUG-2012 11:12

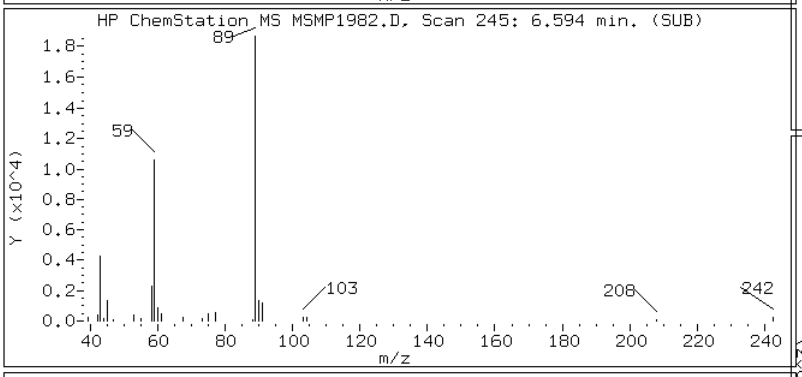
Client ID: S-10 Instrument: MSM.i

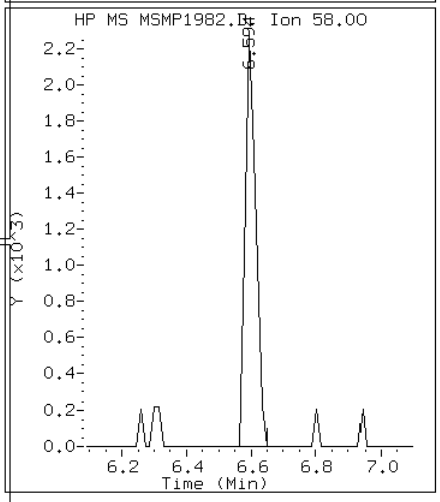
Sample Info: 160-437-F-8 Operator: JDH

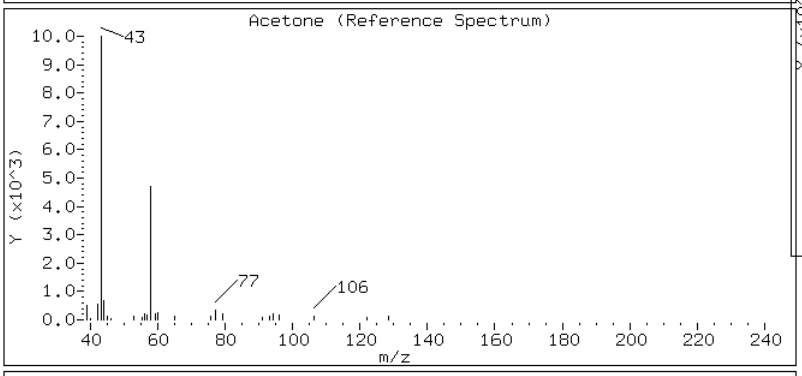
16 Acetone

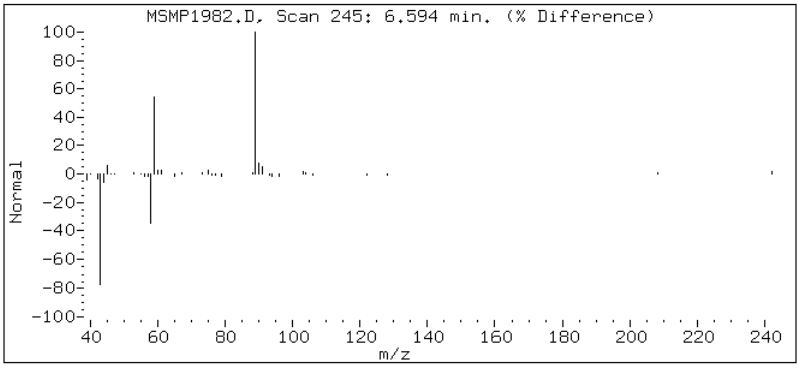












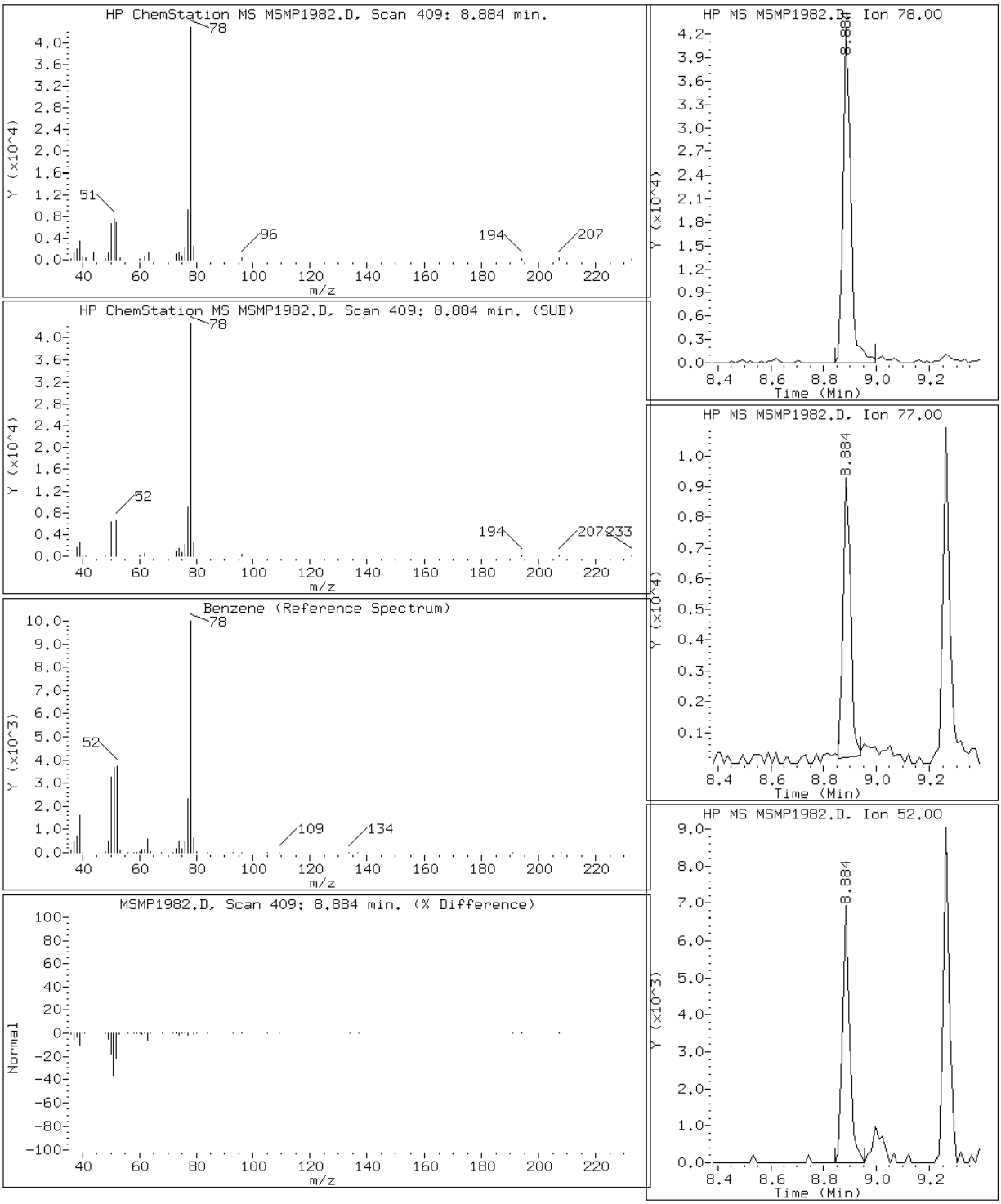
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

40 Benzene



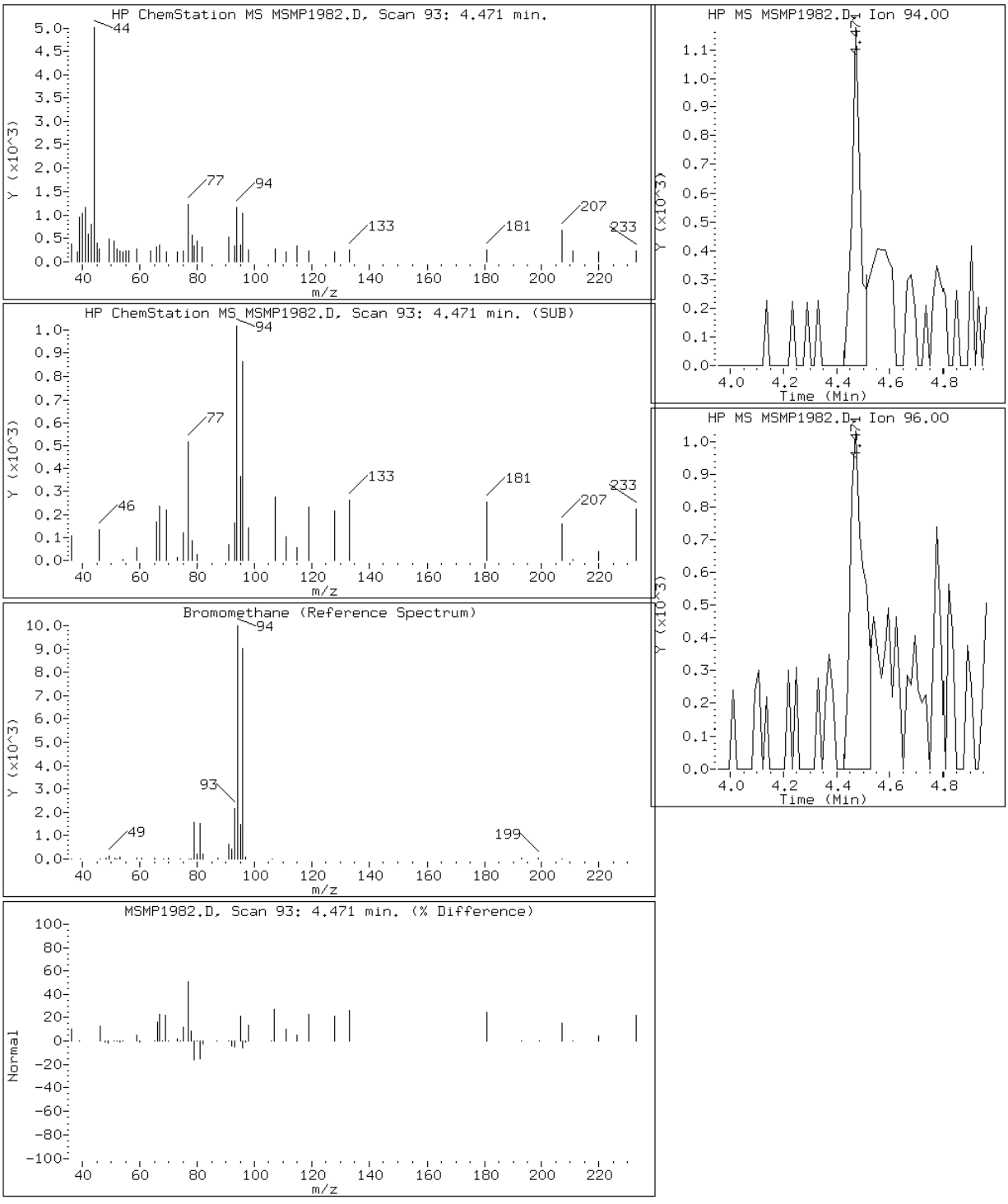
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

5 Bromomethane



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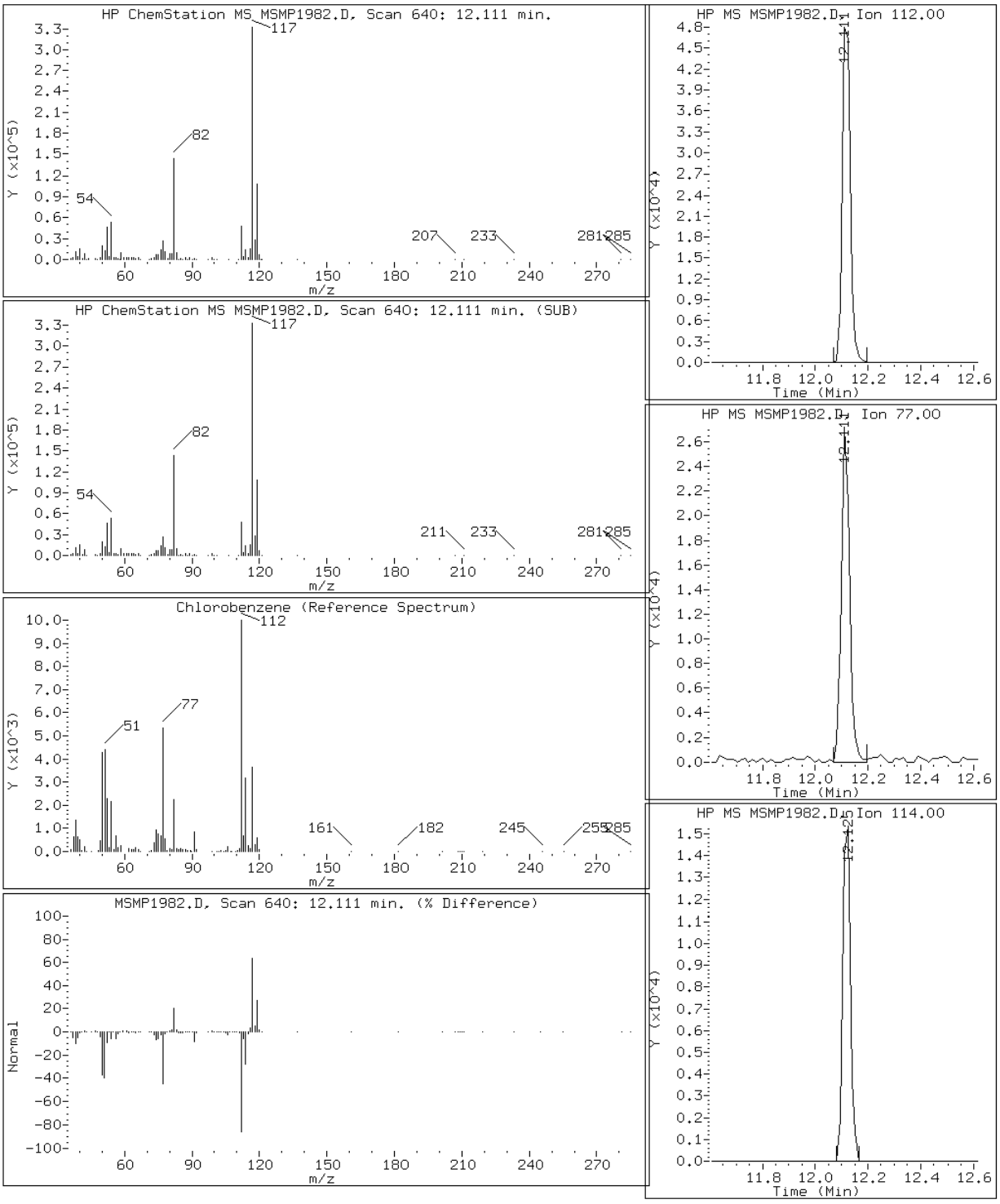
Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

71 Chlorobenzene



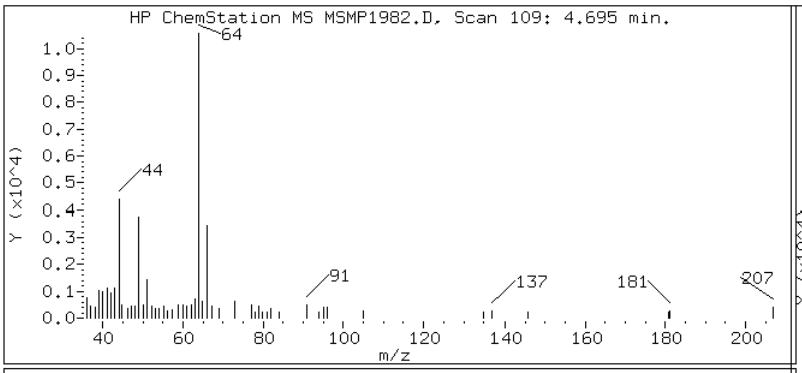
Data File: MSMP1982.D

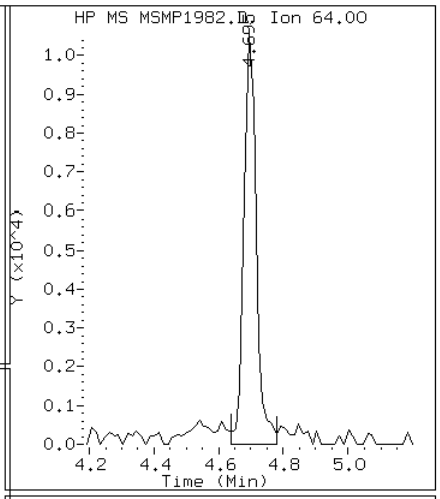
Date: 14-AUG-2012 11:12

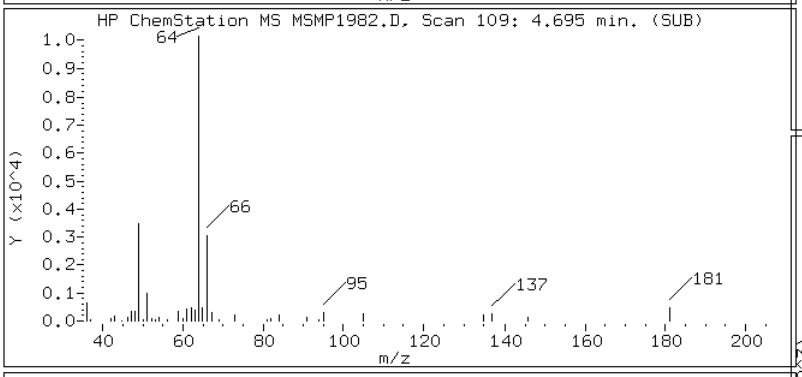
Client ID: S-10 Instrument: MSM.i

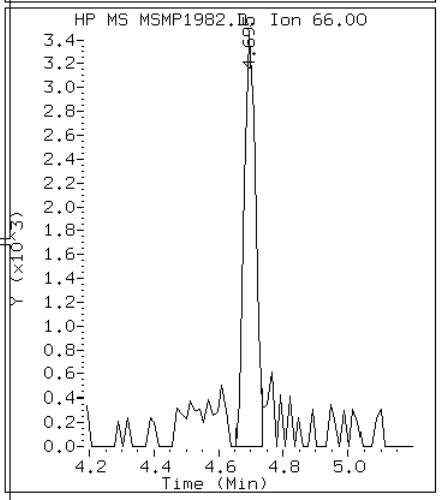
Sample Info: 160-437-F-8 Operator: JDH

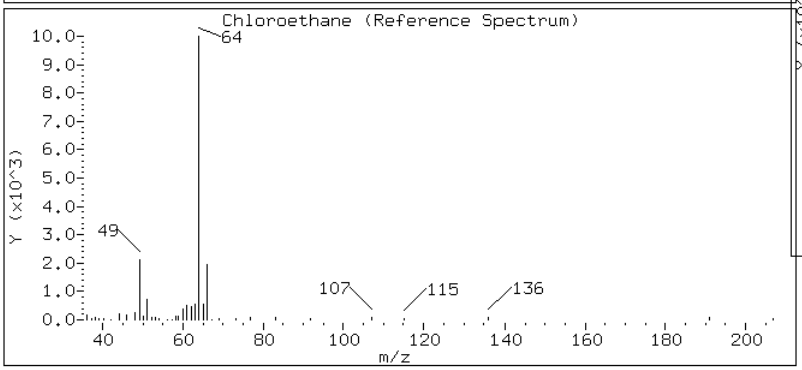
6 Chloroethane

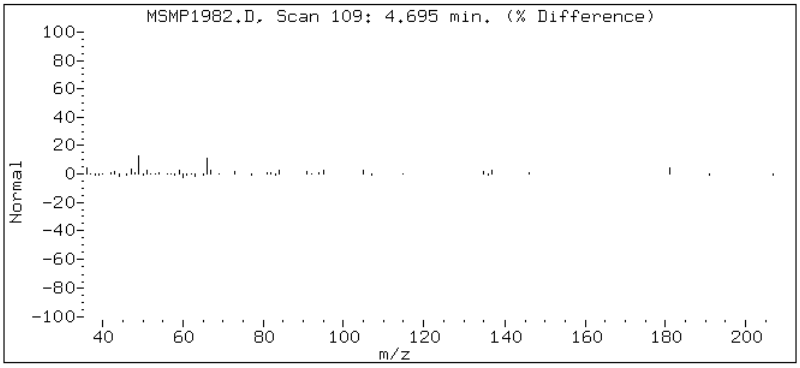












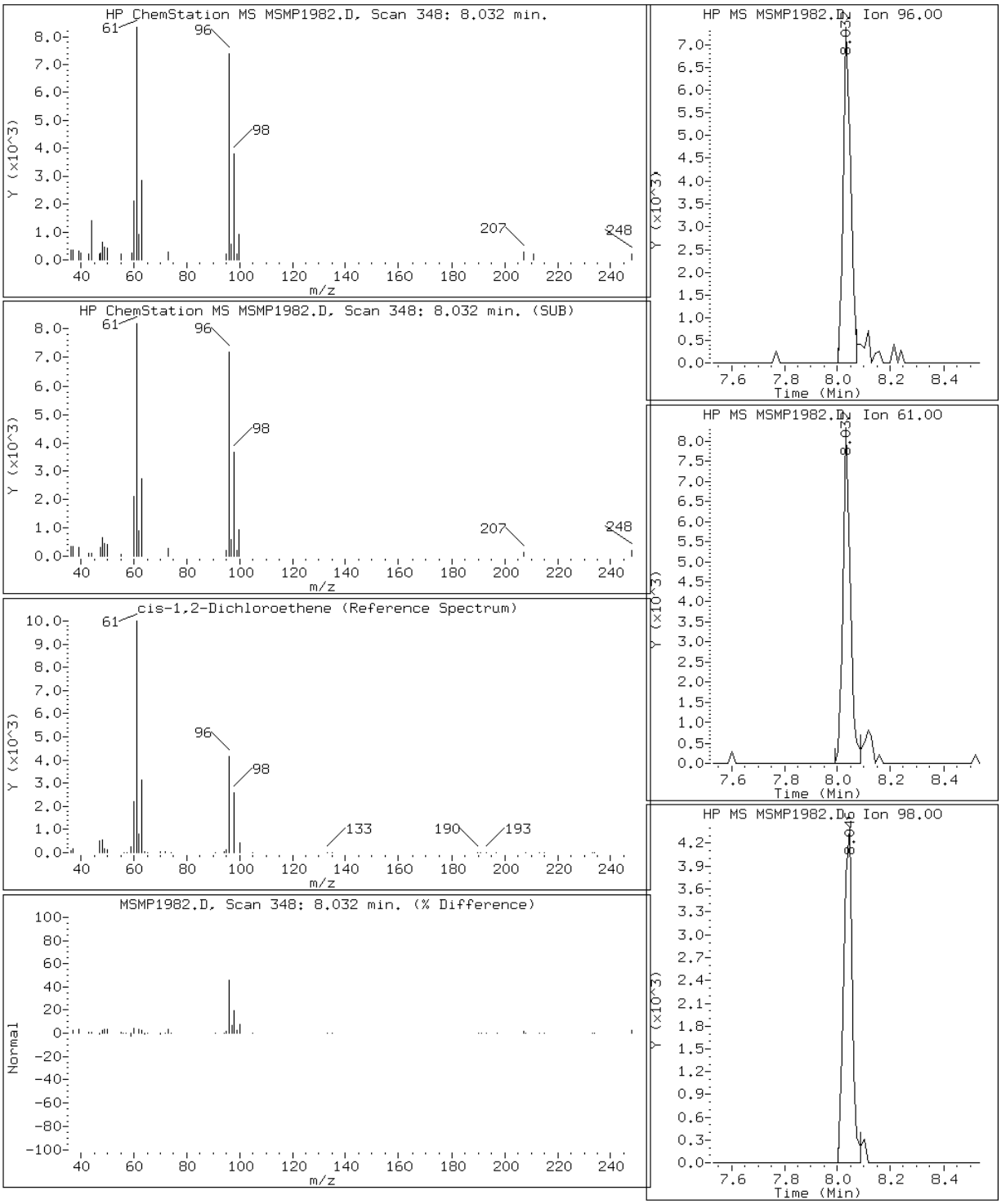
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

27 cis-1,2-Dichloroethene



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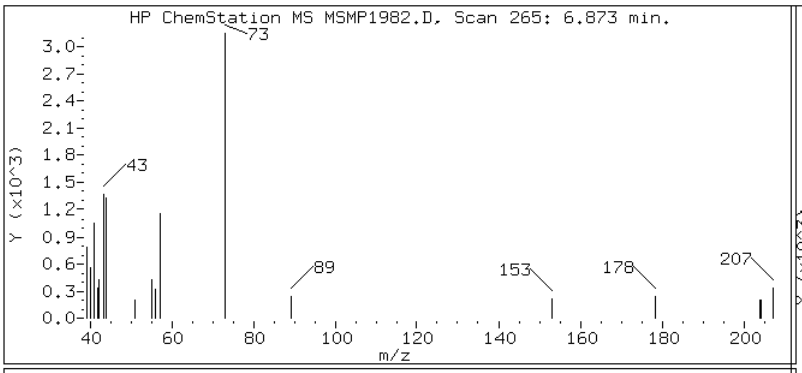
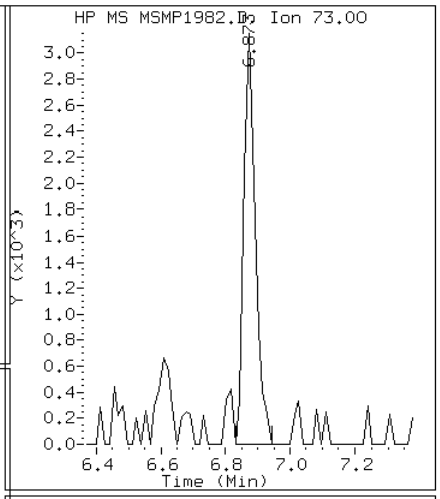
Date: 14-AUG-2012 11:12

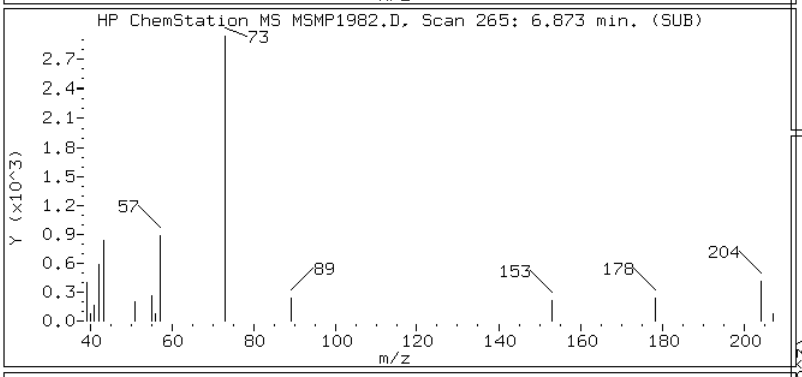
Client ID: S-10 Instrument: MSM.i

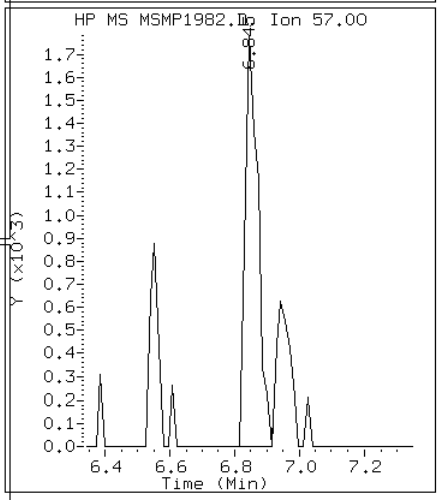
Sample Info: 160-437-F-8 Operator: JDH

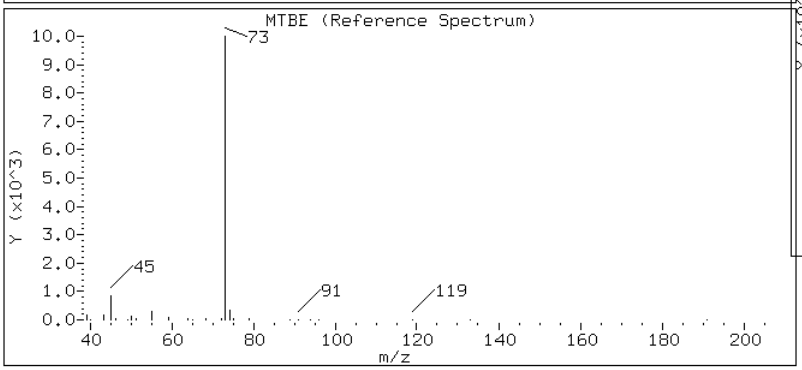
20 MTBE

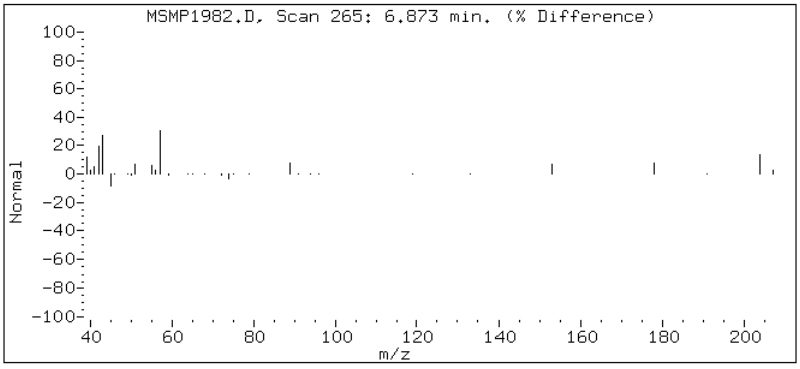












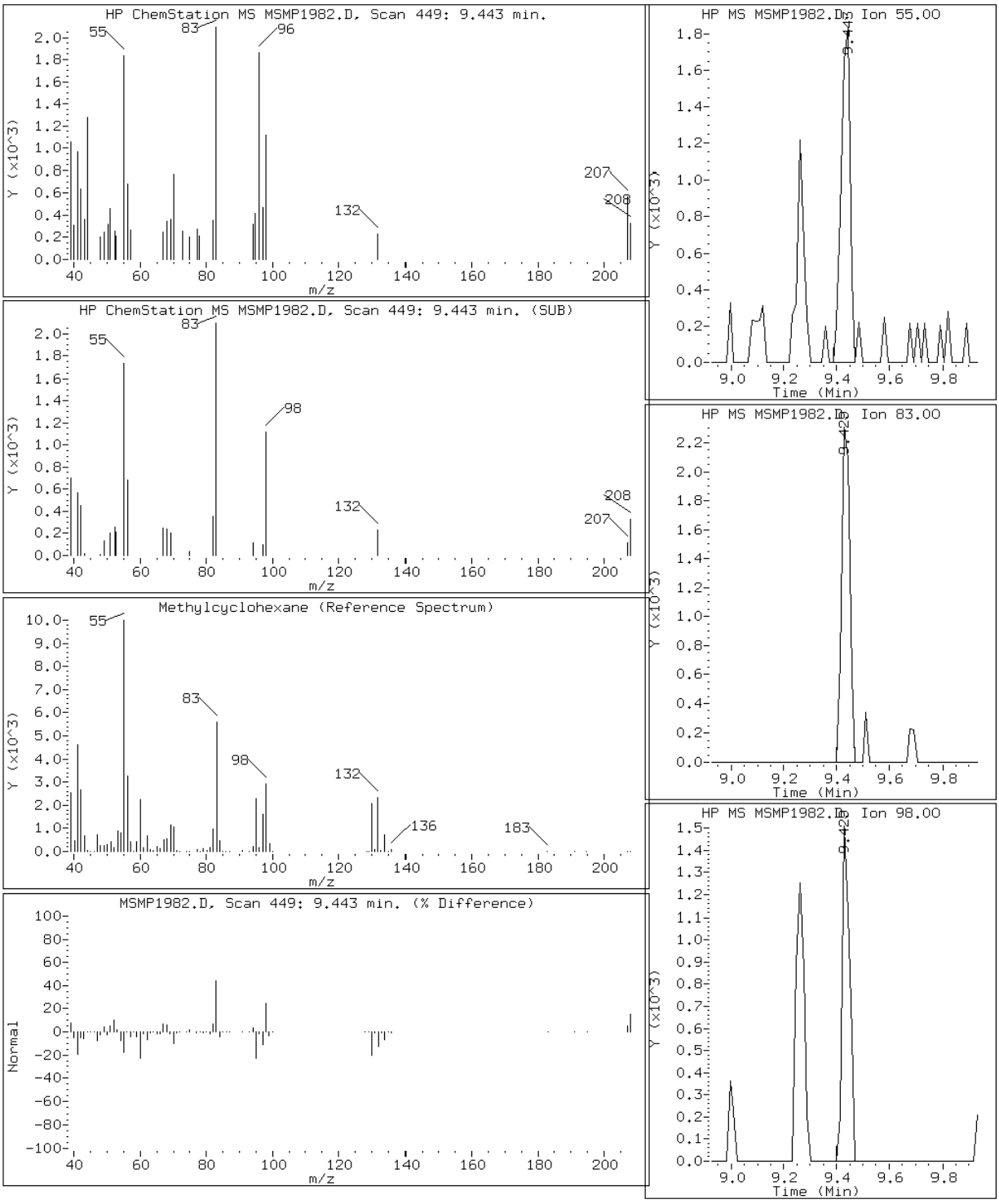
Data File: MSMP1982.D

Date: 14-AUG-2012 11:12

Client ID: S-10 Instrument: MSM.i

Sample Info: 160-437-F-8 Operator: JDH

47 Methylcyclohexane



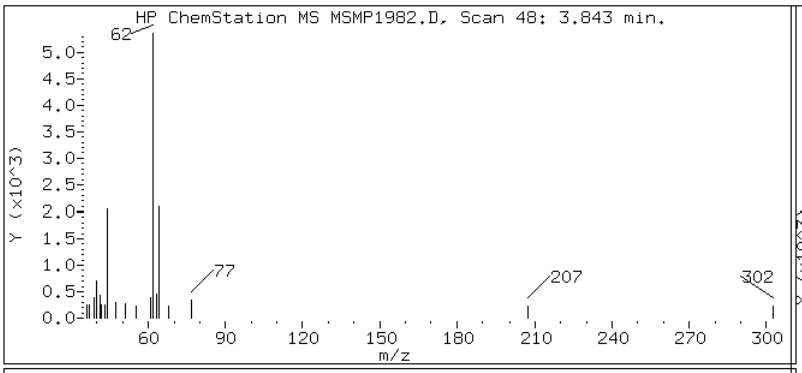
Data File: MSMP1982.D

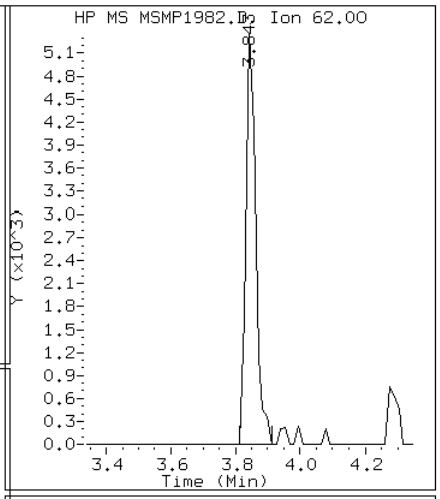
Date: 14-AUG-2012 11:12

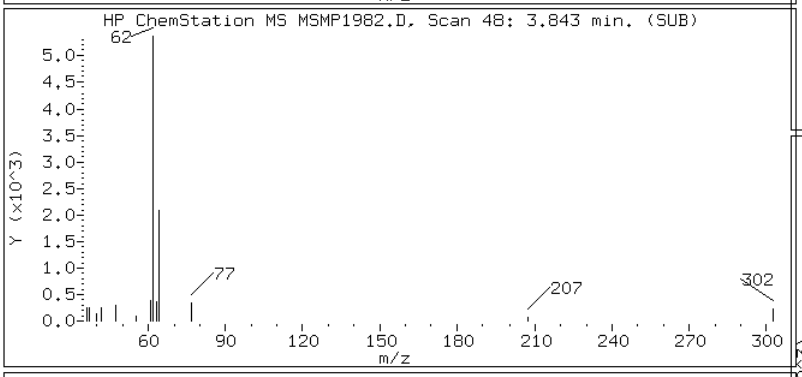
Client ID: S-10 Instrument: MSM.i

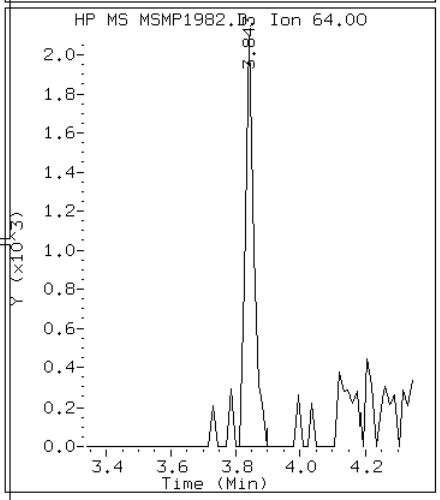
Sample Info: 160-437-F-8 Operator: JDH

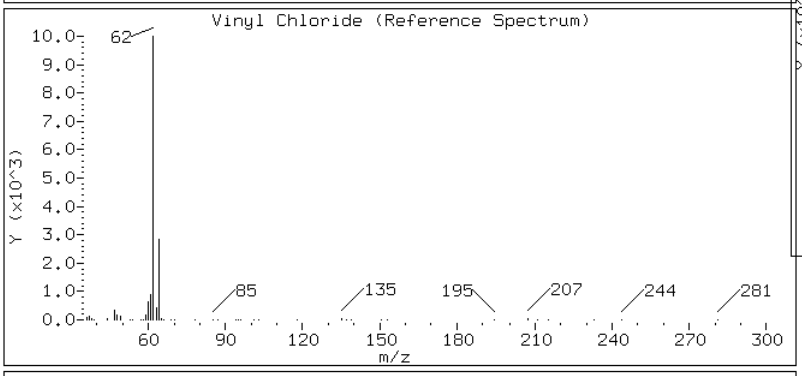
4 Vinyl Chloride

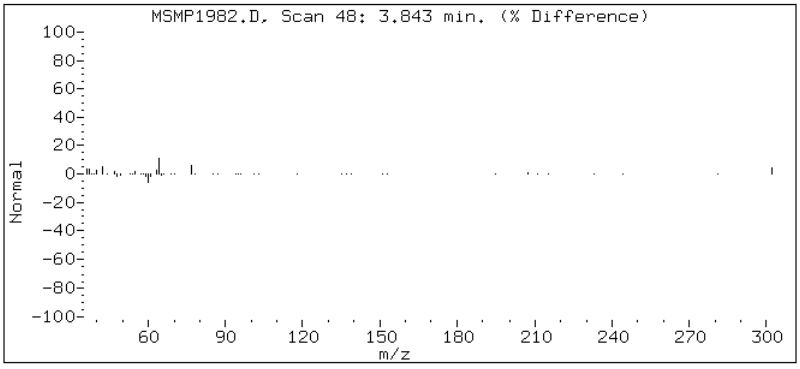












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Matrix: Water | Lab File ID: MSMP1979.D

Analysis Method: 8260C | Date Collected: 08/08/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 09:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	11	J	20	6.7
71-43-2	Benzene	0.53	J	5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.53	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	5.1		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	0.51	J	5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Matrix: Water | Lab File ID: MSMP1979.D

Analysis Method: 8260C | Date Collected: 08/08/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 09:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	108		85-115
1868-53-7	Dibromofluoromethane (Surr)	99		85-119
460-00-4	4-Bromofluorobenzene (Surr)	106		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	113		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1979.D
Report Date: 21-Aug-2012 17:18

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1979.D
Lab Smp Id: 160-437-F-9 Client Smp ID: DUP 05
Inj Date : 14-AUG-2012 09:34
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-9
Misc Info : 160-437-F-9
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:52 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	3277	0.52587	0.5259(a)
	8 Diethyl ether	74	5.448	5.449	(0.588)	75459	22.6217	22.62
	12 Iodomethane	142	5.965	5.965	(0.644)	3743	4.10103	4.101
	16 Acetone	43	6.594	6.594	(0.712)	17228	11.4273	11.43
	20 MTBE	73	6.873	6.873	(0.742)	6160	0.50554	0.5055(a)
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	18570	45.9154	45.92
$	35 Dibromofluoromethane (Surr)	113	8.479	8.480	(0.916)	280831	49.3643	49.36
	40 Benzene	78	8.884	8.884	(0.959)	14502	0.53349	0.5335(a)
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	263934	56.3369	56.34
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1337618	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1199922	53.9873	53.99
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	878967	50.0000	
	71 Chlorobenzene	112	12.110	12.110	(1.001)	89918	5.05006	5.050
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	366260	53.1367	53.14
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	435966	50.0000	
	105 Naphthalene	128	16.524	16.524	(1.158)	20977	4.83635	4.836

QC Flag Legend

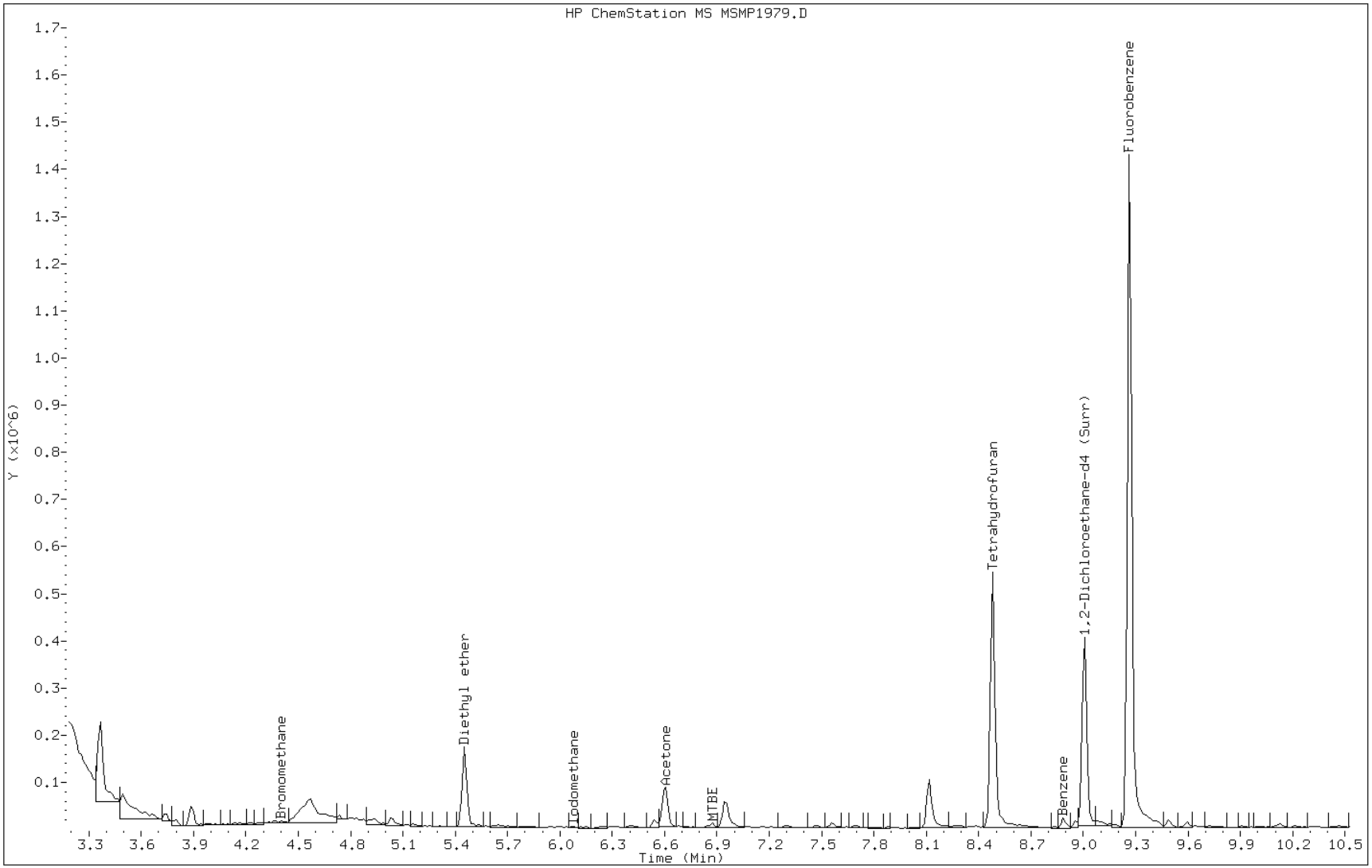
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MSMP1979.D

Date: 14-AUG-2012 09:34

Client ID: DUP 05 Instrument: MSM.i

Sample Info: 160-437-F-9 Operator: JDH

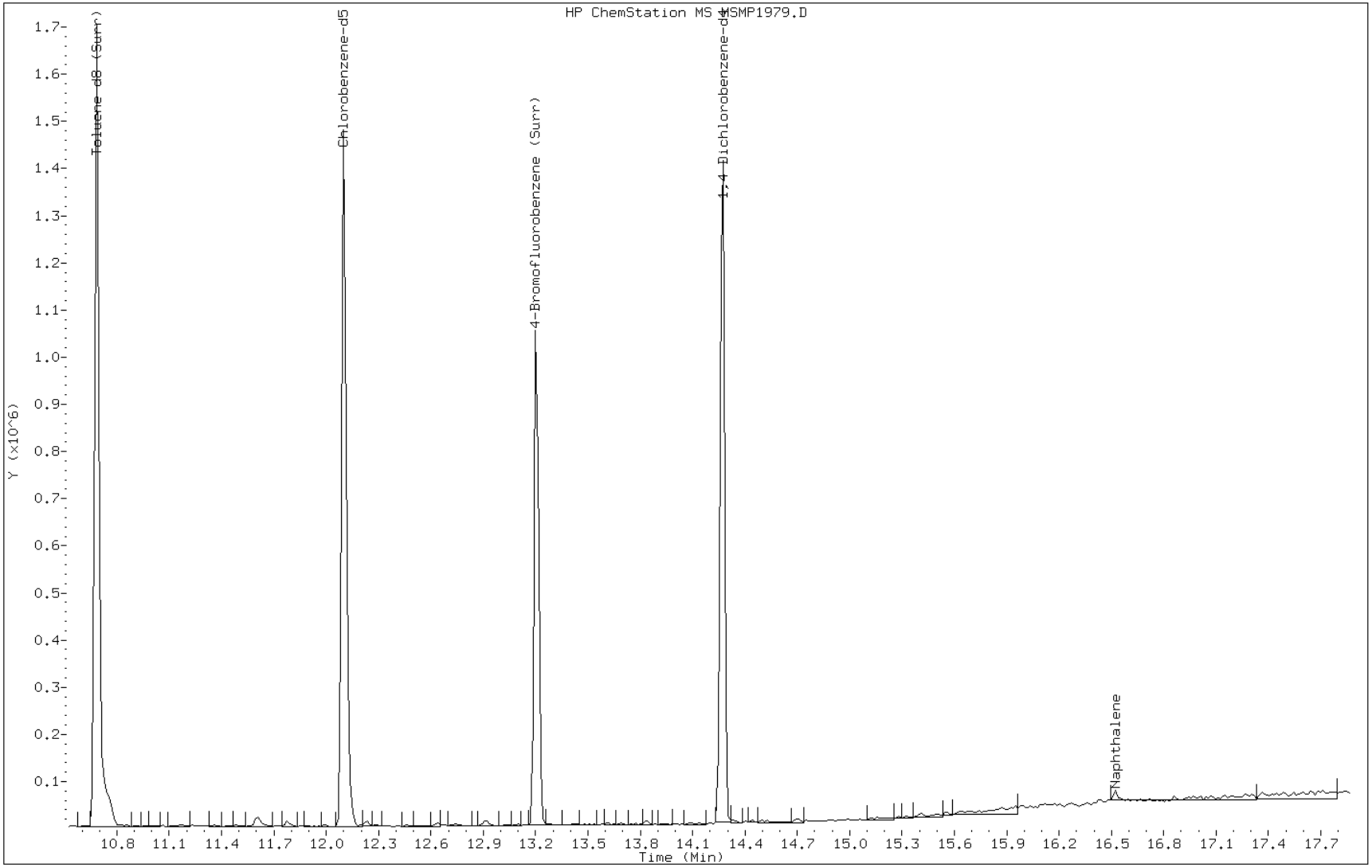


Data File: MSMP1979.D

Date: 14-AUG-2012 09:34

Client ID: DUP 05 Instrument: MSM.i

Sample Info: 160-437-F-9 Operator: JDH



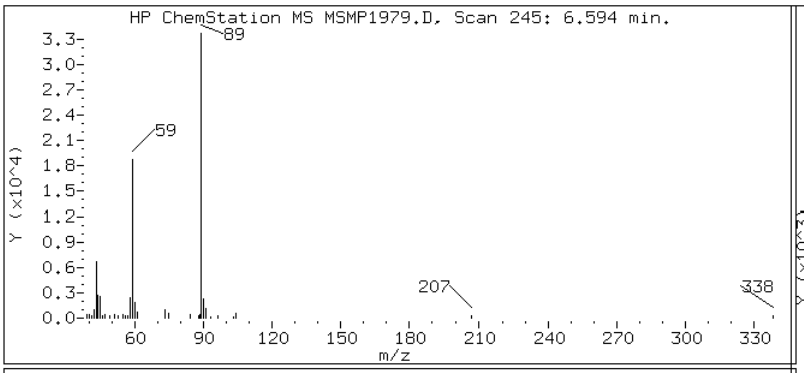
Data File: MSMP1979.D

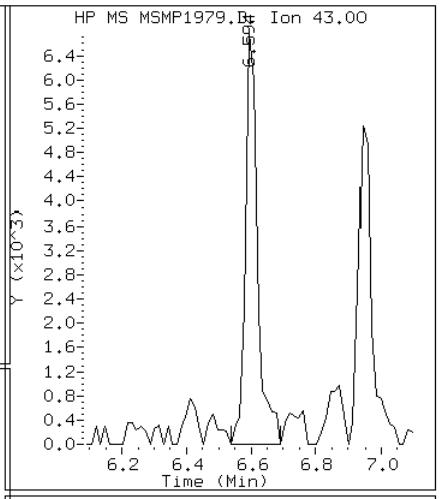
Date: 14-AUG-2012 09:34

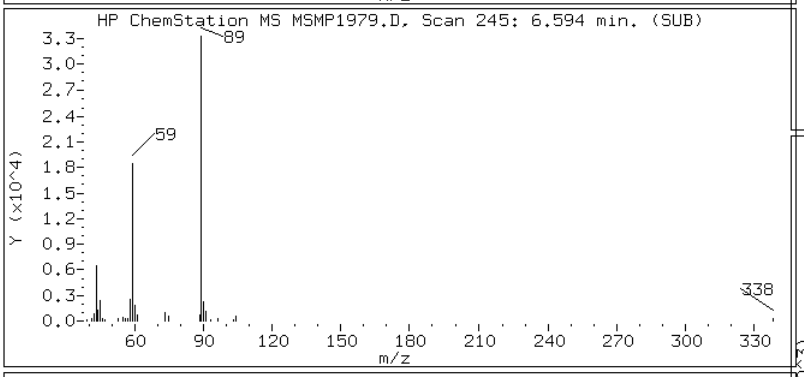
Client ID: DUP 05 Instrument: MSM.i

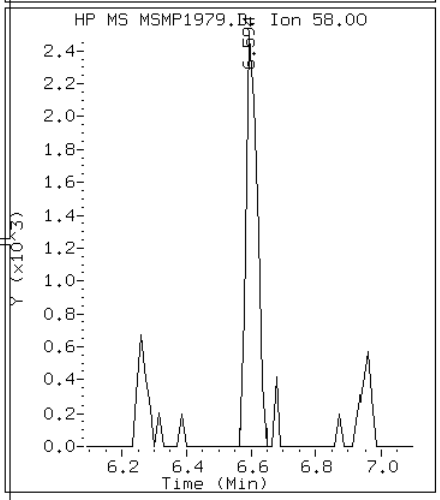
Sample Info: 160-437-F-9 Operator: JDH

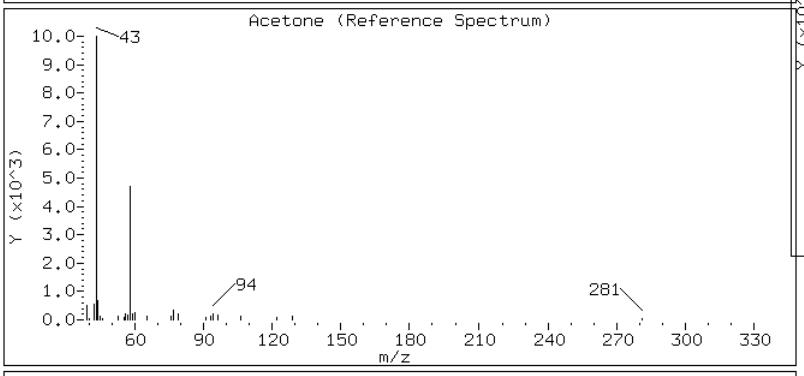
16 Acetone

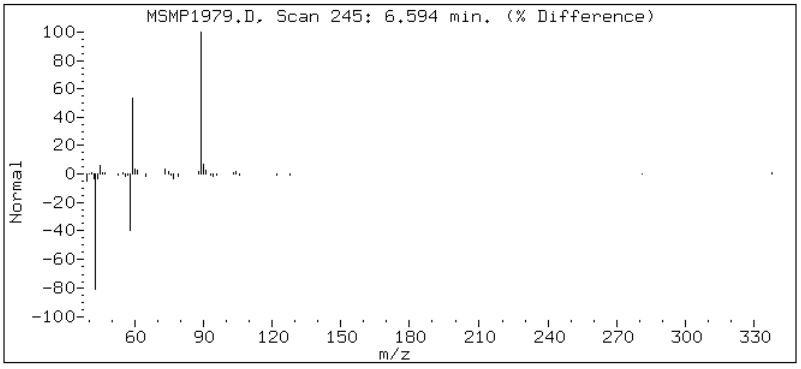












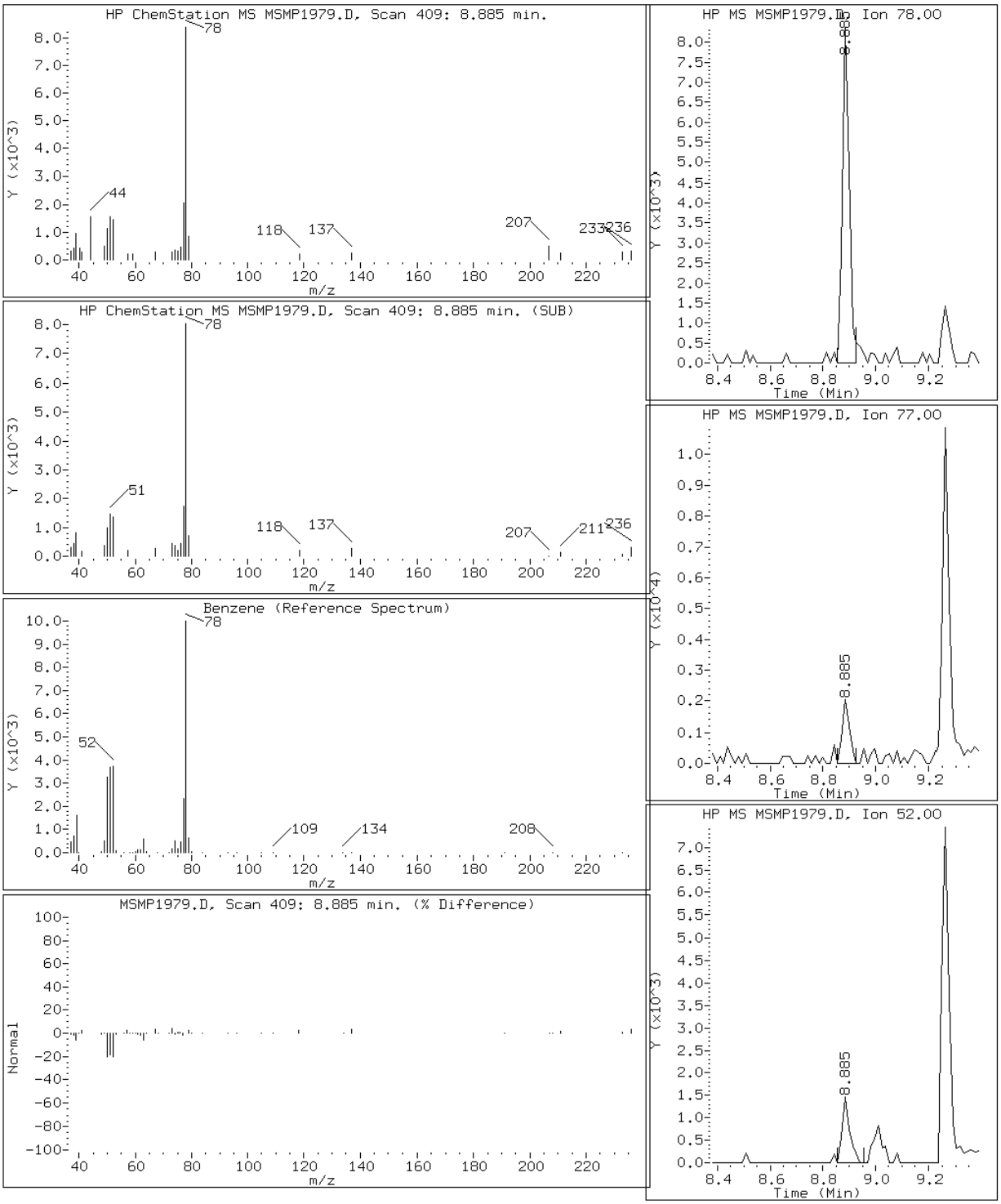
Data File: MSMP1979.D

Date: 14-AUG-2012 09:34

Client ID: DUP 05 Instrument: MSM.i

Sample Info: 160-437-F-9 Operator: JDH

40 Benzene



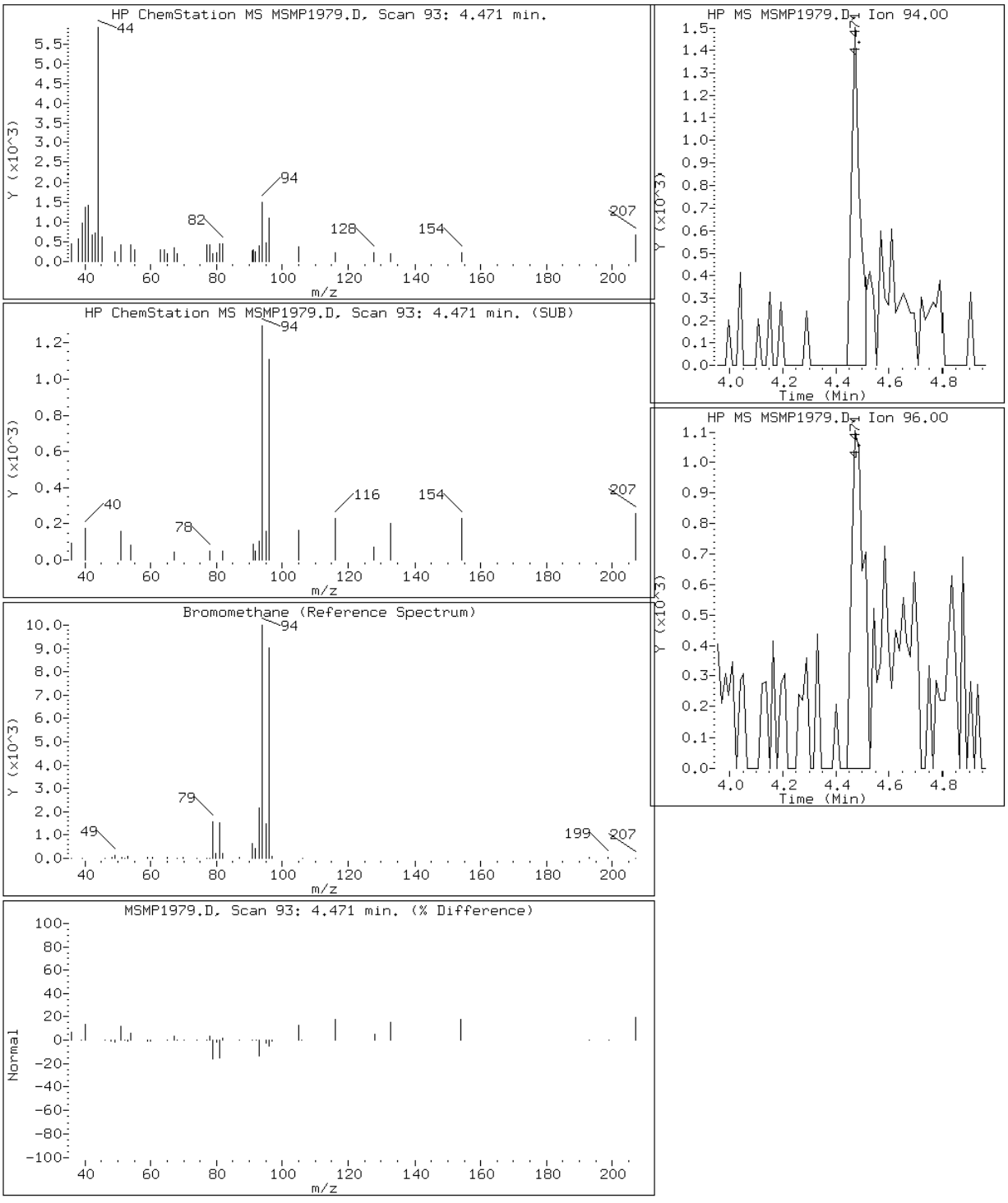
Data File: MSMP1979.D

Date: 14-AUG-2012 09:34

Client ID: DUP 05 Instrument: MSM.i

Sample Info: 160-437-F-9 Operator: JDH

5 Bromomethane



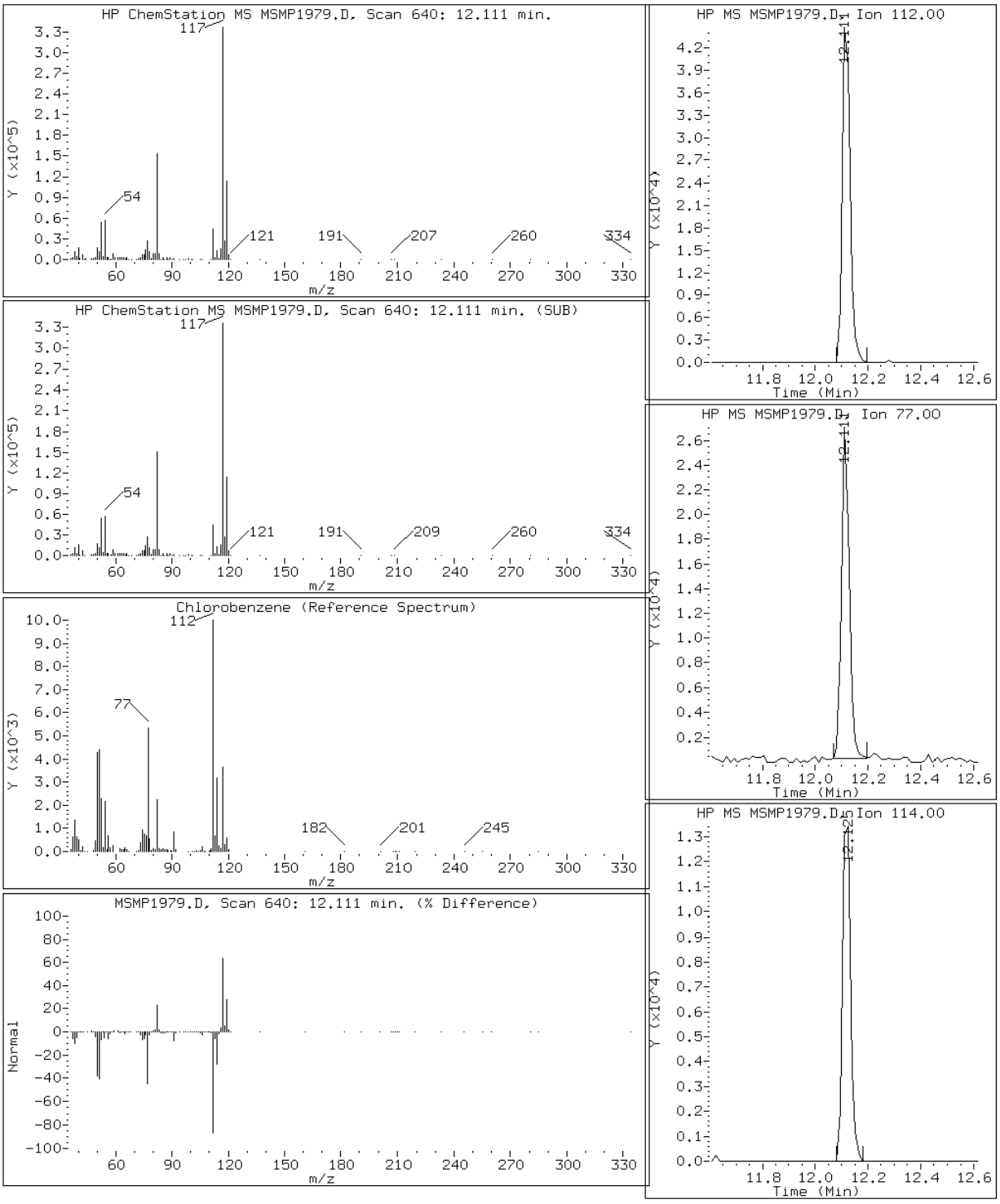
Data File: MSMP1979.D

Date: 14-AUG-2012 09:34

Client ID: DUP 05 Instrument: MSM.i

Sample Info: 160-437-F-9 Operator: JDH

71 Chlorobenzene



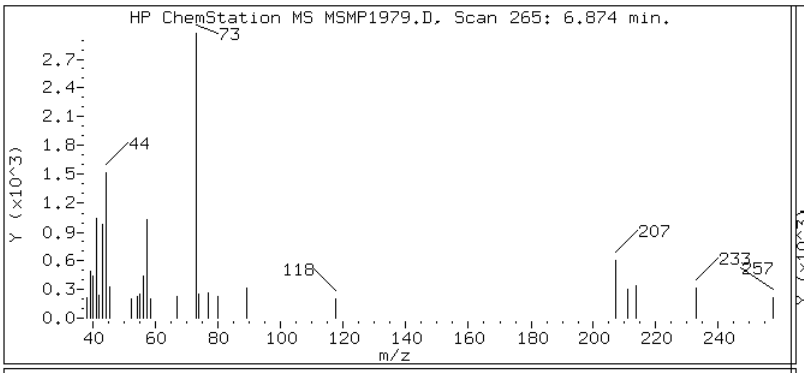
Data File: MSMP1979.D

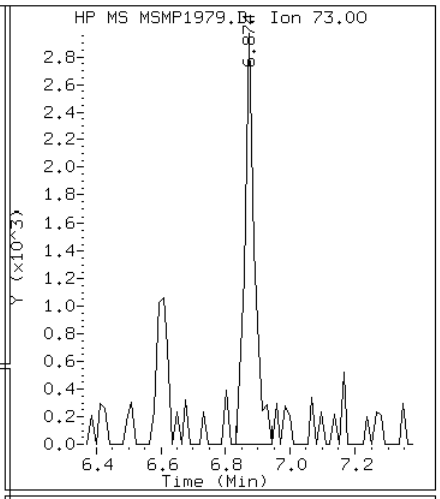
Date: 14-AUG-2012 09:34

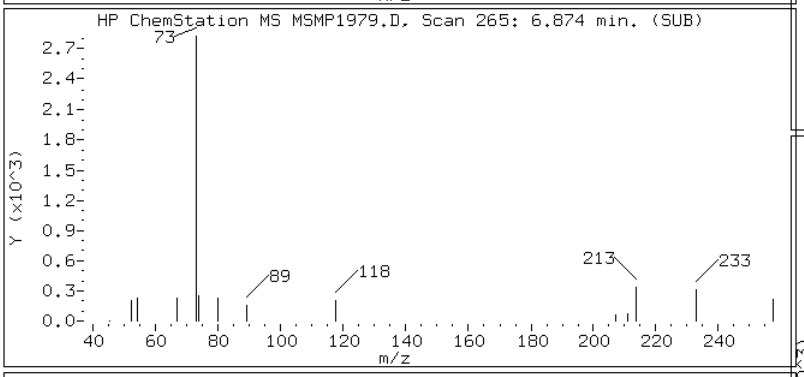
Client ID: DUP 05 Instrument: MSM.i

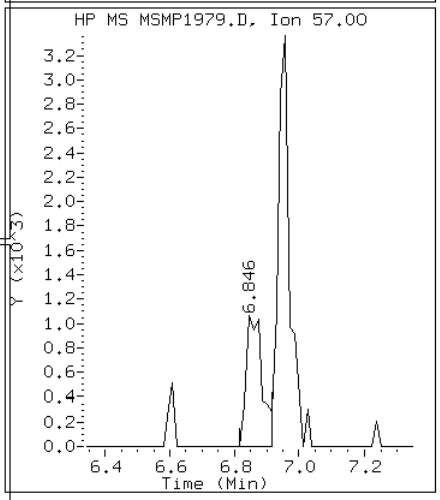
Sample Info: 160-437-F-9 Operator: JDH

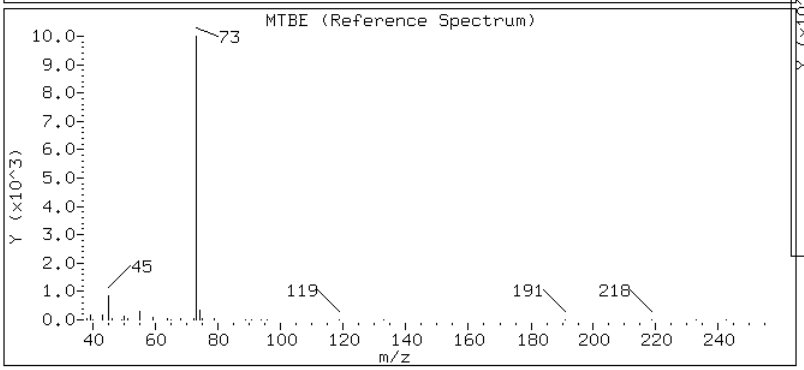
20 MTBE

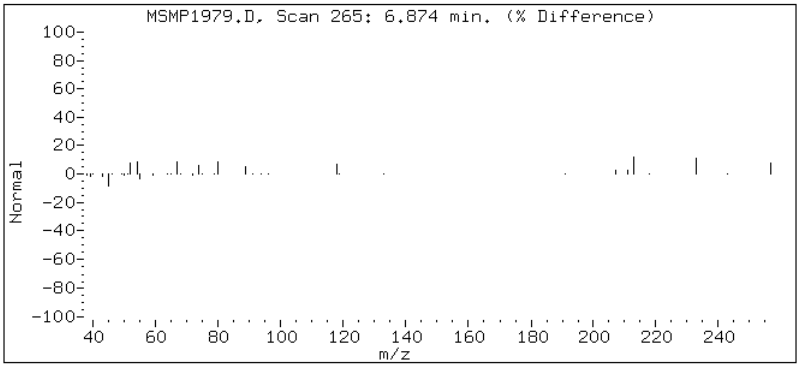












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 160-437-10

Matrix: Water | Lab File ID: MSMP1970.D

Analysis Method: 8260C | Date Collected: 08/08/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 05:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	ND		5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	0.47	J B	10	0.40
75-15-0	Carbon disulfide	ND	*	5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	ND		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: TRIP BLANK | Lab Sample ID: 160-437-10

Matrix: Water | Lab File ID: MSMP1970.D

Analysis Method: 8260C | Date Collected: 08/08/2012 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 05:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	105		85-115
1868-53-7	Dibromofluoromethane (Surr)	94		85-119
460-00-4	4-Bromofluorobenzene (Surr)	106		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1970.D
Report Date: 15-Aug-2012 15:10

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1970.D
Lab Smp Id: 160-437-A-10 Client Smp ID: TRIP BLANK
Inj Date : 14-AUG-2012 05:49
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-A-10
Misc Info : 160-437-A-10
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:00 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	3487	0.46533	0.4653(a)
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	322800	47.1851	47.18
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	283154	50.2602	50.26
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1608527	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1391704	52.4251	52.42
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1049830	50.0000	
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	421254	52.9739	52.97
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	502967	50.0000	
	106 1,2,3-Trichlorobenzene	180	16.719	16.733	(1.171)	1415	0.50020	0.5002(a)

QC Flag Legend

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

Data File: MSMP1970.D

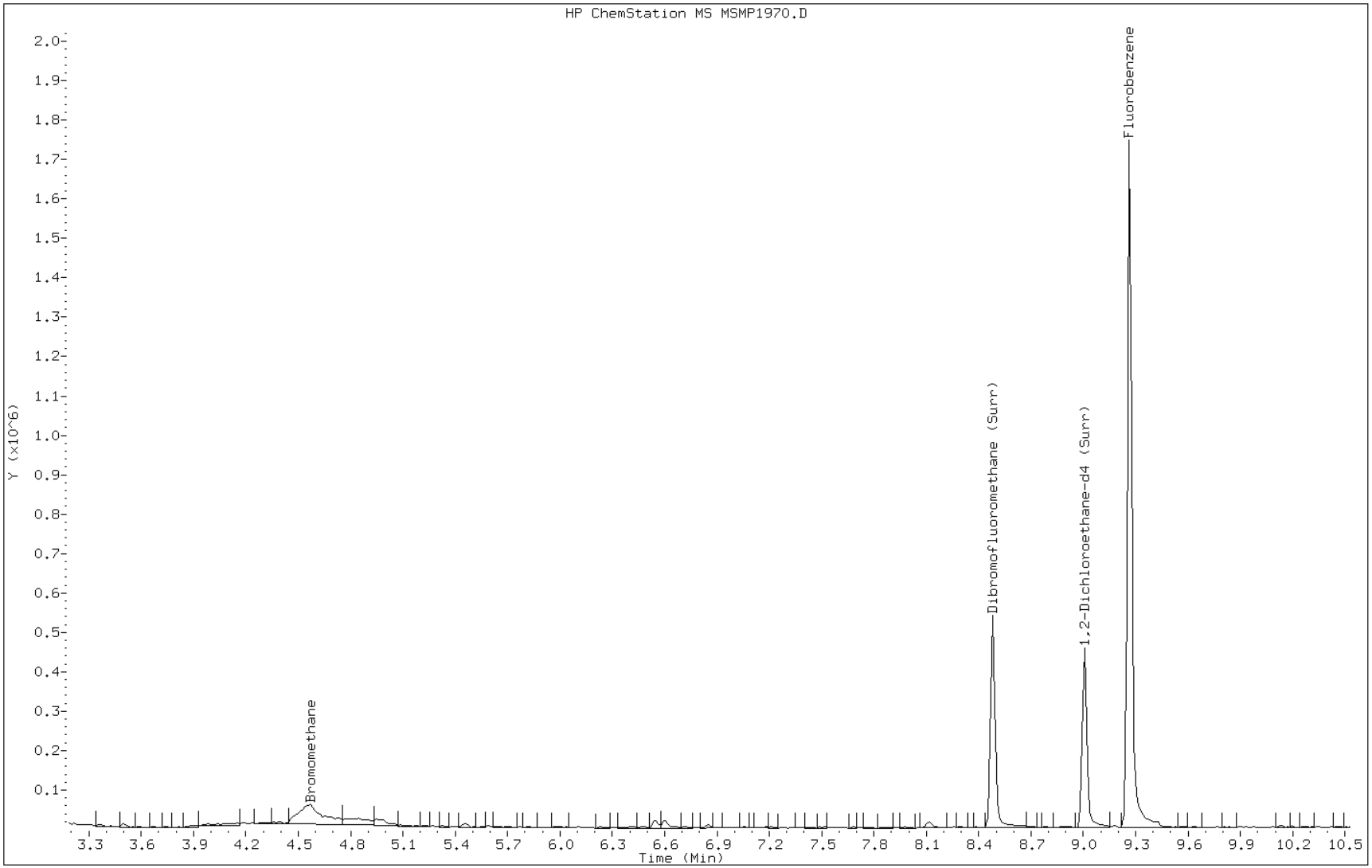
Date: 14-AUG-2012 05:49

Client ID: TRIP BLANK

Instrument: MSM.i

Sample Info: 160-437-A-10

Operator: JDH



Data File: MSMP1970.D

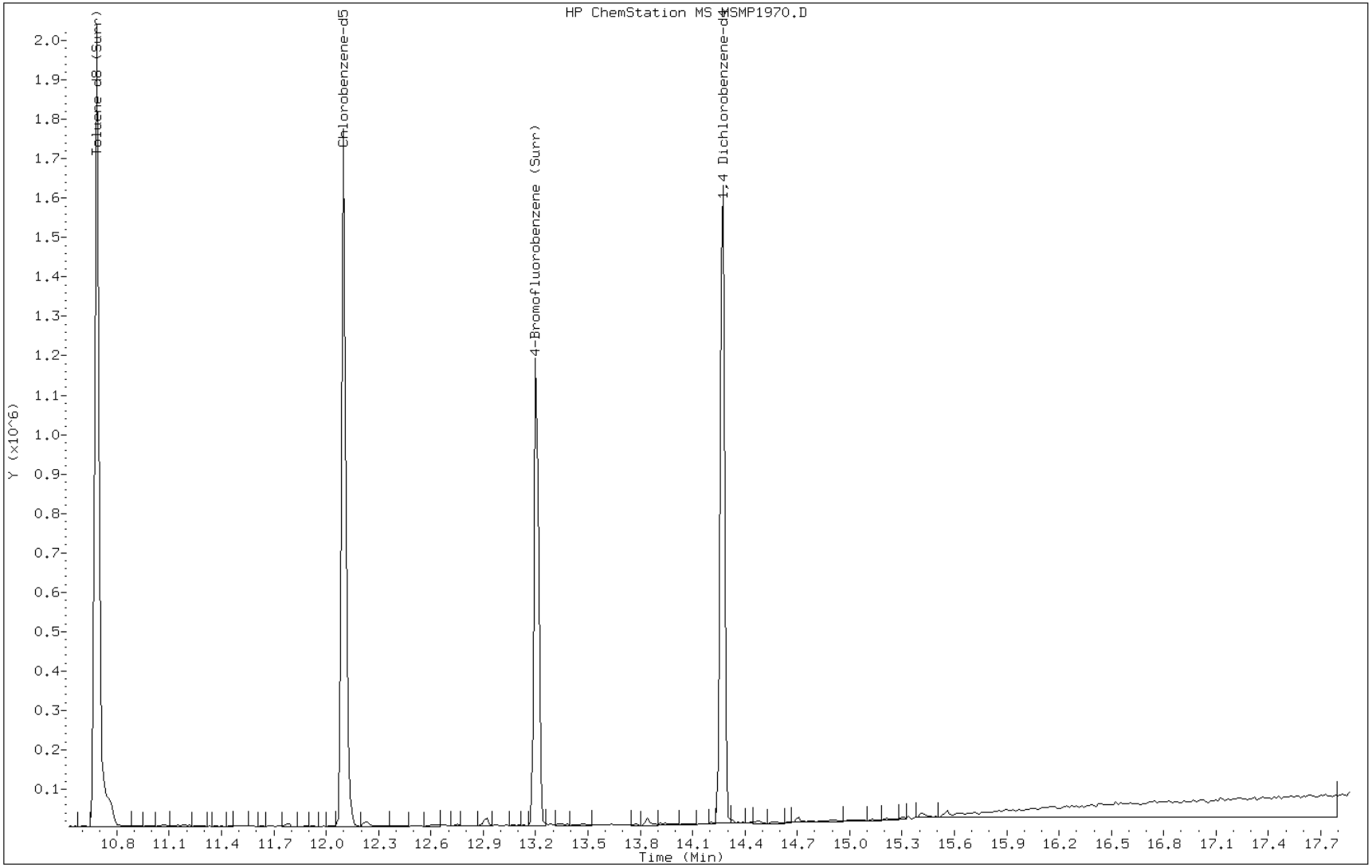
Date: 14-AUG-2012 05:49

Client ID: TRIP BLANK

Instrument: MSM.i

Sample Info: 160-437-A-10

Operator: JDH



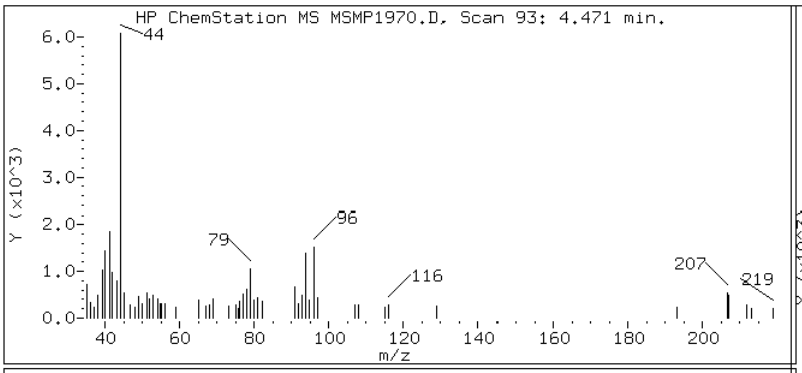
Data File: MSMP1970.D

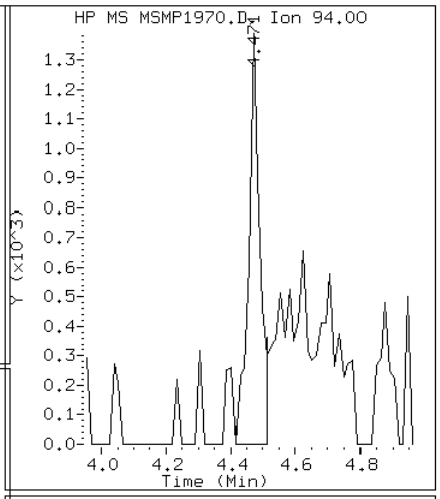
Date: 14-AUG-2012 05:49

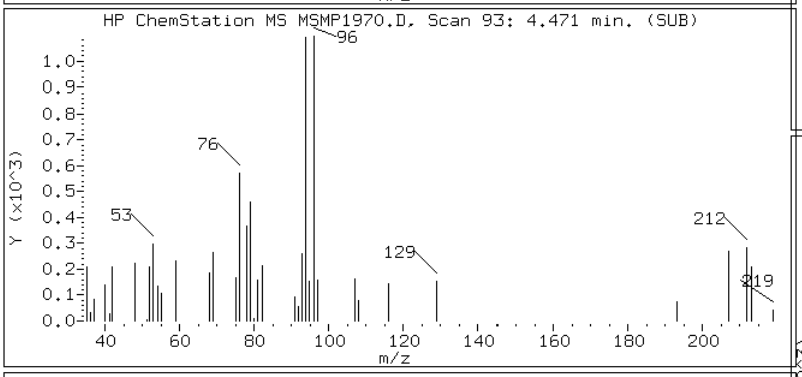
Client ID: TRIP BLANK Instrument: MSM.i

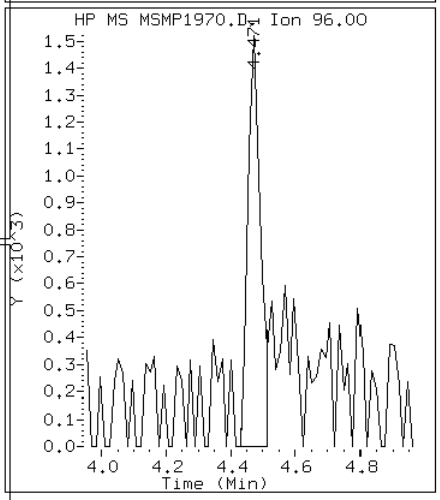
Sample Info: 160-437-A-10 Operator: JDH

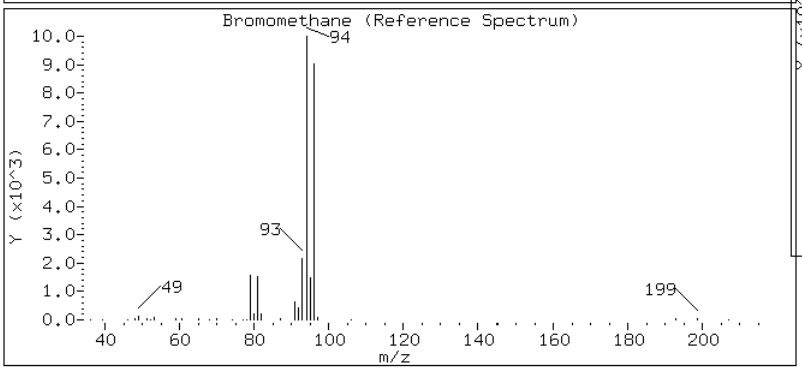
5 Bromomethane

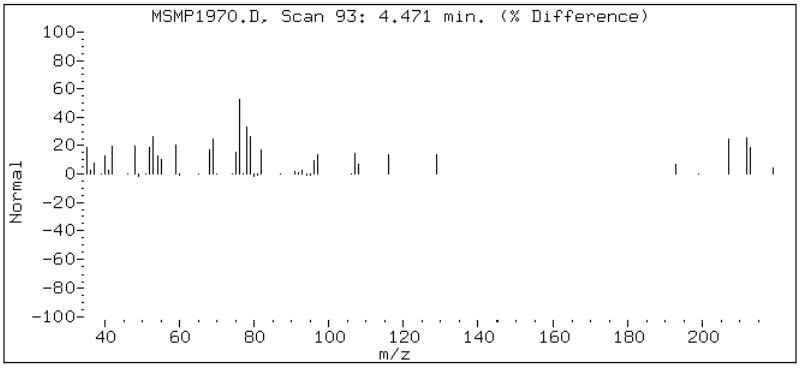












FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-8911/2	MICL1797.D
Level 2	IC 160-8911/3	MICL1798.D
Level 3	IC 160-8911/4	MICL1799.D
Level 4	IC 160-8911/5	MICL1800.D
Level 5	IC 160-8911/6	MICL1801.D
Level 6	ICIS 160-8911/7	MICL1802.D
Level 7	IC 160-8911/8	MICL1803.D
Level 8	IC 160-8911/9	MICL1804.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 0.2457	+++++ 0.2428	0.2699 0.2350	0.2368	0.2290	Ave		0.2432			0.1000	5.9		15.0			
1,2-Dichloro-1,1,2,2-tetrafluoroethane	+++++ 0.1625	+++++ 0.1532	0.1760 0.1509	0.1568	0.1482	Ave		0.1579			0.0100	6.4		15.0			
Chloromethane	+++++ 0.3402	+++++ 0.3055	0.3833 0.2632	0.3490	0.3351	Ave		0.3294			0.1000	12.4		15.0			
Vinyl chloride	0.3301 0.4310	0.4816 0.3834	0.4580 0.3406	0.4067	0.4026	Ave		0.4042			0.1000	13.1		15.0			
Bromomethane	+++++ 0.2194	+++++ 0.1936	0.2774 +++++	0.2504	0.2239	Ave		0.2329			0.1000	13.7		15.0			
Chloroethane	+++++ 0.2371	+++++ 0.2264	0.2621 0.2130	0.2462	0.2257	Ave		0.2351			0.1000	7.4		15.0			
Trichlorofluoromethane	+++++ 0.4595	+++++ 0.4329	0.4825 0.4173	0.4374	0.4197	Ave		0.4416			0.1000	5.7		15.0			
Ethyl ether	+++++ 0.1391	+++++ 0.1302	0.1154 0.1214	0.1210	0.1209	Ave		0.1247			0.0100	6.8		15.0			
1,1-Dichloroethene	+++++ 0.2282	+++++ 0.2276	0.2260 0.2307	0.2148	0.2112	Ave		0.2231			0.1000	3.6		15.0			
Carbon disulfide	+++++ 0.6650	+++++ 0.6354	0.6512 0.5876	0.6257	0.6145	Ave		0.6299			0.1000	4.4		15.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.2151	+++++ 0.1962	0.2280 0.2004	0.2053	0.1957	Ave		0.2068			0.1000	6.1		15.0			
Iodomethane	+++++ 0.2185	+++++ 0.2296	0.1298 0.2567	0.1345	0.1644	None	0.0707	0.2471							0.9914		
Acrolein	+++++ 0.0236	+++++ 0.0234	0.0279 0.0218	0.0191	0.0201	Ave		0.0226			0.0010	13.8		15.0			
Allyl chloride	+++++ 0.2473	+++++ 0.2328	0.2327 0.2154	0.2359	0.2328	Ave		0.2328			0.0100	4.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Methylene Chloride	+++++ 0.2708	+++++ 0.2578	0.3002 0.2451	0.2734	0.2746	Ave		0.2703			0.1000	6.8		15.0			
Acetone	+++++ 0.0487	+++++ 0.0388	0.0814 0.0323	0.0569	0.0445	Qua	-0.003	16.547	112.34		0.1000				0.9988		0.9900
Methyl acetate	+++++ 0.0348	+++++ 0.0318	0.0311 0.0309	0.0325	0.0312	Ave		0.0321		*	0.1000	4.5		15.0			
trans-1,2-Dichloroethene	+++++ 0.3022	0.2925 0.2797	0.3069 0.2825	0.2659	0.2798	Ave		0.2871			0.1000	5.0		15.0			
n-Hexane	+++++ 0.0672	+++++ 0.0632	0.0714 0.0620	0.0565	0.0555	Ave		0.0626			0.0100	9.8		15.0			
Methyl tert-butyl ether	+++++ 0.5016	+++++ 0.4652	0.4251 0.4495	0.4486	0.4428	Ave		0.4555			0.1000	5.7		15.0			
Pentachloroethane	0 0.0087	0 0.0081	0 0.0080	0	0.0091	Ave		0.0085		*	0.0100	6.0		15.0			
Acetonitrile	+++++ 0.0177	+++++ 0.0165	0.0206 0.0144	0.0164	0.0173	Ave		0.0172			0.0010	11.9		15.0			
2-Chloro-1,3-butadiene	+++++ 0.3521	+++++ 0.3346	0.3032 0.3182	0.3063	0.3113	Ave		0.3210			0.0100	5.9		15.0			
1,1-Dichloroethane	+++++ 0.4994	+++++ 0.4533	0.4667 0.4073	0.4597	0.4649	Ave		0.4585			0.2000	6.5		15.0			
Acrylonitrile	+++++ 0.0613	+++++ 0.0595	0.0537 0.0516	0.0523	0.0591	Ave		0.0562			0.0100	7.4		15.0			
Vinyl acetate	+++++ 0.2080	+++++ 0.1853	0.1482 0.1731	0.1633	0.1648	Ave		0.1738			0.0100	11.9		15.0			
cis-1,2-Dichloroethene	+++++ 0.3054	0.2827 0.2871	0.2933 0.2858	0.2726	0.2837	Ave		0.2872			0.1000	3.5		15.0			
2,2-Dichloropropane	+++++ 0.3236	+++++ 0.3083	0.3053 0.2988	0.2849	0.2807	Ave		0.3003			0.0100	5.3		15.0			
Bromochloromethane	+++++ 0.1297	+++++ 0.1215	0.1152 0.1305	0.1147	0.1192	Ave		0.1218			0.0100	5.7		15.0			
Cyclohexane	+++++ 0.4334	+++++ 0.4046	0.4285 0.3839	0.3634	0.3937	Ave		0.4013			0.1000	6.7		15.0			
Chloroform	+++++ 0.4181	0.4309 0.4065	0.4174 0.3878	0.3935	0.3989	Ave		0.4076			0.2000	3.8		15.0			
Ethyl acetate	+++++ 0.0212	+++++ 0.0194	0.0193 0.0172	0.0253	0.0219	Ave		0.0207			0.0100	13.4		15.0			
Carbon tetrachloride	+++++ 0.3205	+++++ 0.3048	0.2969 0.3118	0.2820	0.2810	Ave		0.2995			0.1000	5.3		15.0			
Tetrahydrofuran	+++++ 0.0170	+++++ 0.0162	0.0145 0.0144	0.0140	0.0146	Ave		0.0151			0.0010	7.8		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	+++++ 0.3551	+++++ 0.3375	0.3490 0.3405	0.3308	0.3331	Ave		0.3410			0.1000	2.8		15.0			
2-Butanone (MEK)	+++++ 0.0678	+++++ 0.0628	0.0686 0.0579	0.0562	0.0548	Ave		0.0613		*	0.1000	9.7		15.0			
1,1-Dichloropropene	+++++ 0.3400	+++++ 0.3275	0.3267 0.3068	0.2980	0.3079	Ave		0.3178			0.0100	5.0		15.0			
Bromodichloromethane	+++++ 0.2699	+++++ 0.2719	0.2636 0.2611	0.2281	0.2548	Ave		0.2582			0.2000	6.2		15.0			
Benzene	0.7864 1.1103	1.1083 1.0338	1.1258 0.8602	1.0223	1.0818	Ave		1.0161			0.5000	12.4		15.0			
Propionitrile	+++++ 0.0206	+++++ 0.0184	0.0190 0.0172	0.0185	0.0181	Ave		0.0186			0.0010	6.1		15.0			
Methacrylonitrile	+++++ 0.0926	+++++ 0.0836	0.0820 0.0720	0.0779	0.0814	Ave		0.0816			0.0100	8.3		15.0			
Isobutanol	+++++ 0.0058	+++++ 0.0056	0.0052 0.0052	0.0047	0.0048	Ave		0.0052			0.0010	8.1		15.0			
1,2-Dichloroethane	+++++ 0.2446	0.2532 0.2392	0.2295 0.2219	0.2340	0.2291	Ave		0.2359			0.1000	4.5		15.0			
Trichloroethene	+++++ 0.2823	0.2591 0.2489	0.2637 0.2610	0.2360	0.2376	Ave		0.2555			0.2000	6.3		15.0			
Methylcyclohexane	+++++ 0.3103	+++++ 0.2836	0.2842 0.2434	0.2759	0.2827	Ave		0.2800			0.1000	7.7		15.0			
1-Butanol	+++++ 0.0029	+++++ 0.0034	0.0034 0.0032	0.0018	0.0022	Lin	0.6129	0.0033		*	0.0100				0.9967		0.9900
Dibromomethane	+++++ 0.1132	+++++ 0.1115	0.1082 0.1063	0.0968	0.1030	Ave		0.1065			0.0100	5.6		15.0			
1,2-Dichloropropane	+++++ 0.2760	+++++ 0.2632	0.2619 0.2345	0.2609	0.2525	Ave		0.2582			0.1000	5.4		15.0			
Methyl methacrylate	+++++ 0.1094	+++++ 0.1083	0.0783 0.0969	0.0781	0.0884	Ave		0.0932			0.0100	15.0	*	15.0			
1,4-Dioxane	+++++ 0.0015	+++++ 0.0015	0.0013 0.0014	0.0010	0.0012	Ave		0.0013			0.0010	14.0		15.0			
cis-1,3-Dichloropropene	+++++ 0.3266	+++++ 0.3386	0.2853 0.3168	0.2864	0.3040	Ave		0.3096			0.2000	7.0		15.0			
2-Chloroethyl vinyl ether	+++++ 0.0793	+++++ 0.0705	+++++ 0.0714	0.0699	0.0751	Ave		0.0732			0.0100	5.4		15.0			
Toluene	+++++ 0.9723	+++++ 0.8902	0.9569 0.8389	0.8823	0.9352	Ave		0.9126			0.4000	5.6		15.0			
2-Nitropropane	+++++ 0.0529	+++++ 0.0479	0.0431 0.0489	0.0440	0.0437	Ave		0.0468			0.0100	8.2		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Methyl-2-pentanone (MIBK)	+++++ 0.2011	+++++ 0.1819	0.1802 0.1712	0.1632	0.1699	Ave		0.1779			0.1000	7.5		15.0			
trans-1,3-Dichloropropene	+++++ 0.3661	+++++ 0.3471	0.2997 0.3351	0.2841	0.3308	Ave		0.3272			0.1000	9.3		15.0			
Tetrachloroethene	+++++ 0.3112	0.3097 0.2848	0.3163 0.3185	0.2969	0.2860	Ave		0.3033			0.2000	4.6		15.0			
Ethyl methacrylate	+++++ 0.3079	+++++ 0.2922	0.2140 0.2884	0.2077	0.2532	None	0.0381	0.2964							0.9974		
1,1,2-Trichloroethane	+++++ 0.2190	+++++ 0.1955	0.1977 0.1897	0.1857	0.2018	Ave		0.1983			0.1000	5.9		15.0			
Dibromochloromethane	+++++ 0.2973	+++++ 0.2811	0.2438 0.3051	0.2422	0.2604	Ave		0.2716			0.1000	9.9		15.0			
1,3-Dichloropropane	+++++ 0.4370	+++++ 0.4014	0.4170 0.3822	0.3830	0.4177	Ave		0.4064			0.0100	5.3		15.0			
1,2-Dibromoethane (EDB)	+++++ 0.2357	+++++ 0.2167	0.2018 0.2293	0.1843	0.2024	Ave		0.2117			0.1000	9.1		15.0			
2-Hexanone	+++++ 0.1272	+++++ 0.1137	0.1133 0.1106	0.1070	0.1068	Ave		0.1131			0.1000	6.6		15.0			
Ethylbenzene	2.0850 1.7657	1.8873 1.5442	1.8580 1.2669	1.6272	1.7144	Ave		1.7186			0.1000	14.4		15.0			
Chlorobenzene	+++++ 1.0665	+++++ 0.9749	1.0520 0.9372	0.9900	1.0565	Ave		1.0129			0.5000	5.2		15.0			
1,1,1,2-Tetrachloroethane	+++++ 0.3524	+++++ 0.3307	0.3278 0.3680	0.3079	0.3319	Ave		0.3364			0.0100	6.2		15.0			
m-Xylene & p-Xylene	0.8350 0.7391	0.7535 0.6646	0.7155 0.5789	0.6505	0.7106	Ave		0.7060			0.1000	10.8		15.0			
o-Xylene	0.6224 0.6828	0.6501 0.6595	0.6178 0.6645	0.5921	0.6373	Ave		0.6408			0.3000	4.6		15.0			
Styrene	+++++ 1.0251	+++++ 0.9892	0.8066 0.9467	0.8024	0.9271	Ave		0.9162			0.3000	10.1		15.0			
Bromoform	+++++ 0.3053	+++++ 0.2994	0.2583 0.3115	0.2456	0.2771	Ave		0.2829			0.1000	9.5		15.0			
Isopropylbenzene	+++++ 2.8654	+++++ 2.7121	2.7505 2.0723	2.7272	2.7558	Ave		2.6472			0.1000	10.8		15.0			
N-Propylbenzene	+++++ 3.8060	+++++ 3.4019	3.8005 +++++	3.6335	3.6907	Ave		3.6665			0.0100	4.5		15.0			
Bromobenzene	+++++ 0.7944	+++++ 0.7858	0.8018 0.7650	0.7647	0.7981	Ave		0.7850			0.0100	2.1		15.0			
1,1,2,2-Tetrachloroethane	+++++ 0.5679	+++++ 0.5241	0.5500 0.4434	0.4874	0.5219	Ave		0.5158			0.3000	8.7		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	+++++ 2.8741	+++++ 2.7298	2.7012 2.0330	2.6369	2.7219	Ave		2.6162			0.0100	11.3		15.0			
2-Chlorotoluene	+++++ 2.5058	+++++ 2.4392	2.5698 1.9309	2.4067	2.4702	Ave		2.3871			0.0100	9.7		15.0			
1,2,3-Trichloropropane	+++++ 0.5921	+++++ 0.5655	0.5433 0.4875	0.5114	0.5301	Ave		0.5383			0.0100	7.0		15.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1004	+++++ 0.0993	0.0999 0.0907	0.0899	0.0906	Ave		0.0951			0.0100	5.5		15.0			
Cyclohexanone	+++++ 0.0156	+++++ 0.0139	0.0187 0.0119	0.0142	0.0143	Ave		0.0148			0.0010	15.4	*	15.0			
4-Chlorotoluene	+++++ 2.2428	+++++ 2.1224	2.1042 1.6729	2.0957	2.1688	Ave		2.0678			0.0100	9.7		15.0			
tert-Butylbenzene	+++++ 2.4910	+++++ 2.3936	2.4113 1.9180	2.3648	2.3803	Ave		2.3265			0.0100	8.8		15.0			
1,2,4-Trimethylbenzene	+++++ 2.8210	+++++ 2.6763	2.7374 2.0027	2.5506	2.6553	Ave		2.5739			0.0100	11.4		15.0			
sec-Butylbenzene	+++++ 3.7993	+++++ 3.4161	3.7269 2.3707	3.5575	3.5308	Ave		3.4002			0.0100	15.4	*	15.0			
4-Isopropyltoluene	+++++ 3.0104	+++++ 2.7705	2.7699 2.0924	2.7199	2.7704	Ave		2.6889			0.0100	11.5		15.0			
1,3-Dichlorobenzene	+++++ 1.5880	+++++ 1.5453	1.6429 1.3990	1.5951	1.5556	Ave		1.5543			0.6000	5.4		15.0			
1,4-Dichlorobenzene	+++++ 1.6144	+++++ 1.5841	1.7772 1.3964	1.5793	1.5957	Ave		1.5912			0.5000	7.6		15.0			
n-Butylbenzene	+++++ 2.7735	+++++ 2.5376	2.5777 1.8936	2.5344	2.4927	Ave		2.4682			0.0100	12.1		15.0			
1,2-Dichlorobenzene	+++++ 1.4188	+++++ 1.3946	1.4355 1.2699	1.3015	1.3747	Ave		1.3658			0.4000	4.8		15.0			
Nonanal	+++++ 0.1418	+++++ 0.1607	0.1711 0.1680	0.0895	0.1071	Lin	0.1037	0.1714			0.0100				0.9983		0.9900
1,2-Dibromo-3-Chloropropane	+++++ 0.0877	+++++ 0.0891	0.0964 0.0915	0.0748	0.0822	Ave		0.0869			0.0500	8.7		15.0			
Hexachlorobutadiene	+++++ 0.3948	+++++ 0.3809	0.4605 0.3958	0.4038	0.3807	Ave		0.4028			0.0100	7.4		15.0			
1,2,4-Trichlorobenzene	+++++ 0.5471	+++++ 0.5587	0.5444 0.5823	0.4896	0.4831	Ave		0.5342			0.2000	7.4		15.0			
Naphthalene	+++++ 0.5390	+++++ 0.5954	0.4912 +++++	0.4216	0.4401	Ave		0.4974			0.0100	14.4		15.0			
1,2,3-Trichlorobenzene	+++++ 0.2816	+++++ 0.2896	0.3022 0.3141	0.2422	0.2577	Ave		0.2812			0.0100	9.6		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	+++++ 0.2257	+++++ 0.2227	0.1953 +++++	0.1998	0.2198	Ave		0.2127			0.0100	6.6		15.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.1792	+++++ 0.1764	0.1824 +++++	0.1673	0.1703	Ave		0.1751			0.0100	3.6		15.0			
Toluene-d8 (Surr)	+++++ 1.3066	+++++ 1.2405	1.2182 +++++	1.2299	1.3265	Ave		1.2643			0.0100	3.9		15.0			
4-Bromofluorobenzene (Surr)	+++++ 0.8281	+++++ 0.8425	0.7546 +++++	0.7498	0.7776	Ave		0.7905			0.0100	5.4		15.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-8911/2	MICL1797.D
Level 2	IC 160-8911/3	MICL1798.D
Level 3	IC 160-8911/4	MICL1799.D
Level 4	IC 160-8911/5	MICL1800.D
Level 5	IC 160-8911/6	MICL1801.D
Level 6	ICIS 160-8911/7	MICL1802.D
Level 7	IC 160-8911/8	MICL1803.D
Level 8	IC 160-8911/9	MICL1804.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 415007	+++++ 936956	41469 2119569	77116	148262	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroeth ane	FB	Ave	+++++ 274409	+++++ 591276	27030 1360531	51059	95922	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	+++++ 574677	+++++ 1178834	58880 2373037	113652	216942	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	11842 728090	39373 1479172	70350 3071140	132452	260614	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	+++++ 370667	+++++ 746800	42610 +++++	81554	144934	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Chloroethane	FB	Ave	+++++ 400574	+++++ 873481	40260 1921155	80196	146133	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	+++++ 776157	+++++ 1670100	74121 3763468	142454	271684	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	+++++ 469944	+++++ 1005064	35465 2190336	78794	156560	+++++ 100	+++++ 200	10.0 400	20.0	40.0
1,1-Dichloroethene	FB	Ave	+++++ 385395	+++++ 878042	34724 2080460	69965	136695	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	+++++ 1123232	+++++ 2451741	100030 5298860	203784	397753	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	+++++ 363344	+++++ 756850	35025 1807475	66876	126705	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Iodomethane	FB	None	+++++ 369091	+++++ 885820	19945 2314991	43817	106438	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Acrolein	FB	Ave	+++++ 199362	+++++ 452221	21394 981463	31074	65108	+++++ 250	+++++ 500	25.0 1000	50.0	100
Allyl chloride	FB	Ave	+++++ 417789	+++++ 898374	35753 1942680	76817	150729	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Methylene Chloride	FB	Ave	+++++ 457383	+++++ 994674	46109 2210080	89044	177740	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Acetone	FB	Qua	+++++ 82330	+++++ 149744	12506 291094	18542	28787	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	+++++ 58753	+++++ 122808	4776 278966	10570	20217	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	+++++ 510389	23912 1079355	47150 2547719	86585	181107	+++++ 50.0	2.50 100	5.00 200	10.0	20.0
n-Hexane	FB	Ave	+++++ 113502	+++++ 243892	10975 558853	18417	35931	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	+++++ 847277	+++++ 1794768	65308 4053387	146108	286664	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Pentachloroethane	DCB	Ave	0 5148	0 11085	0 28332	0	1968	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Acetonitrile	FB	Ave	+++++ 149878	+++++ 318869	15836 649352	26752	56008	+++++ 250	+++++ 500	25.0 1000	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	+++++ 594709	+++++ 1291100	46584 2869822	99765	201484	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	+++++ 843546	+++++ 1748821	71691 3672747	149728	300922	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Acrylonitrile	FB	Ave	+++++ 517507	+++++ 1146949	41232 2325021	85222	191209	+++++ 250	+++++ 500	25.0 1000	50.0	100
Vinyl acetate	FB	Ave	+++++ 351386	+++++ 714903	22767 1561012	53178	106674	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	+++++ 515914	23113 1107732	45050 2577564	88766	183670	+++++ 50.0	2.50 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	+++++ 546540	+++++ 1189350	46899 2694297	92799	181711	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	+++++ 219029	+++++ 468829	17694 1177150	37369	77172	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	+++++ 732168	+++++ 1561051	65825 3461666	118345	254880	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Chloroform	FB	Ave	+++++ 706330	35228 1568233	64117 3496688	128152	258189	+++++ 50.0	2.50 100	5.00 200	10.0	20.0
Ethyl acetate	FB	Ave	+++++ 71722	+++++ 149813	5930 310841	16473	28326	+++++ 100	+++++ 200	10.0 400	20.0	40.0
Carbon tetrachloride	FB	Ave	+++++ 541373	+++++ 1176153	45611 2811603	91856	181919	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	+++++ 143510	+++++ 311990	11121 650709	22838	47280	+++++ 250	+++++ 500	25.0 1000	50.0	100
1,1,1-Trichloroethane	FB	Ave	+++++ 599832	+++++ 1302196	53619 3070535	107726	215654	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	+++++ 114445	+++++ 242237	10531 522080	18292	35444	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1-Dichloropropene	FB	Ave	+++++ 574258	+++++ 1263553	50180 2766515	97062	199333	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	+++++ 455902	+++++ 1049049	40492 2354514	74274	164909	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Benzene	FB	Ave	28214 1875549	90604 3988744	172941 7757337	332929	700251	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Propionitrile	FB	Ave	+++++ 173787	+++++ 354709	14620 774298	30169	58528	+++++ 250	+++++ 500	25.0 1000	50.0	100
Methacrylonitrile	FB	Ave	+++++ 782148	+++++ 1612037	62997 3245423	126908	263361	+++++ 250	+++++ 500	25.0 1000	50.0	100
Isobutanol	FB	Ave	+++++ 194568	+++++ 432390	16009 936161	30783	61640	+++++ 1000	+++++ 2000	100 4000	200	400
1,2-Dichloroethane	FB	Ave	+++++ 413227	20701 922974	35250 2001397	76208	148302	+++++ 50.0	2.50 100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	+++++ 476776	21181 960301	40507 2353571	76875	153793	+++++ 50.0	2.50 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	+++++ 524218	+++++ 1094104	43660 2194777	89841	183026	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1-Butanol	FB	Lin	+++++ 49439	+++++ 131769	5245 286476	5955	14060	+++++ 500	+++++ 1000	50.0 2000	100	200
Dibromomethane	FB	Ave	+++++ 191165	+++++ 430170	16626 958373	31538	66683	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	+++++ 466140	+++++ 1015526	40235 2114460	84984	163481	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Methyl methacrylate	FB	Ave	+++++ 184877	+++++ 417860	12027 873382	25434	57237	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	+++++ 50318	+++++ 115747	3879 259195	6662	16045	+++++ 1000	+++++ 2000	100 4000	200	400
cis-1,3-Dichloropropene	FB	Ave	+++++ 551755	+++++ 1306583	43834 2856419	93272	196817	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	+++++ 133898	+++++ 271832	+++++ 643578	22752	48583	+++++ 50.0	+++++ 100	+++++ 200	10.0	20.0
Toluene	CBZ	Ave	+++++ 1115166	+++++ 2457088	97311 5204004	195205	400307	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Nitropropane	CBZ	Ave	+++++ 121382	+++++ 264192	8765 607063	19476	37428	+++++ 100	+++++ 200	10.0 400	20.0	40.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	+++++ 230616	+++++ 502183	18325 1062121	36116	72732	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	+++++ 419897	+++++ 958149	30475 2078631	62867	141612	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Tetrachloroethene	CBZ	Ave	+++++ 356865	16074 786082	32161 1975497	65683	122403	+++++ 50.0	2.50 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl methacrylate	CBZ	None	+++++ 353077	+++++ 806574	21760 1788819	45962	108370	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	+++++ 251215	+++++ 539546	20104 1177015	41096	86394	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Dibromochloromethane	CBZ	Ave	+++++ 340975	+++++ 775824	24788 1892410	53582	111450	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	+++++ 501241	+++++ 1107949	42404 2370750	84751	178811	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dibromoethane (EDB)	CBZ	Ave	+++++ 270379	+++++ 598036	20525 1422577	40785	86644	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Hexanone	CBZ	Ave	+++++ 145887	+++++ 313954	11520 685972	23680	45736	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	45167 2025106	97956 4262484	188939 7858502	360039	733870	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Chlorobenzene	CBZ	Ave	+++++ 1223120	+++++ 2690982	106982 5813786	219034	452260	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	+++++ 404185	+++++ 912896	33337 2282439	68126	142051	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	36178 1695366	78218 3668858	145517 7181789	287876	608312	2.00 100	5.00 200	10.0 400	20.0	40.0
o-Xylene	CBZ	Ave	13482 783101	33739 1820420	62820 4121684	131015	272790	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Styrene	CBZ	Ave	+++++ 1175674	+++++ 2730520	82026 5872415	177546	396865	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Bromoform	DCB	Ave	+++++ 181500	+++++ 411045	12932 1099678	26133	59984	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Isopropylbenzene	DCB	Ave	+++++ 1703712	+++++ 3723212	137723 7315132	290192	596568	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
N-Propylbenzene	DCB	Ave	+++++ 2262968	+++++ 4670273	190301 +++++	386621	798959	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Bromobenzene	DCB	Ave	+++++ 472340	+++++ 1078757	40146 2700640	81368	172772	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	+++++ 337639	+++++ 719437	27541 1565249	51860	112983	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	+++++ 1708856	+++++ 3747634	135256 7176587	280576	589239	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
2-Chlorotoluene	DCB	Ave	+++++ 1489886	+++++ 3348636	128674 6816028	256089	534737	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	+++++ 352037	+++++ 776373	27205 1720770	54413	114748	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	+++++ 59693	+++++ 136300	5001 320027	9567	19610	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Cyclohexanone	DCB	Ave	+++++ 93004	+++++ 190349	9388 421745	15157	30884	+++++ 500	+++++ 1000	50.0 2000	100	200
4-Chlorotoluene	DCB	Ave	+++++ 1333512	+++++ 2913766	105365 5905202	222989	469500	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
tert-Butylbenzene	DCB	Ave	+++++ 1481059	+++++ 3286012	120741 6770638	251623	515288	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	+++++ 1677286	+++++ 3674106	137070 7069492	271398	574805	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
sec-Butylbenzene	DCB	Ave	+++++ 2258942	+++++ 4689774	186617 8368495	378535	764351	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
4-Isopropyltoluene	DCB	Ave	+++++ 1789895	+++++ 3803494	138698 7386207	289416	599742	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	+++++ 944165	+++++ 2121495	82263 4938337	169724	336761	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	+++++ 959867	+++++ 2174652	88990 4929245	168050	345429	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
n-Butylbenzene	DCB	Ave	+++++ 1649046	+++++ 3483739	129070 6684303	269670	539625	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	+++++ 843555	+++++ 1914559	71877 4482855	138484	297588	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Nonanal	DCB	Lin	+++++ 84290	+++++ 220556	8569 592957	9526	23179	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	+++++ 52131	+++++ 122266	4825 323063	7955	17801	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Ave	+++++ 234728	+++++ 522906	23059 1397064	42970	82424	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	+++++ 325289	+++++ 767053	27257 2055410	52100	104579	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Naphthalene	DCB	Ave	+++++ 320450	+++++ 817401	24597 +++++	44856	95264	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Ave	+++++ 167424	+++++ 397572	15131 1108724	25769	55785	+++++ 50.0	+++++ 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	+++++ 381222	+++++ 859276	30006 +++++	65056	142273	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 302736	+++++ 680623	28014 +++++	54486	110255	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	+++++ 1498509	+++++ 3424011	123884 +++++	272116	567803	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0
4-Bromofluorobenzene (Surr)	DCB	Ave	+++++ 492367	+++++ 1156611	37784 +++++	79785	168332	+++++ 50.0	+++++ 100	5.00 +++++	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 8911

SDG No.:

Instrument ID: MSM GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/08/2012 10:15 Calibration End Date: 08/08/2012 13:11 Calibration ID: 725

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
None = No Calib Curve
Qua = Quadratic ISTD

Data File: MICL1797.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1797.D
Lab Smp Id: IC Client Smp ID: VSTD001
Inj Date : 08-AUG-2012 10:15
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD001
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 13:11 Cal File: MICL1804.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	7123	1.00000	0.8162(a)
2	Freon-114	135	3.563	3.563	(0.385)	5036	1.00000	0.8888(a)
3	Chloromethane	50	3.661	3.661	(0.395)	11790	1.00000	0.9977(a)
4	Vinyl Chloride	62	3.842	3.842	(0.415)	11842	1.00000	0.8165(a)
5	Bromomethane	94	4.471	4.471	(0.483)	11517	1.00000	1.378(a)
6	Chloroethane	64	4.694	4.694	(0.507)	6509	1.00000	0.7716(a)
7	Trichlorofluoromethane	101	4.946	4.946	(0.534)	13433	1.00000	0.8479(a)
M 26	1,2-Dichloroethene (total)	96				15840	2.00000	1.537(a)
8	Diethyl ether	74	5.449	5.449	(0.588)	14052	2.00000	3.141
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	6798	1.00000	0.8494(a)
10	Carbon Disulfide	76	5.812	5.812	(0.628)	18973	1.00000	0.8395(a)
11	1,1,2-Trichlorofluoroethane	151	5.826	5.826	(0.629)	5534	1.00000	0.7459(a)
12	Iodomethane	142	5.979	5.979	(0.646)	4702	1.00000	4.065
13	Acrolein	56	6.217	6.217	(0.671)	5008	5.00000	6.164
14	Allyl chloride	39	6.412	6.412	(0.692)	8933	1.00000	1.069(a)
15	Methylene Chloride	84	6.538	6.538	(0.706)	22882	1.00000	2.359
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	7660	1.00000	0.7437(a)
18	Methyl Acetate	74	6.747	6.747	(0.729)	1375	1.00000	1.196(a)
19	n-Hexane	86	6.845	6.845	(0.739)	2490	1.00000	1.108(a)
20	MTBE	73	6.873	6.873	(0.742)	10596	1.00000	0.6484(a)
21	Acetonitrile	41	7.152	7.152	(0.772)	7500	5.00000	12.17
22	2-Chloro-1,3-butadiene	53	7.446	7.446	(0.804)	8431	1.00000	0.7321(a)

Data File: MICL1797.D
Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.474	7.474	(0.807)	13409	1.00000	0.8151(a)
	24 Acrylonitrile	53	7.502	7.502	(0.810)	10274	5.00000	5.092
	25 Vinyl acetate	43	7.711	7.711	(0.833)	5576	1.00000	0.8943(a)
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	8180	1.00000	0.7938(a)
	28 2,2-Dichloropropane	77	8.144	8.144	(0.879)	9618	1.00000	0.8928(a)
	30 Bromochloromethane	128	8.242	8.242	(0.890)	2575	1.00000	0.5892(a)
	29 Cyclohexane	84	8.270	8.270	(0.893)	9347	1.00000	0.6493(a)
	31 Chloroform	83	8.298	8.298	(0.896)	13615	1.00000	0.9311(a)
	33 Ethyl acetate	45	8.381	8.381	(0.905)	5174	2.00000	6.958
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	6746	1.00000	0.6278(a)
	34 Tetrahydrofuran	71	8.479	8.479	(0.916)	2343	5.00000	4.320
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	5592	1.00000	0.7329(a)
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	8919	1.00000	0.7290(a)
	37 2-Butanone	43	8.591	8.591	(0.928)	5126	1.00000	2.330
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	8387	1.00000	0.7355(a)
	40 Benzene	78	8.884	8.884	(0.959)	28214	1.00000	0.7739(a)
	41 Propionitrile	54	8.884	8.884	(0.959)	4055	5.00000	6.067
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	13911	5.00000	4.753
	45 Isobutanol	43	8.982	8.982	(0.970)	8733	20.0000	46.73
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	5159	1.00000	0.8211(a)
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	6436	1.00000	0.7603(a)
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1793908	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	9303	1.00000	1.015(a)
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	8611	1.00000	0.8571(a)
	49 n-Butanol	56	9.624	9.624	(1.039)	3500	10.0000	60.40
	50 Dibromomethane	93	9.820	9.820	(1.060)	2436	1.00000	0.6375(a)
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	6583	1.00000	0.7107(a)
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	2578	1.00000	0.7707(a)
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	1701	20.0000	35.78
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	2272	1.00000	0.8651(a)
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	7038	1.00000	0.6335(a)
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	29465	1.00000	1.076(a)
	58 Toluene	92	10.728	10.728	(0.887)	17628	1.00000	0.8916(a)
	59 2-Nitropropane	43	10.937	10.937	(0.904)	3157	1.00000	3.117
	62 4-Methyl-2-pentanone	43	11.035	11.035	(0.912)	6229	1.00000	1.616(a)
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	5583	1.00000	0.7878(a)
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	6391	1.00000	0.9727(a)
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	6804	1.00000	2.962
	64 1,1,2-Trichloroethane	83	11.231	11.231	(0.928)	5079	1.00000	1.183(a)
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	5589	1.00000	0.9498(a)
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	9024	1.00000	1.025(a)
	68 1,2-Dibromoethane	107	11.664	11.664	(0.964)	4164	1.00000	0.9079(a)
	69 2-Hexanone	43	11.761	11.761	(0.972)	7669	1.00000	3.130
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1083130	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	45167	1.00000	1.213(a)
	71 Chlorobenzene	112	12.124	12.124	(1.002)	25310	1.00000	1.154(a)
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	8923	1.00000	1.224(a)
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	36178	2.00000	2.366
	75 o-Xylene	106	12.641	12.641	(1.045)	13482	1.00000	0.9712(a)
	76 Styrene	104	12.683	12.683	(1.048)	22305	1.00000	1.124(a)
	77 Bromoform	173	12.753	12.753	(0.893)	3662	1.00000	1.257(a)
	78 Isopropylbenzene	105	12.907	12.907	(0.904)	31503	1.00000	1.155(a)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	12130	1.00000	1.490(a)
	81 n-Propylbenzene	91	13.298	13.298	(0.932)	46597	1.00000	1.234(a)

Data File: MICL1797.D
Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	80 Bromobenzene	156	13.339	13.339	(0.934)	12059	1.00000	1.491(a)
	82 1,1,2,2-Tetrachloroethane	83	13.353	13.353	(0.935)	11242	1.00000	2.116
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	29681	1.00000	1.101(a)
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	32052	1.00000	1.304(a)
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	9734	1.00000	1.756(a)
	86 trans-1,4-dichloro-2-butene	53	13.521	13.521	(0.947)	1381	1.00000	1.410(a)
	87 Cyclohexanone	55	13.591	13.591	(0.952)	7236	10.0000	47.51
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	31960	1.00000	1.500(a)
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	30673	1.00000	1.280(a)
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	33637	1.00000	1.269(a)
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	52404	1.00000	1.496(a)
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	36338	1.00000	1.312(a)
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	29185	1.00000	1.823(a)
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	515007	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	29617	1.00000	1.807(a)
	98 n-Butylbenzene	91	14.485	14.485	(1.015)	40025	1.00000	1.574(a)
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	28678	1.00000	2.038
	145 Nonanal	57	15.406	15.406	(1.079)	9858	1.00000	10.77
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	2761	1.00000	3.083
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	9880	1.00000	2.382
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	14702	1.00000	2.672
	105 Naphthalene	128	16.524	16.524	(1.158)	23443	1.00000	4.575
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	8787	1.00000	3.034
M	107 Xylenes (total)	106				49660	3.00000	3.337

QC Flag Legend

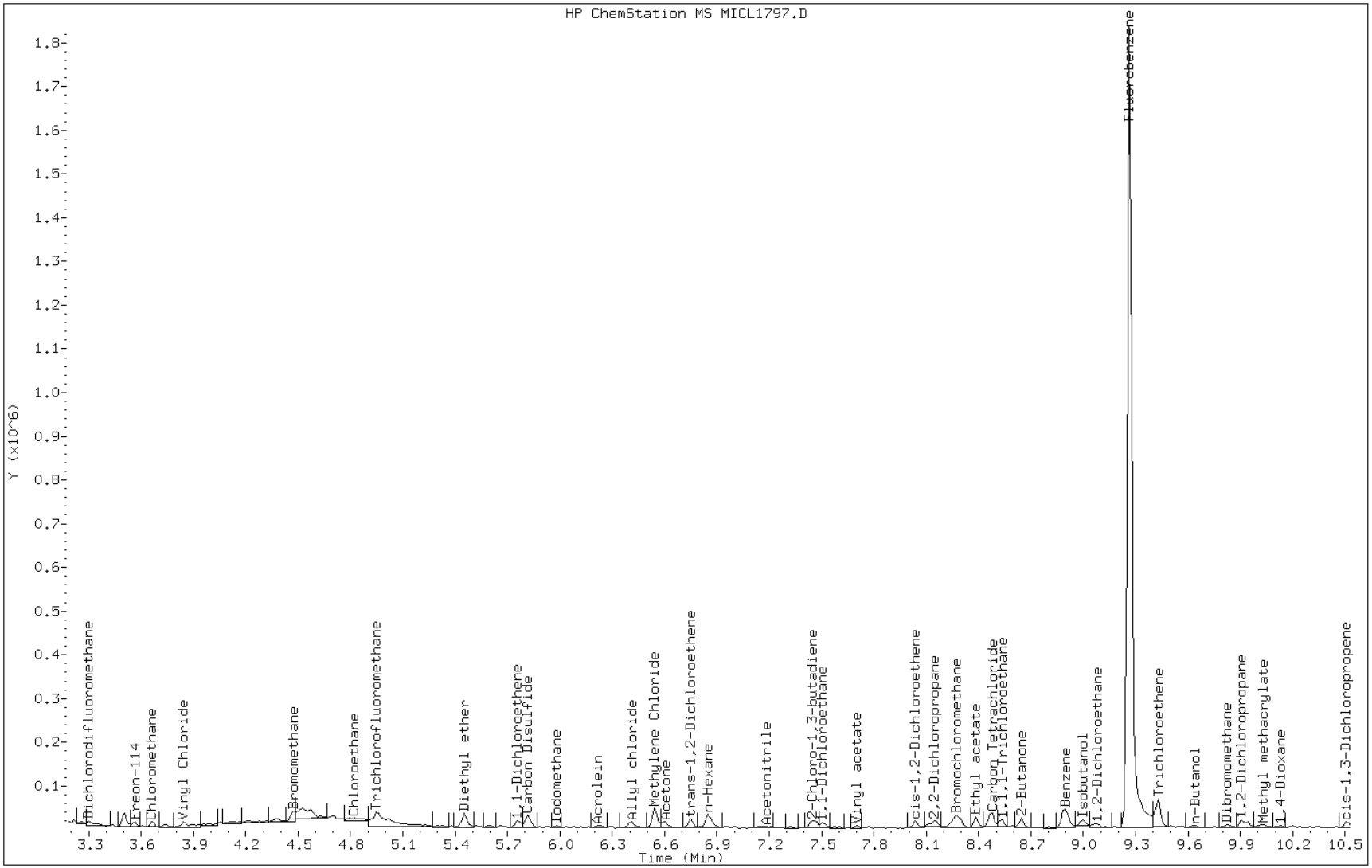
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: MICL1797.D

Date: 08-AUG-2012 10:15

Client ID: VSTD001 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

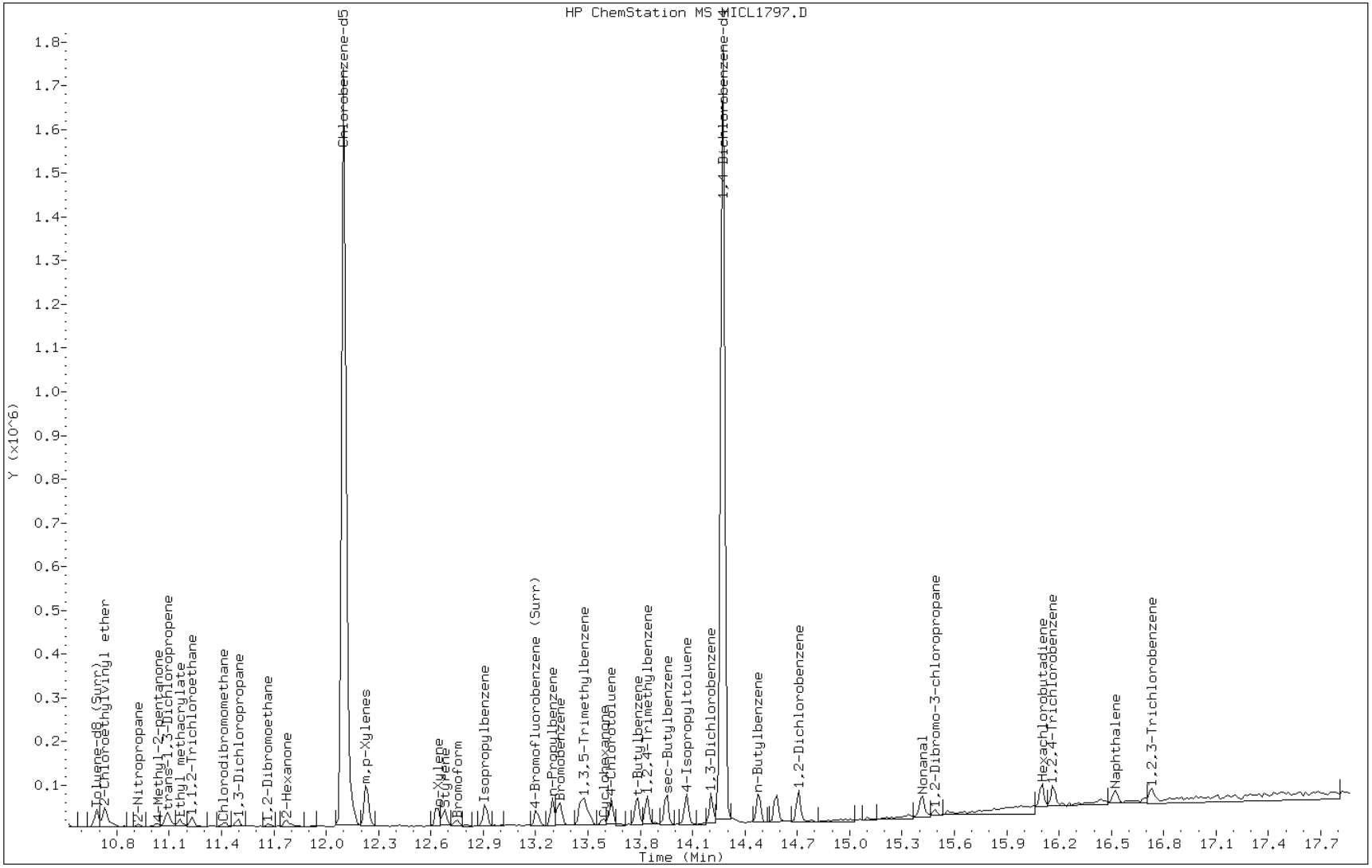


Data File: MICL1797.D

Date: 08-AUG-2012 10:15

Client ID: VSTD001 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1798.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1798.D
Lab Smp Id: IC Client Smp ID: VSTD0025
Inj Date : 08-AUG-2012 10:40
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD0025
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 10:15 Cal File: MICL1797.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	22362	2.50000	2.812
2	Freon-114	135	3.563	3.563	(0.385)	13073	2.50000	2.532
3	Chloromethane	50	3.661	3.661	(0.395)	34073	2.50000	3.163
4	Vinyl Chloride	62	3.842	3.842	(0.415)	39373	2.50000	2.978
5	Bromomethane	94	4.471	4.471	(0.483)	25660	2.50000	3.369
6	Chloroethane	64	4.694	4.694	(0.507)	21022	2.50000	2.734
7	Trichlorofluoromethane	101	4.946	4.946	(0.534)	38015	2.50000	2.633
M 26	1,2-Dichloroethene (total)	96				47025	5.00000	5.008
8	Diethyl ether	74	5.448	5.448	(0.588)	21064	5.00000	5.166
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	18917	2.50000	2.593
10	Carbon Disulfide	76	5.812	5.812	(0.628)	56187	2.50000	2.728
11	1,1,2-Trichlorofluoroethane	151	5.812	5.812	(0.628)	18039	2.50000	2.668
12	Iodomethane	142	5.979	5.979	(0.646)	10713	2.50000	4.860
13	Acrolein	56	6.217	6.217	(0.671)	10495	12.5000	14.17
14	Allyl chloride	39	6.412	6.412	(0.692)	21628	2.50000	2.840
15	Methylene Chloride	84	6.552	6.552	(0.707)	27039	2.50000	3.059
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	23912	2.50000	2.547
18	Methyl Acetate	74	6.747	6.747	(0.729)	2954	2.50000	2.818
19	n-Hexane	86	6.845	6.845	(0.739)	5576	2.50000	2.722
20	MTBE	73	6.873	6.873	(0.742)	36050	2.50000	2.420
21	Acetonitrile	41	7.166	7.166	(0.774)	10347	12.5000	18.43
22	2-Chloro-1,3-butadiene	53	7.446	7.446	(0.804)	23770	2.50000	2.265

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.474	7.474	(0.807)	43331	2.50000	2.890
	24 Acrylonitrile	53	7.515	7.515	(0.812)	21687	12.5000	11.79
	25 Vinyl acetate	43	7.697	7.697	(0.831)	13314	2.50000	2.343
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	23113	2.50000	2.461
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	27397	2.50000	2.790
	30 Bromochloromethane	128	8.242	8.242	(0.890)	9852	2.50000	2.473
	29 Cyclohexane	84	8.270	8.270	(0.893)	30097	2.50000	2.294
	31 Chloroform	83	8.298	8.298	(0.896)	35228	2.50000	2.643
	33 Ethyl acetate	45	8.381	8.381	(0.905)	5752	5.00000	8.487
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	22300	2.50000	2.277
	34 Tetrahydrofuran	71	8.479	8.479	(0.916)	6309	12.5000	12.76
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	15683	2.50000	2.255
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	26945	2.50000	2.416
	37 2-Butanone	43	8.591	8.591	(0.928)	7290	2.50000	3.636
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	24607	2.50000	2.368
	40 Benzene	78	8.884	8.884	(0.959)	90604	2.50000	2.727
	41 Propionitrile	54	8.884	8.884	(0.959)	8917	12.5000	14.64
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	32768	12.5000	12.28
	45 Isobutanol	43	8.996	8.996	(0.971)	7877	50.0000	46.25
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	15228	2.50000	2.659
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	20701	2.50000	2.683
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1635050	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	21181	2.50000	2.535
	47 Methylcyclohexane	55	9.429	9.429	(1.018)	24450	2.50000	2.670
	49 n-Butanol	56	9.638	9.638	(1.041)	3999	25.0000	67.94
	50 Dibromomethane	93	9.820	9.820	(1.060)	7855	2.50000	2.255
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	21607	2.50000	2.559
	52 Bromodichloromethane	83	9.946	9.946	(1.074)	20159	2.50000	2.387
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	6973	2.50000	2.287
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	2171	50.0000	50.10
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	5642	2.50000	2.357
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	24032	2.50000	2.373
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	66294	2.50000	2.526
	58 Toluene	92	10.728	10.728	(0.887)	51427	2.50000	2.714
	59 2-Nitropropane	43	10.937	10.937	(0.904)	5522	2.50000	5.689
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	10185	2.50000	2.757
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	17991	2.50000	2.649
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	16074	2.50000	2.553
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	12518	2.50000	3.937
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	12387	2.50000	3.010
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	13243	2.50000	2.348
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	23076	2.50000	2.735
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	12141	2.50000	2.762
	69 2-Hexanone	43	11.775	11.775	(0.973)	8480	2.50000	3.611
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1038042	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	97956	2.50000	2.745
	71 Chlorobenzene	112	12.124	12.124	(1.002)	60138	2.50000	2.860
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	17918	2.50000	2.565
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	78218	5.00000	5.337
	75 o-Xylene	106	12.641	12.641	(1.045)	33739	2.50000	2.536
	76 Styrene	104	12.683	12.683	(1.048)	44757	2.50000	2.353
	77 Bromoform	173	12.753	12.753	(0.893)	6582	2.50000	2.306
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	72088	2.50000	2.699
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	19047	2.50000	2.388

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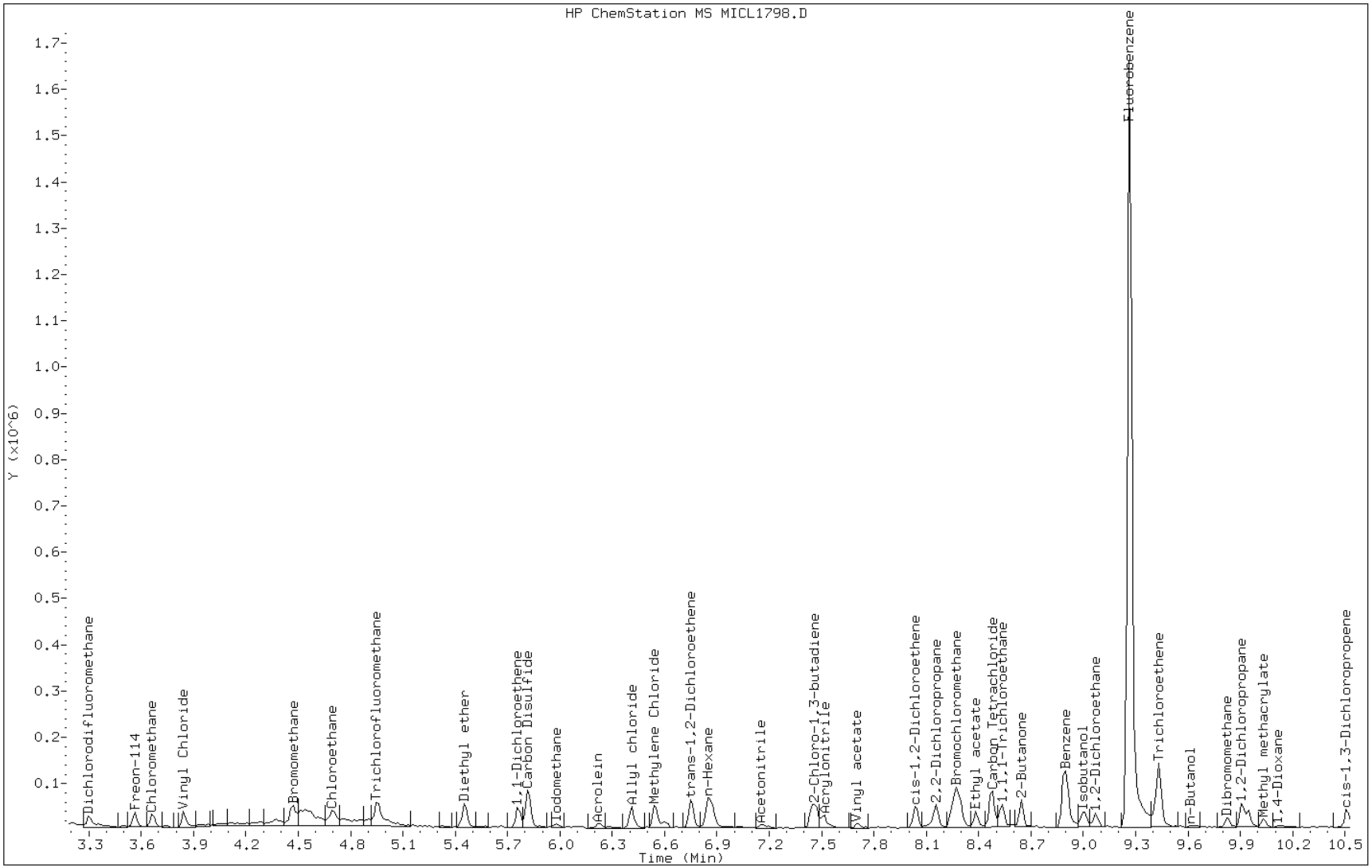
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	81 n-Propylbenzene	91	13.297	13.297	(0.931)	88889	2.50000	2.402
	80 Bromobenzene	156	13.339	13.339	(0.934)	22666	2.50000	2.862
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	15357	2.50000	2.951
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	64626	2.50000	2.448
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	63522	2.50000	2.637
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	14750	2.50000	2.715
	86 trans-1,4-dichloro-2-butene	53	13.521	13.521	(0.947)	2740	2.50000	2.855
	87 Cyclohexanone	55	13.591	13.591	(0.952)	6615	25.0000	44.34
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	55184	2.50000	2.645
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	59110	2.50000	2.518
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	71932	2.50000	2.770
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	94432	2.50000	2.752
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	69552	2.50000	2.563
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	47177	2.50000	3.008
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	504543	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	48382	2.50000	3.013
	98 n-Butylbenzene	91	14.485	14.485	(1.015)	63631	2.50000	2.555
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	38101	2.50000	2.764
	145 Nonanal	57	15.406	15.406	(1.079)	8252	2.50000	9.957
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	2967	2.50000	3.382
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	12431	2.50000	3.059
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	15828	2.50000	2.936
	105 Naphthalene	128	16.524	16.524	(1.158)	17701	2.50000	3.526
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	9465	2.50000	3.335
M	107 Xylenes (total)	106				111957	7.50000	7.873

Data File: MICL1798.D

Date: 08-AUG-2012 10:40

Client ID: VSTD0025 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



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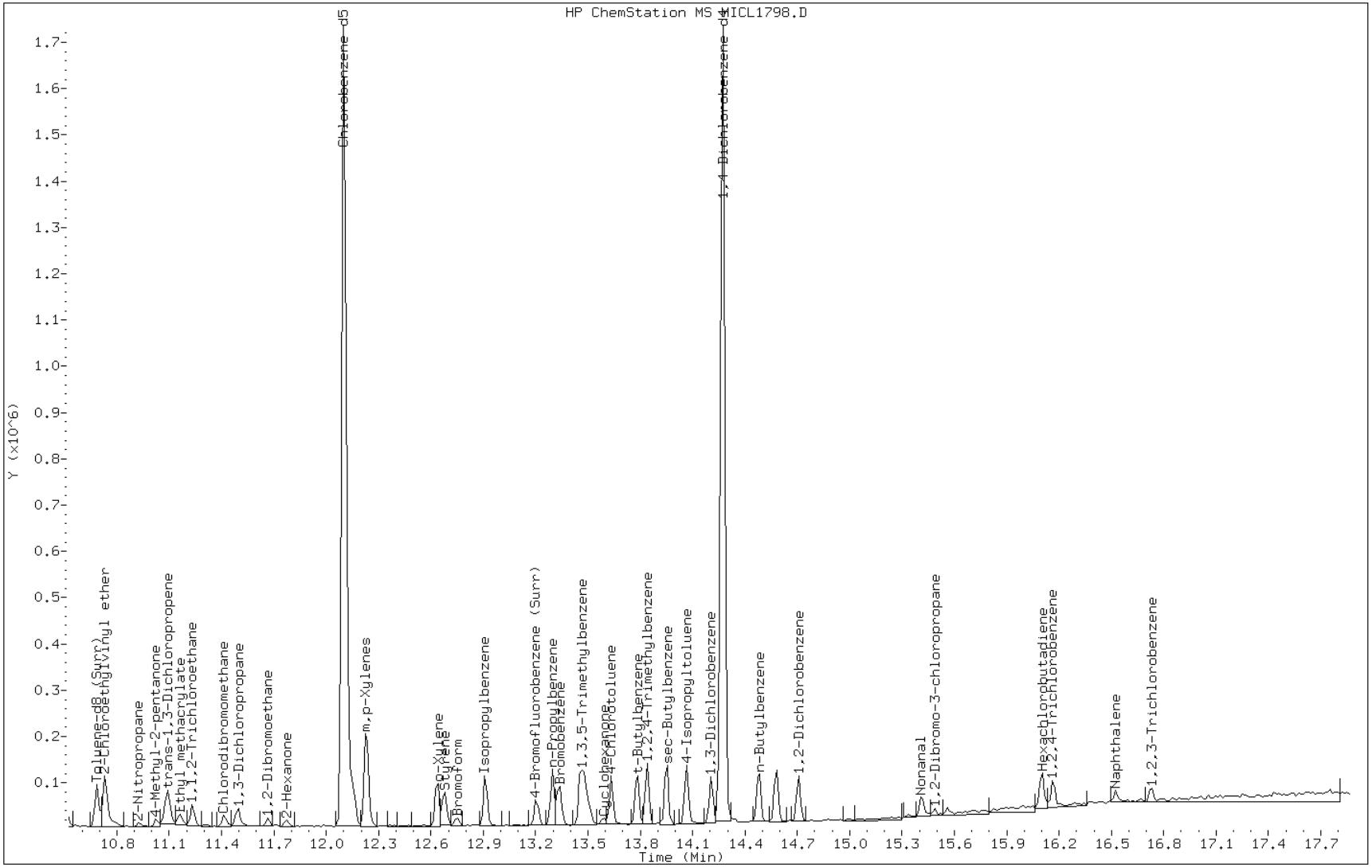
Date: 08-AUG-2012 10:40

Client ID: VSTD0025 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1799.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1799.D
Lab Smp Id: IC Client Smp ID: VSTD005
Inj Date : 08-AUG-2012 11:05
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD005
Comment   : NONE
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Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 10:40 Cal File: MICL1798.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	41469	5.00000	5.549
2	Freon-114	135	3.563	3.563	(0.385)	27030	5.00000	5.571
3	Chloromethane	50	3.661	3.661	(0.395)	58880	5.00000	5.818
4	Vinyl Chloride	62	3.842	3.842	(0.415)	70350	5.00000	5.664
5	Bromomethane	94	4.471	4.471	(0.483)	42610	5.00000	5.954
6	Chloroethane	64	4.694	4.694	(0.507)	40260	5.00000	5.574
7	Trichlorofluoromethane	101	4.960	4.960	(0.536)	74121	5.00000	5.464
M 26	1,2-Dichloroethene (total)	96				92200	10.0000	10.45
8	Diethyl ether	74	5.448	5.448	(0.588)	35465	10.0000	9.258
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	34724	5.00000	5.066
10	Carbon Disulfide	76	5.812	5.812	(0.628)	100030	5.00000	5.169
11	1,1,2-Trichlorofluoroethane	151	5.825	5.825	(0.629)	35025	5.00000	5.513
12	Iodomethane	142	5.965	5.965	(0.644)	19945	5.00000	6.162
13	Acrolein	56	6.217	6.217	(0.671)	21394	25.0000	30.75
14	Allyl chloride	39	6.412	6.412	(0.692)	35753	5.00000	4.998
15	Methylene Chloride	84	6.552	6.552	(0.707)	46109	5.00000	5.552
16	Acetone	43	6.594	6.594	(0.712)	12506	5.00000	6.947
17	trans-1,2-Dichloroethene	96	6.761	6.761	(0.730)	47150	5.00000	5.346
18	Methyl Acetate	74	6.747	6.747	(0.729)	4776	5.00000	4.850
19	n-Hexane	86	6.845	6.845	(0.739)	10975	5.00000	5.702
20	MTBE	73	6.873	6.873	(0.742)	65308	5.00000	4.667
21	Acetonitrile	41	7.152	7.152	(0.772)	15836	25.0000	30.02

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.446	7.446	(0.804)	46584	5.00000	4.724
	23 1,1-Dichloroethane	63	7.460	7.460	(0.805)	71691	5.00000	5.089
	24 Acrylonitrile	53	7.515	7.515	(0.812)	41232	25.0000	23.87
	25 Vinyl acetate	43	7.711	7.711	(0.833)	22767	5.00000	4.264
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	45050	5.00000	5.105
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	46899	5.00000	5.084
	30 Bromochloromethane	128	8.242	8.242	(0.890)	17694	5.00000	4.728
	29 Cyclohexane	84	8.270	8.270	(0.893)	65825	5.00000	5.339
	31 Chloroform	83	8.297	8.297	(0.896)	64117	5.00000	5.120
	33 Ethyl acetate	45	8.381	8.381	(0.905)	5930	10.0000	9.313
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	45611	5.00000	4.956
	34 Tetrahydrofuran	71	8.479	8.479	(0.916)	11121	25.0000	23.94
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	30006	5.00000	4.593
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	53619	5.00000	5.118
	37 2-Butanone	43	8.591	8.591	(0.928)	10531	5.00000	5.590
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	50180	5.00000	5.139
	40 Benzene	78	8.884	8.884	(0.959)	172941	5.00000	5.540
	41 Propionitrile	54	8.884	8.884	(0.959)	14620	25.0000	25.54
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	62997	25.0000	25.13
	45 Isobutanol	43	8.996	8.996	(0.971)	16009	100.000	100.0
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	28014	5.00000	5.207
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	35250	5.00000	4.863
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1536182	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	40507	5.00000	5.160
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	43660	5.00000	5.075
	49 n-Butanol	56	9.624	9.624	(1.039)	5245	50.0000	82.71
	50 Dibromomethane	93	9.820	9.820	(1.060)	16626	5.00000	5.081
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	40235	5.00000	5.072
	52 Bromodichloromethane	83	9.946	9.946	(1.074)	40492	5.00000	5.104
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	12027	5.00000	4.199
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	3879	100.000	95.27
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	9988	5.00000	4.441
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	43834	5.00000	4.608
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	123884	5.00000	4.818
	58 Toluene	92	10.728	10.728	(0.887)	97311	5.00000	5.243
	59 2-Nitropropane	43	10.937	10.937	(0.904)	8765	10.0000	9.217
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	18325	5.00000	5.064
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	30475	5.00000	4.580
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	32161	5.00000	5.213
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	21760	5.00000	5.512
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	20104	5.00000	4.986
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	24788	5.00000	4.487
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	42404	5.00000	5.130
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	20525	5.00000	4.766
	69 2-Hexanone	43	11.761	11.761	(0.972)	11520	5.00000	5.008
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1016906	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	188939	5.00000	5.405
	71 Chlorobenzene	112	12.124	12.124	(1.002)	106982	5.00000	5.193
	73 1,1,1,2-Tetrachloroethane	131	12.166	12.166	(1.006)	33337	5.00000	4.872
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	145517	10.0000	10.13
	75 o-Xylene	106	12.641	12.641	(1.045)	62820	5.00000	4.820
	76 Styrene	104	12.683	12.683	(1.048)	82026	5.00000	4.402
	77 Bromoform	173	12.753	12.753	(0.893)	12932	5.00000	4.565
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	137723	5.00000	5.195

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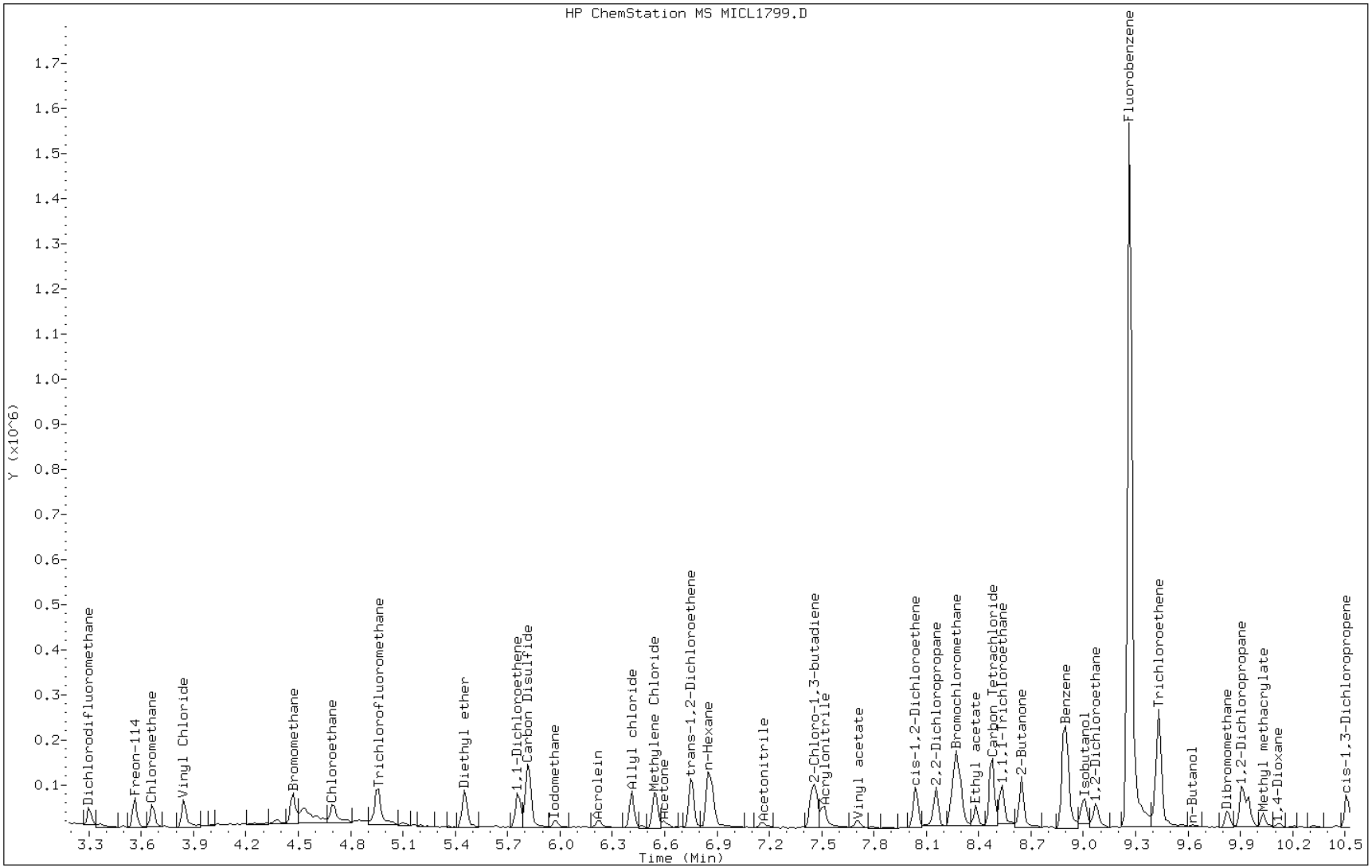
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	37784	5.00000	4.773
	81 n-Propylbenzene	91	13.297	13.297	(0.931)	190301	5.00000	5.183
	80 Bromobenzene	156	13.339	13.339	(0.934)	40146	5.00000	5.107
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	27541	5.00000	5.332
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	135256	5.00000	5.162
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	128674	5.00000	5.383
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	27205	5.00000	5.046
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	5001	5.00000	5.250
	87 Cyclohexanone	55	13.591	13.591	(0.952)	9388	50.0000	63.40
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	105365	5.00000	5.088
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	120741	5.00000	5.182
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	137070	5.00000	5.318
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	186617	5.00000	5.480
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	138698	5.00000	5.151
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	82263	5.00000	5.285
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	500725	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	88990	5.00000	5.585
	98 n-Butylbenzene	91	14.471	14.471	(1.014)	129070	5.00000	5.222
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	71877	5.00000	5.255
	145 Nonanal	57	15.406	15.406	(1.079)	8569	5.00000	10.18
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	4825	5.00000	5.542
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	23059	5.00000	5.717
	104 1,2,4-Trichlorobenzene	180	16.160	16.160	(1.132)	27257	5.00000	5.095
	105 Naphthalene	128	16.524	16.524	(1.158)	24597	5.00000	4.938
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	15131	5.00000	5.373
M	107 Xylenes (total)	106				208337	15.0000	14.96

Data File: MICL1799.D

Date: 08-AUG-2012 11:05

Client ID: VSTD005 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

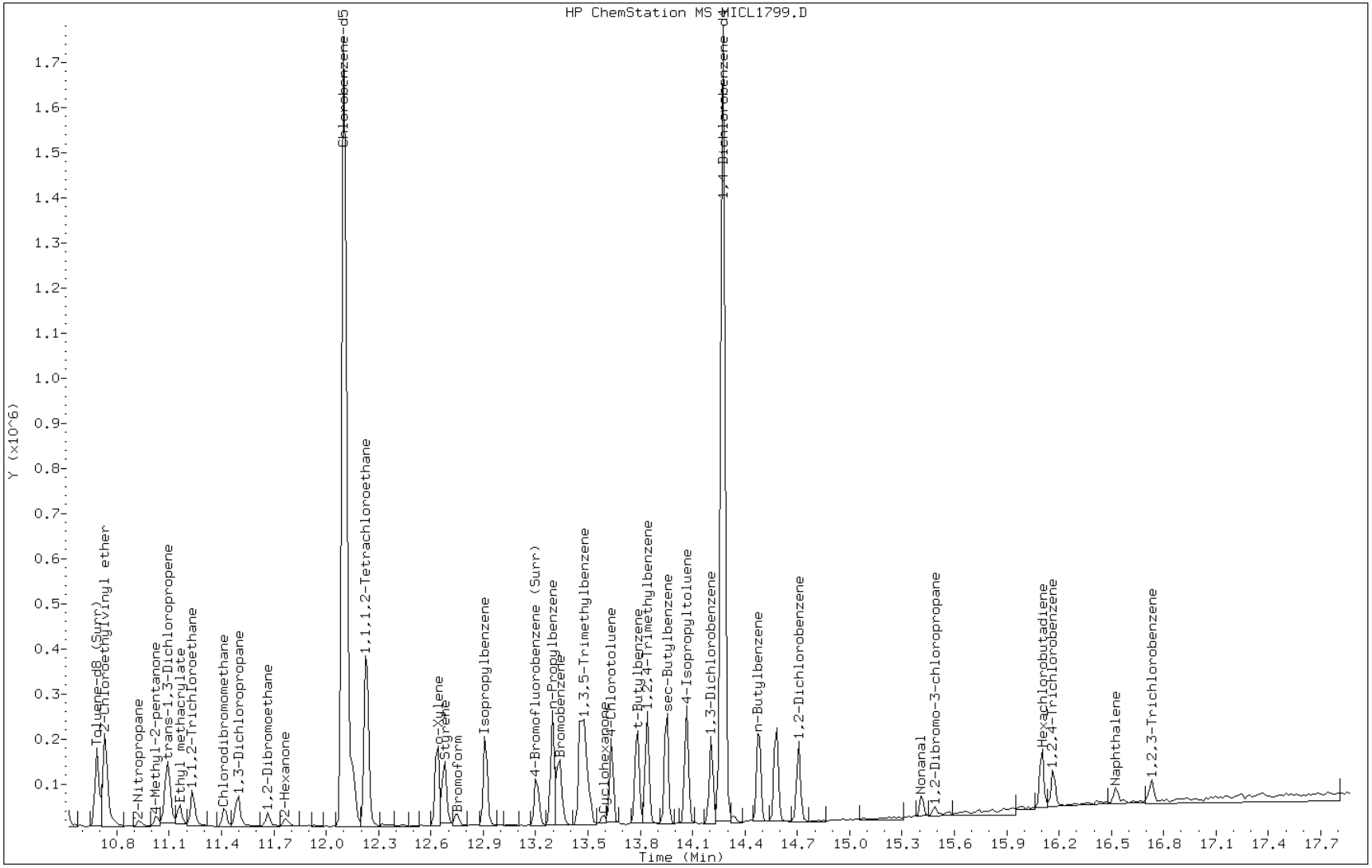


Data File: MICL1799.D

Date: 08-AUG-2012 11:05

Client ID: VSTD005 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1800.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1800.D
Lab Smp Id: IC Client Smp ID: VSTD010
Inj Date : 08-AUG-2012 11:30
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD010
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 11:05 Cal File: MICL1799.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	77116	10.0000	9.735
2	Freon-114	135	3.563	3.563	(0.385)	51059	10.0000	9.928
3	Chloromethane	50	3.661	3.661	(0.395)	113652	10.0000	10.59
4	Vinyl Chloride	62	3.842	3.842	(0.415)	132452	10.0000	10.06
5	Bromomethane	94	4.471	4.471	(0.483)	81554	10.0000	10.75
6	Chloroethane	64	4.694	4.694	(0.507)	80196	10.0000	10.47
7	Trichlorofluoromethane	101	4.960	4.960	(0.536)	142454	10.0000	9.906
M 26	1,2-Dichloroethene (total)	96				175351	20.0000	18.75
8	Diethyl ether	74	5.449	5.449	(0.588)	78794	20.0000	19.40
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	69965	10.0000	9.630
10	Carbon Disulfide	76	5.812	5.812	(0.628)	203784	10.0000	9.934
11	1,1,2-Trichlorofluoroethane	151	5.826	5.826	(0.629)	66876	10.0000	9.930
12	Iodomethane	142	5.979	5.979	(0.646)	43817	10.0000	8.979
13	Acrolein	56	6.217	6.217	(0.671)	31074	50.0000	42.14
14	Allyl chloride	39	6.412	6.412	(0.692)	76817	10.0000	10.13
15	Methylene Chloride	84	6.552	6.552	(0.707)	89044	10.0000	10.12
16	Acetone	43	6.594	6.594	(0.712)	18542	10.0000	9.988
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	86585	10.0000	9.261
18	Methyl Acetate	74	6.747	6.747	(0.729)	10570	10.0000	10.12
19	n-Hexane	86	6.845	6.845	(0.739)	18417	10.0000	9.027
20	MTBE	73	6.873	6.873	(0.742)	146108	10.0000	9.850
21	Acetonitrile	41	7.152	7.152	(0.772)	26752	50.0000	47.84

Data File: MICL1800.D
Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.446	7.446	(0.804)	99765	10.0000	9.544
	23 1,1-Dichloroethane	63	7.474	7.474	(0.807)	149728	10.0000	10.03
	24 Acrylonitrile	53	7.516	7.516	(0.812)	85222	50.0000	46.54
	25 Vinyl acetate	43	7.711	7.711	(0.833)	53178	10.0000	9.396
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	88766	10.0000	9.489
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	92799	10.0000	9.490
	30 Bromochloromethane	128	8.242	8.242	(0.890)	37369	10.0000	9.420
	29 Cyclohexane	84	8.270	8.270	(0.893)	118345	10.0000	9.056
	31 Chloroform	83	8.298	8.298	(0.896)	128152	10.0000	9.654
	33 Ethyl acetate	45	8.381	8.381	(0.905)	16473	20.0000	24.40
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	91856	10.0000	9.417
	34 Tetrahydrofuran	71	8.479	8.479	(0.916)	22838	50.0000	46.38
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	65056	10.0000	9.394
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	107726	10.0000	9.700
	37 2-Butanone	43	8.591	8.591	(0.928)	18292	10.0000	9.160
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	97062	10.0000	9.378
	40 Benzene	78	8.884	8.884	(0.959)	332929	10.0000	10.06
	41 Propionitrile	54	8.884	8.884	(0.959)	30169	50.0000	49.72
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	126908	50.0000	47.77
	45 Isobutanol	43	8.996	8.996	(0.971)	30783	200.000	181.5
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	54486	10.0000	9.553
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	76208	10.0000	9.918
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1628386	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	76875	10.0000	9.238
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	89841	10.0000	9.851
	49 n-Butanol	56	9.624	9.624	(1.039)	5955	100.000	86.42
	50 Dibromomethane	93	9.820	9.820	(1.060)	31538	10.0000	9.092
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	84984	10.0000	10.11
	52 Bromodichloromethane	83	9.946	9.946	(1.074)	74274	10.0000	8.832
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	25434	10.0000	8.376
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	6662	200.000	154.4
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	22752	10.0000	9.544
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	93272	10.0000	9.249
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	272116	10.0000	9.727
	58 Toluene	92	10.728	10.728	(0.887)	195205	10.0000	9.667
	59 2-Nitropropane	43	10.923	10.923	(0.903)	19476	20.0000	18.83
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	36116	10.0000	9.174
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	62867	10.0000	8.685
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	65683	10.0000	9.787
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	45962	10.0000	8.911
	64 1,1,2-Trichloroethane	83	11.231	11.231	(0.928)	41096	10.0000	9.369
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	53582	10.0000	8.916
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	84751	10.0000	9.425
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	40785	10.0000	8.706
	69 2-Hexanone	43	11.761	11.761	(0.972)	23680	10.0000	9.462
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1106283	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	360039	10.0000	9.468
	71 Chlorobenzene	112	12.124	12.124	(1.002)	219034	10.0000	9.774
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	68126	10.0000	9.152
	74 m,p-Xylenes	106	12.222	12.222	(1.010)	287876	20.0000	18.43
	75 o-Xylene	106	12.641	12.641	(1.045)	131015	10.0000	9.241
	76 Styrene	104	12.683	12.683	(1.048)	177546	10.0000	8.758
	77 Bromoform	173	12.753	12.753	(0.893)	26133	10.0000	8.683
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	290192	10.0000	10.30

Data File: MICL1800.D
Report Date: 27-Aug-2012 15:28

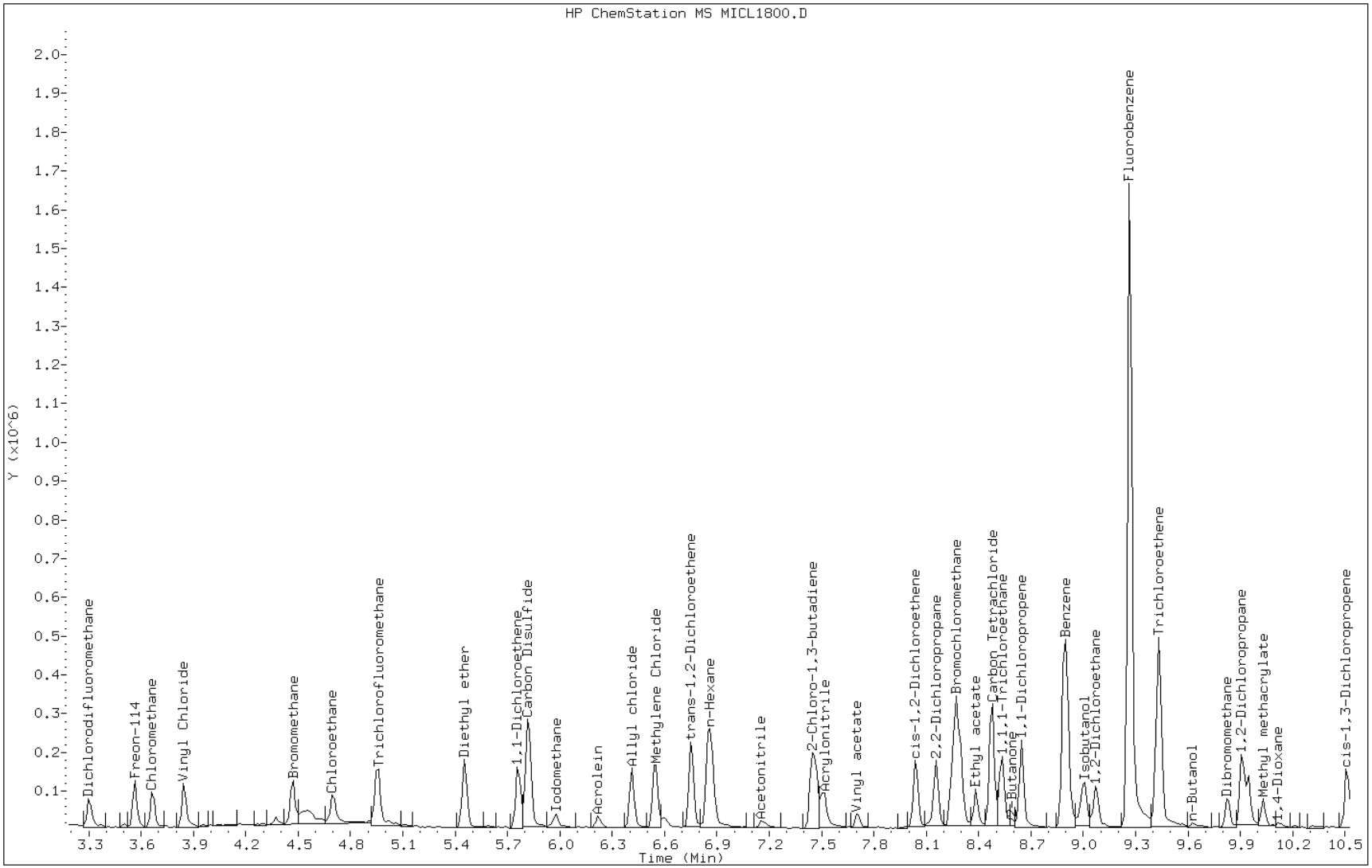
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	79785	10.0000	9.485
	81 n-Propylbenzene	91	13.298	13.298	(0.932)	386621	10.0000	9.910
	80 Bromobenzene	156	13.339	13.339	(0.934)	81368	10.0000	9.742
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	51860	10.0000	9.450
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	280576	10.0000	10.08
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	256089	10.0000	10.08
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	54413	10.0000	9.500
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	9567	10.0000	9.452
	87 Cyclohexanone	55	13.591	13.591	(0.952)	15157	100.000	96.34
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	222989	10.0000	10.13
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	251623	10.0000	10.16
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	271398	10.0000	9.910
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	378535	10.0000	10.46
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	289416	10.0000	10.12
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	169724	10.0000	10.26
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	532026	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	168050	10.0000	9.926
	98 n-Butylbenzene	91	14.471	14.471	(1.014)	269670	10.0000	10.27
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	138484	10.0000	9.529
	145 Nonanal	57	15.406	15.406	(1.079)	9526	10.0000	10.41
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	7955	10.0000	8.600
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	42970	10.0000	10.03
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	52100	10.0000	9.166
	105 Naphthalene	128	16.524	16.524	(1.158)	44856	10.0000	8.474
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	25769	10.0000	8.612
M	107 Xylenes (total)	106				418891	30.0000	27.67

Data File: MICL1800.D

Date: 08-AUG-2012 11:30

Client ID: VSTD010 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

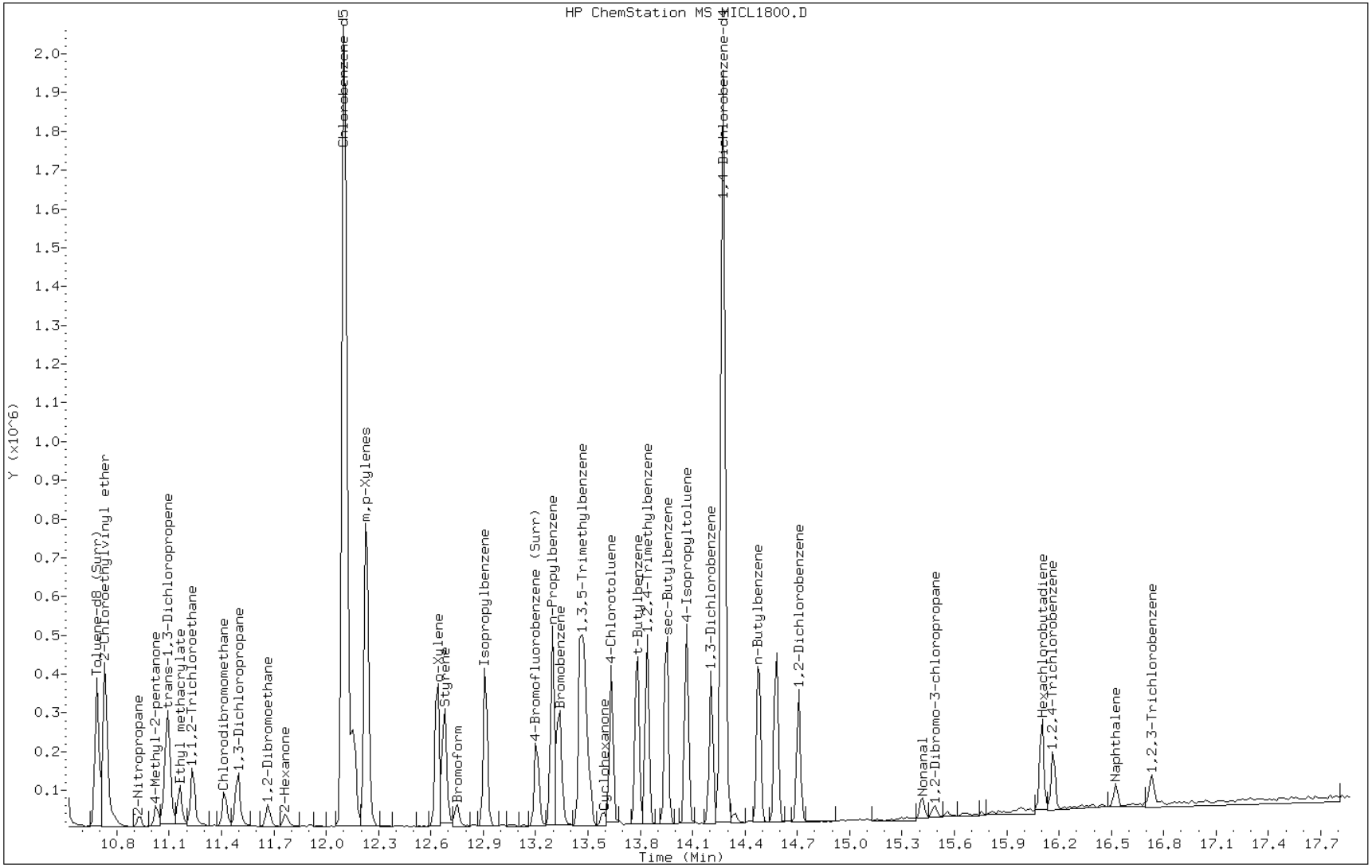


Data File: MICL1800.D

Date: 08-AUG-2012 11:30

Client ID: VSTD010 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1801.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1801.D
Lab Smp Id: IC Client Smp ID: VSTD020
Inj Date : 08-AUG-2012 11:55
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD020
Comment   : NONE
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Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 11:30 Cal File: MICL1800.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.297	3.297	(0.356)	148262	20.0000	18.83
2	Freon-114	135	3.563	3.563	(0.385)	95922	20.0000	18.77
3	Chloromethane	50	3.661	3.661	(0.395)	216942	20.0000	20.35
4	Vinyl Chloride	62	3.842	3.842	(0.415)	260614	20.0000	19.92
5	Bromomethane	94	4.471	4.471	(0.483)	144934	20.0000	19.22
6	Chloroethane	64	4.694	4.694	(0.507)	146133	20.0000	19.20
7	Trichlorofluoromethane	101	4.959	4.959	(0.536)	271684	20.0000	19.01
M 26	1,2-Dichloroethene (total)	96				364777	40.0000	39.25
8	Diethyl ether	74	5.448	5.448	(0.588)	156560	40.0000	38.79
9	1,1-Dichloroethene	96	5.755	5.755	(0.621)	136695	20.0000	18.93
10	Carbon Disulfide	76	5.811	5.811	(0.628)	397753	20.0000	19.51
11	1,1,2-Trichlorofluoroethane	151	5.825	5.825	(0.629)	126705	20.0000	18.93
12	Iodomethane	142	5.979	5.979	(0.646)	106438	20.0000	16.84
13	Acrolein	56	6.216	6.216	(0.671)	65108	100.000	88.84
14	Allyl chloride	39	6.412	6.412	(0.692)	150729	20.0000	20.00
15	Methylene Chloride	84	6.552	6.552	(0.707)	177740	20.0000	20.32
16	Acetone	43	6.593	6.593	(0.712)	28787	20.0000	16.33
17	trans-1,2-Dichloroethene	96	6.761	6.761	(0.730)	181107	20.0000	19.49
18	Methyl Acetate	74	6.747	6.747	(0.729)	20217	20.0000	19.49
19	n-Hexane	86	6.845	6.845	(0.739)	35931	20.0000	17.72
20	MTBE	73	6.873	6.873	(0.742)	286664	20.0000	19.44
21	Acetonitrile	41	7.152	7.152	(0.772)	56008	100.000	100.8

Data File: MICL1801.D
Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.445	7.445	(0.804)	201484	20.0000	19.40
	23 1,1-Dichloroethane	63	7.473	7.473	(0.807)	300922	20.0000	20.28
	24 Acrylonitrile	53	7.515	7.515	(0.812)	191209	100.000	105.1
	25 Vinyl acetate	43	7.711	7.711	(0.833)	106674	20.0000	18.96
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	183670	20.0000	19.76
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	181711	20.0000	18.70
	30 Bromochloromethane	128	8.241	8.241	(0.890)	77172	20.0000	19.57
	29 Cyclohexane	84	8.269	8.269	(0.893)	254880	20.0000	19.62
	31 Chloroform	83	8.297	8.297	(0.896)	258189	20.0000	19.57
	33 Ethyl acetate	45	8.381	8.381	(0.905)	28326	40.0000	42.23
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	181919	20.0000	18.76
	34 Tetrahydrofuran	71	8.479	8.479	(0.916)	47280	100.000	96.63
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	142273	20.0000	20.67
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	215654	20.0000	19.54
	37 2-Butanone	43	8.591	8.591	(0.928)	35444	20.0000	17.86
	39 1,1-Dichloropropene	75	8.646	8.646	(0.934)	199333	20.0000	19.38
	40 Benzene	78	8.884	8.884	(0.959)	700251	20.0000	21.29
	41 Propionitrile	54	8.884	8.884	(0.959)	58528	100.000	97.06
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	263361	100.000	99.74
	45 Isobutanol	43	8.996	8.996	(0.971)	61640	400.000	365.6
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	110255	20.0000	19.45
	44 1,2-Dichloroethane	62	9.065	9.065	(0.979)	148302	20.0000	19.42
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1618307	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	153793	20.0000	18.60
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	183026	20.0000	20.19
	49 n-Butanol	56	9.624	9.624	(1.039)	14060	200.000	163.1
	50 Dibromomethane	93	9.820	9.820	(1.060)	66683	20.0000	19.34
	51 1,2-Dichloropropane	63	9.903	9.903	(1.069)	163481	20.0000	19.56
	52 Bromodichloromethane	83	9.945	9.945	(1.074)	164909	20.0000	19.73
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	57237	20.0000	18.97
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	16045	400.000	374.1
	55 2-Chloroethylvinyl ether	63	10.727	10.727	(1.158)	48583	20.0000	20.50
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	196817	20.0000	19.64
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	567803	20.0000	20.98
	58 Toluene	92	10.727	10.727	(0.887)	400307	20.0000	20.49
	59 2-Nitropropane	43	10.923	10.923	(0.903)	37428	40.0000	37.40
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	72732	20.0000	19.10
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	141612	20.0000	20.22
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	122403	20.0000	18.86
	65 Ethyl methacrylate	69	11.160	11.160	(0.923)	108370	20.0000	18.98
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	86394	20.0000	20.36
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	111450	20.0000	19.17
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	178811	20.0000	20.56
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	86644	20.0000	19.12
	69 2-Hexanone	43	11.761	11.761	(0.972)	45736	20.0000	18.89
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1070135	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	733870	20.0000	19.95
	71 Chlorobenzene	112	12.124	12.124	(1.002)	452260	20.0000	20.86
	73 1,1,1,2-Tetrachloroethane	131	12.166	12.166	(1.006)	142051	20.0000	19.73
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	608312	40.0000	40.26
	75 o-Xylene	106	12.641	12.641	(1.045)	272790	20.0000	19.89
	76 Styrene	104	12.683	12.683	(1.048)	396865	20.0000	20.24
	77 Bromoform	173	12.753	12.753	(0.893)	59984	20.0000	19.59
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	596568	20.0000	20.82

Data File: MICL1801.D
Report Date: 27-Aug-2012 15:28

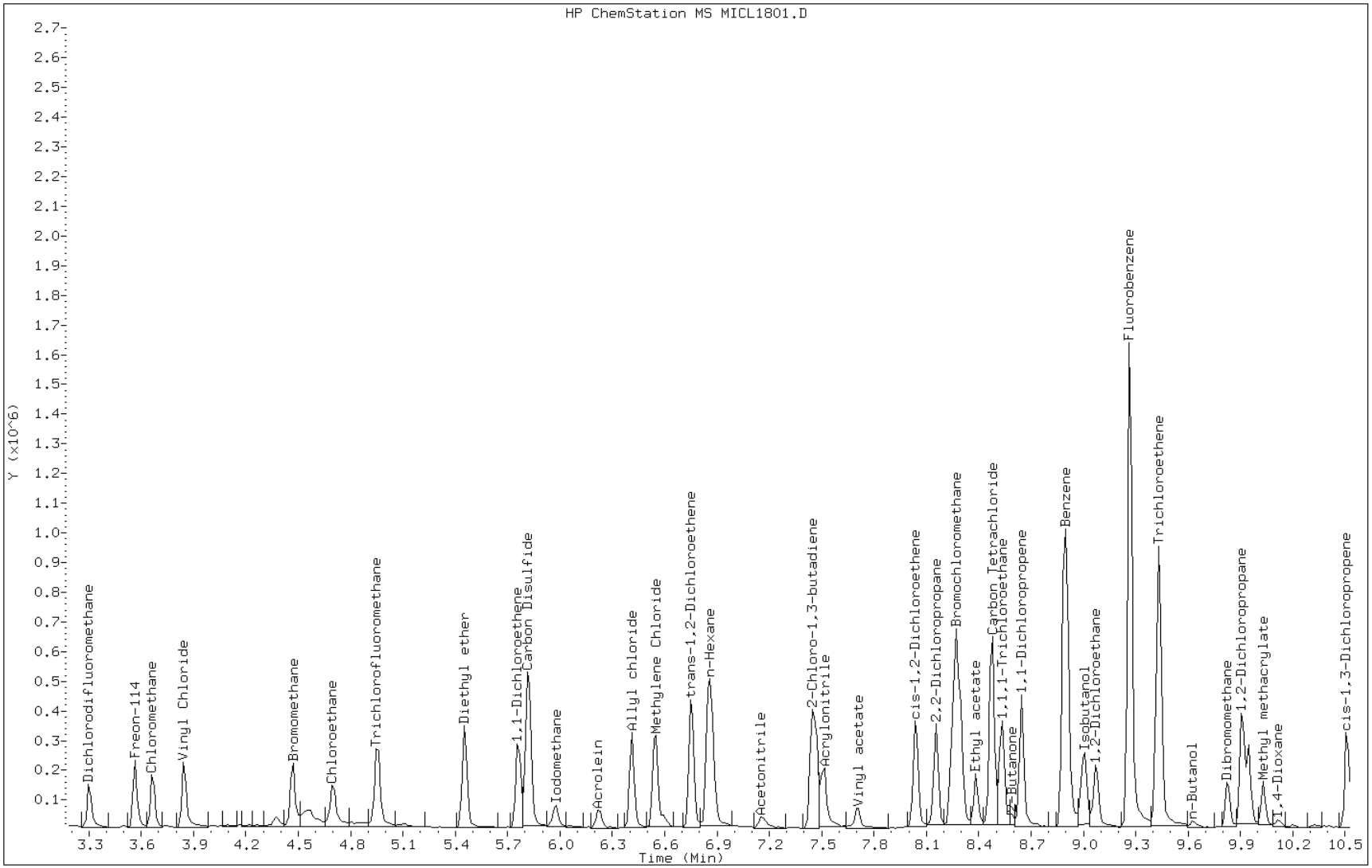
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (Surr)	95	13.199	13.199	(0.925)	168332	20.0000	19.67
	81 n-Propylbenzene	91	13.297	13.297	(0.931)	798959	20.0000	20.13
	80 Bromobenzene	156	13.339	13.339	(0.934)	172772	20.0000	20.33
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	112983	20.0000	20.24
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	589239	20.0000	20.81
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	534737	20.0000	20.70
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	114748	20.0000	19.69
	86 trans-1,4-dichloro-2-butene	53	13.521	13.521	(0.947)	19610	20.0000	19.05
	87 Cyclohexanone	55	13.591	13.591	(0.952)	30884	200.000	193.0
	88 4-Chlorotoluene	91	13.632	13.632	(0.955)	469500	20.0000	20.98
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	515288	20.0000	20.46
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	574805	20.0000	20.63
	90 Pentachloroethane	167	13.842	13.842	(0.970)	1968	20.0000	21.48
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	764351	20.0000	20.77
	93 4-Isopropyltoluene	119	14.065	14.065	(0.985)	599742	20.0000	20.61
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	336761	20.0000	20.02
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	541196	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	345429	20.0000	20.06
	98 n-Butylbenzene	91	14.470	14.470	(1.014)	539625	20.0000	20.20
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	297588	20.0000	20.13
	145 Nonanal	57	15.406	15.406	(1.079)	23179	20.0000	17.68
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	17801	20.0000	18.92
	101 Hexachlorobutadiene	225	16.104	16.104	(1.128)	82424	20.0000	18.91
	104 1,2,4-Trichlorobenzene	180	16.160	16.160	(1.132)	104579	20.0000	18.09
	105 Naphthalene	128	16.523	16.523	(1.158)	95264	20.0000	17.69
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	55785	20.0000	18.33
M	107 Xylenes (total)	106				881102	60.0000	60.15

Data File: MICL1801.D

Date: 08-AUG-2012 11:55

Client ID: VSTD020 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

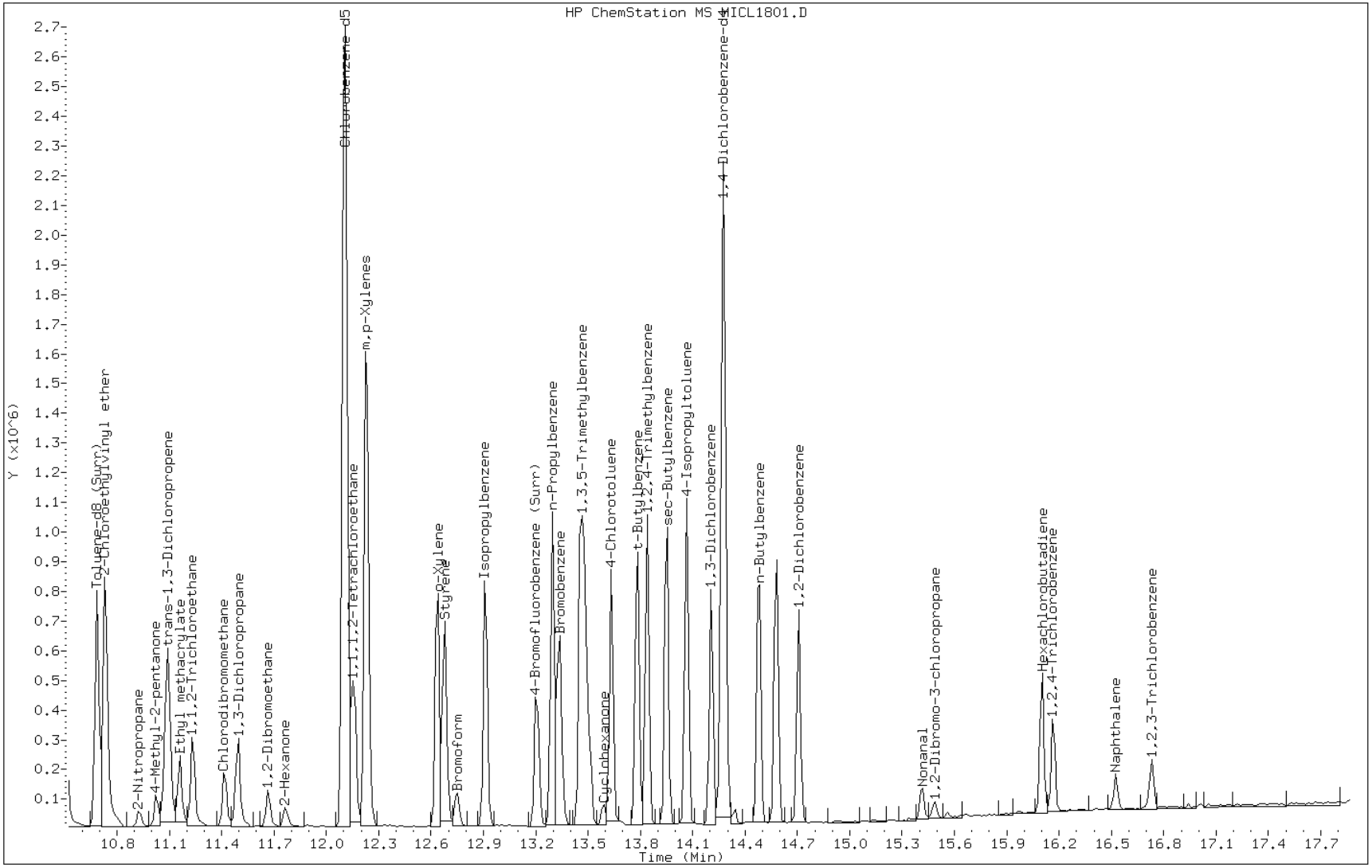


Data File: MICL1801.D

Date: 08-AUG-2012 11:55

Client ID: VSTD020 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1802.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1802.D
Lab Smp Id: ICIS Client Smp ID: VSTD050
Inj Date : 08-AUG-2012 12:20
Operator : KA Inst ID: MSM.i
Smp Info : ICIS;M120808A.B
Misc Info : VBLKM221A;VSTD050
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 11:55 Cal File: MICL1801.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	415007	50.0000	50.50
2	Freon-114	135	3.563	3.563	(0.385)	274409	50.0000	51.44
3	Chloromethane	50	3.661	3.661	(0.395)	574677	50.0000	51.64
4	Vinyl Chloride	62	3.842	3.842	(0.415)	728090	50.0000	53.31
5	Bromomethane	94	4.471	4.471	(0.483)	370667	50.0000	47.10
6	Chloroethane	64	4.694	4.694	(0.507)	400574	50.0000	50.43
7	Trichlorofluoromethane	101	4.946	4.946	(0.534)	776157	50.0000	52.03
M 26	1,2-Dichloroethene (total)	96				1026303	100.000	105.8
8	Diethyl ether	74	5.448	5.448	(0.588)	469944	100.000	111.6
9	1,1-Dichloroethene	96	5.756	5.756	(0.621)	385395	50.0000	51.14
10	Carbon Disulfide	76	5.811	5.811	(0.628)	1123232	50.0000	52.78
11	1,1,2-Trichlorofluoroethane	151	5.825	5.825	(0.629)	363344	50.0000	52.01
12	Iodomethane	142	5.979	5.979	(0.646)	369091	50.0000	47.74
13	Acrolein	56	6.216	6.216	(0.671)	199362	250.000	260.6
14	Allyl chloride	39	6.412	6.412	(0.692)	417789	50.0000	53.11
15	Methylene Chloride	84	6.538	6.538	(0.706)	457383	50.0000	50.09
16	Acetone	43	6.594	6.594	(0.712)	82330	50.0000	53.51
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	510389	50.0000	52.63
18	Methyl Acetate	74	6.747	6.747	(0.729)	58753	50.0000	54.26
19	n-Hexane	86	6.845	6.845	(0.739)	113502	50.0000	53.63
20	MTBE	73	6.873	6.873	(0.742)	847277	50.0000	55.06
21	Acetonitrile	41	7.152	7.152	(0.772)	149878	250.000	258.4

Data File: MICL1802.D
Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.445	7.445	(0.804)	594709	50.0000	54.84
	23 1,1-Dichloroethane	63	7.473	7.473	(0.807)	843546	50.0000	54.45
	24 Acrylonitrile	53	7.515	7.515	(0.812)	517507	250.000	272.4
	25 Vinyl acetate	43	7.697	7.697	(0.831)	351386	50.0000	59.85
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	515914	50.0000	53.17
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	546540	50.0000	53.88
	30 Bromochloromethane	128	8.242	8.242	(0.890)	219029	50.0000	53.22
	29 Cyclohexane	84	8.269	8.269	(0.893)	732168	50.0000	54.01
	31 Chloroform	83	8.297	8.297	(0.896)	706330	50.0000	51.30
	33 Ethyl acetate	45	8.381	8.381	(0.905)	71722	100.000	102.4
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	541373	50.0000	53.50
	34 Tetrahydrofuran	71	8.465	8.465	(0.914)	143510	250.000	281.0
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	381222	50.0000	53.06
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	599832	50.0000	52.06
	37 2-Butanone	43	8.591	8.591	(0.928)	114445	50.0000	55.25
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	574258	50.0000	53.48
	40 Benzene	78	8.884	8.884	(0.959)	1875549	50.0000	54.64
	41 Propionitrile	54	8.884	8.884	(0.959)	173787	250.000	276.1
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	782148	250.000	283.8
	45 Isobutanol	43	8.996	8.996	(0.971)	194568	1000.00	1106
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	302736	50.0000	51.17
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	413227	50.0000	51.84
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1689183	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	476776	50.0000	55.23
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	524218	50.0000	55.41
	49 n-Butanol	56	9.624	9.624	(1.039)	49439	500.000	477.0
	50 Dibromomethane	93	9.820	9.820	(1.060)	191165	50.0000	53.13
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	466140	50.0000	53.44
	52 Bromodichloromethane	83	9.945	9.945	(1.074)	455902	50.0000	52.26
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	184877	50.0000	58.69
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	50318	1000.00	1124
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	133898	50.0000	54.14
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	551755	50.0000	52.74
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1498509	50.0000	51.67
	58 Toluene	92	10.728	10.728	(0.887)	1115166	50.0000	53.27
	59 2-Nitropropane	43	10.923	10.923	(0.903)	121382	100.000	113.2
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	230616	50.0000	56.50
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	419897	50.0000	55.95
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	356865	50.0000	51.29
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	353077	50.0000	53.83
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	251215	50.0000	55.24
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	340975	50.0000	54.73
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	501241	50.0000	53.77
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	270379	50.0000	55.67
	69 2-Hexanone	43	11.761	11.761	(0.972)	145887	50.0000	56.23
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1146907	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	2025106	50.0000	51.37
	71 Chlorobenzene	112	12.124	12.124	(1.002)	1223120	50.0000	52.64
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	404185	50.0000	52.37
	74 m,p-Xylenes	106	12.222	12.222	(1.010)	1695366	100.000	104.7
	75 o-Xylene	106	12.641	12.641	(1.045)	783101	50.0000	53.28
	76 Styrene	104	12.683	12.683	(1.048)	1175674	50.0000	55.94
	77 Bromoform	173	12.753	12.753	(0.893)	181500	50.0000	53.96
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	1703712	50.0000	54.12

Data File: MICL1802.D
Report Date: 27-Aug-2012 15:28

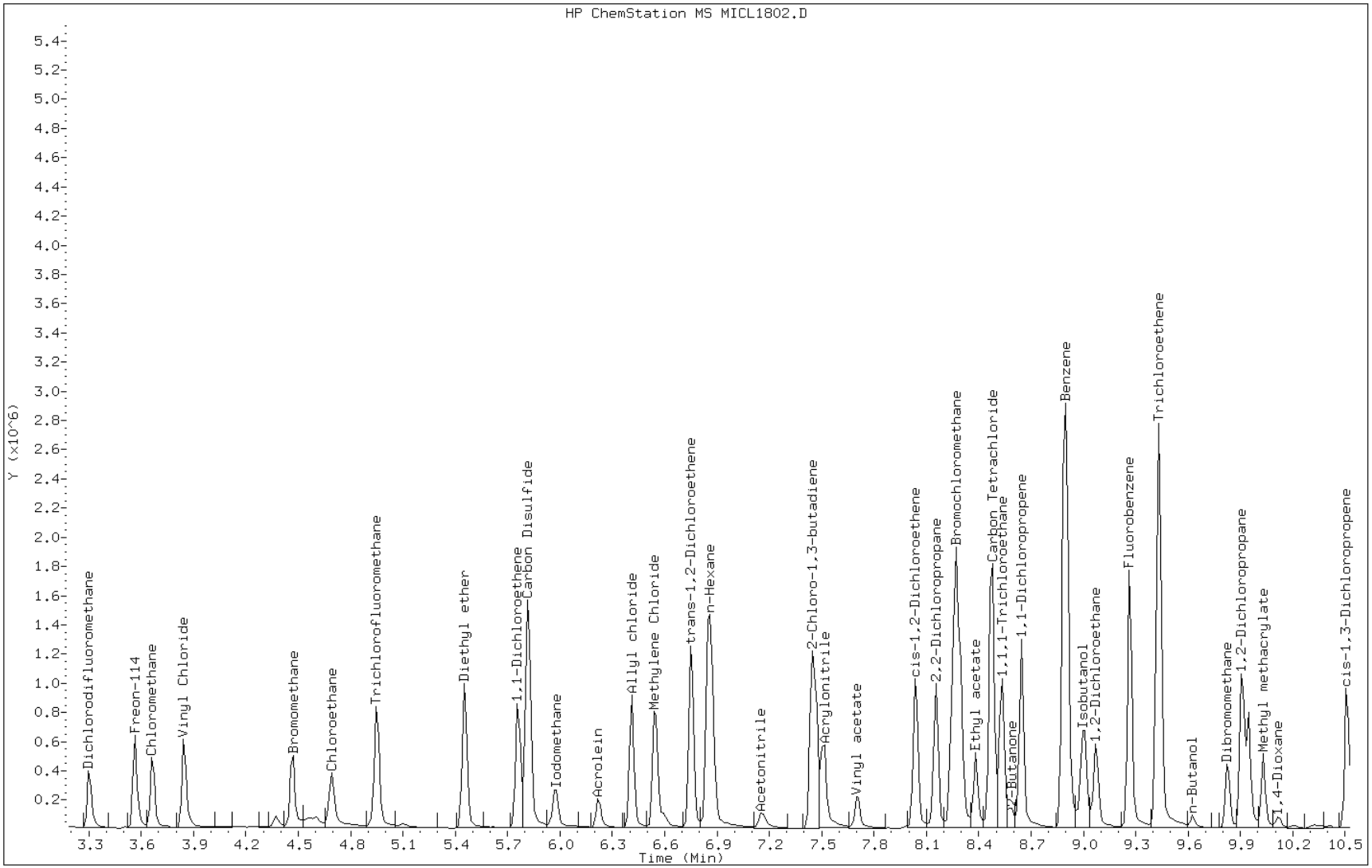
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	492367	50.0000	52.38
	81 n-Propylbenzene	91	13.297	13.297	(0.931)	2262968	50.0000	51.90
	80 Bromobenzene	156	13.339	13.339	(0.934)	472340	50.0000	50.60
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	337639	50.0000	55.05
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	1708856	50.0000	54.93
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	1489886	50.0000	52.49
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	352037	50.0000	55.00
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	59693	50.0000	52.77
	87 Cyclohexanone	55	13.591	13.591	(0.952)	93004	500.000	529.0
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	1333512	50.0000	54.23
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	1481059	50.0000	53.53
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	1677286	50.0000	54.80
	90 Pentachloroethane	167	13.842	13.842	(0.970)	5148	50.0000	51.16
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	2258942	50.0000	55.87
	93 4-Isopropyltoluene	119	14.065	14.065	(0.985)	1789895	50.0000	55.98
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	944165	50.0000	51.08
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	594575	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	959867	50.0000	50.73
	98 n-Butylbenzene	91	14.471	14.471	(1.014)	1649046	50.0000	56.18
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	843555	50.0000	51.94
	145 Nonanal	57	15.420	15.420	(1.080)	84290	50.0000	46.55
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	52131	50.0000	50.43
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	234728	50.0000	49.01
	104 1,2,4-Trichlorobenzene	180	16.160	16.160	(1.132)	325289	50.0000	51.21
	105 Naphthalene	128	16.524	16.524	(1.158)	320450	50.0000	54.17
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	167424	50.0000	50.06
M	107 Xylenes (total)	106				2478467	150.000	158.0

Data File: MICL1802.D

Date: 08-AUG-2012 12:20

Client ID: VSTD050 Instrument: MSM.i

Sample Info: ICIS;M120808A.B Operator: KA

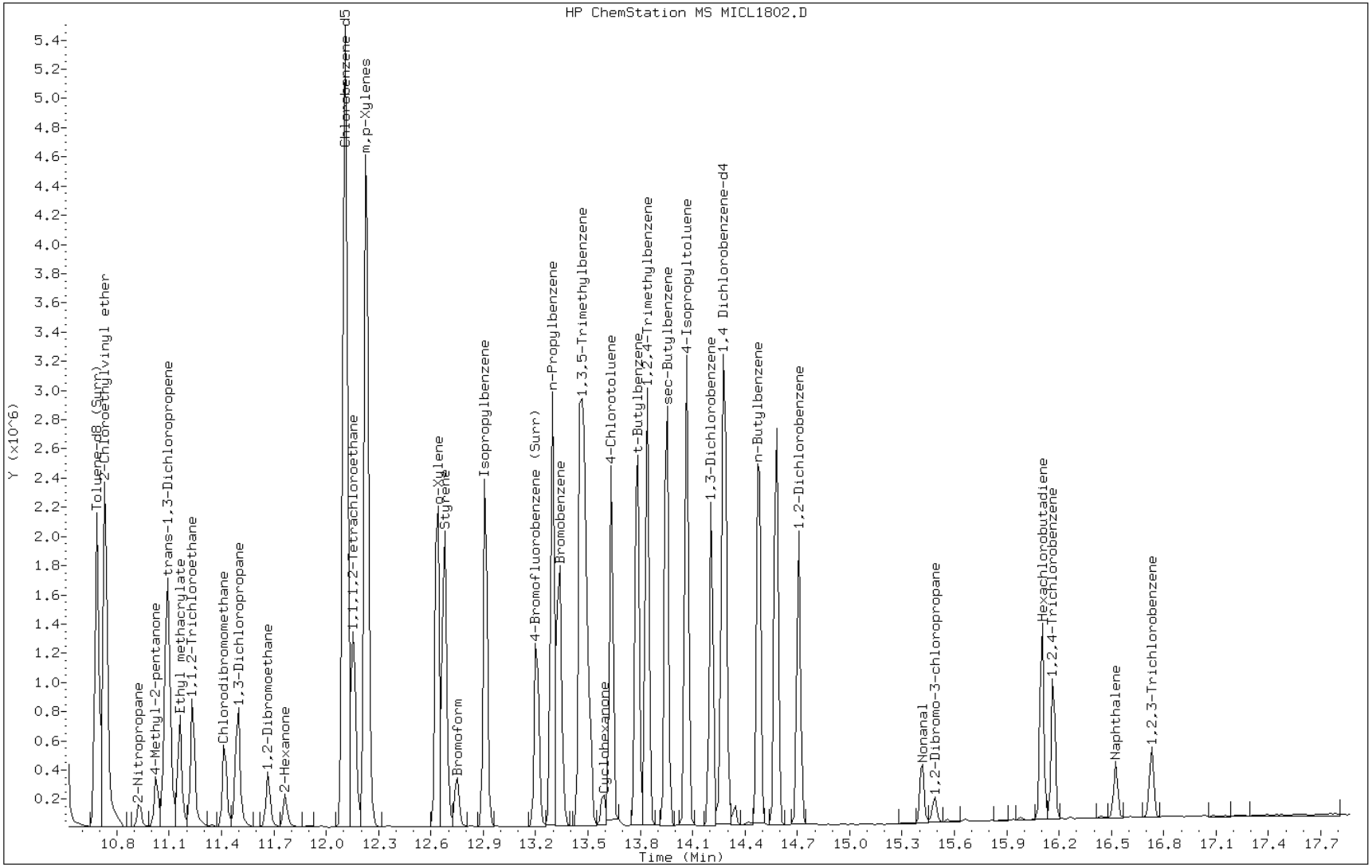


Data File: MICL1802.D

Date: 08-AUG-2012 12:20

Client ID: VSTD050 Instrument: MSM.i

Sample Info: ICIS;M120808A.B Operator: KA



Data File: MICL1803.D
Report Date: 27-Aug-2012 15:28

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GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1803.D
Lab Smp Id: IC Client Smp ID: VSTD100
Inj Date : 08-AUG-2012 12:45
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD100
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	936956	100.000	99.84
2	Freon-114	135	3.563	3.563	(0.385)	591276	100.000	97.04
3	Chloromethane	50	3.661	3.661	(0.395)	1178834	100.000	92.76
4	Vinyl Chloride	62	3.842	3.842	(0.415)	1479172	100.000	94.84
5	Bromomethane	94	4.457	4.457	(0.481)	746800	100.000	83.09
6	Chloroethane	64	4.680	4.680	(0.505)	873481	100.000	96.29
7	Trichlorofluoromethane	101	4.946	4.946	(0.534)	1670100	100.000	98.03
M 26	1,2-Dichloroethene (total)	96				2187087	200.000	197.4
8	Diethyl ether	74	5.448	5.448	(0.588)	1005064	200.000	208.9
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	878042	100.000	102.0
10	Carbon Disulfide	76	5.812	5.812	(0.628)	2451741	100.000	100.9
11	1,1,2-Trichlorofluoroethane	151	5.812	5.812	(0.628)	756850	100.000	94.86
12	Iodomethane	142	5.965	5.965	(0.644)	885820	100.000	96.43
13	Acrolein	56	6.217	6.217	(0.671)	452221	500.000	517.6
14	Allyl chloride	39	6.412	6.412	(0.692)	898374	100.000	100.0
15	Methylene Chloride	84	6.538	6.538	(0.706)	994674	100.000	95.37
16	Acetone	43	6.594	6.594	(0.712)	149744	100.000	97.90
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	1079355	100.000	97.45
18	Methyl Acetate	74	6.747	6.747	(0.729)	122808	100.000	99.30
19	n-Hexane	86	6.845	6.845	(0.739)	243892	100.000	100.9
20	MTBE	73	6.873	6.873	(0.742)	1794768	100.000	102.1
21	Acetonitrile	41	7.152	7.152	(0.772)	318869	500.000	481.3

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.446	7.446	(0.804)	1291100	100.000	104.2
	23 1,1-Dichloroethane	63	7.460	7.460	(0.805)	1748821	100.000	98.85
	24 Acrylonitrile	53	7.515	7.515	(0.812)	1146949	500.000	528.6
	25 Vinyl acetate	43	7.697	7.697	(0.831)	714903	100.000	106.6
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	1107732	100.000	99.95
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	1189350	100.000	102.7
	30 Bromochloromethane	128	8.242	8.242	(0.890)	468829	100.000	99.75
	29 Cyclohexane	84	8.270	8.270	(0.893)	1561051	100.000	100.8
	31 Chloroform	83	8.298	8.298	(0.896)	1568233	100.000	99.72
	33 Ethyl acetate	45	8.381	8.381	(0.905)	149813	200.000	187.4
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	1176153	100.000	101.8
	34 Tetrahydrofuran	71	8.465	8.465	(0.914)	311990	500.000	534.9
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	859276	100.000	104.7
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	1302196	100.000	98.97
	37 2-Butanone	43	8.591	8.591	(0.928)	242237	100.000	102.4
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	1263553	100.000	103.0
	40 Benzene	78	8.884	8.884	(0.959)	3988744	100.000	101.7
	41 Propionitrile	54	8.884	8.884	(0.959)	354709	500.000	493.5
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	1612037	500.000	512.2
	45 Isobutanol	43	8.996	8.996	(0.971)	432390	2000.00	2152
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	680623	100.000	100.7
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	922974	100.000	101.4
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1929174	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	960301	100.000	97.41
	47 Methylcyclohexane	55	9.443	9.443	(1.020)	1094104	100.000	101.3
	49 n-Butanol	56	9.624	9.624	(1.039)	131769	1000.00	1072
	50 Dibromomethane	93	9.820	9.820	(1.060)	430170	100.000	104.7
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	1015526	100.000	101.9
	52 Bromodichloromethane	83	9.946	9.946	(1.074)	1049049	100.000	105.3
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	417860	100.000	116.2
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	115747	2000.00	2264
	55 2-Chloroethylvinyl ether	63	10.728	10.728	(1.158)	271832	100.000	96.25
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	1306583	100.000	109.4
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	3424011	100.000	98.11
	58 Toluene	92	10.728	10.728	(0.887)	2457088	100.000	97.54
	59 2-Nitropropane	43	10.923	10.923	(0.903)	264192	200.000	204.7(A)
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	502183	100.000	102.2
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	958149	100.000	106.1
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	786082	100.000	93.89
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	806574	100.000	100.5
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	539546	100.000	98.60
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	775824	100.000	103.5
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	1107949	100.000	98.77
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	598036	100.000	102.3
	69 2-Hexanone	43	11.761	11.761	(0.972)	313954	100.000	100.6
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1380124	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	4262484	100.000	89.85
	71 Chlorobenzene	112	12.124	12.124	(1.002)	2690982	100.000	96.25
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	912896	100.000	98.30
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	3668858	200.000	188.3
	75 o-Xylene	106	12.641	12.641	(1.045)	1820420	100.000	102.9
	76 Styrene	104	12.683	12.683	(1.048)	2730520	100.000	108.0
	77 Bromoform	173	12.753	12.753	(0.893)	411045	100.000	105.8
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	3723212	100.000	102.4

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	1156611	100.000	106.6
	81 n-Propylbenzene	91	13.298	13.298	(0.932)	4670273	100.000	92.78
	80 Bromobenzene	156	13.339	13.339	(0.934)	1078757	100.000	100.1
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	719437	100.000	101.6
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	3747634	100.000	104.3
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	3348636	100.000	102.2
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	776373	100.000	105.0
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	136300	100.000	104.4
	87 Cyclohexanone	55	13.591	13.591	(0.952)	190349	1000.00	937.7
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	2913766	100.000	102.6
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	3286012	100.000	102.9
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	3674106	100.000	104.0
	90 Pentachloroethane	167	13.828	13.828	(0.969)	11085	100.000	95.42
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	4689774	100.000	100.5
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	3803494	100.000	103.0
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	2121495	100.000	99.42
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	686419	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	2174652	100.000	99.55
	98 n-Butylbenzene	91	14.471	14.471	(1.014)	3483739	100.000	102.8
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	1914559	100.000	102.1
	145 Nonanal	57	15.406	15.406	(1.079)	220556	100.000	98.94
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	122266	100.000	102.4
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	522906	100.000	94.57
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	767053	100.000	104.6
	105 Naphthalene	128	16.524	16.524	(1.158)	817401	100.000	119.7
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	397572	100.000	103.0
M	107 Xylenes (total)	106				5489278	300.000	291.2

QC Flag Legend

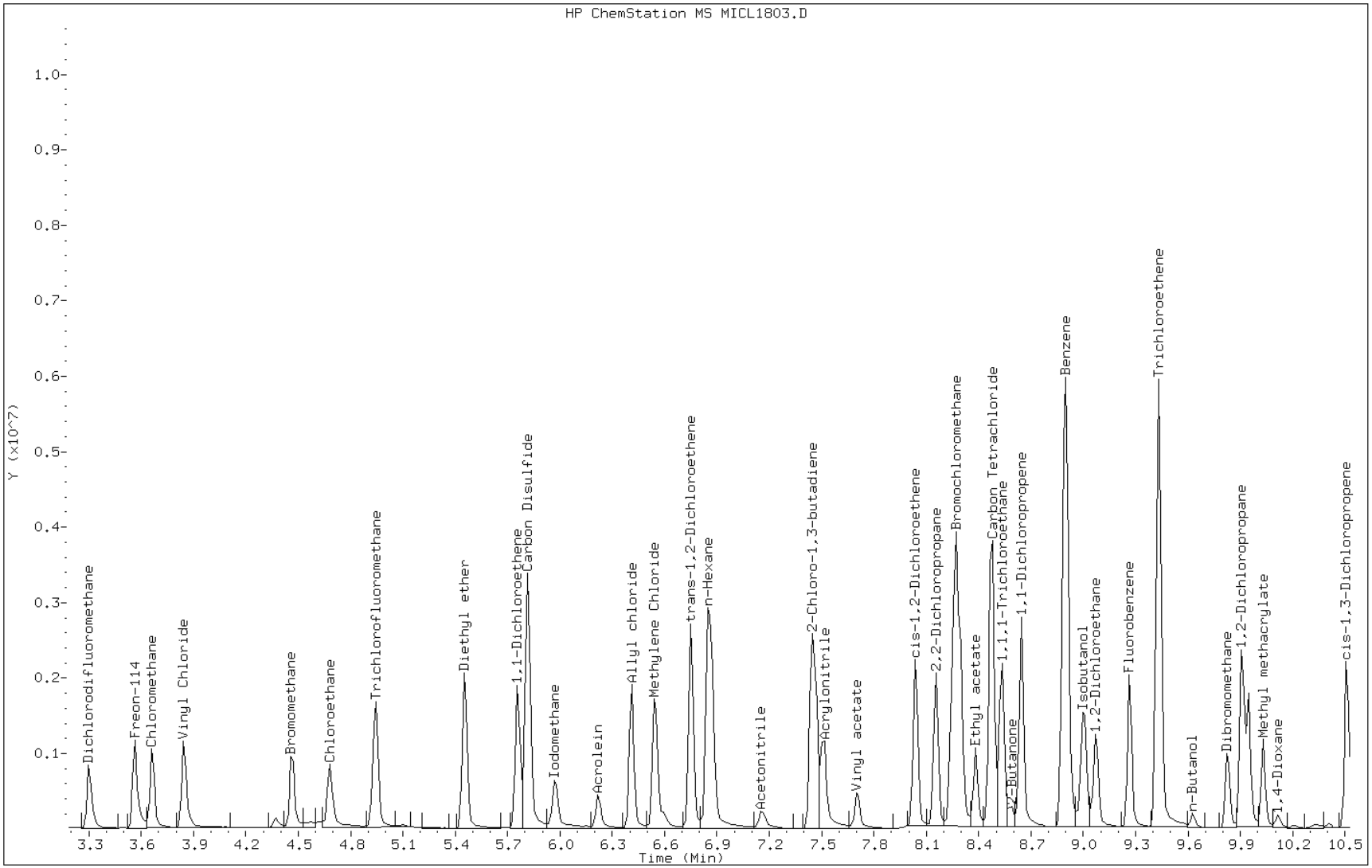
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: MICL1803.D

Date: 08-AUG-2012 12:45

Client ID: VSTD100 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

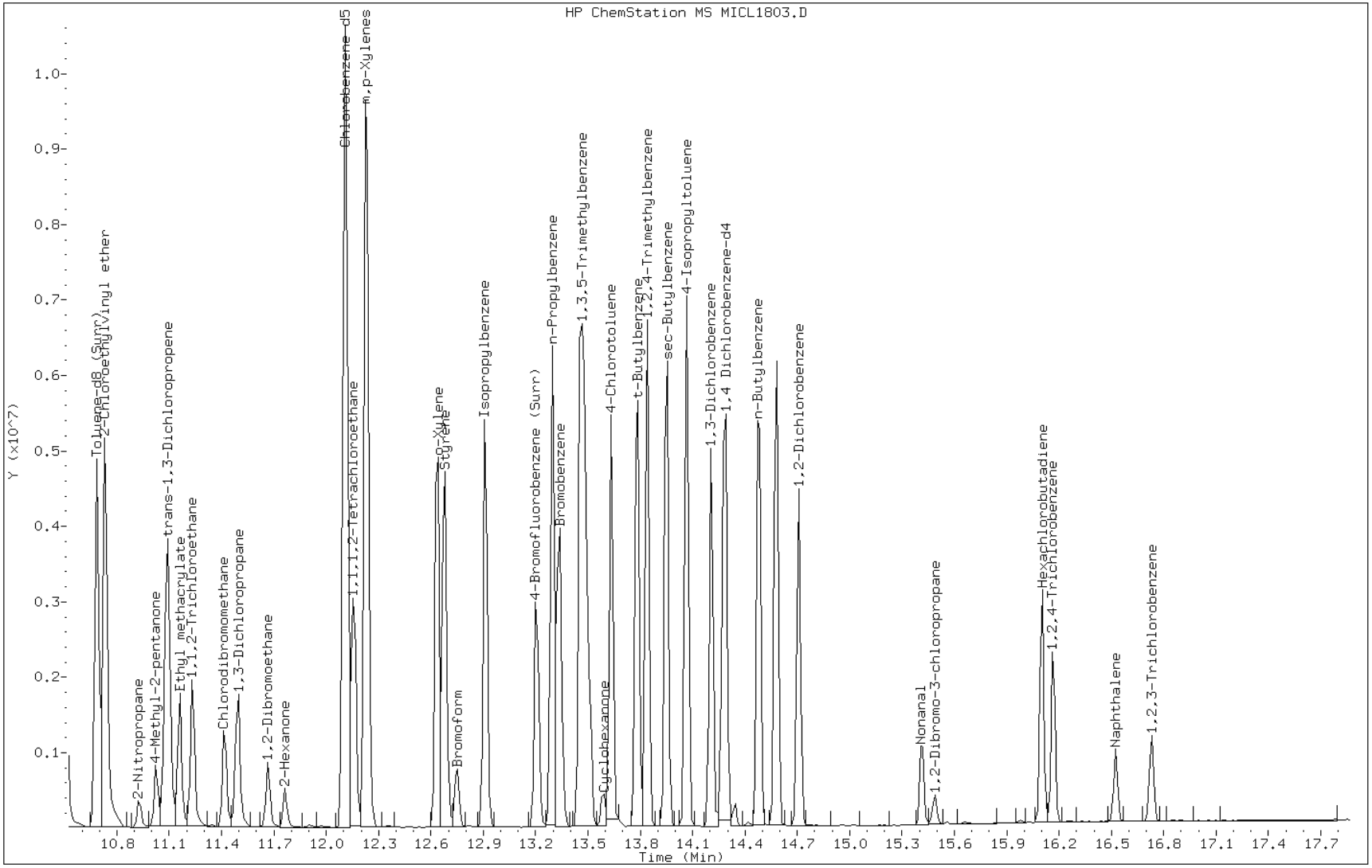


Data File: MICL1803.D

Date: 08-AUG-2012 12:45

Client ID: VSTD100 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



Data File: MICL1804.D
Report Date: 27-Aug-2012 15:28

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MICL1804.D
Lab Smp Id: IC Client Smp ID: VSTD200
Inj Date : 08-AUG-2012 13:11
Operator : KA Inst ID: MSM.i
Smp Info : IC;M120808A.B
Misc Info : VBLKM221A;VSTD200
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\8260C-M5mL.m
Meth Date : 27-Aug-2012 15:28 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:45 Cal File: MICL1803.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	0.10000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.297	3.297	(0.356)	2119569	200.000	193.3
2	Freon-114	135	3.563	3.563	(0.385)	1360531	200.000	191.1
3	Chloromethane	50	3.660	3.660	(0.395)	2373037	200.000	159.8
4	Vinyl Chloride	62	3.842	3.842	(0.415)	3071140	200.000	168.5
5	Bromomethane	94	4.471	4.471	(0.483)	1608344	200.000	153.1
6	Chloroethane	64	4.680	4.680	(0.505)	1921155	200.000	181.2
7	Trichlorofluoromethane	101	4.945	4.945	(0.534)	3763468	200.000	189.0
M 26	1,2-Dichloroethene (total)	96				5125283	400.000	395.9
8	Diethyl ether	74	5.448	5.448	(0.588)	2190336	400.000	389.6
9	1,1-Dichloroethene	96	5.755	5.755	(0.621)	2080460	200.000	206.8(A)
10	Carbon Disulfide	76	5.811	5.811	(0.628)	5298860	200.000	186.6
11	1,1,2-Trichlorofluoroethane	151	5.811	5.811	(0.628)	1807475	200.000	193.8
12	Iodomethane	142	5.979	5.979	(0.646)	2314991	200.000	211.3(A)
13	Acrolein	56	6.216	6.216	(0.671)	981463	1000.00	961.3
14	Allyl chloride	39	6.412	6.412	(0.692)	1942680	200.000	185.0
15	Methylene Chloride	84	6.551	6.551	(0.707)	2210080	200.000	181.3
16	Acetone	43	6.593	6.593	(0.712)	291094	200.000	200.3(A)
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	2547719	200.000	196.8
18	Methyl Acetate	74	6.747	6.747	(0.729)	278966	200.000	193.0
19	n-Hexane	86	6.845	6.845	(0.739)	558853	200.000	197.8
20	MTBE	73	6.873	6.873	(0.742)	4053387	200.000	197.4
21	Acetonitrile	41	7.152	7.152	(0.772)	649352	1000.00	838.7

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.445	7.445	(0.804)	2869822	200.000	198.3
	23 1,1-Dichloroethane	63	7.473	7.473	(0.807)	3672747	200.000	177.6
	24 Acrylonitrile	53	7.515	7.515	(0.811)	2325021	1000.00	917.0
	25 Vinyl acetate	43	7.697	7.697	(0.831)	1561012	200.000	199.2
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	2577564	200.000	199.0
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	2694297	200.000	199.0
	30 Bromochloromethane	128	8.241	8.241	(0.890)	1177150	200.000	214.3(A)
	29 Cyclohexane	84	8.269	8.269	(0.893)	3461666	200.000	191.3
	31 Chloroform	83	8.297	8.297	(0.896)	3496688	200.000	190.3
	33 Ethyl acetate	45	8.381	8.381	(0.905)	310841	400.000	332.6
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	2811603	200.000	208.2(A)
	34 Tetrahydrofuran	71	8.465	8.465	(0.914)	650709	1000.00	954.6
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	3070535	200.000	199.7
	37 2-Butanone	43	8.591	8.591	(0.928)	522080	200.000	188.8
	39 1,1-Dichloropropene	75	8.646	8.646	(0.934)	2766515	200.000	193.1
	40 Benzene	78	8.884	8.884	(0.959)	7757337	200.000	169.3
	41 Propionitrile	54	8.884	8.884	(0.959)	774298	1000.00	921.8
	42 Methacrylonitrile	41	8.912	8.912	(0.962)	3245423	1000.00	882.3
	45 Isobutanol	43	8.996	8.996	(0.971)	936161	4000.00	3986
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.065	9.065	(0.979)	86704	200.000	10.98
	44 1,2-Dichloroethane	62	9.065	9.065	(0.979)	2001397	200.000	188.1
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	2254406	50.0000	
	48 Trichloroethene	95	9.429	9.429	(1.018)	2353571	200.000	204.3(A)
	47 Methylcyclohexane	55	9.442	9.442	(1.020)	2194777	200.000	173.8
	49 n-Butanol	56	9.624	9.624	(1.039)	286476	2000.00	1968
	50 Dibromomethane	93	9.820	9.820	(1.060)	958373	200.000	199.6
	51 1,2-Dichloropropane	63	9.903	9.903	(1.069)	2114460	200.000	181.6
	52 Bromodichloromethane	83	9.945	9.945	(1.074)	2354514	200.000	202.2(A)
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	873382	200.000	207.8(A)
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	259195	4000.00	4338(A)
	55 2-Chloroethylvinyl ether	63	10.727	10.727	(1.158)	643578	200.000	195.0
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	2856419	200.000	204.6(A)
$	57 Toluene-d8 (Surr)	98	10.685	10.685	(0.883)	16743	200.000	0.4270(a)
	58 Toluene	92	10.727	10.727	(0.887)	5204004	200.000	183.8
	59 2-Nitropropane	43	10.923	10.923	(0.903)	607063	400.000	418.6(A)
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	1062121	200.000	192.5
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	2078631	200.000	204.8(A)
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	1975497	200.000	210.0(A)
	65 Ethyl methacrylate	69	11.160	11.160	(0.923)	1788819	200.000	196.5
	64 1,1,2-Trichloroethane	83	11.230	11.230	(0.928)	1177015	200.000	191.4
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	1892410	200.000	224.6(A)
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	2370750	200.000	188.1
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	1422577	200.000	216.6(A)
	69 2-Hexanone	43	11.761	11.761	(0.972)	685972	200.000	195.5
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1550769	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	7858502	200.000	147.4
	71 Chlorobenzene	112	12.124	12.124	(1.002)	5813786	200.000	185.1
	73 1,1,1,2-Tetrachloroethane	131	12.166	12.166	(1.006)	2282439	200.000	218.7(A)
	74 m,p-Xylenes	106	12.236	12.236	(1.012)	7181789	400.000	328.0
	75 o-Xylene	106	12.641	12.641	(1.045)	4121684	200.000	207.4(A)
	76 Styrene	104	12.683	12.683	(1.048)	5872415	200.000	206.6(A)
	77 Bromoform	173	12.752	12.752	(0.893)	1099678	200.000	220.3(A)
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	7315132	200.000	156.6
$	79 4-Bromofluorobenzene (Surr)	95	13.199	13.199	(0.925)	18467	200.000	1.324(a)

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Report Date: 27-Aug-2012 15:28

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
81	n-Propylbenzene	91	13.297	13.297	(0.931)	8328771	200.000	128.7
80	Bromobenzene	156	13.339	13.339	(0.934)	2700640	200.000	194.9
82	1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	1565249	200.000	171.9
84	1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	7176587	200.000	155.4
83	2-Chlorotoluene	91	13.479	13.479	(0.944)	6816028	200.000	161.8
85	1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	1720770	200.000	181.1
86	trans-1,4-dichloro-2-butene	53	13.521	13.521	(0.947)	320027	200.000	190.6
87	Cyclohexanone	55	13.590	13.590	(0.952)	421745	2000.00	1616
88	4-Chlorotoluene	91	13.632	13.632	(0.955)	5905202	200.000	161.8
89	t-Butylbenzene	119	13.786	13.786	(0.966)	6770638	200.000	164.9
91	1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	7069492	200.000	155.6
90	Pentachloroethane	167	13.842	13.842	(0.970)	28332	200.000	189.7
92	sec-Butylbenzene	105	13.954	13.954	(0.977)	8368495	200.000	139.4
93	4-Isopropyltoluene	119	14.065	14.065	(0.985)	7386207	200.000	155.6
94	1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	4938337	200.000	180.0
* 95	1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	882505	50.0000	
96	1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	4929245	200.000	175.5
98	n-Butylbenzene	91	14.484	14.484	(1.015)	6684303	200.000	153.4
99	1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	4482855	200.000	186.0
145	Nonanal	57	15.406	15.406	(1.079)	592957	200.000	201.2(A)
100	1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	323063	200.000	210.5(A)
101	Hexachlorobutadiene	225	16.104	16.104	(1.128)	1397064	200.000	196.5
104	1,2,4-Trichlorobenzene	180	16.160	16.160	(1.132)	2055410	200.000	218.0(A)
105	Naphthalene	128	16.523	16.523	(1.158)	2196697	200.000	250.2(A)
106	1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	1108724	200.000	223.4(A)
M 107	Xylenes (total)	106				11303473	600.000	535.4

QC Flag Legend

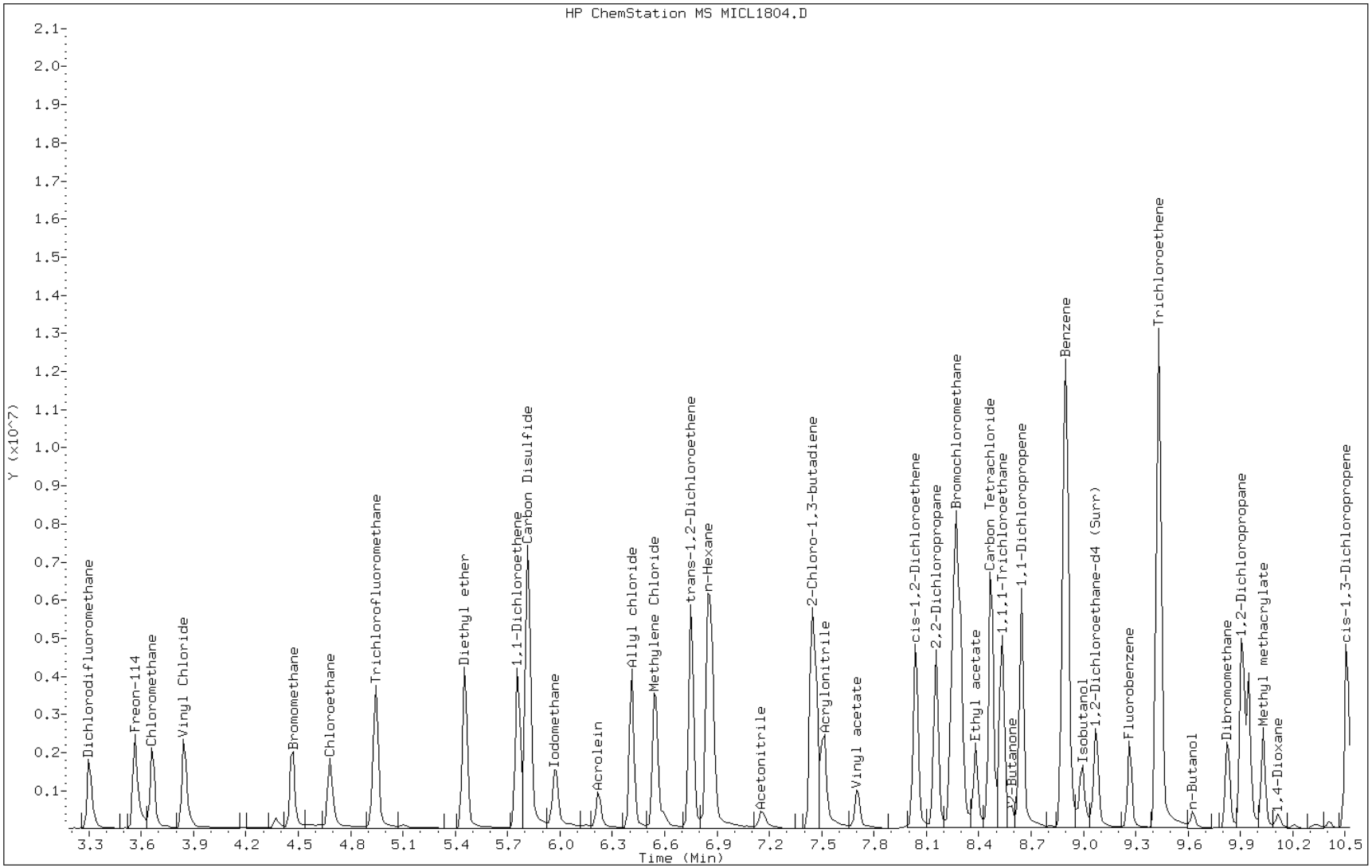
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: MICL1804.D

Date: 08-AUG-2012 13:11

Client ID: VSTD200 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA

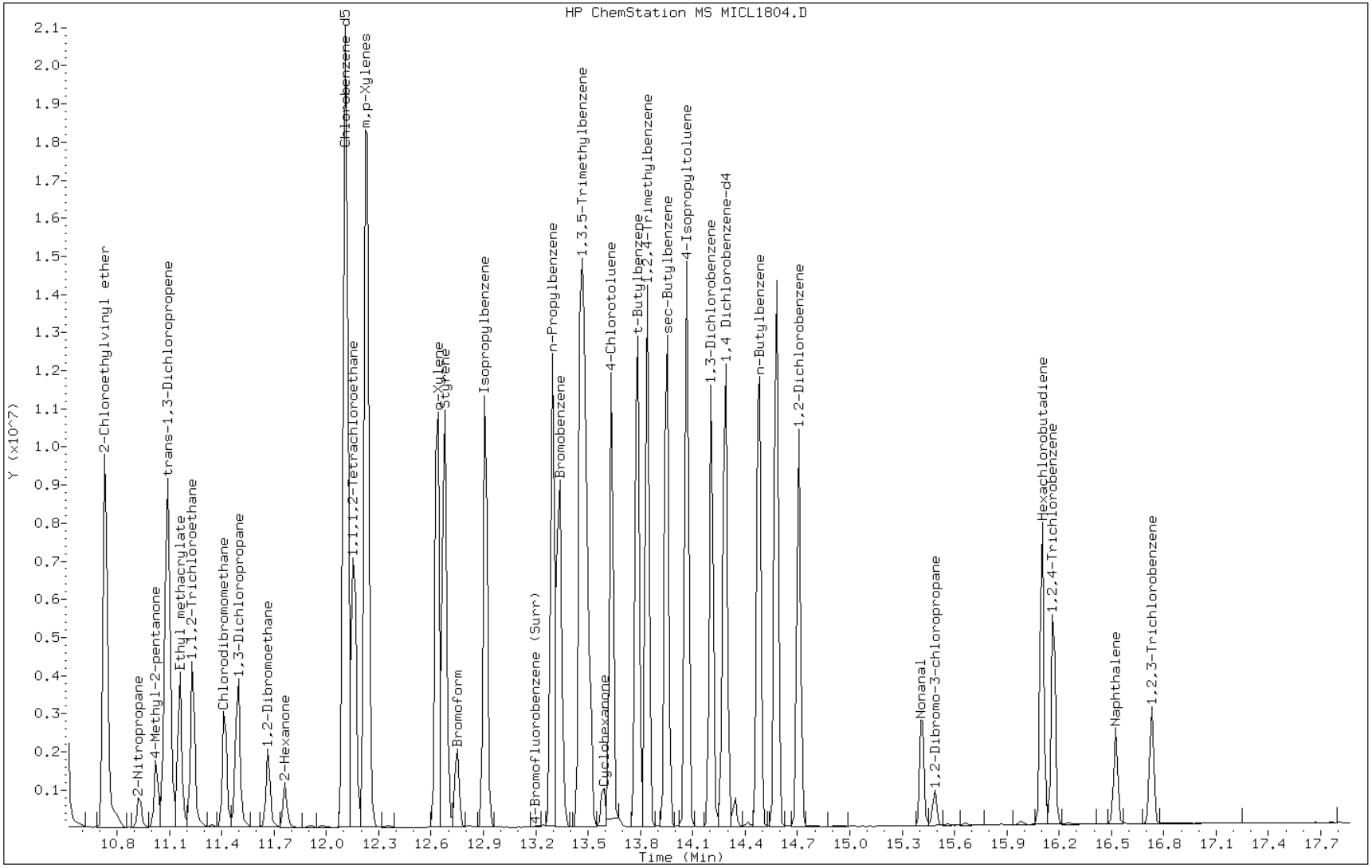


Data File: MICL1804.D

Date: 08-AUG-2012 13:11

Client ID: VSTD200 Instrument: MSM.i

Sample Info: IC;M120808A.B Operator: KA



FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-9019/2	ZICL1073.D
Level 2	IC 160-9019/3	ZICL1074.D
Level 3	IC 160-9019/4	ZICL1075.D
Level 4	IC 160-9019/5	ZICL1076.D
Level 5	IC 160-9019/6	ZICL1077.D
Level 6	ICIS 160-9019/7	ZICL1078.D
Level 7	IC 160-9019/8	ZICL1079.D
Level 8	IC 160-9019/9	ZICL1080.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Pentachloroethane	0 0	0 0	0 0	0	0	Ave					0.0100			20.0			
Dichlorodifluoromethane	0.3428	0.4301 0.3278	0.3770 0.3298	0.3650	0.3544	LinF		0.3303							0.9997		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.1590	0.1634	0.1654 0.1665	0.1669	0.1576	Ave		0.1631			0.0100	2.4		20.0			
Chloromethane	0.3360	0.3198	0.3685 0.3166	0.3536	0.3283	Ave		0.3371			0.1000	6.0		20.0			
Vinyl chloride	0.3856 0.3452	0.4042 0.3315	0.3633 0.3335	0.3524	0.3389	Ave		0.3568			0.1000	7.3		20.0			
Bromomethane	0.1439	0.1358	0.1753 0.1356	0.1631	0.1519	Ave		0.1509			0.1000	10.5		20.0			
Chloroethane	0.1428	0.1171	0.1690 0.1294	0.1565	0.1532	Ave		0.1447			0.1000	13.1		20.0			
Trichlorofluoromethane	0.4402	0.4088	0.4315 0.4251	0.4399	0.4266	Ave		0.4287			0.1000	2.7		20.0			
Ethyl ether	0.1394	0.1272	0.1312 0.1217	0.1277	0.1305	Ave		0.1296			0.0100	4.5		20.0			
1,1-Dichloroethene	0.2615	0.2511	0.2890 0.2493	0.2653	0.2587	Ave		0.2625			0.1000	5.5		20.0			
Carbon disulfide	0.8352	0.7769	0.8852 0.7310	0.8386	0.8378	Ave		0.8174			0.1000	6.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2243	0.2126	0.2257 0.2131	0.2225	0.2217	Ave		0.2200			0.1000	2.6		20.0			
Iodomethane	0.4174	0.4022	0.4381 0.3956	0.4120	0.4007	Ave		0.4110			0.0100	3.8		20.0			
Acrolein	0.0286	0.0263	0.0295 0.0259	0.0263	0.0253	Ave		0.0270			0.0010	6.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Allyl chloride	0.2455	0.2355	0.2424 0.2330	0.2338	0.2388	Ave		0.2382			0.0100	2.1		20.0			
Methylene Chloride	0.2806	0.2606	0.2837 0.2573	0.2582	0.2542	Ave		0.2658			0.1000	4.9		20.0			
Acetone	0.0408	0.0385	0.0365	0.0428	0.0378	Ave		0.0393		*	0.1000	6.4		20.0			
trans-1,2-Dichloroethene	0.3053	0.3751 0.2895	0.3332 0.2794	0.3221	0.2987	Ave		0.3147			0.1000	10.3		20.0			
Methyl acetate	0.0348	0.0312	0.0397 0.0316	0.0316	0.0317	Ave		0.0334		*	0.1000	10.0		20.0			
n-Hexane	0.0782	0.0738	0.0824 0.0729	0.0767	0.0767	Ave		0.0768			0.0100	4.4		20.0			
Methyl tert-butyl ether	0.5809	0.5243	0.5655 0.4963	0.5423	0.5388	Ave		0.5414			0.1000	5.5		20.0			
Acetonitrile	0.0156	0.0149	0.0159 0.0151	0.0158	0.0136	Ave		0.0152			0.0010	5.6		20.0			
2-Chloro-1,3-butadiene	0.4444	0.4253	0.4678 0.4057	0.4601	0.4448	Ave		0.4414			0.0100	5.2		20.0			
1,1-Dichloroethane	0.4828	0.4650	0.5143 0.4432	0.4842	0.4929	Ave		0.4804			0.2000	5.1		20.0			
Acrylonitrile	0.0601	0.0536	0.0526 0.0522	0.0543	0.0516	Ave		0.0541			0.0100	5.7		20.0			
Vinyl acetate	0.2260	0.2118	0.2273 0.2088	0.1988	0.1941	Ave		0.2111			0.0100	6.5		20.0			
cis-1,2-Dichloroethene	0.3089	0.3373 0.2898	0.3170 0.2833	0.3053	0.2967	Ave		0.3055			0.1000	5.9		20.0			
2,2-Dichloropropane	0.3543	0.3300	0.3946 0.3135	0.3706	0.3594	Ave		0.3538			0.0100	8.2		20.0			
Bromochloromethane	0.1251	0.1174	0.1249 0.1129	0.1266	0.1208	Ave		0.1213			0.0100	4.4		20.0			
Cyclohexane	0.4661	0.4322	0.5104 0.4120	0.4860	0.4549	Ave		0.4603			0.1000	7.7		20.0			
Chloroform	0.4657	0.5207 0.4269	0.5134 0.4091	0.4559	0.4381	Ave		0.4614			0.2000	9.2		20.0			
Ethyl acetate	0.0221	0.0206	0.0214 0.0199	0.0187	0.0187	Ave		0.0202			0.0100	6.9		20.0			
Carbon tetrachloride	0.3830	0.3631	0.4163 0.3550	0.3979	0.3776	Ave		0.3822			0.1000	5.9		20.0			
Tetrahydrofuran	0.0177	0.0159	0.0183 0.0153	0.0162	0.0155	Ave		0.0165			0.0010	7.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1,1-Trichloroethane	0.4182	0.3962	0.4335 0.3817	0.4256	0.4063	Ave		0.4103			0.1000	4.7		20.0			
2-Butanone (MEK)	0.0694	0.0630	0.0587 0.0626	0.0557	0.0607	Ave		0.0617		*	0.1000	7.6		20.0			
1,1-Dichloropropene	0.4019	0.3802	0.4520 0.3686	0.4052	0.4055	Ave		0.4022			0.0100	7.1		20.0			
Benzene	1.4063 1.1291	1.3736 0.9983	1.2345 +++++	1.1866	1.1600	Ave		1.2126			0.5000	11.7		20.0			
Propionitrile	0.0204	0.0183	0.0199 0.0169	0.0178	0.0163	Ave		0.0183			0.0010	9.0		20.0			
Methacrylonitrile	0.0912	0.0815	0.0930 0.0754	0.0810	0.0843	Ave		0.0844			0.0100	7.9		20.0			
Isobutanol	0.0064	0.0057	0.0064 0.0057	0.0055	0.0052	Ave		0.0058			0.0010	8.3		20.0			
1,2-Dichloroethane	0.2810	0.2866 0.2651	0.2770 0.2577	0.2650	0.2641	Ave		0.2709			0.1000	3.9		20.0			
Methylcyclohexane	0.3458	0.3226	0.3840 0.2968	0.3557	0.3456	Ave		0.3418			0.1000	8.7		20.0			
Trichloroethene	0.2879	0.3243 0.2702	0.3031 0.2541	0.2956	0.2881	Ave		0.2891			0.2000	7.8		20.0			
1-Butanol	0.0041	0.0037	0.0047 0.0037	0.0036	0.0035	Ave		0.0039		*	0.0100	11.7		20.0			
Dibromomethane	0.1247	0.1129	0.1222 0.1117	0.1074	0.1091	Ave		0.1147			0.0100	6.2		20.0			
1,2-Dichloropropane	0.2750	0.2599	0.2844 0.2450	0.2755	0.2714	Ave		0.2685			0.1000	5.2		20.0			
Bromodichloromethane	0.3241	0.3075	0.3368 0.2965	0.3087	0.3151	Ave		0.3148			0.2000	4.5		20.0			
Methyl methacrylate	0.1359	0.1234	0.1344 0.1206	0.1182	0.1185	Ave		0.1252			0.0100	6.3		20.0			
1,4-Dioxane	0.0013	0.0012	0.0011 0.0013	0.0011	0.0012	Ave		0.0012			0.0010	7.7		20.0			
2-Chloroethyl vinyl ether	0.0581	0.0607	0.0408 0.0718	0.0455	0.0447	Lin	0.1435	0.0728			0.0100			20.0	0.9946		
cis-1,3-Dichloropropene	0.4125	0.3908	0.4154 0.3672	0.3956	0.3961	Ave		0.3963			0.2000	4.4		20.0			
Toluene	1.1607 1.0337	1.2036 0.9698	1.0667 0.9046	1.0500	1.0429	Ave		1.0540			0.4000	9.1		20.0			
2-Nitropropane	0.0624	0.0581	0.0553 0.0640	0.0510	0.0539	Ave		0.0574			0.0100	8.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Methyl-2-pentanone (MIBK)	0.2233	0.2086	0.2038 0.2195	0.1924	0.1953	Ave		0.2072			0.1000	6.1		20.0			
trans-1,3-Dichloropropene	0.4430	0.4238	0.4028 0.4270	0.3942	0.4031	Ave		0.4156			0.1000	4.5		20.0			
Tetrachloroethene	0.3395	0.3827 0.3330	0.3576 0.3369	0.3342	0.3388	Ave		0.3461			0.2000	5.2		20.0			
Ethyl methacrylate	0.4053	0.3745	0.3735 0.3840	0.3513	0.3534	Ave		0.3737			0.0100	5.4		20.0			
1,1,2-Trichloroethane	0.2264	0.2173	0.2320 0.2277	0.2073	0.2044	Ave		0.2192			0.1000	5.2		20.0			
Dibromochloromethane	0.3087	0.3076	0.2866 0.3177	0.2832	0.2830	Ave		0.2978			0.1000	5.1		20.0			
1,3-Dichloropropane	0.4893	0.4729	0.4861 0.4790	0.4564	0.4558	Ave		0.4732			0.0100	3.1		20.0			
1,2-Dibromoethane (EDB)	0.2672	0.2631	0.2557 0.2765	0.2349	0.2513	Ave		0.2581			0.1000	5.6		20.0			
2-Hexanone	0.1502	0.1405	0.1400 0.1451	0.1191	0.1296	Ave		0.1374			0.1000	8.2		20.0			
Ethylbenzene	2.4503 1.8667	2.3565 1.6335	2.1584 +++++	2.0035	1.9913	Ave		2.0657			0.1000	13.6		20.0			
Chlorobenzene	1.0946	1.0083	1.2053 0.9092	1.1151	1.1251	Ave		1.0763			0.5000	9.6		20.0			
1,1,1,2-Tetrachloroethane	0.3899	0.3918	0.3986 0.3949	0.3769	0.3950	Ave		0.3912			0.0100	1.9		20.0			
m-Xylene & p-Xylene	0.9171 0.7702	0.9192 0.6822	0.8686 0.5774	0.8129	0.8138	Ave		0.7952			0.1000	14.8		20.0			
o-Xylene	0.8781 0.7694	0.8906 0.7301	0.8073 0.7027	0.7766	0.7850	Ave		0.7925			0.3000	8.3		20.0			
Styrene	1.2210	1.1251	1.2834 1.0173	1.2134	1.2238	Ave		1.1807			0.3000	8.0		20.0			
Bromoform	0.3656	0.3442	0.3501 0.3470	0.3335	0.3211	Ave		0.3436			0.1000	4.4		20.0			
Isopropylbenzene	3.5854	3.1588	4.1619 +++++	3.9060	3.8145	Ave		3.7253			0.1000	10.1		20.0			
N-Propylbenzene	4.3579	3.6606	5.0376 +++++	4.8569	4.7523	Ave		4.5331			0.0100	12.1		20.0			
Bromobenzene	0.9087	0.8500	0.9902 0.8233	0.8915	0.8689	Ave		0.8888			0.0100	6.5		20.0			
1,1,2,2-Tetrachloroethane	0.6271	0.5572	0.6099 0.5484	0.5677	0.5534	Ave		0.5773			0.3000	5.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,3,5-Trimethylbenzene	3.3392	2.8920	3.9282 +++++	3.7134	3.5561	Ave		3.4858			0.0100	11.4		20.0			
2-Chlorotoluene	3.0153	2.6728	3.3694 2.2759	3.1579	3.0620	Ave		2.9256			0.0100	13.4		20.0			
1,2,3-Trichloropropane	0.6412	0.5980	0.6256 0.5985	0.5528	0.5626	Ave		0.5965			0.0100	5.8		20.0			
trans-1,4-Dichloro-2-butene	0.1275	0.1229	0.1064 0.1299	0.1001	0.0981	Ave		0.1141			0.0100	12.5		20.0			
Cyclohexanone	0.0171	0.0154	0.0205 0.0150	0.0164	0.0166	Ave		0.0168			0.0010	11.6		20.0			
4-Chlorotoluene	2.6639	2.3992	2.8367 2.0572	2.7056	2.7364	Ave		2.5665			0.0100	11.3		20.0			
tert-Butylbenzene	2.7984	2.5211	3.1864 2.1347	3.0175	2.9452	Ave		2.7672			0.0100	13.8		20.0			
1,2,4-Trimethylbenzene	3.2774	2.8796	3.8475 +++++	3.5291	3.4564	Ave		3.3980			0.0100	10.5		20.0			
sec-Butylbenzene	4.1968	3.5201	5.0410 +++++	4.7941	4.5957	Ave		4.4296			0.0100	13.4		20.0			
4-Isopropyltoluene	3.2589	2.8633	3.7656 +++++	3.6514	3.4426	Ave		3.3964			0.0100	10.5		20.0			
1,3-Dichlorobenzene	1.7119	1.5877	1.8682 1.4555	1.7288	1.6975	Ave		1.6749			0.6000	8.4		20.0			
1,4-Dichlorobenzene	1.6803	1.5439	1.8351 1.4154	1.7047	1.6946	Ave		1.6457			0.5000	8.9		20.0			
n-Butylbenzene	3.0959	2.7222	3.7811 +++++	3.4720	3.3474	Ave		3.2837			0.0100	12.2		20.0			
1,2-Dichlorobenzene	1.4602	1.3311	1.5962 1.2473	1.4861	1.4862	Ave		1.4345			0.4000	8.7		20.0			
Nonanal	0.2786	0.2608	0.4118 0.2661	0.3574	0.3199	Lin	-0.065	0.2603			0.0100			20.0	0.9995		
1,2-Dibromo-3-Chloropropane	0.0851	0.0758	0.0888 0.0809	0.0919	0.0896	Ave		0.0853			0.0500	7.1		20.0			
Hexachlorobutadiene	0.5042 0.2913	0.4529 0.2669	0.4377 0.2774	0.3819	0.3443	Lin	-0.052	0.2719			0.0100			20.0	0.9989		
1,2,4-Trichlorobenzene	0.5455	0.4897	0.6845 0.4608	0.6310	0.6010	Ave		0.5687			0.2000	15.1		20.0			
Naphthalene	1.4924 0.8036	1.2865 0.6837	1.1897 0.6718	0.9928	0.9204	Lin	-0.095	0.6609			0.0100			20.0	0.9980		
1,2,3-Trichlorobenzene	0.2957	0.4769 0.2531	0.4449 0.2466	0.4197	0.3807	Qua	-0.099	3.7798	0.3971		0.0100			20.0	0.9982		

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dibromofluoromethane (Surr)	0.2261 0.2469	0.2396 0.2343	0.2336 +++++	0.2529	0.2341	Ave		0.2382			0.0100	3.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.1965 0.2143	0.2090 0.2032	0.1910 +++++	0.2160	0.1991	Ave		0.2042			0.0100	4.6		20.0			
Toluene-d8 (Surr)	1.3159 1.3491	1.3456 1.2513	1.3704 +++++	1.4244	1.3382	Ave		1.3421			0.0100	3.9		20.0			
4-Bromofluorobenzene (Surr)	1.1163 1.1076	1.0231 1.0411	1.0877 +++++	1.1484	1.0727	Ave		1.0853			0.0100	4.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 160-9019/2	ZICL1073.D
Level 2	IC 160-9019/3	ZICL1074.D
Level 3	IC 160-9019/4	ZICL1075.D
Level 4	IC 160-9019/5	ZICL1076.D
Level 5	IC 160-9019/6	ZICL1077.D
Level 6	ICIS 160-9019/7	ZICL1078.D
Level 7	IC 160-9019/8	ZICL1079.D
Level 8	IC 160-9019/9	ZICL1080.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Pentachloroethane	DCB	Ave	0 0	0 0	0 0	0	0	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Dichlorodifluoromethane	FB	LinF	729713	47299 1425137	80447 2834827	153002	304757	50.0	2.50 100	5.00 200	10.0	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	FB	Ave	338519	710372	35296 1430902	69951	135532	50.0	100	5.00 200	10.0	20.0
Chloromethane	FB	Ave	715252	1390618	78637 2721242	148215	282324	50.0	100	5.00 200	10.0	20.0
Vinyl chloride	FB	Ave	16522 734661	44455 1441411	77515 2866769	147735	291453	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Bromomethane	FB	Ave	306269	590433	37398 1165583	68380	130644	50.0	100	5.00 200	10.0	20.0
Chloroethane	FB	Ave	303999	509364	36065 1112247	65600	131761	50.0	100	5.00 200	10.0	20.0
Trichlorofluoromethane	FB	Ave	936918	1777375	92078 3654006	184401	366906	50.0	100	5.00 200	10.0	20.0
Ethyl ether	FB	Ave	593391	1105999	55992 2092278	107093	224392	100	200	10.0 400	20.0	40.0
1,1-Dichloroethene	FB	Ave	556592	1091764	61660 2143050	111202	222499	50.0	100	5.00 200	10.0	20.0
Carbon disulfide	FB	Ave	1777711	3377944	188883 6283766	351539	720460	50.0	100	5.00 200	10.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	477466	924503	48166 1832172	93277	190653	50.0	100	5.00 200	10.0	20.0
Iodomethane	FB	Ave	888405	1748881	93476 3401053	172686	344625	50.0	100	5.00 200	10.0	20.0
Acrolein	FB	Ave	304574	571254	31506 1114767	55146	108826	250	500	25.0 1000	50.0	100
Allyl chloride	FB	Ave	522508	1023976	51733 2002512	97989	205369	50.0	100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methylene Chloride	FB	Ave	597338	1133255	60542 2211491	108213	218627	50.0	100	5.00 200	10.0	20.0
Acetone	FB	Ave	86768	167375	314031	17958	32520	50.0	100	200	10.0	20.0
trans-1,2-Dichloroethene	FB	Ave	649821	41250 1258580	71109 2401783	135014	256839	50.0	2.50 100	5.00 200	10.0	20.0
Methyl acetate	FB	Ave	74061	135543	8470 271367	13266	27263	50.0	100	5.00 200	10.0	20.0
n-Hexane	FB	Ave	166426	320758	17579 626969	32164	65932	50.0	100	5.00 200	10.0	20.0
Methyl tert-butyl ether	FB	Ave	1236448	2279829	120661 4266369	227337	463391	50.0	100	5.00 200	10.0	20.0
Acetonitrile	FB	Ave	166526	323108	16989 648542	33090	58643	250	500	25.0 1000	50.0	100
2-Chloro-1,3-butadiene	FB	Ave	945896	1849115	99828 3487547	192882	382549	50.0	100	5.00 200	10.0	20.0
1,1-Dichloroethane	FB	Ave	1027610	2021746	109733 3809732	202979	423881	50.0	100	5.00 200	10.0	20.0
Acrylonitrile	FB	Ave	639634	1166042	56089 2245551	113843	221875	250	500	25.0 1000	50.0	100
Vinyl acetate	FB	Ave	481122	920968	48502 1795041	83345	166916	50.0	100	5.00 200	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	657503	37089 1259911	67644 2435095	127974	255153	50.0	2.50 100	5.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	754160	1434979	84208 2694724	155361	309087	50.0	100	5.00 200	10.0	20.0
Bromochloromethane	FB	Ave	266370	510458	26646 970519	53058	103870	50.0	100	5.00 200	10.0	20.0
Cyclohexane	FB	Ave	992187	1879327	108900 3541781	203698	391166	50.0	100	5.00 200	10.0	20.0
Chloroform	FB	Ave	991305	57261 1856183	109547 3516583	191084	376716	50.0	2.50 100	5.00 200	10.0	20.0
Ethyl acetate	FB	Ave	94023	179209	9142 342761	15679	32110	100	200	10.0 400	20.0	40.0
Carbon tetrachloride	FB	Ave	815118	1578810	88836 3051820	166809	324716	50.0	100	5.00 200	10.0	20.0
Tetrahydrofuran	FB	Ave	188562	345456	19575 657428	34039	66643	250	500	25.0 1000	50.0	100
1,1,1-Trichloroethane	FB	Ave	890210	1722678	92511 3280909	178403	349418	50.0	100	5.00 200	10.0	20.0
2-Butanone (MEK)	FB	Ave	147817	273717	12528 538226	23334	52158	50.0	100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,1-Dichloropropene	FB	Ave	855501	1653011	96449 3168905	169844	348684	50.0	100	5.00 200	10.0	20.0
Benzene	FB	Ave	60255 2403294	151061 4340511	263412 +++++	497374	997537	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0
Propionitrile	FB	Ave	217306	397272	21271 726266	37310	70088	250	500	25.0 1000	50.0	100
Methacrylonitrile	FB	Ave	970496	1770994	99261 3238983	169865	362672	250	500	25.0 1000	50.0	100
Isobutanol	FB	Ave	271043	493559	27358 977911	46114	89652	1000	2000	100 4000	200	400
1,2-Dichloroethane	FB	Ave	598199	31518 1152868	59108 2214906	111098	227102	50.0	2.50 100	5.00 200	10.0	20.0
Methylcyclohexane	FB	Ave	735996	1402825	81935 2551735	149120	297231	50.0	100	5.00 200	10.0	20.0
Trichloroethene	FB	Ave	612859	35660 1174802	64686 2184538	123891	247800	50.0	2.50 100	5.00 200	10.0	20.0
1-Butanol	FB	Ave	87079	159898	10105 320347	15280	30156	500	1000	50.0 2000	100	200
Dibromomethane	FB	Ave	265493	490995	26074 960217	45014	93803	50.0	100	5.00 200	10.0	20.0
1,2-Dichloropropane	FB	Ave	585343	1130277	60689 2106218	115465	233411	50.0	100	5.00 200	10.0	20.0
Bromodichloromethane	FB	Ave	689854	1337115	71874 2548782	129404	270937	50.0	100	5.00 200	10.0	20.0
Methyl methacrylate	FB	Ave	289275	536433	28669 1037066	49566	101902	50.0	100	5.00 200	10.0	20.0
1,4-Dioxane	FB	Ave	55484	108481	4765 221738	9036	20468	1000	2000	100 4000	200	400
2-Chloroethyl vinyl ether	FB	Lin	123681	263884	8713 616881	19084	38470	50.0	100	5.00 200	10.0	20.0
cis-1,3-Dichloropropene	FB	Ave	877915	1699093	88643 3156677	165819	340607	50.0	100	5.00 200	10.0	20.0
Toluene	CBZ	Ave	35896 1563953	94453 2853690	164961 4934036	319348	641777	1.00 50.0	2.50 100	5.00 200	10.0	20.0
2-Nitropropane	CBZ	Ave	188777	342072	17091 697725	30999	66343	100	200	10.0 400	20.0	40.0
4-Methyl-2-pentanone (MIBK)	CBZ	Ave	337912	613929	31517 1197518	58521	120189	50.0	100	5.00 200	10.0	20.0
trans-1,3-Dichloropropene	CBZ	Ave	670255	1246938	62296 2329257	119889	248028	50.0	100	5.00 200	10.0	20.0
Tetrachloroethene	CBZ	Ave	513607	30037 980018	55309 1837468	101652	208485	50.0	2.50 100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Ethyl methacrylate	CBZ	Ave	613252	1102131	57760 2094479	106832	217499	50.0	100	5.00 200	10.0	20.0
1,1,2-Trichloroethane	CBZ	Ave	342520	639477	35884 1242140	63059	125792	50.0	100	5.00 200	10.0	20.0
Dibromochloromethane	CBZ	Ave	467097	905244	44325 1733078	86125	174178	50.0	100	5.00 200	10.0	20.0
1,3-Dichloropropane	CBZ	Ave	740243	1391615	75178 2612765	138797	280492	50.0	100	5.00 200	10.0	20.0
1,2-Dibromoethane (EDB)	CBZ	Ave	404311	774159	39548 1507984	71444	154667	50.0	100	5.00 200	10.0	20.0
2-Hexanone	CBZ	Ave	227189	413406	21654 791736	36212	79781	50.0	100	5.00 200	10.0	20.0
Ethylbenzene	CBZ	Ave	75777 2824277	184930 4806743	333801 +++++	609364	1225380	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0
Chlorobenzene	CBZ	Ave	1656097	2966981	186410 4959211	339157	692358	50.0	100	5.00 200	10.0	20.0
1,1,1,2-Tetrachloroethane	CBZ	Ave	589951	1152986	61643 2154037	114620	243080	50.0	100	5.00 200	10.0	20.0
m-Xylene & p-Xylene	CBZ	Ave	56725 2330596	144272 4014955	268662 6299368	494485	1001537	2.00 100	5.00 200	10.0 400	20.0	40.0
o-Xylene	CBZ	Ave	27157 1164012	69890 2148358	124854 3832775	236185	483081	1.00 50.0	2.50 100	5.00 200	10.0	20.0
Styrene	CBZ	Ave	1847300	3310643	198488 5549157	369049	753088	50.0	100	5.00 200	10.0	20.0
Bromoform	DCB	Ave	258228	483811	24893 945940	46808	91665	50.0	100	5.00 200	10.0	20.0
Isopropylbenzene	DCB	Ave	2532344	4440568	295961 +++++	548144	1088984	50.0	100	5.00 +++++	10.0	20.0
N-Propylbenzene	DCB	Ave	3077974	5146091	358234 +++++	681592	1356706	50.0	100	5.00 +++++	10.0	20.0
Bromobenzene	DCB	Ave	641815	1194965	70412 2244472	125103	248061	50.0	100	5.00 200	10.0	20.0
1,1,2,2-Tetrachloroethane	DCB	Ave	442887	783245	43374 1495222	79668	157986	50.0	100	5.00 200	10.0	20.0
1,3,5-Trimethylbenzene	DCB	Ave	2358489	4065521	279342 +++++	521123	1015226	50.0	100	5.00 +++++	10.0	20.0
2-Chlorotoluene	DCB	Ave	2129705	3757460	239604 6204840	443166	874155	50.0	100	5.00 200	10.0	20.0
1,2,3-Trichloropropane	DCB	Ave	452866	840679	44487 1631645	77582	160627	50.0	100	5.00 200	10.0	20.0
trans-1,4-Dichloro-2-butene	DCB	Ave	90076	172761	7564 354151	14049	27998	50.0	100	5.00 200	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Cyclohexanone	DCB	Ave	120757	215790	14576 410192	22998	47486	500	1000	50.0 2000	100	200
4-Chlorotoluene	DCB	Ave	1881501	3372837	201723 5608539	379685	781216	50.0	100	5.00 200	10.0	20.0
tert-Butylbenzene	DCB	Ave	1976515	3544096	226590 5819946	423456	840802	50.0	100	5.00 200	10.0	20.0
1,2,4-Trimethylbenzene	DCB	Ave	2314840	4048142	273602 +++++	495258	986744	50.0	100	5.00 +++++	10.0	20.0
sec-Butylbenzene	DCB	Ave	2964232	4948583	358476 +++++	672781	1312018	50.0	100	5.00 +++++	10.0	20.0
4-Isopropyltoluene	DCB	Ave	2301758	4025159	267779 +++++	512421	982827	50.0	100	5.00 +++++	10.0	20.0
1,3-Dichlorobenzene	DCB	Ave	1209104	2232017	132848 3968204	242609	484608	50.0	100	5.00 200	10.0	20.0
1,4-Dichlorobenzene	DCB	Ave	1186827	2170378	130498 3858723	239230	483796	50.0	100	5.00 200	10.0	20.0
n-Butylbenzene	DCB	Ave	2186642	3826876	268882 +++++	487244	955630	50.0	100	5.00 +++++	10.0	20.0
1,2-Dichlorobenzene	DCB	Ave	1031329	1871274	113507 3400553	208555	424289	50.0	100	5.00 200	10.0	20.0
Nonanal	DCB	Lin	196752	366697	29287 725383	50157	91336	50.0	100	5.00 200	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCB	Ave	60079	106584	6318 220528	12892	25575	50.0	100	5.00 200	10.0	20.0
Hexachlorobutadiene	DCB	Lin	7293 205760	16736 375232	31124 756243	53599	98288	1.00 50.0	2.50 100	5.00 200	10.0	20.0
1,2,4-Trichlorobenzene	DCB	Ave	385273	688438	48678 1256227	88547	171577	50.0	100	5.00 200	10.0	20.0
Naphthalene	DCB	Lin	21587 567560	47537 961156	84600 1831588	139328	262754	1.00 50.0	2.50 100	5.00 200	10.0	20.0
1,2,3-Trichlorobenzene	DCB	Qua	208847	17622 355776	31639 672334	58904	108674	50.0	2.50 100	5.00 200	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	9686 525501	26345 1018822	49845 +++++	106001	201326	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	8419 456164	22983 883368	40764 +++++	90528	171245	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0
Toluene-d8 (Surr)	CBZ	Ave	40695 2041199	105603 3682017	211930 +++++	433214	823499	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0
4-Bromofluorobenzene (Surr)	DCB	Ave	16147 782332	37802 1463593	77350 +++++	161166	306236	1.00 50.0	2.50 100	5.00 +++++	10.0	20.0

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9019

SDG No.:

Instrument ID: MSZ GC Column: RTX-VMS40 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 08/13/2012 07:37 Calibration End Date: 08/13/2012 10:22 Calibration ID: 759

Curve Type Legend:

Ave = Average ISTD
Lin = Linear ISTD
LinF = Linear ISTD forced zero
Qua = Quadratic ISTD

Data File: ZICL1073.D
Report Date: 13-Aug-2012 23:58

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1073.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 07:37
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD001
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 09:35 Cal File: ZICL1078.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.989	2.989	(0.335)	18451	1.00000	1.304
2	Freon-114	135	3.226	3.226	(0.362)	7274	1.00000	1.041
3	Chloromethane	50	3.310	3.310	(0.372)	17267	1.00000	1.195
4	Vinyl Chloride	62	3.478	3.478	(0.390)	16522	1.00000	1.081
5	Bromomethane	94	4.064	4.064	(0.456)	9827	1.00000	1.520
6	Chloroethane	64	4.302	4.302	(0.483)	8853	1.00000	1.428
7	Trichlorofluoromethane	101	4.539	4.539	(0.509)	22149	1.00000	1.206
8	Diethyl ether	74	5.042	5.042	(0.566)	12435	2.00000	2.239
9	1,1-Dichloroethene	96	5.349	5.349	(0.600)	13639	1.00000	1.213
10	Carbon Disulfide	76	5.391	5.391	(0.605)	41012	1.00000	1.171
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	10682	1.00000	1.133
M 26	1,2-Dichloroethene (total)	96				31538	2.00000	2.377
13	Acrolein	56	5.824	5.824	(0.654)	7282	5.00000	6.295
14	Allyl chloride	39	6.005	6.005	(0.674)	11835	1.00000	1.160
15	Methylene Chloride	84	6.145	6.145	(0.690)	13561	1.00000	1.191
17	trans-1,2-Dichloroethene	96	6.355	6.355	(0.713)	14574	1.00000	1.081
18	Methyl Acetate	74	6.369	6.369	(0.715)	1986	1.00000	1.386
19	n-Hexane	86	6.452	6.452	(0.724)	4178	1.00000	1.270
20	MTBE	73	6.480	6.480	(0.727)	26532	1.00000	1.144
21	Acetonitrile	41	6.802	6.802	(0.763)	5783	5.00000	8.904

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.053	7.053	(0.792)	23898	1.00000	1.264
	23 1,1-Dichloroethane	63	7.095	7.095	(0.796)	24782	1.00000	1.204
	24 Acrylonitrile	53	7.151	7.151	(0.803)	10054	5.00000	4.339
	25 Vinyl acetate	43	7.346	7.346	(0.824)	8744	1.00000	0.9665
	27 cis-1,2-Dichloroethene	96	7.667	7.667	(0.861)	16964	1.00000	1.296
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	18725	1.00000	1.235
	30 Bromochloromethane	128	7.891	7.891	(0.886)	5964	1.00000	1.148
	29 Cyclohexane	84	7.891	7.891	(0.886)	22736	1.00000	1.153
	31 Chloroform	83	7.933	7.933	(0.890)	25260	1.00000	1.278
	32 Carbon Tetrachloride	117	8.100	8.100	(0.909)	18695	1.00000	1.142
	34 Tetrahydrofuran	71	8.114	8.114	(0.911)	4413	5.00000	6.243
$	35 Dibromofluoromethane (surr)	113	8.128	8.128	(0.912)	9686	1.00000	0.9490
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	20890	1.00000	1.188
	37 2-Butanone	43	8.240	8.240	(0.925)	2788	1.00000	1.055
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	18368	1.00000	1.066
	40 Benzene	78	8.533	8.533	(0.958)	60255	1.00000	1.160
	41 Propionitrile	54	8.547	8.547	(0.959)	4178	5.00000	5.337
	42 Methacrylonitrile	41	8.561	8.561	(0.961)	20398	5.00000	5.640
	45 Isobutanol	43	8.659	8.659	(0.972)	4848	20.0000	19.48
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	8419	1.00000	0.9625
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	12521	1.00000	1.078
*	46 Fluorobenzene	96	8.910	8.910	(1.000)	2142304	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	17688	1.00000	1.208
	48 Trichloroethene	95	9.078	9.078	(1.019)	16682	1.00000	1.347
	49 n-Butanol	56	9.302	9.302	(1.044)	2824	10.0000	16.91
	50 Dibromomethane	93	9.483	9.483	(1.064)	5391	1.00000	1.097
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	11778	1.00000	1.024
	52 Bromodichloromethane	83	9.609	9.609	(1.078)	13380	1.00000	0.9920
	53 Methyl methacrylate	69	9.707	9.707	(1.089)	6425	1.00000	1.198
	54 1,4-Dioxane	88	9.776	9.776	(1.097)	1386	20.0000	26.86
	55 2-Chloroethylvinyl ether	63	10.098	10.098	(1.133)	2734	1.00000	8.054
	56 cis-1,3-Dichloropropene	75	10.181	10.181	(1.143)	16800	1.00000	0.9895
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	40695	1.00000	0.9804
	58 Toluene	92	10.405	10.405	(0.884)	35896	1.00000	1.101
	59 2-Nitropropane	43	10.614	10.614	(0.902)	3811	2.00000	2.146
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	7294	1.00000	1.138
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	11286	1.00000	1.054
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	13130	1.00000	1.021
	65 Ethyl methacrylate	69	10.838	10.838	(0.921)	10226	1.00000	0.8849
	64 1,1,2-Trichloroethane	83	10.908	10.908	(0.926)	7851	1.00000	1.158
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	9146	1.00000	0.9930
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	15928	1.00000	1.088
	68 1,2-Dibromoethane	107	11.341	11.341	(0.963)	7427	1.00000	0.9304
	69 2-Hexanone	43	11.452	11.452	(0.973)	4236	1.00000	0.9967
*	70 Chlorobenzene-d5	117	11.774	11.774	(1.000)	1546284	50.0000	
	72 Ethylbenzene	91	11.787	11.787	(1.001)	75777	1.00000	1.186
	71 Chlorobenzene	112	11.787	11.787	(1.001)	39809	1.00000	1.196
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.829	(1.005)	12719	1.00000	1.051
	74 m,p-Xylenes	106	11.899	11.899	(1.011)	56725	2.00000	2.307
	75 o-Xylene	106	12.318	12.318	(1.046)	27157	1.00000	1.108
	76 Styrene	104	12.360	12.360	(1.050)	43401	1.00000	1.189
	77 Bromoform	173	12.416	12.416	(0.890)	4402	1.00000	0.8858
	78 Isopropylbenzene	105	12.584	12.584	(0.902)	63728	1.00000	1.183
$	79 4-Bromofluorobenzene (surr)	95	12.877	12.877	(0.923)	16147	1.00000	1.028

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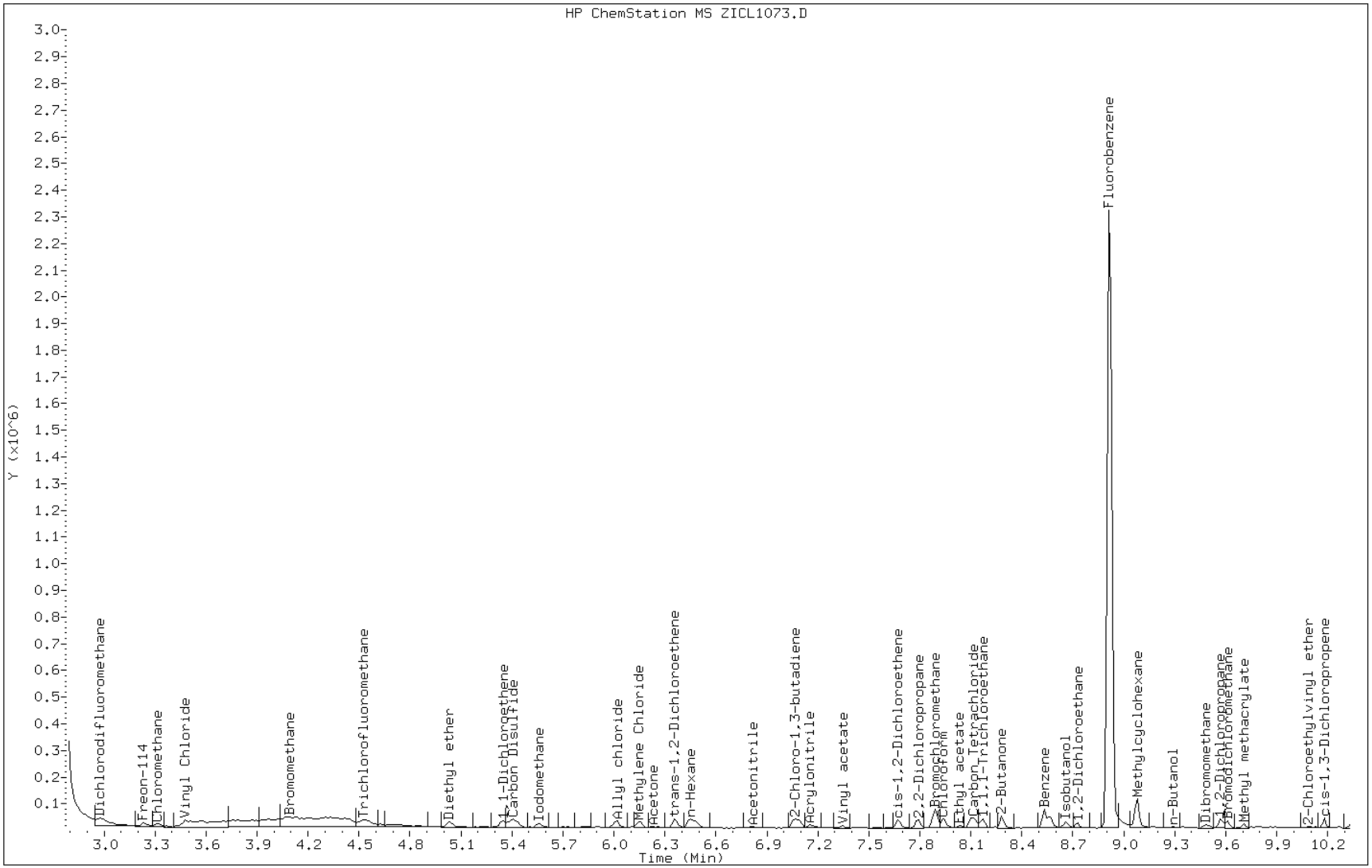
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
81	n-Propylbenzene	91	12.975	12.975	(0.930)	77535	1.00000	1.182
80	Bromobenzene	156	13.003	13.003	(0.932)	15110	1.00000	1.175
82	1,1,2,2-Tetrachloroethane	83	13.030	13.030	(0.934)	9022	1.00000	1.080
84	1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	56089	1.00000	1.112
83	2-Chlorotoluene	91	13.156	13.156	(0.943)	49952	1.00000	1.180
85	1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	10139	1.00000	1.175
86	trans-1,4-dichloro-2-butene	53	13.198	13.198	(0.946)	2062	1.00000	1.249
87	Cyclohexanone	55	13.268	13.268	(0.951)	4035	10.0000	16.57
88	4-Chlorotoluene	91	13.310	13.310	(0.954)	43513	1.00000	1.172
89	t-Butylbenzene	119	13.463	13.463	(0.965)	46090	1.00000	1.151
91	1,2,4-Trimethylbenzene	105	13.519	13.519	(0.969)	64381	1.00000	1.310
92	sec-Butylbenzene	105	13.631	13.631	(0.977)	77694	1.00000	1.212
93	4-Isopropyltoluene	119	13.757	13.757	(0.986)	57921	1.00000	1.179
94	1,3-Dichlorobenzene	146	13.882	13.882	(0.995)	28559	1.00000	1.179
* 95	1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	723236	50.0000	
96	1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	28761	1.00000	1.208
98	n-Butylbenzene	91	14.162	14.162	(1.015)	53727	1.00000	1.131
99	1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	21775	1.00000	1.049
100	1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	1648	1.00000	1.335
104	1,2,4-Trichlorobenzene	180	15.852	15.852	(1.136)	10862	1.00000	1.320
M 107	Xylenes (total)	106				83882	3.00000	3.415

Data File: ZICL1073.D

Date: 13-AUG-2012 07:37

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB

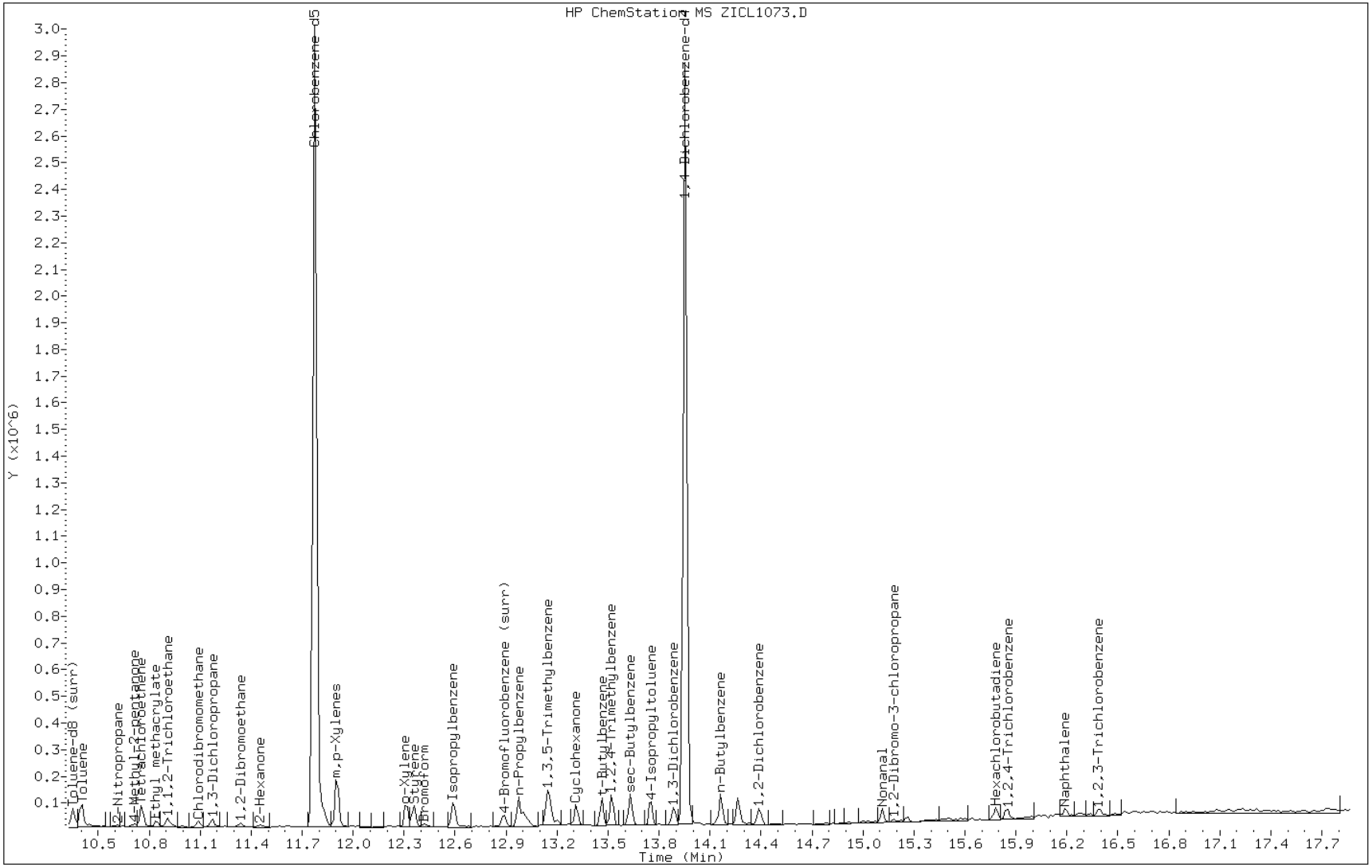


Data File: ZICL1073.D

Date: 13-AUG-2012 07:37

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1074.D
Report Date: 13-Aug-2012 23:58

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1074.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 08:00
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD002.5
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 07:37 Cal File: ZICL1073.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.990	2.990	(0.336)	47299	2.50000	3.255
2	Freon-114	135	3.228	3.228	(0.362)	20531	2.50000	2.861
3	Chloromethane	50	3.311	3.311	(0.372)	41493	2.50000	2.798
4	Vinyl Chloride	62	3.479	3.479	(0.390)	44455	2.50000	2.832
5	Bromomethane	94	4.066	4.066	(0.456)	21095	2.50000	3.177
6	Chloroethane	64	4.303	4.303	(0.483)	19524	2.50000	3.068
7	Trichlorofluoromethane	101	4.540	4.540	(0.510)	54853	2.50000	2.909
8	Diethyl ether	74	5.029	5.029	(0.564)	31508	5.00000	5.526
9	1,1-Dichloroethene	96	5.351	5.351	(0.600)	32013	2.50000	2.773
10	Carbon Disulfide	76	5.392	5.392	(0.605)	110939	2.50000	3.085
11	1,1,2-Trichlorofluoroethane	151	5.434	5.434	(0.610)	26899	2.50000	2.779
12	Iodomethane	142	5.560	5.560	(0.624)	51521	2.50000	2.850
M 26	1,2-Dichloroethene (total)	96				78339	5.00000	5.740
13	Acrolein	56	5.839	5.839	(0.655)	14672	12.5000	12.35
14	Allyl chloride	39	6.021	6.021	(0.676)	31877	2.50000	3.043
15	Methylene Chloride	84	6.147	6.147	(0.690)	33023	2.50000	2.825
17	trans-1,2-Dichloroethene	96	6.356	6.356	(0.713)	41250	2.50000	2.979
18	Methyl Acetate	74	6.370	6.370	(0.715)	2875	2.50000	1.955
19	n-Hexane	86	6.454	6.454	(0.724)	8943	2.50000	2.648
20	MTBE	73	6.482	6.482	(0.727)	67799	2.50000	2.847

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	21 Acetonitrile	41	6.803	6.803	(0.763)	9467	12.5000	14.20
	22 2-Chloro-1,3-butadiene	53	7.068	7.068	(0.793)	55075	2.50000	2.837
	23 1,1-Dichloroethane	63	7.096	7.096	(0.796)	59088	2.50000	2.796
	24 Acrylonitrile	53	7.152	7.152	(0.803)	28104	12.5000	11.81
	25 Vinyl acetate	43	7.348	7.348	(0.824)	23065	2.50000	2.483
	27 cis-1,2-Dichloroethene	96	7.669	7.669	(0.861)	37089	2.50000	2.760
	28 2,2-Dichloropropane	77	7.795	7.795	(0.875)	43332	2.50000	2.785
	30 Bromochloromethane	128	7.878	7.878	(0.884)	15933	2.50000	2.986
	29 Cyclohexane	84	7.892	7.892	(0.886)	61119	2.50000	3.019
	31 Chloroform	83	7.934	7.934	(0.890)	57261	2.50000	2.821
	33 Ethyl acetate	45	8.032	8.032	(0.901)	5316	5.00000	5.972
	32 Carbon Tetrachloride	117	8.102	8.102	(0.909)	46687	2.50000	2.777
	34 Tetrahydrofuran	71	8.116	8.116	(0.911)	10477	12.5000	14.44
$	35 Dibromofluoromethane (surr)	113	8.130	8.130	(0.912)	26345	2.50000	2.514
	36 1,1,1-Trichloroethane	97	8.172	8.172	(0.917)	51648	2.50000	2.862
	37 2-Butanone	43	8.241	8.241	(0.925)	7656	2.50000	2.822
	39 1,1-Dichloropropene	75	8.283	8.283	(0.929)	50243	2.50000	2.840
	40 Benzene	78	8.535	8.535	(0.958)	151061	2.50000	2.832
	41 Propionitrile	54	8.549	8.549	(0.959)	10779	12.5000	13.41
	42 Methacrylonitrile	41	8.563	8.563	(0.961)	48746	12.5000	13.13
	45 Isobutanol	43	8.660	8.660	(0.972)	15832	50.0000	61.96
$	43 1,2-Dichloroethane-d4 (surr)	65	8.660	8.660	(0.972)	22983	2.50000	2.559
	44 1,2-Dichloroethane	62	8.730	8.730	(0.980)	31518	2.50000	2.644
*	46 Fluorobenzene	96	8.912	8.912	(1.000)	2199458	50.0000	
	47 Methylcyclohexane	55	9.079	9.079	(1.019)	45807	2.50000	3.047
	48 Trichloroethene	95	9.079	9.079	(1.019)	35660	2.50000	2.804
	49 n-Butanol	56	9.303	9.303	(1.044)	5234	25.0000	30.53
	50 Dibromomethane	93	9.484	9.484	(1.064)	13316	2.50000	2.640
	51 1,2-Dichloropropane	63	9.568	9.568	(1.074)	32231	2.50000	2.728
	52 Bromodichloromethane	83	9.610	9.610	(1.078)	39881	2.50000	2.880
	53 Methyl methacrylate	69	9.708	9.708	(1.089)	15170	2.50000	2.755
	54 1,4-Dioxane	88	9.778	9.778	(1.097)	2560	50.0000	48.33
	55 2-Chloroethylvinyl ether	63	10.085	10.085	(1.132)	5321	2.50000	8.840
	56 cis-1,3-Dichloropropene	75	10.183	10.183	(1.143)	46505	2.50000	2.668
$	57 Toluene-d8 (surr)	98	10.350	10.350	(0.879)	105603	2.50000	2.506
	58 Toluene	92	10.406	10.406	(0.884)	94453	2.50000	2.855
	59 2-Nitropropane	43	10.616	10.616	(0.902)	11839	5.00000	6.567
	62 4-Methyl-2-pentanone	43	10.700	10.700	(0.909)	16840	2.50000	2.589
	60 Tetrachloroethene	164	10.755	10.755	(0.913)	30037	2.50000	2.765
	63 trans-1,3-Dichloropropene	75	10.755	10.755	(0.913)	38330	2.50000	2.938
	65 Ethyl methacrylate	69	10.839	10.839	(0.921)	31730	2.50000	2.705
	64 1,1,2-Trichloroethane	83	10.909	10.909	(0.926)	18767	2.50000	2.727
	66 Chlorodibromomethane	129	11.091	11.091	(0.942)	24917	2.50000	2.665
	67 1,3-Dichloropropane	76	11.174	11.174	(0.949)	40937	2.50000	2.756
	68 1,2-Dibromoethane	107	11.328	11.328	(0.962)	21513	2.50000	2.655
	69 2-Hexanone	43	11.454	11.454	(0.973)	11343	2.50000	2.629
*	70 Chlorobenzene-d5	117	11.775	11.775	(1.000)	1569560	50.0000	
	72 Ethylbenzene	91	11.775	11.775	(1.000)	184930	2.50000	2.852
	71 Chlorobenzene	112	11.789	11.789	(1.001)	101729	2.50000	3.011
	73 1,1,1,2-Tetrachloroethane	131	11.831	11.831	(1.005)	35257	2.50000	2.871
	74 m,p-Xylenes	106	11.901	11.901	(1.011)	144272	5.00000	5.780
	75 o-Xylene	106	12.320	12.320	(1.046)	69890	2.50000	2.809
	76 Styrene	104	12.362	12.362	(1.050)	110363	2.50000	2.978
	77 Bromoform	173	12.417	12.417	(0.890)	12501	2.50000	2.462

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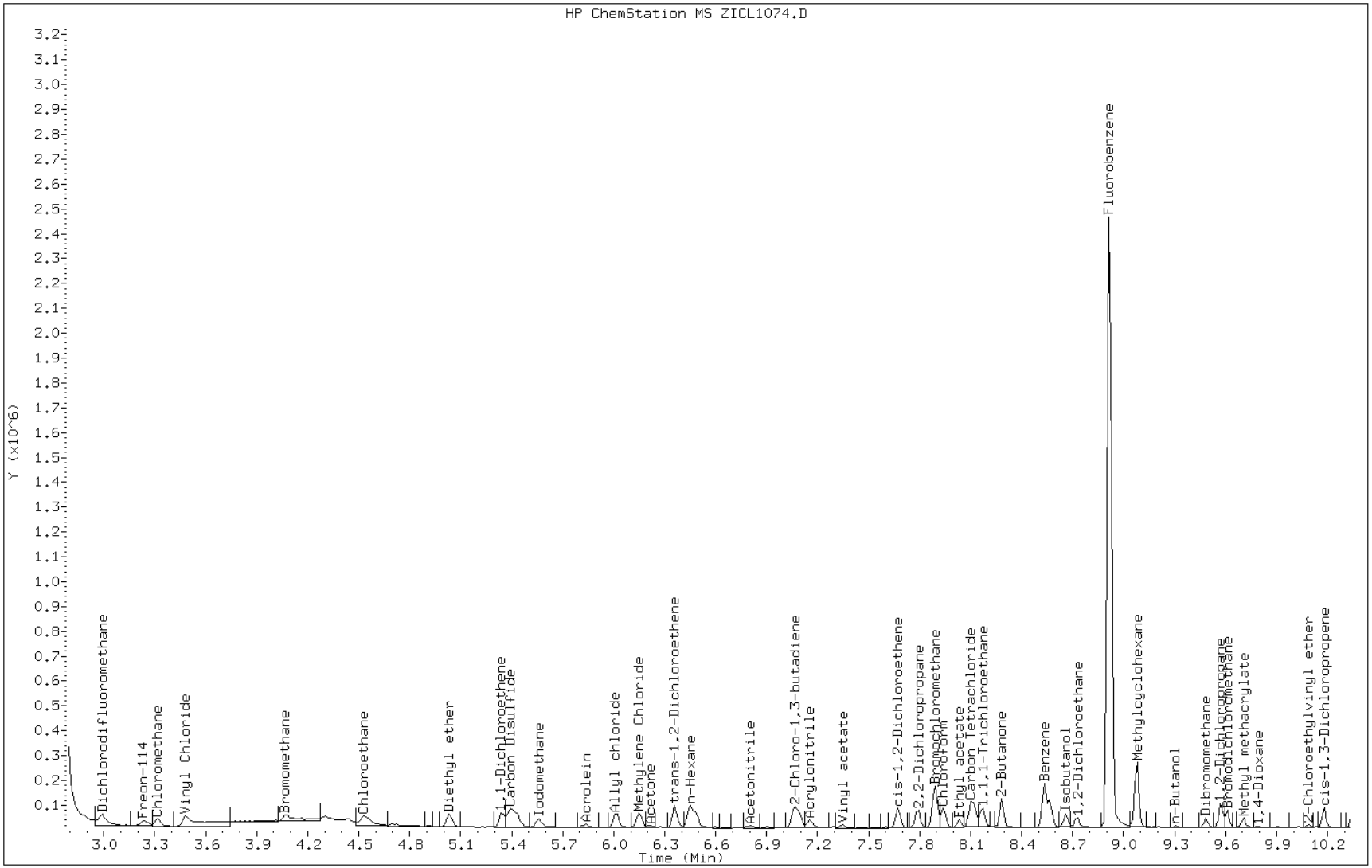
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	78 Isopropylbenzene	105	12.585	12.585	(0.902)	159897	2.50000	2.904
$	79 4-Bromofluorobenzene (surr)	95	12.878	12.878	(0.923)	37802	2.50000	2.357
	81 n-Propylbenzene	91	12.976	12.976	(0.930)	208032	2.50000	3.105
	80 Bromobenzene	156	13.004	13.004	(0.932)	35712	2.50000	2.719
	82 1,1,2,2-Tetrachloroethane	83	13.032	13.032	(0.934)	24200	2.50000	2.836
	84 1,3,5-Trimethylbenzene	105	13.144	13.144	(0.942)	146290	2.50000	2.840
	83 2-Chlorotoluene	91	13.158	13.158	(0.943)	131579	2.50000	3.043
	85 1,2,3-Trichloropropane	75	13.199	13.199	(0.946)	22804	2.50000	2.587
	86 trans-1,4-dichloro-2-butene	53	13.199	13.199	(0.946)	4279	2.50000	2.536
	87 Cyclohexanone	55	13.269	13.269	(0.951)	7591	25.0000	30.51
	88 4-Chlorotoluene	91	13.311	13.311	(0.954)	116637	2.50000	3.075
	89 t-Butylbenzene	119	13.465	13.465	(0.965)	125575	2.50000	3.070
	91 1,2,4-Trimethylbenzene	105	13.521	13.521	(0.969)	146468	2.50000	2.916
	92 sec-Butylbenzene	105	13.632	13.632	(0.977)	198163	2.50000	3.027
	93 4-Isopropyltoluene	119	13.744	13.744	(0.985)	149802	2.50000	2.984
	94 1,3-Dichlorobenzene	146	13.884	13.884	(0.995)	70917	2.50000	2.865
*	95 1,4 Dichlorobenzene-d4	152	13.954	13.954	(1.000)	738994	50.0000	
	96 1,4-Dichlorobenzene	146	13.968	13.968	(1.001)	71510	2.50000	2.940
	98 n-Butylbenzene	91	14.163	14.163	(1.015)	147258	2.50000	3.034
	99 1,2-Dichlorobenzene	146	14.387	14.387	(1.031)	63351	2.50000	2.988
	145 Nonanal	57	15.113	15.113	(1.083)	18561	2.50000	1.586
	100 1,2-Dibromo-3-chloropropane	157	15.183	15.183	(1.088)	3803	2.50000	3.015
	101 Hexachlorobutadiene	225	15.783	15.783	(1.131)	16736	2.50000	1.575
	104 1,2,4-Trichlorobenzene	180	15.853	15.853	(1.136)	26949	2.50000	3.206
M	107 Xylenes (total)	106				214162	7.50000	8.589

Data File: ZICL1074.D

Date: 13-AUG-2012 08:00

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB

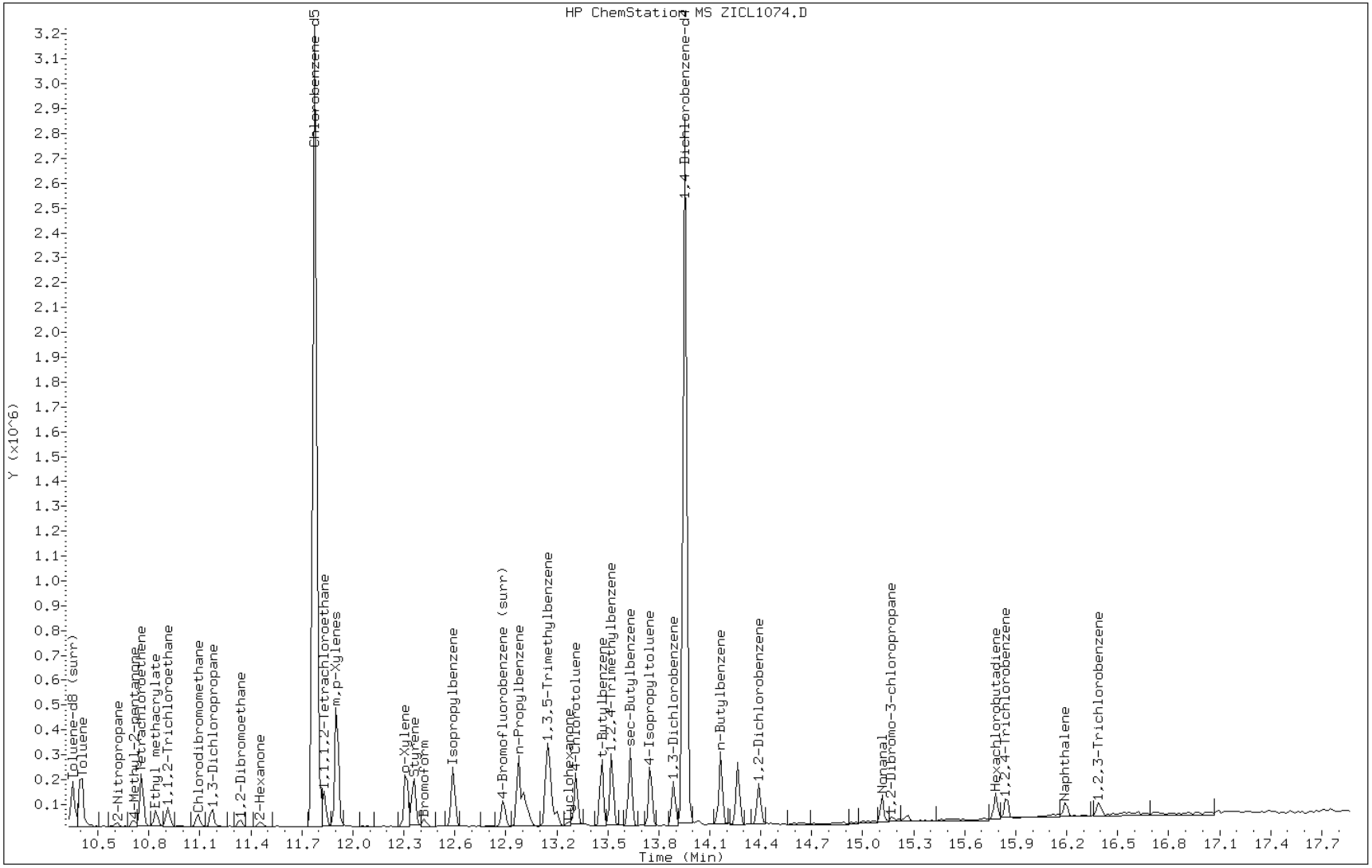


Data File: ZICL1074.D

Date: 13-AUG-2012 08:00

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1075.D
Report Date: 13-Aug-2012 23:58

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1075.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 08:24
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD005
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 08:00 Cal File: ZICL1074.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.988	2.988	(0.335)	80447	5.00000	5.706
2	Freon-114	135	3.225	3.225	(0.361)	35296	5.00000	5.070
3	Chloromethane	50	3.309	3.309	(0.371)	78637	5.00000	5.466
4	Vinyl Chloride	62	3.477	3.477	(0.390)	77515	5.00000	5.090
5	Bromomethane	94	4.063	4.063	(0.455)	37398	5.00000	5.806
6	Chloroethane	64	4.301	4.301	(0.482)	36065	5.00000	5.841
7	Trichlorofluoromethane	101	4.524	4.524	(0.507)	92078	5.00000	5.033
8	Diethyl ether	74	5.041	5.041	(0.565)	55992	10.0000	10.12
9	1,1-Dichloroethene	96	5.348	5.348	(0.599)	61660	5.00000	5.504
10	Carbon Disulfide	76	5.390	5.390	(0.604)	188883	5.00000	5.414
11	1,1,2-Trichlorofluoroethane	151	5.418	5.418	(0.607)	48166	5.00000	5.130
12	Iodomethane	142	5.558	5.558	(0.623)	93476	5.00000	5.329
M 26	1,2-Dichloroethene (total)	96				138753	10.0000	10.48
13	Acrolein	56	5.823	5.823	(0.653)	31506	25.0000	27.34
14	Allyl chloride	39	6.018	6.018	(0.674)	51733	5.00000	5.090
15	Methylene Chloride	84	6.144	6.144	(0.689)	60542	5.00000	5.338
16	Acetone	43	6.214	6.214	(0.696)	11766	5.00000	7.017
17	trans-1,2-Dichloroethene	96	6.354	6.354	(0.712)	71109	5.00000	5.294
18	Methyl Acetate	74	6.382	6.382	(0.715)	8470	5.00000	5.937
19	n-Hexane	86	6.451	6.451	(0.723)	17579	5.00000	5.365

Data File: ZICL1075.D
Report Date: 13-Aug-2012 23:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.479	6.479	(0.726)	120661	5.00000	5.223
	21 Acetonitrile	41	6.801	6.801	(0.762)	16989	25.0000	26.26
	22 2-Chloro-1,3-butadiene	53	7.066	7.066	(0.792)	99828	5.00000	5.300
	23 1,1-Dichloroethane	63	7.094	7.094	(0.795)	109733	5.00000	5.352
	24 Acrylonitrile	53	7.150	7.150	(0.801)	56089	25.0000	24.30
	25 Vinyl acetate	43	7.345	7.345	(0.823)	48502	5.00000	5.382
	27 cis-1,2-Dichloroethene	96	7.666	7.666	(0.859)	67644	5.00000	5.189
	28 2,2-Dichloropropane	77	7.792	7.792	(0.873)	84208	5.00000	5.578
	30 Bromochloromethane	128	7.890	7.890	(0.884)	26646	5.00000	5.148
	29 Cyclohexane	84	7.890	7.890	(0.884)	108900	5.00000	5.544
	31 Chloroform	83	7.946	7.946	(0.890)	109547	5.00000	5.564
	33 Ethyl acetate	45	8.030	8.030	(0.900)	9142	10.0000	10.58
	32 Carbon Tetrachloride	117	8.099	8.099	(0.908)	88836	5.00000	5.447
	34 Tetrahydrofuran	71	8.113	8.113	(0.909)	19575	25.0000	27.80
$	35 Dibromofluoromethane (surr)	113	8.127	8.127	(0.911)	49845	5.00000	4.903
	36 1,1,1-Trichloroethane	97	8.169	8.169	(0.915)	92511	5.00000	5.284
	37 2-Butanone	43	8.239	8.239	(0.923)	12528	5.00000	4.760
	39 1,1-Dichloropropene	75	8.281	8.281	(0.928)	96449	5.00000	5.619
	40 Benzene	78	8.532	8.532	(0.956)	263412	5.00000	5.090
	41 Propionitrile	54	8.546	8.546	(0.958)	21271	25.0000	27.28
	42 Methacrylonitrile	41	8.560	8.560	(0.959)	99261	25.0000	27.56
	45 Isobutanol	43	8.658	8.658	(0.970)	27358	100.000	110.4
$	43 1,2-Dichloroethane-d4 (surr)	65	8.658	8.658	(0.970)	40764	5.00000	4.679
	44 1,2-Dichloroethane	62	8.728	8.728	(0.978)	59108	5.00000	5.112
*	46 Fluorobenzene	96	8.923	8.923	(1.000)	2133821	50.0000	
	47 Methylcyclohexane	55	9.077	9.077	(1.017)	81935	5.00000	5.618
	48 Trichloroethene	95	9.077	9.077	(1.017)	64686	5.00000	5.244
	49 n-Butanol	56	9.300	9.300	(1.042)	10105	50.0000	60.76
	50 Dibromomethane	93	9.482	9.482	(1.063)	26074	5.00000	5.328
	51 1,2-Dichloropropane	63	9.566	9.566	(1.072)	60689	5.00000	5.296
	52 Bromodichloromethane	83	9.608	9.608	(1.077)	71874	5.00000	5.350
	53 Methyl methacrylate	69	9.705	9.705	(1.088)	28669	5.00000	5.367
	54 1,4-Dioxane	88	9.775	9.775	(1.095)	4765	100.000	92.72
	55 2-Chloroethylvinyl ether	63	10.097	10.097	(1.131)	8713	5.00000	9.983
	56 cis-1,3-Dichloropropene	75	10.180	10.180	(1.141)	88643	5.00000	5.242
$	57 Toluene-d8 (surr)	98	10.348	10.348	(0.879)	211930	5.00000	5.105
	58 Toluene	92	10.404	10.404	(0.884)	164961	5.00000	5.060
	59 2-Nitropropane	43	10.613	10.613	(0.902)	17091	10.0000	9.621
	62 4-Methyl-2-pentanone	43	10.711	10.711	(0.910)	31517	5.00000	4.918
	60 Tetrachloroethene	164	10.753	10.753	(0.913)	55309	5.00000	5.166
	63 trans-1,3-Dichloropropene	75	10.753	10.753	(0.913)	62296	5.00000	4.846
	65 Ethyl methacrylate	69	10.837	10.837	(0.921)	57760	5.00000	4.997
	64 1,1,2-Trichloroethane	83	10.907	10.907	(0.926)	35884	5.00000	5.293
	66 Chlorodibromomethane	129	11.088	11.088	(0.942)	44325	5.00000	4.812
	67 1,3-Dichloropropane	76	11.172	11.172	(0.949)	75178	5.00000	5.136
	68 1,2-Dibromoethane	107	11.340	11.340	(0.963)	39548	5.00000	4.953
	69 2-Hexanone	43	11.451	11.451	(0.973)	21654	5.00000	5.094
*	70 Chlorobenzene-d5	117	11.772	11.772	(1.000)	1546524	50.0000	
	72 Ethylbenzene	91	11.786	11.786	(1.001)	333801	5.00000	5.224
	71 Chlorobenzene	112	11.786	11.786	(1.001)	186410	5.00000	5.600
	73 1,1,1,2-Tetrachloroethane	131	11.828	11.828	(1.005)	61643	5.00000	5.095
	74 m,p-Xylenes	106	11.912	11.912	(1.012)	268662	10.0000	10.92
	75 o-Xylene	106	12.317	12.317	(1.046)	124854	5.00000	5.094
	76 Styrene	104	12.359	12.359	(1.050)	198488	5.00000	5.435

Data File: ZICL1075.D
Report Date: 13-Aug-2012 23:58

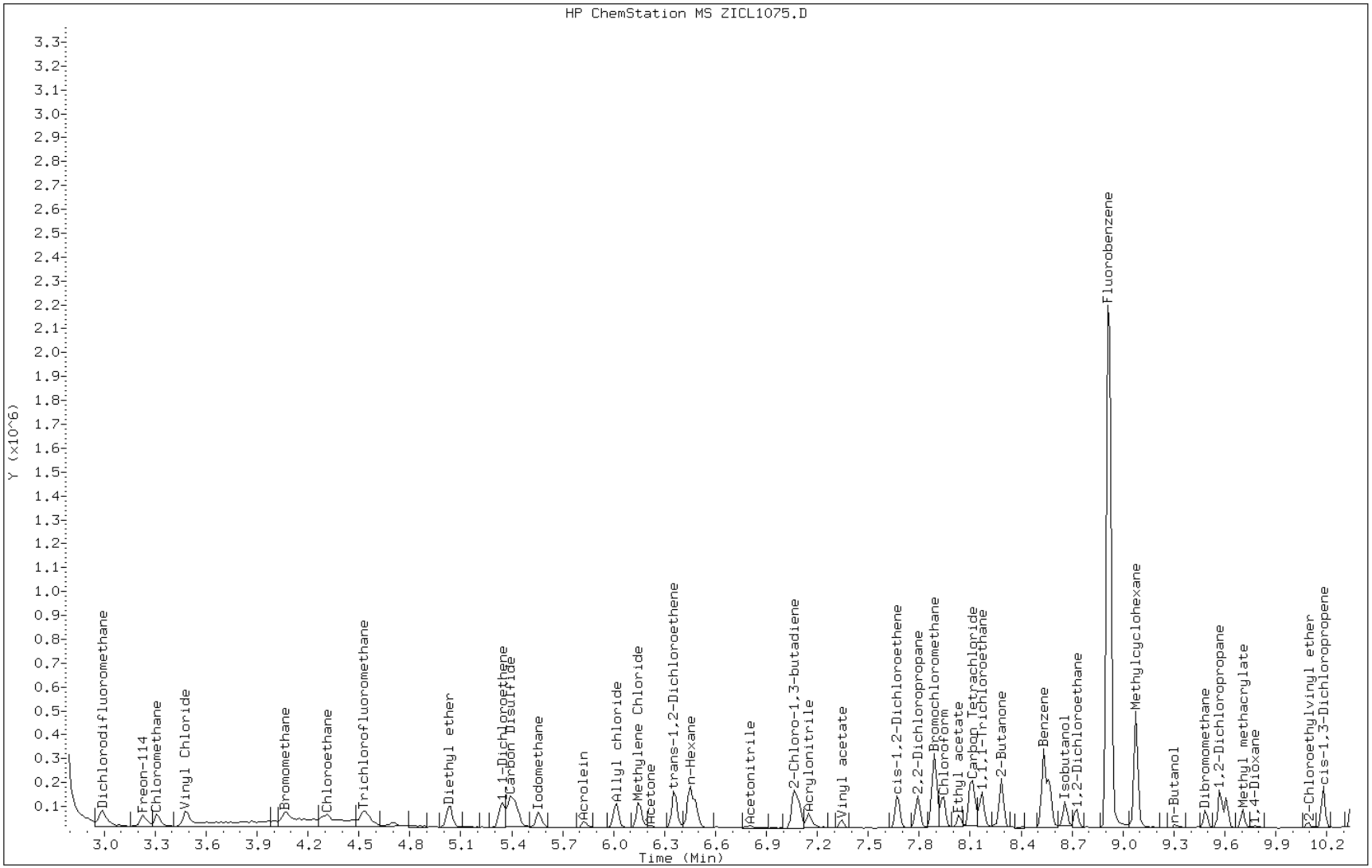
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Bromoform	173	12.429	12.429	(0.891)	24893	5.00000	5.094
78	Isopropylbenzene	105	12.583	12.583	(0.902)	295961	5.00000	5.586
$ 79	4-Bromofluorobenzene (surr)	95	12.890	12.890	(0.924)	77350	5.00000	5.011
81	n-Propylbenzene	91	12.974	12.974	(0.930)	358234	5.00000	5.556
80	Bromobenzene	156	13.015	13.015	(0.933)	70412	5.00000	5.570
82	1,1,2,2-Tetrachloroethane	83	13.029	13.029	(0.934)	43374	5.00000	5.283
84	1,3,5-Trimethylbenzene	105	13.141	13.141	(0.942)	279342	5.00000	5.635
83	2-Chlorotoluene	91	13.155	13.155	(0.943)	239604	5.00000	5.758
85	1,2,3-Trichloropropane	75	13.197	13.197	(0.946)	44487	5.00000	5.244
86	trans-1,4-dichloro-2-butene	53	13.211	13.211	(0.947)	7564	5.00000	4.659
87	Cyclohexanone	55	13.267	13.267	(0.951)	14576	50.0000	60.88
88	4-Chlorotoluene	91	13.309	13.309	(0.954)	201723	5.00000	5.526
89	t-Butylbenzene	119	13.462	13.462	(0.965)	226590	5.00000	5.757
91	1,2,4-Trimethylbenzene	105	13.518	13.518	(0.969)	273602	5.00000	5.661
92	sec-Butylbenzene	105	13.630	13.630	(0.977)	358476	5.00000	5.690
93	4-Isopropyltoluene	119	13.756	13.756	(0.986)	267779	5.00000	5.544
94	1,3-Dichlorobenzene	146	13.881	13.881	(0.995)	132848	5.00000	5.577
* 95	1,4 Dichlorobenzene-d4	152	13.951	13.951	(1.000)	711115	50.0000	
96	1,4-Dichlorobenzene	146	13.965	13.965	(1.001)	130498	5.00000	5.576
98	n-Butylbenzene	91	14.161	14.161	(1.015)	268882	5.00000	5.757
99	1,2-Dichlorobenzene	146	14.384	14.384	(1.031)	113507	5.00000	5.563
145	Nonanal	57	15.110	15.110	(1.083)	29287	5.00000	4.673
100	1,2-Dibromo-3-chloropropane	157	15.180	15.180	(1.088)	6318	5.00000	5.205
101	Hexachlorobutadiene	225	15.781	15.781	(1.131)	31124	5.00000	5.459
104	1,2,4-Trichlorobenzene	180	15.851	15.851	(1.136)	48678	5.00000	6.018
105	Naphthalene	128	16.186	16.186	(1.160)	84600	5.00000	4.245
106	1,2,3-Trichlorobenzene	180	16.395	16.395	(1.175)	31639	5.00000	3.474
M 107	Xylenes (total)	106				393516	15.0000	16.02

Data File: ZICL1075.D

Date: 13-AUG-2012 08:24

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1075.D

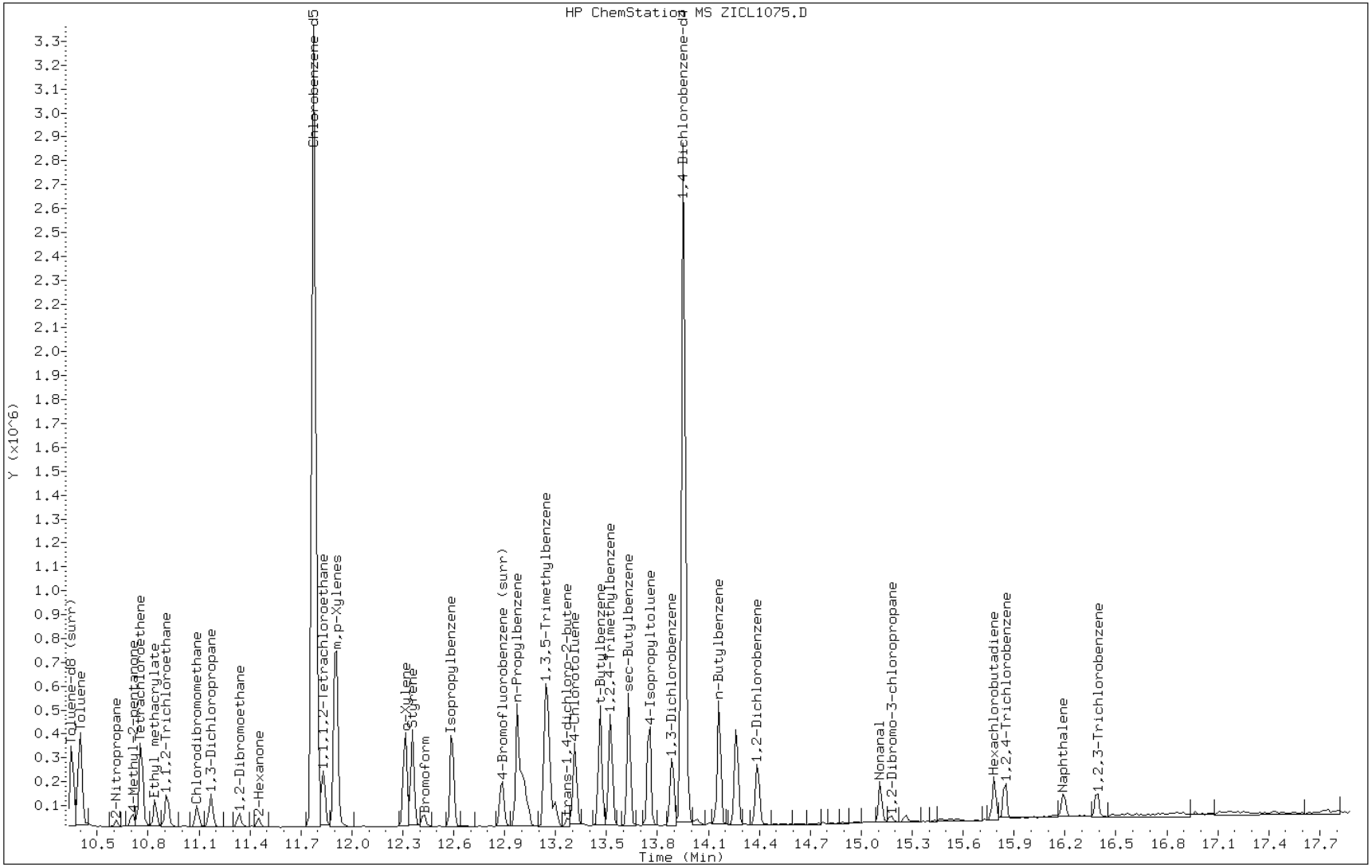
Date: 13-AUG-2012 08:24

Client ID:

Instrument: MSZ.i

Sample Info: IC

Operator: GLB



Data File: ZICL1076.D
Report Date: 13-Aug-2012 23:58

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GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1076.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 08:47
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD010
Comment : NONE
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Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 08:24 Cal File: ZICL1075.D
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.989	2.989	(0.335)	153002	10.0000	11.05
2	Freon-114	135	3.226	3.226	(0.362)	69951	10.0000	10.23
3	Chloromethane	50	3.310	3.310	(0.372)	148215	10.0000	10.49
4	Vinyl Chloride	62	3.478	3.478	(0.390)	147735	10.0000	9.877
5	Bromomethane	94	4.064	4.064	(0.456)	68380	10.0000	10.81
6	Chloroethane	64	4.302	4.302	(0.483)	65600	10.0000	10.82
7	Trichlorofluoromethane	101	4.539	4.539	(0.509)	184401	10.0000	10.26
8	Diethyl ether	74	5.028	5.028	(0.564)	107093	20.0000	19.71
9	1,1-Dichloroethene	96	5.349	5.349	(0.600)	111202	10.0000	10.11
10	Carbon Disulfide	76	5.391	5.391	(0.605)	351539	10.0000	10.26
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	93277	10.0000	10.11
12	Iodomethane	142	5.559	5.559	(0.624)	172686	10.0000	10.02
M 26	1,2-Dichloroethene (total)	96				262988	20.0000	20.23
13	Acrolein	56	5.824	5.824	(0.654)	55146	50.0000	48.73
14	Allyl chloride	39	6.020	6.020	(0.676)	97989	10.0000	9.816
15	Methylene Chloride	84	6.145	6.145	(0.690)	108213	10.0000	9.713
16	Acetone	43	6.215	6.215	(0.698)	17958	10.0000	10.90
17	trans-1,2-Dichloroethene	96	6.355	6.355	(0.713)	135014	10.0000	10.23
18	Methyl Acetate	74	6.369	6.369	(0.715)	13266	10.0000	9.467
19	n-Hexane	86	6.453	6.453	(0.724)	32164	10.0000	9.994

Data File: ZICL1076.D
Report Date: 13-Aug-2012 23:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.480	6.480	(0.727)	227337	10.0000	10.02
	21 Acetonitrile	41	6.802	6.802	(0.763)	33090	50.0000	52.08
	22 2-Chloro-1,3-butadiene	53	7.053	7.053	(0.792)	192882	10.0000	10.42
	23 1,1-Dichloroethane	63	7.095	7.095	(0.796)	202979	10.0000	10.08
	24 Acrylonitrile	53	7.151	7.151	(0.803)	113843	50.0000	50.22
	25 Vinyl acetate	43	7.346	7.346	(0.824)	83345	10.0000	9.417
	27 cis-1,2-Dichloroethene	96	7.668	7.668	(0.861)	127974	10.0000	9.995
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	155361	10.0000	10.48
	30 Bromochloromethane	128	7.877	7.877	(0.884)	53058	10.0000	10.44
	29 Cyclohexane	84	7.891	7.891	(0.886)	203698	10.0000	10.56
	31 Chloroform	83	7.933	7.933	(0.890)	191084	10.0000	9.880
	33 Ethyl acetate	45	8.031	8.031	(0.901)	15679	20.0000	18.48
	32 Carbon Tetrachloride	117	8.101	8.101	(0.909)	166809	10.0000	10.41
	34 Tetrahydrofuran	71	8.114	8.114	(0.911)	34039	50.0000	49.22
$	35 Dibromofluoromethane (surr)	113	8.128	8.128	(0.912)	106001	10.0000	10.62
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	178403	10.0000	10.37
	37 2-Butanone	43	8.240	8.240	(0.925)	23334	10.0000	9.026
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	169844	10.0000	10.07
	40 Benzene	78	8.533	8.533	(0.958)	497374	10.0000	9.785
	41 Propionitrile	54	8.547	8.547	(0.959)	37310	50.0000	48.71
	42 Methacrylonitrile	41	8.561	8.561	(0.961)	169865	50.0000	48.01
	45 Isobutanol	43	8.659	8.659	(0.972)	46114	200.000	189.4
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	90528	10.0000	10.58
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	111098	10.0000	9.782
*	46 Fluorobenzene	96	8.911	8.911	(1.000)	2095866	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	149120	10.0000	10.41
	48 Trichloroethene	95	9.078	9.078	(1.019)	123891	10.0000	10.22
	49 n-Butanol	56	9.302	9.302	(1.044)	15280	100.000	93.54
	50 Dibromomethane	93	9.483	9.483	(1.064)	45014	10.0000	9.365
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	115465	10.0000	10.26
	52 Bromodichloromethane	83	9.609	9.609	(1.078)	129404	10.0000	9.807
	53 Methyl methacrylate	69	9.707	9.707	(1.089)	49566	10.0000	9.447
	54 1,4-Dioxane	88	9.776	9.776	(1.097)	9036	200.000	179.0
	55 2-Chloroethylvinyl ether	63	10.084	10.084	(1.132)	19084	10.0000	13.43
	56 cis-1,3-Dichloropropene	75	10.181	10.181	(1.143)	165819	10.0000	9.983
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	433214	10.0000	10.61
	58 Toluene	92	10.405	10.405	(0.884)	319348	10.0000	9.962
	59 2-Nitropropane	43	10.614	10.614	(0.902)	30999	20.0000	17.75
	62 4-Methyl-2-pentanone	43	10.698	10.698	(0.909)	58521	10.0000	9.288
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	101652	10.0000	9.656
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	119889	10.0000	9.484
	65 Ethyl methacrylate	69	10.838	10.838	(0.921)	106832	10.0000	9.400
	64 1,1,2-Trichloroethane	83	10.908	10.908	(0.926)	63059	10.0000	9.458
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	86125	10.0000	9.508
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	138797	10.0000	9.643
	68 1,2-Dibromoethane	107	11.341	11.341	(0.963)	71444	10.0000	9.100
	69 2-Hexanone	43	11.452	11.452	(0.973)	36212	10.0000	8.664
*	70 Chlorobenzene-d5	117	11.774	11.774	(1.000)	1520714	50.0000	
	72 Ethylbenzene	91	11.774	11.774	(1.000)	609364	10.0000	9.699
	71 Chlorobenzene	112	11.788	11.788	(1.001)	339157	10.0000	10.36
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.829	(1.005)	114620	10.0000	9.634
	74 m,p-Xylenes	106	11.899	11.899	(1.011)	494485	20.0000	20.45
	75 o-Xylene	106	12.318	12.318	(1.046)	236185	10.0000	9.799
	76 Styrene	104	12.360	12.360	(1.050)	369049	10.0000	10.28

Data File: ZICL1076.D
Report Date: 13-Aug-2012 23:58

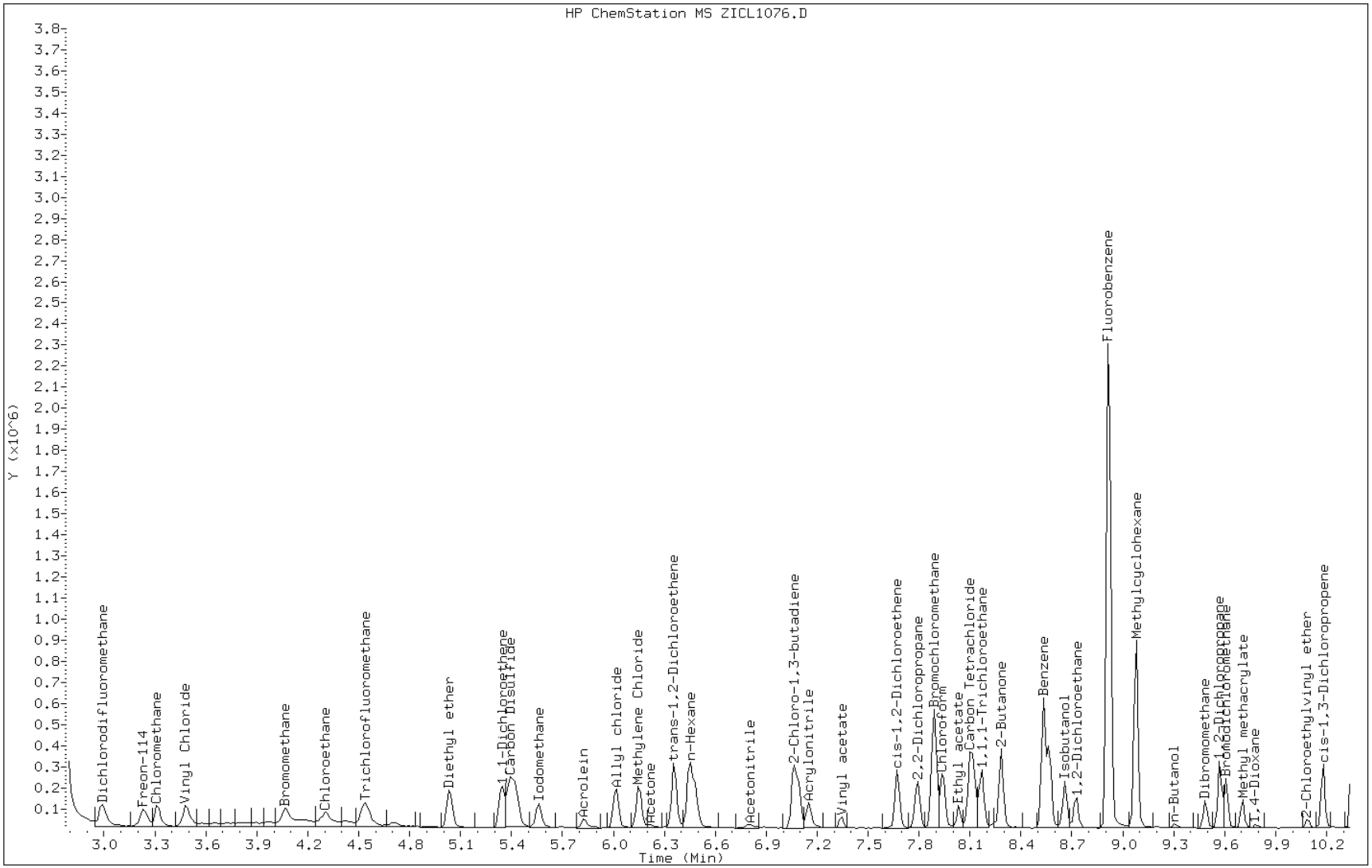
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Bromoform	173	12.416	12.416	(0.890)	46808	10.0000	9.708
	78 Isopropylbenzene	105	12.584	12.584	(0.902)	548144	10.0000	10.48
$	79 4-Bromofluorobenzene (surr)	95	12.877	12.877	(0.923)	161166	10.0000	10.58
	81 n-Propylbenzene	91	12.975	12.975	(0.930)	681592	10.0000	10.71
	80 Bromobenzene	156	13.003	13.003	(0.932)	125103	10.0000	10.03
	82 1,1,2,2-Tetrachloroethane	83	13.031	13.031	(0.934)	79668	10.0000	9.834
	84 1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	521123	10.0000	10.65
	83 2-Chlorotoluene	91	13.156	13.156	(0.943)	443166	10.0000	10.79
	85 1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	77582	10.0000	9.269
	86 trans-1,4-dichloro-2-butene	53	13.212	13.212	(0.947)	14049	10.0000	8.770
	87 Cyclohexanone	55	13.268	13.268	(0.951)	22998	100.000	97.34
	88 4-Chlorotoluene	91	13.310	13.310	(0.954)	379685	10.0000	10.54
	89 t-Butylbenzene	119	13.464	13.464	(0.965)	423456	10.0000	10.90
	91 1,2,4-Trimethylbenzene	105	13.519	13.519	(0.969)	495258	10.0000	10.38
	92 sec-Butylbenzene	105	13.631	13.631	(0.977)	672781	10.0000	10.82
	93 4-Isopropyltoluene	119	13.757	13.757	(0.986)	512421	10.0000	10.75
	94 1,3-Dichlorobenzene	146	13.882	13.882	(0.995)	242609	10.0000	10.32
*	95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	701674	50.0000	
	96 1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	239230	10.0000	10.36
	98 n-Butylbenzene	91	14.162	14.162	(1.015)	487244	10.0000	10.57
	99 1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	208555	10.0000	10.36
	145 Nonanal	57	15.112	15.112	(1.083)	50157	10.0000	10.49
	100 1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	12892	10.0000	10.76
	101 Hexachlorobutadiene	225	15.782	15.782	(1.131)	53599	10.0000	11.46
	104 1,2,4-Trichlorobenzene	180	15.852	15.852	(1.136)	88547	10.0000	11.09
	105 Naphthalene	128	16.187	16.187	(1.160)	139328	10.0000	10.27
	106 1,2,3-Trichlorobenzene	180	16.396	16.396	(1.175)	58904	10.0000	11.03
M	107 Xylenes (total)	106				730670	30.0000	30.24

Data File: ZICL1076.D

Date: 13-AUG-2012 08:47

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1076.D

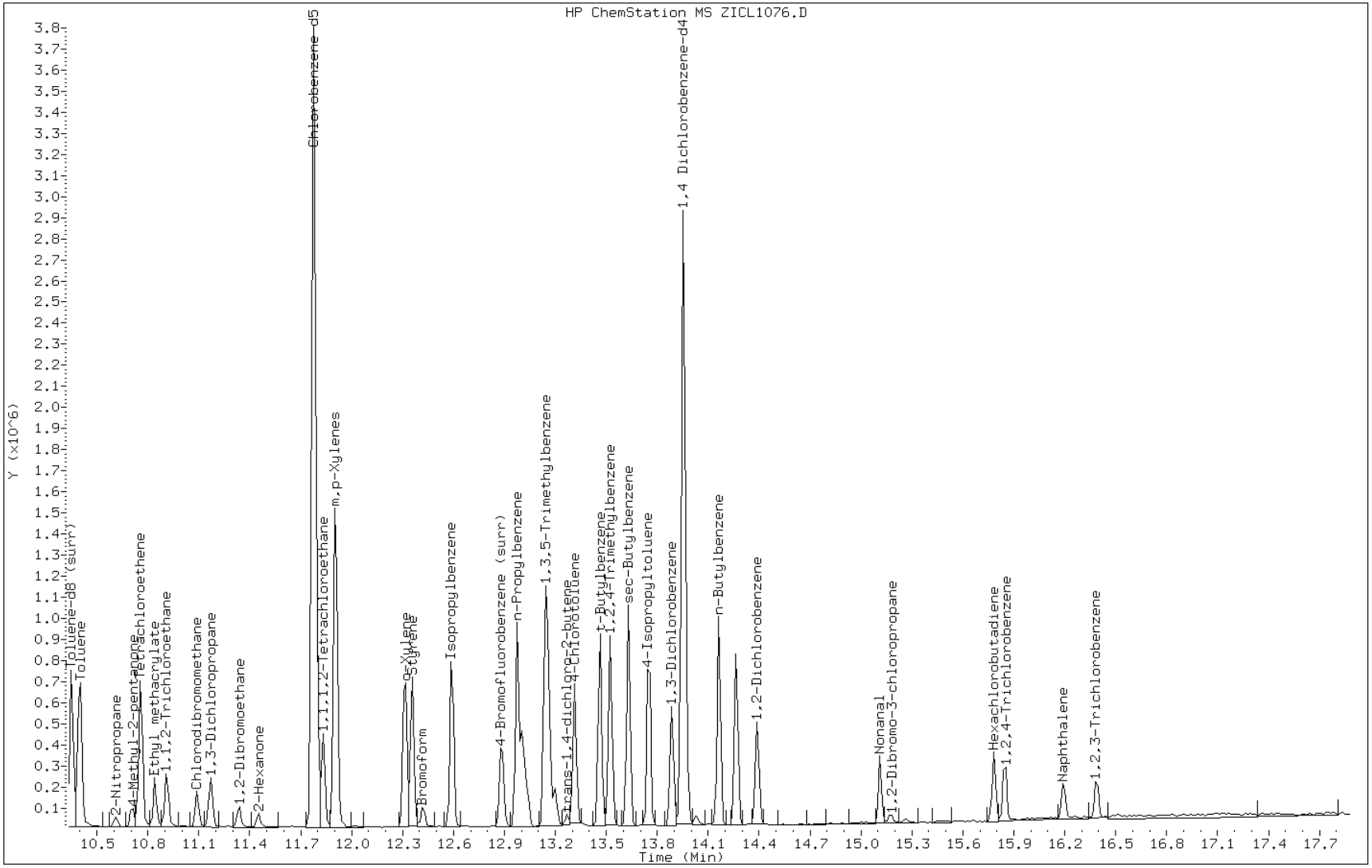
Date: 13-AUG-2012 08:47

Client ID:

Instrument: MSZ.i

Sample Info: IC

Operator: GLB



Data File: ZICL1077.D
Report Date: 13-Aug-2012 23:58

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1077.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 09:11
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD020
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 08:47 Cal File: ZICL1076.D
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.990	2.990	(0.336)	304757	20.0000	21.45
2	Freon-114	135	3.242	3.242	(0.364)	135532	20.0000	19.32
3	Chloromethane	50	3.312	3.312	(0.372)	282324	20.0000	19.48
4	Vinyl Chloride	62	3.479	3.479	(0.390)	291453	20.0000	19.00
5	Bromomethane	94	4.066	4.066	(0.456)	130644	20.0000	20.13
6	Chloroethane	64	4.303	4.303	(0.483)	131761	20.0000	21.18
7	Trichlorofluoromethane	101	4.541	4.541	(0.510)	366906	20.0000	19.90
8	Diethyl ether	74	5.029	5.029	(0.564)	224392	40.0000	40.26
9	1,1-Dichloroethene	96	5.351	5.351	(0.600)	222499	20.0000	19.71
10	Carbon Disulfide	76	5.393	5.393	(0.605)	720460	20.0000	20.50
11	1,1,2-Trichlorofluoroethane	151	5.420	5.420	(0.608)	190653	20.0000	20.15
12	Iodomethane	142	5.560	5.560	(0.624)	344625	20.0000	19.50
M 26	1,2-Dichloroethene (total)	96				511992	40.0000	38.40
13	Acrolein	56	5.826	5.826	(0.654)	108826	100.000	93.75
14	Allyl chloride	39	6.007	6.007	(0.674)	205369	20.0000	20.05
15	Methylene Chloride	84	6.147	6.147	(0.690)	218627	20.0000	19.13
16	Acetone	43	6.217	6.217	(0.698)	32520	20.0000	19.25
17	trans-1,2-Dichloroethene	96	6.356	6.356	(0.713)	256839	20.0000	18.98
18	Methyl Acetate	74	6.370	6.370	(0.715)	27263	20.0000	18.97
19	n-Hexane	86	6.454	6.454	(0.724)	65932	20.0000	19.97

Data File: ZICL1077.D
Report Date: 13-Aug-2012 23:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.482	6.482	(0.727)	463391	20.0000	19.91
	21 Acetonitrile	41	6.789	6.789	(0.762)	58643	100.000	89.97
	22 2-Chloro-1,3-butadiene	53	7.068	7.068	(0.793)	382549	20.0000	20.16
	23 1,1-Dichloroethane	63	7.096	7.096	(0.796)	423881	20.0000	20.52
	24 Acrylonitrile	53	7.152	7.152	(0.803)	221875	100.000	95.42
	25 Vinyl acetate	43	7.348	7.348	(0.824)	166916	20.0000	18.38
	27 cis-1,2-Dichloroethene	96	7.669	7.669	(0.861)	255153	20.0000	19.43
	28 2,2-Dichloropropane	77	7.795	7.795	(0.875)	309087	20.0000	20.32
	30 Bromochloromethane	128	7.879	7.879	(0.884)	103870	20.0000	19.92
	29 Cyclohexane	84	7.892	7.892	(0.886)	391166	20.0000	19.76
	31 Chloroform	83	7.934	7.934	(0.890)	376716	20.0000	18.99
	33 Ethyl acetate	45	8.032	8.032	(0.901)	32110	40.0000	36.90
	32 Carbon Tetrachloride	117	8.102	8.102	(0.909)	324716	20.0000	19.76
	34 Tetrahydrofuran	71	8.116	8.116	(0.911)	66643	100.000	93.94
$	35 Dibromofluoromethane (surr)	113	8.130	8.130	(0.912)	201326	20.0000	19.66
	36 1,1,1-Trichloroethane	97	8.172	8.172	(0.917)	349418	20.0000	19.81
	37 2-Butanone	43	8.242	8.242	(0.925)	52158	20.0000	19.67
	39 1,1-Dichloropropene	75	8.284	8.284	(0.929)	348684	20.0000	20.16
	40 Benzene	78	8.535	8.535	(0.958)	997537	20.0000	19.13
	41 Propionitrile	54	8.549	8.549	(0.959)	70088	100.000	89.21
	42 Methacrylonitrile	41	8.563	8.563	(0.961)	362672	100.000	99.93
	45 Isobutanol	43	8.661	8.661	(0.972)	89652	400.000	358.9
$	43 1,2-Dichloroethane-d4 (surr)	65	8.661	8.661	(0.972)	171245	20.0000	19.51
	44 1,2-Dichloroethane	62	8.730	8.730	(0.980)	227102	20.0000	19.49
*	46 Fluorobenzene	96	8.912	8.912	(1.000)	2149927	50.0000	
	47 Methylcyclohexane	55	9.080	9.080	(1.019)	297231	20.0000	20.22
	48 Trichloroethene	95	9.080	9.080	(1.019)	247800	20.0000	19.94
	49 n-Butanol	56	9.303	9.303	(1.044)	30156	200.000	180.0
	50 Dibromomethane	93	9.485	9.485	(1.064)	93803	20.0000	19.02
	51 1,2-Dichloropropane	63	9.568	9.568	(1.074)	233411	20.0000	20.21
	52 Bromodichloromethane	83	9.610	9.610	(1.078)	270937	20.0000	20.02
	53 Methyl methacrylate	69	9.708	9.708	(1.089)	101902	20.0000	18.93
	54 1,4-Dioxane	88	9.778	9.778	(1.097)	20468	400.000	395.3
	55 2-Chloroethylvinyl ether	63	10.085	10.085	(1.132)	38470	20.0000	19.47
	56 cis-1,3-Dichloropropene	75	10.183	10.183	(1.143)	340607	20.0000	19.99
$	57 Toluene-d8 (surr)	98	10.351	10.351	(0.879)	823499	20.0000	19.94
	58 Toluene	92	10.406	10.406	(0.884)	641777	20.0000	19.79
	59 2-Nitropropane	43	10.616	10.616	(0.902)	66343	40.0000	37.54
	62 4-Methyl-2-pentanone	43	10.700	10.700	(0.909)	120189	20.0000	18.85
	60 Tetrachloroethene	164	10.756	10.756	(0.913)	208485	20.0000	19.58
	63 trans-1,3-Dichloropropene	75	10.756	10.756	(0.913)	248028	20.0000	19.39
	65 Ethyl methacrylate	69	10.839	10.839	(0.921)	217499	20.0000	18.92
	64 1,1,2-Trichloroethane	83	10.909	10.909	(0.926)	125792	20.0000	18.65
	66 Chlorodibromomethane	129	11.091	11.091	(0.942)	174178	20.0000	19.01
	67 1,3-Dichloropropane	76	11.175	11.175	(0.949)	280492	20.0000	19.26
	68 1,2-Dibromoethane	107	11.342	11.342	(0.963)	154667	20.0000	19.47
	69 2-Hexanone	43	11.454	11.454	(0.973)	79781	20.0000	18.87
*	70 Chlorobenzene-d5	117	11.775	11.775	(1.000)	1538433	50.0000	
	72 Ethylbenzene	91	11.775	11.775	(1.000)	1225380	20.0000	19.28
	71 Chlorobenzene	112	11.789	11.789	(1.001)	692358	20.0000	20.91
	73 1,1,1,2-Tetrachloroethane	131	11.831	11.831	(1.005)	243080	20.0000	20.20
	74 m,p-Xylenes	106	11.901	11.901	(1.011)	1001537	40.0000	40.93
	75 o-Xylene	106	12.320	12.320	(1.046)	483081	20.0000	19.81
	76 Styrene	104	12.362	12.362	(1.050)	753088	20.0000	20.73

Data File: ZICL1077.D
Report Date: 13-Aug-2012 23:58

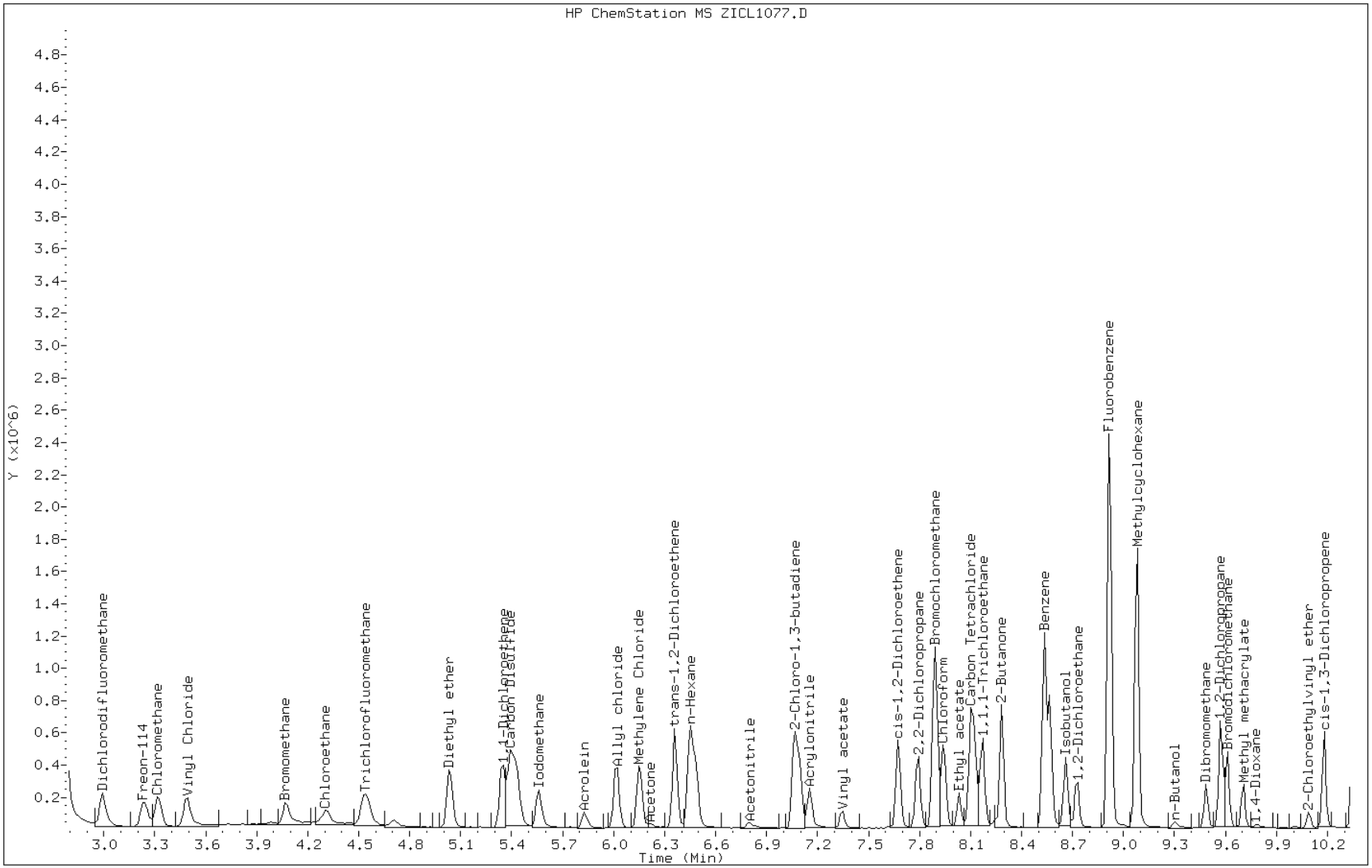
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Bromoform	173	12.418	12.418	(0.890)	91665	20.0000	18.69
	78 Isopropylbenzene	105	12.585	12.585	(0.902)	1088984	20.0000	20.48
$	79 4-Bromofluorobenzene (surr)	95	12.878	12.878	(0.923)	306236	20.0000	19.77
	81 n-Propylbenzene	91	12.976	12.976	(0.930)	1356706	20.0000	20.97
	80 Bromobenzene	156	13.004	13.004	(0.932)	248061	20.0000	19.55
	82 1,1,2,2-Tetrachloroethane	83	13.032	13.032	(0.934)	157986	20.0000	19.17
	84 1,3,5-Trimethylbenzene	105	13.144	13.144	(0.942)	1015226	20.0000	20.40
	83 2-Chlorotoluene	91	13.158	13.158	(0.943)	874155	20.0000	20.93
	85 1,2,3-Trichloropropane	75	13.200	13.200	(0.946)	160627	20.0000	18.87
	86 trans-1,4-dichloro-2-butene	53	13.200	13.200	(0.946)	27998	20.0000	17.18
	87 Cyclohexanone	55	13.269	13.269	(0.951)	47486	200.000	197.6
	88 4-Chlorotoluene	91	13.311	13.311	(0.954)	781216	20.0000	21.32
	89 t-Butylbenzene	119	13.465	13.465	(0.965)	840802	20.0000	21.29
	91 1,2,4-Trimethylbenzene	105	13.521	13.521	(0.969)	986744	20.0000	20.34
	92 sec-Butylbenzene	105	13.633	13.633	(0.977)	1312018	20.0000	20.75
	93 4-Isopropyltoluene	119	13.744	13.744	(0.985)	982827	20.0000	20.27
	94 1,3-Dichlorobenzene	146	13.884	13.884	(0.995)	484608	20.0000	20.27
*	95 1,4 Dichlorobenzene-d4	152	13.954	13.954	(1.000)	713715	50.0000	
	96 1,4-Dichlorobenzene	146	13.968	13.968	(1.001)	483796	20.0000	20.60
	98 n-Butylbenzene	91	14.163	14.163	(1.015)	955630	20.0000	20.39
	99 1,2-Dichlorobenzene	146	14.387	14.387	(1.031)	424289	20.0000	20.72
	145 Nonanal	57	15.113	15.113	(1.083)	91336	20.0000	21.35
	100 1,2-Dibromo-3-chloropropane	157	15.183	15.183	(1.088)	25575	20.0000	20.99
	101 Hexachlorobutadiene	225	15.783	15.783	(1.131)	98288	20.0000	22.74
	104 1,2,4-Trichlorobenzene	180	15.853	15.853	(1.136)	171577	20.0000	21.13
	105 Naphthalene	128	16.188	16.188	(1.160)	262754	20.0000	23.10
	106 1,2,3-Trichlorobenzene	180	16.384	16.384	(1.174)	108674	20.0000	24.26
M	107 Xylenes (total)	106				1484618	60.0000	60.75

Data File: ZICL1077.D

Date: 13-AUG-2012 09:11

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB

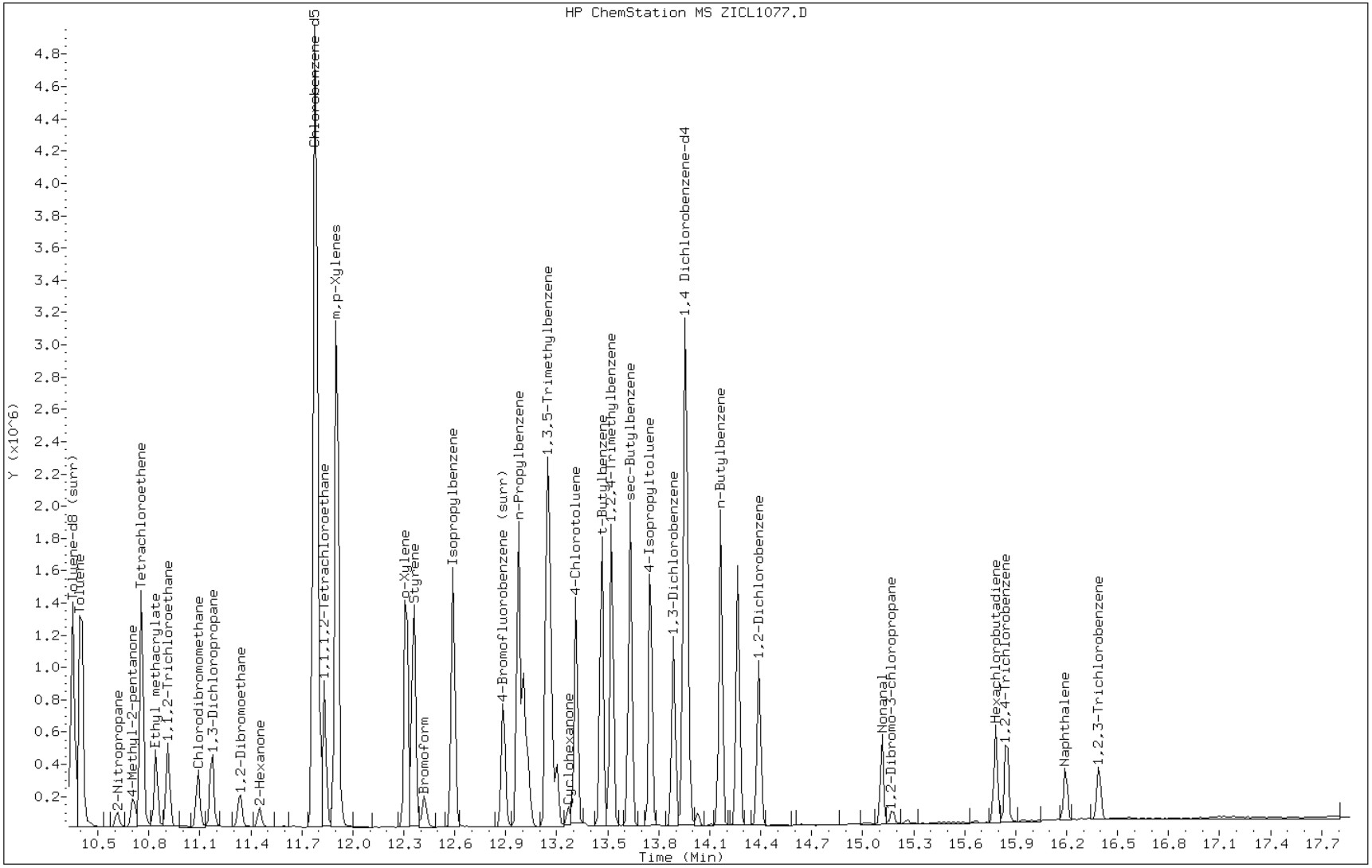


Data File: ZICL1077.D

Date: 13-AUG-2012 09:11

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1078.D
Report Date: 13-Aug-2012 23:57

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1078.D
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Inj Date : 13-AUG-2012 09:35
Operator : GLB Inst ID: MSZ.i
Smp Info : ICIS
Misc Info : VSTD050
Comment : NONE
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Meth Date : 13-Aug-2012 23:57 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 10 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.990	2.990	(0.336)	729713	50.0000	51.89
2	Freon-114	135	3.242	3.242	(0.364)	338519	50.0000	48.75
3	Chloromethane	50	3.326	3.326	(0.373)	715252	50.0000	49.84
4	Vinyl Chloride	62	3.493	3.493	(0.392)	734661	50.0000	48.36
5	Bromomethane	94	4.066	4.066	(0.456)	306269	50.0000	47.67
6	Chloroethane	64	4.303	4.303	(0.483)	303999	50.0000	49.36
7	Trichlorofluoromethane	101	4.541	4.541	(0.510)	936918	50.0000	51.34
8	Diethyl ether	74	5.029	5.029	(0.564)	593391	100.000	107.5
9	1,1-Dichloroethene	96	5.351	5.351	(0.600)	556592	50.0000	49.81
10	Carbon Disulfide	76	5.393	5.393	(0.605)	1777711	50.0000	51.08
11	1,1,2-Trichlorofluoroethane	151	5.420	5.420	(0.608)	477466	50.0000	50.98
12	Iodomethane	142	5.560	5.560	(0.624)	888405	50.0000	50.78
M 26	1,2-Dichloroethene (total)	96				1307324	100.000	99.06
13	Acrolein	56	5.825	5.825	(0.654)	304574	250.000	265.0
14	Allyl chloride	39	6.007	6.007	(0.674)	522508	50.0000	51.54
15	Methylene Chloride	84	6.147	6.147	(0.690)	597338	50.0000	52.80
16	Acetone	43	6.217	6.217	(0.698)	86768	50.0000	51.88
17	trans-1,2-Dichloroethene	96	6.356	6.356	(0.713)	649821	50.0000	48.50
18	Methyl Acetate	74	6.370	6.370	(0.715)	74061	50.0000	52.04
19	n-Hexane	86	6.454	6.454	(0.724)	166426	50.0000	50.92

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.482	6.482	(0.727)	1236448	50.0000	53.65
	21 Acetonitrile	41	6.789	6.789	(0.762)	166526	250.000	258.1
	22 2-Chloro-1,3-butadiene	53	7.054	7.054	(0.792)	945896	50.0000	50.34
	23 1,1-Dichloroethane	63	7.096	7.096	(0.796)	1027610	50.0000	50.25
	24 Acrylonitrile	53	7.152	7.152	(0.803)	639634	250.000	277.8
	25 Vinyl acetate	43	7.348	7.348	(0.824)	481122	50.0000	53.52
	27 cis-1,2-Dichloroethene	96	7.669	7.669	(0.861)	657503	50.0000	50.56
	28 2,2-Dichloropropane	77	7.795	7.795	(0.875)	754160	50.0000	50.08
	30 Bromochloromethane	128	7.878	7.878	(0.884)	266370	50.0000	51.59
	29 Cyclohexane	84	7.892	7.892	(0.886)	992187	50.0000	50.64
	31 Chloroform	83	7.934	7.934	(0.890)	991305	50.0000	50.47
	33 Ethyl acetate	45	8.032	8.032	(0.901)	94023	100.000	109.1
	32 Carbon Tetrachloride	117	8.102	8.102	(0.909)	815118	50.0000	50.10
	34 Tetrahydrofuran	71	8.116	8.116	(0.911)	188562	250.000	268.5
$	35 Dibromofluoromethane (surr)	113	8.130	8.130	(0.912)	525501	50.0000	51.82
	36 1,1,1-Trichloroethane	97	8.172	8.172	(0.917)	890210	50.0000	50.97
	37 2-Butanone	43	8.242	8.242	(0.925)	147817	50.0000	56.30
	39 1,1-Dichloropropene	75	8.284	8.284	(0.929)	855501	50.0000	49.96
	40 Benzene	78	8.535	8.535	(0.958)	2403294	50.0000	46.56
	41 Propionitrile	54	8.549	8.549	(0.959)	217306	250.000	279.4
	42 Methacrylonitrile	41	8.563	8.563	(0.961)	970496	250.000	270.1
	45 Isobutanol	43	8.661	8.661	(0.972)	271043	1000.00	1096
$	43 1,2-Dichloroethane-d4 (surr)	65	8.661	8.661	(0.972)	456164	50.0000	52.49
	44 1,2-Dichloroethane	62	8.730	8.730	(0.980)	598199	50.0000	51.86
*	46 Fluorobenzene	96	8.912	8.912	(1.000)	2128499	50.0000	
	47 Methylcyclohexane	55	9.080	9.080	(1.019)	735996	50.0000	50.59
	48 Trichloroethene	95	9.080	9.080	(1.019)	612859	50.0000	49.80
	49 n-Butanol	56	9.303	9.303	(1.044)	87079	500.000	524.9
	50 Dibromomethane	93	9.485	9.485	(1.064)	265493	50.0000	54.39
	51 1,2-Dichloropropane	63	9.568	9.568	(1.074)	585343	50.0000	51.20
	52 Bromodichloromethane	83	9.610	9.610	(1.078)	689854	50.0000	51.48
	53 Methyl methacrylate	69	9.708	9.708	(1.089)	289275	50.0000	54.29
	54 1,4-Dioxane	88	9.778	9.778	(1.097)	55484	1000.00	1082
	55 2-Chloroethylvinyl ether	63	10.085	10.085	(1.132)	123681	50.0000	47.10
	56 cis-1,3-Dichloropropene	75	10.183	10.183	(1.143)	877915	50.0000	52.04
$	57 Toluene-d8 (surr)	98	10.351	10.351	(0.879)	2041199	50.0000	50.26
	58 Toluene	92	10.406	10.406	(0.884)	1563953	50.0000	49.04
	59 2-Nitropropane	43	10.616	10.616	(0.902)	188777	100.000	108.6
	62 4-Methyl-2-pentanone	43	10.700	10.700	(0.909)	337912	50.0000	53.90
	60 Tetrachloroethene	164	10.756	10.756	(0.913)	513607	50.0000	49.04
	63 trans-1,3-Dichloropropene	75	10.756	10.756	(0.913)	670255	50.0000	53.29
	65 Ethyl methacrylate	69	10.839	10.839	(0.921)	613252	50.0000	54.24
	64 1,1,2-Trichloroethane	83	10.909	10.909	(0.926)	342520	50.0000	51.64
	66 Chlorodibromomethane	129	11.091	11.091	(0.942)	467097	50.0000	51.83
	67 1,3-Dichloropropane	76	11.175	11.175	(0.949)	740243	50.0000	51.69
	68 1,2-Dibromoethane	107	11.342	11.342	(0.963)	404311	50.0000	51.76
	69 2-Hexanone	43	11.454	11.454	(0.973)	227189	50.0000	54.64
*	70 Chlorobenzene-d5	117	11.775	11.775	(1.000)	1512958	50.0000	
	72 Ethylbenzene	91	11.775	11.775	(1.000)	2824277	50.0000	45.18
	71 Chlorobenzene	112	11.789	11.789	(1.001)	1656097	50.0000	50.85
	73 1,1,1,2-Tetrachloroethane	131	11.831	11.831	(1.005)	589951	50.0000	49.84
	74 m,p-Xylenes	106	11.901	11.901	(1.011)	2330596	100.000	96.86
	75 o-Xylene	106	12.320	12.320	(1.046)	1164012	50.0000	48.54
	76 Styrene	104	12.362	12.362	(1.050)	1847300	50.0000	51.71

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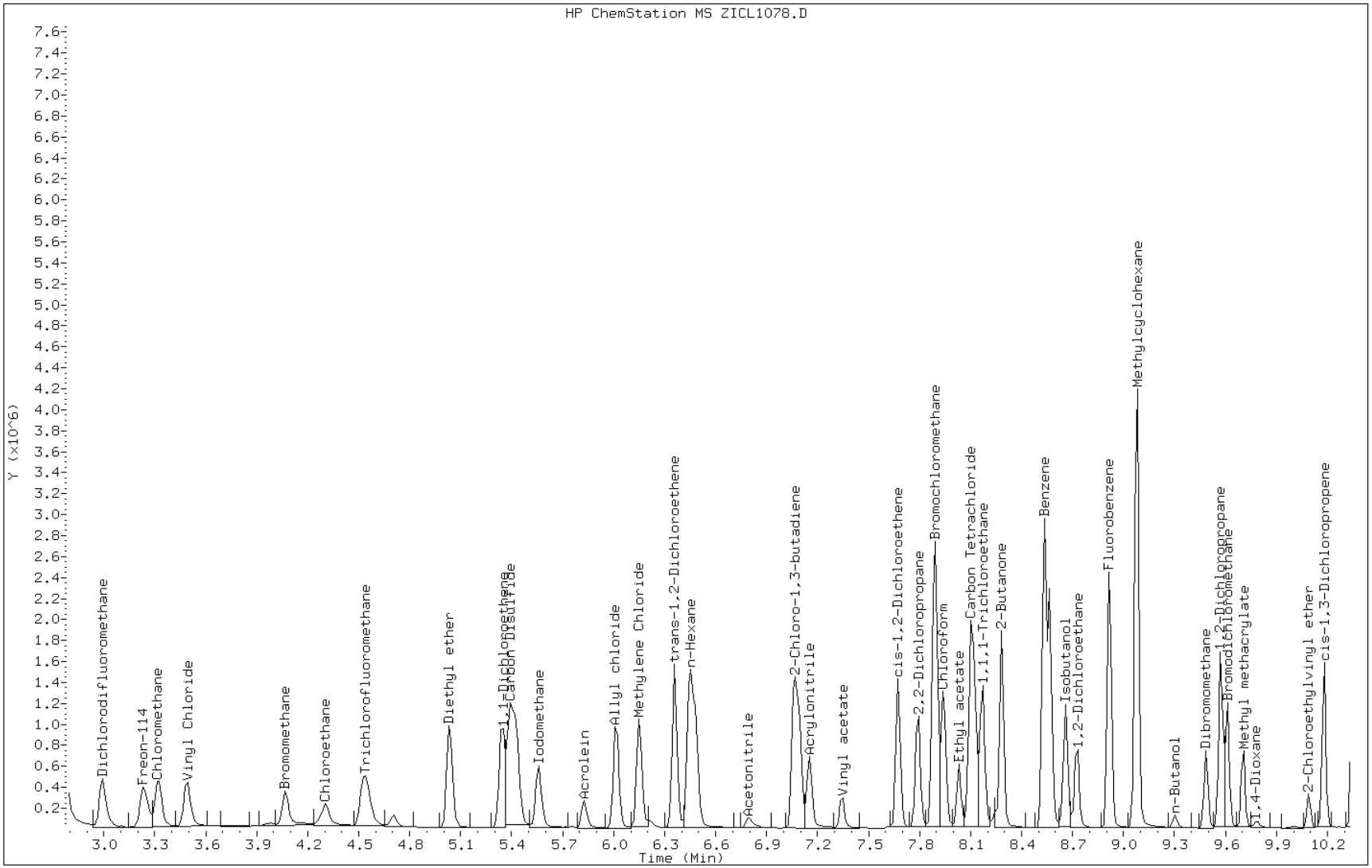
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	77 Bromoform	173	12.417	12.417	(0.890)	258228	50.0000	53.21
	78 Isopropylbenzene	105	12.585	12.585	(0.902)	2532344	50.0000	48.12
$	79 4-Bromofluorobenzene (surr)	95	12.878	12.878	(0.923)	782332	50.0000	51.03
	81 n-Propylbenzene	91	12.976	12.976	(0.930)	3077974	50.0000	48.07
	80 Bromobenzene	156	13.004	13.004	(0.932)	641815	50.0000	51.12
	82 1,1,2,2-Tetrachloroethane	83	13.032	13.032	(0.934)	442887	50.0000	54.31
	84 1,3,5-Trimethylbenzene	105	13.144	13.144	(0.942)	2358489	50.0000	47.90
	83 2-Chlorotoluene	91	13.158	13.158	(0.943)	2129705	50.0000	51.53
	85 1,2,3-Trichloropropane	75	13.200	13.200	(0.946)	452866	50.0000	53.75
	86 trans-1,4-dichloro-2-butene	53	13.200	13.200	(0.946)	90076	50.0000	55.86
	87 Cyclohexanone	55	13.269	13.269	(0.951)	120757	500.000	507.8
	88 4-Chlorotoluene	91	13.311	13.311	(0.954)	1881501	50.0000	51.90
	89 t-Butylbenzene	119	13.465	13.465	(0.965)	1976515	50.0000	50.56
	91 1,2,4-Trimethylbenzene	105	13.521	13.521	(0.969)	2314840	50.0000	48.22
	92 sec-Butylbenzene	105	13.633	13.633	(0.977)	2964232	50.0000	47.37
	93 4-Isopropyltoluene	119	13.744	13.744	(0.985)	2301758	50.0000	47.98
	94 1,3-Dichlorobenzene	146	13.884	13.884	(0.995)	1209104	50.0000	51.10
*	95 1,4 Dichlorobenzene-d4	152	13.954	13.954	(1.000)	706302	50.0000	
	96 1,4-Dichlorobenzene	146	13.968	13.968	(1.001)	1186827	50.0000	51.05
	98 n-Butylbenzene	91	14.163	14.163	(1.015)	2186642	50.0000	47.14
	99 1,2-Dichlorobenzene	146	14.387	14.387	(1.031)	1031329	50.0000	50.89
	145 Nonanal	57	15.113	15.113	(1.083)	196752	50.0000	50.28
	100 1,2-Dibromo-3-chloropropane	157	15.183	15.183	(1.088)	60079	50.0000	49.83
	101 Hexachlorobutadiene	225	15.783	15.783	(1.131)	205760	50.0000	50.98
	104 1,2,4-Trichlorobenzene	180	15.853	15.853	(1.136)	385273	50.0000	47.95
	105 Naphthalene	128	16.188	16.188	(1.160)	567560	50.0000	56.04
	106 1,2,3-Trichlorobenzene	180	16.384	16.384	(1.174)	208847	50.0000	52.64
M	107 Xylenes (total)	106				3494608	150.000	145.4

Data File: ZICL1078.D

Date: 13-AUG-2012 09:35

Client ID: Instrument: MSZ.i

Sample Info: ICIS Operator: GLB



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Date: 13-AUG-2012 09:35

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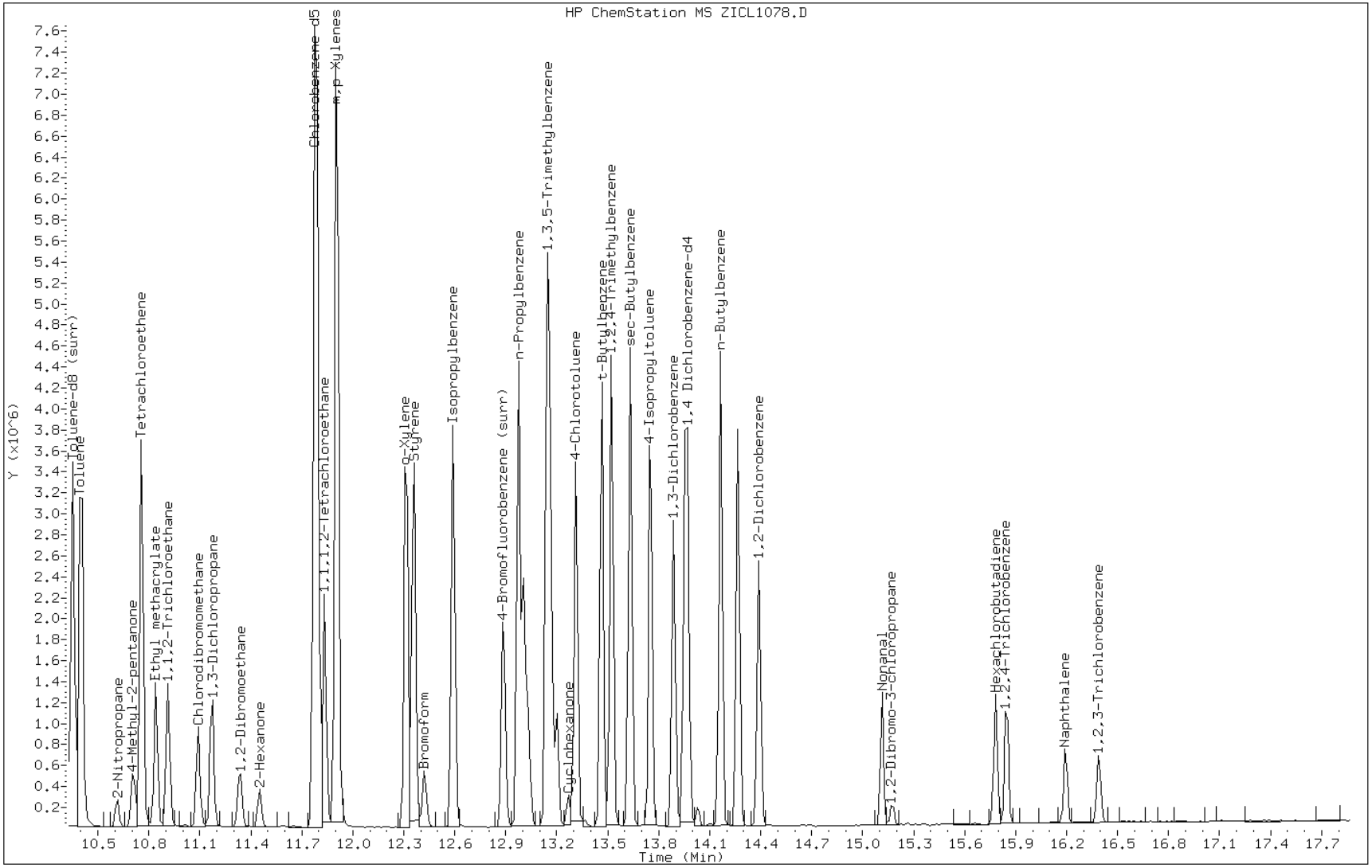
Instrument: MSZ.i

Sample Info: ICIS

Operator: GLB



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TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1079.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 09:58
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD100
Comment : NONE
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Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 09:11 Cal File: ZICL1077.D
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.989	2.989	(0.335)	1425137	100.000	99.22
2	Freon-114	135	3.226	3.226	(0.362)	710372	100.000	100.2
3	Chloromethane	50	3.324	3.324	(0.373)	1390618	100.000	94.86
4	Vinyl Chloride	62	3.491	3.491	(0.392)	1441411	100.000	92.90
5	Bromomethane	94	4.064	4.064	(0.456)	590433	100.000	89.97
6	Chloroethane	64	4.301	4.301	(0.483)	509364	100.000	80.97
7	Trichlorofluoromethane	101	4.525	4.525	(0.508)	1777375	100.000	95.36
8	Diethyl ether	74	5.028	5.028	(0.564)	1105999	200.000	196.2
9	1,1-Dichloroethene	96	5.335	5.335	(0.599)	1091764	100.000	95.66
10	Carbon Disulfide	76	5.391	5.391	(0.605)	3377944	100.000	95.04
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	924503	100.000	96.64
12	Iodomethane	142	5.558	5.558	(0.624)	1748881	100.000	97.86
M 26	1,2-Dichloroethene (total)	96				2518491	200.000	186.8
13	Acrolein	56	5.824	5.824	(0.654)	571254	500.000	486.6
14	Allyl chloride	39	6.005	6.005	(0.674)	1023976	100.000	98.88
15	Methylene Chloride	84	6.145	6.145	(0.690)	1133255	100.000	98.07
16	Acetone	43	6.215	6.215	(0.698)	167375	100.000	97.98
17	trans-1,2-Dichloroethene	96	6.354	6.354	(0.713)	1258580	100.000	91.96
18	Methyl Acetate	74	6.368	6.368	(0.715)	135543	100.000	93.25
19	n-Hexane	86	6.452	6.452	(0.724)	320758	100.000	96.08

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.480	6.480	(0.727)	2279829	100.000	96.85
	21 Acetonitrile	41	6.801	6.801	(0.763)	323108	500.000	490.2
	22 2-Chloro-1,3-butadiene	53	7.053	7.053	(0.792)	1849115	100.000	96.35
	23 1,1-Dichloroethane	63	7.095	7.095	(0.796)	2021746	100.000	96.79
	24 Acrylonitrile	53	7.150	7.150	(0.802)	1166042	500.000	495.9
	25 Vinyl acetate	43	7.346	7.346	(0.824)	920968	100.000	100.3
	27 cis-1,2-Dichloroethene	96	7.667	7.667	(0.861)	1259911	100.000	94.86
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	1434979	100.000	93.29
	30 Bromochloromethane	128	7.877	7.877	(0.884)	510458	100.000	96.80
	29 Cyclohexane	84	7.891	7.891	(0.886)	1879327	100.000	93.91
	31 Chloroform	83	7.947	7.947	(0.892)	1856183	100.000	92.52
	33 Ethyl acetate	45	8.030	8.030	(0.901)	179209	200.000	203.7
	32 Carbon Tetrachloride	117	8.100	8.100	(0.909)	1578810	100.000	95.02
	34 Tetrahydrofuran	71	8.114	8.114	(0.911)	345456	500.000	481.6
$	35 Dibromofluoromethane (surr)	113	8.128	8.128	(0.912)	1018822	100.000	98.37
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	1722678	100.000	96.57
	37 2-Butanone	43	8.240	8.240	(0.925)	273717	100.000	102.1
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	1653011	100.000	94.52
	40 Benzene	78	8.533	8.533	(0.958)	4340511	100.000	82.32
	41 Propionitrile	54	8.547	8.547	(0.959)	397272	500.000	500.0
	42 Methacrylonitrile	41	8.561	8.561	(0.961)	1770994	500.000	482.6
	45 Isobutanol	43	8.659	8.659	(0.972)	493559	2000.00	1954
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	883368	100.000	99.51
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	1152868	100.000	97.86
*	46 Fluorobenzene	96	8.910	8.910	(1.000)	2174032	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	1402825	100.000	94.40
	48 Trichloroethene	95	9.078	9.078	(1.019)	1174802	100.000	93.47
	49 n-Butanol	56	9.301	9.301	(1.044)	159898	1000.00	943.6
	50 Dibromomethane	93	9.483	9.483	(1.064)	490995	100.000	98.48
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	1130277	100.000	96.80
	52 Bromodichloromethane	83	9.608	9.608	(1.078)	1337115	100.000	97.69
	53 Methyl methacrylate	69	9.706	9.706	(1.089)	536433	100.000	98.56
	54 1,4-Dioxane	88	9.776	9.776	(1.097)	108481	2000.00	2072
	55 2-Chloroethylvinyl ether	63	10.083	10.083	(1.132)	263884	100.000	90.58
	56 cis-1,3-Dichloropropene	75	10.181	10.181	(1.143)	1699093	100.000	98.62
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	3682017	100.000	93.23
	58 Toluene	92	10.405	10.405	(0.884)	2853690	100.000	92.01
	59 2-Nitropropane	43	10.614	10.614	(0.902)	342072	200.000	202.4(A)
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	613929	100.000	100.7
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	980018	100.000	96.22
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	1246938	100.000	102.0
	65 Ethyl methacrylate	69	10.837	10.837	(0.921)	1102131	100.000	100.2
	64 1,1,2-Trichloroethane	83	10.907	10.907	(0.926)	639477	100.000	99.14
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	905244	100.000	103.3
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	1391615	100.000	99.93
	68 1,2-Dibromoethane	107	11.340	11.340	(0.963)	774159	100.000	101.9
	69 2-Hexanone	43	11.452	11.452	(0.973)	413406	100.000	102.2
*	70 Chlorobenzene-d5	117	11.773	11.773	(1.000)	1471284	50.0000	
	72 Ethylbenzene	91	11.787	11.787	(1.001)	4806743	100.000	79.08
	71 Chlorobenzene	112	11.787	11.787	(1.001)	2966981	100.000	93.68
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.829	(1.005)	1152986	100.000	100.2
	74 m,p-Xylenes	106	11.913	11.913	(1.012)	4014955	200.000	171.6
	75 o-Xylene	106	12.318	12.318	(1.046)	2148358	100.000	92.13
	76 Styrene	104	12.360	12.360	(1.050)	3310643	100.000	95.29

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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Bromoform	173	12.430	12.430	(0.891)	483811	100.000	100.2
78	Isopropylbenzene	105	12.583	12.583	(0.902)	4440568	100.000	84.79
$ 79	4-Bromofluorobenzene (surr)	95	12.891	12.891	(0.924)	1463593	100.000	95.93
81	n-Propylbenzene	91	12.974	12.974	(0.930)	5146091	100.000	80.75
80	Bromobenzene	156	13.016	13.016	(0.933)	1194965	100.000	95.64
82	1,1,2,2-Tetrachloroethane	83	13.030	13.030	(0.934)	783245	100.000	96.51
84	1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	4065521	100.000	82.96
83	2-Chlorotoluene	91	13.156	13.156	(0.943)	3757460	100.000	91.36
85	1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	840679	100.000	100.3
86	trans-1,4-dichloro-2-butene	53	13.212	13.212	(0.947)	172761	100.000	107.7
87	Cyclohexanone	55	13.268	13.268	(0.951)	215790	1000.00	911.8
88	4-Chlorotoluene	91	13.310	13.310	(0.954)	3372837	100.000	93.48
89	t-Butylbenzene	119	13.463	13.463	(0.965)	3544096	100.000	91.10
91	1,2,4-Trimethylbenzene	105	13.519	13.519	(0.969)	4048142	100.000	84.74
92	sec-Butylbenzene	105	13.631	13.631	(0.977)	4948583	100.000	79.47
93	4-Isopropyltoluene	119	13.756	13.756	(0.986)	4025159	100.000	84.30
94	1,3-Dichlorobenzene	146	13.882	13.882	(0.995)	2232017	100.000	94.79
* 95	1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	702895	50.0000	
96	1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	2170378	100.000	93.81
98	n-Butylbenzene	91	14.161	14.161	(1.015)	3826876	100.000	82.90
99	1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	1871274	100.000	92.79
145	Nonanal	57	15.111	15.111	(1.083)	366697	100.000	96.99
100	1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	106584	100.000	88.84
101	Hexachlorobutadiene	225	15.782	15.782	(1.131)	375232	100.000	95.58
104	1,2,4-Trichlorobenzene	180	15.851	15.851	(1.136)	688438	100.000	86.10
105	Naphthalene	128	16.187	16.187	(1.160)	961156	100.000	98.69
106	1,2,3-Trichlorobenzene	180	16.396	16.396	(1.175)	355776	100.000	95.77
M 107	Xylenes (total)	106				6163313	300.000	263.7

QC Flag Legend

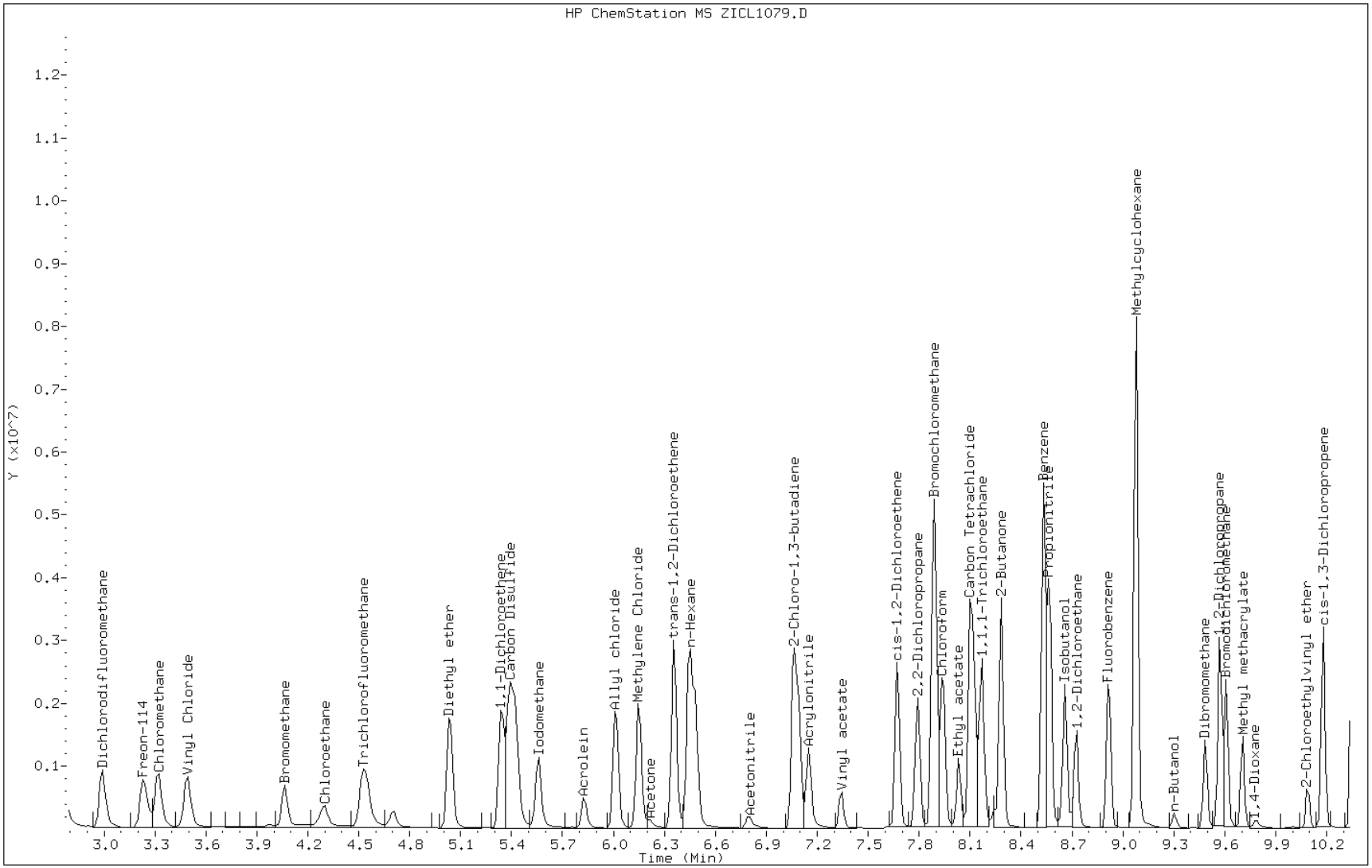
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: ZICL1079.D

Date: 13-AUG-2012 09:58

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB

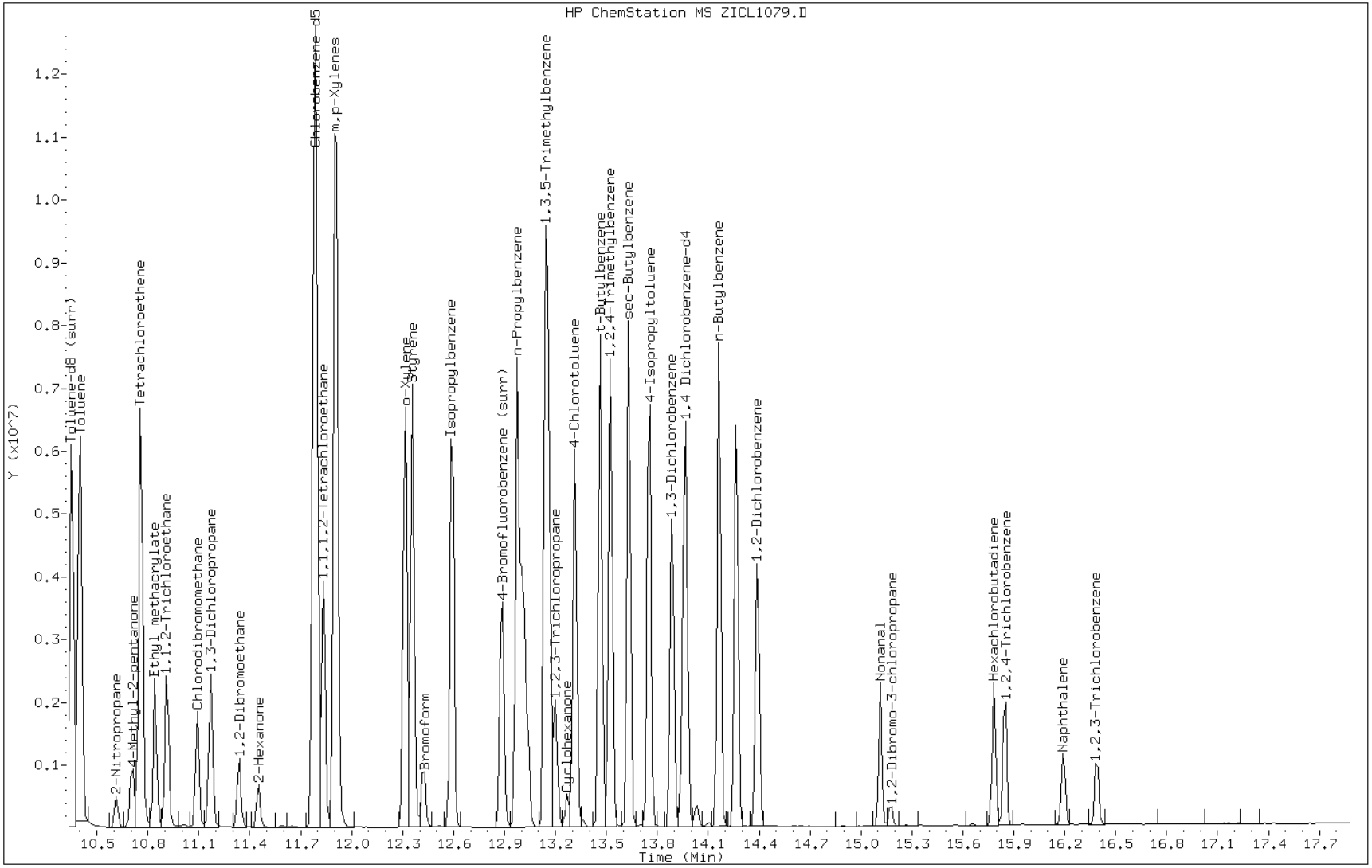


Data File: ZICL1079.D

Date: 13-AUG-2012 09:58

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1080.D
Report Date: 13-Aug-2012 23:58

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICL1080.D
Lab Smp Id: IC
Inj Date : 13-AUG-2012 10:22
Operator : GLB Inst ID: MSZ.i
Smp Info : IC
Misc Info : VSTD200
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:58 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 09:58 Cal File: ZICL1079.D
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.991	2.991	(0.336)	2834827	200.000	199.6
2	Freon-114	135	3.228	3.228	(0.362)	1430902	200.000	204.1(A)
3	Chloromethane	50	3.326	3.326	(0.373)	2721242	200.000	187.8
4	Vinyl Chloride	62	3.494	3.494	(0.392)	2866769	200.000	186.9
5	Bromomethane	94	4.066	4.066	(0.456)	1165583	200.000	179.7
6	Chloroethane	64	4.290	4.290	(0.481)	1112247	200.000	178.8
7	Trichlorofluoromethane	101	4.527	4.527	(0.508)	3654006	200.000	198.3
8	Diethyl ether	74	5.030	5.030	(0.564)	2092278	400.000	375.6
9	1,1-Dichloroethene	96	5.337	5.337	(0.599)	2143050	200.000	190.0
10	Carbon Disulfide	76	5.379	5.379	(0.604)	6283766	200.000	178.8
11	1,1,2-Trichlorofluoroethane	151	5.421	5.421	(0.608)	1832172	200.000	193.8
12	Iodomethane	142	5.561	5.561	(0.624)	3401053	200.000	192.5
M 26	1,2-Dichloroethene (total)	96				4836878	400.000	363.0
13	Acrolein	56	5.826	5.826	(0.654)	1114767	1000.00	960.7
14	Allyl chloride	39	6.008	6.008	(0.674)	2002512	200.000	195.6
15	Methylene Chloride	84	6.147	6.147	(0.690)	2211491	200.000	193.6
16	Acetone	43	6.217	6.217	(0.698)	314031	200.000	186.0
17	trans-1,2-Dichloroethene	96	6.357	6.357	(0.713)	2401783	200.000	177.5
18	Methyl Acetate	74	6.357	6.357	(0.713)	271367	200.000	188.8
19	n-Hexane	86	6.441	6.441	(0.723)	626969	200.000	190.0

Data File: ZICL1080.D
Report Date: 13-Aug-2012 23:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.482	6.482	(0.727)	4266369	200.000	183.4
	21 Acetonitrile	41	6.790	6.790	(0.762)	648542	1000.00	995.4
	22 2-Chloro-1,3-butadiene	53	7.055	7.055	(0.792)	3487547	200.000	183.8
	23 1,1-Dichloroethane	63	7.097	7.097	(0.796)	3809732	200.000	184.5
	24 Acrylonitrile	53	7.153	7.153	(0.803)	2245551	1000.00	966.1
	25 Vinyl acetate	43	7.334	7.334	(0.823)	1795041	200.000	197.8
	27 cis-1,2-Dichloroethene	96	7.670	7.670	(0.861)	2435095	200.000	185.5
	28 2,2-Dichloropropane	77	7.795	7.795	(0.875)	2694724	200.000	177.2
	30 Bromochloromethane	128	7.879	7.879	(0.884)	970519	200.000	186.2
	29 Cyclohexane	84	7.893	7.893	(0.886)	3541781	200.000	179.0
	31 Chloroform	83	7.935	7.935	(0.890)	3516583	200.000	177.3
	33 Ethyl acetate	45	8.033	8.033	(0.901)	342761	400.000	394.0
	32 Carbon Tetrachloride	117	8.103	8.103	(0.909)	3051820	200.000	185.8
	34 Tetrahydrofuran	71	8.116	8.116	(0.911)	657428	1000.00	927.1
	36 1,1,1-Trichloroethane	97	8.172	8.172	(0.917)	3280909	200.000	186.1
	37 2-Butanone	43	8.242	8.242	(0.925)	538226	200.000	203.0(A)
	39 1,1-Dichloropropene	75	8.284	8.284	(0.929)	3168905	200.000	183.3
	40 Benzene	78	8.535	8.535	(0.958)	7079141	200.000	135.8
	41 Propionitrile	54	8.549	8.549	(0.959)	726266	1000.00	924.8
	42 Methacrylonitrile	41	8.563	8.563	(0.961)	3238983	1000.00	892.8
	45 Isobutanol	43	8.661	8.661	(0.972)	977911	4000.00	3917
	44 1,2-Dichloroethane	62	8.731	8.731	(0.980)	2214906	200.000	190.2
*	46 Fluorobenzene	96	8.913	8.913	(1.000)	2149071	50.0000	
	47 Methylcyclohexane	55	9.080	9.080	(1.019)	2551735	200.000	173.7
	48 Trichloroethene	95	9.080	9.080	(1.019)	2184538	200.000	175.8
	49 n-Butanol	56	9.304	9.304	(1.044)	320347	2000.00	1912
	50 Dibromomethane	93	9.485	9.485	(1.064)	960217	200.000	194.8
	51 1,2-Dichloropropane	63	9.569	9.569	(1.074)	2106218	200.000	182.5
	52 Bromodichloromethane	83	9.611	9.611	(1.078)	2548782	200.000	188.4
	53 Methyl methacrylate	69	9.709	9.709	(1.089)	1037066	200.000	192.8
	54 1,4-Dioxane	88	9.778	9.778	(1.097)	221738	4000.00	4284(A)
	55 2-Chloroethylvinyl ether	63	10.086	10.086	(1.132)	616881	200.000	204.4(A)
	56 cis-1,3-Dichloropropene	75	10.183	10.183	(1.143)	3156677	200.000	185.3
	58 Toluene	92	10.407	10.407	(0.884)	4934036	200.000	171.6
	59 2-Nitropropane	43	10.616	10.616	(0.902)	697725	400.000	445.4(A)
	62 4-Methyl-2-pentanone	43	10.700	10.700	(0.909)	1197518	200.000	211.9(A)
	60 Tetrachloroethene	164	10.756	10.756	(0.913)	1837468	200.000	194.6
	63 trans-1,3-Dichloropropene	75	10.756	10.756	(0.913)	2329257	200.000	205.5(A)
	65 Ethyl methacrylate	69	10.840	10.840	(0.921)	2094479	200.000	205.5(A)
	64 1,1,2-Trichloroethane	83	10.910	10.910	(0.926)	1242140	200.000	207.8(A)
	66 Chlorodibromomethane	129	11.091	11.091	(0.942)	1733078	200.000	213.4(A)
	67 1,3-Dichloropropane	76	11.175	11.175	(0.949)	2612765	200.000	202.4(A)
	68 1,2-Dibromoethane	107	11.343	11.343	(0.963)	1507984	200.000	214.2(A)
	69 2-Hexanone	43	11.454	11.454	(0.973)	791736	200.000	211.2(A)
*	70 Chlorobenzene-d5	117	11.776	11.776	(1.000)	1363660	50.0000	
	72 Ethylbenzene	91	11.776	11.776	(1.000)	7220165	200.000	128.2
	71 Chlorobenzene	112	11.790	11.790	(1.001)	4959211	200.000	168.9
	73 1,1,1,2-Tetrachloroethane	131	11.831	11.831	(1.005)	2154037	200.000	201.9(A)
	74 m,p-Xylenes	106	11.915	11.915	(1.012)	6299368	400.000	290.5
	75 o-Xylene	106	12.320	12.320	(1.046)	3832775	200.000	177.3
	76 Styrene	104	12.362	12.362	(1.050)	5549157	200.000	172.3
	77 Bromoform	173	12.418	12.418	(0.890)	945940	200.000	202.0(A)
	78 Isopropylbenzene	105	12.586	12.586	(0.902)	6909728	200.000	136.1
	81 n-Propylbenzene	91	12.977	12.977	(0.930)	7678907	200.000	124.3

Data File: ZICL1080.D
Report Date: 13-Aug-2012 23:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
80	Bromobenzene	156	13.005	13.005	(0.932)	2244472	200.000	185.3
82	1,1,2,2-Tetrachloroethane	83	13.033	13.033	(0.934)	1495222	200.000	190.0
84	1,3,5-Trimethylbenzene	105	13.144	13.144	(0.942)	6381281	200.000	134.3
83	2-Chlorotoluene	91	13.158	13.158	(0.943)	6204840	200.000	155.6
85	1,2,3-Trichloropropane	75	13.200	13.200	(0.946)	1631645	200.000	200.7(A)
86	trans-1,4-dichloro-2-butene	53	13.200	13.200	(0.946)	354151	200.000	227.6(A)
87	Cyclohexanone	55	13.270	13.270	(0.951)	410192	2000.00	1787
88	4-Chlorotoluene	91	13.312	13.312	(0.954)	5608539	200.000	160.3
89	t-Butylbenzene	119	13.466	13.466	(0.965)	5819946	200.000	154.3
91	1,2,4-Trimethylbenzene	105	13.521	13.521	(0.969)	6409173	200.000	138.4
92	sec-Butylbenzene	105	13.633	13.633	(0.977)	7497250	200.000	124.2
93	4-Isopropyltoluene	119	13.759	13.759	(0.986)	6342171	200.000	137.0
94	1,3-Dichlorobenzene	146	13.884	13.884	(0.995)	3968204	200.000	173.8
* 95	1,4 Dichlorobenzene-d4	152	13.954	13.954	(1.000)	681583	50.0000	
96	1,4-Dichlorobenzene	146	13.968	13.968	(1.001)	3858723	200.000	172.0
98	n-Butylbenzene	91	14.164	14.164	(1.015)	6061321	200.000	135.4
99	1,2-Dichlorobenzene	146	14.387	14.387	(1.031)	3400553	200.000	173.9
145	Nonanal	57	15.114	15.114	(1.083)	725383	200.000	201.2(A)
100	1,2-Dibromo-3-chloropropane	157	15.183	15.183	(1.088)	220528	200.000	189.6
101	Hexachlorobutadiene	225	15.784	15.784	(1.131)	756243	200.000	201.4(A)
104	1,2,4-Trichlorobenzene	180	15.854	15.854	(1.136)	1256227	200.000	162.0
105	Naphthalene	128	16.189	16.189	(1.160)	1831588	200.000	198.5
106	1,2,3-Trichlorobenzene	180	16.384	16.384	(1.174)	672334	200.000	200.8(A)
M 107	Xylenes (total)	106				10132143	600.000	467.8

QC Flag Legend

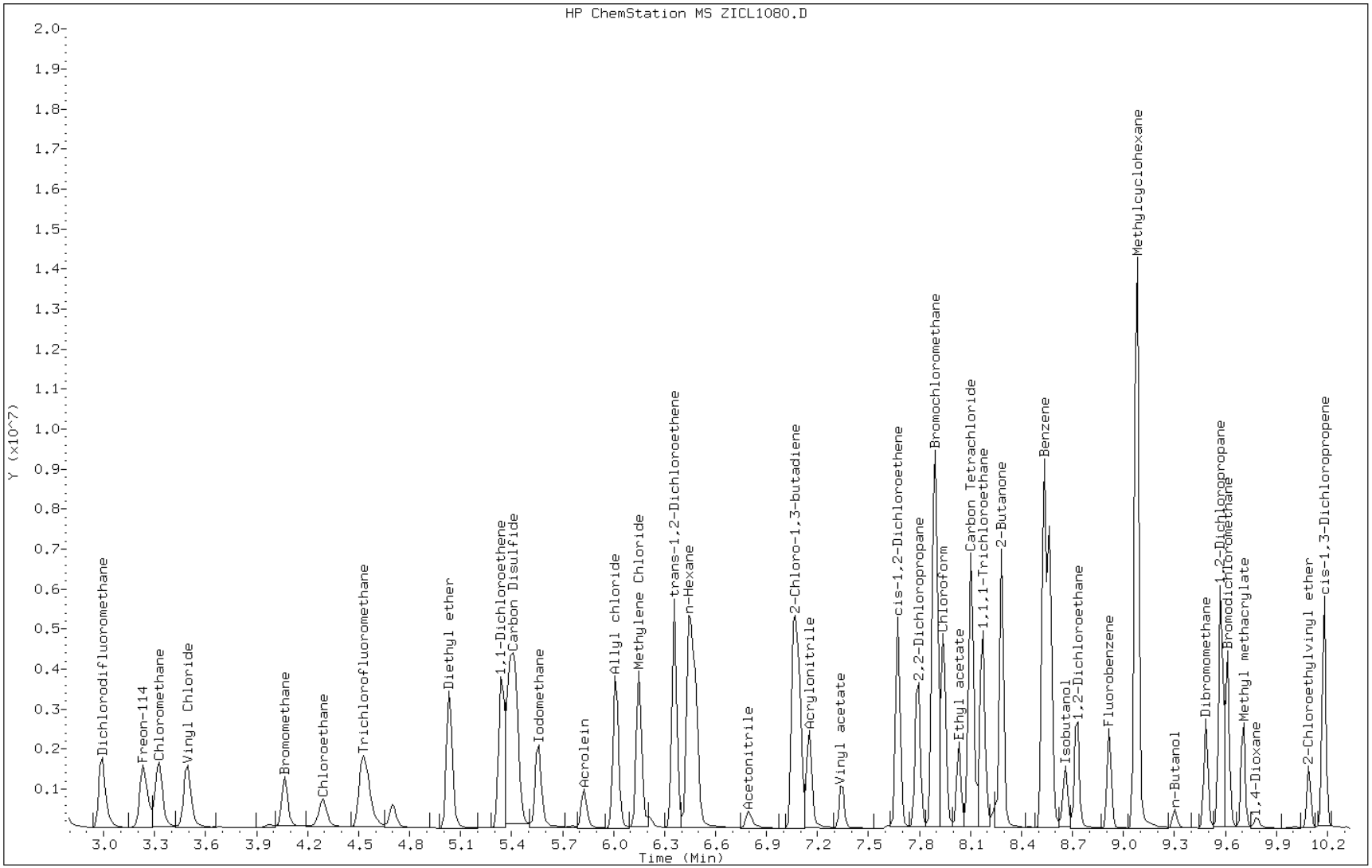
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: ZICL1080.D

Date: 13-AUG-2012 10:22

Client ID: Instrument: MSZ.i

Sample Info: IC Operator: GLB



Data File: ZICL1080.D

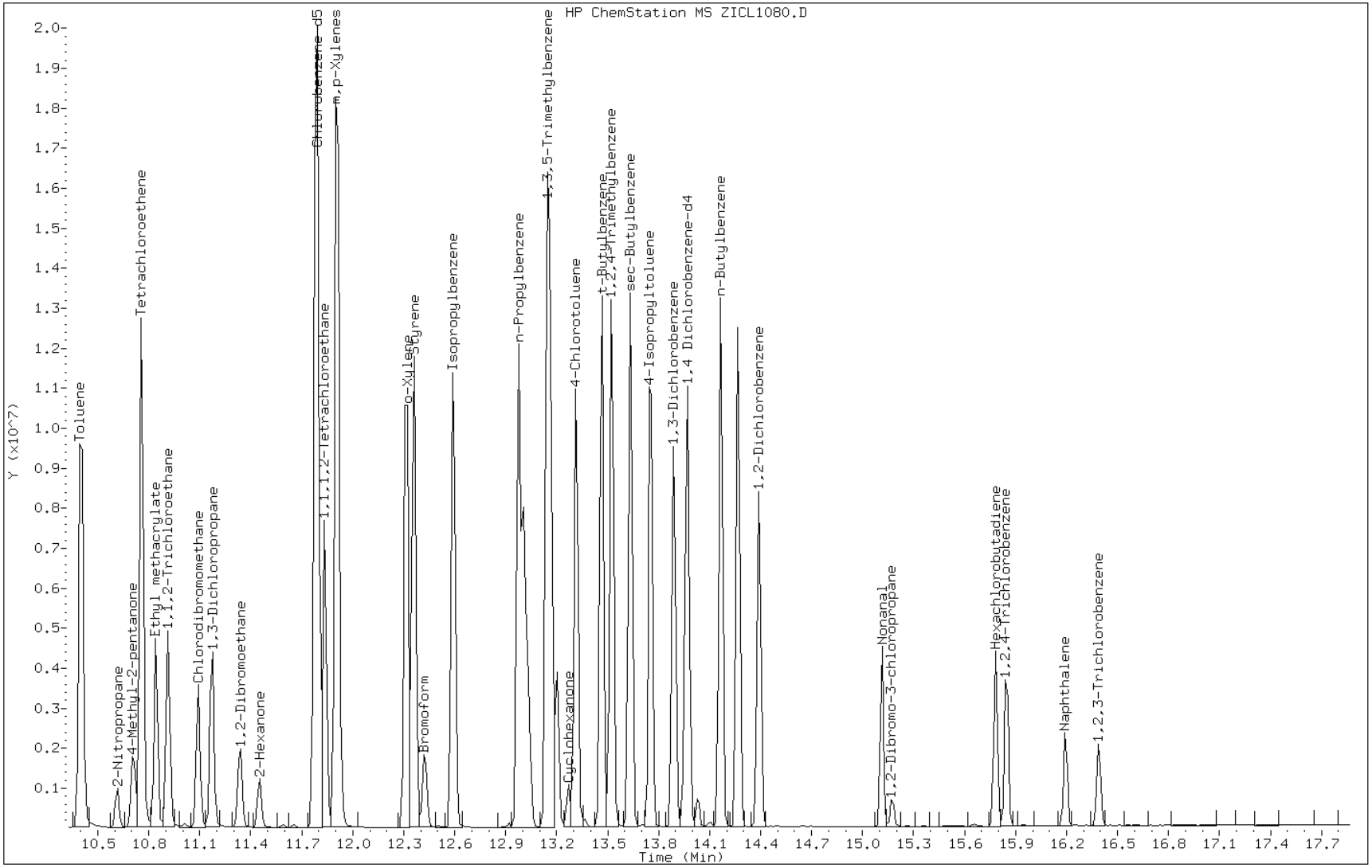
Date: 13-AUG-2012 10:22

Client ID:

Instrument: MSZ.i

Sample Info: IC

Operator: GLB



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9262/2 Calibration Date: 08/14/2012 03:56

Instrument ID: MSM Calib Start Date: 08/08/2012 10:15

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/08/2012 13:11

Lab File ID: MCCV1966.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-Chloroethyl vinyl ether	Ave	0.0732	0.0000	0.0100		50.0	-100.0*	20.0
Dichlorodifluoromethane	Ave	0.2432	0.3184	0.1000	65.5	50.0	30.9*	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.1579	0.1767	0.0100	55.9	50.0	11.9	20.0
Chloromethane	Ave	0.3294	0.3782	0.1000	57.4	50.0	14.8	20.0
Vinyl chloride	Ave	0.4042	0.4938	0.1000	61.1	50.0	22.2*	20.0
Bromomethane	Ave	0.2329	0.2437	0.1000	52.3	50.0	4.6	20.0
Chloroethane	Ave	0.2351	0.2750	0.1000	58.5	50.0	17.0	20.0
Trichlorofluoromethane	Ave	0.4416	0.5302	0.1000	60.0	50.0	20.1*	20.0
Ethyl ether	Ave	0.1247	0.1408	0.0100	113	100	12.9	20.0
1,1-Dichloroethene	Ave	0.2231	0.2514	0.1000	56.3	50.0	12.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2068	0.2186	0.1000	52.9	50.0	5.7	20.0
Carbon disulfide	Ave	0.6299	0.8326	0.1000	66.1	50.0	32.2*	20.0
Iodomethane	None				55.7	50.0	11.3	20.0
Acrolein	Ave	0.0226	0.0274	0.0010	303	250	21.0*	20.0
Allyl chloride	Ave	0.2328	0.2721	0.0100	58.4	50.0	16.9	20.0
Methylene Chloride	Ave	0.2703	0.2862	0.1000	52.9	50.0	5.9	20.0
Acetone	Qua	0.0504	0.0432*	0.1000	46.1	50.0	-7.8	20.0
Methyl acetate	Ave	0.0321	0.0381*	0.1000	59.5	50.0	19.0	20.0
trans-1,2-Dichloroethene	Ave	0.2871	0.3154	0.1000	54.9	50.0	9.9	20.0
n-Hexane	Ave	0.0626	0.0704	0.0100	56.2	50.0	12.3	20.0
Methyl tert-butyl ether	Ave	0.4555	0.5221	0.1000	57.3	50.0	14.6	20.0
Acetonitrile	Ave	0.0172	0.0174	0.0010	254	250	1.5	20.0
2-Chloro-1,3-butadiene	Ave	0.3210	0.3831	0.0100	59.7	50.0	19.3	20.0
1,1-Dichloroethane	Ave	0.4585	0.5073	0.2000	55.3	50.0	10.6	20.0
Acrylonitrile	Ave	0.0562	0.0643	0.0100	286	250	14.3	20.0
Vinyl acetate	Ave	0.1738	0.2085	0.0100	60.0	50.0	19.9	20.0
cis-1,2-Dichloroethene	Ave	0.2872	0.3002	0.1000	52.3	50.0	4.5	20.0
2,2-Dichloropropane	Ave	0.3003	0.3502	0.0100	58.3	50.0	16.6	20.0
Bromochloromethane	Ave	0.1218	0.1193	0.0100	49.0	50.0	-2.1	20.0
Cyclohexane	Ave	0.4013	0.4409	0.1000	54.9	50.0	9.9	20.0
Chloroform	Ave	0.4076	0.4138	0.2000	50.8	50.0	1.5	20.0
Ethyl acetate	Ave	0.0207	0.0196	0.0100	94.7	100	-5.3	20.0
Carbon tetrachloride	Ave	0.2995	0.3322	0.1000	55.5	50.0	10.9	20.0
Tetrahydrofuran	Ave	0.0151	0.0178	0.0010	295	250	17.8	20.0
1,1,1-Trichloroethane	Ave	0.3410	0.3601	0.1000	52.8	50.0	5.6	20.0
2-Butanone (MEK)	Ave	0.0613	0.0701*	0.1000	57.2	50.0	14.3	20.0
1,1-Dichloropropene	Ave	0.3178	0.3511	0.0100	55.2	50.0	10.5	20.0
Benzene	Ave	1.016	1.120	0.5000	55.1	50.0	10.2	20.0
Propionitrile	Ave	0.0186	0.0208	0.0010	279	250	11.8	20.0
Methacrylonitrile	Ave	0.0816	0.0949	0.0100	291	250	16.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9262/2 Calibration Date: 08/14/2012 03:56

Instrument ID: MSM Calib Start Date: 08/08/2012 10:15

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/08/2012 13:11

Lab File ID: MCCV1966.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Isobutanol	Ave	0.0052	0.0062	0.0010	1190	1000	18.7	20.0
1,2-Dichloroethane	Ave	0.2359	0.2583	0.1000	54.7	50.0	9.5	20.0
Trichloroethene	Ave	0.2555	0.2737	0.2000	53.6	50.0	7.1	20.0
Methylcyclohexane	Ave	0.2800	0.3155	0.1000	56.3	50.0	12.7	20.0
1-Butanol	Lin	0.0028	0.0036*	0.0100	575	500	15.0	20.0
Dibromomethane	Ave	0.1065	0.1136	0.0100	53.3	50.0	6.7	20.0
1,2-Dichloropropane	Ave	0.2582	0.2754	0.1000	53.3	50.0	6.7	20.0
Bromodichloromethane	Ave	0.2582	0.2705	0.2000	52.4	50.0	4.8	20.0
Methyl methacrylate	Ave	0.0932	0.1101	0.0100	59.1	50.0	18.1	20.0
1,4-Dioxane	Ave	0.0013	0.0015	0.0010	1130	1000	13.3	20.0
cis-1,3-Dichloropropene	Ave	0.3096	0.3452	0.2000	55.7	50.0	11.5	20.0
Toluene	Ave	0.9126	0.9604	0.4000	52.6	50.0	5.2	20.0
2-Nitropropane	Ave	0.0468	0.0579	0.0100	62.0	100	23.9*	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1779	0.2081	0.1000	58.5	50.0	16.9	20.0
trans-1,3-Dichloropropene	Ave	0.3272	0.3744	0.1000	57.2	50.0	14.4	20.0
Tetrachloroethene	Ave	0.3033	0.3054	0.2000	50.3	50.0	0.7	20.0
Ethyl methacrylate	None				53.8	50.0	7.6	20.0
1,1,2-Trichloroethane	Ave	0.1983	0.2120	0.1000	53.5	50.0	6.9	20.0
Dibromochloromethane	Ave	0.2716	0.2816	0.1000	51.8	50.0	3.7	20.0
1,3-Dichloropropane	Ave	0.4064	0.4420	0.0100	54.4	50.0	8.8	20.0
1,2-Dibromoethane (EDB)	Ave	0.2117	0.2293	0.1000	54.2	50.0	8.3	20.0
2-Hexanone	Ave	0.1131	0.1253	0.1000	55.4	50.0	10.8	20.0
Chlorobenzene	Ave	1.013	1.043	0.5000	51.5	50.0	2.9	20.0
Ethylbenzene	Ave	1.719	1.779	0.1000	51.8	50.0	3.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3364	0.3419	0.0100	50.8	50.0	1.6	20.0
m-Xylene & p-Xylene	Ave	0.7060	0.7337	0.1000	104	100	3.9	20.0
o-Xylene	Ave	0.6408	0.6740	0.3000	52.6	50.0	5.2	20.0
Styrene	Ave	0.9162	1.021	0.3000	55.7	50.0	11.4	20.0
Bromoform	Ave	0.2829	0.3135	0.1000	55.4	50.0	10.8	20.0
Isopropylbenzene	Ave	2.647	2.970	0.1000	56.1	50.0	12.2	20.0
N-Propylbenzene	Ave	3.667	3.975	0.0100	54.2	50.0	8.4	20.0
Bromobenzene	Ave	0.7850	0.7994	0.0100	50.9	50.0	1.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5158	0.5840	0.3000	56.6	50.0	13.2	20.0
1,3,5-Trimethylbenzene	Ave	2.616	2.966	0.0100	56.7	50.0	13.4	20.0
2-Chlorotoluene	Ave	2.387	2.653	0.0100	55.6	50.0	11.1	20.0
1,2,3-Trichloropropane	Ave	0.5383	0.6256	0.0100	58.1	50.0	16.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.0951	0.1084	0.0100	56.6	50.0	13.2	20.0
Cyclohexanone	Ave	0.0148	0.0174	0.0010	589	500	17.7	20.0
4-Chlorotoluene	Ave	2.068	2.314	0.0100	56.0	50.0	11.9	20.0
tert-Butylbenzene	Ave	2.326	2.517	0.0100	54.1	50.0	8.2	20.0
1,2,4-Trimethylbenzene	Ave	2.574	2.865	0.0100	55.7	50.0	11.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9262/2 Calibration Date: 08/14/2012 03:56

Instrument ID: MSM Calib Start Date: 08/08/2012 10:15

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/08/2012 13:11

Lab File ID: MCCV1966.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	3.400	3.884	0.0100	57.1	50.0	14.2	20.0
4-Isopropyltoluene	Ave	2.689	3.070	0.0100	57.1	50.0	14.2	20.0
1,3-Dichlorobenzene	Ave	1.554	1.595	0.6000	51.3	50.0	2.6	20.0
1,4-Dichlorobenzene	Ave	1.591	1.641	0.5000	51.6	50.0	3.1	20.0
n-Butylbenzene	Ave	2.468	2.856	0.0100	57.9	50.0	15.7	20.0
1,2-Dichlorobenzene	Ave	1.366	1.417	0.4000	51.9	50.0	3.8	20.0
Nonanal	Lin	0.1397	0.1765	0.0100	56.7	50.0	13.4	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0869	0.0888	0.0500	51.1	50.0	2.2	20.0
Hexachlorobutadiene	Ave	0.4028	0.3924	0.0100	48.7	50.0	-2.6	20.0
1,2,4-Trichlorobenzene	Ave	0.5342	0.5670	0.2000	53.1	50.0	6.1	20.0
Naphthalene	Ave	0.4974	0.5833	0.0100	58.6	50.0	17.2	20.0
1,2,3-Trichlorobenzene	Ave	0.2812	0.2993	0.0100	53.2	50.0	6.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2127	0.2186	0.0100	51.4	50.0	30.5*	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.1751	0.1821	0.0100	52.0	50.0	30.7*	20.0
Toluene-d8 (Surr)	Ave	1.264	1.331	0.0100	52.6	50.0	32.7*	20.0
4-Bromofluorobenzene (Surr)	Ave	0.7905	0.8630	0.0100	54.6	50.0	38.1*	20.0

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MCCV1966.D
Report Date: 15-Aug-2012 15:15

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MCCV1966.D
Lab Smp Id: CCVIS Client Smp ID: CCVIS
Inj Date : 14-AUG-2012 03:56
Operator : JDH Inst ID: MSM.i
Smp Info : CCVIS
Misc Info : VBLKM227A;VSTD050
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:00 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL-P.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	3.298	3.298	(0.356)	554996	50.0000	65.46
2	Freon-114	135	3.563	3.563	(0.385)	307970	50.0000	55.95
3	Chloromethane	50	3.661	3.661	(0.395)	659081	50.0000	57.40
4	Vinyl Chloride	62	3.842	3.842	(0.415)	860705	50.0000	61.08
5	Bromomethane	94	4.457	4.457	(0.481)	424786	50.0000	52.32
6	Chloroethane	64	4.694	4.694	(0.507)	479313	50.0000	58.49
7	Trichlorofluoromethane	101	4.946	4.946	(0.534)	924094	50.0000	60.04
M 26	1,2-Dichloroethene (total)	96				1073000	100.000	107.2
8	Diethyl ether	74	5.449	5.449	(0.588)	490715	100.000	112.9
9	1,1-Dichloroethene	96	5.756	5.756	(0.622)	438143	50.0000	56.34
10	Carbon Disulfide	76	5.812	5.812	(0.628)	1451069	50.0000	66.09
11	1,1,2-Trichlorofluoroethane	151	5.812	5.812	(0.628)	381028	50.0000	52.86
12	Iodomethane	142	5.965	5.965	(0.644)	449030	50.0000	55.66
13	Acrolein	56	6.217	6.217	(0.671)	238797	250.000	302.5
14	Allyl chloride	39	6.412	6.412	(0.692)	474251	50.0000	58.43
15	Methylene Chloride	84	6.538	6.538	(0.706)	498734	50.0000	52.93
16	Acetone	43	6.594	6.594	(0.712)	75341	50.0000	46.10
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	549764	50.0000	54.94
18	Methyl Acetate	74	6.747	6.747	(0.729)	66460	50.0000	59.48
19	n-Hexane	86	6.845	6.845	(0.739)	122616	50.0000	56.15
20	MTBE	73	6.873	6.873	(0.742)	909953	50.0000	57.31
21	Acetonitrile	41	7.152	7.152	(0.772)	151829	250.000	253.6
22	2-Chloro-1,3-butadiene	53	7.432	7.432	(0.802)	667611	50.0000	59.67

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MCCV1966.D
Report Date: 15-Aug-2012 15:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	23 1,1-Dichloroethane	63	7.460	7.460	(0.805)	884156	50.0000	55.32
	24 Acrylonitrile	53	7.502	7.502	(0.810)	559871	250.000	285.6
	25 Vinyl acetate	43	7.697	7.697	(0.831)	363306	50.0000	59.97
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	523236	50.0000	52.26
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	610265	50.0000	58.31
	30 Bromochloromethane	128	8.242	8.242	(0.890)	207846	50.0000	48.95
	29 Cyclohexane	84	8.270	8.270	(0.893)	768424	50.0000	54.94
	31 Chloroform	83	8.298	8.298	(0.896)	721271	50.0000	50.77
	33 Ethyl acetate	45	8.381	8.381	(0.905)	68398	100.000	94.68
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	578951	50.0000	55.45
	34 Tetrahydrofuran	71	8.465	8.465	(0.914)	155200	250.000	294.5
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	381004	50.0000	51.40
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	627572	50.0000	52.80
	37 2-Butanone	43	8.577	8.577	(0.926)	122185	50.0000	57.17
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	611846	50.0000	55.23
	40 Benzene	78	8.884	8.884	(0.959)	1951828	50.0000	55.11
	41 Propionitrile	54	8.884	8.884	(0.959)	181454	250.000	279.4
	42 Methacrylonitrile	41	8.898	8.898	(0.961)	826544	250.000	290.7
	45 Isobutanol	43	8.982	8.982	(0.970)	215579	1000.00	1187
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	317360	50.0000	51.99
	44 1,2-Dichloroethane	62	9.066	9.066	(0.979)	450192	50.0000	54.74
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1742874	50.0000	
	48 Trichloroethene	95	9.415	9.415	(1.017)	476935	50.0000	53.55
	47 Methylcyclohexane	55	9.429	9.429	(1.018)	549915	50.0000	56.34
	49 n-Butanol	56	9.624	9.624	(1.039)	62228	500.000	575.1
	50 Dibromomethane	93	9.820	9.820	(1.060)	198031	50.0000	53.34
	51 1,2-Dichloropropane	63	9.904	9.904	(1.069)	480025	50.0000	53.34
	52 Bromodichloromethane	83	9.946	9.946	(1.074)	471512	50.0000	52.38
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	191944	50.0000	59.06
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	52358	1000.00	1133
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	601691	50.0000	55.75
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1580121	50.0000	52.63
	58 Toluene	92	10.728	10.728	(0.887)	1140261	50.0000	52.62
	59 2-Nitropropane	43	10.923	10.923	(0.903)	137588	50.0000	61.96
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	247037	50.0000	58.47
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	444504	50.0000	57.22
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	362547	50.0000	50.34
	65 Ethyl methacrylate	69	11.161	11.161	(0.923)	365230	50.0000	53.80
	64 1,1,2-Trichloroethane	83	11.231	11.231	(0.928)	251707	50.0000	53.47
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	334372	50.0000	51.84
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	524724	50.0000	54.38
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	272240	50.0000	54.15
	69 2-Hexanone	43	11.761	11.761	(0.972)	148771	50.0000	55.39
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1187234	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	2112619	50.0000	51.77
	71 Chlorobenzene	112	12.110	12.110	(1.001)	1237909	50.0000	51.47
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	405912	50.0000	50.81
	74 m,p-Xylenes	106	12.222	12.222	(1.010)	1742196	100.000	103.9
	75 o-Xylene	106	12.627	12.627	(1.044)	800134	50.0000	52.59
	76 Styrene	104	12.683	12.683	(1.048)	1211671	50.0000	55.70
	77 Bromoform	173	12.753	12.753	(0.893)	183778	50.0000	55.41
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	1741275	50.0000	56.10
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	505928	50.0000	54.58
	81 n-Propylbenzene	91	13.298	13.298	(0.931)	2330218	50.0000	54.20

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MCCV1966.D
Report Date: 15-Aug-2012 15:15

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	80 Bromobenzene	156	13.325	13.325	(0.933)	468657	50.0000	50.92
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	342373	50.0000	56.62
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	1738733	50.0000	56.68
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	1555209	50.0000	55.57
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	366722	50.0000	58.10
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	63537	50.0000	56.61
	87 Cyclohexanone	55	13.577	13.577	(0.951)	102053	500.000	588.7
	88 4-Chlorotoluene	91	13.633	13.633	(0.955)	1356585	50.0000	55.95
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	1475344	50.0000	54.09
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	1679590	50.0000	55.66
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	2276833	50.0000	57.11
	93 4-Isopropyltoluene	119	14.066	14.066	(0.985)	1799543	50.0000	57.08
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	935181	50.0000	51.32
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	586237	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	962119	50.0000	51.57
	98 n-Butylbenzene	91	14.471	14.471	(1.014)	1674293	50.0000	57.85
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	830804	50.0000	51.88
	145 Nonanal	57	15.406	15.406	(1.079)	103497	50.0000	56.70
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	52062	50.0000	51.08
	101 Hexachlorobutadiene	225	16.105	16.105	(1.128)	230031	50.0000	48.71
	104 1,2,4-Trichlorobenzene	180	16.161	16.161	(1.132)	332401	50.0000	53.07
	105 Naphthalene	128	16.524	16.524	(1.158)	341922	50.0000	58.62
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	175473	50.0000	53.22
M	107 Xylenes (total)	106				2542330	150.000	156.5

Data File: MCCV1966.D

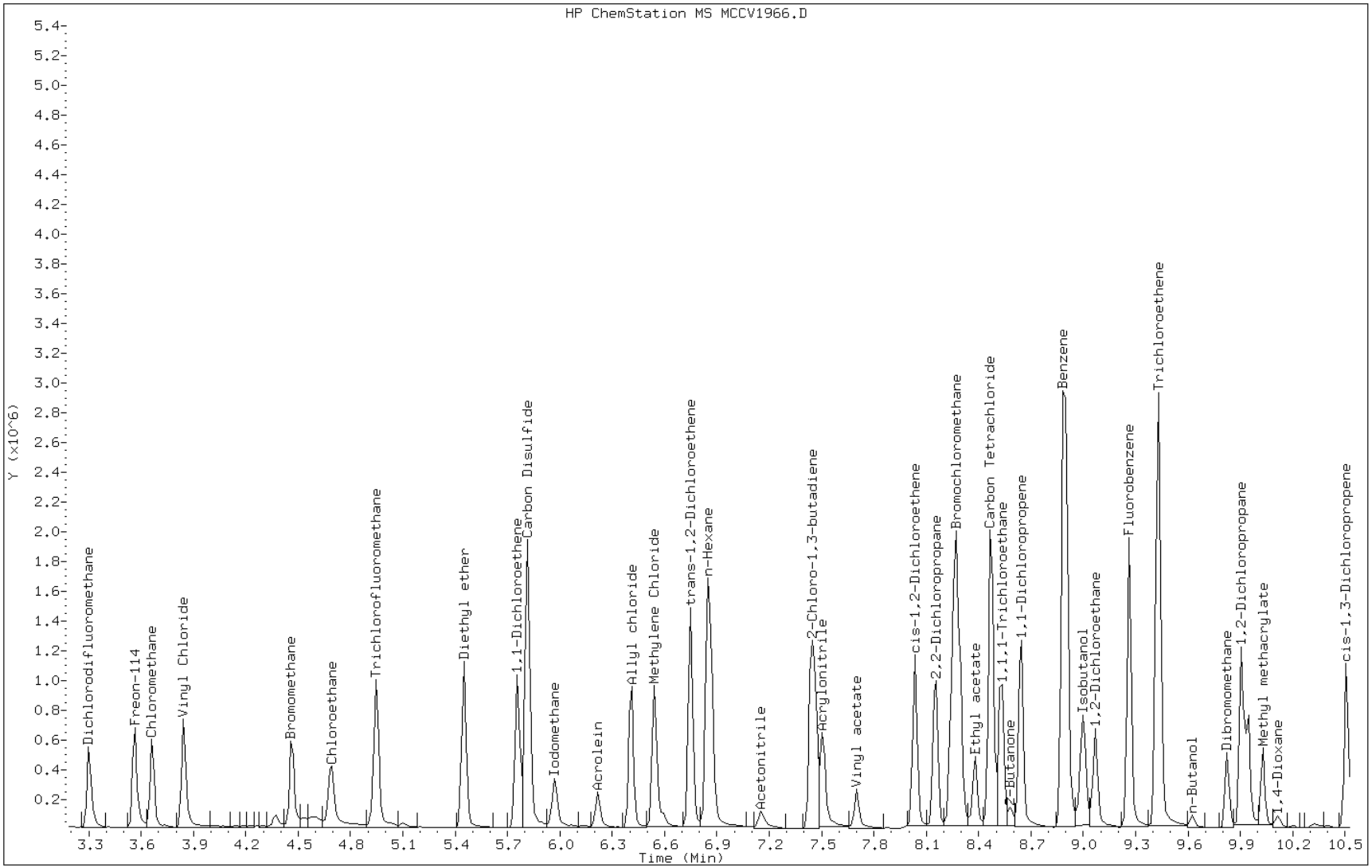
Date: 14-AUG-2012 03:56

Client ID: CCVIS

Instrument: MSM.i

Sample Info: CCVIS

Operator: JDH

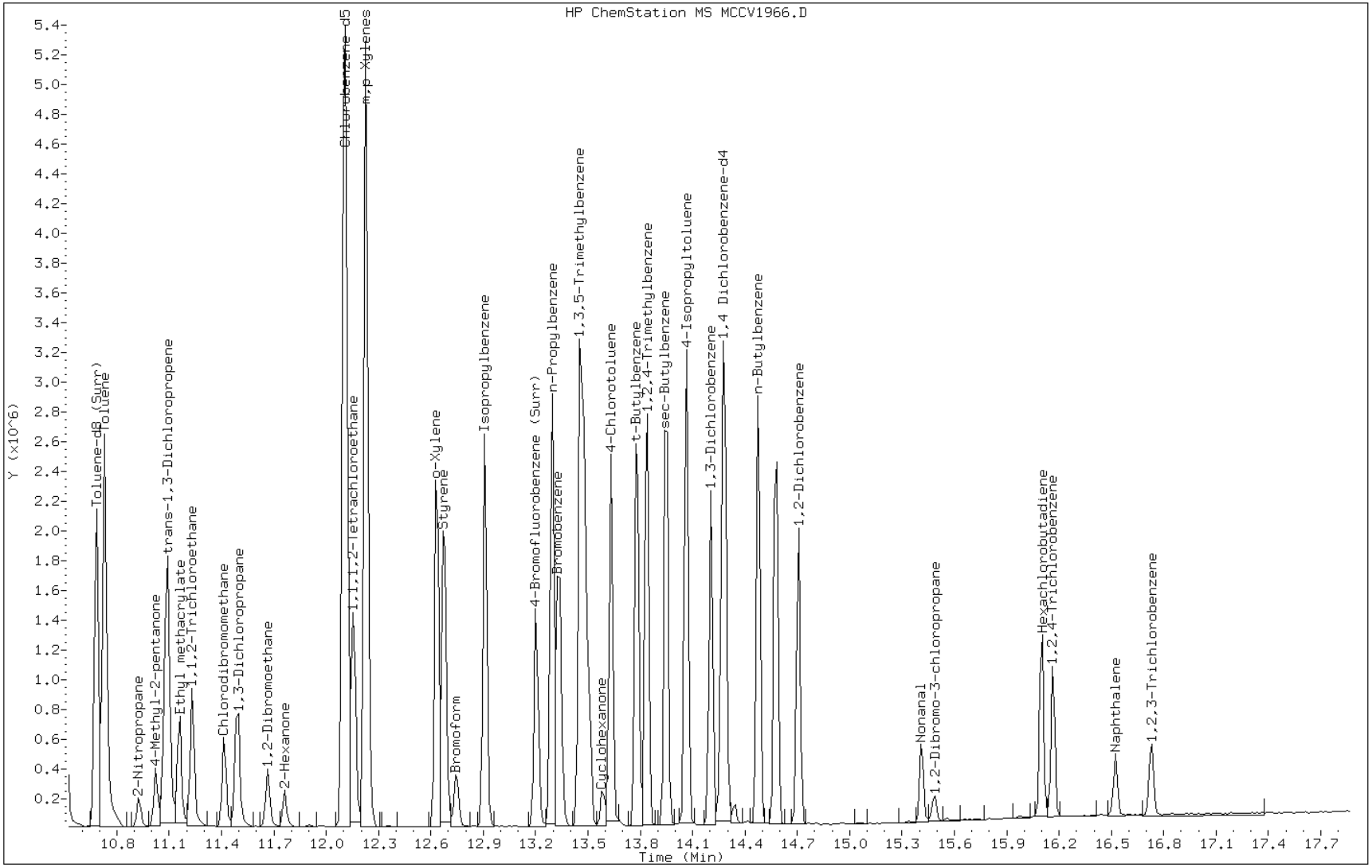


Data File: MCCV1966.D

Date: 14-AUG-2012 03:56

Client ID: CCVIS Instrument: MSM.i

Sample Info: CCVIS Operator: JDH



FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9019/10 Calibration Date: 08/13/2012 11:33

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZICV1083.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	LinF	0.3610	0.2314	0.1000	35.0	50.0	-30.0	30.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.1631	0.1331	0.0100	40.8	50.0	-18.4	30.0
Chloromethane	Ave	0.3371	0.2994	0.1000	44.4	50.0	-11.2	30.0
Vinyl chloride	Ave	0.3568	0.3097	0.1000	43.4	50.0	-13.2	30.0
Bromomethane	Ave	0.1509	0.1358	0.1000	45.0	50.0	-10.0	30.0
Chloroethane	Ave	0.1447	0.1361	0.1000	47.0	50.0	-5.9	30.0
Trichlorofluoromethane	Ave	0.4287	0.3994	0.1000	46.6	50.0	-6.8	30.0
Ethyl ether	Ave	0.1296	0.1315	0.0100	101	100	1.5	30.0
1,1-Dichloroethene	Ave	0.2625	0.2466	0.1000	47.0	50.0	-6.0	30.0
Carbon disulfide	Ave	0.8174	0.8424	0.1000	51.5	50.0	3.1	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2200	0.2085	0.1000	47.4	50.0	-5.2	30.0
Iodomethane	Ave	0.4110	0.4214	0.0100	51.3	50.0	2.5	30.0
Acrolein	Ave	0.0270	0.0285	0.0010	264	250	5.4	30.0
Allyl chloride	Ave	0.2382	0.2338	0.0100	49.1	50.0	-1.8	30.0
Methylene Chloride	Ave	0.2658	0.2676	0.1000	50.3	50.0	0.7	30.0
Acetone	Ave	0.0393	0.0396*	0.1000	50.4	50.0	0.8	30.0
trans-1,2-Dichloroethene	Ave	0.3147	0.2937	0.1000	46.7	50.0	-6.7	30.0
Methyl acetate	Ave	0.0334	0.0326*	0.1000	48.8	50.0	-2.4	30.0
n-Hexane	Ave	0.0768	0.0733	0.0100	47.7	50.0	-4.5	30.0
Methyl tert-butyl ether	Ave	0.5414	0.5518	0.1000	51.0	50.0	1.9	30.0
Acetonitrile	Ave	0.0152	0.0153	0.0010	252	250	0.6	30.0
2-Chloro-1,3-butadiene	Ave	0.4414	0.4233	0.0100	48.0	50.0	-4.1	30.0
1,1-Dichloroethane	Ave	0.4804	0.4789	0.2000	49.8	50.0	-0.3	30.0
Acrylonitrile	Ave	0.0541	0.0532	0.0100	246	250	-1.6	30.0
Vinyl acetate	Ave	0.2111	0.2236	0.0100	53.0	50.0	5.9	30.0
cis-1,2-Dichloroethene	Ave	0.3055	0.3083	0.1000	50.5	50.0	0.9	30.0
2,2-Dichloropropane	Ave	0.3538	0.3437	0.0100	48.6	50.0	-2.8	30.0
Bromochloromethane	Ave	0.1213	0.1201	0.0100	49.5	50.0	-1.0	30.0
Cyclohexane	Ave	0.4603	0.4409	0.1000	47.9	50.0	-4.2	30.0
Chloroform	Ave	0.4614	0.4582	0.2000	49.7	50.0	-0.7	30.0
Ethyl acetate	Ave	0.0202	0.0198	0.0100	97.8	100	-2.2	30.0
Carbon tetrachloride	Ave	0.3822	0.3585	0.1000	46.9	50.0	-6.2	30.0
Tetrahydrofuran	Ave	0.0165	0.0162	0.0010	246	250	-1.7	30.0
1,1,1-Trichloroethane	Ave	0.4103	0.4029	0.1000	49.1	50.0	-1.8	30.0
2-Butanone (MEK)	Ave	0.0617	0.0638*	0.1000	51.7	50.0	3.4	30.0
1,1-Dichloropropene	Ave	0.4022	0.3855	0.0100	47.9	50.0	-4.1	30.0
Benzene	Ave	1.213	1.116	0.5000	46.0	50.0	-8.0	30.0
Propionitrile	Ave	0.0183	0.0183	0.0010	251	250	0.2	30.0
Methacrylonitrile	Ave	0.0844	0.0865	0.0100	256	250	2.4	30.0
Isobutanol	Ave	0.0058	0.0060	0.0010	1020	1000	2.4	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9019/10 Calibration Date: 08/13/2012 11:33

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZICV1083.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.2709	0.2665	0.1000	49.2	50.0	-1.7	30.0
Methylcyclohexane	Ave	0.3418	0.3272	0.1000	47.9	50.0	-4.3	30.0
Trichloroethene	Ave	0.2891	0.2788	0.2000	48.2	50.0	-3.5	30.0
1-Butanol	Ave	0.0039	0.0036*	0.0100	457	500	-8.7	30.0
Dibromomethane	Ave	0.1147	0.1168	0.0100	50.9	50.0	1.8	30.0
1,2-Dichloropropane	Ave	0.2685	0.2659	0.1000	49.5	50.0	-1.0	30.0
Bromodichloromethane	Ave	0.3148	0.3214	0.2000	51.1	50.0	2.1	30.0
Methyl methacrylate	Ave	0.1252	0.1240	0.0100	49.5	50.0	-1.0	30.0
1,4-Dioxane	Ave	0.0012	0.0013	0.0010	1040	1000	4.5	30.0
2-Chloroethyl vinyl ether	Lin	0.0536	0.0640	0.0100	51.1	50.0	2.3	30.0
cis-1,3-Dichloropropene	Ave	0.3963	0.4260	0.2000	53.8	50.0	7.5	30.0
Toluene	Ave	1.054	1.015	0.4000	48.2	50.0	-3.7	30.0
2-Nitropropane	Ave	0.0574	0.0567	0.0100	98.8	100	-1.2	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2072	0.2085	0.1000	50.3	50.0	0.6	30.0
Tetrachloroethene	Ave	0.3461	0.3308	0.2000	47.8	50.0	-4.4	30.0
trans-1,3-Dichloropropene	Ave	0.4156	0.4435	0.1000	53.4	50.0	6.7	30.0
Ethyl methacrylate	Ave	0.3737	0.3765	0.0100	50.4	50.0	0.8	30.0
1,1,2-Trichloroethane	Ave	0.2192	0.2148	0.1000	49.0	50.0	-2.0	30.0
Dibromochloromethane	Ave	0.2978	0.3049	0.1000	51.2	50.0	2.4	30.0
1,3-Dichloropropane	Ave	0.4732	0.4798	0.0100	50.7	50.0	1.4	30.0
1,2-Dibromoethane (EDB)	Ave	0.2581	0.2562	0.1000	49.6	50.0	-0.7	30.0
2-Hexanone	Ave	0.1374	0.1366	0.1000	49.7	50.0	-0.6	30.0
Chlorobenzene	Ave	1.076	1.036	0.5000	48.1	50.0	-3.7	30.0
Ethylbenzene	Ave	2.066	1.857	0.1000	44.9	50.0	-10.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.3912	0.3826	0.0100	48.9	50.0	-2.2	30.0
m-Xylene & p-Xylene	Ave	0.7952	0.7444	0.1000	93.6	100	-6.4	30.0
o-Xylene	Ave	0.7925	0.7271	0.3000	45.9	50.0	-8.2	30.0
Styrene	Ave	1.181	1.234	0.3000	52.3	50.0	4.5	30.0
Bromoform	Ave	0.3436	0.3599	0.1000	52.4	50.0	4.8	30.0
Isopropylbenzene	Ave	3.725	3.870	0.1000	51.9	50.0	3.9	30.0
N-Propylbenzene	Ave	4.533	4.175	0.0100	46.0	50.0	-7.9	30.0
Bromobenzene	Ave	0.8888	0.8926	0.0100	50.2	50.0	0.4	30.0
1,1,2,2-Tetrachloroethane	Ave	0.5773	0.5986	0.3000	51.8	50.0	3.7	30.0
1,3,5-Trimethylbenzene	Ave	3.486	3.383	0.0100	48.5	50.0	-3.0	30.0
2-Chlorotoluene	Ave	2.926	2.877	0.0100	49.2	50.0	-1.7	30.0
1,2,3-Trichloropropane	Ave	0.5965	0.6095	0.0100	51.1	50.0	2.2	30.0
trans-1,4-Dichloro-2-butene	Ave	0.1141	0.1190	0.0100	52.1	50.0	4.2	30.0
Cyclohexanone	Ave	0.0168	0.0149	0.0010	442	500	-11.6	30.0
4-Chlorotoluene	Ave	2.567	2.549	0.0100	49.7	50.0	-0.7	30.0
tert-Butylbenzene	Ave	2.767	2.692	0.0100	48.6	50.0	-2.7	30.0
1,2,4-Trimethylbenzene	Ave	3.398	3.348	0.0100	49.3	50.0	-1.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9019/10 Calibration Date: 08/13/2012 11:33

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZICV1083.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	4.430	3.998	0.0100	45.1	50.0	-9.7	30.0
4-Isopropyltoluene	Ave	3.396	3.285	0.0100	48.4	50.0	-3.3	30.0
1,3-Dichlorobenzene	Ave	1.675	1.631	0.6000	48.7	50.0	-2.6	30.0
1,4-Dichlorobenzene	Ave	1.646	1.698	0.5000	51.6	50.0	3.2	30.0
n-Butylbenzene	Ave	3.284	3.114	0.0100	47.4	50.0	-5.2	30.0
1,2-Dichlorobenzene	Ave	1.435	1.391	0.4000	48.5	50.0	-3.0	30.0
Nonanal	Lin	0.3158	0.2640	0.0100	47.5	50.0	-5.0	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.0853	0.0800	0.0500	46.9	50.0	-6.3	30.0
Hexachlorobutadiene	Lin	0.3696	0.2905	0.0100	50.8	50.0	1.6	30.0
1,2,4-Trichlorobenzene	Ave	0.5687	0.4999	0.2000	43.9	50.0	-12.1	30.0
Naphthalene	Lin	1.005	0.7142	0.0100	49.3	50.0	-1.5	30.0
1,2,3-Trichlorobenzene	Qua	0.3597	0.2606	0.0100	45.6	50.0	-8.8	30.0
Dibromofluoromethane (Surr)	Ave	0.2382	0.2455	0.0100	51.5	50.0	3.1	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2042	0.2084	0.0100	51.0	50.0	2.1	30.0
Toluene-d8 (Surr)	Ave	1.342	1.358	0.0100	50.6	50.0	1.1	30.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.124	0.0100	51.8	50.0	3.6	30.0

Data File: ZICV1083.D
Report Date: 13-Aug-2012 23:56

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZICV1083.D
Lab Smp Id: ICV
Inj Date : 13-AUG-2012 11:33
Operator : GLB Inst ID: MSZ.i
Smp Info : ICV
Misc Info : ICV
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\8260C-Z5mL.m
Meth Date : 13-Aug-2012 23:56 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 15 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * DSW/Ws* * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
DSW	5.000	DefSample WT
Ws	5.000	Weight of Sample Purged or Extracted (g)
Va	100.000	Volume of Methanol Purged (ul)
DSW	5.000	DefSample Weight
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.988	2.988	(0.335)	494417	50.0000	35.02(M)
2	Freon-114	135	3.240	3.240	(0.364)	284383	50.0000	40.79
3	Chloromethane	50	3.324	3.324	(0.373)	639790	50.0000	44.40
4	Vinyl Chloride	62	3.491	3.491	(0.392)	661947	50.0000	43.40
5	Bromomethane	94	4.064	4.064	(0.456)	290214	50.0000	44.99
6	Chloroethane	64	4.301	4.301	(0.483)	290860	50.0000	47.03
7	Trichlorofluoromethane	101	4.539	4.539	(0.509)	853614	50.0000	46.59
8	Diethyl ether	74	5.041	5.041	(0.566)	562168	100.000	101.5
9	1,1-Dichloroethene	96	5.349	5.349	(0.600)	527110	50.0000	46.98
10	Carbon Disulfide	76	5.391	5.391	(0.605)	1800396	50.0000	51.53
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	445549	50.0000	47.38
12	Iodomethane	142	5.558	5.558	(0.624)	900632	50.0000	51.27
M 26	1,2-Dichloroethene (total)	96				1286461	100.000	97.11
13	Acrolein	56	5.824	5.824	(0.654)	304141	250.000	263.6
14	Allyl chloride	39	6.019	6.019	(0.676)	499644	50.0000	49.08
15	Methylene Chloride	84	6.145	6.145	(0.690)	571813	50.0000	50.34
16	Acetone	43	6.215	6.215	(0.697)	84660	50.0000	50.41
17	trans-1,2-Dichloroethene	96	6.354	6.354	(0.713)	627600	50.0000	46.65
18	Methyl Acetate	74	6.368	6.368	(0.715)	69736	50.0000	48.80
19	n-Hexane	86	6.452	6.452	(0.724)	156649	50.0000	47.73

Data File: ZICV1083.D
Report Date: 13-Aug-2012 23:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
	20 MTBE	73	6.480	6.480	(0.727)	1179335	50.0000	50.97
	21 Acetonitrile	41	6.801	6.801	(0.763)	162973	250.000	251.5
	22 2-Chloro-1,3-butadiene	53	7.067	7.067	(0.793)	904656	50.0000	47.95
	23 1,1-Dichloroethane	63	7.094	7.094	(0.796)	1023452	50.0000	49.84
	24 Acrylonitrile	53	7.150	7.150	(0.802)	568653	250.000	246.0
	25 Vinyl acetate	43	7.346	7.346	(0.824)	477901	50.0000	52.95
	27 cis-1,2-Dichloroethene	96	7.667	7.667	(0.861)	658861	50.0000	50.46
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	734596	50.0000	48.58
	30 Bromochloromethane	128	7.877	7.877	(0.884)	256714	50.0000	49.52
	29 Cyclohexane	84	7.891	7.891	(0.886)	942190	50.0000	47.89
	31 Chloroform	83	7.946	7.946	(0.892)	979203	50.0000	49.65
	33 Ethyl acetate	45	8.030	8.030	(0.901)	84613	100.000	97.82
	32 Carbon Tetrachloride	117	8.100	8.100	(0.909)	766116	50.0000	46.90
	34 Tetrahydrofuran	71	8.114	8.114	(0.911)	173242	250.000	245.7
$	35 Dibromofluoromethane (surr)	113	8.128	8.128	(0.912)	524601	50.0000	51.52
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	860988	50.0000	49.10
	37 2-Butanone	43	8.240	8.240	(0.925)	136280	50.0000	51.70
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	823950	50.0000	47.92
	40 Benzene	78	8.533	8.533	(0.958)	2384703	50.0000	46.01
	41 Propionitrile	54	8.547	8.547	(0.959)	195712	250.000	250.6
	42 Methacrylonitrile	41	8.561	8.561	(0.961)	923882	250.000	256.1
	45 Isobutanol	43	8.659	8.659	(0.972)	254259	1000.00	1024
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	445377	50.0000	51.04
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	569478	50.0000	49.17
*	46 Fluorobenzene	96	8.910	8.910	(1.000)	2137137	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	699310	50.0000	47.87
	48 Trichloroethene	95	9.078	9.078	(1.019)	595876	50.0000	48.23
	49 n-Butanol	56	9.301	9.301	(1.044)	76076	500.000	456.7
	50 Dibromomethane	93	9.483	9.483	(1.064)	249520	50.0000	50.91
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	568349	50.0000	49.52
	52 Bromodichloromethane	83	9.608	9.608	(1.078)	686908	50.0000	51.05
	53 Methyl methacrylate	69	9.706	9.706	(1.089)	264925	50.0000	49.52
	54 1,4-Dioxane	88	9.776	9.776	(1.097)	53773	1000.00	1045
	55 2-Chloroethylvinyl ether	63	10.083	10.083	(1.132)	136712	50.0000	51.13
	56 cis-1,3-Dichloropropene	75	10.181	10.181	(1.143)	910471	50.0000	53.76
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	2047917	50.0000	50.57
	58 Toluene	92	10.404	10.404	(0.884)	1531247	50.0000	48.15
	59 2-Nitropropane	43	10.614	10.614	(0.902)	171125	100.000	98.76
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	314547	50.0000	50.32(M)
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	499095	50.0000	47.79
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	669066	50.0000	53.35
	65 Ethyl methacrylate	69	10.837	10.837	(0.921)	567947	50.0000	50.38
	64 1,1,2-Trichloroethane	83	10.907	10.907	(0.926)	324043	50.0000	49.00
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	459906	50.0000	51.18
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	723794	50.0000	50.69
	68 1,2-Dibromoethane	107	11.340	11.340	(0.963)	386561	50.0000	49.64
	69 2-Hexanone	43	11.452	11.452	(0.973)	206135	50.0000	49.72
*	70 Chlorobenzene-d5	117	11.773	11.773	(1.000)	1508583	50.0000	
	72 Ethylbenzene	91	11.787	11.787	(1.001)	2801172	50.0000	44.94
	71 Chlorobenzene	112	11.787	11.787	(1.001)	1563283	50.0000	48.14
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.829	(1.005)	577145	50.0000	48.90
	74 m,p-Xylenes	106	11.913	11.913	(1.012)	2246064	100.000	93.62
	75 o-Xylene	106	12.318	12.318	(1.046)	1096927	50.0000	45.88
	76 Styrene	104	12.360	12.360	(1.050)	1861915	50.0000	52.27

Data File: ZICV1083.D
Report Date: 13-Aug-2012 23:56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
77	Bromoform	173	12.430	12.430	(0.891)	249651	50.0000	52.38
78	Isopropylbenzene	105	12.583	12.583	(0.902)	2684398	50.0000	51.94
$ 79	4-Bromofluorobenzene (surr)	95	12.876	12.876	(0.923)	779842	50.0000	51.80
81	n-Propylbenzene	91	12.974	12.974	(0.930)	2895669	50.0000	46.05
80	Bromobenzene	156	13.016	13.016	(0.933)	619104	50.0000	50.22
82	1,1,2,2-Tetrachloroethane	83	13.030	13.030	(0.934)	415153	50.0000	51.84
84	1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	2346251	50.0000	48.52
83	2-Chlorotoluene	91	13.156	13.156	(0.943)	1995511	50.0000	49.17
85	1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	422751	50.0000	51.09
86	trans-1,4-dichloro-2-butene	53	13.198	13.198	(0.946)	82521	50.0000	52.12
87	Cyclohexanone	55	13.268	13.268	(0.951)	103246	500.000	442.1
88	4-Chlorotoluene	91	13.309	13.309	(0.954)	1768106	50.0000	49.66
89	t-Butylbenzene	119	13.463	13.463	(0.965)	1867205	50.0000	48.64
91	1,2,4-Trimethylbenzene	105	13.519	13.519	(0.969)	2322153	50.0000	49.26
92	sec-Butylbenzene	105	13.631	13.631	(0.977)	2773097	50.0000	45.13
93	4-Isopropyltoluene	119	13.756	13.756	(0.986)	2278512	50.0000	48.36
94	1,3-Dichlorobenzene	146	13.882	13.882	(0.995)	1131054	50.0000	48.68
* 95	1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	693600	50.0000	
96	1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	1177807	50.0000	51.59
98	n-Butylbenzene	91	14.161	14.161	(1.015)	2159746	50.0000	47.41
99	1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	965051	50.0000	48.50
145	Nonanal	57	15.111	15.111	(1.083)	183132	50.0000	47.48
100	1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	55470	50.0000	46.85
101	Hexachlorobutadiene	225	15.781	15.781	(1.131)	201459	50.0000	50.82
104	1,2,4-Trichlorobenzene	180	15.851	15.851	(1.136)	346715	50.0000	43.94
105	Naphthalene	128	16.186	16.186	(1.160)	495332	50.0000	49.27
106	1,2,3-Trichlorobenzene	180	16.396	16.396	(1.175)	180747	50.0000	45.62
M 107	Xylenes (total)	106				3342991	150.000	139.5

QC Flag Legend

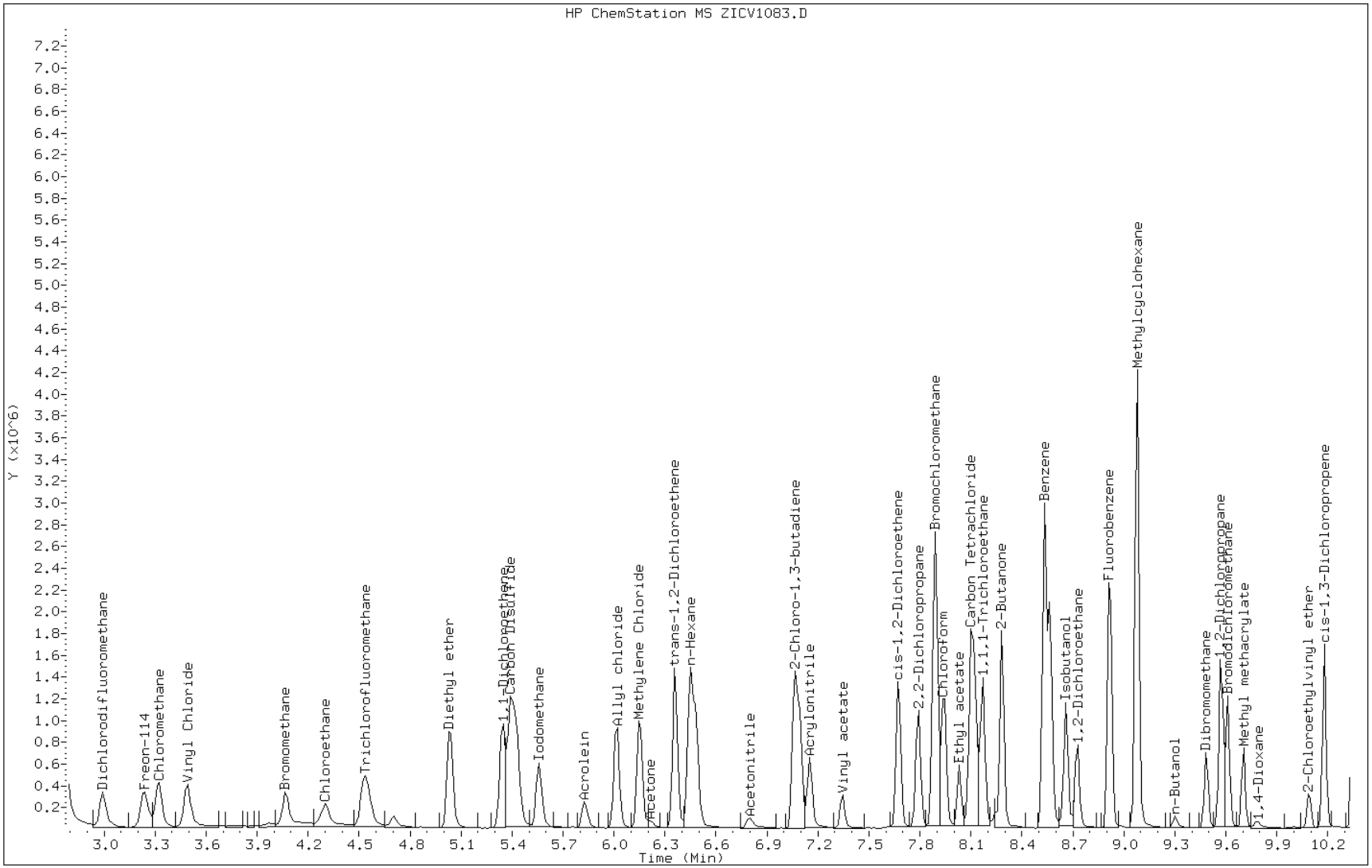
M - Compound response manually integrated.

Data File: ZICV1083.D

Date: 13-AUG-2012 11:33

Client ID: Instrument: MSZ.i

Sample Info: ICV Operator: GLB

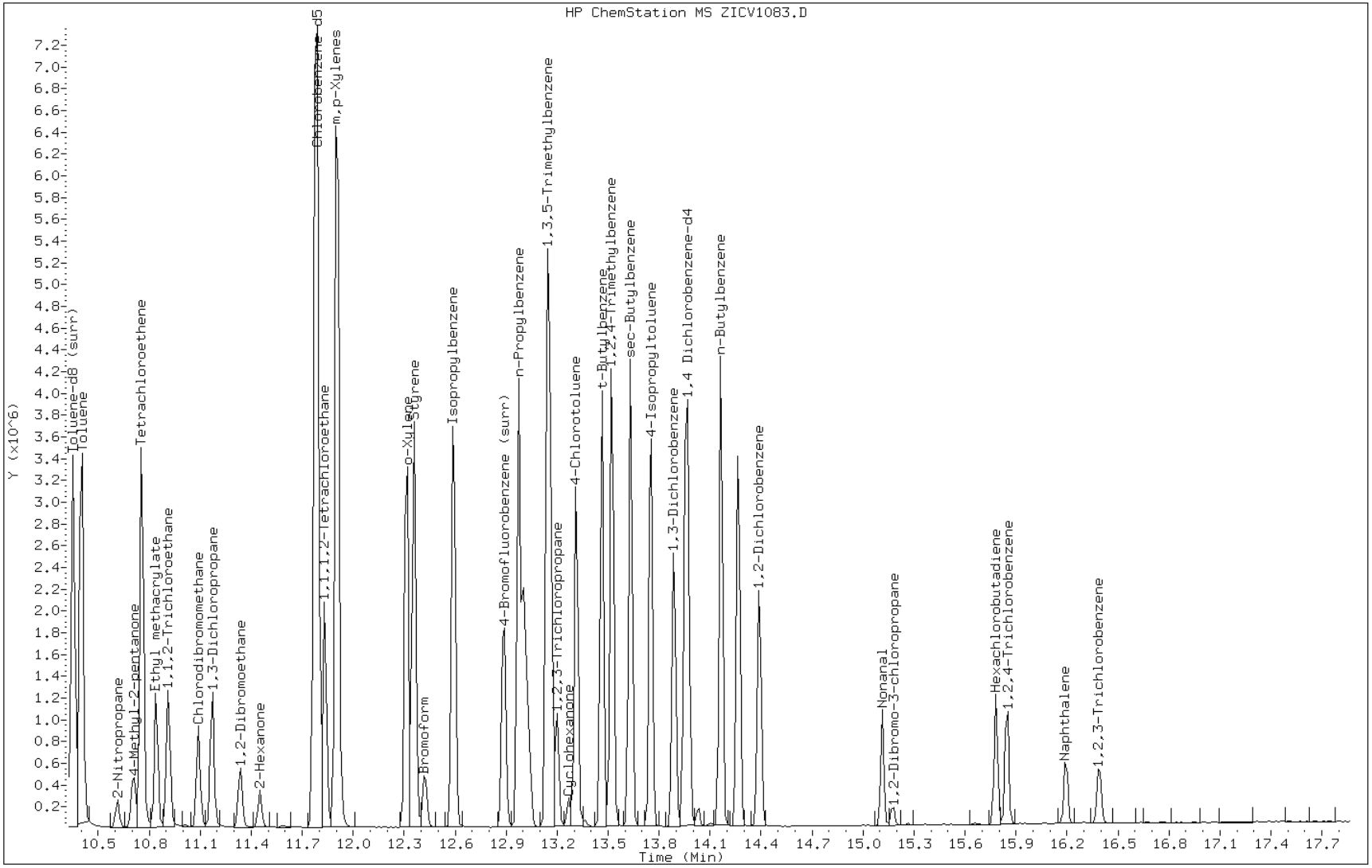


Data File: ZICV1083.D

Date: 13-AUG-2012 11:33

Client ID: Instrument: MSZ.i

Sample Info: ICV Operator: GLB



Manual Integration Report

Data File: ZICV1083.D
Inj. Date and Time: 13-AUG-2012 11:33
Instrument ID: MSZ.i
Client ID:
Compound: 1 Dichlorodifluoromethane
CAS #: 3114-55-4
Report Date: 08/14/2012

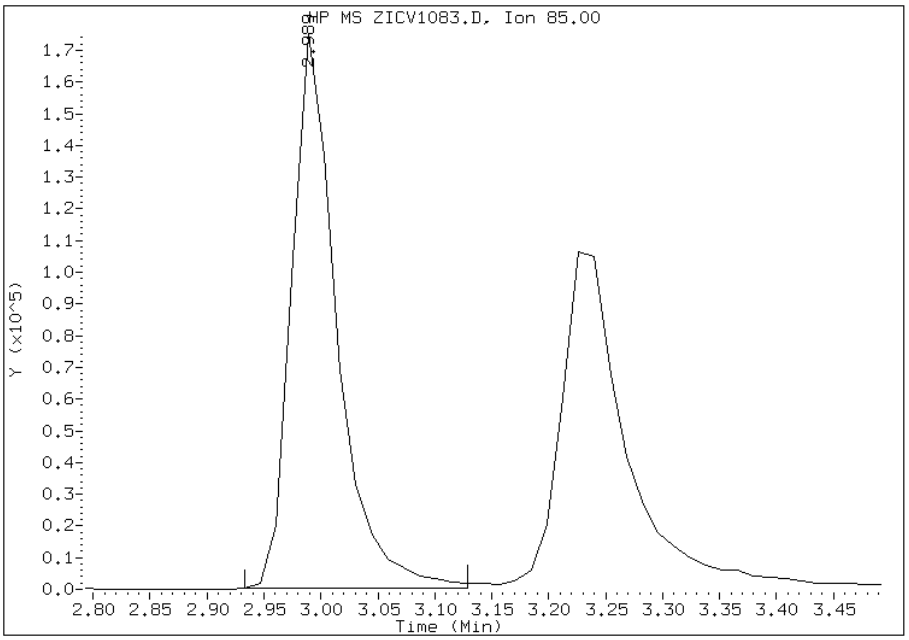
Processing Integration Results

RT: 2.99

Response: 486041

Amount: 33

Conc: 33



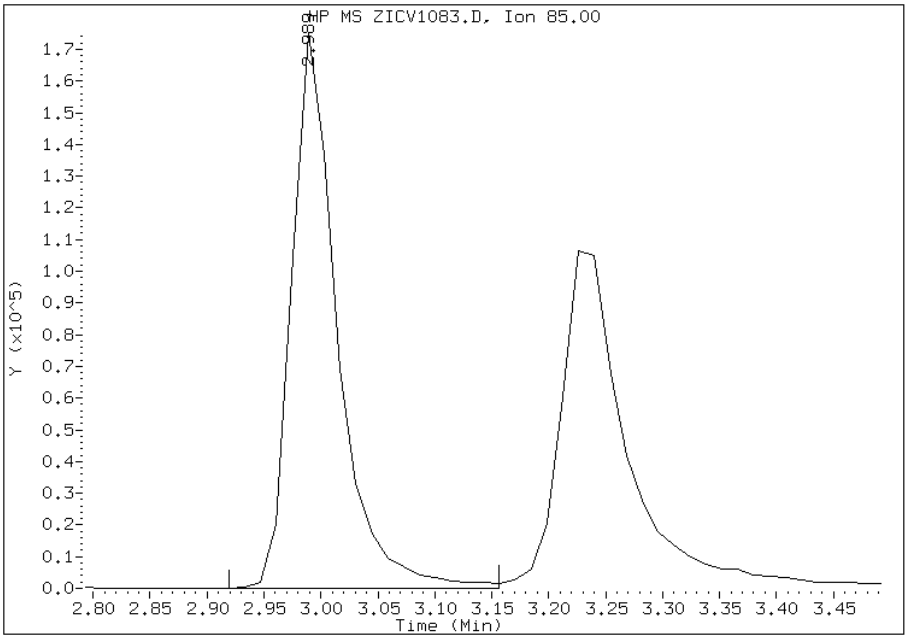
Manual Integration Results

RT: 2.99

Response: 494417

Amount: 35

Conc: 35



Manually Integrated By: bonkoskig
Modification Date: 13-Aug-2012 23:37
Manual Integration Reason: Baseline Event

Manual Integration Report

Data File: ZICV1083.D
Inj. Date and Time: 13-AUG-2012 11:33
Instrument ID: MSZ.i
Client ID:
Compound: 62 4-Methyl-2-pentanone
CAS #: 108-10-1
Report Date: 08/14/2012

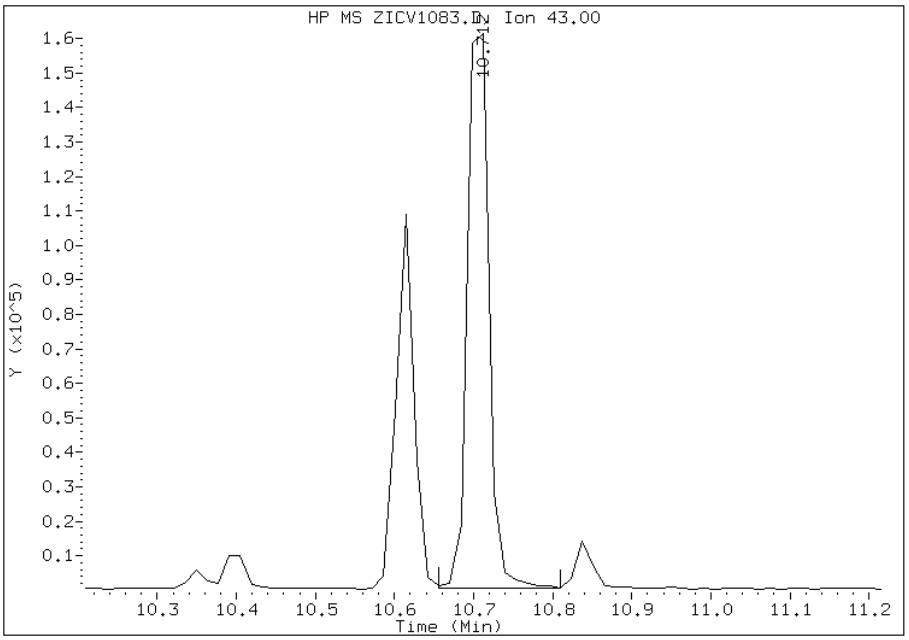
Processing Integration Results

RT: 10.71

Response: 314547

Amount: 65

Conc: 65



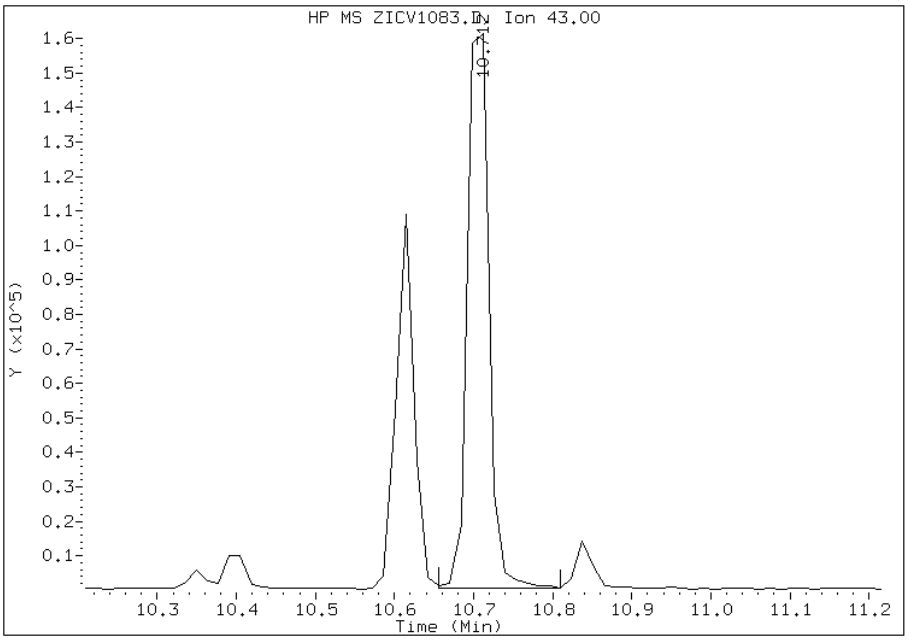
Manual Integration Results

RT: 10.71

Response: 314547

Amount: 50

Conc: 50



Manually Integrated By: bonkoskig
Modification Date: 13-Aug-2012 23:23
Manual Integration Reason: Analyte not Identified by the Data System

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9490/2 Calibration Date: 08/16/2012 17:54

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZCCV1167.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	LinF	0.3610	0.3091	0.1000	46.8	50.0	-6.4	20.0
1,2-Dichloro-1,1,2,2-tetrafluoroethane	Ave	0.1631	0.1619	0.0100	49.6	50.0	-0.7	20.0
Chloromethane	Ave	0.3371	0.3075	0.1000	45.6	50.0	-8.8	20.0
Vinyl chloride	Ave	0.3568	0.3094	0.1000	43.4	50.0	-13.3	20.0
Bromomethane	Ave	0.1509	0.1325	0.1000	43.9	50.0	-12.2	20.0
Chloroethane	Ave	0.1447	0.1349	0.1000	46.6	50.0	-6.8	20.0
Trichlorofluoromethane	Ave	0.4287	0.4153	0.1000	48.4	50.0	-3.1	20.0
Ethyl ether	Ave	0.1296	0.1334	0.0100	103	100	2.9	20.0
1,1-Dichloroethene	Ave	0.2625	0.2538	0.1000	48.3	50.0	-3.3	20.0
Carbon disulfide	Ave	0.8174	0.8052	0.1000	49.3	50.0	-1.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2200	0.2194	0.1000	49.9	50.0	-0.3	20.0
Iodomethane	Ave	0.4110	0.4072	0.0100	49.5	50.0	-0.9	20.0
Acrolein	Ave	0.0270	0.0249	0.0010	231	250	-7.7	20.0
Allyl chloride	Ave	0.2382	0.2238	0.0100	47.0	50.0	-6.0	20.0
Methylene Chloride	Ave	0.2658	0.2636	0.1000	49.6	50.0	-0.8	20.0
Acetone	Ave	0.0393	0.0378*	0.1000	48.1	50.0	-3.8	20.0
trans-1,2-Dichloroethene	Ave	0.3147	0.2935	0.1000	46.6	50.0	-6.8	20.0
Methyl acetate	Ave	0.0334	0.0326*	0.1000	48.8	50.0	-2.4	20.0
n-Hexane	Ave	0.0768	0.0729	0.0100	47.5	50.0	-5.0	20.0
Methyl tert-butyl ether	Ave	0.5414	0.5349	0.1000	49.4	50.0	-1.2	20.0
Acetonitrile	Ave	0.0152	0.0145	0.0010	240	250	-4.2	20.0
2-Chloro-1,3-butadiene	Ave	0.4414	0.4133	0.0100	46.8	50.0	-6.3	20.0
1,1-Dichloroethane	Ave	0.4804	0.4597	0.2000	47.8	50.0	-4.3	20.0
Acrylonitrile	Ave	0.0541	0.0545	0.0100	252	250	0.7	20.0
Vinyl acetate	Ave	0.2111	0.1993	0.0100	47.2	50.0	-5.6	20.0
cis-1,2-Dichloroethene	Ave	0.3055	0.2936	0.1000	48.1	50.0	-3.9	20.0
2,2-Dichloropropane	Ave	0.3538	0.3443	0.0100	48.7	50.0	-2.7	20.0
Bromochloromethane	Ave	0.1213	0.1209	0.0100	49.9	50.0	-0.3	20.0
Cyclohexane	Ave	0.4603	0.4326	0.1000	47.0	50.0	-6.0	20.0
Chloroform	Ave	0.4614	0.4332	0.2000	46.9	50.0	-6.1	20.0
Ethyl acetate	Ave	0.0202	0.0201	0.0100	99.3	100	-0.7	20.0
Carbon tetrachloride	Ave	0.3822	0.3592	0.1000	47.0	50.0	-6.0	20.0
Tetrahydrofuran	Ave	0.0165	0.0157	0.0010	238	250	-4.7	20.0
1,1,1-Trichloroethane	Ave	0.4103	0.3939	0.1000	48.0	50.0	-4.0	20.0
2-Butanone (MEK)	Ave	0.0617	0.0638*	0.1000	51.7	50.0	3.4	20.0
1,1-Dichloropropene	Ave	0.4022	0.3869	0.0100	48.1	50.0	-3.8	20.0
Benzene	Ave	1.213	1.051	0.5000	43.3	50.0	-13.3	20.0
Propionitrile	Ave	0.0183	0.0180	0.0010	247	250	-1.3	20.0
Methacrylonitrile	Ave	0.0844	0.0812	0.0100	241	250	-3.8	20.0
Isobutanol	Ave	0.0058	0.0057	0.0010	984	1000	-1.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9490/2 Calibration Date: 08/16/2012 17:54

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZCCV1167.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloroethane	Ave	0.2709	0.2579	0.1000	47.6	50.0	-4.8	20.0
Methylcyclohexane	Ave	0.3418	0.3181	0.1000	46.5	50.0	-6.9	20.0
Trichloroethene	Ave	0.2891	0.2733	0.2000	47.3	50.0	-5.4	20.0
1-Butanol	Ave	0.0039	0.0035*	0.0100	447	500	-10.5	20.0
Dibromomethane	Ave	0.1147	0.1135	0.0100	49.5	50.0	-1.0	20.0
1,2-Dichloropropane	Ave	0.2685	0.2509	0.1000	46.7	50.0	-6.6	20.0
Bromodichloromethane	Ave	0.3148	0.3036	0.2000	48.2	50.0	-3.5	20.0
Methyl methacrylate	Ave	0.1252	0.1192	0.0100	47.6	50.0	-4.7	20.0
1,4-Dioxane	Ave	0.0012	0.0014	0.0010	1120	1000	12.2	20.0
2-Chloroethyl vinyl ether	Lin	0.0536	0.0399	0.0100	34.6	50.0	-30.8*	20.0
cis-1,3-Dichloropropene	Ave	0.3963	0.3860	0.2000	48.7	50.0	-2.6	20.0
Toluene	Ave	1.054	0.9833	0.4000	46.6	50.0	-6.7	20.0
2-Nitropropane	Ave	0.0574	0.0525	0.0100	91.4	100	-8.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2072	0.1962	0.1000	47.3	50.0	-5.3	20.0
Tetrachloroethene	Ave	0.3461	0.3306	0.2000	47.8	50.0	-4.5	20.0
trans-1,3-Dichloropropene	Ave	0.4156	0.3992	0.1000	48.0	50.0	-4.0	20.0
Ethyl methacrylate	Ave	0.3737	0.3608	0.0100	48.3	50.0	-3.4	20.0
1,1,2-Trichloroethane	Ave	0.2192	0.2132	0.1000	48.6	50.0	-2.7	20.0
Dibromochloromethane	Ave	0.2978	0.2935	0.1000	49.3	50.0	-1.4	20.0
1,3-Dichloropropane	Ave	0.4732	0.4461	0.0100	47.1	50.0	-5.7	20.0
1,2-Dibromoethane (EDB)	Ave	0.2581	0.2484	0.1000	48.1	50.0	-3.8	20.0
2-Hexanone	Ave	0.1374	0.1266	0.1000	46.1	50.0	-7.9	20.0
Chlorobenzene	Ave	1.076	1.027	0.5000	47.7	50.0	-4.6	20.0
Ethylbenzene	Ave	2.066	1.752	0.1000	42.4	50.0	-15.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3912	0.3752	0.0100	48.0	50.0	-4.1	20.0
m-Xylene & p-Xylene	Ave	0.7952	0.7347	0.1000	92.4	100	-7.6	20.0
o-Xylene	Ave	0.7925	0.7385	0.3000	46.6	50.0	-6.8	20.0
Styrene	Ave	1.181	1.148	0.3000	48.6	50.0	-2.7	20.0
Bromoform	Ave	0.3436	0.3313	0.1000	48.2	50.0	-3.6	20.0
Isopropylbenzene	Ave	3.725	3.363	0.1000	45.1	50.0	-9.7	20.0
N-Propylbenzene	Ave	4.533	4.037	0.0100	44.5	50.0	-10.9	20.0
Bromobenzene	Ave	0.8888	0.8682	0.0100	48.8	50.0	-2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5773	0.5576	0.3000	48.3	50.0	-3.4	20.0
1,3,5-Trimethylbenzene	Ave	3.486	3.114	0.0100	44.7	50.0	-10.7	20.0
2-Chlorotoluene	Ave	2.926	2.769	0.0100	47.3	50.0	-5.4	20.0
1,2,3-Trichloropropane	Ave	0.5965	0.5709	0.0100	47.9	50.0	-4.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1141	0.1138	0.0100	49.9	50.0	-0.3	20.0
Cyclohexanone	Ave	0.0168	0.0161	0.0010	477	500	-4.6	20.0
4-Chlorotoluene	Ave	2.567	2.465	0.0100	48.0	50.0	-4.0	20.0
tert-Butylbenzene	Ave	2.767	2.611	0.0100	47.2	50.0	-5.7	20.0
1,2,4-Trimethylbenzene	Ave	3.398	3.048	0.0100	44.9	50.0	-10.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9490/2 Calibration Date: 08/16/2012 17:54

Instrument ID: MSZ Calib Start Date: 08/13/2012 07:37

GC Column: RTX-VMS40 ID: 0.18(mm) Calib End Date: 08/13/2012 10:22

Lab File ID: ZCCV1167.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
sec-Butylbenzene	Ave	4.430	3.913	0.0100	44.2	50.0	-11.7	20.0
4-Isopropyltoluene	Ave	3.396	3.053	0.0100	44.9	50.0	-10.1	20.0
1,3-Dichlorobenzene	Ave	1.675	1.627	0.6000	48.6	50.0	-2.9	20.0
1,4-Dichlorobenzene	Ave	1.646	1.579	0.5000	48.0	50.0	-4.0	20.0
n-Butylbenzene	Ave	3.284	2.899	0.0100	44.1	50.0	-11.7	20.0
1,2-Dichlorobenzene	Ave	1.435	1.370	0.4000	47.7	50.0	-4.5	20.0
Nonanal	Lin	0.3158	0.2342	0.0100	41.7	50.0	-16.5	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0853	0.0761	0.0500	44.6	50.0	-10.9	20.0
Hexachlorobutadiene	Lin	0.3696	0.2818	0.0100	49.2	50.0	-1.5	20.0
1,2,4-Trichlorobenzene	Ave	0.5687	0.4982	0.2000	43.8	50.0	-12.4	20.0
Naphthalene	Lin	1.005	0.6667	0.0100	45.7	50.0	-8.6	20.0
1,2,3-Trichlorobenzene	Qua	0.3597	0.2588	0.0100	45.3	50.0	-9.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2382	0.2469	0.0100	51.8	50.0	3.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2042	0.2072	0.0100	50.8	50.0	1.5	20.0
Toluene-d8 (Surr)	Ave	1.342	1.306	0.0100	48.7	50.0	-2.7	20.0
4-Bromofluorobenzene (Surr)	Ave	1.085	1.061	0.0100	48.9	50.0	-2.2	20.0

Data File: \\slsvr01\chem\MSZ.i\Z120816D.b\ZCCV1167.D
Report Date: 17-Aug-2012 04:44

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\slsvr01\chem\MSZ.i\Z120816D.b\ZCCV1167.D
Lab Smp Id: CCVIS
Inj Date : 16-AUG-2012 17:54
Operator : JDH Inst ID: MSZ.i
Smp Info : CCVIS
Misc Info : CCVIS
Comment : NONE
Method : \\slsvr01\chem\MSZ.i\Z120816D.b\8260C-Z5mL.m
Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL-P.sub
Target Version: 4.14
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1	Dichlorodifluoromethane	85	2.989	2.989	(0.335)	707626	50.0000	46.78
2	Freon-114	135	3.226	3.226	(0.362)	370716	50.0000	49.63
3	Chloromethane	50	3.324	3.324	(0.373)	703935	50.0000	45.60
4	Vinyl Chloride	62	3.492	3.492	(0.392)	708281	50.0000	43.35
5	Bromomethane	94	4.064	4.064	(0.456)	303237	50.0000	43.88
6	Chloroethane	64	4.302	4.302	(0.483)	308814	50.0000	46.62
7	Trichlorofluoromethane	101	4.525	4.525	(0.508)	950745	50.0000	48.44
8	Diethyl ether	74	5.028	5.028	(0.564)	610921	100.000	102.9
9	1,1-Dichloroethene	96	5.349	5.349	(0.600)	580923	50.0000	48.34
10	Carbon Disulfide	76	5.391	5.391	(0.605)	1843458	50.0000	49.25
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	502261	50.0000	49.86
12	Iodomethane	142	5.559	5.559	(0.624)	932213	50.0000	49.54
M 26	1,2-Dichloroethene (total)	96				1344065	100.000	94.68
13	Acrolein	56	5.824	5.824	(0.654)	285330	250.000	230.8
14	Allyl chloride	39	6.006	6.006	(0.674)	512248	50.0000	46.98
15	Methylene Chloride	84	6.145	6.145	(0.690)	603374	50.0000	49.58
16	Acetone	43	6.215	6.215	(0.698)	86553	50.0000	48.11
17	trans-1,2-Dichloroethene	96	6.355	6.355	(0.713)	671813	50.0000	46.62
18	Methyl Acetate	74	6.369	6.369	(0.715)	74714	50.0000	48.81
19	n-Hexane	86	6.453	6.453	(0.724)	166933	50.0000	47.48
20	MTBE	73	6.481	6.481	(0.727)	1224493	50.0000	49.40
21	Acetonitrile	41	6.788	6.788	(0.762)	166226	250.000	239.5

Data File: \\slsvr01\chem\MSZ.i\Z120816D.b\ZCCV1167.D
Report Date: 17-Aug-2012 04:44

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.067	7.067	(0.793)	946291	50.0000	46.82
	23 1,1-Dichloroethane	63	7.095	7.095	(0.796)	1052430	50.0000	47.85
	24 Acrylonitrile	53	7.151	7.151	(0.803)	623587	250.000	251.8
	25 Vinyl acetate	43	7.346	7.346	(0.824)	456229	50.0000	47.19
	27 cis-1,2-Dichloroethene	96	7.668	7.668	(0.861)	672252	50.0000	48.06
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	788197	50.0000	48.66
	30 Bromochloromethane	128	7.877	7.877	(0.884)	276860	50.0000	49.86
	29 Cyclohexane	84	7.891	7.891	(0.886)	990395	50.0000	47.00
	31 Chloroform	83	7.947	7.947	(0.892)	991814	50.0000	46.95
	33 Ethyl acetate	45	8.031	8.031	(0.901)	92004	100.000	99.29
	32 Carbon Tetrachloride	117	8.101	8.101	(0.909)	822295	50.0000	46.99
	34 Tetrahydrofuran	71	8.115	8.115	(0.911)	180024	250.000	238.3
$	35 Dibromofluoromethane (surr)	113	8.129	8.129	(0.912)	565334	50.0000	51.83
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	901854	50.0000	48.01
	37 2-Butanone	43	8.240	8.240	(0.925)	146029	50.0000	51.71
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	885698	50.0000	48.09
	40 Benzene	78	8.534	8.534	(0.958)	2405849	50.0000	43.33
	41 Propionitrile	54	8.548	8.548	(0.959)	206380	250.000	246.7
	42 Methacrylonitrile	41	8.562	8.562	(0.961)	929692	250.000	240.6
	45 Isobutanol	43	8.659	8.659	(0.972)	261726	1000.00	984.0
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	474449	50.0000	50.76
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	590439	50.0000	47.59
*	46 Fluorobenzene	96	8.911	8.911	(1.000)	2289369	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	728297	50.0000	46.54
	48 Trichloroethene	95	9.078	9.078	(1.019)	625770	50.0000	47.28
	49 n-Butanol	56	9.302	9.302	(1.044)	79828	500.000	447.4
	50 Dibromomethane	93	9.483	9.483	(1.064)	259771	50.0000	49.48
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	574396	50.0000	46.71
	52 Bromodichloromethane	83	9.609	9.609	(1.078)	695081	50.0000	48.22
	53 Methyl methacrylate	69	9.707	9.707	(1.089)	272961	50.0000	47.63
	54 1,4-Dioxane	88	9.791	9.791	(1.099)	61836	1000.00	1122
	55 2-Chloroethylvinyl ether	63	10.084	10.084	(1.132)	91410	50.0000	34.61
	56 cis-1,3-Dichloropropene	75	10.182	10.182	(1.143)	883748	50.0000	48.71
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	2125877	50.0000	48.67
	58 Toluene	92	10.405	10.405	(0.884)	1600059	50.0000	46.64
	59 2-Nitropropane	43	10.615	10.615	(0.902)	170790	100.000	91.37
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	319216	50.0000	47.34
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	538056	50.0000	47.76
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	649611	50.0000	48.02
	65 Ethyl methacrylate	69	10.838	10.838	(0.921)	587177	50.0000	48.28
	64 1,1,2-Trichloroethane	83	10.908	10.908	(0.926)	346904	50.0000	48.63
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	477630	50.0000	49.28
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	725998	50.0000	47.14
	68 1,2-Dibromoethane	107	11.341	11.341	(0.963)	404137	50.0000	48.11
	69 2-Hexanone	43	11.453	11.453	(0.973)	206008	50.0000	46.06
*	70 Chlorobenzene-d5	117	11.774	11.774	(1.000)	1627295	50.0000	
	72 Ethylbenzene	91	11.788	11.788	(1.001)	2850987	50.0000	42.40
	71 Chlorobenzene	112	11.788	11.788	(1.001)	1670717	50.0000	47.70
	73 1,1,1,2-Tetrachloroethane	131	11.830	11.830	(1.005)	610506	50.0000	47.95
	74 m,p-Xylenes	106	11.913	11.913	(1.012)	2391232	100.000	92.40
	75 o-Xylene	106	12.318	12.318	(1.046)	1201716	50.0000	46.59
	76 Styrene	104	12.360	12.360	(1.050)	1868740	50.0000	48.63
	77 Bromoform	173	12.430	12.430	(0.891)	255823	50.0000	48.21
	78 Isopropylbenzene	105	12.584	12.584	(0.902)	2596759	50.0000	45.14

Data File: \\slsvr01\chem\MSZ.i\Z120816D.b\ZCCV1167.D
Report Date: 17-Aug-2012 04:44

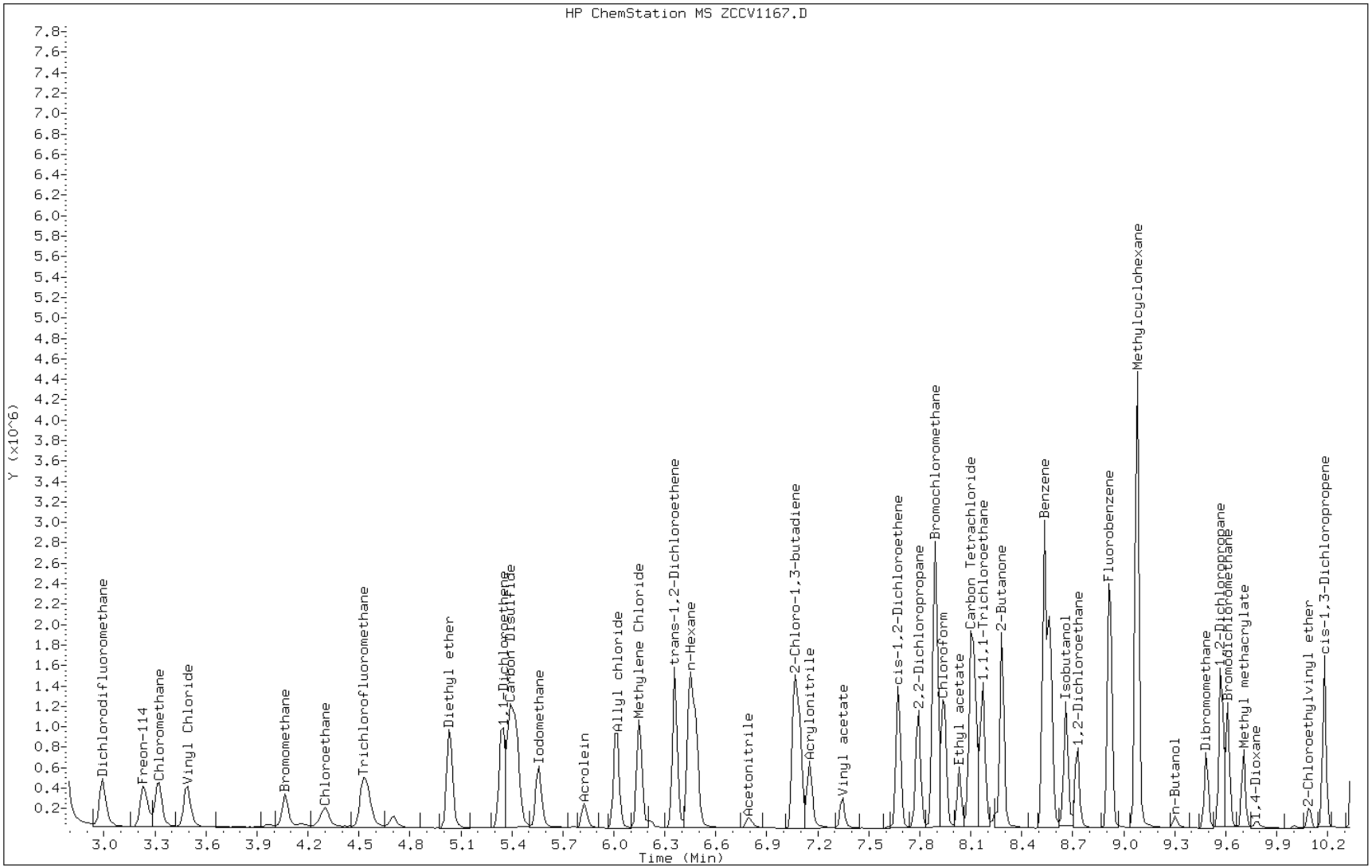
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
$	79 4-Bromofluorobenzene (surr)	95	12.891	12.891	(0.924)	819322	50.0000	48.88
	81 n-Propylbenzene	91	12.975	12.975	(0.930)	3117171	50.0000	44.53
	80 Bromobenzene	156	13.017	13.017	(0.933)	670414	50.0000	48.84
	82 1,1,2,2-Tetrachloroethane	83	13.031	13.031	(0.934)	430530	50.0000	48.29
	84 1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	2404820	50.0000	44.67
	83 2-Chlorotoluene	91	13.156	13.156	(0.943)	2137888	50.0000	47.32
	85 1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	440867	50.0000	47.86
	86 trans-1,4-dichloro-2-butene	53	13.212	13.212	(0.947)	87908	50.0000	49.87
	87 Cyclohexanone	55	13.268	13.268	(0.951)	123993	500.000	476.9
	88 4-Chlorotoluene	91	13.310	13.310	(0.954)	1903219	50.0000	48.02
	89 t-Butylbenzene	119	13.464	13.464	(0.965)	2015857	50.0000	47.17
	91 1,2,4-Trimethylbenzene	105	13.520	13.520	(0.969)	2353817	50.0000	44.85
	92 sec-Butylbenzene	105	13.631	13.631	(0.977)	3021636	50.0000	44.17
	93 4-Isopropyltoluene	119	13.757	13.757	(0.986)	2357705	50.0000	44.95
	94 1,3-Dichlorobenzene	146	13.883	13.883	(0.995)	1256408	50.0000	48.57
*	95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	772178	50.0000	
	96 1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	1219578	50.0000	47.99
	98 n-Butylbenzene	91	14.162	14.162	(1.015)	2238875	50.0000	44.15
	99 1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	1057571	50.0000	47.74
	145 Nonanal	57	15.112	15.112	(1.083)	180825	50.0000	41.75
	100 1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	58722	50.0000	44.55
	101 Hexachlorobutadiene	225	15.782	15.782	(1.131)	217626	50.0000	49.24
	104 1,2,4-Trichlorobenzene	180	15.852	15.852	(1.136)	384677	50.0000	43.80
	105 Naphthalene	128	16.201	16.201	(1.161)	514839	50.0000	45.68
	106 1,2,3-Trichlorobenzene	180	16.397	16.397	(1.175)	199844	50.0000	45.27
M	107 Xylenes (total)	106				3592948	150.000	139.0

Data File: ZCCV1167.D

Date: 16-AUG-2012 17:54

Client ID: Instrument: MSZ.i

Sample Info: CCVIS Operator: JDH

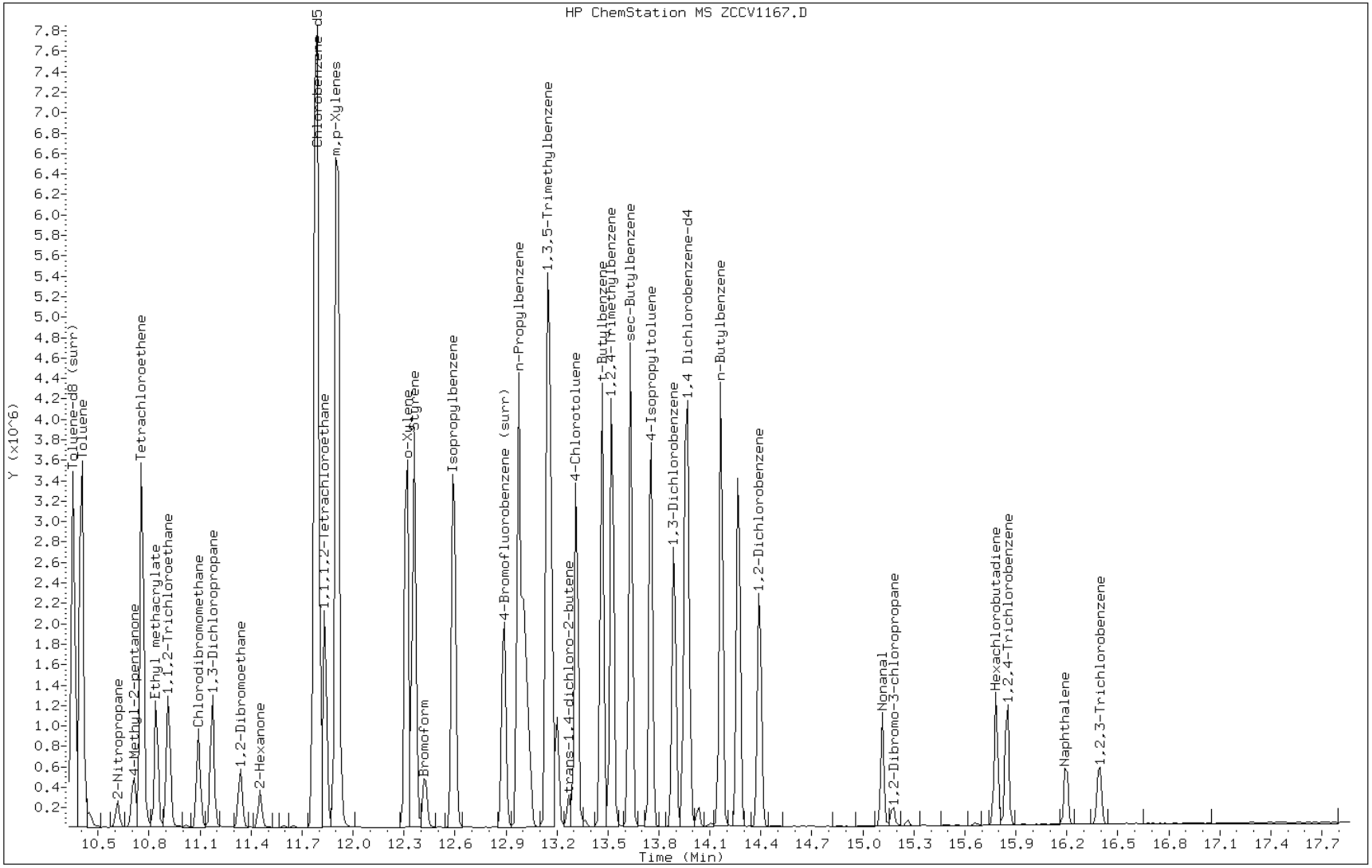


Data File: ZCCV1167.D

Date: 16-AUG-2012 17:54

Client ID: Instrument: MSZ.i

Sample Info: CCVIS Operator: JDH



Data File: \\slsvr01\chem\MSM.i\M120808A.b\MBFB1795.D
Report Date: 08-Aug-2012 09:08

TestAmerica St. Louis

Data file : \\slsvr01\chem\MSM.i\M120808A.b\MBFB1795.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 08-AUG-2012 08:59
Operator : KA Inst ID: MSM.i
Smp Info : BFB;M120808A.B
Misc Info : VBLKM221A;BFB
Comment   :
Method   : \\slsvr01\chem\MSM.i\M120808A.b\390bfb.m
Meth Date : 01-Aug-2012 13:13 aguk Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: SLGC04

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

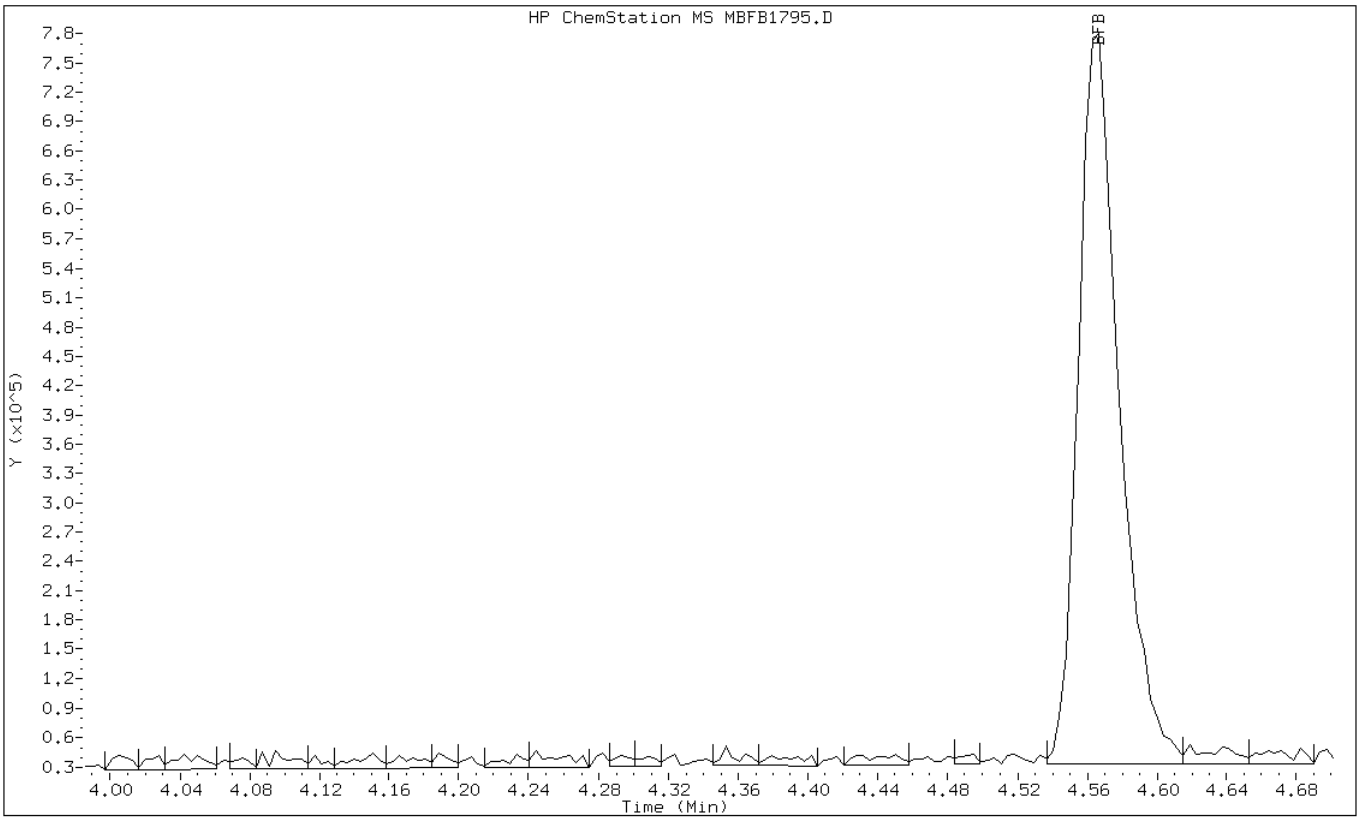
					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 BFB						CAS #: 460-00-4		
4.566	4.250	0.316	95	144320			0.00- 100.00	100.00
4.566	4.250	0.316	50	30696			15.00- 40.00	21.27
4.566	4.250	0.316	75	62464			30.00- 60.00	43.28
4.566	4.250	0.316	96	10049			5.00- 9.00	6.96
4.566	4.250	0.316	173	353			0.00- 2.00	0.28
4.566	4.250	0.316	174	127848			50.00- 0.00	88.59
4.566	4.250	0.316	175	9943			5.00- 9.00	7.78
4.566	4.250	0.316	176	124072			95.00- 101.00	97.05
4.566	4.250	0.316	177	8726			5.00- 9.00	7.03

Data File: MBFB1795.D

Date: 08-AUG-2012 08:59

Client ID: BFB Instrument: MSM.i

Sample Info: BFB;M120808A.B Operator: KA



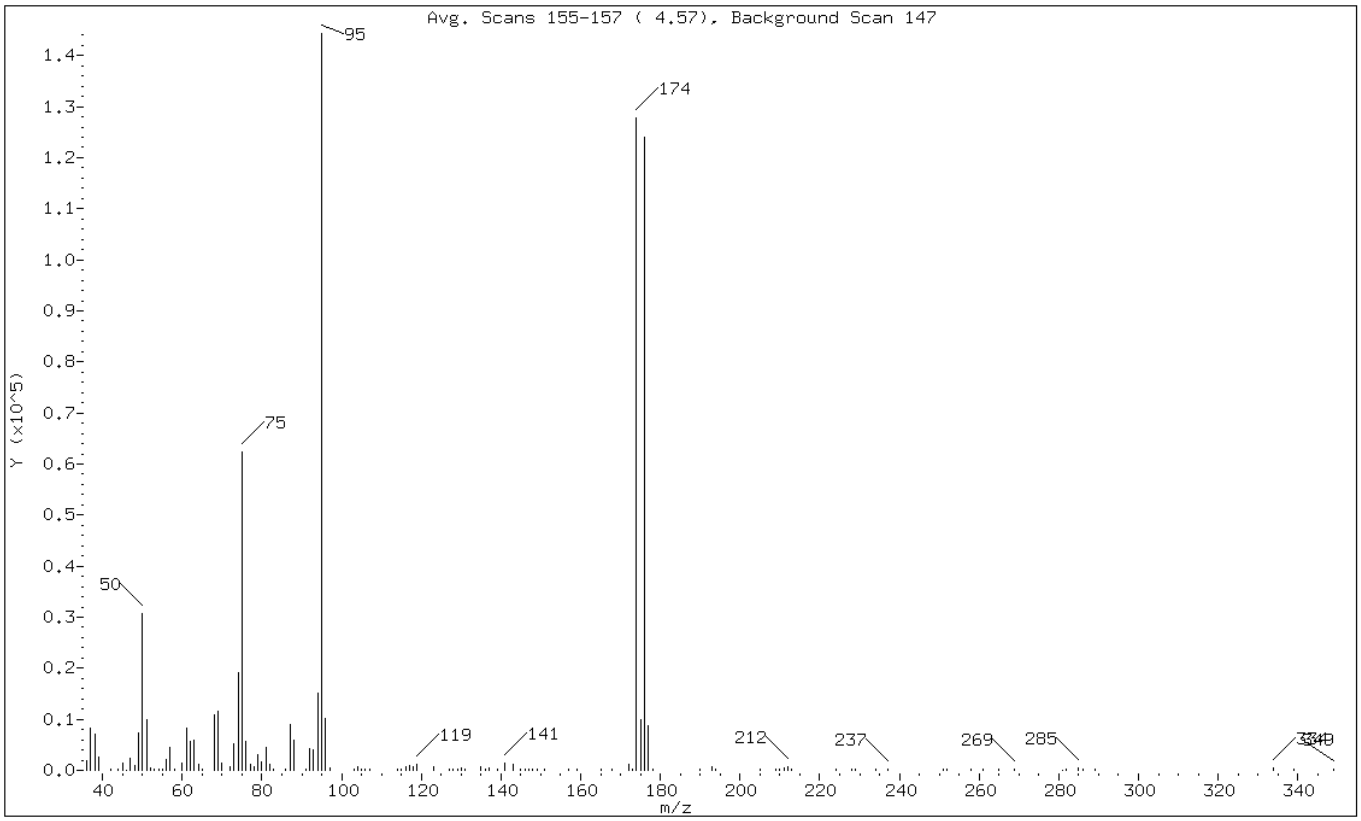
Data File: MBFB1795.D

Date: 08-AUG-2012 08:59

Client ID: BFB Instrument: MSM.i

Sample Info: BFB;M120808A.B Operator: KA

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.27
75	30.00 - 60.00% of mass 95	43.28
96	5.00 - 9.00% of mass 95	6.96
173	Less than 2.00% of mass 174	0.24 (0.28)
174	Greater than 50.00% of mass 95	88.59
175	5.00 - 9.00% of mass 174	6.89 (7.78)
176	95.00 - 101.00% of mass 174	85.97 (97.05)
177	5.00 - 9.00% of mass 176	6.05 (7.03)

Data File: MBFB1795.D

Date: 08-AUG-2012 08:59

Client ID: BFB Instrument: MSM.i

Sample Info: BFB;M120808A.B Operator: KA

Data File: \\slsvr01\chem\MSM.i\M120808A.b\ICAL-8260C-M5mL-15RSDLow\MBF
Spectrum: Avg. Scans 155-157 (4.57), Background Scan 147
Location of Maximum: 95.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1851	73.00	5240	118.00	731	178.00	312
37.00	8293	74.00	19120	119.00	1115	190.00	142
38.00	7183	75.00	62464	123.00	609	193.00	770
39.00	2706	76.00	5576	127.00	264	194.00	225
42.00	165	77.00	1167	128.00	174	205.00	164
44.00	211	78.00	740	129.00	169	209.00	127
45.00	1333	79.00	2980	130.00	397	210.00	319
46.00	54	80.00	1593	131.00	154	211.00	412
47.00	2274	81.00	4538	135.00	706	212.00	785
48.00	829	82.00	1075	136.00	143	213.00	163
49.00	7440	83.00	138	137.00	588	224.00	139
50.00	30696	86.00	137	139.00	238	228.00	165
51.00	10033	87.00	8957	141.00	1450	229.00	260
52.00	528	88.00	5832	143.00	1214	234.00	315
53.00	238	91.00	317	145.00	147	237.00	320
54.00	162	92.00	4286	146.00	274	251.00	146
55.00	157	93.00	4072	147.00	217	252.00	176
56.00	2041	94.00	15119	148.00	136	258.00	193
57.00	4490	95.00	144320	149.00	204	261.00	167
58.00	165	96.00	10049	151.00	156	265.00	178
60.00	1435	97.00	439	157.00	166	269.00	263
61.00	8151	103.00	255	159.00	324	281.00	20
62.00	5778	104.00	705	165.00	168	282.00	143
63.00	6009	105.00	180	168.00	143	285.00	512
64.00	1158	106.00	330	172.00	1210	286.00	144
65.00	284	107.00	257	173.00	353	289.00	160
68.00	10845	114.00	153	174.00	127848	334.00	435
69.00	11532	115.00	155	175.00	9943	339.00	192
70.00	1348	116.00	620	176.00	124072	349.00	160
72.00	702	117.00	996	177.00	8726		

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MBFB1964.D
Report Date: 15-Aug-2012 14:57

TestAmerica St. Louis

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MBFB1964.D
Lab Smp Id: BFB Client Smp ID: VBFB
Inj Date : 14-AUG-2012 02:41
Operator : JDH Inst ID: MSM.i
Smp Info : BFB;M120814A.B
Misc Info : VBLKM227A;;BFB
Comment   :
Method   : \\Slsvr01\Chem\MSM.i\M120814A.b\390bfb.m
Meth Date : 15-Aug-2012 14:56 hannj Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: SLGC01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

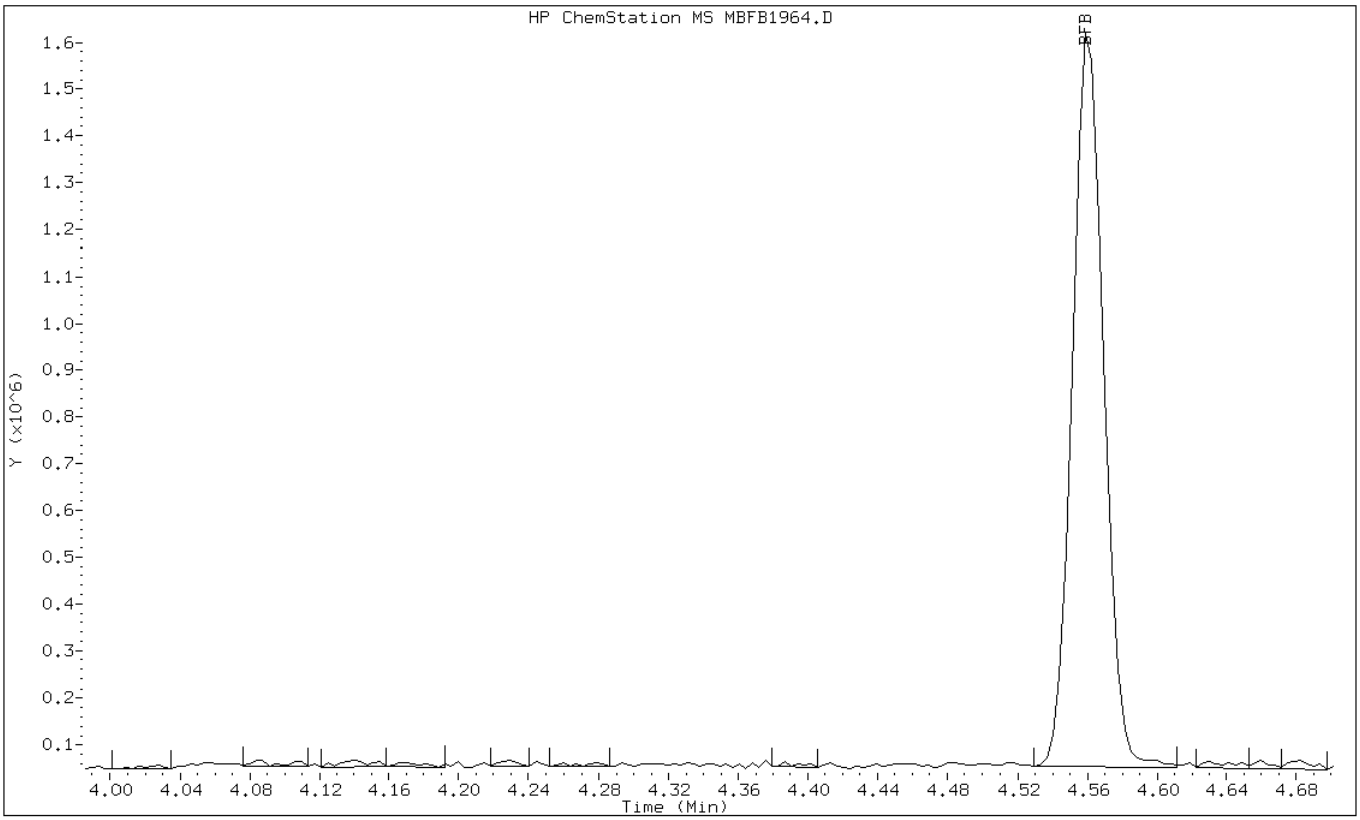
					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 BFB							CAS #: 460-00-4	
4.558	4.250	0.308	95	310336			0.00- 100.00	100.00
4.558	4.250	0.308	50	67488			15.00- 40.00	21.75
4.558	4.250	0.308	75	122872			30.00- 60.00	39.59
4.558	4.250	0.308	96	21584			5.00- 9.00	6.96
4.558	4.250	0.308	173	1201			0.00- 2.00	0.48
4.558	4.250	0.308	174	250560			50.00- 0.00	80.74
4.558	4.250	0.308	175	18072			5.00- 9.00	7.21
4.558	4.250	0.308	176	238080			95.00- 101.00	95.02
4.558	4.250	0.308	177	14342			5.00- 9.00	6.02

Data File: MBFB1964.D

Date: 14-AUG-2012 02:41

Client ID: VBFB Instrument: MSM.i

Sample Info: BFB;M120814A.B Operator: JDH



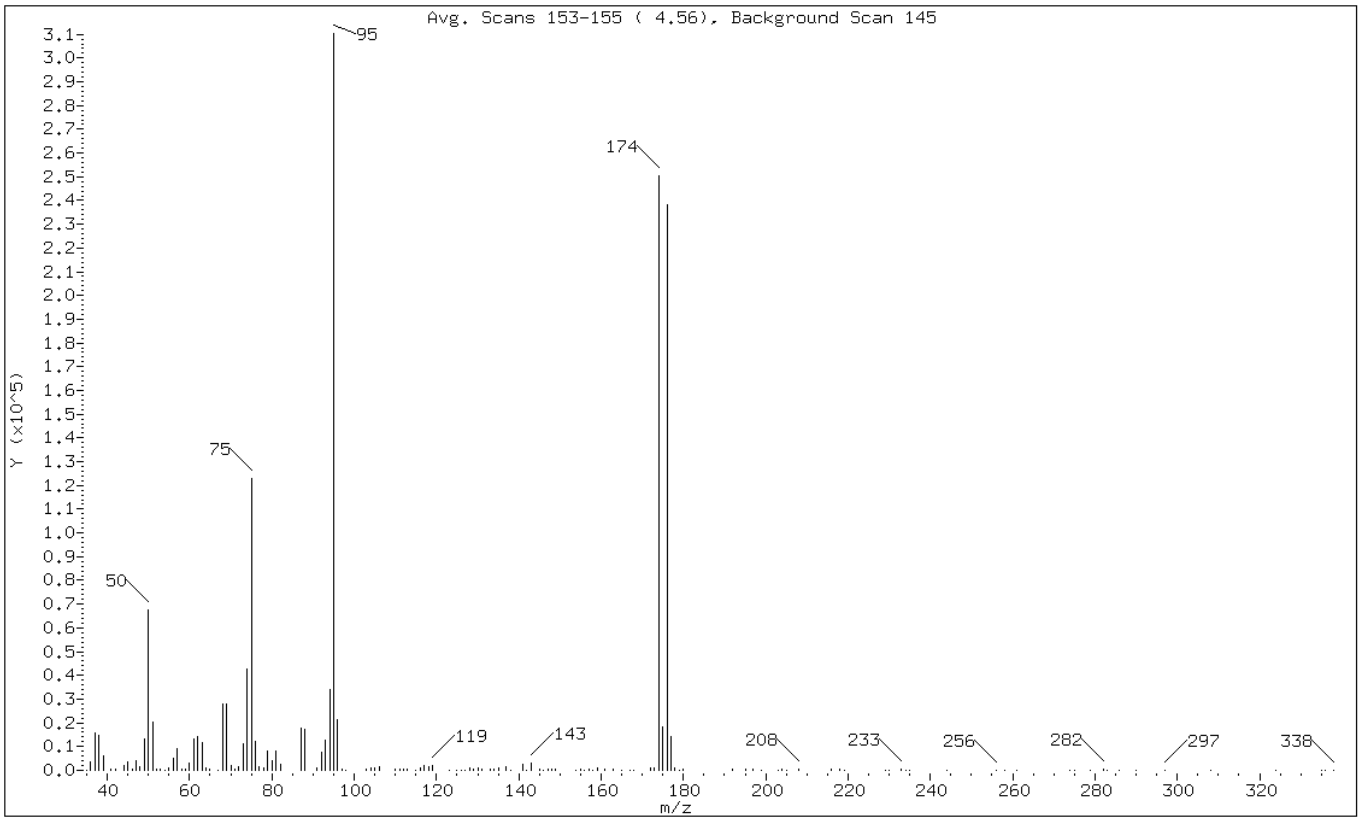
Data File: MBFB1964.D

Date: 14-AUG-2012 02:41

Client ID: VBFB Instrument: MSM.i

Sample Info: BFB;M120814A.B Operator: JDH

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	21.75
75	30.00 - 60.00% of mass 95	39.59
96	5.00 - 9.00% of mass 95	6.96
173	Less than 2.00% of mass 174	0.39 (0.48)
174	Greater than 50.00% of mass 95	80.74
175	5.00 - 9.00% of mass 174	5.82 (7.21)
176	95.00 - 101.00% of mass 174	76.72 (95.02)
177	5.00 - 9.00% of mass 176	4.62 (6.02)

Data File: MBFB1964.D

Date: 14-AUG-2012 02:41

Client ID: VBFB Instrument: MSM.i

Sample Info: BFB;M120814A.B Operator: JDH

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MBFB1964.D
Spectrum: Avg. Scans 153-155 (4.56), Background Scan 145
Location of Maximum: 95.00
Number of points: 142

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	172	74.00	42480	128.00	763	180.00	286
36.00	3460	75.00	122872	129.00	550	192.00	376
37.00	15969	76.00	12311	130.00	1199	195.00	289
38.00	14557	77.00	1320	131.00	313	197.00	531
39.00	6270	78.00	969	133.00	664	199.00	139
41.00	540	79.00	8123	134.00	481	203.00	213
42.00	306	80.00	4306	135.00	934	204.00	332
44.00	1923	81.00	8023	137.00	1436	205.00	138
45.00	3418	82.00	2423	138.00	239	208.00	636
46.00	671	87.00	17904	141.00	2769	216.00	277
47.00	4196	88.00	17304	142.00	178	218.00	356
48.00	1690	91.00	1090	143.00	2846	219.00	134
49.00	13256	92.00	7755	145.00	311	229.00	135
50.00	67488	93.00	12799	146.00	201	230.00	199
51.00	20472	94.00	34024	147.00	378	233.00	512
52.00	703	95.00	310336	148.00	658	234.00	150
53.00	392	96.00	21584	149.00	304	235.00	183
54.00	199	97.00	501	154.00	143	244.00	163
55.00	1265	98.00	183	155.00	424	256.00	239
56.00	5329	103.00	419	156.00	156	258.00	155
57.00	9364	104.00	1096	157.00	311	261.00	139
58.00	360	105.00	1109	158.00	172	274.00	141
59.00	399	106.00	1638	159.00	810	275.00	200
60.00	2914	110.00	278	161.00	729	279.00	148
61.00	13430	111.00	419	163.00	290	282.00	373
62.00	14174	112.00	310	165.00	133	283.00	152
63.00	11694	113.00	284	167.00	172	286.00	195
64.00	894	115.00	187	168.00	155	290.00	144
65.00	463	116.00	1246	172.00	791	297.00	183
67.00	155	117.00	2017	173.00	1201	308.00	134
68.00	28048	118.00	1465	174.00	250560	324.00	141
69.00	27792	119.00	2081	175.00	18072	335.00	147
70.00	1980	123.00	8	176.00	238080	336.00	182
71.00	258	125.00	144	177.00	14342	338.00	230
72.00	1274	126.00	238	178.00	904		
73.00	11274	127.00	172	179.00	166		

Data File: \\slsvr01\chem\MSZ.i\Z120813A.b\ZBFB1071.D
Report Date: 13-Aug-2012 06:57

TestAmerica St. Louis

Data file : \\slsvr01\chem\MSZ.i\Z120813A.b\ZBFB1071.D
Lab Smp Id: BFB Client Smp ID: VBFB
Inj Date : 13-AUG-2012 06:52
Operator : glb Inst ID: MSZ.i
Smp Info : BFB;Z120813A.B
Misc Info : VBLKZ226A;
Comment   :
Method   : \\slsvr01\chem\MSZ.i\Z120813A.b\390bfb.m
Meth Date : 31-Jul-2012 21:30 bonkoskig Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: SLVOA02

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

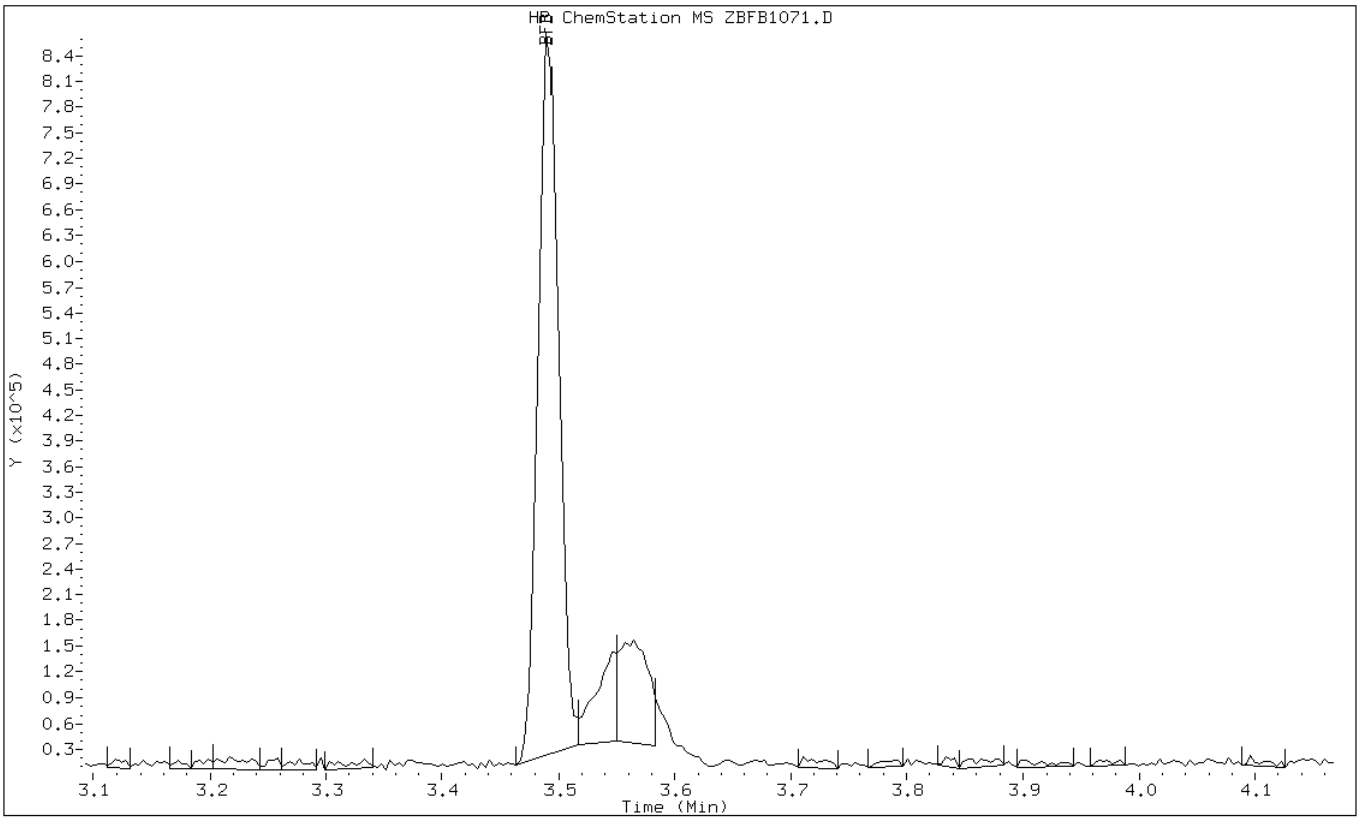
					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 BFB						CAS #: 460-00-4		
3.490	3.514	-0.024	95	174656			0.00- 100.00	100.00
3.490	3.514	-0.024	50	29104			15.00- 40.00	16.66
3.490	3.514	-0.024	75	82040			30.00- 60.00	46.97
3.490	3.514	-0.024	96	11223			5.00- 9.00	6.43
3.490	3.514	-0.024	173	485			0.00- 2.00	0.35
3.490	3.514	-0.024	174	137408			50.00- 0.00	78.67
3.490	3.514	-0.024	175	9611			5.00- 9.00	6.99
3.490	3.514	-0.024	176	136000			95.00- 101.00	98.98
3.490	3.514	-0.024	177	9091			5.00- 9.00	6.68

Data File: ZBFB1071.D

Date: 13-AUG-2012 06:52

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120813A.B Operator: glb



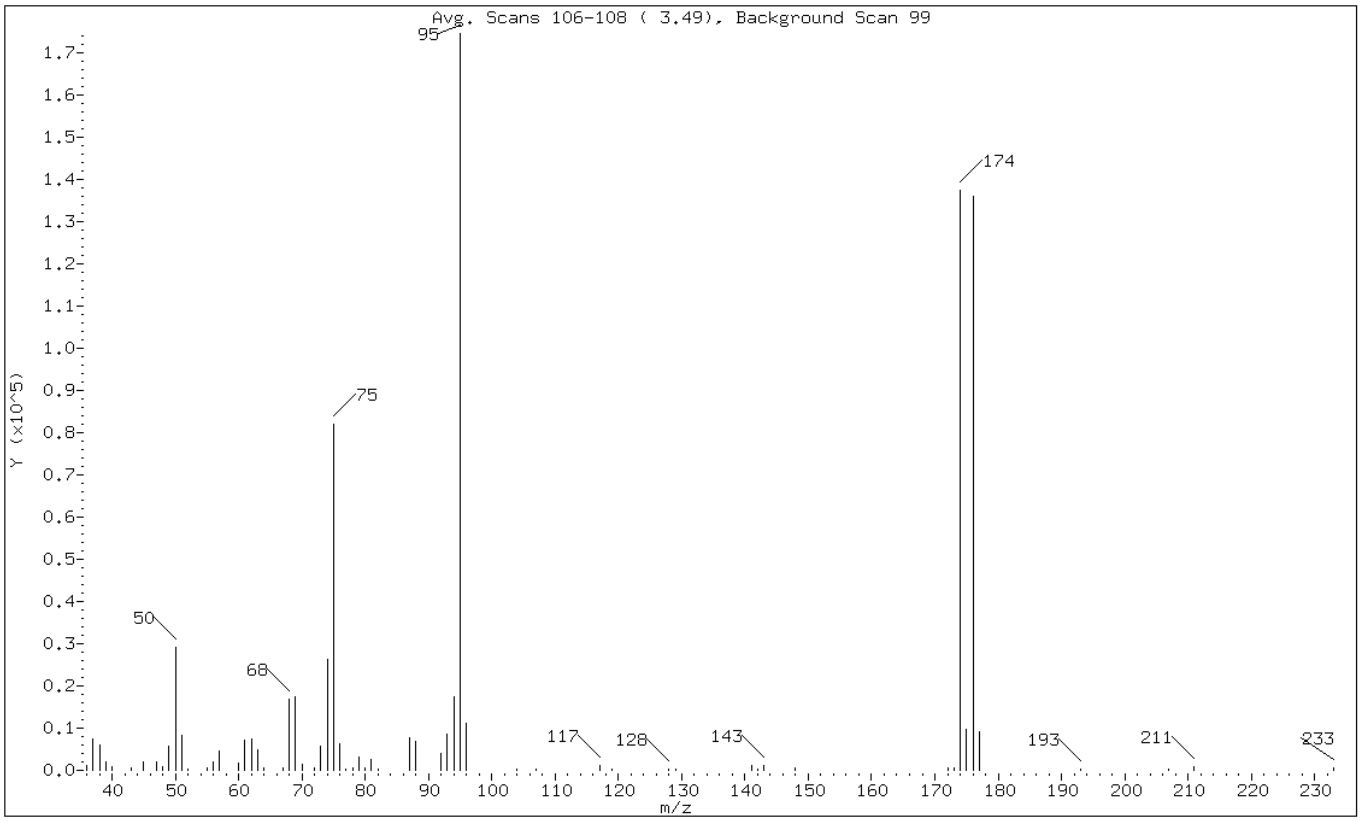
Data File: ZBFB1071.D

Date: 13-AUG-2012 06:52

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120813A.B Operator: glb

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.66
75	30.00 - 60.00% of mass 95	46.97
96	5.00 - 9.00% of mass 95	6.43
173	Less than 2.00% of mass 174	0.28 (0.35)
174	Greater than 50.00% of mass 95	78.67
175	5.00 - 9.00% of mass 174	5.50 (6.99)
176	95.00 - 101.00% of mass 174	77.87 (98.98)
177	5.00 - 9.00% of mass 176	5.21 (6.68)

Data File: ZBFB1071.D

Date: 13-AUG-2012 06:52

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120813A.B Operator: glb

Data File: \\slsvr01\chem\MSZ.i\Z120813A.b\ICAL-8260C-Z5mL-RSD15Low\ZBF
Spectrum: Avg. Scans 106-108 (3.49), Background Scan 99
Location of Maximum: 95.00
Number of points: 63

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1119	60.00	1575	79.00	3003	129.00	356
37.00	7393	61.00	7158	80.00	465	141.00	1260
38.00	5884	62.00	7520	81.00	2439	142.00	337
39.00	2014	63.00	4916	82.00	392	143.00	1279
40.00	931	64.00	534	87.00	7837	148.00	431
43.00	583	67.00	576	88.00	6755	172.00	495
45.00	1887	68.00	16912	92.00	3945	173.00	485
47.00	2133	69.00	17320	93.00	8666	174.00	137408
48.00	924	70.00	1315	94.00	17304	175.00	9611
49.00	5623	72.00	439	95.00	174656	176.00	136000
50.00	29104	73.00	5709	96.00	11223	177.00	9091
51.00	8429	74.00	26312	104.00	367	193.00	340
52.00	335	75.00	82040	107.00	334	207.00	278
55.00	708	76.00	6362	117.00	1032	211.00	827
56.00	1971	77.00	376	119.00	355	233.00	463
57.00	4458	78.00	452	128.00	362		

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZBFB1166.D
Report Date: 16-Aug-2012 17:34

TestAmerica St. Louis

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZBFB1166.D
Lab Smp Id: BFB Client Smp ID: VBFB
Inj Date : 16-AUG-2012 17:20
Operator : JDH Inst ID: MSZ.i
Smp Info : BFB;Z120816D.B
Misc Info : VBLKZ229D;
Comment   :
Method   : \\Slsvr01\Chem\MSZ.i\Z120816D.b\390bfb.m
Meth Date : 31-Jul-2012 21:30 bonkoskig Quant Type: ESTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: BFB
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: SLGC01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

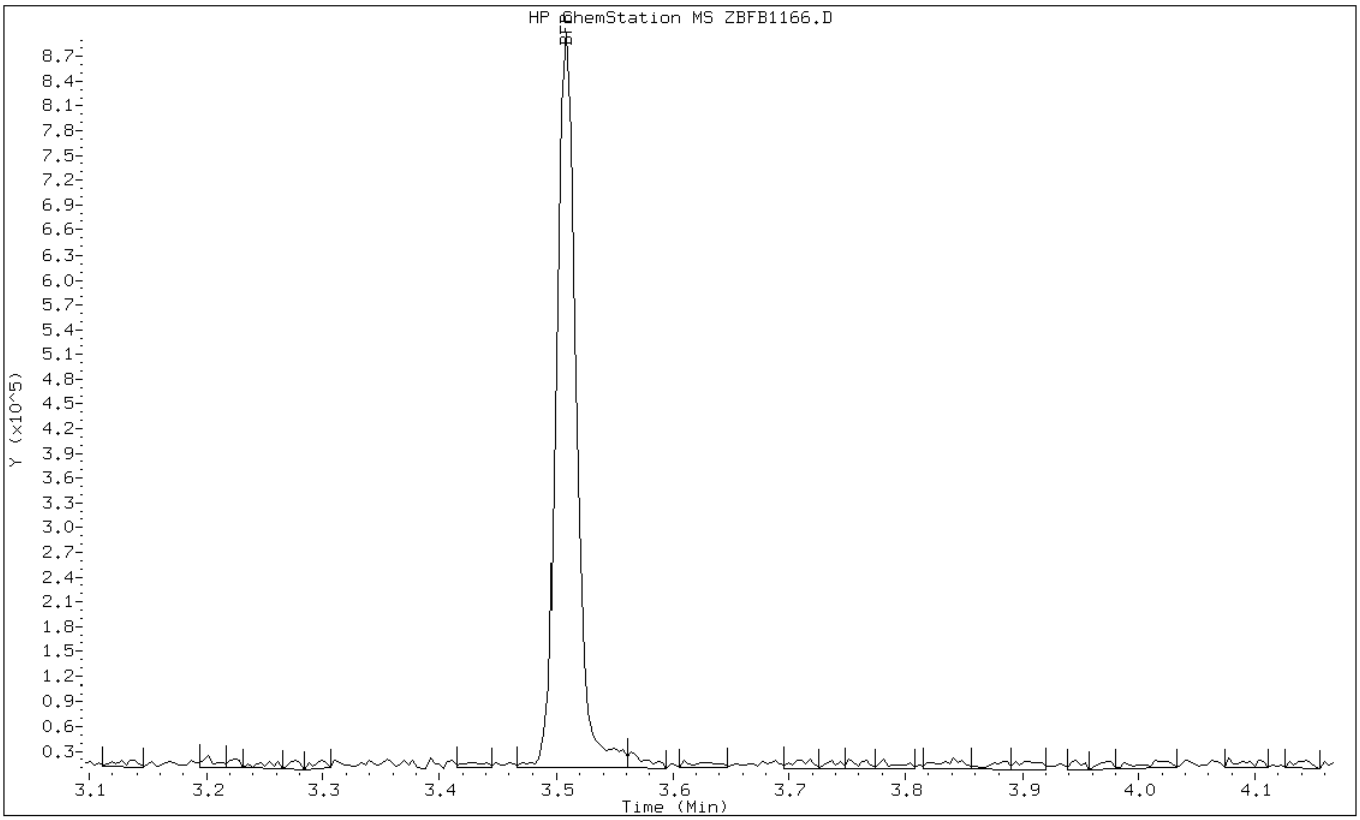
					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	DLT RT	MASS	RESPONSE	(ug/L)	(ug/L)	TARGET RANGE	RATIO
1 BFB						CAS #: 460-00-4		
3.508	3.514	-0.006	95	179392			0.00- 100.00	100.00
3.508	3.514	-0.006	50	30800			15.00- 40.00	17.17
3.508	3.514	-0.006	75	82648			30.00- 60.00	46.07
3.508	3.514	-0.006	96	11607			5.00- 9.00	6.47
3.508	3.514	-0.006	173	432			0.00- 2.00	0.30
3.508	3.514	-0.006	174	144960			50.00- 0.00	80.81
3.508	3.514	-0.006	175	9612			5.00- 9.00	6.63
3.508	3.514	-0.006	176	141120			95.00- 101.00	97.35
3.508	3.514	-0.006	177	10251			5.00- 9.00	7.26

Data File: ZBFB1166.D

Date: 16-AUG-2012 17:20

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120816D.B Operator: JDH



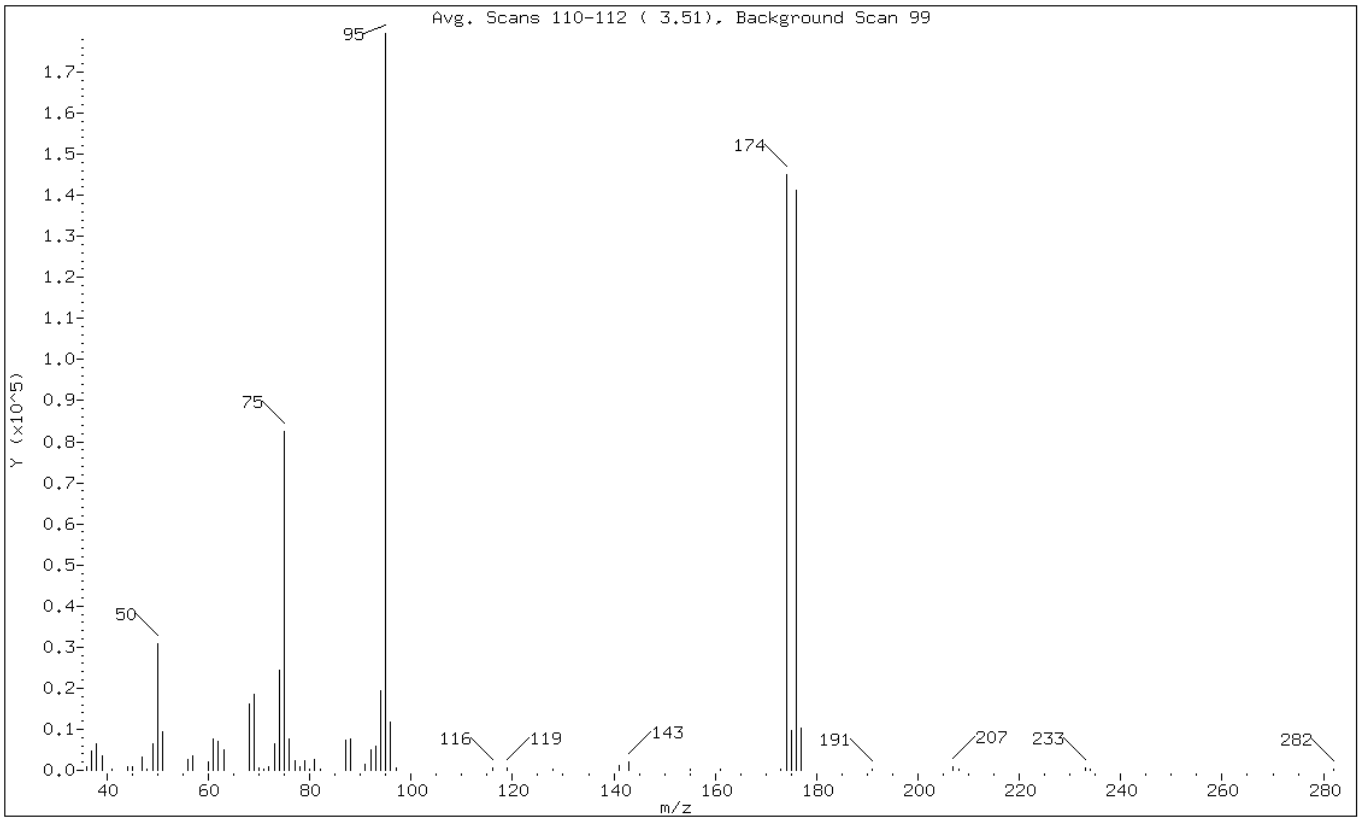
Data File: ZBFB1166.D

Date: 16-AUG-2012 17:20

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120816D.B Operator: JDH

1 BFB



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.17
75	30.00 - 60.00% of mass 95	46.07
96	5.00 - 9.00% of mass 95	6.47
173	Less than 2.00% of mass 174	0.24 (0.30)
174	Greater than 50.00% of mass 95	80.81
175	5.00 - 9.00% of mass 174	5.36 (6.63)
176	95.00 - 101.00% of mass 174	78.67 (97.35)
177	5.00 - 9.00% of mass 176	5.71 (7.26)

Data File: ZBFB1166.D

Date: 16-AUG-2012 17:20

Client ID: VBFB Instrument: MSZ.i

Sample Info: BFB;Z120816D.B Operator: JDH

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZBFB1166.D
Spectrum: Avg. Scans 110-112 (3.51), Background Scan 99
Location of Maximum: 95.00
Number of points: 60

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	946	62.00	7070	82.00	349	161.00	339
37.00	4726	63.00	5115	87.00	7221	173.00	432
38.00	6501	68.00	16147	88.00	7739	174.00	144960
39.00	3559	69.00	18432	91.00	1376	175.00	9612
41.00	394	70.00	562	92.00	5068	176.00	141120
44.00	916	71.00	386	93.00	5894	177.00	10251
45.00	971	72.00	865	94.00	19512	191.00	359
47.00	3132	73.00	6510	95.00	179392	207.00	805
48.00	344	74.00	24504	96.00	11607	208.00	365
49.00	6313	75.00	82648	97.00	444	233.00	716
50.00	30800	76.00	7553	116.00	454	234.00	345
51.00	9395	77.00	2334	119.00	671	282.00	434
56.00	2625	78.00	943	128.00	393		
57.00	3423	79.00	2457	141.00	1038		
60.00	2014	80.00	399	143.00	2089		
61.00	7594	81.00	2785	155.00	410		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-9262/3

Matrix: Water | Lab File ID: MBLK1969.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 05:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	0.684	J	5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	ND		5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	1.08	J	10	0.40
75-15-0	Carbon disulfide	ND		5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	ND		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-9262/3

Matrix: Water | Lab File ID: MBLK1969.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 05:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	113		85-115
1868-53-7	Dibromofluoromethane (Surr)	98		85-119
460-00-4	4-Bromofluorobenzene (Surr)	120		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MBLK1969.D
Report Date: 15-Aug-2012 15:07

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MBLK1969.D
Lab Smp Id: MB 160-9262/3
Inj Date : 14-AUG-2012 05:24
Operator : JDH Inst ID: MSM.i
Smp Info : MB 160-9262/3
Misc Info : MB 160-9262/3
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:00 MSM.i Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	5 Bromomethane	94	4.471	4.457	(0.483)	8747	1.08222	1.082(a)
	12 Iodomethane	142	5.979	5.965	(0.646)	5421	4.16706	4.167
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	362424	49.1180	49.12
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	330170	54.3364	54.34
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1734908	50.0000	
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1568054	56.7134	56.71
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1093419	50.0000	
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	477491	60.1542	60.15
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	502061	50.0000	
	104 1,2,4-Trichlorobenzene	180	16.160	16.161	(1.132)	3671	0.68438	0.6844(aH)
	105 Naphthalene	128	16.524	16.524	(1.158)	7331	1.46769	1.468(a)
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	2483	0.87931	0.8793(a)

QC Flag Legend

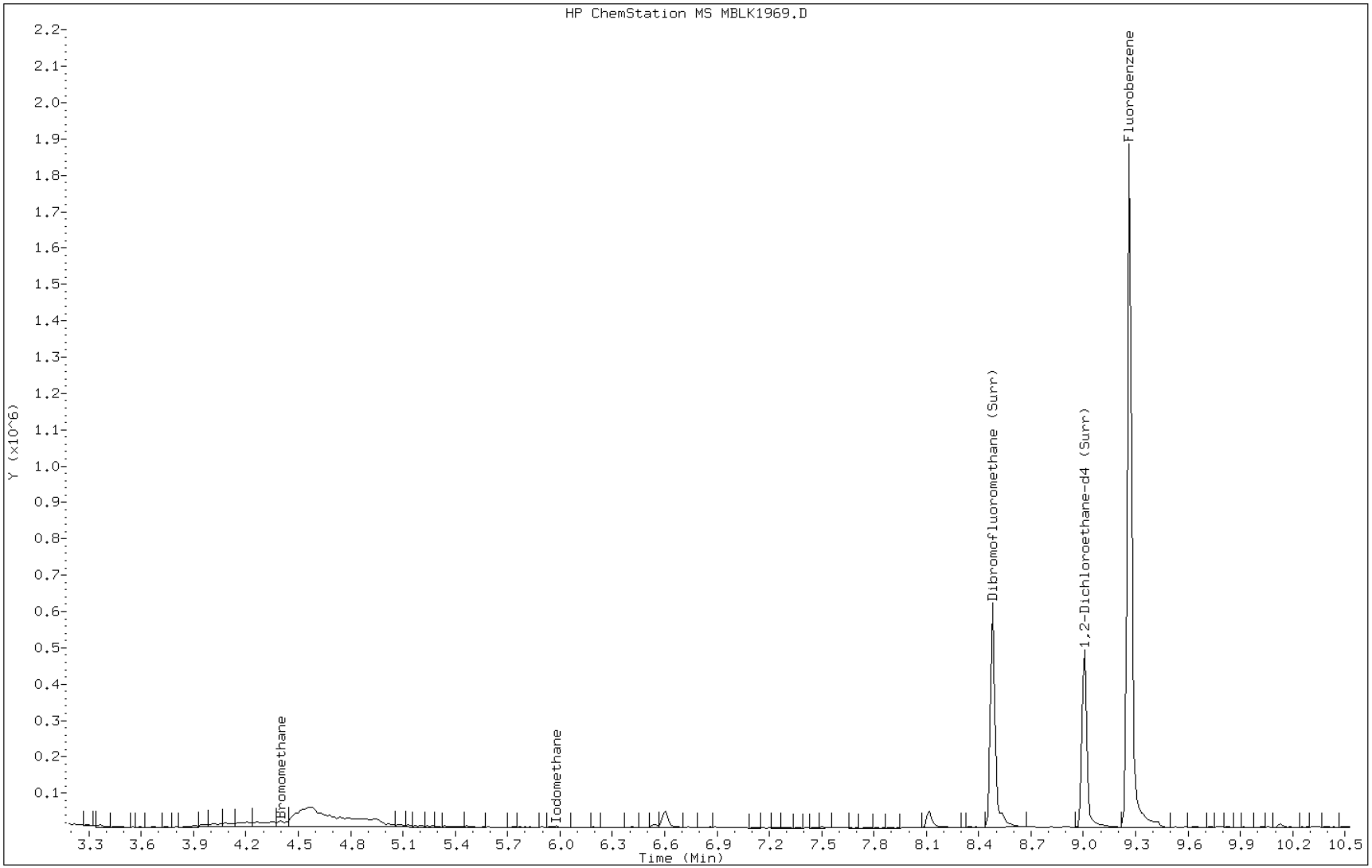
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: MBLK1969.D

Date: 14-AUG-2012 05:24

Client ID: Instrument: MSM.i

Sample Info: MB 160-9262/3 Operator: JDH

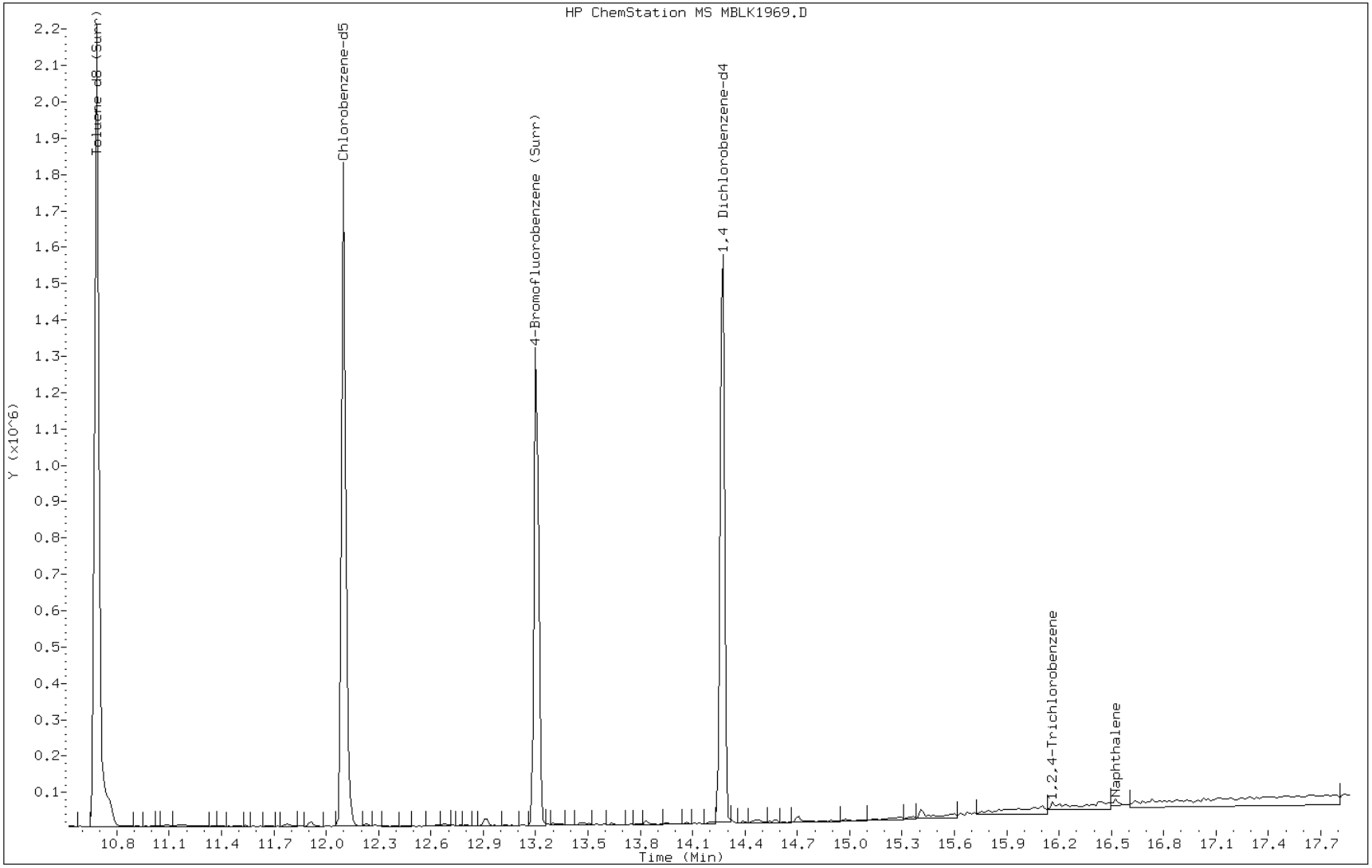


Data File: MBLK1969.D

Date: 14-AUG-2012 05:24

Client ID: Instrument: MSM.i

Sample Info: MB 160-9262/3 Operator: JDH



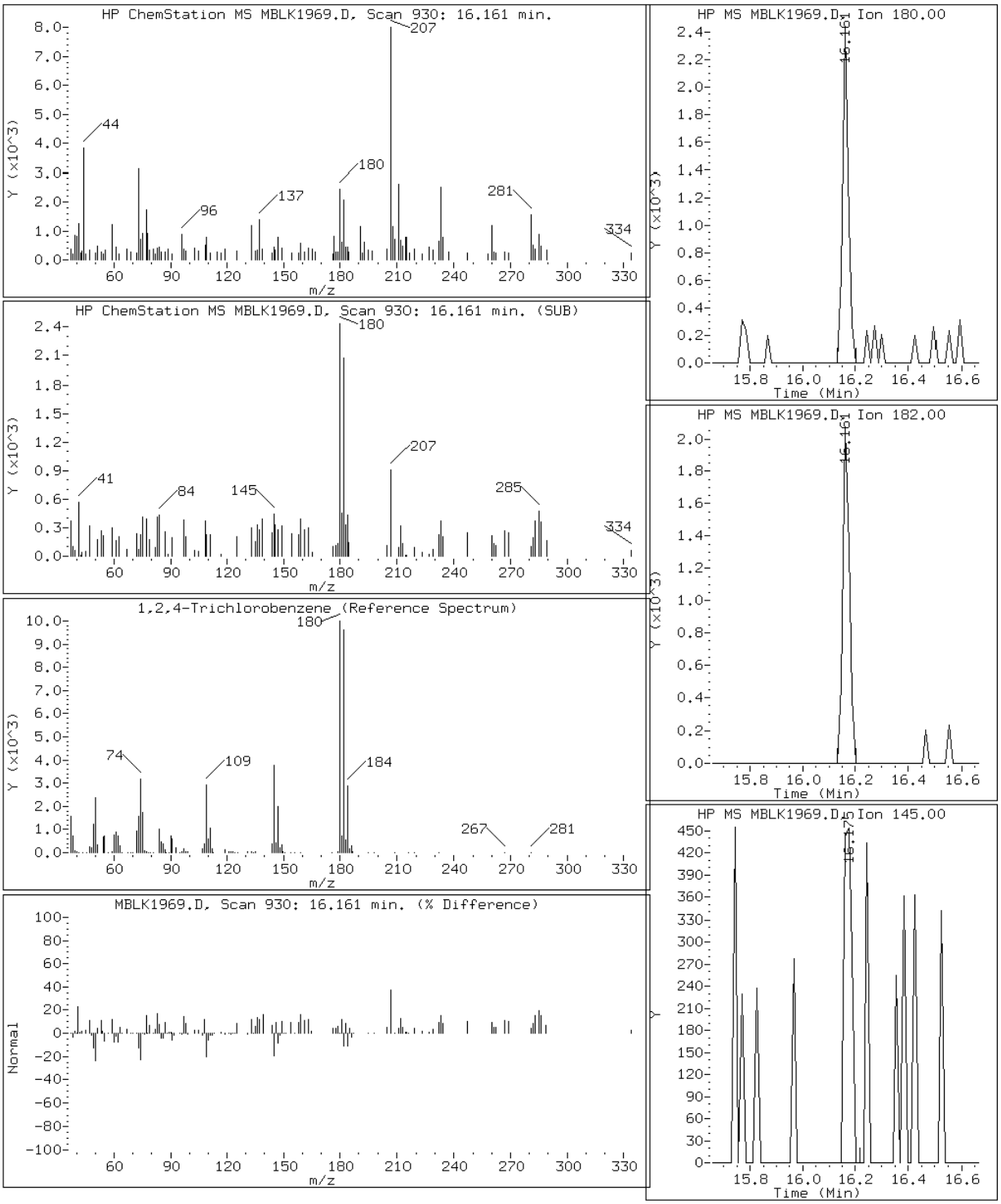
Data File: MBLK1969.D

Date: 14-AUG-2012 05:24

Client ID: Instrument: MSM.i

Sample Info: MB 160-9262/3 Operator: JDH

104 1,2,4-Trichlorobenzene



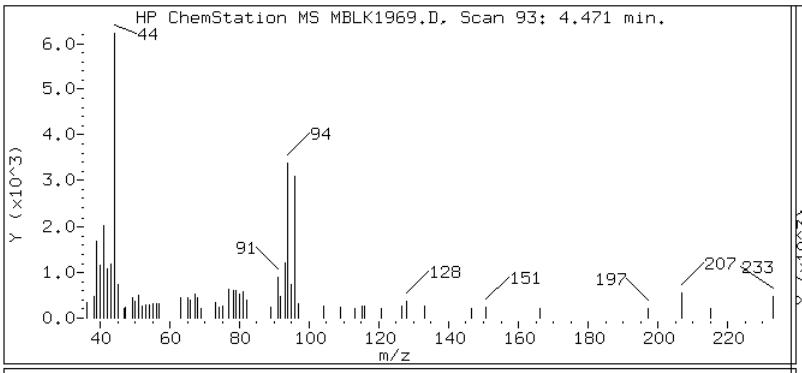
Data File: MBLK1969.D

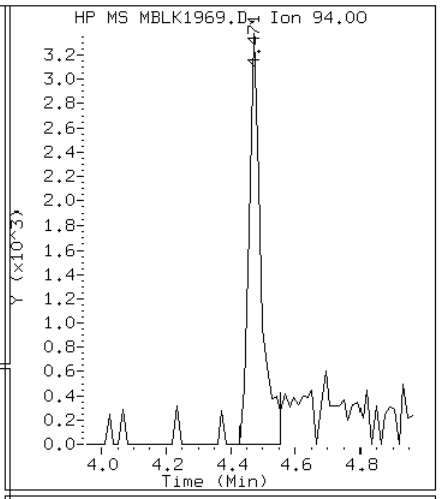
Date: 14-AUG-2012 05:24

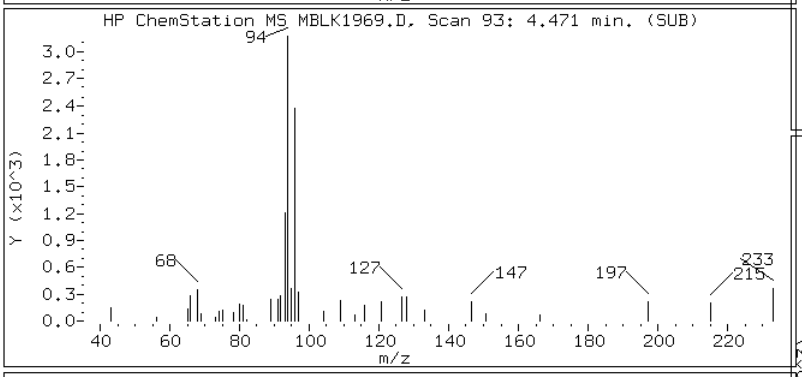
Client ID: Instrument: MSM.i

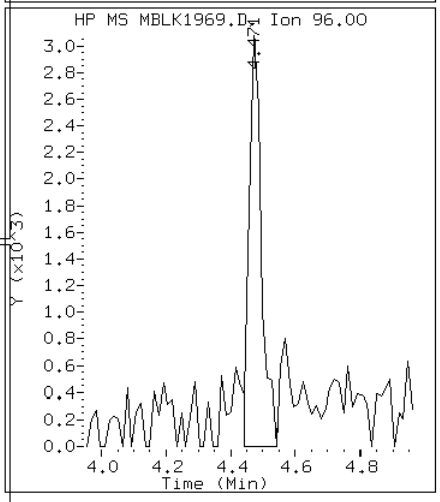
Sample Info: MB 160-9262/3 Operator: JDH

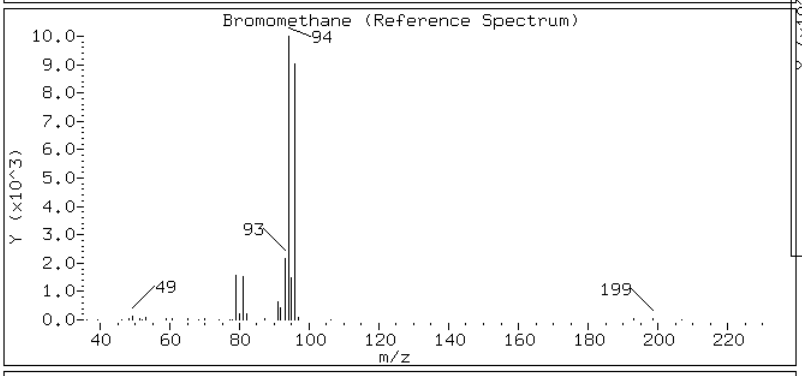
5 Bromomethane

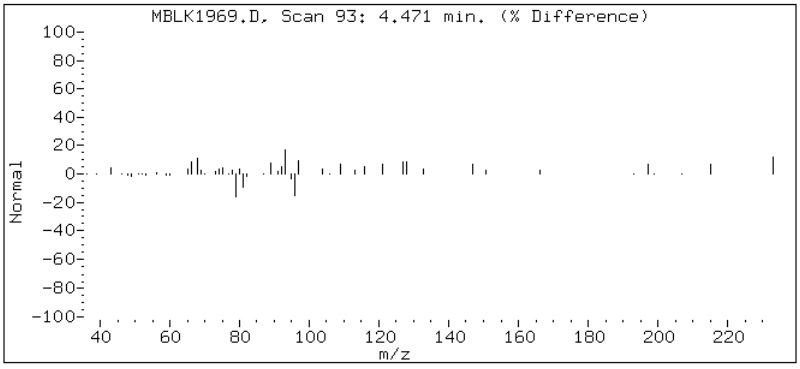












FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-9490/3

Matrix: Water | Lab File ID: ZBLK1170.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 19:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.43
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.57
75-34-3	1,1-Dichloroethane	ND		5.0	0.39
75-35-4	1,1-Dichloroethene	ND		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	1.2
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.28
107-06-2	1,2-Dichloroethane	ND		5.0	0.37
78-87-5	1,2-Dichloropropane	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.23
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.35
78-93-3	2-Butanone (MEK)	ND		20	0.39
591-78-6	2-Hexanone	ND		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	0.33
67-64-1	Acetone	ND		20	6.7
71-43-2	Benzene	ND		5.0	0.25
75-25-2	Bromoform	ND		5.0	0.37
74-83-9	Bromomethane	ND		10	0.40
75-15-0	Carbon disulfide	ND		5.0	0.37
56-23-5	Carbon tetrachloride	ND		5.0	0.36
108-90-7	Chlorobenzene	ND		5.0	0.38
124-48-1	Dibromochloromethane	ND		5.0	0.33
75-00-3	Chloroethane	ND		10	0.38
67-66-3	Chloroform	ND		5.0	0.15
74-87-3	Chloromethane	ND		10	0.55
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.34
110-82-7	Cyclohexane	ND		10	0.36
75-27-4	Bromodichloromethane	ND		5.0	0.25
75-71-8	Dichlorodifluoromethane	ND		10	0.45
100-41-4	Ethylbenzene	ND		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	ND		5.0	0.44
98-82-8	Isopropylbenzene	ND		5.0	0.26
79-20-9	Methyl acetate	ND		5.0	2.3
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-9490/3

Matrix: Water | Lab File ID: ZBLK1170.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 19:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	ND		10	0.26
75-09-2	Methylene Chloride	ND		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	ND		5.0	0.57
95-47-6	o-Xylene	ND		5.0	0.32
100-42-5	Styrene	ND		5.0	0.35
127-18-4	Tetrachloroethene	ND		5.0	0.28
108-88-3	Toluene	ND		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	0.35
79-01-6	Trichloroethene	ND		5.0	0.29
75-69-4	Trichlorofluoromethane	ND		5.0	0.22
75-01-4	Vinyl chloride	ND		5.0	0.43
1330-20-7	Xylenes, Total	ND		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	93		85-115
1868-53-7	Dibromofluoromethane (Surr)	101		85-119
460-00-4	4-Bromofluorobenzene (Surr)	93		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		82-132

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZBLK1170.D
Report Date: 21-Aug-2012 22:54

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZBLK1170.D
Lab Smp Id: MB 160-9490/3 Client Smp ID: MB 160-9490/3
Inj Date : 16-AUG-2012 19:05
Operator : JDH Inst ID: MSZ.i
Smp Info : MB 160-9490/3
Misc Info : MB 160-9490/3
Comment : NONE
Method : \\Slsvr01\Chem\MSZ.i\Z120816D.b\8260C-Z5mL.m
Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

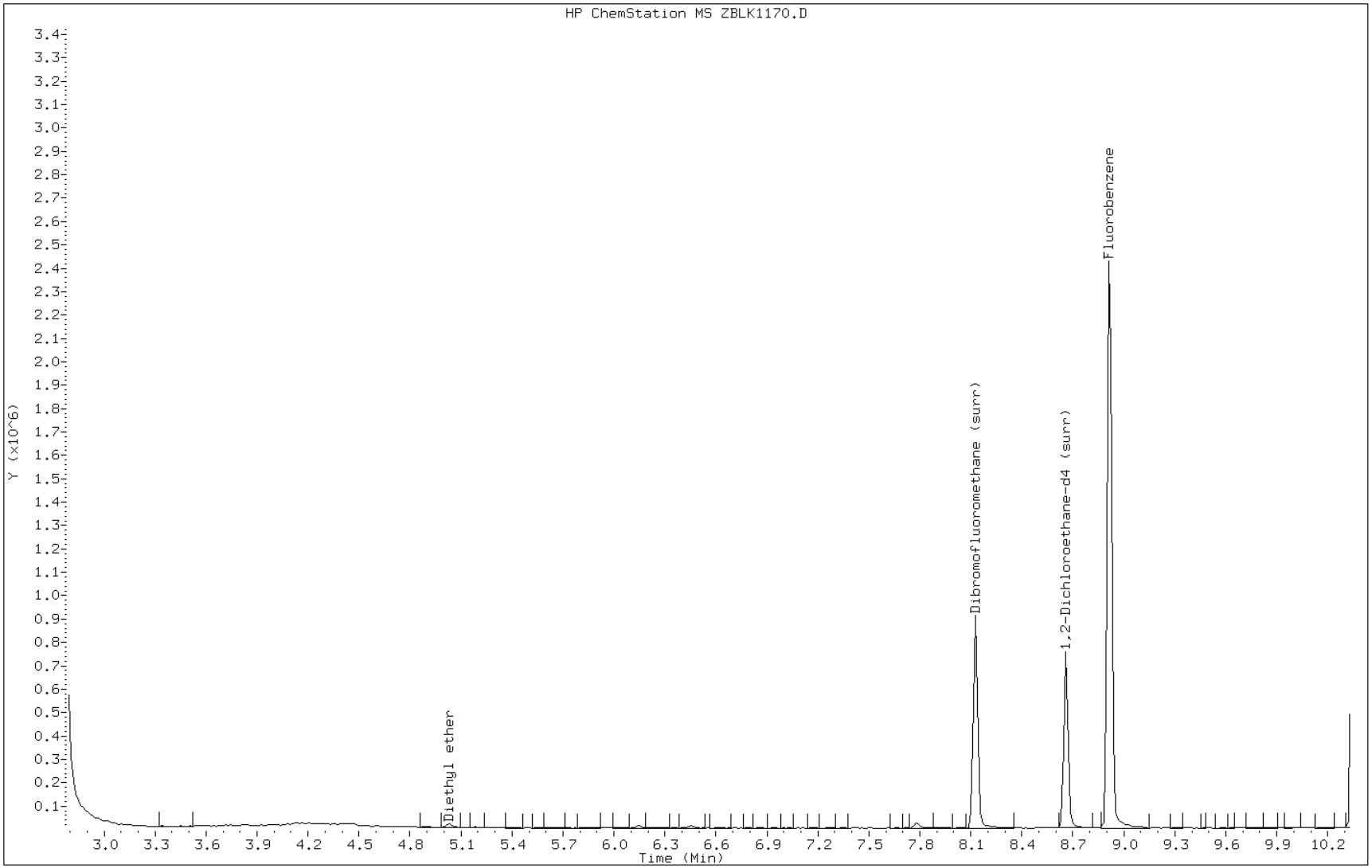
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
$ 35 Dibromofluoromethane (surr)	113	8.128	8.129	(0.912)	540715	50.5979	50.60
$ 43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	451965	49.3459	49.34
* 46 Fluorobenzene	96	8.910	8.911	(1.000)	2243165	50.0000	
$ 57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	2062485	46.4135	46.41
* 70 Chlorobenzene-d5	117	11.773	11.774	(1.000)	1655471	50.0000	
$ 79 4-Bromofluorobenzene (surr)	95	12.877	12.891	(0.923)	777219	46.6509	46.65
* 95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	767557	50.0000	

Data File: ZBLK1170.D

Date: 16-AUG-2012 19:05

Client ID: MB 160-9490/3 Instrument: MSZ.i

Sample Info: MB 160-9490/3 Operator: JDH

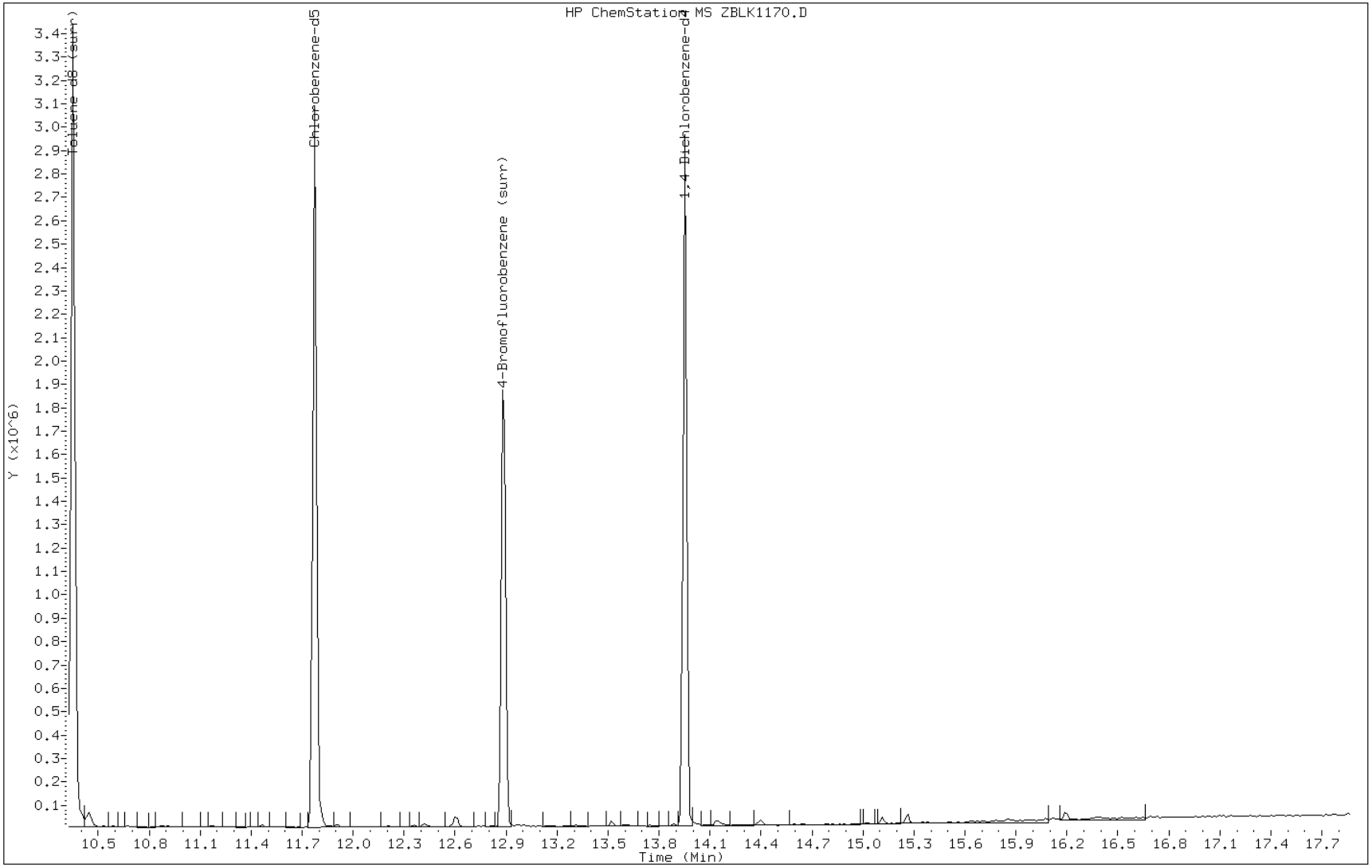


Data File: ZBLK1170.D

Date: 16-AUG-2012 19:05

Client ID: MB 160-9490/3 Instrument: MSZ.i

Sample Info: MB 160-9490/3 Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-9262/4

Matrix: Water | Lab File ID: MLCS1967.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 04:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	51.1		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	54.4		5.0	0.43
79-00-5	1,1,2-Trichloroethane	52.9		5.0	0.57
75-34-3	1,1-Dichloroethane	51.1		5.0	0.39
75-35-4	1,1-Dichloroethene	51.3		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	49.7		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	49.8		10	1.2
95-50-1	1,2-Dichlorobenzene	49.2		5.0	0.28
107-06-2	1,2-Dichloroethane	51.0		5.0	0.37
78-87-5	1,2-Dichloropropane	50.5		5.0	0.32
541-73-1	1,3-Dichlorobenzene	48.8		5.0	0.23
106-46-7	1,4-Dichlorobenzene	51.2		5.0	0.35
78-93-3	2-Butanone (MEK)	51.6		20	0.39
591-78-6	2-Hexanone	52.2		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	54.5		20	0.33
67-64-1	Acetone	53.0		20	6.7
71-43-2	Benzene	53.5		5.0	0.25
75-25-2	Bromoform	57.0		5.0	0.37
74-83-9	Bromomethane	44.2		10	0.40
75-15-0	Carbon disulfide	62.5		5.0	0.37
56-23-5	Carbon tetrachloride	50.9		5.0	0.36
108-90-7	Chlorobenzene	47.7		5.0	0.38
124-48-1	Dibromochloromethane	52.8		5.0	0.33
75-00-3	Chloroethane	47.8		10	0.38
67-66-3	Chloroform	50.8		5.0	0.15
74-87-3	Chloromethane	42.9		10	0.55
156-59-2	cis-1,2-Dichloroethene	50.9		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	57.0		5.0	0.34
110-82-7	Cyclohexane	50.3		10	0.36
75-27-4	Bromodichloromethane	51.4		5.0	0.25
75-71-8	Dichlorodifluoromethane	37.5		10	0.45
100-41-4	Ethylbenzene	50.7		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	51.6		5.0	0.44
98-82-8	Isopropylbenzene	59.8		5.0	0.26
79-20-9	Methyl acetate	51.4		5.0	2.3
1634-04-4	Methyl tert-butyl ether	52.5		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-9262/4

Matrix: Water | Lab File ID: MLCS1967.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 04:33

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	48.9		10	0.26
75-09-2	Methylene Chloride	49.7		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	99.0		5.0	0.57
95-47-6	o-Xylene	50.4		5.0	0.32
100-42-5	Styrene	54.9		5.0	0.35
127-18-4	Tetrachloroethene	48.9		5.0	0.28
108-88-3	Toluene	51.8		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	49.6		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	59.0		5.0	0.35
79-01-6	Trichloroethene	52.1		5.0	0.29
75-69-4	Trichlorofluoromethane	53.9		5.0	0.22
75-01-4	Vinyl chloride	47.8		5.0	0.43
1330-20-7	Xylenes, Total	149		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	104		85-115
1868-53-7	Dibromofluoromethane (Surr)	101		85-119
460-00-4	4-Bromofluorobenzene (Surr)	111		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MLCS1967.D
Report Date: 15-Aug-2012 15:38

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MLCS1967.D
Lab Smp Id: LCS 160-9262/4
Inj Date : 14-AUG-2012 04:33
Operator : JDH Inst ID: MSM.i
Smp Info : LCS 160-9262/4
Misc Info : LCS 160-9262/4
Comment : NONE
Method : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:37 hannj Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.297	3.298	(0.356)	341252	37.4663	37.47
2	Freon-114	135	3.563	3.563	(0.385)	251793	42.5789	42.58
3	Chloromethane	50	3.660	3.661	(0.395)	529435	42.9226	42.92
4	Vinyl Chloride	62	3.842	3.842	(0.415)	724001	47.8273	47.83
5	Bromomethane	94	4.456	4.457	(0.481)	385409	44.1834	44.18
6	Chloroethane	64	4.694	4.694	(0.507)	420474	47.7579	47.76
7	Trichlorofluoromethane	101	4.945	4.946	(0.534)	891418	53.9106	53.91
M 26	1,2-Dichloroethene (total)	96				1080756	100.505	100.5
8	Diethyl ether	74	5.448	5.449	(0.588)	490940	105.142	105.1
9	1,1-Dichloroethene	96	5.755	5.756	(0.621)	428624	51.3086	51.31
10	Carbon Disulfide	76	5.811	5.812	(0.628)	1474406	62.5064	62.51
11	1,1,2-Trichlorofluoroethane	151	5.811	5.812	(0.628)	352522	45.5214	45.52
12	Iodomethane	142	5.965	5.965	(0.644)	434515	50.4856	50.48
13	Acrolein	56	6.216	6.217	(0.671)	246517	290.711	290.7
14	Allyl chloride	39	6.412	6.412	(0.692)	432641	49.6177	49.62
15	Methylene Chloride	84	6.537	6.538	(0.706)	503136	49.7065	49.71
16	Acetone	43	6.593	6.594	(0.712)	90578	53.0097	53.01
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	533380	49.6161	49.62
18	Methyl Acetate	74	6.747	6.747	(0.729)	61692	51.3948	51.39
19	n-Hexane	86	6.845	6.845	(0.739)	113572	48.4114	48.41
20	MTBE	73	6.873	6.873	(0.742)	894823	52.4619	52.46
21	Acetonitrile	41	7.152	7.152	(0.772)	147458	229.312	229.3

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MLCS1967.D
Report Date: 15-Aug-2012 15:38

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/L)	FINAL (ug/L)
	22	2-Chloro-1,3-butadiene	53	7.445	7.432	(0.804)	636732	52.9755	52.98
	23	1,1-Dichloroethane	63	7.459	7.460	(0.805)	877281	51.0902	51.09
	24	Acrylonitrile	53	7.501	7.502	(0.810)	517635	245.822	245.8
	25	Vinyl acetate	43	7.697	7.697	(0.831)	360241	55.3553	55.36
	27	cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	547376	50.8890	50.89
	28	2,2-Dichloropropane	77	8.157	8.158	(0.881)	607401	54.0202	54.02
	30	Bromochloromethane	128	8.241	8.242	(0.890)	231042	50.6504	50.65
	29	Cyclohexane	84	8.269	8.270	(0.893)	756338	50.3346	50.33
	31	Chloroform	83	8.297	8.298	(0.896)	775475	50.8085	50.81
	33	Ethyl acetate	45	8.381	8.381	(0.905)	72574	93.5103	93.51(M)
	32	Carbon Tetrachloride	117	8.465	8.465	(0.914)	570936	50.9023	50.90
	34	Tetrahydrofuran	71	8.465	8.465	(0.914)	150147	265.215	265.2
$	35	Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	401893	50.4677	50.47
	36	1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	652248	51.0759	51.08
	37	2-Butanone	43	8.576	8.577	(0.926)	118398	51.5625	51.56
	39	1,1-Dichloropropene	75	8.646	8.647	(0.934)	625457	52.5537	52.55
	40	Benzene	78	8.884	8.884	(0.959)	2037366	53.5431	53.54
	41	Propionitrile	54	8.884	8.884	(0.959)	172893	247.820	247.8
	42	Methacrylonitrile	41	8.898	8.898	(0.961)	781552	255.833	255.8
	45	Isobutanol	43	8.982	8.982	(0.970)	200563	1028.28	1028
$	43	1,2-Dichloroethane-d4 (Surr)	65	9.009	9.010	(0.973)	330660	50.4213	50.42
	44	1,2-Dichloroethane	62	9.065	9.066	(0.979)	450772	51.0189	51.02
*	46	Fluorobenzene	96	9.261	9.261	(1.000)	1872394	50.0000	
	48	Trichloroethene	95	9.428	9.415	(1.018)	498162	52.0646	52.06
	47	Methylcyclohexane	55	9.428	9.429	(1.018)	513253	48.9462	48.95
	49	n-Butanol	56	9.624	9.624	(1.039)	52187	455.686	455.7
	50	Dibromomethane	93	9.819	9.820	(1.060)	204773	51.3431	51.34
	51	1,2-Dichloropropane	63	9.903	9.904	(1.069)	487999	50.4752	50.48
	52	Bromodichloromethane	83	9.945	9.946	(1.074)	496805	51.3780	51.38
	53	Methyl methacrylate	69	10.029	10.029	(1.083)	185040	52.9981	53.00
	54	1,4-Dioxane	88	10.113	10.113	(1.092)	55140	1111.11	1111
	56	cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	660875	56.9953	57.00
$	57	Toluene-d8 (Surr)	98	10.685	10.686	(0.883)	1635478	52.1087	52.11
	58	Toluene	92	10.727	10.728	(0.887)	1173500	51.7978	51.80
	59	2-Nitropropane	43	10.923	10.924	(0.903)	132847	114.457	114.4
	62	4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	240786	54.5136	54.51
	63	trans-1,3-Dichloropropene	75	11.076	11.077	(0.916)	478865	58.9621	58.96
	60	Tetrachloroethene	164	11.090	11.091	(0.917)	368140	48.8930	48.89
	65	Ethyl methacrylate	69	11.160	11.161	(0.923)	378602	53.3569	53.36
	64	1,1,2-Trichloroethane	83	11.230	11.231	(0.928)	260291	52.8887	52.89
	66	Chlorodibromomethane	129	11.412	11.412	(0.943)	356194	52.8255	52.82
	67	1,3-Dichloropropane	76	11.495	11.496	(0.950)	536369	53.1664	53.17
	68	1,2-Dibromoethane	107	11.663	11.663	(0.964)	271309	51.6208	51.62
	69	2-Hexanone	43	11.761	11.761	(0.972)	146609	52.2118	52.21
*	70	Chlorobenzene-d5	117	12.096	12.096	(1.000)	1241211	50.0000	
	72	Ethylbenzene	91	12.110	12.110	(1.001)	2161979	50.6758	50.68
	71	Chlorobenzene	112	12.110	12.110	(1.001)	1199426	47.7035	47.70
	73	1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	417273	49.9607	49.96
	74	m,p-Xylenes	106	12.222	12.222	(1.010)	1734624	98.9798	98.98
	75	o-Xylene	106	12.641	12.627	(1.045)	802390	50.4419	50.44
	76	Styrene	104	12.683	12.683	(1.048)	1248987	54.9150	54.92
	77	Bromoform	173	12.752	12.753	(0.893)	198522	56.9644	56.96
	78	Isopropylbenzene	105	12.906	12.906	(0.904)	1949282	59.7654	59.76
$	79	4-Bromofluorobenzene (Surr)	95	13.199	13.200	(0.925)	540215	55.4648	55.46

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MLCS1967.D
Report Date: 15-Aug-2012 15:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
81	n-Propylbenzene	91	13.297	13.298	(0.931)	2267567	50.1959	50.20
80	Bromobenzene	156	13.339	13.325	(0.934)	490858	50.7536	50.75
82	1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	345721	54.4038	54.40
84	1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	1831940	56.8343	56.83
83	2-Chlorotoluene	91	13.479	13.479	(0.944)	1519751	51.6734	51.67
85	1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	367806	55.4567	55.46
86	trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	63366	53.7311	53.73
87	Cyclohexanone	55	13.590	13.577	(0.952)	96489	529.659	529.6
88	4-Chlorotoluene	91	13.632	13.633	(0.955)	1345465	52.8113	52.81
89	t-Butylbenzene	119	13.786	13.786	(0.966)	1451603	50.6418	50.64
91	1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	1751810	55.2412	55.24
92	sec-Butylbenzene	105	13.953	13.954	(0.977)	2220659	53.0076	53.01
93	4-Isopropyltoluene	119	14.065	14.066	(0.985)	1828504	55.1922	55.19
94	1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	934616	48.8045	48.80
* 95	1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	616037	50.0000	
96	1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	1003023	51.1630	51.16
98	n-Butylbenzene	91	14.470	14.471	(1.014)	1707166	56.1373	56.14
99	1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	828699	49.2457	49.24
145	Nonanal	57	15.406	15.406	(1.079)	99599	52.3605	52.36
100	1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	53314	49.7749	49.77
101	Hexachlorobutadiene	225	16.104	16.105	(1.128)	233522	47.0596	47.06
104	1,2,4-Trichlorobenzene	180	16.160	16.161	(1.132)	326937	49.6737	49.67
105	Naphthalene	128	16.523	16.524	(1.158)	337620	55.0869	55.09
106	1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	167333	48.2945	48.29
M 107	Xylenes (total)	106				2537014	149.422	149.4

QC Flag Legend

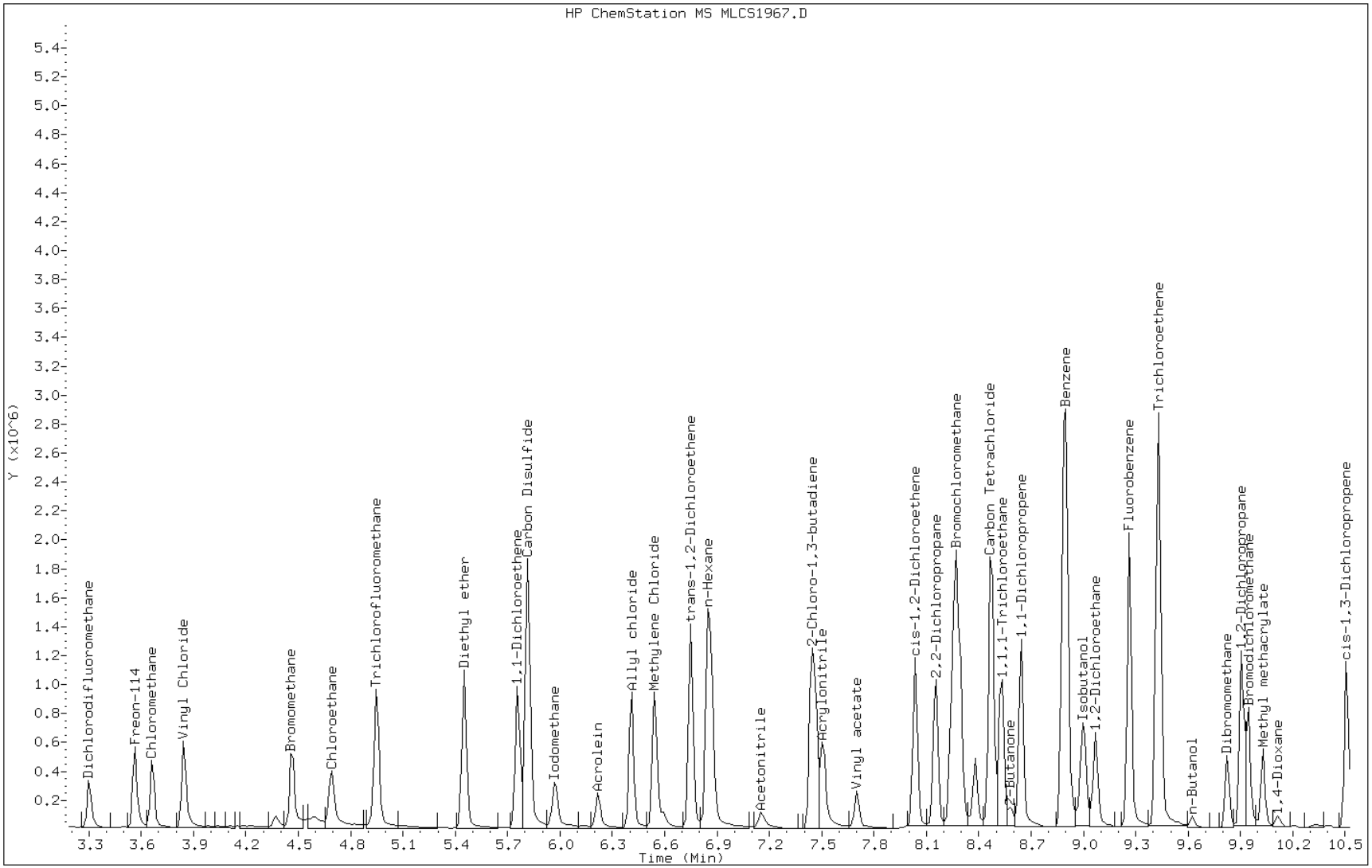
M - Compound response manually integrated.

Data File: MLCS1967.D

Date: 14-AUG-2012 04:33

Client ID: Instrument: MSM.i

Sample Info: LCS 160-9262/4 Operator: JDH



Data File: MLCS1967.D

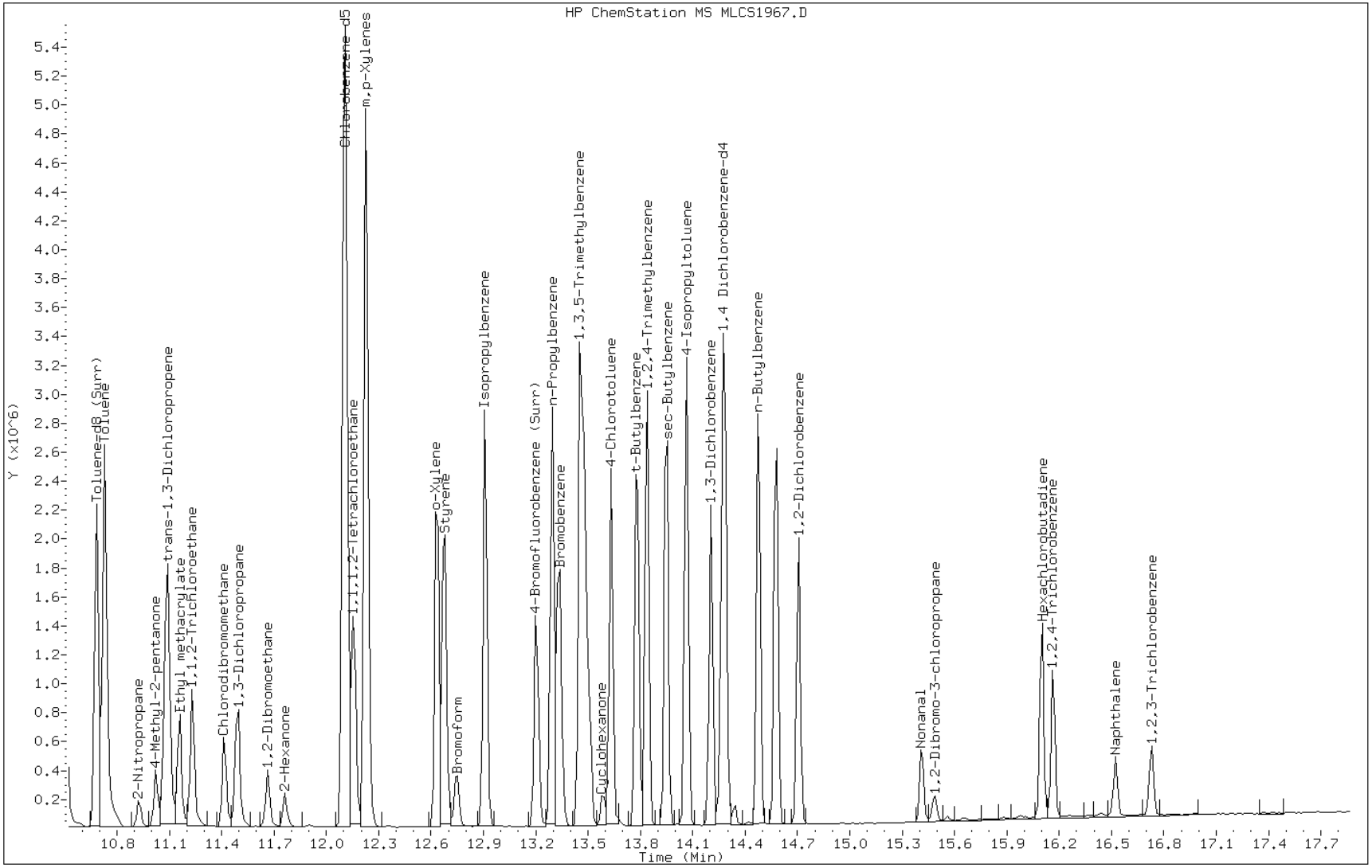
Date: 14-AUG-2012 04:33

Client ID:

Instrument: MSM.i

Sample Info: LCS 160-9262/4

Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-9490/4

Matrix: Water | Lab File ID: ZLCS1168.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 18:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	49.7		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	51.0		5.0	0.43
79-00-5	1,1,2-Trichloroethane	48.9		5.0	0.57
75-34-3	1,1-Dichloroethane	48.3		5.0	0.39
75-35-4	1,1-Dichloroethene	46.8		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	41.4		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	45.6		10	1.2
95-50-1	1,2-Dichlorobenzene	48.4		5.0	0.28
107-06-2	1,2-Dichloroethane	49.3		5.0	0.37
78-87-5	1,2-Dichloropropane	48.6		5.0	0.32
541-73-1	1,3-Dichlorobenzene	48.6		5.0	0.23
106-46-7	1,4-Dichlorobenzene	48.6		5.0	0.35
78-93-3	2-Butanone (MEK)	54.5		20	0.39
591-78-6	2-Hexanone	48.5		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	48.5		20	0.33
67-64-1	Acetone	51.4		20	6.7
71-43-2	Benzene	43.8		5.0	0.25
75-25-2	Bromoform	51.4		5.0	0.37
74-83-9	Bromomethane	45.8		10	0.40
75-15-0	Carbon disulfide	47.9		5.0	0.37
56-23-5	Carbon tetrachloride	47.0		5.0	0.36
108-90-7	Chlorobenzene	48.4		5.0	0.38
124-48-1	Dibromochloromethane	50.3		5.0	0.33
75-00-3	Chloroethane	45.3		10	0.38
67-66-3	Chloroform	46.6		5.0	0.15
74-87-3	Chloromethane	45.6		10	0.55
156-59-2	cis-1,2-Dichloroethene	47.6		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	50.2		5.0	0.34
110-82-7	Cyclohexane	47.3		10	0.36
75-27-4	Bromodichloromethane	49.1		5.0	0.25
75-71-8	Dichlorodifluoromethane	46.9		10	0.45
100-41-4	Ethylbenzene	42.6		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	49.7		5.0	0.44
98-82-8	Isopropylbenzene	45.6		5.0	0.26
79-20-9	Methyl acetate	51.6		5.0	2.3
1634-04-4	Methyl tert-butyl ether	52.1		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-9490/4

Matrix: Water | Lab File ID: ZLCS1168.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 18:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	47.0		10	0.26
75-09-2	Methylene Chloride	50.5		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	91.8		5.0	0.57
95-47-6	o-Xylene	46.2		5.0	0.32
100-42-5	Styrene	49.5		5.0	0.35
127-18-4	Tetrachloroethene	45.3		5.0	0.28
108-88-3	Toluene	46.6		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	46.1		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	50.3		5.0	0.35
79-01-6	Trichloroethene	48.3		5.0	0.29
75-69-4	Trichlorofluoromethane	48.5		5.0	0.22
75-01-4	Vinyl chloride	43.7		5.0	0.43
1330-20-7	Xylenes, Total	138		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	96		85-115
1868-53-7	Dibromofluoromethane (Surr)	103		85-119
460-00-4	4-Bromofluorobenzene (Surr)	97		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		82-132

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZLCS1168.D
Report Date: 21-Aug-2012 22:48

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZLCS1168.D
Lab Smp Id: LCS 160-9490/4 Client Smp ID: LCS 160-9490/4
Inj Date : 16-AUG-2012 18:17
Operator : JDH Inst ID: MSZ.i
Smp Info : LCS 160-9490/4
Misc Info : LCS 160-9490/4
Comment : NONE
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Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL-P.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	2.989	2.989	(0.335)	694867	46.8991	46.90
2	Freon-114	135	3.227	3.226	(0.362)	339069	46.3445	46.34
3	Chloromethane	50	3.324	3.324	(0.373)	689550	45.6031	45.60
4	Vinyl Chloride	62	3.492	3.492	(0.392)	699168	43.6878	43.69
5	Bromomethane	94	4.065	4.064	(0.456)	309909	45.7819	45.78
6	Chloroethane	64	4.302	4.302	(0.483)	294164	45.3330	45.33
7	Trichlorofluoromethane	101	4.539	4.525	(0.509)	931883	48.4687	48.47
8	Diethyl ether	74	5.028	5.028	(0.564)	619576	106.581	106.6
9	1,1-Dichloroethene	96	5.350	5.349	(0.600)	550392	46.7537	46.75
10	Carbon Disulfide	76	5.391	5.391	(0.605)	1755975	47.8957	47.90
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	488355	49.4926	49.49
12	Iodomethane	142	5.559	5.559	(0.624)	916187	49.7021	49.70
M 26	1,2-Dichloroethene (total)	96				1302870	93.6985	93.70
13	Acrolein	56	5.824	5.824	(0.654)	292105	241.246	241.2
14	Allyl chloride	39	6.006	6.006	(0.674)	511121	47.8513	47.85
15	Methylene Chloride	84	6.146	6.145	(0.690)	601978	50.5016	50.50
16	Acetone	43	6.215	6.215	(0.698)	90493	51.3543	51.35
17	trans-1,2-Dichloroethene	96	6.355	6.355	(0.713)	651035	46.1186	46.12
18	Methyl Acetate	74	6.369	6.369	(0.715)	77326	51.5733	51.57
19	n-Hexane	86	6.453	6.453	(0.724)	161740	46.9688	46.97
20	MTBE	73	6.481	6.481	(0.727)	1265868	52.1356	52.14
21	Acetonitrile	41	6.788	6.788	(0.762)	171986	252.980	253.0
22	2-Chloro-1,3-butadiene	53	7.067	7.067	(0.793)	911588	46.0507	46.05

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZLCS1168.D
Report Date: 21-Aug-2012 22:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	23 1,1-Dichloroethane	63	7.095	7.095	(0.796)	1040902	48.3118	48.31
	24 Acrylonitrile	53	7.151	7.151	(0.803)	616803	254.307	254.3
	25 Vinyl acetate	43	7.347	7.346	(0.824)	478391	50.5163	50.52
	27 cis-1,2-Dichloroethene	96	7.668	7.668	(0.861)	651835	47.5798	47.58
	28 2,2-Dichloropropane	77	7.794	7.793	(0.875)	795756	50.1556	50.16
	30 Bromochloromethane	128	7.877	7.877	(0.884)	280455	51.5599	51.56
	29 Cyclohexane	84	7.891	7.891	(0.886)	977371	47.3474	47.35
	31 Chloroform	83	7.933	7.947	(0.890)	964191	46.5947	46.59
	33 Ethyl acetate	45	8.031	8.031	(0.901)	93018	102.482	102.5
	32 Carbon Tetrachloride	117	8.101	8.101	(0.909)	805888	47.0187	47.02
	34 Tetrahydrofuran	71	8.115	8.115	(0.911)	191962	259.423	259.4
$	35 Dibromofluoromethane (surr)	113	8.129	8.129	(0.912)	550935	51.5694	51.57
	36 1,1,1-Trichloroethane	97	8.171	8.170	(0.917)	913821	49.6637	49.66
	37 2-Butanone	43	8.240	8.240	(0.925)	150758	54.5031	54.50
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	842784	46.7173	46.72
	40 Benzene	78	8.534	8.534	(0.958)	2382611	43.8095	43.81
	41 Propionitrile	54	8.548	8.548	(0.959)	221467	270.256	270.2
	42 Methacrylonitrile	41	8.562	8.562	(0.961)	956468	252.657	252.6
	45 Isobutanol	43	8.659	8.659	(0.972)	269235	1033.39	1033
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	458034	50.0233	50.02
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	598790	49.2766	49.28
*	46 Fluorobenzene	96	8.911	8.911	(1.000)	2242503	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	719805	46.9590	46.96
	48 Trichloroethene	95	9.078	9.078	(1.019)	626099	48.2952	48.30
	49 n-Butanol	56	9.302	9.302	(1.044)	87829	502.495	502.5
	50 Dibromomethane	93	9.483	9.483	(1.064)	256921	49.9563	49.96
	51 1,2-Dichloropropane	63	9.567	9.567	(1.074)	584790	48.5538	48.55
	52 Bromodichloromethane	83	9.609	9.609	(1.078)	693762	49.1396	49.14
	53 Methyl methacrylate	69	9.707	9.707	(1.089)	288369	51.3674	51.37
	54 1,4-Dioxane	88	9.777	9.791	(1.097)	61478	1138.34	1138
	55 2-Chloroethylvinyl ether	63	10.084	10.084	(1.132)	85651	33.4225	33.42
	56 cis-1,3-Dichloropropene	75	10.182	10.182	(1.143)	892356	50.2115	50.21
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	2072534	48.1977	48.20
	58 Toluene	92	10.405	10.405	(0.884)	1574577	46.6282	46.63
	59 2-Nitropropane	43	10.615	10.615	(0.902)	176646	96.0001	96.00
	62 4-Methyl-2-pentanone	43	10.699	10.712	(0.909)	321652	48.4588	48.46
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	502246	45.2919	45.29
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	670055	50.3168	50.32
	65 Ethyl methacrylate	69	10.838	10.838	(0.921)	592275	49.4710	49.47
	64 1,1,2-Trichloroethane	83	10.908	10.908	(0.926)	343448	48.9032	48.90
	66 Chlorodibromomethane	129	11.090	11.089	(0.942)	480404	50.3469	50.35
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	741485	48.9032	48.90
	68 1,2-Dibromoethane	107	11.341	11.341	(0.963)	410641	49.6540	49.65
	69 2-Hexanone	43	11.453	11.453	(0.973)	213372	48.4622	48.46
*	70 Chlorobenzene-d5	117	11.774	11.774	(1.000)	1601953	50.0000	
	72 Ethylbenzene	91	11.788	11.788	(1.001)	2820295	42.6126	42.61
	71 Chlorobenzene	112	11.788	11.788	(1.001)	1669013	48.4012	48.40
	73 1,1,1,2-Tetrachloroethane	131	11.830	11.830	(1.005)	613527	48.9518	48.95
	74 m,p-Xylenes	106	11.900	11.913	(1.011)	2338561	91.7916	91.79
	75 o-Xylene	106	12.319	12.318	(1.046)	1172889	46.1952	46.20
	76 Styrene	104	12.361	12.360	(1.050)	1870948	49.4598	49.46
	77 Bromoform	173	12.416	12.430	(0.890)	265490	51.4157	51.42
	78 Isopropylbenzene	105	12.584	12.584	(0.902)	2551718	45.5756	45.58
$	79 4-Bromofluorobenzene (surr)	95	12.877	12.891	(0.923)	787238	48.2641	48.26

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZLCS1168.D
Report Date: 21-Aug-2012 22:48

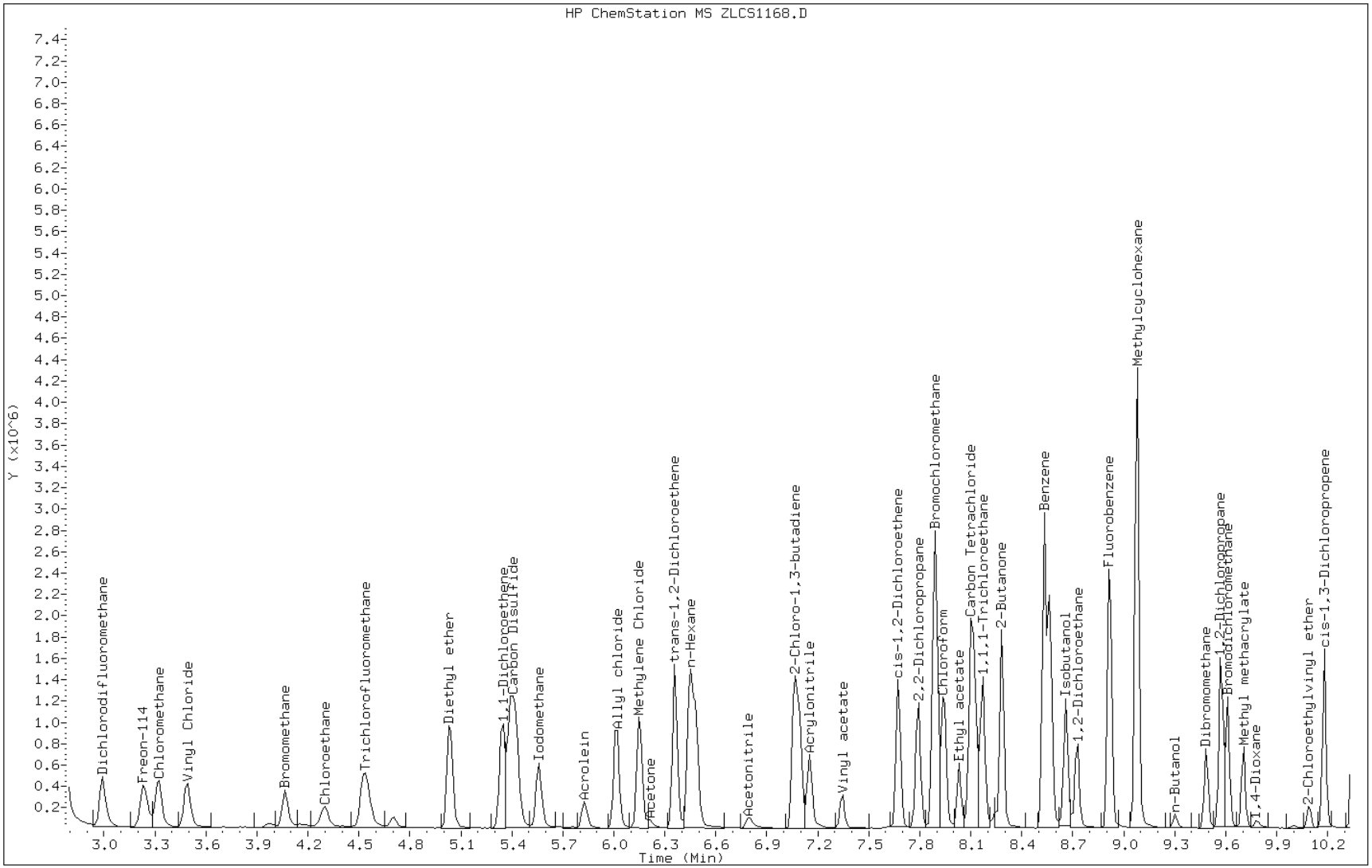
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	81 n-Propylbenzene	91	12.975	12.975	(0.930)	3072132	45.0930	45.09
	80 Bromobenzene	156	13.003	13.017	(0.932)	660080	49.4170	49.42
	82 1,1,2,2-Tetrachloroethane	83	13.031	13.031	(0.934)	442723	51.0278	51.03
	84 1,3,5-Trimethylbenzene	105	13.143	13.142	(0.942)	2338123	44.6300	44.63
	83 2-Chlorotoluene	91	13.157	13.156	(0.943)	2109358	47.9737	47.97
	85 1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	446715	49.8325	49.83
	86 trans-1,4-dichloro-2-butene	53	13.198	13.212	(0.946)	88444	51.5549	51.55
	87 Cyclohexanone	55	13.268	13.268	(0.951)	121934	481.911	481.9
	88 4-Chlorotoluene	91	13.310	13.310	(0.954)	1868647	48.4447	48.44
	89 t-Butylbenzene	119	13.464	13.464	(0.965)	1945039	46.7680	46.77
	91 1,2,4-Trimethylbenzene	105	13.520	13.520	(0.969)	2307884	45.1909	45.19
	92 sec-Butylbenzene	105	13.631	13.631	(0.977)	2933320	44.0614	44.06
	93 4-Isopropyltoluene	119	13.757	13.757	(0.986)	2284752	44.7595	44.76
	94 1,3-Dichlorobenzene	146	13.883	13.883	(0.995)	1223989	48.6231	48.62
*	95 1,4 Dichlorobenzene-d4	152	13.953	13.952	(1.000)	751465	50.0000	
	96 1,4-Dichlorobenzene	146	13.967	13.966	(1.001)	1202480	48.6178	48.62
	98 n-Butylbenzene	91	14.162	14.162	(1.015)	2146573	43.4950	43.50
	99 1,2-Dichlorobenzene	146	14.386	14.385	(1.031)	1042745	48.3652	48.36
	145 Nonanal	57	15.112	15.112	(1.083)	182486	43.4143	43.41
	100 1,2-Dibromo-3-chloropropane	157	15.182	15.181	(1.088)	58524	45.6270	45.63
	101 Hexachlorobutadiene	225	15.782	15.782	(1.131)	201709	46.7712	46.77
	104 1,2,4-Trichlorobenzene	180	15.852	15.852	(1.136)	354157	41.4323	41.43
	105 Naphthalene	128	16.187	16.201	(1.160)	507201	46.3070	46.31
	106 1,2,3-Trichlorobenzene	180	16.397	16.397	(1.175)	187192	43.3359	43.34
M	107 Xylenes (total)	106				3511450	137.987	138.0

Data File: ZLCS1168.D

Date: 16-AUG-2012 18:17

Client ID: LCS 160-9490/4 Instrument: MSZ.i

Sample Info: LCS 160-9490/4 Operator: JDH

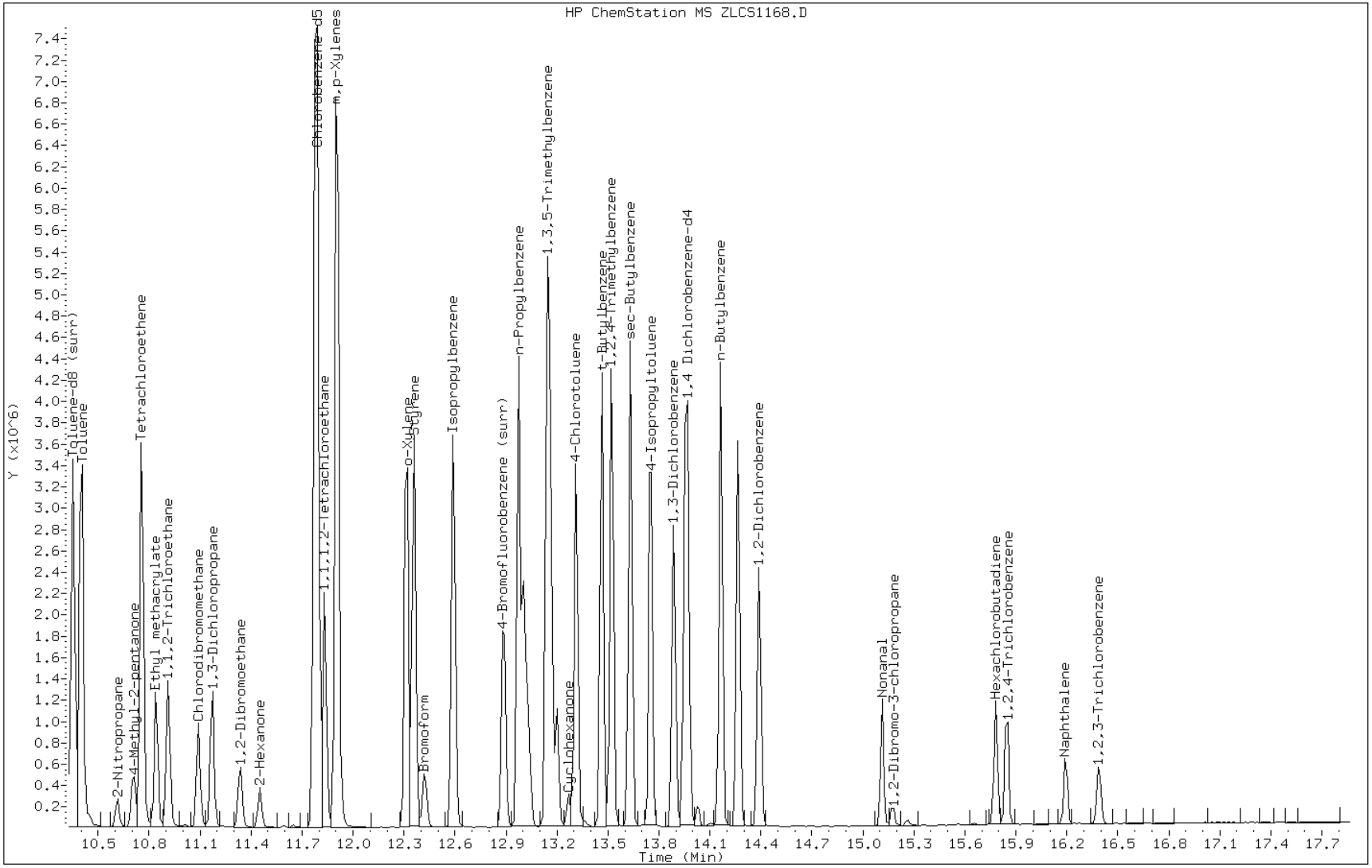


Data File: ZLCS1168.D

Date: 16-AUG-2012 18:17

Client ID: LCS 160-9490/4 Instrument: MSZ.i

Sample Info: LCS 160-9490/4 Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS MS | Lab Sample ID: 160-437-1 MS

Matrix: Water | Lab File ID: MSMP1973.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 07:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	50.2		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	52.0		5.0	0.43
79-00-5	1,1,2-Trichloroethane	50.8		5.0	0.57
75-34-3	1,1-Dichloroethane	52.8		5.0	0.39
75-35-4	1,1-Dichloroethene	49.3		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	52.5		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	48.3		10	1.2
95-50-1	1,2-Dichlorobenzene	45.9		5.0	0.28
107-06-2	1,2-Dichloroethane	52.7		5.0	0.37
78-87-5	1,2-Dichloropropane	52.6		5.0	0.32
541-73-1	1,3-Dichlorobenzene	45.3		5.0	0.23
106-46-7	1,4-Dichlorobenzene	48.8		5.0	0.35
78-93-3	2-Butanone (MEK)	49.8		20	0.39
591-78-6	2-Hexanone	51.6		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	55.1		20	0.33
67-64-1	Acetone	47.7		20	6.7
71-43-2	Benzene	53.9		5.0	0.25
75-25-2	Bromoform	52.3		5.0	0.37
74-83-9	Bromomethane	44.3		10	0.40
75-15-0	Carbon disulfide	60.5		5.0	0.37
56-23-5	Carbon tetrachloride	52.2		5.0	0.36
108-90-7	Chlorobenzene	47.1		5.0	0.38
124-48-1	Dibromochloromethane	51.3		5.0	0.33
75-00-3	Chloroethane	55.9		10	0.38
67-66-3	Chloroform	50.2		5.0	0.15
74-87-3	Chloromethane	43.9		10	0.55
156-59-2	cis-1,2-Dichloroethene	49.8		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	58.0		5.0	0.34
110-82-7	Cyclohexane	49.4		10	0.36
75-27-4	Bromodichloromethane	53.9		5.0	0.25
75-71-8	Dichlorodifluoromethane	45.3		10	0.45
100-41-4	Ethylbenzene	49.7		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	49.3		5.0	0.44
98-82-8	Isopropylbenzene	55.3		5.0	0.26
79-20-9	Methyl acetate	52.3		5.0	2.3
1634-04-4	Methyl tert-butyl ether	55.9		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS MS | Lab Sample ID: 160-437-1 MS

Matrix: Water | Lab File ID: MSMP1973.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 07:04

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	51.6		10	0.26
75-09-2	Methylene Chloride	48.2		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	96.3		5.0	0.57
95-47-6	o-Xylene	47.0		5.0	0.32
100-42-5	Styrene	52.6		5.0	0.35
127-18-4	Tetrachloroethene	47.1		5.0	0.28
108-88-3	Toluene	48.9		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	49.1		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	56.8		5.0	0.35
79-01-6	Trichloroethene	46.6		5.0	0.29
75-69-4	Trichlorofluoromethane	53.1		5.0	0.22
75-01-4	Vinyl chloride	49.8		5.0	0.43
1330-20-7	Xylenes, Total	143		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	95		85-115
1868-53-7	Dibromofluoromethane (Surr)	102		85-119
460-00-4	4-Bromofluorobenzene (Surr)	101		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1973.D
Report Date: 15-Aug-2012 15:38

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1973.D
Lab Smp Id: 160-437-F-1 MS Client Smp ID: PZ-113-AS
Inj Date : 14-AUG-2012 07:04
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-1 MS
Misc Info : 160-437-F-1 MS
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:37 hannj Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.297	3.298	(0.356)	330595	45.3496	45.35
2	Freon-114	135	3.563	3.563	(0.385)	215536	45.5388	45.54
3	Chloromethane	50	3.661	3.661	(0.395)	433144	43.8750	43.87
4	Vinyl Chloride	62	3.842	3.842	(0.415)	603112	49.7789	49.78
5	Bromomethane	94	4.471	4.457	(0.483)	309489	44.3296	44.33
6	Chloroethane	64	4.694	4.694	(0.507)	393795	55.8841	55.88
7	Trichlorofluoromethane	101	4.945	4.946	(0.534)	702975	53.1183	53.12
M 26	1,2-Dichloroethene (total)	96				851358	98.9201	98.92
8	Diethyl ether	74	5.448	5.449	(0.588)	400852	107.261	107.3
9	1,1-Dichloroethene	96	5.755	5.756	(0.621)	329925	49.3447	49.34
10	Carbon Disulfide	76	5.811	5.812	(0.628)	1142101	60.4955	60.50
11	1,1,2-Trichlorofluoroethane	151	5.825	5.812	(0.629)	290611	46.8870	46.89
12	Iodomethane	142	5.965	5.965	(0.644)	327621	47.7653	47.76
13	Acrolein	56	6.216	6.217	(0.671)	180214	265.530	265.5
14	Allyl chloride	39	6.412	6.412	(0.692)	369003	52.8750	52.87
15	Methylene Chloride	84	6.538	6.538	(0.706)	390348	48.1827	48.18
16	Acetone	43	6.593	6.594	(0.712)	66630	47.7303	47.73
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	422706	49.1287	49.13
18	Methyl Acetate	74	6.747	6.747	(0.729)	50230	52.2835	52.28
19	n-Hexane	86	6.845	6.845	(0.739)	94821	50.5001	50.50
20	MTBE	73	6.873	6.873	(0.742)	762755	55.8732	55.87
21	Acetonitrile	41	7.152	7.152	(0.772)	119445	232.080	232.1

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1973.D
Report Date: 15-Aug-2012 15:38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	22 2-Chloro-1,3-butadiene	53	7.445	7.432	(0.804)	508712	52.8813	52.88
	23 1,1-Dichloroethane	63	7.459	7.460	(0.805)	726178	52.8388	52.84
	24 Acrylonitrile	53	7.515	7.502	(0.812)	403030	239.137	239.1
	25 Vinyl acetate	43	7.697	7.697	(0.831)	306180	58.7833	58.78
	27 cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	428652	49.7914	49.79
	28 2,2-Dichloropropane	77	8.158	8.158	(0.881)	463476	51.5014	51.50
	30 Bromochloromethane	128	8.241	8.242	(0.890)	179332	49.1203	49.12
	29 Cyclohexane	84	8.269	8.270	(0.893)	593596	49.3575	49.36
	31 Chloroform	83	8.297	8.298	(0.896)	613108	50.1900	50.19
	33 Ethyl acetate	45	8.381	8.381	(0.905)	56893	91.5901	91.59
	32 Carbon Tetrachloride	117	8.465	8.465	(0.914)	468784	52.2196	52.22
	34 Tetrahydrofuran	71	8.479	8.465	(0.916)	132419	292.242	292.2
$	35 Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	326133	51.1692	51.17
	36 1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	512965	50.1883	50.19
	37 2-Butanone	43	8.591	8.577	(0.928)	91447	49.7589	49.76
	39 1,1-Dichloropropene	75	8.647	8.647	(0.934)	487797	51.2102	51.21
	40 Benzene	78	8.884	8.884	(0.959)	1641951	53.9145	53.91
	41 Propionitrile	54	8.884	8.884	(0.959)	151203	270.789	270.8
	42 Methacrylonitrile	41	8.898	8.898	(0.961)	669971	274.010	274.0
	45 Isobutanol	43	8.996	8.982	(0.971)	174841	1119.99	1120
$	43 1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	266980	50.8654	50.86
	44 1,2-Dichloroethane	62	9.065	9.066	(0.979)	373015	52.7487	52.75
*	46 Fluorobenzene	96	9.261	9.261	(1.000)	1498601	50.0000	
	48 Trichloroethene	95	9.429	9.415	(1.018)	356560	46.5603	46.56
	47 Methylcyclohexane	55	9.429	9.429	(1.018)	432708	51.5577	51.56
	49 n-Butanol	56	9.624	9.624	(1.039)	49165	530.951	531.0
	50 Dibromomethane	93	9.820	9.820	(1.060)	165222	51.7594	51.76
	51 1,2-Dichloropropane	63	9.903	9.904	(1.069)	407259	52.6309	52.63
	52 Bromodichloromethane	83	9.945	9.946	(1.074)	416973	53.8778	53.88
	53 Methyl methacrylate	69	10.029	10.029	(1.083)	154314	55.2219	55.22
	54 1,4-Dioxane	88	10.113	10.113	(1.092)	49517	1246.68	1247
	56 cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	538044	57.9761	57.98
$	57 Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1296882	47.7167	47.72
	58 Toluene	92	10.727	10.728	(0.887)	960289	48.9479	48.95
	59 2-Nitropropane	43	10.923	10.924	(0.903)	116548	115.958	116.0
	62 4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	210810	55.1149	55.11
	63 trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	399171	56.7574	56.76
	60 Tetrachloroethene	164	11.091	11.091	(0.917)	306993	47.0832	47.08
	65 Ethyl methacrylate	69	11.160	11.161	(0.923)	308327	50.2924	50.29
	64 1,1,2-Trichloroethane	83	11.230	11.231	(0.928)	216628	50.8302	50.83
	66 Chlorodibromomethane	129	11.412	11.412	(0.943)	299448	51.2841	51.28
	67 1,3-Dichloropropane	76	11.496	11.496	(0.950)	453657	51.9284	51.93
	68 1,2-Dibromoethane	107	11.663	11.663	(0.964)	224397	49.3039	49.30
	69 2-Hexanone	43	11.761	11.761	(0.972)	125434	51.5855	51.58
*	70 Chlorobenzene-d5	117	12.096	12.096	(1.000)	1074835	50.0000	
	72 Ethylbenzene	91	12.110	12.110	(1.001)	1834286	49.6500	49.65
	71 Chlorobenzene	112	12.110	12.110	(1.001)	1024982	47.0757	47.08
	73 1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	348088	48.1283	48.13
	74 m,p-Xylenes	106	12.222	12.222	(1.010)	1460825	96.2594	96.26
	75 o-Xylene	106	12.641	12.627	(1.045)	646931	46.9643	46.96
	76 Styrene	104	12.683	12.683	(1.048)	1035204	52.5609	52.56
	77 Bromoform	173	12.753	12.753	(0.893)	163319	52.3132	52.31
	78 Isopropylbenzene	105	12.906	12.906	(0.904)	1616020	55.3098	55.31
$	79 4-Bromofluorobenzene (Surr)	95	13.200	13.200	(0.925)	442311	50.6943	50.69

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1973.D
Report Date: 15-Aug-2012 15:38

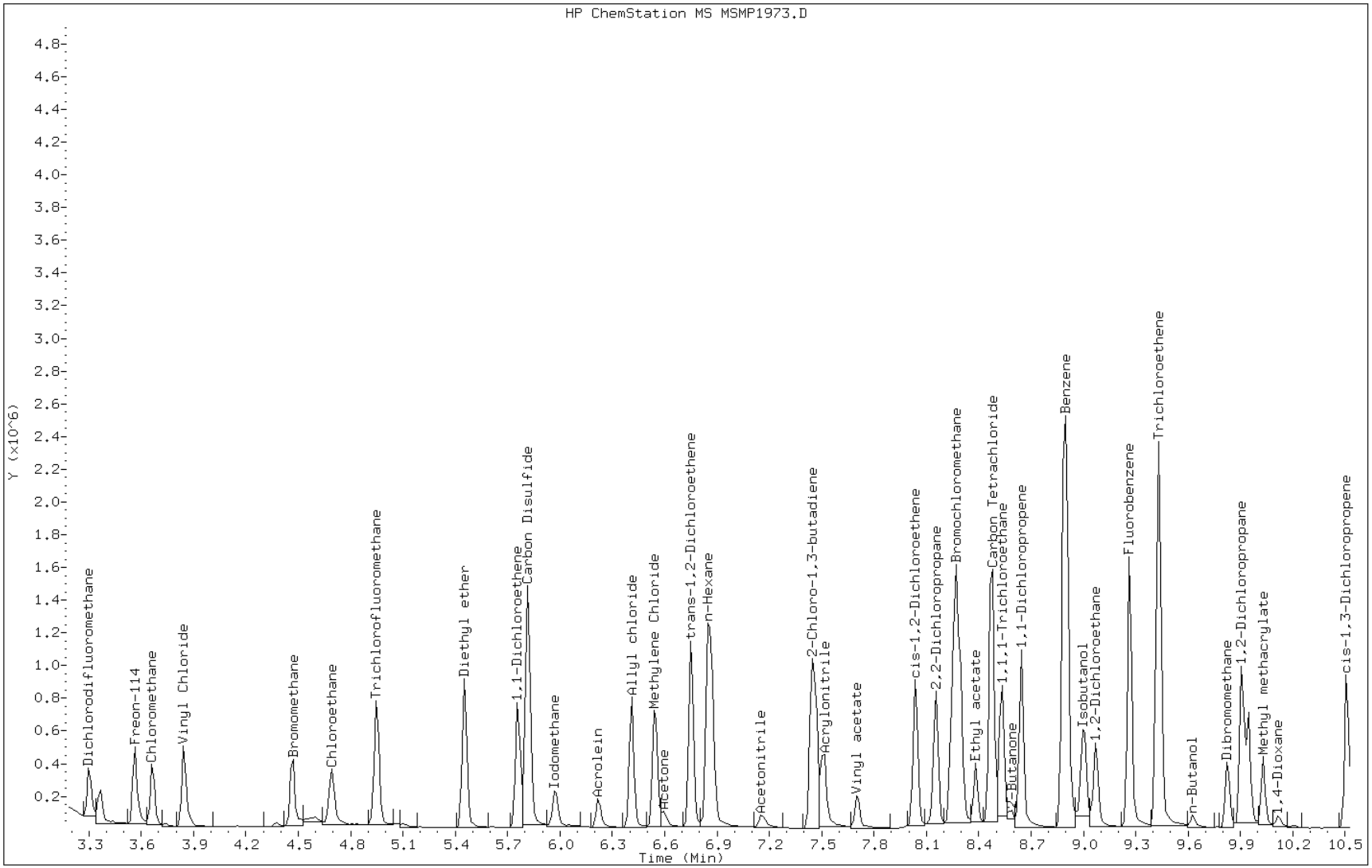
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	81 n-Propylbenzene	91	13.297	13.298	(0.931)	1882279	46.5128	46.51
	80 Bromobenzene	156	13.339	13.325	(0.934)	410516	47.3829	47.38
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	295756	51.9538	51.95
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	1547833	53.6048	53.60
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	1276334	48.4439	48.44
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	312285	52.5613	52.56
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	55632	52.6592	52.66
	87 Cyclohexanone	55	13.577	13.577	(0.951)	60373	369.949	369.9
	88 4-Chlorotoluene	91	13.632	13.633	(0.955)	1109392	48.6093	48.61
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	1204817	46.9205	46.92
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	1496464	52.6772	52.68
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	1858839	49.5312	49.53
	93 4-Isopropyltoluene	119	14.065	14.066	(0.985)	1531307	51.5970	51.60
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	777947	45.3479	45.35
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	551857	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	857327	48.8171	48.82
	98 n-Butylbenzene	91	14.470	14.471	(1.014)	1441895	52.9285	52.93
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	692061	45.9088	45.91
	145 Nonanal	57	15.406	15.406	(1.079)	90936	53.2665	53.27
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	46383	48.3402	48.34
	101 Hexachlorobutadiene	225	16.104	16.105	(1.128)	199601	44.9018	44.90
	104 1,2,4-Trichlorobenzene	180	16.160	16.161	(1.132)	309341	52.4663	52.47
	105 Naphthalene	128	16.523	16.524	(1.158)	309138	56.3057	56.30
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	170470	54.9218	54.92
M	107 Xylenes (total)	106				2107756	143.224	143.2

Data File: MSMP1973.D

Date: 14-AUG-2012 07:04

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 MS Operator: JDH

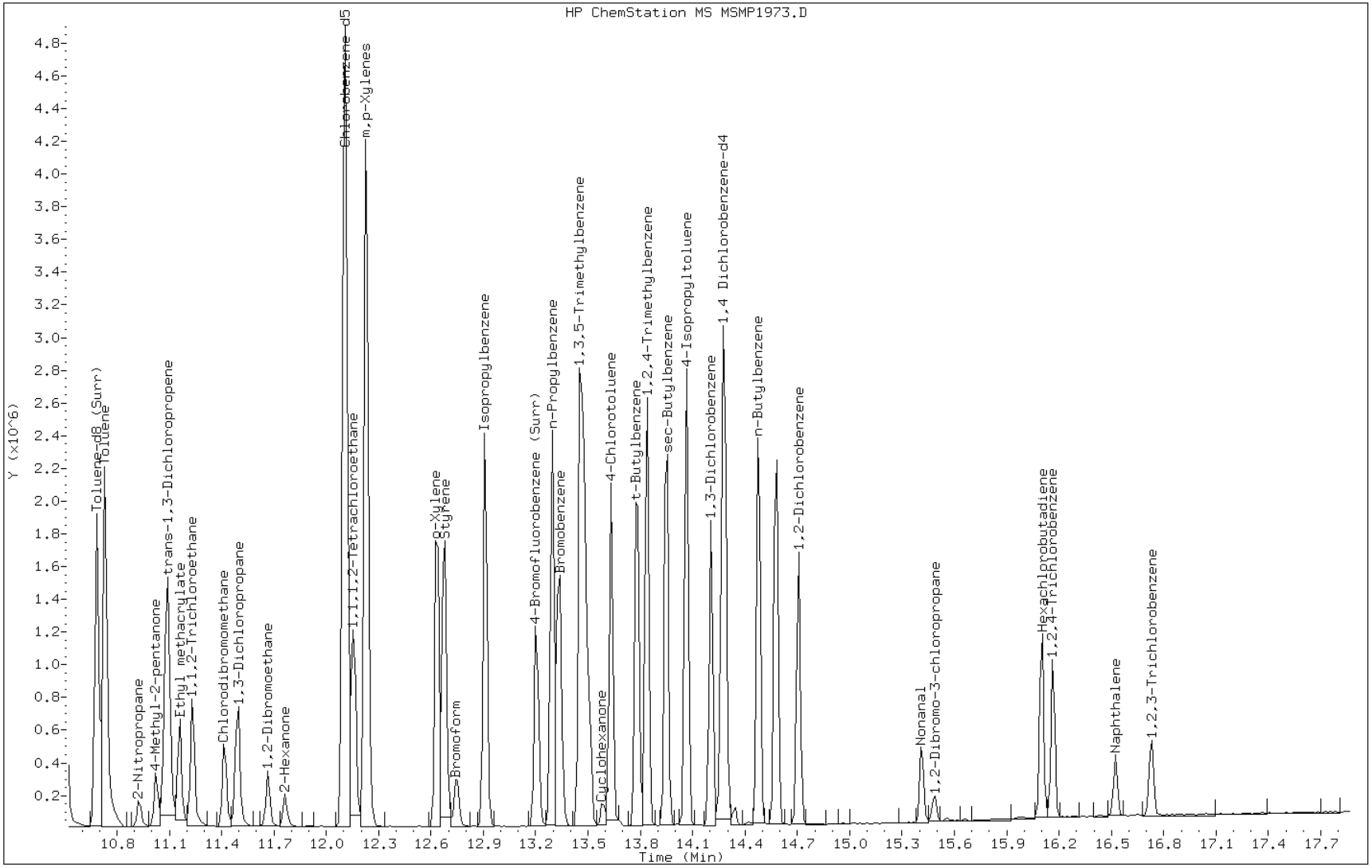


Data File: MSMP1973.D

Date: 14-AUG-2012 07:04

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 MS Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-468-F-1 MS

Matrix: Water | Lab File ID: ZSMP1176.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 21:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	48.7		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	46.7		5.0	0.43
79-00-5	1,1,2-Trichloroethane	47.4		5.0	0.57
75-34-3	1,1-Dichloroethane	49.8		5.0	0.39
75-35-4	1,1-Dichloroethene	47.5		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	46.7		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	43.5		10	1.2
95-50-1	1,2-Dichlorobenzene	45.6		5.0	0.28
107-06-2	1,2-Dichloroethane	48.1		5.0	0.37
78-87-5	1,2-Dichloropropane	48.7		5.0	0.32
541-73-1	1,3-Dichlorobenzene	45.7		5.0	0.23
106-46-7	1,4-Dichlorobenzene	49.0		5.0	0.35
78-93-3	2-Butanone (MEK)	48.1		20	0.39
591-78-6	2-Hexanone	45.1		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	45.3		20	0.33
67-64-1	Acetone	47.8		20	6.7
71-43-2	Benzene	45.2		5.0	0.25
75-25-2	Bromoform	48.1		5.0	0.37
74-83-9	Bromomethane	41.1		10	0.40
75-15-0	Carbon disulfide	50.8		5.0	0.37
56-23-5	Carbon tetrachloride	47.6		5.0	0.36
108-90-7	Chlorobenzene	46.7		5.0	0.38
124-48-1	Dibromochloromethane	49.2		5.0	0.33
75-00-3	Chloroethane	43.3		10	0.38
67-66-3	Chloroform	50.1		5.0	0.15
74-87-3	Chloromethane	41.1		10	0.55
156-59-2	cis-1,2-Dichloroethene	54.5		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	52.0		5.0	0.34
110-82-7	Cyclohexane	46.7		10	0.36
75-27-4	Bromodichloromethane	50.1		5.0	0.25
75-71-8	Dichlorodifluoromethane	37.7		10	0.45
100-41-4	Ethylbenzene	43.4		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	48.6		5.0	0.44
98-82-8	Isopropylbenzene	48.1		5.0	0.26
79-20-9	Methyl acetate	46.5		5.0	2.3
1634-04-4	Methyl tert-butyl ether	49.1		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-468-F-1 MS

Matrix: Water | Lab File ID: ZSMP1176.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 21:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	46.0		10	0.26
75-09-2	Methylene Chloride	50.4		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	91.1		5.0	0.57
95-47-6	o-Xylene	44.7		5.0	0.32
100-42-5	Styrene	50.6		5.0	0.35
127-18-4	Tetrachloroethene	47.4		5.0	0.28
108-88-3	Toluene	46.9		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	46.9		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	51.2		5.0	0.35
79-01-6	Trichloroethene	47.8		5.0	0.29
75-69-4	Trichlorofluoromethane	48.0		5.0	0.22
75-01-4	Vinyl chloride	44.3		5.0	0.43
1330-20-7	Xylenes, Total	136		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		85-115
1868-53-7	Dibromofluoromethane (Surr)	102		85-119
460-00-4	4-Bromofluorobenzene (Surr)	95		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		82-132

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1176.D
Report Date: 21-Aug-2012 23:01

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1176.D
Lab Smp Id: 160-468-F-1 MS Client Smp ID: I-9 S
Inj Date : 16-AUG-2012 21:37
Operator : JDH Inst ID: MSZ.i
Smp Info : 160-468-F-1 MS
Misc Info : 160-468-F-1 MS
Comment   : NONE
Method   : \\Slsvr01\Chem\MSZ.i\Z120816D.b\8260C-Z5mL.m
Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1	Dichlorodifluoromethane	85	2.988	2.989	(0.335)	517069	37.6732	37.67
2	Freon-114	135	3.240	3.226	(0.364)	291275	42.9768	42.98
3	Chloromethane	50	3.324	3.324	(0.373)	575554	41.0899	41.09
4	Vinyl Chloride	62	3.491	3.492	(0.392)	656352	44.2727	44.27
5	Bromomethane	94	4.064	4.064	(0.456)	257897	41.1269	41.13
6	Chloroethane	64	4.301	4.302	(0.483)	260554	43.3454	43.34
7	Trichlorofluoromethane	101	4.525	4.525	(0.508)	855401	48.0275	48.03
8	Diethyl ether	74	5.027	5.028	(0.564)	642264	119.267	119.3
9	1,1-Dichloroethene	96	5.349	5.349	(0.600)	518052	47.5048	47.50
10	Carbon Disulfide	76	5.391	5.391	(0.605)	1724179	50.7670	50.77
11	1,1,2-Trichlorofluoroethane	151	5.418	5.419	(0.608)	440733	48.2171	48.22
12	Iodomethane	142	5.558	5.559	(0.624)	891259	52.1934	52.19
M 26	1,2-Dichloroethene (total)	96				1305232	101.420	101.4
13	Acrolein	56	5.823	5.824	(0.654)	266062	237.205	237.2
14	Allyl chloride	39	6.005	6.006	(0.674)	468319	47.3296	47.33
15	Methylene Chloride	84	6.145	6.145	(0.690)	556365	50.3854	50.38
16	Acetone	43	6.215	6.215	(0.697)	78053	47.8159	47.82
17	trans-1,2-Dichloroethene	96	6.354	6.355	(0.713)	613825	46.9394	46.94
18	Methyl Acetate	74	6.368	6.369	(0.715)	64588	46.5021	46.50
19	n-Hexane	86	6.452	6.453	(0.724)	156876	49.1778	49.18
20	MTBE	73	6.480	6.481	(0.727)	1104092	49.0876	49.09
21	Acetonitrile	41	6.787	6.788	(0.762)	141133	224.100	224.1
22	2-Chloro-1,3-butadiene	53	7.066	7.067	(0.793)	854181	46.5809	46.58

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1176.D
Report Date: 21-Aug-2012 23:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	23 1,1-Dichloroethane	63	7.094	7.095	(0.796)	993553	49.7800	49.78
	24 Acrylonitrile	53	7.150	7.151	(0.802)	549213	244.441	244.4
	25 Vinyl acetate	43	7.346	7.346	(0.824)	430198	49.0385	49.04
	27 cis-1,2-Dichloroethene	96	7.667	7.668	(0.861)	691407	54.4803	54.48
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	738947	50.2775	50.28
	30 Bromochloromethane	128	7.876	7.877	(0.884)	246803	48.9801	48.98
	29 Cyclohexane	84	7.890	7.891	(0.886)	892481	46.6720	46.67
	31 Chloroform	83	7.946	7.947	(0.892)	959950	50.0775	50.08
	33 Ethyl acetate	45	8.030	8.031	(0.901)	78309	93.1354	93.14
	32 Carbon Tetrachloride	117	8.100	8.101	(0.909)	756015	47.6154	47.62
	34 Tetrahydrofuran	71	8.114	8.115	(0.911)	183307	267.419	267.4
$	35 Dibromofluoromethane (surr)	113	8.128	8.129	(0.912)	506308	51.1596	51.16
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	830867	48.7450	48.74
	37 2-Butanone	43	8.240	8.240	(0.925)	123214	48.0863	48.09
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	795908	47.6261	47.63
	40 Benzene	78	8.533	8.534	(0.958)	2279378	45.2431	45.24
	41 Propionitrile	54	8.547	8.548	(0.959)	189157	249.178	249.2
	42 Methacrylonitrile	41	8.561	8.562	(0.961)	851868	242.915	242.9
	45 Isobutanol	43	8.659	8.659	(0.972)	228457	946.580	946.6
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	422922	49.8604	49.86
	44 1,2-Dichloroethane	62	8.728	8.729	(0.980)	540937	48.0544	48.05
*	46 Fluorobenzene	96	8.910	8.911	(1.000)	2077363	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	653773	46.0417	46.04
	48 Trichloroethene	95	9.078	9.078	(1.019)	574059	47.8011	47.80
	49 n-Butanol	56	9.301	9.302	(1.044)	75074	463.665	463.7
	50 Dibromomethane	93	9.483	9.483	(1.064)	234442	49.2092	49.21
	51 1,2-Dichloropropane	63	9.566	9.567	(1.074)	542976	48.6659	48.66
	52 Bromodichloromethane	83	9.608	9.609	(1.078)	655792	50.1427	50.14
	53 Methyl methacrylate	69	9.706	9.707	(1.089)	246413	47.3830	47.38
	54 1,4-Dioxane	88	9.776	9.791	(1.097)	65060	1300.43	1300
	56 cis-1,3-Dichloropropene	75	10.181	10.182	(1.143)	855995	51.9944	51.99
$	57 Toluene-d8 (surr)	98	10.348	10.349	(0.879)	1963310	48.8923	48.89
	58 Toluene	92	10.404	10.405	(0.884)	1480204	46.9390	46.94
	59 2-Nitropropane	43	10.614	10.615	(0.902)	153428	89.2893	89.29
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	280654	45.2777	45.28
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	490596	47.3756	47.38
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	636178	51.1573	51.16
	65 Ethyl methacrylate	69	10.837	10.838	(0.921)	528565	47.2773	47.28
	64 1,1,2-Trichloroethane	83	10.907	10.908	(0.926)	310613	47.3612	47.36
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	438790	49.2436	49.24
	67 1,3-Dichloropropane	76	11.172	11.173	(0.949)	684267	48.3267	48.33
	68 1,2-Dibromoethane	107	11.340	11.341	(0.963)	375517	48.6237	48.62
	69 2-Hexanone	43	11.452	11.453	(0.973)	185306	45.0694	45.07
*	70 Chlorobenzene-d5	117	11.773	11.774	(1.000)	1495970	50.0000	
	72 Ethylbenzene	91	11.787	11.788	(1.001)	2684314	43.4314	43.43
	71 Chlorobenzene	112	11.787	11.788	(1.001)	1504534	46.7225	46.72
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.830	(1.005)	556961	47.5868	47.59
	74 m,p-Xylenes	106	11.913	11.913	(1.012)	2167303	91.0963	91.10
	75 o-Xylene	106	12.318	12.318	(1.046)	1058834	44.6575	44.66
	76 Styrene	104	12.360	12.360	(1.050)	1788151	50.6199	50.62
	77 Bromoform	173	12.429	12.430	(0.891)	240818	48.1083	48.11
	78 Isopropylbenzene	105	12.583	12.584	(0.902)	2612192	48.1268	48.13
$	79 4-Bromofluorobenzene (surr)	95	12.876	12.891	(0.923)	747183	47.2528	47.25
	81 n-Propylbenzene	91	12.974	12.975	(0.930)	2798338	42.3694	42.37

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1176.D
Report Date: 21-Aug-2012 23:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	80 Bromobenzene	156	13.002	13.017	(0.932)	617920	47.7194	47.72
	82 1,1,2,2-Tetrachloroethane	83	13.030	13.031	(0.934)	393132	46.7408	46.74
	84 1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	2305698	45.3988	45.40
	83 2-Chlorotoluene	91	13.156	13.156	(0.943)	1934325	45.3800	45.38
	85 1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	405510	46.6623	46.66
	86 trans-1,4-dichloro-2-butene	53	13.198	13.212	(0.946)	79320	47.6943	47.69
	87 Cyclohexanone	55	13.267	13.268	(0.951)	70328	286.717	286.7
	88 4-Chlorotoluene	91	13.309	13.310	(0.954)	1733912	46.3692	46.37
	89 t-Butylbenzene	119	13.463	13.464	(0.965)	1792405	44.4569	44.46
	91 1,2,4-Trimethylbenzene	105	13.519	13.520	(0.969)	2257607	45.6004	45.60
	92 sec-Butylbenzene	105	13.631	13.631	(0.977)	2675694	41.4590	41.46
	93 4-Isopropyltoluene	119	13.756	13.757	(0.986)	2197013	44.3978	44.40
	94 1,3-Dichlorobenzene	146	13.882	13.883	(0.995)	1116261	45.7419	45.74
*	95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	728494	50.0000	
	96 1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	1174654	48.9903	48.99
	98 n-Butylbenzene	91	14.161	14.162	(1.015)	2137973	44.6868	44.69
	99 1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	953607	45.6255	45.62
	145 Nonanal	57	15.111	15.112	(1.083)	203851	50.5197	50.52
	100 1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	54134	43.5353	43.54
	101 Hexachlorobutadiene	225	15.781	15.782	(1.131)	211161	50.7136	50.71
	104 1,2,4-Trichlorobenzene	180	15.851	15.852	(1.136)	387094	46.7135	46.71
	105 Naphthalene	128	16.186	16.201	(1.160)	539957	51.3188	51.32
	106 1,2,3-Trichlorobenzene	180	16.396	16.397	(1.175)	218685	53.5476	53.55
M	107 Xylenes (total)	106				3226137	135.754	135.8

Data File: ZSMP1176.D

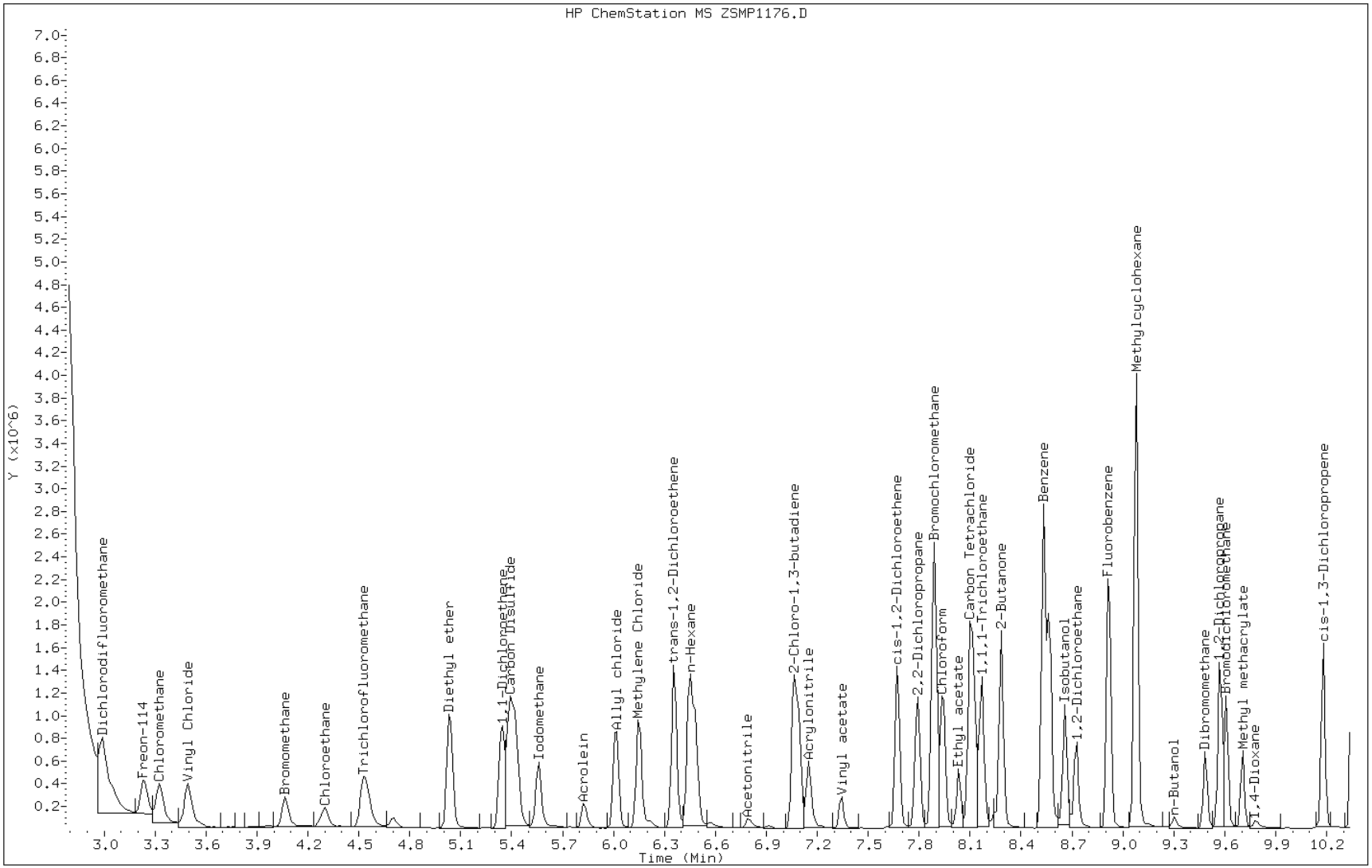
Date: 16-AUG-2012 21:37

Client ID: I-9 S

Instrument: MSZ.i

Sample Info: 160-468-F-1 MS

Operator: JDH



Data File: ZSMP1176.D

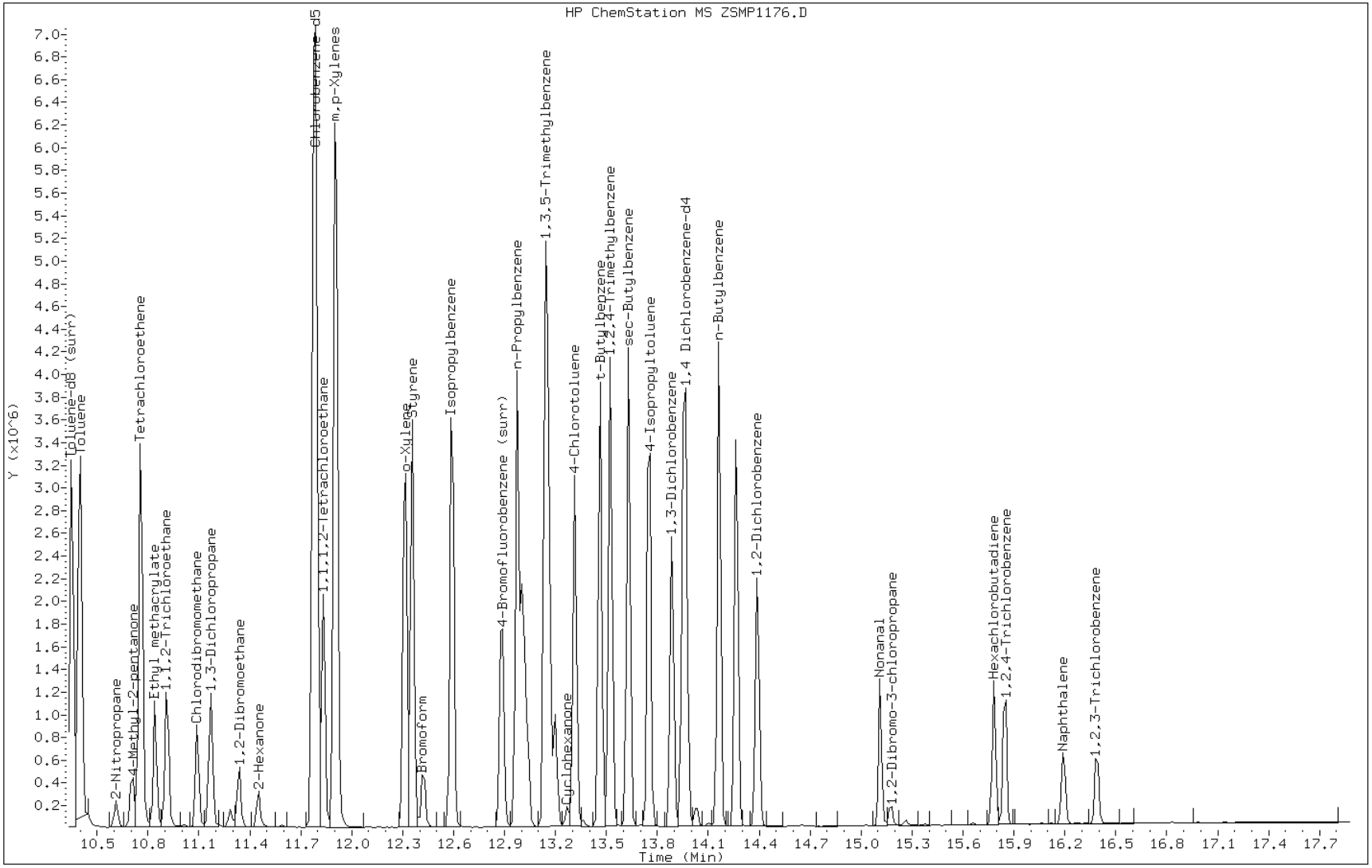
Date: 16-AUG-2012 21:37

Client ID: I-9 S

Instrument: MSZ.i

Sample Info: 160-468-F-1 MS

Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS MSD | Lab Sample ID: 160-437-1 MSD

Matrix: Water | Lab File ID: MSMP1974.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 07:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	51.0		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	52.2		5.0	0.43
79-00-5	1,1,2-Trichloroethane	51.8		5.0	0.57
75-34-3	1,1-Dichloroethane	50.9		5.0	0.39
75-35-4	1,1-Dichloroethene	50.7		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	53.6		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	47.4		10	1.2
95-50-1	1,2-Dichlorobenzene	48.6		5.0	0.28
107-06-2	1,2-Dichloroethane	50.8		5.0	0.37
78-87-5	1,2-Dichloropropane	51.2		5.0	0.32
541-73-1	1,3-Dichlorobenzene	47.6		5.0	0.23
106-46-7	1,4-Dichlorobenzene	51.3		5.0	0.35
78-93-3	2-Butanone (MEK)	45.5		20	0.39
591-78-6	2-Hexanone	50.7		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	51.0		20	0.33
67-64-1	Acetone	40.6		20	6.7
71-43-2	Benzene	53.8		5.0	0.25
75-25-2	Bromoform	51.9		5.0	0.37
74-83-9	Bromomethane	48.4		10	0.40
75-15-0	Carbon disulfide	61.9		5.0	0.37
56-23-5	Carbon tetrachloride	51.3		5.0	0.36
108-90-7	Chlorobenzene	48.5		5.0	0.38
124-48-1	Dibromochloromethane	51.2		5.0	0.33
75-00-3	Chloroethane	53.0		10	0.38
67-66-3	Chloroform	49.8		5.0	0.15
74-87-3	Chloromethane	47.1		10	0.55
156-59-2	cis-1,2-Dichloroethene	50.3		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	57.4		5.0	0.34
110-82-7	Cyclohexane	48.8		10	0.36
75-27-4	Bromodichloromethane	53.0		5.0	0.25
75-71-8	Dichlorodifluoromethane	51.3		10	0.45
100-41-4	Ethylbenzene	50.3		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	49.8		5.0	0.44
98-82-8	Isopropylbenzene	57.8		5.0	0.26
79-20-9	Methyl acetate	46.5		5.0	2.3
1634-04-4	Methyl tert-butyl ether	51.9		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS MSD | Lab Sample ID: 160-437-1 MSD

Matrix: Water | Lab File ID: MSMP1974.D

Analysis Method: 8260C | Date Collected: 08/08/2012 09:35

Sample wt/vol: 5(mL) | Date Analyzed: 08/14/2012 07:29

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9262 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	50.6		10	0.26
75-09-2	Methylene Chloride	47.7		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	97.6		5.0	0.57
95-47-6	o-Xylene	48.5		5.0	0.32
100-42-5	Styrene	55.3		5.0	0.35
127-18-4	Tetrachloroethene	49.2		5.0	0.28
108-88-3	Toluene	51.9		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	48.8		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	57.7		5.0	0.35
79-01-6	Trichloroethene	48.9		5.0	0.29
75-69-4	Trichlorofluoromethane	53.6		5.0	0.22
75-01-4	Vinyl chloride	51.2		5.0	0.43
1330-20-7	Xylenes, Total	146		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	99		85-115
1868-53-7	Dibromofluoromethane (Surr)	100		85-119
460-00-4	4-Bromofluorobenzene (Surr)	106		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		82-132

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1974.D
Report Date: 15-Aug-2012 15:38

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1974.D
Lab Smp Id: 160-437-F-1 MSD Client Smp ID: PZ-113-AS
Inj Date : 14-AUG-2012 07:29
Operator : JDH Inst ID: MSM.i
Smp Info : 160-437-F-1 MSD
Misc Info : 160-437-F-1 MSD
Comment   : NONE
Method   : \\Slsvr01\Chem\MSM.i\M120814A.b\8260C-M5mL.m
Meth Date : 15-Aug-2012 15:37 hannj Quant Type: ISTD
Cal Date : 08-AUG-2012 12:20 Cal File: MICL1802.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14
Processing Host: SLGC01

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	3.297	3.298	(0.356)	416956	51.3401	51.34
2	Freon-114	135	3.563	3.563	(0.385)	266179	50.4806	50.48
3	Chloromethane	50	3.661	3.661	(0.395)	518413	47.1357	47.14
4	Vinyl Chloride	62	3.842	3.842	(0.415)	691686	51.2443	51.24
5	Bromomethane	94	4.471	4.457	(0.483)	376686	48.4303	48.43
6	Chloroethane	64	4.694	4.694	(0.507)	415806	52.9661	52.97
7	Trichlorofluoromethane	101	4.945	4.946	(0.534)	790949	53.6465	53.65
M 26	1,2-Dichloroethene (total)	96				949494	99.0268	99.03
8	Diethyl ether	74	5.448	5.449	(0.588)	482784	115.958	116.0
9	1,1-Dichloroethene	96	5.755	5.756	(0.621)	377869	50.7289	50.73
10	Carbon Disulfide	76	5.811	5.812	(0.628)	1302802	61.9421	61.94
11	1,1,2-Trichlorofluoroethane	151	5.825	5.812	(0.629)	318516	46.1276	46.13
12	Iodomethane	142	5.965	5.965	(0.644)	391128	50.9326	50.93
13	Acrolein	56	6.216	6.217	(0.671)	186072	246.091	246.1
14	Allyl chloride	39	6.412	6.412	(0.692)	400341	51.4920	51.49
15	Methylene Chloride	84	6.538	6.538	(0.706)	430710	47.7214	47.72
16	Acetone	43	6.593	6.594	(0.712)	65084	40.6299	40.63
17	trans-1,2-Dichloroethene	96	6.747	6.747	(0.729)	467384	48.7596	48.76
18	Methyl Acetate	74	6.747	6.747	(0.729)	49798	46.5268	46.53
19	n-Hexane	86	6.845	6.845	(0.739)	102858	49.1717	49.17
20	MTBE	73	6.873	6.873	(0.742)	789287	51.8970	51.90
21	Acetonitrile	41	7.152	7.152	(0.772)	135376	236.103	236.1

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1974.D
Report Date: 15-Aug-2012 15:38

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
	22	2-Chloro-1,3-butadiene	53	7.445	7.432	(0.804)	569921	53.1782	53.18
	23	1,1-Dichloroethane	63	7.459	7.460	(0.805)	779287	50.8975	50.90
	24	Acrylonitrile	53	7.515	7.502	(0.812)	453846	241.717	241.7
	25	Vinyl acetate	43	7.697	7.697	(0.831)	331232	57.0819	57.08
	27	cis-1,2-Dichloroethene	96	8.032	8.032	(0.867)	482110	50.2672	50.27
	28	2,2-Dichloropropane	77	8.158	8.158	(0.881)	522084	52.0741	52.07
	30	Bromochloromethane	128	8.241	8.242	(0.890)	203724	50.0881	50.09
	29	Cyclohexane	84	8.269	8.270	(0.893)	653888	48.8039	48.80
	31	Chloroform	83	8.297	8.298	(0.896)	677495	49.7823	49.78
	33	Ethyl acetate	45	8.381	8.381	(0.905)	59891	86.5447	86.54
	32	Carbon Tetrachloride	117	8.465	8.465	(0.914)	513372	51.3313	51.33
	34	Tetrahydrofuran	71	8.465	8.465	(0.914)	135756	268.931	268.9
$	35	Dibromofluoromethane (Surr)	113	8.479	8.479	(0.916)	353403	49.7707	49.77
	36	1,1,1-Trichloroethane	97	8.535	8.535	(0.922)	580739	51.0017	51.00
	37	2-Butanone	43	8.591	8.577	(0.928)	93103	45.4730	45.47
	39	1,1-Dichloropropene	75	8.646	8.647	(0.934)	549737	51.8038	51.80
	40	Benzene	78	8.884	8.884	(0.959)	1824887	53.7862	53.79
	41	Propionitrile	54	8.884	8.884	(0.959)	151550	243.621	243.6
	42	Methacrylonitrile	41	8.898	8.898	(0.961)	692578	254.254	254.2
	45	Isobutanol	43	8.996	8.982	(0.971)	178343	1025.45	1025
$	43	1,2-Dichloroethane-d4 (Surr)	65	9.010	9.010	(0.973)	285721	48.8624	48.86
	44	1,2-Dichloroethane	62	9.065	9.066	(0.979)	399948	50.7666	50.77
*	46	Fluorobenzene	96	9.261	9.261	(1.000)	1669540	50.0000	
	48	Trichloroethene	95	9.429	9.415	(1.018)	417151	48.8951	48.90
	47	Methylcyclohexane	55	9.429	9.429	(1.018)	472700	50.5560	50.56
	49	n-Butanol	56	9.624	9.624	(1.039)	45774	448.752	448.8
	50	Dibromomethane	93	9.820	9.820	(1.060)	178627	50.2293	50.23
	51	1,2-Dichloropropane	63	9.903	9.904	(1.069)	441712	51.2387	51.24
	52	Bromodichloromethane	83	9.945	9.946	(1.074)	456818	52.9828	52.98
	53	Methyl methacrylate	69	10.029	10.029	(1.083)	167071	53.6656	53.66
	54	1,4-Dioxane	88	10.113	10.113	(1.092)	51302	1159.38	1159
	56	cis-1,3-Dichloropropene	75	10.504	10.504	(1.134)	592980	57.3535	57.35
$	57	Toluene-d8 (Surr)	98	10.686	10.686	(0.883)	1413183	49.6144	49.61
	58	Toluene	92	10.727	10.728	(0.887)	1067582	51.9245	51.92
	59	2-Nitropropane	43	10.923	10.924	(0.903)	116783	110.870	110.9
	62	4-Methyl-2-pentanone	43	11.021	11.021	(0.911)	204289	50.9638	50.96
	63	trans-1,3-Dichloropropene	75	11.077	11.077	(0.916)	424946	57.6550	57.65
	60	Tetrachloroethene	164	11.091	11.091	(0.917)	336144	49.1929	49.19
	65	Ethyl methacrylate	69	11.160	11.161	(0.923)	326213	50.7547	50.75
	64	1,1,2-Trichloroethane	83	11.230	11.231	(0.928)	231200	51.7648	51.76
	66	Chlorodibromomethane	129	11.412	11.412	(0.943)	313263	51.1929	51.19
	67	1,3-Dichloropropane	76	11.496	11.496	(0.950)	487290	53.2236	53.22
	68	1,2-Dibromoethane	107	11.663	11.663	(0.964)	237554	49.8042	49.80
	69	2-Hexanone	43	11.761	11.761	(0.972)	129217	50.7074	50.71
*	70	Chlorobenzene-d5	117	12.096	12.096	(1.000)	1126425	50.0000	
	72	Ethylbenzene	91	12.110	12.110	(1.001)	1946698	50.2795	50.28
	71	Chlorobenzene	112	12.110	12.110	(1.001)	1107820	48.5500	48.55
	73	1,1,1,2-Tetrachloroethane	131	12.152	12.152	(1.005)	381151	50.2861	50.29
	74	m,p-Xylenes	106	12.222	12.222	(1.010)	1552216	97.5970	97.60
	75	o-Xylene	106	12.641	12.627	(1.045)	700005	48.4898	48.49
	76	Styrene	104	12.683	12.683	(1.048)	1141474	55.3022	55.30
	77	Bromoform	173	12.753	12.753	(0.893)	167475	51.8682	51.87
	78	Isopropylbenzene	105	12.906	12.906	(0.904)	1746697	57.8029	57.80
$	79	4-Bromofluorobenzene (Surr)	95	13.199	13.200	(0.925)	477453	52.9100	52.91

Data File: \\Slsvr01\Chem\MSM.i\M120814A.b\MSMP1974.D
Report Date: 15-Aug-2012 15:38

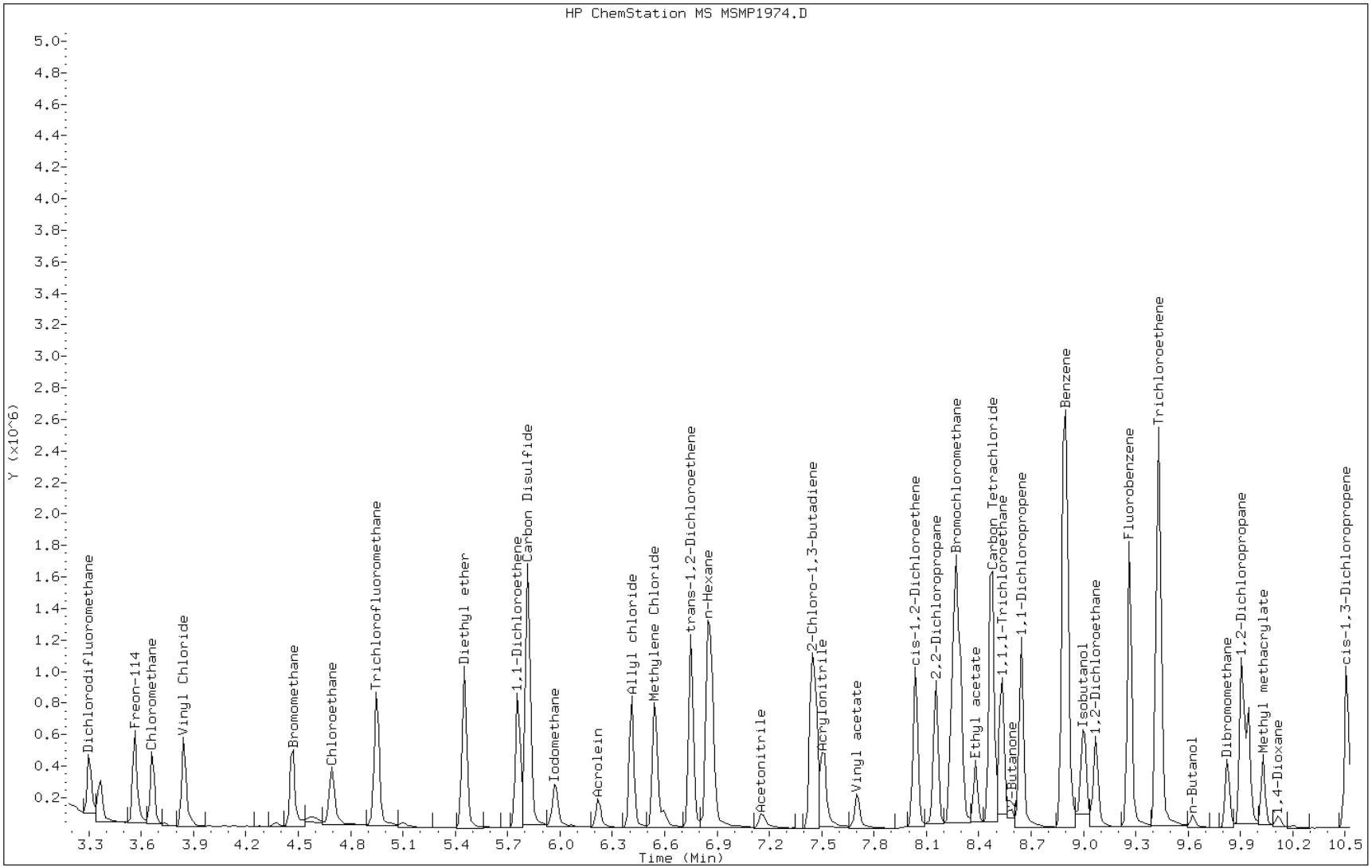
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
	81 n-Propylbenzene	91	13.297	13.298	(0.931)	2049621	48.9709	48.97
	80 Bromobenzene	156	13.339	13.325	(0.934)	449159	50.1265	50.13
	82 1,1,2,2-Tetrachloroethane	83	13.339	13.339	(0.934)	307520	52.2316	52.23
	84 1,3,5-Trimethylbenzene	105	13.451	13.451	(0.942)	1650518	55.2683	55.27
	83 2-Chlorotoluene	91	13.479	13.479	(0.944)	1404446	51.5414	51.54
	85 1,2,3-Trichloropropane	75	13.507	13.507	(0.946)	330070	53.7152	53.72
	86 trans-1,4-dichloro-2-butene	53	13.507	13.507	(0.946)	54806	50.1596	50.16
	87 Cyclohexanone	55	13.577	13.577	(0.951)	64495	382.121	382.1
	88 4-Chlorotoluene	91	13.632	13.633	(0.955)	1215814	51.5084	51.51
	89 t-Butylbenzene	119	13.786	13.786	(0.966)	1300576	48.9726	48.97
	91 1,2,4-Trimethylbenzene	105	13.842	13.842	(0.970)	1598104	54.3923	54.39
	92 sec-Butylbenzene	105	13.954	13.954	(0.977)	1990394	51.2805	51.28
	93 4-Isopropyltoluene	119	14.065	14.066	(0.985)	1643080	53.5300	53.53
	94 1,3-Dichlorobenzene	146	14.205	14.205	(0.995)	844440	47.5939	47.59
*	95 1,4 Dichlorobenzene-d4	152	14.275	14.275	(1.000)	570756	50.0000	
	96 1,4-Dichlorobenzene	146	14.289	14.289	(1.001)	931006	51.2571	51.26
	98 n-Butylbenzene	91	14.470	14.471	(1.014)	1534029	54.4460	54.44
	99 1,2-Dichlorobenzene	146	14.708	14.708	(1.030)	757355	48.5766	48.58
	145 Nonanal	57	15.406	15.406	(1.079)	112795	62.8494	62.85
	100 1,2-Dibromo-3-chloropropane	157	15.490	15.490	(1.085)	46995	47.3563	47.36
	101 Hexachlorobutadiene	225	16.104	16.105	(1.128)	211701	46.0468	46.05
	104 1,2,4-Trichlorobenzene	180	16.160	16.161	(1.132)	326839	53.5985	53.60
	105 Naphthalene	128	16.523	16.524	(1.158)	327808	57.7292	57.73
	106 1,2,3-Trichlorobenzene	180	16.733	16.733	(1.172)	171522	53.4309	53.43
M	107 Xylenes (total)	106				2252221	146.087	146.1

Data File: MSMP1974.D

Date: 14-AUG-2012 07:29

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 MSD Operator: JDH

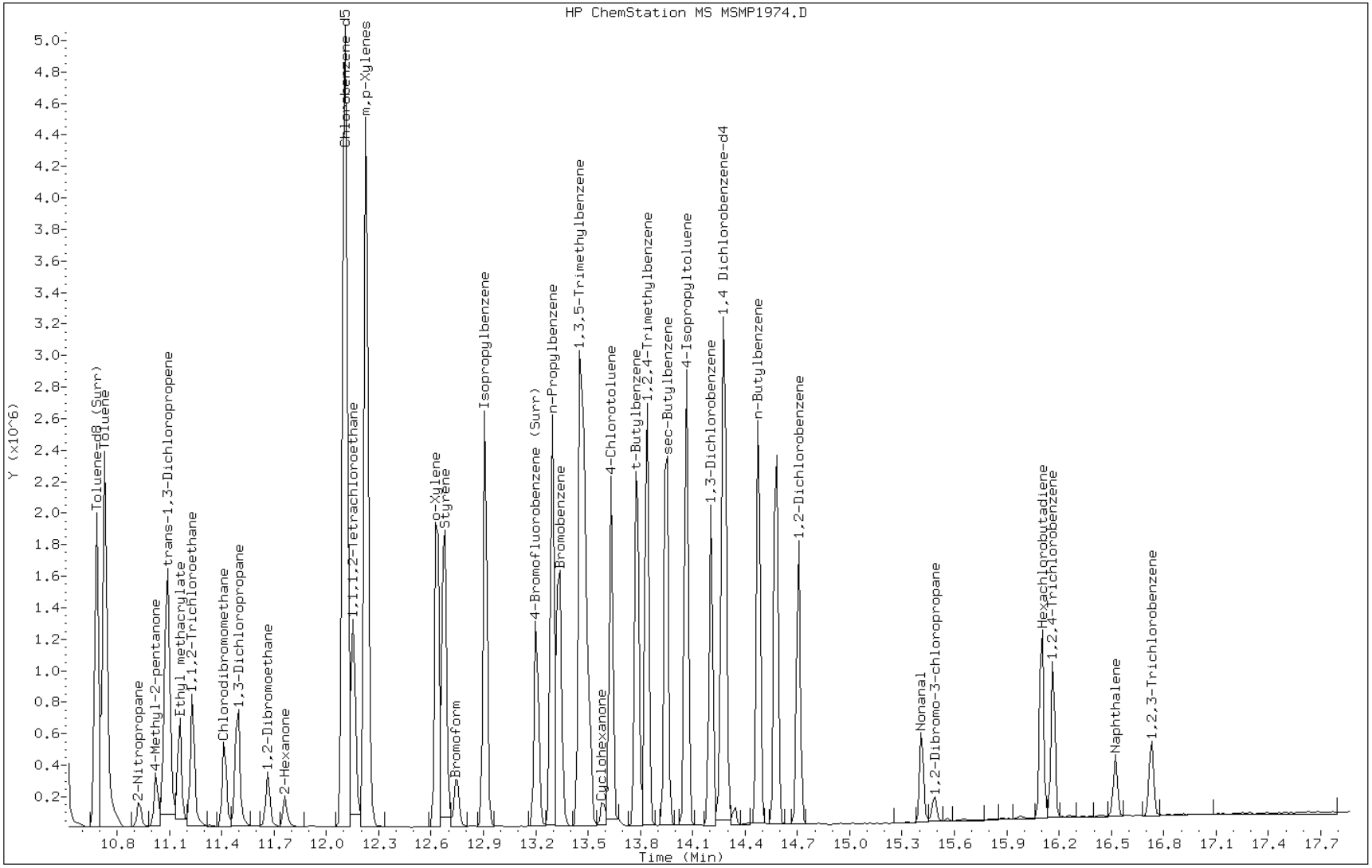


Data File: MSMP1974.D

Date: 14-AUG-2012 07:29

Client ID: PZ-113-AS Instrument: MSM.i

Sample Info: 160-437-F-1 MSD Operator: JDH



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-468-F-1 MSD

Matrix: Water | Lab File ID: ZSMP1177.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 22:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	50.2		5.0	0.29
79-34-5	1,1,2,2-Tetrachloroethane	47.4		5.0	0.43
79-00-5	1,1,2-Trichloroethane	47.3		5.0	0.57
75-34-3	1,1-Dichloroethane	50.5		5.0	0.39
75-35-4	1,1-Dichloroethene	48.3		5.0	0.37
120-82-1	1,2,4-Trichlorobenzene	45.3		5.0	0.55
96-12-8	1,2-Dibromo-3-Chloropropane	42.0		10	1.2
95-50-1	1,2-Dichlorobenzene	47.0		5.0	0.28
107-06-2	1,2-Dichloroethane	48.6		5.0	0.37
78-87-5	1,2-Dichloropropane	48.5		5.0	0.32
541-73-1	1,3-Dichlorobenzene	46.8		5.0	0.23
106-46-7	1,4-Dichlorobenzene	49.0		5.0	0.35
78-93-3	2-Butanone (MEK)	49.2		20	0.39
591-78-6	2-Hexanone	43.6		20	0.59
108-10-1	4-Methyl-2-pentanone (MIBK)	44.3		20	0.33
67-64-1	Acetone	42.2		20	6.7
71-43-2	Benzene	45.7		5.0	0.25
75-25-2	Bromoform	48.3		5.0	0.37
74-83-9	Bromomethane	42.0		10	0.40
75-15-0	Carbon disulfide	51.5		5.0	0.37
56-23-5	Carbon tetrachloride	48.2		5.0	0.36
108-90-7	Chlorobenzene	47.5		5.0	0.38
124-48-1	Dibromochloromethane	48.5		5.0	0.33
75-00-3	Chloroethane	46.9		10	0.38
67-66-3	Chloroform	48.2		5.0	0.15
74-87-3	Chloromethane	40.0		10	0.55
156-59-2	cis-1,2-Dichloroethene	54.2		5.0	0.16
10061-01-5	cis-1,3-Dichloropropene	51.7		5.0	0.34
110-82-7	Cyclohexane	48.3		10	0.36
75-27-4	Bromodichloromethane	50.6		5.0	0.25
75-71-8	Dichlorodifluoromethane	37.2		10	0.45
100-41-4	Ethylbenzene	44.4		5.0	0.30
106-93-4	1,2-Dibromoethane (EDB)	47.4		5.0	0.44
98-82-8	Isopropylbenzene	50.3		5.0	0.26
79-20-9	Methyl acetate	45.4		5.0	2.3
1634-04-4	Methyl tert-butyl ether	47.7		5.0	0.40

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-468-F-1 MSD

Matrix: Water | Lab File ID: ZSMP1177.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 08/16/2012 22:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: RTX-VMS40 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 9490 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	46.8		10	0.26
75-09-2	Methylene Chloride	50.5		5.0	1.7
179601-23-1	m-Xylene & p-Xylene	93.0		5.0	0.57
95-47-6	o-Xylene	45.4		5.0	0.32
100-42-5	Styrene	50.7		5.0	0.35
127-18-4	Tetrachloroethene	47.7		5.0	0.28
108-88-3	Toluene	48.2		5.0	1.0
156-60-5	trans-1,2-Dichloroethene	46.9		5.0	0.18
10061-02-6	trans-1,3-Dichloropropene	50.6		5.0	0.35
79-01-6	Trichloroethene	47.9		5.0	0.29
75-69-4	Trichlorofluoromethane	48.4		5.0	0.22
75-01-4	Vinyl chloride	45.3		5.0	0.43
1330-20-7	Xylenes, Total	138		10	0.85

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		85-115
1868-53-7	Dibromofluoromethane (Surr)	105		85-119
460-00-4	4-Bromofluorobenzene (Surr)	100		82-121
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		82-132

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1177.D
Report Date: 21-Aug-2012 23:01

TestAmerica St. Louis

GC/MS VOLATILES

Data file : \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1177.D
Lab Smp Id: 160-468-F-1 MSD Client Smp ID: I-9 D
Inj Date : 16-AUG-2012 22:01
Operator : JDH Inst ID: MSZ.i
Smp Info : 160-468-F-1 MSD
Misc Info : 160-468-F-1 MSD
Comment   : NONE
Method   : \\Slsvr01\Chem\MSZ.i\Z120816D.b\8260C-Z5mL.m
Meth Date : 17-Aug-2012 04:44 MSZ.i Quant Type: ISTD
Cal Date : 13-AUG-2012 10:22 Cal File: ZICL1080.D
Als bottle: 11 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: CCAL.sub
Target Version: 4.14

Concentration Formula: Amt * DF * Vod/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vod	5.000	DefSampleVolume (mL)
Vo	5.000	Volume of Sample Purged (mL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1	Dichlorodifluoromethane	85	2.988	2.989	(0.335)	498615	37.1519	37.15
2	Freon-114	135	3.226	3.226	(0.362)	300510	45.3441	45.34
3	Chloromethane	50	3.324	3.324	(0.373)	548429	40.0407	40.04
4	Vinyl Chloride	62	3.491	3.492	(0.392)	657175	45.3327	45.33
5	Bromomethane	94	4.064	4.064	(0.456)	257709	42.0283	42.03
6	Chloroethane	64	4.301	4.302	(0.483)	275959	46.9485	46.95
7	Trichlorofluoromethane	101	4.525	4.525	(0.508)	842395	48.3691	48.37
8	Diethyl ether	74	5.027	5.028	(0.564)	617162	117.203	117.2
9	1,1-Dichloroethene	96	5.335	5.349	(0.599)	515002	48.2953	48.30
10	Carbon Disulfide	76	5.391	5.391	(0.605)	1711746	51.5430	51.54
11	1,1,2-Trichlorofluoroethane	151	5.419	5.419	(0.608)	443882	49.6620	49.66
12	Iodomethane	142	5.558	5.559	(0.624)	891775	53.4070	53.41
M 26	1,2-Dichloroethene (total)	96				1272338	101.102	101.1
13	Acrolein	56	5.824	5.824	(0.654)	260623	237.622	237.6
14	Allyl chloride	39	6.005	6.006	(0.674)	469979	48.5737	48.57
15	Methylene Chloride	84	6.145	6.145	(0.690)	545103	50.4842	50.48
16	Acetone	43	6.215	6.215	(0.697)	67289	42.1559	42.16
17	trans-1,2-Dichloroethene	96	6.354	6.355	(0.713)	599415	46.8762	46.88
18	Methyl Acetate	74	6.354	6.369	(0.713)	61617	45.3683	45.37
19	n-Hexane	86	6.452	6.453	(0.724)	155831	49.9572	49.96
20	MTBE	73	6.480	6.481	(0.727)	1048721	47.6824	47.68
21	Acetonitrile	41	6.787	6.788	(0.762)	134084	217.732	217.7
22	2-Chloro-1,3-butadiene	53	7.053	7.067	(0.792)	831640	46.3795	46.38

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1177.D
Report Date: 21-Aug-2012 23:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	23 1,1-Dichloroethane	63	7.094	7.095	(0.796)	986539	50.5487	50.55
	24 Acrylonitrile	53	7.150	7.151	(0.802)	521018	237.147	237.1
	25 Vinyl acetate	43	7.346	7.346	(0.824)	406720	47.4129	47.41
	27 cis-1,2-Dichloroethene	96	7.667	7.668	(0.861)	672923	54.2255	54.22
	28 2,2-Dichloropropane	77	7.793	7.793	(0.875)	737096	51.2880	51.29
	30 Bromochloromethane	128	7.877	7.877	(0.884)	248489	50.4322	50.43
	29 Cyclohexane	84	7.891	7.891	(0.886)	903473	48.3175	48.32
	31 Chloroform	83	7.932	7.947	(0.890)	903081	48.1785	48.18
	33 Ethyl acetate	45	8.030	8.031	(0.901)	75274	91.5545	91.55
	32 Carbon Tetrachloride	117	8.100	8.101	(0.909)	748025	48.1798	48.18
	34 Tetrahydrofuran	71	8.114	8.115	(0.911)	175858	262.366	262.4
$	35 Dibromofluoromethane (surr)	113	8.128	8.129	(0.912)	508181	52.5125	52.51
	36 1,1,1-Trichloroethane	97	8.170	8.170	(0.917)	836920	50.2128	50.21
	37 2-Butanone	43	8.240	8.240	(0.925)	123367	49.2371	49.24
	39 1,1-Dichloropropene	75	8.282	8.282	(0.929)	772354	47.2640	47.26
	40 Benzene	78	8.533	8.534	(0.958)	2253690	45.7469	45.75
	41 Propionitrile	54	8.547	8.548	(0.959)	170026	229.052	229.0
	42 Methacrylonitrile	41	8.561	8.562	(0.961)	795880	232.093	232.1
	45 Isobutanol	43	8.659	8.659	(0.972)	210073	890.133	890.1
$	43 1,2-Dichloroethane-d4 (surr)	65	8.659	8.659	(0.972)	424486	51.1789	51.18
	44 1,2-Dichloroethane	62	8.729	8.729	(0.980)	534596	48.5673	48.57
*	46 Fluorobenzene	96	8.910	8.911	(1.000)	2031330	50.0000	
	47 Methylcyclohexane	55	9.078	9.078	(1.019)	650198	46.8276	46.83
	48 Trichloroethene	95	9.078	9.078	(1.019)	562261	47.8797	47.88
	49 n-Butanol	56	9.301	9.302	(1.044)	65033	410.753	410.8
	50 Dibromomethane	93	9.483	9.483	(1.064)	230241	49.4226	49.42
	51 1,2-Dichloropropane	63	9.566	9.567	(1.074)	528705	48.4606	48.46
	52 Bromodichloromethane	83	9.608	9.609	(1.078)	646946	50.5873	50.59
	53 Methyl methacrylate	69	9.706	9.707	(1.089)	228505	44.9352	44.94
	54 1,4-Dioxane	88	9.776	9.791	(1.097)	60394	1234.52	1234
	56 cis-1,3-Dichloropropene	75	10.181	10.182	(1.143)	832373	51.7054	51.70
$	57 Toluene-d8 (surr)	98	10.349	10.349	(0.879)	1981725	50.7555	50.76
	58 Toluene	92	10.404	10.405	(0.884)	1476572	48.1565	48.16
	59 2-Nitropropane	43	10.614	10.615	(0.902)	148583	88.9308	88.93
	62 4-Methyl-2-pentanone	43	10.712	10.712	(0.910)	266953	44.2931	44.29
	60 Tetrachloroethene	164	10.754	10.754	(0.913)	480220	47.6935	47.69
	63 trans-1,3-Dichloropropene	75	10.754	10.754	(0.913)	611306	50.5564	50.56
	65 Ethyl methacrylate	69	10.837	10.838	(0.921)	505415	46.4933	46.49
	64 1,1,2-Trichloroethane	83	10.907	10.908	(0.926)	301614	47.2979	47.30
	66 Chlorodibromomethane	129	11.089	11.089	(0.942)	419907	48.4656	48.46
	67 1,3-Dichloropropane	76	11.173	11.173	(0.949)	653133	47.4407	47.44
	68 1,2-Dibromoethane	107	11.340	11.341	(0.963)	356016	47.4107	47.41
	69 2-Hexanone	43	11.452	11.453	(0.973)	174359	43.6139	43.61
*	70 Chlorobenzene-d5	117	11.773	11.774	(1.000)	1454571	50.0000	
	72 Ethylbenzene	91	11.787	11.788	(1.001)	2666625	44.3732	44.37
	71 Chlorobenzene	112	11.787	11.788	(1.001)	1488008	47.5244	47.52
	73 1,1,1,2-Tetrachloroethane	131	11.829	11.830	(1.005)	542755	47.6929	47.69
	74 m,p-Xylenes	106	11.899	11.913	(1.011)	2150227	92.9509	92.95
	75 o-Xylene	106	12.318	12.318	(1.046)	1045911	45.3680	45.37
	76 Styrene	104	12.360	12.360	(1.050)	1741232	50.6946	50.69
	77 Bromoform	173	12.416	12.430	(0.890)	227379	48.2802	48.28
	78 Isopropylbenzene	105	12.583	12.584	(0.902)	2568411	50.2962	50.30
$	79 4-Bromofluorobenzene (surr)	95	12.876	12.891	(0.923)	744598	50.0508	50.05
	81 n-Propylbenzene	91	12.974	12.975	(0.930)	2737388	44.0531	44.05

Data File: \\Slsvr01\Chem\MSZ.i\Z120816D.b\ZSMP1177.D
Report Date: 21-Aug-2012 23:01

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
	80 Bromobenzene	156	13.002	13.017	(0.932)	597061	49.0083	49.01
	82 1,1,2,2-Tetrachloroethane	83	13.030	13.031	(0.934)	375265	47.4224	47.42
	84 1,3,5-Trimethylbenzene	105	13.142	13.142	(0.942)	2249361	47.0749	47.07
	83 2-Chlorotoluene	91	13.156	13.156	(0.943)	1902517	47.4408	47.44
	85 1,2,3-Trichloropropane	75	13.198	13.198	(0.946)	371860	45.4813	45.48
	86 trans-1,4-dichloro-2-butene	53	13.198	13.212	(0.946)	71396	45.6296	45.63
	87 Cyclohexanone	55	13.268	13.268	(0.951)	67781	293.711	293.7
	88 4-Chlorotoluene	91	13.309	13.310	(0.954)	1676044	47.6405	47.64
	89 t-Butylbenzene	119	13.463	13.464	(0.965)	1751031	46.1620	46.16
	91 1,2,4-Trimethylbenzene	105	13.519	13.520	(0.969)	2188278	46.9798	46.98
	92 sec-Butylbenzene	105	13.631	13.631	(0.977)	2640479	43.4864	43.49
	93 4-Isopropyltoluene	119	13.756	13.757	(0.986)	2131953	45.7926	45.79
	94 1,3-Dichlorobenzene	146	13.882	13.883	(0.995)	1075019	46.8223	46.82
*	95 1,4 Dichlorobenzene-d4	152	13.952	13.952	(1.000)	685390	50.0000	
	96 1,4-Dichlorobenzene	146	13.966	13.966	(1.001)	1104933	48.9806	48.98
	98 n-Butylbenzene	91	14.161	14.162	(1.015)	2044797	45.4271	45.43
	99 1,2-Dichlorobenzene	146	14.385	14.385	(1.031)	924585	47.0190	47.02
	145 Nonanal	57	15.111	15.112	(1.083)	195921	51.6778	51.68
	100 1,2-Dibromo-3-chloropropane	157	15.181	15.181	(1.088)	49177	42.0360	42.04
	101 Hexachlorobutadiene	225	15.781	15.782	(1.131)	206527	52.8225	52.82
	104 1,2,4-Trichlorobenzene	180	15.851	15.852	(1.136)	353408	45.3305	45.33
	105 Naphthalene	128	16.186	16.201	(1.160)	497112	50.1160	50.12
	106 1,2,3-Trichlorobenzene	180	16.396	16.397	(1.175)	187078	48.0902	48.09
M	107 Xylenes (total)	106				3196138	138.319	138.3

Data File: ZSMP1177.D

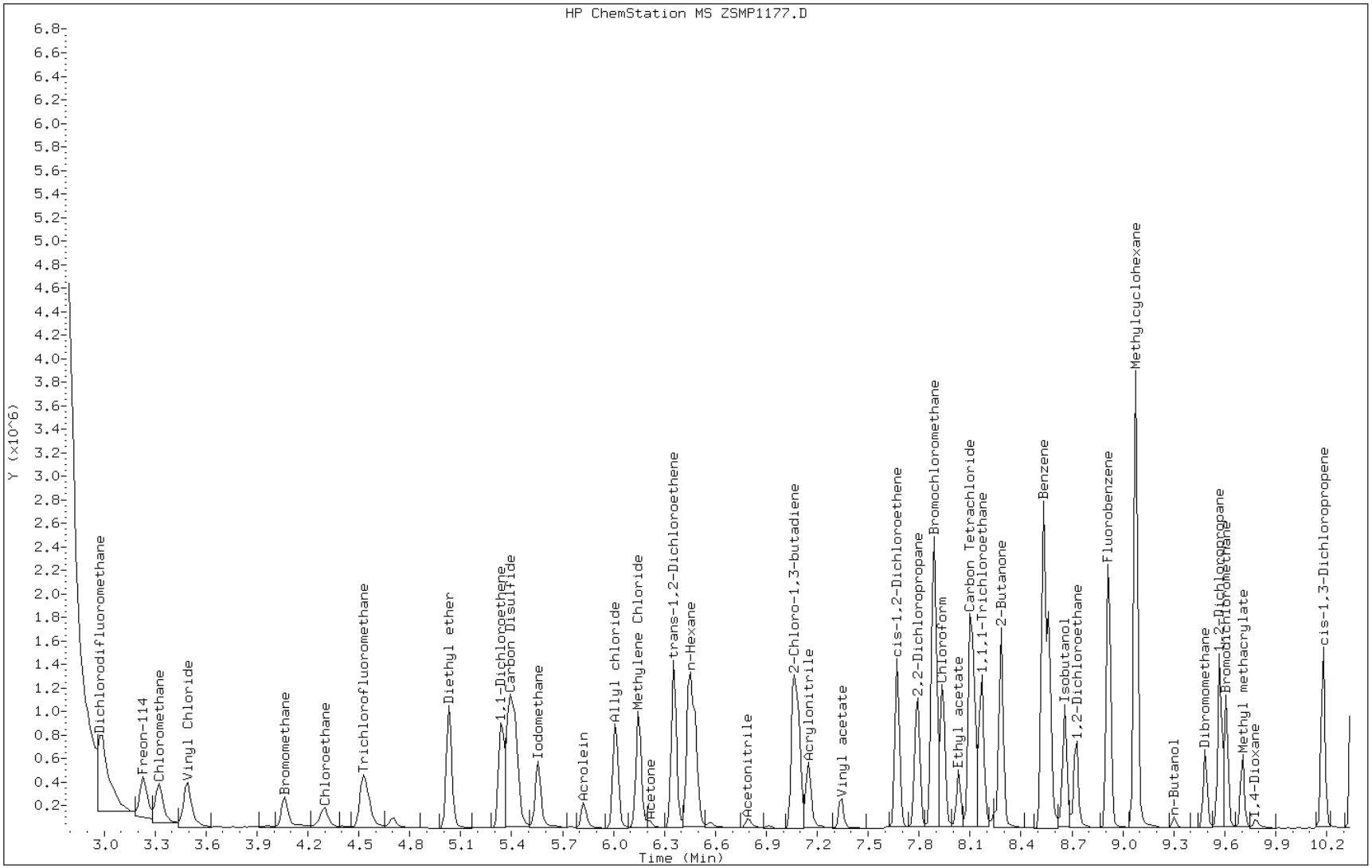
Date: 16-AUG-2012 22:01

Client ID: I-9 D

Instrument: MSZ.i

Sample Info: 160-468-F-1 MSD

Operator: JDH

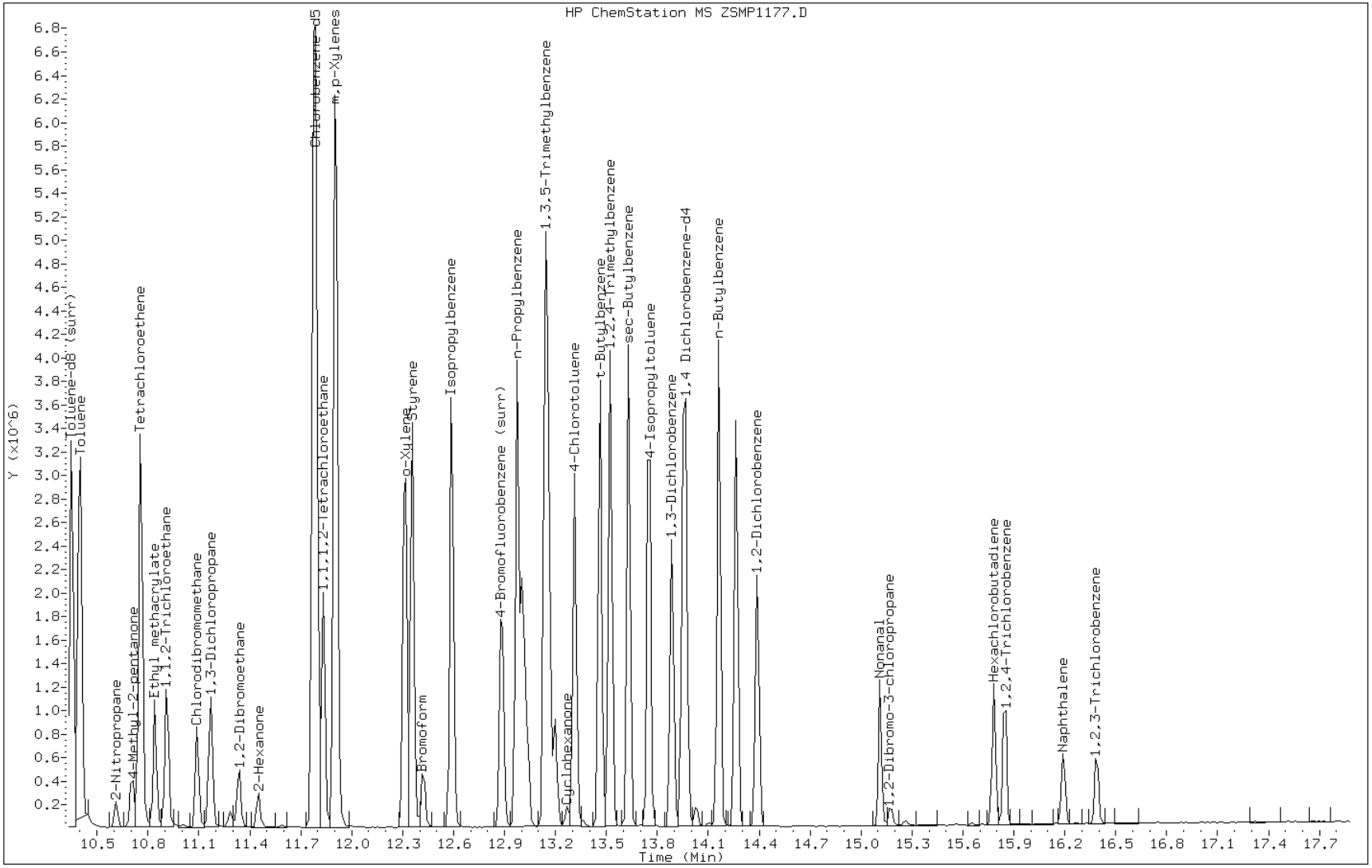


Data File: ZSMP1177.D

Date: 16-AUG-2012 22:01

Client ID: I-9 D Instrument: MSZ.i

Sample Info: 160-468-F-1 MSD Operator: JDH



GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSM Start Date: 08/08/2012 08:59

Analysis Batch Number: 8911 End Date: 08/08/2012 14:01

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-8911/1		08/08/2012 08:59	1	MBFB1795.D	RTX-VMS40 0.18(mm)
IC 160-8911/2		08/08/2012 10:15	1	MICL1797.D	RTX-VMS40 0.18(mm)
IC 160-8911/3		08/08/2012 10:40	1	MICL1798.D	RTX-VMS40 0.18(mm)
IC 160-8911/4		08/08/2012 11:05	1	MICL1799.D	RTX-VMS40 0.18(mm)
IC 160-8911/5		08/08/2012 11:30	1	MICL1800.D	RTX-VMS40 0.18(mm)
IC 160-8911/6		08/08/2012 11:55	1	MICL1801.D	RTX-VMS40 0.18(mm)
ICIS 160-8911/7		08/08/2012 12:20	1	MICL1802.D	RTX-VMS40 0.18(mm)
IC 160-8911/8		08/08/2012 12:45	1	MICL1803.D	RTX-VMS40 0.18(mm)
IC 160-8911/9		08/08/2012 13:11	1	MICL1804.D	RTX-VMS40 0.18(mm)
ICV 160-8911/10		08/08/2012 14:01	1		RTX-VMS40 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSM Start Date: 08/14/2012 02:41

Analysis Batch Number: 9262 End Date: 08/14/2012 11:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-9262/1		08/14/2012 02:41	1	MBFB1964.D	RTX-VMS40 0.18(mm)
CCVIS 160-9262/2		08/14/2012 03:56	1	MCCV1966.D	RTX-VMS40 0.18(mm)
LCS 160-9262/4		08/14/2012 04:33	1	MLCS1967.D	RTX-VMS40 0.18(mm)
MB 160-9262/3		08/14/2012 05:24	1	MBLK1969.D	RTX-VMS40 0.18(mm)
160-437-10	TRIP BLANK	08/14/2012 05:49	1	MSMP1970.D	RTX-VMS40 0.18(mm)
ZZZZZ		08/14/2012 06:14	1		RTX-VMS40 0.18(mm)
160-437-1	PZ-113-AS	08/14/2012 06:39	1	MSMP1972.D	RTX-VMS40 0.18(mm)
160-437-1 MS	PZ-113-AS MS	08/14/2012 07:04	1	MSMP1973.D	RTX-VMS40 0.18(mm)
160-437-1 MSD	PZ-113-AS MSD	08/14/2012 07:29	1	MSMP1974.D	RTX-VMS40 0.18(mm)
160-437-2	D-3	08/14/2012 08:19	1	MSMP1976.D	RTX-VMS40 0.18(mm)
160-437-3	PZ-112-AS	08/14/2012 08:44	1	MSMP1977.D	RTX-VMS40 0.18(mm)
160-437-4	I-11	08/14/2012 09:09	1	MSMP1978.D	RTX-VMS40 0.18(mm)
160-437-9	DUP 05	08/14/2012 09:34	1	MSMP1979.D	RTX-VMS40 0.18(mm)
160-437-6	D-12	08/14/2012 10:22	1	MSMP1980.D	RTX-VMS40 0.18(mm)
160-437-7	PZ-305-AI	08/14/2012 10:47	1	MSMP1981.D	RTX-VMS40 0.18(mm)
160-437-8	S-10	08/14/2012 11:12	1	MSMP1982.D	RTX-VMS40 0.18(mm)
160-437-5	PZ-207-AS	08/14/2012 11:54	1	MSMP1983.D	RTX-VMS40 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSZ Start Date: 08/13/2012 06:52

Analysis Batch Number: 9019 End Date: 08/13/2012 11:33

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-9019/1		08/13/2012 06:52	1	ZBFB1071.D	RTX-VMS40 0.18(mm)
IC 160-9019/2		08/13/2012 07:37	1	ZICL1073.D	RTX-VMS40 0.18(mm)
IC 160-9019/3		08/13/2012 08:00	1	ZICL1074.D	RTX-VMS40 0.18(mm)
IC 160-9019/4		08/13/2012 08:24	1	ZICL1075.D	RTX-VMS40 0.18(mm)
IC 160-9019/5		08/13/2012 08:47	1	ZICL1076.D	RTX-VMS40 0.18(mm)
IC 160-9019/6		08/13/2012 09:11	1	ZICL1077.D	RTX-VMS40 0.18(mm)
ICIS 160-9019/7		08/13/2012 09:35	1	ZICL1078.D	RTX-VMS40 0.18(mm)
IC 160-9019/8		08/13/2012 09:58	1	ZICL1079.D	RTX-VMS40 0.18(mm)
IC 160-9019/9		08/13/2012 10:22	1	ZICL1080.D	RTX-VMS40 0.18(mm)
ICV 160-9019/10		08/13/2012 11:33	1	ZICV1083.D	RTX-VMS40 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSZ Start Date: 08/16/2012 17:20

Analysis Batch Number: 9490 End Date: 08/17/2012 01:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 160-9490/1		08/16/2012 17:20	1	ZBFB1166.D	RTX-VMS40 0.18(mm)
CCVIS 160-9490/2		08/16/2012 17:54	1	ZCCV1167.D	RTX-VMS40 0.18(mm)
LCS 160-9490/4		08/16/2012 18:17	1	ZLCS1168.D	RTX-VMS40 0.18(mm)
MB 160-9490/3		08/16/2012 19:05	1	ZBLK1170.D	RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 19:28	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 19:52	1		RTX-VMS40 0.18(mm)
160-437-3	PZ-112-AS	08/16/2012 20:15	1	ZSMP1173.D	RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 20:39	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 21:13	1		RTX-VMS40 0.18(mm)
160-468-F-1 MS		08/16/2012 21:37	1	ZSMP1176.D	RTX-VMS40 0.18(mm)
160-468-F-1 MSD		08/16/2012 22:01	1	ZSMP1177.D	RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 22:47	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 23:11	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 23:34	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/16/2012 23:58	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/17/2012 00:22	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/17/2012 00:45	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/17/2012 01:09	1		RTX-VMS40 0.18(mm)
ZZZZZ		08/17/2012 01:32	1		RTX-VMS40 0.18(mm)

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI5SiiMS ID: 0.25 (mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPH #
PZ-113-AS	160-437-1	46	35	81	75	78	84
D-3	160-437-2	43	27	81	71	85	84
PZ-112-AS	160-437-3	43	27	78	70	81	81
PZ-112-AS	160-437-3	40	25	71	73	77	85
I-11	160-437-4	44	27	83	71	81	84
PZ-207-AS	160-437-5	44	27	83	74	85	80
D-12	160-437-6	46	27	84	70	80	83
PZ-305-AI	160-437-7	41	26	79	68	74	81
S-10	160-437-8	50	43	84	71	81	83
DUP 05	160-437-9	64	46	81	71	83	81
	MB 160-8998/1-A	55	34	87	79	71	98
	LCS 160-8998/2-A	58	36	88	76	81	91
	160-428-A-6-B MS	46	29	86	77	86	86
	160-428-A-6-C MSD	45	27	87	75	84	85

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	21-85
PHL = Phenol-d5 (Surr)	10-70
NBZ = Nitrobenzene-d5 (Surr)	45-99
FBP = 2-Fluorobiphenyl (Surr)	46-99
TBP = 2,4,6-Tribromophenol (Surr)	46-118
TPH = Terphenyl-d14 (Surr)	53-126

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JLCS3403.D

Lab ID: LCS 160-8998/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Acenaphthene	100	82.5	82	56-91	
Acenaphthylene	100	83.9	84	56-92	
Anthracene	100	84.8	85	59-94	
Benzo[a]anthracene	100	97.5	98	69-107	
Benzo[b]fluoranthene	100	87.7	88	67-101	
Benzo[k]fluoranthene	100	91.3	91	66-104	
Benzo[g,h,i]perylene	100	99.0	99	65-109	
Benzo[a]pyrene	100	85.3	85	60-97	
Bis(2-chloroethoxy)methane	100	83.3	83	51-95	
Bis(2-chloroethyl)ether	100	86.9	87	49-99	
Bis(2-ethylhexyl) phthalate	100	90.0	90	61-103	
4-Bromophenyl phenyl ether	100	84.3	84	61-98	
Butyl benzyl phthalate	100	85.8	86	60-101	
Carbazole	99.9	87.7	88	60-98	
4-Chloroaniline	100	55.7	56	24-70	
4-Chloro-3-methylphenol	100	75.2	75	49-90	
2-Chloronaphthalene	100	80.2	80	52-90	
2-Chlorophenol	100	77.6	78	47-90	
4-Chlorophenyl phenyl ether	100	80.8	81	56-93	
Chrysene	100	86.5	86	61-97	
Dibenz(a,h)anthracene	100	99.1	99	60-111	
Dibenzofuran	100	80.3	80	54-88	
Di-n-butyl phthalate	100	87.3	87	59-99	
1,2-Dichlorobenzene	100	77.3	77	45-91	
1,3-Dichlorobenzene	100	75.8	76	40-89	
1,4-Dichlorobenzene	100	75.1	75	43-87	
3,3'-Dichlorobenzidine	100	67.7	68	33-82	
2,4-Dichlorophenol	100	76.1	76	54-88	
Diethyl phthalate	100	83.8	84	58-96	
2,4-Dimethylphenol	100	78.3	78	48-88	
Dimethyl phthalate	100	83.0	83	60-94	
4,6-Dinitro-2-methylphenol	100	80.1	80	57-99	
2,4-Dinitrophenol	100	71.3	71	34-100	
2,4-Dinitrotoluene	100	87.0	87	58-99	
2,6-Dinitrotoluene	100	84.1	84	61-94	
Di-n-octyl phthalate	100	91.2	91	60-105	
Fluoranthene	100	88.7	89	59-99	
Fluorene	100	81.5	82	57-94	
Hexachlorobenzene	100	83.7	84	60-100	
Hexachlorobutadiene	100	75.3	75	33-96	
Hexachlorocyclopentadiene	100	97.7	98	40-121	
Hexachloroethane	100	79.8	80	38-92	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JLCS3403.D

Lab ID: LCS 160-8998/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Indeno[1,2,3-cd]pyrene	100	88.4	88	57-122	
Isophorone	100	79.8	80	43-105	
2-Methylnaphthalene	100	78.1	78	48-88	
2-Methylphenol	100	68.8	69	46-80	
3 & 4 Methylphenol	100	69.9	70	48-84	
Naphthalene	100	78.4	78	50-88	
2-Nitroaniline	100	86.2	86	55-97	
3-Nitroaniline	100	70.5	70	34-85	
4-Nitroaniline	100	78.7	79	51-90	
Nitrobenzene	100	85.3	85	49-99	
2-Nitrophenol	100	80.2	80	51-95	
4-Nitrophenol	100	32.4	32	17-42	
N-Nitrosodiphenylamine	100	107	107	68-121	
N-Nitrosodi-n-propylamine	100	89.4	89	53-106	
2,2'-oxybis[1-chloropropane]	100	83.5	84	44-103	
Pentachlorophenol	100	70.9	71	56-97	
Phenanthrene	100	84.2	84	59-94	
Phenol	100	34.8	35	21-50	
Pyrene	100	82.4	82	62-101	
1,2,4-Trichlorobenzene	99.9	76.4	76	46-89	
2,4,5-Trichlorophenol	100	77.5	78	58-95	
2,4,6-Trichlorophenol	100	76.6	77	54-93	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JSMP3409.D

Lab ID: 160-428-A-6-B MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Acenaphthene	94.5	ND	79.1	84	49-97	
Acenaphthylene	94.5	ND	80.8	85	49-98	
Anthracene	94.5	ND	78.4	83	49-103	
Benzo[a]anthracene	94.5	ND	88.7	94	52-117	
Benzo[b]fluoranthene	94.5	ND	79.3	84	50-110	
Benzo[k]fluoranthene	94.5	ND	80.8	86	53-111	
Benzo[g,h,i]perylene	94.5	ND	91.0	96	44-125	
Benzo[a]pyrene	94.5	ND	77.7	82	47-107	
Bis(2-chloroethoxy)methane	94.5	ND	77.8	82	46-98	
Bis(2-chloroethyl)ether	94.5	ND	80.3	85	40-99	
Bis(2-ethylhexyl) phthalate	94.5	ND	82.9	88	47-111	
4-Bromophenyl phenyl ether	94.5	ND	77.9	82	49-108	
Butyl benzyl phthalate	94.5	ND	79.0	84	44-113	
Carbazole	94.5	ND	82.0	87	48-104	
4-Chloroaniline	94.5	ND	49.9	53	25-73	
4-Chloro-3-methylphenol	94.5	ND	66.7	71	42-100	
2-Chloronaphthalene	94.5	ND	76.4	81	45-96	
2-Chlorophenol	94.5	ND	64.7	68	37-99	
4-Chlorophenyl phenyl ether	94.5	ND	77.9	82	50-101	
Chrysene	94.5	ND	78.1	83	48-111	
Dibenz(a,h)anthracene	94.5	ND	90.8	96	26-126	
Dibenzofuran	94.5	ND	76.9	81	47-94	
Di-n-butyl phthalate	94.5	ND	82.4	87	47-107	
1,2-Dichlorobenzene	94.5	ND	72.5	77	36-92	
1,3-Dichlorobenzene	94.5	ND	71.3	75	32-92	
1,4-Dichlorobenzene	94.5	ND	71.3	75	33-89	
3,3'-Dichlorobenzidine	94.5	ND	51.2	54	23-89	
2,4-Dichlorophenol	94.5	ND	68.4	72	42-98	
Diethyl phthalate	94.5	ND	81.3	86	50-104	
2,4-Dimethylphenol	94.5	ND	69.7	74	39-97	
Dimethyl phthalate	94.5	ND	81.8	87	50-103	
4,6-Dinitro-2-methylphenol	94.5	ND	77.4	82	36-119	
2,4-Dinitrophenol	94.5	ND	74.5	79	22-121	
2,4-Dinitrotoluene	94.5	ND	86.5	91	51-107	
2,6-Dinitrotoluene	94.5	ND	81.5	86	50-107	
Di-n-octyl phthalate	94.5	ND	84.8	90	47-115	
Fluoranthene	94.5	ND	83.1	88	50-108	
Fluorene	94.5	ND	79.1	84	51-102	
Hexachlorobenzene	94.5	ND	76.5	81	50-113	
Hexachlorobutadiene	94.5	ND	70.7	75	31-100	
Hexachlorocyclopentadiene	94.5	ND	92.9	98	10-122	
Hexachloroethane	94.5	ND	75.6	80	29-92	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JSMP3409.D

Lab ID: 160-428-A-6-B MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Indeno[1,2,3-cd]pyrene	94.5	ND	82.3	87	48-128	
Isophorone	94.5	ND	75.4	80	43-115	
2-Methylnaphthalene	94.5	ND	73.7	78	40-91	
2-Methylphenol	94.5	ND	55.4	59	32-96	
3 & 4 Methylphenol	94.5	ND	55.8	59	30-103	
Naphthalene	94.5	ND	73.7	78	41-94	
2-Nitroaniline	94.5	ND	82.6	87	45-101	
3-Nitroaniline	94.5	ND	62.9	67	34-87	
4-Nitroaniline	94.5	ND	74.3	79	40-103	
Nitrobenzene	94.5	ND	80.5	85	43-96	
2-Nitrophenol	94.5	ND	73.7	78	42-99	
4-Nitrophenol	94.5	ND	30.1	32	10-69	
N-Nitrosodiphenylamine	94.5	ND	99.0	105	59-129	
N-Nitrosodi-n-propylamine	94.5	ND	82.5	87	44-109	
2,2'-oxybis[1-chloropropane]	94.5	ND	76.6	81	33-100	
Pentachlorophenol	94.5	ND	76.9	81	38-119	
Phenanthrene	94.5	ND	78.1	83	49-102	
Phenol	94.5	ND	26.5	28	10-68	
Pyrene	94.5	ND	74.0	78	45-112	
1,2,4-Trichlorobenzene	94.5	ND	72.3	77	39-92	
2,4,5-Trichlorophenol	94.5	ND	72.9	77	48-102	
2,4,6-Trichlorophenol	94.5	ND	74.0	78	45-99	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JSMP3410.D

Lab ID: 160-428-A-6-C MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	94.5	76.0	80	4	20	49-97	
Acenaphthylene	94.5	78.2	83	3	20	49-98	
Anthracene	94.5	76.8	81	2	20	49-103	
Benzo[a]anthracene	94.5	87.7	93	1	20	52-117	
Benzo[b]fluoranthene	94.5	79.3	84	0	20	50-110	
Benzo[k]fluoranthene	94.5	79.3	84	2	20	53-111	
Benzo[g,h,i]perylene	94.5	90.8	96	0	20	44-125	
Benzo[a]pyrene	94.5	77.1	82	1	20	47-107	
Bis(2-chloroethoxy)methane	94.5	77.5	82	0	20	46-98	
Bis(2-chloroethyl)ether	94.5	78.7	83	2	20	40-99	
Bis(2-ethylhexyl) phthalate	94.5	79.9	85	4	20	47-111	
4-Bromophenyl phenyl ether	94.5	75.3	80	3	20	49-108	
Butyl benzyl phthalate	94.5	76.7	81	3	20	44-113	
Carbazole	94.4	80.4	85	2	20	48-104	
4-Chloroaniline	94.5	48.9	52	2	20	25-73	
4-Chloro-3-methylphenol	94.5	66.1	70	1	20	42-100	
2-Chloronaphthalene	94.5	73.2	77	4	20	45-96	
2-Chlorophenol	94.5	62.2	66	4	20	37-99	
4-Chlorophenyl phenyl ether	94.5	74.2	78	5	20	50-101	
Chrysene	94.5	77.5	82	1	20	48-111	
Dibenz(a,h)anthracene	94.5	89.7	95	1	20	26-126	
Dibenzofuran	94.5	74.6	79	3	20	47-94	
Di-n-butyl phthalate	94.5	79.8	84	3	20	47-107	
1,2-Dichlorobenzene	94.5	69.1	73	5	20	36-92	
1,3-Dichlorobenzene	94.5	68.7	73	4	20	32-92	
1,4-Dichlorobenzene	94.5	68.3	72	4	20	33-89	
3,3'-Dichlorobenzidine	94.5	51.4	54	0	20	23-89	
2,4-Dichlorophenol	94.5	68.1	72	0	20	42-98	
Diethyl phthalate	94.5	78.4	83	4	20	50-104	
2,4-Dimethylphenol	94.5	68.9	73	1	20	39-97	
Dimethyl phthalate	94.5	78.3	83	4	20	50-103	
4,6-Dinitro-2-methylphenol	94.5	74.6	79	4	20	36-119	
2,4-Dinitrophenol	94.5	71.8	76	4	20	22-121	
2,4-Dinitrotoluene	94.5	81.8	87	6	20	51-107	
2,6-Dinitrotoluene	94.5	78.3	83	4	20	50-107	
Di-n-octyl phthalate	94.5	82.2	87	3	20	47-115	
Fluoranthene	94.5	80.7	85	3	20	50-108	
Fluorene	94.5	75.4	80	5	20	51-102	
Hexachlorobenzene	94.5	76.1	81	1	20	50-113	
Hexachlorobutadiene	94.5	69.4	73	2	20	31-100	
Hexachlorocyclopentadiene	94.5	91.3	97	2	20	10-122	
Hexachloroethane	94.5	72.2	76	5	20	29-92	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Level: Low Lab File ID: JSMP3410.D

Lab ID: 160-428-A-6-C MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Indeno[1,2,3-cd]pyrene	94.5	81.2	86	1	20	48-128	
Isophorone	94.5	75.8	80	0	20	43-115	
2-Methylnaphthalene	94.5	72.5	77	2	20	40-91	
2-Methylphenol	94.5	53.9	57	3	20	32-96	
3 & 4 Methylphenol	94.5	53.1	56	5	20	30-103	
Naphthalene	94.5	73.2	77	1	20	41-94	
2-Nitroaniline	94.5	79.2	84	4	20	45-101	
3-Nitroaniline	94.5	62.3	66	1	20	34-87	
4-Nitroaniline	94.5	71.8	76	3	20	40-103	
Nitrobenzene	94.5	79.8	84	1	20	43-96	
2-Nitrophenol	94.5	73.0	77	1	20	42-99	
4-Nitrophenol	94.5	28.0	30	7	20	10-69	
N-Nitrosodiphenylamine	94.5	96.9	102	2	20	59-129	
N-Nitrosodi-n-propylamine	94.5	80.5	85	2	20	44-109	
2,2'-oxybis[1-chloropropane]	94.5	74.4	79	3	20	33-100	
Pentachlorophenol	94.5	73.7	78	4	20	38-119	
Phenanthrene	94.5	76.4	81	2	20	49-102	
Phenol	94.5	25.0	26	6	20	10-68	
Pyrene	94.5	72.4	77	2	20	45-112	
1,2,4-Trichlorobenzene	94.4	70.8	75	2	20	39-92	
2,4,5-Trichlorophenol	94.5	70.8	75	3	20	48-102	
2,4,6-Trichlorophenol	94.5	71.8	76	3	20	45-99	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: JBLK3402.D Lab Sample ID: MB 160-8998/1-A

Matrix: Water Date Extracted: 08/13/2012 12:21

Instrument ID: MSJ Date Analyzed: 08/15/2012 15:15

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 160-8998/2-A	JLCS3403.D	08/15/2012 15:47
	160-428-A-6-B MS	JSMP3409.D	08/15/2012 19:00
	160-428-A-6-C MSD	JSMP3410.D	08/15/2012 19:32
PZ-113-AS	160-437-1	JSMP3413.D	08/15/2012 21:09
D-3	160-437-2	JSMP3414.D	08/15/2012 21:41
PZ-112-AS	160-437-3	JSMP3415.D	08/15/2012 22:13
I-11	160-437-4	JSMP3416.D	08/15/2012 22:45
PZ-207-AS	160-437-5	JSMP3417.D	08/15/2012 23:17
D-12	160-437-6	JSMP3418.D	08/15/2012 23:49
PZ-305-AI	160-437-7	JSMP3419.D	08/16/2012 00:21
S-10	160-437-8	JSMP3420.D	08/16/2012 00:54
DUP 05	160-437-9	JSMP3421.D	08/16/2012 01:26
PZ-112-AS	160-437-3	JSMP3512.D	08/22/2012 22:13

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: JDFT2871.D DFTPP Injection Date: 07/24/2012

Instrument ID: MSJ DFTPP Injection Time: 12:10

Analysis Batch No.: 7404

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	40.4	
68	Less than 2% of mass 69	0.0	(0.0)1
69	Mass 69 Relative abundance	50.6	
70	Less than 2% of mass 69	0.0	(0.0)1
127	10-80% of Base Peak	51.0	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.9	
275	10-60% of Base Peak	28.2	
365	Greater than 1% of mass 198	3.7	
441	present but less than 24% of mass 442	14.0	(15.2)1
442	Greater than 50% of mass 198	91.7	
443	15-24% of mass 442	18.3	(20.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 160-7404/2	JICL2872.D	07/24/2012	13:09
	STD160 160-7404/3	JICL2873.D	07/24/2012	13:42
	STD120 160-7404/4	JICL2874.D	07/24/2012	14:16
	STD080 160-7404/5	JICL2875.D	07/24/2012	14:49
	STD020 160-7404/6	JICL2876.D	07/24/2012	15:23
	STD010 160-7404/7	JICL2877.D	07/24/2012	15:56
	STD005 160-7404/8	JICL2878.D	07/24/2012	16:30
	ICV 160-7404/16	JICV2879.D	07/24/2012	17:04
	STD0508270B 160-7404/9	JICL2880.D	07/24/2012	17:37
	STD1608270B 160-7404/10	JICL2881.D	07/24/2012	18:11
	STD1208270B 160-7404/11	JICL2882.D	07/24/2012	18:44
	STD0808270B 160-7404/12	JICL2883.D	07/24/2012	19:18
	STD0208270B 160-7404/13	JICL2884.D	07/24/2012	19:52
	STD0108270B 160-7404/14	JICL2885.D	07/24/2012	20:25
	STD0058270B 160-7404/15	JICL2886.D	07/24/2012	20:59
	ICV 160-7404/17	JICV2887.D	07/24/2012	21:32

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: JDFT3399.D DFTPP Injection Date: 08/15/2012

Instrument ID: MSJ DFTPP Injection Time: 13:45

Analysis Batch No.: 9331

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	40.7	
68	Less than 2% of mass 69	0.0	(0.0)1
69	Mass 69 Relative abundance	50.8	
70	Less than 2% of mass 69	0.0	(0.0)1
127	10-80% of Base Peak	52.1	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.7	
275	10-60% of Base Peak	26.2	
365	Greater than 1% of mass 198	3.3	
441	present but less than 24% of mass 442	13.1	(14.9)1
442	Greater than 50% of mass 198	87.5	
443	15-24% of mass 442	17.4	(19.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 160-9331/2	JCCV3400.D	08/15/2012	14:03
	CCV 160-9331/3	JCCV3401.D	08/15/2012	14:37
	MB 160-8998/1-A	JBLK3402.D	08/15/2012	15:15
	LCS 160-8998/2-A	JLCS3403.D	08/15/2012	15:47
	160-428-A-6-B MS	JSMP3409.D	08/15/2012	19:00
	160-428-A-6-C MSD	JSMP3410.D	08/15/2012	19:32
PZ-113-AS	160-437-1	JSMP3413.D	08/15/2012	21:09
D-3	160-437-2	JSMP3414.D	08/15/2012	21:41
PZ-112-AS	160-437-3	JSMP3415.D	08/15/2012	22:13
I-11	160-437-4	JSMP3416.D	08/15/2012	22:45
PZ-207-AS	160-437-5	JSMP3417.D	08/15/2012	23:17
D-12	160-437-6	JSMP3418.D	08/15/2012	23:49
PZ-305-AI	160-437-7	JSMP3419.D	08/16/2012	00:21
S-10	160-437-8	JSMP3420.D	08/16/2012	00:54
DUP 05	160-437-9	JSMP3421.D	08/16/2012	01:26

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: JDFT3486.D DFTPP Injection Date: 08/22/2012

Instrument ID: MSJ DFTPP Injection Time: 08:06

Analysis Batch No.: 9562

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	43.4	
68	Less than 2% of mass 69	0.0	(0.0)1
69	Mass 69 Relative abundance	45.6	
70	Less than 2% of mass 69	0.0	(0.0)1
127	10-80% of Base Peak	49.8	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.6	
275	10-60% of Base Peak	26.6	
365	Greater than 1% of mass 198	3.3	
441	present but less than 24% of mass 442	12.8	(14.9)1
442	Greater than 50% of mass 198	85.8	
443	15-24% of mass 442	17.2	(20.1)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	ICIS 160-9562/2	JICL3489.D	08/22/2012	09:59
	STD160 160-9562/3	JICL3490.D	08/22/2012	10:32
	STD120 160-9562/4	JICL3491.D	08/22/2012	11:06
	STD080 160-9562/5	JICL3492.D	08/22/2012	11:40
	STD020 160-9562/6	JICL3493.D	08/22/2012	12:14
	STD010 160-9562/7	JICL3494.D	08/22/2012	12:48
	ICV 160-9562/14	JICV3495.D	08/22/2012	13:22
	STD0508270B 160-9562/8	JICL3496.D	08/22/2012	13:56
	STD1608270B 160-9562/9	JICL3497.D	08/22/2012	14:30
	STD1208270B 160-9562/10	JICL3498.D	08/22/2012	15:04
	STD0808270B 160-9562/11	JICL3499.D	08/22/2012	15:38
	STD0208270B 160-9562/12	JICL3500.D	08/22/2012	16:12
	STD0108270B 160-9562/13	JICL3501.D	08/22/2012	16:46
	ICV 160-9562/15	JICV3502.D	08/22/2012	17:20

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab File ID: JDFT3504.D DFTPP Injection Date: 08/22/2012

Instrument ID: MSJ DFTPP Injection Time: 17:57

Analysis Batch No.: 9564

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	41.7	
68	Less than 2% of mass 69	0.0	(0.0)1
69	Mass 69 Relative abundance	45.4	
70	Less than 2% of mass 69	0.0	(0.0)1
127	10-80% of Base Peak	49.4	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	6.7	
275	10-60% of Base Peak	27.4	
365	Greater than 1% of mass 198	3.4	
441	present but less than 24% of mass 442	12.9	(14.5)1
442	Greater than 50% of mass 198	88.6	
443	15-24% of mass 442	17.1	(19.3)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 160-9564/3	JCCV3505.D	08/22/2012	18:15
	CCV 160-9564/4	JCCV3506.D	08/22/2012	18:49
PZ-112-AS	160-437-3	JSMP3512.D	08/22/2012	22:13

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: ICIS 160-7404/2 Date Analyzed: 07/24/2012 13:09

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JICL2872.D Heated Purge: (Y/N) N

Calibration ID: 590

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		163756	6.04	595648	7.77	325845	10.73
UPPER LIMIT		327512	6.54	1191296	8.27	651690	11.23
LOWER LIMIT		81878	5.54	297824	7.27	162923	10.23
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 160-7404/16		187193	6.05	690220	7.78	379055	10.75
ICV 160-7404/17		193395	6.04	710189	7.76	395312	10.73

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: ICIS 160-7404/2 Date Analyzed: 07/24/2012 13:09

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JICL2872.D Heated Purge: (Y/N) N

Calibration ID: 590

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		552140	13.56	550393	18.83	493648	21.63
UPPER LIMIT		1104280	14.06	1100786	19.33	987296	22.13
LOWER LIMIT		276070	13.06	275197	18.33	246824	21.13
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 160-7404/16		642100	13.58	651024	18.85	603210	21.66
ICV 160-7404/17		690957	13.56	701163	18.82	654905	21.62

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9331/2 Date Analyzed: 08/15/2012 14:03

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JCCV3400.D Heated Purge: (Y/N) N

Calibration ID: 651

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		208771	5.77	761202	7.47	397872	10.39
UPPER LIMIT		417542	6.27	1522404	7.97	795744	10.89
LOWER LIMIT		104386	5.27	380601	6.97	198936	9.89
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 160-9331/3		189202	5.77	704490	7.47	360366	10.39
MB 160-8998/1-A		186338	5.78	697040	7.48	354214	10.40
LCS 160-8998/2-A		171068	5.78	615423	7.48	310763	10.40
160-428-A-6-B MS		180720	5.78	634789	7.47	319904	10.39
160-428-A-6-C MSD		157746	5.77	538332	7.47	276130	10.39
160-437-1	PZ-113-AS	160370	5.78	564870	7.47	281218	10.40
160-437-2	D-3	146439	5.77	511047	7.46	270840	10.38
160-437-3	PZ-112-AS	154617	5.78	547374	7.47	289933	10.40
160-437-4	I-11	164854	5.78	575898	7.47	287178	10.39
160-437-5	PZ-207-AS	175879	5.77	599276	7.47	313896	10.39
160-437-6	D-12	166202	5.78	587216	7.46	298719	10.39
160-437-7	PZ-305-AI	173030	5.77	601506	7.46	304515	10.38
160-437-8	S-10	160950	5.77	564497	7.45	289100	10.38
160-437-9	DUP 05	161032	5.77	558428	7.46	288624	10.38

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9331/2 Date Analyzed: 08/15/2012 14:03

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JCCV3400.D Heated Purge: (Y/N) N

Calibration ID: 651

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		687692	13.20	713116	18.45	686509	21.16
UPPER LIMIT		1375384	13.70	1426232	18.95	1373018	21.66
LOWER LIMIT		343846	12.70	356558	17.95	343255	20.66
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 160-9331/3		599043	13.20	592789	18.44	562126	21.16
MB 160-8998/1-A		528655	13.22	448433	18.46	416509	21.18
LCS 160-8998/2-A		496744	13.22	494669	18.46	489372	21.18
160-428-A-6-B MS		538294	13.21	559096	18.46	569348	21.17
160-428-A-6-C MSD		458201	13.20	474145	18.45	482302	21.16
160-437-1	PZ-113-AS	451440	13.21	449900	18.45	464752	21.17
160-437-2	D-3	463319	13.19	484912	18.43	508322	21.15
160-437-3	PZ-112-AS	493529	13.21	513417	18.45	545117	21.17
160-437-4	I-11	478615	13.21	484588	18.45	505848	21.17
160-437-5	PZ-207-AS	545266	13.21	581240	18.45	641879	21.17
160-437-6	D-12	491465	13.21	509850	18.45	526954	21.16
160-437-7	PZ-305-AI	489746	13.20	495844	18.44	512852	21.15
160-437-8	S-10	483194	13.19	505582	18.43	526821	21.15
160-437-9	DUP 05	488822	13.19	520516	18.44	550779	21.15

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: ICIS 160-9562/2 Date Analyzed: 08/22/2012 09:59

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JICL3489.D Heated Purge: (Y/N) N

Calibration ID: 824

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		186825	6.03	678320	7.76	380959	10.72
UPPER LIMIT		373650	6.53	1356640	8.26	761918	11.22
LOWER LIMIT		93413	5.53	339160	7.26	190480	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 160-9562/14		161547	6.04	602392	7.76	333805	10.73
ICV 160-9562/15		164832	6.05	600805	7.78	333683	10.75

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: ICIS 160-9562/2 Date Analyzed: 08/22/2012 09:59

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JICL3489.D Heated Purge: (Y/N) N

Calibration ID: 824

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		670321	13.56	675575	18.82	611167	21.63
UPPER LIMIT		1340642	14.06	1351150	19.32	1222334	22.13
LOWER LIMIT		335161	13.06	337788	18.32	305584	21.13
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 160-9562/14		582447	13.56	585943	18.83	525678	21.64
ICV 160-9562/15		590265	13.58	615598	18.85	555178	21.67

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9564/3 Date Analyzed: 08/22/2012 18:15

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JCCV3505.D Heated Purge: (Y/N) N

Calibration ID: 825

		DCB		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		130989	6.03	475217	7.76	264090	10.72
UPPER LIMIT		261978	6.53	950434	8.26	528180	11.22
LOWER LIMIT		65495	5.53	237609	7.26	132045	10.22
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 160-9564/4		138577	6.03	510167	7.76	272328	10.72
160-437-3	PZ-112-AS	162673	6.03	588837	7.76	316914	10.72

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Sample No.: CCVIS 160-9564/3 Date Analyzed: 08/22/2012 18:15

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm)

Lab File ID (Standard): JCCV3505.D Heated Purge: (Y/N) N

Calibration ID: 825

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		459670	13.55	472324	18.82	415593	21.63
UPPER LIMIT		919340	14.05	944648	19.32	831186	22.13
LOWER LIMIT		229835	13.05	236162	18.32	207797	21.13
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 160-9564/4		466283	13.56	467985	18.82	415235	21.63
160-437-3	PZ-112-AS	547263	13.56	546606	18.82	518295	21.64

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS | Lab Sample ID: 160-437-1

Matrix: Water | Lab File ID: JSMP3413.D

Analysis Method: 8270D | Date Collected: 08/08/2012 09:35

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.6(mL) | Date Analyzed: 08/15/2012 21:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	1.8	J	9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS | Lab Sample ID: 160-437-1

Matrix: Water | Lab File ID: JSMP3413.D

Analysis Method: 8270D | Date Collected: 08/08/2012 09:35

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.6(mL) | Date Analyzed: 08/15/2012 21:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-113-AS | Lab Sample ID: 160-437-1

Matrix: Water | Lab File ID: JSMP3413.D

Analysis Method: 8270D | Date Collected: 08/08/2012 09:35

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.6(mL) | Date Analyzed: 08/15/2012 21:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	46		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	78		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	81		45-99
4165-62-2	Phenol-d5 (Surr)	35		10-70
1718-51-0	Terphenyl-d14 (Surr)	84		53-126
321-60-8	2-Fluorobiphenyl (Surr)	75		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3413.D
Lab Smp Id: 160-437-A-1-A Client Smp ID: PZ-113-AS
Inj Date : 15-AUG-2012 21:09
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-1-A
Misc Info : 160-437-A-1-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1054.600	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	1 1,4-Dioxane	88	2.387	2.359	(0.413)	34446	15.7364	14.92
$	10 2-Fluorophenol	112	4.289	4.277	(0.742)	170950	34.1448	32.38
$	15 Phenol-d5	99	5.347	5.346	(0.925)	164243	26.4493	25.08
*	22 1,4-Dichlorobenzene-d4	152	5.779	5.773	(1.000)	160370	40.0000	
$	36 Nitrobenzene-d5	82	6.468	6.467	(0.866)	241763	40.5175	38.42
*	48 Naphthalene-d8	136	7.467	7.466	(1.000)	564870	40.0000	
$	69 2-Fluorobiphenyl (Surr)	172	9.209	9.203	(0.886)	360515	37.3787	35.44
	76 Dimethylphthalate	163	9.935	9.940	(0.956)	17466	1.91607	1.817(aM)
*	82 Acenaphthene-d10	164	10.395	10.389	(1.000)	281218	40.0000	
$	104 2,4,6-Tribromophenol	330	11.875	11.868	(1.142)	76754	58.2657	55.25
*	121 Phenanthrene-d10	188	13.210	13.204	(1.000)	451440	40.0000	
$	139 Terphenyl-d14	244	16.416	16.409	(0.890)	353706	41.8333	39.67
*	153 Chrysene-d12	240	18.451	18.450	(1.000)	449900	40.0000	
*	166 Perylene-d12	264	21.165	21.164	(1.000)	464752	40.0000	

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: JSMP3413.D

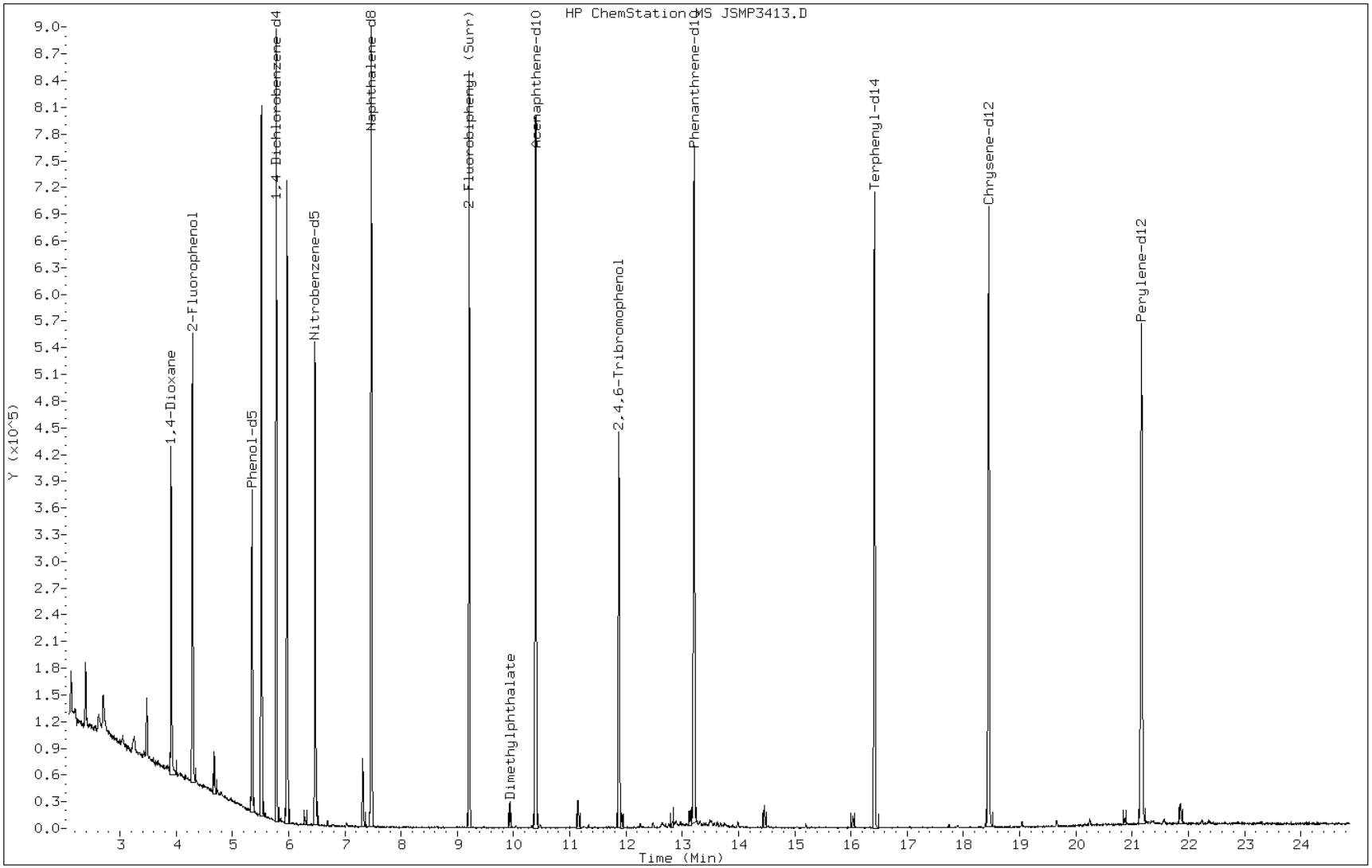
Date: 15-AUG-2012 21:09

Client ID: PZ-113-AS

Instrument: MSJ.i

Sample Info: 160-437-A-1-A

Operator: MAK



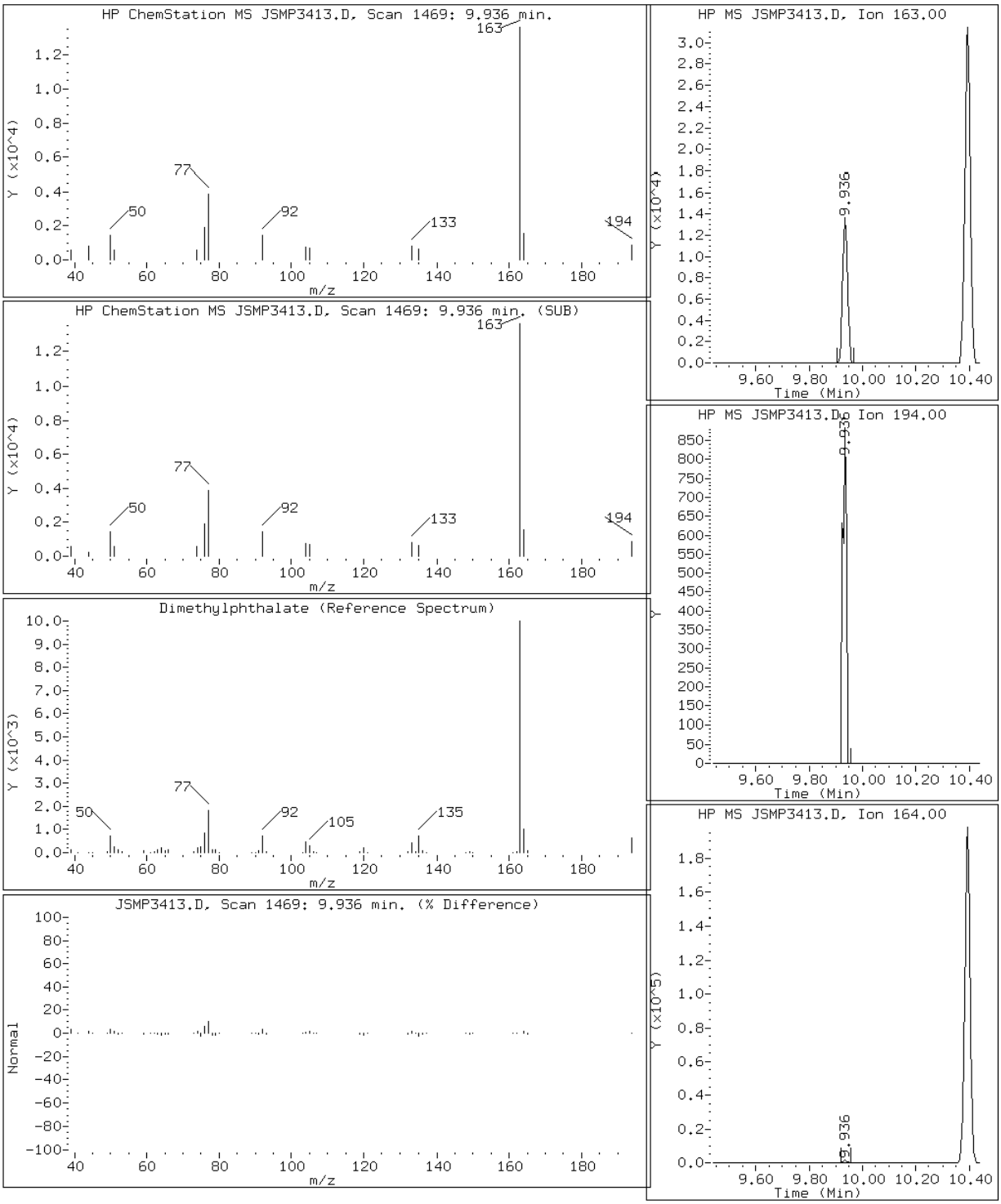
Data File: JSMP3413.D

Date: 15-AUG-2012 21:09

Client ID: PZ-113-AS Instrument: MSJ.i

Sample Info: 160-437-A-1-A Operator: MAK

76 Dimethylphthalate



Manual Integration Report

Data File: JSMP3413.D
Inj. Date and Time: 15-AUG-2012 21:09
Instrument ID: MSJ.i
Client ID: PZ-113-AS
Compound: 76 Dimethylphthalate
CAS #: 131-11-3
Report Date: 08/17/2012

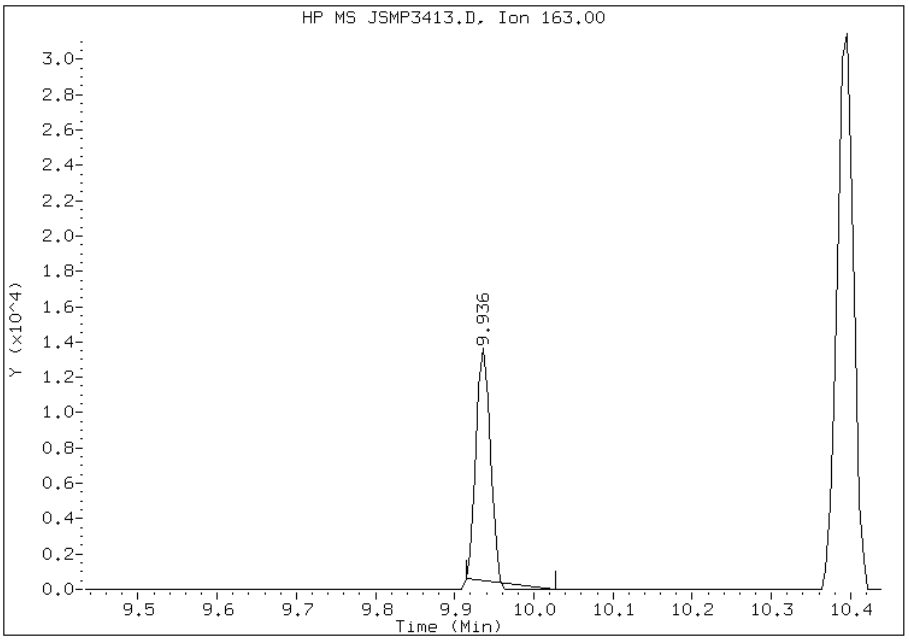
Processing Integration Results

RT: 9.94

Response: 15381

Amount: 2

Conc: 2



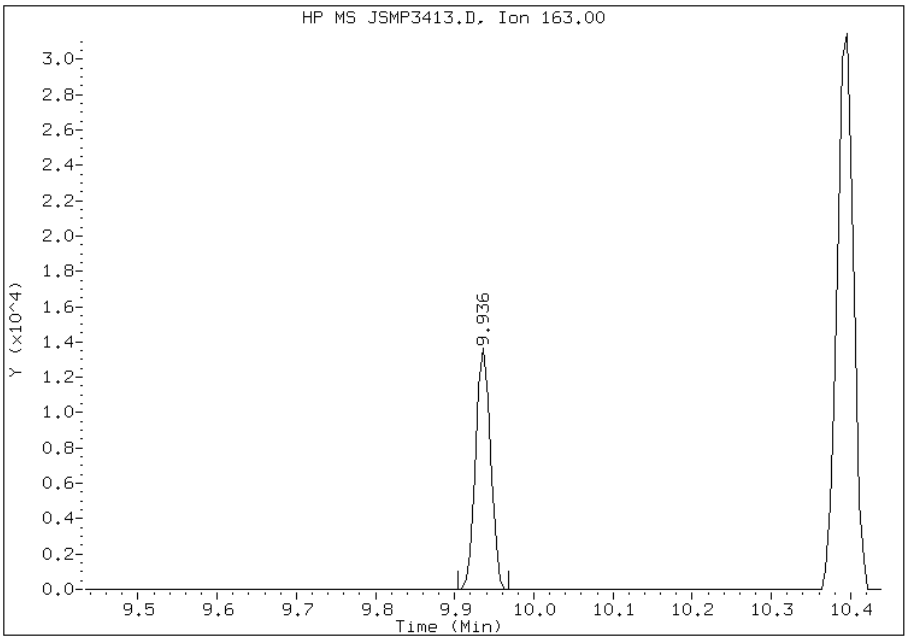
Manual Integration Results

RT: 9.94

Response: 17466

Amount: 2

Conc: 2



Manually Integrated By: kuessnerm
Modification Date: 16-Aug-2012 16:57
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Matrix: Water | Lab File ID: JSMP3414.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1059.1(mL) | Date Analyzed: 08/15/2012 21:41

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.4	0.94
208-96-8	Acenaphthylene	ND		9.4	0.94
120-12-7	Anthracene	ND		9.4	0.94
56-55-3	Benzo[a]anthracene	ND		9.4	0.94
205-99-2	Benzo[b]fluoranthene	ND		9.4	0.94
207-08-9	Benzo[k]fluoranthene	ND		9.4	0.94
191-24-2	Benzo[g,h,i]perylene	ND		9.4	0.94
50-32-8	Benzo[a]pyrene	ND		9.4	0.94
111-91-1	Bis(2-chloroethoxy)methane	ND		9.4	0.94
111-44-4	Bis(2-chloroethyl)ether	ND		9.4	0.94
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.4	0.94
101-55-3	4-Bromophenyl phenyl ether	ND		9.4	0.94
85-68-7	Butyl benzyl phthalate	ND		9.4	0.94
86-74-8	Carbazole	ND		9.4	0.94
106-47-8	4-Chloroaniline	ND		9.4	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.4	0.94
91-58-7	2-Chloronaphthalene	ND		9.4	0.94
95-57-8	2-Chlorophenol	ND		9.4	0.94
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.4	0.94
218-01-9	Chrysene	ND		9.4	0.94
53-70-3	Dibenz(a,h)anthracene	ND		9.4	0.94
132-64-9	Dibenzofuran	ND		9.4	0.94
84-74-2	Di-n-butyl phthalate	ND		9.4	0.94
95-50-1	1,2-Dichlorobenzene	ND		9.4	0.94
541-73-1	1,3-Dichlorobenzene	ND		9.4	0.94
106-46-7	1,4-Dichlorobenzene	ND		9.4	0.94
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.4	1.0
84-66-2	Diethyl phthalate	ND		9.4	0.94
105-67-9	2,4-Dimethylphenol	ND		9.4	0.94
131-11-3	Dimethyl phthalate	ND		9.4	0.94
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.4	0.94
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.4	0.94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Matrix: Water | Lab File ID: JSMP3414.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1059.1(mL) | Date Analyzed: 08/15/2012 21:41

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.4	2.0
117-84-0	Di-n-octyl phthalate	ND		9.4	0.94
206-44-0	Fluoranthene	ND		9.4	0.94
86-73-7	Fluorene	ND		9.4	0.94
118-74-1	Hexachlorobenzene	ND		9.4	0.94
87-68-3	Hexachlorobutadiene	ND		9.4	0.94
77-47-4	Hexachlorocyclopentadiene	ND		9.4	0.94
67-72-1	Hexachloroethane	ND		9.4	0.94
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.4	0.94
78-59-1	Isophorone	ND		9.4	0.94
91-57-6	2-Methylnaphthalene	ND		9.4	0.94
95-48-7	2-Methylphenol	ND		9.4	0.94
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.4	0.94
88-74-4	2-Nitroaniline	ND		9.4	0.94
99-09-2	3-Nitroaniline	ND		9.4	0.94
100-01-6	4-Nitroaniline	ND		9.4	0.94
98-95-3	Nitrobenzene	ND		9.4	1.0
88-75-5	2-Nitrophenol	ND		9.4	0.94
100-02-7	4-Nitrophenol	ND		9.4	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.4	0.94
621-64-7	N-Nitrosodi-n-propylamine	ND		9.4	0.94
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.4	0.94
87-86-5	Pentachlorophenol	ND		9.4	1.2
85-01-8	Phenanthrene	ND		9.4	0.94
108-95-2	Phenol	ND		9.4	1.9
129-00-0	Pyrene	ND		9.4	0.94
120-82-1	1,2,4-Trichlorobenzene	ND		9.4	0.94
95-95-4	2,4,5-Trichlorophenol	ND		9.4	0.94
88-06-2	2,4,6-Trichlorophenol	ND		9.4	0.94

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Matrix: Water | Lab File ID: JSMP3414.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1059.1(mL) | Date Analyzed: 08/15/2012 21:41

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	43		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	85		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	81		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	84		53-126
321-60-8	2-Fluorobiphenyl (Surr)	71		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3414.D
Lab Smp Id: 160-437-A-2-A Client Smp ID: D-3
Inj Date : 15-AUG-2012 21:41
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-2-A
Misc Info : 160-437-A-2-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1059.100	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

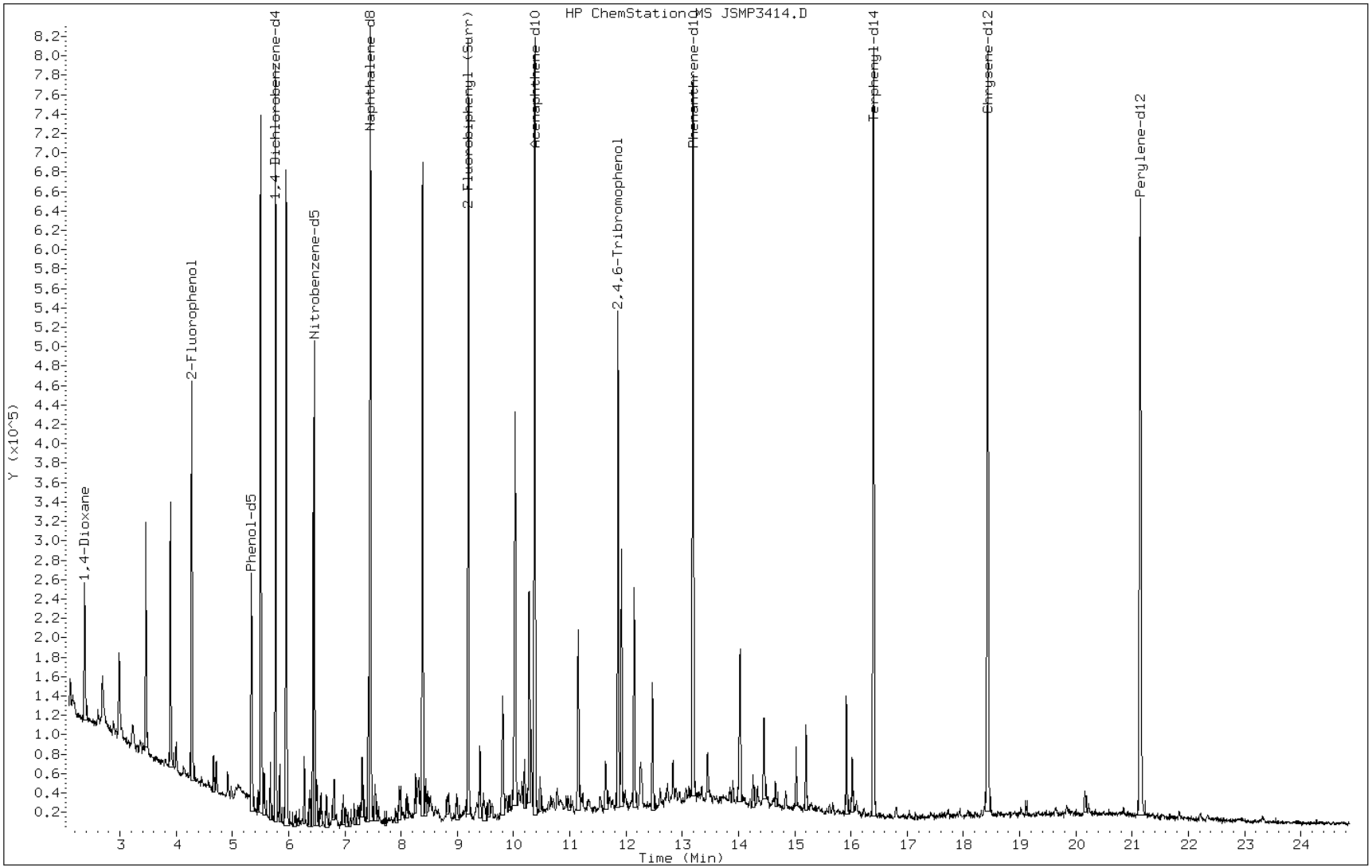
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1 1,4-Dioxane	88	2.365	2.359	(0.410)	78705	39.3764	37.18
$ 10 2-Fluorophenol	112	4.278	4.277	(0.742)	148893	32.5684	30.75
$ 15 Phenol-d5	99	5.341	5.346	(0.926)	113771	20.0643	18.94
* 22 1,4-Dichlorobenzene-d4	152	5.768	5.773	(1.000)	146439	40.0000	
$ 36 Nitrobenzene-d5	82	6.457	6.467	(0.866)	218938	40.5566	38.29
* 48 Naphthalene-d8	136	7.456	7.466	(1.000)	511047	40.0000	
$ 69 2-Fluorobiphenyl (Surr)	172	9.193	9.203	(0.886)	329433	35.4649	33.48
* 82 Acenaphthene-d10	164	10.378	10.389	(1.000)	270840	40.0000	
$ 104 2,4,6-Tribromophenol	330	11.858	11.868	(1.143)	80645	63.5653	60.02
* 121 Phenanthrene-d10	188	13.188	13.204	(1.000)	463319	40.0000	
$ 139 Terphenyl-d14	244	16.399	16.409	(0.890)	383820	42.1173	39.77
* 153 Chrysene-d12	240	18.429	18.450	(1.000)	484912	40.0000	
* 166 Perylene-d12	264	21.148	21.164	(1.000)	508322	40.0000	

Data File: JSMP3414.D

Date: 15-AUG-2012 21:41

Client ID: D-3 Instrument: MSJ.i

Sample Info: 160-437-A-2-A Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: JSMP3415.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:48

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.3(mL) | Date Analyzed: 08/15/2012 22:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	9.8		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	11		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: JSMP3415.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:48

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.3(mL) | Date Analyzed: 08/15/2012 22:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: JSMP3415.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:48

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.3(mL) | Date Analyzed: 08/15/2012 22:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	43		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	81		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	78		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	81		53-126
321-60-8	2-Fluorobiphenyl (Surr)	70		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3415.D
Lab Smp Id: 160-437-A-3-A Client Smp ID: PZ-112-AS
Inj Date : 15-AUG-2012 22:13
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-3-A
Misc Info : 160-437-A-3-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1054.300	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
1 1,4-Dioxane	88	2.382	2.359	(0.412)	20676	9.79716	9.292(a)
$ 10 2-Fluorophenol	112	4.295	4.277	(0.743)	156018	32.3219	30.66(MH)
$ 15 Phenol-d5	99	5.358	5.346	(0.927)	119162	19.9036	18.88
20 2-Chlorophenol	128	5.534	5.527	(0.957)	53432	10.3112	9.780
* 22 1,4-Dichlorobenzene-d4	152	5.780	5.773	(1.000)	154617	40.0000	
23 1,4-Dichlorobenzene	146	5.801	5.794	(1.004)	70491	11.7744	11.17
$ 36 Nitrobenzene-d5	82	6.469	6.467	(0.866)	226887	39.2398	37.22
* 48 Naphthalene-d8	136	7.474	7.466	(1.000)	547374	40.0000	
50 Naphthalene	128	7.511	7.498	(1.005)	3735536	252.093	239.1(A)
$ 69 2-Fluorobiphenyl (Surr)	172	9.210	9.203	(0.886)	348846	35.0817	33.27
* 82 Acenaphthene-d10	164	10.396	10.389	(1.000)	289933	40.0000	
$ 104 2,4,6-Tribromophenol	330	11.875	11.868	(1.142)	82662	60.8644	57.73
* 121 Phenanthrene-d10	188	13.211	13.204	(1.000)	493529	40.0000	
$ 139 Terphenyl-d14	244	16.422	16.409	(0.890)	389582	40.3761	38.30
* 153 Chrysene-d12	240	18.452	18.450	(1.000)	513417	40.0000	
* 166 Perylene-d12	264	21.171	21.164	(1.000)	545117	40.0000	

QC Flag Legend

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

QC Flag Legend

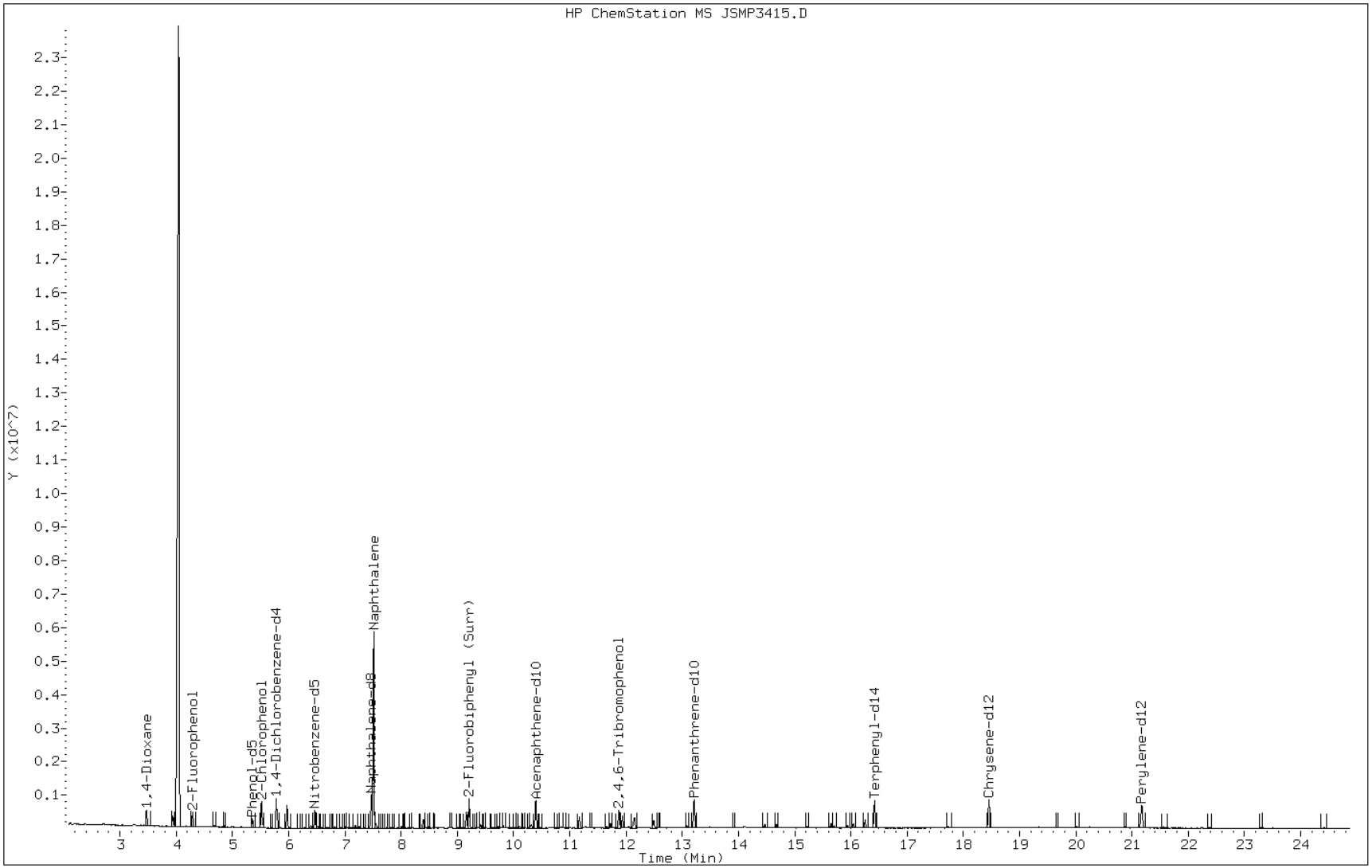
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: JSMP3415.D

Date: 15-AUG-2012 22:13

Client ID: PZ-112-AS Instrument: MSJ.i

Sample Info: 160-437-A-3-A Operator: MAK



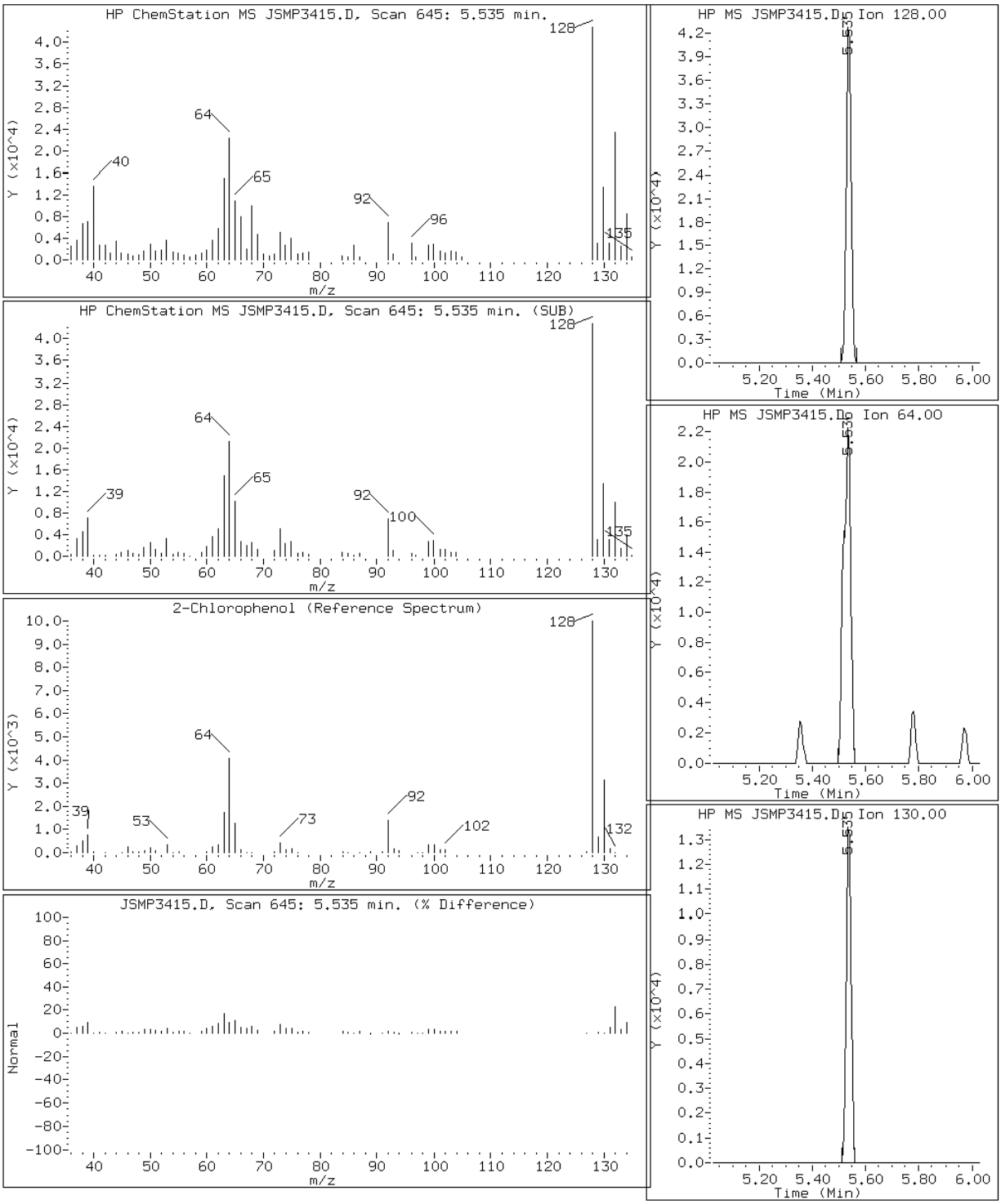
Data File: JSMP3415.D

Date: 15-AUG-2012 22:13

Client ID: PZ-112-AS Instrument: MSJ.i

Sample Info: 160-437-A-3-A Operator: MAK

20 2-Chlorophenol



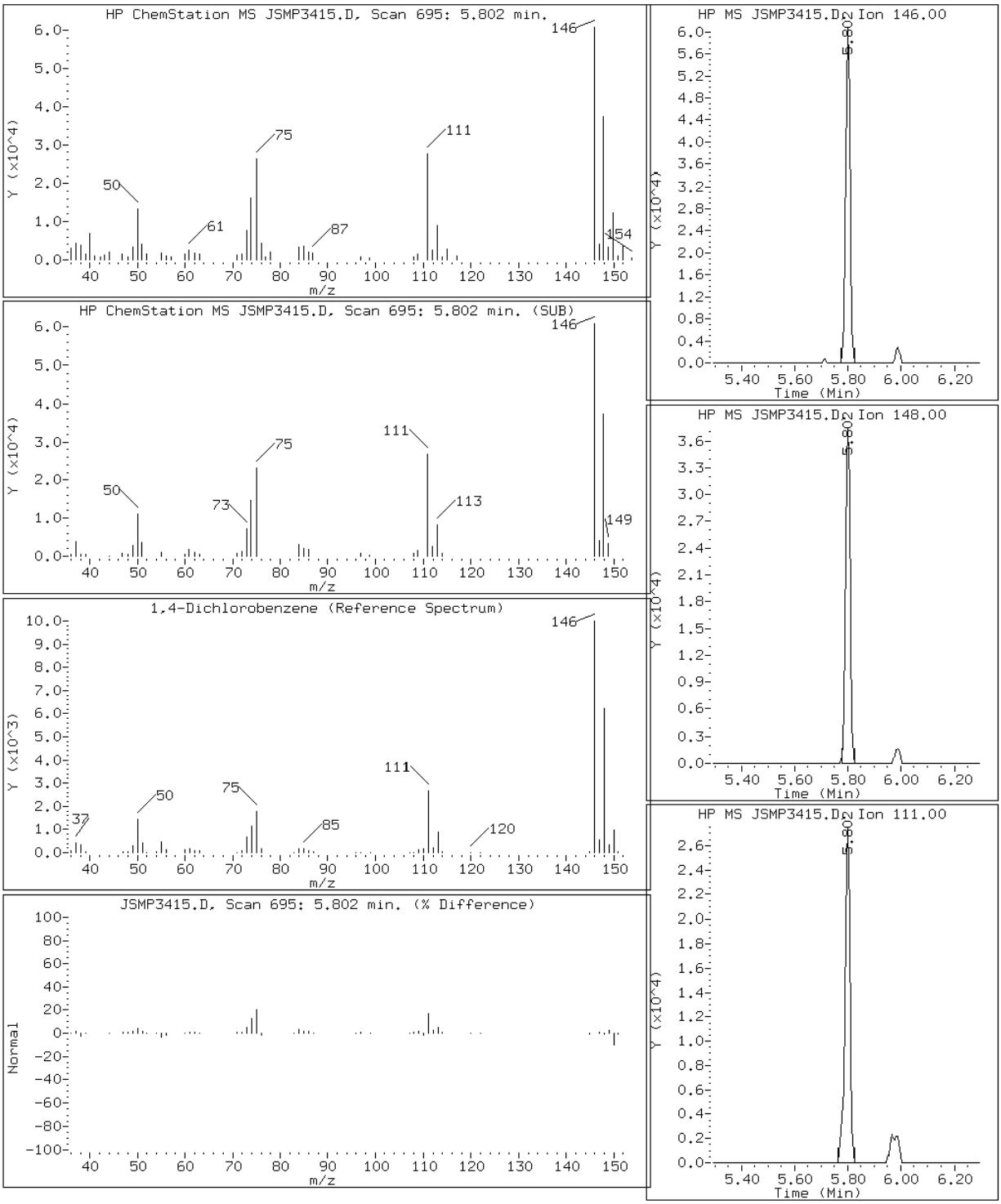
Data File: JSMP3415.D

Date: 15-AUG-2012 22:13

Client ID: PZ-112-AS Instrument: MSJ.i

Sample Info: 160-437-A-3-A Operator: MAK

23 1,4-Dichlorobenzene



Manual Integration Report

Data File: JSMP3415.D
Inj. Date and Time: 15-AUG-2012 22:13
Instrument ID: MSJ.i
Client ID: PZ-112-AS
Compound: 10 2-Fluorophenol
CAS #: 367-12-4
Report Date: 08/17/2012

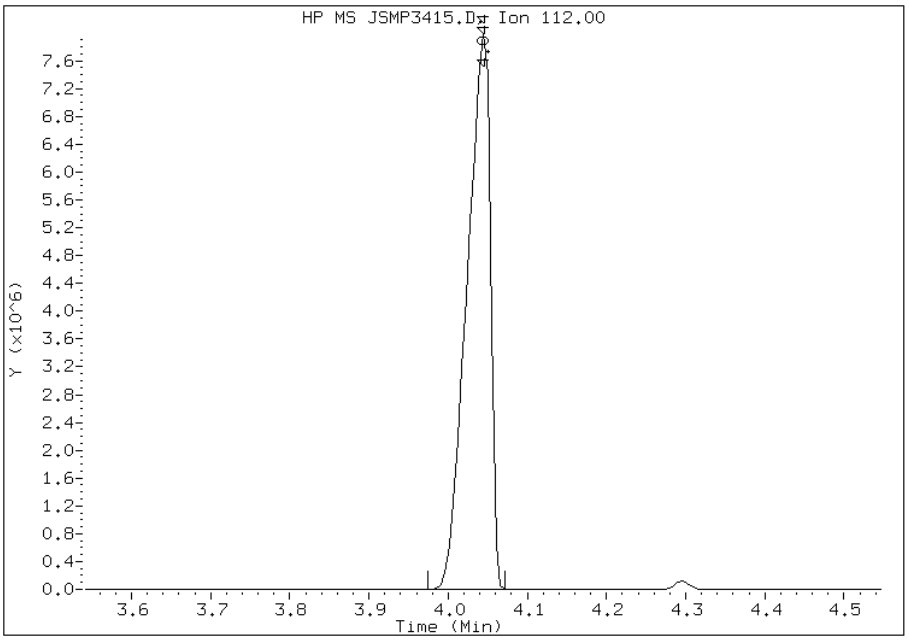
Processing Integration Results

RT: 4.04

Response: 16155806

Amount: 3347

Conc: 3175



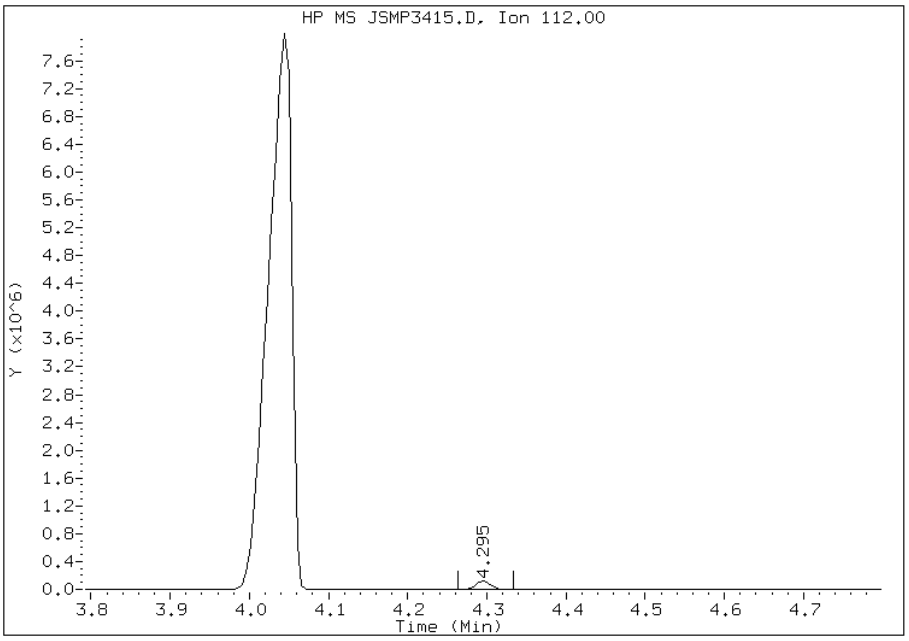
Manual Integration Results

RT: 4.30

Response: 156018

Amount: 32

Conc: 31



Manually Integrated By: kuessnerm
Modification Date: 17-Aug-2012 04:35
Manual Integration Reason: Analyte Misidentified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-112-AS | Lab Sample ID: 160-437-3

Matrix: Water | Lab File ID: JSMP3512.D

Analysis Method: 8270D | Date Collected: 08/08/2012 10:48

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.3(mL) | Date Analyzed: 08/22/2012 22:13

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9564 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
91-20-3	Naphthalene	220		47	4.7

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	40		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	77		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	71		45-99
4165-62-2	Phenol-d5 (Surr)	25		10-70
1718-51-0	Terphenyl-d14 (Surr)	85		53-126
321-60-8	2-Fluorobiphenyl (Surr)	73		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\slsvr01\BNA_LAB\MSJ.i\J120822B.B\JSMP3512.D
Lab Smp Id: 160-437-A-3-A Client Smp ID: PZ-112-AS
Inj Date : 22-AUG-2012 22:13
Operator : JW Inst ID: MSJ.i
Smp Info : 160-437-A-3-A
Misc Info : 160-437-A-3-A
Comment :
Method : \\slsvr01\BNA_LAB\MSJ.i\J120822B.B\8270J_625.m
Meth Date : 23-Aug-2012 12:56 winklerj Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 10
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: TAISTL0025

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

Name	Value	Description
DF	5.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1054.300	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 10 2-Fluorophenol	112	4.512	4.511	(0.748)	31420	6.03883	28.64(aM)
$ 15 Phenol-d5	99	5.564	5.568	(0.922)	23952	3.68357	17.47(a)
* 22 1,4-Dichlorobenzene-d4	152	6.034	6.028	(1.000)	162673	40.0000	
$ 36 Nitrobenzene-d5	82	6.734	6.733	(0.868)	43728	7.12542	33.79(a)
* 48 Naphthalene-d8	136	7.759	7.758	(1.000)	588837	40.0000	
50 Naphthalene	128	7.791	7.785	(1.004)	749693	47.3940	224.8
$ 69 2-Fluorobiphenyl (Surr)	172	9.516	9.515	(0.887)	79031	7.33848	34.80(a)
* 82 Acenaphthene-d10	164	10.723	10.717	(1.000)	316914	40.0000	
$ 104 2,4,6-Tribromophenol	330	12.203	12.207	(1.138)	17574	11.6106	55.06
* 121 Phenanthrene-d10	188	13.560	13.553	(1.000)	547263	40.0000	
$ 139 Terphenyl-d14	244	16.770	16.769	(0.891)	86724	8.52163	40.41(a)
* 153 Chrysene-d12	240	18.820	18.820	(1.000)	546606	40.0000	
* 166 Perylene-d12	264	21.635	21.629	(1.000)	518295	40.0000	

QC Flag Legend

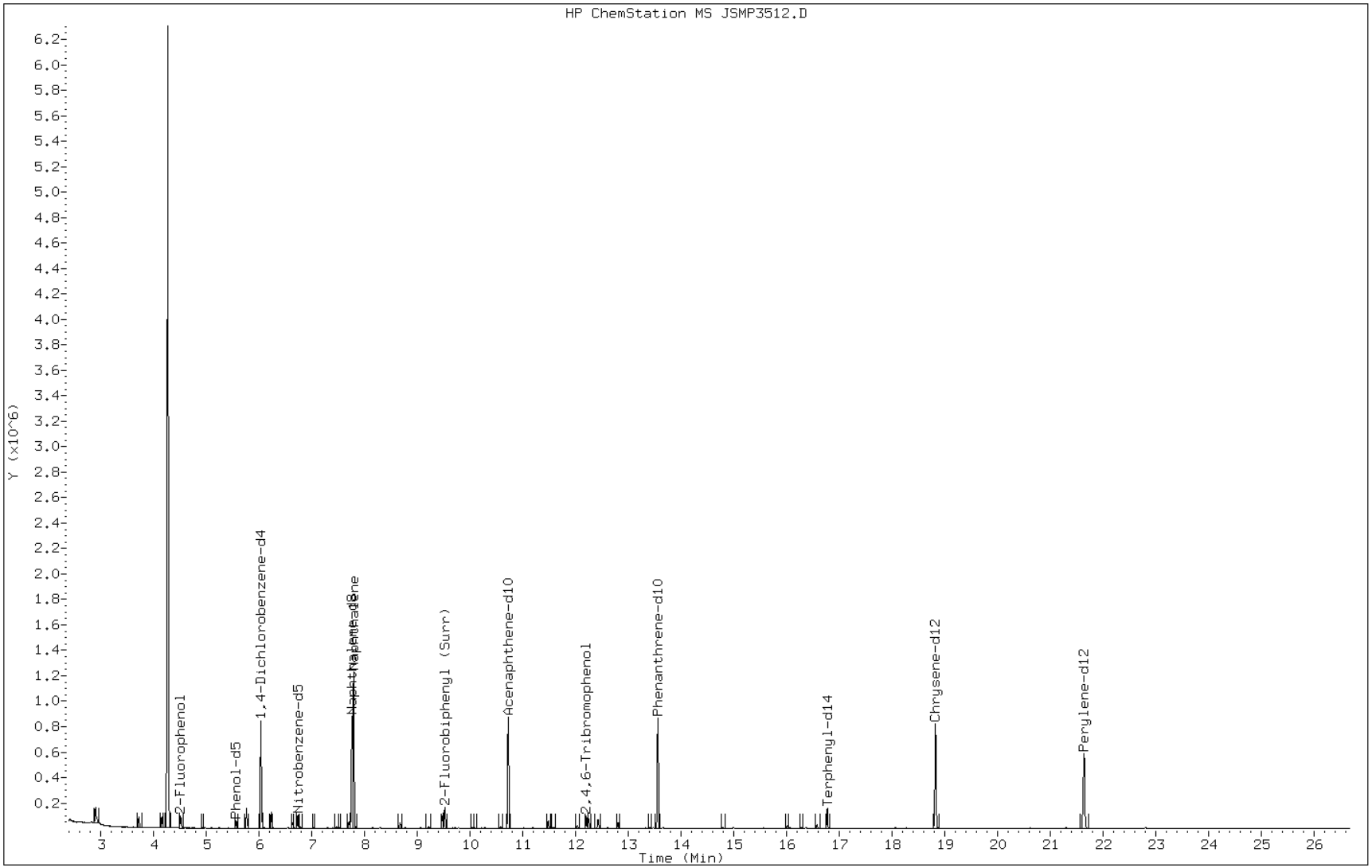
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: JSMP3512.D

Date: 22-AUG-2012 22:13

Client ID: PZ-112-AS Instrument: MSJ.i

Sample Info: 160-437-A-3-A Operator: JW



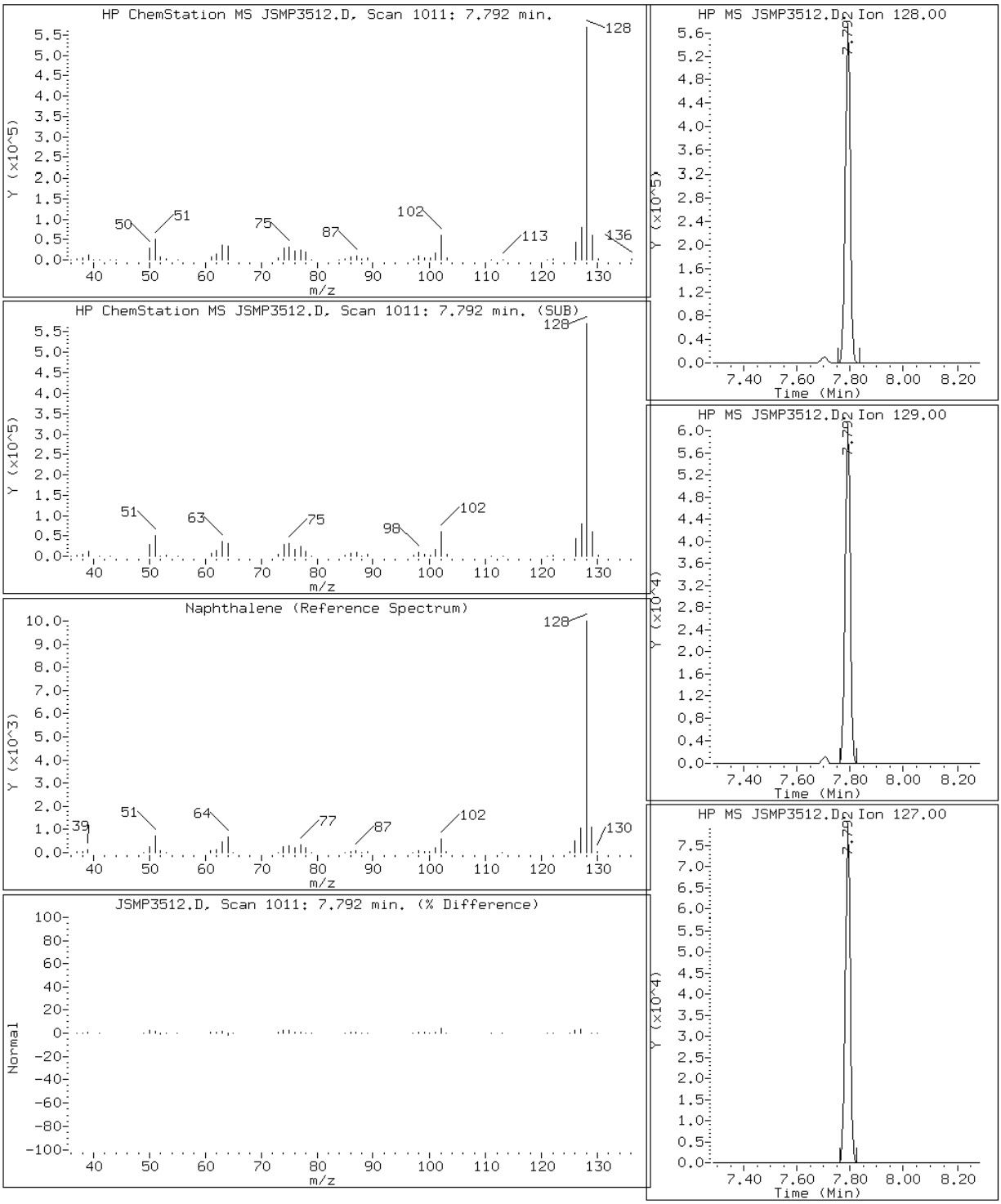
Data File: JSMP3512.D

Date: 22-AUG-2012 22:13

Client ID: PZ-112-AS Instrument: MSJ.i

Sample Info: 160-437-A-3-A Operator: JW

50 Naphthalene



Manual Integration Report

Data File: JSMP3512.D
Inj. Date and Time: 22-AUG-2012 22:13
Instrument ID: MSJ.i
Client ID: PZ-112-AS
Compound: 10 2-Fluorophenol
CAS #: 367-12-4
Report Date: 08/23/2012

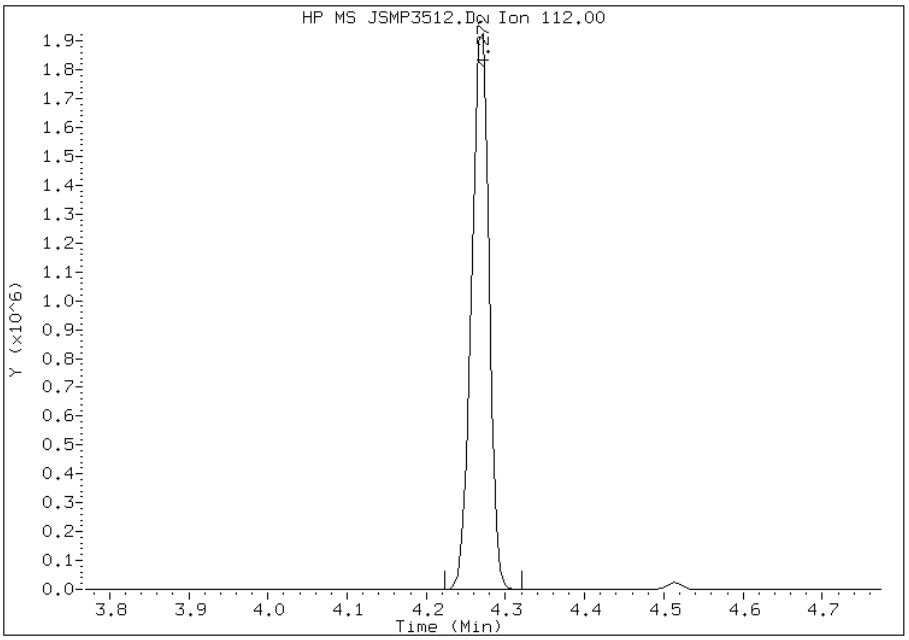
Processing Integration Results

RT: 4.27

Response: 2925090

Amount: 562

Conc: 2666



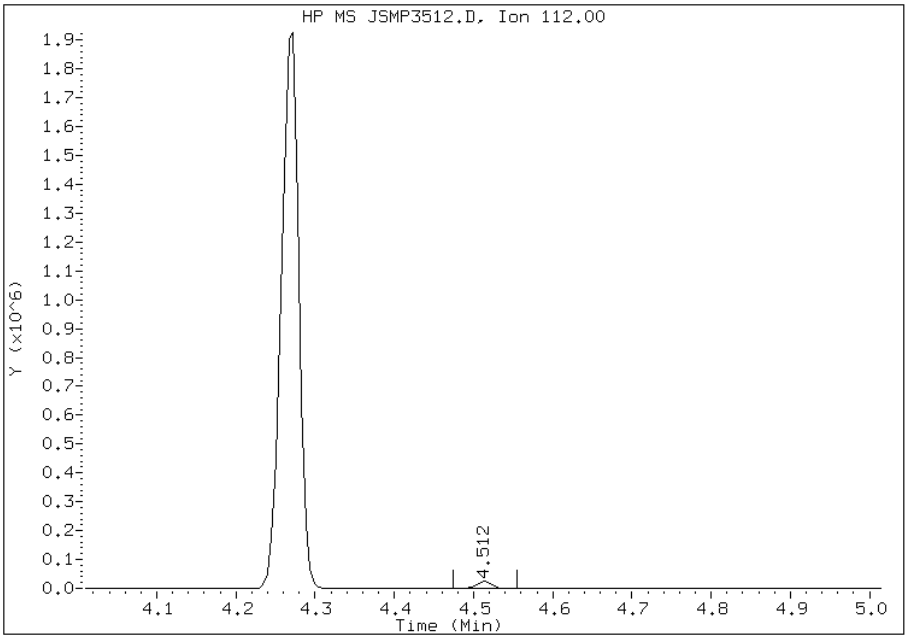
Manual Integration Results

RT: 4.51

Response: 31420

Amount: 6

Conc: 29



Manually Integrated By: winklerj
Modification Date: 23-Aug-2012 14:09
Manual Integration Reason: Analyte Misidentified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Matrix: Water | Lab File ID: JSMP3416.D

Analysis Method: 8270D | Date Collected: 08/08/2012 11:43

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 22:45

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Matrix: Water | Lab File ID: JSMP3416.D

Analysis Method: 8270D | Date Collected: 08/08/2012 11:43

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 22:45

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Matrix: Water | Lab File ID: JSMP3416.D

Analysis Method: 8270D | Date Collected: 08/08/2012 11:43

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 22:45

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	44		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	81		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	83		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	84		53-126
321-60-8	2-Fluorobiphenyl (Surr)	71		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3416.D
Lab Smp Id: 160-437-A-4-A Client Smp ID: I-11
Inj Date : 15-AUG-2012 22:45
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-4-A
Misc Info : 160-437-A-4-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1057.800	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	1 1,4-Dioxane	88	2.381	2.359	(0.412)	221286	98.3434	92.97
$	10 2-Fluorophenol	112	4.294	4.277	(0.743)	170822	33.1912	31.38
$	15 Phenol-d5	99	5.357	5.346	(0.927)	129126	20.2285	19.12
*	22 1,4-Dichlorobenzene-d4	152	5.779	5.773	(1.000)	164854	40.0000	
	25 Benzyl Alcohol	108	5.950	5.944	(1.030)	4274	1.21700	1.150(a)
$	36 Nitrobenzene-d5	82	6.473	6.467	(0.866)	251331	41.3144	39.06
*	48 Naphthalene-d8	136	7.472	7.466	(1.000)	575898	40.0000	
$	69 2-Fluorobiphenyl (Surr)	172	9.214	9.203	(0.886)	350604	35.5967	33.65
*	82 Acenaphthene-d10	164	10.394	10.389	(1.000)	287178	40.0000	
$	104 2,4,6-Tribromophenol	330	11.879	11.868	(1.143)	81561	60.6299	57.32
*	121 Phenanthrene-d10	188	13.210	13.204	(1.000)	478615	40.0000	
$	139 Terphenyl-d14	244	16.420	16.409	(0.890)	382069	41.9532	39.66
*	153 Chrysene-d12	240	18.450	18.450	(1.000)	484588	40.0000	
*	166 Perylene-d12	264	21.169	21.164	(1.000)	505848	40.0000	

QC Flag Legend

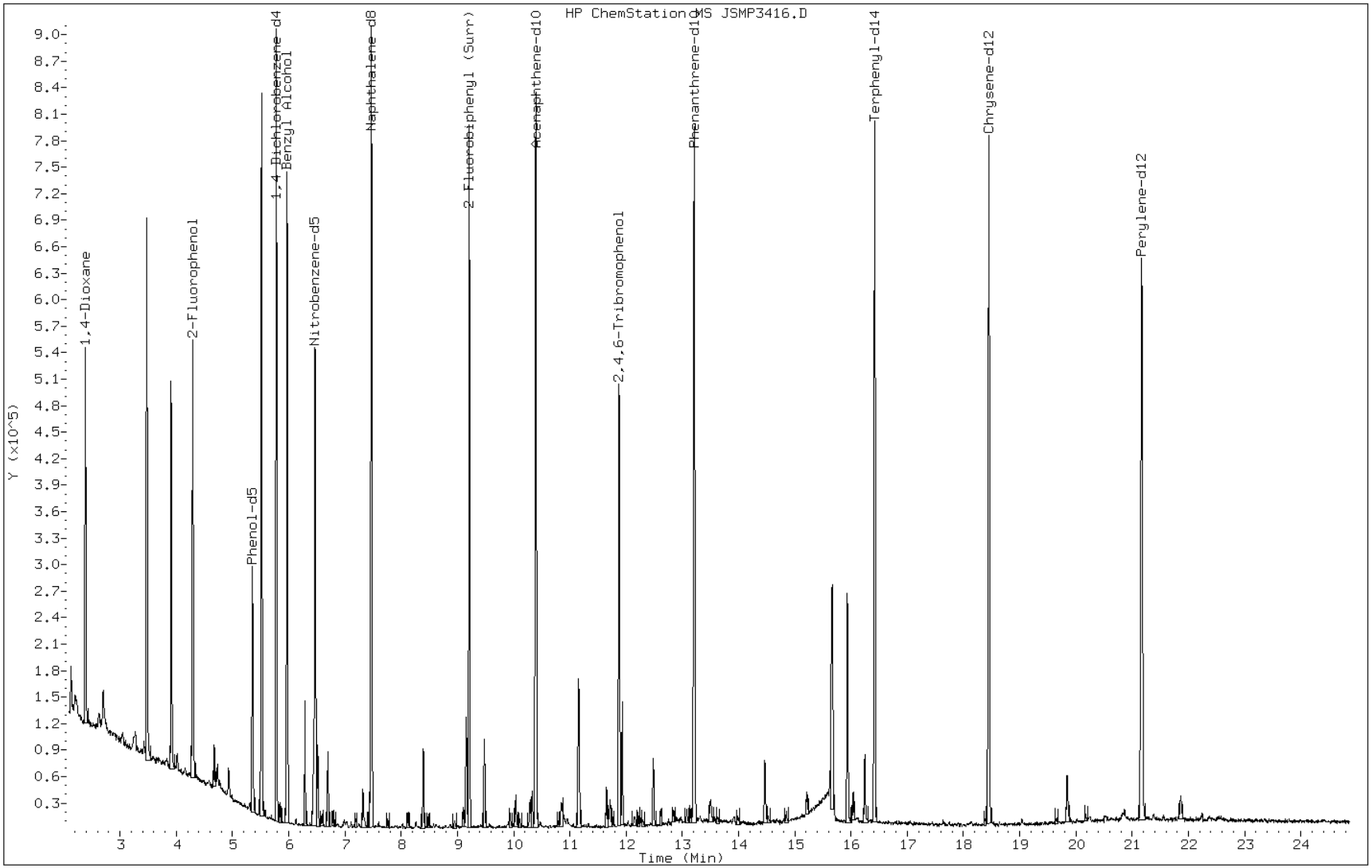
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JSMP3416.D

Date: 15-AUG-2012 22:45

Client ID: I-11 Instrument: MSJ.i

Sample Info: 160-437-A-4-A Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-207-AS | Lab Sample ID: 160-437-5

Matrix: Water | Lab File ID: JSMP3417.D

Analysis Method: 8270D | Date Collected: 08/08/2012 12:55

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.7(mL) | Date Analyzed: 08/15/2012 23:17

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	28		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	2.4	J	9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-207-AS | Lab Sample ID: 160-437-5

Matrix: Water | Lab File ID: JSMP3417.D

Analysis Method: 8270D | Date Collected: 08/08/2012 12:55

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.7(mL) | Date Analyzed: 08/15/2012 23:17

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	1.9	J	9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-207-AS | Lab Sample ID: 160-437-5

Matrix: Water | Lab File ID: JSMP3417.D

Analysis Method: 8270D | Date Collected: 08/08/2012 12:55

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1054.7(mL) | Date Analyzed: 08/15/2012 23:17

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	44		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	85		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	83		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	80		53-126
321-60-8	2-Fluorobiphenyl (Surr)	74		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3417.D
Lab Smp Id: 160-437-A-5-A Client Smp ID: PZ-207-AS
Inj Date : 15-AUG-2012 23:17
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-5-A
Misc Info : 160-437-A-5-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1054.700	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 1,4-Dioxane	88	2.387	2.359	(0.413)	99729	41.5430	39.39
$	10 2-Fluorophenol	112	4.295	4.277	(0.744)	180783	32.9248	31.22
$	15 Phenol-d5	99	5.358	5.346	(0.928)	137618	20.2074	19.16
*	22 1,4-Dichlorobenzene-d4	152	5.774	5.773	(1.000)	175879	40.0000	
	23 1,4-Dichlorobenzene	146	5.796	5.794	(1.004)	16965	2.49116	2.362(a)
$	36 Nitrobenzene-d5	82	6.469	6.467	(0.866)	263316	41.5960	39.44
*	48 Naphthalene-d8	136	7.468	7.466	(1.000)	599276	40.0000	
$	69 2-Fluorobiphenyl (Surr)	172	9.204	9.203	(0.886)	396605	36.8397	34.93
*	82 Acenaphthene-d10	164	10.390	10.389	(1.000)	313896	40.0000	
	100 N-Nitrosodiphenylamine	169	11.667	11.665	(0.883)	13864	1.95573	1.854(a)
$	104 2,4,6-Tribromophenol	330	11.875	11.868	(1.143)	93343	63.4821	60.19
*	121 Phenanthrene-d10	188	13.205	13.204	(1.000)	545266	40.0000	
$	139 Terphenyl-d14	244	16.416	16.409	(0.890)	435209	39.8418	37.78
*	153 Chrysene-d12	240	18.451	18.450	(1.000)	581240	40.0000	
	155 bis(2-ethylhexyl)Phthalate	149	18.638	18.631	(1.010)	290122	29.1165	27.61
*	166 Perylene-d12	264	21.170	21.164	(1.000)	641879	40.0000	

QC Flag Legend

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

Data File: JSMP3417.D

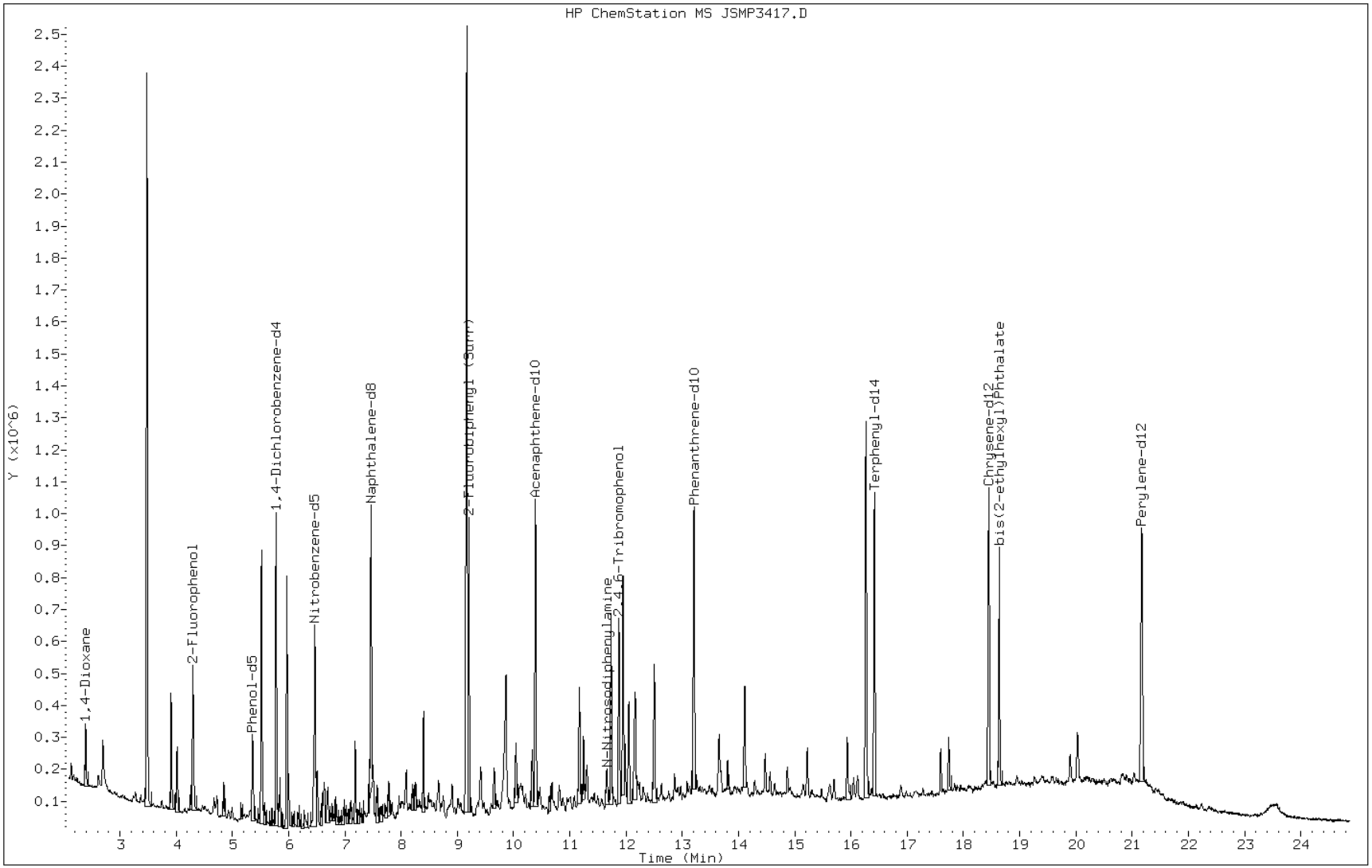
Date: 15-AUG-2012 23:17

Client ID: PZ-207-AS

Instrument: MSJ.i

Sample Info: 160-437-A-5-A

Operator: MAK



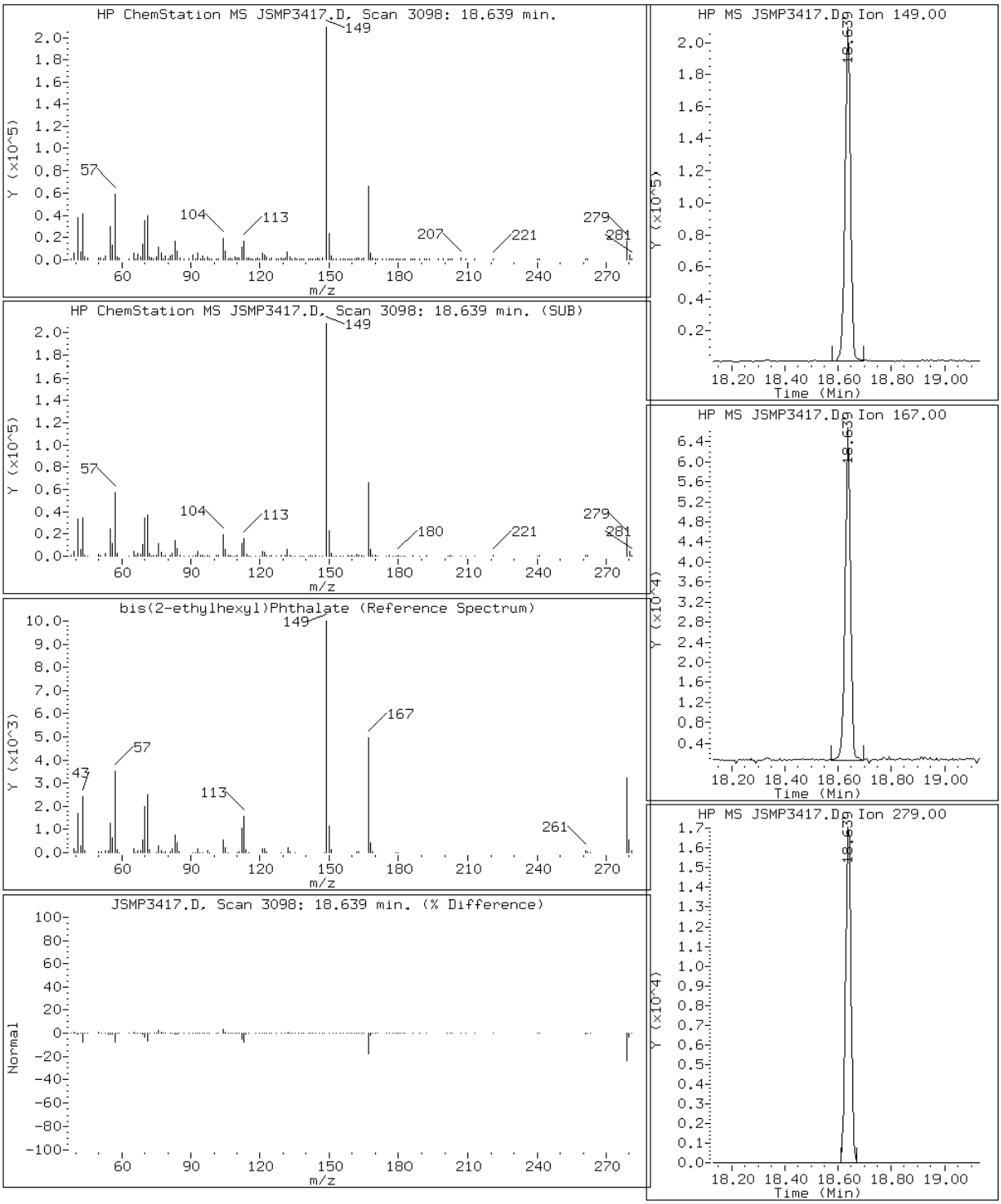
Data File: JSMP3417.D

Date: 15-AUG-2012 23:17

Client ID: PZ-207-AS Instrument: MSJ.i

Sample Info: 160-437-A-5-A Operator: MAK

155 bis(2-ethylhexyl)Phthalate



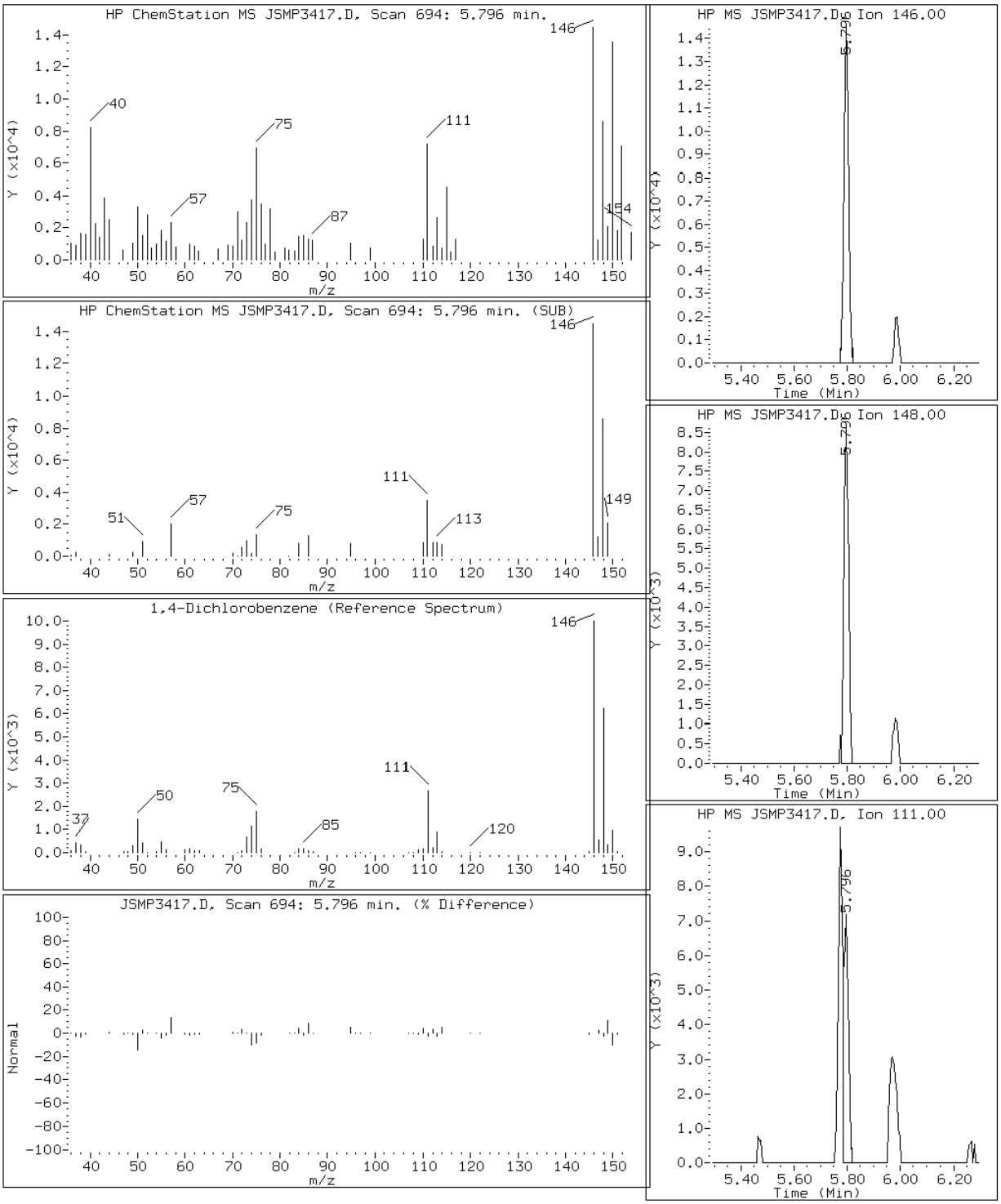
Data File: JSMP3417.D

Date: 15-AUG-2012 23:17

Client ID: PZ-207-AS Instrument: MSJ.i

Sample Info: 160-437-A-5-A Operator: MAK

23 1,4-Dichlorobenzene



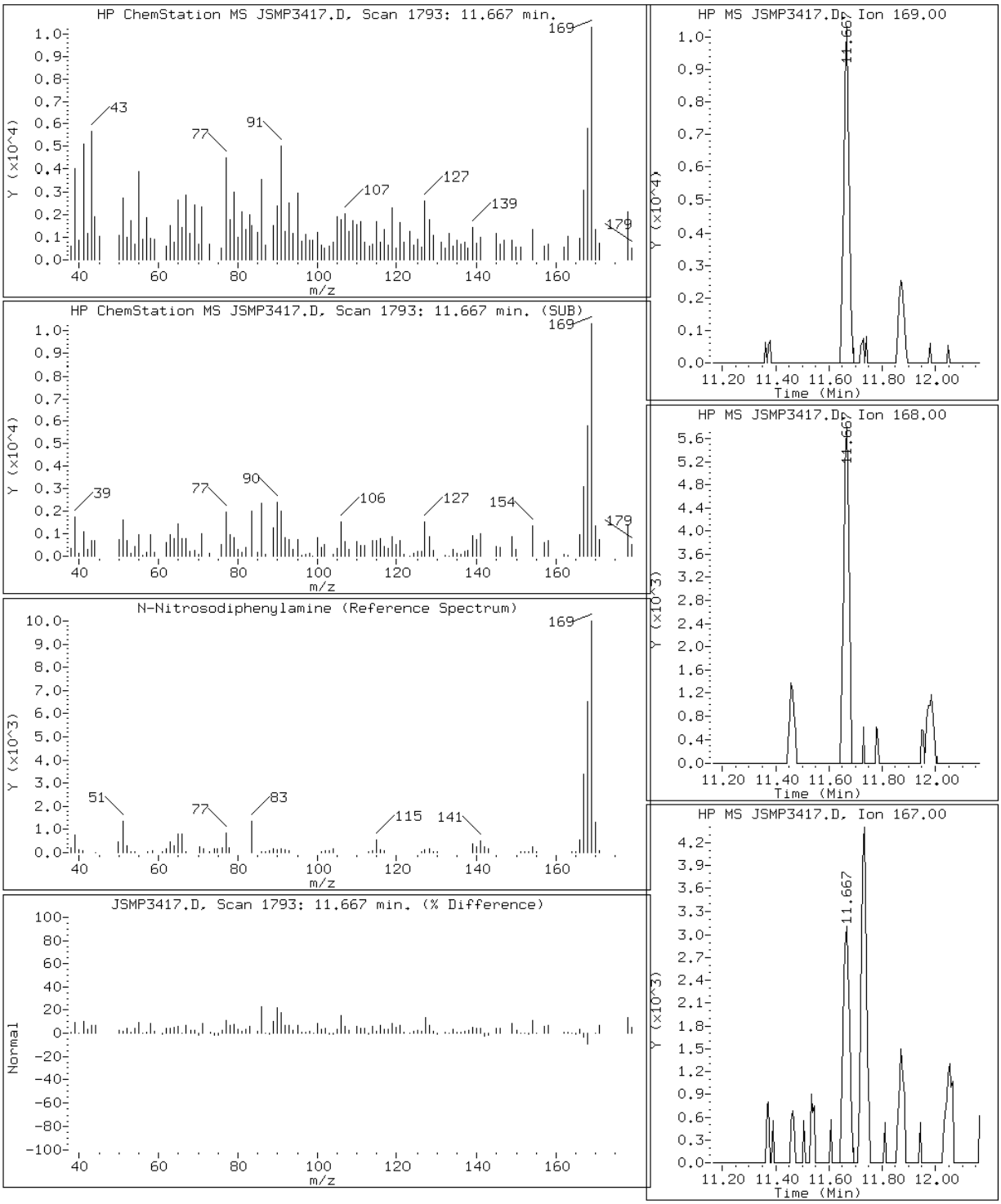
Data File: JSMP3417.D

Date: 15-AUG-2012 23:17

Client ID: PZ-207-AS Instrument: MSJ.i

Sample Info: 160-437-A-5-A Operator: MAK

100 N-Nitrosodiphenylamine



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Matrix: Water | Lab File ID: JSMP3418.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:16

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1055.1(mL) | Date Analyzed: 08/15/2012 23:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	1.8	J	9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Matrix: Water | Lab File ID: JSMP3418.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:16

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1055.1(mL) | Date Analyzed: 08/15/2012 23:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Matrix: Water | Lab File ID: JSMP3418.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:16

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1055.1(mL) | Date Analyzed: 08/15/2012 23:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	46		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	80		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	84		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	83		53-126
321-60-8	2-Fluorobiphenyl (Surr)	70		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3418.D
Lab Smp Id: 160-437-A-6-A Client Smp ID: D-12
Inj Date : 15-AUG-2012 23:49
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-6-A
Misc Info : 160-437-A-6-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1055.100	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	1 1,4-Dioxane	88	2.384	2.359	(0.413)	86892	38.3031	36.30
$	10 2-Fluorophenol	112	4.291	4.277	(0.743)	178269	34.3573	32.56
$	15 Phenol-d5	99	5.354	5.346	(0.927)	132409	20.5746	19.50
*	22 1,4-Dichlorobenzene-d4	152	5.776	5.773	(1.000)	166202	40.0000	
$	36 Nitrobenzene-d5	82	6.465	6.467	(0.866)	261038	42.0830	39.88
*	48 Naphthalene-d8	136	7.464	7.466	(1.000)	587216	40.0000	
$	69 2-Fluorobiphenyl (Surr)	172	9.206	9.203	(0.886)	357642	34.9084	33.08
	76 Dimethylphthalate	163	9.932	9.940	(0.956)	18568	1.91762	1.817(aM)
*	82 Acenaphthene-d10	164	10.392	10.389	(1.000)	298719	40.0000	
$	104 2,4,6-Tribromophenol	330	11.872	11.868	(1.142)	83592	59.7389	56.62
*	121 Phenanthrene-d10	188	13.207	13.204	(1.000)	491465	40.0000	
$	139 Terphenyl-d14	244	16.412	16.409	(0.890)	398493	41.5886	39.42
*	153 Chrysene-d12	240	18.448	18.450	(1.000)	509850	40.0000	
*	166 Perylene-d12	264	21.162	21.164	(1.000)	526954	40.0000	

QC Flag Legend

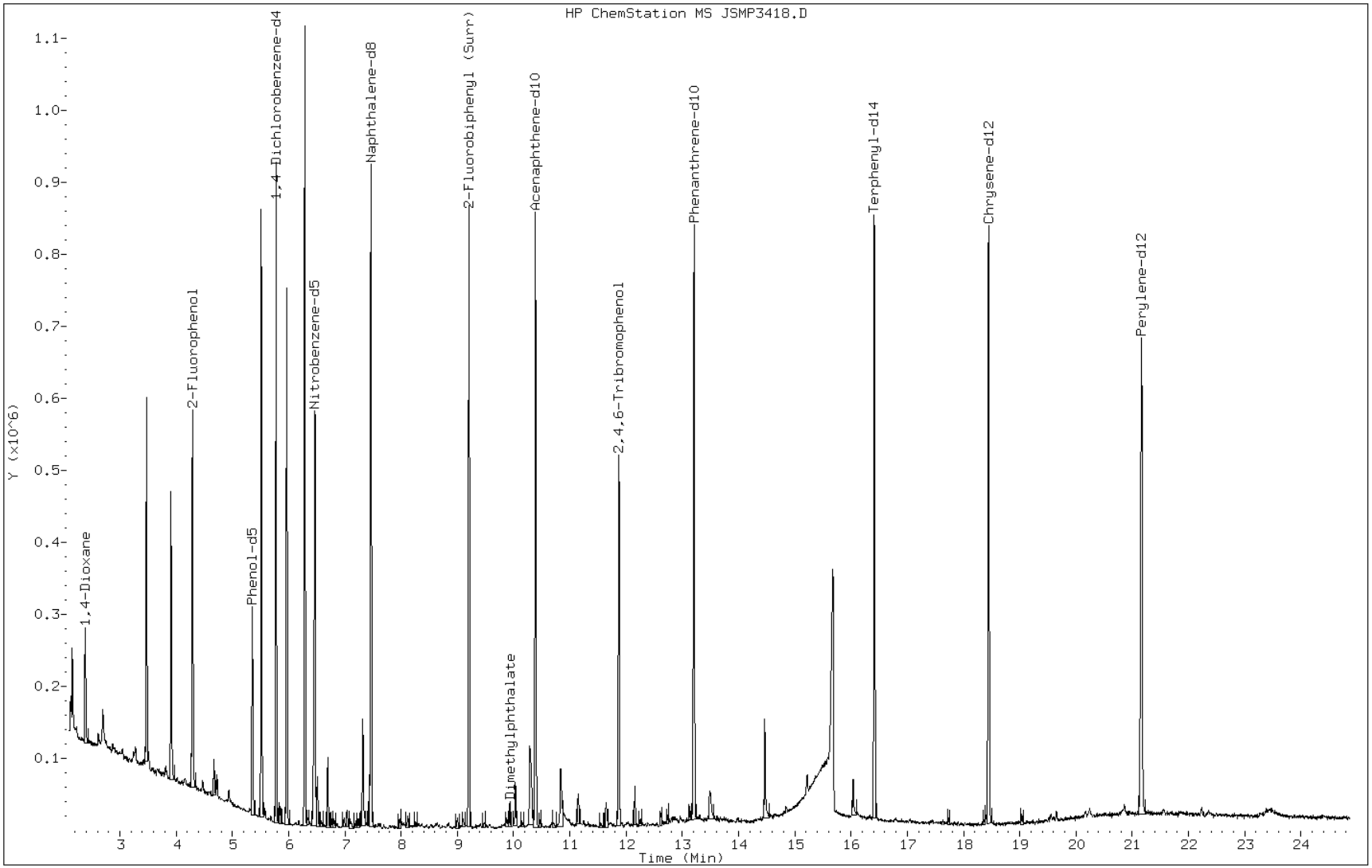
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

Data File: JSMP3418.D

Date: 15-AUG-2012 23:49

Client ID: D-12 Instrument: MSJ.i

Sample Info: 160-437-A-6-A Operator: MAK



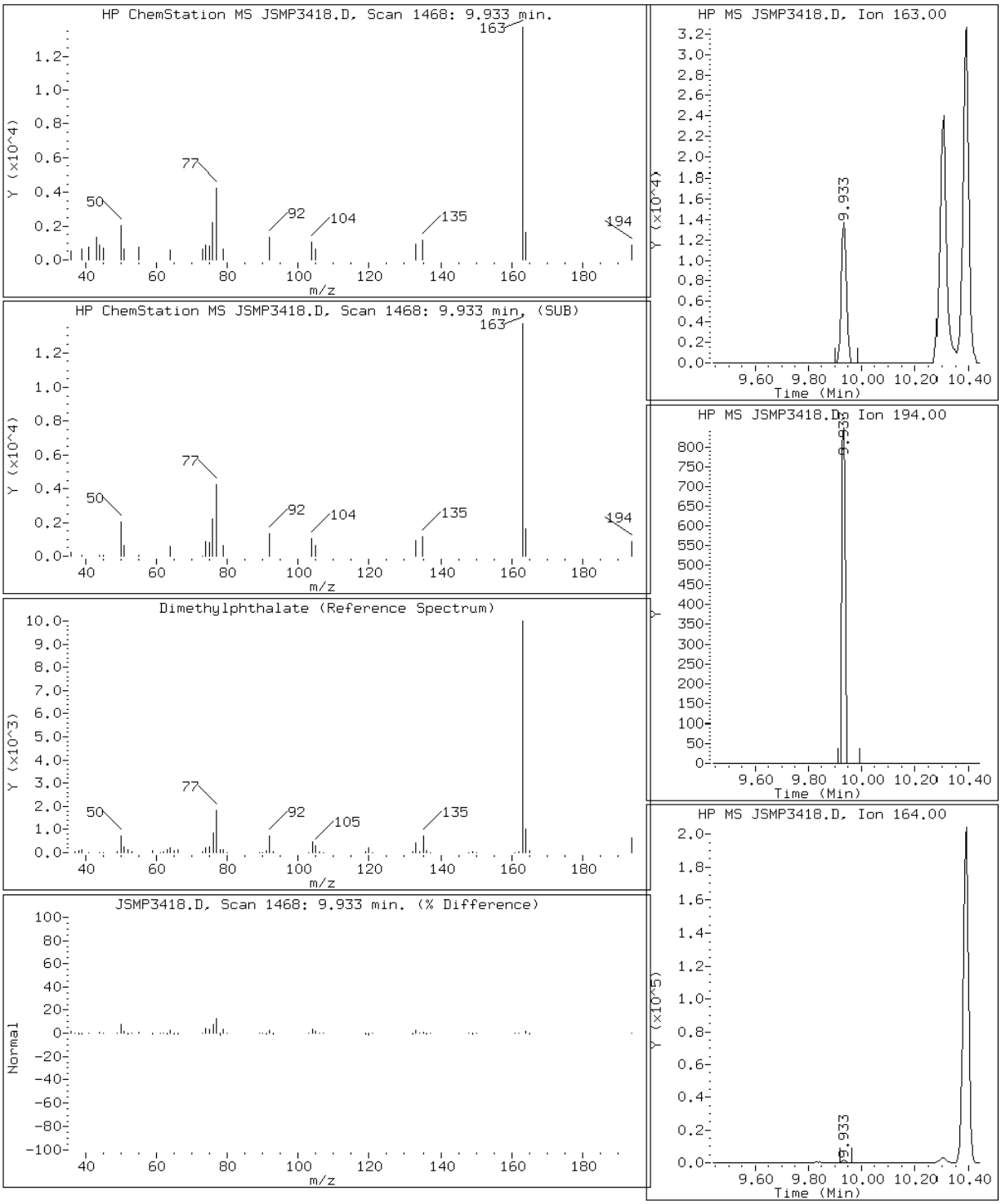
Data File: JSMP3418.D

Date: 15-AUG-2012 23:49

Client ID: D-12 Instrument: MSJ.i

Sample Info: 160-437-A-6-A Operator: MAK

76 Dimethylphthalate



Manual Integration Report

Data File: JSMP3418.D
Inj. Date and Time: 15-AUG-2012 23:49
Instrument ID: MSJ.i
Client ID: D-12
Compound: 76 Dimethylphthalate
CAS #: 131-11-3
Report Date: 08/17/2012

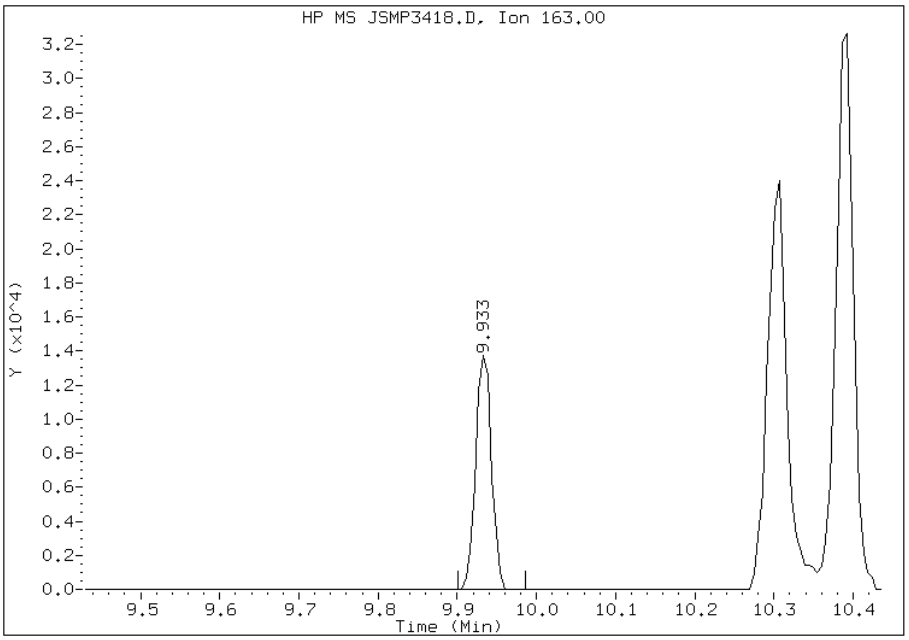
Processing Integration Results

RT: 9.93

Response: 18568

Amount: 2

Conc: 2



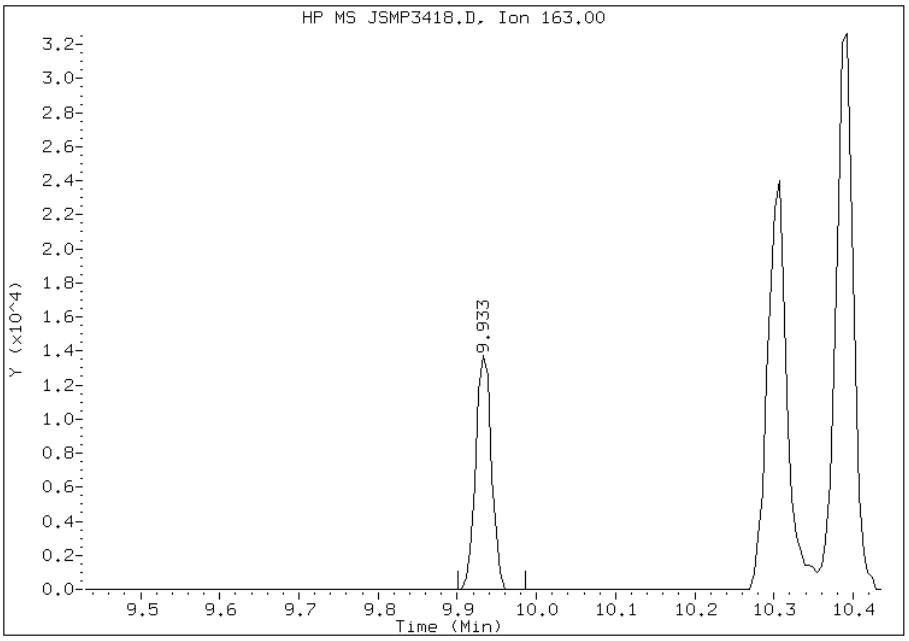
Manual Integration Results

RT: 9.93

Response: 18568

Amount: 2

Conc: 2



Manually Integrated By: kuessnerm
Modification Date: 16-Aug-2012 17:07
Manual Integration Reason: Analyte not Identified by the Data System

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-305-AI | Lab Sample ID: 160-437-7

Matrix: Water | Lab File ID: JSMP3419.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:30

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.1(mL) | Date Analyzed: 08/16/2012 00:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-305-AI | Lab Sample ID: 160-437-7

Matrix: Water | Lab File ID: JSMP3419.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:30

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.1(mL) | Date Analyzed: 08/16/2012 00:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: PZ-305-AI | Lab Sample ID: 160-437-7

Matrix: Water | Lab File ID: JSMP3419.D

Analysis Method: 8270D | Date Collected: 08/08/2012 14:30

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1057.1(mL) | Date Analyzed: 08/16/2012 00:21

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	41		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	74		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	79		45-99
4165-62-2	Phenol-d5 (Surr)	26		10-70
1718-51-0	Terphenyl-d14 (Surr)	81		53-126
321-60-8	2-Fluorobiphenyl (Surr)	68		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3419.D
Lab Smp Id: 160-437-A-7-A Client Smp ID: PZ-305-AI
Inj Date : 16-AUG-2012 00:21
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-7-A
Misc Info : 160-437-A-7-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1057.100	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 10 2-Fluorophenol	112	4.289	4.277	(0.743)	167662	31.0379	29.36
$ 15 Phenol-d5	99	5.347	5.346	(0.926)	129659	19.3522	18.31
* 22 1,4-Dichlorobenzene-d4	152	5.774	5.773	(1.000)	173030	40.0000	
$ 36 Nitrobenzene-d5	82	6.463	6.467	(0.866)	249811	39.3163	37.19
* 48 Naphthalene-d8	136	7.462	7.466	(1.000)	601506	40.0000	
$ 69 2-Fluorobiphenyl (Surr)	172	9.198	9.203	(0.886)	356983	34.1809	32.33
* 82 Acenaphthene-d10	164	10.384	10.389	(1.000)	304515	40.0000	
$ 104 2,4,6-Tribromophenol	330	11.864	11.868	(1.142)	78745	55.2039	52.22
* 121 Phenanthrene-d10	188	13.200	13.204	(1.000)	489746	40.0000	
$ 139 Terphenyl-d14	244	16.405	16.409	(0.890)	378269	40.5931	38.40
* 153 Chrysene-d12	240	18.440	18.450	(1.000)	495844	40.0000	
* 166 Perylene-d12	264	21.154	21.164	(1.000)	512852	40.0000	

Data File: JSMP3419.D

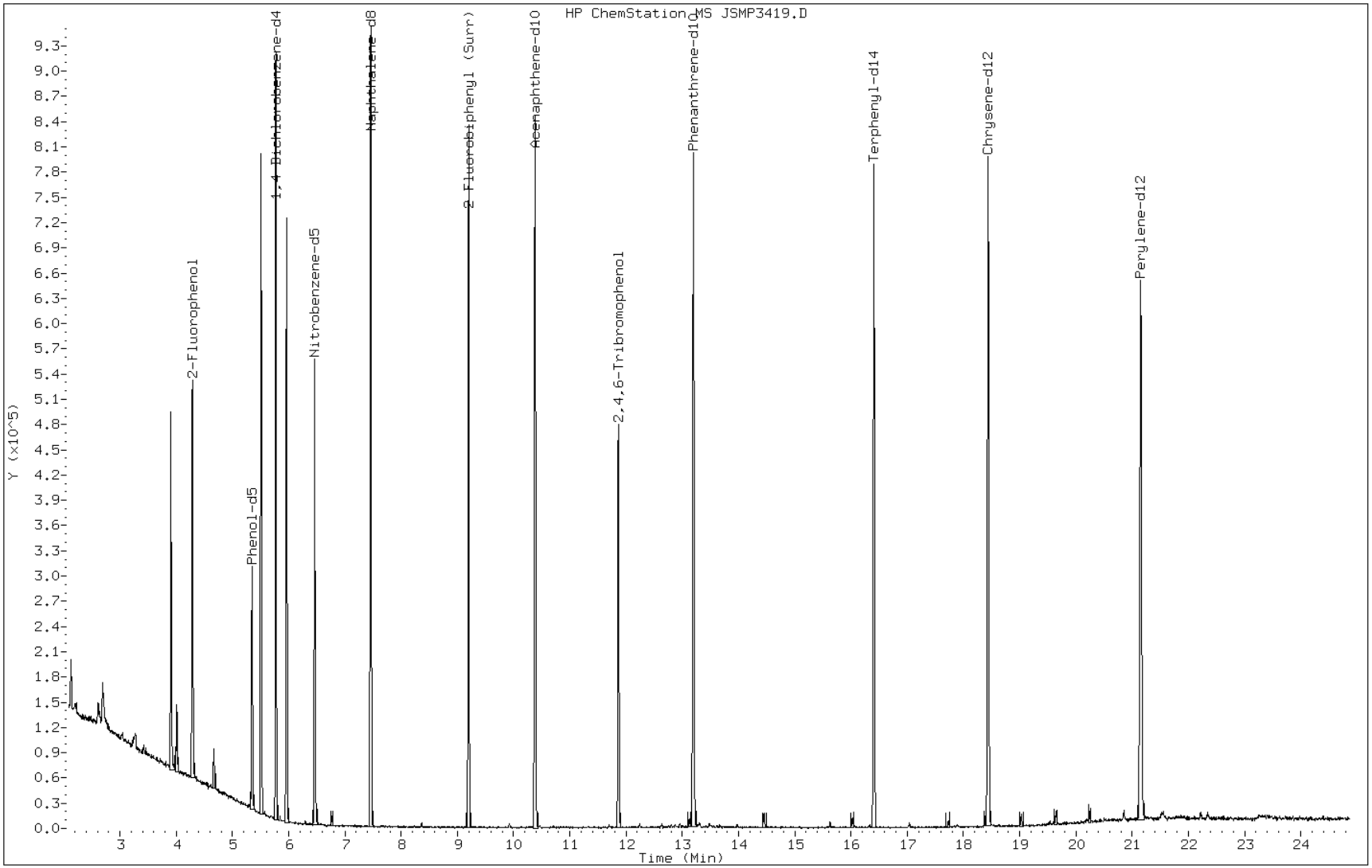
Date: 16-AUG-2012 00:21

Client ID: PZ-305-AI

Instrument: MSJ.i

Sample Info: 160-437-A-7-A

Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Matrix: Water | Lab File ID: JSMP3420.D

Analysis Method: 8270D | Date Collected: 08/08/2012 15:02

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1058.2(mL) | Date Analyzed: 08/16/2012 00:54

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Matrix: Water | Lab File ID: JSMP3420.D

Analysis Method: 8270D | Date Collected: 08/08/2012 15:02

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1058.2(mL) | Date Analyzed: 08/16/2012 00:54

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Matrix: Water | Lab File ID: JSMP3420.D

Analysis Method: 8270D | Date Collected: 08/08/2012 15:02

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1058.2(mL) | Date Analyzed: 08/16/2012 00:54

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	50		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	81		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	84		45-99
4165-62-2	Phenol-d5 (Surr)	43		10-70
1718-51-0	Terphenyl-d14 (Surr)	83		53-126
321-60-8	2-Fluorobiphenyl (Surr)	71		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3420.D
Lab Smp Id: 160-437-A-8-A Client Smp ID: S-10
Inj Date : 16-AUG-2012 00:54
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-8-A
Misc Info : 160-437-A-8-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1058.200	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	1 1,4-Dioxane	88	2.374	2.359	(0.412)	342351	155.837	147.3
$	10 2-Fluorophenol	112	4.281	4.277	(0.742)	189870	37.7872	35.71
$	15 Phenol-d5	99	5.344	5.346	(0.927)	203059	32.5823	30.79
*	22 1,4-Dichlorobenzene-d4	152	5.766	5.773	(1.000)	160950	40.0000	
	25 Benzyl Alcohol	108	5.937	5.944	(1.030)	5477	1.59738	1.510(a)
$	36 Nitrobenzene-d5	82	6.455	6.467	(0.866)	249257	41.8010	39.50
*	48 Naphthalene-d8	136	7.454	7.466	(1.000)	564497	40.0000	
$	69 2-Fluorobiphenyl (Surr)	172	9.196	9.203	(0.886)	349889	35.2879	33.35
*	82 Acenaphthene-d10	164	10.376	10.389	(1.000)	289100	40.0000	
$	104 2,4,6-Tribromophenol	330	11.862	11.868	(1.143)	82426	60.8655	57.52
*	121 Phenanthrene-d10	188	13.192	13.204	(1.000)	483194	40.0000	
$	139 Terphenyl-d14	244	16.402	16.409	(0.890)	392332	41.2913	39.02
*	153 Chrysene-d12	240	18.432	18.450	(1.000)	505582	40.0000	
*	166 Perylene-d12	264	21.146	21.164	(1.000)	526821	40.0000	

QC Flag Legend

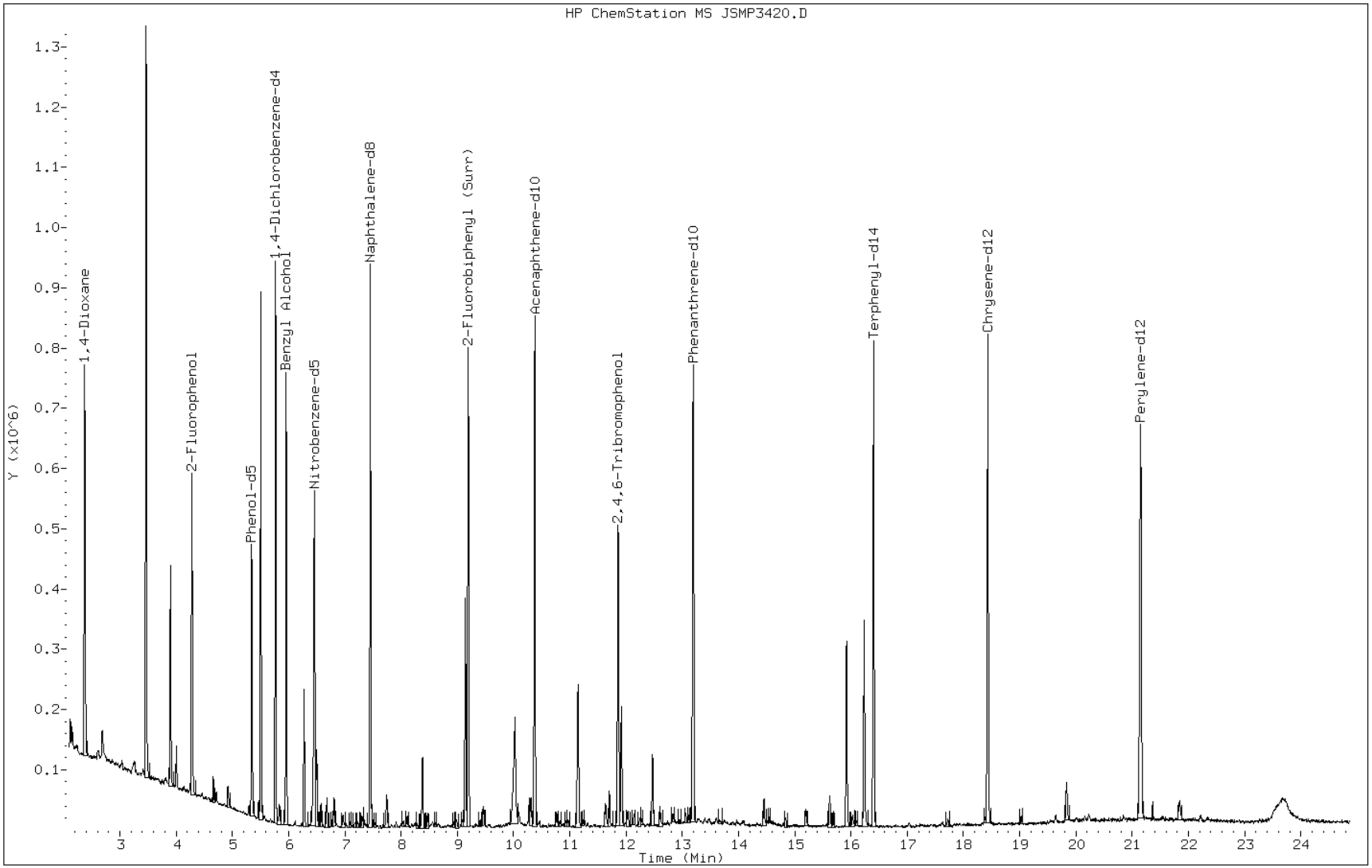
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JSMP3420.D

Date: 16-AUG-2012 00:54

Client ID: S-10 Instrument: MSJ.i

Sample Info: 160-437-A-8-A Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Matrix: Water | Lab File ID: JSMP3421.D

Analysis Method: 8270D | Date Collected: 08/08/2012 00:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1056.8(mL) | Date Analyzed: 08/16/2012 01:26

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		9.5	0.95
208-96-8	Acenaphthylene	ND		9.5	0.95
120-12-7	Anthracene	ND		9.5	0.95
56-55-3	Benzo[a]anthracene	ND		9.5	0.95
205-99-2	Benzo[b]fluoranthene	ND		9.5	0.95
207-08-9	Benzo[k]fluoranthene	ND		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	ND		9.5	0.95
50-32-8	Benzo[a]pyrene	ND		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	ND		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	ND		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	ND		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	ND		9.5	0.95
85-68-7	Butyl benzyl phthalate	ND		9.5	0.95
86-74-8	Carbazole	ND		9.5	0.95
106-47-8	4-Chloroaniline	ND		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	ND		9.5	0.95
91-58-7	2-Chloronaphthalene	ND		9.5	0.95
95-57-8	2-Chlorophenol	ND		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	ND		9.5	0.95
218-01-9	Chrysene	ND		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	ND		9.5	0.95
132-64-9	Dibenzofuran	ND		9.5	0.95
84-74-2	Di-n-butyl phthalate	ND		9.5	0.95
95-50-1	1,2-Dichlorobenzene	ND		9.5	0.95
541-73-1	1,3-Dichlorobenzene	ND		9.5	0.95
106-46-7	1,4-Dichlorobenzene	ND		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	ND		47	1.2
120-83-2	2,4-Dichlorophenol	ND		9.5	1.0
84-66-2	Diethyl phthalate	ND		9.5	0.95
105-67-9	2,4-Dimethylphenol	ND		9.5	0.95
131-11-3	Dimethyl phthalate	ND		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	ND		9.5	0.95
51-28-5	2,4-Dinitrophenol	ND		47	1.9
121-14-2	2,4-Dinitrotoluene	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Matrix: Water | Lab File ID: JSMP3421.D

Analysis Method: 8270D | Date Collected: 08/08/2012 00:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1056.8(mL) | Date Analyzed: 08/16/2012 01:26

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		9.5	2.0
117-84-0	Di-n-octyl phthalate	ND		9.5	0.95
206-44-0	Fluoranthene	ND		9.5	0.95
86-73-7	Fluorene	ND		9.5	0.95
118-74-1	Hexachlorobenzene	ND		9.5	0.95
87-68-3	Hexachlorobutadiene	ND		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	ND		9.5	0.95
67-72-1	Hexachloroethane	ND		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	ND		9.5	0.95
78-59-1	Isophorone	ND		9.5	0.95
91-57-6	2-Methylnaphthalene	ND		9.5	0.95
95-48-7	2-Methylphenol	ND		9.5	0.95
15831-10-4	3 & 4 Methylphenol	ND		19	1.9
91-20-3	Naphthalene	ND		9.5	0.95
88-74-4	2-Nitroaniline	ND		9.5	0.95
99-09-2	3-Nitroaniline	ND		9.5	0.95
100-01-6	4-Nitroaniline	ND		9.5	0.95
98-95-3	Nitrobenzene	ND		9.5	1.0
88-75-5	2-Nitrophenol	ND		9.5	0.95
100-02-7	4-Nitrophenol	ND		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	ND		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	ND		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	ND		9.5	0.95
87-86-5	Pentachlorophenol	ND		9.5	1.2
85-01-8	Phenanthrene	ND		9.5	0.95
108-95-2	Phenol	ND		9.5	1.9
129-00-0	Pyrene	ND		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	ND		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	ND		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	ND		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Matrix: Water | Lab File ID: JSMP3421.D

Analysis Method: 8270D | Date Collected: 08/08/2012 00:00

Extract. Method: 3510C | Date Extracted: 08/13/2012 13:55

Sample wt/vol: 1056.8(mL) | Date Analyzed: 08/16/2012 01:26

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	64		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	83		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	81		45-99
4165-62-2	Phenol-d5 (Surr)	46		10-70
1718-51-0	Terphenyl-d14 (Surr)	81		53-126
321-60-8	2-Fluorobiphenyl (Surr)	71		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3421.D
Lab Smp Id: 160-437-A-9-A Client Smp ID: DUP 05
Inj Date : 16-AUG-2012 01:26
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-437-A-9-A
Misc Info : 160-437-A-9-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1056.800	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
1 1,4-Dioxane	88	2.371	2.359	(0.411)	84006	38.2198	36.16
$ 10 2-Fluorophenol	112	4.284	4.277	(0.743)	241998	48.1370	45.55
$ 15 Phenol-d5	99	5.347	5.346	(0.927)	214015	34.3227	32.48
* 22 1,4-Dichlorobenzene-d4	152	5.769	5.773	(1.000)	161032	40.0000	
25 Benzyl Alcohol	108	5.940	5.944	(1.030)	4176	1.21732	1.152(a)
$ 36 Nitrobenzene-d5	82	6.458	6.467	(0.866)	239586	40.6158	38.43
* 48 Naphthalene-d8	136	7.457	7.466	(1.000)	558428	40.0000	
$ 69 2-Fluorobiphenyl (Surr)	172	9.193	9.203	(0.886)	350696	35.4277	33.52
* 82 Acenaphthene-d10	164	10.379	10.389	(1.000)	288624	40.0000	
$ 104 2,4,6-Tribromophenol	330	11.864	11.868	(1.143)	84191	62.2714	58.92
* 121 Phenanthrene-d10	188	13.194	13.204	(1.000)	488822	40.0000	
$ 139 Terphenyl-d14	244	16.400	16.409	(0.890)	397806	40.6662	38.48
* 153 Chrysene-d12	240	18.435	18.450	(1.000)	520516	40.0000	
* 166 Perylene-d12	264	21.149	21.164	(1.000)	550779	40.0000	

QC Flag Legend

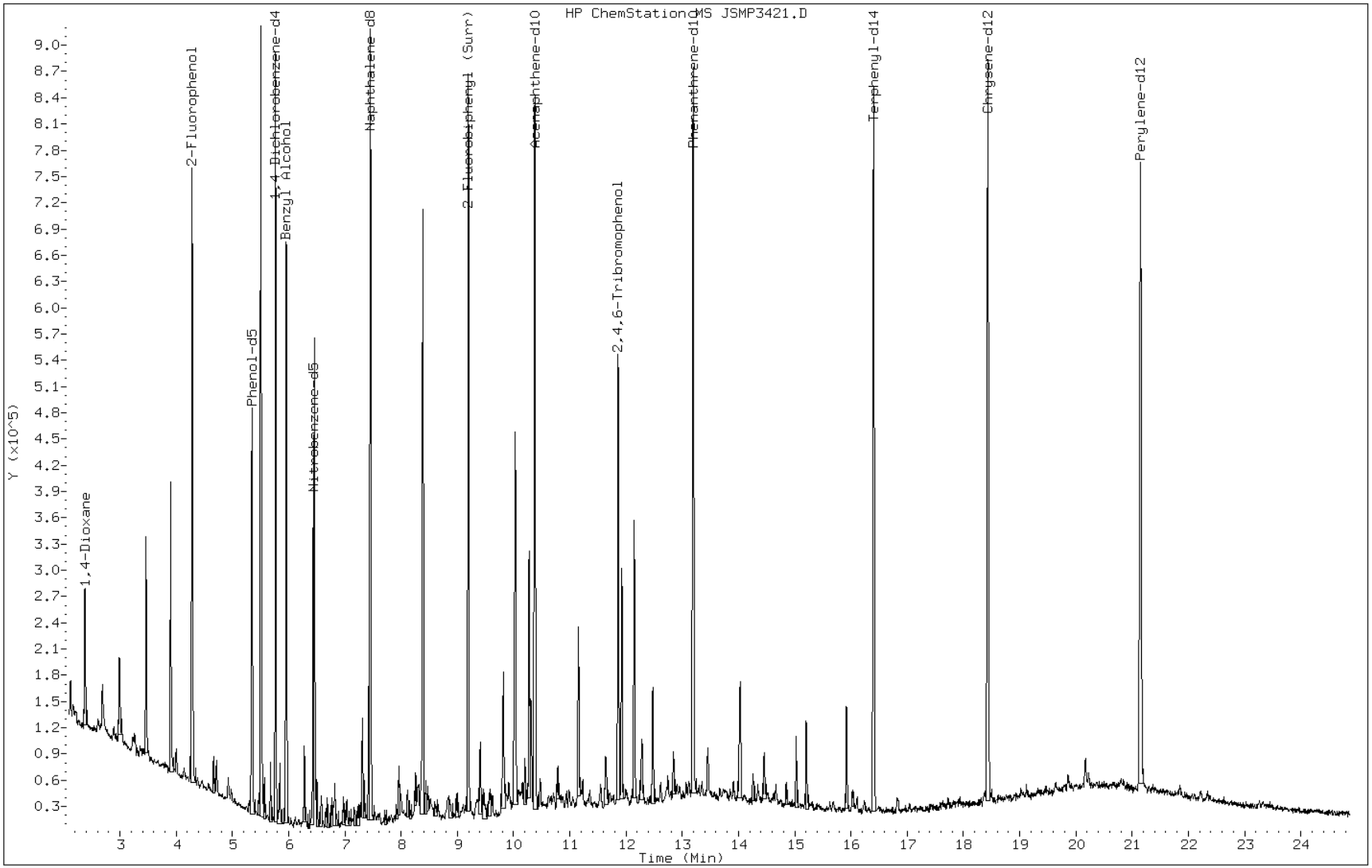
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JSMP3421.D

Date: 16-AUG-2012 01:26

Client ID: DUP 05 Instrument: MSJ.i

Sample Info: 160-437-A-9-A Operator: MAK



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 160-7404/8	JICL2878.D
Level 2	STD010 160-7404/7	JICL2877.D
Level 3	STD020 160-7404/6	JICL2876.D
Level 4	ICIS 160-7404/2	JICL2872.D
Level 5	STD080 160-7404/5	JICL2875.D
Level 6	STD120 160-7404/4	JICL2874.D
Level 7	STD160 160-7404/3	JICL2873.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.5054 0.5363	0.5714 0.5487	0.5721	0.5521	0.5357	Ave		0.5460			0.0100	4.2		20.0			
N-Nitrosodimethylamine	0.8024 0.7987	0.8185 0.8021	0.8477	0.8167	0.8083	Ave		0.8135			0.0100	2.1		20.0			
Pyridine	1.4911 1.3562	1.5141 1.3528	1.5209	1.4005	1.4104	Ave		1.4351			0.0100	5.1		20.0			
Dimethylformamide	0.8899 0.7329	0.8141 0.7361	0.7912	0.7659	0.7642	Ave		0.7849			0.0100	6.9		20.0			
Cyclohexanol	0.9746 0.9853	1.0296 0.9868	1.0391	0.9984	1.0005	Ave		1.0021			0.0100	2.4		20.0			
Phenol	1.6190 1.6650	1.6955 1.6601	1.7487	1.6626	1.6926	Ave		1.6776			0.8000	2.4		20.0			
Bis(2-chloroethyl)ether	1.2396 1.2723	1.2761 1.3043	1.3093	1.2716	1.2782	Ave		1.2787			0.7000	1.8		20.0			
2-Chlorophenol	1.3212 1.3066	1.3653 1.3131	1.3937	1.3488	1.3354	Ave		1.3406			0.8000	2.3		20.0			
1,3-Dichlorobenzene	1.4945 1.4940	1.5281 1.5336	1.5149	1.5215	1.4800	Ave		1.5095			0.0100	1.3		20.0			
1,4-Dichlorobenzene	1.4887 1.5495	1.5607 1.5750	1.5668	1.5653	1.5357	Ave		1.5488			0.0100	1.9		20.0			
Benzyl alcohol	0.8016 0.8291	0.8637 0.8383	0.8894	0.8647	0.8781	Ave		0.8521			0.0100	3.6		20.0			
1,2-Dichlorobenzene	1.4579 1.4171	1.4382 1.4521	1.4530	1.4198	1.4109	Ave		1.4356			0.0100	1.4		20.0			
2-Methylphenol	1.1525 1.1296	1.1987 1.1256	1.2140	1.1603	1.1602	Ave		1.1630			0.6000	2.8		20.0			
Benzoic acid	+++++ 0.2202	0.1706 0.2168	0.2101	0.2173	0.2283	Ave		0.2105			0.0100	9.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,2'-oxybis[1-chloropropane]	1.3239 1.3379	1.3417 1.3435	1.4007	1.3109	1.3506	Ave		1.3442			0.0100	2.1		20.0			
N-Nitrosodi-n-propylamine	0.8790 0.9217	0.9461 0.9096	0.9644	0.9513	0.9540	Ave		0.9323			0.5000	3.3		20.0			
Hexachloroethane	0.5642 0.5804	0.5631 0.5952	0.5946	0.5960	0.5801	Ave		0.5819			0.3000	2.4		20.0			
Nitrobenzene	0.4193 0.4369	0.4292 0.4362	0.4307	0.4265	0.4322	Ave		0.4301			0.2000	1.4		20.0			
Isophorone	0.6714 0.6902	0.6828 0.6879	0.7037	0.6935	0.7090	Ave		0.6912			0.4000	1.8		20.0			
2-Nitrophenol	0.1717 0.1985	0.1916 0.2018	0.1892	0.1960	0.1988	Ave		0.1925			0.1000	5.3		20.0			
2,4-Dimethylphenol	0.3506 0.3851	0.3698 0.3829	0.3760	0.3838	0.3879	Ave		0.3766			0.2000	3.5		20.0			
Bis(2-chloroethoxy)methane	0.3884 0.4061	0.3931 0.4115	0.4020	0.4006	0.4080	Ave		0.4014			0.0100	2.1		20.0			
2,4-Dichlorophenol	0.2913 0.2916	0.2852 0.2930	0.2931	0.2910	0.2936	Ave		0.2913			0.0100	1.0		20.0			
1,2,4-Trichlorobenzene	0.3310 0.3368	0.3230 0.3417	0.3261	0.3310	0.3304	Ave		0.3314			0.0100	1.9		20.0			
Naphthalene	1.0615 1.0998	1.0717 1.1206	1.0728	1.0660	1.0875	Ave		1.0828			0.7000	2.0		20.0			
4-Chloroaniline	0.4120 0.4175	0.4200 0.4154	0.4216	0.4194	0.4279	Ave		0.4191			0.0100	1.2		20.0			
Hexachlorobutadiene	0.1993 0.2056	0.2061 0.2089	0.2051	0.2046	0.2043	Ave		0.2048			0.0100	1.4		20.0			
4-Chloro-3-methylphenol	0.2973 0.3199	0.3077 0.3179	0.3231	0.3209	0.3307	Ave		0.3168			0.2000	3.5		20.0			
2-Methylnaphthalene	0.6718 0.7107	0.6810 0.7216	0.6935	0.7014	0.7081	Ave		0.6983			0.4000	2.5		20.0			
Hexachlorocyclopentadiene	0.2471 0.3214	0.2645 0.3326	0.2807	0.3084	0.3062	Ave		0.2944			0.0500	10.6		20.0			
2,4,6-Trichlorophenol	0.3597 0.3854	0.3769 0.3942	0.3796	0.3845	0.3872	Ave		0.3811			0.2000	2.9		20.0			
2,4,5-Trichlorophenol	0.3724 0.4064	0.3825 0.4019	0.3910	0.3991	0.4049	Ave		0.3940			0.2000	3.2		20.0			
2-Chloronaphthalene	1.1825 1.2134	1.1505 1.2271	1.1851	1.1836	1.1894	Ave		1.1902			0.8000	2.1		20.0			
2-Nitroaniline	0.3328 0.3947	0.3610 0.3919	0.3821	0.3833	0.3927	Ave		0.3769			0.0100	6.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dimethyl phthalate	1.2597 1.3062	1.2816 1.3172	1.3104	1.2931	1.3078	Ave		1.2966			0.0100	1.6		20.0			
2,6-Dinitrotoluene	0.2423 0.3054	0.2750 0.3066	0.2893	0.2955	0.3081	Ave		0.2889			0.2000	8.2		20.0			
Acenaphthylene	1.7200 1.8433	1.7965 1.8685	1.7968	1.7885	1.8300	Ave		1.8063			0.9000	2.7		20.0			
3-Nitroaniline	0.2663 0.3166	0.2950 0.3150	0.3141	0.3031	0.3172	Ave		0.3039			0.0100	6.1		20.0			
Acenaphthene	1.1552 1.1876	1.1673 1.2025	1.1715	1.1582	1.1875	Ave		1.1757			0.0100	1.5		20.0			
2,4-Dinitrophenol	0.0821 0.2099	0.1370 0.2192	0.1720	0.1867	0.2088	Lin1	0.0900	0.2182			0.0100				0.9986		0.9900
4-Nitrophenol	0.1799 0.2246	0.2056 0.2226	0.2207	0.2276	0.2222	Ave		0.2148			0.0100	7.9		20.0			
2,4-Dinitrotoluene	0.3341 0.4023	0.3605 0.4035	0.3804	0.3910	0.4017	Ave		0.3819			0.2000	6.9		20.0			
Dibenzofuran	1.5931 1.6944	1.6212 1.7082	1.6523	1.6526	1.6786	Ave		1.6572			0.8000	2.4		20.0			
Diethyl phthalate	1.2278 1.2684	1.2319 1.2764	1.2514	1.2662	1.2711	Ave		1.2562			0.0100	1.6		20.0			
Fluorene	1.2682 1.3816	1.3025 1.3992	1.3447	1.3461	1.3703	Ave		1.3447			0.9000	3.4		20.0			
4-Chlorophenyl phenyl ether	0.6498 0.6664	0.6538 0.6741	0.6631	0.6671	0.6615	Ave		0.6623			0.4000	1.2		20.0			
4-Nitroaniline	0.2774 0.3081	0.3022 0.3083	0.3038	0.3068	0.3155	Ave		0.3032			0.0100	4.0		20.0			
4,6-Dinitro-2-methylphenol	0.0994 0.1631	0.1183 0.1635	0.1382	0.1494	0.1587	Lin1	0.0616	0.1645			0.0100				0.9994		0.9900
N-Nitrosodiphenylamine	0.4943 0.5329	0.5119 0.5357	0.5230	0.5120	0.5304	Ave		0.5200			0.0100	2.8		20.0			
Azobenzene	0.8027 0.8751	0.8374 0.8815	0.8618	0.8537	0.8734	Ave		0.8551			0.0100	3.2		20.0			
4-Bromophenyl phenyl ether	0.2136 0.2230	0.2144 0.2284	0.2197	0.2219	0.2235	Ave		0.2206			0.0100	2.4		20.0			
Hexachlorobenzene	0.2236 0.2329	0.2295 0.2355	0.2339	0.2385	0.2330	Ave		0.2324			0.1000	2.0		20.0			
Pentachlorophenol	0.1249 0.1783	0.1479 0.1803	0.1608	0.1682	0.1767	Ave		0.1624			0.0500	12.4		20.0			
Phenanthrene	1.0999 1.1326	1.1111 1.1384	1.1164	1.1234	1.1281	Ave		1.1214			0.7000	1.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Anthracene	1.0839 1.1459	1.1182 1.1676	1.1351	1.1346	1.1604	Ave		1.1351			0.7000	2.5		20.0			
Carbazole	0.9259 0.9691	0.9402 0.9833	0.9601	0.9573	0.9762	Ave		0.9589			0.0100	2.1		20.0			
Di-n-butyl phthalate	1.0693 1.2491	1.1255 1.2646	1.1848	1.2160	1.2323	Ave		1.1917			0.0100	6.0		20.0			
Fluoranthene	1.0440 1.1364	1.0854 1.1513	1.1135	1.1326	1.1519	Ave		1.1164			0.6000	3.5		20.0			
Pyrene	1.1647 1.2382	1.2048 1.2610	1.2144	1.2047	1.2269	Ave		1.2164			0.6000	2.5		20.0			
Di-n-octyl phthalate	+++++ 1.2333	0.9630 1.2578	1.0641	1.1191	1.2076	Ave		1.1408			0.0100	10.0		20.0			
Butyl benzyl phthalate	0.4598 0.5411	0.4939 0.5480	0.5126	0.5172	0.5399	Ave		0.5161			0.0100	6.1		20.0			
3,3'-Dichlorobenzidine	0.3124 0.4099	0.3568 0.4157	0.3820	0.3909	0.4115	Ave		0.3827			0.0100	9.7		20.0			
Benzo[a]anthracene	0.9339 0.9864	0.9561 0.9954	0.9723	0.9643	0.9801	Ave		0.9698			0.8000	2.1		20.0			
Chrysene	1.0020 1.0168	0.9938 1.0188	1.0313	1.0019	1.0137	Ave		1.0112			0.7000	1.3		20.0			
Bis(2-ethylhexyl) phthalate	0.5721 0.7385	0.6372 0.7477	0.6819	0.6940	0.7286	Ave		0.6857			0.0100	9.2		20.0			
Benzo[b]fluoranthene	0.9325 1.0410	1.0133 1.0962	1.0326	1.0492	1.0435	Ave		1.0298			0.7000	4.8		20.0			
Benzo[k]fluoranthene	1.0273 1.0674	1.0078 1.0506	1.0701	1.0631	1.0979	Ave		1.0549			0.7000	2.8		20.0			
Benzo[a]pyrene	0.9159 1.0557	0.9634 1.0677	1.0041	1.0309	1.0571	Ave		1.0135			0.7000	5.6		20.0			
Indeno[1,2,3-cd]pyrene	0.6862 1.1103	0.7476 1.1017	0.8030	0.8829	1.0039	Lin1	0.0755	1.0923			0.5000				0.9942		0.9900
Dibenz(a,h)anthracene	0.7775 1.1417	0.8718 1.1380	0.8745	0.9575	1.0674	Ave		0.9755			0.4000	14.7		20.0			
Benzo[g,h,i]perylene	0.8153 1.1423	0.8717 1.1527	0.9113	0.9709	1.0897	Ave		0.9934			0.5000	13.7		20.0			
2-Fluorophenol (Surr)	1.2355 1.2185	1.2826 1.2112	1.2906	1.2555	1.2475	Ave		1.2488			0.0100	2.4		20.0			
Phenol-d5 (Surr)	1.4997 1.5203	1.5472 1.5159	1.6080	1.5749	1.5760	Ave		1.5489			0.0100	2.5		20.0			
Nitrobenzene-d5 (Surr)	0.4054 0.4297	0.4134 0.4329	0.4222	0.4248	0.4293	Ave		0.4225			0.0100	2.3		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
2-Fluorobiphenyl (Surr)	1.3447 1.4053	1.3476 1.4269	1.3474	1.3519	1.3794	Ave		1.3719			0.0100	2.4		20.0			
2,4,6-Tribromophenol (Surr)	0.1503 0.1967	0.1897 0.1968	0.1813	0.1991	0.1978	Ave		0.1874			0.0100	9.3		20.0			
Terphenyl-d14 (Surr)	0.7021 0.7718	0.7344 0.7859	0.7475	0.7555	0.7650	Ave		0.7517			0.0100	3.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD005 160-7404/8	JICL2878.D
Level 2	STD010 160-7404/7	JICL2877.D
Level 3	STD020 160-7404/6	JICL2876.D
Level 4	ICIS 160-7404/2	JICL2872.D
Level 5	STD080 160-7404/5	JICL2875.D
Level 6	STD120 160-7404/4	JICL2874.D
Level 7	STD160 160-7404/3	JICL2873.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	11694 314330	30560 425605	57264	113005	206315	5.00 120	10.0 160	20.0	50.0	80.0
N-Nitrosodimethylamine	DCB	Ave	18565 468088	43770 622125	84844	167176	311329	5.00 120	10.0 160	20.0	50.0	80.0
Pyridine	DCB	Ave	34499 794829	80974 1049268	152222	286674	543220	5.00 120	10.0 160	20.0	50.0	80.0
Dimethylformamide	DCB	Ave	20590 429532	43535 570985	79187	156780	294328	5.00 120	10.0 160	20.0	50.0	80.0
Cyclohexanol	DCB	Ave	22549 577461	55064 765435	104002	204376	385341	5.00 120	10.0 160	20.0	50.0	80.0
Phenol	DCB	Ave	37458 975840	90673 1287657	175027	340319	651876	5.00 120	10.0 160	20.0	50.0	80.0
Bis(2-chloroethyl)ether	DCB	Ave	28680 745673	68243 1011648	131043	260286	492273	5.00 120	10.0 160	20.0	50.0	80.0
2-Chlorophenol	DCB	Ave	30568 765796	73012 1018532	139490	276088	514339	5.00 120	10.0 160	20.0	50.0	80.0
1,3-Dichlorobenzene	DCB	Ave	34576 875584	81722 1189562	151627	311447	570010	5.00 120	10.0 160	20.0	50.0	80.0
1,4-Dichlorobenzene	DCB	Ave	34442 908151	83462 1221638	156822	320411	591460	5.00 120	10.0 160	20.0	50.0	80.0
Benzyl alcohol	DCB	Ave	18547 485920	46187 650217	89018	177009	338177	5.00 120	10.0 160	20.0	50.0	80.0
1,2-Dichlorobenzene	DCB	Ave	33730 830567	76915 1126327	145427	290632	543405	5.00 120	10.0 160	20.0	50.0	80.0
2-Methylphenol	DCB	Ave	26665 662061	64107 873056	121512	237498	446848	5.00 120	10.0 160	20.0	50.0	80.0
Benzoic acid	NPT	Ave	+++++ 450660	33234 581702	78347	161811	315548	+++++ 120	10.0 160	20.0	50.0	80.0
2,2'-oxybis[1-chloropropane]	DCB	Ave	30629 784111	71750 1042099	140192	268344	520172	5.00 120	10.0 160	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
N-Nitrosodi-n-propylamine	DCB	Ave	20337 540169	50597 705508	96528	194718	367421	5.00 120	10.0 160	20.0	50.0	80.0
Hexachloroethane	DCB	Ave	13054 340173	30112 461665	59510	121988	223413	5.00 120	10.0 160	20.0	50.0	80.0
Nitrobenzene	NPT	Ave	35128 894416	83581 1170662	160595	317576	597423	5.00 120	10.0 160	20.0	50.0	80.0
Isophorone	NPT	Ave	56255 1412918	132984 1845970	262383	516349	980020	5.00 120	10.0 160	20.0	50.0	80.0
2-Nitrophenol	NPT	Ave	14384 406414	37320 541588	70555	145938	274749	5.00 120	10.0 160	20.0	50.0	80.0
2,4-Dimethylphenol	NPT	Ave	29372 788238	72018 1027386	140190	285758	536178	5.00 120	10.0 160	20.0	50.0	80.0
Bis(2-chloroethoxy)methane	NPT	Ave	32541 831346	76563 1104365	149893	298285	563945	5.00 120	10.0 160	20.0	50.0	80.0
2,4-Dichlorophenol	NPT	Ave	24405 596901	55552 786228	109303	216702	405809	5.00 120	10.0 160	20.0	50.0	80.0
1,2,4-Trichlorobenzene	NPT	Ave	27735 689433	62905 916889	121603	246439	456739	5.00 120	10.0 160	20.0	50.0	80.0
Naphthalene	NPT	Ave	88942 2251244	208723 3007056	400029	793700	1503360	5.00 120	10.0 160	20.0	50.0	80.0
4-Chloroaniline	NPT	Ave	34518 854666	81806 1114642	157217	312287	591561	5.00 120	10.0 160	20.0	50.0	80.0
Hexachlorobutadiene	NPT	Ave	16696 420802	40147 560581	76487	152329	282359	5.00 120	10.0 160	20.0	50.0	80.0
4-Chloro-3-methylphenol	NPT	Ave	24912 654788	59936 853115	120486	238944	457196	5.00 120	10.0 160	20.0	50.0	80.0
2-Methylnaphthalene	NPT	Ave	56286 1454808	132639 1936380	258586	522231	978845	5.00 120	10.0 160	20.0	50.0	80.0
Hexachlorocyclopentadiene	ANT	Ave	10785 344895	27539 463743	56452	125617	229353	5.00 120	10.0 160	20.0	50.0	80.0
2,4,6-Trichlorophenol	ANT	Ave	15697 413626	39240 549673	76339	156620	289968	5.00 120	10.0 160	20.0	50.0	80.0
2,4,5-Trichlorophenol	ANT	Ave	16252 436060	39823 560335	78647	162560	303216	5.00 120	10.0 160	20.0	50.0	80.0
2-Chloronaphthalene	ANT	Ave	51608 1302134	119788 1711058	238362	482068	890777	5.00 120	10.0 160	20.0	50.0	80.0
2-Nitroaniline	ANT	Ave	14523 423583	37585 546505	76857	156112	294085	5.00 120	10.0 160	20.0	50.0	80.0
Dimethyl phthalate	ANT	Ave	54980 1401741	133433 1836652	263565	526689	979444	5.00 120	10.0 160	20.0	50.0	80.0
2,6-Dinitrotoluene	ANT	Ave	10574 327678	28636 427471	58192	120361	230722	5.00 120	10.0 160	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Acenaphthylene	ANT	Ave	75070 1978105	187043 2605367	361393	728478	1370575	5.00 120	10.0 160	20.0	50.0	80.0
3-Nitroaniline	ANT	Ave	11622 339745	30714 439269	63175	123471	237534	5.00 120	10.0 160	20.0	50.0	80.0
Acenaphthene	ANT	Ave	50420 1274406	121534 1676656	235612	471726	889393	5.00 120	10.0 160	20.0	50.0	80.0
2,4-Dinitrophenol	ANT	Lin1	3582 225225	14264 305627	34589	76053	156386	5.00 120	10.0 160	20.0	50.0	80.0
4-Nitrophenol	ANT	Ave	7852 241054	21404 310391	44388	92704	166438	5.00 120	10.0 160	20.0	50.0	80.0
2,4-Dinitrotoluene	ANT	Ave	14580 431682	37529 562566	76503	159239	300876	5.00 120	10.0 160	20.0	50.0	80.0
Dibenzofuran	ANT	Ave	69530 1818297	168796 2381801	332317	673110	1257142	5.00 120	10.0 160	20.0	50.0	80.0
Diethyl phthalate	ANT	Ave	53586 1361154	128260 1779813	251685	515718	951978	5.00 120	10.0 160	20.0	50.0	80.0
Fluorene	ANT	Ave	55352 1482658	135608 1950969	270454	548287	1026270	5.00 120	10.0 160	20.0	50.0	80.0
4-Chlorophenyl phenyl ether	ANT	Ave	28359 715136	68067 939954	133367	271694	495459	5.00 120	10.0 160	20.0	50.0	80.0
4-Nitroaniline	ANT	Ave	12108 330629	31468 429855	61102	124969	236297	5.00 120	10.0 160	20.0	50.0	80.0
4,6-Dinitro-2-methylphenol	PHN	Lin1	7326 290783	20986 376386	46731	103117	198293	5.00 120	10.0 160	20.0	50.0	80.0
N-Nitrosodiphenylamine	PHN	Ave	36427 949883	90809 1233427	176854	353364	662656	5.00 120	10.0 160	20.0	50.0	80.0
Azobenzene	PHN	Ave	59152 1559893	148537 2029667	291415	589214	1091278	5.00 120	10.0 160	20.0	50.0	80.0
4-Bromophenyl phenyl ether	PHN	Ave	15737 397458	38033 525879	74288	153183	279263	5.00 120	10.0 160	20.0	50.0	80.0
Hexachlorobenzene	PHN	Ave	16477 415204	40702 542353	79092	164612	291151	5.00 120	10.0 160	20.0	50.0	80.0
Pentachlorophenol	PHN	Ave	9205 317820	26230 415180	54367	116104	220796	5.00 120	10.0 160	20.0	50.0	80.0
Phenanthrene	PHN	Ave	81047 2018894	197085 2621152	377488	775360	1409438	5.00 120	10.0 160	20.0	50.0	80.0
Anthracene	PHN	Ave	79874 2042627	198346 2688346	383805	783080	1449845	5.00 120	10.0 160	20.0	50.0	80.0
Carbazole	PHN	Ave	68228 1727540	166783 2264069	324643	660715	1219618	5.00 120	10.0 160	20.0	50.0	80.0
Di-n-butyl phthalate	PHN	Ave	78795 2226617	199642 2911883	400630	839234	1539585	5.00 120	10.0 160	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Fluoranthene	PHN	Ave	76933 2025662	192528 2651015	376508	781664	1439165	5.00 120	10.0 160	20.0	50.0	80.0
Pyrene	CRY	Ave	83609 2119785	206741 2785940	404197	828811	1495720	5.00 120	10.0 160	20.0	50.0	80.0
Di-n-octyl phthalate	CRY	Ave	+++++ 2111363	165246 2778846	354158	769902	1472263	+++++ 120	10.0 160	20.0	50.0	80.0
Butyl benzyl phthalate	CRY	Ave	33011 926425	84759 1210730	170616	355804	658225	5.00 120	10.0 160	20.0	50.0	80.0
3,3'-Dichlorobenzidine	CRY	Ave	22424 701650	61221 918364	127146	268952	501649	5.00 120	10.0 160	20.0	50.0	80.0
Benzo[a]anthracene	CRY	Ave	67045 1688595	164073 2199135	323605	663461	1194843	5.00 120	10.0 160	20.0	50.0	80.0
Chrysene	CRY	Ave	71931 1740763	170538 2250889	343273	689314	1235795	5.00 120	10.0 160	20.0	50.0	80.0
Bis(2-ethylhexyl) phthalate	CRY	Ave	41068 1264252	109350 1652026	226966	477478	888225	5.00 120	10.0 160	20.0	50.0	80.0
Benzo[b]fluoranthene	PRY	Ave	61089 1674594	155847 2259826	312388	647419	1171091	5.00 120	10.0 160	20.0	50.0	80.0
Benzo[k]fluoranthene	PRY	Ave	67298 1717192	154997 2165800	323709	656023	1232080	5.00 120	10.0 160	20.0	50.0	80.0
Benzo[a]pyrene	PRY	Ave	60000 1698319	148172 2201137	303766	636110	1186255	5.00 120	10.0 160	20.0	50.0	80.0
Indeno[1,2,3-cd]pyrene	PRY	Lin1	44956 1786141	114979 2271275	242910	544820	1126645	5.00 120	10.0 160	20.0	50.0	80.0
Dibenz(a,h)anthracene	PRY	Ave	50932 1836667	134076 2346086	264541	590861	1197819	5.00 120	10.0 160	20.0	50.0	80.0
Benzo[g,h,i]perylene	PRY	Ave	53408 1837665	134070 2376439	275695	599081	1222917	5.00 120	10.0 160	20.0	50.0	80.0
2-Fluorophenol (Surr)	DCB	Ave	28584 714149	68592 939467	129176	256989	480464	5.00 120	10.0 160	20.0	50.0	80.0
Phenol-d5 (Surr)	DCB	Ave	34697 890994	82744 1175791	160946	322370	606991	5.00 120	10.0 160	20.0	50.0	80.0
Nitrobenzene-d5 (Surr)	NPT	Ave	33963 879649	80512 1161682	157427	316299	593495	5.00 120	10.0 160	20.0	50.0	80.0
2-Fluorobiphenyl (Surr)	ANT	Ave	58689 1508058	140312 1989549	270989	550641	1033062	5.00 120	10.0 160	20.0	50.0	80.0
2,4,6-Tribromophenol (Surr)	ANT	Ave	6560 211031	19746 274353	36464	81102	148152	5.00 120	10.0 160	20.0	50.0	80.0
Terphenyl-d14 (Surr)	CRY	Ave	50399 1321283	126029 1736223	248813	519778	932591	5.00 120	10.0 160	20.0	50.0	80.0

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 13:09 Calibration End Date: 07/24/2012 16:30 Calibration ID: 590

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2872.D
Lab Smp Id: ICIS-012050 Client Smp ID: ICIS-012050
Inj Date : 24-JUL-2012 13:09
Operator : MAK Inst ID: MSJ.i
Smp Info : ICIS-012050
Misc Info : 12050
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:47 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.612	2.612	(0.432)	113005	50.0000	50.56
	4 N-Nitrosodimethylamine	74	2.981	2.981	(0.493)	167176	50.0000	50.20
	3 Pyridine	79	3.029	3.029	(0.501)	286674	50.0000	48.79
	5 Dimethylformamide	44	3.440	3.440	(0.569)	156780	50.0000	48.79
$	10 2-Fluorophenol	112	4.519	4.519	(0.748)	256989	50.0000	50.27
	11 Cyclohexanol	57	4.706	4.706	(0.779)	204376	50.0000	49.82
	19 Bis(2-chloroethyl)ether	93	5.711	5.711	(0.945)	260286	50.0000	49.72
$	15 Phenol-d5	99	5.577	5.577	(0.923)	322370	50.0000	50.84
	16 Phenol	94	5.593	5.593	(0.926)	340319	50.0000	49.55
	20 2-Chlorophenol	128	5.786	5.786	(0.958)	276088	50.0000	50.30
	21 1,3-Dichlorobenzene	146	5.973	5.973	(0.989)	311447	50.0000	50.40
*	22 1,4-Dichlorobenzene-d4	152	6.042	6.042	(1.000)	163756	40.0000	
	23 1,4-Dichlorobenzene	146	6.058	6.058	(1.003)	320411	50.0000	50.53
	26 1,2-Dichlorobenzene	146	6.256	6.256	(1.035)	290632	50.0000	49.45
	25 Benzyl Alcohol	108	6.202	6.202	(1.027)	177009	50.0000	50.74
	28 2,2-oxybis(1-Chloropropane)	45	6.373	6.373	(1.055)	268344	50.0000	48.76
	27 2-Methylphenol	108	6.336	6.336	(1.049)	237498	50.0000	49.88
	35 Hexachloroethane	117	6.694	6.694	(1.108)	121988	50.0000	51.20
	32 N-Nitrosodinpropylamine	70	6.549	6.549	(1.084)	194718	50.0000	51.02
M	215 Total Cresols	100				237498	150.000	49.88
$	36 Nitrobenzene-d5	82	6.742	6.742	(0.868)	316299	50.0000	50.27

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.769	6.769	(0.871)	317576	50.0000	49.58
	39 Isophorone	82	7.094	7.094	(0.913)	516349	50.0000	50.16
	40 2-Nitrophenol	139	7.207	7.207	(0.928)	145938	50.0000	50.90
	41 2,4-Dimethylphenol	107	7.260	7.260	(0.935)	285758	50.0000	50.96
	42 Bis(2-chloroethoxy)methane	93	7.399	7.399	(0.953)	298285	50.0000	49.90
	45 2,4-Dichlorophenol	162	7.548	7.548	(0.972)	216702	50.0000	49.96
	47 1,2,4-Trichlorobenzene	180	7.682	7.682	(0.989)	246439	50.0000	49.93
*	48 Naphthalene-d8	136	7.767	7.767	(1.000)	595648	40.0000	
	44 Benzoic Acid	122	7.420	7.420	(0.955)	161811	50.0000	51.61
	50 Naphthalene	128	7.800	7.800	(1.004)	793700	50.0000	49.22
	51 4-Chloroaniline	127	7.880	7.880	(1.014)	312287	50.0000	50.04
	54 Hexachlorobutadiene	225	7.997	7.997	(1.030)	152329	50.0000	49.94
	62 2-Methylnaphthalene	142	8.895	8.895	(1.145)	522231	50.0000	50.22
	59 4-Chloro-3-Methylphenol	107	8.638	8.638	(1.112)	238944	50.0000	50.65
	66 Hexachlorocyclopentadiene	237	9.178	9.178	(0.855)	125617	50.0000	52.38
	67 2,4,6-Trichlorophenol	196	9.375	9.375	(0.874)	156620	50.0000	50.45
	68 2,4,5-Trichlorophenol	196	9.429	9.429	(0.879)	162560	50.0000	50.65
$	69 2-Fluorobiphenyl (Surr)	172	9.530	9.530	(0.888)	550641	50.0000	49.27
	72 2-Chloronaphthalene	162	9.728	9.728	(0.906)	482068	50.0000	49.72
	73 2-Nitroaniline	65	9.910	9.910	(0.923)	156112	50.0000	50.84
	76 Dimethylphthalate	163	10.262	10.262	(0.956)	526689	50.0000	49.86
	79 Acenaphthylene	152	10.465	10.465	(0.975)	728478	50.0000	49.51
	80 2,6-Dinitrotoluene	165	10.358	10.358	(0.965)	120361	50.0000	51.15
*	82 Acenaphthene-d10	164	10.732	10.732	(1.000)	325845	40.0000	
	83 Acenaphthene	153	10.791	10.791	(1.005)	471726	50.0000	49.26
	81 3-Nitroaniline	138	10.658	10.658	(0.993)	123471	50.0000	49.87
	84 2,4-Dinitrophenol	184	10.845	10.845	(1.010)	76053	50.0000	46.38
	86 Dibenzofuran	168	11.112	11.112	(1.035)	673110	50.0000	49.86
	88 2,4-Dinitrotoluene	165	11.101	11.101	(1.034)	159239	50.0000	51.18
	85 4-Nitrophenol	109	10.983	10.983	(1.023)	92704	50.0000	52.99
	93 Diethylphthalate	149	11.592	11.592	(1.080)	515718	50.0000	50.40
	94 Fluorene	166	11.758	11.758	(1.096)	548287	50.0000	50.05
	95 4-Chlorophenyl-phenylether	204	11.779	11.779	(1.098)	271694	50.0000	50.36
	98 4-Nitroaniline	138	11.811	11.811	(1.101)	124969	50.0000	50.60
	99 4,6-Dinitro-2-methylphenol	198	11.870	11.870	(0.875)	103117	50.0000	47.87
	100 N-Nitrosodiphenylamine	169	12.009	12.009	(0.885)	353364	50.0000	49.23
	102 Azobenzene	77	12.084	12.084	(0.891)	589214	50.0000	49.92
$	104 2,4,6-Tribromophenol	330	12.217	12.217	(1.138)	81102	50.0000	53.13
	109 4-Bromophenyl-phenylether	248	12.720	12.720	(0.938)	153183	50.0000	50.30
	112 Hexachlorobenzene	284	12.826	12.826	(0.946)	164612	50.0000	51.31
	117 Pentachlorophenol	266	13.211	13.211	(0.974)	116104	50.0000	51.78
*	121 Phenanthrene-d10	188	13.564	13.564	(1.000)	552140	40.0000	
	122 Phenanthrene	178	13.612	13.612	(1.004)	775360	50.0000	50.09
	124 Anthracene	178	13.713	13.713	(1.011)	783080	50.0000	49.98
	126 Carbazole	167	14.044	14.044	(1.035)	660715	50.0000	49.92
	129 Di-n-Butylphthalate	149	14.819	14.819	(1.093)	839234	50.0000	51.02
	134 Fluoranthene	202	15.962	15.962	(1.177)	781664	50.0000	50.72
	137 Pyrene	202	16.406	16.406	(0.871)	828811	50.0000	49.52
$	139 Terphenyl-d14	244	16.774	16.774	(0.891)	519778	50.0000	50.25
	146 Butylbenzylphthalate	149	17.800	17.800	(0.946)	355804	50.0000	50.10
	150 Benzo(a)Anthracene	228	18.804	18.804	(0.999)	663461	50.0000	49.72
*	153 Chrysene-d12	240	18.826	18.826	(1.000)	550393	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.794	18.794	(0.998)	268952	50.0000	51.07
	154 Chrysene	228	18.874	18.874	(1.003)	689314	50.0000	49.54

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.986	18.986	(1.009)	477478	50.0000	50.60
158 Di-n-octylphthalate	149	20.215	20.215	(1.074)	769902	50.0000	49.05
160 Benzo(b)fluoranthene	252	20.845	20.845	(0.964)	647419	50.0000	50.94
161 Benzo(k)fluoranthene	252	20.904	20.904	(0.966)	656023	50.0000	50.39
165 Benzo(a)pyrene	252	21.507	21.507	(0.994)	636110	50.0000	50.86
* 166 Perylene-d12	264	21.630	21.630	(1.000)	493648	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.349	24.349	(1.126)	544820	50.0000	43.44
174 Dibenzo(a,h)anthracene	278	24.435	24.435	(1.130)	590861	50.0000	49.08(M)
177 Benzo(g,h,i)perylene	276	25.172	25.172	(1.164)	599081	50.0000	48.86

QC Flag Legend

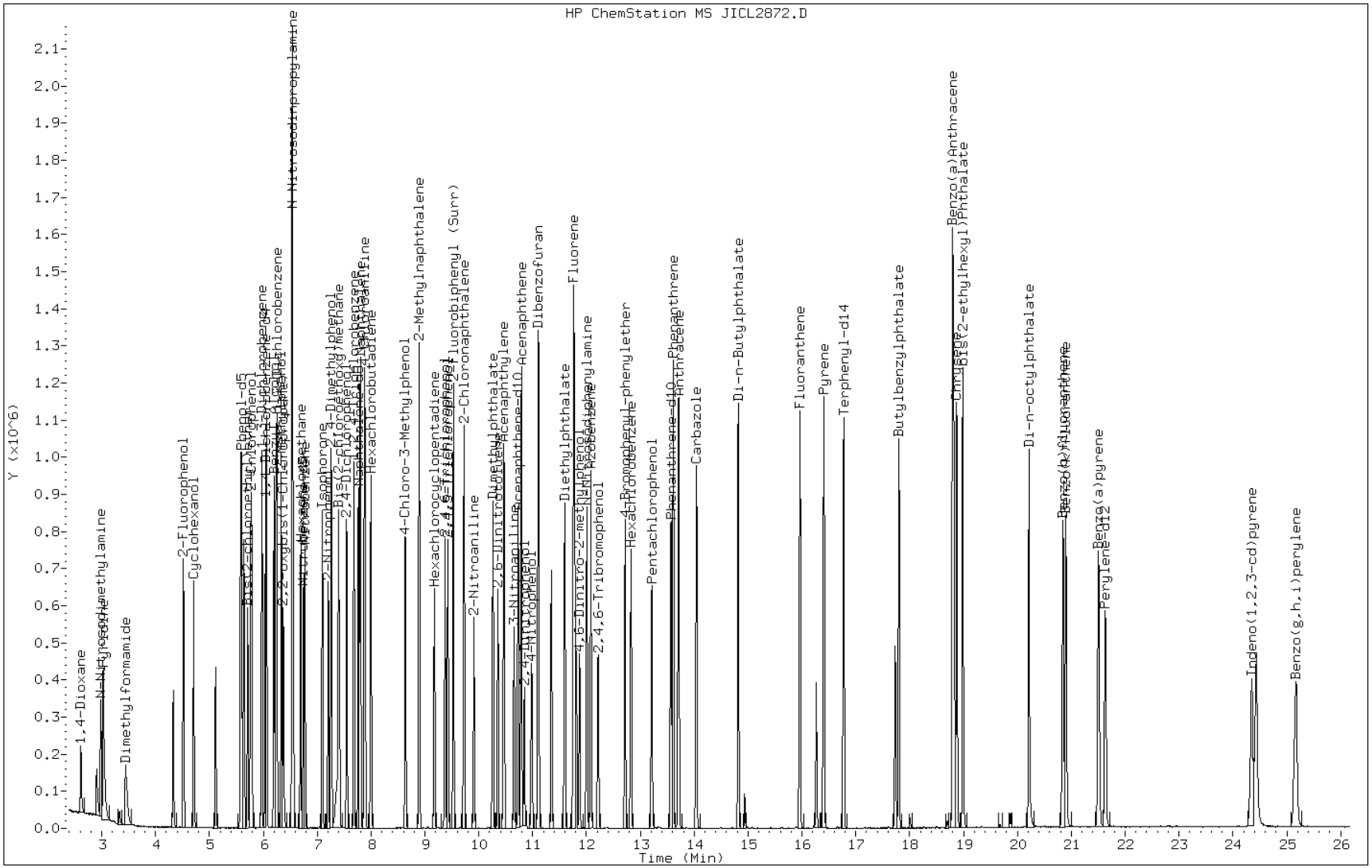
M - Compound response manually integrated.

Data File: JICL2872.D

Date: 24-JUL-2012 13:09

Client ID: ICIS-012050 Instrument: MSJ.i

Sample Info: ICIS-012050 Operator: MAK



Manual Integration Report

Data File: JICL2872.D
Inj. Date and Time: 24-JUL-2012 13:09
Instrument ID: MSJ.i
Client ID: ICIS-012050
Compound: 174 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 07/25/2012

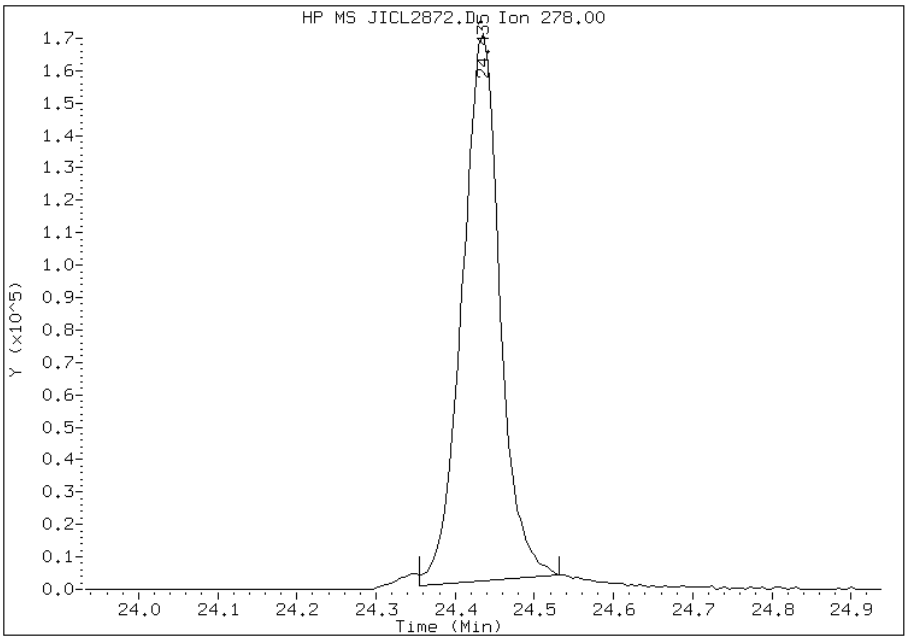
Processing Integration Results

RT: 24.44

Response: 557805

Amount: 50

Conc: 50



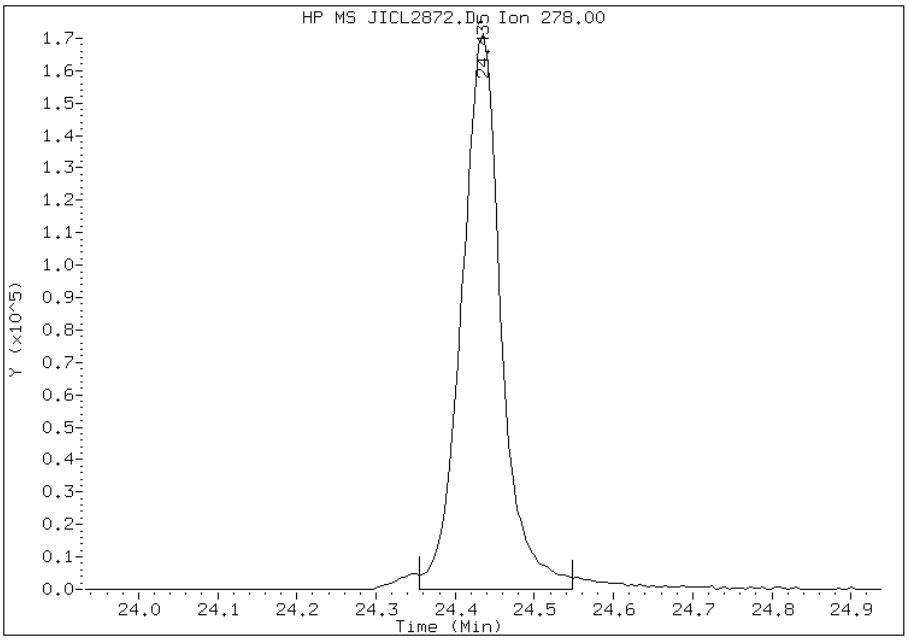
Manual Integration Results

RT: 24.44

Response: 590861

Amount: 49

Conc: 49



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 09:55
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2873.D
Lab Smp Id: STD160-012006 Client Smp ID: STD160-012006
Inj Date : 24-JUL-2012 13:42
Operator : MAK Inst ID: MSJ.i
Smp Info : STD160-012006
Misc Info : 12006
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:37 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 14:16 Cal File: JICL2874.D
Als bottle: 4 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	2.688	2.688	(0.444)	425605	160.000	160.8(A)
4	N-Nitrosodimethylamine	74	3.073	3.073	(0.508)	622125	160.000	157.8
3	Pyridine	79	3.099	3.099	(0.512)	1049268	160.000	150.8
5	Dimethylformamide	44	3.570	3.570	(0.590)	570985	160.000	150.0(M)
$ 10	2-Fluorophenol	112	4.553	4.553	(0.752)	939467	160.000	155.2
11	Cyclohexanol	57	4.745	4.745	(0.784)	765435	160.000	157.6
19	Bis(2-chloroethyl)ether	93	5.733	5.733	(0.947)	1011648	160.000	163.2(A)
$ 15	Phenol-d5	99	5.616	5.616	(0.928)	1175791	160.000	156.6
16	Phenol	94	5.632	5.632	(0.930)	1287657	160.000	158.3
20	2-Chlorophenol	128	5.813	5.813	(0.960)	1018532	160.000	156.7
21	1,3-Dichlorobenzene	146	5.990	5.990	(0.989)	1189562	160.000	162.6(A)
* 22	1,4-Dichlorobenzene-d4	152	6.054	6.054	(1.000)	193912	40.0000	
23	1,4-Dichlorobenzene	146	6.075	6.075	(1.004)	1221638	160.000	162.7(A)
26	1,2-Dichlorobenzene	146	6.267	6.267	(1.035)	1126327	160.000	161.8(A)
25	Benzyl Alcohol	108	6.230	6.230	(1.029)	650217	160.000	157.4
28	2,2-oxybis(1-Chloropropane)	45	6.385	6.385	(1.055)	1042099	160.000	159.9
27	2-Methylphenol	108	6.353	6.353	(1.049)	873056	160.000	154.8
35	Hexachloroethane	117	6.700	6.700	(1.107)	461665	160.000	163.6(A)
32	N-Nitrosodinpropylamine	70	6.604	6.604	(1.091)	705508	160.000	156.1
M 215	Total Cresols	100				873056	480.000	154.8
$ 36	Nitrobenzene-d5	82	6.764	6.764	(0.870)	1161682	160.000	163.9(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.791	6.791	(0.874)	1170662	160.000	162.3(A)
	39 Isophorone	82	7.127	7.127	(0.917)	1845970	160.000	159.2
	40 2-Nitrophenol	139	7.224	7.224	(0.929)	541588	160.000	167.7(A)
	41 2,4-Dimethylphenol	107	7.282	7.282	(0.937)	1027386	160.000	162.7(A)
	42 Bis(2-chloroethoxy)methane	93	7.416	7.416	(0.954)	1104365	160.000	164.0(A)
	45 2,4-Dichlorophenol	162	7.571	7.571	(0.974)	786228	160.000	160.9(A)
	47 1,2,4-Trichlorobenzene	180	7.694	7.694	(0.990)	916889	160.000	164.9(A)
*	48 Naphthalene-d8	136	7.774	7.774	(1.000)	670878	40.0000	
	44 Benzoic Acid	122	7.523	7.523	(0.968)	581702	160.000	164.7(AM)
	50 Naphthalene	128	7.811	7.811	(1.005)	3007056	160.000	165.6(A)
	51 4-Chloroaniline	127	7.897	7.897	(1.016)	1114642	160.000	158.6
	54 Hexachlorobutadiene	225	8.004	8.004	(1.030)	560581	160.000	163.2(A)
	62 2-Methylnaphthalene	142	8.906	8.906	(1.146)	1936380	160.000	165.3(A)
	59 4-Chloro-3-Methylphenol	107	8.650	8.650	(1.113)	853115	160.000	160.6(A)
	66 Hexachlorocyclopentadiene	237	9.179	9.179	(0.855)	463743	160.000	180.7(A)
	67 2,4,6-Trichlorophenol	196	9.387	9.387	(0.874)	549673	160.000	165.5(A)
	68 2,4,5-Trichlorophenol	196	9.441	9.441	(0.879)	560335	160.000	163.2(A)
$	69 2-Fluorobiphenyl (Surr)	172	9.537	9.537	(0.888)	1989549	160.000	166.4(A)
	72 2-Chloronaphthalene	162	9.740	9.740	(0.907)	1711058	160.000	165.0(A)
	73 2-Nitroaniline	65	9.927	9.927	(0.924)	546505	160.000	166.4(A)
	76 Dimethylphthalate	163	10.285	10.285	(0.958)	1836652	160.000	162.5(A)
	79 Acenaphthylene	152	10.477	10.477	(0.976)	2605367	160.000	165.5(A)
	80 2,6-Dinitrotoluene	165	10.381	10.381	(0.967)	427471	160.000	169.8(A)
*	82 Acenaphthene-d10	164	10.739	10.739	(1.000)	348587	40.0000	
	83 Acenaphthene	153	10.803	10.803	(1.006)	1676656	160.000	163.6(A)
	81 3-Nitroaniline	138	10.685	10.685	(0.995)	439269	160.000	165.9(A)
	84 2,4-Dinitrophenol	184	10.867	10.867	(1.012)	305627	160.000	164.3(A)
	86 Dibenzofuran	168	11.129	11.129	(1.036)	2381801	160.000	164.9(A)
	88 2,4-Dinitrotoluene	165	11.123	11.123	(1.036)	562566	160.000	169.0(A)
	85 4-Nitrophenol	109	11.016	11.016	(1.026)	310391	160.000	165.8(A)
	93 Diethylphthalate	149	11.615	11.615	(1.082)	1779813	160.000	162.6(A)
	94 Fluorene	166	11.775	11.775	(1.097)	1950969	160.000	166.5(A)
	95 4-Chlorophenyl-phenylether	204	11.791	11.791	(1.098)	939954	160.000	162.9(A)
	98 4-Nitroaniline	138	11.861	11.861	(1.104)	429855	160.000	162.7(A)
	99 4,6-Dinitro-2-methylphenol	198	11.903	11.903	(0.877)	376386	160.000	161.4(A)
	100 N-Nitrosodiphenylamine	169	12.026	12.026	(0.886)	1233427	160.000	164.8(A)
	102 Azobenzene	77	12.096	12.096	(0.891)	2029667	160.000	164.9(A)
$	104 2,4,6-Tribromophenol	330	12.234	12.234	(1.139)	274353	160.000	168.0(A)
	109 4-Bromophenyl-phenylether	248	12.731	12.731	(0.938)	525879	160.000	165.6(AM)
	112 Hexachlorobenzene	284	12.844	12.844	(0.946)	542353	160.000	162.1(A)
	117 Pentachlorophenol	266	13.223	13.223	(0.974)	415180	160.000	177.6(A)
*	121 Phenanthrene-d10	188	13.570	13.570	(1.000)	575638	40.0000	
	122 Phenanthrene	178	13.629	13.629	(1.004)	2621152	160.000	162.4(A)
	124 Anthracene	178	13.730	13.730	(1.012)	2688346	160.000	164.6(A)
	126 Carbazole	167	14.062	14.062	(1.036)	2264069	160.000	164.1(A)
	129 Di-n-Butylphthalate	149	14.831	14.831	(1.093)	2911883	160.000	169.8(A)
	134 Fluoranthene	202	15.979	15.979	(1.178)	2651015	160.000	165.0(A)
	137 Pyrene	202	16.423	16.423	(0.872)	2785940	160.000	165.9(A)
$	139 Terphenyl-d14	244	16.786	16.786	(0.891)	1736223	160.000	167.3(A)
	146 Butylbenzylphthalate	149	17.812	17.812	(0.946)	1210730	160.000	169.9(A)
	150 Benzo(a)Anthracene	228	18.816	18.816	(0.999)	2199135	160.000	164.2(A)
*	153 Chrysene-d12	240	18.837	18.837	(1.000)	552334	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.811	18.811	(0.999)	918364	160.000	173.8(A)
	154 Chrysene	228	18.896	18.896	(1.003)	2250889	160.000	161.2(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.992	18.992	(1.008)	1652026	160.000	174.5(A)
158 Di-n-octylphthalate	149	20.221	20.221	(1.073)	2778846	160.000	176.4(A)
160 Benzo(b)fluoranthene	252	20.867	20.867	(0.964)	2259826	160.000	170.3(A)
161 Benzo(k)fluoranthene	252	20.926	20.926	(0.967)	2165800	160.000	159.3
165 Benzo(a)pyrene	252	21.540	21.540	(0.995)	2201137	160.000	168.5(A)
* 166 Perylene-d12	264	21.642	21.642	(1.000)	515395	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.404	24.404	(1.128)	2271275	160.000	164.4(A)
174 Dibenzo(a,h)anthracene	278	24.495	24.495	(1.132)	2346086	160.000	186.6(A)
177 Benzo(g,h,i)perylene	276	25.253	25.253	(1.167)	2376439	160.000	185.6(A)

QC Flag Legend

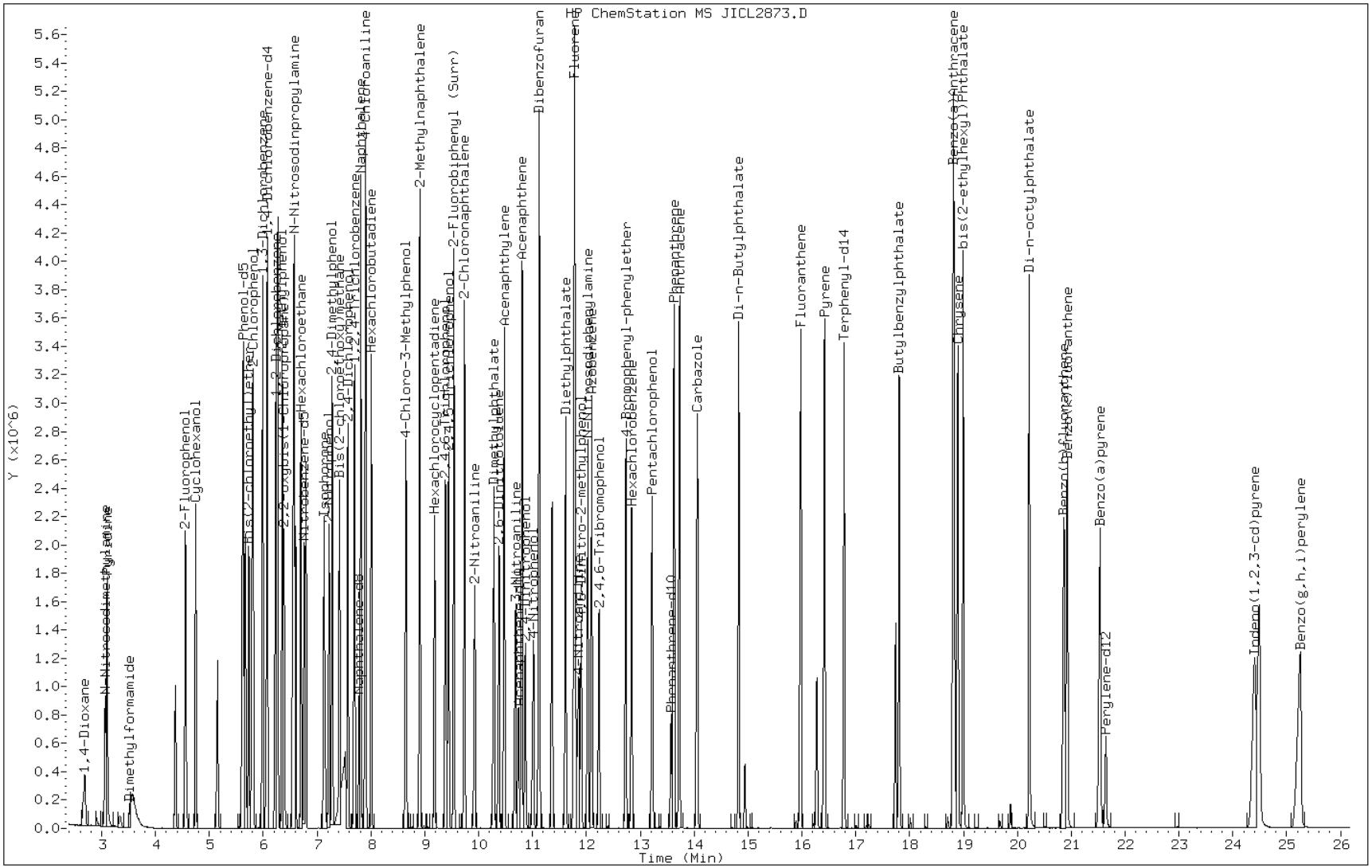
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: JICL2873.D

Date: 24-JUL-2012 13:42

Client ID: STD160-012006 Instrument: MSJ.i

Sample Info: STD160-012006 Operator: MAK



Manual Integration Report

Data File: JICL2873.D
Inj. Date and Time: 24-JUL-2012 13:42
Instrument ID: MSJ.i
Client ID: STD160-012006
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

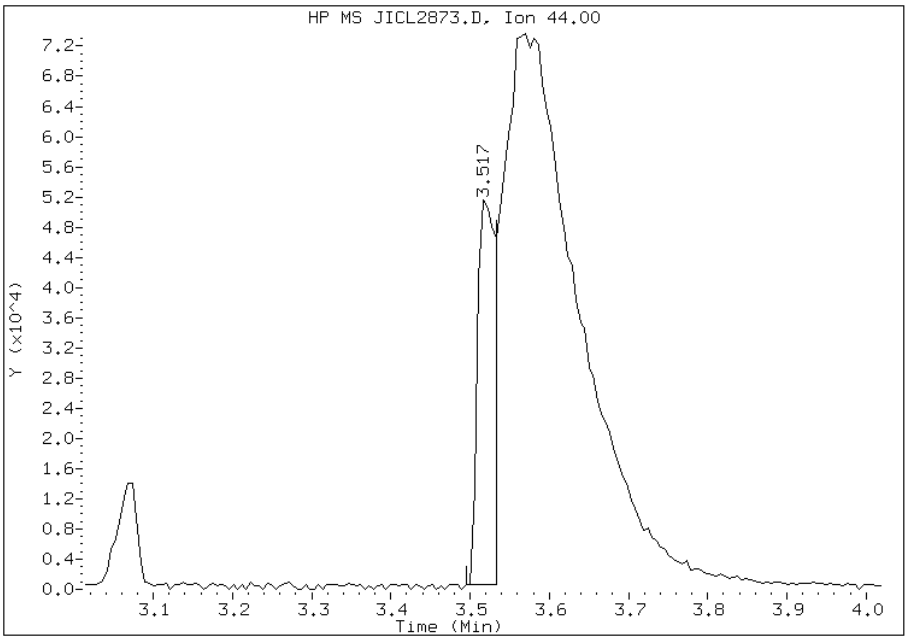
Processing Integration Results

RT: 3.52

Response: 79257

Amount: 38

Conc: 38



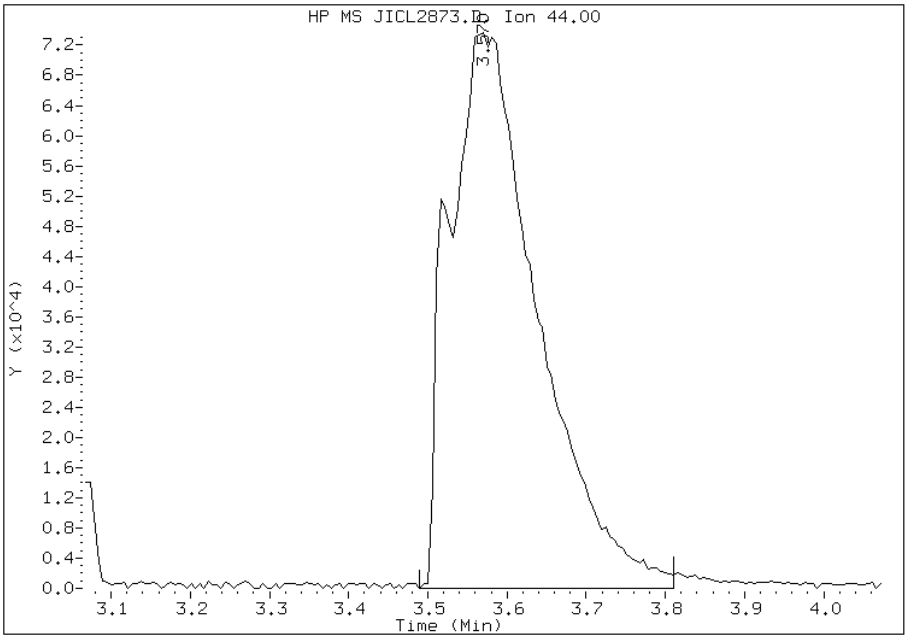
Manual Integration Results

RT: 3.57

Response: 570985

Amount: 150

Conc: 150



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 09:59
Manual Integration Reason: Incomplete Integration

Manual Integration Report

Data File: JICL2873.D
Inj. Date and Time: 24-JUL-2012 13:42
Instrument ID: MSJ.i
Client ID: STD160-012006
Compound: 44 Benzoic Acid
CAS #: 65-85-0
Report Date: 07/25/2012

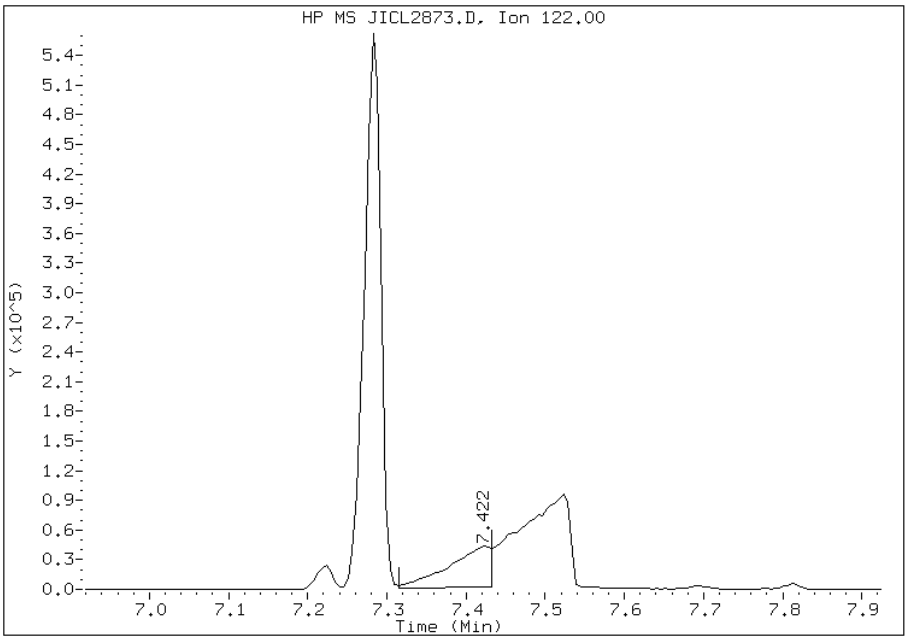
Processing Integration Results

RT: 7.42

Response: 152066

Amount: 63

Conc: 63



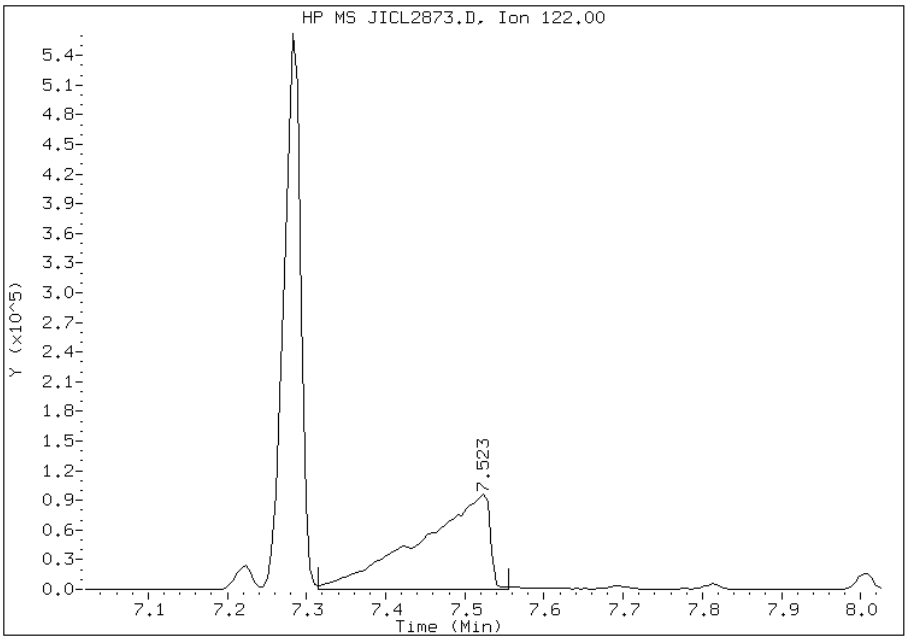
Manual Integration Results

RT: 7.52

Response: 581702

Amount: 165

Conc: 165



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 09:59
Manual Integration Reason: Incomplete Integration

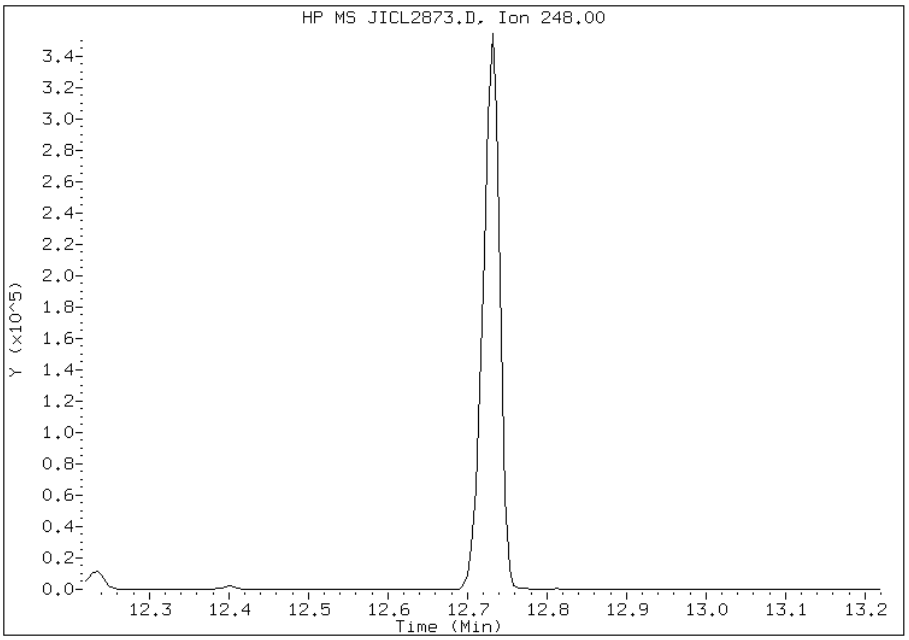
Manual Integration Report

Data File: JICL2873.D
Inj. Date and Time: 24-JUL-2012 13:42
Instrument ID: MSJ.i
Client ID: STD160-012006
Compound: 109 4-Bromophenyl-phenylether
CAS #: 101-55-3
Report Date: 07/25/2012

Processing Integration Results

Not Detected

Expected RT: 12.72



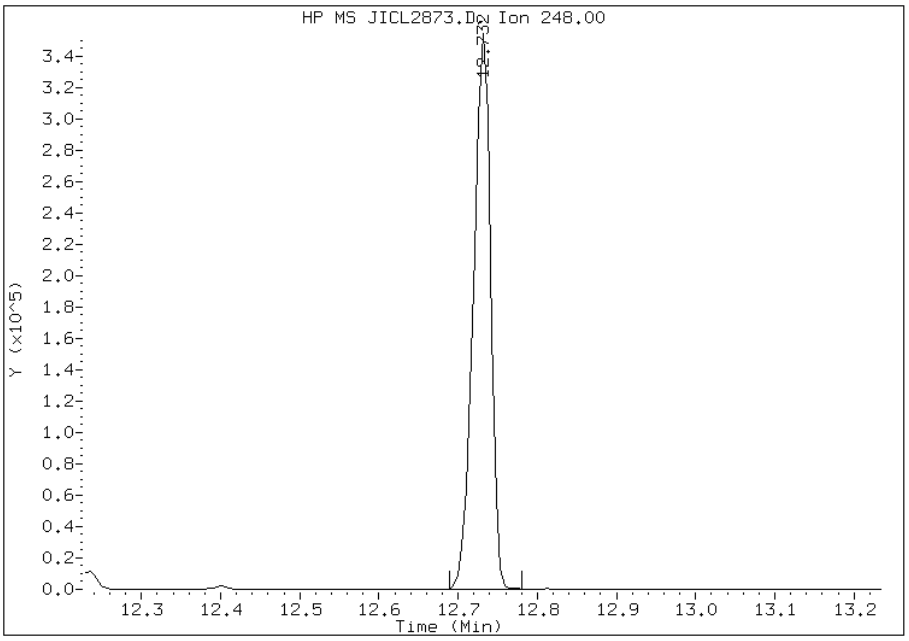
Manual Integration Results

RT: 12.73

Response: 525879

Amount: 166

Conc: 166



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:00
Manual Integration Reason: Analyte not Identified by the Data System

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2874.D
Lab Smp Id: STD120-012005 Client Smp ID: STD120-012005
Inj Date : 24-JUL-2012 14:16
Operator : MAK Inst ID: MSJ.i
Smp Info : STD120-012005
Misc Info : 12005
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:37 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 14:49 Cal File: JICL2875.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.650	2.650	(0.438)	314330	120.000	117.9
	4 N-Nitrosodimethylamine	74	3.035	3.035	(0.501)	468088	120.000	117.8
	3 Pyridine	79	3.067	3.067	(0.507)	794829	120.000	113.4
	5 Dimethylformamide	44	3.531	3.531	(0.583)	429532	120.000	112.0(M)
$	10 2-Fluorophenol	112	4.541	4.541	(0.750)	714149	120.000	117.1
	11 Cyclohexanol	57	4.733	4.733	(0.782)	577461	120.000	118.0
	19 Bis(2-chloroethyl)ether	93	5.732	5.732	(0.947)	745673	120.000	119.4
$	15 Phenol-d5	99	5.604	5.604	(0.926)	890994	120.000	117.8
	16 Phenol	94	5.626	5.626	(0.929)	975840	120.000	119.1
	20 2-Chlorophenol	128	5.807	5.807	(0.959)	765796	120.000	117.0
	21 1,3-Dichlorobenzene	146	5.989	5.989	(0.989)	875584	120.000	118.8
*	22 1,4-Dichlorobenzene-d4	152	6.053	6.053	(1.000)	195361	40.0000	
	23 1,4-Dichlorobenzene	146	6.074	6.074	(1.004)	908151	120.000	120.0
	26 1,2-Dichlorobenzene	146	6.267	6.267	(1.035)	830567	120.000	118.4
	25 Benzyl Alcohol	108	6.224	6.224	(1.028)	485920	120.000	116.8
	28 2,2-oxybis(1-Chloropropane)	45	6.384	6.384	(1.055)	784111	120.000	119.4
	27 2-Methylphenol	108	6.352	6.352	(1.049)	662061	120.000	116.6
	35 Hexachloroethane	117	6.705	6.705	(1.108)	340173	120.000	119.7
	32 N-Nitrosodinpropylamine	70	6.598	6.598	(1.090)	540169	120.000	118.6
M	215 Total Cresols	100				662061	360.000	116.6
$	36 Nitrobenzene-d5	82	6.763	6.763	(0.870)	879649	120.000	122.0

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.790	6.790	(0.873)	894416	120.000	121.9
	39 Isophorone	82	7.121	7.121	(0.916)	1412918	120.000	119.8
	40 2-Nitrophenol	139	7.223	7.223	(0.929)	406414	120.000	123.8
	41 2,4-Dimethylphenol	107	7.282	7.282	(0.936)	788238	120.000	122.7
	42 Bis(2-chloroethoxy)methane	93	7.415	7.415	(0.953)	831346	120.000	121.4
	45 2,4-Dichlorophenol	162	7.570	7.570	(0.973)	596901	120.000	120.1
	47 1,2,4-Trichlorobenzene	180	7.693	7.693	(0.989)	689433	120.000	121.9
*	48 Naphthalene-d8	136	7.778	7.778	(1.000)	682339	40.0000	
	44 Benzoic Acid	122	7.501	7.501	(0.964)	450660	120.000	125.5(M)
	50 Naphthalene	128	7.810	7.810	(1.004)	2251244	120.000	121.9
	51 4-Chloroaniline	127	7.896	7.896	(1.015)	854666	120.000	119.5
	54 Hexachlorobutadiene	225	8.008	8.008	(1.030)	420802	120.000	120.4
	62 2-Methylnaphthalene	142	8.911	8.911	(1.146)	1454808	120.000	122.1
	59 4-Chloro-3-Methylphenol	107	8.649	8.649	(1.112)	654788	120.000	121.2
	66 Hexachlorocyclopentadiene	237	9.183	9.183	(0.855)	344895	120.000	131.0
	67 2,4,6-Trichlorophenol	196	9.386	9.386	(0.874)	413626	120.000	121.4
	68 2,4,5-Trichlorophenol	196	9.445	9.445	(0.879)	436060	120.000	123.8
$	69 2-Fluorobiphenyl (Surr)	172	9.541	9.541	(0.888)	1508058	120.000	122.9
	72 2-Chloronaphthalene	162	9.739	9.739	(0.907)	1302134	120.000	122.3
	73 2-Nitroaniline	65	9.931	9.931	(0.924)	423583	120.000	125.7
	76 Dimethylphthalate	163	10.284	10.284	(0.957)	1401741	120.000	120.9
	79 Acenaphthylene	152	10.482	10.482	(0.976)	1978105	120.000	122.5
	80 2,6-Dinitrotoluene	165	10.375	10.375	(0.966)	327678	120.000	126.8
*	82 Acenaphthene-d10	164	10.743	10.743	(1.000)	357704	40.0000	
	83 Acenaphthene	153	10.807	10.807	(1.006)	1274406	120.000	121.2
	81 3-Nitroaniline	138	10.685	10.685	(0.995)	339745	120.000	125.0
	84 2,4-Dinitrophenol	184	10.866	10.866	(1.011)	225225	120.000	119.0
	86 Dibenzofuran	168	11.128	11.128	(1.036)	1818297	120.000	122.7
	88 2,4-Dinitrotoluene	165	11.123	11.123	(1.035)	431682	120.000	126.4
	85 4-Nitrophenol	109	11.010	11.010	(1.025)	241054	120.000	125.5
	93 Diethylphthalate	149	11.614	11.614	(1.081)	1361154	120.000	121.2
	94 Fluorene	166	11.774	11.774	(1.096)	1482658	120.000	123.3
	95 4-Chlorophenyl-phenylether	204	11.790	11.790	(1.097)	715136	120.000	120.8
	98 4-Nitroaniline	138	11.849	11.849	(1.103)	330629	120.000	122.0
	99 4,6-Dinitro-2-methylphenol	198	11.903	11.903	(0.877)	290783	120.000	121.4
	100 N-Nitrosodiphenylamine	169	12.031	12.031	(0.886)	949883	120.000	123.0
	102 Azobenzene	77	12.100	12.100	(0.891)	1559893	120.000	122.8
$	104 2,4,6-Tribromophenol	330	12.234	12.234	(1.139)	211031	120.000	125.9
	109 4-Bromophenyl-phenylether	248	12.736	12.736	(0.938)	397458	120.000	121.3
	112 Hexachlorobenzene	284	12.843	12.843	(0.946)	415204	120.000	120.2
	117 Pentachlorophenol	266	13.222	13.222	(0.974)	317820	120.000	131.7
*	121 Phenanthrene-d10	188	13.575	13.575	(1.000)	594184	40.0000	
	122 Phenanthrene	178	13.628	13.628	(1.004)	2018894	120.000	121.2
	124 Anthracene	178	13.730	13.730	(1.011)	2042627	120.000	121.1
	126 Carbazole	167	14.061	14.061	(1.036)	1727540	120.000	121.3
	129 Di-n-Butylphthalate	149	14.830	14.830	(1.092)	2226617	120.000	125.8
	134 Fluoranthene	202	15.984	15.984	(1.177)	2025662	120.000	122.1
	137 Pyrene	202	16.427	16.427	(0.872)	2119785	120.000	122.2
$	139 Terphenyl-d14	244	16.791	16.791	(0.891)	1321283	120.000	123.2
	146 Butylbenzylphthalate	149	17.811	17.811	(0.945)	926425	120.000	125.8
	150 Benzo(a)Anthracene	228	18.821	18.821	(0.999)	1688595	120.000	122.0
*	153 Chrysene-d12	240	18.842	18.842	(1.000)	570654	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.815	18.815	(0.999)	701650	120.000	128.5
	154 Chrysene	228	18.895	18.895	(1.003)	1740763	120.000	120.7

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.997	18.997	(1.008)	1264252	120.000	129.2
158 Di-n-octylphthalate	149	20.226	20.226	(1.073)	2111363	120.000	129.7
160 Benzo(b)fluoranthene	252	20.872	20.872	(0.964)	1674594	120.000	121.3
161 Benzo(k)fluoranthene	252	20.931	20.931	(0.967)	1717192	120.000	121.4
165 Benzo(a)pyrene	252	21.540	21.540	(0.995)	1698319	120.000	125.0
* 166 Perylene-d12	264	21.647	21.647	(1.000)	536229	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.409	24.409	(1.128)	1786141	120.000	125.0
174 Dibenzo(a,h)anthracene	278	24.494	24.494	(1.132)	1836667	120.000	140.4
177 Benzo(g,h,i)perylene	276	25.247	25.247	(1.166)	1837665	120.000	138.0

QC Flag Legend

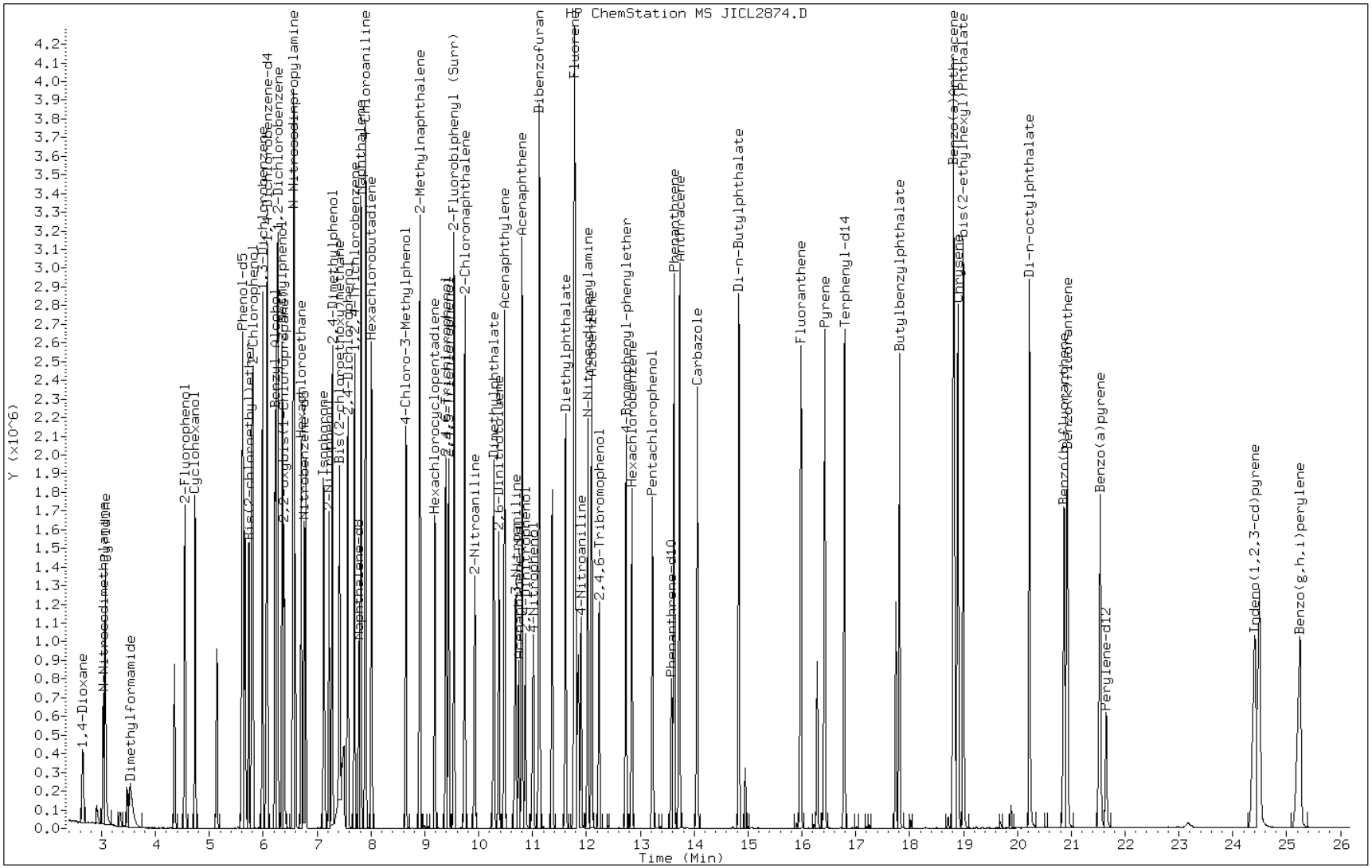
M - Compound response manually integrated.

Data File: JICL2874.D

Date: 24-JUL-2012 14:16

Client ID: STD120-012005 Instrument: MSJ.i

Sample Info: STD120-012005 Operator: MAK



Manual Integration Report

Data File: JICL2874.D
Inj. Date and Time: 24-JUL-2012 14:16
Instrument ID: MSJ.i
Client ID: STD120-012005
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

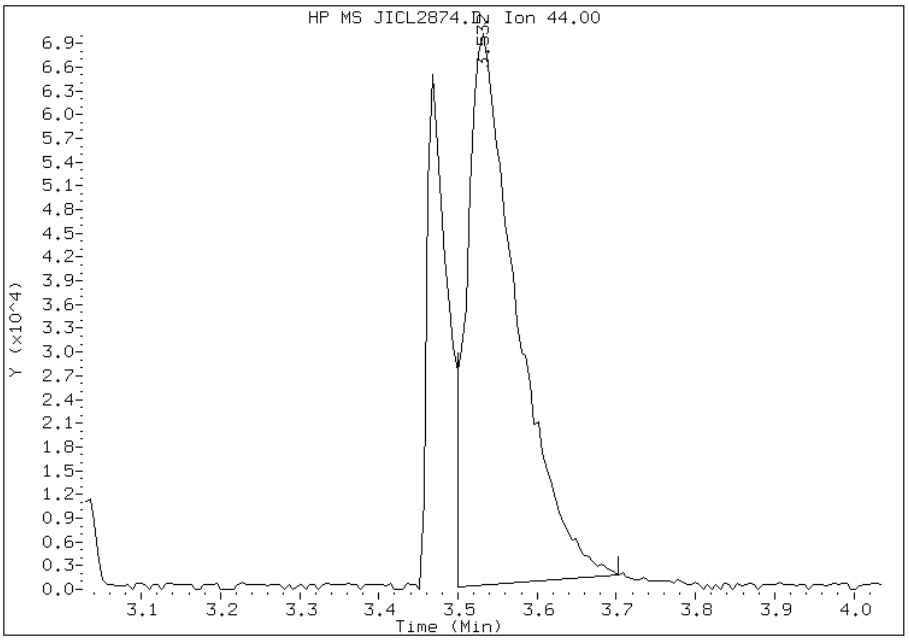
Processing Integration Results

RT: 3.53

Response: 307512

Amount: 136

Conc: 136



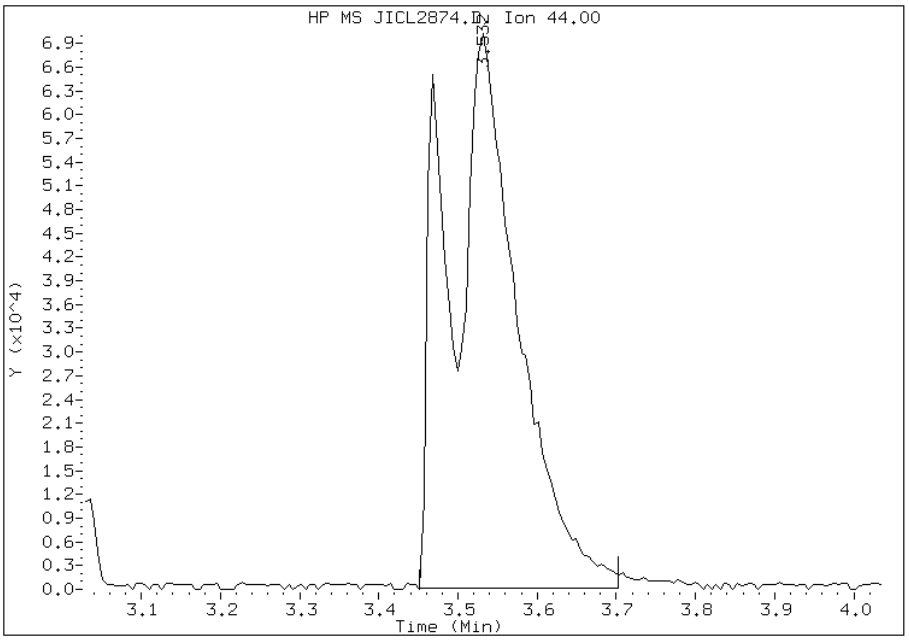
Manual Integration Results

RT: 3.53

Response: 429532

Amount: 112

Conc: 112



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:02
Manual Integration Reason: Incomplete Integration

Manual Integration Report

Data File: JICL2874.D
Inj. Date and Time: 24-JUL-2012 14:16
Instrument ID: MSJ.i
Client ID: STD120-012005
Compound: 44 Benzoic Acid
CAS #: 65-85-0
Report Date: 07/25/2012

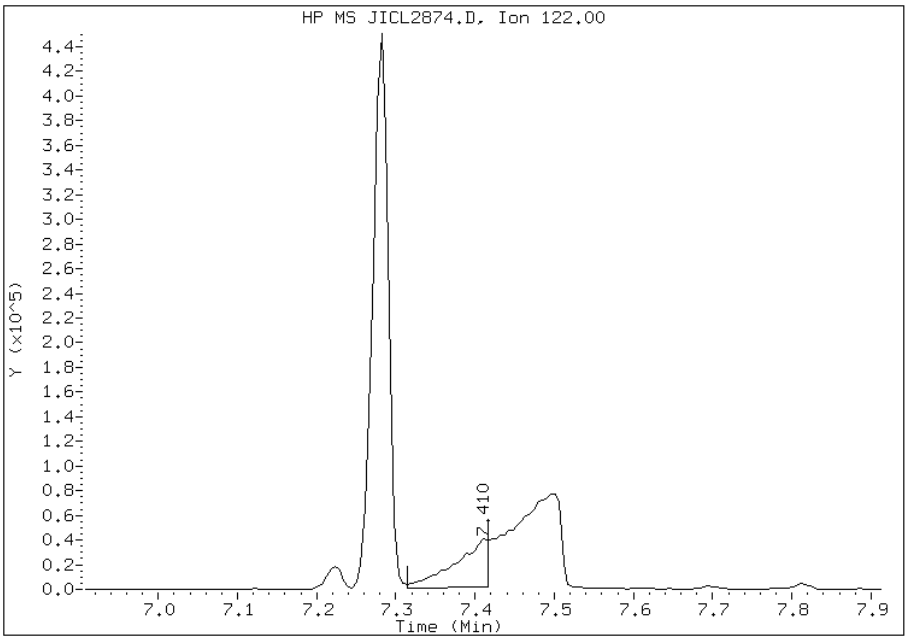
Processing Integration Results

RT: 7.41

Response: 113583

Amount: 39

Conc: 39



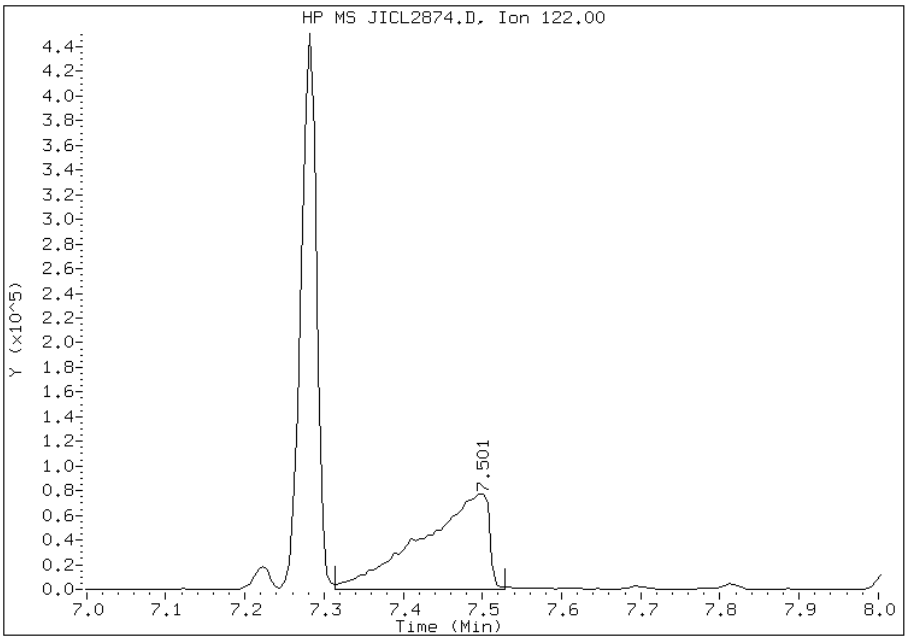
Manual Integration Results

RT: 7.50

Response: 450660

Amount: 125

Conc: 125



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:03
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2875.D
Lab Smp Id: STD080-012004 Client Smp ID: STD080-012004
Inj Date : 24-JUL-2012 14:49
Operator : MAK Inst ID: MSJ.i
Smp Info : STD080-012004
Misc Info : 12004
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:37 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 13:09 Cal File: JICL2872.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.608	2.608	(0.432)	206315	80.0000	78.49
	4 N-Nitrosodimethylamine	74	2.982	2.982	(0.494)	311329	80.0000	79.49
	3 Pyridine	79	3.019	3.019	(0.501)	543220	80.0000	78.62
	5 Dimethylformamide	44	3.425	3.425	(0.568)	294328	80.0000	77.89(M)
$	10 2-Fluorophenol	112	4.515	4.515	(0.749)	480464	80.0000	79.92
	11 Cyclohexanol	57	4.702	4.702	(0.779)	385341	80.0000	79.88
	19 Bis(2-chloroethyl)ether	93	5.706	5.706	(0.946)	492273	80.0000	79.96
$	15 Phenol-d5	99	5.578	5.578	(0.925)	606991	80.0000	81.40
	16 Phenol	94	5.594	5.594	(0.927)	651876	80.0000	80.71
	20 2-Chlorophenol	128	5.781	5.781	(0.958)	514339	80.0000	79.69
	21 1,3-Dichlorobenzene	146	5.968	5.968	(0.989)	570010	80.0000	78.44
*	22 1,4-Dichlorobenzene-d4	152	6.032	6.032	(1.000)	192572	40.0000	
	23 1,4-Dichlorobenzene	146	6.053	6.053	(1.004)	591460	80.0000	79.32
	26 1,2-Dichlorobenzene	146	6.246	6.246	(1.035)	543405	80.0000	78.62
	25 Benzyl Alcohol	108	6.198	6.198	(1.027)	338177	80.0000	82.43
	28 2,2-oxybis(1-Chloropropane)	45	6.363	6.363	(1.055)	520172	80.0000	80.38
	27 2-Methylphenol	108	6.331	6.331	(1.050)	446848	80.0000	79.81
	35 Hexachloroethane	117	6.684	6.684	(1.108)	223413	80.0000	79.74
	32 N-Nitrosodinpropylamine	70	6.572	6.572	(1.089)	367421	80.0000	81.86
M	215 Total Cresols	100				446848	240.000	79.81
$	36 Nitrobenzene-d5	82	6.737	6.737	(0.868)	593495	80.0000	81.29

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.764	6.764	(0.872)	597423	80.0000	80.38
	39 Isophorone	82	7.095	7.095	(0.915)	980020	80.0000	82.05
	40 2-Nitrophenol	139	7.202	7.202	(0.928)	274749	80.0000	82.59
	41 2,4-Dimethylphenol	107	7.255	7.255	(0.935)	536178	80.0000	82.40
	42 Bis(2-chloroethoxy)methane	93	7.394	7.394	(0.953)	563945	80.0000	81.31
	45 2,4-Dichlorophenol	162	7.544	7.544	(0.972)	405809	80.0000	80.63
	47 1,2,4-Trichlorobenzene	180	7.672	7.672	(0.989)	456739	80.0000	79.75
*	48 Naphthalene-d8	136	7.758	7.758	(1.000)	691174	40.0000	
	44 Benzoic Acid	122	7.453	7.453	(0.961)	315548	80.0000	86.73(M)
	50 Naphthalene	128	7.790	7.790	(1.004)	1503360	80.0000	80.35
	51 4-Chloroaniline	127	7.875	7.875	(1.015)	591561	80.0000	81.68
	54 Hexachlorobutadiene	225	7.987	7.987	(1.030)	282359	80.0000	79.78
	62 2-Methylnaphthalene	142	8.885	8.885	(1.145)	978845	80.0000	81.12
	59 4-Chloro-3-Methylphenol	107	8.628	8.628	(1.112)	457196	80.0000	83.52
	66 Hexachlorocyclopentadiene	237	9.168	9.168	(0.855)	229353	80.0000	83.21
	67 2,4,6-Trichlorophenol	196	9.366	9.366	(0.873)	289968	80.0000	81.28
	68 2,4,5-Trichlorophenol	196	9.419	9.419	(0.878)	303216	80.0000	82.20
$	69 2-Fluorobiphenyl (Surr)	172	9.520	9.520	(0.888)	1033062	80.0000	80.44
	72 2-Chloronaphthalene	162	9.718	9.718	(0.906)	890777	80.0000	79.94
	73 2-Nitroaniline	65	9.905	9.905	(0.924)	294085	80.0000	83.34
	76 Dimethylphthalate	163	10.258	10.258	(0.957)	979444	80.0000	80.69
	79 Acenaphthylene	152	10.455	10.455	(0.975)	1370575	80.0000	81.05
	80 2,6-Dinitrotoluene	165	10.354	10.354	(0.966)	230722	80.0000	85.31
*	82 Acenaphthene-d10	164	10.722	10.722	(1.000)	374469	40.0000	
	83 Acenaphthene	153	10.781	10.781	(1.005)	889393	80.0000	80.81
	81 3-Nitroaniline	138	10.658	10.658	(0.994)	237534	80.0000	83.49
	84 2,4-Dinitrophenol	184	10.840	10.840	(1.011)	156386	80.0000	80.14
	86 Dibenzofuran	168	11.107	11.107	(1.036)	1257142	80.0000	81.03
	88 2,4-Dinitrotoluene	165	11.096	11.096	(1.035)	300876	80.0000	84.16
	85 4-Nitrophenol	109	10.984	10.984	(1.024)	166438	80.0000	82.79
	93 Diethylphthalate	149	11.588	11.588	(1.081)	951978	80.0000	80.95
	94 Fluorene	166	11.753	11.753	(1.096)	1026270	80.0000	81.52
	95 4-Chlorophenyl-phenylether	204	11.769	11.769	(1.098)	495459	80.0000	79.92
	98 4-Nitroaniline	138	11.818	11.818	(1.102)	236297	80.0000	83.26
	99 4,6-Dinitro-2-methylphenol	198	11.871	11.871	(0.876)	198293	80.0000	79.64
	100 N-Nitrosodiphenylamine	169	12.005	12.005	(0.886)	662656	80.0000	81.59
	102 Azobenzene	77	12.074	12.074	(0.891)	1091278	80.0000	81.72
$	104 2,4,6-Tribromophenol	330	12.208	12.208	(1.138)	148152	80.0000	84.46
	109 4-Bromophenyl-phenylether	248	12.710	12.710	(0.938)	279263	80.0000	81.04
	112 Hexachlorobenzene	284	12.817	12.817	(0.946)	291151	80.0000	80.21
	117 Pentachlorophenol	266	13.201	13.201	(0.974)	220796	80.0000	87.03
*	121 Phenanthrene-d10	188	13.554	13.554	(1.000)	624695	40.0000	
	122 Phenanthrene	178	13.602	13.602	(1.004)	1409438	80.0000	80.48
	124 Anthracene	178	13.703	13.703	(1.011)	1449845	80.0000	81.79
	126 Carbazole	167	14.035	14.035	(1.035)	1219618	80.0000	81.44
	129 Di-n-Butylphthalate	149	14.809	14.809	(1.093)	1539585	80.0000	82.73
	134 Fluoranthene	202	15.958	15.958	(1.177)	1439165	80.0000	82.54
	137 Pyrene	202	16.401	16.401	(0.872)	1495720	80.0000	80.69
$	139 Terphenyl-d14	244	16.764	16.764	(0.891)	932591	80.0000	81.41
	146 Butylbenzylphthalate	149	17.790	17.790	(0.945)	658225	80.0000	83.69
	150 Benzo(a)Anthracene	228	18.794	18.794	(0.999)	1194843	80.0000	80.85
*	153 Chrysene-d12	240	18.816	18.816	(1.000)	609571	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.789	18.789	(0.999)	501649	80.0000	86.01
	154 Chrysene	228	18.869	18.869	(1.003)	1235795	80.0000	80.20

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.976	18.976	(1.009)	888225	80.0000	85.00
158 Di-n-octylphthalate	149	20.205	20.205	(1.074)	1472263	80.0000	84.69
160 Benzo(b)fluoranthene	252	20.840	20.840	(0.964)	1171091	80.0000	81.07
161 Benzo(k)fluoranthene	252	20.894	20.894	(0.966)	1232080	80.0000	83.26
165 Benzo(a)pyrene	252	21.503	21.503	(0.995)	1186255	80.0000	83.43
* 166 Perylene-d12	264	21.620	21.620	(1.000)	561112	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.345	24.345	(1.126)	1126645	80.0000	76.55
174 Dibenzo(a,h)anthracene	278	24.430	24.430	(1.130)	1197819	80.0000	87.54
177 Benzo(g,h,i)perylene	276	25.173	25.173	(1.164)	1222917	80.0000	87.75

QC Flag Legend

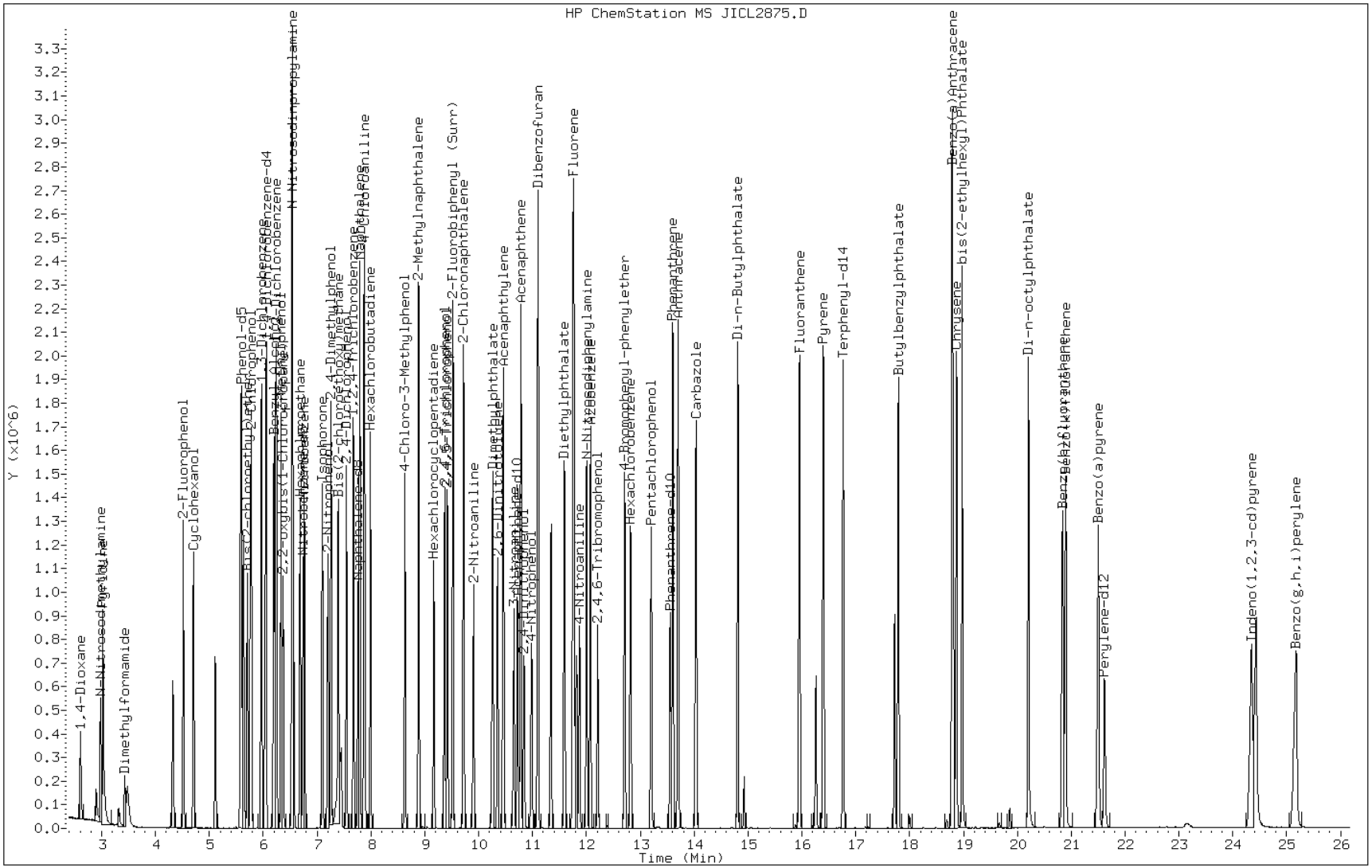
M - Compound response manually integrated.

Data File: JICL2875.D

Date: 24-JUL-2012 14:49

Client ID: STD080-012004 Instrument: MSJ.i

Sample Info: STD080-012004 Operator: MAK



Manual Integration Report

Data File: JICL2875.D
Inj. Date and Time: 24-JUL-2012 14:49
Instrument ID: MSJ.i
Client ID: STD080-012004
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

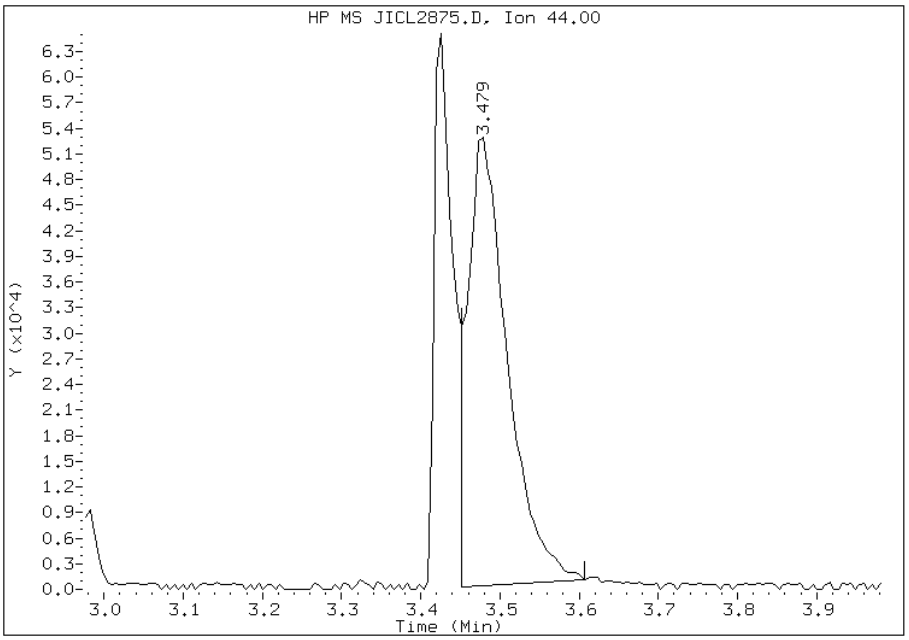
Processing Integration Results

RT: 3.48

Response: 184748

Amount: 82

Conc: 82



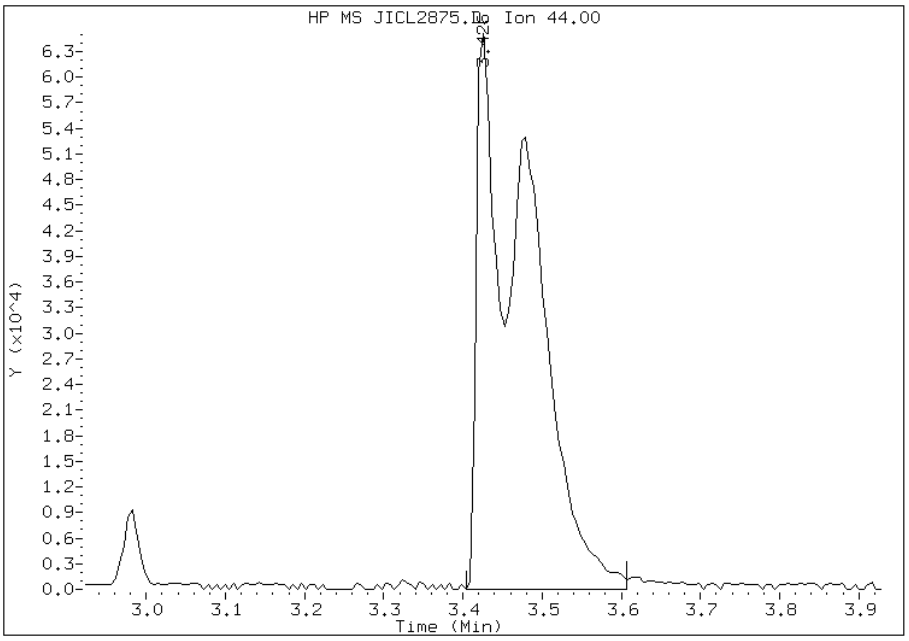
Manual Integration Results

RT: 3.43

Response: 294328

Amount: 78

Conc: 78



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:03
Manual Integration Reason: Incomplete Integration

Manual Integration Report

Data File: JICL2875.D
Inj. Date and Time: 24-JUL-2012 14:49
Instrument ID: MSJ.i
Client ID: STD080-012004
Compound: 44 Benzoic Acid
CAS #: 65-85-0
Report Date: 07/25/2012

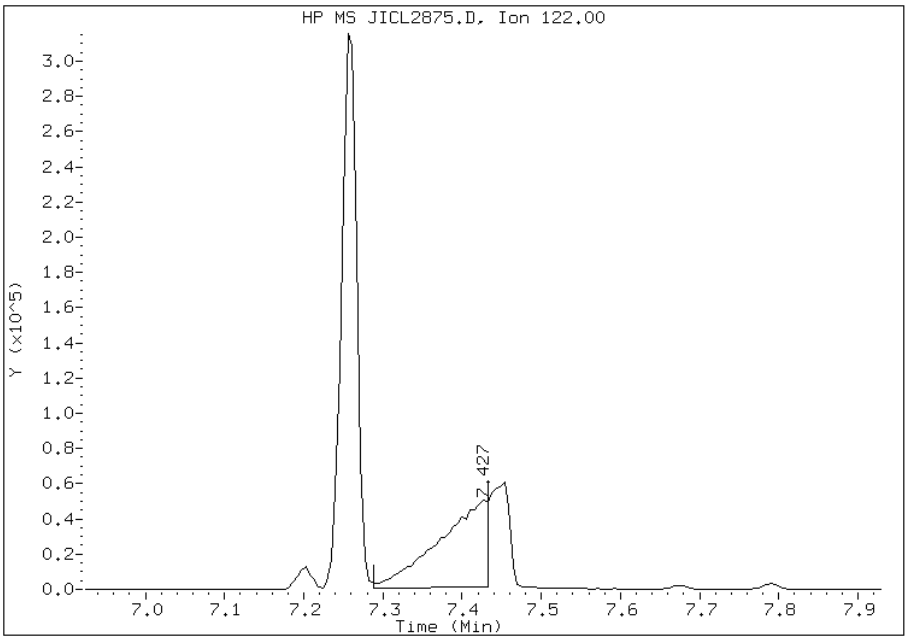
Processing Integration Results

RT: 7.43

Response: 213025

Amount: 62

Conc: 62



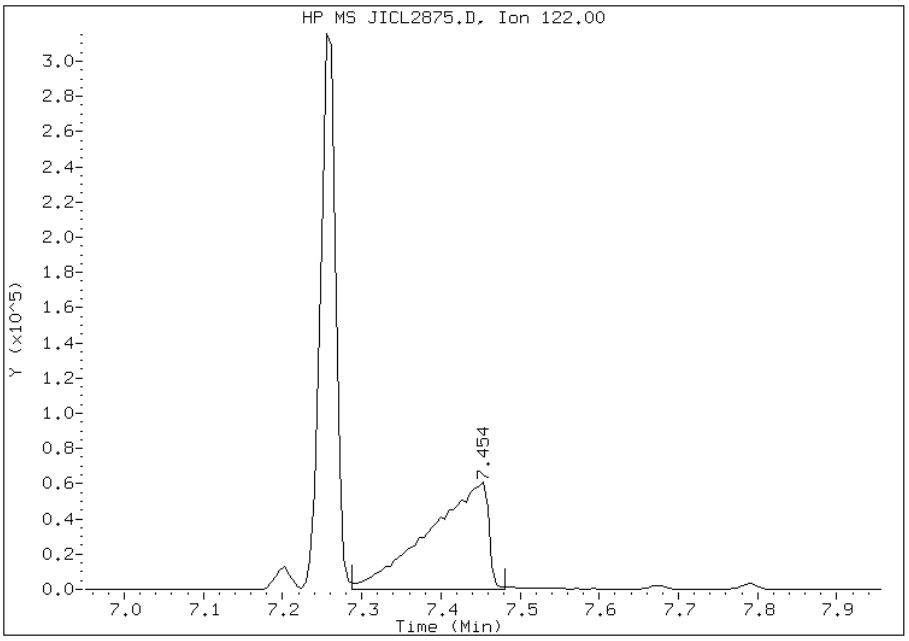
Manual Integration Results

RT: 7.45

Response: 315548

Amount: 87

Conc: 87



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:04
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2876.D
Lab Smp Id: STD020-011994 Client Smp ID: STD020-011994
Inj Date : 24-JUL-2012 15:23
Operator : MAK Inst ID: MSJ.i
Smp Info : STD020-011994
Misc Info : 11994
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:36 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 15:56 Cal File: JICL2877.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.606	2.606	(0.432)	57264	20.0000	20.96
	4 N-Nitrosodimethylamine	74	2.970	2.970	(0.492)	84844	20.0000	20.84
	3 Pyridine	79	3.018	3.018	(0.500)	152222	20.0000	21.19
	5 Dimethylformamide	44	3.429	3.429	(0.569)	79187	20.0000	20.16(M)
$	10 2-Fluorophenol	112	4.503	4.503	(0.747)	129176	20.0000	20.67
	11 Cyclohexanol	57	4.695	4.695	(0.779)	104002	20.0000	20.74
	19 Bis(2-chloroethyl)ether	93	5.694	5.694	(0.944)	131043	20.0000	20.48
$	15 Phenol-d5	99	5.561	5.561	(0.922)	160946	20.0000	20.76
	16 Phenol	94	5.577	5.577	(0.925)	175027	20.0000	20.85
	20 2-Chlorophenol	128	5.774	5.774	(0.957)	139490	20.0000	20.79
	21 1,3-Dichlorobenzene	146	5.961	5.961	(0.988)	151627	20.0000	20.07
*	22 1,4-Dichlorobenzene-d4	152	6.031	6.031	(1.000)	200179	40.0000	
	23 1,4-Dichlorobenzene	146	6.047	6.047	(1.003)	156822	20.0000	20.23
	26 1,2-Dichlorobenzene	146	6.239	6.239	(1.035)	145427	20.0000	20.24
	25 Benzyl Alcohol	108	6.186	6.186	(1.026)	89018	20.0000	20.87
	28 2,2-oxybis(1-Chloropropane)	45	6.362	6.362	(1.055)	140192	20.0000	20.84
	27 2-Methylphenol	108	6.319	6.319	(1.048)	121512	20.0000	20.88
	35 Hexachloroethane	117	6.677	6.677	(1.107)	59510	20.0000	20.43
	32 N-Nitrosodinpropylamine	70	6.528	6.528	(1.082)	96528	20.0000	20.69
M	215 Total Cresols	100				121512	60.0000	20.88
$	36 Nitrobenzene-d5	82	6.731	6.731	(0.868)	157427	20.0000	19.98

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.757	6.757	(0.872)	160595	20.0000	20.02
	39 Isophorone	82	7.078	7.078	(0.913)	262383	20.0000	20.36
	40 2-Nitrophenol	139	7.195	7.195	(0.928)	70555	20.0000	19.66
	41 2,4-Dimethylphenol	107	7.243	7.243	(0.935)	140190	20.0000	19.97
	42 Bis(2-chloroethoxy)methane	93	7.382	7.382	(0.952)	149893	20.0000	20.03
	45 2,4-Dichlorophenol	162	7.532	7.532	(0.972)	109303	20.0000	20.13
	47 1,2,4-Trichlorobenzene	180	7.671	7.671	(0.990)	121603	20.0000	19.68
*	48 Naphthalene-d8	136	7.751	7.751	(1.000)	745749	40.0000	
	44 Benzoic Acid	122	7.361	7.361	(0.950)	78347	20.0000	19.96
	50 Naphthalene	128	7.783	7.783	(1.004)	400029	20.0000	19.81
	51 4-Chloroaniline	127	7.863	7.863	(1.014)	157217	20.0000	20.12
	54 Hexachlorobutadiene	225	7.986	7.986	(1.030)	76487	20.0000	20.03
	62 2-Methylnaphthalene	142	8.883	8.883	(1.146)	258586	20.0000	19.86
	59 4-Chloro-3-Methylphenol	107	8.622	8.622	(1.112)	120486	20.0000	20.40
	66 Hexachlorocyclopentadiene	237	9.161	9.161	(0.855)	56452	20.0000	19.07
	67 2,4,6-Trichlorophenol	196	9.359	9.359	(0.873)	76339	20.0000	19.92
	68 2,4,5-Trichlorophenol	196	9.412	9.412	(0.878)	78647	20.0000	19.85
$	69 2-Fluorobiphenyl (Surr)	172	9.514	9.514	(0.888)	270989	20.0000	19.64
	72 2-Chloronaphthalene	162	9.711	9.711	(0.906)	238362	20.0000	19.91
	73 2-Nitroaniline	65	9.893	9.893	(0.923)	76857	20.0000	20.28
	76 Dimethylphthalate	163	10.246	10.246	(0.956)	263565	20.0000	20.21
	79 Acenaphthylene	152	10.449	10.449	(0.975)	361393	20.0000	19.90
	80 2,6-Dinitrotoluene	165	10.337	10.337	(0.965)	58192	20.0000	20.03
*	82 Acenaphthene-d10	164	10.716	10.716	(1.000)	402253	40.0000	
	83 Acenaphthene	153	10.775	10.775	(1.005)	235612	20.0000	19.93
	81 3-Nitroaniline	138	10.641	10.641	(0.993)	63175	20.0000	20.67
	84 2,4-Dinitrophenol	184	10.828	10.828	(1.010)	34589	20.0000	19.36
	86 Dibenzofuran	168	11.095	11.095	(1.035)	332317	20.0000	19.94
	88 2,4-Dinitrotoluene	165	11.079	11.079	(1.034)	76503	20.0000	19.92
	85 4-Nitrophenol	109	10.962	10.962	(1.023)	44388	20.0000	20.55
	93 Diethylphthalate	149	11.576	11.576	(1.080)	251685	20.0000	19.92
	94 Fluorene	166	11.741	11.741	(1.096)	270454	20.0000	20.00
	95 4-Chlorophenyl-phenylether	204	11.763	11.763	(1.098)	133367	20.0000	20.02
	98 4-Nitroaniline	138	11.784	11.784	(1.100)	61102	20.0000	20.04
	99 4,6-Dinitro-2-methylphenol	198	11.848	11.848	(0.875)	46731	20.0000	19.26
	100 N-Nitrosodiphenylamine	169	11.987	11.987	(0.885)	176854	20.0000	20.12
	102 Azobenzene	77	12.062	12.062	(0.890)	291415	20.0000	20.16
$	104 2,4,6-Tribromophenol	330	12.196	12.196	(1.138)	36464	20.0000	19.35
	109 4-Bromophenyl-phenylether	248	12.703	12.703	(0.938)	74288	20.0000	19.91
	112 Hexachlorobenzene	284	12.810	12.810	(0.946)	79092	20.0000	20.13
	117 Pentachlorophenol	266	13.195	13.195	(0.974)	54367	20.0000	19.80
*	121 Phenanthrene-d10	188	13.547	13.547	(1.000)	676260	40.0000	
	122 Phenanthrene	178	13.595	13.595	(1.004)	377488	20.0000	19.91
	124 Anthracene	178	13.691	13.691	(1.011)	383805	20.0000	20.00
	126 Carbazole	167	14.023	14.023	(1.035)	324643	20.0000	20.02
	129 Di-n-Butylphthalate	149	14.803	14.803	(1.093)	400630	20.0000	19.88
	134 Fluoranthene	202	15.946	15.946	(1.177)	376508	20.0000	19.95
	137 Pyrene	202	16.384	16.384	(0.871)	404197	20.0000	19.97
$	139 Terphenyl-d14	244	16.758	16.758	(0.891)	248813	20.0000	19.89
	146 Butylbenzylphthalate	149	17.783	17.783	(0.945)	170616	20.0000	19.86
	150 Benzo(a)Anthracene	228	18.782	18.782	(0.999)	323605	20.0000	20.05
*	153 Chrysene-d12	240	18.809	18.809	(1.000)	665679	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.777	18.777	(0.998)	127146	20.0000	19.96
	154 Chrysene	228	18.857	18.857	(1.003)	343273	20.0000	20.40

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.969	18.969	(1.009)	226966	20.0000	19.89
158 Di-n-octylphthalate	149	20.198	20.198	(1.074)	354158	20.0000	18.65
160 Benzo(b)fluoranthene	252	20.823	20.823	(0.963)	312388	20.0000	20.06
161 Benzo(k)fluoranthene	252	20.877	20.877	(0.966)	323709	20.0000	20.29
165 Benzo(a)pyrene	252	21.480	21.480	(0.994)	303766	20.0000	19.81
* 166 Perylene-d12	264	21.614	21.614	(1.000)	605032	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.312	24.312	(1.125)	242910	20.0000	17.72
174 Dibenzo(a,h)anthracene	278	24.392	24.392	(1.129)	264541	20.0000	17.93(M)
177 Benzo(g,h,i)perylene	276	25.118	25.118	(1.162)	275695	20.0000	18.35

QC Flag Legend

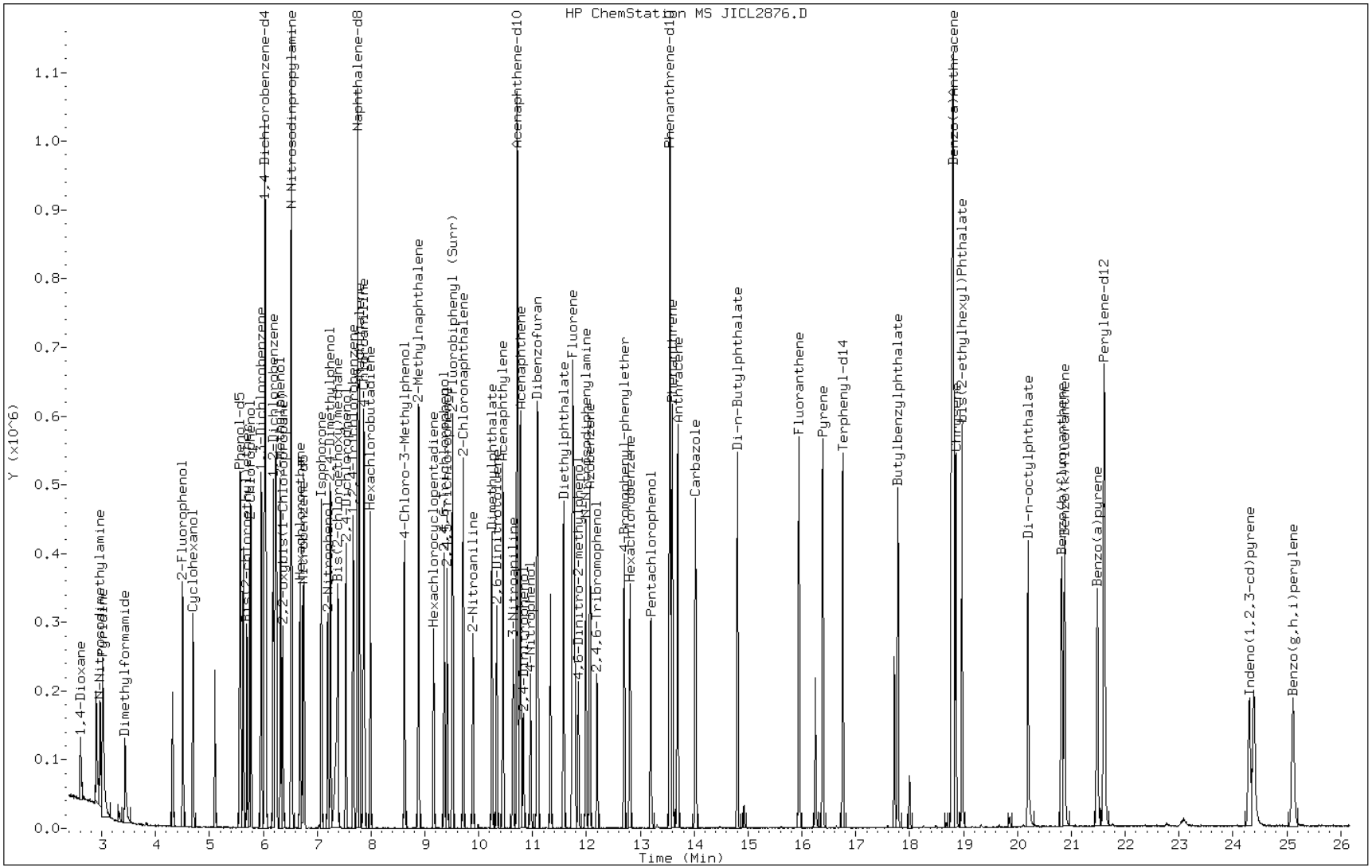
M - Compound response manually integrated.

Data File: JICL2876.D

Date: 24-JUL-2012 15:23

Client ID: STD020-011994 Instrument: MSJ.i

Sample Info: STD020-011994 Operator: MAK



Manual Integration Report

Data File: JICL2876.D
Inj. Date and Time: 24-JUL-2012 15:23
Instrument ID: MSJ.i
Client ID: STD020-011994
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

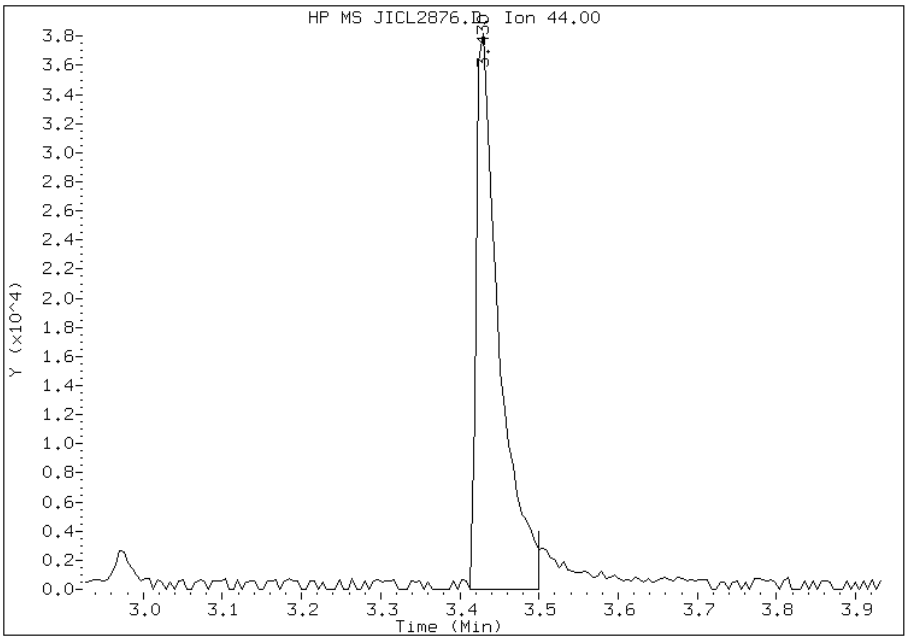
Processing Integration Results

RT: 3.43

Response: 75935

Amount: 29

Conc: 29



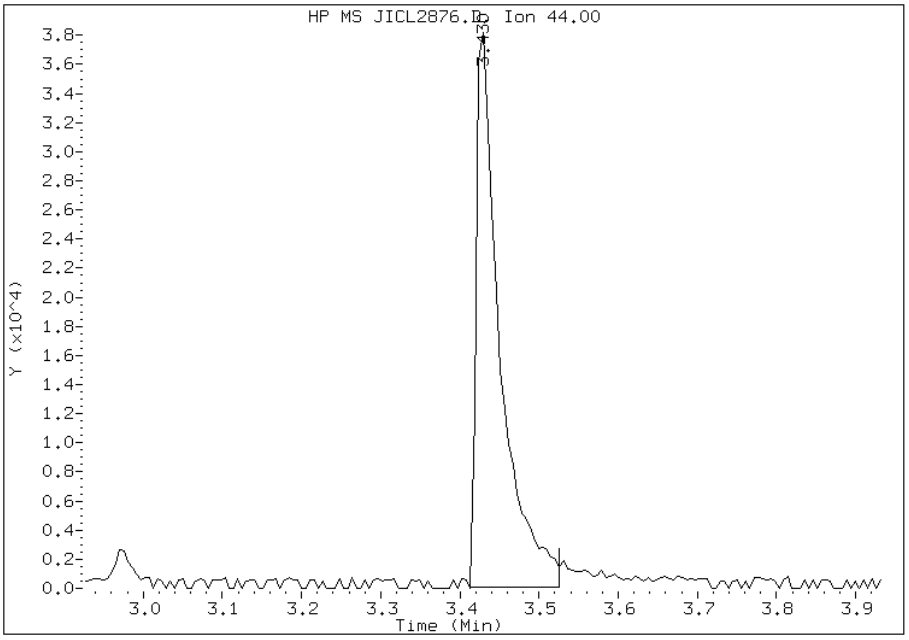
Manual Integration Results

RT: 3.43

Response: 79187

Amount: 20

Conc: 20



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:05
Manual Integration Reason: Incomplete Integration

Manual Integration Report

Data File: JICL2876.D
Inj. Date and Time: 24-JUL-2012 15:23
Instrument ID: MSJ.i
Client ID: STD020-011994
Compound: 174 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 07/25/2012

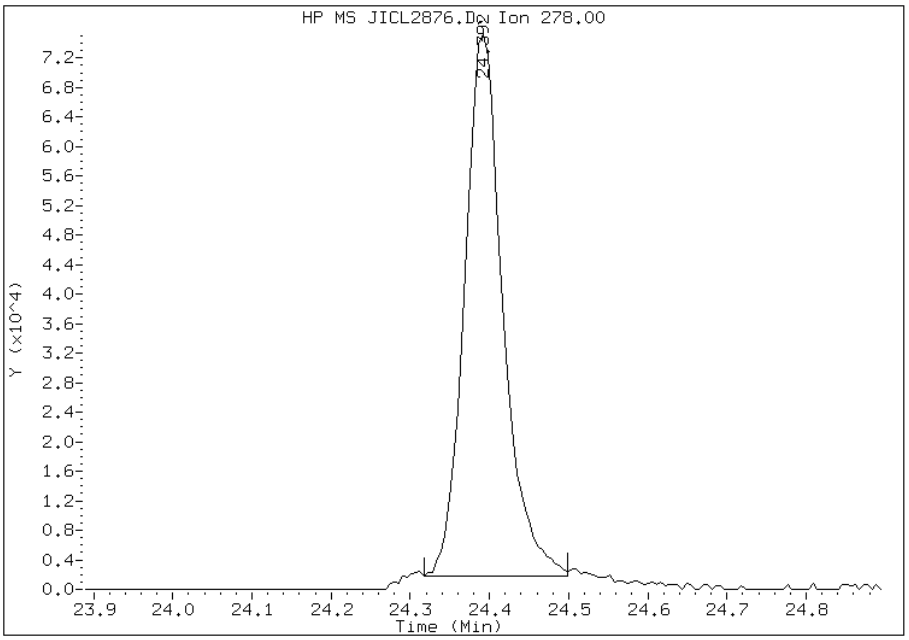
Processing Integration Results

RT: 24.39

Response: 245335

Amount: 17

Conc: 17



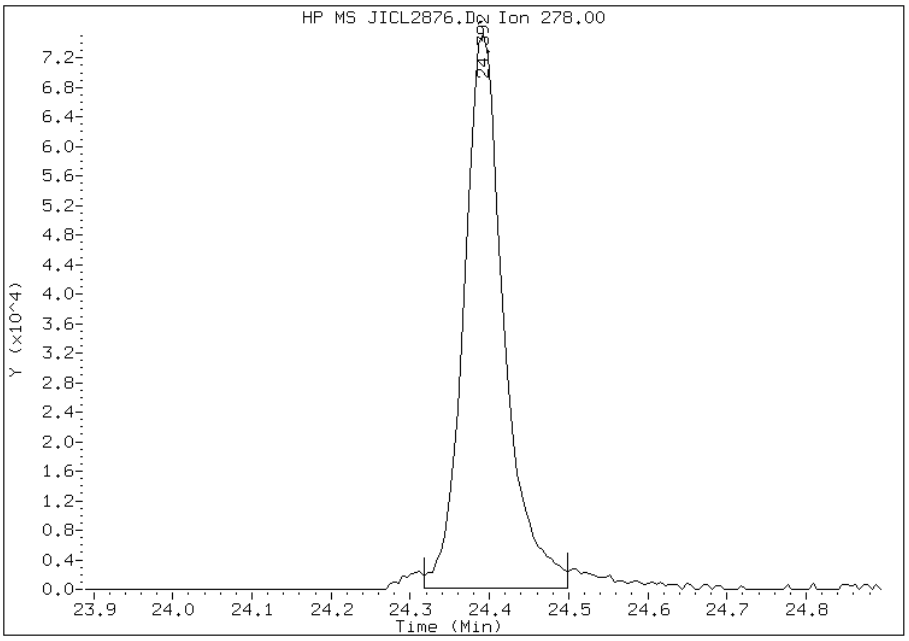
Manual Integration Results

RT: 24.39

Response: 264541

Amount: 18

Conc: 18



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:05
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2877.D
Lab Smp Id: STD010-011993 Client Smp ID: STD010-011993
Inj Date : 24-JUL-2012 15:56
Operator : MAK Inst ID: MSJ.i
Smp Info : STD010-011993
Misc Info : 11993
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:36 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 16:30 Cal File: JICL2878.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.620	2.620	(0.433)	30560	10.0000	10.47
	4 N-Nitrosodimethylamine	74	2.989	2.989	(0.494)	43770	10.0000	10.06
	3 Pyridine	79	3.042	3.042	(0.503)	80974	10.0000	10.55
	5 Dimethylformamide	44	3.454	3.454	(0.571)	43535	10.0000	10.37(M)
$	10 2-Fluorophenol	112	4.522	4.522	(0.747)	68592	10.0000	10.27
	11 Cyclohexanol	57	4.714	4.714	(0.779)	55064	10.0000	10.28
	19 Bis(2-chloroethyl)ether	93	5.713	5.713	(0.944)	68243	10.0000	9.979(a)
$	15 Phenol-d5	99	5.580	5.580	(0.922)	82744	10.0000	9.990(a)
	16 Phenol	94	5.596	5.596	(0.925)	90673	10.0000	10.11
	20 2-Chlorophenol	128	5.793	5.793	(0.958)	73012	10.0000	10.18
	21 1,3-Dichlorobenzene	146	5.986	5.986	(0.989)	81722	10.0000	10.12
*	22 1,4-Dichlorobenzene-d4	152	6.050	6.050	(1.000)	213914	40.0000	
	23 1,4-Dichlorobenzene	146	6.071	6.071	(1.004)	83462	10.0000	10.08
	26 1,2-Dichlorobenzene	146	6.264	6.264	(1.035)	76915	10.0000	10.02
	25 Benzyl Alcohol	108	6.205	6.205	(1.026)	46187	10.0000	10.14
	28 2,2-oxybis(1-Chloropropane)	45	6.381	6.381	(1.055)	71750	10.0000	9.981(a)
	27 2-Methylphenol	108	6.338	6.338	(1.048)	64107	10.0000	10.31
	35 Hexachloroethane	117	6.702	6.702	(1.108)	30112	10.0000	9.676(a)
	32 N-Nitrosodinpropylamine	70	6.547	6.547	(1.082)	50597	10.0000	10.15
M	215 Total Cresols	100				64107	30.0000	10.31
$	36 Nitrobenzene-d5	82	6.750	6.750	(0.868)	80512	10.0000	9.784(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.776	6.776	(0.872)	83581	10.0000	9.977(a)
	39 Isophorone	82	7.097	7.097	(0.913)	132984	10.0000	9.878(a)
	40 2-Nitrophenol	139	7.214	7.214	(0.928)	37320	10.0000	9.953(a)
	41 2,4-Dimethylphenol	107	7.268	7.268	(0.935)	72018	10.0000	9.820(a)
	42 Bis(2-chloroethoxy)methane	93	7.401	7.401	(0.952)	76563	10.0000	9.794(a)
	45 2,4-Dichlorophenol	162	7.556	7.556	(0.972)	55552	10.0000	9.793(a)
	47 1,2,4-Trichlorobenzene	180	7.690	7.690	(0.989)	62905	10.0000	9.745(a)
*	48 Naphthalene-d8	136	7.775	7.775	(1.000)	779029	40.0000	
	44 Benzoic Acid	122	7.353	7.353	(0.946)	33234	10.0000	8.105(a)
	50 Naphthalene	128	7.807	7.807	(1.004)	208723	10.0000	9.897(a)
	51 4-Chloroaniline	127	7.882	7.882	(1.014)	81806	10.0000	10.02
	54 Hexachlorobutadiene	225	8.010	8.010	(1.030)	40147	10.0000	10.06
	62 2-Methylnaphthalene	142	8.903	8.903	(1.145)	132639	10.0000	9.753(a)
	59 4-Chloro-3-Methylphenol	107	8.641	8.641	(1.111)	59936	10.0000	9.714(a)
	66 Hexachlorocyclopentadiene	237	9.186	9.186	(0.855)	27539	10.0000	8.984(a)
	67 2,4,6-Trichlorophenol	196	9.383	9.383	(0.874)	39240	10.0000	9.890(a)
	68 2,4,5-Trichlorophenol	196	9.437	9.437	(0.879)	39823	10.0000	9.707(a)
$	69 2-Fluorobiphenyl (Surr)	172	9.538	9.538	(0.888)	140312	10.0000	9.823(a)
	72 2-Chloronaphthalene	162	9.736	9.736	(0.906)	119788	10.0000	9.666(a)
	73 2-Nitroaniline	65	9.918	9.918	(0.923)	37585	10.0000	9.577(a)
	76 Dimethylphthalate	163	10.265	10.265	(0.956)	133433	10.0000	9.884(aM)
	79 Acenaphthylene	152	10.473	10.473	(0.975)	187043	10.0000	9.946(a)
	80 2,6-Dinitrotoluene	165	10.361	10.361	(0.965)	28636	10.0000	9.521(a)
*	82 Acenaphthene-d10	164	10.740	10.740	(1.000)	416467	40.0000	
	83 Acenaphthene	153	10.799	10.799	(1.005)	121534	10.0000	9.929(a)
	81 3-Nitroaniline	138	10.660	10.660	(0.993)	30714	10.0000	9.707(a)
	84 2,4-Dinitrophenol	184	10.852	10.852	(1.010)	14264	10.0000	9.878(aQ)
	86 Dibenzofuran	168	11.120	11.120	(1.035)	168796	10.0000	9.783(a)
	88 2,4-Dinitrotoluene	165	11.103	11.103	(1.034)	37529	10.0000	9.438(a)
	85 4-Nitrophenol	109	10.981	10.981	(1.022)	21404	10.0000	9.573(a)
	93 Diethylphthalate	149	11.595	11.595	(1.080)	128260	10.0000	9.807(a)
	94 Fluorene	166	11.766	11.766	(1.095)	135608	10.0000	9.686(a)
	95 4-Chlorophenyl-phenylether	204	11.787	11.787	(1.097)	68067	10.0000	9.872(a)
	98 4-Nitroaniline	138	11.803	11.803	(1.099)	31468	10.0000	9.969(a)
	99 4,6-Dinitro-2-methylphenol	198	11.873	11.873	(0.874)	20986	10.0000	9.656(a)
	100 N-Nitrosodiphenylamine	169	12.012	12.012	(0.885)	90809	10.0000	9.844(a)
	102 Azobenzene	77	12.086	12.086	(0.890)	148537	10.0000	9.793(a)
$	104 2,4,6-Tribromophenol	330	12.225	12.225	(1.138)	19746	10.0000	10.12
	109 4-Bromophenyl-phenylether	248	12.728	12.728	(0.937)	38033	10.0000	9.718(a)
	112 Hexachlorobenzene	284	12.834	12.834	(0.945)	40702	10.0000	9.872(a)
	117 Pentachlorophenol	266	13.214	13.214	(0.973)	26230	10.0000	9.103(a)
*	121 Phenanthrene-d10	188	13.577	13.577	(1.000)	709538	40.0000	
	122 Phenanthrene	178	13.620	13.620	(1.003)	197085	10.0000	9.908(a)
	124 Anthracene	178	13.716	13.716	(1.010)	198346	10.0000	9.851(a)
	126 Carbazole	167	14.047	14.047	(1.035)	166783	10.0000	9.806(a)
	129 Di-n-Butylphthalate	149	14.827	14.827	(1.092)	199642	10.0000	9.445(a)
	134 Fluoranthene	202	15.970	15.970	(1.176)	192528	10.0000	9.722(a)
	137 Pyrene	202	16.414	16.414	(0.872)	206741	10.0000	9.905(a)
$	139 Terphenyl-d14	244	16.782	16.782	(0.891)	126029	10.0000	9.770(a)
	146 Butylbenzylphthalate	149	17.808	17.808	(0.946)	84759	10.0000	9.571(a)
	150 Benzo(a)Anthracene	228	18.812	18.812	(0.999)	164073	10.0000	9.859(a)
*	153 Chrysene-d12	240	18.834	18.834	(1.000)	686410	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.802	18.802	(0.998)	61221	10.0000	9.322(a)
	154 Chrysene	228	18.882	18.882	(1.003)	170538	10.0000	9.828(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155	bis(2-ethylhexyl)Phthalate	149	18.994	18.994	(1.009)	109350	10.0000	9.293(a)
158	Di-n-octylphthalate	149	20.223	20.223	(1.074)	165246	10.0000	8.441(a)
160	Benzo(b)fluoranthene	252	20.853	20.853	(0.963)	155847	10.0000	9.840(a)
161	Benzo(k)fluoranthene	252	20.906	20.906	(0.966)	154997	10.0000	9.554(a)
165	Benzo(a)pyrene	252	21.515	21.515	(0.994)	148172	10.0000	9.505(a)
* 166	Perylene-d12	264	21.649	21.649	(1.000)	615192	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	24.357	24.357	(1.125)	114979	10.0000	9.866(a)
174	Dibenzo(a,h)anthracene	278	24.437	24.437	(1.129)	134076	10.0000	8.937(aM)
177	Benzo(g,h,i)perylene	276	25.169	25.169	(1.163)	134070	10.0000	8.775(a)

QC Flag Legend

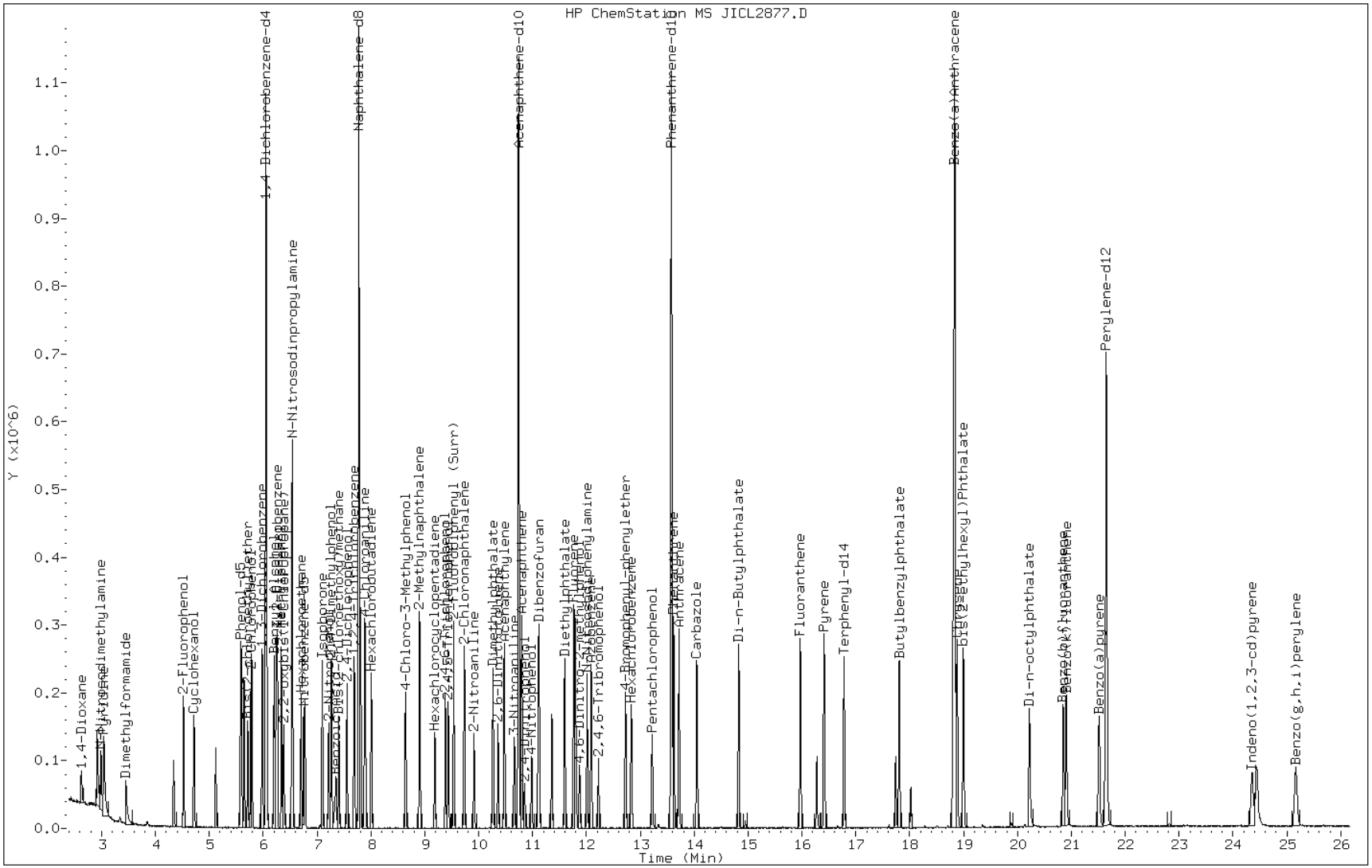
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: JICL2877.D

Date: 24-JUL-2012 15:56

Client ID: STD010-011993 Instrument: MSJ.i

Sample Info: STD010-011993 Operator: MAK



Manual Integration Report

Data File: JICL2877.D
Inj. Date and Time: 24-JUL-2012 15:56
Instrument ID: MSJ.i
Client ID: STD010-011993
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

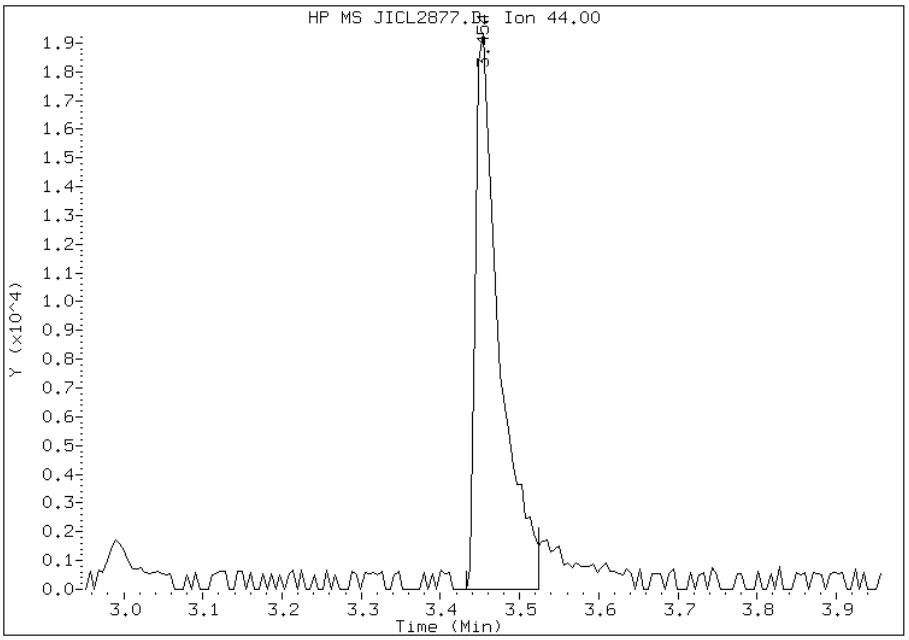
Processing Integration Results

RT: 3.45

Response: 40249

Amount: 13

Conc: 13



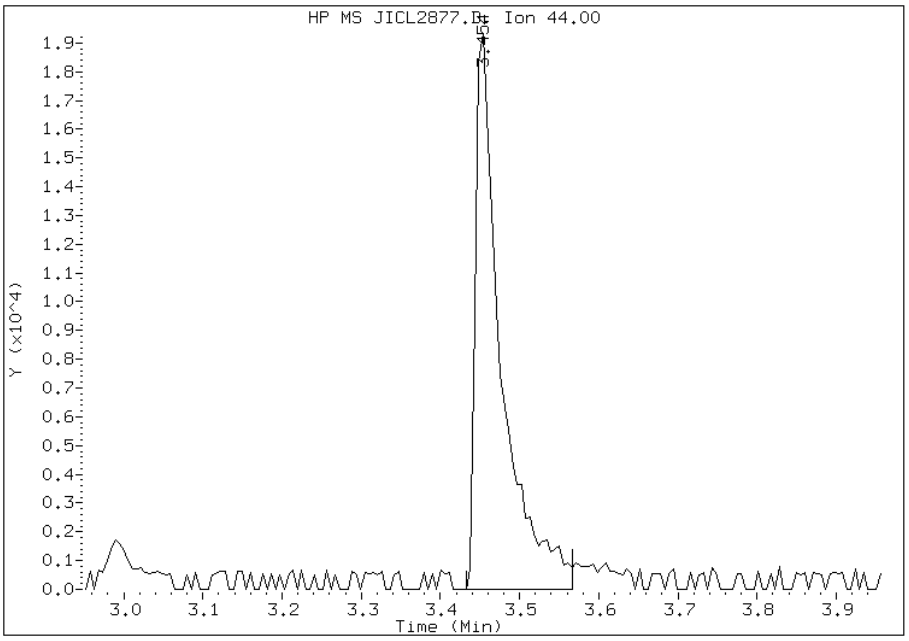
Manual Integration Results

RT: 3.45

Response: 43535

Amount: 10

Conc: 10



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:06
Manual Integration Reason: Incomplete Integration

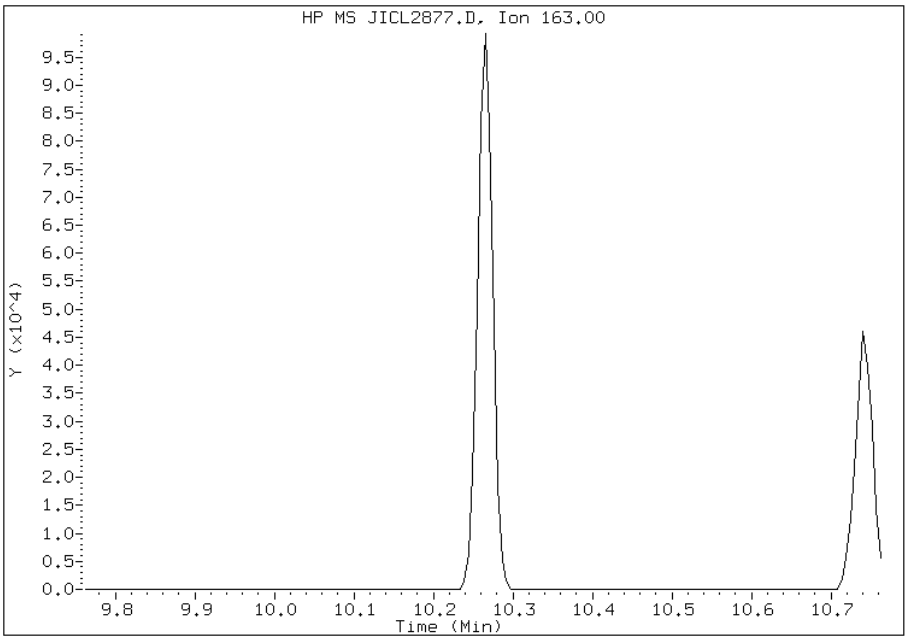
Manual Integration Report

Data File: JICL2877.D
Inj. Date and Time: 24-JUL-2012 15:56
Instrument ID: MSJ.i
Client ID: STD010-011993
Compound: 76 Dimethylphthalate
CAS #: 131-11-3
Report Date: 07/25/2012

Processing Integration Results

Not Detected

Expected RT: 10.26



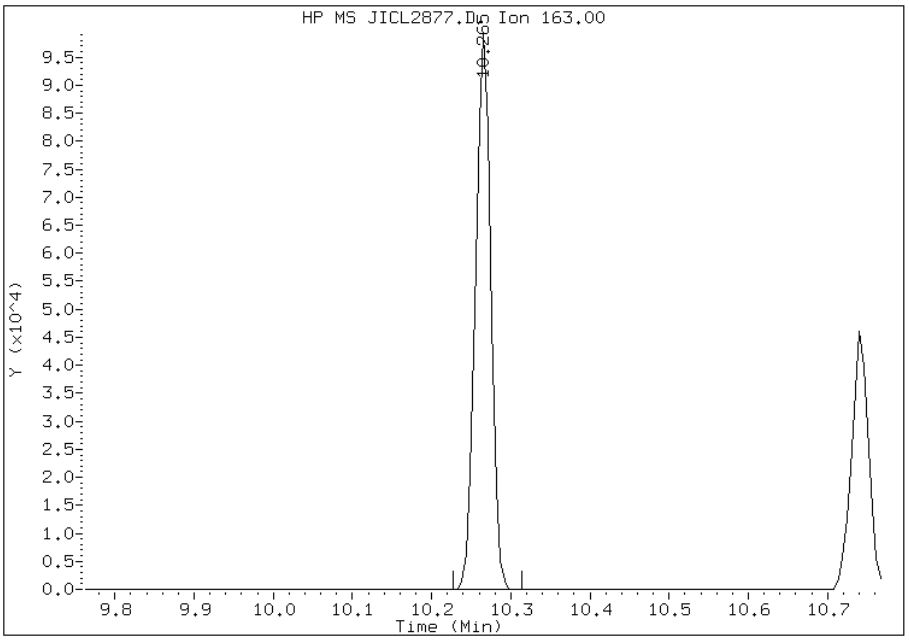
Manual Integration Results

RT: 10.27

Response: 133433

Amount: 10

Conc: 10



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:06
Manual Integration Reason: Analyte not Identified by the Data System

Manual Integration Report

Data File: JICL2877.D
Inj. Date and Time: 24-JUL-2012 15:56
Instrument ID: MSJ.i
Client ID: STD010-011993
Compound: 174 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 07/25/2012

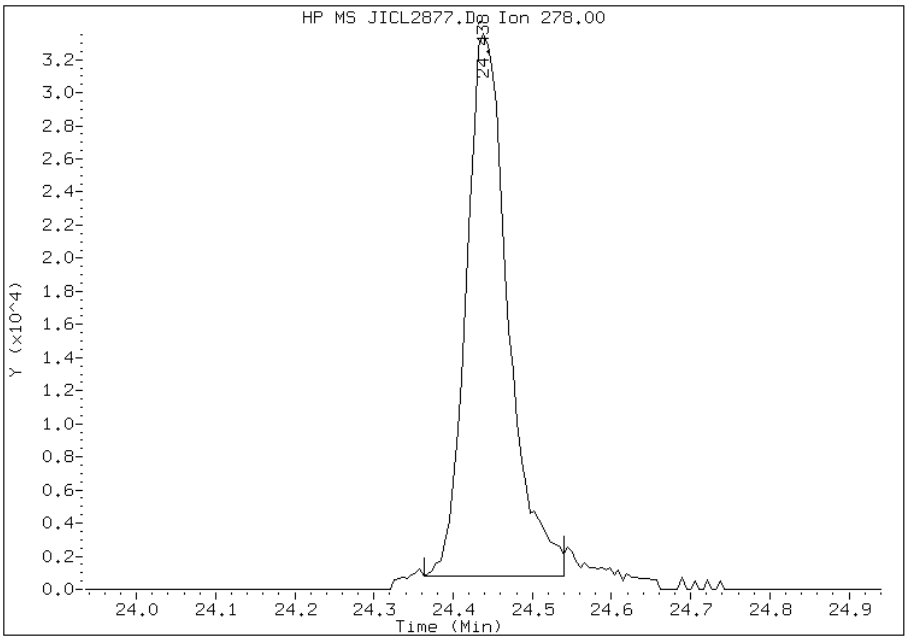
Processing Integration Results

RT: 24.44

Response: 119329

Amount: 8

Conc: 8



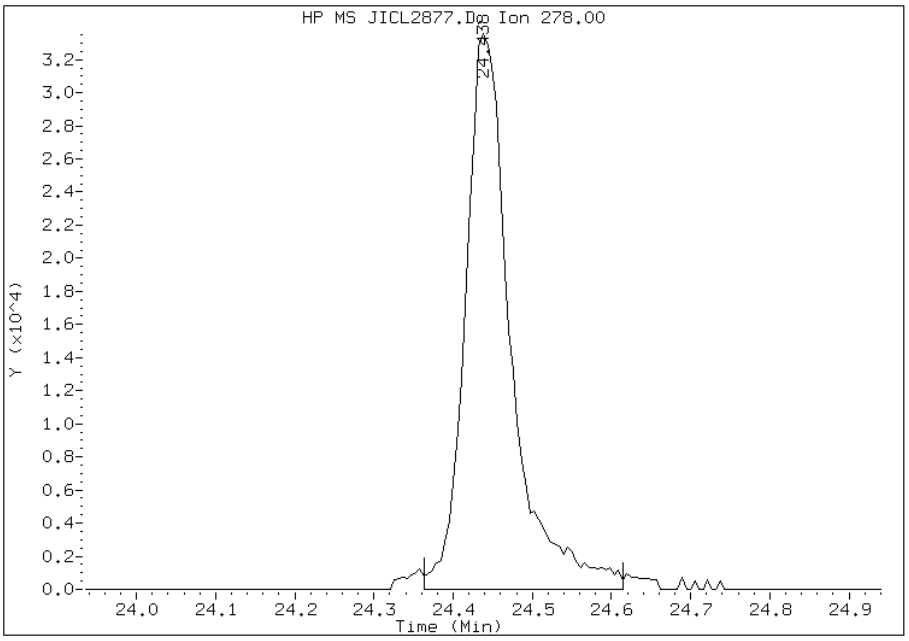
Manual Integration Results

RT: 24.44

Response: 134076

Amount: 9

Conc: 9



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:07
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2878.D
Lab Smp Id: STD005-011992 Client Smp ID: STD005-011992
Inj Date : 24-JUL-2012 16:30
Operator : MAK Inst ID: MSJ.i
Smp Info : STD005-011992
Misc Info : 11992
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:36 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 13:42 Cal File: JICL2873.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	2.622	2.622	(0.434)	11694	5.00000	4.629(a)
4	N-Nitrosodimethylamine	74	2.991	2.991	(0.495)	18565	5.00000	4.932(a)
3	Pyridine	79	3.049	3.049	(0.505)	34499	5.00000	5.195(a)
5	Dimethylformamide	44	3.461	3.461	(0.573)	20590	5.00000	5.669(aM)
$ 10	2-Fluorophenol	112	4.518	4.518	(0.748)	28584	5.00000	4.947(a)
11	Cyclohexanol	57	4.711	4.711	(0.780)	22549	5.00000	4.863(a)
19	Bis(2-chloroethyl)ether	93	5.710	5.710	(0.945)	28680	5.00000	4.847(a)
$ 15	Phenol-d5	99	5.571	5.571	(0.922)	34697	5.00000	4.841(a)
16	Phenol	94	5.587	5.587	(0.925)	37458	5.00000	4.825(a)
20	2-Chlorophenol	128	5.785	5.785	(0.958)	30568	5.00000	4.928(a)
21	1,3-Dichlorobenzene	146	5.977	5.977	(0.989)	34576	5.00000	4.950(a)
* 22	1,4-Dichlorobenzene-d4	152	6.041	6.041	(1.000)	185090	40.0000	
23	1,4-Dichlorobenzene	146	6.062	6.062	(1.004)	34442	5.00000	4.806(a)
26	1,2-Dichlorobenzene	146	6.255	6.255	(1.035)	33730	5.00000	5.078(a)
25	Benzyl Alcohol	108	6.196	6.196	(1.026)	18547	5.00000	4.704(a)
28	2,2-oxybis(1-Chloropropane)	45	6.372	6.372	(1.055)	30629	5.00000	4.924(a)
27	2-Methylphenol	108	6.335	6.335	(1.049)	26665	5.00000	4.955(a)
35	Hexachloroethane	117	6.693	6.693	(1.108)	13054	5.00000	4.848(a)
32	N-Nitrosodinpropylamine	70	6.538	6.538	(1.082)	20337	5.00000	4.714(a)
M 215	Total Cresols	100				26665	15.0000	4.955(a)
$ 36	Nitrobenzene-d5	82	6.746	6.746	(0.869)	33963	5.00000	4.797(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.767	6.767	(0.871)	35128	5.00000	4.873(a)
	39 Isophorone	82	7.088	7.088	(0.913)	56255	5.00000	4.857(a)
	40 2-Nitrophenol	139	7.211	7.211	(0.928)	14384	5.00000	4.459(a)
	41 2,4-Dimethylphenol	107	7.259	7.259	(0.935)	29372	5.00000	4.655(a)
	42 Bis(2-chloroethoxy)methane	93	7.398	7.398	(0.953)	32541	5.00000	4.838(a)
	45 2,4-Dichlorophenol	162	7.547	7.547	(0.972)	24405	5.00000	5.000(a)
	47 1,2,4-Trichlorobenzene	180	7.686	7.686	(0.990)	27735	5.00000	4.994(a)
*	48 Naphthalene-d8	136	7.766	7.766	(1.000)	670290	40.0000	
	50 Naphthalene	128	7.798	7.798	(1.004)	88942	5.00000	4.902(a)
	51 4-Chloroaniline	127	7.873	7.873	(1.014)	34518	5.00000	4.915(a)
	54 Hexachlorobutadiene	225	8.001	8.001	(1.030)	16696	5.00000	4.864(a)
	62 2-Methylnaphthalene	142	8.899	8.899	(1.146)	56286	5.00000	4.810(a)
	59 4-Chloro-3-Methylphenol	107	8.637	8.637	(1.112)	24912	5.00000	4.692(a)
	66 Hexachlorocyclopentadiene	237	9.182	9.182	(0.856)	10785	5.00000	4.196(a)
	67 2,4,6-Trichlorophenol	196	9.374	9.374	(0.874)	15697	5.00000	4.719(a)
	68 2,4,5-Trichlorophenol	196	9.428	9.428	(0.879)	16252	5.00000	4.725(a)
$	69 2-Fluorobiphenyl (Surr)	172	9.529	9.529	(0.888)	58689	5.00000	4.901(a)
	72 2-Chloronaphthalene	162	9.727	9.727	(0.906)	51608	5.00000	4.967(a)
	73 2-Nitroaniline	65	9.909	9.909	(0.923)	14523	5.00000	4.414(a)
	76 Dimethylphthalate	163	10.256	10.256	(0.956)	54980	5.00000	4.858(aM)
	79 Acenaphthylene	152	10.464	10.464	(0.975)	75070	5.00000	4.761(a)
	80 2,6-Dinitrotoluene	165	10.352	10.352	(0.965)	10574	5.00000	4.193(a)
*	82 Acenaphthene-d10	164	10.731	10.731	(1.000)	349157	40.0000	
	83 Acenaphthene	153	10.790	10.790	(1.005)	50420	5.00000	4.913(a)
	81 3-Nitroaniline	138	10.646	10.646	(0.992)	11622	5.00000	4.381(a)
	84 2,4-Dinitrophenol	184	10.844	10.844	(1.010)	3582	5.00000	5.481(aQ)
	86 Dibenzofuran	168	11.111	11.111	(1.035)	69530	5.00000	4.807(a)
	88 2,4-Dinitrotoluene	165	11.095	11.095	(1.034)	14580	5.00000	4.374(a)
	85 4-Nitrophenol	109	10.977	10.977	(1.023)	7852	5.00000	4.189(a)
	93 Diethylphthalate	149	11.586	11.586	(1.080)	53586	5.00000	4.887(a)
	94 Fluorene	166	11.757	11.757	(1.096)	55352	5.00000	4.716(a)
	95 4-Chlorophenyl-phenylether	204	11.778	11.778	(1.098)	28359	5.00000	4.906(a)
	98 4-Nitroaniline	138	11.794	11.794	(1.099)	12108	5.00000	4.575(a)
	99 4,6-Dinitro-2-methylphenol	198	11.864	11.864	(0.874)	7326	5.00000	5.486(a)
	100 N-Nitrosodiphenylamine	169	12.003	12.003	(0.885)	36427	5.00000	4.753(a)
	102 Azobenzene	77	12.078	12.078	(0.890)	59152	5.00000	4.694(a)
$	104 2,4,6-Tribromophenol	330	12.211	12.211	(1.138)	6560	5.00000	4.011(a)
	109 4-Bromophenyl-phenylether	248	12.719	12.719	(0.937)	15737	5.00000	4.839(a)
	112 Hexachlorobenzene	284	12.825	12.825	(0.945)	16477	5.00000	4.810(a)
	117 Pentachlorophenol	266	13.210	13.210	(0.974)	9205	5.00000	3.845(a)
*	121 Phenanthrene-d10	188	13.568	13.568	(1.000)	589511	40.0000	
	122 Phenanthrene	178	13.611	13.611	(1.003)	81047	5.00000	4.904(a)
	124 Anthracene	178	13.707	13.707	(1.010)	79874	5.00000	4.775(a)
	126 Carbazole	167	14.043	14.043	(1.035)	68228	5.00000	4.828(a)
	129 Di-n-Butylphthalate	149	14.818	14.818	(1.092)	78795	5.00000	4.486(a)
	134 Fluoranthene	202	15.961	15.961	(1.176)	76933	5.00000	4.676(a)
	137 Pyrene	202	16.405	16.405	(0.871)	83609	5.00000	4.787(a)
$	139 Terphenyl-d14	244	16.773	16.773	(0.891)	50399	5.00000	4.670(a)
	146 Butylbenzylphthalate	149	17.799	17.799	(0.946)	33011	5.00000	4.455(a)
	150 Benzo(a)Anthracene	228	18.803	18.803	(0.999)	67045	5.00000	4.815(a)
*	153 Chrysene-d12	240	18.825	18.825	(1.000)	574303	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.793	18.793	(0.998)	22424	5.00000	4.081(a)
	154 Chrysene	228	18.873	18.873	(1.003)	71931	5.00000	4.954(a)
	155 bis(2-ethylhexyl)Phthalate	149	18.990	18.990	(1.009)	41068	5.00000	4.171(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
160 Benzo(b)fluoranthene	252	20.839	20.839	(0.963)	61089	5.00000	4.528(a)
161 Benzo(k)fluoranthene	252	20.892	20.892	(0.966)	67298	5.00000	4.869(a)
165 Benzo(a)pyrene	252	21.501	21.501	(0.994)	60000	5.00000	4.518(a)
* 166 Perylene-d12	264	21.635	21.635	(1.000)	524082	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.338	24.338	(1.125)	44956	5.00000	6.163(a)
174 Dibenzo(a,h)anthracene	278	24.423	24.423	(1.129)	50932	5.00000	3.985(a)
177 Benzo(g,h,i)perylene	276	25.144	25.144	(1.162)	53408	5.00000	4.103(a)

QC Flag Legend

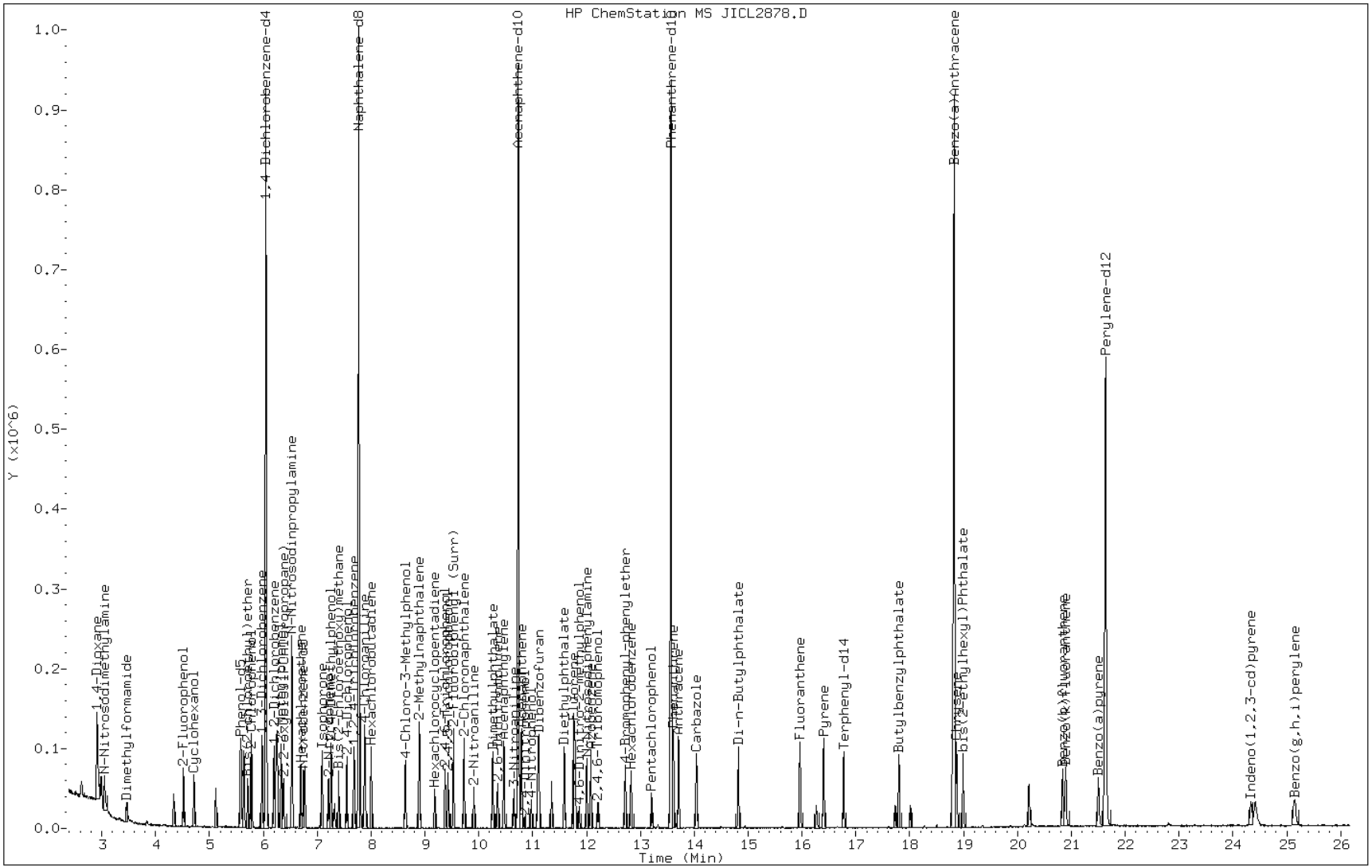
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
Q - Qualifier signal failed the ratio test.
M - Compound response manually integrated.

Data File: JICL2878.D

Date: 24-JUL-2012 16:30

Client ID: STD005-011992 Instrument: MSJ.i

Sample Info: STD005-011992 Operator: MAK



Manual Integration Report

Data File: JICL2878.D
Inj. Date and Time: 24-JUL-2012 16:30
Instrument ID: MSJ.i
Client ID: STD005-011992
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 07/25/2012

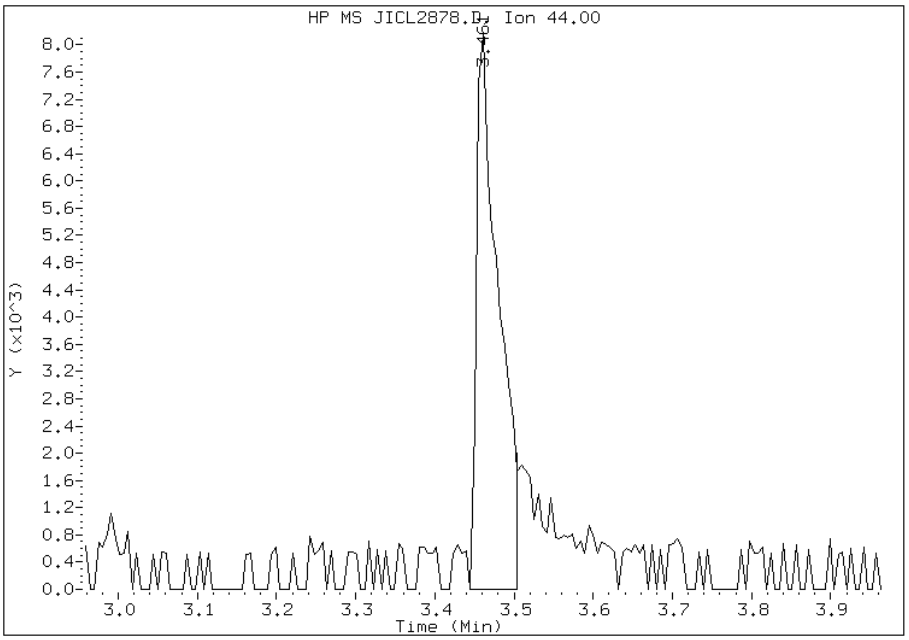
Processing Integration Results

RT: 3.46

Response: 15703

Amount: 6

Conc: 6



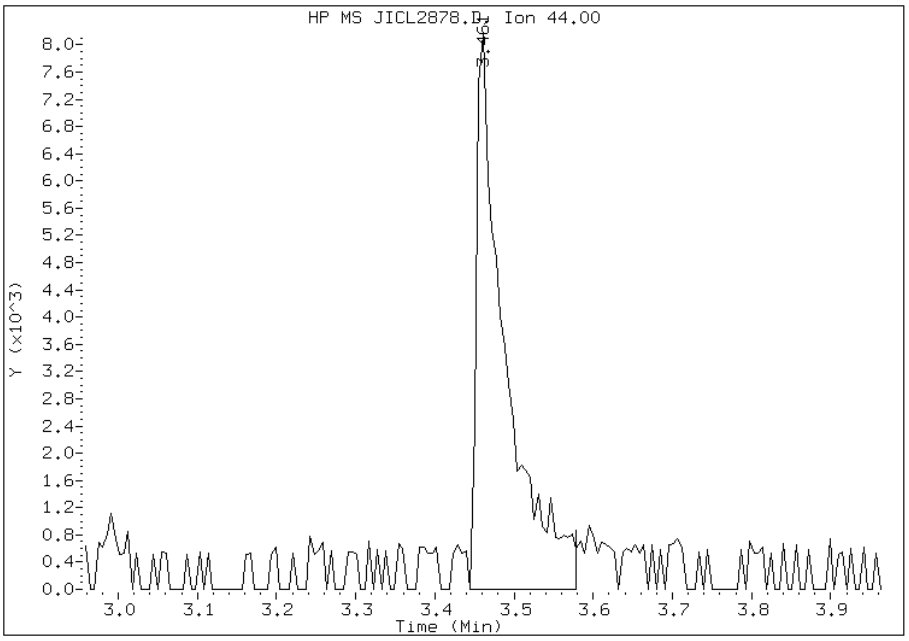
Manual Integration Results

RT: 3.46

Response: 20590

Amount: 6

Conc: 6



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:07
Manual Integration Reason: Incomplete Integration

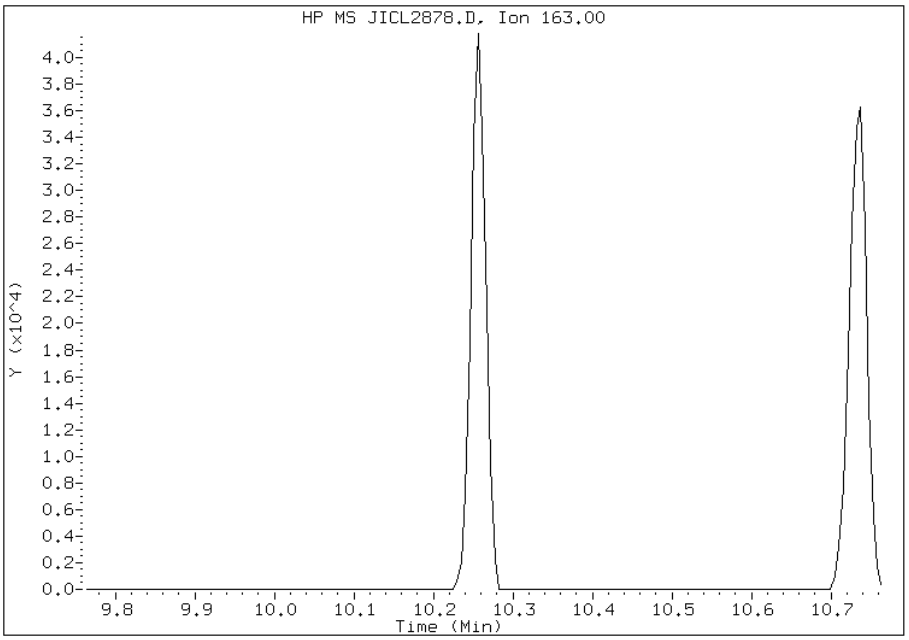
Manual Integration Report

Data File: JICL2878.D
Inj. Date and Time: 24-JUL-2012 16:30
Instrument ID: MSJ.i
Client ID: STD005-011992
Compound: 76 Dimethylphthalate
CAS #: 131-11-3
Report Date: 07/25/2012

Processing Integration Results

Not Detected

Expected RT: 10.26



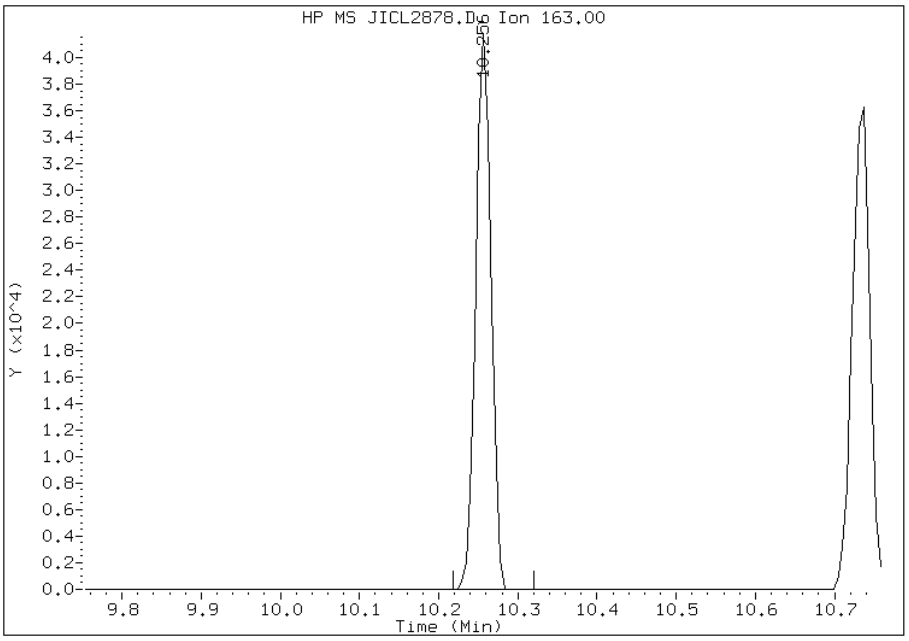
Manual Integration Results

RT: 10.26

Response: 54980

Amount: 5

Conc: 5



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 10:08
Manual Integration Reason: Analyte not Identified by the Data System

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 17:37 Calibration End Date: 07/24/2012 20:59 Calibration ID: 591

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0058270B 160-7404/15	JICL2886.D
Level 2	STD0108270B 160-7404/14	JICL2885.D
Level 3	STD0208270B 160-7404/13	JICL2884.D
Level 4	STD0508270B 160-7404/9	JICL2880.D
Level 5	STD0808270B 160-7404/12	JICL2883.D
Level 6	STD1208270B 160-7404/11	JICL2882.D
Level 7	STD1608270B 160-7404/10	JICL2881.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5		B	M1	M2								
Aniline	1.9284 2.0761	1.9306 2.1029	2.0097	2.0090	2.0410	Ave		2.0140			0.0100	3.3		20.0			
3 & 4 Methylphenol	1.2740 1.4182	1.3080 1.4417	1.3572	1.3733	1.4126	Ave		1.3693			0.6000	4.5		20.0			
Benzidine	+++++ 0.7514	0.5467 0.7698	0.6307	0.7181	0.7360	Ave		0.6921			0.0100	12.4		20.0			
3,3'-Dimethylbenzidine	+++++ 0.7575	0.5556 0.7819	0.6429	0.7183	0.7451	Ave		0.7002			0.0100	12.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 7404

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 07/24/2012 17:37 Calibration End Date: 07/24/2012 20:59 Calibration ID: 591

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0058270B 160-7404/15	JICL2886.D
Level 2	STD0108270B 160-7404/14	JICL2885.D
Level 3	STD0208270B 160-7404/13	JICL2884.D
Level 4	STD0508270B 160-7404/9	JICL2880.D
Level 5	STD0808270B 160-7404/12	JICL2883.D
Level 6	STD1208270B 160-7404/11	JICL2882.D
Level 7	STD1608270B 160-7404/10	JICL2881.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Aniline	DCB	Ave	47728 1204426	95870 1674067	208240	470852	844110	5.00 120	10.0 160	20.0	50.0	80.0
3 & 4 Methylphenol	DCB	Ave	63062 1645456	129902 2295405	281267	643726	1168418	10.0 240	20.0 320	40.0	100	160
Benzidine	CRY	Ave	+++++ 1564351	89490 2153226	214693	563929	1068731	+++++ 120	10.0 160	20.0	50.0	80.0
3,3'-Dimethylbenzidine	CRY	Ave	+++++ 1577106	90950 2187095	218839	564079	1082015	+++++ 120	10.0 160	20.0	50.0	80.0

Curve Type Legend:
Ave = Average ISTD

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2880.D
Lab Smp Id: STD0508270B-012062 Client Smp ID: STD0508270B-012062
Inj Date : 24-JUL-2012 17:37
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0508270B-012062
Misc Info : 12062
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 19:52 Cal File: JICL2884.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

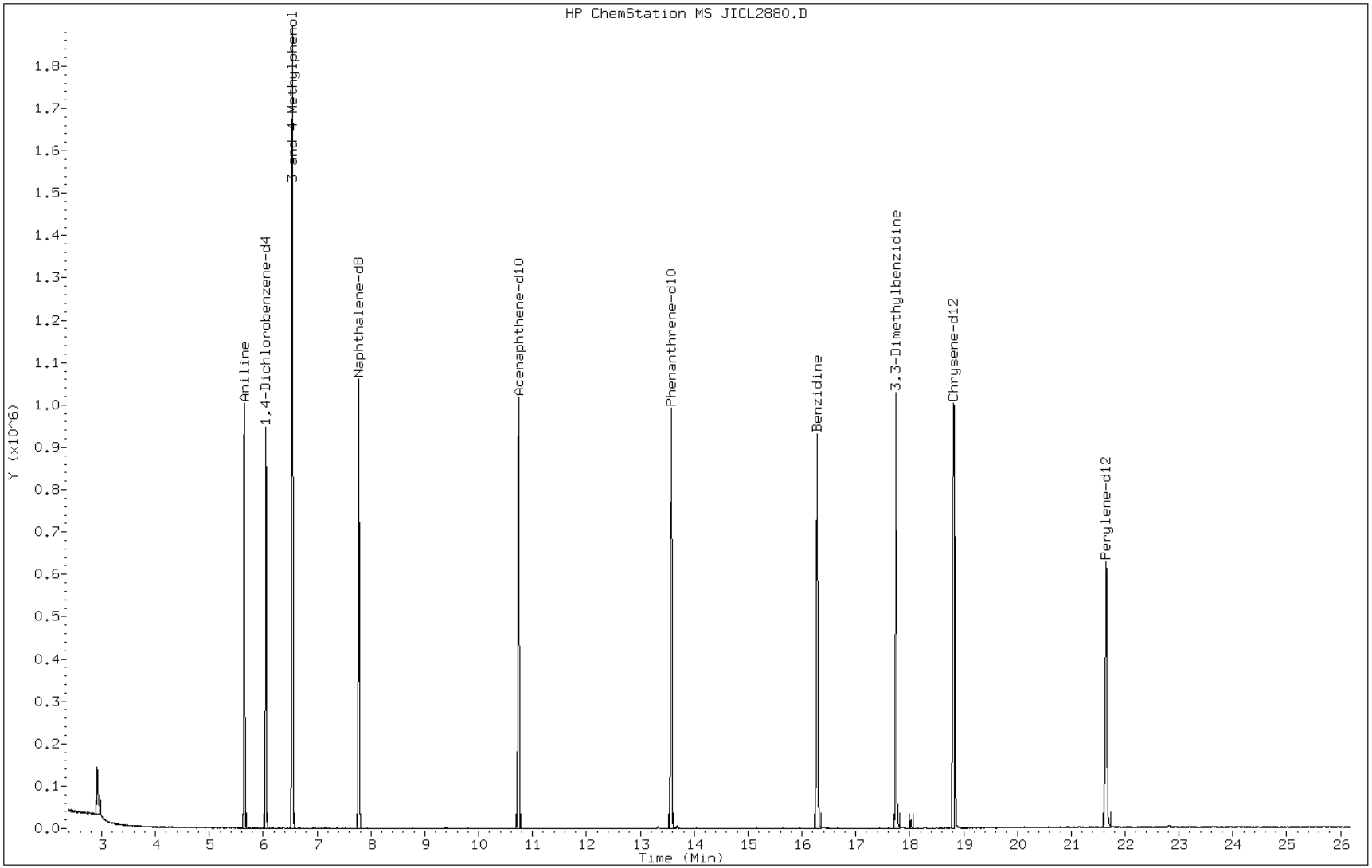
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.647	5.647	(0.934)	470852	50.0000	49.88
*	22 1,4-Dichlorobenzene-d4	152	6.048	6.048	(1.000)	187498	40.0000	
	29 3 and 4-Methylphenol	107	6.539	6.539	(1.081)	643726	100.000	100.3
M	215 Total Cresols	100				643726	150.000	100.3
*	48 Naphthalene-d8	136	7.773	7.773	(1.000)	683255	40.0000	
*	82 Acenaphthene-d10	164	10.738	10.738	(1.000)	370623	40.0000	
*	121 Phenanthrene-d10	188	13.575	13.575	(1.000)	635469	40.0000	
	135 Benzidine	184	16.283	16.283	(0.865)	563929	50.0000	51.88
	145 3,3-Dimethylbenzidine	212	17.747	17.747	(0.942)	564079	50.0000	51.29
*	153 Chrysene-d12	240	18.832	18.832	(1.000)	628204	40.0000	
*	166 Perylene-d12	264	21.647	21.647	(1.000)	566907	40.0000	

Data File: JICL2880.D

Date: 24-JUL-2012 17:37

Client ID: STD0508270B-012062 Instrument: MSJ.i

Sample Info: STD0508270B-012062 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2881.D
Lab Smp Id: STD1608270B-012067 Client Smp ID: STD1608270B-012067
Inj Date : 24-JUL-2012 18:11
Operator : MAK Inst ID: MSJ.i
Smp Info : STD1608270B-012067
Misc Info : 12067
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:44 Cal File: JICL2882.D
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.647	5.647	(0.935)	1674067	160.000	167.1(A)
*	22 1,4-Dichlorobenzene-d4	152	6.037	6.037	(1.000)	199019	40.0000	
	29 3 and 4-Methylphenol	107	6.550	6.550	(1.085)	2295405	320.000	336.9(A)
M	215 Total Cresols	100				2295405	480.000	336.9
*	48 Naphthalene-d8	136	7.763	7.763	(1.000)	745963	40.0000	
*	82 Acenaphthene-d10	164	10.728	10.728	(1.000)	395222	40.0000	
*	121 Phenanthrene-d10	188	13.564	13.564	(1.000)	690354	40.0000	
	135 Benzidine	184	16.289	16.289	(0.865)	2153226	160.000	177.9(A)
	145 3,3-Dimethylbenzidine	212	17.752	17.752	(0.943)	2187095	160.000	178.6(A)
*	153 Chrysene-d12	240	18.821	18.821	(1.000)	699326	40.0000	
*	166 Perylene-d12	264	21.631	21.631	(1.000)	628279	40.0000	

QC Flag Legend

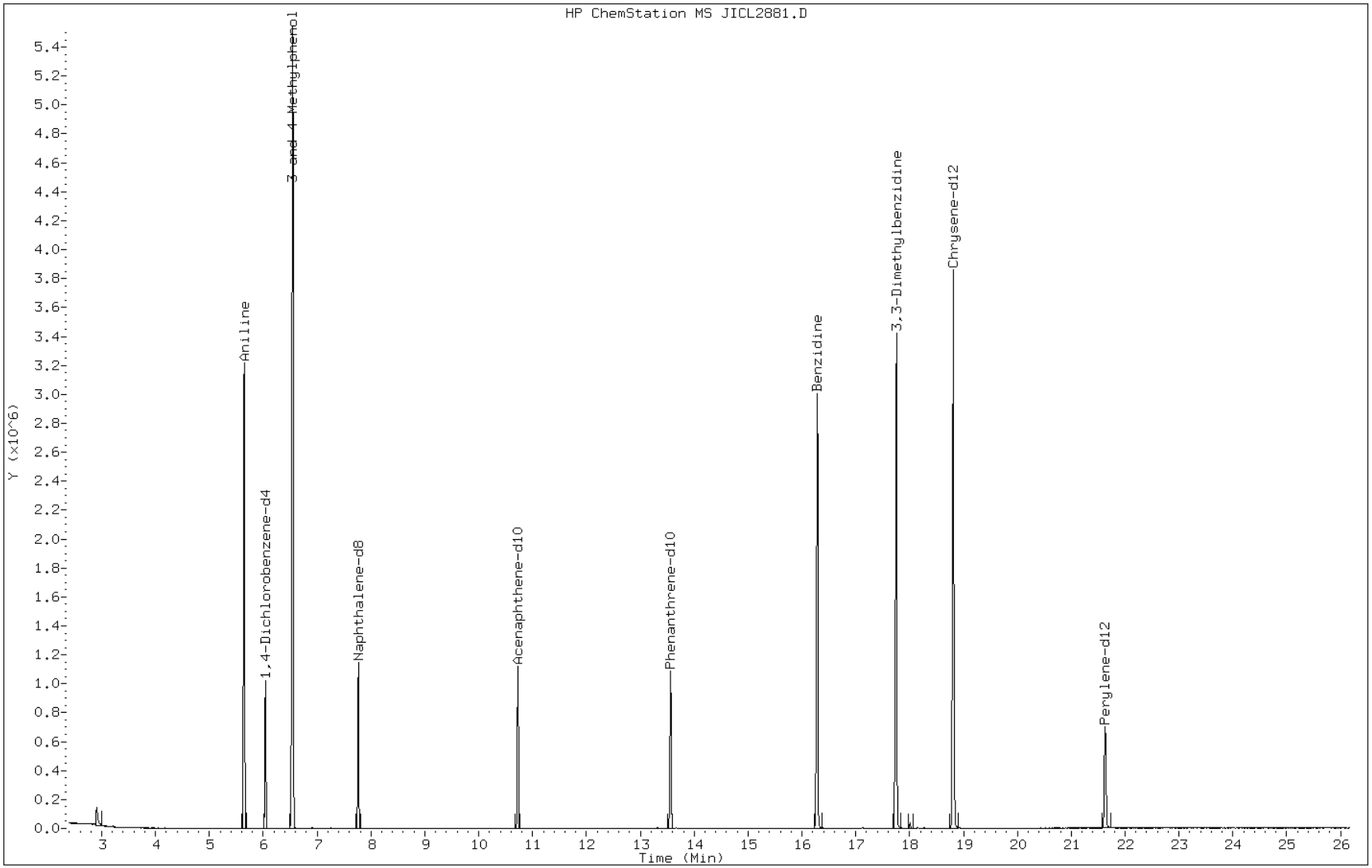
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: JICL2881.D

Date: 24-JUL-2012 18:11

Client ID: STD1608270B-012067 Instrument: MSJ.i

Sample Info: STD1608270B-012067 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2882.D
Lab Smp Id: STD1208270B-012066 Client Smp ID: STD1208270B-012066
Inj Date : 24-JUL-2012 18:44
Operator : MAK Inst ID: MSJ.i
Smp Info : STD1208270B-012066
Misc Info : 12066
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 19:18 Cal File: JICL2883.D
Als bottle: 13 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

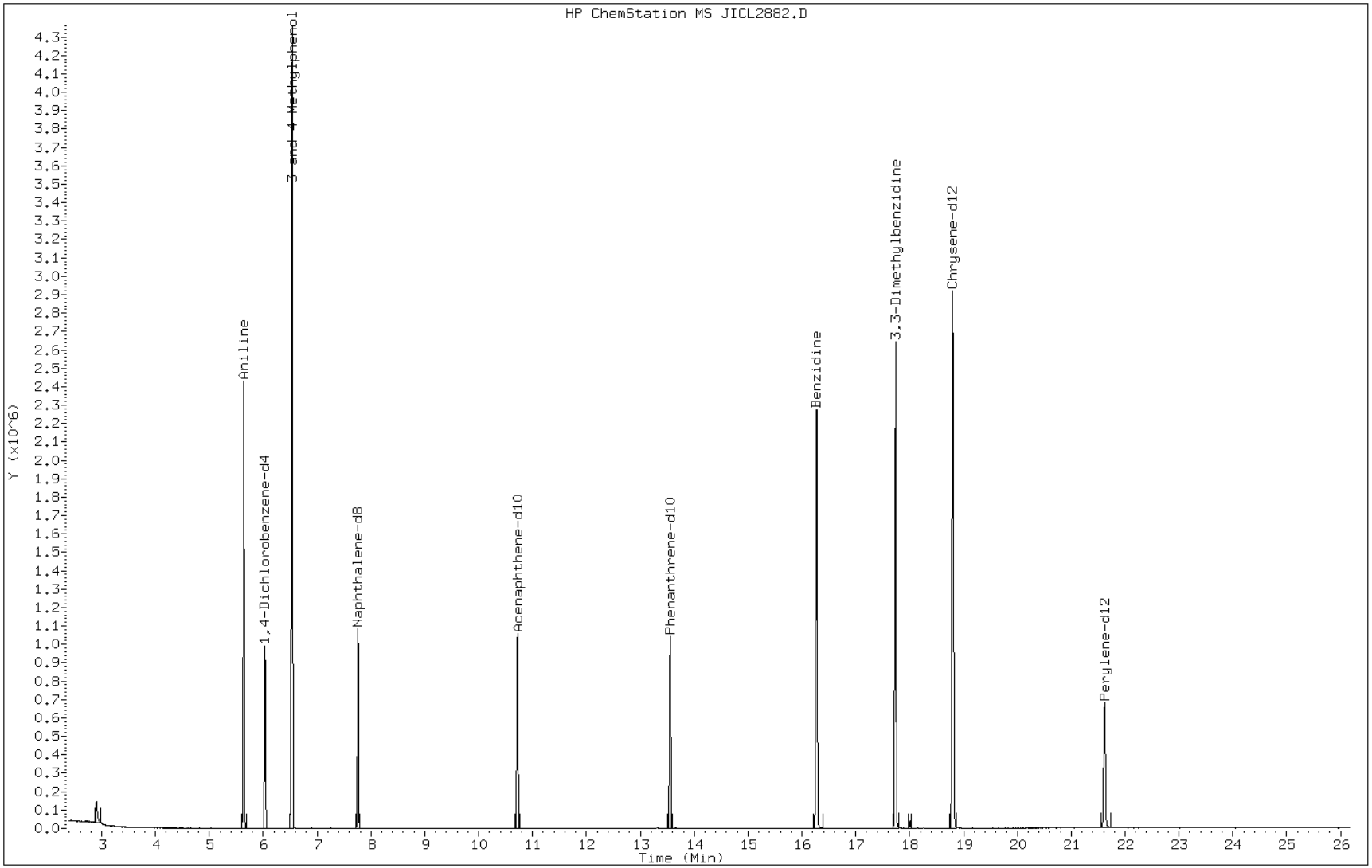
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	17 Aniline	93	5.637	5.637	(0.934)	1204426	120.000	123.7
*	22 1,4-Dichlorobenzene-d4	152	6.032	6.032	(1.000)	193376	40.0000	
	29 3 and 4-Methylphenol	107	6.539	6.539	(1.084)	1645456	240.000	248.6
M	215 Total Cresols	100				1645456	360.000	248.6
*	48 Naphthalene-d8	136	7.757	7.757	(1.000)	722606	40.0000	
*	82 Acenaphthene-d10	164	10.722	10.722	(1.000)	390776	40.0000	
*	121 Phenanthrene-d10	188	13.554	13.554	(1.000)	671517	40.0000	
	135 Benzidine	184	16.278	16.278	(0.865)	1564351	120.000	130.3
	145 3,3-Dimethylbenzidine	212	17.742	17.742	(0.943)	1577106	120.000	129.8
*	153 Chrysene-d12	240	18.810	18.810	(1.000)	693965	40.0000	
*	166 Perylene-d12	264	21.620	21.620	(1.000)	618286	40.0000	

Data File: JICL2882.D

Date: 24-JUL-2012 18:44

Client ID: STD1208270B-012066 Instrument: MSJ.i

Sample Info: STD1208270B-012066 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2883.D
Lab Smp Id: STD0808270B-012065 Client Smp ID: STD0808270B-012065
Inj Date : 24-JUL-2012 19:18
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0808270B-012065
Misc Info : 12065
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 17:37 Cal File: JICL2880.D
Als bottle: 14 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

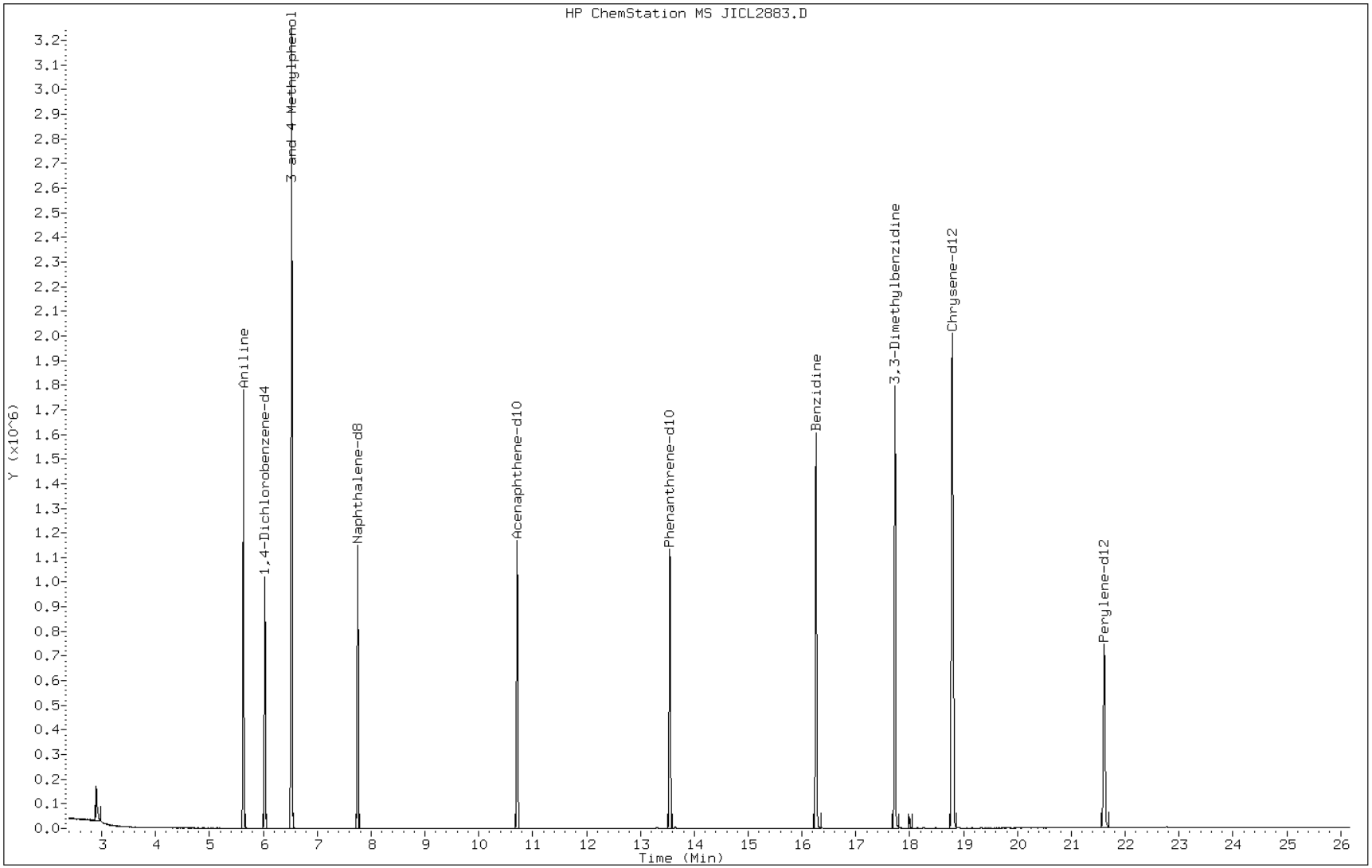
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.630	5.630	(0.934)	844110	80.0000	81.07
*	22 1,4-Dichlorobenzene-d4	152	6.030	6.030	(1.000)	206791	40.0000	
	29 3 and 4-Methylphenol	107	6.527	6.527	(1.082)	1168418	160.000	165.0
M	215 Total Cresols	100				1168418	240.000	165.0
*	48 Naphthalene-d8	136	7.751	7.751	(1.000)	768855	40.0000	
*	82 Acenaphthene-d10	164	10.715	10.715	(1.000)	416752	40.0000	
*	121 Phenanthrene-d10	188	13.547	13.547	(1.000)	716273	40.0000	
	135 Benzidine	184	16.266	16.266	(0.865)	1068731	80.0000	85.07
	145 3,3-Dimethylbenzidine	212	17.730	17.730	(0.943)	1082015	80.0000	85.13
*	153 Chrysene-d12	240	18.803	18.803	(1.000)	726078	40.0000	
*	166 Perylene-d12	264	21.613	21.613	(1.000)	651454	40.0000	

Data File: JICL2883.D

Date: 24-JUL-2012 19:18

Client ID: STD0808270B-012065 Instrument: MSJ.i

Sample Info: STD0808270B-012065 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2884.D
Lab Smp Id: STD0208270B-012033 Client Smp ID: STD0208270B-012033
Inj Date : 24-JUL-2012 19:52
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0208270B-012033
Misc Info : 12033
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 20:25 Cal File: JICL2885.D
Als bottle: 15 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

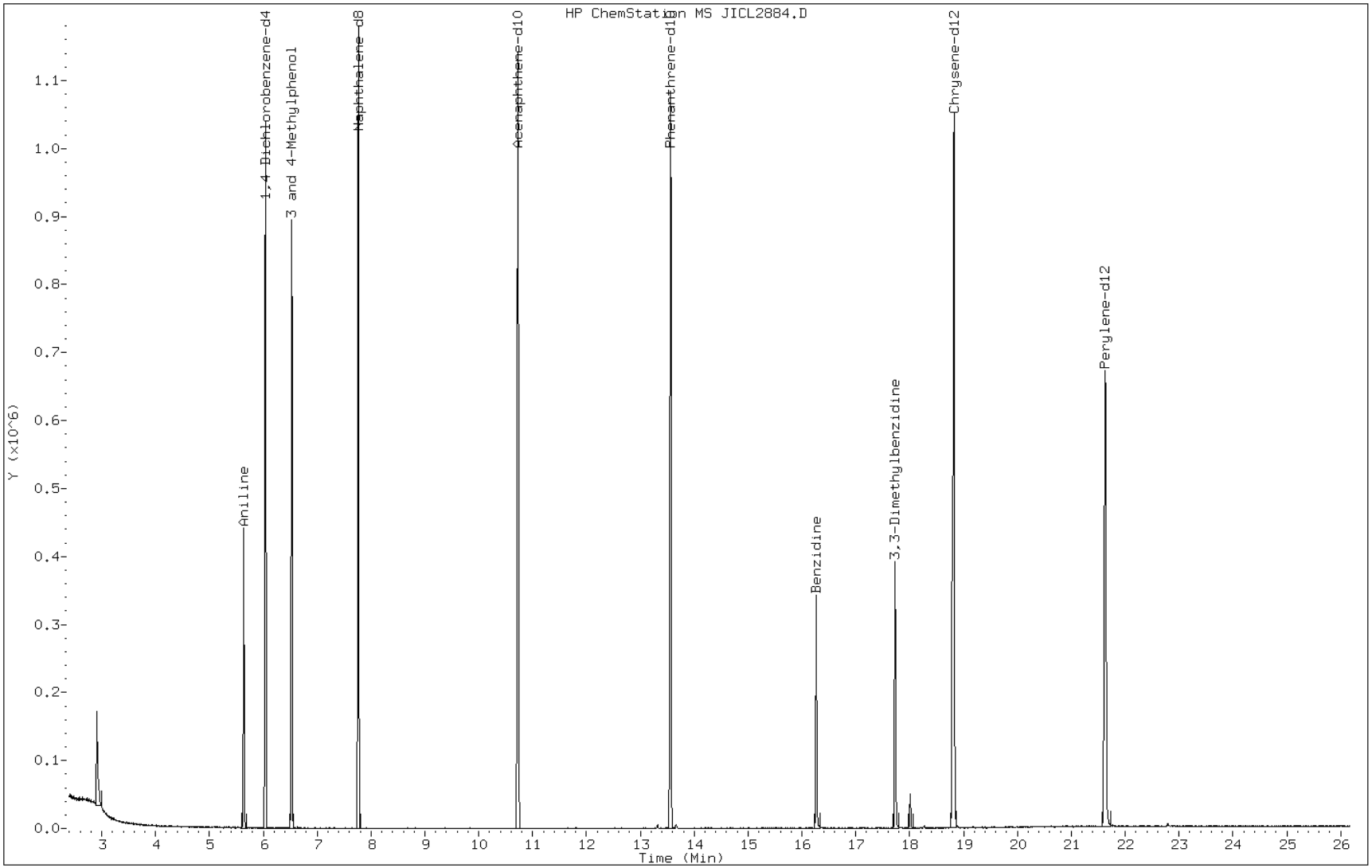
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.636	5.636	(0.934)	208240	20.0000	19.96
*	22 1,4-Dichlorobenzene-d4	152	6.036	6.036	(1.000)	207235	40.0000	
	29 3 and 4-Methylphenol	107	6.528	6.528	(1.081)	281267	40.0000	39.65
M	215 Total Cresols	100				281267	60.0000	39.65
*	48 Naphthalene-d8	136	7.762	7.762	(1.000)	765195	40.0000	
*	82 Acenaphthene-d10	164	10.727	10.727	(1.000)	408516	40.0000	
*	121 Phenanthrene-d10	188	13.563	13.563	(1.000)	698738	40.0000	
	135 Benzidine	184	16.267	16.267	(0.864)	214693	20.0000	18.22
	145 3,3-Dimethylbenzidine	212	17.725	17.725	(0.942)	218839	20.0000	18.36
*	153 Chrysene-d12	240	18.820	18.820	(1.000)	680793	40.0000	
*	166 Perylene-d12	264	21.630	21.630	(1.000)	624800	40.0000	

Data File: JICL2884.D

Date: 24-JUL-2012 19:52

Client ID: STD0208270B-012033 Instrument: MSJ.i

Sample Info: STD0208270B-012033 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2885.D
Lab Smp Id: STD0108270B-012030 Client Smp ID: STD0108270B-012030
Inj Date : 24-JUL-2012 20:25
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0108270B-012030
Misc Info : 12030
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 20:59 Cal File: JICL2886.D
Als bottle: 16 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.633	5.633	(0.933)	95870	10.0000	9.586(a)
*	22 1,4-Dichlorobenzene-d4	152	6.039	6.039	(1.000)	198633	40.0000	
	29 3 and 4-Methylphenol	107	6.525	6.525	(1.080)	129902	20.0000	19.10(a)
M	215 Total Cresols	100				129902	30.0000	19.10
*	48 Naphthalene-d8	136	7.765	7.765	(1.000)	738558	40.0000	
*	82 Acenaphthene-d10	164	10.724	10.724	(1.000)	389421	40.0000	
*	121 Phenanthrene-d10	188	13.561	13.561	(1.000)	680662	40.0000	
	135 Benzidine	184	16.264	16.264	(0.864)	89490	10.0000	7.899(a)
	145 3,3-Dimethylbenzidine	212	17.728	17.728	(0.942)	90950	10.0000	7.934(a)
*	153 Chrysene-d12	240	18.818	18.818	(1.000)	654802	40.0000	
*	166 Perylene-d12	264	21.633	21.633	(1.000)	598304	40.0000	

QC Flag Legend

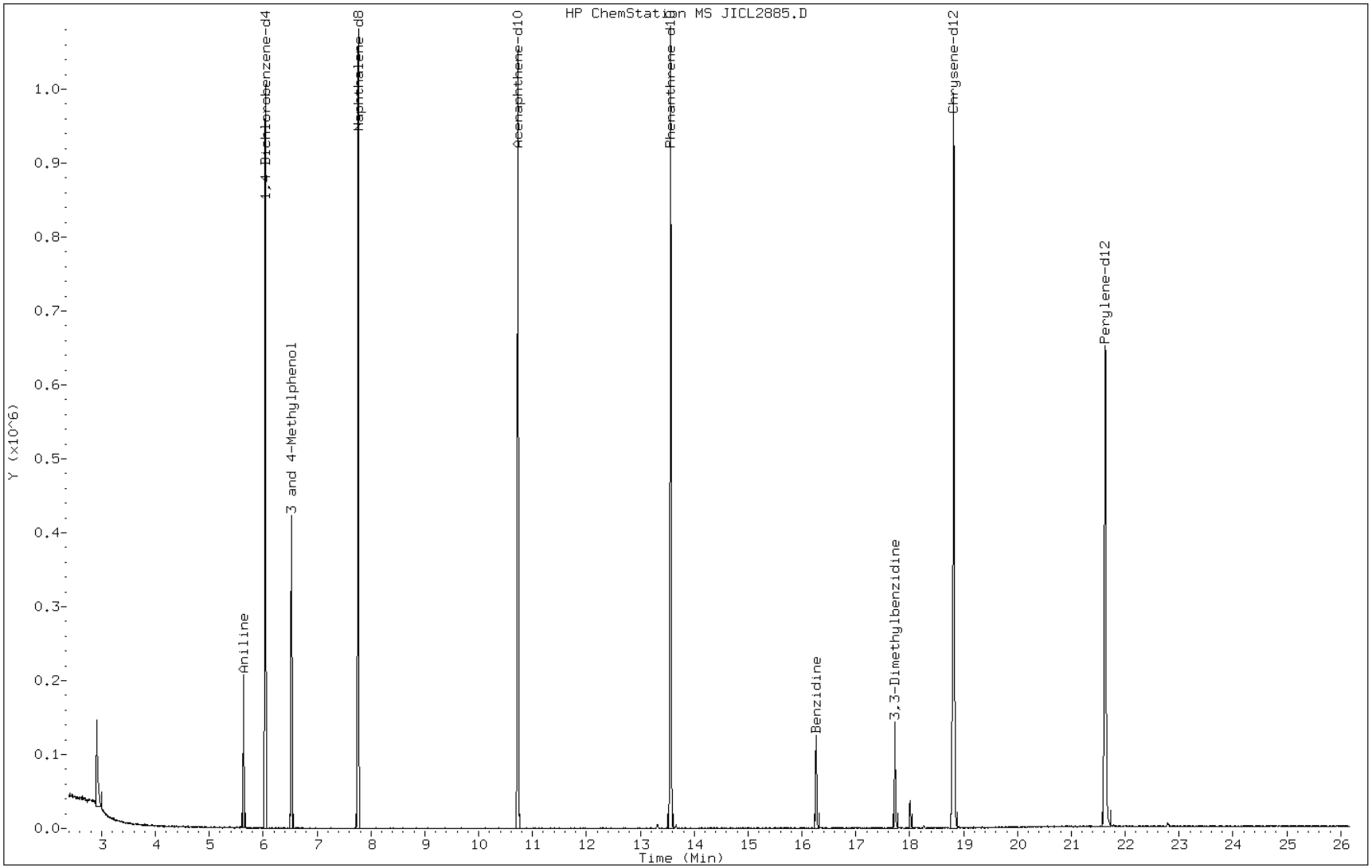
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JICL2885.D

Date: 24-JUL-2012 20:25

Client ID: STD0108270B-012030 Instrument: MSJ.i

Sample Info: STD0108270B-012030 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICL2886.D
Lab Smp Id: STD0058270B-012029 Client Smp ID: STD0058270B-012029
Inj Date : 24-JUL-2012 20:59
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0058270B-012029
Misc Info : 12029
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:33 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 20:59 Cal File: JICL2886.D
Als bottle: 17 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.634	5.634	(0.933)	47728	5.00000	4.788(a)
*	22 1,4-Dichlorobenzene-d4	152	6.040	6.040	(1.000)	197998	40.0000	
	29 3 and 4-Methylphenol	107	6.521	6.521	(1.080)	63062	10.0000	9.304(a)
M	215 Total Cresols	100				63062	15.0000	9.304(a)
*	48 Naphthalene-d8	136	7.765	7.765	(1.000)	728902	40.0000	
*	82 Acenaphthene-d10	164	10.725	10.725	(1.000)	384484	40.0000	
*	121 Phenanthrene-d10	188	13.561	13.561	(1.000)	654552	40.0000	
*	153 Chrysene-d12	240	18.818	18.818	(1.000)	627451	40.0000	
*	166 Perylene-d12	264	21.628	21.628	(1.000)	570945	40.0000	

QC Flag Legend

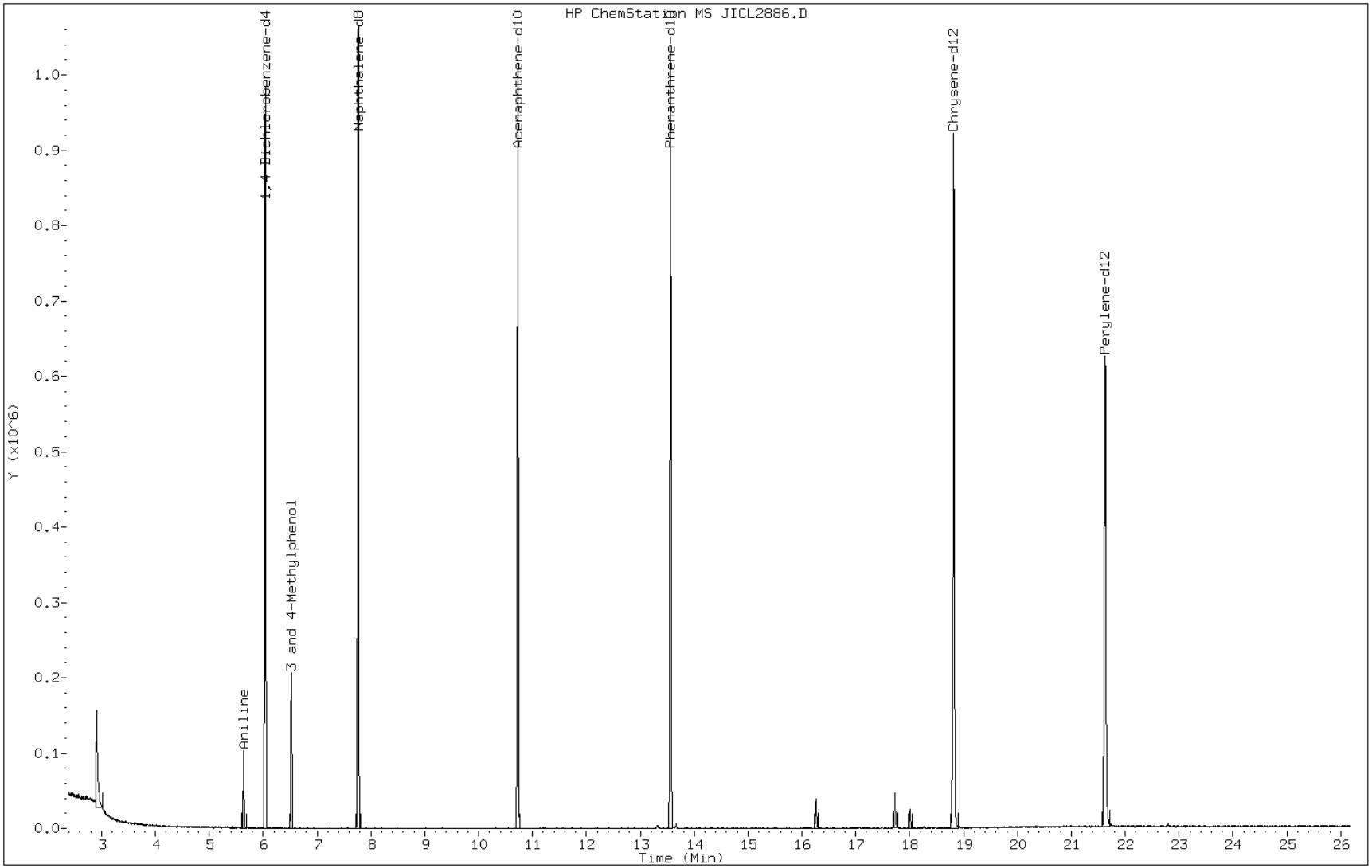
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JICL2886.D

Date: 24-JUL-2012 20:59

Client ID: STD0058270B-012029 Instrument: MSJ.i

Sample Info: STD0058270B-012029 Operator: MAK



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 160-9562/7	JICL3494.D
Level 2	STD020 160-9562/6	JICL3493.D
Level 3	ICIS 160-9562/2	JICL3489.D
Level 4	STD080 160-9562/5	JICL3492.D
Level 5	STD120 160-9562/4	JICL3491.D
Level 6	STD160 160-9562/3	JICL3490.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.5988 0.6032	0.6539	0.5991	0.5952	0.5989	Ave		0.6082			0.0100	3.7		20.0			
N-Nitrosodimethylamine	0.9298 0.8824	0.8988	0.8779	0.8929	0.8750	Ave		0.8928			0.0100	2.3		20.0			
Pyridine	1.6276 1.4022	1.6410	1.5130	1.5159	1.4324	Ave		1.5220			0.0100	6.4		20.0			
Dimethylformamide	0.9964 0.9706	0.9653	0.9921	1.0052	0.9646	Ave		0.9824			0.0100	1.8		20.0			
Cyclohexanol	1.4777 1.3997	1.4821	1.4312	1.4076	1.3728	Ave		1.4285			0.0100	3.1		20.0			
Phenol	1.7964 1.7444	1.7621	1.7377	1.7629	1.7185	Ave		1.7536			0.8000	1.5		20.0			
Bis(2-chloroethyl)ether	1.3581 1.4410	1.3528	1.3102	1.3474	1.2995	Ave		1.3515			0.7000	3.7		20.0			
2-Chlorophenol	1.4028 1.3195	1.3909	1.3265	1.3430	1.2995	Ave		1.3470			0.8000	3.1		20.0			
1,3-Dichlorobenzene	1.5345 1.5033	1.5523	1.5256	1.5025	1.4925	Ave		1.5184			0.0100	1.5		20.0			
1,4-Dichlorobenzene	1.6102 1.5424	1.6088	1.5589	1.5358	1.5366	Ave		1.5655			0.0100	2.2		20.0			
Benzyl alcohol	0.9291 0.8953	0.9041	0.9049	0.9054	0.8669	Ave		0.9010			0.0100	2.2		20.0			
1,2-Dichlorobenzene	1.4784 1.4244	1.4825	1.4417	1.4321	1.4209	Ave		1.4467			0.0100	1.9		20.0			
2-Methylphenol	1.2923 1.1869	1.2476	1.2034	1.2234	1.1685	Ave		1.2203			0.6000	3.7		20.0			
bis (2-chloroisopropyl) ether	2.3979 2.1688	2.3642	2.2851	2.2706	2.1882	Ave		2.2791			0.0100	4.0		20.0			
N-Nitrosodi-n-propylamine	1.0040 0.9041	0.9799	0.9813	0.9876	0.9463	Ave		0.9672			0.5000	3.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Hexachloroethane	0.5996 0.5729	0.5906	0.5724	0.5723	0.5681	Ave		0.5793			0.3000	2.2		20.0			
Nitrobenzene	0.4389 0.4268	0.4365	0.4268	0.4284	0.4255	Ave		0.4305			0.2000	1.3		20.0			
Isophorone	0.7486 0.7124	0.7195	0.7285	0.7276	0.7082	Ave		0.7241			0.4000	2.0		20.0			
2-Nitrophenol	0.1916 0.1969	0.1928	0.1959	0.1971	0.1959	Ave		0.1950			0.1000	1.2		20.0			
2,4-Dimethylphenol	0.3772 0.3896	0.3732	0.3899	0.3873	0.3875	Ave		0.3841			0.2000	1.9		20.0			
Bis(2-chloroethoxy)methane	0.4185 0.4167	0.4169	0.4080	0.4125	0.4107	Ave		0.4139			0.0100	1.0		20.0			
Benzoic acid	0.1778 0.2255	0.2083	0.2287	0.2356	0.2299	Ave		0.2176			0.0100	9.9		20.0			
2,4-Dichlorophenol	0.2878 0.2940	0.2862	0.2945	0.2901	0.2873	Ave		0.2900			0.0100	1.2		20.0			
1,2,4-Trichlorobenzene	0.3203 0.3266	0.3271	0.3209	0.3190	0.3213	Ave		0.3225			0.0100	1.1		20.0			
Naphthalene	1.0706 1.0925	1.0768	1.0611	1.0745	1.0717	Ave		1.0745			0.7000	1.0		20.0			
4-Chloroaniline	0.4470 0.4107	0.4270	0.4229	0.4240	0.4132	Ave		0.4241			0.0100	3.0		20.0			
Hexachlorobutadiene	0.1982 0.2042	0.2042	0.2025	0.1948	0.2000	Ave		0.2006			0.0100	1.9		20.0			
4-Chloro-3-methylphenol	0.3380 0.3330	0.3185	0.3347	0.3354	0.3259	Ave		0.3309			0.2000	2.2		20.0			
2-Methylnaphthalene	0.6879 0.7002	0.6776	0.6903	0.6929	0.6848	Ave		0.6890			0.4000	1.1		20.0			
Hexachlorocyclopentadiene	0.2663 0.3156	0.2849	0.2962	0.2891	0.3055	Ave		0.2929			0.0500	5.9		20.0			
2,4,6-Trichlorophenol	0.3865 0.4046	0.3838	0.3916	0.3911	0.3933	Ave		0.3918			0.2000	1.8		20.0			
2,4,5-Trichlorophenol	0.4079 0.4269	0.4025	0.4115	0.4142	0.4186	Ave		0.4136			0.2000	2.1		20.0			
2-Chloronaphthalene	1.1864 1.2120	1.1843	1.1664	1.1769	1.2028	Ave		1.1881			0.8000	1.4		20.0			
2-Nitroaniline	0.3923 0.4122	0.3822	0.3966	0.4074	0.4049	Ave		0.3993			0.0100	2.8		20.0			
Dimethyl phthalate	1.3482 1.3294	1.2966	1.3096	1.3149	1.3100	Ave		1.3181			0.0100	1.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,6-Dinitrotoluene	0.2919 0.3095	0.2841	0.3000	0.3059	0.3071	Ave		0.2997			0.2000	3.3		20.0			
Acenaphthylene	1.8303 1.8727	1.8249	1.8331	1.8300	1.8414	Ave		1.8388			0.9000	1.0		20.0			
3-Nitroaniline	0.3139 0.3270	0.3115	0.3200	0.3273	0.3218	Ave		0.3203			0.0100	2.0		20.0			
Acenaphthene	1.1807 1.1919	1.1697	1.1489	1.1641	1.1726	Ave		1.1713			0.0100	1.2		20.0			
2,4-Dinitrophenol	0.1652 0.2280	0.1744	0.2142	0.2268	0.2262	Ave		0.2058			0.0100	13.8		20.0			
4-Nitrophenol	0.2079 0.2199	0.1957	0.2176	0.2212	0.2178	Ave		0.2133			0.0100	4.6		20.0			
2,4-Dinitrotoluene	0.3962 0.4151	0.3804	0.4015	0.4117	0.4114	Ave		0.4027			0.2000	3.2		20.0			
Dibenzofuran	1.6636 1.6675	1.6303	1.6246	1.6320	1.6443	Ave		1.6437			0.8000	1.1		20.0			
Diethyl phthalate	1.3509 1.3338	1.2938	1.3111	1.3266	1.3089	Ave		1.3209			0.0100	1.5		20.0			
Fluorene	1.3555 1.3877	1.3132	1.3106	1.3458	1.3500	Ave		1.3438			0.9000	2.1		20.0			
4-Chlorophenyl phenyl ether	0.6456 0.6552	0.6318	0.6355	0.6374	0.6375	Ave		0.6405			0.4000	1.3		20.0			
4-Nitroaniline	0.3115 0.3253	0.3051	0.3263	0.3345	0.3244	Ave		0.3212			0.0100	3.4		20.0			
4,6-Dinitro-2-methylphenol	0.1324 0.1604	0.1342	0.1522	0.1582	0.1588	Ave		0.1494			0.0100	8.5		20.0			
N-Nitrosodiphenylamine	0.5213 0.5322	0.5209	0.5189	0.5207	0.5251	Ave		0.5232			0.0100	0.9		20.0			
Azobenzene	0.8446 0.8533	0.8668	0.8359	0.8413	0.8471	Ave		0.8482			0.0100	1.3		20.0			
4-Bromophenyl phenyl ether	0.2025 0.2200	0.2105	0.2059	0.2110	0.2130	Ave		0.2105			0.0100	2.9		20.0			
Hexachlorobenzene	0.2231 0.2331	0.2232	0.2233	0.2247	0.2291	Ave		0.2261			0.1000	1.8		20.0			
Pentachlorophenol	0.1389 0.1671	0.1493	0.1567	0.1620	0.1620	Ave		0.1560			0.0500	6.6		20.0			
Phenanthrene	1.0880 1.0955	1.0735	1.0491	1.0613	1.0737	Ave		1.0735			0.7000	1.6		20.0			
Anthracene	1.0906 1.1040	1.0885	1.0644	1.0806	1.0833	Ave		1.0853			0.7000	1.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Carbazole	0.9419 0.9686	0.9516	0.9411	0.9554	0.9548	Ave		0.9522			0.0100	1.1		20.0			
Di-n-butyl phthalate	1.1881 1.2740	1.1991	1.2304	1.2504	1.2534	Ave		1.2326			0.0100	2.7		20.0			
Fluoranthene	1.0895 1.1458	1.0831	1.1040	1.1299	1.1244	Ave		1.1128			0.6000	2.2		20.0			
Pyrene	1.1819 1.2066	1.1843	1.1552	1.1543	1.1780	Ave		1.1767			0.6000	1.7		20.0			
Butyl benzyl phthalate	0.5289 0.5554	0.5281	0.5368	0.5403	0.5423	Ave		0.5386			0.0100	1.9		20.0			
3,3'-Dichlorobenzidine	0.3691 0.4406	0.3801	0.4111	0.4197	0.4325	Ave		0.4089			0.0100	7.0		20.0			
Benzo[a]anthracene	0.9658 1.0372	0.9805	0.9837	1.0027	1.0203	Ave		0.9983			0.8000	2.7		20.0			
Chrysene	1.0216 1.0419	1.0349	1.0155	1.0145	1.0290	Ave		1.0262			0.7000	1.1		20.0			
Bis(2-ethylhexyl) phthalate	0.7024 0.7638	0.7077	0.7246	0.7386	0.7459	Ave		0.7305			0.0100	3.2		20.0			
Di-n-octyl phthalate	1.1553 1.3544	1.1668	1.2642	1.3008	1.3113	Ave		1.2588			0.0100	6.4		20.0			
Benzo[b]fluoranthene	1.0583 1.2187	1.0676	1.0991	1.1225	1.1415	Ave		1.1179			0.7000	5.2		20.0			
Benzo[k]fluoranthene	1.0744 1.1168	1.1257	1.1241	1.1243	1.1140	Ave		1.1132			0.7000	1.8		20.0			
Benzo[a]pyrene	1.0479 1.1592	1.0659	1.0937	1.1111	1.1335	Ave		1.1019			0.7000	3.8		20.0			
Indeno[1,2,3-cd]pyrene	0.9222 1.2389	0.9366	1.0120	1.0721	1.1407	Ave		1.0538			0.5000	11.6		20.0			
Dibenz(a,h)anthracene	0.9672 1.2564	0.9573	1.0866	1.1310	1.1424	Ave		1.0902			0.4000	10.4		20.0			
Benzo[g,h,i]perylene	0.9747 1.2085	0.9854	1.0543	1.0959	1.1394	Ave		1.0764			0.5000	8.4		20.0			
2-Fluorophenol (Surr)	1.3148 1.2624	1.3131	1.2694	1.2686	1.2479	Ave		1.2794			0.0100	2.2		20.0			
Phenol-d5 (Surr)	1.6645 1.5771	1.6043	1.6004	1.5948	1.5522	Ave		1.5989			0.0100	2.3		20.0			
Nitrobenzene-d5 (Surr)	0.4162 0.4192	0.4175	0.4171	0.4171	0.4143	Ave		0.4169			0.0100	0.4		20.0			
2-Fluorobiphenyl (Surr)	1.3414 1.4009	1.3627	1.3386	1.3406	1.3714	Ave		1.3593			0.0100	1.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
2,4,6-Tribromophenol (Surr)	0.1860 0.1976	0.1818	0.1920	0.1940	0.1948	Ave		0.1910			0.0100	3.1		20.0			
Terphenyl-d14 (Surr)	0.7297 0.7770	0.7341	0.7376	0.7344	0.7557	Ave		0.7447			0.0100	2.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD010 160-9562/7	JICL3494.D
Level 2	STD020 160-9562/6	JICL3493.D
Level 3	ICIS 160-9562/2	JICL3489.D
Level 4	STD080 160-9562/5	JICL3492.D
Level 5	STD120 160-9562/4	JICL3491.D
Level 6	STD160 160-9562/3	JICL3490.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,4-Dioxane	DCB	Ave	41112 445752	51660	139913	222614	323541	10.0 160	20.0	50.0	80.0	120
N-Nitrosodimethylamine	DCB	Ave	63837 652026	71003	205014	333976	472719	10.0 160	20.0	50.0	80.0	120
Pyridine	DCB	Ave	111746 1036194	129639	353339	566990	773892	10.0 160	20.0	50.0	80.0	120
Dimethylformamide	DCB	Ave	68411 717273	76261	231692	375977	521136	10.0 160	20.0	50.0	80.0	120
Cyclohexanol	DCB	Ave	101454 1034353	117082	334235	526464	741691	10.0 160	20.0	50.0	80.0	120
Phenol	DCB	Ave	123329 1289048	139205	405798	659347	928410	10.0 160	20.0	50.0	80.0	120
Bis(2-chloroethyl)ether	DCB	Ave	93243 1064832	106873	305969	503937	702071	10.0 160	20.0	50.0	80.0	120
2-Chlorophenol	DCB	Ave	96311 975066	109882	309787	502289	702079	10.0 160	20.0	50.0	80.0	120
1,3-Dichlorobenzene	DCB	Ave	105352 1110909	122628	356269	561951	806353	10.0 160	20.0	50.0	80.0	120
1,4-Dichlorobenzene	DCB	Ave	110550 1139807	127098	364048	574401	830135	10.0 160	20.0	50.0	80.0	120
Benzyl alcohol	DCB	Ave	63789 661606	71424	211330	338626	468361	10.0 160	20.0	50.0	80.0	120
1,2-Dichlorobenzene	DCB	Ave	101502 1052547	117119	336682	535649	767662	10.0 160	20.0	50.0	80.0	120
2-Methylphenol	DCB	Ave	88722 877084	98558	281029	457585	631282	10.0 160	20.0	50.0	80.0	120
bis (2-chloroisopropyl) ether	DCB	Ave	164625 1602649	186773	533638	849230	1182170	10.0 160	20.0	50.0	80.0	120
N-Nitrosodi-n-propylamine	DCB	Ave	68933 668067	77415	229159	369378	511231	10.0 160	20.0	50.0	80.0	120
Hexachloroethane	DCB	Ave	41165 423381	46661	133670	214062	306915	10.0 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Nitrobenzene	NPT	Ave	113789 1122134	127343	361925	592352	827325	10.0 160	20.0	50.0	80.0	120
Isophorone	NPT	Ave	194081 1873260	209870	617708	1006041	1376832	10.0 160	20.0	50.0	80.0	120
2-Nitrophenol	NPT	Ave	49668 517698	56241	166085	272554	380842	10.0 160	20.0	50.0	80.0	120
2,4-Dimethylphenol	NPT	Ave	97786 1024470	108852	330615	535556	753356	10.0 160	20.0	50.0	80.0	120
Bis(2-chloroethoxy)methane	NPT	Ave	108509 1095759	121609	345902	570361	798498	10.0 160	20.0	50.0	80.0	120
Benzoic acid	NPT	Ave	46095 592882	60774	193909	325714	447047	10.0 160	20.0	50.0	80.0	120
2,4-Dichlorophenol	NPT	Ave	74610 772988	83483	249679	401080	558519	10.0 160	20.0	50.0	80.0	120
1,2,4-Trichlorobenzene	NPT	Ave	83049 858720	95421	272110	440988	624732	10.0 160	20.0	50.0	80.0	120
Naphthalene	NPT	Ave	277584 2872639	314116	899688	1485642	2083643	10.0 160	20.0	50.0	80.0	120
4-Chloroaniline	NPT	Ave	115907 1079981	124565	358547	586252	803313	10.0 160	20.0	50.0	80.0	120
Hexachlorobutadiene	NPT	Ave	51388 536971	59559	171731	269271	388796	10.0 160	20.0	50.0	80.0	120
4-Chloro-3-methylphenol	NPT	Ave	87635 875475	92894	283800	463754	633555	10.0 160	20.0	50.0	80.0	120
2-Methylnaphthalene	NPT	Ave	178361 1841130	197649	585338	957990	1331455	10.0 160	20.0	50.0	80.0	120
Hexachlorocyclopentadiene	ANT	Ave	39055 450793	45076	141062	225465	322634	10.0 160	20.0	50.0	80.0	120
2,4,6-Trichlorophenol	ANT	Ave	56684 577927	60715	186501	304982	415426	10.0 160	20.0	50.0	80.0	120
2,4,5-Trichlorophenol	ANT	Ave	59835 609741	63674	195943	322998	442138	10.0 160	20.0	50.0	80.0	120
2-Chloronaphthalene	ANT	Ave	174011 1731149	187362	555428	917744	1270310	10.0 160	20.0	50.0	80.0	120
2-Nitroaniline	ANT	Ave	57543 588776	60467	188855	317656	427659	10.0 160	20.0	50.0	80.0	120
Dimethyl phthalate	ANT	Ave	197739 1898936	205138	623620	1025380	1383606	10.0 160	20.0	50.0	80.0	120
2,6-Dinitrotoluene	ANT	Ave	42817 442039	44948	142839	238568	324304	10.0 160	20.0	50.0	80.0	120
Acenaphthylene	ANT	Ave	268456 2674904	288720	872940	1427046	1944829	10.0 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
3-Nitroaniline	ANT	Ave	46039 467030	49288	152362	255260	339897	10.0 160	20.0	50.0	80.0	120
Acenaphthene	ANT	Ave	173170 1702433	185055	547108	907793	1238428	10.0 160	20.0	50.0	80.0	120
2,4-Dinitrophenol	ANT	Ave	24231 325724	27592	101991	176821	238933	10.0 160	20.0	50.0	80.0	120
4-Nitrophenol	ANT	Ave	30488 314082	30968	103615	172457	230081	10.0 160	20.0	50.0	80.0	120
2,4-Dinitrotoluene	ANT	Ave	58114 592860	60183	191201	321020	434536	10.0 160	20.0	50.0	80.0	120
Dibenzofuran	ANT	Ave	244008 2381758	257921	773624	1272611	1736639	10.0 160	20.0	50.0	80.0	120
Diethyl phthalate	ANT	Ave	198144 1905217	204694	624327	1034484	1382459	10.0 160	20.0	50.0	80.0	120
Fluorene	ANT	Ave	198811 1982094	207764	624104	1049419	1425838	10.0 160	20.0	50.0	80.0	120
4-Chlorophenyl phenyl ether	ANT	Ave	94693 935927	99955	302621	497031	673272	10.0 160	20.0	50.0	80.0	120
4-Nitroaniline	ANT	Ave	45694 464660	48274	155400	260809	342628	10.0 160	20.0	50.0	80.0	120
4,6-Dinitro-2-methylphenol	PHN	Ave	34723 396768	36125	127538	217285	291005	10.0 160	20.0	50.0	80.0	120
N-Nitrosodiphenylamine	PHN	Ave	136696 1316604	140186	434828	715342	962260	10.0 160	20.0	50.0	80.0	120
Azobenzene	PHN	Ave	221484 2110876	233263	700393	1155750	1552360	10.0 160	20.0	50.0	80.0	120
4-Bromophenyl phenyl ether	PHN	Ave	53115 544173	56653	172533	289876	390243	10.0 160	20.0	50.0	80.0	120
Hexachlorobenzene	PHN	Ave	58496 576571	60077	187082	308730	419815	10.0 160	20.0	50.0	80.0	120
Pentachlorophenol	PHN	Ave	36432 413364	40192	131326	222581	296794	10.0 160	20.0	50.0	80.0	120
Phenanthrene	PHN	Ave	285309 2710031	288891	879046	1457969	1967608	10.0 160	20.0	50.0	80.0	120
Anthracene	PHN	Ave	286002 2731106	292948	891823	1484505	1985243	10.0 160	20.0	50.0	80.0	120
Carbazole	PHN	Ave	246986 2396106	256093	788558	1312419	1749698	10.0 160	20.0	50.0	80.0	120
Di-n-butyl phthalate	PHN	Ave	311568 3151683	322703	1030949	1717677	2296973	10.0 160	20.0	50.0	80.0	120
Fluoranthene	PHN	Ave	285714 2834372	291486	925006	1552210	2060553	10.0 160	20.0	50.0	80.0	120

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 09:59 Calibration End Date: 08/22/2012 12:48 Calibration ID: 824

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Pyrene	CRY	Ave	303867 2986784	309293	975532	1635112	2183467	10.0 160	20.0	50.0	80.0	120
Butyl benzyl phthalate	CRY	Ave	135971 1374910	137932	453272	765369	1005140	10.0 160	20.0	50.0	80.0	120
3,3'-Dichlorobenzidine	CRY	Ave	94892 1090667	99262	347181	594535	801701	10.0 160	20.0	50.0	80.0	120
Benzo[a]anthracene	CRY	Ave	248299 2567493	256067	830694	1420377	1891102	10.0 160	20.0	50.0	80.0	120
Chrysene	CRY	Ave	262664 2579076	270278	857590	1437113	1907338	10.0 160	20.0	50.0	80.0	120
Bis(2-ethylhexyl) phthalate	CRY	Ave	180598 1890825	184832	611862	1046265	1382575	10.0 160	20.0	50.0	80.0	120
Di-n-octyl phthalate	CRY	Ave	297018 3352708	304736	1067588	1842713	2430548	10.0 160	20.0	50.0	80.0	120
Benzo[b]fluoranthene	PRY	Ave	246347 2740149	248231	839698	1453709	2023135	10.0 160	20.0	50.0	80.0	120
Benzo[k]fluoranthene	PRY	Ave	250094 2510987	261745	858742	1456131	1974467	10.0 160	20.0	50.0	80.0	120
Benzo[a]pyrene	PRY	Ave	243937 2606336	247836	835526	1439038	2009065	10.0 160	20.0	50.0	80.0	120
Indeno[1,2,3-cd]pyrene	PRY	Ave	214666 2785534	217790	773099	1388495	2021812	10.0 160	20.0	50.0	80.0	120
Dibenz(a,h)anthracene	PRY	Ave	225153 2824800	222586	830120	1464836	2024767	10.0 160	20.0	50.0	80.0	120
Benzo[g,h,i]perylene	PRY	Ave	226886 2717264	229121	805444	1419256	2019370	10.0 160	20.0	50.0	80.0	120
2-Fluorophenol (Surr)	DCB	Ave	90270 932837	103735	296451	474478	674198	10.0 160	20.0	50.0	80.0	120
Phenol-d5 (Surr)	DCB	Ave	114274 1165426	126735	373743	596499	838615	10.0 160	20.0	50.0	80.0	120
Nitrobenzene-d5 (Surr)	NPT	Ave	107907 1102099	121792	353663	576639	805434	10.0 160	20.0	50.0	80.0	120
2-Fluorobiphenyl (Surr)	ANT	Ave	196750 2001060	215597	637441	1045410	1448402	10.0 160	20.0	50.0	80.0	120
2,4,6-Tribromophenol (Surr)	ANT	Ave	27284 282210	28770	91451	151266	205735	10.0 160	20.0	50.0	80.0	120
Terphenyl-d14 (Surr)	CRY	Ave	187615 1923306	191724	622883	1040291	1400600	10.0 160	20.0	50.0	80.0	120

Curve Type Legend:
Ave = Average ISTD

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3489.D
Lab Smp Id: ICIS-012052 Client Smp ID: ICIS-012052
Inj Date : 22-AUG-2012 09:59
Operator : MAK Inst ID: MSJ.i
Smp Info : ICIS-012052
Misc Info : 12052
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:19 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.603	2.603	(0.432)	139913	50.0000	49.25
	4 N-Nitrosodimethylamine	74	2.972	2.972	(0.493)	205014	50.0000	49.16
	3 Pyridine	79	3.014	3.014	(0.500)	353339	50.0000	49.70
	5 Dimethylformamide	44	3.426	3.426	(0.568)	231692	50.0000	50.49
$	10 2-Fluorophenol	112	4.510	4.510	(0.748)	296451	50.0000	49.61
	11 Cyclohexanol	57	4.697	4.697	(0.779)	334235	50.0000	50.09
	19 Bis(2-chloroethyl)ether	93	5.701	5.701	(0.945)	305969	50.0000	48.47
$	15 Phenol-d5	99	5.573	5.573	(0.924)	373743	50.0000	50.05
	16 Phenol	94	5.589	5.589	(0.927)	405798	50.0000	49.54
	20 2-Chlorophenol	128	5.776	5.776	(0.958)	309787	50.0000	49.24
	21 1,3-Dichlorobenzene	146	5.963	5.963	(0.988)	356269	50.0000	50.23
*	22 1,4-Dichlorobenzene-d4	152	6.032	6.032	(1.000)	186825	40.0000	
	23 1,4-Dichlorobenzene	146	6.054	6.054	(1.004)	364048	50.0000	49.79
	26 1,2-Dichlorobenzene	146	6.246	6.246	(1.035)	336682	50.0000	49.83
	25 Benzyl Alcohol	108	6.192	6.192	(1.027)	211330	50.0000	50.22
	28 2,2-oxybis(1-Chloropropane)	45	6.363	6.363	(1.055)	533638	50.0000	50.13
	27 2-Methylphenol	108	6.326	6.326	(1.049)	281029	50.0000	49.30
	35 Hexachloroethane	117	6.684	6.684	(1.108)	133670	50.0000	49.40
	32 N-Nitrosodinpropylamine	70	6.540	6.540	(1.084)	229159	50.0000	50.73
M	215 Total Cresols	100				281029	150.000	49.30
$	36 Nitrobenzene-d5	82	6.737	6.737	(0.869)	353663	50.0000	50.03

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.764	6.764	(0.872)	361925	50.0000	49.58
	39 Isophorone	82	7.090	7.090	(0.914)	617708	50.0000	50.30
	40 2-Nitrophenol	139	7.197	7.197	(0.928)	166085	50.0000	50.22
	41 2,4-Dimethylphenol	107	7.255	7.255	(0.935)	330615	50.0000	50.76
	42 Bis(2-chloroethoxy)methane	93	7.389	7.389	(0.952)	345902	50.0000	49.28
	45 2,4-Dichlorophenol	162	7.544	7.544	(0.972)	249679	50.0000	50.78
	47 1,2,4-Trichlorobenzene	180	7.672	7.672	(0.989)	272110	50.0000	49.75
*	48 Naphthalene-d8	136	7.757	7.757	(1.000)	678320	40.0000	
	44 Benzoic Acid	122	7.421	7.421	(0.957)	193909	50.0000	52.54
	50 Naphthalene	128	7.789	7.789	(1.004)	899688	50.0000	49.37
	51 4-Chloroaniline	127	7.870	7.870	(1.014)	358547	50.0000	49.85
	54 Hexachlorobutadiene	225	7.987	7.987	(1.030)	171731	50.0000	50.47
	62 2-Methylnaphthalene	142	8.884	8.884	(1.145)	585338	50.0000	50.10
	59 4-Chloro-3-Methylphenol	107	8.628	8.628	(1.112)	283800	50.0000	50.58
	66 Hexachlorocyclopentadiene	237	9.167	9.167	(0.855)	141062	50.0000	50.56
	67 2,4,6-Trichlorophenol	196	9.365	9.365	(0.873)	186501	50.0000	49.98
	68 2,4,5-Trichlorophenol	196	9.418	9.418	(0.878)	195943	50.0000	49.74
$	69 2-Fluorobiphenyl (Surr)	172	9.520	9.520	(0.888)	637441	50.0000	49.24
	72 2-Chloronaphthalene	162	9.718	9.718	(0.906)	555428	50.0000	49.08
	73 2-Nitroaniline	65	9.899	9.899	(0.923)	188855	50.0000	49.66
	76 Dimethylphthalate	163	10.257	10.257	(0.957)	623620	50.0000	49.68
	79 Acenaphthylene	152	10.455	10.455	(0.975)	872940	50.0000	49.85
	80 2,6-Dinitrotoluene	165	10.348	10.348	(0.965)	142839	50.0000	50.04
*	82 Acenaphthene-d10	164	10.722	10.722	(1.000)	380959	40.0000	
	83 Acenaphthene	153	10.780	10.780	(1.005)	547108	50.0000	49.04
	81 3-Nitroaniline	138	10.652	10.652	(0.994)	152362	50.0000	49.95
	84 2,4-Dinitrophenol	184	10.834	10.834	(1.010)	101991	50.0000	52.04
	86 Dibenzofuran	168	11.101	11.101	(1.035)	773624	50.0000	49.42
	88 2,4-Dinitrotoluene	165	11.090	11.090	(1.034)	191201	50.0000	49.85
	85 4-Nitrophenol	109	10.978	10.978	(1.024)	103615	50.0000	50.99
	93 Diethylphthalate	149	11.587	11.587	(1.081)	624327	50.0000	49.63
	94 Fluorene	166	11.747	11.747	(1.096)	624104	50.0000	48.76
	95 4-Chlorophenyl-phenylether	204	11.768	11.768	(1.098)	302621	50.0000	49.61
	98 4-Nitroaniline	138	11.806	11.806	(1.101)	155400	50.0000	50.80
	99 4,6-Dinitro-2-methylphenol	198	11.865	11.865	(0.875)	127538	50.0000	50.95
	100 N-Nitrosodiphenylamine	169	11.998	11.998	(0.885)	434828	50.0000	49.59
	102 Azobenzene	77	12.073	12.073	(0.890)	700393	50.0000	49.28
$	104 2,4,6-Tribromophenol	330	12.206	12.206	(1.138)	91451	50.0000	50.26
	109 4-Bromophenyl-phenylether	248	12.709	12.709	(0.937)	172533	50.0000	48.91
	112 Hexachlorobenzene	284	12.815	12.815	(0.945)	187082	50.0000	49.38
	117 Pentachlorophenol	266	13.200	13.200	(0.974)	131326	50.0000	50.23
*	121 Phenanthrene-d10	188	13.558	13.558	(1.000)	670321	40.0000	
	122 Phenanthrene	178	13.606	13.606	(1.004)	879046	50.0000	48.86
	124 Anthracene	178	13.702	13.702	(1.011)	891823	50.0000	49.04
	126 Carbazole	167	14.038	14.038	(1.035)	788558	50.0000	49.42
	129 Di-n-Butylphthalate	149	14.813	14.813	(1.093)	1030949	50.0000	49.91
	134 Fluoranthene	202	15.956	15.956	(1.177)	925006	50.0000	49.60
	137 Pyrene	202	16.399	16.399	(0.871)	975532	50.0000	49.09
$	139 Terphenyl-d14	244	16.768	16.768	(0.891)	622883	50.0000	49.52
	146 Butylbenzylphthalate	149	17.793	17.793	(0.945)	453272	50.0000	49.83
	150 Benzo(a)Anthracene	228	18.797	18.797	(0.999)	830694	50.0000	49.26
*	153 Chrysene-d12	240	18.824	18.824	(1.000)	675575	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.792	18.792	(0.998)	347181	50.0000	50.28
	154 Chrysene	228	18.877	18.877	(1.003)	857590	50.0000	49.48

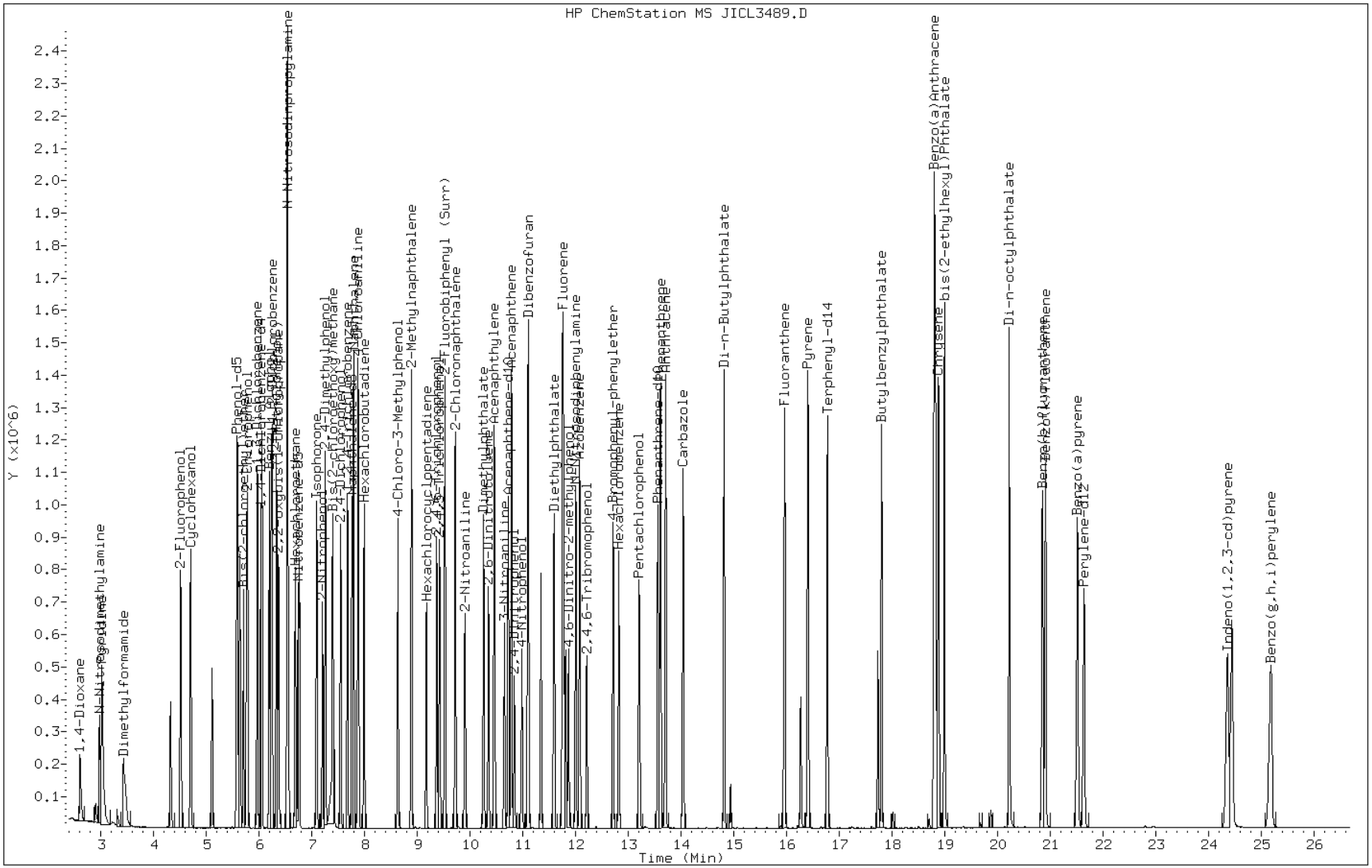
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155	bis(2-ethylhexyl)Phthalate	149	18.984	18.984	(1.009)	611862	50.0000	49.59
158	Di-n-octylphthalate	149	20.213	20.213	(1.074)	1067588	50.0000	50.21
160	Benzo(b)fluoranthene	252	20.843	20.843	(0.963)	839698	50.0000	49.16
161	Benzo(k)fluoranthene	252	20.902	20.902	(0.966)	858742	50.0000	50.49
165	Benzo(a)pyrene	252	21.511	21.511	(0.994)	835526	50.0000	49.63
* 166	Perylene-d12	264	21.633	21.633	(1.000)	611167	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	24.352	24.352	(1.126)	773099	50.0000	48.02
174	Dibenzo(a,h)anthracene	278	24.432	24.432	(1.129)	830120	50.0000	49.84
177	Benzo(g,h,i)perylene	276	25.180	25.180	(1.164)	805444	50.0000	48.98

Data File: JICL3489.D

Date: 22-AUG-2012 09:59

Client ID: ICIS-012052 Instrument: MSJ.i

Sample Info: ICIS-012052 Operator: MAK



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GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3490.D
Lab Smp Id: STD160-012006 Client Smp ID: STD160-012006
Inj Date : 22-AUG-2012 10:32
Operator : MAK Inst ID: MSJ.i
Smp Info : STD160-012006
Misc Info : 12006
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:15 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 15:04 Cal File: JICL3498.D
Als bottle: 4 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.693	2.693	(0.444)	445752	160.000	158.7
	4 N-Nitrosodimethylamine	74	3.072	3.072	(0.507)	652026	160.000	158.1
	3 Pyridine	79	3.104	3.104	(0.512)	1036194	160.000	147.4
	5 Dimethylformamide	44	3.580	3.580	(0.590)	717273	160.000	158.1(M)
$	10 2-Fluorophenol	112	4.562	4.562	(0.752)	932837	160.000	157.9
	11 Cyclohexanol	57	4.755	4.755	(0.784)	1034353	160.000	156.8
	19 Bis(2-chloroethyl)ether	93	5.748	5.748	(0.948)	1064832	160.000	170.6(A)
$	15 Phenol-d5	99	5.625	5.625	(0.928)	1165426	160.000	157.8
	16 Phenol	94	5.647	5.647	(0.931)	1289048	160.000	159.2
	20 2-Chlorophenol	128	5.823	5.823	(0.960)	975066	160.000	156.7
	21 1,3-Dichlorobenzene	146	5.999	5.999	(0.989)	1110909	160.000	158.4
*	22 1,4-Dichlorobenzene-d4	152	6.063	6.063	(1.000)	184741	40.0000	
	23 1,4-Dichlorobenzene	146	6.085	6.085	(1.004)	1139807	160.000	157.6
	26 1,2-Dichlorobenzene	146	6.282	6.282	(1.036)	1052547	160.000	157.5
	25 Benzyl Alcohol	108	6.239	6.239	(1.029)	661606	160.000	159.0
	28 2,2-oxybis(1-Chloropropane)	45	6.394	6.394	(1.055)	1602649	160.000	152.2
	27 2-Methylphenol	108	6.368	6.368	(1.050)	877084	160.000	155.6
	35 Hexachloroethane	117	6.709	6.709	(1.107)	423381	160.000	158.2
	32 N-Nitrosodinpropylamine	70	6.619	6.619	(1.092)	668067	160.000	149.6(H)
M	215 Total Cresols	100				877084	480.000	155.6
$	36 Nitrobenzene-d5	82	6.774	6.774	(0.870)	1102099	160.000	160.9(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	37 Nitrobenzene	77	6.806	6.806	(0.874)	1122134	160.000	158.6
	39 Isophorone	82	7.142	7.142	(0.917)	1873260	160.000	157.4
	40 2-Nitrophenol	139	7.233	7.233	(0.929)	517698	160.000	161.5(A)
	41 2,4-Dimethylphenol	107	7.297	7.297	(0.937)	1024470	160.000	162.3(A)
	42 Bis(2-chloroethoxy)methane	93	7.430	7.430	(0.954)	1095759	160.000	161.1(A)
	45 2,4-Dichlorophenol	162	7.585	7.585	(0.974)	772988	160.000	162.2(A)
	47 1,2,4-Trichlorobenzene	180	7.708	7.708	(0.990)	858720	160.000	162.0(A)
*	48 Naphthalene-d8	136	7.788	7.788	(1.000)	657333	40.0000	
	44 Benzoic Acid	122	7.548	7.548	(0.969)	592882	160.000	165.8(A)
	50 Naphthalene	128	7.826	7.826	(1.005)	2872639	160.000	162.7(A)
	51 4-Chloroaniline	127	7.917	7.917	(1.016)	1079981	160.000	154.9
	54 Hexachlorobutadiene	225	8.018	8.018	(1.029)	536971	160.000	162.8(A)
	62 2-Methylnaphthalene	142	8.921	8.921	(1.145)	1841130	160.000	162.6(A)
	59 4-Chloro-3-Methylphenol	107	8.664	8.664	(1.112)	875475	160.000	161.0(A)
	66 Hexachlorocyclopentadiene	237	9.193	9.193	(0.855)	450793	160.000	172.4(A)
	67 2,4,6-Trichlorophenol	196	9.401	9.401	(0.874)	577927	160.000	165.2(A)
	68 2,4,5-Trichlorophenol	196	9.455	9.455	(0.879)	609741	160.000	165.1(A)
$	69 2-Fluorobiphenyl (Surr)	172	9.556	9.556	(0.889)	2001060	160.000	164.9(A)
	72 2-Chloronaphthalene	162	9.754	9.754	(0.907)	1731149	160.000	163.2(A)
	73 2-Nitroaniline	65	9.946	9.946	(0.925)	588776	160.000	165.2(A)
	76 Dimethylphthalate	163	10.304	10.304	(0.958)	1898936	160.000	161.4(A)
	79 Acenaphthylene	152	10.496	10.496	(0.976)	2674904	160.000	163.0(A)
	80 2,6-Dinitrotoluene	165	10.395	10.395	(0.967)	442039	160.000	165.2(A)
*	82 Acenaphthene-d10	164	10.753	10.753	(1.000)	357093	40.0000	
	83 Acenaphthene	153	10.822	10.822	(1.006)	1702433	160.000	162.8(A)
	81 3-Nitroaniline	138	10.705	10.705	(0.996)	467030	160.000	163.4(A)
	84 2,4-Dinitrophenol	184	10.886	10.886	(1.012)	325724	160.000	177.3(A)
	86 Dibenzofuran	168	11.143	11.143	(1.036)	2381758	160.000	162.3(A)
	88 2,4-Dinitrotoluene	165	11.143	11.143	(1.036)	592860	160.000	164.9(A)
	85 4-Nitrophenol	109	11.041	11.041	(1.027)	314082	160.000	164.9(A)
	93 Diethylphthalate	149	11.634	11.634	(1.082)	1905217	160.000	161.6(A)
	94 Fluorene	166	11.794	11.794	(1.097)	1982094	160.000	165.2(A)
	95 4-Chlorophenyl-phenylether	204	11.805	11.805	(1.098)	935927	160.000	163.7(A)
	98 4-Nitroaniline	138	11.885	11.885	(1.105)	464660	160.000	162.0(A)
	99 4,6-Dinitro-2-methylphenol	198	11.928	11.928	(0.878)	396768	160.000	171.8(A)
	100 N-Nitrosodiphenylamine	169	12.051	12.051	(0.887)	1316604	160.000	162.8(A)
	102 Azobenzene	77	12.115	12.115	(0.892)	2110876	160.000	161.0(A)
$	104 2,4,6-Tribromophenol	330	12.253	12.253	(1.140)	282210	160.000	165.5(A)
	109 4-Bromophenyl-phenylether	248	12.750	12.750	(0.938)	544173	160.000	167.2(A)
	112 Hexachlorobenzene	284	12.862	12.862	(0.947)	576571	160.000	165.0(A)
	117 Pentachlorophenol	266	13.242	13.242	(0.974)	413364	160.000	171.4(A)
*	121 Phenanthrene-d10	188	13.589	13.589	(1.000)	618440	40.0000	
	122 Phenanthrene	178	13.648	13.648	(1.004)	2710031	160.000	163.3(A)
	124 Anthracene	178	13.749	13.749	(1.012)	2731106	160.000	162.8(A)
	126 Carbazole	167	14.080	14.080	(1.036)	2396106	160.000	162.8(A)
	129 Di-n-Butylphthalate	149	14.849	14.849	(1.093)	3151683	160.000	165.4(A)
	134 Fluoranthene	202	16.003	16.003	(1.178)	2834372	160.000	164.7(A)
	137 Pyrene	202	16.446	16.446	(0.872)	2986784	160.000	164.1(A)
$	139 Terphenyl-d14	244	16.809	16.809	(0.891)	1923306	160.000	166.9(A)
	146 Butylbenzylphthalate	149	17.835	17.835	(0.945)	1374910	160.000	165.0(A)
	150 Benzo(a)Anthracene	228	18.844	18.844	(0.999)	2567493	160.000	166.2(A)
*	153 Chrysene-d12	240	18.866	18.866	(1.000)	618851	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.839	18.839	(0.999)	1090667	160.000	172.4(A)
	154 Chrysene	228	18.924	18.924	(1.003)	2579076	160.000	162.4(A)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	19.021	19.021	(1.008)	1890825	160.000	167.3(A)
158 Di-n-octylphthalate	149	20.249	20.249	(1.073)	3352708	160.000	172.2(A)
160 Benzo(b)fluoranthene	252	20.906	20.906	(0.964)	2740149	160.000	174.4(A)
161 Benzo(k)fluoranthene	252	20.965	20.965	(0.967)	2510987	160.000	160.5(A)
165 Benzo(a)pyrene	252	21.579	21.579	(0.995)	2606336	160.000	168.3(A)
* 166 Perylene-d12	264	21.680	21.680	(1.000)	562102	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.469	24.469	(1.129)	2785534	160.000	188.1(A)
174 Dibenzo(a,h)anthracene	278	24.559	24.559	(1.133)	2824800	160.000	184.4(A)
177 Benzo(g,h,i)perylene	276	25.328	25.328	(1.168)	2717264	160.000	179.6(A)

QC Flag Legend

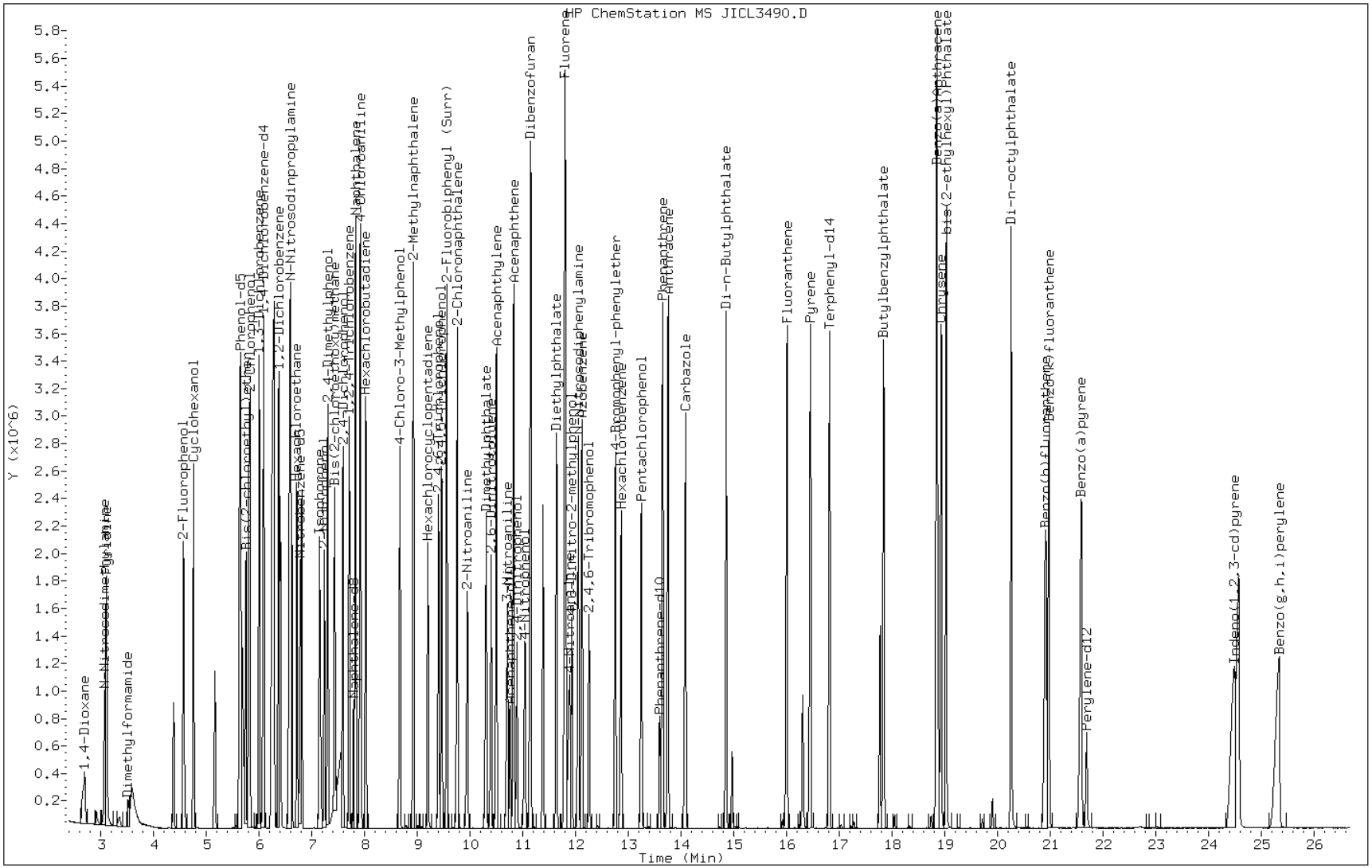
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: JICL3490.D

Date: 22-AUG-2012 10:32

Client ID: STD160-012006 Instrument: MSJ.i

Sample Info: STD160-012006 Operator: MAK



Manual Integration Report

Data File: JICL3490.D
Inj. Date and Time: 22-AUG-2012 10:32
Instrument ID: MSJ.i
Client ID: STD160-012006
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 08/23/2012

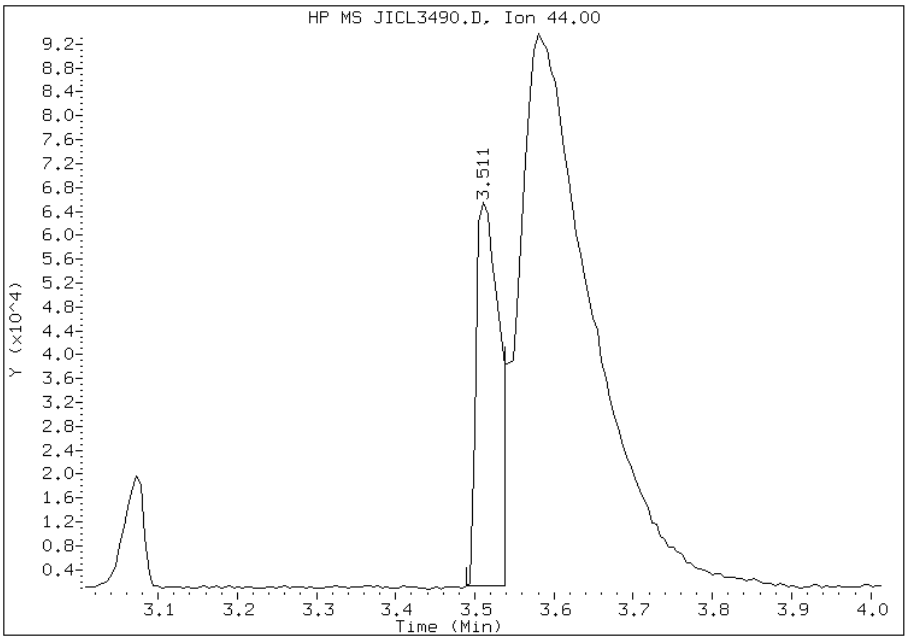
Processing Integration Results

RT: 3.51

Response: 127262

Amount: 47

Conc: 47



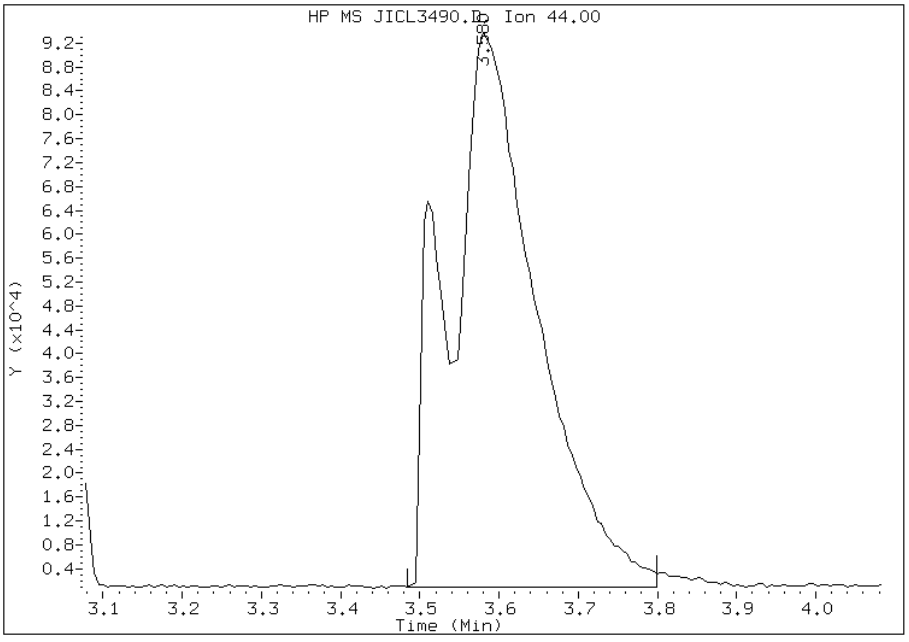
Manual Integration Results

RT: 3.58

Response: 717273

Amount: 158

Conc: 158



Manually Integrated By: kuessnerm
Modification Date: 22-Aug-2012 11:53
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

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Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3491.D
Lab Smp Id: STD120-012005 Client Smp ID: STD120-012005
Inj Date : 22-AUG-2012 11:06
Operator : MAK Inst ID: MSJ.i
Smp Info : STD120-012005
Misc Info : 12005
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:15 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 15:38 Cal File: JICL3499.D
Als bottle: 5 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.634	2.634	(0.436)	323541	120.000	118.2
	4 N-Nitrosodimethylamine	74	3.018	3.018	(0.500)	472719	120.000	117.6
	3 Pyridine	79	3.050	3.050	(0.505)	773892	120.000	112.9
	5 Dimethylformamide	44	3.446	3.446	(0.571)	521136	120.000	117.8(M)
$	10 2-Fluorophenol	112	4.530	4.530	(0.750)	674198	120.000	117.0
	11 Cyclohexanol	57	4.717	4.717	(0.781)	741691	120.000	115.3
	19 Bis(2-chloroethyl)ether	93	5.716	5.716	(0.947)	702071	120.000	115.4
$	15 Phenol-d5	99	5.593	5.593	(0.927)	838615	120.000	116.5
	16 Phenol	94	5.609	5.609	(0.929)	928410	120.000	117.6
	20 2-Chlorophenol	128	5.790	5.790	(0.959)	702079	120.000	115.8
	21 1,3-Dichlorobenzene	146	5.972	5.972	(0.989)	806353	120.000	118.0
*	22 1,4-Dichlorobenzene-d4	152	6.036	6.036	(1.000)	180086	40.0000	
	23 1,4-Dichlorobenzene	146	6.057	6.057	(1.004)	830135	120.000	117.8
	26 1,2-Dichlorobenzene	146	6.255	6.255	(1.036)	767662	120.000	117.9
	25 Benzyl Alcohol	108	6.207	6.207	(1.028)	468361	120.000	115.5
	28 2,2-oxybis(1-Chloropropane)	45	6.367	6.367	(1.055)	1182170	120.000	115.2
	27 2-Methylphenol	108	6.335	6.335	(1.050)	631282	120.000	114.9
	35 Hexachloroethane	117	6.688	6.688	(1.108)	306915	120.000	117.7
	32 N-Nitrosodinpropylamine	70	6.586	6.586	(1.091)	511231	120.000	117.4
M	215 Total Cresols	100				631282	360.000	114.9
$	36 Nitrobenzene-d5	82	6.746	6.746	(0.869)	805434	120.000	119.2

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.773	6.773	(0.873)	827325	120.000	118.6
	39 Isophorone	82	7.110	7.110	(0.916)	1376832	120.000	117.4
	40 2-Nitrophenol	139	7.206	7.206	(0.928)	380842	120.000	120.5
	41 2,4-Dimethylphenol	107	7.270	7.270	(0.937)	753356	120.000	121.0
	42 Bis(2-chloroethoxy)methane	93	7.403	7.403	(0.954)	798498	120.000	119.1
	45 2,4-Dichlorophenol	162	7.553	7.553	(0.973)	558519	120.000	118.9
	47 1,2,4-Trichlorobenzene	180	7.681	7.681	(0.990)	624732	120.000	119.5
*	48 Naphthalene-d8	136	7.761	7.761	(1.000)	648081	40.0000	
	44 Benzoic Acid	122	7.484	7.484	(0.964)	447047	120.000	126.8
	50 Naphthalene	128	7.799	7.799	(1.005)	2083643	120.000	119.7
	51 4-Chloroaniline	127	7.884	7.884	(1.016)	803313	120.000	116.9
	54 Hexachlorobutadiene	225	7.991	7.991	(1.030)	388796	120.000	119.6
	62 2-Methylnaphthalene	142	8.894	8.894	(1.146)	1331455	120.000	119.3
	59 4-Chloro-3-Methylphenol	107	8.637	8.637	(1.113)	633555	120.000	118.2
	66 Hexachlorocyclopentadiene	237	9.171	9.171	(0.855)	322634	120.000	125.1
	67 2,4,6-Trichlorophenol	196	9.369	9.369	(0.874)	415426	120.000	120.5
	68 2,4,5-Trichlorophenol	196	9.428	9.428	(0.879)	442138	120.000	121.4
$	69 2-Fluorobiphenyl (Surr)	172	9.524	9.524	(0.888)	1448402	120.000	121.1
	72 2-Chloronaphthalene	162	9.721	9.721	(0.906)	1270310	120.000	121.5
	73 2-Nitroaniline	65	9.914	9.914	(0.924)	427659	120.000	121.7
	76 Dimethylphthalate	163	10.272	10.272	(0.958)	1383606	120.000	119.3
	79 Acenaphthylene	152	10.464	10.464	(0.976)	1944829	120.000	120.2
	80 2,6-Dinitrotoluene	165	10.362	10.362	(0.966)	324304	120.000	122.9
*	82 Acenaphthene-d10	164	10.726	10.726	(1.000)	352055	40.0000	
	83 Acenaphthene	153	10.790	10.790	(1.006)	1238428	120.000	120.1
	81 3-Nitroaniline	138	10.667	10.667	(0.995)	339897	120.000	120.6
	84 2,4-Dinitrophenol	184	10.854	10.854	(1.012)	238933	120.000	131.9
	86 Dibenzofuran	168	11.110	11.110	(1.036)	1736639	120.000	120.0
	88 2,4-Dinitrotoluene	165	11.110	11.110	(1.036)	434536	120.000	122.6
	85 4-Nitrophenol	109	11.003	11.003	(1.026)	230081	120.000	122.5
	93 Diethylphthalate	149	11.601	11.601	(1.082)	1382459	120.000	118.9
	94 Fluorene	166	11.762	11.762	(1.097)	1425838	120.000	120.6
	95 4-Chlorophenyl-phenylether	204	11.778	11.778	(1.098)	673272	120.000	119.4
	98 4-Nitroaniline	138	11.836	11.836	(1.104)	342628	120.000	121.2
	99 4,6-Dinitro-2-methylphenol	198	11.885	11.885	(0.876)	291005	120.000	127.6
	100 N-Nitrosodiphenylamine	169	12.013	12.013	(0.886)	962260	120.000	120.4
	102 Azobenzene	77	12.082	12.082	(0.891)	1552360	120.000	119.8
$	104 2,4,6-Tribromophenol	330	12.221	12.221	(1.139)	205735	120.000	122.4
	109 4-Bromophenyl-phenylether	248	12.718	12.718	(0.938)	390243	120.000	121.4
	112 Hexachlorobenzene	284	12.825	12.825	(0.946)	419815	120.000	121.6
	117 Pentachlorophenol	266	13.209	13.209	(0.974)	296794	120.000	124.6
*	121 Phenanthrene-d10	188	13.562	13.562	(1.000)	610848	40.0000	
	122 Phenanthrene	178	13.615	13.615	(1.004)	1967608	120.000	120.0
	124 Anthracene	178	13.717	13.717	(1.011)	1985243	120.000	119.8
	126 Carbazole	167	14.048	14.048	(1.036)	1749698	120.000	120.3
	129 Di-n-Butylphthalate	149	14.817	14.817	(1.093)	2296973	120.000	122.0
	134 Fluoranthene	202	15.970	15.970	(1.178)	2060553	120.000	121.2
	137 Pyrene	202	16.414	16.414	(0.872)	2183467	120.000	120.1
$	139 Terphenyl-d14	244	16.777	16.777	(0.891)	1400600	120.000	121.8
	146 Butylbenzylphthalate	149	17.802	17.802	(0.945)	1005140	120.000	120.8
	150 Benzo(a)Anthracene	228	18.812	18.812	(0.999)	1891102	120.000	122.6
*	153 Chrysene-d12	240	18.833	18.833	(1.000)	617834	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.807	18.807	(0.999)	801701	120.000	127.0
	154 Chrysene	228	18.892	18.892	(1.003)	1907338	120.000	120.3

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.994	18.994	(1.009)	1382575	120.000	122.5
158 Di-n-octylphthalate	149	20.222	20.222	(1.074)	2430548	120.000	125.0
160 Benzo(b)fluoranthene	252	20.863	20.863	(0.964)	2023135	120.000	122.5
161 Benzo(k)fluoranthene	252	20.927	20.927	(0.967)	1974467	120.000	120.1
165 Benzo(a)pyrene	252	21.536	21.536	(0.995)	2009065	120.000	123.4
* 166 Perylene-d12	264	21.643	21.643	(1.000)	590789	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.399	24.399	(1.127)	2021812	120.000	129.9
174 Dibenzo(a,h)anthracene	278	24.484	24.484	(1.131)	2024767	120.000	125.8
177 Benzo(g,h,i)perylene	276	25.232	25.232	(1.166)	2019370	120.000	127.0

QC Flag Legend

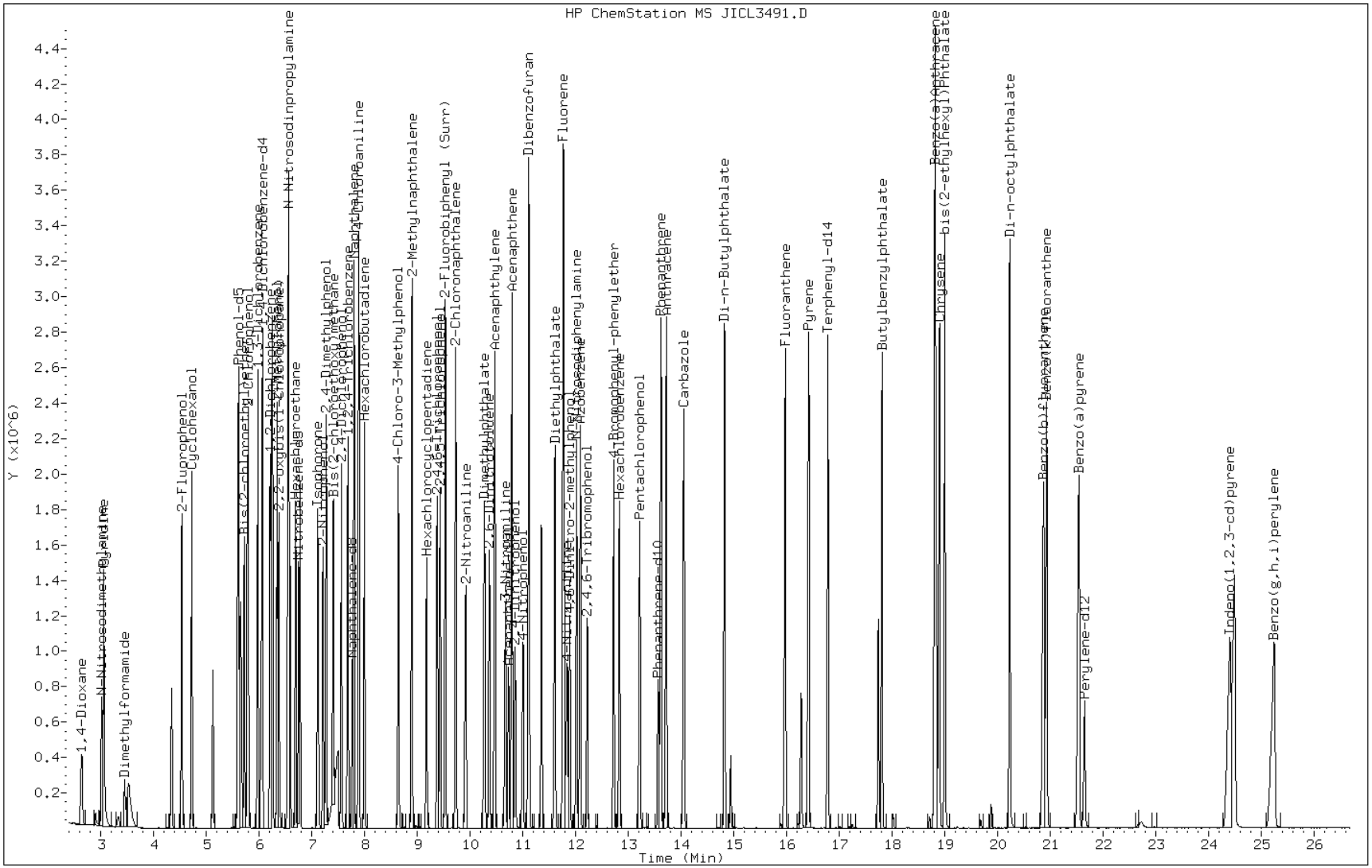
M - Compound response manually integrated.

Data File: JICL3491.D

Date: 22-AUG-2012 11:06

Client ID: STD120-012005 Instrument: MSJ.i

Sample Info: STD120-012005 Operator: MAK



Manual Integration Report

Data File: JICL3491.D
Inj. Date and Time: 22-AUG-2012 11:06
Instrument ID: MSJ.i
Client ID: STD120-012005
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 08/23/2012

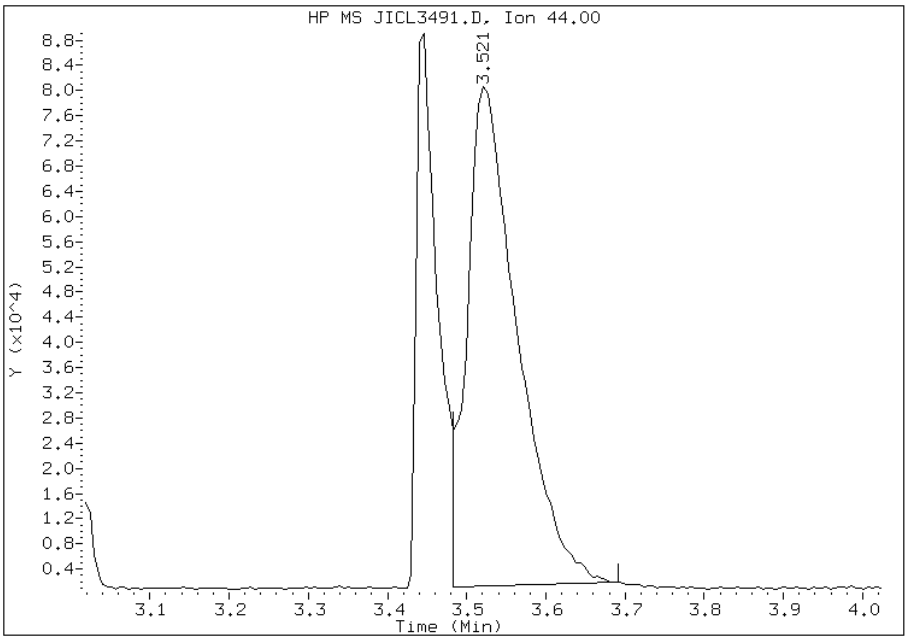
Processing Integration Results

RT: 3.52

Response: 351776

Amount: 129

Conc: 129



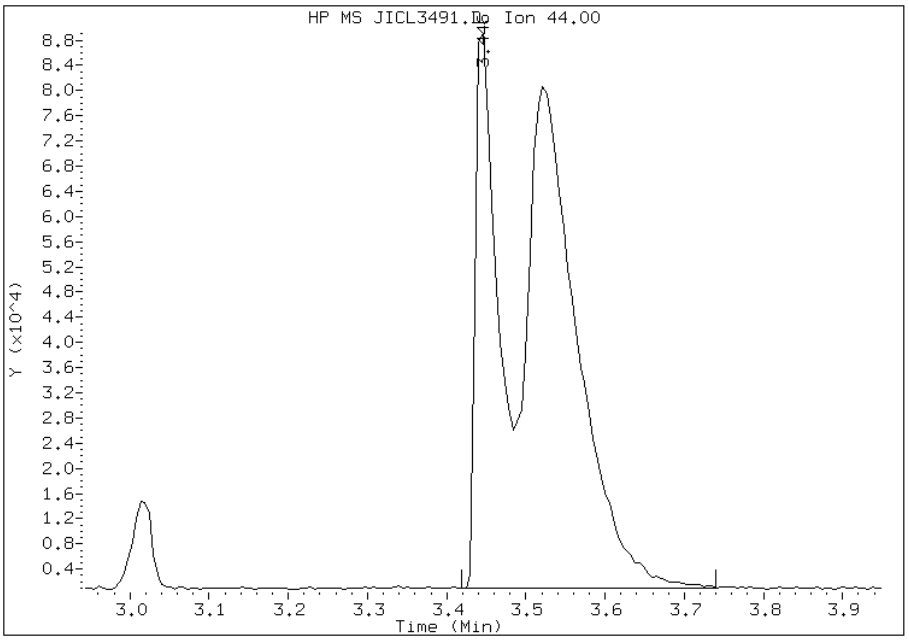
Manual Integration Results

RT: 3.45

Response: 521136

Amount: 118

Conc: 118



Manually Integrated By: kuessnerm
Modification Date: 22-Aug-2012 11:56
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3492.D
Lab Smp Id: STD080-012004 Client Smp ID: STD080-012004
Inj Date : 22-AUG-2012 11:40
Operator : MAK Inst ID: MSJ.i
Smp Info : STD080-012004
Misc Info : 12004
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:14 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 13:56 Cal File: JICL3496.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	2.606	2.606	(0.432)	222614	80.0000	78.29
4	N-Nitrosodimethylamine	74	2.980	2.980	(0.494)	333976	80.0000	80.01
3	Pyridine	79	3.023	3.023	(0.501)	566990	80.0000	79.68
5	Dimethylformamide	44	3.429	3.429	(0.568)	375977	80.0000	81.86(M)
$ 10	2-Fluorophenol	112	4.524	4.524	(0.750)	474478	80.0000	79.33
11	Cyclohexanol	57	4.711	4.711	(0.781)	526464	80.0000	78.83
19	Bis(2-chloroethyl)ether	93	5.710	5.710	(0.946)	503937	80.0000	79.75
$ 15	Phenol-d5	99	5.587	5.587	(0.926)	596499	80.0000	79.80
16	Phenol	94	5.603	5.603	(0.928)	659347	80.0000	80.42
20	2-Chlorophenol	128	5.790	5.790	(0.959)	502289	80.0000	79.76
21	1,3-Dichlorobenzene	146	5.971	5.971	(0.989)	561951	80.0000	79.16
* 22	1,4-Dichlorobenzene-d4	152	6.035	6.035	(1.000)	187009	40.0000	
23	1,4-Dichlorobenzene	146	6.057	6.057	(1.004)	574401	80.0000	78.48
26	1,2-Dichlorobenzene	146	6.249	6.249	(1.035)	535649	80.0000	79.20
25	Benzyl Alcohol	108	6.206	6.206	(1.028)	338626	80.0000	80.39
28	2,2-oxybis(1-Chloropropane)	45	6.372	6.372	(1.056)	849230	80.0000	79.70
27	2-Methylphenol	108	6.334	6.334	(1.050)	457585	80.0000	80.20
35	Hexachloroethane	117	6.687	6.687	(1.108)	214062	80.0000	79.03
32	N-Nitrosodinpropylamine	70	6.575	6.575	(1.089)	369378	80.0000	81.69
M 215	Total Cresols	100				457585	240.000	80.20
$ 36	Nitrobenzene-d5	82	6.746	6.746	(0.869)	576639	80.0000	80.03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
37	Nitrobenzene	77	6.772	6.772	(0.872)	592352	80.0000	79.61
39	Isophorone	82	7.104	7.104	(0.915)	1006041	80.0000	80.39
40	2-Nitrophenol	139	7.205	7.205	(0.928)	272554	80.0000	80.86
41	2,4-Dimethylphenol	107	7.264	7.264	(0.935)	535556	80.0000	80.67
42	Bis(2-chloroethoxy)methane	93	7.403	7.403	(0.953)	570361	80.0000	79.74
45	2,4-Dichlorophenol	162	7.552	7.552	(0.972)	401080	80.0000	80.03
47	1,2,4-Trichlorobenzene	180	7.680	7.680	(0.989)	440988	80.0000	79.11
* 48	Naphthalene-d8	136	7.766	7.766	(1.000)	691310	40.0000	
44	Benzoic Acid	122	7.467	7.467	(0.961)	325714	80.0000	86.59
50	Naphthalene	128	7.798	7.798	(1.004)	1485642	80.0000	80.00
51	4-Chloroaniline	127	7.883	7.883	(1.015)	586252	80.0000	79.98
54	Hexachlorobutadiene	225	7.996	7.996	(1.030)	269271	80.0000	77.65
62	2-Methylnaphthalene	142	8.893	8.893	(1.145)	957990	80.0000	80.46
59	4-Chloro-3-Methylphenol	107	8.636	8.636	(1.112)	463754	80.0000	81.09
66	Hexachlorocyclopentadiene	237	9.171	9.171	(0.855)	225465	80.0000	78.96
67	2,4,6-Trichlorophenol	196	9.373	9.373	(0.874)	304982	80.0000	79.85
68	2,4,5-Trichlorophenol	196	9.427	9.427	(0.879)	322998	80.0000	80.12
$ 69	2-Fluorobiphenyl (Surr)	172	9.528	9.528	(0.888)	1045410	80.0000	78.90
72	2-Chloronaphthalene	162	9.726	9.726	(0.906)	917744	80.0000	79.24
73	2-Nitroaniline	65	9.913	9.913	(0.924)	317656	80.0000	81.62
76	Dimethylphthalate	163	10.265	10.265	(0.957)	1025380	80.0000	79.81
79	Acenaphthylene	152	10.468	10.468	(0.976)	1427046	80.0000	79.62
80	2,6-Dinitrotoluene	165	10.362	10.362	(0.966)	238568	80.0000	81.65
* 82	Acenaphthene-d10	164	10.730	10.730	(1.000)	389898	40.0000	
83	Acenaphthene	153	10.794	10.794	(1.006)	907793	80.0000	79.51
81	3-Nitroaniline	138	10.666	10.666	(0.994)	255260	80.0000	81.77
84	2,4-Dinitrophenol	184	10.853	10.853	(1.011)	176821	80.0000	88.14
86	Dibenzofuran	168	11.115	11.115	(1.036)	1272611	80.0000	79.43
88	2,4-Dinitrotoluene	165	11.109	11.109	(1.035)	321020	80.0000	81.78
85	4-Nitrophenol	109	10.997	10.997	(1.025)	172457	80.0000	82.93
93	Diethylphthalate	149	11.601	11.601	(1.081)	1034484	80.0000	80.35
94	Fluorene	166	11.761	11.761	(1.096)	1049419	80.0000	80.12
95	4-Chlorophenyl-phenylether	204	11.777	11.777	(1.098)	497031	80.0000	79.61
98	4-Nitroaniline	138	11.830	11.830	(1.103)	260809	80.0000	83.30
99	4,6-Dinitro-2-methylphenol	198	11.884	11.884	(0.876)	217285	80.0000	84.71
100	N-Nitrosodiphenylamine	169	12.012	12.012	(0.885)	715342	80.0000	79.62
102	Azobenzene	77	12.087	12.087	(0.891)	1155750	80.0000	79.35
$ 104	2,4,6-Tribromophenol	330	12.220	12.220	(1.139)	151266	80.0000	81.23
109	4-Bromophenyl-phenylether	248	12.722	12.722	(0.938)	289876	80.0000	80.20
112	Hexachlorobenzene	284	12.829	12.829	(0.946)	308730	80.0000	79.52
117	Pentachlorophenol	266	13.208	13.208	(0.974)	222581	80.0000	83.08
* 121	Phenanthrene-d10	188	13.566	13.566	(1.000)	686878	40.0000	
122	Phenanthrene	178	13.614	13.614	(1.004)	1457969	80.0000	79.09
124	Anthracene	178	13.716	13.716	(1.011)	1484505	80.0000	79.66
126	Carbazole	167	14.047	14.047	(1.035)	1312419	80.0000	80.26
129	Di-n-Butylphthalate	149	14.821	14.821	(1.093)	1717677	80.0000	81.15
134	Fluoranthene	202	15.970	15.970	(1.177)	1552210	80.0000	81.23
137	Pyrene	202	16.413	16.413	(0.871)	1635112	80.0000	78.47
$ 139	Terphenyl-d14	244	16.782	16.782	(0.891)	1040291	80.0000	78.88
146	Butylbenzylphthalate	149	17.807	17.807	(0.945)	765369	80.0000	80.25
150	Benzo(a)Anthracene	228	18.811	18.811	(0.999)	1420377	80.0000	80.35
* 153	Chrysene-d12	240	18.838	18.838	(1.000)	708294	40.0000	
152	3,3'-Dichlorobenzidine	252	18.806	18.806	(0.998)	594535	80.0000	82.12
154	Chrysene	228	18.891	18.891	(1.003)	1437113	80.0000	79.08

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155	bis(2-ethylhexyl)Phthalate	149	18.993	18.993	(1.008)	1046265	80.0000	80.88
158	Di-n-octylphthalate	149	20.227	20.227	(1.074)	1842713	80.0000	82.67
160	Benzo(b)fluoranthene	252	20.862	20.862	(0.964)	1453709	80.0000	80.32
161	Benzo(k)fluoranthene	252	20.921	20.921	(0.966)	1456131	80.0000	80.80
165	Benzo(a)pyrene	252	21.530	21.530	(0.995)	1439038	80.0000	80.67
* 166	Perylene-d12	264	21.647	21.647	(1.000)	647559	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	24.393	24.393	(1.127)	1388495	80.0000	81.39
174	Dibenzo(a,h)anthracene	278	24.478	24.478	(1.131)	1464836	80.0000	83.00
177	Benzo(g,h,i)perylene	276	25.226	25.226	(1.165)	1419256	80.0000	81.45

QC Flag Legend

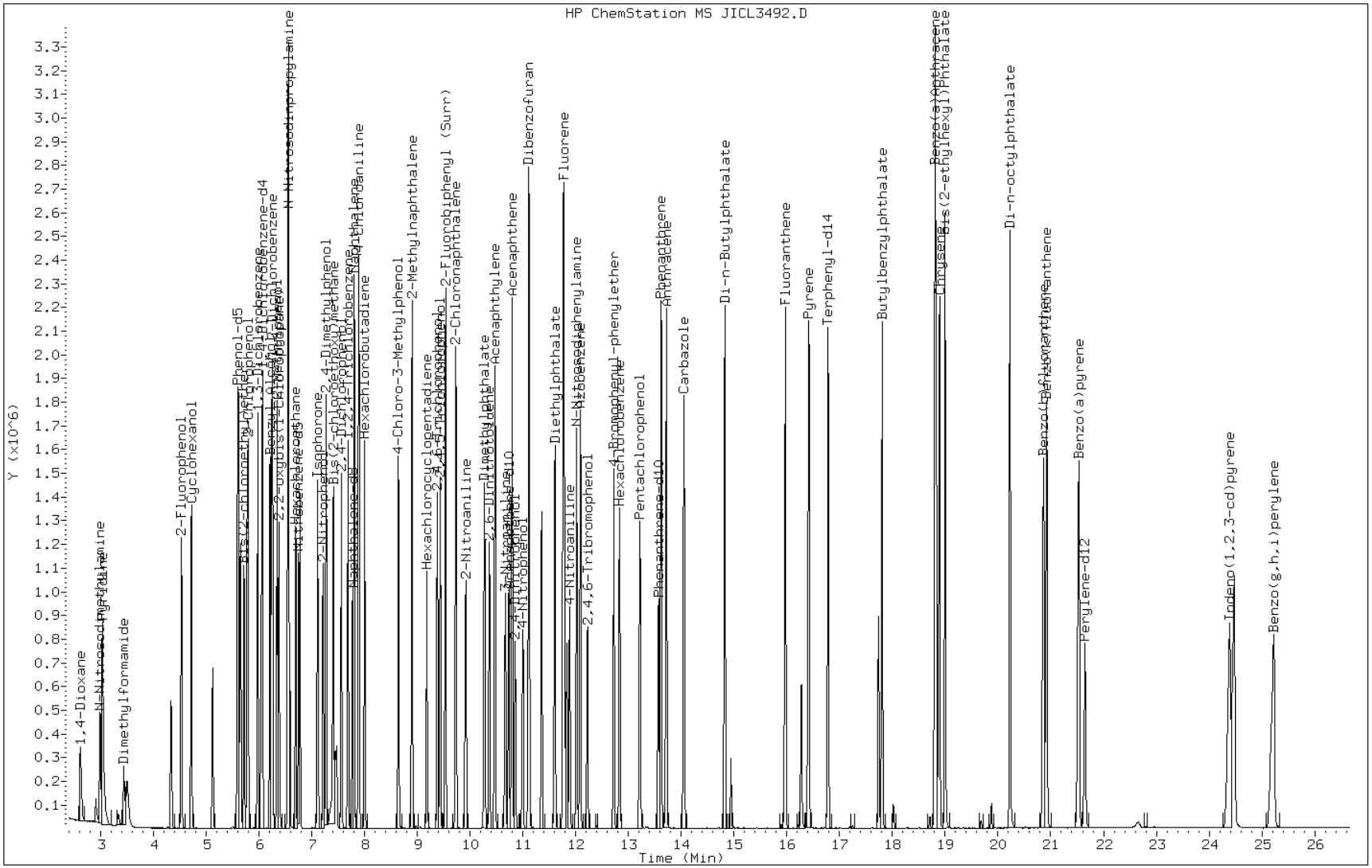
M - Compound response manually integrated.

Data File: JICL3492.D

Date: 22-AUG-2012 11:40

Client ID: STD080-012004 Instrument: MSJ.i

Sample Info: STD080-012004 Operator: MAK



Manual Integration Report

Data File: JICL3492.D
Inj. Date and Time: 22-AUG-2012 11:40
Instrument ID: MSJ.i
Client ID: STD080-012004
Compound: 5 Dimethylformamide
CAS #: 68-12-2
Report Date: 08/23/2012

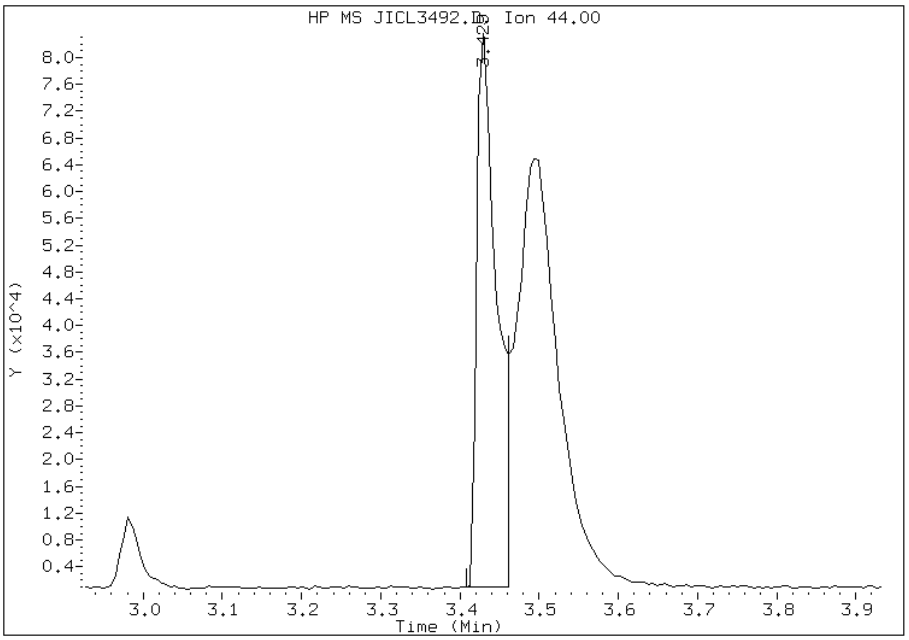
Processing Integration Results

RT: 3.43

Response: 146647

Amount: 38

Conc: 38



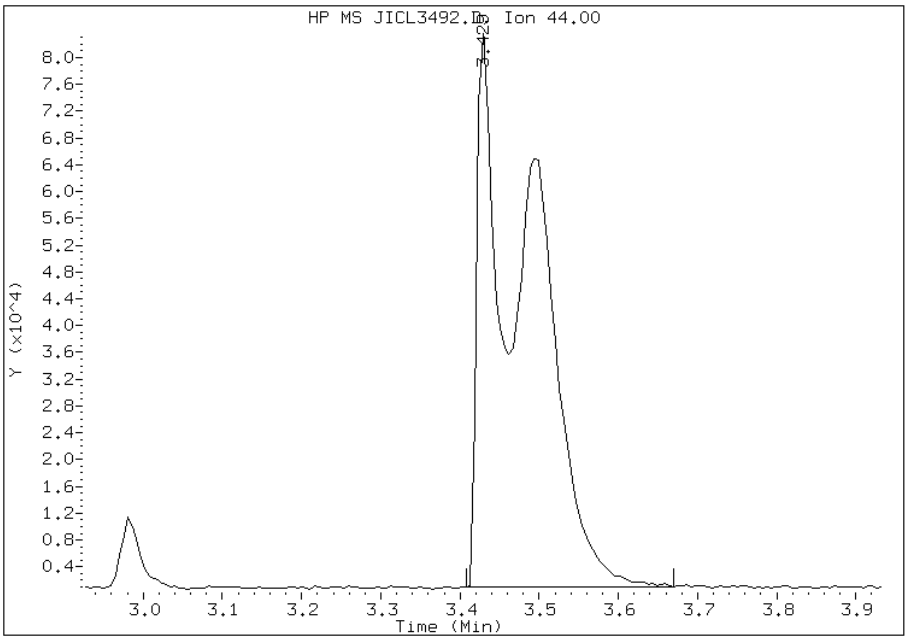
Manual Integration Results

RT: 3.43

Response: 375977

Amount: 82

Conc: 82



Manually Integrated By: kuessnerm
Modification Date: 22-Aug-2012 12:50
Manual Integration Reason: Incomplete Integration

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3493.D
Lab Smp Id: STD020-011994 Client Smp ID: STD020-011994
Inj Date : 22-AUG-2012 12:14
Operator : MAK Inst ID: MSJ.i
Smp Info : STD020-011994
Misc Info : 11994
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:14 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 16:46 Cal File: JICL3501.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.612	2.612	(0.432)	51660	20.0000	21.50
	4 N-Nitrosodimethylamine	74	2.981	2.981	(0.493)	71003	20.0000	20.13
	3 Pyridine	79	3.029	3.029	(0.501)	129639	20.0000	21.56
	5 Dimethylformamide	44	3.435	3.435	(0.569)	76261	20.0000	19.65
$	10 2-Fluorophenol	112	4.514	4.514	(0.747)	103735	20.0000	20.53
	11 Cyclohexanol	57	4.701	4.701	(0.778)	117082	20.0000	20.75
	19 Bis(2-chloroethyl)ether	93	5.705	5.705	(0.944)	106873	20.0000	20.02
$	15 Phenol-d5	99	5.571	5.571	(0.922)	126735	20.0000	20.07
	16 Phenol	94	5.587	5.587	(0.925)	139205	20.0000	20.10
	20 2-Chlorophenol	128	5.785	5.785	(0.958)	109882	20.0000	20.65
	21 1,3-Dichlorobenzene	146	5.972	5.972	(0.989)	122628	20.0000	20.44
*	22 1,4-Dichlorobenzene-d4	152	6.041	6.041	(1.000)	157999	40.0000	
	23 1,4-Dichlorobenzene	146	6.057	6.057	(1.003)	127098	20.0000	20.55
	26 1,2-Dichlorobenzene	146	6.255	6.255	(1.035)	117119	20.0000	20.50
	25 Benzyl Alcohol	108	6.196	6.196	(1.026)	71424	20.0000	20.07
	28 2,2-oxybis(1-Chloropropane)	45	6.367	6.367	(1.054)	186773	20.0000	20.75
	27 2-Methylphenol	108	6.330	6.330	(1.048)	98558	20.0000	20.45
	35 Hexachloroethane	117	6.693	6.693	(1.108)	46661	20.0000	20.39
	32 N-Nitrosodinpropylamine	70	6.538	6.538	(1.082)	77415	20.0000	20.26
M	215 Total Cresols	100				98558	60.0000	20.45
$	36 Nitrobenzene-d5	82	6.741	6.741	(0.868)	121792	20.0000	20.03

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.768	6.768	(0.871)	127343	20.0000	20.28
	39 Isophorone	82	7.088	7.088	(0.913)	209870	20.0000	19.87
	40 2-Nitrophenol	139	7.206	7.206	(0.928)	56241	20.0000	19.77
	41 2,4-Dimethylphenol	107	7.259	7.259	(0.935)	108852	20.0000	19.43
	42 Bis(2-chloroethoxy)methane	93	7.398	7.398	(0.953)	121609	20.0000	20.14
	45 2,4-Dichlorophenol	162	7.547	7.547	(0.972)	83483	20.0000	19.74
	47 1,2,4-Trichlorobenzene	180	7.681	7.681	(0.989)	95421	20.0000	20.28
*	48 Naphthalene-d8	136	7.766	7.766	(1.000)	583408	40.0000	
	44 Benzoic Acid	122	7.366	7.366	(0.948)	60774	20.0000	19.14
	50 Naphthalene	128	7.799	7.799	(1.004)	314116	20.0000	20.04
	51 4-Chloroaniline	127	7.873	7.873	(1.014)	124565	20.0000	20.14
	54 Hexachlorobutadiene	225	7.996	7.996	(1.030)	59559	20.0000	20.35
	62 2-Methylnaphthalene	142	8.893	8.893	(1.145)	197649	20.0000	19.67
	59 4-Chloro-3-Methylphenol	107	8.637	8.637	(1.112)	92894	20.0000	19.25
	66 Hexachlorocyclopentadiene	237	9.177	9.177	(0.855)	45076	20.0000	19.45
	67 2,4,6-Trichlorophenol	196	9.374	9.374	(0.874)	60715	20.0000	19.59
	68 2,4,5-Trichlorophenol	196	9.428	9.428	(0.879)	63674	20.0000	19.46
$	69 2-Fluorobiphenyl (Surr)	172	9.529	9.529	(0.888)	215597	20.0000	20.05
	72 2-Chloronaphthalene	162	9.727	9.727	(0.906)	187362	20.0000	19.94
	73 2-Nitroaniline	65	9.903	9.903	(0.923)	60467	20.0000	19.14
	76 Dimethylphthalate	163	10.255	10.255	(0.956)	205138	20.0000	19.67(Q)
	79 Acenaphthylene	152	10.464	10.464	(0.975)	288720	20.0000	19.85
	80 2,6-Dinitrotoluene	165	10.352	10.352	(0.965)	44948	20.0000	18.96
*	82 Acenaphthene-d10	164	10.731	10.731	(1.000)	316417	40.0000	
	83 Acenaphthene	153	10.790	10.790	(1.005)	185055	20.0000	19.97
	81 3-Nitroaniline	138	10.651	10.651	(0.993)	49288	20.0000	19.46
	84 2,4-Dinitrophenol	184	10.838	10.838	(1.010)	27592	20.0000	16.95
	86 Dibenzofuran	168	11.110	11.110	(1.035)	257921	20.0000	19.84
	88 2,4-Dinitrotoluene	165	11.094	11.094	(1.034)	60183	20.0000	18.89
	85 4-Nitrophenol	109	10.976	10.976	(1.023)	30968	20.0000	18.35
	93 Diethylphthalate	149	11.591	11.591	(1.080)	204694	20.0000	19.59
	94 Fluorene	166	11.756	11.756	(1.096)	207764	20.0000	19.54
	95 4-Chlorophenyl-phenylether	204	11.778	11.778	(1.098)	99955	20.0000	19.73
	98 4-Nitroaniline	138	11.799	11.799	(1.100)	48274	20.0000	19.00
	99 4,6-Dinitro-2-methylphenol	198	11.858	11.858	(0.874)	36125	20.0000	17.97
	100 N-Nitrosodiphenylamine	169	12.007	12.007	(0.885)	140186	20.0000	19.91
	102 Azobenzene	77	12.077	12.077	(0.890)	233263	20.0000	20.44
$	104 2,4,6-Tribromophenol	330	12.216	12.216	(1.138)	28770	20.0000	19.04
	109 4-Bromophenyl-phenylether	248	12.718	12.718	(0.937)	56653	20.0000	20.00
	112 Hexachlorobenzene	284	12.824	12.824	(0.945)	60077	20.0000	19.75
	117 Pentachlorophenol	266	13.209	13.209	(0.974)	40192	20.0000	19.14
*	121 Phenanthrene-d10	188	13.567	13.567	(1.000)	538239	40.0000	
	122 Phenanthrene	178	13.610	13.610	(1.003)	288891	20.0000	20.00
	124 Anthracene	178	13.711	13.711	(1.011)	292948	20.0000	20.06
	126 Carbazole	167	14.042	14.042	(1.035)	256093	20.0000	19.99
	129 Di-n-Butylphthalate	149	14.822	14.822	(1.093)	322703	20.0000	19.46
	134 Fluoranthene	202	15.965	15.965	(1.177)	291486	20.0000	19.47
	137 Pyrene	202	16.403	16.403	(0.871)	309293	20.0000	20.13
$	139 Terphenyl-d14	244	16.777	16.777	(0.891)	191724	20.0000	19.71
	146 Butylbenzylphthalate	149	17.802	17.802	(0.946)	137932	20.0000	19.61
	150 Benzo(a)Anthracene	228	18.806	18.806	(0.999)	256067	20.0000	19.64
*	153 Chrysene-d12	240	18.828	18.828	(1.000)	522339	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.801	18.801	(0.999)	99262	20.0000	18.59
	154 Chrysene	228	18.876	18.876	(1.003)	270278	20.0000	20.17

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.993	18.993	(1.009)	184832	20.0000	19.38
158 Di-n-octylphthalate	149	20.222	20.222	(1.074)	304736	20.0000	18.54
160 Benzo(b)fluoranthene	252	20.847	20.847	(0.963)	248231	20.0000	19.10
161 Benzo(k)fluoranthene	252	20.905	20.905	(0.966)	261745	20.0000	20.22
165 Benzo(a)pyrene	252	21.514	21.514	(0.994)	247836	20.0000	19.35
* 166 Perylene-d12	264	21.643	21.643	(1.000)	465044	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.350	24.350	(1.125)	217790	20.0000	17.78
174 Dibenzo(a,h)anthracene	278	24.436	24.436	(1.129)	222586	20.0000	17.56
177 Benzo(g,h,i)perylene	276	25.168	25.168	(1.163)	229121	20.0000	18.31

QC Flag Legend

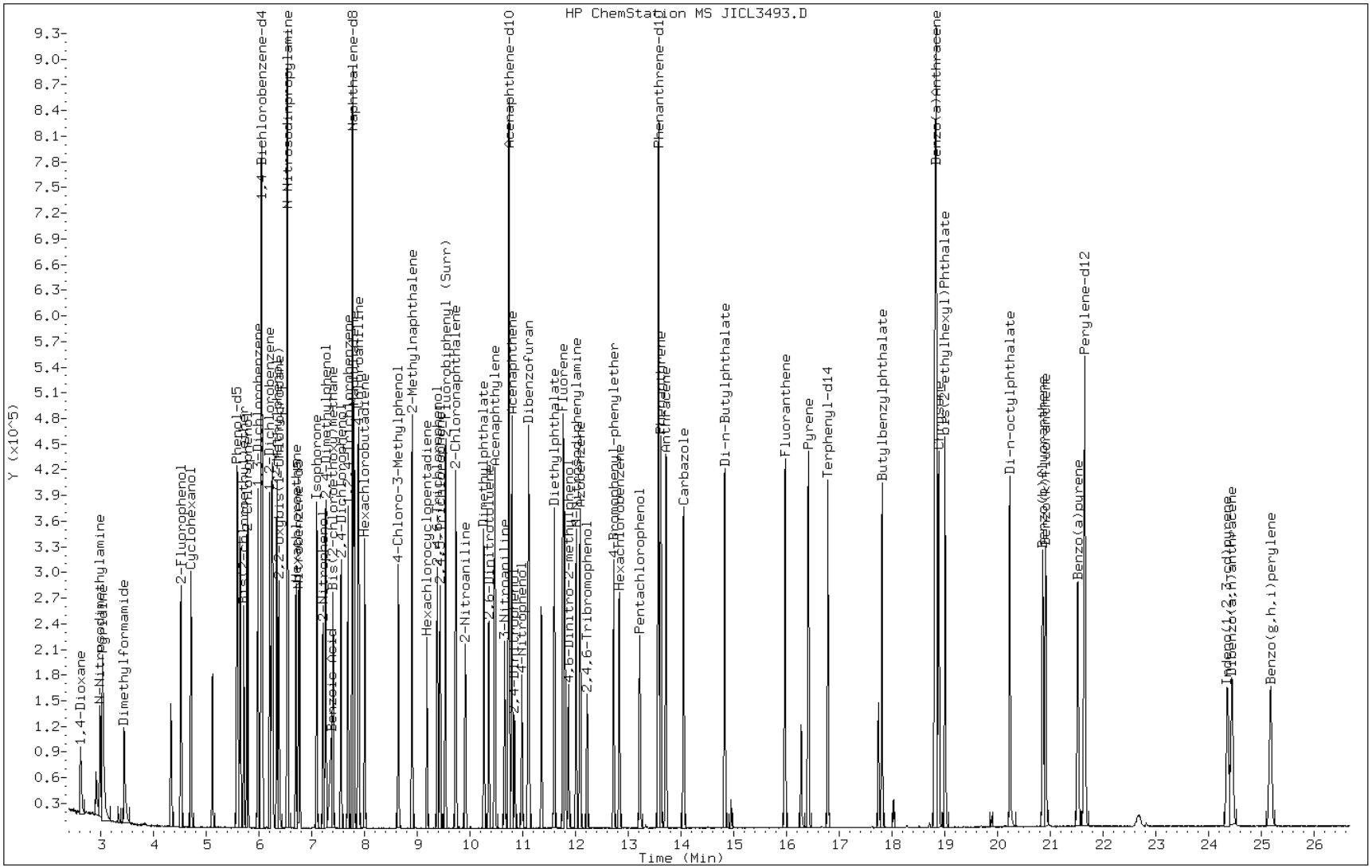
Q - Qualifier signal failed the ratio test.

Data File: JICL3493.D

Date: 22-AUG-2012 12:14

Client ID: STD020-011994 Instrument: MSJ.i

Sample Info: STD020-011994 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3494.D
Lab Smp Id: STD010-011993 Client Smp ID: STD010-011993
Inj Date : 22-AUG-2012 12:48
Operator : MAK Inst ID: MSJ.i
Smp Info : STD010-011993
Misc Info : 11993
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:14 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 16:46 Cal File: JICL3501.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.615	2.615	(0.433)	41112	10.0000	9.846(a)
	4 N-Nitrosodimethylamine	74	2.984	2.984	(0.494)	63837	10.0000	10.41
	3 Pyridine	79	3.032	3.032	(0.502)	111746	10.0000	10.69
	5 Dimethylformamide	44	3.438	3.438	(0.569)	68411	10.0000	10.14
$	10 2-Fluorophenol	112	4.517	4.517	(0.748)	90270	10.0000	10.28
	11 Cyclohexanol	57	4.703	4.703	(0.779)	101454	10.0000	10.34
	19 Bis(2-chloroethyl)ether	93	5.708	5.708	(0.945)	93243	10.0000	10.05
$	15 Phenol-d5	99	5.574	5.574	(0.923)	114274	10.0000	10.41
	16 Phenol	94	5.590	5.590	(0.926)	123329	10.0000	10.24
	20 2-Chlorophenol	128	5.782	5.782	(0.958)	96311	10.0000	10.41
	21 1,3-Dichlorobenzene	146	5.975	5.975	(0.989)	105352	10.0000	10.10
*	22 1,4-Dichlorobenzene-d4	152	6.039	6.039	(1.000)	274620	40.0000	
	23 1,4-Dichlorobenzene	146	6.060	6.060	(1.004)	110550	10.0000	10.29
	26 1,2-Dichlorobenzene	146	6.252	6.252	(1.035)	101502	10.0000	10.22
	25 Benzyl Alcohol	108	6.194	6.194	(1.026)	63789	10.0000	10.31
	28 2,2-oxybis(1-Chloropropane)	45	6.370	6.370	(1.055)	164625	10.0000	10.52
	27 2-Methylphenol	108	6.333	6.333	(1.049)	88722	10.0000	10.59
	35 Hexachloroethane	117	6.690	6.690	(1.108)	41165	10.0000	10.35
	32 N-Nitrosodinpropylamine	70	6.535	6.535	(1.082)	68933	10.0000	10.38
M	215 Total Cresols	100				88722	30.0000	10.59
$	36 Nitrobenzene-d5	82	6.738	6.738	(0.868)	107907	10.0000	9.983(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.765	6.765	(0.871)	113789	10.0000	10.19
	39 Isophorone	82	7.086	7.086	(0.913)	194081	10.0000	10.34
	40 2-Nitrophenol	139	7.203	7.203	(0.928)	49668	10.0000	9.823(a)
	41 2,4-Dimethylphenol	107	7.257	7.257	(0.935)	97786	10.0000	9.819(a)
	42 Bis(2-chloroethoxy)methane	93	7.395	7.395	(0.953)	108509	10.0000	10.11
	45 2,4-Dichlorophenol	162	7.545	7.545	(0.972)	74610	10.0000	9.924(a)
	47 1,2,4-Trichlorobenzene	180	7.684	7.684	(0.990)	83049	10.0000	9.931(a)
*	48 Naphthalene-d8	136	7.764	7.764	(1.000)	1037096	40.0000	
	44 Benzoic Acid	122	7.358	7.358	(0.948)	46095	10.0000	8.169(a)
	50 Naphthalene	128	7.796	7.796	(1.004)	277584	10.0000	9.963(a)
	51 4-Chloroaniline	127	7.871	7.871	(1.014)	115907	10.0000	10.54
	54 Hexachlorobutadiene	225	7.999	7.999	(1.030)	51388	10.0000	9.878(a)
	62 2-Methylnaphthalene	142	8.891	8.891	(1.145)	178361	10.0000	9.985(a)
	59 4-Chloro-3-Methylphenol	107	8.635	8.635	(1.112)	87635	10.0000	10.21
	66 Hexachlorocyclopentadiene	237	9.174	9.174	(0.855)	39055	10.0000	9.090(a)
	67 2,4,6-Trichlorophenol	196	9.372	9.372	(0.873)	56684	10.0000	9.863(a)
	68 2,4,5-Trichlorophenol	196	9.425	9.425	(0.878)	59835	10.0000	9.863(a)
$	69 2-Fluorobiphenyl (Surr)	172	9.526	9.526	(0.888)	196750	10.0000	9.868(a)
	72 2-Chloronaphthalene	162	9.724	9.724	(0.906)	174011	10.0000	9.985(a)
	73 2-Nitroaniline	65	9.906	9.906	(0.923)	57543	10.0000	9.826(a)
	76 Dimethylphthalate	163	10.258	10.258	(0.956)	197739	10.0000	10.23
	79 Acenaphthylene	152	10.461	10.461	(0.975)	268456	10.0000	9.954(a)
	80 2,6-Dinitrotoluene	165	10.349	10.349	(0.964)	42817	10.0000	9.739(a)
*	82 Acenaphthene-d10	164	10.734	10.734	(1.000)	586691	40.0000	
	83 Acenaphthene	153	10.787	10.787	(1.005)	173170	10.0000	10.08
	81 3-Nitroaniline	138	10.653	10.653	(0.993)	46039	10.0000	9.801(a)
	84 2,4-Dinitrophenol	184	10.840	10.840	(1.010)	24231	10.0000	8.027(a)
	86 Dibenzofuran	168	11.107	11.107	(1.035)	244008	10.0000	10.12
	88 2,4-Dinitrotoluene	165	11.091	11.091	(1.033)	58114	10.0000	9.838(a)
	85 4-Nitrophenol	109	10.974	10.974	(1.022)	30488	10.0000	9.743(a)
	93 Diethylphthalate	149	11.588	11.588	(1.080)	198144	10.0000	10.23
	94 Fluorene	166	11.754	11.754	(1.095)	198811	10.0000	10.09
	95 4-Chlorophenyl-phenylether	204	11.775	11.775	(1.097)	94693	10.0000	10.08
	98 4-Nitroaniline	138	11.796	11.796	(1.099)	45694	10.0000	9.699(a)
	99 4,6-Dinitro-2-methylphenol	198	11.861	11.861	(0.874)	34723	10.0000	8.865(a)
	100 N-Nitrosodiphenylamine	169	12.005	12.005	(0.885)	136696	10.0000	9.963(a)
	102 Azobenzene	77	12.079	12.079	(0.890)	221484	10.0000	9.958(a)
$	104 2,4,6-Tribromophenol	330	12.213	12.213	(1.138)	27284	10.0000	9.737(a)
	109 4-Bromophenyl-phenylether	248	12.715	12.715	(0.937)	53115	10.0000	9.623(a)
	112 Hexachlorobenzene	284	12.822	12.822	(0.945)	58496	10.0000	9.867(a)
	117 Pentachlorophenol	266	13.206	13.206	(0.973)	36432	10.0000	8.905(a)
*	121 Phenanthrene-d10	188	13.570	13.570	(1.000)	1048928	40.0000	
	122 Phenanthrene	178	13.612	13.612	(1.003)	285309	10.0000	10.13
	124 Anthracene	178	13.709	13.709	(1.010)	286002	10.0000	10.05
	126 Carbazole	167	14.040	14.040	(1.035)	246986	10.0000	9.891(a)
	129 Di-n-Butylphthalate	149	14.819	14.819	(1.092)	311568	10.0000	9.639(a)
	134 Fluoranthene	202	15.962	15.962	(1.176)	285714	10.0000	9.791(a)
	137 Pyrene	202	16.406	16.406	(0.871)	303867	10.0000	10.04
$	139 Terphenyl-d14	244	16.774	16.774	(0.891)	187615	10.0000	9.798(a)
	146 Butylbenzylphthalate	149	17.805	17.805	(0.945)	135971	10.0000	9.819(a)
	150 Benzo(a)Anthracene	228	18.809	18.809	(0.999)	248299	10.0000	9.674(a)
*	153 Chrysene-d12	240	18.836	18.836	(1.000)	1028404	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.799	18.799	(0.998)	94892	10.0000	9.027(a)
	154 Chrysene	228	18.879	18.879	(1.002)	262664	10.0000	9.955(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155 bis(2-ethylhexyl)Phthalate	149	18.996	18.996	(1.009)	180598	10.0000	9.616(a)
158 Di-n-octylphthalate	149	20.225	20.225	(1.074)	297018	10.0000	9.177(a)
160 Benzo(b)fluoranthene	252	20.850	20.850	(0.963)	246347	10.0000	9.466(a)
161 Benzo(k)fluoranthene	252	20.903	20.903	(0.965)	250094	10.0000	9.651(a)
165 Benzo(a)pyrene	252	21.512	21.512	(0.993)	243937	10.0000	9.510(a)
* 166 Perylene-d12	264	21.656	21.656	(1.000)	931115	40.0000	
173 Indeno(1,2,3-cd)pyrene	276	24.353	24.353	(1.125)	214666	10.0000	8.751(aH)
174 Dibenzo(a,h)anthracene	278	24.439	24.439	(1.128)	225153	10.0000	8.872(a)
177 Benzo(g,h,i)perylene	276	25.170	25.170	(1.162)	226886	10.0000	9.055(a)

QC Flag Legend

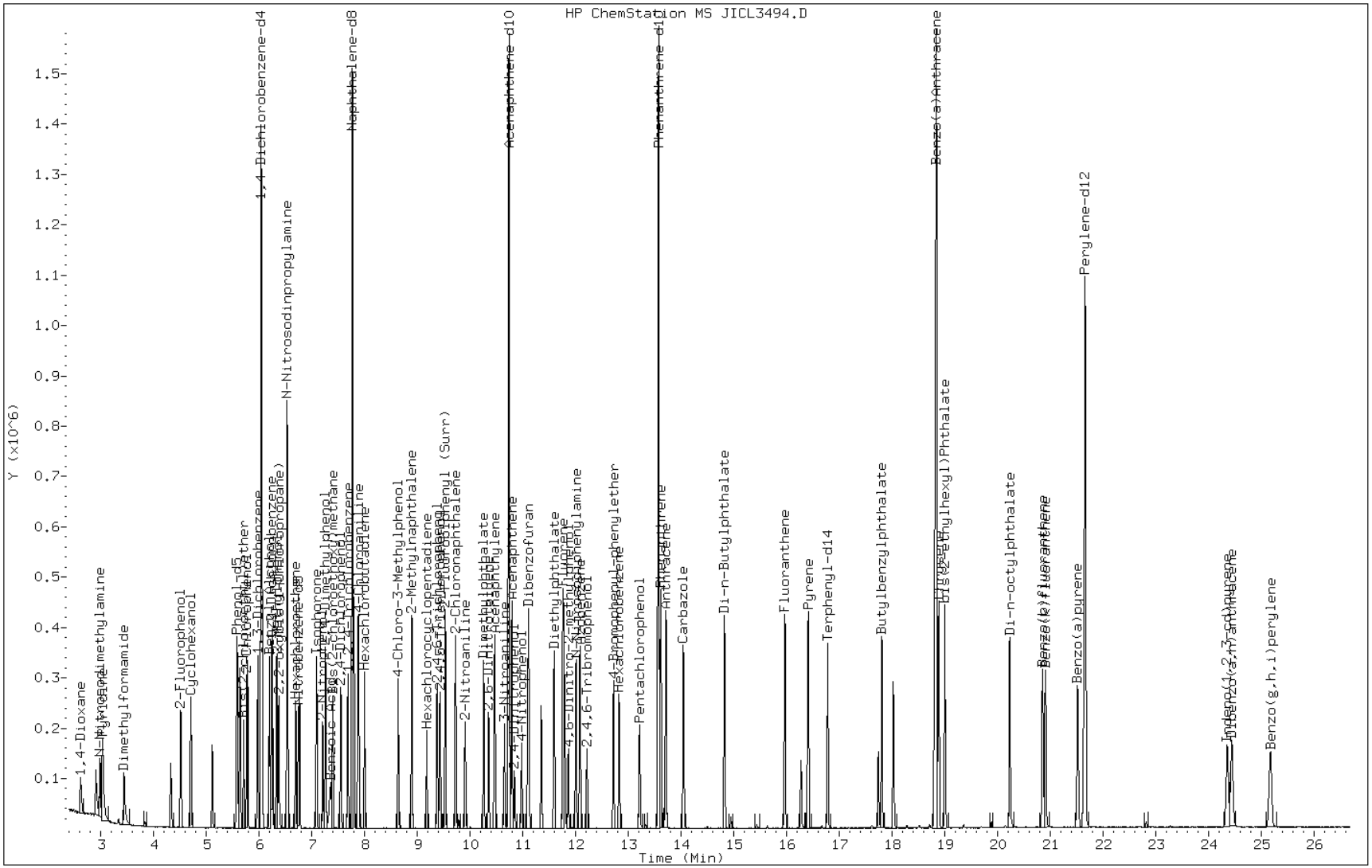
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.

Data File: JICL3494.D

Date: 22-AUG-2012 12:48

Client ID: STD010-011993 Instrument: MSJ.i

Sample Info: STD010-011993 Operator: MAK



FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 13:56 Calibration End Date: 08/22/2012 16:46 Calibration ID: 825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0108270B 160-9562/13	JICL3501.D
Level 2	STD0208270B 160-9562/12	JICL3500.D
Level 3	STD0508270B 160-9562/8	JICL3496.D
Level 4	STD0808270B 160-9562/11	JICL3499.D
Level 5	STD1208270B 160-9562/10	JICL3498.D
Level 6	STD1608270B 160-9562/9	JICL3497.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Aniline	1.9857 2.0768	2.0688	2.0767	2.0372	1.9880	Ave		2.0388			0.0100	2.1		20.0			
3 & 4 Methylphenol	1.3505 1.4189	1.4037	1.3876	1.3944	1.3329	Ave		1.3814			0.6000	2.4		20.0			
Benzidine	0.5083 0.7380	0.5925	0.7320	0.7199	0.7384	Ave		0.6715			0.0100	14.6		20.0			
3,3'-Dimethylbenzidine	0.5153 0.7557	0.5999	0.7213	0.7214	0.7475	Ave		0.6768			0.0100	14.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica St. Louis Job No.: 160-437-1 Analy Batch No.: 9562

SDG No.:

Instrument ID: MSJ GC Column: RXI5SiiMS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/22/2012 13:56 Calibration End Date: 08/22/2012 16:46 Calibration ID: 825

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD0108270B 160-9562/13	JICL3501.D
Level 2	STD0208270B 160-9562/12	JICL3500.D
Level 3	STD0508270B 160-9562/8	JICL3496.D
Level 4	STD0808270B 160-9562/11	JICL3499.D
Level 5	STD1208270B 160-9562/10	JICL3498.D
Level 6	STD1608270B 160-9562/9	JICL3497.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Aniline	DCB	Ave	92034 1574226	165773	459761	781410	976667	10.0 160	20.0	50.0	80.0	120
3 & 4 Methylphenol	DCB	Ave	125194 2151135	224967	614412	1069707	1309722	20.0 320	40.0	100	160	240
Benzidine	CRY	Ave	79788 2200399	165338	546029	1007361	1245233	10.0 160	20.0	50.0	80.0	120
3,3'-Dimethylbenzidine	CRY	Ave	80895 2253336	167405	538052	1009418	1260610	10.0 160	20.0	50.0	80.0	120

Curve Type Legend:
Ave = Average ISTD

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3496.D
Lab Smp Id: STD0508270B-012064 Client Smp ID: STD0508270B-012064
Inj Date : 22-AUG-2012 13:56
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0508270B-012064
Misc Info : 12064
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 16:12 Cal File: JICL3500.D
Als bottle: 10 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

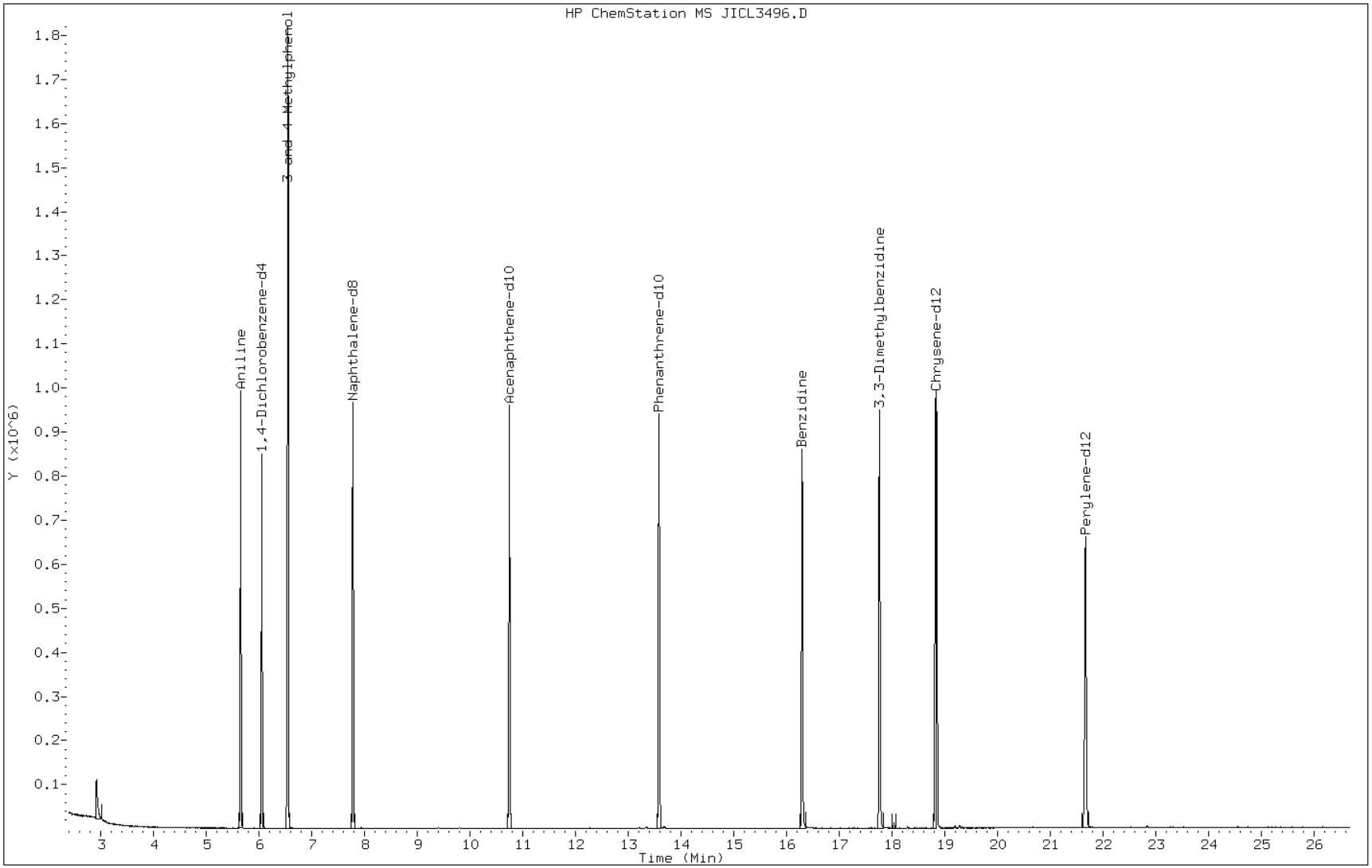
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.646	5.646	(0.934)	459761	50.0000	50.93
*	22 1,4-Dichlorobenzene-d4	152	6.047	6.047	(1.000)	177112	40.0000	
	29 3 and 4-Methylphenol	107	6.543	6.543	(1.082)	614412	100.000	100.4
M	215 Total Cresols	100				614412	150.000	100.4
*	48 Naphthalene-d8	136	7.777	7.777	(1.000)	649940	40.0000	
*	82 Acenaphthene-d10	164	10.741	10.741	(1.000)	343548	40.0000	
*	121 Phenanthrene-d10	188	13.577	13.577	(1.000)	595869	40.0000	
	135 Benzidine	184	16.291	16.291	(0.865)	546029	50.0000	54.50
	145 3,3-Dimethylbenzidine	212	17.759	17.759	(0.943)	538052	50.0000	53.28
*	153 Chrysene-d12	240	18.838	18.838	(1.000)	596786	40.0000	
*	166 Perylene-d12	264	21.664	21.664	(1.000)	543426	40.0000	

Data File: JICL3496.D

Date: 22-AUG-2012 13:56

Client ID: STD0508270B-012064 Instrument: MSJ.i

Sample Info: STD0508270B-012064 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3497.D
Lab Smp Id: STD1608270B-012067 Client Smp ID: STD1608270B-012067
Inj Date : 22-AUG-2012 14:30
Operator : MAK Inst ID: MSJ.i
Smp Info : STD1608270B-012067
Misc Info : 12067
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 15:04 Cal File: JICL3498.D
Als bottle: 11 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.635	5.635	(0.934)	1574226	160.000	163.0(A)
*	22 1,4-Dichlorobenzene-d4	152	6.030	6.030	(1.000)	189501	40.0000	
	29 3 and 4-Methylphenol	107	6.543	6.543	(1.085)	2151135	320.000	328.7(A)
M	215 Total Cresols	100				2151135	480.000	328.7
*	48 Naphthalene-d8	136	7.755	7.755	(1.000)	710354	40.0000	
*	82 Acenaphthene-d10	164	10.714	10.714	(1.000)	387202	40.0000	
*	121 Phenanthrene-d10	188	13.550	13.550	(1.000)	678037	40.0000	
	135 Benzidine	184	16.285	16.285	(0.865)	2200399	160.000	175.8(A)
	145 3,3-Dimethylbenzidine	212	17.754	17.754	(0.944)	2253336	160.000	178.6(A)
*	153 Chrysene-d12	240	18.817	18.817	(1.000)	745414	40.0000	
*	166 Perylene-d12	264	21.631	21.631	(1.000)	649919	40.0000	

QC Flag Legend

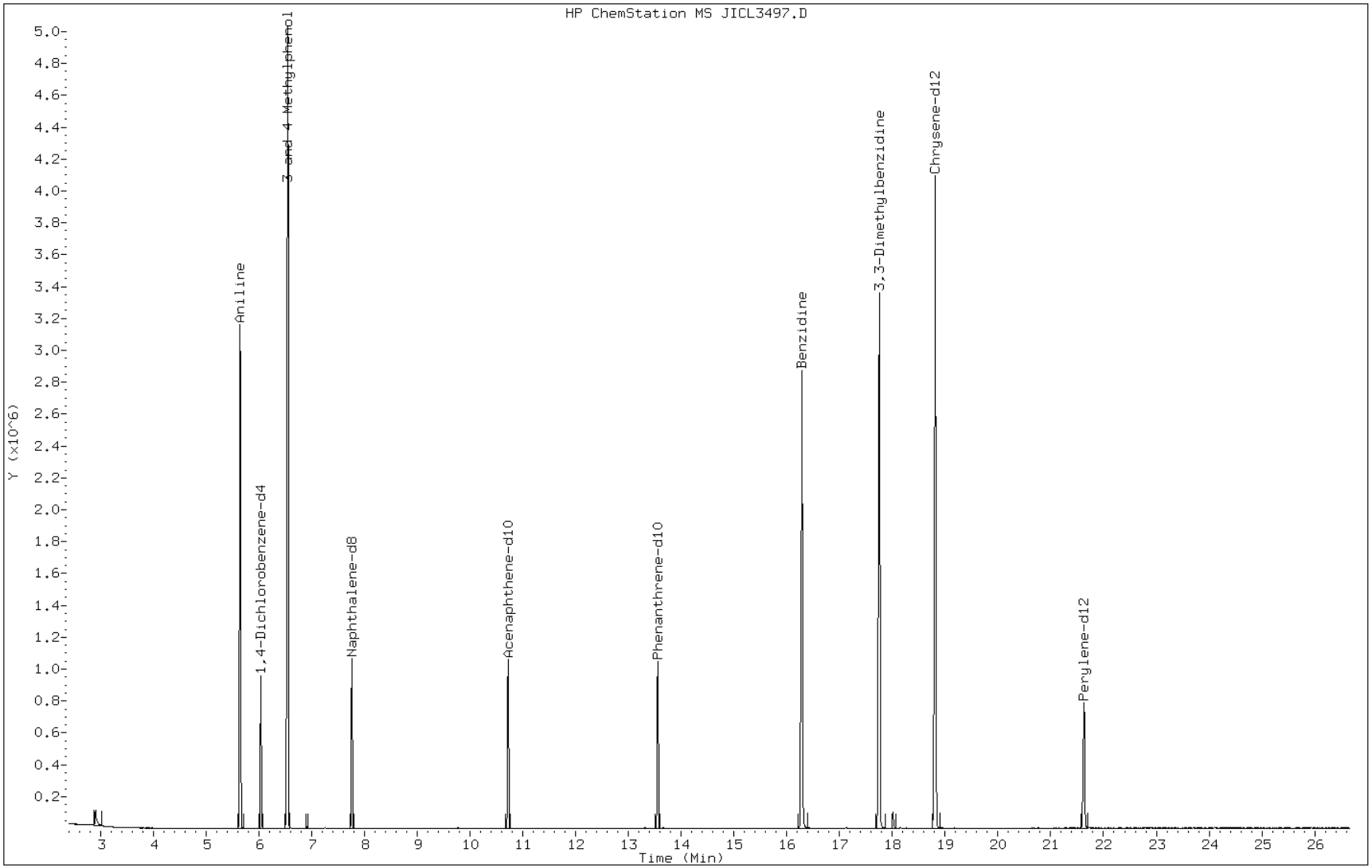
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: JICL3497.D

Date: 22-AUG-2012 14:30

Client ID: STD1608270B-012067 Instrument: MSJ.i

Sample Info: STD1608270B-012067 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3498.D
Lab Smp Id: STD1208270B-012066 Client Smp ID: STD1208270B-012066
Inj Date : 22-AUG-2012 15:04
Operator : MAK Inst ID: MSJ.i
Smp Info : STD1208270B-012066
Misc Info : 12066
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 15:38 Cal File: JICL3499.D
Als bottle: 12 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

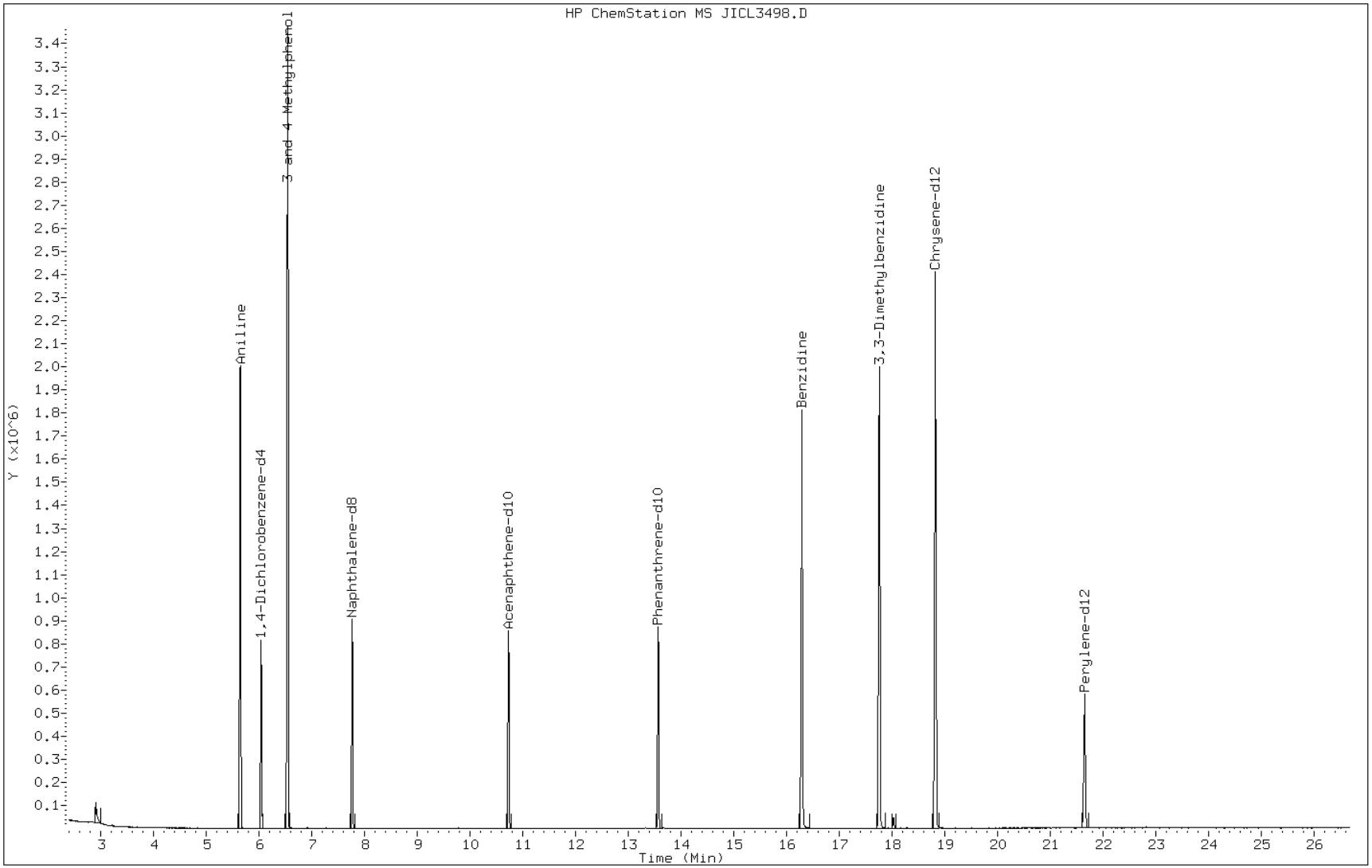
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	17 Aniline	93	5.644	5.644	(0.935)	976667	120.000	117.0
*	22 1,4-Dichlorobenzene-d4	152	6.039	6.039	(1.000)	163763	40.0000	
	29 3 and 4-Methylphenol	107	6.541	6.541	(1.083)	1309722	240.000	231.6
M	215 Total Cresols	100				1309722	360.000	231.6
*	48 Naphthalene-d8	136	7.764	7.764	(1.000)	591778	40.0000	
*	82 Acenaphthene-d10	164	10.729	10.729	(1.000)	312477	40.0000	
*	121 Phenanthrene-d10	188	13.565	13.565	(1.000)	541959	40.0000	
	135 Benzidine	184	16.289	16.289	(0.865)	1245233	120.000	131.9
	145 3,3-Dimethylbenzidine	212	17.758	17.758	(0.943)	1260610	120.000	132.5
*	153 Chrysene-d12	240	18.826	18.826	(1.000)	562156	40.0000	
*	166 Perylene-d12	264	21.646	21.646	(1.000)	500425	40.0000	

Data File: JICL3498.D

Date: 22-AUG-2012 15:04

Client ID: STD1208270B-012066 Instrument: MSJ.i

Sample Info: STD1208270B-012066 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3499.D
Lab Smp Id: STD0808270B-012065 Client Smp ID: STD0808270B-012065
Inj Date : 22-AUG-2012 15:38
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0808270B-012065
Misc Info : 12065
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 13:56 Cal File: JICL3496.D
Als bottle: 13 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

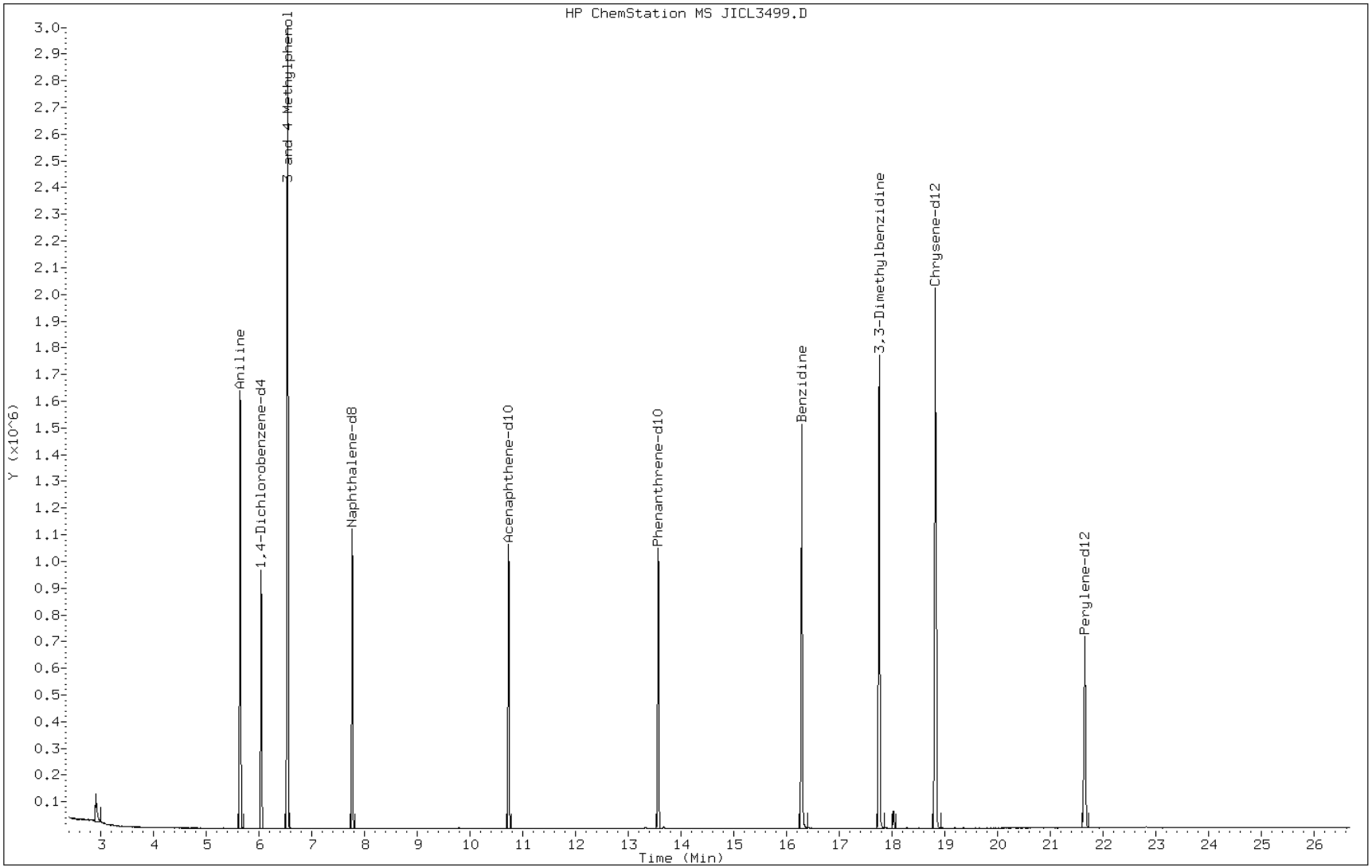
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.638	5.638	(0.934)	781410	80.0000	79.93
*	22 1,4-Dichlorobenzene-d4	152	6.039	6.039	(1.000)	191787	40.0000	
	29 3 and 4-Methylphenol	107	6.541	6.541	(1.083)	1069707	160.000	161.5
M	215 Total Cresols	100				1069707	240.000	161.5
*	48 Naphthalene-d8	136	7.764	7.764	(1.000)	714808	40.0000	
*	82 Acenaphthene-d10	164	10.729	10.729	(1.000)	382631	40.0000	
*	121 Phenanthrene-d10	188	13.565	13.565	(1.000)	668272	40.0000	
	135 Benzidine	184	16.283	16.283	(0.865)	1007361	80.0000	85.77
	145 3,3-Dimethylbenzidine	212	17.752	17.752	(0.943)	1009418	80.0000	85.27
*	153 Chrysene-d12	240	18.831	18.831	(1.000)	699616	40.0000	
*	166 Perylene-d12	264	21.651	21.651	(1.000)	624595	40.0000	

Data File: JICL3499.D

Date: 22-AUG-2012 15:38

Client ID: STD0808270B-012065 Instrument: MSJ.i

Sample Info: STD0808270B-012065 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3500.D
Lab Smp Id: STD0208270B-012033 Client Smp ID: STD0208270B-012033
Inj Date : 22-AUG-2012 16:12
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0208270B-012033
Misc Info : 12033
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 16:46 Cal File: JICL3501.D
Als bottle: 14 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

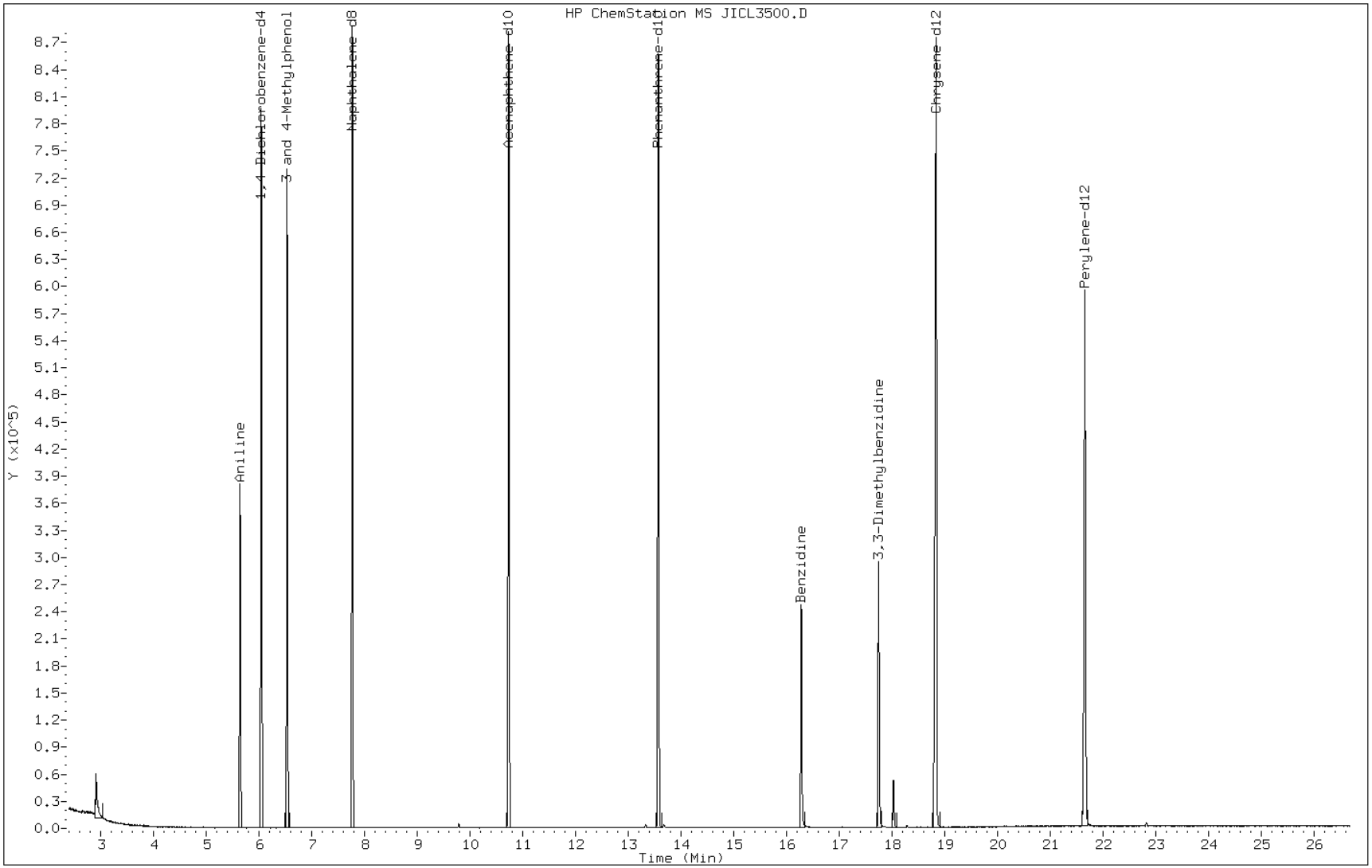
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
17 Aniline	93	5.635	5.635	(0.934)	165773	20.0000	20.29
* 22 1,4-Dichlorobenzene-d4	152	6.036	6.036	(1.000)	160263	40.0000	
29 3 and 4-Methylphenol	107	6.527	6.527	(1.081)	224967	40.0000	40.65
M 215 Total Cresols	100				224967	60.0000	40.65
* 48 Naphthalene-d8	136	7.761	7.761	(1.000)	601205	40.0000	
* 82 Acenaphthene-d10	164	10.725	10.725	(1.000)	324057	40.0000	
* 121 Phenanthrene-d10	188	13.567	13.567	(1.000)	563565	40.0000	
135 Benzidine	184	16.269	16.269	(0.864)	165338	20.0000	17.65
145 3,3-Dimethylbenzidine	212	17.738	17.738	(0.942)	167405	20.0000	17.73
* 153 Chrysene-d12	240	18.828	18.828	(1.000)	558111	40.0000	
* 166 Perylene-d12	264	21.648	21.648	(1.000)	506648	40.0000	

Data File: JICL3500.D

Date: 22-AUG-2012 16:12

Client ID: STD0208270B-012033 Instrument: MSJ.i

Sample Info: STD0208270B-012033 Operator: MAK



TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICL3501.D
Lab Smp Id: STD0108270B-012030 Client Smp ID: STD0108270B-012030
Inj Date : 22-AUG-2012 16:46
Operator : MAK Inst ID: MSJ.i
Smp Info : STD0108270B-012030
Misc Info : 12030
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 16:46 Cal File: JICL3501.D
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.630	5.630	(0.933)	92034	10.0000	9.739(a)
*	22 1,4-Dichlorobenzene-d4	152	6.036	6.036	(1.000)	185398	40.0000	
	29 3 and 4-Methylphenol	107	6.522	6.522	(1.081)	125194	20.0000	19.55(a)
M	215 Total Cresols	100				125194	30.0000	19.55
*	48 Naphthalene-d8	136	7.756	7.756	(1.000)	690410	40.0000	
*	82 Acenaphthene-d10	164	10.720	10.720	(1.000)	365691	40.0000	
*	121 Phenanthrene-d10	188	13.556	13.556	(1.000)	637666	40.0000	
	135 Benzidine	184	16.264	16.264	(0.864)	79788	10.0000	7.569(a)
	145 3,3-Dimethylbenzidine	212	17.733	17.733	(0.942)	80895	10.0000	7.613(a)
*	153 Chrysene-d12	240	18.822	18.822	(1.000)	627942	40.0000	
*	166 Perylene-d12	264	21.637	21.637	(1.000)	578261	40.0000	

QC Flag Legend

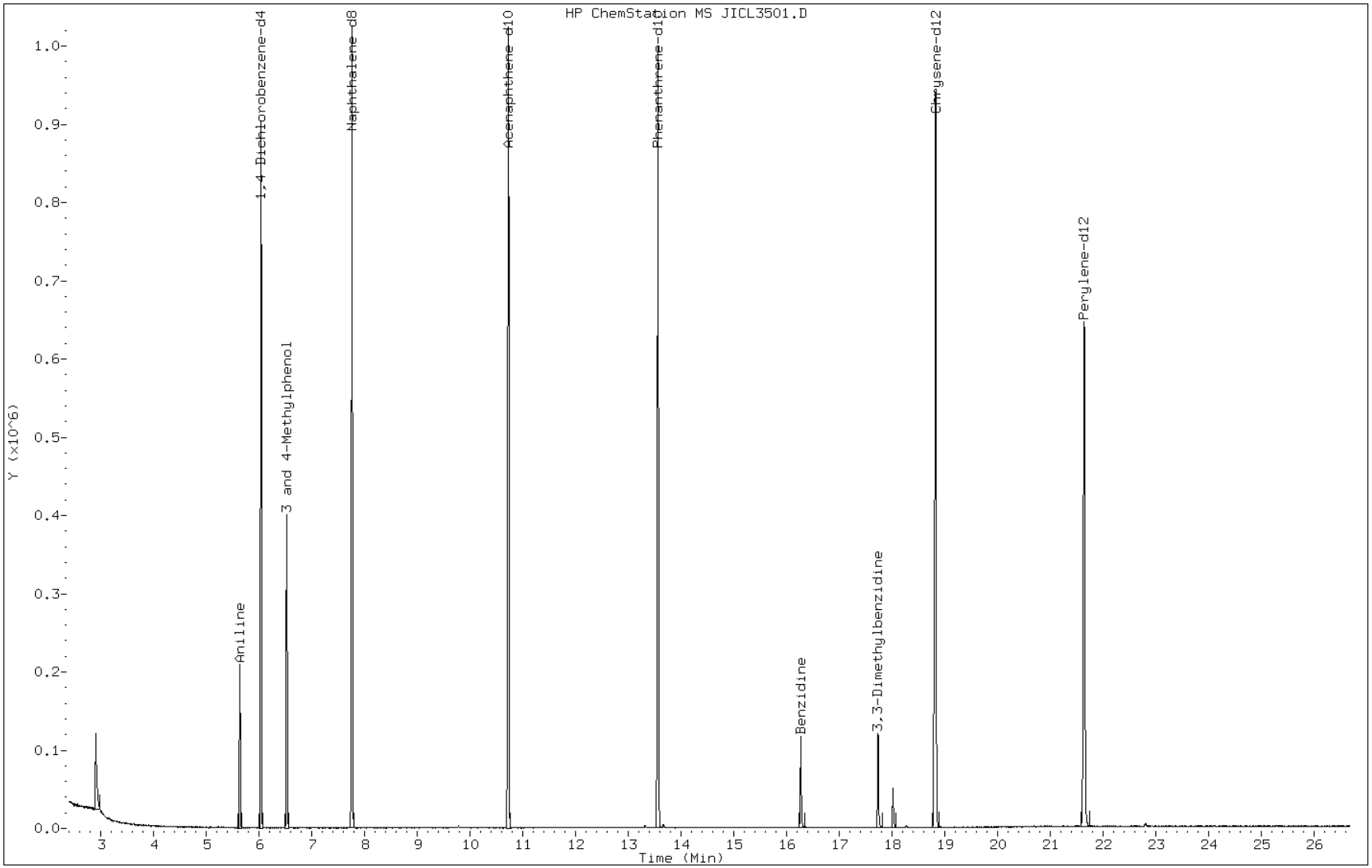
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: JICL3501.D

Date: 22-AUG-2012 16:46

Client ID: STD0108270B-012030 Instrument: MSJ.i

Sample Info: STD0108270B-012030 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-7404/16 Calibration Date: 07/24/2012 17:04

Instrument ID: MSJ Calib Start Date: 07/24/2012 13:09

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 16:30

Lab File ID: JICV2879.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5460	0.5228	0.0100	47.9	50.0	-4.2	30.0
N-Nitrosodimethylamine	Ave	0.8135	0.7928	0.0100	48.7	50.0	-2.5	30.0
Pyridine	Ave	1.435	1.474	0.0100	51.3	50.0	2.7	30.0
Dimethylformamide	Ave	0.7849	0.7157	0.0100	45.6	50.0	-8.8	30.0
Cyclohexanol	Ave	1.002	1.027	0.0100	51.2	50.0	2.5	30.0
Phenol	Ave	1.678	1.613	0.8000	48.1	50.0	-3.8	30.0
Bis(2-chloroethyl)ether	Ave	1.279	1.271	0.7000	49.7	50.0	-0.6	30.0
2-Chlorophenol	Ave	1.341	1.310	0.8000	48.9	50.0	-2.3	30.0
1,3-Dichlorobenzene	Ave	1.510	1.488	0.0100	49.3	50.0	-1.4	30.0
1,4-Dichlorobenzene	Ave	1.549	1.519	0.0100	49.0	50.0	-1.9	30.0
Benzyl alcohol	Ave	0.8521	0.8401	0.0100	49.3	50.0	-1.4	30.0
1,2-Dichlorobenzene	Ave	1.436	1.405	0.0100	48.9	50.0	-2.1	30.0
2-Methylphenol	Ave	1.163	1.161	0.6000	49.9	50.0	-0.2	30.0
2,2'-oxybis[1-chloropropane]	Ave	1.344	1.325	0.0100	49.3	50.0	-1.4	30.0
N-Nitrosodi-n-propylamine	Ave	0.9323	0.998	0.5000	53.5	50.0	7.1	30.0
Hexachloroethane	Ave	0.5819	0.5856	0.3000	50.3	50.0	0.6	30.0
Nitrobenzene	Ave	0.4301	0.4111	0.2000	47.8	50.0	-4.4	30.0
Isophorone	Ave	0.6912	0.6923	0.4000	50.1	50.0	0.2	30.0
2-Nitrophenol	Ave	0.1925	0.1847	0.1000	48.0	50.0	-4.1	30.0
2,4-Dimethylphenol	Ave	0.3766	0.3671	0.2000	48.7	50.0	-2.5	30.0
Bis(2-chloroethoxy)methane	Ave	0.4014	0.3896	0.0100	48.5	50.0	-2.9	30.0
Benzoic acid	Ave	0.2105	0.1919	0.0100	45.6	50.0	-8.9	30.0
2,4-Dichlorophenol	Ave	0.2913	0.2810	0.0100	48.2	50.0	-3.5	30.0
1,2,4-Trichlorobenzene	Ave	0.3314	0.3402	0.0100	51.3	50.0	2.6	30.0
Naphthalene	Ave	1.083	1.039	0.7000	48.0	50.0	-4.0	30.0
4-Chloroaniline	Ave	0.4191	0.4059	0.0100	48.4	50.0	-3.1	30.0
Hexachlorobutadiene	Ave	0.2048	0.1933	0.0100	47.2	50.0	-5.6	30.0
4-Chloro-3-methylphenol	Ave	0.3168	0.3108	0.2000	49.1	50.0	-1.9	30.0
2-Methylnaphthalene	Ave	0.6983	0.6781	0.4000	48.6	50.0	-2.9	30.0
Hexachlorocyclopentadiene	Ave	0.2944	0.3877	0.0500	65.8	50.0	31.7*	30.0
2,4,6-Trichlorophenol	Ave	0.3811	0.3558	0.2000	46.7	50.0	-6.6	30.0
2,4,5-Trichlorophenol	Ave	0.3940	0.3782	0.2000	48.0	50.0	-4.0	30.0
2-Chloronaphthalene	Ave	1.190	1.108	0.8000	46.6	50.0	-6.9	30.0
2-Nitroaniline	Ave	0.3769	0.3590	0.0100	47.6	50.0	-4.8	30.0
Dimethyl phthalate	Ave	1.297	1.257	0.0100	48.5	50.0	-3.0	30.0
2,6-Dinitrotoluene	Ave	0.2889	0.2909	0.2000	50.3	50.0	0.7	30.0
Acenaphthylene	Ave	1.806	1.779	0.9000	49.2	50.0	-1.5	30.0
3-Nitroaniline	Ave	0.3039	0.3034	0.0100	49.9	50.0	-0.2	30.0
Acenaphthene	Ave	1.176	1.121	0.0100	47.7	50.0	-4.7	30.0
2,4-Dinitrophenol	Lin1	0.1737	0.1844	0.0100	45.8	50.0	-8.3	30.0
4-Nitrophenol	Ave	0.2148	0.2130	0.0100	49.6	50.0	-0.8	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-7404/16 Calibration Date: 07/24/2012 17:04

Instrument ID: MSJ Calib Start Date: 07/24/2012 13:09

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 16:30

Lab File ID: JICV2879.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4-Dinitrotoluene	Ave	0.3819	0.3898	0.2000	51.0	50.0	2.1	30.0
Dibenzofuran	Ave	1.657	1.557	0.8000	47.0	50.0	-6.1	30.0
Diethyl phthalate	Ave	1.256	1.215	0.0100	48.4	50.0	-3.3	30.0
Fluorene	Ave	1.345	1.310	0.9000	48.7	50.0	-2.5	30.0
4-Chlorophenyl phenyl ether	Ave	0.6623	0.6269	0.4000	47.3	50.0	-5.3	30.0
4-Nitroaniline	Ave	0.3032	0.3023	0.0100	49.9	50.0	-0.3	30.0
4,6-Dinitro-2-methylphenol	Lin1	0.1415	0.1407	0.0100	45.2	50.0	-9.6	30.0
Azobenzene	Ave	0.8551	0.8075	0.0100	47.2	50.0	-5.6	30.0
4-Bromophenyl phenyl ether	Ave	0.2206	0.2109	0.0100	47.8	50.0	-4.4	30.0
Hexachlorobenzene	Ave	0.2324	0.2228	0.1000	47.9	50.0	-4.2	30.0
Pentachlorophenol	Ave	0.1624	0.1623	0.0500	50.0	50.0	-0.0	30.0
Phenanthrene	Ave	1.121	1.062	0.7000	47.4	50.0	-5.3	30.0
Anthracene	Ave	1.135	1.098	0.7000	48.4	50.0	-3.3	30.0
Carbazole	Ave	0.9589	0.9551	0.0100	49.8	50.0	-0.4	30.0
Di-n-butyl phthalate	Ave	1.192	1.159	0.0100	48.6	50.0	-2.7	30.0
Fluoranthene	Ave	1.116	1.127	0.6000	50.5	50.0	0.9	30.0
Pyrene	Ave	1.216	1.145	0.6000	47.1	50.0	-5.9	30.0
Butyl benzyl phthalate	Ave	0.5161	0.4956	0.0100	48.0	50.0	-4.0	30.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3790	0.0100	49.5	50.0	-1.0	30.0
Benzo[a]anthracene	Ave	0.9698	1.053	0.8000	54.3	50.0	8.6	30.0
Chrysene	Ave	1.011	1.003	0.7000	49.6	50.0	-0.8	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.6857	0.6698	0.0100	48.8	50.0	-2.3	30.0
Di-n-octyl phthalate	Ave	1.141	1.077	0.0100	47.2	50.0	-5.6	30.0
Benzo[b]fluoranthene	Ave	1.030	1.041	0.7000	50.5	50.0	1.1	30.0
Benzo[k]fluoranthene	Ave	1.055	1.095	0.7000	51.9	50.0	3.8	30.0
Benzo[a]pyrene	Ave	1.014	0.9892	0.7000	48.8	50.0	-2.4	30.0
Indeno[1,2,3-cd]pyrene	Lin1	0.9051	0.9255	0.5000	45.4	50.0	-9.2	30.0
Dibenz(a,h)anthracene	Ave	0.9755	0.9771	0.4000	50.1	50.0	0.2	30.0
Benzo[g,h,i]perylene	Ave	0.9934	1.001	0.5000	50.4	50.0	0.8	30.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICV2879.D
Lab Smp Id: ICV-012026 Client Smp ID: ICV-012026
Inj Date : 24-JUL-2012 17:04
Operator : MAK Inst ID: MSJ.i
Smp Info : ICV-012026
Misc Info : 12026
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 11:49 kuessnerm Quant Type: ISTD
Cal Date : 24-JUL-2012 13:42 Cal File: JICL2873.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	2.610	2.610	(0.431)	122339	50.0000	47.88
4	N-Nitrosodimethylamine	74	2.984	2.984	(0.493)	185504	50.0000	48.73
3	Pyridine	79	3.027	3.027	(0.500)	344844	50.0000	51.34
5	Dimethylformamide	44	3.438	3.438	(0.568)	167475	50.0000	45.59
11	Cyclohexanol	57	4.715	4.715	(0.779)	240226	50.0000	51.23
19	Bis(2-chloroethyl)ether	93	5.719	5.719	(0.945)	297360	50.0000	49.69
16	Phenol	94	5.601	5.601	(0.926)	377523	50.0000	48.08(H)
20	2-Chlorophenol	128	5.794	5.794	(0.958)	306472	50.0000	48.85
21	1,3-Dichlorobenzene	146	5.986	5.986	(0.989)	348233	50.0000	49.30
* 22	1,4-Dichlorobenzene-d4	152	6.050	6.050	(1.000)	187193	40.0000	
23	1,4-Dichlorobenzene	146	6.072	6.072	(1.004)	355482	50.0000	49.04
26	1,2-Dichlorobenzene	146	6.264	6.264	(1.035)	328811	50.0000	48.94
25	Benzyl Alcohol	108	6.210	6.210	(1.026)	196574	50.0000	49.29
28	2,2-oxybis(1-Chloropropane)	45	6.381	6.381	(1.055)	310002	50.0000	49.28
27	2-Methylphenol	108	6.344	6.344	(1.049)	271672	50.0000	49.92
35	Hexachloroethane	117	6.702	6.702	(1.108)	137023	50.0000	50.31
32	N-Nitrosodinpropylamine	70	6.558	6.558	(1.084)	233604	50.0000	53.54
M 215	Total Cresols	100				271672	150.000	49.92
37	Nitrobenzene	77	6.782	6.782	(0.872)	354694	50.0000	47.79
39	Isophorone	82	7.108	7.108	(0.913)	597308	50.0000	50.08
40	2-Nitrophenol	139	7.220	7.220	(0.928)	159358	50.0000	47.97

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
41	2,4-Dimethylphenol	107	7.274	7.274	(0.935)	316732	50.0000	48.74
42	Bis(2-chloroethoxy)methane	93	7.412	7.412	(0.953)	336169	50.0000	48.54
45	2,4-Dichlorophenol	162	7.562	7.562	(0.972)	242429	50.0000	48.24
47	1,2,4-Trichlorobenzene	180	7.696	7.696	(0.989)	293518	50.0000	51.32
* 48	Naphthalene-d8	136	7.781	7.781	(1.000)	690220	40.0000	
44	Benzoic Acid	122	7.428	7.428	(0.955)	165544	50.0000	45.56
50	Naphthalene	128	7.813	7.813	(1.004)	896492	50.0000	47.98
51	4-Chloroaniline	127	7.888	7.888	(1.014)	350239	50.0000	48.43
54	Hexachlorobutadiene	225	8.011	8.011	(1.030)	166797	50.0000	47.19
62	2-Methylnaphthalene	142	8.908	8.908	(1.145)	585021	50.0000	48.55
59	4-Chloro-3-Methylphenol	107	8.646	8.646	(1.111)	268151	50.0000	49.05
66	Hexachlorocyclopentadiene	237	9.191	9.191	(0.855)	183700	50.0000	65.84
67	2,4,6-Trichlorophenol	196	9.389	9.389	(0.874)	168585	50.0000	46.68
68	2,4,5-Trichlorophenol	196	9.442	9.442	(0.879)	179184	50.0000	47.99
72	2-Chloronaphthalene	162	9.736	9.736	(0.906)	525194	50.0000	46.56
73	2-Nitroaniline	65	9.923	9.923	(0.923)	170110	50.0000	47.62
76	Dimethylphthalate	163	10.281	10.281	(0.957)	595807	50.0000	48.49
79	Acenaphthylene	152	10.484	10.484	(0.976)	842699	50.0000	49.23
80	2,6-Dinitrotoluene	165	10.372	10.372	(0.965)	137816	50.0000	50.34
* 82	Acenaphthene-d10	164	10.746	10.746	(1.000)	379055	40.0000	
83	Acenaphthene	153	10.805	10.805	(1.005)	531075	50.0000	47.67
81	3-Nitroaniline	138	10.676	10.676	(0.994)	143772	50.0000	49.92
84	2,4-Dinitrophenol	184	10.863	10.863	(1.011)	87356	50.0000	45.84
86	Dibenzofuran	168	11.125	11.125	(1.035)	737516	50.0000	46.96
88	2,4-Dinitrotoluene	165	11.115	11.115	(1.034)	184669	50.0000	51.03
85	4-Nitrophenol	109	10.997	10.997	(1.023)	100928	50.0000	49.59
93	Diethylphthalate	149	11.606	11.606	(1.080)	575660	50.0000	48.36
94	Fluorene	166	11.772	11.772	(1.095)	620920	50.0000	48.73
95	4-Chlorophenyl-phenylether	204	11.793	11.793	(1.097)	297013	50.0000	47.33
98	4-Nitroaniline	138	11.825	11.825	(1.100)	143223	50.0000	49.85
99	4,6-Dinitro-2-methylphenol	198	11.884	11.884	(0.875)	112926	50.0000	45.22
100	N-Nitrosodiphenylamine	169	12.023	12.023	(0.886)	504636	50.0000	60.45
102	Azobenzene	77	12.092	12.092	(0.891)	648133	50.0000	47.22
109	4-Bromophenyl-phenylether	248	12.733	12.733	(0.938)	169231	50.0000	47.78
112	Hexachlorobenzene	284	12.840	12.840	(0.946)	178789	50.0000	47.92
117	Pentachlorophenol	266	13.219	13.219	(0.974)	130300	50.0000	49.97
* 121	Phenanthrene-d10	188	13.577	13.577	(1.000)	642100	40.0000	
122	Phenanthrene	178	13.625	13.625	(1.004)	852440	50.0000	47.35
124	Anthracene	178	13.727	13.727	(1.011)	881049	50.0000	48.35
126	Carbazole	167	14.058	14.058	(1.035)	766559	50.0000	49.80
129	Di-n-Butylphthalate	149	14.833	14.833	(1.092)	930340	50.0000	48.63
134	Fluoranthene	202	15.981	15.981	(1.177)	904244	50.0000	50.46
137	Pyrene	202	16.419	16.419	(0.871)	931824	50.0000	47.07
146	Butylbenzylphthalate	149	17.814	17.814	(0.945)	403334	50.0000	48.02
150	Benzo(a)Anthracene	228	18.823	18.823	(0.999)	856684	50.0000	54.28
* 153	Chrysene-d12	240	18.845	18.845	(1.000)	651024	40.0000	
152	3,3'-Dichlorobenzidine	252	18.813	18.813	(0.998)	308383	50.0000	49.51
154	Chrysene	228	18.893	18.893	(1.003)	816050	50.0000	49.58
155	bis(2-ethylhexyl)Phthalate	149	18.999	18.999	(1.008)	545054	50.0000	48.84
158	Di-n-octylphthalate	149	20.228	20.228	(1.073)	876390	50.0000	47.20
160	Benzo(b)fluoranthene	252	20.864	20.864	(0.963)	784804	50.0000	50.54
161	Benzo(k)fluoranthene	252	20.917	20.917	(0.966)	825433	50.0000	51.89
165	Benzo(a)pyrene	252	21.526	21.526	(0.994)	745863	50.0000	48.80
* 166	Perylene-d12	264	21.655	21.655	(1.000)	603210	40.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
173 Indeno(1,2,3-cd)pyrene	276	24.384	24.384	(1.126)	697807	50.0000	45.38
174 Dibenzo(a,h)anthracene	278	24.470	24.470	(1.130)	736772	50.0000	50.08(M)
177 Benzo(g,h,i)perylene	276	25.212	25.212	(1.164)	754933	50.0000	50.39

QC Flag Legend

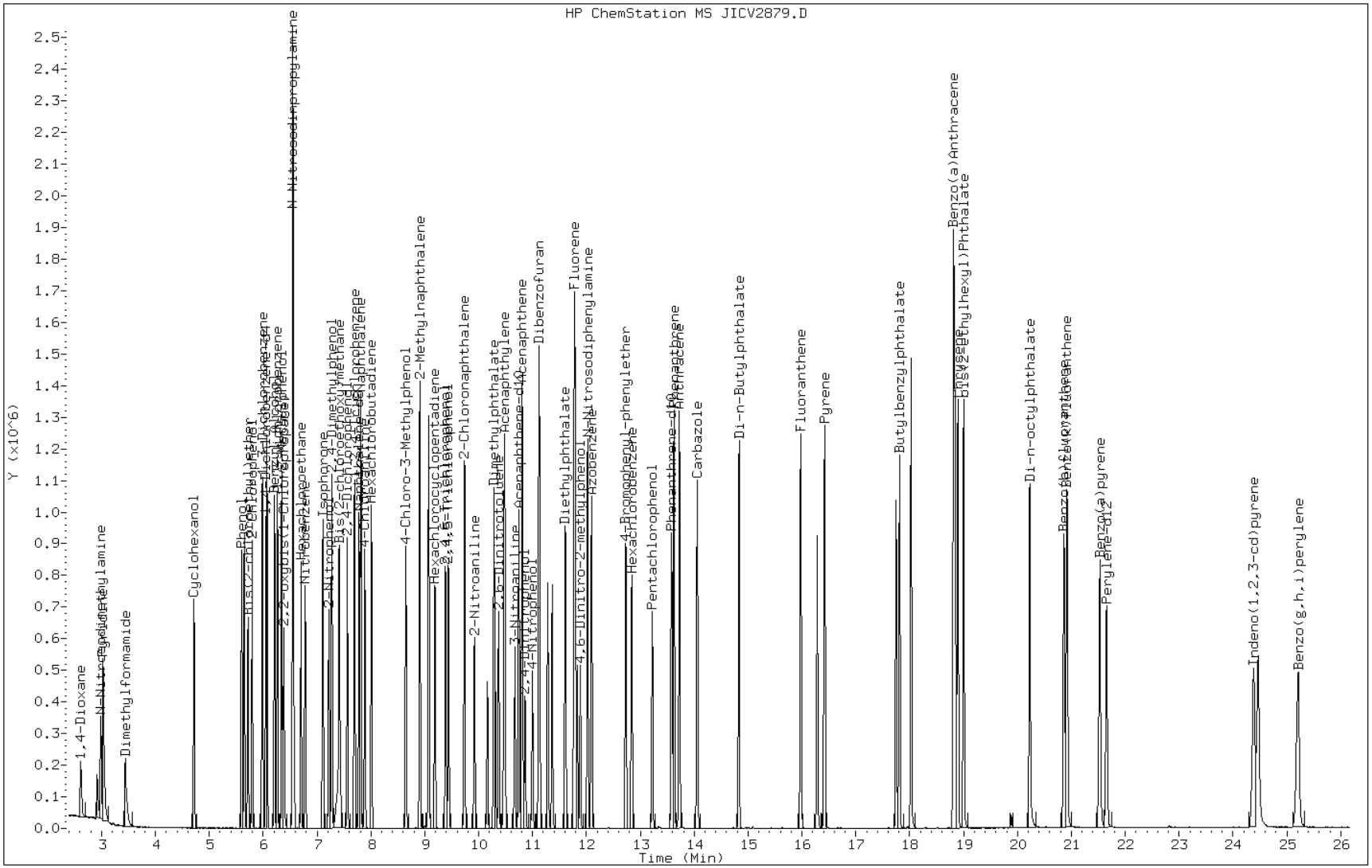
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: JICV2879.D

Date: 24-JUL-2012 17:04

Client ID: ICV-012026 Instrument: MSJ.i

Sample Info: ICV-012026 Operator: MAK



Manual Integration Report

Data File: JICV2879.D
Inj. Date and Time: 24-JUL-2012 17:04
Instrument ID: MSJ.i
Client ID: ICV-012026
Compound: 174 Dibenzo(a,h)anthracene
CAS #: 53-70-3
Report Date: 07/25/2012

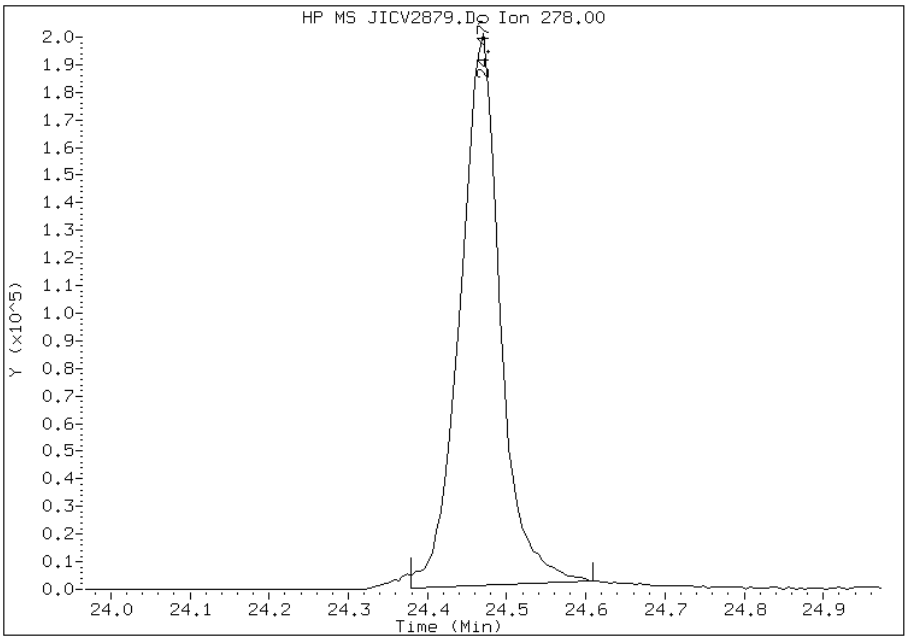
Processing Integration Results

RT: 24.47

Response: 699537

Amount: 48

Conc: 48



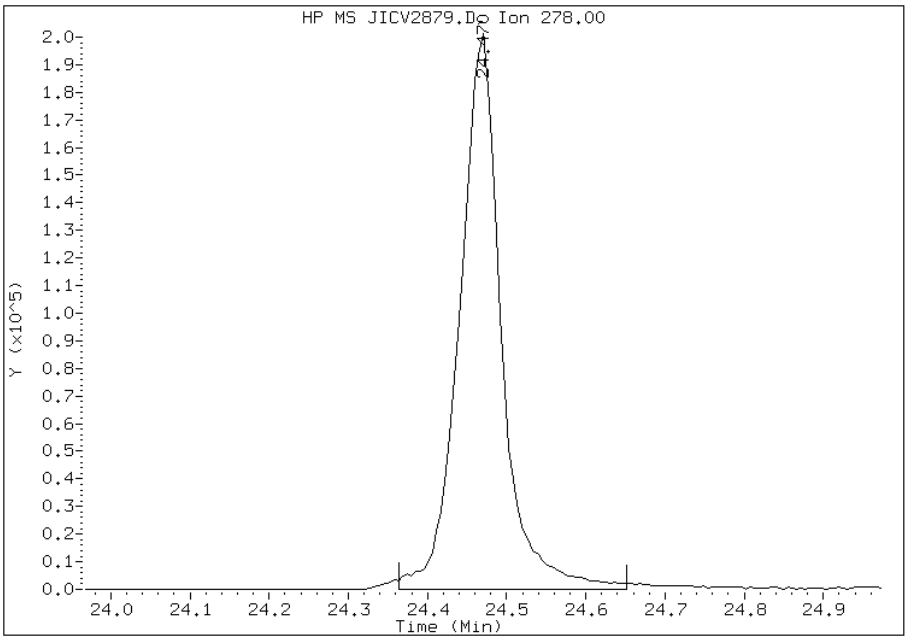
Manual Integration Results

RT: 24.47

Response: 736772

Amount: 50

Conc: 50



Manually Integrated By: kuessnerm
Modification Date: 25-Jul-2012 11:56
Manual Integration Reason: Incomplete Integration

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-7404/17 Calibration Date: 07/24/2012 21:32

Instrument ID: MSJ Calib Start Date: 07/24/2012 17:37

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 20:59

Lab File ID: JICV2887.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aniline	Ave	2.014	1.937	0.0100	48.1	50.0	-3.8	30.0
Benzidine	Ave	0.6921	0.6725	0.0100	48.6	50.0	-2.8	30.0
3,3'-Dimethylbenzidine	Ave	0.7002	0.6719	0.0100	48.0	50.0	-4.0	30.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JICV2887.D
Lab Smp Id: ICV-012068 Client Smp ID: ICV-012068
Inj Date : 24-JUL-2012 21:32
Operator : MAK Inst ID: MSJ.i
Smp Info : ICV-012068
Misc Info : 12068
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\8270J_625.m
Meth Date : 25-Jul-2012 12:35 kuessnerm Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270BICV.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

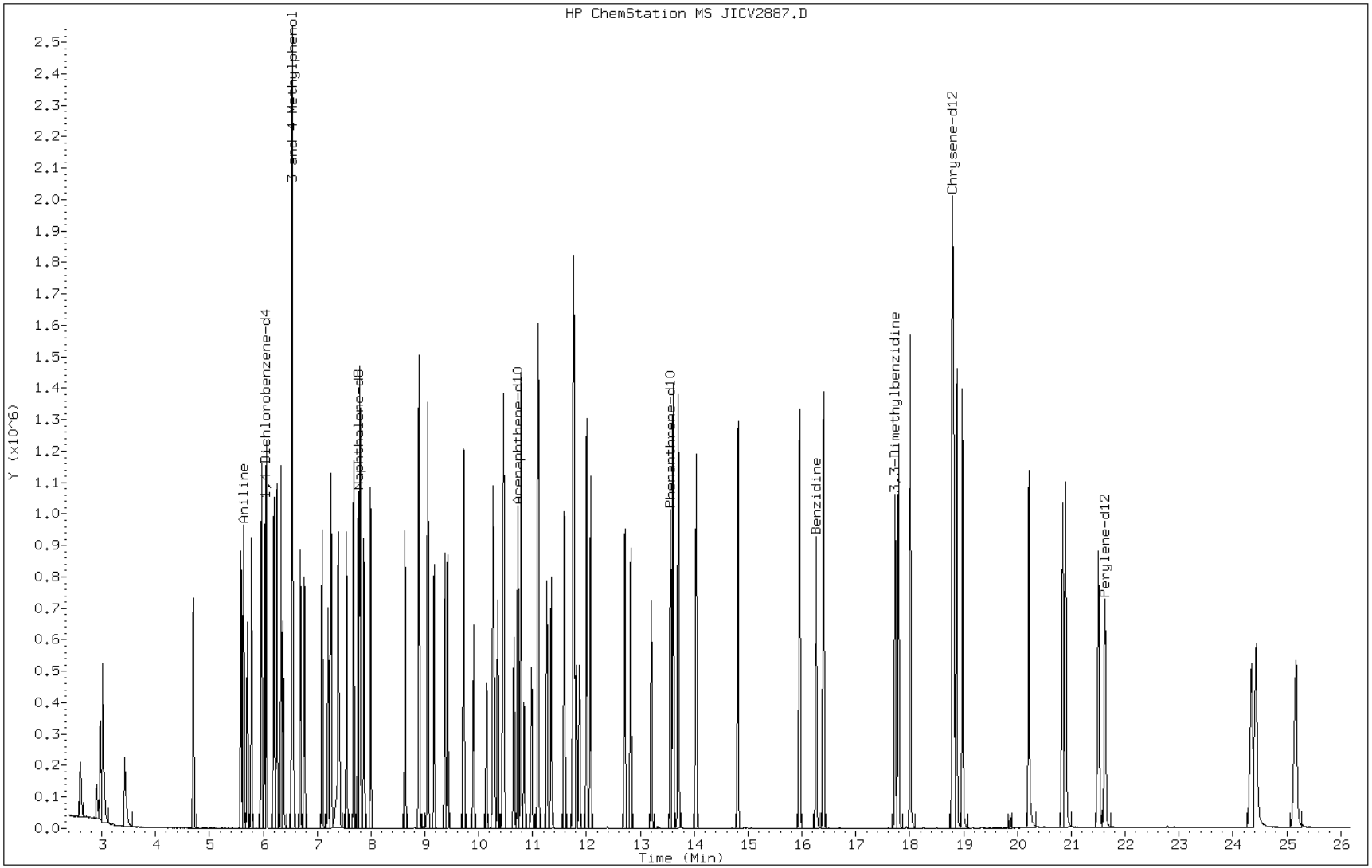
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
17 Aniline	93	5.635	5.635	(0.934)	468161	50.0000	48.08
* 22 1,4-Dichlorobenzene-d4	152	6.036	6.036	(1.000)	193395	40.0000	
29 3 and 4-Methylphenol	107	6.538	6.538	(1.083)	622495	100.000	94.03
* 48 Naphthalene-d8	136	7.761	7.761	(1.000)	710189	40.0000	
* 82 Acenaphthene-d10	164	10.726	10.726	(1.000)	395312	40.0000	
* 121 Phenanthrene-d10	188	13.558	13.558	(1.000)	690957	40.0000	
135 Benzidine	184	16.261	16.261	(0.864)	589402	50.0000	48.58
145 3,3-Dimethylbenzidine	212	17.730	17.730	(0.942)	588873	50.0000	47.98
* 153 Chrysene-d12	240	18.820	18.820	(1.000)	701163	40.0000	
* 166 Perylene-d12	264	21.624	21.624	(1.000)	654905	40.0000	

Data File: JICV2887.D

Date: 24-JUL-2012 21:32

Client ID: ICV-012068 Instrument: MSJ.i

Sample Info: ICV-012068 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9331/2 Calibration Date: 08/15/2012 14:03

Instrument ID: MSJ Calib Start Date: 07/24/2012 13:09

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 16:30

Lab File ID: JCCV3400.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5460	0.6906	0.0100	63.2	50.0	26.5*	20.0
N-Nitrosodimethylamine	Ave	0.8135	1.017	0.0100	62.5	50.0	25.0*	20.0
Pyridine	Ave	1.435	1.792	0.0100	62.4	50.0	24.8*	20.0
Dimethylformamide	Ave	0.7849	0.8243	0.0100	52.5	50.0	5.0	20.0
Cyclohexanol	Ave	1.002	1.111	0.0100	55.5	50.0	10.9	20.0
Phenol	Ave	1.678	1.931	0.8000	57.5	50.0	15.1	20.0
Bis(2-chloroethyl)ether	Ave	1.279	1.367	0.7000	53.4	50.0	6.9	20.0
2-Chlorophenol	Ave	1.341	1.366	0.8000	50.9	50.0	1.9	20.0
1,3-Dichlorobenzene	Ave	1.510	1.514	0.0100	50.2	50.0	0.3	20.0
1,4-Dichlorobenzene	Ave	1.549	1.549	0.0100	50.0	50.0	0.0	20.0
Benzyl alcohol	Ave	0.8521	0.8887	0.0100	52.1	50.0	4.3	20.0
1,2-Dichlorobenzene	Ave	1.436	1.425	0.0100	49.6	50.0	-0.7	20.0
2-Methylphenol	Ave	1.163	1.178	0.6000	50.7	50.0	1.3	20.0
2,2'-oxybis[1-chloropropane]	Ave	1.344	1.392	0.0100	51.8	50.0	3.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.9323	0.9795	0.5000	52.5	50.0	5.1	20.0
Hexachloroethane	Ave	0.5819	0.6012	0.3000	51.7	50.0	3.3	20.0
Nitrobenzene	Ave	0.4301	0.4467	0.2000	51.9	50.0	3.9	20.0
Isophorone	Ave	0.6912	0.7168	0.4000	51.8	50.0	3.7	20.0
2-Nitrophenol	Ave	0.1925	0.1930	0.1000	50.1	50.0	0.2	20.0
2,4-Dimethylphenol	Ave	0.3766	0.3761	0.2000	49.9	50.0	-0.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.4014	0.4080	0.0100	50.8	50.0	1.6	20.0
Benzoic acid	Ave	0.2105	0.2105	0.0100	50.0	50.0	-0.0	20.0
2,4-Dichlorophenol	Ave	0.2913	0.2875	0.0100	49.4	50.0	-1.3	20.0
1,2,4-Trichlorobenzene	Ave	0.3314	0.3191	0.0100	48.1	50.0	-3.7	20.0
Naphthalene	Ave	1.083	1.063	0.7000	49.1	50.0	-1.8	20.0
4-Chloroaniline	Ave	0.4191	0.4055	0.0100	48.4	50.0	-3.3	20.0
Hexachlorobutadiene	Ave	0.2048	0.1977	0.0100	48.3	50.0	-3.5	20.0
4-Chloro-3-methylphenol	Ave	0.3168	0.3215	0.2000	50.7	50.0	1.5	20.0
2-Methylnaphthalene	Ave	0.6983	0.6837	0.4000	49.0	50.0	-2.1	20.0
Hexachlorocyclopentadiene	Ave	0.2944	0.3055	0.0500	51.9	50.0	3.7	20.0
2,4,6-Trichlorophenol	Ave	0.3811	0.3768	0.2000	49.4	50.0	-1.1	20.0
2,4,5-Trichlorophenol	Ave	0.3940	0.3975	0.2000	50.4	50.0	0.9	20.0
2-Chloronaphthalene	Ave	1.190	1.188	0.8000	49.9	50.0	-0.2	20.0
2-Nitroaniline	Ave	0.3769	0.4045	0.0100	53.7	50.0	7.3	20.0
Dimethyl phthalate	Ave	1.297	1.303	0.0100	50.3	50.0	0.5	20.0
2,6-Dinitrotoluene	Ave	0.2889	0.3070	0.2000	53.1	50.0	6.3	20.0
Acenaphthylene	Ave	1.806	1.833	0.9000	50.7	50.0	1.5	20.0
3-Nitroaniline	Ave	0.3039	0.3235	0.0100	53.2	50.0	6.5	20.0
Acenaphthene	Ave	1.176	1.178	0.0100	50.1	50.0	0.2	20.0
2,4-Dinitrophenol	Lin1	0.1737	0.2034	0.0100	50.2	50.0	0.4	20.0
4-Nitrophenol	Ave	0.2148	0.2249	0.0100	52.4	50.0	4.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9331/2 Calibration Date: 08/15/2012 14:03

Instrument ID: MSJ Calib Start Date: 07/24/2012 13:09

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 16:30

Lab File ID: JCCV3400.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2,4-Dinitrotoluene	Ave	0.3819	0.4123	0.2000	54.0	50.0	8.0	20.0
Dibenzofuran	Ave	1.657	1.645	0.8000	49.6	50.0	-0.7	20.0
Diethyl phthalate	Ave	1.256	1.297	0.0100	51.6	50.0	3.2	20.0
Fluorene	Ave	1.345	1.349	0.9000	50.2	50.0	0.3	20.0
4-Chlorophenyl phenyl ether	Ave	0.6623	0.6515	0.4000	49.2	50.0	-1.6	20.0
4-Nitroaniline	Ave	0.3032	0.3219	0.0100	53.1	50.0	6.2	20.0
4,6-Dinitro-2-methylphenol	Lin1	0.1415	0.1533	0.0100	49.1	50.0	-1.9	20.0
N-Nitrosodiphenylamine	Ave	0.5200	0.5081	0.0100	48.8	50.0	-2.3	20.0
Azobenzene	Ave	0.8551	0.8920	0.0100	52.2	50.0	4.3	20.0
4-Bromophenyl phenyl ether	Ave	0.2206	0.2134	0.0100	48.4	50.0	-3.3	20.0
Hexachlorobenzene	Ave	0.2324	0.2246	0.1000	48.3	50.0	-3.4	20.0
Pentachlorophenol	Ave	0.1624	0.1394	0.0500	42.9	50.0	-14.2	20.0
Phenanthrene	Ave	1.121	1.098	0.7000	49.0	50.0	-2.1	20.0
Anthracene	Ave	1.135	1.127	0.7000	49.6	50.0	-0.7	20.0
Carbazole	Ave	0.9589	0.9669	0.0100	50.4	50.0	0.8	20.0
Di-n-butyl phthalate	Ave	1.192	1.221	0.0100	51.2	50.0	2.4	20.0
Fluoranthene	Ave	1.116	1.133	0.6000	50.7	50.0	1.5	20.0
Pyrene	Ave	1.216	1.172	0.6000	48.2	50.0	-3.7	20.0
Butyl benzyl phthalate	Ave	0.5161	0.5202	0.0100	50.4	50.0	0.8	20.0
3,3'-Dichlorobenzidine	Ave	0.3827	0.3863	0.0100	50.5	50.0	0.9	20.0
Benzo[a]anthracene	Ave	0.9698	0.9626	0.8000	49.6	50.0	-0.7	20.0
Chrysene	Ave	1.011	0.9888	0.7000	48.9	50.0	-2.2	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.6857	0.7211	0.0100	52.6	50.0	5.2	20.0
Di-n-octyl phthalate	Ave	1.141	1.226	0.0100	53.7	50.0	7.5	20.0
Benzo[b]fluoranthene	Ave	1.030	1.015	0.7000	49.3	50.0	-1.5	20.0
Benzo[k]fluoranthene	Ave	1.055	1.027	0.7000	48.7	50.0	-2.6	20.0
Benzo[a]pyrene	Ave	1.014	1.020	0.7000	50.3	50.0	0.6	20.0
Indeno[1,2,3-cd]pyrene	Lin1	0.9051	0.9561	0.5000	46.8	50.0	-6.4	20.0
Dibenz(a,h)anthracene	Ave	0.9755	0.9809	0.4000	50.3	50.0	0.6	20.0
Benzo[g,h,i]perylene	Ave	0.9934	1.026	0.5000	51.6	50.0	3.2	20.0
2-Fluorophenol (Surr)	Ave	1.249	1.397	0.0100	55.9	50.0	11.9	20.0
Phenol-d5 (Surr)	Ave	1.549	1.668	0.0100	53.8	50.0	7.7	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4225	0.4408	0.0100	52.2	50.0	4.3	20.0
2-Fluorobiphenyl (Surr)	Ave	1.372	1.370	0.0100	49.9	50.0	-0.1	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1874	0.1905	0.0100	50.8	50.0	1.7	20.0
Terphenyl-d14 (Surr)	Ave	0.7517	0.7190	0.0100	47.8	50.0	-4.3	20.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JCCV3400.D
Lab Smp Id: CCVIS-012052 Client Smp ID: CCVIS-012052
Inj Date : 15-AUG-2012 14:03
Operator : MAK Inst ID: MSJ.i
Smp Info : CCVIS-012052
Misc Info : 12052
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.359	2.359	(0.409)	180231	50.0000	63.25(H)
	4 N-Nitrosodimethylamine	74	2.733	2.733	(0.474)	265364	50.0000	62.50
	3 Pyridine	79	2.776	2.776	(0.481)	467523	50.0000	62.42
	5 Dimethylformamide	44	3.193	3.193	(0.553)	215100	50.0000	52.51
$	10 2-Fluorophenol	112	4.277	4.277	(0.741)	364564	50.0000	55.93
	11 Cyclohexanol	57	4.448	4.448	(0.771)	290026	50.0000	55.45
	19 Bis(2-chloroethyl)ether	93	5.452	5.452	(0.944)	356653	50.0000	53.44
$	15 Phenol-d5	99	5.346	5.346	(0.926)	435238	50.0000	53.84(H)
	16 Phenol	94	5.362	5.362	(0.929)	503827	50.0000	57.54
	20 2-Chlorophenol	128	5.527	5.527	(0.957)	356385	50.0000	50.93
	21 1,3-Dichlorobenzene	146	5.709	5.709	(0.989)	395180	50.0000	50.16(H)
*	22 1,4-Dichlorobenzene-d4	152	5.773	5.773	(1.000)	208771	40.0000	(H)
	23 1,4-Dichlorobenzene	146	5.794	5.794	(1.004)	404236	50.0000	50.01(H)
	26 1,2-Dichlorobenzene	146	5.981	5.981	(1.036)	371954	50.0000	49.64
	25 Benzyl Alcohol	108	5.944	5.944	(1.030)	231925	50.0000	52.15(H)
	28 2,2-oxybis(1-Chloropropane)	45	6.104	6.104	(1.057)	363256	50.0000	51.78
	27 2-Methylphenol	108	6.083	6.083	(1.054)	307542	50.0000	50.66(H)
	35 Hexachloroethane	117	6.409	6.409	(1.110)	156902	50.0000	51.66
	32 N-Nitrosodinpropylamine	70	6.275	6.275	(1.087)	255608	50.0000	52.53(H)
M	215 Total Cresols	100				307542	150.000	50.66
$	36 Nitrobenzene-d5	82	6.467	6.467	(0.866)	419430	50.0000	52.16

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	37 Nitrobenzene	77	6.494	6.494	(0.870)	425074	50.0000	51.93
	39 Isophorone	82	6.815	6.815	(0.913)	681998	50.0000	51.85
	40 2-Nitrophenol	139	6.922	6.922	(0.927)	183618	50.0000	50.12
	41 2,4-Dimethylphenol	107	6.991	6.991	(0.936)	357848	50.0000	49.94
	42 Bis(2-chloroethoxy)methane	93	7.114	7.114	(0.953)	388200	50.0000	50.82
	45 2,4-Dichlorophenol	162	7.269	7.269	(0.974)	273591	50.0000	49.36
	47 1,2,4-Trichlorobenzene	180	7.386	7.386	(0.989)	303581	50.0000	48.13
*	48 Naphthalene-d8	136	7.466	7.466	(1.000)	761202	40.0000	
	44 Benzoic Acid	122	7.178	7.178	(0.961)	200302	50.0000	49.99
	50 Naphthalene	128	7.498	7.498	(1.004)	1011421	50.0000	49.08
	51 4-Chloroaniline	127	7.584	7.584	(1.016)	385805	50.0000	48.37
	54 Hexachlorobutadiene	225	7.691	7.691	(1.030)	188088	50.0000	48.25
	62 2-Methylnaphthalene	142	8.578	8.578	(1.149)	650569	50.0000	48.96
	59 4-Chloro-3-Methylphenol	107	8.353	8.353	(1.119)	305890	50.0000	50.74
	66 Hexachlorocyclopentadiene	237	8.850	8.850	(0.852)	151914	50.0000	51.87
	67 2,4,6-Trichlorophenol	196	9.058	9.058	(0.872)	187390	50.0000	49.44
	68 2,4,5-Trichlorophenol	196	9.122	9.122	(0.878)	197715	50.0000	50.45
$	69 2-Fluorobiphenyl (Surr)	172	9.203	9.203	(0.886)	681568	50.0000	49.95
	72 2-Chloronaphthalene	162	9.395	9.395	(0.904)	590968	50.0000	49.92
	73 2-Nitroaniline	65	9.587	9.587	(0.923)	201175	50.0000	53.66
	76 Dimethylphthalate	163	9.940	9.940	(0.957)	648092	50.0000	50.25
	79 Acenaphthylene	152	10.127	10.127	(0.975)	911660	50.0000	50.74
	80 2,6-Dinitrotoluene	165	10.031	10.031	(0.966)	152698	50.0000	53.14
*	82 Acenaphthene-d10	164	10.389	10.389	(1.000)	397872	40.0000	
	83 Acenaphthene	153	10.447	10.447	(1.006)	586055	50.0000	50.11
	81 3-Nitroaniline	138	10.335	10.335	(0.995)	160908	50.0000	53.23
	84 2,4-Dinitrophenol	184	10.522	10.522	(1.013)	101157	50.0000	50.20
	86 Dibenzofuran	168	10.768	10.768	(1.037)	818315	50.0000	49.64
	88 2,4-Dinitrotoluene	165	10.768	10.768	(1.037)	205073	50.0000	53.98
	85 4-Nitrophenol	109	10.698	10.698	(1.030)	111869	50.0000	52.37
	93 Diethylphthalate	149	11.259	11.259	(1.084)	645025	50.0000	51.62
	94 Fluorene	166	11.409	11.409	(1.098)	671062	50.0000	50.17
	95 4-Chlorophenyl-phenylether	204	11.436	11.436	(1.101)	323990	50.0000	49.18
	98 4-Nitroaniline	138	11.484	11.484	(1.105)	160098	50.0000	53.09(H)
	99 4,6-Dinitro-2-methylphenol	198	11.537	11.537	(0.874)	131816	50.0000	49.07
	100 N-Nitrosodiphenylamine	169	11.665	11.665	(0.883)	436735	50.0000	48.85
	102 Azobenzene	77	11.735	11.735	(0.889)	766744	50.0000	52.16
$	104 2,4,6-Tribromophenol	330	11.868	11.868	(1.142)	94733	50.0000	50.83
	109 4-Bromophenyl-phenylether	248	12.365	12.365	(0.936)	183439	50.0000	48.36
	112 Hexachlorobenzene	284	12.467	12.467	(0.944)	193073	50.0000	48.32
	117 Pentachlorophenol	266	12.862	12.862	(0.974)	119795	50.0000	42.89
*	121 Phenanthrene-d10	188	13.204	13.204	(1.000)	687692	40.0000	
	122 Phenanthrene	178	13.252	13.252	(1.004)	943940	50.0000	48.96
	124 Anthracene	178	13.348	13.348	(1.011)	968892	50.0000	49.65
	126 Carbazole	167	13.690	13.690	(1.037)	831128	50.0000	50.42
	129 Di-n-Butylphthalate	149	14.470	14.470	(1.096)	1049224	50.0000	51.21
	134 Fluoranthene	202	15.592	15.592	(1.181)	973917	50.0000	50.74
	137 Pyrene	202	16.030	16.030	(0.869)	1044372	50.0000	48.16
$	139 Terphenyl-d14	244	16.409	16.409	(0.889)	640945	50.0000	47.82
	146 Butylbenzylphthalate	149	17.440	17.440	(0.945)	463690	50.0000	50.40
	150 Benzo(a)Anthracene	228	18.428	18.428	(0.999)	858059	50.0000	49.63
*	153 Chrysene-d12	240	18.450	18.450	(1.000)	713116	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.428	18.428	(0.999)	344315	50.0000	50.46
	154 Chrysene	228	18.498	18.498	(1.003)	881435	50.0000	48.89

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155	bis(2-ethylhexyl)Phthalate	149	18.631	18.631	(1.010)	642760	50.0000	52.58
158	Di-n-octylphthalate	149	19.855	19.855	(1.076)	1092776	50.0000	53.73
160	Benzo(b)fluoranthene	252	20.437	20.437	(0.966)	870680	50.0000	49.26
161	Benzo(k)fluoranthene	252	20.485	20.485	(0.968)	881553	50.0000	48.69(H)
165	Benzo(a)pyrene	252	21.046	21.046	(0.994)	875024	50.0000	50.30
* 166	Perylene-d12	264	21.164	21.164	(1.000)	686509	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	23.658	23.658	(1.118)	820467	50.0000	46.78(H)
174	Dibenzo(a,h)anthracene	278	23.739	23.739	(1.122)	841752	50.0000	50.28
177	Benzo(g,h,i)perylene	276	24.412	24.412	(1.153)	880015	50.0000	51.61

QC Flag Legend

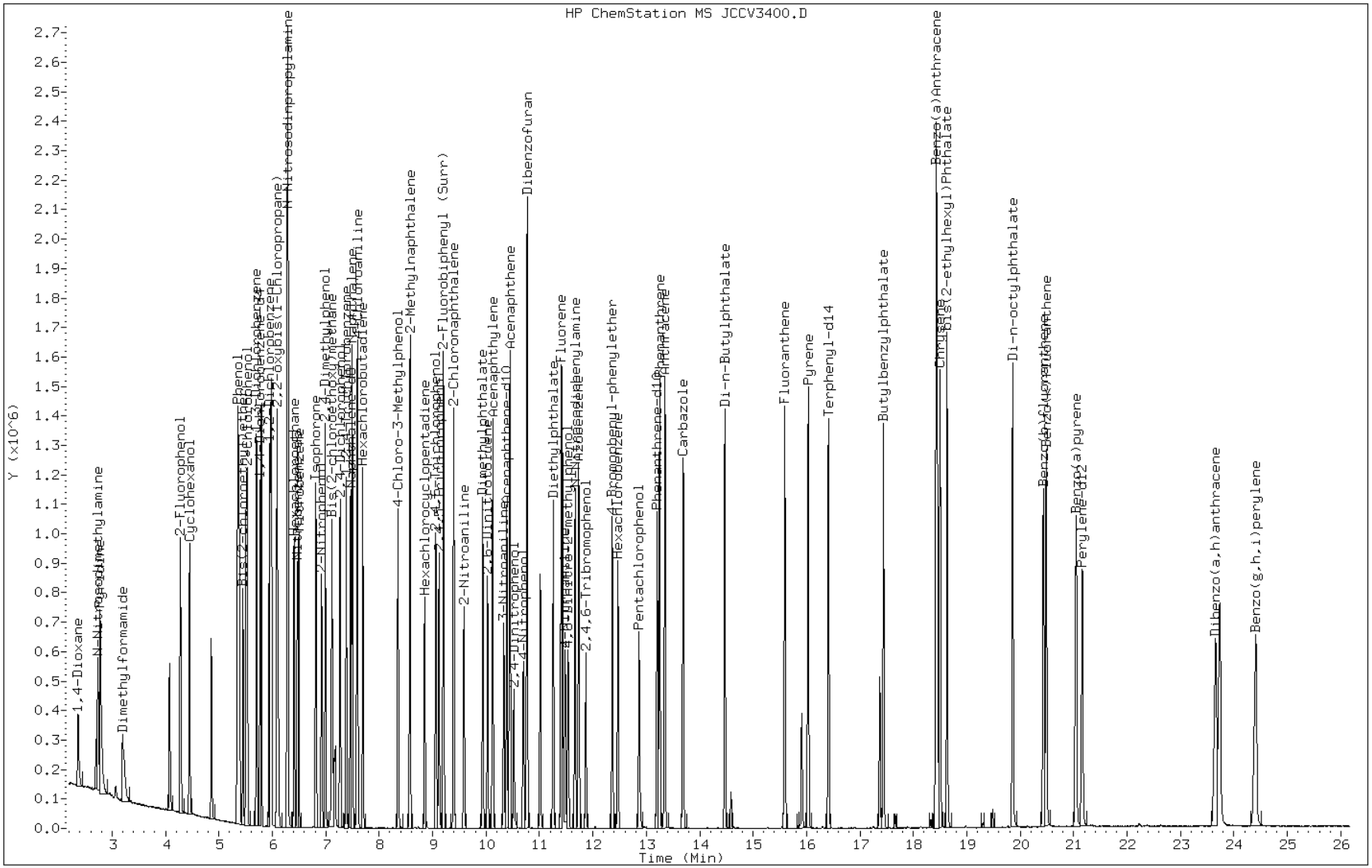
H - Operator selected an alternate compound hit.

Data File: JCCV3400.D

Date: 15-AUG-2012 14:03

Client ID: CCVIS-012052 Instrument: MSJ.i

Sample Info: CCVIS-012052 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCV 160-9331/3 Calibration Date: 08/15/2012 14:37

Instrument ID: MSJ Calib Start Date: 07/24/2012 17:37

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 07/24/2012 20:59

Lab File ID: JCCV3401.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aniline	Ave	2.014	2.238	0.0100	55.6	50.0	11.1	20.0
3 & 4 Methylphenol	Ave	1.369	1.446	0.6000	106	100	5.6	20.0
Benzidine	Ave	0.6921	0.6246	0.0100	45.1	50.0	-9.8	20.0
3,3'-Dimethylbenzidine	Ave	0.7002	0.6413	0.0100	45.8	50.0	-8.4	20.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270B\JCCV3401.D
Lab Smp Id: CCV-012063 Client Smp ID: CCV-012063
Inj Date : 15-AUG-2012 14:37
Operator : MAK Inst ID: MSJ.i
Smp Info : CCV-012063
Misc Info : 12063
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270B\8270J_625.m
Meth Date : 15-Aug-2012 15:21 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

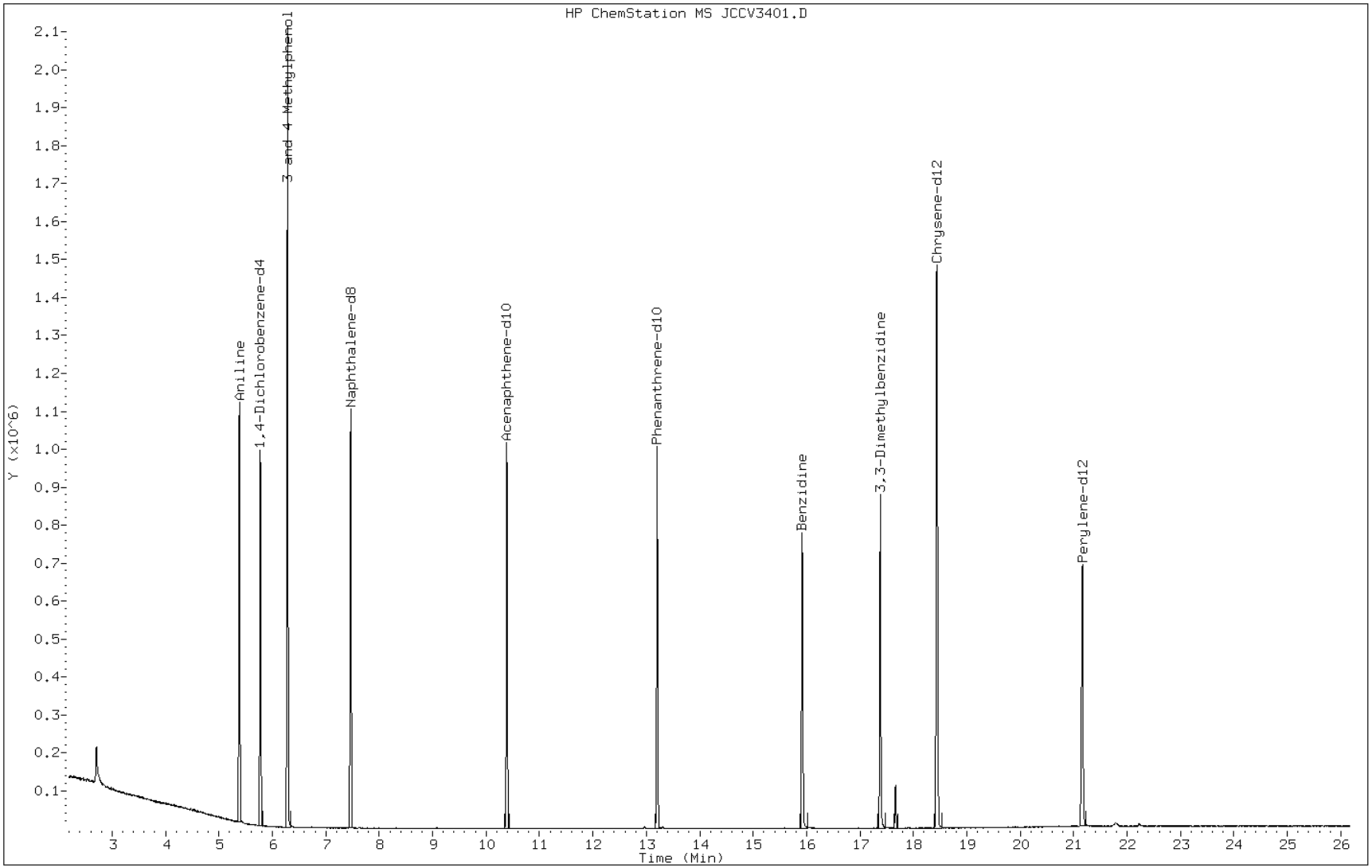
		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	17 Aniline	93	5.383	5.383	(0.932)	529359	50.0000	55.57
*	22 1,4-Dichlorobenzene-d4	152	5.773	5.773	(1.000)	189202	40.0000	
	29 3 and 4-Methylphenol	107	6.286	6.286	(1.089)	684099	100.000	105.6
M	215 Total Cresols	100				684099	150.000	105.6
*	48 Naphthalene-d8	136	7.466	7.466	(1.000)	704490	40.0000	
*	82 Acenaphthene-d10	164	10.388	10.388	(1.000)	360366	40.0000	
*	121 Phenanthrene-d10	188	13.204	13.204	(1.000)	599043	40.0000	
	135 Benzidine	184	15.917	15.917	(0.863)	462816	50.0000	45.12
	145 3,3-Dimethylbenzidine	212	17.381	17.381	(0.942)	475156	50.0000	45.79
*	153 Chrysene-d12	240	18.444	18.444	(1.000)	592789	40.0000	
*	166 Perylene-d12	264	21.163	21.163	(1.000)	562126	40.0000	

Data File: JCCV3401.D

Date: 15-AUG-2012 14:37

Client ID: CCV-012063 Instrument: MSJ.i

Sample Info: CCV-012063 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9562/14 Calibration Date: 08/22/2012 13:22

Instrument ID: MSJ Calib Start Date: 08/22/2012 09:59

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 12:48

Lab File ID: JICV3495.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6082	0.6175	0.0100	50.8	50.0	1.5	30.0
N-Nitrosodimethylamine	Ave	0.8928	0.8893	0.0100	49.8	50.0	-0.4	30.0
Pyridine	Ave	1.522	1.584	0.0100	52.0	50.0	4.0	30.0
Dimethylformamide	Ave	0.9824	0.9010	0.0100	45.9	50.0	-8.3	30.0
Cyclohexanol	Ave	1.429	1.471	0.0100	51.5	50.0	3.0	30.0
Phenol	Ave	1.754	1.660	0.8000	47.3	50.0	-5.3	30.0
Bis(2-chloroethyl)ether	Ave	1.352	1.321	0.7000	48.9	50.0	-2.2	30.0
2-Chlorophenol	Ave	1.347	1.310	0.8000	48.6	50.0	-2.8	30.0
1,3-Dichlorobenzene	Ave	1.518	1.502	0.0100	49.5	50.0	-1.1	30.0
1,4-Dichlorobenzene	Ave	1.565	1.530	0.0100	48.9	50.0	-2.3	30.0
Benzyl alcohol	Ave	0.9010	0.8702	0.0100	48.3	50.0	-3.4	30.0
1,2-Dichlorobenzene	Ave	1.447	1.416	0.0100	49.0	50.0	-2.1	30.0
2-Methylphenol	Ave	1.220	1.211	0.6000	49.6	50.0	-0.8	30.0
bis (2-chloroisopropyl) ether	Ave	2.279	2.241	0.0100	49.2	50.0	-1.7	30.0
N-Nitrosodi-n-propylamine	Ave	0.9672	1.034	0.5000	53.4	50.0	6.9	30.0
Hexachloroethane	Ave	0.5793	0.5879	0.3000	50.7	50.0	1.5	30.0
Nitrobenzene	Ave	0.4305	0.4140	0.2000	48.1	50.0	-3.8	30.0
Isophorone	Ave	0.7241	0.7146	0.4000	49.3	50.0	-1.3	30.0
2-Nitrophenol	Ave	0.1950	0.1859	0.1000	47.7	50.0	-4.7	30.0
2,4-Dimethylphenol	Ave	0.3841	0.3684	0.2000	48.0	50.0	-4.1	30.0
Bis(2-chloroethoxy)methane	Ave	0.4139	0.4036	0.0100	48.8	50.0	-2.5	30.0
Benzoic acid	Ave	0.2176	0.1982	0.0100	45.5	50.0	-8.9	30.0
2,4-Dichlorophenol	Ave	0.2900	0.2703	0.0100	46.6	50.0	-6.8	30.0
1,2,4-Trichlorobenzene	Ave	0.3225	0.3283	0.0100	50.9	50.0	1.8	30.0
Naphthalene	Ave	1.075	1.027	0.7000	47.8	50.0	-4.4	30.0
4-Chloroaniline	Ave	0.4241	0.4103	0.0100	48.4	50.0	-3.3	30.0
Hexachlorobutadiene	Ave	0.2006	0.1912	0.0100	47.6	50.0	-4.7	30.0
4-Chloro-3-methylphenol	Ave	0.3309	0.3133	0.2000	47.3	50.0	-5.3	30.0
2-Methylnaphthalene	Ave	0.6890	0.6578	0.4000	47.7	50.0	-4.5	30.0
Hexachlorocyclopentadiene	Ave	0.2929	0.3793	0.0500	64.7	50.0	29.5	30.0
2,4,6-Trichlorophenol	Ave	0.3918	0.3649	0.2000	46.6	50.0	-6.9	30.0
2,4,5-Trichlorophenol	Ave	0.4136	0.3896	0.2000	47.1	50.0	-5.8	30.0
2-Chloronaphthalene	Ave	1.188	1.117	0.8000	47.0	50.0	-6.0	30.0
2-Nitroaniline	Ave	0.3993	0.3745	0.0100	46.9	50.0	-6.2	30.0
Dimethyl phthalate	Ave	1.318	1.259	0.0100	47.8	50.0	-4.5	30.0
2,6-Dinitrotoluene	Ave	0.2997	0.2915	0.2000	48.6	50.0	-2.8	30.0
Acenaphthylene	Ave	1.839	1.795	0.9000	48.8	50.0	-2.4	30.0
3-Nitroaniline	Ave	0.3203	0.3078	0.0100	48.0	50.0	-3.9	30.0
Acenaphthene	Ave	1.171	1.122	0.0100	47.9	50.0	-4.2	30.0
2,4-Dinitrophenol	Ave	0.2058	0.1830	0.0100	44.5	50.0	-11.1	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9562/14 Calibration Date: 08/22/2012 13:22

Instrument ID: MSJ Calib Start Date: 08/22/2012 09:59

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 12:48

Lab File ID: JICV3495.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.2133	0.2042	0.0100	47.9	50.0	-4.3	30.0
2,4-Dinitrotoluene	Ave	0.4027	0.3923	0.2000	48.7	50.0	-2.6	30.0
Dibenzofuran	Ave	1.644	1.532	0.8000	46.6	50.0	-6.8	30.0
Diethyl phthalate	Ave	1.321	1.264	0.0100	47.8	50.0	-4.3	30.0
Fluorene	Ave	1.344	1.289	0.9000	48.0	50.0	-4.1	30.0
4-Chlorophenyl phenyl ether	Ave	0.6405	0.6141	0.4000	47.9	50.0	-4.1	30.0
4-Nitroaniline	Ave	0.3212	0.3080	0.0100	47.9	50.0	-4.1	30.0
4,6-Dinitro-2-methylphenol	Ave	0.1494	0.1367	0.0100	45.7	50.0	-8.5	30.0
Azobenzene	Ave	0.8482	0.8075	0.0100	47.6	50.0	-4.8	30.0
4-Bromophenyl phenyl ether	Ave	0.2105	0.2009	0.0100	47.7	50.0	-4.5	30.0
Hexachlorobenzene	Ave	0.2261	0.2159	0.1000	47.7	50.0	-4.5	30.0
Pentachlorophenol	Ave	0.1560	0.1473	0.0500	47.2	50.0	-5.6	30.0
Phenanthrene	Ave	1.074	1.022	0.7000	47.6	50.0	-4.8	30.0
Anthracene	Ave	1.085	1.046	0.7000	48.2	50.0	-3.6	30.0
Carbazole	Ave	0.9522	0.9283	0.0100	48.7	50.0	-2.5	30.0
Di-n-butyl phthalate	Ave	1.233	1.187	0.0100	48.1	50.0	-3.7	30.0
Fluoranthene	Ave	1.113	1.086	0.6000	48.8	50.0	-2.4	30.0
Pyrene	Ave	1.177	1.114	0.6000	47.3	50.0	-5.4	30.0
Butyl benzyl phthalate	Ave	0.5386	0.5138	0.0100	47.7	50.0	-4.6	30.0
3,3'-Dichlorobenzidine	Ave	0.4089	0.3811	0.0100	46.6	50.0	-6.8	30.0
Benzo[a]anthracene	Ave	0.998	1.067	0.8000	53.4	50.0	6.9	30.0
Chrysene	Ave	1.026	1.006	0.7000	49.0	50.0	-2.0	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7305	0.6926	0.0100	47.4	50.0	-5.2	30.0
Di-n-octyl phthalate	Ave	1.259	1.169	0.0100	46.4	50.0	-7.2	30.0
Benzo[b]fluoranthene	Ave	1.118	1.112	0.7000	49.7	50.0	-0.6	30.0
Benzo[k]fluoranthene	Ave	1.113	1.140	0.7000	51.2	50.0	2.4	30.0
Benzo[a]pyrene	Ave	1.102	1.067	0.7000	48.4	50.0	-3.1	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.054	1.021	0.5000	48.4	50.0	-3.2	30.0
Dibenz(a,h)anthracene	Ave	1.090	1.036	0.4000	47.5	50.0	-5.0	30.0
Benzo[g,h,i]perylene	Ave	1.076	1.075	0.5000	49.9	50.0	-0.2	30.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICV3495.D
Lab Smp Id: ICV-012026 Client Smp ID: ICV-012026
Inj Date : 22-AUG-2012 13:22
Operator : MAK Inst ID: MSJ.i
Smp Info : ICV-012026
Misc Info : 12026
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:16 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270ICV.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
1	1,4-Dioxane	88	2.608	2.608	(0.432)	124683	50.0000	50.76
4	N-Nitrosodimethylamine	74	2.976	2.976	(0.493)	179588	50.0000	49.81
3	Pyridine	79	3.019	3.019	(0.500)	319780	50.0000	52.02
5	Dimethylformamide	44	3.425	3.425	(0.567)	181942	50.0000	45.86
11	Cyclohexanol	57	4.701	4.701	(0.779)	296985	50.0000	51.48
19	Bis(2-chloroethyl)ether	93	5.705	5.705	(0.945)	266849	50.0000	48.89
16	Phenol	94	5.588	5.588	(0.926)	335269	50.0000	47.34(H)
20	2-Chlorophenol	128	5.780	5.780	(0.958)	264495	50.0000	48.62
21	1,3-Dichlorobenzene	146	5.967	5.967	(0.988)	303255	50.0000	49.45
* 22	1,4-Dichlorobenzene-d4	152	6.037	6.037	(1.000)	161547	40.0000	
23	1,4-Dichlorobenzene	146	6.058	6.058	(1.004)	308973	50.0000	48.87
26	1,2-Dichlorobenzene	146	6.250	6.250	(1.035)	286019	50.0000	48.95
25	Benzyl Alcohol	108	6.197	6.197	(1.027)	175725	50.0000	48.29
28	2,2-oxybis(1-Chloropropane)	45	6.368	6.368	(1.055)	452481	50.0000	49.16
27	2-Methylphenol	108	6.330	6.330	(1.049)	244494	50.0000	49.61
35	Hexachloroethane	117	6.688	6.688	(1.108)	118716	50.0000	50.74
32	N-Nitrosodinpropylamine	70	6.539	6.539	(1.083)	208713	50.0000	53.43
M 215	Total Cresols	100				244494	150.000	49.61
37	Nitrobenzene	77	6.763	6.763	(0.871)	311761	50.0000	48.09
39	Isophorone	82	7.089	7.089	(0.913)	538100	50.0000	49.34
40	2-Nitrophenol	139	7.201	7.201	(0.928)	140004	50.0000	47.67

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
41	2,4-Dimethylphenol	107	7.254	7.254	(0.935)	277403	50.0000	47.95
42	Bis(2-chloroethoxy)methane	93	7.393	7.393	(0.953)	303935	50.0000	48.76
45	2,4-Dichlorophenol	162	7.548	7.548	(0.972)	203515	50.0000	46.60
47	1,2,4-Trichlorobenzene	180	7.676	7.676	(0.989)	247230	50.0000	50.90
* 48	Naphthalene-d8	136	7.762	7.762	(1.000)	602392	40.0000	
44	Benzoic Acid	122	7.415	7.415	(0.955)	149215	50.0000	45.53
50	Naphthalene	128	7.794	7.794	(1.004)	773560	50.0000	47.80
51	4-Chloroaniline	127	7.869	7.869	(1.014)	308934	50.0000	48.36
54	Hexachlorobutadiene	225	7.997	7.997	(1.030)	143963	50.0000	47.64
62	2-Methylnaphthalene	142	8.889	8.889	(1.145)	495280	50.0000	47.74
59	4-Chloro-3-Methylphenol	107	8.632	8.632	(1.112)	235945	50.0000	47.35
66	Hexachlorocyclopentadiene	237	9.172	9.172	(0.855)	158268	50.0000	64.74
67	2,4,6-Trichlorophenol	196	9.369	9.369	(0.874)	152242	50.0000	46.56
68	2,4,5-Trichlorophenol	196	9.423	9.423	(0.879)	162547	50.0000	47.09
72	2-Chloronaphthalene	162	9.722	9.722	(0.906)	465926	50.0000	46.99
73	2-Nitroaniline	65	9.903	9.903	(0.923)	156270	50.0000	46.90
76	Dimethylphthalate	163	10.267	10.267	(0.957)	525310	50.0000	47.76
79	Acenaphthylene	152	10.464	10.464	(0.976)	748867	50.0000	48.80
80	2,6-Dinitrotoluene	165	10.352	10.352	(0.965)	121621	50.0000	48.62
* 82	Acenaphthene-d10	164	10.726	10.726	(1.000)	333805	40.0000	
83	Acenaphthene	153	10.790	10.790	(1.006)	468121	50.0000	47.89
81	3-Nitroaniline	138	10.657	10.657	(0.994)	128413	50.0000	48.05
84	2,4-Dinitrophenol	184	10.844	10.844	(1.011)	76373	50.0000	44.47
86	Dibenzofuran	168	11.111	11.111	(1.036)	639407	50.0000	46.61
88	2,4-Dinitrotoluene	165	11.095	11.095	(1.034)	163691	50.0000	48.71
85	4-Nitrophenol	109	10.982	10.982	(1.024)	85220	50.0000	47.86
93	Diethylphthalate	149	11.591	11.591	(1.081)	527318	50.0000	47.84
94	Fluorene	166	11.757	11.757	(1.096)	537910	50.0000	47.97
95	4-Chlorophenyl-phenylether	204	11.773	11.773	(1.098)	256219	50.0000	47.94
98	4-Nitroaniline	138	11.810	11.810	(1.101)	128524	50.0000	47.95
99	4,6-Dinitro-2-methylphenol	198	11.869	11.869	(0.875)	99488	50.0000	45.74
100	N-Nitrosodiphenylamine	169	12.003	12.003	(0.885)	459240	50.0000	60.28
102	Azobenzene	77	12.077	12.077	(0.891)	587908	50.0000	47.60
109	4-Bromophenyl-phenylether	248	12.713	12.713	(0.937)	146299	50.0000	47.73
112	Hexachlorobenzene	284	12.820	12.820	(0.945)	157174	50.0000	47.74
117	Pentachlorophenol	266	13.204	13.204	(0.974)	107230	50.0000	47.20
* 121	Phenanthrene-d10	188	13.562	13.562	(1.000)	582447	40.0000	
122	Phenanthrene	178	13.610	13.610	(1.004)	743917	50.0000	47.59
124	Anthracene	178	13.706	13.706	(1.011)	761671	50.0000	48.20
126	Carbazole	167	14.043	14.043	(1.035)	675828	50.0000	48.74
129	Di-n-Butylphthalate	149	14.817	14.817	(1.093)	864042	50.0000	48.14
134	Fluoranthene	202	15.966	15.966	(1.177)	790899	50.0000	48.81
137	Pyrene	202	16.404	16.404	(0.871)	815728	50.0000	47.32
146	Butylbenzylphthalate	149	17.803	17.803	(0.946)	376325	50.0000	47.70
150	Benzo(a)Anthracene	228	18.807	18.807	(0.999)	781362	50.0000	53.43
* 153	Chrysene-d12	240	18.828	18.828	(1.000)	585943	40.0000	
152	3,3'-Dichlorobenzidine	252	18.802	18.802	(0.999)	279130	50.0000	46.61
154	Chrysene	228	18.882	18.882	(1.003)	736817	50.0000	49.01
155	bis(2-ethylhexyl)Phthalate	149	18.994	18.994	(1.009)	507280	50.0000	47.40
158	Di-n-octylphthalate	149	20.222	20.222	(1.074)	856024	50.0000	46.42
160	Benzo(b)fluoranthene	252	20.853	20.853	(0.964)	730400	50.0000	49.71
161	Benzo(k)fluoranthene	252	20.906	20.906	(0.966)	748926	50.0000	51.19
165	Benzo(a)pyrene	252	21.515	21.515	(0.994)	701255	50.0000	48.42
* 166	Perylene-d12	264	21.638	21.638	(1.000)	525678	40.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
173 Indeno(1,2,3-cd)pyrene	276	24.362	24.362	(1.126)	670591	50.0000	48.42(H)
174 Dibenzo(a,h)anthracene	278	24.447	24.447	(1.130)	680547	50.0000	47.50
177 Benzo(g,h,i)perylene	276	25.184	25.184	(1.164)	706058	50.0000	49.91

QC Flag Legend

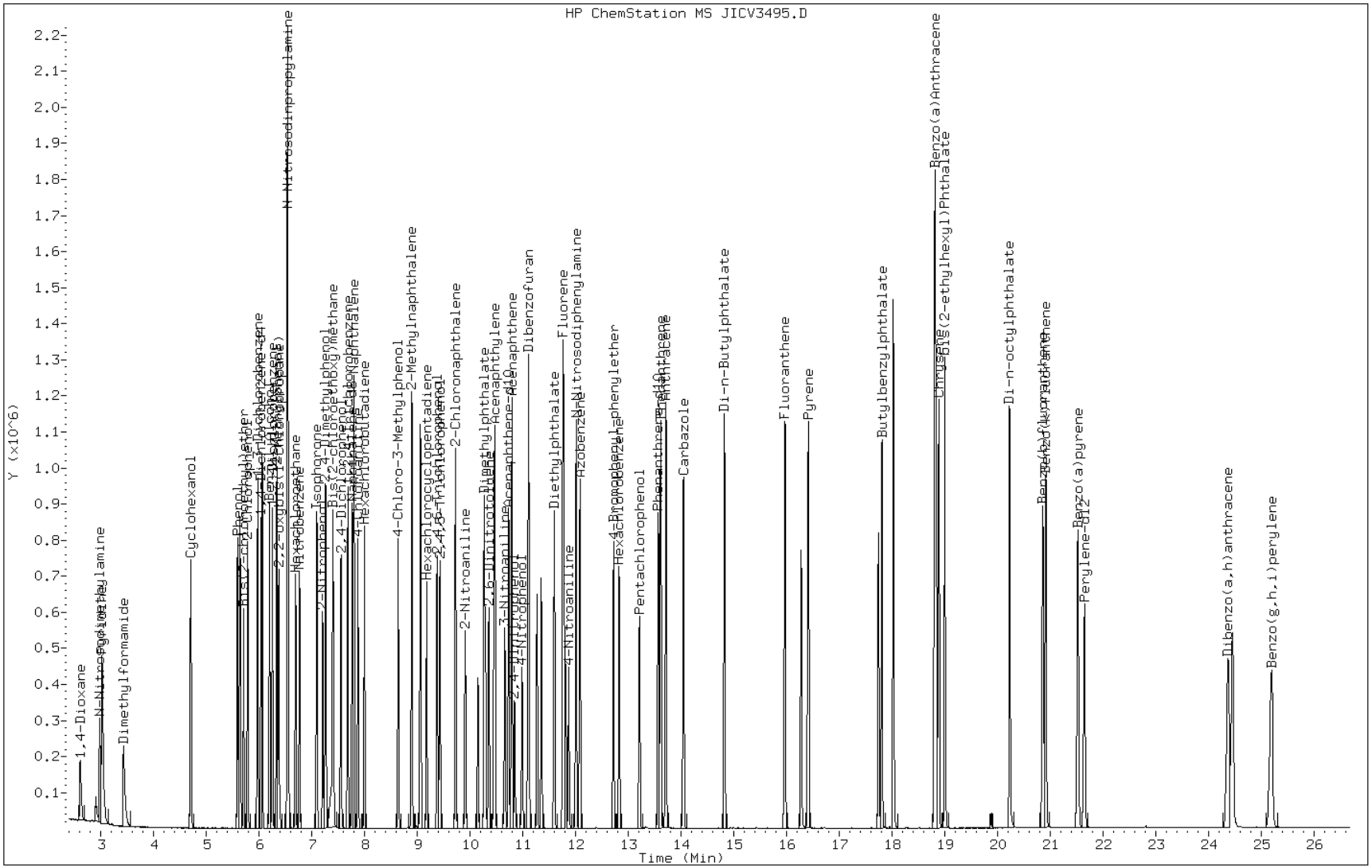
H - Operator selected an alternate compound hit.

Data File: JICV3495.D

Date: 22-AUG-2012 13:22

Client ID: ICV-012026 Instrument: MSJ.i

Sample Info: ICV-012026 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICV 160-9562/15 Calibration Date: 08/22/2012 17:20

Instrument ID: MSJ Calib Start Date: 08/22/2012 13:56

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 16:46

Lab File ID: JICV3502.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aniline	Ave	2.039	1.976	0.0100	48.5	50.0	-3.1	30.0
Benzidine	Ave	0.6715	0.6525	0.0100	48.6	50.0	-2.8	30.0
3,3'-Dimethylbenzidine	Ave	0.6768	0.6451	0.0100	47.7	50.0	-4.7	30.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JICV3502.D
Lab Smp Id: ICV-012068 Client Smp ID: ICV-012068
Inj Date : 22-AUG-2012 17:20
Operator : MAK Inst ID: MSJ.i
Smp Info : ICV-012068
Misc Info : 12068
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\8270J_625.m
Meth Date : 23-Aug-2012 14:18 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 16 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270BICV.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

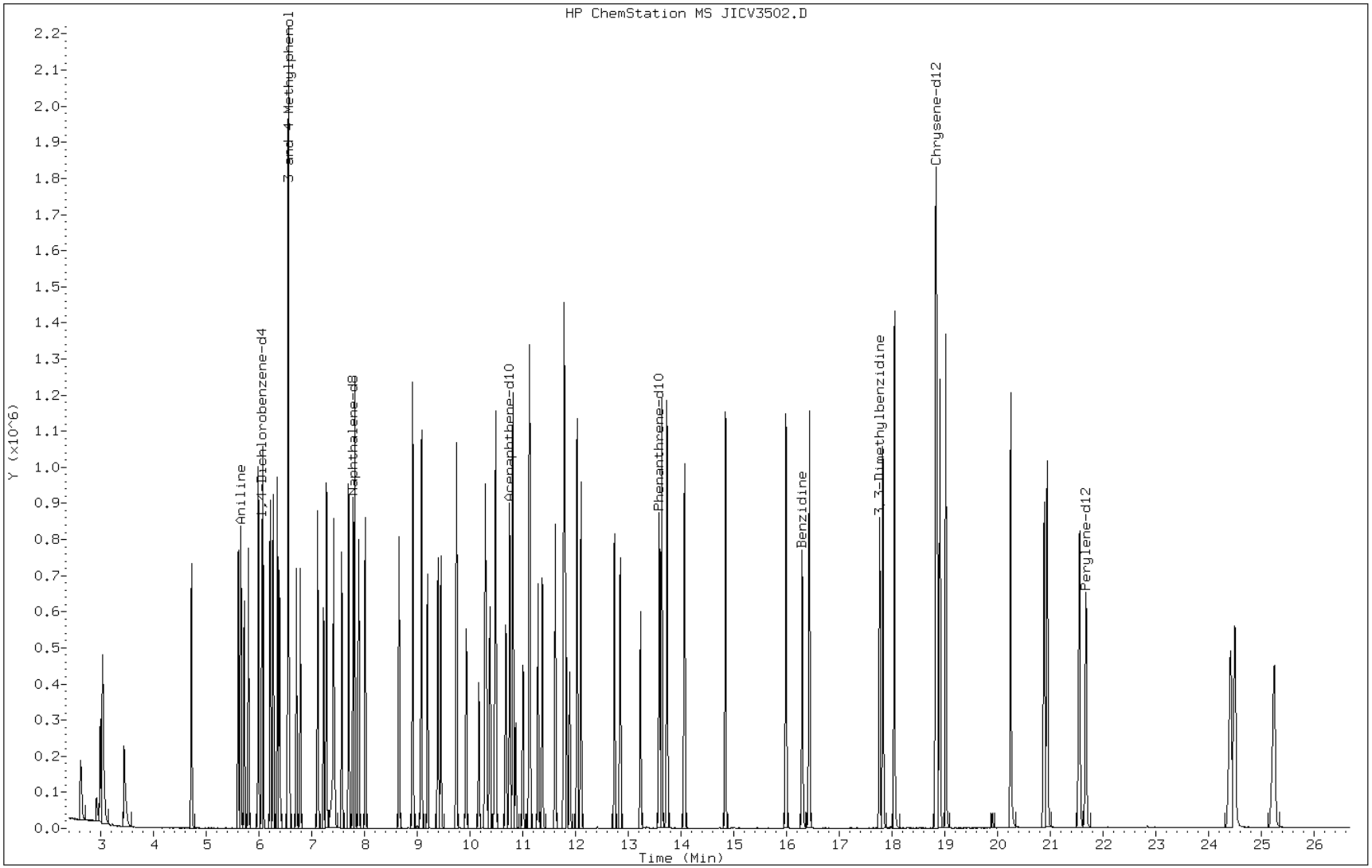
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
17 Aniline	93	5.648	5.648	(0.934)	407106	50.0000	48.46
* 22 1,4-Dichlorobenzene-d4	152	6.048	6.048	(1.000)	164832	40.0000	
29 3 and 4-Methylphenol	107	6.550	6.550	(1.083)	528302	100.000	92.81
* 48 Naphthalene-d8	136	7.779	7.779	(1.000)	600805	40.0000	
* 82 Acenaphthene-d10	164	10.748	10.748	(1.000)	333683	40.0000	
* 121 Phenanthrene-d10	188	13.579	13.579	(1.000)	590265	40.0000	
135 Benzidine	184	16.292	16.292	(0.864)	502071	50.0000	48.58
145 3,3-Dimethylbenzidine	212	17.761	17.761	(0.942)	496427	50.0000	47.66
* 153 Chrysene-d12	240	18.851	18.851	(1.000)	615598	40.0000	
* 166 Perylene-d12	264	21.671	21.671	(1.000)	555178	40.0000	

Data File: JICV3502.D

Date: 22-AUG-2012 17:20

Client ID: ICV-012068 Instrument: MSJ.i

Sample Info: ICV-012068 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9564/3 Calibration Date: 08/22/2012 18:15

Instrument ID: MSJ Calib Start Date: 08/22/2012 09:59

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 12:48

Lab File ID: JCCV3505.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.6082	0.6288	0.0100	51.7	50.0	3.4	20.0
N-Nitrosodimethylamine	Ave	0.8928	0.8850	0.0100	49.6	50.0	-0.9	20.0
Pyridine	Ave	1.522	1.554	0.0100	51.1	50.0	2.1	20.0
Dimethylformamide	Ave	0.9824	0.9695	0.0100	49.3	50.0	-1.3	20.0
Cyclohexanol	Ave	1.429	1.416	0.0100	49.6	50.0	-0.9	20.0
Phenol	Ave	1.754	1.707	0.8000	48.7	50.0	-2.7	20.0
Bis(2-chloroethyl)ether	Ave	1.352	1.310	0.7000	48.5	50.0	-3.1	20.0
2-Chlorophenol	Ave	1.347	1.334	0.8000	49.5	50.0	-0.9	20.0
1,3-Dichlorobenzene	Ave	1.518	1.488	0.0100	49.0	50.0	-2.0	20.0
1,4-Dichlorobenzene	Ave	1.565	1.531	0.0100	48.9	50.0	-2.2	20.0
Benzyl alcohol	Ave	0.9010	0.8909	0.0100	49.4	50.0	-1.1	20.0
1,2-Dichlorobenzene	Ave	1.447	1.417	0.0100	49.0	50.0	-2.1	20.0
2-Methylphenol	Ave	1.220	1.196	0.6000	49.0	50.0	-2.0	20.0
bis (2-chloroisopropyl) ether	Ave	2.279	2.234	0.0100	49.0	50.0	-2.0	20.0
N-Nitrosodi-n-propylamine	Ave	0.9672	0.9744	0.5000	50.4	50.0	0.7	20.0
Hexachloroethane	Ave	0.5793	0.5921	0.3000	51.1	50.0	2.2	20.0
Nitrobenzene	Ave	0.4305	0.4328	0.2000	50.3	50.0	0.5	20.0
Isophorone	Ave	0.7241	0.7216	0.4000	49.8	50.0	-0.3	20.0
2-Nitrophenol	Ave	0.1950	0.1935	0.1000	49.6	50.0	-0.8	20.0
2,4-Dimethylphenol	Ave	0.3841	0.3926	0.2000	51.1	50.0	2.2	20.0
Bis(2-chloroethoxy)methane	Ave	0.4139	0.4136	0.0100	50.0	50.0	-0.0	20.0
Benzoic acid	Ave	0.2176	0.2067	0.0100	47.5	50.0	-5.0	20.0
2,4-Dichlorophenol	Ave	0.2900	0.2864	0.0100	49.4	50.0	-1.2	20.0
1,2,4-Trichlorobenzene	Ave	0.3225	0.3205	0.0100	49.7	50.0	-0.6	20.0
Naphthalene	Ave	1.075	1.058	0.7000	49.2	50.0	-1.6	20.0
4-Chloroaniline	Ave	0.4241	0.4206	0.0100	49.6	50.0	-0.8	20.0
Hexachlorobutadiene	Ave	0.2006	0.2030	0.0100	50.6	50.0	1.2	20.0
4-Chloro-3-methylphenol	Ave	0.3309	0.3319	0.2000	50.2	50.0	0.3	20.0
2-Methylnaphthalene	Ave	0.6890	0.6780	0.4000	49.2	50.0	-1.6	20.0
Hexachlorocyclopentadiene	Ave	0.2929	0.2931	0.0500	50.0	50.0	0.0	20.0
2,4,6-Trichlorophenol	Ave	0.3918	0.3857	0.2000	49.2	50.0	-1.6	20.0
2,4,5-Trichlorophenol	Ave	0.4136	0.4122	0.2000	49.8	50.0	-0.3	20.0
2-Chloronaphthalene	Ave	1.188	1.168	0.8000	49.1	50.0	-1.7	20.0
2-Nitroaniline	Ave	0.3993	0.3999	0.0100	50.1	50.0	0.2	20.0
Dimethyl phthalate	Ave	1.318	1.300	0.0100	49.3	50.0	-1.4	20.0
2,6-Dinitrotoluene	Ave	0.2997	0.3007	0.2000	50.2	50.0	0.3	20.0
Acenaphthylene	Ave	1.839	1.785	0.9000	48.5	50.0	-2.9	20.0
3-Nitroaniline	Ave	0.3203	0.3157	0.0100	49.3	50.0	-1.4	20.0
Acenaphthene	Ave	1.171	1.151	0.0100	49.1	50.0	-1.7	20.0
2,4-Dinitrophenol	Ave	0.2058	0.1872	0.0100	45.5	50.0	-9.0	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCVIS 160-9564/3 Calibration Date: 08/22/2012 18:15

Instrument ID: MSJ Calib Start Date: 08/22/2012 09:59

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 12:48

Lab File ID: JCCV3505.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Nitrophenol	Ave	0.2133	0.2209	0.0100	51.8	50.0	3.6	20.0
2,4-Dinitrotoluene	Ave	0.4027	0.3971	0.2000	49.3	50.0	-1.4	20.0
Dibenzofuran	Ave	1.644	1.608	0.8000	48.9	50.0	-2.2	20.0
Diethyl phthalate	Ave	1.321	1.313	0.0100	49.7	50.0	-0.6	20.0
Fluorene	Ave	1.344	1.321	0.9000	49.2	50.0	-1.7	20.0
4-Chlorophenyl phenyl ether	Ave	0.6405	0.6297	0.4000	49.2	50.0	-1.7	20.0
4-Nitroaniline	Ave	0.3212	0.3221	0.0100	50.1	50.0	0.3	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1494	0.1472	0.0100	49.3	50.0	-1.4	20.0
N-Nitrosodiphenylamine	Ave	0.5232	0.5175	0.0100	49.5	50.0	-1.1	20.0
Azobenzene	Ave	0.8482	0.8491	0.0100	50.1	50.0	0.1	20.0
4-Bromophenyl phenyl ether	Ave	0.2105	0.2129	0.0100	50.6	50.0	1.1	20.0
Hexachlorobenzene	Ave	0.2261	0.2255	0.1000	49.9	50.0	-0.3	20.0
Pentachlorophenol	Ave	0.1560	0.1575	0.0500	50.5	50.0	0.9	20.0
Phenanthrene	Ave	1.074	1.071	0.7000	49.9	50.0	-0.2	20.0
Anthracene	Ave	1.085	1.081	0.7000	49.8	50.0	-0.3	20.0
Carbazole	Ave	0.9522	0.9532	0.0100	50.1	50.0	0.1	20.0
Di-n-butyl phthalate	Ave	1.233	1.222	0.0100	49.6	50.0	-0.8	20.0
Fluoranthene	Ave	1.113	1.114	0.6000	50.0	50.0	0.0	20.0
Pyrene	Ave	1.177	1.147	0.6000	48.7	50.0	-2.5	20.0
Butyl benzyl phthalate	Ave	0.5386	0.5210	0.0100	48.4	50.0	-3.3	20.0
3,3'-Dichlorobenzidine	Ave	0.4089	0.3889	0.0100	47.6	50.0	-4.9	20.0
Benzo[a]anthracene	Ave	0.998	0.9655	0.8000	48.4	50.0	-3.3	20.0
Chrysene	Ave	1.026	0.9881	0.7000	48.1	50.0	-3.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7305	0.7019	0.0100	48.0	50.0	-3.9	20.0
Di-n-octyl phthalate	Ave	1.259	1.183	0.0100	47.0	50.0	-6.0	20.0
Benzo[b]fluoranthene	Ave	1.118	1.107	0.7000	49.5	50.0	-1.0	20.0
Benzo[k]fluoranthene	Ave	1.113	1.109	0.7000	49.8	50.0	-0.3	20.0
Benzo[a]pyrene	Ave	1.102	1.093	0.7000	49.6	50.0	-0.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.054	0.9703	0.5000	46.0	50.0	-7.9	20.0
Dibenz(a,h)anthracene	Ave	1.090	1.012	0.4000	46.4	50.0	-7.1	20.0
Benzo[g,h,i]perylene	Ave	1.076	1.029	0.5000	47.8	50.0	-4.4	20.0
2-Fluorophenol (Surr)	Ave	1.279	1.248	0.0100	48.8	50.0	-2.5	20.0
Phenol-d5 (Surr)	Ave	1.599	1.555	0.0100	48.6	50.0	-2.7	20.0
Nitrobenzene-d5 (Surr)	Ave	0.4169	0.4128	0.0100	49.5	50.0	-1.0	20.0
2-Fluorobiphenyl (Surr)	Ave	1.359	1.340	0.0100	49.3	50.0	-1.4	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1910	0.1902	0.0100	49.8	50.0	-0.5	20.0
Terphenyl-d14 (Surr)	Ave	0.7447	0.7195	0.0100	48.3	50.0	-3.4	20.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\JCCV3505.D
Lab Smp Id: CCVIS-012052 Client Smp ID: CCVIS-012052
Inj Date : 22-AUG-2012 18:15
Operator : MAK Inst ID: MSJ.i
Smp Info : CCVIS-012052
Misc Info : 12052
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\8270J_625.m
Meth Date : 22-Aug-2012 20:09 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	1 1,4-Dioxane	88	2.604	2.604	(0.432)	102956	50.0000	51.69
	4 N-Nitrosodimethylamine	74	2.973	2.973	(0.493)	144909	50.0000	49.56
	3 Pyridine	79	3.015	3.015	(0.500)	254459	50.0000	51.05
	5 Dimethylformamide	44	3.421	3.421	(0.568)	158744	50.0000	49.34
$	10 2-Fluorophenol	112	4.511	4.511	(0.748)	204320	50.0000	48.77
	11 Cyclohexanol	57	4.698	4.698	(0.779)	231812	50.0000	49.55
	19 Bis(2-chloroethyl)ether	93	5.697	5.697	(0.945)	214489	50.0000	48.46
$	15 Phenol-d5	99	5.568	5.568	(0.924)	254654	50.0000	48.64
	16 Phenol	94	5.584	5.584	(0.926)	279449	50.0000	48.66
	20 2-Chlorophenol	128	5.777	5.777	(0.958)	218472	50.0000	49.53
	21 1,3-Dichlorobenzene	146	5.964	5.964	(0.989)	243692	50.0000	49.01
*	22 1,4-Dichlorobenzene-d4	152	6.028	6.028	(1.000)	130989	40.0000	
	23 1,4-Dichlorobenzene	146	6.049	6.049	(1.004)	250650	50.0000	48.89
	26 1,2-Dichlorobenzene	146	6.241	6.241	(1.035)	231963	50.0000	48.96
	25 Benzyl Alcohol	108	6.188	6.188	(1.027)	145871	50.0000	49.44
	28 2,2-oxybis(1-Chloropropane)	45	6.364	6.364	(1.056)	365790	50.0000	49.01
	27 2-Methylphenol	108	6.321	6.321	(1.049)	195889	50.0000	49.02
	35 Hexachloroethane	117	6.679	6.679	(1.108)	96949	50.0000	51.10
	32 N-Nitrosodinpropylamine	70	6.535	6.535	(1.084)	159541	50.0000	50.37
M	215 Total Cresols	100				195889	150.000	49.02
$	36 Nitrobenzene-d5	82	6.733	6.733	(0.868)	245200	50.0000	49.51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
37	Nitrobenzene	77	6.759	6.759	(0.871)	257084	50.0000	50.26
39	Isophorone	82	7.085	7.085	(0.913)	428648	50.0000	49.82
40	2-Nitrophenol	139	7.197	7.197	(0.928)	114959	50.0000	49.62
41	2,4-Dimethylphenol	107	7.251	7.251	(0.935)	233184	50.0000	51.10
42	Bis(2-chloroethoxy)methane	93	7.390	7.390	(0.953)	245672	50.0000	49.96
45	2,4-Dichlorophenol	162	7.539	7.539	(0.972)	170119	50.0000	49.38
47	1,2,4-Trichlorobenzene	180	7.673	7.673	(0.989)	190352	50.0000	49.68
* 48	Naphthalene-d8	136	7.758	7.758	(1.000)	475217	40.0000	
44	Benzoic Acid	122	7.400	7.400	(0.954)	122761	50.0000	47.48
50	Naphthalene	128	7.785	7.785	(1.003)	628253	50.0000	49.21
51	4-Chloroaniline	127	7.865	7.865	(1.014)	249845	50.0000	49.58
54	Hexachlorobutadiene	225	7.988	7.988	(1.030)	120587	50.0000	50.59
62	2-Methylnaphthalene	142	8.885	8.885	(1.145)	402725	50.0000	49.20
59	4-Chloro-3-Methylphenol	107	8.623	8.623	(1.112)	197182	50.0000	50.16
66	Hexachlorocyclopentadiene	237	9.163	9.163	(0.855)	96740	50.0000	50.02
67	2,4,6-Trichlorophenol	196	9.361	9.361	(0.873)	127319	50.0000	49.22
68	2,4,5-Trichlorophenol	196	9.414	9.414	(0.878)	136081	50.0000	49.83
$ 69	2-Fluorobiphenyl (Surr)	172	9.515	9.515	(0.888)	442242	50.0000	49.28
72	2-Chloronaphthalene	162	9.713	9.713	(0.906)	385451	50.0000	49.14
73	2-Nitroaniline	65	9.895	9.895	(0.923)	132024	50.0000	50.08
76	Dimethylphthalate	163	10.252	10.252	(0.957)	429122	50.0000	49.31
79	Acenaphthylene	152	10.455	10.455	(0.976)	589249	50.0000	48.54
80	2,6-Dinitrotoluene	165	10.343	10.343	(0.965)	99265	50.0000	50.16
* 82	Acenaphthene-d10	164	10.717	10.717	(1.000)	264090	40.0000	
83	Acenaphthene	153	10.776	10.776	(1.005)	379913	50.0000	49.13
81	3-Nitroaniline	138	10.648	10.648	(0.994)	104204	50.0000	49.28
84	2,4-Dinitrophenol	184	10.835	10.835	(1.011)	61795	50.0000	45.48
86	Dibenzofuran	168	11.102	11.102	(1.036)	530919	50.0000	48.92
88	2,4-Dinitrotoluene	165	11.086	11.086	(1.034)	131089	50.0000	49.30
85	4-Nitrophenol	109	10.974	10.974	(1.024)	72936	50.0000	51.78
93	Diethylphthalate	149	11.588	11.588	(1.081)	433590	50.0000	49.72
94	Fluorene	166	11.748	11.748	(1.096)	436108	50.0000	49.16
95	4-Chlorophenyl-phenylether	204	11.769	11.769	(1.098)	207854	50.0000	49.15
98	4-Nitroaniline	138	11.796	11.796	(1.101)	106326	50.0000	50.14
99	4,6-Dinitro-2-methylphenol	198	11.855	11.855	(0.875)	84592	50.0000	49.28
100	N-Nitrosodiphenylamine	169	11.994	11.994	(0.885)	297358	50.0000	49.46
102	Azobenzene	77	12.068	12.068	(0.890)	487897	50.0000	50.06
$ 104	2,4,6-Tribromophenol	330	12.207	12.207	(1.139)	62780	50.0000	49.77
109	4-Bromophenyl-phenylether	248	12.709	12.709	(0.938)	122301	50.0000	50.56
112	Hexachlorobenzene	284	12.816	12.816	(0.946)	129544	50.0000	49.86
117	Pentachlorophenol	266	13.195	13.195	(0.974)	90477	50.0000	50.46
* 121	Phenanthrene-d10	188	13.553	13.553	(1.000)	459670	40.0000	
122	Phenanthrene	178	13.601	13.601	(1.004)	615417	50.0000	49.88
124	Anthracene	178	13.703	13.703	(1.011)	621405	50.0000	49.83
126	Carbazole	167	14.034	14.034	(1.035)	547719	50.0000	50.05
129	Di-n-Butylphthalate	149	14.808	14.808	(1.093)	702368	50.0000	49.59
134	Fluoranthene	202	15.957	15.957	(1.177)	639924	50.0000	50.04
137	Pyrene	202	16.395	16.395	(0.871)	677151	50.0000	48.73
$ 139	Terphenyl-d14	244	16.769	16.769	(0.891)	424773	50.0000	48.30
146	Butylbenzylphthalate	149	17.794	17.794	(0.946)	307618	50.0000	48.37
150	Benzo(a)Anthracene	228	18.798	18.798	(0.999)	570044	50.0000	48.36
* 153	Chrysene-d12	240	18.820	18.820	(1.000)	472324	40.0000	
152	3,3'-Dichlorobenzidine	252	18.793	18.793	(0.999)	229590	50.0000	47.56
154	Chrysene	228	18.868	18.868	(1.003)	583360	50.0000	48.14

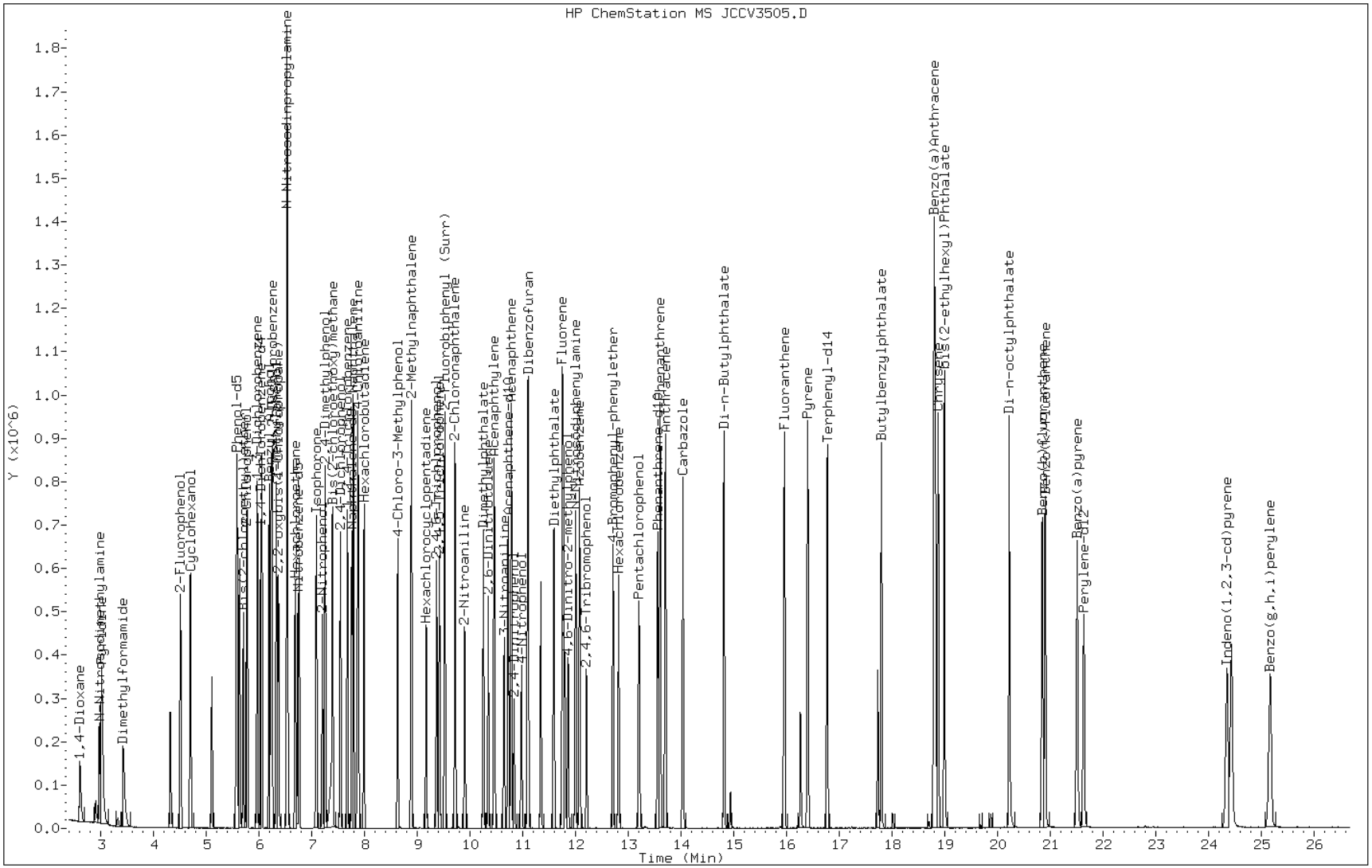
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
155	bis(2-ethylhexyl)Phthalate	149	18.985	18.985	(1.009)	414426	50.0000	48.04
158	Di-n-octylphthalate	149	20.214	20.214	(1.074)	698251	50.0000	46.98
160	Benzo(b)fluoranthene	252	20.844	20.844	(0.964)	575221	50.0000	49.52
161	Benzo(k)fluoranthene	252	20.897	20.897	(0.966)	576371	50.0000	49.83
165	Benzo(a)pyrene	252	21.506	21.506	(0.994)	567877	50.0000	49.60
* 166	Perylene-d12	264	21.629	21.629	(1.000)	415593	40.0000	
173	Indeno(1,2,3-cd)pyrene	276	24.348	24.348	(1.126)	504080	50.0000	46.04
174	Dibenzo(a,h)anthracene	278	24.433	24.433	(1.130)	525908	50.0000	46.43
177	Benzo(g,h,i)perylene	276	25.165	25.165	(1.163)	534800	50.0000	47.82

Data File: JCCV3505.D

Date: 22-AUG-2012 18:15

Client ID: CCVIS-012052 Instrument: MSJ.i

Sample Info: CCVIS-012052 Operator: MAK



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: CCV 160-9564/4 Calibration Date: 08/22/2012 18:49

Instrument ID: MSJ Calib Start Date: 08/22/2012 13:56

GC Column: RXI5SiiMS ID: 0.25(mm) Calib End Date: 08/22/2012 16:46

Lab File ID: JCCV3506.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Aniline	Ave	2.039	2.084	0.0100	51.1	50.0	2.2	20.0
3 & 4 Methylphenol	Ave	1.381	1.399	0.6000	101	100	1.3	20.0
Benzidine	Ave	0.6715	0.7041	0.0100	52.4	50.0	4.9	20.0
3,3'-Dimethylbenzidine	Ave	0.6768	0.6975	0.0100	51.5	50.0	3.0	20.0

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\8270B\JCCV3506.D
Lab Smp Id: CCV-012064 Client Smp ID: CCV-012064
Inj Date : 22-AUG-2012 18:49
Operator : MAK Inst ID: MSJ.i
Smp Info : CCV-012064
Misc Info : 12064
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\8270B\8270J_625.m
Meth Date : 22-Aug-2012 20:08 MSJ.i Quant Type: ISTD
Cal Date : 22-AUG-2012 14:30 Cal File: JICL3497.D
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8270B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

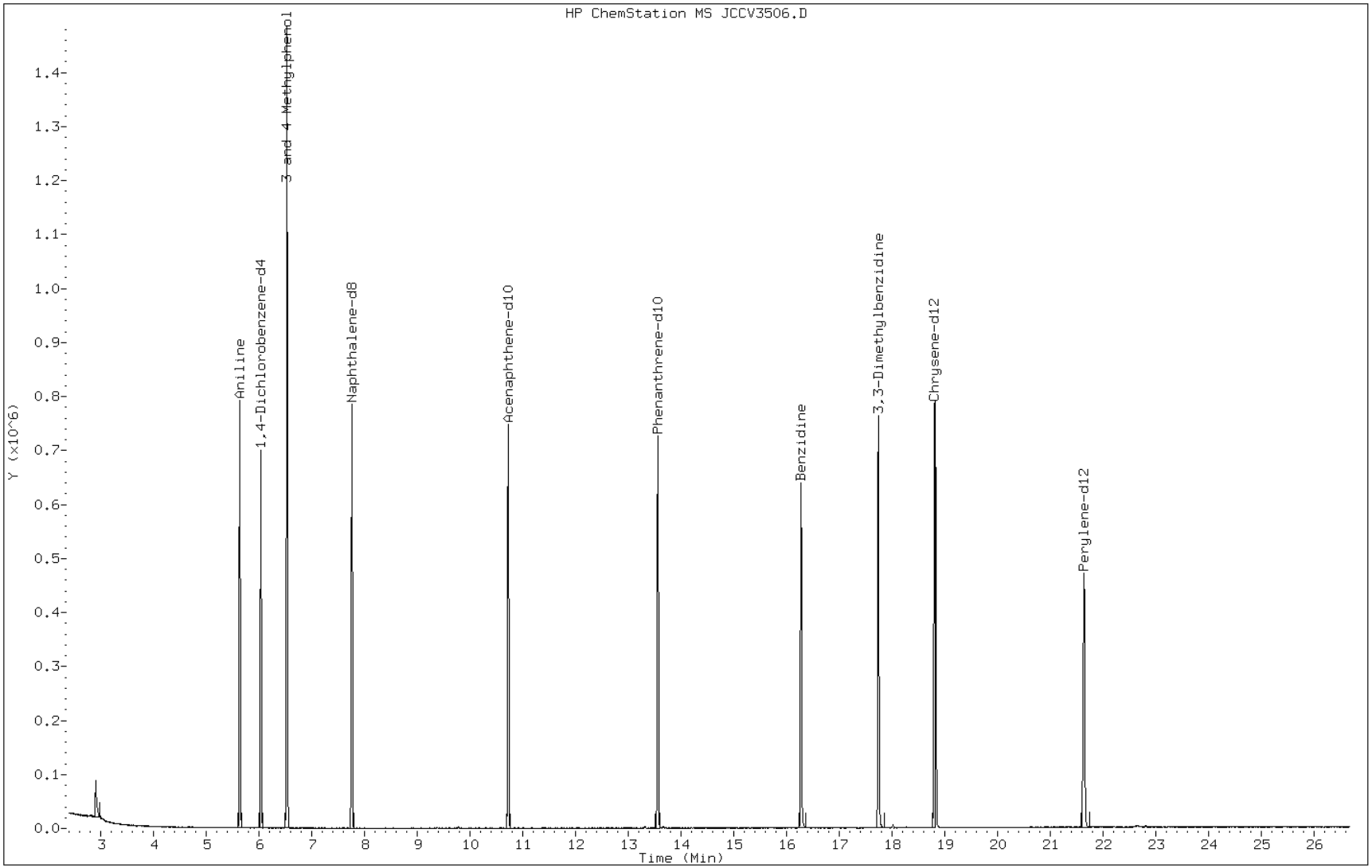
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	17 Aniline	93	5.633	5.633	(0.934)	360917	50.0000	51.10
*	22 1,4-Dichlorobenzene-d4	152	6.033	6.033	(1.000)	138577	40.0000	
	29 3 and 4-Methylphenol	107	6.525	6.525	(1.081)	484776	100.000	101.3
M	215 Total Cresols	100				484776	150.000	101.3
*	48 Naphthalene-d8	136	7.758	7.758	(1.000)	510167	40.0000	
*	82 Acenaphthene-d10	164	10.723	10.723	(1.000)	272328	40.0000	
*	121 Phenanthrene-d10	188	13.559	13.559	(1.000)	466283	40.0000	
	135 Benzidine	184	16.272	16.272	(0.865)	411896	50.0000	52.43
	145 3,3-Dimethylbenzidine	212	17.735	17.735	(0.942)	408002	50.0000	51.52
*	153 Chrysene-d12	240	18.820	18.820	(1.000)	467985	40.0000	
*	166 Perylene-d12	264	21.634	21.634	(1.000)	415235	40.0000	

Data File: JCCV3506.D

Date: 22-AUG-2012 18:49

Client ID: CCV-012064 Instrument: MSJ.i

Sample Info: CCV-012064 Operator: MAK



TestAmerica St. Louis

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JDFT2871.D
Lab Smp Id: DFTPP-010691 Client Smp ID: DFTPP-010691
Inj Date : 24-JUL-2012 12:10
Operator : MAK Inst ID: MSJ.i
Smp Info : DFTPP-010691
Misc Info : 10691
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\sw846tun.m
Meth Date : 24-Jul-2012 12:33 kuessnerm Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: SLSVOA01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

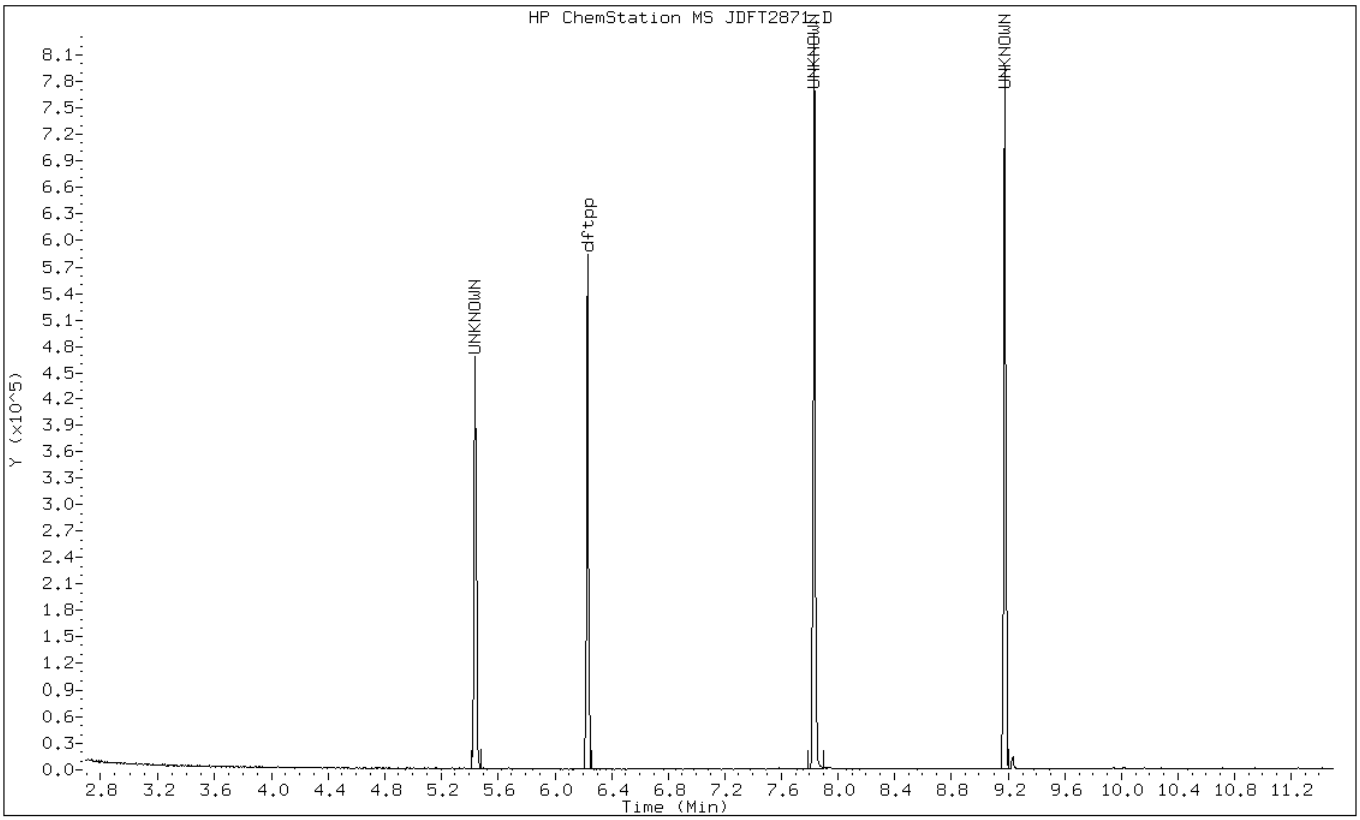
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 dftpp	198	6.230	6.230	(0.000)	53160		

Data File: JDFT2871.D

Date: 24-JUL-2012 12:10

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK



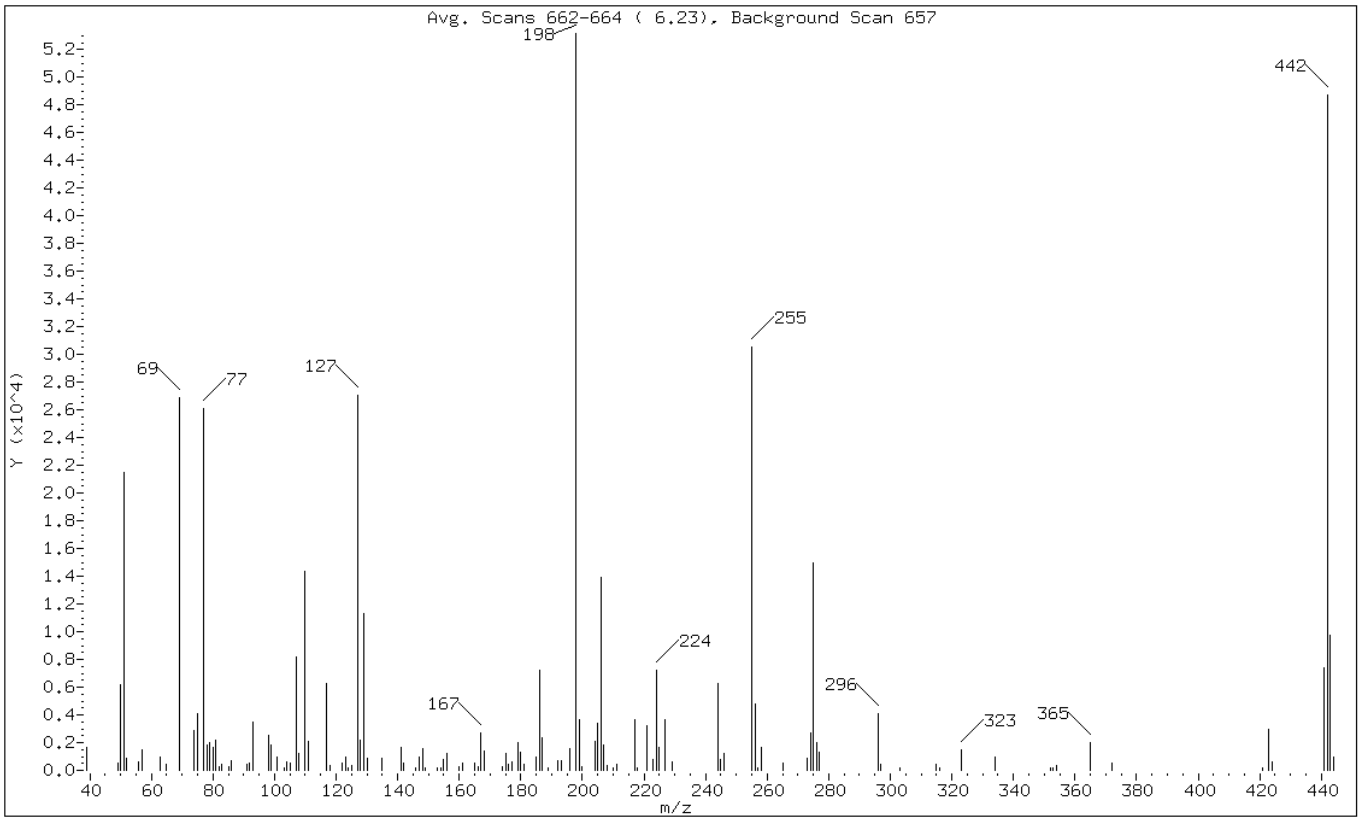
Data File: JDFT2871.D

Date: 24-JUL-2012 12:10

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.36
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	50.59
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	50.97
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.87
275	10.00 - 30.00% of mass 198	28.21
365	Greater than 1.00% of mass 198	3.73
441	Present, but less than mass 443	13.95
442	Greater than 40.00% of mass 198	91.66
443	17.00 - 23.00% of mass 442	18.31 (19.97)

Data File: JDFT2871.D

Date: 24-JUL-2012 12:10

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

Data File: \\Slsvr01\BNA_LAB\MSJ.i\J120724A.B\JDFT2871.D
Spectrum: Avg. Scans 662-664 (6.23), Background Scan 657
Location of Maximum: 198.00
Number of points: 125

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	1660	110.00	14341	177.00	589	255.00	30512
49.00	488	111.00	2102	179.00	1958	256.00	4781
50.00	6159	117.00	6302	180.00	1276	257.00	195
51.00	21456	118.00	352	181.00	421	258.00	1635
52.00	874	122.00	513	185.00	973	265.00	549
56.00	633	123.00	943	186.00	7202	273.00	891
57.00	1520	124.00	178	187.00	2312	274.00	2675
63.00	989	125.00	367	189.00	175	275.00	14995
65.00	394	127.00	27096	192.00	695	276.00	2040
69.00	26896	128.00	2169	193.00	691	277.00	1305
74.00	2836	129.00	11350	196.00	1606	296.00	4051
75.00	4076	130.00	890	198.00	53160	297.00	452
77.00	26088	135.00	864	199.00	3653	303.00	188
78.00	1825	141.00	1635	200.00	265	315.00	451
79.00	2036	142.00	500	204.00	2095	316.00	174
80.00	1641	146.00	204	205.00	3385	323.00	1458
81.00	2172	147.00	921	206.00	13938	334.00	952
82.00	262	148.00	1567	207.00	1837	352.00	170
83.00	415	149.00	168	208.00	389	353.00	214
85.00	219	153.00	182	210.00	190	354.00	364
86.00	702	154.00	182	211.00	467	365.00	1983
91.00	432	155.00	795	217.00	3675	372.00	554
92.00	491	156.00	1216	218.00	179	421.00	183
93.00	3470	160.00	248	221.00	3196	423.00	2968
98.00	2511	161.00	515	223.00	758	424.00	632
99.00	1835	165.00	513	224.00	7222	441.00	7417
101.00	981	166.00	223	225.00	1684	442.00	48728
103.00	203	167.00	2708	227.00	3630	443.00	9733
104.00	612	168.00	1365	229.00	641	444.00	922
105.00	505	174.00	281	244.00	6245		
107.00	8176	175.00	1237	245.00	793		
108.00	1236	176.00	419	246.00	1181		

TestAmerica St. Louis

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JDFT3399.D
Lab Smp Id: DFTPP-010691 Client Smp ID: DFTPP-010691
Inj Date : 15-AUG-2012 13:45
Operator : MAK Inst ID: MSJ.i
Smp Info : DFTPP-010691
Misc Info : 10691
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\sw846tun.m
Meth Date : 15-Aug-2012 14:22 kuessnerm Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: SLSVOA01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

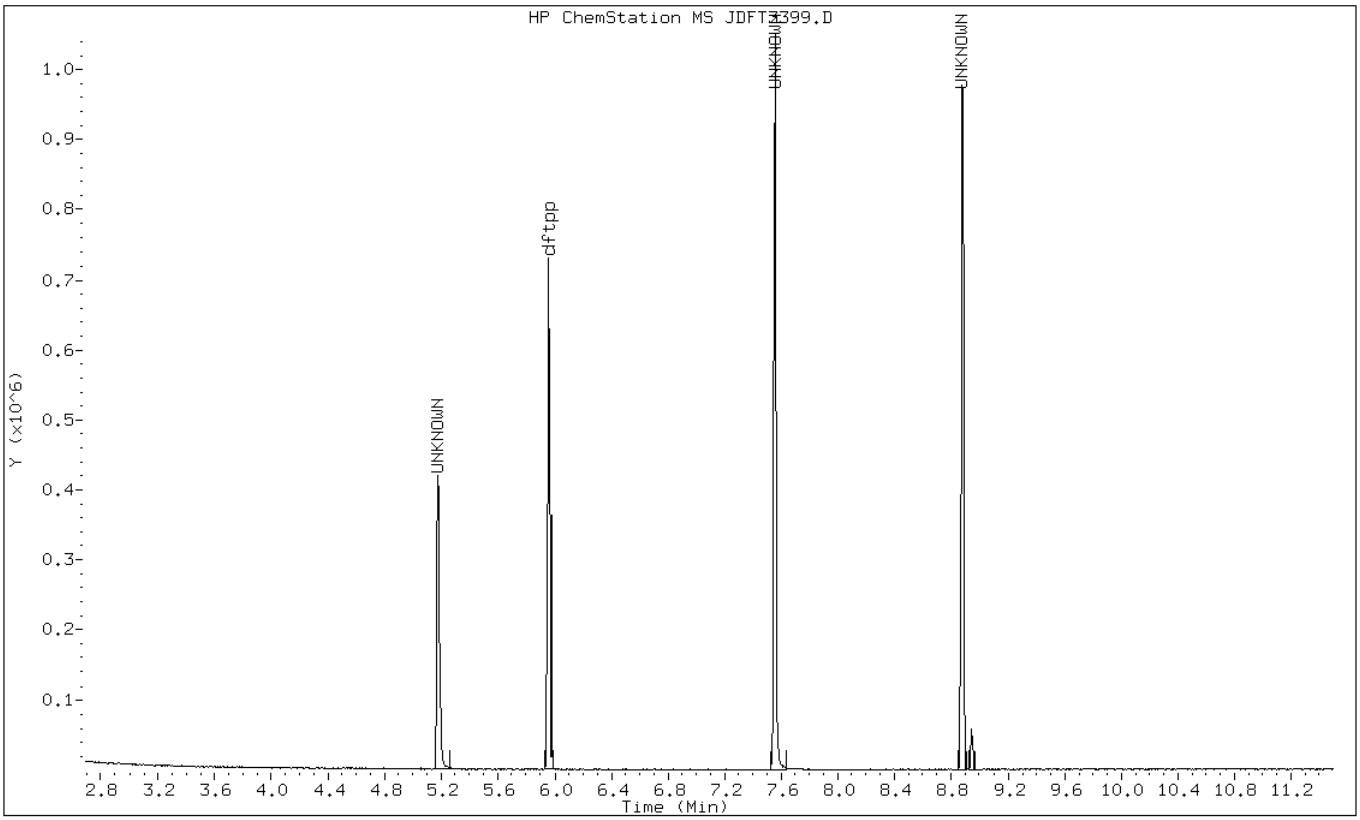
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 dftpp	198	5.963	5.960	(0.000)	67752		

Data File: JDFT3399.D

Date: 15-AUG-2012 13:45

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK



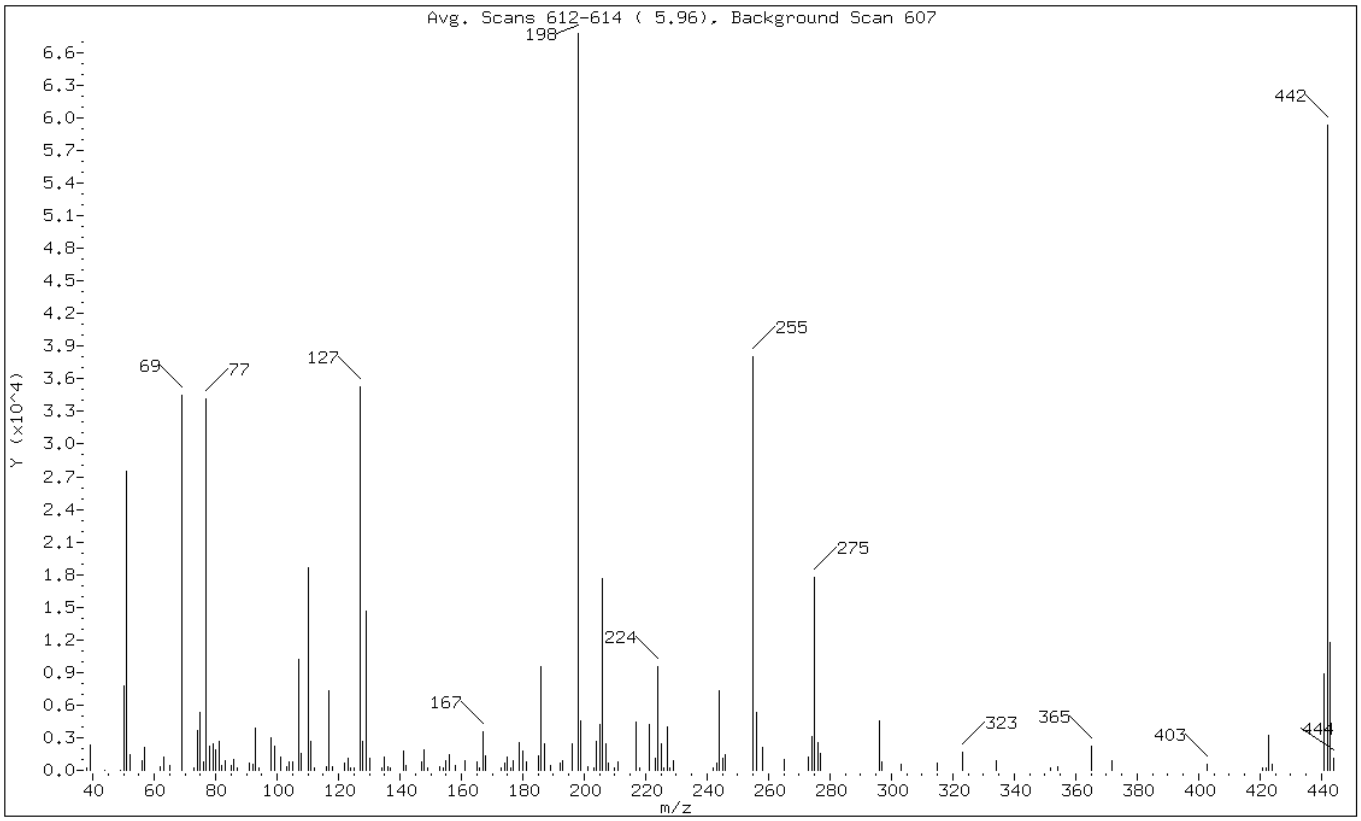
Data File: JDFT3399.D

Date: 15-AUG-2012 13:45

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	40.67
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	50.83
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	52.06
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.68
275	10.00 - 30.00% of mass 198	26.23
365	Greater than 1.00% of mass 198	3.35
441	Present, but less than mass 443	13.06
442	Greater than 40.00% of mass 198	87.52
443	17.00 - 23.00% of mass 442	17.35 (19.83)

Data File: JDFT3399.D

Date: 15-AUG-2012 13:45

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

Data File: \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JDFT3399.D
Spectrum: Avg. Scans 612-614 (5.96), Background Scan 607
Location of Maximum: 198.00
Number of points: 141

m/z	Y	m/z	Y	m/z	Y	m/z	Y
38.00	223	105.00	805	173.00	208	242.00	235
39.00	2380	107.00	10214	174.00	716	243.00	646
44.00	6	108.00	1529	175.00	1264	244.00	7345
49.00	40	110.00	18648	176.00	180	245.00	1079
50.00	7763	111.00	2702	177.00	927	246.00	1465
51.00	27552	112.00	188	179.00	2545	255.00	38040
52.00	1414	116.00	339	180.00	1798	256.00	5349
56.00	836	117.00	7340	181.00	778	258.00	2156
57.00	2065	118.00	310	185.00	1345	265.00	954
62.00	388	122.00	703	186.00	9535	273.00	1253
63.00	1258	123.00	1108	187.00	2385	274.00	3094
65.00	442	124.00	216	189.00	456	275.00	17768
69.00	34440	125.00	167	192.00	676	276.00	2502
73.00	173	127.00	35272	193.00	878	277.00	1583
74.00	3673	128.00	2639	196.00	2479	296.00	4549
75.00	5314	129.00	14648	198.00	67752	297.00	735
76.00	752	130.00	1092	199.00	4529	303.00	548
77.00	34112	134.00	192	201.00	383	315.00	623
78.00	2238	135.00	1173	203.00	215	323.00	1628
79.00	2490	136.00	348	204.00	2647	334.00	925
80.00	1921	137.00	178	205.00	4244	352.00	191
81.00	2606	141.00	1821	206.00	17600	354.00	375
82.00	390	142.00	402	207.00	2441	365.00	2268
83.00	833	147.00	829	208.00	679	372.00	844
85.00	424	148.00	1901	210.00	167	403.00	514
86.00	997	149.00	209	211.00	783	421.00	195
87.00	180	153.00	362	217.00	4461	422.00	176
91.00	611	154.00	200	218.00	185	423.00	3167
92.00	508	155.00	857	221.00	4218	424.00	506
93.00	3910	156.00	1441	223.00	1075	441.00	8848
94.00	185	158.00	423	224.00	9528	442.00	59296
98.00	2962	161.00	843	225.00	2393	443.00	11758
99.00	2213	165.00	790	226.00	168	444.00	1090
101.00	1272	166.00	182	227.00	3941		
103.00	371	167.00	3522	228.00	245		
104.00	817	168.00	1328	229.00	870		

TestAmerica St. Louis

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JDFT3486.D
Lab Smp Id: DFTPP-010691 Client Smp ID: DFTPP-010691
Inj Date : 22-AUG-2012 08:06
Operator : MAK Inst ID: MSJ.i
Smp Info : DFTPP-010691
Misc Info : 10691
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\sw846tun.m
Meth Date : 22-Aug-2012 08:26 kuessnerm Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: SLSVOA01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

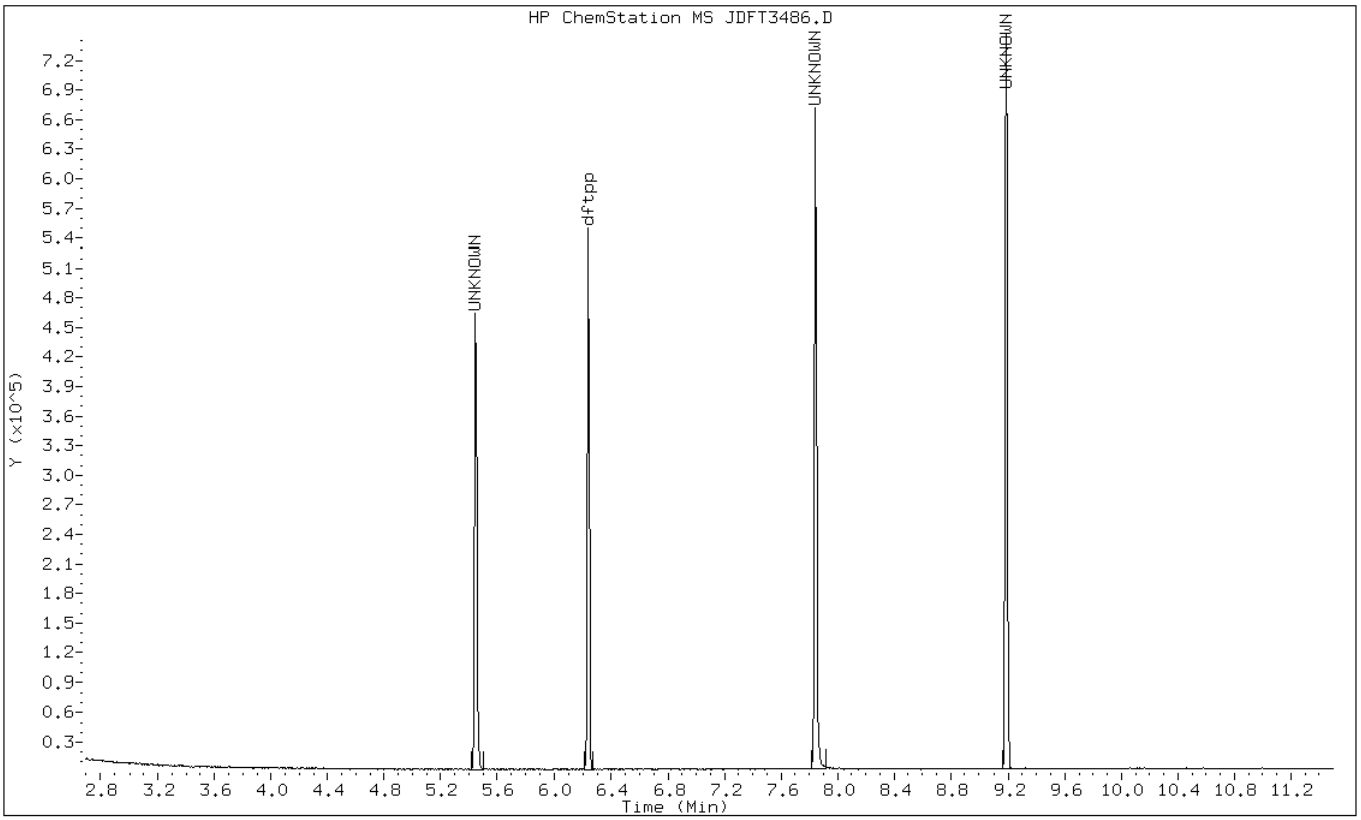
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 dftpp	198	6.237	6.230	(0.000)	52608		

Data File: JDFT3486.D

Date: 22-AUG-2012 08:06

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK



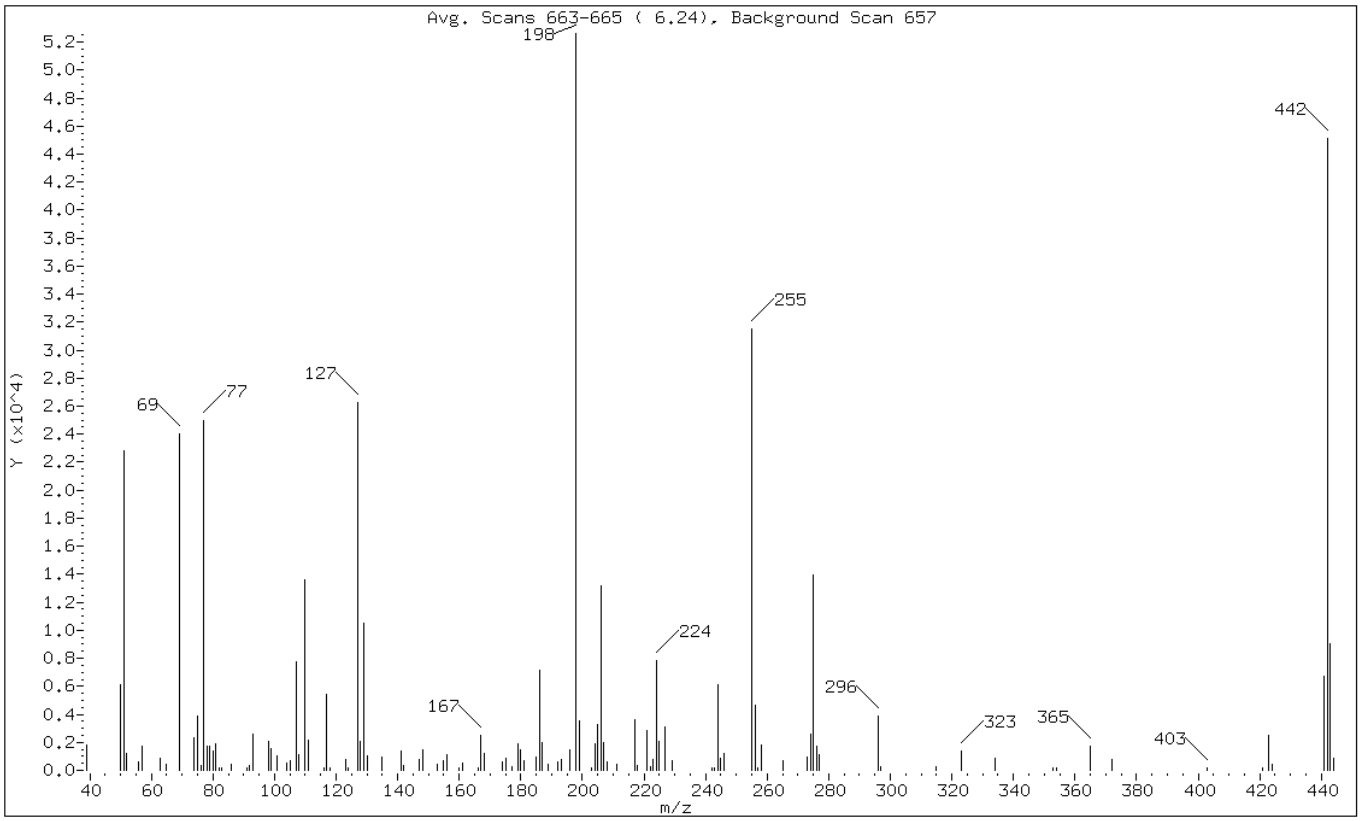
Data File: JDFT3486.D

Date: 22-AUG-2012 08:06

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	43.40
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	45.61
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	49.85
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.64
275	10.00 - 30.00% of mass 198	26.57
365	Greater than 1.00% of mass 198	3.34
441	Present, but less than mass 443	12.80
442	Greater than 40.00% of mass 198	85.78
443	17.00 - 23.00% of mass 442	17.20 (20.05)

Data File: JDFT3486.D

Date: 22-AUG-2012 08:06

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

Data File: \\Slsvr01\BNA_LAB\MSJ.i\J120822A.B\JDFT3486.D
Spectrum: Avg. Scans 663-665 (6.24), Background Scan 657
Location of Maximum: 198.00
Number of points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	1800	110.00	13606	185.00	940	255.00	31488
50.00	6156	111.00	2184	186.00	7124	256.00	4626
51.00	22832	116.00	168	187.00	2019	257.00	178
52.00	1220	117.00	5446	189.00	390	258.00	1815
56.00	582	118.00	214	192.00	588	265.00	701
57.00	1683	123.00	802	193.00	740	273.00	938
63.00	820	124.00	192	196.00	1495	274.00	2556
65.00	394	127.00	26224	198.00	52608	275.00	13978
69.00	23992	128.00	2055	199.00	3494	276.00	1725
74.00	2335	129.00	10509	203.00	176	277.00	1131
75.00	3900	130.00	1035	204.00	1865	296.00	3844
76.00	321	135.00	945	205.00	3260	297.00	243
77.00	24984	141.00	1394	206.00	13188	315.00	251
78.00	1742	142.00	349	207.00	1976	323.00	1338
79.00	1685	147.00	748	208.00	632	334.00	846
80.00	1342	148.00	1463	211.00	420	353.00	172
81.00	1852	153.00	413	217.00	3654	354.00	167
82.00	196	155.00	706	218.00	350	365.00	1756
83.00	170	156.00	1131	221.00	2808	372.00	792
86.00	469	160.00	169	222.00	300	403.00	184
91.00	183	161.00	503	223.00	804	421.00	168
92.00	366	166.00	212	224.00	7874	423.00	2506
93.00	2604	167.00	2499	225.00	2075	424.00	471
98.00	2024	168.00	1229	227.00	3126	441.00	6734
99.00	1554	174.00	609	229.00	649	442.00	45128
101.00	1039	175.00	861	242.00	168	443.00	9049
104.00	538	177.00	240	243.00	167	444.00	848
105.00	658	179.00	1858	244.00	6071		
107.00	7720	180.00	1433	245.00	818		
108.00	1104	181.00	706	246.00	1188		

TestAmerica St. Louis

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\JDFT3504.D
Lab Smp Id: DFTPP-010691 Client Smp ID: DFTPP-010691
Inj Date : 22-AUG-2012 17:57
Operator : MAK Inst ID: MSJ.i
Smp Info : DFTPP-010691
Misc Info : 10691
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120822B.B\sw846tun.m
Meth Date : 22-Aug-2012 08:26 kuessnerm Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 2 QC Sample: DFTPP
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14
Processing Host: SLSVOA01

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	1.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	1.000	Injection Volume
Cpnd Variable		Local Compound Variable

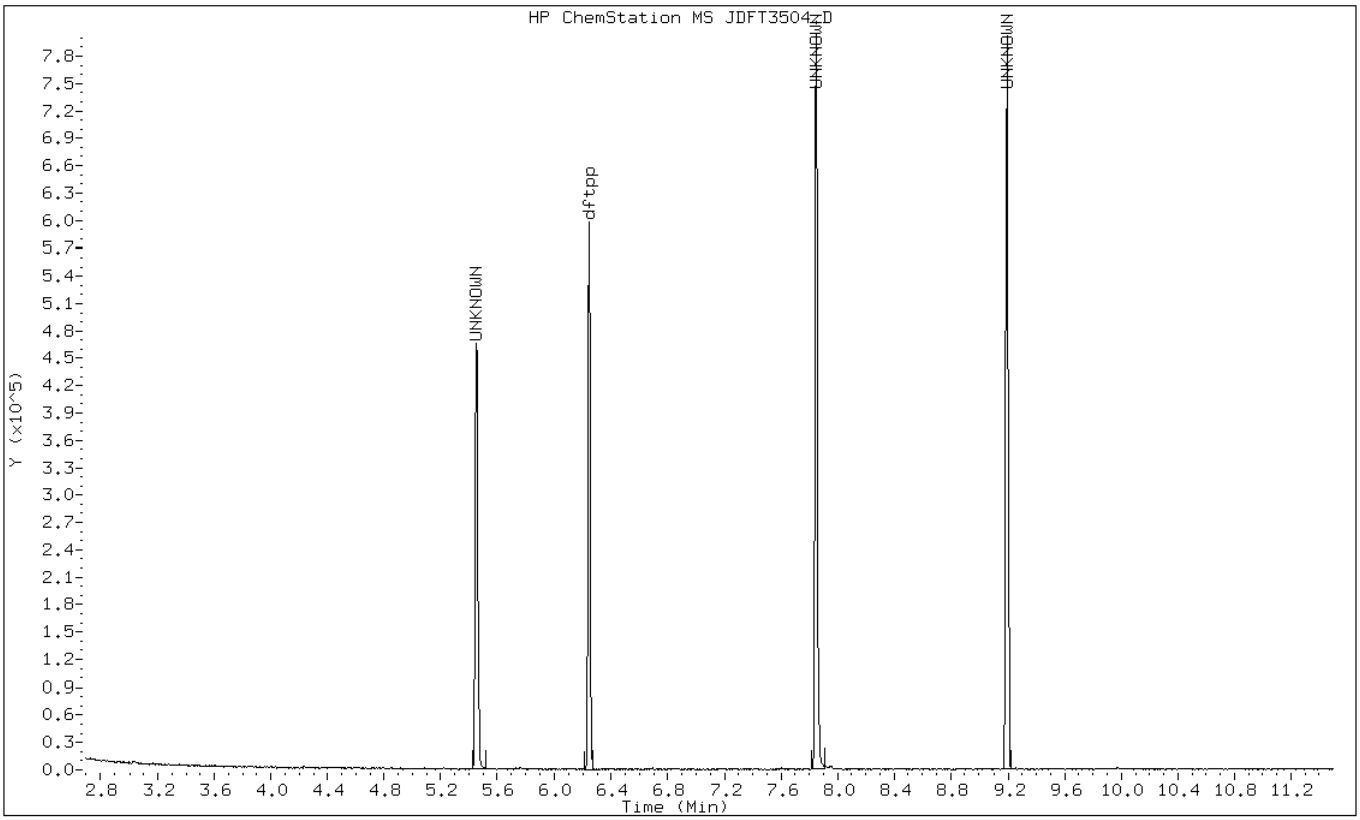
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 dftpp	198	6.243	6.230	(0.000)	57640		

Data File: JDFT3504.D

Date: 22-AUG-2012 17:57

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK



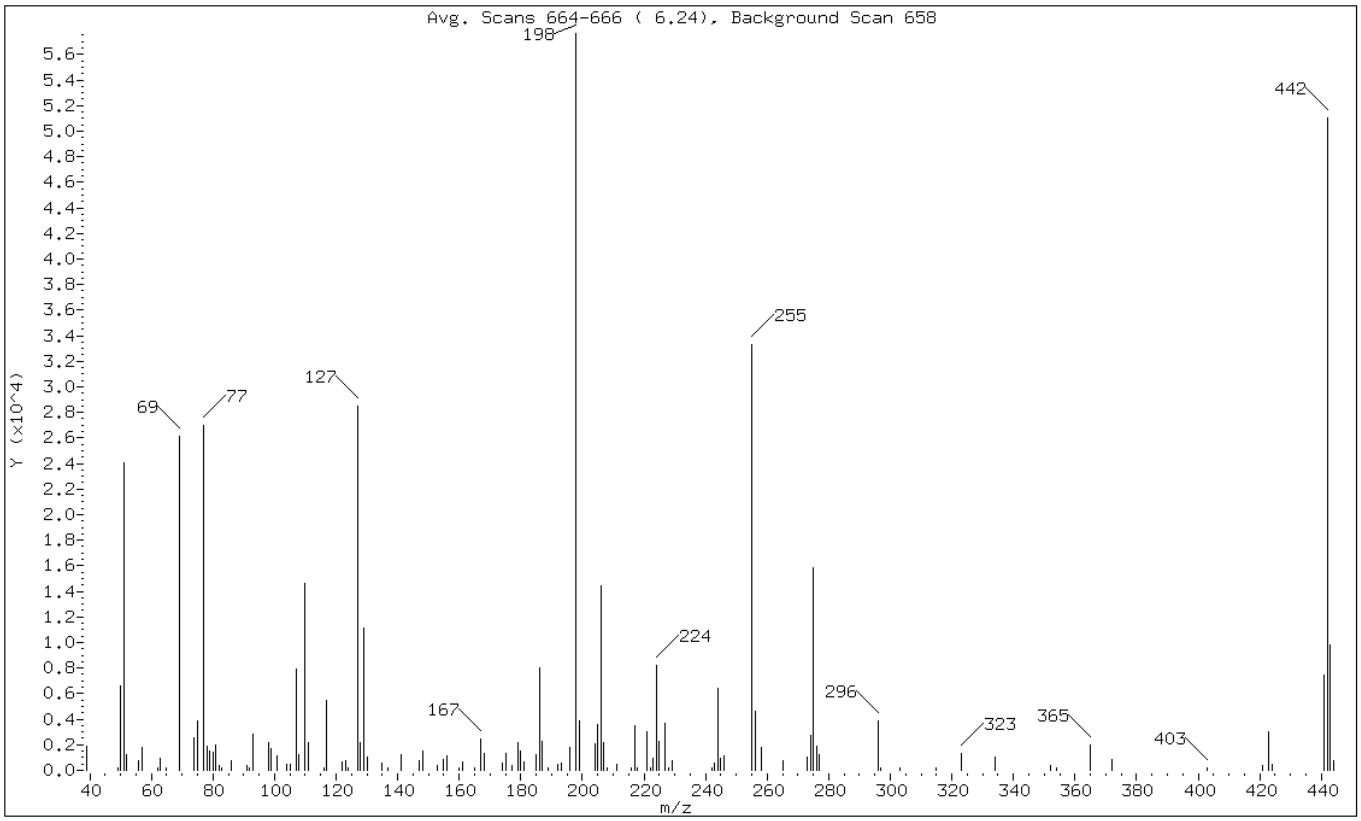
Data File: JDFT3504.D

Date: 22-AUG-2012 17:57

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 60.00% of mass 198	41.71
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	45.37
70	Less than 2.00% of mass 69	0.00 (0.00)
127	40.00 - 60.00% of mass 198	49.38
197	Less than 1.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.72
275	10.00 - 30.00% of mass 198	27.44
365	Greater than 1.00% of mass 198	3.42
441	Present, but less than mass 443	12.88
442	Greater than 40.00% of mass 198	88.58
443	17.00 - 23.00% of mass 442	17.10 (19.30)

Data File: JDFT3504.D

Date: 22-AUG-2012 17:57

Client ID: DFTPP-010691 Instrument: MSJ.i

Sample Info: DFTPP-010691 Operator: MAK

Data File: \\slsvr01\BNA_LAB\MSJ.i\J120822B.B\JDFT3504.D
Spectrum: Avg. Scans 664-666 (6.24), Background Scan 658
Location of Maximum: 198.00
Number of points: 119

m/z	Y	m/z	Y	m/z	Y	m/z	Y
39.00	1849	108.00	1260	181.00	671	245.00	941
49.00	167	110.00	14585	185.00	1238	246.00	1135
50.00	6562	111.00	2214	186.00	7984	255.00	33264
51.00	24040	116.00	178	187.00	2268	256.00	4659
52.00	1227	117.00	5478	189.00	218	258.00	1746
56.00	766	122.00	615	192.00	482	265.00	764
57.00	1780	123.00	790	193.00	552	273.00	1080
62.00	228	124.00	198	196.00	1817	274.00	2752
63.00	916	127.00	28464	198.00	57640	275.00	15819
65.00	171	128.00	2166	199.00	3871	276.00	1877
69.00	26152	129.00	11137	204.00	2118	277.00	1247
74.00	2505	130.00	1030	205.00	3580	296.00	3895
75.00	3841	135.00	612	206.00	14397	297.00	234
77.00	26952	137.00	189	207.00	2169	303.00	221
78.00	1928	141.00	1257	208.00	212	315.00	202
79.00	1528	147.00	717	211.00	494	323.00	1314
80.00	1370	148.00	1514	216.00	169	334.00	1079
81.00	1935	153.00	381	217.00	3512	352.00	354
82.00	398	155.00	802	218.00	174	354.00	177
83.00	174	156.00	1104	221.00	3059	365.00	1971
86.00	712	160.00	190	222.00	189	372.00	811
91.00	352	161.00	672	223.00	928	403.00	186
92.00	186	165.00	186	224.00	8211	421.00	360
93.00	2796	167.00	2471	225.00	2243	423.00	2974
98.00	2169	168.00	1362	227.00	3678	424.00	431
99.00	1706	174.00	579	228.00	207	441.00	7425
101.00	1155	175.00	1278	229.00	745	442.00	51056
104.00	516	177.00	357	242.00	177	443.00	9854
105.00	491	179.00	2149	243.00	551	444.00	801
107.00	7905	180.00	1500	244.00	6368		

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-8998/1-A

Matrix: Water | Lab File ID: JBLK3402.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		10	1.0
208-96-8	Acenaphthylene	ND		10	1.0
120-12-7	Anthracene	ND		10	1.0
56-55-3	Benzo[a]anthracene	ND		10	1.0
205-99-2	Benzo[b]fluoranthene	ND		10	1.0
207-08-9	Benzo[k]fluoranthene	ND		10	1.0
191-24-2	Benzo[g,h,i]perylene	ND		10	1.0
50-32-8	Benzo[a]pyrene	ND		10	1.0
111-91-1	Bis(2-chloroethoxy)methane	ND		10	1.0
111-44-4	Bis(2-chloroethyl)ether	ND		10	1.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		10	1.0
101-55-3	4-Bromophenyl phenyl ether	ND		10	1.0
85-68-7	Butyl benzyl phthalate	ND		10	1.0
86-74-8	Carbazole	ND		10	1.0
106-47-8	4-Chloroaniline	ND		10	2.2
59-50-7	4-Chloro-3-methylphenol	ND		10	1.0
91-58-7	2-Chloronaphthalene	ND		10	1.0
95-57-8	2-Chlorophenol	ND		10	1.0
7005-72-3	4-Chlorophenyl phenyl ether	ND		10	1.0
218-01-9	Chrysene	ND		10	1.0
53-70-3	Dibenz(a,h)anthracene	ND		10	1.0
132-64-9	Dibenzofuran	ND		10	1.0
84-74-2	Di-n-butyl phthalate	ND		10	1.0
95-50-1	1,2-Dichlorobenzene	ND		10	1.0
541-73-1	1,3-Dichlorobenzene	ND		10	1.0
106-46-7	1,4-Dichlorobenzene	ND		10	1.0
91-94-1	3,3'-Dichlorobenzidine	ND		50	1.3
120-83-2	2,4-Dichlorophenol	ND		10	1.1
84-66-2	Diethyl phthalate	ND		10	1.0
105-67-9	2,4-Dimethylphenol	ND		10	1.0
131-11-3	Dimethyl phthalate	ND		10	1.0
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	1.0
51-28-5	2,4-Dinitrophenol	ND		50	2.0
121-14-2	2,4-Dinitrotoluene	ND		10	1.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-8998/1-A

Matrix: Water | Lab File ID: JBLK3402.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	ND		10	2.2
117-84-0	Di-n-octyl phthalate	ND		10	1.0
206-44-0	Fluoranthene	ND		10	1.0
86-73-7	Fluorene	ND		10	1.0
118-74-1	Hexachlorobenzene	ND		10	1.0
87-68-3	Hexachlorobutadiene	ND		10	1.0
77-47-4	Hexachlorocyclopentadiene	ND		10	1.0
67-72-1	Hexachloroethane	ND		10	1.0
193-39-5	Indeno[1,2,3-cd]pyrene	ND		10	1.0
78-59-1	Isophorone	ND		10	1.0
91-57-6	2-Methylnaphthalene	ND		10	1.0
95-48-7	2-Methylphenol	ND		10	1.0
15831-10-4	3 & 4 Methylphenol	ND		20	2.0
91-20-3	Naphthalene	ND		10	1.0
88-74-4	2-Nitroaniline	ND		10	1.0
99-09-2	3-Nitroaniline	ND		10	1.0
100-01-6	4-Nitroaniline	ND		10	1.0
98-95-3	Nitrobenzene	ND		10	1.1
88-75-5	2-Nitrophenol	ND		10	1.0
100-02-7	4-Nitrophenol	ND		10	2.0
86-30-6	N-Nitrosodiphenylamine	ND		10	1.0
621-64-7	N-Nitrosodi-n-propylamine	ND		10	1.0
108-60-1	2,2'-oxybis[1-chloropropane]	ND		10	1.0
87-86-5	Pentachlorophenol	ND		10	1.3
85-01-8	Phenanthrene	ND		10	1.0
108-95-2	Phenol	ND		10	2.0
129-00-0	Pyrene	ND		10	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		10	1.0
95-95-4	2,4,5-Trichlorophenol	ND		10	1.0
88-06-2	2,4,6-Trichlorophenol	ND		10	1.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 160-8998/1-A

Matrix: Water | Lab File ID: JBLK3402.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	55		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	71		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	87		45-99
4165-62-2	Phenol-d5 (Surr)	34		10-70
1718-51-0	Terphenyl-d14 (Surr)	98		53-126
321-60-8	2-Fluorobiphenyl (Surr)	79		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JBLK3402.D
Lab Smp Id: MB 160-8998/1-A Client Smp ID: MB 160-8998/1-A
Inj Date : 15-AUG-2012 15:15
Operator : MAK Inst ID: MSJ.i
Smp Info : MB 160-8998/1-A
Misc Info : MB 160-8998/1-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFLCS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 10 2-Fluorophenol	112	4.294	4.277	(0.742)	238913	41.0693	41.07
$ 15 Phenol-d5	99	5.352	5.346	(0.925)	183410	25.4198	25.42
* 22 1,4-Dichlorobenzene-d4	152	5.784	5.773	(1.000)	186338	40.0000	
$ 36 Nitrobenzene-d5	82	6.474	6.467	(0.866)	321901	43.7186	43.72
* 48 Naphthalene-d8	136	7.478	7.466	(1.000)	697040	40.0000	
$ 69 2-Fluorobiphenyl (Surr)	172	9.219	9.203	(0.886)	479038	39.4320	39.43
* 82 Acenaphthene-d10	164	10.400	10.389	(1.000)	354214	40.0000	
$ 104 2,4,6-Tribromophenol	330	11.880	11.868	(1.142)	88470	53.3194	53.32
* 121 Phenanthrene-d10	188	13.215	13.204	(1.000)	528655	40.0000	
$ 139 Terphenyl-d14	244	16.426	16.409	(0.890)	414779	49.2170	49.22(R)
* 153 Chrysene-d12	240	18.456	18.450	(1.000)	448433	40.0000	
* 166 Perylene-d12	264	21.175	21.164	(1.000)	416509	40.0000	

QC Flag Legend

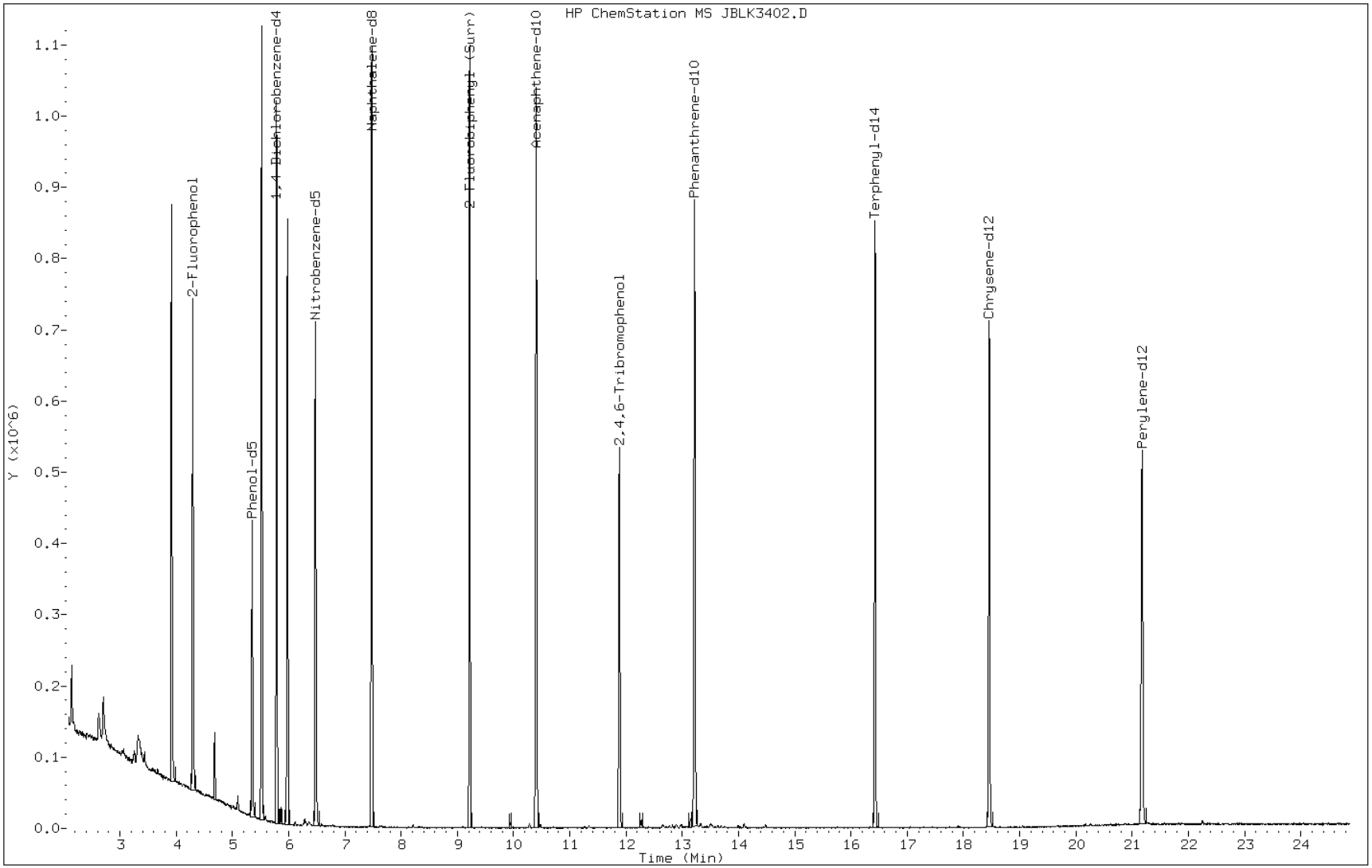
R - Spike/Surrogate failed recovery limits.

Data File: JBLK3402.D

Date: 15-AUG-2012 15:15

Client ID: MB 160-8998/1-A Instrument: MSJ.i

Sample Info: MB 160-8998/1-A Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-8998/2-A

Matrix: Water | Lab File ID: JLCS3403.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	82.5		10	1.0
208-96-8	Acenaphthylene	83.9		10	1.0
120-12-7	Anthracene	84.8		10	1.0
56-55-3	Benzo[a]anthracene	97.5		10	1.0
205-99-2	Benzo[b]fluoranthene	87.7		10	1.0
207-08-9	Benzo[k]fluoranthene	91.3		10	1.0
191-24-2	Benzo[g,h,i]perylene	99.0		10	1.0
50-32-8	Benzo[a]pyrene	85.3		10	1.0
111-91-1	Bis(2-chloroethoxy)methane	83.3		10	1.0
111-44-4	Bis(2-chloroethyl)ether	86.9		10	1.0
117-81-7	Bis(2-ethylhexyl) phthalate	90.0		10	1.0
101-55-3	4-Bromophenyl phenyl ether	84.3		10	1.0
85-68-7	Butyl benzyl phthalate	85.8		10	1.0
86-74-8	Carbazole	87.7		10	1.0
106-47-8	4-Chloroaniline	55.7		10	2.2
59-50-7	4-Chloro-3-methylphenol	75.2		10	1.0
91-58-7	2-Chloronaphthalene	80.2		10	1.0
95-57-8	2-Chlorophenol	77.6		10	1.0
7005-72-3	4-Chlorophenyl phenyl ether	80.8		10	1.0
218-01-9	Chrysene	86.5		10	1.0
53-70-3	Dibenz(a,h)anthracene	99.1		10	1.0
132-64-9	Dibenzofuran	80.3		10	1.0
84-74-2	Di-n-butyl phthalate	87.3		10	1.0
95-50-1	1,2-Dichlorobenzene	77.3		10	1.0
541-73-1	1,3-Dichlorobenzene	75.8		10	1.0
106-46-7	1,4-Dichlorobenzene	75.1		10	1.0
91-94-1	3,3'-Dichlorobenzidine	67.7		50	1.3
120-83-2	2,4-Dichlorophenol	76.1		10	1.1
84-66-2	Diethyl phthalate	83.8		10	1.0
105-67-9	2,4-Dimethylphenol	78.3		10	1.0
131-11-3	Dimethyl phthalate	83.0		10	1.0
534-52-1	4,6-Dinitro-2-methylphenol	80.1		10	1.0
51-28-5	2,4-Dinitrophenol	71.3		50	2.0
121-14-2	2,4-Dinitrotoluene	87.0		10	1.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-8998/2-A

Matrix: Water | Lab File ID: JLCS3403.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	84.1		10	2.2
117-84-0	Di-n-octyl phthalate	91.2		10	1.0
206-44-0	Fluoranthene	88.7		10	1.0
86-73-7	Fluorene	81.5		10	1.0
118-74-1	Hexachlorobenzene	83.7		10	1.0
87-68-3	Hexachlorobutadiene	75.3		10	1.0
77-47-4	Hexachlorocyclopentadiene	97.7		10	1.0
67-72-1	Hexachloroethane	79.8		10	1.0
193-39-5	Indeno[1,2,3-cd]pyrene	88.4		10	1.0
78-59-1	Isophorone	79.8		10	1.0
91-57-6	2-Methylnaphthalene	78.1		10	1.0
95-48-7	2-Methylphenol	68.8		10	1.0
15831-10-4	3 & 4 Methylphenol	69.9		20	2.0
91-20-3	Naphthalene	78.4		10	1.0
88-74-4	2-Nitroaniline	86.2		10	1.0
99-09-2	3-Nitroaniline	70.5		10	1.0
100-01-6	4-Nitroaniline	78.7		10	1.0
98-95-3	Nitrobenzene	85.3		10	1.1
88-75-5	2-Nitrophenol	80.2		10	1.0
100-02-7	4-Nitrophenol	32.4		10	2.0
86-30-6	N-Nitrosodiphenylamine	107		10	1.0
621-64-7	N-Nitrosodi-n-propylamine	89.4		10	1.0
108-60-1	2,2'-oxybis[1-chloropropane]	83.5		10	1.0
87-86-5	Pentachlorophenol	70.9		10	1.3
85-01-8	Phenanthrene	84.2		10	1.0
108-95-2	Phenol	34.8		10	2.0
129-00-0	Pyrene	82.4		10	1.0
120-82-1	1,2,4-Trichlorobenzene	76.4		10	1.0
95-95-4	2,4,5-Trichlorophenol	77.5		10	1.0
88-06-2	2,4,6-Trichlorophenol	76.6		10	1.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 160-8998/2-A

Matrix: Water | Lab File ID: JLCS3403.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1000(mL) | Date Analyzed: 08/15/2012 15:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	58		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	81		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	88		45-99
4165-62-2	Phenol-d5 (Surr)	36		10-70
1718-51-0	Terphenyl-d14 (Surr)	91		53-126
321-60-8	2-Fluorobiphenyl (Surr)	76		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JLCS3403.D
Lab Smp Id: LCS 160-8998/2-A Client Smp ID: LCS 160-8998/2-A
Inj Date : 15-AUG-2012 15:47
Operator : MAK Inst ID: MSJ.i
Smp Info : LCS 160-8998/2-A
Misc Info : LCS 160-8998/2-A
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 6 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFLCS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$	10 2-Fluorophenol	112	4.288	4.277	(0.741)	230628	43.1840	43.18
	19 Bis(2-chloroethyl)ether	93	5.458	5.452	(0.944)	475304	86.9115	86.91(R)
$	15 Phenol-d5	99	5.351	5.346	(0.925)	179257	27.0618	27.06
	16 Phenol	94	5.368	5.362	(0.928)	249718	34.8051	34.80
	20 2-Chlorophenol	128	5.538	5.527	(0.958)	444621	77.5507	77.55
	21 1,3-Dichlorobenzene	146	5.715	5.709	(0.988)	489039	75.7526	75.75(R)
*	22 1,4-Dichlorobenzene-d4	152	5.784	5.773	(1.000)	171068	40.0000	
	23 1,4-Dichlorobenzene	146	5.806	5.794	(1.004)	497159	75.0566	75.06(R)
	26 1,2-Dichlorobenzene	146	5.993	5.981	(1.036)	474558	77.2950	77.29(R)
	28 2,2-oxybis(1-Chloropropane)	45	6.115	6.104	(1.057)	480069	83.5110	83.51
	27 2-Methylphenol	108	6.094	6.083	(1.054)	342363	68.8334	68.83
	35 Hexachloroethane	117	6.415	6.409	(1.109)	198477	79.7502	79.75(R)
	32 N-Nitrosodinpropylamine	70	6.286	6.275	(1.087)	356475	89.4067	89.41
	29 3 and 4-Methylphenol	107	6.286	6.286	(1.087)	409332	69.8998	69.90
M	215 Total Cresols	100				751695	138.733	138.7
$	36 Nitrobenzene-d5	82	6.473	6.467	(0.866)	284745	43.8010	43.80
	37 Nitrobenzene	77	6.505	6.494	(0.870)	564826	85.3472	85.35
	39 Isophorone	82	6.826	6.815	(0.913)	848574	79.7930	79.79
	40 2-Nitrophenol	139	6.933	6.922	(0.927)	237653	80.2332	80.23
	41 2,4-Dimethylphenol	107	7.002	6.991	(0.936)	453486	78.2743	78.27
	42 Bis(2-chloroethoxy)methane	93	7.125	7.114	(0.953)	514202	83.2630	83.26

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	45 2,4-Dichlorophenol	162	7.280	7.269	(0.974)	341163	76.1312	76.13
	47 1,2,4-Trichlorobenzene	180	7.398	7.386	(0.989)	389409	76.3663	76.37
*	48 Naphthalene-d8	136	7.478	7.466	(1.000)	615423	40.0000	
	50 Naphthalene	128	7.510	7.498	(1.004)	1306349	78.4111	78.41
	51 4-Chloroaniline	127	7.590	7.584	(1.015)	359326	55.7221	55.72
	54 Hexachlorobutadiene	225	7.702	7.691	(1.030)	237242	75.2786	75.28
	62 2-Methylnaphthalene	142	8.589	8.578	(1.149)	839287	78.1186	78.12
	59 4-Chloro-3-Methylphenol	107	8.364	8.353	(1.119)	366367	75.1638	75.16
	66 Hexachlorocyclopentadiene	237	8.861	8.850	(0.852)	223416	97.6746	97.67(R)
	67 2,4,6-Trichlorophenol	196	9.070	9.058	(0.872)	226878	76.6344	76.63
	68 2,4,5-Trichlorophenol	196	9.134	9.122	(0.878)	237298	77.5206	77.52
$	69 2-Fluorobiphenyl (Surr)	172	9.214	9.203	(0.886)	403655	37.8726	37.87
	72 2-Chloronaphthalene	162	9.406	9.395	(0.904)	741474	80.1855	80.18
	73 2-Nitroaniline	65	9.604	9.587	(0.923)	252362	86.1781	86.18
	76 Dimethylphthalate	163	9.951	9.940	(0.957)	836527	83.0445	83.04
	79 Acenaphthylene	152	10.138	10.127	(0.975)	1177372	83.9009	83.90
	80 2,6-Dinitrotoluene	165	10.047	10.031	(0.966)	188709	84.0834	84.08
*	82 Acenaphthene-d10	164	10.400	10.389	(1.000)	310763	40.0000	
	83 Acenaphthene	153	10.459	10.447	(1.006)	753386	82.4823	82.48
	81 3-Nitroaniline	138	10.346	10.335	(0.995)	166432	70.4907	70.49
	84 2,4-Dinitrophenol	184	10.533	10.522	(1.013)	114846	71.3357	71.34
	86 Dibenzofuran	168	10.779	10.768	(1.036)	1034330	80.3373	80.34
	85 4-Nitrophenol	109	10.704	10.698	(1.029)	53994	32.3625	32.36
	88 2,4-Dinitrotoluene	165	10.779	10.768	(1.036)	258121	86.9966	87.00
	94 Fluorene	166	11.420	11.409	(1.098)	851579	81.5156	81.52
	93 Diethylphthalate	149	11.271	11.259	(1.084)	817550	83.7717	83.77
	95 4-Chlorophenyl-phenylether	204	11.447	11.436	(1.101)	415603	80.7768	80.78
	98 4-Nitroaniline	138	11.495	11.484	(1.105)	185469	78.7443	78.74
	99 4,6-Dinitro-2-methylphenol	198	11.554	11.537	(0.874)	158532	80.0553	80.06
	100 N-Nitrosodiphenylamine	169	11.677	11.665	(0.884)	688122	106.552	106.6(R)
$	104 2,4,6-Tribromophenol	330	11.880	11.868	(1.142)	87945	60.4139	60.41
	109 4-Bromophenyl-phenylether	248	12.382	12.365	(0.937)	231099	84.3403	84.34
	112 Hexachlorobenzene	284	12.483	12.467	(0.945)	241629	83.7128	83.71
	117 Pentachlorophenol	266	12.873	12.862	(0.974)	143086	70.9271	70.93
*	121 Phenanthrene-d10	188	13.215	13.204	(1.000)	496744	40.0000	
	122 Phenanthrene	178	13.263	13.252	(1.004)	1173232	84.2463	84.25
	124 Anthracene	178	13.365	13.348	(1.011)	1195362	84.7995	84.80
	126 Carbazole	167	13.707	13.690	(1.037)	1044607	87.7236	87.72
	129 Di-n-Butylphthalate	149	14.481	14.470	(1.096)	1291613	87.2787	87.28
	134 Fluoranthene	202	15.608	15.592	(1.181)	1229859	88.7049	88.70
	137 Pyrene	202	16.046	16.030	(0.869)	1239234	82.3823	82.38
$	139 Terphenyl-d14	244	16.420	16.409	(0.889)	422473	45.4444	45.44
	146 Butylbenzylphthalate	149	17.451	17.440	(0.945)	547298	85.7526	85.75
	150 Benzo(a)Anthracene	228	18.445	18.428	(0.999)	1169668	97.5292	97.53(R)
*	153 Chrysene-d12	240	18.461	18.450	(1.000)	494669	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.445	18.428	(0.999)	320603	67.7375	67.74
	154 Chrysene	228	18.515	18.498	(1.003)	1081563	86.4894	86.49
	155 bis(2-ethylhexyl)Phthalate	149	18.643	18.631	(1.010)	763459	90.0297	90.03
	158 Di-n-octylphthalate	149	19.871	19.855	(1.076)	1286508	91.1907	91.19
	160 Benzo(b)fluoranthene	252	20.448	20.437	(0.966)	1104415	87.6629	87.66
	161 Benzo(k)fluoranthene	252	20.507	20.485	(0.968)	1177826	91.2637	91.26
	165 Benzo(a)pyrene	252	21.068	21.046	(0.995)	1057477	85.2807	85.28
*	166 Perylene-d12	264	21.175	21.164	(1.000)	489372	40.0000	
	173 Indeno(1,2,3-cd)pyrene	276	23.691	23.658	(1.119)	1141390	88.4300	88.43

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
174 Dibenzo(a,h)anthracene	278	23.766	23.739	(1.122)	1183062	99.1316	99.13
177 Benzo(g,h,i)perylene	276	24.455	24.412	(1.155)	1202847	98.9682	98.97

QC Flag Legend

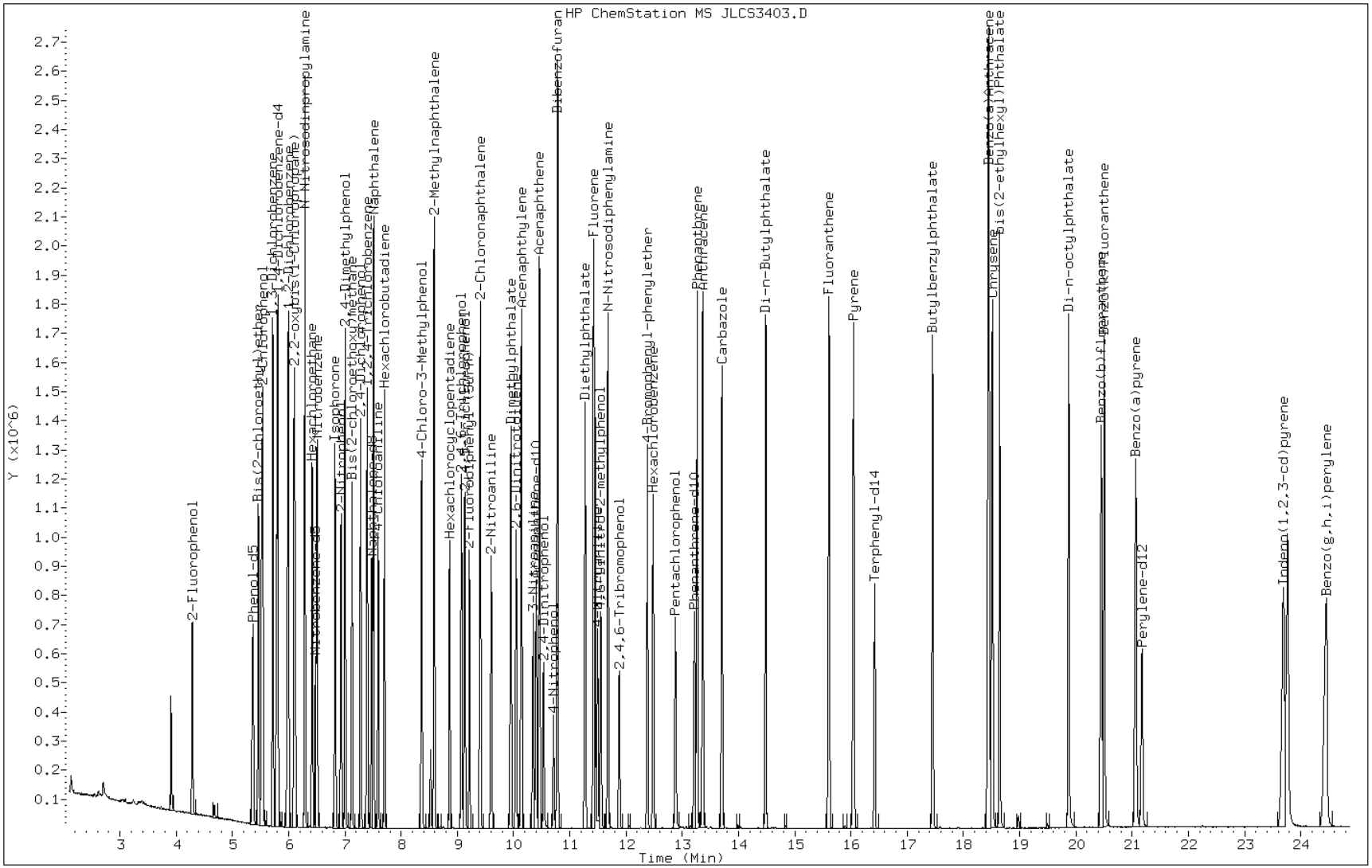
R - Spike/Surrogate failed recovery limits.

Data File: JLCS3403.D

Date: 15-AUG-2012 15:47

Client ID: LCS 160-8998/2-A Instrument: MSJ.i

Sample Info: LCS 160-8998/2-A Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-B MS

Matrix: Water | Lab File ID: JSMP3409.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 19:00

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	79.1		9.5	0.95
208-96-8	Acenaphthylene	80.8		9.5	0.95
120-12-7	Anthracene	78.4		9.5	0.95
56-55-3	Benzo[a]anthracene	88.7		9.5	0.95
205-99-2	Benzo[b]fluoranthene	79.3		9.5	0.95
207-08-9	Benzo[k]fluoranthene	80.8		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	91.0		9.5	0.95
50-32-8	Benzo[a]pyrene	77.7		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	77.8		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	80.3		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	82.9		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	77.9		9.5	0.95
85-68-7	Butyl benzyl phthalate	79.0		9.5	0.95
86-74-8	Carbazole	82.0		9.5	0.95
106-47-8	4-Chloroaniline	49.9		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	66.7		9.5	0.95
91-58-7	2-Chloronaphthalene	76.4		9.5	0.95
95-57-8	2-Chlorophenol	64.7		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	77.9		9.5	0.95
218-01-9	Chrysene	78.1		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	90.8		9.5	0.95
132-64-9	Dibenzofuran	76.9		9.5	0.95
84-74-2	Di-n-butyl phthalate	82.4		9.5	0.95
95-50-1	1,2-Dichlorobenzene	72.5		9.5	0.95
541-73-1	1,3-Dichlorobenzene	71.3		9.5	0.95
106-46-7	1,4-Dichlorobenzene	71.3		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	51.2		47	1.2
120-83-2	2,4-Dichlorophenol	68.4		9.5	1.0
84-66-2	Diethyl phthalate	81.3		9.5	0.95
105-67-9	2,4-Dimethylphenol	69.7		9.5	0.95
131-11-3	Dimethyl phthalate	81.8		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	77.4		9.5	0.95
51-28-5	2,4-Dinitrophenol	74.5		47	1.9
121-14-2	2,4-Dinitrotoluene	86.5		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-B MS

Matrix: Water | Lab File ID: JSMP3409.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 19:00

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	81.5		9.5	2.0
117-84-0	Di-n-octyl phthalate	84.8		9.5	0.95
206-44-0	Fluoranthene	83.1		9.5	0.95
86-73-7	Fluorene	79.1		9.5	0.95
118-74-1	Hexachlorobenzene	76.5		9.5	0.95
87-68-3	Hexachlorobutadiene	70.7		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	92.9		9.5	0.95
67-72-1	Hexachloroethane	75.6		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	82.3		9.5	0.95
78-59-1	Isophorone	75.4		9.5	0.95
91-57-6	2-Methylnaphthalene	73.7		9.5	0.95
95-48-7	2-Methylphenol	55.4		9.5	0.95
15831-10-4	3 & 4 Methylphenol	55.8		19	1.9
91-20-3	Naphthalene	73.7		9.5	0.95
88-74-4	2-Nitroaniline	82.6		9.5	0.95
99-09-2	3-Nitroaniline	62.9		9.5	0.95
100-01-6	4-Nitroaniline	74.3		9.5	0.95
98-95-3	Nitrobenzene	80.5		9.5	1.0
88-75-5	2-Nitrophenol	73.7		9.5	0.95
100-02-7	4-Nitrophenol	30.1		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	99.0		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	82.5		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	76.6		9.5	0.95
87-86-5	Pentachlorophenol	76.9		9.5	1.2
85-01-8	Phenanthrene	78.1		9.5	0.95
108-95-2	Phenol	26.5		9.5	1.9
129-00-0	Pyrene	74.0		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	72.3		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	72.9		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	74.0		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-B MS

Matrix: Water | Lab File ID: JSMP3409.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.8(mL) | Date Analyzed: 08/15/2012 19:00

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	46		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	86		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	86		45-99
4165-62-2	Phenol-d5 (Surr)	29		10-70
1718-51-0	Terphenyl-d14 (Surr)	86		53-126
321-60-8	2-Fluorobiphenyl (Surr)	77		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3409.D
Lab Smp Id: 160-428-A-6-B MS Client Smp ID: 160-428-A-6-B MS
Inj Date : 15-AUG-2012 19:00
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-428-A-6-B MS
Misc Info : 160-428-A-6-B MS
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1057.800	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1	1,4-Dioxane	88	2.409	2.359	(0.417)	2544	1.03134	0.9750(aM)
$	10	2-Fluorophenol	112	4.289	4.277	(0.742)	196568	34.8406	32.94
	19	Bis(2-chloroethyl)ether	93	5.459	5.452	(0.945)	490948	84.9775	80.33
$	15	Phenol-d5	99	5.353	5.346	(0.926)	151047	21.5852	20.40
	16	Phenol	94	5.363	5.362	(0.928)	212317	28.0117	26.48
	20	2-Chlorophenol	128	5.534	5.527	(0.957)	414693	68.4676	64.73
	21	1,3-Dichlorobenzene	146	5.710	5.709	(0.988)	514658	75.4632	71.34
*	22	1,4-Dichlorobenzene-d4	152	5.780	5.773	(1.000)	180720	40.0000	
	23	1,4-Dichlorobenzene	146	5.801	5.794	(1.004)	527612	75.3999	71.28
	26	1,2-Dichlorobenzene	146	5.988	5.981	(1.036)	497558	76.7129	72.52
	28	2,2-oxybis(1-Chloropropane)	45	6.111	6.104	(1.057)	492255	81.0574	76.63
	27	2-Methylphenol	108	6.095	6.083	(1.055)	307913	58.6007	55.40
	35	Hexachloroethane	117	6.410	6.409	(1.109)	210261	79.9729	75.60
	32	N-Nitrosodinpropylamine	70	6.282	6.275	(1.087)	367514	87.2524	82.48
	29	3 and 4-Methylphenol	107	6.287	6.286	(1.088)	365022	59.0041	55.78
M	215	Total Cresols	100				672935	117.605	111.2
$	36	Nitrobenzene-d5	82	6.469	6.467	(0.866)	287608	42.8917	40.55
	37	Nitrobenzene	77	6.496	6.494	(0.870)	581247	85.1490	80.50
	39	Isophorone	82	6.822	6.815	(0.913)	874908	79.7594	75.40
	40	2-Nitrophenol	139	6.928	6.922	(0.928)	238197	77.9635	73.70
	41	2,4-Dimethylphenol	107	6.998	6.991	(0.937)	440415	73.6990	69.67

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	42 Bis(2-chloroethoxy)methane	93	7.121	7.114	(0.954)	523985	82.2587	77.76
	45 2,4-Dichlorophenol	162	7.276	7.269	(0.974)	334403	72.3461	68.39
	47 1,2,4-Trichlorobenzene	180	7.388	7.386	(0.989)	402520	76.5292	72.35
*	48 Naphthalene-d8	136	7.468	7.466	(1.000)	634789	40.0000	
	50 Naphthalene	128	7.500	7.498	(1.004)	1339522	77.9494	73.69
	51 4-Chloroaniline	127	7.596	7.584	(1.017)	351107	52.7865	49.90
	54 Hexachlorobutadiene	225	7.698	7.691	(1.031)	243261	74.8336	70.74
	62 2-Methylnaphthalene	142	8.585	8.578	(1.149)	863591	77.9285	73.67
	59 4-Chloro-3-Methylphenol	107	8.360	8.353	(1.119)	354980	70.6058	66.75
	66 Hexachlorocyclopentadiene	237	8.857	8.850	(0.852)	231288	98.2268	92.86
	67 2,4,6-Trichlorophenol	196	9.065	9.058	(0.872)	238685	78.3188	74.04
	68 2,4,5-Trichlorophenol	196	9.129	9.122	(0.879)	243122	77.1538	72.94
$	69 2-Fluorobiphenyl (Surr)	172	9.210	9.203	(0.886)	419902	38.2712	36.18
	72 2-Chloronaphthalene	162	9.402	9.395	(0.905)	769464	80.8347	76.42
	73 2-Nitroaniline	65	9.600	9.587	(0.924)	263543	87.4247	82.65
	76 Dimethylphthalate	163	9.947	9.940	(0.957)	897006	86.5040	81.78
	79 Acenaphthylene	152	10.134	10.127	(0.975)	1235030	85.4948	80.82
	80 2,6-Dinitrotoluene	165	10.043	10.031	(0.967)	199165	86.2065	81.50
*	82 Acenaphthene-d10	164	10.390	10.389	(1.000)	319904	40.0000	
	83 Acenaphthene	153	10.454	10.447	(1.006)	786334	83.6295	79.06
	81 3-Nitroaniline	138	10.342	10.335	(0.995)	161744	66.5477	62.91
	84 2,4-Dinitrophenol	184	10.529	10.522	(1.013)	131203	78.7717	74.47
	86 Dibenzofuran	168	10.775	10.768	(1.037)	1077625	81.3083	76.86
	85 4-Nitrophenol	109	10.711	10.698	(1.031)	54751	31.8785	30.14
	88 2,4-Dinitrotoluene	165	10.780	10.768	(1.038)	279451	91.4944	86.49
	94 Fluorene	166	11.416	11.409	(1.099)	900364	83.7228	79.15
	93 Diethylphthalate	149	11.266	11.259	(1.084)	863685	85.9702	81.27
	95 4-Chlorophenyl-phenylether	204	11.443	11.436	(1.101)	436550	82.4236	77.92
	98 4-Nitroaniline	138	11.496	11.484	(1.106)	190647	78.6299	74.33
	99 4,6-Dinitro-2-methylphenol	198	11.549	11.537	(0.874)	175707	81.8233	77.35
	100 N-Nitrosodiphenylamine	169	11.672	11.665	(0.884)	733021	104.743	99.02(R)
$	104 2,4,6-Tribromophenol	330	11.875	11.868	(1.143)	96943	64.6922	61.16
	109 4-Bromophenyl-phenylether	248	12.377	12.365	(0.937)	244801	82.4448	77.94
	112 Hexachlorobenzene	284	12.479	12.467	(0.945)	253170	80.9409	76.52
	117 Pentachlorophenol	266	12.869	12.862	(0.974)	177837	81.3487	76.90
*	121 Phenanthrene-d10	188	13.211	13.204	(1.000)	538294	40.0000	
	122 Phenanthrene	178	13.259	13.252	(1.004)	1247255	82.6486	78.13
	124 Anthracene	178	13.360	13.348	(1.011)	1267034	82.9459	78.41
	126 Carbazole	167	13.702	13.690	(1.037)	1119459	86.7531	82.01
	129 Di-n-Butylphthalate	149	14.477	14.470	(1.096)	1397915	87.1706	82.41
	134 Fluoranthene	202	15.604	15.592	(1.181)	1319928	87.8528	83.05
	137 Pyrene	202	16.042	16.030	(0.869)	1331086	78.2915	74.01
$	139 Terphenyl-d14	244	16.416	16.409	(0.889)	453721	43.1816	40.82
	146 Butylbenzylphthalate	149	17.447	17.440	(0.945)	603039	83.5982	79.03
	150 Benzo(a)Anthracene	228	18.435	18.428	(0.999)	1271541	93.8061	88.68
*	153 Chrysene-d12	240	18.457	18.450	(1.000)	559096	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.435	18.428	(0.999)	289831	54.1795	51.22
	154 Chrysene	228	18.510	18.498	(1.003)	1167357	82.5930	78.08
	155 bis(2-ethylhexyl)Phthalate	149	18.638	18.631	(1.010)	840848	87.7295	82.94
	158 Di-n-octylphthalate	149	19.862	19.855	(1.076)	1429896	89.6749	84.77
	160 Benzo(b)fluoranthene	252	20.444	20.437	(0.966)	1229231	83.8645	79.28
	161 Benzo(k)fluoranthene	252	20.503	20.485	(0.969)	1283978	85.5137	80.84
	165 Benzo(a)pyrene	252	21.064	21.046	(0.995)	1185178	82.1533	77.66
*	166 Perylene-d12	264	21.165	21.164	(1.000)	569348	40.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
173 Indeno(1,2,3-cd)pyrene	276	23.687	23.658	(1.119)	1306588	87.0578	82.30
174 Dibenzo(a,h)anthracene	278	23.762	23.739	(1.123)	1333670	96.0537	90.80
177 Benzo(g,h,i)perylene	276	24.440	24.412	(1.155)	1360879	96.2423	90.98

QC Flag Legend

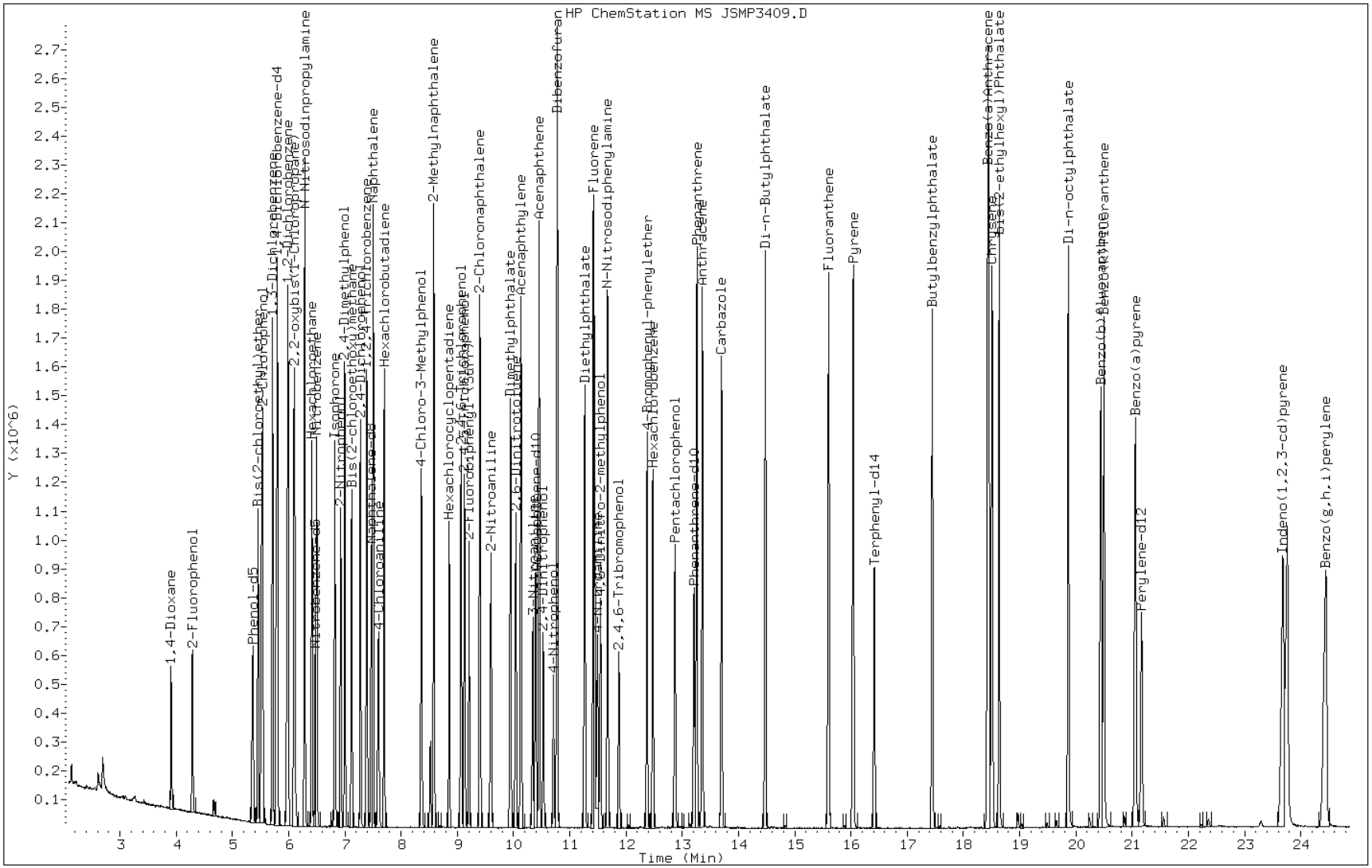
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: JSMP3409.D

Date: 15-AUG-2012 19:00

Client ID: 160-428-A-6-B MS Instrument: MSJ.i

Sample Info: 160-428-A-6-B MS Operator: MAK



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-C MSD

Matrix: Water | Lab File ID: JSMP3410.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.9(mL) | Date Analyzed: 08/15/2012 19:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	76.0		9.5	0.95
208-96-8	Acenaphthylene	78.2		9.5	0.95
120-12-7	Anthracene	76.8		9.5	0.95
56-55-3	Benzo[a]anthracene	87.7		9.5	0.95
205-99-2	Benzo[b]fluoranthene	79.3		9.5	0.95
207-08-9	Benzo[k]fluoranthene	79.3		9.5	0.95
191-24-2	Benzo[g,h,i]perylene	90.8		9.5	0.95
50-32-8	Benzo[a]pyrene	77.1		9.5	0.95
111-91-1	Bis(2-chloroethoxy)methane	77.5		9.5	0.95
111-44-4	Bis(2-chloroethyl)ether	78.7		9.5	0.95
117-81-7	Bis(2-ethylhexyl) phthalate	79.9		9.5	0.95
101-55-3	4-Bromophenyl phenyl ether	75.3		9.5	0.95
85-68-7	Butyl benzyl phthalate	76.7		9.5	0.95
86-74-8	Carbazole	80.4		9.5	0.95
106-47-8	4-Chloroaniline	48.9		9.5	2.1
59-50-7	4-Chloro-3-methylphenol	66.1		9.5	0.95
91-58-7	2-Chloronaphthalene	73.2		9.5	0.95
95-57-8	2-Chlorophenol	62.2		9.5	0.95
7005-72-3	4-Chlorophenyl phenyl ether	74.2		9.5	0.95
218-01-9	Chrysene	77.5		9.5	0.95
53-70-3	Dibenz(a,h)anthracene	89.7		9.5	0.95
132-64-9	Dibenzofuran	74.6		9.5	0.95
84-74-2	Di-n-butyl phthalate	79.8		9.5	0.95
95-50-1	1,2-Dichlorobenzene	69.1		9.5	0.95
541-73-1	1,3-Dichlorobenzene	68.7		9.5	0.95
106-46-7	1,4-Dichlorobenzene	68.3		9.5	0.95
91-94-1	3,3'-Dichlorobenzidine	51.4		47	1.2
120-83-2	2,4-Dichlorophenol	68.1		9.5	1.0
84-66-2	Diethyl phthalate	78.4		9.5	0.95
105-67-9	2,4-Dimethylphenol	68.9		9.5	0.95
131-11-3	Dimethyl phthalate	78.3		9.5	0.95
534-52-1	4,6-Dinitro-2-methylphenol	74.6		9.5	0.95
51-28-5	2,4-Dinitrophenol	71.8		47	1.9
121-14-2	2,4-Dinitrotoluene	81.8		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-C MSD

Matrix: Water | Lab File ID: JSMP3410.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.9(mL) | Date Analyzed: 08/15/2012 19:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
606-20-2	2,6-Dinitrotoluene	78.3		9.5	2.0
117-84-0	Di-n-octyl phthalate	82.2		9.5	0.95
206-44-0	Fluoranthene	80.7		9.5	0.95
86-73-7	Fluorene	75.4		9.5	0.95
118-74-1	Hexachlorobenzene	76.1		9.5	0.95
87-68-3	Hexachlorobutadiene	69.4		9.5	0.95
77-47-4	Hexachlorocyclopentadiene	91.3		9.5	0.95
67-72-1	Hexachloroethane	72.2		9.5	0.95
193-39-5	Indeno[1,2,3-cd]pyrene	81.2		9.5	0.95
78-59-1	Isophorone	75.8		9.5	0.95
91-57-6	2-Methylnaphthalene	72.5		9.5	0.95
95-48-7	2-Methylphenol	53.9		9.5	0.95
15831-10-4	3 & 4 Methylphenol	53.1		19	1.9
91-20-3	Naphthalene	73.2		9.5	0.95
88-74-4	2-Nitroaniline	79.2		9.5	0.95
99-09-2	3-Nitroaniline	62.3		9.5	0.95
100-01-6	4-Nitroaniline	71.8		9.5	0.95
98-95-3	Nitrobenzene	79.8		9.5	1.0
88-75-5	2-Nitrophenol	73.0		9.5	0.95
100-02-7	4-Nitrophenol	28.0		9.5	1.9
86-30-6	N-Nitrosodiphenylamine	96.9		9.5	0.95
621-64-7	N-Nitrosodi-n-propylamine	80.5		9.5	0.95
108-60-1	2,2'-oxybis[1-chloropropane]	74.4		9.5	0.95
87-86-5	Pentachlorophenol	73.7		9.5	1.2
85-01-8	Phenanthrene	76.4		9.5	0.95
108-95-2	Phenol	25.0		9.5	1.9
129-00-0	Pyrene	72.4		9.5	0.95
120-82-1	1,2,4-Trichlorobenzene	70.8		9.5	0.95
95-95-4	2,4,5-Trichlorophenol	70.8		9.5	0.95
88-06-2	2,4,6-Trichlorophenol	71.8		9.5	0.95

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG No.:

Client Sample ID: | Lab Sample ID: 160-428-A-6-C MSD

Matrix: Water | Lab File ID: JSMP3410.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 08/13/2012 12:21

Sample wt/vol: 1057.9(mL) | Date Analyzed: 08/15/2012 19:32

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 9331 | Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
367-12-4	2-Fluorophenol (Surr)	45		21-85
118-79-6	2,4,6-Tribromophenol (Surr)	84		46-118
4165-60-0	Nitrobenzene-d5 (Surr)	87		45-99
4165-62-2	Phenol-d5 (Surr)	27		10-70
1718-51-0	Terphenyl-d14 (Surr)	85		53-126
321-60-8	2-Fluorobiphenyl (Surr)	75		46-99

TestAmerica St. Louis

GC/MS SEMIVOLATILES

Data file : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\JSMP3410.D
Lab Smp Id: 160-428-A-6-C MSD Client Smp ID: 160-428-A-6-C MSD
Inj Date : 15-AUG-2012 19:32
Operator : MAK Inst ID: MSJ.i
Smp Info : 160-428-A-6-C MSD
Misc Info : 160-428-A-6-C MSD
Comment :
Method : \\Slsvr01\BNA_LAB\MSJ.i\J120815A.B\8270J_625.m
Meth Date : 15-Aug-2012 15:22 MSJ.i Quant Type: ISTD
Cal Date : 24-JUL-2012 18:11 Cal File: JICL2881.D
Als bottle: 13 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLSFMS09B.sub
Target Version: 4.14
Processing Host: SLSVOA01

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

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1000.000	Volume of final extract (uL)
Vo	1057.900	Volume of sample extracted (mL)
Vi	1.000	Volume injected (uL)
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	1 1,4-Dioxane	88	2.395	2.359	(0.415)	2913	1.35292	1.279(a)
$	10 2-Fluorophenol	112	4.281	4.277	(0.742)	166952	33.9010	32.04
	19 Bis(2-chloroethyl)ether	93	5.451	5.452	(0.944)	419862	83.2574	78.70
$	15 Phenol-d5	99	5.344	5.346	(0.926)	123457	20.2119	19.10
	16 Phenol	94	5.360	5.362	(0.929)	175229	26.4856	25.04
	20 2-Chlorophenol	128	5.531	5.527	(0.958)	348083	65.8398	62.24
	21 1,3-Dichlorobenzene	146	5.707	5.709	(0.989)	432341	72.6258	68.65
*	22 1,4-Dichlorobenzene-d4	152	5.771	5.773	(1.000)	157746	40.0000	
	23 1,4-Dichlorobenzene	146	5.793	5.794	(1.004)	441529	72.2875	68.33
	26 1,2-Dichlorobenzene	146	5.980	5.981	(1.036)	413969	73.1207	69.12
	28 2,2-oxybis(1-Chloropropane)	45	6.103	6.104	(1.057)	417398	78.7410	74.43
	27 2-Methylphenol	108	6.087	6.083	(1.055)	261288	56.9695	53.85
	35 Hexachloroethane	117	6.407	6.409	(1.110)	175262	76.3694	72.19
	32 N-Nitrosodinpropylamine	70	6.274	6.275	(1.087)	313209	85.1894	80.53
	29 3 and 4-Methylphenol	107	6.279	6.286	(1.088)	303142	56.1380	53.06
M	215 Total Cresols	100				564430	113.108	106.9
$	36 Nitrobenzene-d5	82	6.466	6.467	(0.866)	246937	43.4247	41.05
	37 Nitrobenzene	77	6.493	6.494	(0.870)	488728	84.4239	79.80
	39 Isophorone	82	6.813	6.815	(0.913)	745495	80.1389	75.75
	40 2-Nitrophenol	139	6.920	6.922	(0.927)	199977	77.1817	72.96
	41 2,4-Dimethylphenol	107	6.995	6.991	(0.937)	369162	72.8443	68.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	42 Bis(2-chloroethoxy)methane	93	7.112	7.114	(0.953)	442837	81.9758	77.49
	45 2,4-Dichlorophenol	162	7.267	7.269	(0.974)	282581	72.0887	68.14
	47 1,2,4-Trichlorobenzene	180	7.385	7.386	(0.989)	334295	74.9461	70.84
*	48 Naphthalene-d8	136	7.465	7.466	(1.000)	538332	40.0000	
	50 Naphthalene	128	7.497	7.498	(1.004)	1128823	77.4583	73.22
	51 4-Chloroaniline	127	7.588	7.584	(1.016)	291951	51.7574	48.92
	54 Hexachlorobutadiene	225	7.695	7.691	(1.031)	202512	73.4606	69.44
	62 2-Methylnaphthalene	142	8.576	8.578	(1.149)	720738	76.6911	72.49
	59 4-Chloro-3-Methylphenol	107	8.352	8.353	(1.119)	297995	69.8916	66.07
	66 Hexachlorocyclopentadiene	237	8.849	8.850	(0.852)	196200	96.5344	91.25
	67 2,4,6-Trichlorophenol	196	9.062	9.058	(0.872)	199760	75.9374	71.78
	68 2,4,5-Trichlorophenol	196	9.121	9.122	(0.878)	203805	74.9297	70.83
$	69 2-Fluorobiphenyl (Surr)	172	9.201	9.203	(0.886)	353162	37.2910	35.25
	72 2-Chloronaphthalene	162	9.393	9.395	(0.904)	636612	77.4802	73.24
	73 2-Nitroaniline	65	9.591	9.587	(0.923)	218055	83.8020	79.22
	76 Dimethylphthalate	163	9.938	9.940	(0.957)	741163	82.8058	78.27
	79 Acenaphthylene	152	10.125	10.127	(0.975)	1031418	82.7186	78.19
	80 2,6-Dinitrotoluene	165	10.034	10.031	(0.966)	165243	82.8622	78.33
*	82 Acenaphthene-d10	164	10.387	10.389	(1.000)	276130	40.0000	
	83 Acenaphthene	153	10.446	10.447	(1.006)	652893	80.4453	76.04
	81 3-Nitroaniline	138	10.334	10.335	(0.995)	138346	65.9443	62.34
	84 2,4-Dinitrophenol	184	10.521	10.522	(1.013)	109071	75.9980	71.84
	86 Dibenzofuran	168	10.766	10.768	(1.037)	902278	78.8704	74.55
	85 4-Nitrophenol	109	10.702	10.698	(1.030)	43912	29.6207	28.00
	88 2,4-Dinitrotoluene	165	10.766	10.768	(1.037)	228190	86.5549	81.82
	94 Fluorene	166	11.407	11.409	(1.098)	740601	79.7840	75.42
	93 Diethylphthalate	149	11.258	11.259	(1.084)	719220	82.9393	78.40
	95 4-Chlorophenyl-phenylether	204	11.434	11.436	(1.101)	358779	78.4785	74.18
	98 4-Nitroaniline	138	11.482	11.484	(1.105)	158968	75.9580	71.80
	99 4,6-Dinitro-2-methylphenol	198	11.536	11.537	(0.874)	144120	78.9350	74.61
	100 N-Nitrosodiphenylamine	169	11.669	11.665	(0.884)	610364	102.462	96.85(R)
$	104 2,4,6-Tribromophenol	330	11.867	11.868	(1.142)	81143	62.7325	59.30
	109 4-Bromophenyl-phenylether	248	12.369	12.365	(0.937)	201310	79.6488	75.29
	112 Hexachlorobenzene	284	12.471	12.467	(0.945)	214350	80.5087	76.10
	117 Pentachlorophenol	266	12.860	12.862	(0.974)	144998	77.9209	73.66
*	121 Phenanthrene-d10	188	13.202	13.204	(1.000)	458201	40.0000	
	122 Phenanthrene	178	13.250	13.252	(1.004)	1038663	80.8571	76.43
	124 Anthracene	178	13.352	13.348	(1.011)	1055820	81.2008	76.76
	126 Carbazole	167	13.694	13.690	(1.037)	934606	85.0881	80.43
	129 Di-n-Butylphthalate	149	14.468	14.470	(1.096)	1151940	84.3883	79.77
	134 Fluoranthene	202	15.596	15.592	(1.181)	1091389	85.3392	80.67
	137 Pyrene	202	16.034	16.030	(0.869)	1104972	76.6364	72.44
$	139 Terphenyl-d14	244	16.408	16.409	(0.889)	378588	42.4866	40.16
	146 Butylbenzylphthalate	149	17.439	17.440	(0.945)	496571	81.1724	76.73
	150 Benzo(a)Anthracene	228	18.427	18.428	(0.999)	1066926	92.8133	87.73
*	153 Chrysene-d12	240	18.448	18.450	(1.000)	474145	40.0000	
	152 3,3'-Dichlorobenzidine	252	18.427	18.428	(0.999)	246488	54.3327	51.36
	154 Chrysene	228	18.502	18.498	(1.003)	982147	81.9391	77.45
	155 bis(2-ethylhexyl)Phthalate	149	18.630	18.631	(1.010)	687255	84.5515	79.92
	158 Di-n-octylphthalate	149	19.853	19.855	(1.076)	1176280	86.9866	82.22
	160 Benzo(b)fluoranthene	252	20.436	20.437	(0.966)	1041161	83.8536	79.26
	161 Benzo(k)fluoranthene	252	20.489	20.485	(0.968)	1067475	83.9256	79.33
	165 Benzo(a)pyrene	252	21.050	21.046	(0.995)	996700	81.5576	77.09
*	166 Perylene-d12	264	21.157	21.164	(1.000)	482302	40.0000	

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
173 Indeno(1,2,3-cd)pyrene	276	23.668	23.658	(1.119)	1091346	85.8824	81.18
174 Dibenzo(a,h)anthracene	278	23.742	23.739	(1.122)	1116732	94.9453	89.75
177 Benzo(g,h,i)perylene	276	24.421	24.412	(1.154)	1150125	96.0175	90.76

QC Flag Legend

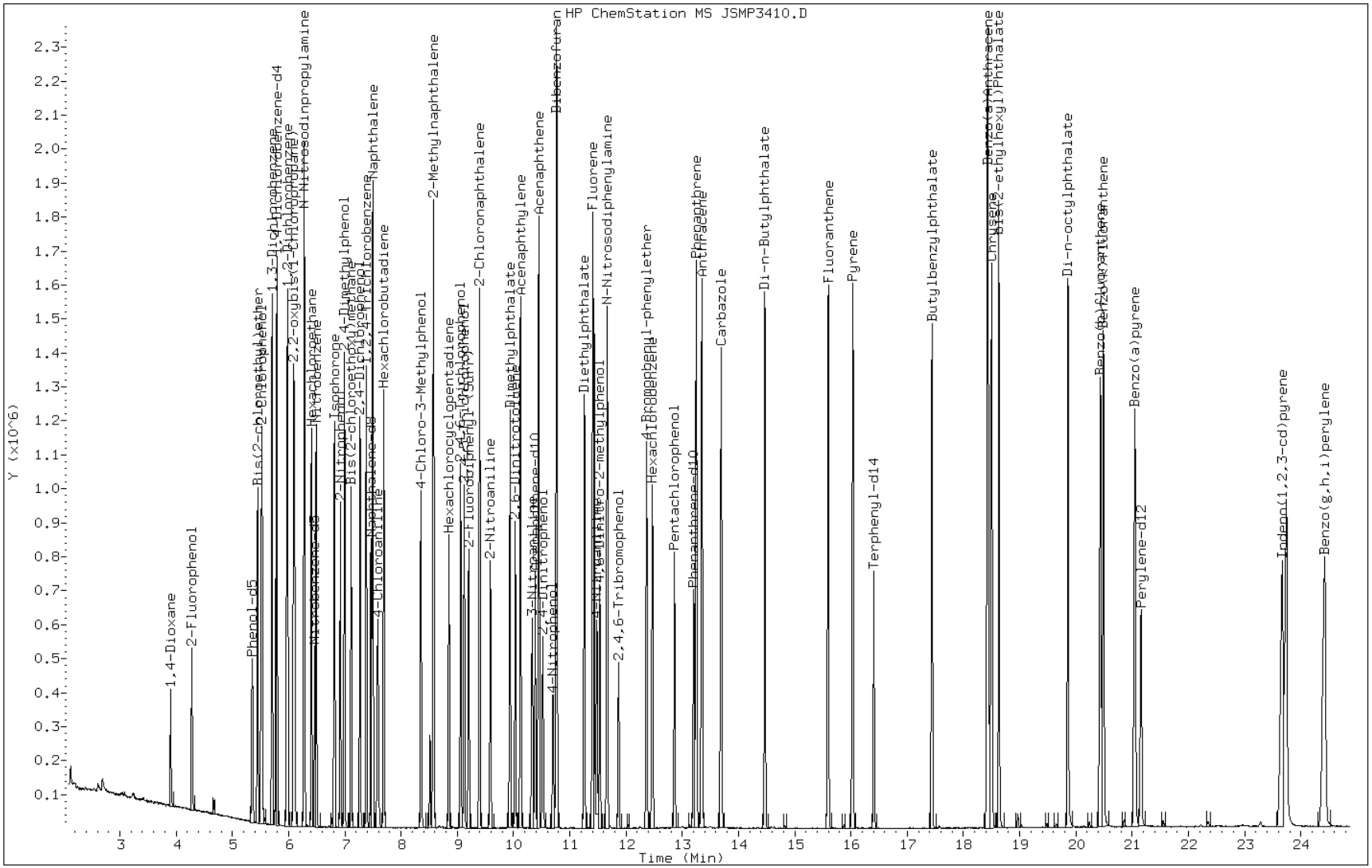
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

Data File: JSMP3410.D

Date: 15-AUG-2012 19:32

Client ID: 160-428-A-6-C MSD Instrument: MSJ.i

Sample Info: 160-428-A-6-C MSD Operator: MAK



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Start Date: 07/24/2012 12:10

Analysis Batch Number: 7404 End Date: 07/24/2012 21:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 160-7404/1		07/24/2012 12:10	1	JDFT2871.D	RXI5SiiMS 0.25(mm)
ICIS 160-7404/2		07/24/2012 13:09	1	JICL2872.D	RXI5SiiMS 0.25(mm)
STD160 160-7404/3 IC		07/24/2012 13:42	1	JICL2873.D	RXI5SiiMS 0.25(mm)
STD120 160-7404/4 IC		07/24/2012 14:16	1	JICL2874.D	RXI5SiiMS 0.25(mm)
STD080 160-7404/5 IC		07/24/2012 14:49	1	JICL2875.D	RXI5SiiMS 0.25(mm)
STD020 160-7404/6 IC		07/24/2012 15:23	1	JICL2876.D	RXI5SiiMS 0.25(mm)
STD010 160-7404/7 IC		07/24/2012 15:56	1	JICL2877.D	RXI5SiiMS 0.25(mm)
STD005 160-7404/8 IC		07/24/2012 16:30	1	JICL2878.D	RXI5SiiMS 0.25(mm)
ICV 160-7404/16		07/24/2012 17:04	1	JICV2879.D	RXI5SiiMS 0.25(mm)
STD0508270B 160-7404/9 IC		07/24/2012 17:37	1	JICL2880.D	RXI5SiiMS 0.25(mm)
STD1608270B 160-7404/10 IC		07/24/2012 18:11	1	JICL2881.D	RXI5SiiMS 0.25(mm)
STD1208270B 160-7404/11 IC		07/24/2012 18:44	1	JICL2882.D	RXI5SiiMS 0.25(mm)
STD0808270B 160-7404/12 IC		07/24/2012 19:18	1	JICL2883.D	RXI5SiiMS 0.25(mm)
STD0208270B 160-7404/13 IC		07/24/2012 19:52	1	JICL2884.D	RXI5SiiMS 0.25(mm)
STD0108270B 160-7404/14 IC		07/24/2012 20:25	1	JICL2885.D	RXI5SiiMS 0.25(mm)
STD0058270B 160-7404/15 IC		07/24/2012 20:59	1	JICL2886.D	RXI5SiiMS 0.25(mm)
ICV 160-7404/17		07/24/2012 21:32	1	JICV2887.D	RXI5SiiMS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Start Date: 08/15/2012 13:45

Analysis Batch Number: 9331 End Date: 08/16/2012 01:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 160-9331/4		08/15/2012 13:45	1	JDFT3399.D	RXI5SiiMS 0.25(mm)
CCVIS 160-9331/2		08/15/2012 14:03	1	JCCV3400.D	RXI5SiiMS 0.25(mm)
CCV 160-9331/3		08/15/2012 14:37	1	JCCV3401.D	RXI5SiiMS 0.25(mm)
MB 160-8998/1-A		08/15/2012 15:15	1	JBLK3402.D	RXI5SiiMS 0.25(mm)
LCS 160-8998/2-A		08/15/2012 15:47	1	JLCS3403.D	RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 16:19	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 16:51	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 17:24	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 17:56	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 18:28	1		RXI5SiiMS 0.25(mm)
160-428-A-6-B MS		08/15/2012 19:00	1	JSMP3409.D	RXI5SiiMS 0.25(mm)
160-428-A-6-C MSD		08/15/2012 19:32	1	JSMP3410.D	RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 20:04	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/15/2012 20:37	1		RXI5SiiMS 0.25(mm)
160-437-1	PZ-113-AS	08/15/2012 21:09	1	JSMP3413.D	RXI5SiiMS 0.25(mm)
160-437-2	D-3	08/15/2012 21:41	1	JSMP3414.D	RXI5SiiMS 0.25(mm)
160-437-3	PZ-112-AS	08/15/2012 22:13	1	JSMP3415.D	RXI5SiiMS 0.25(mm)
160-437-4	I-11	08/15/2012 22:45	1	JSMP3416.D	RXI5SiiMS 0.25(mm)
160-437-5	PZ-207-AS	08/15/2012 23:17	1	JSMP3417.D	RXI5SiiMS 0.25(mm)
160-437-6	D-12	08/15/2012 23:49	1	JSMP3418.D	RXI5SiiMS 0.25(mm)
160-437-7	PZ-305-AI	08/16/2012 00:21	1	JSMP3419.D	RXI5SiiMS 0.25(mm)
160-437-8	S-10	08/16/2012 00:54	1	JSMP3420.D	RXI5SiiMS 0.25(mm)
160-437-9	DUP 05	08/16/2012 01:26	1	JSMP3421.D	RXI5SiiMS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Start Date: 08/22/2012 08:06

Analysis Batch Number: 9562 End Date: 08/22/2012 17:20

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 160-9562/1		08/22/2012 08:06	1	JDFT3486.D	RXI5SiiMS 0.25(mm)
ICIS 160-9562/2		08/22/2012 09:59	1	JICL3489.D	RXI5SiiMS 0.25(mm)
STD160 160-9562/3 IC		08/22/2012 10:32	1	JICL3490.D	RXI5SiiMS 0.25(mm)
STD120 160-9562/4 IC		08/22/2012 11:06	1	JICL3491.D	RXI5SiiMS 0.25(mm)
STD080 160-9562/5 IC		08/22/2012 11:40	1	JICL3492.D	RXI5SiiMS 0.25(mm)
STD020 160-9562/6 IC		08/22/2012 12:14	1	JICL3493.D	RXI5SiiMS 0.25(mm)
STD010 160-9562/7 IC		08/22/2012 12:48	1	JICL3494.D	RXI5SiiMS 0.25(mm)
ICV 160-9562/14		08/22/2012 13:22	1	JICV3495.D	RXI5SiiMS 0.25(mm)
STD0508270B 160-9562/8 IC		08/22/2012 13:56	1	JICL3496.D	RXI5SiiMS 0.25(mm)
STD1608270B 160-9562/9 IC		08/22/2012 14:30	1	JICL3497.D	RXI5SiiMS 0.25(mm)
STD1208270B 160-9562/10 IC		08/22/2012 15:04	1	JICL3498.D	RXI5SiiMS 0.25(mm)
STD0808270B 160-9562/11 IC		08/22/2012 15:38	1	JICL3499.D	RXI5SiiMS 0.25(mm)
STD0208270B 160-9562/12 IC		08/22/2012 16:12	1	JICL3500.D	RXI5SiiMS 0.25(mm)
STD0108270B 160-9562/13 IC		08/22/2012 16:46	1	JICL3501.D	RXI5SiiMS 0.25(mm)
ICV 160-9562/15		08/22/2012 17:20	1	JICV3502.D	RXI5SiiMS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: MSJ Start Date: 08/22/2012 17:57

Analysis Batch Number: 9564 End Date: 08/23/2012 05:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 160-9564/5		08/22/2012 17:57	1	JDFT3504.D	RXI5SiiMS 0.25(mm)
CCVIS 160-9564/3		08/22/2012 18:15	1	JCCV3505.D	RXI5SiiMS 0.25(mm)
CCV 160-9564/4		08/22/2012 18:49	1	JCCV3506.D	RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 19:23	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 19:57	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 20:31	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 21:05	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 21:39	1		RXI5SiiMS 0.25(mm)
160-437-3	PZ-112-AS	08/22/2012 22:13	5	JSMP3512.D	RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 22:47	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 23:21	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/22/2012 23:55	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 00:29	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 01:03	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 01:37	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 02:11	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 02:44	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 03:18	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 03:52	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 04:26	1		RXI5SiiMS 0.25(mm)
ZZZZZ		08/23/2012 05:00	1		RXI5SiiMS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 8998 Batch Start Date: 08/13/12 12:21 Batch Analyst: Bernal, Sarah

Batch Method: 3510C Batch End Date: 08/14/12 13:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	GrossWeight	TareWeight	InitialAmount	FinalAmount	BNA Surrogate 00005	BNASpike 00009
MB 160-8998/1		3510C, 8270D		1000 g	0 g	1000 mL	1 mL	500 uL	
LCS 160-8998/2		3510C, 8270D		1000 g	0 g	1000 mL	1 mL	500 uL	1000 uL
160-428-A-6 MS		3510C, 8270D	T	1551.1 g	493.3 g	1057.8 mL	1 mL	500 uL	1000 uL
160-428-A-6 MSD		3510C, 8270D	T	1552.5 g	494.6 g	1057.9 mL	1 mL	500 uL	1000 uL
160-437-A-1	PZ-113-AS	3510C, 8270D	T	1548.0 g	493.4 g	1054.6 mL	1 mL	500 uL	
160-437-A-2	D-3	3510C, 8270D	T	1553.8 g	494.7 g	1059.1 mL	1 mL	500 uL	
160-437-A-3	PZ-112-AS	3510C, 8270D	T	1549.8 g	495.5 g	1054.3 mL	1 mL	500 uL	
160-437-A-4	I-11	3510C, 8270D	T	1552.1 g	494.3 g	1057.8 mL	1 mL	500 uL	
160-437-A-5	PZ-207-AS	3510C, 8270D	T	1550.4 g	495.7 g	1054.7 mL	1 mL	500 uL	
160-437-A-6	D-12	3510C, 8270D	T	1549.4 g	494.3 g	1055.1 mL	1 mL	500 uL	
160-437-A-7	PZ-305-AI	3510C, 8270D	T	1554.0 g	496.9 g	1057.1 mL	1 mL	500 uL	
160-437-A-8	S-10	3510C, 8270D	T	1553.1 g	494.9 g	1058.2 mL	1 mL	500 uL	
160-437-A-9	DUP 05	3510C, 8270D	T	1551.5 g	494.7 g	1056.8 mL	1 mL	500 uL	

Batch Notes	
Acid used for pH adjustment	SULFURICACID
Acid used for pH adjust Lot #	022946
Base used for pH adjustment	NAOH
Base used for pH adjust Lot #	19040
Concentration End Time	8/14/12 13:00
Concentration Start Time	8/14/12 11:00
Person's name who did the concentration	Matthew Souris
Na2SO4 Lot Number	010529
Oven, Bath or Block Temperature 1	90
Prep Solvent Lot #	022463
Prep Solvent Name	methylenechloride
Prep Solvent Volume Used	400 mL
Person's name who did the prep	sarahpayeur
Person's name who witnessed reagent drop	mattsouris
Analyst who added reagent	SARAHPAYEUR
Sufficient volume for MS/MSD?	yes

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 8998 Batch Start Date: 08/13/12 12:21 Batch Analyst: Bernal, Sarah

Batch Method: 3510C Batch End Date: 08/14/12 13:00

Basis	Basis Description
T	Total/NA

METALS

COVER PAGE
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

Project: West Lake Landfill

Client Sample ID	Lab Sample ID
PZ-113-AS	160-437-1
D-3	160-437-2
PZ-112-AS	160-437-3
I-11	160-437-4
PZ-207-AS	160-437-5
D-12	160-437-6
PZ-305-AI	160-437-7
S-10	160-437-8
DUP 05	160-437-9

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: PZ-113-AS
Lab Sample ID: 160-437-1
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 09:35
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	200	80	ug/L			1	6010C
7440-36-0	Antimony	4.9	10	4.0	ug/L	J		1	6010C
7440-38-2	Arsenic	12	10	2.0	ug/L			1	6010C
7440-39-3	Barium	740	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	190000	5000	530	ug/L			5	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	11	50	4.0	ug/L	J		1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	7500	100	28	ug/L			1	6010C
7439-92-1	Lead	2.3	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	54000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	6400	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	29	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	6800	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	3.9	15	2.7	ug/L	J		1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	50000	1000	320	ug/L			1	6010C
7440-28-0	Thallium	5.8	20	4.0	ug/L	J		1	6010C
7440-62-2	Vanadium	ND	50	4.1	ug/L			1	6010C
7440-66-6	Zinc	9.9	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: PZ-113-AS
Lab Sample ID: 160-437-1
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 09:35
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	ND	50	9.9	ug/L			5	6010C
7440-39-3	Barium	740	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	180000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	6700	500	140	ug/L			5	6010C
7440-09-7	Potassium	ND	25000	8300	ug/L			5	6010C
7439-95-4	Magnesium	51000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	6400	75	17	ug/L			5	6010C
7440-23-5	Sodium	50000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	20	100	20	ug/L	J		5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	33	100	26	ug/L	J	B	5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: D-3 Lab Sample ID: 160-437-2

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2012 10:00

Reporting Basis: WET Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6010C
7440-39-3	Barium	2100	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	260000	10000	1100	ug/L			10	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	4.9	50	4.0	ug/L	J		1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	31000	100	28	ug/L			1	6010C
7439-92-1	Lead	1.7	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	83000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	470	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	18	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	21000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	290000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	ND	50	4.1	ug/L			1	6010C
7440-66-6	Zinc	5.5	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: D-3 | Lab Sample ID: 160-437-2

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 10:00

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	13	50	9.9	ug/L	J		5	6010C
7440-39-3	Barium	1800	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	230000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	27000	500	140	ug/L			5	6010C
7440-09-7	Potassium	18000	25000	8300	ug/L	J		5	6010C
7439-95-4	Magnesium	73000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	410	75	17	ug/L			5	6010C
7440-23-5	Sodium	280000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: PZ-112-AS
Lab Sample ID: 160-437-3
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 10:48
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	300	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	190	10	2.0	ug/L			1	6010C
7440-39-3	Barium	2200	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	150000	5000	530	ug/L			5	6010C
7440-47-3	Chromium	3.2	10	3.1	ug/L	J		1	6010C
7440-48-4	Cobalt	ND	50	4.0	ug/L			1	6010C
7440-50-8	Copper	6.1	25	4.6	ug/L	J		1	6010C
7439-89-6	Iron	44000	100	28	ug/L			1	6010C
7439-92-1	Lead	4.4	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	90000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	280	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	16	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	46000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	110000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	7.5	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	14	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: PZ-112-AS
Lab Sample ID: 160-437-3
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 10:48
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	170	50	9.9	ug/L			5	6010C
7440-39-3	Barium	1800	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	120000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	37000	500	140	ug/L			5	6010C
7440-09-7	Potassium	39000	25000	8300	ug/L			5	6010C
7439-95-4	Magnesium	73000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	220	75	17	ug/L			5	6010C
7440-23-5	Sodium	98000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 11:43

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	15	10	2.0	ug/L			1	6010C
7440-39-3	Barium	860	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	210000	5000	530	ug/L			5	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	ND	50	4.0	ug/L			1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	25000	100	28	ug/L			1	6010C
7439-92-1	Lead	ND	10	1.5	ug/L			1	6010C
7439-95-4	Magnesium	76000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	1300	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	13	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	22000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	110000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	6.8	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	6.1	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: I-11 | Lab Sample ID: 160-437-4

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 11:43

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	15	50	9.9	ug/L	J		5	6010C
7440-39-3	Barium	760	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	190000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	22000	500	140	ug/L			5	6010C
7440-09-7	Potassium	20000	25000	8300	ug/L	J		5	6010C
7439-95-4	Magnesium	64000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	1200	75	17	ug/L			5	6010C
7440-23-5	Sodium	100000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: PZ-207-AS
Lab Sample ID: 160-437-5
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 12:55
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	110	200	80	ug/L	J		1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	5.4	10	2.0	ug/L	J		1	6010C
7440-39-3	Barium	700	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	150000	5000	530	ug/L			5	6010C
7440-47-3	Chromium	3.4	10	3.1	ug/L	J		1	6010C
7440-48-4	Cobalt	5.9	50	4.0	ug/L	J		1	6010C
7440-50-8	Copper	6.3	25	4.6	ug/L	J		1	6010C
7439-89-6	Iron	22000	100	28	ug/L			1	6010C
7439-92-1	Lead	4.9	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	96000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	71	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	40	40	13	ug/L			1	6010C
7440-09-7	Potassium	75000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	290000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	4.7	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	63	20	5.2	ug/L		B	1	6010C
7439-97-6	Mercury	0.16	0.20	0.060	ug/L	J		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: PZ-207-AS
Lab Sample ID: 160-437-5
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 12:55
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	12	50	9.9	ug/L	J		5	6010C
7440-39-3	Barium	660	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	140000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	19000	500	140	ug/L			5	6010C
7440-09-7	Potassium	74000	25000	8300	ug/L			5	6010C
7439-95-4	Magnesium	90000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	66	75	17	ug/L	J		5	6010C
7440-23-5	Sodium	290000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	200	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	22	100	20	ug/L	J		5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 14:16

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	230	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6010C
7440-39-3	Barium	490	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	660000	20000	2100	ug/L			20	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	ND	50	4.0	ug/L			1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	15000	100	28	ug/L			1	6010C
7439-92-1	Lead	2.3	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	67000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	1100	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	ND	40	13	ug/L			1	6010C
7440-09-7	Potassium	13000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	170000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	ND	50	4.1	ug/L			1	6010C
7440-66-6	Zinc	10	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 14:16

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	ND	50	9.9	ug/L			5	6010C
7440-39-3	Barium	470	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	510000	20000	2100	ug/L			20	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	11000	500	140	ug/L			5	6010C
7440-09-7	Potassium	12000	25000	8300	ug/L	J		5	6010C
7439-95-4	Magnesium	61000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	1100	75	17	ug/L			5	6010C
7440-23-5	Sodium	170000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	11	50	7.5	ug/L	J		5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: PZ-305-AI
Lab Sample ID: 160-437-7
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 14:30
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	980	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	26	10	2.0	ug/L			1	6010C
7440-39-3	Barium	670	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	300000	10000	1100	ug/L			10	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	ND	50	4.0	ug/L			1	6010C
7440-50-8	Copper	5.6	25	4.6	ug/L	J		1	6010C
7439-89-6	Iron	44000	100	28	ug/L			1	6010C
7439-92-1	Lead	3.8	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	87000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	4100	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	ND	40	13	ug/L			1	6010C
7440-09-7	Potassium	6900	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	19000	1000	320	ug/L			1	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	8.5	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	22	20	5.2	ug/L		B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: PZ-305-AI
Lab Sample ID: 160-437-7
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 14:30
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	36	50	9.9	ug/L	J		5	6010C
7440-39-3	Barium	610	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	260000	10000	1100	ug/L			10	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	38000	500	140	ug/L			5	6010C
7440-09-7	Potassium	ND	25000	8300	ug/L			5	6010C
7439-95-4	Magnesium	82000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	4000	75	17	ug/L			5	6010C
7440-23-5	Sodium	19000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 15:02

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	790	200	80	ug/L			1	6010C
7440-36-0	Antimony	ND	10	4.0	ug/L			1	6010C
7440-38-2	Arsenic	36	10	2.0	ug/L			1	6010C
7440-39-3	Barium	110	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	360000	10000	1100	ug/L			10	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	ND	50	4.0	ug/L			1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	65000	100	28	ug/L			1	6010C
7439-92-1	Lead	1.8	10	1.5	ug/L	J		1	6010C
7439-95-4	Magnesium	170000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	3100	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	18	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	44000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	190000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	11	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	ND	20	5.2	ug/L			1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: S-10 | Lab Sample ID: 160-437-8

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 15:02

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	590	1000	400	ug/L	J		5	6010C
7440-38-2	Arsenic	36	50	9.9	ug/L	J		5	6010C
7440-39-3	Barium	100	250	20	ug/L	J		5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	320000	10000	1100	ug/L			10	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	61000	500	140	ug/L			5	6010C
7440-09-7	Potassium	40000	25000	8300	ug/L			5	6010C
7439-95-4	Magnesium	150000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	2800	75	17	ug/L			5	6010C
7440-23-5	Sodium	180000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: DUP 05 Lab Sample ID: 160-437-9

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2012 00:00

Reporting Basis: WET Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	200	80	ug/L			1	6010C
7440-36-0	Antimony	4.5	10	4.0	ug/L	J		1	6010C
7440-38-2	Arsenic	ND	10	2.0	ug/L			1	6010C
7440-39-3	Barium	2100	50	4.0	ug/L			1	6010C
7440-41-7	Beryllium	ND	5.0	0.61	ug/L			1	6010C
7440-43-9	Cadmium	ND	5.0	0.91	ug/L			1	6010C
7440-70-2	Calcium	270000	10000	1100	ug/L			10	6010C
7440-47-3	Chromium	ND	10	3.1	ug/L			1	6010C
7440-48-4	Cobalt	4.6	50	4.0	ug/L	J		1	6010C
7440-50-8	Copper	ND	25	4.6	ug/L			1	6010C
7439-89-6	Iron	31000	100	28	ug/L			1	6010C
7439-92-1	Lead	ND	10	1.5	ug/L			1	6010C
7439-95-4	Magnesium	80000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	470	15	3.3	ug/L			1	6010C
7440-02-0	Nickel	17	40	13	ug/L	J		1	6010C
7440-09-7	Potassium	21000	5000	1700	ug/L			1	6010C
7782-49-2	Selenium	ND	15	2.7	ug/L			1	6010C
7440-22-4	Silver	ND	10	6.0	ug/L			1	6010C
7440-23-5	Sodium	290000	5000	1600	ug/L			5	6010C
7440-28-0	Thallium	ND	20	4.0	ug/L			1	6010C
7440-62-2	Vanadium	5.1	50	4.1	ug/L	J		1	6010C
7440-66-6	Zinc	5.8	20	5.2	ug/L	J	B	1	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: DUP 05 | Lab Sample ID: 160-437-9

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 00:00

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	ND	50	30	ug/L			5	6010C
7429-90-5	Aluminum	ND	1000	400	ug/L			5	6010C
7440-38-2	Arsenic	ND	50	9.9	ug/L			5	6010C
7440-39-3	Barium	2000	250	20	ug/L			5	6010C
7440-41-7	Beryllium	ND	25	3.1	ug/L			5	6010C
7440-70-2	Calcium	240000	5000	530	ug/L			5	6010C
7440-43-9	Cadmium	ND	25	4.6	ug/L			5	6010C
7440-48-4	Cobalt	ND	250	20	ug/L			5	6010C
7440-47-3	Chromium	ND	50	16	ug/L			5	6010C
7440-50-8	Copper	ND	130	23	ug/L			5	6010C
7439-89-6	Iron	31000	500	140	ug/L			5	6010C
7440-09-7	Potassium	20000	25000	8300	ug/L	J		5	6010C
7439-95-4	Magnesium	82000	5000	660	ug/L			5	6010C
7439-96-5	Manganese	460	75	17	ug/L			5	6010C
7440-23-5	Sodium	310000	5000	1600	ug/L			5	6010C
7440-02-0	Nickel	ND	200	67	ug/L			5	6010C
7439-92-1	Lead	ND	50	7.5	ug/L			5	6010C
7440-36-0	Antimony	ND	50	20	ug/L			5	6010C
7782-49-2	Selenium	ND	75	13	ug/L			5	6010C
7440-28-0	Thallium	ND	100	20	ug/L			5	6010C
7440-62-2	Vanadium	ND	250	20	ug/L			5	6010C
7440-66-6	Zinc	ND	100	26	ug/L			5	6010C
7439-97-6	Mercury	ND	0.20	0.060	ug/L			1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00010 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00018

Analyte	ICV 160-9492/6 08/21/2012 09:07				CCV 160-9492/12 08/21/2012 09:28				CCV 160-9492/40 08/21/2012 11:50			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	49600		50000	99	49700		50000	99	51800		50000	104
Antimony	998		1000	100	1020		1000	102	1030		1000	103
Arsenic	5010		5000	100	5100		5000	102	5200		5000	104
Barium	5100		5000	102	5020		5000	100	5080		5000	102
Beryllium	5070		5000	101	5050		5000	101	5100		5000	102
Cadmium	5050		5000	101	5110		5000	102	5260		5000	105
Calcium	25000		25000	100	25600		25000	103	25400		25000	102
Chromium	4980		5000	100	5050		5000	101	5160		5000	103
Cobalt	5160		5000	103	5140		5000	103	4870		5000	97
Copper	5000		5000	100	5120		5000	102	5230		5000	105
Iron	50600		50000	101	50200		50000	100	50200		50000	100
Lead	5100		5000	102	5170		5000	103	5230		5000	105
Magnesium	25000		25000	100	24900		25000	100	26200		25000	105
Manganese	5120		5000	102	5000		5000	100	5190		5000	104
Nickel	5130		5000	103	5150		5000	103	5330		5000	107
Potassium	49800		50000	100	49900		50000	100	49800		50000	100
Selenium	5080		5000	102	5110		5000	102	5080		5000	102
Silver	980		1000	98	994		1000	99	956		1000	96
Sodium	50000		50000	100	50100		50000	100	48400		50000	97
Thallium	5320		5000	106	5210		5000	104	4970		5000	99
Vanadium	5000		5000	100	5010		5000	100	4790		5000	96
Zinc	5070		5000	101	5130		5000	103	5040		5000	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00010 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00018

Analyte	CCV 160-9492/52 08/21/2012 12:34				CCV 160-9492/64 08/21/2012 13:16				CCV 160-9492/76 08/21/2012 13:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	51400		50000	103	51200		50000	102	51400		50000	103
Antimony	1000		1000	100	1040		1000	104	1010		1000	101
Arsenic	5070		5000	101	5270		5000	105	5030		5000	101
Barium	5100		5000	102	5030		5000	101	5070		5000	101
Beryllium	5110		5000	102	5060		5000	101	5100		5000	102
Cadmium	5100		5000	102	5300		5000	106	5140		5000	103
Calcium	24400		25000	98	25500		25000	102	24800		25000	99
Chromium	5000		5000	100	5250		5000	105	5050		5000	101
Cobalt	4750		5000	95	4990		5000	100	4830		5000	97
Copper	5110		5000	102	5300		5000	106	5150		5000	103
Iron	50100		50000	100	50000		50000	100	49900		50000	100
Lead	5050		5000	101	5270		5000	105	5090		5000	102
Magnesium	25700		25000	103	25700		25000	103	25700		25000	103
Manganese	5150		5000	103	5150		5000	103	5140		5000	103
Nickel	5130		5000	103	5330		5000	107	5140		5000	103
Potassium	49700		50000	99	49700		50000	99	49600		50000	99
Selenium	4980		5000	100	5190		5000	104	4960		5000	99
Silver	944		1000	94	997		1000	100	956		1000	96
Sodium	48600		50000	97	48600		50000	97	48700		50000	97
Thallium	4860		5000	97	5090		5000	102	4940		5000	99
Vanadium	4810		5000	96	4850		5000	97	4830		5000	97
Zinc	4910		5000	98	5130		5000	103	4960		5000	99

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00010 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00018

Analyte	CCV 160-9492/88 08/21/2012 14:43											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	51100		50000	102								
Antimony	997		1000	100								
Arsenic	5000		5000	100								
Barium	5060		5000	101								
Beryllium	5070		5000	101								
Cadmium	5070		5000	101								
Calcium	24300		25000	97								
Chromium	5000		5000	100								
Cobalt	4790		5000	96								
Copper	5090		5000	102								
Iron	49600		50000	99								
Lead	5020		5000	100								
Magnesium	25500		25000	102								
Manganese	5110		5000	102								
Nickel	5080		5000	102								
Potassium	49500		50000	99								
Selenium	4930		5000	99								
Silver	948		1000	95								
Sodium	48400		50000	97								
Thallium	4880		5000	98								
Vanadium	4830		5000	97								
Zinc	4910		5000	98								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00010 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00018

Analyte	ICV 160-9505/6 08/22/2012 08:12				CCV 160-9505/12 08/22/2012 08:33				CCV 160-9505/24 08/22/2012 09:29			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	25200		25000	101	25500		25000	102	26300		25000	105
Aluminum	49600		50000	99	50300		50000	101	50700		50000	101
Antimony	990		1000	99	1000		1000	100	1020		1000	102
Arsenic	5000		5000	100	5040		5000	101	5180		5000	104
Barium	5100		5000	102	5110		5000	102	5090		5000	102
Beryllium	5060		5000	101	5100		5000	102	5100		5000	102
Cadmium	5070		5000	101	5070		5000	101	5220		5000	104
Chromium	5060		5000	101	5080		5000	102	5230		5000	105
Cobalt	5170		5000	103	5120		5000	102	5340		5000	107
Copper	5000		5000	100	5070		5000	101	5180		5000	104
Iron	50300		50000	101	50600		50000	101	50600		50000	101
Lead	5130		5000	103	5130		5000	103	5300		5000	106
Magnesium	25000		25000	100	25400		25000	101	25800		25000	103
Manganese	5110		5000	102	5050		5000	101	5080		5000	102
Nickel	5160		5000	103	5120		5000	102	5330		5000	107
Potassium	49500		50000	99	50300		50000	101	50300		50000	101
Selenium	5030		5000	101	5030		5000	101	5110		5000	102
Silver	994		1000	99	1000		1000	100	1010		1000	101
Sodium	49700		50000	99	50300		50000	101	50000		50000	100
Thallium	5330		5000	107	5150		5000	103	5220		5000	104
Vanadium	4970		5000	99	5030		5000	101	4950		5000	99
Zinc	5070		5000	101	5080		5000	102	5190		5000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00010 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00018

Analyte	CCV 160-9505/30 08/22/2012 09:51											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	26400		25000	106								
Aluminum	50700		50000	101								
Antimony	1020		1000	102								
Arsenic	5170		5000	103								
Barium	5110		5000	102								
Beryllium	5110		5000	102								
Cadmium	5200		5000	104								
Chromium	5250		5000	105								
Cobalt	5300		5000	106								
Copper	5170		5000	103								
Iron	51000		50000	102								
Lead	5310		5000	106								
Magnesium	25700		25000	103								
Manganese	5100		5000	102								
Nickel	5310		5000	106								
Potassium	50700		50000	101								
Selenium	5130		5000	103								
Silver	1020		1000	102								
Sodium	50600		50000	101								
Thallium	5280		5000	106								
Vanadium	5060		5000	101								
Zinc	5220		5000	104								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00011 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00020

Analyte	ICV 160-9840/6 08/27/2012 13:50				CCV 160-9840/12 08/27/2012 14:11				CCV 160-9840/36 08/27/2012 15:46			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	49900		50000	100	49900		50000	100	49200		50000	98
Antimony	1010		1000	101	998		1000	100	988		1000	99
Arsenic	5050		5000	101	5020		5000	100	5000		5000	100
Barium	5100		5000	102	5010		5000	100	4990		5000	100
Beryllium	5080		5000	102	5040		5000	101	4980		5000	100
Cadmium	5130		5000	103	5030		5000	101	4950		5000	99
Calcium	25300		25000	101	25800		25000	103	25600		25000	102
Chromium	5050		5000	101	5070		5000	101	4960		5000	99
Cobalt	5210		5000	104	5060		5000	101	5000		5000	100
Copper	5080		5000	102	5060		5000	101	4970		5000	99
Iron	50500		50000	101	50100		50000	100	50000		50000	100
Lead	5170		5000	103	5090		5000	102	5040		5000	101
Magnesium	25100		25000	100	25000		25000	100	24800		25000	99
Manganese	5140		5000	103	5010		5000	100	4950		5000	99
Nickel	5200		5000	104	5060		5000	101	5010		5000	100
Potassium	49700		50000	99	49900		50000	100	49700		50000	99
Selenium	5130		5000	103	5050		5000	101	5040		5000	101
Silver	998		1000	100	1010		1000	101	983		1000	98
Sodium	50000		50000	100	50100		50000	100	49700		50000	99
Thallium	5390		5000	108	5160		5000	103	5120		5000	102
Vanadium	5020		5000	100	5030		5000	101	5020		5000	100
Zinc	5140		5000	103	5060		5000	101	5010		5000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00011 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00020

Analyte	CCV 160-9840/48 08/27/2012 16:29				CCV 160-9840/60 08/27/2012 17:12							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	49500		50000	99	49800		50000	100				
Antimony	1000		1000	100	986		1000	99				
Arsenic	5020		5000	100	4970		5000	99				
Barium	5020		5000	100	5050		5000	101				
Beryllium	4980		5000	100	5010		5000	100				
Cadmium	5000		5000	100	4940		5000	99				
Calcium	25300		25000	101	25000		25000	100				
Chromium	4950		5000	99	4900		5000	98				
Cobalt	5030		5000	101	4990		5000	100				
Copper	5040		5000	101	4960		5000	99				
Iron	50000		50000	100	49900		50000	100				
Lead	5030		5000	101	4980		5000	100				
Magnesium	24800		25000	99	24900		25000	99				
Manganese	4970		5000	99	4980		5000	100				
Nickel	5020		5000	100	4970		5000	99				
Potassium	49700		50000	99	49800		50000	100				
Selenium	5070		5000	101	5020		5000	100				
Silver	977		1000	98	964		1000	96				
Sodium	49300		50000	99	49400		50000	99				
Thallium	5070		5000	101	4980		5000	100				
Vanadium	4980		5000	100	4970		5000	99				
Zinc	5000		5000	100	4930		5000	99				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: ICPC MIX ICV_00011 Concentration Units: ug/L

CCV Source: ICPC MIX CAL3_00020

Analyte	ICV 160-9847/6 08/28/2012 08:37				CCV 160-9847/12 08/28/2012 08:58				CCV 160-9847/24 08/28/2012 10:22			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Calcium	25400		25000	101	24800		25000	99	26100		25000	104

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: HG ICV W_00063 Concentration Units: ug/L

CCV Source: HG CCV W_00060

Analyte	ICV 160-9162/7 08/14/2012 13:16				CCV 160-9162/19 08/14/2012 13:39				CCV 160-9162/31 08/14/2012 14:00			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.44		2.50	98	5.04		5.00	101	5.08		5.00	102

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: HG ICV W_00063 Concentration Units: ug/L

CCV Source: HG CCV W_00060

Analyte	CCV 160-9162/43 08/14/2012 14:19											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.98		5.00	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: HG ICV W_00065 Concentration Units: ug/L

CCV Source: HG CCV W_00062

Analyte	ICV 160-9325/7 08/16/2012 13:46				CCV 160-9325/19 08/16/2012 14:08				CCV 160-9325/31 08/16/2012 14:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.56		2.50	102	5.20		5.00	104	4.89		5.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

ICV Source: HG ICV W_00065 Concentration Units: ug/L

CCV Source: HG CCV W_00062

Analyte	CCV 160-9325/43 08/16/2012 14:48				CCV 160-9325/53 08/16/2012 15:06							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.95		5.00	99	4.88		5.00	98				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Method: 6010C Instrument ID: ICP6500

Lab Sample ID: CRI 160-9492/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	200	199	J	99	70-130
Arsenic	10.0	9.90	J	99	70-130
Barium	50.0	50.7		101	70-130
Beryllium	5.00	5.10		102	70-130
Cadmium	5.00	5.20		104	70-130
Calcium	1000	1100		110	70-130
Chromium	10.0	9.70	J	97	70-130
Cobalt	50.0	55.1		110	70-130
Copper	25.0	26.9		108	70-130
Iron	100	104		104	70-130
Magnesium	1000	1020		102	70-130
Manganese	15.0	15.6		104	70-130
Nickel	40.0	44.4		111	70-130
Potassium	5000	4890	J	98	70-130
Lead	10.0	10.3		103	70-130
Antimony	10.0	10.9		109	70-130
Silver	10.0	10.0		100	70-130
Selenium	15.0	12.5	J	83	70-130
Sodium	1000	954	J	95	70-130
Thallium	20.0	20.7		104	70-130
Vanadium	50.0	52.9		106	70-130
Zinc	20.0	20.5		103	70-130

Lab Sample ID: CRI 160-9505/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	200	218		109	70-130
Arsenic	10.0	10.6		106	70-130
Barium	50.0	51.2		102	70-130
Beryllium	5.00	5.70		114	70-130
Cadmium	5.00	5.40		108	70-130
Calcium	1000	1110		111	70-130
Chromium	10.0	10.3		103	70-130
Cobalt	50.0	56.0		112	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Method: 6010C Instrument ID: ICP6500

Lab Sample ID: CRI 160-9505/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Copper	25.0	26.0		104	70-130
Iron	100	110		110	70-130
Magnesium	1000	1010		101	70-130
Manganese	15.0	16.4		109	70-130
Nickel	40.0	44.5		111	70-130
Potassium	5000	4980	J	100	70-130
Lead	10.0	10.6		106	70-130
Antimony	10.0	9.70	J	97	70-130
Silver	10.0	10.6		106	70-130
Selenium	15.0	18.7		125	70-130
Sodium	1000	984	J	98	70-130
Thallium	20.0	23.3		117	70-130
Vanadium	50.0	49.9	J	100	70-130
Zinc	20.0	21.4		107	70-130

Lab Sample ID: CRI 160-9840/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	200	194	J	97	70-130
Arsenic	10.0	8.80	J	88	70-130
Barium	50.0	50.1		100	70-130
Beryllium	5.00	5.10		102	70-130
Cadmium	5.00	4.70	J	94	70-130
Calcium	1000	1030		103	70-130
Chromium	10.0	9.00	J	90	70-130
Cobalt	50.0	51.5		103	70-130
Copper	25.0	25.6		102	70-130
Iron	100	103		103	70-130
Magnesium	1000	1000		100	70-130
Manganese	15.0	16.2		108	70-130
Nickel	40.0	41.8		105	70-130
Potassium	5000	4910	J	98	70-130
Lead	10.0	11.4		114	70-130
Antimony	10.0	9.00	J	90	70-130

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

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Method: 6010C Instrument ID: ICP6500

Lab Sample ID: CRI 160-9840/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	10.0	9.70	J	97	70-130
Selenium	15.0	12.9	J	86	70-130
Sodium	1000	993	J	99	70-130
Thallium	20.0	25.2		126	70-130
Vanadium	50.0	52.7		105	70-130
Zinc	20.0	20.0		100	70-130

Lab Sample ID: CRI 160-9847/8 Concentration Units: ug/L

CRQL Check Standard Source: ICPC MIX CAL1_00019

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Calcium	1000	1050		105	70-130

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

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9492/7 08/21/2012 09:11		CCB 160-9492/13 08/21/2012 09:32		CCB 160-9492/41 08/21/2012 11:54		CCB 160-9492/53 08/21/2012 12:37	
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	ND		ND		ND		ND	
Antimony	10	ND		ND		ND		ND	
Arsenic	10	6.80	J	ND		ND		2.00	J
Barium	50	ND		ND		ND		ND	
Beryllium	5.0	0.700	J	0.800	J	ND		1.10	J
Cadmium	5.0	4.60	J	ND		ND		ND	
Calcium	1000	ND		ND		ND		ND	
Chromium	10	ND		ND		ND		ND	
Cobalt	50	4.80	J	ND		ND		ND	
Copper	25	ND		ND		ND		ND	
Iron	100	ND		ND		ND		ND	
Lead	10	2.20	J	ND		ND		ND	
Magnesium	1000	ND		ND		ND		ND	
Manganese	15	ND		ND		ND		ND	
Nickel	40	ND		ND		ND		ND	
Potassium	5000	ND		ND		ND		ND	
Selenium	15	5.80	J	ND		3.70	J	ND	
Silver	10	ND		ND		ND		ND	
Sodium	1000	ND		ND		ND		ND	
Thallium	20	8.90	J	4.70	J	ND		ND	
Vanadium	50	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 160-9492/65 08/21/2012 13:20		CCB 160-9492/77 08/21/2012 14:03		CCB 160-9492/89 08/21/2012 14:46			
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	ND		ND		ND			
Antimony	10	ND		ND		ND			
Arsenic	10	ND		ND		ND			
Barium	50	ND		ND		ND			
Beryllium	5.0	0.800	J	0.700	J	0.700	J		
Cadmium	5.0	ND		ND		ND			
Calcium	1000	ND		ND		ND			
Chromium	10	ND		ND		ND			
Cobalt	50	ND		ND		ND			
Copper	25	ND		ND		ND			
Iron	100	ND		ND		ND			
Lead	10	ND		ND		ND			
Magnesium	1000	ND		ND		ND			
Manganese	15	ND		ND		ND			
Nickel	40	ND		ND		ND			
Potassium	5000	ND		ND		ND			
Selenium	15	3.20	J	ND		3.20	J		
Silver	10	ND		ND		ND			
Sodium	1000	ND		ND		ND			
Thallium	20	ND		ND		ND			
Vanadium	50	ND		ND		ND			
Zinc	20	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9505/7 08/22/2012 08:15		CCB 160-9505/13 08/22/2012 08:37		CCB 160-9505/25 08/22/2012 09:33		CCB 160-9505/31 08/22/2012 09:54	
		Found	C	Found	C	Found	C	Found	C
Calcium	1000	ND		ND		ND		112	J
Aluminum	200	ND		ND		ND		ND	
Antimony	10	ND		ND		ND		ND	
Arsenic	10	4.10	J	ND		ND		5.50	J
Barium	50	ND		ND		ND		ND	
Beryllium	5.0	0.900	J	0.800	J	0.700	J	ND	
Cadmium	5.0	2.10	J	ND		ND		4.20	J
Chromium	10	ND		ND		ND		ND	
Cobalt	50	ND		ND		ND		4.40	J
Copper	25	ND		4.90	J	ND		5.60	J
Iron	100	ND		ND		ND		ND	
Lead	10	1.70	J	ND		ND		3.50	J
Magnesium	1000	ND		ND		ND		ND	
Manganese	15	ND		ND		ND		ND	
Nickel	40	ND		ND		ND		ND	
Potassium	5000	ND		ND		ND		ND	
Selenium	15	6.20	J	6.00	J	4.50	J	8.40	J
Silver	10	ND		ND		ND		ND	
Sodium	1000	ND		ND		ND		ND	
Thallium	20	5.60	J	ND		ND		4.20	J
Vanadium	50	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9840/7 08/27/2012 13:53		CCB 160-9840/13 08/27/2012 14:15		CCB 160-9840/37 08/27/2012 15:49		CCB 160-9840/49 08/27/2012 16:32	
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	ND		ND		ND		ND	
Antimony	10	ND		4.80	J	ND		ND	
Arsenic	10	3.10	J	ND		ND		ND	
Barium	50	ND		ND		ND		ND	
Beryllium	5.0	ND		ND		0.700	J	ND	
Cadmium	5.0	ND		ND		ND		ND	
Calcium	1000	ND		ND		ND		ND	
Chromium	10	ND		ND		ND		ND	
Cobalt	50	ND		ND		ND		ND	
Copper	25	ND		ND		ND		ND	
Iron	100	ND		ND		ND		ND	
Lead	10	ND		ND		ND		ND	
Magnesium	1000	ND		ND		ND		ND	
Manganese	15	ND		ND		ND		ND	
Nickel	40	ND		ND		ND		ND	
Potassium	5000	ND		ND		ND		ND	
Selenium	15	ND		5.30	J	3.50	J	ND	
Silver	10	ND		ND		ND		ND	
Sodium	1000	ND		ND		ND		ND	
Thallium	20	4.40	J	ND		ND		ND	
Vanadium	50	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 160-9840/61 08/27/2012 17:15							
		Found	C	Found	C	Found	C	Found	C
Aluminum	200	ND							
Antimony	10	ND							
Arsenic	10	2.30	J						
Barium	50	ND							
Beryllium	5.0	0.700	J						
Cadmium	5.0	ND							
Calcium	1000	ND							
Chromium	10	ND							
Cobalt	50	ND							
Copper	25	ND							
Iron	100	ND							
Lead	10	ND							
Magnesium	1000	ND							
Manganese	15	ND							
Nickel	40	ND							
Potassium	5000	ND							
Selenium	15	ND							
Silver	10	ND							
Sodium	1000	ND							
Thallium	20	ND							
Vanadium	50	ND							
Zinc	20	ND							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9847/7 08/28/2012 08:40		CCB 160-9847/13 08/28/2012 09:02		CCB 160-9847/25 08/28/2012 10:25			
		Found	C	Found	C	Found	C	Found	C
Calcium	1000	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9162/8 08/14/2012 13:19		CCB 160-9162/20 08/14/2012 13:41		CCB 160-9162/32 08/14/2012 14:02		CCB 160-9162/44 08/14/2012 14:21	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-9325/8 08/16/2012 13:49		CCB 160-9325/20 08/16/2012 14:10		CCB 160-9325/32 08/16/2012 14:30		CCB 160-9325/44 08/16/2012 14:50	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 160-9325/54 08/16/2012 15:09							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	ND							

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-8952/1-A

Instrument Code: ICP6500 Batch No.: 9492

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7439-92-1	Lead	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-22-4	Silver	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	6.40	J		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-9563/1-A

Instrument Code: ICP6500 Batch No.: 9840

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7439-92-1	Lead	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-22-4	Silver	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	6.70	J		6010C

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-9032/1-A

Instrument Code: HAA2 Batch No.: 9162

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-9305/1-A

Instrument Code: HAA2 Batch No.: 9325

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	ND			7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSA 160-9492/9 Instrument ID: ICP6500

Lab File ID: 082112C1a.asc ICS Source: ICPC MIX ICSA_00009

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**100000**	**100700**	**101**
Antimony		**3.80**	
Arsenic		**0.0000**	
Barium		**0.200**	
Beryllium		**0.100**	
Cadmium		**0.0000**	
Calcium	**50000**	**49820**	**100**
Chromium		**0.600**	
Cobalt		**3.30**	
Copper		**0.0000**	
Iron	**100000**	**100800**	**101**
Lead		**0.0000**	
Magnesium	**100000**	**101700**	**102**
Manganese		**1.10**	
Nickel		**3.50**	
Potassium		**0.0000**	
Selenium		**0.0000**	
Silver		**0.0000**	
Sodium		**0.0000**	
Thallium		**2.10**	
Vanadium		**7.30**	
Zinc		**0.0000**	
Bismuth		*3.90*	
Boron		*0.600*	
Lithium		*3.90*	
Molybdenum		*0.300*	
Phosphorus		*3.70*	
S		*7.70*	
Silicon		*0.0000*	
Strontium		*0.0000*	
Thorium		*0.0000*	
Tin		*0.0000*	
Titanium		*0.0000*	
Uranium		*0.0000*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSAB 160-9492/10 Instrument ID: ICP6500

Lab File ID: 082112C1a.asc ICS Source: ICPC MIX AB_00011

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**100000**	**100900**	**101**
Antimony	**1000**	**1065**	**107**
Arsenic	**1000**	**984**	**98**
Barium	**500**	**498**	**100**
Beryllium	**500**	**488**	**98**
Cadmium	**1000**	**1013**	**101**
Calcium	**50000**	**49800**	**100**
Chromium	**500**	**503**	**101**
Cobalt	**500**	**503**	**101**
Copper	**500**	**504**	**101**
Iron	**100000**	**100700**	**101**
Lead	**1000**	**999**	**100**
Magnesium	**100000**	**101200**	**101**
Manganese	**500**	**509**	**102**
Nickel	**1000**	**1013**	**101**
Potassium	**20000**	**19840**	**99**
Selenium	**1000**	**987**	**99**
Silver	**1000**	**1004**	**100**
Sodium	**20000**	**19900**	**100**
Thallium	**1000**	**1015**	**102**
Vanadium	**500**	**511**	**102**
Zinc	**1000**	**1011**	**101**
Bismuth	*1000*	*1017*	*102*
Boron	*1000*	*1011*	*101*
Lithium	*1000*	*1010*	*101*
Molybdenum	*1000*	*1023*	*102*
Phosphorus	*500*	*498*	*100*
S	*20000*	*19910*	*100*
Silicon	*1000*	*1090*	*109*
Strontium	*1000*	*1016*	*102*
Thorium	*1000*	*981*	*98*
Tin	*1000*	*998*	*100*
Titanium	*500*	*512*	*102*
Uranium	*1000*	*968*	*97*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSA 160-9505/9 Instrument ID: ICP6500

Lab File ID: 082212C1.asc ICS Source: ICPC MIX ICSA_00009

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**50000**	**52300**	**105**
Aluminum	*100000*	*101100*	*101*
Antimony		*3.20*	
Arsenic		*0.300*	
Barium		*0.400*	
Beryllium		*0.100*	
Bismuth		*16.7*	
Boron		*0.0000*	
Cadmium		*5.60*	
Chromium		*9.10*	
Cobalt		*9.50*	
Copper		*7.70*	
Iron	*100000*	*101300*	*101*
Lead		*4.40*	
Lithium		*1.10*	
Magnesium	*100000*	*103300*	*103*
Manganese		*1.60*	
Molybdenum		*6.40*	
Nickel		*9.90*	
Phosphorus		*10.2*	
Potassium		*17.0*	
S		*82.7*	
Selenium		*8.10*	
Silicon		*0.0000*	
Silver		*0.0000*	
Sodium		*0.0000*	
Strontium		*0.0000*	
Thallium		*6.70*	
Thorium		*0.0000*	
Tin		*6.30*	
Titanium		*0.0000*	
Uranium		*47.6*	
Vanadium		*8.50*	
Zinc		*4.30*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSAB 160-9505/10 Instrument ID: ICP6500

Lab File ID: 082212C1.asc ICS Source: ICPC MIX AB_00011

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Calcium	**50000**	**49500**	**99**
Aluminum	*100000*	*100100*	*100*
Antimony	*1000*	*1048*	*105*
Arsenic	*1000*	*981*	*98*
Barium	*500*	*499*	*100*
Beryllium	*500*	*484*	*97*
Bismuth	*1000*	*1003*	*100*
Boron	*1000*	*995*	*99*
Cadmium	*1000*	*1003*	*100*
Chromium	*500*	*505*	*101*
Cobalt	*500*	*503*	*101*
Copper	*500*	*495*	*99*
Iron	*100000*	*100300*	*100*
Lead	*1000*	*1000*	*100*
Lithium	*1000*	*1003*	*100*
Magnesium	*100000*	*100900*	*101*
Manganese	*500*	*503*	*101*
Molybdenum	*1000*	*1016*	*102*
Nickel	*1000*	*1011*	*101*
Phosphorus	*500*	*492*	*98*
Potassium	*20000*	*19860*	*99*
S	*20000*	*19820*	*99*
Selenium	*1000*	*992*	*99*
Silicon	*1000*	*1086*	*109*
Silver	*1000*	*994*	*99*
Sodium	*20000*	*19820*	*99*
Strontium	*1000*	*1020*	*102*
Thallium	*1000*	*1005*	*101*
Thorium	*1000*	*1005*	*101*
Tin	*1000*	*997*	*100*
Titanium	*500*	*506*	*101*
Uranium	*1000*	*1007*	*101*
Vanadium	*500*	*507*	*101*
Zinc	*1000*	*1004*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSA 160-9840/9 Instrument ID: ICP6500

Lab File ID: 082712C2.asc ICS Source: ICPC MIX ICSA_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**100000**	**100000**	**100**
Antimony		**4.90**	
Arsenic		**0.0000**	
Barium		**0.100**	
Beryllium		**0.100**	
Cadmium		**0.0000**	
Calcium	**50000**	**49410**	**99**
Chromium		**8.50**	
Cobalt		**2.60**	
Copper		**1.80**	
Iron	**100000**	**101200**	**101**
Lead		**0.0000**	
Magnesium	**100000**	**100900**	**101**
Manganese		**1.50**	
Nickel		**3.50**	
Potassium		**0.0000**	
Selenium		**0.0000**	
Silver		**0.100**	
Sodium		**3.60**	
Thallium		**0.600**	
Vanadium		**5.60**	
Zinc		**0.0000**	
Bismuth		*14.6*	
Boron		*0.0000*	
Lithium		*1.20*	
Molybdenum		*0.0000*	
Phosphorus		*4.30*	
S		*6.80*	
Silicon		*0.0000*	
Strontium		*0.0000*	
Thorium		*0.0000*	
Tin		*0.0000*	
Titanium		*0.100*	
Uranium		*21.3*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSAB 160-9840/10 Instrument ID: ICP6500

Lab File ID: 082712C2.asc ICS Source: ICPC MIX AB_00012

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Aluminum	**100000**	**99480**	**99**
Antimony	**1000**	**1033**	**103**
Arsenic	**1000**	**965**	**96**
Barium	**500**	**498**	**100**
Beryllium	**500**	**482**	**96**
Cadmium	**1000**	**980**	**98**
Calcium	**50000**	**48580**	**97**
Chromium	**500**	**499**	**100**
Cobalt	**500**	**488**	**98**
Copper	**500**	**486**	**97**
Iron	**100000**	**100900**	**101**
Lead	**1000**	**980**	**98**
Magnesium	**100000**	**100300**	**100**
Manganese	**500**	**501**	**100**
Nickel	**1000**	**988**	**99**
Potassium	**20000**	**19790**	**99**
Selenium	**1000**	**975**	**98**
Silver	**1000**	**991**	**99**
Sodium	**20000**	**19780**	**99**
Thallium	**1000**	**997**	**100**
Vanadium	**500**	**518**	**104**
Zinc	**1000**	**983**	**98**
Bismuth	*1000*	*993*	*99*
Boron	*1000*	*994*	*99*
Lithium	*1000*	*999*	*100*
Molybdenum	*1000*	*999*	*100*
Phosphorus	*500*	*487*	*97*
S	*20000*	*19650*	*98*
Silicon	*1000*	*999*	*100*
Strontium	*1000*	*996*	*100*
Thorium	*1000*	*1000*	*100*
Tin	*1000*	*977*	*98*
Titanium	*500*	*506*	*101*
Uranium	*1000*	*995*	*100*

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSA 160-9847/9 Instrument ID: ICP6500

Lab File ID: 082812C1.asc ICS Source: ICPC MIX ICSA_00010

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Calcium	**50000**	**51740**	**103**
Aluminum	*100000*	*99880*	*100*
Antimony		*3.90*	
Arsenic		*0.0000*	
Barium		*0.500*	
Beryllium		*0.0000*	
Bismuth		*11.1*	
Boron		*0.0000*	
Cadmium		*0.0000*	
Chromium		*15.4*	
Cobalt		*3.00*	
Copper		*0.800*	
Iron	*100000*	*100500*	*101*
Lead		*0.0000*	
Lithium		*1.50*	
Magnesium	*100000*	*100500*	*101*
Manganese		*1.00*	
Molybdenum		*0.100*	
Nickel		*4.10*	
Phosphorus		*3.60*	
Potassium		*0.0000*	
S		*2.10*	
Selenium		*1.80*	
Silicon		*0.0000*	
Silver		*0.0000*	
Sodium		*0.0000*	
Strontium		*0.0000*	
Thallium		*0.0000*	
Thorium		*0.900*	
Tin		*0.0000*	
Titanium		*1.20*	
Uranium		*41.4*	
Vanadium		*2.30*	
Zinc		*0.0000*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Lab Sample ID: ICSAB 160-9847/10 Instrument ID: ICP6500

Lab File ID: 082812C1.asc ICS Source: ICPC MIX AB_00012

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Calcium	**50000**	**48190**	**96**
Aluminum	*100000*	*98200*	*98*
Antimony	*1000*	*1024*	*102*
Arsenic	*1000*	*952*	*95*
Barium	*500*	*490*	*98*
Beryllium	*500*	*476*	*95*
Bismuth	*1000*	*986*	*99*
Boron	*1000*	*985*	*98*
Cadmium	*1000*	*969*	*97*
Chromium	*500*	*500*	*100*
Cobalt	*500*	*480*	*96*
Copper	*500*	*479*	*96*
Iron	*100000*	*99750*	*100*
Lead	*1000*	*972*	*97*
Lithium	*1000*	*986*	*99*
Magnesium	*100000*	*98900*	*99*
Manganese	*500*	*494*	*99*
Molybdenum	*1000*	*994*	*99*
Nickel	*1000*	*972*	*97*
Phosphorus	*500*	*491*	*98*
Potassium	*20000*	*19670*	*98*
S	*20000*	*19490*	*97*
Selenium	*1000*	*967*	*97*
Silicon	*1000*	*982*	*98*
Silver	*1000*	*994*	*99*
Sodium	*20000*	*19760*	*99*
Strontium	*1000*	*993*	*99*
Thallium	*1000*	*999*	*100*
Thorium	*1000*	*1007*	*101*
Tin	*1000*	*964*	*96*
Titanium	*500*	*498*	*100*
Uranium	*1000*	*984*	*98*
Vanadium	*500*	*481*	*96*
Zinc	*1000*	*975*	*98*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: PZ-113-AS MS
Lab ID: 160-437-1 MS
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.813		ND		1.00	81	80-120		7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: PZ-113-AS MS
Lab ID: 160-437-1 MS
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9260		ND		10000	93	75-125		6010C
Arsenic	947		ND		1000	95	75-125		6010C
Barium	1600		740		1000	87	75-125		6010C
Beryllium	922		ND		1000	92	75-125		6010C
Cadmium	947		ND		1000	95	75-125		6010C
Calcium	183000		180000		10000	-6	75-125	4	6010C
Chromium	952		ND		1000	95	75-125		6010C
Cobalt	979		ND		1000	98	75-125		6010C
Copper	948		ND		1000	95	75-125		6010C
Iron	15600		6700		10000	90	75-125		6010C
Magnesium	56900		51000		10000	55	75-125	4	6010C
Manganese	6870		6400		1000	48	75-125	4	6010C
Nickel	1010		ND		1000	101	75-125		6010C
Potassium	15600	J	ND		10000	156	75-125	F	6010C
Lead	968		ND		1000	97	75-125		6010C
Antimony	490		ND		500	98	75-125		6010C
Silver	97.0		ND		100	97	75-125		6010C
Selenium	952		ND		1000	95	75-125		6010C
Sodium	55800		50000		10000	60	75-125	4	6010C
Thallium	226		20	J	200	103	75-125		6010C
Vanadium	914		ND		1000	91	75-125		6010C
Zinc	960		33	J	1000	93	75-125		6010C

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 160-420-D-1-E MS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	26400		11000		10000	155	75-125	F	6010C
Arsenic	1100		120		1000	98	75-125		6010C
Barium	2140		1100		1000	108	75-125		6010C
Beryllium	1010		ND		1000	101	75-125		6010C
Cadmium	996		ND		1000	100	75-125		6010C
Calcium	169000		150000		10000	154	75-125	4	6010C
Chromium	986		16		1000	97	75-125		6010C
Cobalt	984		69		1000	91	75-125		6010C
Copper	1020		22	J	1000	100	75-125		6010C
Iron	78200		69000		10000	96	75-125	4	6010C
Magnesium	62800		50000		10000	125	75-125	4	6010C
Manganese	3290		2300		1000	101	75-125		6010C
Nickel	1080		93		1000	99	75-125		6010C
Potassium	18500		7300		10000	112	75-125		6010C
Lead	973		25		1000	95	75-125		6010C
Antimony	502		ND		500	100	75-125		6010C
Silver	96.8		ND		100	97	75-125		6010C
Selenium	927		ND		1000	93	75-125		6010C
Sodium	71200		61000		10000	105	75-125	4	6010C
Thallium	190		ND		200	95	75-125		6010C
Vanadium	990		32	J	1000	96	75-125		6010C
Zinc	1100		150		1000	95	75-125		6010C

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 160-428-E-6-B MS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.957		ND		1.00	96	80-120		7470A

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: PZ-113-AS MSD
Lab ID: 160-437-1 MSD
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.746		1.00	75	80-120	9	20	F	7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: PZ-113-AS MSD
Lab ID: 160-437-1 MSD
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	9830		10000	98	75-125	6	20		6010C
Arsenic	997		1000	100	75-125	5	20		6010C
Barium	1690		1000	95	75-125	5	20		6010C
Beryllium	978		1000	98	75-125	6	20		6010C
Cadmium	982		1000	98	75-125	4	20		6010C
Calcium	186000		10000	28	75-125	2	20	4	6010C
Chromium	985		1000	99	75-125	3	20		6010C
Cobalt	1020		1000	102	75-125	4	20		6010C
Copper	1000		1000	100	75-125	6	20		6010C
Iron	16500		10000	99	75-125	6	20		6010C
Magnesium	59300		10000	79	75-125	4	20	4	6010C
Manganese	7140		1000	76	75-125	4	20	4	6010C
Nickel	1060		1000	106	75-125	4	20		6010C
Potassium	16300	J	10000	163	75-125	5	20	F	6010C
Lead	1020		1000	102	75-125	5	20		6010C
Antimony	512		500	102	75-125	4	20		6010C
Silver	104		100	104	75-125	6	20		6010C
Selenium	970		1000	97	75-125	2	20		6010C
Sodium	57900		10000	81	75-125	4	20	4	6010C
Thallium	232		200	106	75-125	3	20		6010C
Vanadium	964		1000	96	75-125	5	20		6010C
Zinc	1000		1000	97	75-125	5	20		6010C

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 160-420-D-1-F MSD

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	33900		10000	230	75-125	25	20	F	6010C
Arsenic	1060		1000	94	75-125	3	20		6010C
Barium	2220		1000	116	75-125	4	20		6010C
Beryllium	978		1000	98	75-125	3	20		6010C
Cadmium	954		1000	95	75-125	4	20		6010C
Calcium	172000		10000	182	75-125	2	20	4	6010C
Chromium	954		1000	94	75-125	3	20		6010C
Cobalt	948		1000	88	75-125	4	20		6010C
Copper	979		1000	96	75-125	4	20		6010C
Iron	82000		10000	134	75-125	5	20	4	6010C
Magnesium	68500		10000	181	75-125	9	20	4	6010C
Manganese	3260		1000	98	75-125	1	20		6010C
Nickel	1050		1000	96	75-125	3	20		6010C
Potassium	19800		10000	125	75-125	7	20		6010C
Lead	938		1000	91	75-125	4	20		6010C
Antimony	469		500	94	75-125	7	20		6010C
Silver	94.1		100	94	75-125	3	20		6010C
Selenium	881		1000	88	75-125	5	20		6010C
Sodium	70600		10000	100	75-125	1	20	4	6010C
Thallium	180		200	90	75-125	5	20		6010C
Vanadium	969		1000	94	75-125	2	20		6010C
Zinc	1070		1000	92	75-125	3	20		6010C

SDR = Sample Duplicate Result

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

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: _____ Lab ID: 160-428-E-6-C MSD

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.: _____

Matrix: Water Concentration Units: ug/L

% Solids: _____

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.922		1.00	92	80-120	4	20		7470A

SDR = Sample Duplicate Result

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

FORM VD - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 160-9492/11

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: ICPC MIX CAL4_00012

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	100000	99500		100	90	110		6010C
Arsenic	10000	9900		99	90	110		6010C
Barium	10000	9930		99	90	110		6010C
Beryllium	10000	9910		99	90	110		6010C
Cadmium	10000	9910		99	90	110		6010C
Calcium	50000	49100		98	90	110		6010C
Chromium	10000	9880		99	90	110		6010C
Cobalt	10000	9850		98	90	110		6010C
Copper	10000	9880		99	90	110		6010C
Iron	100000	98800		99	90	110		6010C
Magnesium	50000	49300		99	90	110		6010C
Manganese	10000	9890		99	90	110		6010C
Nickel	10000	9810		98	90	110		6010C
Potassium	100000	99900		100	90	110		6010C
Lead	10000	9810		98	90	110		6010C
Antimony	2000	2000		100	90	110		6010C
Silver	2000	2020		101	90	110		6010C
Selenium	10000	9890		99	90	110		6010C
Sodium	100000	99800		100	90	110		6010C
Thallium	10000	9730		97	90	110		6010C
Vanadium	10000	9960		100	90	110		6010C
Zinc	10000	9900		99	90	110		6010C

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 160-8952/2-A

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: PR_Spike_4_00005

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	10000	10500		105	80	120		6010C
Arsenic	1000	1010		101	80	120		6010C
Barium	1000	1020		102	80	120		6010C
Beryllium	1000	1020		102	80	120		6010C
Cadmium	1000	1060		106	80	120		6010C
Calcium	10000	10500		105	80	120		6010C
Chromium	1000	1060		106	80	120		6010C
Cobalt	1000	1030		103	80	120		6010C
Copper	1000	1080		108	80	120		6010C
Iron	10000	10300		103	80	120		6010C
Magnesium	10000	10600		106	80	120		6010C
Manganese	1000	1060		106	80	120		6010C
Nickel	1000	1110		111	80	120		6010C
Potassium	10000	9860		99	80	120		6010C
Lead	1000	1080		108	80	120		6010C
Antimony	500	532		106	80	120		6010C
Silver	100	102		102	80	120		6010C
Selenium	1000	996		100	80	120		6010C
Sodium	10000	9710		97	80	120		6010C
Thallium	200	217		109	80	120		6010C
Vanadium	1000	964		96	80	120		6010C
Zinc	1000	1030		103	80	120		6010C

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

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 160-9505/11

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: ICPC MIX CAL4_00012

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	100000	101000		101	90	110		6010C
Arsenic	10000	9920		99	90	110		6010C
Barium	10000	9930		99	90	110		6010C
Beryllium	10000	9900		99	90	110		6010C
Cadmium	10000	9870		99	90	110		6010C
Calcium	50000	48700		97	90	110		6010C
Chromium	10000	9900		99	90	110		6010C
Cobalt	10000	9820		98	90	110		6010C
Copper	10000	9830		98	90	110		6010C
Iron	100000	99700		100	90	110		6010C
Magnesium	50000	50100		100	90	110		6010C
Manganese	10000	9990		100	90	110		6010C
Nickel	10000	9800		98	90	110		6010C
Potassium	100000	101000		101	90	110		6010C
Lead	10000	9750		98	90	110		6010C
Antimony	2000	1990		99	90	110		6010C
Silver	2000	2000		100	90	110		6010C
Selenium	10000	9890		99	90	110		6010C
Sodium	100000	100000		100	90	110		6010C
Thallium	10000	9650		97	90	110		6010C
Vanadium	10000	9960		100	90	110		6010C
Zinc	10000	9810		98	90	110		6010C

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

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 160-9840/11

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: ICPC MIX CAL4_00012

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	100000	99900		100	90	110		6010C
Arsenic	10000	9860		99	90	110		6010C
Barium	10000	10200		102	90	110		6010C
Beryllium	10000	9920		99	90	110		6010C
Cadmium	10000	9790		98	90	110		6010C
Calcium	50000	48400		97	90	110		6010C
Chromium	10000	9820		98	90	110		6010C
Cobalt	10000	9710		97	90	110		6010C
Copper	10000	9770		98	90	110		6010C
Iron	100000	100000		100	90	110		6010C
Magnesium	50000	49800		100	90	110		6010C
Manganese	10000	9950		99	90	110		6010C
Nickel	10000	9730		97	90	110		6010C
Potassium	100000	101000		101	90	110		6010C
Lead	10000	9720		97	90	110		6010C
Antimony	2000	1970		99	90	110		6010C
Silver	2000	2010		100	90	110		6010C
Selenium	10000	9890		99	90	110		6010C
Sodium	100000	100000		100	90	110		6010C
Thallium	10000	9710		97	90	110		6010C
Vanadium	10000	10100		101	90	110		6010C
Zinc	10000	9800		98	90	110		6010C

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 160-9563/2-A

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: PR_Spike_4_00005

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	10000	9960		100	80	120		6010C
Arsenic	1000	979		98	80	120		6010C
Barium	1000	998		100	80	120		6010C
Beryllium	1000	984		98	80	120		6010C
Cadmium	1000	989		99	80	120		6010C
Calcium	10000	10100		101	80	120		6010C
Chromium	1000	1020		102	80	120		6010C
Cobalt	1000	1020		102	80	120		6010C
Copper	1000	1010		101	80	120		6010C
Iron	10000	10200		102	80	120		6010C
Magnesium	10000	10000		100	80	120		6010C
Manganese	1000	1010		101	80	120		6010C
Nickel	1000	1040		104	80	120		6010C
Potassium	10000	9820		98	80	120		6010C
Lead	1000	1020		102	80	120		6010C
Antimony	500	513		103	80	120		6010C
Silver	100	105		105	80	120		6010C
Selenium	1000	977		98	80	120		6010C
Sodium	10000	9690		97	80	120		6010C
Thallium	200	216		108	80	120		6010C
Vanadium	1000	985		99	80	120		6010C
Zinc	1000	997		100	80	120		6010C

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

FORM VIIA - IN

LINEAR RANGE CHECK STANDARD
METALS -

Lab ID: LRC 160-9847/11

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: ICPC MIX CAL4_00012

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Calcium	50000	48200		96	90	110		6010C

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

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 160-9032/2-A

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: Hg Curve Int._00081

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.00	1.01		101	80	120		7470A

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

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 160-9305/2-A

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

Sample Matrix: Water LCS Source: Hg Curve Int._00083

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	1.00	1.00		100	80	120		7470A

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 160-437-1

SDG No:

Lab Name: TestAmerica St. Louis Job No: 160-437-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	ND		ND		NC		6010C
Arsenic	ND		70.0	J	NC		6010C
Barium	740		663	J	NC		6010C
Beryllium	ND		ND		NC		6010C
Cadmium	ND		ND		NC		6010C
Calcium	180000		167000		9.1		6010C
Chromium	ND		ND		NC		6010C
Cobalt	ND		ND		NC		6010C
Copper	ND		ND		NC		6010C
Iron	6700		6020		NC		6010C
Magnesium	51000		46900		8.8		6010C
Manganese	6400		5780		9.6		6010C
Nickel	ND		ND		NC		6010C
Potassium	ND		ND		NC		6010C
Lead	ND		ND		NC		6010C
Antimony	ND		ND		NC		6010C
Silver	ND		ND		NC		6010C
Selenium	ND		ND		NC		6010C
Sodium	50000		45100		NC		6010C
Thallium	20	J	ND		NC		6010C
Vanadium	ND		ND		NC		6010C
Zinc	33	J	145	J	NC		6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 160-420-D-1-D SD

SDG No:

Lab Name: TestAmerica St. Louis Job No: 160-437-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	11000		11100		2.1		6010C
Arsenic	120		127		4.7		6010C
Barium	1100		1090		2.3		6010C
Beryllium	ND		ND		NC		6010C
Cadmium	ND		ND		NC		6010C
Calcium	150000		167000		8.2		6010C
Chromium	16		ND		NC		6010C
Cobalt	69		74.5	J	NC		6010C
Copper	22	J	29.0	J	NC		6010C
Iron	69000		71900		4.7		6010C
Magnesium	50000		57200		14	V	6010C
Manganese	2300		2380		4.7		6010C
Nickel	93		102	J	NC		6010C
Potassium	7300		ND		NC		6010C
Lead	25		25.0	J	NC		6010C
Antimony	ND		ND		NC		6010C
Silver	ND		ND		NC		6010C
Selenium	ND		ND		NC		6010C
Sodium	61000		61900		2.0		6010C
Thallium	ND		ND		NC		6010C
Vanadium	32	J	21.5	J	NC		6010C
Zinc	150		175		NC		6010C

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 160-437-1

SDG No:

Lab Name: TestAmerica St. Louis Job No: 160-437-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	ND		ND		NC		7470A

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

FORM VIII-IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - DISSOLVED

Lab ID: 160-428-E-6-A SD

SDG No:

Lab Name: TestAmerica St. Louis Job No: 160-437-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Mercury	ND		ND		NC		7470A

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: ICP6500

Method: 6010C MDL Date: 03/09/2011 19:31

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Aluminum	396.152	200	79.9
Antimony	206.833	10	3.97
Arsenic	189.042	10	1.97
Barium	455.403	50	3.95
Beryllium	313.042	5	0.61
Cadmium	228.802	5	0.91
Calcium	184.006	1000	106
Chromium	283.563	10	3.14
Cobalt	228.616	50	3.96
Copper	217.894	25	4.55
Iron	259.94	100	28.2
Lead	220.353	10	1.5
Magnesium	279.806	1000	132
Manganese	257.61	15	3.32
Nickel	221.647	40	13.3
Potassium	766.49	5000	1650
Selenium	196.09	15	2.66
Silver	328.068	10	5.95
Sodium	589.592	1000	324
Thallium	190.856	20	3.97
Vanadium	290.882	50	4.06
Zinc	213.856	20	5.15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: ICP6500

Method: 6010C XMDL Date: 03/09/2011 14:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	396.152	200	79.9
Antimony	206.833	10	3.97
Arsenic	189.042	10	1.97
Barium	455.403	50	3.95
Beryllium	313.042	5	0.61
Cadmium	228.802	5	0.91
Calcium	184.006	1000	106
Chromium	283.563	10	3.14
Cobalt	228.616	50	3.96
Copper	217.894	25	4.55
Iron	259.94	100	28.2
Lead	220.353	10	1.5
Magnesium	279.806	1000	132
Manganese	257.61	15	3.32
Nickel	221.647	40	13.3
Potassium	766.49	5000	1650
Selenium	196.09	15	2.66
Silver	328.068	10	5.95
Sodium	589.592	1000	324
Thallium	190.856	20	3.97
Vanadium	290.882	50	4.06
Zinc	213.856	20	5.15

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: ICP6500

Method: 6010C MDL Date: 03/09/2011 19:31

Prep Method: 3010A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Aluminum	396.152	200	79.9
Antimony	206.833	10	3.97
Arsenic	189.042	10	1.97
Barium	455.403	50	3.95
Beryllium	313.042	5	0.61
Cadmium	228.802	5	0.91
Calcium	184.006	1000	106
Chromium	283.563	10	3.14
Cobalt	228.616	50	3.96
Copper	217.894	25	4.55
Iron	259.94	100	28.2
Lead	220.353	10	1.5
Magnesium	279.806	1000	132
Manganese	257.61	15	3.32
Nickel	221.647	40	13.3
Potassium	766.49	5000	1650
Selenium	196.09	15	2.66
Silver	328.068	10	5.95
Sodium	589.592	1000	324
Thallium	190.856	20	3.97
Vanadium	290.882	50	4.06
Zinc	213.856	20	5.15

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: ICP6500

Method: 6010C XMDL Date: 03/09/2011 14:35

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Aluminum	396.152	200	79.9
Antimony	206.833	10	3.97
Arsenic	189.042	10	1.97
Barium	455.403	50	3.95
Beryllium	313.042	5	0.61
Cadmium	228.802	5	0.91
Calcium	184.006	1000	106
Chromium	283.563	10	3.14
Cobalt	228.616	50	3.96
Copper	217.894	25	4.55
Iron	259.94	100	28.2
Lead	220.353	10	1.5
Magnesium	279.806	1000	132
Manganese	257.61	15	3.32
Nickel	221.647	40	13.3
Potassium	766.49	5000	1650
Selenium	196.09	15	2.66
Silver	328.068	10	5.95
Sodium	589.592	1000	324
Thallium	190.856	20	3.97
Vanadium	290.882	50	4.06
Zinc	213.856	20	5.15

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: HAA2

Method: 7470A MDL Date: 06/28/2011 19:17

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury		0.2	0.06

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: HAA2

Method: 7470A XMDL Date: 06/28/2011 19:19

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: HAA2

Method: 7470A MDL Date: 06/28/2011 19:17

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury		0.2	0.06

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: HAA2

Method: 7470A XMDL Date: 06/28/2011 19:19

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury		0.2	0.06

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	In
Aluminum	396.152														
Antimony	206.833														
Arsenic	189.042									0.007738					
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	249.678														
Cadmium	228.802														
Calcium	184.006														
Chromium	283.563														
Cobalt	228.616														
Copper	217.894														
Iron	259.940			-0.000041	-0.001407							0.0001797			
Lead	220.353														
Lithium	670.784														
Magnesium	279.806														
Manganese	257.610														
Molybdenum	202.030		0.04227	0.001377								-0.003741			
Nickel	221.647														
Phosphorus	177.495														
Potassium	766.490														
Selenium	196.090														
Silicon	251.611														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856														
Thorium	283.231														
Tin	189.989														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	In
Titanium	334.941														
Uranium	367.007											0.00287			
Vanadium	290.882														
Yttrium	371.030														
Zinc	213.856														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn
Aluminum	396.152									-0.000068					
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	249.678														
Cadmium	228.802														
Calcium	184.006														
Chromium	283.563														
Cobalt	228.616														
Copper	217.894									0.001114					
Iron	259.940									0.000045			-0.00019		
Lead	220.353														
Lithium	670.784														
Magnesium	279.806														
Manganese	257.610														
Molybdenum	202.030									-0.001107				0.01033	
Nickel	221.647														
Phosphorus	177.495														
Potassium	766.490														
Selenium	196.090														
Silicon	251.611														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856														
Thorium	283.231														
Tin	189.989											-0.002473			

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	K	Li	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Se	Si	Sn
Titanium	334.941														
Uranium	367.007									0.00079					
Vanadium	290.882											-0.001979			
Yttrium	371.030														
Zinc	213.856														

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	Sr	Th	Ti	Tl	U	V	Y	Zn						
Aluminum	396.152														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042														
Bismuth	223.061														
Boron	249.678														
Cadmium	228.802														
Calcium	184.006	0.000055													
Chromium	283.563														
Cobalt	228.616														
Copper	217.894								0.001245						
Iron	259.940		0.004242			0.003854			0.0001487						
Lead	220.353														
Lithium	670.784														
Magnesium	279.806														
Manganese	257.610														
Molybdenum	202.030														
Nickel	221.647								0.006191						
Phosphorus	177.495														
Potassium	766.490														
Selenium	196.090														
Silicon	251.611														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856														
Thorium	283.231					0.15273									
Tin	189.989														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

ICP-AES Instrument ID: ICP6500 Date: 03/08/2012

Analyte	Wave Length	Sr	Th	Ti	Tl	U	V	Y	Zn						
Titanium	334.941		0.03679												
Uranium	367.007														
Vanadium	290.882				-0.010787										
Yttrium	371.030														
Zinc	213.856														

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica St. Louis Job No: 160-437-1

SDG No.:

Instrument ID: ICP6500 Date: 02/14/2012 10:45

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Aluminum		100	6010C
Arsenic		10	6010C
Barium		10	6010C
Beryllium		10	6010C
Cadmium		10	6010C
Calcium		50	6010C
Chromium		10	6010C
Cobalt		10	6010C
Copper		10	6010C
Iron		100	6010C
Magnesium		50	6010C
Manganese		10	6010C
Nickel		10	6010C
Potassium		100	6010C
Lead		10	6010C
Antimony		2.0	6010C
Silver		4.0	6010C
Selenium		10	6010C
Sodium		100	6010C
Thallium		10	6010C
Vanadium		10	6010C
Zinc		10	6010C

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica St. Louis Job No: 160-437-1

SDG No.:

Instrument ID: HAA2 Date: 03/14/2012 13:48

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-8952/1-A	08/10/2012 13:36	8952		50	50
LCS 160-8952/2-A	08/10/2012 13:36	8952		50	50
160-420-D-1-E MS	08/10/2012 13:36	8952		50	50
160-420-D-1-F MSD	08/10/2012 13:36	8952		50	50
160-437-1	08/10/2012 13:36	8952		50	50
160-437-2	08/10/2012 13:36	8952		50	50
160-437-3	08/10/2012 13:36	8952		50	50
160-437-4	08/10/2012 13:36	8952		50	50
160-437-5	08/10/2012 13:36	8952		50	50
160-437-6	08/10/2012 13:36	8952		50	50
160-437-7	08/10/2012 13:36	8952		50	50
160-437-8	08/10/2012 13:37	8952		50	50
160-437-9	08/10/2012 13:37	8952		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-9563/1-A	08/23/2012 14:40	9563		50	50
LCS 160-9563/2-A	08/23/2012 14:40	9563		50	50
160-437-1	08/23/2012 14:40	9563		50	50
160-437-1 MS	08/23/2012 14:40	9563		50	50
160-437-1 MSD	08/23/2012 14:40	9563		50	50
160-437-2	08/23/2012 14:40	9563		50	50
160-437-3	08/23/2012 14:40	9563		50	50
160-437-4	08/23/2012 14:40	9563		50	50
160-437-5	08/23/2012 14:40	9563		50	50
160-437-6	08/23/2012 14:40	9563		50	50
160-437-7	08/23/2012 14:40	9563		50	50
160-437-8	08/23/2012 14:40	9563		50	50
160-437-9	08/23/2012 14:40	9563		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-9032/1-A	08/14/2012 09:04	9032		30	30
LCS 160-9032/2-A	08/14/2012 09:04	9032		30	30
160-437-1	08/14/2012 09:04	9032		30	30
160-437-1 MS	08/14/2012 09:04	9032		30	30
160-437-1 MSD	08/14/2012 09:04	9032		30	30
160-437-2	08/14/2012 09:04	9032		30	30
160-437-3	08/14/2012 09:04	9032		30	30
160-437-4	08/14/2012 09:04	9032		30	30
160-437-5	08/14/2012 09:04	9032		30	30
160-437-6	08/14/2012 09:04	9032		30	30
160-437-7	08/14/2012 09:04	9032		30	30
160-437-8	08/14/2012 09:04	9032		30	30
160-437-9	08/14/2012 09:04	9032		30	30

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-9305/1-A	08/16/2012 10:03	9305		30	30
LCS 160-9305/2-A	08/16/2012 10:03	9305		30	30
160-428-E-6-B MS	08/16/2012 10:03	9305		30	30
160-428-E-6-C MSD	08/16/2012 10:03	9305		30	30
160-437-1	08/16/2012 10:03	9305		30	30
160-437-2	08/16/2012 10:03	9305		30	30
160-437-3	08/16/2012 10:03	9305		30	30
160-437-4	08/16/2012 10:03	9305		30	30
160-437-5	08/16/2012 10:03	9305		30	30
160-437-6	08/16/2012 10:03	9305		30	30
160-437-7	08/16/2012 10:03	9305		30	30
160-437-8	08/16/2012 10:03	9305		30	30
160-437-9	08/16/2012 10:03	9305		30	30

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ICIS 160-9492/1	1		08:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9492/2			08:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9492/3			08:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9492/4			09:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9492/5			09:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 160-9492/6	1		09:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 160-9492/7	1		09:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 160-9492/8	1		09:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 160-9492/9	1		09:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 160-9492/10	1		09:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LRC 160-9492/11	1		09:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 160-9492/12	1		09:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/13	1		09:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:41																				
ZZZZZZ			09:44																				
CCV 160-9492/16			09:48																				
CCB 160-9492/17			09:51																				
ZZZZZZ			10:32																				
ZZZZZZ			10:36																				
ZZZZZZ			10:39																				
ZZZZZZ			10:43																				
ZZZZZZ			10:46																				
ZZZZZZ			10:50																				
ZZZZZZ			10:53																				
ZZZZZZ			10:57																				
ZZZZZZ			11:01																				
ZZZZZZ			11:04																				
CCV 160-9492/28			11:08																				
CCB 160-9492/29			11:11																				
ZZZZZZ			11:15																				
ZZZZZZ			11:19																				
ZZZZZZ			11:22																				
ZZZZZZ			11:26																				
ZZZZZZ			11:29																				
ZZZZZZ			11:33																				
ZZZZZZ			11:37																				
ZZZZZZ			11:40																				
ZZZZZZ			11:43																				
ZZZZZZ			11:47																				
CCV 160-9492/40	1		11:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/41	1		11:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			11:57																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ZZZZZZ			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:08																				
ZZZZZZ			12:12																				
ZZZZZZ			12:16																				
MB 160-8952/1-A	1	T	12:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 160-8952/2-A	1	T	12:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:26																				
160-420-D-1-D SD	25	T	12:30						X							X							
CCV 160-9492/52	1		12:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/53	1		12:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-420-D-1-E MS	5	T	12:41						X							X							
160-420-D-1-F MSD	5	T	12:44						X							X							
ZZZZZZ			12:48																				
ZZZZZZ			12:51																				
ZZZZZZ			12:55																				
160-437-1	5	T	12:58						X							X							
160-437-2	5	T	13:02													X		X					
160-437-3	5	T	13:06						X							X		X					
160-437-4	5	T	13:09						X							X		X					
160-437-5	5	T	13:13						X							X		X					
CCV 160-9492/64	1		13:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/65	1		13:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-6	5	T	13:24													X		X					
160-437-7	5	T	13:27													X							
160-437-8	5	T	13:31													X		X					
160-437-9	5	T	13:34													X		X					
ZZZZZZ			13:38																				
160-420-D-1-D SD	5	T	13:41	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
160-420-D-1-E MS	1	T	13:45	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
160-420-D-1-F MSD	1	T	13:48	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
ZZZZZZ			13:52																				
ZZZZZZ			13:55																				
CCV 160-9492/76	1		13:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/77	1		14:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:06																				
160-437-1	1	T	14:10	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
160-437-2	1	T	14:14	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
160-437-3	1	T	14:17	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
160-437-4	1	T	14:21	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
160-437-5	1	T	14:24	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
160-437-6	1	T	14:28	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
160-437-7	1	T	14:32	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
160-437-8	1	T	14:36	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
160-437-9	1	T	14:39	X	X	X	X	X		X	X	X	X	X	X		X		X	X	X	X	X
CCV 160-9492/88	1		14:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9492/89	1		14:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 160-9492/90			14:50																				
CCB 160-9492/91			14:53																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ICIS 160-9492/1	1		08:50	X	X																		
IC 160-9492/2			08:53	X	X																		
IC 160-9492/3			08:57	X	X																		
IC 160-9492/4			09:00	X	X																		
IC 160-9492/5			09:04	X	X																		
ICV 160-9492/6	1		09:07	X	X																		
ICB 160-9492/7	1		09:11	X	X																		
CRI 160-9492/8	1		09:14	X	X																		
ICSA 160-9492/9	1		09:18	X	X																		
ICSAB 160-9492/10	1		09:21	X	X																		
LRC 160-9492/11	1		09:25	X	X																		
CCV 160-9492/12	1		09:28	X	X																		
CCB 160-9492/13	1		09:32	X	X																		
ZZZZZZ			09:41																				
ZZZZZZ			09:44																				
CCV 160-9492/16			09:48																				
CCB 160-9492/17			09:51																				
ZZZZZZ			10:32																				
ZZZZZZ			10:36																				
ZZZZZZ			10:39																				
ZZZZZZ			10:43																				
ZZZZZZ			10:46																				
ZZZZZZ			10:50																				
ZZZZZZ			10:53																				
ZZZZZZ			10:57																				
ZZZZZZ			11:01																				
ZZZZZZ			11:04																				
CCV 160-9492/28			11:08																				
CCB 160-9492/29			11:11																				
ZZZZZZ			11:15																				
ZZZZZZ			11:19																				
ZZZZZZ			11:22																				
ZZZZZZ			11:26																				
ZZZZZZ			11:29																				
ZZZZZZ			11:33																				
ZZZZZZ			11:37																				
ZZZZZZ			11:40																				
ZZZZZZ			11:43																				
ZZZZZZ			11:47																				
CCV 160-9492/40	1		11:50	X	X																		
CCB 160-9492/41	1		11:54	X	X																		
ZZZZZZ			11:57																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ZZZZZZ			12:01																				
ZZZZZZ			12:05																				
ZZZZZZ			12:08																				
ZZZZZZ			12:12																				
ZZZZZZ			12:16																				
MB 160-8952/1-A	1	T	12:19	X	X																		
LCS 160-8952/2-A	1	T	12:23	X	X																		
ZZZZZZ			12:26																				
160-420-D-1-D SD	25	T	12:30																				
CCV 160-9492/52	1		12:34	X	X																		
CCB 160-9492/53	1		12:37	X	X																		
160-420-D-1-E MS	5	T	12:41																				
160-420-D-1-F MSD	5	T	12:44																				
ZZZZZZ			12:48																				
ZZZZZZ			12:51																				
ZZZZZZ			12:55																				
160-437-1	5	T	12:58																				
160-437-2	5	T	13:02																				
160-437-3	5	T	13:06																				
160-437-4	5	T	13:09																				
160-437-5	5	T	13:13																				
CCV 160-9492/64	1		13:16	X	X																		
CCB 160-9492/65	1		13:20	X	X																		
160-437-6	5	T	13:24																				
160-437-7	5	T	13:27																				
160-437-8	5	T	13:31																				
160-437-9	5	T	13:34																				
ZZZZZZ			13:38																				
160-420-D-1-D SD	5	T	13:41	X	X																		
160-420-D-1-E MS	1	T	13:45	X	X																		
160-420-D-1-F MSD	1	T	13:48	X	X																		
ZZZZZZ			13:52																				
ZZZZZZ			13:55																				
CCV 160-9492/76	1		13:59	X	X																		
CCB 160-9492/77	1		14:03	X	X																		
ZZZZZZ			14:06																				
160-437-1	1	T	14:10	X	X																		
160-437-2	1	T	14:14	X	X																		
160-437-3	1	T	14:17	X	X																		
160-437-4	1	T	14:21	X	X																		
160-437-5	1	T	14:24	X	X																		
160-437-6	1	T	14:28	X	X																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/21/2012 08:50 End Date: 08/21/2012 14:53

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
160-437-7	1	T	14:32	X	X																		
160-437-8	1	T	14:36	X	X																		
160-437-9	1	T	14:39	X	X																		
CCV 160-9492/88	1		14:43	X	X																		
CCB 160-9492/89	1		14:46	X	X																		
CCV 160-9492/90			14:50																				
CCB 160-9492/91			14:53																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/22/2012 07:54 End Date: 08/22/2012 09:54

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ca																				
ICIS 160-9505/1	1		07:54	X																				
IC 160-9505/2			07:58	X																				
IC 160-9505/3			08:02	X																				
IC 160-9505/4			08:05	X																				
IC 160-9505/5			08:08	X																				
ICV 160-9505/6	1		08:12	X																				
ICB 160-9505/7	1		08:15	X																				
CRI 160-9505/8	1		08:19	X																				
ICSA 160-9505/9	1		08:23	X																				
ICSAB 160-9505/10	1		08:26	X																				
LRC 160-9505/11	1		08:30	X																				
CCV 160-9505/12	1		08:33	X																				
CCB 160-9505/13	1		08:37	X																				
ZZZZZZ			08:53																					
ZZZZZZ			08:57																					
ZZZZZZ			09:01																					
ZZZZZZ			09:04																					
ZZZZZZ			09:08																					
ZZZZZZ			09:11																					
ZZZZZZ			09:15																					
ZZZZZZ			09:18																					
ZZZZZZ			09:22																					
160-437-2	10	T	09:26	X																				
CCV 160-9505/24	1		09:29	X																				
CCB 160-9505/25	1		09:33	X																				
160-437-6	20	T	09:36	X																				
160-437-7	10	T	09:40	X																				
160-437-8	10	T	09:44	X																				
160-437-9	10	T	09:47	X																				
CCV 160-9505/30	1		09:51	X																				
CCB 160-9505/31	1		09:54	X																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
ICIS 160-9840/1	1		13:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9840/2			13:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9840/3			13:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9840/4			13:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
IC 160-9840/5			13:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 160-9840/6	1		13:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICB 160-9840/7	1		13:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 160-9840/8	1		13:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 160-9840/9	1		14:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 160-9840/10	1		14:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LRC 160-9840/11	1		14:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 160-9840/12	1		14:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9840/13	1		14:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:27																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
ZZZZZZ			14:37																				
ZZZZZZ			14:41																				
ZZZZZZ			14:45																				
ZZZZZZ			14:48																				
ZZZZZZ			14:52																				
ZZZZZZ			14:56																				
ZZZZZZ			14:59																				
CCV 160-9840/24			15:03																				
CCB 160-9840/25			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:13																				
ZZZZZZ			15:17																				
ZZZZZZ			15:21																				
ZZZZZZ			15:24																				
ZZZZZZ			15:28																				
ZZZZZZ			15:31																				
ZZZZZZ			15:35																				
ZZZZZZ			15:39																				
ZZZZZZ			15:42																				
CCV 160-9840/36	1		15:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9840/37	1		15:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:00																				
ZZZZZZ			16:04																				
MB 160-9563/1-A	1	T	16:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
LCS 160-9563/2-A	1	T	16:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-1	5	D	16:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-1 SD	25	D	16:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-1 MS	5	D	16:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-1 MSD	5	D	16:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 160-9840/48	1		16:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9840/49	1		16:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-2	5	D	16:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-3	5	D	16:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-4	5	D	16:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-5	5	D	16:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-6	5	D	16:50	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-7	5	D	16:54	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-8	5	D	16:57	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
160-437-9	5	D	17:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			17:05																				
ZZZZZZ			17:08																				
CCV 160-9840/60	1		17:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 160-9840/61	1		17:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:26																				
ZZZZZZ			17:30																				
ZZZZZZ			17:33																				
ZZZZZZ			17:37																				
ZZZZZZ			17:41																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
ZZZZZZ			17:52																				
CCV 160-9840/72			17:55																				
CCB 160-9840/73			17:58																				
ZZZZZZ			18:02																				
ZZZZZZ			18:06																				
ZZZZZZ			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:24																				
ZZZZZZ			18:27																				
ZZZZZZ			18:31																				
ZZZZZZ			18:34																				
CCV 160-9840/84			18:38																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D / F	Type	Time	Analytes																				
				Ag	Al	As	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Mg	Mn	Na	Ni	Pb	Sb	Se	Tl
CCB 160-9840/85			18:42																				
ZZZZZZ			18:45																				
ZZZZZZ			18:49																				
ZZZZZZ			18:52																				
ZZZZZZ			18:56																				
ZZZZZZ			18:59																				
ZZZZZZ			19:03																				
ZZZZZZ			19:06																				
ZZZZZZ			19:09																				
CCV 160-9840/94			19:13																				
CCB 160-9840/95			19:16																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
ICIS 160-9840/1	1		13:32	X	X																		
IC 160-9840/2			13:36	X	X																		
IC 160-9840/3			13:40	X	X																		
IC 160-9840/4			13:43	X	X																		
IC 160-9840/5			13:46	X	X																		
ICV 160-9840/6	1		13:50	X	X																		
ICB 160-9840/7	1		13:53	X	X																		
CRI 160-9840/8	1		13:57	X	X																		
ICSA 160-9840/9	1		14:01	X	X																		
ICSAB 160-9840/10	1		14:04	X	X																		
LRC 160-9840/11	1		14:08	X	X																		
CCV 160-9840/12	1		14:11	X	X																		
CCB 160-9840/13	1		14:15	X	X																		
ZZZZZZ			14:27																				
ZZZZZZ			14:30																				
ZZZZZZ			14:34																				
ZZZZZZ			14:37																				
ZZZZZZ			14:41																				
ZZZZZZ			14:45																				
ZZZZZZ			14:48																				
ZZZZZZ			14:52																				
ZZZZZZ			14:56																				
ZZZZZZ			14:59																				
CCV 160-9840/24			15:03																				
CCB 160-9840/25			15:06																				
ZZZZZZ			15:10																				
ZZZZZZ			15:13																				
ZZZZZZ			15:17																				
ZZZZZZ			15:21																				
ZZZZZZ			15:24																				
ZZZZZZ			15:28																				
ZZZZZZ			15:31																				
ZZZZZZ			15:35																				
ZZZZZZ			15:39																				
ZZZZZZ			15:42																				
CCV 160-9840/36	1		15:46	X	X																		
CCB 160-9840/37	1		15:49	X	X																		
ZZZZZZ			15:53																				
ZZZZZZ			15:57																				
ZZZZZZ			16:00																				
ZZZZZZ			16:04																				
MB 160-9563/1-A	1	T	16:07	X	X																		

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D / F	Type	Time	Analytes																			
				V	Zn																		
LCS 160-9563/2-A	1	T	16:11	X	X																		
160-437-1	5	D	16:14	X	X																		
160-437-1 SD	25	D	16:18	X	X																		
160-437-1 MS	5	D	16:22	X	X																		
160-437-1 MSD	5	D	16:25	X	X																		
CCV 160-9840/48	1		16:29	X	X																		
CCB 160-9840/49	1		16:32	X	X																		
160-437-2	5	D	16:36	X	X																		
160-437-3	5	D	16:39	X	X																		
160-437-4	5	D	16:43	X	X																		
160-437-5	5	D	16:47	X	X																		
160-437-6	5	D	16:50	X	X																		
160-437-7	5	D	16:54	X	X																		
160-437-8	5	D	16:57	X	X																		
160-437-9	5	D	17:01	X	X																		
ZZZZZZ			17:05																				
ZZZZZZ			17:08																				
CCV 160-9840/60	1		17:12	X	X																		
CCB 160-9840/61	1		17:15	X	X																		
ZZZZZZ			17:19																				
ZZZZZZ			17:23																				
ZZZZZZ			17:26																				
ZZZZZZ			17:30																				
ZZZZZZ			17:33																				
ZZZZZZ			17:37																				
ZZZZZZ			17:41																				
ZZZZZZ			17:44																				
ZZZZZZ			17:48																				
ZZZZZZ			17:52																				
CCV 160-9840/72			17:55																				
CCB 160-9840/73			17:58																				
ZZZZZZ			18:02																				
ZZZZZZ			18:06																				
ZZZZZZ			18:09																				
ZZZZZZ			18:13																				
ZZZZZZ			18:16																				
ZZZZZZ			18:20																				
ZZZZZZ			18:24																				
ZZZZZZ			18:27																				
ZZZZZZ			18:31																				
ZZZZZZ			18:34																				
CCV 160-9840/84			18:38																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/27/2012 13:32 End Date: 08/27/2012 19:16

Lab Sample ID	D / F	Type	Time	Analytes																				
				V	Zn																			
CCB 160-9840/85			18:42																					
ZZZZZZ			18:45																					
ZZZZZZ			18:49																					
ZZZZZZ			18:52																					
ZZZZZZ			18:56																					
ZZZZZZ			18:59																					
ZZZZZZ			19:03																					
ZZZZZZ			19:06																					
ZZZZZZ			19:09																					
CCV 160-9840/94			19:13																					
CCB 160-9840/95			19:16																					

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: ICP6500 Method: 6010C

Start Date: 08/28/2012 08:19 End Date: 08/28/2012 10:39

Lab Sample ID	D / F	Type	Time	Analytes																			
				Ca																			
ICIS 160-9847/1	1		08:19	X																			
IC 160-9847/2			08:23	X																			
IC 160-9847/3			08:27	X																			
IC 160-9847/4			08:30	X																			
IC 160-9847/5			08:33	X																			
ICV 160-9847/6	1		08:37	X																			
ICB 160-9847/7	1		08:40	X																			
CRI 160-9847/8	1		08:44	X																			
ICSA 160-9847/9	1		08:48	X																			
ICSAB 160-9847/10	1		08:51	X																			
LRC 160-9847/11	1		08:55	X																			
CCV 160-9847/12	1		08:58	X																			
CCB 160-9847/13	1		09:02	X																			
160-437-6	20	D	09:45	X																			
160-437-7	10	D	09:49	X																			
160-437-8	10	D	09:53	X																			
ZZZZZZ			09:56																				
ZZZZZZ			10:00																				
ZZZZZZ			10:04																				
ZZZZZZ			10:07																				
ZZZZZZ			10:11																				
ZZZZZZ			10:15																				
ZZZZZZ			10:18																				
CCV 160-9847/24	1		10:22	X																			
CCB 160-9847/25	1		10:25	X																			
ZZZZZZ			10:29																				
ZZZZZZ			10:32																				
CCV 160-9847/28			10:36																				
CCB 160-9847/29			10:39																				

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: HAA2 Method: 7470A

Start Date: 08/14/2012 13:05 End Date: 08/14/2012 14:37

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 160-9162/1			13:05	X																			
IC 160-9162/2			13:07	X																			
IC 160-9162/3			13:08	X																			
IC 160-9162/4			13:10	X																			
IC 160-9162/5			13:12	X																			
IC 160-9162/6			13:14	X																			
ICV 160-9162/7	1		13:16	X																			
ICB 160-9162/8	1		13:19	X																			
ZZZZZZ			13:21																				
ZZZZZZ			13:23																				
ZZZZZZ			13:25																				
ZZZZZZ			13:26																				
ZZZZZZ			13:28																				
ZZZZZZ			13:30																				
ZZZZZZ			13:32																				
ZZZZZZ			13:33																				
MB 160-9032/1-A	1	T	13:35	X																			
LCS 160-9032/2-A	1	T	13:37	X																			
CCV 160-9162/19	1		13:39	X																			
CCB 160-9162/20	1		13:41	X																			
160-437-1	1	T	13:43	X																			
160-437-1 SD	5	T	13:45	X																			
160-437-1 MS	1	T	13:46	X																			
160-437-1 MSD	1	T	13:48	X																			
160-437-2	1	T	13:50	X																			
160-437-3	1	T	13:52	X																			
160-437-4	1	T	13:54	X																			
160-437-5	1	T	13:55	X																			
160-437-6	1	T	13:57	X																			
160-437-7	1	T	13:59	X																			
CCV 160-9162/31	1		14:00	X																			
CCB 160-9162/32	1		14:02	X																			
160-437-8	1	T	14:04	X																			
160-437-9	1	T	14:06	X																			
ZZZZZZ			14:07																				
ZZZZZZ			14:09																				
ZZZZZZ			14:10																				
ZZZZZZ			14:12																				
ZZZZZZ			14:13																				
ZZZZZZ			14:15																				
ZZZZZZ			14:16																				
ZZZZZZ			14:18																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: HAA2 Method: 7470A

Start Date: 08/14/2012 13:05 End Date: 08/14/2012 14:37

Lab Sample ID	D / F	Type	Time	Analytes																				
				Hg																				
CCV 160-9162/43	1		14:19	X																				
CCB 160-9162/44	1		14:21	X																				
ZZZZZZ			14:24																					
ZZZZZZ			14:25																					
ZZZZZZ			14:27																					
ZZZZZZ			14:28																					
ZZZZZZ			14:31																					
ZZZZZZ			14:33																					
ZZZZZZ			14:34																					
CCV 160-9162/52			14:36																					
CCB 160-9162/53			14:37																					

Prep Types

D = Dissolved

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: HAA2 Method: 7470A

Start Date: 08/16/2012 13:35 End Date: 08/16/2012 15:09

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
IC 160-9325/1			13:35	X																			
IC 160-9325/2			13:37	X																			
IC 160-9325/3			13:38	X																			
IC 160-9325/4			13:40	X																			
IC 160-9325/5			13:42	X																			
IC 160-9325/6			13:44	X																			
ICV 160-9325/7	1		13:46	X																			
ICB 160-9325/8	1		13:49	X																			
ZZZZZZ			13:51																				
ZZZZZZ			13:53																				
ZZZZZZ			13:54																				
ZZZZZZ			13:56																				
ZZZZZZ			13:58																				
ZZZZZZ			13:59																				
ZZZZZZ			14:01																				
ZZZZZZ			14:04																				
ZZZZZZ			14:05																				
ZZZZZZ			14:07																				
CCV 160-9325/19	1		14:08	X																			
CCB 160-9325/20	1		14:10	X																			
ZZZZZZ			14:12																				
MB 160-9305/1-A	1	T	14:14	X																			
LCS 160-9305/2-A	1	T	14:15	X																			
ZZZZZZ			14:17																				
ZZZZZZ			14:19																				
ZZZZZZ			14:20																				
ZZZZZZ			14:22																				
ZZZZZZ			14:23																				
160-428-E-6-A SD	5	D	14:25	X																			
160-428-E-6-B MS	1	D	14:26	X																			
CCV 160-9325/31	1		14:28	X																			
CCB 160-9325/32	1		14:30	X																			
160-428-E-6-C MSD	1	D	14:32	X																			
ZZZZZZ			14:34																				
ZZZZZZ			14:36																				
160-437-1	1	D	14:37	X																			
160-437-2	1	D	14:39	X																			
160-437-3	1	D	14:41	X																			
160-437-4	1	D	14:42	X																			
160-437-5	1	D	14:44	X																			
160-437-6	1	D	14:45	X																			
160-437-7	1	D	14:47	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: HAA2 Method: 7470A

Start Date: 08/16/2012 13:35 End Date: 08/16/2012 15:09

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
CCV 160-9325/43	1		14:48	X																			
CCB 160-9325/44	1		14:50	X																			
160-437-8	1	D	14:52	X																			
160-437-9	1	D	14:54	X																			
ZZZZZZ			14:55																				
ZZZZZZ			14:57																				
ZZZZZZ			14:58																				
ZZZZZZ			15:01																				
ZZZZZZ			15:02																				
ZZZZZZ			15:04																				
CCV 160-9325/53	1		15:06	X																			
CCB 160-9325/54	1		15:09	X																			

Prep Types

D = Dissolved

T = Total/NA

File: 082112C1

ICV/ICB/LLC/ICSA/ICSAB/LDR/CCV/CCB CR 8/22/12 Std. ICPC-081312 6500

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1001	3	1	1	Unk	160-405-E-9-B	DF=10		
2	1002	3	1	2	Unk	160-430-A-14-A	DF=5		
3	1003	3	1	3	Unk	MB 160-8951/1-A			
4	1004	3	1	4	Unk	LCS 160-8951/2-A			
5	1005	3	1	5	Unk	160-415-D-1-B	DF=5		
6	1006	3	1	6	Unk	160-415-D-2-D	DF=5		
7	1007	3	1	7	Unk	160-415-D-2-D SD	DF=25		
8	1008	3	1	8	Unk	160-415-D-2-E MS	DF=5		
9	1009	3	1	9	Unk	160-415-D-2-F MSD	DF=5		
10	1010	3	1	10	Unk	160-415-D-3-B	DF=5		
11	1011	3	1	11	Unk	160-415-D-4-B	DF=5		
12	1012	3	1	12	Unk	160-415-D-5-B	DF=5		
13	1013	3	1	13	Unk	160-415-D-6-B	DF=5		
14	1014	3	1	14	Unk	160-415-D-8-B	DF=5		
15	1015	3	1	15	Unk	160-415-D-9-A	DF=5		
16	1016	3	2	1	Unk	160-415-D-10-B	DF=5		
17	1017	3	2	2	Unk	160-415-D-1-B			
18	1018	3	2	3	Unk	160-415-D-2-D			
19	1019	3	2	4	Unk	160-415-D-2-D SD	DF=5		
20	1020	3	2	5	Unk	160-415-D-2-E MS			
21	1021	3	2	6	Unk	160-415-D-2-F MSD			
22	1022	3	2	7	Unk	160-415-D-3-B			
23	1023	3	2	8	Unk	160-415-D-4-B			
24	1024	3	2	9	Unk	160-415-D-5-B			
25	1025	3	2	10	Unk	160-415-D-6-B			
26	1026	3	2	11	Unk	160-415-D-8-B			
27	1027	3	2	12	Unk	160-415-D-9-A			
28	1028	3	2	13	Unk	160-415-D-10-B			
29	1029	3	2	14	Unk	MB 160-8952/1-A			
30	1030	3	2	15	Unk	LCS 160-8952/2-A			
31	1031	3	3	1	Unk	160-420-D-1-D	DF=5		
32	1032	3	3	2	Unk	160-420-D-1-D SD	DF=25		
33	1033	3	3	3	Unk	160-420-D-1-E MS	DF=5		
34	1034	3	3	4	Unk	160-420-D-1-F MSD	DF=5		
35	1035	3	3	5	Unk	160-420-D-2-B	DF=5		
36	1036	3	3	6	Unk	160-420-D-3-B	DF=5		
37	1037	3	3	7	Unk	160-420-D-4-B	DF=5		
38	1038	3	3	8	Unk	160-437-D-1-A	DF=5		
39	1039	3	3	9	Unk	160-437-D-2-A	DF=5		
40	1040	3	3	10	Unk	160-437-D-3-A	DF=5		
41	1041	3	3	11	Unk	160-437-D-4-A	DF=5		
42	1042	3	3	12	Unk	160-437-D-5-A	DF=5		
43	1043	3	3	13	Unk	160-437-D-6-A	DF=5		
44	1044	3	3	14	Unk	160-437-D-7-A	DF=5		
45	1045	3	3	15	Unk	160-437-D-8-A	DF=5		
46	1046	3	4	1	Unk	160-437-D-9-A	DF=5		
47	1047	3	4	2	Unk	160-420-D-1-D			
48	1048	3	4	3	Unk	160-420-D-1-D SD	DF=5		
49	1049	3	4	4	Unk	160-420-D-1-E MS			
50	1050	3	4	5	Unk	160-420-D-1-F MSD			
51	1051	3	4	6	Unk	160-420-D-2-B			
52	1052	3	4	7	Unk	160-420-D-3-B			
53	1053	3	4	8	Unk	160-420-D-4-B			
54	1054	3	4	9	Unk	160-437-D-1-A			
55	1055	3	4	10	Unk	160-437-D-2-A			
56	1056	3	4	11	Unk	160-437-D-3-A			
57	1057	3	4	12	Unk	160-437-D-4-A			
58	1058	3	4	13	Unk	160-437-D-5-A			
59	1059	3	4	14	Unk	160-437-D-6-A			
60	1060	3	4	15	Unk	160-437-D-7-A			
61	1061	3	5	1	Unk	160-437-D-8-A			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
CCV CCB 62	1062	3	5	2	Unk	160-437-D-9-A	Ca↑ Mg↑ Mn↑	J-All except Ca, Mg, Na	

Analytical batch: 9492

Vertical Table Report
Author: File: 082112C1
Notes:

	CALBLK1 8/21/2012 8:50:05A metals 2011 (493)	CAL 1 8/21/2012 8:53:45A metals 2011 (493)	CAL 2 8/21/2012 8:57:24A metals 2011 (493)	CAL 3 8/21/2012 9:00:43A metals 2011 (493)	CAL 4 8/21/2012 9:04:02A metals 2011 (493)
Ag3280	-.0010	.0133	.2863	1.406	2.787
Al3961	.0021	.0265	1.306	6.432	12.94
As1890	.0000	.0004	.0506	.2523	.4969
B_2496	.0007	.0144	.1449	.7188	1.439
Ba4554	.0252	.4461	8.388	42.05	83.69
Be3130	.0006	.0438	8.703	43.46	85.62
Bi2230	.0004	.0118		.2783	.5371
Ca1840	.0015	.1595	.8002	3.722	7.150
Cd2288	-.0001	.0040	.8332	4.091	7.944
Co2286	.0000	.0200	.3970	1.896	3.648
Cr2835	.0081	.0227	1.397	6.700	13.06
Cu2178	.0001	.0020	.0754	.3640	.7015
Fe2599	.0005	.0287	2.765	13.62	27.12
K_7664	.0105	.5324	1.069	5.329	10.77
Li6707	.0020	.1148	2.200	10.99	22.06
Mg2798	-.0013	.0353	.1825	.9035	1.801
Mn2576	.0001	.0233	1.550	7.559	15.06
Mo2020	.0000	.0162	.4098	2.004	3.929
Na5895	-.0095	.3219	3.408	17.25	34.71
Ni2216	.0004	.0206	.4995	2.378	4.567
P_1774	.0001	.0179		.3649	.7134
Pb2203	-.0001	.0009	.1128	.5382	1.025
S_1820	.0003	.1577		1.603	3.189
Sb2068	.0004	.0008	.0133	.0635	.1256
Se1960	.0002	.0007	.0383	.1901	.3727
Si2516	.0047	.0414		.4741	.9559
Sn1899	.0001	.0130	.1273	.6170	1.193
Sr4077	-.0005	.0588	12.18	59.92	119.0
Th2832	.0103	.0462		.9765	1.903
Ti3349	.0013	.0181	.8652	4.264	8.621
Tl1908	-.0004	.0014	.0849	.3963	.7418
U_3670	.0110	.0641		.6472	1.247
V_2908	-.0008	.0105	.2224	1.117	2.226
Y_3710	4923.5	5000.7	4903.3	4830.0	4832.0
Zn2138	.0014	.0118	.5332	2.610	5.046

Vertical Table Report
Author:
Notes:

M	ICV 8/21/2012 9:07:39A metals 2011 (493)	ICB 8/21/2012 9:11:00A metals 2011 (493)	LLC 8/21/2012 9:14:41A metals 2011 (493)	ICSA 8/21/2012 9:18:19A metals 2011 (493)	ICSAB 8/21/2012 9:21:57A metals 2011 (493)
Ag3280	.9799	.0004	.0100	<.0000	1.004
Al3961	49.62	.0037	.1989	100.7	100.9
As1890	5.012	W .0068	.0099	<.0000	.9839
B_2496	5.108	.0205	.1077	.0006	1.011
Ba4554	5.096	.0007	.0507	.0002	.4978
Be3130	5.071	.0007	.0051	.0001	.4877
Bi2230	5.051	<.0000	.2118	.0039	1.017
Ca1840	25.03	.0205	1.101	49.82	49.80
Cd2288	5.048	W .0046	.0052	<.0000	1.013
Co2286	5.157	.0048	.0551	.0033	.5027
Cr2835	4.976	.0004	.0097	.0006	.5029
Cu2178	5.000	.0029	.0269	<.0000	.5039
Fe2599	50.58	.0075	.1038	100.8	100.7
K_7664	49.75	<.0000	4.888	<.0000	19.84
Li6707	4.985	.0024	.0527	.0039	1.010
Mg2798	24.96	.0152	1.022	101.7	101.2
Mn2576	5.118	.0007	.0156	.0011	.5087
Mo2020	5.067	W .0145	.0421	.0003	1.023
Na5895	49.98	<.0000	.9536	<.0000	19.90
Ni2216	5.131	W .0046	.0444	.0035	1.013
P_1774	5.028	.0041	.2515	.0037	.4978
Pb2203	5.101	.0022	.0103	W<.0000	.9988
S_1820	49.99	.0478	5.033	.0077	19.91
Sb2068	.9975	.0002	.0109	.0038	1.065
Se1960	5.077	.0058	.0125	<.0000	.9869
Si2516	4.974	.0093	.3935	<.0000	1.090
Sn1899	5.012	.0060	.1091	<.0000	.9981
Sr4077	5.034	.0006	.0050	<.0000	1.016
Th2832	5.074	<.0000	.1971	<.0000	.9810
Ti3349	5.011	.0019	.0202	<.0000	.5119
Tl1908	5.320	W .0089	.0207	.0021	1.015
U_3670	4.919	<.0000	.4985	<.0000	.9684
V_2908	4.997	.0022	.0529	.0073	.5111
Y_3710	4992.9	5146.2	4998.3	4976.7	4886.5
Zn2138	5.065	.0041	.0205	<.0000	1.011

Vertical Table Report
Author:
Notes:

M	LDR 8/21/2012 9:25:18A metals 2011 (493)	CCV 8/21/2012 9:28:57A metals 2011 (493)	CCB 8/21/2012 9:32:17A metals 2011 (493)	160-405-E-9-B 8/21/2012 9:41:22A metals 2011 (493)	160-430-A-14-A 8/21/2012 9:44:59A metals 2011 (493)
Ag3280	2.018	.9939	.0003	<.0000	.0004
Al3961	99.51	49.67	<.0000	<.0000	.4544
As1890	9.899	5.100	.0015	.0003	.0139
B_2496	9.985	5.018	.0176	.6883	.0037
Ba4554	9.929	5.016	.0012	.0558	.0962
Be3130	9.908	5.045	.0008	.0000	.0000
Bi2230	9.924	5.143	<.0000	<.0000	<.0000
Ca1840	49.08	25.64	.0024	7.731	3.758
Cd2288	9.912	5.110	.0008	<.0000	.0162
Co2286	9.846	5.141	.0009	.0008	.0065
Cr2835	9.879	5.051	.0005	.0007	.0032
Cu2178	9.884	5.121	.0028	.0015	.1473
Fe2599	98.77	50.21	.0070	1.125	1.543
K_7664	99.87	49.94	<.0000	15.86	.3991
Li6707	10.04	4.966	.0044	.0040	.0018
Mg2798	49.32	24.91	.0056	8.087	1.352
Mn2576	9.889	4.999	.0007	.0039	.0162
Mo2020	9.939	5.102	W .0103	.0009	.0014
Na5895	99.84	50.13	<.0000	52.56	1.040
Ni2216	9.808	5.150	.0008	.0099	.0178
P_1774	9.964	5.118	.0010	.0377	.2506
Pb2203	9.809	5.166	<.0000	<.0000	7.633
S_1820	99.40	50.79	.0119	.4654	1.716
Sb2068	2.002	1.017	<.0000	.0017	.0766
Se1960	9.888	5.106	.0026	.0006	.0073
Si2516	10.03	4.976	.0076	.9607	.9346
Sn1899	9.824	5.135	.0021	.0016	.0461
Sr4077	9.879	4.991	.0006	.0384	.0157
Th2832	9.895	5.060	<.0000	<.0000	<.0000
Ti3349	9.934	4.936	.0016	.0002	.0076
Tl1908	9.734	5.212	.0047	<.0000	<.0000
U_3670	10.01	5.082	<.0000	<.0000	<.0000
V_2908	9.957	5.009	.0022	.0014	.0020
Y_3710	4756.8	4811.6	4852.1	4934.0	5164.2
Zn2138	9.895	5.129	.0009	.0022	.6427

Vertical Table Report
Author:
Notes:

M	CCV 8/21/2012 9:48:38A metals 2011 (493)	CCB 8/21/2012 9:51:57A metals 2011 (493)	MB 160-8951/1-A 8/21/2012 10:32:40/ metals 2011 (493)	LCS 160-8951/2-A 8/21/2012 10:36:20/ metals 2011 (493)	160-415-D-1-B 8/21/2012 10:39:39/ metals 2011 (493)
Ag3280	.9839	<.0000	<.0000	.1031	.0002
Al3961	49.85	<.0000	<.0000	10.18	.0090
As1890	5.008	.0010	<.0000	1.011	.0010
B_2496	4.965	.0131	<.0000	.9787	.0109
Ba4554	5.020	.0008	.0002	1.002	.0237
Be3130	5.042	.0007	<.0000	1.003	.0002
Bi2230	5.041	<.0000	<.0000	1.037	<.0000
Ca1840	25.15	<.0000	.0209	10.54	21.63
Cd2288	5.027	.0004	<.0000	1.043	<.0000
Co2286	5.032	.0005	.0002	1.041	.0003
Cr2835	5.031	<.0000	<.0000	1.056	<.0000
Cu2178	5.041	.0012	.0021	1.067	<.0000
Fe2599	50.02	.0078	.0006	10.21	.0240
K_7664	49.67	<.0000	<.0000	9.772	.2296
Li6707	4.953	.0020	.0012	.9770	.0053
Mg2798	25.13	.0061	.0140	10.34	10.38
Mn2576	5.008	.0007	.0002	1.040	.0005
Mo2020	4.989	.0090	.0003	1.053	.0024
Na5895	49.69	<.0000	<.0000	9.670	2.331
Ni2216	5.059	<.0000	.0001	1.102	.0003
P_1774	4.993	<.0000	.0004	.9804	<.0000
Pb2203	5.068	<.0000	<.0000	1.072	<.0000
S_1820	49.64	.0023	.0029	9.723	3.648
Sb2068	.9932	<.0000	.0001	.5293	.0029
Se1960	4.989	.0015	<.0000	.9995	<.0000
Si2516	4.948	.0047	.0389	F .0373	1.544
Sn1899	5.047	.0017	<.0000	1.065	<.0000
Sr4077	4.976	.0006	<.0000	1.026	.0807
Th2832	5.037	<.0000	<.0000	1.047	<.0000
Ti3349	4.966	.0014	<.0000	1.007	.0002
Tl1908	5.096	.0044	<.0000	.2194	<.0000
U_3670	5.027	<.0000	<.0000	.9610	<.0000
V_2908	4.982	<.0000	.0011	.9757	<.0000
Y_3710	4877.7	4924.7	4813.9	4966.9	4864.4
Zn2138	5.024	<.0000	W .0107	1.038	.0045

Vertical Table Report
Author:
Notes:

AM	160-415-D-2-D 8/21/2012 10:43:16A metals 2011 (493)	160-415-D-2-D SD 8/21/2012 10:46:53A metals 2011 (493)	160-415-D-2-E MS 8/21/2012 10:50:32A metals 2011 (493)	160-415-D-2-F MSD 8/21/2012 10:53:59A metals 2011 (493)	160-415-D-3-B 8/21/2012 10:57:27A metals 2011 (493)
Ag3280	<.0000	<.0000	.0194	.0179	.0003
Al3961	.1755	.0236	2.057	1.907	.0016
As1890	.0042	.0013	.2308	.2110	<.0000
B_2496	.0805	.0155	.2363	.2330	.0483
Ba4554	.2536	.0509	.3938	.3866	.0103
Be3130	<.0000	<.0000	.1714	.1689	<.0000
Bi2230	<.0000	<.0000	.2256	.2031	<.0000
Ca1840	F 58.77	11.13	F 64.60	F 58.51	8.186
Cd2288	<.0000	<.0000	.2338	.2108	<.0000
Co2286	.0009	.0004	.2191	.1977	.0001
Cr2835	<.0000	<.0000	.1934	.1816	<.0000
Cu2178	<.0000	.0015	.2362	.2152	.0021
Fe2599	6.682	1.343	7.525	7.658	.0071
K_7664	1.574	.2593	3.038	2.998	.4646
Li6707	.0105	.0034	.1717	.1678	.0086
Mg2798	15.99	3.211	15.75	15.58	4.912
Mn2576	.1213	.0246	.2851	.2789	.0023
Mo2020	.0004	.0001	.2287	.2078	.0024
Na5895	19.25	3.788	18.39	18.23	10.29
Ni2216	.0045	.0005	.2426	.2196	.0003
P_1774	.1973	.0347	.4313	.3867	.0422
Pb2203	.0010	<.0000	.2316	.2098	.0004
S_1820	.4163	.0854	2.604	2.454	2.665
Sb2068	.0009	<.0000	.1199	.1084	<.0000
Se1960	<.0000	<.0000	.2247	.2006	<.0000
Si2516	5.097	1.002	4.653	4.348	2.117
Sn1899	<.0000	<.0000	.2311	.2103	<.0000
Sr4077	.2772	.0560	.4193	.4129	.5116
Th2832	<.0000	<.0000	.1838	.1658	<.0000
Ti3349	.0043	.0009	.1775	.1733	<.0000
Tl1908	.0004	.0006	.0472	.0425	.0005
U_3670	<.0000	<.0000	.1218	.1077	<.0000
V_2908	.0014	.0016	.1640	.1606	.0029
Y_3710	5098.1	5238.7	5250.7	5246.8	5101.7
Zn2138	.0075	.0047	.2294	.2073	.0075

Vertical Table Report
Author:
Notes:

AM	160-415-D-4-B 8/21/2012 11:01:05 metals 2011 (493)	160-415-D-5-B 8/21/2012 11:04:43 metals 2011 (493)	CCV 8/21/2012 11:08:21 metals 2011 (493)	CCB 8/21/2012 11:11:41 metals 2011 (493)	160-415-D-6-B 8/21/2012 11:15:24 metals 2011 (493)
Ag3280	<.0000	.0004	.9629	.0002	.0001
Al3961	.0610	<.0000	50.90	.0084	.1782
As1890	.0004	<.0000	5.272	.0023	.0045
B_2496	.0117	.2185	4.755	.0124	.0796
Ba4554	.0357	.3726	5.002	.0015	.2434
Be3130	<.0000	<.0000	5.024	.0014	.0000
Bi2230	<.0000	<.0000	5.186	<.0000	<.0000
Ca1840	13.95	F 50.98	25.04	.0017	F 56.13
Cd2288	<.0000	<.0000	5.317	.0002	<.0000
Co2286	.0005	.0009	4.865	.0001	.0008
Cr2835	<.0000	<.0000	5.116	<.0000	<.0000
Cu2178	<.0000	.0010	5.344	<.0000	<.0000
Fe2599	.3620	5.744	49.21	.0143	6.327
K_7664	.3136	3.948	48.83	<.0000	1.496
Li6707	.0099	.0087	4.679	.0036	.0104
Mg2798	9.104	15.46	25.59	.0265	15.40
Mn2576	.0179	.1189	5.102	.0012	.1172
Mo2020	.0007	.0002	5.041	.0087	.0010
Na5895	5.590	58.37	47.57	<.0000	18.01
Ni2216	.0009	.0035	5.310	<.0000	.0050
P_1774	.0304	.1142	4.941	<.0000	.1852
Pb2203	<.0000	.0003	5.216	<.0000	<.0000
S_1820	1.277	.3553	51.11	.0063	.3694
Sb2068	.0008	.0004	1.051	.0017	.0020
Se1960	<.0000	.0005	5.182	.0025	<.0000
Si2516	2.023	2.970	4.616	.0056	4.669
Sn1899	<.0000	<.0000	5.278	.0018	<.0000
Sr4077	.3087	.1489	5.067	.0014	.2680
Th2832	<.0000	<.0000	5.099	<.0000	<.0000
Ti3349	<.0000	.0006	5.018	.0024	.0042
Tl1908	<.0000	.0003	4.990	.0033	.0017
U_3670	<.0000	<.0000	4.717	<.0000	<.0000
V_2908	.0049	.0032	4.713	.0039	.0021
Y_3710	5174.3	5053.3	4944.8	4950.5	5116.6
Zn2138	.0053	.0028	5.079	.0006	.0046

Vertical Table Report
Author:
Notes:

AM	160-415-D-8-B 8/21/2012 11:19:01	160-415-D-9-A 8/21/2012 11:22:38	160-415-D-10-B 8/21/2012 11:26:12	160-415-D-1-B 8/21/2012 11:29:49	160-415-D-2-D 8/21/2012 11:33:26
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	<.0000	<.0000	.0001	<.0000	<.0000
Al3961	.0084	2.001	.8781	.0802	.9411
As1890	.0011	.0120	.0008	.0004	.0203
B_2496	.0450	.1275	.0039	.0440	.4196
Ba4554	.1122	.1430	.0339	.1350	1.352
Be3130	<.0000	<.0000	<.0000	<.0000	<.0000
Bi2230	<.0000	<.0000	<.0000	<.0000	<.0000
Ca1840	W 44.75	F 58.51	30.32	F 95.59	F 236.7
Cd2288	<.0000	.0002	<.0000	<.0000	<.0000
Co2286	.0007	.0024	.0006	.0003	.0025
Cr2835	<.0000	.0025	.0010	<.0000	.0024
Cu2178	<.0000	.0092	.0000	<.0000	.0048
Fe2599	1.069	10.88	.7697	.1187	34.12
K_7664	.5729	1.762	.5405	1.557	8.600
Li6707	.0076	.0096	.0056	.0239	.0439
Mg2798	22.17	16.18	9.690	F 58.44	F 81.86
Mn2576	.0183	.2638	.0141	.0017	.6281
Mo2020	.0006	.0009	.0084	.0027	.0009
Na5895	14.39	27.07	3.839	13.27	F 101.1
Ni2216	.0086	.0143	.0031	.0032	.0226
P_1774	.0158	.1770	.0513	.0008	.9044
Pb2203	<.0000	.0216	.0004	<.0000	.0038
S_1820	3.531	4.073	1.614	17.43	1.860
Sb2068	<.0000	.0009	.0029	.0010	.0043
Se1960	<.0000	<.0000	<.0000	.0008	<.0000
Si2516	2.782	6.662	2.598	8.456	F 26.08
Sn1899	<.0000	.0007	<.0000	<.0000	<.0000
Sr4077	.2328	.1758	.1149	.4720	1.505
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	<.0000	.0307	.0044	<.0000	.0214
Tl1908	.0004	.0005	<.0000	<.0000	.0001
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0040	.0041	.0022	.0017	.0054
Y_3710	5233.1	5206.6	5031.3	5039.9	5154.2
Zn2138	.0029	1.259	.0103	.0149	.0159

Vertical Table Report
Author:
Notes:

AM	160-415-D-2-D SD 8/21/2012 11:37:04 metals 2011 (493)	160-415-D-2-E MS 8/21/2012 11:40:41 metals 2011 (493)	160-415-D-2-F MSD 8/21/2012 11:43:57 metals 2011 (493)	160-415-D-3-B 8/21/2012 11:47:14 metals 2011 (493)	CCV 8/21/2012 11:50:52 metals 2011 (493)
Ag3280	<.0000	.0999	.0977	<.0000	.9564
Al3961	.1793	12.42	11.42	.0277	51.76
As1890	.0029	1.009	1.016	.0019	5.195
B_2496	.0827	1.422	1.386	.3023	4.837
Ba4554	.2682	2.394	2.322	.0629	5.082
Be3130	<.0000	1.033	1.006	.0006	5.104
Bi2230	<.0000	.9664	.9600	<.0000	5.052
Ca1840	F 56.46	F 249.5	F 247.0	38.67	25.38
Cd2288	<.0000	1.015	1.005	<.0000	5.259
Co2286	.0007	.9074	.8997	.0004	4.867
Cr2835	.0002	.9786	.9620	<.0000	5.157
Cu2178	<.0000	1.011	1.002	.0039	5.225
Fe2599	6.997	44.20	44.53	.0694	50.19
K_7664	1.633	19.08	18.54	3.198	49.81
Li6707	.0104	1.037	.9970	.0403	4.732
Mg2798	16.91	F 92.25	F 90.29	28.67	26.17
Mn2576	.1276	1.659	1.610	.0157	5.189
Mo2020	<.0000	.9855	.9803	.0121	5.020
Na5895	20.05	F 112.5	F 110.0	62.22	48.42
Ni2216	.0044	1.011	1.001	.0033	5.333
P_1774	.1868	1.888	1.858	.2053	4.884
Pb2203	.0014	.9538	.9435	.0004	5.233
S_1820	.3807	11.44	11.97	12.95	50.10
Sb2068	.0005	.5213	.5203	.0021	1.026
Se1960	<.0000	.9676	.9692	.0008	5.078
Si2516	5.249	F 28.03	F 25.93	F 12.79	4.696
Sn1899	<.0000	.9680	.9695	<.0000	5.296
Sr4077	.2952	2.549	2.482	3.083	5.101
Th2832	<.0000	.9725	.9647	<.0000	5.078
Ti3349	.0048	1.068	1.034	.0010	5.096
Tl1908	.0017	.1866	.1848	<.0000	4.968
U_3670	<.0000	.9006	.8832	<.0000	4.647
V_2908	.0022	.9706	.9431	.0044	4.785
Y_3710	5046.2	5006.1	5083.7	5012.9	4790.8
Zn2138	.0065	.9864	.9704	.0308	5.042

Vertical Table Report
Author:
Notes:

	CCB	160-415-D-4-B	160-415-D-5-B	160-415-D-6-B	160-415-D-8-B
AM	8/21/2012 11:54:11/	8/21/2012 11:57:54/	8/21/2012 12:01:30I	8/21/2012 12:05:15I	8/21/2012 12:08:52I
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	.0005	.0003	<.0000	.0002	<.0000
Al3961	<.0000	.3703	.0390	.9704	.0594
As1890	.0012	<.0000	.0006	.0184	.0049
B_2496	.0159	.0714	1.216	.4089	.2577
Ba4554	.0009	.1988	2.043	1.298	.6217
Be3130	.0006	.0000	<.0000	<.0000	<.0000
Bi2230	<.0000	<.0000	<.0000	<.0000	<.0000
Ca1840	.0035	F 64.45	F 226.9	F 243.5	F 209.5
Cd2288	.0003	<.0000	<.0000	<.0000	.0000
Co2286	.0004	.0006	.0047	.0023	.0013
Cr2835	<.0000	<.0000	.0015	.0023	.0001
Cu2178	.0004	.0016	<.0000	.0052	<.0000
Fe2599	.0077	1.997	30.63	33.15	5.918
K_7664	<.0000	2.129	22.41	8.480	3.583
Li6707	.0017	.0392	.0417	.0422	.0374
Mg2798	.0207	W 49.86	F 82.43	F 80.06	F 122.7
Mn2576	.0007	.1003	.6341	.6120	.1012
Mo2020	.0090	.0041	.0008	.0008	.0022
Na5895	<.0000	31.65	F 317.6	W 98.35	82.39
Ni2216	.0002	.0045	.0171	.0238	.0436
P_1774	<.0000	.1524	.5843	.9218	.0877
Pb2203	<.0000	.0017	.0019	.0027	.0016
S_1820	.0085	6.189	1.802	1.804	18.59
Sb2068	<.0000	.0010	.0030	.0040	.0026
Se1960	.0037	<.0000	<.0000	<.0000	<.0000
Si2516	.0057	F 11.50	F 16.57	F 25.89	F 16.12
Sn1899	.0018	<.0000	<.0000	<.0000	<.0000
Sr4077	.0006	1.742	.8165	1.432	1.306
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	.0016	.0035	.0003	.0223	.0004
Tl1908	.0031	<.0000	.0001	.0016	<.0000
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0024	.0064	.0039	.0047	.0031
Y_3710	4728.4	5111.1	4884.4	4957.5	4831.6
Zn2138	.0010	.0196	.0056	.0166	.0103

Vertical Table Report
Author:
Notes:

	160-415-D-9-A	160-415-D-10-B	MB 160-8952/1-A	LCS 160-8952/2-A	160-420-D-1-D
PM	8/21/2012 12:12:28F	8/21/2012 12:16:09F	8/21/2012 12:19:45F	8/21/2012 12:23:27F	8/21/2012 12:26:46F
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	<.0000	<.0000	.0003	.1021	<.0000
Al3961	11.55	5.303	<.0000	10.46	1.982
As1890	.0579	.0048	<.0000	1.005	.0245
B_2496	.7437	.0453	.0011	.9796	.0355
Ba4554	.8157	.2037	<.0000	1.017	.1937
Be3130	.0003	.0001	<.0000	1.022	.0002
Bi2230	<.0000	<.0000	<.0000	1.036	<.0000
Ca1840	F 265.2	F 129.3	.0311	10.49	30.79
Cd2288	.0014	.0002	<.0000	1.059	.0000
Co2286	.0107	.0020	.0000	1.026	.0149
Cr2835	.0176	.0127	<.0000	1.060	.0032
Cu2178	.0539	.0011	<.0000	1.082	.0038
Fe2599	61.14	4.485	.0029	10.30	12.81
K_7664	10.66	3.641	<.0000	9.862	1.296
Li6707	.0488	.0233	.0016	.9760	.0055
Mg2798	F 90.65	F 56.72	.0229	10.55	10.07
Mn2576	1.475	.0834	.0001	1.064	.4267
Mo2020	.0034	.0379	.0002	1.054	.0047
Na5895	F 154.7	23.67	.0724	9.714	11.00
Ni2216	.0727	.0143	<.0000	1.112	.0196
P_1774	.9328	.2465	<.0000	.9685	.1684
Pb2203	.1068	.0027	<.0000	1.078	.0047
S_1820	21.23	7.515	.0044	9.602	.4182
Sb2068	.0033	.0034	.0003	.5323	.0017
Se1960	.0017	.0022	<.0000	.9958	<.0000
Si2516	F 39.07	F 16.01	.0372	F .0535	7.332
Sn1899	.0075	<.0000	<.0000	1.060	.0002
Sr4077	1.011	.6968	<.0000	1.049	.0907
Th2832	<.0000	<.0000	<.0000	1.049	<.0000
Ti3349	.1735	.0316	.0002	1.029	.0613
Tl1908	.0007	.0012	<.0000	.2174	.0009
U_3670	.0072	<.0000	<.0000	.9200	<.0000
V_2908	.0240	.0120	<.0000	.9638	.0068
Y_3710	4965.8	5073.8	5006.5	4876.8	5119.7
Zn2138	6.344	.0414	.0064	1.026	.0316

Vertical Table Report
Author:
Notes:

	160-420-D-1-D SD	CCV	CCB	160-420-D-1-E MS	160-420-D-1-F MSD
PM	8/21/2012 12:30:24F	8/21/2012 12:34:04F	8/21/2012 12:37:23F	8/21/2012 12:41:06F	8/21/2012 12:44:34F
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	.0002	.9437	.0000	.0199	.0203
Al3961	.4404	51.43	.0008	4.965	6.974
As1890	.0060	5.074	.0020	.2283	.2294
B_2496	.0079	4.847	.0127	.2220	.2356
Ba4554	.0437	5.102	.0011	.3929	.4450
Be3130	<.0000	5.109	.0011	.1882	.1990
Bi2230	<.0000	4.965	<.0000	.2034	.2008
Ca1840	6.662	24.41	.0028	33.86	34.42
Cd2288	<.0000	5.103	.0004	.2127	.2105
Co2286	.0031	4.746	.0005	.2174	.2176
Cr2835	<.0000	5.001	<.0000	.2060	.2130
Cu2178	<.0000	5.111	.0002	.2206	.2162
Fe2599	2.910	50.09	.0107	14.88	17.04
K_7664	.2479	49.66	<.0000	3.318	3.940
Li6707	.0026	4.783	.0028	.1853	.1983
Mg2798	2.287	25.69	.0199	12.56	13.69
Mn2576	.0960	5.151	.0008	.6349	.6872
Mo2020	.0009	4.880	.0082	.2120	.2114
Na5895	2.489	48.56	.0265	13.06	14.26
Ni2216	.0040	5.130	.0003	.2419	.2411
P_1774	.0340	4.814	<.0000	.3661	.3754
Pb2203	.0010	5.051	<.0000	.2202	.2187
S_1820	.0983	49.20	.0067	2.355	2.364
Sb2068	<.0000	1.002	<.0000	.1076	.1016
Se1960	<.0000	4.982	.0011	.1915	.1883
Si2516	1.626	4.697	.0025	W 9.490	F 12.20
Sn1899	<.0000	5.107	.0017	.2055	.1982
Sr4077	.0204	5.139	.0009	.2845	.3110
Th2832	<.0000	4.967	<.0000	.1918	.1863
Ti3349	.0132	5.087	.0019	.2539	.3140
Tl1908	.0009	4.857	.0031	.0450	.0434
U_3670	<.0000	4.643	<.0000	.1436	.1451
V_2908	.0008	4.813	.0025	.1819	.1977
Y_3710	4948.4	5035.6	5076.6	4694.9	4855.9
Zn2138	.0114	4.912	.0009	.2367	.2391

Vertical Table Report
Author:
Notes:

	160-420-D-2-B	160-420-D-3-B	160-420-D-4-B	160-437-D-1-A	160-437-D-2-A
PM	8/21/2012 12:48:03F	8/21/2012 12:51:40F	8/21/2012 12:55:14F	8/21/2012 12:58:49F	8/21/2012 1:02:25P
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	.0002	.0002	<.0000	<.0000	.0001
Al3961	.2330	11.73	7.014	.0035	.0067
As1890	.0017	.0164	.0017	.0007	.0000
B_2496	.0287	.0425	.0414	.0414	.2650
Ba4554	.0472	1.394	.1465	.1501	.3824
Be3130	.0000	.0007	.0002	<.0000	<.0000
Bi2230	<.0000	.0007	<.0000	<.0000	<.0000
Ca1840	32.72	F 140.5	F 59.19	38.52	F 50.88
Cd2288	<.0000	.0001	.0008	<.0000	<.0000
Co2286	.0019	.0241	.0062	.0025	.0013
Cr2835	<.0000	.0206	.0137	<.0000	<.0000
Cu2178	<.0000	.0266	.0197	.0015	<.0000
Fe2599	.3823	67.72	6.411	1.544	5.948
K_7664	.9273	3.449	2.342	1.328	3.855
Li6707	.0067	.0177	.0139	.0056	.0099
Mg2798	4.507	26.44	14.32	10.81	16.61
Mn2576	.1225	2.230	.3401	1.341	.0915
Mo2020	.0009	.0012	.0011	.0004	.0002
Na5895	9.360	28.23	62.40	9.916	58.46
Ni2216	.0041	.0615	.0203	.0061	.0035
P_1774	.0647	1.045	.1442	.0290	.1246
Pb2203	.0004	.0341	.0223	<.0000	<.0000
S_1820	5.360	3.297	2.567	.3760	.3465
Sb2068	.0034	.0048	.0030	.0012	.0014
Se1960	<.0000	<.0000	<.0000	<.0000	<.0000
Si2516	2.013	F 15.29	F 13.35	3.117	3.196
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.0591	.2796	.1292	.1320	.1564
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	.0041	.0731	.0857	<.0000	.0008
Tl1908	<.0000	.0023	<.0000	.0020	<.0000
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	<.0000	.0319	.0151	.0008	<.0000
Y_3710	4713.3	5060.0	4869.3	4819.8	4724.8
Zn2138	.0055	.1442	.0934	.0042	.0027

Vertical Table Report
Author:
Notes:

M	160-437-D-3-A 8/21/2012 1:06:02P metals 2011 (493)	160-437-D-4-A 8/21/2012 1:09:40P metals 2011 (493)	160-437-D-5-A 8/21/2012 1:13:17P metals 2011 (493)	CCV 8/21/2012 1:16:56P metals 2011 (493)	CCB 8/21/2012 1:20:16P metals 2011 (493)
Ag3280	.0001	<.0000	.0002	.9967	.0004
Al3961	.0479	<.0000	.0144	51.16	<.0000
As1890	.0391	.0028	.0012	5.265	.0009
B_2496	.2086	.1752	.3442	4.857	.0108
Ba4554	.4292	.1714	.1397	5.030	.0008
Be3130	<.0000	<.0000	<.0000	5.062	.0008
Bi2230	<.0000	<.0000	<.0000	5.178	<.0000
Ca1840	30.53	W 41.41	29.34	25.53	.0047
Cd2288	<.0000	<.0000	<.0000	5.299	.0005
Co2286	.0009	.0005	.0011	4.987	.0006
Cr2835	.0004	<.0000	.0007	5.251	<.0000
Cu2178	.0030	<.0000	<.0000	5.300	<.0000
Fe2599	8.897	5.245	4.446	50.02	.0108
K_7664	9.004	4.326	14.90	49.69	<.0000
Li6707	.0125	.0095	.0079	4.768	.0023
Mg2798	18.06	15.12	19.28	25.71	.0121
Mn2576	.0566	.2695	.0147	5.147	.0010
Mo2020	.0004	.0003	.0002	5.095	.0090
Na5895	22.21	22.75	57.51	48.56	.0244
Ni2216	.0035	.0028	.0085	5.330	.0005
P_1774	.2506	.0550	.1113	5.059	<.0000
Pb2203	<.0000	<.0000	<.0000	5.271	<.0000
S_1820	.2033	1.424	.5428	51.35	.0067
Sb2068	.0022	.0021	.0012	1.044	.0003
Se1960	<.0000	<.0000	<.0000	5.194	.0032
Si2516	4.895	2.372	3.322	4.787	.0141
Sn1899	<.0000	<.0000	.0006	5.304	.0022
Sr4077	.3961	.2404	.1452	5.031	.0007
Th2832	<.0000	<.0000	<.0000	5.218	<.0000
Ti3349	.0016	<.0000	.0006	5.019	.0014
Tl1908	.0004	<.0000	.0001	5.094	.0032
U_3670	<.0000	<.0000	<.0000	4.968	<.0000
V_2908	.0036	.0003	.0017	4.849	.0022
Y_3710	4709.1	4867.9	4826.0	4827.9	4994.0
Zn2138	.0048	.0023	.0158	5.129	.0010

Vertical Table Report
Author:
Notes:

M	160-437-D-6-A 8/21/2012 1:24:00P metals 2011 (493)	160-437-D-7-A 8/21/2012 1:27:35P metals 2011 (493)	160-437-D-8-A 8/21/2012 1:31:11P metals 2011 (493)	160-437-D-9-A 8/21/2012 1:34:46P metals 2011 (493)	160-420-D-1-D 8/21/2012 1:38:24P metals 2011 (493)
Ag3280	.0003	.0000	.0006	.0002	<.0000
Al3961	.0402	.1892	.1516	<.0000	10.89
As1890	<.0000	.0062	.0056	<.0000	.1213
B_2496	.2043	.0171	.2186	.2600	.1971
Ba4554	.0992	.1367	.0229	.3774	1.063
Be3130	.0001	<.0000	.0001	<.0000	.0005
Bi2230	<.0000	<.0000	<.0000	<.0000	<.0000
Ca1840	F 117.0	F 59.04	F 65.92	F 50.60	F 137.3
Cd2288	<.0000	<.0000	<.0000	.0000	.0001
Co2286	.0010	.0004	.0007	.0010	.0686
Cr2835	<.0000	.0001	.0001	<.0000	.0156
Cu2178	<.0000	.0002	<.0000	<.0000	.0217
Fe2599	3.085	9.212	13.47	5.833	68.62
K_7664	2.388	1.333	8.735	3.804	7.251
Li6707	.0095	.0042	.0123	.0084	.0292
Mg2798	13.36	17.32	33.97	16.01	F 53.69
Mn2576	.2369	.8532	.6433	.0900	2.277
Mo2020	.0009	.0005	.0001	.0001	.0156
Na5895	34.88	3.774	38.54	57.41	60.66
Ni2216	.0022	.0012	.0036	.0036	.0929
P_1774	.1123	.3468	.0708	.1272	.8372
Pb2203	<.0000	.0007	.0002	.0006	.0253
S_1820	46.92	.1486	60.93	.3718	2.081
Sb2068	.0015	.0029	.0017	.0017	.0032
Se1960	<.0000	<.0000	<.0000	<.0000	.0013
Si2516	3.449	4.038	3.685	3.086	F 39.97
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.2809	.1993	.1705	.1541	.5002
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	.0005	.0055	<.0000	<.0000	.3337
Tl1908	.0013	<.0000	<.0000	<.0000	.0018
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0011	.0003	.0047	.0003	.0318
Y_3710	4905.7	4855.8	4961.6	4880.4	5194.1
Zn2138	.0047	.0067	.0020	.0030	.1480

Vertical Table Report
Author:
Notes:

M	160-420-D-1-D SD 8/21/2012 1:41:59P metals 2011 (493)	160-420-D-1-E MS 8/21/2012 1:45:35P metals 2011 (493)	160-420-D-1-F MSD 8/21/2012 1:48:52P metals 2011 (493)	160-420-D-2-B 8/21/2012 1:52:09P metals 2011 (493)	160-420-D-3-B 8/21/2012 1:55:44P metals 2011 (493)
Ag3280	.0002	.0968	.0941	<.0000	.0004
Al3961	2.224	26.42	33.92	1.307	50.91
As1890	.0254	1.098	1.062	.0007	.0699
B_2496	.0420	1.166	1.150	.1544	.1611
Ba4554	.2174	2.138	2.218	.2499	6.052
Be3130	.0001	1.010	.9776	.0010	.0036
Bi2230	<.0000	.9671	.9240	<.0000	.0245
Ca1840	31.28	F 144.6	F 142.3	F 142.7	F 416.7
Cd2288	<.0000	.9956	.9536	.0002	.0019
Co2286	.0149	.9835	.9475	.0079	.0880
Cr2835	.0023	.9855	.9539	.0012	.0766
Cu2178	.0058	1.018	.9792	.0010	.0970
Fe2599	14.37	78.24	82.04	2.065	F 268.0
K_7664	1.464	18.47	19.80	5.315	15.20
Li6707	.0061	.9908	.9635	.0203	.0761
Mg2798	11.24	F 64.16	F 64.51	23.05	F 109.8
Mn2576	.4769	3.285	3.256	.6391	W 9.239
Mo2020	.0032	.9820	.9496	.0030	.0042
Na5895	12.37	71.15	70.62	49.92	F 122.1
Ni2216	.0203	1.079	1.048	.0198	.2267
P_1774	.1734	1.753	1.735	.3186	4.082
Pb2203	.0050	.9733	.9382	.0049	.1212
S_1820	.4366	11.46	11.15	26.36	13.18
Sb2068	.0010	.5018	.4693	.0035	<.0000
Se1960	<.0000	.9270	.8811	<.0000	.0065
Si2516	8.268	F 50.95	F 59.36	F 10.72	F 67.62
Sn1899	<.0000	.9249	.8737	<.0000	.0012
Sr4077	.1020	1.550	1.552	.3165	1.234
Th2832	<.0000	.9418	.9011	<.0000	<.0000
Ti3349	.0686	1.360	1.536	.0258	.3071
Tl1908	.0007	.1903	.1802	.0011	.0075
U_3670	<.0000	.8595	.8232	<.0000	.2094
V_2908	.0043	.9895	.9689	.0060	.1346
Y_3710	5198.5	5279.8	5402.4	5132.6	6161.4
Zn2138	.0350	1.101	1.065	.0191	.5550

Vertical Table Report
Author:
Notes:

M	CCV 8/21/2012 1:59:41P metals 2011 (493)	CCB 8/21/2012 2:03:01P metals 2011 (493)	160-420-D-4-B 8/21/2012 2:06:43P metals 2011 (493)	160-437-D-1-A 8/21/2012 2:10:25P metals 2011 (493)	160-437-D-2-A 8/21/2012 2:14:01P metals 2011 (493)
Ag3280	.9563	.0004	.0003	.0005	<.0000
Al3961	51.44	<.0000	34.84	.0726	.0523
As1890	5.033	<.0000	.0109	.0115	.0009
B_2496	4.877	.0121	.2134	.2104	1.394
Ba4554	5.073	.0010	.7251	.7411	2.059
Be3130	5.095	.0007	.0015	<.0000	<.0000
Bi2230	5.020	<.0000	<.0000	<.0000	<.0000
Ca1840	24.80	.0499	F 235.4	F 164.6	F 217.3
Cd2288	5.140	.0007	.0040	<.0000	<.0000
Co2286	4.833	.0008	.0261	.0111	.0049
Cr2835	5.049	<.0000	.0642	.0001	.0009
Cu2178	5.150	.0012	.0856	<.0000	<.0000
Fe2599	49.94	.0196	30.82	7.462	30.79
K_7664	49.63	<.0000	11.88	6.841	21.14
Li6707	4.832	.0028	.0584	.0226	.0415
Mg2798	25.73	.0274	F 67.94	F 51.33	F 83.79
Mn2576	5.139	.0010	1.640	6.428	.4730
Mo2020	4.950	.0100	.0054	.0024	.0010
Na5895	48.72	.0225	F 304.7	49.68	F 306.0
Ni2216	5.139	.0008	.0910	.0291	.0178
P_1774	4.871	.0004	.6737	.1429	.6347
Pb2203	5.088	<.0000	.0999	.0023	.0017
S_1820	49.11	.0101	12.11	1.798	1.790
Sb2068	1.007	.0010	.0054	.0049	.0017
Se1960	4.957	.0017	.0023	.0039	.0006
Si2516	5.152	W .1183	F 67.54	F 15.27	F 17.01
Sn1899	5.101	.0018	.0021	<.0000	<.0000
Sr4077	5.083	.0007	.6468	.6557	.8411
Th2832	5.016	<.0000	<.0000	<.0000	<.0000
Ti3349	5.077	.0013	.4262	.0015	<.0000
Tl1908	4.936	.0039	.0010	.0058	<.0000
U_3670	4.734	<.0000	.0069	<.0000	<.0000
V_2908	4.828	.0014	.0745	.0022	.0024
Y_3710	4897.0	4936.8	5297.3	5029.9	5012.9
Zn2138	4.964	.0014	.4216	.0099	.0055

Vertical Table Report
Author:
Notes:

	160-437-D-3-A	160-437-D-4-A	160-437-D-5-A	160-437-D-6-A	160-437-D-7-A
M	8/21/2012 2:17:47P	8/21/2012 2:21:22P	8/21/2012 2:24:57P	8/21/2012 2:28:42P	8/21/2012 2:32:26P
	metals	metals	metals	metals	metals
	2011 (493)	2011 (493)	2011 (493)	2011 (493)	2011 (493)
Ag3280	<.0000	.0003	<.0000	<.0000	.0002
Al3961	.2983	.0308	.1059	.2272	.9756
As1890	.1876	.0145	.0054	<.0000	.0264
B_2496	1.060	.8779	1.730	1.006	.0763
Ba4554	2.191	.8552	.6954	.4883	.6736
Be3130	.0000	<.0000	<.0000	<.0000	<.0000
Bi2230	<.0000	<.0000	<.0000	<.0000	<.0000
Ca1840	F 128.7	F 179.6	F 125.6	F 444.4	F 241.7
Cd2288	<.0000	<.0000	<.0000	<.0000	<.0000
Co2286	.0030	.0028	.0059	.0020	.0011
Cr2835	.0032	.0011	.0034	.0007	.0029
Cu2178	.0061	<.0000	.0063	<.0000	.0056
Fe2599	43.75	25.49	21.52	14.83	44.49
K_7664	45.84	22.04	75.45	12.54	6.941
Li6707	.0501	.0422	.0345	.0474	.0169
Mg2798	F 87.40	F 72.97	F 92.55	F 62.79	F 82.09
Mn2576	.2771	1.309	.0712	1.131	4.054
Mo2020	.0027	.0016	.0005	.0012	.0011
Na5895	F 111.9	F 113.5	F 277.5	F 171.7	19.12
Ni2216	.0157	.0134	.0398	.0123	.0063
P_1774	1.179	.2797	.5354	.5503	1.675
Pb2203	.0044	.0013	.0049	.0023	.0038
S_1820	.9872	7.113	2.633	F 226.1	.7179
Sb2068	.0018	.0032	.0030	.0039	.0019
Se1960	<.0000	<.0000	<.0000	<.0000	.0018
Si2516	F 24.57	F 11.83	F 16.51	F 17.58	F 20.44
Sn1899	<.0000	<.0000	.0022	<.0000	<.0000
Sr4077	2.020	1.212	.7282	1.401	.9908
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	.0066	<.0000	.0046	.0021	.0209
Tl1908	<.0000	<.0000	<.0000	.0011	.0028
U_3670	<.0000	<.0000	<.0000	.0696	<.0000
V_2908	.0075	.0068	.0047	.0019	.0085
Y_3710	5029.5	4923.4	4971.2	4863.2	5012.0
Zn2138	.0142	.0061	.0631	.0100	.0216

Vertical Table Report
Author:
Notes:

M	160-437-D-8-A 8/21/2012 2:36:02P metals 2011 (493)	160-437-D-9-A 8/21/2012 2:39:46P metals 2011 (493)	CCV 8/21/2012 2:43:34P metals 2011 (493)	CCB 8/21/2012 2:46:54P metals 2011 (493)	CCV 8/21/2012 2:50:37P metals 2011 (493)
Ag3280	.0003	<.0000	.9475	<.0000	.9697
Al3961	.7867	.0392	51.14	<.0000	51.18
As1890	.0358	<.0000	4.996	.0001	5.009
B_2496	1.071	1.392	4.868	.0138	4.924
Ba4554	.1128	2.050	5.063	.0006	5.071
Be3130	.0004	<.0000	5.074	.0007	5.083
Bi2230	<.0000	<.0000	4.966	<.0000	4.990
Ca1840	F 270.5	F 214.4	24.34	.0038	24.71
Cd2288	<.0000	<.0000	5.071	.0005	5.091
Co2286	.0028	.0046	4.791	.0006	4.865
Cr2835	.0017	.0012	5.004	<.0000	5.068
Cu2178	.0012	<.0000	5.091	.0000	5.101
Fe2599	65.01	30.67	49.59	.0070	49.84
K_7664	44.40	21.10	49.45	<.0000	49.81
Li6707	.0585	.0395	4.820	.0028	4.903
Mg2798	F 161.8	F 83.41	25.53	.0161	25.46
Mn2576	3.056	.4693	5.106	.0007	5.105
Mo2020	<.0000	.0008	4.902	.0091	4.946
Na5895	F 190.2	F 299.9	48.40	.0652	49.03
Ni2216	.0182	.0174	5.079	.0000	5.104
P_1774	.3542	.6187	4.825	<.0000	4.911
Pb2203	.0018	.0006	5.018	.0007	5.076
S_1820	F 295.9	1.785	48.90	.0138	48.94
Sb2068	.0019	.0045	.9968	.0010	.9962
Se1960	.0007	<.0000	4.932	.0032	4.948
Si2516	F 18.66	F 16.81	4.841	.0186	4.819
Sn1899	<.0000	<.0000	5.045	.0014	5.067
Sr4077	.8486	.8369	5.090	.0005	5.123
Th2832	<.0000	<.0000	4.974	<.0000	5.023
Ti3349	.0001	<.0000	5.057	.0012	5.049
Tl1908	.0017	<.0000	4.879	.0023	4.967
U_3670	.0135	<.0000	4.742	<.0000	4.858
V_2908	.0107	.0051	4.832	.0003	4.900
Y_3710	5013.7	4985.6	5034.3	5040.0	4889.3
Zn2138	.0026	.0058	4.909	<.0000	4.963

Vertical Table Report
Author:
Notes:

	CCB
M	8/21/2012 2:53:56PM
	metals
	2011 (493)
Ag3280	<.0000
Al3961	.0027
As1890	.0012
B_2496	.0151
Ba4554	.0010
Be3130	.0009
Bi2230	<.0000
Ca1840	.0017
Cd2288	.0003
Co2286	.0005
Cr2835	.0006
Cu2178	.0022
Fe2599	.0106
K_7664	.0154
Li6707	.0006
Mg2798	.0227
Mn2576	.0011
Mo2020	.0094
Na5895	.0514
Ni2216	.0005
P_1774	.0004
Pb2203	<.0000
S_1820	.0158
Sb2068	<.0000
Se1960	.0013
Si2516	.0160
Sn1899	.0018
Sr4077	.0008
Th2832	<.0000
Ti3349	.0016
Tl1908	.0058
U_3670	<.0000
V_2908	<.0000
Y_3710	4891.2
Zn2138	<.0000

Sample Name: CALBLK1 Acquired: 8/21/2012 8:50:05 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0010**	**.0021**	**.0000**	**.0007**	**.0252**	**.0006**	**.0004**	**.0015**	**-.0001**
Stddev	.0004	.0005	.000	.0001	.0016	.0002	.0002	.0000	.0001
%RSD	42.15	22.51	192.2	15.30	6.415	32.71	38.72	3.022	102.4
#1	-.0014	.0017	.0000	.0008	.0233	.0008	.0004	.0014	-.0001
#2	-.0006	.0026	.0000	.0006	.0260	.0004	.0005	.0015	.0000
#3	-.0010	.0020	-.0002	.0009	.0262	.0007	.0002	.0015	-.0001

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0081**	**.0001**	**.0005**	**.0105**	**.0020**	**-.0013**	**.0001**	**.0000**
Stddev	.000	.0004	.0001	.0005	.0039	.0016	.0004	.0006	.0000
%RSD	285.1	4.614	174.9	92.64	37.28	80.85	28.08	428.4	542.3
#1	-.0001	.0080	.0001	.0000	.0105	.0016	-.0010	.0008	.0000
#2	.0001	.0077	-.0001	.0010	.0066	.0037	-.0012	.0000	.0000
#3	-.0002	.0085	.0002	.0006	.0145	.0006	-.0017	-.0003	.0000

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0095**	**.0004**	**.0001**	**-.0001**	**.0003**	**.0004**	**.0002**	**.0047**	**.0001**
Stddev	.0020	.0001	.0001	.0001	.0001	.0000	.0001	.0003	.0001
%RSD	20.71	26.37	146.7	53.26	20.65	6.236	31.67	5.431	62.52
#1	-.0076	.0003	.0000	-.0001	.0003	.0004	.0002	.0050	.0002
#2	-.0115	.0005	.0000	-.0002	.0002	.0004	.0003	.0045	.0002
#3	-.0094	.0003	.0002	-.0002	.0003	.0004	.0001	.0047	.0000

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0005**	**.0103**	**.0013**	**-.0004**	**.0110**	**-.0008**	**.0014**
Stddev	.0004	.0011	.0011	.0001	.0009	.0003	.0001
%RSD	87.14	11.06	82.25	14.43	8.055	30.71	6.249
#1	-.0008	.0094	.0007	-.0004	.0100	-.0006	.0013
#2	.0000	.0098	.0007	-.0003	.0115	-.0010	.0013
#3	-.0007	.0116	.0025	-.0004	.0116	-.0009	.0015

Sample Name: CALBLK1 Acquired: 8/21/2012 8:50:05 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	4923.5
Stddev	9.6
%RSD	.19552
#1	4919.7
#2	4916.3
#3	4934.4

Sample Name: CAL 1 Acquired: 8/21/2012 8:53:45 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0133	.0265	.0004	.0144	.4461	.0438	.0118	.1595	.0040
Stddev	.0005	.0009	.0001	.0002	.0011	.0007	.0000	.0006	.0000
%RSD	3.495	3.489	24.72	1.378	.2575	1.682	.2884	.3644	.3744
#1	.0138	.0259	.0004	.0142	.4464	.0433	.0118	.1600	.0040
#2	.0131	.0260	.0005	.0144	.4449	.0435	.0118	.1588	.0040
#3	.0130	.0275	.0004	.0146	.4471	.0446	.0119	.1597	.0040

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0200	.0227	.0020	.0287	.5324	.1148	.0353	.0233	.0162
Stddev	.0002	.0004	.0001	.0006	.0035	.0011	.0006	.0003	.0001
%RSD	.8574	1.889	3.084	2.235	.6592	.9711	1.814	1.392	.7477
#1	.0198	.0231	.0020	.0283	.5302	.1150	.0357	.0236	.0162
#2	.0200	.0223	.0020	.0282	.5305	.1136	.0346	.0233	.0160
#3	.0201	.0226	.0019	.0294	.5364	.1158	.0358	.0230	.0163

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3219	.0206	.0179	.0009	.1577	.0008	.0007	.0414	.0130
Stddev	.0006	.0001	.0000	.0001	.0006	.0002	.0001	.0001	.0001
%RSD	.1763	.2759	.0276	5.497	.3635	20.86	13.35	.3620	.8156
#1	.3223	.0205	.0179	.0010	.1576	.0010	.0006	.0412	.0131
#2	.3212	.0207	.0179	.0010	.1571	.0007	.0008	.0414	.0129
#3	.3220	.0206	.0179	.0009	.1582	.0007	.0006	.0415	.0131

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0588	.0462	.0181	.0014	.0641	.0105	.0118
Stddev	.0014	.0009	.0004	.0001	.0009	.0005	.0001
%RSD	2.324	2.022	2.051	4.228	1.390	4.589	.9362
#1	.0592	.0465	.0178	.0015	.0631	.0110	.0119
#2	.0599	.0451	.0185	.0014	.0642	.0106	.0117
#3	.0573	.0469	.0180	.0014	.0649	.0100	.0117

Sample Name: CAL 1 Acquired: 8/21/2012 8:53:45 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5000.7
Stddev	18.8
%RSD	.37564
#1	4984.6
#2	5021.3
#3	4996.0

Sample Name: CAL 2 Acquired: 8/21/2012 8:57:24 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Ca1840	Cd2288	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2863	1.306	.0506	.1449	8.388	8.703	.8002	.8332	.3970
Stddev	.0019	.004	.0006	.0006	.011	.008	.0062	.0072	.0029
%RSD	.6777	.2760	1.242	.4453	.1354	.0920	.7776	.8622	.7297
#1	.2886	1.310	.0513	.1445	8.401	8.711	.8056	.8400	.3999
#2	.2854	1.303	.0500	.1446	8.381	8.695	.7934	.8257	.3941
#3	.2850	1.305	.0505	.1457	8.381	8.703	.8017	.8340	.3970

Elem	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.397	.0754	2.765	1.069	2.200	.1825	1.550	.4098	3.408
Stddev	.007	.0009	.005	.006	.005	.0004	.005	.0035	.002
%RSD	.5101	1.165	.1907	.5278	.2206	.2117	.3333	.8435	.0560
#1	1.404	.0763	2.770	1.074	2.204	.1828	1.556	.4128	3.409
#2	1.390	.0746	2.759	1.063	2.195	.1826	1.545	.4060	3.405
#3	1.396	.0753	2.766	1.069	2.202	.1821	1.550	.4106	3.408

Elem	Ni2216	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4995	.1128	.0133	.0383	.1273	12.18	.8652	.0849	.2224
Stddev	.0039	.0009	.0001	.0003	.0011	.02	.0019	.0005	.0001
%RSD	.7795	.7808	.8256	.7277	.8343	.1472	.2184	.6035	.0357
#1	.5030	.1136	.0134	.0386	.1283	12.20	.8650	.0855	.2224
#2	.4953	.1118	.0133	.0381	.1262	12.17	.8634	.0845	.2225
#3	.5002	.1130	.0132	.0383	.1274	12.18	.8671	.0848	.2224

Elem	Zn2138
Units	Cts/S
Avg	.5332
Stddev	.0047
%RSD	.8779
#1	.5375
#2	.5282
#3	.5340

Sample Name: CAL 2 Acquired: 8/21/2012 8:57:24 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	4903.3
Stddev	31.7
%RSD	.64713
#1	4879.2
#2	4939.2
#3	4891.5

Sample Name: CAL 3 Acquired: 8/21/2012 9:00:43 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.406**	**6.432**	**.2523**	**.7188**	**42.05**	**43.46**	**.2783**	**3.722**	**4.091**
Stddev	.009	.006	.0017	.0001	.04	.06	.0015	.026	.028
%RSD	.6064	.1009	.6667	.0164	.0985	.1330	.5545	.6865	.6855
#1	1.398	6.425	.2515	.7188	42.10	43.51	.2775	3.711	4.078
#2	1.415	6.437	.2542	.7186	42.02	43.47	.2800	3.751	4.123
#3	1.405	6.435	.2511	.7188	42.02	43.40	.2773	3.703	4.072

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.896**	**6.700**	**.3640**	**13.62**	**5.329**	**10.99**	**.9035**	**7.559**	**2.004**
Stddev	.011	.038	.0026	.01	.002	.01	.0020	.006	.012
%RSD	.5693	.5730	.7247	.0702	.0310	.1052	.2206	.0860	.6177
#1	1.893	6.674	.3633	13.62	5.329	10.99	.9029	7.553	2.000
#2	1.908	6.744	.3669	13.63	5.327	11.00	.9057	7.566	2.018
#3	1.887	6.681	.3617	13.61	5.330	10.98	.9018	7.558	1.995

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**17.25**	**2.378**	**.3649**	**.5382**	**1.603**	**.0635**	**.1901**	**.4741**	**.6170**
Stddev	.01	.017	.0022	.0040	.011	.0005	.0012	.0011	.0043
%RSD	.0443	.7110	.6004	.7377	.6546	.7910	.6466	.2341	.6904
#1	17.26	2.368	.3640	.5361	1.599	.0632	.1897	.4728	.6152
#2	17.26	2.397	.3673	.5428	1.615	.0641	.1915	.4745	.6219
#3	17.25	2.368	.3632	.5358	1.596	.0633	.1892	.4749	.6140

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**59.92**	**.9765**	**4.264**	**.3963**	**.6472**	**1.117**	**2.610**
Stddev	.73	.0049	.005	.0021	.0036	.004	.017
%RSD	1.223	.4983	.1209	.5199	.5608	.3141	.6659
#1	60.60	.9732	4.264	.3956	.6441	1.113	2.604
#2	60.02	.9821	4.269	.3986	.6512	1.117	2.630
#3	59.15	.9742	4.259	.3947	.6463	1.120	2.596

Sample Name: CAL 3 Acquired: 8/21/2012 9:00:43 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	4830.0
Stddev	36.7
%RSD	.76055
#1	4847.5
#2	4787.8
#3	4854.7

Sample Name: CAL 4 Acquired: 8/21/2012 9:04:02 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.787**	**12.94**	**.4969**	**1.439**	**83.69**	**85.62**	**.5371**	**7.150**	**7.944**
Stddev	.008	.08	.0016	.004	.58	.92	.0027	.030	.029
%RSD	.2843	.6121	.3125	.3121	.6915	1.075	.5051	.4203	.3718
#1	2.778	13.03	.4958	1.444	83.07	86.46	.5356	7.119	7.921
#2	2.793	12.91	.4986	1.436	83.77	85.77	.5402	7.180	7.978
#3	2.790	12.88	.4961	1.437	84.22	84.64	.5354	7.151	7.934

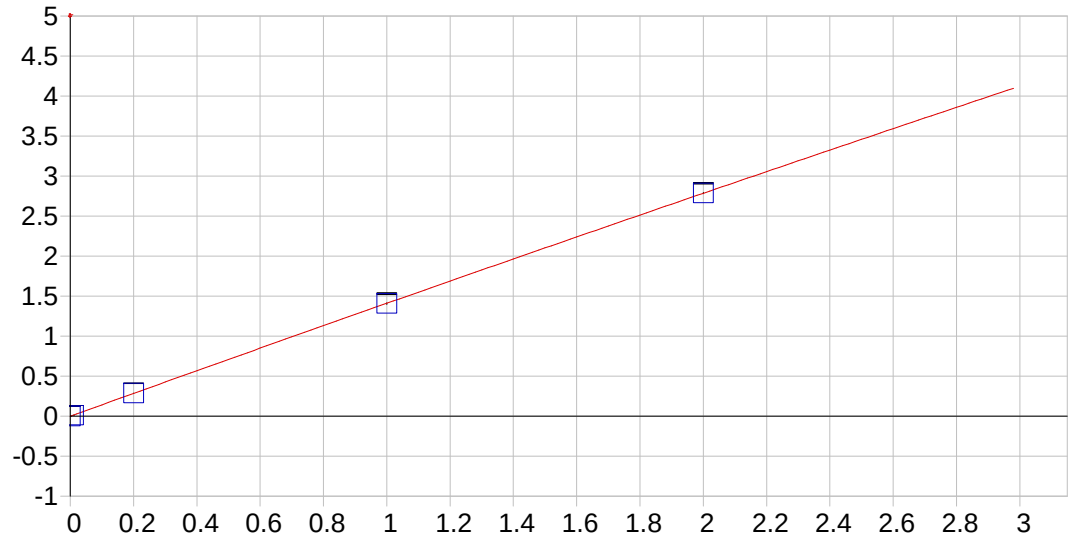
Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.648**	**13.06**	**.7015**	**27.12**	**10.77**	**22.06**	**1.801**	**15.06**	**3.929**
Stddev	.017	.02	.0022	.13	.05	.14	.010	.08	.015
%RSD	.4637	.1843	.3106	.4707	.4906	.6438	.5540	.5512	.3798
#1	3.630	13.03	.6997	27.26	10.83	22.22	1.812	15.15	3.915
#2	3.664	13.08	.7039	27.06	10.74	21.99	1.796	15.03	3.945
#3	3.650	13.05	.7008	27.02	10.74	21.97	1.793	15.00	3.926

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**34.71**	**4.567**	**.7134**	**1.025**	**3.189**	**.1256**	**.3727**	**.9559**	**1.193**
Stddev	.15	.016	.0031	.004	.013	.0005	.0017	.0044	.005
%RSD	.4368	.3474	.4360	.3739	.4099	.3654	.4447	.4626	.4076
#1	34.89	4.553	.7108	1.021	3.180	.1253	.3717	.9609	1.188
#2	34.63	4.584	.7168	1.029	3.204	.1262	.3746	.9527	1.197
#3	34.62	4.564	.7125	1.024	3.182	.1254	.3718	.9540	1.193

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**119.0**	**1.903**	**8.621**	**.7418**	**1.247**	**2.226**	**5.046**
Stddev	1.0	.009	.062	.0032	.003	.015	.021
%RSD	.8615	.4536	.7232	.4337	.2746	.6904	.4069
#1	119.4	1.893	8.690	.7385	1.243	2.244	5.026
#2	119.8	1.908	8.605	.7449	1.250	2.218	5.067
#3	117.8	1.907	8.568	.7421	1.247	2.217	5.044

Sample Name: CAL 4 Acquired: 8/21/2012 9:04:02 Type: Cal
Method: 2011(v493) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	4832.0
Stddev	18.4
%RSD	.38158
#1	4853.2
#2	4822.5
#3	4820.2

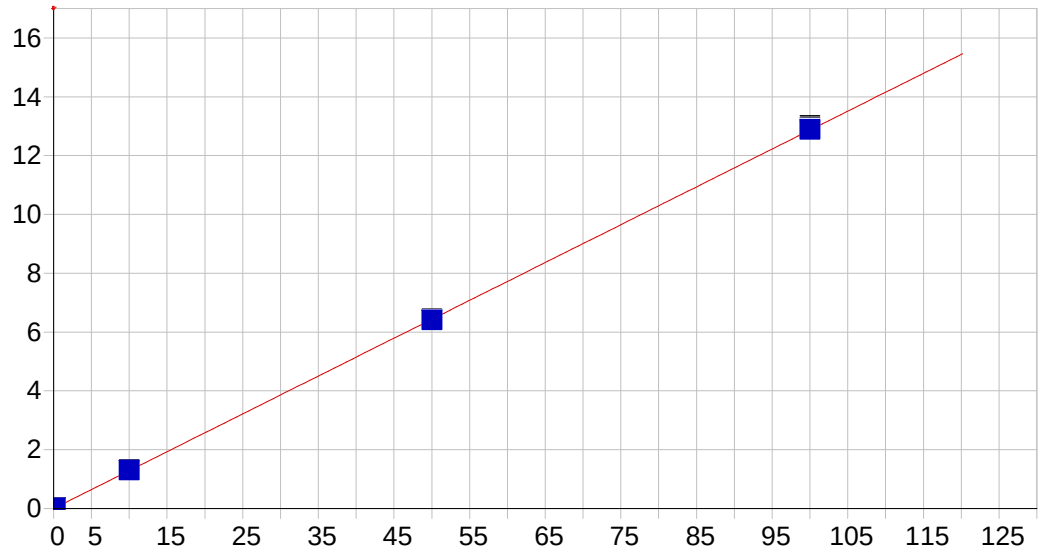


Ag 328.068 {103}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Curvilinear	Weighting:	1/Conc

A0 (Offset):	-0.000988	Re-Slope:	1.000000
A1 (Gain):	1.429348	Y-int:	0.000000
A2 (Curvature):	-0.018120		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000032		
Predicted MDL:	0.000621		
Predicted MQL:	0.002070		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00099	.000	1
CAL 1	.01000	.00999	.000	-.129	.01329	.000	1
CAL 2	.20000	.20153	.002	.764	.28633	.002	1
CAL 3	1.0000	.99722	-.003	-.278	1.4064	.009	1
CAL 4	2.0000	2.0013	.001	.063	2.7869	.008	1

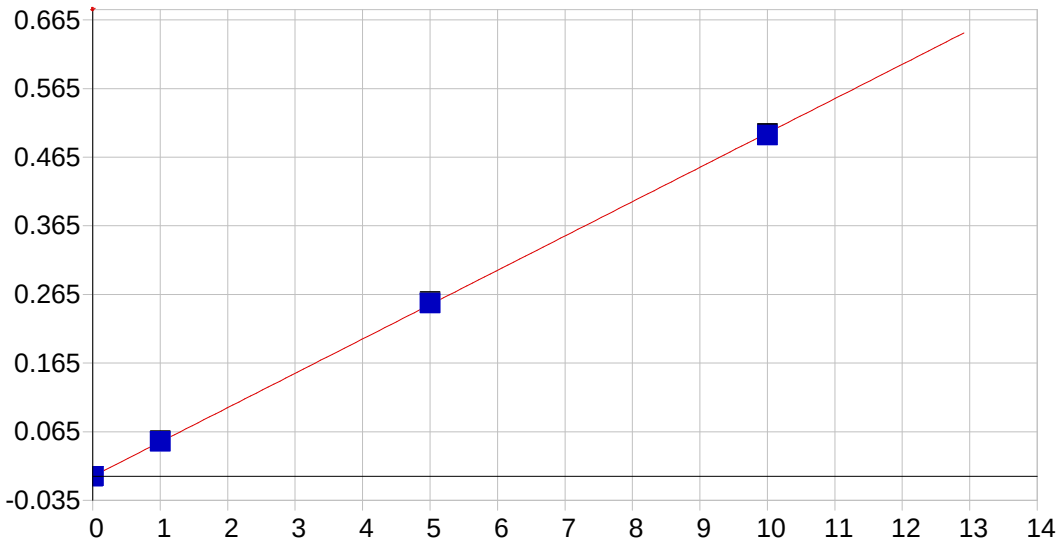


Al 396.152 { 85}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002098	Re-Slope:	1.000000
A1 (Gain):	0.128654	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000127		
Predicted MDL:	0.009215		
Predicted MQL:	0.030716		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00210	.000	1
CAL 1	.20000	.18770	-.012	-6.15	.02646	.001	1
CAL 2	10.000	10.093	.093	.934	1.3061	.004	1
CAL 3	50.000	49.768	-.232	-.465	6.4321	.006	1
CAL 4	100.00	100.15	.151	.151	12.941	.079	1

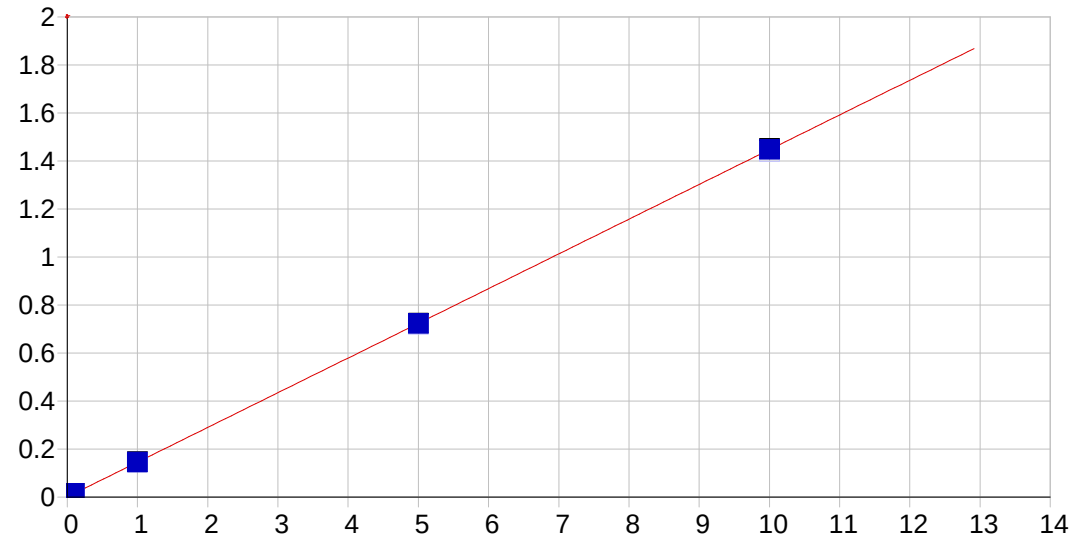


As 189.042 {478}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000047	Re-Slope:	1.000000
A1 (Gain):	0.050030	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999968	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.001776		
Predicted MQL:	0.005920		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00005	.000	1
CAL 1	.01000	.00948	-.001	-5.18	.00043	.000	1
CAL 2	1.0000	1.0135	.014	1.35	.05062	.001	1
CAL 3	5.0000	5.0469	.047	.938	.25225	.002	1
CAL 4	10.000	9.9401	-.060	-.599	.49686	.002	1

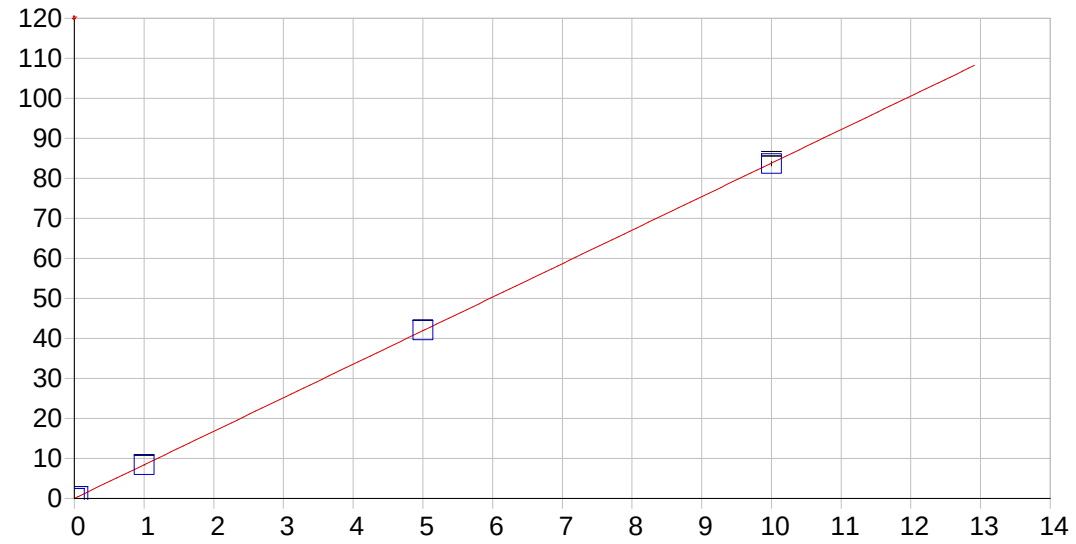


B 249.678 {135}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000745	Re-Slope:	1.000000
A1 (Gain):	0.144615	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999990	Status:	OK.
Std Error of Est:	0.000033		
Predicted MDL:	0.002811		
Predicted MQL:	0.009369		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00075	.000	1
CAL 1	.10000	.09450	-.006	-5.50	.01440	.000	1
CAL 2	1.0000	1.0032	.003	.322	.14492	.001	1
CAL 3	5.0000	4.9962	-.004	-.076	.71875	.000	1
CAL 4	10.000	10.006	.006	.061	1.4387	.004	1



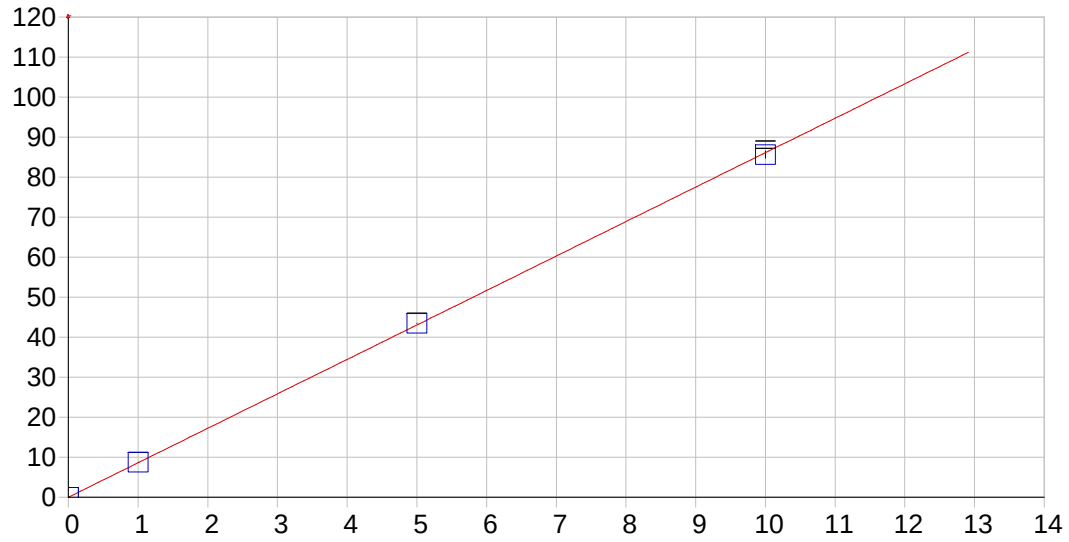
Ba 455.403 { 74}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.025170	Re-Slope:	1.000000

A1 (Gain):	8.378096	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999998	Status:	OK.
Std Error of Est:	0.000661		
Predicted MDL:	0.000190		
Predicted MQL:	0.000632		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.02517	.002	1
CAL 1	.05000	.05025	.000	.490	.44613	.001	1
CAL 2	1.0000	.99815	-.002	-.185	8.3877	.011	1
CAL 3	5.0000	5.0158	.016	.316	42.048	.041	1
CAL 4	10.000	9.9858	-.014	-.142	83.687	.579	1

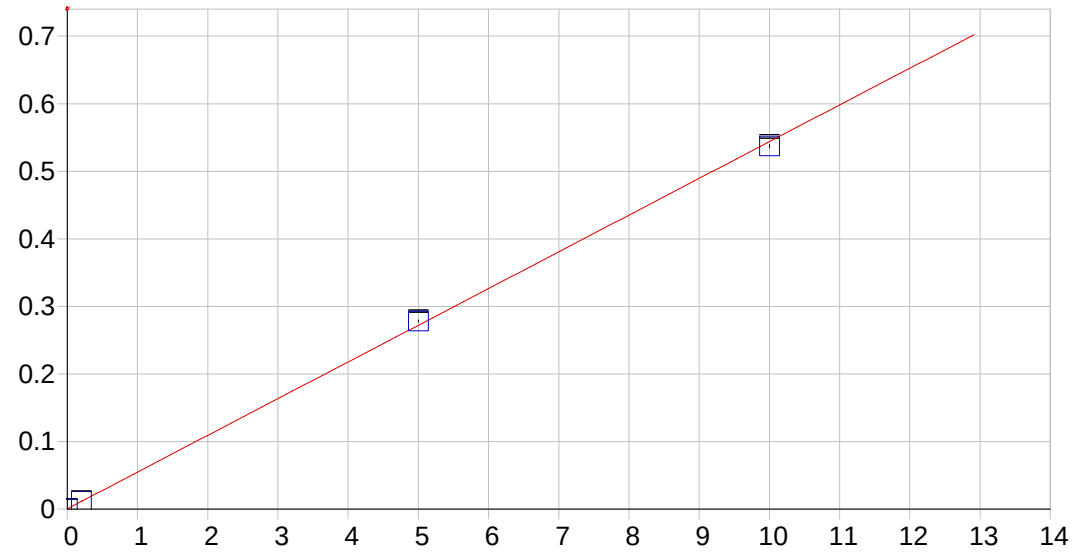


Be 313.042 {108}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000631	Re-Slope:	1.000000
A1 (Gain):	8.611460	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000732		
Predicted MDL:	0.000065		
Predicted MQL:	0.000216		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00063	.000	1
CAL 1	.00500	.00501	.000	.273	.04381	.001	1
CAL 2	1.0000	1.0106	.011	1.06	8.7030	.008	1
CAL 3	5.0000	5.0465	.046	.929	43.458	.058	1
CAL 4	10.000	9.9430	-.057	-.570	85.624	.920	1

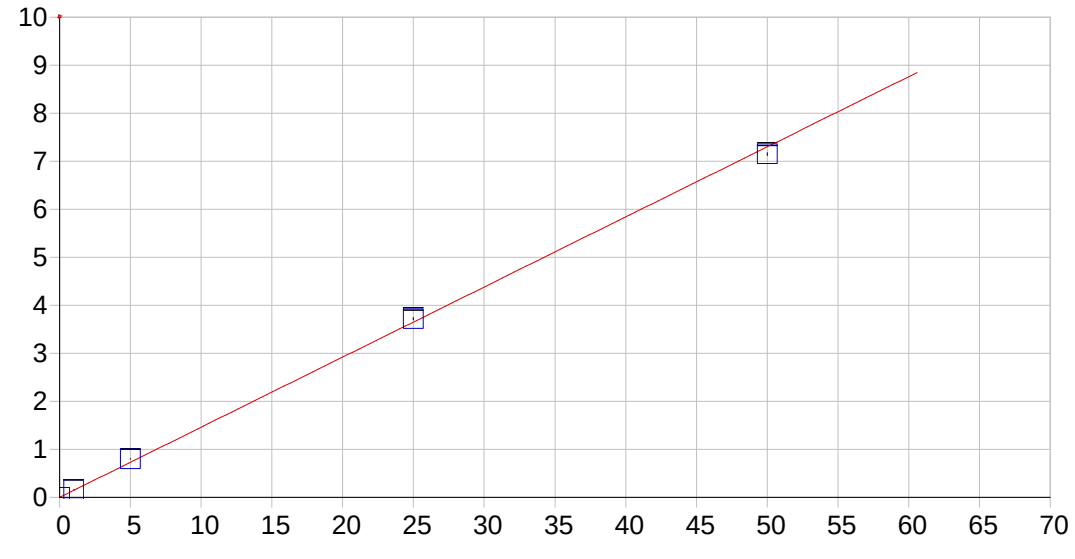


Bi 223.061 {451}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000402	Re-Slope:	1.000000
A1 (Gain):	0.054339	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999848	Status:	OK.
Std Error of Est:	0.000074		
Predicted MDL:	0.002747		
Predicted MQL:	0.009157		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00040	.000	1
CAL 1	.20000	.21027	.010	5.14	.01183	.000	1
CAL 3	5.0000	5.1135	.113	2.27	.27826	.002	1
CAL 4	10.000	9.8762	-.124	-1.24	.53707	.003	1



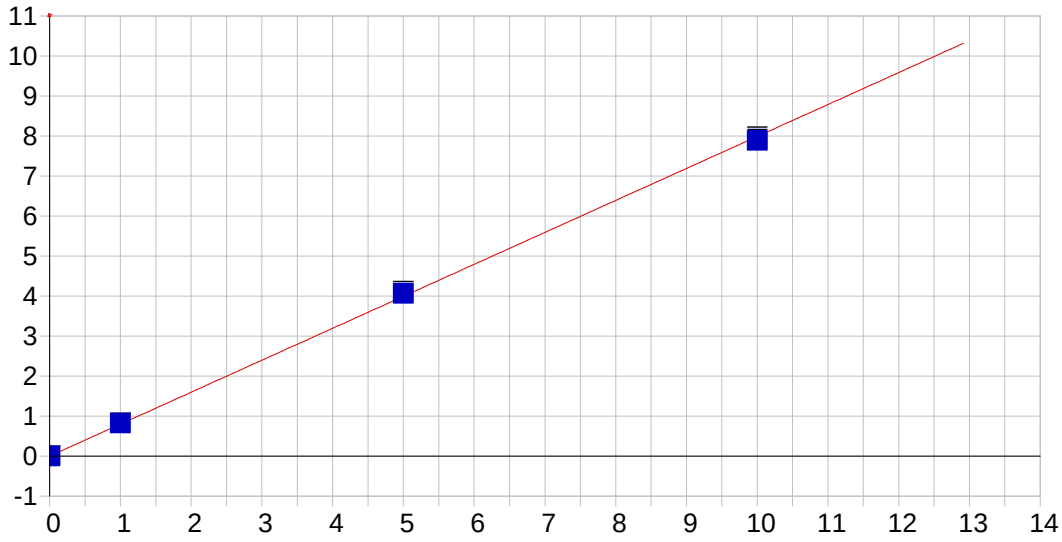
Ca 184.006 {483}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001516	Re-Slope:	1.000000
A1 (Gain):	0.145992	Y-int:	0.000000

A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.999495		Status:	OK.		
Std Error of Est:		0.001704					
Predicted MDL:		0.000600					
Predicted MQL:		0.002000					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00017	.000	.000	.00149	.000	1
CAL 1	1.0000	1.0821	.082	8.21	.15949	.001	1
CAL 2	5.0000	5.4709	.471	9.42	.80022	.006	1
CAL 3	25.000	25.482	.482	1.93	3.7217	.026	1
CAL 4	50.000	48.965	-1.03	-2.07	7.1500	.030	1

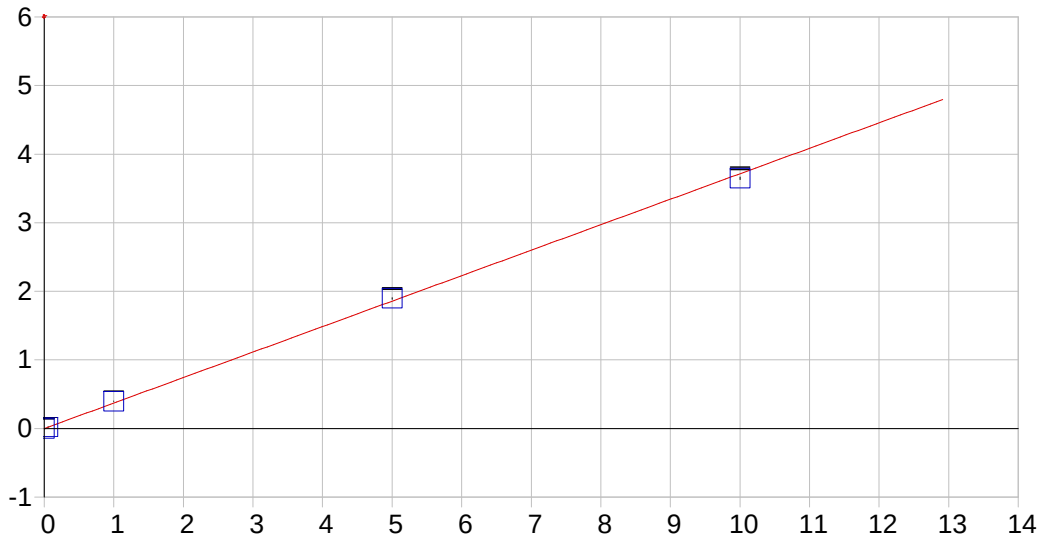


Cd 228.802 {447}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000070	Re-Slope:	1.000000
A1 (Gain):	0.798898	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999866	Status:	OK.
Std Error of Est:	0.000152		
Predicted MDL:	0.000185		
Predicted MQL:	0.000616		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00007	.000	1
CAL 1	.00500	.00510	.000	2.06	.00403	.000	1
CAL 2	1.0000	1.0363	.036	3.63	.83322	.007	1
CAL 3	5.0000	5.0872	.087	1.74	4.0911	.028	1
CAL 4	10.000	9.8765	-.124	-1.24	7.9443	.030	1

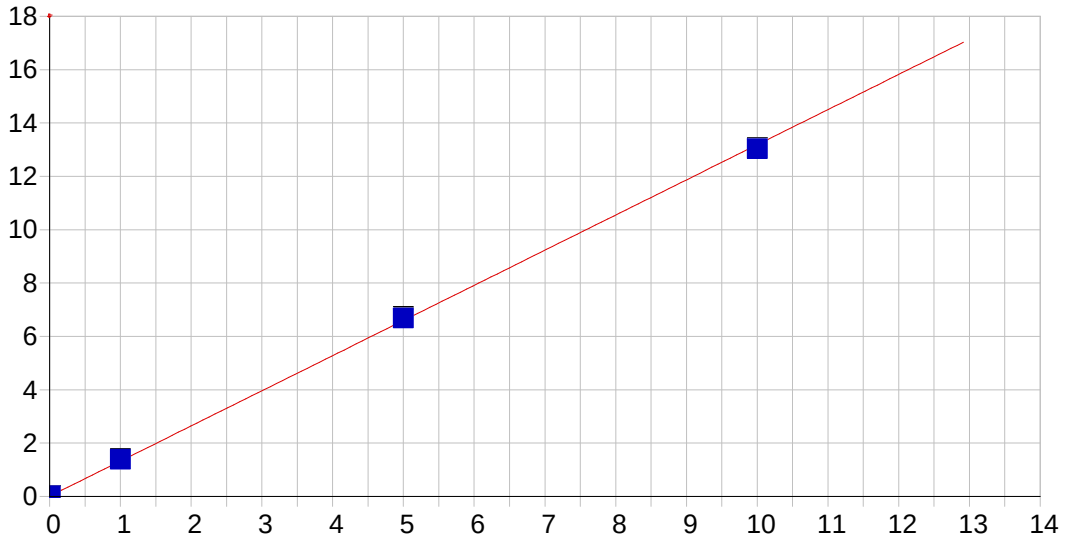


Co 228.616 {448}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000045	Re-Slope:	1.000000
A1 (Gain):	0.371394	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999675	Status:	OK.
Std Error of Est:	0.000346		
Predicted MDL:	0.000323		
Predicted MQL:	0.001077		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00005	.000	1
CAL 1	.05000	.05386	.004	7.72	.01996	.000	1
CAL 2	1.0000	1.0691	.069	6.91	.39702	.003	1
CAL 3	5.0000	5.1049	.105	2.10	1.8959	.011	1
CAL 4	10.000	9.8221	-.178	-1.78	3.6478	.017	1



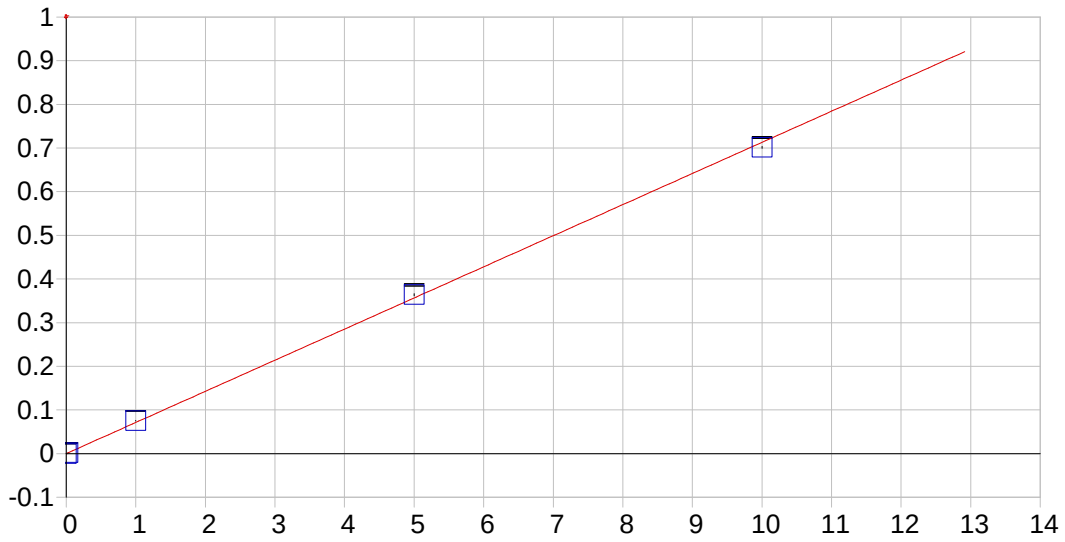
Cr 283.563 {119}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.008086	Re-Slope:	1.000000

A1 (Gain):	1.317749	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999834	Status:	OK.
Std Error of Est:	0.000392		
Predicted MDL:	0.000395		
Predicted MQL:	0.001315		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00809	.000	1
CAL 1	.01000	.00974	.000	-2.60	.02266	.000	1
CAL 2	1.0000	1.0543	.054	5.43	1.3966	.007	1
CAL 3	5.0000	5.0671	.067	1.34	6.7000	.038	1
CAL 4	10.000	9.8790	-.121	-1.21	13.055	.024	1

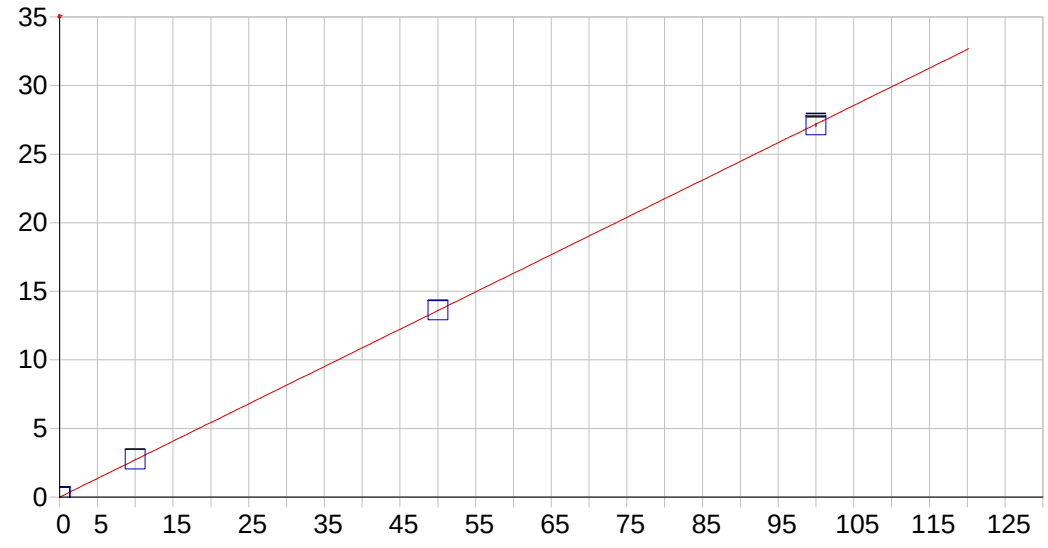


Cu 217.894 {455}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000086	Re-Slope:	1.000000
A1 (Gain):	0.071293	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999748	Status:	OK.
Std Error of Est:	0.000041		
Predicted MDL:	0.002020		
Predicted MQL:	0.006732		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00009	.000	1
CAL 1	.02500	.02664	.002	6.57	.00199	.000	1
CAL 2	1.0000	1.0563	.056	5.63	.07539	.001	1
CAL 3	5.0000	5.1040	.104	2.08	.36397	.003	1
CAL 4	10.000	9.8380	-.162	-1.62	.70146	.002	1

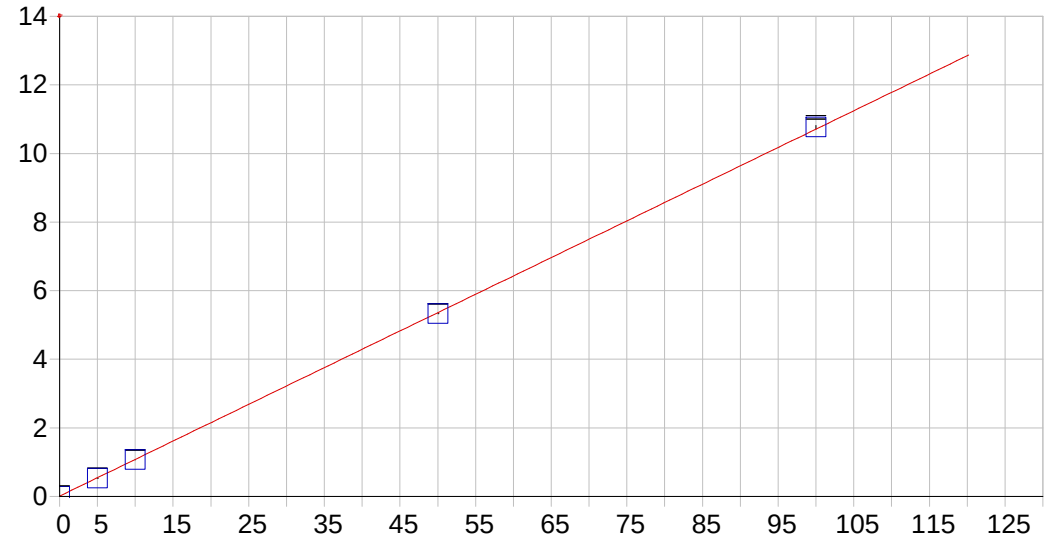


Fe 259.940 {130}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000547	Re-Slope:	1.000000
A1 (Gain):	0.271878	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999988	Status:	OK.
Std Error of Est:	0.000216		
Predicted MDL:	0.001451		
Predicted MQL:	0.004836		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00055	.001	1
CAL 1	.10000	.10338	.003	3.38	.02865	.001	1
CAL 2	10.000	10.167	.167	1.67	2.7649	.005	1
CAL 3	50.000	50.094	.094	.189	13.620	.010	1
CAL 4	100.00	99.735	-.265	-.265	27.116	.128	1



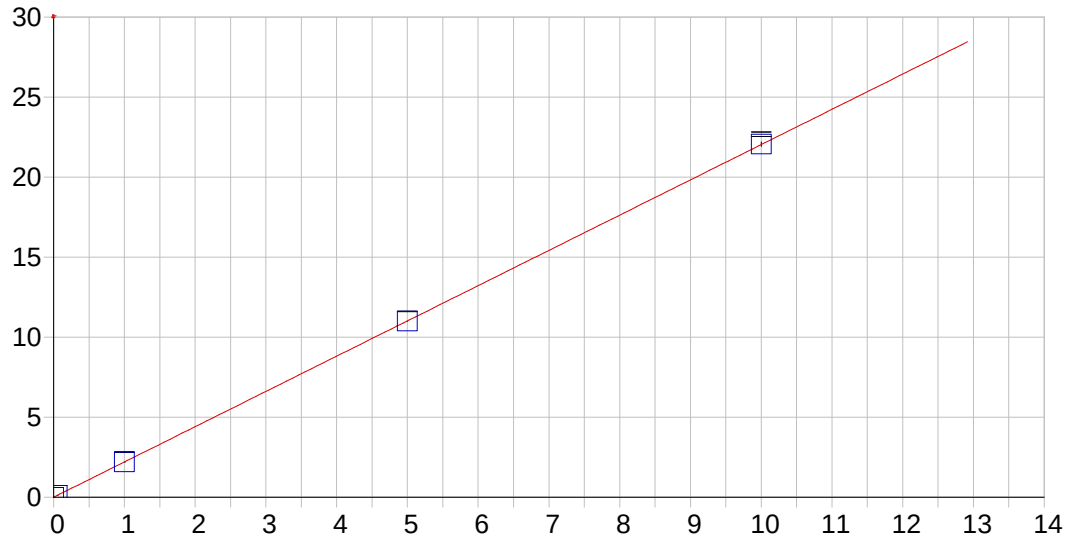
K 766.490 { 44}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.010513	Re-Slope:	1.000000

A1 (Gain):	0.107001		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999973	Status:	OK.		
Std Error of Est:	0.000916				
Predicted MDL:	0.024444				
Predicted MQL:	0.081480				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00018	.000	.000	.01053	.004	1
CAL 1	5.0000	4.8772	-.123	-2.46	.53237	.004	1
CAL 2	10.000	9.8895	-.110	-1.10	1.0687	.006	1
CAL 3	50.000	49.703	-.297	-.594	5.3288	.002	1
CAL 4	100.00	100.53	.530	.530	10.767	.053	1

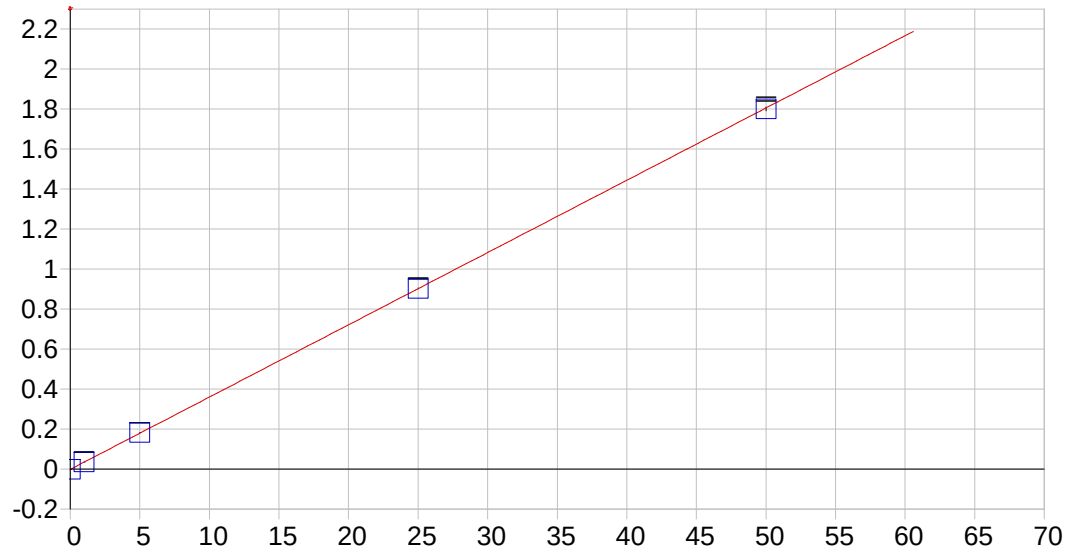


Li 670.784 { 50}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001962	Re-Slope:	1.000000
A1 (Gain):	2.203066	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000181		
Predicted MDL:	0.001194		
Predicted MQL:	0.003980		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00196	.002	1
CAL 1	.05000	.05123	.001	2.46	.11482	.001	1
CAL 2	1.0000	.99778	-.002	-.222	2.2001	.005	1
CAL 3	5.0000	4.9879	-.012	-.241	10.991	.012	1
CAL 4	10.000	10.013	.013	.131	22.061	.142	1

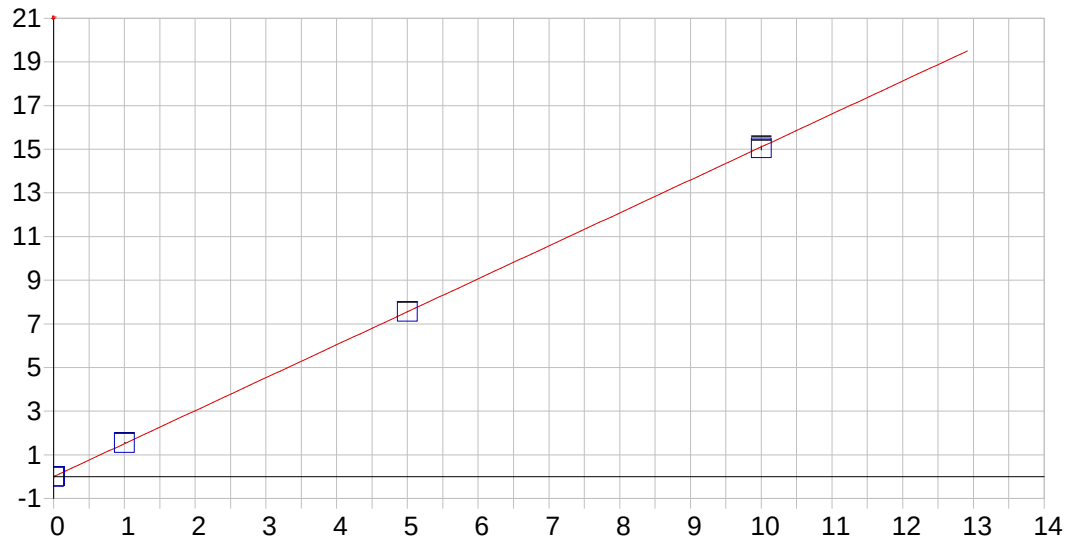


Mg 279.806 {121}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001294	Re-Slope:	1.000000
A1 (Gain):	0.036136	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999987	Status:	OK.
Std Error of Est:	0.000068		
Predicted MDL:	0.012525		
Predicted MQL:	0.041749		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00003	.000	.000	-.00129	.000	1
CAL 1	1.0000	1.0136	.014	1.36	.03534	.001	1
CAL 2	5.0000	5.0863	.086	1.73	.18251	.000	1
CAL 3	25.000	25.037	.037	.149	.90346	.002	1
CAL 4	50.000	49.863	-.137	-.275	1.8006	.010	1



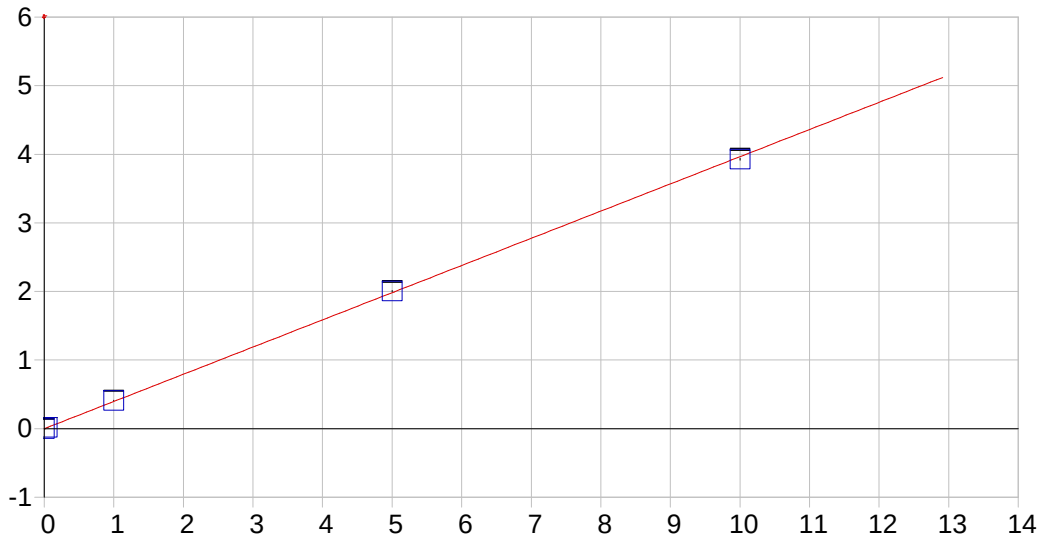
Mn 257.610 {131}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000140	Re-Slope:	1.000000

A1 (Gain):	1.510482	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999975	Status:	OK.
Std Error of Est:	0.000214		
Predicted MDL:	0.000280		
Predicted MQL:	0.000933		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00014	.001	1
CAL 1	.01500	.01533	.000	2.17	.02329	.000	1
CAL 2	1.0000	1.0263	.026	2.63	1.5504	.005	1
CAL 3	5.0000	5.0043	.004	.086	7.5590	.006	1
CAL 4	10.000	9.9690	-.031	-.310	15.058	.083	1

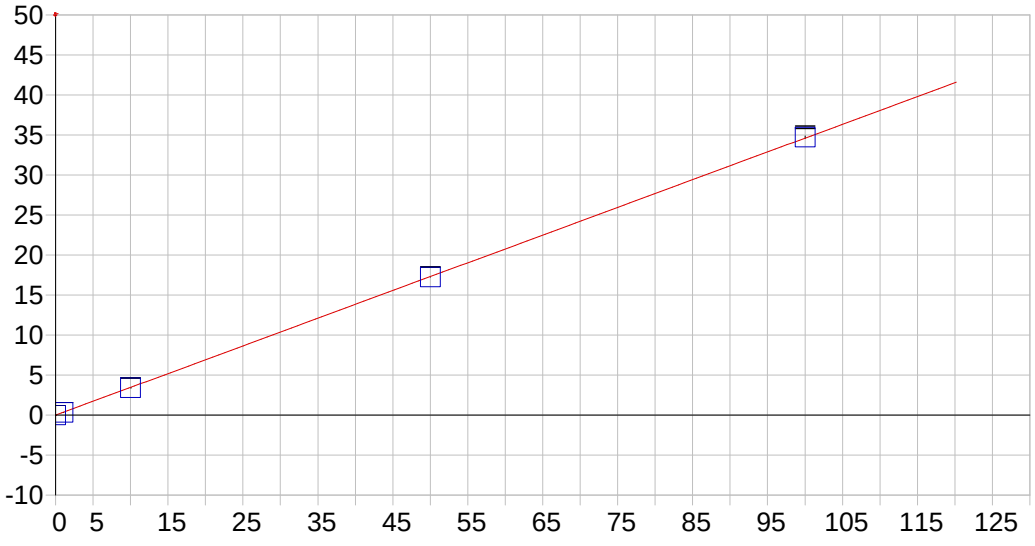


Mo 202.030 {467}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000007	Re-Slope:	1.000000
A1 (Gain):	0.396450	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999919	Status:	OK.
Std Error of Est:	0.000165		
Predicted MDL:	0.000268		
Predicted MQL:	0.000892		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00001	.000	1
CAL 1	.04000	.04074	.001	1.84	.01616	.000	1
CAL 2	1.0000	1.0336	.034	3.36	.40980	.003	1
CAL 3	5.0000	5.0560	.056	1.12	2.0045	.012	1
CAL 4	10.000	9.9096	-.090	-.904	3.9287	.015	1

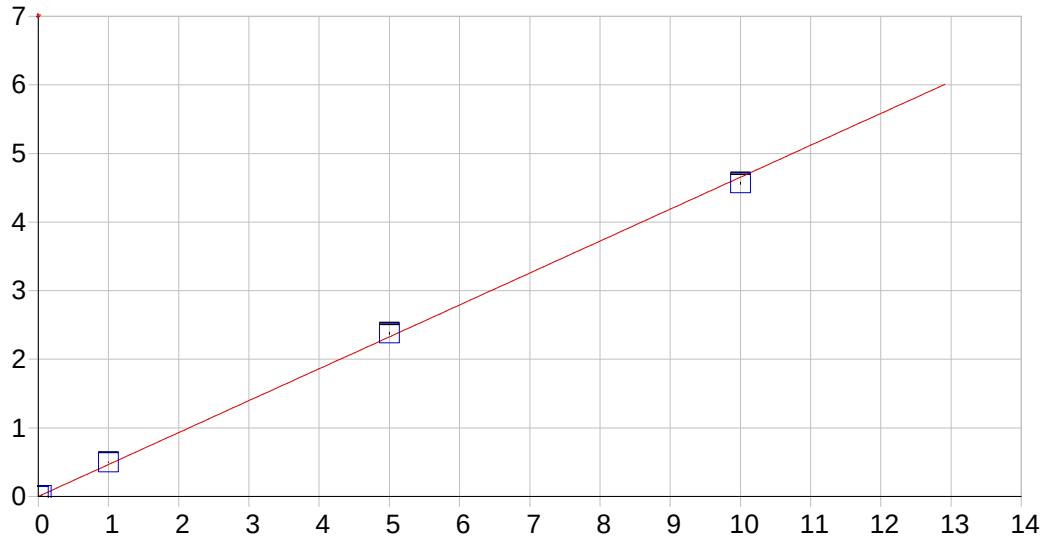


Na 589.592 { 57}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.009518	Re-Slope:	1.000000
A1 (Gain):	0.346181	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999985	Status:	OK.
Std Error of Est:	0.000974		
Predicted MDL:	0.007475		
Predicted MQL:	0.024916		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00006	.000	.000	-.00950	.002	1
CAL 1	1.0000	.95724	-.043	-4.28	.32186	.001	1
CAL 2	10.000	9.8709	-.129	-1.29	3.4076	.002	1
CAL 3	50.000	49.870	-.130	-.261	17.254	.008	1
CAL 4	100.00	100.30	.302	.302	34.713	.152	1



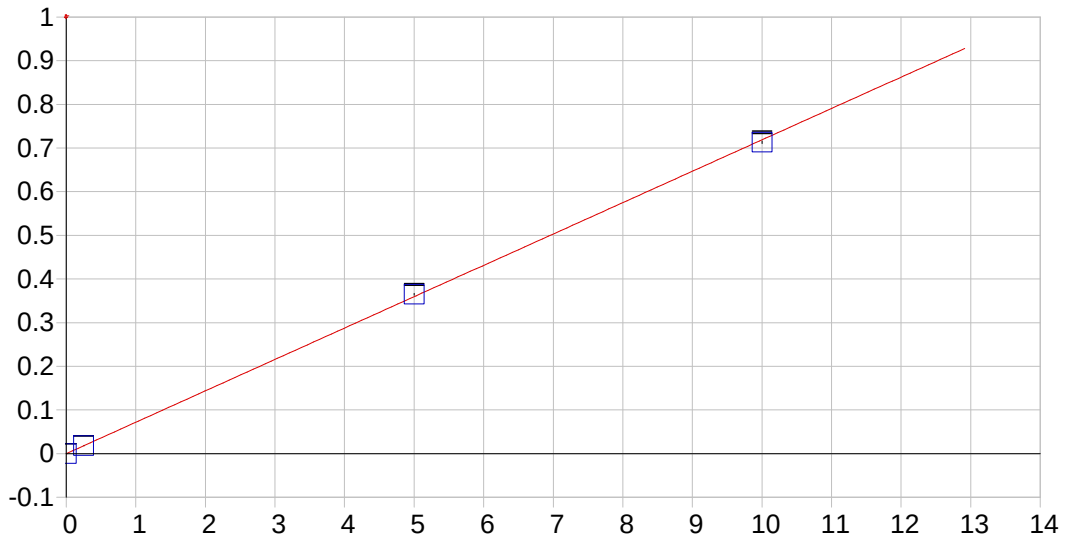
Ni 221.647 {452}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000361	Re-Slope:	1.000000

A1 (Gain):	0.465307	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999644	Status:	OK.
Std Error of Est:	0.000406		
Predicted MDL:	0.000346		
Predicted MQL:	0.001155		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00036	.000	1
CAL 1	.04000	.04352	.004	8.79	.02061	.000	1
CAL 2	1.0000	1.0727	.073	7.27	.49951	.004	1
CAL 3	5.0000	5.1094	.109	2.19	2.3778	.017	1
CAL 4	10.000	9.8143	-.186	-1.86	4.5670	.016	1

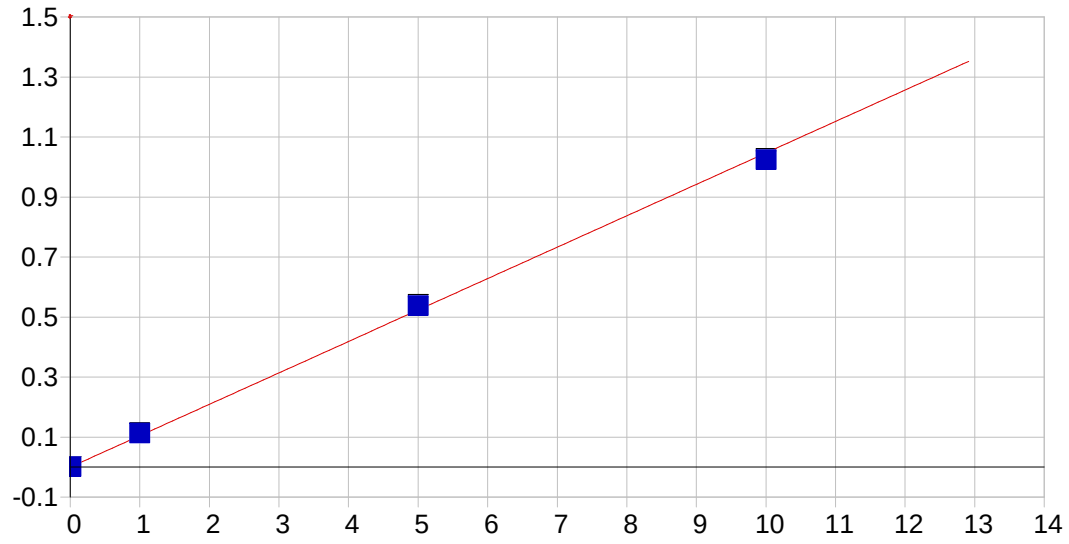


P 177.495 {490}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000093	Re-Slope:	1.000000
A1 (Gain):	0.071862	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999944	Status:	OK.
Std Error of Est:	0.000066		
Predicted MDL:	0.001232		
Predicted MQL:	0.004106		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00009	.000	1
CAL 1	.25000	.24844	-.002	-.625	.01795	.000	1
CAL 3	5.0000	5.0759	.076	1.52	.36486	.002	1
CAL 4	10.000	9.9257	-.074	-.743	.71337	.003	1

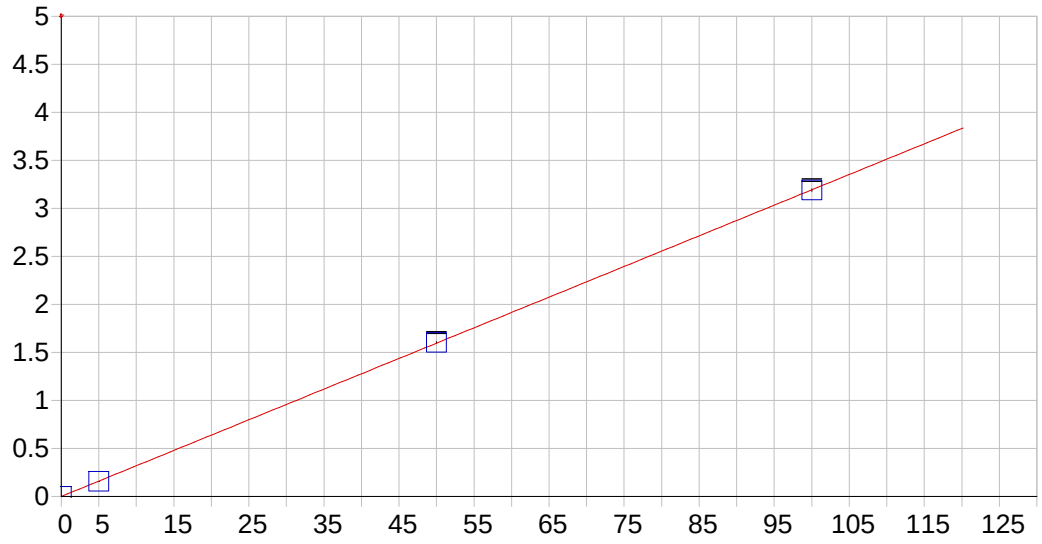


Pb 220.353 {453}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000144	Re-Slope:	1.000000
A1 (Gain):	0.104709	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999539	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.001330		
Predicted MQL:	0.004435		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00014	.000	1
CAL 1	.01000	.01003	.000	.275	.00094	.000	1
CAL 2	1.0000	1.0787	.079	7.87	.11279	.001	1
CAL 3	5.0000	5.1389	.139	2.78	.53824	.004	1
CAL 4	10.000	9.7824	-.218	-2.18	1.0248	.004	1



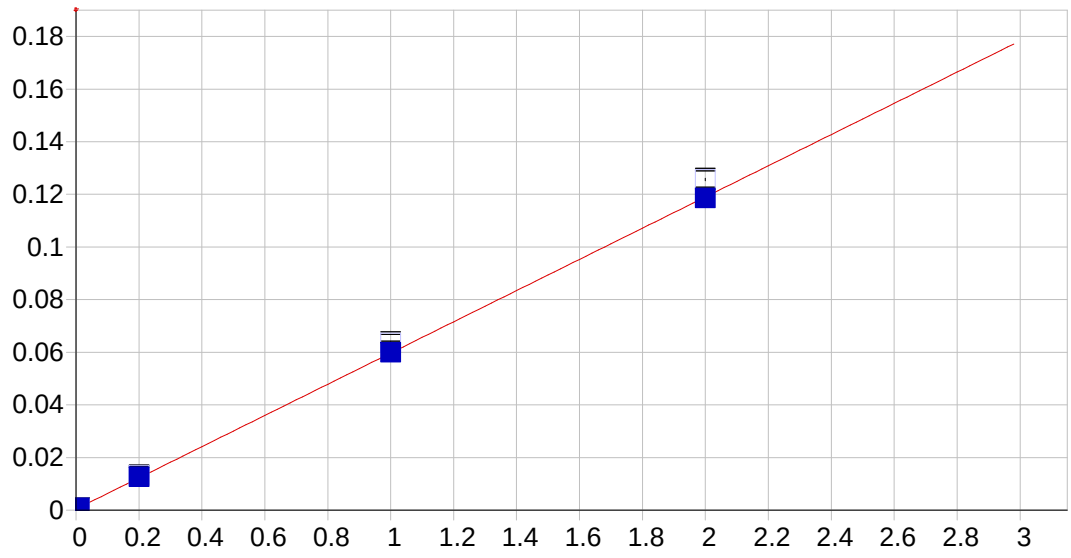
S 182.034 {485}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000278	Re-Slope:	1.000000

A1 (Gain):	0.031928			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999993		Status:	OK.	
Std Error of Est:	0.000145				
Predicted MDL:	0.002618				
Predicted MQL:	0.008727				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00006	.000	.000	.00028	.000	1
CAL 1	5.0000	4.9292	-.071	-1.42	.15765	.001	1
CAL 3	50.000	50.209	.209	.417	1.6033	.010	1
CAL 4	100.00	99.862	-.138	-.138	3.1886	.013	1

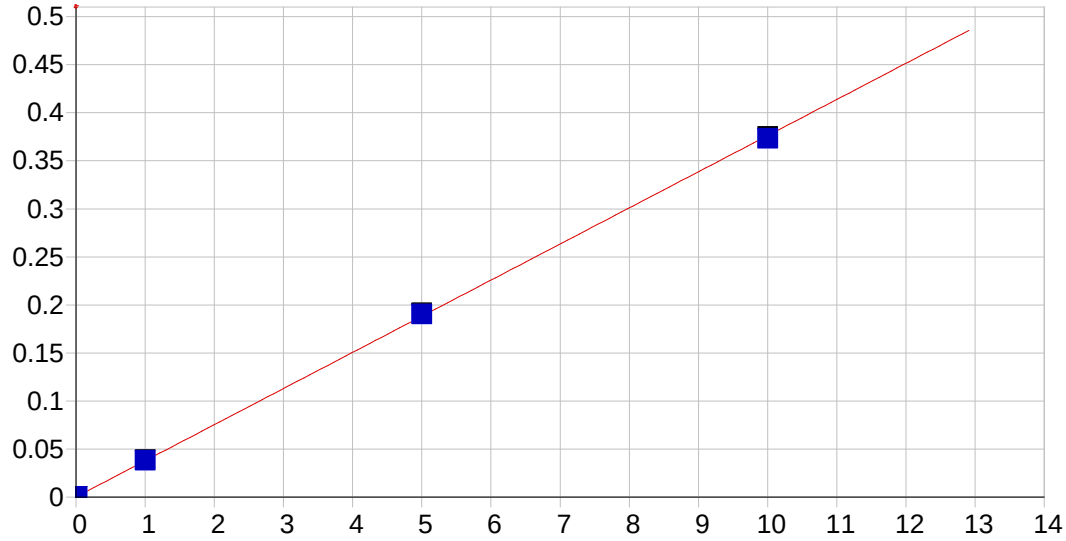


Sb 206.833 {463}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000397	Re-Slope:	1.000000
A1 (Gain):	0.059309	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999873	Status:	OK.
Std Error of Est:	0.000007		
Predicted MDL:	0.002255		
Predicted MQL:	0.007518		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00040	.000	1
CAL 1	.01000	.00735	-.003	-26.5	.00082	.000	1
CAL 2	.20000	.20568	.006	2.84	.01330	.000	1
CAL 3	1.0000	1.0045	.004	.450	.06351	.001	1
CAL 4	2.0000	1.9923	-.008	-.386	.12563	.000	1

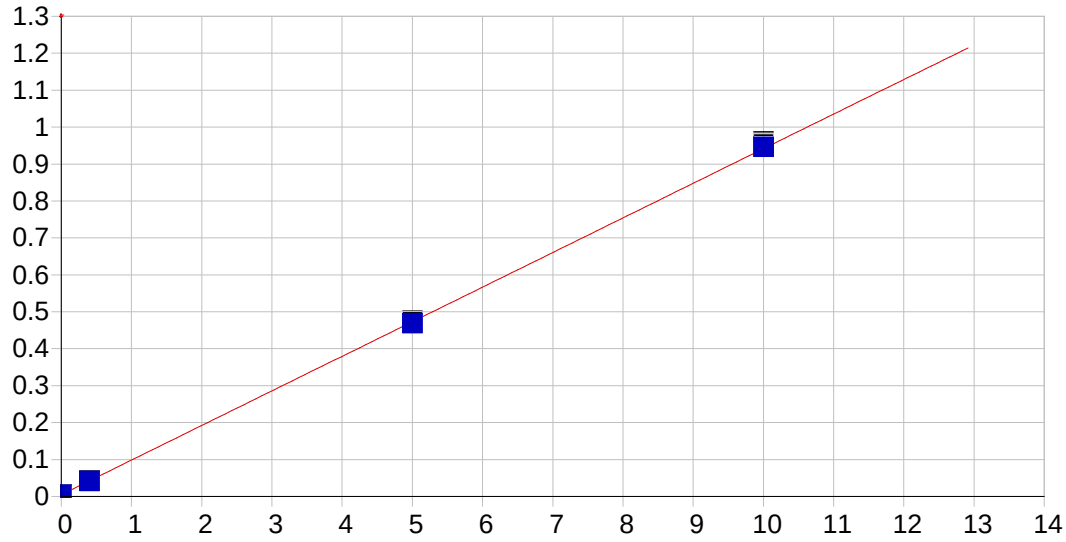


Se 196.090 {472}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000192	Re-Slope:	1.000000
A1 (Gain):	0.037604	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999942	Status:	OK.
Std Error of Est:	0.000008		
Predicted MDL:	0.002652		
Predicted MQL:	0.008841		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00019	.000	1
CAL 1	.01500	.01295	-.002	-13.6	.00068	.000	1
CAL 2	1.0000	1.0165	.017	1.65	.03835	.000	1
CAL 3	5.0000	5.0608	.061	1.22	.19014	.001	1
CAL 4	10.000	9.9247	-.075	-.753	.37268	.002	1



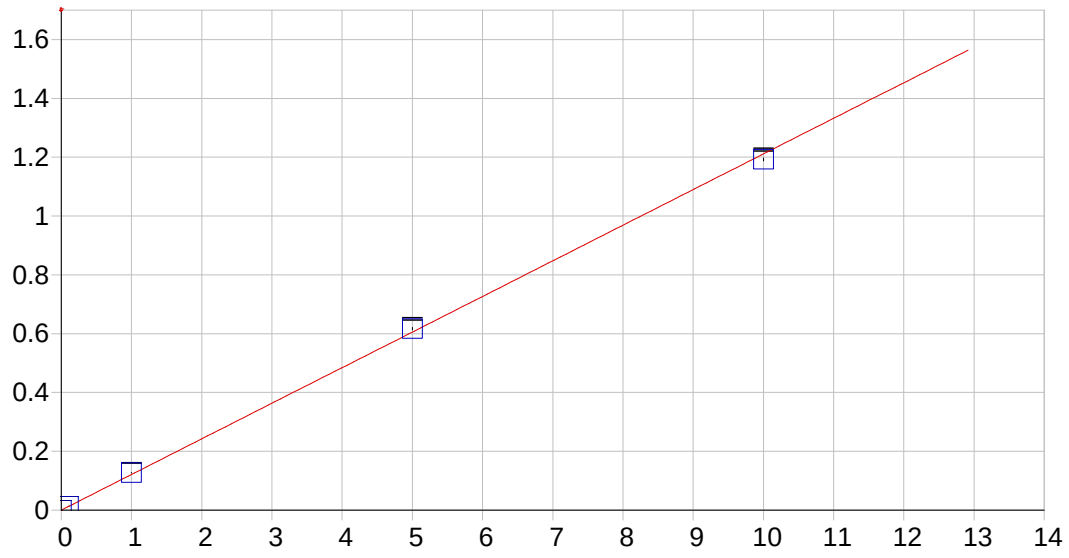
Si 251.611 {134}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004747	Re-Slope:	1.000000

A1 (Gain):	0.093672			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999974		Status:	OK.	
Std Error of Est:	0.000076				
Predicted MDL:	0.004443				
Predicted MQL:	0.014812				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00475	.000	1
CAL 1	.40000	.39063	-.009	-2.34	.04138	.000	1
CAL 3	5.0000	4.9586	-.041	-.828	.47407	.001	1
CAL 4	10.000	10.051	.051	.507	.95589	.004	1

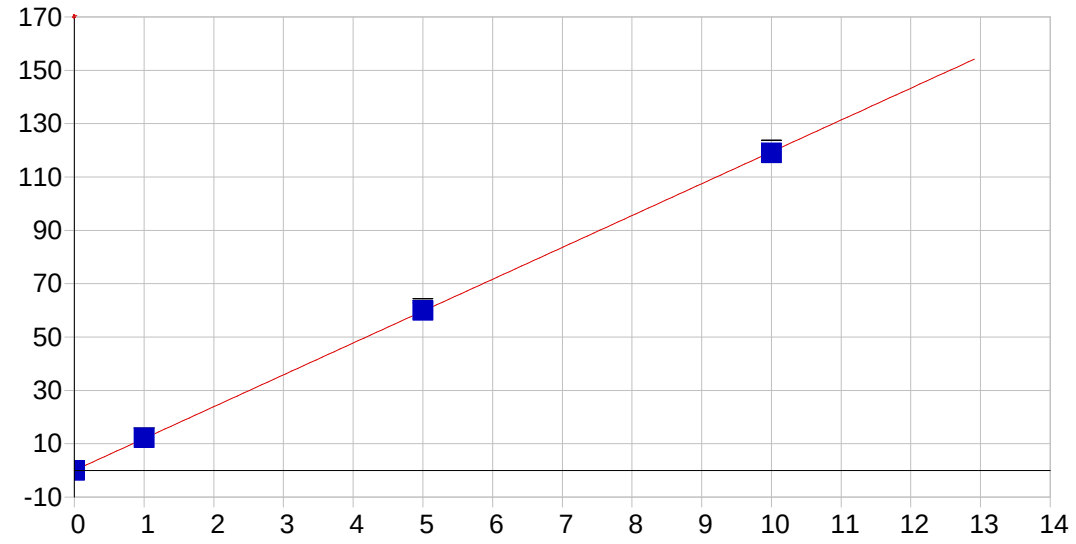


Sn 189.989 {478}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000116	Re-Slope:	1.000000
A1 (Gain):	0.121090	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999780	Status:	OK.
Std Error of Est:	0.000132		
Predicted MDL:	0.000670		
Predicted MQL:	0.002233		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00011	.000	1
CAL 1	.10000	.10663	.007	6.63	.01303	.000	1
CAL 2	1.0000	1.0504	.050	5.04	.12731	.001	1
CAL 3	5.0000	5.0948	.095	1.90	.61704	.004	1
CAL 4	10.000	9.8482	-.152	-1.52	1.1926	.005	1

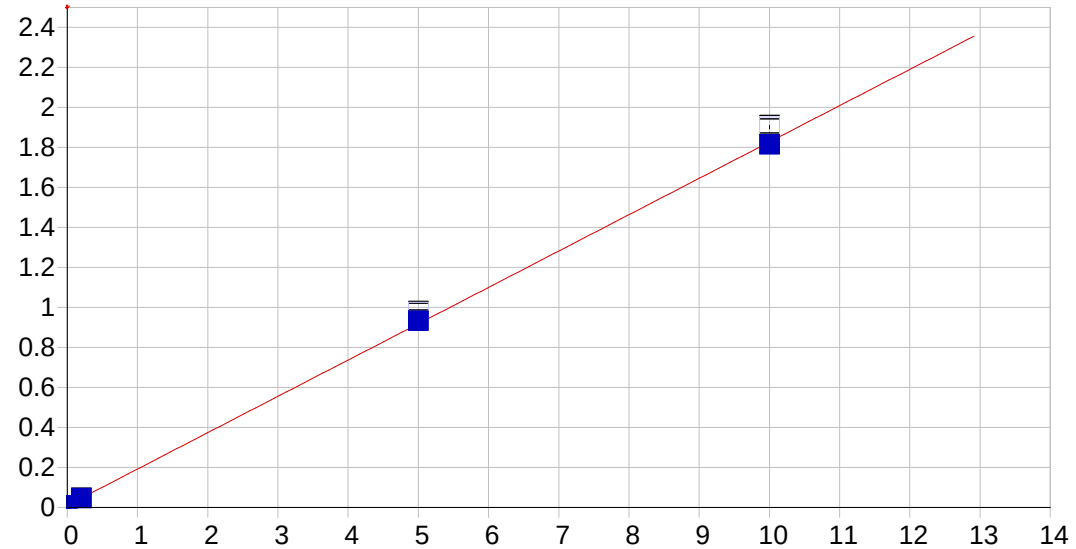


Sr 407.771 { 83}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000476	Re-Slope:	1.000000
A1 (Gain):	11.941450	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999982	Status:	OK.
Std Error of Est:	0.000838		
Predicted MDL:	0.000085		
Predicted MQL:	0.000283		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00048	.000	1
CAL 1	.00500	.00491	.000	-1.80	.05881	.001	1
CAL 2	1.0000	1.0200	.020	2.00	12.183	.018	1
CAL 3	5.0000	5.0168	.017	.336	59.924	.733	1
CAL 4	10.000	9.9633	-.037	-.367	119.01	1.03	1



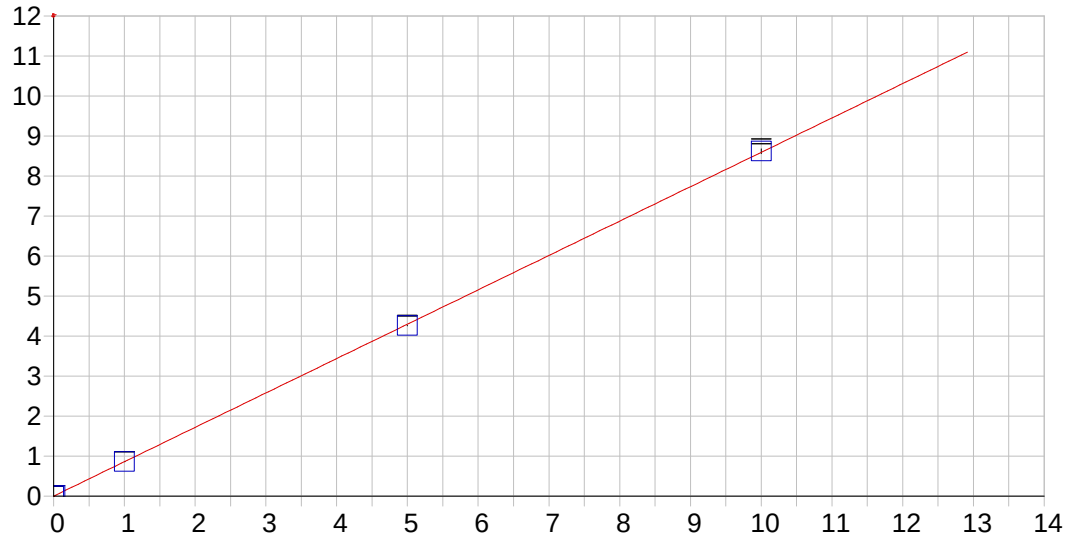
Th 283.231 {119}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.010276	Re-Slope:	1.000000

A1 (Gain):	0.181693	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999950	Status:	OK.
Std Error of Est:	0.000149		
Predicted MDL:	0.004248		
Predicted MQL:	0.014159		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.01028	.001	1
CAL 1	.20000	.19668	-.003	-1.66	.04617	.001	1
CAL 3	5.0000	5.0747	.075	1.49	.97651	.005	1
CAL 4	10.000	9.9285	-.071	-.715	1.9026	.009	1

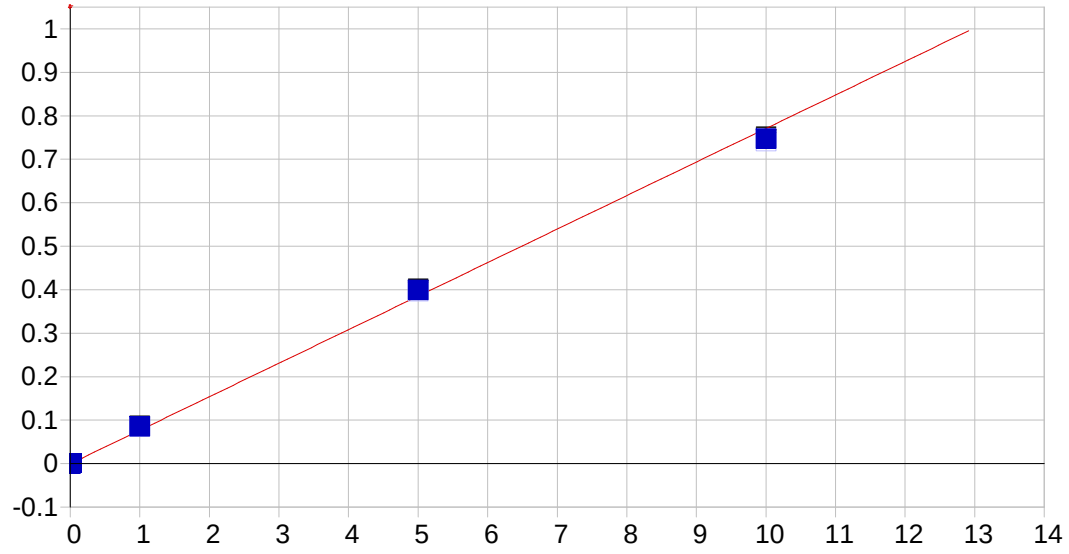


Ti 334.941 {101}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001276	Re-Slope:	1.000000
A1 (Gain):	0.859132	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000104		
Predicted MDL:	0.000855		
Predicted MQL:	0.002849		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00128	.001	1
CAL 1	.02000	.01957	.000	-2.16	.01809	.000	1
CAL 2	1.0000	1.0055	.006	.553	.86516	.002	1
CAL 3	5.0000	4.9617	-.038	-.765	4.2641	.005	1
CAL 4	10.000	10.033	.033	.332	8.6211	.062	1

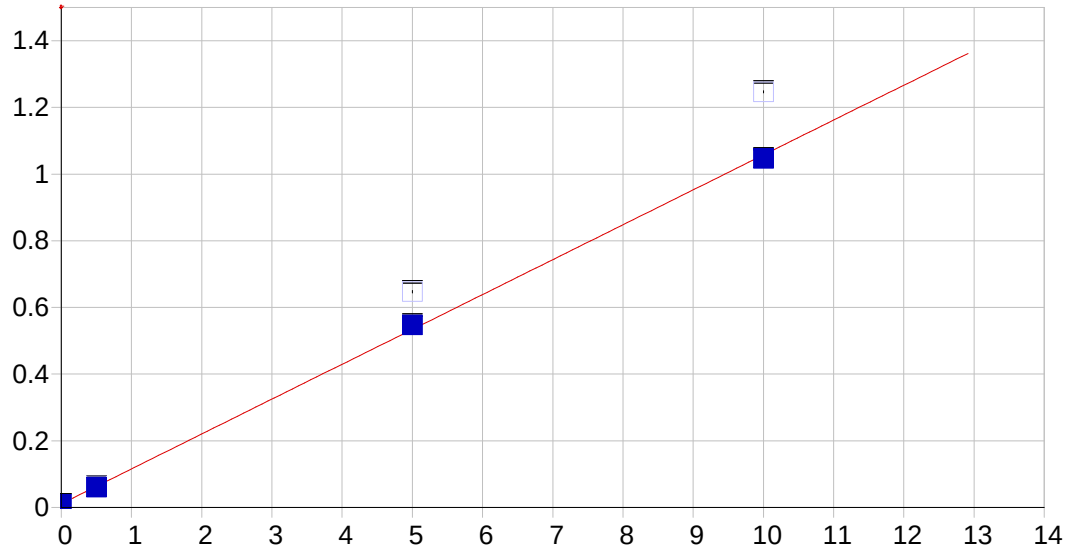


Tl 190.856 {477}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000368	Re-Slope:	1.000000
A1 (Gain):	0.077117	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999076	Status:	OK.
Std Error of Est:	0.000076		
Predicted MDL:	0.001372		
Predicted MQL:	0.004575		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00037	.000	1
CAL 1	.02000	.02386	.004	19.3	.00144	.000	1
CAL 2	1.0000	1.1133	.113	11.3	.08490	.001	1
CAL 3	5.0000	5.1822	.182	3.64	.39631	.002	1
CAL 4	10.000	9.7007	-.299	-2.99	.74182	.003	1



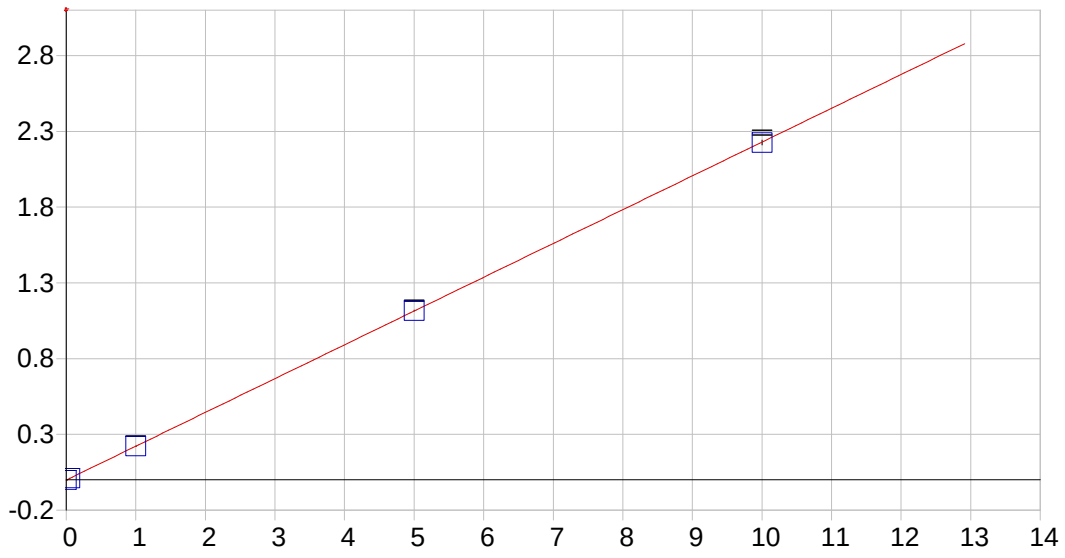
U 367.007 { 92}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.011008	Re-Slope:	1.000000

A1 (Gain):	0.104634			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999880		Status:	OK.	
Std Error of Est:	0.000239				
Predicted MDL:	0.011009				
Predicted MQL:	0.036696				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00002	.000	.000	.01101	.001	1
CAL 1	.50000	.47620	-.024	-4.76	.06407	.001	1
CAL 3	5.0000	5.1237	.124	2.47	.64719	.004	1
CAL 4	10.000	9.8975	-.103	-1.03	1.2468	.003	1

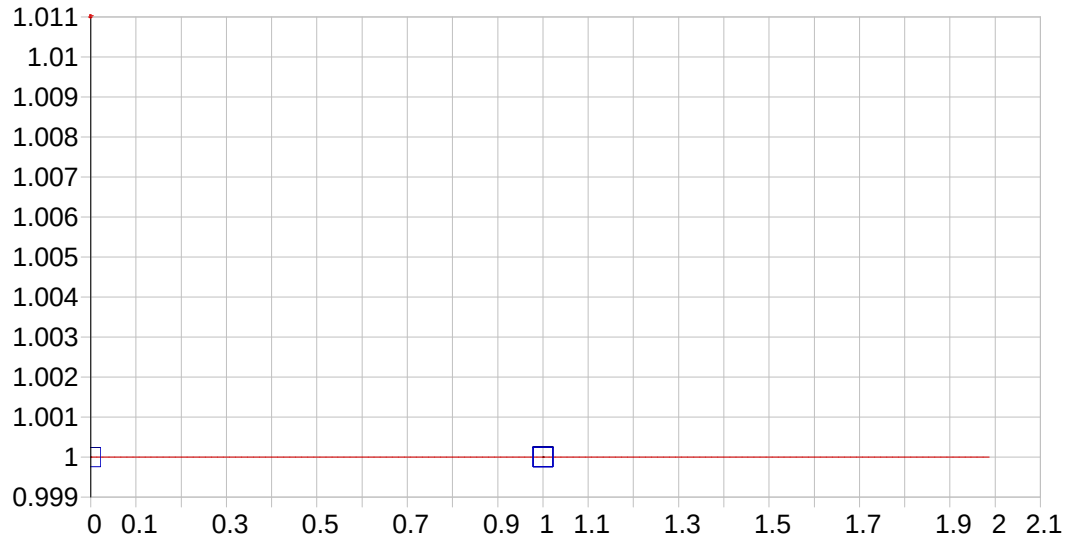


V 290.882 {116}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000844	Re-Slope:	1.000000
A1 (Gain):	0.223008	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999998	Status:	OK.
Std Error of Est:	0.000016		
Predicted MDL:	0.002807		
Predicted MQL:	0.009357		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00084	.000	1
CAL 1	.05000	.05101	.001	2.02	.01053	.000	1
CAL 2	1.0000	1.0010	.001	.105	.22240	.000	1
CAL 3	5.0000	5.0112	.011	.223	1.1167	.004	1
CAL 4	10.000	9.9868	-.013	-.132	2.2263	.015	1

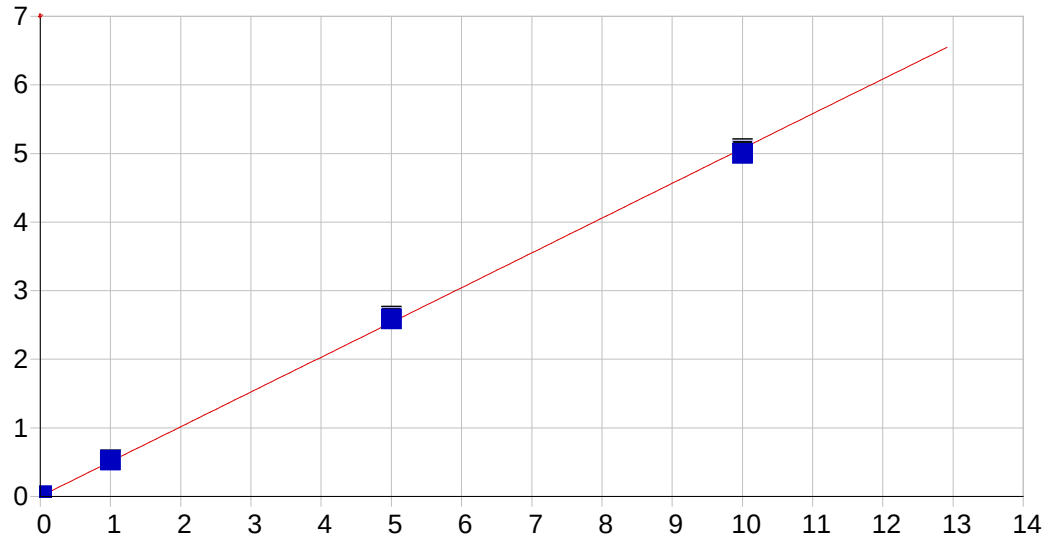


Y 371.030 { 91}*

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	1.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CAL 1	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CALBLK1	.00000	.00000	.000	.000	1.0000	.000	1
CAL 2	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 3	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 4	1.0000	.00000	-1.00	-100.	1.0000	.000	1



Zn 213.856 {458}

Date of Fit:	8/21/2012 9:07:34	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001380	Re-Slope:	1.000000

A1 (Gain):		0.507032			Y-int:	0.000000	
A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.999828		Status:		OK.	
Std Error of Est:		0.000219					
Predicted MDL:		0.000175					
Predicted MQL:		0.000585					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00138	.000	1
CAL 1	.02000	.02022	.000	1.08	.01178	.000	1
CAL 2	1.0000	1.0400	.040	4.00	.53324	.005	1
CAL 3	5.0000	5.1006	.101	2.01	2.6102	.017	1
CAL 4	10.000	9.8592	-.141	-1.41	5.0455	.021	1

Sample Name: ICV Acquired: 8/21/2012 9:07:39 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9799**	**49.62**	**5.012**	**5.108**	**5.096**	**5.071**	**5.051**	**25.03**	**5.048**
Stddev	.0012	.18	.030	.009	.018	.021	.031	.12	.024
%RSD	.1209	.3593	.5971	.1657	.3448	.4107	.6213	.4900	.4772
#1	.9801	49.46	4.979	5.100	5.087	5.054	5.016	24.89	5.022
#2	.9811	49.81	5.017	5.117	5.116	5.094	5.060	25.08	5.054
#3	.9787	49.59	5.038	5.107	5.085	5.064	5.077	25.12	5.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.157**	**4.976**	**5.000**	**50.58**	**49.75**	**4.985**	**24.96**	**5.118**	**5.067**
Stddev	.025	.013	.020	.21	.19	.016	.09	.021	.025
%RSD	.4768	.2536	.3999	.4146	.3802	.3220	.3766	.4041	.5011
#1	5.129	4.974	4.977	50.37	49.61	4.982	24.87	5.101	5.039
#2	5.163	4.990	5.010	50.79	49.96	5.002	25.06	5.141	5.074
#3	5.177	4.965	5.013	50.56	49.66	4.970	24.95	5.111	5.089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.98**	**5.131**	**5.028**	**5.101**	**49.99**	**.9975**	**5.077**	**4.974**	**5.012**
Stddev	.16	.025	.030	.031	.30	.0052	.040	.022	.030
%RSD	.3268	.4839	.6037	.5991	.5905	.5166	.7814	.4478	.5970
#1	49.92	5.103	4.993	5.067	49.68	.9926	5.032	4.966	4.979
#2	50.16	5.142	5.042	5.109	50.04	.9970	5.090	4.999	5.022
#3	49.85	5.149	5.049	5.127	50.26	1.003	5.109	4.956	5.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV Acquired: 8/21/2012 9:07:39 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.034**	**5.074**	**5.011**	**5.320**	**4.919**	**4.997**	**5.065**
Stddev	.100	.012	.019	.022	.005	.013	.026
%RSD	1.979	.2283	.3851	.4222	.1064	.2643	.5098
#1	4.919	5.077	5.004	5.296	4.913	4.992	5.036
#2	5.088	5.084	5.033	5.324	4.924	5.012	5.074
#3	5.096	5.062	4.997	5.341	4.919	4.987	5.085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4992.9**
Stddev	14.4
%RSD	.28849
#1	5009.4
#2	4982.9
#3	4986.5

Sample Name: ICB Acquired: 8/21/2012 9:11:00 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0037**	W **.0068**	**.0205**	**.0007**	**.0007**	**<.0000**	**.0205**
Stddev	.0003	.0061	.0095	.0041	.0002	.0001	.0064	.0363
%RSD	70.76	163.9	139.2	20.19	33.96	16.89	1064.	176.9
#1	.0004	.0106	.0012	.0229	.0009	.0009	-.0030	-.0013
#2	.0006	.0020	.0178	.0230	.0006	.0007	.0066	.0624
#3	.0001	-.0013	.0015	.0158	.0005	.0007	-.0055	.0005
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0054					
Low Limit			-.0054					

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.0046**	**.0048**	**.0004**	**.0029**	**.0075**	**<.0000**	**.0024**	**.0152**
Stddev	.0073	.0075	.0003	.0078	.0017	.0068	.0008	.0057
%RSD	160.3	156.9	69.16	269.9	23.04	32.16	33.03	37.63
#1	.0001	.0005	.0003	.0016	.0083	-.0288	.0015	.0178
#2	.0131	.0135	.0002	.0112	.0087	-.0176	.0030	.0192
#3	.0006	.0004	.0007	-.0042	.0055	-.0166	.0028	.0087
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010							
Low Limit	-.0010							

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	W **.0145**	**<.0000**	W **.0046**	**.0041**	**.0022**	**.0478**	**.0002**
Stddev	.0002	.0075	.0095	.0075	.0067	.0075	.0783	.0008
%RSD	26.34	51.58	698.3	163.4	163.6	336.6	163.6	347.2
#1	.0005	.0094	.0096	.0000	-.0006	-.0013	.0051	-.0005
#2	.0009	.0231	-.0069	.0133	.0117	.0108	.1382	.0001
#3	.0007	.0110	-.0067	.0006	.0011	-.0028	.0002	.0011
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0100		.0045				
Low Limit		-.0100		-.0045				

Sample Name: ICB Acquired: 8/21/2012 9:11:00 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**.0093**	**.0060**	**.0006**	**<.0000**	**.0019**	W **.0089**	**<.0000**
Stddev	.0080	.0058	.0079	.0001	.0022	.0007	.0079	.0120
%RSD	139.1	62.69	131.3	22.66	118.5	37.80	88.62	191.7
#1	.0006	.0091	.0012	.0007	.0003	.0012	.0042	.0039
#2	.0150	.0152	.0151	.0006	-.0018	.0026	.0181	-.0194
#3	.0016	.0036	.0017	.0005	-.0042	.0019	.0046	-.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
High Limit							.0079	
Low Limit							-.0079	

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	**.0022**	**.0041**
Stddev	.0034	.0076
%RSD	150.1	184.0
#1	.0045	-.0004
#2	.0038	.0130
#3	-.0016	-.0001
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	**5146.2**
Stddev	18.1
%RSD	.35263
#1	5140.3
#2	5166.6
#3	5131.7

Sample Name: LLC Acquired: 8/21/2012 9:14:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0100**	**.1989**	**.0099**	**.1077**	**.0507**	**.0051**	**.2118**	**1.101**	**.0052**
Stddev	.0009	.0024	.0011	.0010	.0003	.0001	.0013	.007	.0001
%RSD	8.743	1.226	11.05	.9462	.5753	1.165	.5938	.6189	2.157
#1	.0103	.1991	.0099	.1069	.0505	.0050	.2129	1.102	.0053
#2	.0091	.2013	.0111	.1088	.0505	.0051	.2104	1.107	.0051
#3	.0108	.1964	.0089	.1075	.0510	.0051	.2120	1.094	.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0551**	**.0097**	**.0269**	**.1038**	**4.888**	**.0527**	**1.022**	**.0156**	**.0421**
Stddev	.0003	.0004	.0009	.0010	.029	.0012	.004	.0004	.0003
%RSD	.5406	3.744	3.277	.9707	.5907	2.192	.3752	2.513	.6362
#1	.0552	.0101	.0259	.1029	4.855	.0534	1.025	.0152	.0423
#2	.0554	.0096	.0273	.1049	4.901	.0514	1.018	.0156	.0423
#3	.0548	.0094	.0275	.1038	4.908	.0533	1.024	.0160	.0418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9536**	**.0444**	**.2515**	**.0103**	**5.033**	**.0109**	**.0125**	**.3935**	**.1091**
Stddev	.0056	.0008	.0013	.0014	.034	.0014	.0025	.0075	.0017
%RSD	.5889	1.743	.5328	13.23	.6825	13.29	20.08	1.914	1.542
#1	.9481	.0452	.2508	.0111	5.049	.0109	.0145	.3986	.1104
#2	.9593	.0444	.2530	.0111	5.055	.0124	.0133	.3969	.1097
#3	.9535	.0437	.2506	.0088	4.993	.0095	.0097	.3848	.1072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: LLC Acquired: 8/21/2012 9:14:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	.1971	.0202	.0207	.4985	.0529	.0205
Stddev	.0001	.0025	.0004	.0017	.0021	.0020	.0002
%RSD	2.146	1.291	1.987	8.426	.4268	3.762	.9070
#1	.0049	.1996	.0201	.0218	.5008	.0507	.0206
#2	.0051	.1973	.0206	.0216	.4979	.0544	.0206
#3	.0051	.1945	.0198	.0187	.4967	.0538	.0202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	4998.3
Stddev	26.0
%RSD	.51998
#1	4980.8
#2	4986.0
#3	5028.2

Sample Name: ICSA Acquired: 8/21/2012 9:18:19 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	100.7	<.0000	.0006	.0002	.0001	.0039
Stddev	.0004	.3	.0015	.0006	.0002	.0000	.0022
%RSD	272.2	.2764	39.88	99.48	108.1	35.76	56.45
#1	.0000	100.4	-.0055	.0000	.0004	.0001	.0063
#2	-.0007	100.9	-.0029	.0012	.0002	.0001	.0020
#3	.0002	100.6	-.0029	.0006	.0000	.0000	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Ca1840	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.82	<.0000	.0033	.0006	<.0000	100.8	<.0000
Stddev	.10	.0000	.0004	.0002	.0019	.2	.0110
%RSD	.2067	7.383	10.92	36.64	265.9	.2185	14.47
#1	49.93	-.0005	.0032	.0004	-.0005	100.8	-.0857
#2	49.81	-.0006	.0037	.0006	.0010	101.0	-.0640
#3	49.73	-.0005	.0030	.0009	-.0027	100.6	-.0777
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2798	Mn2576	Mo2020	Na5895	Ni2216	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039	101.7	.0011	.0003	<.0000	.0035	.0037
Stddev	.0006	.3	.0001	.0002	.0069	.0003	.0007
%RSD	16.15	.2911	11.95	58.20	30.25	9.442	18.06
#1	.0032	101.4	.0009	.0001	-.0192	.0031	.0033
#2	.0045	102.0	.0012	.0004	-.0186	.0035	.0045
#3	.0041	101.5	.0012	.0004	-.0309	.0038	.0035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 8/21/2012 9:18:19 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W<.0000	.0077	.0038	<.0000	<.0000	<.0000	<.0000
Stddev	.0004	.0022	.0006	.0017	.0053	.0003	.0001
%RSD	16.61	29.15	16.57	82.29	409.7	53.95	12.32
#1	-.0022	.0090	.0041	-.0023	.0022	-.0008	-.0008
#2	-.0025	.0090	.0042	-.0037	.0013	-.0002	-.0007
#3	-.0030	.0051	.0031	-.0003	-.0074	-.0006	-.0009
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0025						
Low Limit	-.0025						

Elem	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0021	<.0000	.0073	<.0000
Stddev	.0006	.0003	.0009	.0161	.0012	.0001
%RSD	1.567	70.83	41.02	7706.	16.90	4.180
#1	-.0359	-.0001	.0029	-.0114	.0080	-.0025
#2	-.0366	-.0007	.0012	-.0075	.0080	-.0025
#3	-.0371	-.0004	.0023	.0183	.0058	-.0027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y_3710
Units	Cts/S
Avg	4976.7
Stddev	4.6
%RSD	.09322
#1	4979.6
#2	4979.1
#3	4971.3

Sample Name: ICSAB Acquired: 8/21/2012 9:21:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.004**	**100.9**	**.9839**	**1.011**	**.4978**	**.4877**	**1.017**	**49.80**	**1.013**
Stddev	.001	.3	.0036	.008	.0015	.0012	.010	.18	.004
%RSD	.1236	.2604	.3637	.7681	.2935	.2473	.9950	.3560	.4123
#1	1.005	100.6	.9836	1.003	.4962	.4864	1.006	49.63	1.010
#2	1.003	101.0	.9805	1.018	.4982	.4879	1.018	49.79	1.012
#3	1.003	101.1	.9876	1.012	.4990	.4888	1.026	49.98	1.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5027**	**.5029**	**.5039**	**100.7**	**19.84**	**1.010**	**101.2**	**.5087**	**1.023**
Stddev	.0011	.0011	.0042	.3	.10	.003	.2	.0023	.006
%RSD	.2271	.2159	.8345	.2518	.5004	.2708	.2021	.4462	.5579
#1	.5019	.5042	.5000	100.4	19.74	1.007	101.1	.5065	1.018
#2	.5022	.5021	.5032	100.8	19.93	1.010	101.2	.5110	1.022
#3	.5040	.5025	.5084	100.9	19.85	1.012	101.5	.5087	1.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.90**	**1.013**	**.4978**	**.9988**	**19.91**	**1.065**	**.9869**	**1.090**	**.9981**
Stddev	.10	.003	.0029	.0017	.08	.007	.0108	.002	.0005
%RSD	.5270	.3274	.5879	.1694	.4083	.6826	1.091	.2075	.0534
#1	19.78	1.010	.4954	.9969	19.85	1.058	.9745	1.090	.9979
#2	19.97	1.012	.4969	.9994	19.89	1.064	.9929	1.092	.9988
#3	19.95	1.017	.5010	1.000	20.00	1.073	.9933	1.088	.9978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICSAB Acquired: 8/21/2012 9:21:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.016	.9810	.5119	1.015	.9684	.5111	1.011
Stddev	.002	.0041	.0024	.008	.0207	.0013	.004
%RSD	.1782	.4154	.4595	.7882	2.142	.2637	.4007
#1	1.014	.9763	.5094	1.006	.9904	.5105	1.008
#2	1.016	.9832	.5121	1.016	.9656	.5127	1.010
#3	1.018	.9836	.5141	1.022	.9492	.5102	1.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	4886.5
Stddev	8.7
%RSD	.17749
#1	4896.2
#2	4883.6
#3	4879.6

Sample Name: LDR Acquired: 8/21/2012 9:25:18 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**99.51**	**9.899**	**9.985**	**9.929**	**9.908**	**9.924**	**49.08**	**9.912**
Stddev	.007	.07	.044	.017	.131	.150	.047	.25	.038
%RSD	.3639	.0704	.4407	.1699	1.318	1.514	.4774	.5154	.3805
#1	2.013	99.49	9.859	9.979	10.05	10.04	9.887	48.80	9.880
#2	2.026	99.46	9.946	9.972	9.788	9.745	9.977	49.30	9.953
#3	2.014	99.59	9.893	10.00	9.950	9.939	9.907	49.13	9.902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.846**	**9.879**	**9.884**	**98.77**	**99.87**	**10.04**	**49.32**	**9.889**	**9.939**
Stddev	.041	.038	.049	.30	.17	.01	.16	.003	.042
%RSD	.4198	.3873	.4924	.3010	.1668	.1301	.3142	.0293	.4251
#1	9.812	9.838	9.855	98.46	99.75	10.05	49.16	9.889	9.902
#2	9.892	9.913	9.940	98.80	99.80	10.03	49.47	9.886	9.985
#3	9.835	9.886	9.857	99.05	100.1	10.05	49.33	9.892	9.929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**99.84**	**9.808**	**9.964**	**9.809**	**99.40**	**2.002**	**9.888**	**10.03**	**9.824**
Stddev	.23	.045	.057	.046	.40	.013	.040	.02	.040
%RSD	.2322	.4629	.5674	.4668	.4011	.6342	.4029	.2285	.4097
#1	99.80	9.762	9.909	9.761	99.01	1.992	9.845	10.02	9.784
#2	99.63	9.853	10.02	9.853	99.81	2.016	9.923	10.01	9.865
#3	100.1	9.809	9.962	9.812	99.38	1.998	9.896	10.05	9.823
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: LDR Acquired: 8/21/2012 9:25:18 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.879**	**9.895**	**9.934**	**9.734**	**10.01**	**9.957**	**9.895**
Stddev	.067	.041	.013	.039	.06	.012	.043
%RSD	.6796	.4165	.1280	.4018	.5637	.1226	.4330
#1	9.855	9.861	9.921	9.696	9.991	9.959	9.856
#2	9.955	9.941	9.935	9.774	10.08	9.944	9.941
#3	9.827	9.883	9.946	9.732	9.970	9.968	9.888
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4756.8**
Stddev	22.3
%RSD	.46782
#1	4780.5
#2	4736.3
#3	4753.5

Sample Name: CCV Acquired: 8/21/2012 9:28:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9939**	**49.67**	**5.100**	**5.018**	**5.016**	**5.045**	**5.143**	**25.64**	**5.110**
Stddev	.0011	.13	.013	.020	.013	.018	.019	.02	.010
%RSD	.1096	.2670	.2520	.4038	.2648	.3626	.3653	.0777	.1886
#1	.9927	49.62	5.091	5.008	5.007	5.038	5.145	25.64	5.109
#2	.9948	49.57	5.114	5.004	5.009	5.031	5.160	25.66	5.120
#3	.9941	49.82	5.094	5.041	5.031	5.066	5.123	25.62	5.101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.141**	**5.051**	**5.121**	**50.21**	**49.94**	**4.966**	**24.91**	**4.999**	**5.102**
Stddev	.011	.010	.016	.16	.17	.014	.05	.017	.009
%RSD	.2183	.2036	.3048	.3263	.3404	.2749	.1958	.3406	.1863
#1	5.137	5.040	5.114	50.15	49.86	4.955	24.86	4.989	5.098
#2	5.153	5.054	5.139	50.09	49.82	4.961	24.92	4.989	5.112
#3	5.132	5.059	5.111	50.40	50.14	4.981	24.96	5.018	5.095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.13**	**5.150**	**5.118**	**5.166**	**50.79**	**1.017**	**5.106**	**4.976**	**5.135**
Stddev	.19	.007	.008	.011	.17	.004	.013	.017	.011
%RSD	.3862	.1300	.1612	.2074	.3377	.4172	.2628	.3479	.2194
#1	49.96	5.151	5.117	5.166	50.69	1.015	5.105	4.968	5.128
#2	50.08	5.156	5.126	5.177	50.98	1.021	5.120	4.965	5.148
#3	50.34	5.143	5.110	5.156	50.68	1.014	5.093	4.996	5.130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 9:28:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.991**	**5.060**	**4.936**	**5.212**	**5.082**	**5.009**	**5.129**
Stddev	.028	.012	.016	.005	.015	.017	.013
%RSD	.5621	.2287	.3175	.1036	.3029	.3318	.2574
#1	4.959	5.055	4.929	5.211	5.079	4.995	5.128
#2	5.011	5.074	4.924	5.217	5.069	5.004	5.142
#3	5.003	5.052	4.954	5.207	5.099	5.027	5.116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4811.6**
Stddev	2.7
%RSD	.05623
#1	4814.1
#2	4812.0
#3	4808.8

Sample Name: CCB Acquired: 8/21/2012 9:32:17 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	<.0000	.0015	.0176	.0012	.0008	<.0000	.0024
Stddev	.0006	.0033	.0007	.0066	.0002	.0002	.0008	.0048
%RSD	191.3	93.72	46.13	37.64	18.08	20.81	48.73	200.5
#1	.0010	-.0029	.0007	.0252	.0015	.0009	-.0023	-.0005
#2	-.0001	-.0071	.0018	.0129	.0012	.0007	-.0018	.0080
#3	.0000	-.0006	.0019	.0147	.0010	.0006	-.0007	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0009	.0005	.0028	.0070	<.0000	.0044	.0056
Stddev	.0007	.0008	.0003	.0017	.0009	.0109	.0009	.0109
%RSD	89.23	85.74	62.18	62.68	12.90	20.45	21.64	194.7
#1	.0002	.0003	.0009	.0015	.0081	-.0647	.0054	.0159
#2	.0016	.0018	.0006	.0048	.0066	-.0515	.0040	.0066
#3	.0006	.0006	.0002	.0021	.0064	-.0431	.0037	-.0058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	W .0103	<.0000	.0008	.0010	<.0000	.0119	<.0000
Stddev	.0001	.0012	.0063	.0009	.0005	.0021	.0086	.0009
%RSD	18.47	11.91	43.83	119.0	54.17	361.9	71.86	54.60
#1	.0008	.0090	-.0072	.0004	.0015	-.0018	.0069	-.0016
#2	.0006	.0114	-.0171	.0019	.0005	.0018	.0218	-.0026
#3	.0008	.0105	-.0191	.0001	.0010	-.0018	.0070	-.0008
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0100						
Low Limit		-.0100						

Sample Name: CCB Acquired: 8/21/2012 9:32:17 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0026	.0076	.0021	.0006	<.0000	.0016	.0047	<.0000
Stddev	.0017	.0042	.0012	.0001	.0025	.0016	.0011	.0018
%RSD	65.50	56.03	56.28	19.48	150.0	95.84	23.61	20.69
#1	.0032	.0027	.0013	.0006	-.0046	.0032	.0035	-.0106
#2	.0039	.0105	.0034	.0007	-.0002	.0017	.0056	-.0087
#3	.0007	.0095	.0015	.0005	-.0002	.0000	.0052	-.0070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0022	.0009
Stddev	.0019	.0009
%RSD	88.14	99.19
#1	.0029	.0002
#2	.0037	.0019
#3	.0000	.0006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	4852.1
Stddev	31.5
%RSD	.65012
#1	4833.8
#2	4834.1
#3	4888.6

Sample Name: 160-405-E-9-B Acquired: 8/21/2012 9:41:22 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0003	.6883	.0558	.0000	<.0000	7.731	<.0000
Stddev	.0005	.0039	.0012	.0182	.0015	.0001	.0028	.646	.0000
%RSD	188.5	215.1	454.9	2.647	2.691	466.3	46.72	8.355	629.3
#1	-.0008	-.0040	.0013	.6702	.0542	.0000	-.0033	7.087	.0000
#2	-.0002	.0027	.0004	.6881	.0558	.0000	-.0088	7.728	.0000
#3	.0002	-.0041	-.0010	.7066	.0572	.0000	-.0056	8.379	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0007	.0015	1.125	15.86	.0040	8.087	.0039	.0009
Stddev	.0003	.0001	.0016	.031	.39	.0001	.194	.0003	.0001
%RSD	34.57	12.19	110.4	2.716	2.443	3.676	2.400	7.185	15.87
#1	.0007	.0008	.0032	1.094	15.50	.0041	7.896	.0037	.0007
#2	.0006	.0008	.0010	1.126	15.82	.0039	8.080	.0042	.0010
#3	.0011	.0006	.0002	1.155	16.27	.0041	8.284	.0038	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	52.56	.0099	.0377	<.0000	.4654	.0017	.0006	.9607	.0016
Stddev	1.29	.0004	.0040	.0005	.0361	.0027	.0012	.0277	.0002
%RSD	2.461	4.188	10.56	42.32	7.752	161.3	190.7	2.881	10.31
#1	51.25	.0095	.0336	-.0006	.4292	.0001	-.0002	.9311	.0015
#2	52.59	.0098	.0380	-.0015	.4656	.0048	.0020	.9652	.0016
#3	53.83	.0103	.0416	-.0013	.5014	.0001	.0001	.9859	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-405-E-9-B Acquired: 8/21/2012 9:41:22 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0384	<.0000	.0002	<.0000	<.0000	.0014	.0022
Stddev	.0010	.0061	.0005	.0005	.0064	.0039	.0001
%RSD	2.611	323.1	289.5	47.54	34.33	277.0	5.649
#1	.0374	.0051	.0007	-.0007	-.0241	.0004	.0023
#2	.0384	-.0044	.0002	-.0015	-.0116	.0058	.0022
#3	.0394	-.0064	-.0004	-.0007	-.0201	-.0019	.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4934.0
Stddev	28.6
%RSD	.58049
#1	4941.5
#2	4902.3
#3	4958.1

Sample Name: 160-430-A-14-A Acquired: 8/21/2012 9:44:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.4544**	**.0139**	**.0037**	**.0962**	**.0000**	**<.0000**	**3.758**	**.0162**
Stddev	.0006	.0059	.0005	.0009	.0012	.0000	.0038	.204	.0010
%RSD	147.2	1.289	3.362	23.97	1.266	185.1	62.90	5.439	5.977
#1	-.0003	.4485	.0134	.0035	.0951	.0000	-.0098	3.561	.0153
#2	.0006	.4547	.0140	.0029	.0960	.0001	-.0059	3.742	.0160
#3	.0008	.4602	.0143	.0047	.0975	.0000	-.0023	3.969	.0172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065**	**.0032**	**.1473**	**1.543**	**.3991**	**.0018**	**1.352**	**.0162**	**.0014**
Stddev	.0007	.0003	.0078	.027	.0150	.0012	.016	.0003	.0002
%RSD	11.35	10.45	5.297	1.729	3.758	63.85	1.159	1.663	12.89
#1	.0059	.0031	.1409	1.518	.3938	.0005	1.334	.0163	.0014
#2	.0064	.0036	.1450	1.540	.3874	.0026	1.358	.0159	.0015
#3	.0073	.0029	.1560	1.571	.4160	.0024	1.363	.0164	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.040**	**.0178**	**.2506**	**7.633**	**1.716**	**.0766**	**.0073**	**.9346**	**.0461**
Stddev	.023	.0012	.0123	.428	.093	.0049	.0011	.0127	.0029
%RSD	2.211	6.555	4.924	5.611	5.397	6.437	15.44	1.364	6.381
#1	1.019	.0164	.2392	7.222	1.625	.0728	.0062	.9243	.0435
#2	1.036	.0183	.2489	7.601	1.713	.0748	.0085	.9306	.0455
#3	1.064	.0186	.2637	8.077	1.810	.0822	.0073	.9489	.0493
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-430-A-14-A Acquired: 8/21/2012 9:44:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0157	<.0000	.0076	<.0000	<.0000	.0020	.6427
Stddev	.0003	.0013	.0005	.0015	.0078	.0013	.0348
%RSD	1.908	23.00	6.471	1462.	50.72	65.26	5.411
#1	.0154	-.0041	.0075	.0016	-.0130	.0034	.6088
#2	.0156	-.0066	.0081	-.0008	-.0090	.0016	.6410
#3	.0160	-.0058	.0071	-.0011	-.0240	.0009	.6783
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5164.2
Stddev	45.0
%RSD	.87060
#1	5112.4
#2	5193.4
#3	5186.8

Sample Name: CCV Acquired: 8/21/2012 9:48:38 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9839**	**49.85**	**5.008**	**4.965**	**5.020**	**5.042**	**5.041**	**25.15**	**5.027**
Stddev	.0042	.22	.045	.015	.014	.011	.043	.23	.040
%RSD	.4254	.4328	.9018	.3081	.2829	.2194	.8635	.8951	.7914
#1	.9791	49.60	4.957	4.948	5.004	5.030	4.993	24.91	4.983
#2	.9863	49.99	5.043	4.969	5.027	5.050	5.078	25.35	5.060
#3	.9864	49.96	5.025	4.977	5.029	5.046	5.052	25.20	5.039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.032**	**5.031**	**5.041**	**50.02**	**49.67**	**4.953**	**25.13**	**5.008**	**4.989**
Stddev	.036	.037	.035	.22	.20	.015	.17	.022	.037
%RSD	.7237	.7287	.6906	.4424	.4028	.2934	.6842	.4498	.7382
#1	4.992	4.992	5.001	49.77	49.45	4.938	24.97	4.983	4.947
#2	5.062	5.064	5.060	50.17	49.83	4.966	25.31	5.026	5.017
#3	5.044	5.036	5.062	50.13	49.74	4.956	25.12	5.016	5.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.69**	**5.059**	**4.993**	**5.068**	**49.64**	**.9932**	**4.989**	**4.948**	**5.047**
Stddev	.19	.039	.043	.038	.36	.0114	.038	.018	.037
%RSD	.3869	.7776	.8514	.7550	.7176	1.150	.7602	.3665	.7381
#1	49.47	5.016	4.945	5.025	49.23	.9806	4.946	4.928	5.005
#2	49.81	5.093	5.027	5.098	49.90	1.003	5.019	4.962	5.076
#3	49.80	5.068	5.007	5.079	49.79	.9961	5.000	4.954	5.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 9:48:38 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.976**	**5.037**	**4.966**	**5.096**	**5.027**	**4.982**	**5.024**
Stddev	.015	.025	.015	.043	.030	.020	.035
%RSD	.2967	.4952	.2911	.8445	.5910	.3967	.7067
#1	4.991	5.009	4.950	5.047	5.002	4.959	4.984
#2	4.961	5.057	4.976	5.122	5.020	4.993	5.053
#3	4.976	5.045	4.974	5.121	5.060	4.994	5.035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4877.7**
Stddev	40.8
%RSD	.83598
#1	4919.6
#2	4838.1
#3	4875.4

Sample Name: CCB Acquired: 8/21/2012 9:51:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0010	.0131	.0008	.0007	<.0000	<.0000	.0004
Stddev	.0002	.0077	.0005	.0007	.0002	.0002	.0029	.0012	.0001
%RSD	122.6	223.1	44.57	5.493	27.44	30.89	93.34	178.8	14.35
#1	-.0004	-.0096	.0010	.0127	.0010	.0010	-.0046	-.0008	.0004
#2	-.0002	.0052	.0015	.0139	.0009	.0006	.0002	-.0018	.0004
#3	.0000	-.0061	.0006	.0127	.0006	.0006	-.0049	.0006	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	<.0000	.0012	.0078	<.0000	.0020	.0061	.0007	.0090
Stddev	.0005	.0005	.0029	.0029	.0093	.0010	.0163	.0004	.0004
%RSD	97.19	217.2	247.4	37.61	17.85	48.77	269.6	56.52	4.103
#1	.0001	.0001	.0040	.0111	-.0533	.0029	.0173	.0011	.0087
#2	.0004	.0000	-.0017	.0057	-.0424	.0010	-.0127	.0006	.0089
#3	.0010	-.0007	.0012	.0066	-.0609	.0022	.0135	.0003	.0094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	<.0000	.0023	<.0000	.0015	.0047	.0017
Stddev	.0044	.0004	.0011	.0003	.0012	.0028	.0027	.0066	.0002
%RSD	26.07	371.9	277.8	19.64	52.77	458.4	180.3	140.7	8.959
#1	-.0144	-.0006	.0000	-.0021	.0026	-.0038	.0006	.0056	.0015
#2	-.0142	.0002	-.0016	-.0017	.0010	.0009	.0045	.0108	.0018
#3	-.0219	.0000	.0004	-.0014	.0034	.0010	-.0006	-.0023	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 9:51:57 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0014	.0044	<.0000	<.0000	<.0000
Stddev	.0002	.0022	.0004	.0005	.0176	.0018	.0001
%RSD	34.88	51.06	30.09	11.76	531.6	659.0	320.2
#1	.0008	-.0062	.0018	.0041	-.0230	-.0019	-.0001
#2	.0005	-.0019	.0013	.0042	.0022	.0017	.0000
#3	.0004	-.0048	.0010	.0050	.0108	-.0006	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4924.7
Stddev	41.7
%RSD	.84602
#1	4913.7
#2	4889.6
#3	4970.7

Sample Name: MB 160-8951/1-A Acquired: 8/21/2012 10:32:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	<.0000	.0002	<.0000	<.0000	.0209
Stddev	.0007	.0010	.0015	.0030	.0001	.0000	.0038	.0001
%RSD	189.5	20.80	131.3	138.2	67.20	82.02	73.55	.4340
#1	-.0011	-.0061	-.0026	-.0016	.0002	.0000	-.0045	.0209
#2	-.0005	-.0045	.0003	-.0054	.0001	-.0001	-.0093	.0210
#3	.0004	-.0042	-.0010	.0005	.0004	-.0001	-.0018	.0208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0002	<.0000	.0021	.0006	<.0000	.0012	.0140
Stddev	.0001	.0002	.0005	.0002	.0020	.0168	.0004	.0097
%RSD	181.3	129.9	166.9	10.51	350.9	22.11	30.34	69.49
#1	.0001	.0005	-.0005	.0023	.0015	-.0594	.0008	.0166
#2	-.0002	.0001	.0003	.0021	.0019	-.0753	.0016	.0221
#3	-.0001	.0000	-.0007	.0018	-.0017	-.0929	.0013	.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0003	<.0000	.0001	.0004	<.0000	.0029	.0001
Stddev	.0002	.0001	.0023	.0002	.0009	.0015	.0036	.0011
%RSD	78.89	47.14	9.091	211.3	245.3	55.58	123.7	1322.
#1	.0004	.0002	-.0280	.0001	.0002	-.0013	-.0003	.0007
#2	.0001	.0004	-.0247	.0003	.0013	-.0023	.0022	.0008
#3	.0001	.0003	-.0235	-.0001	-.0004	-.0042	.0067	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: MB 160-8951/1-A Acquired: 8/21/2012 10:32:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0389	<.0000	<.0000	<.0000	<.0000	<.0000	<.0000
Stddev	.0048	.0019	.0011	.0000	.0022	.0011	.0021	.0126
%RSD	186.2	4.985	1611.	32.32	34.43	240.5	288.4	255.6
#1	-.0059	.0375	-.0008	-.0002	-.0039	-.0018	.0016	-.0050
#2	-.0048	.0411	-.0005	-.0001	-.0077	.0002	-.0026	-.0175
#3	.0029	.0381	.0011	-.0001	-.0076	.0002	-.0011	.0077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0011	W .0107
Stddev	.0007	.0001
%RSD	68.25	.5493
#1	.0003	.0107
#2	.0017	.0108
#3	.0013	.0107
Check ?	Chk Pass	Chk Warn
High Limit		.0100
Low Limit		-.0100

Int. Std.	Y_3710
Units	Cts/S
Avg	4813.9
Stddev	8.6
%RSD	.17897
#1	4823.4
#2	4811.5
#3	4806.7

Sample Name: LCS 160-8951/2-A Acquired: 8/21/2012 10:36:20 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1031**	**10.18**	**1.011**	**.9787**	**1.002**	**1.003**	**1.037**	**10.54**	**1.043**
Stddev	.0008	.06	.007	.0100	.005	.005	.008	.06	.007
%RSD	.7813	.5723	.6688	1.022	.5284	.4588	.7696	.5467	.6295
#1	.1027	10.12	1.003	.9694	.9960	.9982	1.033	10.50	1.039
#2	.1026	10.17	1.013	.9773	1.003	1.005	1.032	10.51	1.040
#3	.1041	10.24	1.016	.9893	1.006	1.007	1.046	10.61	1.051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.041**	**1.056**	**1.067**	**10.21**	**9.772**	**.9770**	**10.34**	**1.040**	**1.053**
Stddev	.007	.004	.010	.06	.049	.0052	.08	.004	.006
%RSD	.6332	.3685	.9364	.5396	.5017	.5347	.8032	.4246	.5696
#1	1.037	1.051	1.060	10.15	9.717	.9710	10.25	1.035	1.049
#2	1.037	1.058	1.062	10.22	9.787	.9803	10.34	1.041	1.050
#3	1.048	1.058	1.078	10.26	9.812	.9798	10.41	1.043	1.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.670**	**1.102**	**.9804**	**1.072**	**9.723**	**.5293**	**.9995**	F **.0373**	**1.065**
Stddev	.040	.008	.0075	.007	.048	.0020	.0053	.0061	.005
%RSD	.4108	.7439	.7669	.6889	.4899	.3745	.5275	16.44	.5013
#1	9.625	1.097	.9739	1.067	9.693	.5288	.9968	.0334	1.063
#2	9.682	1.098	.9786	1.069	9.698	.5276	.9962	.0342	1.061
#3	9.701	1.112	.9886	1.081	9.778	.5314	1.006	.0444	1.071
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-8951/2-A Acquired: 8/21/2012 10:36:20 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.026	1.047	1.007	.2194	.9610	.9757	1.038
Stddev	.005	.005	.004	.0011	.0096	.0069	.007
%RSD	.4690	.5211	.4279	.5113	.9978	.7100	.6885
#1	1.020	1.052	1.003	.2182	.9703	.9689	1.034
#2	1.027	1.041	1.007	.2203	.9614	.9754	1.034
#3	1.030	1.048	1.012	.2198	.9512	.9827	1.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4966.9
Stddev	26.4
%RSD	.53134
#1	4985.2
#2	4978.8
#3	4936.6

Sample Name: 160-415-D-1-B Acquired: 8/21/2012 10:39:39 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0090**	**.0010**	**.0109**	**.0237**	**.0002**	**<.0000**	**21.63**	**<.0000**
Stddev	.0007	.0056	.0020	.0008	.0001	.0000	.0019	1.35	.0002
%RSD	432.0	62.02	199.0	7.095	.3480	21.95	39.00	6.225	31780.
#1	-.0007	.0056	.0031	.0117	.0238	.0002	-.0033	20.22	-.0002
#2	.0007	.0059	.0007	.0103	.0237	.0001	-.0045	21.78	.0002
#3	.0005	.0154	-.0008	.0106	.0238	.0002	-.0070	22.90	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**<.0000**	**<.0000**	**.0240**	**.2296**	**.0053**	**10.38**	**.0005**	**.0024**
Stddev	.0002	.0008	.0025	.0007	.0216	.0005	.05	.0000	.0004
%RSD	64.95	163.6	203.0	2.847	9.406	10.06	.4862	5.150	14.85
#1	.0001	-.0008	.0001	.0245	.2057	.0047	10.33	.0005	.0021
#2	.0003	.0004	-.0041	.0244	.2354	.0058	10.38	.0005	.0022
#3	.0005	-.0010	.0003	.0232	.2478	.0053	10.43	.0005	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.331**	**.0003**	**<.0000**	**<.0000**	**3.648**	**.0029**	**<.0000**	**1.544**	**<.0000**
Stddev	.024	.0005	.0010	.0006	.273	.0024	.0010	.012	.0005
%RSD	1.028	200.3	267.6	142.5	7.469	81.29	201.2	.7549	621.5
#1	2.310	.0009	-.0009	.0002	3.352	.0053	-.0001	1.530	-.0006
#2	2.326	.0000	-.0009	-.0005	3.702	.0005	-.0016	1.549	.0002
#3	2.357	-.0001	.0008	-.0010	3.889	.0030	.0002	1.552	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-1-B Acquired: 8/21/2012 10:39:39 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0807	<.0000	.0002	<.0000	<.0000	<.0000	.0045
Stddev	.0007	.0014	.0006	.0008	.0080	.0009	.0003
%RSD	.8472	12.09	304.7	67.66	22.27	46.14	6.766
#1	.0802	-.0110	.0009	-.0003	-.0446	-.0009	.0042
#2	.0805	-.0132	-.0001	-.0018	-.0292	-.0021	.0047
#3	.0815	-.0106	-.0002	-.0013	-.0333	-.0026	.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4864.4
Stddev	3.0
%RSD	.06191
#1	4867.8
#2	4862.0
#3	4863.4

Sample Name: 160-415-D-2-D Acquired: 8/21/2012 10:43:16 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.1755	.0042	.0805	.2536	<.0000	<.0000	F 58.77	<.0000
Stddev	.0006	.0063	.0002	.0019	.0011	.0000	.0016	1.57	.0002
%RSD	157.2	3.563	5.576	2.345	.4419	275.0	29.12	2.670	120.2
#1	-.0006	.1683	.0040	.0795	.2526	-.0001	-.0040	57.20	.0000
#2	.0003	.1792	.0042	.0794	.2533	.0000	-.0071	58.77	-.0001
#3	-.0009	.1790	.0045	.0827	.2548	.0000	-.0052	60.33	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	<.0000	<.0000	6.682	1.574	.0105	15.99	.1213	.0004
Stddev	.0003	.0001	.0014	.029	.029	.0006	.08	.0007	.0002
%RSD	31.26	121.7	70.86	.4373	1.861	5.999	.4746	.5439	44.32
#1	.0006	-.0002	-.0010	6.656	1.551	.0100	15.93	.1209	.0005
#2	.0010	-.0001	-.0013	6.677	1.566	.0102	15.96	.1210	.0004
#3	.0011	.0000	-.0036	6.714	1.607	.0112	16.08	.1221	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.25	.0045	.1973	.0010	.4163	.0009	<.0000	5.097	<.0000
Stddev	.07	.0003	.0042	.0007	.0113	.0010	.0015	.015	.0002
%RSD	.3776	6.000	2.135	65.70	2.716	108.0	60.78	.2867	18.02
#1	19.18	.0047	.1933	.0017	.4062	-.0002	-.0016	5.086	-.0014
#2	19.24	.0046	.1967	.0005	.4143	.0011	-.0015	5.091	-.0010
#3	19.33	.0042	.2017	.0008	.4285	.0018	-.0041	5.113	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-D Acquired: 8/21/2012 10:43:16 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2772	<.0000	.0043	.0004	<.0000	.0014	.0075
Stddev	.0012	.0043	.0012	.0007	.0076	.0012	.0000
%RSD	.4378	34.53	27.47	209.1	13.21	90.20	.6404
#1	.2764	-.0079	.0056	-.0005	-.0615	.0024	.0074
#2	.2766	-.0126	.0042	.0009	-.0488	.0016	.0075
#3	.2786	-.0164	.0032	.0006	-.0625	.0000	.0075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5098.1
Stddev	16.2
%RSD	.31786
#1	5114.9
#2	5082.6
#3	5096.8

Sample Name: 160-415-D-2-D SD Acquired: 8/21/2012 10:46:53 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0236	.0013	.0155	.0509	<.0000	<.0000	11.13	<.0000
Stddev	.0006	.0116	.0016	.0017	.0002	.0001	.0038	.04	.0000
%RSD	140.1	49.18	125.2	10.92	.4049	222.2	94.13	.3929	26.91
#1	-.0006	.0218	.0029	.0167	.0510	.0000	-.0006	11.08	-.0002
#2	-.0009	.0360	-.0003	.0161	.0507	-.0001	-.0035	11.14	-.0002
#3	.0002	.0130	.0012	.0135	.0511	-.0001	-.0081	11.17	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	<.0000	.0015	1.343	.2593	.0034	3.211	.0246	.0001
Stddev	.0002	.0002	.0008	.005	.0068	.0004	.018	.0004	.0001
%RSD	51.08	29.64	52.37	.3929	2.613	11.96	.5592	1.682	126.0
#1	.0005	-.0006	.0013	1.339	.2550	.0034	3.199	.0241	.0000
#2	.0001	-.0007	.0023	1.342	.2671	.0030	3.202	.0250	.0002
#3	.0005	-.0010	.0008	1.349	.2557	.0038	3.232	.0246	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.788	.0005	.0347	<.0000	.0854	<.0000	<.0000	1.002	<.0000
Stddev	.017	.0002	.0015	.0005	.0038	.0016	.0025	.010	.0005
%RSD	.4466	45.23	4.376	26.65	4.415	1256.	134.3	1.038	116.8
#1	3.781	.0004	.0329	-.0014	.0871	-.0015	-.0038	1.002	-.0009
#2	3.775	.0008	.0356	-.0024	.0880	.0017	-.0028	.9922	.0000
#3	3.807	.0004	.0356	-.0019	.0811	-.0005	.0010	1.013	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-D SD Acquired: 8/21/2012 10:46:53 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0560	<.0000	.0009	.0006	<.0000	.0016	.0047
Stddev	.0002	.0026	.0006	.0014	.0032	.0019	.0001
%RSD	.3638	26.00	72.45	220.4	13.77	119.0	2.144
#1	.0559	-.0094	.0011	.0014	-.0224	.0001	.0048
#2	.0558	-.0128	.0002	.0015	-.0269	.0010	.0047
#3	.0562	-.0077	.0014	-.0010	-.0206	.0038	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5238.7
Stddev	33.1
%RSD	.63150
#1	5275.9
#2	5227.3
#3	5212.8

Sample Name: 160-415-D-2-E MS Acquired: 8/21/2012 10:50:32 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0194**	**2.057**	**.2308**	**.2363**	**.3938**	**.1714**	**.2256**	F **64.60**	**.2338**
Stddev	.0011	.079	.0166	.0089	.0145	.0064	.0164	4.31	.0167
%RSD	5.442	3.813	7.193	3.776	3.688	3.723	7.266	6.680	7.158
#1	.0182	1.976	.2154	.2282	.3796	.1651	.2098	60.26	.2171
#2	.0195	2.063	.2285	.2349	.3932	.1713	.2245	64.67	.2338
#3	.0203	2.133	.2484	.2459	.4086	.1778	.2425	68.89	.2505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2191**	**.1934**	**.2362**	**7.525**	**3.038**	**.1717**	**15.75**	**.2851**	**.2287**
Stddev	.0147	.0067	.0134	.269	.124	.0068	.57	.0110	.0164
%RSD	6.689	3.451	5.674	3.570	4.072	3.985	3.601	3.867	7.176
#1	.2044	.1866	.2221	7.254	2.927	.1655	15.18	.2741	.2121
#2	.2193	.1939	.2376	7.530	3.017	.1706	15.75	.2850	.2289
#3	.2337	.1999	.2488	7.791	3.171	.1791	16.31	.2961	.2449
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.39**	**.2426**	**.4313**	**.2316**	**2.604**	**.1199**	**.2247**	**4.653**	**.2311**
Stddev	.68	.0165	.0304	.0153	.186	.0079	.0171	.162	.0163
%RSD	3.687	6.785	7.049	6.586	7.156	6.593	7.610	3.475	7.039
#1	17.70	.2260	.4007	.2163	2.416	.1124	.2079	4.492	.2149
#2	18.40	.2430	.4315	.2318	2.608	.1190	.2241	4.651	.2310
#3	19.06	.2589	.4615	.2468	2.788	.1282	.2421	4.816	.2474
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-E MS Acquired: 8/21/2012 10:50:32 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4193	.1838	.1775	.0472	.1218	.1640	.2294
Stddev	.0155	.0045	.0067	.0026	.0159	.0065	.0165
%RSD	3.692	2.427	3.752	5.553	13.07	3.993	7.184
#1	.4038	.1788	.1707	.0446	.1039	.1565	.2130
#2	.4194	.1850	.1777	.0472	.1270	.1670	.2292
#3	.4347	.1874	.1840	.0498	.1345	.1685	.2460
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5250.7
Stddev	25.0
%RSD	.47566
#1	5234.6
#2	5238.1
#3	5279.5

Sample Name: 160-415-D-2-F MSD Acquired: 8/21/2012 10:53:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0179**	**1.907**	**.2110**	**.2330**	**.3866**	**.1689**	**.2031**	F **58.51**	**.2108**
Stddev	.0005	.044	.0145	.0040	.0083	.0040	.0126	4.01	.0144
%RSD	3.069	2.317	6.852	1.732	2.151	2.372	6.194	6.848	6.808
#1	.0173	1.859	.1972	.2283	.3780	.1649	.1922	54.64	.1965
#2	.0184	1.914	.2098	.2352	.3870	.1688	.2002	58.26	.2106
#3	.0181	1.947	.2261	.2354	.3946	.1729	.2168	62.64	.2252
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1977**	**.1816**	**.2152**	**7.658**	**2.998**	**.1678**	**15.58**	**.2789**	**.2078**
Stddev	.0142	.0050	.0137	.169	.069	.0022	.29	.0052	.0145
%RSD	7.157	2.734	6.363	2.201	2.312	1.293	1.887	1.861	6.977
#1	.1838	.1765	.2015	7.491	2.921	.1660	15.29	.2735	.1936
#2	.1973	.1820	.2151	7.653	3.018	.1672	15.56	.2794	.2073
#3	.2121	.1864	.2289	7.828	3.055	.1702	15.87	.2839	.2226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.23**	**.2196**	**.3867**	**.2098**	**2.454**	**.1084**	**.2006**	**4.348**	**.2103**
Stddev	.37	.0149	.0261	.0129	.175	.0076	.0153	.106	.0144
%RSD	2.031	6.782	6.750	6.151	7.126	6.963	7.603	2.433	6.826
#1	17.85	.2050	.3612	.1981	2.283	.1008	.1867	4.244	.1962
#2	18.25	.2190	.3854	.2075	2.447	.1086	.1983	4.344	.2099
#3	18.59	.2348	.4134	.2236	2.632	.1159	.2169	4.455	.2249
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-F MSD Acquired: 8/21/2012 10:53:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4129	.1658	.1733	.0425	.1077	.1606	.2073
Stddev	.0088	.0117	.0048	.0021	.0019	.0018	.0141
%RSD	2.130	7.039	2.796	4.885	1.728	1.134	6.796
#1	.4039	.1556	.1679	.0415	.1092	.1590	.1934
#2	.4135	.1634	.1745	.0411	.1056	.1601	.2070
#3	.4214	.1786	.1774	.0449	.1084	.1626	.2215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5246.8
Stddev	14.9
%RSD	.28332
#1	5253.5
#2	5257.1
#3	5229.7

Sample Name: 160-415-D-3-B Acquired: 8/21/2012 10:57:27 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0016**	**<.0000**	**.0483**	**.0103**	**<.0000**	**<.0000**	**8.186**	**<.0000**
Stddev	.0003	.0025	.0014	.0024	.0001	.0000	.0041	.561	.0001
%RSD	110.5	154.4	261.6	5.054	.8246	38.17	99.52	6.858	53.17
#1	.0001	.0028	.0010	.0457	.0103	.0000	.0006	7.654	-.0002
#2	.0001	.0033	-.0018	.0505	.0102	-.0001	-.0067	8.131	-.0002
#3	.0006	-.0013	-.0009	.0486	.0104	.0000	-.0061	8.773	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**<.0000**	**.0021**	**.0071**	**.4646**	**.0086**	**4.912**	**.0023**	**.0024**
Stddev	.0001	.0002	.0028	.0001	.0179	.0007	.085	.0003	.0004
%RSD	151.5	30.36	135.1	1.149	3.846	7.655	1.720	11.93	16.03
#1	.0000	-.0007	.0049	.0070	.4439	.0079	4.833	.0026	.0023
#2	.0002	-.0011	.0022	.0070	.4756	.0088	4.903	.0020	.0021
#3	.0000	-.0006	-.0008	.0071	.4742	.0092	5.001	.0023	.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.29**	**.0003**	**.0422**	**.0004**	**2.665**	**<.0000**	**<.0000**	**2.117**	**<.0000**
Stddev	.15	.0003	.0031	.0007	.194	.0019	.0005	.030	.0003
%RSD	1.432	91.60	7.392	159.0	7.264	841.3	106.8	1.401	106.9
#1	10.15	.0000	.0387	.0007	2.476	.0008	.0000	2.088	.0000
#2	10.28	.0005	.0434	-.0003	2.656	-.0024	-.0010	2.115	-.0003
#3	10.44	.0005	.0445	.0009	2.863	.0010	-.0004	2.147	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-3-B Acquired: 8/21/2012 10:57:27 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5116	<.0000	<.0000	.0005	<.0000	.0029	.0075
Stddev	.0077	.0034	.0002	.0007	.0072	.0048	.0003
%RSD	1.507	25.41	147.5	138.2	34.19	163.2	4.238
#1	.5043	-.0166	-.0001	.0000	-.0180	-.0006	.0072
#2	.5108	-.0132	-.0004	.0014	-.0158	.0084	.0076
#3	.5197	-.0099	.0000	.0002	-.0292	.0011	.0078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5101.7
Stddev	15.8
%RSD	.30967
#1	5084.2
#2	5106.1
#3	5114.8

Sample Name: 160-415-D-4-B Acquired: 8/21/2012 11:01:05 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0610	.0004	.0117	.0357	<.0000	<.0000	13.95	<.0000
Stddev	.0002	.0085	.0006	.0013	.0004	.0001	.0003	.83	.0002
%RSD	2047.	13.99	154.5	10.78	1.044	190.2	6.842	5.928	80.46
#1	.0001	.0514	.0003	.0129	.0353	.0000	-.0045	13.18	-.0002
#2	-.0002	.0640	-.0002	.0104	.0359	.0000	-.0052	13.85	.0000
#3	.0001	.0677	.0010	.0118	.0360	-.0001	-.0051	14.83	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	<.0000	<.0000	.3620	.3136	.0099	9.104	.0179	.0007
Stddev	.0003	.0003	.0004	.0057	.0099	.0014	.090	.0005	.0002
%RSD	52.84	24.84	43.81	1.570	3.149	14.03	.9928	2.665	28.19
#1	.0002	-.0012	-.0005	.3561	.3151	.0115	9.030	.0179	.0007
#2	.0008	-.0015	-.0012	.3626	.3226	.0094	9.076	.0174	.0005
#3	.0005	-.0009	-.0012	.3674	.3031	.0088	9.205	.0183	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.590	.0009	.0304	<.0000	1.277	.0008	<.0000	2.023	<.0000
Stddev	.081	.0004	.0015	.0024	.074	.0009	.0011	.028	.0004
%RSD	1.443	43.53	5.073	630.0	5.800	122.8	64.12	1.401	73.80
#1	5.509	.0012	.0291	.0004	1.207	.0010	-.0026	1.994	-.0009
#2	5.590	.0009	.0300	.0015	1.268	-.0003	-.0019	2.024	-.0007
#3	5.670	.0005	.0321	-.0030	1.354	.0016	-.0005	2.051	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-4-B Acquired: 8/21/2012 11:01:05 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3087	<.0000	<.0000	<.0000	<.0000	.0049	.0053
Stddev	.0040	.0026	.0009	.0006	.0061	.0037	.0001
%RSD	1.297	18.55	582.9	187.4	21.61	75.09	1.397
#1	.3044	-.0144	-.0006	.0004	-.0236	.0039	.0053
#2	.3092	-.0167	-.0007	-.0006	-.0264	.0089	.0054
#3	.3124	-.0114	.0009	-.0007	-.0353	.0018	.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5174.3
Stddev	22.3
%RSD	.43032
#1	5188.7
#2	5185.6
#3	5148.7

Sample Name: 160-415-D-5-B Acquired: 8/21/2012 11:04:43 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	<.0000	<.0000	.2185	.3726	<.0000	<.0000	F 50.98	<.0000
Stddev	.0004	.0075	.0031	.0020	.0017	.0000	.0022	1.55	.0002
%RSD	93.93	1315.	256.0	.9321	.4579	26.70	34.03	3.042	370.6
#1	.0001	-.0059	.0022	.2188	.3712	-.0001	-.0082	49.59	-.0003
#2	.0003	.0080	-.0037	.2164	.3720	-.0001	-.0069	50.71	.0001
#3	.0008	-.0038	-.0021	.2205	.3745	-.0001	-.0040	52.65	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	<.0000	.0010	5.744	3.948	.0087	15.46	.1189	.0002
Stddev	.0005	.0001	.0010	.030	.026	.0006	.10	.0006	.0002
%RSD	52.77	45.46	104.9	.5250	.6672	6.815	.6433	.5063	91.57
#1	.0005	-.0003	.0009	5.722	3.928	.0086	15.38	.1183	.0005
#2	.0008	-.0002	.0000	5.731	3.978	.0094	15.43	.1188	.0000
#3	.0015	-.0001	.0020	5.778	3.938	.0082	15.57	.1195	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.37	.0035	.1142	.0003	.3553	.0004	.0005	2.970	<.0000
Stddev	.30	.0003	.0020	.0014	.0090	.0004	.0027	.012	.0003
%RSD	.5207	9.226	1.736	415.1	2.547	115.2	498.2	.4054	39.09
#1	58.13	.0033	.1121	-.0009	.3470	-.0001	-.0001	2.957	-.0006
#2	58.26	.0039	.1145	.0018	.3540	.0005	-.0017	2.972	-.0005
#3	58.71	.0033	.1160	.0000	.3650	.0007	.0035	2.980	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-5-B Acquired: 8/21/2012 11:04:43 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1489	<.0000	.0006	.0003	<.0000	.0032	.0028
Stddev	.0007	.0008	.0004	.0007	.0046	.0027	.0001
%RSD	.5017	8.102	60.52	233.0	9.463	84.70	3.760
#1	.1484	-.0085	.0002	.0011	-.0493	.0054	.0029
#2	.1485	-.0096	.0007	.0001	-.0435	.0002	.0027
#3	.1497	-.0099	.0010	-.0003	-.0526	.0040	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5053.3
Stddev	28.6
%RSD	.56554
#1	5076.4
#2	5062.1
#3	5021.3

Sample Name: CCV Acquired: 8/21/2012 11:08:21 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9629**	**50.90**	**5.272**	**4.755**	**5.002**	**5.024**	**5.186**	**25.04**	**5.317**
Stddev	.0193	.13	.104	.026	.017	.021	.107	.44	.102
%RSD	2.009	.2480	1.970	.5474	.3456	.4146	2.068	1.746	1.924
#1	.9434	50.76	5.188	4.726	4.985	5.001	5.092	24.68	5.226
#2	.9821	51.00	5.388	4.765	5.004	5.029	5.303	25.53	5.427
#3	.9633	50.95	5.240	4.776	5.019	5.042	5.162	24.91	5.296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.865**	**5.116**	**5.344**	**49.21**	**48.83**	**4.679**	**25.59**	**5.102**	**5.041**
Stddev	.084	.105	.110	.21	.17	.017	.12	.019	.096
%RSD	1.720	2.045	2.066	.4268	.3455	.3586	.4862	.3753	1.909
#1	4.796	5.020	5.246	48.97	48.63	4.660	25.45	5.080	4.962
#2	4.958	5.228	5.463	49.33	48.94	4.683	25.68	5.116	5.148
#3	4.841	5.101	5.322	49.34	48.91	4.693	25.65	5.110	5.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**47.57**	**5.310**	**4.941**	**5.216**	**51.11**	**1.051**	**5.182**	**4.616**	**5.278**
Stddev	.19	.095	.094	.093	1.04	.024	.102	.023	.095
%RSD	.3965	1.784	1.908	1.789	2.037	2.242	1.971	.4986	1.790
#1	47.35	5.229	4.865	5.139	50.20	1.029	5.104	4.591	5.196
#2	47.67	5.414	5.046	5.320	52.25	1.076	5.297	4.622	5.382
#3	47.68	5.287	4.910	5.189	50.88	1.048	5.144	4.636	5.256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 11:08:21 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.067**	**5.099**	**5.018**	**4.990**	**4.717**	**4.713**	**5.079**
Stddev	.114	.095	.013	.091	.093	.020	.095
%RSD	2.252	1.868	.2592	1.828	1.976	.4297	1.862
#1	5.000	5.001	5.004	4.919	4.626	4.689	4.999
#2	5.198	5.191	5.021	5.093	4.813	4.726	5.184
#3	5.002	5.103	5.029	4.958	4.712	4.723	5.055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4944.8**
Stddev	78.2
%RSD	1.5816
#1	5003.1
#2	4855.9
#3	4975.4

Sample Name: CCB Acquired: 8/21/2012 11:11:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0084**	**.0023**	**.0124**	**.0015**	**.0014**	**<.0000**	**.0017**	**.0002**
Stddev	.0007	.0037	.0005	.0019	.0006	.0006	.0005	.0003	.0001
%RSD	426.1	44.39	22.23	15.38	41.98	40.62	7.539	15.13	81.44
#1	.0010	.0045	.0018	.0146	.0009	.0009	-.0057	.0019	.0001
#2	-.0002	.0086	.0028	.0111	.0014	.0013	-.0061	.0014	.0001
#3	-.0002	.0119	.0024	.0116	.0021	.0021	-.0066	.0017	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**<.0000**	**<.0000**	**.0143**	**<.0000**	**.0036**	**.0265**	**.0012**	**.0087**
Stddev	.0002	.0005	.0028	.0058	.0155	.0007	.0054	.0003	.0007
%RSD	126.5	79.19	1726.	40.43	18.97	20.56	20.22	25.88	7.524
#1	.0000	-.0003	.0023	.0092	-.0638	.0041	.0203	.0009	.0080
#2	.0001	-.0013	-.0032	.0132	-.0889	.0039	.0291	.0015	.0086
#3	.0003	-.0004	.0004	.0206	-.0920	.0027	.0300	.0012	.0093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**<.0000**	**<.0000**	**.0063**	**.0017**	**.0025**	**.0056**	**.0018**
Stddev	.0086	.0004	.0011	.0003	.0037	.0011	.0041	.0056	.0004
%RSD	148.3	3298.	475.6	808.8	58.81	65.69	165.0	100.3	20.34
#1	-.0103	-.0002	-.0015	-.0002	.0105	.0030	.0025	.0013	.0018
#2	-.0112	-.0003	.0004	-.0002	.0045	.0016	-.0016	.0120	.0021
#3	.0041	.0004	.0004	.0003	.0038	.0007	.0066	.0036	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 11:11:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	<.0000	.0024	.0033	<.0000	.0039	.0006
Stddev	.0006	.0038	.0014	.0013	.0108	.0020	.0001
%RSD	45.68	43.12	56.87	40.83	36.57	51.74	12.61
#1	.0009	-.0044	.0012	.0032	-.0405	.0054	.0005
#2	.0012	-.0108	.0022	.0047	-.0290	.0046	.0006
#3	.0021	-.0110	.0039	.0020	-.0189	.0016	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4950.5
Stddev	23.5
%RSD	.47468
#1	4977.1
#2	4932.4
#3	4942.0

Sample Name: 160-415-D-6-B Acquired: 8/21/2012 11:15:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.1782	.0045	.0796	.2434	.0000	<.0000	F 56.13	<.0000
Stddev	.0005	.0021	.0018	.0037	.0015	.0000	.0008	2.20	.0000
%RSD	761.5	1.166	39.78	4.682	.5971	182.5	34.26	3.912	23.53
#1	-.0005	.1758	.0025	.0776	.2419	.0000	-.0026	53.99	-.0001
#2	.0003	.1796	.0060	.0773	.2434	.0000	-.0013	56.02	-.0001
#3	.0003	.1791	.0050	.0839	.2448	.0000	-.0027	58.37	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	<.0000	<.0000	6.327	1.496	.0104	15.40	.1172	.0010
Stddev	.0004	.0002	.0009	.039	.009	.0011	.05	.0006	.0002
%RSD	56.50	146.9	56.25	.6215	.5990	10.65	.3406	.4857	18.90
#1	.0010	-.0001	-.0006	6.284	1.486	.0097	15.35	.1165	.0008
#2	.0010	-.0004	-.0023	6.336	1.502	.0117	15.42	.1174	.0011
#3	.0003	.0000	-.0016	6.361	1.501	.0098	15.45	.1176	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	18.01	.0050	.1852	<.0000	.3694	.0020	<.0000	4.669	<.0000
Stddev	.11	.0003	.0081	.0007	.0135	.0012	.0009	.019	.0003
%RSD	.6206	5.568	4.369	136.0	3.667	63.09	29.81	.4059	36.76
#1	17.89	.0048	.1781	.0003	.3574	.0024	-.0019	4.650	-.0011
#2	18.06	.0048	.1836	-.0011	.3666	.0029	-.0032	4.688	-.0007
#3	18.10	.0053	.1940	-.0008	.3841	.0006	-.0036	4.671	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-6-B Acquired: 8/21/2012 11:15:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2680	<.0000	.0042	.0017	<.0000	.0021	.0046
Stddev	.0019	.0008	.0009	.0009	.0082	.0029	.0001
%RSD	.6993	4.893	20.80	49.81	12.70	135.7	2.478
#1	.2659	-.0158	.0034	.0025	-.0635	.0003	.0045
#2	.2686	-.0146	.0051	.0008	-.0738	.0006	.0046
#3	.2696	-.0159	.0040	.0018	-.0575	.0054	.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5116.6
Stddev	13.8
%RSD	.26913
#1	5124.6
#2	5100.7
#3	5124.6

Sample Name: 160-415-D-8-B Acquired: 8/21/2012 11:19:01 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0084	.0011	.0450	.1122	<.0000	<.0000	W 44.75
Stddev	.0004	.0058	.0022	.0013	.0009	.0001	.0033	1.55
%RSD	208.1	69.39	197.3	2.960	.7602	152.1	55.66	3.462
#1	.0002	.0020	-.0011	.0436	.1124	.0000	-.0060	43.25
#2	-.0003	.0133	.0032	.0463	.1113	-.0001	-.0090	44.63
#3	-.0006	.0099	.0012	.0452	.1129	.0000	-.0025	46.35
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0007	<.0000	<.0000	1.069	.5729	.0076	22.17
Stddev	.0001	.0002	.0001	.0014	.006	.0326	.0005	.09
%RSD	173.0	29.22	7.475	80.07	.5439	5.683	6.211	.4187
#1	.0000	.0009	-.0011	-.0016	1.067	.5757	.0071	22.06
#2	-.0001	.0008	-.0013	-.0004	1.064	.5391	.0077	22.19
#3	-.0001	.0005	-.0012	-.0031	1.075	.6040	.0081	22.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0183	.0006	14.39	.0086	.0158	<.0000	3.531	<.0000
Stddev	.0001	.0002	.07	.0004	.0015	.0004	.124	.0017
%RSD	.8030	30.23	.4804	4.534	9.664	104.4	3.506	62470.
#1	.0181	.0004	14.39	.0082	.0157	-.0007	3.416	.0008
#2	.0183	.0008	14.32	.0087	.0173	-.0005	3.516	-.0019
#3	.0184	.0007	14.46	.0090	.0143	.0001	3.662	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-415-D-8-B Acquired: 8/21/2012 11:19:01 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.782	<.0000	.2328	<.0000	<.0000	.0004	<.0000
Stddev	.0022	.014	.0006	.0013	.0030	.0003	.0010	.0098
%RSD	95.57	.5013	37.55	.5499	18.52	93.83	236.7	18.74
#1	-.0045	2.769	-.0021	.2326	-.0189	.0000	.0016	-.0567
#2	-.0001	2.779	-.0009	.2316	-.0130	-.0005	-.0001	-.0591
#3	-.0024	2.797	-.0018	.2341	-.0165	-.0005	-.0002	-.0410
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0040	.0029
Stddev	.0011	.0001
%RSD	27.96	3.583
#1	.0033	.0028
#2	.0035	.0030
#3	.0054	.0028
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	5233.1
Stddev	35.4
%RSD	.67683
#1	5213.5
#2	5211.7
#3	5274.0

Sample Name: 160-415-D-9-A Acquired: 8/21/2012 11:22:38 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.001	.0120	.1275	.1430	<.0000	<.0000	F 58.51	.0002
Stddev	.0001	.020	.0012	.0038	.0010	.0000	.0013	2.27	.0001
%RSD	104.9	1.012	10.15	2.983	.6711	70.04	43.80	3.872	28.00
#1	-.0001	1.978	.0106	.1275	.1421	-.0001	-.0017	56.55	.0002
#2	-.0003	2.011	.0128	.1314	.1428	.0000	-.0029	57.99	.0003
#3	.0000	2.015	.0126	.1238	.1440	.0000	-.0042	60.99	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024	.0025	.0092	10.88	1.762	.0096	16.18	.2638	.0009
Stddev	.0000	.0004	.0010	.10	.014	.0011	.12	.0018	.0003
%RSD	1.052	17.20	10.86	.9141	.7691	11.39	.7492	.6896	29.33
#1	.0024	.0025	.0100	10.79	1.761	.0109	16.08	.2620	.0006
#2	.0023	.0029	.0096	10.87	1.748	.0088	16.13	.2637	.0012
#3	.0024	.0020	.0081	10.99	1.775	.0092	16.31	.2656	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	27.07	.0143	.1770	.0216	4.073	.0009	<.0000	6.662	.0007
Stddev	.23	.0005	.0071	.0013	.161	.0025	.0005	.051	.0007
%RSD	.8452	3.417	4.000	6.022	3.955	265.9	13.37	.7711	104.7
#1	26.87	.0138	.1701	.0206	3.937	.0024	-.0037	6.617	.0015
#2	27.02	.0144	.1767	.0212	4.031	-.0019	-.0034	6.651	.0003
#3	27.32	.0148	.1842	.0231	4.251	.0022	-.0044	6.718	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-9-A Acquired: 8/21/2012 11:22:38 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1758	<.0000	.0307	.0005	<.0000	.0041	1.259
Stddev	.0016	.0038	.0008	.0011	.0080	.0019	.050
%RSD	.9375	20.56	2.722	251.8	14.14	47.07	3.992
#1	.1741	-.0167	.0313	.0018	-.0502	.0019	1.216
#2	.1759	-.0227	.0297	-.0004	-.0544	.0049	1.248
#3	.1773	-.0157	.0311	.0000	-.0657	.0055	1.314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5206.6
Stddev	22.3
%RSD	.42910
#1	5199.0
#2	5231.7
#3	5189.0

Sample Name: 160-415-D-10-B Acquired: 8/21/2012 11:26:12 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.8781**	**.0008**	**.0039**	**.0339**	**<.0000**	**<.0000**	**30.32**	**<.0000**
Stddev	.0002	.0285	.0009	.0030	.0006	.0001	.0039	2.61	.0001
%RSD	180.8	3.250	121.5	77.03	1.794	145.3	133.0	8.591	1042.
#1	.0001	.8452	-.0002	.0066	.0333	.0000	.0008	27.64	.0000
#2	-.0001	.8932	.0016	.0007	.0340	-.0001	-.0069	30.48	.0001
#3	.0004	.8959	.0008	.0044	.0345	.0000	-.0025	32.84	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0010**	**.0000**	**.7697**	**.5405**	**.0056**	**9.690**	**.0141**	**.0084**
Stddev	.0001	.0002	.0022	.0137	.0203	.0003	.218	.0004	.0008
%RSD	17.98	17.42	4504.	1.782	3.750	6.174	2.253	2.917	9.079
#1	.0008	.0010	.0011	.7551	.5271	.0053	9.448	.0136	.0076
#2	.0006	.0012	.0015	.7714	.5307	.0059	9.749	.0143	.0085
#3	.0005	.0009	-.0025	.7824	.5639	.0054	9.872	.0143	.0092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.839**	**.0031**	**.0513**	**.0004**	**1.614**	**.0029**	**<.0000**	**2.598**	**<.0000**
Stddev	.077	.0003	.0041	.0010	.138	.0018	.0037	.063	.0005
%RSD	2.019	8.906	7.930	221.1	8.535	62.53	87.80	2.437	62.89
#1	3.759	.0034	.0469	.0013	1.474	.0037	-.0049	2.535	-.0009
#2	3.844	.0028	.0520	.0005	1.618	.0042	-.0002	2.597	-.0002
#3	3.914	.0030	.0549	-.0006	1.750	.0008	-.0075	2.661	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-10-B Acquired: 8/21/2012 11:26:12 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1149	<.0000	.0044	<.0000	<.0000	.0022	.0103
Stddev	.0024	.0033	.0003	.0004	.0116	.0021	.0008
%RSD	2.065	32.46	6.574	1572.	26.99	95.60	7.485
#1	.1125	-.0065	.0040	-.0003	-.0497	.0032	.0096
#2	.1150	-.0128	.0045	-.0002	-.0296	-.0002	.0103
#3	.1172	-.0112	.0045	.0004	-.0498	.0035	.0111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5031.3
Stddev	32.3
%RSD	.64211
#1	5052.0
#2	4994.1
#3	5047.8

Sample Name: 160-415-D-1-B Acquired: 8/21/2012 11:29:49 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0802	.0004	.0440	.1350	<.0000	<.0000	F 95.59	<.0000
Stddev	.0003	.0029	.0008	.0027	.0003	.0001	.0022	.38	.0000
%RSD	110.1	3.605	197.2	6.242	.2564	85.09	44.61	.4020	50.74
#1	-.0005	.0795	.0012	.0469	.1347	.0000	-.0060	95.70	-.0001
#2	-.0003	.0834	.0000	.0435	.1354	-.0001	-.0065	95.17	-.0002
#3	.0001	.0778	-.0001	.0415	.1350	-.0002	-.0024	95.91	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	<.0000	<.0000	.1187	1.557	.0239	F 58.44	.0017	.0027
Stddev	.0003	.0002	.0014	.0019	.019	.0004	.15	.0001	.0003
%RSD	90.56	16.10	197.2	1.613	1.206	1.794	.2625	7.932	10.07
#1	.0000	-.0011	-.0016	.1168	1.536	.0239	58.29	.0016	.0027
#2	.0005	-.0011	-.0015	.1187	1.562	.0235	58.43	.0018	.0030
#3	.0003	-.0008	.0009	.1206	1.572	.0243	58.60	.0018	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	13.27	.0032	.0008	<.0000	17.43	.0010	.0008	8.456	<.0000
Stddev	.02	.0005	.0007	.0007	.12	.0005	.0022	.024	.0003
%RSD	.1553	16.41	86.71	172.1	.7009	46.36	266.4	.2779	20.10
#1	13.25	.0037	.0016	.0003	17.52	.0005	.0016	8.429	-.0011
#2	13.29	.0028	.0002	-.0012	17.29	.0013	-.0016	8.470	-.0014
#3	13.27	.0030	.0006	-.0004	17.47	.0013	.0025	8.470	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-1-B Acquired: 8/21/2012 11:29:49 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4720	<.0000	<.0000	<.0000	<.0000	.0017	.0149
Stddev	.0012	.0017	.0012	.0005	.0105	.0007	.0001
%RSD	.2478	11.12	587.1	60.73	12.71	38.45	.8683
#1	.4714	-.0167	.0011	-.0004	-.0828	.0019	.0150
#2	.4711	-.0157	-.0003	-.0007	-.0934	.0010	.0149
#3	.4733	-.0134	-.0014	-.0013	-.0723	.0023	.0148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5039.9
Stddev	16.9
%RSD	.33452
#1	5043.5
#2	5054.7
#3	5021.6

Sample Name: 160-415-D-2-D Acquired: 8/21/2012 11:33:26 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.9411	.0203	.4196	1.352	<.0000	<.0000	F 236.7	<.0000
Stddev	.0005	.0126	.0009	.0018	.005	.0001	.0021	1.8	.0000
%RSD	155.0	1.340	4.418	.4322	.3523	372.5	79.87	.7442	11.18
#1	.0001	.9355	.0213	.4206	1.353	.0000	-.0036	234.7	-.0003
#2	-.0009	.9322	.0195	.4175	1.347	-.0001	-.0002	237.6	-.0004
#3	-.0002	.9555	.0202	.4207	1.357	.0001	-.0042	237.9	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.0024	.0048	34.12	8.600	.0439	F 81.86	.6281	.0009
Stddev	.0004	.0004	.0017	.11	.064	.0006	.40	.0025	.0001
%RSD	14.16	18.31	34.72	.3090	.7465	1.394	.4824	.4003	11.78
#1	.0023	.0019	.0058	34.07	8.592	.0440	81.51	.6259	.0010
#2	.0029	.0027	.0029	34.04	8.540	.0433	81.80	.6275	.0010
#3	.0024	.0026	.0057	34.24	8.668	.0445	82.29	.6308	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 101.1	.0226	.9044	.0038	1.860	.0043	<.0000	F 26.08	<.0000
Stddev	.3	.0004	.0088	.0013	.009	.0012	.0012	.10	.0007
%RSD	.3276	1.623	.9703	33.35	.5124	27.67	54.51	.3966	73.01
#1	101.0	.0225	.8944	.0029	1.849	.0034	-.0010	26.01	-.0017
#2	100.8	.0229	.9081	.0052	1.863	.0039	-.0034	26.04	-.0006
#3	101.4	.0222	.9107	.0033	1.867	.0056	-.0021	26.20	-.0004
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-415-D-2-D Acquired: 8/21/2012 11:33:26 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.505	<.0000	.0214	.0001	<.0000	.0054	.0159
Stddev	.004	.0050	.0007	.0015	.0047	.0007	.0001
%RSD	.2575	20.13	3.135	2054.	46.67	13.80	.5273
#1	1.506	-.0276	.0214	.0012	-.0079	.0050	.0160
#2	1.501	-.0283	.0207	-.0016	-.0156	.0062	.0158
#3	1.508	-.0193	.0220	.0006	-.0070	.0049	.0159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5154.2
Stddev	44.7
%RSD	.86753
#1	5203.3
#2	5143.5
#3	5115.8

Sample Name: 160-415-D-2-D SD Acquired: 8/21/2012 11:37:04 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.1793	.0029	.0827	.2682	<.0000	<.0000	F 56.46	<.0000
Stddev	.0005	.0152	.0009	.0003	.0014	.0000	.0013	.15	.0002
%RSD	631.6	8.486	30.69	.3400	.5253	33.10	42.49	.2732	110.6
#1	-.0001	.1788	.0020	.0824	.2671	-.0001	-.0024	56.31	-.0001
#2	.0004	.1644	.0029	.0828	.2677	-.0001	-.0047	56.44	-.0001
#3	-.0005	.1948	.0038	.0830	.2698	-.0001	-.0024	56.62	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0002	<.0000	6.997	1.633	.0104	16.91	.1276	<.0000
Stddev	.0003	.0002	.0017	.025	.004	.0012	.07	.0006	.0002
%RSD	39.97	77.11	175.3	.3572	.2645	11.15	.4134	.5035	5291.
#1	.0004	.0004	-.0020	6.987	1.628	.0103	16.92	.1274	.0001
#2	.0007	.0002	-.0020	6.979	1.637	.0093	16.83	.1271	.0001
#3	.0009	.0001	.0010	7.026	1.634	.0116	16.97	.1283	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.05	.0044	.1868	.0014	.3807	.0005	<.0000	5.249	<.0000
Stddev	.08	.0003	.0016	.0018	.0035	.0026	.0032	.043	.0009
%RSD	.3974	7.811	.8828	126.5	.9183	531.0	395.0	.8103	57.11
#1	20.02	.0041	.1849	.0026	.3778	-.0023	-.0044	5.247	-.0021
#2	19.99	.0044	.1875	.0022	.3796	.0009	.0003	5.208	-.0023
#3	20.14	.0047	.1880	-.0006	.3845	.0028	.0017	5.293	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-D SD Acquired: 8/21/2012 11:37:04 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2952	<.0000	.0048	.0017	<.0000	.0022	.0065
Stddev	.0012	.0066	.0001	.0009	.0067	.0013	.0001
%RSD	.3926	47.77	1.155	50.97	9.711	59.61	1.731
#1	.2946	-.0212	.0048	.0012	-.0653	.0009	.0065
#2	.2945	-.0119	.0047	.0028	-.0642	.0034	.0065
#3	.2966	-.0084	.0048	.0012	-.0763	.0022	.0067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5046.2
Stddev	10.4
%RSD	.20643
#1	5055.0
#2	5049.0
#3	5034.7

Sample Name: 160-415-D-2-E MS Acquired: 8/21/2012 11:40:41 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0999	12.42	1.009	1.422	2.394	1.033	.9664	F 249.5	1.015
Stddev	.0014	.05	.014	.003	.006	.004	.0144	3.6	.013
%RSD	1.364	.3929	1.420	.1977	.2711	.3433	1.486	1.425	1.304
#1	.0996	12.36	1.010	1.421	2.389	1.029	.9703	247.5	1.013
#2	.1014	12.44	1.024	1.419	2.392	1.034	.9783	253.6	1.029
#3	.0988	12.45	.9950	1.425	2.401	1.036	.9504	247.4	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9074	.9786	1.011	44.20	19.08	1.037	F 92.25	1.659	.9855
Stddev	.0124	.0162	.014	.20	.02	.001	.55	.004	.0142
%RSD	1.367	1.652	1.420	.4504	.1292	.0961	.5940	.2656	1.444
#1	.9037	.9658	1.012	43.97	19.05	1.037	91.74	1.654	.9833
#2	.9212	.9968	1.025	44.34	19.08	1.036	92.83	1.662	1.001
#3	.8972	.9733	.9965	44.28	19.10	1.038	92.17	1.662	.9724
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 112.5	1.011	1.888	.9538	11.44	.5213	.9676	F 28.03	.9680
Stddev	.3	.012	.026	.0114	.15	.0062	.0126	.10	.0123
%RSD	.2537	1.168	1.406	1.196	1.334	1.189	1.298	.3528	1.267
#1	112.2	1.007	1.884	.9509	11.44	.5236	.9694	27.92	.9628
#2	112.5	1.025	1.917	.9664	11.59	.5260	.9791	28.12	.9820
#3	112.8	1.002	1.864	.9442	11.29	.5142	.9542	28.04	.9592
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-415-D-2-E MS Acquired: 8/21/2012 11:40:41 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.549	.9725	1.068	.1866	.9006	.9706	.9864
Stddev	.010	.0077	.003	.0031	.0246	.0058	.0136
%RSD	.3827	.7914	.2645	1.660	2.729	.6021	1.382
#1	2.540	.9636	1.065	.1839	.9034	.9646	.9840
#2	2.548	.9772	1.068	.1899	.9236	.9763	1.001
#3	2.560	.9766	1.070	.1859	.8747	.9709	.9741
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5006.1
Stddev	68.8
%RSD	1.3750
#1	5050.0
#2	4926.7
#3	5041.5

Sample Name: 160-415-D-2-F MSD Acquired: 8/21/2012 11:43:57 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0977	11.42	1.016	1.386	2.322	1.006	.9600	F 247.0	1.005
Stddev	.0021	.04	.005	.004	.011	.004	.0098	1.2	.007
%RSD	2.142	.3906	.5119	.3166	.4633	.4152	1.018	.4862	.6793
#1	.0956	11.41	1.017	1.381	2.313	1.002	.9637	247.5	1.007
#2	.0978	11.37	1.010	1.388	2.318	1.007	.9489	245.6	.9977
#3	.0998	11.46	1.021	1.388	2.334	1.010	.9673	247.9	1.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8997	.9620	1.002	44.53	18.54	.9970	F 90.29	1.610	.9803
Stddev	.0068	.0065	.006	.18	.09	.0046	.40	.005	.0049
%RSD	.7526	.6739	.5673	.4068	.5017	.4624	.4473	.3391	.4967
#1	.9024	.9570	1.004	44.37	18.46	.9935	89.86	1.607	.9826
#2	.8919	.9595	.9955	44.48	18.50	.9953	90.35	1.608	.9747
#3	.9046	.9693	1.007	44.73	18.64	1.002	90.67	1.617	.9835
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 110.0	1.001	1.858	.9435	11.97	.5203	.9692	F 25.93	.9695
Stddev	.5	.005	.016	.0060	.09	.0064	.0110	.09	.0050
%RSD	.4692	.5319	.8488	.6388	.7590	1.230	1.137	.3356	.5167
#1	109.6	1.005	1.866	.9465	12.03	.5171	.9742	25.84	.9731
#2	109.9	.9954	1.839	.9365	11.87	.5161	.9566	25.93	.9638
#3	110.6	1.004	1.867	.9474	12.02	.5276	.9768	26.02	.9717
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-415-D-2-F MSD Acquired: 8/21/2012 11:43:57 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.482	.9647	1.034	.1848	.8832	.9431	.9704
Stddev	.010	.0099	.006	.0029	.0047	.0064	.0072
%RSD	.4155	1.027	.6083	1.596	.5335	.6829	.7402
#1	2.473	.9663	1.029	.1828	.8882	.9406	.9727
#2	2.480	.9541	1.033	.1835	.8788	.9383	.9624
#3	2.493	.9737	1.041	.1882	.8826	.9504	.9762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5083.7
Stddev	25.1
%RSD	.49295
#1	5084.5
#2	5108.4
#3	5058.3

Sample Name: 160-415-D-3-B Acquired: 8/21/2012 11:47:14 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0277	.0019	.3023	.0629	.0006	<.0000	38.67	<.0000
Stddev	.0005	.0161	.0012	.0015	.0020	.0010	.0014	.33	.0001
%RSD	101.8	58.05	63.19	.4859	3.245	162.0	96.66	.8475	279.0
#1	-.0011	.0337	.0027	.3012	.0652	.0019	-.0029	38.29	-.0001
#2	-.0002	.0095	.0005	.3018	.0617	.0000	-.0012	38.90	.0001
#3	-.0003	.0399	.0024	.3040	.0617	.0000	-.0001	38.81	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	<.0000	.0039	.0694	3.198	.0403	28.67	.0157	.0121
Stddev	.0003	.0002	.0012	.0458	.039	.0010	.07	.0019	.0003
%RSD	63.91	20.84	31.82	66.04	1.224	2.416	.2580	12.14	2.680
#1	.0002	-.0011	.0025	.1223	3.241	.0413	28.59	.0179	.0118
#2	.0003	-.0010	.0045	.0431	3.165	.0394	28.72	.0145	.0125
#3	.0007	-.0014	.0047	.0428	3.189	.0402	28.71	.0147	.0121
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.22	.0033	.2053	.0004	12.95	.0021	.0008	F 12.79	<.0000
Stddev	.20	.0001	.0032	.0008	.12	.0021	.0003	.03	.0008
%RSD	.3244	2.927	1.574	218.8	.9440	103.0	42.98	.2275	78.76
#1	62.05	.0033	.2017	.0001	12.81	-.0002	.0004	12.76	-.0005
#2	62.15	.0033	.2059	.0013	13.01	.0024	.0009	12.82	-.0020
#3	62.44	.0035	.2081	-.0002	13.02	.0040	.0011	12.80	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-415-D-3-B Acquired: 8/21/2012 11:47:14 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.083	<.0000	.0010	<.0000	<.0000	.0044	.0308
Stddev	.011	.0027	.0007	.0015	.0079	.0032	.0002
%RSD	.3600	18.99	73.02	94.06	17.06	72.38	.7819
#1	3.076	-.0112	.0017	-.0007	-.0438	.0076	.0305
#2	3.078	-.0164	.0002	-.0007	-.0554	.0011	.0309
#3	3.096	-.0148	.0012	-.0032	-.0402	.0046	.0310
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5012.9
Stddev	33.8
%RSD	.67362
#1	5049.3
#2	4982.7
#3	5006.6

Sample Name: CCV Acquired: 8/21/2012 11:50:52 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9564**	**51.76**	**5.195**	**4.837**	**5.082**	**5.104**	**5.052**	**25.38**	**5.259**
Stddev	.0051	.06	.016	.018	.005	.006	.019	.10	.021
%RSD	.5289	.1246	.3115	.3668	.0975	.1170	.3701	.3820	.4061
#1	.9507	51.80	5.178	4.817	5.083	5.105	5.035	25.28	5.237
#2	.9601	51.79	5.210	4.850	5.087	5.109	5.072	25.47	5.280
#3	.9584	51.68	5.197	4.843	5.077	5.097	5.050	25.39	5.258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.867**	**5.157**	**5.225**	**50.19**	**49.81**	**4.732**	**26.17**	**5.189**	**5.020**
Stddev	.017	.035	.023	.04	.08	.004	.04	.002	.021
%RSD	.3542	.6868	.4348	.0783	.1672	.0881	.1713	.0313	.4192
#1	4.848	5.116	5.205	50.17	49.71	4.731	26.12	5.189	4.998
#2	4.882	5.181	5.250	50.24	49.88	4.736	26.18	5.191	5.040
#3	4.870	5.174	5.220	50.17	49.82	4.728	26.21	5.188	5.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.42**	**5.333**	**4.884**	**5.233**	**50.10**	**1.026**	**5.078**	**4.696**	**5.296**
Stddev	.04	.023	.018	.016	.24	.003	.029	.010	.025
%RSD	.0924	.4352	.3579	.3112	.4868	.3060	.5737	.2111	.4749
#1	48.40	5.309	4.869	5.215	49.86	1.030	5.049	4.686	5.269
#2	48.47	5.355	4.903	5.247	50.35	1.025	5.107	4.705	5.318
#3	48.40	5.337	4.879	5.236	50.09	1.024	5.077	4.698	5.300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 11:50:52 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.101**	**5.078**	**5.096**	**4.968**	**4.647**	**4.785**	**5.042**
Stddev	.037	.032	.007	.011	.044	.002	.021
%RSD	.7327	.6220	.1422	.2261	.9500	.0483	.4093
#1	5.060	5.042	5.097	4.957	4.600	4.787	5.021
#2	5.112	5.099	5.103	4.979	4.687	4.783	5.062
#3	5.132	5.094	5.089	4.967	4.655	4.784	5.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4790.8**
Stddev	23.3
%RSD	.48681
#1	4817.0
#2	4783.3
#3	4772.2

Sample Name: CCB Acquired: 8/21/2012 11:54:11 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**<.0000**	**.0012**	**.0159**	**.0009**	**.0006**	**<.0000**	**.0035**	**.0003**
Stddev	.0003	.0061	.0007	.0035	.0002	.0001	.0011	.0004	.0001
%RSD	68.70	652.0	60.30	22.27	24.76	13.49	24.82	12.32	41.84
#1	.0009	-.0076	.0004	.0145	.0007	.0007	-.0054	.0033	.0003
#2	.0002	.0044	.0013	.0199	.0009	.0007	-.0033	.0033	.0002
#3	.0004	.0004	.0018	.0132	.0011	.0006	-.0046	.0040	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**<.0000**	**.0004**	**.0077**	**<.0000**	**.0017**	**.0207**	**.0007**	**.0090**
Stddev	.0002	.0005	.0014	.0013	.0196	.0010	.0133	.0001	.0007
%RSD	58.13	75.62	341.6	17.07	28.56	55.70	64.32	18.07	8.201
#1	.0003	-.0011	.0002	.0092	-.0877	.0025	.0354	.0006	.0082
#2	.0002	-.0004	.0019	.0072	-.0692	.0022	.0094	.0008	.0092
#3	.0007	-.0003	-.0009	.0067	-.0486	.0006	.0173	.0007	.0097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0002**	**<.0000**	**<.0000**	**.0085**	**<.0000**	**.0037**	**.0057**	**.0018**
Stddev	.0151	.0002	.0011	.0011	.0016	.0020	.0017	.0036	.0005
%RSD	198.9	98.02	154.7	215.0	18.36	185.4	46.84	63.96	28.24
#1	-.0047	.0000	-.0020	.0000	.0078	.0006	.0017	.0042	.0012
#2	.0059	.0003	.0002	.0002	.0103	-.0033	.0047	.0098	.0019
#3	-.0240	.0005	-.0004	-.0018	.0074	-.0005	.0047	.0031	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 11:54:11 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0016	.0031	<.0000	.0024	.0010
Stddev	.0001	.0062	.0005	.0017	.0098	.0019	.0002
%RSD	19.69	51.58	33.84	53.52	46.68	77.83	23.55
#1	.0007	-.0182	.0021	.0013	-.0098	.0009	.0008
#2	.0006	-.0120	.0016	.0047	-.0277	.0018	.0010
#3	.0005	-.0058	.0010	.0034	-.0258	.0045	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4728.4
Stddev	45.0
%RSD	.95137
#1	4776.2
#2	4722.0
#3	4687.0

Sample Name: 160-415-D-4-B Acquired: 8/21/2012 11:57:54 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.3703**	**<.0000**	**.0714**	**.1988**	**.0000**	**<.0000**	**F 64.45**
Stddev	.0006	.0097	.0029	.0034	.0004	.0000	.0030	.40
%RSD	209.3	2.629	17760.	4.749	.2260	499.4	1214.	.6209
#1	.0001	.3594	.0018	.0724	.1986	.0000	.0014	63.99
#2	-.0002	.3735	-.0034	.0741	.1993	.0000	-.0037	64.66
#3	.0010	.3781	.0016	.0676	.1985	.0000	.0015	64.71
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								50.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0006**	**<.0000**	**.0016**	**1.997**	**2.129**	**.0392**	**W 49.86**
Stddev	.0000	.0004	.0003	.0015	.003	.047	.0016	.14
%RSD	.6764	62.94	55.87	93.59	.1452	2.201	4.042	.2872
#1	-.0001	.0010	-.0007	.0030	1.996	2.128	.0406	49.70
#2	-.0001	.0003	-.0008	.0000	2.000	2.083	.0375	49.98
#3	-.0001	.0005	-.0002	.0017	1.995	2.176	.0397	49.90
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1003**	**.0041**	**31.65**	**.0045**	**.1524**	**.0017**	**6.189**	**.0010**
Stddev	.0003	.0002	.07	.0002	.0015	.0010	.033	.0012
%RSD	.3072	5.235	.2137	3.533	.9682	61.16	.5263	120.5
#1	.1002	.0040	31.57	.0043	.1508	.0007	6.152	-.0003
#2	.1000	.0039	31.69	.0046	.1528	.0017	6.204	.0019
#3	.1006	.0043	31.69	.0045	.1536	.0027	6.212	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-415-D-4-B Acquired: 8/21/2012 11:57:54 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	F 11.50	<.0000	1.742	<.0000	.0035	<.0000	<.0000
Stddev	.0018	.02	.0005	.002	.0025	.0004	.0019	.0120
%RSD	108.3	.1806	47.24	.0885	20.97	11.98	502.0	19.35
#1	-.0022	11.47	-.0006	1.740	-.0128	.0037	-.0020	-.0681
#2	-.0032	11.51	-.0009	1.743	-.0090	.0030	-.0009	-.0702
#3	.0003	11.50	-.0015	1.743	-.0136	.0037	.0018	-.0484
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.00						
Low Limit		-10.00						

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0064	.0196
Stddev	.0001	.0002
%RSD	1.826	.8232
#1	.0064	.0195
#2	.0065	.0195
#3	.0063	.0198
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	5111.1
Stddev	37.3
%RSD	.72912
#1	5153.9
#2	5093.8
#3	5085.7

Sample Name: 160-415-D-5-B Acquired: 8/21/2012 12:01:30 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0390	.0006	1.216	2.043	<.0000	<.0000	F 226.9	<.0000
Stddev	.0006	.0121	.0006	.007	.006	.0000	.0007	.4	.0001
%RSD	2846.	31.01	104.3	.5927	.2747	44.96	17.27	.1608	35.52
#1	.0007	.0377	-.0001	1.209	2.039	-.0001	-.0044	226.7	-.0003
#2	-.0002	.0277	.0008	1.214	2.041	.0000	-.0044	226.6	-.0005
#3	-.0005	.0517	.0012	1.223	2.050	-.0001	-.0032	227.3	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0047	.0015	<.0000	30.63	22.41	.0417	F 82.43	.6341	.0008
Stddev	.0005	.0006	.0008	.05	.08	.0018	.12	.0012	.0002
%RSD	10.40	42.70	178.2	.1673	.3513	4.396	.1481	.1900	32.04
#1	.0051	.0021	.0005	30.59	22.37	.0397	82.48	.6354	.0008
#2	.0050	.0014	-.0011	30.60	22.36	.0419	82.29	.6330	.0010
#3	.0042	.0009	-.0007	30.69	22.50	.0434	82.51	.6340	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 317.6	.0171	.5843	.0019	1.802	.0030	<.0000	F 16.57	<.0000
Stddev	2.7	.0003	.0046	.0012	.005	.0012	.0017	.06	.0008
%RSD	.8436	1.918	.7898	66.13	.2625	40.83	202.7	.3851	80.52
#1	320.7	.0170	.5790	.0016	1.798	.0040	-.0004	16.53	-.0015
#2	316.2	.0175	.5862	.0008	1.801	.0032	-.0028	16.53	-.0014
#3	315.9	.0168	.5876	.0032	1.807	.0016	.0006	16.64	-.0001
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-415-D-5-B Acquired: 8/21/2012 12:01:30 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8165	<.0000	.0003	.0001	<.0000	.0039	.0056
Stddev	.0012	.0014	.0001	.0007	.0115	.0024	.0003
%RSD	.1452	8.751	48.66	1069.	48.08	62.01	4.936
#1	.8155	-.0178	.0003	.0000	-.0367	.0028	.0059
#2	.8161	-.0154	.0004	-.0006	-.0141	.0022	.0055
#3	.8178	-.0154	.0001	.0008	-.0212	.0067	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4884.4
Stddev	9.0
%RSD	.18453
#1	4885.0
#2	4893.1
#3	4875.1

Sample Name: 160-415-D-6-B Acquired: 8/21/2012 12:05:15 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.9704**	**.0184**	**.4089**	**1.298**	**<.0000**	**<.0000**	F **243.5**
Stddev	.0006	.0101	.0008	.0028	.002	.0000	.0011	.6
%RSD	284.1	1.042	4.610	.6895	.1693	34.07	40.24	.2498
#1	.0008	.9799	.0192	.4096	1.295	-.0001	-.0022	243.8
#2	.0002	.9598	.0184	.4112	1.298	.0000	-.0018	243.8
#3	-.0004	.9716	.0175	.4057	1.300	-.0001	-.0038	242.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								50.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0023**	**.0023**	**.0052**	**33.15**	**8.480**	**.0422**	F **80.06**
Stddev	.0001	.0001	.0003	.0018	.05	.030	.0002	.18
%RSD	17.95	6.266	14.73	34.09	.1365	.3508	.4963	.2235
#1	-.0003	.0022	.0027	.0052	33.10	8.488	.0419	80.14
#2	-.0003	.0022	.0023	.0034	33.18	8.448	.0424	80.18
#3	-.0002	.0024	.0020	.0069	33.16	8.506	.0422	79.85
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								50.00
Low Limit								-10.00

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6120**	**.0008**	W **98.35**	**.0238**	**.9218**	**.0027**	**1.804**	**.0040**
Stddev	.0003	.0001	.19	.0002	.0038	.0015	.013	.0027
%RSD	.0449	13.98	.1922	.8159	.4120	55.24	.7283	67.64
#1	.6119	.0008	98.17	.0239	.9239	.0014	1.815	.0069
#2	.6123	.0010	98.34	.0238	.9241	.0023	1.807	.0037
#3	.6119	.0008	98.54	.0235	.9174	.0044	1.790	.0015
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			90.00					
Low Limit			-10.00					

Sample Name: 160-415-D-6-B Acquired: 8/21/2012 12:05:15 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	F 25.89	<.0000	1.432	<.0000	.0223	.0016	<.0000
Stddev	.0006	.01	.0008	.003	.0011	.0005	.0012	.0039
%RSD	652.6	.0508	148.6	.2050	4.806	2.310	72.37	34.16
#1	.0002	25.90	.0003	1.428	-.0224	.0229	.0026	-.0161
#2	.0003	25.87	-.0013	1.432	-.0241	.0222	.0003	-.0098
#3	-.0007	25.89	-.0007	1.434	-.0220	.0219	.0019	-.0088
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.00						
Low Limit		-10.00						

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0047	.0166
Stddev	.0013	.0003
%RSD	28.70	1.795
#1	.0061	.0169
#2	.0035	.0166
#3	.0044	.0163
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	4957.5
Stddev	6.6
%RSD	.13216
#1	4952.0
#2	4955.8
#3	4964.7

Sample Name: 160-415-D-8-B Acquired: 8/21/2012 12:08:52 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0594	.0049	.2577	.6217	<.0000	<.0000	F 209.5	.0000
Stddev	.0008	.0077	.0017	.0013	.0009	.0001	.0006	1.1	.0001
%RSD	193.8	12.98	35.18	.4881	.1511	53.32	16.72	.5379	522.4
#1	.0003	.0554	.0055	.2578	.6227	-.0001	-.0032	210.2	.0001
#2	-.0003	.0546	.0061	.2565	.6208	-.0002	-.0044	208.2	.0001
#3	-.0012	.0683	.0029	.2590	.6217	-.0001	-.0036	210.1	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	.0001	<.0000	5.918	3.583	.0374	F 122.7	.1012	.0022
Stddev	.0002	.0002	.0021	.008	.015	.0007	.3	.0002	.0002
%RSD	16.09	203.1	101.1	.1311	.4255	1.940	.2277	.1963	9.622
#1	.0016	.0000	.0003	5.926	3.586	.0370	122.9	.1014	.0024
#2	.0011	.0004	-.0034	5.910	3.597	.0370	122.4	.1010	.0020
#3	.0014	.0000	-.0032	5.919	3.567	.0383	122.8	.1012	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	82.39	.0436	.0877	.0016	18.59	.0026	<.0000	F 16.12	<.0000
Stddev	.15	.0005	.0008	.0009	.11	.0011	.0018	.04	.0012
%RSD	.1781	1.241	.9035	60.61	.6068	42.76	84.40	.2221	78.43
#1	82.51	.0432	.0871	.0005	18.65	.0015	-.0043	16.15	-.0008
#2	82.23	.0435	.0875	.0022	18.46	.0037	-.0014	16.08	-.0028
#3	82.44	.0443	.0886	.0020	18.66	.0025	-.0008	16.12	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-415-D-8-B Acquired: 8/21/2012 12:08:52 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.306	<.0000	.0004	<.0000	<.0000	.0031	.0103
Stddev	.002	.0068	.0009	.0010	.0078	.0024	.0001
%RSD	.1140	62.71	226.7	476.7	25.71	75.71	1.193
#1	1.307	-.0031	.0009	.0004	-.0381	.0056	.0102
#2	1.305	-.0140	-.0007	-.0013	-.0299	.0029	.0104
#3	1.305	-.0156	.0010	.0003	-.0226	.0009	.0104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4831.6
Stddev	23.5
%RSD	.48608
#1	4814.1
#2	4858.3
#3	4822.4

Sample Name: 160-415-D-9-A Acquired: 8/21/2012 12:12:28 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	11.55	.0579	.7437	.8157	.0003	<.0000	F 265.2	.0014
Stddev	.0003	.01	.0005	.0060	.0012	.0000	.0011	.7	.0001
%RSD	110.3	.1100	.8621	.8019	.1421	15.42	190.7	.2637	5.390
#1	-.0001	11.53	.0578	.7369	.8144	.0002	-.0017	265.1	.0013
#2	-.0001	11.55	.0584	.7482	.8163	.0003	-.0004	265.9	.0015
#3	-.0006	11.56	.0574	.7459	.8165	.0003	.0004	264.5	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0107	.0176	.0539	61.14	10.66	.0488	F 90.65	1.475	.0034
Stddev	.0003	.0004	.0008	.08	.03	.0005	.20	.002	.0001
%RSD	2.463	2.063	1.542	.1334	.2347	.9959	.2245	.1326	2.286
#1	.0107	.0172	.0545	61.05	10.64	.0488	90.43	1.473	.0035
#2	.0105	.0176	.0543	61.21	10.69	.0492	90.83	1.476	.0035
#3	.0110	.0179	.0530	61.16	10.66	.0483	90.68	1.476	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 154.7	.0727	.9328	.1068	21.23	.0033	.0017	F 39.07	.0075
Stddev	.9	.0001	.0060	.0015	.13	.0016	.0016	.01	.0003
%RSD	.5820	.1904	.6394	1.386	.6311	48.88	94.06	.0327	4.285
#1	155.8	.0728	.9330	.1052	21.15	.0028	.0029	39.07	.0072
#2	154.2	.0727	.9386	.1081	21.38	.0052	-.0001	39.08	.0078
#3	154.2	.0725	.9267	.1072	21.14	.0021	.0023	39.06	.0075
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-415-D-9-A Acquired: 8/21/2012 12:12:28 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.011	<.0000	.1735	.0007	.0072	.0240	6.344
Stddev	.002	.0030	.0012	.0013	.0096	.0015	.028
%RSD	.1449	9.782	.6978	192.8	132.8	6.175	.4397
#1	1.010	-.0275	.1737	.0022	-.0035	.0225	6.332
#2	1.012	-.0325	.1746	-.0001	.0101	.0239	6.376
#3	1.013	-.0330	.1722	-.0001	.0150	.0255	6.325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4965.8
Stddev	9.6
%RSD	.19282
#1	4975.0
#2	4955.9
#3	4966.5

Sample Name: 160-415-D-10-B Acquired: 8/21/2012 12:16:09 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	5.303	.0048	.0453	.2037	.0001	<.0000	F 129.3	.0002
Stddev	.0001	.010	.0024	.0013	.0005	.0001	.0011	.2	.0001
%RSD	91.14	.1886	50.76	2.947	.2509	75.93	18.71	.1265	53.04
#1	-.0001	5.293	.0075	.0456	.2031	.0000	-.0065	129.5	.0001
#2	-.0001	5.305	.0029	.0439	.2038	.0001	-.0059	129.2	.0002
#3	.0000	5.313	.0039	.0465	.2041	.0001	-.0045	129.1	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020	.0127	.0011	4.485	3.641	.0233	F 56.72	.0834	.0379
Stddev	.0003	.0003	.0007	.008	.032	.0009	.13	.0004	.0001
%RSD	15.57	2.573	68.91	.1843	.8822	3.753	.2319	.4712	.3528
#1	.0022	.0124	.0014	4.476	3.610	.0227	56.56	.0830	.0380
#2	.0016	.0130	.0016	4.486	3.674	.0229	56.80	.0838	.0378
#3	.0020	.0127	.0002	4.493	3.638	.0243	56.78	.0834	.0380
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.67	.0143	.2465	.0027	7.515	.0034	.0022	F 16.01	<.0000
Stddev	.07	.0001	.0013	.0001	.029	.0021	.0012	.04	.0011
%RSD	.2918	.9707	.5209	3.184	.3793	63.16	51.96	.2645	64.93
#1	23.59	.0143	.2459	.0026	7.545	.0046	.0030	15.97	-.0017
#2	23.67	.0141	.2479	.0028	7.488	.0046	.0009	16.03	-.0027
#3	23.73	.0144	.2456	.0026	7.513	.0009	.0028	16.05	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-415-D-10-B Acquired: 8/21/2012 12:16:09 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6968	<.0000	.0316	.0012	<.0000	.0120	.0414
Stddev	.0022	.0045	.0009	.0008	.0090	.0021	.0007
%RSD	.3157	43.53	2.994	68.13	15.59	17.27	1.661
#1	.6945	-.0155	.0315	.0017	-.0475	.0140	.0421
#2	.6969	-.0081	.0307	.0016	-.0640	.0099	.0407
#3	.6989	-.0074	.0326	.0003	-.0619	.0122	.0414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5073.8
Stddev	7.3
%RSD	.14324
#1	5079.0
#2	5065.5
#3	5077.0

Sample Name: MB 160-8952/1-A Acquired: 8/21/2012 12:19:45 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**<.0000**	**<.0000**	**.0011**	**<.0000**	**<.0000**	**<.0000**	**.0311**	**<.0000**
Stddev	.0004	.0041	.0022	.0022	.0001	.0000	.0010	.0061	.0001
%RSD	157.1	31.98	1089.	193.2	82.76	22.07	37.71	19.58	91.35
#1	.0001	-.0118	-.0024	-.0009	.0000	-.0001	-.0025	.0367	.0000
#2	-.0001	-.0093	.0000	.0035	-.0002	-.0001	-.0036	.0246	-.0001
#3	.0007	-.0173	.0019	.0008	-.0003	.0000	-.0017	.0318	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**<.0000**	**<.0000**	**.0029**	**<.0000**	**.0016**	**.0229**	**.0001**	**.0002**
Stddev	.0003	.0003	.0028	.0006	.0118	.0014	.0084	.0003	.0004
%RSD	1108.	20.53	326.6	18.88	13.67	86.98	36.96	498.9	207.0
#1	.0000	-.0016	.0023	.0030	-.0839	.0006	.0161	.0004	.0001
#2	-.0002	-.0011	-.0020	.0035	-.0988	.0032	.0323	-.0002	-.0001
#3	.0003	-.0013	-.0029	.0024	-.0756	.0011	.0202	.0000	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0724**	**<.0000**	**<.0000**	**<.0000**	**.0044**	**.0003**	**<.0000**	**.0372**	**<.0000**
Stddev	.0103	.0000	.0011	.0008	.0024	.0004	.0029	.0019	.0004
%RSD	14.18	.6943	256.0	38.31	55.12	113.6	70.99	5.074	138.2
#1	.0805	-.0004	-.0010	-.0012	.0023	.0000	-.0028	.0350	-.0006
#2	.0757	-.0004	.0008	-.0025	.0071	.0002	-.0019	.0384	.0002
#3	.0608	-.0004	-.0011	-.0029	.0038	.0007	-.0073	.0382	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: MB 160-8952/1-A Acquired: 8/21/2012 12:19:45 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0002	<.0000	<.0000	<.0000	.0064
Stddev	.0000	.0005	.0008	.0003	.0063	.0018	.0002
%RSD	124.5	3.815	478.3	32.43	37.52	351.2	3.003
#1	.0000	-.0125	-.0002	-.0007	-.0218	-.0007	.0066
#2	.0000	-.0128	-.0004	-.0012	-.0097	-.0022	.0063
#3	.0000	-.0135	.0011	-.0013	-.0187	.0014	.0064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5006.5
Stddev	37.5
%RSD	.74862
#1	5048.6
#2	4993.8
#3	4976.9

Sample Name: LCS 160-8952/2-A Acquired: 8/21/2012 12:23:27 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1021**	**10.46**	**1.005**	**.9796**	**1.017**	**1.022**	**1.036**	**10.49**	**1.059**
Stddev	.0008	.01	.005	.0057	.002	.002	.003	.02	.001
%RSD	.7712	.0574	.4871	.5801	.1529	.2052	.2391	.2151	.1303
#1	.1029	10.46	1.001	.9785	1.017	1.020	1.036	10.47	1.059
#2	.1020	10.47	1.004	.9745	1.016	1.021	1.033	10.47	1.058
#3	.1013	10.46	1.010	.9857	1.019	1.024	1.038	10.51	1.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.026**	**1.060**	**1.082**	**10.30**	**9.862**	**.9760**	**10.55**	**1.064**	**1.054**
Stddev	.004	.001	.004	.02	.013	.0022	.01	.001	.002
%RSD	.3638	.1197	.3648	.1662	.1327	.2275	.1266	.0872	.2183
#1	1.024	1.062	1.086	10.29	9.847	.9755	10.53	1.065	1.052
#2	1.023	1.059	1.081	10.29	9.865	.9741	10.56	1.064	1.053
#3	1.030	1.060	1.079	10.32	9.873	.9784	10.54	1.064	1.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.714**	**1.112**	**.9685**	**1.078**	**9.602**	**.5323**	**.9958**	F **.0535**	**1.060**
Stddev	.026	.003	.0020	.003	.009	.0027	.0033	.0117	.002
%RSD	.2647	.2365	.2023	.2420	.0942	.5110	.3273	21.77	.1811
#1	9.695	1.113	.9664	1.077	9.591	.5295	.9952	.0401	1.059
#2	9.704	1.109	.9687	1.077	9.607	.5322	.9929	.0603	1.059
#3	9.743	1.114	.9703	1.081	9.606	.5350	.9993	.0602	1.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-8952/2-A Acquired: 8/21/2012 12:23:27 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.049	1.049	1.029	.2174	.9200	.9638	1.026
Stddev	.001	.003	.003	.0019	.0084	.0051	.003
%RSD	.0937	.2439	.2654	.8572	.9149	.5298	.2739
#1	1.048	1.049	1.026	.2160	.9157	.9640	1.025
#2	1.049	1.052	1.030	.2196	.9297	.9586	1.024
#3	1.050	1.047	1.030	.2167	.9146	.9688	1.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4876.8
Stddev	13.1
%RSD	.26804
#1	4881.7
#2	4886.7
#3	4862.0

Sample Name: 160-420-D-1-D Acquired: 8/21/2012 12:26:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	1.982	.0245	.0355	.1937	.0002	<.0000	30.79	.0000
Stddev	.0001	.018	.0017	.0017	.0009	.0001	.0007	1.02	.0003
%RSD	102.4	.8946	6.864	4.691	.4391	32.80	15.93	3.329	1081.
#1	-.0002	1.992	.0237	.0349	.1930	.0003	-.0036	29.94	.0002
#2	-.0001	1.962	.0234	.0342	.1936	.0002	-.0044	30.49	-.0003
#3	.0000	1.993	.0264	.0374	.1947	.0002	-.0050	31.93	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0149	.0032	.0038	12.81	1.296	.0055	10.07	.4267	.0047
Stddev	.0005	.0002	.0024	.05	.010	.0004	.02	.0031	.0004
%RSD	3.123	7.625	63.18	.3717	.7639	7.227	.2113	.7181	8.083
#1	.0149	.0032	.0066	12.78	1.298	.0057	10.09	.4243	.0043
#2	.0145	.0029	.0029	12.79	1.286	.0050	10.05	.4257	.0047
#3	.0154	.0034	.0020	12.86	1.305	.0056	10.08	.4301	.0051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.00	.0196	.1684	.0047	.4182	.0017	<.0000	7.332	.0002
Stddev	.05	.0006	.0060	.0017	.0168	.0030	.0017	.040	.0009
%RSD	.4705	2.909	3.561	36.84	4.027	173.4	562.5	.5399	405.7
#1	10.96	.0193	.1642	.0030	.4050	-.0015	.0005	7.307	.0005
#2	10.98	.0193	.1658	.0065	.4124	.0043	-.0022	7.311	-.0008
#3	11.06	.0203	.1753	.0046	.4371	.0023	.0008	7.378	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-1-D Acquired: 8/21/2012 12:26:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0907	<.0000	.0613	.0009	<.0000	.0068	.0316
Stddev	.0004	.0015	.0002	.0010	.0061	.0004	.0011
%RSD	.4579	9.365	.3324	119.6	14.07	5.193	3.438
#1	.0904	-.0174	.0615	-.0003	-.0370	.0064	.0306
#2	.0906	-.0162	.0613	.0015	-.0446	.0067	.0314
#3	.0912	-.0144	.0611	.0014	-.0491	.0071	.0328
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5119.7
Stddev	55.3
%RSD	1.0803
#1	5057.0
#2	5161.7
#3	5140.3

Sample Name: 160-420-D-1-D SD Acquired: 8/21/2012 12:30:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.4404**	**.0060**	**.0079**	**.0437**	**<.0000**	**<.0000**	**6.662**	**<.0000**
Stddev	.0003	.0036	.0018	.0017	.0000	.0001	.0014	.068	.0002
%RSD	171.4	.8185	29.50	21.85	.0984	280.8	25.35	1.025	344.0
#1	-.0002	.4445	.0052	.0090	.0437	.0000	-.0045	6.585	-.0001
#2	.0004	.4376	.0048	.0059	.0437	.0000	-.0070	6.683	-.0002
#3	.0003	.4392	.0080	.0089	.0436	-.0001	-.0048	6.716	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**<.0000**	**<.0000**	**2.910**	**.2479**	**.0026**	**2.287**	**.0960**	**.0009**
Stddev	.0002	.0001	.0005	.017	.0422	.0005	.027	.0006	.0001
%RSD	4.893	25.49	52.82	.5824	17.04	18.71	1.200	.5873	7.683
#1	.0033	-.0006	-.0013	2.896	.2190	.0020	2.259	.0958	.0008
#2	.0031	-.0003	-.0004	2.929	.2283	.0029	2.314	.0966	.0010
#3	.0030	-.0004	-.0012	2.905	.2963	.0028	2.288	.0955	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.489**	**.0040**	**.0340**	**.0010**	**.0983**	**<.0000**	**<.0000**	**1.626**	**<.0000**
Stddev	.008	.0002	.0028	.0005	.0033	.0010	.0023	.015	.0000
%RSD	.3193	4.700	8.111	46.03	3.397	935.6	150.4	.9236	100.7
#1	2.491	.0038	.0309	.0005	.0951	-.0012	-.0040	1.622	.0000
#2	2.495	.0040	.0361	.0012	.0980	.0004	-.0012	1.642	-.0001
#3	2.480	.0042	.0350	.0013	.1017	.0005	.0006	1.613	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-1-D SD Acquired: 8/21/2012 12:30:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0204	<.0000	.0132	.0009	<.0000	.0008	.0114
Stddev	.0000	.0025	.0005	.0014	.0164	.0029	.0001
%RSD	.2031	17.76	3.913	157.2	120.2	356.5	.9099
#1	.0204	-.0111	.0135	.0022	-.0061	.0023	.0113
#2	.0204	-.0155	.0135	-.0006	-.0324	-.0025	.0115
#3	.0203	-.0154	.0126	.0010	-.0024	.0026	.0115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4948.4
Stddev	56.3
%RSD	1.1384
#1	5012.3
#2	4926.8
#3	4906.0

Sample Name: CCV Acquired: 8/21/2012 12:34:04 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9437**	**51.43**	**5.074**	**4.847**	**5.102**	**5.109**	**4.965**	**24.41**	**5.103**
Stddev	.0078	.25	.032	.026	.024	.021	.035	.14	.031
%RSD	.8312	.4800	.6287	.5433	.4713	.4103	.7046	.5648	.6063
#1	.9500	51.54	5.098	4.849	5.111	5.115	4.998	24.52	5.128
#2	.9463	51.61	5.086	4.873	5.120	5.126	4.971	24.47	5.113
#3	.9349	51.15	5.037	4.820	5.075	5.085	4.928	24.26	5.068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.746**	**5.001**	**5.111**	**50.09**	**49.66**	**4.783**	**25.69**	**5.151**	**4.880**
Stddev	.033	.030	.039	.19	.22	.021	.15	.024	.030
%RSD	.6899	.5930	.7698	.3849	.4456	.4485	.5957	.4711	.6212
#1	4.771	5.031	5.144	50.17	49.76	4.792	25.74	5.158	4.908
#2	4.758	5.001	5.121	50.23	49.80	4.799	25.82	5.171	4.885
#3	4.709	4.972	5.067	49.87	49.40	4.759	25.52	5.124	4.848
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.56**	**5.130**	**4.814**	**5.051**	**49.20**	**1.002**	**4.982**	**4.697**	**5.107**
Stddev	.24	.029	.041	.031	.32	.011	.039	.026	.033
%RSD	.4961	.5640	.8407	.6057	.6415	1.080	.7792	.5634	.6392
#1	48.67	5.153	4.852	5.073	49.45	1.013	5.012	4.722	5.131
#2	48.73	5.141	4.819	5.063	49.31	1.001	4.996	4.700	5.121
#3	48.29	5.098	4.772	5.016	48.85	.9917	4.938	4.669	5.070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 12:34:04 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.139**	**4.967**	**5.087**	**4.857**	**4.643**	**4.813**	**4.912**
Stddev	.031	.018	.019	.033	.045	.024	.032
%RSD	.6065	.3553	.3664	.6801	.9809	.5038	.6405
#1	5.174	4.976	5.097	4.884	4.676	4.825	4.937
#2	5.117	4.978	5.099	4.866	4.663	4.829	4.921
#3	5.125	4.946	5.066	4.820	4.591	4.785	4.877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**5035.6**
Stddev	29.4
%RSD	.58410
#1	5010.6
#2	5028.2
#3	5068.0

Sample Name: CCB Acquired: 8/21/2012 12:37:23 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0008**	**.0020**	**.0127**	**.0011**	**.0011**	**<.0000**	**.0028**	**.0004**
Stddev	.0005	.0184	.0010	.0030	.0009	.0010	.0031	.0027	.0005
%RSD	1741.	2424.	50.18	23.90	82.19	89.95	89.11	96.63	126.0
#1	.0006	.0210	.0017	.0154	.0021	.0022	.0001	.0009	.0001
#2	-.0005	-.0036	.0011	.0134	.0007	.0005	-.0053	.0016	.0001
#3	.0000	-.0151	.0030	.0094	.0005	.0005	-.0052	.0060	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**<.0000**	**.0002**	**.0107**	**<.0000**	**.0028**	**.0199**	**.0008**	**.0082**
Stddev	.0004	.0006	.0007	.0087	.0159	.0009	.0037	.0008	.0010
%RSD	93.13	50.67	313.4	81.01	34.18	32.31	18.58	102.9	11.76
#1	.0002	-.0008	.0001	.0207	-.0282	.0034	.0176	.0017	.0073
#2	.0002	-.0010	-.0004	.0059	-.0559	.0032	.0180	.0006	.0079
#3	.0010	-.0019	.0011	.0055	-.0556	.0018	.0242	.0001	.0092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0265**	**.0003**	**<.0000**	**<.0000**	**.0067**	**<.0000**	**.0011**	**.0025**	**.0017**
Stddev	.0112	.0002	.0010	.0003	.0035	.0021	.0026	.0010	.0005
%RSD	42.30	71.45	148.7	86.50	53.06	681.0	230.6	39.61	28.77
#1	.0374	.0001	-.0012	-.0003	.0050	-.0021	-.0019	.0035	.0016
#2	.0150	.0003	.0005	-.0008	.0043	-.0009	.0027	.0015	.0013
#3	.0270	.0006	-.0013	-.0001	.0108	.0020	.0026	.0025	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 12:37:23 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	<.0000	.0019	.0031	<.0000	.0025	.0009
Stddev	.0009	.0063	.0010	.0019	.0107	.0014	.0002
%RSD	98.29	52.55	51.58	61.22	53.73	57.23	22.24
#1	.0020	-.0116	.0030	.0039	-.0250	.0027	.0007
#2	.0005	-.0058	.0012	.0010	-.0269	.0038	.0008
#3	.0003	-.0183	.0014	.0045	-.0076	.0010	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5076.6
Stddev	37.8
%RSD	.74439
#1	5120.2
#2	5052.3
#3	5057.4

Sample Name: 160-420-D-1-E MS Acquired: 8/21/2012 12:41:06 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0199**	**4.965**	**.2283**	**.2220**	**.3929**	**.1882**	**.2034**	**33.86**
Stddev	.0003	.031	.0094	.0041	.0021	.0014	.0069	1.09
%RSD	1.596	.6305	4.119	1.863	.5364	.7507	3.388	3.204
#1	.0202	4.962	.2189	.2220	.3914	.1875	.1972	32.76
#2	.0198	4.936	.2283	.2178	.3920	.1872	.2023	33.90
#3	.0196	4.998	.2377	.2260	.3953	.1898	.2108	34.93
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2127**	**.2174**	**.2060**	**.2206**	**14.88**	**3.318**	**.1853**	**12.56**
Stddev	.0070	.0069	.0032	.0066	.10	.024	.0018	.08
%RSD	3.305	3.190	1.560	2.987	.6654	.7338	.9570	.6458
#1	.2055	.2103	.2025	.2141	14.80	3.307	.1837	12.48
#2	.2132	.2175	.2066	.2204	14.84	3.302	.1851	12.54
#3	.2195	.2242	.2088	.2272	14.99	3.346	.1872	12.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6349**	**.2120**	**13.06**	**.2419**	**.3661**	**.2202**	**2.355**	**.1076**
Stddev	.0022	.0067	.10	.0072	.0128	.0069	.077	.0019
%RSD	.3480	3.145	.7488	2.989	3.501	3.135	3.290	1.751
#1	.6332	.2051	12.98	.2347	.3541	.2126	2.278	.1056
#2	.6341	.2124	13.03	.2417	.3645	.2219	2.355	.1078
#3	.6374	.2184	13.17	.2492	.3796	.2260	2.433	.1094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-420-D-1-E MS Acquired: 8/21/2012 12:41:06 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1915	W 9.490	.2055	.2845	.1918	.2539	.0450	.1436
Stddev	.0041	.066	.0062	.0015	.0039	.0010	.0015	.0054
%RSD	2.151	.6907	3.019	.5441	2.029	.4011	3.393	3.770
#1	.1876	9.424	.1993	.2837	.1882	.2544	.0435	.1385
#2	.1910	9.492	.2054	.2837	.1959	.2527	.0466	.1430
#3	.1958	9.555	.2117	.2863	.1912	.2546	.0450	.1493
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		9.000						
Low Limit		-10.00						

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.1819	.2367
Stddev	.0013	.0081
%RSD	.7357	3.437
#1	.1812	.2283
#2	.1835	.2370
#3	.1812	.2446
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	4694.9
Stddev	55.0
%RSD	1.1723
#1	4757.4
#2	4673.7
#3	4653.7

Sample Name: 160-420-D-1-F MSD Acquired: 8/21/2012 12:44:34 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0203**	**6.974**	**.2294**	**.2356**	**.4450**	**.1990**	**.2008**	**34.42**	**.2105**
Stddev	.0008	.054	.0030	.0030	.0037	.0016	.0017	.23	.0015
%RSD	3.856	.7706	1.291	1.293	.8406	.8001	.8316	.6566	.7256
#1	.0212	7.036	.2328	.2385	.4493	.2009	.2023	34.54	.2116
#2	.0197	6.938	.2271	.2325	.4432	.1981	.1990	34.16	.2087
#3	.0200	6.949	.2284	.2358	.4425	.1981	.2011	34.56	.2111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2176**	**.2130**	**.2162**	**17.04**	**3.940**	**.1983**	**13.69**	**.6872**	**.2114**
Stddev	.0017	.0018	.0017	.15	.023	.0030	.14	.0066	.0014
%RSD	.7736	.8631	.7666	.8640	.5730	1.513	1.036	.9631	.6769
#1	.2185	.2151	.2181	17.21	3.965	.2018	13.85	.6947	.2126
#2	.2156	.2122	.2156	16.96	3.924	.1966	13.61	.6820	.2098
#3	.2186	.2117	.2149	16.95	3.929	.1966	13.60	.6850	.2118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.26**	**.2411**	**.3754**	**.2187**	**2.364**	**.1016**	**.1883**	F **12.20**	**.1982**
Stddev	.11	.0015	.0002	.0019	.014	.0018	.0023	.12	.0009
%RSD	.7918	.6272	.0624	.8625	.5703	1.745	1.219	.9898	.4785
#1	14.39	.2416	.3751	.2206	2.376	.1036	.1899	12.34	.1993
#2	14.20	.2394	.3756	.2168	2.349	.1001	.1857	12.16	.1975
#3	14.18	.2422	.3753	.2188	2.366	.1012	.1894	12.10	.1978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-1-F MSD Acquired: 8/21/2012 12:44:34 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3110	.1863	.3140	.0434	.1451	.1977	.2391
Stddev	.0029	.0041	.0031	.0004	.0056	.0020	.0008
%RSD	.9451	2.223	.9868	.8744	3.858	1.012	.3350
#1	.3144	.1910	.3175	.0438	.1434	.1996	.2397
#2	.3096	.1830	.3115	.0433	.1514	.1980	.2382
#3	.3091	.1851	.3131	.0431	.1406	.1956	.2395
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4855.9
Stddev	52.2
%RSD	1.0760
#1	4795.6
#2	4885.8
#3	4886.3

Sample Name: 160-420-D-2-B Acquired: 8/21/2012 12:48:03 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.2330	.0017	.0287	.0472	.0000	<.0000	32.72	<.0000
Stddev	.0003	.0056	.0009	.0035	.0002	.0000	.0021	1.06	.0001
%RSD	164.0	2.422	52.15	12.12	.4423	831.9	94.72	3.226	152.6
#1	.0000	.2297	.0016	.0259	.0469	.0001	-.0004	31.64	.0000
#2	.0004	.2297	.0026	.0277	.0472	.0000	-.0018	32.78	-.0002
#3	.0000	.2395	.0008	.0326	.0474	.0000	-.0045	33.75	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0019	<.0000	<.0000	.3823	.9273	.0067	4.507	.1225	.0009
Stddev	.0002	.0002	.0022	.0013	.0255	.0011	.030	.0009	.0001
%RSD	11.49	35.44	532.1	.3457	2.746	15.92	.6641	.7587	9.495
#1	.0021	-.0006	.0000	.3814	.9419	.0077	4.472	.1222	.0008
#2	.0017	-.0005	-.0027	.3816	.8979	.0056	4.524	.1218	.0009
#3	.0020	-.0009	.0015	.3838	.9420	.0070	4.525	.1236	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.360	.0041	.0647	.0004	5.360	.0034	<.0000	2.013	<.0000
Stddev	.051	.0003	.0014	.0000	.216	.0026	.0030	.008	.0004
%RSD	.5392	7.226	2.217	9.159	4.035	76.38	126.8	.3884	22.60
#1	9.309	.0037	.0631	.0004	5.120	.0030	-.0001	2.007	-.0013
#2	9.363	.0041	.0651	.0004	5.420	.0062	-.0057	2.010	-.0016
#3	9.409	.0043	.0659	.0005	5.540	.0010	-.0013	2.022	-.0021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-2-B Acquired: 8/21/2012 12:48:03 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0591	<.0000	.0041	<.0000	<.0000	<.0000	.0055
Stddev	.0002	.0035	.0011	.0015	.0217	.0023	.0002
%RSD	.3463	23.13	26.17	228.1	50.62	233.6	4.412
#1	.0591	-.0178	.0053	-.0024	-.0523	.0012	.0053
#2	.0590	-.0113	.0038	.0004	-.0581	-.0008	.0058
#3	.0594	-.0169	.0032	.0000	-.0180	-.0033	.0056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4713.3
Stddev	19.0
%RSD	.40311
#1	4728.6
#2	4719.4
#3	4692.0

Sample Name: 160-420-D-3-B Acquired: 8/21/2012 12:51:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**11.73**	**.0164**	**.0425**	**1.394**	**.0007**	**.0007**	F **140.5**	**.0001**
Stddev	.0004	.03	.0003	.0026	.004	.0000	.0011	1.0	.0001
%RSD	216.3	.2763	1.626	6.237	.2793	3.400	163.3	.7148	93.40
#1	.0004	11.76	.0164	.0395	1.395	.0007	.0017	139.6	.0000
#2	.0005	11.70	.0161	.0445	1.389	.0008	-.0005	140.2	.0001
#3	-.0003	11.73	.0166	.0433	1.396	.0008	.0008	141.6	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0241**	**.0206**	**.0266**	**67.72**	**3.449**	**.0177**	**26.44**	**2.230**	**.0012**
Stddev	.0001	.0007	.0014	.25	.036	.0001	.08	.005	.0003
%RSD	.5944	3.435	5.143	.3710	1.036	.6380	.2911	.2443	29.73
#1	.0242	.0198	.0279	67.79	3.470	.0178	26.44	2.232	.0009
#2	.0242	.0210	.0269	67.44	3.408	.0176	26.36	2.224	.0016
#3	.0239	.0210	.0252	67.92	3.469	.0178	26.51	2.234	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.23**	**.0615**	**1.045**	**.0341**	**3.297**	**.0048**	**<.0000**	F **15.29**	**<.0000**
Stddev	.10	.0006	.010	.0006	.034	.0014	.0012	.12	.0004
%RSD	.3581	.9900	.9520	1.769	1.029	30.15	2432.	.8109	37.15
#1	28.26	.0611	1.035	.0342	3.269	.0033	-.0015	15.43	-.0013
#2	28.11	.0612	1.045	.0335	3.289	.0062	.0009	15.23	-.0015
#3	28.30	.0622	1.055	.0347	3.335	.0048	.0004	15.21	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-3-B Acquired: 8/21/2012 12:51:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2796	<.0000	.0731	.0023	<.0000	.0319	.1442
Stddev	.0012	.0013	.0002	.0009	.0062	.0014	.0012
%RSD	.4137	8.060	.2906	37.17	19.68	4.445	.8204
#1	.2799	-.0159	.0730	.0014	-.0262	.0334	.1432
#2	.2783	-.0154	.0731	.0026	-.0382	.0317	.1439
#3	.2805	-.0179	.0734	.0030	-.0298	.0306	.1455
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5060.0
Stddev	2.5
%RSD	.04980
#1	5062.9
#2	5058.3
#3	5058.8

Sample Name: 160-420-D-4-B Acquired: 8/21/2012 12:55:14 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	7.014	.0017	.0414	.1465	.0002	<.0000	F 59.19	.0008
Stddev	.0004	.017	.0018	.0012	.0001	.0000	.0012	.47	.0001
%RSD	699.4	.2388	107.3	3.010	.0909	12.85	35.45	.7985	17.09
#1	.0001	6.996	.0036	.0400	.1464	.0003	-.0021	59.23	.0009
#2	-.0006	7.017	.0000	.0424	.1466	.0002	-.0034	58.70	.0008
#3	.0003	7.029	.0014	.0418	.1466	.0002	-.0044	59.64	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062	.0137	.0197	6.411	2.342	.0139	14.32	.3401	.0011
Stddev	.0002	.0003	.0005	.004	.017	.0009	.03	.0001	.0002
%RSD	2.792	2.025	2.759	.0572	.7377	6.722	.2321	.0419	19.20
#1	.0064	.0140	.0191	6.407	2.338	.0128	14.35	.3399	.0011
#2	.0061	.0136	.0202	6.414	2.327	.0146	14.28	.3402	.0009
#3	.0062	.0135	.0196	6.413	2.361	.0142	14.33	.3402	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	62.40	.0203	.1442	.0223	2.567	.0030	<.0000	F 13.35	<.0000
Stddev	.07	.0005	.0007	.0006	.018	.0016	.0018	.03	.0010
%RSD	.1144	2.217	.4928	2.706	.7025	52.89	1004.	.1963	119.6
#1	62.32	.0199	.1434	.0220	2.576	.0044	.0003	13.37	-.0011
#2	62.43	.0208	.1445	.0219	2.546	.0013	.0013	13.35	-.0016
#3	62.45	.0203	.1447	.0230	2.578	.0031	-.0022	13.32	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-4-B Acquired: 8/21/2012 12:55:14 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1292	<.0000	.0857	<.0000	<.0000	.0151	.0934
Stddev	.0001	.0059	.0006	.0006	.0104	.0013	.0008
%RSD	.0676	55.93	.6692	58.83	22.62	8.311	.8829
#1	.1291	-.0041	.0856	-.0012	-.0490	.0136	.0936
#2	.1293	-.0157	.0863	-.0004	-.0543	.0159	.0924
#3	.1293	-.0117	.0851	-.0016	-.0343	.0157	.0940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4869.3
Stddev	45.1
%RSD	.92559
#1	4818.2
#2	4903.6
#3	4886.0

Sample Name: 160-437-D-1-A Acquired: 8/21/2012 12:58:49 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0035	.0007	.0414	.1501	<.0000	<.0000	38.52	<.0000
Stddev	.0006	.0032	.0013	.0029	.0008	.0000	.0042	.13	.0001
%RSD	550.4	91.38	182.3	6.889	.5333	135.6	292.0	.3331	140.1
#1	.0001	.0007	-.0005	.0396	.1492	.0000	.0028	38.43	.0000
#2	.0004	.0028	.0022	.0447	.1502	.0000	-.0016	38.46	.0000
#3	-.0008	.0069	.0006	.0400	.1508	.0000	-.0056	38.66	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	<.0000	.0015	1.544	1.328	.0056	10.81	1.341	.0004
Stddev	.0003	.0003	.0014	.009	.018	.0000	.08	.007	.0001
%RSD	10.86	38.16	94.09	.6013	1.340	.5391	.7764	.5066	17.32
#1	.0023	-.0004	.0000	1.533	1.319	.0056	10.73	1.335	.0005
#2	.0024	-.0009	.0017	1.548	1.317	.0056	10.81	1.340	.0004
#3	.0028	-.0007	.0029	1.551	1.349	.0056	10.90	1.348	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.916	.0061	.0290	<.0000	.3760	.0012	<.0000	3.117	<.0000
Stddev	.050	.0003	.0005	.0010	.0040	.0003	.0019	.025	.0003
%RSD	.5065	4.681	1.635	90.07	1.063	23.17	350.1	.7998	27.71
#1	9.867	.0063	.0291	-.0016	.3741	.0011	.0017	3.092	-.0007
#2	9.913	.0058	.0285	.0000	.3733	.0010	-.0020	3.119	-.0012
#3	9.968	.0062	.0295	-.0017	.3806	.0015	-.0013	3.141	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-1-A Acquired: 8/21/2012 12:58:49 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1320	<.0000	<.0000	.0020	<.0000	.0008	.0042
Stddev	.0007	.0024	.0012	.0014	.0057	.0039	.0002
%RSD	.5497	23.02	437.4	67.11	14.71	506.1	4.195
#1	.1312	-.0087	-.0016	.0025	-.0319	-.0028	.0044
#2	.1323	-.0132	.0003	.0005	-.0411	.0049	.0042
#3	.1325	-.0094	.0005	.0031	-.0422	.0002	.0041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4819.8
Stddev	30.4
%RSD	.62995
#1	4838.6
#2	4835.9
#3	4784.7

Sample Name: 160-437-D-2-A Acquired: 8/21/2012 13:02:25 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0067	.0000	.2650	.3824	<.0000	<.0000	F 50.88	<.0000
Stddev	.0006	.0041	.0017	.0009	.0007	.0000	.0022	.26	.0001
%RSD	646.1	61.46	12430.	.3410	.1849	7.919	188.7	.5188	76.10
#1	-.0004	.0078	-.0006	.2641	.3820	-.0001	.0010	50.61	-.0003
#2	-.0001	.0021	.0019	.2651	.3820	.0000	-.0034	50.89	-.0003
#3	.0007	.0100	-.0013	.2659	.3832	-.0001	-.0012	51.14	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0013	<.0000	<.0000	5.948	3.855	.0099	16.61	.0915	.0002
Stddev	.0001	.0002	.0006	.006	.016	.0003	.04	.0005	.0002
%RSD	7.944	128.4	56.48	.1067	.4251	3.056	.2338	.5703	98.16
#1	.0013	.0000	-.0004	5.941	3.846	.0098	16.57	.0912	.0001
#2	.0014	-.0001	-.0014	5.949	3.846	.0102	16.61	.0912	.0003
#3	.0012	-.0004	-.0014	5.954	3.874	.0096	16.64	.0921	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	58.46	.0035	.1246	<.0000	.3465	.0014	<.0000	3.196	<.0000
Stddev	.10	.0002	.0013	.0009	.0040	.0027	.0003	.012	.0003
%RSD	.1780	7.106	1.055	143.0	1.141	189.9	11.68	.3839	90.19
#1	58.35	.0033	.1261	.0001	.3423	-.0002	-.0027	3.186	-.0004
#2	58.45	.0038	.1237	-.0003	.3471	.0046	-.0023	3.192	-.0007
#3	58.56	.0034	.1239	-.0017	.3501	-.0001	-.0022	3.209	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-2-A Acquired: 8/21/2012 13:02:25 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1564	<.0000	.0008	<.0000	<.0000	<.0000	.0027
Stddev	.0005	.0040	.0010	.0022	.0087	.0019	.0001
%RSD	.2962	41.92	133.2	196.0	16.75	247.0	2.874
#1	.1563	-.0128	-.0003	.0012	-.0506	.0013	.0028
#2	.1560	-.0105	.0009	-.0030	-.0615	-.0025	.0027
#3	.1569	-.0051	.0017	-.0015	-.0442	-.0011	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4724.8
Stddev	16.9
%RSD	.35735
#1	4744.0
#2	4718.0
#3	4712.3

Sample Name: 160-437-D-3-A Acquired: 8/21/2012 13:06:02 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0479**	**.0391**	**.2086**	**.4292**	**<.0000**	**<.0000**	**30.53**	**<.0000**
Stddev	.0003	.0028	.0023	.0012	.0020	.0000	.0019	.16	.0001
%RSD	544.6	5.858	5.974	.5698	.4569	36.00	99.93	.5123	24.63
#1	-.0002	.0509	.0403	.2075	.4270	-.0001	-.0040	30.71	-.0004
#2	.0004	.0454	.0405	.2083	.4301	.0000	-.0002	30.47	-.0002
#3	.0000	.0474	.0364	.2099	.4305	-.0001	-.0016	30.41	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0004**	**.0030**	**8.897**	**9.004**	**.0125**	**18.06**	**.0566**	**.0004**
Stddev	.0001	.0006	.0007	.030	.015	.0007	.02	.0004	.0002
%RSD	15.41	130.3	22.51	.3372	.1653	5.897	.1304	.7233	38.48
#1	.0011	-.0002	.0025	8.863	9.001	.0129	18.04	.0571	.0003
#2	.0008	.0005	.0038	8.912	8.991	.0117	18.09	.0565	.0006
#3	.0010	.0010	.0028	8.918	9.021	.0130	18.04	.0563	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.21**	**.0035**	**.2506**	**<.0000**	**.2033**	**.0022**	**<.0000**	**4.895**	**<.0000**
Stddev	.10	.0003	.0025	.0002	.0025	.0027	.0014	.033	.0002
%RSD	.4401	7.695	1.001	25.28	1.229	125.7	62.35	.6692	22.50
#1	22.10	.0036	.2529	-.0006	.2047	.0026	-.0009	4.857	-.0009
#2	22.26	.0036	.2510	-.0006	.2048	.0047	-.0037	4.908	-.0006
#3	22.28	.0032	.2480	-.0009	.2004	-.0008	-.0023	4.919	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-3-A Acquired: 8/21/2012 13:06:02 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3961	<.0000	.0016	.0004	<.0000	.0036	.0048
Stddev	.0013	.0024	.0002	.0008	.0031	.0015	.0003
%RSD	.3262	20.74	12.63	176.4	6.108	41.12	5.373
#1	.3947	-.0145	.0016	.0013	-.0475	.0039	.0051
#2	.3973	-.0104	.0014	-.0003	-.0534	.0019	.0045
#3	.3962	-.0101	.0018	.0003	-.0491	.0048	.0048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4709.1
Stddev	16.6
%RSD	.35282
#1	4694.1
#2	4706.3
#3	4727.0

Sample Name: 160-437-D-4-A Acquired: 8/21/2012 13:09:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0028	.1752	.1714	<.0000	<.0000	W 41.41
Stddev	.0002	.0037	.0012	.0025	.0004	.0001	.0014	.15
%RSD	191.5	47.80	42.31	1.453	.2494	138.5	36.67	.3593
#1	-.0004	-.0114	.0032	.1741	.1710	-.0001	-.0030	41.33
#2	.0001	-.0078	.0037	.1734	.1712	-.0001	-.0056	41.58
#3	-.0001	-.0040	.0015	.1781	.1718	.0000	-.0033	41.32
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0005	<.0000	<.0000	5.245	4.326	.0095	15.12
Stddev	.0000	.0001	.0003	.0009	.018	.022	.0001	.07
%RSD	24.63	24.76	63.00	164.7	.3381	.5035	1.464	.4406
#1	-.0002	.0005	-.0005	.0000	5.229	4.301	.0093	15.05
#2	-.0002	.0004	-.0001	-.0001	5.243	4.339	.0096	15.13
#3	-.0001	.0007	-.0006	-.0016	5.264	4.338	.0095	15.18
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2695	.0003	22.75	.0028	.0550	<.0000	1.424	.0021
Stddev	.0009	.0001	.05	.0000	.0008	.0004	.010	.0011
%RSD	.3282	42.60	.2244	1.057	1.526	41.47	.6955	51.73
#1	.2688	.0002	22.71	.0028	.0541	-.0006	1.425	.0015
#2	.2692	.0003	22.73	.0027	.0554	-.0013	1.434	.0033
#3	.2705	.0005	22.81	.0028	.0557	-.0008	1.414	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-437-D-4-A Acquired: 8/21/2012 13:09:40 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.372	<.0000	.2404	<.0000	<.0000	<.0000	<.0000
Stddev	.0006	.012	.0003	.0008	.0025	.0014	.0004	.0094
%RSD	71.64	.5100	32.54	.3490	21.04	934.1	611.7	16.77
#1	-.0010	2.362	-.0006	.2401	-.0099	-.0009	-.0001	-.0661
#2	-.0012	2.369	-.0007	.2398	-.0145	.0015	-.0005	-.0554
#3	-.0001	2.386	-.0011	.2414	-.0105	-.0010	.0004	-.0473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0003	.0023
Stddev	.0013	.0001
%RSD	468.1	4.428
#1	.0004	.0024
#2	.0015	.0024
#3	-.0010	.0022
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	4867.9
Stddev	4.0
%RSD	.08146
#1	4871.9
#2	4864.0
#3	4867.7

Sample Name: 160-437-D-5-A Acquired: 8/21/2012 13:13:17 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0144**	**.0012**	**.3442**	**.1397**	**<.0000**	**<.0000**	**29.34**	**<.0000**
Stddev	.0006	.0062	.0016	.0009	.0003	.0000	.0018	.01	.0002
%RSD	302.5	43.49	131.8	.2508	.2025	169.1	61.81	.0354	154.3
#1	-.0003	.0215	.0009	.3435	.1398	.0000	-.0010	29.33	-.0002
#2	.0000	.0113	-.0002	.3439	.1400	-.0001	-.0045	29.34	-.0001
#3	.0009	.0102	.0029	.3452	.1394	.0000	-.0033	29.35	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0007**	**<.0000**	**4.446**	**14.90**	**.0079**	**19.28**	**.0147**	**.0002**
Stddev	.0005	.0005	.0007	.011	.02	.0001	.07	.0001	.0001
%RSD	45.55	68.92	61.27	.2390	.1518	1.803	.3547	.6745	31.78
#1	.0016	.0002	-.0006	4.447	14.89	.0080	19.25	.0147	.0002
#2	.0006	.0012	-.0020	4.457	14.93	.0077	19.36	.0148	.0003
#3	.0012	.0007	-.0010	4.436	14.89	.0080	19.23	.0146	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**57.51**	**.0085**	**.1113**	**<.0000**	**.5428**	**.0012**	**<.0000**	**3.322**	**.0006**
Stddev	.09	.0003	.0004	.0011	.0033	.0018	.0011	.010	.0004
%RSD	.1478	3.687	.3932	12690.	.6055	150.2	55.68	.3136	72.85
#1	57.48	.0082	.1117	-.0013	.5408	.0024	-.0032	3.310	.0008
#2	57.61	.0088	.1108	.0010	.5466	-.0009	-.0020	3.327	.0009
#3	57.45	.0086	.1114	.0003	.5411	.0022	-.0009	3.329	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-5-A Acquired: 8/21/2012 13:13:17 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1452	<.0000	.0006	.0001	<.0000	.0017	.0158
Stddev	.0005	.0022	.0004	.0006	.0013	.0037	.0001
%RSD	.3363	20.59	69.97	435.4	2.494	222.0	.6447
#1	.1451	-.0109	.0001	.0003	-.0539	.0052	.0158
#2	.1457	-.0082	.0010	-.0005	-.0513	-.0021	.0156
#3	.1447	-.0124	.0008	.0006	-.0523	.0019	.0158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4826.0
Stddev	11.9
%RSD	.24581
#1	4816.1
#2	4822.7
#3	4839.1

Sample Name: CCV Acquired: 8/21/2012 13:16:56 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9967**	**51.16**	**5.265**	**4.857**	**5.030**	**5.062**	**5.178**	**25.53**	**5.299**
Stddev	.0100	.05	.075	.013	.004	.003	.082	.27	.075
%RSD	1.005	.1008	1.417	.2605	.0771	.0566	1.589	1.057	1.415
#1	1.007	51.21	5.345	4.855	5.028	5.061	5.264	25.84	5.381
#2	.9951	51.17	5.254	4.870	5.034	5.065	5.170	25.44	5.281
#3	.9876	51.11	5.197	4.845	5.027	5.060	5.100	25.32	5.234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.987**	**5.251**	**5.300**	**50.02**	**49.69**	**4.768**	**25.71**	**5.147**	**5.095**
Stddev	.064	.049	.088	.05	.10	.004	.06	.007	.072
%RSD	1.290	.9313	1.661	.1046	.1920	.0908	.2175	.1464	1.405
#1	5.058	5.303	5.395	50.01	49.69	4.764	25.77	5.142	5.171
#2	4.971	5.244	5.284	50.08	49.79	4.772	25.67	5.156	5.084
#3	4.933	5.206	5.221	49.97	49.60	4.767	25.68	5.143	5.029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.56**	**5.330**	**5.059**	**5.271**	**51.35**	**1.044**	**5.194**	**4.787**	**5.304**
Stddev	.05	.066	.067	.060	.80	.016	.077	.024	.058
%RSD	.0979	1.230	1.319	1.139	1.559	1.543	1.476	.4930	1.097
#1	48.57	5.402	5.134	5.338	52.19	1.061	5.276	4.813	5.369
#2	48.61	5.314	5.038	5.255	51.24	1.043	5.183	4.780	5.286
#3	48.51	5.273	5.005	5.221	50.60	1.029	5.124	4.767	5.258
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 13:16:56 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.031**	**5.218**	**5.019**	**5.094**	**4.968**	**4.849**	**5.129**
Stddev	.023	.036	.008	.070	.051	.003	.072
%RSD	.4502	.6901	.1639	1.383	1.017	.0593	1.395
#1	5.053	5.258	5.013	5.172	5.021	4.846	5.206
#2	5.008	5.207	5.028	5.074	4.961	4.850	5.116
#3	5.032	5.188	5.017	5.035	4.920	4.852	5.065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4827.9**
Stddev	40.0
%RSD	.82824
#1	4784.9
#2	4834.7
#3	4864.0

Sample Name: CCB Acquired: 8/21/2012 13:20:16 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**<.0000**	**.0009**	**.0108**	**.0008**	**.0008**	**<.0000**	**.0047**	**.0005**
Stddev	.0002	.0091	.0003	.0014	.0004	.0004	.0008	.0031	.0000
%RSD	38.70	530.1	31.53	12.84	44.74	50.44	13.15	64.92	4.236
#1	.0002	-.0020	.0007	.0103	.0008	.0008	-.0060	.0082	.0005
#2	.0004	.0075	.0012	.0123	.0011	.0013	-.0050	.0027	.0005
#3	.0006	-.0107	.0008	.0096	.0004	.0004	-.0065	.0032	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**<.0000**	**<.0000**	**.0108**	**<.0000**	**.0023**	**.0121**	**.0010**	**.0090**
Stddev	.0006	.0003	.0029	.0043	.0216	.0017	.0087	.0005	.0003
%RSD	99.03	104.9	8507.	39.93	61.98	75.69	72.01	48.39	2.816
#1	.0010	-.0002	.0023	.0110	-.0223	.0024	.0200	.0008	.0088
#2	-.0001	-.0007	-.0033	.0151	-.0225	.0040	.0137	.0015	.0090
#3	.0010	-.0001	.0009	.0064	-.0599	.0005	.0027	.0006	.0093
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0244**	**.0005**	**<.0000**	**<.0000**	**.0067**	**.0003**	**.0032**	**.0141**	**.0022**
Stddev	.0050	.0003	.0003	.0013	.0028	.0006	.0021	.0005	.0006
%RSD	20.54	61.36	81.95	75.33	42.50	239.8	66.44	3.703	28.63
#1	.0246	.0005	-.0003	-.0019	.0095	-.0003	.0021	.0140	.0027
#2	.0293	.0002	-.0008	-.0031	.0038	.0010	.0056	.0136	.0015
#3	.0193	.0007	-.0002	-.0004	.0069	.0001	.0018	.0146	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 13:20:16 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	<.0000	.0014	.0032	<.0000	.0022	.0010
Stddev	.0003	.0022	.0007	.0014	.0130	.0023	.0002
%RSD	45.98	19.93	50.62	45.03	85.02	103.2	22.83
#1	.0007	-.0087	.0015	.0048	-.0266	.0048	.0012
#2	.0011	-.0111	.0020	.0026	-.0011	.0006	.0008
#3	.0004	-.0131	.0006	.0021	-.0182	.0013	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4994.0
Stddev	46.2
%RSD	.92561
#1	5022.9
#2	4940.7
#3	5018.4

Sample Name: 160-437-D-6-A Acquired: 8/21/2012 13:24:00 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0402	<.0000	.2043	.0992	.0001	<.0000	F 117.0	<.0000
Stddev	.0003	.0096	.0014	.0040	.0004	.0001	.0025	.8	.0002
%RSD	97.15	23.99	448.2	1.970	.4501	112.5	79.57	.6665	248.1
#1	.0004	.0315	-.0020	.2061	.0987	.0000	-.0006	116.2	-.0001
#2	.0000	.0506	.0006	.1997	.0994	.0002	-.0056	117.1	-.0002
#3	.0005	.0385	.0003	.2072	.0995	.0000	-.0031	117.8	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	<.0000	<.0000	3.085	2.388	.0095	13.36	.2369	.0009
Stddev	.0004	.0001	.0010	.007	.008	.0007	.00	.0002	.0002
%RSD	45.84	40.73	29.32	.2226	.3501	7.518	.0292	.0807	26.04
#1	.0010	-.0005	-.0034	3.079	2.381	.0104	13.36	.2368	.0008
#2	.0005	-.0002	-.0025	3.083	2.386	.0090	13.36	.2367	.0006
#3	.0013	-.0002	-.0046	3.092	2.397	.0092	13.35	.2371	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.88	.0022	.1123	<.0000	46.92	.0015	<.0000	3.449	<.0000
Stddev	.07	.0001	.0017	.0013	.49	.0013	.0010	.006	.0004
%RSD	.1915	5.018	1.543	266.9	1.048	89.96	162.0	.1738	27.27
#1	34.84	.0021	.1115	.0009	46.36	.0028	.0005	3.449	-.0013
#2	34.85	.0023	.1111	-.0006	47.13	.0001	-.0012	3.442	-.0010
#3	34.96	.0022	.1143	-.0018	47.28	.0015	-.0011	3.454	-.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-6-A Acquired: 8/21/2012 13:24:00 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2809	<.0000	.0005	.0013	<.0000	.0011	.0047
Stddev	.0007	.0030	.0006	.0008	.0171	.0029	.0002
%RSD	.2370	28.93	110.9	60.93	20.47	271.1	3.378
#1	.2802	-.0080	.0012	.0020	-.0878	.0039	.0048
#2	.2811	-.0097	.0001	.0004	-.0647	-.0020	.0046
#3	.2815	-.0139	.0003	.0014	-.0982	.0014	.0049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4905.7
Stddev	16.3
%RSD	.33217
#1	4908.7
#2	4920.3
#3	4888.1

Sample Name: 160-437-D-7-A Acquired: 8/21/2012 13:27:35 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.1892**	**.0062**	**.0171**	**.1367**	**<.0000**	**<.0000**	**F 59.04**	**<.0000**
Stddev	.0002	.0032	.0016	.0027	.0002	.0000	.0013	.33	.0001
%RSD	448.8	1.704	25.40	15.77	.1547	40.41	32.18	.5608	254.6
#1	-.0002	.1922	.0063	.0196	.1368	-.0001	-.0045	59.42	-.0001
#2	.0001	.1896	.0076	.0174	.1365	-.0001	-.0025	58.81	-.0001
#3	.0002	.1858	.0045	.0143	.1368	.0000	-.0050	58.88	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0001**	**.0002**	**9.212**	**1.333**	**.0042**	**17.32**	**.8532**	**.0005**
Stddev	.0002	.0002	.0010	.003	.026	.0007	.04	.0029	.0001
%RSD	46.32	114.3	451.4	.0299	1.959	17.32	.2466	.3403	19.90
#1	.0004	.0000	.0012	9.215	1.334	.0034	17.37	.8545	.0004
#2	.0002	.0003	-.0007	9.209	1.358	.0045	17.28	.8499	.0005
#3	.0007	.0001	.0001	9.212	1.306	.0048	17.32	.8553	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.774**	**.0012**	**.3468**	**.0007**	**.1486**	**.0029**	**<.0000**	**4.038**	**<.0000**
Stddev	.001	.0002	.0018	.0008	.0032	.0002	.0003	.012	.0004
%RSD	.0263	19.53	.5270	119.5	2.168	7.297	34.32	.2887	34.44
#1	3.774	.0009	.3486	.0011	.1522	.0031	-.0008	4.039	-.0009
#2	3.774	.0014	.3449	-.0003	.1473	.0027	-.0009	4.050	-.0009
#3	3.773	.0012	.3468	.0012	.1462	.0030	-.0014	4.026	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-7-A Acquired: 8/21/2012 13:27:35 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1993	<.0000	.0055	<.0000	<.0000	.0003	.0067
Stddev	.0005	.0023	.0012	.0019	.0113	.0028	.0001
%RSD	.2391	13.94	22.50	435.2	18.74	830.3	1.838
#1	.1992	-.0188	.0063	.0011	-.0710	-.0024	.0068
#2	.1989	-.0143	.0061	-.0025	-.0485	.0003	.0066
#3	.1999	-.0158	.0041	.0001	-.0614	.0031	.0066
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4855.8
Stddev	18.2
%RSD	.37519
#1	4834.9
#2	4868.3
#3	4864.3

Sample Name: 160-437-D-8-A Acquired: 8/21/2012 13:31:11 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.1516	.0056	.2186	.0229	.0001	<.0000	F 65.92	<.0000
Stddev	.0004	.0039	.0004	.0020	.0001	.0000	.0026	.35	.0001
%RSD	64.41	2.585	6.651	.9228	.2728	51.27	67.93	.5379	47.99
#1	.0010	.1505	.0051	.2166	.0230	.0001	-.0069	65.85	-.0004
#2	.0003	.1484	.0057	.2207	.0229	.0001	-.0024	66.31	-.0001
#3	.0004	.1559	.0058	.2186	.0229	.0001	-.0023	65.61	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0001	<.0000	13.47	8.735	.0123	33.97	.6433	.0001
Stddev	.0001	.0002	.0011	.08	.019	.0008	.24	.0052	.0003
%RSD	20.19	143.1	50.87	.5914	.2166	6.657	.7007	.8032	265.4
#1	.0008	-.0001	-.0014	13.46	8.746	.0114	33.94	.6415	.0000
#2	.0009	.0002	-.0033	13.56	8.746	.0128	34.22	.6491	-.0001
#3	.0006	.0002	-.0015	13.40	8.713	.0128	33.75	.6392	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	38.54	.0036	.0708	.0002	60.93	.0017	<.0000	3.685	<.0000
Stddev	.24	.0005	.0003	.0008	.19	.0017	.0016	.021	.0005
%RSD	.6242	14.60	.4193	346.6	.3044	101.4	46.31	.5729	60.35
#1	38.58	.0040	.0705	.0008	60.88	.0036	-.0019	3.685	-.0003
#2	38.76	.0030	.0709	.0005	61.13	.0005	-.0051	3.706	-.0011
#3	38.28	.0039	.0711	-.0006	60.76	.0009	-.0034	3.664	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-8-A Acquired: 8/21/2012 13:31:11 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1705	<.0000	<.0000	<.0000	<.0000	.0047	.0020
Stddev	.0010	.0049	.0010	.0011	.0067	.0033	.0001
%RSD	.6016	37.82	1111.	473.9	10.59	70.86	4.329
#1	.1709	-.0144	.0007	.0004	-.0611	.0010	.0021
#2	.1712	-.0075	.0003	-.0015	-.0703	.0056	.0019
#3	.1693	-.0170	-.0013	.0005	-.0573	.0074	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4961.6
Stddev	32.0
%RSD	.64545
#1	4966.9
#2	4927.2
#3	4990.5

Sample Name: 160-437-D-9-A Acquired: 8/21/2012 13:34:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	<.0000	<.0000	.2600	.3774	<.0000	<.0000	F 50.60	.0000
Stddev	.0003	.0059	.0012	.0046	.0015	.0000	.0011	2.08	.0003
%RSD	133.3	89.65	113.5	1.758	.3997	57.77	103.4	4.109	676.1
#1	.0006	-.0016	-.0022	.2573	.3757	-.0001	.0002	48.72	.0003
#2	.0000	-.0051	-.0011	.2574	.3780	.0000	-.0018	50.26	-.0001
#3	.0001	-.0131	.0002	.2653	.3786	-.0001	-.0016	52.83	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	<.0000	<.0000	5.833	3.804	.0084	16.01	.0900	.0001
Stddev	.0001	.0002	.0009	.026	.029	.0008	.09	.0005	.0003
%RSD	7.747	55.89	62.60	.4526	.7564	9.385	.5836	.5551	215.2
#1	.0011	-.0004	-.0026	5.808	3.773	.0080	15.94	.0895	.0003
#2	.0009	-.0001	-.0007	5.831	3.829	.0078	15.97	.0905	-.0002
#3	.0010	-.0005	-.0012	5.860	3.810	.0093	16.12	.0900	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	57.41	.0036	.1272	.0006	.3718	.0017	<.0000	3.086	<.0000
Stddev	.31	.0004	.0043	.0015	.0149	.0011	.0013	.029	.0005
%RSD	.5472	10.01	3.401	259.2	4.003	61.36	75.31	.9262	35.08
#1	57.07	.0038	.1230	.0023	.3590	.0010	-.0007	3.060	-.0020
#2	57.47	.0032	.1270	-.0003	.3683	.0012	-.0031	3.082	-.0013
#3	57.69	.0038	.1317	-.0003	.3881	.0030	-.0013	3.117	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-9-A Acquired: 8/21/2012 13:34:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1541	<.0000	<.0000	<.0000	<.0000	.0003	.0030
Stddev	.0004	.0039	.0007	.0011	.0202	.0013	.0000
%RSD	.2499	30.52	367.9	827.9	43.60	404.7	1.100
#1	.1536	-.0114	-.0010	.0010	-.0295	-.0012	.0029
#2	.1542	-.0170	.0004	-.0001	-.0409	.0011	.0030
#3	.1543	-.0095	.0000	-.0013	-.0689	.0010	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4880.4
Stddev	70.7
%RSD	1.4481
#1	4942.5
#2	4895.3
#3	4803.5

Sample Name: 160-420-D-1-D Acquired: 8/21/2012 13:38:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	10.89	.1213	.1971	1.063	.0005	<.0000	F 137.3	.0001
Stddev	.0003	.04	.0005	.0005	.003	.0001	.0010	.6	.0003
%RSD	152.7	.3327	.3880	.2631	.2925	16.55	127.4	.4435	337.4
#1	-.0006	10.86	.1213	.1966	1.061	.0004	-.0005	136.6	.0004
#2	.0001	10.89	.1208	.1972	1.061	.0005	-.0020	137.5	.0000
#3	-.0002	10.93	.1217	.1976	1.066	.0005	.0000	137.7	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0686	.0156	.0217	68.62	7.251	.0292	F 53.69	2.277	.0156
Stddev	.0004	.0004	.0006	.17	.021	.0016	.21	.002	.0001
%RSD	.5430	2.490	2.912	.2438	.2858	5.613	.4002	.0980	.7811
#1	.0682	.0159	.0210	68.50	7.235	.0297	53.44	2.275	.0156
#2	.0686	.0157	.0220	68.54	7.244	.0274	53.79	2.278	.0155
#3	.0690	.0152	.0221	68.81	7.275	.0306	53.83	2.279	.0158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	60.66	.0929	.8372	.0253	2.081	.0032	.0013	F 39.97	<.0000
Stddev	.20	.0006	.0038	.0017	.019	.0006	.0004	.12	.0007
%RSD	.3339	.6241	.4575	6.676	.9304	18.47	33.99	.3034	234.3
#1	60.48	.0922	.8339	.0262	2.060	.0034	.0014	39.86	-.0012
#2	60.61	.0932	.8364	.0263	2.087	.0025	.0008	39.95	.0003
#3	60.88	.0933	.8414	.0233	2.098	.0036	.0016	40.10	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-1-D Acquired: 8/21/2012 13:38:24 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5002	<.0000	.3337	.0018	<.0000	.0318	.1480
Stddev	.0009	.0016	.0006	.0013	.0144	.0020	.0009
%RSD	.1865	4.613	.1650	75.16	36.59	6.209	.6047
#1	.4999	-.0373	.3340	.0032	-.0537	.0326	.1470
#2	.4995	-.0349	.3331	.0017	-.0399	.0296	.1484
#3	.5013	-.0342	.3341	.0005	-.0248	.0333	.1486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5194.1
Stddev	16.3
%RSD	.31304
#1	5212.8
#2	5184.3
#3	5185.0

Sample Name: 160-420-D-1-D SD Acquired: 8/21/2012 13:41:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**2.224**	**.0254**	**.0420**	**.2174**	**.0001**	**<.0000**	**31.28**	**<.0000**
Stddev	.0005	.004	.0018	.0029	.0009	.0001	.0015	.23	.0002
%RSD	289.4	.1646	6.894	6.883	.3918	81.87	58.46	.7458	422.3
#1	.0001	2.222	.0265	.0446	.2164	.0001	-.0038	31.02	.0001
#2	.0006	2.228	.0234	.0425	.2180	.0000	-.0031	31.47	.0000
#3	-.0002	2.222	.0264	.0389	.2178	.0001	-.0009	31.35	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0149**	**.0023**	**.0058**	**14.37**	**1.464**	**.0061**	**11.24**	**.4769**	**.0032**
Stddev	.0002	.0001	.0003	.06	.013	.0002	.05	.0018	.0002
%RSD	1.296	2.316	5.465	.4207	.9020	3.505	.4069	.3787	4.921
#1	.0147	.0023	.0055	14.30	1.475	.0060	11.18	.4748	.0033
#2	.0151	.0022	.0057	14.41	1.449	.0063	11.25	.4776	.0032
#3	.0150	.0023	.0061	14.39	1.467	.0060	11.27	.4782	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.37**	**.0203**	**.1734**	**.0050**	**.4366**	**.0010**	**<.0000**	**8.268**	**<.0000**
Stddev	.03	.0000	.0010	.0009	.0070	.0020	.0036	.014	.0003
%RSD	.2098	.0794	.5529	17.78	1.612	198.2	2118.	.1686	40.57
#1	12.34	.0203	.1725	.0041	.4300	-.0009	-.0024	8.262	-.0004
#2	12.38	.0202	.1744	.0048	.4357	.0008	.0039	8.284	-.0009
#3	12.38	.0203	.1734	.0059	.4440	.0031	-.0021	8.259	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-1-D SD Acquired: 8/21/2012 13:41:59 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1020	<.0000	.0686	.0007	<.0000	.0043	.0350
Stddev	.0005	.0039	.0006	.0006	.0047	.0012	.0002
%RSD	.4840	19.04	.8206	89.25	13.22	27.01	.5676
#1	.1015	-.0240	.0683	.0000	-.0391	.0049	.0349
#2	.1024	-.0163	.0683	.0009	-.0301	.0030	.0352
#3	.1021	-.0207	.0693	.0012	-.0367	.0051	.0349
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5198.5
Stddev	29.6
%RSD	.56908
#1	5218.5
#2	5164.5
#3	5212.6

Sample Name: 160-420-D-1-E MS Acquired: 8/21/2012 13:45:35 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0968**	**26.42**	**1.098**	**1.166**	**2.138**	**1.010**	**.9671**	F **144.6**	**.9956**
Stddev	.0009	.13	.006	.006	.007	.003	.0096	.9	.0077
%RSD	.9343	.4740	.5497	.4871	.3152	.3331	.9907	.6095	.7755
#1	.0959	26.28	1.091	1.160	2.131	1.006	.9560	143.6	.9867
#2	.0977	26.52	1.102	1.169	2.141	1.012	.9727	145.3	.9998
#3	.0968	26.45	1.100	1.170	2.143	1.012	.9725	144.8	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9835**	**.9855**	**1.018**	**78.24**	**18.47**	**.9908**	F **64.16**	**3.285**	**.9820**
Stddev	.0073	.0064	.009	.30	.09	.0023	.35	.014	.0078
%RSD	.7386	.6469	.9139	.3831	.4775	.2308	.5511	.4207	.7943
#1	.9752	.9796	1.008	77.90	18.38	.9882	63.83	3.270	.9730
#2	.9869	.9923	1.020	78.44	18.55	.9925	64.53	3.296	.9858
#3	.9884	.9846	1.026	78.39	18.49	.9918	64.12	3.290	.9871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**71.15**	**1.079**	**1.753**	**.9733**	**11.46**	**.5018**	**.9270**	F **50.95**	**.9249**
Stddev	.24	.006	.011	.0067	.09	.0045	.0056	.19	.0066
%RSD	.3332	.6043	.6463	.6912	.7579	.8868	.6095	.3639	.7179
#1	70.88	1.071	1.740	.9656	11.36	.4968	.9213	50.74	.9177
#2	71.27	1.083	1.758	.9773	11.50	.5052	.9326	51.06	.9307
#3	71.30	1.082	1.761	.9771	11.53	.5035	.9270	51.06	.9264
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-1-E MS Acquired: 8/21/2012 13:45:35 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.550	.9418	1.360	.1903	.8595	.9895	1.101
Stddev	.005	.0141	.005	.0018	.0075	.0080	.008
%RSD	.3485	1.495	.3641	.9333	.8726	.8129	.7073
#1	1.544	.9286	1.354	.1893	.8640	.9805	1.092
#2	1.552	.9566	1.363	.1924	.8637	.9921	1.103
#3	1.553	.9400	1.362	.1893	.8509	.9960	1.107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5279.8
Stddev	35.6
%RSD	.67360
#1	5313.1
#2	5242.4
#3	5283.9

Sample Name: 160-420-D-1-F MSD Acquired: 8/21/2012 13:48:52 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0941**	**33.92**	**1.062**	**1.150**	**2.218**	**.9776**	**.9240**	F **142.3**	**.9536**
Stddev	.0014	.06	.004	.007	.005	.0027	.0066	.5	.0027
%RSD	1.482	.1840	.3772	.5992	.2313	.2752	.7092	.3818	.2863
#1	.0924	33.85	1.057	1.147	2.213	.9750	.9164	141.7	.9508
#2	.0948	33.97	1.063	1.145	2.217	.9775	.9278	142.6	.9537
#3	.0949	33.95	1.065	1.158	2.223	.9804	.9277	142.7	.9562
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9475**	**.9539**	**.9792**	**82.04**	**19.80**	**.9635**	F **64.51**	**3.256**	**.9496**
Stddev	.0026	.0079	.0052	.25	.04	.0036	.22	.008	.0032
%RSD	.2759	.8310	.5309	.3030	.1865	.3766	.3377	.2350	.3381
#1	.9445	.9449	.9745	81.76	19.76	.9593	64.29	3.247	.9459
#2	.9484	.9598	.9784	82.12	19.80	.9654	64.53	3.259	.9509
#3	.9494	.9570	.9848	82.23	19.84	.9658	64.72	3.261	.9520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**70.62**	**1.048**	**1.735**	**.9382**	**11.15**	**.4693**	**.8811**	F **59.36**	**.8737**
Stddev	.23	.004	.010	.0057	.03	.0038	.0027	.19	.0026
%RSD	.3199	.3427	.5561	.6121	.2752	.8175	.3008	.3203	.2946
#1	70.39	1.044	1.726	.9325	11.12	.4678	.8781	59.15	.8708
#2	70.63	1.050	1.733	.9382	11.16	.4665	.8832	59.40	.8757
#3	70.84	1.050	1.745	.9440	11.18	.4737	.8820	59.52	.8747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-1-F MSD Acquired: 8/21/2012 13:48:52 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.552	.9011	1.536	.1802	.8232	.9689	1.065
Stddev	.004	.0069	.004	.0014	.0109	.0020	.004
%RSD	.2525	.7672	.2667	.7916	1.326	.2066	.3786
#1	1.549	.8932	1.532	.1811	.8128	.9710	1.061
#2	1.551	.9058	1.536	.1809	.8221	.9671	1.065
#3	1.556	.9043	1.540	.1786	.8346	.9687	1.069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5402.4
Stddev	23.1
%RSD	.42818
#1	5429.0
#2	5391.2
#3	5387.0

Sample Name: 160-420-D-2-B Acquired: 8/21/2012 13:52:09 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	1.307	.0007	.1544	.2499	.0010	<.0000	F 142.7	.0002
Stddev	.0003	.045	.0005	.0046	.0027	.0014	.0011	1.4	.0000
%RSD	115.2	3.455	61.81	2.989	1.087	134.5	23.01	.9570	13.67
#1	.0001	1.278	.0003	.1504	.2479	.0003	-.0037	142.2	.0003
#2	-.0003	1.359	.0008	.1534	.2530	.0026	-.0060	141.6	.0002
#3	-.0005	1.283	.0012	.1595	.2488	.0001	-.0049	144.2	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0079	.0012	.0010	2.065	5.315	.0203	23.05	.6391	.0030
Stddev	.0003	.0002	.0009	.113	.036	.0011	.10	.0039	.0002
%RSD	3.219	18.86	83.21	5.450	.6851	5.222	.4312	.6140	7.962
#1	.0078	.0014	.0002	2.000	5.273	.0215	22.99	.6348	.0029
#2	.0082	.0010	.0019	2.195	5.330	.0199	23.00	.6425	.0033
#3	.0077	.0014	.0009	1.999	5.341	.0195	23.17	.6400	.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.92	.0198	.3186	.0049	26.36	.0035	<.0000	F 10.72	<.0000
Stddev	.08	.0006	.0029	.0010	.33	.0020	.0015	.06	.0009
%RSD	.1594	2.976	.9144	20.15	1.266	56.94	2322.	.5231	74.27
#1	49.83	.0191	.3169	.0051	26.30	.0052	.0007	10.66	-.0011
#2	49.95	.0201	.3169	.0057	26.06	.0039	.0009	10.78	-.0022
#3	49.98	.0202	.3220	.0038	26.72	.0013	-.0018	10.71	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-420-D-2-B Acquired: 8/21/2012 13:52:09 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3165	<.0000	.0258	.0011	<.0000	.0060	.0191
Stddev	.0017	.0029	.0020	.0005	.0041	.0022	.0004
%RSD	.5454	16.36	7.618	45.47	8.144	36.22	2.219
#1	.3152	-.0210	.0253	.0008	-.0551	.0036	.0191
#2	.3184	-.0170	.0280	.0008	-.0471	.0079	.0186
#3	.3158	-.0153	.0242	.0017	-.0493	.0065	.0195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5132.6
Stddev	42.9
%RSD	.83625
#1	5153.4
#2	5161.1
#3	5083.2

Sample Name: 160-420-D-3-B Acquired: 8/21/2012 13:55:44 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**50.91**	**.0699**	**.1611**	**6.052**	**.0036**	**.0245**	F **416.7**
Stddev	.0001	.16	.0011	.0044	.071	.0003	.0008	1.5
%RSD	29.43	.3113	1.603	2.702	1.178	8.240	3.359	.3648
#1	.0005	50.80	.0686	.1572	6.120	.0034	.0253	417.1
#2	.0003	50.83	.0708	.1658	5.978	.0039	.0237	417.9
#3	.0004	51.09	.0702	.1602	6.057	.0034	.0247	415.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail
High Limit								50.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0880**	**.0766**	**.0970**	F **268.0**	**15.20**	**.0761**	F **109.8**
Stddev	.0001	.0007	.0014	.0010	3.3	.06	.0002	.1
%RSD	2.830	.8501	1.773	1.058	1.237	.3747	.2153	.0540
#1	.0019	.0878	.0781	.0975	264.8	15.20	.0759	109.7
#2	.0019	.0889	.0756	.0958	271.4	15.15	.0760	109.8
#3	.0020	.0875	.0760	.0976	267.8	15.26	.0763	109.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail
High Limit					100.0			50.00
Low Limit					-10.00			-10.00

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **9.239**	**.0042**	F **122.1**	**.2267**	**4.082**	**.1212**	**13.18**	**<.0000**
Stddev	.021	.0002	.4	.0010	.013	.0007	.07	.0024
%RSD	.2247	3.765	.3617	.4606	.3056	.6033	.5392	239.6
#1	9.224	.0042	121.6	.2263	4.084	.1207	13.17	-.0030
#2	9.230	.0044	122.1	.2279	4.093	.1209	13.26	-.0016
#3	9.263	.0041	122.5	.2260	4.068	.1221	13.12	.0016
Check ?	Chk Warn	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	9.000		100.0					
Low Limit	-10.00		-10.00					

Sample Name: 160-420-D-3-B Acquired: 8/21/2012 13:55:44 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0065	F 67.62	.0012	1.234	<.0000	.3071	.0075	.2094
Stddev	.0033	.23	.0001	.004	.0051	.0015	.0005	.0078
%RSD	51.13	.3402	11.42	.3013	14.48	.4878	6.114	3.719
#1	.0031	67.86	.0013	1.231	-.0299	.3060	.0080	.2027
#2	.0097	67.61	.0011	1.235	-.0401	.3065	.0070	.2074
#3	.0067	67.40	.0013	1.238	-.0363	.3088	.0075	.2179
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		10.00						
Low Limit		-10.00						

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.1346	.5550
Stddev	.0020	.0018
%RSD	1.521	.3293
#1	.1341	.5548
#2	.1329	.5569
#3	.1369	.5532
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	6161.4
Stddev	18.6
%RSD	.30260
#1	6168.9
#2	6140.1
#3	6175.1

Sample Name: CCV Acquired: 8/21/2012 13:59:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9563**	**51.44**	**5.033**	**4.877**	**5.073**	**5.095**	**5.020**	**24.80**	**5.140**
Stddev	.0042	.25	.038	.027	.031	.029	.028	.18	.033
%RSD	.4396	.4873	.7573	.5519	.6113	.5693	.5601	.7376	.6360
#1	.9610	51.72	5.070	4.908	5.106	5.126	5.043	24.99	5.174
#2	.9528	51.25	4.994	4.860	5.045	5.069	4.988	24.62	5.108
#3	.9553	51.35	5.036	4.862	5.067	5.090	5.027	24.80	5.140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.833**	**5.049**	**5.150**	**49.94**	**49.63**	**4.832**	**25.73**	**5.139**	**4.950**
Stddev	.033	.028	.035	.26	.29	.023	.11	.028	.032
%RSD	.6798	.5573	.6883	.5282	.5767	.4728	.4447	.5473	.6355
#1	4.866	5.079	5.182	50.22	49.93	4.858	25.86	5.171	4.981
#2	4.801	5.024	5.112	49.69	49.36	4.814	25.66	5.119	4.918
#3	4.831	5.045	5.157	49.89	49.60	4.825	25.68	5.128	4.950
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.72**	**5.139**	**4.871**	**5.088**	**49.11**	**1.007**	**4.957**	**5.152**	**5.101**
Stddev	.31	.036	.036	.034	.29	.009	.041	.075	.034
%RSD	.6428	.6987	.7345	.6770	.5881	.9341	.8312	1.450	.6698
#1	49.04	5.175	4.900	5.121	49.41	1.017	4.997	5.092	5.134
#2	48.42	5.103	4.831	5.052	48.83	.9984	4.915	5.127	5.066
#3	48.71	5.139	4.882	5.091	49.08	1.006	4.958	5.236	5.102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 13:59:41 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.083**	**5.016**	**5.077**	**4.936**	**4.734**	**4.828**	**4.964**
Stddev	.010	.034	.027	.030	.029	.018	.033
%RSD	.1983	.6703	.5375	.6105	.6033	.3657	.6632
#1	5.086	5.055	5.107	4.966	4.765	4.845	4.997
#2	5.092	4.996	5.054	4.905	4.726	4.810	4.931
#3	5.072	4.998	5.070	4.938	4.710	4.830	4.964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4897.0**
Stddev	29.3
%RSD	.59898
#1	4866.0
#2	4924.4
#3	4900.6

Sample Name: CCB Acquired: 8/21/2012 14:03:01 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**<.0000**	**<.0000**	**.0121**	**.0010**	**.0007**	**<.0000**	**.0499**
Stddev	.0004	.0063	.0002	.0030	.0001	.0001	.0019	.0128
%RSD	113.7	607.4	48.12	25.15	12.05	14.63	29.83	25.58
#1	.0000	.0062	-.0002	.0121	.0011	.0008	-.0044	.0584
#2	.0008	-.0049	-.0003	.0151	.0009	.0007	-.0083	.0561
#3	.0003	-.0044	-.0005	.0090	.0011	.0006	-.0068	.0352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0008**	**<.0000**	**.0012**	**.0196**	**<.0000**	**.0028**	**.0274**
Stddev	.0004	.0002	.0004	.0018	.0023	.0221	.0006	.0062
%RSD	59.29	19.31	151.9	154.3	11.53	56.37	22.39	22.59
#1	.0002	.0009	.0001	-.0002	.0205	-.0179	.0032	.0307
#2	.0009	.0006	-.0003	.0004	.0212	-.0376	.0031	.0203
#3	.0010	.0010	-.0008	.0032	.0170	-.0619	.0020	.0312
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0100**	**.0225**	**.0008**	**.0004**	**<.0000**	**.0101**	**.0010**
Stddev	.0003	.0010	.0031	.0007	.0007	.0006	.0015	.0015
%RSD	30.72	10.17	13.63	83.13	181.8	96.34	14.64	157.0
#1	.0007	.0091	.0260	.0001	.0012	-.0013	.0087	.0008
#2	.0009	.0098	.0203	.0009	.0002	-.0003	.0116	.0026
#3	.0013	.0111	.0211	.0014	-.0002	-.0003	.0100	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB Acquired: 8/21/2012 14:03:01 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	W **.1183**	**.0018**	**.0007**	**<.0000**	**.0013**	**.0039**	**<.0000**
Stddev	.0017	.0268	.0009	.0002	.0048	.0006	.0004	.0064
%RSD	99.69	22.62	49.57	24.61	52.08	43.67	9.262	37.88
#1	.0022	.0906	.0019	.0009	-.0084	.0019	.0036	-.0196
#2	.0031	.1202	.0009	.0007	-.0144	.0010	.0043	-.0216
#3	-.0002	.1440	.0027	.0005	-.0049	.0009	.0038	-.0096
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0800						
Low Limit		-.0800						

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	**.0014**	**.0014**
Stddev	.0037	.0004
%RSD	269.1	27.42
#1	.0045	.0010
#2	.0022	.0013
#3	-.0027	.0018
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	**4936.8**
Stddev	38.0
%RSD	.76873
#1	4962.8
#2	4954.4
#3	4893.3

Sample Name: 160-420-D-4-B Acquired: 8/21/2012 14:06:43 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**34.84**	**.0109**	**.2134**	**.7251**	**.0015**	**<.0000**	**F 235.4**	**.0040**
Stddev	.0006	.02	.0006	.0023	.0013	.0000	.0011	.6	.0002
%RSD	166.4	.0490	5.140	1.096	.1845	2.985	49.59	.2617	4.471
#1	.0006	34.86	.0107	.2160	.7264	.0014	-.0034	236.0	.0040
#2	-.0003	34.83	.0105	.2126	.7252	.0015	-.0023	234.8	.0042
#3	.0007	34.83	.0116	.2116	.7237	.0014	-.0011	235.5	.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0261**	**.0642**	**.0856**	**30.82**	**11.88**	**.0584**	**F 67.94**	**1.640**	**.0054**
Stddev	.0001	.0002	.0009	.08	.03	.0026	.16	.002	.0003
%RSD	.4483	.3206	1.088	.2541	.2192	4.407	.2390	.1075	4.841
#1	.0262	.0641	.0851	30.90	11.91	.0562	68.09	1.639	.0051
#2	.0259	.0641	.0851	30.83	11.88	.0613	67.97	1.642	.0057
#3	.0261	.0645	.0867	30.74	11.86	.0578	67.77	1.640	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**F 304.7**	**.0910**	**.6737**	**.0999**	**12.11**	**.0054**	**.0023**	**F 67.54**	**.0021**
Stddev	2.9	.0002	.0023	.0014	.00	.0011	.0011	.24	.0005
%RSD	.9647	.2344	.3430	1.445	.0076	21.32	49.12	.3564	21.23
#1	306.7	.0912	.6758	.1013	12.11	.0065	.0035	67.76	.0025
#2	306.1	.0909	.6712	.0985	12.10	.0042	.0017	67.57	.0016
#3	301.3	.0908	.6739	.0998	12.11	.0055	.0016	67.29	.0022
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-420-D-4-B Acquired: 8/21/2012 14:06:43 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6468	<.0000	.4262	.0010	.0069	.0745	.4216
Stddev	.0020	.0030	.0015	.0002	.0140	.0020	.0008
%RSD	.3030	11.10	.3466	19.86	203.3	2.696	.1954
#1	.6474	-.0244	.4264	.0012	.0228	.0734	.4225
#2	.6484	-.0304	.4276	.0008	-.0032	.0733	.4215
#3	.6446	-.0267	.4246	.0011	.0010	.0768	.4208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5297.3
Stddev	15.8
%RSD	.29893
#1	5279.1
#2	5307.5
#3	5305.3

Sample Name: 160-437-D-1-A Acquired: 8/21/2012 14:10:25 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0726**	**.0115**	**.2104**	**.7411**	**<.0000**	**<.0000**	F **164.6**	**<.0000**
Stddev	.0002	.0145	.0012	.0008	.0013	.0001	.0021	.9	.0001
%RSD	41.16	19.97	10.74	.3690	.1801	139.1	115.6	.5371	58.67
#1	.0005	.0813	.0125	.2100	.7410	.0000	-.0010	165.3	-.0002
#2	.0007	.0807	.0101	.2113	.7424	-.0001	-.0043	163.6	-.0001
#3	.0003	.0559	.0119	.2099	.7398	.0000	-.0002	165.0	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0111**	**.0001**	**<.0000**	**7.462**	**6.841**	**.0226**	F **51.33**	**6.428**	**.0024**
Stddev	.0001	.0003	.0009	.015	.022	.0004	.01	.005	.0001
%RSD	1.046	444.0	41.66	.2055	.3181	1.984	.0183	.0796	5.199
#1	.0110	.0002	-.0012	7.452	6.856	.0226	51.33	6.422	.0025
#2	.0112	.0003	-.0023	7.479	6.816	.0222	51.32	6.430	.0025
#3	.0111	-.0003	-.0029	7.453	6.850	.0231	51.34	6.432	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.68**	**.0291**	**.1429**	**.0023**	**1.798**	**.0049**	**.0039**	F **15.27**	**<.0000**
Stddev	.07	.0003	.0021	.0009	.023	.0022	.0029	.06	.0003
%RSD	.1455	1.096	1.484	40.17	1.281	45.76	73.91	.3670	19.06
#1	49.65	.0295	.1448	.0013	1.821	.0065	.0049	15.20	-.0011
#2	49.77	.0288	.1406	.0025	1.775	.0057	.0061	15.29	-.0014
#3	49.64	.0291	.1432	.0030	1.797	.0023	.0006	15.30	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-437-D-1-A Acquired: 8/21/2012 14:10:25 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.6557	<.0000	.0015	.0058	<.0000	.0022	.0099
Stddev	.0013	.0031	.0004	.0007	.0112	.0029	.0001
%RSD	.2053	25.95	26.95	11.76	26.06	132.9	.7738
#1	.6558	-.0097	.0019	.0058	-.0353	.0039	.0100
#2	.6570	-.0157	.0011	.0051	-.0378	.0039	.0099
#3	.6543	-.0110	.0015	.0065	-.0558	-.0012	.0098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5029.9
Stddev	26.0
%RSD	.51605
#1	5034.6
#2	5053.2
#3	5001.9

Sample Name: 160-437-D-2-A Acquired: 8/21/2012 14:14:01 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0523	.0009	1.394	2.059	<.0000	<.0000	F 217.3	<.0000
Stddev	.0005	.0111	.0008	.007	.012	.0000	.0016	1.3	.0002
%RSD	158.7	21.31	86.34	.5221	.5758	22.80	183.4	.6146	311.3
#1	.0002	.0412	.0015	1.401	2.072	-.0001	-.0024	218.2	.0000
#2	-.0003	.0522	.0011	1.387	2.050	-.0001	.0008	215.8	-.0002
#3	-.0009	.0635	.0000	1.394	2.053	-.0001	-.0011	217.9	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0049	.0009	<.0000	30.79	21.14	.0415	F 83.79	.4730	.0010
Stddev	.0001	.0003	.0017	.18	.11	.0004	.36	.0028	.0001
%RSD	2.873	27.90	286.5	.5960	.4980	1.036	.4329	.5894	12.31
#1	.0050	.0012	.0000	30.99	21.25	.0411	84.14	.4760	.0011
#2	.0047	.0007	.0007	30.63	21.04	.0414	83.42	.4705	.0010
#3	.0049	.0009	-.0025	30.75	21.12	.0419	83.80	.4726	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 306.0	.0178	.6347	.0017	1.790	.0017	.0006	F 17.01	<.0000
Stddev	1.7	.0001	.0040	.0002	.012	.0013	.0016	.08	.0007
%RSD	.5453	.3930	.6307	8.824	.6446	74.47	285.1	.4477	146.0
#1	307.9	.0177	.6379	.0017	1.800	.0031	.0024	17.07	.0001
#2	305.5	.0178	.6302	.0019	1.778	.0008	-.0001	16.92	-.0003
#3	304.6	.0178	.6361	.0016	1.793	.0012	-.0006	17.03	-.0012
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-437-D-2-A Acquired: 8/21/2012 14:14:01 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8411	<.0000	<.0000	<.0000	<.0000	.0024	.0055
Stddev	.0050	.0032	.0003	.0009	.0155	.0014	.0001
%RSD	.5917	14.20	389.9	830.3	34.30	60.49	1.938
#1	.8468	-.0261	.0003	.0006	-.0298	.0031	.0056
#2	.8378	-.0224	-.0002	-.0011	-.0607	.0033	.0056
#3	.8387	-.0197	-.0003	.0001	-.0445	.0007	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5012.9
Stddev	32.6
%RSD	.65044
#1	5012.6
#2	5045.7
#3	4980.5

Sample Name: 160-437-D-3-A Acquired: 8/21/2012 14:17:47 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.2983	.1876	1.060	2.191	.0000	<.0000	F 128.7	<.0000
Stddev	.0002	.0135	.0038	.001	.004	.0000	.0017	.3	.0003
%RSD	78.17	4.528	2.011	.0483	.1873	372.5	676.4	.2428	21.04
#1	-.0004	.2908	.1877	1.060	2.188	.0000	.0008	129.1	-.0014
#2	.0000	.3139	.1913	1.060	2.189	.0000	.0006	128.5	-.0013
#3	-.0002	.2903	.1838	1.061	2.196	.0000	-.0022	128.6	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030	.0032	.0061	43.75	45.84	.0501	F 87.40	.2771	.0027
Stddev	.0003	.0001	.0023	.04	.09	.0014	.12	.0008	.0001
%RSD	8.749	4.236	37.65	.1023	.1921	2.765	.1385	.2912	3.346
#1	.0031	.0032	.0085	43.73	45.79	.0499	87.27	.2778	.0027
#2	.0028	.0033	.0059	43.72	45.79	.0489	87.42	.2762	.0027
#3	.0033	.0031	.0039	43.80	45.94	.0517	87.51	.2773	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 111.9	.0157	1.179	.0044	.9872	.0018	<.0000	F 24.57	<.0000
Stddev	.2	.0001	.005	.0005	.0026	.0027	.0022	.04	.0003
%RSD	.1589	.7897	.3943	10.95	.2585	151.9	704100.	.1480	38.62
#1	111.7	.0157	1.180	.0049	.9881	.0029	.0006	24.53	-.0005
#2	111.8	.0157	1.174	.0044	.9893	-.0013	.0018	24.58	-.0012
#3	112.1	.0155	1.183	.0039	.9844	.0038	-.0024	24.60	-.0009
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-437-D-3-A Acquired: 8/21/2012 14:17:47 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.020	<.0000	.0066	<.0000	<.0000	.0075	.0142
Stddev	.002	.0022	.0010	.0009	.0055	.0009	.0001
%RSD	.0950	9.882	14.46	239.7	6.159	11.84	.5621
#1	2.019	-.0227	.0061	.0006	-.0834	.0068	.0141
#2	2.019	-.0242	.0077	-.0013	-.0910	.0073	.0142
#3	2.022	-.0199	.0060	-.0004	-.0940	.0085	.0142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5029.5
Stddev	10.0
%RSD	.19857
#1	5019.5
#2	5039.5
#3	5029.5

Sample Name: 160-437-D-4-A Acquired: 8/21/2012 14:21:22 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0308**	**.0145**	**.8779**	**.8552**	**<.0000**	**<.0000**	F **179.6**	**<.0000**
Stddev	.0006	.0079	.0018	.0018	.0011	.0000	.0010	1.7	.0002
%RSD	197.0	25.60	12.72	.2064	.1307	35.32	35.50	.9354	54.17
#1	.0006	.0299	.0160	.8765	.8565	.0000	-.0039	178.7	-.0003
#2	-.0004	.0234	.0125	.8773	.8546	-.0001	-.0030	178.5	-.0001
#3	.0007	.0391	.0150	.8799	.8545	-.0001	-.0018	181.5	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0011**	**<.0000**	**25.49**	**22.04**	**.0422**	F **72.97**	**1.309**	**.0016**
Stddev	.0005	.0005	.0021	.05	.04	.0006	.31	.003	.0001
%RSD	17.04	46.06	914.3	.1892	.1893	1.389	.4238	.1983	6.510
#1	.0023	.0017	.0022	25.51	22.05	.0424	72.82	1.310	.0017
#2	.0032	.0009	-.0011	25.44	22.00	.0415	72.76	1.306	.0015
#3	.0029	.0008	-.0018	25.53	22.08	.0427	73.33	1.311	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **113.5**	**.0134**	**.2797**	**.0013**	**7.113**	**.0032**	**<.0000**	F **11.83**	**<.0000**
Stddev	.1	.0005	.0024	.0016	.074	.0030	.0034	.05	.0008
%RSD	.1242	3.492	.8687	122.5	1.042	93.02	199.8	.4205	99.59
#1	113.5	.0136	.2773	-.0004	7.109	.0041	-.0045	11.80	-.0016
#2	113.3	.0128	.2797	.0027	7.041	-.0001	.0021	11.80	-.0006
#3	113.6	.0136	.2821	.0016	7.189	.0055	-.0028	11.89	-.0001
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-437-D-4-A Acquired: 8/21/2012 14:21:22 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.212	<.0000	<.0000	<.0000	<.0000	.0068	.0061
Stddev	.001	.0045	.0002	.0006	.0036	.0014	.0001
%RSD	.0687	31.38	26.78	2429.	10.50	20.70	1.198
#1	1.213	-.0186	-.0009	-.0006	-.0379	.0065	.0061
#2	1.211	-.0151	-.0006	.0005	-.0307	.0083	.0061
#3	1.211	-.0096	-.0006	.0001	-.0339	.0056	.0062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4923.4
Stddev	48.4
%RSD	.98389
#1	4951.2
#2	4951.6
#3	4867.5

Sample Name: 160-437-D-5-A Acquired: 8/21/2012 14:24:57 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.1059	.0054	1.730	.6954	<.0000	<.0000	F 125.6	<.0000
Stddev	.0002	.0037	.0009	.010	.0017	.0001	.0010	1.1	.0002
%RSD	96.96	3.517	16.04	.5526	.2454	207.0	26.38	.8794	187.4
#1	.0000	.1055	.0050	1.723	.6947	-.0002	-.0038	124.8	-.0001
#2	-.0002	.1098	.0048	1.741	.6974	.0000	-.0050	125.1	.0001
#3	-.0003	.1024	.0064	1.726	.6942	.0000	-.0029	126.8	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059	.0034	.0063	21.52	75.45	.0345	F 92.55	.0712	.0005
Stddev	.0003	.0005	.0012	.03	.05	.0014	.21	.0003	.0002
%RSD	5.522	15.04	19.74	.1454	.0655	4.126	.2240	.4432	41.07
#1	.0057	.0028	.0050	21.49	75.39	.0361	92.33	.0709	.0008
#2	.0057	.0036	.0065	21.55	75.47	.0336	92.56	.0714	.0003
#3	.0063	.0037	.0075	21.53	75.48	.0338	92.75	.0714	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 277.5	.0398	.5354	.0049	2.633	.0030	<.0000	F 16.51	.0022
Stddev	3.4	.0006	.0021	.0013	.028	.0012	.0011	.06	.0003
%RSD	1.211	1.434	.3906	26.19	1.052	40.11	75.24	.3373	13.43
#1	274.4	.0394	.5347	.0035	2.622	.0017	-.0003	16.45	.0025
#2	277.2	.0396	.5337	.0060	2.613	.0041	-.0025	16.51	.0019
#3	281.1	.0404	.5377	.0052	2.665	.0033	-.0017	16.56	.0023
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-437-D-5-A Acquired: 8/21/2012 14:24:57 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7282	<.0000	.0046	<.0000	<.0000	.0047	.0631
Stddev	.0012	.0021	.0002	.0004	.0061	.0009	.0007
%RSD	.1660	18.16	3.673	907.0	10.34	18.46	1.166
#1	.7280	-.0103	.0047	.0004	-.0536	.0039	.0626
#2	.7296	-.0101	.0044	-.0001	-.0573	.0056	.0627
#3	.7272	-.0138	.0047	-.0004	-.0654	.0046	.0639
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4971.2
Stddev	37.7
%RSD	.75799
#1	5001.0
#2	4983.6
#3	4928.8

Sample Name: 160-437-D-6-A Acquired: 8/21/2012 14:28:42 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.2272	<.0000	1.006	.4883	<.0000	<.0000	F 444.4	<.0000
Stddev	.0003	.0070	.0006	.004	.0008	.0001	.0007	7.9	.0001
%RSD	103.4	3.081	77.92	.3612	.1666	278.2	15.62	1.779	42.40
#1	.0000	.2306	-.0015	1.007	.4875	-.0001	-.0042	443.0	-.0001
#2	-.0003	.2192	-.0005	1.003	.4884	.0000	-.0039	437.2	-.0002
#3	-.0005	.2319	-.0004	1.010	.4891	.0000	-.0052	452.9	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020	.0007	<.0000	14.83	12.54	.0474	F 62.79	1.131	.0012
Stddev	.0003	.0004	.0010	.06	.06	.0009	.44	.006	.0003
%RSD	12.90	58.45	53.47	.4111	.4385	1.868	.7033	.5427	24.16
#1	.0022	.0004	-.0024	14.79	12.51	.0483	62.61	1.127	.0010
#2	.0020	.0006	-.0007	14.80	12.51	.0471	62.46	1.128	.0010
#3	.0017	.0012	-.0025	14.90	12.60	.0466	63.29	1.138	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 171.7	.0123	.5503	.0023	F 226.1	.0039	<.0000	F 17.58	<.0000
Stddev	2.1	.0001	.0112	.0017	4.4	.0018	.0020	.07	.0006
%RSD	1.217	.6317	2.033	71.37	1.940	47.30	2774.	.3734	24.30
#1	170.7	.0123	.5485	.0005	225.2	.0055	-.0023	17.56	-.0020
#2	170.2	.0122	.5401	.0038	222.1	.0041	.0004	17.52	-.0022
#3	174.0	.0124	.5623	.0026	230.8	.0019	.0017	17.65	-.0031
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0				100.0			10.00	
Low Limit	-10.00				-10.00			-10.00	

Sample Name: 160-437-D-6-A Acquired: 8/21/2012 14:28:42 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.401	<.0000	.0021	.0011	.0696	.0019	.0100
Stddev	.003	.0046	.0004	.0003	.0082	.0015	.0002
%RSD	.1765	28.50	20.51	28.27	11.78	80.54	1.629
#1	1.398	-.0157	.0018	.0008	.0617	.0004	.0101
#2	1.402	-.0209	.0026	.0011	.0781	.0034	.0098
#3	1.402	-.0118	.0019	.0014	.0692	.0018	.0101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4863.2
Stddev	85.0
%RSD	1.7485
#1	4879.6
#2	4938.9
#3	4771.2

Sample Name: 160-437-D-7-A Acquired: 8/21/2012 14:32:26 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.9756**	**.0264**	**.0763**	**.6736**	**<.0000**	**<.0000**	F **241.7**	**<.0000**
Stddev	.0008	.0096	.0008	.0018	.0025	.0000	.0007	1.2	.0001
%RSD	530.7	.9838	3.047	2.335	.3683	35.47	54.61	.5030	20.97
#1	-.0005	.9646	.0255	.0770	.6711	-.0001	-.0021	241.6	-.0003
#2	.0011	.9799	.0271	.0742	.6761	.0000	-.0007	243.0	-.0002
#3	-.0001	.9822	.0265	.0775	.6735	-.0001	-.0012	240.5	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0029**	**.0056**	**44.49**	**6.941**	**.0169**	F **82.09**	**4.054**	**.0011**
Stddev	.0003	.0002	.0020	.15	.020	.0001	.30	.016	.0002
%RSD	30.39	6.352	36.69	.3272	.2917	.8539	.3634	.3885	19.24
#1	.0015	.0029	.0050	44.41	6.951	.0168	81.89	4.044	.0009
#2	.0009	.0027	.0078	44.66	6.918	.0168	82.44	4.072	.0013
#3	.0009	.0030	.0038	44.40	6.954	.0171	81.96	4.046	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.12**	**.0063**	**1.675**	**.0038**	**.7179**	**.0019**	**.0018**	F **20.44**	**<.0000**
Stddev	.05	.0000	.007	.0009	.0041	.0013	.0018	.06	.0008
%RSD	.2732	.4509	.4328	24.97	.5684	68.16	99.94	.2958	77.41
#1	19.07	.0063	1.676	.0046	.7199	.0004	.0031	20.41	-.0002
#2	19.17	.0063	1.682	.0028	.7205	.0026	.0026	20.51	-.0017
#3	19.11	.0062	1.667	.0039	.7132	.0028	-.0003	20.41	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-437-D-7-A Acquired: 8/21/2012 14:32:26 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9908	<.0000	.0209	.0028	<.0000	.0085	.0216
Stddev	.0028	.0058	.0001	.0019	.0077	.0021	.0003
%RSD	.2828	23.86	.3390	68.87	453.7	24.11	1.275
#1	.9889	-.0237	.0208	.0046	-.0093	.0092	.0217
#2	.9940	-.0305	.0209	.0008	.0062	.0062	.0217
#3	.9894	-.0189	.0210	.0028	-.0020	.0101	.0213
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5012.0
Stddev	21.4
%RSD	.42722
#1	5019.1
#2	4988.0
#3	5029.0

Sample Name: 160-437-D-8-A Acquired: 8/21/2012 14:36:02 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.7867	.0358	1.071	.1128	.0004	<.0000	F 270.5	<.0000
Stddev	.0005	.0087	.0005	.003	.0004	.0001	.0019	1.4	.0001
%RSD	173.0	1.106	1.516	.3198	.3972	16.92	90.50	.5023	16.16
#1	.0005	.7774	.0362	1.073	.1132	.0004	-.0035	269.0	-.0007
#2	.0006	.7880	.0359	1.067	.1130	.0004	.0001	271.3	-.0005
#3	-.0003	.7946	.0352	1.073	.1123	.0005	-.0030	271.3	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0028	.0017	.0012	65.01	44.40	.0585	F 161.8	3.056	<.0000
Stddev	.0002	.0010	.0013	.07	.02	.0004	.2	.002	.0002
%RSD	5.634	58.33	107.2	.1033	.0491	.6947	.1432	.0700	89.76
#1	.0030	.0016	.0011	64.98	44.37	.0586	161.6	3.057	.0000
#2	.0027	.0028	.0026	64.97	44.42	.0589	161.8	3.053	-.0004
#3	.0027	.0008	.0000	65.09	44.40	.0581	162.0	3.058	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 190.2	.0182	.3542	.0018	F 295.9	.0019	.0007	F 18.66	<.0000
Stddev	1.1	.0001	.0029	.0012	1.9	.0008	.0040	.01	.0002
%RSD	.6020	.5942	.8250	65.35	.6570	42.24	572.6	.0387	29.10
#1	188.9	.0182	.3513	.0028	293.8	.0011	.0016	18.65	-.0006
#2	191.1	.0181	.3544	.0005	296.5	.0027	.0042	18.66	-.0009
#3	190.7	.0183	.3571	.0022	297.5	.0020	-.0037	18.66	-.0011
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0				100.0			10.00	
Low Limit	-10.00				-10.00			-10.00	

Sample Name: 160-437-D-8-A Acquired: 8/21/2012 14:36:02 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8486	<.0000	.0001	.0017	.0135	.0107	.0026
Stddev	.0009	.0056	.0008	.0011	.0046	.0036	.0002
%RSD	.1054	16.66	1540.	63.17	34.12	33.64	9.475
#1	.8493	-.0302	-.0007	.0012	.0138	.0102	.0029
#2	.8476	-.0305	.0009	.0030	.0088	.0073	.0024
#3	.8489	-.0400	-.0001	.0010	.0180	.0145	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5013.7
Stddev	17.3
%RSD	.34547
#1	5033.7
#2	5003.2
#3	5004.1

Sample Name: 160-437-D-9-A Acquired: 8/21/2012 14:39:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0392	<.0000	1.392	2.050	<.0000	<.0000	F 214.4	<.0000
Stddev	.0008	.0086	.0019	.005	.004	.0000	.0022	.4	.0000
%RSD	130.9	21.82	411.3	.3705	.1867	18.34	81.08	.1725	17.57
#1	-.0004	.0475	-.0025	1.386	2.054	-.0001	-.0002	214.0	-.0003
#2	-.0015	.0397	.0012	1.393	2.047	-.0001	-.0040	214.6	-.0002
#3	.0001	.0304	-.0001	1.397	2.049	-.0001	-.0042	214.7	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046	.0012	<.0000	30.67	21.10	.0395	F 83.41	.4693	.0008
Stddev	.0001	.0007	.0019	.06	.03	.0003	.09	.0012	.0001
%RSD	1.547	57.05	167.9	.2068	.1216	.6533	.1096	.2520	10.92
#1	.0045	.0004	-.0027	30.69	21.13	.0393	83.52	.4706	.0008
#2	.0046	.0018	.0010	30.60	21.08	.0398	83.37	.4687	.0007
#3	.0046	.0015	-.0016	30.72	21.10	.0395	83.35	.4684	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit							50.00		
Low Limit							-10.00		

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F 299.9	.0174	.6187	.0006	1.785	.0045	<.0000	F 16.81	<.0000
Stddev	4.9	.0002	.0036	.0018	.008	.0015	.0036	.02	.0009
%RSD	1.637	1.222	.5843	303.1	.4360	34.56	158.4	.1045	88.82
#1	295.2	.0176	.6178	.0001	1.788	.0061	-.0064	16.81	-.0012
#2	299.6	.0172	.6227	-.0009	1.791	.0043	.0002	16.79	.0000
#3	305.0	.0175	.6157	.0026	1.777	.0030	-.0006	16.82	-.0017
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	100.0							10.00	
Low Limit	-10.00							-10.00	

Sample Name: 160-437-D-9-A Acquired: 8/21/2012 14:39:46 Type: Unk
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8369	<.0000	<.0000	<.0000	<.0000	.0051	.0058
Stddev	.0010	.0010	.0003	.0014	.0051	.0019	.0002
%RSD	.1150	5.087	14.76	292.7	32.75	38.39	2.957
#1	.8379	-.0196	-.0022	.0011	-.0186	.0031	.0059
#2	.8360	-.0185	-.0020	-.0017	-.0185	.0051	.0059
#3	.8367	-.0204	-.0017	-.0008	-.0097	.0070	.0056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4985.6
Stddev	22.8
%RSD	.45750
#1	5008.1
#2	4986.3
#3	4962.5

Sample Name: CCV Acquired: 8/21/2012 14:43:34 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9475**	**51.14**	**4.996**	**4.868**	**5.063**	**5.074**	**4.966**	**24.34**	**5.071**
Stddev	.0040	.03	.018	.010	.007	.011	.018	.11	.022
%RSD	.4202	.0580	.3667	.2110	.1320	.2197	.3721	.4400	.4425
#1	.9444	51.15	4.986	4.877	5.071	5.086	4.946	24.28	5.053
#2	.9520	51.11	5.017	4.869	5.059	5.073	4.982	24.46	5.096
#3	.9462	51.16	4.984	4.857	5.059	5.064	4.969	24.27	5.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.791**	**5.004**	**5.091**	**49.59**	**49.45**	**4.820**	**25.53**	**5.106**	**4.902**
Stddev	.018	.027	.029	.07	.08	.008	.04	.003	.022
%RSD	.3707	.5436	.5690	.1414	.1526	.1727	.1516	.0586	.4434
#1	4.778	4.984	5.059	49.67	49.53	4.829	25.50	5.104	4.886
#2	4.811	5.035	5.115	49.58	49.38	4.812	25.51	5.110	4.927
#3	4.785	4.992	5.100	49.53	49.42	4.820	25.57	5.105	4.893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.40**	**5.079**	**4.825**	**5.018**	**48.90**	**.9968**	**4.932**	**4.841**	**5.045**
Stddev	.06	.024	.021	.021	.22	.0062	.020	.018	.016
%RSD	.1212	.4698	.4252	.4171	.4597	.6197	.4006	.3751	.3223
#1	48.47	5.066	4.808	5.009	48.72	.9933	4.915	4.862	5.035
#2	48.36	5.106	4.848	5.042	49.15	1.004	4.953	4.834	5.064
#3	48.36	5.063	4.819	5.003	48.84	.9932	4.927	4.827	5.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 14:43:34 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.090**	**4.974**	**5.057**	**4.879**	**4.742**	**4.832**	**4.909**
Stddev	.063	.042	.009	.017	.037	.011	.023
%RSD	1.237	.8336	.1704	.3547	.7715	.2200	.4670
#1	5.141	4.952	5.066	4.865	4.718	4.823	4.890
#2	5.109	5.021	5.055	4.898	4.784	4.829	4.934
#3	5.019	4.947	5.050	4.873	4.723	4.844	4.903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**5034.3**
Stddev	18.0
%RSD	.35712
#1	5043.7
#2	5013.6
#3	5045.7

Sample Name: CCB Acquired: 8/21/2012 14:46:54 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0001	.0138	.0006	.0007	<.0000	.0038	.0005
Stddev	.0002	.0010	.0020	.0029	.0002	.0002	.0021	.0013	.0002
%RSD	1145.	15.81	1508.	20.77	31.62	29.06	73.73	33.65	38.45
#1	.0000	-.0052	-.0004	.0139	.0008	.0009	-.0014	.0049	.0005
#2	.0002	-.0060	-.0016	.0109	.0007	.0007	-.0054	.0024	.0003
#3	-.0003	-.0071	.0024	.0167	.0004	.0005	-.0020	.0041	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0000	.0070	<.0000	.0028	.0161	.0007	.0091
Stddev	.0001	.0004	.0018	.0015	.0266	.0002	.0068	.0003	.0006
%RSD	14.96	157.2	4084.	21.83	46.08	7.703	42.13	48.08	7.123
#1	.0007	.0000	.0018	.0078	-.0480	.0030	.0192	.0010	.0087
#2	.0005	-.0001	-.0017	.0079	-.0374	.0026	.0209	.0005	.0087
#3	.0006	-.0007	.0001	.0052	-.0879	.0029	.0083	.0005	.0098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0652	.0000	<.0000	.0007	.0138	.0010	.0032	.0186	.0014
Stddev	.0038	.0001	.0005	.0013	.0042	.0036	.0018	.0048	.0006
%RSD	5.857	1673.	25.86	196.1	30.68	359.2	56.79	25.87	42.14
#1	.0668	-.0001	-.0016	.0022	.0151	.0031	.0026	.0170	.0008
#2	.0608	.0001	-.0014	-.0001	.0091	-.0032	.0017	.0240	.0015
#3	.0679	.0000	-.0023	.0000	.0173	.0031	.0052	.0148	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 14:46:54 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	<.0000	.0012	.0023	<.0000	.0003	<.0000
Stddev	.0001	.0024	.0005	.0006	.0059	.0014	.0002
%RSD	15.96	21.33	37.55	26.12	44.84	552.1	68.54
#1	.0006	-.0141	.0016	.0021	-.0193	-.0010	-.0005
#2	.0006	-.0092	.0014	.0030	-.0126	.0018	-.0003
#3	.0004	-.0111	.0007	.0019	-.0075	-.0001	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5040.0
Stddev	2.7
%RSD	.05310
#1	5042.7
#2	5037.4
#3	5039.9

Sample Name: CCV Acquired: 8/21/2012 14:50:37 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9697**	**51.18**	**5.009**	**4.924**	**5.071**	**5.083**	**4.990**	**24.71**	**5.091**
Stddev	.0053	.04	.048	.006	.004	.006	.043	.23	.051
%RSD	.5427	.0691	.9623	.1199	.0712	.1224	.8686	.9162	1.008
#1	.9752	51.17	5.001	4.928	5.075	5.091	5.003	24.65	5.092
#2	.9647	51.15	4.966	4.918	5.068	5.080	4.942	24.52	5.040
#3	.9690	51.22	5.061	4.927	5.072	5.080	5.026	24.96	5.142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.865**	**5.068**	**5.101**	**49.84**	**49.81**	**4.903**	**25.46**	**5.105**	**4.946**
Stddev	.047	.018	.052	.09	.09	.009	.03	.001	.046
%RSD	.9572	.3614	1.016	.1738	.1707	.1767	.1260	.0091	.9260
#1	4.859	5.074	5.105	49.82	49.81	4.913	25.47	5.105	4.943
#2	4.822	5.048	5.047	49.76	49.72	4.896	25.49	5.105	4.902
#3	4.915	5.083	5.151	49.93	49.89	4.901	25.43	5.105	4.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.03**	**5.104**	**4.911**	**5.076**	**48.94**	**.9962**	**4.948**	**4.819**	**5.067**
Stddev	.06	.050	.050	.048	.52	.0074	.059	.015	.046
%RSD	.1319	.9778	1.026	.9366	1.068	.7443	1.193	.3127	.8991
#1	49.04	5.097	4.903	5.062	48.92	.9960	4.948	4.802	5.058
#2	48.96	5.058	4.865	5.038	48.43	.9889	4.888	4.821	5.026
#3	49.09	5.157	4.965	5.129	49.48	1.004	5.006	4.832	5.116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/21/2012 14:50:37 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.123**	**5.023**	**5.049**	**4.967**	**4.858**	**4.900**	**4.963**
Stddev	.061	.026	.013	.043	.010	.010	.048
%RSD	1.189	.5224	.2640	.8601	.2033	.2026	.9561
#1	5.141	5.048	5.065	4.968	4.867	4.895	4.961
#2	5.055	4.995	5.042	4.924	4.860	4.894	4.917
#3	5.173	5.025	5.041	5.009	4.847	4.911	5.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4889.3**
Stddev	34.5
%RSD	.70523
#1	4895.0
#2	4920.6
#3	4852.4

Sample Name: CCB Acquired: 8/21/2012 14:53:56 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0027	.0012	.0151	.0010	.0009	<.0000	.0017	.0003
Stddev	.0006	.0033	.0007	.0010	.0002	.0002	.0006	.0016	.0002
%RSD	229.5	122.4	62.36	6.688	20.77	22.61	16.62	94.62	68.02
#1	-.0009	.0025	.0019	.0141	.0012	.0011	-.0030	.0001	.0001
#2	-.0002	.0062	.0012	.0162	.0010	.0009	-.0041	.0034	.0006
#3	.0003	-.0005	.0004	.0150	.0008	.0007	-.0032	.0017	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0006	.0022	.0106	.0154	.0006	.0227	.0011	.0094
Stddev	.0003	.0014	.0007	.0027	.0119	.0002	.0075	.0002	.0008
%RSD	64.24	217.6	30.92	25.35	77.01	39.34	32.95	14.75	8.952
#1	.0001	.0005	.0015	.0116	.0144	.0007	.0303	.0013	.0084
#2	.0008	-.0007	.0022	.0125	.0041	.0007	.0153	.0011	.0096
#3	.0006	.0021	.0029	.0075	.0278	.0003	.0225	.0010	.0101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0514	.0005	.0004	<.0000	.0158	<.0000	.0013	.0160	.0018
Stddev	.0047	.0004	.0021	.0002	.0015	.0011	.0007	.0072	.0007
%RSD	9.133	72.96	510.1	16.59	9.656	191.9	48.36	44.79	36.91
#1	.0550	.0001	-.0016	-.0015	.0151	-.0001	.0017	.0085	.0011
#2	.0532	.0008	.0026	-.0012	.0175	.0002	.0006	.0168	.0024
#3	.0461	.0008	.0002	-.0012	.0147	-.0018	.0017	.0227	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/21/2012 14:53:56 Type: QC
Method: 2011(v493) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	<.0000	.0016	.0058	<.0000	<.0000	<.0000
Stddev	.0002	.0026	.0006	.0001	.0131	.0018	.0002
%RSD	25.54	40.45	39.50	2.222	93.36	989.9	66.79
#1	.0011	-.0049	.0023	.0056	.0011	.0017	-.0006
#2	.0008	-.0093	.0016	.0058	-.0208	-.0004	-.0002
#3	.0007	-.0048	.0010	.0059	-.0223	-.0018	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4891.2
Stddev	12.6
%RSD	.25743
#1	4886.8
#2	4905.4
#3	4881.5

File: 082212e1

ICV | ICB | LLC | ICSA | ICSAB | LOR | CCV | CCB CB 8/22/12 Std. ICPC-081312 6500

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1001	3	1	1	Unk	160-415-D-2-D	DF=10		
2	1002	3	1	2	Unk	160-415-D-2-D SD	DF=50		
3	1003	3	1	3	Unk	160-415-D-2-E MS	DF=10		
4	1004	3	1	4	Unk	160-415-D-2-F MSD	DF=10		
5	1005	3	1	5	Unk	160-415-D-5-B	DF=10		
6	1006	3	1	6	Unk	160-415-D-6-B	DF=10		
7	1007	3	1	7	Unk	160-415-D-9-A	DF=10		
8	1008	3	1	8	Unk	160-420-D-3-B	DF=20		
9	1009	3	1	9	Unk	160-420-D-4-B	DF=10		
10	1010	3	1	10	Unk	160-437-D-2-A	DF=10		
11	1011	3	1	11	Unk	160-437-D-6-A	DF=20		
12	1012	3	1	12	Unk	160-437-D-7-A	DF=10		
13	1013	3	1	13	Unk	160-437-D-8-A	DF=10		
14	1014	3	1	14	Unk	160-437-D-9-A	DF=10		

CCV
CCB

CCV
CCB

-Cg

Analytical batch 9505

Vertical Table Report
Author: File: 082212C1
Notes:

	CALBLK1 8/22/2012 7:54:52 metals 2011 (494)	CAL 1 8/22/2012 7:58:32 metals 2011 (494)	CAL 2 8/22/2012 8:02:11 metals 2011 (494)	CAL 3 8/22/2012 8:05:30 metals 2011 (494)	CAL 4 8/22/2012 8:08:49 metals 2011 (494)
Ag3280	-.0008	.0130	.2559	1.264	2.525
Al3961	.0000	.0263	1.259	6.213	12.57
As1890	.0000	.0004	.0480	.2423	.4779
B_2496	.0003	.0133	.1324	.6622	1.329
Ba4554	.0226	.4330	8.113	40.77	81.03
Be3130	.0002	.0424	8.439	42.15	83.41
Bi2230	.0002	.0114		.2621	.5084
Ca1840	.0012	.1524	.7330	3.405	6.529
Cd2288	.0000	.0040	.7951	3.936	7.690
Co2286	.0000	.0179	.3348	1.606	3.090
Cr2835	.0062	.0200	1.280	6.153	12.06
Cu2178	.0001	.0020	.0719	.3502	.6803
Fe2599	.0003	.0273	2.612	12.85	25.65
K_7664	.0004	.5104	1.016	5.071	10.27
Li6707	.0034	.0978	1.939	9.650	19.55
Mg2798	-.0006	.0340	.1753	.8675	1.730
Mn2576	.0002	.0226	1.483	7.244	14.50
Mo2020	.0001	.0155	.3791	1.865	3.654
Na5895	-.0075	.3136	3.180	16.10	32.41
Ni2216	.0002	.0207	.4790	2.285	4.394
P_1774	.0000	.0166		.3252	.6374
Pb2203	-.0002	.0009	.1055	.5052	.9632
S_1820	.0004	.1538		1.515	3.021
Sb2068	.0004	.0010	.0126	.0609	.1205
Se1960	.0001	.0007	.0361	.1811	.3567
Si2516	.0035	.0343		.3972	.8056
Sn1899	.0001	.0129	.1210	.5890	1.140
Sr4077	-.0017	.0583	11.99	58.07	117.7
Th2832	.0073	.0428		.9218	1.802
Ti3349	.0019	.0178	.8374	4.139	8.400
Tl1908	-.0002	.0013	.0757	.3552	.6641
U_3670	.0420	.0938		.5999	1.140
V_2908	-.0008	.0095	.1969	.9924	1.985
Y_3710	5473.4	5312.5	5345.8	5264.5	5260.3
Zn2138	.0010	.0112	.4889	2.413	4.663

Vertical Table Report
Author:
Notes:

	ICV	ICB	LLC	ICSA	ICSAB
AM	8/22/2012 8:12:26	8/22/2012 8:15:45	8/22/2012 8:19:26	8/22/2012 8:23:04	8/22/2012 8:26:42
	metals	metals	metals	metals	metals
	2011 (494)	2011 (494)	2011 (494)	2011 (494)	2011 (494)
Ag3280	.9940	.0002	.0106	.0000	.9942
Al3961	49.59	.0133	.2181	101.1	100.1
As1890	4.996	.0041	.0106	.0003	.9808
B_2496	5.089	.0247	.1083	<.0000	.9946
Ba4554	5.096	.0009	.0512	.0004	.4990
Be3130	5.057	.0009	.0057	.0001	.4842
Bi2230	5.012	.0044	.2153	.0167	1.003
Ca1840	25.16	.0115	1.109	52.30	49.50
Cd2288	5.066	W .0021	.0054	F .0056	1.003
Co2286	5.170	.0026	.0560	W .0095	.5029
Cr2835	5.059	.0006	.0103	W .0091	.5045
Cu2178	4.998	.0023	.0260	.0077	.4951
Fe2599	50.33	.0107	.1101	101.3	100.3
K_7664	49.53	.0355	4.983	.0170	19.86
Li6707	4.990	.0020	.0516	.0011	1.003
Mg2798	24.99	.0016	1.013	103.3	100.9
Mn2576	5.105	.0008	.0164	.0016	.5034
Mo2020	5.069	W .0114	.0422	.0064	1.016
Na5895	49.65	.0120	.9841	<.0000	19.82
Ni2216	5.159	.0023	.0445	W .0099	1.011
P_1774	4.995	.0025	.2531	.0102	.4920
Pb2203	5.125	.0017	.0106	W .0044	1.000
S_1820	49.44	.0286	4.979	.0827	19.82
Sb2068	.9896	<.0000	.0097	.0032	1.048
Se1960	5.032	.0062	W .0187	.0081	.9915
Si2516	4.956	<.0000	.3859	<.0000	1.086
Sn1899	5.031	.0042	.1091	.0063	.9974
Sr4077	5.049	.0009	.0056	<.0000	1.020
Th2832	5.152	.0044	.2098	<.0000	1.005
Ti3349	5.011	.0010	.0198	<.0000	.5064
Tl1908	5.330	.0056	.0233	.0067	1.005
U_3670	4.989	.0095	.5025	W .0476	1.007
V_2908	4.972	<.0000	.0499	W .0085	.5069
Y_3710	5338.2	5295.5	5362.3	5097.2	5387.9
Zn2138	5.071	.0022	.0214	.0043	1.004

Vertical Table Report
Author:
Notes:

	LDR	CCV	CCB	160-415-D-2-D	160-415-D-2-D SD
AM	8/22/2012 8:30:04	8/22/2012 8:33:42	8/22/2012 8:37:01	8/22/2012 8:53:47	8/22/2012 8:57:23
	metals 2011 (494)	metals 2011 (494)	metals 2011 (494)	metals 2011 (494)	metals 2011 (494)
Ag3280	1.998	1.003	.0001	.0003	.0000
Al3961	100.6	50.33	.0112	.0934	.0265
As1890	9.919	5.041	.0008	.0022	<.0000
B_2496	9.953	5.040	.0249	.0407	.0076
Ba4554	9.928	5.105	.0006	.1286	.0252
Be3130	9.902	5.103	.0008	.0000	.0000
Bi2230	9.818	5.064	<.0000	.0018	<.0000
Ca1840	48.72	25.45	.0014	31.97	6.126
Cd2288	9.867	5.066	.0004	<.0000	<.0000
Co2286	9.818	5.124	.0006	.0003	.0000
Cr2835	9.897	5.082	.0003	.0002	<.0000
Cu2178	9.825	5.073	.0049	<.0000	<.0000
Fe2599	99.74	50.59	.0089	3.397	.6692
K_7664	100.6	50.32	.0589	.8714	.2041
Li6707	10.06	5.042	.0011	.0045	.0000
Mg2798	50.09	25.35	<.0000	8.023	1.599
Mn2576	9.994	5.045	.0008	.0607	.0118
Mo2020	9.856	5.057	.0090	.0004	<.0000
Na5895	100.1	50.32	.0083	9.814	1.911
Ni2216	9.797	5.120	.0002	.0023	.0003
P_1774	9.850	5.032	<.0000	.1038	.0192
Pb2203	9.754	5.131	<.0000	<.0000	<.0000
S_1820	99.12	49.88	.0090	.2052	.0428
Sb2068	1.985	1.003	.0005	.0004	<.0000
Se1960	9.887	5.025	.0060	.0001	.0019
Si2516	10.10	5.025	.0004	2.715	.5295
Sn1899	9.835	5.103	.0022	<.0000	.0003
Sr4077	9.979	5.073	.0007	.1395	.0274
Th2832	9.943	5.116	.0015	<.0000	<.0000
Ti3349	10.06	5.019	.0005	.0014	.0003
Tl1908	9.654	5.154	.0027	<.0000	<.0000
U_3670	9.939	5.158	.0142	<.0000	<.0000
V_2908	9.961	5.029	<.0000	<.0000	<.0000
Y_3710	5240.6	5260.6	5291.8	5289.9	5182.9
Zn2138	9.812	5.080	<.0000	.0059	.0057

Vertical Table Report
Author:
Notes:

AM	160-415-D-2-E MS 8/22/2012 9:01:02 metals 2011 (494)	160-415-D-2-F MSI 8/22/2012 9:04:35 metals 2011 (494)	160-415-D-5-B 8/22/2012 9:08:08 metals 2011 (494)	160-415-D-6-B 8/22/2012 9:11:46 metals 2011 (494)	160-415-D-9-A 8/22/2012 9:15:24 metals 2011 (494)
Ag3280	.0089	.0090	.0003	.0003	<.0000
Al3961	.9643	.9510	.0106	.0812	.8882
As1890	.1155	.1060	<.0000	<.0000	.0046
B_2496	.1178	.1187	.1007	.0365	.0591
Ba4554	.1862	.1932	.1631	.1077	.0634
Be3130	.0808	.0839	.0000	.0000	.0000
Bi2230	.1122	.1032	<.0000	.0013	.0044
Ca1840	34.80	31.82	27.56	32.51	36.67
Cd2288	.1165	.1068	<.0000	<.0000	<.0000
Co2286	.1216	.1111	.0008	.0005	.0015
Cr2835	.0971	.0927	.0005	.0003	.0020
Cu2178	.1156	.1081	.0014	<.0000	.0055
Fe2599	3.636	3.876	2.556	2.843	4.929
K_7664	1.537	1.575	1.808	.7177	.8545
Li6707	.0827	.0870	.0019	.0018	.0035
Mg2798	7.549	7.708	6.773	6.760	7.145
Mn2576	.1333	.1364	.0510	.0511	.1152
Mo2020	.1188	.1093	.0002	.0001	.0003
Na5895	8.889	9.273	26.16	8.189	12.32
Ni2216	.1255	.1141	.0019	.0024	.0088
P_1774	.2225	.2037	.0598	.1070	.1074
Pb2203	.1205	.1101	<.0000	.0021	.0124
S_1820	1.298	1.248	.1781	.1970	2.358
Sb2068	.0587	.0531	<.0000	.0007	<.0000
Se1960	.1148	.1045	.0002	<.0000	.0026
Si2516	2.367	2.317	1.393	2.263	3.236
Sn1899	.1188	.1096	.0001	<.0000	.0004
Sr4077	.1958	.2041	.0647	.1164	.0766
Th2832	.0991	.0919	.0029	<.0000	<.0000
Ti3349	.0818	.0846	<.0000	.0013	.0126
Tl1908	.0241	.0225	<.0000	<.0000	<.0000
U_3670	.0749	.0624	<.0000	<.0000	<.0000
V_2908	.0783	.0813	.0003	<.0000	.0004
Y_3710	4980.1	5328.8	5201.7	5131.6	5085.8
Zn2138	.1198	.1086	.0026	.0038	.7612

Vertical Table Report
Author:
Notes:

	160-420-D-3-B	160-420-D-4-B	160-437-D-2-A	CCV	CCB
AM	8/22/2012 9:18:59	8/22/2012 9:22:36	8/22/2012 9:26:12	8/22/2012 9:29:51	8/22/2012 9:33:11
	metals	metals	metals	metals	metals
	2011 (494)	2011 (494)	2011 (494)	2011 (494)	2011 (494)
Ag3280	<.0000	<.0000	.0002	1.007	.0003
Al3961	2.879	3.143	.0219	50.69	.0094
As1890	.0035	<.0000	.0006	5.177	.0015
B_2496	.0137	.0193	.1333	4.954	.0135
Ba4554	.3459	.0669	.1891	5.090	.0009
Be3130	.0002	.0001	<.0000	5.095	.0007
Bi2230	.0030	.0024	.0025	5.125	<.0000
Ca1840	38.40	31.12	26.07	26.28	.0011
Cd2288	<.0000	.0002	<.0000	5.223	.0003
Co2286	.0066	.0034	.0006	5.338	.0005
Cr2835	.0055	.0071	.0002	5.232	.0000
Cu2178	.0073	.0075	.0005	5.176	.0002
Fe2599	17.01	2.934	2.943	50.57	.0082
K_7664	.8766	1.094	1.963	50.29	.0245
Li6707	.0042	.0041	.0034	5.038	.0009
Mg2798	6.528	6.438	7.931	25.79	<.0000
Mn2576	.5481	.1515	.0438	5.079	.0005
Mo2020	.0000	.0003	<.0000	5.144	.0087
Na5895	7.005	28.73	29.22	49.96	.0035
Ni2216	.0158	.0109	.0017	5.327	<.0000
P_1774	.2654	.0734	.0624	5.079	<.0000
Pb2203	.0092	.0108	.0007	5.300	.0005
S_1820	.8125	1.281	.1701	50.56	.0056
Sb2068	.0007	<.0000	<.0000	1.021	<.0000
Se1960	.0026	.0016	<.0000	5.110	.0045
Si2516	4.003	6.420	1.680	5.134	.0147
Sn1899	<.0000	<.0000	<.0000	5.303	.0018
Sr4077	.0698	.0587	.0769	5.148	.0006
Th2832	<.0000	.0026	<.0000	5.236	<.0000
Ti3349	.0168	.0381	<.0000	5.029	.0009
Tl1908	<.0000	<.0000	.0003	5.216	.0005
U_3670	<.0000	<.0000	<.0000	5.275	<.0000
V_2908	.0084	.0070	<.0000	4.951	.0012
Y_3710	5361.6	5172.9	5167.3	4988.5	5099.4
Zn2138	.0392	.0492	.0025	5.186	.0002

Vertical Table Report
Author:
Notes:

	160-437-D-6-A	160-437-D-7-A	160-437-D-8-A	160-437-D-9-A	CCV
AM	8/22/2012 9:36:53	8/22/2012 9:40:31	8/22/2012 9:44:08	8/22/2012 9:47:43	8/22/2012 9:51:23
	metals	metals	metals	metals	metals
	2011 (494)	2011 (494)	2011 (494)	2011 (494)	2011 (494)
Ag3280	<.0000	<.0000	<.0000	.0001	1.020
Al3961	.0218	.1014	.0958	.0087	50.74
As1890	<.0000	.0022	.0026	<.0000	5.170
B_2496	.0585	.0109	.1119	.1436	5.024
Ba4554	.0253	.0684	.0114	.2056	5.108
Be3130	.0002	.0000	.0001	.0001	5.106
Bi2230	.0005	.0016	<.0000	.0006	5.148
Ca1840	33.13	30.18	35.72	27.22	26.44
Cd2288	.0000	<.0000	<.0000	<.0000	5.201
Co2286	.0001	.0005	.0004	.0002	5.301
Cr2835	.0004	.0006	.0003	.0003	5.254
Cu2178	<.0000	<.0000	<.0000	<.0000	5.174
Fe2599	.7854	4.659	6.811	3.212	50.97
K_7664	.6326	.6729	4.493	2.144	50.71
Li6707	.0035	.0019	.0028	.0039	5.045
Mg2798	3.346	8.396	16.48	8.551	25.65
Mn2576	.0586	.4159	.3127	.0473	5.095
Mo2020	.0006	.0000	.0001	.0000	5.185
Na5895	8.870	1.923	19.81	31.96	50.61
Ni2216	.0010	.0008	.0019	.0017	5.307
P_1774	.0300	.1744	.0382	.0665	5.161
Pb2203	.0007	.0012	.0003	.0005	5.308
S_1820	11.79	.0652	31.67	.1828	50.93
Sb2068	.0003	.0019	<.0000	<.0000	1.022
Se1960	.0026	.0010	.0010	<.0000	5.131
Si2516	.9160	2.136	1.947	1.754	5.094
Sn1899	<.0000	<.0000	<.0000	.0002	5.290
Sr4077	.0699	.0991	.0837	.0831	5.098
Th2832	.0028	.0016	.0012	.0012	5.238
Ti3349	<.0000	.0015	<.0000	<.0000	5.027
Tl1908	<.0000	<.0000	<.0000	<.0000	5.282
U_3670	<.0000	<.0000	<.0000	<.0000	5.240
V_2908	<.0000	<.0000	.0042	<.0000	5.057
Y_3710	4851.8	5158.8	5203.6	5239.8	4988.9
Zn2138	.0040	.0044	.0023	.0028	5.219

Vertical Table Report
Author:
Notes:

	CCB
AM	8/22/2012 9:54:43AM
	metals
	2011 (494)
Ag3280	<.0000
Al3961	.0089
As1890	W .0055
B_2496	.0157
Ba4554	.0011
Be3130	.0006
Bi2230	.0067
Ca1840	.1124
Cd2288	W .0042
Co2286	.0044
Cr2835	.0004
Cu2178	.0056
Fe2599	.0070
K_7664	.0451
Li6707	.0014
Mg2798	.0030
Mn2576	.0005
Mo2020	W .0130
Na5895	<.0000
Ni2216	W .0050
P_1774	.0052
Pb2203	W .0035
S_1820	.0786
Sb2068	<.0000
Se1960	.0084
Si2516	.0076
Sn1899	.0057
Sr4077	.0005
Th2832	.0030
Ti3349	.0009
Tl1908	.0042
U_3670	.0285
V_2908	.0008
Y_3710	4911.9
Zn2138	.0044

Sample Name: CALBLK1 Acquired: 8/22/2012 7:54:52 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0008**	**.0000**	**.0000**	**.0003**	**.0226**	**.0002**	**.0002**	**.0012**	**.0000**
Stddev	.0002	.000	.000	.0003	.0013	.0003	.0001	.0000	.000
%RSD	19.62	1365.	114.0	73.90	5.866	130.5	60.00	2.209	5.619
#1	-.0007	-.0001	.0000	.0003	.0222	-.0001	.0001	.0011	.0000
#2	-.0008	.0001	.0000	.0001	.0215	.0004	.0001	.0012	.0000
#3	-.0010	-.0001	.0000	.0006	.0241	.0003	.0003	.0012	.0000

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0000**	**.0062**	**.0001**	**.0003**	**.0004**	**.0034**	**-.0006**	**.0002**	**.0001**
Stddev	.000	.0005	.0001	.0002	.0017	.0022	.0005	.0003	.0000
%RSD	267.0	7.976	86.24	57.58	424.3	64.22	73.32	219.6	9.749
#1	-.0002	.0068	.0002	.0004	.0024	.0041	-.0012	.0005	.0001
#2	.0000	.0060	.0000	.0001	-.0010	.0052	-.0003	.0000	.0001
#3	.0001	.0058	.0001	.0005	-.0001	.0010	-.0005	-.0001	.0001

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0075**	**.0002**	**.0000**	**-.0002**	**.0004**	**.0004**	**.0001**	**.0035**	**.0001**
Stddev	.0011	.0001	.0001	.0001	.0000	.0001	.0000	.0003	.0001
%RSD	13.99	47.71	319.7	39.44	3.945	12.58	29.44	8.944	211.5
#1	-.0069	.0003	-.0001	-.0001	.0004	.0004	.0001	.0031	.0001
#2	-.0087	.0001	.0001	-.0003	.0004	.0005	.0001	.0038	.0002
#3	-.0069	.0002	.0001	-.0003	.0004	.0004	.0001	.0035	-.0001

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0017**	**.0073**	**.0019**	**-.0002**	**.0420**	**-.0008**	**.0010**
Stddev	.0009	.0008	.0001	.0001	.0015	.0002	.0001
%RSD	49.09	11.13	5.153	25.75	3.469	30.86	5.973
#1	-.0025	.0076	.0019	-.0003	.0420	-.0010	.0010
#2	-.0008	.0079	.0020	-.0002	.0435	-.0007	.0010
#3	-.0018	.0064	.0018	-.0002	.0406	-.0006	.0011

Sample Name: CALBLK1 Acquired: 8/22/2012 7:54:52 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5473.4
Stddev	25.5
%RSD	.46581
#1	5449.2
#2	5470.9
#3	5500.0

Sample Name: CAL 1 Acquired: 8/22/2012 7:58:32 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0130**	**.0263**	**.0004**	**.0133**	**.4330**	**.0424**	**.0114**	**.1524**	**.0040**
Stddev	.0002	.0002	.0001	.0005	.0024	.0004	.0001	.0020	.0001
%RSD	1.715	.6568	23.48	3.574	.5565	.8581	.9216	1.287	2.052
#1	.0131	.0264	.0005	.0136	.4310	.0426	.0115	.1546	.0039
#2	.0127	.0264	.0003	.0127	.4322	.0426	.0113	.1508	.0040
#3	.0131	.0261	.0003	.0135	.4357	.0420	.0114	.1520	.0041

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0179**	**.0200**	**.0020**	**.0273**	**.5104**	**.0978**	**.0340**	**.0226**	**.0155**
Stddev	.0002	.0004	.0001	.0007	.0025	.0004	.0002	.0003	.0001
%RSD	1.213	1.908	3.685	2.657	.4806	.3601	.5352	1.535	.3395
#1	.0181	.0204	.0021	.0269	.5114	.0974	.0342	.0230	.0156
#2	.0177	.0199	.0020	.0270	.5076	.0981	.0339	.0224	.0155
#3	.0178	.0197	.0020	.0282	.5122	.0978	.0339	.0224	.0155

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3136**	**.0207**	**.0166**	**.0009**	**.1538**	**.0010**	**.0007**	**.0343**	**.0129**
Stddev	.0015	.0003	.0003	.0000	.0017	.0001	.0001	.0005	.0002
%RSD	.4762	1.303	1.506	1.015	1.134	7.590	10.11	1.576	1.460
#1	.3119	.0210	.0169	.0009	.1557	.0011	.0007	.0338	.0130
#2	.3142	.0204	.0164	.0009	.1522	.0010	.0008	.0343	.0127
#3	.3148	.0206	.0166	.0009	.1537	.0010	.0007	.0349	.0129

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0583**	**.0428**	**.0178**	**.0013**	**.0938**	**.0095**	**.0112**
Stddev	.0006	.0004	.0007	.0001	.0019	.0004	.0001
%RSD	1.004	.9103	3.662	5.616	2.011	3.993	.9071
#1	.0578	.0432	.0183	.0014	.0959	.0091	.0113
#2	.0582	.0424	.0171	.0012	.0932	.0096	.0111
#3	.0589	.0427	.0181	.0013	.0923	.0099	.0112

Sample Name: CAL 1 Acquired: 8/22/2012 7:58:32 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5312.5
Stddev	79.7
%RSD	1.4997
#1	5225.5
#2	5381.8
#3	5330.3

Sample Name: CAL 2 Acquired: 8/22/2012 8:02:11 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Ca1840	Cd2288	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2559	1.259	.0480	.1324	8.113	8.439	.7330	.7951	.3348
Stddev	.0011	.009	.0005	.0006	.043	.037	.0054	.0075	.0029
%RSD	.4348	.6909	1.017	.4710	.5243	.4420	.7358	.9403	.8627
#1	.2572	1.269	.0485	.1331	8.161	8.482	.7387	.8032	.3378
#2	.2552	1.258	.0478	.1322	8.098	8.422	.7326	.7938	.3346
#3	.2554	1.251	.0476	.1320	8.080	8.413	.7279	.7884	.3321

Elem	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.280	.0719	2.612	1.016	1.939	.1753	1.483	.3791	3.180
Stddev	.006	.0007	.018	.007	.009	.0020	.010	.0032	.015
%RSD	.4348	.9554	.6994	.6874	.4662	1.148	.6457	.8354	.4747
#1	1.287	.0727	2.633	1.023	1.949	.1775	1.494	.3825	3.197
#2	1.276	.0717	2.604	1.014	1.937	.1750	1.479	.3785	3.175
#3	1.278	.0713	2.598	1.010	1.931	.1735	1.477	.3762	3.168

Elem	Ni2216	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4790	.1055	.0126	.0361	.1210	11.99	.8374	.0757	.1969
Stddev	.0036	.0008	.0002	.0001	.0009	.05	.0071	.0006	.0017
%RSD	.7507	.7300	1.192	.3411	.7567	.4429	.8429	.7529	.8672
#1	.4829	.1063	.0128	.0363	.1219	12.05	.8452	.0762	.1989
#2	.4783	.1055	.0125	.0361	.1210	11.96	.8355	.0758	.1960
#3	.4758	.1048	.0126	.0360	.1201	11.95	.8314	.0750	.1958

Elem	Zn2138
Units	Cts/S
Avg	.4889
Stddev	.0044
%RSD	.8953
#1	.4935
#2	.4884
#3	.4848

Sample Name: CAL 2 Acquired: 8/22/2012 8:02:11 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5345.8
Stddev	29.4
%RSD	.54917
#1	5319.6
#2	5340.3
#3	5377.5

Sample Name: CAL 3 Acquired: 8/22/2012 8:05:30 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.264	6.213	.2423	.6622	40.77	42.15	.2621	3.405	3.936
Stddev	.005	.040	.0007	.0032	.23	.21	.0011	.003	.014
%RSD	.3637	.6415	.3007	.4793	.5676	.4972	.4273	.0839	.3481
#1	1.269	6.257	.2414	.6658	41.03	42.39	.2608	3.403	3.920
#2	1.260	6.181	.2425	.6597	40.65	42.08	.2629	3.408	3.946
#3	1.264	6.200	.2428	.6611	40.62	41.99	.2626	3.403	3.942

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.606	6.153	.3502	12.85	5.071	9.650	.8675	7.244	1.865
Stddev	.003	.006	.0017	.06	.025	.056	.0054	.037	.004
%RSD	.1875	.0993	.4926	.4629	.4962	.5810	.6251	.5164	.2211
#1	1.602	6.160	.3482	12.92	5.100	9.715	.8733	7.286	1.862
#2	1.608	6.148	.3513	12.81	5.057	9.613	.8626	7.215	1.870
#3	1.608	6.152	.3510	12.82	5.057	9.623	.8667	7.231	1.864

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	16.10	2.285	.3252	.5052	1.515	.0609	.1811	.3972	.5890
Stddev	.09	.005	.0005	.0005	.006	.0005	.0008	.0010	.0012
%RSD	.5688	.2101	.1499	.0933	.4053	.8803	.4399	.2427	.2090
#1	16.21	2.280	.3248	.5046	1.508	.0603	.1804	.3975	.5882
#2	16.04	2.290	.3257	.5056	1.520	.0614	.1819	.3961	.5904
#3	16.06	2.286	.3252	.5053	1.517	.0609	.1810	.3979	.5884

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	58.07	.9218	4.139	.3552	.5999	.9924	2.413
Stddev	.59	.0052	.019	.0009	.0021	.0083	.005
%RSD	1.018	.5605	.4696	.2393	.3551	.8413	.2133
#1	58.68	.9277	4.162	.3542	.6023	1.001	2.407
#2	57.50	.9181	4.128	.3557	.5992	.9847	2.417
#3	58.04	.9196	4.128	.3557	.5982	.9913	2.414

Sample Name: CAL 3 Acquired: 8/22/2012 8:05:30 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5264.5
Stddev	14.3
%RSD	.27109
#1	5258.2
#2	5280.8
#3	5254.4

Sample Name: CAL 4 Acquired: 8/22/2012 8:08:49 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.525**	**12.57**	**.4779**	**1.329**	**81.03**	**83.41**	**.5084**	**6.529**	**7.690**
Stddev	.009	.06	.0012	.005	.76	.16	.0013	.015	.018
%RSD	.3393	.4551	.2488	.3501	.9339	.1889	.2501	.2361	.2290
#1	2.531	12.55	.4780	1.325	80.27	83.28	.5080	6.530	7.686
#2	2.528	12.64	.4790	1.334	81.03	83.36	.5099	6.544	7.709
#3	2.515	12.54	.4767	1.327	81.79	83.58	.5074	6.513	7.674

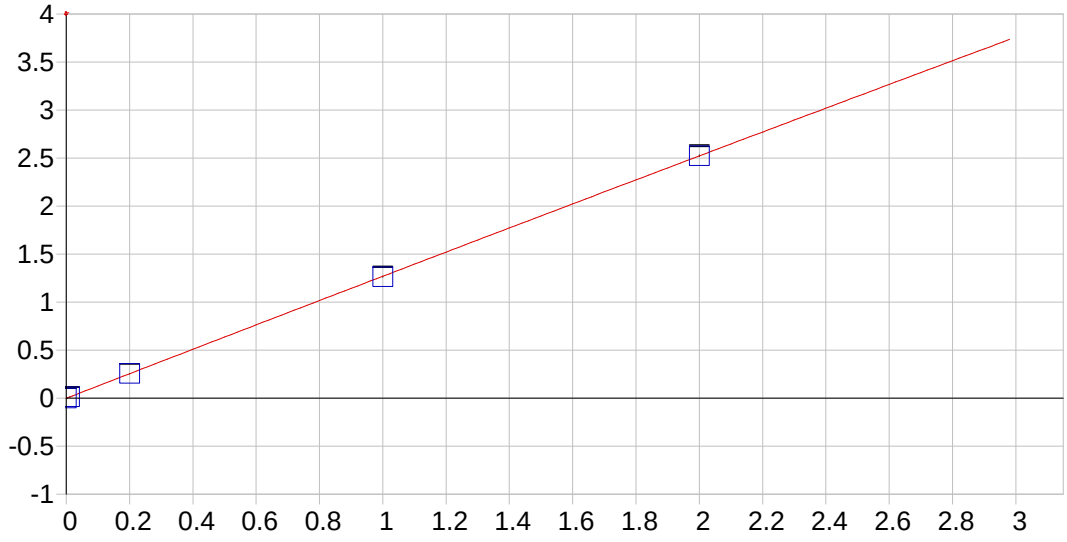
Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.090**	**12.06**	**.6803**	**25.65**	**10.27**	**19.55**	**1.730**	**14.50**	**3.654**
Stddev	.007	.03	.0019	.12	.05	.09	.006	.07	.008
%RSD	.2331	.2208	.2795	.4483	.4657	.4505	.3716	.4675	.2285
#1	3.091	12.07	.6798	25.61	10.26	19.50	1.729	14.48	3.654
#2	3.098	12.08	.6824	25.78	10.32	19.66	1.737	14.58	3.663
#3	3.083	12.03	.6786	25.56	10.23	19.50	1.724	14.45	3.646

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**32.41**	**4.394**	**.6374**	**.9632**	**3.021**	**.1205**	**.3567**	**.8056**	**1.140**
Stddev	.14	.009	.0011	.0022	.008	.0006	.0012	.0027	.004
%RSD	.4424	.2017	.1769	.2328	.2568	.4566	.3380	.3381	.3291
#1	32.36	4.394	.6375	.9633	3.019	.1200	.3556	.8049	1.139
#2	32.57	4.404	.6385	.9655	3.029	.1211	.3580	.8086	1.144
#3	32.29	4.386	.6363	.9610	3.014	.1204	.3564	.8033	1.136

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**117.7**	**1.802**	**8.400**	**.6641**	**1.140**	**1.985**	**4.663**
Stddev	1.3	.004	.038	.0021	.003	.008	.011
%RSD	1.144	.1928	.4543	.3093	.2826	.4198	.2387
#1	116.2	1.802	8.380	.6640	1.141	1.986	4.663
#2	118.6	1.805	8.444	.6662	1.142	1.994	4.675
#3	118.3	1.798	8.376	.6620	1.136	1.977	4.652

Sample Name: CAL 4 Acquired: 8/22/2012 8:08:49 Type: Cal
Method: 2011(v494) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	5260.3
Stddev	10.5
%RSD	.19970
#1	5260.4
#2	5249.7
#3	5270.7

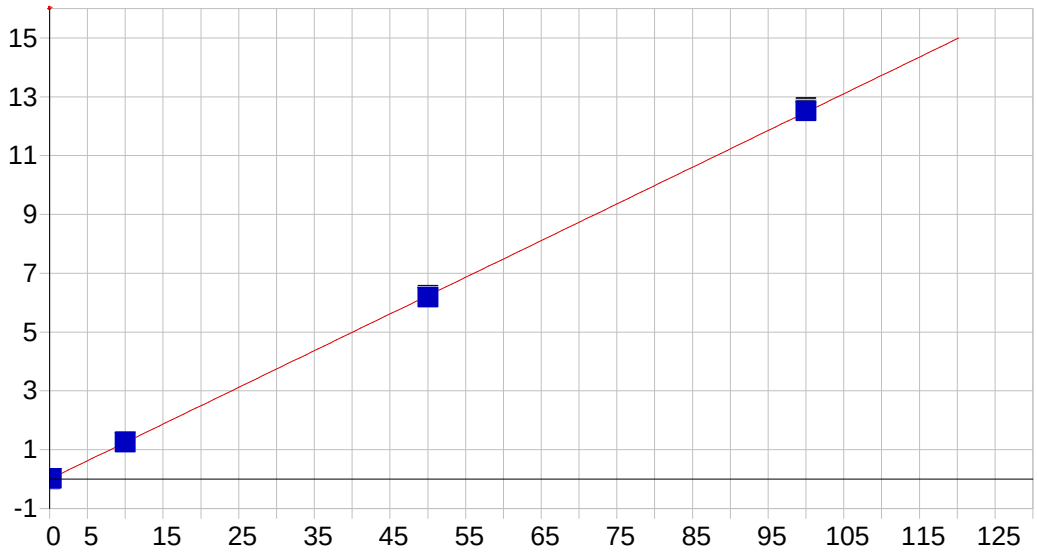


Ag 328.068 {103}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Curvilinear	Weighting:	1/Conc

A0 (Offset):	-0.000838	Re-Slope:	1.000000
A1 (Gain):	1.278108	Y-int:	0.000000
A2 (Curvature):	-0.008168		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000060		
Predicted MDL:	0.000629		
Predicted MQL:	0.002096		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00084	.000	1
CAL 1	.01000	.01082	.001	8.19	.01299	.000	1
CAL 2	.20000	.20117	.001	.583	.25594	.001	1
CAL 3	1.0000	.99623	-.004	-.377	1.2643	.005	1
CAL 4	2.0000	2.0018	.002	.089	2.5249	.009	1

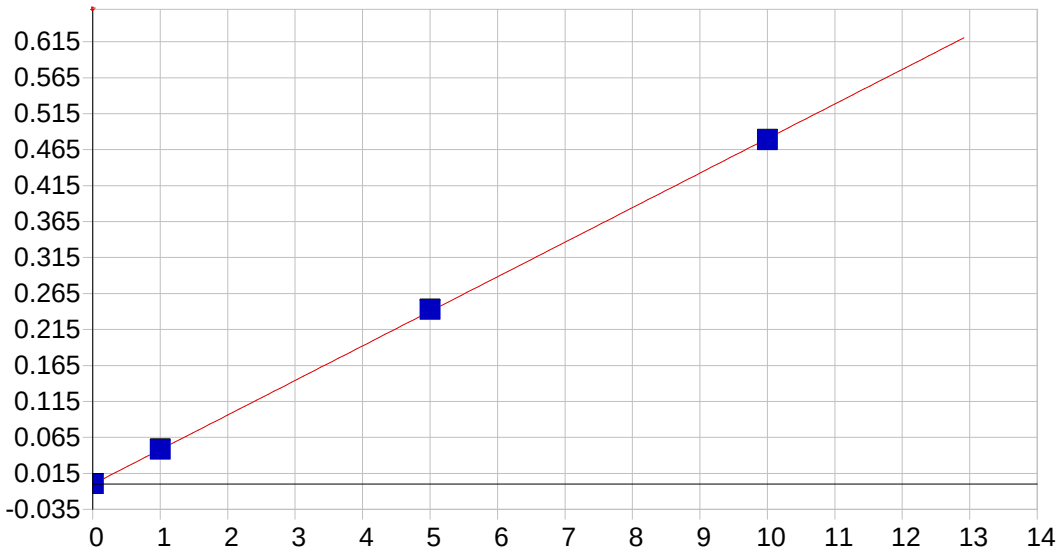


Al 396.152 { 85}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000006	Re-Slope:	1.000000
A1 (Gain):	0.124769	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000168		
Predicted MDL:	0.008593		
Predicted MQL:	0.028642		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00001	.000	1
CAL 1	.20000	.20920	.009	4.60	.02631	.000	1
CAL 2	10.000	10.050	.050	.502	1.2592	.009	1
CAL 3	50.000	49.583	-.417	-.835	6.2127	.040	1
CAL 4	100.00	100.36	.358	.358	12.574	.057	1

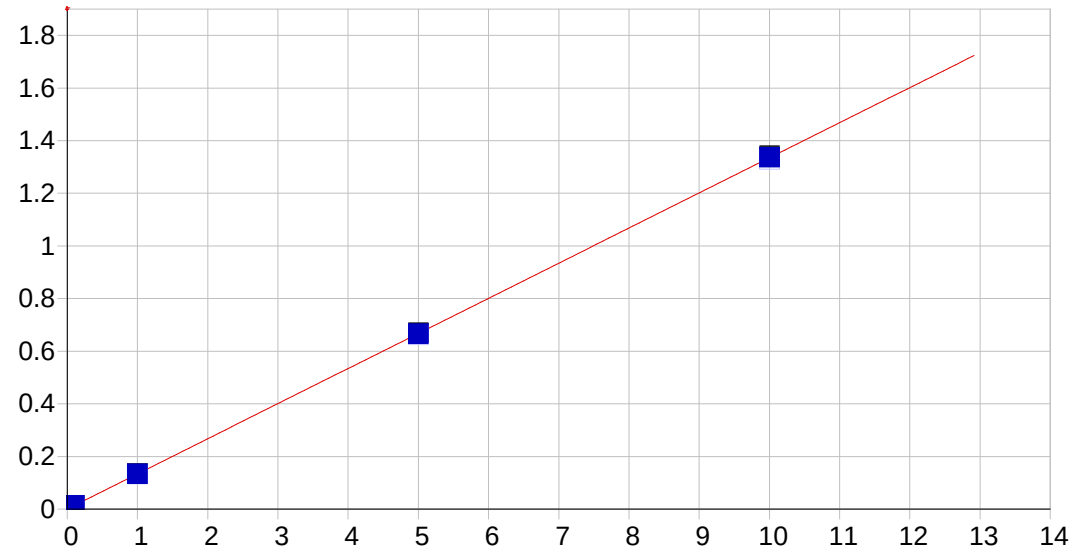


As 189.042 {478}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000019	Re-Slope:	1.000000
A1 (Gain):	0.048043	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000007		
Predicted MDL:	0.001677		
Predicted MQL:	0.005589		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00002	.000	1
CAL 1	.01000	.00785	-.002	-21.5	.00036	.000	1
CAL 2	1.0000	1.0002	.000	.022	.04800	.000	1
CAL 3	5.0000	5.0469	.047	.937	.24226	.001	1
CAL 4	10.000	9.9551	-.045	-.449	.47788	.001	1

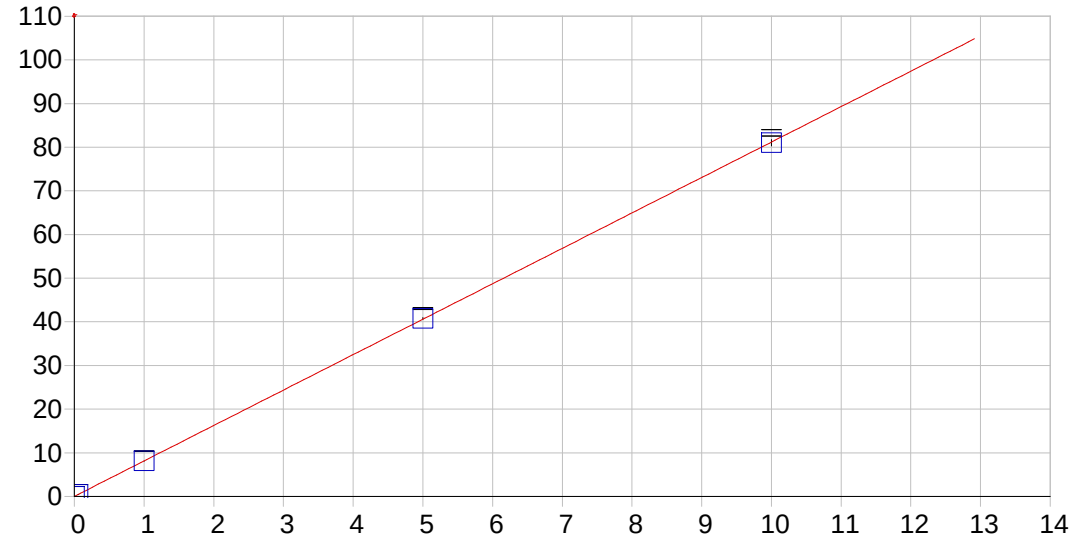


B 249.678 {135}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000347	Re-Slope:	1.000000
A1 (Gain):	0.133450	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000021		
Predicted MDL:	0.002769		
Predicted MQL:	0.009230		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00035	.000	1
CAL 1	.10000	.09705	-.003	-2.95	.01329	.000	1
CAL 2	1.0000	.99596	-.004	-.404	.13242	.001	1
CAL 3	5.0000	4.9909	-.009	-.182	.66222	.003	1
CAL 4	10.000	10.016	.016	.161	1.3287	.005	1



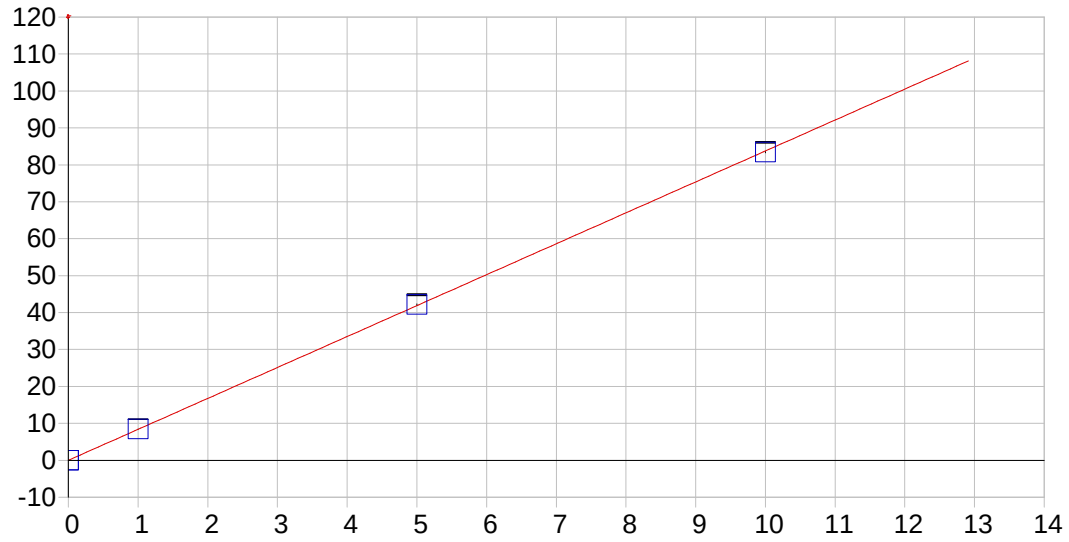
Ba 455.403 { 74}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.022601	Re-Slope:	1.000000

A1 (Gain):	8.115444		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999996		Status:	OK.	
Std Error of Est:	0.000860				
Predicted MDL:	0.000177				
Predicted MQL:	0.000590				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.02260	.001	1
CAL 1	.05000	.05057	.001	1.13	.43297	.002	1
CAL 2	1.0000	.99695	-.003	-.305	8.1133	.043	1
CAL 3	5.0000	5.0207	.021	.415	40.768	.231	1
CAL 4	10.000	9.9818	-.018	-.182	81.029	.757	1

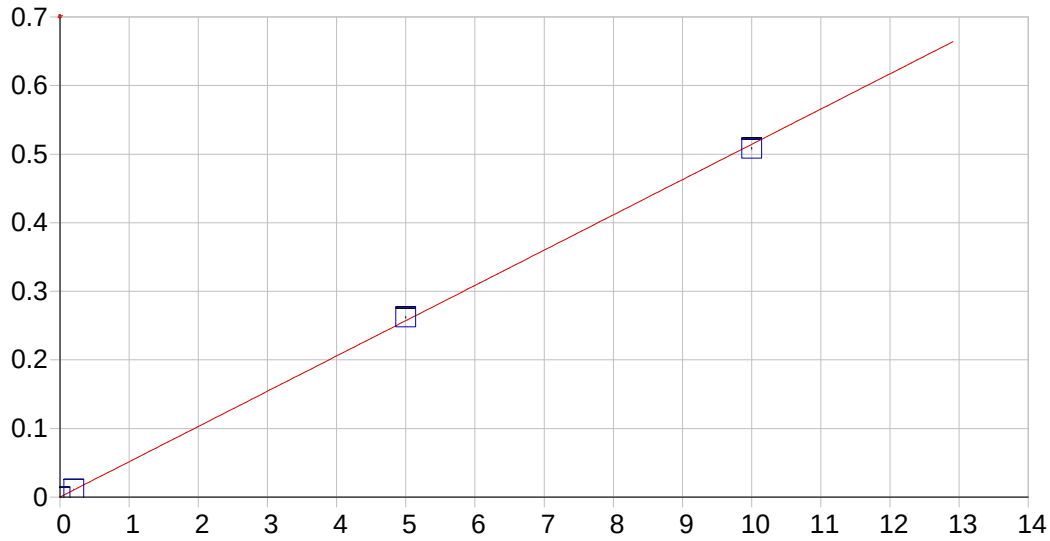


Be 313.042 {108}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000219	Re-Slope:	1.000000
A1 (Gain):	8.374955	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000508		
Predicted MDL:	0.000061		
Predicted MQL:	0.000203		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00022	.000	1
CAL 1	.00500	.00504	.000	.742	.04240	.000	1
CAL 2	1.0000	1.0076	.008	.761	8.4389	.037	1
CAL 3	5.0000	5.0331	.033	.661	42.152	.210	1
CAL 4	10.000	9.9593	-.041	-.407	83.409	.158	1

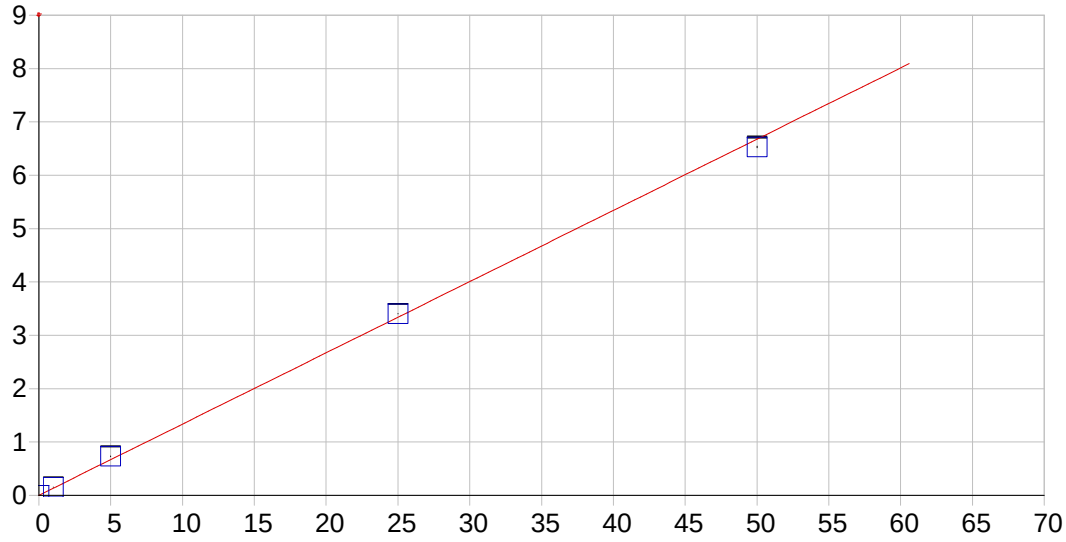


Bi 223.061 {451}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000170	Re-Slope:	1.000000
A1 (Gain):	0.051406	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999844	Status:	OK.
Std Error of Est:	0.000071		
Predicted MDL:	0.002644		
Predicted MQL:	0.008812		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00002	.000	.000	.00017	.000	1
CAL 1	.20000	.21816	.018	9.08	.01138	.000	1
CAL 3	5.0000	5.0949	.095	1.90	.26208	.001	1
CAL 4	10.000	9.8869	-.113	-1.13	.50842	.001	1



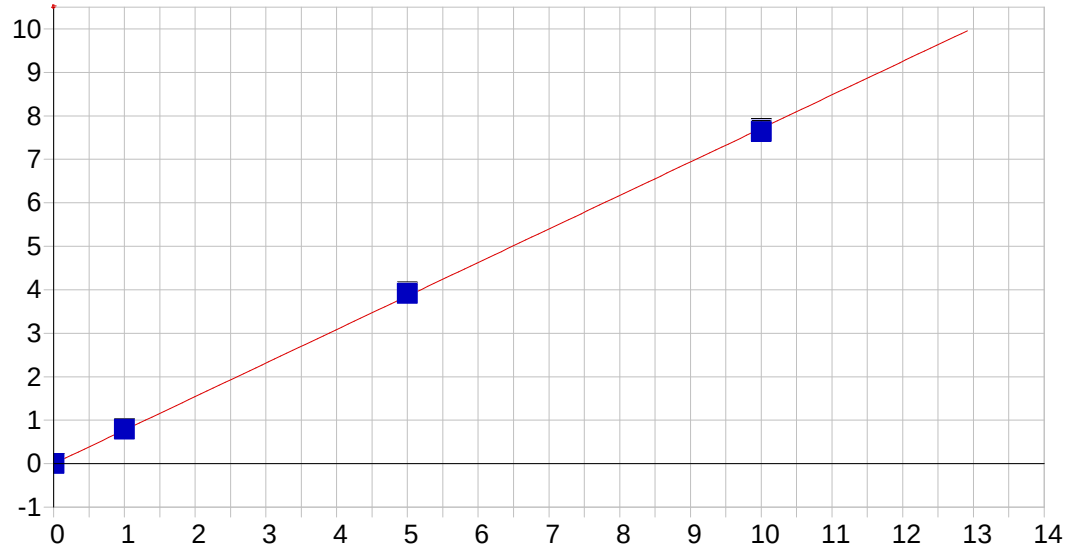
Ca 184.006 {483}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001183	Re-Slope:	1.000000
A1 (Gain):	0.133515	Y-int:	0.000000

A2 (Curvature):	0.000000						
n (Exponent):	1.000000						
Correlation:	0.999394			Status:	OK.		
Std Error of Est:	0.001708						
Predicted MDL:	0.000598						
Predicted MQL:	0.001993						

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00023	.000	.000	.00115	.000	1
CAL 1	1.0000	1.1329	.133	13.3	.15244	.002	1
CAL 2	5.0000	5.4815	.482	9.63	.73305	.005	1
CAL 3	25.000	25.493	.493	1.97	3.4048	.003	1
CAL 4	50.000	48.893	-1.11	-2.21	6.5291	.015	1

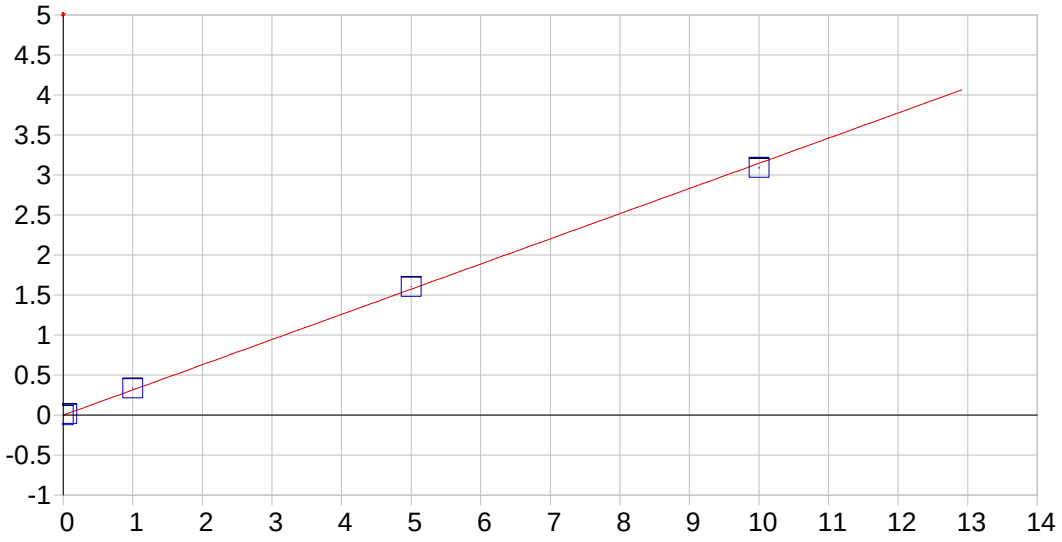


Cd 228.802 {447}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000042	Re-Slope:	1.000000
A1 (Gain):	0.771107	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999923	Status:	OK.
Std Error of Est:	0.000111		
Predicted MDL:	0.000173		
Predicted MQL:	0.000578		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00004	.000	1
CAL 1	.00500	.00518	.000	3.62	.00398	.000	1
CAL 2	1.0000	1.0244	.024	2.44	.79511	.007	1
CAL 3	5.0000	5.0706	.071	1.41	3.9360	.014	1
CAL 4	10.000	9.9048	-.095	-.952	7.6898	.018	1

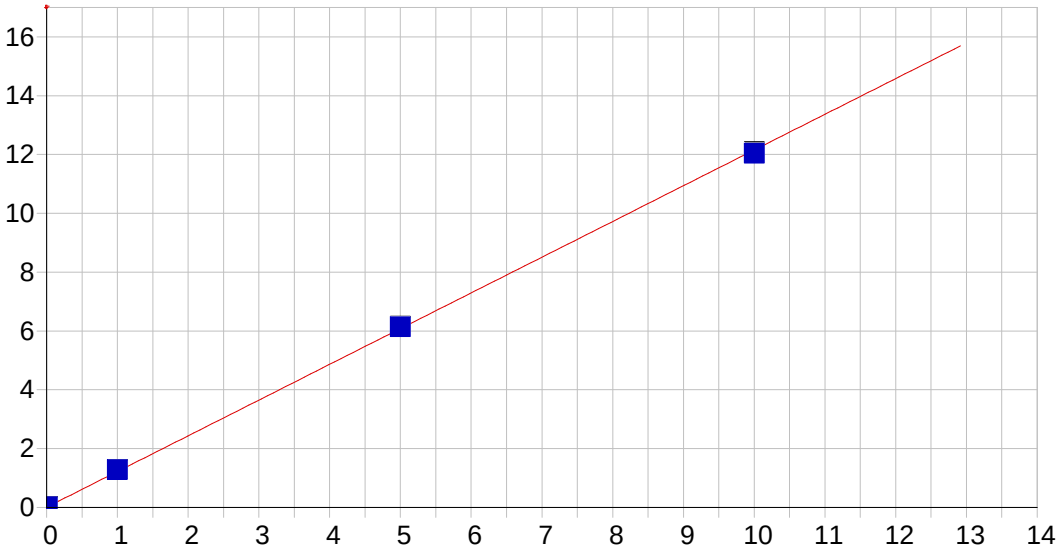


Co 228.616 {448}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000038	Re-Slope:	1.000000
A1 (Gain):	0.314594	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999676	Status:	OK.
Std Error of Est:	0.000293		
Predicted MDL:	0.000347		
Predicted MQL:	0.001156		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00004	.000	1
CAL 1	.05000	.05687	.007	13.7	.01785	.000	1
CAL 2	1.0000	1.0644	.064	6.44	.33483	.003	1
CAL 3	5.0000	5.1048	.105	2.10	1.6059	.003	1
CAL 4	10.000	9.8239	-.176	-1.76	3.0905	.007	1



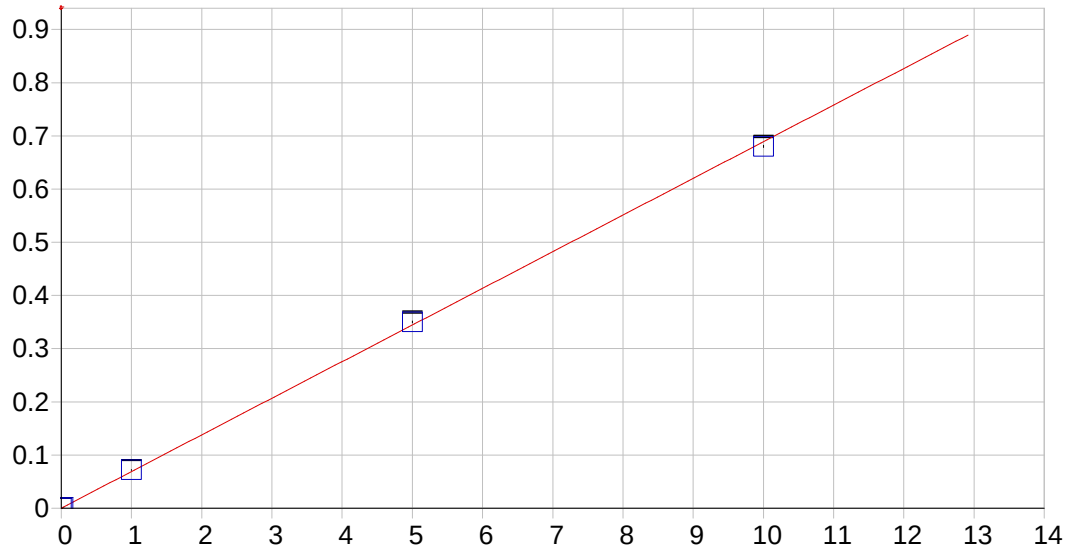
Cr 283.563 {119}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006200	Re-Slope:	1.000000

A1 (Gain):	1.214700	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000311		
Predicted MDL:	0.000386		
Predicted MQL:	0.001286		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00620	.000	1
CAL 1	.01000	.01004	.000	.380	.01999	.000	1
CAL 2	1.0000	1.0496	.050	4.96	1.2804	.006	1
CAL 3	5.0000	5.0495	.050	.990	6.1534	.006	1
CAL 4	10.000	9.9010	-.099	-.990	12.060	.027	1

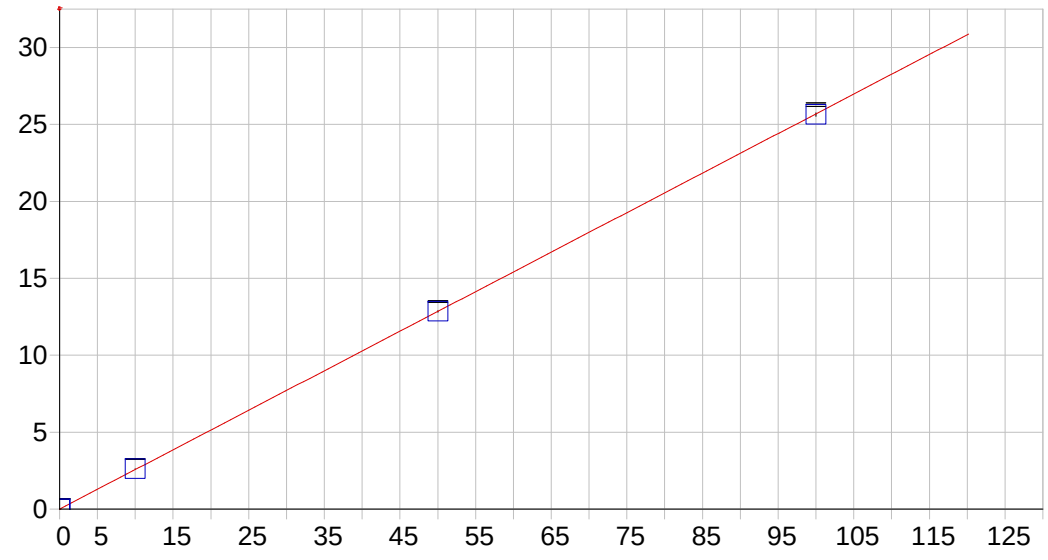


Cu 217.894 {455}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000110	Re-Slope:	1.000000
A1 (Gain):	0.068887	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999844	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.001892		
Predicted MQL:	0.006307		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00011	.000	1
CAL 1	.02500	.02755	.003	10.2	.00201	.000	1
CAL 2	1.0000	1.0424	.042	4.24	.07192	.001	1
CAL 3	5.0000	5.0815	.081	1.63	.35016	.002	1
CAL 4	10.000	9.8736	-.126	-1.26	.68027	.002	1

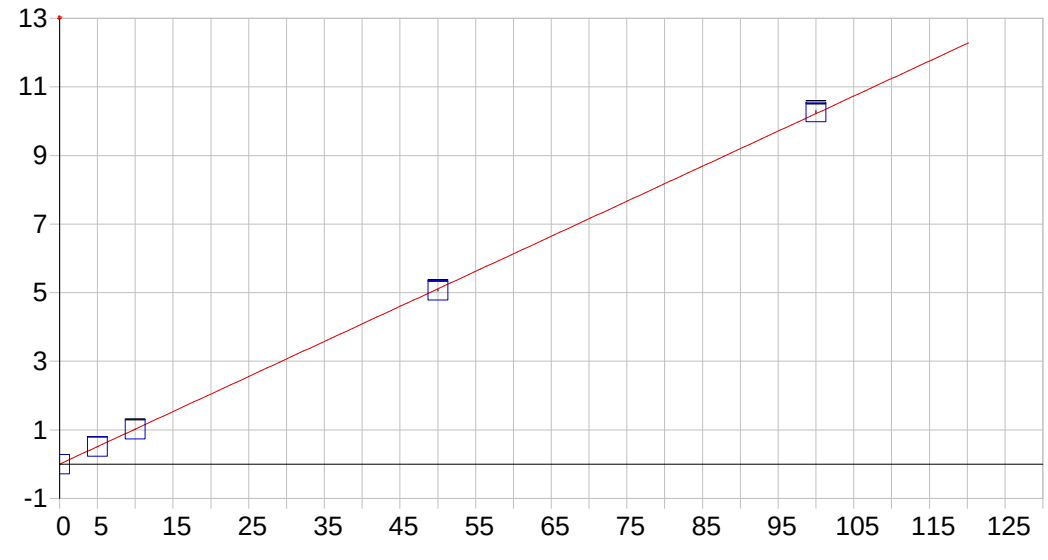


Fe 259.940 {130}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000345	Re-Slope:	1.000000
A1 (Gain):	0.256946	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999990	Status:	OK.
Std Error of Est:	0.000189		
Predicted MDL:	0.001400		
Predicted MQL:	0.004668		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00034	.000	1
CAL 1	.10000	.10507	.005	5.07	.02734	.001	1
CAL 2	10.000	10.163	.163	1.63	2.6118	.018	1
CAL 3	50.000	50.010	.010	.021	12.850	.059	1
CAL 4	100.00	99.821	-.179	-.179	25.649	.115	1



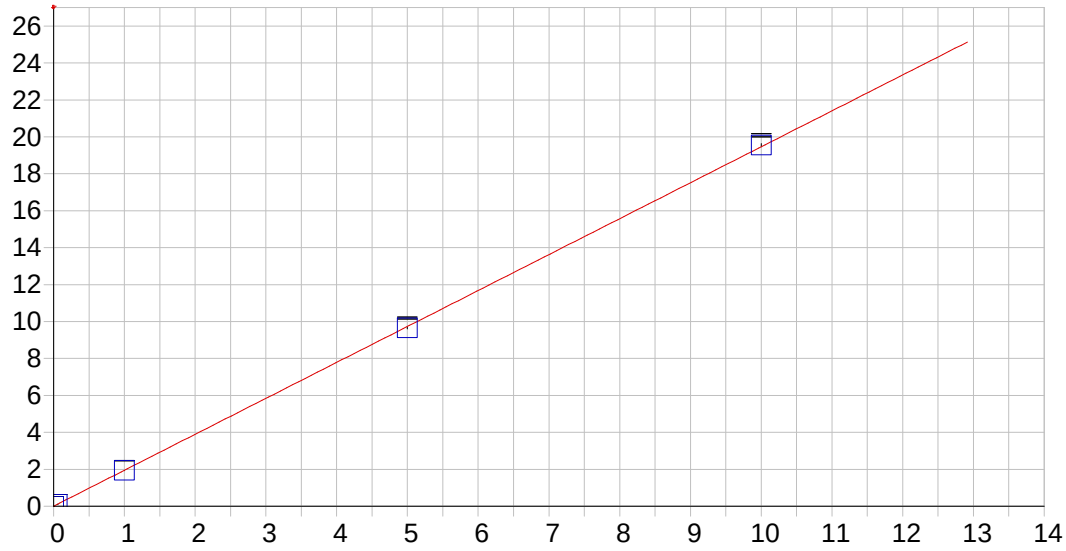
K 766.490 { 44}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000406	Re-Slope:	1.000000

A1 (Gain):	0.102206		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999983	Status:	OK.		
Std Error of Est:	0.000698				
Predicted MDL:	0.023309				
Predicted MQL:	0.077697				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00006	.000	.000	.00041	.002	1
CAL 1	5.0000	4.9899	-.010	-.202	.51040	.002	1
CAL 2	10.000	9.9321	-.068	-.679	1.0155	.007	1
CAL 3	50.000	49.615	-.385	-.771	5.0713	.025	1
CAL 4	100.00	100.46	.463	.463	10.268	.048	1

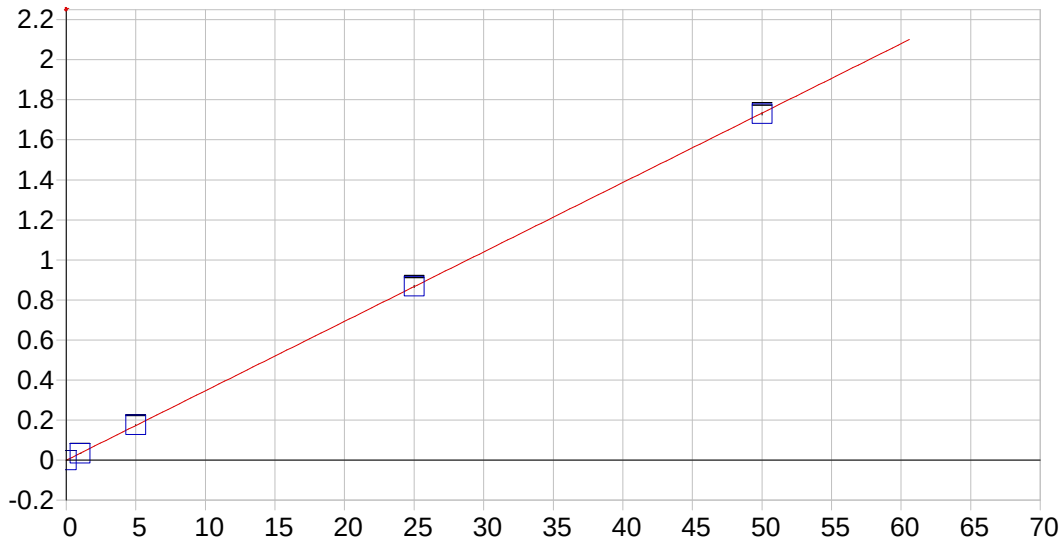


Li 670.784 { 50}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003402	Re-Slope:	1.000000
A1 (Gain):	1.945675	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999980	Status:	OK.
Std Error of Est:	0.000455		
Predicted MDL:	0.001226		
Predicted MQL:	0.004086		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00341	.002	1
CAL 1	.05000	.04850	-.001	-2.99	.09777	.000	1
CAL 2	1.0000	.99474	-.005	-.526	1.9388	.009	1
CAL 3	5.0000	4.9582	-.042	-.836	9.6505	.056	1
CAL 4	10.000	10.049	.049	.486	19.555	.088	1

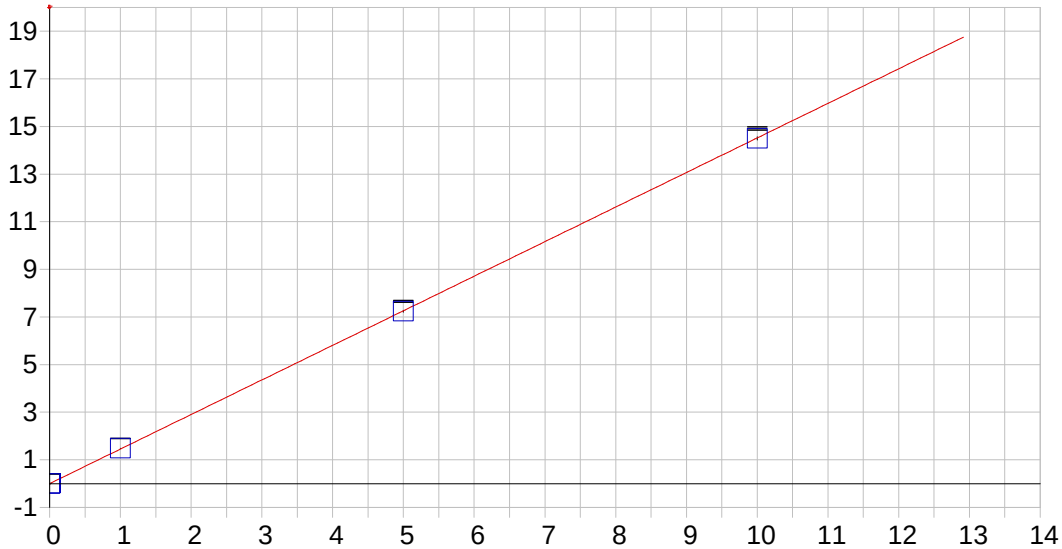


Mg 279.806 {121}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000632	Re-Slope:	1.000000
A1 (Gain):	0.034681	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.011790		
Predicted MQL:	0.039302		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00063	.000	1
CAL 1	1.0000	.99902	-.001	-.098	.03401	.000	1
CAL 2	5.0000	5.0735	.074	1.47	.17532	.002	1
CAL 3	25.000	25.033	.033	.131	.86753	.005	1
CAL 4	50.000	49.895	-.105	-.211	1.7298	.006	1



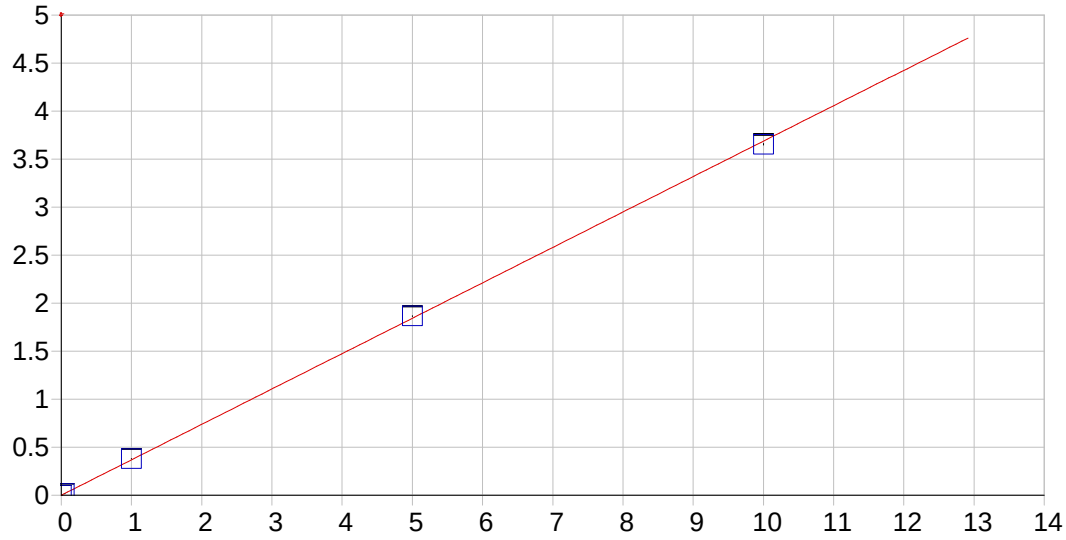
Mn 257.610 {131}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000153	Re-Slope:	1.000000

A1 (Gain):	1.452003	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999984	Status:	OK.
Std Error of Est:	0.000164		
Predicted MDL:	0.000263		
Predicted MQL:	0.000877		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00015	.000	1
CAL 1	.01500	.01544	.000	2.92	.02257	.000	1
CAL 2	1.0000	1.0215	.022	2.15	1.4834	.010	1
CAL 3	5.0000	4.9889	-.011	-.222	7.2440	.037	1
CAL 4	10.000	9.9891	-.011	-.109	14.504	.068	1

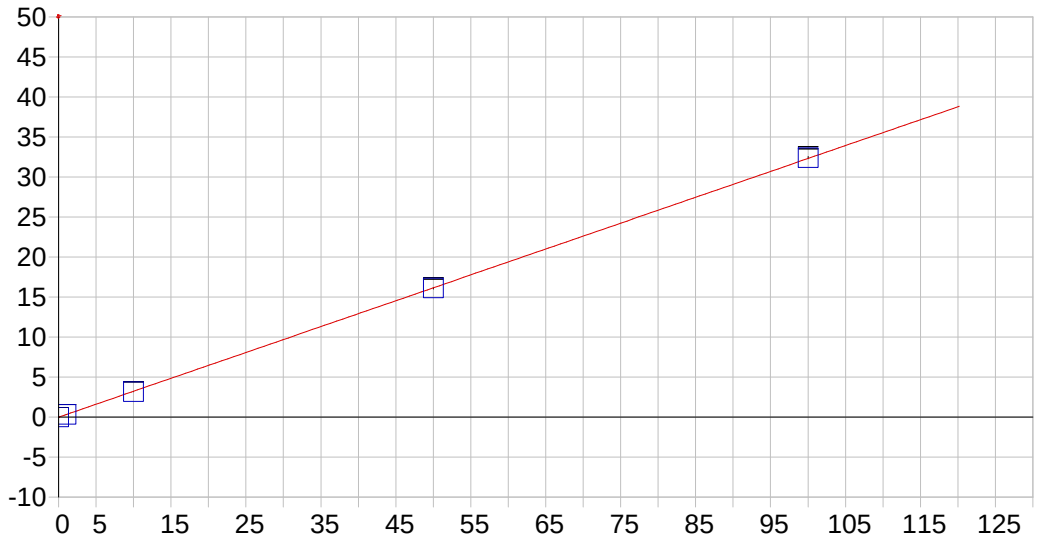


Mo 202.030 {467}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000090	Re-Slope:	1.000000
A1 (Gain):	0.368695	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999927	Status:	OK.
Std Error of Est:	0.000146		
Predicted MDL:	0.000262		
Predicted MQL:	0.000872		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00009	.000	1
CAL 1	.04000	.04179	.002	4.49	.01550	.000	1
CAL 2	1.0000	1.0279	.028	2.79	.37906	.003	1
CAL 3	5.0000	5.0591	.059	1.18	1.8654	.004	1
CAL 4	10.000	9.9112	-.089	-.888	3.6543	.008	1

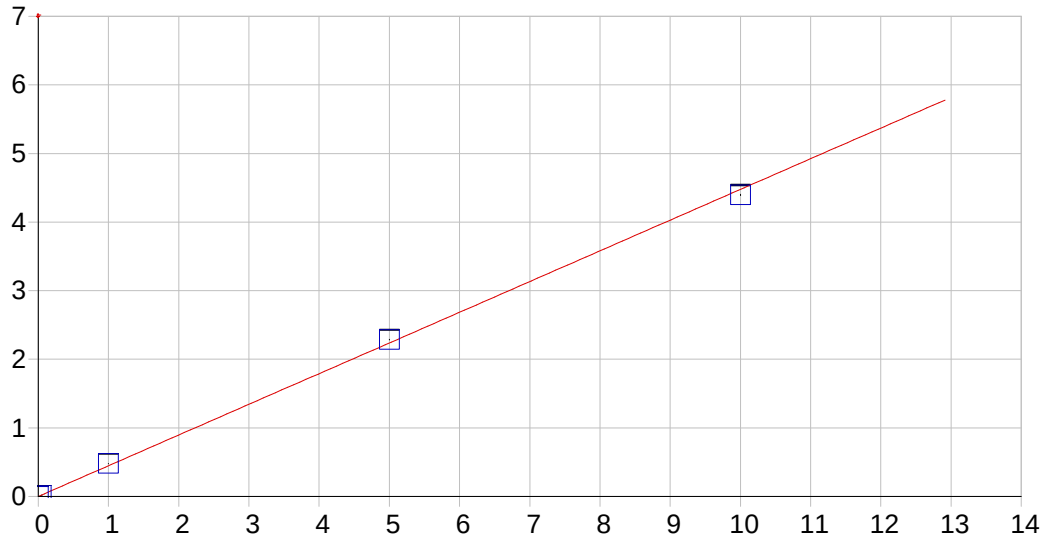


Na 589.592 { 57}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.007537	Re-Slope:	1.000000
A1 (Gain):	0.323200	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999990	Status:	OK.
Std Error of Est:	0.000760		
Predicted MDL:	0.007239		
Predicted MQL:	0.024130		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00002	.000	.000	-.00753	.001	1
CAL 1	1.0000	.99371	-.006	-.629	.31363	.001	1
CAL 2	10.000	9.8618	-.138	-1.38	3.1798	.015	1
CAL 3	50.000	49.845	-.155	-.309	16.102	.092	1
CAL 4	100.00	100.30	.299	.299	32.409	.143	1



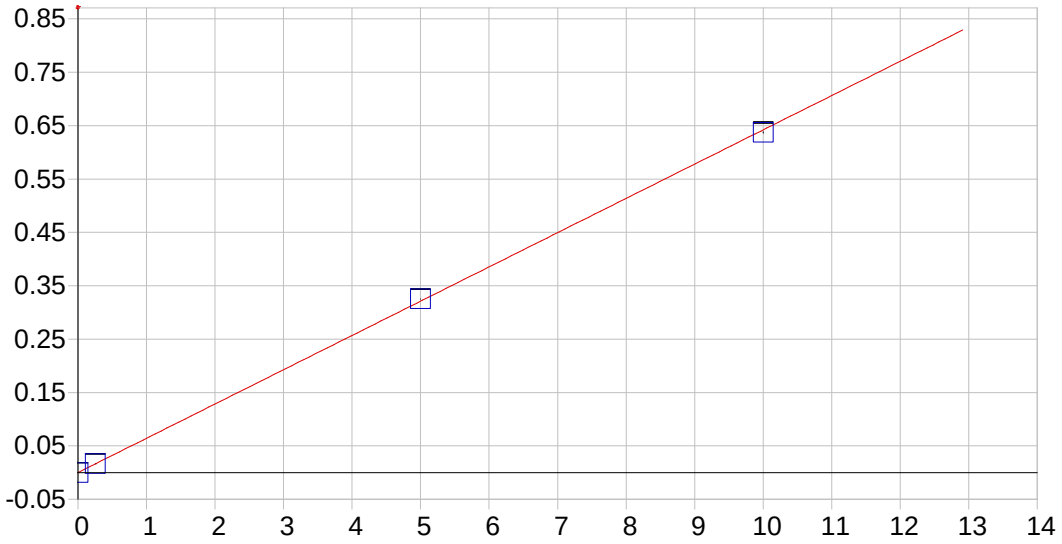
Ni 221.647 {452}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000225	Re-Slope:	1.000000

A1 (Gain):	0.447548		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999650		Status:	OK.	
Std Error of Est:	0.000387				
Predicted MDL:	0.000327				
Predicted MQL:	0.001091				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00022	.000	1
CAL 1	.04000	.04571	.006	14.3	.02068	.000	1
CAL 2	1.0000	1.0698	.070	6.98	.47901	.004	1
CAL 3	5.0000	5.1061	.106	2.12	2.2855	.005	1
CAL 4	10.000	9.8184	-.182	-1.82	4.3944	.009	1

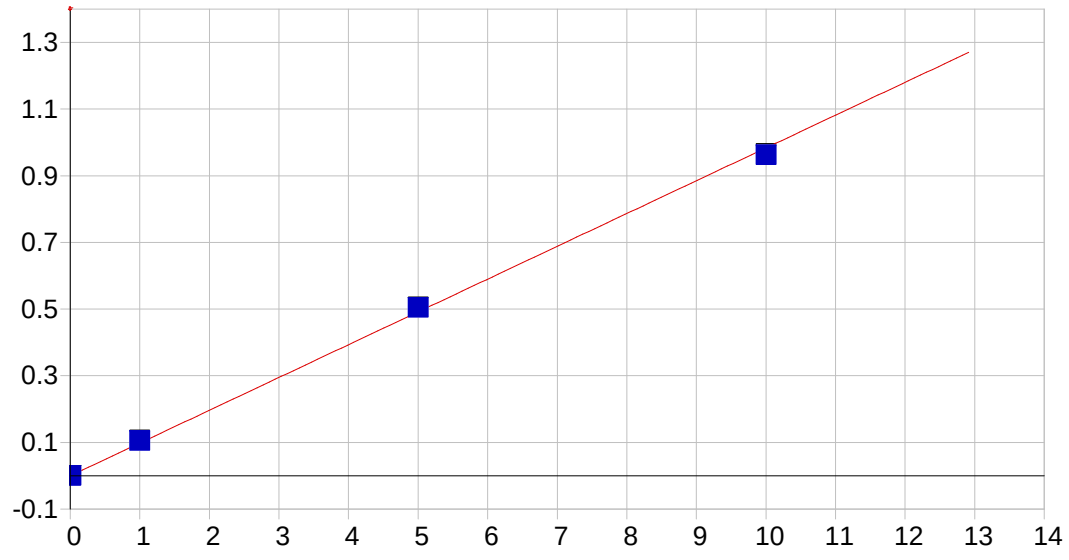


P 177.495 {490}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000033	Re-Slope:	1.000000	
A1 (Gain):	0.064209	Y-int:	0.000000	
A2 (Curvature):	0.000000			
n (Exponent):	1.000000			
Correlation:	0.999946	Status:	OK.	
Std Error of Est:	0.000058			
Predicted MDL:	0.001248			
Predicted MQL:	0.004159			

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00003	.000	1
CAL 1	.25000	.25819	.008	3.28	.01661	.000	1
CAL 3	5.0000	5.0648	.065	1.30	.32524	.000	1
CAL 4	10.000	9.9270	-.073	-.730	.63743	.001	1

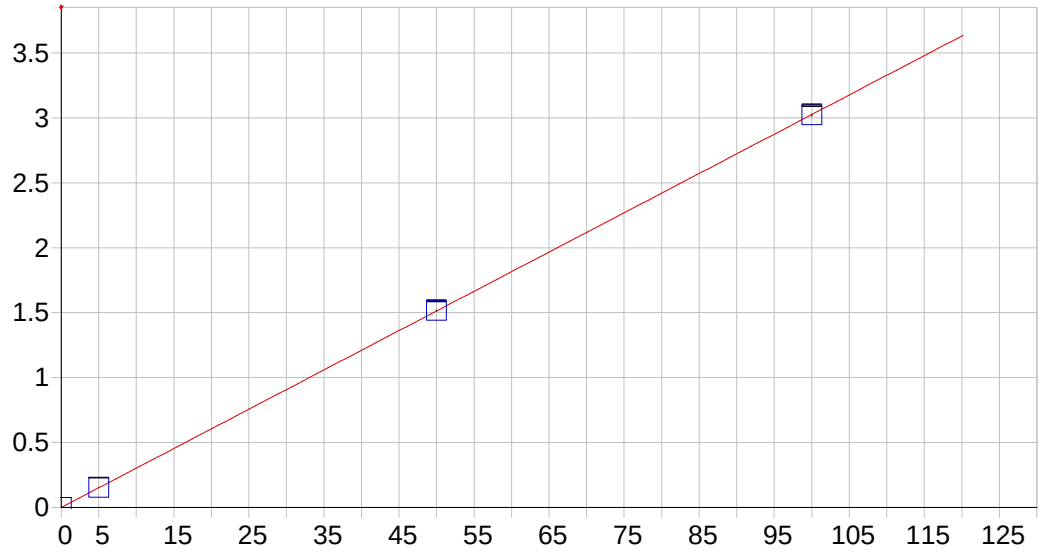


Pb 220.353 {453}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000240	Re-Slope:	1.000000
A1 (Gain):	0.098374	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999565	Status:	OK.
Std Error of Est:	0.000047		
Predicted MDL:	0.001284		
Predicted MQL:	0.004281		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00024	.000	1
CAL 1	.01000	.01119	.001	11.9	.00090	.000	1
CAL 2	1.0000	1.0755	.075	7.55	.10554	.001	1
CAL 3	5.0000	5.1348	.135	2.70	.50517	.000	1
CAL 4	10.000	9.7885	-.212	-2.12	.96325	.002	1



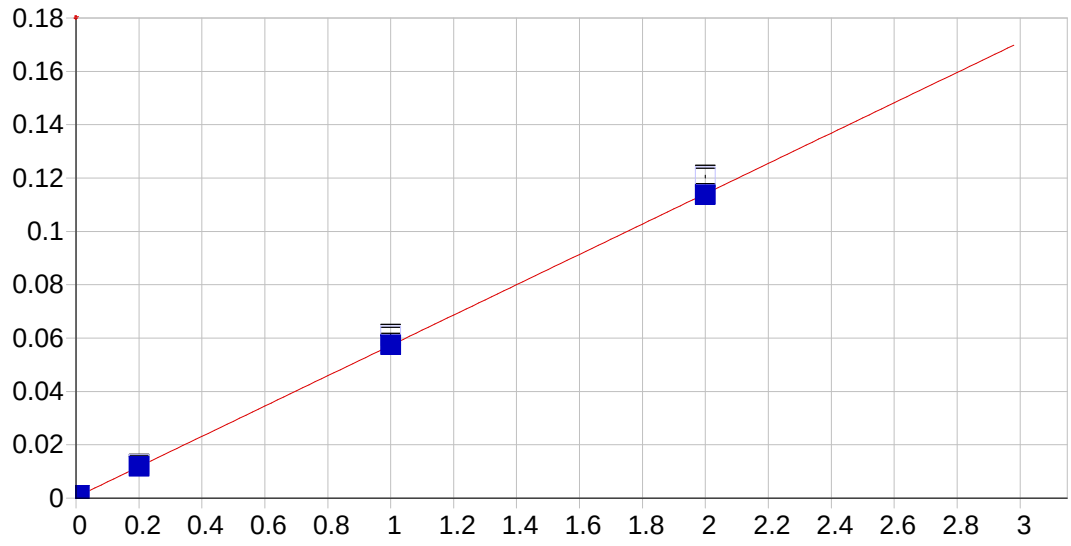
S 182.034 {485}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000402	Re-Slope:	1.000000

A1 (Gain):	0.030249	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999996	Status:	OK.
Std Error of Est:	0.000113		
Predicted MDL:	0.002515		
Predicted MQL:	0.008382		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00007	.000	.000	.00040	.000	1
CAL 1	5.0000	5.0727	.073	1.45	.15385	.002	1
CAL 3	50.000	50.075	.075	.151	1.5151	.006	1
CAL 4	100.00	99.852	-.148	-.148	3.0208	.008	1

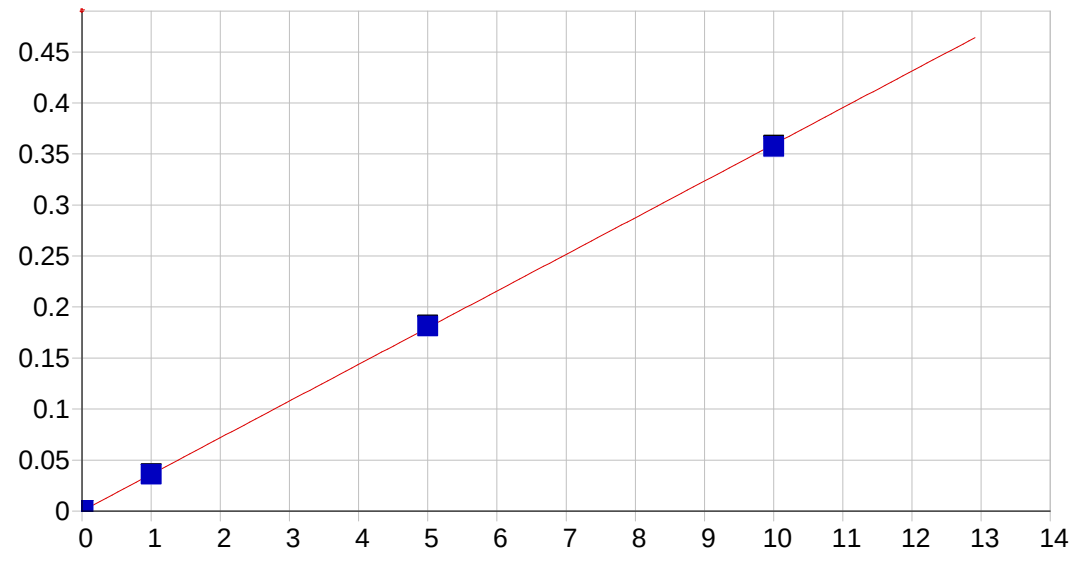


Sb 206.833 {463}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000423	Re-Slope:	1.000000
A1 (Gain):	0.056847	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999980	Status:	OK.
Std Error of Est:	0.000003		
Predicted MDL:	0.002126		
Predicted MQL:	0.007086		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00042	.000	1
CAL 1	.01000	.01091	.001	9.07	.00103	.000	1
CAL 2	.20000	.20226	.002	1.13	.01260	.000	1
CAL 3	1.0000	1.0038	.004	.379	.06087	.001	1
CAL 4	2.0000	1.9931	-.007	-.344	.12050	.001	1

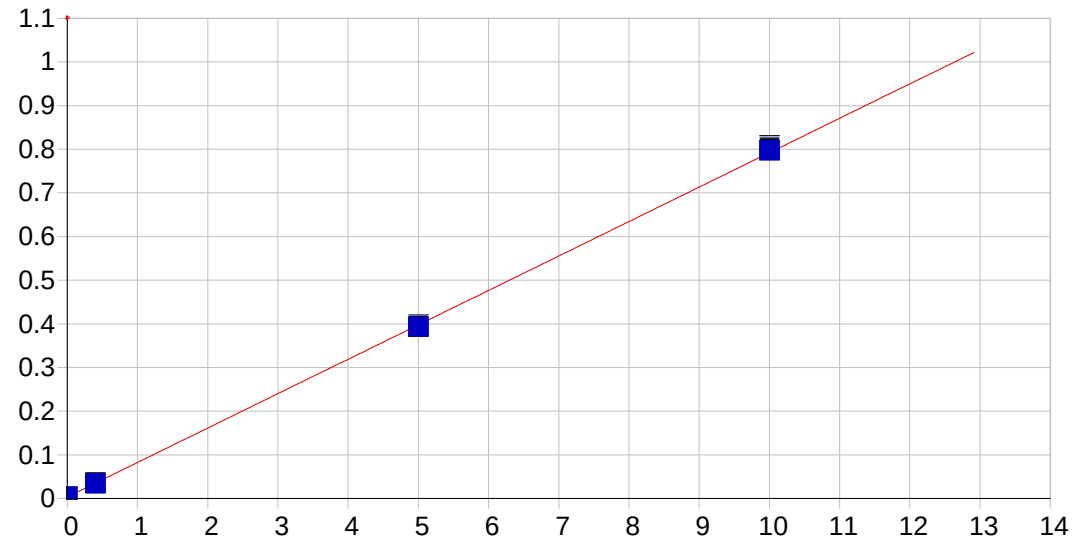


Se 196.090 {472}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000099	Re-Slope:	1.000000
A1 (Gain):	0.035925	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999955	Status:	OK.
Std Error of Est:	0.000007		
Predicted MDL:	0.002530		
Predicted MQL:	0.008434		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00010	.000	1
CAL 1	.01500	.01813	.003	20.8	.00075	.000	1
CAL 2	1.0000	1.0047	.005	.471	.03612	.000	1
CAL 3	5.0000	5.0472	.047	.945	.18108	.001	1
CAL 4	10.000	9.9449	-.055	-.551	.35669	.001	1



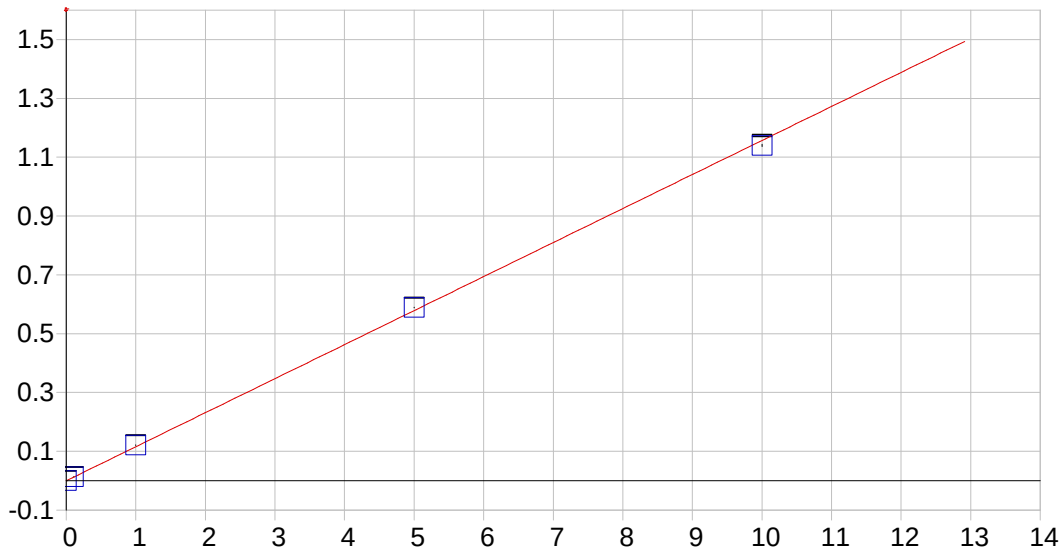
Si 251.611 {134}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003482	Re-Slope:	1.000000

A1 (Gain):	0.078859			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999956		Status:	OK.	
Std Error of Est:	0.000083				
Predicted MDL:	0.004774				
Predicted MQL:	0.015914				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00348	.000	1
CAL 1	.40000	.39088	-.009	-2.28	.03434	.001	1
CAL 3	5.0000	4.9407	-.059	-1.19	.39717	.001	1
CAL 4	10.000	10.068	.068	.684	.80561	.003	1

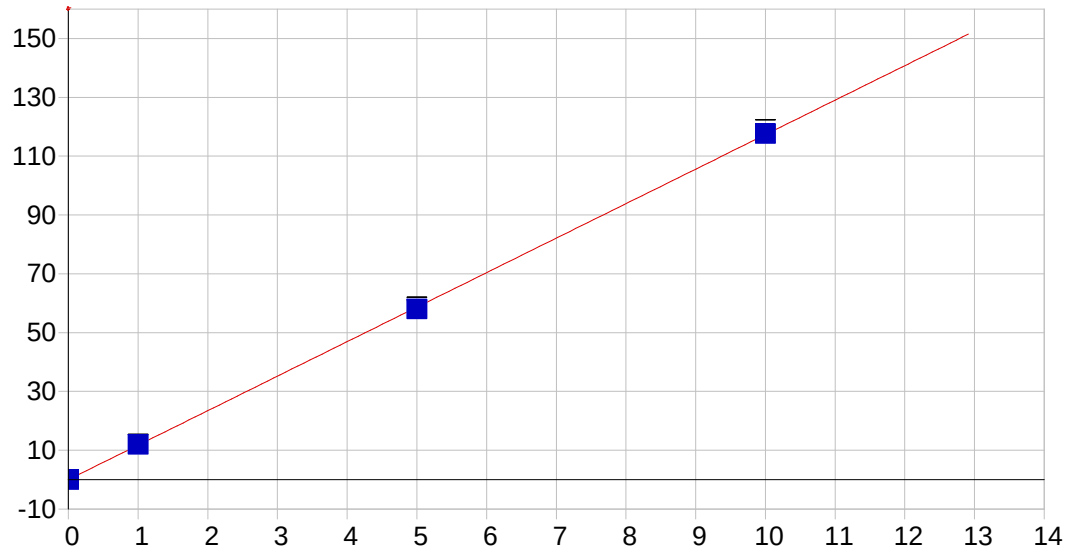


Sn 189.989 {478}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000061	Re-Slope:	1.000000
A1 (Gain):	0.115678	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999781	Status:	OK.
Std Error of Est:	0.000125		
Predicted MDL:	0.000639		
Predicted MQL:	0.002130		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00002	.000	.000	.00006	.000	1
CAL 1	.10000	.11060	.011	10.6	.01285	.000	1
CAL 2	1.0000	1.0455	.045	4.55	.12100	.001	1
CAL 3	5.0000	5.0914	.091	1.83	.58902	.001	1
CAL 4	10.000	9.8526	-.147	-1.47	1.1398	.004	1

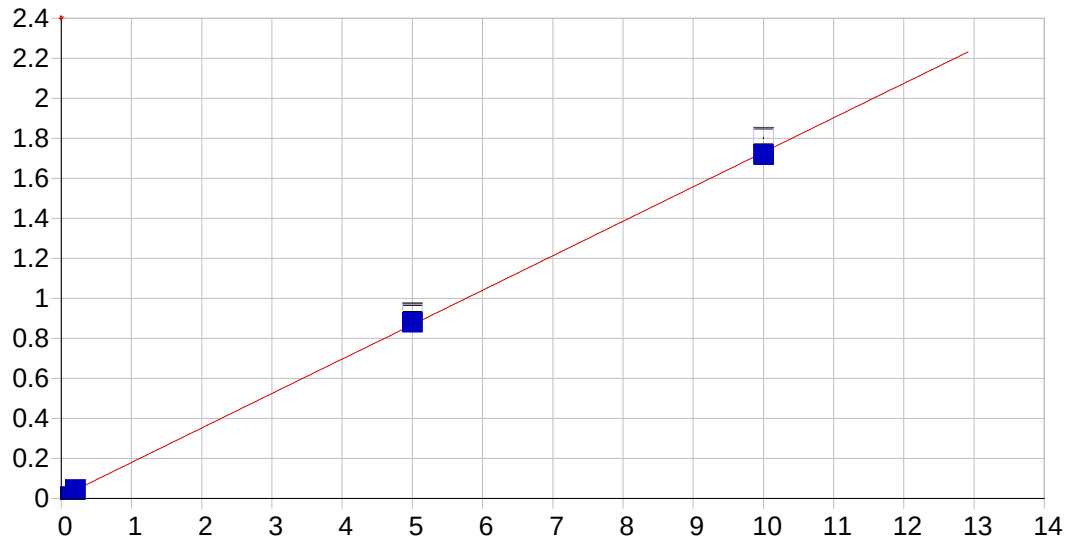


Sr 407.771 { 83}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001731	Re-Slope:	1.000000
A1 (Gain):	11.731829	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.001109		
Predicted MDL:	0.000078		
Predicted MQL:	0.000261		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00173	.001	1
CAL 1	.00500	.00506	.000	1.21	.05828	.001	1
CAL 2	1.0000	1.0215	.022	2.15	11.986	.053	1
CAL 3	5.0000	4.9489	-.051	-1.02	58.074	.591	1
CAL 4	10.000	10.029	.029	.295	117.69	1.35	1



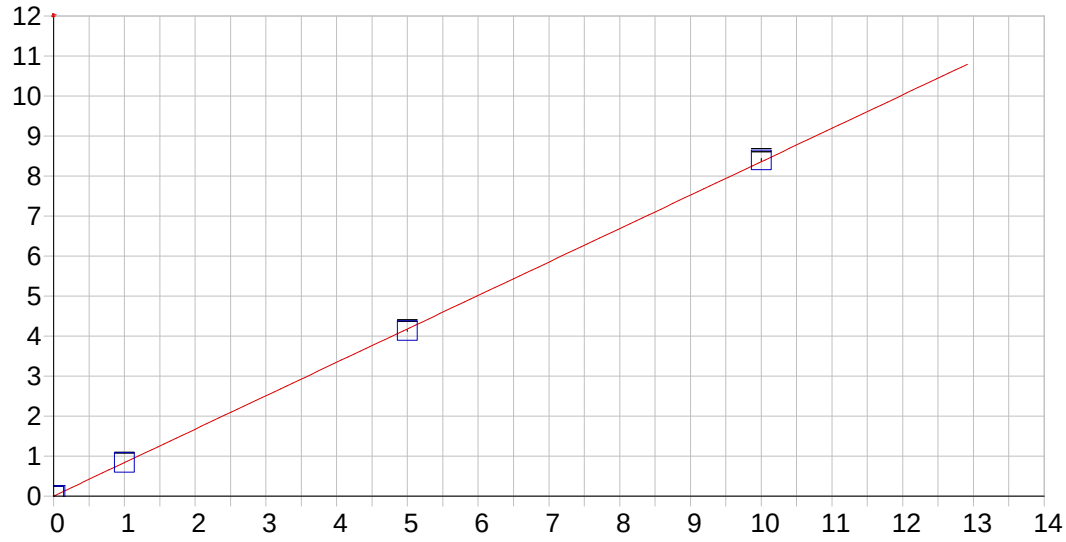
Th 283.231 {119}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007297	Re-Slope:	1.000000

A1 (Gain):	0.172287		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999957		Status:	OK.	
Std Error of Est:	0.000131				
Predicted MDL:	0.004083				
Predicted MQL:	0.013610				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00730	.001	1
CAL 1	.20000	.20502	.005	2.51	.04277	.000	1
CAL 3	5.0000	5.0648	.065	1.30	.92181	.005	1
CAL 4	10.000	9.9304	-.070	-.696	1.8020	.003	1

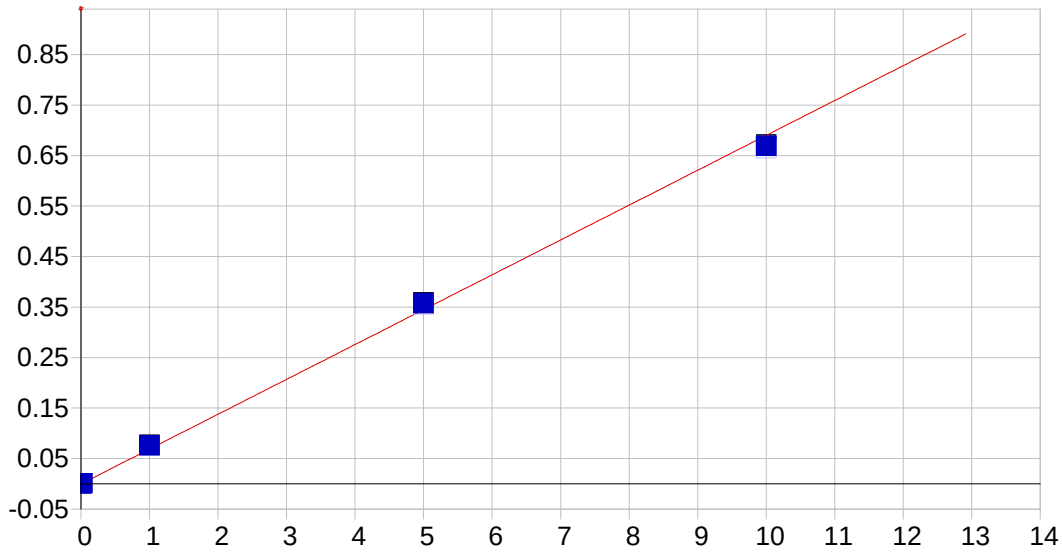


Ti 334.941 {101}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001926	Re-Slope:	1.000000
A1 (Gain):	0.835620	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000134		
Predicted MDL:	0.000796		
Predicted MQL:	0.002652		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00193	.000	1
CAL 1	.02000	.01903	-.001	-4.87	.01782	.001	1
CAL 2	1.0000	.99978	.000	-.022	.83736	.007	1
CAL 3	5.0000	4.9511	-.049	-.979	4.1391	.019	1
CAL 4	10.000	10.050	.050	.501	8.4000	.038	1

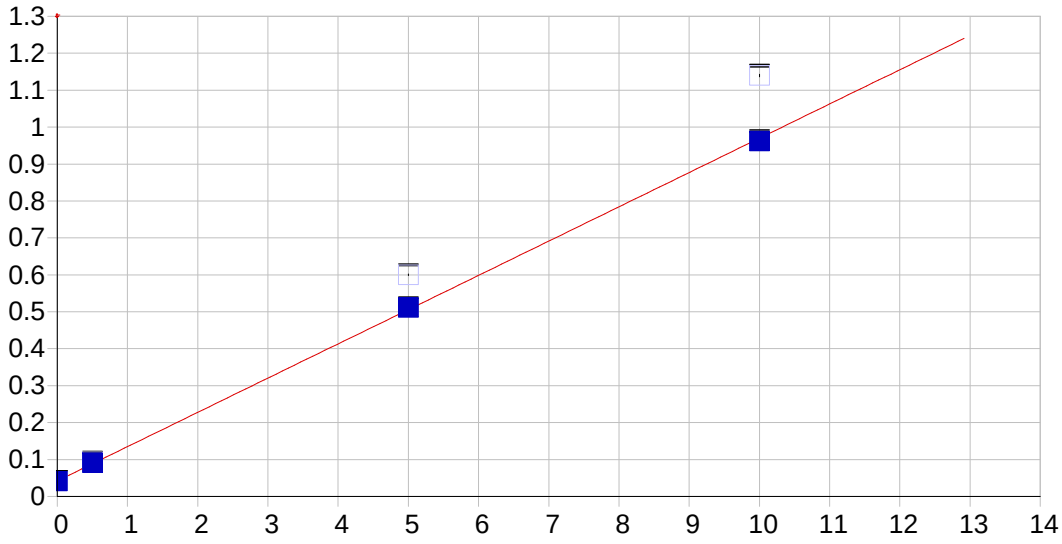


Tl 190.856 {477}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000225	Re-Slope:	1.000000
A1 (Gain):	0.069014	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999120	Status:	OK.
Std Error of Est:	0.000066		
Predicted MDL:	0.001385		
Predicted MQL:	0.004617		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00022	.000	1
CAL 1	.02000	.02230	.002	11.5	.00129	.000	1
CAL 2	1.0000	1.1074	.107	10.7	.07567	.001	1
CAL 3	5.0000	5.1884	.188	3.77	.35521	.001	1
CAL 4	10.000	9.7019	-.298	-2.98	.66406	.002	1



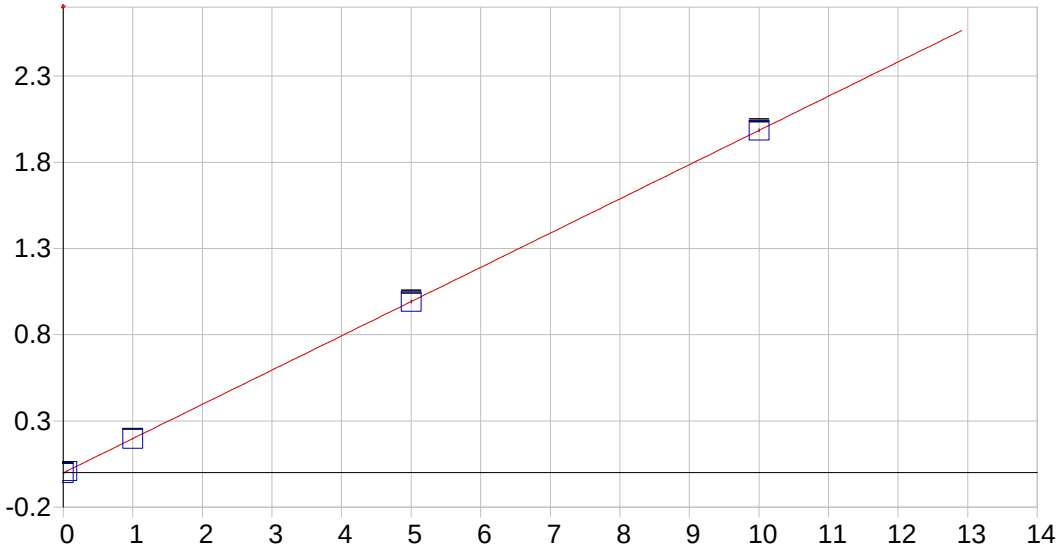
U 367.007 { 92}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.042008	Re-Slope:	1.000000

A1 (Gain):	0.092780	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999936	Status:	OK.
Std Error of Est:	0.000155		
Predicted MDL:	0.011240		
Predicted MQL:	0.037467		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00003	.000	.000	.04201	.001	1
CAL 1	.50000	.52729	.027	5.46	.09380	.002	1
CAL 3	5.0000	5.0570	.057	1.14	.59992	.002	1
CAL 4	10.000	9.9187	-.081	-.813	1.1397	.003	1

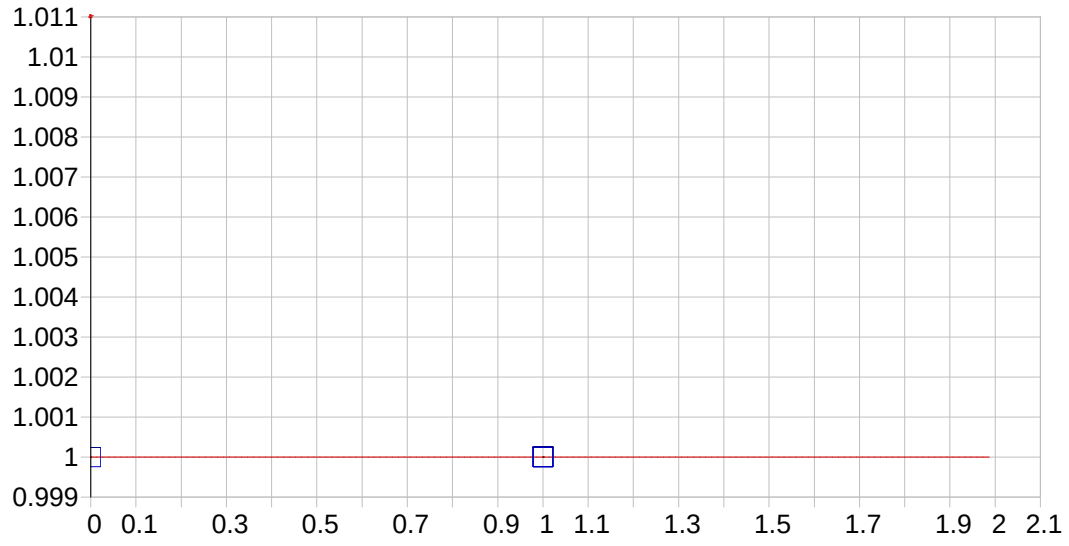


V 290.882 {116}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000767	Re-Slope:	1.000000
A1 (Gain):	0.198590	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000018		
Predicted MDL:	0.002850		
Predicted MQL:	0.009500		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00077	.000	1
CAL 1	.05000	.05191	.002	3.81	.00954	.000	1
CAL 2	1.0000	.99542	-.005	-.458	.19691	.002	1
CAL 3	5.0000	5.0011	.001	.023	.99240	.008	1
CAL 4	10.000	10.002	.002	.015	1.9854	.008	1

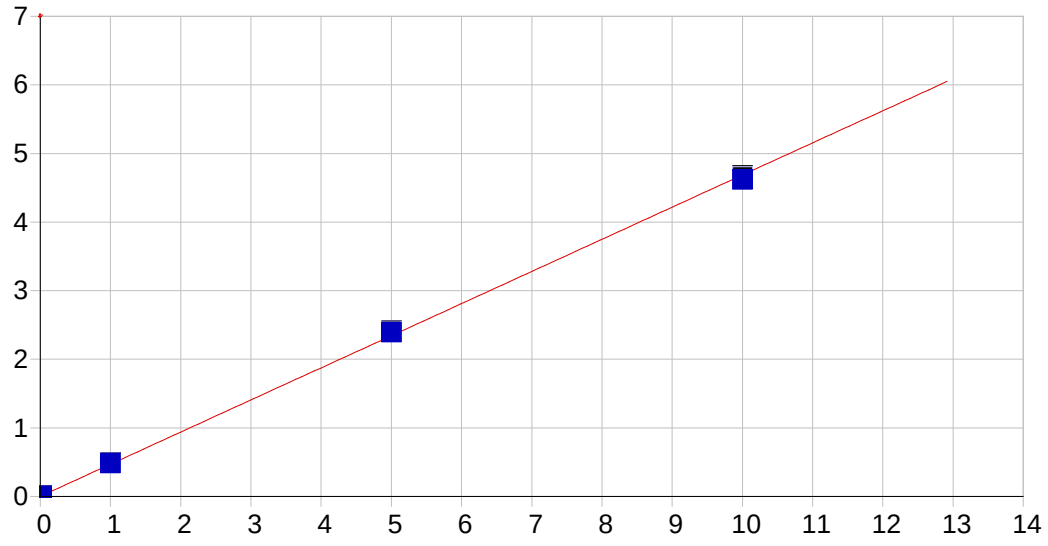


Y 371.030 { 91}*

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	1.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CAL 1	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CALBLK1	.00000	.00000	.000	.000	1.0000	.000	1
CAL 2	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 3	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 4	1.0000	.00000	-1.00	-100.	1.0000	.000	1



Zn 213.856 {458}

Date of Fit:	8/22/2012 8:12:21	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001026	Re-Slope:	1.000000

A1 (Gain):		0.468471			Y-int:	0.000000	
A2 (Curvature):		0.000000					
n (Exponent):		1.000000					
Correlation:		0.999842		Status:		OK.	
Std Error of Est:		0.000194					
Predicted MDL:		0.000172					
Predicted MQL:		0.000575					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00103	.000	1
CAL 1	.02000	.02139	.001	6.94	.01118	.000	1
CAL 2	1.0000	1.0324	.032	3.24	.48887	.004	1
CAL 3	5.0000	5.1032	.103	2.06	2.4127	.005	1
CAL 4	10.000	9.8629	-.137	-1.37	4.6633	.011	1

Sample Name: ICV Acquired: 8/22/2012 8:12:26 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9940**	**49.59**	**4.996**	**5.089**	**5.096**	**5.057**	**5.012**	**25.16**	**5.066**
Stddev	.0074	.06	.032	.004	.006	.009	.036	.15	.032
%RSD	.7479	.1226	.6358	.0740	.1179	.1880	.7226	.5834	.6292
#1	.9934	49.60	4.999	5.087	5.099	5.060	5.016	25.15	5.067
#2	.9869	49.53	4.962	5.094	5.089	5.047	4.974	25.01	5.034
#3	1.002	49.65	5.026	5.088	5.100	5.065	5.046	25.30	5.098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.170**	**5.059**	**4.998**	**50.33**	**49.53**	**4.990**	**24.99**	**5.105**	**5.069**
Stddev	.032	.037	.031	.11	.04	.005	.11	.009	.028
%RSD	.6189	.7281	.6137	.2261	.0859	.1080	.4454	.1682	.5507
#1	5.164	5.050	4.994	50.33	49.49	4.987	24.99	5.104	5.071
#2	5.141	5.027	4.970	50.21	49.51	4.987	24.88	5.097	5.040
#3	5.204	5.099	5.031	50.44	49.58	4.996	25.10	5.114	5.095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.65**	**5.159**	**4.995**	**5.125**	**49.44**	**.9896**	**5.032**	**4.956**	**5.031**
Stddev	.10	.029	.032	.033	.30	.0075	.024	.026	.028
%RSD	.2058	.5548	.6394	.6337	.6019	.7629	.4855	.5238	.5632
#1	49.66	5.158	5.000	5.125	49.43	.9832	5.025	4.956	5.029
#2	49.55	5.130	4.961	5.093	49.15	.9876	5.013	4.930	5.003
#3	49.75	5.188	5.024	5.158	49.74	.9979	5.060	4.982	5.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV Acquired: 8/22/2012 8:12:26 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.049**	**5.152**	**5.011**	**5.330**	**4.989**	**4.972**	**5.071**
Stddev	.005	.049	.011	.041	.032	.016	.031
%RSD	.0961	.9505	.2151	.7683	.6490	.3156	.6128
#1	5.047	5.134	5.015	5.328	4.971	4.961	5.071
#2	5.055	5.115	4.999	5.290	4.969	4.965	5.040
#3	5.046	5.208	5.019	5.371	5.026	4.990	5.102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**5338.2**
Stddev	31.7
%RSD	.59324
#1	5343.7
#2	5366.7
#3	5304.1

Sample Name: ICB Acquired: 8/22/2012 8:15:45 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0133**	**.0041**	**.0247**	**.0009**	**.0009**	**.0044**	**.0115**
Stddev	.0003	.0175	.0009	.0031	.0003	.0003	.0014	.0006
%RSD	122.6	131.8	22.44	12.38	39.27	35.67	32.76	4.925
#1	.0002	.0325	.0049	.0282	.0013	.0012	.0055	.0116
#2	.0005	-.0018	.0043	.0225	.0006	.0008	.0028	.0120
#3	.0000	.0091	.0031	.0233	.0008	.0006	.0049	.0109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W **.0021**	**.0026**	**.0006**	**.0023**	**.0107**	**.0355**	**.0020**	**.0016**
Stddev	.0002	.0002	.0002	.0030	.0039	.0244	.0009	.0091
%RSD	11.59	6.660	39.13	130.3	36.27	68.63	46.48	568.6
#1	.0021	.0027	.0006	.0055	.0151	.0539	.0028	-.0059
#2	.0024	.0024	.0004	-.0003	.0080	.0079	.0010	.0117
#3	.0019	.0027	.0008	.0016	.0089	.0448	.0021	-.0010
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010							
Low Limit	-.0010							

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	W **.0114**	**.0120**	**.0023**	**.0025**	**.0017**	**.0286**	**<.0000**
Stddev	.0005	.0006	.0092	.0002	.0006	.0003	.0073	.0013
%RSD	57.23	4.858	76.66	9.872	24.51	20.22	25.67	92.15
#1	.0013	.0107	.0220	.0025	.0031	.0014	.0330	.0000
#2	.0007	.0117	.0104	.0023	.0019	.0021	.0327	-.0017
#3	.0004	.0117	.0037	.0021	.0027	.0016	.0201	-.0026
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit		.0100						
Low Limit		-.0100						

Sample Name: ICB Acquired: 8/22/2012 8:15:45 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0062	<.0000	.0042	.0009	.0044	.0010	.0056	.0095
Stddev	.0027	.0031	.0004	.0003	.0032	.0003	.0002	.0115
%RSD	44.41	76.13	9.183	34.78	73.02	26.09	3.360	121.1
#1	.0050	-.0072	.0045	.0012	.0079	.0013	.0054	-.0024
#2	.0042	-.0011	.0038	.0008	.0016	.0011	.0058	.0206
#3	.0093	-.0038	.0044	.0006	.0037	.0007	.0055	.0104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.0022
Stddev	.0012	.0002
%RSD	5624.	7.587
#1	-.0003	.0024
#2	-.0011	.0022
#3	.0013	.0020
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	5295.5
Stddev	37.1
%RSD	.70102
#1	5329.1
#2	5255.6
#3	5301.9

Sample Name: LLC Acquired: 8/22/2012 8:19:26 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0106**	**.2181**	**.0106**	**.1083**	**.0512**	**.0057**	**.2153**	**1.109**
Stddev	.0001	.0097	.0014	.0045	.0007	.0006	.0018	.002
%RSD	.8893	4.461	13.02	4.145	1.385	10.44	.8591	.2034
#1	.0107	.2260	.0117	.1115	.0520	.0064	.2168	1.109
#2	.0105	.2210	.0109	.1032	.0508	.0053	.2132	1.112
#3	.0106	.2072	.0091	.1102	.0508	.0054	.2159	1.107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0054**	**.0560**	**.0103**	**.0260**	**.1101**	**4.983**	**.0516**	**1.013**
Stddev	.0002	.0008	.0004	.0009	.0061	.018	.0004	.003
%RSD	3.073	1.398	3.846	3.332	5.530	.3507	.8397	.2834
#1	.0054	.0569	.0108	.0257	.1168	4.985	.0513	1.015
#2	.0056	.0557	.0100	.0270	.1049	4.965	.0515	1.013
#3	.0053	.0554	.0103	.0254	.1086	5.000	.0521	1.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0164**	**.0422**	**.9841**	**.0445**	**.2531**	**.0106**	**4.979**	**.0097**
Stddev	.0002	.0003	.0060	.0005	.0013	.0012	.017	.0025
%RSD	1.185	.6635	.6112	1.039	.5227	11.69	.3398	25.40
#1	.0166	.0421	.9801	.0445	.2526	.0119	4.995	.0073
#2	.0164	.0425	.9812	.0449	.2521	.0094	4.962	.0096
#3	.0163	.0420	.9910	.0440	.2546	.0105	4.981	.0123
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: LLC Acquired: 8/22/2012 8:19:26 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .0187	.3859	.1091	.0056	.2098	.0198	.0233	.5025
Stddev	.0033	.0039	.0006	.0006	.0050	.0007	.0023	.0043
%RSD	17.74	1.011	.5082	10.34	2.392	3.329	9.792	.8617
#1	.0220	.3903	.1096	.0063	.2124	.0202	.0240	.5038
#2	.0154	.3841	.1090	.0053	.2040	.0202	.0251	.5061
#3	.0187	.3831	.1085	.0052	.2130	.0191	.0207	.4977
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	.0150							
Range	20.00%							

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0499	.0214
Stddev	.0017	.0004
%RSD	3.327	1.999
#1	.0503	.0218
#2	.0513	.0215
#3	.0481	.0210
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3710
Units	Cts/S
Avg	5362.3
Stddev	12.0
%RSD	.22350
#1	5351.4
#2	5360.4
#3	5375.1

Sample Name: ICSA Acquired: 8/22/2012 8:23:04 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**101.1**	**.0003**	**<.0000**	**.0004**	**.0001**	**.0167**	**52.30**
Stddev	.0009	.4	.0111	.0015	.0001	.0001	.0122	.15
%RSD	13600.	.3488	3602.	42.61	14.42	38.01	72.88	.2779
#1	.0007	101.0	-.0063	-.0023	.0004	.0001	.0116	52.34
#2	-.0010	100.8	-.0058	-.0033	.0004	.0001	.0079	52.14
#3	.0003	101.5	.0131	-.0053	.0005	.0002	.0306	52.42
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0056**	W **.0095**	W **.0091**	**.0077**	**101.3**	**.0170**	**.0011**	**103.3**
Stddev	.0104	.0107	.0001	.0100	.3	.0183	.0013	.3
%RSD	187.3	112.6	.8847	130.0	.2535	107.5	119.5	.3062
#1	-.0003	.0037	.0091	.0007	101.4	.0333	.0011	103.3
#2	-.0006	.0029	.0092	.0033	101.0	-.0028	-.0002	102.9
#3	.0176	.0218	.0091	.0192	101.5	.0205	.0023	103.6
Check ?	Chk Fail	Chk Warn	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0050	.0079	.0061					
Low Limit	-.0050	-.0079	-.0061					

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0064**	**<.0000**	W **.0099**	**.0102**	W **.0044**	**.0827**	**.0032**
Stddev	.0001	.0103	.0108	.0105	.0104	.0094	.1179	.0014
%RSD	6.848	160.1	138.6	105.7	102.6	211.9	142.5	44.88
#1	.0015	.0001	-.0075	.0040	.0053	-.0016	.0183	.0031
#2	.0016	.0009	.0029	.0037	.0031	-.0004	.0111	.0018
#3	.0017	.0183	-.0188	.0220	.0221	.0152	.2189	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit				.0045		.0025		
Low Limit				-.0045		-.0025		

Sample Name: ICSA Acquired: 8/22/2012 8:23:04 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**<.0000**	**.0063**	**<.0000**	**<.0000**	**<.0000**	**.0067**	W **.0476**
Stddev	.0090	.0048	.0095	.0001	.0066	.0007	.0098	.0045
%RSD	111.3	46.75	150.5	5.578	31.57	114.1	146.4	9.527
#1	.0037	-.0147	.0005	-.0010	-.0163	.0002	.0011	.0424
#2	.0021	-.0051	.0012	-.0009	-.0286	-.0011	.0010	.0502
#3	.0185	-.0112	.0173	-.0009	-.0181	-.0008	.0181	.0504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								.0470
Low Limit								-.0470

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	W **.0085**	**.0043**
Stddev	.0008	.0108
%RSD	9.822	250.8
#1	.0094	-.0018
#2	.0084	-.0020
#3	.0077	.0168
Check ?	Chk Warn	Chk Pass
High Limit	.0081	
Low Limit	-.0081	

Int. Std.	Y_3710
Units	Cts/S
Avg	**5097.2**
Stddev	38.0
%RSD	.74621
#1	5102.4
#2	5132.4
#3	5056.9

Sample Name: ICSAB Acquired: 8/22/2012 8:26:42 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9942**	**100.1**	**.9808**	**.9946**	**.4990**	**.4842**	**1.003**	**49.50**	**1.003**
Stddev	.0022	.1	.0017	.0030	.0012	.0010	.004	.13	.003
%RSD	.2189	.0569	.1726	.2971	.2325	.2058	.4068	.2578	.3171
#1	.9946	100.0	.9793	.9949	.4977	.4830	1.002	49.37	.9996
#2	.9919	100.1	.9826	.9914	.4996	.4849	1.008	49.53	1.005
#3	.9963	100.2	.9806	.9973	.4998	.4846	1.000	49.62	1.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5029**	**.5045**	**.4951**	**100.3**	**19.86**	**1.003**	**100.9**	**.5034**	**1.016**
Stddev	.0028	.0015	.0035	.2	.05	.001	.1	.0008	.003
%RSD	.5659	.2914	.7015	.2021	.2751	.1423	.0648	.1646	.2783
#1	.4999	.5055	.4913	100.1	19.79	1.002	100.9	.5025	1.013
#2	.5031	.5028	.4981	100.4	19.89	1.002	100.9	.5037	1.017
#3	.5056	.5052	.4958	100.5	19.88	1.004	101.0	.5041	1.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.82**	**1.011**	**.4920**	**1.000**	**19.82**	**1.048**	**.9915**	**1.086**	**.9974**
Stddev	.06	.004	.0040	.004	.07	.004	.0057	.007	.0056
%RSD	.2970	.3547	.8085	.3584	.3593	.4201	.5706	.6946	.5608
#1	19.76	1.007	.4882	.9966	19.74	1.043	.9853	1.078	.9912
#2	19.86	1.013	.4961	1.004	19.85	1.048	.9930	1.093	.9989
#3	19.86	1.014	.4918	1.000	19.86	1.052	.9963	1.088	1.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICSAB Acquired: 8/22/2012 8:26:42 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.020	1.005	.5064	1.005	1.007	.5069	1.004
Stddev	.003	.009	.0005	.003	.001	.0042	.004
%RSD	.2810	.8890	.0994	.2793	.0591	.8227	.4246
#1	1.017	1.015	.5062	1.003	1.007	.5058	.9989
#2	1.023	.9995	.5069	1.003	1.007	.5034	1.006
#3	1.020	1.000	.5059	1.008	1.006	.5115	1.006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	5387.9
Stddev	14.2
%RSD	.26346
#1	5396.5
#2	5395.7
#3	5371.5

Sample Name: LDR Acquired: 8/22/2012 8:30:04 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.998**	**100.6**	**9.919**	**9.953**	**9.928**	**9.902**	**9.818**	**48.72**	**9.867**
Stddev	.018	.7	.140	.062	.277	.130	.146	.60	.133
%RSD	.9271	.7173	1.415	.6242	2.787	1.316	1.492	1.234	1.349
#1	2.018	101.4	10.06	10.02	10.22	10.05	9.969	49.34	10.00
#2	1.995	100.2	9.919	9.917	9.884	9.818	9.808	48.68	9.860
#3	1.981	100.1	9.778	9.918	9.676	9.836	9.677	48.14	9.737
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.818**	**9.897**	**9.825**	**99.74**	**100.6**	**10.06**	**50.09**	**9.994**	**9.856**
Stddev	.128	.081	.138	.69	.7	.07	.32	.065	.134
%RSD	1.305	.8172	1.400	.6957	.7084	.7062	.6384	.6506	1.363
#1	9.952	9.985	9.967	100.5	101.4	10.14	50.46	10.07	9.995
#2	9.804	9.880	9.817	99.43	100.3	10.01	49.95	9.954	9.847
#3	9.697	9.826	9.692	99.25	100.1	10.02	49.87	9.959	9.727
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.1**	**9.797**	**9.850**	**9.754**	**99.12**	**1.985**	**9.887**	**10.10**	**9.835**
Stddev	.8	.128	.145	.121	1.53	.035	.153	.08	.129
%RSD	.7512	1.311	1.474	1.241	1.544	1.743	1.544	.7709	1.312
#1	101.0	9.930	9.992	9.879	100.7	2.020	10.04	10.19	9.968
#2	99.78	9.788	9.857	9.746	99.12	1.985	9.881	10.05	9.826
#3	99.55	9.674	9.702	9.637	97.60	1.951	9.737	10.06	9.711
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: LDR Acquired: 8/22/2012 8:30:04 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.979**	**9.943**	**10.06**	**9.654**	**9.939**	**9.961**	**9.812**
Stddev	.216	.100	.06	.115	.059	.070	.128
%RSD	2.161	1.002	.5726	1.194	.5922	.7066	1.303
#1	10.23	10.05	10.12	9.774	9.994	10.04	9.942
#2	9.861	9.935	10.02	9.645	9.947	9.922	9.808
#3	9.849	9.848	10.03	9.545	9.877	9.919	9.687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**5240.6**
Stddev	46.7
%RSD	.89162
#1	5189.1
#2	5252.4
#3	5280.3

Sample Name: CCV Acquired: 8/22/2012 8:33:42 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.003**	**50.33**	**5.041**	**5.040**	**5.105**	**5.103**	**5.064**	**25.45**	**5.066**
Stddev	.015	.56	.055	.046	.050	.056	.046	.27	.058
%RSD	1.531	1.104	1.095	.9071	.9745	1.089	.9040	1.073	1.136
#1	1.007	50.44	5.035	5.042	5.108	5.106	5.068	25.42	5.058
#2	1.016	50.83	5.099	5.085	5.153	5.157	5.109	25.75	5.127
#3	.9861	49.74	4.989	4.993	5.054	5.046	5.017	25.20	5.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.124**	**5.082**	**5.073**	**50.59**	**50.32**	**5.042**	**25.35**	**5.045**	**5.057**
Stddev	.051	.061	.055	.58	.48	.043	.31	.053	.051
%RSD	.9997	1.199	1.083	1.152	.9502	.8608	1.214	1.052	1.004
#1	5.107	5.090	5.069	50.60	50.36	5.050	25.36	5.054	5.048
#2	5.182	5.138	5.130	51.16	50.78	5.081	25.66	5.093	5.111
#3	5.083	5.017	5.020	50.00	49.83	4.995	25.04	4.988	5.011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.32**	**5.120**	**5.032**	**5.131**	**49.88**	**1.003**	**5.025**	**5.025**	**5.103**
Stddev	.51	.052	.055	.051	.52	.011	.063	.056	.050
%RSD	1.012	1.011	1.089	.9918	1.033	1.103	1.247	1.115	.9877
#1	50.35	5.104	5.031	5.121	49.80	.9992	5.023	5.032	5.089
#2	50.80	5.178	5.087	5.186	50.43	1.015	5.089	5.076	5.159
#3	49.79	5.078	4.977	5.086	49.41	.9939	4.964	4.965	5.061
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/22/2012 8:33:42 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.073**	**5.116**	**5.019**	**5.154**	**5.158**	**5.029**	**5.080**
Stddev	.121	.067	.048	.056	.073	.063	.051
%RSD	2.379	1.316	.9562	1.079	1.424	1.252	1.008
#1	4.950	5.115	5.023	5.150	5.143	5.049	5.073
#2	5.191	5.184	5.065	5.212	5.238	5.079	5.135
#3	5.077	5.049	4.969	5.101	5.094	4.958	5.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**5260.6**
Stddev	65.8
%RSD	1.2505
#1	5252.3
#2	5199.4
#3	5330.1

Sample Name: CCB Acquired: 8/22/2012 8:37:01 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0112**	**.0008**	**.0249**	**.0006**	**.0008**	**<.0000**	**.0014**	**.0004**
Stddev	.0004	.0041	.0029	.0025	.0002	.0001	.0014	.0011	.0002
%RSD	870.8	36.23	363.1	9.856	24.51	15.83	39.17	73.51	43.76
#1	.0002	.0066	.0036	.0273	.0008	.0008	-.0022	.0012	.0002
#2	.0004	.0140	-.0021	.0251	.0007	.0008	-.0036	.0005	.0006
#3	-.0004	.0131	.0008	.0224	.0005	.0006	-.0050	.0026	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0003**	**.0049**	**.0089**	**.0589**	**.0011**	**<.0000**	**.0008**	**.0090**
Stddev	.0003	.0002	.0015	.0005	.0317	.0001	.0093	.0001	.0007
%RSD	54.53	63.27	30.24	5.687	53.92	13.39	178.0	17.90	7.548
#1	.0009	.0001	.0059	.0089	.0670	.0010	-.0108	.0007	.0082
#2	.0003	.0003	.0032	.0084	.0857	.0013	.0055	.0009	.0093
#3	.0005	.0004	.0055	.0094	.0238	.0011	-.0103	.0007	.0095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0083**	**.0002**	**<.0000**	**<.0000**	**.0090**	**.0005**	**.0060**	**.0004**	**.0022**
Stddev	.0044	.0001	.0003	.0008	.0013	.0020	.0047	.0028	.0005
%RSD	52.50	34.58	49.05	903.9	14.89	440.6	77.67	753.9	21.80
#1	.0040	.0002	-.0008	.0003	.0086	-.0017	.0006	-.0017	.0021
#2	.0127	.0001	-.0003	-.0010	.0104	.0008	.0088	.0036	.0019
#3	.0081	.0002	-.0005	.0004	.0078	.0023	.0086	-.0008	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/22/2012 8:37:01 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0015	.0005	.0027	.0142	<.0000	<.0000
Stddev	.0001	.0040	.0006	.0014	.0286	.0020	.0001
%RSD	17.31	270.7	103.8	51.06	201.3	463.8	166.0
#1	.0009	.0002	-.0001	.0021	-.0162	.0016	-.0002
#2	.0007	.0059	.0010	.0017	.0182	-.0006	-.0001
#3	.0006	-.0017	.0007	.0043	.0405	-.0023	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5291.8
Stddev	92.4
%RSD	1.7456
#1	5397.8
#2	5228.5
#3	5249.1

Sample Name: 160-415-D-2-D Acquired: 8/22/2012 8:53:47 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0934**	**.0022**	**.0407**	**.1286**	**.0000**	**.0018**	**31.97**	**<.0000**
Stddev	.0001	.0027	.0011	.0005	.0003	.0001	.0029	.95	.0001
%RSD	25.60	2.938	50.69	1.312	.2258	1332.	162.8	2.975	75.11
#1	.0002	.0907	.0034	.0413	.1286	.0000	.0033	31.04	-.0001
#2	.0002	.0961	.0019	.0403	.1283	-.0001	.0036	31.92	.0000
#3	.0003	.0934	.0013	.0404	.1289	.0001	-.0015	32.94	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0002**	**<.0000**	**3.397**	**.8714**	**.0045**	**8.023**	**.0607**	**.0004**
Stddev	.0002	.0004	.0023	.023	.0178	.0005	.039	.0003	.0002
%RSD	77.43	188.1	690.9	.6782	2.043	10.02	.4810	.4628	48.22
#1	.0005	.0007	-.0024	3.406	.8574	.0041	8.043	.0610	.0002
#2	.0001	.0002	-.0007	3.371	.8914	.0044	7.979	.0604	.0006
#3	.0002	-.0002	.0021	3.414	.8653	.0050	8.049	.0607	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.814**	**.0023**	**.1038**	**<.0000**	**.2052**	**.0004**	**.0001**	**2.715**	**<.0000**
Stddev	.033	.0001	.0042	.0009	.0075	.0013	.0017	.021	.0002
%RSD	.3404	2.752	4.052	628.3	3.664	329.2	2483.	.7830	63.40
#1	9.829	.0024	.1001	.0005	.1977	.0019	.0014	2.691	-.0001
#2	9.776	.0023	.1030	-.0011	.2054	-.0007	-.0018	2.727	-.0004
#3	9.837	.0024	.1084	.0002	.2127	.0000	.0006	2.729	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-D Acquired: 8/22/2012 8:53:47 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1395	<.0000	.0014	<.0000	<.0000	<.0000	.0059
Stddev	.0004	.0028	.0008	.0009	.0017	.0025	.0002
%RSD	.2624	441.5	55.14	131.3	4.815	1205.	2.663
#1	.1396	-.0008	.0012	.0004	-.0365	.0012	.0057
#2	.1391	-.0034	.0008	-.0013	-.0347	-.0031	.0060
#3	.1398	.0022	.0023	-.0013	-.0331	.0013	.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5289.9
Stddev	13.3
%RSD	.25057
#1	5275.3
#2	5293.4
#3	5301.1

Sample Name: 160-415-D-2-D SD Acquired: 8/22/2012 8:57:23 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=50

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0265**	**<.0000**	**.0076**	**.0252**	**.0000**	**<.0000**	**6.126**	**<.0000**
Stddev	.0005	.0089	.0018	.0009	.0002	.0000	.0015	.120	.0002
%RSD	1206.	33.34	295.9	11.36	.7194	138.5	144.7	1.959	241.4
#1	-.0002	.0365	.0011	.0070	.0250	.0000	-.0023	5.997	.0000
#2	-.0003	.0237	-.0004	.0072	.0252	.0001	.0006	6.146	.0001
#3	.0006	.0194	-.0025	.0086	.0254	.0001	-.0014	6.234	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**<.0000**	**<.0000**	**.6692**	**.2041**	**.0000**	**1.599**	**.0118**	**<.0000**
Stddev	.0001	.0000	.0004	.0019	.0212	.0009	.007	.0002	.0001
%RSD	210.8	7.343	88.74	.2807	10.37	1846.	.4184	1.341	76.74
#1	.0000	-.0005	-.0004	.6693	.2279	.0008	1.594	.0119	-.0001
#2	.0002	-.0006	-.0001	.6672	.1874	.0003	1.597	.0118	.0000
#3	.0000	-.0006	-.0008	.6710	.1970	-.0010	1.607	.0116	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.911**	**.0003**	**.0192**	**<.0000**	**.0428**	**<.0000**	**.0019**	**.5295**	**.0003**
Stddev	.004	.0003	.0003	.0014	.0032	.0016	.0044	.0014	.0002
%RSD	.1944	111.4	1.359	219.2	7.587	634.1	233.4	.2730	63.60
#1	1.909	-.0001	.0194	-.0013	.0393	-.0003	.0056	.5304	.0005
#2	1.916	.0004	.0189	-.0015	.0456	-.0018	.0030	.5278	.0002
#3	1.909	.0005	.0192	.0010	.0434	.0014	-.0029	.5302	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-D SD Acquired: 8/22/2012 8:57:23 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=50

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0274	<.0000	.0003	<.0000	<.0000	<.0000	.0057
Stddev	.0002	.0043	.0009	.0018	.0040	.0021	.0002
%RSD	.5699	160.9	334.1	87.29	46.50	1954.	2.782
#1	.0275	-.0024	-.0007	-.0007	-.0105	-.0022	.0057
#2	.0273	-.0071	.0003	-.0014	-.0040	.0020	.0059
#3	.0276	.0015	.0012	-.0040	-.0113	-.0001	.0055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5182.9
Stddev	49.1
%RSD	.94729
#1	5238.9
#2	5147.3
#3	5162.5

Sample Name: 160-415-D-2-E MS Acquired: 8/22/2012 9:01:02 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**.9643**	**.1155**	**.1178**	**.1862**	**.0808**	**.1122**	**34.80**	**.1165**
Stddev	.0006	.0287	.0088	.0064	.0060	.0029	.0076	3.15	.0107
%RSD	6.372	2.976	7.637	5.426	3.247	3.565	6.817	9.051	9.221
#1	.0089	.9329	.1066	.1107	.1801	.0780	.1045	31.63	.1058
#2	.0084	.9711	.1156	.1232	.1862	.0807	.1122	34.85	.1165
#3	.0095	.9890	.1242	.1195	.1922	.0837	.1198	37.93	.1272
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1216**	**.0971**	**.1156**	**3.636**	**1.537**	**.0827**	**7.549**	**.1333**	**.1188**
Stddev	.0110	.0052	.0118	.117	.036	.0028	.272	.0048	.0108
%RSD	9.046	5.342	10.17	3.221	2.334	3.418	3.607	3.609	9.112
#1	.1104	.0922	.1039	3.519	1.496	.0803	7.277	.1285	.1081
#2	.1221	.0966	.1154	3.636	1.560	.0820	7.548	.1333	.1187
#3	.1324	.1025	.1274	3.753	1.556	.0858	7.821	.1382	.1298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.889**	**.1255**	**.2225**	**.1205**	**1.298**	**.0587**	**.1148**	**2.367**	**.1188**
Stddev	.290	.0108	.0212	.0093	.118	.0062	.0121	.082	.0101
%RSD	3.268	8.576	9.538	7.695	9.108	10.62	10.54	3.475	8.480
#1	8.602	.1150	.1998	.1116	1.180	.0521	.1031	2.285	.1086
#2	8.882	.1250	.2259	.1199	1.299	.0594	.1139	2.368	.1190
#3	9.183	.1365	.2418	.1301	1.416	.0645	.1272	2.449	.1288
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-E MS Acquired: 8/22/2012 9:01:02 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1958	.0991	.0818	.0241	.0749	.0783	.1198
Stddev	.0063	.0085	.0028	.0028	.0196	.0028	.0111
%RSD	3.226	8.613	3.441	11.46	26.19	3.599	9.225
#1	.1897	.0906	.0791	.0212	.0524	.0763	.1088
#2	.1954	.0990	.0816	.0245	.0842	.0815	.1198
#3	.2023	.1077	.0847	.0267	.0881	.0770	.1309
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4980.1
Stddev	41.0
%RSD	.82231
#1	5027.3
#2	4954.1
#3	4958.9

Sample Name: 160-415-D-2-F MSD Acquired: 8/22/2012 9:04:35 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090**	**.9510**	**.1060**	**.1187**	**.1932**	**.0839**	**.1032**	**31.82**	**.1068**
Stddev	.0006	.0152	.0077	.0032	.0044	.0020	.0085	2.51	.0088
%RSD	6.457	1.600	7.258	2.668	2.297	2.426	8.200	7.893	8.258
#1	.0084	.9334	.0975	.1174	.1889	.0818	.0939	29.21	.0975
#2	.0095	.9594	.1084	.1164	.1930	.0839	.1055	32.03	.1079
#3	.0093	.9602	.1123	.1223	.1978	.0859	.1103	34.22	.1151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1111**	**.0927**	**.1081**	**3.876**	**1.575**	**.0870**	**7.708**	**.1364**	**.1093**
Stddev	.0092	.0018	.0077	.089	.035	.0020	.143	.0029	.0091
%RSD	8.317	1.951	7.087	2.289	2.201	2.336	1.850	2.118	8.340
#1	.1016	.0907	.1001	3.788	1.535	.0847	7.551	.1336	.0997
#2	.1118	.0931	.1088	3.875	1.595	.0875	7.743	.1363	.1102
#3	.1200	.0942	.1154	3.965	1.596	.0887	7.830	.1394	.1179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.273**	**.1141**	**.2037**	**.1101**	**1.248**	**.0531**	**.1045**	**2.317**	**.1096**
Stddev	.215	.0093	.0175	.0086	.107	.0051	.0087	.045	.0090
%RSD	2.321	8.135	8.577	7.845	8.557	9.651	8.278	1.945	8.179
#1	9.064	.1043	.1854	.1012	1.138	.0475	.0961	2.280	.1005
#2	9.262	.1151	.2055	.1107	1.255	.0542	.1040	2.304	.1098
#3	9.494	.1228	.2202	.1185	1.352	.0575	.1134	2.368	.1184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-2-F MSD Acquired: 8/22/2012 9:04:35 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2041	.0919	.0846	.0225	.0624	.0813	.1086
Stddev	.0045	.0022	.0015	.0021	.0048	.0033	.0088
%RSD	2.217	2.385	1.730	9.459	7.693	4.018	8.119
#1	.1997	.0925	.0832	.0210	.0604	.0778	.0993
#2	.2039	.0894	.0845	.0216	.0679	.0816	.1095
#3	.2087	.0937	.0861	.0250	.0590	.0843	.1169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5328.8
Stddev	35.6
%RSD	.66810
#1	5331.3
#2	5292.0
#3	5363.1

Sample Name: 160-415-D-5-B Acquired: 8/22/2012 9:08:08 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0106**	**<.0000**	**.1007**	**.1631**	**.0000**	**<.0000**	**27.56**	**<.0000**
Stddev	.0003	.0086	.0011	.0044	.0023	.0000	.0018	2.36	.0001
%RSD	91.27	81.32	197.6	4.344	1.427	404.7	560.6	8.575	87.18
#1	.0000	.0007	.0003	.0971	.1609	.0000	-.0005	25.21	-.0001
#2	.0004	.0161	-.0018	.0996	.1630	.0000	-.0021	27.53	.0000
#3	.0006	.0150	-.0002	.1056	.1655	.0000	.0016	29.94	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0005**	**.0014**	**2.556**	**1.808**	**.0019**	**6.773**	**.0510**	**.0002**
Stddev	.0002	.0003	.0018	.040	.009	.0011	.088	.0008	.0001
%RSD	21.17	59.41	124.9	1.573	.4846	55.03	1.302	1.626	55.18
#1	.0007	.0002	.0032	2.514	1.798	.0032	6.677	.0502	.0003
#2	.0010	.0008	.0013	2.559	1.810	.0012	6.792	.0510	.0003
#3	.0008	.0004	-.0003	2.594	1.815	.0014	6.850	.0519	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**26.16**	**.0019**	**.0598**	**<.0000**	**.1781**	**<.0000**	**.0002**	**1.393**	**.0001**
Stddev	.34	.0002	.0057	.0020	.0160	.0018	.0037	.021	.0005
%RSD	1.308	10.19	9.580	715.5	9.002	380.2	2374.	1.520	757.3
#1	25.82	.0017	.0541	-.0018	.1639	-.0001	.0006	1.370	-.0005
#2	26.16	.0019	.0596	-.0010	.1749	-.0025	.0037	1.401	.0005
#3	26.51	.0021	.0656	.0020	.1954	.0011	-.0038	1.410	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-5-B Acquired: 8/22/2012 9:08:08 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0647	.0029	<.0000	<.0000	<.0000	.0003	.0026
Stddev	.0008	.0026	.0012	.0007	.0025	.0032	.0002
%RSD	1.278	90.47	124.4	30.12	9.400	1013.	9.245
#1	.0639	.0017	.0001	-.0032	-.0235	-.0034	.0027
#2	.0648	.0059	-.0007	-.0018	-.0284	.0025	.0023
#3	.0655	.0011	-.0022	-.0022	-.0268	.0019	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5201.7
Stddev	43.3
%RSD	.83160
#1	5251.6
#2	5175.6
#3	5177.9

Sample Name: 160-415-D-6-B Acquired: 8/22/2012 9:11:46 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0812**	**<.0000**	**.0365**	**.1077**	**.0000**	**.0013**	**32.51**	**<.0000**
Stddev	.0003	.0053	.0004	.0027	.0026	.0001	.0022	2.96	.0000
%RSD	96.12	6.491	108.4	7.324	2.371	675.8	171.8	9.104	203.8
#1	.0007	.0838	-.0006	.0387	.1052	-.0001	-.0002	29.68	-.0001
#2	.0002	.0752	.0001	.0335	.1076	.0000	.0038	32.27	.0000
#3	.0001	.0847	-.0006	.0374	.1103	.0001	.0002	35.59	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0003**	**<.0000**	**2.843**	**.7177**	**.0018**	**6.760**	**.0511**	**.0001**
Stddev	.0004	.0001	.0030	.076	.0025	.0009	.159	.0015	.0000
%RSD	81.26	22.41	470.3	2.663	.3448	49.83	2.351	3.012	40.37
#1	.0005	.0003	-.0006	2.773	.7198	.0008	6.597	.0497	.0001
#2	.0001	.0003	.0023	2.832	.7149	.0024	6.769	.0509	.0001
#3	.0010	.0004	-.0036	2.923	.7183	.0023	6.915	.0527	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.189**	**.0024**	**.1070**	**.0021**	**.1970**	**.0007**	**<.0000**	**2.263**	**<.0000**
Stddev	.182	.0004	.0099	.0014	.0159	.0008	.0042	.058	.0005
%RSD	2.222	17.83	9.247	67.72	8.089	110.3	600.4	2.544	139.6
#1	8.014	.0019	.0982	.0035	.1820	.0013	.0040	2.210	-.0009
#2	8.175	.0026	.1050	.0022	.1952	-.0002	-.0021	2.254	-.0001
#3	8.377	.0026	.1177	.0006	.2137	.0011	-.0040	2.324	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-6-B Acquired: 8/22/2012 9:11:46 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1164	<.0000	.0013	<.0000	<.0000	<.0000	.0038
Stddev	.0028	.0059	.0006	.0007	.0089	.0019	.0001
%RSD	2.418	355.8	45.68	26.73	59.60	102.6	2.897
#1	.1136	.0032	.0018	-.0018	-.0113	-.0013	.0037
#2	.1164	-.0083	.0007	-.0027	-.0084	-.0003	.0038
#3	.1192	.0000	.0012	-.0031	-.0250	-.0039	.0039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5131.6
Stddev	17.2
%RSD	.33588
#1	5125.2
#2	5151.2
#3	5118.5

Sample Name: 160-415-D-9-A Acquired: 8/22/2012 9:15:24 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.8882	.0046	.0591	.0634	.0000	.0044	36.67	<.0000
Stddev	.0005	.0263	.0006	.0031	.0020	.0000	.0024	3.76	.0002
%RSD	652.6	2.958	12.25	5.163	3.091	68.48	54.65	10.26	167.6
#1	.0002	.8648	.0053	.0563	.0616	.0000	.0068	33.01	-.0003
#2	-.0006	.8831	.0042	.0587	.0632	.0000	.0020	36.48	-.0001
#3	.0002	.9166	.0045	.0624	.0655	.0000	.0044	40.52	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.0020	.0055	4.929	.8545	.0035	7.145	.1152	.0003
Stddev	.0005	.0002	.0002	.165	.0130	.0003	.241	.0038	.0003
%RSD	29.90	8.645	3.653	3.352	1.520	8.958	3.373	3.255	84.18
#1	.0010	.0018	.0057	4.768	.8687	.0037	6.897	.1118	.0006
#2	.0018	.0022	.0056	4.920	.8432	.0032	7.159	.1147	.0000
#3	.0018	.0019	.0053	5.098	.8516	.0037	7.378	.1192	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.32	.0088	.1074	.0124	2.358	<.0000	.0026	3.236	.0004
Stddev	.41	.0006	.0117	.0007	.244	.0020	.0019	.098	.0008
%RSD	3.297	6.534	10.87	5.854	10.37	482.1	72.50	3.027	201.0
#1	11.93	.0082	.0957	.0117	2.119	.0018	.0022	3.135	-.0004
#2	12.29	.0088	.1074	.0123	2.348	-.0011	.0010	3.242	.0004
#3	12.74	.0093	.1191	.0131	2.607	-.0020	.0047	3.330	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-415-D-9-A Acquired: 8/22/2012 9:15:24 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0766	<.0000	.0126	<.0000	<.0000	.0004	.7612
Stddev	.0023	.0029	.0013	.0011	.0017	.0032	.0784
%RSD	2.952	847.0	10.23	162.0	6.255	883.8	10.30
#1	.0744	.0009	.0115	-.0005	-.0247	-.0031	.6847
#2	.0764	.0017	.0122	.0003	-.0272	.0033	.7576
#3	.0789	-.0036	.0140	-.0018	-.0278	.0009	.8414
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5085.8
Stddev	13.2
%RSD	.25936
#1	5093.7
#2	5093.1
#3	5070.5

Sample Name: 160-420-D-3-B Acquired: 8/22/2012 9:18:59 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.879	.0035	.0137	.3459	.0002	.0030	38.40	<.0000
Stddev	.0002	.011	.0008	.0030	.0010	.0000	.0025	1.19	.0001
%RSD	46.92	.3786	22.99	21.81	.3007	15.13	83.47	3.100	57.43
#1	-.0004	2.867	.0031	.0103	.3447	.0002	.0013	37.09	-.0002
#2	-.0002	2.881	.0030	.0152	.3465	.0002	.0059	38.68	-.0001
#3	-.0006	2.888	.0045	.0158	.3464	.0002	.0019	39.42	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066	.0055	.0073	17.01	.8766	.0042	6.528	.5481	.0000
Stddev	.0005	.0004	.0011	.09	.0201	.0007	.061	.0034	.0004
%RSD	7.908	6.455	15.00	.5045	2.292	15.95	.9406	.6224	3327.
#1	.0060	.0055	.0070	16.92	.8938	.0037	6.464	.5442	.0000
#2	.0070	.0058	.0063	17.02	.8545	.0040	6.536	.5496	-.0003
#3	.0069	.0051	.0085	17.09	.8814	.0050	6.586	.5505	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.005	.0158	.2654	.0092	.8125	.0007	.0026	4.003	<.0000
Stddev	.021	.0007	.0072	.0008	.0230	.0015	.0019	.001	.0007
%RSD	.2947	4.236	2.717	9.172	2.837	209.3	72.38	.0294	155.5
#1	6.982	.0151	.2571	.0090	.7859	-.0010	.0040	4.001	.0003
#2	7.012	.0164	.2687	.0084	.8249	.0018	.0005	4.003	-.0011
#3	7.021	.0158	.2704	.0101	.8266	.0013	.0035	4.003	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-3-B Acquired: 8/22/2012 9:18:59 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0698	<.0000	.0168	<.0000	<.0000	.0084	.0392
Stddev	.0001	.0027	.0004	.0015	.0034	.0014	.0009
%RSD	.2040	199.5	2.583	76.19	16.45	17.26	2.248
#1	.0698	-.0042	.0169	-.0031	-.0244	.0071	.0382
#2	.0697	.0011	.0164	-.0027	-.0209	.0081	.0394
#3	.0700	-.0010	.0173	-.0003	-.0175	.0100	.0399
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5361.6
Stddev	61.9
%RSD	1.1543
#1	5428.2
#2	5305.8
#3	5350.8

Sample Name: 160-420-D-4-B Acquired: 8/22/2012 9:22:36 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	3.143	<.0000	.0193	.0669	.0001	.0024	31.12	.0002
Stddev	.0002	.037	.0014	.0026	.0007	.0000	.0039	1.52	.0001
%RSD	40.38	1.187	634.2	13.72	1.046	12.26	161.4	4.898	30.79
#1	-.0005	3.108	-.0002	.0205	.0661	.0001	.0049	29.46	.0003
#2	-.0003	3.140	-.0016	.0162	.0673	.0001	-.0021	31.43	.0001
#3	-.0007	3.182	.0012	.0210	.0673	.0001	.0044	32.46	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0034	.0071	.0075	2.934	1.094	.0041	6.438	.1515	.0003
Stddev	.0002	.0000	.0014	.026	.019	.0006	.081	.0018	.0002
%RSD	5.300	.4549	18.24	.8974	1.696	14.31	1.251	1.187	71.34
#1	.0033	.0071	.0061	2.905	1.073	.0035	6.351	.1495	.0002
#2	.0033	.0071	.0088	2.939	1.105	.0047	6.509	.1521	.0005
#3	.0036	.0071	.0077	2.957	1.105	.0042	6.453	.1529	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	28.73	.0109	.0734	.0108	1.281	<.0000	.0016	6.420	<.0000
Stddev	.29	.0004	.0027	.0010	.067	.0015	.0033	.062	.0002
%RSD	1.022	3.902	3.744	9.487	5.194	148.1	208.6	.9598	184.3
#1	28.41	.0104	.0704	.0108	1.208	-.0018	.0051	6.351	-.0001
#2	28.78	.0111	.0742	.0097	1.297	-.0020	-.0014	6.440	-.0003
#3	28.99	.0112	.0757	.0118	1.339	.0007	.0011	6.469	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-D-4-B Acquired: 8/22/2012 9:22:36 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0587	.0026	.0381	<.0000	<.0000	.0070	.0492
Stddev	.0006	.0050	.0002	.0011	.0152	.0008	.0024
%RSD	.9618	190.3	.4790	1320.	78.27	10.90	4.882
#1	.0581	.0084	.0383	.0006	-.0159	.0075	.0465
#2	.0587	.0003	.0379	.0006	-.0063	.0061	.0500
#3	.0592	-.0008	.0380	-.0014	-.0361	.0075	.0511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5172.9
Stddev	76.5
%RSD	1.4782
#1	5167.1
#2	5099.5
#3	5252.1

Sample Name: 160-437-D-2-A Acquired: 8/22/2012 9:26:12 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0219**	**.0006**	**.1333**	**.1891**	**<.0000**	**.0025**	**26.07**	**<.0000**
Stddev	.0006	.0043	.0008	.0033	.0012	.0001	.0009	.44	.0001
%RSD	379.6	19.49	123.5	2.508	.6598	133.5	34.85	1.672	67.34
#1	.0007	.0268	.0008	.1295	.1886	-.0001	.0024	25.62	.0000
#2	.0003	.0198	-.0002	.1351	.1905	-.0001	.0017	26.09	-.0002
#3	-.0005	.0190	.0013	.1354	.1882	.0000	.0034	26.49	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0002**	**.0005**	**2.943**	**1.963**	**.0034**	**7.931**	**.0438**	**<.0000**
Stddev	.0003	.0002	.0018	.010	.017	.0008	.046	.0006	.0001
%RSD	48.42	122.8	323.1	.3496	.8448	23.77	.5760	1.396	248.3
#1	.0009	.0001	.0025	2.936	1.953	.0039	7.902	.0433	-.0002
#2	.0005	.0000	-.0010	2.954	1.982	.0025	7.983	.0445	.0000
#3	.0003	.0005	.0001	2.937	1.954	.0038	7.906	.0436	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**29.22**	**.0017**	**.0624**	**.0007**	**.1701**	**<.0000**	**<.0000**	**1.680**	**<.0000**
Stddev	.11	.0002	.0008	.0014	.0013	.0007	.0017	.006	.0002
%RSD	.3735	12.44	1.268	199.0	.7526	1122.	259.4	.3750	22.88
#1	29.17	.0018	.0615	-.0009	.1689	-.0008	-.0026	1.674	-.0011
#2	29.35	.0015	.0626	.0017	.1699	.0006	.0007	1.680	-.0007
#3	29.15	.0019	.0631	.0014	.1715	.0000	.0000	1.687	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-2-A Acquired: 8/22/2012 9:26:12 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0769	<.0000	<.0000	.0003	<.0000	<.0000	.0025
Stddev	.0006	.0023	.0004	.0006	.0108	.0027	.0001
%RSD	.7198	1888.	47.97	229.4	23.35	884.5	2.329
#1	.0768	.0005	-.0013	.0009	-.0354	.0013	.0026
#2	.0775	-.0027	-.0007	-.0001	-.0464	.0013	.0025
#3	.0764	.0018	-.0005	-.0001	-.0571	-.0035	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5167.3
Stddev	19.2
%RSD	.37147
#1	5154.4
#2	5158.1
#3	5189.4

Sample Name: CCV Acquired: 8/22/2012 9:29:51 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.007**	**50.69**	**5.177**	**4.954**	**5.090**	**5.095**	**5.125**	**26.28**	**5.223**
Stddev	.001	.09	.002	.003	.004	.009	.005	.01	.002
%RSD	.0468	.1827	.0369	.0657	.0786	.1679	.0953	.0377	.0466
#1	1.006	50.63	5.175	4.953	5.091	5.087	5.128	26.29	5.221
#2	1.007	50.80	5.179	4.952	5.094	5.104	5.127	26.28	5.226
#3	1.007	50.65	5.177	4.958	5.086	5.093	5.119	26.27	5.222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.338**	**5.232**	**5.176**	**50.57**	**50.29**	**5.038**	**25.79**	**5.079**	**5.144**
Stddev	.005	.007	.010	.03	.04	.006	.07	.002	.008
%RSD	.0897	.1352	.1848	.0557	.0790	.1294	.2671	.0315	.1522
#1	5.332	5.224	5.181	50.54	50.33	5.042	25.74	5.080	5.150
#2	5.339	5.234	5.182	50.59	50.25	5.030	25.87	5.080	5.146
#3	5.341	5.238	5.165	50.58	50.29	5.041	25.77	5.077	5.135
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.96**	**5.327**	**5.079**	**5.300**	**50.56**	**1.021**	**5.110**	**5.134**	**5.303**
Stddev	.02	.005	.009	.003	.06	.004	.014	.011	.003
%RSD	.0461	.0995	.1784	.0518	.1129	.4008	.2707	.2188	.0500
#1	49.97	5.323	5.089	5.300	50.62	1.024	5.114	5.124	5.304
#2	49.97	5.333	5.076	5.303	50.56	1.022	5.123	5.131	5.306
#3	49.93	5.325	5.072	5.298	50.50	1.016	5.095	5.146	5.301
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/22/2012 9:29:51 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.148**	**5.236**	**5.029**	**5.216**	**5.275**	**4.951**	**5.186**
Stddev	.012	.014	.008	.009	.018	.014	.005
%RSD	.2303	.2652	.1538	.1667	.3324	.2831	.0962
#1	5.136	5.240	5.020	5.220	5.255	4.967	5.188
#2	5.146	5.221	5.032	5.222	5.287	4.943	5.190
#3	5.160	5.248	5.034	5.206	5.284	4.943	5.181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4988.5**
Stddev	5.5
%RSD	.10976
#1	4994.6
#2	4984.0
#3	4987.0

Sample Name: CCB Acquired: 8/22/2012 9:33:11 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0094**	**.0015**	**.0135**	**.0009**	**.0007**	**<.0000**	**.0011**	**.0003**
Stddev	.0004	.0069	.0020	.0019	.0004	.0002	.0016	.0006	.0002
%RSD	141.5	72.91	136.5	13.76	45.11	25.00	108.4	56.07	78.39
#1	.0007	.0031	.0021	.0149	.0010	.0008	.0002	.0008	.0004
#2	.0001	.0084	.0031	.0142	.0012	.0008	-.0015	.0007	.0000
#3	.0000	.0167	-.0008	.0114	.0004	.0005	-.0030	.0017	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0000**	**.0002**	**.0082**	**.0245**	**.0009**	**<.0000**	**.0005**	**.0087**
Stddev	.0002	.0006	.0022	.0011	.0091	.0006	.0107	.0002	.0009
%RSD	39.78	9049.	1054.	13.16	37.28	73.87	136.4	48.53	10.28
#1	.0005	.0004	.0008	.0084	.0350	.0002	-.0171	.0007	.0078
#2	.0003	-.0007	-.0022	.0091	.0191	.0015	.0039	.0005	.0086
#3	.0007	.0003	.0020	.0070	.0193	.0009	-.0103	.0002	.0096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**<.0000**	**<.0000**	**.0005**	**.0056**	**<.0000**	**.0045**	**.0147**	**.0018**
Stddev	.0111	.0001	.0014	.0010	.0025	.0016	.0012	.0032	.0006
%RSD	314.5	141.0	341.4	175.8	45.25	214.6	26.42	21.57	35.28
#1	.0101	-.0003	-.0020	.0001	.0080	-.0025	.0036	.0122	.0025
#2	.0097	.0000	.0002	-.0001	.0029	.0007	.0040	.0136	.0012
#3	-.0093	-.0001	.0005	.0016	.0059	-.0004	.0058	.0183	.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/22/2012 9:33:11 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0009	.0005	<.0000	.0012	.0002
Stddev	.0002	.0024	.0004	.0003	.0232	.0027	.0002
%RSD	28.49	80.87	41.06	57.26	129.3	222.6	127.3
#1	.0007	-.0056	.0010	.0003	-.0279	.0043	.0000
#2	.0008	-.0025	.0005	.0008	.0086	-.0009	.0001
#3	.0004	-.0008	.0013	.0003	-.0346	.0002	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5099.4
Stddev	37.8
%RSD	.74061
#1	5068.1
#2	5141.4
#3	5088.8

Sample Name: 160-437-D-6-A Acquired: 8/22/2012 9:36:53 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0218	<.0000	.0585	.0253	.0002	.0005	33.13	.0000
Stddev	.0005	.0147	.0018	.0066	.0002	.0002	.0006	.30	.0000
%RSD	384.2	67.47	106.3	11.25	.8034	123.9	137.2	.9188	238.6
#1	.0005	.0213	-.0016	.0509	.0254	.0005	.0010	32.84	.0001
#2	-.0004	.0074	.0001	.0632	.0254	.0001	.0007	33.45	.0000
#3	-.0005	.0368	-.0035	.0613	.0250	.0000	-.0003	33.11	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0004	<.0000	.7854	.6326	.0035	3.346	.0586	.0006
Stddev	.0002	.0002	.0011	.0011	.0293	.0006	.010	.0003	.0004
%RSD	156.9	37.89	62.99	.1343	4.627	17.08	.2930	.4426	70.95
#1	.0001	.0005	-.0005	.7862	.6434	.0042	3.357	.0588	.0001
#2	.0000	.0005	-.0026	.7842	.6550	.0032	3.339	.0588	.0006
#3	.0003	.0002	-.0021	.7858	.5995	.0032	3.341	.0583	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.870	.0010	.0300	.0007	11.79	.0003	.0026	.9160	<.0000
Stddev	.024	.0001	.0013	.0005	.08	.0016	.0012	.0028	.0005
%RSD	.2659	9.888	4.303	72.75	.7030	469.2	46.74	.3064	226.7
#1	8.844	.0010	.0305	.0008	11.72	-.0009	.0026	.9174	-.0002
#2	8.874	.0009	.0285	.0001	11.89	-.0002	.0038	.9178	.0003
#3	8.891	.0011	.0309	.0010	11.77	.0021	.0014	.9128	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-6-A Acquired: 8/22/2012 9:36:53 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0699	.0028	<.0000	<.0000	<.0000	<.0000	.0040
Stddev	.0001	.0026	.0000	.0018	.0155	.0014	.0002
%RSD	.1889	95.37	19.74	85.05	117.7	146.1	5.423
#1	.0699	.0022	-.0001	-.0003	-.0310	-.0014	.0040
#2	.0700	.0056	-.0001	-.0038	-.0033	.0006	.0042
#3	.0697	.0004	-.0001	-.0021	-.0052	-.0022	.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4851.8
Stddev	46.6
%RSD	.95966
#1	4904.9
#2	4818.0
#3	4832.6

Sample Name: 160-437-D-7-A Acquired: 8/22/2012 9:40:31 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.1014	.0022	.0109	.0684	.0000	.0016	30.18	<.0000
Stddev	.0005	.0054	.0011	.0009	.0002	.0000	.0019	.33	.0002
%RSD	96.15	5.362	50.87	8.645	.2836	62.20	118.2	1.096	100.1
#1	-.0001	.1040	.0019	.0103	.0682	.0000	-.0006	29.84	-.0004
#2	-.0004	.1050	.0013	.0104	.0686	.0000	.0026	30.21	-.0002
#3	-.0011	.0951	.0035	.0120	.0683	.0000	.0029	30.50	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	.0006	<.0000	4.659	.6729	.0019	8.396	.4159	.0000
Stddev	.0002	.0004	.0007	.012	.0107	.0007	.022	.0004	.0001
%RSD	48.70	65.94	222.2	.2487	1.583	36.20	.2650	.0853	239.0
#1	.0002	.0006	-.0011	4.647	.6733	.0027	8.370	.4159	.0000
#2	.0007	.0002	.0003	4.661	.6833	.0018	8.409	.4155	.0001
#3	.0006	.0010	-.0002	4.670	.6620	.0013	8.407	.4162	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.923	.0008	.1744	.0012	.0652	.0019	.0010	2.136	<.0000
Stddev	.006	.0002	.0021	.0014	.0020	.0009	.0018	.015	.0005
%RSD	.3135	24.19	1.219	111.5	3.032	48.32	178.9	.6790	152.5
#1	1.921	.0006	.1720	.0013	.0661	.0009	-.0006	2.122	-.0003
#2	1.930	.0010	.1760	.0025	.0665	.0021	.0029	2.137	.0001
#3	1.919	.0008	.1752	-.0002	.0629	.0026	.0007	2.151	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-7-A Acquired: 8/22/2012 9:40:31 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0991	.0016	.0015	<.0000	<.0000	<.0000	.0044
Stddev	.0001	.0026	.0005	.0016	.0165	.0019	.0000
%RSD	.1508	162.5	33.11	386.4	93.92	74.20	.8443
#1	.0992	.0046	.0011	.0005	-.0354	-.0010	.0043
#2	.0991	-.0005	.0021	.0005	-.0146	-.0020	.0044
#3	.0989	.0008	.0015	-.0022	-.0028	-.0047	.0044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5158.8
Stddev	39.7
%RSD	.76875
#1	5201.2
#2	5152.4
#3	5122.7

Sample Name: 160-437-D-8-A Acquired: 8/22/2012 9:44:08 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0958	.0026	.1119	.0114	.0001	<.0000	35.72	<.0000
Stddev	.0004	.0035	.0015	.0011	.0001	.0000	.0018	.30	.0001
%RSD	50.44	3.677	56.86	.9788	1.088	57.95	92.72	.8526	292.4
#1	-.0004	.0996	.0019	.1107	.0115	.0001	-.0036	35.43	.0000
#2	-.0011	.0952	.0044	.1121	.0113	.0000	.0000	36.04	-.0001
#3	-.0009	.0926	.0017	.1128	.0115	.0001	-.0024	35.68	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0003	<.0000	6.811	4.493	.0028	16.48	.3127	.0001
Stddev	.0002	.0001	.0013	.037	.005	.0011	.10	.0023	.0001
%RSD	46.42	37.00	77.92	.5437	.1132	38.45	.6054	.7230	60.63
#1	.0002	.0004	-.0026	6.775	4.498	.0023	16.40	.3115	.0001
#2	.0004	.0004	-.0002	6.849	4.492	.0040	16.59	.3153	.0001
#3	.0005	.0002	-.0023	6.809	4.488	.0020	16.44	.3113	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.81	.0019	.0382	.0003	31.67	<.0000	.0010	1.947	<.0000
Stddev	.10	.0005	.0007	.0004	.28	.0021	.0032	.014	.0005
%RSD	.4799	25.95	1.767	129.6	.8939	186.9	315.8	.7285	84.85
#1	19.73	.0021	.0387	.0007	31.43	.0006	-.0020	1.932	-.0003
#2	19.91	.0023	.0385	.0002	31.98	-.0034	.0007	1.950	-.0011
#3	19.80	.0014	.0375	-.0001	31.59	-.0005	.0043	1.960	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-8-A Acquired: 8/22/2012 9:44:08 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0837	.0012	<.0000	<.0000	<.0000	.0042	.0023
Stddev	.0002	.0026	.0002	.0018	.0138	.0010	.0001
%RSD	.2143	207.3	16.16	73.02	119.2	23.33	4.209
#1	.0837	.0016	-.0010	-.0032	-.0268	.0033	.0024
#2	.0839	.0036	-.0012	-.0036	-.0078	.0052	.0022
#3	.0835	-.0015	-.0009	-.0004	.0000	.0040	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5203.6
Stddev	37.1
%RSD	.71232
#1	5240.6
#2	5166.5
#3	5203.7

Sample Name: 160-437-D-9-A Acquired: 8/22/2012 9:47:43 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0087**	**<.0000**	**.1436**	**.2056**	**.0001**	**.0006**	**27.22**	**<.0000**
Stddev	.0005	.0088	.0024	.0034	.0012	.0001	.0009	.21	.0001
%RSD	916.7	101.3	96.58	2.349	.5810	100.7	149.9	.7806	67.71
#1	.0006	.0015	-.0044	.1427	.2065	.0001	-.0004	27.46	.0000
#2	-.0003	.0060	-.0031	.1474	.2042	.0000	.0012	27.05	-.0002
#3	-.0002	.0184	.0002	.1408	.2060	.0000	.0010	27.16	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0003**	**<.0000**	**3.212**	**2.144**	**.0039**	**8.551**	**.0473**	**.0000**
Stddev	.0006	.0001	.0010	.011	.026	.0017	.040	.0002	.0002
%RSD	251.3	23.23	403.3	.3361	1.230	42.92	.4647	.5189	3491.
#1	.0009	.0004	-.0010	3.224	2.143	.0031	8.549	.0472	.0002
#2	-.0001	.0003	-.0006	3.202	2.171	.0028	8.512	.0471	-.0002
#3	-.0001	.0003	.0009	3.211	2.118	.0058	8.591	.0476	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**31.96**	**.0017**	**.0665**	**.0005**	**.1828**	**<.0000**	**<.0000**	**1.754**	**.0002**
Stddev	.13	.0005	.0013	.0010	.0013	.0005	.0027	.010	.0009
%RSD	.3947	28.94	1.937	223.8	.7199	7410.	184.5	.5498	386.7
#1	32.06	.0018	.0679	.0004	.1827	.0005	.0011	1.764	.0011
#2	31.82	.0022	.0654	.0015	.1816	.0000	-.0044	1.753	-.0007
#3	32.01	.0012	.0661	-.0006	.1842	-.0005	-.0012	1.744	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-D-9-A Acquired: 8/22/2012 9:47:43 Type: Unk
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0831	.0012	<.0000	<.0000	<.0000	<.0000	.0028
Stddev	.0004	.0024	.0001	.0004	.0045	.0009	.0001
%RSD	.4398	198.0	18.37	33.89	13.17	45.70	1.906
#1	.0833	-.0014	-.0003	-.0012	-.0348	-.0015	.0027
#2	.0827	.0032	-.0002	-.0009	-.0387	-.0029	.0027
#3	.0833	.0018	-.0003	-.0018	-.0296	-.0013	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	5239.8
Stddev	27.7
%RSD	.52905
#1	5213.1
#2	5268.4
#3	5237.7

Sample Name: CCV Acquired: 8/22/2012 9:51:23 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.020**	**50.74**	**5.170**	**5.024**	**5.108**	**5.106**	**5.148**	**26.44**	**5.201**
Stddev	.003	.40	.033	.035	.042	.047	.020	.13	.029
%RSD	.2796	.7848	.6367	.6917	.8143	.9130	.3880	.4896	.5611
#1	1.020	51.20	5.204	5.063	5.156	5.160	5.170	26.59	5.235
#2	1.017	50.53	5.167	4.997	5.084	5.086	5.141	26.36	5.187
#3	1.023	50.49	5.139	5.013	5.084	5.073	5.133	26.38	5.181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.301**	**5.254**	**5.174**	**50.97**	**50.71**	**5.045**	**25.65**	**5.095**	**5.185**
Stddev	.026	.017	.026	.42	.35	.035	.23	.038	.029
%RSD	.5004	.3302	.4988	.8266	.6924	.6950	.8869	.7517	.5641
#1	5.331	5.261	5.198	51.46	51.12	5.086	25.91	5.139	5.218
#2	5.292	5.234	5.178	50.74	50.52	5.024	25.47	5.072	5.173
#3	5.281	5.266	5.147	50.72	50.51	5.026	25.59	5.073	5.164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.61**	**5.307**	**5.161**	**5.308**	**50.93**	**1.022**	**5.131**	**5.094**	**5.290**
Stddev	.36	.027	.023	.027	.26	.007	.032	.028	.028
%RSD	.7143	.5041	.4477	.5127	.5007	.7244	.6221	.5497	.5288
#1	51.03	5.338	5.188	5.339	51.22	1.029	5.167	5.126	5.320
#2	50.42	5.293	5.150	5.298	50.82	1.022	5.120	5.079	5.284
#3	50.39	5.290	5.145	5.288	50.74	1.015	5.105	5.076	5.265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/22/2012 9:51:23 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.098**	**5.238**	**5.027**	**5.282**	**5.240**	**5.057**	**5.219**
Stddev	.043	.012	.040	.024	.005	.035	.027
%RSD	.8489	.2334	.7873	.4469	.0914	.6936	.5218
#1	5.144	5.250	5.073	5.309	5.242	5.094	5.250
#2	5.091	5.226	5.007	5.272	5.234	5.025	5.208
#3	5.058	5.238	5.002	5.265	5.243	5.051	5.199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**4988.9**
Stddev	23.7
%RSD	.47556
#1	4964.8
#2	5012.3
#3	4989.5

Sample Name: CCB Acquired: 8/22/2012 9:54:43 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0089	W .0055	.0157	.0011	.0006	.0067	.1124
Stddev	.0009	.0037	.0078	.0015	.0002	.0001	.0073	.1899
%RSD	378.4	41.43	140.4	9.747	17.38	18.89	109.1	168.9
#1	.0006	.0068	.0002	.0150	.0013	.0007	.0019	.0020
#2	-.0003	.0067	.0145	.0174	.0012	.0006	.0151	.3317
#3	-.0011	.0132	.0020	.0146	.0009	.0005	.0031	.0035
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0054					
Low Limit			-.0054					

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W .0042	.0044	.0004	.0056	.0070	.0451	.0014	.0030
Stddev	.0068	.0070	.0002	.0078	.0013	.0277	.0005	.0042
%RSD	159.3	157.5	43.08	138.7	19.14	61.33	33.85	138.1
#1	.0000	.0002	.0003	.0008	.0058	.0747	.0013	.0067
#2	.0120	.0125	.0006	.0146	.0084	.0408	.0010	.0038
#3	.0007	.0006	.0002	.0014	.0066	.0199	.0020	-.0015
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0010							
Low Limit	-.0010							

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	W .0130	<.0000	W .0050	.0052	W .0035	.0786	<.0000
Stddev	.0002	.0074	.0034	.0068	.0073	.0059	.1247	.0011
%RSD	48.62	57.04	817.3	136.2	138.7	169.7	158.6	205.3
#1	.0008	.0079	.0030	.0011	.0013	.0012	.0054	-.0012
#2	.0003	.0214	-.0037	.0128	.0136	.0102	.2226	.0008
#3	.0005	.0095	-.0005	.0010	.0008	-.0009	.0078	-.0012
Check ?	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Warn	Chk Pass	Chk Pass
High Limit		.0100		.0045		.0025		
Low Limit		-.0100		-.0045		-.0025		

Sample Name: CCB Acquired: 8/22/2012 9:54:43 Type: QC
Method: 2011(v494) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0084	.0076	.0057	.0005	.0030	.0009	.0042	.0285
Stddev	.0059	.0027	.0066	.0001	.0013	.0003	.0064	.0056
%RSD	70.53	35.37	114.6	11.70	41.88	36.40	153.8	19.47
#1	.0044	.0045	.0018	.0006	.0021	.0011	-.0004	.0340
#2	.0153	.0094	.0133	.0005	.0025	.0005	.0115	.0286
#3	.0056	.0090	.0021	.0006	.0045	.0009	.0014	.0229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0008	.0044
Stddev	.0050	.0070
%RSD	604.9	158.7
#1	.0033	.0002
#2	-.0049	.0125
#3	.0042	.0006
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	4911.9
Stddev	32.0
%RSD	.65228
#1	4927.4
#2	4875.1
#3	4933.2

File: 082712C2

ICV | ICB | LLC | ICSA | ICSAB | LOR | CCV | CCB CB 8/28/12 Std. ICPC-082312 6500

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1001	3	1	1	Unk	160-428-D-7-B	DF=10		
2	1002	3	1	2	Unk	MB 160-9326/1-A			
3	1003	3	1	3	Unk	LCS 160-9326/2-A			
4	1004	3	1	4	Unk	160-428-E-1-B	DF=5		
5	1005	3	1	5	Unk	160-428-E-2-B	DF=5		
6	1006	3	1	6	Unk	160-428-E-3-B	DF=5		
7	1007	3	1	7	Unk	160-428-E-5-B	DF=5		
8	1008	3	1	8	Unk	160-428-E-6-D	DF=5		
9	1009	3	1	9	Unk	160-428-E-6-D SD	DF=25		
CCV 10	1010	3	1	10	Unk	160-428-E-6-E MS	DF=5		
CCB 11	1011	3	1	11	Unk	160-428-E-6-F MSD	DF=5		
12	1012	3	1	12	Unk	160-428-E-7-B	DF=5		
13	1013	3	1	13	Unk	160-428-E-8-B	DF=5		
14	1014	3	1	14	Unk	160-453-C-1-A	DF=5		
15	1015	3	1	15	Unk	160-453-C-2-A	DF=5		
16	1016	3	2	1	Unk	160-453-C-3-A	DF=5		
17	1017	3	2	2	Unk	160-453-C-4-A	DF=5		
18	1018	3	2	3	Unk	160-453-C-5-A	DF=5		
19	1019	3	2	4	Unk	160-453-C-6-A	DF=5		
CCV 20	1020	3	2	5	Unk	160-453-C-7-A	DF=5		
CCB 21	1021	3	2	6	Unk	160-453-C-8-A	DF=5		
22	1022	3	2	7	Unk	160-428-E-7-B	DF=10		
23	1023	3	2	8	Unk	160-453-C-1-A	DF=10		
24	1024	3	2	9	Unk	160-453-C-5-A	DF=10		
25	1025	3	2	10	Unk	MB 160-9563/1-A			
26	1026	3	2	11	Unk	LCS 160-9563/2-A			
27	1027	3	2	12	Unk	160-437-E-1-B	DF=5		
28	1028	3	2	13	Unk	160-437-E-1-B SD	DF=25		
29	1029	3	2	14	Unk	160-437-E-1-C MS	DF=5		
CCV 30	1030	3	2	15	Unk	160-437-E-1-D MSD	DF=5		
CCB 31	1031	3	3	1	Unk	160-437-E-2-B	DF=5		
32	1032	3	3	2	Unk	160-437-E-3-B	DF=5		
33	1033	3	3	3	Unk	160-437-E-4-B	DF=5		
34	1034	3	3	4	Unk	160-437-E-5-B	DF=5		
35	1035	3	3	5	Unk	160-437-E-6-B	DF=5		
36	1036	3	3	6	Unk	160-437-E-7-B	DF=5		
37	1037	3	3	7	Unk	160-437-E-8-B	DF=5		
38	1038	3	3	8	Unk	160-437-E-9-B	DF=5		
39	1039	3	3	9	Unk	160-442-E-1-D	DF=5		
CCV 40	1040	3	3	10	Unk	160-442-E-2-B	DF=5		
CCB 41	1041	3	3	11	Unk	160-442-E-3-B	DF=5		
42	1042	3	3	12	Unk	160-442-E-4-B	DF=5		
43	1043	3	3	13	Unk	160-442-E-5-B	DF=5		
44	1044	3	3	14	Unk	160-442-E-6-B	DF=5		
45	1045	3	3	15	Unk	160-420-E-1-D	DF=5		
46	1046	3	4	1	Unk	160-420-E-2-B	DF=5		
47	1047	3	4	2	Unk	160-420-E-3-B	DF=5		
48	1048	3	4	3	Unk	160-420-E-4-B	DF=5		
49	1049	3	4	4	Unk	MB 160-9008/1-A			
CCV 50	1050	3	4	5	Unk	LCS 160-9008/2-A			
CCB 51	1051	3	4	6	Unk	160-442-D-1-A	DF=5		
52	1052	3	4	7	Unk	160-442-D-1-A SD	DF=25		
53	1053	3	4	8	Unk	160-442-D-1-B MS	DF=5		
54	1054	3	4	9	Unk	160-442-D-1-C MSD	DF=5		
55	1055	3	4	10	Unk	160-442-D-2-A	DF=5		
56	1056	3	4	11	Unk	160-442-D-3-A	DF=5		
57	1057	3	4	12	Unk	160-442-D-4-A	DF=5		
58	1058	3	4	13	Unk	160-442-D-5-A	DF=5		
59	1059	3	4	14	Unk	160-442-D-6-A	DF=5		
CCV 60	1060	3	4	15	Unk	MB 160-9220/1-A			
CCB 61	1061	3	5	1	Unk	LCS 160-9220/2-A			

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
62	1062	3	5	2	Unk	LCS 160-9220/7-A			
63	1063	3	5	3	Unk	LCS 160-9220/8-A			
64	1064	3	5	4	Unk	160-448-A-1-A			
65	1065	3	5	5	Unk	160-448-A-1-A SD	DF=5		
66	1066	3	5	6	Unk	160-448-A-1-B MS			
67	1067	3	5	7	Unk	160-448-A-1-C MSD			
68	1068	3	5	8	Unk	160-448-A-2-A			

CCV
CCB

Analytical batch: 9840

Vertical Table Report
Author: File: 082712C2
Notes:

	CALBLK1 8/27/2012 1:32:58F metals 2011 (502)	CAL 1 8/27/2012 1:36:38F metals 2011 (502)	CAL 2 8/27/2012 1:40:16F metals 2011 (502)	CAL 3 8/27/2012 1:43:38F metals 2011 (502)	CAL 4 8/27/2012 1:46:56F metals 2011 (502)
Ag3280	-.0008	.0156	.3210	1.601	3.151
Al3961	.0013	.0298	1.499	7.343	14.81
As1890	-.0001	.0005	.0608	.3075	.5957
B_2496	.0008	.0164	.1537	.7572	1.521
Ba4554	.0369	.4897	8.992	44.61	89.76
Be3130	.0001	.0497	9.919	49.35	98.38
Bi2230	.0003	.0135		.3225	.6174
Ca1840	.0006	.1876	.9455	4.595	8.461
Cd2288	.0000	.0050	1.034	5.155	9.926
Co2286	.0001	.0226	.4378	2.130	4.029
Cr2835	.0093	.0276	1.730	8.378	16.13
Cu2178	.0001	.0024	.0912	.4503	.8626
Fe2599	.0005	.0308	2.989	14.58	29.13
K_7664	-.0049	.5646	1.159	5.785	11.68
Li6707	.0073	.1206	2.269	11.14	22.69
Mg2798	-.0015	.0404	.2124	1.041	2.073
Mn2576	-.0004	.0275	1.773	8.601	17.20
Mo2020	.0006	.0191	.4772	2.368	4.584
Na5895	-.0057	.3603	3.676	18.39	37.09
Ni2216	.0002	.0259	.6264	3.028	5.730
P_1774	-.0001	.0204		.4105	.7945
Pb2203	-.0004	.0011	.1374	.6690	1.260
S_1820	.0004	.1806		1.823	3.577
Sb2068	.0005	.0012	.0157	.0769	.1498
Se1960	.0002	.0009	.0442	.2214	.4264
Si2516	.0048	.0410		.4773	.9709
Sn1899	.0002	.0161	.1573	.7744	1.483
Sr4077	-.0037	.0682	14.35	71.53	141.0
Th2832	.0099	.0541		1.163	2.238
Ti3349	.0017	.0216	.9580	4.719	9.531
Tl1908	-.0006	.0015	.0950	.4568	.8472
U_3670	.0555	.1180		.7602	1.443
V_2908	-.0011	.0106	.2279	1.132	2.277
Y_3710	3609.2	3524.6	3410.8	3306.5	3393.6
Zn2138	.0010	.0137	.6287	3.109	5.947

Vertical Table Report
Author:
Notes:

	ICV	ICB	LLC	ICSA	ICSAB
PM	8/27/2012 1:50:33F	8/27/2012 1:53:54F	8/27/2012 1:57:35F	8/27/2012 2:01:13F	8/27/2012 2:04:51F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.9976	<.0000	.0097	.0001	.9905
Al3961	49.93	<.0000	.1935	100.0	99.48
As1890	5.046	.0031	.0088	<.0000	.9649
B_2496	5.142	.0316	.1128	<.0000	.9937
Ba4554	5.102	.0005	.0501	.0001	.4975
Be3130	5.077	.0006	.0051	.0001	.4815
Bi2230	5.104	.0049	.2055	.0146	.9925
Ca1840	25.27	.0003	1.028	49.41	48.58
Cd2288	5.134	<.0000	.0047	<.0000	.9795
Co2286	5.207	.0001	.0515	.0026	.4884
Cr2835	5.054	<.0000	.0090	W .0085	.4994
Cu2178	5.080	.0003	.0256	.0018	.4861
Fe2599	50.51	.0057	.1027	101.2	100.9
K_7664	49.70	.0045	4.905	<.0000	19.79
Li6707	5.022	.0003	.0507	.0012	.9990
Mg2798	25.11	.0040	1.003	100.9	100.3
Mn2576	5.140	.0010	.0162	.0015	.5012
Mo2020	5.150	.0075	.0394	<.0000	.9987
Na5895	50.03	.0159	.9925	.0036	19.78
Ni2216	5.196	<.0000	.0418	.0035	.9876
P_1774	5.089	.0004	.2435	.0043	.4866
Pb2203	5.168	<.0000	.0114	<.0000	.9804
S_1820	50.48	.0038	4.809	.0068	19.65
Sb2068	1.009	.0025	.0090	.0049	1.033
Se1960	5.125	.0016	.0129	<.0000	.9750
Si2516	4.956	<.0000	.3836	<.0000	.9992
Sn1899	5.073	.0003	.1009	<.0000	.9770
Sr4077	5.036	.0006	.0051	<.0000	.9960
Th2832	5.124	.0027	.1911	<.0000	.9997
Ti3349	5.029	.0022	.0211	.0001	.5059
Tl1908	5.392	.0044	W .0252	.0006	.9974
U_3670	4.946	.0025	.4714	.0213	.9953
V_2908	5.017	<.0000	.0527	.0056	.5184
Y_3710	3378.4	3541.7	3680.2	3517.3	3530.9
Zn2138	5.143	.0002	.0200	<.0000	.9833

Vertical Table Report
Author:
Notes:

	LDR	CCV	CCB	160-428-D-7-B	MB 160-9326/1-A
PM	8/27/2012 2:08:15F	8/27/2012 2:11:52F	8/27/2012 2:15:13F	8/27/2012 2:27:17F	8/27/2012 2:30:53F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	2.008	1.005	.0006	<.0000	.0002
Al3961	99.94	49.89	.0098	.0273	<.0000
As1890	9.858	5.016	.0002	.0015	<.0000
B_2496	10.04	5.065	.0311	.0181	.0030
Ba4554	10.18	5.008	.0006	.0349	<.0000
Be3130	9.916	5.043	.0006	<.0000	.0000
Bi2230	9.817	5.080	.0018	.0039	.0013
Ca1840	48.37	25.78	.0004	29.45	.0255
Cd2288	9.790	5.032	<.0000	<.0000	<.0000
Co2286	9.709	5.061	.0001	<.0000	<.0000
Cr2835	9.819	5.070	.0008	<.0000	<.0000
Cu2178	9.766	5.060	.0036	.0012	.0019
Fe2599	100.3	50.13	.0070	.7717	.0012
K_7664	100.9	49.90	.0314	.3501	<.0000
Li6707	10.02	4.974	.0008	.0038	<.0000
Mg2798	49.83	24.99	.0111	6.923	.0190
Mn2576	9.949	5.011	.0007	.1446	.0002
Mo2020	9.861	5.045	.0068	<.0000	<.0000
Na5895	100.1	50.06	.0164	1.185	.0080
Ni2216	9.726	5.062	<.0000	.0014	.0003
P_1774	9.909	5.056	.0012	.0214	.0003
Pb2203	9.716	5.092	<.0000	.0007	.0003
S_1820	99.55	49.99	.0034	7.179	.0015
Sb2068	1.974	.9981	.0048	.0031	.0024
Se1960	9.886	5.054	.0053	.0004	.0009
Si2516	10.02	4.935	.0006	1.360	.0003
Sn1899	9.785	5.028	.0005	<.0000	<.0000
Sr4077	9.989	4.972	.0006	.0588	.0000
Th2832	9.922	5.111	.0028	<.0000	.0001
Ti3349	10.04	4.994	.0019	.0001	.0017
Tl1908	9.710	5.161	.0009	.0021	<.0000
U_3670	9.883	5.095	.0140	<.0000	.0215
V_2908	10.05	5.031	<.0000	.0026	.0001
Y_3710	3418.0	3397.3	3536.7	3700.3	3539.4
Zn2138	9.801	5.059	.0001	.0039	.0060

Vertical Table Report
Author:
Notes:

	LCS 160-9326/2-A	160-428-E-1-B	160-428-E-2-B	160-428-E-3-B	160-428-E-5-B
PM	8/27/2012 2:34:34F	8/27/2012 2:37:56F	8/27/2012 2:41:34F	8/27/2012 2:45:11F	8/27/2012 2:48:49F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.1034	<.0000	.0003	<.0000	.0006
Al3961	9.989	<.0000	.0021	.0214	.0011
As1890	.9988	.0040	<.0000	.0017	.0005
B_2496	.9910	.1137	.1403	.0534	.0091
Ba4554	.9948	.0744	.1895	.1316	.0377
Be3130	.9902	.0001	<.0000	<.0000	.0000
Bi2230	1.053	.0010	.0043	.0010	.0033
Ca1840	10.37	27.40	35.85	21.91	30.48
Cd2288	1.028	<.0000	<.0000	<.0000	<.0000
Co2286	1.059	.0004	.0002	<.0000	.0003
Cr2835	1.025	.0005	.0008	.0001	<.0000
Cu2178	1.051	<.0000	.0006	<.0000	<.0000
Fe2599	10.17	.1771	2.700	3.666	.0051
K_7664	9.815	2.103	2.071	.8197	.9166
Li6707	.9962	.0047	.0068	.0085	.0049
Mg2798	10.09	13.71	9.212	10.96	6.093
Mn2576	1.018	.0124	.0842	.0230	.1159
Mo2020	1.056	.0007	<.0000	<.0000	<.0000
Na5895	9.808	15.38	23.07	6.664	1.246
Ni2216	1.071	.0036	.0020	.0010	.0023
P_1774	1.009	.0188	.0790	.0276	.0107
Pb2203	1.049	.0014	.0010	.0002	.0018
S_1820	9.866	.5478	.4069	.1359	3.153
Sb2068	.5266	.0022	.0019	.0024	.0025
Se1960	1.013	<.0000	<.0000	<.0000	.0014
Si2516	F .0095	2.206	2.356	2.201	2.098
Sn1899	1.029	<.0000	<.0000	<.0000	<.0000
Sr4077	1.003	.3361	.1095	1.231	.0661
Th2832	1.027	.0036	<.0000	<.0000	<.0000
Ti3349	.9870	.0008	.0008	.0002	.0004
Tl1908	.2243	.0014	.0005	.0003	.0040
U_3670	1.003	<.0000	<.0000	<.0000	<.0000
V_2908	.9896	.0002	<.0000	<.0000	.0009
Y_3710	3586.0	3709.6	3617.9	3618.8	3674.4
Zn2138	1.039	.0031	.0036	.0034	.0032

Vertical Table Report
Author:
Notes:

	160-428-E-6-D	160-428-E-6-D SD	160-428-E-6-E MS	CCV	CCB
PM	8/27/2012 2:52:29F	8/27/2012 2:56:06F	8/27/2012 2:59:45F	8/27/2012 3:03:16F	8/27/2012 3:06:36F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	<.0000	<.0000	.0197	.9870	.0001
Al3961	.0128	<.0000	1.810	49.29	.0035
As1890	.0019	.0009	.1904	4.900	.0028
B_2496	.0320	.0048	.2029	4.992	.0206
Ba4554	.0151	.0029	.1921	4.994	.0007
Be3130	.0000	.0000	.1780	4.991	.0007
Bi2230	<.0000	.0023	.1964	4.945	.0063
Ca1840	21.88	4.297	22.16	24.99	.0016
Cd2288	<.0000	<.0000	.1924	4.881	<.0000
Co2286	.0003	<.0000	.1965	4.911	<.0000
Cr2835	<.0000	<.0000	.1893	4.947	<.0000
Cu2178	.0004	.0025	.1954	4.912	<.0000
Fe2599	.0408	.0074	1.892	49.85	.0074
K_7664	.6826	.1223	2.348	49.54	<.0000
Li6707	.0053	.0006	.1847	4.938	.0017
Mg2798	13.54	2.619	13.75	24.66	.0161
Mn2576	.0101	.0022	.1908	4.954	.0010
Mo2020	<.0000	<.0000	.1976	4.887	.0056
Na5895	3.579	.7120	5.140	49.54	.0220
Ni2216	.0004	.0001	.2002	4.912	.0003
P_1774	.0037	.0010	.1970	4.944	<.0000
Pb2203	<.0000	.0001	.1978	4.930	.0005
S_1820	5.670	1.090	7.185	49.04	.0027
Sb2068	.0022	.0003	.0988	.9747	.0035
Se1960	<.0000	<.0000	.1916	4.941	.0011
Si2516	1.242	.2339	1.134	4.863	.0007
Sn1899	<.0000	<.0000	.1947	4.885	.0006
Sr4077	.7318	.1412	.8231	4.936	.0006
Th2832	.0030	.0031	.1917	5.029	.0053
Ti3349	.0006	<.0000	.1789	4.969	.0015
Tl1908	.0024	<.0000	.0440	5.012	.0010
U_3670	<.0000	<.0000	.1812	5.003	<.0000
V_2908	.0018	.0045	.1804	4.998	.0010
Y_3710	3541.1	3565.0	3527.6	3565.2	3547.5
Zn2138	.0067	.0055	.1968	4.914	.0006

Vertical Table Report
Author:
Notes:

PM	160-428-E-6-F MSD 8/27/2012 3:10:18F metals 2011 (502)	160-428-E-7-B 8/27/2012 3:13:47F metals 2011 (502)	160-428-E-8-B 8/27/2012 3:17:22F metals 2011 (502)	160-453-C-1-A 8/27/2012 3:21:00F metals 2011 (502)	160-453-C-2-A 8/27/2012 3:24:36F metals 2011 (502)
Ag3280	.0194	.0004	.0002	<.0000	<.0000
Al3961	1.878	.0046	<.0000	.0030	.0032
As1890	.1983	.0041	<.0000	.0179	<.0000
B_2496	.2162	.0359	.1619	.0548	.0288
Ba4554	.1987	.0777	.2236	.1290	.1053
Be3130	.1850	.0000	.0001	.0000	<.0000
Bi2230	.2061	.0029	.0030	.0037	.0014
Ca1840	22.58	F 64.72	W 40.00	F 58.24	26.11
Cd2288	.1984	<.0000	<.0000	<.0000	<.0000
Co2286	.2031	<.0000	<.0000	.0002	<.0000
Cr2835	.1912	<.0000	.0000	.0009	.0001
Cu2178	.2014	<.0000	<.0000	<.0000	<.0000
Fe2599	1.955	1.137	3.175	13.21	2.276
K_7664	2.460	.8747	2.433	.8114	.9013
Li6707	.1923	.0091	.0083	.0064	.0040
Mg2798	14.02	16.45	10.81	13.40	5.471
Mn2576	.1979	.3111	.0993	.3315	.0628
Mo2020	.2058	.0000	<.0000	<.0000	<.0000
Na5895	5.220	2.815	27.18	11.96	4.860
Ni2216	.2063	.0016	.0026	.0033	.0009
P_1774	.2034	.0294	.0850	.1787	.0457
Pb2203	.2025	.0007	<.0000	.0016	.0009
S_1820	7.337	15.76	.4594	.3932	2.159
Sb2068	.1041	.0028	.0004	.0021	.0012
Se1960	.1960	<.0000	<.0000	<.0000	<.0000
Si2516	1.150	3.101	2.757	4.517	2.208
Sn1899	.2028	<.0000	<.0000	<.0000	<.0000
Sr4077	.8446	.1392	.1287	.1514	.0563
Th2832	.1905	<.0000	<.0000	<.0000	<.0000
Ti3349	.1872	.0007	.0002	.0006	.0005
Tl1908	.0457	.0047	.0017	.0021	.0004
U_3670	.1619	<.0000	<.0000	<.0000	<.0000
V_2908	.1861	<.0000	.0043	<.0000	.0015
Y_3710	3571.0	3621.2	3530.4	3661.7	3637.4
Zn2138	.2031	.0031	.0050	.0020	.0029

Vertical Table Report
Author:
Notes:

	160-453-C-3-A	160-453-C-4-A	160-453-C-5-A	160-453-C-6-A	160-453-C-7-A
PM	8/27/2012 3:28:14F	8/27/2012 3:31:52F	8/27/2012 3:35:28F	8/27/2012 3:39:05F	8/27/2012 3:42:42F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	<.0000	<.0000	.0003	.0006	<.0000
Al3961	<.0000	.0135	<.0000	<.0000	<.0000
As1890	.0464	.0007	.0030	.0007	<.0000
B_2496	.3029	.0470	.2231	.0782	.0315
Ba4554	.3046	.0428	.3180	.0200	.1023
Be3130	.0000	.0000	<.0000	.0001	.0001
Bi2230	<.0000	.0010	.0009	.0009	.0023
Ca1840	19.90	W 43.38	W 48.20	27.32	26.13
Cd2288	<.0000	<.0000	<.0000	<.0000	<.0000
Co2286	.0007	<.0000	.0004	.0006	<.0000
Cr2835	.0009	.0001	.0008	<.0000	.0002
Cu2178	.0033	.0004	<.0000	.0005	.0008
Fe2599	4.892	1.184	3.496	.3882	2.219
K_7664	12.66	1.737	2.809	.8958	.9060
Li6707	.0059	.0061	.0064	.0039	.0036
Mg2798	13.15	6.647	14.24	2.791	5.338
Mn2576	.0184	.2262	.2648	.6369	.0614
Mo2020	.0208	<.0000	<.0000	<.0000	<.0000
Na5895	77.04	10.63	47.01	8.400	4.813
Ni2216	.0125	.0004	.0059	.0016	.0006
P_1774	.2379	.0519	.0257	.0098	.0460
Pb2203	.0012	.0003	.0013	<.0000	<.0000
S_1820	.4769	5.973	1.270	7.539	2.149
Sb2068	.0012	.0013	.0029	.0038	.0006
Se1960	.0010	<.0000	<.0000	.0010	<.0000
Si2516	4.500	2.054	3.348	2.230	2.154
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.2374	.2620	.2061	.1496	.0556
Th2832	<.0000	.0054	.0096	.0006	.0004
Ti3349	.0002	<.0000	<.0000	.0012	.0001
Tl1908	.0010	.0037	.0016	.0002	.0008
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0032	.0019	<.0000	<.0000	<.0000
Y_3710	3620.1	3549.5	3479.3	3536.5	3671.7
Zn2138	.0031	.0025	.0032	.0032	.0034

Vertical Table Report
Author:
Notes:

	CCV	CCB	160-453-C-8-A	160-428-E-7-B	160-453-C-1-A
PM	8/27/2012 3:46:21F	8/27/2012 3:49:41F	8/27/2012 3:53:23F	8/27/2012 3:57:01F	8/27/2012 4:00:37F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.9830	.0002	<.0000	.0002	<.0000
Al3961	49.18	<.0000	.0070	.0015	<.0000
As1890	5.000	.0014	.0002	.0027	.0114
B_2496	4.994	.0185	.0246	.0189	.0298
Ba4554	4.990	.0005	.0453	.0440	.0709
Be3130	4.981	.0007	.0005	<.0000	.0000
Bi2230	5.022	.0013	.0031	.0003	<.0000
Ca1840	25.62	.0024	34.17	35.36	31.48
Cd2288	4.948	<.0000	<.0000	<.0000	<.0000
Co2286	4.995	<.0000	.0000	<.0000	<.0000
Cr2835	4.960	<.0000	<.0000	<.0000	.0002
Cu2178	4.966	.0017	<.0000	<.0000	<.0000
Fe2599	49.98	.0083	.0069	.6386	7.269
K_7664	49.72	.0329	1.055	.5113	.4649
Li6707	4.913	.0006	.0014	.0051	.0023
Mg2798	24.77	.0041	9.832	9.386	7.409
Mn2576	4.950	.0010	.1454	.1771	.1826
Mo2020	4.990	.0060	.0011	<.0000	<.0000
Na5895	49.65	.0162	3.375	1.600	6.522
Ni2216	5.010	.0001	.0020	.0007	.0017
P_1774	5.067	.0011	.0129	.0157	.0946
Pb2203	5.041	<.0000	.0003	.0003	.0009
S_1820	50.05	.0014	1.600	8.503	.2038
Sb2068	.9878	.0033	.0030	.0038	.0006
Se1960	5.043	.0035	<.0000	.0016	<.0000
Si2516	4.875	<.0000	1.882	1.760	2.471
Sn1899	4.981	<.0000	<.0000	<.0000	<.0000
Sr4077	4.833	.0007	.1317	.0791	.0833
Th2832	5.011	<.0000	.0011	<.0000	.0008
Ti3349	4.957	.0019	.0011	.0011	<.0000
Tl1908	5.119	.0029	.0032	.0039	.0006
U_3670	4.935	<.0000	<.0000	<.0000	<.0000
V_2908	5.017	<.0000	.0018	.0008	.0010
Y_3710	3493.6	3684.5	3578.9	3552.6	3572.6
Zn2138	5.008	.0004	.0041	.0026	.0036

Vertical Table Report
Author:
Notes:

PM	160-453-C-5-A 8/27/2012 4:04:14P metals 2011 (502)	MB 160-9563/1-A 8/27/2012 4:07:51P metals 2011 (502)	LCS 160-9563/2-A 8/27/2012 4:11:32P metals 2011 (502)	160-437-E-1-B 8/27/2012 4:14:54P metals 2011 (502)	160-437-E-1-B SD 8/27/2012 4:18:30P metals 2011 (502)
Ag3280	.0004	<.0000	.1046	<.0000	<.0000
Al3961	<.0000	<.0000	9.963	<.0000	<.0000
As1890	.0011	.0012	.9790	.0019	.0028
B_2496	.1347	.0025	.9930	.0486	.0088
Ba4554	.1911	<.0000	.9982	.1473	.0265
Be3130	.0001	.0001	.9839	.0001	<.0000
Bi2230	.0037	<.0000	1.009	.0012	.0017
Ca1840	27.53	.0241	10.06	36.67	6.667
Cd2288	<.0000	<.0000	.9892	<.0000	<.0000
Co2286	.0002	<.0000	1.024	.0020	.0002
Cr2835	<.0000	<.0000	1.016	<.0000	<.0000
Cu2178	.0010	.0000	1.005	<.0000	.0012
Fe2599	2.099	.0010	10.17	1.331	.2409
K_7664	1.678	<.0000	9.822	1.365	.2401
Li6707	.0025	<.0000	.9925	.0047	.0015
Mg2798	8.551	.0019	10.04	10.28	1.875
Mn2576	.1603	.0005	1.014	1.277	.2310
Mo2020	<.0000	<.0000	1.027	.0011	<.0000
Na5895	27.77	.0138	9.692	9.942	1.803
Ni2216	.0033	.0002	1.039	.0067	.0012
P_1774	.0127	.0009	.9827	.0149	.0035
Pb2203	.0005	<.0000	1.017	.0006	<.0000
S_1820	.7234	.0017	9.655	.3431	.0638
Sb2068	.0045	.0030	.5132	.0018	.0005
Se1960	<.0000	.0002	.9772	<.0000	<.0000
Si2516	1.999	<.0000	F .0178	3.064	.5451
Sn1899	<.0000	<.0000	1.012	<.0000	<.0000
Sr4077	.1240	<.0000	.9983	.1283	.0231
Th2832	.0001	.0049	1.023	<.0000	<.0000
Ti3349	.0012	.0002	1.001	.0002	<.0000
Tl1908	.0018	.0008	.2157	.0040	.0012
U_3670	<.0000	<.0000	.9783	<.0000	<.0000
V_2908	.0020	.0009	.9853	<.0000	<.0000
Y_3710	3586.5	3648.4	3639.3	3574.5	3642.1
Zn2138	.0025	.0067	.9965	.0065	.0058

Vertical Table Report
Author:
Notes:

	160-437-E-1-C MS	160-437-E-1-D MSD	CCV	CCB	160-437-E-2-B
PM	8/27/2012 4:22:09F	8/27/2012 4:25:39F	8/27/2012 4:29:11F	8/27/2012 4:32:32F	8/27/2012 4:36:16F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.0194	.0207	.9767	<.0000	<.0000
Al3961	1.852	1.965	49.51	.0052	<.0000
As1890	.1893	.1994	5.020	.0010	.0026
B_2496	.2245	.2387	4.967	.0179	.2553
Ba4554	.3206	.3373	5.018	.0002	.3545
Be3130	.1843	.1955	4.984	.0006	.0001
Bi2230	.1857	.2036	5.066	<.0000	.0044
Ca1840	36.56	37.22	25.34	.0028	W 45.53
Cd2288	.1893	.1964	4.999	<.0000	<.0000
Co2286	.1957	.2042	5.027	<.0000	.0002
Cr2835	.1903	.1970	4.948	<.0000	.0008
Cu2178	.1895	.2008	5.035	.0012	<.0000
Fe2599	3.124	3.303	49.96	.0067	5.470
K_7664	3.111	3.263	49.68	<.0000	3.659
Li6707	.1895	.2012	4.949	.0019	.0069
Mg2798	11.37	11.86	24.81	<.0000	14.55
Mn2576	1.373	1.428	4.973	.0009	.0820
Mo2020	.1943	.2035	4.983	.0058	<.0000
Na5895	11.15	11.57	49.32	.0137	55.57
Ni2216	.2022	.2110	5.016	.0005	.0033
P_1774	.2055	.2152	5.032	.0013	.1033
Pb2203	.1936	.2030	5.026	<.0000	.0007
S_1820	2.174	2.272	50.27	<.0000	.3194
Sb2068	.0979	.1024	1.001	.0031	.0024
Se1960	.1903	.1939	5.067	.0009	<.0000
Si2516	2.860	2.961	4.901	<.0000	3.017
Sn1899	.1904	.1999	4.983	.0006	<.0000
Sr4077	.3029	.3179	4.779	.0006	.1430
Th2832	.1864	.1974	5.013	<.0000	.0036
Ti3349	.1843	.1974	4.987	.0017	.0008
Tl1908	.0451	.0463	5.072	.0011	.0011
U_3670	.1496	.1501	4.996	<.0000	<.0000
V_2908	.1828	.1927	4.978	<.0000	.0017
Y_3710	3604.8	3657.1	3602.8	3795.5	3672.5
Zn2138	.1919	.2008	5.000	.0005	.0025

Vertical Table Report
Author:
Notes:

	160-437-E-3-B	160-437-E-4-B	160-437-E-5-B	160-437-E-6-B	160-437-E-7-B
PM	8/27/2012 4:39:53F	8/27/2012 4:43:30F	8/27/2012 4:47:07F	8/27/2012 4:50:45F	8/27/2012 4:54:19F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	<.0000	<.0000	.0006	.0000	.0000
Al3961	.0084	<.0000	<.0000	.0369	.0082
As1890	.0334	.0030	.0024	.0001	.0072
B_2496	.1924	.1579	.3475	.1974	.0173
Ba4554	.3619	.1520	.1318	.0932	.1213
Be3130	.0000	.0000	.0000	.0000	.0000
Bi2230	.0029	.0038	.0031	<.0000	.0021
Ca1840	24.75	37.16	27.56	F 107.8	F 55.17
Cd2288	<.0000	<.0000	<.0000	<.0000	<.0000
Co2286	<.0000	<.0000	.0009	.0001	<.0000
Cr2835	.0006	.0004	.0005	.0003	.0007
Cu2178	<.0000	.0006	.0020	<.0000	<.0000
Fe2599	7.334	4.352	3.818	2.240	7.585
K_7664	7.794	3.929	14.72	2.370	1.338
Li6707	.0099	.0065	.0066	.0095	.0030
Mg2798	14.53	12.89	17.94	12.23	16.35
Mn2576	.0432	.2311	.0132	.2159	.7970
Mo2020	<.0000	<.0000	<.0000	<.0000	<.0000
Na5895	19.60	20.75	57.28	34.19	3.799
Ni2216	.0027	.0026	.0393	.0019	.0011
P_1774	.1973	.0495	.0755	.1035	.1497
Pb2203	.0004	.0008	.0012	.0021	.0013
S_1820	.1553	1.276	.5204	43.69	.1176
Sb2068	.0020	.0026	<.0000	.0026	.0024
Se1960	<.0000	<.0000	<.0000	<.0000	.0022
Si2516	4.220	2.150	3.246	3.405	3.773
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.3300	.2091	.1381	.2589	.1901
Th2832	<.0000	.0011	.0008	<.0000	<.0000
Ti3349	.0001	.0001	.0004	.0013	.0000
Tl1908	.0011	.0029	.0044	.0010	.0014
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0025	.0007	<.0000	<.0000	.0035
Y_3710	3663.8	3685.3	3729.2	3713.5	3649.0
Zn2138	.0026	.0023	.0040	.0023	.0024

Vertical Table Report
Author:
Notes:

	160-437-E-8-B	160-437-E-9-B	160-442-E-1-D	160-442-E-2-B	CCV
PM	8/27/2012 4:57:56F	8/27/2012 5:01:31F	8/27/2012 5:05:09F	8/27/2012 5:08:47F	8/27/2012 5:12:28F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.0001	<.0000	<.0000	.0000	.9638
Al3961	.1180	.0088	.0011	<.0000	49.76
As1890	.0071	.0019	.0029	.0014	4.969
B_2496	.2000	.2818	.0194	.0262	4.950
Ba4554	.0204	.4016	.0514	.0531	5.045
Be3130	.0001	.0000	.0001	<.0000	5.014
Bi2230	.0018	<.0000	<.0000	<.0000	4.991
Ca1840	F 60.25	W 48.18	17.80	17.44	24.98
Cd2288	<.0000	<.0000	<.0000	<.0000	4.938
Co2286	.0001	.0004	<.0000	<.0000	4.988
Cr2835	.0011	.0006	<.0000	<.0000	4.895
Cu2178	<.0000	<.0000	<.0000	<.0000	4.962
Fe2599	12.20	6.224	.1833	.7604	49.93
K_7664	8.046	4.087	1.034	.9009	49.78
Li6707	.0105	.0083	.0018	.0037	4.989
Mg2798	29.58	16.40	3.007	4.598	24.85
Mn2576	.5588	.0925	.1759	.0790	4.981
Mo2020	<.0000	<.0000	.0032	<.0000	4.905
Na5895	35.68	61.17	4.064	3.134	49.37
Ni2216	.0033	.0035	.0025	.0007	4.969
P_1774	.0561	.1196	.0071	.0356	4.968
Pb2203	.0004	<.0000	.0007	<.0000	4.977
S_1820	57.11	.3439	.5520	2.061	49.78
Sb2068	.0026	.0026	<.0000	<.0000	.9858
Se1960	<.0000	<.0000	<.0000	.0013	5.023
Si2516	3.522	3.423	1.902	2.210	4.938
Sn1899	<.0000	<.0000	<.0000	<.0000	4.934
Sr4077	.1516	.1607	.0991	.0632	4.886
Th2832	<.0000	<.0000	<.0000	<.0000	4.968
Ti3349	.0002	.0003	.0002	<.0000	4.991
Tl1908	.0019	.0016	.0014	.0026	4.978
U_3670	<.0000	<.0000	<.0000	<.0000	4.978
V_2908	.0022	.0005	<.0000	.0033	4.971
Y_3710	3749.2	3772.4	3700.7	3730.5	3638.6
Zn2138	.0023	.0024	.0029	.0026	4.929

Vertical Table Report
Author:
Notes:

	CCB	160-442-E-3-B	160-442-E-4-B	160-442-E-5-B	160-442-E-6-B
PM	8/27/2012 5:15:49F	8/27/2012 5:19:31F	8/27/2012 5:23:08F	8/27/2012 5:26:45F	8/27/2012 5:30:22F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	<.0000	<.0000	.0002	.0003	<.0000
Al3961	.0084	.0089	<.0000	.0036	.0053
As1890	.0023	.0000	.0018	.0136	.0018
B_2496	.0151	.0779	.0349	.0202	.1045
Ba4554	.0001	.0628	.0789	.1099	.2234
Be3130	.0007	<.0000	.0001	.0000	.0000
Bi2230	.0013	<.0000	.0027	.0011	.0007
Ca1840	.0019	35.78	W 45.97	F 52.08	15.12
Cd2288	<.0000	<.0000	<.0000	<.0000	.0000
Co2286	.0001	.0006	.0011	.0005	<.0000
Cr2835	<.0000	<.0000	.0000	.0009	<.0000
Cu2178	<.0000	.0002	<.0000	.0003	.0006
Fe2599	.0098	.3485	3.564	9.930	2.104
K_7664	.0063	1.342	.7566	.8955	6.413
Li6707	.0008	.0044	.0069	.0031	.0058
Mg2798	.0161	10.42	11.47	17.80	5.222
Mn2576	.0011	.0416	.2174	.8865	.0528
Mo2020	.0056	.0059	<.0000	.0014	<.0000
Na5895	.0280	10.72	3.023	2.665	8.569
Ni2216	.0003	.0037	.0020	.0006	.0011
P_1774	.0008	.0092	.0542	.1048	.0955
Pb2203	.0014	.0008	.0010	.0009	.0005
S_1820	.0026	4.918	2.275	.0365	3.529
Sb2068	.0030	.0020	.0001	.0036	.0034
Se1960	.0021	<.0000	<.0000	.0012	<.0000
Si2516	<.0000	2.231	2.929	2.866	2.871
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.0007	.1341	.1315	.2571	.0926
Th2832	.0033	.0013	<.0000	<.0000	.0043
Ti3349	.0006	.0011	.0017	.0006	.0003
Tl1908	.0009	.0013	.0019	.0014	.0013
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0030	<.0000	<.0000	.0003	<.0000
Y_3710	3838.7	3726.7	3720.9	3603.4	3691.5
Zn2138	.0006	.0026	.0036	.0025	.0024

Vertical Table Report
Author:
Notes:

	160-420-E-1-D	160-420-E-2-B	160-420-E-3-B	160-420-E-4-B	MB 160-9008/1-A
PM	8/27/2012 5:33:57F	8/27/2012 5:37:34F	8/27/2012 5:41:12F	8/27/2012 5:44:49F	8/27/2012 5:48:26F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.0006	<.0000	<.0000	.0001	<.0000
Al3961	<.0000	<.0000	.0024	<.0000	<.0000
As1890	.0215	.0009	.0063	.0021	.0012
B_2496	.0422	.0291	.0434	.0446	.0012
Ba4554	.1680	.0404	.3683	.1084	<.0000
Be3130	.0000	.0000	<.0000	<.0000	.0000
Bi2230	.0025	<.0000	.0016	.0008	<.0000
Ca1840	27.62	29.46	W 48.96	W 42.01	.0273
Cd2288	<.0000	<.0000	<.0000	<.0000	<.0000
Co2286	.0055	<.0000	.0013	.0004	<.0000
Cr2835	<.0000	<.0000	.0005	<.0000	<.0000
Cu2178	.0015	<.0000	<.0000	<.0000	.0009
Fe2599	9.558	.0030	9.988	.0804	.0038
K_7664	.9844	1.062	1.806	1.519	.0145
Li6707	.0036	.0015	.0064	.0062	.0004
Mg2798	9.963	4.174	13.15	10.62	.0162
Mn2576	.3716	.0165	.1896	.2715	.0001
Mo2020	.0022	<.0000	<.0000	<.0000	<.0000
Na5895	12.80	10.01	28.73	66.71	.0380
Ni2216	.0050	.0016	.0020	.0036	.0001
P_1774	.0128	.0101	.0237	.0122	.0010
Pb2203	.0013	.0006	<.0000	<.0000	<.0000
S_1820	.2786	5.316	2.804	1.220	.0034
Sb2068	.0003	.0023	.0015	.0017	<.0000
Se1960	<.0000	<.0000	.0006	<.0000	<.0000
Si2516	3.949	1.661	3.628	2.805	.0193
Sn1899	<.0000	<.0000	<.0000	<.0000	<.0000
Sr4077	.0916	.0601	.1276	.1144	<.0000
Th2832	<.0000	<.0000	<.0000	<.0000	<.0000
Ti3349	<.0000	.0003	<.0000	.0007	.0011
Tl1908	.0034	.0027	.0025	.0015	.0017
U_3670	<.0000	<.0000	<.0000	<.0000	<.0000
V_2908	.0003	<.0000	.0036	<.0000	<.0000
Y_3710	3879.8	3838.8	3790.8	3643.2	3725.1
Zn2138	.0019	.0029	.0025	.0038	.0077

Vertical Table Report
Author:
Notes:

	LCS 160-9008/2-A	CCV	CCB	160-442-D-1-A	160-442-D-1-A SD
PM	8/27/2012 5:52:07F	8/27/2012 5:55:29F	8/27/2012 5:58:49F	8/27/2012 6:02:32F	8/27/2012 6:06:10F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.1039	.9448	.0003	.0002	.0003
Al3961	10.33	50.00	<.0000	.0053	.0040
As1890	1.001	4.817	.0037	.0029	.0011
B_2496	1.006	4.943	.0184	.0282	.0103
Ba4554	1.031	5.072	.0004	.0603	.0112
Be3130	1.016	5.010	.0007	.0000	<.0000
Bi2230	1.050	4.845	.0018	<.0000	<.0000
Ca1840	10.22	24.03	.0019	19.74	3.902
Cd2288	1.030	4.808	<.0000	<.0000	<.0000
Co2286	1.065	4.868	<.0000	.0030	.0005
Cr2835	1.026	4.825	<.0000	<.0000	<.0000
Cu2178	1.056	4.837	.0010	.0008	.0022
Fe2599	10.37	49.84	.0084	.5961	.1165
K_7664	10.05	49.69	.0203	1.193	.2219
Li6707	1.036	5.030	<.0000	.0019	.0006
Mg2798	10.27	24.85	.0216	3.479	.6747
Mn2576	1.047	4.998	.0011	.2077	.0405
Mo2020	1.047	4.761	.0058	.0110	.0013
Na5895	9.865	48.78	.0382	4.536	.8918
Ni2216	1.071	4.834	.0001	.0121	.0027
P_1774	.9879	4.758	<.0000	.0157	.0041
Pb2203	1.043	4.806	.0007	.0001	.0011
S_1820	9.872	48.05	.0028	.8463	.1629
Sb2068	.5279	.9567	.0022	.0048	.0004
Se1960	1.012	4.847	.0021	<.0000	<.0000
Si2516	F .0469	4.956	<.0000	2.205	.4197
Sn1899	1.034	4.779	.0002	<.0000	<.0000
Sr4077	1.033	4.963	.0008	.1138	.0220
Th2832	1.047	4.934	<.0000	<.0000	<.0000
Ti3349	1.025	5.033	.0022	.0008	.0001
Tl1908	.2204	4.766	<.0000	.0026	.0010
U_3670	.9989	5.002	<.0000	<.0000	<.0000
V_2908	.9964	4.891	.0008	.0027	<.0000
Y_3710	3666.2	3744.7	3807.4	3778.4	3739.6
Zn2138	1.027	4.767	.0006	.0069	.0058

Vertical Table Report
Author:
Notes:

PM	160-442-D-1-B MS 8/27/2012 6:09:49F metals 2011 (502)	160-442-D-1-C MSI 8/27/2012 6:13:21F metals 2011 (502)	160-442-D-2-A 8/27/2012 6:16:53F metals 2011 (502)	160-442-D-3-A 8/27/2012 6:20:31F metals 2011 (502)	160-442-D-4-A 8/27/2012 6:24:08F metals 2011 (502)
Ag3280	.0182	.0189	.0000	.0000	.0002
Al3961	1.774	1.846	.4990	.3052	.0266
As1890	.1800	.1831	.0059	.0026	.0020
B_2496	.1921	.2019	.0307	.0656	.0300
Ba4554	.2285	.2355	.0765	.0623	.0796
Be3130	.1730	.1786	.0001	.0000	.0000
Bi2230	.1821	.1883	<.0000	<.0000	<.0000
Ca1840	19.34	20.13	19.91	33.33	W 46.80
Cd2288	.1787	.1843	<.0000	<.0000	<.0000
Co2286	.1898	.1948	.0001	.0040	.0006
Cr2835	.1761	.1813	.0001	<.0000	.0004
Cu2178	.1818	.1880	.0007	<.0000	<.0000
Fe2599	2.344	2.399	2.624	.9855	3.576
K_7664	2.750	2.861	1.142	1.221	.8337
Li6707	.1790	.1857	.0046	.0058	.0050
Mg2798	4.781	4.963	5.429	9.391	11.34
Mn2576	.3584	.3727	.1242	.0422	.2149
Mo2020	.1922	.1986	.0001	.0098	<.0000
Na5895	5.601	5.853	3.547	9.431	3.007
Ni2216	.2001	.2050	.0020	.0114	.0024
P_1774	.1891	.1974	.1153	.0254	.0615
Pb2203	.1844	.1887	.0024	.0011	.0018
S_1820	2.533	2.588	2.355	4.698	2.340
Sb2068	.0923	.0958	.0019	.0010	.0037
Se1960	.1755	.1807	<.0000	<.0000	<.0000
Si2516	1.951	2.037	3.829	2.707	2.971
Sn1899	.1808	.1865	<.0000	<.0000	<.0000
Sr4077	.2728	.2832	.0748	.1202	.1314
Th2832	.1717	.1762	<.0000	<.0000	.0003
Ti3349	.1756	.1823	.0114	.0087	.0011
Tl1908	.0414	.0422	.0010	.0010	.0034
U_3670	.1163	.1187	<.0000	<.0000	<.0000
V_2908	.1684	.1735	.0025	.0016	<.0000
Y_3710	3756.4	3687.8	3703.7	3635.5	3679.3
Zn2138	.1821	.1879	.0161	.0108	.0129

Vertical Table Report
Author:
Notes:

	160-442-D-5-A	160-442-D-6-A	MB 160-9220/1-A	CCV	CCB
PM	8/27/2012 6:27:44F	8/27/2012 6:31:20F	8/27/2012 6:34:59F	8/27/2012 6:38:41F	8/27/2012 6:42:01F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.0001	.0001	.0002	.9524	.0004
Al3961	2.921	.0172	.0135	50.86	<.0000
As1890	.0150	.0004	.0000	4.911	.0024
B_2496	.0189	.0881	.0150	4.958	.0147
Ba4554	.1709	.1925	<.0000	5.125	.0003
Be3130	.0001	<.0000	.0000	5.064	.0006
Bi2230	.0007	<.0000	.0006	4.918	<.0000
Ca1840	F 54.98	13.40	.0294	24.60	.0002
Cd2288	.0002	<.0000	<.0000	4.940	<.0000
Co2286	.0024	<.0000	<.0000	5.008	<.0000
Cr2835	.0039	<.0000	<.0000	4.922	<.0000
Cu2178	.0033	<.0000	.0032	4.964	.0010
Fe2599	12.59	1.871	.0106	50.40	.0066
K_7664	1.602	5.462	.0053	50.28	.0087
Li6707	.0045	.0046	<.0000	5.100	.0015
Mg2798	18.73	4.463	.0131	25.41	.0157
Mn2576	.9059	.0472	.0002	5.076	.0010
Mo2020	.0008	<.0000	<.0000	4.841	.0059
Na5895	2.652	7.286	.0372	49.07	.0258
Ni2216	.0094	.0013	.0000	4.962	.0002
P_1774	.3301	.0849	.0003	4.801	.0005
Pb2203	.0078	.0001	<.0000	4.914	.0004
S_1820	.1161	3.132	.0018	48.59	.0030
Sb2068	.0004	.0008	.0016	.9769	.0047
Se1960	<.0000	<.0000	.0002	4.925	.0019
Si2516	8.677	2.504	.0878	5.054	.0012
Sn1899	<.0000	<.0000	<.0000	4.911	.0001
Sr4077	.2549	.0785	.0001	5.007	.0006
Th2832	<.0000	<.0000	<.0000	5.010	<.0000
Ti3349	.0601	.0013	.0004	5.104	.0019
Tl1908	.0024	.0002	.0023	4.841	.0009
U_3670	<.0000	<.0000	<.0000	5.047	<.0000
V_2908	.0077	<.0000	.0016	4.903	.0014
Y_3710	3829.8	3708.3	3785.8	3560.9	3687.4
Zn2138	.0369	.0054	W .0109	4.862	.0002

Vertical Table Report
Author:
Notes:

PM	LCS 160-9220/2-A 8/27/2012 6:45:44F metals 2011 (502)	LCS 160-9220/7-A 8/27/2012 6:49:05F metals 2011 (502)	LCS 160-9220/8-A 8/27/2012 6:52:24F metals 2011 (502)	160-448-A-1-A 8/27/2012 6:56:04F metals 2011 (502)	160-448-A-1-A SD 8/27/2012 6:59:39F metals 2011 (502)
Ag3280	.4193	.1028	F .0001	.0012	.0012
Al3961	66.99	10.38	F .0064	4.813	1.021
As1890	.8976	.9956	F .0009	.0872	.0200
B_2496	1.292	F 1.377	F .0111	.0104	.0034
Ba4554	2.860	1.034	F<.0000	.3014	.0635
Be3130	.8055	1.008	F .0001	.0001	.0000
Bi2230	.0006	1.023	F<.0000	.0083	.0033
Ca1840	54.03	10.20	F .0145	4.441	.9681
Cd2288	.9632	1.011	F<.0000	.0175	.0035
Co2286	1.200	1.058	F<.0000	.0009	<.0000
Cr2835	.7888	1.018	F<.0000	.0147	.0026
Cu2178	.6417	1.030	F .0030	.7337	.0089
Fe2599	98.01	10.42	F .0071	.7351	.1554
K_7664	20.22	10.15	F<.0000	.6322	.1300
Li6707	.0662	1.026	F .0004	.0717	.0151
Mg2798	24.30	10.31	F .0103	1.453	.3134
Mn2576	3.894	1.039	F .0007	.0345	.0073
Mo2020	.7814	1.038	F<.0000	.0049	<.0000
Na5895	5.924	9.973	F .0209	6.843	1.456
Ni2216	.9934	1.068	F .0012	.0094	.0016
P_1774	4.370	.9814	F .0004	1.410	.3008
Pb2203	1.297	1.036	F .0012	.7632	.0273
S_1820	2.091	9.803	F .0116	5.401	1.157
Sb2068	.7337	.5284	F .0061	.0017	<.0000
Se1960	1.733	1.006	F<.0000	.0028	.0020
Si2516	26.74	F 3.654	4.848	3.855	.8066
Sn1899	1.087	1.027	F<.0000	.0480	<.0000
Sr4077	.9692	1.025	F .0002	.4395	.0931
Th2832	<.0000	1.039	F<.0000	<.0000	<.0000
Ti3349	1.778	1.023	F .0007	.1495	.0324
Tl1908	1.458	.2161	F .0008	.0004	.0026
U_3670	<.0000	.9686	F<.0000	<.0000	<.0000
V_2908	.9428	.9920	F<.0000	.0260	.0029
Y_3710	4523.8	3737.8	3745.9	3887.2	3688.3
Zn2138	2.522	1.010	F .0041	.0493	.0107

Vertical Table Report
Author:
Notes:

	160-448-A-1-B MS	160-448-A-1-C MSD	160-448-A-2-A	CCV	CCB
PM	8/27/2012 7:03:19F	8/27/2012 7:06:38F	8/27/2012 7:09:55F	8/27/2012 7:13:33F	8/27/2012 7:16:55F
	metals	metals	metals	metals	metals
	2011 (502)	2011 (502)	2011 (502)	2011 (502)	2011 (502)
Ag3280	.0931	.0948	<.0000	.9484	<.0000
Al3961	23.69	21.41	17.64	50.38	<.0000
As1890	1.542	.9424	.0094	4.937	.0004
B_2496	.9319	.9414	.0259	4.947	.0165
Ba4554	1.210	1.181	.0675	5.131	.0002
Be3130	.9058	.9216	.0001	5.024	.0006
Bi2230	.9125	.9179	<.0000	4.914	<.0000
Ca1840	12.27	12.19	2.984	24.55	<.0000
Cd2288	.9381	.9352	.0033	4.889	<.0000
Co2286	.9338	.9508	.0023	4.974	<.0000
Cr2835	.9274	.9378	.0159	4.856	<.0000
Cu2178	.9684	.9704	.0186	4.908	.0029
Fe2599	10.10	10.24	.6907	50.40	.0091
K_7664	10.67	10.65	1.178	50.31	.0288
Li6707	1.024	1.026	.0342	5.050	.0004
Mg2798	35.42	11.51	2.506	25.14	.0094
Mn2576	.9868	.9825	.0260	5.039	.0009
Mo2020	.9432	.9454	.0035	4.829	.0055
Na5895	22.23	28.64	12.28	48.89	.0250
Ni2216	.9535	.9704	.0057	4.941	.0001
P_1774	1.308	1.331	.1949	4.822	.0001
Pb2203	1.229	1.111	.0739	4.900	<.0000
S_1820	15.55	21.70	2.202	49.09	<.0000
Sb2068	.4640	.4700	.0006	.9766	.0041
Se1960	.8899	.9060	<.0000	4.959	.0028
Si2516	F 21.32	F 21.29	6.548	5.041	<.0000
Sn1899	.9192	.9278	.0010	4.903	<.0000
Sr4077	1.241	1.277	.2233	4.987	.0007
Th2832	.9334	.9394	<.0000	4.984	<.0000
Ti3349	1.466	1.539	.8731	5.079	.0019
Tl1908	.1882	.1935	.0020	4.837	.0041
U_3670	.8410	.8839	<.0000	5.022	<.0000
V_2908	.9588	.9845	.0334	4.919	.0026
Y_3710	3930.1	4008.7	3913.6	3735.3	3758.3
Zn2138	.9306	.9411	.0101	4.846	.0000

PM

Sample Name: CALBLK1 Acquired: 8/27/2012 13:32:58 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0008**	**.0013**	**-.0001**	**.0008**	**.0369**	**.0001**	**.0003**	**.0006**	**.0000**
Stddev	.0003	.0022	.0001	.0003	.0030	.0002	.0003	.0001	.000
%RSD	41.04	172.1	135.5	33.49	8.077	188.1	121.4	16.36	367.4
#1	-.0011	-.0005	.0001	.0007	.0382	.0003	.0002	.0006	-.0001
#2	-.0005	.0005	-.0002	.0010	.0334	.0001	.0000	.0008	.0000
#3	-.0009	.0037	-.0002	.0005	.0389	-.0001	.0006	.0006	.0000

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**.0093**	**.0001**	**.0005**	**-.0049**	**.0073**	**-.0015**	**-.0004**	**.0006**
Stddev	.0002	.0006	.0002	.0003	.0025	.0033	.0005	.0005	.0002
%RSD	162.4	6.537	213.6	66.83	51.30	44.98	32.71	121.5	28.39
#1	.0004	.0088	.0004	.0001	-.0024	.0108	-.0018	-.0009	.0008
#2	.0001	.0100	-.0001	.0006	-.0075	.0042	-.0017	.0000	.0004
#3	-.0001	.0091	.0000	.0007	-.0049	.0069	-.0009	-.0002	.0006

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0057**	**.0002**	**-.0001**	**-.0004**	**.0004**	**.0005**	**.0002**	**.0048**	**.0002**
Stddev	.0024	.0004	.0001	.0002	.0001	.0001	.0002	.0002	.0001
%RSD	42.24	159.1	89.04	60.78	14.34	19.69	74.68	3.989	44.96
#1	-.0029	.0000	-.0001	-.0004	.0003	.0006	.0002	.0046	.0003
#2	-.0072	.0007	.0000	-.0001	.0004	.0005	.0004	.0049	.0001
#3	-.0070	.0001	.0000	-.0006	.0004	.0004	.0001	.0048	.0002

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0037**	**.0099**	**.0017**	**-.0006**	**.0555**	**-.0011**	**.0010**
Stddev	.0007	.0006	.0004	.0001	.0016	.0005	.0000
%RSD	19.54	6.246	21.75	20.45	2.854	41.77	1.959
#1	-.0041	.0101	.0020	-.0004	.0564	-.0015	.0010
#2	-.0041	.0092	.0013	-.0007	.0536	-.0012	.0010
#3	-.0028	.0103	.0017	-.0006	.0563	-.0006	.0010

Sample Name: CALBLK1 Acquired: 8/27/2012 13:32:58 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3609.2
Stddev	32.0
%RSD	.88550
#1	3613.0
#2	3639.0
#3	3575.5

Sample Name: CAL 1 Acquired: 8/27/2012 13:36:38 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0156**	**.0298**	**.0005**	**.0164**	**.4897**	**.0497**	**.0135**	**.1876**	**.0050**
Stddev	.0010	.0008	.0001	.0005	.0022	.0006	.0002	.0007	.0002
%RSD	6.127	2.544	31.71	3.116	.4587	1.137	1.299	.3710	3.153
#1	.0152	.0297	.0006	.0158	.4921	.0499	.0133	.1884	.0051
#2	.0166	.0291	.0005	.0166	.4893	.0490	.0136	.1876	.0048
#3	.0148	.0306	.0003	.0168	.4877	.0501	.0136	.1870	.0050

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0226**	**.0276**	**.0024**	**.0308**	**.5646**	**.1206**	**.0404**	**.0275**	**.0191**
Stddev	.0002	.0010	.0001	.0006	.0058	.0012	.0006	.0008	.0002
%RSD	1.048	3.522	2.988	1.801	1.020	.9922	1.558	2.886	1.273
#1	.0228	.0275	.0023	.0302	.5589	.1218	.0401	.0281	.0193
#2	.0226	.0286	.0025	.0313	.5646	.1194	.0400	.0266	.0189
#3	.0223	.0266	.0024	.0307	.5704	.1206	.0412	.0277	.0189

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.3603**	**.0259**	**.0204**	**.0011**	**.1806**	**.0012**	**.0009**	**.0410**	**.0161**
Stddev	.0050	.0003	.0003	.0001	.0009	.0001	.0001	.0006	.0000
%RSD	1.402	1.183	1.499	9.601	.5140	10.34	12.33	1.512	.2474
#1	.3624	.0261	.0206	.0011	.1815	.0014	.0007	.0413	.0162
#2	.3545	.0255	.0200	.0010	.1805	.0011	.0009	.0415	.0161
#3	.3638	.0261	.0205	.0012	.1797	.0012	.0009	.0403	.0161

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0682**	**.0541**	**.0216**	**.0015**	**.1180**	**.0106**	**.0137**
Stddev	.0009	.0016	.0007	.0002	.0037	.0005	.0002
%RSD	1.268	2.946	3.193	16.32	3.123	4.832	1.193
#1	.0674	.0524	.0224	.0015	.1165	.0112	.0139
#2	.0691	.0556	.0213	.0017	.1221	.0105	.0136
#3	.0683	.0542	.0212	.0012	.1152	.0102	.0136

Sample Name: CAL 1 Acquired: 8/27/2012 13:36:38 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3524.6
Stddev	26.3
%RSD	.74716
#1	3531.5
#2	3495.6
#3	3546.9

Sample Name: CAL 2 Acquired: 8/27/2012 13:40:16 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Ca1840	Cd2288	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3210	1.499	.0608	.1537	8.992	9.919	.9455	1.034	.4378
Stddev	.0044	.003	.0011	.0007	.013	.015	.0131	.016	.0060
%RSD	1.358	.2038	1.765	.4312	.1398	.1484	1.388	1.552	1.362
#1	.3231	1.497	.0596	.1542	8.993	9.930	.9310	1.016	.4310
#2	.3160	1.497	.0611	.1540	8.979	9.902	.9490	1.041	.4401
#3	.3239	1.502	.0616	.1529	9.004	9.926	.9566	1.047	.4422

Elem	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.730	.0912	2.989	1.159	2.269	.2124	1.773	.4772	3.676
Stddev	.028	.0011	.004	.002	.004	.0014	.003	.0073	.002
%RSD	1.589	1.228	.1392	.1374	.1854	.6539	.1637	1.524	.0650
#1	1.753	.0899	2.988	1.158	2.271	.2108	1.774	.4690	3.677
#2	1.700	.0920	2.985	1.159	2.264	.2134	1.770	.4799	3.677
#3	1.739	.0916	2.993	1.161	2.271	.2131	1.776	.4828	3.673

Elem	Ni2216	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.6264	.1374	.0157	.0442	.1573	14.35	.9580	.0950	.2279
Stddev	.0093	.0020	.0001	.0006	.0024	.01	.0022	.0016	.0014
%RSD	1.487	1.443	.7830	1.375	1.543	.1033	.2283	1.663	.5960
#1	.6159	.1351	.0156	.0435	.1545	14.35	.9591	.0933	.2280
#2	.6293	.1383	.0158	.0445	.1583	14.36	.9555	.0954	.2264
#3	.6339	.1388	.0157	.0446	.1590	14.33	.9595	.0964	.2291

Elem	Zn2138
Units	Cts/S
Avg	.6287
Stddev	.0096
%RSD	1.521
#1	.6179
#2	.6325
#3	.6359

Sample Name: CAL 2 Acquired: 8/27/2012 13:40:16 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3410.8
Stddev	17.1
%RSD	.50157
#1	3426.3
#2	3413.6
#3	3392.5

Sample Name: CAL 3 Acquired: 8/27/2012 13:43:38 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.601**	**7.343**	**.3075**	**.7572**	**44.61**	**49.35**	**.3225**	**4.595**	**5.155**
Stddev	.009	.037	.0018	.0030	.18	.19	.0021	.029	.035
%RSD	.5381	.5101	.5731	.3908	.3958	.3764	.6449	.6241	.6861
#1	1.597	7.325	.3084	.7571	44.55	49.29	.3242	4.620	5.184
#2	1.611	7.386	.3086	.7602	44.81	49.56	.3231	4.600	5.165
#3	1.595	7.318	.3055	.7543	44.47	49.20	.3202	4.564	5.115

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.130**	**8.378**	**.4503**	**14.58**	**5.785**	**11.14**	**1.041**	**8.601**	**2.368**
Stddev	.012	.047	.0031	.04	.015	.04	.005	.045	.014
%RSD	.5646	.5651	.6882	.2908	.2644	.3341	.4950	.5234	.5955
#1	2.139	8.376	.4528	14.58	5.788	11.13	1.044	8.587	2.379
#2	2.134	8.427	.4512	14.62	5.799	11.19	1.044	8.652	2.373
#3	2.116	8.332	.4468	14.54	5.768	11.12	1.035	8.565	2.353

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**18.39**	**3.028**	**.4105**	**.6690**	**1.823**	**.0769**	**.2214**	**.4773**	**.7744**
Stddev	.07	.020	.0025	.0047	.009	.0002	.0014	.0009	.0050
%RSD	.3871	.6470	.6111	.7025	.5120	.2295	.6376	.1881	.6473
#1	18.37	3.045	.4130	.6726	1.831	.0769	.2222	.4777	.7784
#2	18.47	3.032	.4106	.6707	1.825	.0770	.2222	.4780	.7760
#3	18.34	3.007	.4080	.6637	1.812	.0767	.2198	.4763	.7688

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**71.53**	**1.163**	**4.719**	**.4568**	**.7602**	**1.132**	**3.109**
Stddev	1.20	.005	.020	.0035	.0067	.004	.020
%RSD	1.680	.4465	.4131	.7609	.8812	.3396	.6432
#1	72.89	1.159	4.713	.4598	.7580	1.131	3.125
#2	71.12	1.169	4.740	.4576	.7677	1.137	3.116
#3	70.59	1.161	4.703	.4530	.7548	1.129	3.087

Sample Name: CAL 3 Acquired: 8/27/2012 13:43:38 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3306.5
Stddev	42.0
%RSD	1.2689
#1	3270.8
#2	3296.0
#3	3352.7

Sample Name: CAL 4 Acquired: 8/27/2012 13:46:56 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.151**	**14.81**	**.5957**	**1.521**	**89.76**	**98.38**	**.6174**	**8.461**	**9.926**
Stddev	.032	.06	.0062	.003	.24	4.21	.0063	.089	.094
%RSD	1.016	.3922	1.045	.1974	.2671	4.275	1.023	1.048	.9514
#1	3.122	14.80	.5940	1.520	90.00	94.72	.6153	8.434	9.904
#2	3.185	14.75	.6026	1.519	89.52	103.0	.6244	8.560	10.03
#3	3.146	14.87	.5905	1.524	89.77	97.44	.6123	8.389	9.845

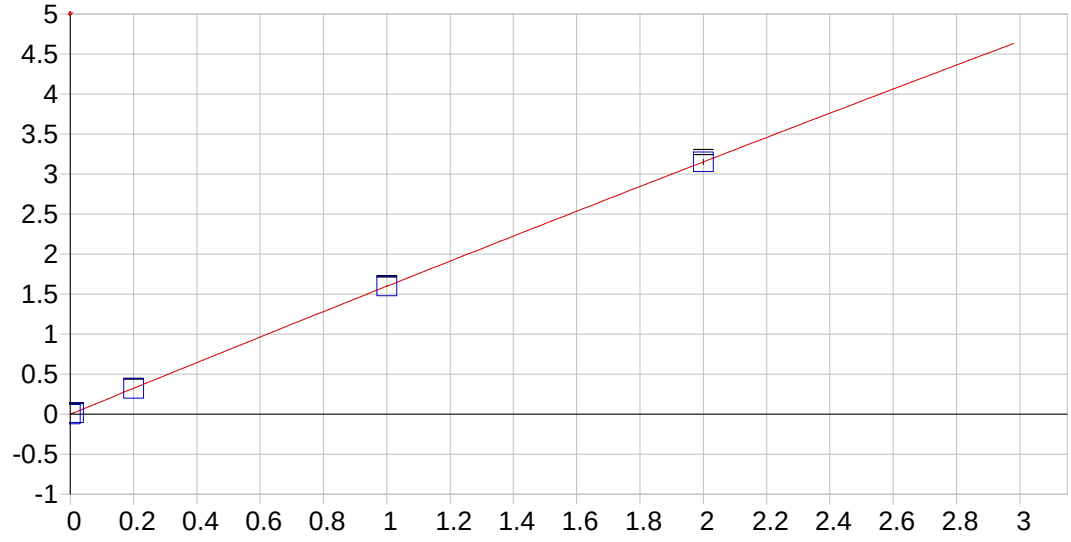
Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.029**	**16.13**	**.8626**	**29.13**	**11.68**	**22.69**	**2.073**	**17.20**	**4.584**
Stddev	.041	.18	.0093	.07	.05	.09	.008	.06	.047
%RSD	1.022	1.098	1.081	.2476	.3961	.3843	.4050	.3229	1.026
#1	4.019	15.94	.8598	29.15	11.69	22.69	2.076	17.20	4.570
#2	4.074	16.29	.8730	29.05	11.63	22.60	2.064	17.14	4.637
#3	3.994	16.16	.8550	29.18	11.72	22.77	2.080	17.25	4.546

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**37.09**	**5.730**	**.7945**	**1.260**	**3.577**	**.1498**	**.4264**	**.9709**	**1.483**
Stddev	.15	.056	.0066	.014	.037	.0017	.0046	.0028	.014
%RSD	.4095	.9829	.8334	1.105	1.032	1.105	1.076	.2871	.9728
#1	37.18	5.716	.7922	1.257	3.569	.1492	.4254	.9709	1.480
#2	36.91	5.792	.8019	1.274	3.617	.1517	.4314	.9681	1.498
#3	37.18	5.682	.7892	1.247	3.544	.1485	.4223	.9737	1.470

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**141.0**	**2.238**	**9.531**	**.8472**	**1.443**	**2.277**	**5.947**
Stddev	2.1	.020	.035	.0085	.015	.006	.060
%RSD	1.520	.9088	.3645	1.007	1.042	.2859	1.015
#1	138.6	2.217	9.540	.8442	1.428	2.282	5.933
#2	141.5	2.258	9.493	.8568	1.458	2.270	6.013
#3	142.8	2.238	9.561	.8405	1.443	2.281	5.895

Sample Name: CAL 4 Acquired: 8/27/2012 13:46:56 Type: Cal
Method: 2011(v502) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3393.6
Stddev	28.7
%RSD	.84601
#1	3408.8
#2	3360.5
#3	3411.6

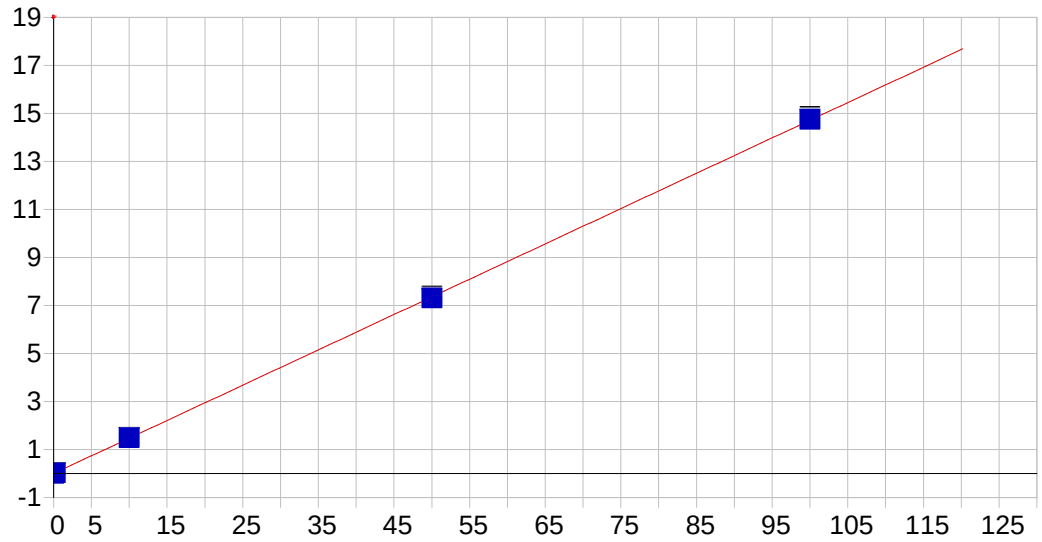


Ag 328.068 {103}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Curvilinear	Weighting:	1/Conc

A0 (Offset):	-0.000847	Re-Slope:	1.000000
A1 (Gain):	1.621601	Y-int:	0.000000
A2 (Curvature):	-0.022572		
n (Exponent):	1.000000		
Correlation:	0.999999	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.000725		
Predicted MQL:	0.002418		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00085	.000	1
CAL 1	.01000	.01012	.000	1.17	.01556	.001	1
CAL 2	.20000	.19902	-.001	-.490	.32099	.004	1
CAL 3	1.0000	1.0016	.002	.157	1.6007	.009	1
CAL 4	2.0000	1.9993	-.001	-.035	3.1510	.032	1

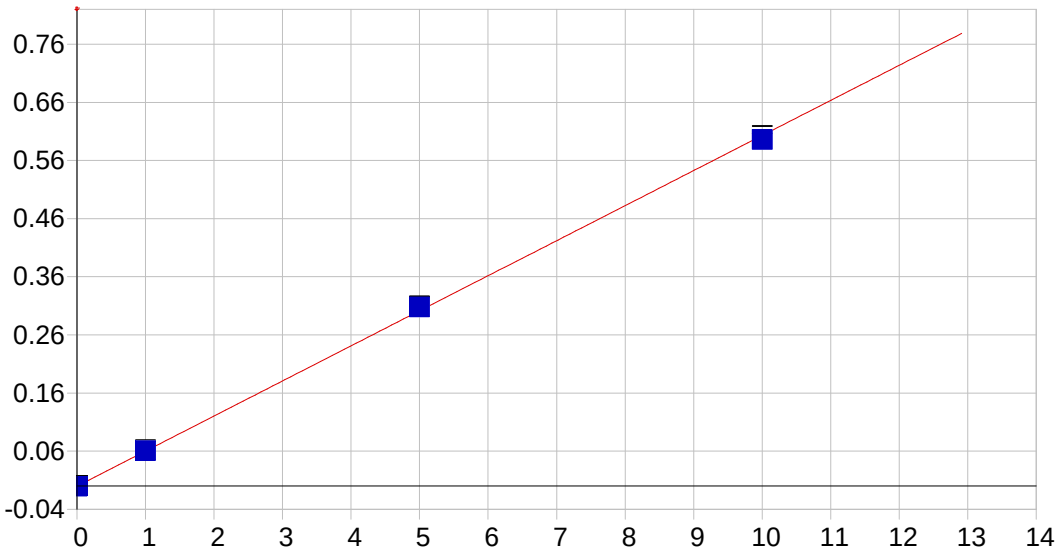


Al 396.152 { 85}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001252	Re-Slope:	1.000000
A1 (Gain):	0.147142	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000179		
Predicted MDL:	0.010522		
Predicted MQL:	0.035075		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00125	.002	1
CAL 1	.20000	.19233	-.008	-3.83	.02980	.001	1
CAL 2	10.000	10.135	.135	1.35	1.4987	.003	1
CAL 3	50.000	49.686	-.314	-.628	7.3432	.037	1
CAL 4	100.00	100.19	.187	.187	14.805	.058	1

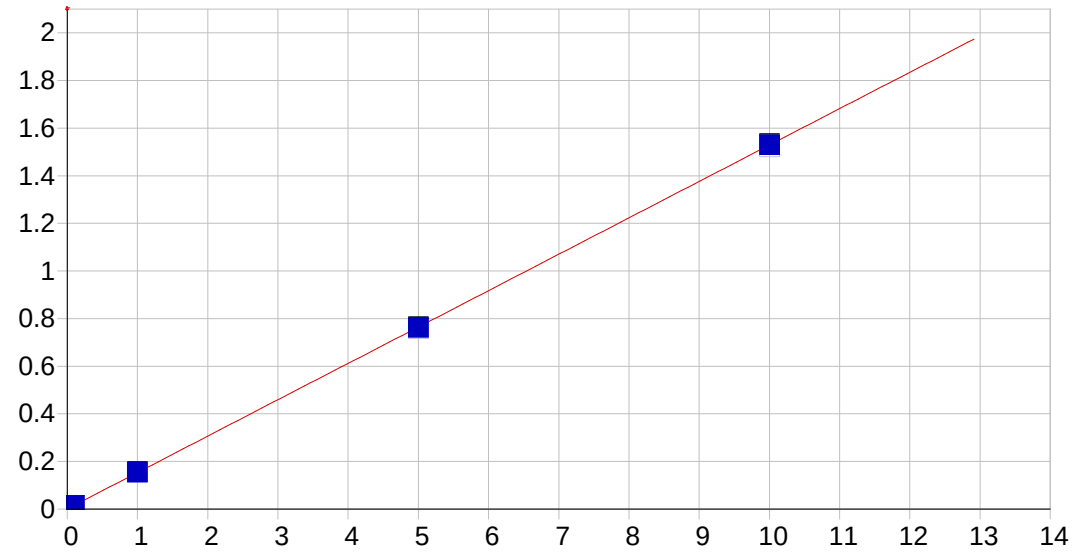


As 189.042 {478}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000095	Re-Slope:	1.000000
A1 (Gain):	0.060309	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999886	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.001916		
Predicted MQL:	0.006386		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00010	.000	1
CAL 1	.01000	.00902	-.001	-9.81	.00045	.000	1
CAL 2	1.0000	1.0102	.010	1.02	.06078	.001	1
CAL 3	5.0000	5.1042	.104	2.08	.30750	.002	1
CAL 4	10.000	9.8866	-.113	-1.13	.59569	.006	1

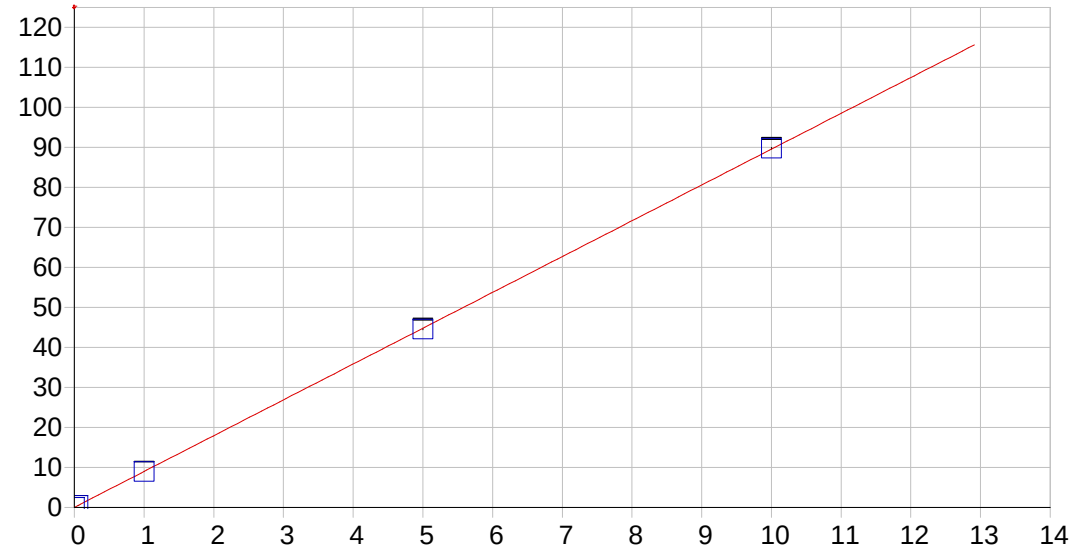


B 249.678 {135}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000765	Re-Slope:	1.000000
A1 (Gain):	0.152817	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999994	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.003471		
Predicted MQL:	0.011569		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00076	.000	1
CAL 1	.10000	.10253	.003	2.53	.01642	.001	1
CAL 2	1.0000	1.0069	.007	.691	.15368	.001	1
CAL 3	5.0000	4.9813	-.019	-.374	.75722	.003	1
CAL 4	10.000	10.009	.009	.093	1.5208	.003	1



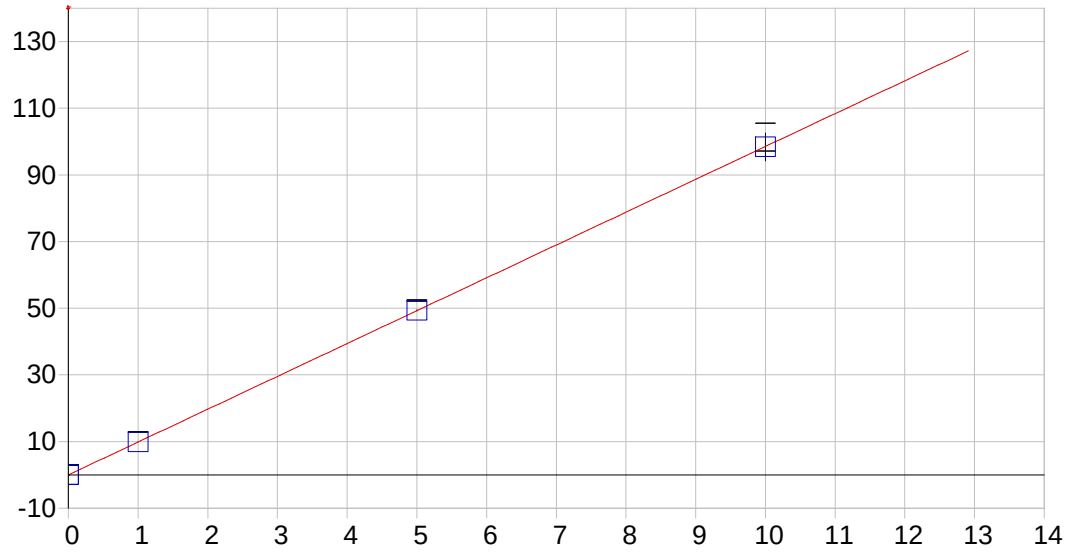
Ba 455.403 { 74}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.036854	Re-Slope:	1.000000

A1 (Gain):	8.953762	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000995		
Predicted MDL:	0.000233		
Predicted MQL:	0.000776		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.03685	.003	1
CAL 1	.05000	.05058	.001	1.15	.48971	.002	1
CAL 2	1.0000	1.0002	.000	.017	8.9921	.013	1
CAL 3	5.0000	4.9780	-.022	-.440	44.609	.177	1
CAL 4	10.000	10.021	.021	.212	89.765	.240	1

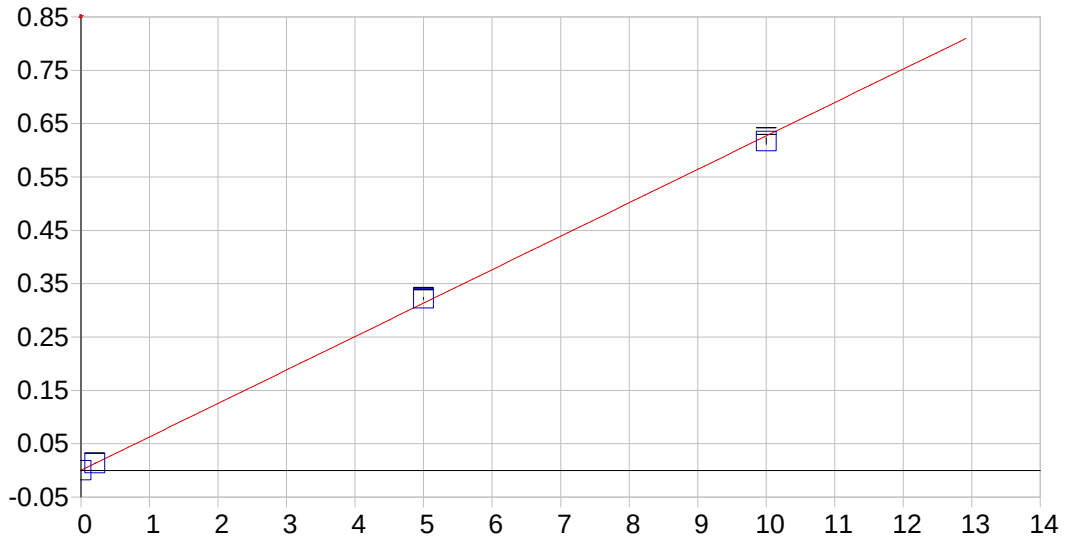


Be 313.042 {108}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000123	Re-Slope:	1.000000
A1 (Gain):	9.852938	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000259		
Predicted MDL:	0.000076		
Predicted MQL:	0.000253		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00012	.000	1
CAL 1	.00500	.00503	.000	.601	.04968	.001	1
CAL 2	1.0000	1.0067	.007	.672	9.9193	.015	1
CAL 3	5.0000	5.0085	.008	.170	49.348	.186	1
CAL 4	10.000	9.9848	-.015	-.152	98.379	4.21	1

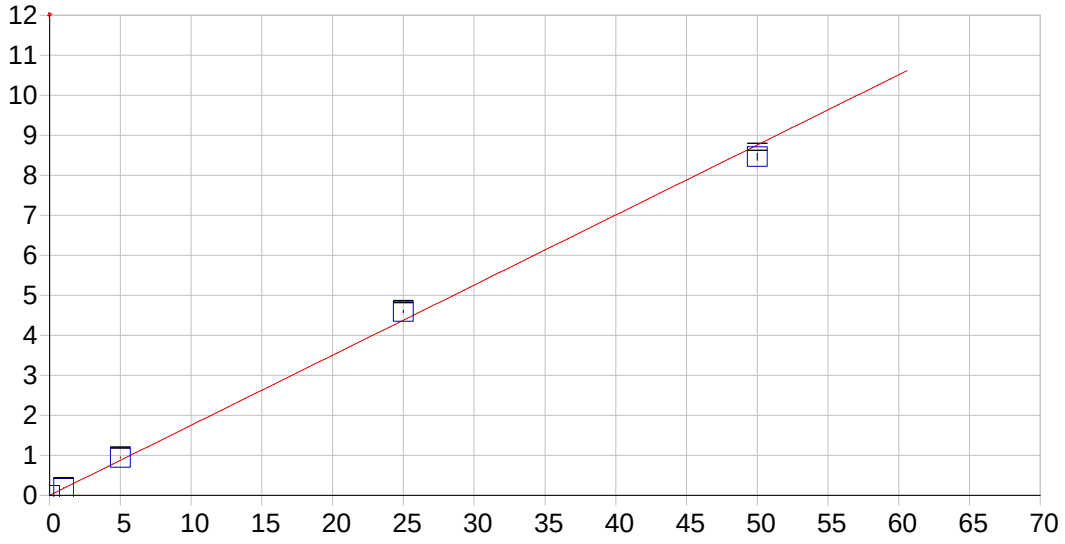


Bi 223.061 {451}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000257	Re-Slope:	1.000000
A1 (Gain):	0.062669	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999770	Status:	OK.
Std Error of Est:	0.000105		
Predicted MDL:	0.003141		
Predicted MQL:	0.010471		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00026	.000	1
CAL 1	.20000	.21130	.011	5.65	.01350	.000	1
CAL 3	5.0000	5.1418	.142	2.84	.32249	.002	1
CAL 4	10.000	9.8469	-.153	-1.53	.61735	.006	1



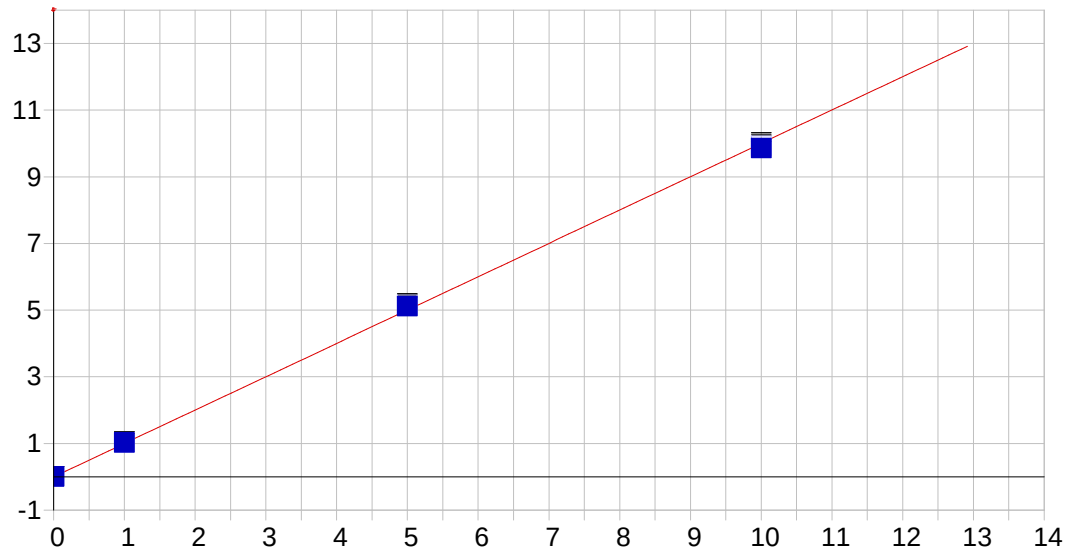
Ca 184.006 {483}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000663	Re-Slope:	1.000000
A1 (Gain):	0.175143	Y-int:	0.000000

A2 (Curvature):	0.000000					
n (Exponent):	1.000000					
Correlation:	0.999053		Status:	OK.		
Std Error of Est:	0.002801					
Predicted MDL:	0.000645					
Predicted MQL:	0.002150					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00016	.000	.000	.00063	.000	1
CAL 1	1.0000	1.0675	.068	6.75	.18764	.001	1
CAL 2	5.0000	5.3949	.395	7.90	.94555	.013	1
CAL 3	25.000	26.230	1.23	4.92	4.5947	.029	1
CAL 4	50.000	48.307	-1.69	-3.39	8.4614	.089	1

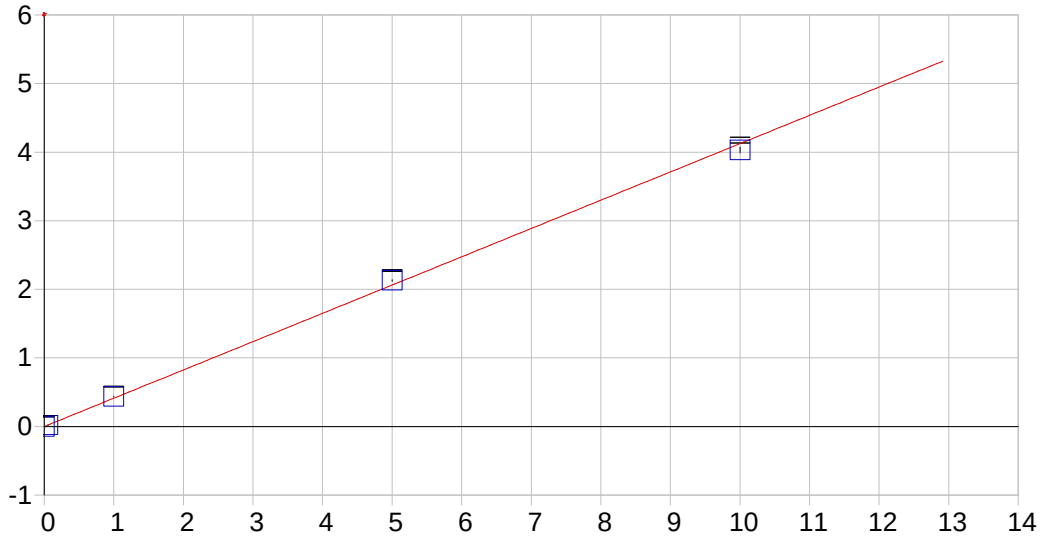


Cd 228.802 {447}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000021	Re-Slope:	1.000000
A1 (Gain):	1.000449	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999825	Status:	OK.
Std Error of Est:	0.000217		
Predicted MDL:	0.000194		
Predicted MQL:	0.000648		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00002	.000	1
CAL 1	.00500	.00495	.000	-.907	.00496	.000	1
CAL 2	1.0000	1.0273	.027	2.73	1.0345	.016	1
CAL 3	5.0000	5.1185	.118	2.37	5.1546	.035	1
CAL 4	10.000	9.8543	-.146	-1.46	9.9264	.094	1

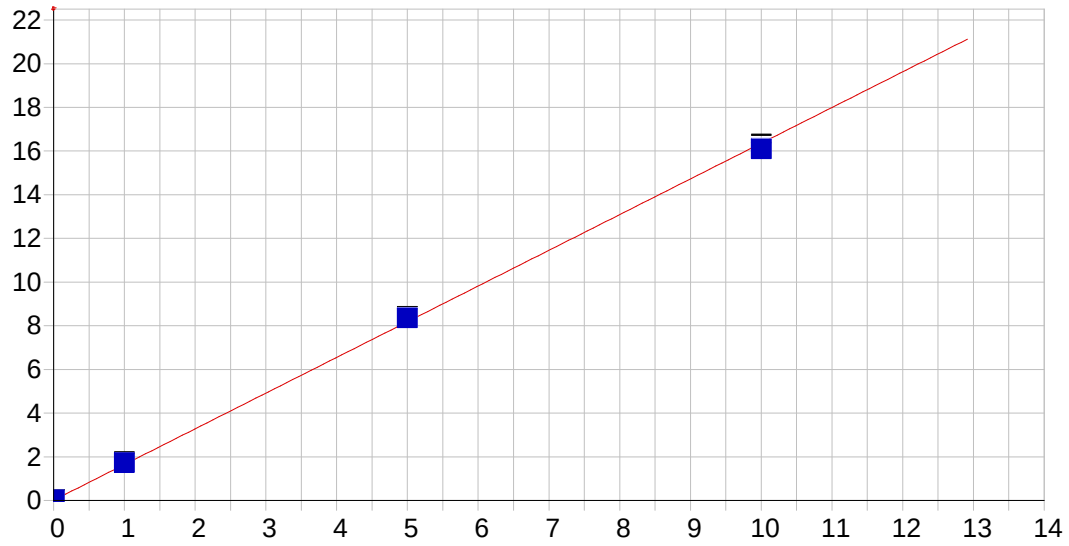


Co 228.616 {448}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000146	Re-Slope:	1.000000
A1 (Gain):	0.412388	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999539	Status:	OK.
Std Error of Est:	0.000458		
Predicted MDL:	0.000384		
Predicted MQL:	0.001279		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00014	.000	1
CAL 1	.05000	.05439	.004	8.79	.02258	.000	1
CAL 2	1.0000	1.0612	.061	6.12	.43779	.006	1
CAL 3	5.0000	5.1642	.164	3.28	2.1298	.012	1
CAL 4	10.000	9.7702	-.230	-2.30	4.0292	.041	1



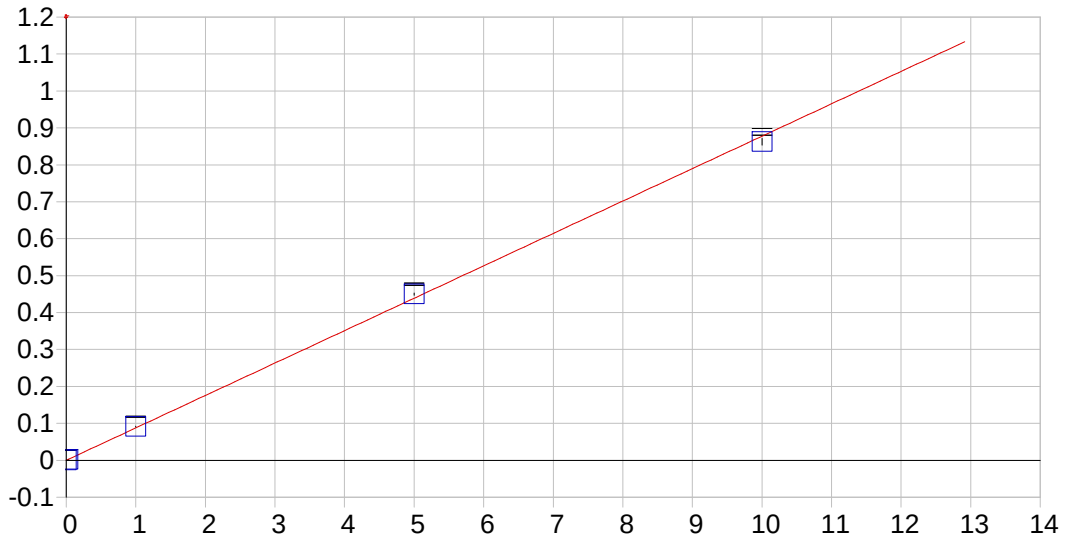
Cr 283.563 {119}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.009297	Re-Slope:	1.000000

A1 (Gain):	1.634887	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999759	Status:	OK.
Std Error of Est:	0.000588		
Predicted MDL:	0.000422		
Predicted MQL:	0.001408		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00930	.001	1
CAL 1	.01000	.00985	.000	-1.47	.02756	.001	1
CAL 2	1.0000	1.0534	.053	5.34	1.7304	.028	1
CAL 3	5.0000	5.1078	.108	2.16	8.3782	.047	1
CAL 4	10.000	9.8391	-.161	-1.61	16.132	.177	1

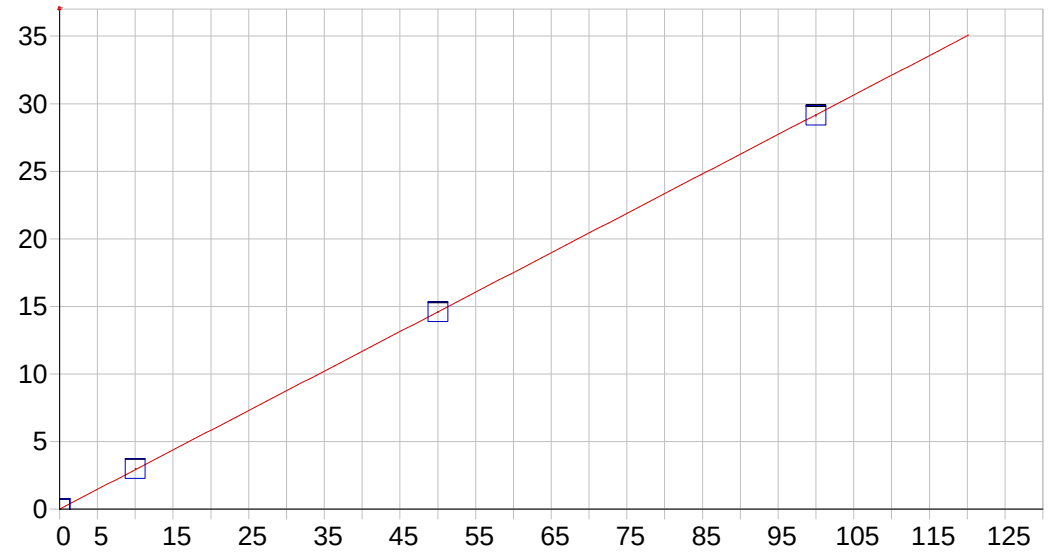


Cu 217.894 {455}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000109	Re-Slope:	1.000000
A1 (Gain):	0.087737	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999758	Status:	OK.
Std Error of Est:	0.000050		
Predicted MDL:	0.002159		
Predicted MQL:	0.007195		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00011	.000	1
CAL 1	.02500	.02607	.001	4.27	.00240	.000	1
CAL 2	1.0000	1.0378	.038	3.78	.09116	.001	1
CAL 3	5.0000	5.1307	.131	2.61	.45026	.003	1
CAL 4	10.000	9.8305	-.170	-1.70	.86261	.009	1

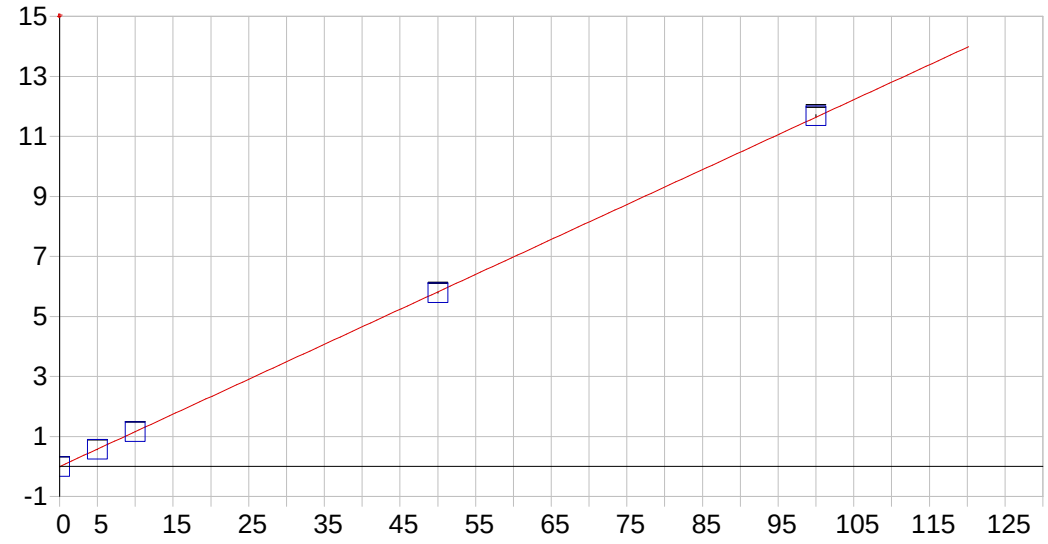


Fe 259.940 {130}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000460	Re-Slope:	1.000000
A1 (Gain):	0.291843	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999980	Status:	OK.
Std Error of Est:	0.000299		
Predicted MDL:	0.001768		
Predicted MQL:	0.005892		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00046	.000	1
CAL 1	.10000	.10385	.004	3.85	.03077	.001	1
CAL 2	10.000	10.239	.239	2.39	2.9886	.004	1
CAL 3	50.000	49.960	-.040	-.081	14.581	.042	1
CAL 4	100.00	99.797	-.203	-.203	29.126	.072	1



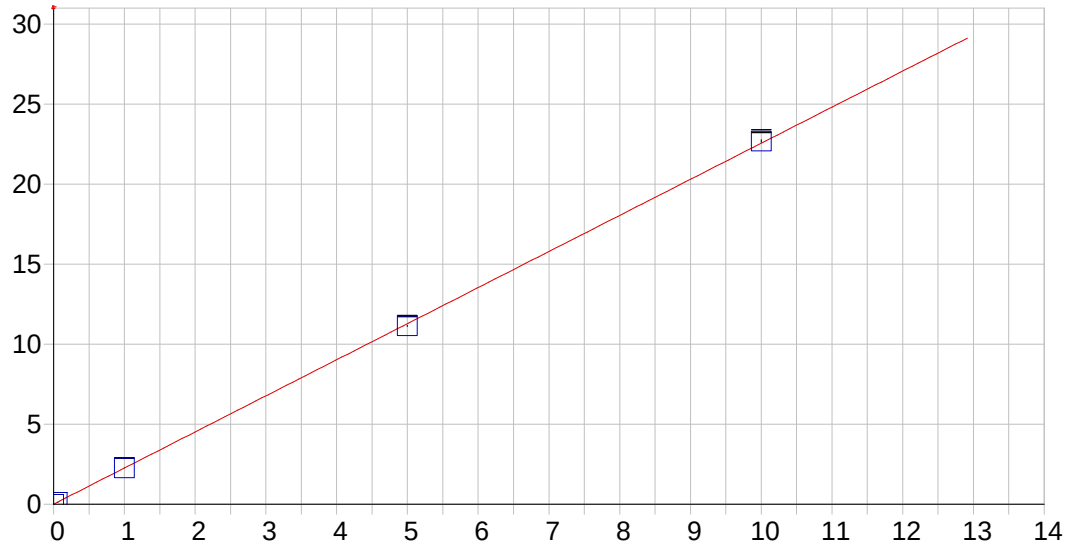
K 766.490 { 44}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.004962	Re-Slope:	1.000000

A1 (Gain):	0.116432		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999984		Status:	OK.	
Std Error of Est:	0.000771				
Predicted MDL:	0.029704				
Predicted MQL:	0.099012				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00012	.000	.000	-.00495	.003	1
CAL 1	5.0000	4.8920	-.108	-2.16	.56462	.006	1
CAL 2	10.000	10.000	.000	.003	1.1594	.002	1
CAL 3	50.000	49.728	-.272	-.545	5.7849	.015	1
CAL 4	100.00	100.38	.380	.380	11.683	.046	1

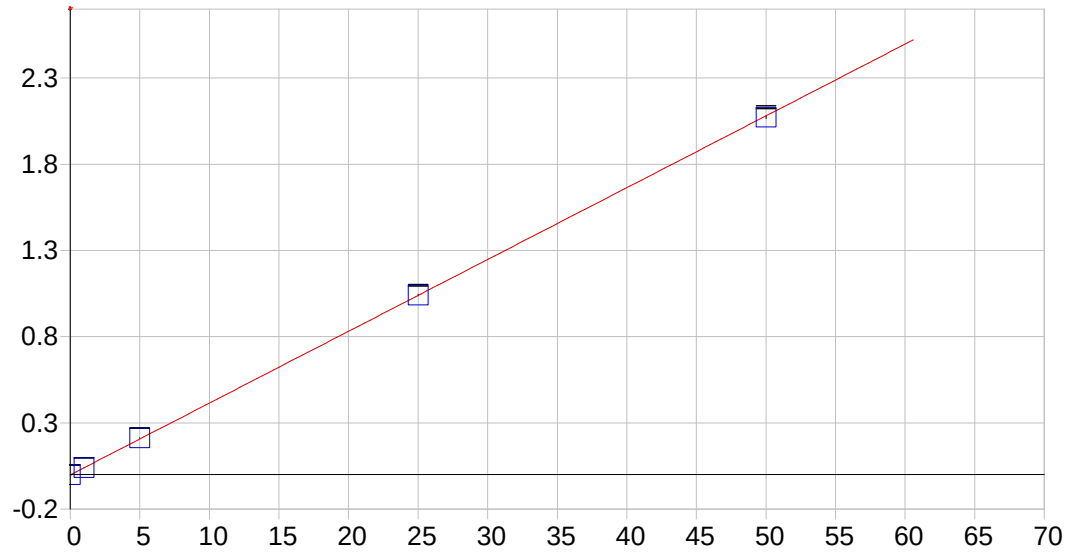


Li 670.784 { 50}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007319	Re-Slope:	1.000000
A1 (Gain):	2.254880	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999966	Status:	OK.
Std Error of Est:	0.000679		
Predicted MDL:	0.001533		
Predicted MQL:	0.005111		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00732	.003	1
CAL 1	.05000	.05024	.000	.477	.12060	.001	1
CAL 2	1.0000	1.0029	.003	.287	2.2687	.004	1
CAL 3	5.0000	4.9390	-.061	-1.22	11.144	.037	1
CAL 4	10.000	10.058	.058	.579	22.687	.087	1

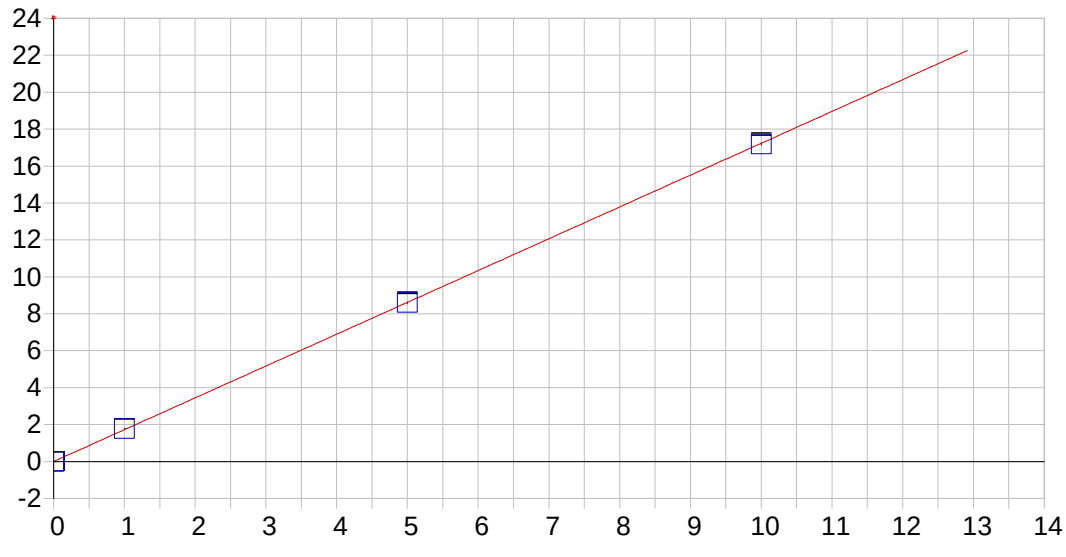


Mg 279.806 {121}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001454	Re-Slope:	1.000000
A1 (Gain):	0.041643	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000113		
Predicted MDL:	0.014180		
Predicted MQL:	0.047266		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00003	.000	.000	-.00146	.000	1
CAL 1	1.0000	1.0056	.006	.565	.04042	.001	1
CAL 2	5.0000	5.1362	.136	2.72	.21243	.001	1
CAL 3	25.000	25.034	.034	.135	1.0410	.005	1
CAL 4	50.000	49.824	-.176	-.351	2.0734	.008	1



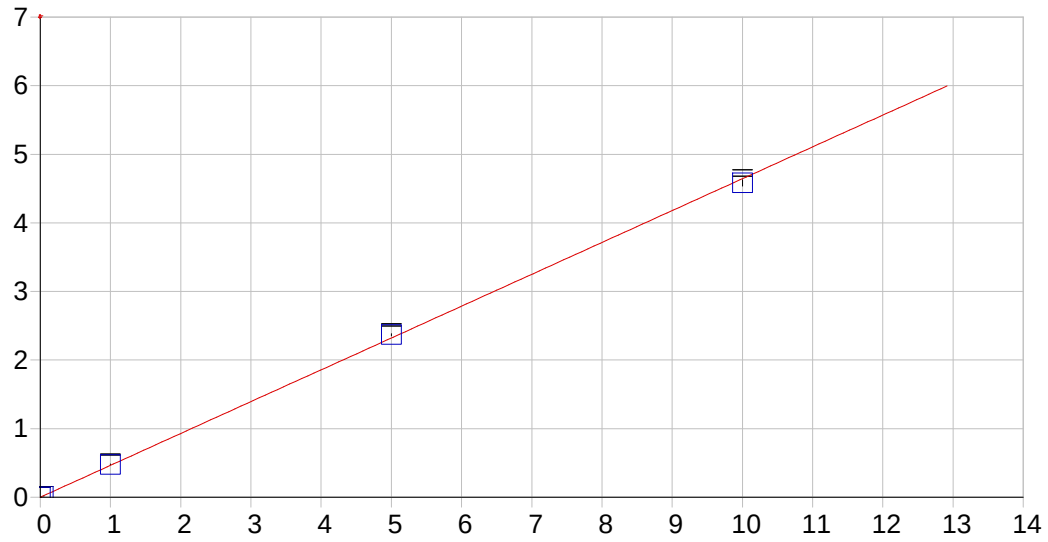
Mn 257.610 {131}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000369	Re-Slope:	1.000000

A1 (Gain):	1.723296	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999969	Status:	OK.
Std Error of Est:	0.000273		
Predicted MDL:	0.000322		
Predicted MQL:	0.001072		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00037	.000	1
CAL 1	.01500	.01616	.001	7.73	.02748	.001	1
CAL 2	1.0000	1.0292	.029	2.92	1.7732	.003	1
CAL 3	5.0000	4.9913	-.009	-.174	8.6011	.045	1
CAL 4	10.000	9.9783	-.022	-.217	17.195	.056	1

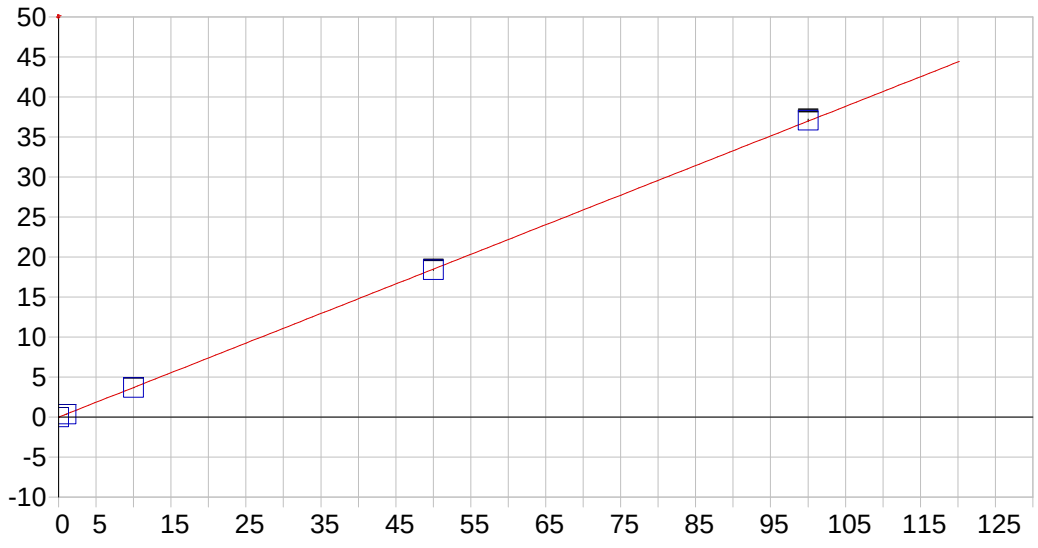


Mo 202.030 {467}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000593	Re-Slope:	1.000000
A1 (Gain):	0.464244	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999865	Status:	OK.
Std Error of Est:	0.000250		
Predicted MDL:	0.000298		
Predicted MQL:	0.000993		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00059	.000	1
CAL 1	.04000	.03977	.000	-.587	.01905	.000	1
CAL 2	1.0000	1.0267	.027	2.67	.47725	.007	1
CAL 3	5.0000	5.1003	.100	2.01	2.3684	.014	1
CAL 4	10.000	9.8732	-.127	-1.27	4.5842	.047	1

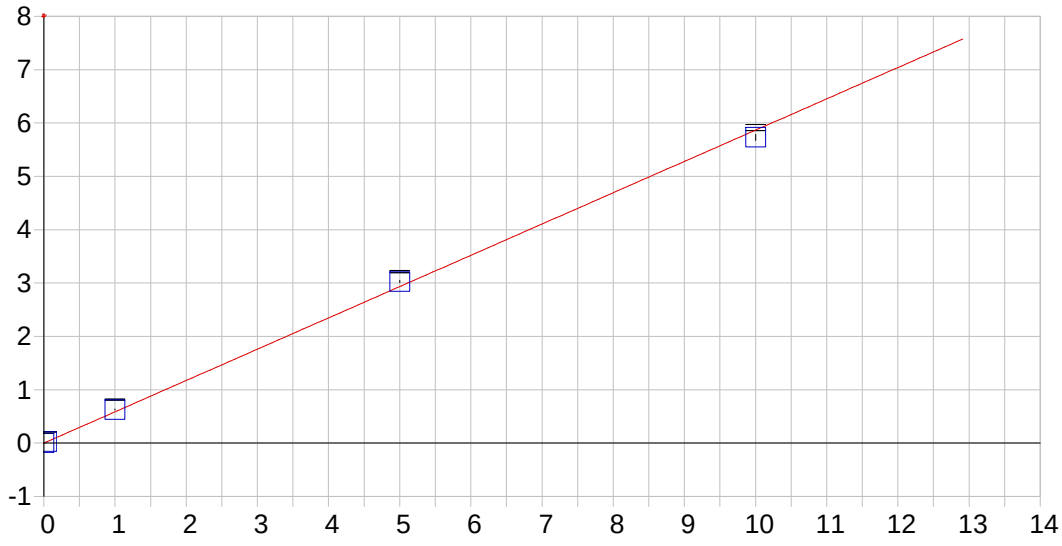


Na 589.592 { 57}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.005714	Re-Slope:	1.000000
A1 (Gain):	0.369822	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000753		
Predicted MDL:	0.008942		
Predicted MQL:	0.029806		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00002	.000	.000	-.00571	.002	1
CAL 1	1.0000	.98958	-.010	-1.04	.36026	.005	1
CAL 2	10.000	9.9546	-.045	-.454	3.6757	.002	1
CAL 3	50.000	49.751	-.249	-.499	18.393	.071	1
CAL 4	100.00	100.31	.305	.305	37.089	.152	1



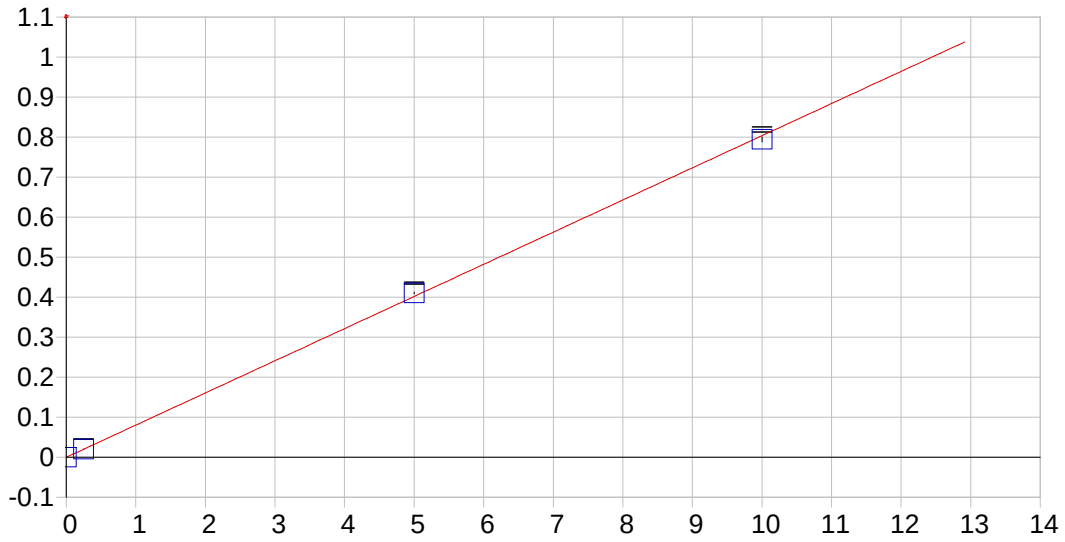
Ni 221.647 {452}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000253	Re-Slope:	1.000000

A1 (Gain):	0.586610	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999517	Status:	OK.
Std Error of Est:	0.000596		
Predicted MDL:	0.000362		
Predicted MQL:	0.001207		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00025	.000	1
CAL 1	.04000	.04372	.004	9.31	.02590	.000	1
CAL 2	1.0000	1.0673	.067	6.73	.62635	.009	1
CAL 3	5.0000	5.1615	.162	3.23	3.0280	.020	1
CAL 4	10.000	9.7675	-.233	-2.33	5.7299	.056	1

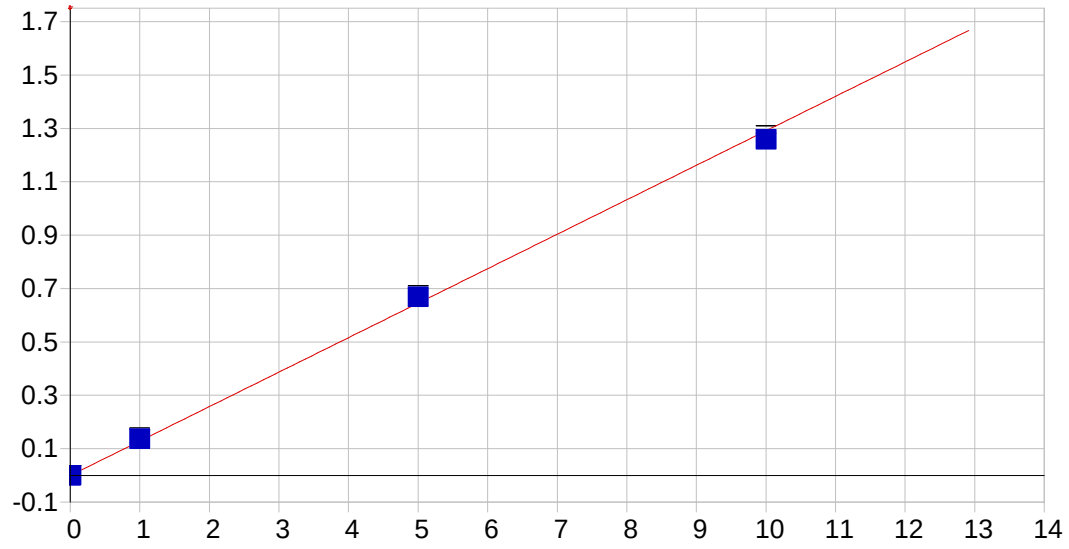


P 177.495 {490}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000066	Re-Slope:	1.000000
A1 (Gain):	0.080363	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999878	Status:	OK.
Std Error of Est:	0.000110		
Predicted MDL:	0.001424		
Predicted MQL:	0.004745		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00007	.000	1
CAL 1	.25000	.25421	.004	1.68	.02036	.000	1
CAL 3	5.0000	5.1090	.109	2.18	.41051	.003	1
CAL 4	10.000	9.8868	-.113	-1.13	.79447	.007	1

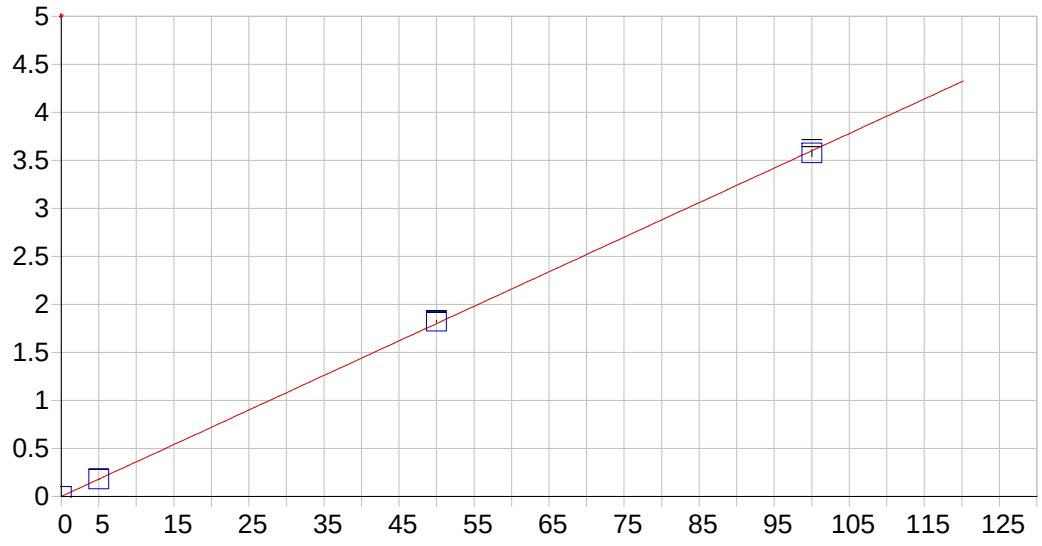


Pb 220.353 {453}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000375	Re-Slope:	1.000000
A1 (Gain):	0.129136	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999457	Status:	OK.
Std Error of Est:	0.000070		
Predicted MDL:	0.001420		
Predicted MQL:	0.004732		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00038	.000	1
CAL 1	.01000	.01124	.001	12.4	.00112	.000	1
CAL 2	1.0000	1.0673	.067	6.73	.13742	.002	1
CAL 3	5.0000	5.1808	.181	3.62	.66902	.005	1
CAL 4	10.000	9.7507	-.249	-2.49	1.2595	.014	1



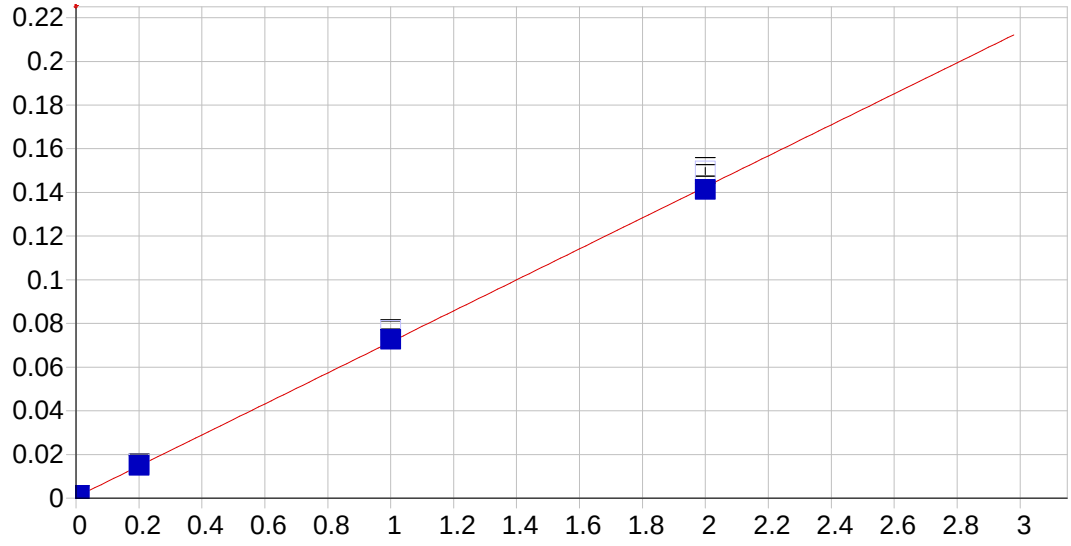
S 182.034 {485}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000378	Re-Slope:	1.000000

A1 (Gain):	0.035990	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999961	Status:	OK.
Std Error of Est:	0.000394		
Predicted MDL:	0.002996		
Predicted MQL:	0.009987		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00004	.000	.000	.00038	.000	1
CAL 1	5.0000	5.0062	.006	.125	.18055	.001	1
CAL 3	50.000	50.630	.630	1.26	1.8226	.009	1
CAL 4	100.00	99.364	-.636	-.636	3.5765	.037	1

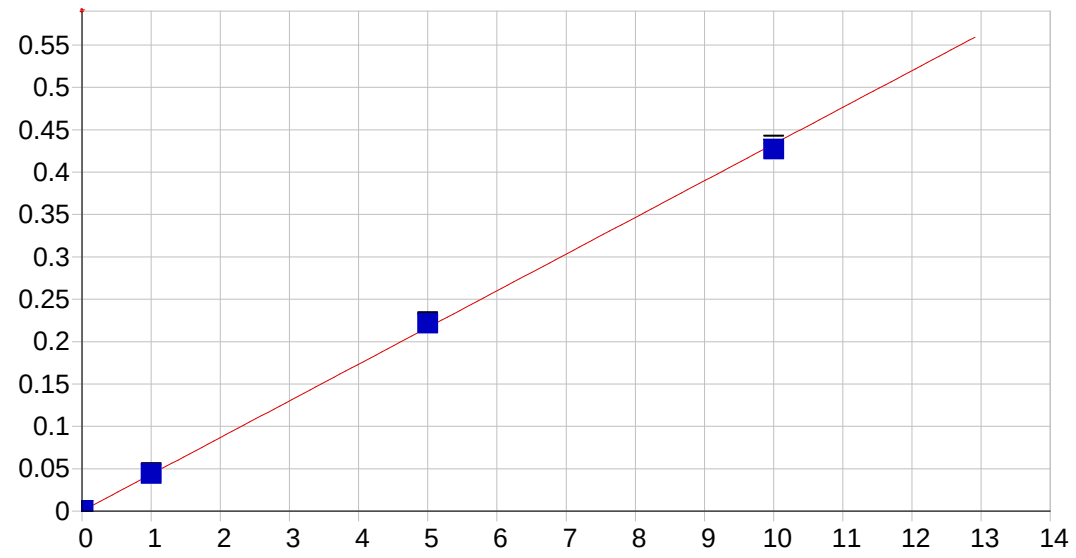


Sb 206.833 {463}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000535	Re-Slope:	1.000000
A1 (Gain):	0.071009	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999943	Status:	OK.
Std Error of Est:	0.000006		
Predicted MDL:	0.002472		
Predicted MQL:	0.008240		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00053	.000	1
CAL 1	.01000	.00982	.000	-1.80	.00122	.000	1
CAL 2	.20000	.20202	.002	1.01	.01573	.000	1
CAL 3	1.0000	1.0154	.015	1.54	.07687	.000	1
CAL 4	2.0000	1.9828	-.017	-.862	.14979	.002	1

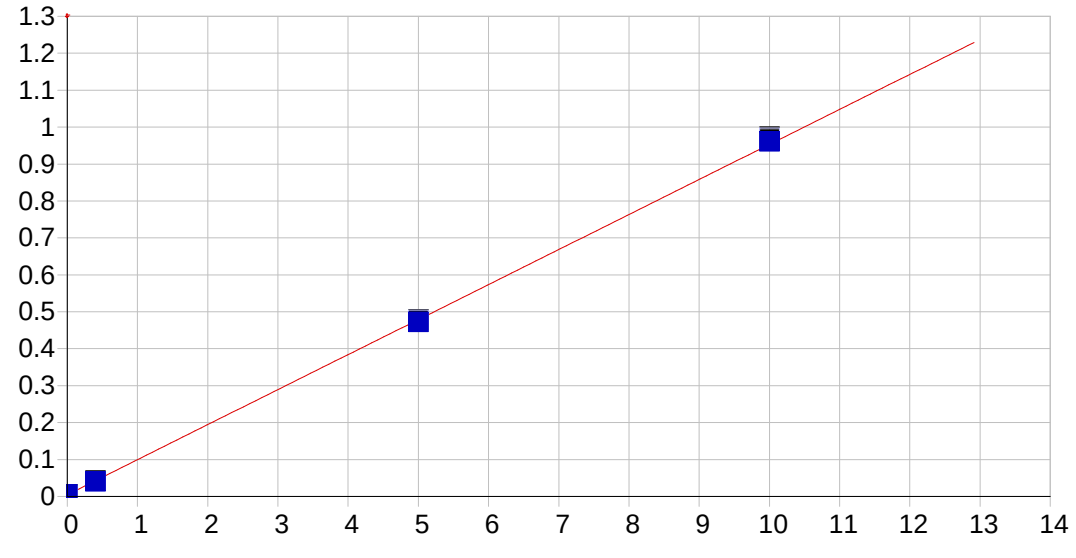


Se 196.090 {472}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000213	Re-Slope:	1.000000
A1 (Gain):	0.043288	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999843	Status:	OK.
Std Error of Est:	0.000015		
Predicted MDL:	0.003004		
Predicted MQL:	0.010013		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00021	.000	1
CAL 1	.01500	.01483	.000	-1.16	.00085	.000	1
CAL 2	1.0000	1.0180	.018	1.80	.04420	.001	1
CAL 3	5.0000	5.1188	.119	2.38	.22139	.001	1
CAL 4	10.000	9.8634	-.137	-1.37	.42636	.005	1



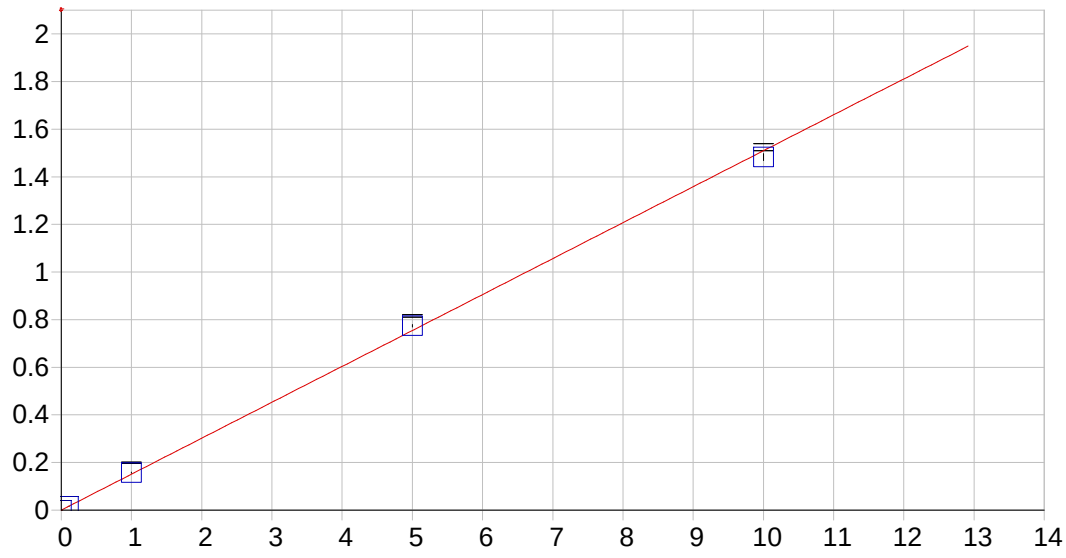
Si 251.611 {134}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004767	Re-Slope:	1.000000

A1 (Gain):	0.094820	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000133		
Predicted MDL:	0.005738		
Predicted MQL:	0.019127		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00002	.000	.000	.00477	.000	1
CAL 1	.40000	.38185	-.018	-4.54	.04101	.001	1
CAL 3	5.0000	4.9323	-.068	-1.35	.47734	.001	1
CAL 4	10.000	10.086	.086	.857	.97089	.003	1

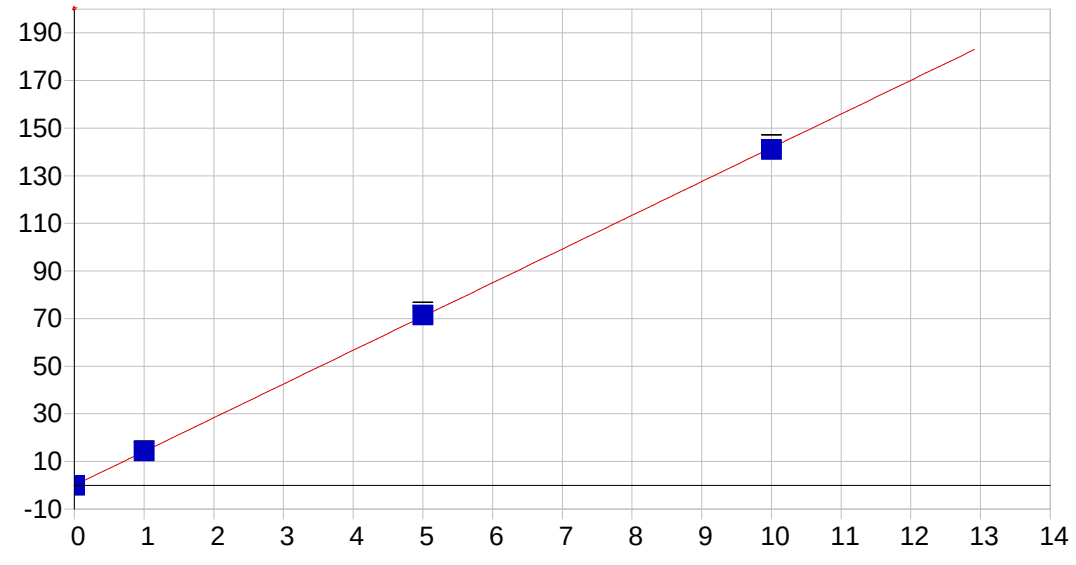


Sn 189.989 {478}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000212	Re-Slope:	1.000000
A1 (Gain):	0.150911	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999738	Status:	OK.
Std Error of Est:	0.000179		
Predicted MDL:	0.000699		
Predicted MQL:	0.002330		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00021	.000	1
CAL 1	.10000	.10553	.006	5.53	.01614	.000	1
CAL 2	1.0000	1.0406	.041	4.06	.15725	.002	1
CAL 3	5.0000	5.1301	.130	2.60	.77440	.005	1
CAL 4	10.000	9.8238	-.176	-1.76	1.4827	.014	1

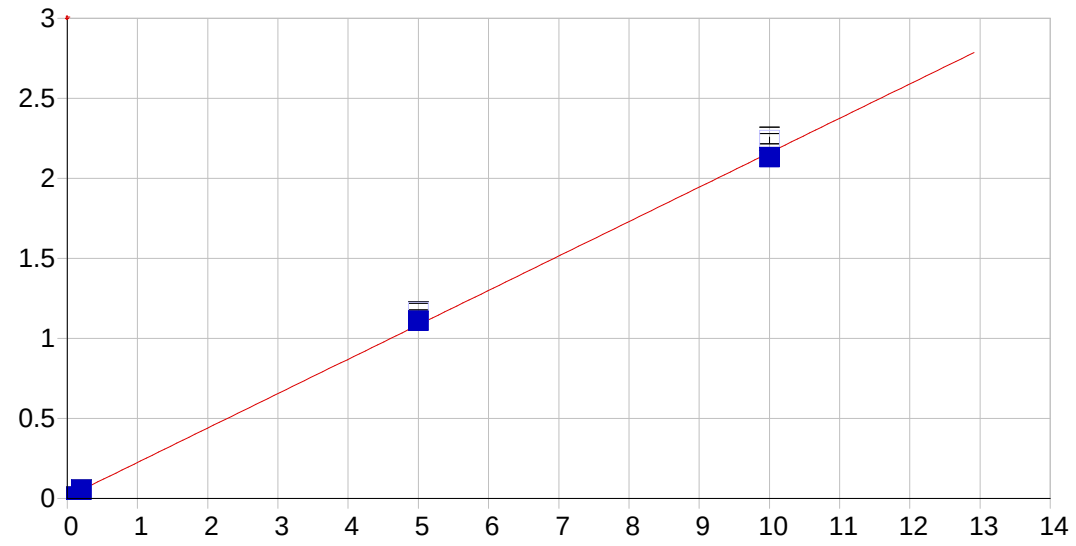


Sr 407.771 { 83}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.003666	Re-Slope:	1.000000
A1 (Gain):	14.173805	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999972	Status:	OK.
Std Error of Est:	0.001230		
Predicted MDL:	0.000095		
Predicted MQL:	0.000316		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00367	.001	1
CAL 1	.00500	.00502	.000	.366	.06824	.001	1
CAL 2	1.0000	1.0123	.012	1.23	14.348	.015	1
CAL 3	5.0000	5.0457	.046	.914	71.532	1.20	1
CAL 4	10.000	9.9420	-.058	-.580	140.95	2.14	1



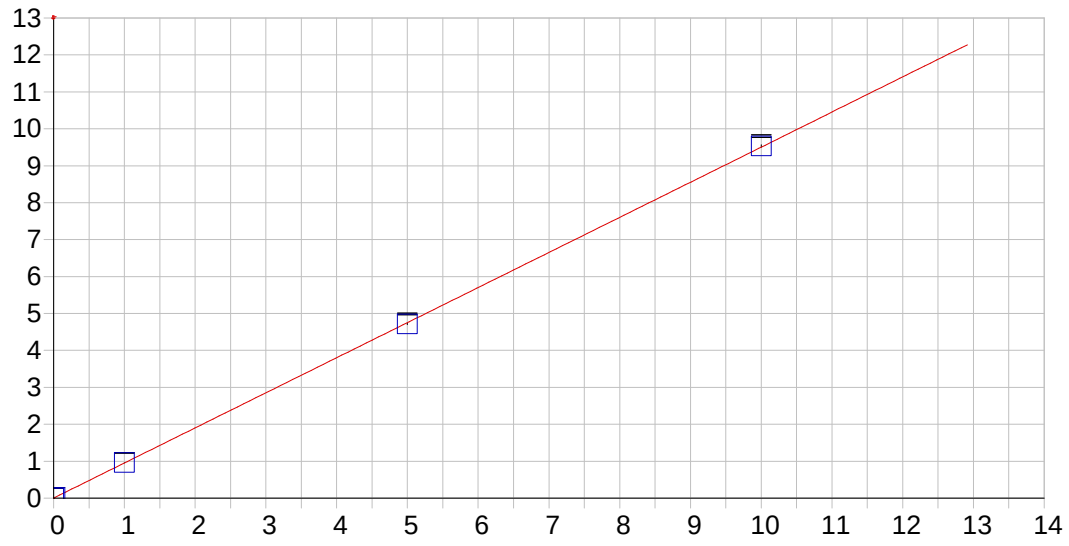
Th 283.231 {119}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.009862	Re-Slope:	1.000000

A1 (Gain):	0.215000			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999863		Status:	OK.	
Std Error of Est:	0.000291				
Predicted MDL:	0.004721				
Predicted MQL:	0.015735				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00986	.001	1
CAL 1	.20000	.20470	.005	2.35	.05406	.002	1
CAL 3	5.0000	5.1205	.121	2.41	1.1631	.005	1
CAL 4	10.000	9.8750	-.125	-1.25	2.2376	.020	1

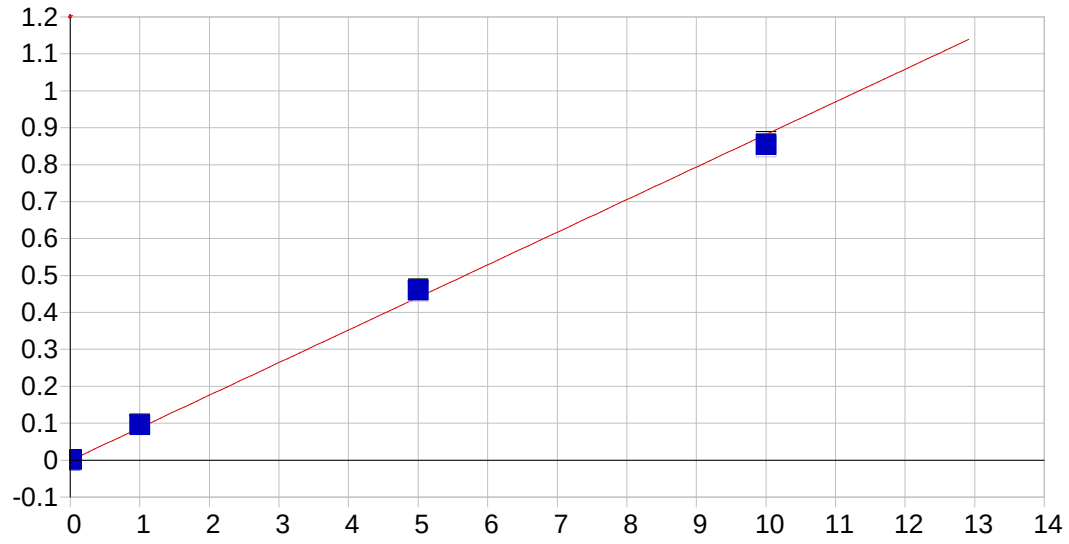


Ti 334.941 {101}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.001665	Re-Slope:	1.000000
A1 (Gain):	0.950242	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999986	Status:	OK.
Std Error of Est:	0.000114		
Predicted MDL:	0.001011		
Predicted MQL:	0.003370		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00166	.000	1
CAL 1	.02000	.02101	.001	5.07	.02163	.001	1
CAL 2	1.0000	1.0064	.006	.643	.95802	.002	1
CAL 3	5.0000	4.9640	-.036	-.720	4.7187	.019	1
CAL 4	10.000	10.029	.029	.286	9.5312	.035	1

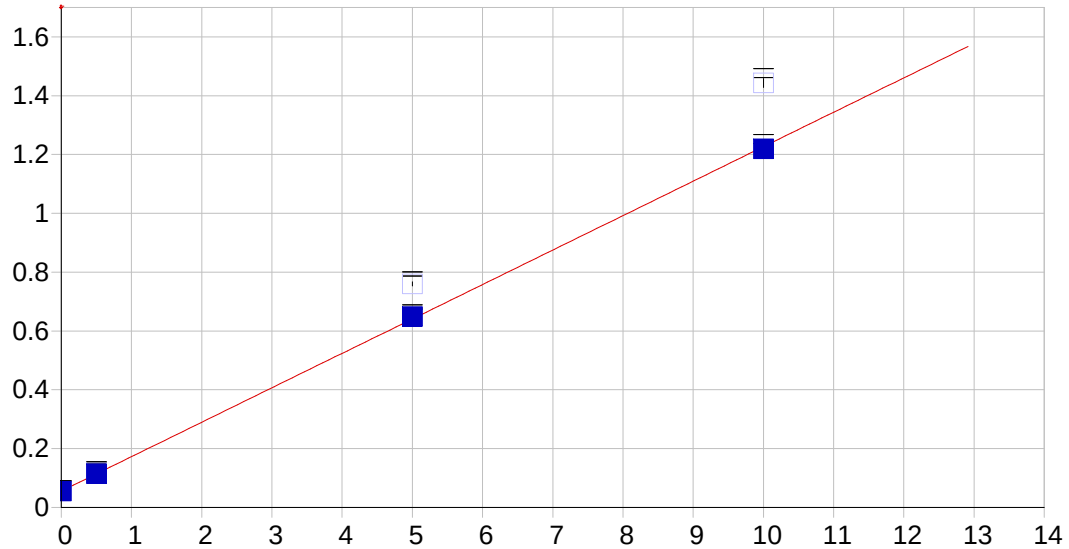


Tl 190.856 {477}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000572	Re-Slope:	1.000000
A1 (Gain):	0.088241	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999086	Status:	OK.
Std Error of Est:	0.000087		
Predicted MDL:	0.001561		
Predicted MQL:	0.005205		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00057	.000	1
CAL 1	.02000	.02388	.004	19.4	.00150	.000	1
CAL 2	1.0000	1.0912	.091	9.12	.09504	.002	1
CAL 3	5.0000	5.2214	.221	4.43	.45679	.003	1
CAL 4	10.000	9.6836	-.316	-3.16	.84717	.009	1



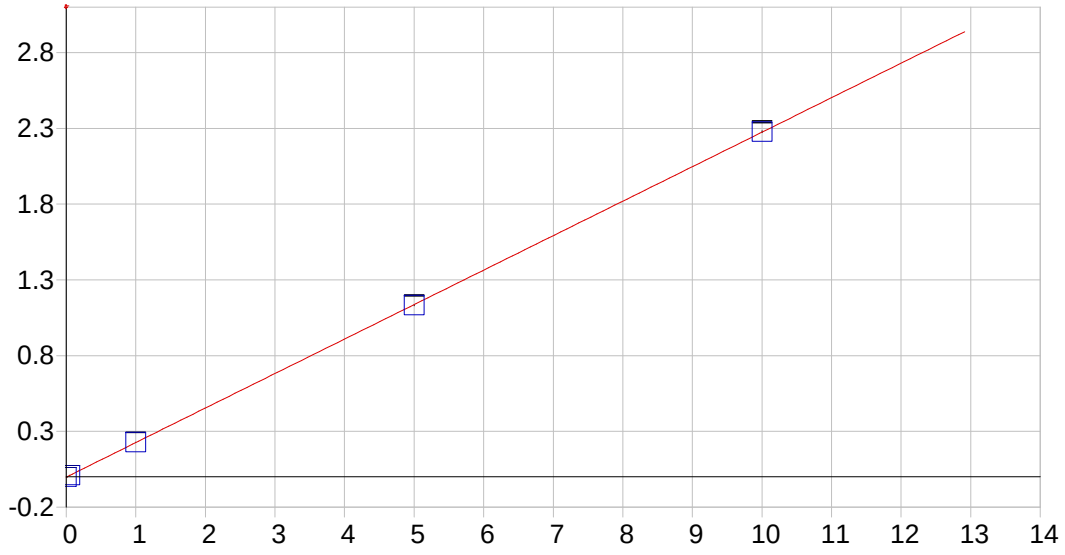
U 367.007 { 92}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.055474	Re-Slope:	1.000000

A1 (Gain):	0.117095	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999973	Status:	OK.
Std Error of Est:	0.000128		
Predicted MDL:	0.013076		
Predicted MQL:	0.043586		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.05547	.002	1
CAL 1	.50000	.50274	.003	.549	.11796	.004	1
CAL 3	5.0000	5.0617	.062	1.23	.76015	.007	1
CAL 4	10.000	9.9359	-.064	-.641	1.4429	.015	1

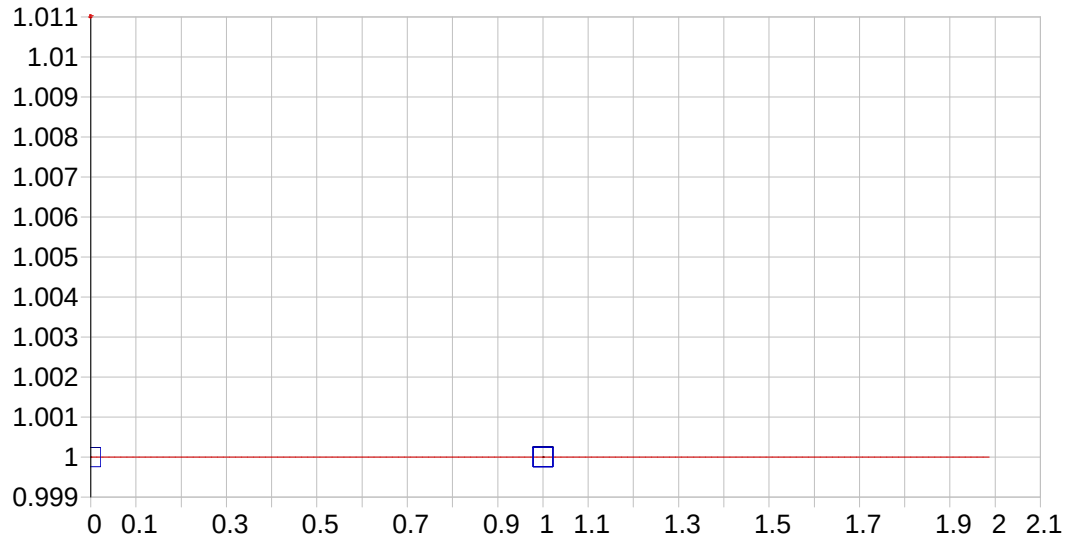


V 290.882 {116}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001121	Re-Slope:	1.000000
A1 (Gain):	0.227592	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000027		
Predicted MDL:	0.003601		
Predicted MQL:	0.012004		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00112	.000	1
CAL 1	.05000	.05147	.001	2.95	.01059	.001	1
CAL 2	1.0000	1.0062	.006	.616	.22787	.001	1
CAL 3	5.0000	4.9805	-.020	-.390	1.1324	.004	1
CAL 4	10.000	10.012	.012	.119	2.2775	.007	1

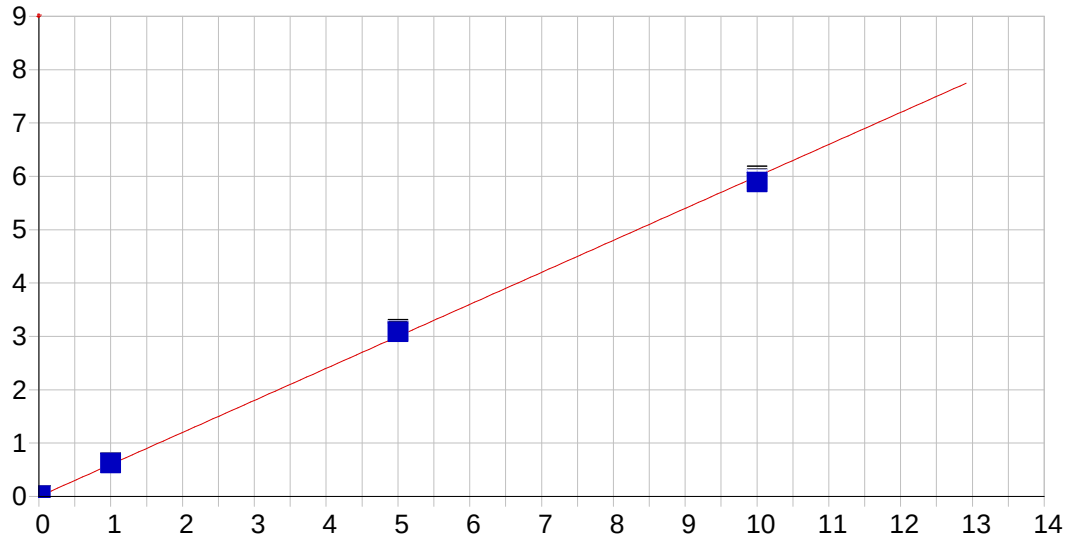


Y 371.030 { 91}*

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	1.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CAL 1	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CALBLK1	.00000	.00000	.000	.000	1.0000	.000	1
CAL 2	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 3	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 4	1.0000	.00000	-1.00	-100.	1.0000	.000	1



Zn 213.856 {458}

Date of Fit:	8/27/2012 13:50:28	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000997	Re-Slope:	1.000000

A1 (Gain):	0.599801			Y-int:	0.000000	
A2 (Curvature):	0.000000					
n (Exponent):	1.000000					
Correlation:	0.999745		Status:	OK.		
Std Error of Est:	0.000315					
Predicted MDL:	0.000195					
Predicted MQL:	0.000650					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00100	.000	1
CAL 1	.02000	.02083	.001	4.17	.01367	.000	1
CAL 2	1.0000	1.0377	.038	3.77	.62875	.010	1
CAL 3	5.0000	5.1372	.137	2.74	3.1091	.020	1
CAL 4	10.000	9.8243	-.176	-1.76	5.9471	.060	1

Sample Name: ICV Acquired: 8/27/2012 13:50:33 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9976**	**49.93**	**5.046**	**5.142**	**5.102**	**5.077**	**5.104**	**25.27**	**5.134**
Stddev	.0105	.18	.039	.009	.014	.017	.035	.19	.034
%RSD	1.049	.3607	.7657	.1802	.2801	.3377	.6834	.7400	.6531
#1	.9941	49.89	5.012	5.145	5.094	5.076	5.072	25.17	5.113
#2	1.009	50.13	5.088	5.150	5.118	5.094	5.141	25.48	5.173
#3	.9893	49.77	5.039	5.132	5.093	5.060	5.098	25.15	5.117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.207**	**5.054**	**5.080**	**50.51**	**49.70**	**5.022**	**25.11**	**5.140**	**5.150**
Stddev	.040	.034	.029	.13	.11	.013	.09	.020	.033
%RSD	.7654	.6634	.5696	.2670	.2141	.2567	.3446	.3894	.6484
#1	5.185	5.063	5.058	50.44	49.61	5.022	25.02	5.134	5.124
#2	5.253	5.083	5.112	50.66	49.81	5.035	25.19	5.163	5.187
#3	5.182	5.018	5.069	50.42	49.67	5.009	25.11	5.124	5.137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.03**	**5.196**	**5.089**	**5.168**	**50.48**	**1.009**	**5.125**	**4.956**	**5.073**
Stddev	.18	.037	.045	.038	.34	.006	.029	.027	.038
%RSD	.3613	.7192	.8801	.7383	.6686	.6463	.5728	.5506	.7402
#1	49.98	5.178	5.045	5.142	50.14	1.009	5.108	4.925	5.051
#2	50.23	5.239	5.135	5.211	50.82	1.016	5.159	4.978	5.117
#3	49.89	5.171	5.088	5.149	50.48	1.003	5.107	4.965	5.053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV Acquired: 8/27/2012 13:50:33 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.036**	**5.124**	**5.029**	**5.392**	**4.946**	**5.017**	**5.143**
Stddev	.080	.031	.021	.034	.065	.017	.033
%RSD	1.587	.6047	.4245	.6286	1.309	.3305	.6428
#1	5.127	5.116	5.025	5.368	4.951	5.009	5.121
#2	4.979	5.159	5.052	5.431	5.008	5.036	5.181
#3	5.001	5.099	5.010	5.378	4.879	5.005	5.128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3378.4**
Stddev	19.1
%RSD	.56415
#1	3373.9
#2	3361.9
#3	3399.3

Sample Name: ICB Acquired: 8/27/2012 13:53:54 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0031	.0316	.0005	.0006	.0049	.0003	<.0000
Stddev	.0007	.0068	.0007	.0036	.0004	.0003	.0031	.0003	.0002
%RSD	409.6	300.8	22.73	11.48	76.14	59.88	63.51	103.2	9478.
#1	-.0009	.0051	.0034	.0278	.0009	.0010	.0065	.0007	.0000
#2	.0003	-.0037	.0023	.0350	.0006	.0005	.0068	.0002	.0002
#3	.0002	-.0083	.0037	.0321	.0001	.0003	.0013	.0001	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	<.0000	.0003	.0057	.0045	.0003	.0040	.0010	.0075
Stddev	.0003	.0001	.0018	.0039	.0164	.0011	.0093	.0003	.0003
%RSD	524.9	23.09	533.9	68.24	360.8	354.8	230.3	24.83	4.598
#1	-.0001	-.0005	.0003	.0090	.0188	-.0009	-.0028	.0013	.0071
#2	-.0001	-.0007	.0022	.0068	-.0133	.0012	.0146	.0010	.0075
#3	.0004	-.0005	-.0015	.0014	.0081	.0007	.0003	.0008	.0078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0159	<.0000	.0004	<.0000	.0038	.0025	.0016	<.0000	.0003
Stddev	.0030	.0003	.0003	.0017	.0058	.0028	.0042	.0013	.0007
%RSD	19.09	369.2	78.30	104.2	154.9	111.6	272.8	39.85	193.6
#1	.0191	.0001	.0001	.0000	.0104	.0000	-.0031	-.0027	-.0004
#2	.0131	.0001	.0008	-.0033	-.0006	.0021	.0052	-.0049	.0007
#3	.0154	-.0004	.0004	-.0015	.0015	.0055	.0025	-.0025	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 8/27/2012 13:53:54 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0027	.0022	.0044	.0025	<.0000	.0002
Stddev	.0003	.0033	.0006	.0004	.0167	.0015	.0001
%RSD	48.97	121.6	27.42	9.782	676.6	635.2	20.58
#1	.0010	.0001	.0025	.0049	-.0092	-.0015	.0002
#2	.0005	.0016	.0015	.0040	-.0050	.0014	.0003
#3	.0004	.0065	.0026	.0044	.0217	-.0006	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3541.7
Stddev	6.4
%RSD	.18063
#1	3539.2
#2	3548.9
#3	3536.8

Sample Name: LLC Acquired: 8/27/2012 13:57:35 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0097**	**.1935**	**.0088**	**.1128**	**.0501**	**.0051**	**.2055**	**1.028**
Stddev	.0003	.0059	.0019	.0016	.0001	.0001	.0023	.004
%RSD	2.966	3.054	21.51	1.439	.2622	1.995	1.120	.4293
#1	.0094	.1877	.0100	.1111	.0502	.0052	.2033	1.023
#2	.0099	.1934	.0066	.1129	.0501	.0050	.2079	1.029
#3	.0099	.1995	.0098	.1144	.0500	.0051	.2054	1.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**.0515**	**.0090**	**.0256**	**.1027**	**4.905**	**.0507**	**1.003**
Stddev	.0002	.0005	.0002	.0019	.0001	.029	.0016	.015
%RSD	4.252	1.002	1.908	7.285	.0835	.5920	3.229	1.457
#1	.0046	.0512	.0092	.0240	.1027	4.922	.0521	.9963
#2	.0050	.0513	.0089	.0277	.1027	4.921	.0489	.9938
#3	.0047	.0521	.0090	.0251	.1028	4.871	.0512	1.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0162**	**.0394**	**.9925**	**.0418**	**.2435**	**.0114**	**4.809**	**.0090**
Stddev	.0002	.0001	.0039	.0002	.0017	.0008	.029	.0027
%RSD	1.074	.2838	.3945	.3600	.6863	6.596	.6079	29.88
#1	.0163	.0395	.9938	.0419	.2417	.0118	4.780	.0060
#2	.0160	.0394	.9955	.0418	.2441	.0105	4.810	.0111
#3	.0163	.0392	.9881	.0416	.2449	.0119	4.838	.0100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: LLC Acquired: 8/27/2012 13:57:35 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0129**	**.3836**	**.1009**	**.0051**	**.1911**	**.0211**	W **.0252**	**.4714**
Stddev	.0006	.0104	.0000	.0000	.0028	.0014	.0008	.0106
%RSD	4.414	2.723	.0092	.3094	1.451	6.394	3.301	2.257
#1	.0126	.3893	.1008	.0051	.1880	.0223	.0243	.4784
#2	.0126	.3716	.1009	.0051	.1935	.0196	.0255	.4767
#3	.0136	.3901	.1009	.0051	.1917	.0215	.0259	.4592
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value							.0200	
Range							20.00%	

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	**.0527**	**.0200**
Stddev	.0034	.0003
%RSD	6.488	1.395
#1	.0500	.0199
#2	.0517	.0198
#3	.0566	.0203
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3710
Units	Cts/S
Avg	**3680.2**
Stddev	4.5
%RSD	.12269
#1	3676.2
#2	3685.1
#3	3679.3

Sample Name: ICSA Acquired: 8/27/2012 14:01:13 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**100.0**	**<.0000**	**<.0000**	**.0001**	**.0001**	**.0146**	**49.41**
Stddev	.0002	.3	.0021	.0016	.0003	.0001	.0007	.43
%RSD	350.4	.2768	64.83	20.15	214.8	73.41	4.759	.8778
#1	.0003	100.2	-.0054	-.0088	.0000	.0001	.0152	49.91
#2	-.0001	99.72	-.0012	-.0085	.0005	.0000	.0139	49.17
#3	.0000	100.2	-.0031	-.0060	-.0001	.0000	.0149	49.15
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0026**	**W .0085**	**.0018**	**101.2**	**<.0000**	**.0012**	**100.9**
Stddev	.0001	.0003	.0007	.0026	.3	.0398	.0004	.3
%RSD	11.58	11.29	8.232	141.2	.2660	442.1	35.26	.2499
#1	-.0009	.0029	.0092	.0046	101.2	-.0546	.0009	101.0
#2	-.0011	.0024	.0084	.0014	100.9	.0189	.0017	100.6
#3	-.0009	.0026	.0078	-.0005	101.4	.0087	.0010	101.1
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0061					
Low Limit			-.0061					

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**<.0000**	**.0036**	**.0035**	**.0043**	**<.0000**	**.0068**	**.0049**
Stddev	.0004	.0004	.0040	.0002	.0008	.0006	.0044	.0008
%RSD	27.34	44.55	109.9	5.878	19.36	98.68	64.86	16.19
#1	.0019	-.0006	.0010	.0035	.0042	-.0010	.0056	.0040
#2	.0011	-.0012	.0082	.0033	.0035	-.0008	.0117	.0055
#3	.0014	-.0006	.0016	.0038	.0051	.0001	.0031	.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICSA Acquired: 8/27/2012 14:01:13 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	<.0000	<.0000	.0001	.0006	.0213
Stddev	.0023	.0076	.0007	.0001	.0009	.0002	.0013	.0132
%RSD	133.1	87.35	143.2	6.176	4.202	158.1	241.2	61.97
#1	.0009	-.0061	.0003	-.0009	-.0215	.0002	-.0008	.0355
#2	-.0025	-.0172	-.0008	-.0009	-.0221	-.0001	.0006	.0189
#3	-.0036	-.0027	-.0009	-.0008	-.0233	.0003	.0019	.0094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0056	<.0000
Stddev	.0028	.0002
%RSD	49.98	7.718
#1	.0080	-.0028
#2	.0025	-.0032
#3	.0063	-.0032
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3517.3
Stddev	28.4
%RSD	.80713
#1	3486.3
#2	3523.7
#3	3542.0

Sample Name: ICSAB Acquired: 8/27/2012 14:04:51 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9905**	**99.48**	**.9649**	**.9937**	**.4975**	**.4815**	**.9925**	**48.58**	**.9795**
Stddev	.0262	.10	.0346	.0080	.0013	.0004	.0315	1.50	.0314
%RSD	2.644	.0973	3.583	.8075	.2688	.0910	3.179	3.091	3.210
#1	.9768	99.59	.9341	.9852	.4987	.4820	.9704	47.33	.9529
#2	.9740	99.42	.9584	1.001	.4978	.4811	.9785	48.17	.9714
#3	1.021	99.42	1.002	.9945	.4961	.4813	1.029	50.25	1.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4884**	**.4994**	**.4861**	**100.9**	**19.79**	**.9990**	**100.3**	**.5012**	**.9987**
Stddev	.0159	.0138	.0162	.2	.07	.0013	.2	.0009	.0311
%RSD	3.255	2.757	3.341	.1806	.3451	.1325	.1731	.1765	3.113
#1	.4747	.4915	.4735	101.1	19.87	1.000	100.4	.5021	.9718
#2	.4847	.4914	.4804	100.7	19.76	.9993	100.1	.5004	.9915
#3	.5059	.5153	.5044	100.8	19.74	.9976	100.3	.5011	1.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.78**	**.9876**	**.4866**	**.9804**	**19.65**	**1.033**	**.9750**	**.9992**	**.9770**
Stddev	.01	.0307	.0146	.0304	.64	.036	.0293	.0041	.0315
%RSD	.0379	3.110	2.997	3.103	3.251	3.478	3.008	.4148	3.223
#1	19.79	.9625	.4740	.9533	19.11	1.002	.9495	.9951	.9507
#2	19.78	.9786	.4832	.9746	19.48	1.024	.9684	.9990	.9685
#3	19.77	1.022	.5025	1.013	20.35	1.072	1.007	1.003	1.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICSAB Acquired: 8/27/2012 14:04:51 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9960	.9997	.5059	.9974	.9953	.5184	.9833
Stddev	.0025	.0265	.0027	.0320	.0577	.0021	.0318
%RSD	.2554	2.653	.5334	3.209	5.796	.4076	3.235
#1	.9983	.9819	.5090	.9716	.9647	.5208	.9568
#2	.9965	.9871	.5043	.9875	.9594	.5168	.9744
#3	.9933	1.030	.5043	1.033	1.062	.5175	1.019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	3530.9
Stddev	82.1
%RSD	2.3253
#1	3584.5
#2	3571.8
#3	3436.4

Sample Name: LDR Acquired: 8/27/2012 14:08:15 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.008**	**99.94**	**9.858**	**10.04**	**10.18**	**9.916**	**9.817**	**48.37**	**9.790**
Stddev	.019	.41	.059	.04	.08	.151	.065	.33	.070
%RSD	.9562	.4056	.5956	.4429	.7636	1.527	.6625	.6806	.7190
#1	2.025	100.4	9.899	10.09	10.10	10.04	9.872	48.57	9.841
#2	1.987	99.79	9.791	10.02	10.19	9.746	9.745	47.99	9.710
#3	2.012	99.64	9.885	10.01	10.25	9.966	9.834	48.56	9.819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.709**	**9.819**	**9.766**	**100.3**	**100.9**	**10.02**	**49.83**	**9.949**	**9.861**
Stddev	.056	.090	.085	.5	.5	.05	.25	.042	.068
%RSD	.5806	.9127	.8712	.5059	.5085	.4818	.4927	.4236	.6887
#1	9.740	9.899	9.841	100.9	101.5	10.07	50.11	9.996	9.905
#2	9.644	9.722	9.674	100.2	100.8	10.01	49.75	9.934	9.783
#3	9.742	9.835	9.784	99.85	100.5	9.977	49.64	9.916	9.895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.1**	**9.726**	**9.909**	**9.716**	**99.55**	**1.974**	**9.886**	**10.02**	**9.785**
Stddev	.4	.059	.072	.068	.67	.012	.079	.05	.063
%RSD	.4419	.6019	.7318	.7019	.6753	.6155	.8019	.5319	.6450
#1	100.6	9.764	9.970	9.758	100.1	1.983	9.948	10.08	9.820
#2	100.0	9.658	9.829	9.638	98.80	1.960	9.797	9.999	9.712
#3	99.76	9.755	9.928	9.753	99.77	1.979	9.912	9.981	9.822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: LDR Acquired: 8/27/2012 14:08:15 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.989**	**9.922**	**10.04**	**9.710**	**9.883**	**10.05**	**9.801**
Stddev	.083	.103	.05	.059	.113	.06	.066
%RSD	.8285	1.036	.4917	.6025	1.142	.5901	.6733
#1	9.906	10.01	10.09	9.741	9.971	10.11	9.849
#2	9.987	9.809	10.05	9.643	9.756	10.04	9.726
#3	10.07	9.948	9.993	9.748	9.922	9.996	9.829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3418.0**
Stddev	34.0
%RSD	.99570
#1	3398.9
#2	3457.3
#3	3397.8

Sample Name: CCV Acquired: 8/27/2012 14:11:52 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.005**	**49.89**	**5.016**	**5.065**	**5.008**	**5.043**	**5.080**	**25.78**	**5.032**
Stddev	.021	.28	.112	.038	.025	.025	.113	.54	.108
%RSD	2.054	.5518	2.227	.7418	.5097	.4936	2.215	2.095	2.151
#1	.9827	49.79	4.924	5.044	5.002	5.030	4.989	25.32	4.946
#2	1.024	50.20	5.140	5.108	5.035	5.072	5.206	26.37	5.154
#3	1.008	49.68	4.983	5.042	4.985	5.027	5.045	25.64	4.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.061**	**5.070**	**5.060**	**50.13**	**49.90**	**4.974**	**24.99**	**5.011**	**5.045**
Stddev	.106	.102	.110	.27	.26	.027	.13	.029	.107
%RSD	2.087	2.018	2.178	.5425	.5196	.5356	.5316	.5688	2.129
#1	4.978	4.965	4.968	50.04	49.83	4.964	24.95	4.997	4.962
#2	5.180	5.170	5.182	50.44	50.18	5.005	25.14	5.043	5.167
#3	5.025	5.074	5.029	49.92	49.67	4.954	24.88	4.991	5.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.06**	**5.062**	**5.056**	**5.092**	**49.99**	**.9981**	**5.054**	**4.935**	**5.028**
Stddev	.24	.104	.103	.104	1.09	.0191	.096	.023	.104
%RSD	.4886	2.054	2.046	2.041	2.180	1.912	1.903	.4701	2.068
#1	49.98	4.979	4.967	5.009	49.16	.9850	4.981	4.932	4.947
#2	50.33	5.178	5.170	5.209	51.23	1.020	5.163	4.960	5.145
#3	49.86	5.027	5.033	5.059	49.59	.9893	5.017	4.913	4.991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 14:11:52 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.972**	**5.111**	**4.994**	**5.161**	**5.095**	**5.031**	**5.059**
Stddev	.156	.108	.029	.108	.124	.020	.108
%RSD	3.138	2.112	.5852	2.091	2.438	.3957	2.140
#1	4.935	5.002	4.977	5.075	4.969	5.025	4.972
#2	5.143	5.218	5.028	5.282	5.217	5.053	5.181
#3	4.838	5.113	4.977	5.124	5.098	5.015	5.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3397.3**
Stddev	68.9
%RSD	2.0286
#1	3465.5
#2	3327.7
#3	3398.8

Sample Name: CCB Acquired: 8/27/2012 14:15:13 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0098**	**.0002**	**.0311**	**.0006**	**.0006**	**.0018**	**.0004**	**<.0000**
Stddev	.0008	.0036	.0023	.0014	.0004	.0003	.0010	.0007	.0000
%RSD	142.1	36.41	1444.	4.436	68.22	53.90	56.11	204.8	16.87
#1	.0014	.0114	.0024	.0322	.0010	.0009	.0029	.0011	-.0001
#2	-.0003	.0122	-.0022	.0316	.0004	.0005	.0013	.0004	-.0001
#3	.0006	.0057	.0002	.0296	.0003	.0003	.0012	-.0004	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0008**	**.0036**	**.0070**	**.0314**	**.0008**	**.0111**	**.0007**	**.0068**
Stddev	.0001	.0017	.0029	.0025	.0115	.0004	.0128	.0004	.0004
%RSD	124.4	215.0	80.82	35.38	36.77	45.30	115.4	57.49	5.942
#1	.0002	.0027	.0050	.0099	.0442	.0011	.0226	.0012	.0064
#2	.0002	-.0001	.0057	.0057	.0279	.0004	-.0027	.0004	.0071
#3	.0000	-.0003	.0003	.0055	.0219	.0010	.0135	.0006	.0070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0164**	**<.0000**	**.0012**	**<.0000**	**.0034**	**.0048**	**.0053**	**.0006**	**.0005**
Stddev	.0035	.0004	.0006	.0015	.0035	.0015	.0027	.0023	.0007
%RSD	21.19	257.3	50.52	1067.	102.3	30.39	50.52	361.6	137.9
#1	.0130	.0001	.0018	-.0006	.0057	.0054	.0081	.0017	.0013
#2	.0163	.0001	.0012	.0016	.0051	.0031	.0047	.0023	.0006
#3	.0199	-.0006	.0006	-.0013	-.0006	.0058	.0029	-.0020	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 14:15:13 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0028	.0019	.0009	.0140	<.0000	.0001
Stddev	.0003	.0053	.0010	.0024	.0103	.0047	.0002
%RSD	46.94	187.1	53.37	262.0	73.41	194.5	143.8
#1	.0009	.0023	.0009	.0005	.0208	.0027	.0004
#2	.0006	.0084	.0020	-.0013	.0022	-.0033	.0000
#3	.0003	-.0022	.0030	.0035	.0191	-.0066	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3536.7
Stddev	34.2
%RSD	.96692
#1	3539.9
#2	3569.2
#3	3501.0

Sample Name: 160-428-D-7-B Acquired: 8/27/2012 14:27:17 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0273	.0015	.0181	.0349	<.0000	.0039	29.45	<.0000
Stddev	.0003	.0026	.0010	.0037	.0003	.0001	.0051	1.83	.0001
%RSD	278.7	9.640	64.96	20.56	.9820	11840.	131.7	6.219	68.71
#1	-.0001	.0258	.0026	.0209	.0347	.0001	.0098	27.87	-.0002
#2	.0002	.0258	.0014	.0139	.0347	.0000	.0006	29.03	-.0002
#3	-.0003	.0304	.0006	.0195	.0353	-.0001	.0012	31.46	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0012	.7717	.3501	.0038	6.923	.1446	<.0000
Stddev	.0002	.0001	.0023	.0106	.0051	.0006	.076	.0010	.0001
%RSD	352.1	24.83	194.5	1.368	1.462	16.71	1.098	.6748	36.42
#1	.0000	-.0004	.0018	.7612	.3442	.0036	6.843	.1438	-.0003
#2	-.0002	-.0005	-.0013	.7716	.3533	.0032	6.931	.1443	-.0006
#3	.0001	-.0003	.0030	.7823	.3529	.0045	6.995	.1457	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.185	.0014	.0214	.0007	7.179	.0031	.0004	1.360	<.0000
Stddev	.019	.0003	.0015	.0013	.414	.0005	.0001	.019	.0003
%RSD	1.579	22.99	6.795	190.4	5.764	15.00	16.61	1.419	32.76
#1	1.173	.0010	.0201	.0016	6.842	.0030	.0004	1.341	-.0006
#2	1.176	.0016	.0211	.0013	7.055	.0036	.0005	1.359	-.0012
#3	1.206	.0015	.0230	-.0008	7.641	.0027	.0005	1.379	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-D-7-B Acquired: 8/27/2012 14:27:17 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0588	<.0000	.0001	.0021	<.0000	.0026	.0039
Stddev	.0008	.0054	.0006	.0006	.0064	.0032	.0002
%RSD	1.430	151.0	949.6	30.51	32.89	124.3	6.065
#1	.0581	.0015	-.0006	.0017	-.0156	.0062	.0042
#2	.0586	-.0093	.0004	.0018	-.0266	-.0001	.0037
#3	.0598	-.0031	.0003	.0028	-.0157	.0017	.0039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3700.3
Stddev	12.9
%RSD	.34925
#1	3686.9
#2	3712.7
#3	3701.4

Sample Name: MB 160-9326/1-A Acquired: 8/27/2012 14:30:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**<.0000**	**.0030**	**<.0000**	**.0000**	**.0013**	**.0255**	**<.0000**
Stddev	.0003	.0053	.0019	.0031	.0001	.0001	.0049	.0017	.0001
%RSD	174.2	76.54	114.7	105.9	25700.	1185.	388.0	6.694	48.05
#1	.0004	-.0008	-.0022	.0057	.0001	-.0001	.0028	.0265	.0000
#2	-.0002	-.0097	.0005	.0037	.0000	.0000	.0053	.0235	-.0001
#3	.0003	-.0103	-.0033	-.0005	-.0001	.0001	-.0042	.0264	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**.0019**	**.0012**	**<.0000**	**<.0000**	**.0190**	**.0002**	**<.0000**
Stddev	.0003	.0007	.0008	.0007	.0147	.0015	.0243	.0003	.0001
%RSD	87.52	341.1	44.47	62.60	62.67	139.9	128.0	227.3	8.111
#1	-.0001	-.0005	.0024	.0006	-.0140	-.0022	.0032	.0006	-.0009
#2	-.0003	-.0007	.0024	.0021	-.0405	-.0016	.0470	.0000	-.0009
#3	-.0006	.0006	.0009	.0009	-.0161	.0006	.0068	-.0001	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0080**	**.0003**	**.0003**	**.0003**	**.0015**	**.0024**	**.0009**	**.0003**	**<.0000**
Stddev	.0118	.0005	.0013	.0007	.0029	.0023	.0011	.0026	.0003
%RSD	147.5	182.5	428.1	264.5	198.7	94.85	115.8	934.3	44.96
#1	-.0050	.0007	-.0007	.0008	-.0018	.0000	.0015	.0027	-.0004
#2	.0110	.0002	-.0002	-.0005	.0037	.0027	.0016	.0005	-.0006
#3	.0181	-.0002	.0018	.0005	.0025	.0045	-.0003	-.0024	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: MB 160-9326/1-A Acquired: 8/27/2012 14:30:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0001	.0017	<.0000	.0215	.0001	.0060
Stddev	.0001	.0037	.0001	.0013	.0132	.0019	.0002
%RSD	1653.	3673.	6.603	171.0	61.26	1502.	3.185
#1	-.0001	.0043	.0018	.0007	.0345	-.0021	.0062
#2	.0001	-.0017	.0017	-.0012	.0218	.0011	.0058
#3	.0001	-.0024	.0016	-.0019	.0082	.0014	.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3539.4
Stddev	11.1
%RSD	.31435
#1	3546.3
#2	3545.4
#3	3526.6

Sample Name: LCS 160-9326/2-A Acquired: 8/27/2012 14:34:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1034**	**9.989**	**.9988**	**.9910**	**.9948**	**.9902**	**1.053**	**10.37**	**1.028**
Stddev	.0034	.044	.0090	.0071	.0064	.0041	.013	.11	.011
%RSD	3.285	.4410	.9047	.7206	.6479	.4135	1.195	1.064	1.097
#1	.0997	9.973	.9895	.9873	.9935	.9872	1.039	10.25	1.015
#2	.1063	9.955	1.008	.9864	.9891	.9885	1.063	10.46	1.037
#3	.1041	10.04	.9992	.9992	1.002	.9948	1.057	10.41	1.031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.059**	**1.025**	**1.051**	**10.17**	**9.815**	**.9962**	**10.09**	**1.018**	**1.056**
Stddev	.011	.023	.013	.08	.034	.0040	.05	.006	.011
%RSD	1.056	2.286	1.207	.7914	.3418	.4032	.5288	.5553	1.063
#1	1.047	.9975	1.037	10.14	9.837	.9944	10.06	1.015	1.043
#2	1.069	1.037	1.061	10.10	9.777	.9934	10.05	1.016	1.064
#3	1.061	1.039	1.055	10.26	9.832	1.001	10.15	1.025	1.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.808**	**1.071**	**1.009**	**1.049**	**9.866**	**.5266**	**1.013**	F **.0095**	**1.029**
Stddev	.035	.011	.011	.011	.099	.0018	.004	.0099	.012
%RSD	.3545	1.028	1.036	1.041	1.002	.3469	.4205	104.1	1.168
#1	9.787	1.058	.9974	1.036	9.757	.5256	1.010	.0024	1.015
#2	9.788	1.078	1.018	1.056	9.950	.5287	1.018	.0053	1.038
#3	9.848	1.077	1.011	1.055	9.891	.5256	1.011	.0209	1.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-9326/2-A Acquired: 8/27/2012 14:34:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.003	1.027	.9870	.2243	1.003	.9896	1.039
Stddev	.004	.020	.0045	.0052	.041	.0095	.010
%RSD	.4439	1.948	.4562	2.298	4.100	.9607	.9693
#1	.9996	1.004	.9834	.2184	.9608	.9937	1.027
#2	1.002	1.037	.9855	.2272	1.004	.9787	1.047
#3	1.008	1.039	.9920	.2274	1.043	.9963	1.042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3586.0
Stddev	45.0
%RSD	1.2542
#1	3637.8
#2	3556.4
#3	3563.9

Sample Name: 160-428-E-1-B Acquired: 8/27/2012 14:37:56 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0040	.1137	.0744	.0001	.0010	27.40	<.0000
Stddev	.0006	.0088	.0002	.0046	.0012	.0001	.0029	2.24	.0002
%RSD	79.67	995.0	5.718	4.035	1.602	51.41	287.6	8.172	149.6
#1	-.0010	.0029	.0043	.1087	.0733	.0002	.0037	25.24	-.0001
#2	-.0001	-.0110	.0038	.1177	.0742	.0001	-.0021	27.25	.0000
#3	-.0010	.0054	.0040	.1146	.0757	.0001	.0015	29.71	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0005	<.0000	.1771	2.103	.0047	13.71	.0124	.0007
Stddev	.0003	.0005	.0020	.0014	.040	.0001	.19	.0003	.0004
%RSD	77.08	101.8	215.2	.8024	1.923	2.147	1.374	2.308	55.17
#1	.0006	.0001	-.0020	.1770	2.058	.0047	13.54	.0122	.0004
#2	.0004	.0003	.0014	.1757	2.135	.0048	13.69	.0127	.0005
#3	.0001	.0011	-.0021	.1786	2.116	.0046	13.91	.0123	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.38	.0036	.0188	.0014	.5478	.0022	<.0000	2.206	<.0000
Stddev	.22	.0002	.0011	.0019	.0414	.0018	.0009	.028	.0003
%RSD	1.439	4.587	5.969	135.9	7.560	79.97	111.5	1.248	32.28
#1	15.17	.0037	.0176	-.0008	.5076	.0009	-.0013	2.186	-.0006
#2	15.35	.0035	.0188	.0022	.5456	.0042	.0002	2.196	-.0009
#3	15.61	.0038	.0199	.0028	.5903	.0016	-.0014	2.238	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-1-B Acquired: 8/27/2012 14:37:56 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3361	.0036	.0008	.0014	<.0000	.0002	.0031
Stddev	.0045	.0058	.0001	.0002	.0053	.0035	.0003
%RSD	1.353	159.3	10.95	14.01	14.91	1499.	9.291
#1	.3319	.0090	.0007	.0012	-.0393	-.0019	.0028
#2	.3354	-.0025	.0009	.0014	-.0385	-.0016	.0030
#3	.3409	.0044	.0008	.0015	-.0297	.0042	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3709.6
Stddev	24.3
%RSD	.65439
#1	3711.9
#2	3732.6
#3	3684.3

Sample Name: 160-428-E-2-B Acquired: 8/27/2012 14:41:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0021**	**<.0000**	**.1403**	**.1895**	**<.0000**	**.0043**	**35.85**	**<.0000**
Stddev	.0000	.0027	.0008	.0039	.0015	.0000	.0025	1.20	.0002
%RSD	13.76	125.7	199.7	2.790	.7795	2490.	57.32	3.344	83.94
#1	.0003	.0027	-.0007	.1358	.1879	.0000	.0037	34.88	.0000
#2	.0003	.0044	-.0010	.1424	.1896	.0000	.0070	35.48	-.0005
#3	.0003	-.0008	.0005	.1428	.1909	.0000	.0022	37.19	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0008**	**.0006**	**2.700**	**2.071**	**.0068**	**9.212**	**.0842**	**<.0000**
Stddev	.0002	.0004	.0032	.021	.037	.0014	.061	.0009	.0005
%RSD	163.0	54.59	523.9	.7921	1.768	21.18	.6577	1.047	62.25
#1	-.0001	.0006	.0031	2.677	2.030	.0082	9.161	.0833	-.0014
#2	.0004	.0005	.0016	2.706	2.099	.0070	9.196	.0844	-.0010
#3	.0002	.0013	-.0030	2.718	2.086	.0053	9.279	.0850	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.07**	**.0020**	**.0790**	**.0010**	**.4069**	**.0019**	**<.0000**	**2.356**	**<.0000**
Stddev	.21	.0003	.0037	.0008	.0114	.0003	.0020	.026	.0002
%RSD	.9083	14.65	4.623	77.48	2.798	17.32	46.55	1.120	13.78
#1	22.84	.0021	.0777	.0019	.3944	.0016	-.0058	2.329	-.0013
#2	23.10	.0016	.0762	.0006	.4098	.0017	-.0050	2.358	-.0011
#3	23.25	.0021	.0831	.0005	.4166	.0022	-.0020	2.382	-.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-2-B Acquired: 8/27/2012 14:41:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1095	<.0000	.0008	.0005	<.0000	<.0000	.0036
Stddev	.0009	.0020	.0005	.0004	.0181	.0037	.0002
%RSD	.8426	565.3	64.83	67.24	37.94	252.5	5.136
#1	.1084	-.0025	.0002	.0007	-.0439	-.0037	.0034
#2	.1098	.0014	.0011	.0007	-.0675	.0028	.0036
#3	.1101	.0000	.0011	.0001	-.0319	-.0035	.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3617.9
Stddev	65.0
%RSD	1.7955
#1	3637.8
#2	3670.5
#3	3545.3

Sample Name: 160-428-E-3-B Acquired: 8/27/2012 14:45:11 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0214	.0017	.0534	.1316	<.0000	.0010	21.91	<.0000
Stddev	.0009	.0003	.0009	.0016	.0011	.0001	.0016	.75	.0002
%RSD	623.0	1.267	49.84	3.080	.8412	206.5	156.5	3.440	165.0
#1	.0009	.0211	.0018	.0517	.1304	.0000	.0018	21.35	-.0001
#2	-.0005	.0214	.0008	.0550	.1319	.0000	.0020	21.61	-.0004
#3	-.0008	.0216	.0025	.0535	.1325	-.0001	-.0008	22.76	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0001	<.0000	3.666	.8197	.0085	10.96	.0230	<.0000
Stddev	.0004	.0005	.0002	.015	.0157	.0024	.07	.0004	.0001
%RSD	242.9	652.2	9.315	.4151	1.914	27.59	.6792	1.529	15.38
#1	.0003	-.0001	-.0020	3.649	.8047	.0058	10.89	.0228	-.0010
#2	-.0004	-.0003	-.0024	3.668	.8186	.0097	10.96	.0234	-.0008
#3	-.0003	.0006	-.0022	3.679	.8360	.0101	11.03	.0228	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.664	.0010	.0276	.0002	.1359	.0024	<.0000	2.201	<.0000
Stddev	.017	.0003	.0009	.0016	.0045	.0007	.0020	.013	.0004
%RSD	.2542	33.11	3.229	727.4	3.323	28.05	69.27	.5902	41.17
#1	6.649	.0009	.0270	.0017	.1360	.0021	-.0043	2.195	-.0007
#2	6.662	.0013	.0271	-.0015	.1314	.0019	-.0036	2.193	-.0013
#3	6.683	.0007	.0286	.0005	.1404	.0031	-.0006	2.216	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-3-B Acquired: 8/27/2012 14:45:11 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.231	<.0000	.0002	.0003	<.0000	<.0000	.0034
Stddev	.005	.0036	.0003	.0014	.0022	.0030	.0001
%RSD	.3894	121.1	153.7	475.0	10.03	405.7	4.061
#1	1.227	-.0069	-.0001	-.0003	-.0237	-.0040	.0034
#2	1.228	.0003	.0002	.0019	-.0228	.0019	.0033
#3	1.236	-.0024	.0005	-.0007	-.0195	-.0001	.0035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3618.8
Stddev	18.6
%RSD	.51404
#1	3609.7
#2	3640.1
#3	3606.4

Sample Name: 160-428-E-5-B Acquired: 8/27/2012 14:48:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0011	.0005	.0091	.0377	.0000	.0033	30.48	<.0000
Stddev	.0002	.0104	.0004	.0011	.0002	.0001	.0036	.27	.0002
%RSD	35.89	904.3	78.15	12.50	.5627	219.2	109.4	.8712	85.51
#1	.0009	.0104	.0003	.0081	.0375	.0000	.0033	30.17	-.0001
#2	.0004	-.0101	.0010	.0103	.0379	.0000	.0069	30.62	-.0004
#3	.0005	.0031	.0002	.0087	.0377	.0001	-.0003	30.65	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	<.0000	<.0000	.0051	.9166	.0049	6.093	.1159	<.0000
Stddev	.0002	.0002	.0030	.0015	.0076	.0011	.014	.0007	.0003
%RSD	57.04	46.00	219.5	28.58	.8335	22.88	.2348	.6010	32.23
#1	.0005	-.0005	.0016	.0068	.9255	.0059	6.083	.1153	-.0012
#2	.0002	-.0002	-.0043	.0041	.9123	.0052	6.088	.1167	-.0013
#3	.0003	-.0005	-.0013	.0045	.9122	.0037	6.110	.1158	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.246	.0023	.0107	.0018	3.153	.0025	.0014	2.098	<.0000
Stddev	.007	.0005	.0001	.0011	.033	.0037	.0037	.008	.0005
%RSD	.5664	20.96	1.213	61.13	1.030	151.3	267.0	.3834	33.46
#1	1.244	.0021	.0107	.0026	3.117	-.0012	-.0010	2.091	-.0010
#2	1.240	.0020	.0106	.0006	3.161	.0063	-.0005	2.107	-.0013
#3	1.253	.0029	.0109	.0021	3.181	.0023	.0057	2.096	-.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-5-B Acquired: 8/27/2012 14:48:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0661	<.0000	.0004	.0040	<.0000	.0009	.0032
Stddev	.0003	.0047	.0001	.0016	.0119	.0031	.0001
%RSD	.3966	259.1	32.45	39.55	112.9	338.7	3.916
#1	.0658	.0009	.0005	.0038	-.0113	-.0025	.0031
#2	.0662	-.0073	.0003	.0056	.0017	.0017	.0034
#3	.0663	.0009	.0005	.0025	-.0221	.0035	.0031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3674.4
Stddev	54.2
%RSD	1.4763
#1	3627.2
#2	3662.2
#3	3733.6

Sample Name: 160-428-E-6-D Acquired: 8/27/2012 14:52:29 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0128	.0019	.0320	.0151	.0000	<.0000	21.88	<.0000
Stddev	.0004	.0033	.0020	.0024	.0004	.0001	.0022	.37	.0001
%RSD	223.9	26.04	101.1	7.456	2.485	184.3	697.4	1.673	29.26
#1	-.0002	.0138	.0037	.0346	.0154	.0000	.0014	22.07	-.0003
#2	.0003	.0154	.0023	.0315	.0147	.0000	.0004	21.46	-.0002
#3	-.0006	.0090	-.0002	.0299	.0151	.0001	-.0028	22.11	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	<.0000	.0004	.0408	.6826	.0053	13.54	.0101	<.0000
Stddev	.0002	.0003	.0004	.0008	.0289	.0010	.05	.0002	.0003
%RSD	72.88	87.86	85.65	1.864	4.228	19.00	.3836	1.826	29.20
#1	.0005	-.0001	.0004	.0416	.6936	.0045	13.59	.0100	-.0013
#2	.0005	-.0003	.0008	.0401	.7044	.0050	13.53	.0103	-.0010
#3	.0001	-.0007	.0001	.0408	.6499	.0065	13.49	.0100	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.579	.0004	.0037	<.0000	5.670	.0022	<.0000	1.242	<.0000
Stddev	.025	.0003	.0018	.0020	.107	.0005	.0015	.009	.0005
%RSD	.7015	64.66	48.58	246.7	1.893	21.25	336.2	.7434	30.89
#1	3.605	.0003	.0056	-.0006	5.697	.0025	.0005	1.245	-.0020
#2	3.555	.0003	.0035	-.0029	5.552	.0017	-.0022	1.249	-.0011
#3	3.577	.0007	.0020	.0011	5.762	.0025	.0004	1.232	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-6-D Acquired: 8/27/2012 14:52:29 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7318	.0030	.0006	.0024	<.0000	.0018	.0067
Stddev	.0034	.0036	.0009	.0005	.0077	.0038	.0002
%RSD	.4693	120.9	133.8	20.54	33.88	207.9	2.551
#1	.7358	-.0012	.0001	.0026	-.0272	-.0025	.0068
#2	.7296	.0049	.0002	.0019	-.0272	.0036	.0065
#3	.7300	.0053	.0016	.0028	-.0139	.0045	.0068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3541.1
Stddev	53.7
%RSD	1.5163
#1	3512.3
#2	3603.0
#3	3507.9

Sample Name: 160-428-E-6-D SD Acquired: 8/27/2012 14:56:06 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0009	.0048	.0029	.0000	.0023	4.297	<.0000
Stddev	.0004	.0105	.0014	.0007	.0000	.0001	.0016	.019	.0001
%RSD	81.08	101.8	150.9	15.13	.3176	159.5	67.80	.4427	85.35
#1	-.0009	.0017	-.0002	.0054	.0029	.0001	.0042	4.276	-.0003
#2	-.0002	-.0178	.0024	.0040	.0029	.0001	.0017	4.314	-.0001
#3	-.0003	-.0148	.0004	.0050	.0029	.0000	.0012	4.301	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0025	.0074	.1223	.0006	2.619	.0022	<.0000
Stddev	.0005	.0001	.0017	.0011	.0268	.0006	.010	.0001	.0003
%RSD	255.7	218.7	69.06	15.39	21.90	86.89	.3870	6.303	21.85
#1	-.0001	-.0001	.0039	.0069	.0970	.0001	2.626	.0021	-.0014
#2	-.0008	-.0002	.0031	.0087	.1503	.0006	2.622	.0023	-.0014
#3	.0003	.0001	.0006	.0066	.1195	.0012	2.607	.0024	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.7120	.0001	.0010	.0001	1.090	.0003	<.0000	.2339	<.0000
Stddev	.0017	.0002	.0015	.0016	.003	.0013	.0030	.0113	.0005
%RSD	.2398	185.8	140.6	2937.	.3113	424.7	217.8	4.828	50.87
#1	.7105	.0002	.0027	-.0010	1.087	-.0011	-.0044	.2210	-.0015
#2	.7117	.0004	-.0002	-.0007	1.094	.0015	.0015	.2385	-.0005
#3	.7139	-.0001	.0006	.0019	1.090	.0006	-.0011	.2422	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-6-D SD Acquired: 8/27/2012 14:56:06 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1412	.0031	<.0000	<.0000	<.0000	.0045	.0055
Stddev	.0001	.0061	.0010	.0014	.0256	.0009	.0001
%RSD	.0536	194.9	212.1	424.6	677.5	19.71	2.109
#1	.1412	-.0020	-.0010	.0007	-.0294	.0036	.0055
#2	.1411	.0016	.0007	.0003	.0218	.0053	.0056
#3	.1412	.0099	-.0011	-.0019	-.0038	.0045	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3565.0
Stddev	37.3
%RSD	1.0459
#1	3607.1
#2	3552.0
#3	3536.1

Sample Name: 160-428-E-6-E MS Acquired: 8/27/2012 14:59:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0197**	**1.810**	**.1904**	**.2029**	**.1921**	**.1780**	**.1964**	**22.16**	**.1924**
Stddev	.0004	.018	.0043	.0025	.0006	.0008	.0028	.39	.0032
%RSD	1.985	1.003	2.256	1.210	.3172	.4228	1.416	1.742	1.656
#1	.0193	1.798	.1879	.2029	.1914	.1773	.1944	21.83	.1895
#2	.0197	1.831	.1881	.2005	.1923	.1779	.1951	22.08	.1918
#3	.0200	1.801	.1954	.2054	.1925	.1788	.1996	22.59	.1958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1965**	**.1893**	**.1954**	**1.892**	**2.348**	**.1847**	**13.75**	**.1908**	**.1976**
Stddev	.0028	.0037	.0030	.010	.038	.0014	.11	.0006	.0037
%RSD	1.434	1.943	1.539	.5504	1.636	.7459	.7680	.3276	1.877
#1	.1935	.1851	.1922	1.883	2.386	.1850	13.63	.1901	.1944
#2	.1968	.1915	.1961	1.903	2.350	.1832	13.79	.1908	.1967
#3	.1991	.1914	.1981	1.888	2.309	.1858	13.82	.1913	.2017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.140**	**.2002**	**.1970**	**.1978**	**7.185**	**.0988**	**.1916**	**1.134**	**.1947**
Stddev	.029	.0030	.0023	.0049	.126	.0029	.0017	.007	.0035
%RSD	.5656	1.496	1.157	2.493	1.747	2.937	.9048	.6041	1.786
#1	5.107	.1976	.1944	.1928	7.073	.0989	.1902	1.135	.1914
#2	5.162	.1996	.1983	.1981	7.162	.0959	.1912	1.126	.1944
#3	5.151	.2035	.1985	.2026	7.321	.1017	.1936	1.140	.1984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-6-E MS Acquired: 8/27/2012 14:59:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8231	.1917	.1789	.0440	.1812	.1804	.1968
Stddev	.0032	.0027	.0002	.0011	.0178	.0023	.0029
%RSD	.3918	1.423	.1397	2.527	9.816	1.259	1.486
#1	.8195	.1892	.1788	.0446	.1613	.1825	.1944
#2	.8242	.1946	.1792	.0428	.1956	.1808	.1960
#3	.8257	.1913	.1787	.0448	.1866	.1780	.2001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3527.6
Stddev	11.7
%RSD	.33233
#1	3540.9
#2	3518.9
#3	3522.9

Sample Name: CCV Acquired: 8/27/2012 15:03:16 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9870**	**49.29**	**4.900**	**4.992**	**4.994**	**4.991**	**4.945**	**24.99**	**4.881**
Stddev	.0111	.15	.006	.007	.012	.011	.011	.06	.010
%RSD	1.125	.3022	.1195	.1369	.2299	.2150	.2289	.2377	.2018
#1	.9790	49.29	4.897	4.998	5.002	4.989	4.935	24.93	4.871
#2	.9824	49.14	4.906	4.993	4.981	4.981	4.957	25.05	4.890
#3	.9997	49.44	4.896	4.985	4.999	5.002	4.941	25.01	4.884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.911**	**4.947**	**4.912**	**49.85**	**49.54**	**4.938**	**24.66**	**4.954**	**4.887**
Stddev	.009	.060	.007	.11	.04	.008	.08	.009	.012
%RSD	.1735	1.219	.1468	.2193	.0874	.1609	.3045	.1803	.2387
#1	4.902	4.906	4.904	49.96	49.56	4.935	24.69	4.957	4.876
#2	4.919	4.918	4.916	49.74	49.49	4.933	24.57	4.944	4.899
#3	4.912	5.016	4.917	49.85	49.57	4.947	24.71	4.962	4.887
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.54**	**4.912**	**4.944**	**4.930**	**49.04**	**.9747**	**4.941**	**4.863**	**4.885**
Stddev	.15	.009	.018	.008	.09	.0039	.010	.022	.017
%RSD	.3075	.1752	.3633	.1554	.1800	.3987	.2109	.4531	.3485
#1	49.48	4.904	4.923	4.921	49.00	.9721	4.930	4.847	4.866
#2	49.43	4.921	4.958	4.933	49.14	.9792	4.951	4.853	4.898
#3	49.71	4.912	4.950	4.935	48.97	.9729	4.941	4.888	4.890
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 15:03:16 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.936**	**5.029**	**4.969**	**5.012**	**5.003**	**4.998**	**4.914**
Stddev	.048	.059	.011	.014	.072	.011	.013
%RSD	.9808	1.178	.2230	.2812	1.449	.2239	.2735
#1	4.965	4.994	4.978	4.996	4.964	4.996	4.901
#2	4.880	4.996	4.957	5.017	4.959	4.989	4.928
#3	4.962	5.098	4.971	5.023	5.087	5.011	4.912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3565.2**
Stddev	35.9
%RSD	1.0075
#1	3602.9
#2	3561.3
#3	3531.4

Sample Name: CCB Acquired: 8/27/2012 15:06:36 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0035**	**.0028**	**.0206**	**.0007**	**.0007**	**.0063**	**.0016**	**<.0000**
Stddev	.0009	.0094	.0033	.0032	.0006	.0004	.0018	.0008	.0003
%RSD	1509.	270.6	115.4	15.73	78.13	59.35	27.85	48.63	115.4
#1	.0011	.0104	-.0008	.0189	.0011	.0011	.0053	.0007	-.0004
#2	-.0007	-.0072	.0054	.0243	.0009	.0006	.0084	.0017	.0001
#3	-.0002	.0072	.0039	.0185	.0001	.0003	.0053	.0022	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**<.0000**	**.0074**	**<.0000**	**.0017**	**.0161**	**.0010**	**.0056**
Stddev	.0003	.0002	.0032	.0041	.0323	.0017	.0139	.0003	.0001
%RSD	81.68	210.3	609.3	55.29	1130.	102.3	86.13	35.21	1.719
#1	-.0001	.0001	-.0042	.0121	-.0397	.0034	.0182	.0009	.0054
#2	-.0006	-.0002	.0017	.0052	.0208	.0016	.0013	.0013	.0056
#3	-.0002	-.0002	.0009	.0049	.0103	.0000	.0288	.0006	.0056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0220**	**.0003**	**<.0000**	**.0005**	**.0027**	**.0035**	**.0011**	**.0007**	**.0006**
Stddev	.0100	.0003	.0015	.0022	.0047	.0007	.0028	.0039	.0002
%RSD	45.35	124.5	358.1	442.8	171.3	20.03	256.6	555.4	37.87
#1	.0335	.0005	.0013	.0031	.0068	.0030	.0022	-.0034	.0006
#2	.0162	.0004	-.0008	-.0011	.0038	.0033	-.0021	.0043	.0008
#3	.0162	-.0001	-.0017	-.0005	-.0024	.0043	.0032	.0012	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 15:06:36 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0053	.0015	.0010	<.0000	.0010	.0006
Stddev	.0004	.0033	.0017	.0004	.0111	.0018	.0002
%RSD	66.80	62.64	117.5	40.46	7579.	177.3	30.23
#1	.0011	.0038	.0034	.0006	-.0115	-.0010	.0007
#2	.0004	.0091	-.0001	.0010	.0107	.0017	.0007
#3	.0003	.0030	.0011	.0015	.0004	.0025	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3547.5
Stddev	18.0
%RSD	.50621
#1	3555.5
#2	3526.9
#3	3560.0

Sample Name: 160-428-E-6-F MSD Acquired: 8/27/2012 15:10:18 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0194**	**1.878**	**.1983**	**.2162**	**.1987**	**.1850**	**.2061**	**22.58**	**.1984**
Stddev	.0008	.009	.0028	.0045	.0008	.0001	.0026	.45	.0038
%RSD	3.884	.4862	1.387	2.090	.3905	.0506	1.245	2.012	1.897
#1	.0187	1.871	.1970	.2132	.1990	.1849	.2032	22.05	.1941
#2	.0202	1.888	.1965	.2139	.1978	.1849	.2082	22.81	.1999
#3	.0193	1.873	.2015	.2214	.1993	.1851	.2069	22.86	.2011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2031**	**.1912**	**.2014**	**1.955**	**2.460**	**.1923**	**14.02**	**.1979**	**.2058**
Stddev	.0042	.0038	.0069	.005	.030	.0029	.04	.0011	.0048
%RSD	2.076	1.983	3.432	.2830	1.214	1.483	.3018	.5471	2.313
#1	.1982	.1868	.1938	1.961	2.487	.1944	13.98	.1972	.2003
#2	.2056	.1935	.2073	1.955	2.428	.1890	14.01	.1973	.2079
#3	.2054	.1932	.2030	1.950	2.466	.1934	14.06	.1992	.2091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.220**	**.2063**	**.2034**	**.2025**	**7.337**	**.1041**	**.1960**	**1.150**	**.2028**
Stddev	.026	.0032	.0027	.0032	.130	.0015	.0076	.005	.0050
%RSD	.5000	1.551	1.337	1.561	1.778	1.472	3.862	.4818	2.467
#1	5.193	.2027	.2008	.1988	7.188	.1037	.1901	1.147	.1971
#2	5.222	.2080	.2062	.2039	7.393	.1029	.1932	1.146	.2056
#3	5.245	.2084	.2032	.2046	7.429	.1059	.2045	1.156	.2059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-6-F MSD Acquired: 8/27/2012 15:10:18 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.8446	.1905	.1872	.0457	.1619	.1861	.2031
Stddev	.0017	.0052	.0012	.0006	.0251	.0038	.0043
%RSD	.2072	2.749	.6245	1.327	15.51	2.043	2.102
#1	.8437	.1846	.1859	.0453	.1354	.1899	.1982
#2	.8434	.1946	.1876	.0464	.1854	.1860	.2053
#3	.8466	.1923	.1881	.0454	.1649	.1823	.2058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3571.0
Stddev	37.9
%RSD	1.0616
#1	3614.7
#2	3547.7
#3	3550.4

Sample Name: 160-428-E-7-B Acquired: 8/27/2012 15:13:47 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0046**	**.0041**	**.0359**	**.0777**	**.0000**	**.0029**	F **64.72**	**<.0000**
Stddev	.0004	.0122	.0041	.0053	.0011	.0001	.0024	2.85	.0001
%RSD	99.56	264.7	99.73	14.79	1.387	168.5	81.27	4.401	36.26
#1	.0003	.0180	.0018	.0365	.0771	.0001	.0055	61.51	-.0002
#2	.0001	.0015	.0089	.0409	.0770	.0000	.0025	65.71	-.0003
#3	.0009	-.0057	.0017	.0303	.0789	.0000	.0008	66.94	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**<.0000**	**1.137**	**.8747**	**.0091**	**16.45**	**.3111**	**.0000**
Stddev	.0003	.0001	.0018	.020	.0150	.0012	.14	.0037	.0001
%RSD	73.52	15.90	132.1	1.749	1.719	13.59	.8319	1.186	341.3
#1	-.0001	-.0009	-.0001	1.116	.8916	.0082	16.36	.3083	.0001
#2	-.0007	-.0010	-.0006	1.139	.8629	.0105	16.38	.3097	.0000
#3	-.0006	-.0007	-.0034	1.156	.8696	.0085	16.61	.3153	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.815**	**.0016**	**.0294**	**.0007**	**15.76**	**.0028**	**<.0000**	**3.101**	**<.0000**
Stddev	.020	.0003	.0008	.0008	.70	.0018	.0011	.032	.0005
%RSD	.7124	16.85	2.888	111.9	4.442	64.64	371.7	1.021	29.39
#1	2.794	.0015	.0286	.0000	14.97	.0007	-.0012	3.071	-.0022
#2	2.816	.0019	.0303	.0006	16.00	.0038	.0009	3.097	-.0013
#3	2.835	.0014	.0293	.0015	16.30	.0039	-.0006	3.134	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-7-B Acquired: 8/27/2012 15:13:47 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1392	<.0000	.0007	.0047	<.0000	<.0000	.0031
Stddev	.0014	.0049	.0006	.0002	.0174	.0021	.0004
%RSD	.9869	559.9	82.28	5.130	35.48	170.9	13.02
#1	.1386	-.0057	.0001	.0047	-.0587	-.0030	.0028
#2	.1383	-.0011	.0007	.0044	-.0289	.0011	.0036
#3	.1408	.0041	.0013	.0049	-.0591	-.0017	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3621.2
Stddev	52.6
%RSD	1.4537
#1	3674.2
#2	3569.0
#3	3620.3

Sample Name: 160-428-E-8-B Acquired: 8/27/2012 15:17:22 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**<.0000**	**.1619**	**.2236**	**.0001**	**.0030**	**W 40.00**
Stddev	.0009	.0037	.0016	.0021	.0010	.0001	.0005	.37
%RSD	496.6	1396.	124.3	1.279	.4308	101.2	16.42	.9206
#1	-.0008	-.0045	-.0020	.1636	.2244	.0001	.0025	39.58
#2	.0005	.0026	-.0024	.1596	.2238	.0001	.0030	40.23
#3	.0009	.0011	.0005	.1626	.2225	.0000	.0035	40.20
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**.0000**	**<.0000**	**3.175**	**2.433**	**.0083**	**10.81**
Stddev	.0002	.0001	.0003	.0036	.017	.004	.0015	.06
%RSD	151.4	46.55	573.3	338.1	.5422	.1683	17.62	.5988
#1	-.0001	-.0004	.0000	.0022	3.185	2.436	.0096	10.85
#2	.0001	-.0002	-.0002	-.0004	3.184	2.434	.0085	10.85
#3	-.0002	-.0003	.0004	-.0049	3.155	2.428	.0067	10.74
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0993**	**<.0000**	**27.18**	**.0026**	**.0850**	**<.0000**	**.4594**	**.0004**
Stddev	.0005	.0003	.15	.0002	.0007	.0009	.0041	.0015
%RSD	.5139	26.70	.5598	7.377	.7907	135.9	.8864	404.8
#1	.0993	-.0014	27.22	.0028	.0846	.0001	.4548	.0013
#2	.0998	-.0008	27.31	.0026	.0858	-.0016	.4608	.0012
#3	.0988	-.0010	27.01	.0024	.0847	-.0004	.4626	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-428-E-8-B Acquired: 8/27/2012 15:17:22 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.757	<.0000	.1287	<.0000	.0002	.0017	<.0000
Stddev	.0017	.003	.0004	.0007	.0075	.0007	.0023	.0185
%RSD	86.92	.1215	26.83	.5535	278.3	385.6	134.3	60.23
#1	-.0032	2.761	-.0010	.1291	-.0104	.0001	-.0006	-.0116
#2	.0000	2.757	-.0014	.1292	.0047	-.0005	.0041	-.0318
#3	-.0026	2.754	-.0017	.1279	-.0024	.0009	.0017	-.0485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0043	.0050
Stddev	.0023	.0002
%RSD	53.84	3.042
#1	.0018	.0048
#2	.0048	.0051
#3	.0063	.0051
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3530.4
Stddev	30.9
%RSD	.87399
#1	3552.8
#2	3495.2
#3	3543.1

Sample Name: 160-453-C-1-A Acquired: 8/27/2012 15:21:00 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0030	.0179	.0548	.1290	.0000	.0037	F 58.24	<.0000
Stddev	.0002	.0080	.0024	.0017	.0006	.0001	.0031	1.26	.0002
%RSD	46.94	264.1	13.65	3.029	.4807	215.8	82.87	2.170	53.16
#1	-.0004	-.0051	.0151	.0560	.1283	.0000	.0072	56.84	-.0006
#2	-.0003	.0033	.0193	.0529	.1294	.0001	.0014	58.55	-.0002
#3	-.0007	.0108	.0194	.0556	.1293	.0000	.0025	59.31	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0009	<.0000	13.21	.8114	.0064	13.40	.3315	<.0000
Stddev	.0003	.0002	.0013	.03	.0191	.0012	.08	.0010	.0002
%RSD	176.5	24.31	40.24	.2066	2.355	19.34	.5612	.3031	26.26
#1	.0004	.0007	-.0020	13.18	.8084	.0073	13.31	.3303	-.0007
#2	.0004	.0008	-.0047	13.22	.7939	.0050	13.42	.3318	-.0012
#3	-.0002	.0011	-.0033	13.23	.8318	.0068	13.46	.3323	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	11.96	.0033	.1787	.0016	.3932	.0021	<.0000	4.517	<.0000
Stddev	.03	.0002	.0049	.0018	.0142	.0021	.0005	.008	.0008
%RSD	.2428	6.698	2.743	108.7	3.622	99.70	13.46	.1841	52.54
#1	11.93	.0030	.1735	.0022	.3769	-.0002	-.0032	4.507	-.0008
#2	11.96	.0035	.1795	.0030	.4035	.0026	-.0039	4.521	-.0014
#3	11.99	.0033	.1832	-.0004	.3992	.0038	-.0031	4.522	-.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-1-A Acquired: 8/27/2012 15:21:00 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1514	<.0000	.0006	.0021	<.0000	<.0000	.0020
Stddev	.0002	.0022	.0005	.0004	.0025	.0027	.0001
%RSD	.1252	41.59	82.88	21.21	5.530	602.9	6.783
#1	.1512	-.0063	.0002	.0024	-.0427	.0025	.0021
#2	.1513	-.0069	.0005	.0023	-.0472	-.0029	.0019
#3	.1516	-.0028	.0012	.0016	-.0432	-.0010	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3661.7
Stddev	15.9
%RSD	.43290
#1	3677.1
#2	3645.5
#3	3662.6

Sample Name: 160-453-C-2-A Acquired: 8/27/2012 15:24:36 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0032	<.0000	.0288	.1053	<.0000	.0014	26.11	<.0000
Stddev	.0008	.0149	.0011	.0029	.0003	.0000	.0007	.25	.0001
%RSD	117.8	463.4	908.5	9.977	.2438	159.9	50.89	.9595	70.45
#1	-.0004	.0200	-.0013	.0264	.1055	.0000	.0007	25.94	-.0001
#2	-.0001	-.0084	.0007	.0320	.1053	.0000	.0014	26.40	-.0001
#3	-.0016	-.0020	.0003	.0280	.1050	-.0001	.0021	25.99	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0001	<.0000	2.276	.9013	.0040	5.471	.0628	<.0000
Stddev	.0005	.0001	.0018	.005	.0164	.0021	.002	.0005	.0003
%RSD	218.7	184.6	591.2	.2417	1.822	51.02	.0418	.8134	30.67
#1	.0003	.0000	.0001	2.271	.8871	.0027	5.473	.0623	-.0011
#2	-.0003	.0002	.0013	2.282	.8977	.0064	5.469	.0633	-.0007
#3	-.0006	.0000	-.0023	2.276	.9193	.0029	5.472	.0628	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.860	.0009	.0457	.0009	2.159	.0012	<.0000	2.208	<.0000
Stddev	.015	.0001	.0029	.0006	.023	.0028	.0032	.004	.0005
%RSD	.3111	8.339	6.377	69.17	1.075	233.5	867.6	.1914	33.96
#1	4.845	.0010	.0469	.0013	2.140	.0030	.0031	2.211	-.0018
#2	4.875	.0008	.0477	.0002	2.185	-.0020	-.0009	2.210	-.0013
#3	4.861	.0009	.0423	.0011	2.153	.0026	-.0032	2.203	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-2-A Acquired: 8/27/2012 15:24:36 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0563	<.0000	.0005	.0004	<.0000	.0015	.0029
Stddev	.0001	.0025	.0008	.0017	.0050	.0017	.0001
%RSD	.1903	193.4	174.5	450.8	19.47	114.1	3.276
#1	.0562	-.0006	-.0001	-.0005	-.0241	.0034	.0029
#2	.0564	-.0040	.0014	-.0007	-.0216	.0001	.0028
#3	.0563	.0008	.0001	.0023	-.0312	.0010	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3637.4
Stddev	87.0
%RSD	2.3917
#1	3588.2
#2	3586.1
#3	3737.8

Sample Name: 160-453-C-3-A Acquired: 8/27/2012 15:28:14 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0464	.3029	.3046	.0000	<.0000	19.90	<.0000
Stddev	.0001	.0009	.0011	.0015	.0021	.0001	.0020	.56	.0002
%RSD	869.6	18.95	2.476	.4834	.6927	169.4	256.9	2.839	66.17
#1	.0000	-.0053	.0451	.3013	.3022	.0000	-.0022	19.40	-.0001
#2	-.0001	-.0036	.0472	.3035	.3062	.0000	.0015	19.80	-.0005
#3	.0001	-.0050	.0469	.3040	.3053	.0001	-.0015	20.52	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0009	.0033	4.892	12.66	.0059	13.15	.0184	.0208
Stddev	.0005	.0004	.0007	.037	.08	.0008	.06	.0003	.0003
%RSD	61.73	40.69	21.29	.7490	.5967	14.49	.4265	1.793	1.578
#1	.0012	.0013	.0033	4.849	12.58	.0053	13.08	.0181	.0206
#2	.0005	.0008	.0041	4.917	12.72	.0054	13.17	.0182	.0212
#3	.0004	.0006	.0026	4.908	12.68	.0068	13.19	.0187	.0207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	77.04	.0125	.2379	.0012	.4769	.0012	.0010	4.500	<.0000
Stddev	.48	.0001	.0062	.0004	.0143	.0018	.0012	.040	.0003
%RSD	.6251	.4792	2.602	29.64	3.007	145.7	115.8	.8834	43.27
#1	76.49	.0125	.2324	.0014	.4645	-.0008	.0002	4.455	-.0007
#2	77.37	.0125	.2368	.0008	.4737	.0025	.0005	4.530	-.0011
#3	77.27	.0124	.2446	.0015	.4926	.0019	.0024	4.515	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-3-A Acquired: 8/27/2012 15:28:14 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2374	<.0000	.0002	.0010	<.0000	.0032	.0031
Stddev	.0012	.0005	.0006	.0002	.0190	.0046	.0001
%RSD	.4991	16.34	252.8	23.10	57.28	140.5	4.803
#1	.2362	-.0026	.0009	.0012	-.0273	.0083	.0030
#2	.2386	-.0034	.0001	.0008	-.0545	.0019	.0033
#3	.2376	-.0035	-.0003	.0010	-.0179	-.0005	.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3620.1
Stddev	69.4
%RSD	1.9172
#1	3685.6
#2	3627.4
#3	3547.4

Sample Name: 160-453-C-4-A Acquired: 8/27/2012 15:31:52 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0135	.0007	.0470	.0428	.0000	.0010	W 43.38
Stddev	.0003	.0113	.0005	.0020	.0002	.0001	.0008	.77
%RSD	28.78	83.42	73.53	4.187	.3642	1567.	82.88	1.783
#1	-.0013	.0163	.0010	.0490	.0430	-.0001	.0005	43.23
#2	-.0008	.0231	.0009	.0450	.0428	.0000	.0019	42.70
#3	-.0009	.0011	.0001	.0470	.0427	.0001	.0006	44.22
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0001	.0004	1.184	1.737	.0061	6.647
Stddev	.0003	.0003	.0001	.0031	.002	.015	.0007	.020
%RSD	197.7	383.9	134.6	694.3	.1268	.8448	11.88	.3063
#1	.0000	.0001	.0001	.0039	1.182	1.747	.0055	6.667
#2	.0000	-.0004	.0002	-.0006	1.185	1.744	.0069	6.626
#3	-.0005	.0001	.0000	-.0020	1.183	1.720	.0059	6.648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2262	<.0000	10.63	.0004	.0519	.0003	5.973	.0013
Stddev	.0010	.0002	.04	.0003	.0017	.0015	.116	.0008
%RSD	.4512	35.73	.3517	78.36	3.229	568.5	1.934	62.50
#1	.2273	-.0008	10.67	.0003	.0538	.0003	5.942	.0013
#2	.2261	-.0005	10.60	.0008	.0514	.0018	5.876	.0022
#3	.2253	-.0004	10.62	.0001	.0506	-.0013	6.101	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-453-C-4-A Acquired: 8/27/2012 15:31:52 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.054	<.0000	.2620	.0054	<.0000	.0037	<.0000
Stddev	.0029	.015	.0002	.0007	.0009	.0005	.0011	.0050
%RSD	99.49	.7043	11.30	.2853	15.89	643.5	29.08	11.76
#1	-.0017	2.070	-.0020	.2624	.0057	.0001	.0047	-.0368
#2	-.0063	2.050	-.0016	.2625	.0044	.0003	.0037	-.0446
#3	-.0008	2.041	-.0018	.2611	.0060	-.0007	.0026	-.0462
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0019	.0025
Stddev	.0033	.0002
%RSD	177.7	8.161
#1	-.0015	.0023
#2	.0052	.0025
#3	.0019	.0027
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3549.5
Stddev	42.5
%RSD	1.1980
#1	3532.2
#2	3598.0
#3	3518.4

Sample Name: 160-453-C-5-A Acquired: 8/27/2012 15:35:28 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	<.0000	.0030	.2231	.3180	<.0000	.0009	W 48.20
Stddev	.0006	.0085	.0004	.0065	.0010	.0001	.0038	1.40
%RSD	222.0	424.4	13.95	2.919	.3228	481.9	423.9	2.912
#1	-.0002	-.0081	.0034	.2251	.3175	-.0002	.0014	47.39
#2	.0000	-.0056	.0025	.2158	.3174	.0000	.0045	47.39
#3	.0010	.0077	.0030	.2284	.3192	.0001	-.0031	49.82
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0004	.0008	<.0000	3.496	2.809	.0064	14.24
Stddev	.0002	.0004	.0003	.0033	.021	.011	.0005	.04
%RSD	130.7	102.7	40.36	10970.	.5869	.3802	7.272	.2979
#1	-.0005	-.0001	.0012	.0036	3.481	2.805	.0069	14.29
#2	-.0001	.0005	.0005	-.0028	3.487	2.801	.0060	14.21
#3	.0000	.0007	.0008	-.0009	3.519	2.821	.0062	14.23
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2648	<.0000	47.01	.0059	.0257	.0013	1.270	.0029
Stddev	.0010	.0002	.22	.0006	.0004	.0008	.032	.0011
%RSD	.3656	15.22	.4765	9.978	1.420	62.00	2.548	37.64
#1	.2639	-.0011	46.81	.0055	.0260	.0021	1.251	.0016
#2	.2647	-.0011	46.98	.0056	.0259	.0006	1.251	.0037
#3	.2658	-.0014	47.25	.0065	.0253	.0011	1.307	.0033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-453-C-5-A Acquired: 8/27/2012 15:35:28 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	3.348	<.0000	.2061	.0096	<.0000	.0016	<.0000
Stddev	.0005	.015	.0009	.0007	.0070	.0008	.0017	.0052
%RSD	31.62	.4557	58.49	.3363	73.45	266.9	107.3	13.83
#1	-.0019	3.334	-.0025	.2054	.0143	-.0012	.0032	-.0379
#2	-.0010	3.345	-.0007	.2063	.0015	.0004	.0018	-.0422
#3	-.0020	3.364	-.0014	.2068	.0129	-.0001	-.0002	-.0319
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.0032
Stddev	.0038	.0001
%RSD	291.6	3.952
#1	-.0049	.0031
#2	.0027	.0034
#3	-.0017	.0032
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3479.3
Stddev	49.7
%RSD	1.4278
#1	3461.9
#2	3535.4
#3	3440.8

Sample Name: 160-453-C-6-A Acquired: 8/27/2012 15:39:05 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**<.0000**	**.0007**	**.0782**	**.0200**	**.0001**	**.0009**	**27.32**	**<.0000**
Stddev	.0005	.0104	.0011	.0027	.0003	.0000	.0011	.25	.0001
%RSD	77.42	1751.	163.8	3.490	1.345	69.86	126.6	.9219	31.12
#1	.0003	-.0111	-.0001	.0794	.0197	.0001	.0004	27.46	-.0003
#2	.0012	.0096	.0020	.0750	.0203	.0000	.0022	27.02	-.0002
#3	.0005	-.0003	.0002	.0801	.0201	.0001	.0001	27.46	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**<.0000**	**.0005**	**.3882**	**.8958**	**.0039**	**2.791**	**.6369**	**<.0000**
Stddev	.0003	.0005	.0019	.0036	.0329	.0004	.024	.0003	.0002
%RSD	45.94	289.5	379.1	.9235	3.669	9.408	.8406	.0499	31.21
#1	.0003	-.0007	.0027	.3922	.8591	.0043	2.766	.6371	-.0008
#2	.0007	.0000	-.0007	.3870	.9059	.0036	2.812	.6370	-.0004
#3	.0009	.0002	-.0005	.3854	.9224	.0037	2.796	.6365	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.400**	**.0016**	**.0098**	**<.0000**	**7.539**	**.0038**	**.0010**	**2.230**	**<.0000**
Stddev	.023	.0005	.0015	.0009	.109	.0018	.0022	.005	.0003
%RSD	.2743	32.87	15.20	505.4	1.441	46.51	218.0	.2070	31.00
#1	8.383	.0010	.0081	-.0007	7.598	.0039	.0016	2.226	-.0012
#2	8.426	.0019	.0108	-.0007	7.413	.0020	.0028	2.235	-.0006
#3	8.390	.0018	.0106	.0008	7.604	.0055	-.0014	2.230	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-6-A Acquired: 8/27/2012 15:39:05 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1496	.0006	.0012	.0002	<.0000	<.0000	.0032
Stddev	.0006	.0036	.0008	.0001	.0050	.0033	.0002
%RSD	.4203	634.5	64.83	45.83	221.3	1301.	5.983
#1	.1495	-.0032	.0015	.0002	.0011	.0014	.0030
#2	.1503	.0039	.0003	.0002	.0002	.0019	.0034
#3	.1490	.0010	.0018	.0001	-.0081	-.0040	.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3536.5
Stddev	21.0
%RSD	.59466
#1	3514.1
#2	3539.6
#3	3555.8

Sample Name: 160-453-C-7-A Acquired: 8/27/2012 15:42:42 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	.0315	.1023	.0001	.0023	26.13	<.0000
Stddev	.0007	.0095	.0007	.0012	.0012	.0000	.0011	.62	.0000
%RSD	119.5	295.1	89.16	3.710	1.190	65.70	48.78	2.376	9.789
#1	-.0003	.0069	-.0003	.0319	.1009	.0000	.0032	25.65	-.0003
#2	-.0015	-.0046	-.0015	.0302	.1032	.0001	.0026	25.91	-.0003
#3	-.0001	-.0119	-.0004	.0324	.1027	.0001	.0010	26.83	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0002	.0008	2.219	.9060	.0036	5.338	.0614	<.0000
Stddev	.0004	.0005	.0006	.013	.0020	.0024	.031	.0007	.0004
%RSD	113.2	241.3	79.26	.5780	.2262	66.60	.5858	1.107	35.66
#1	-.0007	.0003	.0001	2.204	.9050	.0054	5.316	.0607	-.0012
#2	.0001	.0006	.0012	2.227	.9083	.0045	5.374	.0614	-.0013
#3	-.0005	-.0003	.0012	2.226	.9046	.0009	5.325	.0621	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.813	.0006	.0460	<.0000	2.149	.0006	<.0000	2.154	<.0000
Stddev	.029	.0002	.0024	.0002	.059	.0019	.0019	.018	.0008
%RSD	.6114	38.17	5.300	2717.	2.765	316.1	917.5	.8181	70.53
#1	4.780	.0008	.0463	.0000	2.099	-.0015	.0020	2.133	-.0007
#2	4.836	.0004	.0434	.0002	2.132	.0018	-.0012	2.161	-.0006
#3	4.823	.0007	.0483	-.0002	2.215	.0015	-.0014	2.166	-.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-7-A Acquired: 8/27/2012 15:42:42 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0556	.0004	.0001	.0008	<.0000	<.0000	.0034
Stddev	.0005	.0007	.0002	.0007	.0075	.0023	.0001
%RSD	.8772	183.8	216.8	92.14	40.85	17220.	4.331
#1	.0550	.0009	.0003	.0002	-.0126	.0025	.0036
#2	.0560	-.0004	-.0001	.0016	-.0159	-.0021	.0033
#3	.0557	.0006	.0001	.0005	-.0270	-.0004	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3671.7
Stddev	48.8
%RSD	1.3300
#1	3618.4
#2	3682.4
#3	3714.3

Sample Name: CCV Acquired: 8/27/2012 15:46:21 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9830**	**49.18**	**5.000**	**4.994**	**4.990**	**4.981**	**5.022**	**25.62**	**4.948**
Stddev	.0153	.07	.042	.028	.014	.011	.042	.23	.044
%RSD	1.553	.1393	.8381	.5680	.2742	.2133	.8287	.8835	.8868
#1	.9882	49.18	5.001	5.022	4.994	4.985	5.029	25.67	4.956
#2	.9950	49.11	5.041	4.965	4.975	4.969	5.060	25.82	4.987
#3	.9658	49.24	4.957	4.996	5.001	4.989	4.977	25.37	4.901
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.995**	**4.960**	**4.966**	**49.98**	**49.72**	**4.913**	**24.77**	**4.950**	**4.990**
Stddev	.044	.068	.041	.10	.10	.010	.05	.013	.040
%RSD	.8884	1.376	.8148	.2081	.2018	.1949	.2206	.2643	.8095
#1	4.997	4.980	4.966	50.01	49.79	4.920	24.71	4.955	4.996
#2	5.038	5.016	5.006	49.86	49.60	4.902	24.81	4.935	5.028
#3	4.949	4.884	4.925	50.06	49.76	4.917	24.80	4.960	4.947
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.65**	**5.010**	**5.067**	**5.041**	**50.05**	**.9878**	**5.043**	**4.875**	**4.981**
Stddev	.10	.042	.041	.046	.43	.0065	.046	.012	.047
%RSD	.1925	.8305	.8032	.9090	.8598	.6544	.9146	.2470	.9417
#1	49.70	5.016	5.074	5.053	50.07	.9869	5.053	4.878	4.986
#2	49.54	5.049	5.103	5.080	50.46	.9947	5.082	4.861	5.026
#3	49.72	4.966	5.023	4.991	49.60	.9818	4.992	4.885	4.932
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 15:46:21 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.833**	**5.011**	**4.957**	**5.119**	**4.935**	**5.017**	**5.008**
Stddev	.120	.061	.012	.044	.075	.015	.045
%RSD	2.481	1.219	.2352	.8699	1.520	.2984	.8978
#1	4.972	5.050	4.959	5.127	4.988	5.033	5.016
#2	4.761	5.043	4.945	5.158	4.967	5.003	5.049
#3	4.768	4.941	4.968	5.071	4.849	5.016	4.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3493.6**
Stddev	24.0
%RSD	.68829
#1	3481.3
#2	3478.2
#3	3521.3

Sample Name: CCB Acquired: 8/27/2012 15:49:41 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**.0014**	**.0185**	**.0005**	**.0007**	**.0013**	**.0024**	**<.0000**
Stddev	.0006	.0141	.0014	.0059	.0002	.0004	.0036	.0004	.0002
%RSD	232.3	341.2	96.77	31.82	45.02	54.32	283.3	16.72	103.4
#1	.0002	.0095	-.0001	.0216	.0007	.0010	.0013	.0021	-.0002
#2	.0008	-.0186	.0026	.0222	.0003	.0006	-.0024	.0029	-.0003
#3	-.0003	-.0034	.0017	.0117	.0005	.0003	.0048	.0024	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**.0017**	**.0083**	**.0329**	**.0006**	**.0041**	**.0010**	**.0060**
Stddev	.0006	.0001	.0008	.0024	.0410	.0008	.0133	.0004	.0012
%RSD	943.6	24.56	48.68	29.02	124.6	127.1	326.7	44.52	19.25
#1	.0000	-.0005	.0019	.0096	.0690	.0016	-.0085	.0015	.0054
#2	.0005	-.0003	.0023	.0098	.0414	.0003	.0028	.0007	.0053
#3	-.0007	-.0005	.0007	.0055	-.0117	.0001	.0179	.0008	.0073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0162**	**.0001**	**.0011**	**<.0000**	**.0014**	**.0033**	**.0035**	**<.0000**	**<.0000**
Stddev	.0042	.0003	.0013	.0010	.0008	.0023	.0029	.0031	.0004
%RSD	25.90	457.4	121.2	1857.	54.48	70.62	83.90	91.35	138.9
#1	.0118	.0003	.0016	-.0004	.0022	.0031	.0022	-.0043	-.0003
#2	.0202	-.0002	.0020	-.0008	.0012	.0011	.0014	-.0058	-.0007
#3	.0167	.0001	-.0004	.0010	.0007	.0057	.0068	.0001	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 15:49:41 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	<.0000	.0019	.0029	<.0000	<.0000	.0004
Stddev	.0003	.0027	.0006	.0013	.0026	.0053	.0002
%RSD	46.39	50.04	29.21	43.59	63.16	366.1	39.43
#1	.0010	-.0026	.0013	.0040	-.0066	.0045	.0006
#2	.0007	-.0080	.0021	.0015	-.0046	-.0056	.0004
#3	.0004	-.0057	.0024	.0032	-.0014	-.0032	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3684.5
Stddev	51.2
%RSD	1.3898
#1	3714.3
#2	3713.9
#3	3625.4

Sample Name: 160-453-C-8-A Acquired: 8/27/2012 15:53:23 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0070	.0002	.0246	.0453	.0005	.0031	34.17	<.0000
Stddev	.0009	.0125	.0029	.0028	.0008	.0008	.0025	.24	.0001
%RSD	957.3	179.8	1677.	11.50	1.769	153.9	78.99	.6921	35.96
#1	-.0003	-.0058	-.0031	.0222	.0446	.0001	.0017	33.95	-.0004
#2	-.0009	.0192	.0012	.0277	.0462	.0014	.0017	34.12	-.0004
#3	.0008	.0074	.0024	.0239	.0450	.0001	.0060	34.42	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	<.0000	<.0000	.0069	1.055	.0014	9.832	.1454	.0011
Stddev	.0007	.0005	.0044	.0079	.029	.0022	.032	.0008	.0002
%RSD	3434.	2178.	357.7	115.0	2.735	153.7	.3287	.5344	18.60
#1	-.0007	-.0004	.0028	.0004	1.079	-.0010	9.804	.1445	.0011
#2	.0005	-.0002	-.0059	.0158	1.064	.0021	9.825	.1459	.0009
#3	.0003	.0005	-.0005	.0045	1.023	.0033	9.867	.1458	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.375	.0020	.0129	.0003	1.600	.0030	<.0000	1.882	<.0000
Stddev	.024	.0002	.0011	.0004	.011	.0011	.0029	.010	.0004
%RSD	.7103	12.20	8.417	116.1	.6665	38.61	304.9	.5201	24.20
#1	3.363	.0017	.0117	.0005	1.591	.0038	-.0042	1.882	-.0019
#2	3.403	.0022	.0138	-.0001	1.596	.0017	.0002	1.891	-.0020
#3	3.360	.0021	.0132	.0005	1.612	.0035	.0012	1.872	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-8-A Acquired: 8/27/2012 15:53:23 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1317	.0011	.0011	.0032	<.0000	.0018	.0041
Stddev	.0012	.0057	.0010	.0013	.0158	.0004	.0002
%RSD	.9249	535.5	94.16	38.93	66.97	20.71	4.465
#1	.1308	-.0011	.0006	.0046	-.0135	.0016	.0039
#2	.1331	-.0032	.0022	.0030	-.0154	.0023	.0043
#3	.1313	.0076	.0004	.0021	-.0417	.0016	.0042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3578.9
Stddev	19.8
%RSD	.55236
#1	3556.2
#2	3592.0
#3	3588.5

Sample Name: 160-428-E-7-B Acquired: 8/27/2012 15:57:01 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0015	.0027	.0189	.0440	<.0000	.0003	35.36	<.0000
Stddev	.0004	.0109	.0023	.0024	.0004	.0000	.0014	.15	.0001
%RSD	190.9	721.2	84.27	12.66	.8031	140.5	449.4	.4308	69.95
#1	.0005	.0126	.0036	.0215	.0439	.0000	.0000	35.36	-.0001
#2	.0003	-.0093	.0044	.0184	.0444	-.0001	.0019	35.51	-.0003
#3	-.0002	.0012	.0001	.0168	.0437	.0000	-.0009	35.21	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	.6386	.5113	.0051	9.386	.1771	<.0000
Stddev	.0003	.0001	.0022	.0073	.0041	.0003	.044	.0009	.0003
%RSD	93.96	14.10	105.6	1.149	.8093	5.406	.4708	.5171	114.8
#1	.0000	-.0009	-.0037	.6363	.5134	.0053	9.355	.1760	-.0005
#2	-.0007	-.0008	.0004	.6468	.5065	.0053	9.436	.1776	-.0004
#3	-.0004	-.0007	-.0030	.6327	.5139	.0048	9.366	.1776	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.600	.0007	.0157	.0003	8.503	.0038	.0016	1.760	<.0000
Stddev	.004	.0002	.0019	.0021	.054	.0028	.0037	.002	.0004
%RSD	.2197	28.25	12.12	736.6	.6321	75.34	232.5	.1383	38.44
#1	1.602	.0005	.0139	.0026	8.477	.0024	.0058	1.763	-.0006
#2	1.596	.0008	.0177	-.0012	8.565	.0070	-.0014	1.758	-.0013
#3	1.602	.0009	.0155	-.0005	8.467	.0019	.0005	1.759	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-428-E-7-B Acquired: 8/27/2012 15:57:01 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0791	<.0000	.0011	.0039	<.0000	.0008	.0026
Stddev	.0002	.0065	.0004	.0013	.0031	.0015	.0003
%RSD	.2441	1766.	34.13	32.21	11.15	199.6	11.19
#1	.0792	-.0070	.0011	.0046	-.0308	-.0010	.0029
#2	.0791	-.0002	.0007	.0046	-.0247	.0016	.0023
#3	.0788	.0060	.0015	.0024	-.0286	.0018	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3552.6
Stddev	32.2
%RSD	.90615
#1	3535.1
#2	3533.0
#3	3589.7

Sample Name: 160-453-C-1-A Acquired: 8/27/2012 16:00:37 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0114	.0298	.0709	.0000	<.0000	31.48	<.0000
Stddev	.0006	.0136	.0009	.0020	.0004	.0000	.0030	.22	.0001
%RSD	1814.	1251.	7.560	6.712	.5411	662.3	276.0	.6924	17.63
#1	.0002	.0025	.0123	.0275	.0712	.0000	.0010	31.23	-.0005
#2	-.0007	.0104	.0112	.0310	.0711	.0000	-.0045	31.56	-.0004
#3	.0004	-.0161	.0106	.0309	.0705	.0000	.0002	31.64	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0002	<.0000	7.269	.4649	.0023	7.409	.1826	<.0000
Stddev	.0005	.0001	.0011	.057	.0235	.0016	.047	.0015	.0001
%RSD	426.0	55.68	2430.	.7791	5.050	71.51	.6393	.8332	9.999
#1	-.0004	.0003	-.0002	7.324	.4867	.0011	7.434	.1839	-.0011
#2	-.0003	.0002	-.0011	7.272	.4680	.0016	7.439	.1830	-.0009
#3	.0004	.0001	.0011	7.210	.4401	.0041	7.354	.1809	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.522	.0017	.0946	.0009	.2038	.0006	<.0000	2.471	<.0000
Stddev	.036	.0003	.0029	.0006	.0018	.0022	.0028	.007	.0010
%RSD	.5521	18.65	3.042	73.61	.8638	351.2	475.8	.2684	78.33
#1	6.560	.0016	.0951	.0012	.2052	.0030	-.0016	2.473	-.0020
#2	6.518	.0015	.0971	.0001	.2043	-.0013	.0026	2.477	-.0001
#3	6.488	.0021	.0915	.0013	.2018	.0001	-.0027	2.464	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-1-A Acquired: 8/27/2012 16:00:37 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0833	.0008	<.0000	.0006	<.0000	.0010	.0036
Stddev	.0006	.0021	.0009	.0012	.0066	.0026	.0003
%RSD	.6861	269.3	184.5	205.9	46.17	256.1	7.222
#1	.0836	.0027	-.0007	.0019	-.0091	.0036	.0033
#2	.0836	.0011	-.0012	-.0005	-.0216	-.0015	.0038
#3	.0826	-.0015	.0005	.0003	-.0120	.0009	.0037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3572.6
Stddev	7.3
%RSD	.20514
#1	3570.5
#2	3566.5
#3	3580.7

Sample Name: 160-453-C-5-A Acquired: 8/27/2012 16:04:14 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**<.0000**	**.0011**	**.1347**	**.1911**	**.0001**	**.0037**	**27.53**	**<.0000**
Stddev	.0003	.0087	.0003	.0011	.0006	.0001	.0007	.21	.0002
%RSD	77.33	80.50	23.28	.7999	.3202	101.5	18.34	.7480	159.4
#1	.0002	-.0048	.0013	.1335	.1918	.0001	.0037	27.30	.0001
#2	.0007	-.0207	.0013	.1355	.1912	.0000	.0030	27.60	-.0002
#3	.0002	-.0068	.0008	.1351	.1905	.0002	.0044	27.70	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**.0010**	**2.099**	**1.678**	**.0025**	**8.551**	**.1603**	**<.0000**
Stddev	.0001	.0005	.0014	.007	.012	.0016	.029	.0003	.0005
%RSD	68.28	259.4	138.9	.3450	.7100	61.82	.3427	.2115	43.66
#1	.0001	-.0008	.0003	2.092	1.688	.0008	8.583	.1599	-.0007
#2	.0003	.0000	.0026	2.106	1.682	.0031	8.545	.1606	-.0016
#3	.0001	.0002	.0001	2.100	1.665	.0037	8.525	.1604	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**27.77**	**.0033**	**.0127**	**.0005**	**.7234**	**.0045**	**<.0000**	**1.999**	**<.0000**
Stddev	.03	.0003	.0018	.0007	.0011	.0010	.0028	.003	.0002
%RSD	.1115	9.999	14.15	130.3	.1517	22.21	245.4	.1394	28.10
#1	27.75	.0035	.0141	.0013	.7221	.0056	-.0012	2.001	-.0010
#2	27.80	.0033	.0134	.0000	.7239	.0038	.0017	1.996	-.0006
#3	27.75	.0029	.0107	.0003	.7242	.0040	-.0039	1.999	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-453-C-5-A Acquired: 8/27/2012 16:04:14 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1240	.0001	.0012	.0018	<.0000	.0020	.0025
Stddev	.0002	.0057	.0005	.0009	.0120	.0044	.0001
%RSD	.1693	9994.	40.76	53.88	38.30	225.7	3.116
#1	.1241	.0064	.0007	.0029	-.0433	.0032	.0025
#2	.1240	-.0045	.0017	.0012	-.0194	.0057	.0025
#3	.1237	-.0018	.0012	.0012	-.0311	-.0030	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3586.5
Stddev	10.6
%RSD	.29445
#1	3598.6
#2	3579.3
#3	3581.6

Sample Name: MB 160-9563/1-A Acquired: 8/27/2012 16:07:51 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0012	.0025	<.0000	.0001	<.0000	.0241	<.0000
Stddev	.0004	.0029	.0010	.0014	.0003	.0000	.0010	.0004	.0004
%RSD	655.5	28.08	79.91	57.24	159.5	70.51	57.03	1.775	201.2
#1	.0002	-.0121	.0001	.0034	-.0002	.0000	-.0010	.0236	-.0004
#2	-.0005	-.0118	.0015	.0032	.0001	.0000	-.0013	.0243	.0002
#3	.0002	-.0070	.0021	.0008	-.0005	.0001	-.0028	.0244	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0000	.0010	<.0000	<.0000	.0019	.0005	<.0000
Stddev	.0004	.0004	.0020	.0016	.0132	.0015	.0080	.0002	.0003
%RSD	161.8	144.9	4874.	149.5	32.75	285.7	426.0	45.20	23.06
#1	.0002	-.0006	-.0010	.0005	-.0382	-.0005	.0083	.0005	-.0014
#2	-.0005	.0001	-.0013	.0028	-.0283	-.0020	-.0071	.0003	-.0014
#3	-.0004	-.0003	.0024	-.0002	-.0544	.0010	.0045	.0008	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0138	.0002	.0009	<.0000	.0017	.0030	.0002	<.0000	<.0000
Stddev	.0092	.0002	.0010	.0007	.0016	.0018	.0064	.0068	.0003
%RSD	66.64	107.6	108.5	196.0	91.50	58.42	2734.	470.4	206.6
#1	.0097	.0004	.0006	-.0009	.0033	.0040	.0050	-.0086	.0002
#2	.0073	.0002	.0019	-.0007	.0001	.0041	.0027	-.0008	-.0001
#3	.0243	.0000	.0001	.0005	.0018	.0010	-.0070	.0050	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: MB 160-9563/1-A Acquired: 8/27/2012 16:07:51 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0049	.0002	.0008	<.0000	.0009	.0067
Stddev	.0001	.0020	.0005	.0010	.0054	.0023	.0000
%RSD	188.3	41.48	242.5	135.3	93.57	250.4	.4219
#1	.0000	.0056	-.0004	.0011	-.0081	-.0017	.0066
#2	.0000	.0066	.0006	-.0004	-.0096	.0018	.0066
#3	-.0002	.0026	.0004	.0016	.0004	.0026	.0067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3648.4
Stddev	36.9
%RSD	1.0112
#1	3663.1
#2	3675.6
#3	3606.4

Sample Name: LCS 160-9563/2-A Acquired: 8/27/2012 16:11:32 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1046**	**9.963**	**.9790**	**.9930**	**.9982**	**.9839**	**1.009**	**10.06**	**.9892**
Stddev	.0003	.010	.0237	.0046	.0033	.0023	.022	.21	.0198
%RSD	.3212	.1041	2.421	.4614	.3339	.2319	2.167	2.067	2.006
#1	.1047	9.951	1.006	.9881	.9947	.9820	1.033	10.30	1.012
#2	.1043	9.967	.9666	.9936	.9985	.9832	1.004	9.954	.9792
#3	.1049	9.970	.9640	.9972	1.001	.9864	.9900	9.934	.9763
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.024**	**1.016**	**1.005**	**10.17**	**9.822**	**.9925**	**10.04**	**1.014**	**1.027**
Stddev	.024	.009	.020	.02	.042	.0025	.01	.003	.022
%RSD	2.317	.9180	1.984	.2212	.4313	.2568	.1081	.3213	2.104
#1	1.051	1.026	1.028	10.14	9.782	.9901	10.04	1.010	1.052
#2	1.012	1.010	.9957	10.18	9.818	.9922	10.06	1.015	1.015
#3	1.008	1.010	.9922	10.18	9.866	.9952	10.04	1.016	1.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.692**	**1.039**	**.9827**	**1.017**	**9.655**	**.5132**	**.9772**	F **.0178**	**1.012**
Stddev	.008	.023	.0178	.022	.224	.0102	.0264	.0070	.022
%RSD	.0808	2.191	1.809	2.212	2.323	1.989	2.701	39.52	2.162
#1	9.684	1.065	1.003	1.043	9.912	.5243	1.008	.0097	1.037
#2	9.692	1.028	.9733	1.006	9.553	.5111	.9614	.0218	.9982
#3	9.700	1.024	.9715	1.003	9.500	.5042	.9625	.0219	.9999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-9563/2-A Acquired: 8/27/2012 16:11:32 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9983	1.023	1.001	.2157	.9783	.9853	.9965
Stddev	.0025	.008	.002	.0032	.0228	.0097	.0203
%RSD	.2509	.8209	.2101	1.500	2.334	.9890	2.034
#1	.9976	1.032	.9989	.2187	.9891	.9904	1.020
#2	.9963	1.018	1.000	.2123	.9521	.9740	.9872
#3	1.001	1.018	1.003	.2161	.9938	.9913	.9826
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3639.3
Stddev	32.8
%RSD	.89995
#1	3602.0
#2	3652.3
#3	3663.4

Sample Name: 160-437-E-1-B Acquired: 8/27/2012 16:14:54 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0019	.0486	.1473	.0001	.0012	36.67	<.0000
Stddev	.0005	.0009	.0012	.0029	.0002	.0001	.0022	.39	.0002
%RSD	1570.	140.7	61.49	6.068	.1024	82.50	177.4	1.059	92.31
#1	.0004	.0001	.0013	.0519	.1474	.0002	.0000	37.04	-.0005
#2	-.0005	-.0016	.0033	.0463	.1471	.0000	.0000	36.70	-.0003
#3	.0000	-.0004	.0012	.0474	.1474	.0002	.0037	36.27	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0020	<.0000	<.0000	1.331	1.365	.0047	10.28	1.277	.0011
Stddev	.0005	.0003	.0008	.003	.027	.0012	.03	.004	.0002
%RSD	24.75	214.8	64.75	.2315	1.992	26.34	.3316	.3194	22.11
#1	.0025	.0001	-.0012	1.329	1.352	.0033	10.30	1.280	.0010
#2	.0015	-.0001	-.0004	1.335	1.346	.0055	10.24	1.272	.0009
#3	.0022	-.0004	-.0019	1.329	1.396	.0052	10.30	1.277	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	9.942	.0067	.0149	.0006	.3431	.0018	<.0000	3.064	<.0000
Stddev	.037	.0005	.0010	.0007	.0021	.0009	.0022	.010	.0001
%RSD	.3766	7.153	6.671	113.8	.6213	52.55	388.2	.3396	7.651
#1	9.959	.0071	.0152	.0010	.3453	.0021	.0019	3.061	-.0014
#2	9.899	.0061	.0156	.0011	.3430	.0007	-.0013	3.056	-.0016
#3	9.969	.0068	.0137	-.0002	.3410	.0025	-.0023	3.076	-.0017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-1-B Acquired: 8/27/2012 16:14:54 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1283	<.0000	.0002	.0040	<.0000	<.0000	.0065
Stddev	.0004	.0034	.0012	.0007	.0060	.0035	.0003
%RSD	.2938	250.1	612.6	18.27	20.00	3662.	3.949
#1	.1284	-.0014	.0015	.0035	-.0236	.0029	.0068
#2	.1279	-.0048	-.0002	.0048	-.0355	-.0039	.0063
#3	.1287	.0021	-.0007	.0036	-.0314	.0007	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3574.5
Stddev	33.8
%RSD	.94603
#1	3538.6
#2	3579.2
#3	3605.7

Sample Name: 160-437-E-1-B SD Acquired: 8/27/2012 16:18:30 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0028	.0088	.0265	<.0000	.0017	6.667	<.0000
Stddev	.0002	.0078	.0006	.0011	.0001	.0000	.0009	.035	.0001
%RSD	98.26	322.3	20.57	12.58	.3291	81.88	50.07	.5321	53.32
#1	-.0001	.0016	.0024	.0076	.0265	-.0001	.0016	6.645	-.0001
#2	-.0004	.0026	.0026	.0092	.0264	-.0001	.0009	6.649	-.0001
#3	.0000	-.0115	.0035	.0097	.0266	.0000	.0026	6.708	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	<.0000	.0012	.2409	.2401	.0015	1.875	.2310	<.0000
Stddev	.0007	.0004	.0010	.0006	.0182	.0010	.017	.0010	.0001
%RSD	302.2	76.53	87.72	.2532	7.560	67.92	.8812	.4434	10.68
#1	.0007	-.0007	.0022	.2412	.2464	.0005	1.856	.2311	-.0011
#2	.0006	-.0001	.0002	.2402	.2543	.0026	1.886	.2298	-.0009
#3	-.0006	-.0007	.0011	.2414	.2197	.0014	1.883	.2319	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.803	.0012	.0035	<.0000	.0638	.0005	<.0000	.5451	<.0000
Stddev	.016	.0002	.0018	.0011	.0008	.0030	.0030	.0075	.0006
%RSD	.8924	19.05	51.74	189.6	1.292	625.4	556.6	1.370	273.6
#1	1.799	.0014	.0017	-.0015	.0648	-.0020	.0017	.5374	.0000
#2	1.820	.0011	.0053	-.0008	.0634	.0038	-.0039	.5523	-.0009
#3	1.788	.0010	.0033	.0006	.0633	-.0004	.0006	.5454	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-1-B SD Acquired: 8/27/2012 16:18:30 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0231	<.0000	<.0000	.0012	<.0000	<.0000	.0058
Stddev	.0000	.0021	.0002	.0009	.0096	.0025	.0001
%RSD	.2083	152.9	323.1	74.85	76.85	243.9	1.034
#1	.0230	-.0029	.0002	.0020	-.0183	.0016	.0058
#2	.0230	.0010	-.0001	.0003	-.0014	-.0034	.0058
#3	.0231	-.0021	-.0003	.0012	-.0177	-.0014	.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3642.1
Stddev	23.5
%RSD	.64601
#1	3667.9
#2	3636.6
#3	3621.8

Sample Name: 160-437-E-1-C MS Acquired: 8/27/2012 16:22:09 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0194**	**1.852**	**.1893**	**.2245**	**.3206**	**.1843**	**.1857**	**36.56**	**.1893**
Stddev	.0004	.009	.0021	.0064	.0020	.0015	.0014	.39	.0021
%RSD	1.948	.4880	1.113	2.841	.6267	.8024	.7365	1.055	1.094
#1	.0198	1.852	.1878	.2201	.3194	.1834	.1845	36.13	.1869
#2	.0191	1.842	.1917	.2215	.3196	.1836	.1872	36.89	.1907
#3	.0192	1.860	.1884	.2318	.3229	.1860	.1855	36.66	.1902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1957**	**.1903**	**.1895**	**3.124**	**3.111**	**.1895**	**11.37**	**1.373**	**.1943**
Stddev	.0022	.0032	.0034	.017	.020	.0019	.09	.010	.0020
%RSD	1.115	1.692	1.803	.5506	.6528	.9988	.7789	.7068	1.012
#1	.1932	.1867	.1858	3.118	3.103	.1906	11.33	1.369	.1922
#2	.1971	.1926	.1900	3.110	3.097	.1873	11.31	1.365	.1961
#3	.1968	.1918	.1926	3.143	3.135	.1905	11.47	1.384	.1946
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.15**	**.2022**	**.2055**	**.1936**	**2.174**	**.0979**	**.1903**	**2.860**	**.1904**
Stddev	.10	.0019	.0032	.0012	.023	.0014	.0036	.027	.0021
%RSD	.9211	.9473	1.541	.6272	1.050	1.469	1.882	.9428	1.094
#1	11.09	.2000	.2020	.1922	2.153	.0975	.1864	2.830	.1892
#2	11.09	.2037	.2081	.1942	2.198	.0994	.1913	2.866	.1928
#3	11.27	.2028	.2064	.1945	2.170	.0966	.1934	2.883	.1893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-1-C MS Acquired: 8/27/2012 16:22:09 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3029	.1864	.1843	.0451	.1496	.1828	.1919
Stddev	.0025	.0013	.0008	.0010	.0078	.0015	.0024
%RSD	.8378	.6774	.4083	2.277	5.232	.8333	1.257
#1	.3012	.1860	.1850	.0448	.1447	.1814	.1893
#2	.3016	.1854	.1835	.0463	.1455	.1825	.1940
#3	.3058	.1878	.1842	.0444	.1586	.1844	.1925
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3604.8
Stddev	47.2
%RSD	1.3107
#1	3651.8
#2	3557.3
#3	3605.4

Sample Name: 160-437-E-1-D MSD Acquired: 8/27/2012 16:25:39 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0207**	**1.965**	**.1994**	**.2387**	**.3373**	**.1955**	**.2036**	**37.22**	**.1964**
Stddev	.0005	.004	.0003	.0032	.0005	.0007	.0017	.30	.0015
%RSD	2.481	.2090	.1474	1.350	.1562	.3432	.8589	.8092	.7751
#1	.0203	1.963	.1996	.2393	.3368	.1947	.2039	37.23	.1965
#2	.0205	1.963	.1996	.2416	.3378	.1958	.2052	37.51	.1979
#3	.0213	1.970	.1991	.2352	.3373	.1959	.2018	36.91	.1949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2042**	**.1970**	**.2008**	**3.303**	**3.263**	**.2012**	**11.86**	**1.428**	**.2035**
Stddev	.0019	.0020	.0029	.001	.006	.0011	.01	.005	.0020
%RSD	.9327	1.019	1.467	.0358	.1913	.5714	.1208	.3635	.9939
#1	.2040	.1992	.2042	3.301	3.258	.2000	11.84	1.423	.2041
#2	.2062	.1968	.1991	3.304	3.261	.2014	11.87	1.434	.2051
#3	.2024	.1952	.1991	3.303	3.270	.2022	11.86	1.427	.2012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**11.57**	**.2110**	**.2152**	**.2030**	**2.272**	**.1024**	**.1939**	**2.961**	**.1999**
Stddev	.02	.0021	.0030	.0038	.025	.0003	.0018	.006	.0016
%RSD	.1890	.9974	1.397	1.889	1.079	.3397	.9091	.2202	.8055
#1	11.54	.2111	.2147	.2016	2.266	.1027	.1959	2.954	.2001
#2	11.58	.2131	.2184	.2073	2.300	.1020	.1935	2.967	.2014
#3	11.58	.2089	.2125	.2001	2.252	.1025	.1924	2.961	.1982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-1-D MSD Acquired: 8/27/2012 16:25:39 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3179	.1974	.1974	.0463	.1501	.1927	.2008
Stddev	.0010	.0038	.0011	.0016	.0169	.0024	.0018
%RSD	.3036	1.931	.5401	3.504	11.25	1.253	.9176
#1	.3168	.2017	.1966	.0445	.1666	.1900	.2005
#2	.3185	.1961	.1986	.0467	.1508	.1945	.2027
#3	.3183	.1944	.1969	.0477	.1329	.1937	.1991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3657.1
Stddev	17.7
%RSD	.48294
#1	3640.3
#2	3655.5
#3	3675.5

Sample Name: CCV Acquired: 8/27/2012 16:29:11 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9767**	**49.51**	**5.020**	**4.967**	**5.018**	**4.984**	**5.066**	**25.34**	**4.999**
Stddev	.0223	.11	.034	.008	.012	.012	.031	.18	.034
%RSD	2.284	.2235	.6848	.1524	.2361	.2417	.6152	.6909	.6798
#1	.9690	49.39	5.060	4.964	5.005	4.973	5.102	25.54	5.036
#2	.9593	49.60	4.998	4.976	5.029	4.997	5.046	25.24	4.968
#3	1.002	49.54	5.002	4.961	5.019	4.982	5.051	25.24	4.994
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.027**	**4.948**	**5.035**	**49.96**	**49.68**	**4.949**	**24.81**	**4.973**	**4.983**
Stddev	.026	.085	.030	.09	.16	.015	.05	.011	.034
%RSD	.5085	1.708	.5877	.1744	.3135	.3075	.2171	.2275	.6749
#1	5.057	4.928	5.069	49.88	49.51	4.932	24.77	4.960	5.022
#2	5.011	4.874	5.012	50.05	49.76	4.961	24.87	4.982	4.963
#3	5.015	5.040	5.026	49.96	49.79	4.954	24.79	4.977	4.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.32**	**5.016**	**5.032**	**5.026**	**50.27**	**1.001**	**5.067**	**4.901**	**4.983**
Stddev	.06	.034	.038	.033	.38	.008	.040	.013	.031
%RSD	.1127	.6674	.7546	.6603	.7534	.8380	.7789	.2566	.6300
#1	49.27	5.054	5.076	5.063	50.70	1.011	5.110	4.887	5.018
#2	49.38	4.995	5.009	5.002	50.00	.9969	5.032	4.911	4.957
#3	49.31	4.998	5.012	5.011	50.09	.9962	5.058	4.905	4.974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 16:29:11 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.779**	**5.013**	**4.987**	**5.072**	**4.996**	**4.978**	**5.000**
Stddev	.072	.105	.009	.033	.144	.020	.031
%RSD	1.498	2.101	.1762	.6517	2.892	.3921	.6253
#1	4.697	5.000	4.978	5.110	4.953	4.958	5.036
#2	4.823	4.915	4.996	5.049	4.877	4.997	4.977
#3	4.818	5.124	4.987	5.057	5.157	4.977	4.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3602.8**
Stddev	16.5
%RSD	.45744
#1	3591.3
#2	3621.7
#3	3595.3

Sample Name: CCB Acquired: 8/27/2012 16:32:32 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0052	.0010	.0179	.0002	.0006	<.0000	.0028	<.0000
Stddev	.0004	.0058	.0017	.0035	.0004	.0003	.0014	.0017	.0002
%RSD	71.15	110.5	170.0	19.41	206.1	49.09	938.7	61.03	182.6
#1	-.0010	.0062	.0028	.0163	.0006	.0009	-.0005	.0028	-.0004
#2	-.0007	-.0010	-.0007	.0219	.0001	.0005	-.0014	.0011	-.0002
#3	-.0001	.0105	.0010	.0155	-.0002	.0004	.0014	.0045	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0012	.0067	<.0000	.0019	<.0000	.0009	.0058
Stddev	.0002	.0003	.0014	.0024	.0336	.0010	.0116	.0005	.0007
%RSD	284.0	52.65	115.9	36.44	160.3	50.06	157.2	59.19	11.55
#1	-.0001	-.0006	.0027	.0091	.0070	.0024	-.0204	.0015	.0053
#2	-.0002	-.0010	.0000	.0066	-.0117	.0008	.0020	.0006	.0056
#3	.0001	-.0003	.0009	.0043	-.0582	.0026	-.0038	.0006	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0137	.0005	.0013	<.0000	<.0000	.0031	.0009	<.0000	.0006
Stddev	.0045	.0001	.0008	.0020	.0011	.0005	.0021	.0047	.0003
%RSD	32.89	26.08	59.36	1175.	329.0	17.25	225.5	199.5	46.10
#1	.0186	.0005	.0017	.0019	-.0012	.0031	.0002	-.0066	.0003
#2	.0128	.0003	.0004	-.0020	-.0007	.0036	.0033	.0028	.0008
#3	.0097	.0006	.0018	-.0004	.0009	.0026	-.0007	-.0033	.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 16:32:32 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0017	.0011	<.0000	<.0000	.0005
Stddev	.0004	.0047	.0005	.0008	.0070	.0040	.0001
%RSD	60.99	129.1	31.61	68.35	68.03	313.1	14.34
#1	.0010	-.0048	.0022	.0005	-.0139	-.0014	.0005
#2	.0005	-.0077	.0017	.0020	-.0022	-.0052	.0005
#3	.0003	.0015	.0012	.0009	-.0148	.0028	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3795.5
Stddev	43.5
%RSD	1.1453
#1	3813.1
#2	3827.4
#3	3746.0

Sample Name: 160-437-E-2-B Acquired: 8/27/2012 16:36:16 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0026	.2553	.3545	.0001	.0044	W 45.53
Stddev	.0006	.0026	.0004	.0006	.0017	.0001	.0021	1.03
%RSD	5439.	54.92	15.24	.2226	.4761	103.6	47.33	2.262
#1	-.0007	-.0037	.0030	.2547	.3537	.0001	.0066	44.36
#2	.0003	-.0028	.0023	.2556	.3534	.0000	.0039	45.95
#3	.0004	-.0077	.0024	.2557	.3565	.0001	.0026	46.29
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0002	.0008	<.0000	5.470	3.659	.0069	14.55
Stddev	.0002	.0006	.0005	.0024	.038	.052	.0008	.08
%RSD	104.3	318.4	68.77	139.7	.6934	1.430	11.54	.5700
#1	-.0001	.0007	.0003	-.0011	5.440	3.707	.0065	14.47
#2	-.0004	-.0004	.0007	.0003	5.457	3.667	.0063	14.56
#3	.0000	.0002	.0013	-.0044	5.512	3.604	.0078	14.64
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0820	<.0000	55.57	.0033	.1033	.0007	.3194	.0024
Stddev	.0002	.0002	.23	.0004	.0039	.0017	.0092	.0011
%RSD	.2746	50.33	.4096	12.36	3.782	256.6	2.884	46.30
#1	.0822	-.0004	55.35	.0028	.0988	.0026	.3092	.0029
#2	.0818	-.0007	55.56	.0035	.1058	-.0003	.3271	.0011
#3	.0819	-.0003	55.81	.0035	.1054	-.0003	.3220	.0032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-437-E-2-B Acquired: 8/27/2012 16:36:16 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	3.017	<.0000	.1430	.0036	.0008	.0011	<.0000
Stddev	.0012	.004	.0001	.0007	.0024	.0007	.0012	.0060
%RSD	43.76	.1500	12.83	.5237	67.16	82.03	117.0	13.32
#1	-.0018	3.016	-.0010	.1424	.0019	.0015	.0024	-.0494
#2	-.0041	3.014	-.0011	.1427	.0064	.0002	.0008	-.0470
#3	-.0023	3.022	-.0009	.1438	.0026	.0007	.0000	-.0381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0017	.0025
Stddev	.0029	.0001
%RSD	177.8	5.527
#1	.0040	.0025
#2	.0026	.0024
#3	-.0016	.0027
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3672.5
Stddev	34.1
%RSD	.92849
#1	3711.9
#2	3652.8
#3	3652.9

Sample Name: 160-437-E-3-B Acquired: 8/27/2012 16:39:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0084	.0334	.1924	.3619	.0000	.0029	24.75	<.0000
Stddev	.0008	.0037	.0015	.0028	.0027	.0000	.0005	.56	.0002
%RSD	154.5	44.67	4.358	1.443	.7564	279.2	17.83	2.252	33.22
#1	-.0004	.0111	.0331	.1938	.3589	.0000	.0029	24.15	-.0004
#2	-.0015	.0041	.0350	.1892	.3624	.0000	.0024	24.86	-.0008
#3	.0002	.0099	.0321	.1942	.3643	.0000	.0035	25.25	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0006	<.0000	7.334	7.794	.0099	14.53	.0432	<.0000
Stddev	.0004	.0002	.0022	.069	.085	.0019	.07	.0001	.0002
%RSD	12200.	27.95	152.9	.9335	1.088	19.61	.5053	.3319	34.90
#1	.0004	.0006	-.0004	7.257	7.698	.0110	14.44	.0430	-.0009
#2	.0000	.0004	-.0040	7.357	7.825	.0110	14.55	.0431	-.0005
#3	-.0003	.0007	.0001	7.388	7.858	.0076	14.59	.0433	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	19.60	.0027	.1973	.0004	.1553	.0020	<.0000	4.220	<.0000
Stddev	.12	.0002	.0047	.0012	.0017	.0011	.0003	.034	.0005
%RSD	.5962	8.698	2.379	279.3	1.121	57.58	18.17	.7979	48.08
#1	19.49	.0026	.1920	-.0007	.1540	.0011	-.0022	4.193	-.0014
#2	19.58	.0025	.1989	.0004	.1548	.0033	-.0020	4.210	-.0005
#3	19.73	.0029	.2010	.0017	.1573	.0016	-.0015	4.258	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-3-B Acquired: 8/27/2012 16:39:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3300	<.0000	.0001	.0011	<.0000	.0025	.0026
Stddev	.0023	.0069	.0011	.0015	.0181	.0012	.0001
%RSD	.6962	1179.	2021.	135.1	113.6	49.49	3.536
#1	.3275	.0017	.0013	.0010	-.0365	.0040	.0025
#2	.3305	-.0084	-.0010	.0026	-.0019	.0018	.0027
#3	.3320	.0049	-.0001	-.0003	-.0095	.0018	.0027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3663.8
Stddev	18.5
%RSD	.50369
#1	3670.2
#2	3678.3
#3	3643.0

Sample Name: 160-437-E-4-B Acquired: 8/27/2012 16:43:30 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0030	.1579	.1520	.0000	.0038	37.16	<.0000
Stddev	.0003	.0107	.0011	.0049	.0012	.0000	.0031	1.18	.0001
%RSD	66.71	410.1	37.27	3.130	.7765	160.1	80.20	3.186	40.79
#1	-.0004	-.0108	.0031	.1634	.1530	.0001	.0005	35.88	-.0002
#2	-.0001	.0094	.0041	.1537	.1507	.0000	.0065	37.37	-.0002
#3	-.0006	-.0064	.0019	.1568	.1523	.0000	.0046	38.22	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0004	.0006	4.352	3.929	.0065	12.89	.2311	<.0000
Stddev	.0001	.0007	.0020	.017	.044	.0005	.05	.0013	.0003
%RSD	745.0	174.8	352.8	.3842	1.127	7.419	.4117	.5794	28.38
#1	.0001	-.0002	-.0001	4.365	3.942	.0061	12.89	.2322	-.0010
#2	-.0001	.0003	.0028	4.333	3.880	.0071	12.83	.2296	-.0013
#3	-.0001	.0011	-.0010	4.357	3.965	.0064	12.94	.2315	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	20.75	.0026	.0495	.0008	1.276	.0026	<.0000	2.150	<.0000
Stddev	.05	.0008	.0010	.0017	.043	.0003	.0029	.005	.0009
%RSD	.2496	32.37	2.097	225.1	3.381	10.46	112.7	.2384	61.39
#1	20.79	.0017	.0484	-.0012	1.228	.0023	-.0005	2.154	-.0010
#2	20.69	.0034	.0503	.0019	1.289	.0025	-.0060	2.151	-.0009
#3	20.77	.0026	.0499	.0016	1.311	.0029	-.0014	2.144	-.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-4-B Acquired: 8/27/2012 16:43:30 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2091	.0011	.0001	.0029	<.0000	.0007	.0023
Stddev	.0005	.0075	.0009	.0009	.0135	.0032	.0002
%RSD	.2262	666.6	670.2	32.65	26.45	477.2	8.460
#1	.2096	.0094	-.0002	.0026	-.0635	.0042	.0021
#2	.2087	-.0050	-.0006	.0022	-.0533	-.0020	.0025
#3	.2089	-.0011	.0012	.0040	-.0367	-.0002	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3685.3
Stddev	44.5
%RSD	1.2074
#1	3717.9
#2	3703.4
#3	3634.6

Sample Name: 160-437-E-5-B Acquired: 8/27/2012 16:47:07 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**<.0000**	**.0024**	**.3475**	**.1318**	**.0000**	**.0031**	**27.56**	**<.0000**
Stddev	.0003	.0103	.0019	.0072	.0006	.0000	.0032	.08	.0001
%RSD	53.75	149.9	82.32	2.076	.4477	66.86	101.8	.2970	32.99
#1	.0002	-.0170	.0046	.3410	.1311	.0001	.0030	27.53	-.0002
#2	.0008	.0036	.0010	.3462	.1319	.0000	.0000	27.65	-.0003
#3	.0007	-.0071	.0015	.3552	.1323	.0000	.0063	27.49	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0005**	**.0020**	**3.818**	**14.72**	**.0066**	**17.94**	**.0132**	**<.0000**
Stddev	.0000	.0002	.0028	.009	.07	.0007	.04	.0004	.0001
%RSD	4.714	35.42	136.0	.2420	.5032	10.80	.2354	3.365	72.71
#1	.0010	.0003	-.0001	3.812	14.63	.0060	17.89	.0136	-.0001
#2	.0009	.0007	.0052	3.813	14.73	.0074	17.95	.0132	-.0002
#3	.0009	.0005	.0010	3.828	14.78	.0065	17.97	.0127	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**57.28**	**.0393**	**.0755**	**.0012**	**.5204**	**<.0000**	**<.0000**	**3.246**	**<.0000**
Stddev	.25	.0002	.0012	.0007	.0040	.0016	.0014	.016	.0008
%RSD	.4432	.6229	1.630	62.42	.7631	165.9	78.97	.4969	647.7
#1	57.00	.0393	.0752	.0018	.5201	-.0020	-.0023	3.228	-.0009
#2	57.32	.0390	.0768	.0004	.5245	-.0017	-.0002	3.259	-.0003
#3	57.51	.0395	.0744	.0014	.5165	.0009	-.0029	3.251	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-5-B Acquired: 8/27/2012 16:47:07 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1381	.0008	.0004	.0044	<.0000	<.0000	.0040
Stddev	.0004	.0019	.0015	.0009	.0023	.0033	.0003
%RSD	.3052	250.0	368.9	21.44	4.744	746.5	6.977
#1	.1376	.0016	.0012	.0052	-.0476	-.0023	.0041
#2	.1382	.0021	-.0013	.0034	-.0460	.0033	.0041
#3	.1384	-.0014	.0013	.0047	-.0505	-.0023	.0037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3729.2
Stddev	15.2
%RSD	.40824
#1	3736.8
#2	3711.7
#3	3739.2

Sample Name: 160-437-E-6-B Acquired: 8/27/2012 16:50:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	.0369	.0001	.1974	.0932	.0000	<.0000	F 107.8	<.0000
Stddev	.0004	.0111	.0022	.0033	.0005	.0000	.0025	.7	.0001
%RSD	6984.	30.11	2077.	1.677	.5067	41.66	152.4	.6762	55.35
#1	-.0004	.0325	.0021	.1938	.0935	.0000	.0004	107.0	-.0001
#2	.0000	.0287	.0006	.1982	.0934	.0001	-.0044	108.3	-.0004
#3	.0004	.0495	-.0023	.2002	.0927	.0000	-.0008	108.1	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0003	<.0000	2.240	2.370	.0095	12.23	.2159	<.0000
Stddev	.0002	.0002	.0001	.008	.049	.0006	.04	.0008	.0002
%RSD	122.0	65.85	34.86	.3524	2.053	5.810	.3294	.3573	21.69
#1	.0003	.0003	-.0002	2.245	2.414	.0094	12.26	.2166	-.0011
#2	.0000	.0001	-.0003	2.243	2.318	.0090	12.18	.2151	-.0008
#3	.0001	.0005	-.0004	2.231	2.380	.0101	12.23	.2159	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	34.19	.0019	.1035	.0021	43.69	.0026	<.0000	3.405	<.0000
Stddev	.08	.0003	.0023	.0005	.25	.0006	.0036	.018	.0006
%RSD	.2460	15.64	2.230	23.28	.5714	24.97	392.9	.5358	31.62
#1	34.28	.0016	.1010	.0023	43.41	.0019	-.0011	3.410	-.0024
#2	34.12	.0022	.1042	.0015	43.88	.0032	.0028	3.420	-.0018
#3	34.16	.0020	.1054	.0023	43.77	.0026	-.0044	3.385	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-6-B Acquired: 8/27/2012 16:50:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2589	<.0000	.0013	.0010	<.0000	<.0000	.0023
Stddev	.0007	.0012	.0002	.0013	.0100	.0031	.0001
%RSD	.2859	18.74	12.27	133.2	10.20	218.7	3.785
#1	.2598	-.0075	.0013	.0010	-.1085	.0022	.0023
#2	.2586	-.0051	.0014	.0024	-.0950	-.0036	.0024
#3	.2584	-.0068	.0011	-.0003	-.0891	-.0029	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3713.5
Stddev	26.1
%RSD	.70358
#1	3736.7
#2	3685.2
#3	3718.6

Sample Name: 160-437-E-7-B Acquired: 8/27/2012 16:54:19 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0082**	**.0072**	**.0173**	**.1213**	**.0000**	**.0021**	F **55.17**	**<.0000**
Stddev	.0005	.0022	.0031	.0025	.0003	.0001	.0012	.83	.0001
%RSD	1063.	26.59	42.72	14.53	.2718	392.3	57.29	1.505	75.15
#1	.0004	.0065	.0037	.0157	.1214	-.0001	.0033	54.36	-.0002
#2	-.0005	.0074	.0088	.0159	.1216	.0002	.0021	55.12	-.0002
#3	.0002	.0107	.0092	.0202	.1210	.0000	.0009	56.02	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0007**	**<.0000**	**7.585**	**1.338**	**.0030**	**16.35**	**.7970**	**<.0000**
Stddev	.0002	.0001	.0023	.015	.014	.0021	.02	.0001	.0004
%RSD	2407.	18.99	494.8	.1990	1.050	68.36	.1440	.0149	54.25
#1	.0001	.0006	-.0032	7.600	1.354	.0010	16.36	.7969	-.0008
#2	.0001	.0008	.0007	7.586	1.331	.0030	16.36	.7971	-.0004
#3	-.0002	.0006	.0010	7.570	1.328	.0051	16.32	.7969	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.799**	**.0011**	**.1497**	**.0013**	**.1176**	**.0024**	**.0022**	**3.773**	**<.0000**
Stddev	.015	.0002	.0019	.0015	.0055	.0015	.0008	.013	.0002
%RSD	.4048	18.11	1.266	119.4	4.656	63.88	35.95	.3492	15.91
#1	3.816	.0009	.1478	-.0002	.1164	.0035	.0020	3.763	-.0014
#2	3.789	.0013	.1516	.0029	.1129	.0007	.0015	3.769	-.0010
#3	3.790	.0011	.1497	.0012	.1236	.0029	.0031	3.788	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-7-B Acquired: 8/27/2012 16:54:19 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1901	<.0000	.0000	.0014	<.0000	.0035	.0024
Stddev	.0006	.0007	.0006	.0011	.0186	.0019	.0001
%RSD	.2984	78.90	1371.	78.21	29.58	55.20	3.160
#1	.1906	-.0001	-.0007	.0015	-.0843	.0033	.0024
#2	.1903	-.0012	.0005	.0023	-.0524	.0056	.0025
#3	.1895	-.0014	.0003	.0002	-.0519	.0017	.0024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3649.0
Stddev	56.3
%RSD	1.5441
#1	3709.7
#2	3639.2
#3	3598.3

Sample Name: 160-437-E-8-B Acquired: 8/27/2012 16:57:56 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.1180**	**.0071**	**.2000**	**.0204**	**.0001**	**.0018**	F **60.25**	**<.0000**
Stddev	.0003	.0081	.0008	.0028	.0001	.0000	.0043	.57	.0003
%RSD	369.8	6.858	10.83	1.410	.7034	22.31	239.8	.9503	86.94
#1	-.0001	.1272	.0075	.1977	.0202	.0001	-.0028	59.61	-.0006
#2	.0004	.1145	.0075	.1991	.0205	.0001	.0057	60.71	-.0001
#3	.0000	.1122	.0062	.2031	.0204	.0001	.0025	60.42	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0011**	**<.0000**	**12.20**	**8.046**	**.0105**	**29.58**	**.5588**	**<.0000**
Stddev	.0003	.0001	.0014	.02	.046	.0013	.04	.0008	.0001
%RSD	615.0	13.88	50.66	.1843	.5751	12.71	.1292	.1366	9.235
#1	.0004	.0012	-.0038	12.21	8.006	.0110	29.59	.5580	-.0012
#2	-.0003	.0011	-.0030	12.18	8.036	.0114	29.54	.5587	-.0011
#3	.0001	.0009	-.0012	12.22	8.096	.0089	29.62	.5595	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**35.68**	**.0033**	**.0561**	**.0004**	**57.11**	**.0026**	**<.0000**	**3.522**	**<.0000**
Stddev	.06	.0005	.0012	.0005	.78	.0037	.0019	.008	.0005
%RSD	.1586	13.85	2.062	131.8	1.367	139.8	128.5	.2237	46.78
#1	35.66	.0030	.0556	.0001	56.24	.0065	-.0008	3.513	-.0014
#2	35.63	.0031	.0552	.0010	57.75	-.0008	-.0036	3.525	-.0011
#3	35.74	.0038	.0574	.0001	57.34	.0022	.0000	3.528	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-8-B Acquired: 8/27/2012 16:57:56 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1516	<.0000	.0002	.0019	<.0000	.0022	.0023
Stddev	.0005	.0037	.0009	.0008	.0155	.0039	.0001
%RSD	.3113	89.38	372.7	41.59	17.76	179.3	6.173
#1	.1518	-.0004	.0012	.0026	-.0695	.0049	.0022
#2	.1510	-.0043	-.0001	.0021	-.0987	.0041	.0024
#3	.1519	-.0077	-.0004	.0010	-.0931	-.0023	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3749.2
Stddev	26.8
%RSD	.71472
#1	3736.9
#2	3730.8
#3	3779.9

Sample Name: 160-437-E-9-B Acquired: 8/27/2012 17:01:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0088	.0019	.2818	.4016	.0000	<.0000	W 48.18
Stddev	.0007	.0041	.0013	.0045	.0010	.0000	.0024	.73
%RSD	428.2	46.56	69.15	1.597	.2471	196.7	12720.	1.505
#1	-.0004	.0055	.0031	.2858	.4014	.0000	.0015	49.00
#2	-.0007	.0076	.0005	.2828	.4027	.0001	-.0028	47.63
#3	.0006	.0134	.0023	.2769	.4007	.0000	.0013	47.89
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0004	.0006	<.0000	6.224	4.087	.0083	16.40
Stddev	.0000	.0001	.0003	.0014	.006	.026	.0013	.04
%RSD	25.53	30.02	42.23	134.8	.0990	.6458	15.84	.2204
#1	-.0001	.0004	.0009	-.0002	6.220	4.116	.0068	16.37
#2	-.0001	.0004	.0006	-.0003	6.231	4.066	.0093	16.44
#3	-.0002	.0002	.0004	-.0026	6.221	4.078	.0088	16.39
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0925	<.0000	61.17	.0035	.1196	<.0000	.3439	.0026
Stddev	.0002	.0002	.07	.0002	.0019	.0011	.0053	.0016
%RSD	.2686	23.26	.1141	6.211	1.593	119.7	1.528	62.18
#1	.0926	-.0013	61.11	.0038	.1217	-.0002	.3495	.0030
#2	.0922	-.0009	61.25	.0034	.1180	-.0022	.3391	.0039
#3	.0927	-.0009	61.17	.0034	.1192	-.0004	.3430	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-437-E-9-B Acquired: 8/27/2012 17:01:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	3.423	<.0000	.1607	<.0000	.0003	.0016	<.0000
Stddev	.0026	.005	.0004	.0004	.0038	.0003	.0008	.0151
%RSD	158.5	.1398	22.26	.2237	273.0	113.8	49.68	18.37
#1	-.0003	3.429	-.0014	.1607	.0029	-.0001	.0022	-.0648
#2	-.0046	3.420	-.0020	.1611	-.0044	.0005	.0021	-.0917
#3	.0000	3.421	-.0014	.1604	-.0028	.0005	.0007	-.0902
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0005	.0024
Stddev	.0009	.0003
%RSD	187.5	11.23
#1	.0015	.0027
#2	-.0004	.0023
#3	.0005	.0022
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3772.4
Stddev	45.0
%RSD	1.1920
#1	3730.2
#2	3767.2
#3	3819.7

Sample Name: 160-442-E-1-D Acquired: 8/27/2012 17:05:09 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0011	.0029	.0194	.0514	.0001	<.0000	17.80	<.0000
Stddev	.0001	.0031	.0010	.0041	.0002	.0000	.0010	.38	.0001
%RSD	57.69	281.5	33.74	21.08	.4413	20.60	141.0	2.146	105.9
#1	-.0002	.0011	.0040	.0161	.0515	.0001	.0000	17.43	-.0001
#2	-.0001	-.0020	.0022	.0240	.0516	.0000	-.0019	17.79	.0000
#3	-.0002	.0042	.0025	.0182	.0511	.0001	-.0003	18.19	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	.1833	1.034	.0018	3.007	.1759	.0032
Stddev	.0000	.0001	.0003	.0019	.013	.0020	.017	.0005	.0003
%RSD	33.29	29.06	23.91	1.054	1.290	110.9	.5640	.2814	10.47
#1	-.0002	-.0006	-.0013	.1850	1.049	.0041	3.023	.1754	.0028
#2	-.0002	-.0003	-.0011	.1838	1.029	.0012	3.008	.1762	.0034
#3	-.0001	-.0006	-.0017	.1812	1.023	.0002	2.989	.1762	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.064	.0025	.0071	.0007	.5520	<.0000	<.0000	1.902	<.0000
Stddev	.010	.0001	.0019	.0004	.0157	.0008	.0028	.012	.0011
%RSD	.2418	2.815	26.16	57.09	2.839	1453.	97.38	.6262	74.25
#1	4.053	.0024	.0086	.0006	.5414	.0004	-.0061	1.888	-.0026
#2	4.067	.0025	.0077	.0012	.5446	-.0010	-.0009	1.909	-.0004
#3	4.072	.0026	.0050	.0004	.5700	.0004	-.0016	1.910	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-1-D Acquired: 8/27/2012 17:05:09 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0991	<.0000	.0002	.0014	<.0000	<.0000	.0029
Stddev	.0001	.0042	.0007	.0019	.0044	.0004	.0001
%RSD	.0997	161.1	388.8	134.2	11.25	70.15	4.668
#1	.0991	.0021	-.0007	.0036	-.0415	-.0008	.0028
#2	.0993	-.0040	.0007	.0006	-.0342	-.0001	.0028
#3	.0991	-.0059	.0005	.0000	-.0421	-.0009	.0031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3700.7
Stddev	63.8
%RSD	1.7250
#1	3769.7
#2	3688.4
#3	3643.8

Sample Name: 160-442-E-2-B Acquired: 8/27/2012 17:08:47 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**<.0000**	**.0014**	**.0262**	**.0531**	**<.0000**	**<.0000**	**17.44**	**<.0000**
Stddev	.0008	.0032	.0016	.0017	.0002	.0000	.0013	.18	.0001
%RSD	2025.	40.10	110.4	6.315	.4578	133.5	2413.	1.027	39.33
#1	.0008	-.0082	.0030	.0267	.0532	.0000	.0007	17.33	-.0001
#2	.0001	-.0110	.0014	.0243	.0528	.0000	.0007	17.65	-.0002
#3	-.0008	-.0046	-.0002	.0275	.0532	-.0001	-.0016	17.35	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**<.0000**	**.7604**	**.9009**	**.0037**	**4.598**	**.0790**	**<.0000**
Stddev	.0003	.0001	.0015	.0029	.0317	.0003	.041	.0004	.0004
%RSD	281.8	31.29	93.46	.3814	3.514	7.678	.8965	.5492	99.84
#1	-.0004	-.0002	-.0022	.7582	.9297	.0034	4.578	.0786	-.0009
#2	-.0001	-.0003	.0001	.7593	.8670	.0039	4.572	.0790	-.0002
#3	.0002	-.0004	-.0028	.7637	.9060	.0039	4.646	.0795	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.134**	**.0007**	**.0356**	**<.0000**	**2.061**	**<.0000**	**.0013**	**2.210**	**<.0000**
Stddev	.030	.0004	.0011	.0007	.021	.0006	.0017	.017	.0010
%RSD	.9681	61.32	2.984	536.4	1.016	34.45	129.7	.7891	117.1
#1	3.121	.0011	.0344	.0005	2.056	-.0024	.0007	2.208	-.0001
#2	3.112	.0008	.0364	.0000	2.085	-.0019	.0033	2.194	-.0019
#3	3.169	.0002	.0360	-.0010	2.044	-.0012	.0000	2.229	-.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-2-B Acquired: 8/27/2012 17:08:47 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0632	<.0000	<.0000	.0026	<.0000	.0033	.0026
Stddev	.0006	.0009	.0006	.0013	.0126	.0009	.0001
%RSD	.8875	83.70	2153.	51.30	36.45	28.11	4.827
#1	.0629	-.0020	-.0004	.0040	-.0491	.0023	.0027
#2	.0628	-.0012	-.0003	.0015	-.0260	.0037	.0026
#3	.0638	-.0001	.0007	.0022	-.0287	.0040	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3730.5
Stddev	19.4
%RSD	.51896
#1	3741.8
#2	3708.1
#3	3741.5

Sample Name: CCV Acquired: 8/27/2012 17:12:28 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9638**	**49.76**	**4.969**	**4.950**	**5.045**	**5.014**	**4.991**	**24.98**	**4.938**
Stddev	.0134	.20	.084	.014	.010	.020	.081	.40	.078
%RSD	1.395	.3994	1.698	.2767	.1894	.3999	1.632	1.584	1.584
#1	.9788	49.95	5.037	4.965	5.053	5.036	5.056	25.33	5.001
#2	.9529	49.56	4.874	4.947	5.034	4.997	4.899	24.55	4.851
#3	.9597	49.76	4.996	4.937	5.046	5.009	5.017	25.05	4.963
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.988**	**4.895**	**4.962**	**49.93**	**49.78**	**4.989**	**24.85**	**4.981**	**4.905**
Stddev	.079	.070	.075	.13	.20	.018	.15	.025	.079
%RSD	1.588	1.422	1.511	.2552	.4119	.3579	.6114	.5042	1.612
#1	5.046	4.971	5.016	50.04	49.96	5.008	24.90	5.004	4.970
#2	4.897	4.835	4.876	49.79	49.55	4.973	24.68	4.954	4.817
#3	5.019	4.879	4.993	49.97	49.82	4.986	24.97	4.984	4.928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.37**	**4.969**	**4.968**	**4.977**	**49.78**	**.9858**	**5.023**	**4.938**	**4.934**
Stddev	.21	.081	.080	.078	.78	.0212	.073	.009	.080
%RSD	.4196	1.638	1.600	1.573	1.566	2.155	1.460	.1857	1.627
#1	49.56	5.033	5.025	5.043	50.29	.9943	5.071	4.930	4.994
#2	49.15	4.877	4.877	4.890	48.89	.9617	4.939	4.936	4.843
#3	49.39	4.996	5.003	4.997	50.17	1.002	5.060	4.948	4.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 17:12:28 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.886**	**4.968**	**4.991**	**4.978**	**4.978**	**4.971**	**4.929**
Stddev	.012	.079	.014	.071	.095	.014	.076
%RSD	.2511	1.594	.2712	1.426	1.904	.2829	1.550
#1	4.882	5.051	5.004	5.038	5.081	4.987	4.985
#2	4.876	4.893	4.977	4.899	4.894	4.963	4.842
#3	4.900	4.961	4.992	4.996	4.961	4.963	4.960
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3638.6**
Stddev	53.3
%RSD	1.4636
#1	3577.4
#2	3674.5
#3	3663.9

Sample Name: CCB Acquired: 8/27/2012 17:15:49 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0084	.0023	.0151	.0001	.0007	.0013	.0019	<.0000
Stddev	.0001	.0108	.0010	.0046	.0004	.0003	.0023	.0004	.0001
%RSD	13.57	128.8	42.57	30.50	398.9	48.28	178.8	18.87	162.9
#1	-.0006	.0075	.0028	.0203	.0005	.0010	.0020	.0023	.0000
#2	-.0006	.0196	.0029	.0139	.0000	.0006	.0031	.0016	-.0002
#3	-.0007	-.0019	.0012	.0113	-.0002	.0004	-.0013	.0019	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	<.0000	<.0000	.0098	.0063	.0008	.0161	.0011	.0056
Stddev	.0002	.0001	.0027	.0034	.0201	.0009	.0040	.0004	.0004
%RSD	321.2	13.04	1030.	34.96	320.1	118.2	24.77	38.21	6.305
#1	.0000	-.0009	.0017	.0129	.0162	.0007	.0207	.0016	.0052
#2	-.0001	-.0011	.0009	.0103	.0195	-.0001	.0135	.0011	.0059
#3	.0003	-.0011	-.0033	.0061	-.0168	.0017	.0140	.0007	.0058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0280	.0003	.0008	.0014	.0026	.0030	.0021	<.0000	<.0000
Stddev	.0159	.0002	.0009	.0018	.0027	.0026	.0017	.0042	.0009
%RSD	56.75	73.33	112.5	129.6	103.6	86.28	79.34	100.8	2402.
#1	.0398	.0001	-.0002	.0030	.0055	.0002	.0017	-.0044	.0010
#2	.0343	.0002	.0009	-.0005	.0001	.0053	.0039	.0001	-.0004
#3	.0099	.0006	.0017	.0015	.0023	.0036	.0007	-.0082	-.0007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 17:15:49 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	.0033	.0006	.0009	<.0000	.0030	.0006
Stddev	.0004	.0063	.0011	.0013	.0108	.0002	.0001
%RSD	58.24	188.3	174.4	139.1	37.85	5.160	21.65
#1	.0012	.0100	.0019	.0017	-.0410	.0030	.0007
#2	.0006	-.0025	.0001	.0017	-.0220	.0032	.0005
#3	.0004	.0026	-.0001	-.0006	-.0226	.0029	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3838.7
Stddev	26.7
%RSD	.69675
#1	3845.5
#2	3861.4
#3	3809.2

Sample Name: 160-442-E-3-B Acquired: 8/27/2012 17:19:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0089	.0000	.0779	.0628	<.0000	<.0000	35.78	<.0000
Stddev	.0007	.0102	.0007	.0032	.0004	.0001	.0030	.39	.0002
%RSD	4569.	115.1	2719.	4.109	.6024	1072.	781.1	1.093	102.4
#1	.0005	.0058	.0004	.0794	.0623	.0001	.0029	35.42	-.0001
#2	.0002	.0203	-.0008	.0801	.0630	.0000	-.0009	35.73	-.0004
#3	-.0008	.0006	.0004	.0743	.0629	-.0001	-.0032	36.20	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0002	.3485	1.342	.0044	10.42	.0416	.0059
Stddev	.0002	.0004	.0001	.0021	.017	.0015	.06	.0002	.0003
%RSD	24.70	57.38	61.07	.6150	1.252	34.60	.6104	.4604	4.506
#1	.0006	-.0004	.0001	.3466	1.348	.0026	10.35	.0416	.0057
#2	.0008	-.0010	.0003	.3480	1.323	.0051	10.44	.0415	.0057
#3	.0005	-.0004	.0002	.3508	1.355	.0054	10.47	.0418	.0062
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.72	.0037	.0092	.0008	4.918	.0020	<.0000	2.231	<.0000
Stddev	.03	.0001	.0003	.0015	.052	.0045	.0013	.008	.0005
%RSD	.2967	3.571	3.555	180.7	1.054	229.6	60.74	.3627	25.69
#1	10.69	.0035	.0096	-.0005	4.869	.0007	-.0019	2.222	-.0021
#2	10.76	.0038	.0092	.0024	4.913	.0070	-.0036	2.234	-.0022
#3	10.71	.0038	.0089	.0006	4.972	-.0018	-.0010	2.237	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-3-B Acquired: 8/27/2012 17:19:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1341	.0013	.0011	.0013	<.0000	<.0000	.0026
Stddev	.0004	.0032	.0005	.0003	.0096	.0062	.0001
%RSD	.3126	242.4	46.10	24.09	14.48	254.6	4.624
#1	.1336	.0032	.0012	.0015	-.0563	.0026	.0025
#2	.1343	-.0024	.0005	.0016	-.0671	-.0094	.0027
#3	.1344	.0032	.0014	.0010	-.0754	-.0005	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3726.7
Stddev	48.8
%RSD	1.3107
#1	3772.2
#2	3732.8
#3	3675.0

Sample Name: 160-442-E-4-B Acquired: 8/27/2012 17:23:08 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**.0018**	**.0349**	**.0789**	**.0001**	**.0027**	**W 45.97**
Stddev	.0003	.0064	.0016	.0048	.0005	.0001	.0005	.45
%RSD	133.3	1074.	87.16	13.84	.6737	133.0	19.87	.9880
#1	-.0001	-.0044	.0035	.0358	.0796	.0000	.0028	45.97
#2	.0002	-.0042	.0004	.0392	.0786	.0001	.0021	45.51
#3	.0005	.0068	.0014	.0297	.0787	.0001	.0032	46.42
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0011**	**.0000**	**<.0000**	**3.564**	**.7566**	**.0069**	**11.47**
Stddev	.0002	.0003	.0004	.0012	.010	.0355	.0012	.03
%RSD	80.89	26.26	1612.	46.11	.2875	4.698	17.72	.2177
#1	-.0004	.0012	-.0004	-.0037	3.576	.7957	.0056	11.50
#2	-.0004	.0014	.0002	-.0031	3.559	.7481	.0072	11.46
#3	.0000	.0008	.0003	-.0013	3.557	.7261	.0080	11.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2174**	**<.0000**	**3.023**	**.0020**	**.0542**	**.0010**	**2.275**	**.0001**
Stddev	.0007	.0005	.026	.0002	.0011	.0006	.022	.0009
%RSD	.3002	129.1	.8709	10.04	1.970	55.84	.9624	911.5
#1	.2182	-.0009	3.053	.0022	.0538	.0010	2.268	.0001
#2	.2172	.0000	3.003	.0018	.0533	.0004	2.257	.0010
#3	.2169	-.0003	3.013	.0021	.0554	.0016	2.299	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-442-E-4-B Acquired: 8/27/2012 17:23:08 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.929	<.0000	.1315	<.0000	.0017	.0019	<.0000
Stddev	.0026	.012	.0003	.0006	.0040	.0006	.0011	.0161
%RSD	221.5	.4098	13.92	.4485	145.3	36.49	60.02	20.02
#1	-.0041	2.942	-.0022	.1321	-.0012	.0018	.0024	-.0652
#2	.0010	2.918	-.0021	.1313	.0002	.0022	.0027	-.0972
#3	-.0005	2.926	-.0016	.1310	-.0073	.0010	.0006	-.0786
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.0036
Stddev	.0028	.0002
%RSD	263.2	4.287
#1	-.0028	.0036
#2	.0022	.0034
#3	-.0026	.0038
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3720.9
Stddev	38.7
%RSD	1.0413
#1	3704.4
#2	3765.2
#3	3693.2

Sample Name: 160-442-E-5-B Acquired: 8/27/2012 17:26:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0036**	**.0136**	**.0202**	**.1099**	**.0000**	**.0011**	F **52.08**	**<.0000**
Stddev	.0003	.0106	.0009	.0044	.0002	.0001	.0000	.35	.0001
%RSD	113.3	293.1	6.946	21.74	.1510	510.6	3.261	.6798	49.17
#1	.0006	-.0079	.0140	.0207	.1097	.0001	.0011	51.93	-.0001
#2	.0002	.0058	.0143	.0156	.1099	.0001	.0012	51.83	-.0003
#3	.0000	.0130	.0126	.0244	.1100	-.0001	.0012	52.49	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0009**	**.0003**	**9.930**	**.8955**	**.0031**	**17.80**	**.8865**	**.0014**
Stddev	.0005	.0003	.0004	.021	.0123	.0014	.02	.0015	.0003
%RSD	110.7	39.21	117.0	.2088	1.372	43.34	.1241	.1714	22.24
#1	.0011	.0010	.0004	9.951	.9081	.0046	17.83	.8882	.0011
#2	.0001	.0011	-.0001	9.910	.8948	.0019	17.79	.8852	.0017
#3	.0002	.0005	.0007	9.928	.8836	.0030	17.80	.8862	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.665**	**.0006**	**.1048**	**.0009**	**.0365**	**.0036**	**.0012**	**2.866**	**<.0000**
Stddev	.010	.0001	.0007	.0012	.0006	.0008	.0010	.010	.0005
%RSD	.3626	16.53	.6298	142.5	1.658	23.24	88.12	.3423	51.31
#1	2.676	.0007	.1043	.0015	.0370	.0041	.0001	2.870	-.0004
#2	2.659	.0005	.1045	.0017	.0358	.0027	.0022	2.855	-.0014
#3	2.659	.0007	.1055	-.0006	.0366	.0041	.0012	2.873	-.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-5-B Acquired: 8/27/2012 17:26:45 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2571	<.0000	.0006	.0014	<.0000	.0003	.0025
Stddev	.0003	.0013	.0014	.0013	.0105	.0043	.0002
%RSD	.1270	18.40	238.9	92.59	18.24	1241.	7.722
#1	.2574	-.0078	-.0009	.0016	-.0688	.0035	.0024
#2	.2569	-.0080	.0007	.0025	-.0483	.0021	.0024
#3	.2569	-.0056	.0018	.0000	-.0550	-.0046	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3603.4
Stddev	21.3
%RSD	.59240
#1	3627.8
#2	3594.0
#3	3588.3

Sample Name: 160-442-E-6-B Acquired: 8/27/2012 17:30:22 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0053	.0018	.1045	.2234	.0000	.0007	15.12	.0000
Stddev	.0005	.0118	.0010	.0038	.0010	.0001	.0011	.20	.0002
%RSD	114.4	222.5	55.27	3.655	.4498	151.9	153.2	1.329	666.4
#1	-.0007	-.0082	.0027	.1051	.2245	.0001	.0005	14.92	.0000
#2	.0001	.0140	.0017	.1080	.2232	.0000	.0019	15.32	.0003
#3	-.0006	.0101	.0008	.1004	.2225	.0000	-.0003	15.13	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0006	2.104	6.413	.0058	5.222	.0528	<.0000
Stddev	.0005	.0005	.0032	.010	.059	.0015	.030	.0007	.0001
%RSD	312.0	109.4	566.0	.4726	.9267	26.20	.5741	1.256	14.03
#1	-.0005	-.0010	.0016	2.115	6.451	.0042	5.192	.0535	-.0008
#2	-.0005	.0001	-.0030	2.100	6.444	.0072	5.252	.0528	-.0011
#3	.0005	-.0005	.0031	2.096	6.345	.0061	5.220	.0521	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	8.569	.0011	.0955	.0005	3.529	.0034	<.0000	2.871	<.0000
Stddev	.017	.0001	.0017	.0005	.052	.0035	.0030	.004	.0008
%RSD	.2015	12.87	1.771	102.0	1.466	102.2	57.44	.1266	97.61
#1	8.587	.0010	.0944	.0006	3.474	.0067	-.0085	2.871	.0001
#2	8.568	.0010	.0946	.0010	3.577	.0037	-.0041	2.875	-.0014
#3	8.552	.0012	.0974	-.0001	3.535	-.0002	-.0029	2.867	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-6-B Acquired: 8/27/2012 17:30:22 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0926	.0043	.0003	.0013	<.0000	<.0000	.0024
Stddev	.0003	.0035	.0006	.0014	.0077	.0018	.0001
%RSD	.3042	81.29	196.3	109.0	17.97	123.2	4.617
#1	.0927	.0048	-.0003	.0029	-.0367	-.0015	.0023
#2	.0929	.0006	.0007	.0009	-.0400	.0004	.0025
#3	.0923	.0074	.0005	.0002	-.0513	-.0033	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3691.5
Stddev	24.8
%RSD	.67176
#1	3688.8
#2	3668.1
#3	3717.5

Sample Name: 160-420-E-1-D Acquired: 8/27/2012 17:33:57 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**<.0000**	**.0215**	**.0422**	**.1680**	**.0000**	**.0025**	**27.62**	**<.0000**
Stddev	.0008	.0024	.0023	.0020	.0009	.0001	.0006	.36	.0001
%RSD	117.7	130.0	10.87	4.847	.5390	138.3	22.15	1.290	77.71
#1	-.0002	-.0011	.0190	.0440	.1678	.0000	.0022	27.20	-.0003
#2	.0007	.0001	.0237	.0425	.1673	.0000	.0022	27.80	.0000
#3	.0014	-.0045	.0219	.0400	.1690	.0001	.0032	27.84	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0055**	**<.0000**	**.0015**	**9.558**	**.9844**	**.0036**	**9.963**	**.3716**	**.0022**
Stddev	.0002	.0003	.0010	.030	.0255	.0008	.039	.0019	.0002
%RSD	2.815	182.4	66.72	.3112	2.591	21.42	.3888	.5008	7.509
#1	.0056	-.0003	.0026	9.563	.9570	.0028	9.919	.3708	.0021
#2	.0053	.0002	.0007	9.526	1.007	.0043	9.982	.3703	.0024
#3	.0056	-.0003	.0013	9.585	.9887	.0036	9.989	.3737	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.80**	**.0050**	**.0128**	**.0013**	**.2786**	**.0003**	**<.0000**	**3.949**	**<.0000**
Stddev	.06	.0003	.0002	.0007	.0025	.0008	.0019	.003	.0002
%RSD	.4697	5.729	1.780	51.44	.9128	227.3	65.35	.0713	16.18
#1	12.80	.0048	.0129	.0007	.2777	.0007	-.0009	3.949	-.0010
#2	12.74	.0053	.0125	.0020	.2766	-.0005	-.0047	3.945	-.0013
#3	12.86	.0049	.0130	.0013	.2814	.0008	-.0031	3.951	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-E-1-D Acquired: 8/27/2012 17:33:57 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0916	<.0000	<.0000	.0034	<.0000	.0003	.0019
Stddev	.0002	.0042	.0013	.0017	.0057	.0007	.0000
%RSD	.1703	57.60	224.8	49.98	12.54	206.3	1.602
#1	.0916	-.0119	.0007	.0045	-.0478	-.0002	.0019
#2	.0914	-.0064	-.0005	.0014	-.0493	.0011	.0019
#3	.0917	-.0036	-.0019	.0041	-.0388	.0001	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3879.8
Stddev	45.4
%RSD	1.1706
#1	3930.6
#2	3843.1
#3	3865.6

Sample Name: 160-420-E-2-B Acquired: 8/27/2012 17:37:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0009	.0291	.0404	.0000	<.0000	29.46	<.0000
Stddev	.0001	.0036	.0016	.0014	.0002	.0001	.0042	.66	.0000
%RSD	35.25	251.9	188.6	4.962	.4137	163.1	1361.	2.243	45.81
#1	-.0004	-.0055	.0022	.0301	.0402	.0001	-.0043	29.24	.0000
#2	-.0002	-.0003	.0013	.0297	.0405	.0000	-.0007	28.93	-.0001
#3	-.0003	.0015	-.0009	.0274	.0405	.0001	.0041	30.20	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	.0030	1.062	.0015	4.174	.0165	<.0000
Stddev	.0005	.0002	.0034	.0014	.025	.0014	.042	.0004	.0003
%RSD	667.8	21.57	335.9	47.69	2.338	93.72	1.000	2.168	28.93
#1	-.0002	-.0011	.0014	.0046	1.078	.0007	4.153	.0163	-.0014
#2	.0004	-.0010	-.0049	.0021	1.033	.0030	4.147	.0169	-.0008
#3	-.0005	-.0007	.0004	.0022	1.075	.0007	4.222	.0164	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.01	.0016	.0101	.0006	5.316	.0023	<.0000	1.661	<.0000
Stddev	.04	.0005	.0009	.0013	.109	.0020	.0019	.009	.0009
%RSD	.4283	29.71	8.611	204.5	2.052	88.00	102.2	.5701	120.9
#1	9.962	.0011	.0096	.0007	5.288	.0002	.0002	1.654	-.0011
#2	10.03	.0017	.0096	-.0007	5.224	.0042	-.0021	1.672	-.0013
#3	10.04	.0021	.0111	.0019	5.436	.0026	-.0037	1.658	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-420-E-2-B Acquired: 8/27/2012 17:37:34 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0601	<.0000	.0003	.0027	<.0000	<.0000	.0029
Stddev	.0002	.0056	.0007	.0008	.0118	.0030	.0003
%RSD	.3570	82.68	283.3	29.71	17.91	5333.	9.060
#1	.0599	-.0023	.0003	.0035	-.0782	.0010	.0031
#2	.0603	-.0050	.0010	.0019	-.0547	.0023	.0026
#3	.0601	-.0131	-.0005	.0027	-.0651	-.0034	.0029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3838.8
Stddev	70.1
%RSD	1.8266
#1	3849.9
#2	3902.7
#3	3763.8

Sample Name: 160-420-E-3-B Acquired: 8/27/2012 17:41:12 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0024	.0063	.0434	.3683	<.0000	.0016	W 48.96
Stddev	.0006	.0110	.0015	.0053	.0010	.0000	.0026	.07
%RSD	267.3	463.4	24.27	12.28	.2698	454.7	161.0	.1439
#1	-.0007	-.0007	.0051	.0416	.3676	.0000	.0039	49.03
#2	-.0004	-.0068	.0080	.0494	.3678	.0000	.0020	48.89
#3	.0004	.0146	.0057	.0392	.3694	.0000	-.0012	48.95
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0013	.0005	<.0000	9.988	1.806	.0064	13.15
Stddev	.0000	.0003	.0002	.0017	.044	.034	.0011	.03
%RSD	20.24	20.68	44.52	59.69	.4458	1.886	16.89	.2305
#1	-.0002	.0014	.0007	-.0046	9.954	1.820	.0069	13.11
#2	-.0001	.0010	.0003	-.0011	9.971	1.768	.0052	13.15
#3	-.0002	.0014	.0004	-.0031	10.04	1.832	.0071	13.17
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1896	<.0000	28.73	.0020	.0237	<.0000	2.804	.0015
Stddev	.0010	.0002	.13	.0004	.0006	.0006	.010	.0010
%RSD	.5049	27.76	.4396	18.19	2.615	125.0	.3535	70.54
#1	.1886	-.0006	28.67	.0016	.0243	-.0004	2.815	.0017
#2	.1896	-.0010	28.65	.0021	.0237	-.0012	2.801	.0003
#3	.1906	-.0010	28.88	.0024	.0231	.0001	2.796	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-420-E-3-B Acquired: 8/27/2012 17:41:12 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	3.628	<.0000	.1276	<.0000	<.0000	.0025	<.0000
Stddev	.0015	.027	.0008	.0005	.0056	.0003	.0019	.0104
%RSD	257.2	.7388	48.87	.4161	62.27	223.4	75.95	12.73
#1	-.0011	3.616	-.0021	.1274	-.0073	.0002	.0028	-.0749
#2	.0019	3.609	-.0007	.1272	-.0153	-.0004	.0043	-.0938
#3	.0009	3.658	-.0021	.1282	-.0045	-.0002	.0005	-.0768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0036	.0025
Stddev	.0049	.0000
%RSD	137.1	.5487
#1	.0088	.0025
#2	-.0009	.0025
#3	.0029	.0025
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3790.8
Stddev	4.2
%RSD	.11189
#1	3789.3
#2	3795.6
#3	3787.5

Sample Name: 160-420-E-4-B Acquired: 8/27/2012 17:44:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	<.0000	.0021	.0446	.1084	<.0000	.0008	W 42.01
Stddev	.0001	.0073	.0012	.0033	.0006	.0001	.0026	.77
%RSD	125.8	139.0	56.00	7.301	.5873	273.6	316.2	1.836
#1	.0000	.0019	.0029	.0464	.1091	.0000	.0034	41.66
#2	.0001	-.0127	.0008	.0408	.1083	.0000	-.0017	41.48
#3	.0003	-.0050	.0025	.0465	.1078	-.0001	.0007	42.90
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0004	<.0000	<.0000	.0804	1.519	.0062	10.62
Stddev	.0001	.0004	.0005	.0021	.0004	.009	.0017	.05
%RSD	32.08	99.82	93.65	290.0	.5469	.5969	27.98	.4850
#1	-.0002	.0007	-.0010	-.0004	.0808	1.517	.0048	10.64
#2	-.0001	-.0001	-.0006	.0012	.0799	1.529	.0082	10.66
#3	-.0002	.0007	.0000	-.0030	.0805	1.511	.0057	10.56
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2715	<.0000	66.71	.0036	.0122	<.0000	1.220	.0017
Stddev	.0004	.0003	.08	.0004	.0024	.0011	.024	.0004
%RSD	.1592	26.69	.1176	11.03	20.02	1092.	1.981	24.91
#1	.2719	-.0008	66.79	.0035	.0094	.0010	1.212	.0013
#2	.2710	-.0008	66.71	.0040	.0134	-.0001	1.201	.0021
#3	.2715	-.0012	66.63	.0032	.0138	-.0012	1.247	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-420-E-4-B Acquired: 8/27/2012 17:44:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.805	<.0000	.1144	<.0000	.0007	.0015	<.0000
Stddev	.0018	.004	.0010	.0004	.0049	.0011	.0021	.0050
%RSD	193.7	.1329	59.01	.3676	215.5	155.6	144.6	5.967
#1	.0007	2.808	-.0008	.1149	-.0065	.0015	.0030	-.0792
#2	-.0028	2.801	-.0015	.1143	-.0034	.0012	.0024	-.0836
#3	-.0006	2.807	-.0027	.1141	.0031	-.0005	-.0010	-.0892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.0038
Stddev	.0053	.0001
%RSD	154.9	2.362
#1	.0006	.0039
#2	-.0015	.0038
#3	-.0095	.0038
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3643.2
Stddev	38.4
%RSD	1.0536
#1	3660.8
#2	3669.7
#3	3599.2

Sample Name: MB 160-9008/1-A Acquired: 8/27/2012 17:48:26 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0012	.0012	<.0000	.0000	<.0000	.0273	<.0000
Stddev	.0004	.0051	.0016	.0012	.0002	.0000	.0008	.0005	.0002
%RSD	773.7	63.02	137.2	96.79	168.5	574.6	54.04	1.655	122.8
#1	-.0001	-.0052	.0024	-.0001	-.0004	.0000	-.0021	.0277	-.0004
#2	-.0004	-.0050	.0018	.0022	-.0001	.0000	-.0006	.0268	-.0001
#3	.0004	-.0139	-.0006	.0015	.0001	.0000	-.0019	.0273	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0009	.0038	.0145	.0004	.0162	.0001	<.0000
Stddev	.0001	.0001	.0021	.0009	.0276	.0017	.0081	.0001	.0001
%RSD	33.42	11.87	242.4	25.11	189.8	439.3	49.99	56.89	6.484
#1	-.0003	-.0011	.0025	.0031	-.0160	-.0016	.0076	.0002	-.0012
#2	-.0003	-.0010	-.0015	.0034	.0220	.0016	.0237	.0002	-.0010
#3	-.0006	-.0009	.0017	.0048	.0376	.0011	.0171	.0001	-.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0380	.0001	.0010	<.0000	.0034	<.0000	<.0000	.0193	<.0000
Stddev	.0078	.0005	.0010	.0014	.0019	.0006	.0020	.0028	.0004
%RSD	20.53	385.3	106.8	189.2	55.72	42.83	106.7	14.74	94.33
#1	.0467	.0005	.0003	-.0017	.0056	-.0017	-.0033	.0210	-.0004
#2	.0357	.0002	.0022	-.0013	.0024	-.0016	-.0028	.0160	.0000
#3	.0316	-.0004	.0004	.0009	.0022	-.0007	.0004	.0209	-.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: MB 160-9008/1-A Acquired: 8/27/2012 17:48:26 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0011	.0017	<.0000	<.0000	.0077
Stddev	.0000	.0019	.0005	.0004	.0159	.0019	.0001
%RSD	204.2	41.99	45.76	21.86	39.76	168.7	.9406
#1	.0000	-.0060	.0013	.0016	-.0405	-.0033	.0077
#2	.0000	-.0053	.0015	.0014	-.0554	-.0004	.0076
#3	.0000	-.0024	.0005	.0021	-.0237	.0003	.0077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3725.1
Stddev	19.9
%RSD	.53352
#1	3714.2
#2	3748.1
#3	3713.2

Sample Name: LCS 160-9008/2-A Acquired: 8/27/2012 17:52:07 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1039**	**10.33**	**1.001**	**1.006**	**1.031**	**1.016**	**1.050**	**10.22**	**1.030**
Stddev	.0038	.05	.018	.008	.006	.006	.019	.20	.021
%RSD	3.689	.4971	1.776	.8308	.5423	.6444	1.830	2.000	2.009
#1	.1068	10.29	1.015	1.013	1.031	1.014	1.062	10.39	1.047
#2	.1054	10.30	1.007	.9966	1.026	1.011	1.060	10.28	1.037
#3	.0995	10.39	.9807	1.007	1.037	1.024	1.028	9.992	1.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.065**	**1.026**	**1.056**	**10.37**	**10.05**	**1.036**	**10.27**	**1.047**	**1.047**
Stddev	.022	.026	.024	.05	.02	.004	.06	.005	.022
%RSD	2.026	2.569	2.254	.4789	.2060	.3836	.5485	.5013	2.120
#1	1.083	1.050	1.071	10.37	10.04	1.036	10.22	1.047	1.065
#2	1.072	1.030	1.067	10.32	10.03	1.032	10.25	1.041	1.053
#3	1.041	.9982	1.028	10.42	10.07	1.040	10.33	1.052	1.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.865**	**1.071**	**.9879**	**1.043**	**9.872**	**.5279**	**1.012**	F **.0469**	**1.034**
Stddev	.059	.022	.0233	.018	.202	.0139	.019	.0039	.020
%RSD	.5938	2.099	2.358	1.775	2.047	2.640	1.834	8.386	1.891
#1	9.834	1.091	1.006	1.060	10.03	.5418	1.022	.0424	1.050
#2	9.829	1.077	.9959	1.046	9.942	.5280	1.023	.0483	1.039
#3	9.933	1.047	.9617	1.024	9.644	.5139	.9906	.0499	1.012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-9008/2-A Acquired: 8/27/2012 17:52:07 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.033	1.047	1.025	.2204	.9989	.9964	1.027
Stddev	.008	.039	.005	.0053	.0209	.0052	.019
%RSD	.7881	3.675	.4908	2.424	2.094	.5214	1.893
#1	1.029	1.083	1.026	.2236	1.022	.9931	1.042
#2	1.028	1.053	1.020	.2234	.9946	.9936	1.033
#3	1.043	1.006	1.030	.2143	.9805	1.002	1.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3666.2
Stddev	73.9
%RSD	2.0147
#1	3623.7
#2	3623.5
#3	3751.5

Sample Name: CCV Acquired: 8/27/2012 17:55:29 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9448**	**50.00**	**4.817**	**4.943**	**5.072**	**5.010**	**4.845**	**24.03**	**4.808**
Stddev	.0143	.16	.067	.004	.008	.018	.075	.33	.075
%RSD	1.518	.3206	1.381	.0760	.1489	.3657	1.555	1.390	1.566
#1	.9552	50.06	4.880	4.945	5.071	5.024	4.916	24.33	4.879
#2	.9507	50.12	4.824	4.945	5.080	5.016	4.854	24.10	4.817
#3	.9284	49.82	4.748	4.939	5.065	4.989	4.766	23.67	4.729
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.868**	**4.825**	**4.837**	**49.84**	**49.69**	**5.030**	**24.85**	**4.998**	**4.761**
Stddev	.073	.074	.080	.15	.17	.010	.15	.021	.069
%RSD	1.494	1.526	1.662	.2917	.3328	.1940	.6076	.4164	1.454
#1	4.934	4.880	4.911	49.89	49.71	5.037	24.87	5.004	4.824
#2	4.879	4.852	4.850	49.96	49.84	5.035	24.99	5.015	4.771
#3	4.790	4.741	4.751	49.68	49.52	5.019	24.69	4.975	4.687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.78**	**4.834**	**4.758**	**4.806**	**48.05**	**.9567**	**4.847**	**4.956**	**4.779**
Stddev	.20	.068	.063	.067	.70	.0152	.078	.026	.066
%RSD	.4158	1.410	1.314	1.400	1.454	1.586	1.606	.5329	1.374
#1	48.88	4.896	4.816	4.865	48.72	.9726	4.919	4.960	4.841
#2	48.91	4.846	4.765	4.822	48.12	.9551	4.857	4.981	4.787
#3	48.54	4.761	4.692	4.733	47.33	.9424	4.764	4.928	4.710
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 17:55:29 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.963**	**4.934**	**5.033**	**4.766**	**5.002**	**4.891**	**4.767**
Stddev	.123	.084	.011	.070	.076	.012	.068
%RSD	2.470	1.707	.2164	1.471	1.513	.2414	1.418
#1	5.048	4.999	5.037	4.831	5.082	4.896	4.829
#2	5.018	4.964	5.041	4.775	4.992	4.899	4.776
#3	4.822	4.838	5.021	4.692	4.932	4.877	4.695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3744.7**
Stddev	71.3
%RSD	1.9050
#1	3686.4
#2	3723.4
#3	3824.2

Sample Name: CCB Acquired: 8/27/2012 17:58:49 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**<.0000**	**.0037**	**.0184**	**.0004**	**.0007**	**.0018**	**.0019**	**<.0000**
Stddev	.0006	.0073	.0003	.0060	.0003	.0004	.0038	.0006	.0003
%RSD	190.9	185.1	6.706	32.61	68.47	50.89	214.0	31.80	321.6
#1	-.0003	-.0061	.0040	.0195	.0006	.0011	.0054	.0026	.0002
#2	.0007	.0042	.0036	.0238	.0005	.0005	.0021	.0014	-.0003
#3	.0005	-.0099	.0036	.0119	.0001	.0004	-.0022	.0019	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**.0010**	**.0084**	**.0203**	**<.0000**	**.0216**	**.0011**	**.0058**
Stddev	.0004	.0002	.0028	.0040	.0129	.0003	.0166	.0002	.0001
%RSD	184.5	34.24	295.6	47.68	63.71	171.8	76.86	21.97	1.425
#1	-.0006	-.0004	.0023	.0124	.0307	-.0005	.0406	.0011	.0057
#2	-.0003	-.0009	.0029	.0083	.0058	-.0002	.0146	.0008	.0057
#3	.0002	-.0008	-.0023	.0044	.0243	.0001	.0097	.0013	.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0382**	**.0001**	**<.0000**	**.0007**	**.0028**	**.0022**	**.0021**	**<.0000**	**.0002**
Stddev	.0030	.0005	.0004	.0005	.0036	.0026	.0013	.0078	.0007
%RSD	7.745	429.9	1293.	71.53	127.2	120.4	63.43	433.4	303.7
#1	.0416	.0004	-.0005	.0013	.0069	-.0008	.0016	-.0081	.0006
#2	.0366	.0004	.0002	.0005	.0011	.0032	.0011	.0070	-.0006
#3	.0364	-.0005	.0001	.0004	.0004	.0041	.0036	-.0043	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 17:58:49 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	<.0000	.0022	<.0000	<.0000	.0008	.0006
Stddev	.0004	.0039	.0003	.0028	.0155	.0006	.0002
%RSD	46.40	114.2	13.26	1330.	51.82	76.40	33.95
#1	.0011	.0010	.0022	.0016	-.0294	.0006	.0008
#2	.0008	-.0047	.0025	.0012	-.0457	.0003	.0004
#3	.0004	-.0064	.0019	-.0034	-.0147	.0015	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3807.4
Stddev	5.8
%RSD	.15293
#1	3806.1
#2	3813.8
#3	3802.4

Sample Name: 160-442-D-1-A Acquired: 8/27/2012 18:02:32 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0053	.0029	.0282	.0603	.0000	<.0000	19.74	<.0000
Stddev	.0011	.0018	.0008	.0022	.0002	.0000	.0026	.28	.0001
%RSD	584.7	33.09	27.81	7.689	.3247	88.92	1301.	1.395	201.8
#1	-.0009	.0070	.0023	.0260	.0605	.0000	.0021	19.42	.0000
#2	.0012	.0056	.0038	.0283	.0602	.0001	-.0030	19.84	.0000
#3	.0002	.0035	.0025	.0303	.0603	.0000	.0002	19.94	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0030	<.0000	.0008	.5961	1.193	.0019	3.479	.2077	.0110
Stddev	.0004	.0002	.0010	.0011	.034	.0014	.032	.0012	.0004
%RSD	12.27	34.31	128.1	.1786	2.861	74.21	.9136	.5862	3.312
#1	.0026	-.0003	-.0001	.5974	1.212	.0026	3.502	.2088	.0106
#2	.0029	-.0006	.0006	.5956	1.214	.0003	3.492	.2064	.0113
#3	.0033	-.0005	.0019	.5954	1.154	.0028	3.443	.2078	.0111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.536	.0121	.0157	.0001	.8463	.0048	<.0000	2.205	<.0000
Stddev	.007	.0004	.0008	.0018	.0162	.0020	.0008	.009	.0003
%RSD	.1511	2.988	4.955	2004.	1.911	42.14	136.1	.3871	32.32
#1	4.542	.0119	.0149	.0016	.8288	.0071	-.0005	2.213	-.0006
#2	4.529	.0125	.0161	-.0018	.8495	.0035	.0001	2.206	-.0008
#3	4.535	.0119	.0163	.0005	.8607	.0037	-.0014	2.196	-.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-1-A Acquired: 8/27/2012 18:02:32 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1138	<.0000	.0008	.0026	<.0000	.0027	.0069
Stddev	.0002	.0020	.0003	.0012	.0184	.0025	.0005
%RSD	.1629	43.81	40.75	45.53	31.68	90.83	7.265
#1	.1139	-.0029	.0010	.0039	-.0446	.0054	.0065
#2	.1136	-.0041	.0004	.0017	-.0509	.0022	.0067
#3	.1139	-.0069	.0009	.0021	-.0792	.0005	.0075
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3778.4
Stddev	10.2
%RSD	.27099
#1	3787.8
#2	3780.0
#3	3767.5

Sample Name: 160-442-D-1-A SD Acquired: 8/27/2012 18:06:10 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0040**	**.0011**	**.0103**	**.0112**	**<.0000**	**<.0000**	**3.902**	**<.0000**
Stddev	.0002	.0034	.0007	.0019	.0003	.0000	.0014	.045	.0000
%RSD	46.55	83.76	68.41	18.52	2.725	14.35	403.1	1.160	17.94
#1	.0002	.0021	.0003	.0112	.0115	.0000	.0012	3.926	-.0001
#2	.0005	.0079	.0017	.0081	.0109	.0000	-.0008	3.850	-.0002
#3	.0004	.0020	.0013	.0116	.0111	.0000	-.0014	3.929	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**<.0000**	**.0022**	**.1165**	**.2219**	**.0006**	**.6747**	**.0405**	**.0013**
Stddev	.0003	.0005	.0014	.0019	.0435	.0020	.0086	.0008	.0002
%RSD	68.78	53.12	64.51	1.650	19.63	316.7	1.271	1.997	12.58
#1	.0005	-.0006	.0028	.1185	.2202	.0024	.6828	.0401	.0014
#2	.0001	-.0015	.0006	.1147	.1792	.0011	.6755	.0414	.0014
#3	.0008	-.0007	.0032	.1162	.2663	-.0016	.6657	.0400	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8918**	**.0027**	**.0041**	**.0011**	**.1629**	**.0004**	**<.0000**	**.4197**	**<.0000**
Stddev	.0036	.0005	.0004	.0004	.0019	.0019	.0045	.0068	.0007
%RSD	.3996	17.54	8.828	37.78	1.139	423.9	217.0	1.611	164.0
#1	.8916	.0032	.0039	.0007	.1644	-.0003	-.0073	.4140	-.0002
#2	.8955	.0027	.0039	.0015	.1634	.0026	.0001	.4272	-.0012
#3	.8884	.0023	.0045	.0010	.1608	-.0009	.0010	.4180	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-1-A SD Acquired: 8/27/2012 18:06:10 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=25

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0220	<.0000	.0001	.0010	<.0000	<.0000	.0058
Stddev	.0002	.0059	.0004	.0013	.0087	.0017	.0003
%RSD	.8859	117.2	304.6	133.9	13.41	193.5	4.923
#1	.0220	-.0116	.0006	-.0005	-.0683	-.0007	.0061
#2	.0222	-.0032	-.0001	.0017	-.0551	-.0027	.0055
#3	.0219	-.0003	-.0001	.0018	-.0716	.0007	.0058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3739.6
Stddev	22.1
%RSD	.59117
#1	3719.8
#2	3763.5
#3	3735.7

Sample Name: 160-442-D-1-B MS Acquired: 8/27/2012 18:09:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0182**	**1.774**	**.1800**	**.1921**	**.2285**	**.1730**	**.1821**	**19.34**	**.1787**
Stddev	.0004	.008	.0040	.0036	.0018	.0006	.0025	.21	.0017
%RSD	1.921	.4343	2.225	1.881	.7742	.3705	1.358	1.091	.9501
#1	.0186	1.766	.1777	.1886	.2267	.1722	.1846	19.22	.1783
#2	.0181	1.781	.1776	.1958	.2302	.1735	.1819	19.22	.1772
#3	.0180	1.776	.1846	.1918	.2287	.1731	.1797	19.58	.1806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1898**	**.1761**	**.1818**	**2.344**	**2.750**	**.1790**	**4.781**	**.3584**	**.1922**
Stddev	.0017	.0020	.0029	.009	.034	.0010	.015	.0016	.0022
%RSD	.8912	1.118	1.576	.4023	1.251	.5617	.3070	.4423	1.154
#1	.1890	.1752	.1798	2.334	2.723	.1787	4.773	.3572	.1909
#2	.1886	.1748	.1805	2.345	2.789	.1801	4.798	.3602	.1910
#3	.1917	.1784	.1851	2.353	2.739	.1782	4.772	.3577	.1948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.601**	**.2001**	**.1891**	**.1844**	**2.533**	**.0923**	**.1755**	**1.951**	**.1808**
Stddev	.017	.0012	.0016	.0022	.022	.0023	.0067	.007	.0022
%RSD	.2983	.6045	.8331	1.199	.8522	2.515	3.838	.3655	1.207
#1	5.581	.2003	.1878	.1831	2.533	.0938	.1778	1.944	.1811
#2	5.612	.1988	.1887	.1832	2.511	.0935	.1679	1.958	.1785
#3	5.609	.2012	.1909	.1870	2.555	.0896	.1808	1.950	.1829
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-1-B MS Acquired: 8/27/2012 18:09:49 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2728	.1717	.1756	.0414	.1163	.1684	.1821
Stddev	.0007	.0028	.0014	.0020	.0109	.0019	.0017
%RSD	.2605	1.604	.7785	4.910	9.380	1.120	.9491
#1	.2721	.1686	.1743	.0437	.1270	.1698	.1811
#2	.2735	.1731	.1771	.0399	.1165	.1662	.1812
#3	.2728	.1735	.1755	.0406	.1052	.1691	.1841
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3756.4
Stddev	28.7
%RSD	.76303
#1	3763.4
#2	3780.9
#3	3724.9

Sample Name: 160-442-D-1-C MSD Acquired: 8/27/2012 18:13:21 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0189**	**1.846**	**.1831**	**.2019**	**.2355**	**.1786**	**.1883**	**20.13**	**.1843**
Stddev	.0005	.013	.0036	.0009	.0012	.0008	.0004	.44	.0039
%RSD	2.776	.7135	1.985	.4541	.5191	.4590	.1926	2.165	2.127
#1	.0190	1.855	.1794	.2027	.2364	.1794	.1886	19.65	.1800
#2	.0183	1.831	.1832	.2009	.2341	.1777	.1885	20.24	.1853
#3	.0193	1.852	.1866	.2022	.2360	.1788	.1879	20.50	.1876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1948**	**.1813**	**.1880**	**2.399**	**2.861**	**.1857**	**4.963**	**.3727**	**.1986**
Stddev	.0043	.0021	.0049	.015	.026	.0026	.012	.0026	.0043
%RSD	2.200	1.167	2.585	.6178	.9215	1.418	.2477	.7090	2.142
#1	.1903	.1788	.1826	2.410	2.882	.1878	4.959	.3742	.1941
#2	.1953	.1826	.1893	2.382	2.870	.1828	4.953	.3696	.1991
#3	.1989	.1824	.1920	2.404	2.832	.1866	4.977	.3742	.2025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.853**	**.2050**	**.1974**	**.1887**	**2.588**	**.0958**	**.1807**	**2.037**	**.1865**
Stddev	.030	.0045	.0053	.0045	.055	.0030	.0005	.014	.0046
%RSD	.5127	2.185	2.690	2.361	2.133	3.084	.2849	.6714	2.454
#1	5.861	.2002	.1913	.1837	2.528	.0977	.1801	2.045	.1813
#2	5.820	.2058	.2008	.1903	2.601	.0924	.1810	2.022	.1881
#3	5.878	.2091	.2002	.1921	2.636	.0973	.1809	2.046	.1900
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-1-C MSD Acquired: 8/27/2012 18:13:21 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2832	.1762	.1823	.0422	.1187	.1735	.1879
Stddev	.0011	.0084	.0013	.0015	.0112	.0040	.0040
%RSD	.3916	4.743	.7237	3.471	9.434	2.323	2.122
#1	.2839	.1666	.1831	.0415	.1073	.1773	.1837
#2	.2819	.1821	.1808	.0411	.1297	.1693	.1885
#3	.2838	.1798	.1831	.0438	.1193	.1740	.1916
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3687.8
Stddev	28.6
%RSD	.77610
#1	3720.1
#2	3665.5
#3	3677.9

Sample Name: 160-442-D-2-A Acquired: 8/27/2012 18:16:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.4990**	**.0059**	**.0307**	**.0765**	**.0001**	**<.0000**	**19.91**	**<.0000**
Stddev	.0005	.0054	.0005	.0044	.0002	.0000	.0026	.14	.0001
%RSD	1127.	1.080	8.070	14.18	.3004	51.91	312.0	.7240	52.95
#1	.0005	.4995	.0055	.0267	.0762	.0001	.0019	20.00	-.0004
#2	-.0004	.5041	.0064	.0354	.0767	.0000	-.0033	19.98	-.0002
#3	.0000	.4933	.0059	.0301	.0766	.0000	-.0012	19.74	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0007**	**2.624**	**1.142**	**.0046**	**5.429**	**.1242**	**.0001**
Stddev	.0005	.0007	.0009	.004	.040	.0010	.033	.0007	.0000
%RSD	678.3	462.5	119.8	.1530	3.491	21.35	.5987	.5500	20.85
#1	-.0004	-.0004	.0014	2.619	1.100	.0043	5.413	.1236	.0001
#2	.0006	.0009	.0011	2.627	1.180	.0057	5.466	.1250	.0001
#3	.0000	-.0001	-.0003	2.626	1.147	.0038	5.407	.1241	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.547**	**.0020**	**.1153**	**.0024**	**2.355**	**.0019**	**<.0000**	**3.829**	**<.0000**
Stddev	.015	.0004	.0019	.0005	.011	.0003	.0017	.006	.0015
%RSD	.4136	20.94	1.622	21.21	.4452	14.15	169.4	.1501	206.8
#1	3.530	.0018	.1159	.0029	2.357	.0017	.0009	3.827	-.0023
#2	3.555	.0025	.1168	.0023	2.364	.0022	-.0022	3.835	-.0004
#3	3.555	.0017	.1132	.0019	2.343	.0018	-.0016	3.824	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-2-A Acquired: 8/27/2012 18:16:53 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0748**	**<.0000**	**.0114**	**.0010**	**<.0000**	**.0025**	**.0161**
Stddev	.0003	.0033	.0005	.0025	.0127	.0019	.0003
%RSD	.3356	53.63	4.270	247.9	19.93	74.46	1.549
#1	.0747	-.0024	.0116	.0015	-.0612	.0040	.0164
#2	.0751	-.0081	.0108	.0031	-.0773	.0031	.0162
#3	.0746	-.0081	.0118	-.0017	-.0523	.0004	.0159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3703.7**
Stddev	36.7
%RSD	.99200
#1	3670.5
#2	3697.5
#3	3743.1

Sample Name: 160-442-D-3-A Acquired: 8/27/2012 18:20:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.3052**	**.0026**	**.0656**	**.0623**	**.0000**	**<.0000**	**33.33**	**<.0000**
Stddev	.0007	.0049	.0011	.0024	.0003	.0001	.0014	1.31	.0001
%RSD	3912.	1.597	40.68	3.695	.4016	278.7	149.9	3.942	51.75
#1	-.0004	.3002	.0014	.0637	.0621	.0001	-.0011	32.10	-.0001
#2	-.0004	.3055	.0031	.0648	.0623	.0001	-.0023	33.18	-.0002
#3	.0008	.3100	.0033	.0683	.0626	-.0001	.0005	34.71	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0040**	**<.0000**	**<.0000**	**.9855**	**1.221**	**.0058**	**9.391**	**.0422**	**.0098**
Stddev	.0003	.0001	.0022	.0053	.026	.0007	.087	.0007	.0007
%RSD	7.602	27.19	153.8	.5353	2.162	12.42	.9216	1.555	7.014
#1	.0038	-.0004	-.0039	.9809	1.215	.0063	9.299	.0417	.0093
#2	.0039	-.0004	-.0006	.9843	1.198	.0050	9.405	.0419	.0095
#3	.0044	-.0002	.0002	.9913	1.250	.0063	9.470	.0429	.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.431**	**.0114**	**.0254**	**.0011**	**4.698**	**.0010**	**<.0000**	**2.707**	**<.0000**
Stddev	.074	.0002	.0024	.0003	.201	.0013	.0034	.017	.0007
%RSD	.7811	1.758	9.339	25.32	4.277	129.4	1088.	.6284	68.41
#1	9.355	.0113	.0227	.0008	4.516	-.0002	.0000	2.691	-.0013
#2	9.436	.0114	.0265	.0013	4.664	.0023	-.0039	2.704	-.0002
#3	9.502	.0117	.0271	.0012	4.914	.0009	.0029	2.725	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-3-A Acquired: 8/27/2012 18:20:31 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1202	<.0000	.0087	.0010	<.0000	.0016	.0108
Stddev	.0011	.0045	.0011	.0016	.0084	.0017	.0005
%RSD	.9484	76.45	12.55	153.6	17.45	110.5	4.324
#1	.1192	-.0056	.0095	.0016	-.0512	.0035	.0104
#2	.1201	-.0015	.0092	.0022	-.0542	.0007	.0107
#3	.1214	-.0105	.0075	-.0008	-.0385	.0004	.0113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3635.5
Stddev	9.3
%RSD	.25577
#1	3632.6
#2	3646.0
#3	3628.1

Sample Name: 160-442-D-4-A Acquired: 8/27/2012 18:24:08 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0266**	**.0020**	**.0300**	**.0796**	**.0000**	**<.0000**	**W 46.80**
Stddev	.0005	.0029	.0005	.0013	.0001	.0001	.0021	.77
%RSD	223.6	10.87	26.90	4.215	.0737	148.4	155.2	1.636
#1	.0003	.0292	.0022	.0309	.0796	.0000	.0007	45.93
#2	.0007	.0272	.0014	.0286	.0795	.0001	-.0035	47.10
#3	-.0003	.0235	.0024	.0306	.0796	.0000	-.0012	47.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0006**	**.0004**	**<.0000**	**3.576**	**.8337**	**.0050**	**11.34**
Stddev	.0002	.0002	.0002	.0024	.007	.0183	.0017	.04
%RSD	85.44	36.92	54.41	187.7	.2023	2.191	33.29	.3475
#1	.0000	.0003	.0005	-.0020	3.570	.8240	.0038	11.30
#2	-.0002	.0007	.0001	.0014	3.575	.8224	.0069	11.34
#3	-.0004	.0007	.0004	-.0033	3.584	.8548	.0042	11.38
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2149**	**<.0000**	**3.007**	**.0024**	**.0615**	**.0018**	**2.340**	**.0037**
Stddev	.0001	.0002	.005	.0004	.0020	.0004	.050	.0011
%RSD	.0482	37.69	.1644	16.43	3.284	20.74	2.149	29.25
#1	.2150	-.0008	3.013	.0026	.0592	.0015	2.285	.0043
#2	.2148	-.0004	3.005	.0020	.0628	.0017	2.355	.0044
#3	.2148	-.0008	3.003	.0027	.0625	.0022	2.382	.0025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: 160-442-D-4-A Acquired: 8/27/2012 18:24:08 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	2.971	<.0000	.1314	.0003	.0011	.0034	<.0000
Stddev	.0027	.023	.0002	.0002	.0032	.0005	.0007	.0052
%RSD	600.5	.7846	11.71	.1595	1170.	45.65	20.53	7.491
#1	-.0004	2.956	-.0021	.1316	-.0008	.0012	.0041	-.0680
#2	-.0032	2.960	-.0016	.1314	-.0022	.0005	.0028	-.0645
#3	.0023	2.998	-.0019	.1312	.0039	.0015	.0032	-.0747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.0129
Stddev	.0006	.0003
%RSD	83.09	2.305
#1	-.0005	.0125
#2	-.0002	.0130
#3	-.0014	.0131
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3679.3
Stddev	29.3
%RSD	.79686
#1	3712.5
#2	3656.8
#3	3668.6

Sample Name: 160-442-D-5-A Acquired: 8/27/2012 18:27:44 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**2.921**	**.0150**	**.0189**	**.1709**	**.0001**	**.0007**	F **54.98**	**.0002**
Stddev	.0005	.027	.0009	.0007	.0011	.0001	.0027	1.26	.0002
%RSD	776.8	.9143	6.267	3.712	.6331	78.42	406.9	2.292	92.32
#1	-.0003	2.892	.0140	.0195	.1697	.0000	.0034	54.04	.0001
#2	-.0001	2.945	.0151	.0182	.1716	.0002	.0005	56.41	.0001
#3	.0006	2.926	.0159	.0190	.1714	.0002	-.0019	54.48	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.0039**	**.0033**	**12.59**	**1.602**	**.0045**	**18.73**	**.9059**	**.0008**
Stddev	.0003	.0003	.0014	.08	.027	.0002	.13	.0058	.0002
%RSD	12.06	7.056	41.96	.6052	1.683	3.401	.6918	.6381	18.89
#1	.0022	.0040	.0028	12.51	1.592	.0047	18.60	.8992	.0007
#2	.0027	.0041	.0023	12.64	1.581	.0044	18.86	.9088	.0009
#3	.0024	.0036	.0049	12.64	1.633	.0044	18.72	.9096	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.652**	**.0094**	**.3301**	**.0078**	**.1161**	**.0004**	**<.0000**	**8.677**	**<.0000**
Stddev	.011	.0004	.0057	.0006	.0034	.0006	.0013	.059	.0007
%RSD	.4162	4.037	1.723	7.351	2.918	168.3	162.6	.6793	43.06
#1	2.639	.0090	.3259	.0075	.1129	-.0002	.0007	8.613	-.0010
#2	2.661	.0098	.3366	.0084	.1197	.0003	-.0012	8.728	-.0025
#3	2.655	.0094	.3279	.0074	.1157	.0010	-.0019	8.689	-.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-5-A Acquired: 8/27/2012 18:27:44 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2549	<.0000	.0601	.0024	<.0000	.0077	.0369
Stddev	.0019	.0052	.0005	.0005	.0033	.0026	.0009
%RSD	.7539	69.63	.7919	21.87	4.952	33.03	2.548
#1	.2527	-.0072	.0597	.0028	-.0711	.0106	.0362
#2	.2557	-.0024	.0606	.0027	-.0645	.0057	.0380
#3	.2562	-.0127	.0601	.0018	-.0668	.0069	.0365
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3829.8
Stddev	74.3
%RSD	1.9407
#1	3851.4
#2	3747.1
#3	3891.0

Sample Name: 160-442-D-6-A Acquired: 8/27/2012 18:31:20 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0172	.0004	.0881	.1925	<.0000	<.0000	13.40	<.0000
Stddev	.0000	.0069	.0006	.0032	.0010	.0000	.0030	.18	.0001
%RSD	42.65	40.08	163.1	3.630	.5346	27.47	1058.	1.356	28.97
#1	.0002	.0172	.0010	.0871	.1916	.0000	-.0037	13.21	-.0003
#2	.0001	.0103	-.0002	.0917	.1922	.0000	.0012	13.57	-.0004
#3	.0001	.0240	.0003	.0855	.1936	.0000	.0017	13.42	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	<.0000	1.871	5.462	.0046	4.463	.0472	<.0000
Stddev	.0001	.0004	.0019	.013	.041	.0023	.034	.0003	.0002
%RSD	43.05	82.59	627.5	.6847	.7450	49.00	.7713	.5371	15.18
#1	-.0003	-.0001	.0017	1.858	5.439	.0065	4.426	.0473	-.0013
#2	-.0003	-.0009	-.0006	1.870	5.439	.0021	4.470	.0474	-.0010
#3	-.0001	-.0004	-.0020	1.884	5.509	.0053	4.494	.0469	-.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.286	.0013	.0849	.0001	3.132	.0008	<.0000	2.504	<.0000
Stddev	.055	.0002	.0014	.0019	.038	.0006	.0038	.017	.0008
%RSD	.7509	14.51	1.643	2636.	1.216	70.38	184.5	.6694	58.08
#1	7.240	.0011	.0833	.0023	3.092	.0015	-.0013	2.496	-.0009
#2	7.273	.0015	.0857	-.0008	3.167	.0005	-.0062	2.493	-.0023
#3	7.347	.0015	.0856	-.0013	3.137	.0005	.0013	2.524	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-6-A Acquired: 8/27/2012 18:31:20 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0785	<.0000	.0013	.0002	<.0000	<.0000	.0054
Stddev	.0007	.0041	.0008	.0012	.0092	.0019	.0002
%RSD	.9362	56.57	59.46	641.9	14.53	86.07	3.510
#1	.0781	-.0073	.0013	.0010	-.0668	-.0012	.0056
#2	.0782	-.0113	.0006	-.0012	-.0531	-.0044	.0053
#3	.0794	-.0031	.0021	.0008	-.0707	-.0010	.0053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3708.3
Stddev	70.7
%RSD	1.9065
#1	3748.0
#2	3626.7
#3	3750.3

Sample Name: MB 160-9220/1-A Acquired: 8/27/2012 18:34:59 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0135**	**.0000**	**.0150**	**<.0000**	**.0000**	**.0006**	**.0294**
Stddev	.0003	.0102	.0019	.0041	.0001	.0000	.0026	.0004
%RSD	117.1	75.08	10910.	27.43	78.87	88.00	414.7	1.497
#1	.0004	.0036	-.0017	.0143	-.0002	.0000	.0034	.0298
#2	.0004	.0131	.0021	.0195	-.0001	.0000	.0000	.0295
#3	-.0001	.0239	-.0003	.0113	.0000	.0000	-.0016	.0289
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**<.0000**	**.0032**	**.0106**	**.0053**	**<.0000**	**.0131**
Stddev	.0001	.0003	.0003	.0014	.0014	.0125	.0012	.0013
%RSD	59.89	79.66	27.10	41.98	13.30	233.6	61.10	9.685
#1	-.0001	-.0004	-.0013	.0033	.0099	.0195	-.0011	.0137
#2	-.0002	.0000	-.0007	.0045	.0097	.0007	-.0033	.0116
#3	-.0001	-.0005	-.0010	.0018	.0122	-.0041	-.0015	.0140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**<.0000**	**.0372**	**.0000**	**.0003**	**<.0000**	**.0018**	**.0016**
Stddev	.0003	.0003	.0106	.0001	.0023	.0012	.0022	.0019
%RSD	146.3	19.11	28.42	246.4	822.1	320.8	123.2	121.8
#1	.0004	-.0012	.0416	.0000	-.0022	.0010	-.0007	.0007
#2	.0002	-.0012	.0448	.0000	.0007	-.0010	.0034	.0003
#3	-.0001	-.0016	.0251	.0002	.0023	-.0012	.0028	.0038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: MB 160-9220/1-A Acquired: 8/27/2012 18:34:59 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0878	<.0000	.0001	<.0000	.0004	.0023	<.0000
Stddev	.0031	.0037	.0004	.0001	.0024	.0004	.0004	.0111
%RSD	1632.	4.167	153.6	112.1	31.15	96.05	16.26	24.28
#1	.0000	.0886	.0001	.0001	-.0098	.0004	.0019	-.0334
#2	.0034	.0838	-.0002	.0001	-.0081	.0008	.0027	-.0495
#3	-.0029	.0909	-.0006	.0000	-.0051	.0000	.0024	-.0547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0016	W .0109
Stddev	.0025	.0001
%RSD	151.1	.6149
#1	.0042	.0109
#2	.0014	.0110
#3	-.0007	.0109
Check ?	Chk Pass	Chk Warn
High Limit		.0100
Low Limit		-.0100

Int. Std.	Y_3710
Units	Cts/S
Avg	3785.8
Stddev	48.6
%RSD	1.2828
#1	3778.2
#2	3741.4
#3	3837.7

Sample Name: CCV Acquired: 8/27/2012 18:38:41 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9524**	**50.86**	**4.911**	**4.958**	**5.125**	**5.064**	**4.918**	**24.60**	**4.940**
Stddev	.0185	.12	.012	.020	.018	.011	.028	.04	.009
%RSD	1.940	.2357	.2439	.4024	.3537	.2079	.5672	.1468	.1806
#1	.9737	50.90	4.907	4.957	5.121	5.068	4.885	24.56	4.931
#2	.9430	50.73	4.901	4.939	5.109	5.052	4.935	24.60	4.941
#3	.9405	50.96	4.924	4.979	5.145	5.072	4.933	24.63	4.949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.008**	**4.922**	**4.964**	**50.40**	**50.28**	**5.100**	**25.41**	**5.076**	**4.841**
Stddev	.011	.085	.012	.16	.18	.014	.04	.011	.016
%RSD	.2276	1.734	.2322	.3101	.3583	.2807	.1730	.2118	.3206
#1	4.995	5.021	4.952	50.43	50.26	5.100	25.46	5.076	4.824
#2	5.013	4.872	4.967	50.22	50.11	5.085	25.37	5.065	4.843
#3	5.016	4.873	4.974	50.53	50.47	5.113	25.41	5.087	4.855
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.07**	**4.962**	**4.801**	**4.914**	**48.59**	**.9769**	**4.925**	**5.054**	**4.911**
Stddev	.12	.008	.011	.012	.21	.0061	.019	.025	.008
%RSD	.2393	.1552	.2379	.2530	.4325	.6272	.3872	.4933	.1578
#1	49.12	4.955	4.789	4.904	48.36	.9699	4.904	5.080	4.902
#2	48.94	4.960	4.805	4.910	48.66	.9794	4.928	5.030	4.913
#3	49.15	4.970	4.811	4.928	48.76	.9813	4.942	5.051	4.917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 18:38:41 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.007**	**5.010**	**5.104**	**4.841**	**5.047**	**4.903**	**4.862**
Stddev	.054	.108	.017	.011	.102	.005	.010
%RSD	1.082	2.160	.3299	.2182	2.016	.1115	.2061
#1	4.996	5.134	5.105	4.829	5.164	4.903	4.851
#2	4.960	4.965	5.086	4.845	4.982	4.898	4.866
#3	5.066	4.932	5.120	4.849	4.994	4.909	4.869
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3560.9**
Stddev	35.6
%RSD	1.0004
#1	3519.8
#2	3579.7
#3	3583.2

Sample Name: CCB Acquired: 8/27/2012 18:42:01 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**<.0000**	**.0024**	**.0147**	**.0003**	**.0006**	**<.0000**	**.0002**	**<.0000**
Stddev	.0004	.0038	.0004	.0026	.0002	.0003	.0010	.0006	.0002
%RSD	108.6	200.4	15.30	17.77	54.28	55.34	382.9	275.8	555.3
#1	.0001	-.0007	.0025	.0174	.0005	.0010	-.0010	.0004	.0001
#2	.0008	-.0062	.0021	.0122	.0003	.0006	-.0006	.0008	.0000
#3	.0002	.0011	.0028	.0145	.0002	.0003	.0008	-.0005	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**<.0000**	**.0010**	**.0066**	**.0087**	**.0015**	**.0157**	**.0010**	**.0059**
Stddev	.0002	.0004	.0014	.0026	.0214	.0007	.0069	.0004	.0005
%RSD	228.4	67.42	132.3	39.70	245.3	46.99	44.25	39.69	7.759
#1	.0000	-.0004	-.0001	.0095	-.0139	.0023	.0221	.0008	.0054
#2	.0001	-.0010	.0007	.0061	.0287	.0013	.0167	.0015	.0061
#3	-.0003	-.0003	.0025	.0043	.0114	.0009	.0083	.0008	.0063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0258**	**.0002**	**.0005**	**.0004**	**.0030**	**.0047**	**.0019**	**.0012**	**.0001**
Stddev	.0051	.0001	.0007	.0005	.0027	.0024	.0017	.0036	.0010
%RSD	19.94	30.83	139.8	127.9	87.66	50.14	89.77	302.9	936.7
#1	.0241	.0001	.0006	.0000	.0033	.0041	.0024	-.0018	-.0010
#2	.0216	.0002	.0011	.0010	.0056	.0027	.0033	.0053	.0008
#3	.0315	.0003	-.0003	.0002	.0003	.0073	.0000	.0002	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 18:42:01 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	<.0000	.0019	.0009	<.0000	.0014	.0002
Stddev	.0003	.0064	.0003	.0004	.0148	.0019	.0002
%RSD	50.98	173.6	16.50	47.23	35.45	140.9	108.0
#1	.0010	-.0011	.0019	.0012	-.0575	.0029	.0001
#2	.0005	.0010	.0021	.0011	-.0396	.0020	.0004
#3	.0004	-.0110	.0015	.0004	-.0281	-.0008	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3687.4
Stddev	22.0
%RSD	.59598
#1	3685.6
#2	3710.1
#3	3666.3

Sample Name: LCS 160-9220/2-A Acquired: 8/27/2012 18:45:44 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4193**	**66.99**	**.8976**	**1.292**	**2.860**	**.8055**	**.0006**	**54.03**	**.9632**
Stddev	.0033	.29	.0017	.005	.014	.0035	.0035	.08	.0025
%RSD	.7779	.4325	.1860	.3750	.4712	.4336	541.8	.1503	.2552
#1	.4218	67.18	.8994	1.288	2.869	.8077	-.0033	54.07	.9655
#2	.4205	67.13	.8960	1.297	2.867	.8073	.0021	54.09	.9635
#3	.4157	66.65	.8974	1.289	2.845	.8015	.0032	53.94	.9606
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.200**	**.7888**	**.6417**	**98.01**	**20.22**	**.0662**	**24.30**	**3.894**	**.7814**
Stddev	.003	.0070	.0011	.41	.04	.0008	.04	.017	.0018
%RSD	.2291	.8825	.1698	.4185	.2093	1.248	.1715	.4346	.2341
#1	1.202	.7929	.6416	98.33	20.24	.0662	24.31	3.902	.7827
#2	1.199	.7927	.6429	98.16	20.25	.0670	24.34	3.905	.7823
#3	1.197	.7807	.6407	97.55	20.17	.0654	24.26	3.874	.7793
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.924**	**.9934**	**4.370**	**1.297**	**2.091**	**.7337**	**1.733**	**26.74**	**1.087**
Stddev	.026	.0017	.006	.005	.002	.0002	.002	.12	.001
%RSD	.4392	.1758	.1408	.3831	.0870	.0318	.1142	.4559	.0551
#1	5.946	.9946	4.370	1.301	2.089	.7335	1.731	26.79	1.086
#2	5.931	.9942	4.376	1.298	2.093	.7337	1.735	26.83	1.086
#3	5.895	.9914	4.364	1.292	2.092	.7339	1.732	26.60	1.087
Check ?	Chk Pass	Chk Pass	None	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass
High Limit									
Low Limit									

Sample Name: LCS 160-9220/2-A Acquired: 8/27/2012 18:45:44 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9692	<.0000	1.778	1.458	<.0000	.9428	2.522
Stddev	.0039	.0007	.009	.002	.0204	.0011	.005
%RSD	.3994	1.896	.5055	.1412	33.73	.1163	.2093
#1	.9730	-.0388	1.787	1.459	-.0496	.9438	2.527
#2	.9695	-.0390	1.777	1.460	-.0838	.9416	2.524
#3	.9653	-.0402	1.770	1.456	-.0476	.9429	2.516
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4523.8
Stddev	29.3
%RSD	.64783
#1	4506.5
#2	4507.2
#3	4557.6

Sample Name: LCS 160-9220/7-A Acquired: 8/27/2012 18:49:05 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1028**	**10.38**	**.9956**	F **1.377**	**1.034**	**1.008**	**1.023**	**10.20**	**1.011**
Stddev	.0022	.03	.0180	.005	.004	.002	.013	.15	.014
%RSD	2.178	.2910	1.811	.3322	.3958	.2158	1.229	1.471	1.411
#1	.1049	10.34	1.008	1.373	1.030	1.005	1.033	10.32	1.022
#2	.1032	10.39	1.004	1.382	1.035	1.009	1.027	10.25	1.016
#3	.1005	10.40	.9749	1.376	1.038	1.009	1.009	10.03	.9945
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				1.200					
Low Limit				.8000					

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.058**	**1.018**	**1.030**	**10.42**	**10.15**	**1.026**	**10.31**	**1.039**	**1.038**
Stddev	.016	.025	.015	.03	.02	.004	.01	.003	.015
%RSD	1.515	2.460	1.472	.2516	.1767	.3680	.1317	.2441	1.478
#1	1.070	1.034	1.039	10.39	10.15	1.023	10.30	1.036	1.049
#2	1.063	1.030	1.038	10.42	10.14	1.025	10.32	1.038	1.044
#3	1.040	.9891	1.013	10.44	10.17	1.030	10.29	1.041	1.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.973**	**1.068**	**.9814**	**1.036**	**9.803**	**.5284**	**1.006**	F **3.654**	**1.027**
Stddev	.026	.016	.0151	.016	.167	.0085	.014	.018	.016
%RSD	.2573	1.527	1.539	1.559	1.704	1.617	1.399	.4966	1.580
#1	9.949	1.079	.9941	1.049	9.925	.5342	1.019	3.641	1.039
#2	10.00	1.075	.9855	1.040	9.872	.5324	1.009	3.646	1.032
#3	9.971	1.049	.9647	1.018	9.613	.5186	.9912	3.674	1.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								6.000	
Low Limit								4.000	

Sample Name: LCS 160-9220/7-A Acquired: 8/27/2012 18:49:05 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.025	1.039	1.023	.2161	.9686	.9920	1.010
Stddev	.002	.030	.005	.0022	.0398	.0066	.015
%RSD	.2263	2.861	.4546	1.020	4.112	.6613	1.451
#1	1.023	1.060	1.018	.2185	1.005	.9882	1.021
#2	1.026	1.052	1.023	.2153	.9748	.9996	1.014
#3	1.027	1.005	1.027	.2143	.9260	.9883	.9931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3737.8
Stddev	48.6
%RSD	1.3006
#1	3694.3
#2	3728.9
#3	3790.3

Sample Name: LCS 160-9220/8-A Acquired: 8/27/2012 18:52:24 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0001	F .0064	F .0009	F .0111	F<.0000	F .0001	F<.0000	F .0145
Stddev	.0003	.0099	.0017	.0014	.0003	.0001	.0029	.0005
%RSD	307.0	153.7	177.2	12.58	186.4	65.66	114.5	3.667
#1	.0004	-.0012	.0000	.0117	.0002	.0002	.0006	.0152
#2	-.0002	.0176	.0000	.0095	-.0002	.0001	-.0050	.0143
#3	.0001	.0029	.0029	.0121	-.0005	.0000	-.0031	.0142
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	.1200	12.00	1.200	1.200	1.200	1.200	1.200	12.00
Low Limit	.0800	8.000	.8000	.8000	.8000	.8000	.8000	8.000

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F<.0000	F<.0000	F<.0000	F .0030	F .0071	F<.0000	F .0004	F .0103
Stddev	.0000	.0002	.0003	.0034	.0015	.0216	.0003	.0110
%RSD	33.20	29.04	27.73	114.2	20.89	91.67	78.93	106.9
#1	-.0001	-.0006	-.0015	.0027	.0058	-.0032	.0005	.0007
#2	-.0001	-.0004	-.0010	.0065	.0087	-.0213	.0008	.0080
#3	-.0001	-.0008	-.0010	-.0003	.0068	-.0462	.0001	.0224
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	1.200	1.200	1.200	1.200	12.00	12.00	1.200	12.00
Low Limit	.8000	.8000	.8000	.8000	8.000	8.000	.8000	8.000

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F .0007	F<.0000	F .0209	F .0012	F .0004	F .0012	F .0116	F .0061
Stddev	.0003	.0002	.0036	.0001	.0010	.0010	.0015	.0027
%RSD	50.05	91.06	17.16	9.090	239.5	86.23	12.78	43.21
#1	.0011	.0000	.0226	.0012	.0016	.0023	.0125	.0072
#2	.0006	-.0001	.0168	.0013	-.0004	.0005	.0125	.0081
#3	.0004	-.0003	.0234	.0011	.0001	.0007	.0099	.0031
Check ?	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	1.200	1.200	12.00	1.200	1.200	1.200	12.00	.6000
Low Limit	.8000	.8000	8.000	.8000	.8000	.8000	8.000	.4000

Sample Name: LCS 160-9220/8-A Acquired: 8/27/2012 18:52:24 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F<.0000	4.848	F<.0000	F .0002	F<.0000	F .0007	F .0008	F<.0000
Stddev	.0022	.012	.0003	.0001	.0050	.0007	.0002	.0024
%RSD	248.0	.2535	76.90	84.48	69.53	103.9	24.66	5.136
#1	.0015	4.847	-.0007	.0003	-.0014	.0000	.0010	-.0496
#2	-.0013	4.837	-.0003	.0001	-.0098	.0006	.0008	-.0448
#3	-.0028	4.861	-.0001	.0000	-.0102	.0014	.0006	-.0478
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail	Chk Fail
High Limit	1.200		1.200	1.200	1.200	1.200	.2400	1.200
Low Limit	.8000		.8000	.8000	.8000	.8000	.1600	.8000

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	F<.0000	F .0041
Stddev	.0025	.0001
%RSD	219.8	2.635
#1	.0016	.0040
#2	-.0016	.0040
#3	-.0033	.0042
Check ?	Chk Fail	Chk Fail
High Limit	1.200	1.200
Low Limit	.8000	.8000

Int. Std.	Y_3710
Units	Cts/S
Avg	3745.9
Stddev	57.4
%RSD	1.5323
#1	3680.7
#2	3788.9
#3	3768.1

Sample Name: 160-448-A-1-A Acquired: 8/27/2012 18:56:04 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**4.813**	**.0872**	**.0104**	**.3014**	**.0001**	**.0083**	**4.441**	**.0175**
Stddev	.0005	.019	.0006	.0021	.0020	.0000	.0017	.031	.0001
%RSD	41.93	.3875	.7002	20.21	.6680	76.67	20.39	.7021	.6331
#1	.0018	4.810	.0869	.0080	.3000	.0001	.0103	4.417	.0174
#2	.0011	4.796	.0879	.0111	.3006	.0000	.0071	4.476	.0176
#3	.0008	4.833	.0869	.0120	.3037	.0000	.0076	4.430	.0175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0147**	**.7337**	**.7351**	**.6322**	**.0717**	**1.453**	**.0345**	**.0049**
Stddev	.0001	.0005	.0054	.0053	.0136	.0010	.013	.0004	.0005
%RSD	11.85	3.465	.7379	.7205	2.146	1.386	.8840	1.213	9.156
#1	.0008	.0149	.7290	.7301	.6214	.0728	1.439	.0349	.0052
#2	.0008	.0151	.7396	.7345	.6474	.0709	1.455	.0341	.0044
#3	.0010	.0141	.7325	.7407	.6278	.0715	1.465	.0347	.0052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**6.843**	**.0094**	**1.410**	**.7632**	**5.401**	**.0017**	**.0028**	**3.855**	**.0480**
Stddev	.050	.0002	.010	.0070	.037	.0028	.0018	.032	.0009
%RSD	.7354	1.716	.7368	.9206	.6809	163.8	65.90	.8417	1.779
#1	6.838	.0096	1.402	.7566	5.368	.0017	.0010	3.846	.0470
#2	6.796	.0095	1.421	.7706	5.440	-.0011	.0026	3.828	.0485
#3	6.896	.0093	1.406	.7624	5.395	.0046	.0047	3.891	.0485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-448-A-1-A Acquired: 8/27/2012 18:56:04 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4395	<.0000	.1495	.0004	<.0000	.0260	.0493
Stddev	.0026	.0031	.0001	.0020	.0102	.0021	.0002
%RSD	.5952	156.6	.0854	513.4	18.78	8.097	.3602
#1	.4387	-.0010	.1494	.0026	-.0658	.0280	.0493
#2	.4373	-.0055	.1496	-.0002	-.0471	.0238	.0495
#3	.4424	.0005	.1495	-.0012	-.0495	.0262	.0491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3887.2
Stddev	19.6
%RSD	.50517
#1	3905.1
#2	3866.2
#3	3890.1

Sample Name: 160-448-A-1-A SD Acquired: 8/27/2012 18:59:39 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**1.021**	**.0200**	**.0034**	**.0635**	**.0000**	**.0033**	**.9681**	**.0035**
Stddev	.0003	.014	.0007	.0038	.0003	.0001	.0046	.0130	.0002
%RSD	22.75	1.388	3.698	110.5	.5499	1074.	140.1	1.344	5.869
#1	.0011	1.036	.0201	.0074	.0638	-.0001	-.0003	.9536	.0033
#2	.0015	1.017	.0207	.0000	.0635	-.0001	.0017	.9787	.0037
#3	.0010	1.009	.0192	.0028	.0631	.0001	.0084	.9720	.0036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0026**	**.0089**	**.1554**	**.1300**	**.0151**	**.3134**	**.0073**	**<.0000**
Stddev	.0002	.0016	.0028	.0005	.0211	.0015	.0125	.0001	.0002
%RSD	41.41	60.81	31.33	.3521	16.21	10.09	3.997	1.252	188.0
#1	-.0006	.0021	.0090	.1552	.1413	.0135	.2989	.0074	.0000
#2	-.0004	.0014	.0116	.1560	.1057	.0165	.3213	.0072	.0000
#3	-.0002	.0044	.0060	.1549	.1430	.0151	.3199	.0074	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.456**	**.0016**	**.3008**	**.0273**	**1.157**	**<.0000**	**.0020**	**.8066**	**<.0000**
Stddev	.014	.0004	.0060	.0016	.029	.0015	.0034	.0103	.0004
%RSD	.9706	23.88	1.992	5.864	2.463	1221.	172.2	1.277	161.8
#1	1.443	.0019	.2941	.0265	1.125	-.0006	.0008	.8011	.0002
#2	1.471	.0018	.3055	.0291	1.180	.0016	-.0007	.8185	-.0003
#3	1.454	.0012	.3029	.0262	1.164	-.0014	.0058	.8003	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-448-A-1-A SD Acquired: 8/27/2012 18:59:39 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0931	<.0000	.0324	.0026	<.0000	.0029	.0107
Stddev	.0006	.0031	.0003	.0005	.0060	.0031	.0002
%RSD	.6530	3040.	.8693	17.46	11.76	104.7	1.732
#1	.0932	.0020	.0323	.0022	-.0513	.0006	.0107
#2	.0936	.0013	.0322	.0025	-.0568	.0064	.0110
#3	.0924	-.0036	.0327	.0031	-.0448	.0018	.0106
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3688.3
Stddev	13.6
%RSD	.36825
#1	3703.9
#2	3681.6
#3	3679.3

Sample Name: 160-448-A-1-B MS Acquired: 8/27/2012 19:03:19 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0931**	**23.69**	**1.542**	**.9319**	**1.210**	**.9058**	**.9125**	**12.27**	**.9381**
Stddev	.0007	.10	.018	.0026	.009	.0049	.0084	.13	.0100
%RSD	.7299	.4430	1.163	.2841	.7435	.5392	.9208	1.070	1.068
#1	.0938	23.80	1.555	.9312	1.215	.9107	.9172	12.37	.9446
#2	.0931	23.59	1.550	.9297	1.200	.9009	.9175	12.32	.9430
#3	.0924	23.69	1.521	.9348	1.216	.9058	.9028	12.12	.9265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9338**	**.9274**	**.9684**	**10.10**	**10.67**	**1.024**	**35.42**	**.9868**	**.9432**
Stddev	.0097	.0125	.0084	.08	.07	.006	.24	.0072	.0094
%RSD	1.043	1.344	.8707	.8335	.6849	.6015	.6703	.7338	.9977
#1	.9410	.9394	.9711	10.16	10.71	1.028	35.63	.9932	.9503
#2	.9376	.9282	.9752	9.999	10.58	1.017	35.16	.9790	.9468
#3	.9227	.9145	.9589	10.13	10.71	1.027	35.47	.9883	.9325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**22.23**	**.9535**	**1.308**	**1.229**	**15.55**	**.4640**	**.8899**	F **21.32**	**.9192**
Stddev	.11	.0107	.014	.015	.15	.0080	.0087	.14	.0093
%RSD	.4880	1.118	1.101	1.242	.9486	1.717	.9737	.6606	1.010
#1	22.32	.9617	1.320	1.239	15.65	.4661	.8924	21.43	.9260
#2	22.11	.9574	1.312	1.237	15.61	.4707	.8970	21.16	.9230
#3	22.27	.9415	1.292	1.211	15.38	.4552	.8802	21.37	.9086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-448-A-1-B MS Acquired: 8/27/2012 19:03:19 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.241	.9334	1.466	.1882	.8410	.9588	.9306
Stddev	.005	.0116	.012	.0023	.0229	.0045	.0103
%RSD	.4283	1.243	.8178	1.206	2.718	.4673	1.104
#1	1.245	.9366	1.478	.1897	.8661	.9639	.9373
#2	1.235	.9431	1.454	.1892	.8354	.9557	.9356
#3	1.243	.9205	1.467	.1856	.8214	.9567	.9188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3930.1
Stddev	62.0
%RSD	1.5778
#1	3891.1
#2	3897.5
#3	4001.6

Sample Name: 160-448-A-1-C MSD Acquired: 8/27/2012 19:06:38 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0948**	**21.41**	**.9424**	**.9414**	**1.181**	**.9216**	**.9179**	**12.19**	**.9352**
Stddev	.0017	.02	.0122	.0056	.002	.0026	.0069	.15	.0123
%RSD	1.776	.0948	1.294	.5948	.1301	.2817	.7555	1.249	1.320
#1	.0950	21.40	.9425	.9361	1.182	.9228	.9203	12.19	.9343
#2	.0963	21.43	.9545	.9473	1.182	.9233	.9234	12.35	.9479
#3	.0930	21.39	.9301	.9409	1.180	.9186	.9101	12.04	.9233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9508**	**.9378**	**.9704**	**10.24**	**10.65**	**1.026**	**11.51**	**.9825**	**.9454**
Stddev	.0130	.0192	.0116	.01	.03	.003	.05	.0029	.0130
%RSD	1.368	2.046	1.197	.0775	.2424	.3167	.4336	.2943	1.375
#1	.9495	.9334	.9693	10.25	10.68	1.026	11.55	.9809	.9458
#2	.9644	.9589	.9825	10.25	10.62	1.030	11.52	.9859	.9582
#3	.9385	.9213	.9594	10.24	10.65	1.023	11.45	.9808	.9322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**28.64**	**.9704**	**1.331**	**1.111**	**21.70**	**.4700**	**.9060**	F **21.29**	**.9278**
Stddev	.07	.0123	.016	.013	.28	.0086	.0069	.08	.0139
%RSD	.2514	1.267	1.193	1.134	1.277	1.838	.7649	.3823	1.495
#1	28.65	.9700	1.328	1.113	21.67	.4672	.9082	21.28	.9256
#2	28.70	.9829	1.348	1.122	22.00	.4797	.9116	21.37	.9426
#3	28.56	.9583	1.317	1.097	21.44	.4631	.8983	21.21	.9151
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								10.00	
Low Limit								-10.00	

Sample Name: 160-448-A-1-C MSD Acquired: 8/27/2012 19:06:38 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.277	.9394	1.539	.1935	.8839	.9845	.9411
Stddev	.004	.0195	.006	.0015	.0412	.0038	.0124
%RSD	.2788	2.075	.3929	.7529	4.661	.3844	1.317
#1	1.277	.9368	1.543	.1941	.8489	.9881	.9412
#2	1.280	.9600	1.543	.1946	.9293	.9849	.9534
#3	1.273	.9213	1.532	.1919	.8734	.9806	.9286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	4008.7
Stddev	54.1
%RSD	1.3501
#1	4019.7
#2	3949.9
#3	4056.5

Sample Name: 160-448-A-2-A Acquired: 8/27/2012 19:09:55 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	17.64	.0094	.0259	.0675	.0001	<.0000	2.984	.0033
Stddev	.0007	.08	.0013	.0034	.0001	.0001	.0028	.022	.0001
%RSD	198.7	.4345	13.48	13.14	.1484	66.57	109.3	.7362	3.922
#1	-.0011	17.73	.0097	.0282	.0675	.0002	.0005	2.959	.0032
#2	-.0001	17.60	.0105	.0220	.0674	.0002	-.0032	2.999	.0033
#3	.0001	17.60	.0080	.0274	.0676	.0000	-.0049	2.994	.0035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0023	.0159	.0186	.6907	1.178	.0342	2.506	.0260	.0035
Stddev	.0004	.0001	.0005	.0069	.008	.0010	.020	.0003	.0002
%RSD	17.13	.9299	2.857	.9985	.6482	3.048	.8060	1.221	5.406
#1	.0027	.0160	.0189	.6987	1.186	.0353	2.528	.0262	.0034
#2	.0020	.0160	.0180	.6862	1.172	.0334	2.489	.0256	.0034
#3	.0022	.0158	.0189	.6874	1.175	.0338	2.499	.0262	.0037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.28	.0057	.1949	.0739	2.202	.0006	<.0000	6.548	.0010
Stddev	.06	.0001	.0013	.0021	.014	.0011	.0045	.016	.0008
%RSD	.4476	1.751	.6697	2.807	.6392	175.3	2228.	.2468	80.55
#1	12.33	.0056	.1956	.0715	2.186	.0006	-.0050	6.566	.0015
#2	12.29	.0058	.1958	.0748	2.210	.0017	.0038	6.544	.0001
#3	12.22	.0057	.1934	.0753	2.211	-.0005	.0006	6.535	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-448-A-2-A Acquired: 8/27/2012 19:09:55 Type: Unk
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2233	<.0000	.8731	.0020	<.0000	.0334	.0101
Stddev	.0008	.0056	.0051	.0006	.0121	.0043	.0000
%RSD	.3776	30.86	.5784	27.31	37.02	12.93	.1373
#1	.2242	-.0157	.8788	.0015	-.0214	.0364	.0101
#2	.2233	-.0143	.8693	.0020	-.0455	.0354	.0101
#3	.2225	-.0246	.8712	.0026	-.0313	.0285	.0101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3913.6
Stddev	35.9
%RSD	.91642
#1	3878.3
#2	3912.4
#3	3950.0

Sample Name: CCV Acquired: 8/27/2012 19:13:33 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9484**	**50.38**	**4.937**	**4.947**	**5.131**	**5.024**	**4.914**	**24.55**	**4.889**
Stddev	.0081	.07	.052	.004	.007	.014	.053	.23	.047
%RSD	.8496	.1359	1.059	.0861	.1335	.2753	1.081	.9343	.9664
#1	.9394	50.42	4.924	4.943	5.128	5.033	4.901	24.48	4.877
#2	.9549	50.42	4.995	4.952	5.138	5.032	4.972	24.81	4.942
#3	.9510	50.30	4.893	4.946	5.125	5.009	4.868	24.37	4.850
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.974**	**4.856**	**4.908**	**50.40**	**50.31**	**5.050**	**25.14**	**5.039**	**4.829**
Stddev	.049	.050	.050	.08	.06	.010	.05	.012	.047
%RSD	.9874	1.023	1.009	.1599	.1140	.2054	.1848	.2419	.9740
#1	4.958	4.807	4.907	50.41	50.26	5.048	25.15	5.047	4.817
#2	5.029	4.906	4.958	50.47	50.38	5.061	25.18	5.044	4.880
#3	4.934	4.856	4.859	50.31	50.29	5.040	25.09	5.025	4.788
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**48.89**	**4.941**	**4.822**	**4.900**	**49.09**	**.9766**	**4.959**	**5.041**	**4.903**
Stddev	.13	.049	.042	.045	.50	.0062	.051	.014	.046
%RSD	.2690	1.000	.8776	.9113	1.021	.6382	1.039	.2679	.9380
#1	49.01	4.923	4.821	4.883	48.97	.9813	4.946	5.033	4.895
#2	48.92	4.997	4.865	4.950	49.64	.9791	5.016	5.056	4.953
#3	48.75	4.903	4.781	4.866	48.66	.9695	4.916	5.033	4.862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/27/2012 19:13:33 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.987**	**4.984**	**5.079**	**4.837**	**5.022**	**4.919**	**4.846**
Stddev	.135	.030	.012	.048	.038	.021	.045
%RSD	2.702	.6081	.2277	.9817	.7496	.4260	.9389
#1	4.839	4.954	5.083	4.831	4.979	4.941	4.839
#2	5.103	5.015	5.089	4.888	5.039	4.915	4.895
#3	5.019	4.982	5.066	4.793	5.049	4.900	4.804
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3735.3**
Stddev	41.1
%RSD	1.0995
#1	3744.1
#2	3690.5
#3	3771.2

Sample Name: CCB Acquired: 8/27/2012 19:16:55 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0004	.0165	.0002	.0006	<.0000	<.0000	<.0000
Stddev	.0009	.0067	.0017	.0003	.0005	.0003	.0033	.0002	.0002
%RSD	248.9	366.4	379.9	1.599	256.7	55.08	779.1	1234.	110.7
#1	.0004	-.0090	.0006	.0162	.0007	.0009	-.0008	-.0002	.0000
#2	-.0014	-.0008	.0020	.0165	.0000	.0007	.0031	.0002	-.0004
#3	-.0001	.0043	-.0013	.0167	-.0002	.0003	-.0035	.0000	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	.0029	.0091	.0288	.0004	.0094	.0009	.0055
Stddev	.0001	.0003	.0005	.0035	.0129	.0003	.0068	.0002	.0004
%RSD	52.03	43.89	16.30	38.94	44.79	59.10	72.23	19.19	7.004
#1	-.0004	-.0004	.0032	.0130	.0436	.0004	.0025	.0011	.0052
#2	-.0001	-.0009	.0024	.0083	.0196	.0002	.0097	.0010	.0054
#3	-.0003	-.0007	.0032	.0061	.0232	.0007	.0161	.0007	.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0250	.0001	.0001	<.0000	<.0000	.0041	.0028	<.0000	<.0000
Stddev	.0104	.0003	.0006	.0019	.0015	.0016	.0015	.0038	.0003
%RSD	41.71	550.8	423.3	860.7	355.8	40.06	54.06	96.57	204.1
#1	.0268	.0004	.0002	.0020	.0007	.0032	.0015	-.0075	-.0005
#2	.0343	-.0001	.0007	-.0014	.0002	.0060	.0045	.0001	.0000
#3	.0138	-.0001	-.0005	-.0013	-.0021	.0031	.0025	-.0044	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/27/2012 19:16:55 Type: QC
Method: 2011(v502) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	<.0000	.0019	.0041	<.0000	.0026	.0000
Stddev	.0004	.0011	.0006	.0005	.0049	.0027	.0001
%RSD	58.92	16.94	28.63	13.21	11.00	103.3	7254.
#1	.0012	-.0066	.0025	.0041	-.0439	.0044	.0001
#2	.0006	-.0073	.0014	.0047	-.0394	.0040	.0000
#3	.0004	-.0052	.0019	.0036	-.0491	-.0005	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3758.3
Stddev	19.4
%RSD	.51598
#1	3748.4
#2	3780.7
#3	3745.9

File 082812C1

ICV | ICB | LLC | ICSA | ICSAB | LOR | CCV | CCB CS 8/28/12 Std. ICSC-082312 6500

	Pos ID	Rack	Row	Col	Type	Samplename	Comment	Custom ID1	Custom ID2
1	1001	3	1	1	Unk	160-437-E-6-B	DF=20		
2	1002	3	1	2	Unk	160-437-E-7-B	DF=10		
3	1003	3	1	3	Unk	160-437-E-8-B	DF=10		
4	1004	3	1	4	Unk	160-442-E-5-B	DF=10		
5	1005	3	1	5	Unk	160-442-D-5-A	DF=10		
6	1006	3	1	6	Unk	MV8KCB			
7	1007	3	1	7	Unk	MV852C			
8	1008	3	1	8	Unk	MV7RA			
9	1009	3	1	9	Unk	MV7RAV	5		
10	1010	3	1	10	Unk	MV7RAS			
11	1011	3	1	11	Unk	MV7RAD			
12	1012	3	1	12	Unk	MV7RA			

Ca

Pb

Analytical batch: 9847

Vertical Table Report
Author: File: 082812C1
Notes:

	CALBLK1 8/28/2012 8:19:52/ metals 2011 (503)	CAL 1 8/28/2012 8:23:31/ metals 2011 (503)	CAL 2 8/28/2012 8:27:10/ metals 2011 (503)	CAL 3 8/28/2012 8:30:33/ metals 2011 (503)	CAL 4 8/28/2012 8:33:50/ metals 2011 (503)
Ag3280	-.0009	.0150	.2977	1.458	2.936
Al3961	-.0002	.0304	1.445	7.164	14.27
As1890	.0000	.0005	.0589	.2967	.5836
B_2496	.0003	.0149	.1424	.7118	1.416
Ba4554	.0345	.4764	8.750	43.89	87.94
Be3130	.0010	.0458	9.083	45.85	89.70
Bi2230	.0003	.0126		.3057	.5947
Ca1840	.0005	.1780	.8921	4.308	8.110
Cd2288	-.0003	.0046	1.002	4.958	9.687
Co2286	.0001	.0219	.4306	2.083	4.000
Cr2835	.0070	.0240	1.628	7.793	15.37
Cu2178	.0002	.0024	.0882	.4303	.8360
Fe2599	.0006	.0292	2.852	14.07	27.92
K_7664	.0047	.5521	1.118	5.592	11.24
Li6707	.0057	.1193	2.187	10.90	21.85
Mg2798	-.0011	.0393	.2053	1.013	2.013
Mn2576	.0002	.0261	1.695	8.336	16.46
Mo2020	.0002	.0179	.4536	2.239	4.411
Na5895	-.0364	.2981	3.361	17.10	34.31
Ni2216	.0002	.0252	.6117	2.940	5.656
P_1774	.0000	.0185		.3731	.7351
Pb2203	-.0003	.0010	.1317	.6366	1.220
S_1820	.0004	.1715		1.742	3.474
Sb2068	.0006	.0012	.0153	.0735	.1449
Se1960	.0001	.0009	.0429	.2131	.4188
Si2516	.0034	.0394		.4690	.9455
Sn1899	.0002	.0157	.1524	.7469	1.456
Sr4077	-.0020	.0639	13.06	64.19	128.3
Th2832	.0076	.0509		1.106	2.192
Ti3349	.0020	.0203	.9284	4.638	9.247
Tl1908	-.0005	.0014	.0873	.4157	.7893
U_3670	.0478	.1063		.7300	1.411
V_2908	.0004	.0105	.2012	1.001	1.997
Y_3710	3768.7	3731.7	3664.5	3586.0	3561.7
Zn2138	.0010	.0129	.5961	2.935	5.711

Vertical Table Report
Author:
Notes:

AM	ICV 8/28/2012 8:37:28/ metals 2011 (503)	ICB 8/28/2012 8:40:46/ metals 2011 (503)	LLC 8/28/2012 8:44:29/ metals 2011 (503)	ICSA 8/28/2012 8:48:07/ metals 2011 (503)	ICSAB 8/28/2012 8:51:45/ metals 2011 (503)
Ag3280	1.001	<.0000	.0099	<.0000	.9943
Al3961	49.70	.0083	.2036	99.88	98.20
As1890	5.057	.0004	.0100	W<.0000	.9515
B_2496	5.120	.0342	.1174	<.0000	.9847
Ba4554	5.061	.0008	.0500	.0005	.4900
Be3130	5.058	.0008	.0050	.0000	.4756
Bi2230	5.083	.0021	.1994	.0111	.9862
Ca1840	25.35	.0002	1.049	51.74	48.19
Cd2288	5.114	.0002	.0051	<.0000	.9693
Co2286	5.214	<.0000	.0526	.0030	.4802
Cr2835	5.059	.0003	.0100	F .0154	.4999
Cu2178	5.043	.0003	.0267	.0008	.4793
Fe2599	50.29	.0094	.1031	100.5	99.75
K_7664	49.58	<.0000	4.861	<.0000	19.67
Li6707	4.983	.0031	.0528	.0015	.9856
Mg2798	25.09	.0002	1.007	100.5	98.90
Mn2576	5.121	.0011	.0157	.0010	.4938
Mo2020	5.140	.0074	.0405	.0001	.9943
Na5895	49.72	.0144	.9909	<.0000	19.76
Ni2216	5.211	.0002	.0428	.0041	.9718
P_1774	5.066	.0007	.2446	.0036	.4912
Pb2203	5.172	<.0000	.0090	W<.0000	.9724
S_1820	50.40	.0049	4.823	.0021	19.49
Sb2068	1.006	<.0000	W .0078	.0039	1.024
Se1960	5.113	.0029	.0161	.0018	.9673
Si2516	4.955	<.0000	.3881	<.0000	.9815
Sn1899	5.096	.0011	.1029	<.0000	.9640
Sr4077	5.100	.0008	.0050	W<.0000	.9929
Th2832	5.163	<.0000	.1997	.0009	1.007
Ti3349	5.004	.0012	.0201	.0012	.4983
Tl1908	5.384	.0018	W .0245	<.0000	.9990
U_3670	4.946	.0030	.4982	.0414	.9843
V_2908	4.980	<.0000	.0480	.0023	.4806
Y_3710	3590.3	3693.0	3725.6	3567.9	3814.5
Zn2138	5.130	<.0000	.0204	<.0000	.9754

Vertical Table Report
Author:
Notes:

	LDR	CCV	CCB	160-437-E-6-B	160-437-E-7-B
AM	8/28/2012 8:55:08/	8/28/2012 8:58:46/	8/28/2012 9:02:06/	8/28/2012 9:45:55/	8/28/2012 9:49:32/
	metals	metals	metals	metals	metals
	2011 (503)	2011 (503)	2011 (503)	2011 (503)	2011 (503)
Ag3280	1.992	.9794	.0004	<.0000	.0001
Al3961	98.73	49.36	.0089	.0196	.0082
As1890	9.841	4.842	.0007	<.0000	.0017
B_2496	10.03	5.043	.0371	.0387	.0108
Ba4554	9.747	4.974	.0007	.0183	.0528
Be3130	10.03	5.034	.0007	<.0000	<.0000
Bi2230	9.894	4.910	<.0000	<.0000	<.0000
Ca1840	48.19	24.75	.0004	25.52	25.69
Cd2288	9.771	4.839	.0004	.0000	.0001
Co2286	9.632	4.851	<.0000	.0005	<.0000
Cr2835	9.668	4.854	.0007	<.0000	.0005
Cu2178	9.790	4.870	.0022	.0008	<.0000
Fe2599	99.31	49.83	.0086	.4485	3.343
K_7664	99.96	49.64	.0000	.4430	.5564
Li6707	9.929	4.951	.0028	.0036	.0017
Mg2798	48.99	24.58	.0099	2.473	7.149
Mn2576	9.838	4.960	.0008	.0437	.3513
Mo2020	9.867	4.853	.0072	.0001	<.0000
Na5895	100.6	49.99	.0250	6.680	1.676
Ni2216	9.645	4.851	.0004	.0007	.0009
P_1774	9.970	4.894	.0014	.0218	.0685
Pb2203	9.673	4.894	<.0000	<.0000	.0012
S_1820	99.88	48.39	.0049	9.618	.0531
Sb2068	1.977	.9671	.0042	.0014	<.0000
Se1960	9.880	4.869	.0051	.0039	.0010
Si2516	9.824	4.856	<.0000	.6683	1.628
Sn1899	9.716	4.830	.0009	<.0000	<.0000
Sr4077	10.00	4.971	.0008	.0516	.0837
Th2832	9.824	4.916	.0018	<.0000	.0042
Ti3349	9.932	4.960	.0009	.0003	<.0000
Tl1908	9.762	4.987	.0007	.0020	.0004
U_3670	9.734	4.886	.0214	<.0000	<.0000
V_2908	9.796	4.929	<.0000	.0007	<.0000
Y_3710	3685.5	3826.9	3830.8	3949.3	3824.9
Zn2138	9.800	4.869	<.0000	.0012	.0015

Vertical Table Report
Author:
Notes:

	160-437-E-8-B	160-442-E-5-B	160-442-D-5-A	MV8KCB	MV852C
AM	8/28/2012 9:53:09/	8/28/2012 9:56:45/	8/28/2012 10:00:23	8/28/2012 10:04:00	8/28/2012 10:07:49
	metals	metals	metals	metals	metals
	2011 (503)	2011 (503)	2011 (503)	2011 (503)	2011 (503)
Ag3280	.0001	<.0000	.0001	<.0000	.1045
Al3961	.0639	.0051	1.329	.0176	9.619
As1890	.0024	.0027	.0058	<.0000	.9721
B_2496	.1014	.0148	.0141	W .0920	1.112
Ba4554	.0099	.0458	.0779	.0017	.9756
Be3130	.0001	<.0000	.0001	<.0000	.9890
Bi2230	<.0000	<.0000	<.0000	<.0000	.9448
Ca1840	32.15	24.76	28.79	W .7170	10.21
Cd2288	.0002	.0001	.0002	.0002	.9466
Co2286	.0003	.0006	.0013	<.0000	.9270
Cr2835	.0013	.0014	.0031	.0020	.9421
Cu2178	<.0000	<.0000	.0009	.0030	.9507
Fe2599	5.927	4.214	5.938	.0383	10.08
K_7664	3.818	.3640	.7503	.1681	10.16
Li6707	.0048	.0022	.0014	.0056	.9766
Mg2798	14.09	7.248	8.492	.1391	9.629
Mn2576	.2669	.3653	.4125	<.0000	.9737
Mo2020	<.0000	.0008	.0009	<.0000	1.003
Na5895	17.57	1.162	1.290	F 560.8	F 542.1
Ni2216	.0019	.0007	.0045	.0004	.9538
P_1774	.0279	.0496	.1740	.0067	1.034
Pb2203	<.0000	<.0000	.0039	<.0000	.9308
S_1820	28.64	.0244	.0596	.0646	9.901
Sb2068	<.0000	<.0000	.0003	.0010	.4967
Se1960	.0038	.0026	.0035	.0027	.9952
Si2516	1.641	1.149	3.833	.0882	F .1523
Sn1899	<.0000	<.0000	<.0000	.0010	.9366
Sr4077	.0727	.1070	.1169	.0008	.9811
Th2832	.0060	.0121	.0167	.0233	.9790
Ti3349	<.0000	.0013	.0270	.0001	.9860
Tl1908	.0010	.0027	.0003	<.0000	.1947
U_3670	<.0000	.0217	.0098	<.0000	.8571
V_2908	<.0000	<.0000	<.0000	.0035	.9467
Y_3710	3706.3	3759.6	3815.4	3765.2	3823.3
Zn2138	.0016	.0017	.0195	.0064	.9950

Vertical Table Report
Author:
Notes:

	MV7RA	MV7RAV	MV7RAS	CCV	CCB
AM	8/28/2012 10:11:19	8/28/2012 10:15:03	8/28/2012 10:18:41	8/28/2012 10:22:15	8/28/2012 10:25:35
	metals	metals	metals	metals	metals
	2011 (503)	2011 (503)	2011 (503)	2011 (503)	2011 (503)
Ag3280	.0001	.0001	.1036	1.036	<.0000
Al3961	.1002	.0297	9.660	46.86	.0111
As1890	<.0000	<.0000	.9328	4.916	.0014
B_2496	.1175	.0299	1.140	5.081	.0265
Ba4554	.0338	.0067	1.006	4.825	.0009
Be3130	.0002	<.0000	.9896	4.889	.0009
Bi2230	.0046	.0026	.9294	5.087	<.0000
Ca1840	W 42.76	9.170	F 52.65	26.09	.0002
Cd2288	.0395	.0084	.9632	4.857	.0002
Co2286	.0072	.0016	.8946	4.804	.0001
Cr2835	.0029	.0014	.9389	4.925	.0009
Cu2178	.0087	.0006	.9303	4.916	<.0000
Fe2599	.1650	.0339	10.23	49.19	.0095
K_7664	6.558	1.295	16.89	49.13	.0480
Li6707	.0124	.0035	.9840	4.737	.0024
Mg2798	12.13	2.460	21.87	23.52	<.0000
Mn2576	.4138	.0837	1.384	4.720	.0006
Mo2020	.0013	<.0000	.9794	5.071	.0066
Na5895	F 629.7	F 130.1	F 653.0	50.85	.0829
Ni2216	.0260	.0056	.9402	4.874	.0002
P_1774	.0079	.0010	1.035	5.306	<.0000
Pb2203	.0074	.0013	.9074	5.012	<.0000
S_1820	19.87	3.996	29.69	50.25	.0032
Sb2068	.0021	.0001	.4816	.9825	.0017
Se1960	.0057	.0040	.9617	5.038	.0048
Si2516	1.370	.2678	1.462	4.575	.0002
Sn1899	<.0000	<.0000	.9004	4.880	.0007
Sr4077	.2948	.0595	1.284	4.748	.0008
Th2832	.0126	.0093	.9811	5.029	.0094
Ti3349	.0017	.0009	.9798	4.740	.0015
Tl1908	<.0000	.0006	.1930	5.399	.0014
U_3670	<.0000	.0105	.8256	4.754	.0443
V_2908	<.0000	<.0000	.9355	4.571	.0004
Y_3710	3730.0	3713.1	3722.6	3617.2	3770.5
Zn2138	.1116	.0257	1.088	5.067	<.0000

Vertical Table Report
Author:
Notes:

	MV7RAD	MV7RA	CCV	CCB
AM	8/28/2012 10:29:16	8/28/2012 10:32:45	8/28/2012 10:36:24	8/28/2012 10:39:45AM
	metals	metals	metals	metals
	2011 (503)	2011 (503)	2011 (503)	2011 (503)
Ag3280	.1031	.0809	1.006	<.0000
Al3961	9.543	1.462	47.31	.0101
As1890	.9584	.0798	4.632	<.0000
B_2496	1.133	.1074	5.101	.0229
Ba4554	.9928	.3798	4.862	.0007
Be3130	.9771	.0358	4.943	.0007
Bi2230	.9403	.0010	4.847	<.0000
Ca1840	F 53.51	W 47.06	24.73	<.0000
Cd2288	.9778	.0733	4.641	.0001
Co2286	.9164	.3817	4.572	.0003
Cr2835	.9488	.0714	4.753	.0016
Cu2178	.9423	.1943	4.703	.0009
Fe2599	10.13	.8782	49.25	.0079
K_7664	16.68	6.138	49.14	.0354
Li6707	.9637	.0104	4.798	.0021
Mg2798	21.76	18.09	23.54	<.0000
Mn2576	1.374	.4871	4.751	.0007
Mo2020	.9903	.3269	4.823	.0073
Na5895	F 652.7	F 579.6	50.85	.1008
Ni2216	.9621	.3283	4.629	.0001
P_1774	1.046	.0095	4.992	<.0000
Pb2203	.9244	.0828	4.751	<.0000
S_1820	30.35	18.34	47.21	.0042
Sb2068	.4938	.0747	.9347	<.0000
Se1960	.9771	.1232	4.736	.0037
Si2516	1.450	1.291	4.601	.0015
Sn1899	.9210	.7535	4.626	.0012
Sr4077	1.267	.3084	4.857	.0006
Th2832	.9842	<.0000	4.877	.0155
Ti3349	.9697	.1426	4.796	.0011
Tl1908	.1960	.1577	5.108	.0010
U_3670	.8177	3.191	4.604	.0446
V_2908	.9246	.3413	4.605	<.0000
Y_3710	3673.4	3741.4	3714.0	3678.2
Zn2138	1.100	.2650	4.804	.0001

Sample Name: CALBLK1 Acquired: 8/28/2012 8:19:52 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0009**	**-.0002**	**.0000**	**.0003**	**.0345**	**.0010**	**.0003**	**.0005**	**-.0003**
Stddev	.0008	.0023	.000	.0005	.0033	.0004	.0002	.0001	.0002
%RSD	93.85	1278.	6835.	182.1	9.427	36.89	52.21	19.70	79.61
#1	-.0016	-.0008	-.0001	.0008	.0333	.0012	.0004	.0006	.0000
#2	.0000	-.0021	.0002	.0002	.0321	.0006	.0001	.0004	-.0003
#3	-.0009	.0024	-.0001	-.0002	.0382	.0012	.0004	.0006	-.0005

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**.0070**	**.0002**	**.0006**	**.0047**	**.0057**	**-.0011**	**.0002**	**.0002**
Stddev	.0001	.0005	.0003	.0004	.0042	.0005	.0008	.0004	.0001
%RSD	201.2	7.217	148.5	67.25	89.63	9.580	69.97	192.9	46.89
#1	.0002	.0073	.0005	.0002	.0093	.0061	-.0011	.0000	.0001
#2	-.0001	.0072	.0000	.0010	.0040	.0059	-.0003	.0000	.0002
#3	.0001	.0064	.0001	.0006	.0009	.0051	-.0018	.0007	.0002

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0364**	**.0002**	**.0000**	**-.0003**	**.0004**	**.0006**	**.0001**	**.0034**	**.0002**
Stddev	.0026	.0001	.000	.0000	.0000	.0001	.0001	.0007	.0001
%RSD	7.201	68.89	1593.	9.884	12.26	15.81	97.22	19.43	50.95
#1	-.0390	.0001	-.0001	-.0003	.0003	.0007	.0002	.0037	.0002
#2	-.0364	.0002	-.0002	-.0003	.0003	.0005	.0001	.0038	.0003
#3	-.0338	.0003	.0002	-.0003	.0004	.0006	.0000	.0026	.0001

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0020**	**.0076**	**.0020**	**-.0005**	**.0478**	**.0004**	**.0010**
Stddev	.0003	.0008	.0012	.0001	.0016	.0007	.0001
%RSD	17.42	10.91	57.40	20.61	3.277	190.6	14.72
#1	-.0024	.0085	.0007	-.0006	.0461	.0002	.0010
#2	-.0017	.0072	.0028	-.0006	.0481	.0012	.0009
#3	-.0018	.0069	.0026	-.0004	.0492	-.0002	.0012

Sample Name: CALBLK1 Acquired: 8/28/2012 8:19:52 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3768.7
Stddev	25.5
%RSD	.67719
#1	3797.1
#2	3747.7
#3	3761.2

Sample Name: CAL 1 Acquired: 8/28/2012 8:23:31 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0150**	**.0304**	**.0005**	**.0149**	**.4764**	**.0458**	**.0126**	**.1780**	**.0046**
Stddev	.0009	.0004	.0000	.0006	.0044	.0004	.0003	.0012	.0003
%RSD	5.743	1.279	5.711	3.948	.9212	.7650	2.203	.6766	6.053
#1	.0144	.0309	.0005	.0145	.4736	.0456	.0125	.1776	.0043
#2	.0160	.0303	.0005	.0146	.4815	.0463	.0129	.1793	.0048
#3	.0145	.0301	.0004	.0156	.4742	.0457	.0124	.1770	.0048

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0219**	**.0240**	**.0024**	**.0292**	**.5521**	**.1193**	**.0393**	**.0261**	**.0179**
Stddev	.0001	.0000	.0003	.0002	.0052	.0038	.0004	.0004	.0001
%RSD	.6692	.1784	11.30	.5232	.9360	3.173	1.078	1.483	.5550
#1	.0218	.0240	.0024	.0294	.5464	.1177	.0397	.0264	.0178
#2	.0220	.0240	.0026	.0292	.5535	.1237	.0389	.0262	.0180
#3	.0217	.0239	.0021	.0291	.5564	.1166	.0392	.0257	.0179

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2981**	**.0252**	**.0185**	**.0010**	**.1715**	**.0012**	**.0009**	**.0394**	**.0157**
Stddev	.0035	.0003	.0004	.0002	.0016	.0001	.0001	.0005	.0001
%RSD	1.188	1.158	1.920	17.33	.9271	8.585	7.186	1.276	.8223
#1	.2945	.0253	.0183	.0008	.1704	.0012	.0009	.0397	.0156
#2	.3015	.0255	.0189	.0009	.1733	.0013	.0008	.0397	.0158
#3	.2984	.0249	.0182	.0011	.1707	.0011	.0009	.0388	.0156

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0639**	**.0509**	**.0203**	**.0014**	**.1063**	**.0105**	**.0129**
Stddev	.0013	.0016	.0014	.0002	.0034	.0007	.0002
%RSD	2.001	3.187	6.674	15.74	3.160	6.858	1.288
#1	.0654	.0493	.0218	.0013	.1032	.0102	.0128
#2	.0631	.0525	.0199	.0013	.1099	.0099	.0131
#3	.0633	.0508	.0192	.0016	.1059	.0113	.0128

Sample Name: CAL 1 Acquired: 8/28/2012 8:23:31 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3731.7
Stddev	43.5
%RSD	1.1656
#1	3753.2
#2	3681.7
#3	3760.3

Sample Name: CAL 2 Acquired: 8/28/2012 8:27:10 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Ca1840	Cd2288	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.2977	1.445	.0589	.1424	8.750	9.083	.8921	1.002	.4306
Stddev	.0019	.005	.0002	.0015	.024	.011	.0046	.005	.0024
%RSD	.6421	.3836	.3980	1.080	.2725	.1255	.5119	.5317	.5478
#1	.2967	1.450	.0589	.1410	8.775	9.096	.8894	1.003	.4304
#2	.2999	1.445	.0591	.1440	8.728	9.078	.8974	1.008	.4331
#3	.2965	1.439	.0586	.1422	8.747	9.075	.8895	.9971	.4284

Elem	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.628	.0882	2.852	1.118	2.187	.2053	1.695	.4536	3.361
Stddev	.011	.0006	.004	.004	.004	.0015	.004	.0025	.003
%RSD	.6668	.6950	.1345	.3145	.1827	.7081	.2553	.5477	.0963
#1	1.627	.0880	2.857	1.115	2.191	.2067	1.700	.4528	3.362
#2	1.639	.0889	2.850	1.116	2.188	.2038	1.695	.4564	3.358
#3	1.617	.0878	2.850	1.122	2.183	.2052	1.691	.4516	3.364

Elem	Ni2216	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.6117	.1317	.0153	.0429	.1524	13.06	.9284	.0873	.2012
Stddev	.0037	.0007	.0000	.0003	.0009	.02	.0026	.0003	.0012
%RSD	.5976	.5275	.2688	.7441	.6109	.1839	.2854	.3248	.5828
#1	.6101	.1316	.0152	.0430	.1521	13.08	.9314	.0872	.2019
#2	.6158	.1325	.0153	.0432	.1534	13.04	.9264	.0876	.2018
#3	.6090	.1311	.0153	.0425	.1517	13.04	.9273	.0871	.1998

Elem	Zn2138
Units	Cts/S
Avg	.5961
Stddev	.0027
%RSD	.4577
#1	.5962
#2	.5988
#3	.5934

Sample Name: CAL 2 Acquired: 8/28/2012 8:27:10 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3664.5
Stddev	18.6
%RSD	.50782
#1	3677.9
#2	3643.2
#3	3672.3

Sample Name: CAL 3 Acquired: 8/28/2012 8:30:33 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.458**	**7.164**	**.2967**	**.7118**	**43.89**	**45.85**	**.3057**	**4.308**	**4.958**
Stddev	.009	.015	.0045	.0023	.21	.16	.0047	.060	.074
%RSD	.6427	.2079	1.531	.3248	.4674	.3545	1.543	1.388	1.487
#1	1.455	7.148	.2918	.7096	43.67	45.67	.3008	4.245	4.879
#2	1.468	7.166	.3007	.7116	43.94	45.89	.3101	4.365	5.025
#3	1.450	7.178	.2975	.7142	44.07	45.99	.3063	4.313	4.971

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.083**	**7.793**	**.4303**	**14.07**	**5.592**	**10.90**	**1.013**	**8.336**	**2.239**
Stddev	.032	.045	.0070	.06	.022	.04	.002	.020	.035
%RSD	1.535	.5807	1.631	.4024	.3863	.3781	.2020	.2357	1.576
#1	2.048	7.781	.4227	14.01	5.569	10.85	1.011	8.323	2.202
#2	2.112	7.844	.4365	14.07	5.597	10.91	1.014	8.326	2.272
#3	2.088	7.756	.4317	14.13	5.611	10.93	1.015	8.359	2.245

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**17.10**	**2.940**	**.3731**	**.6366**	**1.742**	**.0735**	**.2131**	**.4690**	**.7469**
Stddev	.07	.043	.0058	.0093	.031	.0012	.0030	.0027	.0118
%RSD	.3800	1.458	1.551	1.461	1.804	1.614	1.417	.5851	1.583
#1	17.03	2.896	.3669	.6269	1.707	.0723	.2098	.4664	.7344
#2	17.12	2.981	.3784	.6454	1.769	.0747	.2157	.4686	.7578
#3	17.16	2.945	.3740	.6375	1.748	.0735	.2138	.4719	.7487

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**64.19**	**1.106**	**4.638**	**.4157**	**.7300**	**1.001**	**2.935**
Stddev	1.45	.007	.010	.0061	.0028	.002	.044
%RSD	2.255	.6030	.2204	1.473	.3794	.2425	1.514
#1	62.70	1.106	4.628	.4092	.7285	.9987	2.887
#2	64.28	1.112	4.639	.4214	.7332	1.004	2.975
#3	65.59	1.099	4.648	.4163	.7283	1.001	2.942

Sample Name: CAL 3 Acquired: 8/28/2012 8:30:33 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3586.0
Stddev	15.3
%RSD	.42627
#1	3591.6
#2	3568.7
#3	3597.7

Sample Name: CAL 4 Acquired: 8/28/2012 8:33:50 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.936**	**14.27**	**.5836**	**1.416**	**87.94**	**89.70**	**.5947**	**8.110**	**9.687**
Stddev	.082	.08	.0086	.006	.92	.66	.0093	.121	.138
%RSD	2.788	.5743	1.469	.4339	1.041	.7354	1.567	1.497	1.426
#1	2.842	14.33	.5739	1.422	87.43	89.36	.5839	7.972	9.528
#2	2.977	14.30	.5870	1.416	89.00	89.28	.5995	8.158	9.750
#3	2.989	14.18	.5900	1.409	87.41	90.46	.6006	8.199	9.782

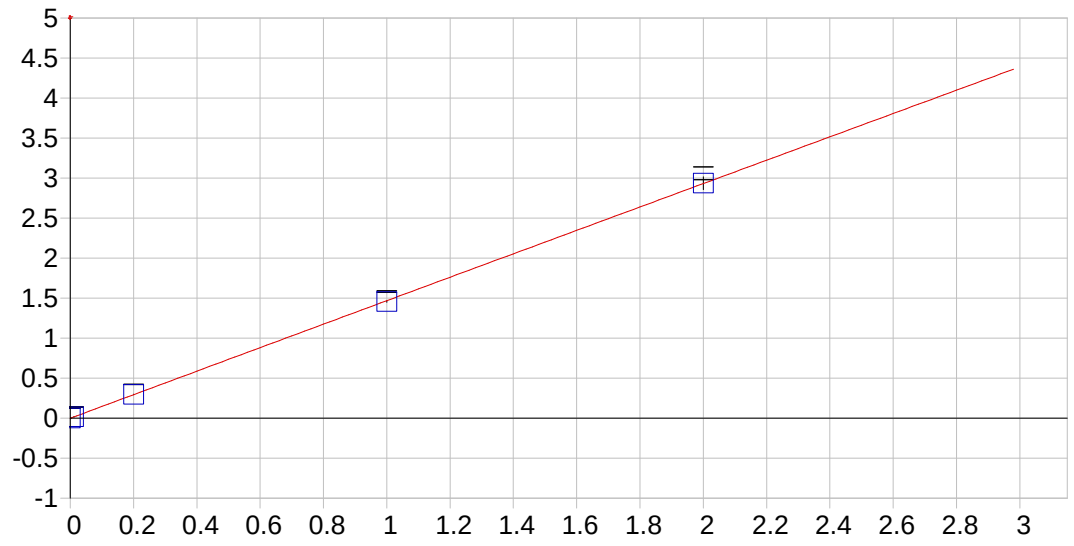
Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.000**	**15.37**	**.8360**	**27.92**	**11.24**	**21.85**	**2.013**	**16.46**	**4.411**
Stddev	.060	.39	.0129	.14	.06	.12	.009	.11	.065
%RSD	1.493	2.515	1.547	.4984	.5281	.5548	.4724	.6665	1.480
#1	3.932	14.93	.8212	28.06	11.29	21.95	2.019	16.55	4.336
#2	4.024	15.56	.8413	27.93	11.26	21.88	2.017	16.50	4.440
#3	4.044	15.63	.8453	27.78	11.18	21.71	2.002	16.34	4.457

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**34.31**	**5.656**	**.7351**	**1.220**	**3.474**	**.1449**	**.4188**	**.9455**	**1.456**
Stddev	.16	.086	.0103	.018	.051	.0021	.0060	.0053	.022
%RSD	.4677	1.513	1.405	1.468	1.458	1.450	1.431	.5646	1.487
#1	34.48	5.559	.7232	1.199	3.415	.1425	.4119	.9509	1.432
#2	34.31	5.693	.7398	1.227	3.500	.1459	.4219	.9455	1.462
#3	34.16	5.718	.7421	1.233	3.505	.1463	.4226	.9402	1.473

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**128.3**	**2.192**	**9.247**	**.7893**	**1.411**	**1.997**	**5.711**
Stddev	1.1	.057	.060	.0118	.041	.014	.084
%RSD	.8876	2.611	.6462	1.490	2.898	.6870	1.469
#1	127.8	2.126	9.307	.7759	1.364	2.009	5.615
#2	129.6	2.223	9.245	.7942	1.430	2.002	5.744
#3	127.5	2.227	9.187	.7978	1.438	1.982	5.773

Sample Name: CAL 4 Acquired: 8/28/2012 8:33:50 Type: Cal
Method: 2011(v503) Mode: IR Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	Y_3710
Units	Cts/S
Avg	3561.7
Stddev	48.9
%RSD	1.3724
#1	3616.7
#2	3545.4
#3	3523.1

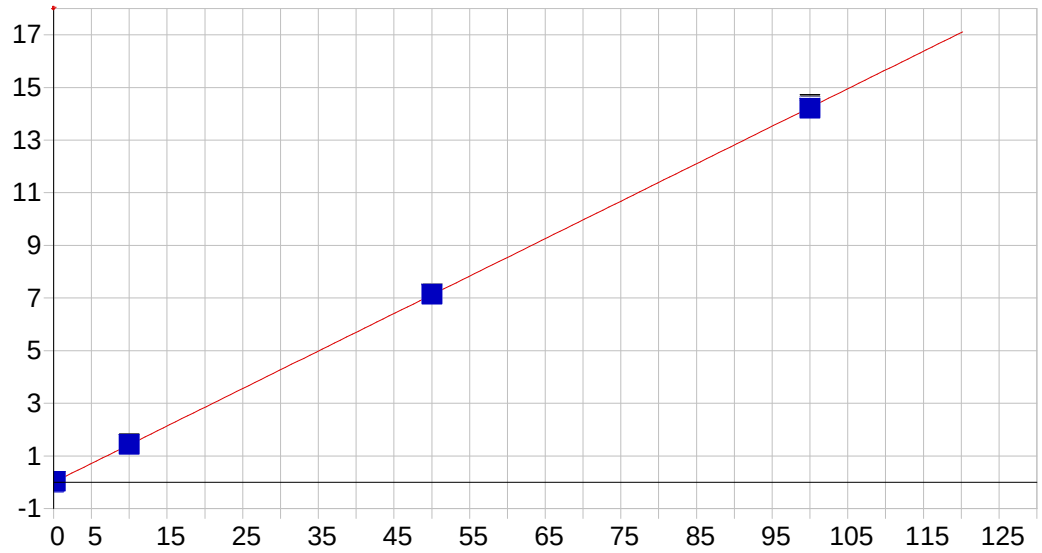


Ag 328.068 {103}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Curvilinear	Weighting:	1/Conc

A0 (Offset):	-0.000852	Re-Slope:	1.000000
A1 (Gain):	1.471307	Y-int:	0.000000
A2 (Curvature):	-0.002608		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000091		
Predicted MDL:	0.000781		
Predicted MQL:	0.002604		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00085	.001	1
CAL 1	.01000	.01075	.001	7.55	.01497	.001	1
CAL 2	.20000	.20299	.003	1.50	.29770	.002	1
CAL 3	1.0000	.99309	-.007	-.691	1.4577	.009	1
CAL 4	2.0000	2.0032	.003	.158	2.9359	.082	1

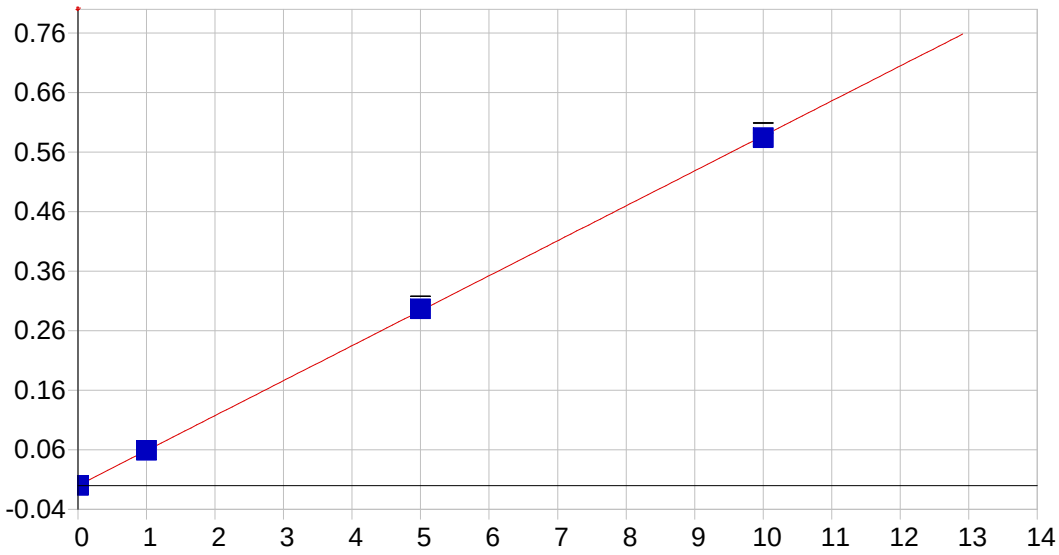


Al 396.152 { 85}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000180	Re-Slope:	1.000000
A1 (Gain):	0.142408	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999992	Status:	OK.
Std Error of Est:	0.000132		
Predicted MDL:	0.010550		
Predicted MQL:	0.035167		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00002	.000	.000	-.00018	.002	1
CAL 1	.20000	.21329	.013	6.65	.03044	.000	1
CAL 2	10.000	10.103	.103	1.03	1.4446	.006	1
CAL 3	50.000	50.096	.096	.192	7.1640	.015	1
CAL 4	100.00	99.787	-.213	-.213	14.271	.082	1

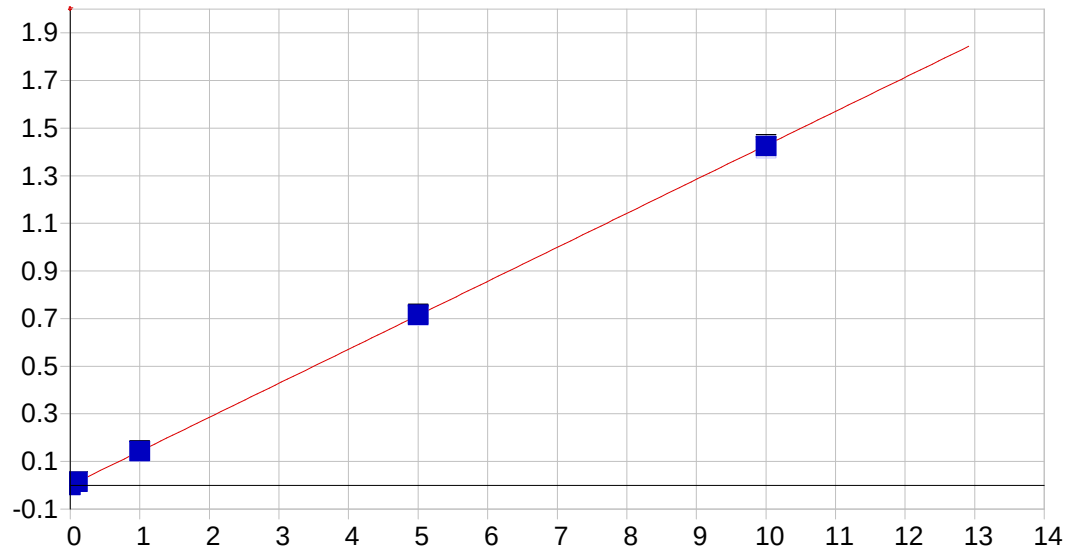


As 189.042 {478}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000002	Re-Slope:	1.000000
A1 (Gain):	0.058736	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999958	Status:	OK.
Std Error of Est:	0.000009		
Predicted MDL:	0.001919		
Predicted MQL:	0.006396		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00000	.000	1
CAL 1	.01000	.00796	-.002	-20.4	.00047	.000	1
CAL 2	1.0000	1.0028	.003	.281	.05885	.000	1
CAL 3	5.0000	5.0549	.055	1.10	.29667	.005	1
CAL 4	10.000	9.9444	-.056	-.556	.58363	.009	1

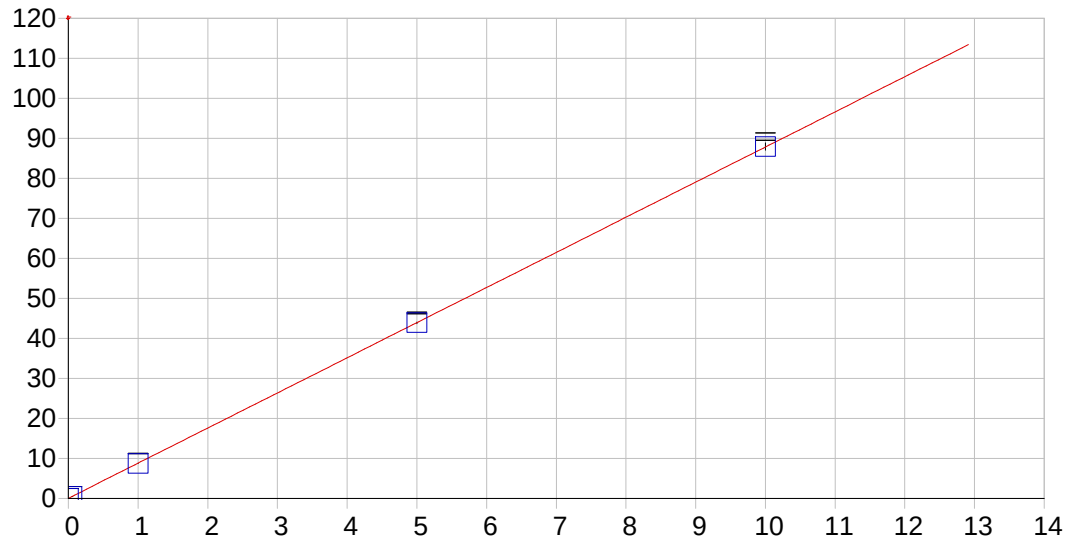


B 249.678 {135}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000281	Re-Slope:	1.000000
A1 (Gain):	0.142734	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000024		
Predicted MDL:	0.003623		
Predicted MQL:	0.012078		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00028	.001	1
CAL 1	.10000	.10264	.003	2.64	.01492	.001	1
CAL 2	1.0000	1.0019	.002	.194	.14240	.002	1
CAL 3	5.0000	5.0159	.016	.318	.71176	.002	1
CAL 4	10.000	9.9795	-.020	-.205	1.4158	.006	1



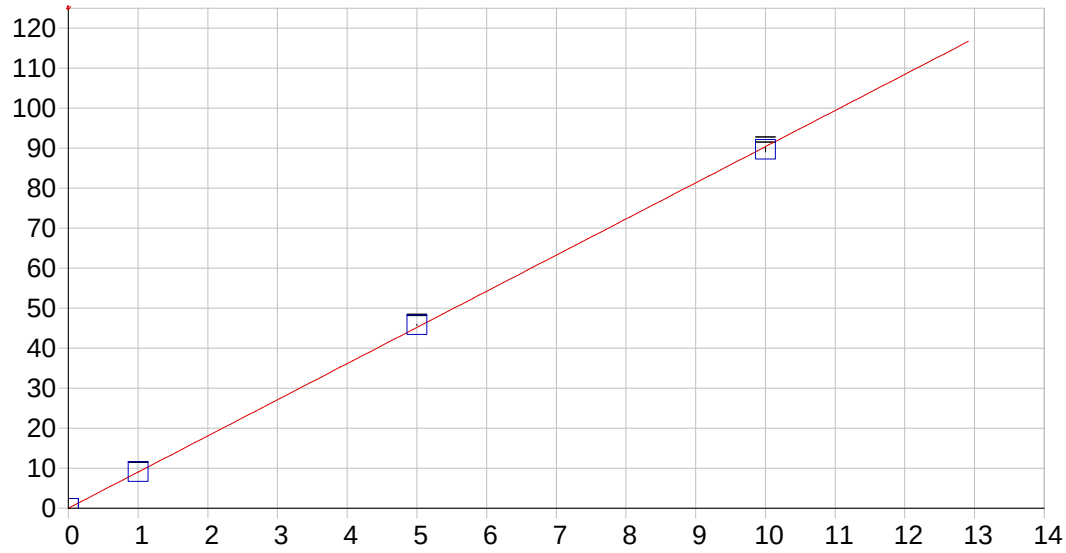
Ba 455.403 { 74}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.034530	Re-Slope:	1.000000

A1 (Gain):	8.780305	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999998	Status:	OK.
Std Error of Est:	0.000702		
Predicted MDL:	0.000230		
Predicted MQL:	0.000767		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.03453	.003	1
CAL 1	.05000	.05033	.000	.657	.47643	.004	1
CAL 2	1.0000	.99261	-.007	-.739	8.7500	.024	1
CAL 3	5.0000	4.9949	-.005	-.103	43.891	.205	1
CAL 4	10.000	10.012	.012	.122	87.945	.916	1

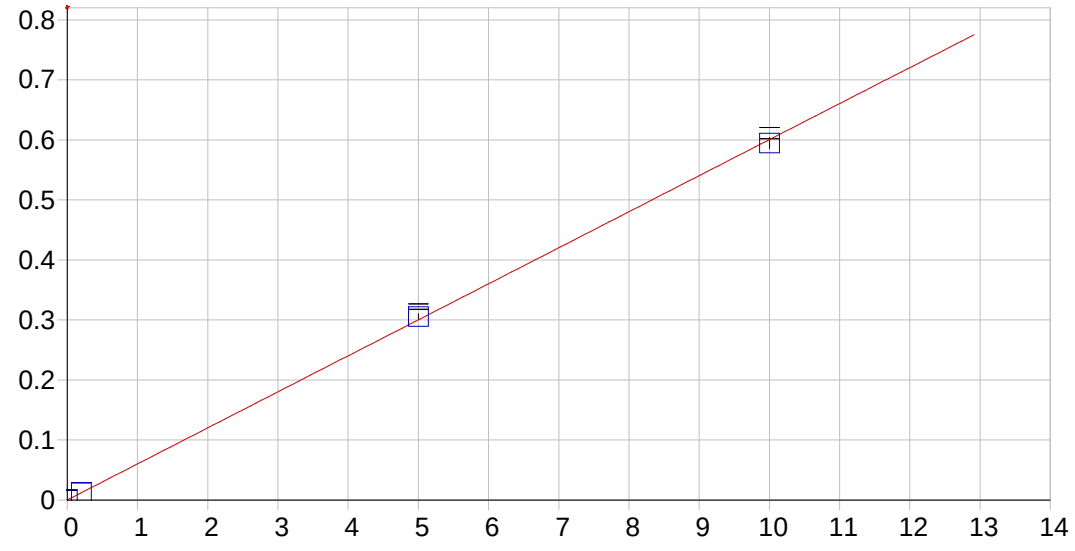


Be 313.042 {108}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000994	Re-Slope:	1.000000
A1 (Gain):	9.039314	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999949	Status:	OK.
Std Error of Est:	0.001058		
Predicted MDL:	0.000078		
Predicted MQL:	0.000261		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00099	.000	1
CAL 1	.00500	.00496	.000	-.754	.04585	.000	1
CAL 2	1.0000	1.0047	.005	.472	9.0829	.011	1
CAL 3	5.0000	5.0720	.072	1.44	45.848	.163	1
CAL 4	10.000	9.9234	-.077	-.766	89.701	.660	1

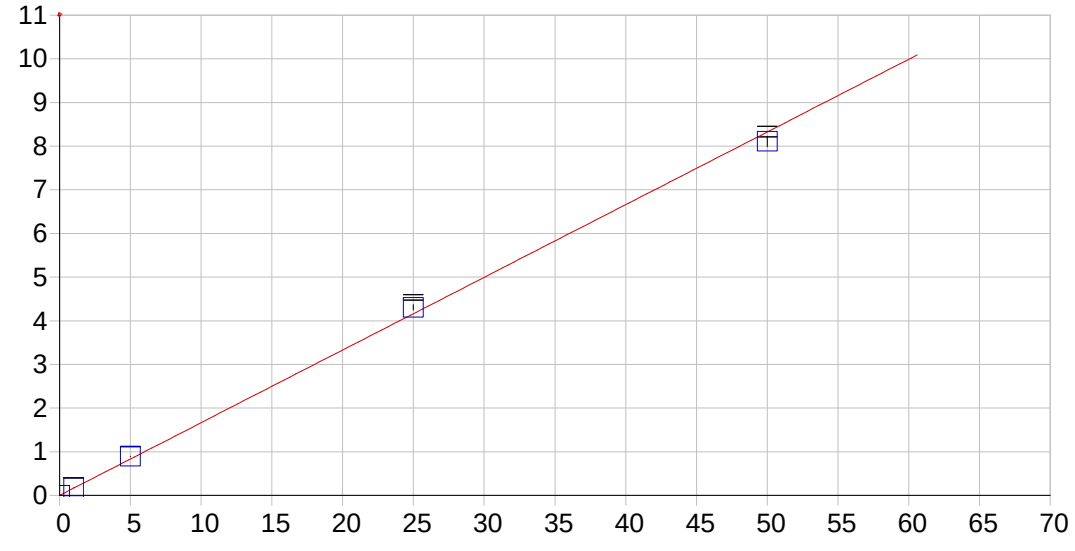


Bi 223.061 {451}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000305	Re-Slope:	1.000000
A1 (Gain):	0.060008	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999913	Status:	OK.
Std Error of Est:	0.000062		
Predicted MDL:	0.003204		
Predicted MQL:	0.010680		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00030	.000	1
CAL 1	.20000	.20503	.005	2.52	.01261	.000	1
CAL 3	5.0000	5.0900	.090	1.80	.30575	.005	1
CAL 4	10.000	9.9050	-.095	-.950	.59468	.009	1



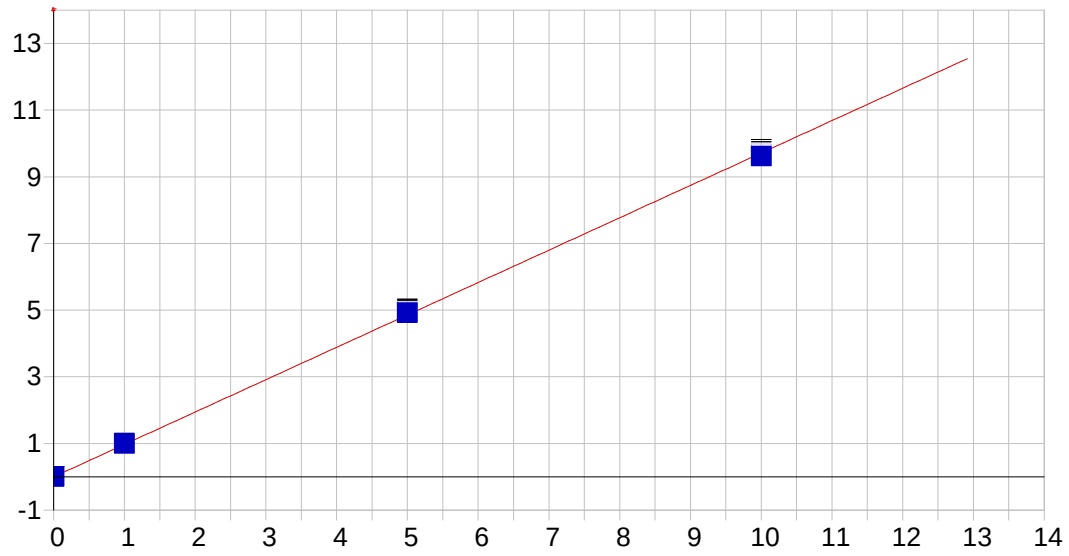
Ca 184.006 {483}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000553	Re-Slope:	1.000000
A1 (Gain):	0.166486	Y-int:	0.000000

A2 (Curvature):	0.000000					
n (Exponent):	1.000000					
Correlation:	0.999425		Status:	OK.		
Std Error of Est:	0.002075					
Predicted MDL:	0.000663					
Predicted MQL:	0.002209					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00015	.000	.000	.00053	.000	1
CAL 1	1.0000	1.0658	.066	6.58	.17800	.001	1
CAL 2	5.0000	5.3550	.355	7.10	.89208	.005	1
CAL 3	25.000	25.871	.871	3.48	4.3077	.060	1
CAL 4	50.000	48.708	-1.29	-2.58	8.1098	.121	1

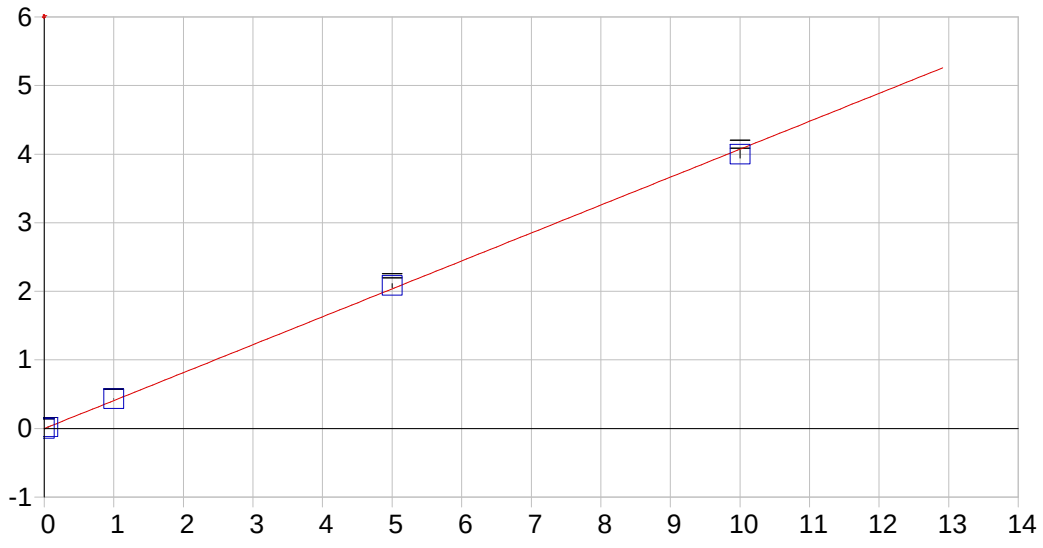


Cd 228.802 {447}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000292	Re-Slope:	1.000000
A1 (Gain):	0.971449	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999921	Status:	OK.
Std Error of Est:	0.000142		
Predicted MDL:	0.000196		
Predicted MQL:	0.000652		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00029	.000	1
CAL 1	.00500	.00503	.000	.589	.00462	.000	1
CAL 2	1.0000	1.0254	.025	2.54	1.0024	.005	1
CAL 3	5.0000	5.0705	.071	1.41	4.9583	.074	1
CAL 4	10.000	9.9040	-.096	-.960	9.6867	.138	1

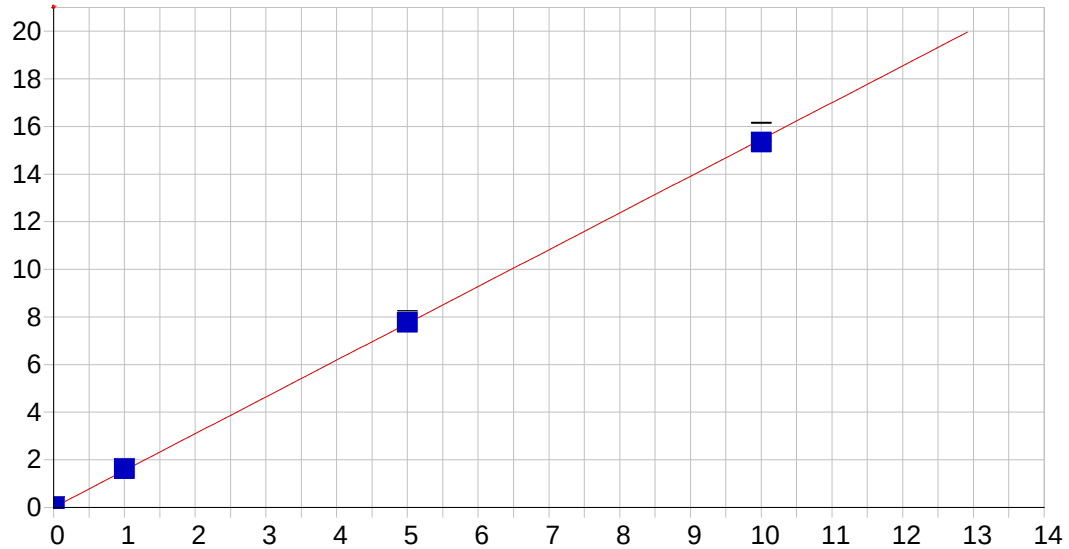


Co 228.616 {448}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000062	Re-Slope:	1.000000
A1 (Gain):	0.407149	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999711	Status:	OK.
Std Error of Est:	0.000358		
Predicted MDL:	0.000379		
Predicted MQL:	0.001265		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00006	.000	1
CAL 1	.05000	.05355	.004	7.10	.02186	.000	1
CAL 2	1.0000	1.0575	.057	5.75	.43062	.002	1
CAL 3	5.0000	5.1149	.115	2.30	2.0826	.032	1
CAL 4	10.000	9.8241	-.176	-1.76	3.9999	.060	1



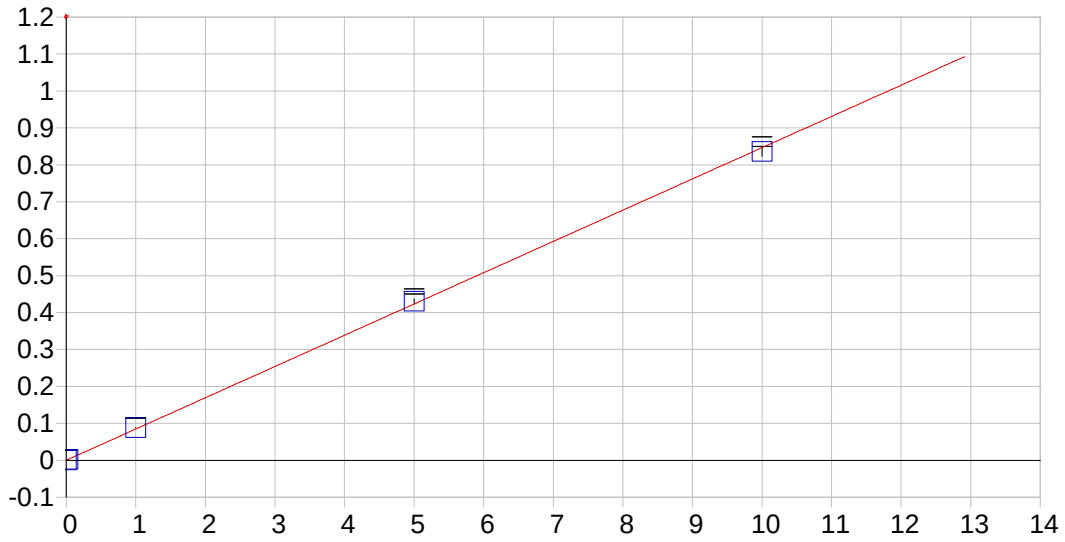
Cr 283.563 {119}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.006981	Re-Slope:	1.000000

A1 (Gain):	1.545112	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999899	Status:	OK.
Std Error of Est:	0.000359		
Predicted MDL:	0.000436		
Predicted MQL:	0.001452		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00698	.001	1
CAL 1	.01000	.00969	.000	-3.13	.02398	.000	1
CAL 2	1.0000	1.0498	.050	4.98	1.6280	.011	1
CAL 3	5.0000	5.0283	.028	.565	7.7934	.045	1
CAL 4	10.000	9.9225	-.078	-.775	15.373	.387	1

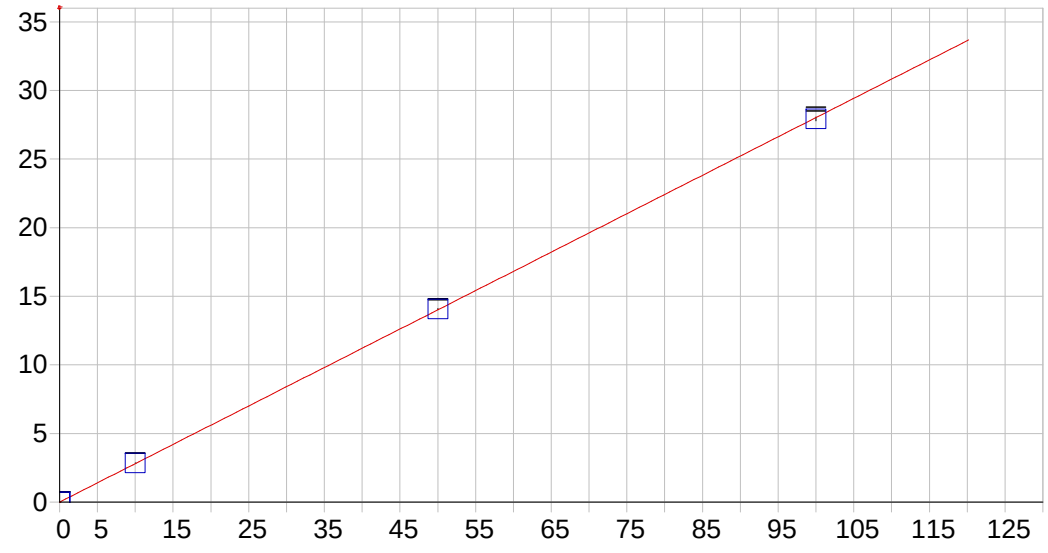


Cu 217.894 {455}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000186	Re-Slope:	1.000000
A1 (Gain):	0.084623	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999858	Status:	OK.
Std Error of Est:	0.000037		
Predicted MDL:	0.002181		
Predicted MQL:	0.007270		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00019	.000	1
CAL 1	.02500	.02561	.001	2.45	.00235	.000	1
CAL 2	1.0000	1.0405	.040	4.05	.08824	.001	1
CAL 3	5.0000	5.0826	.083	1.65	.43029	.007	1
CAL 4	10.000	9.8763	-.124	-1.24	.83595	.013	1

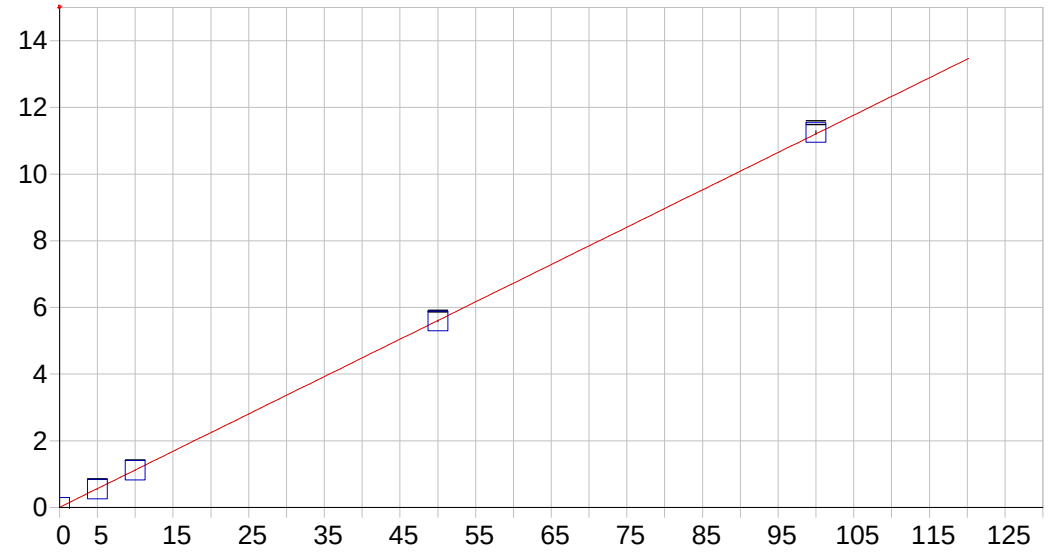


Fe 259.940 {130}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000605	Re-Slope:	1.000000
A1 (Gain):	0.280264	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999983	Status:	OK.
Std Error of Est:	0.000265		
Predicted MDL:	0.001788		
Predicted MQL:	0.005961		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00060	.000	1
CAL 1	.10000	.10212	.002	2.12	.02922	.000	1
CAL 2	10.000	10.175	.175	1.75	2.8523	.004	1
CAL 3	50.000	50.201	.201	.403	14.070	.057	1
CAL 4	100.00	99.621	-.379	-.379	27.921	.139	1



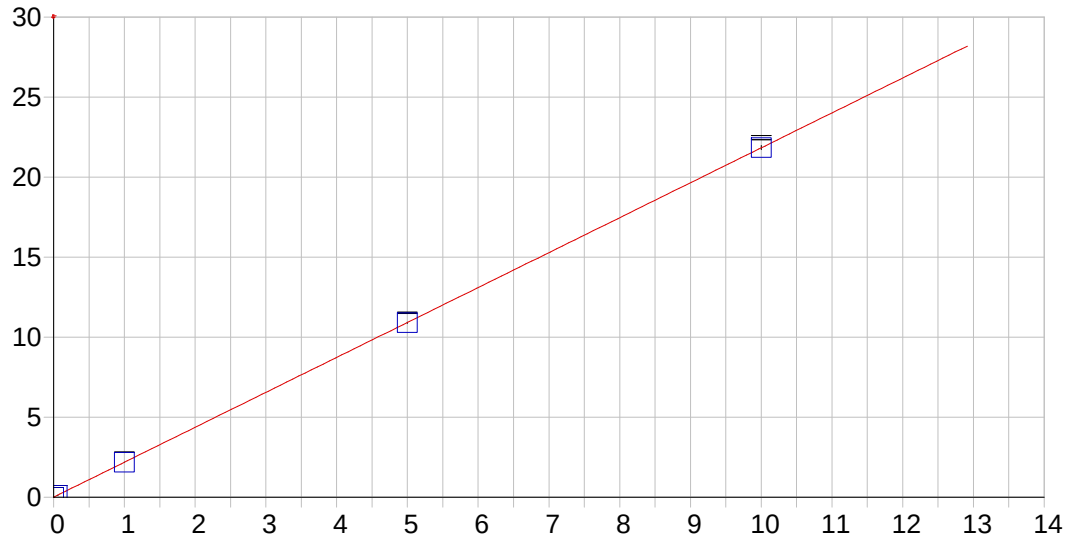
K 766.490 { 44}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.004704	Re-Slope:	1.000000

A1 (Gain):	0.112048		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999986	Status:	OK.		
Std Error of Est:	0.000682				
Predicted MDL:	0.029900				
Predicted MQL:	0.099665				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00015	.000	.000	.00472	.004	1
CAL 1	5.0000	4.8852	-.115	-2.30	.55208	.005	1
CAL 2	10.000	9.9321	-.068	-.679	1.1176	.004	1
CAL 3	50.000	49.866	-.134	-.267	5.5921	.022	1
CAL 4	100.00	100.32	.316	.316	11.245	.059	1

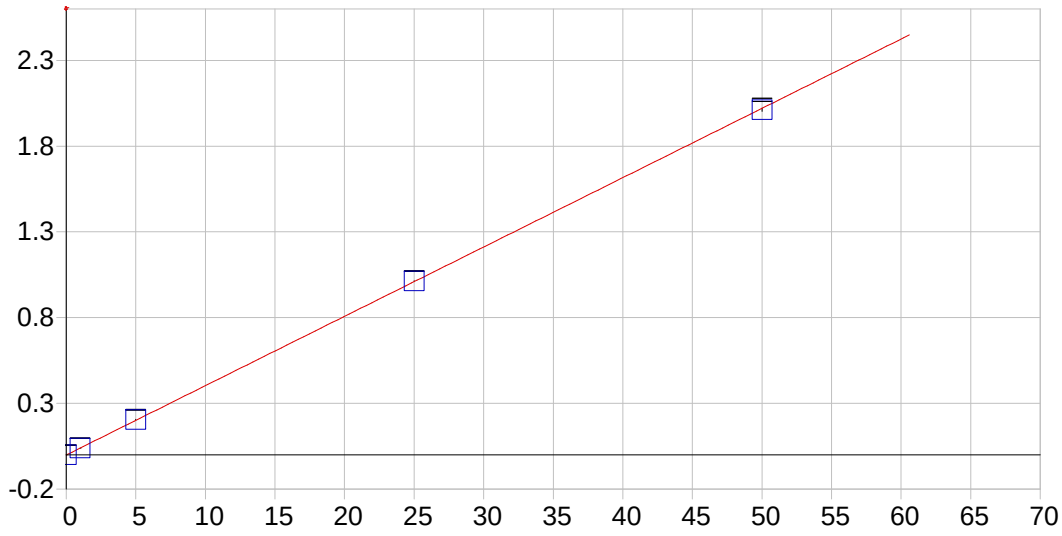


Li 670.784 { 50}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.005738	Re-Slope:	1.000000
A1 (Gain):	2.182568	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999997	Status:	OK.
Std Error of Est:	0.000208		
Predicted MDL:	0.001537		
Predicted MQL:	0.005124		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00573	.001	1
CAL 1	.05000	.05205	.002	4.09	.11933	.004	1
CAL 2	1.0000	.99962	.000	-.038	2.1875	.004	1
CAL 3	5.0000	4.9904	-.010	-.193	10.898	.041	1
CAL 4	10.000	10.008	.008	.080	21.849	.121	1

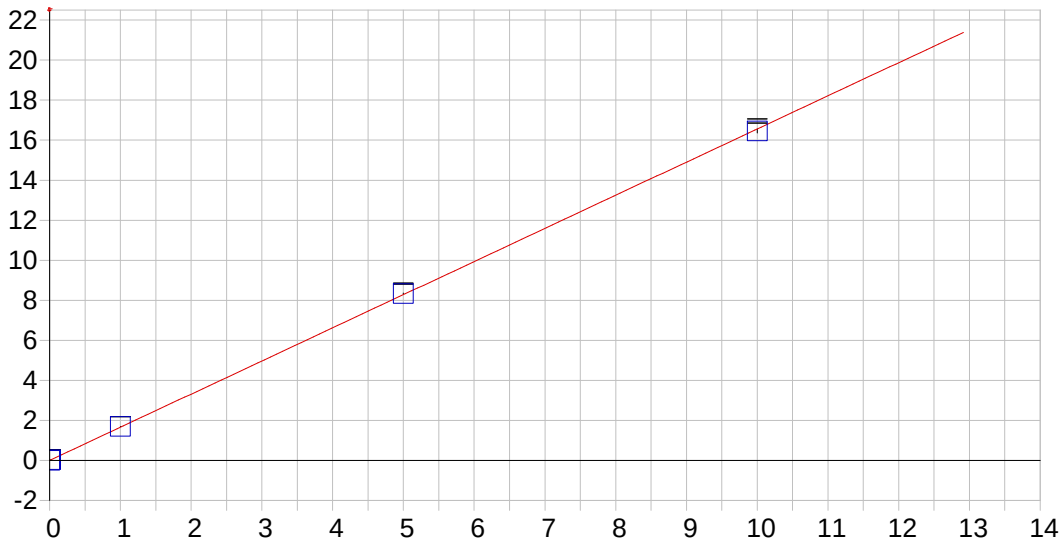


Mg 279.806 {121}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001098	Re-Slope:	1.000000
A1 (Gain):	0.040428	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999980	Status:	OK.
Std Error of Est:	0.000094		
Predicted MDL:	0.014158		
Predicted MQL:	0.047194		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00002	.000	.000	-.00110	.001	1
CAL 1	1.0000	.99876	-.001	-.124	.03928	.000	1
CAL 2	5.0000	5.1044	.104	2.09	.20526	.001	1
CAL 3	25.000	25.089	.089	.357	1.0132	.002	1
CAL 4	50.000	49.808	-.192	-.385	2.0125	.010	1



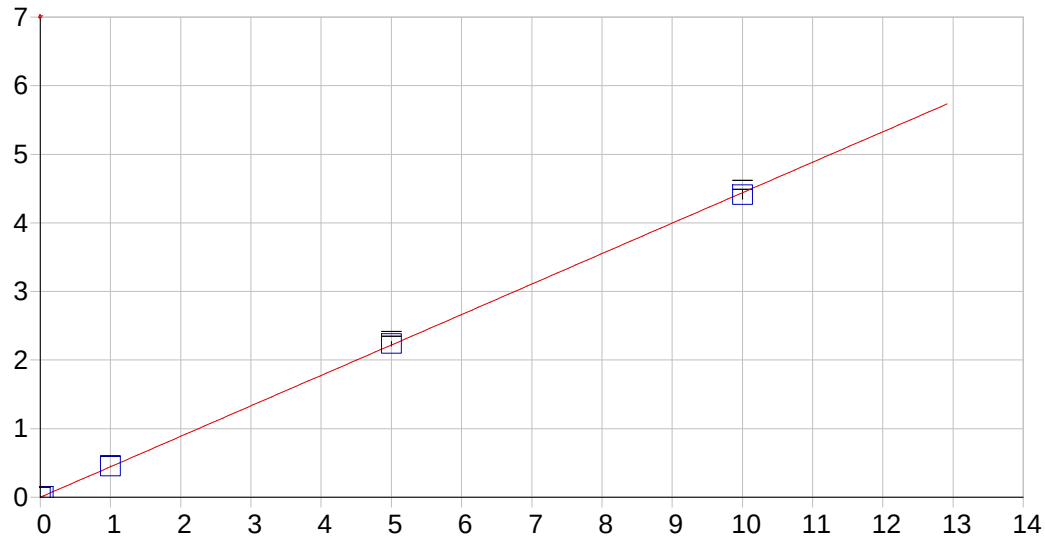
Mn 257.610 {131}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000208	Re-Slope:	1.000000

A1 (Gain):	1.655929	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999964	Status:	OK.
Std Error of Est:	0.000282		
Predicted MDL:	0.000324		
Predicted MQL:	0.001079		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00021	.000	1
CAL 1	.01500	.01562	.001	4.15	.02608	.000	1
CAL 2	1.0000	1.0237	.024	2.37	1.6954	.004	1
CAL 3	5.0000	5.0340	.034	.680	8.3361	.020	1
CAL 4	10.000	9.9417	-.058	-.583	16.463	.110	1

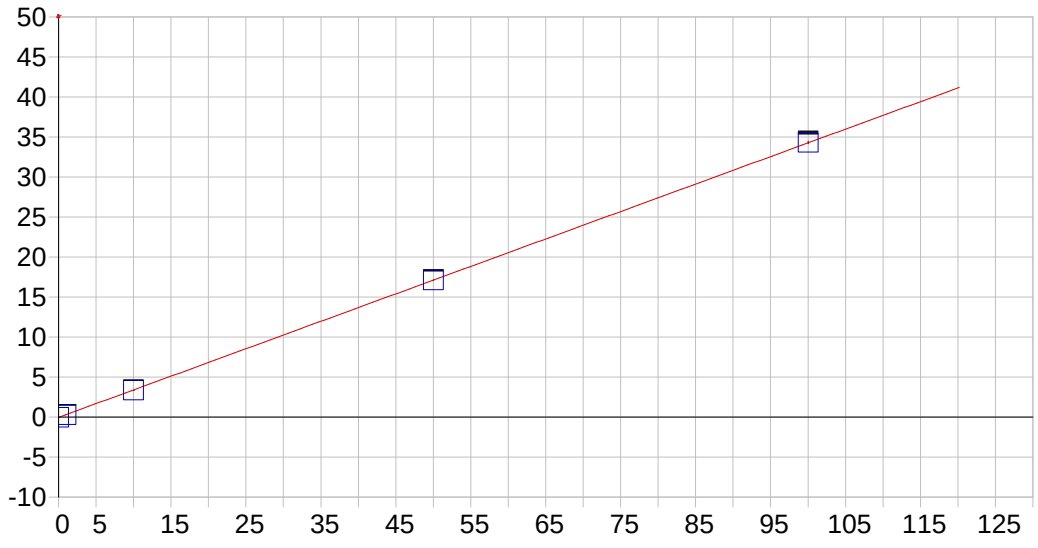


Mo 202.030 {467}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000153	Re-Slope:	1.000000
A1 (Gain):	0.443958	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999960	Status:	OK.
Std Error of Est:	0.000129		
Predicted MDL:	0.000305		
Predicted MQL:	0.001018		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00015	.000	1
CAL 1	.04000	.03995	.000	-.123	.01789	.000	1
CAL 2	1.0000	1.0214	.021	2.14	.45361	.002	1
CAL 3	5.0000	5.0439	.044	.879	2.2395	.035	1
CAL 4	10.000	9.9347	-.065	-.653	4.4107	.065	1

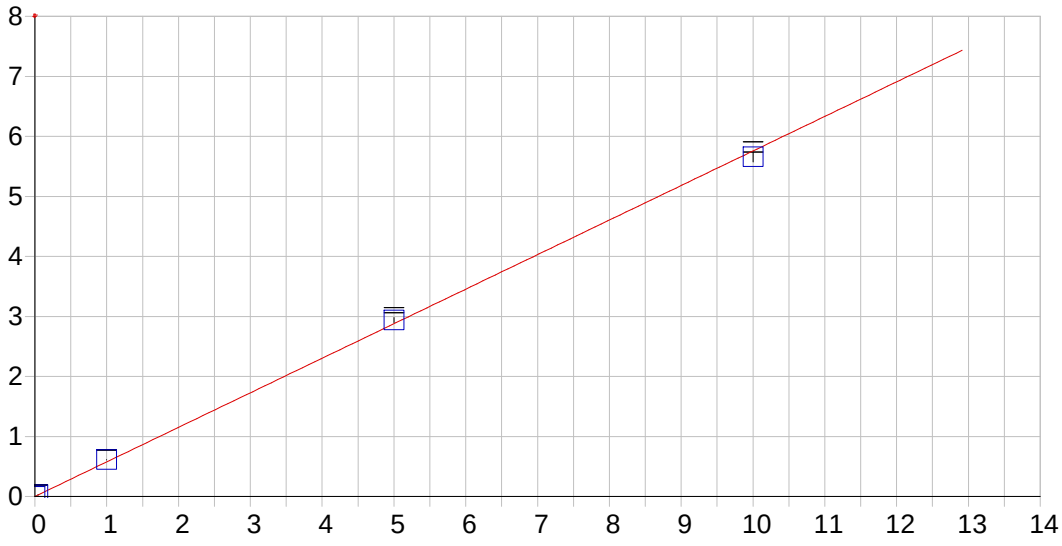


Na 589.592 { 57}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.036403	Re-Slope:	1.000000
A1 (Gain):	0.343007	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000581		
Predicted MDL:	0.009663		
Predicted MQL:	0.032211		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00003	.000	.000	-.03639	.003	1
CAL 1	1.0000	.97528	-.025	-2.47	.29812	.004	1
CAL 2	10.000	9.9062	-.094	-.938	3.3615	.003	1
CAL 3	50.000	49.972	-.028	-.056	17.104	.065	1
CAL 4	100.00	100.15	.146	.146	34.315	.160	1



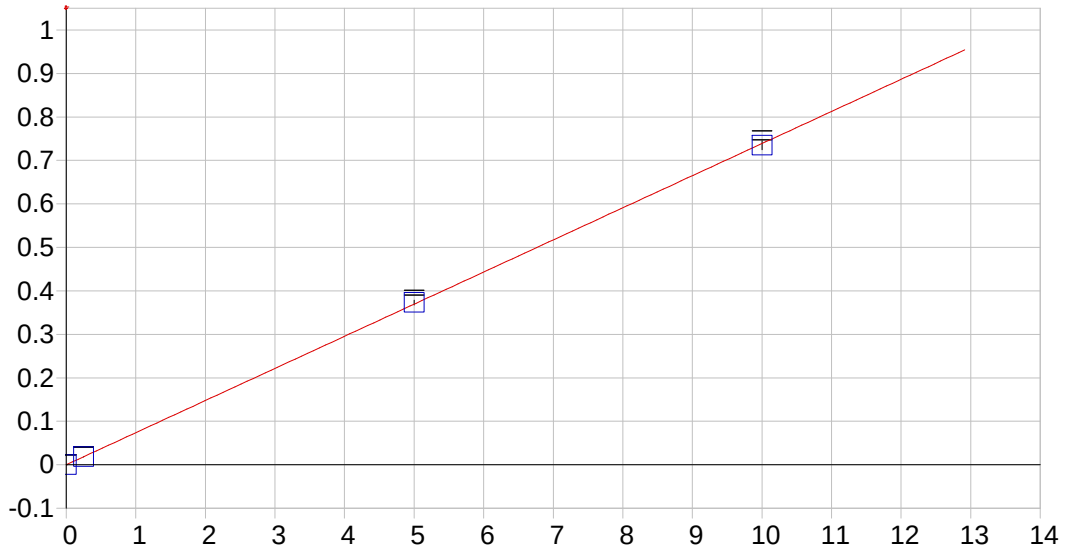
Ni 221.647 {452}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000190	Re-Slope:	1.000000

A1 (Gain):	0.575624	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999703	Status:	OK.
Std Error of Est:	0.000458		
Predicted MDL:	0.000361		
Predicted MQL:	0.001203		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00019	.000	1
CAL 1	.04000	.04348	.003	8.69	.02522	.000	1
CAL 2	1.0000	1.0623	.062	6.23	.61166	.004	1
CAL 3	5.0000	5.1079	.108	2.16	2.9404	.043	1
CAL 4	10.000	9.8263	-.174	-1.74	5.6565	.086	1

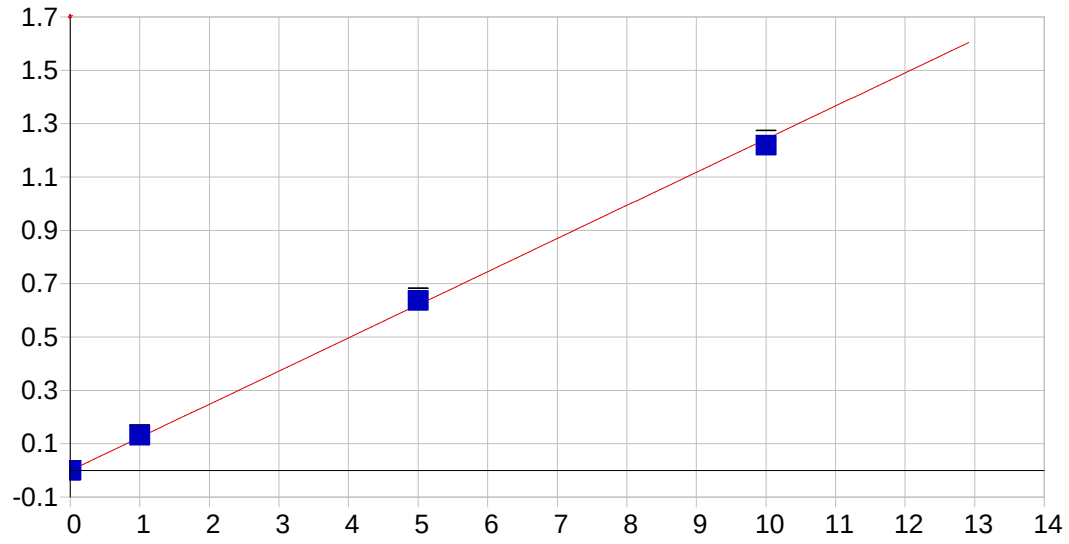


P 177.495 {490}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000014	Re-Slope:	1.000000
A1 (Gain):	0.073878	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999975	Status:	OK.
Std Error of Est:	0.000045		
Predicted MDL:	0.001499		
Predicted MQL:	0.004998		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00001	.000	1
CAL 1	.25000	.25006	.000	.023	.01846	.000	1
CAL 3	5.0000	5.0502	.050	1.00	.37309	.006	1
CAL 4	10.000	9.9497	-.050	-.503	.73505	.010	1

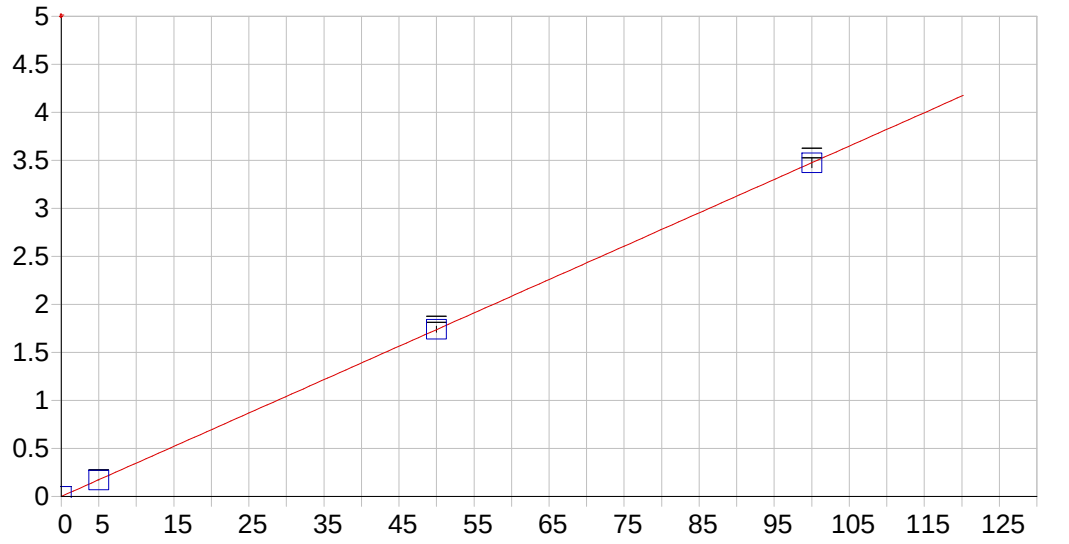


Pb 220.353 {453}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000296	Re-Slope:	1.000000
A1 (Gain):	0.124231	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999672	Status:	OK.
Std Error of Est:	0.000052		
Predicted MDL:	0.001440		
Predicted MQL:	0.004799		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00030	.000	1
CAL 1	.01000	.00970	.000	-3.04	.00095	.000	1
CAL 2	1.0000	1.0628	.063	6.28	.13172	.001	1
CAL 3	5.0000	5.1239	.124	2.48	.63661	.009	1
CAL 4	10.000	9.8136	-.186	-1.86	1.2196	.018	1



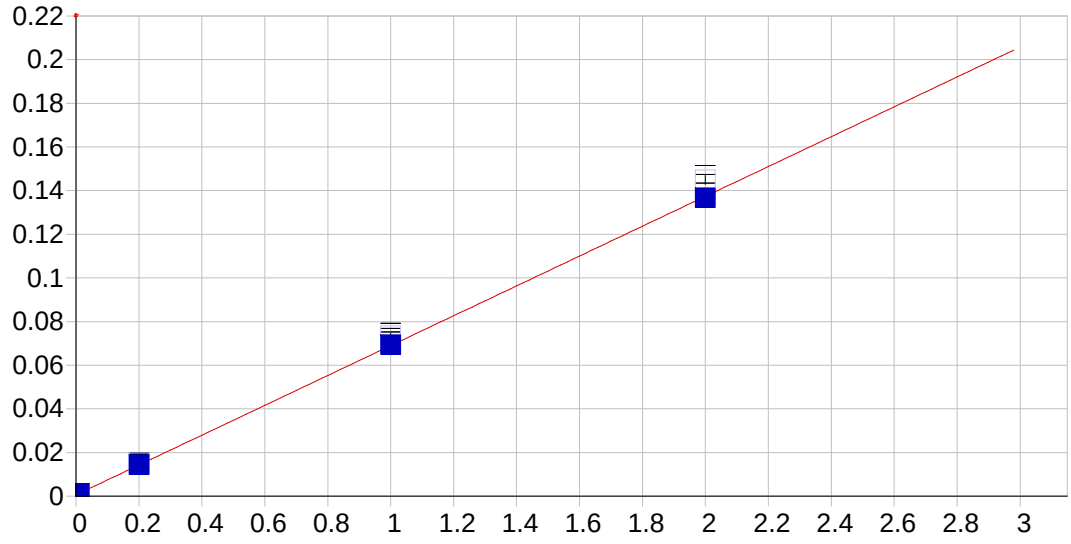
S 182.034 {485}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000359	Re-Slope:	1.000000

A1 (Gain):	0.034745	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999995	Status:	OK.
Std Error of Est:	0.000131		
Predicted MDL:	0.003030		
Predicted MQL:	0.010100		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00007	.000	.000	.00036	.000	1
CAL 1	5.0000	4.9243	-.076	-1.51	.17145	.002	1
CAL 3	50.000	50.113	.113	.227	1.7415	.031	1
CAL 4	100.00	99.962	-.038	-.038	3.4735	.051	1

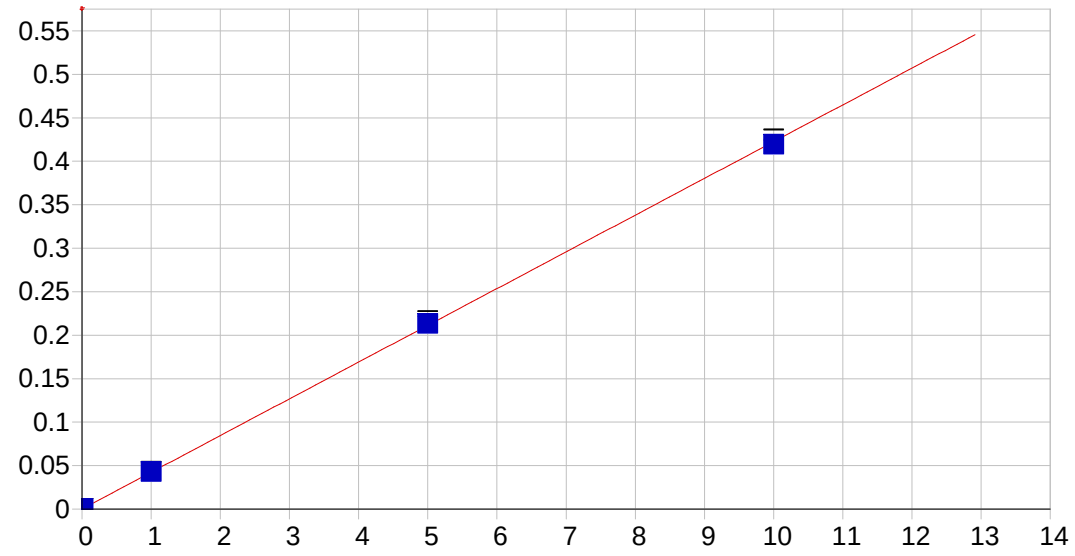


Sb 206.833 {463}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000582	Re-Slope:	1.000000
A1 (Gain):	0.068388	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999976	Status:	OK.
Std Error of Est:	0.000004		
Predicted MDL:	0.002503		
Predicted MQL:	0.008343		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00058	.000	1
CAL 1	.01000	.00928	-.001	-7.24	.00120	.000	1
CAL 2	.20000	.20273	.003	1.36	.01526	.000	1
CAL 3	1.0000	1.0068	.007	.680	.07351	.001	1
CAL 4	2.0000	1.9911	-.009	-.443	.14490	.002	1

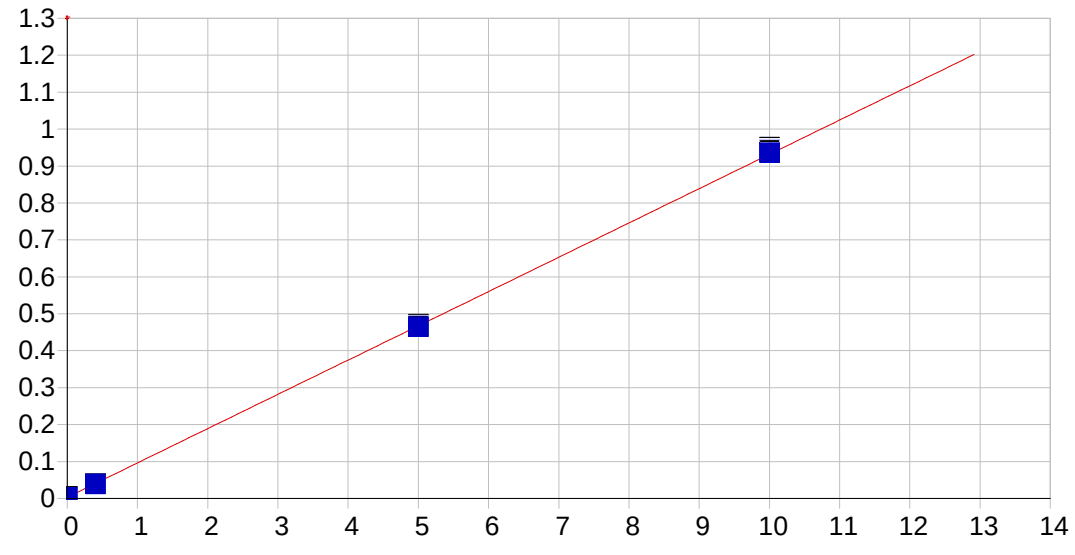


Se 196.090 {472}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000106	Re-Slope:	1.000000
A1 (Gain):	0.042245	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999936	Status:	OK.
Std Error of Est:	0.000010		
Predicted MDL:	0.003017		
Predicted MQL:	0.010056		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00011	.000	1
CAL 1	.01500	.01849	.003	23.3	.00089	.000	1
CAL 2	1.0000	1.0151	.015	1.51	.04291	.000	1
CAL 3	5.0000	5.0512	.051	1.02	.21309	.003	1
CAL 4	10.000	9.9302	-.070	-.698	.41880	.006	1



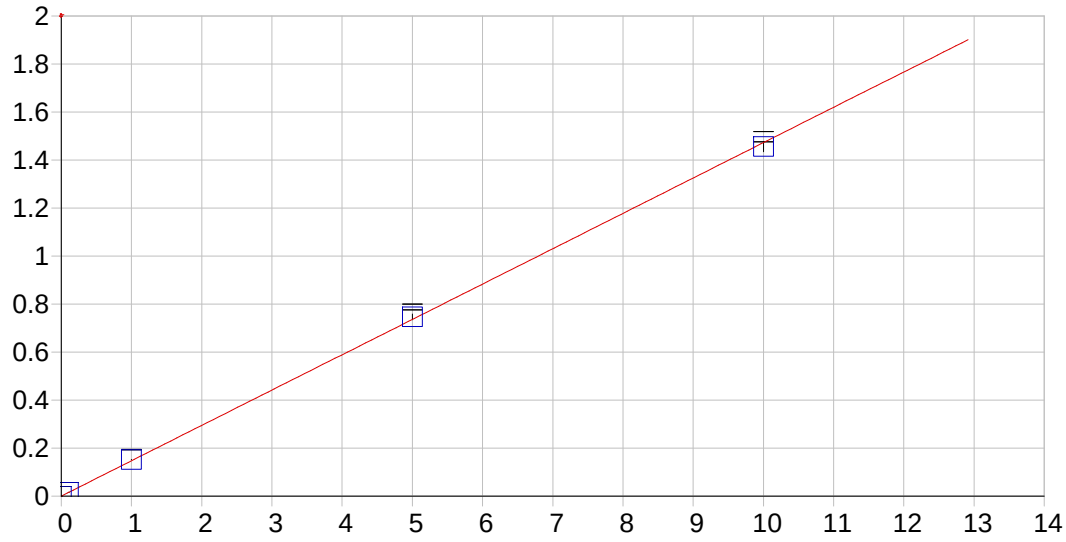
Si 251.611 {134}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.003367	Re-Slope:	1.000000

A1 (Gain):	0.092819		Y-int:	0.000000	
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999973		Status:	OK.	
Std Error of Est:	0.000076				
Predicted MDL:	0.005695				
Predicted MQL:	0.018984				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00001	.000	.000	.00337	.001	1
CAL 1	.40000	.38797	-.012	-3.01	.03942	.001	1
CAL 3	5.0000	4.9645	-.036	-.710	.46896	.003	1
CAL 4	10.000	10.047	.047	.474	.94555	.005	1

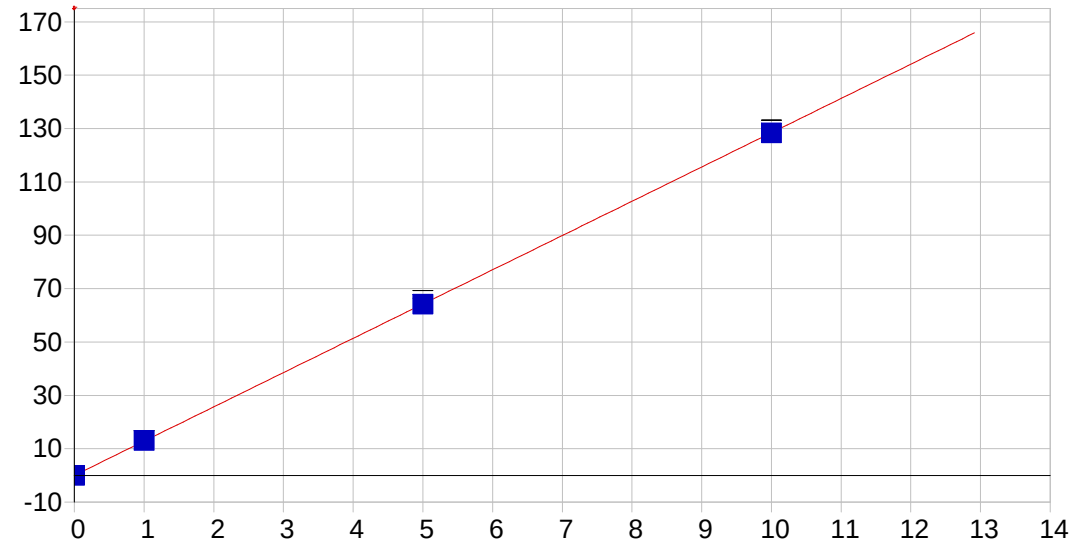


Sn 189.989 {478}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000173	Re-Slope:	1.000000
A1 (Gain):	0.147212	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999884	Status:	OK.
Std Error of Est:	0.000116		
Predicted MDL:	0.000700		
Predicted MQL:	0.002333		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00017	.000	1
CAL 1	.10000	.10515	.005	5.15	.01565	.000	1
CAL 2	1.0000	1.0341	.034	3.41	.15240	.001	1
CAL 3	5.0000	5.0728	.073	1.46	.74695	.012	1
CAL 4	10.000	9.8880	-.112	-1.12	1.4558	.022	1

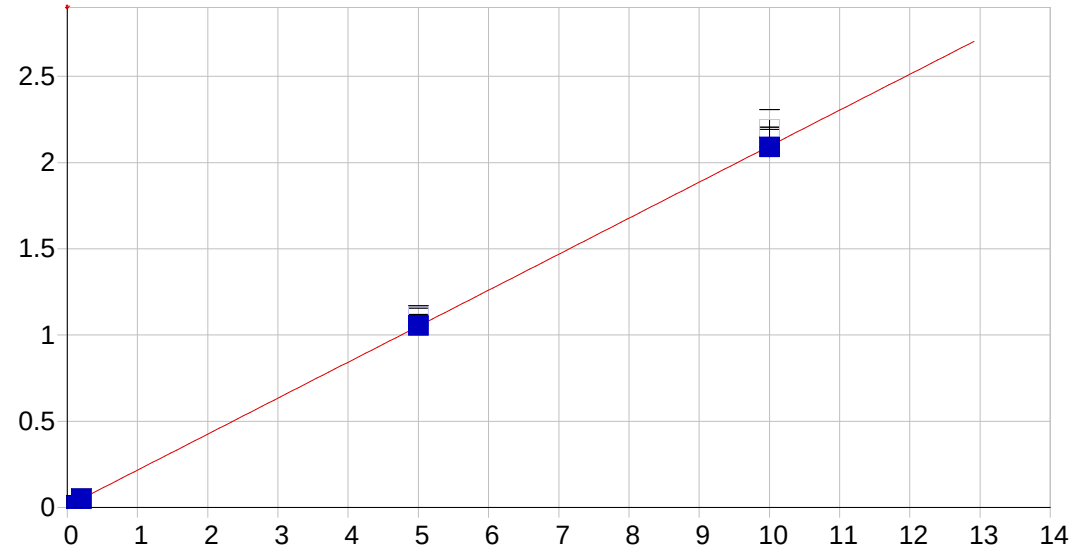


Sr 407.771 { 83}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.001992	Re-Slope:	1.000000
A1 (Gain):	12.844080	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999991	Status:	OK.
Std Error of Est:	0.000627		
Predicted MDL:	0.000100		
Predicted MQL:	0.000334		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	-.00199	.000	1
CAL 1	.00500	.00508	.000	1.55	.06393	.001	1
CAL 2	1.0000	1.0163	.016	1.63	13.055	.024	1
CAL 3	5.0000	4.9964	-.004	-.072	64.190	1.45	1
CAL 4	10.000	9.9872	-.013	-.128	128.31	1.14	1



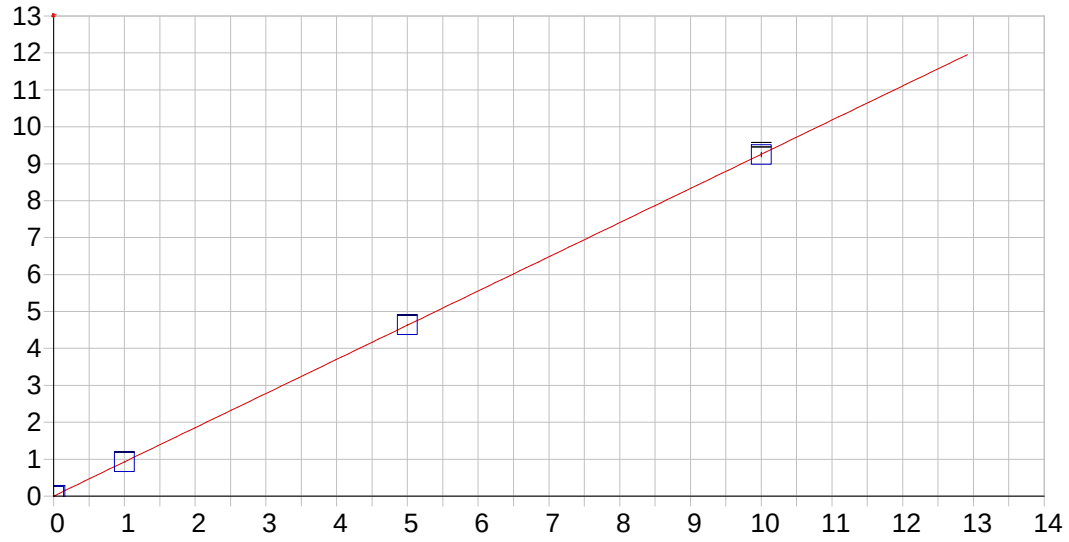
Th 283.231 {119}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.007553	Re-Slope:	1.000000

A1 (Gain):	0.208770	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999990	Status:	OK.
Std Error of Est:	0.000075		
Predicted MDL:	0.004780		
Predicted MQL:	0.015932		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	.00755	.001	1
CAL 1	.20000	.20667	.007	3.34	.05088	.002	1
CAL 3	5.0000	5.0161	.016	.322	1.1056	.007	1
CAL 4	10.000	9.9775	-.022	-.225	2.1922	.057	1

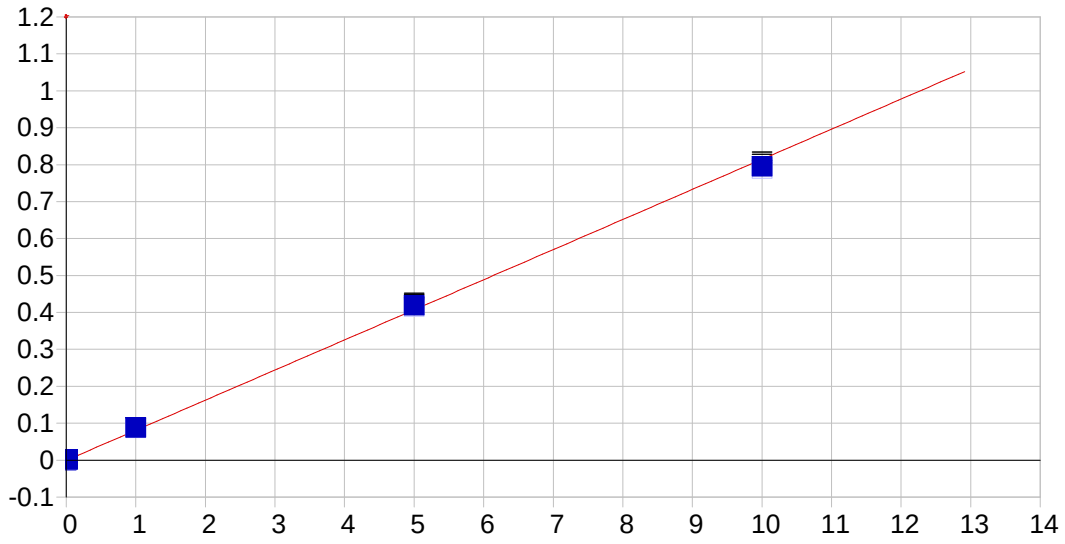


Ti 334.941 {101}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.002028	Re-Slope:	1.000000
A1 (Gain):	0.925423	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999999	Status:	OK.
Std Error of Est:	0.000031		
Predicted MDL:	0.001006		
Predicted MQL:	0.003353		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00203	.001	1
CAL 1	.02000	.01973	.000	-1.33	.02029	.001	1
CAL 2	1.0000	1.0010	.001	.099	.92837	.003	1
CAL 3	5.0000	5.0098	.010	.195	4.6382	.010	1
CAL 4	10.000	9.9895	-.010	-.105	9.2465	.060	1

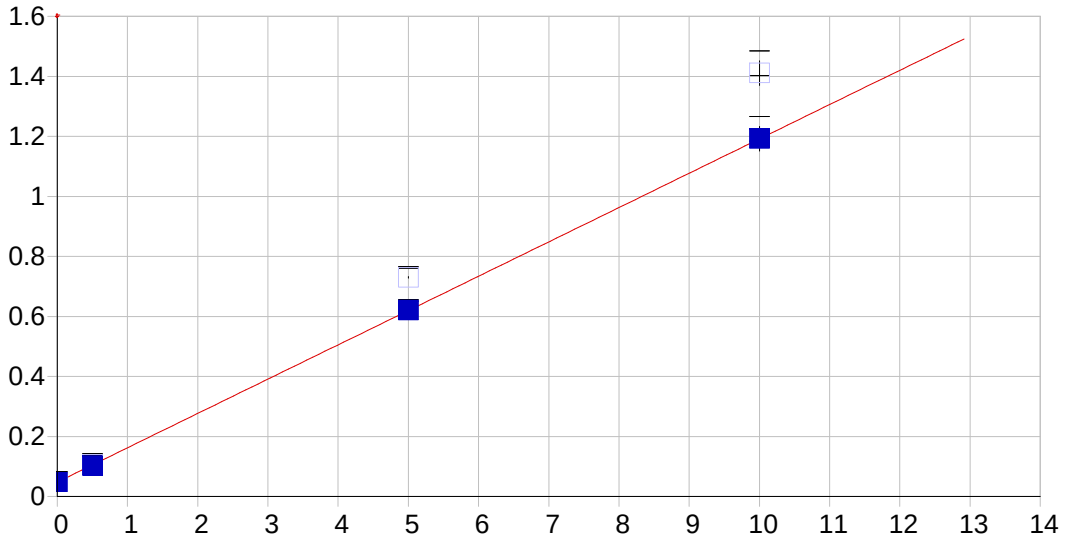


Tl 190.856 {477}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	-0.000548	Re-Slope:	1.000000
A1 (Gain):	0.081515	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999434	Status:	OK.
Std Error of Est:	0.000063		
Predicted MDL:	0.001650		
Predicted MQL:	0.005501		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	-.00001	.000	.000	-.00055	.000	1
CAL 1	.02000	.02421	.004	21.1	.00139	.000	1
CAL 2	1.0000	1.0857	.086	8.57	.08733	.000	1
CAL 3	5.0000	5.1442	.144	2.88	.41566	.006	1
CAL 4	10.000	9.7660	-.234	-2.34	.78929	.012	1



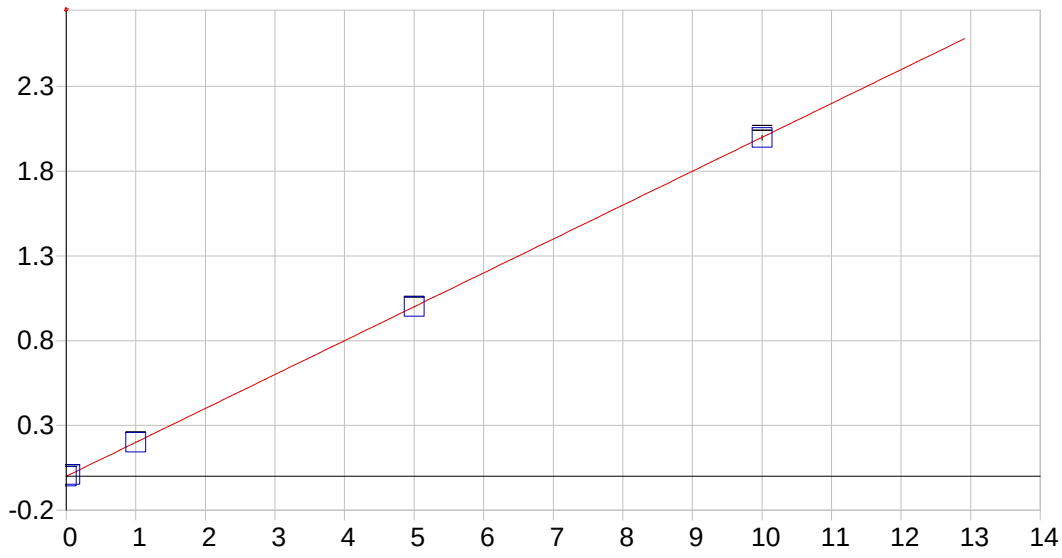
U 367.007 { 92}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.047837	Re-Slope:	1.000000

A1 (Gain):	0.114350			Y-int:	0.000000
A2 (Curvature):	0.000000				
n (Exponent):	1.000000				
Correlation:	0.999982		Status:	OK.	
Std Error of Est:	0.000100				
Predicted MDL:	0.013091				
Predicted MQL:	0.043636				

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00002	.000	.000	.04784	.002	1
CAL 1	.50000	.48066	-.019	-3.87	.10634	.003	1
CAL 3	5.0000	5.0090	.009	.180	.72998	.003	1
CAL 4	10.000	10.008	.008	.082	1.4110	.041	1

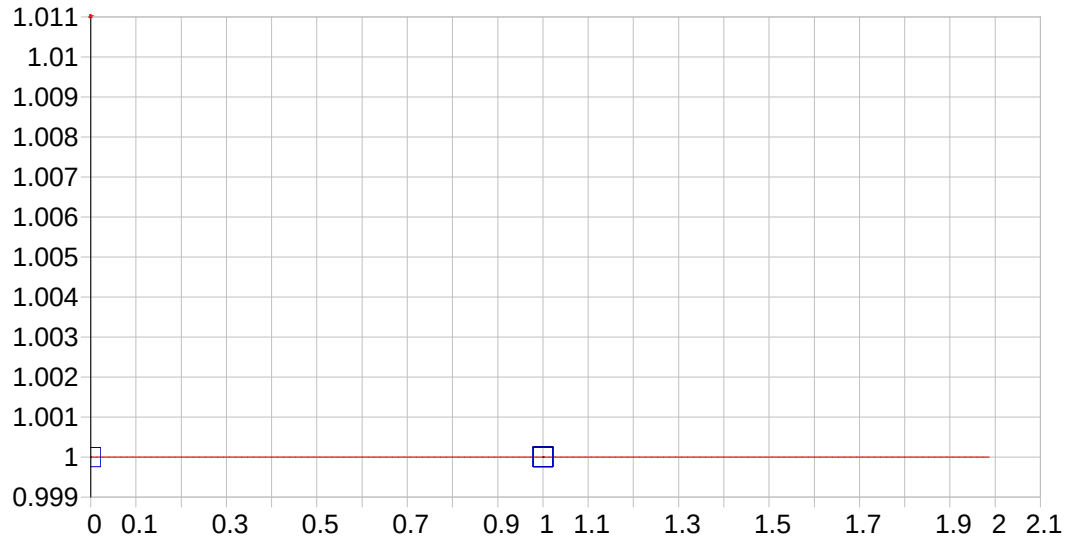


V 290.882 {116}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000389	Re-Slope:	1.000000
A1 (Gain):	0.199912	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.999999	Status:	OK.
Std Error of Est:	0.000012		
Predicted MDL:	0.003970		
Predicted MQL:	0.013234		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00039	.001	1
CAL 1	.05000	.05034	.000	.683	.01045	.001	1
CAL 2	1.0000	1.0045	.004	.449	.20120	.001	1
CAL 3	5.0000	5.0056	.006	.113	1.0011	.002	1
CAL 4	10.000	9.9895	-.010	-.105	1.9974	.014	1

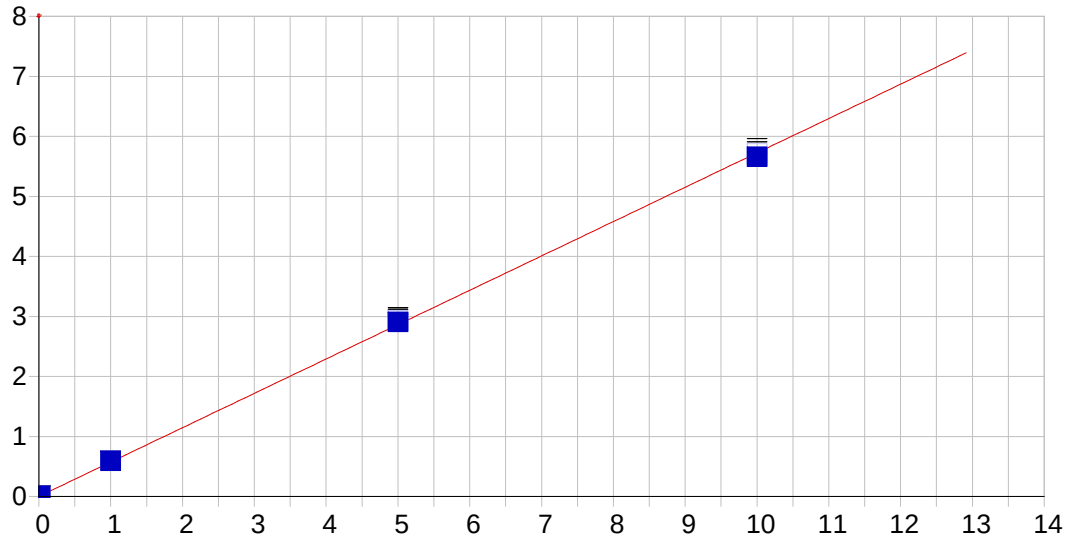


Y 371.030 { 91}*

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	1.000000	Re-Slope:	1.000000
A1 (Gain):	0.000000	Y-int:	0.000000
A2 (Curvature):	0.000000		
n (Exponent):	1.000000		
Correlation:	0.000000	Status:	Warning Zero Gain
Std Error of Est:	0.000000		
Predicted MDL:	n/a		
Predicted MQL:	n/a		

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CAL 1	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CALBLK1	.00000	.00000	.000	.000	1.0000	.000	1
CAL 2	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 3	1.0000	.00000	-1.00	-100.	1.0000	.000	1
CAL 4	1.0000	.00000	-1.00	-100.	1.0000	.000	1



Zn 213.856 {458}

Date of Fit:	8/28/2012 8:37:23	Type of Fit:	Linear	Weighting:	1/Conc

A0 (Offset):	0.000996	Re-Slope:	1.000000

A1 (Gain):	0.572328			Y-int:	0.000000	
A2 (Curvature):	0.000000					
n (Exponent):	1.000000					
Correlation:	0.999891		Status:	OK.		
Std Error of Est:	0.000197					
Predicted MDL:	0.000199					
Predicted MQL:	0.000664					

Std. Name	Stated Conc.	Found Conc.	Difference	% Diff.	(S)IR	Std Dev	Emphasis
CALBLK1	.00000	.00000	.000	.000	.00100	.000	1
CAL 1	.02000	.02056	.001	2.81	.01293	.000	1
CAL 2	1.0000	1.0309	.031	3.09	.59612	.003	1
CAL 3	5.0000	5.0812	.081	1.62	2.9346	.044	1
CAL 4	10.000	9.8874	-.113	-1.13	5.7109	.084	1

Sample Name: ICV Acquired: 8/28/2012 8:37:28 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.001**	**49.70**	**5.057**	**5.120**	**5.061**	**5.058**	**5.083**	**25.35**	**5.114**
Stddev	.016	.12	.059	.024	.011	.017	.064	.28	.064
%RSD	1.582	.2467	1.173	.4630	.2075	.3273	1.260	1.124	1.248
#1	1.018	49.75	5.125	5.135	5.056	5.061	5.156	25.68	5.188
#2	.9988	49.78	5.022	5.133	5.073	5.073	5.035	25.20	5.076
#3	.9867	49.56	5.023	5.093	5.053	5.040	5.059	25.17	5.079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.214**	**5.059**	**5.043**	**50.29**	**49.58**	**4.983**	**25.09**	**5.121**	**5.140**
Stddev	.057	.071	.056	.15	.09	.010	.11	.011	.058
%RSD	1.101	1.401	1.110	.2891	.1767	.2002	.4446	.2042	1.131
#1	5.280	5.134	5.107	50.30	49.53	4.988	25.21	5.126	5.207
#2	5.181	5.049	5.005	50.43	49.68	4.990	25.09	5.128	5.104
#3	5.181	4.993	5.017	50.14	49.54	4.972	24.98	5.109	5.109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.72**	**5.211**	**5.066**	**5.172**	**50.40**	**1.006**	**5.113**	**4.955**	**5.096**
Stddev	.12	.062	.055	.056	.55	.007	.057	.009	.059
%RSD	.2462	1.182	1.078	1.091	1.094	.6840	1.110	.1870	1.155
#1	49.65	5.282	5.128	5.237	51.04	1.014	5.178	4.964	5.164
#2	49.86	5.173	5.027	5.143	50.04	1.003	5.075	4.957	5.066
#3	49.65	5.178	5.042	5.137	50.13	1.001	5.086	4.945	5.058
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICV Acquired: 8/28/2012 8:37:28 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.100**	**5.163**	**5.004**	**5.384**	**4.946**	**4.980**	**5.130**
Stddev	.033	.099	.016	.060	.099	.011	.059
%RSD	.6434	1.913	.3091	1.112	1.991	.2223	1.141
#1	5.062	5.268	5.005	5.453	5.051	4.985	5.197
#2	5.125	5.151	5.019	5.352	4.932	4.988	5.093
#3	5.112	5.071	4.988	5.346	4.855	4.968	5.098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3590.3**
Stddev	48.8
%RSD	1.3586
#1	3535.3
#2	3607.2
#3	3628.3

Sample Name: ICB Acquired: 8/28/2012 8:40:46 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0083	.0004	.0342	.0008	.0008	.0021	.0002	.0002
Stddev	.0006	.0063	.0021	.0018	.0006	.0004	.0028	.0009	.0001
%RSD	124.0	75.84	536.1	5.147	69.96	49.54	134.1	421.7	48.80
#1	-.0006	.0145	-.0008	.0352	.0015	.0013	.0026	.0007	.0002
#2	-.0011	.0083	.0028	.0322	.0006	.0008	.0047	.0007	.0001
#3	.0002	.0020	-.0009	.0353	.0004	.0005	-.0009	-.0008	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0003	.0003	.0094	<.0000	.0031	.0002	.0011	.0074
Stddev	.0001	.0002	.0027	.0031	.0151	.0009	.0149	.0003	.0004
%RSD	31.84	72.52	1019.	33.49	130.1	27.71	6039.	32.07	5.219
#1	-.0003	.0002	.0008	.0128	.0038	.0040	-.0145	.0014	.0070
#2	-.0005	.0005	.0026	.0089	-.0263	.0024	.0000	.0009	.0076
#3	-.0004	.0001	-.0026	.0065	-.0123	.0029	.0153	.0008	.0077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0144	.0002	.0007	<.0000	.0049	<.0000	.0029	<.0000	.0011
Stddev	.0112	.0003	.0012	.0012	.0033	.0010	.0011	.0026	.0007
%RSD	77.84	195.4	174.6	67.59	67.43	495.7	37.17	193.6	65.61
#1	.0258	.0005	.0014	-.0004	.0087	-.0005	.0022	.0005	.0012
#2	.0034	-.0002	.0014	-.0028	.0027	.0009	.0042	-.0002	.0004
#3	.0141	.0002	-.0007	-.0021	.0032	-.0010	.0023	-.0043	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: ICB Acquired: 8/28/2012 8:40:46 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	<.0000	.0012	.0018	.0030	<.0000	<.0000
Stddev	.0003	.0053	.0004	.0008	.0133	.0051	.0001
%RSD	43.96	219.3	30.93	42.77	450.5	180.3	69.83
#1	.0011	.0030	.0016	.0022	-.0090	-.0044	-.0001
#2	.0008	-.0076	.0009	.0009	.0173	-.0070	-.0001
#3	.0004	-.0026	.0011	.0022	.0006	.0029	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3693.0
Stddev	25.0
%RSD	.67745
#1	3712.4
#2	3664.8
#3	3701.8

Sample Name: LLC Acquired: 8/28/2012 8:44:29 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0099**	**.2036**	**.0100**	**.1174**	**.0500**	**.0050**	**.1994**	**1.049**
Stddev	.0010	.0132	.0006	.0017	.0003	.0001	.0023	.007
%RSD	9.602	6.481	6.080	1.470	.5447	1.646	1.138	.6876
#1	.0092	.2005	.0106	.1162	.0503	.0049	.2020	1.048
#2	.0095	.2180	.0100	.1165	.0499	.0050	.1984	1.042
#3	.0110	.1922	.0094	.1194	.0498	.0050	.1977	1.056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0051**	**.0526**	**.0100**	**.0267**	**.1031**	**4.861**	**.0528**	**1.007**
Stddev	.0001	.0009	.0005	.0007	.0025	.024	.0024	.002
%RSD	1.289	1.787	4.723	2.436	2.418	.4894	4.461	.2332
#1	.0051	.0528	.0106	.0261	.1057	4.872	.0554	1.006
#2	.0052	.0515	.0097	.0274	.1030	4.834	.0508	1.010
#3	.0052	.0534	.0098	.0267	.1007	4.878	.0521	1.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0157**	**.0405**	**.9909**	**.0428**	**.2446**	**.0090**	**4.823**	W **.0078**
Stddev	.0004	.0001	.0169	.0004	.0047	.0013	.022	.0044
%RSD	2.398	.2369	1.704	.9994	1.912	14.42	.4616	56.96
#1	.0153	.0405	.9907	.0428	.2459	.0079	4.829	.0027
#2	.0161	.0404	1.008	.0424	.2394	.0087	4.798	.0106
#3	.0157	.0406	.9741	.0432	.2485	.0104	4.841	.0100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
Value								.0100
Range								-20.00%

Sample Name: LLC Acquired: 8/28/2012 8:44:29 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0161	.3881	.1029	.0050	.1997	.0201	W .0245	.4982
Stddev	.0034	.0043	.0004	.0001	.0008	.0006	.0004	.0127
%RSD	21.29	1.103	.3519	1.659	.4103	3.012	1.552	2.556
#1	.0124	.3928	.1034	.0049	.1988	.0206	.0248	.4979
#2	.0168	.3845	.1027	.0049	.2000	.0202	.0245	.4857
#3	.0191	.3871	.1027	.0051	.2003	.0194	.0241	.5112
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass
Value							.0200	
Range							20.00%	

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0480	.0204
Stddev	.0049	.0003
%RSD	10.27	1.227
#1	.0517	.0203
#2	.0424	.0202
#3	.0499	.0207
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	Y_3710
Units	Cts/S
Avg	3725.6
Stddev	47.2
%RSD	1.2658
#1	3733.3
#2	3768.4
#3	3675.1

Sample Name: ICSA Acquired: 8/28/2012 8:48:07 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	99.88	W<.0000	<.0000	.0005	.0000	.0111
Stddev	.0005	.02	.0023	.0043	.0004	.0000	.0036
%RSD	172.8	.0159	40.57	64.10	72.03	81.65	32.33
#1	-.0008	99.88	-.0039	-.0028	.0004	.0001	.0131
#2	-.0001	99.90	-.0082	-.0062	.0009	.0001	.0069
#3	.0001	99.86	-.0047	-.0114	.0002	.0000	.0132
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			.0054				
Low Limit			-.0054				

Elem	Ca1840	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	51.74	<.0000	.0030	F .0154	.0008	100.5	<.0000
Stddev	.56	.0001	.0002	.0004	.0003	.1	.0138
%RSD	1.089	21.79	5.968	2.490	43.83	.1369	25.73
#1	51.13	-.0003	.0032	.0150	.0004	100.4	-.0583
#2	51.86	-.0005	.0029	.0157	.0008	100.7	-.0648
#3	52.23	-.0004	.0031	.0155	.0011	100.5	-.0383
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.0100			
Low Limit				-.0100			

Elem	Li6707	Mg2798	Mn2576	Mo2020	Na5895	Ni2216	P_1774
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	100.5	.0010	.0001	<.0000	.0041	.0036
Stddev	.0010	.1	.0000	.0006	.0100	.0001	.0017
%RSD	63.43	.1456	3.580	678.7	1031.	2.014	48.88
#1	.0007	100.3	.0010	.0007	.0082	.0040	.0046
#2	.0013	100.6	.0011	-.0004	-.0117	.0041	.0045
#3	.0026	100.5	.0010	-.0001	.0006	.0042	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Sample Name: ICSA Acquired: 8/28/2012 8:48:07 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	W<.0000	.0021	.0039	.0018	<.0000	<.0000	W<.0000
Stddev	.0005	.0051	.0019	.0059	.0025	.0005	.0001
%RSD	17.67	243.1	48.80	324.4	25.70	315.2	6.916
#1	-.0022	-.0029	.0058	-.0043	-.0121	.0004	-.0010
#2	-.0032	.0020	.0020	.0023	-.0101	-.0007	-.0011
#3	-.0030	.0072	.0039	.0075	-.0071	-.0002	-.0011
Check ?	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit	.0025						.0011
Low Limit	-.0025						-.0011

Elem	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	.0012	<.0000	.0414	.0023	<.0000
Stddev	.0049	.0007	.0015	.0074	.0062	.0003
%RSD	513.4	59.67	380.7	17.79	271.7	11.72
#1	-.0019	.0015	.0013	.0334	.0088	-.0026
#2	.0066	.0016	-.0017	.0479	-.0035	-.0024
#3	-.0019	.0004	-.0008	.0430	.0015	-.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit						
Low Limit						

Int. Std.	Y_3710
Units	Cts/S
Avg	3567.9
Stddev	19.7
%RSD	.55320
#1	3581.9
#2	3545.4
#3	3576.5

Sample Name: ICSAB Acquired: 8/28/2012 8:51:45 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9943**	**98.20**	**.9515**	**.9847**	**.4900**	**.4756**	**.9862**	**48.19**	**.9693**
Stddev	.0031	.36	.0106	.0045	.0028	.0026	.0148	.39	.0078
%RSD	.3153	.3630	1.114	.4537	.5648	.5550	1.500	.8112	.8046
#1	.9919	97.88	.9576	.9812	.4870	.4731	.9897	48.37	.9739
#2	.9979	98.15	.9576	.9832	.4903	.4752	.9989	48.45	.9738
#3	.9933	98.58	.9393	.9897	.4925	.4783	.9700	47.74	.9603
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4802**	**.4999**	**.4793**	**99.75**	**19.67**	**.9856**	**98.90**	**.4938**	**.9943**
Stddev	.0054	.0038	.0053	.47	.09	.0034	.43	.0018	.0083
%RSD	1.115	.7589	1.113	.4702	.4763	.3470	.4341	.3733	.8387
#1	.4838	.5000	.4844	99.25	19.57	.9821	98.44	.4920	.9992
#2	.4827	.5037	.4796	99.83	19.68	.9890	99.00	.4937	.9991
#3	.4740	.4961	.4738	100.2	19.76	.9857	99.28	.4956	.9847
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**19.76**	**.9718**	**.4912**	**.9724**	**19.49**	**1.024**	**.9673**	**.9815**	**.9640**
Stddev	.08	.0084	.0021	.0058	.16	.011	.0087	.0109	.0104
%RSD	.4178	.8652	.4318	.5934	.8389	1.047	.8966	1.107	1.083
#1	19.67	.9743	.4921	.9764	19.57	1.031	.9708	.9763	.9694
#2	19.78	.9786	.4926	.9750	19.60	1.029	.9738	.9743	.9706
#3	19.83	.9624	.4887	.9657	19.30	1.011	.9575	.9940	.9520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: ICSAB Acquired: 8/28/2012 8:51:45 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9929	1.007	.4983	.9990	.9843	.4806	.9754
Stddev	.0052	.002	.0013	.0072	.0067	.0054	.0080
%RSD	.5202	.2387	.2672	.7178	.6844	1.129	.8241
#1	.9877	1.008	.4975	1.000	.9819	.4754	.9798
#2	.9930	1.005	.4977	1.005	.9919	.4801	.9802
#3	.9981	1.010	.4999	.9913	.9791	.4863	.9661
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	3814.5
Stddev	21.5
%RSD	.56430
#1	3803.7
#2	3800.5
#3	3839.3

Sample Name: LDR Acquired: 8/28/2012 8:55:08 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**98.73**	**9.841**	**10.03**	**9.747**	**10.03**	**9.894**	**48.19**	**9.771**
Stddev	.014	.28	.081	.01	.393	.01	.080	.56	.080
%RSD	.7059	.2868	.8255	.1401	4.033	.0566	.8120	1.161	.8179
#1	2.007	99.06	9.903	10.04	10.11	10.03	9.968	48.76	9.847
#2	1.979	98.56	9.749	10.02	9.328	10.03	9.809	47.65	9.687
#3	1.989	98.57	9.870	10.03	9.806	10.04	9.904	48.15	9.778
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**9.632**	**9.668**	**9.790**	**99.31**	**99.96**	**9.929**	**48.99**	**9.838**	**9.867**
Stddev	.085	.066	.070	.29	.26	.033	.17	.035	.083
%RSD	.8769	.6790	.7115	.2925	.2563	.3325	.3388	.3517	.8394
#1	9.715	9.742	9.851	99.64	100.3	9.967	49.18	9.877	9.948
#2	9.546	9.644	9.714	99.09	99.78	9.906	48.87	9.827	9.783
#3	9.635	9.618	9.804	99.21	99.85	9.914	48.91	9.810	9.871
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**100.6**	**9.645**	**9.970**	**9.673**	**99.88**	**1.977**	**9.880**	**9.824**	**9.716**
Stddev	.3	.092	.089	.098	.74	.018	.077	.044	.096
%RSD	.2590	.9528	.8887	1.010	.7458	.9131	.7777	.4460	.9855
#1	100.9	9.734	10.04	9.772	100.5	1.988	9.950	9.853	9.809
#2	100.4	9.550	9.871	9.576	99.05	1.957	9.798	9.774	9.618
#3	100.5	9.652	9.998	9.671	100.1	1.988	9.891	9.845	9.721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: LDR Acquired: 8/28/2012 8:55:08 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**10.00**	**9.824**	**9.932**	**9.762**	**9.734**	**9.796**	**9.800**
Stddev	.16	.074	.028	.100	.051	.028	.089
%RSD	1.641	.7496	.2852	1.027	.5202	.2836	.9052
#1	10.18	9.909	9.965	9.866	9.792	9.827	9.887
#2	9.855	9.775	9.916	9.667	9.707	9.774	9.709
#3	9.969	9.789	9.915	9.753	9.702	9.787	9.805
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3685.5**
Stddev	53.8
%RSD	1.4602
#1	3623.4
#2	3717.2
#3	3716.0

Sample Name: CCV Acquired: 8/28/2012 8:58:46 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9794**	**49.36**	**4.842**	**5.043**	**4.974**	**5.034**	**4.910**	**24.75**	**4.839**
Stddev	.0096	.03	.037	.010	.009	.010	.038	.22	.040
%RSD	.9811	.0614	.7571	.2028	.1744	.2033	.7756	.8861	.8300
#1	.9701	49.39	4.814	5.055	4.984	5.045	4.885	24.62	4.812
#2	.9789	49.33	4.829	5.039	4.969	5.024	4.892	24.64	4.820
#3	.9892	49.37	4.884	5.036	4.968	5.033	4.954	25.01	4.886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.851**	**4.854**	**4.870**	**49.83**	**49.64**	**4.951**	**24.58**	**4.960**	**4.853**
Stddev	.044	.045	.039	.11	.05	.001	.09	.009	.041
%RSD	.8980	.9299	.7988	.2224	.1018	.0244	.3600	.1905	.8396
#1	4.817	4.811	4.838	49.94	49.70	4.952	24.63	4.959	4.823
#2	4.835	4.852	4.859	49.72	49.63	4.951	24.48	4.951	4.836
#3	4.900	4.901	4.913	49.82	49.60	4.949	24.64	4.970	4.899
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**49.99**	**4.851**	**4.894**	**4.894**	**48.39**	**.9671**	**4.869**	**4.856**	**4.830**
Stddev	.08	.041	.032	.037	.39	.0092	.026	.016	.042
%RSD	.1542	.8443	.6521	.7667	.8032	.9523	.5341	.3216	.8757
#1	50.07	4.823	4.872	4.871	48.12	.9582	4.845	4.853	4.801
#2	49.93	4.833	4.881	4.874	48.22	.9667	4.866	4.842	4.810
#3	49.96	4.898	4.931	4.937	48.84	.9766	4.897	4.873	4.879
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/28/2012 8:58:46 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.971**	**4.916**	**4.960**	**4.987**	**4.886**	**4.929**	**4.869**
Stddev	.057	.052	.013	.040	.045	.005	.038
%RSD	1.144	1.065	.2665	.8004	.9207	.0982	.7864
#1	4.909	4.876	4.973	4.958	4.839	4.929	4.841
#2	4.984	4.896	4.947	4.971	4.889	4.925	4.854
#3	5.021	4.975	4.960	5.033	4.929	4.934	4.913
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3826.9**
Stddev	28.9
%RSD	.75473
#1	3854.1
#2	3830.0
#3	3796.6

Sample Name: CCB Acquired: 8/28/2012 9:02:06 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0089**	**.0007**	**.0371**	**.0007**	**.0007**	**<.0000**	**.0004**	**.0004**
Stddev	.0003	.0037	.0011	.0022	.0004	.0004	.0033	.0002	.0002
%RSD	90.84	41.43	151.6	5.867	63.77	51.82	82.82	56.07	56.55
#1	.0004	.0063	-.0006	.0393	.0012	.0011	-.0026	.0005	.0006
#2	.0000	.0131	.0014	.0372	.0006	.0007	-.0016	.0004	.0001
#3	.0007	.0072	.0014	.0349	.0003	.0004	-.0076	.0001	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0007**	**.0022**	**.0086**	**.0000**	**.0028**	**.0099**	**.0008**	**.0072**
Stddev	.0005	.0004	.0008	.0031	.0373	.0011	.0135	.0004	.0003
%RSD	322.8	58.52	33.92	36.62	117000.	39.84	136.8	47.25	4.049
#1	.0004	.0002	.0028	.0121	.0385	.0018	-.0005	.0012	.0070
#2	-.0001	.0009	.0026	.0077	-.0025	.0040	.0049	.0004	.0071
#3	-.0007	.0010	.0014	.0060	-.0360	.0026	.0251	.0008	.0076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0250**	**.0004**	**.0014**	**<.0000**	**.0049**	**.0042**	**.0051**	**<.0000**	**.0009**
Stddev	.0146	.0001	.0019	.0004	.0013	.0013	.0003	.0039	.0009
%RSD	58.27	23.95	139.5	23.81	25.64	30.98	5.540	79.07	101.7
#1	.0368	.0004	-.0004	-.0014	.0056	.0057	.0048	-.0004	.0014
#2	.0296	.0003	.0034	-.0019	.0058	.0036	.0054	-.0072	-.0001
#3	.0087	.0005	.0011	-.0012	.0035	.0033	.0052	-.0073	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/28/2012 9:02:06 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0018	.0009	.0007	.0214	<.0000	<.0000
Stddev	.0003	.0010	.0011	.0008	.0151	.0075	.0002
%RSD	32.97	58.32	124.6	115.9	70.83	216.2	3105.
#1	.0010	.0007	.0016	.0005	.0366	-.0069	.0001
#2	.0008	.0027	.0016	.0000	.0211	.0052	.0001
#3	.0005	.0019	-.0004	.0015	.0063	-.0087	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3830.8
Stddev	25.4
%RSD	.66187
#1	3805.6
#2	3856.3
#3	3830.6

Sample Name: 160-437-E-6-B Acquired: 8/28/2012 9:45:55 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0196	<.0000	.0387	.0183	<.0000	<.0000	25.52	.0000
Stddev	.0001	.0029	.0026	.0029	.0003	.0000	.0033	1.47	.0002
%RSD	152.8	14.85	198.4	7.546	1.389	25.53	1061.	5.755	561.5
#1	-.0001	.0211	.0014	.0369	.0181	.0000	.0006	24.01	-.0001
#2	-.0001	.0163	-.0015	.0420	.0183	-.0001	-.0039	25.60	.0000
#3	.0000	.0215	-.0038	.0371	.0186	-.0001	.0024	26.94	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	<.0000	.0008	.4485	.4430	.0036	2.473	.0437	.0001
Stddev	.0001	.0003	.0015	.0033	.0127	.0007	.026	.0007	.0004
%RSD	23.84	1275.	202.8	.7324	2.858	18.53	1.051	1.533	402.9
#1	.0006	.0003	.0019	.4453	.4298	.0037	2.470	.0429	.0004
#2	.0004	-.0001	.0013	.4484	.4442	.0029	2.448	.0441	-.0003
#3	.0004	-.0003	-.0010	.4519	.4551	.0043	2.500	.0440	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.680	.0007	.0218	<.0000	9.618	.0014	.0039	.6683	<.0000
Stddev	.071	.0004	.0033	.0004	.499	.0020	.0018	.0155	.0005
%RSD	1.067	57.18	15.00	35.37	5.188	138.1	47.84	2.326	70.89
#1	6.600	.0005	.0181	-.0012	9.098	-.0008	.0017	.6517	-.0001
#2	6.703	.0012	.0230	-.0013	9.663	.0026	.0049	.6709	-.0010
#3	6.736	.0004	.0244	-.0006	10.09	.0026	.0050	.6824	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-6-B Acquired: 8/28/2012 9:45:55 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=20

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0516	<.0000	.0003	.0020	<.0000	.0007	.0012
Stddev	.0005	.0021	.0002	.0011	.0088	.0033	.0000
%RSD	1.054	271.3	53.43	52.93	99.51	462.7	1.636
#1	.0510	-.0008	.0002	.0028	.0005	.0020	.0012
#2	.0516	.0013	.0005	.0008	-.0100	-.0030	.0012
#3	.0521	-.0028	.0003	.0025	-.0171	.0031	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3949.3
Stddev	63.0
%RSD	1.5952
#1	3953.2
#2	4010.3
#3	3884.5

Sample Name: 160-437-E-7-B Acquired: 8/28/2012 9:49:32 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0082**	**.0017**	**.0108**	**.0528**	**<.0000**	**<.0000**	**25.69**	**.0001**
Stddev	.0002	.0056	.0013	.0038	.0004	.0000	.0036	.65	.0002
%RSD	228.5	68.12	76.48	34.68	.7430	41.31	172.5	2.535	295.9
#1	.0001	.0111	.0003	.0140	.0527	-.0001	-.0026	24.97	.0002
#2	-.0001	.0018	.0030	.0118	.0525	-.0001	-.0053	25.89	-.0001
#3	.0003	.0118	.0019	.0067	.0533	-.0001	.0017	26.22	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**<.0000**	**.0005**	**<.0000**	**3.343**	**.5564**	**.0017**	**7.149**	**.3513**	**<.0000**
Stddev	.0006	.0001	.0021	.022	.0273	.0020	.064	.0020	.0003
%RSD	402.5	12.48	186.0	.6453	4.912	118.3	.8995	.5674	157.2
#1	-.0007	.0006	-.0022	3.328	.5499	.0004	7.137	.3504	-.0004
#2	.0005	.0005	.0013	3.333	.5328	.0039	7.091	.3500	-.0003
#3	-.0003	.0005	-.0024	3.367	.5863	.0006	7.218	.3536	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.676**	**.0009**	**.0685**	**.0012**	**.0531**	**<.0000**	**.0010**	**1.628**	**<.0000**
Stddev	.009	.0004	.0031	.0007	.0031	.0027	.0059	.010	.0005
%RSD	.5273	48.43	4.453	56.69	5.842	102.1	582.8	.6378	45.63
#1	1.674	.0004	.0651	.0005	.0499	-.0012	.0036	1.626	-.0016
#2	1.668	.0010	.0695	.0012	.0534	-.0010	-.0057	1.619	-.0012
#3	1.685	.0013	.0709	.0018	.0561	-.0058	.0052	1.640	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-7-B Acquired: 8/28/2012 9:49:32 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0837	.0042	<.0000	.0004	<.0000	<.0000	.0015
Stddev	.0003	.0052	.0002	.0011	.0053	.0009	.0002
%RSD	.3681	125.7	21.61	285.7	154.8	41.22	14.02
#1	.0836	.0015	-.0013	-.0005	-.0034	-.0030	.0016
#2	.0835	.0008	-.0011	.0016	-.0087	-.0017	.0016
#3	.0841	.0102	-.0008	.0000	.0019	-.0015	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3824.9
Stddev	10.9
%RSD	.28369
#1	3823.5
#2	3814.8
#3	3836.3

Sample Name: 160-437-E-8-B Acquired: 8/28/2012 9:53:09 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0639**	**.0024**	**.1014**	**.0099**	**.0001**	**<.0000**	**32.15**	**.0002**
Stddev	.0007	.0041	.0009	.0035	.0002	.0000	.0044	.49	.0001
%RSD	578.0	6.438	36.61	3.425	2.120	47.36	222.1	1.511	32.33
#1	-.0003	.0683	.0033	.1042	.0099	.0001	.0013	31.85	.0002
#2	-.0002	.0603	.0017	.1024	.0101	.0000	-.0070	32.71	.0001
#3	.0009	.0630	.0020	.0975	.0097	.0001	-.0002	31.90	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0013**	**<.0000**	**5.927**	**3.818**	**.0048**	**14.09**	**.2669**	**<.0000**
Stddev	.0002	.0005	.0002	.035	.013	.0022	.06	.0008	.0001
%RSD	50.36	36.31	7.672	.5898	.3414	46.29	.3975	.2943	25.59
#1	.0003	.0009	-.0025	5.887	3.830	.0040	14.04	.2660	-.0004
#2	.0002	.0018	-.0029	5.953	3.819	.0073	14.15	.2675	-.0003
#3	.0005	.0012	-.0028	5.941	3.804	.0031	14.08	.2671	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**17.57**	**.0019**	**.0279**	**<.0000**	**28.64**	**<.0000**	**.0038**	**1.641**	**<.0000**
Stddev	.08	.0001	.0002	.0011	.44	.0023	.0029	.012	.0006
%RSD	.4798	4.448	.7256	239.2	1.535	1078.	77.46	.7514	58.30
#1	17.48	.0019	.0277	-.0013	28.38	.0004	.0052	1.633	-.0009
#2	17.60	.0018	.0281	.0008	29.15	.0017	.0004	1.635	-.0006
#3	17.64	.0018	.0278	-.0008	28.39	-.0027	.0058	1.655	-.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-437-E-8-B Acquired: 8/28/2012 9:53:09 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0727	.0060	<.0000	.0010	<.0000	<.0000	.0016
Stddev	.0005	.0053	.0008	.0010	.0145	.0016	.0001
%RSD	.6856	89.00	208.3	105.4	486.1	50.90	7.865
#1	.0721	.0119	-.0012	.0015	.0079	-.0024	.0018
#2	.0728	.0042	-.0004	.0016	.0026	-.0021	.0016
#3	.0731	.0018	.0004	-.0002	-.0195	-.0050	.0015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3706.3
Stddev	75.2
%RSD	2.0280
#1	3671.9
#2	3654.5
#3	3792.5

Sample Name: 160-442-E-5-B Acquired: 8/28/2012 9:56:45 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0051	.0027	.0148	.0458	<.0000	<.0000	24.76	.0001
Stddev	.0005	.0033	.0009	.0035	.0005	.0000	.0050	1.17	.0002
%RSD	573.5	64.94	31.41	23.63	1.016	64.76	290.2	4.726	195.3
#1	.0004	.0016	.0027	.0120	.0453	.0000	.0034	23.71	.0000
#2	-.0001	.0082	.0019	.0136	.0462	-.0001	-.0020	24.54	.0004
#3	-.0006	.0054	.0036	.0187	.0459	-.0001	-.0065	26.02	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0014	<.0000	4.214	.3640	.0022	7.248	.3653	.0008
Stddev	.0003	.0004	.0015	.020	.0164	.0012	.070	.0019	.0001
%RSD	46.19	27.74	121.9	.4736	4.509	54.35	.9668	.5162	18.01
#1	.0005	.0012	-.0013	4.196	.3495	.0010	7.196	.3647	.0007
#2	.0004	.0018	.0003	4.209	.3606	.0034	7.219	.3638	.0008
#3	.0009	.0012	-.0027	4.235	.3818	.0022	7.327	.3674	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.162	.0007	.0496	<.0000	.0244	<.0000	.0026	1.149	<.0000
Stddev	.007	.0003	.0023	.0030	.0025	.0013	.0012	.009	.0009
%RSD	.6273	41.87	4.603	859.0	10.27	160.3	47.34	.7663	154.7
#1	1.155	.0007	.0472	-.0016	.0234	-.0024	.0015	1.140	.0004
#2	1.162	.0010	.0497	-.0024	.0273	-.0002	.0040	1.149	-.0008
#3	1.170	.0004	.0518	.0030	.0226	.0001	.0024	1.157	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-E-5-B Acquired: 8/28/2012 9:56:45 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1070	.0121	.0013	.0027	.0217	<.0000	.0017
Stddev	.0005	.0037	.0004	.0002	.0105	.0007	.0001
%RSD	.4241	30.77	31.21	6.926	48.34	32.92	4.063
#1	.1070	.0099	.0012	.0027	.0106	-.0023	.0016
#2	.1065	.0163	.0010	.0028	.0231	-.0027	.0017
#3	.1074	.0100	.0018	.0025	.0315	-.0014	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3759.6
Stddev	30.0
%RSD	.79846
#1	3787.5
#2	3727.8
#3	3763.5

Sample Name: 160-442-D-5-A Acquired: 8/28/2012 10:00:23 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**1.329**	**.0058**	**.0141**	**.0779**	**.0001**	**<.0000**	**28.79**	**.0002**
Stddev	.0006	.010	.0016	.0002	.0004	.0001	.0023	.93	.0001
%RSD	1032.	.7858	28.09	1.160	.4872	51.93	1808.	3.233	36.80
#1	.0001	1.317	.0075	.0140	.0775	.0001	.0025	27.72	.0002
#2	.0006	1.332	.0043	.0143	.0782	.0001	-.0021	29.18	.0002
#3	-.0005	1.337	.0055	.0140	.0780	.0002	-.0008	29.46	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0031**	**.0009**	**5.938**	**.7503**	**.0014**	**8.492**	**.4125**	**.0009**
Stddev	.0001	.0005	.0024	.023	.0106	.0006	.028	.0013	.0003
%RSD	10.55	15.49	261.7	.3889	1.418	42.13	.3340	.3101	34.15
#1	.0014	.0036	.0036	5.927	.7490	.0007	8.465	.4134	.0008
#2	.0012	.0030	.0003	5.923	.7403	.0019	8.488	.4110	.0007
#3	.0014	.0027	-.0011	5.965	.7615	.0016	8.522	.4130	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.290**	**.0045**	**.1740**	**.0039**	**.0596**	**.0003**	**.0035**	**3.833**	**<.0000**
Stddev	.010	.0002	.0051	.0003	.0059	.0031	.0020	.009	.0004
%RSD	.7913	4.226	2.907	8.813	9.921	954.7	58.35	.2262	42.62
#1	1.286	.0046	.1684	.0035	.0528	.0027	.0037	3.843	-.0005
#2	1.283	.0045	.1755	.0041	.0623	-.0032	.0054	3.830	-.0010
#3	1.302	.0043	.1782	.0041	.0637	.0016	.0014	3.826	-.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: 160-442-D-5-A Acquired: 8/28/2012 10:00:23 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: DF=10

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1169	.0167	.0270	.0003	.0098	<.0000	.0195
Stddev	.0002	.0018	.0008	.0003	.0105	.0019	.0008
%RSD	.1972	10.96	2.801	85.88	106.4	77.70	3.859
#1	.1167	.0172	.0262	.0007	.0084	-.0022	.0186
#2	.1169	.0182	.0277	.0002	.0210	-.0045	.0199
#3	.1172	.0146	.0271	.0002	.0002	-.0007	.0200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3815.4
Stddev	35.5
%RSD	.92944
#1	3809.7
#2	3783.2
#3	3853.4

Sample Name: MV8KCB Acquired: 8/28/2012 10:04:00 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0176	<.0000	W .0920	.0017	<.0000	<.0000	W .7170
Stddev	.0003	.0133	.0003	.0036	.0002	.0000	.0019	.0061
%RSD	48.48	75.68	11.41	3.961	13.55	36.17	141.9	.8489
#1	-.0003	.0294	-.0026	.0940	.0018	.0000	.0008	.7236
#2	-.0007	.0203	-.0021	.0942	.0019	-.0001	-.0030	.7115
#3	-.0009	.0032	-.0026	.0878	.0015	-.0001	-.0019	.7161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit				.0500				.5000
Low Limit				-.0500				-.5000

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	<.0000	.0020	.0030	.0383	.1681	.0056	.1391
Stddev	.0004	.0001	.0004	.0013	.0022	.0328	.0003	.0175
%RSD	223.6	32.02	18.65	45.39	5.705	19.50	5.146	12.62
#1	.0006	-.0001	.0016	.0025	.0407	.1303	.0055	.1278
#2	-.0001	-.0003	.0023	.0045	.0366	.1845	.0054	.1301
#3	.0000	-.0002	.0022	.0019	.0375	.1894	.0059	.1593
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	<.0000	F 560.8	.0004	.0067	<.0000	.0646	.0010
Stddev	.0004	.0003	3.2	.0002	.0014	.0021	.0013	.0014
%RSD	425.1	53.86	.5704	52.81	20.45	592.5	1.968	146.6
#1	.0003	-.0002	561.9	.0006	.0061	.0020	.0657	-.0005
#2	-.0004	-.0005	563.2	.0003	.0057	-.0012	.0632	.0024
#3	-.0002	-.0007	557.1	.0002	.0083	-.0018	.0648	.0010
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			1.000					
Low Limit			-1.000					

Sample Name: MV8KCB Acquired: 8/28/2012 10:04:00 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0027	.0882	.0010	.0008	.0233	.0001	<.0000	<.0000
Stddev	.0019	.0032	.0007	.0000	.0035	.0006	.0015	.0020
%RSD	71.25	3.662	66.57	6.148	14.90	1086.	93.42	7.610
#1	.0038	.0906	.0017	.0008	.0271	.0003	.0001	-.0272
#2	.0005	.0845	.0008	.0008	.0225	-.0006	-.0029	-.0243
#3	.0037	.0895	.0004	.0007	.0203	.0004	-.0020	-.0282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.0035	.0064
Stddev	.0057	.0001
%RSD	164.9	1.896
#1	.0083	.0065
#2	-.0028	.0064
#3	.0049	.0063
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3765.2
Stddev	15.2
%RSD	.40413
#1	3748.6
#2	3778.5
#3	3768.5

Sample Name: MV852C Acquired: 8/28/2012 10:07:49 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1045**	**9.619**	**.9721**	**1.112**	**.9756**	**.9890**	**.9448**	**10.21**	**.9466**
Stddev	.0014	.036	.0060	.009	.0027	.0034	.0038	.07	.0074
%RSD	1.384	.3793	.6177	.7871	.2792	.3415	.4020	.6743	.7787
#1	.1028	9.578	.9664	1.106	.9725	.9851	.9410	10.13	.9381
#2	.1055	9.649	.9717	1.122	.9776	.9912	.9449	10.25	.9506
#3	.1052	9.629	.9783	1.109	.9766	.9907	.9486	10.25	.9511
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9270**	**.9421**	**.9507**	**10.08**	**10.16**	**.9766**	**9.629**	**.9737**	**1.003**
Stddev	.0064	.0062	.0086	.04	.05	.0008	.039	.0042	.008
%RSD	.6942	.6570	.9053	.3865	.5170	.0861	.4069	.4280	.8104
#1	.9196	.9368	.9410	10.04	10.10	.9757	9.589	.9689	.9939
#2	.9302	.9489	.9538	10.10	10.18	.9774	9.667	.9760	1.008
#3	.9312	.9405	.9573	10.11	10.20	.9768	9.630	.9761	1.008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **542.1**	**.9538**	**1.034**	**.9308**	**9.901**	**.4967**	**.9952**	F **.1523**	**.9366**
Stddev	9.3	.0080	.007	.0058	.081	.0044	.0119	.0082	.0077
%RSD	1.721	.8372	.6860	.6178	.8204	.8790	1.198	5.400	.8256
#1	540.9	.9446	1.026	.9243	9.808	.4925	.9815	.1429	.9285
#2	533.3	.9581	1.039	.9352	9.954	.5012	1.003	.1559	.9373
#3	551.9	.9588	1.036	.9330	9.943	.4964	1.001	.1582	.9439
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	12.00							6.000	
Low Limit	8.000							4.000	

Sample Name: MV852C Acquired: 8/28/2012 10:07:49 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9811	.9790	.9860	.1947	.8571	.9467	.9950
Stddev	.0041	.0133	.0043	.0033	.0205	.0059	.0084
%RSD	.4174	1.359	.4325	1.713	2.396	.6192	.8393
#1	.9764	.9683	.9814	.1935	.8352	.9419	.9853
#2	.9837	.9939	.9868	.1920	.8759	.9532	.9993
#3	.9833	.9748	.9898	.1984	.8601	.9449	1.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3823.3
Stddev	21.8
%RSD	.56960
#1	3848.3
#2	3808.7
#3	3812.8

Sample Name: MV7RA Acquired: 8/28/2012 10:11:19 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.1002**	**<.0000**	**.1175**	**.0338**	**.0002**	**.0046**	**W 42.76**
Stddev	.0003	.0055	.0011	.0026	.0002	.0000	.0007	.54
%RSD	253.8	5.463	194.1	2.183	.5165	29.61	15.31	1.258
#1	.0004	.1004	.0007	.1155	.0340	.0002	.0039	43.07
#2	.0000	.1056	-.0009	.1166	.0337	.0002	.0045	42.14
#3	-.0001	.0947	-.0015	.1204	.0337	.0001	.0053	43.07
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0395**	**.0072**	**.0029**	**.0087**	**.1650**	**6.558**	**.0124**	**12.13**
Stddev	.0006	.0002	.0005	.0027	.0027	.016	.0010	.02
%RSD	1.586	3.151	17.84	31.39	1.607	.2450	8.059	.1452
#1	.0400	.0074	.0034	.0118	.1678	6.558	.0113	12.15
#2	.0388	.0069	.0024	.0075	.1645	6.542	.0133	12.13
#3	.0396	.0072	.0027	.0068	.1626	6.575	.0125	12.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4138**	**.0013**	**F 629.7**	**.0260**	**.0079**	**.0074**	**19.87**	**.0021**
Stddev	.0016	.0005	18.6	.0007	.0009	.0004	.24	.0005
%RSD	.3817	38.93	2.958	2.678	11.83	5.475	1.208	24.84
#1	.4151	.0012	630.6	.0258	.0068	.0070	20.01	.0027
#2	.4142	.0009	610.7	.0254	.0084	.0077	19.59	.0018
#3	.4121	.0019	647.9	.0268	.0085	.0075	20.00	.0018
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			100.0					
Low Limit			-10.00					

Sample Name: MV7RA Acquired: 8/28/2012 10:11:19 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0057	1.370	<.0000	.2948	.0126	.0017	<.0000	<.0000
Stddev	.0011	.009	.0006	.0007	.0046	.0003	.0020	.0140
%RSD	19.11	.6278	1710.	.2397	36.26	19.82	171.5	27.05
#1	.0057	1.379	-.0007	.2953	.0179	.0014	.0011	-.0560
#2	.0068	1.362	.0003	.2951	.0102	.0016	-.0023	-.0630
#3	.0047	1.368	.0003	.2940	.0097	.0020	-.0024	-.0360
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	<.0000	.1116
Stddev	.0027	.0014
%RSD	152.7	1.218
#1	.0008	.1121
#2	-.0046	.1101
#3	-.0016	.1127
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3730.0
Stddev	65.0
%RSD	1.7417
#1	3689.6
#2	3805.0
#3	3695.5

Sample Name: MV7RAV Acquired: 8/28/2012 10:15:03 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: 5

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0297**	**<.0000**	**.0299**	**.0067**	**<.0000**	**.0026**	**9.170**	**.0084**
Stddev	.0009	.0141	.0006	.0022	.0004	.0001	.0030	.036	.0001
%RSD	605.5	47.32	58.83	7.239	5.356	118.8	113.2	.3914	1.493
#1	-.0008	.0141	-.0018	.0295	.0064	.0000	.0023	9.153	.0083
#2	.0003	.0414	-.0005	.0279	.0067	-.0001	-.0002	9.211	.0085
#3	.0009	.0336	-.0009	.0322	.0071	-.0001	.0058	9.145	.0084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0014**	**.0006**	**.0339**	**1.295**	**.0035**	**2.460**	**.0837**	**<.0000**
Stddev	.0005	.0007	.0008	.0006	.003	.0004	.017	.0008	.0002
%RSD	31.05	49.40	134.4	1.820	.2545	10.17	.7055	.9323	78.49
#1	.0017	.0018	.0014	.0335	1.298	.0032	2.450	.0838	-.0004
#2	.0020	.0018	-.0003	.0335	1.296	.0039	2.480	.0845	-.0001
#3	.0011	.0006	.0007	.0346	1.292	.0035	2.450	.0829	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**F 130.1**	**.0056**	**.0010**	**.0013**	**3.996**	**.0001**	**.0040**	**.2678**	**<.0000**
Stddev	.6	.0001	.0019	.0016	.014	.0010	.0006	.0012	.0003
%RSD	.4748	2.031	185.9	119.7	.3575	843.6	15.79	.4644	94.79
#1	130.5	.0057	.0025	-.0005	3.990	.0010	.0040	.2679	-.0006
#2	130.5	.0054	-.0011	.0021	4.012	-.0010	.0046	.2666	.0000
#3	129.4	.0056	.0017	.0023	3.985	.0003	.0034	.2691	-.0005
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.0								
Low Limit	-10.00								

Sample Name: MV7RAV Acquired: 8/28/2012 10:15:03 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment: 5

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0595	.0093	.0009	.0006	.0105	<.0000	.0257
Stddev	.0004	.0063	.0006	.0018	.0122	.0045	.0001
%RSD	.7111	67.21	70.19	283.9	116.3	72.75	.4471
#1	.0595	.0024	.0016	-.0010	.0014	-.0022	.0258
#2	.0598	.0147	.0005	.0025	.0244	-.0111	.0256
#3	.0590	.0108	.0005	.0004	.0057	-.0054	.0256
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3713.1
Stddev	28.2
%RSD	.75844
#1	3738.5
#2	3682.8
#3	3717.9

Sample Name: MV7RAS Acquired: 8/28/2012 10:18:41 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1036**	**9.660**	**.9328**	**1.140**	**1.006**	**.9896**	**.9294**	F **52.65**	**.9632**
Stddev	.0008	.010	.0064	.011	.002	.0027	.0068	.17	.0076
%RSD	.7690	.1011	.6811	.9370	.1597	.2749	.7311	.3207	.7865
#1	.1045	9.656	.9355	1.151	1.007	.9920	.9346	52.79	.9691
#2	.1030	9.671	.9373	1.138	1.007	.9901	.9320	52.69	.9659
#3	.1033	9.653	.9255	1.130	1.004	.9866	.9218	52.46	.9547
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8946**	**.9389**	**.9303**	**10.23**	**16.89**	**.9840**	**21.87**	**1.384**	**.9794**
Stddev	.0048	.0043	.0103	.03	.06	.0028	.03	.005	.0060
%RSD	.5311	.4540	1.102	.3332	.3449	.2845	.1219	.3404	.6151
#1	.8990	.9389	.9385	10.24	16.89	.9865	21.87	1.383	.9847
#2	.8951	.9431	.9335	10.27	16.95	.9844	21.90	1.389	.9806
#3	.8896	.9346	.9188	10.20	16.84	.9810	21.85	1.380	.9728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **653.0**	**.9402**	**1.035**	**.9074**	**29.69**	**.4816**	**.9617**	**1.462**	**.9004**
Stddev	11.1	.0039	.005	.0047	.14	.0041	.0072	.003	.0025
%RSD	1.696	.4194	.4696	.5188	.4876	.8542	.7460	.1881	.2775
#1	665.4	.9431	1.039	.9104	29.75	.4857	.9691	1.462	.9026
#2	643.9	.9417	1.036	.9098	29.79	.4818	.9613	1.464	.9009
#3	649.8	.9357	1.030	.9019	29.52	.4774	.9548	1.459	.8977
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.0								
Low Limit	-10.00								

Sample Name: MV7RAS Acquired: 8/28/2012 10:18:41 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.284	.9811	.9798	.1930	.8256	.9355	1.088
Stddev	.003	.0089	.0023	.0021	.0229	.0071	.007
%RSD	.2309	.9102	.2358	1.093	2.770	.7555	.6322
#1	1.285	.9897	.9775	.1909	.8026	.9288	1.092
#2	1.286	.9718	.9821	.1951	.8483	.9429	1.091
#3	1.281	.9818	.9798	.1932	.8259	.9348	1.080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3722.6
Stddev	53.8
%RSD	1.4457
#1	3679.6
#2	3705.1
#3	3782.9

Sample Name: CCV Acquired: 8/28/2012 10:22:15 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.036**	**46.86**	**4.916**	**5.081**	**4.825**	**4.889**	**5.087**	**26.09**	**4.857**
Stddev	.012	.03	.034	.017	.010	.018	.034	.21	.034
%RSD	1.114	.0710	.6990	.3329	.2075	.3625	.6694	.7953	.6929
#1	1.045	46.82	4.902	5.063	4.815	4.869	5.072	26.08	4.850
#2	1.041	46.87	4.956	5.084	4.826	4.895	5.126	26.30	4.894
#3	1.023	46.89	4.891	5.097	4.834	4.904	5.062	25.89	4.828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.804**	**4.925**	**4.916**	**49.19**	**49.13**	**4.737**	**23.52**	**4.720**	**5.071**
Stddev	.040	.057	.035	.17	.02	.010	.06	.008	.041
%RSD	.8305	1.158	.7134	.3481	.0328	.2109	.2604	.1636	.8062
#1	4.794	4.964	4.907	49.00	49.11	4.737	23.45	4.713	5.060
#2	4.848	4.953	4.955	49.28	49.13	4.727	23.56	4.719	5.116
#3	4.771	4.860	4.887	49.31	49.14	4.747	23.54	4.729	5.037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.85**	**4.874**	**5.306**	**5.012**	**50.25**	**.9825**	**5.038**	**4.575**	**4.880**
Stddev	.06	.038	.035	.043	.33	.0061	.032	.010	.036
%RSD	.1180	.7835	.6606	.8681	.6558	.6242	.6275	.2254	.7390
#1	50.78	4.872	5.308	5.013	50.07	.9797	5.038	4.565	4.871
#2	50.88	4.914	5.341	5.055	50.63	.9895	5.069	4.574	4.920
#3	50.88	4.837	5.271	4.968	50.06	.9782	5.006	4.586	4.849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/28/2012 10:22:15 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.748**	**5.029**	**4.740**	**5.399**	**4.754**	**4.571**	**5.067**
Stddev	.130	.069	.021	.044	.078	.011	.039
%RSD	2.728	1.367	.4417	.8233	1.643	.2454	.7692
#1	4.626	5.077	4.719	5.394	4.797	4.558	5.061
#2	4.736	5.060	4.741	5.446	4.801	4.579	5.109
#3	4.884	4.951	4.760	5.358	4.664	4.576	5.032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3617.2**
Stddev	37.6
%RSD	1.0382
#1	3607.9
#2	3585.1
#3	3658.5

Sample Name: CCB Acquired: 8/28/2012 10:25:35 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0111	.0014	.0265	.0009	.0009	<.0000	.0002	.0002
Stddev	.0006	.0074	.0008	.0038	.0005	.0004	.0027	.0007	.0002
%RSD	85.89	67.15	53.24	14.34	54.33	46.32	356.1	362.1	110.3
#1	-.0014	.0197	.0014	.0306	.0015	.0013	.0021	.0009	.0004
#2	-.0003	.0064	.0007	.0232	.0009	.0008	-.0033	.0002	.0002
#3	-.0004	.0072	.0022	.0257	.0005	.0005	-.0010	-.0005	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0009	<.0000	.0095	.0480	.0024	<.0000	.0006	.0066
Stddev	.0004	.0003	.0028	.0043	.0139	.0011	.0133	.0002	.0003
%RSD	563.0	35.22	726.4	45.53	29.01	44.68	243.7	32.69	4.312
#1	-.0002	.0012	.0015	.0145	.0482	.0036	-.0095	.0009	.0063
#2	.0005	.0007	-.0036	.0072	.0340	.0023	-.0162	.0005	.0069
#3	-.0001	.0007	.0010	.0068	.0618	.0014	.0094	.0005	.0065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0829	.0002	<.0000	<.0000	.0032	.0017	.0048	.0002	.0007
Stddev	.0066	.0004	.0026	.0009	.0046	.0028	.0013	.0015	.0003
%RSD	7.923	202.2	2198.	157.9	143.0	159.2	26.99	660.2	39.02
#1	.0891	-.0001	-.0011	.0001	.0082	.0048	.0048	.0010	.0010
#2	.0760	.0006	-.0020	-.0016	-.0008	.0010	.0035	-.0015	.0008
#3	.0835	.0001	.0028	-.0002	.0023	-.0006	.0061	.0012	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/28/2012 10:25:35 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0094	.0015	.0014	.0443	.0004	<.0000
Stddev	.0004	.0069	.0012	.0007	.0230	.0048	.0000
%RSD	50.99	73.69	82.16	51.33	51.85	1132.	26.55
#1	.0013	.0158	.0027	.0009	.0357	.0034	-.0002
#2	.0008	.0021	.0002	.0022	.0704	-.0051	-.0001
#3	.0004	.0102	.0016	.0010	.0269	.0030	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3770.5
Stddev	13.6
%RSD	.36060
#1	3754.8
#2	3778.4
#3	3778.4

Sample Name: MV7RAD Acquired: 8/28/2012 10:29:16 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1031**	**9.543**	**.9584**	**1.133**	**.9928**	**.9771**	**.9403**	F **53.51**	**.9778**
Stddev	.0011	.031	.0087	.006	.0032	.0027	.0091	.49	.0077
%RSD	1.099	.3226	.9082	.5630	.3214	.2804	.9724	.9136	.7912
#1	.1034	9.555	.9685	1.136	.9963	.9801	.9500	54.07	.9867
#2	.1041	9.565	.9536	1.137	.9923	.9764	.9318	53.20	.9730
#3	.1019	9.507	.9532	1.125	.9899	.9747	.9393	53.24	.9736
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit								50.00	
Low Limit								-10.00	

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9164**	**.9488**	**.9423**	**10.13**	**16.68**	**.9637**	**21.76**	**1.374**	**.9903**
Stddev	.0083	.0136	.0063	.02	.04	.0037	.04	.000	.0095
%RSD	.9046	1.433	.6650	.2119	.2279	.3874	.2032	.0233	.9599
#1	.9258	.9602	.9485	10.15	16.68	.9674	21.71	1.375	1.001
#2	.9102	.9525	.9423	10.14	16.72	.9638	21.80	1.374	.9837
#3	.9132	.9337	.9360	10.11	16.64	.9600	21.76	1.374	.9860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **652.7**	**.9621**	**1.046**	**.9244**	**30.35**	**.4938**	**.9771**	**1.450**	**.9210**
Stddev	21.6	.0081	.011	.0087	.26	.0056	.0070	.008	.0053
%RSD	3.314	.8441	1.061	.9428	.8471	1.140	.7143	.5783	.5754
#1	646.7	.9715	1.059	.9344	30.64	.5001	.9851	1.442	.9271
#2	634.8	.9574	1.042	.9185	30.22	.4919	.9724	1.449	.9173
#3	676.7	.9575	1.038	.9202	30.18	.4893	.9737	1.459	.9188
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	100.0								
Low Limit	-10.00								

Sample Name: MV7RAD Acquired: 8/28/2012 10:29:16 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.267	.9842	.9697	.1960	.8177	.9246	1.100
Stddev	.003	.0075	.0027	.0020	.0092	.0047	.009
%RSD	.2007	.7635	.2817	1.017	1.126	.5087	.8437
#1	1.269	.9911	.9699	.1979	.8137	.9298	1.111
#2	1.267	.9853	.9723	.1939	.8282	.9233	1.094
#3	1.264	.9762	.9668	.1962	.8111	.9206	1.095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3673.4
Stddev	37.7
%RSD	1.0258
#1	3632.4
#2	3706.5
#3	3681.5

Sample Name: MV7RA Acquired: 8/28/2012 10:32:45 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0809**	**1.462**	**.0798**	**.1074**	**.3798**	**.0358**	**.0010**	W **47.06**
Stddev	.0020	.033	.0047	.0017	.0063	.0004	.0029	.44
%RSD	2.474	2.226	5.845	1.590	1.663	1.257	294.4	.9347
#1	.0791	1.425	.0749	.1093	.3736	.0353	.0037	46.55
#2	.0804	1.476	.0806	.1071	.3796	.0358	-.0020	47.29
#3	.0831	1.485	.0841	.1059	.3862	.0362	.0012	47.34
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Warn
High Limit								40.00
Low Limit								-10.00

Elem	Cd2288	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0733**	**.3817**	**.0714**	**.1943**	**.8782**	**6.138**	**.0104**	**18.09**
Stddev	.0018	.0193	.0019	.0125	.0125	.040	.0021	.15
%RSD	2.477	5.061	2.658	6.449	1.418	.6480	20.09	.8411
#1	.0715	.3616	.0698	.1836	.8655	6.106	.0081	17.94
#2	.0733	.3833	.0709	.1913	.8789	6.125	.0121	18.09
#3	.0752	.4001	.0735	.2081	.8903	6.182	.0109	18.25
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4871**	**.3269**	F **579.6**	**.3283**	**.0095**	**.0828**	**18.34**	**.0747**
Stddev	.0024	.0170	5.9	.0151	.0019	.0028	.11	.0039
%RSD	.4885	5.193	1.020	4.587	20.53	3.389	.6260	5.158
#1	.4844	.3097	579.4	.3126	.0078	.0811	18.25	.0724
#2	.4880	.3274	573.8	.3296	.0116	.0812	18.47	.0725
#3	.4889	.3436	585.6	.3426	.0090	.0860	18.29	.0791
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit			100.0					
Low Limit			-10.00					

Sample Name: MV7RA Acquired: 8/28/2012 10:32:45 Type: Unk
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2516	Sn1899	Sr4077	Th2832	Ti3349	Tl1908	U_3670
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1232	1.291	.7535	.3084	<.0000	.1426	.1577	3.191
Stddev	.0098	.010	.0409	.0019	.0047	.0029	.0069	.097
%RSD	7.996	.7461	5.431	.6108	312.4	2.027	4.383	3.041
#1	.1125	1.282	.7115	.3064	-.0031	.1397	.1511	3.105
#2	.1251	1.290	.7559	.3088	-.0052	.1428	.1571	3.172
#3	.1319	1.301	.7933	.3101	.0038	.1455	.1649	3.296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	V_2908	Zn2138
Units	ppm	ppm
Avg	.3413	.2650
Stddev	.0058	.0083
%RSD	1.693	3.150
#1	.3347	.2562
#2	.3441	.2660
#3	.3451	.2728
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	Y_3710
Units	Cts/S
Avg	3741.4
Stddev	11.3
%RSD	.30216
#1	3744.1
#2	3751.2
#3	3729.0

Sample Name: CCV Acquired: 8/28/2012 10:36:24 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.006**	**47.31**	**4.632**	**5.101**	**4.862**	**4.943**	**4.847**	**24.73**	**4.641**
Stddev	.019	.07	.023	.025	.004	.009	.018	.18	.028
%RSD	1.883	.1424	.5057	.4982	.0879	.1893	.3714	.7421	.6061
#1	1.004	47.26	4.645	5.072	4.860	4.932	4.856	24.79	4.651
#2	.9883	47.38	4.605	5.115	4.867	4.945	4.826	24.52	4.609
#3	1.026	47.28	4.646	5.117	4.860	4.951	4.858	24.87	4.663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.572**	**4.753**	**4.703**	**49.25**	**49.14**	**4.798**	**23.54**	**4.751**	**4.823**
Stddev	.031	.099	.030	.11	.03	.005	.02	.009	.027
%RSD	.6805	2.080	.6299	.2155	.0672	.1135	.0848	.1869	.5622
#1	4.583	4.733	4.718	49.12	49.10	4.795	23.53	4.749	4.835
#2	4.537	4.666	4.669	49.29	49.14	4.805	23.53	4.761	4.792
#3	4.597	4.861	4.722	49.32	49.17	4.795	23.57	4.744	4.842
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**50.85**	**4.629**	**4.992**	**4.751**	**47.21**	**.9347**	**4.736**	**4.601**	**4.626**
Stddev	.08	.029	.025	.018	.23	.0062	.026	.010	.027
%RSD	.1662	.6367	.5017	.3904	.4825	.6672	.5454	.2171	.5821
#1	50.75	4.641	4.998	4.760	47.37	.9403	4.753	4.612	4.635
#2	50.91	4.595	4.965	4.729	46.95	.9280	4.707	4.593	4.596
#3	50.89	4.651	5.014	4.763	47.32	.9357	4.750	4.596	4.648
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Sample Name: CCV Acquired: 8/28/2012 10:36:24 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.857**	**4.877**	**4.796**	**5.108**	**4.604**	**4.605**	**4.804**
Stddev	.173	.088	.008	.033	.089	.015	.028
%RSD	3.572	1.808	.1655	.6499	1.926	.3212	.5768
#1	5.056	4.864	4.787	5.116	4.617	4.611	4.811
#2	4.738	4.796	4.800	5.071	4.510	4.615	4.774
#3	4.778	4.971	4.801	5.136	4.686	4.588	4.828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Int. Std.	Y_3710
Units	Cts/S
Avg	**3714.0**
Stddev	31.2
%RSD	.83995
#1	3718.3
#2	3742.9
#3	3681.0

Sample Name: CCB Acquired: 8/28/2012 10:39:45 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2496	Ba4554	Be3130	Bi2230	Ca1840	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	<.0000	.0101	<.0000	.0229	.0007	.0007	<.0000	<.0000	.0001
Stddev	.0010	.0073	.0009	.0045	.0002	.0004	.0018	.0004	.0001
%RSD	314.0	72.96	97.89	19.67	26.47	56.49	99.90	257.2	78.10
#1	.0008	.0185	-.0012	.0177	.0008	.0011	-.0029	-.0006	.0002
#2	-.0006	.0070	-.0016	.0259	.0009	.0007	-.0028	-.0001	.0000
#3	-.0012	.0047	.0001	.0251	.0005	.0003	.0003	.0002	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Co2286	Cr2835	Cu2178	Fe2599	K_7664	Li6707	Mg2798	Mn2576	Mo2020
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0016	.0009	.0079	.0354	.0021	<.0000	.0007	.0073
Stddev	.0006	.0003	.0019	.0041	.0343	.0014	.0061	.0005	.0007
%RSD	212.1	19.05	227.8	52.64	96.94	67.56	430.1	63.92	9.398
#1	.0005	.0013	.0011	.0125	.0711	.0005	-.0026	.0011	.0065
#2	.0009	.0019	-.0012	.0046	.0028	.0030	.0052	.0009	.0076
#3	-.0004	.0015	.0027	.0065	.0322	.0028	-.0068	.0002	.0077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Na5895	Ni2216	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2516	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1008	.0001	<.0000	<.0000	.0042	<.0000	.0037	.0015	.0012
Stddev	.0077	.0003	.0008	.0007	.0024	.0023	.0009	.0036	.0002
%RSD	7.632	282.5	1066.	55.14	56.63	946.0	23.63	236.6	16.45
#1	.1093	-.0002	-.0008	-.0010	.0015	.0005	.0032	-.0026	.0014
#2	.0988	.0003	-.0001	-.0022	.0052	.0016	.0032	.0038	.0010
#3	.0943	.0002	.0007	-.0008	.0059	-.0028	.0047	.0033	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Sample Name: CCB Acquired: 8/28/2012 10:39:45 Type: QC
Method: 2011(v503) Mode: CONC Corr. Factor: 1.000000
User: metals Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sr4077	Th2832	Ti3349	Tl1908	U_3670	V_2908	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0006	.0155	.0011	.0010	.0446	<.0000	.0001
Stddev	.0003	.0045	.0016	.0026	.0122	.0033	.0001
%RSD	48.40	29.03	139.3	261.7	27.27	220.7	105.2
#1	.0009	.0162	.0022	.0017	.0307	.0018	.0001
#2	.0007	.0107	-.0007	-.0019	.0535	-.0015	.0000
#3	.0003	.0196	.0019	.0032	.0495	-.0048	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Int. Std.	Y_3710
Units	Cts/S
Avg	3678.2
Stddev	50.9
%RSD	1.3839
#1	3735.9
#2	3658.9
#3	3639.7

HAA081412A

Method: Initial Method Operator: CDS HAA2 Date of Analysis: 14 Aug 2012 13:04:33

Seq ID	Type	Sample ID	Extended ID	Date	Conc	Units	Stnd Conc	µ Abs	Method	Chapter
8708	Std	CALIBRATION BLANK - 1		14 Aug 2012 13:05:37	-	PPB	0.0000	34	Initial Method	HAA081412A
8709	Std	CALIBRATION 1 - 1		14 Aug 2012 13:07:09	-	PPB	0.2000	1399	Initial Method	HAA081412A
8710	Std	CALIBRATION 2 - 1		14 Aug 2012 13:08:41	-	PPB	0.5000	3040	Initial Method	HAA081412A
8711	Std	CALIBRATION 3 - 1		14 Aug 2012 13:10:24	-	PPB	1.0000	7000	Initial Method	HAA081412A
8712	Std	CALIBRATION 4 - 1		14 Aug 2012 13:12:23	-	PPB	5.0000	36439	Initial Method	HAA081412A
8713	Std	CALIBRATION 5 - 1		14 Aug 2012 13:14:25	-	PPB	10.0000	72183	Initial Method	HAA081412A
8714	CK STND	ICV - 1		14 Aug 2012 13:16:56	2.4442	PPB		17557	Initial Method	HAA081412A
8715	CK STND	ICB - 1		14 Aug 2012 13:19:34	-0.0176	PPB		-291	Initial Method	HAA081412A
8716	SMPL	160-299-A-19-A MDLV - 1		14 Aug 2012 13:21:53	0.1861	PPB		1186	Initial Method	HAA081412A
8717	SMPL	160-306-A-19-A LOQV - 1		14 Aug 2012 13:23:23	0.1577	PPB		980	Initial Method	HAA081412A
8718	SMPL	MB 160-9031/1-A - 1		14 Aug 2012 13:25:06	-0.0321	PPB		-396	Initial Method	HAA081412A
8719	SMPL	LCS 160-9031/2-A - 1		14 Aug 2012 13:26:52	0.9962	PPB		7059	Initial Method	HAA081412A
8720	SMPL	160-415-D-9-B - 1		14 Aug 2012 13:28:23	0.0540	PPB		228	Initial Method	HAA081412A
8721	SMPL	160-415-D-9-B SD - 1	5X	14 Aug 2012 13:30:30	-0.0166	PPB		-285	Initial Method	HAA081412A
8722	SMPL	160-415-D-9-C MS - 1		14 Aug 2012 13:32:03	1.0704	PPB		7597	Initial Method	HAA081412A
8723	SMPL	160-415-D-9-D MSD - 1		14 Aug 2012 13:33:34	1.0558	PPB		7491	Initial Method	HAA081412A
8724	SMPL	MB 160-9032/1-A - 1		14 Aug 2012 13:35:39	-0.0146	PPB		-269	Initial Method	HAA081412A
8725	SMPL	LCS 160-9032/2-A - 1		14 Aug 2012 13:37:46	1.0063	PPB		7132	Initial Method	HAA081412A
8726	CK STND	CCV - 1		14 Aug 2012 13:39:18	5.0414	PPB		36387	Initial Method	HAA081412A
8727	CK STND	CCB - 1		14 Aug 2012 13:41:23	-0.0427	PPB		-473	Initial Method	HAA081412A
8728	SMPL	160-437-D-1-B - 1		14 Aug 2012 13:43:49	0.0038	PPB		-136	Initial Method	HAA081412A
8729	SMPL	160-437-D-1-B SD - 1	5X	14 Aug 2012 13:45:20	-0.0066	PPB		-211	Initial Method	HAA081412A
8730	SMPL	160-437-D-1-C MS - 1		14 Aug 2012 13:46:52	0.8127	PPB		5729	Initial Method	HAA081412A
8731	SMPL	160-437-D-1-D MSD - 1		14 Aug 2012 13:48:23	0.7457	PPB		5243	Initial Method	HAA081412A
8732	SMPL	160-437-D-2-B - 1		14 Aug 2012 13:50:35	-0.0383	PPB		-441	Initial Method	HAA081412A
8733	SMPL	160-437-D-3-B - 1		14 Aug 2012 13:52:48	0.0112	PPB		-82	Initial Method	HAA081412A
8734	SMPL	160-437-D-4-B - 1		14 Aug 2012 13:54:19	0.0201	PPB		-16	Initial Method	HAA081412A
8735	SMPL	160-437-D-5-B - 1		14 Aug 2012 13:55:49	0.1630	PPB		1018	Initial Method	HAA081412A
8736	SMPL	160-437-D-6-B - 1		14 Aug 2012 13:57:20	-0.0164	PPB		-282	Initial Method	HAA081412A
8737	SMPL	160-437-D-7-B - 1		14 Aug 2012 13:59:04	0.0436	PPB		153	Initial Method	HAA081412A
8738	CK STND	CCV - 1		14 Aug 2012 14:00:35	5.0829	PPB		36688	Initial Method	HAA081412A
8739	CK STND	CCB - 1		14 Aug 2012 14:02:06	-0.0186	PPB		-295	Initial Method	HAA081412A
8740	SMPL	160-437-D-8-B - 1		14 Aug 2012 14:04:31	0.0196	PPB		-21	Initial Method	HAA081412A
8741	SMPL	160-437-D-9-B - 1		14 Aug 2012 14:06:02	0.0145	PPB		-58	Initial Method	HAA081412A
8742	SMPL	160-442-D-1-D - 1		14 Aug 2012 14:07:34	0.0096	PPB		-94	Initial Method	HAA081412A
8743	SMPL	160-442-D-2-B - 1		14 Aug 2012 14:09:06	0.0122	PPB		-75	Initial Method	HAA081412A
8744	SMPL	160-442-D-3-B - 1		14 Aug 2012 14:10:38	0.0156	PPB		-50	Initial Method	HAA081412A
8745	SMPL	160-442-D-4-B - 1		14 Aug 2012 14:12:09	0.0206	PPB		-14	Initial Method	HAA081412A
8746	SMPL	160-442-D-5-B - 1		14 Aug 2012 14:13:40	0.0536	PPB		225	Initial Method	HAA081412A
8747	SMPL	160-442-D-6-B - 1		14 Aug 2012 14:15:11	0.0042	PPB		-133	Initial Method	HAA081412A
8748	SMPL	MB 160-8920/1-A - 1		14 Aug 2012 14:16:43	0.0292	PPB		48	Initial Method	HAA081412A
8749	SMPL	LCS 160-8920/2-A - 1		14 Aug 2012 14:18:14	1.0057	PPB		7128	Initial Method	HAA081412A
8750	CK STND	CCV - 1		14 Aug 2012 14:19:45	4.9777	PPB		35925	Initial Method	HAA081412A
8751	CK STND	CCB - 1		14 Aug 2012 14:21:49	-0.0386	PPB		-443	Initial Method	HAA081412A
8752	SMPL	160-420-E-1-A - 1		14 Aug 2012 14:24:16	0.0088	PPB		-100	Initial Method	HAA081412A
8753	SMPL	160-420-E-1-A SD - 1	5X	14 Aug 2012 14:25:47	0.0086	PPB		-101	Initial Method	HAA081412A
8754	SMPL	160-420-E-1-B MS - 1		14 Aug 2012 14:27:18	0.8343	PPB		5885	Initial Method	HAA081412A
8755	SMPL	160-420-E-1-C MSD - 1		14 Aug 2012 14:28:49	0.7567	PPB		5323	Initial Method	HAA081412A
8756	SMPL	160-420-E-2-A - 1		14 Aug 2012 14:31:00	-0.0307	PPB		-386	Initial Method	HAA081412A
8757	SMPL	160-420-E-3-A - 1		14 Aug 2012 14:33:11	0.0108	PPB		-85	Initial Method	HAA081412A
8758	SMPL	160-420-E-4-A - 1		14 Aug 2012 14:34:43	0.0385	PPB		116	Initial Method	HAA081412A
8759	CK STND	CCV - 1		14 Aug 2012 14:36:14	4.8774	PPB		35198	Initial Method	HAA081412A
8760	CK STND	CCB - 1		14 Aug 2012 14:37:45	-0.0337	PPB		-408	Initial Method	HAA081412A

Hg

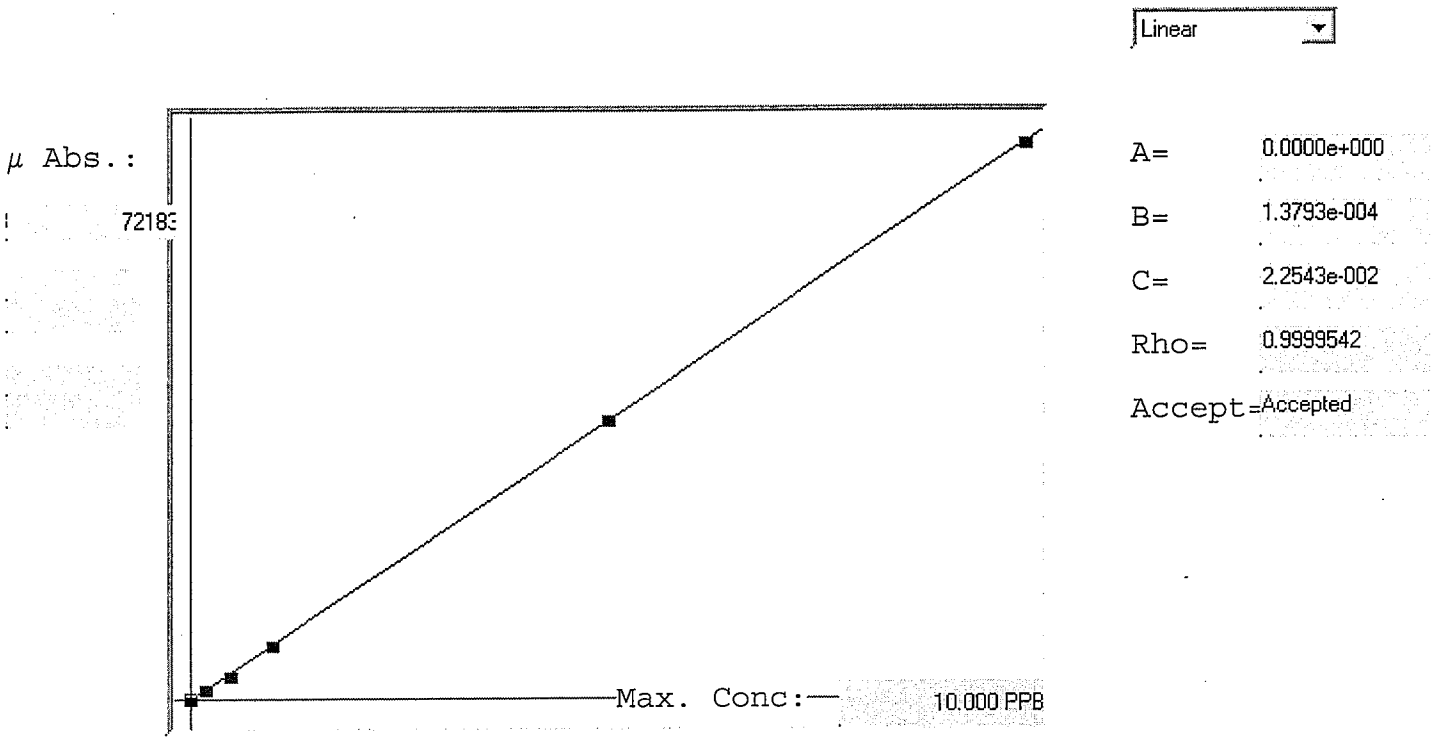
Hg

Hg

CDS 8-15-12
Stds Hg 081412
7470A

A. Batch: 9162

Initial Method



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
CALIBRATION BLANK	0.000	0.027	0.027	34	0.000	34				
CALIBRATION 1	0.200	0.216	0.016	1399	0.0 %	1399				
CALIBRATION 2	0.500	0.442	-0.058	3040	0.0 %	3040				
CALIBRATION 3	1.000	0.988	-0.012	7000	0.0 %	7000				
CALIBRATION 4	5.000	5.049	0.049	36439	0.0 %	36439				
CALIBRATION 5	10.000	9.979	-0.021	72183	0.0 %	72183				

COS 8-15-12

Stds: ~~Hg 0815~~ COS 8-15-12
Hg 081412

7470A

Rho: 0.9999542

A. Batch: 9162

HAA081412A

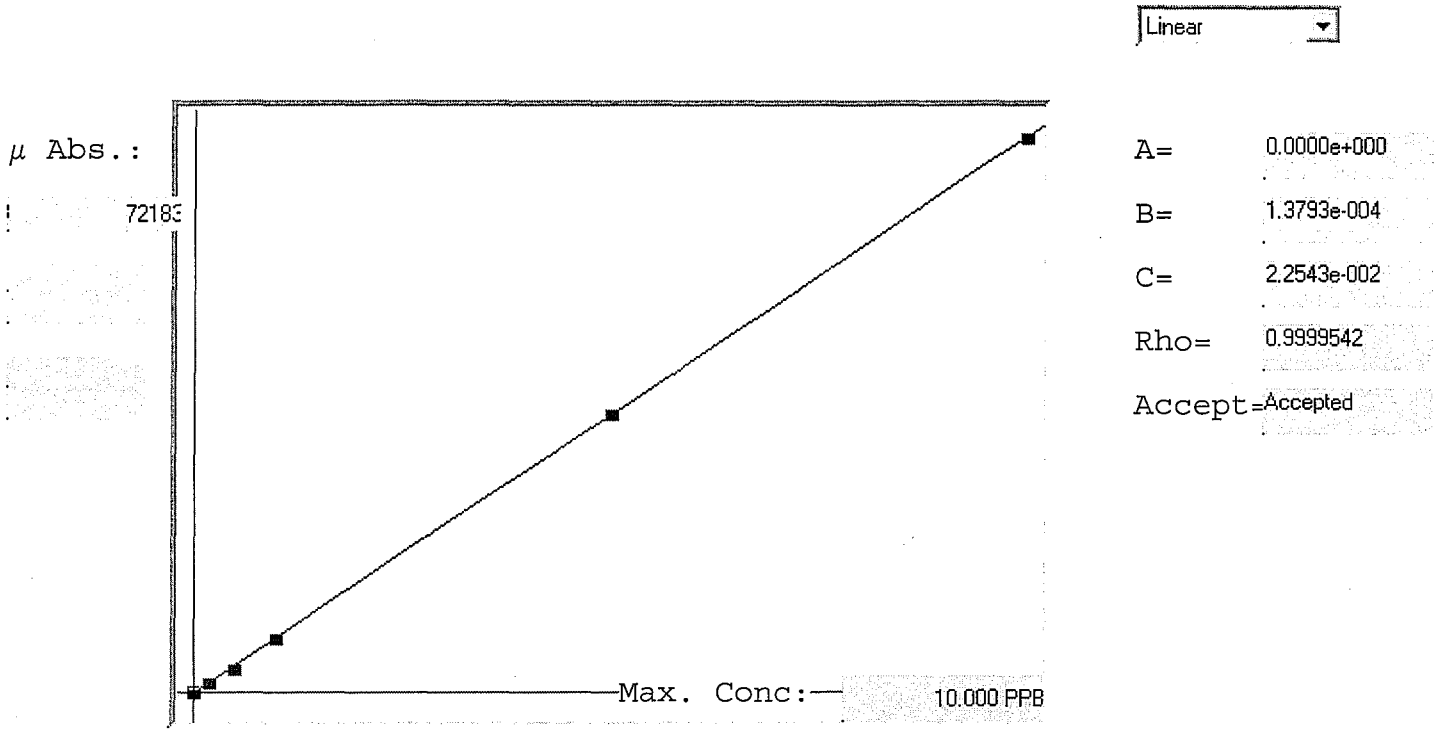
Method: Initial Method Operator: CDS HAA2 Date of Analysis: 14 Aug 2012 13:04:33

Seq ID	Type	Sample ID	Extended ID	Date	Conc	Units	Stnd Cond	µ Abs	Method	Chapter
8708	Std	CALIBRATION BLANK - 1		14 Aug 2012 13:05:37	-	PPB	0.0000	34	Initial Method	HAA081412A
8709	Std	CALIBRATION 1 - 1		14 Aug 2012 13:07:09	-	PPB	0.2000	1399	Initial Method	HAA081412A
8710	Std	CALIBRATION 2 - 1		14 Aug 2012 13:08:41	-	PPB	0.5000	3040	Initial Method	HAA081412A
8711	Std	CALIBRATION 3 - 1		14 Aug 2012 13:10:24	-	PPB	1.0000	7000	Initial Method	HAA081412A
8712	Std	CALIBRATION 4 - 1		14 Aug 2012 13:12:23	-	PPB	5.0000	36439	Initial Method	HAA081412A
8713	Std	CALIBRATION 5 - 1		14 Aug 2012 13:14:29	-	PPB	10.0000	72183	Initial Method	HAA081412A
8714	CK STND	ICV - 1		14 Aug 2012 13:16:56	2.4442	PPB		17557	Initial Method	HAA081412A
8715	CK STND	ICB - 1		14 Aug 2012 13:19:34	-0.0176	PPB		-291	Initial Method	HAA081412A
8716	SMPL	160-299-A-19-A MDLV - 1] Hg		14 Aug 2012 13:21:53	0.1861	PPB		1186	Initial Method	HAA081412A
8717	SMPL	160-306-A-19-A LOQV - 1		14 Aug 2012 13:23:23	0.1577	PPB		980	Initial Method	HAA081412A
8718	SMPL	MB 160-9031/1-A - 1		14 Aug 2012 13:25:06	-0.0321	PPB		-396	Initial Method	HAA081412A
8719	SMPL	LCS 160-9031/2-A - 1		14 Aug 2012 13:26:52	0.9962	PPB		7059	Initial Method	HAA081412A
8720	SMPL	160-415-D-9-B - 1		14 Aug 2012 13:28:23	0.0540	PPB		228	Initial Method	HAA081412A
8721	SMPL	160-415-D-9-B SD - 1	5X	14 Aug 2012 13:30:30	-0.0168	PPB		-285	Initial Method	HAA081412A
8722	SMPL	160-415-D-9-C MS - 1		14 Aug 2012 13:32:03	1.0704	PPB		7597	Initial Method	HAA081412A
8723	SMPL	160-415-D-9-D MSD - 1		14 Aug 2012 13:33:34	1.0558	PPB		7491	Initial Method	HAA081412A
8724	SMPL	MB 160-9032/1-A - 1		14 Aug 2012 13:35:39	-0.0146	PPB		-269	Initial Method	HAA081412A
8725	SMPL	LCS 160-9032/2-A - 1		14 Aug 2012 13:37:46	1.0063	PPB		7132	Initial Method	HAA081412A
8726	CK STND	CCV - 1		14 Aug 2012 13:39:18	5.0414	PPB		36387	Initial Method	HAA081412A
8727	CK STND	CCB - 1		14 Aug 2012 13:41:23	-0.0427	PPB		-473	Initial Method	HAA081412A
8728	SMPL	160-437-D-1-B - 1		14 Aug 2012 13:43:49	0.0038	PPB		-136	Initial Method	HAA081412A
8729	SMPL	160-437-D-1-B SD - 1	5X	14 Aug 2012 13:45:20	-0.0066	PPB		-211	Initial Method	HAA081412A
8730	SMPL	160-437-D-1-C MS - 1		14 Aug 2012 13:46:52	0.8127	PPB		5729	Initial Method	HAA081412A
8731	SMPL	160-437-D-1-D MSD - 1		14 Aug 2012 13:48:23	0.7457	PPB		5243	Initial Method	HAA081412A
8732	SMPL	160-437-D-2-B - 1		14 Aug 2012 13:50:35	-0.0383	PPB		-441	Initial Method	HAA081412A
8733	SMPL	160-437-D-3-B - 1		14 Aug 2012 13:52:48	0.0112	PPB		-82	Initial Method	HAA081412A
8734	SMPL	160-437-D-4-B - 1		14 Aug 2012 13:54:19	0.0201	PPB		-18	Initial Method	HAA081412A
8735	SMPL	160-437-D-5-B - 1		14 Aug 2012 13:55:49	0.1630	PPB		1018	Initial Method	HAA081412A
8736	SMPL	160-437-D-6-B - 1		14 Aug 2012 13:57:20	-0.0164	PPB		-282	Initial Method	HAA081412A
8737	SMPL	160-437-D-7-B - 1		14 Aug 2012 13:59:04	0.0436	PPB		153	Initial Method	HAA081412A
8738	CK STND	CCV - 1		14 Aug 2012 14:00:35	5.0829	PPB		36688	Initial Method	HAA081412A
8739	CK STND	CCB - 1		14 Aug 2012 14:02:06	-0.0186	PPB		-298	Initial Method	HAA081412A
8740	SMPL	160-437-D-8-B - 1		14 Aug 2012 14:04:31	0.0196	PPB		-21	Initial Method	HAA081412A
8741	SMPL	160-437-D-9-B - 1		14 Aug 2012 14:06:02	0.0145	PPB		-58	Initial Method	HAA081412A
8742	SMPL	160-442-D-1-D - 1		14 Aug 2012 14:07:34	0.0096	PPB		-94	Initial Method	HAA081412A
8743	SMPL	160-442-D-2-B - 1		14 Aug 2012 14:09:06	0.0122	PPB		-75	Initial Method	HAA081412A
8744	SMPL	160-442-D-3-B - 1		14 Aug 2012 14:10:38	0.0156	PPB		-50	Initial Method	HAA081412A
8745	SMPL	160-442-D-4-B - 1		14 Aug 2012 14:12:09	0.0206	PPB		-14	Initial Method	HAA081412A
8746	SMPL	160-442-D-5-B - 1		14 Aug 2012 14:13:40	0.0536	PPB		225	Initial Method	HAA081412A
8747	SMPL	160-442-D-6-B - 1		14 Aug 2012 14:15:11	0.0042	PPB		-133	Initial Method	HAA081412A
8748	SMPL	MB 160-8920/1-A - 1		14 Aug 2012 14:16:43	0.0292	PPB		48	Initial Method	HAA081412A
8749	SMPL	LCS 160-8920/2-A - 1		14 Aug 2012 14:18:14	1.0057	PPB		7128	Initial Method	HAA081412A
8750	CK STND	CCV - 1		14 Aug 2012 14:19:45	4.9777	PPB		35925	Initial Method	HAA081412A
8751	CK STND	CCB - 1		14 Aug 2012 14:21:49	-0.0386	PPB		-443	Initial Method	HAA081412A
8752	SMPL	160-420-E-1-A - 1		14 Aug 2012 14:24:16	0.0088	PPB		-100	Initial Method	HAA081412A
8753	SMPL	160-420-E-1-A SD - 1	5X	14 Aug 2012 14:25:47	0.0086	PPB		-101	Initial Method	HAA081412A
8754	SMPL	160-420-E-1-B MS - 1		14 Aug 2012 14:27:18	0.8343	PPB		5885	Initial Method	HAA081412A
8755	SMPL	160-420-E-1-C MSD - 1		14 Aug 2012 14:28:49	0.7567	PPB		5323	Initial Method	HAA081412A
8756	SMPL	160-420-E-2-A - 1		14 Aug 2012 14:31:00	-0.0307	PPB		-386	Initial Method	HAA081412A
8757	SMPL	160-420-E-3-A - 1		14 Aug 2012 14:33:11	0.0108	PPB		-85	Initial Method	HAA081412A
8758	SMPL	160-420-E-4-A - 1		14 Aug 2012 14:34:43	0.0385	PPB		116	Initial Method	HAA081412A
8759	CK STND	CCV - 1		14 Aug 2012 14:36:14	4.8774	PPB		35198	Initial Method	HAA081412A
8760	CK STND	CCB - 1		14 Aug 2012 14:37:45	-0.0337	PPB		-408	Initial Method	HAA081412A

CDS 8-14-12
Stds Hg081412
7470A

A. Batch 9162

Initial Method



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
CALIBRATION BLANK	0.000	0.027	0.027	34	0.000	34				
CALIBRATION 1	0.200	0.216	0.016	1399	0.0 %	1399				
CALIBRATION 2	0.500	0.442	-0.058	3040	0.0 %	3040				
CALIBRATION 3	1.000	0.988	-0.012	7000	0.0 %	7000				
CALIBRATION 4	5.000	5.049	0.049	36439	0.0 %	36439				
CALIBRATION 5	10.000	9.979	-0.021	72183	0.0 %	72183				

COS 8-14-12
Stds Hg081412
7470A

A. Batch: 9162
Rho: 0.9999542

HAA081612A

Method: Initial Method Operator: CDS HAA2 Date of Analysis: 16 Aug 2012 13:34:29

Seq ID	Type	Sample ID	Extended ID	Date	Conc	Units	Stnd Cond	µ Abs	Method	Chapter
8822	Std	CALIBRATION BLANK - 1		16 Aug 2012 13:35:48	-	PPB	0.0000	-5	Initial Method	HAA0816A
8823	Std	CALIBRATION 1 - 1		16 Aug 2012 13:37:20	-	PPB	0.2000	1454	Initial Method	HAA0816A
8824	Std	CALIBRATION 2 - 1		16 Aug 2012 13:38:52	-	PPB	0.5000	3505	Initial Method	HAA0816A
8825	Std	CALIBRATION 3 - 1		16 Aug 2012 13:40:36	-	PPB	1.0000	7590	Initial Method	HAA0816A
8826	Std	CALIBRATION 4 - 1		16 Aug 2012 13:42:32	-	PPB	5.0000	39693	Initial Method	HAA0816A
8827	Std	CALIBRATION 5 - 1		16 Aug 2012 13:44:36	-	PPB	10.0000	77464	Initial Method	HAA0816A
8828	CK STND	ICV - 1		16 Aug 2012 13:46:59	2.5565	PPB		19849	Initial Method	HAA0816A
8829	CK STND	ICB - 1		16 Aug 2012 13:49:31	-0.0459	PPB		-428	Initial Method	HAA0816A
8830	SMPL	MB 160-9303/1-A - 1		16 Aug 2012 13:51:47	0.0022	PPB		-53	Initial Method	HAA0816A
8831	SMPL	LCS 160-9303/2-A - 1		16 Aug 2012 13:53:17	0.9952	PPB		7684	Initial Method	HAA0816A
8832	SMPL	160-442-E-1-A - 1		16 Aug 2012 13:54:48	-0.0323	PPB		-322	Initial Method	HAA0816A
8833	SMPL	160-442-E-1-A SD - 1	5X	16 Aug 2012 13:56:53	-0.0042	PPB		-103	Initial Method	HAA0816A
8834	SMPL	160-442-E-1-B MS - 1		16 Aug 2012 13:58:23	1.0482	PPB		8097	Initial Method	HAA0816A
8835	SMPL	160-442-E-1-C MSD - 1		16 Aug 2012 13:59:54	0.9908	PPB		7650	Initial Method	HAA0816A
8836	SMPL	160-442-E-2-A - 1		16 Aug 2012 14:01:58	-0.0320	PPB		-320	Initial Method	HAA0816A
8837	SMPL	160-442-E-3-A - 1		16 Aug 2012 14:04:04	0.0119	PPB		22	Initial Method	HAA0816A
8838	SMPL	160-442-E-4-A - 1		16 Aug 2012 14:05:35	0.0188	PPB		76	Initial Method	HAA0816A
8839	SMPL	160-442-E-5-A - 1		16 Aug 2012 14:07:06	0.0232	PPB		110	Initial Method	HAA0816A
8840	CK STND	CCV - 1		16 Aug 2012 14:08:38	5.2009	PPB		40454	Initial Method	HAA0816A
8841	CK STND	CCB - 1		16 Aug 2012 14:10:08	-0.0368	PPB		-357	Initial Method	HAA0816A
8842	SMPL	160-442-E-6-A - 1		16 Aug 2012 14:12:34	0.0062	PPB		-22	Initial Method	HAA0816A
8843	SMPL	MB 160-9305/1-A - 1		16 Aug 2012 14:14:05	0.0030	PPB		-47	Initial Method	HAA0816A
8844	SMPL	LCS 160-9305/2-A - 1		16 Aug 2012 14:15:37	1.0021	PPB		7738	Initial Method	HAA0816A
8845	SMPL	160-428-E-1-A - 1		16 Aug 2012 14:17:08	-0.0310	PPB		-312	Initial Method	HAA0816A
8846	SMPL	160-428-E-2-A - 1		16 Aug 2012 14:19:14	0.0047	PPB		-34	Initial Method	HAA0816A
8847	SMPL	160-428-E-3-A - 1		16 Aug 2012 14:20:45	0.0053	PPB		-29	Initial Method	HAA0816A
8848	SMPL	160-428-E-5-A - 1		16 Aug 2012 14:22:16	0.0087	PPB		-3	Initial Method	HAA0816A
8849	SMPL	160-428-E-6-A - 1		16 Aug 2012 14:23:47	0.0141	PPB		39	Initial Method	HAA0816A
8850	SMPL	160-428-E-6-A SD - 1	5X	16 Aug 2012 14:25:18	0.0133	PPB		33	Initial Method	HAA0816A
8851	SMPL	160-428-E-6-B MS - 1		16 Aug 2012 14:26:49	0.9571	PPB		7387	Initial Method	HAA0816A
8852	CK STND	CCV - 1		16 Aug 2012 14:28:20	4.8886	PPB		38021	Initial Method	HAA0816A
8853	CK STND	CCB - 1		16 Aug 2012 14:30:22	-0.0463	PPB		-431	Initial Method	HAA0816A
8854	SMPL	160-428-E-6-C MSD - 1		16 Aug 2012 14:32:47	0.9222	PPB		7115	Initial Method	HAA0816A
8855	SMPL	160-428-E-7-A - 1		16 Aug 2012 14:34:18	-0.0400	PPB		-382	Initial Method	HAA0816A
8856	SMPL	160-428-E-8-A - 1		16 Aug 2012 14:36:25	0.0006	PPB		-66	Initial Method	HAA0816A
8857	SMPL	160-437-E-1-A - 1		16 Aug 2012 14:37:57	-0.0006	PPB		-75	Initial Method	HAA0816A
8858	SMPL	160-437-E-2-A - 1		16 Aug 2012 14:39:29	0.0085	PPB		-4	Initial Method	HAA0816A
8859	SMPL	160-437-E-3-A - 1		16 Aug 2012 14:41:00	-0.0008	PPB		-77	Initial Method	HAA0816A
8860	SMPL	160-437-E-4-A - 1		16 Aug 2012 14:42:31	-0.0049	PPB		-109	Initial Method	HAA0816A
8861	SMPL	160-437-E-5-A - 1		16 Aug 2012 14:44:02	0.0250	PPB		124	Initial Method	HAA0816A
8862	SMPL	160-437-E-6-A - 1		16 Aug 2012 14:45:33	0.0044	PPB		-36	Initial Method	HAA0816A
8863	SMPL	160-437-E-7-A - 1		16 Aug 2012 14:47:04	0.0133	PPB		33	Initial Method	HAA0816A
8864	CK STND	CCV - 1		16 Aug 2012 14:48:35	4.9534	PPB		38526	Initial Method	HAA0816A
8865	CK STND	CCB - 1		16 Aug 2012 14:50:06	-0.0414	PPB		-393	Initial Method	HAA0816A
8866	SMPL	160-437-E-8-A - 1		16 Aug 2012 14:52:32	0.0048	PPB		-33	Initial Method	HAA0816A
8867	SMPL	160-437-E-9-A - 1		16 Aug 2012 14:54:02	0.0084	PPB		-5	Initial Method	HAA0816A
8868	SMPL	MV4X1B-033 - 1		16 Aug 2012 14:55:33	-0.0020	PPB		-86	Initial Method	HAA0816A
8869	SMPL	MV543C - 1		16 Aug 2012 14:57:04	4.9746	PPB		38691	Initial Method	HAA0816A
8870	SMPL	MV4J3 - 1		16 Aug 2012 14:58:35	-0.0002	PPB		-72	Initial Method	HAA0816A
8871	SMPL	MV4J3V - 1	5X	16 Aug 2012 15:01:02	-0.0164	PPB		-198	Initial Method	HAA0816A
8872	SMPL	MV4J3S - 1		16 Aug 2012 15:02:36	4.2080	PPB		32718	Initial Method	HAA0816A
8873	SMPL	MV4J3D - 1		16 Aug 2012 15:04:07	4.1953	PPB		32619	Initial Method	HAA0816A
8874	CK STND	CCV - 1		16 Aug 2012 15:06:35	4.8813	PPB		37964	Initial Method	HAA0816A
8875	CK STND	CCB - 1		16 Aug 2012 15:09:03	-0.0526	PPB		-480	Initial Method	HAA0816A

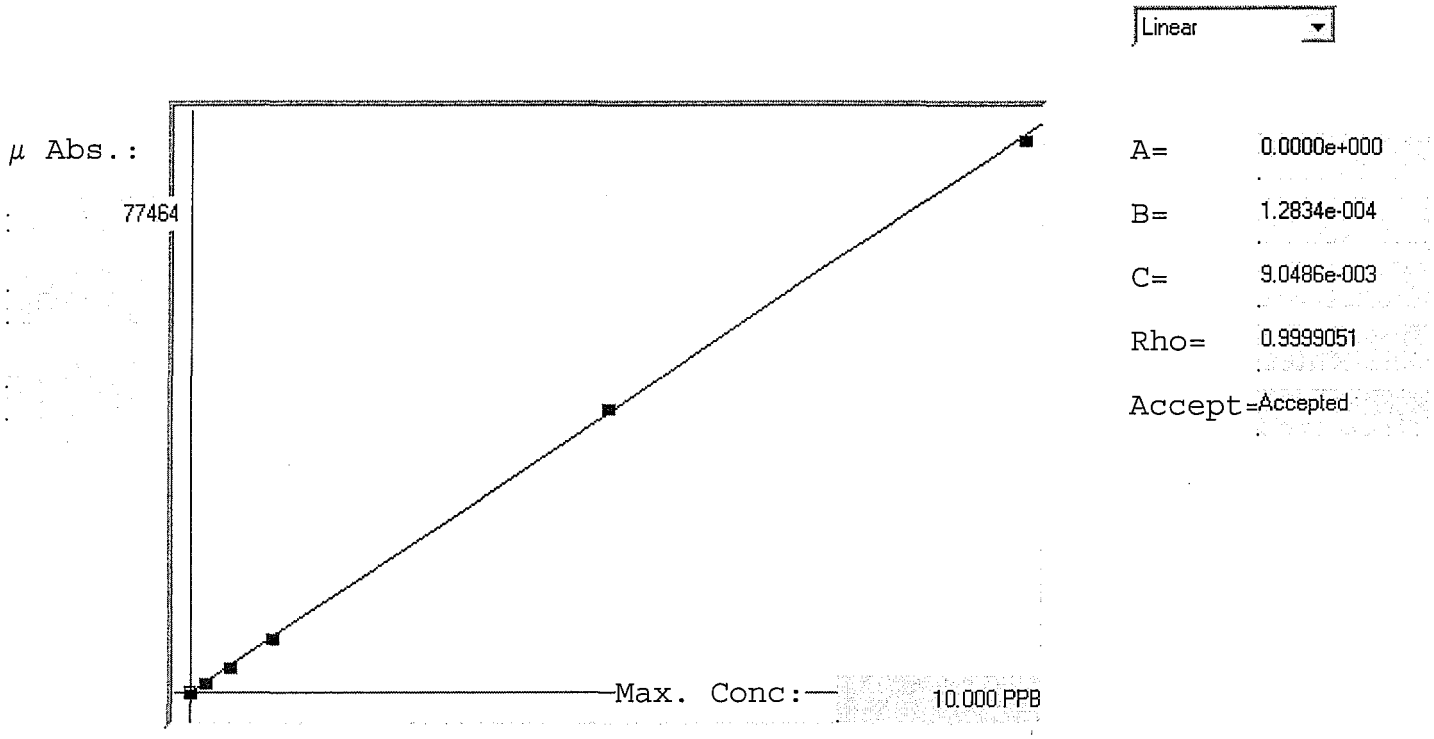
Hg

Hg

CDS 8-17-12
Stds Hg081612
7470A

A, Batch: 9325

Initial Method



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
CALIBRATION BLANK	0.000	0.008	0.008	-5	0.000	-5				
CALIBRATION 1	0.200	0.196	-0.004	1454	0.0 %	1454				
CALIBRATION 2	0.500	0.459	-0.041	3505	0.0 %	3505				
CALIBRATION 3	1.000	0.983	-0.017	7590	0.0 %	7590				
CALIBRATION 4	5.000	5.103	0.103	39693	0.0 %	39693				
CALIBRATION 5	10.000	9.951	-0.049	77464	0.0 %	77464				

CDS 8-17-12
Stds Hg081612
7470A

Rho: 0.9999051
A, Batch: 9325

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 8952 Batch Start Date: 08/10/12 13:36 Batch Analyst: Weese, Robert

Batch Method: 3010A Batch End Date: 08/13/12 09:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	PR_Spike_1 00005	PR_Spike_4 00005		
MB 160-8952/1		3010A, 6010C		50 mL	50 mL				
LCS 160-8952/2		3010A, 6010C		50 mL	50 mL	0.25 mL	0.25 mL		
160-420-D-1 MS		3010A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL		
160-420-D-1 MSD		3010A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL		
160-437-D-1	PZ-113-AS	3010A, 6010C	T	50 mL	50 mL				
160-437-D-2	D-3	3010A, 6010C	T	50 mL	50 mL				
160-437-D-3	PZ-112-AS	3010A, 6010C	T	50 mL	50 mL				
160-437-D-4	I-11	3010A, 6010C	T	50 mL	50 mL				
160-437-D-5	PZ-207-AS	3010A, 6010C	T	50 mL	50 mL				
160-437-D-6	D-12	3010A, 6010C	T	50 mL	50 mL				
160-437-D-7	PZ-305-AI	3010A, 6010C	T	50 mL	50 mL				
160-437-D-8	S-10	3010A, 6010C	T	50 mL	50 mL				
160-437-D-9	DUP 05	3010A, 6010C	T	50 mL	50 mL				

Batch Notes	
Balance ID	27150548
Lot # of hydrochloric acid	024068
Lot # of Nitric Acid	024066
Oven, Bath or Block Temperature 1	92.6 Degrees C
Pipette ID	M-PREP-2
ID number of the thermometer	111815886
Digestion Tube/Cup Lot #	139499-263

Basis	Basis Description
T	Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9563 Batch Start Date: 08/23/12 14:40 Batch Analyst: Weese, Robert

Batch Method: 3010A Batch End Date: 08/24/12 06:50

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	PR_Spike_1 00005	PR_Spike_4 00005		
MB 160-9563/1		3010A, 6010C		50 mL	50 mL				
LCS 160-9563/2		3010A, 6010C		50 mL	50 mL	0.25 mL	0.25 mL		
160-437-E-1	PZ-113-AS	3010A, 6010C	D	50 mL	50 mL				
160-437-E-1 MS	PZ-113-AS	3010A, 6010C	D	50 mL	50 mL	0.25 mL	0.25 mL		
160-437-E-1 MSD	PZ-113-AS	3010A, 6010C	D	50 mL	50 mL	0.25 mL	0.25 mL		
160-437-E-2	D-3	3010A, 6010C	D	50 mL	50 mL				
160-437-E-3	PZ-112-AS	3010A, 6010C	D	50 mL	50 mL				
160-437-E-4	I-11	3010A, 6010C	D	50 mL	50 mL				
160-437-E-5	PZ-207-AS	3010A, 6010C	D	50 mL	50 mL				
160-437-E-6	D-12	3010A, 6010C	D	50 mL	50 mL				
160-437-E-7	PZ-305-AI	3010A, 6010C	D	50 mL	50 mL				
160-437-E-8	S-10	3010A, 6010C	D	50 mL	50 mL				
160-437-E-9	DUP 05	3010A, 6010C	D	50 mL	50 mL				

Batch Notes	
Balance ID	27150548
Lot # of hydrochloric acid	024068
Lot # of Nitric Acid	024066
Oven, Bath or Block Temperature 1	92.9 Degrees C
Pipette ID	M-PREP-2
ID number of the thermometer	111815886
Digestion Tube/Cup Lot #	139499-263

Basis	Basis Description
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9032 Batch Start Date: 08/14/12 10:10 Batch Analyst: Smith, Chris

Batch Method: 7470A Batch End Date: 08/14/12 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg Curve Int. 00081			
MB 160-9032/1		7470A, 7470A		30 mL	30 mL				
LCS 160-9032/2		7470A, 7470A		30 mL	30 mL	0.3 mL			
160-437-D-1	PZ-113-AS	7470A, 7470A	T	30 mL	30 mL				
160-437-D-1 MS	PZ-113-AS	7470A, 7470A	T	30 mL	30 mL	0.3 mL			
160-437-D-1 MSD	PZ-113-AS	7470A, 7470A	T	30 mL	30 mL	0.3 mL			
160-437-D-2	D-3	7470A, 7470A	T	30 mL	30 mL				
160-437-D-3	PZ-112-AS	7470A, 7470A	T	30 mL	30 mL				
160-437-D-4	I-11	7470A, 7470A	T	30 mL	30 mL				
160-437-D-5	PZ-207-AS	7470A, 7470A	T	30 mL	30 mL				
160-437-D-6	D-12	7470A, 7470A	T	30 mL	30 mL				
160-437-D-7	PZ-305-AI	7470A, 7470A	T	30 mL	30 mL				
160-437-D-8	S-10	7470A, 7470A	T	30 mL	30 mL				
160-437-D-9	DUP 05	7470A, 7470A	T	30 mL	30 mL				

Batch Notes	
Hydroxylamine Sulfate Lot Number	019862
Sulfuric Acid Lot Number	016589
Lot # of hydrochloric acid	024637
Lot # of Nitric Acid	019623
Hood ID or number	HOOD2
Hot Block ID number	HG1
Potassium Persulfate Lot Number	024639
Potassium Permanganate Lot Number	024880
NaCL Lot #	000907
Oven, Bath or Block Temperature 1	95.2 Celsius
Oven, Bath or Block Temperature 2	95.4 Celsius
Pipette ID	MET10, MET12, HG6
Stannous Chloride Lot Number	023464
SOP Number	ST-MT-0005
ID number of the thermometer	111815895
Digestion Tube/Cup Lot #	139499-263

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9032 Batch Start Date: 08/14/12 10:10 Batch Analyst: Smith, Chris

Batch Method: 7470A Batch End Date: 08/14/12 12:10

Basis	Basis Description
T	Total/NA

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9305 Batch Start Date: 08/16/12 11:01 Batch Analyst: Smith, Chris

Batch Method: 7470A Batch End Date: 08/16/12 13:01

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Hg Curve Int. 00083			
MB 160-9305/1		7470A, 7470A		30 mL	30 mL				
LCS 160-9305/2		7470A, 7470A		30 mL	30 mL	0.3 mL			
160-428-E-6 MS		7470A, 7470A	D	30 mL	30 mL	0.3 mL			
160-428-E-6 MSD		7470A, 7470A	D	30 mL	30 mL	0.3 mL			
160-437-E-1	PZ-113-AS	7470A, 7470A	D	30 mL	30 mL				
160-437-E-2	D-3	7470A, 7470A	D	30 mL	30 mL				
160-437-E-3	PZ-112-AS	7470A, 7470A	D	30 mL	30 mL				
160-437-E-4	I-11	7470A, 7470A	D	30 mL	30 mL				
160-437-E-5	PZ-207-AS	7470A, 7470A	D	30 mL	30 mL				
160-437-E-6	D-12	7470A, 7470A	D	30 mL	30 mL				
160-437-E-7	PZ-305-AI	7470A, 7470A	D	30 mL	30 mL				
160-437-E-8	S-10	7470A, 7470A	D	30 mL	30 mL				
160-437-E-9	DUP 05	7470A, 7470A	D	30 mL	30 mL				

Batch Notes	
Hydroxylamine Sulfate Lot Number	019862
Sulfuric Acid Lot Number	016589
Lot # of hydrochloric acid	024637
Lot # of Nitric Acid	019623
Hood ID or number	HOOD2
Hot Block ID number	HG1
Potassium Persulfate Lot Number	024639
Potassium Permanganate Lot Number	024880
NaCL Lot #	000907
Oven, Bath or Block Temperature 1	95.4 Celsius
Oven, Bath or Block Temperature 2	95.3 Celsius
Pipette ID	MET10, MET12, HG6
Stannous Chloride Lot Number	023464
SOP Number	ST-MT-0005
ID number of the thermometer	111815895
Digestion Tube/Cup Lot #	139499-263

METALS BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9305 Batch Start Date: 08/16/12 11:01 Batch Analyst: Smith, Chris

Batch Method: 7470A Batch End Date: 08/16/12 13:01

Basis	Basis Description
D	Dissolved

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG No.:

Project: West Lake Landfill

Client Sample ID	Lab Sample ID
PZ-113-AS	160-437-1
D-3	160-437-2
D-3	160-437-2 DL
PZ-112-AS	160-437-3
PZ-112-AS	160-437-3 DL
I-11	160-437-4
PZ-207-AS	160-437-5
PZ-207-AS	160-437-5 DL
D-12	160-437-6
D-12	160-437-6 DL
PZ-305-AI	160-437-7
S-10	160-437-8
DUP 05	160-437-9
DUP 05	160-437-9 DL

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ-113-AS
Lab Sample ID: 160-437-1
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 09:35
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	650	5.0	0.54	mg/L		B *	1	310.1
24959-67-9	Bromide	0.98	0.25	0.025	mg/L			1	300.0
20461-54-5	Iodide	0.51	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: D-3DL
Lab Sample ID: 160-437-2
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 10:00
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	1100	10	1.1	mg/L		B *	2	310.1
24959-67-9	Bromide	8.4	1.3	0.13	mg/L			5	300.0
20461-54-5	Iodide	0.28	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ-112-ASDL
Lab Sample ID: 160-437-3
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 10:48
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	1100	10	1.1	mg/L		B *	2	310.1
24959-67-9	Bromide	0.46	0.25	0.025	mg/L			1	300.0
20461-54-5	Iodide	ND	1.0	0.10	mg/L			1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: I-11 Lab Sample ID: 160-437-4

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2012 11:43

Reporting Basis: WET Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	830	5.0	0.54	mg/L		B *	1	310.1
24959-67-9	Bromide	1.8	0.25	0.025	mg/L			1	300.0
20461-54-5	Iodide	0.21	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ-207-ASDL
Lab Sample ID: 160-437-5
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 12:55
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	1300	10	1.1	mg/L		B *	2	310.1
24959-67-9	Bromide	3.0	1.3	0.13	mg/L			5	300.0
20461-54-5	Iodide	0.25	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: D-12 | Lab Sample ID: 160-437-6

Lab Name: TestAmerica St. Louis | Job No.: 160-437-1

SDG ID.:

Matrix: Water | Date Sampled: 08/08/2012 14:16

Reporting Basis: WET | Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	960	5.0	0.54	mg/L		B *	1	310.1
24959-67-9	Bromide	4.8	1.3	0.13	mg/L			5	300.0
20461-54-5	Iodide	0.20	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: PZ-305-AI
Lab Sample ID: 160-437-7
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 14:30
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	990	5.0	0.54	mg/L		B *	1	310.1
24959-67-9	Bromide	0.49	0.25	0.025	mg/L			1	300.0
20461-54-5	Iodide	0.36	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: S-10 Lab Sample ID: 160-437-8

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG ID.:

Matrix: Water Date Sampled: 08/08/2012 15:02

Reporting Basis: WET Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	800	5.0	0.54	mg/L		B *	1	310.1
24959-67-9	Bromide	2.0	0.25	0.025	mg/L			1	300.0
20461-54-5	Iodide	0.31	1.0	0.10	mg/L	J		1	300.0

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: DUP 05DL
Lab Sample ID: 160-437-9
Lab Name: TestAmerica St. Louis
Job No.: 160-437-1
SDG ID.:
Matrix: Water
Date Sampled: 08/08/2012 00:00
Reporting Basis: WET
Date Received: 08/09/2012 08:10

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	1100	10	1.1	mg/L		B	2	310.1
24959-67-9	Bromide	8.1	1.3	0.13	mg/L			5	300.0
20461-54-5	Iodide	0.30	1.0	0.10	mg/L	J		1	300.0

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Analyst: JB Batch Start Date: 08/13/2012

Reporting Units: mg/L Analytical Batch No.: 9057

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	20:27	Iodide	4.06	4.00	102	90-110		IC Iodide QC_00002
8	ICB	20:41	Iodide	ND					
19	CCV	23:08	Iodide	3.86	4.00	97	90-110		IC Iodide Cal_00002
20	CCB	23:22	Iodide	ND					
31	CCV	01:49	Iodide	3.73	4.00	93	90-110		IC Iodide Cal_00002
32	CCB	02:02	Iodide	ND					
43	CCV	04:30	Iodide	3.82	4.00	96	90-110		IC Iodide Cal_00002
44	CCB	04:43	Iodide	ND					

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

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Analyst: JB Batch Start Date: 08/17/2012

Reporting Units: mg/L Analytical Batch No.: 9484

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
7	ICV	13:07	Bromide	1.85	2.00	92	90-110		IC 2nd Source_00001
8	ICB	13:24	Bromide	ND					
20	CCV	16:47	Bromide	1.94	2.00	97	90-110		IC Cal High_00006
21	CCB	17:03	Bromide	ND					
32	CCV	20:04	Bromide	1.87	2.00	94	90-110		IC Cal High_00006
33	CCB	20:20	Bromide	ND					

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

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 9057	Date: 08/14/2012 00:29						
300.0	MB 160-9057/25	Iodide	ND		mg/L	1.0	1
Batch ID: 9484	Date: 08/17/2012 13:40						
300.0	MB 160-9484/9	Bromide	ND		mg/L	0.25	1
Batch ID: 9518	Date: 08/22/2012 15:29						
310.1	MB 160-9518/1	Alkalinity	0.750	J	mg/L	1.3	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 9057		Date: 08/14/2012 01:09									
300.0	160-437-1	Iodide	0.51	J	mg/L						
300.0	160-437-1 MS	Iodide	4.34		mg/L	4.00	96	90-110			
Batch ID: 9484		Date: 08/17/2012 14:36									
300.0	160-437-1	Bromide	0.98		mg/L						
300.0	160-437-1 MS	Bromide	2.75		mg/L	2.00	89	90-110			F
Batch ID: 9518		Date: 08/22/2012 17:33									
310.1	160-437-1	Alkalinity	650		mg/L						B *
310.1	160-437-1 MS	Alkalinity	666		mg/L	20.0	100	80-120			4

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

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 9057	Date: 08/14/2012 01:22										
300.0	160-437-1 MSD	Iodide	4.36		mg/L	4.00	96	90-110	0	20	
Batch ID: 9484	Date: 08/17/2012 14:52										
300.0	160-437-1 MSD	Bromide	2.72		mg/L	2.00	87	90-110	1	20	F
Batch ID: 9518	Date: 08/22/2012 17:38										
310.1	160-437-1 MSD	Alkalinity	670		mg/L	20.0	120	80-120	1	20	4

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

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 9057		Date: 08/14/2012 00:42									
						LCS Source: IC Iodide QC_00002					
300.0	LCS 160-9057/26	Iodide	3.89		mg/L	4.00	97	90-110			
Batch ID: 9484		Date: 08/17/2012 13:57									
						LCS Source: IC 2nd Source_00001					
300.0	LCS 160-9484/10	Bromide	1.96		mg/L	2.00	98	90-110			
Batch ID: 9518		Date: 08/22/2012 15:29									
						LCS Source: Alk Int._00002					
310.1	LCS 160-9518/3	Alkalinity	372		mg/L	400	93	90-110			

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

FORM VIIA-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 9518		Date: 08/22/2012 15:29									
						LCS Source: Alk Int._00002					
310.1	LLCS 160-9518/2	Alkalinity	188		mg/L	200	94	90-110			

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

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 310.1 MDL Date: 01/19/2012 14:28

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Alkalinity		5	0.542

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: NOEQUIP

Method: 310.1 XMDL Date: 01/19/2012 14:29

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	0.542

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: IC1500

Method: 300.0 MDL Date: 01/18/2012 14:04

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Bromide		0.25	0.025
Iodide		1	0.1

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job Number: 160-437-1

SDG Number:

Matrix: Water Instrument ID: IC1500

Method: 300.0 XMDL Date: 01/18/2012 14:07

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Bromide		0.25	0.025
Iodide		1	0.1

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: NOEQUIP Method: 310.1

Start Date: 08/22/2012 15:29 End Date: 08/22/2012 17:38

Lab Sample ID	D / F	Type	Time	Analytes																				
				Alk																				
MB 160-9518/1	1	T	15:29	X																				
LLCS 160-9518/2	1	T	15:29	X																				
LCS 160-9518/3	1	T	15:29	X																				
160-437-1	1	T	15:29	X																				
ZZZZZZ			15:29																					
160-437-2 DL	2	T	15:29	X																				
ZZZZZZ			15:29																					
160-437-3 DL	2	T	15:29	X																				
160-437-4	1	T	15:29	X																				
ZZZZZZ			15:29																					
160-437-5 DL	2	T	15:29	X																				
160-437-6	1	T	15:29	X																				
160-437-7	1	T	15:29	X																				
160-437-8	1	T	17:33	X																				
ZZZZZZ			17:33																					
160-437-9 DL	2	T	17:33	X																				
160-437-1 MS	1	T	17:33	X																				
160-437-1 MSD	1	T	17:38	X																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: IC1500 Method: 300.0

Start Date: 08/13/2012 19:04 End Date: 08/14/2012 06:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				I-																			
IC 160-9057/1			19:04	X																			
IC 160-9057/2			19:18	X																			
IC 160-9057/3			19:32	X																			
IC 160-9057/4			19:46	X																			
IC 160-9057/5			20:00	X																			
IC 160-9057/6			20:14	X																			
ICV 160-9057/7	1		20:27	X																			
ICB 160-9057/8	1		20:41	X																			
ZZZZZZ			20:54																				
ZZZZZZ			21:07																				
ZZZZZZ			21:21																				
ZZZZZZ			21:34																				
ZZZZZZ			21:48																				
ZZZZZZ			22:01																				
ZZZZZZ			22:15																				
ZZZZZZ			22:28																				
ZZZZZZ			22:41																				
ZZZZZZ			22:55																				
CCV 160-9057/19	1		23:08	X																			
CCB 160-9057/20	1		23:22	X																			
ZZZZZZ			23:35																				
ZZZZZZ			23:48																				
ZZZZZZ			00:02																				
ZZZZZZ			00:15																				
MB 160-9057/25	1	T	00:29	X																			
LCS 160-9057/26	1	T	00:42	X																			
160-437-1	1	T	00:55	X																			
160-437-1 MS	1	T	01:09	X																			
160-437-1 MSD	1	T	01:22	X																			
160-437-2	1	T	01:36	X																			
CCV 160-9057/31	1		01:49	X																			
CCB 160-9057/32	1		02:02	X																			
160-437-3	1	T	02:16	X																			
160-437-4	1	T	02:29	X																			
160-437-5	1	T	02:43	X																			
160-437-6	1	T	02:56	X																			
160-437-7	1	T	03:09	X																			
160-437-8	1	T	03:23	X																			
160-437-9	1	T	03:36	X																			
ZZZZZZ			03:50																				
ZZZZZZ			04:03																				
ZZZZZZ			04:17																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: IC1500 Method: 300.0

Start Date: 08/13/2012 19:04 End Date: 08/14/2012 06:04

Lab Sample ID	D / F	Type	Time	Analytes																			
				I -																			
CCV 160-9057/43	1		04:30	X																			
CCB 160-9057/44	1		04:43	X																			
ZZZZZZ			04:57																				
ZZZZZZ			05:10																				
ZZZZZZ			05:24																				
ZZZZZZ			05:37																				
CCV 160-9057/49			05:50																				
CCB 160-9057/50			06:04																				

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: IC1500 Method: 300.0

Start Date: 08/17/2012 11:29 End Date: 08/18/2012 14:07

Lab Sample ID	D / F	Type	Time	Analytes																				
				Br																				
IC 160-9484/1			11:29	X																				
IC 160-9484/2			11:45	X																				
IC 160-9484/3			12:02	X																				
IC 160-9484/4			12:18	X																				
IC 160-9484/5			12:35	X																				
IC 160-9484/6			12:51	X																				
ICV 160-9484/7	1		13:07	X																				
ICB 160-9484/8	1		13:24	X																				
MB 160-9484/9	1	T	13:40	X																				
LCS 160-9484/10	1	T	13:57	X																				
160-437-1	1	T	14:19	X																				
160-437-1 MS	1	T	14:36	X																				
160-437-1 MSD	1	T	14:52	X																				
ZZZZZZ			15:09																					
160-437-2 DL	5	T	15:25	X																				
160-437-3	1	T	15:41	X																				
ZZZZZZ			15:58																					
160-437-4	1	T	16:14	X																				
ZZZZZZ			16:31																					
CCV 160-9484/20	1		16:47	X																				
CCB 160-9484/21	1		17:03	X																				
ZZZZZZ			17:20																					
160-437-5 DL	5	T	17:36	X																				
ZZZZZZ			17:53																					
160-437-6 DL	5	T	18:09	X																				
160-437-7	1	T	18:25	X																				
ZZZZZZ			18:42																					
160-437-8	1	T	18:58	X																				
ZZZZZZ			19:15																					
ZZZZZZ			19:31																					
160-437-9 DL	5	T	19:48	X																				
CCV 160-9484/32	1		20:04	X																				
CCB 160-9484/33	1		20:20	X																				
ZZZZZZ			20:37																					
ZZZZZZ			20:53																					
ZZZZZZ			21:10																					
ZZZZZZ			21:26																					
ZZZZZZ			21:42																					
ZZZZZZ			21:59																					
ZZZZZZ			22:15																					
ZZZZZZ			22:32																					
ZZZZZZ			22:48																					

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: IC1500 Method: 300.0

Start Date: 08/17/2012 11:29 End Date: 08/18/2012 14:07

Lab Sample ID	D / F	Type	Time	Analytes																			
				Br																			
ZZZZZZ			23:04																				
CCV 160-9484/44			23:21																				
CCB 160-9484/45			23:37																				
ZZZZZZ			23:54																				
ZZZZZZ			00:10																				
ZZZZZZ			00:26																				
ZZZZZZ			00:43																				
ZZZZZZ			00:59																				
ZZZZZZ			01:16																				
ZZZZZZ			01:32																				
CCV 160-9484/53			01:48																				
CCB 160-9484/54			02:05																				
ZZZZZZ			02:21																				
ZZZZZZ			02:38																				
ZZZZZZ			02:54																				
ZZZZZZ			03:11																				
ZZZZZZ			03:27																				
ZZZZZZ			03:43																				
ZZZZZZ			04:00																				
ZZZZZZ			04:16																				
ZZZZZZ			04:33																				
ZZZZZZ			04:49																				
ZZZZZZ			05:05																				
ZZZZZZ			05:22																				
CCV 160-9484/67			05:38																				
CCB 160-9484/68			05:55																				
ZZZZZZ			06:11																				
ZZZZZZ			06:27																				
ZZZZZZ			06:44																				
ZZZZZZ			07:00																				
ZZZZZZ			07:17																				
ZZZZZZ			07:33																				
ZZZZZZ			07:49																				
ZZZZZZ			08:06																				
ZZZZZZ			08:22																				
ZZZZZZ			08:39																				
CCV 160-9484/79			08:55																				
CCB 160-9484/80			09:12																				
ZZZZZZ			09:28																				
ZZZZZZ			09:44																				
ZZZZZZ			10:01																				
ZZZZZZ			10:17																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Instrument ID: IC1500 Method: 300.0

Start Date: 08/17/2012 11:29 End Date: 08/18/2012 14:07

Lab Sample ID	D / F	Type	Time	Analytes																			
				Br																			
ZZZZZZ			10:34																				
ZZZZZZ			10:50																				
ZZZZZZ			11:06																				
ZZZZZZ			11:23																				
ZZZZZZ			11:39																				
CCV 160-9484/90			11:56																				
CCB 160-9484/91			12:12																				
ZZZZZZ			12:28																				
ZZZZZZ			12:45																				
ZZZZZZ			13:01																				
ZZZZZZ			13:18																				
ZZZZZZ			13:34																				
CCV 160-9484/97			13:50																				
CCB 160-9484/98			14:07																				

Prep Types

T = Total/NA

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica St. Louis
Data Review Checklist
Ion Chromatography
Method 300.0/9056A

Lot(s): 420-1, 428-1, 437-1, 442-1	NCMs: N/A
Batch #(s): 9057 (Iodide)	Run Date: 8/13/12
Due Date: 8/20/12	Instrument ID: ICICS1500

	Yes	No	N/A	2nd Level
A. Calibration/Instrument Run QC 1. Instrument calibrated (if applicable) using a blank and the required minimum number of calibration standards?	✓			✓
2. Is the initial calibration curve correlation coefficient ≥ 0.995?	✓			✓
3. ICV/CCV analyzed at the appropriate frequency and within control limits?	✓			✓
4. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
5. Calibration curve is updated in the method with the correct retention times?	✓			✓
B. Sample Results 1. Samples with concentration > the linear range or affected by interferences diluted and reanalyzed?			✓	✓
2. All reported results bracketed by in control QC?	✓			✓
3. Sample analyses done within holding time?	✓			✓
4. All dilutions were checked and verified against the "straight" runs?			✓	✓
C. Preparation/Matrix QC 1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and <RL or CRDL (CLP)?	✓			✓
3. MS run at required frequency and within limits?	✓			✓
4. MS or Dup run at required frequency and RPD within SOP limits?	✓			✓
D. Other 1. Are all nonconformances documented appropriately?			✓	✓
2. Current MDL data on file?	✓			✓
3. Calculations checked for error?			✓	✓
4. Were manual integrations checked for appropriateness, correctness and proper documentation (before/after chromatograms, reason, analyst, date?	✓			✓
5. Transcriptions checked for error?	✓			✓
6. All client/project specific requirements met?	✓			✓
7. Date/time of analysis verified as correct?	✓			✓

Analyst: JB Date: 8/14/12
Comments:

2nd Level: [signature] Date: 8/16/12

TestAmerica St. Louis

Anion Worksheet

Analyst: JB Method: 300.0 SOP: ST-WC-0028, Rev. 17

Date: 8/13/12 Instrument: IC ICS 1500

All result as ppb Batch#: 9057

Lot Number	Sample ID	Fluoride	Chloride	Nitrite	Bromide	Nitrate	Phosphate	Sulfate	Chlorate	Iodide
420-1	420-1									1x
	420-2									1x
	420-3									1x
	420-4									1x
428-1	428-1									1x
	428-2									1x
	428-3									1x
	428-5									1x
	428-6									1x
	428-8									1x
437-1	437-1									1x
	437-2									1x
	437-3									1x
	437-4									1x
	437-5									1x
	437-6									1x
	437-7									1x
	437-8									1x
	437-9									1x
442-1	442-1									1x
	442-2									1x
	442-3									1x
	442-4									1x
	442-5									1x
	442-6									1x

Form: SL-INORG-0080, Revised 4/15/2011

8/13/12 ICICS 1500 Iodide run is pulling from its 8/13/12 Calibration. JB 8/14/12

Sequence: 081312CAL IODIDE
Operator: boydj
Printed: 8/14/2012 11:31:40 AM

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 51

Created: 8/13/2012 6:31:15 PM by boydj
Last Update: 8/14/2012 10:37:15 AM by boydj

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	CAL 1	Standard	1	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 7:04:48 PM
2	CAL 2	Standard	2	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 7:18:42 PM
3	CAL 3	Standard	3	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 7:32:36 PM
4	CAL 4	Standard	4	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 7:46:31 PM
5	CAL 5	Standard	5	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 8:00:26 PM
6	CAL 6	Standard	6	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 8:14:20 PM
7	ICV	Unknown	7	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 8:27:45 PM
8	ICB	Unknown	8	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 8:41:09 PM
9	MB	Unknown	9	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 8:54:34 PM
10	LCS	Unknown	10	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 9:07:58 PM
11	420-B-1	Unknown	11	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 9:21:22 PM
12	420-B-2	Unknown	12	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 9:34:47 PM
13	420-B-3	Unknown	13	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 9:48:11 PM
14	420-B-4	Unknown	14	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 10:01:36 PM
15	428-B-1	Unknown	15	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 10:15:00 PM
16	428-B-2	Unknown	16	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 10:28:25 PM
17	428-B-3	Unknown	17	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 10:41:49 PM
18	428-B-5	Unknown	18	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 10:55:13 PM
19	CCV	Unknown	19	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 11:08:38 PM
20	CCB	Unknown	20	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 11:22:02 PM
21	428-B-6	Unknown	21	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 11:35:27 PM
22	428-B-6 MS	Unknown	22	50.0	Claire_Routine	STLANIONS	Finished	8/13/2012 11:48:51 PM
23	428-B-6 MSD	Unknown	23	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 12:02:15 AM
24	428-B-8	Unknown	24	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 12:15:40 AM
25	MB	Unknown	25	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 12:29:05 AM
26	LCS	Unknown	26	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 12:42:29 AM
27	437-B-1	Unknown	27	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 12:55:53 AM
28	437-B-1 MS	Unknown	28	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 1:09:18 AM
29	437-B-1 MSD	Unknown	29	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 1:22:43 AM
30	437-B-2	Unknown	30	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 1:36:07 AM
31	CCV	Unknown	31	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 1:49:31 AM
32	CCB	Unknown	32	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 2:02:56 AM
33	437-B-3	Unknown	33	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 2:16:20 AM
34	437-B-4	Unknown	34	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 2:29:45 AM
35	437-B-5	Unknown	35	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 2:43:09 AM
36	437-B-6	Unknown	36	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 2:56:34 AM
37	437-B-7	Unknown	37	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 3:09:58 AM
38	437-B-8	Unknown	38	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 3:23:23 AM
39	437-B-9	Unknown	39	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 3:36:47 AM
40	442-B-1	Unknown	40	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 3:50:11 AM
41	442-B-2	Unknown	41	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 4:03:35 AM
42	442-B-2 MS	Unknown	42	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 4:17:00 AM

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Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 51
Created: 8/13/2012 6:31:15 PM by boydj
Last Update: 8/14/2012 10:37:15 AM by boydj

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	CAL 1	1.0000	1.0000	1.0000	100	081312CLAIRE	
2	CAL 2	1.0000	1.0000	1.0000	101	081312CLAIRE	
3	CAL 3	1.0000	1.0000	1.0000	102	081312CLAIRE	
4	CAL 4	1.0000	1.0000	1.0000	103	081312CLAIRE	
5	CAL 5	1.0000	1.0000	1.0000	104	081312CLAIRE	
6	CAL 6	1.0000	1.0000	1.0000	105	081312CLAIRE	
7	ICV	1.0000	1.0000	1.0000	106	081312CLAIRE	
8	ICB	1.0000	1.0000	1.0000	107	081312CLAIRE	
9	MB	1.0000	1.0000	1.0000	108	081312CLAIRE	
10	LCS	1.0000	1.0000	1.0000	109	081312CLAIRE	
11	420-B-1	1.0000	1.0000	1.0000	110	081312CLAIRE	
12	420-B-2	1.0000	1.0000	1.0000	111	081312CLAIRE	
13	420-B-3	1.0000	1.0000	1.0000	112	081312CLAIRE	
14	420-B-4	1.0000	1.0000	1.0000	113	081312CLAIRE	
15	428-B-1	1.0000	1.0000	1.0000	114	081312CLAIRE	
16	428-B-2	1.0000	1.0000	1.0000	115	081312CLAIRE	
17	428-B-3	1.0000	1.0000	1.0000	116	081312CLAIRE	
18	428-B-5	1.0000	1.0000	1.0000	117	081312CLAIRE	
19	CCV	1.0000	1.0000	1.0000	118	081312CLAIRE	
20	CCB	1.0000	1.0000	1.0000	119	081312CLAIRE	
21	428-B-6	1.0000	1.0000	1.0000	120	081312CLAIRE	
22	428-B-6 MS	1.0000	1.0000	1.0000	121	081312CLAIRE	
23	428-B-6 MSD	1.0000	1.0000	1.0000	122	081312CLAIRE	
24	428-B-8	1.0000	1.0000	1.0000	123	081312CLAIRE	
25	MB	1.0000	1.0000	1.0000	124	081312CLAIRE	
26	LCS	1.0000	1.0000	1.0000	125	081312CLAIRE	
27	437-B-1	1.0000	1.0000	1.0000	126	081312CLAIRE	
28	437-B-1 MS	1.0000	1.0000	1.0000	127	081312CLAIRE	
29	437-B-1 MSD	1.0000	1.0000	1.0000	128	081312CLAIRE	
30	437-B-2	1.0000	1.0000	1.0000	129	081312CLAIRE	
31	CCV	1.0000	1.0000	1.0000	130	081312CLAIRE	
32	CCB	1.0000	1.0000	1.0000	131	081312CLAIRE	
33	437-B-3	1.0000	1.0000	1.0000	132	081312CLAIRE	
34	437-B-4	1.0000	1.0000	1.0000	133	081312CLAIRE	
35	437-B-5	1.0000	1.0000	1.0000	134	081312CLAIRE	
36	437-B-6	1.0000	1.0000	1.0000	135	081312CLAIRE	
37	437-B-7	1.0000	1.0000	1.0000	136	081312CLAIRE	
38	437-B-8	1.0000	1.0000	1.0000	137	081312CLAIRE	
39	437-B-9	1.0000	1.0000	1.0000	138	081312CLAIRE	
40	442-B-1	1.0000	1.0000	1.0000	139	081312CLAIRE	
41	442-B-2	1.0000	1.0000	1.0000	140	081312CLAIRE	
42	442-B-2 MS	1.0000	1.0000	1.0000	141	081312CLAIRE	

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 51
Created: 8/13/2012 6:31:15 PM by boydj
Last Update: 8/14/2012 10:37:15 AM by boydj

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	CCV	Unknown	43	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 4:30:25 AM
44	CCB	Unknown	44	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 4:43:49 AM
45	442-B-3	Unknown	45	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 4:57:14 AM
46	442-B-4	Unknown	46	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 5:10:39 AM
47	442-B-5	Unknown	47	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 5:24:03 AM
48	442-B-6	Unknown	48	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 5:37:28 AM
49	CCV	Unknown	49	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 5:50:52 AM
50	CCB	Unknown	50	50.0	Claire_Routine	STLANIONS	Finished	8/14/2012 6:04:17 AM
51	END	Unknown	51	50.0	Claire_Shutdown	STLANIONS	Finished	8/14/2012 6:17:41 AM

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 51
Created: 8/13/2012 6:31:15 PM by boydj
Last Update: 8/14/2012 10:37:15 AM by boydj

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	CCV	1.0000	1.0000	1.0000	142	081312CLAIRE	
44	CCB	1.0000	1.0000	1.0000	143	081312CLAIRE	
45	442-B-3	1.0000	1.0000	1.0000	144	081312CLAIRE	
46	442-B-4	1.0000	1.0000	1.0000	145	081312CLAIRE	
47	442-B-5	1.0000	1.0000	1.0000	146	081312CLAIRE	
48	442-B-6	1.0000	1.0000	1.0000	147	081312CLAIRE	
49	CCV	1.0000	1.0000	1.0000	148	081312CLAIRE	
50	CCB	1.0000	1.0000	1.0000	149	081312CLAIRE	
51	END	1.0000	1.0000	1.0000	150	081312CLAIRE	

Title: STLANIONS
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG\081312CAL IODIDE.SEQ Created: 8/14/2008 4:24:54 PM by chemist
Timebase: CLAIRE Changed: 8/13/2012 8:01:35 PM by boydj

```
                Pressure.LowerLimit =               0
                Pressure.UpperLimit =               5000
                %A.Equate =                         "%A"
;               %B.Equate =                         "%B"
;               %C.Equate =                         "%C"
;               %D.Equate =                         "%D"
                LoadPosition
                Data_Collection_Rate =              2.0
;               Temperature_Compensation =          1.7
                ColumnTemperature =                 35.0 [°C]
                Suppressor_Type =                   ASRS_4mm
                ; Carbonate =                       0.0
                ; Bicarbonate =                     0.0
                ; Hydroxide =                       35.0
                ; Tetraborate =                     0.0
                ; Other eluent =                    0.0
                ; Recommended Current =             149
                Suppressor_Current =                149
                Flow =                              0.8
;               %B =                                0.0
;               %C =                                0.0
;               %D =                                0.0
;               Curve =                             5

-2.300          Pump_ECD_Relay_1.Closed             Duration=1.00

 0.000          Autozero
                ECD_1.AcqOn
                ECD_Total.AcqOn
                Channel_Pressure.AcqOn
                Pump_InjectValve.InjectPosition     Duration=30.00

11.0            ECD_1.AcqOff
                ECD_Total.AcqOff
                Channel_Pressure.AcqOff

                End
```

Chromeleon © Dionex Corporation, Version 6.80 Build 2212

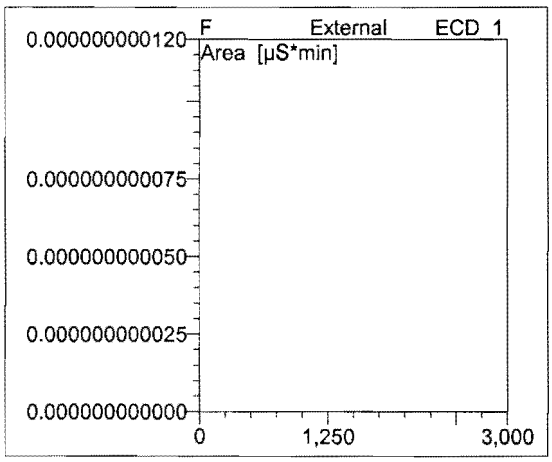
Title: STLANIONS
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG\081312CAL IODIDE.SEQ
Timebase: CLAIRE

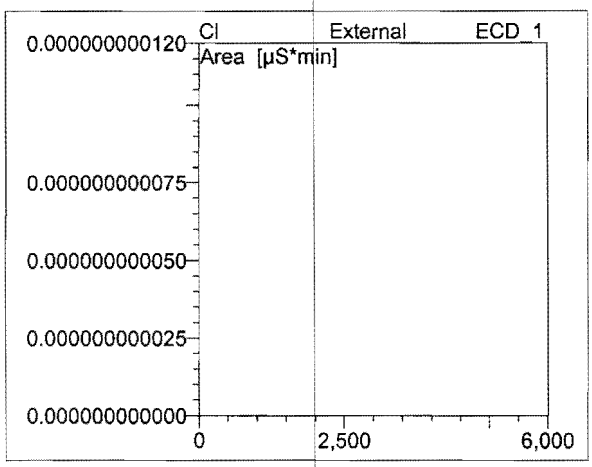
Created: 8/14/2008 4:24:54 PM by chemist
Changed: 8/13/2012 8:01:35 PM by boydj

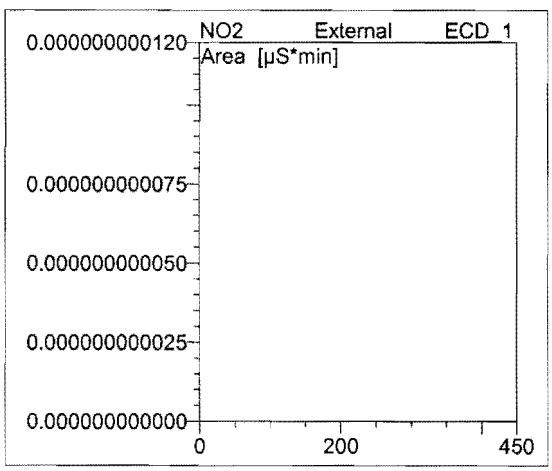
No.	Channel	Operation	Parameters

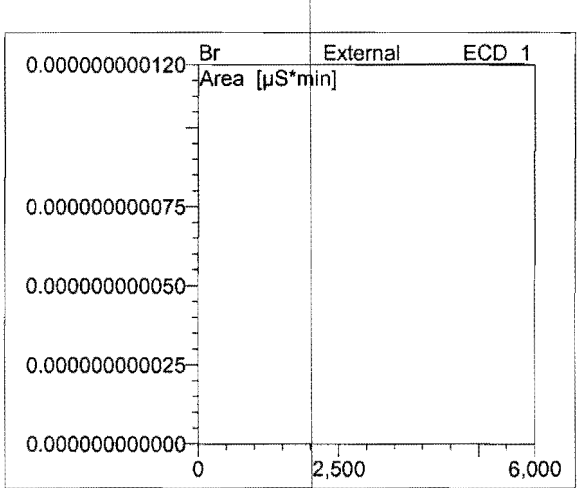
Calibration Batch Report - ECD_1

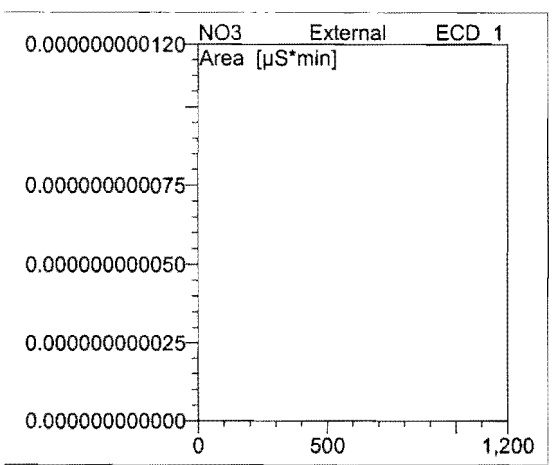
Sequence:	**081312CAL IODIDE**	Inj. Vol.:	**50.0**
Program:	**Claire_Routine**	Operator:	**SLIC03**
Inj. Date/Time	**08/13/12 20:14**	Run Time:	**11.00**

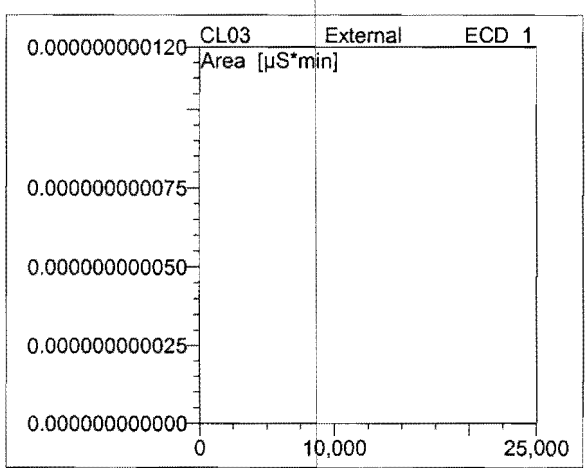


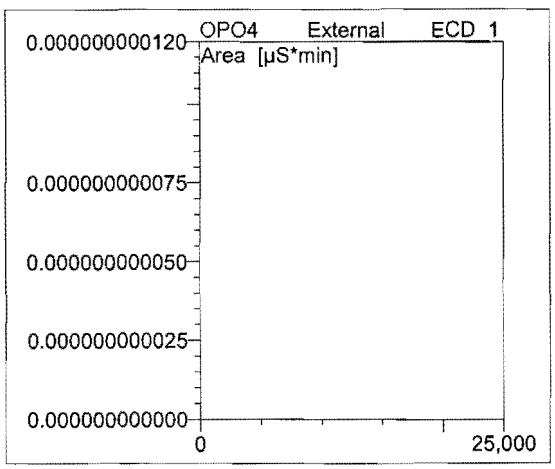


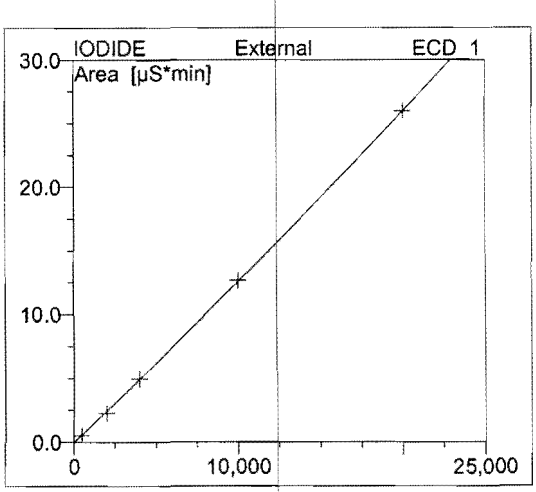












✓

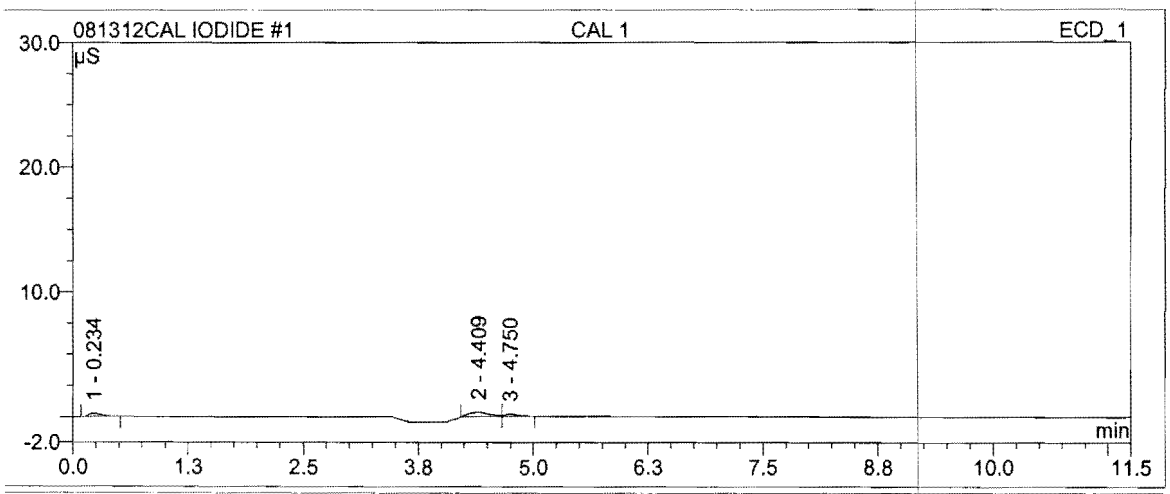
No.	Peak Name	Cal.Type	Corr.Coeff. %
4	IODIDE	Quad	99.994 ✓

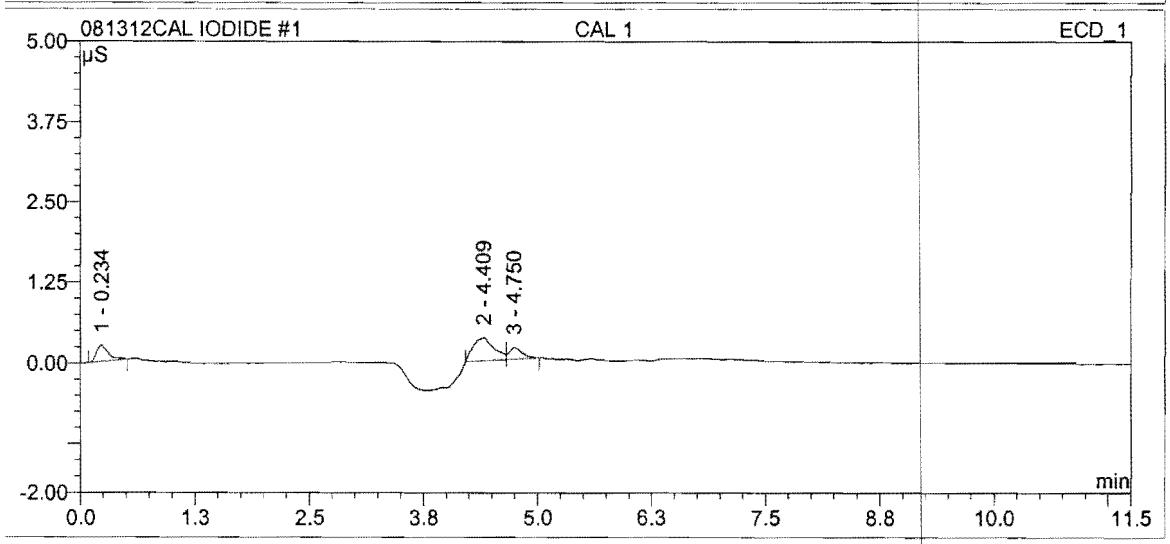
JB
8/14/12

Integration Report - ECD_1

Sample Name:	**CAL 1**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 19:04**	*Run Time:*	**11.50**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

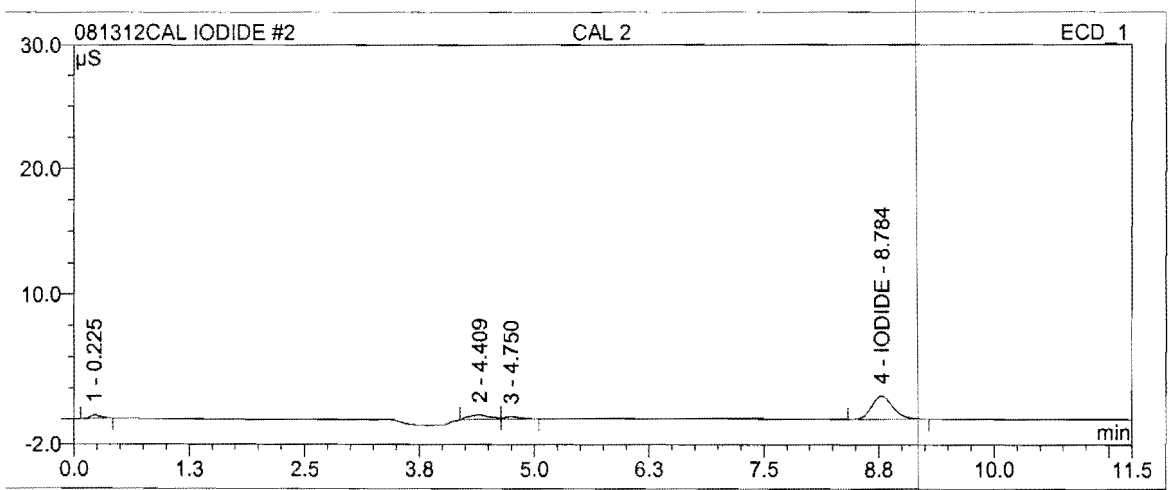


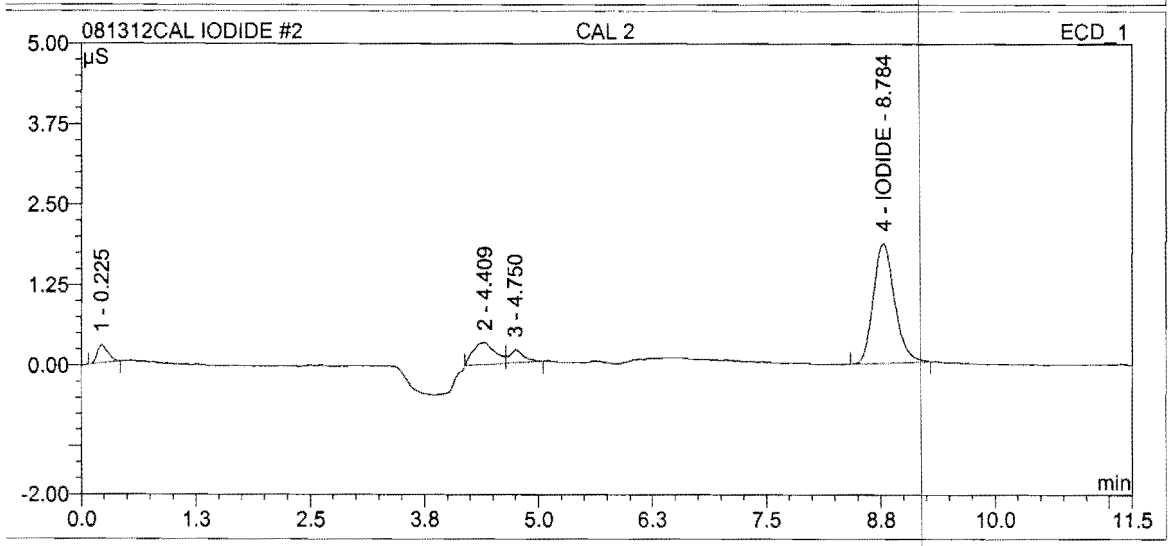


Integration Report - ECD_1

Sample Name:	**CAL 2**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 19:18**	*Run Time:*	**11.50**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.78	IODIDE	BMB	0.504	1.857	413.4689
		TOTAL:		0.50	1.86	413.47

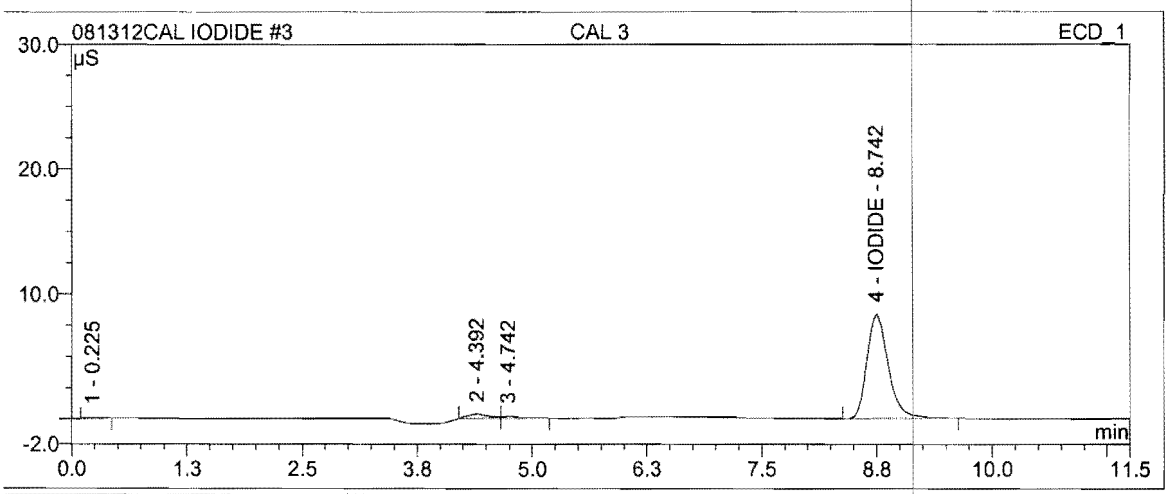


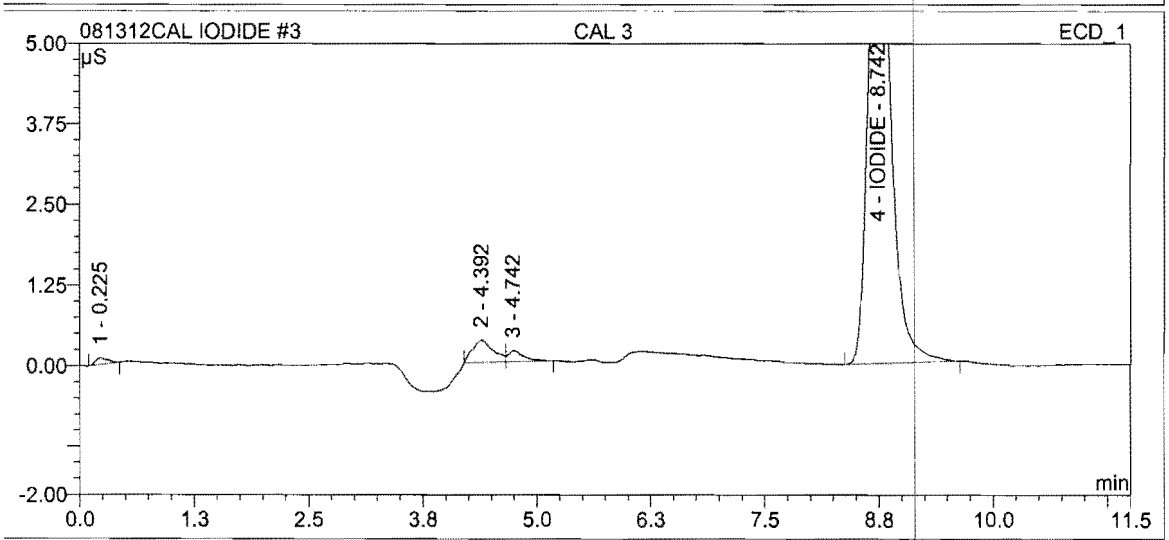


Integration Report - ECD_1

Sample Name:	**CAL 3**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 19:32**	*Run Time:*	**11.50**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.74	IODIDE	BMB	2.251	8.347	1839.1688
		TOTAL:		2.25	8.35	1839.17

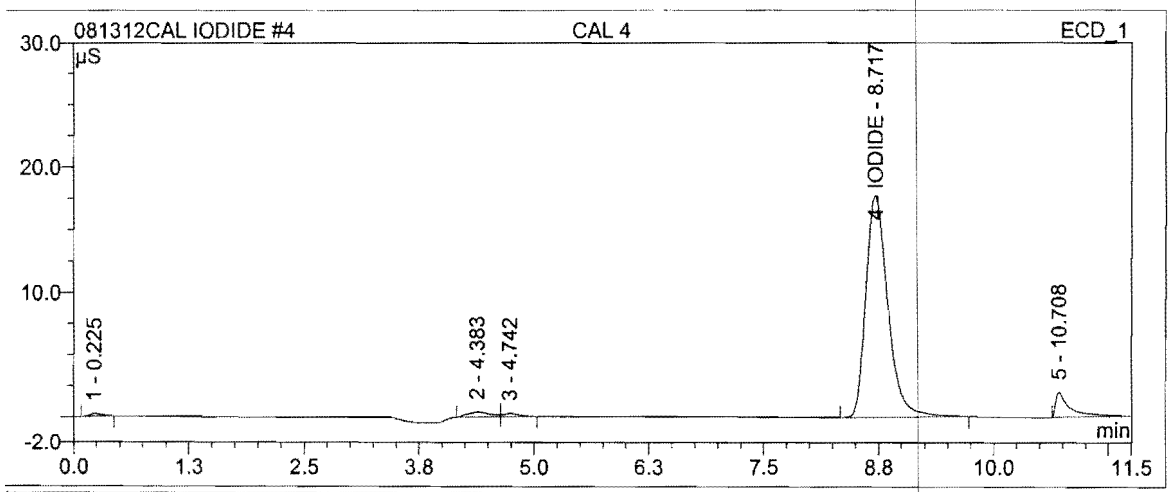


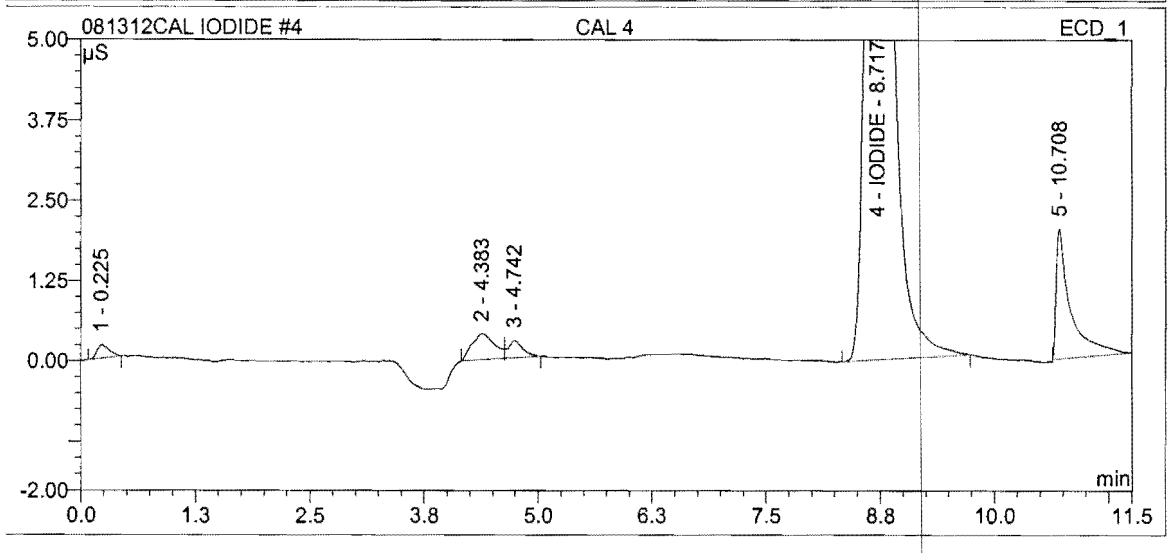


Integration Report - ECD_1

Sample Name:	**CAL 4**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 19:46**	*Run Time:*	**11.50**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.72	IODIDE	BMB	4.934	17.708	4001.8147
		TOTAL:		4.93	17.71	4001.81

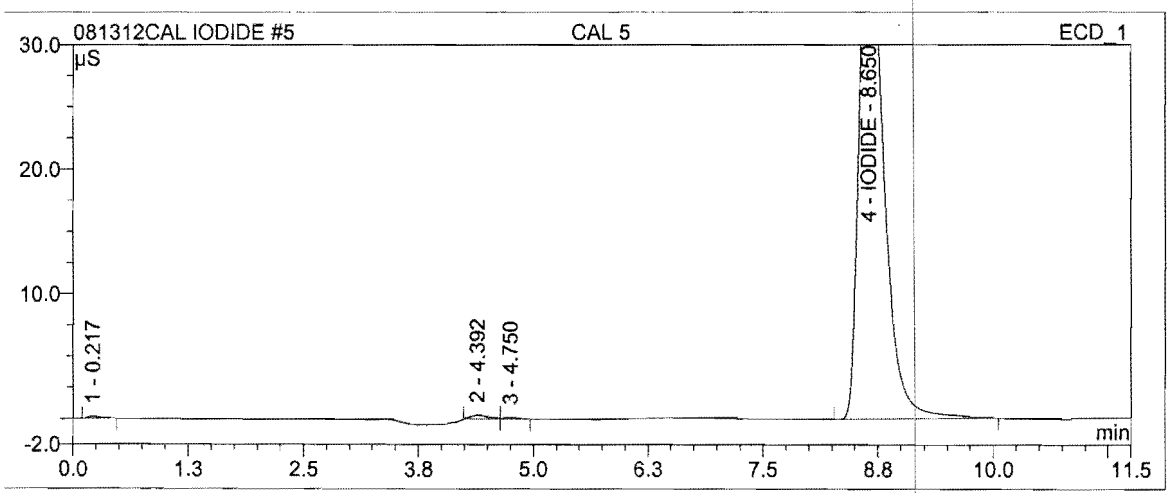


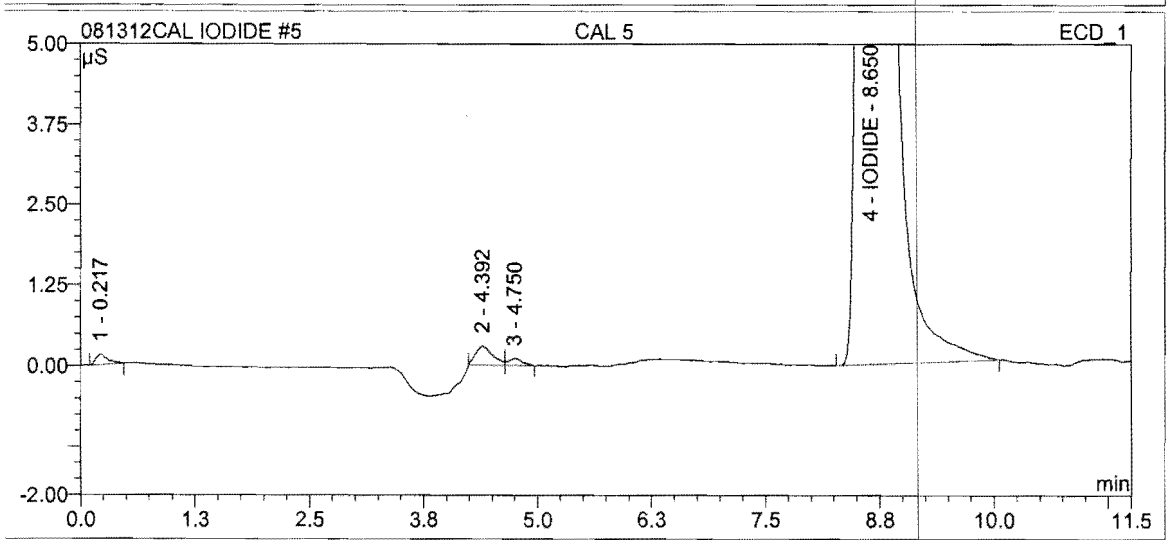


Integration Report - ECD_1

Sample Name:	**CAL 5**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 20:00**	*Run Time:*	**11.50**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.65	IODIDE	BMB	12.656	43.004	10061.7283
		TOTAL:		12.66	43.00	10061.73

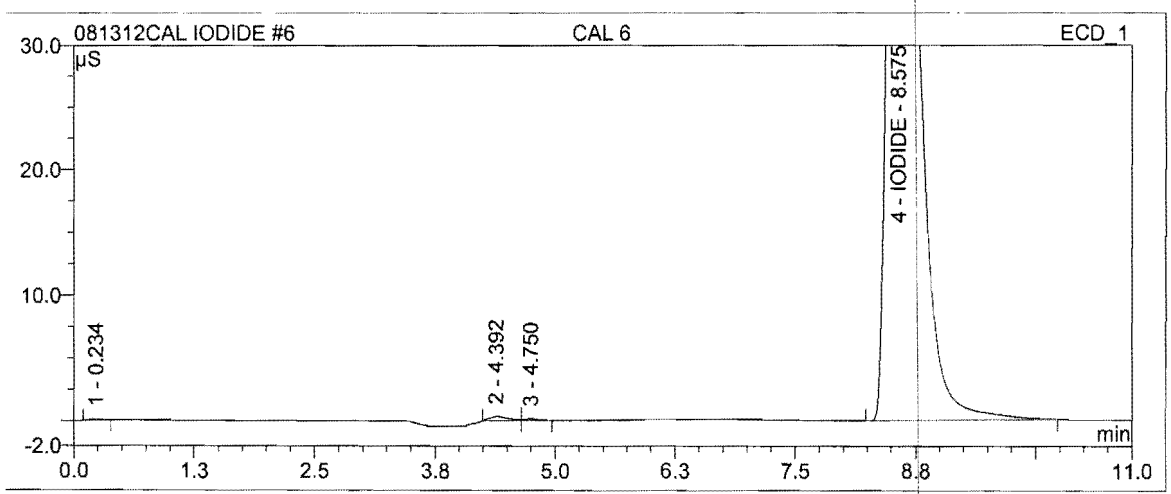


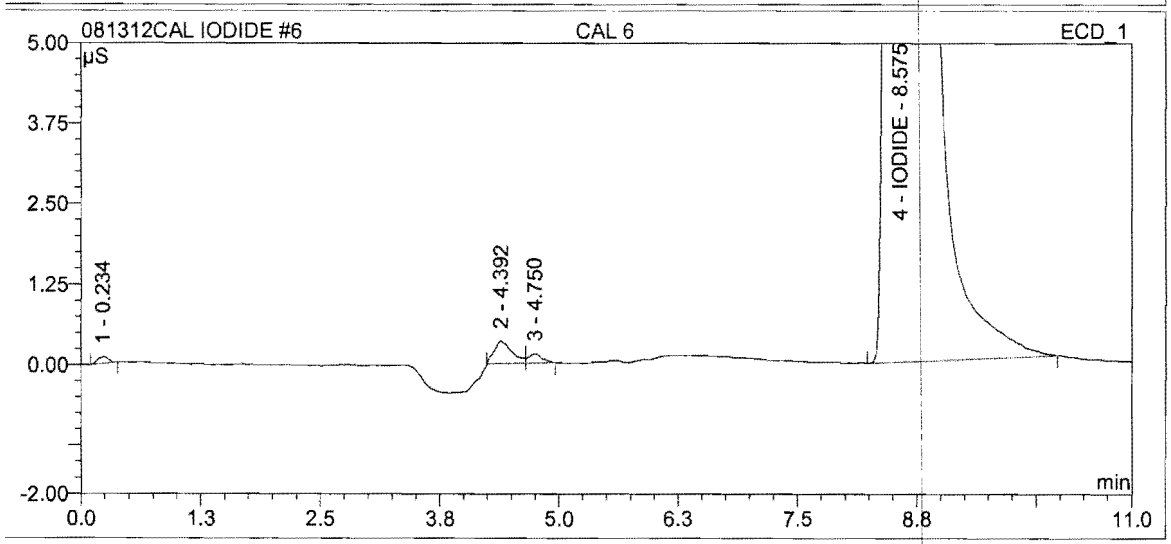


Integration Report - ECD_1

Sample Name:	**CAL 6**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 20:14**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.58	IODIDE	BMB	25.957	80.513	19986.9021
		TOTAL:		25.96	80.51	19986.90

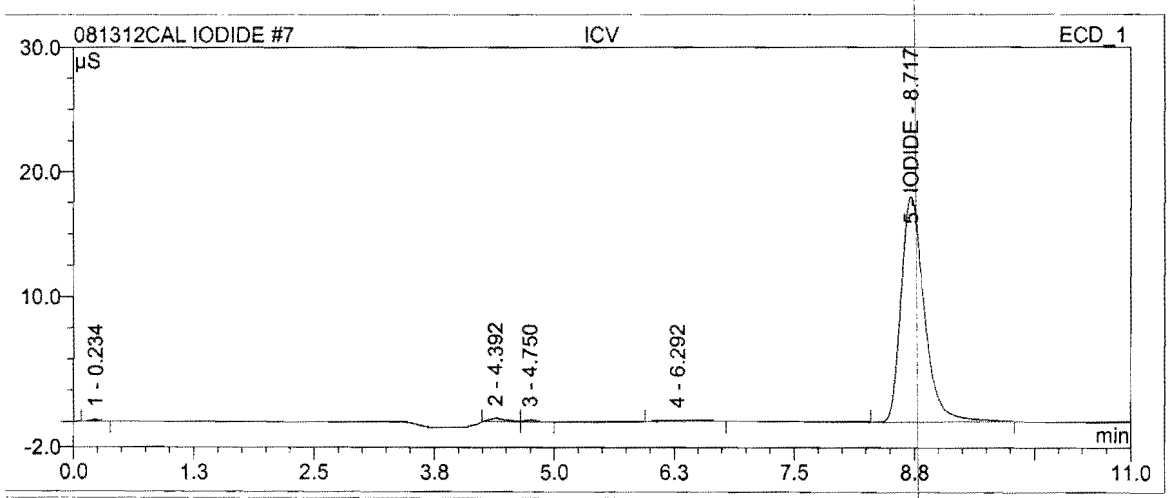


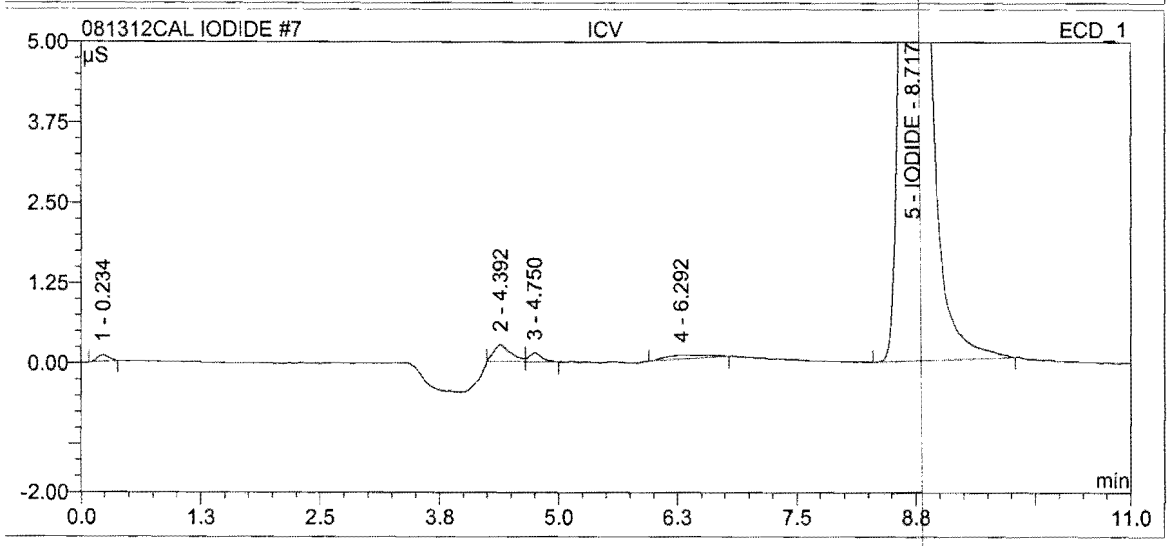


Integration Report - ECD_1

Sample Name:	**ICV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 20:27**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.72	IODIDE	BMB	5.008	17.967	4061.1624
		TOTAL:		5.01	17.97	4061.16

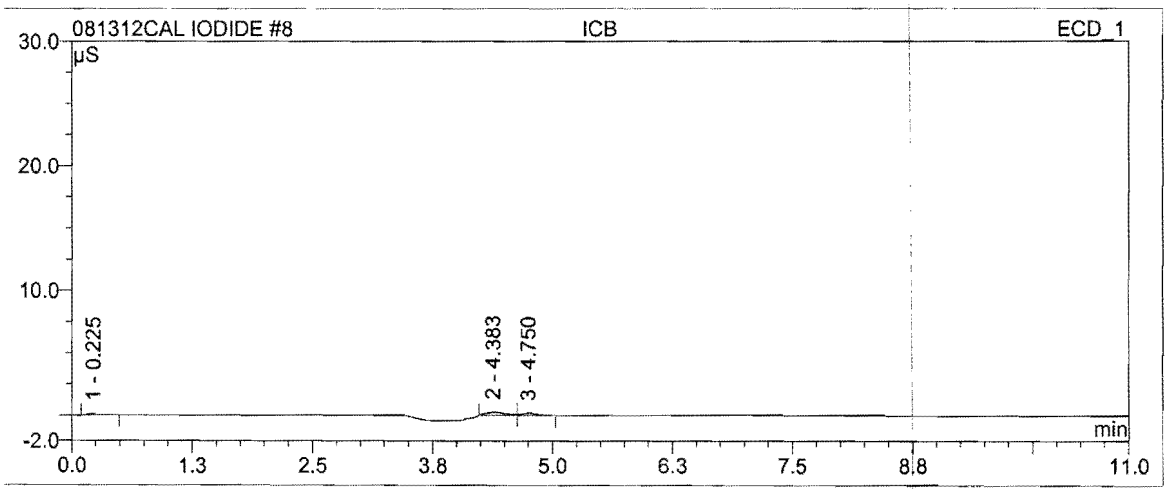


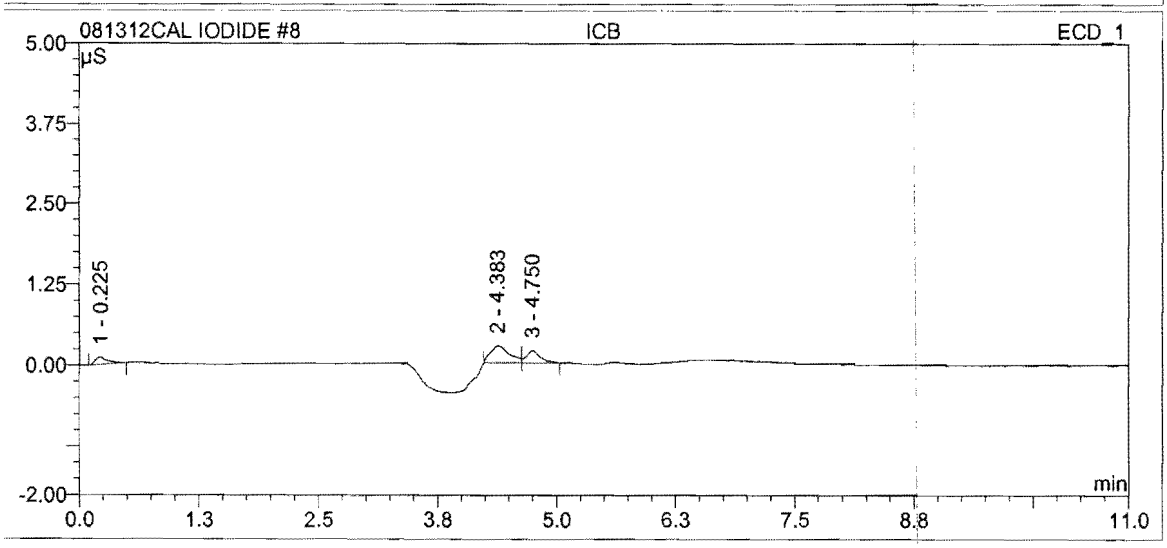


Integration Report - ECD_1

Sample Name:	**ICB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 20:41**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

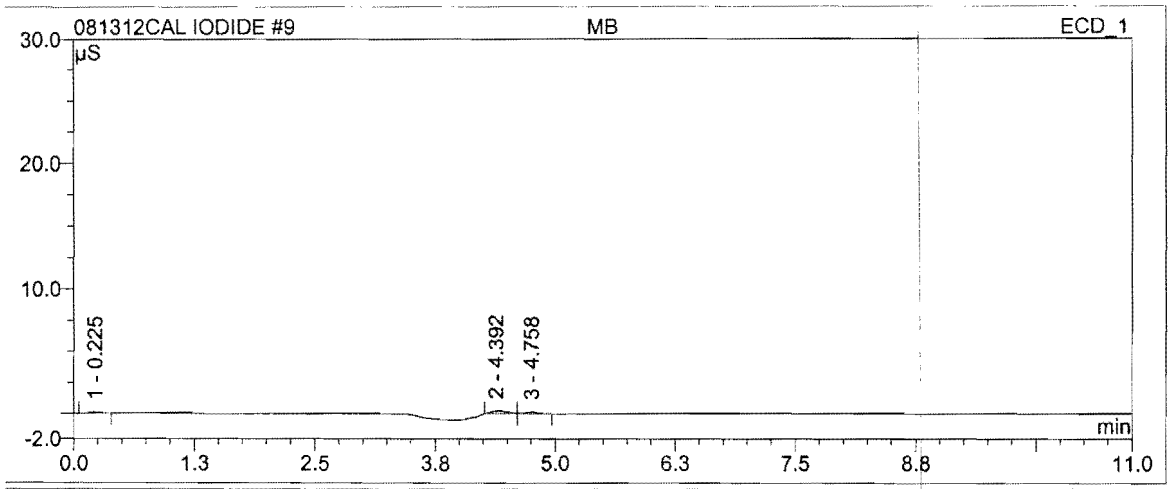


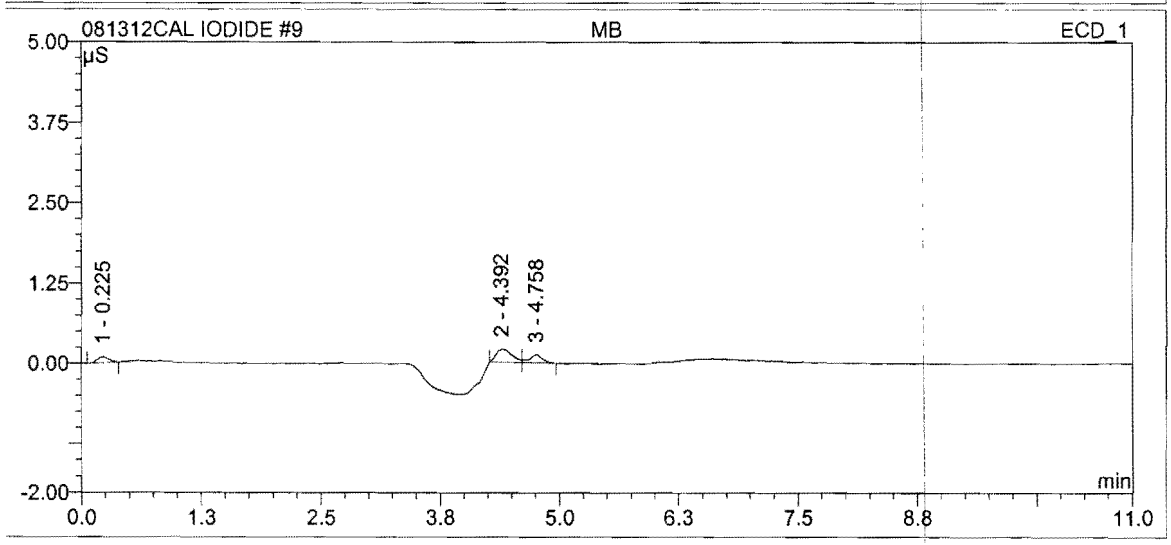


Integration Report - ECD_1

Sample Name:	**MB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 20:54**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

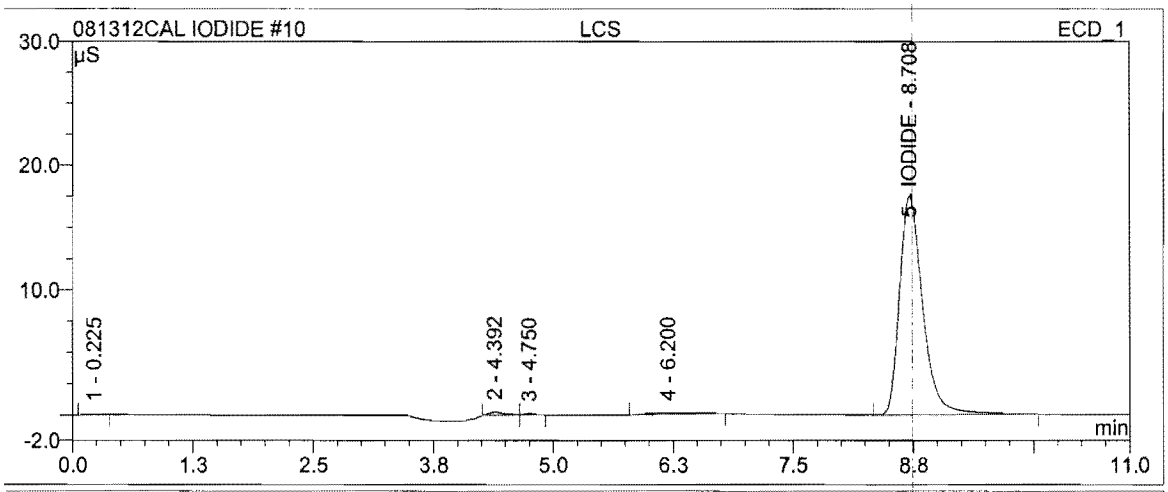


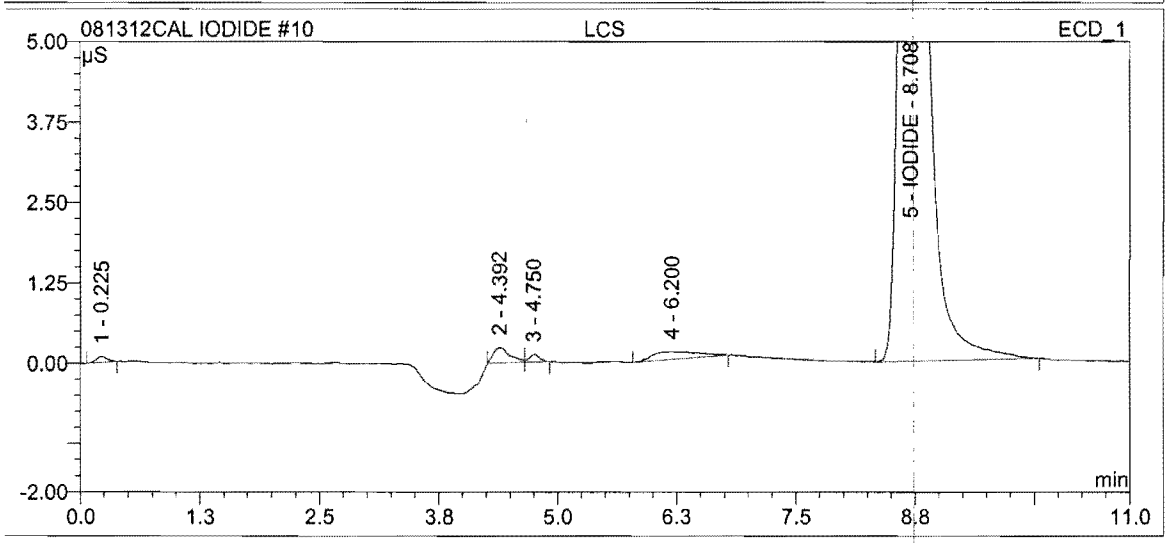


Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:07**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.71	IODIDE	BMB	4.906	17.491	3979.5344
		TOTAL:		4.91	17.49	3979.53





Integration Report - ECD_1

Sample Name:	**420-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:21**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.84	IODIDE	MB	2.332	3.510	1905.1610
		TOTAL:		2.33	3.51	1905.16

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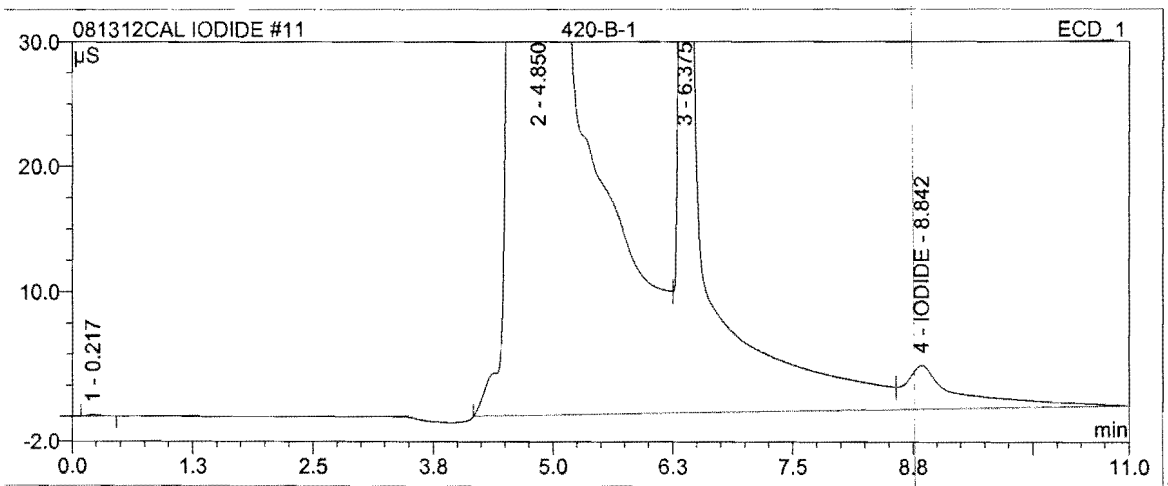
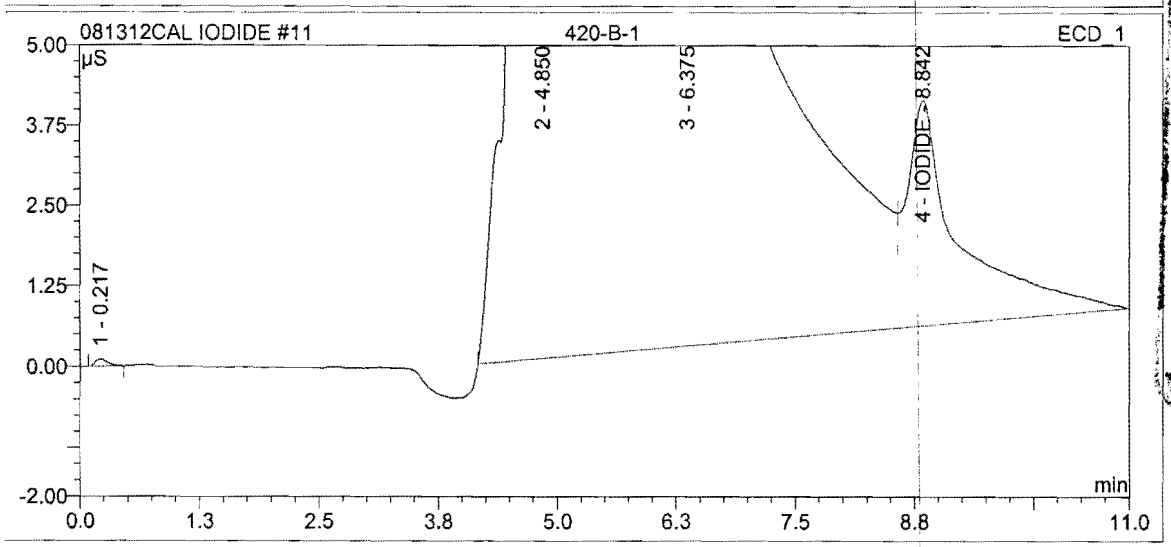


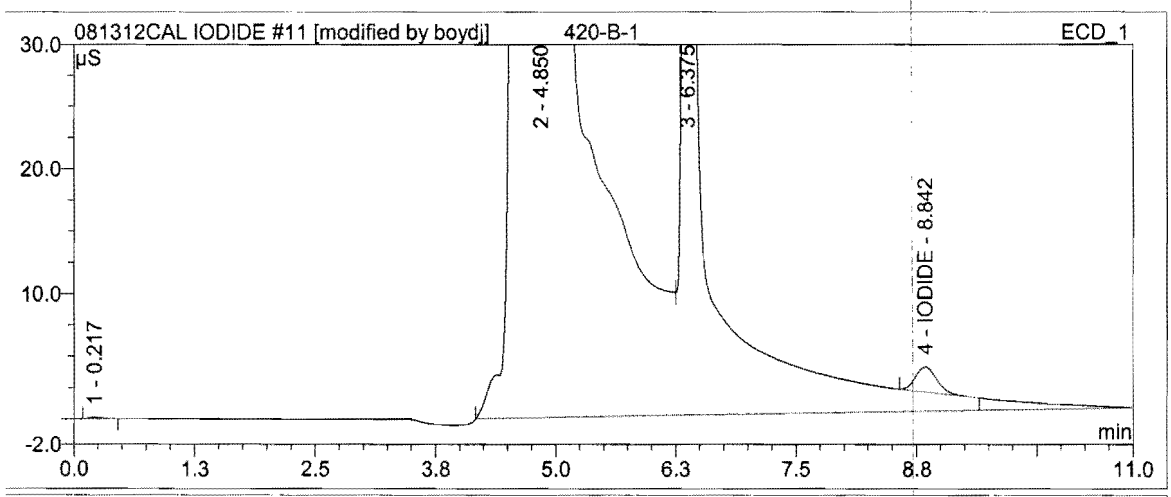


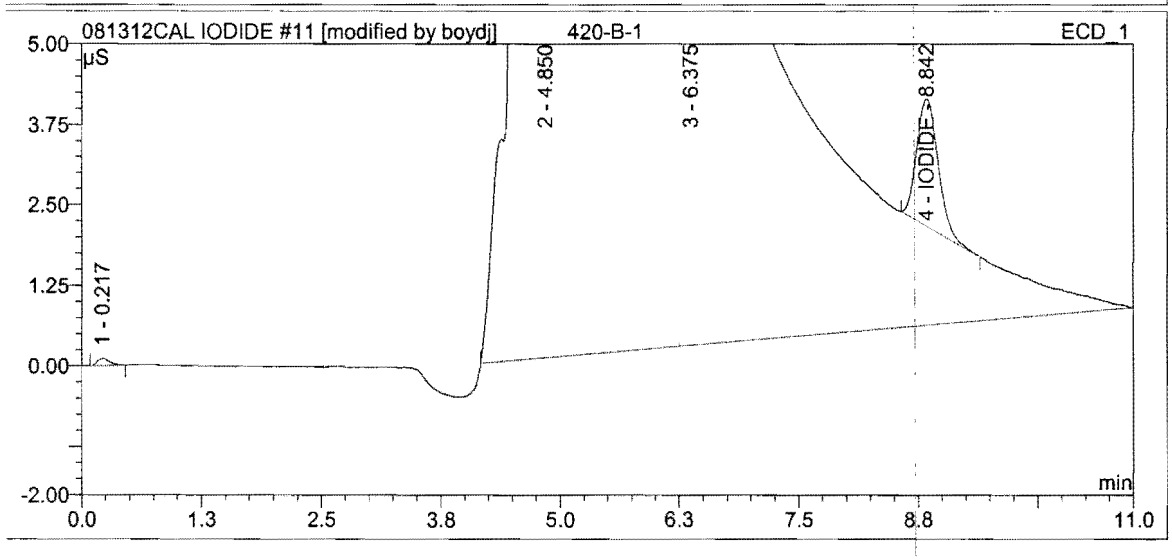
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Error
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**420-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:21**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.84	IODIDE	Rd*	0.515	1.982	423.0650
		TOTAL:		0.52	1.98	423.06

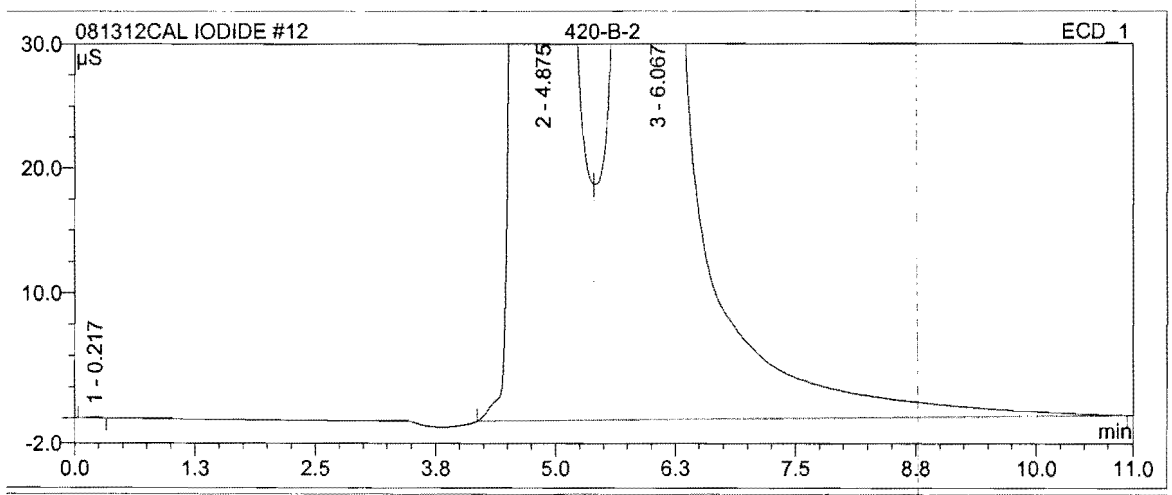


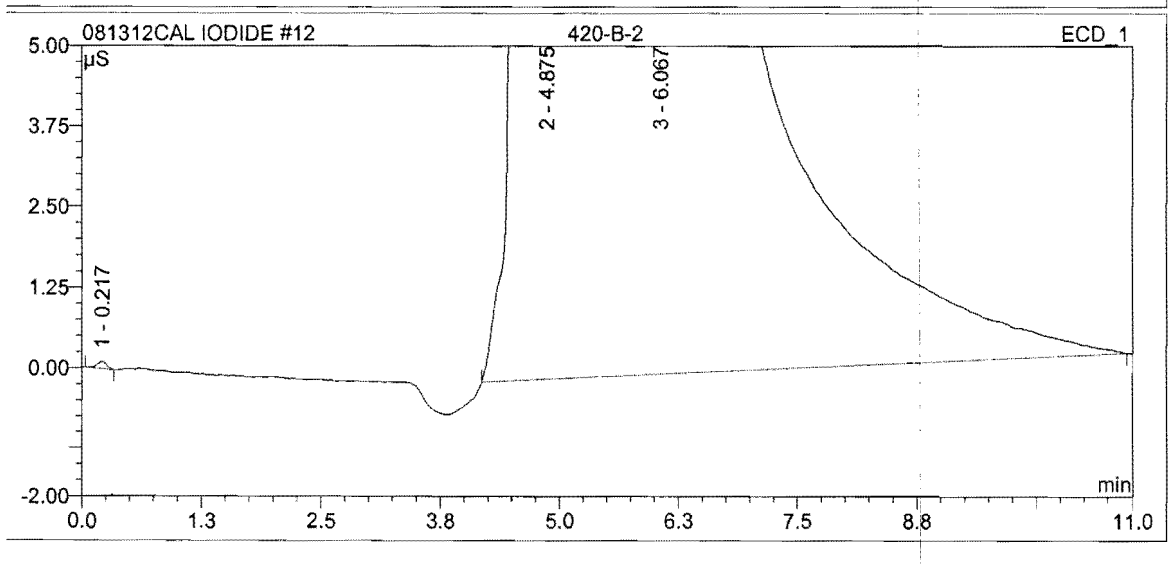


Integration Report - ECD_1

Sample Name:	**420-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:34**	*Run Time:*	**11.01**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**420-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:48**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.82	IODIDE	MB	2.486	2.646	2030.1678
		TOTAL:		2.49	2.65	2030.17

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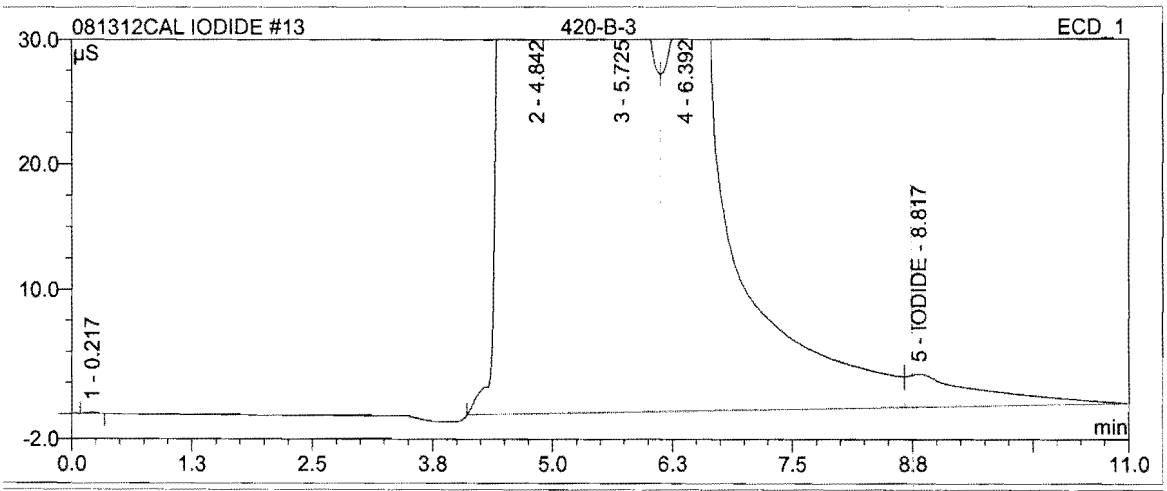
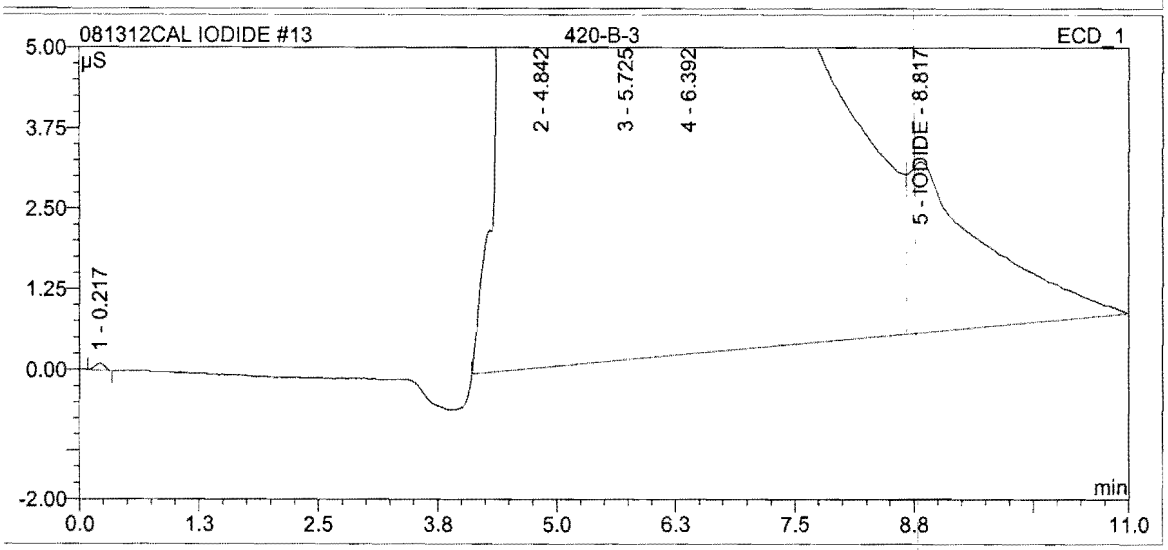


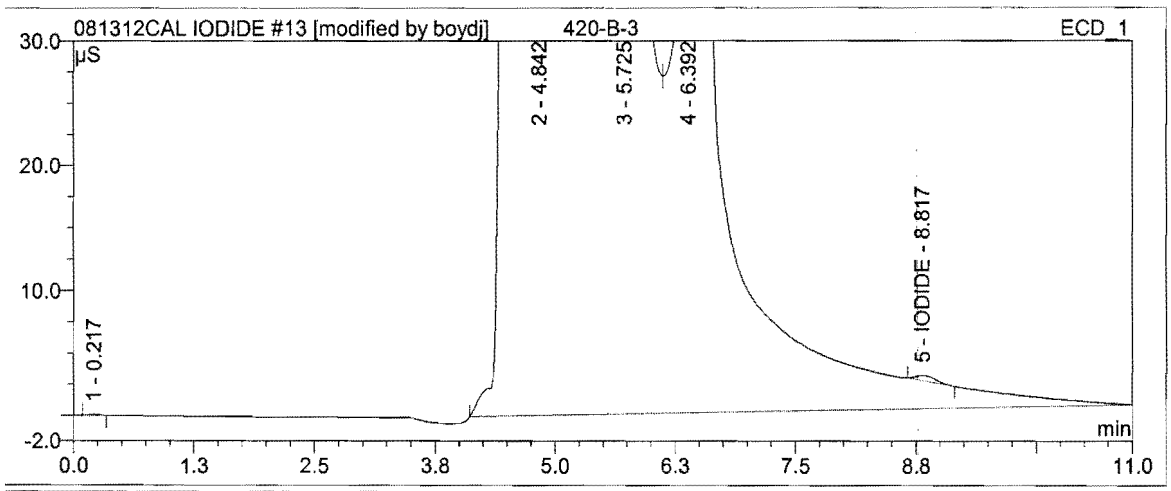


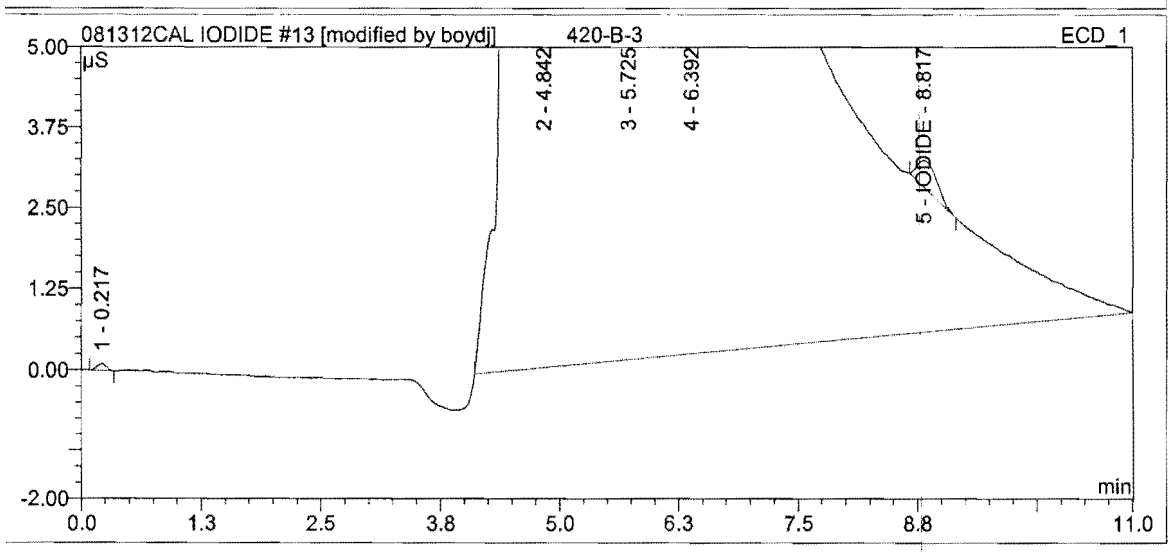
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -I = rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**420-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 21:48**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.82	IODIDE	Rd*	0.103	0.410	84.7937
		TOTAL:		0.10	0.41	84.79





Integration Report - ECD_1

Sample Name:	**420-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:01**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.78	IODIDE	MB	1.991	2.182	1628.0566
		TOTAL:		1.99	2.18	1628.06

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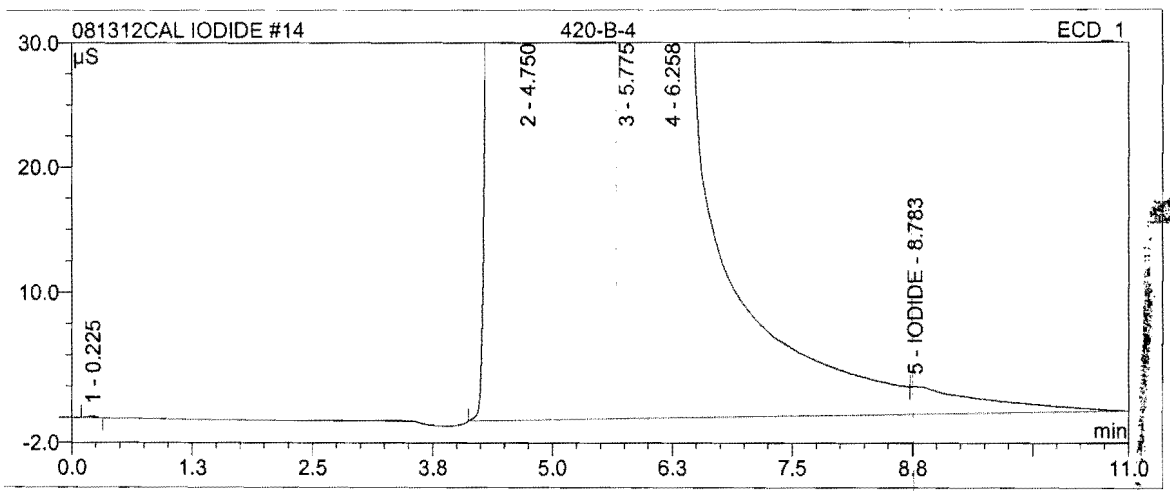
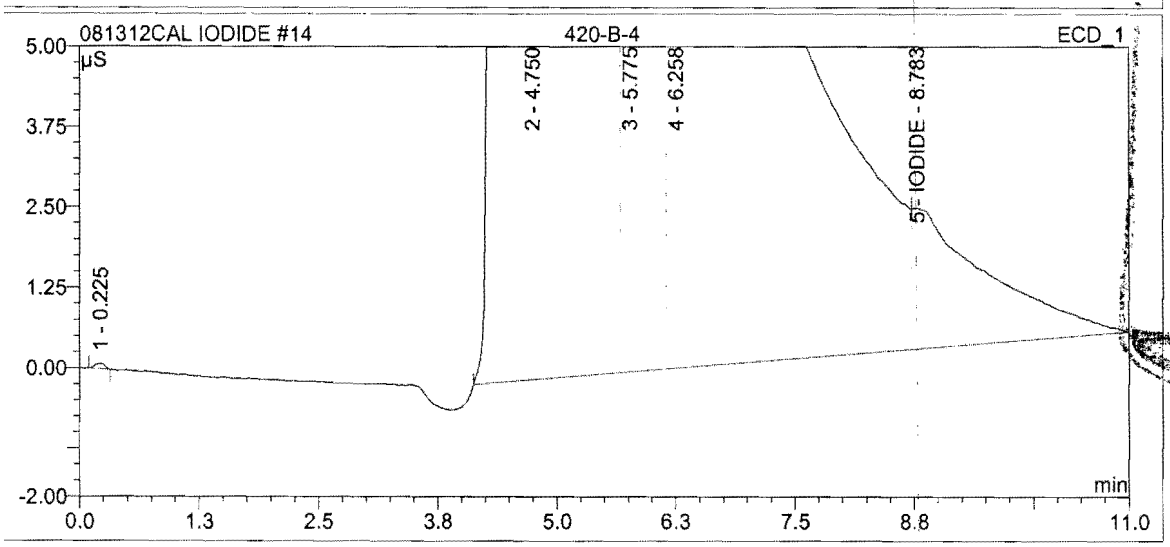


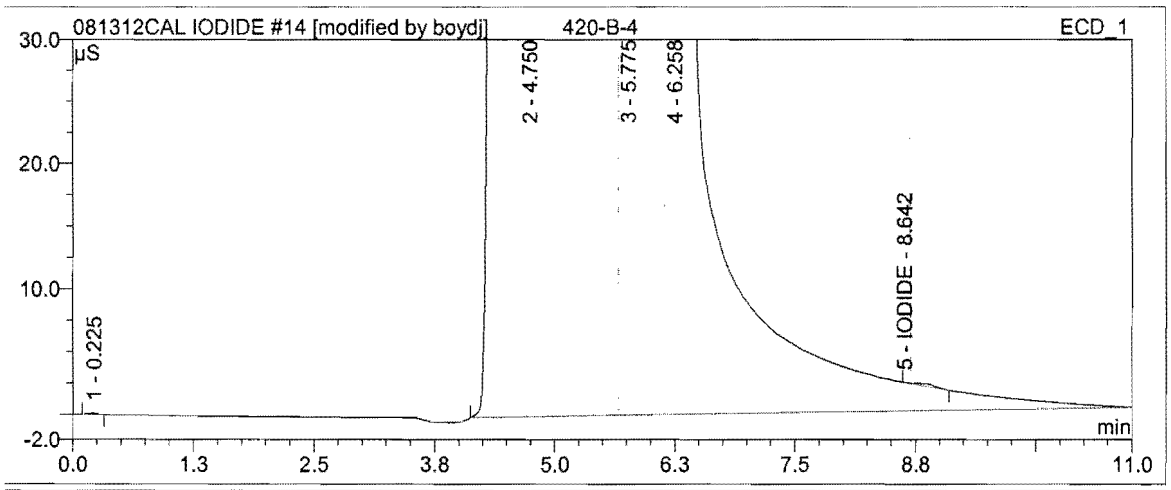


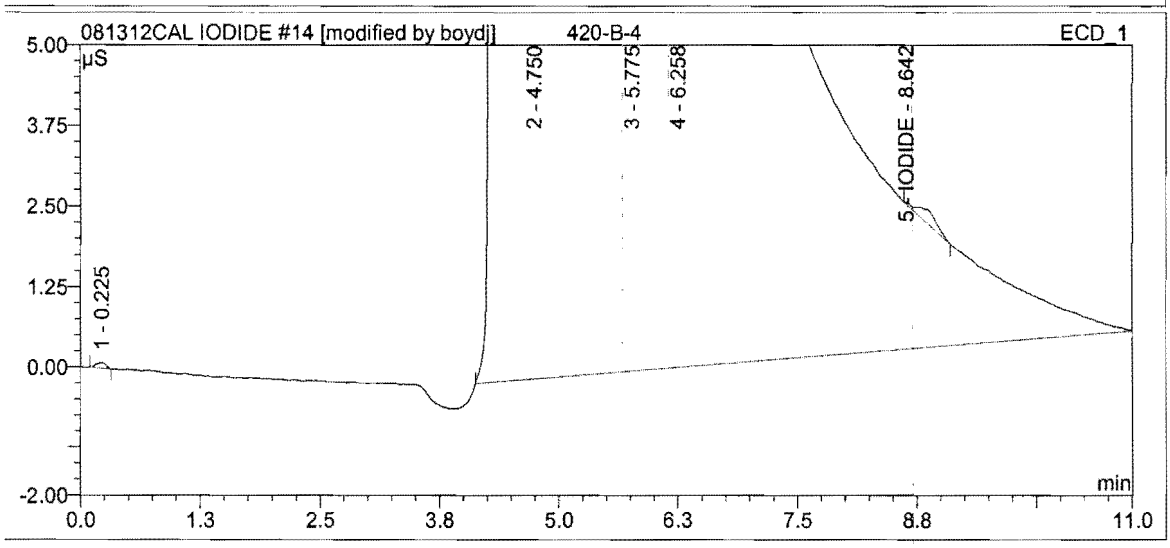
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -I=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**420-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:01**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.64	IODIDE	Rd*	0.050	0.033	40.7838
		TOTAL:		0.05	0.03	40.78





Integration Report - ECD_1

Sample Name:	**428-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:15**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.85	IODIDE	MB	3.418	5.623	2783.6738
		TOTAL:		3.42	5.62	2783.67

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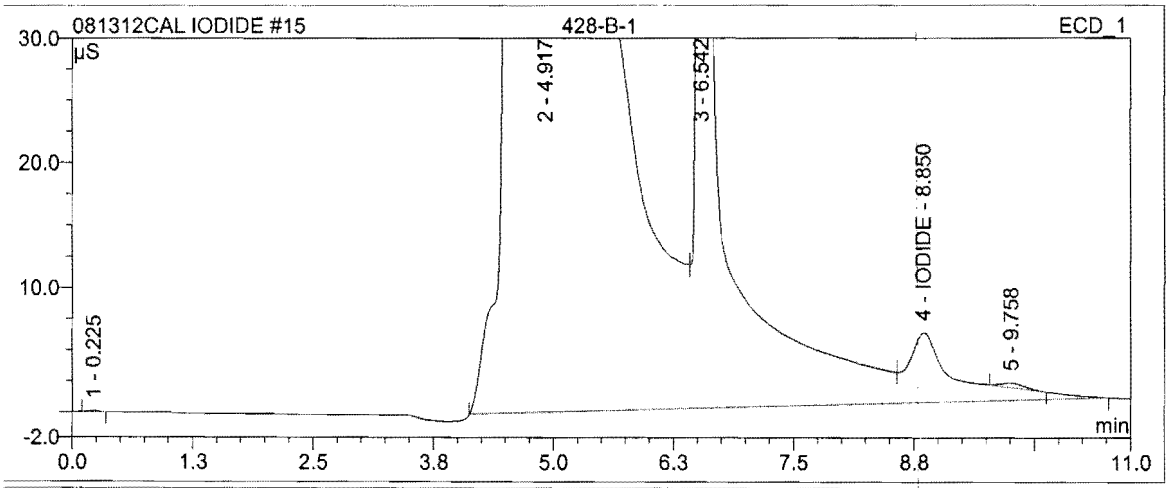
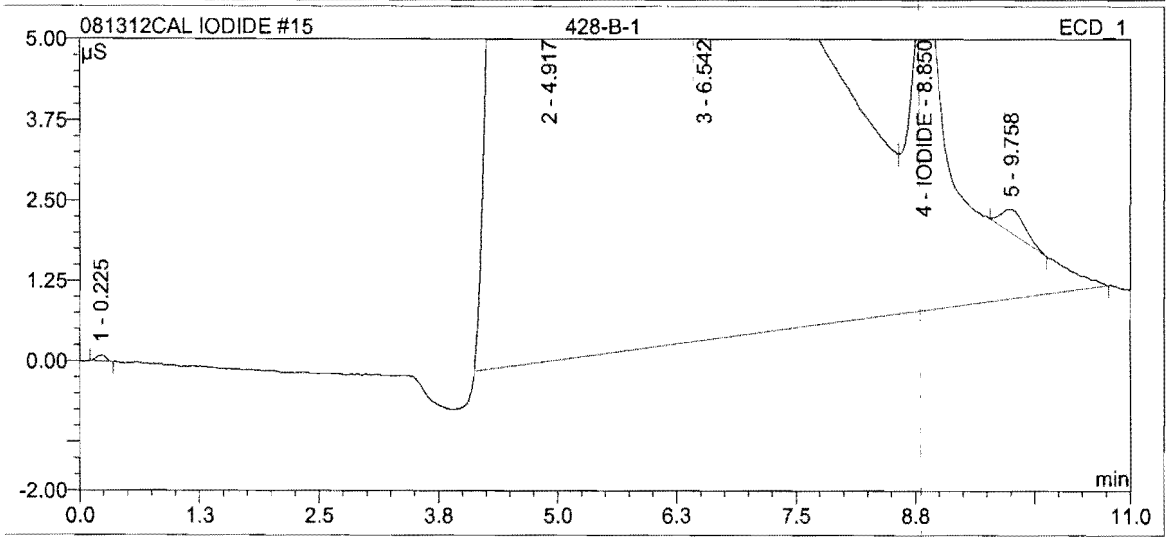


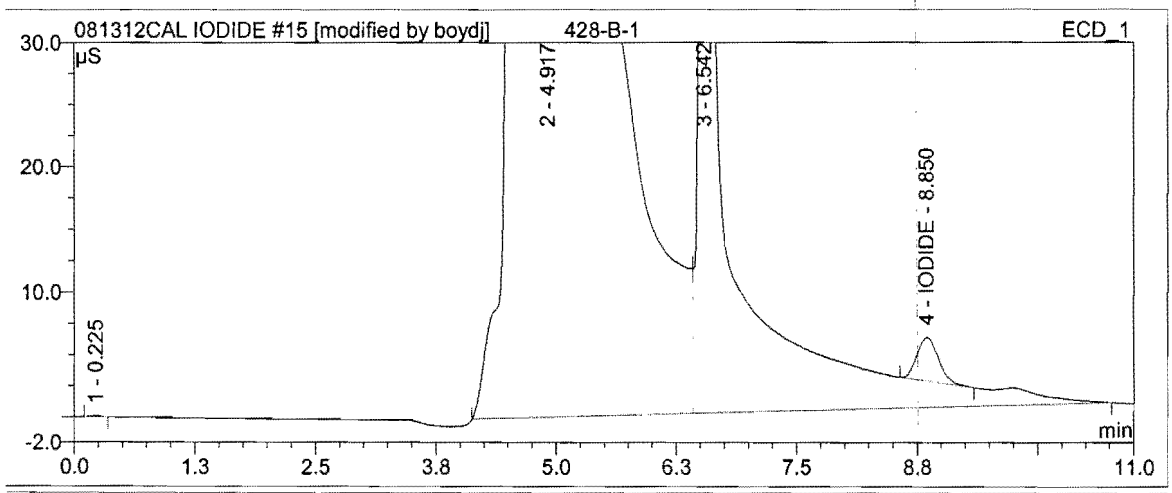


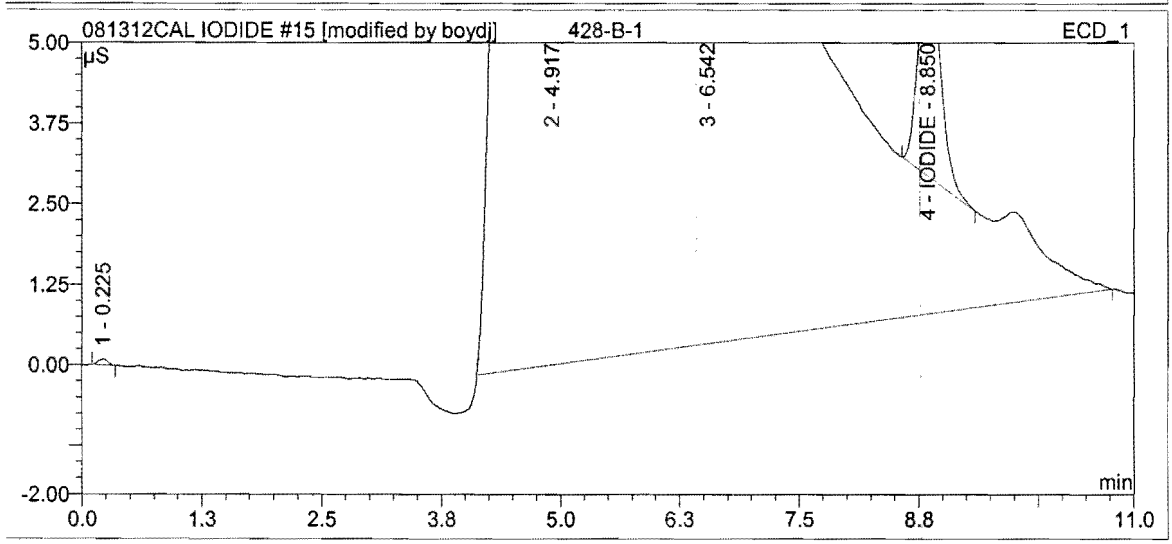
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing I=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**428-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:15**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.85	IODIDE	Rd*	0.907	3.497	743.8143
		TOTAL:		0.91	3.50	743.81





Integration Report - ECD_1

Sample Name:	**428-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:28**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.83	IODIDE	MB	0.662	1.522	543.0028
		TOTAL:		0.66	1.52	543.00

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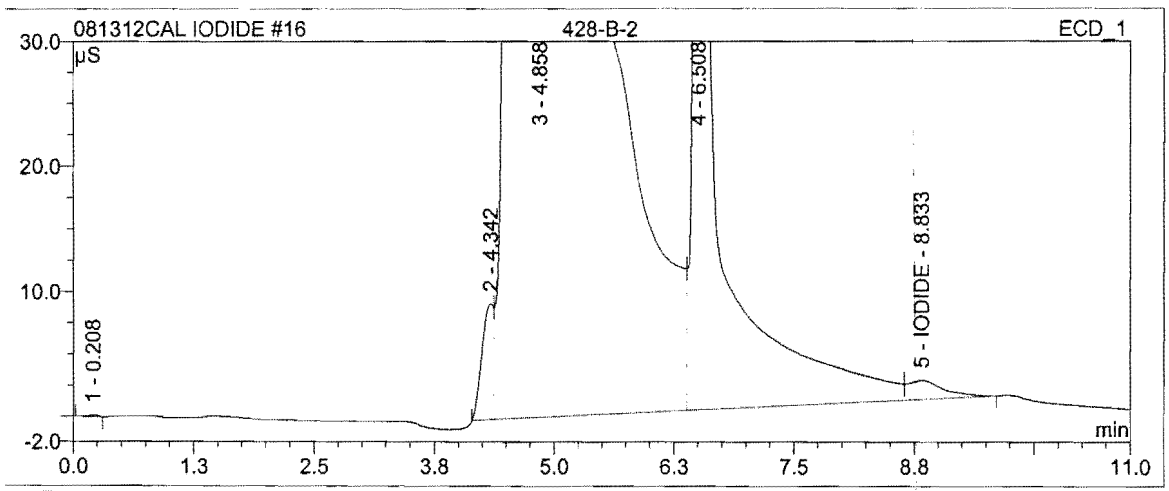
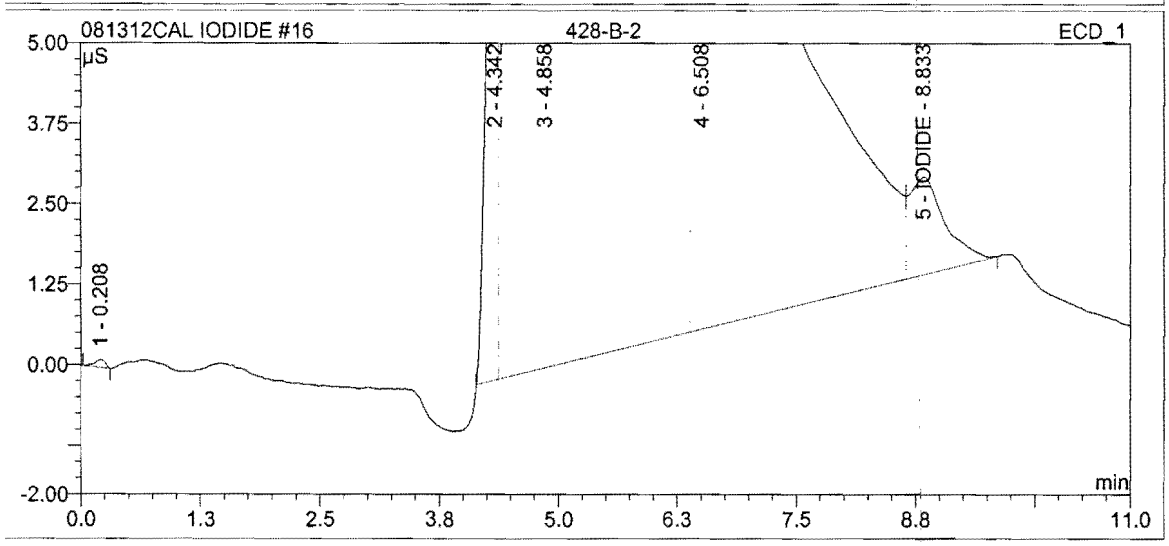
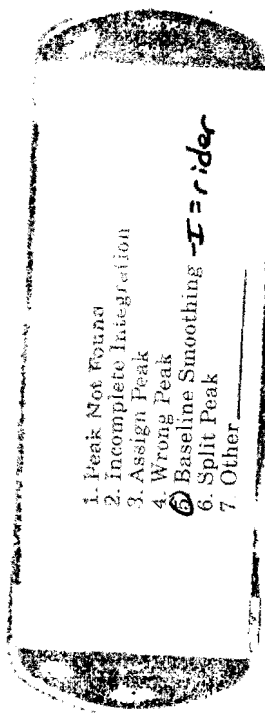


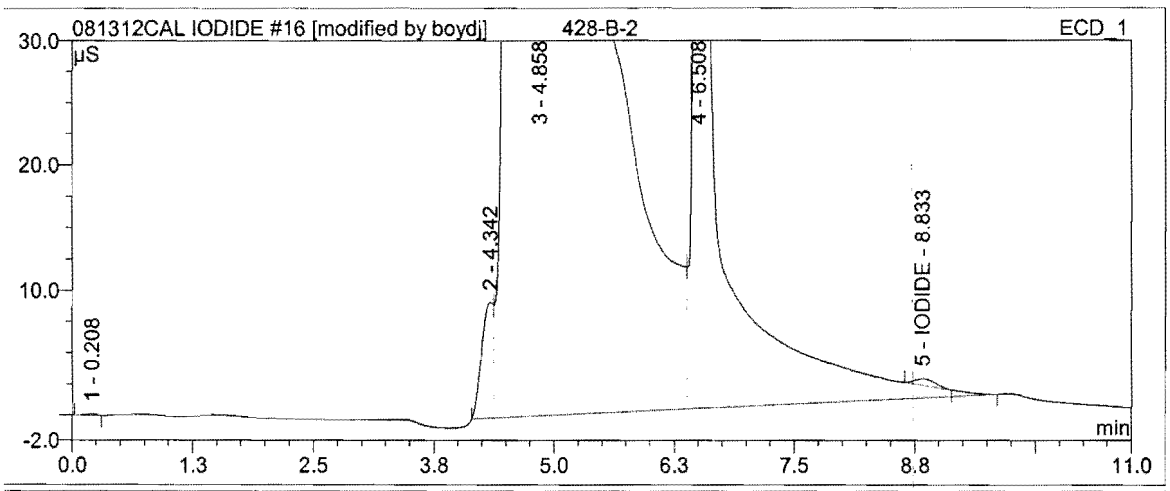


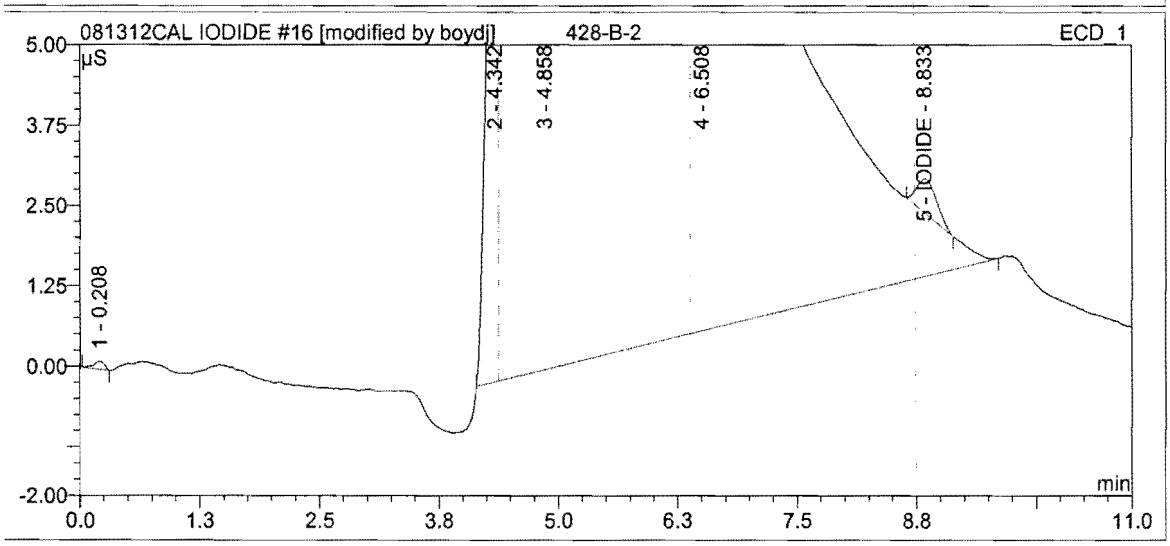


Integration Report - ECD_1

Sample Name:	**428-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:28**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.83	IODIDE	Rd*	0.132	0.527	108.4027
		TOTAL:		0.13	0.53	108.40

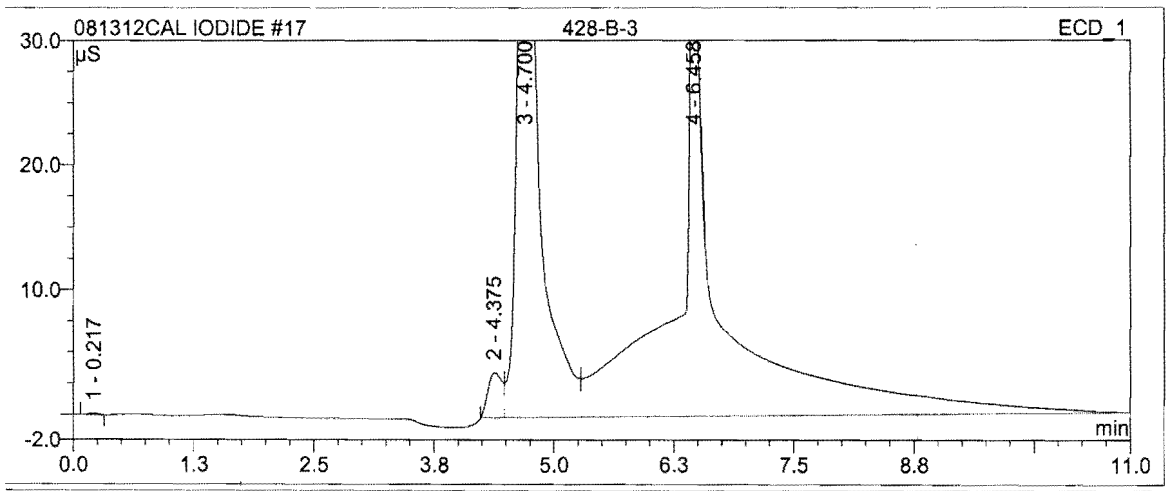


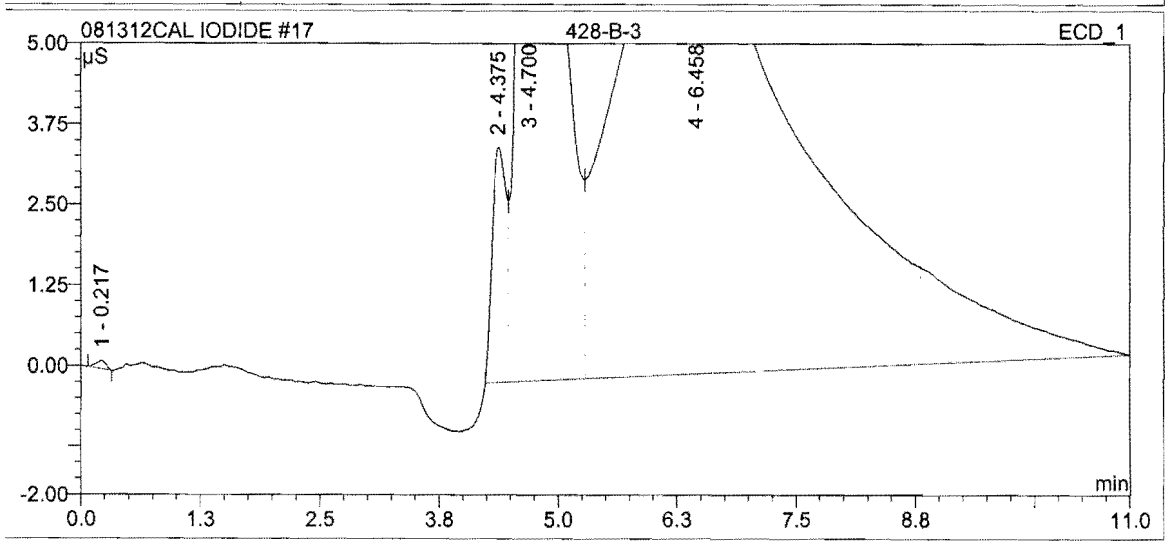


Integration Report - ECD_1

Sample Name:	**428-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:41**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

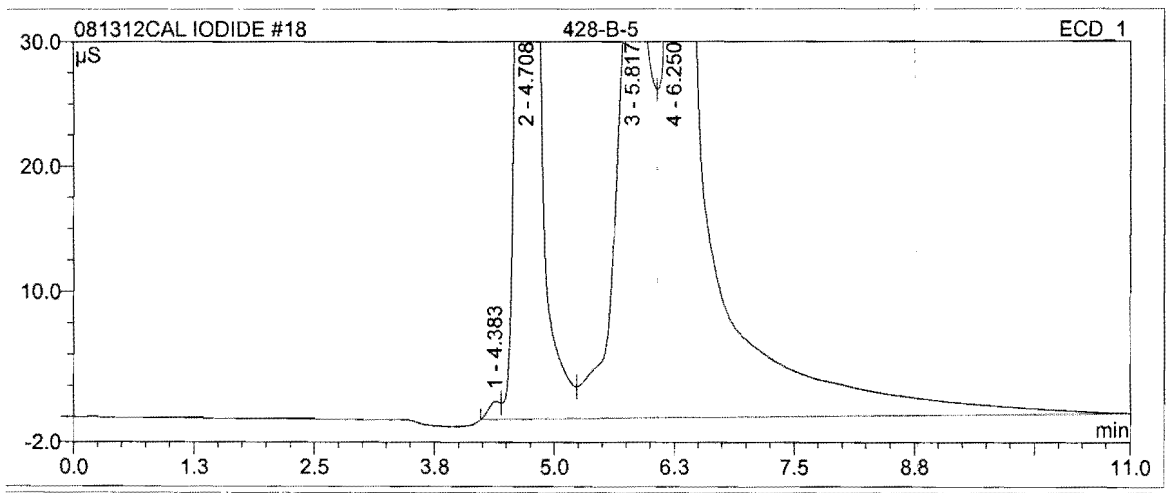


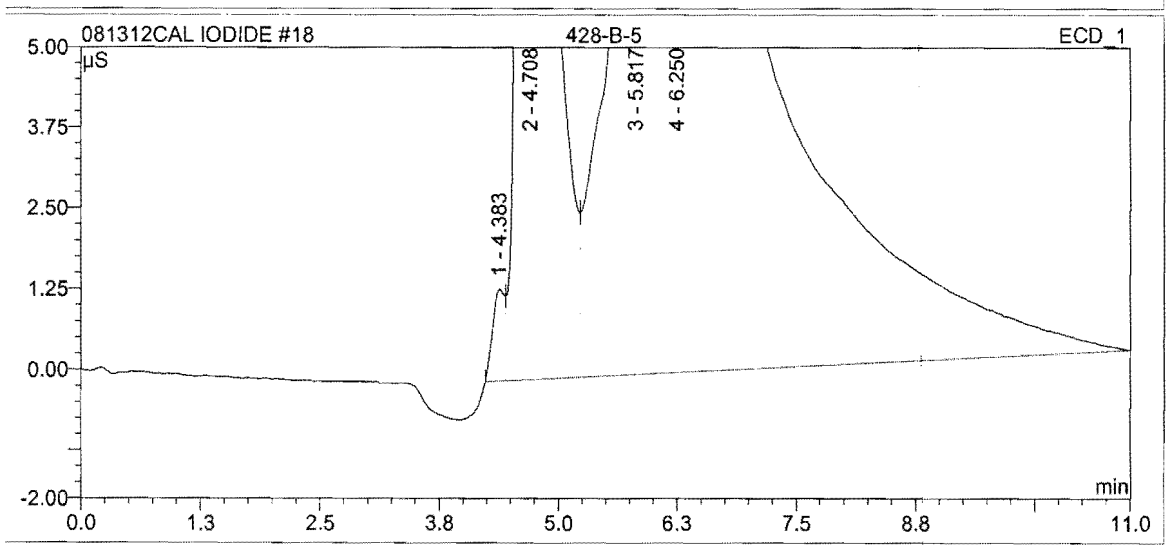


Integration Report - ECD_1

Sample Name:	**428-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 22:55**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

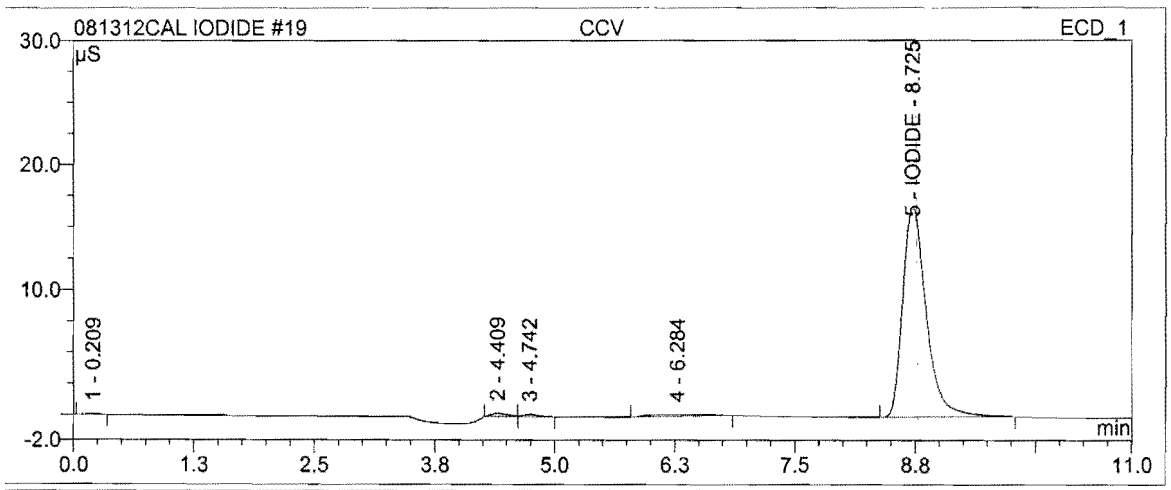


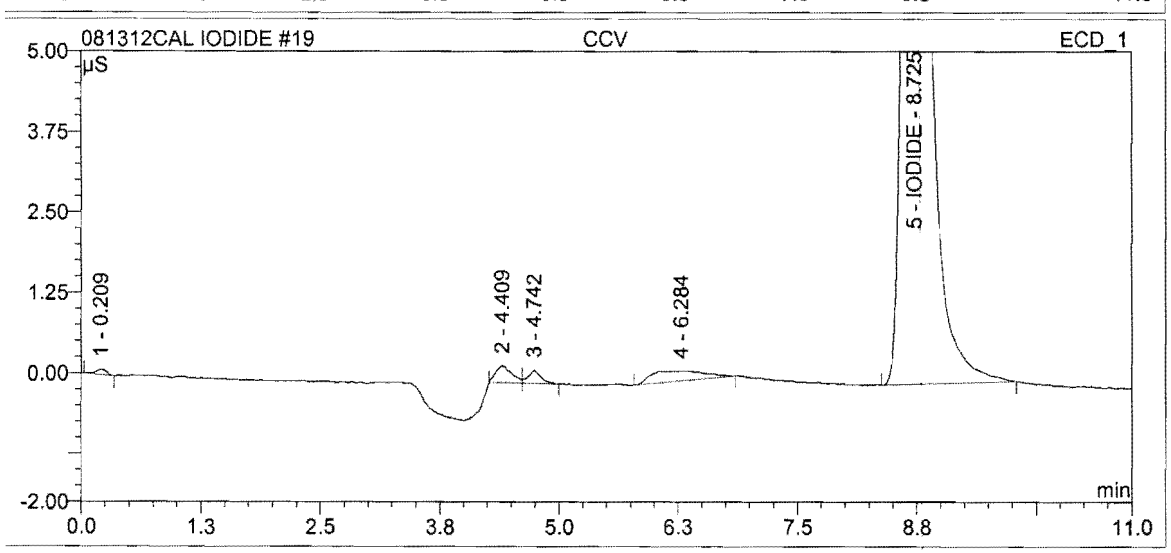


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:08**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.73	IODIDE	BMB	4.763	16.728	3864.9099
		TOTAL:		4.76	16.73	3864.91

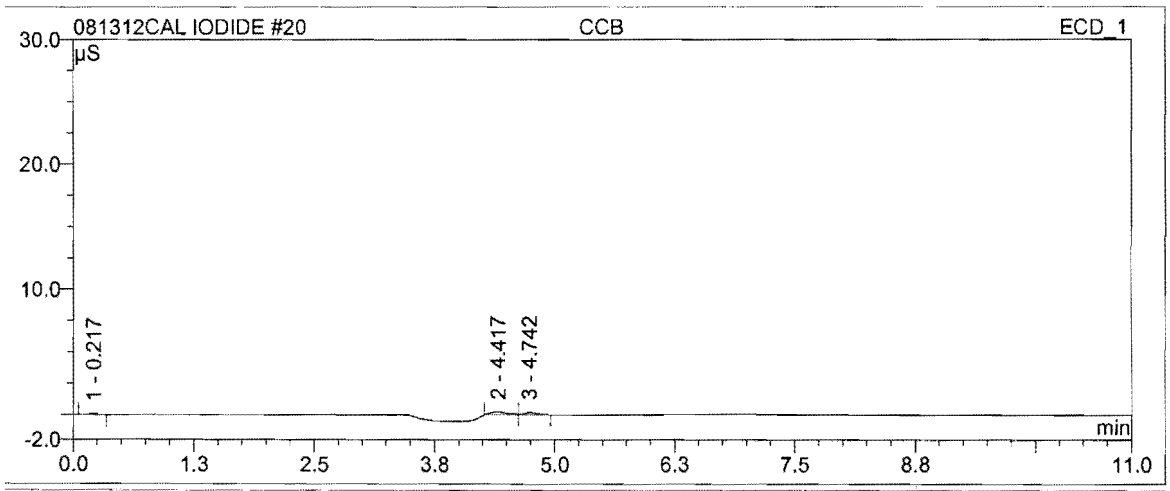


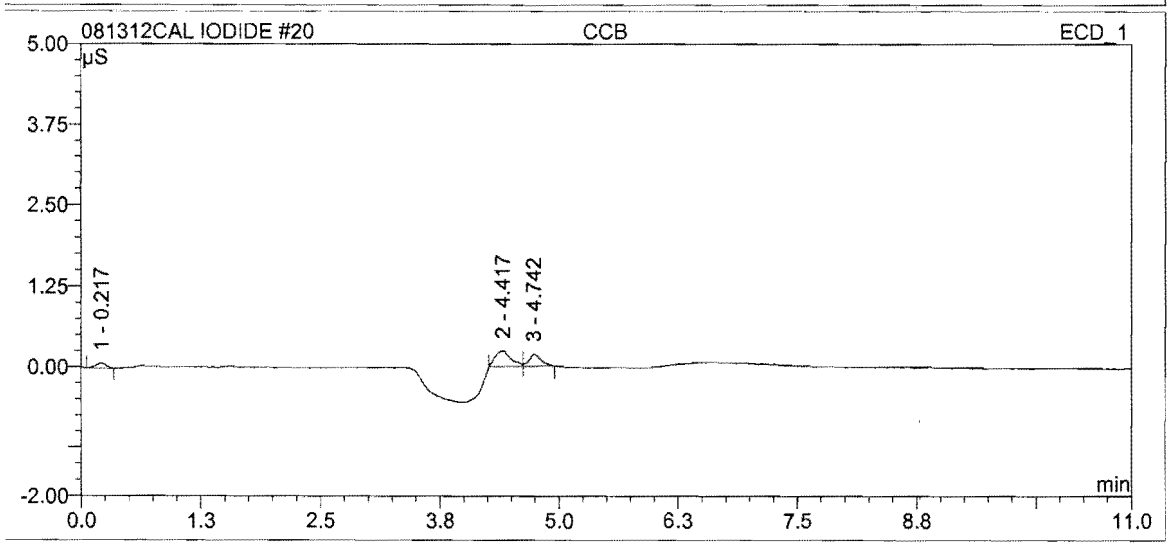


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:22**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**428-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:35**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
7	8.79	IODIDE	MB	1.253	1.503	1026.6175
		TOTAL:		1.25	1.50	1026.62

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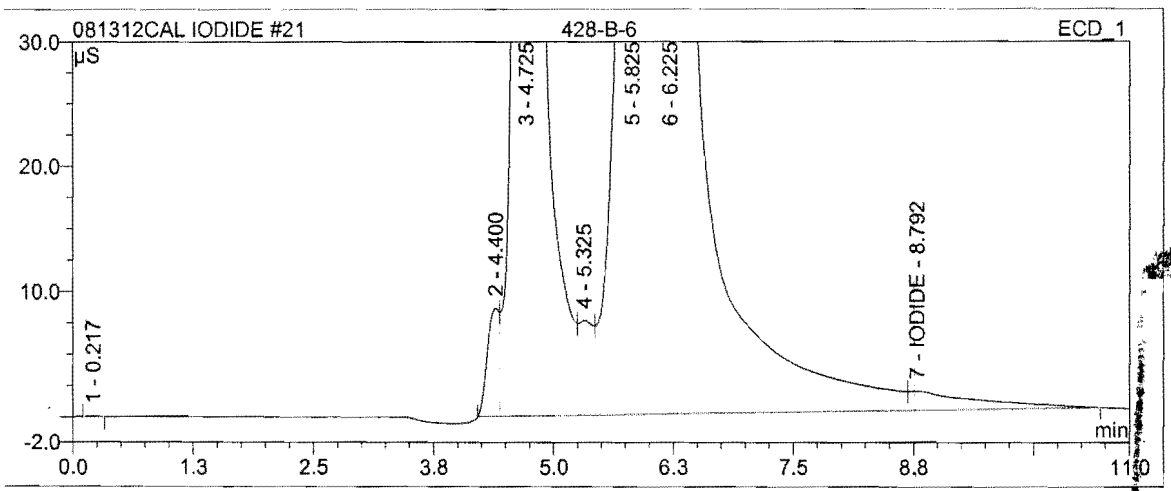
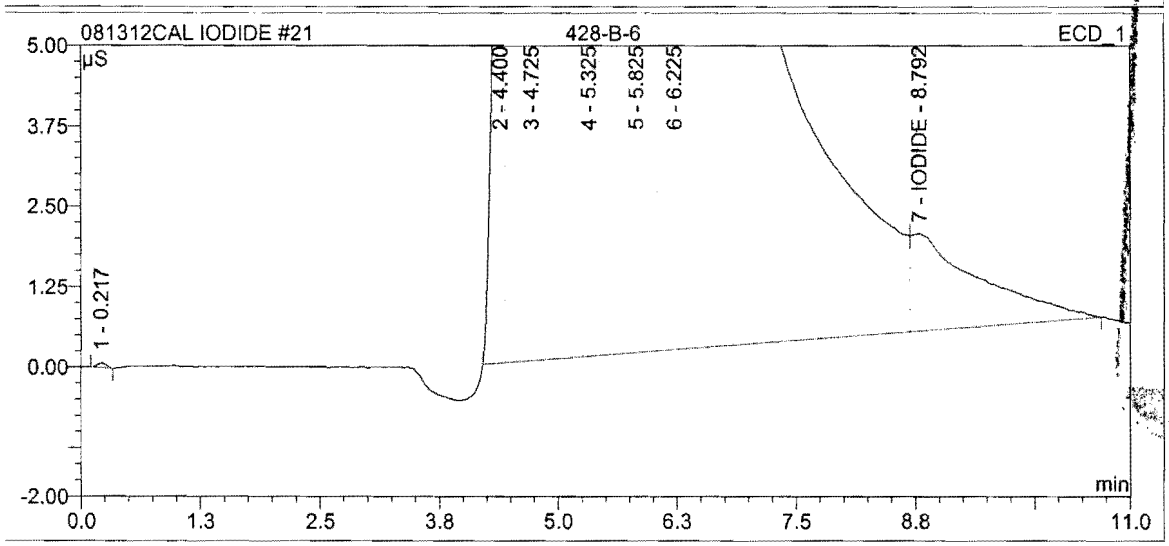


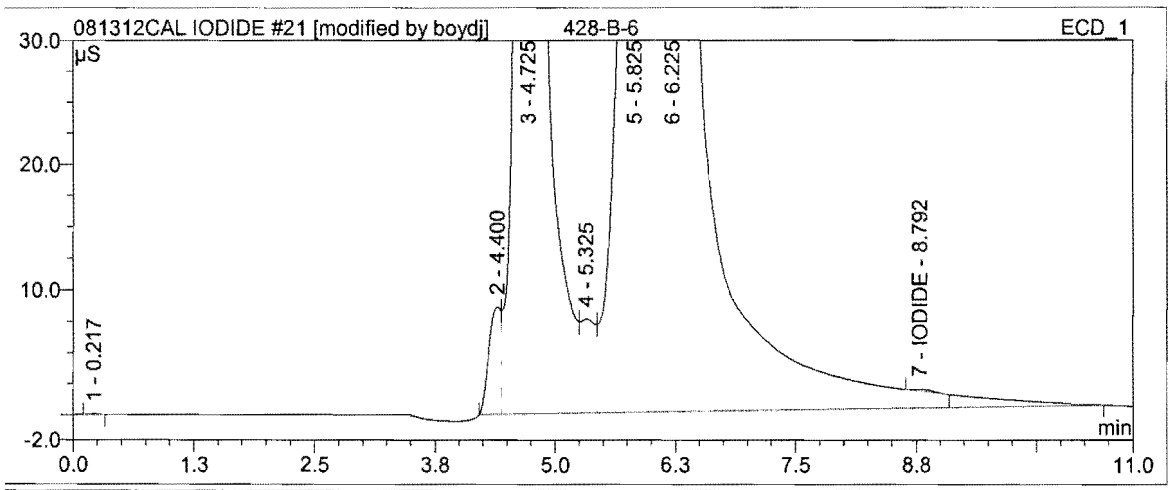


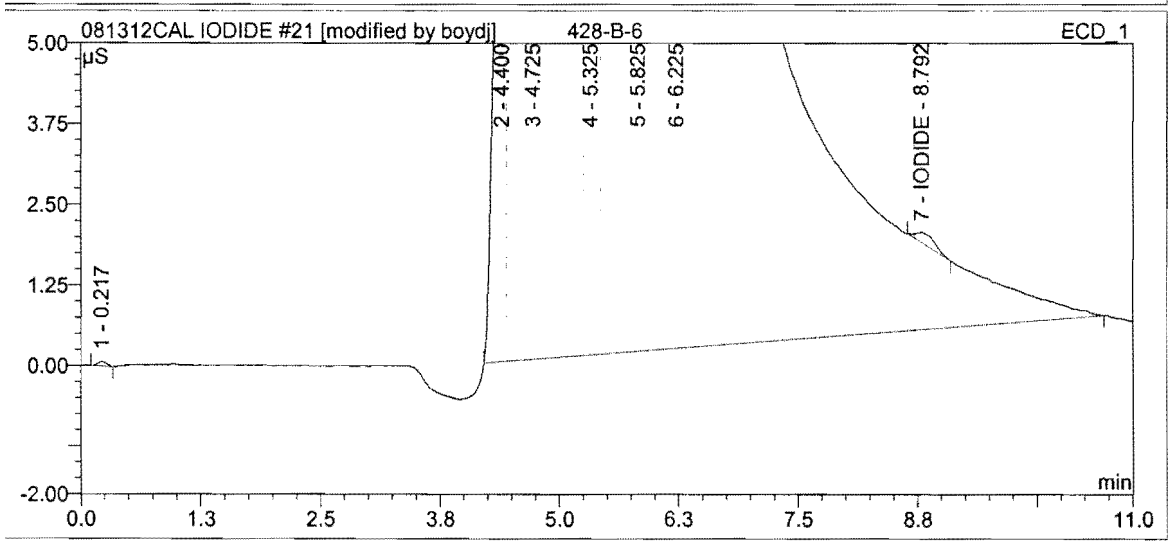
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - I = rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**428-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:35**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
7	8.79	IODIDE	Rd*	0.039	0.156	32.1898
		TOTAL:		0.04	0.16	32.19

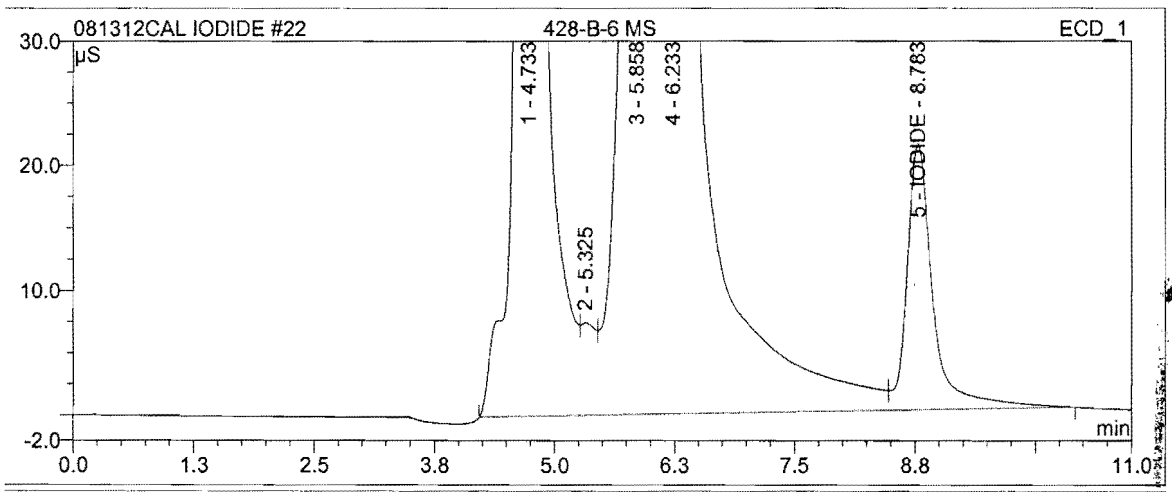


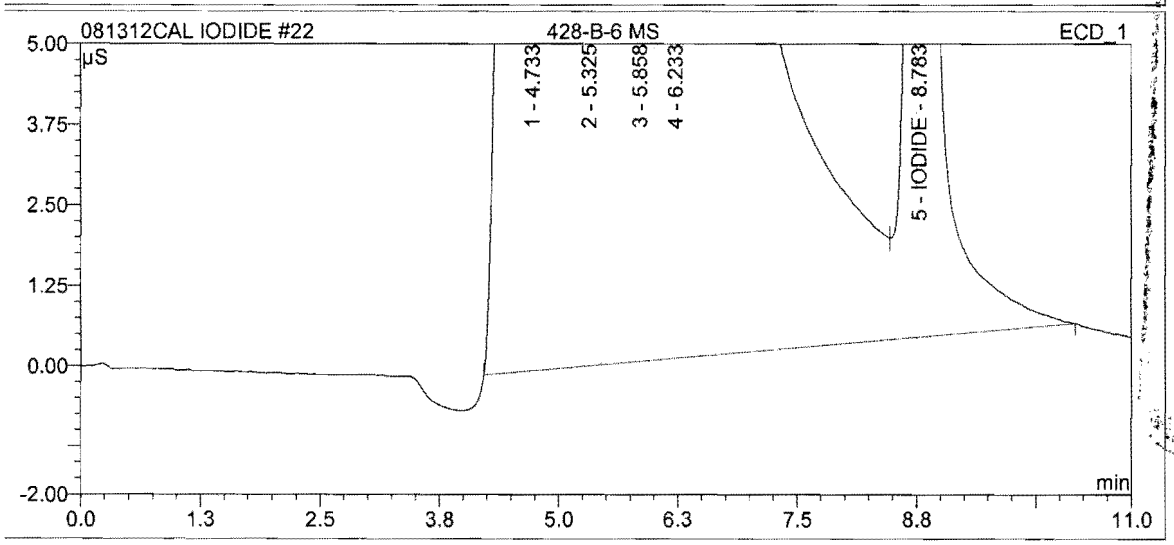


Integration Report - ECD_1

Sample Name:	**428-B-6 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:48**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.78	IODIDE	MB	6.723	21.286	5427.2496
		TOTAL:		6.72	21.29	5427.25





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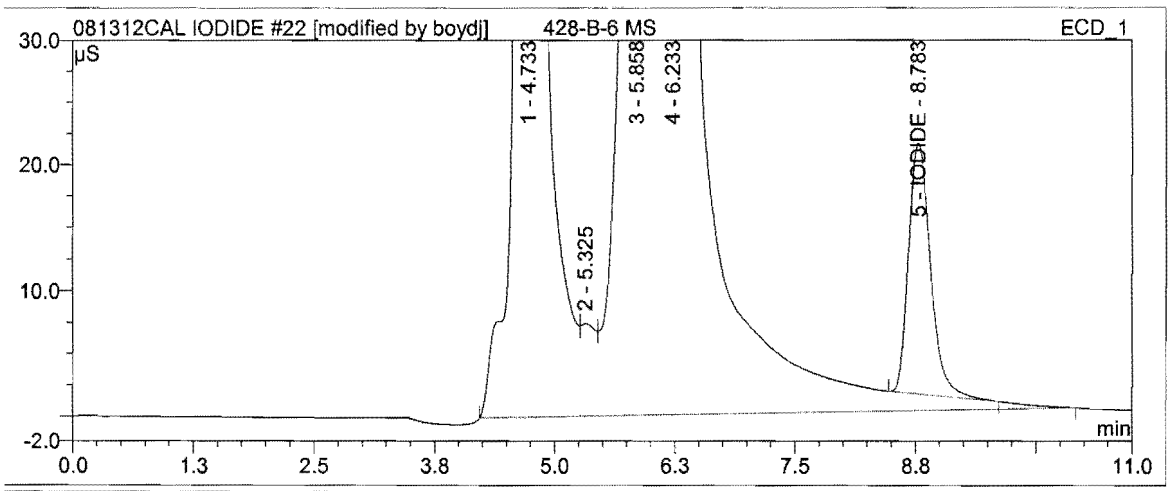
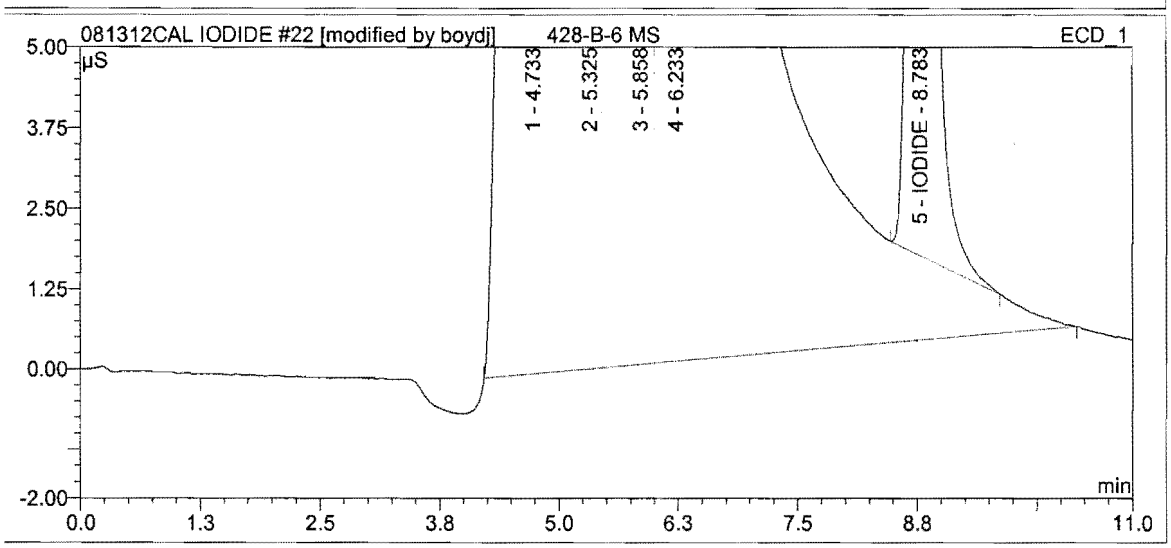
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**428-B-6 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**13.08.12 23:48**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.78	IODIDE	Rd*	5.280	19.976	4278.8792
		TOTAL:		5.28	19.98	4278.88

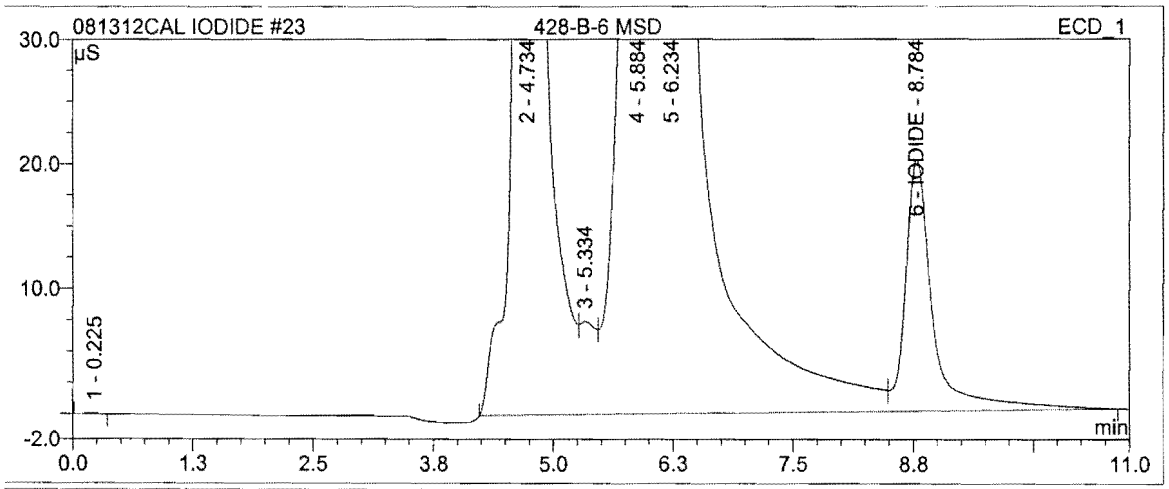


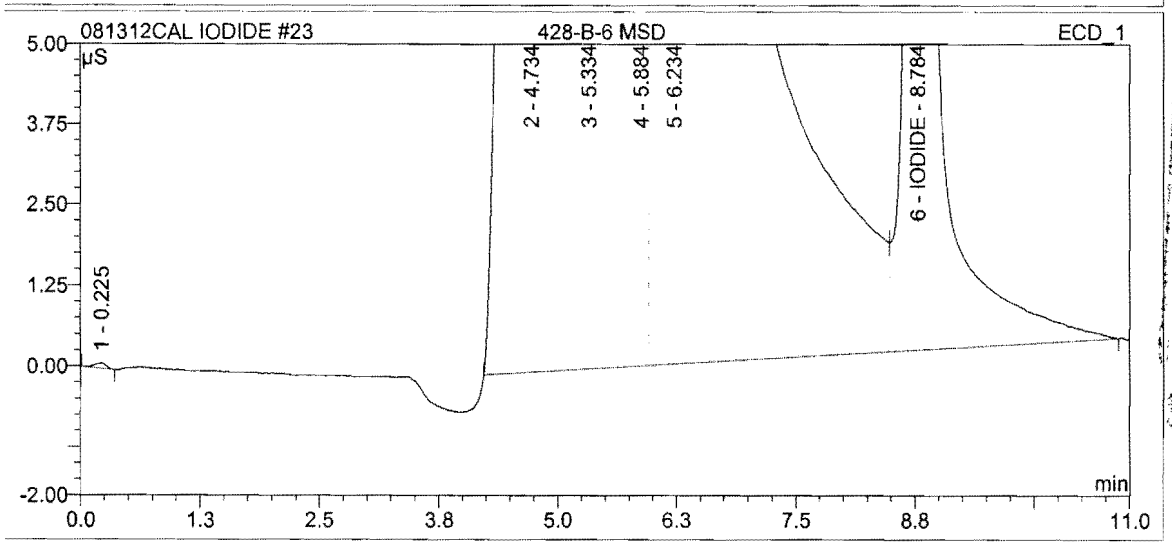


Integration Report - ECD_1

Sample Name:	**428-B-6 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:02**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
6	8.78	IODIDE	MB	6.729	20.089	5432.2731
		TOTAL:		6.73	20.09	5432.27





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1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

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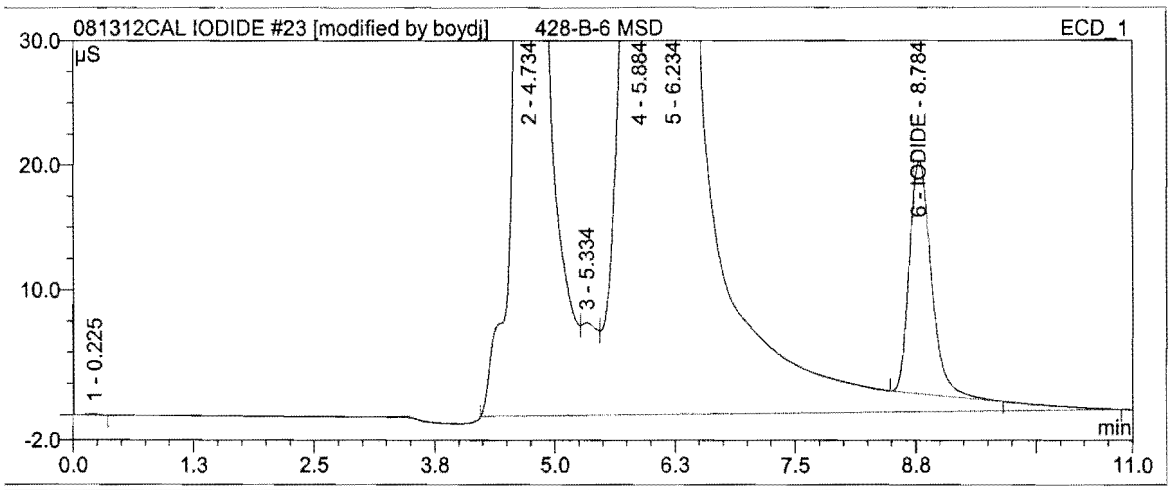
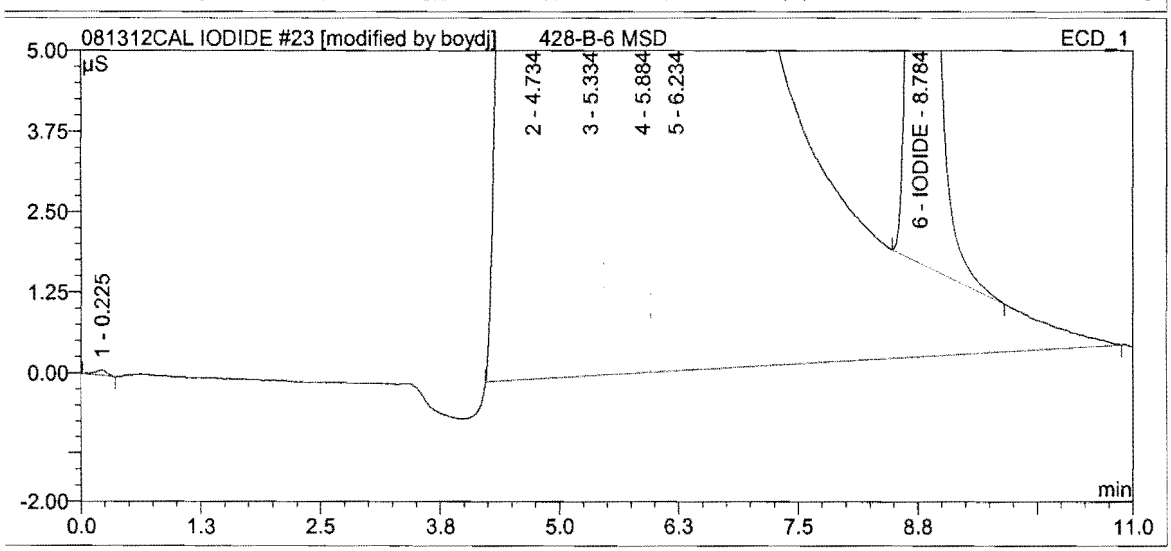
Integration Report - ECD_1

Sample Name:	**428-B-6 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:02**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
6	8.78	IODIDE	Rd*	4.915	18.646	3986.9741
		TOTAL:		4.92	18.65	3986.97





Integration Report - ECD_1

Sample Name:	**428-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:15**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.84	IODIDE	MB	2.434	2.576	1987.9649
		TOTAL:		2.43	2.58	1987.96

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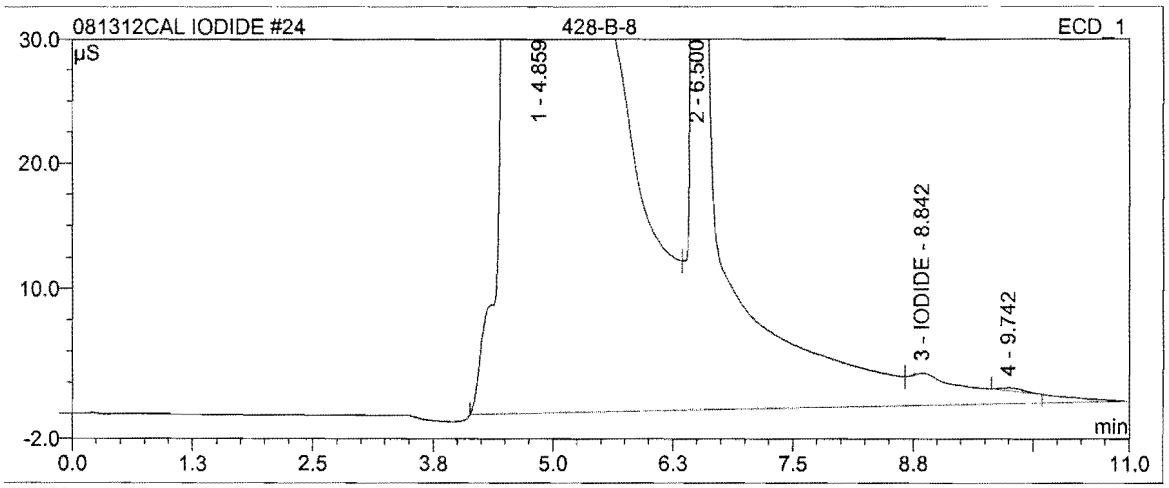
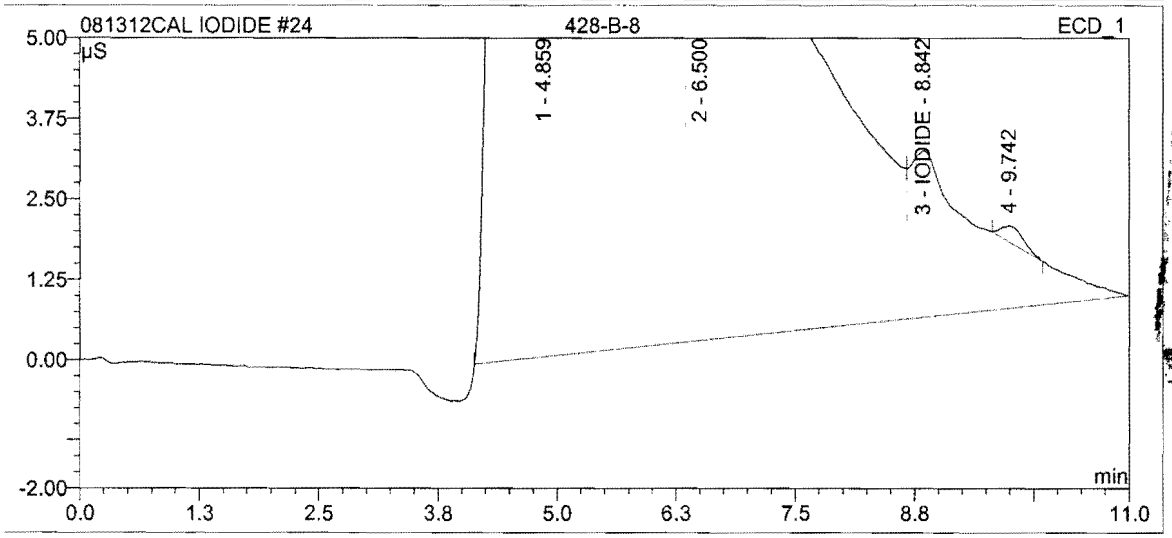


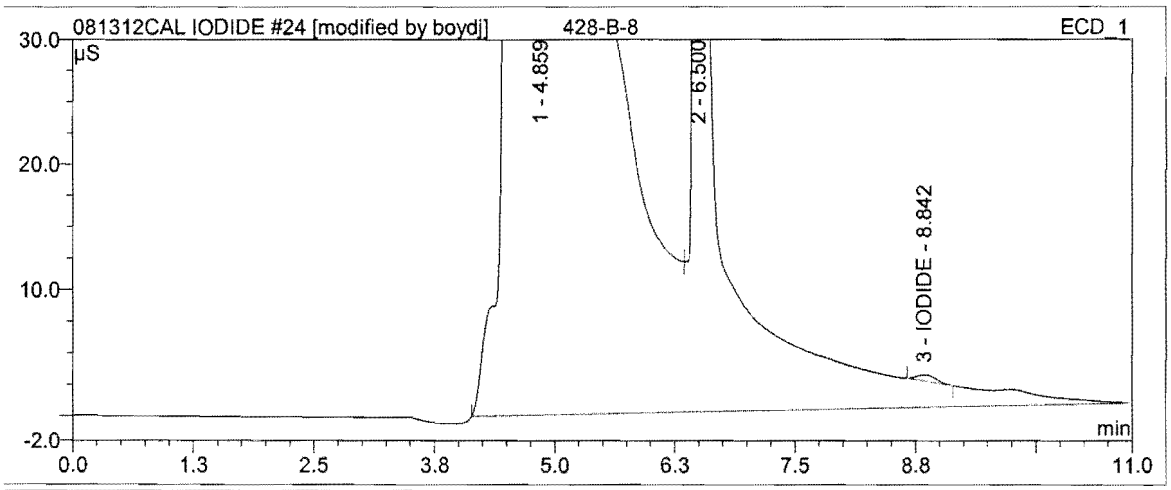


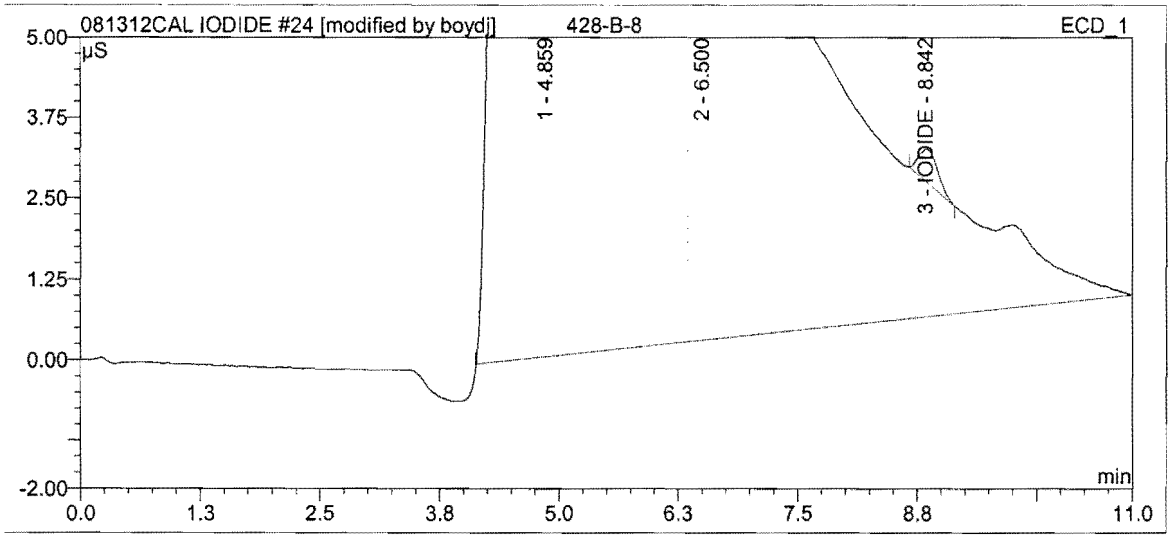
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Integrator
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**428-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:15**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.84	IODIDE	Rd*	0.121	0.494	99.0768
		TOTAL:		0.12	0.49	99.08

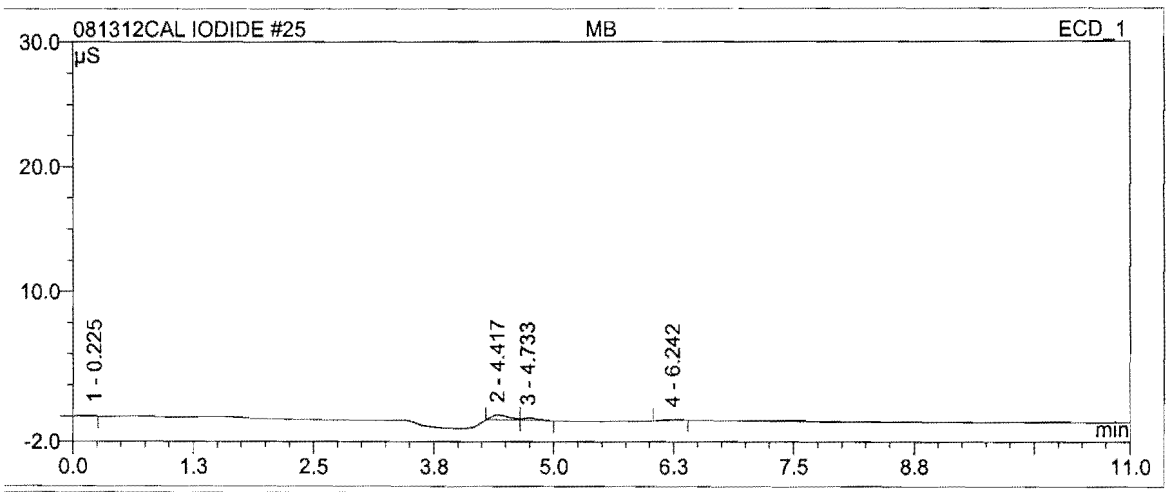


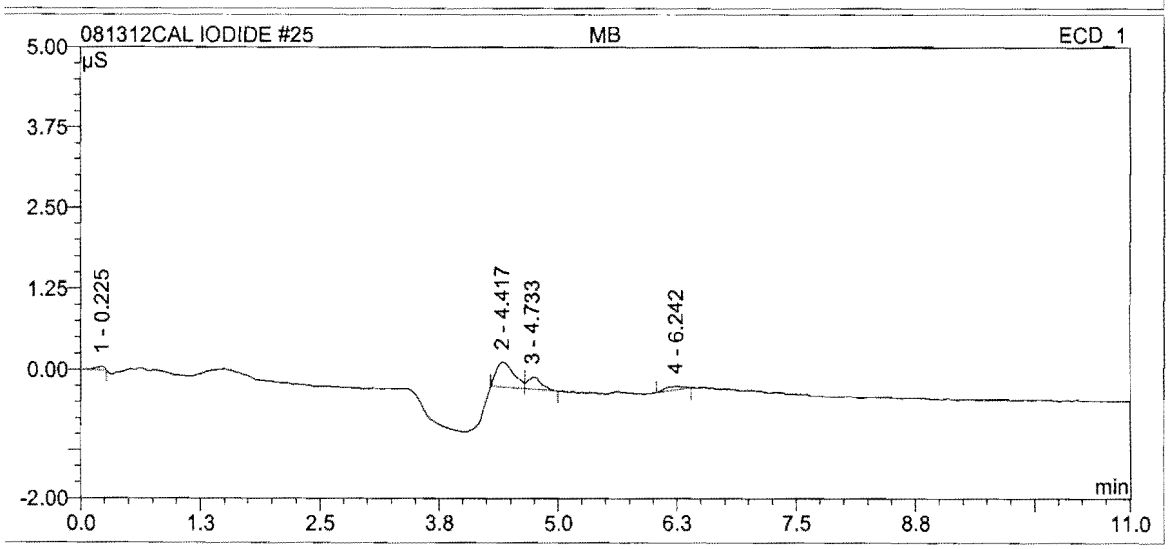


Integration Report - ECD_1

Sample Name:	**MB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:29**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

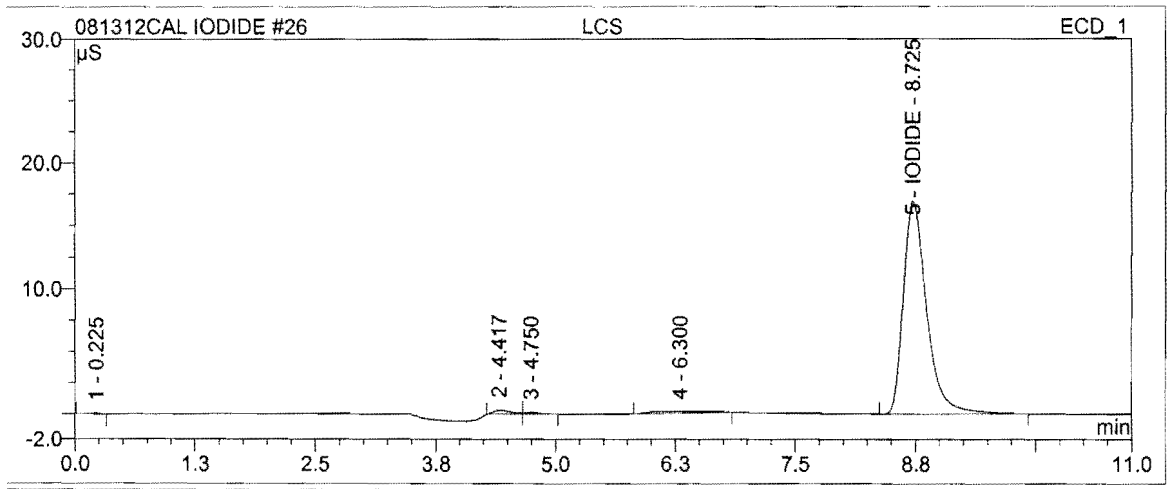


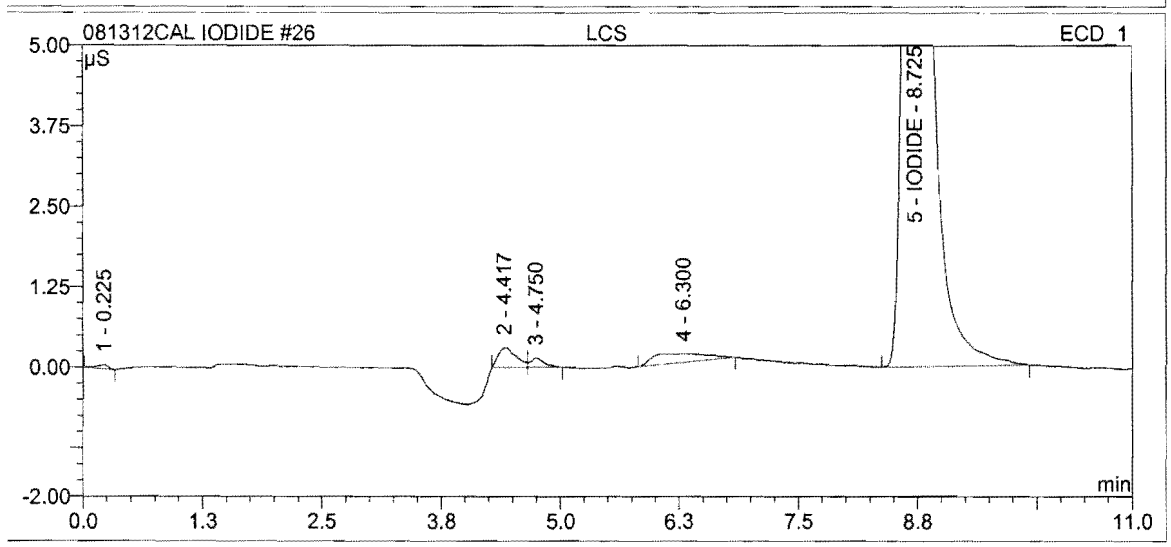


Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:42**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.73	IODIDE	BMB	4.789	16.906	3885.6649
		TOTAL:		4.79	16.91	3885.66





Integration Report - ECD_1

Sample Name:	**437-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:55**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	MB	2.476	3.936	2021.9439
		TOTAL:		2.48	3.94	2021.94

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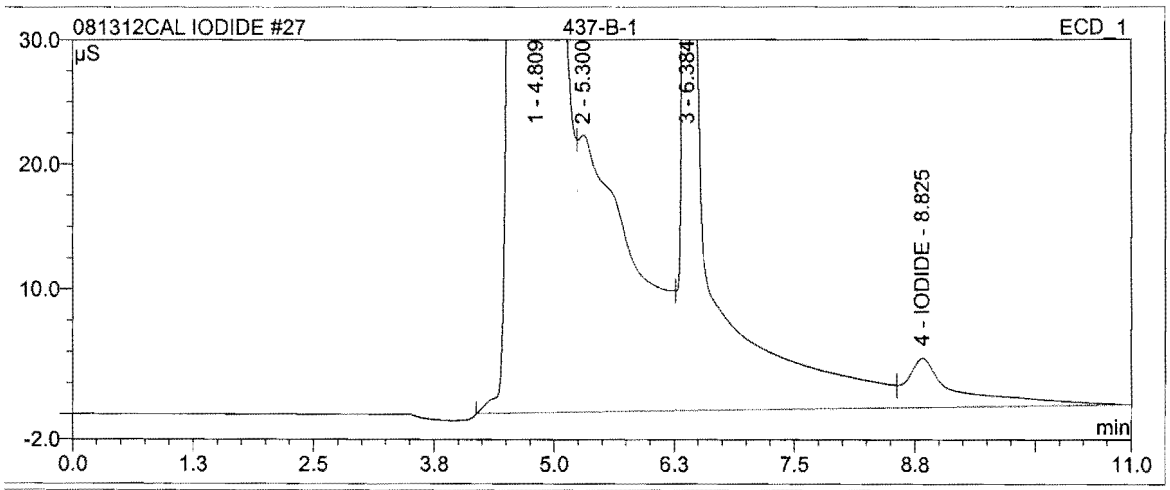
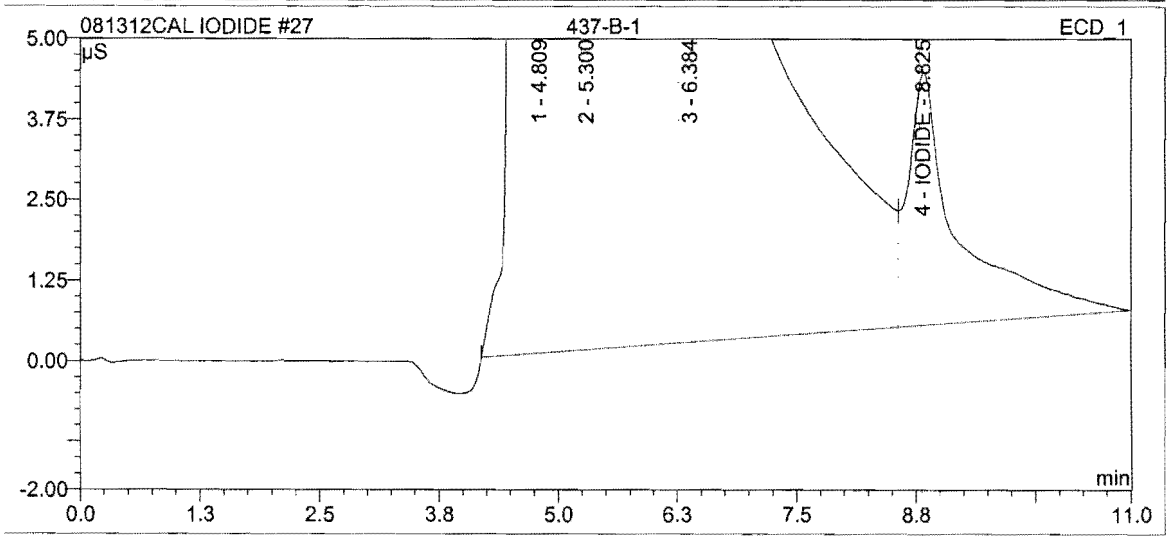
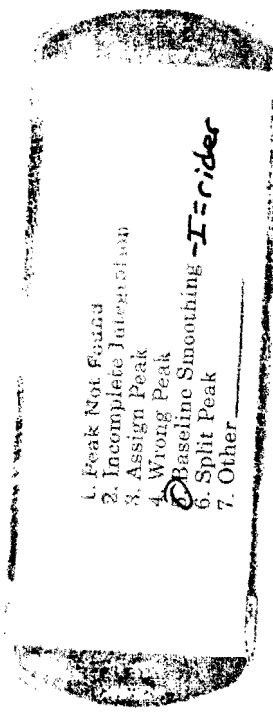


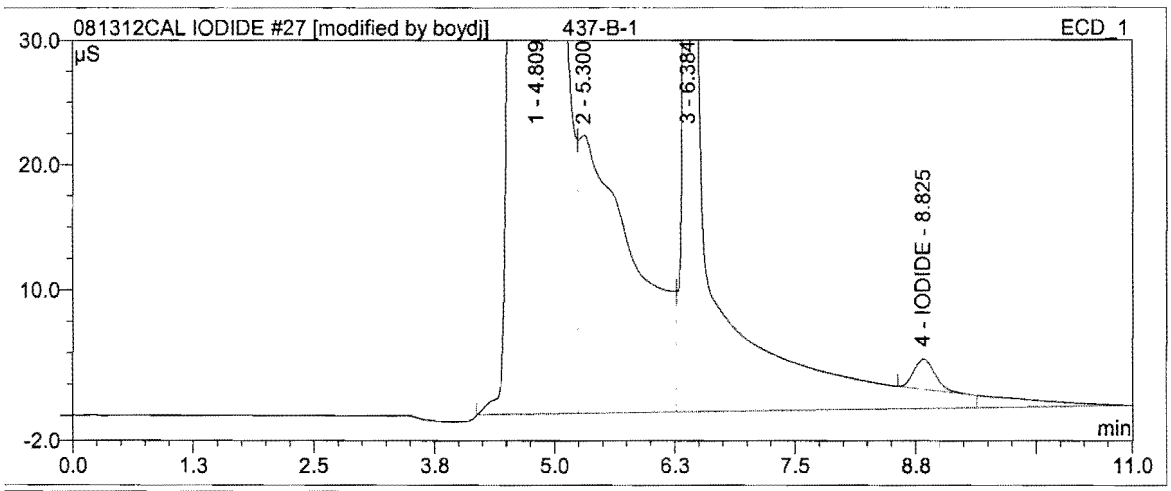


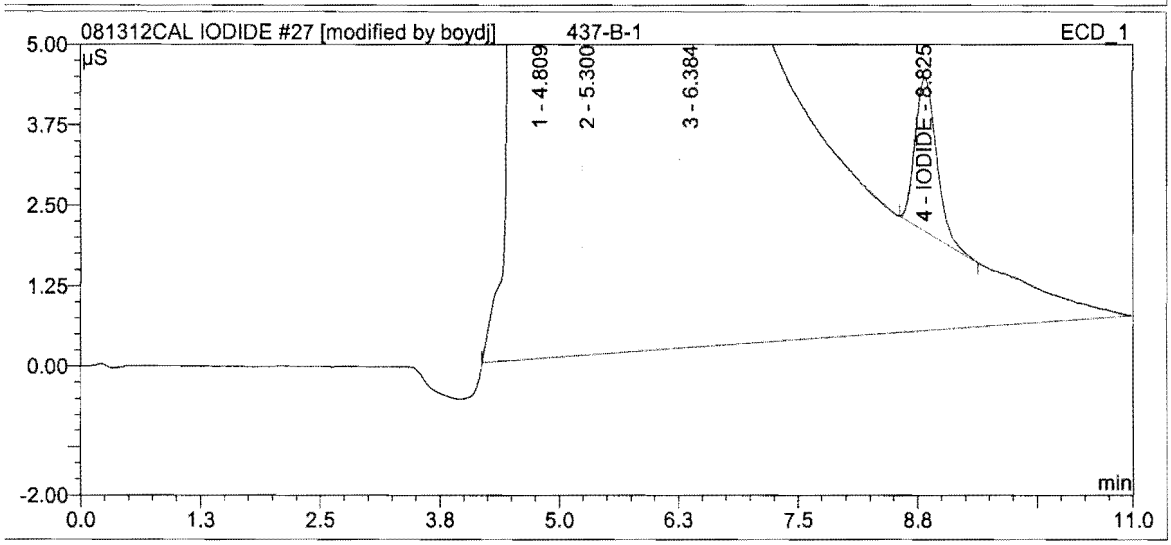


Integration Report - ECD_1

Sample Name:	**437-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 00:55**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	Rd*	0.620	2.388	509.1074
		TOTAL:		0.62	2.39	509.11

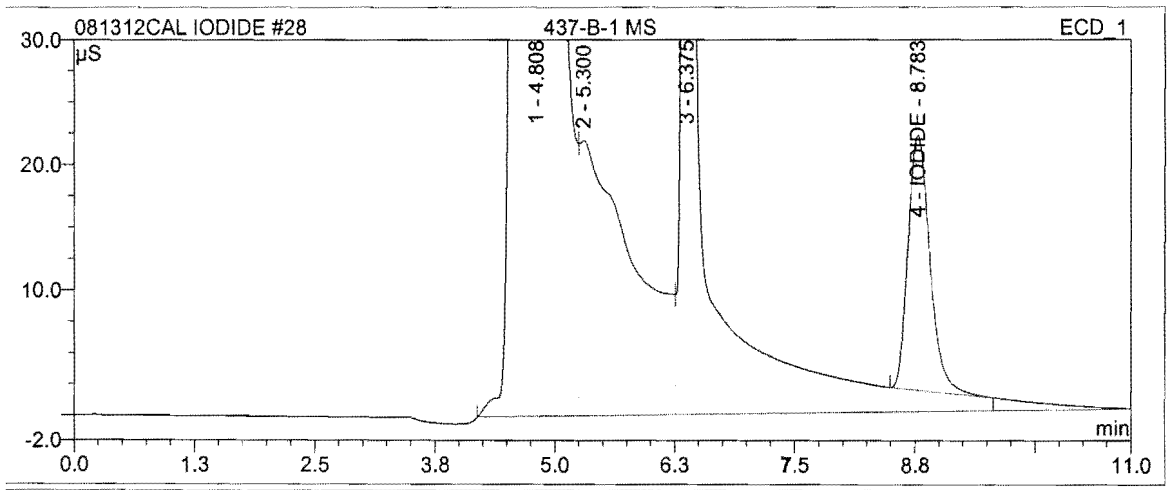


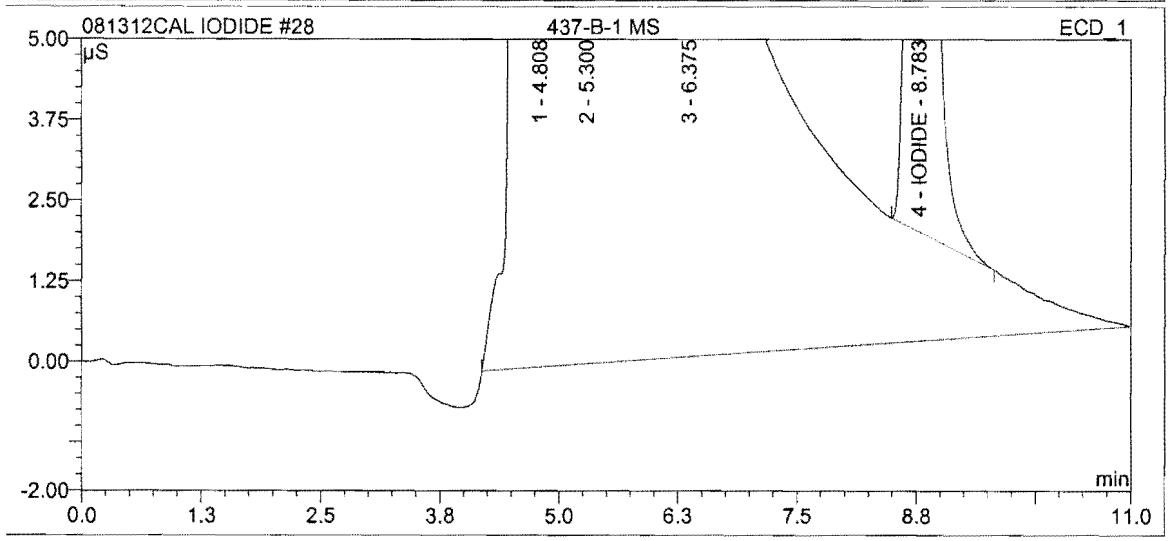


Integration Report - ECD_1

Sample Name:	**437-B-1 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 01:09**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.78	IODIDE	Rd	5.362	20.347	4344.1410
		TOTAL:		5.36	20.35	4344.14

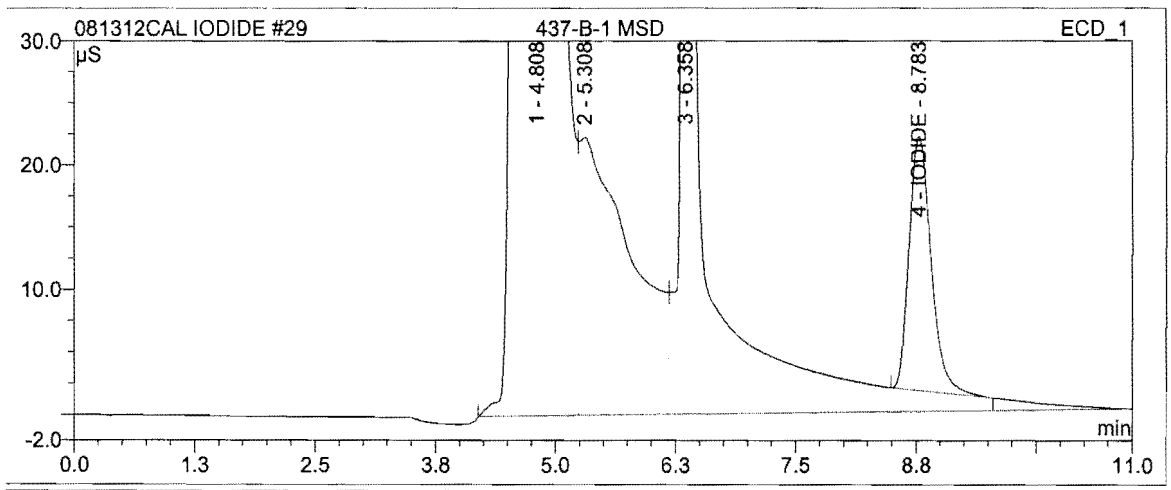


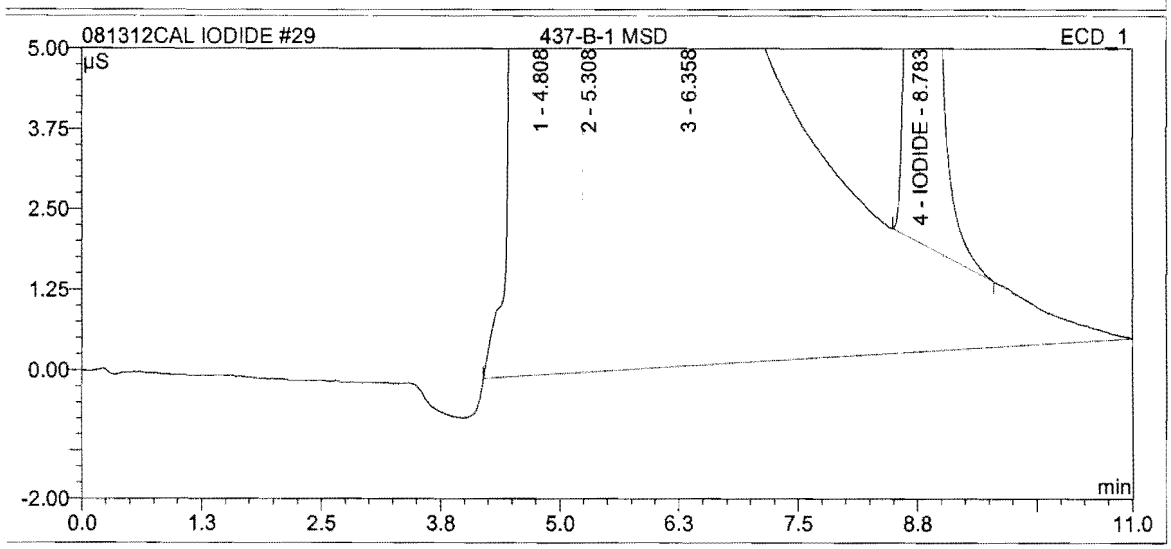


Integration Report - ECD_1

Sample Name:	**437-B-1 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 01:22**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.78	IODIDE	Rd	5.379	20.300	4358.0792
		TOTAL:		5.38	20.30	4358.08





Integration Report - ECD_1

Sample Name:	**437-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 01:36**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.85	IODIDE	M	2.351	4.259	1920.4618
		TOTAL:		2.35	4.26	1920.46

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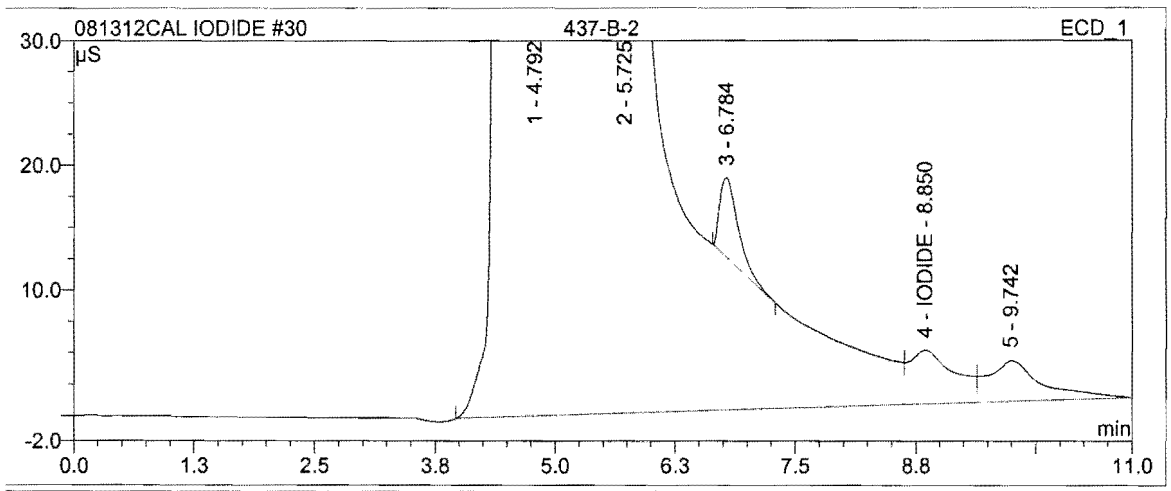
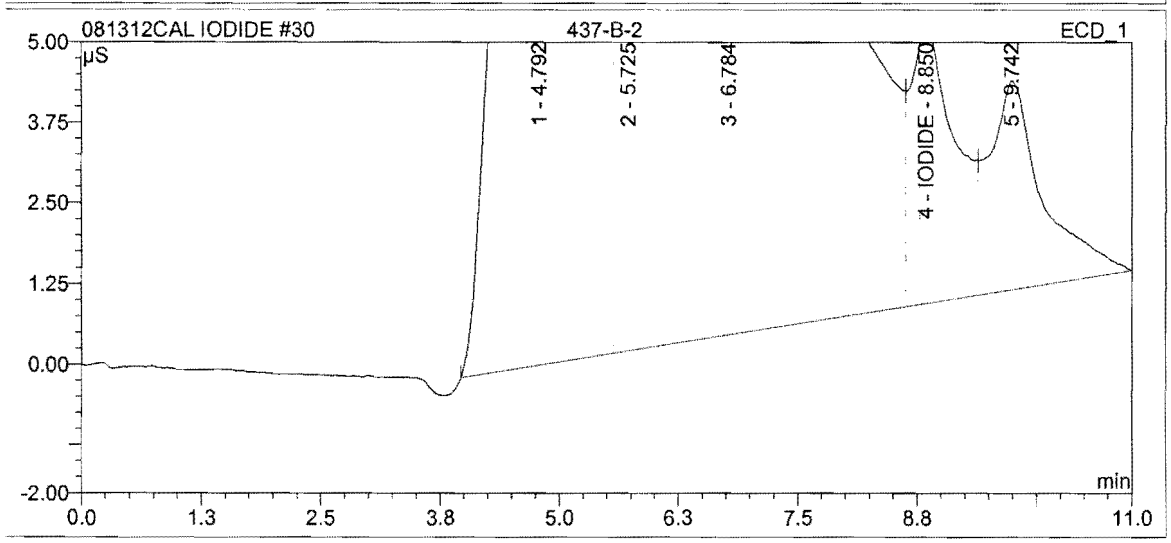


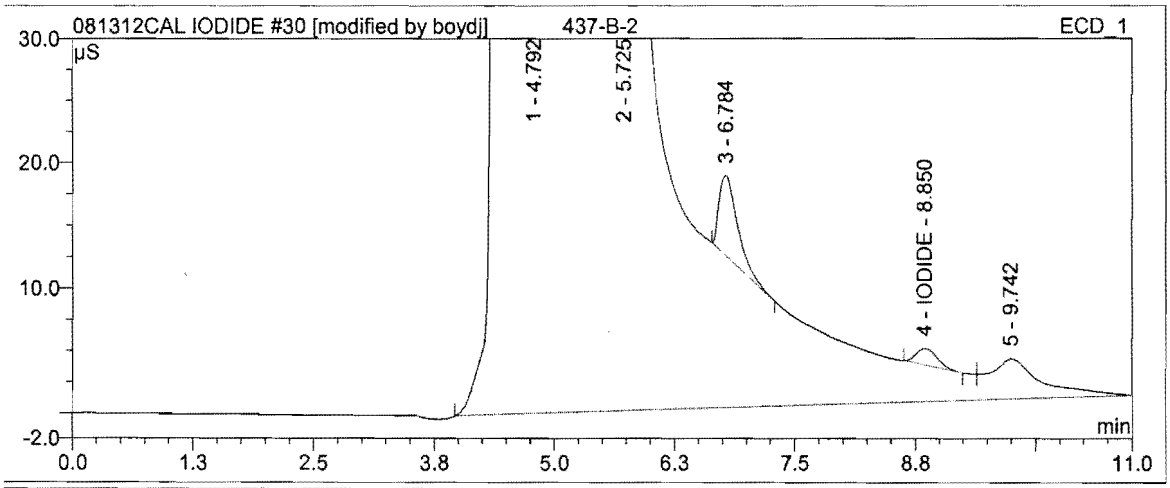


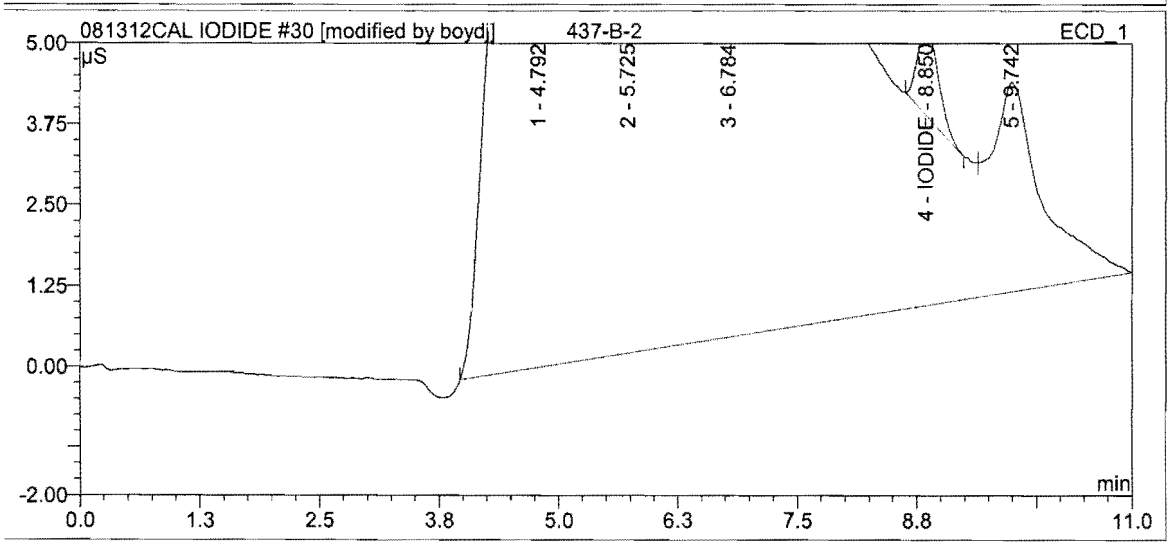
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -I=rider
6. Split Peak
7 Other

Integration Report - ECD_1

Sample Name:	**437-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 01:36**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.85	IODIDE	Rd*	0.345	1.321	283.1033
		TOTAL:		0.34	1.32	283.10

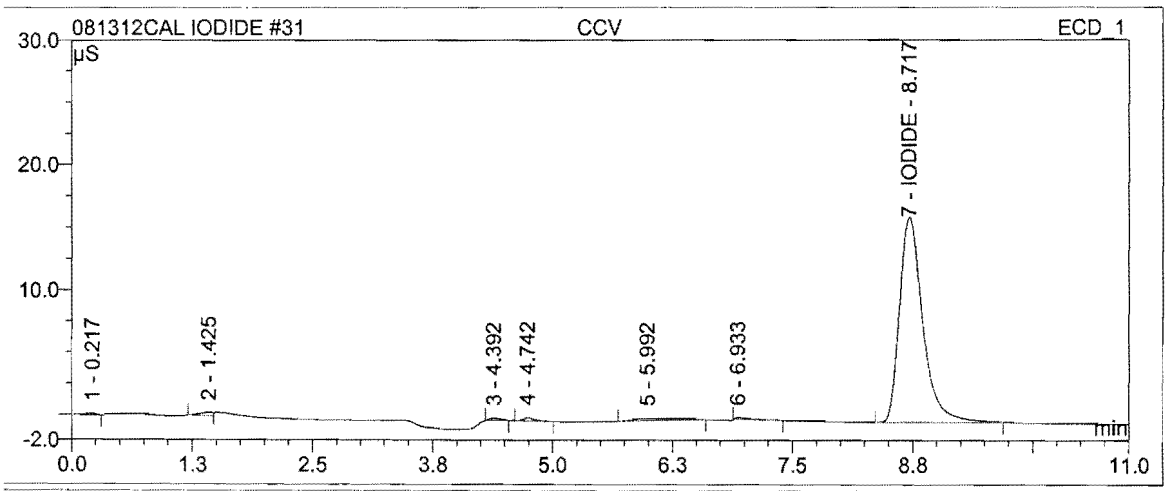


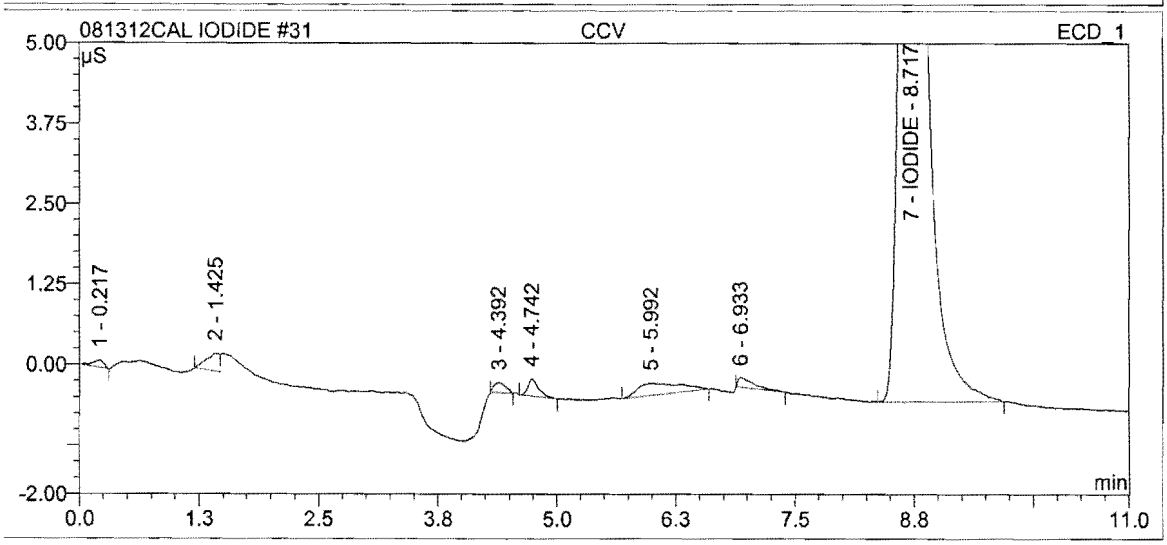


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 01:49**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
7	8.72	IODIDE	BMB	4.591	16.390	3727.6004
		TOTAL:		4.59	16.39	3727.60

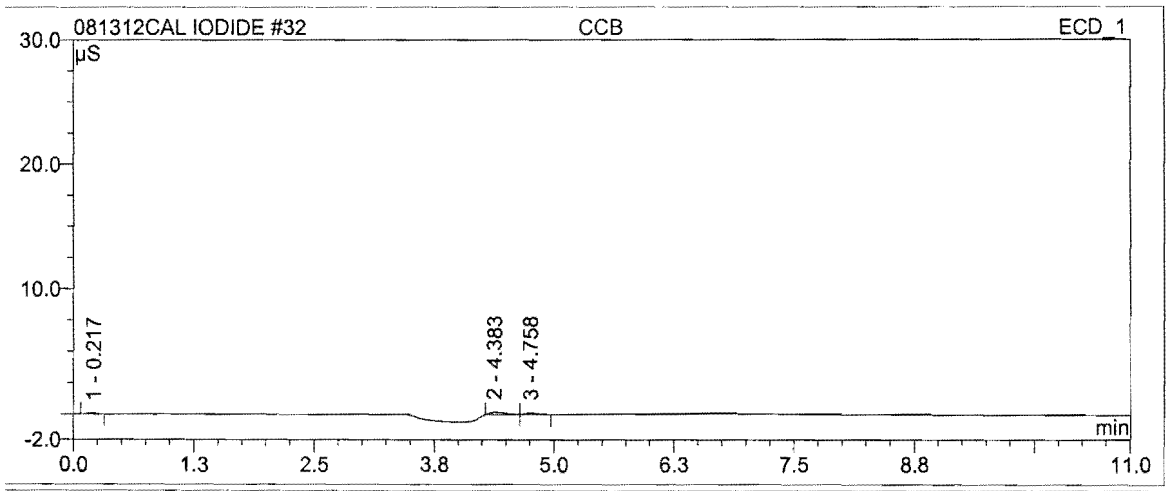


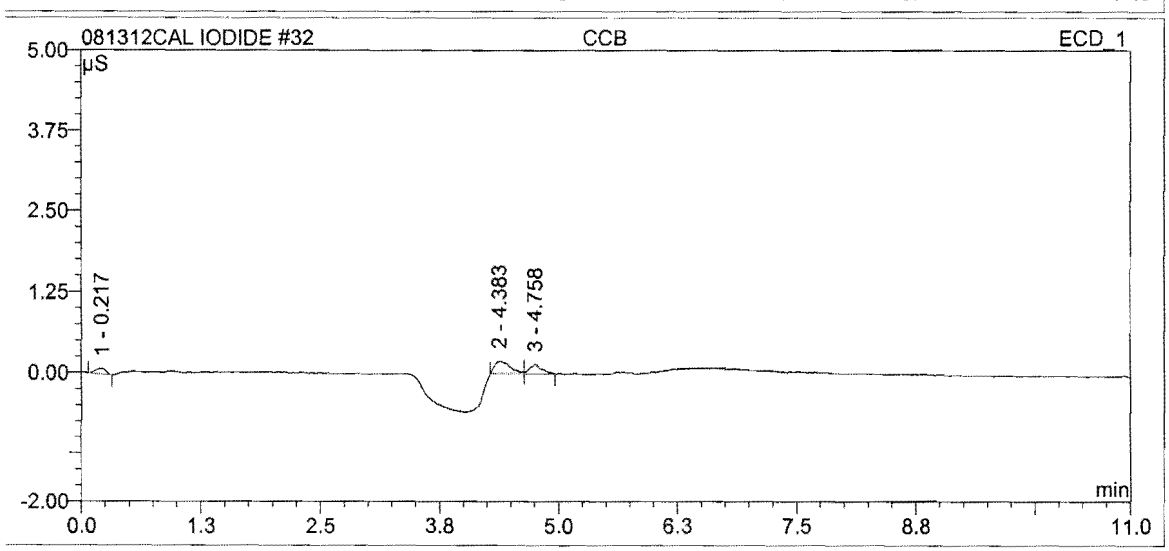


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:02**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

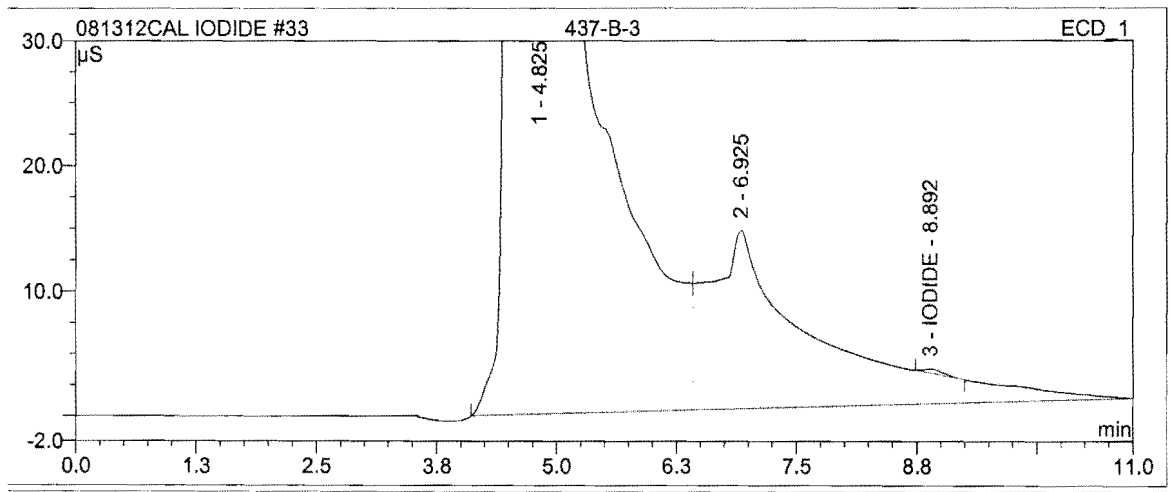


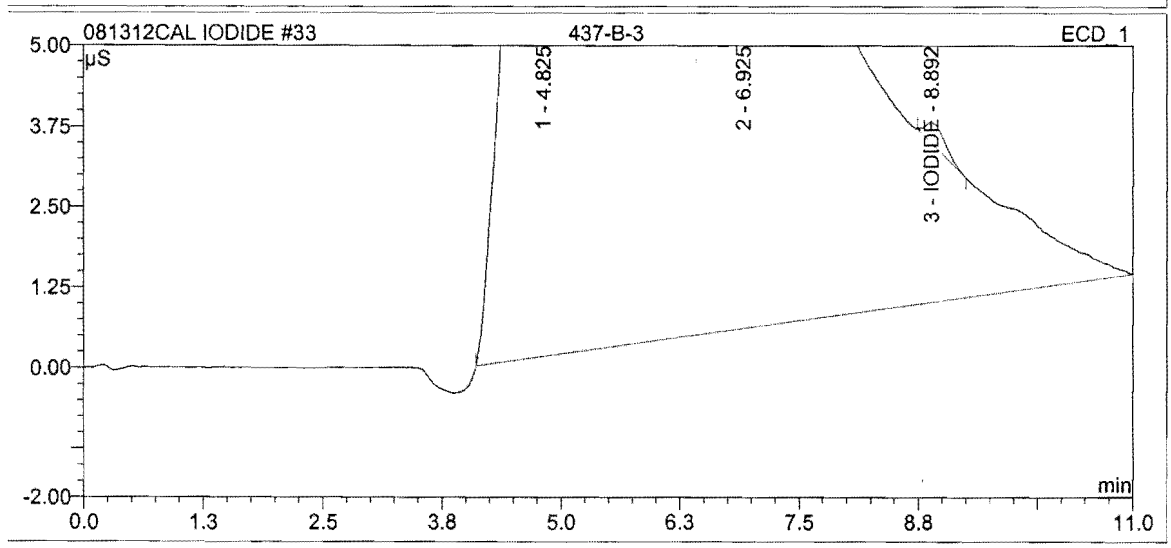


Integration Report - ECD_1

Sample Name:	**437-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:16**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.89	IODIDE	Rd	0.082	0.320	67.3344
		TOTAL:		0.08	0.32	67.33





Integration Report - ECD_1

Sample Name:	**437-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:29**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	MB	2.813	3.198	2294.4336
		TOTAL:		2.81	3.20	2294.43

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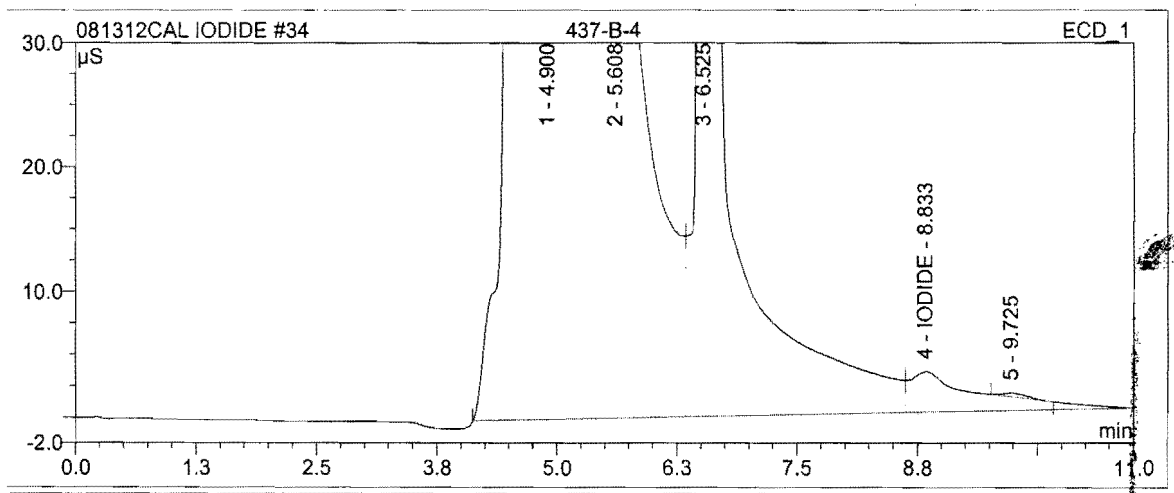
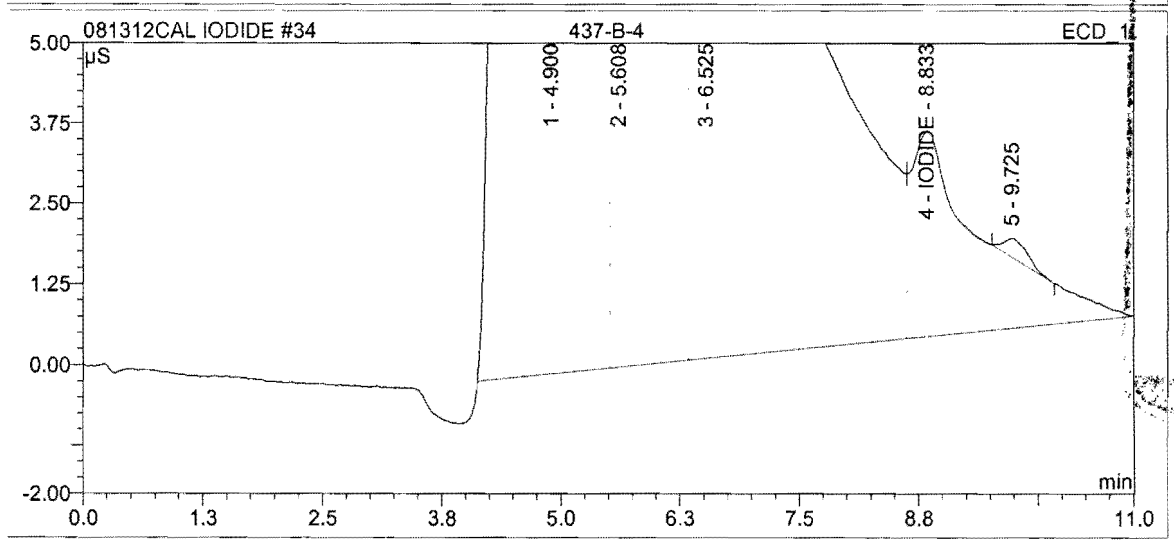




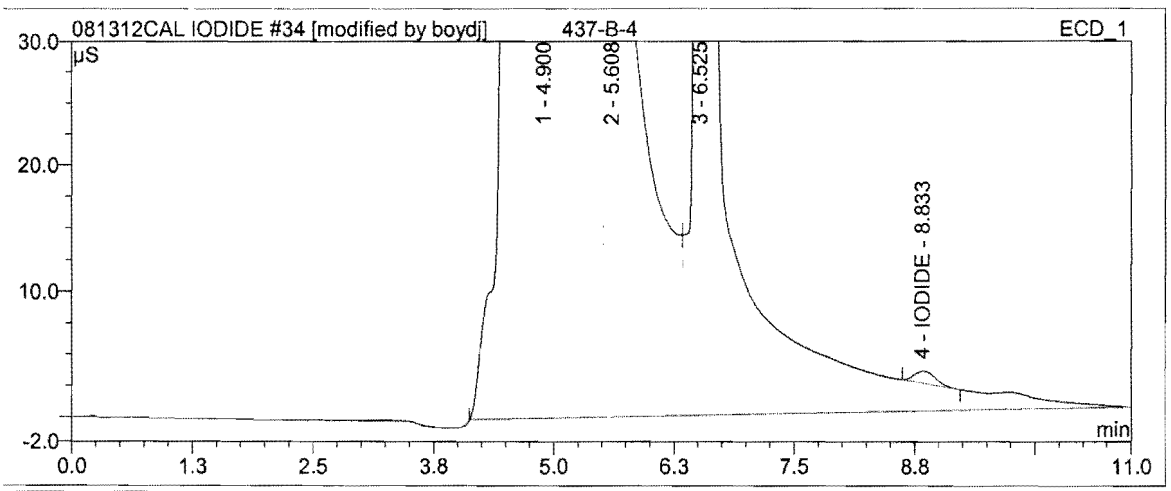
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

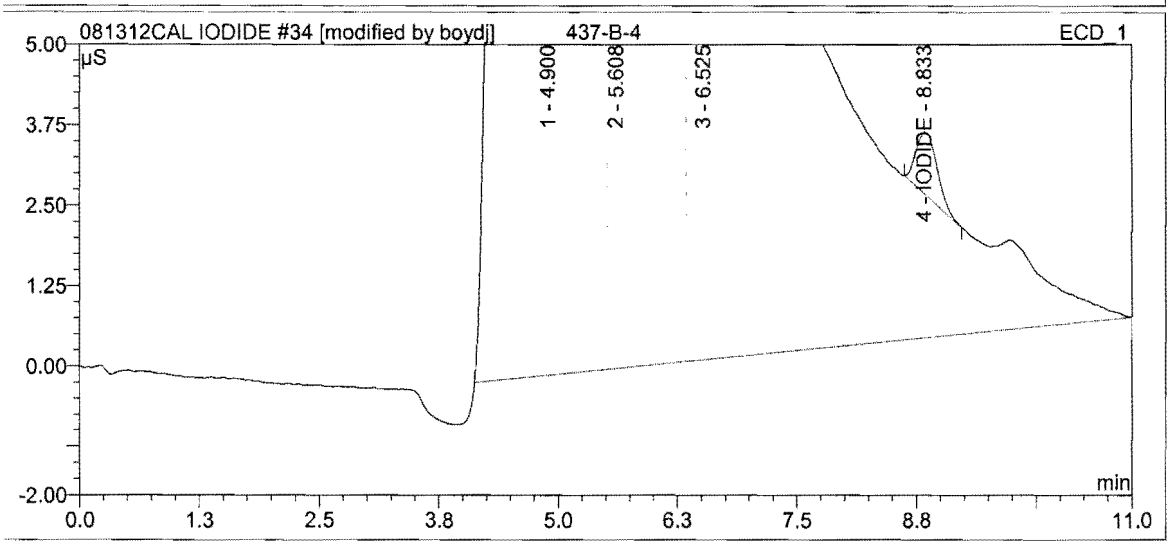
I=rider

Integration Report - ECD_1

Sample Name:	**437-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:29**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	Rd*	0.250	0.958	205.1036
		TOTAL:		0.25	0.96	205.10

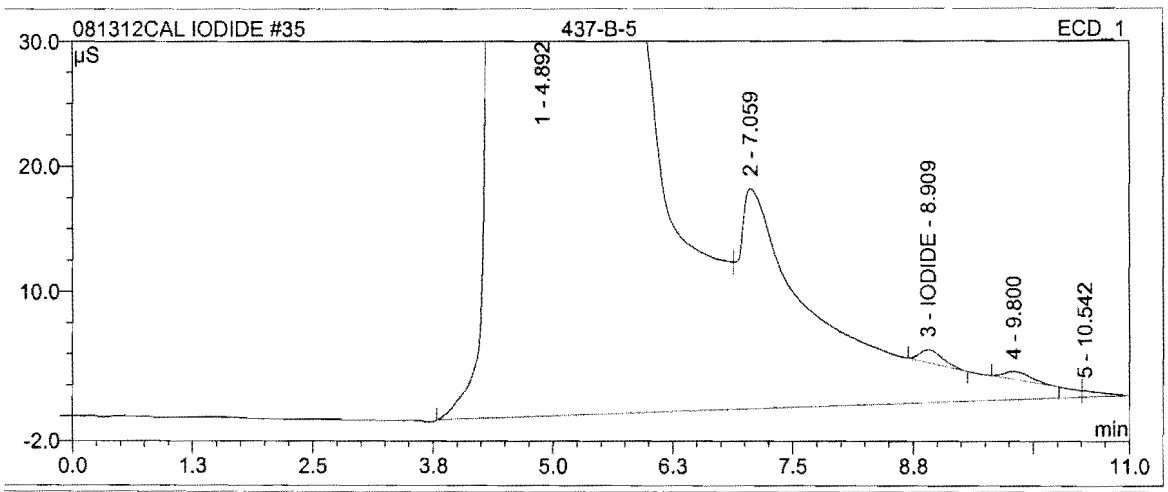


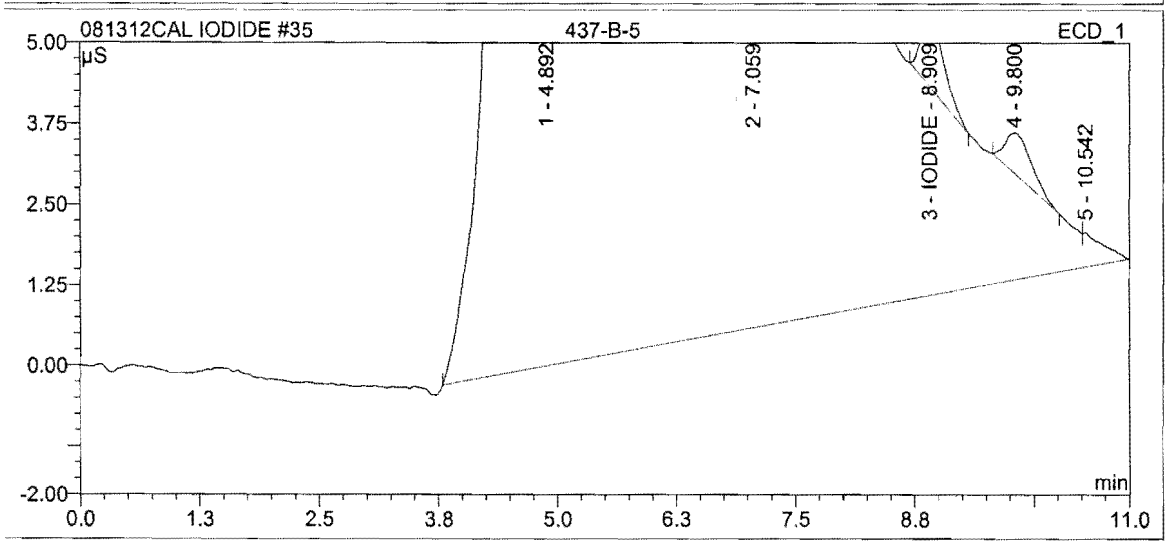


Integration Report - ECD_1

Sample Name:	**437-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:43**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.91	IODIDE	Rd	0.300	1.056	246.6490
		TOTAL:		0.30	1.06	246.65





Integration Report - ECD_1

Sample Name:	**437-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:56**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
6	8.82	IODIDE	MB	6.085	6.440	4920.8724
		TOTAL:		6.09	6.44	4920.87

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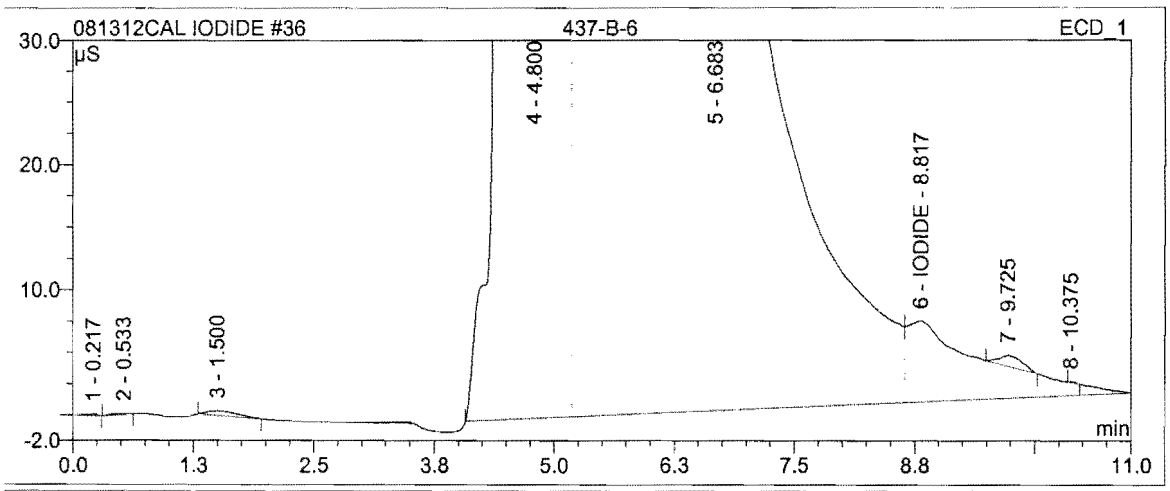
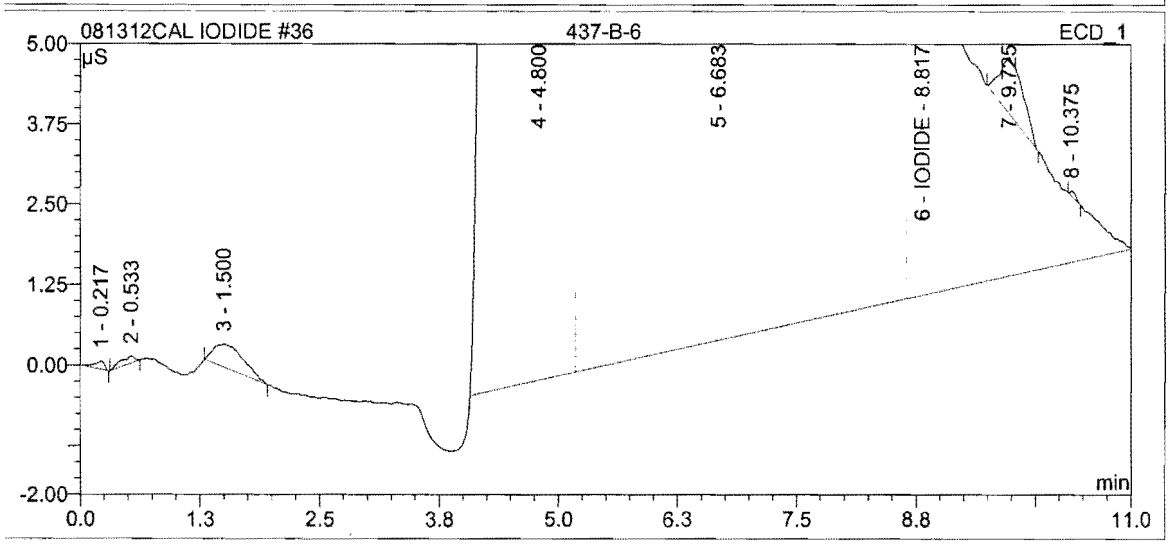
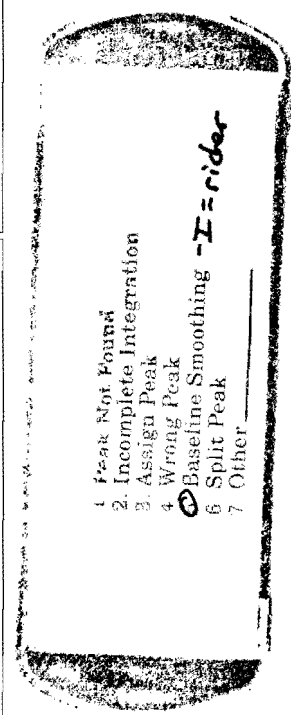


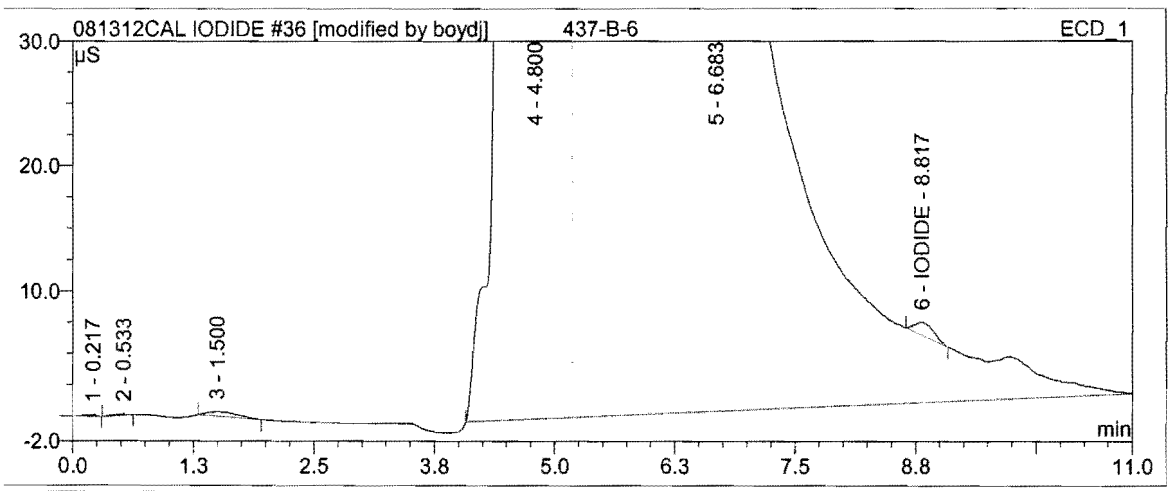


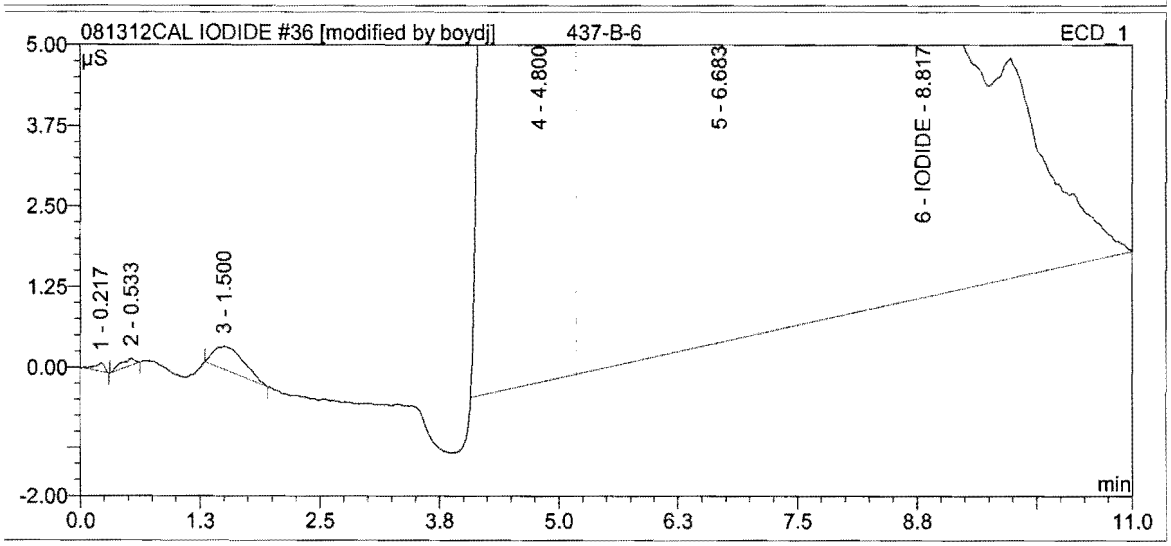


Integration Report - ECD_1

Sample Name:	**437-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 02:56**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
6	8.82	IODIDE	Rd*	0.247	1.040	202.6089
		TOTAL:		0.25	1.04	202.61





Integration Report - ECD_1

Sample Name:	**437-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:09**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.83	IODIDE	M	2.290	3.304	1870.8822
		TOTAL:		2.29	3.30	1870.88

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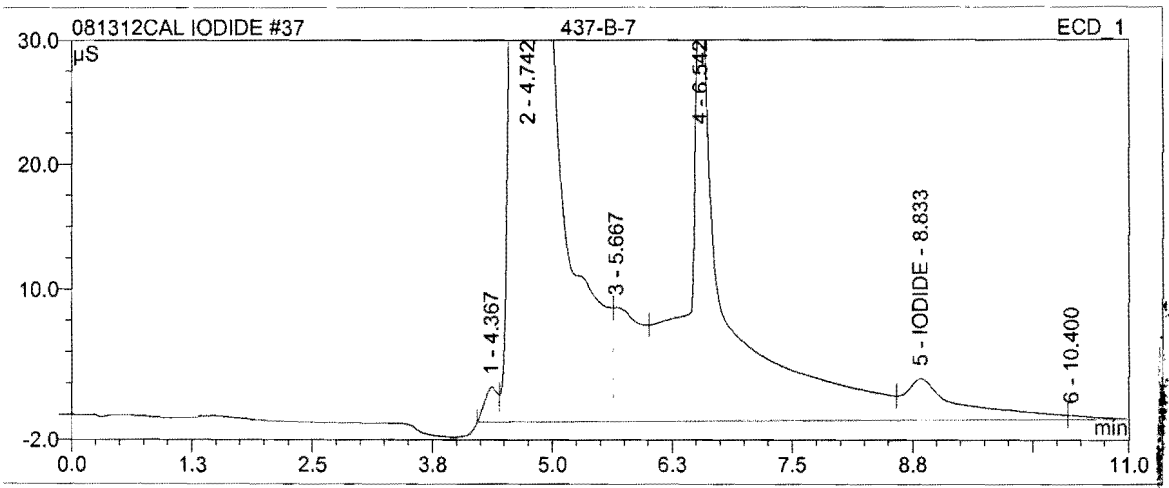
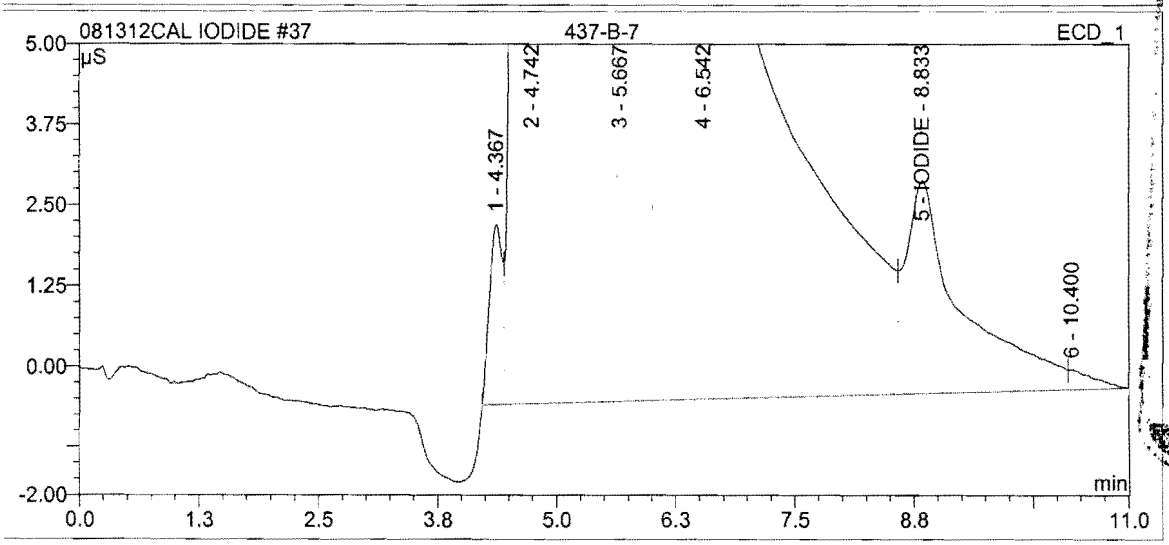




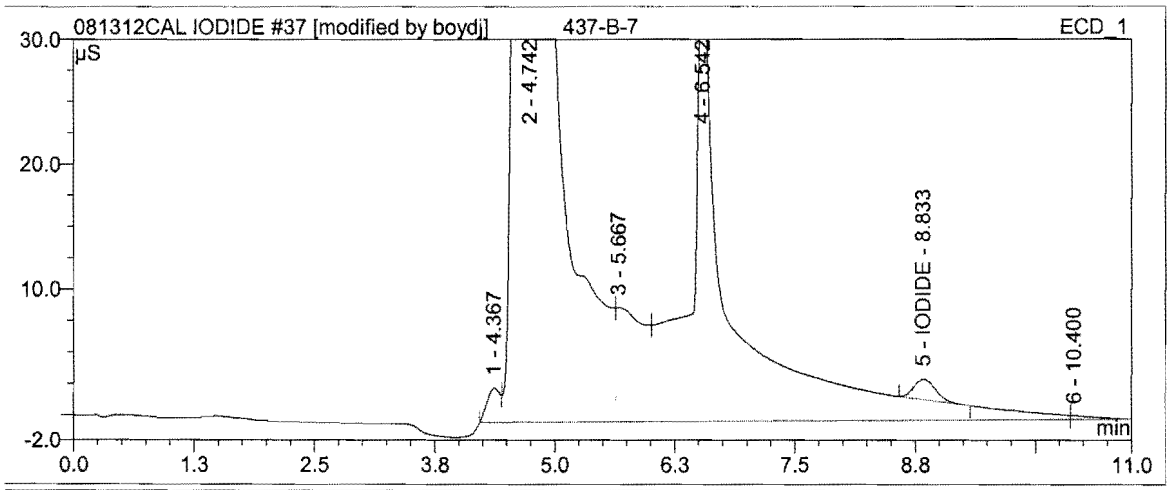
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

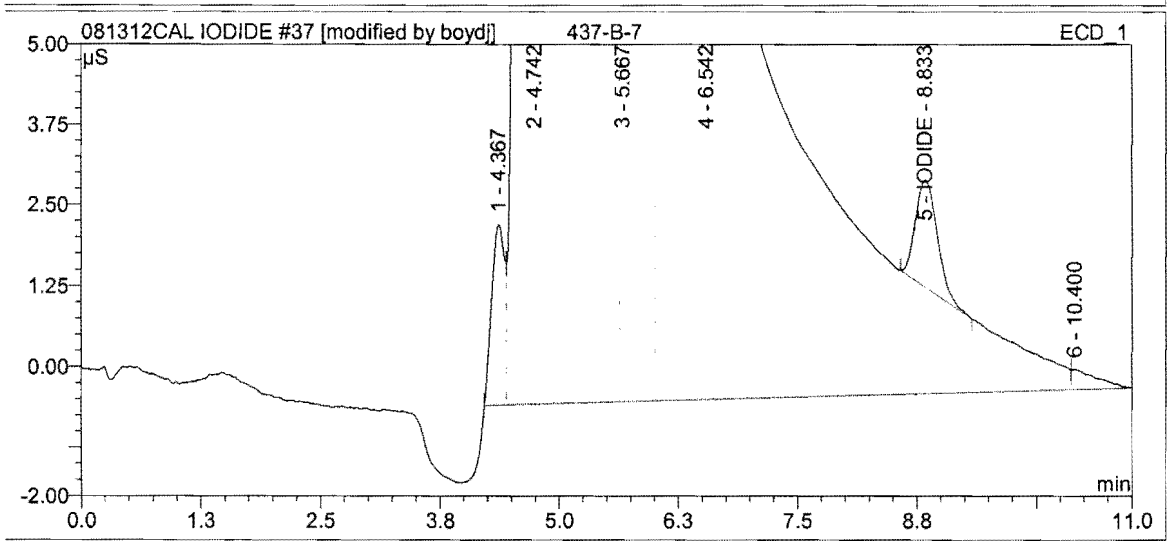
I = rider

Integration Report - ECD_1

Sample Name:	**437-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:09**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.83	IODIDE	Rd*	0.440	1.651	361.3307
		TOTAL:		0.44	1.65	361.33





Integration Report - ECD_1

Sample Name:	**437-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:23**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.84	IODIDE	MB	1.505	3.735	1232.2707
		TOTAL:		1.51	3.73	1232.27

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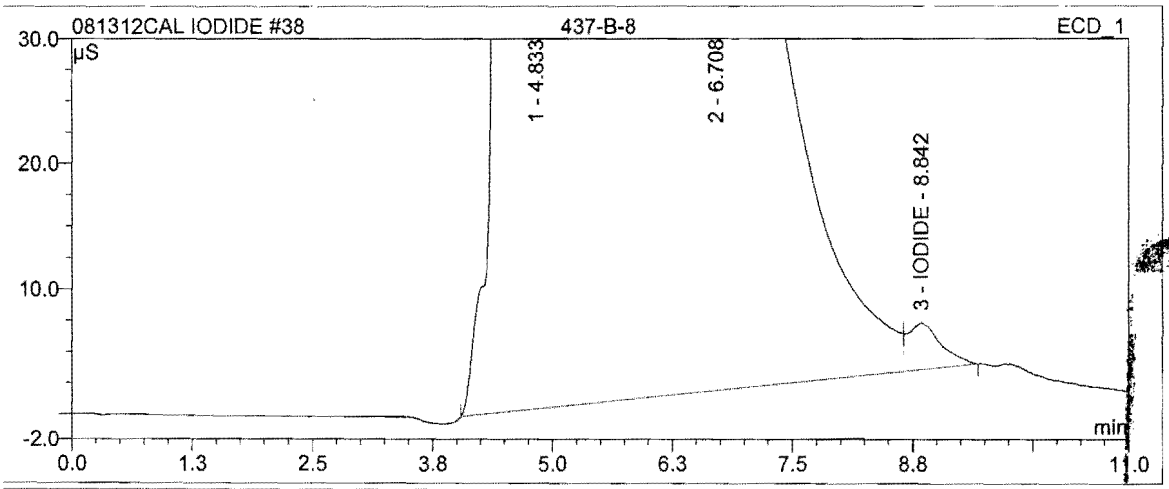
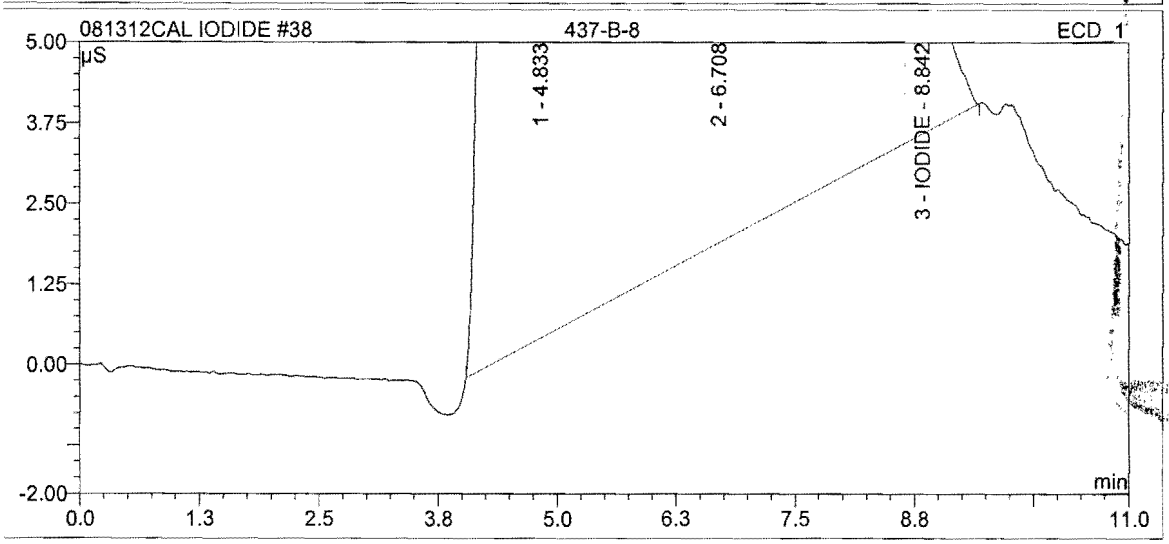




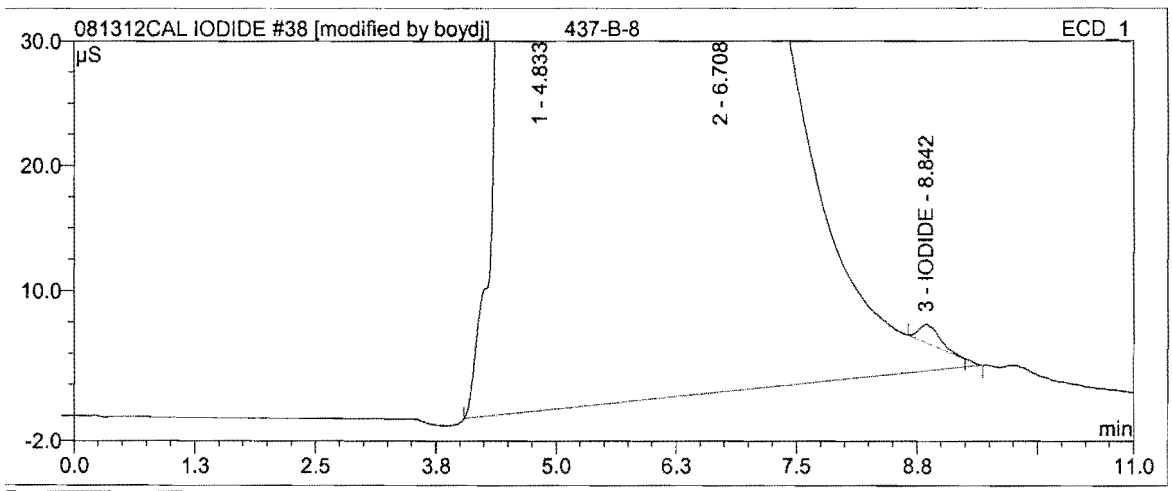
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

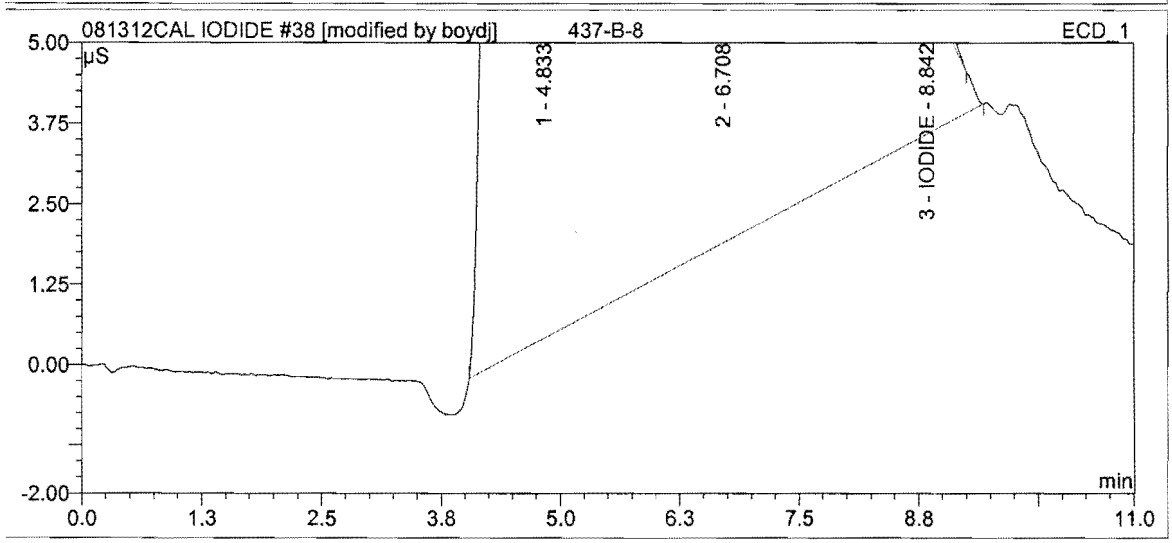
I=rider

Integration Report - ECD_1

Sample Name:	**437-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:23**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.84	IODIDE	Rd*	0.373	1.459	306.0341
		TOTAL:		0.37	1.46	306.03

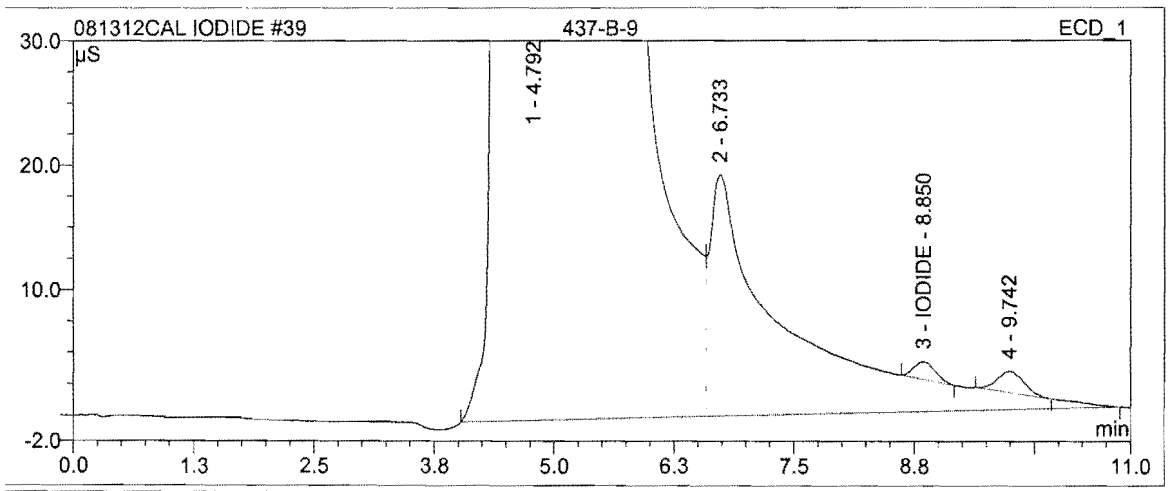


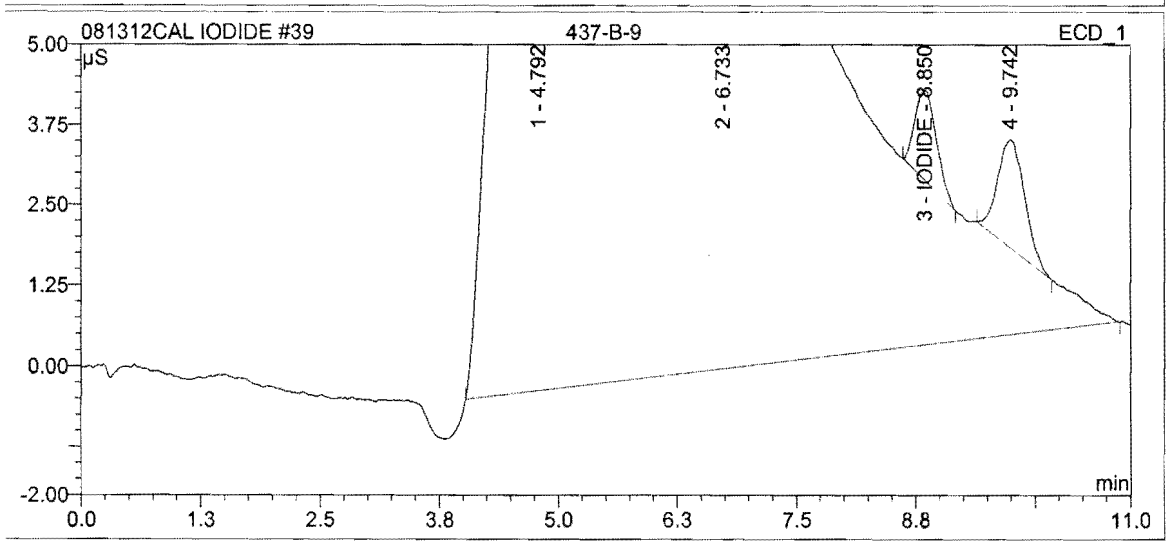


Integration Report - ECD_1

Sample Name:	**437-B-9**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:36**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.85	IODIDE	Rd	0.366	1.400	300.8563
		TOTAL:		0.37	1.40	300.86





Integration Report - ECD_1

Sample Name:	**442-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:50**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
6	8.72	IODIDE	MB	0.465	0.688	381.5167
		TOTAL:		0.46	0.69	381.52

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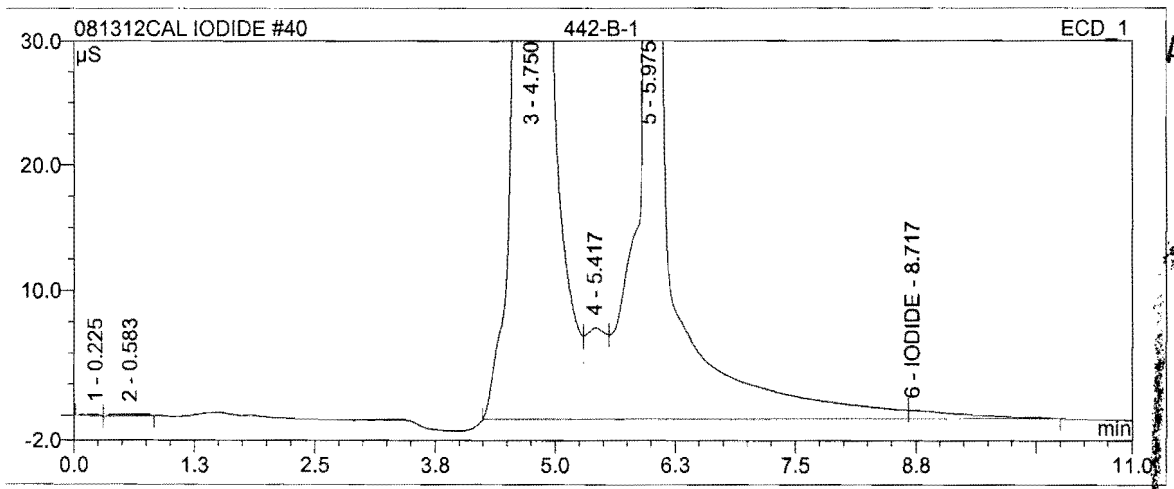
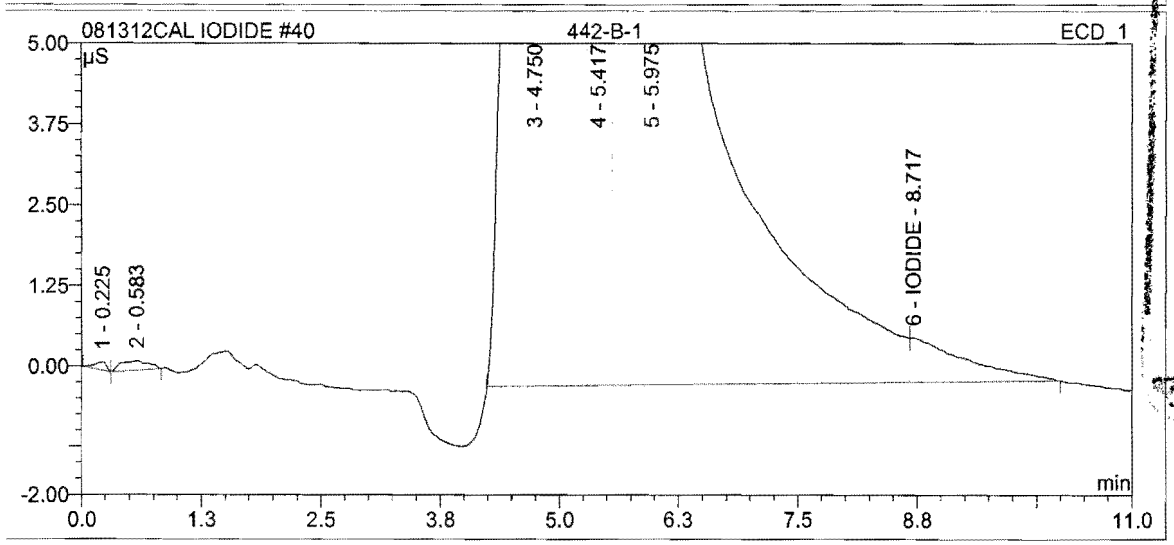


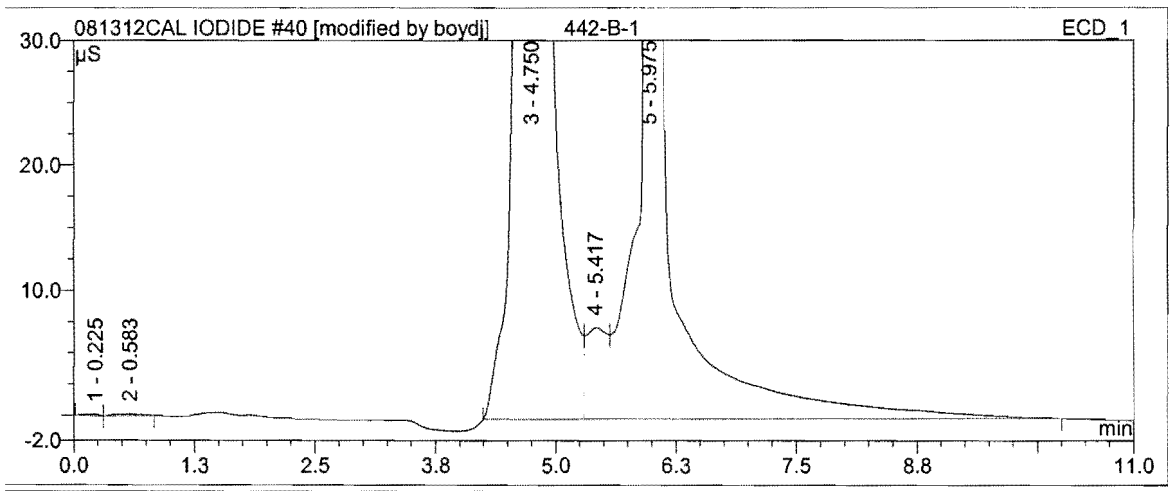


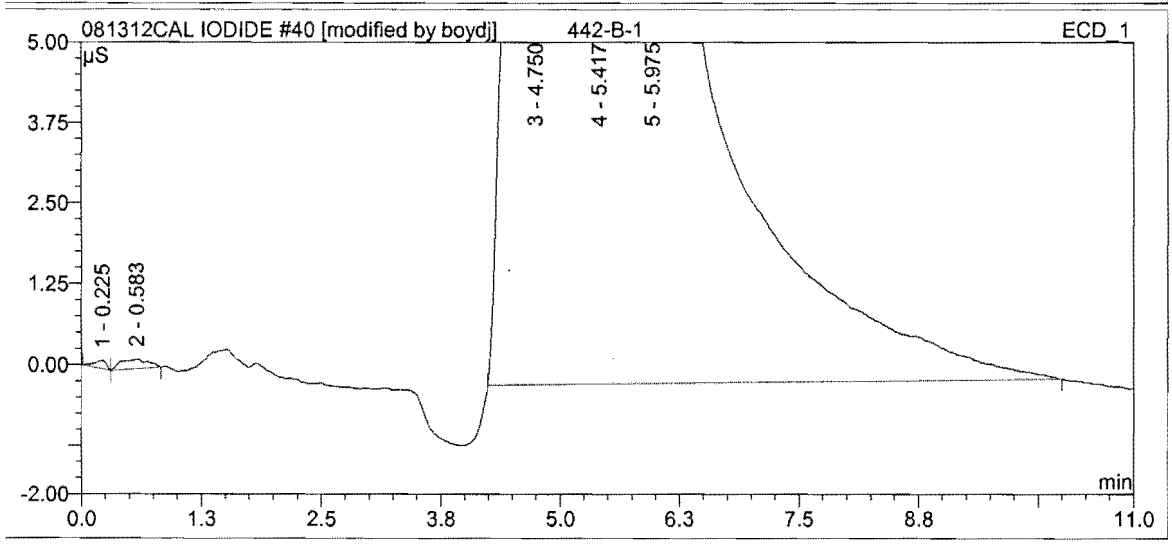
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak - No Iodide
5. Baseline Smoothing
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 03:50**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

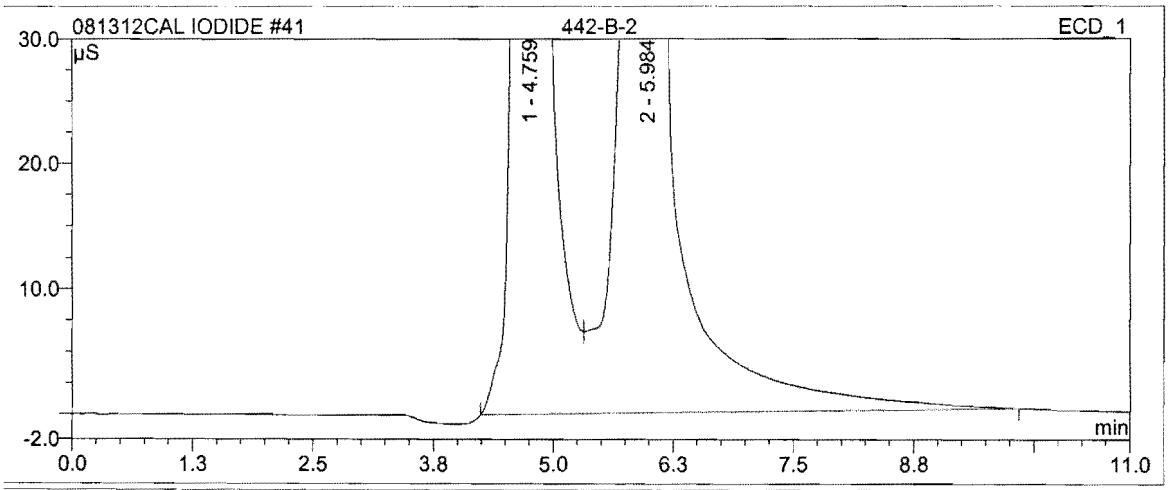


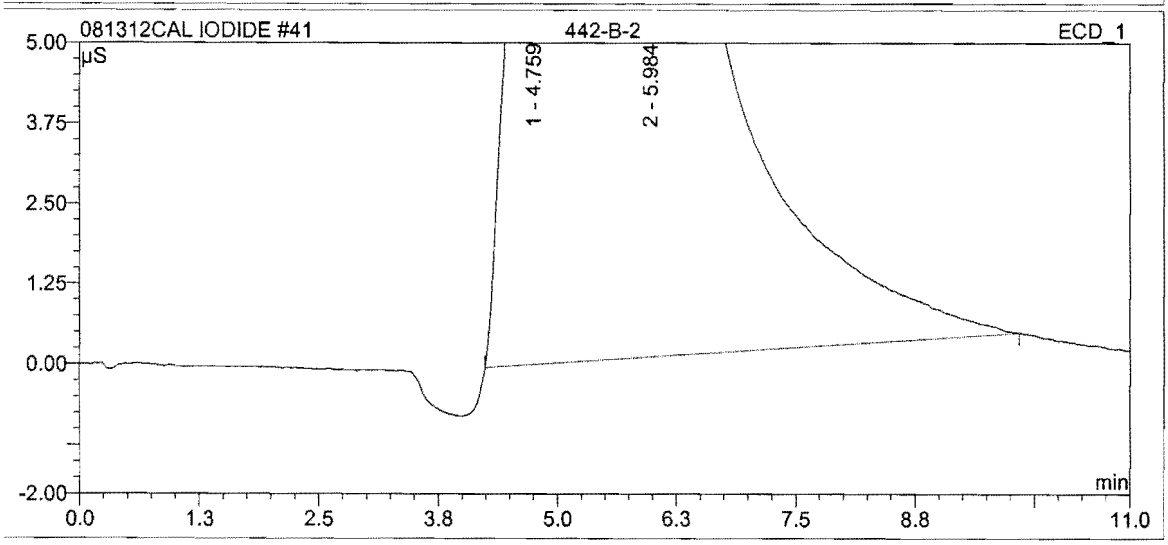


Integration Report - ECD_1

Sample Name:	**442-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:03**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

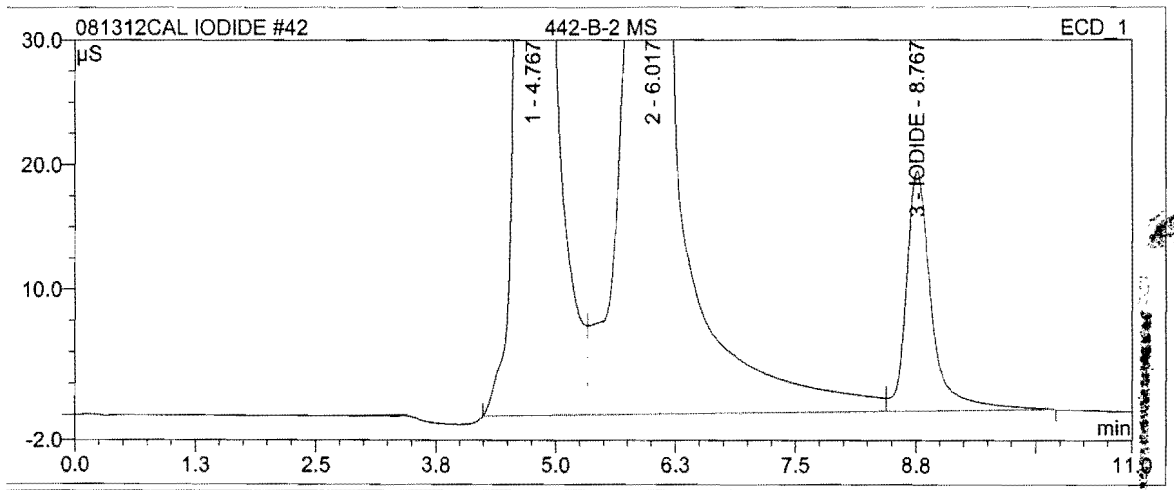


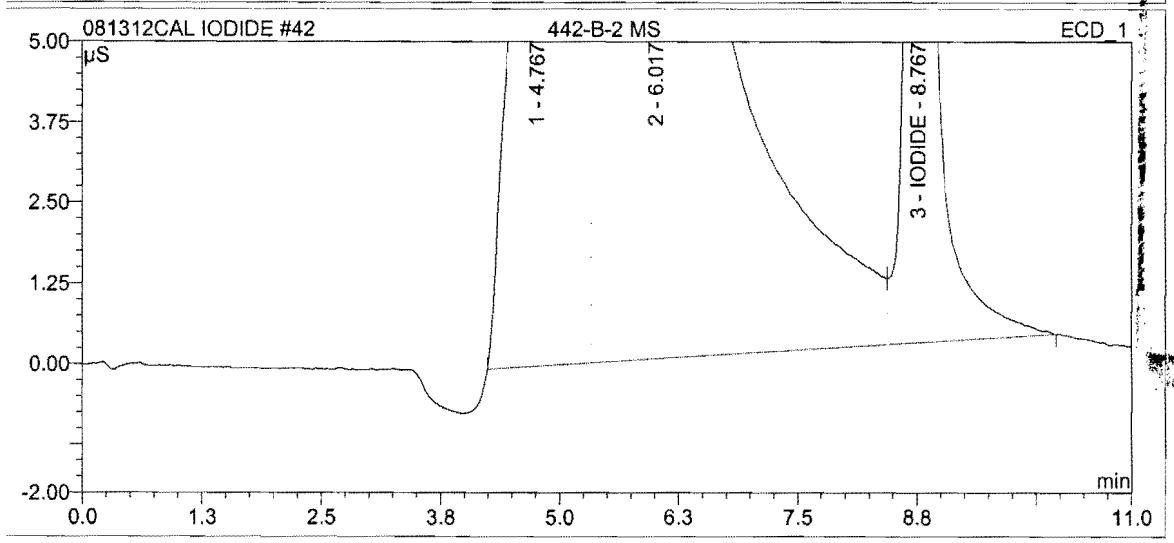


Integration Report - ECD_1

Sample Name:	**442-B-2 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:17**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.77	IODIDE	MB	5.828	19.192	4716.1590
		TOTAL:		5.83	19.19	4716.16





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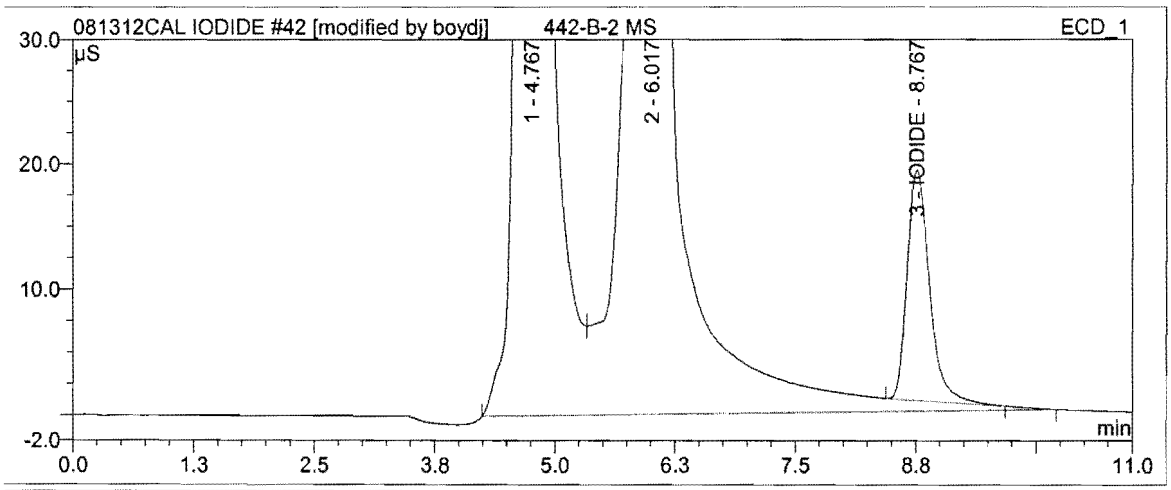
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

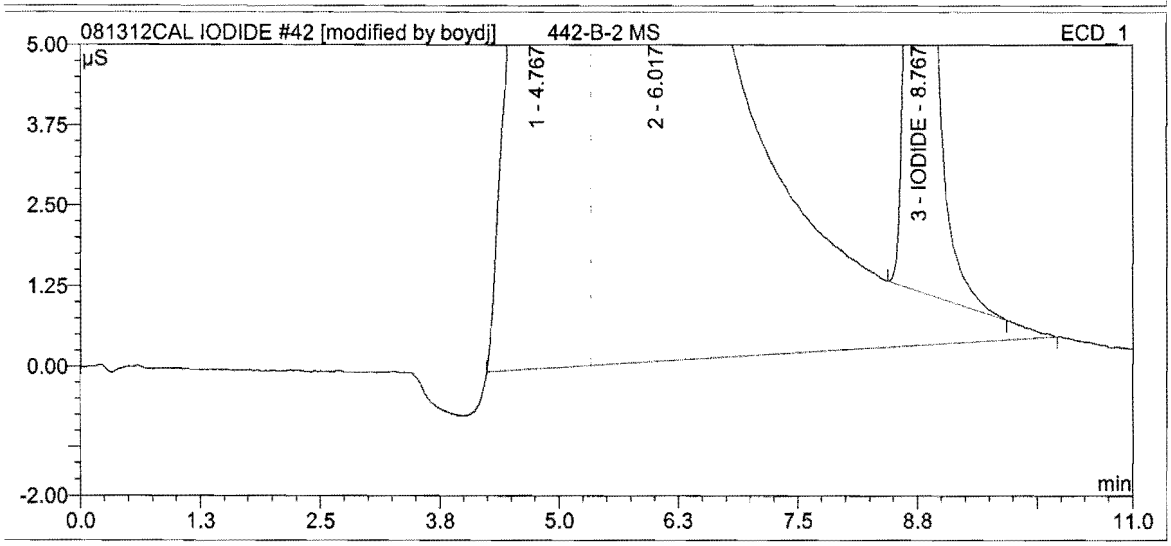
I = rider

Integration Report - ECD_1

Sample Name:	**442-B-2 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:17**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	8.77	IODIDE	Rd*	4.927	18.353	3996.2210
		TOTAL:		4.93	18.35	3996.22

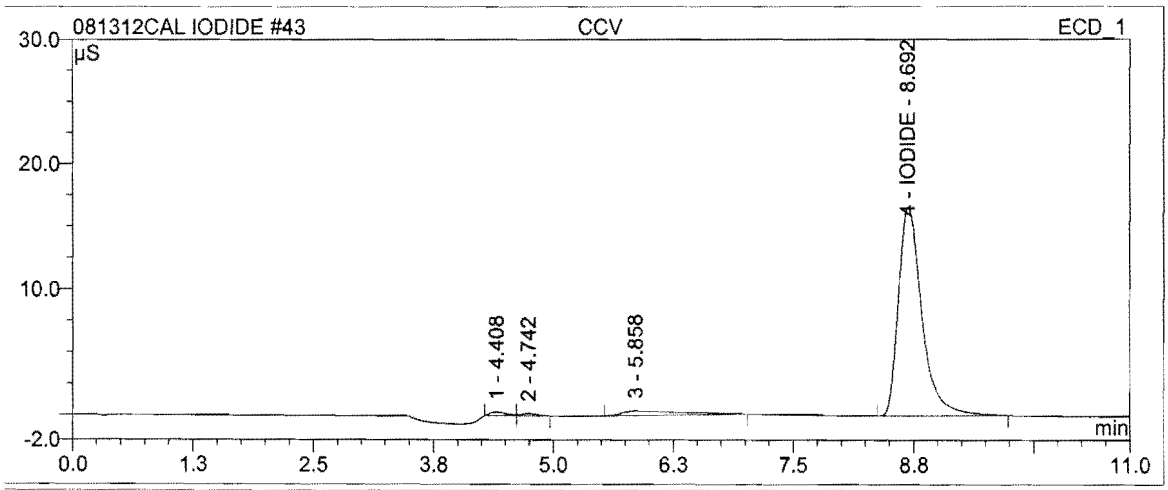


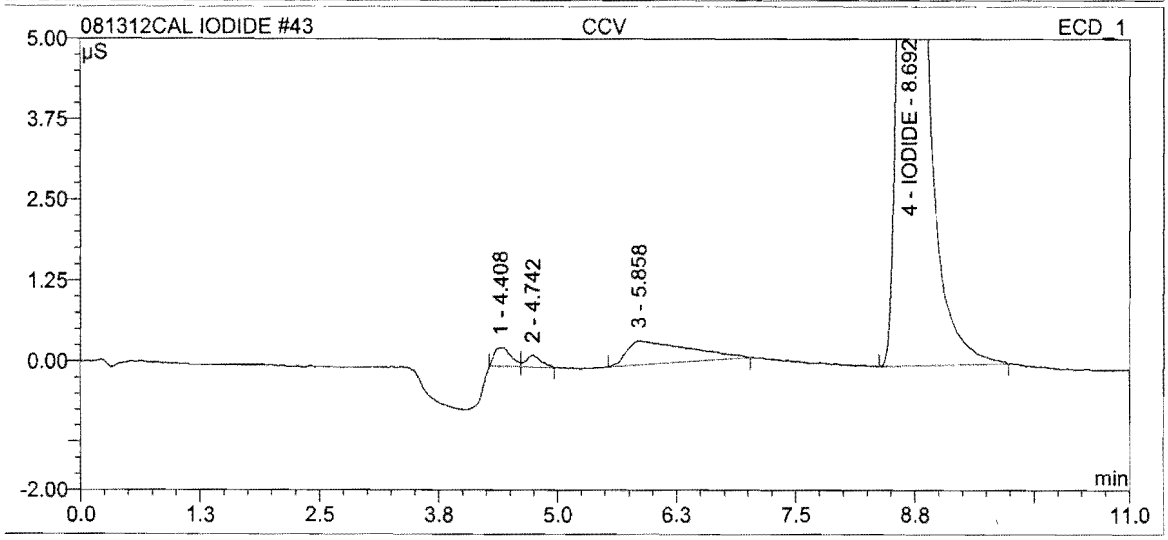


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:30**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.69	IODIDE	BMB	4.711	16.655	3823.2949
		TOTAL:		4.71	16.66	3823.29

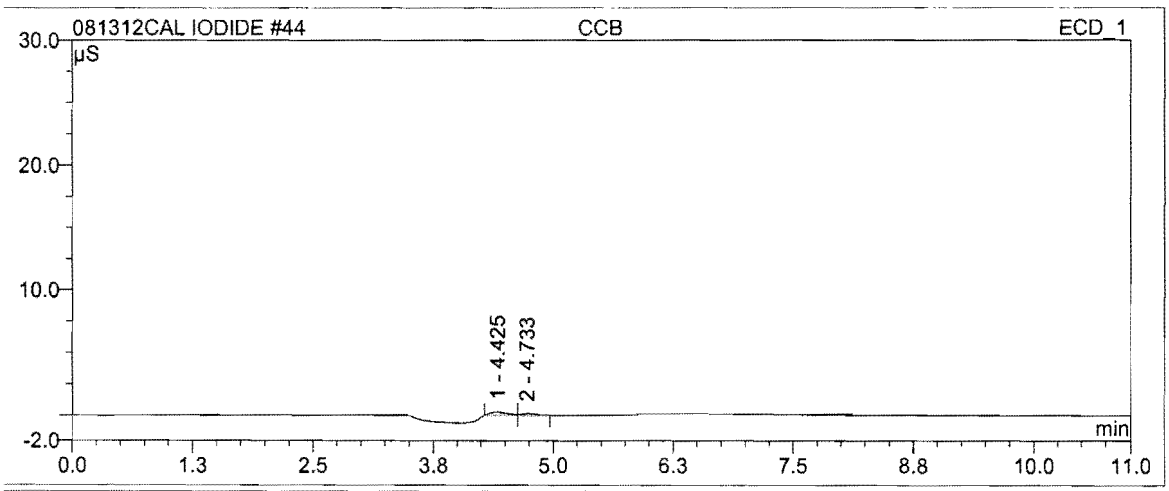


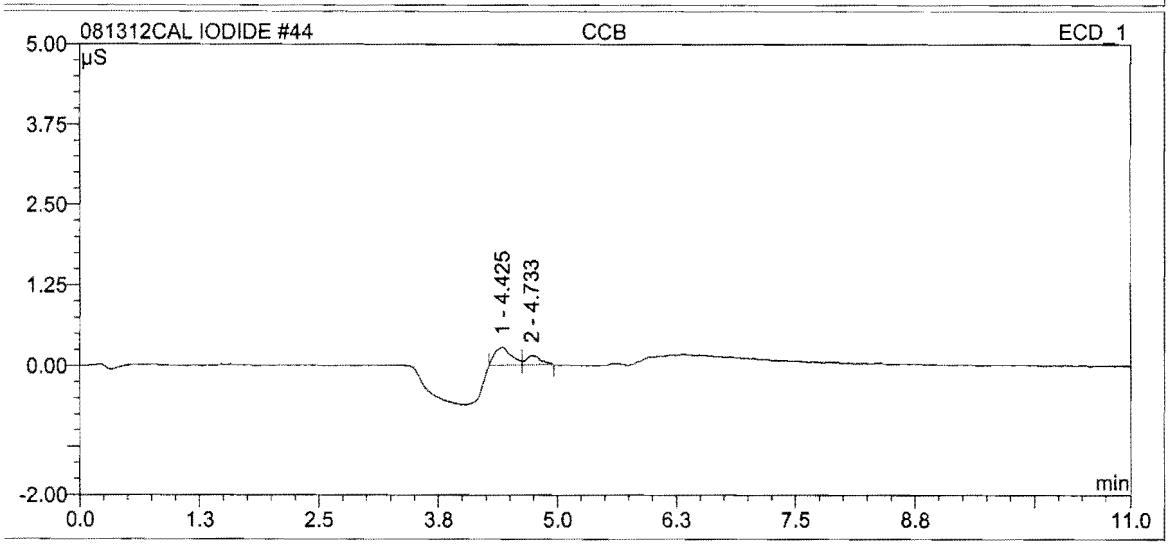


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:43**	*Run Time:*	**11.01**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**442-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:57**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.81	IODIDE	MB	1.503	1.792	1230.5165
		TOTAL:		1.50	1.79	1230.52

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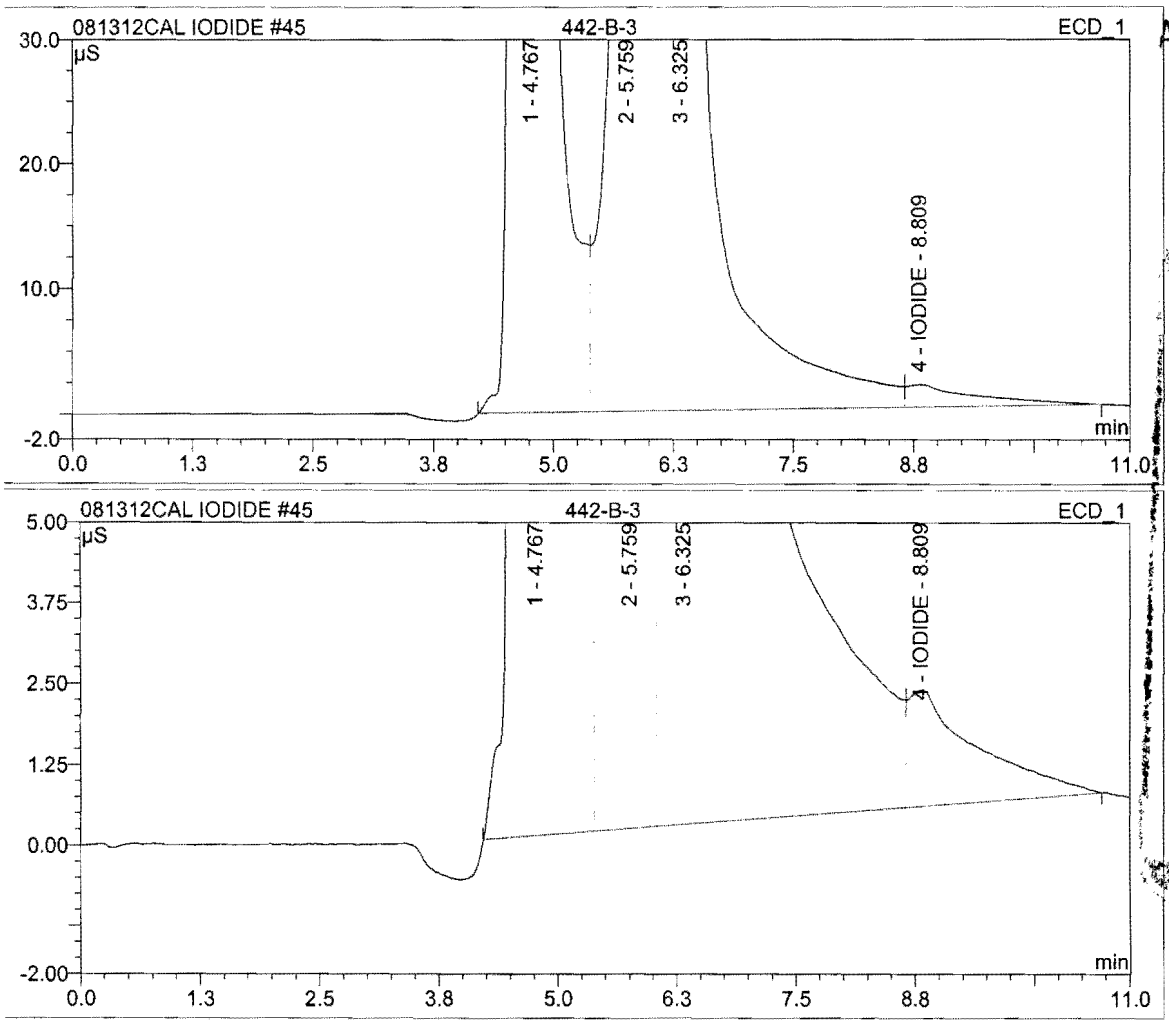
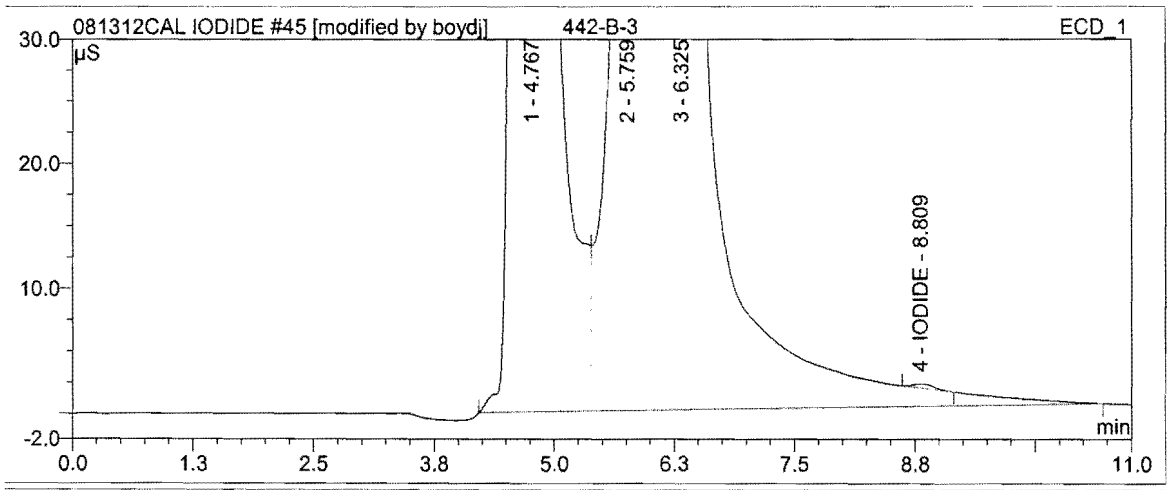


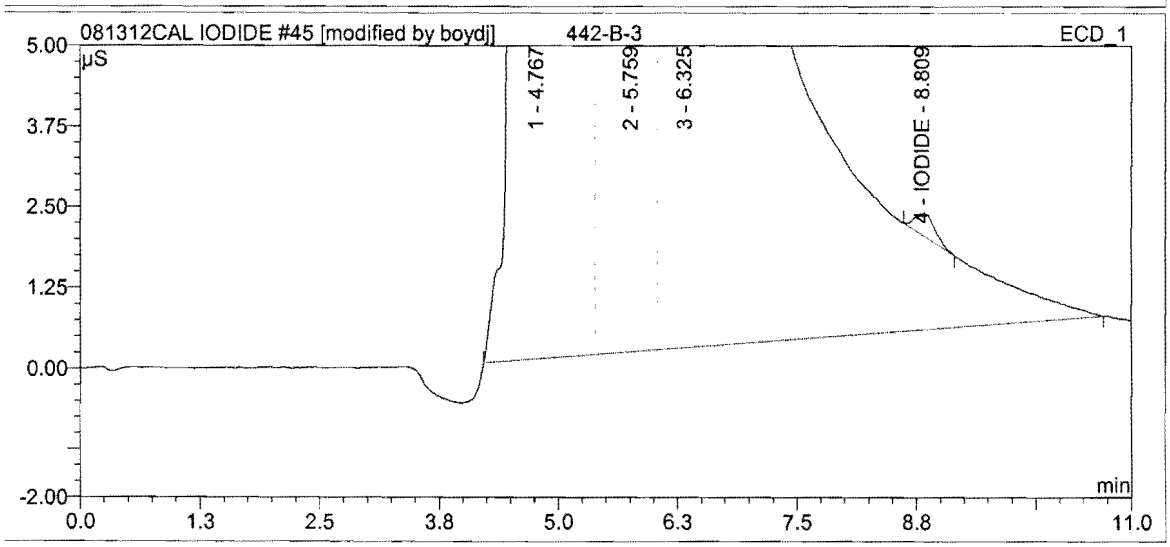
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -I=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 04:57**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.81	IODIDE	Rd*	0.086	0.326	70.5569
		TOTAL:		0.09	0.33	70.56





Integration Report - ECD_1

Sample Name:	**442-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:10**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.82	IODIDE	MB	2.067	2.182	1689.8903
		TOTAL:		2.07	2.18	1689.89

MI
38

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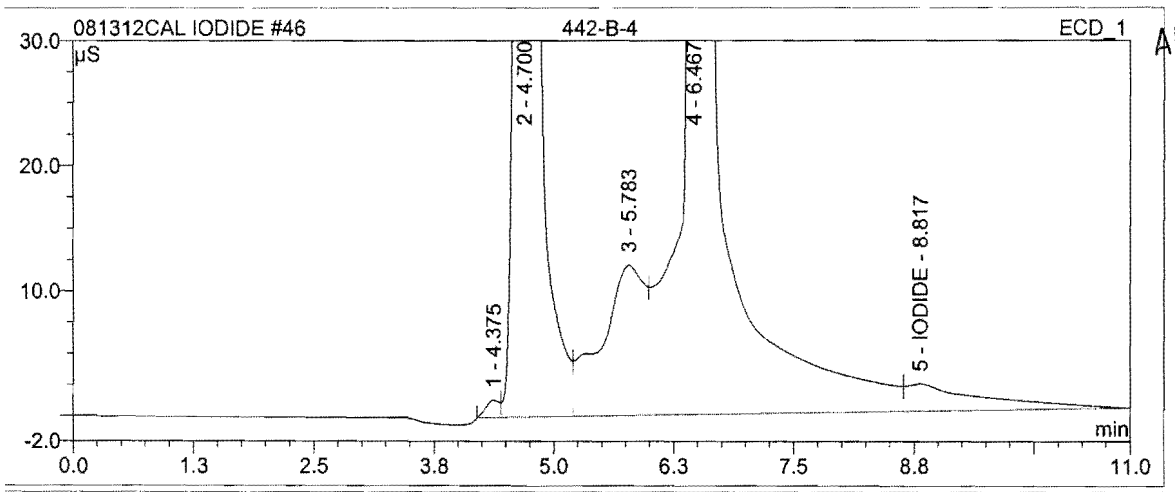
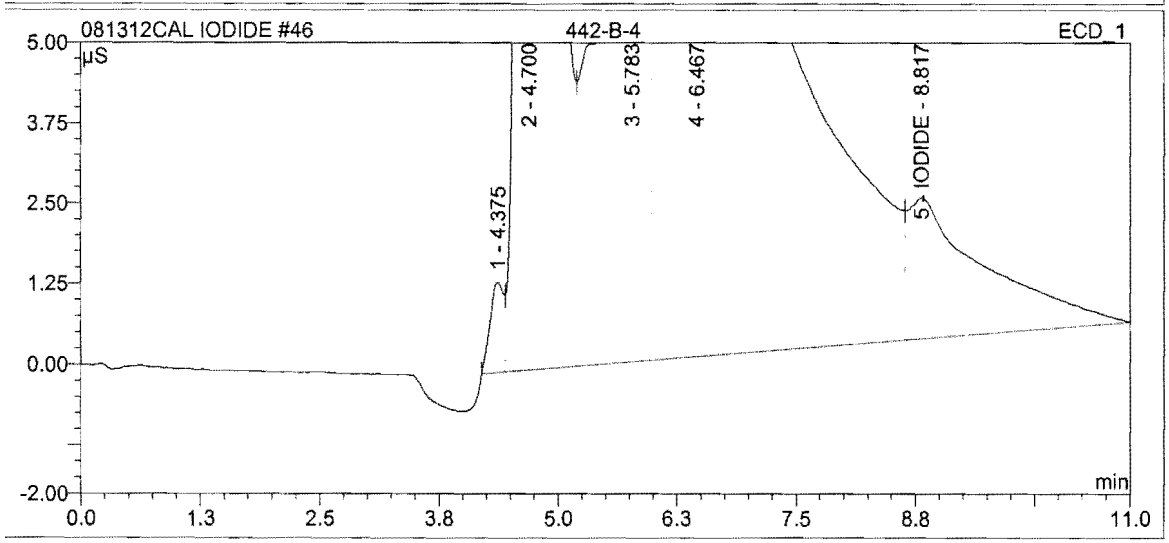


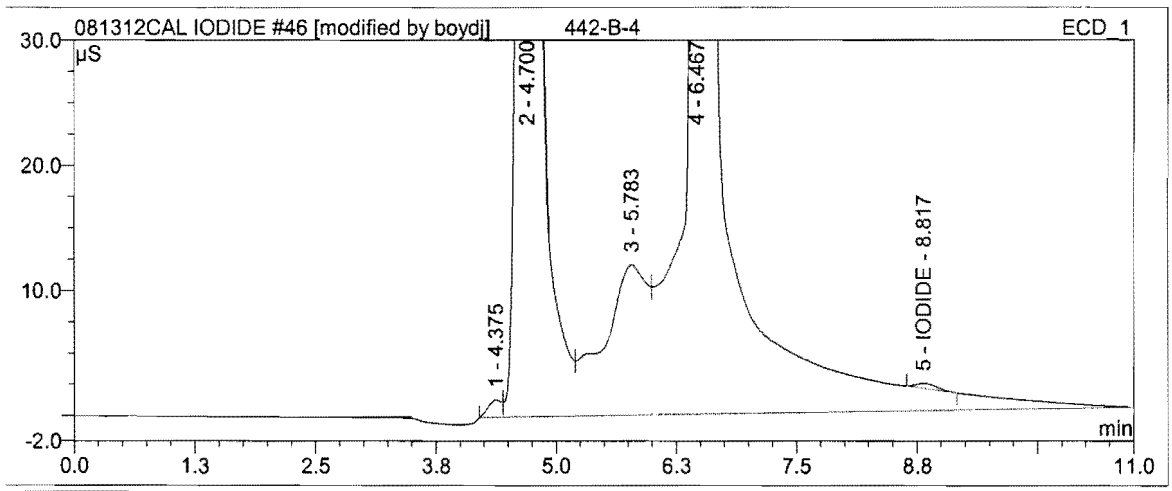


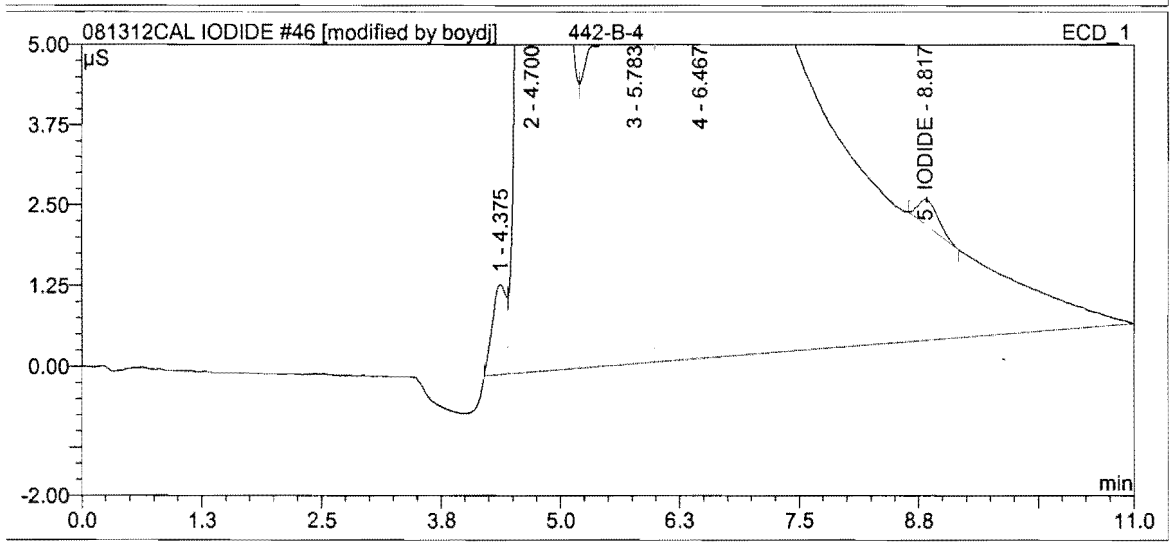
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Incidor
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:10**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
5	8.82	IODIDE	Rd*	0.100	0.392	82.0637
		TOTAL:		0.10	0.39	82.06





Integration Report - ECD_1

Sample Name:	**442-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:24**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	MB	2.470	2.716	2016.8829
		TOTAL:		2.47	2.72	2016.88

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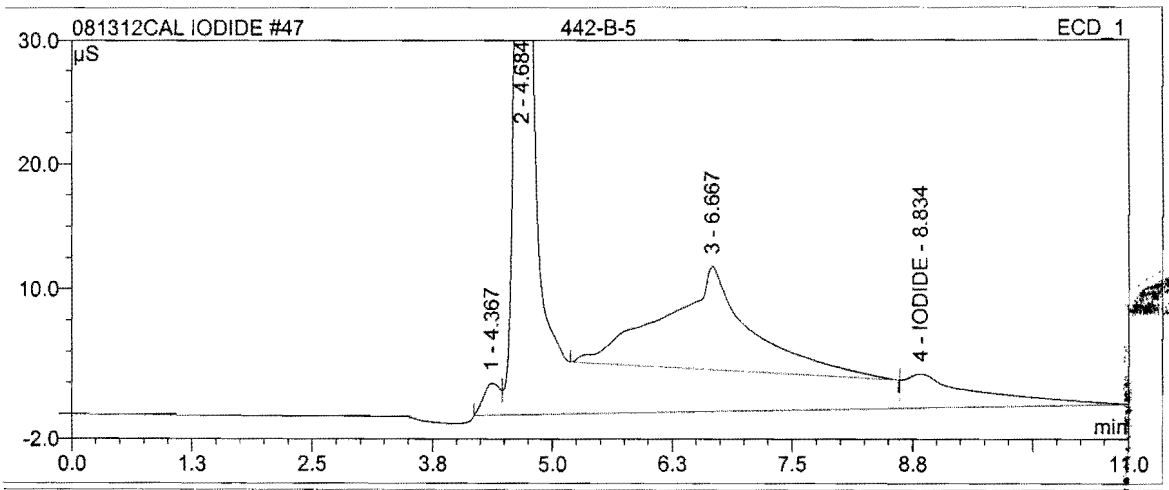
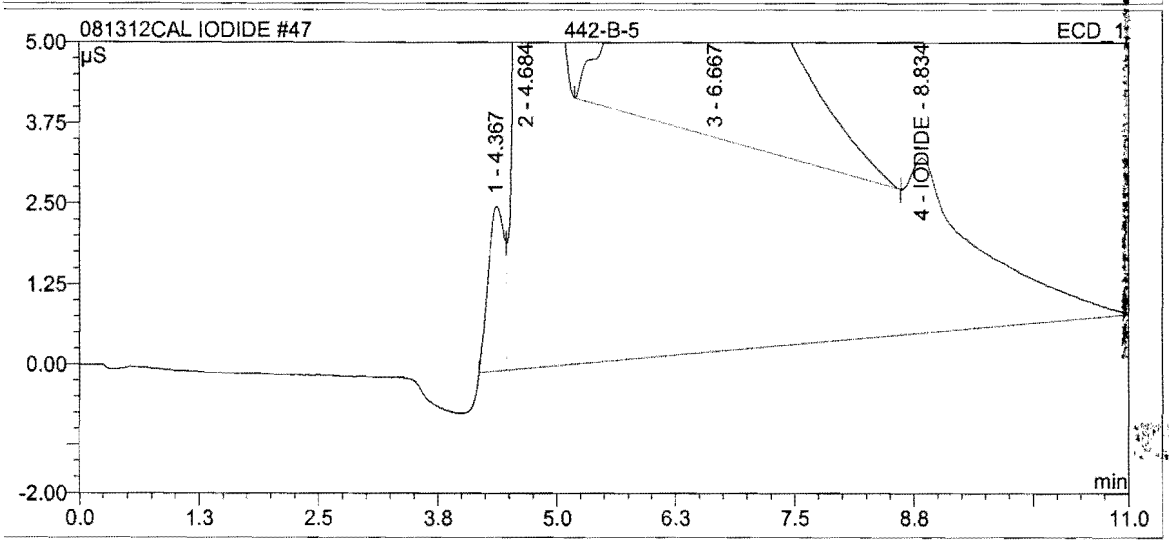


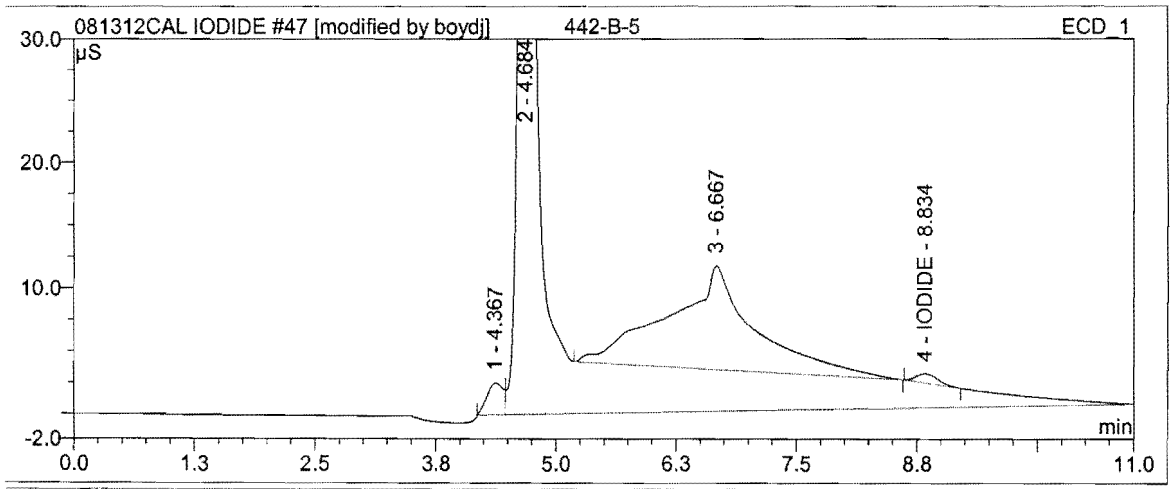


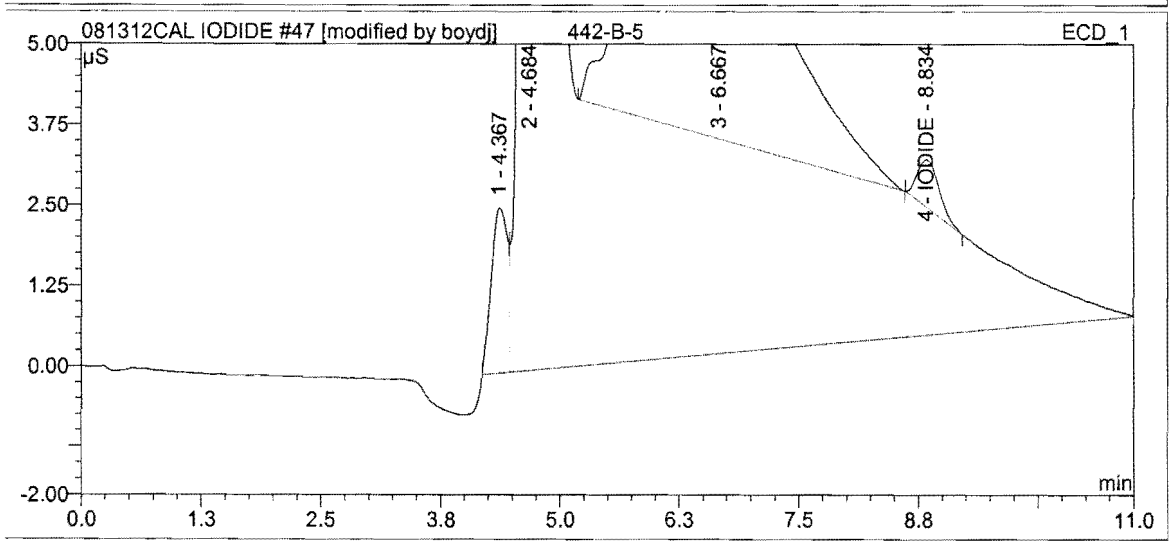
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -I=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:24**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.83	IODIDE	Rd*	0.197	0.736	161.6790
		TOTAL:		0.20	0.74	161.68

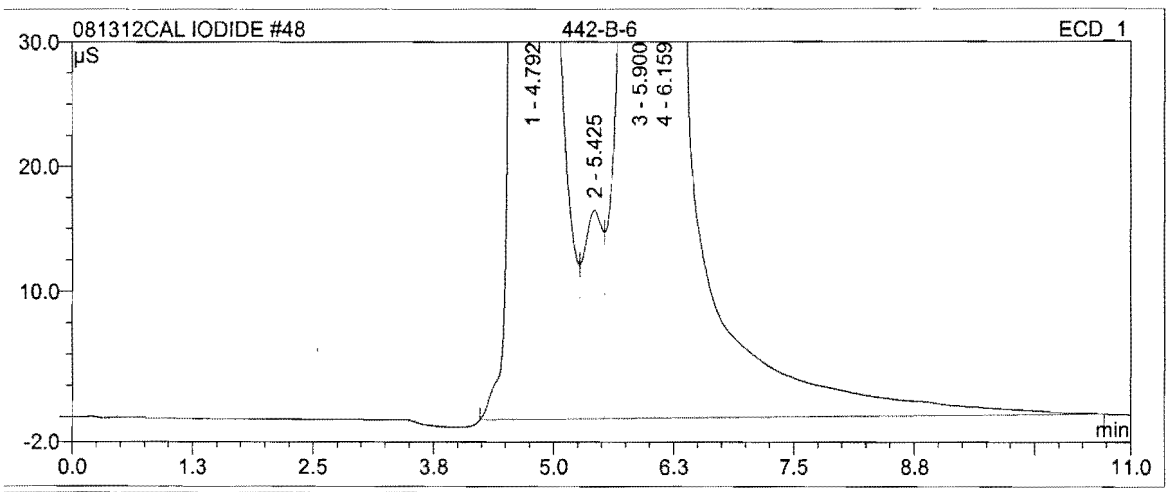


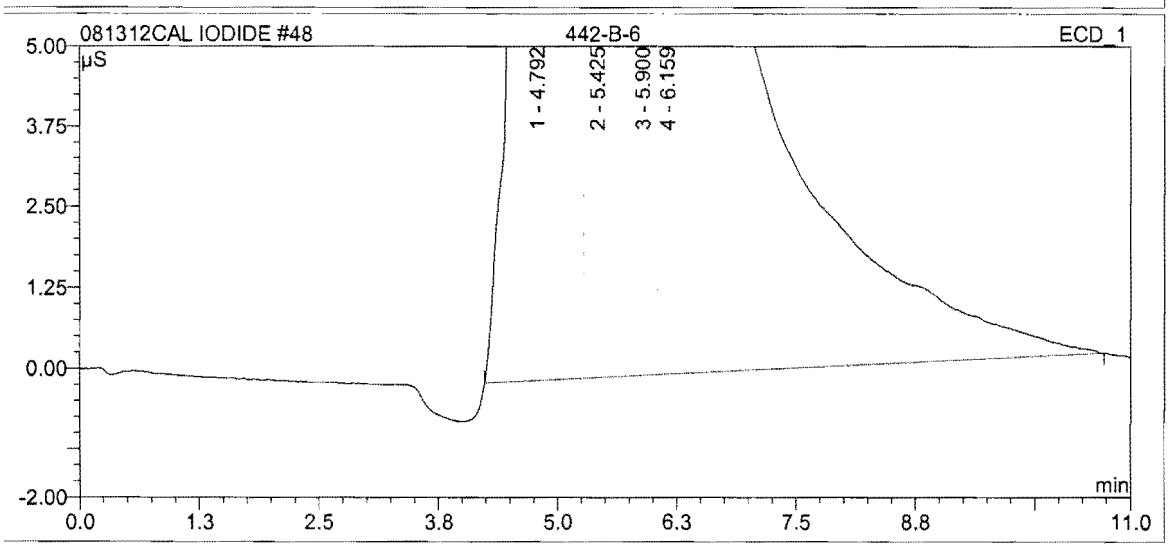


Integration Report - ECD_1

Sample Name:	**442-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:37**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

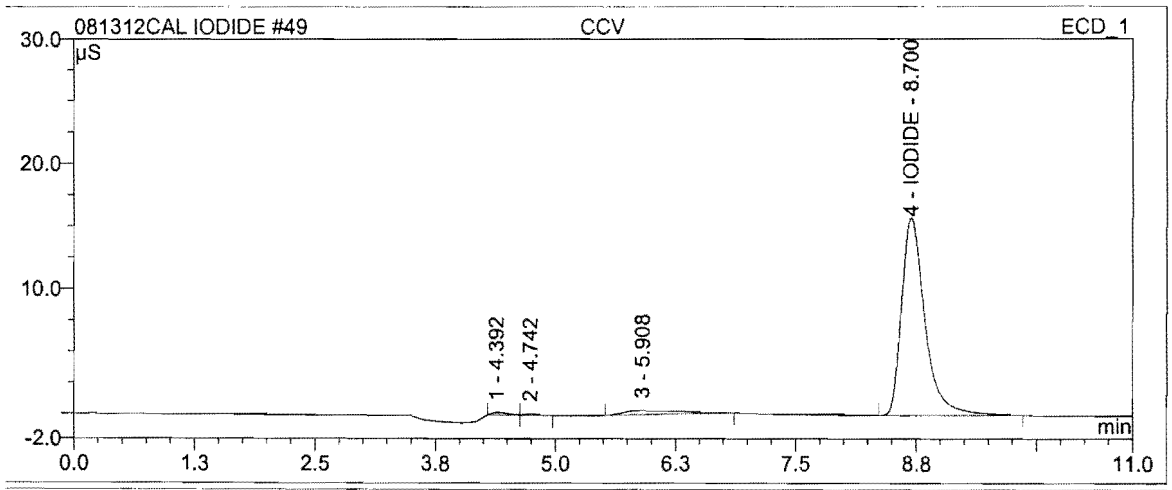


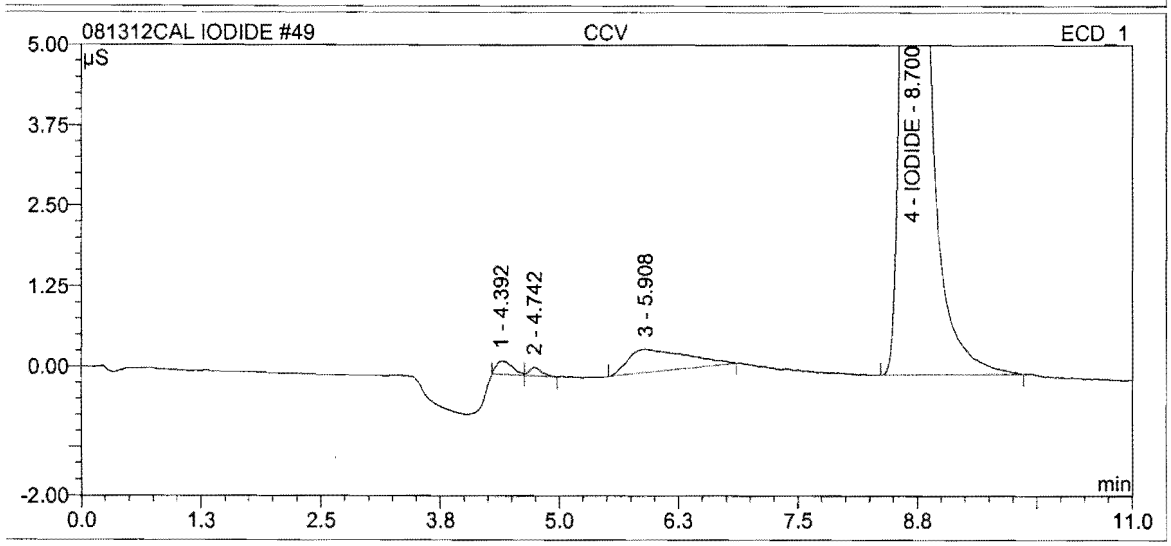


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 05:50**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	8.70	IODIDE	BMB	4.464	15.835	3625.2724
		TOTAL:		4.46	15.83	3625.27

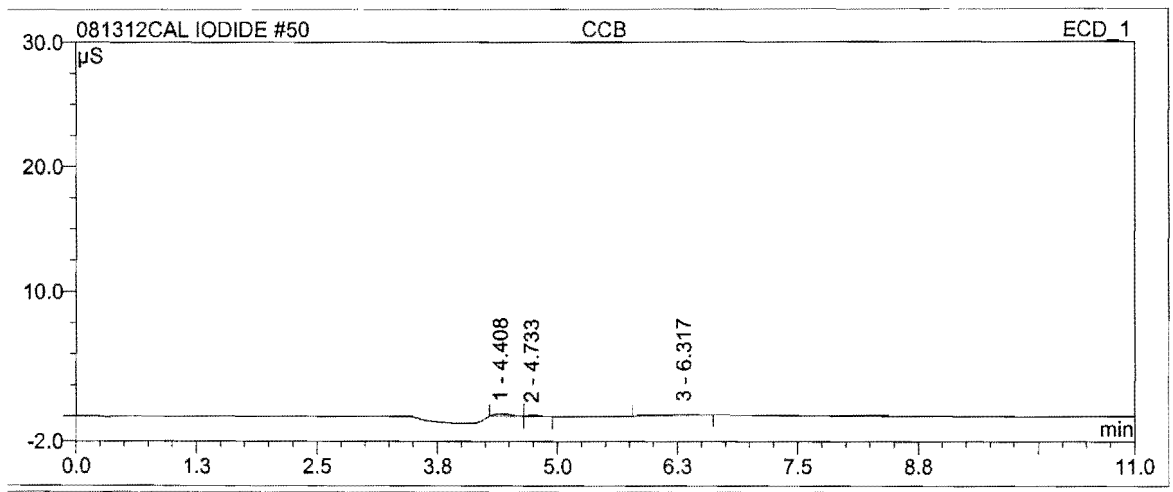


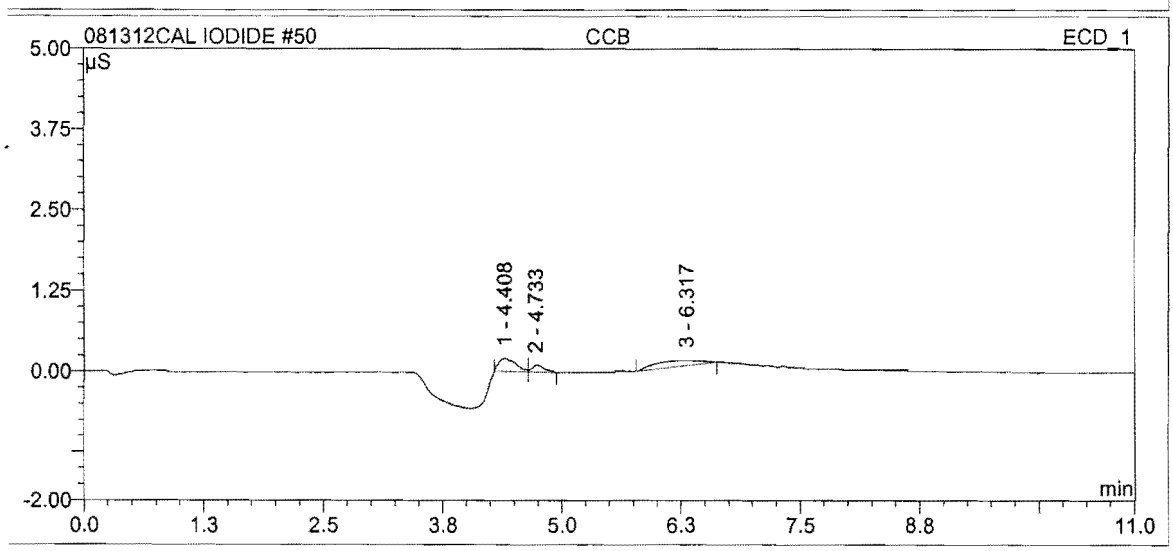


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 06:04**	*Run Time:*	**11.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**END**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Shutdown**	*Operator:*	**n.a.**
Inj. Date/Time:	**14.08.12 06:17**	*Run Time:*	**n.a.**

n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
n.a.	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
		TOTAL:		0.00	0.00	0.00

081312CAL IODIDE #51 END ECD_1

Can't open raw data file "C:\Chromel\data\CLAIRE\Sequences\12AUG\081312CAL IODIDE.SEQ\ECD_1.CHL\1390.acd".
The system cannot find the file specified.

081312CAL IODIDE #51 END ECD_1

Can't open raw data file "C:\Chromel\data\CLAIRE\Sequences\12AUG\081312CAL IODIDE.SEQ\ECD_1.CHL\1390.acd".
The system cannot find the file specified.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica St. Louis
Data Review Checklist
Ion Chromatography
Method 300.0/9056A

Lot(s): 437-1, 442-1, 453-1, 457-1, 468-1, 491-1, 492-1	NCMs: 1337 (Dilutions) 1338 (ms/msD failure)
Batch #(s): 9484	Run Date: 8/17/12
Due Date: 8/22/12	Instrument ID: ICICS1500

	Yes	No	N/A	2nd Level
A. Calibration/Instrument Run QC				
1. Instrument calibrated (if applicable) using a blank and the required minimum number of calibration standards?	✓			—
2. Is the initial calibration curve correlation coefficient ≥ 0.995?	✓			—
3. ICV/CCV analyzed at the appropriate frequency and within control limits?	✓			—
4. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			—
5. Calibration curve is updated in the method with the correct retention times?	✓			—
B. Sample Results				
1. Samples with concentration > the linear range or affected by interferences diluted and reanalyzed? -NCM	✓			—
2. All reported results bracketed by in control QC?	✓			—
3. Sample analyses done within holding time?	✓			—
4. All dilutions were checked and verified against the "straight" runs?	✓			—
C. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			—
2. Method blank done per prep batch and <RL or CRDL (CLP)?	✓			—
3. MS run at required frequency and within limits? -NCM	✓	(✓)		—
4. MS or Dup run at required frequency and RPD within SOP limits?	✓			—
D. Other				
1. Are all nonconformances documented appropriately?	✓			—
2. Current MDL data on file?	✓			—
3. Calculations checked for error?			✓	—
4. Were manual integrations checked for appropriateness, correctness and proper documentation (before/after chromatograms, reason, analyst, date?	✓			—
5. Transcriptions checked for error?	✓			—
6. All client/project specific requirements met?	✓			—
7. Date/time of analysis verified as correct?	✓			—

Analyst: JB Date: 8/22/12
Comments:

2nd Level: [signature] Date: 8/22/12

WETCHEM ION CHROMATOGRAPHY
QA\Forms\Review\WetChemIon
Revision 2 7/31/12

NCM ID: 160-1337 **Date Opened:** 08/22/2012
NCM Type: Reporting Limit - Dilution, Target **Date Closed:**
Lab Section: Wet Chemisty Analysis **Date Verified:**

Narrative

The following samples were diluted to bring the concentration of Bromide within the calibration range in batch9484: <&commaMerge&>. Elevated reporting limits (RLs) are provided.

Affected Items

Description	Project Manager
160-437-B-5 ^5	Fussner, Lynn M
160-468-B-3 ^5	Fussner, Lynn M
160-437-B-9 ^5	Fussner, Lynn M
160-437-B-6 ^5	Fussner, Lynn M
160-437-B-2 ^5	Fussner, Lynn M

Notifications

User Full Name	Date Received	Date	Notice Level	Verification Type
Cruz, Fernando	08/22/2012		Level 1	Review

NCM ID: 160-1338 **Date Opened:** 08/22/2012
NCM Type: MS/MSD - %R, LCS Pass **Date Closed:**
Lab Section: Wet Chemisty Analysis **Date Verified:**

Narrative

The following matrix spike / matrix spike duplicate (MS/MSD) recoveries for Bromide batch 9484 were outside control limits. The associated laboratory control sample (LCS) recoveries met acceptance criteria.

Affected Items

Description	Project Manager
160-457-B-4 MSD	Fussner, Lynn M
160-437-B-1 MS	Fussner, Lynn M
160-453-B-7 MS	Fussner, Lynn M
160-437-B-1 MS	Fussner, Lynn M
160-437-B-1 MSD	Fussner, Lynn M
160-457-B-4 MSD	Fussner, Lynn M
160-437-B-1 MS	Fussner, Lynn M
160-457-B-4 MSD	Fussner, Lynn M
160-437-B-1 MSD	Fussner, Lynn M
160-442-B-2 MS	Fussner, Lynn M
160-437-B-1 MSD	Fussner, Lynn M
160-457-B-4 MSD	Fussner, Lynn M

Notifications

User Full Name	Date Received	Date	Notice Level	Verification Type
Cruz, Fernando	08/22/2012		Level 1	Review

Dec: 8/22

TestAmerica St. Louis

Anion Worksheet

Analyst: JB Method: 300.0 SOP: ST-WC-0028, Rev. 17

Date: 8/17/12 Instrument: IC ICS 1500

All result as ppb Batch#: 9484

Lot Number	Sample ID	Fluoride	Chloride	Nitrite	Bromide	Nitrate	Phosphate	Sulfate	Chlorate	Iodide
437-1	437-1 •				1x *					
	437-2				5x *					
	437-3				1x *					
	437-4				1x *					
	437-5				5x *					
	437-6				5x *					
	437-7				1x *					
	437-8				1x *					
	437-9				5x *					
442-1	442-1				1x *					
	442-2 •				1x *					
	442-3				1x *					
	442-4				1x *					
	442-5				1x *					
	442-6				1x *					
453-1	453-1				1x *					
	453-2				1x *					
	453-3				1x *					
	453-4				1x *					
	453-5				1x *					

Form: SL-INORG-0080, Revised 4/15/2011

TestAmerica St. Louis

Anion Worksheet

Analyst: JB Method: 300.0 SOP: ST-WC-0028, Rev. 17

Date: 8/17/12 Instrument: ICICS1500

All result as ppb Batch#: 9484

Lot Number	Sample ID	Fluoride	Chloride	Nitrite	Bromide	Nitrate	Phosphate	Sulfate	Chlorate	Iodide
453-1	453-6				1x *					
	453-7*				1x *					
	453-8				1x *					
457-1	457-1				1x *					
	457-3				1x *					
	457-4 *	-client req. ms/msD from separate bottles			1x *					
	457-5				1x *					
	457-6				1x *					
	457-7				1x *					
	457-8				1x *					
468-1	468-1				1x *					
	468-2				1x *					
	468-3				5x *					
	468-4				1x *					
	468-5				1x *					
	468-6				1x *					
491-1	491-1				1x *					
	491-2				1x *					
492-1	492-1				1x *					

Form: SL-INORG-0080, Revised 4/15/2011

8/17/12 ICICS1500 run is pulling from its 8/17/12 Calibration. JB 8/22/12

Sequence: 081712CAL
Operator: boydj
Printed: 8/21/2012 5:41:13 PM

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	CAL 1	Standard	1	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:29:25 AM
2	CAL 2	Standard	2	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:45:50 AM
3	CAL 3	Standard	3	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 12:02:14 PM
4	CAL 4	Standard	4	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 12:18:38 PM
5	CAL 5	Standard	5	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 12:35:02 PM
6	CAL 6	Standard	6	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 12:51:26 PM
7	ICV	Unknown	7	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 1:07:50 PM
8	ICB	Unknown	8	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 1:24:15 PM
9	MB	Unknown	9	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 1:40:39 PM
10	LCS	Unknown	10	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 1:57:04 PM
11	437-B-1	Unknown	11	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 2:19:51 PM
12	437-B-1 MS	Unknown	12	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 2:36:16 PM
13	437-B-1 MSD	Unknown	13	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 2:52:40 PM
14	437-B-2	Unknown	14	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 3:09:04 PM
15	437-B-2 @5	Unknown	15	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 3:25:28 PM
16	437-B-3	Unknown	16	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 3:41:53 PM
17	437-B-3 @5	Unknown	17	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 3:58:18 PM
18	437-B-4	Unknown	18	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 4:14:42 PM
19	437-B-4 @5	Unknown	19	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 4:31:06 PM
20	CCV	Unknown	20	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 4:47:31 PM
21	CCB	Unknown	21	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 5:03:56 PM
22	437-B-5	Unknown	22	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 5:20:20 PM
23	437-B-5 @5	Unknown	23	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 5:36:44 PM
24	437-B-6	Unknown	24	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 5:53:09 PM
25	437-B-6 @5	Unknown	25	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 6:09:33 PM
26	437-B-7	Unknown	26	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 6:25:58 PM
27	437-B-7 @5	Unknown	27	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 6:42:22 PM
28	437-B-8	Unknown	28	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 6:58:47 PM
29	437-B-8 @5	Unknown	29	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 7:15:11 PM
30	437-B-9	Unknown	30	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 7:31:35 PM
31	437-B-9 @5	Unknown	31	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 7:48:00 PM
32	CCV	Unknown	32	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 8:04:25 PM
33	CCB	Unknown	33	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 8:20:50 PM
34	442-B-1	Unknown	34	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 8:37:14 PM
35	442-B-2	Unknown	35	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 8:53:38 PM
36	442-B-2 MS	Unknown	36	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 9:10:02 PM
37	442-B-3	Unknown	37	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 9:26:27 PM
38	442-B-4	Unknown	38	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 9:42:51 PM
39	442-B-5	Unknown	39	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 9:59:16 PM
40	442-B-5 @5	Unknown	40	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 10:15:40 PM
41	442-B-6	Unknown	41	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 10:32:05 PM
42	453-B-1	Unknown	42	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 10:48:29 PM

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Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	CAL 1	1.0000	1.0000	1.0000	100	081712CLAIRE	
2	CAL 2	1.0000	1.0000	1.0000	101	081712CLAIRE	
3	CAL 3	1.0000	1.0000	1.0000	102	081712CLAIRE	
4	CAL 4	1.0000	1.0000	1.0000	103	081712CLAIRE	
5	CAL 5	1.0000	1.0000	1.0000	104	081712CLAIRE	
6	CAL 6	1.0000	1.0000	1.0000	105	081712CLAIRE	
7	ICV	1.0000	1.0000	1.0000	106	081712CLAIRE	
8	ICB	1.0000	1.0000	1.0000	107	081712CLAIRE	
9	MB	1.0000	1.0000	1.0000	108	081712CLAIRE	
10	LCS	1.0000	1.0000	1.0000	109	081712CLAIRE	
11	437-B-1	1.0000	1.0000	1.0000	110	081712CLAIRE	
12	437-B-1 MS	1.0000	1.0000	1.0000	111	081712CLAIRE	
13	437-B-1 MSD	1.0000	1.0000	1.0000	112	081712CLAIRE	
14	437-B-2	1.0000	1.0000	1.0000	113	081712CLAIRE	
15	437-B-2 @5	1.0000	1.0000	1.0000	114	081712CLAIRE	
16	437-B-3	1.0000	1.0000	1.0000	115	081712CLAIRE	
17	437-B-3 @5	1.0000	1.0000	1.0000	116	081712CLAIRE	
18	437-B-4	1.0000	1.0000	1.0000	117	081712CLAIRE	
19	437-B-4 @5	1.0000	1.0000	1.0000	118	081712CLAIRE	
20	CCV	1.0000	1.0000	1.0000	119	081712CLAIRE	
21	CCB	1.0000	1.0000	1.0000	120	081712CLAIRE	
22	437-B-5	1.0000	1.0000	1.0000	121	081712CLAIRE	
23	437-B-5 @5	1.0000	1.0000	1.0000	122	081712CLAIRE	
24	437-B-6	1.0000	1.0000	1.0000	123	081712CLAIRE	
25	437-B-6 @5	1.0000	1.0000	1.0000	124	081712CLAIRE	
26	437-B-7	1.0000	1.0000	1.0000	125	081712CLAIRE	
27	437-B-7 @5	1.0000	1.0000	1.0000	126	081712CLAIRE	
28	437-B-8	1.0000	1.0000	1.0000	127	081712CLAIRE	
29	437-B-8 @5	1.0000	1.0000	1.0000	128	081712CLAIRE	
30	437-B-9	1.0000	1.0000	1.0000	129	081712CLAIRE	
31	437-B-9 @5	1.0000	1.0000	1.0000	130	081712CLAIRE	
32	CCV	1.0000	1.0000	1.0000	131	081712CLAIRE	
33	CCB	1.0000	1.0000	1.0000	132	081712CLAIRE	
34	442-B-1	1.0000	1.0000	1.0000	133	081712CLAIRE	
35	442-B-2	1.0000	1.0000	1.0000	134	081712CLAIRE	
36	442-B-2 MS	1.0000	1.0000	1.0000	135	081712CLAIRE	
37	442-B-3	1.0000	1.0000	1.0000	136	081712CLAIRE	
38	442-B-4	1.0000	1.0000	1.0000	137	081712CLAIRE	
39	442-B-5	1.0000	1.0000	1.0000	138	081712CLAIRE	
40	442-B-5 @5	1.0000	1.0000	1.0000	139	081712CLAIRE	
41	442-B-6	1.0000	1.0000	1.0000	140	081712CLAIRE	
42	453-B-1	1.0000	1.0000	1.0000	141	081712CLAIRE	

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	453-B-1 @5	Unknown	43	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:04:54 PM
44	CCV	Unknown	44	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:21:19 PM
45	CCB	Unknown	45	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:37:42 PM
46	453-B-2	Unknown	46	50.0	Claire_Routine	STLANIONS	Finished	8/17/2012 11:54:07 PM
47	453-B-3	Unknown	47	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:10:32 AM
48	453-B-3 @5	Unknown	48	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:26:56 AM
49	453-B-4	Unknown	49	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:43:21 AM
50	453-B-4 @5	Unknown	50	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:59:46 AM
51	453-B-5	Unknown	51	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:16:10 AM
52	453-B-5 @5	Unknown	52	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:32:35 AM
53	CCV	Unknown	53	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:48:59 AM
54	CCB	Unknown	54	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 2:05:23 AM
55	MB	Unknown	55	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 2:21:47 AM
56	LCS	Unknown	56	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 2:38:12 AM
57	453-B-6	Unknown	57	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 2:54:36 AM
58	453-B-7	Unknown	58	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 3:11:00 AM
59	453-B-7 MS	Unknown	59	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 3:27:25 AM
60	453-B-8	Unknown	60	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 3:43:50 AM
61	457-B-1	Unknown	61	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 4:00:14 AM
62	457-B-3	Unknown	62	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 4:16:39 AM
63	457-B-4	Unknown	63	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 4:33:03 AM
64	457-B-4 @5	Unknown	64	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 4:49:28 AM
65	457-B-4 MS	Unknown	65	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 5:05:53 AM
66	457-B-4 MS @5	Unknown	66	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 5:22:17 AM
67	CCV	Unknown	67	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 5:38:42 AM
68	CCB	Unknown	68	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 5:55:07 AM
69	457-B-4 MSD	Unknown	69	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 6:11:31 AM
70	457-B-4 MSD @5	Unknown	70	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 6:27:55 AM
71	457-B-5	Unknown	71	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 6:44:19 AM
72	457-B-5 @5	Unknown	72	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 7:00:45 AM
73	457-B-6	Unknown	73	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 7:17:09 AM
74	457-B-6 @5	Unknown	74	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 7:33:33 AM
75	457-B-7	Unknown	75	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 7:49:58 AM
76	457-B-7 @5	Unknown	76	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 8:06:22 AM
77	457-B-8	Unknown	77	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 8:22:47 AM
78	457-B-8 @5	Unknown	78	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 8:39:12 AM
79	CCV	Unknown	79	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 8:55:37 AM
80	CCB	Unknown	80	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 9:12:01 AM
81	468-B-1	Unknown	81	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 9:28:26 AM
82	468-B-1 @5	Unknown	82	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 9:44:50 AM
83	468-B-2	Unknown	83	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 10:01:15 AM
84	468-B-2 @5	Unknown	84	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 10:17:39 AM

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
43	453-B-1 @5	1.0000	1.0000	1.0000	142	081712CLAIRE	
44	CCV	1.0000	1.0000	1.0000	143	081712CLAIRE	
45	CCB	1.0000	1.0000	1.0000	144	081712CLAIRE	
46	453-B-2	1.0000	1.0000	1.0000	145	081712CLAIRE	
47	453-B-3	1.0000	1.0000	1.0000	146	081712CLAIRE	
48	453-B-3 @5	1.0000	1.0000	1.0000	147	081712CLAIRE	
49	453-B-4	1.0000	1.0000	1.0000	148	081712CLAIRE	
50	453-B-4 @5	1.0000	1.0000	1.0000	149	081712CLAIRE	
51	453-B-5	1.0000	1.0000	1.0000	150	081712CLAIRE	
52	453-B-5 @5	1.0000	1.0000	1.0000	151	081712CLAIRE	
53	CCV	1.0000	1.0000	1.0000	152	081712CLAIRE	
54	CCB	1.0000	1.0000	1.0000	153	081712CLAIRE	
55	MB	1.0000	1.0000	1.0000	154	081712CLAIRE	
56	LCS	1.0000	1.0000	1.0000	155	081712CLAIRE	
57	453-B-6	1.0000	1.0000	1.0000	156	081712CLAIRE	
58	453-B-7	1.0000	1.0000	1.0000	157	081712CLAIRE	
59	453-B-7 MS	1.0000	1.0000	1.0000	158	081712CLAIRE	
60	453-B-8	1.0000	1.0000	1.0000	159	081712CLAIRE	
61	457-B-1	1.0000	1.0000	1.0000	160	081712CLAIRE	
62	457-B-3	1.0000	1.0000	1.0000	161	081712CLAIRE	
63	457-B-4	1.0000	1.0000	1.0000	162	081712CLAIRE	
64	457-B-4 @5	1.0000	1.0000	1.0000	163	081712CLAIRE	
65	457-B-4 MS	1.0000	1.0000	1.0000	164	081712CLAIRE	
66	457-B-4 MS @5	1.0000	1.0000	1.0000	165	081712CLAIRE	
67	CCV	1.0000	1.0000	1.0000	166	081712CLAIRE	
68	CCB	1.0000	1.0000	1.0000	167	081712CLAIRE	
69	457-B-4 MSD	1.0000	1.0000	1.0000	168	081712CLAIRE	
70	457-B-4 MSD @5	1.0000	1.0000	1.0000	169	081712CLAIRE	
71	457-B-5	1.0000	1.0000	1.0000	170	081712CLAIRE	
72	457-B-5 @5	1.0000	1.0000	1.0000	171	081712CLAIRE	
73	457-B-6	1.0000	1.0000	1.0000	172	081712CLAIRE	
74	457-B-6 @5	1.0000	1.0000	1.0000	173	081712CLAIRE	
75	457-B-7	1.0000	1.0000	1.0000	174	081712CLAIRE	
76	457-B-7 @5	1.0000	1.0000	1.0000	175	081712CLAIRE	
77	457-B-8	1.0000	1.0000	1.0000	176	081712CLAIRE	
78	457-B-8 @5	1.0000	1.0000	1.0000	177	081712CLAIRE	
79	CCV	1.0000	1.0000	1.0000	178	081712CLAIRE	
80	CCB	1.0000	1.0000	1.0000	179	081712CLAIRE	
81	468-B-1	1.0000	1.0000	1.0000	180	081712CLAIRE	
82	468-B-1 @5	1.0000	1.0000	1.0000	181	081712CLAIRE	
83	468-B-2	1.0000	1.0000	1.0000	182	081712CLAIRE	
84	468-B-2 @5	1.0000	1.0000	1.0000	183	081712CLAIRE	

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
85	468-B-3 @5	Unknown	85	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 10:34:04 AM
86	468-B-3 @50	Unknown	86	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 10:50:28 AM
87	468-B-4	Unknown	87	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 11:06:53 AM
88	468-B-4 @5	Unknown	88	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 11:23:17 AM
89	468-B-5	Unknown	89	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 11:39:42 AM
90	CCV	Unknown	90	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 11:56:06 AM
91	CCB	Unknown	91	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:12:30 PM
92	468-B-6	Unknown	92	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:28:54 PM
93	468-B-6 @5	Unknown	93	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 12:45:19 PM
94	491-B-1	Unknown	94	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:01:44 PM
95	491-B-2	Unknown	95	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:18:08 PM
96	492-B-1	Unknown	96	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:34:32 PM
97	CCV	Unknown	97	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 1:50:57 PM
98	CCB	Unknown	98	50.0	Claire_Routine	STLANIONS	Finished	8/18/2012 2:07:21 PM
99	END	Unknown	99	50.0	Claire_Shutdown	STLANIONS	Finished	8/18/2012 2:23:46 PM

Title:
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG
Timebase: CLAIRE
#Samples: 99
Created: 8/17/2012 9:45:46 AM by boydj
Last Update: 8/17/2012 5:20:17 PM by boydj

No.	Name	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
85	468-B-3 @5	1.0000	1.0000	1.0000	184	081712CLAIRE	
86	468-B-3 @50	1.0000	1.0000	1.0000	185	081712CLAIRE	
87	468-B-4	1.0000	1.0000	1.0000	186	081712CLAIRE	
88	468-B-4 @5	1.0000	1.0000	1.0000	187	081712CLAIRE	
89	468-B-5	1.0000	1.0000	1.0000	188	081712CLAIRE	
90	CCV	1.0000	1.0000	1.0000	189	081712CLAIRE	
91	CCB	1.0000	1.0000	1.0000	190	081712CLAIRE	
92	468-B-6	1.0000	1.0000	1.0000	191	081712CLAIRE	
93	468-B-6 @5	1.0000	1.0000	1.0000	192	081712CLAIRE	
94	491-B-1	1.0000	1.0000	1.0000	193	081712CLAIRE	
95	491-B-2	1.0000	1.0000	1.0000	194	081712CLAIRE	
96	492-B-1	1.0000	1.0000	1.0000	195	081712CLAIRE	
97	CCV	1.0000	1.0000	1.0000	196	081712CLAIRE	
98	CCB	1.0000	1.0000	1.0000	197	081712CLAIRE	
99	END	1.0000	1.0000	1.0000	198	081712CLAIRE	

Title: STLANIONS
Datasource: SLIC03_local
Location: CLAIRE\Sequences\12AUG\081712CAL.SEQ
Created: 8/14/2008 4:24:54 PM by chemist
Timebase: CLAIRE
Changed: 8/2/2012 1:00:23 PM by boydj

```
                Pressure.LowerLimit =               0
                Pressure.UpperLimit =               4000
                %A.Equate =                         "%A"
;               %B.Equate =                         "%B"
;               %C.Equate =                         "%C"
;               %D.Equate =                         "%D"
                LoadPosition
                Data_Collection_Rate =              2.0
;               Temperature_Compensation =          1.7
                ColumnTemperature =                 35.0 [°C]
                Suppressor_Type =                   ASRS_4mm
                ; Carbonate =                       3.5
                ; Bicarbonate =                     1.0
                ; Hydroxide =                       0.0
                ; Tetraborate =                     0.0
                ; Other eluent =                    0.0
                ; Recommended Current =             30
                Suppressor_Current =                30
                Flow =                              1.0

;               %B =                                0.0
;               %C =                                0.0
;               %D =                                0.0
;               Curve =                             5

-2.300          Pump_ECD_Relay_1.Closed             Duration=1.00

 0.000          Autozero
                ECD_1.AcqOn
                ECD_Total.AcqOn
                Channel_Pressure.AcqOn
                Pump_InjectValve.InjectPosition     Duration=30.00

14.0            ECD_1.AcqOff
                ECD_Total.AcqOff
                Channel_Pressure.AcqOff

                End
```

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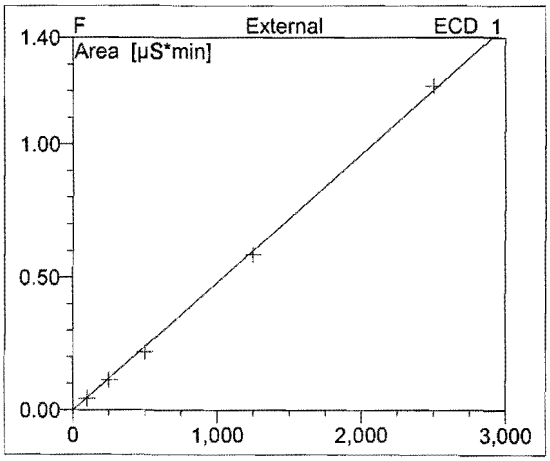
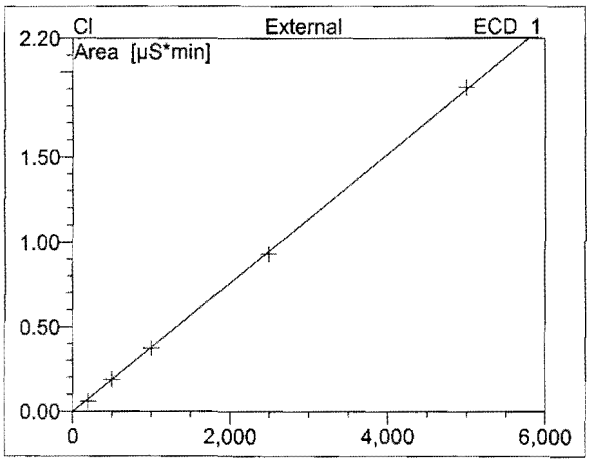
Program File:	Claire_Routine	Printed: 8/21/2012 5:41:19 PM
Operator:	boydj	
Title:	STLANIONS	
Datasource:	SLIC03_local	
Location:	CLAIRE\Sequences\12AUG\081712CAL.SEQ	Created: 8/14/2008 4:24:54 PM by chemist
Timebase:	CLAIRE	Changed: 8/2/2012 1:00:23 PM by boydj

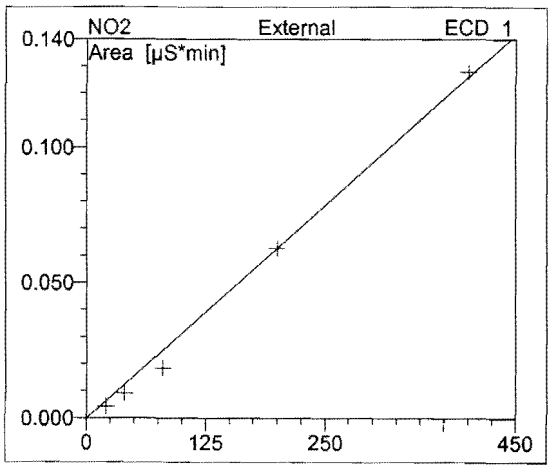
No.	Channel	Operation	Parameters

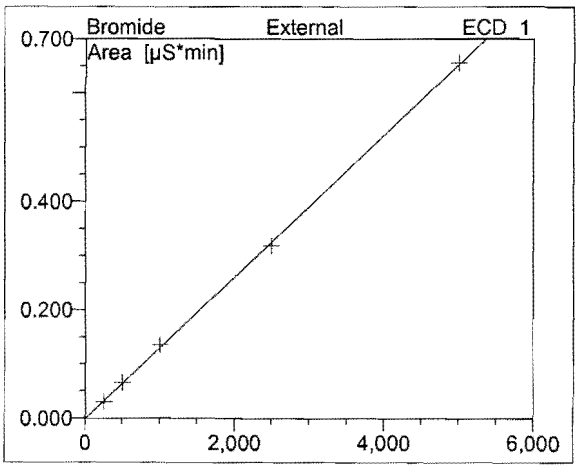
Calibration Batch Report - ECD_1

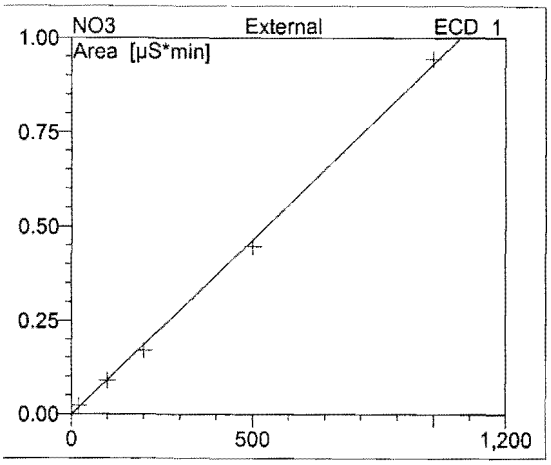
Sequence:	**081712CAL**	Inj. Vol.:	**50.0**
Program:	**Claire_Routine**	Operator:	**SLIC03**
Inj. Date/Time:	**08/17/12 12:51**	Run Time:	**14.00**

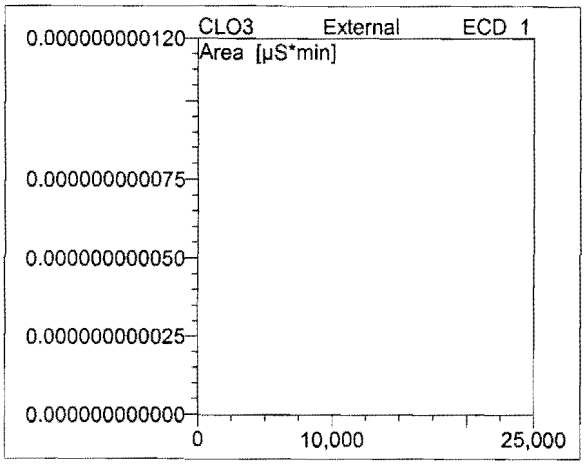


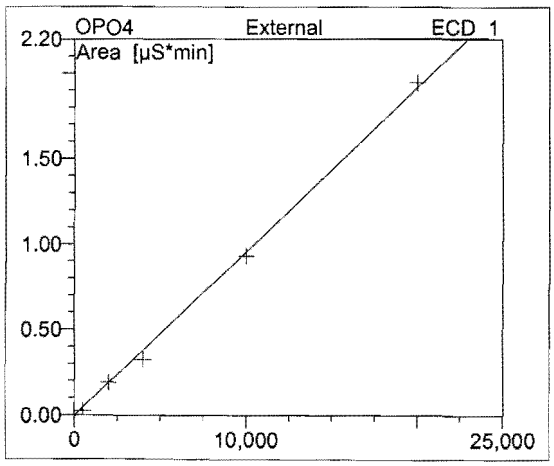


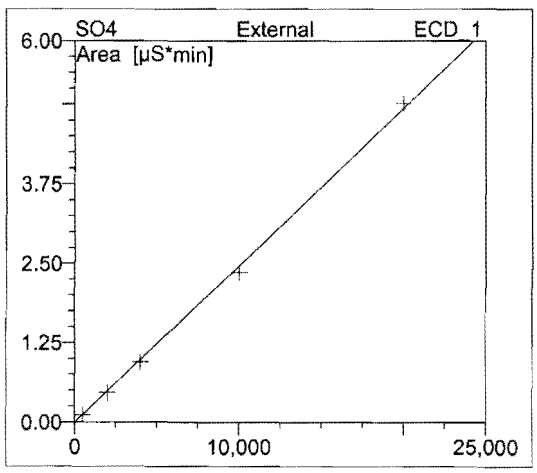












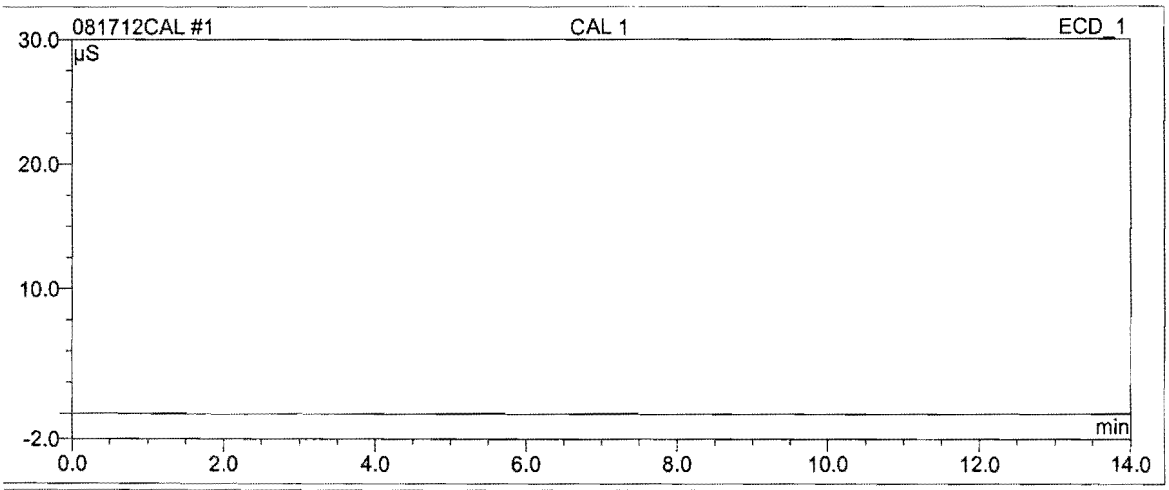
No.	Peak Name	Cal.Type	Corr.Coeff. %
2	F	Lin	99.978 ✓
3	Cl	Lin	99.992 ✓
4	NO2	Lin	99.916 ✓
5	Bromide	Lin	99.982 ✓
6	NO3	Lin	99.948 ✓
7	OPO4	Lin	99.949 ✓
8	SO4	Lin	99.960 ✓

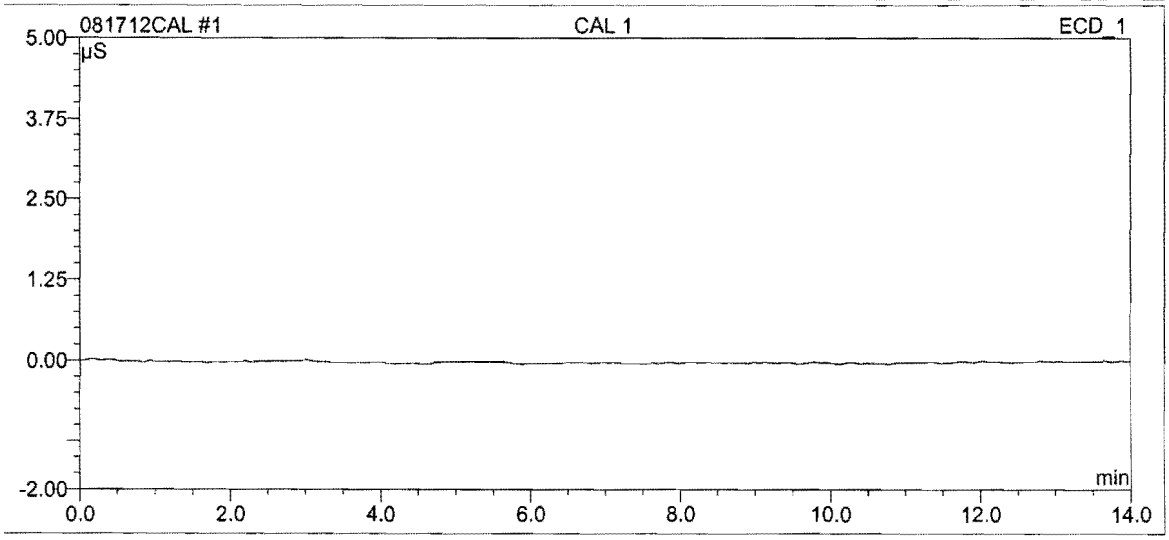
JB
8/22/12

Integration Report - ECD_1

Sample Name:	**CAL 1**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 11:29**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

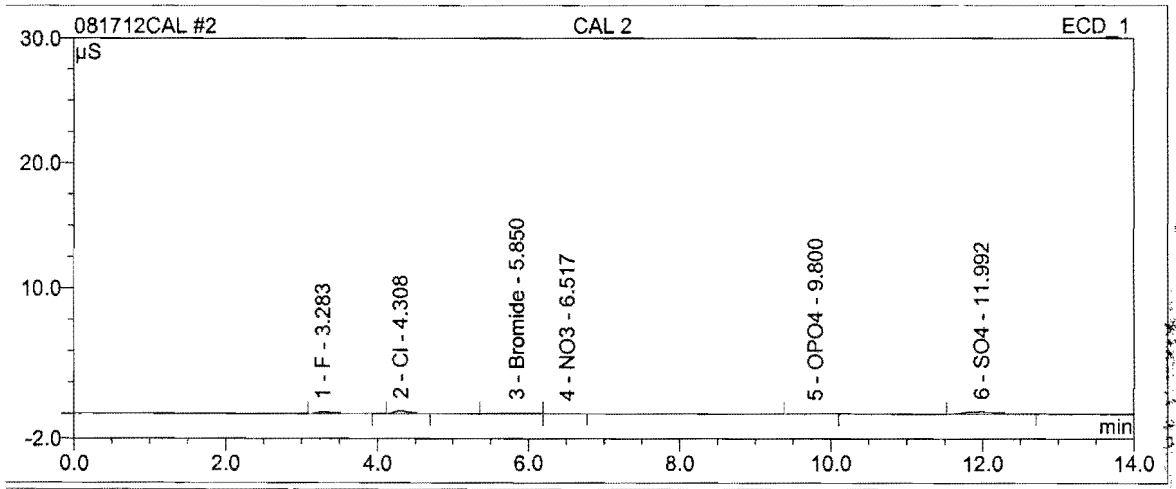


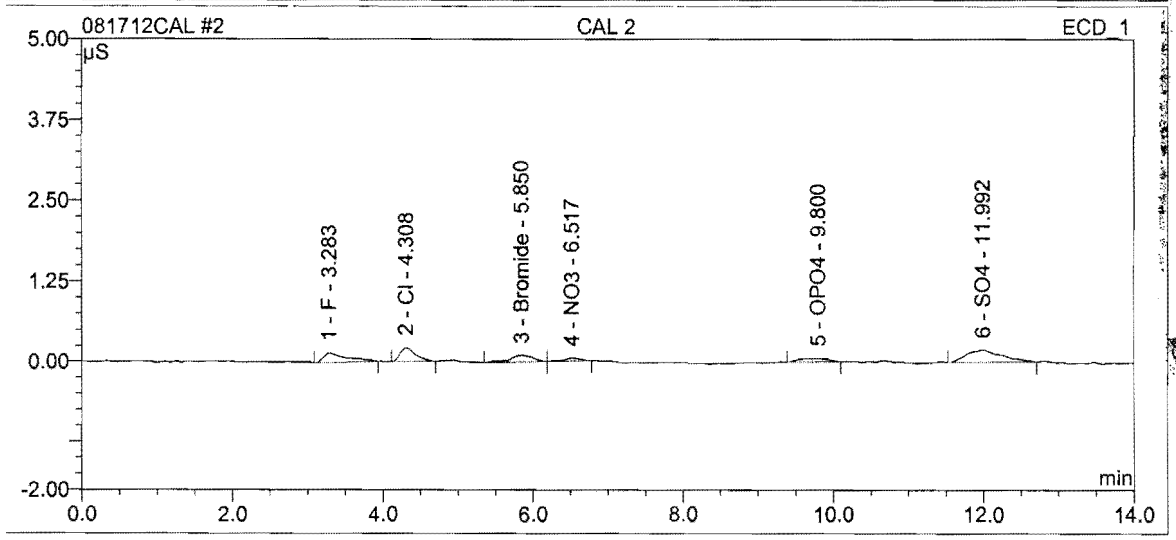


Integration Report - ECD_1

Sample Name:	**CAL 2**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 11:45**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BMB	0.053	0.148	111.1122
2	4.31	Cl	BMB	0.053	0.218	140.4166
3	5.85	Bromide	BMb	0.040	0.108	311.4883
4	6.52	NO3	bMB	0.012	0.049	13.4884
5	9.80	OPO4	BMB	0.024	0.056	253.7334
6	11.99	SO4	BMB	0.107	0.196	433.8655
		TOTAL:		0.29	0.78	1264.10





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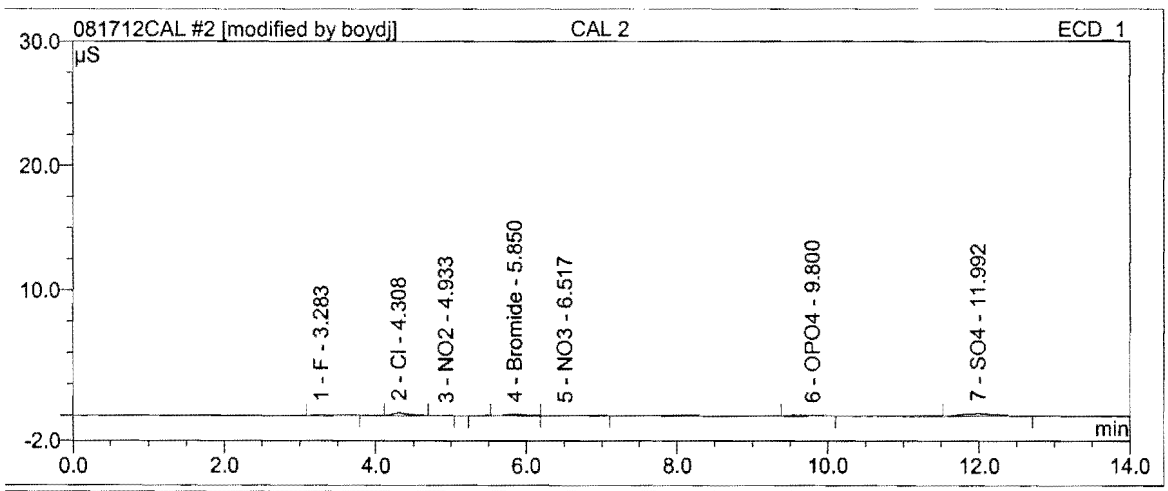
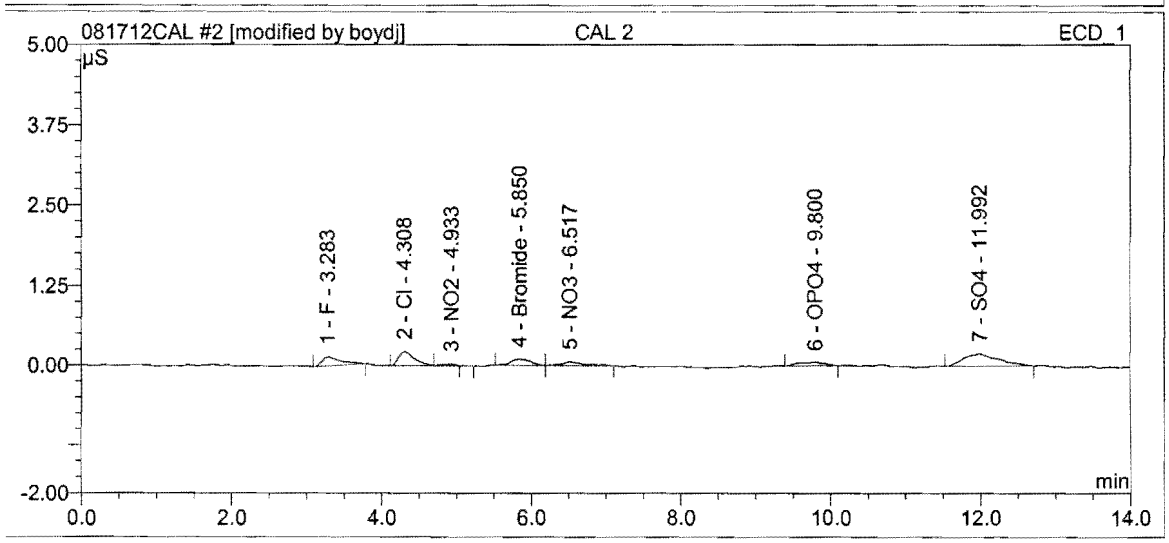
1. Peak list saved
2. Incomplete Integration
3. Assign Peak - NO2
4. Wrong Peak
5. Baseline Smoothing - F, Cl, NO2, Br, NO3
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**CAL 2**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 11:45**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BMB*	0.042	0.141	87.5996
2	4.31	Cl	BMB*	0.059	0.221	154.3750
3	4.93	NO2	Rd*	0.004	0.023	13.3057
4	5.85	Bromide	BMb*	0.030	0.097	228.8426
5	6.52	NO3	bMB*	0.022	0.060	23.7325
6	9.80	OPO4	BMB	0.024	0.056	253.7334
7	11.99	SO4	BMB	0.107	0.196	433.8655
		TOTAL:		0.29	0.79	1195.45





Integration Report - ECD_1

Sample Name:	**CAL 3**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:02**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BMb	0.113	0.359	234.5796
2	4.30	Cl	bMB	0.175	0.544	466.9482
3	4.87	NO2	Rd	0.009	0.053	28.9047
4	5.85	Bromide	BM	0.056	0.184	441.7870
5	6.51	NO3	MB	0.059	0.193	67.1889
6	9.72	OPO4	BMB	0.190	0.341	1984.2743
7	11.90	SO4	BMB	0.460	0.755	1860.1017
TOTAL:				1.06	2.43	5083.78

MI
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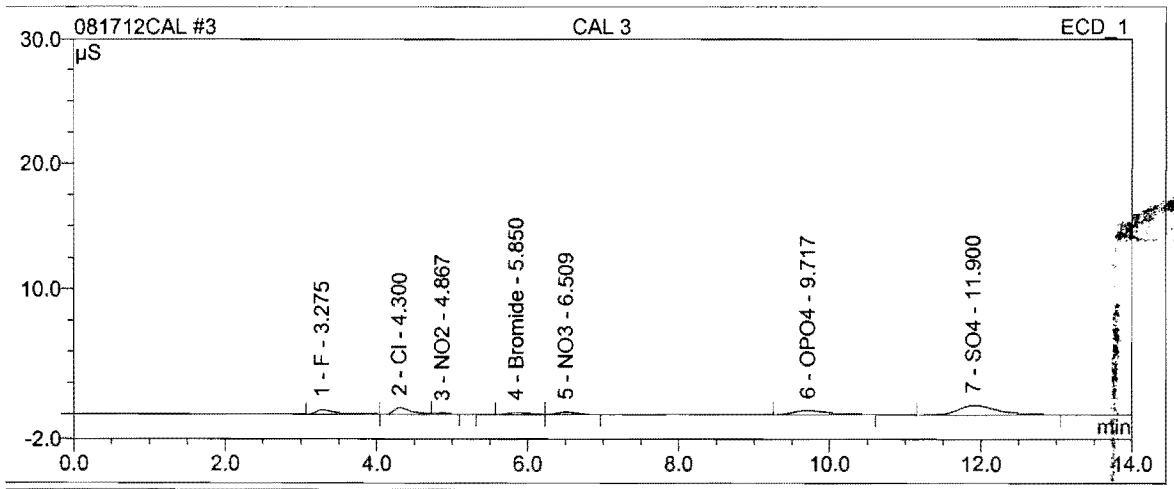
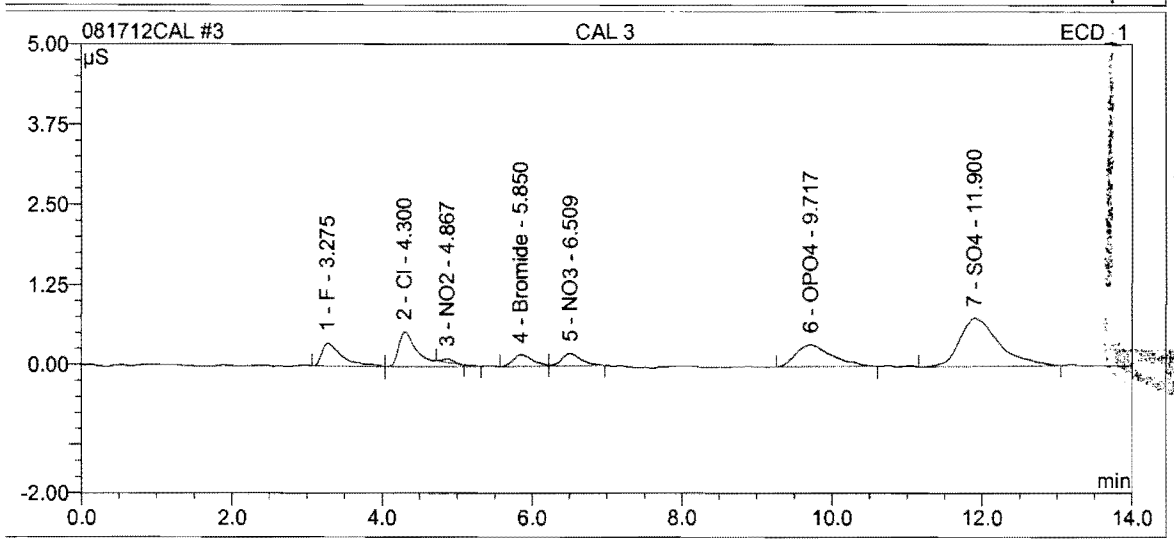
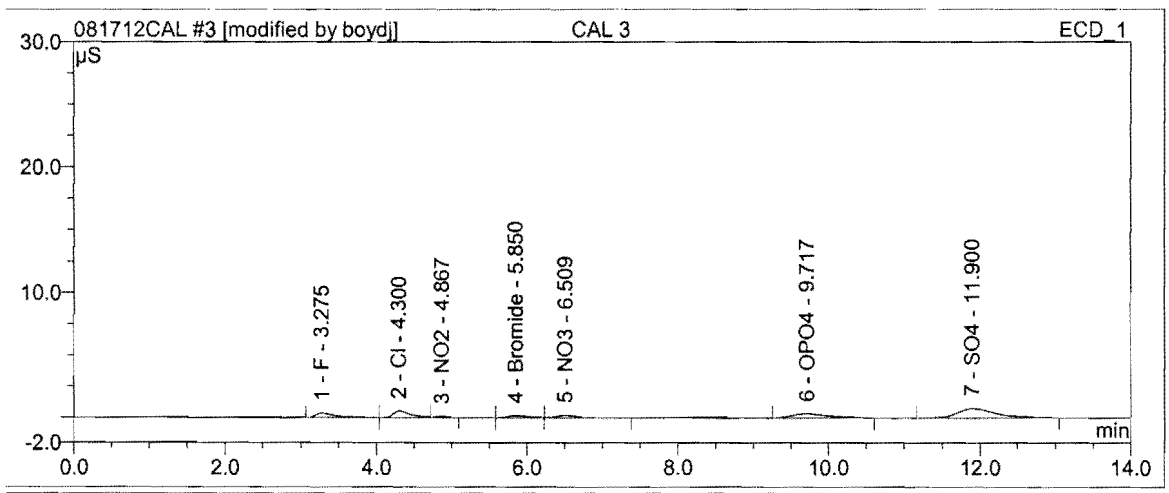


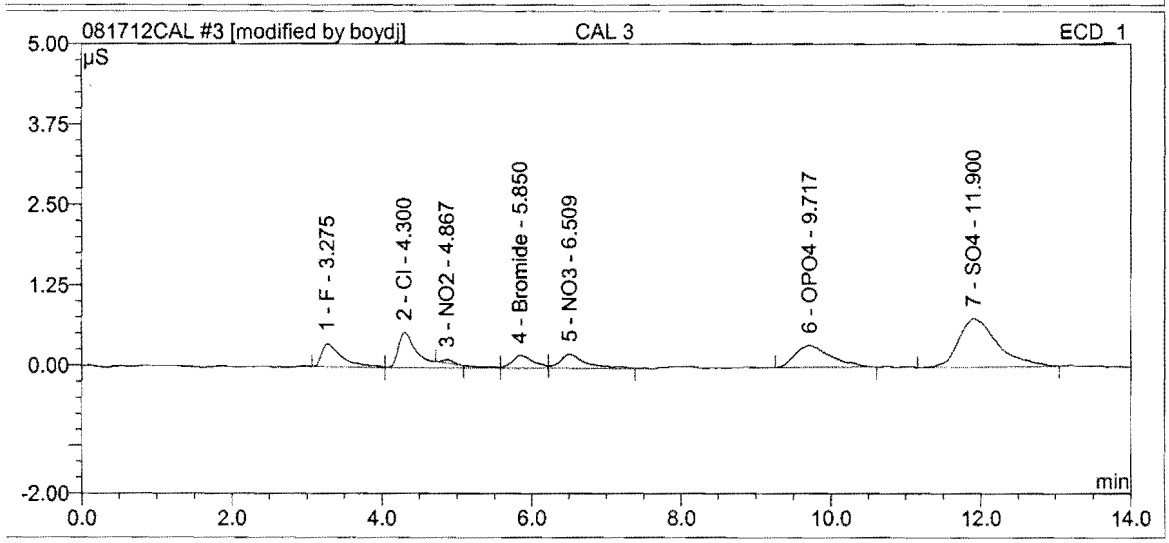


Integration Report - ECD_1

Sample Name:	**CAL 3**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:02**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BMb	0.113	0.359	233.6892
2	4.30	Cl	bM *	0.188	0.547	494.5484
3	4.87	NO2	Rd	0.009	0.053	28.9233
4	5.85	Bromide	M *	0.065	0.198	500.5161
5	6.51	NO3	MB*	0.089	0.219	95.1458
6	9.72	OPO4	BMB	0.190	0.341	1984.2743
7	11.90	SO4	BMB	0.460	0.755	1860.1017
		TOTAL:		1.11	2.47	5197.20





Integration Report - ECD_1

Sample Name:	**CAL 4**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:18**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BM	0.214	0.738	445.1629
2	4.30	Cl	M	0.350	1.095	936.2451
3	4.88	NO2	Rd	0.018	0.099	58.4559
4	5.86	Bromide	M	0.119	0.386	938.6533
5	6.51	NO3	MB	0.133	0.388	150.7955
6	9.70	OPO4	BMB	0.325	0.622	3394.0565
7	11.90	SO4	BMB	0.948	1.512	3833.4159
		TOTAL:		2.11	4.84	9756.79

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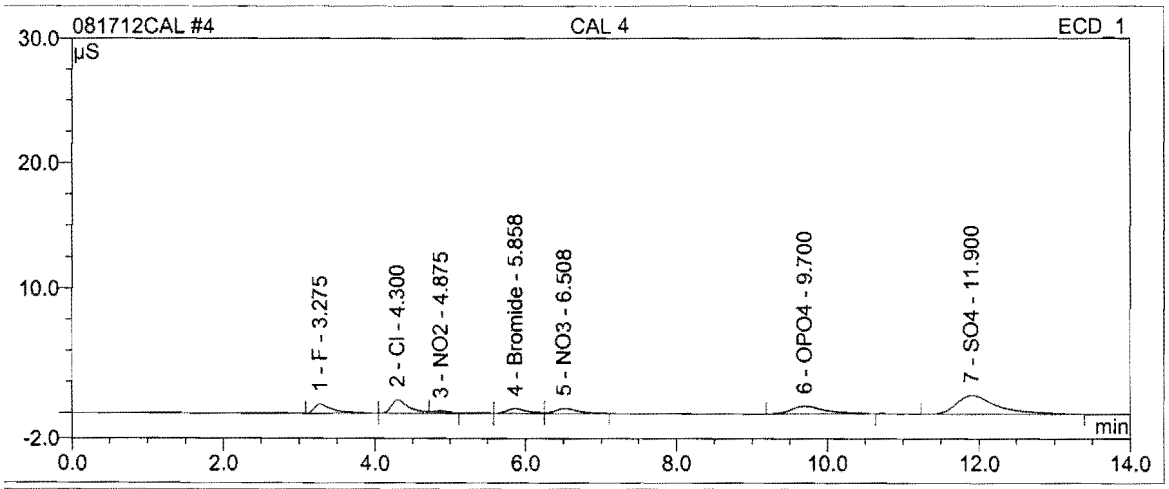
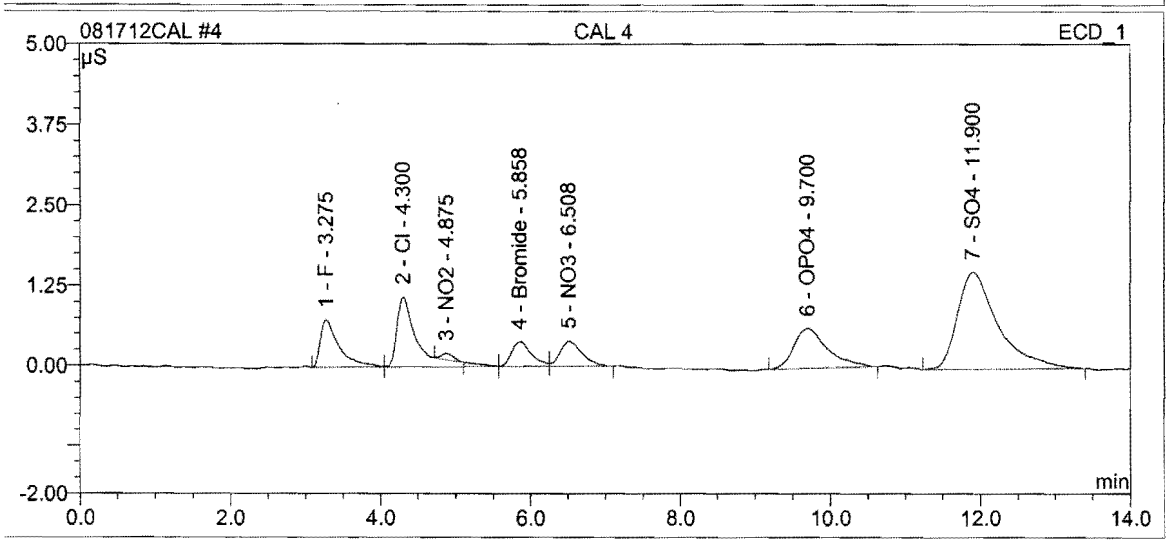


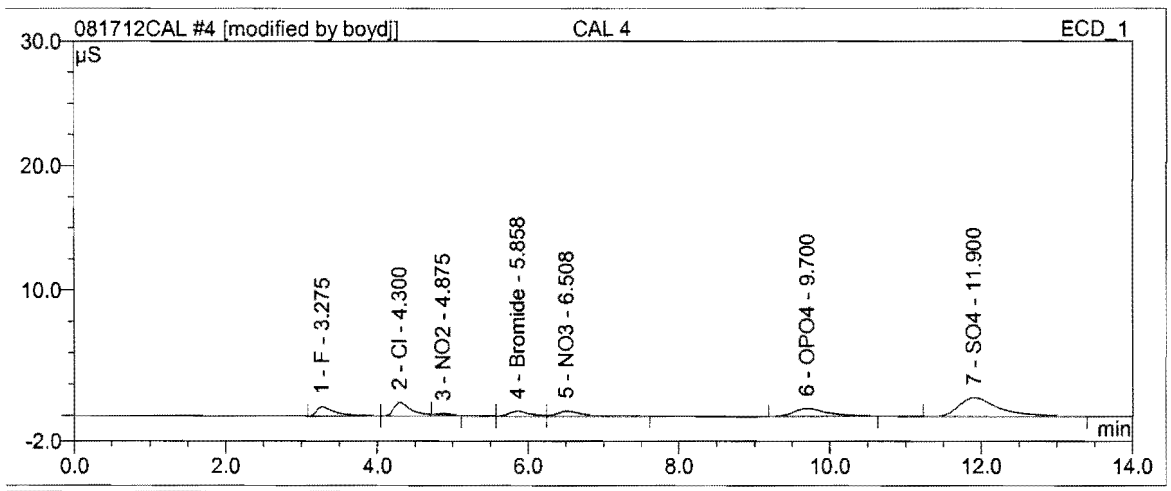


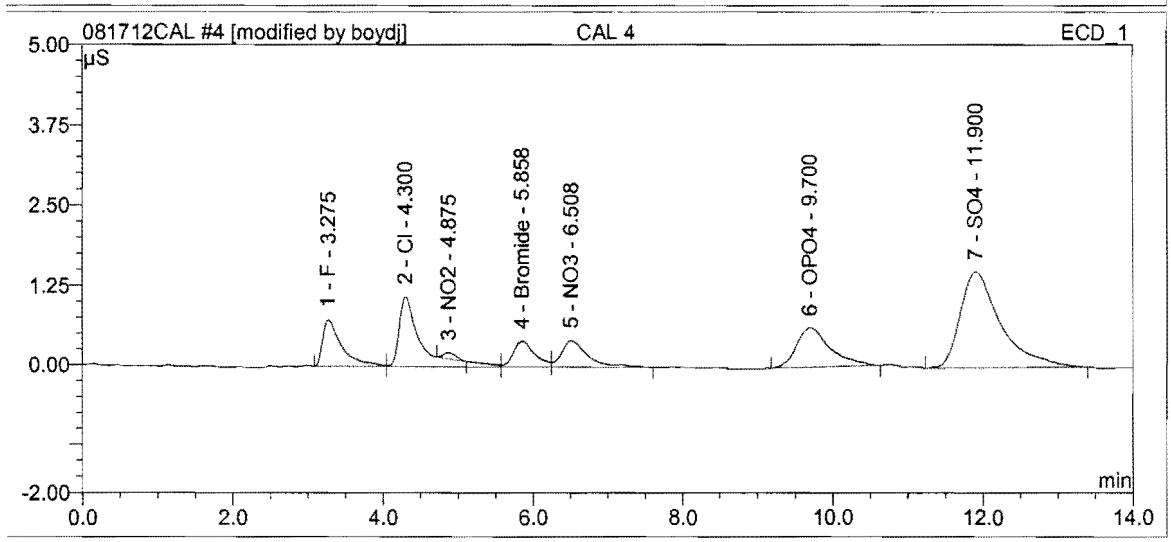
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other _____

Integration Report - ECD_1

Sample Name:	**CAL 4**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:18**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BM *	0.218	0.740	452.0421
2	4.30	Cl	M *	0.374	1.105	984.2916
3	4.88	NO2	Rd	0.018	0.099	58.4935
4	5.86	Bromide	M *	0.136	0.410	1040.9304
5	6.51	NO3	MB*	0.170	0.418	182.0468
6	9.70	OPO4	BMB	0.325	0.622	3394.0565
7	11.90	SO4	BMB	0.948	1.512	3833.4159
		TOTAL:		2.19	4.91	9945.28





Integration Report - ECD_1

Sample Name:	**CAL 5**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:35**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.576	2.002	1199.2677
3	4.31	Cl	M	0.873	2.816	2333.3029
4	4.88	NO2	Rd	0.063	0.271	199.1592
5	5.86	Bromide	M	0.278	0.924	2190.8819
6	6.52	NO3	MB	0.339	0.980	384.1839
7	9.69	OPO4	BMB	0.930	1.716	9698.3381
8	11.88	SO4	BMB	2.360	3.888	9545.0432
		TOTAL:		5.42	12.60	25550.18

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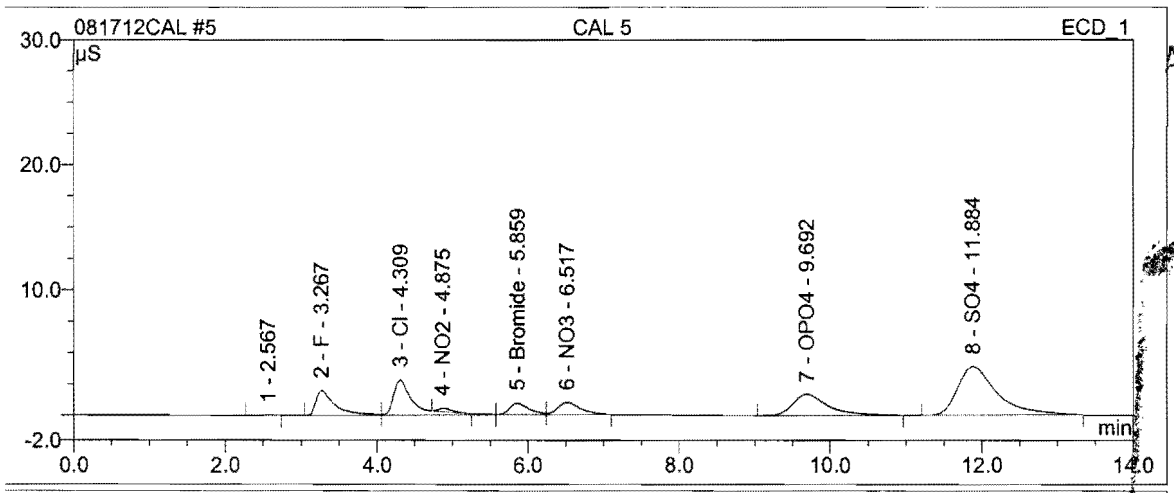
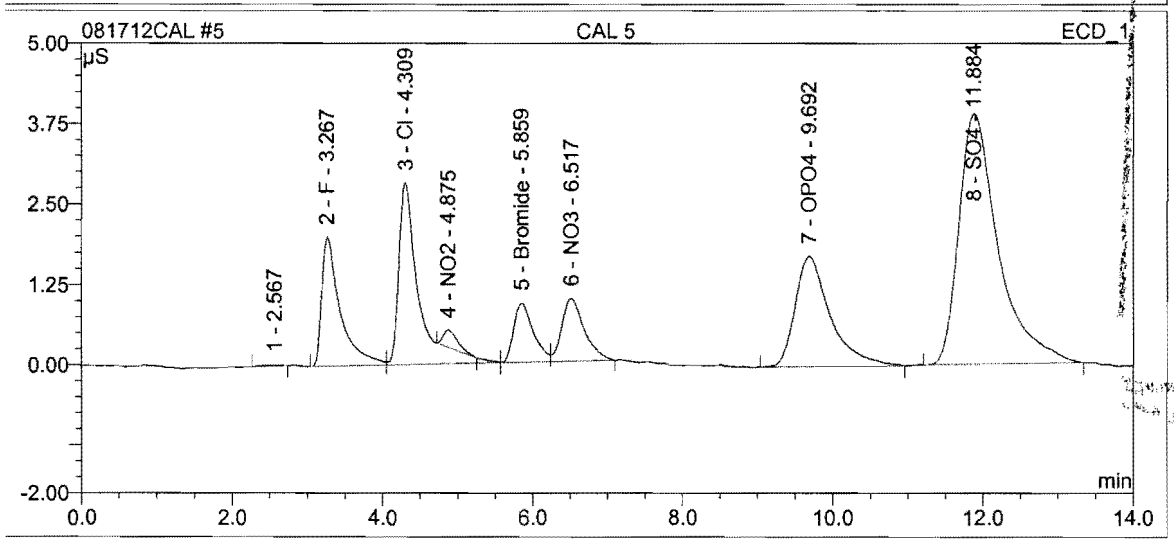


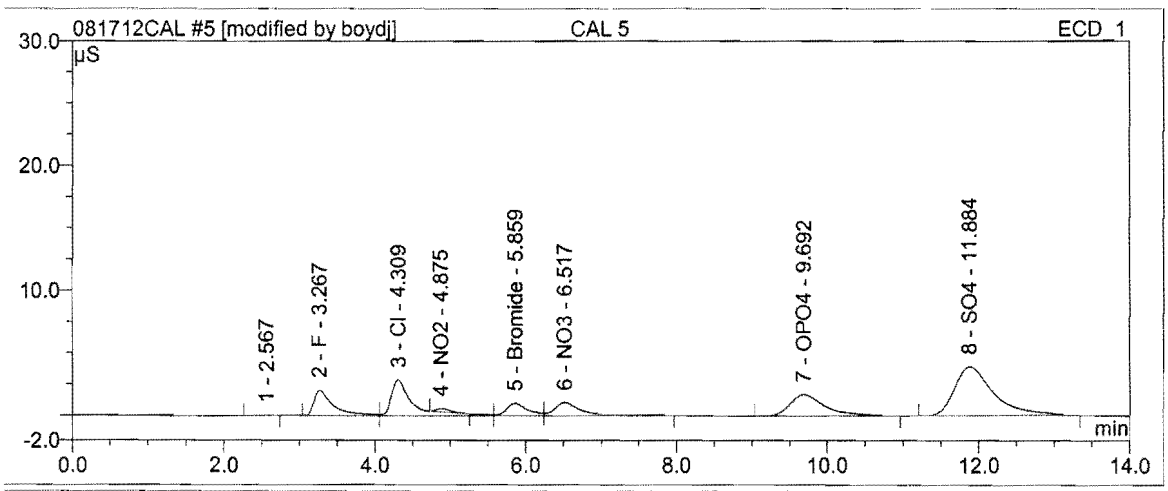


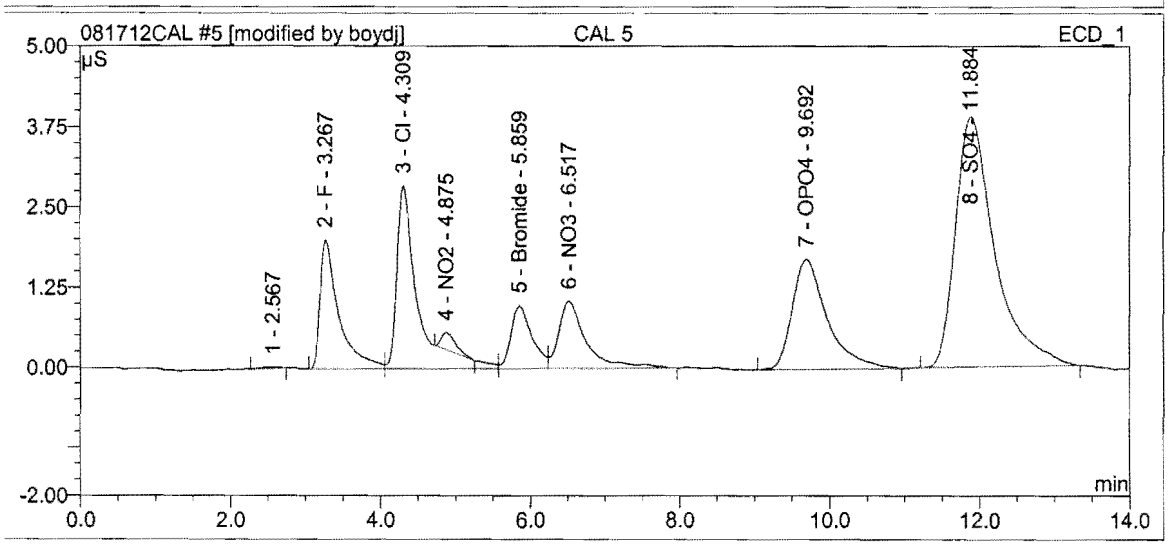
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**CAL 5**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:35**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM *	0.587	2.006	1217.8368
3	4.31	Cl	M *	0.931	2.843	2452.8143
4	4.88	NO2	Rd	0.063	0.271	199.2874
5	5.86	Bromide	M *	0.319	0.984	2443.0887
6	6.52	NO3	MB*	0.447	1.055	480.3228
7	9.69	OPO4	BMB	0.930	1.716	9698.3381
8	11.88	SO4	BMB	2.360	3.888	9545.0432
		TOTAL:		5.64	12.76	26036.73

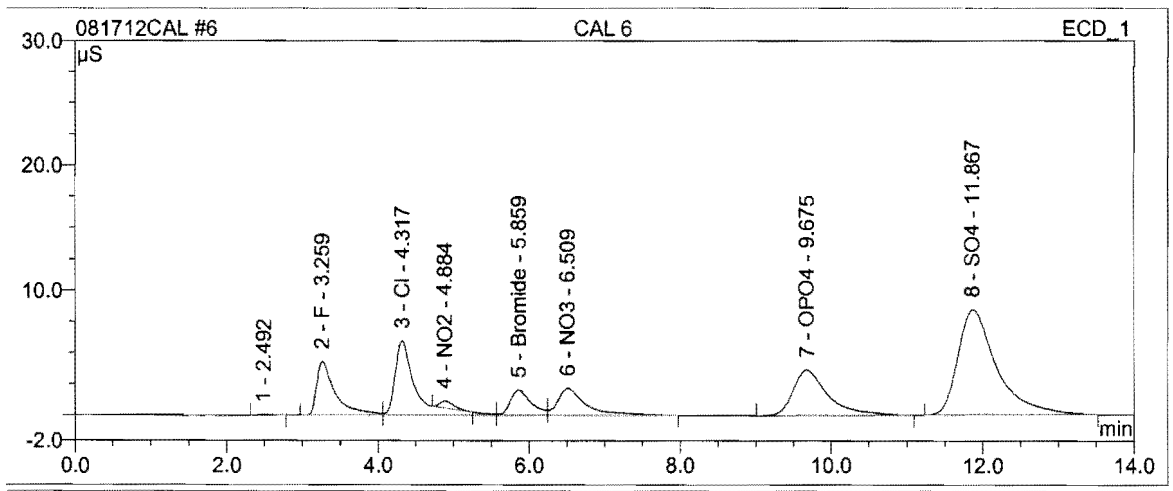


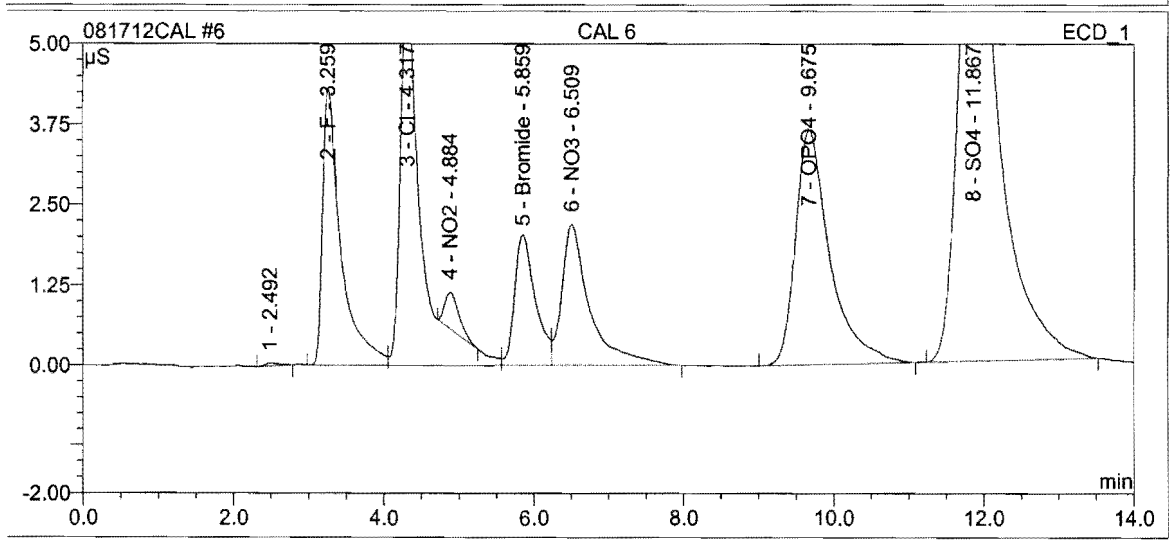


Integration Report - ECD_1

Sample Name:	**CAL 6**	*Inj. Vol.:*	**50.0**
Sample Type:	**standard**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 12:51**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.26	F	BM	1.218	4.305	2527.8003
3	4.32	Cl	M	1.910	5.960	5029.1047
4	4.88	NO2	Rd	0.128	0.573	406.1000
5	5.86	Bromide	M	0.656	2.035	5021.2758
6	6.51	NO3	MB	0.944	2.190	1013.8400
7	9.68	OPO4	BMB	1.944	3.655	20279.7489
8	11.87	SO4	BMB	5.014	8.426	20276.4384
		TOTAL:		11.81	27.14	54554.31





Integration Report - ECD_1

Sample Name:	**ICV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:07**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM	0.456	1.576	947.0355
2	4.31	Cl	M	0.716	2.241	1884.9761
3	4.89	NO2	Rd	0.050	0.218	159.4405
4	5.86	Bromide	M	0.234	0.746	1793.3024
5	6.52	NO3	MB	0.337	0.821	361.4390
6	9.69	OPO4	BM	0.769	1.354	8023.5900
7	11.90	SO4	MB	1.956	3.124	7909.2465
		TOTAL:		4.52	10.08	21079.03

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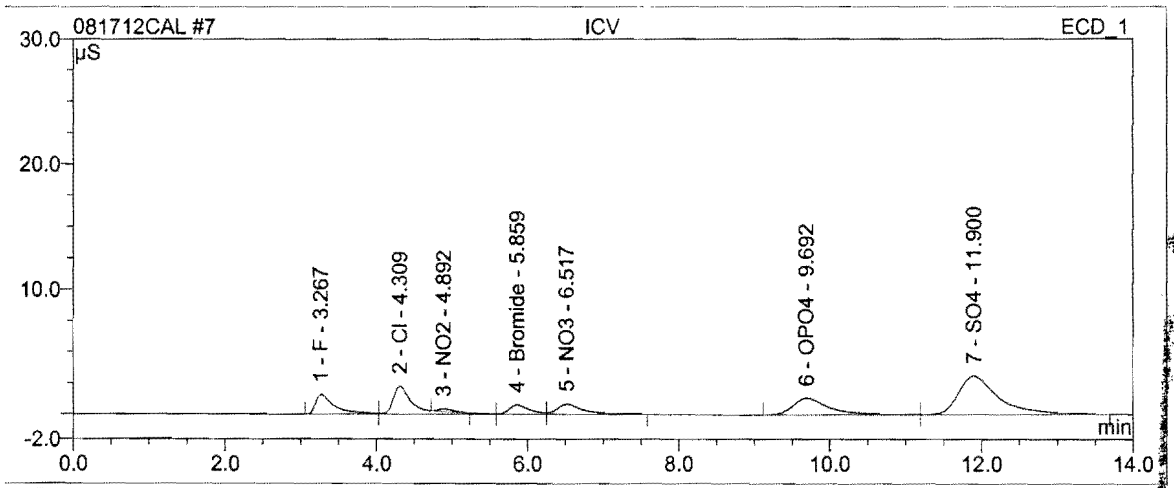
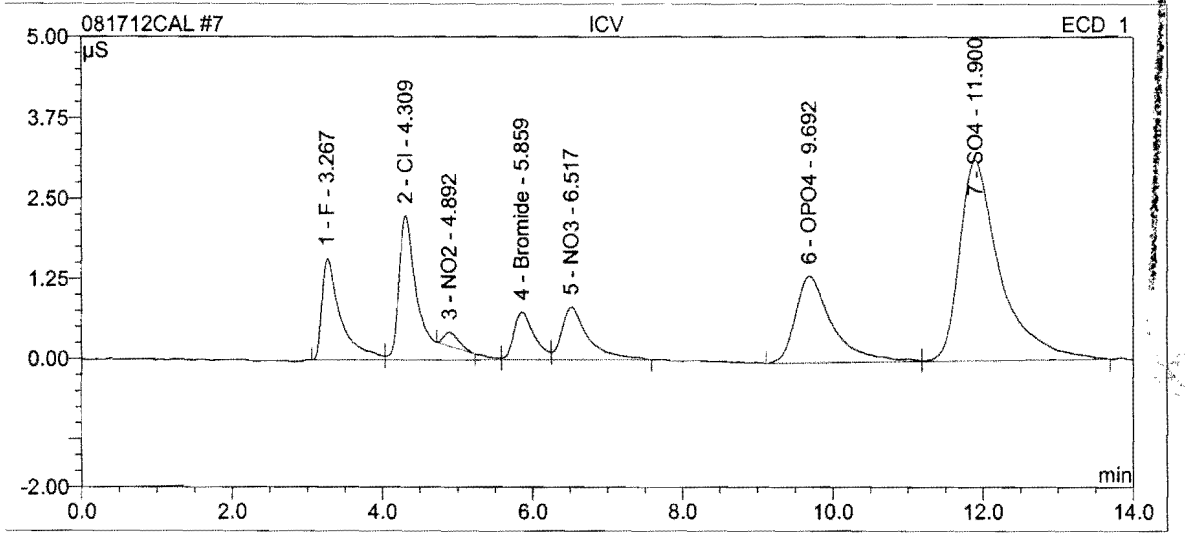




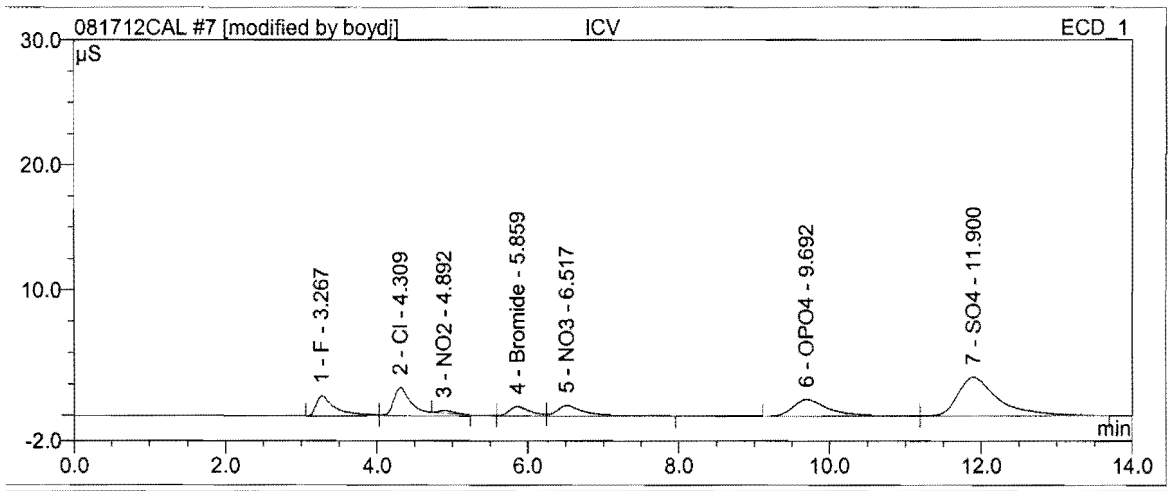
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Soundness
6. Split Peak
7. Other

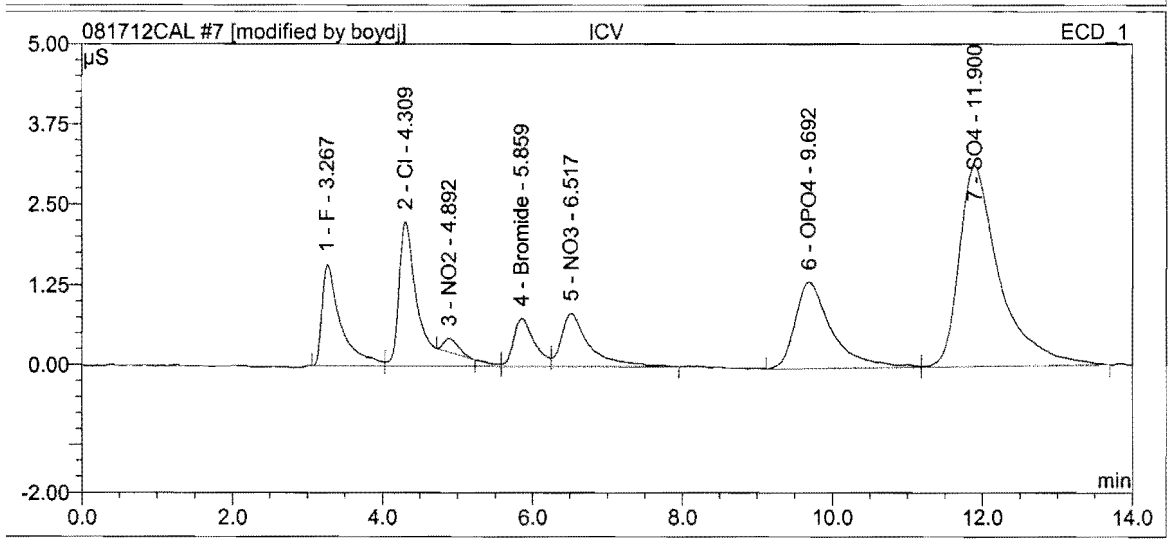
-NO3 delimiter pulled right.

Integration Report - ECD_1

Sample Name:	**ICV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:07**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM *	0.458	1.577	950.5573
2	4.31	Cl	M *	0.725	2.245	1910.5081
3	4.89	NO2	Rd	0.050	0.218	159.4405
4	5.86	Bromide	M *	0.241	0.756	1845.4632
5	6.52	NO3	MB*	0.360	0.833	386.3397
6	9.69	OPO4	BM	0.769	1.354	8023.5900
7	11.90	SO4	MB	1.956	3.124	7909.2465
		TOTAL:		4.56	10.11	21185.15

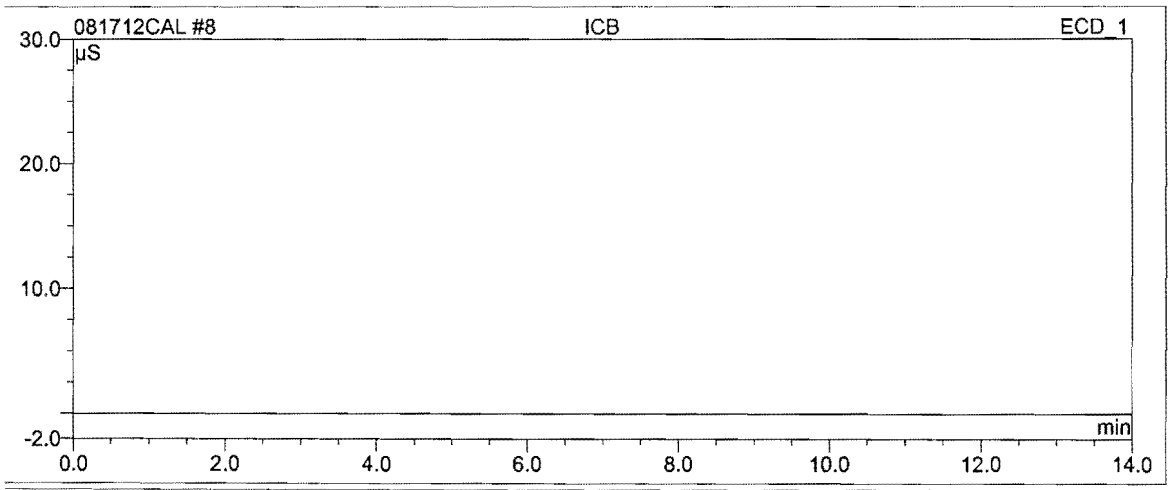


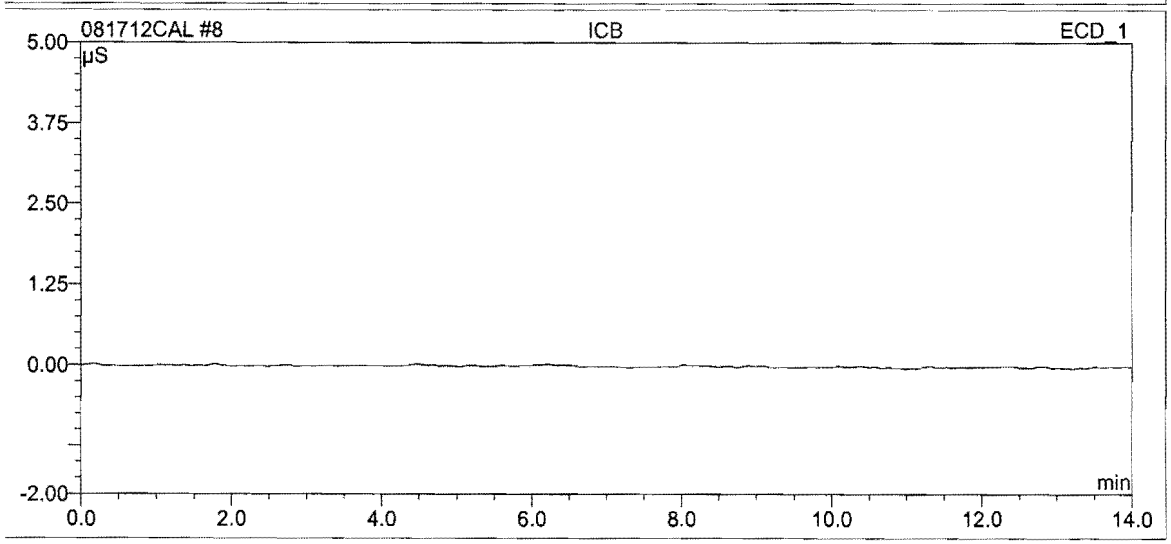


Integration Report - ECD_1

Sample Name:	**ICB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:24**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

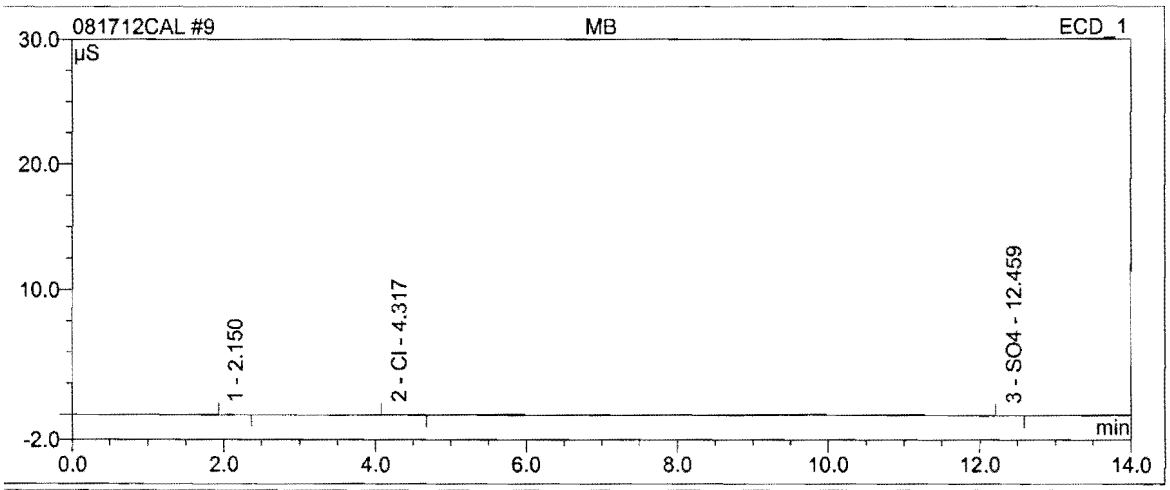


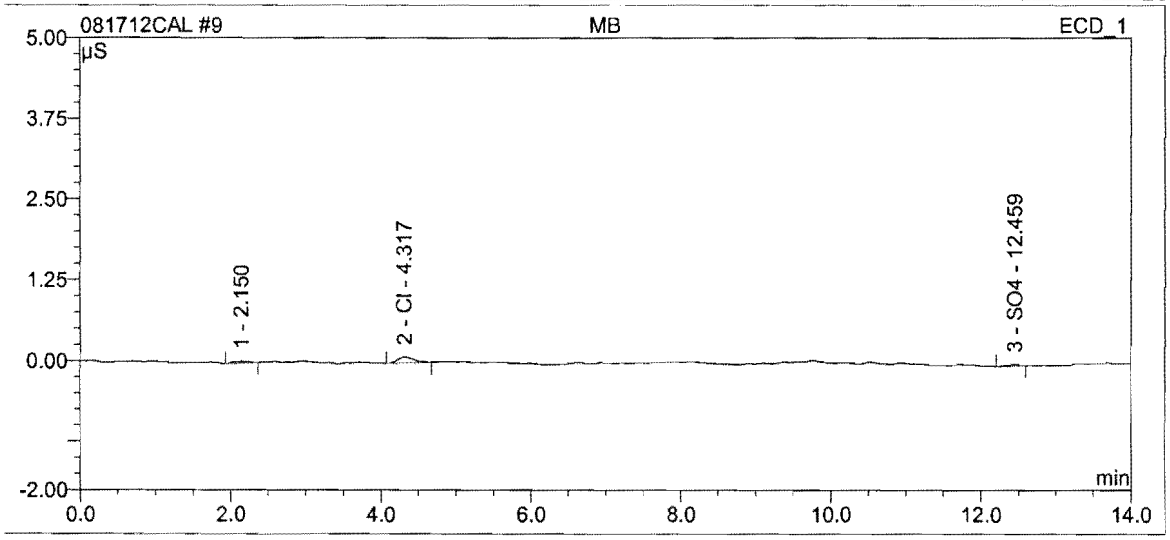


Integration Report - ECD_1

Sample Name:	**MB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:40**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	4.32	Cl	BMB	0.025	0.097	66.6960
3	12.46	SO4	BMB	0.005	0.027	22.1936
		TOTAL:		0.03	0.12	88.89





Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:57**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM	0.471	1.574	978.7720
2	4.31	Cl	Mb	0.684	2.203	1800.9907
3	4.88	NO2	Rd	0.058	0.243	184.7802
4	5.86	Bromide	bM	0.225	0.734	1721.7747
5	6.52	NO3	MB	0.287	0.776	308.7509
6	9.69	OPO4	BMB	0.690	1.312	7195.3697
7	11.90	SO4	BMB	1.866	3.068	7544.6650
		TOTAL:		4.28	9.91	19735.10

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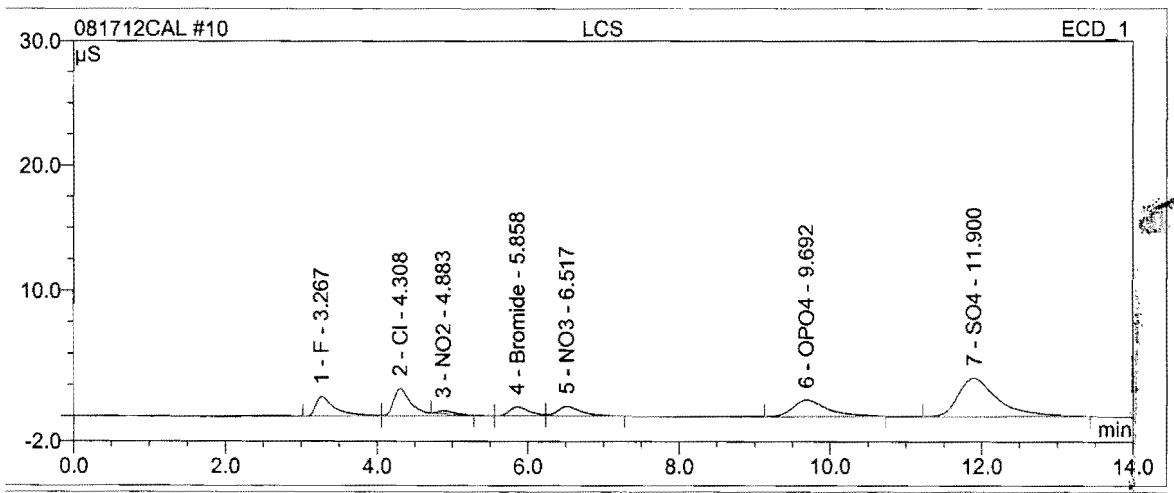
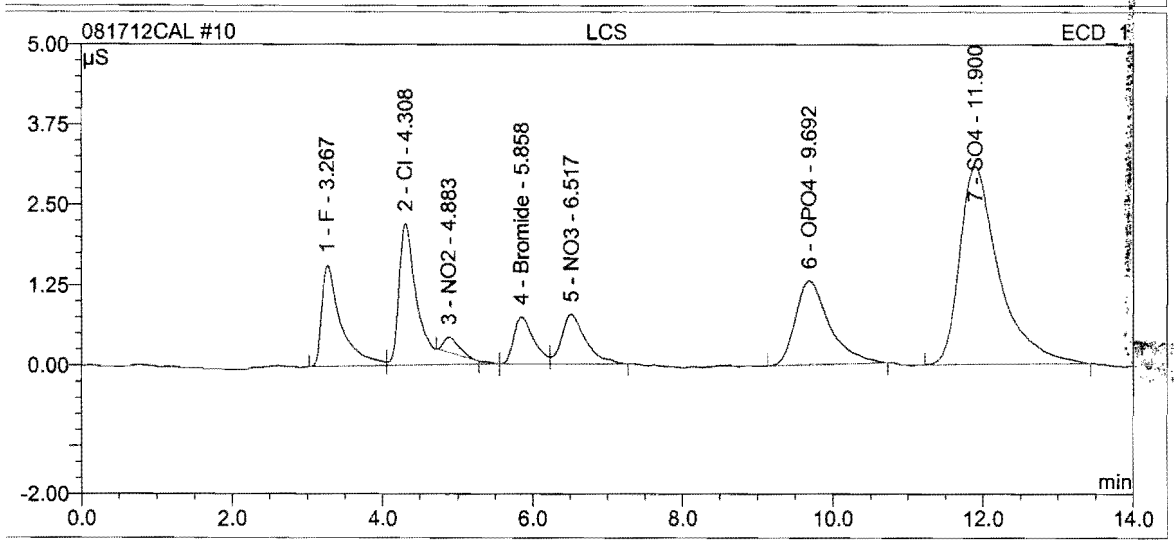


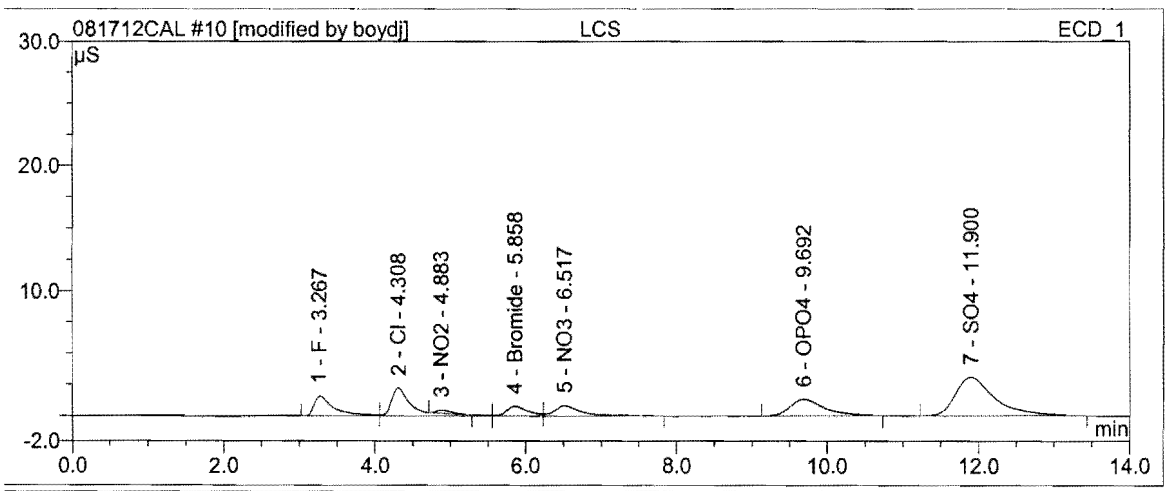


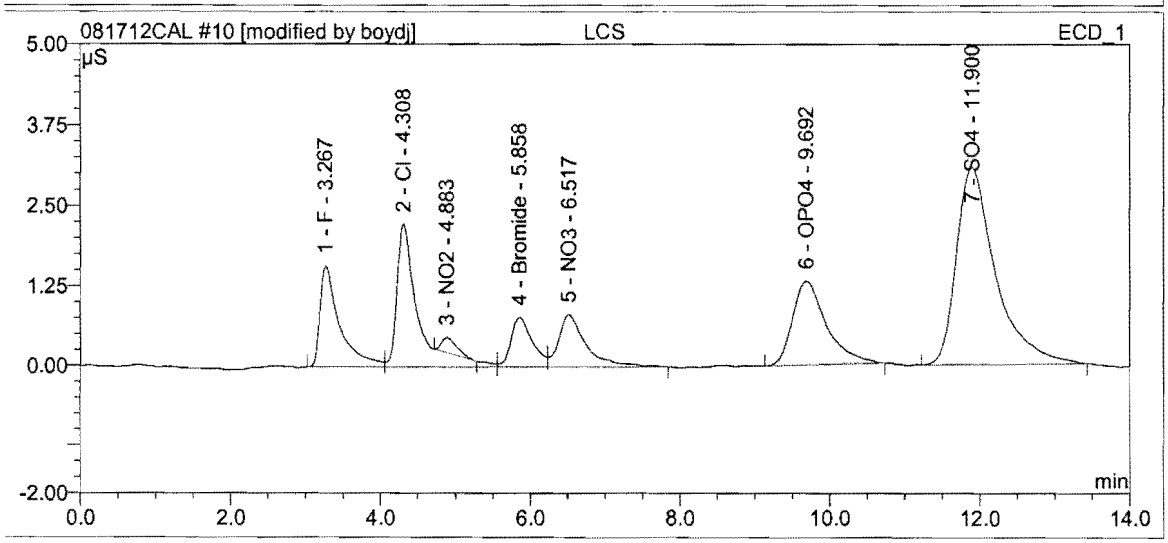
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -NO3 delimiter pulled right.
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 13:57**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM *	0.481	1.578	998.9792
2	4.31	Cl	M *	0.733	2.227	1929.4505
3	4.88	NO2	Rd	0.058	0.243	184.7802
4	5.86	Bromide	M *	0.256	0.780	1957.0954
5	6.52	NO3	MB*	0.345	0.820	370.8586
6	9.69	OPO4	BMB	0.690	1.312	7195.3697
7	11.90	SO4	BMB	1.866	3.068	7544.6650
		TOTAL:		4.43	10.03	20181.20





Integration Report - ECD_1

Sample Name:	**437-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:19**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	0.250	0.471	518.5961
3	4.78	NO2	M	44.637	163.251	141651.8204
4	6.01	Bromide	MB	0.460	0.980	3521.0724
5	12.04	SO4	BMB	1.073	1.822	4339.1697
TOTAL:				46.42	166.52	150030.66

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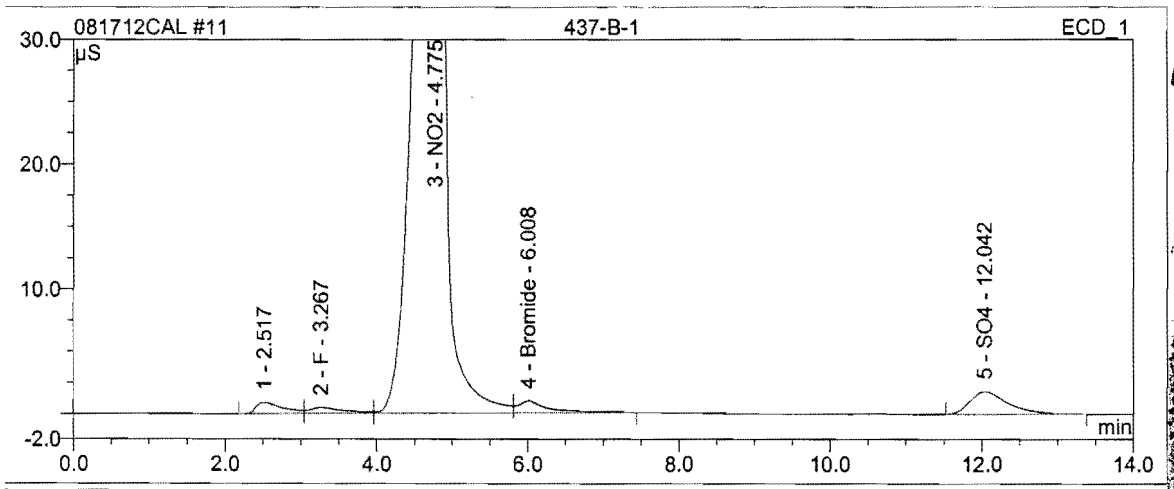
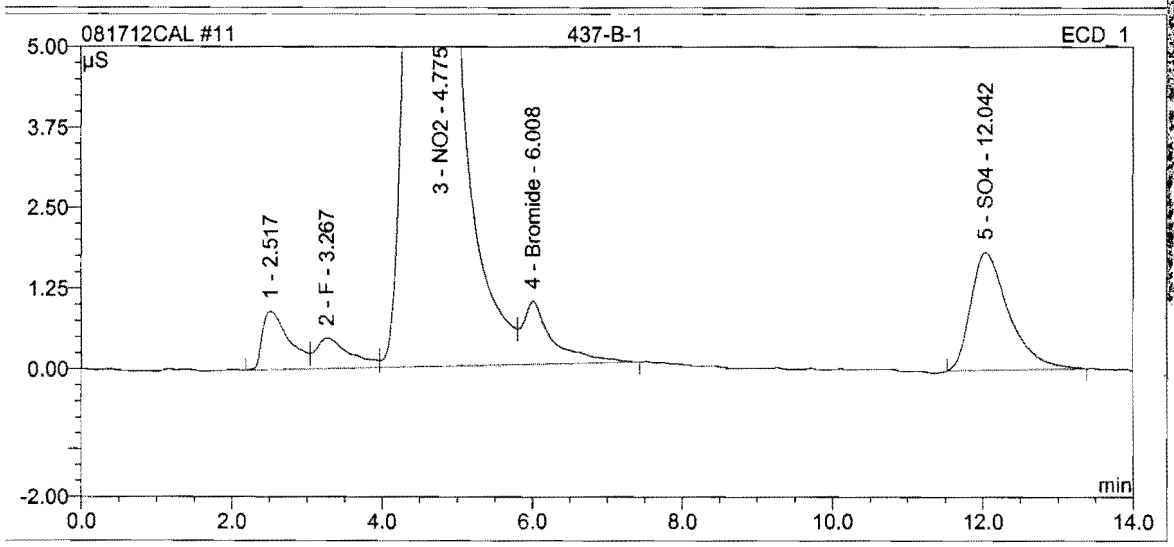


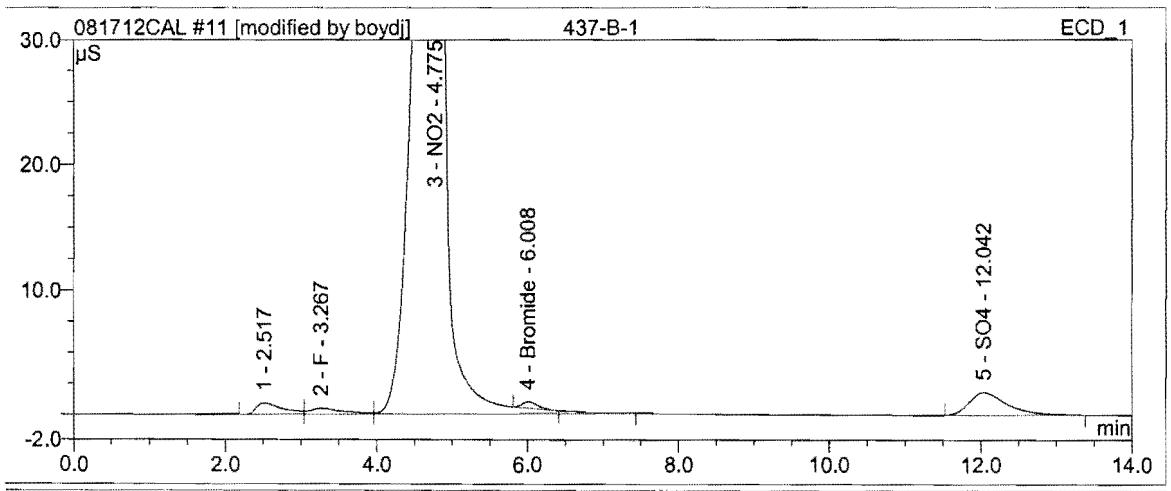


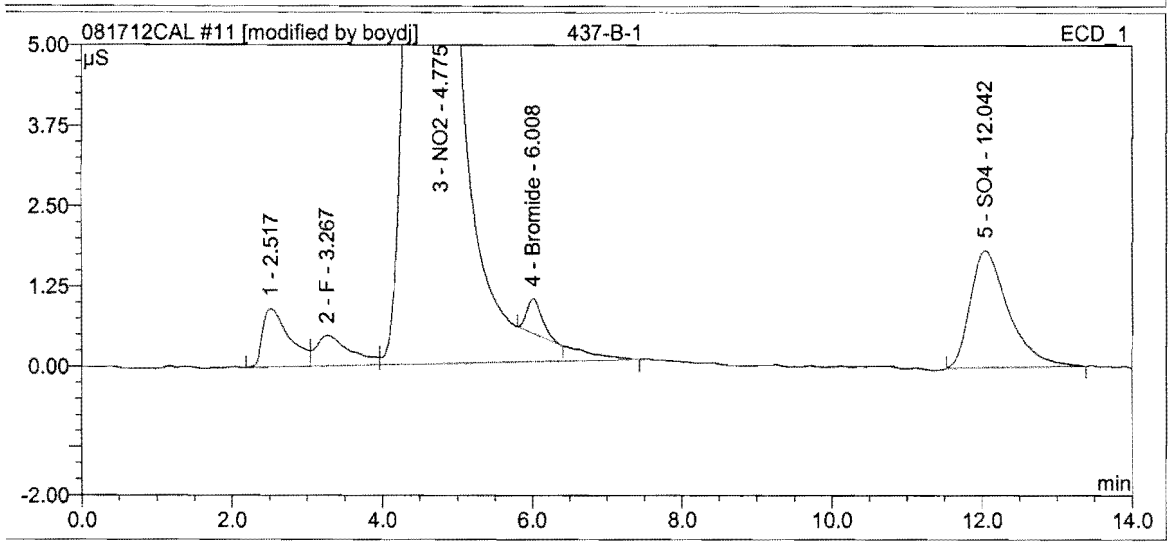
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Shoulder -Br = rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:19**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	0.250	0.471	518.5961
3	4.78	NO2	MB*	44.969	163.251	142707.6932
4	6.01	Bromide	Rd*	0.127	0.534	975.0997
5	12.04	SO4	BMB	1.073	1.822	4339.1697
		TOTAL:		46.42	166.08	148540.56





Integration Report - ECD_1

Sample Name:	**437-B-1 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:36**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	1.218	2.977	2529.2056
3	4.78	NO2	M	44.762	163.757	142049.7910
4	6.02	Bromide	M	0.630	1.910	4820.3543
5	6.66	NO3	MB	0.425	1.080	456.2806
6	9.83	OPO4	BMB	0.379	0.679	3949.7239
7	12.08	SO4	BMB	2.084	3.508	8428.4570
TOTAL:				49.50	173.91	162233.81

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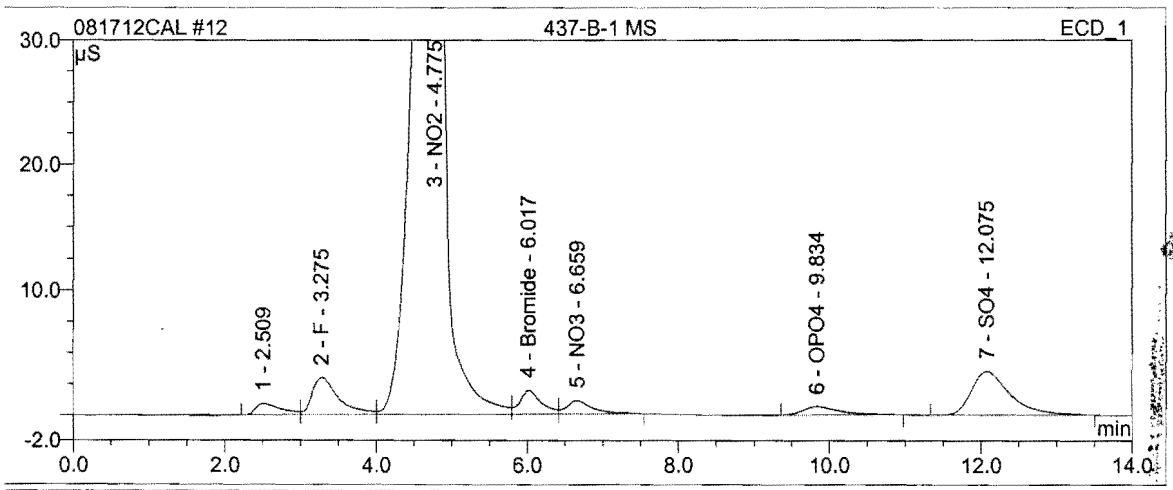
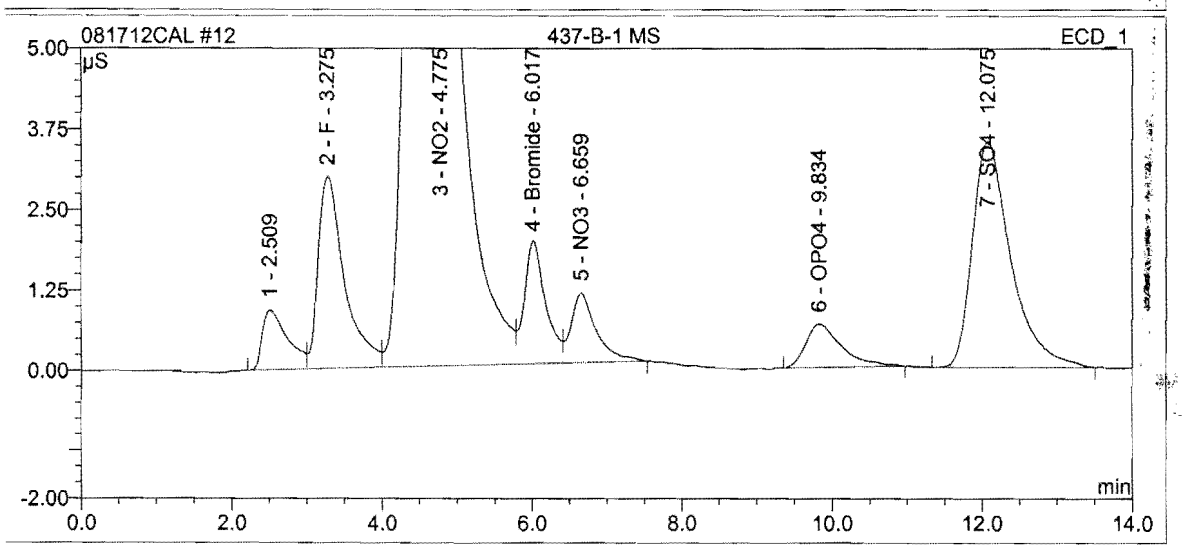


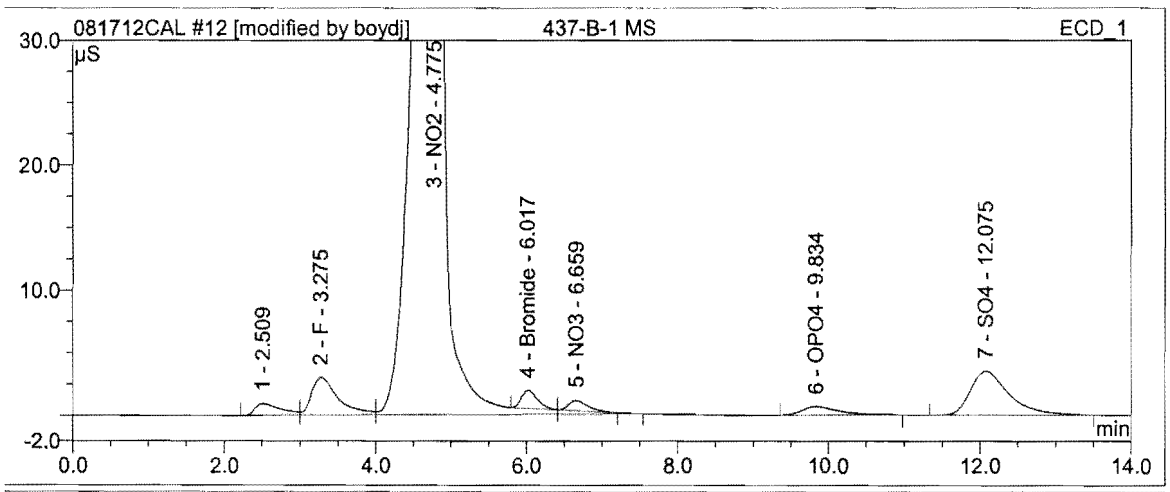


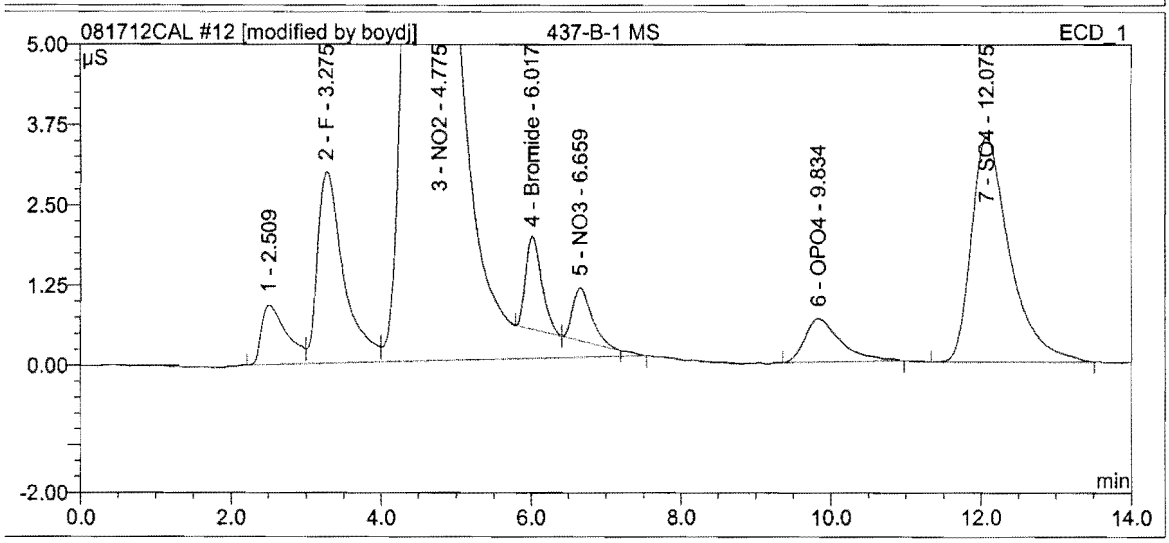
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Br⁻ rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-1 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:36**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	1.218	2.977	2529.2056
3	4.78	NO2	MB*	45.217	163.757	143493.8058
4	6.02	Bromide	Rd*	0.359	1.451	2747.6672
5	6.66	NO3	Rd*	0.241	0.816	258.5000
6	9.83	OPO4	BMB	0.379	0.679	3949.7239
7	12.08	SO4	BMB	2.084	3.508	8428.4570
		TOTAL:		49.50	173.19	161407.36





Integration Report - ECD_1

Sample Name:	**437-B-1 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:52**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	1.206	2.965	2502.9194
3	4.78	NO2	M	44.841	163.930	142299.9274
4	6.03	Bromide	M	0.663	1.958	5072.3887
5	6.66	NO3	MB	0.485	1.109	521.0327
6	9.84	OPO4	BM	0.337	0.617	3517.6960
7	12.08	SO4	BMB	2.002	3.420	8096.9839
		TOTAL:		49.53	174.00	162010.95

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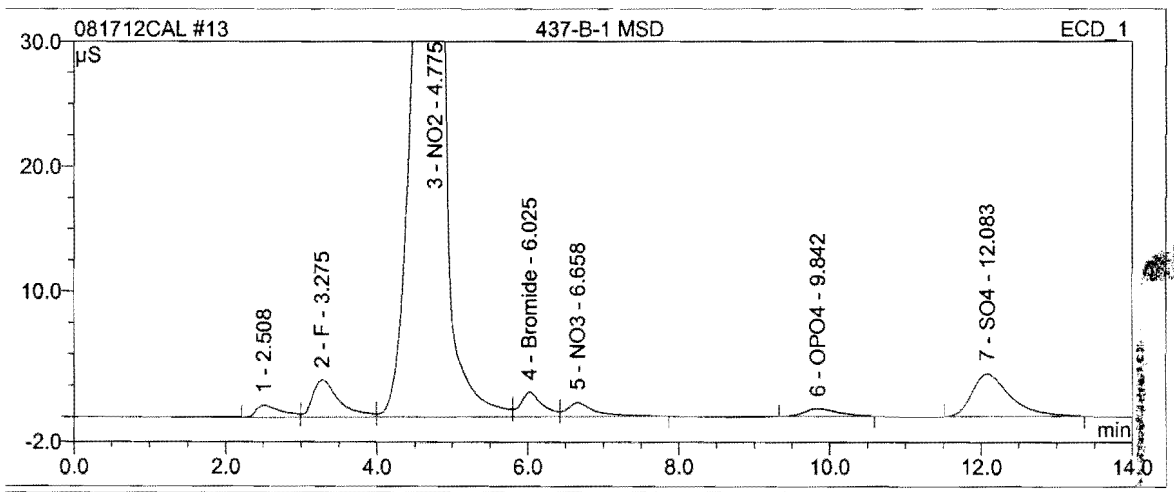
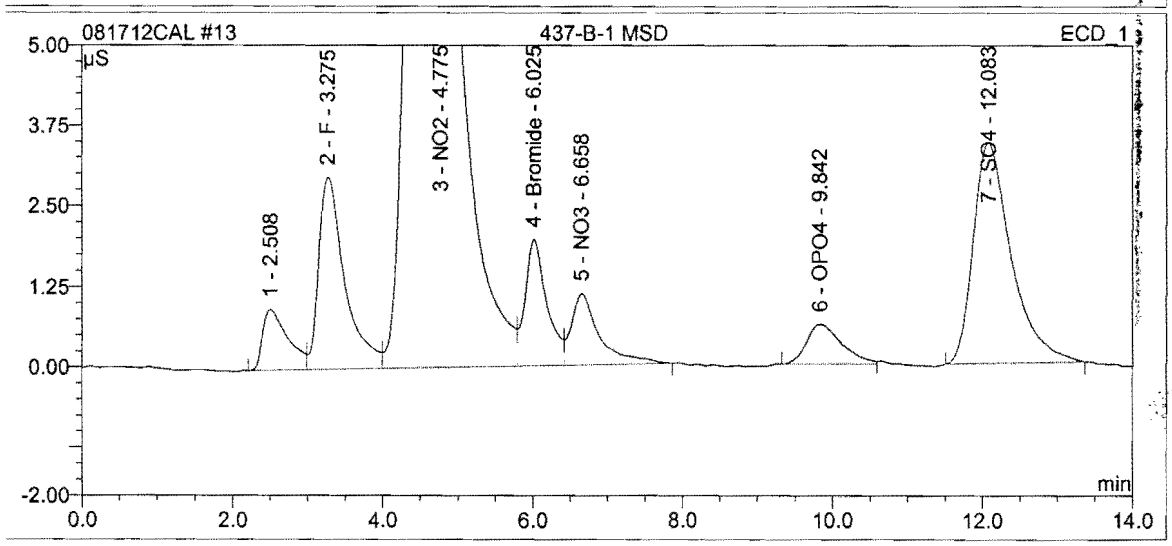


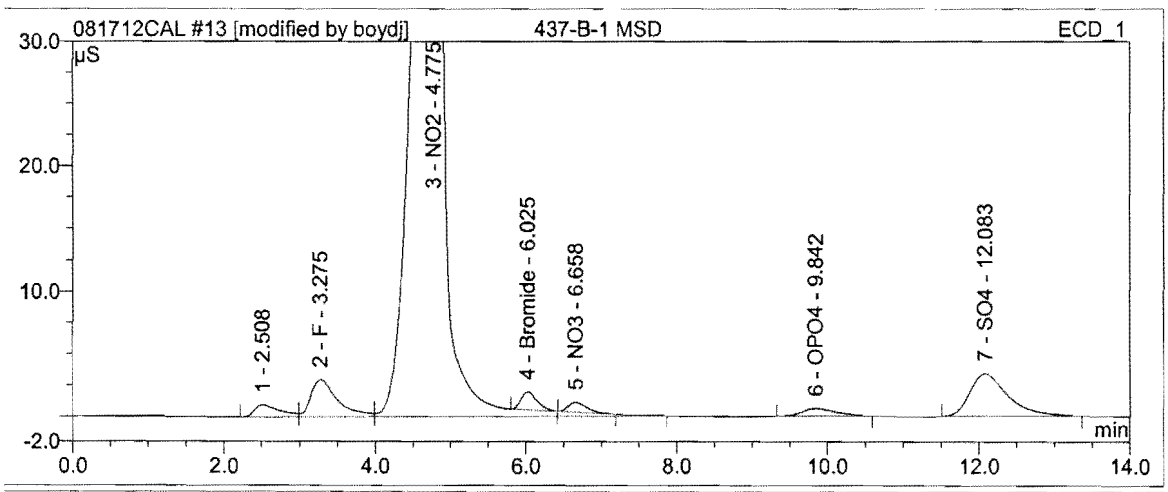


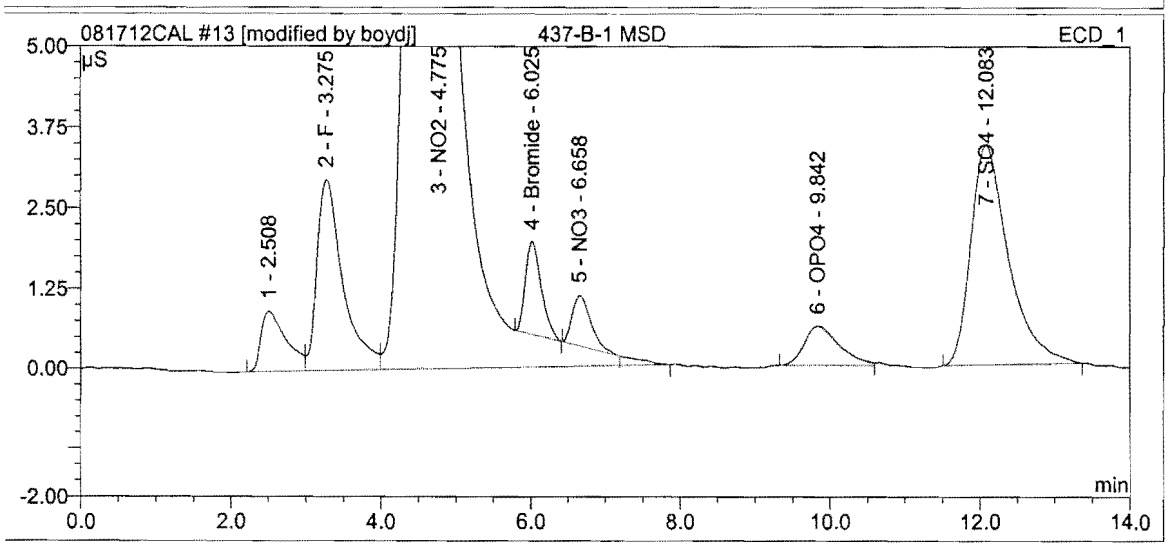
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -Br = rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-1 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 14:52**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	1.206	2.965	2502.9194
3	4.78	NO2	MB*	45.405	163.930	144090.7203
4	6.03	Bromide	Rd*	0.356	1.441	2721.0007
5	6.66	NO3	Rd*	0.228	0.785	245.0095
6	9.84	OPO4	BM	0.337	0.617	3517.6960
7	12.08	SO4	BMB	2.002	3.420	8096.9839
		TOTAL:		49.53	173.16	161174.33

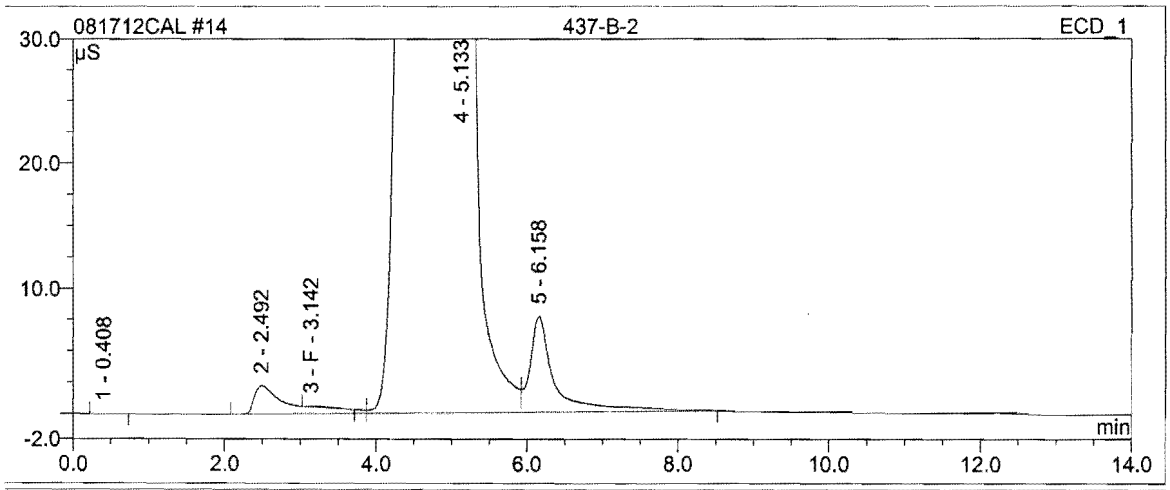


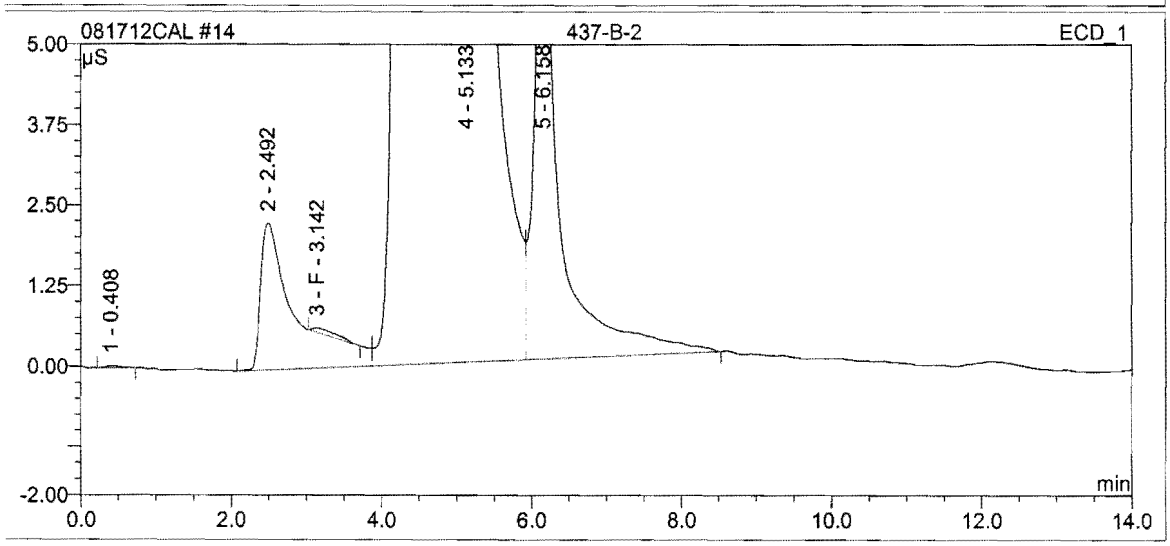


Integration Report - ECD_1

Sample Name:	**437-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:09**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.14	F	Rd	0.030	0.068	62.7379
		TOTAL:		0.03	0.07	62.74





Integration Report - ECD_1

Sample Name:	**437-B-2 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:25**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	bMB	0.008	0.039	15.8336
4	5.93	Bromide	MB	0.489	1.203	3739.0078
		TOTAL:		0.50	1.24	3754.84

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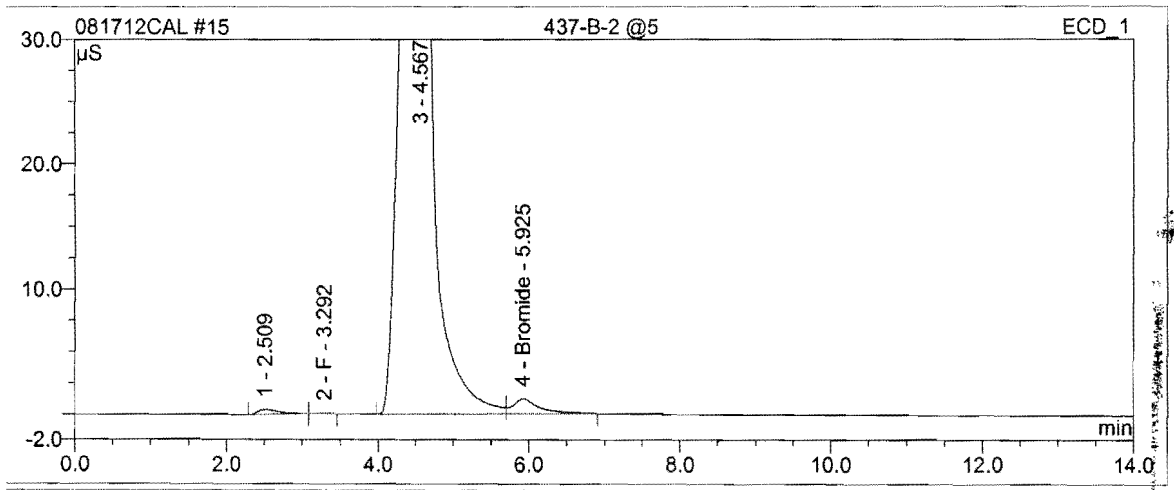
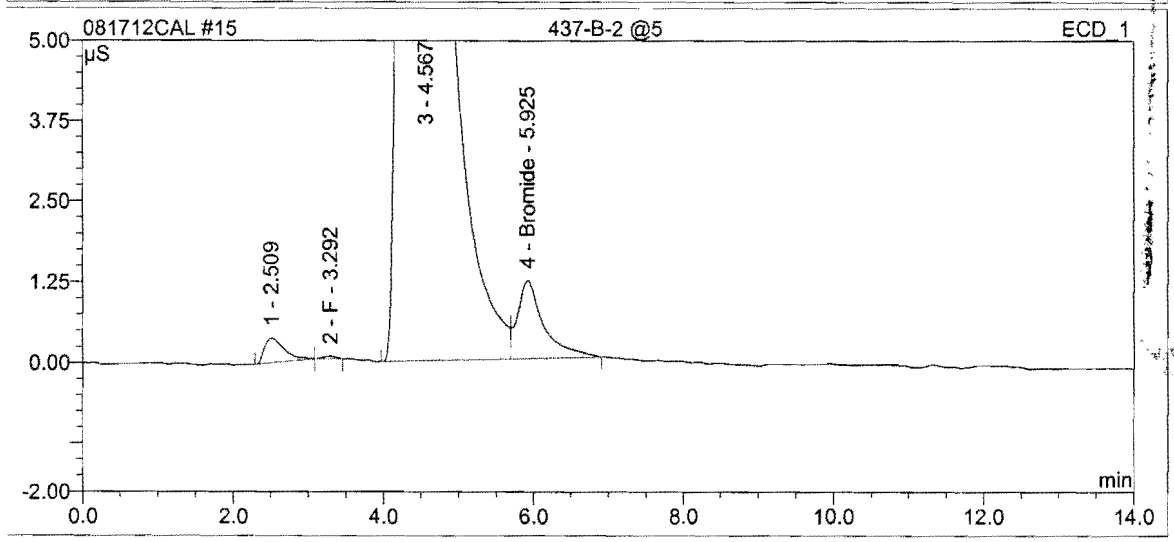


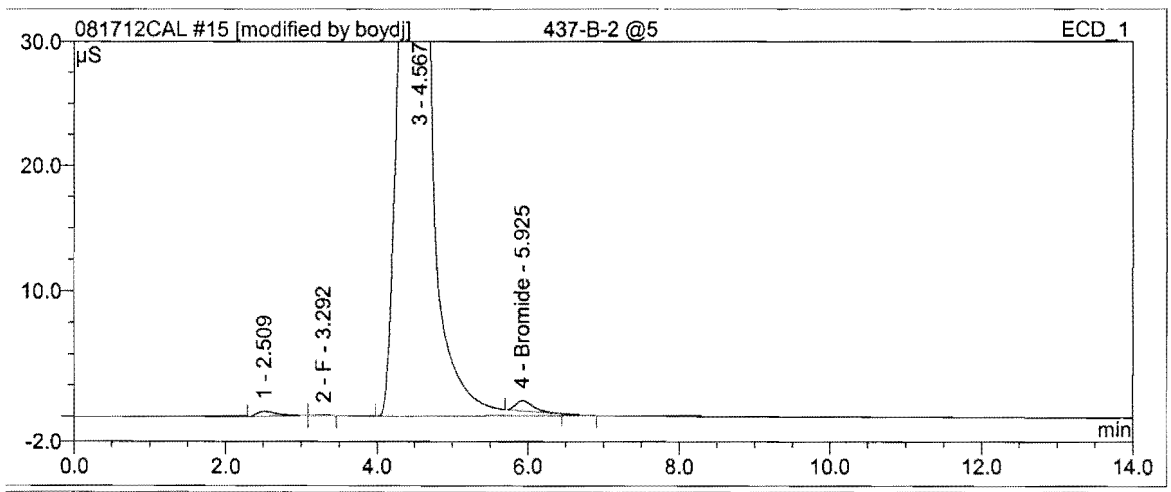


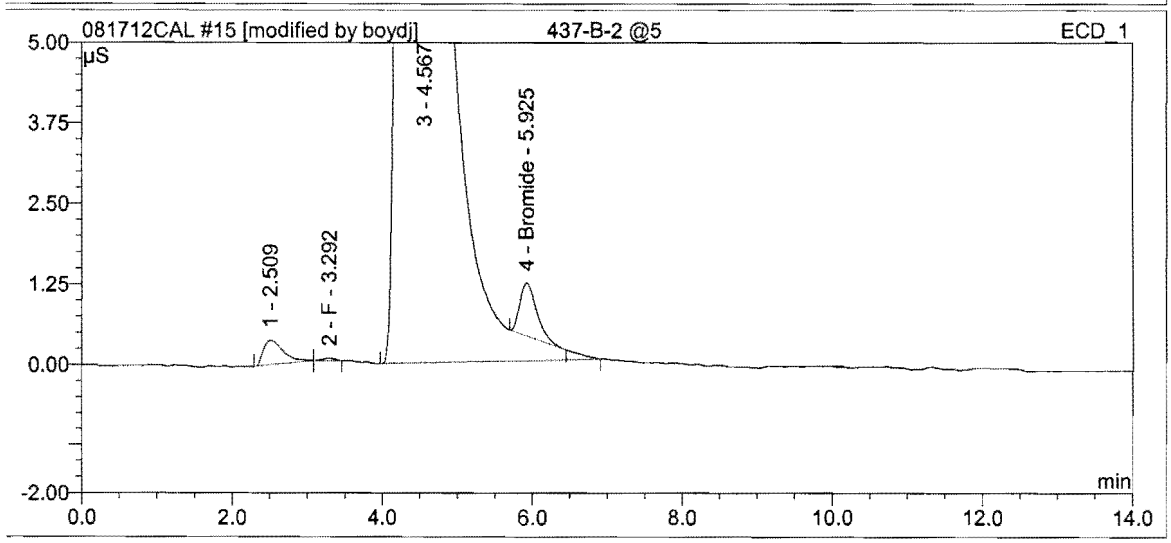
1. Peak Line Shift
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -Br=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-2 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:25**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	bMB	0.008	0.039	15.8336
4	5.93	Bromide	Rd*	0.219	0.821	1673.9574
		TOTAL:		0.23	0.86	1689.79





Integration Report - ECD_1

Sample Name:	**437-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:41**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.28	F	Rd	0.077	0.176	159.1123
4	5.09	NO2	M	62.262	218.474	197585.0334
6	6.79	NO3	Rd	0.041	0.156	43.9168
7	12.18	SO4	BMB	0.080	0.142	323.9848
		TOTAL:		62.46	218.95	198112.05

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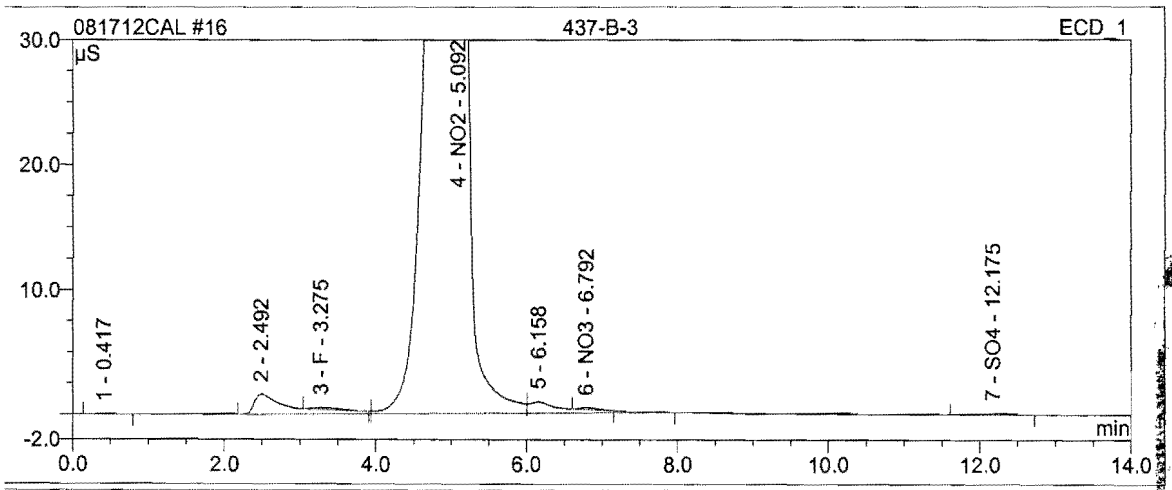
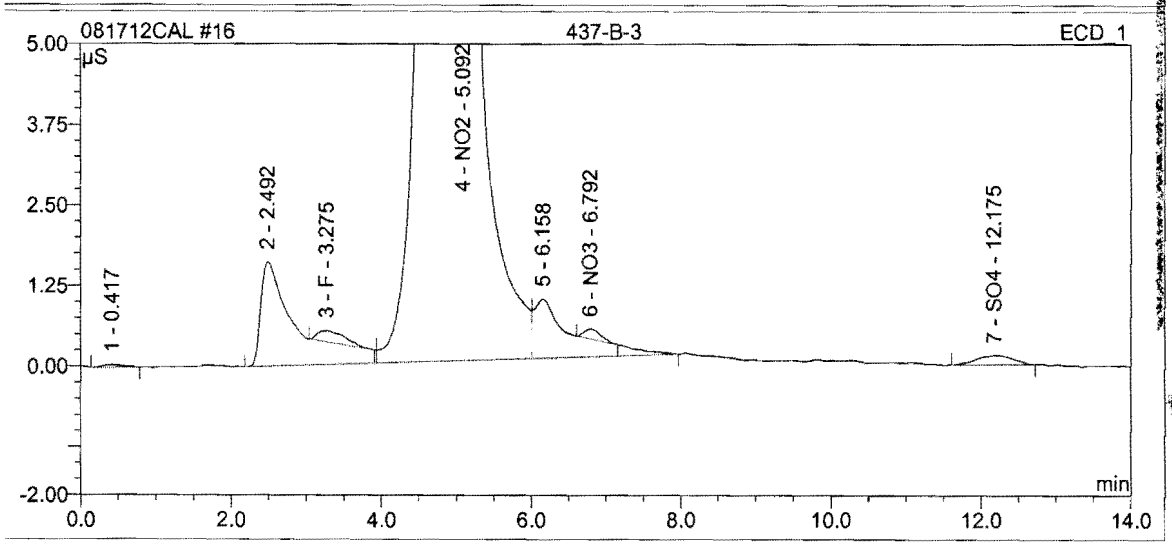


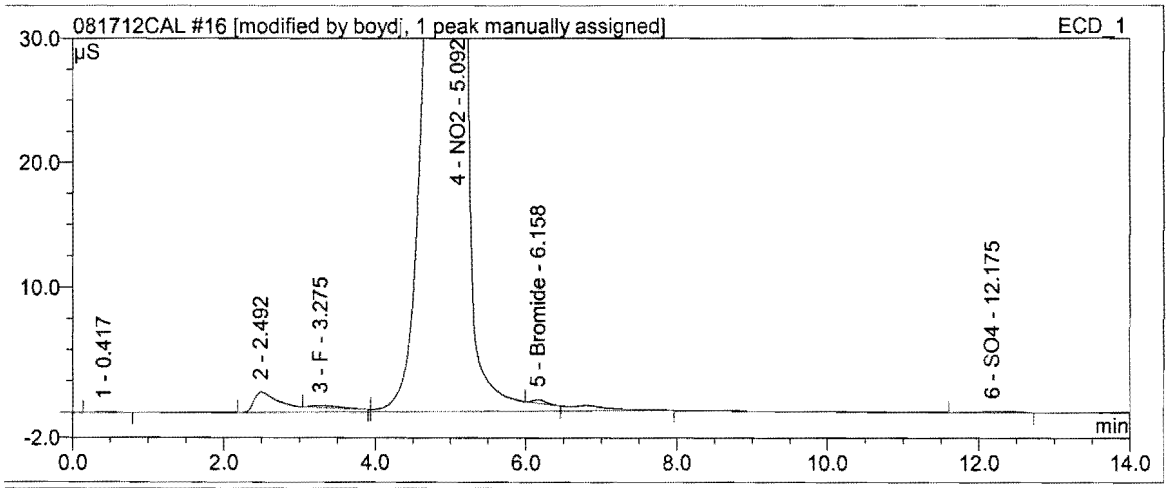


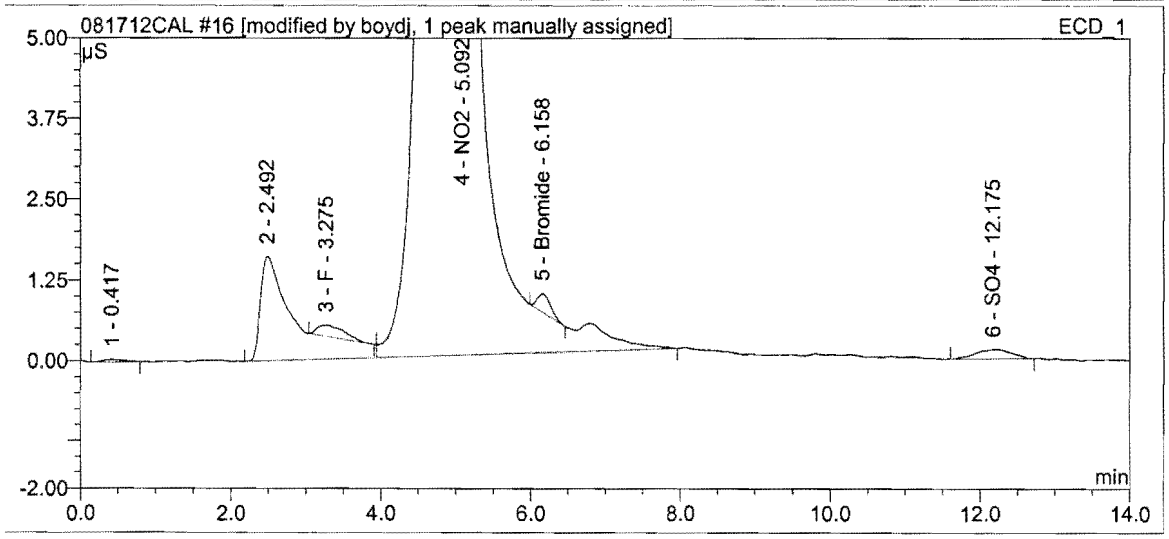
1. Peak not found
2. Incomplete Integration
3. Assign Peak -Br
4. Wrong Peak
5. Baseline Smoothing -Br-rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:41**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.28	F	Rd	0.077	0.176	159.1123
4	5.09	NO2	MB*	62.808	218.474	199318.9269
5	6.16	Bromide	Rd*^	0.061	0.287	464.7451
6	12.18	SO4	BMB	0.080	0.142	323.9848
TOTAL:				63.03	219.08	200266.77

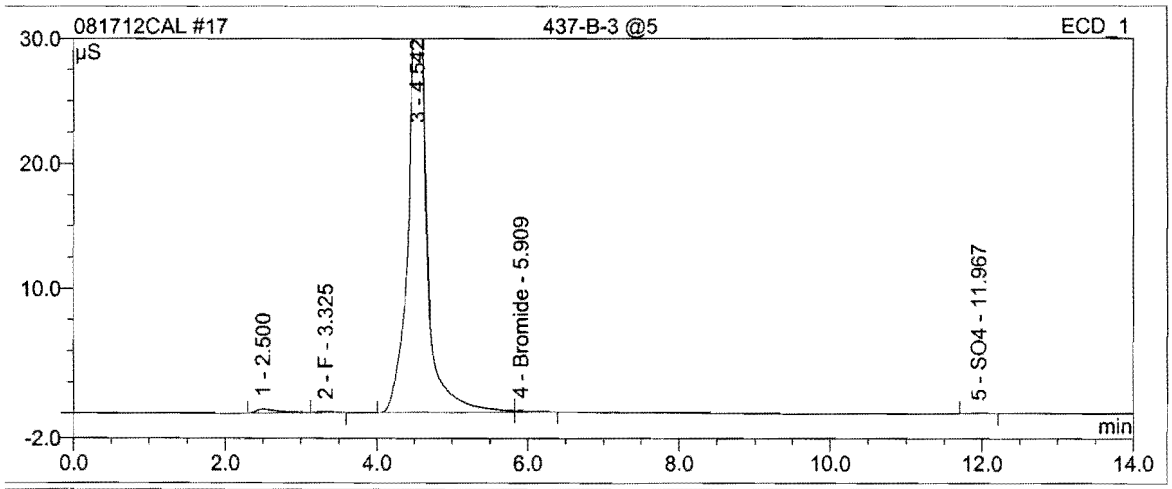


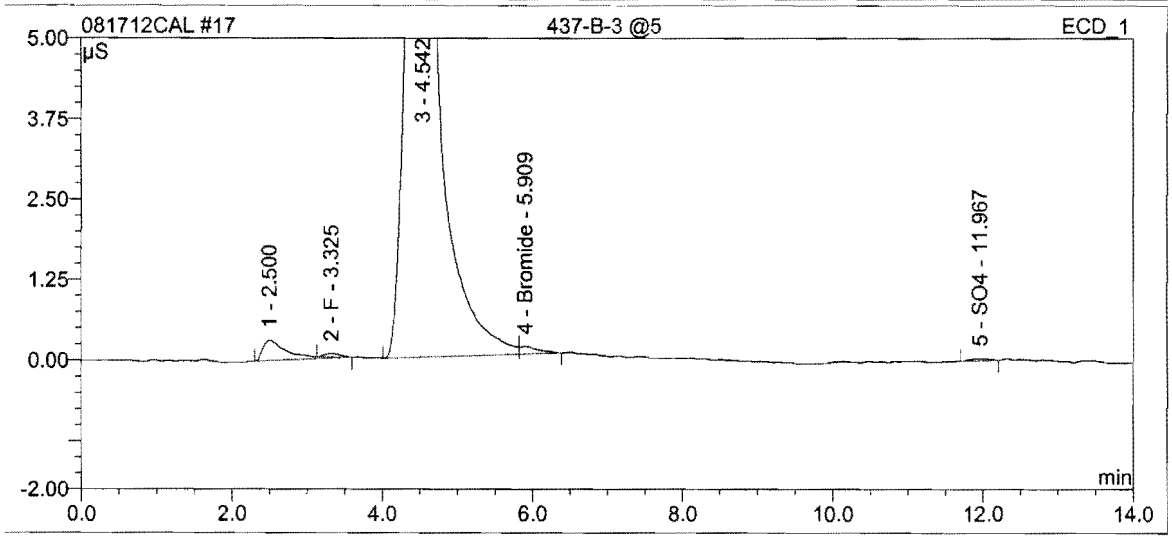


Integration Report - ECD_1

Sample Name:	**437-B-3 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 15:58**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.33	F	Rd	0.014	0.055	29.3252
4	5.91	Bromide	MB	0.034	0.117	257.2457
5	11.97	SO4	BMB	0.011	0.034	42.9015
		TOTAL:		0.06	0.21	329.47





Integration Report - ECD_1

Sample Name:	**437-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 16:14**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.26	F	M	2.129	4.783	4419.5072
3	4.96	NO2	M	109.225	273.057	346619.3270
4	6.08	Bromide	MB	0.772	1.771	5909.8281
5	12.08	SO4	BMB	4.572	7.655	18488.3480
		TOTAL:		116.70	287.27	375437.01

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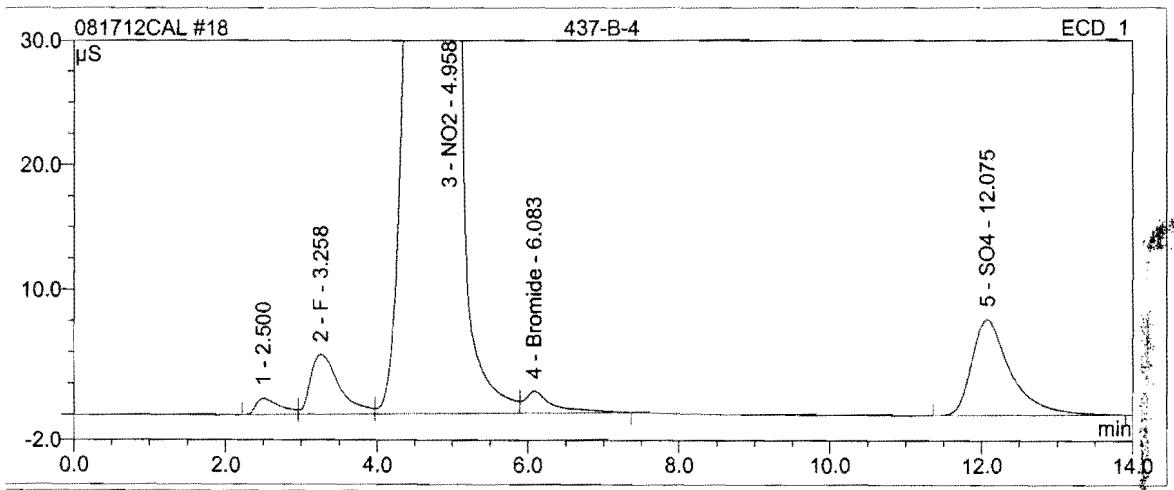
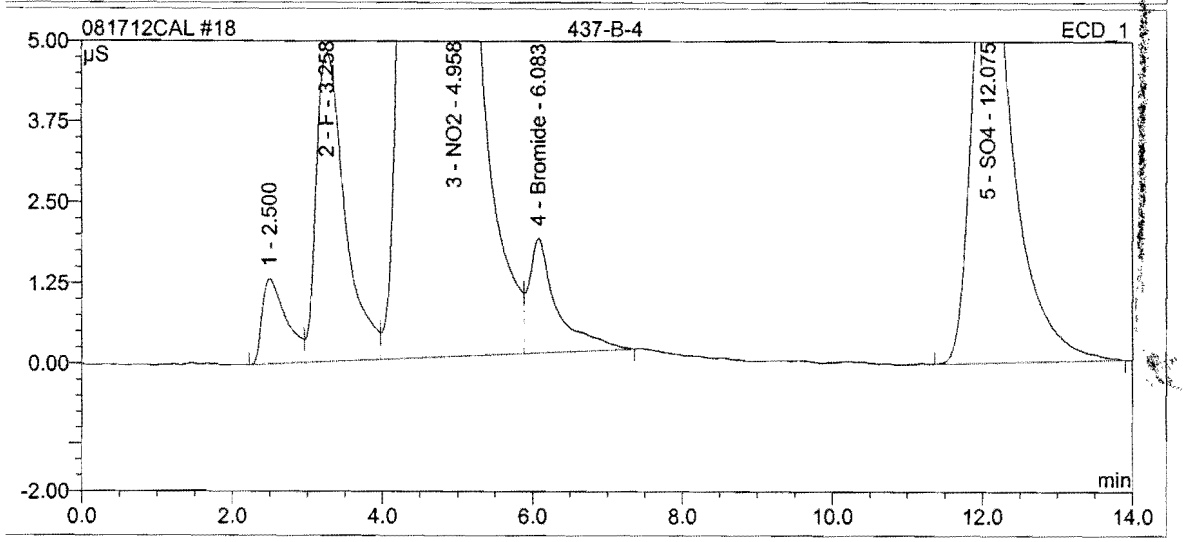


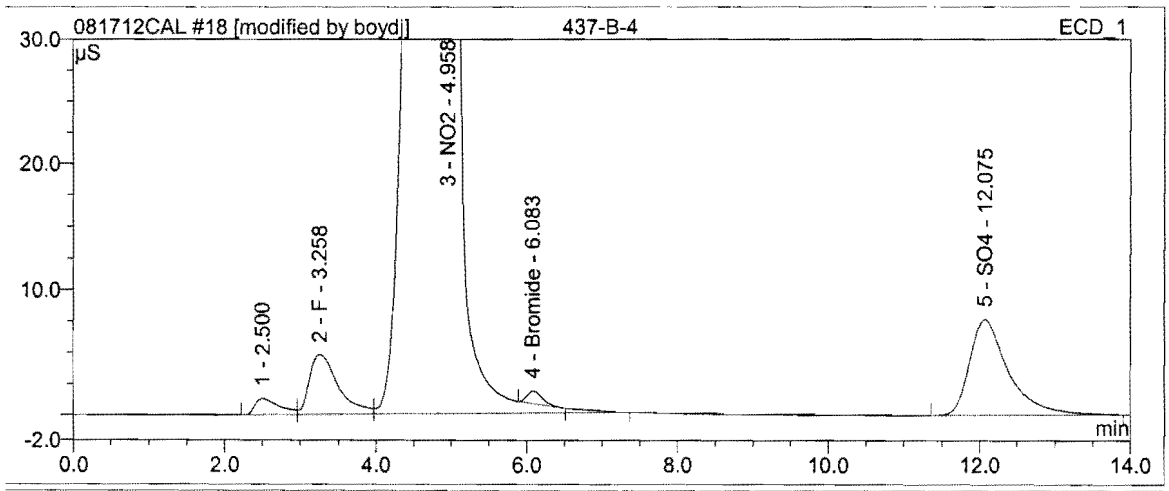


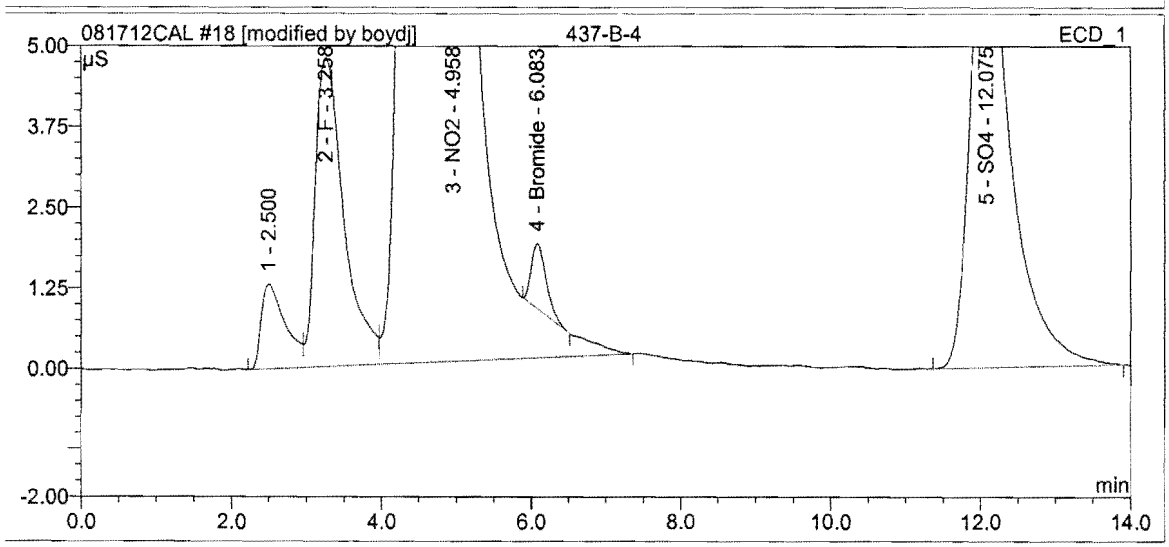
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Brucider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 16:14**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.26	F	M	2.129	4.783	4419.5072
3	4.96	NO2	MB*	109.761	273.057	348320.8948
4	6.08	Bromide	Rd*	0.236	1.010	1806.9037
5	12.08	SO4	BMB	4.572	7.655	18488.3480
		TOTAL:		116.70	286.51	373035.65

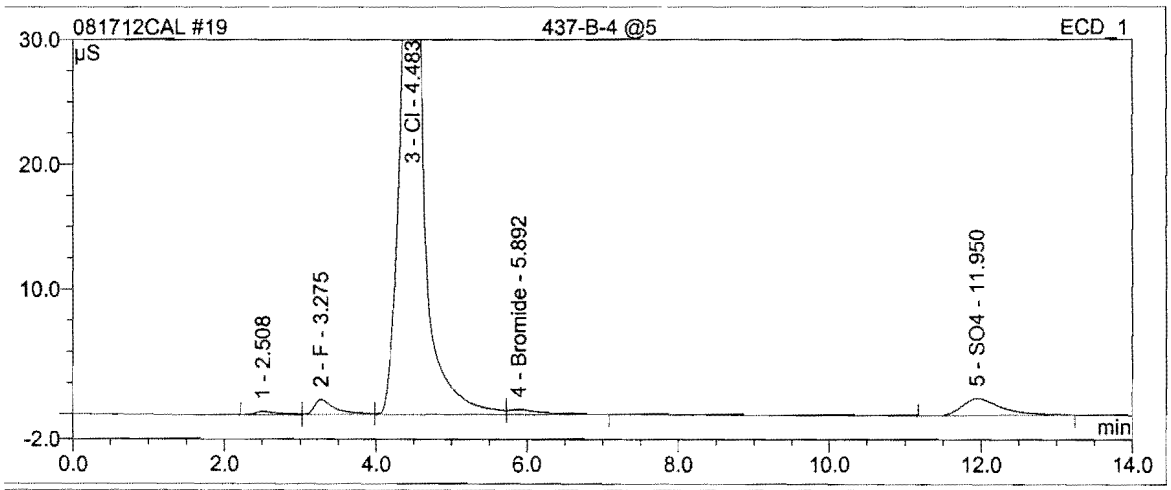


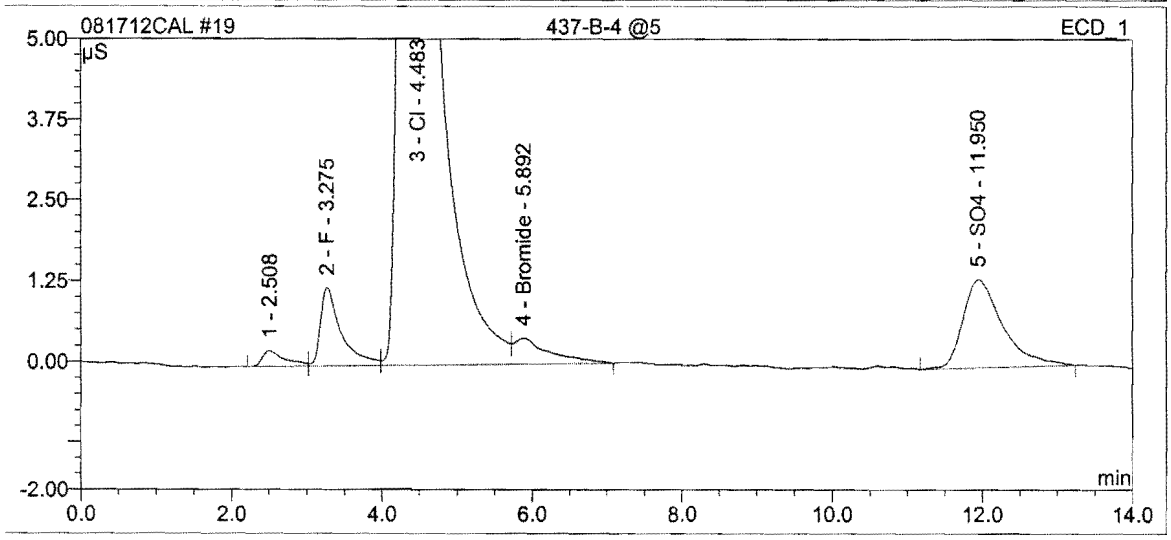


Integration Report - ECD_1

Sample Name:	**437-B-4 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 16:31**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.389	1.214	808.4437
3	4.48	Cl	M	19.106	70.315	50315.6455
4	5.89	Bromide	MB	0.224	0.399	1711.5635
5	11.95	SO4	BMB	0.834	1.362	3372.3833
		TOTAL:		20.55	73.29	56208.04





Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 16:47**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.476	1.611	988.0756
3	4.31	Cl	M	0.708	2.225	1865.1099
4	4.89	NO2	Rd	0.051	0.222	162.2597
5	5.87	Bromide	M	0.247	0.767	1892.9436
6	6.53	NO3	MB	0.314	0.800	337.1848
7	9.68	OPO4	BM	0.721	1.330	7522.9658
8	11.90	SO4	MB	1.819	3.007	7356.7937
		TOTAL:		4.34	9.96	20125.33

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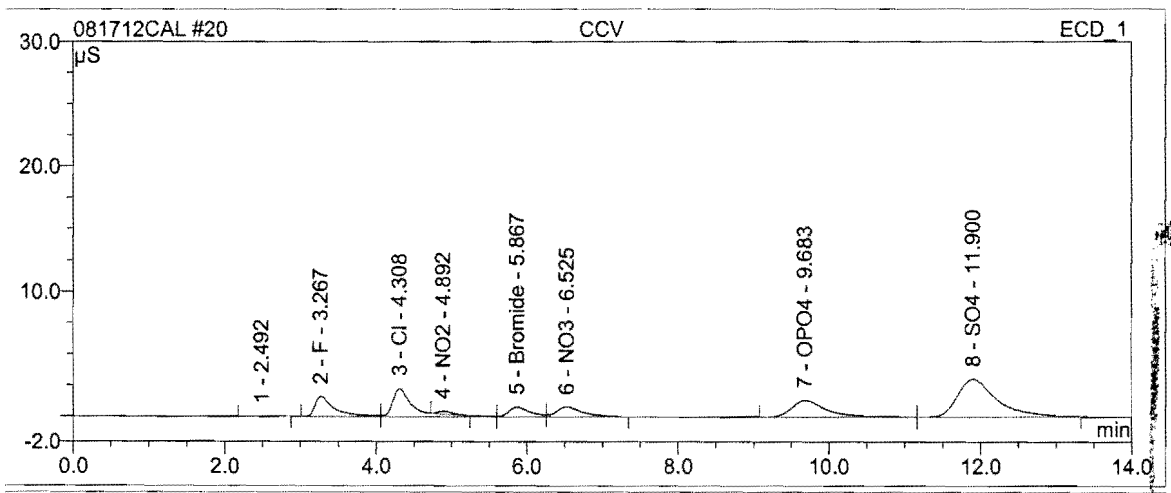
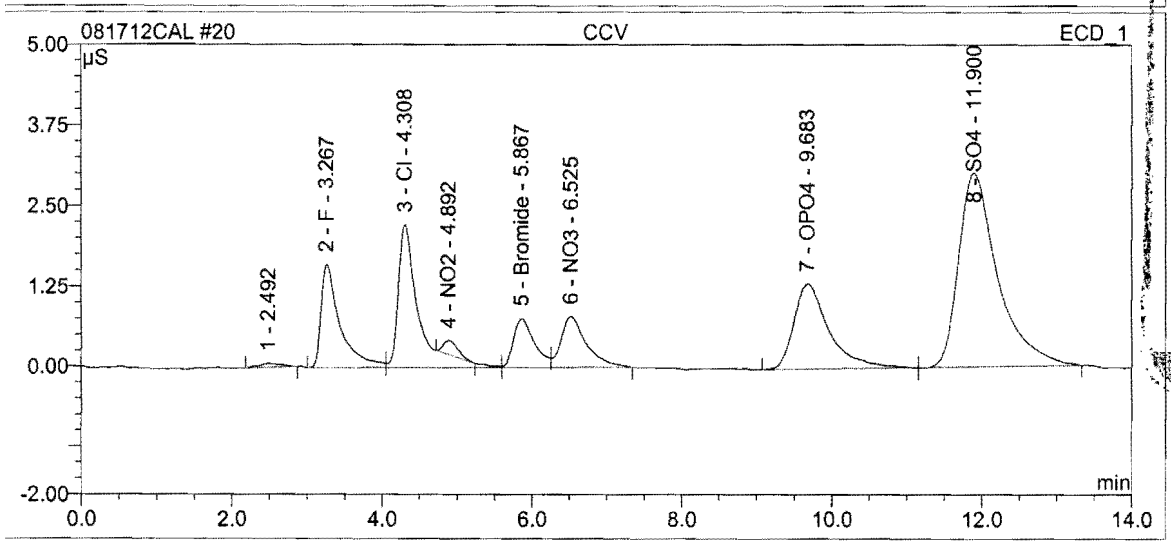


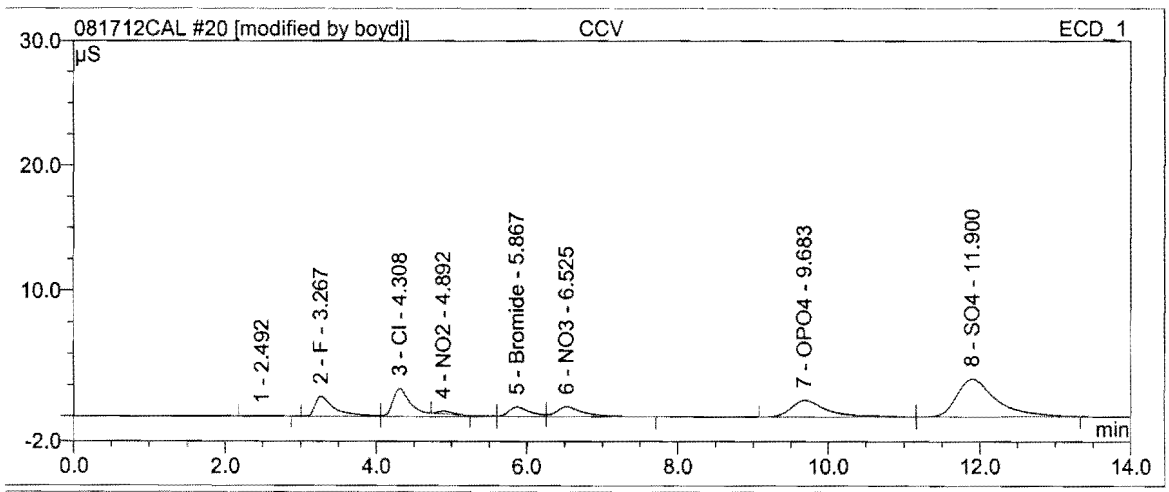


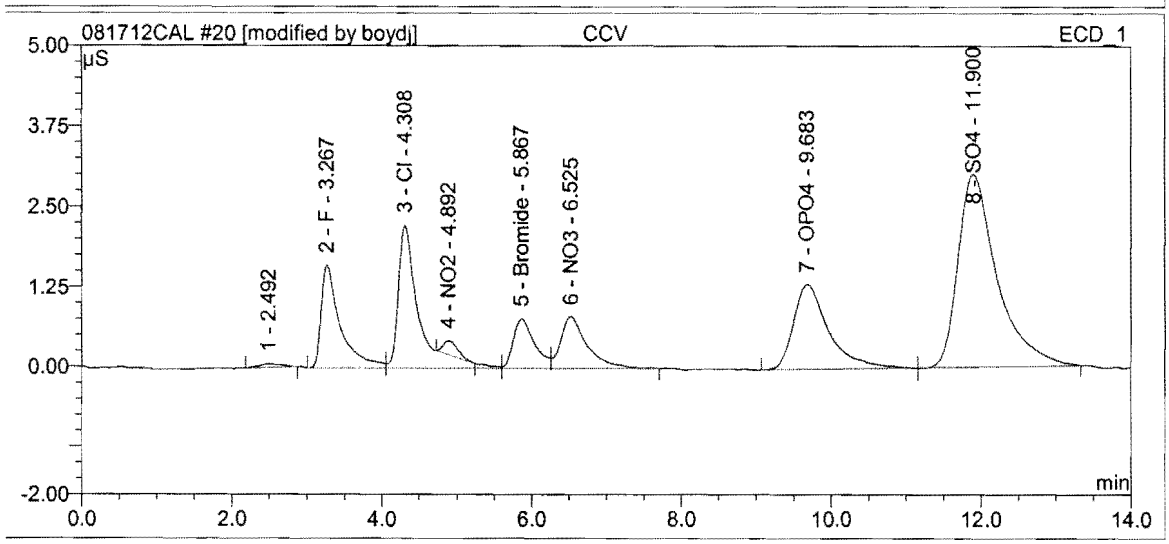
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 16:47**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM *	0.478	1.612	991.6831
3	4.31	Cl	M *	0.717	2.229	1888.3934
4	4.89	NO2	Rd	0.051	0.222	162.2597
5	5.87	Bromide	M *	0.253	0.776	1939.2889
6	6.53	NO3	MB*	0.330	0.811	354.4703
7	9.68	OPO4	BM	0.721	1.330	7522.9658
8	11.90	SO4	MB	1.819	3.007	7356.7937
		TOTAL:		4.37	9.99	20215.85

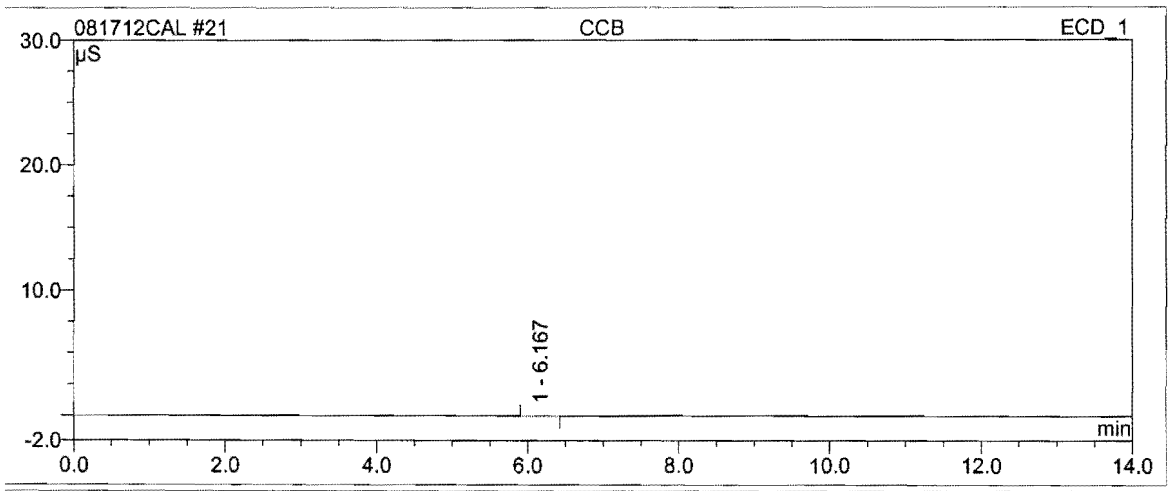


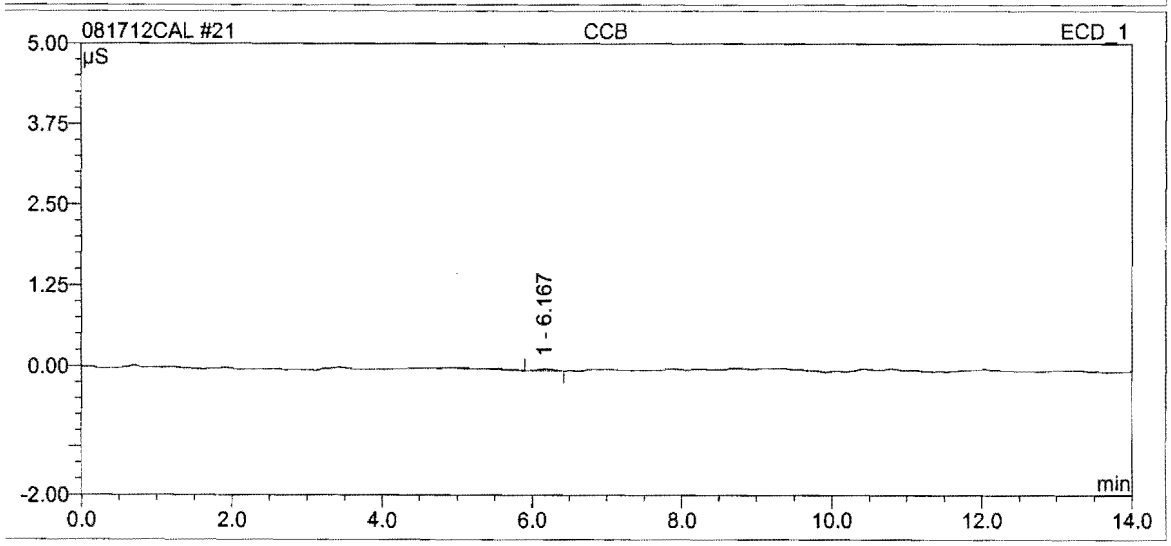


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 17:03**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

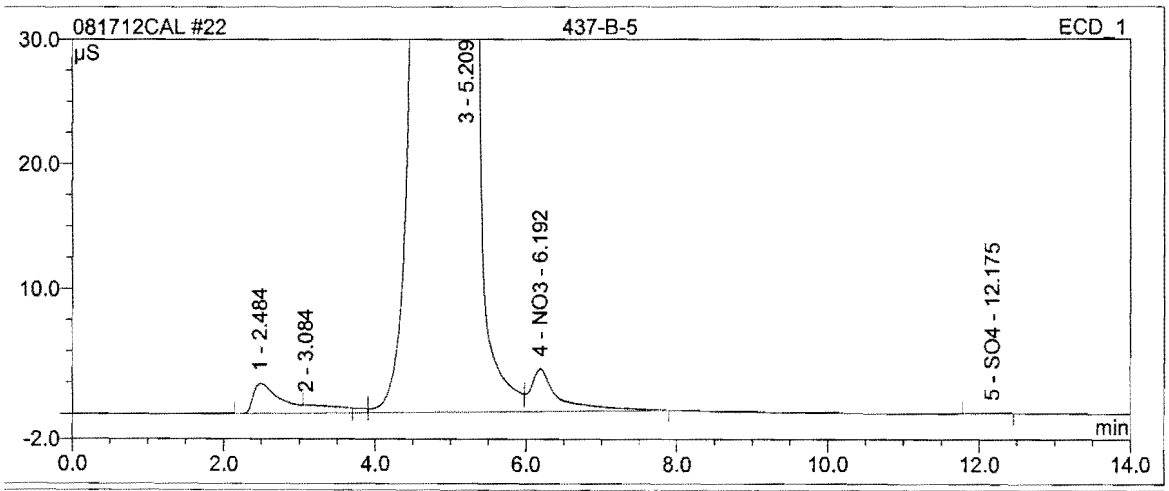


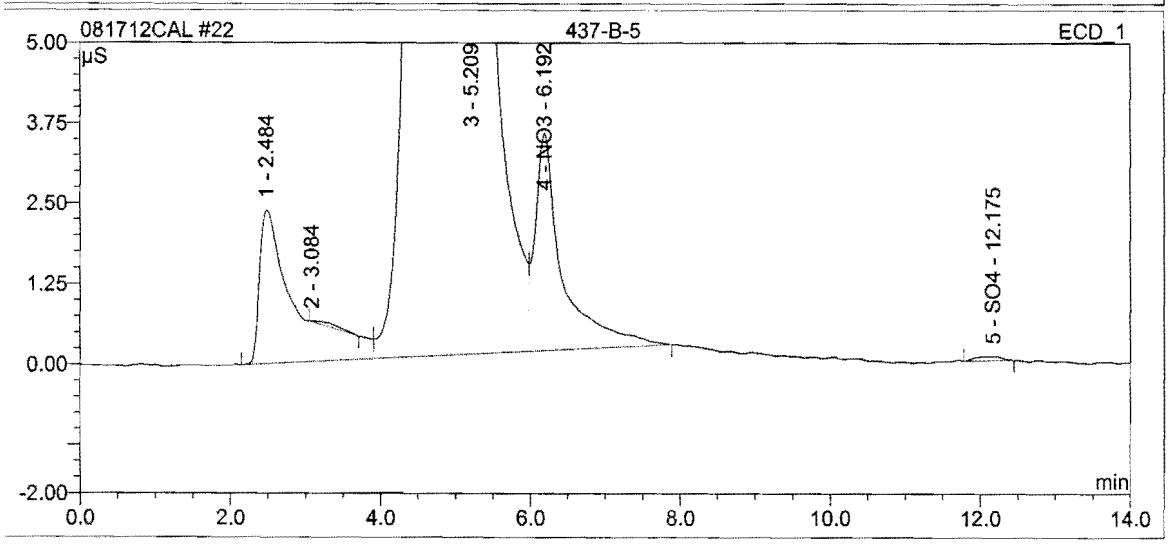


Integration Report - ECD_1

Sample Name:	**437-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 17:20**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
4	6.19	NO3	MB	1.439	3.385	1545.5491
5	12.18	SO4	BMB	0.027	0.065	109.1299
		TOTAL:		1.47	3.45	1654.68





Integration Report - ECD_1

Sample Name:	**437-B-5 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 17:36**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.31	F	Rd	0.010	0.042	21.4575
5	5.95	Bromide	MB	0.289	0.626	2207.8280
		TOTAL:		0.30	0.67	2229.29

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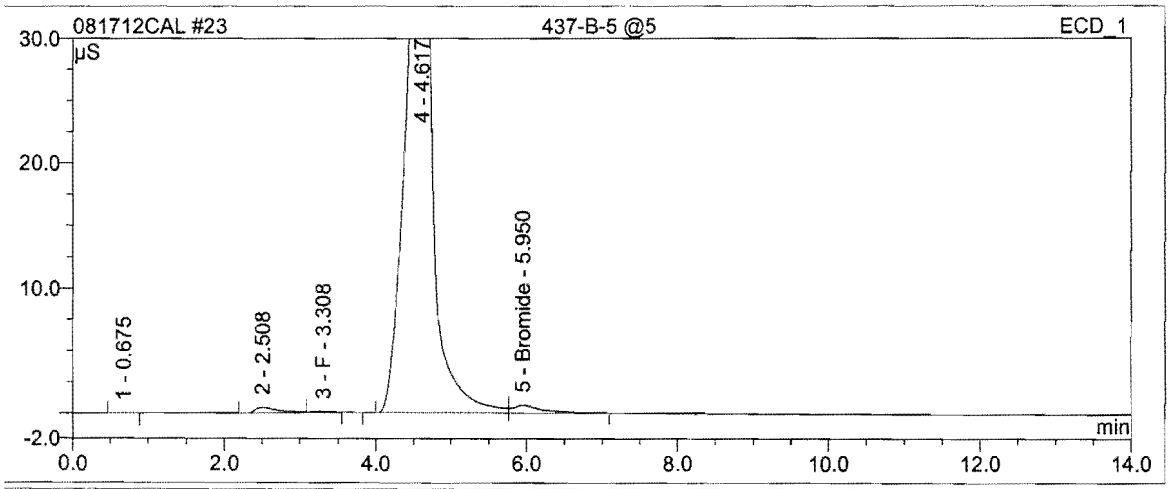
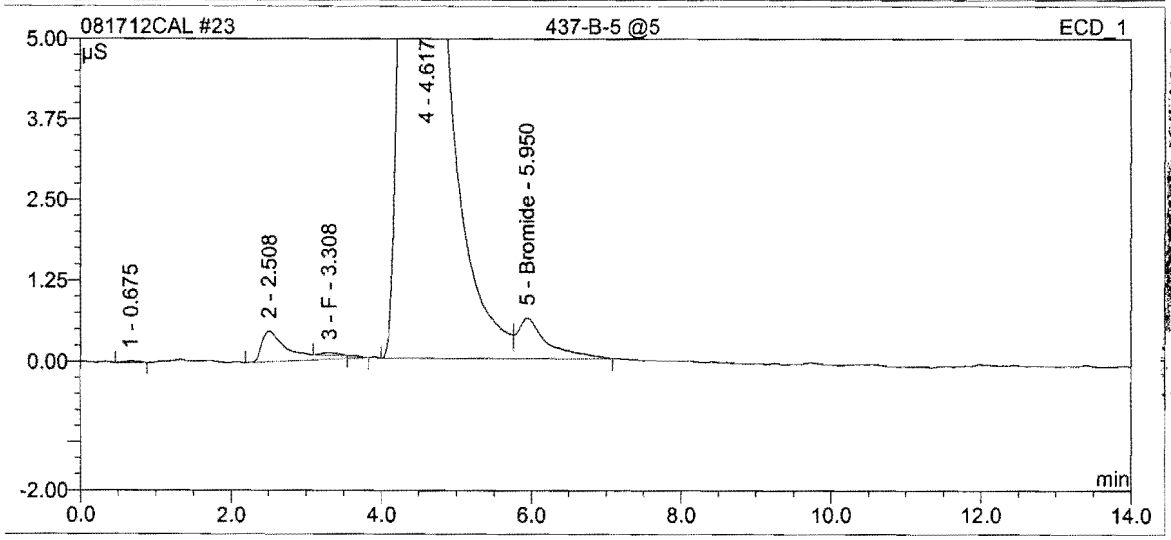


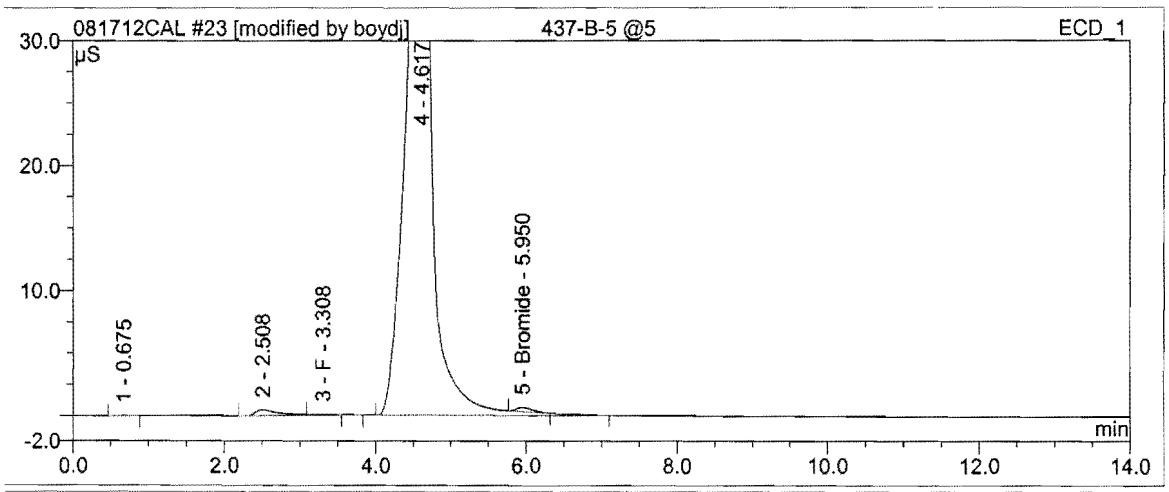


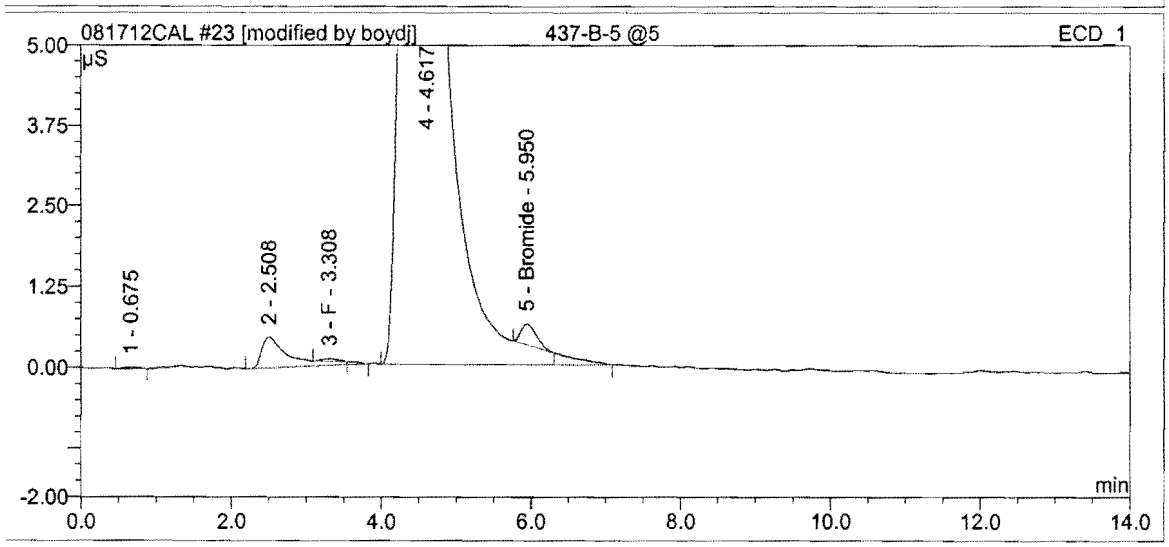
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Br=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-5 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 17:36**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.31	F	Rd	0.010	0.042	21.4575
5	5.95	Bromide	Rd*	0.078	0.323	599.3979
		TOTAL:		0.09	0.37	620.86

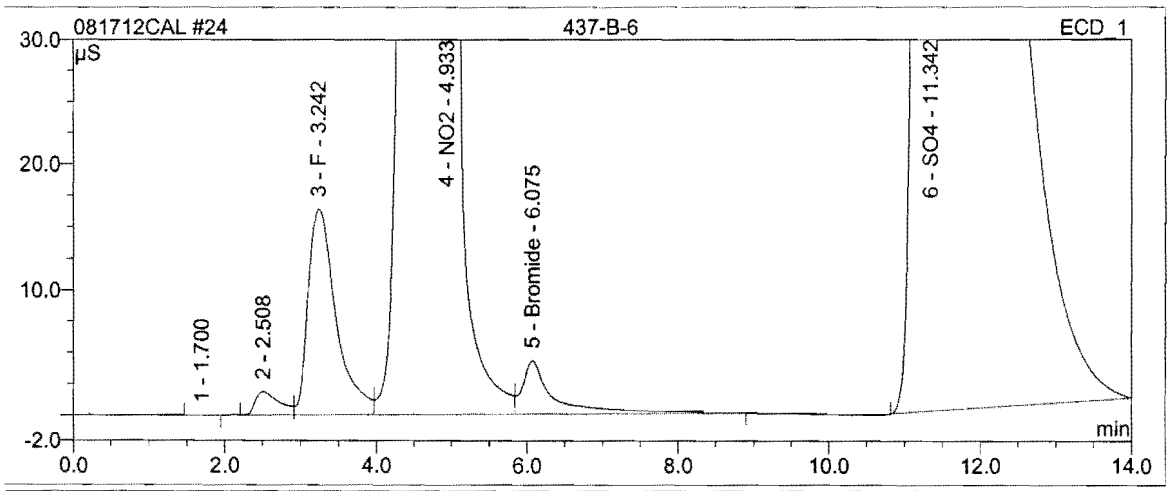


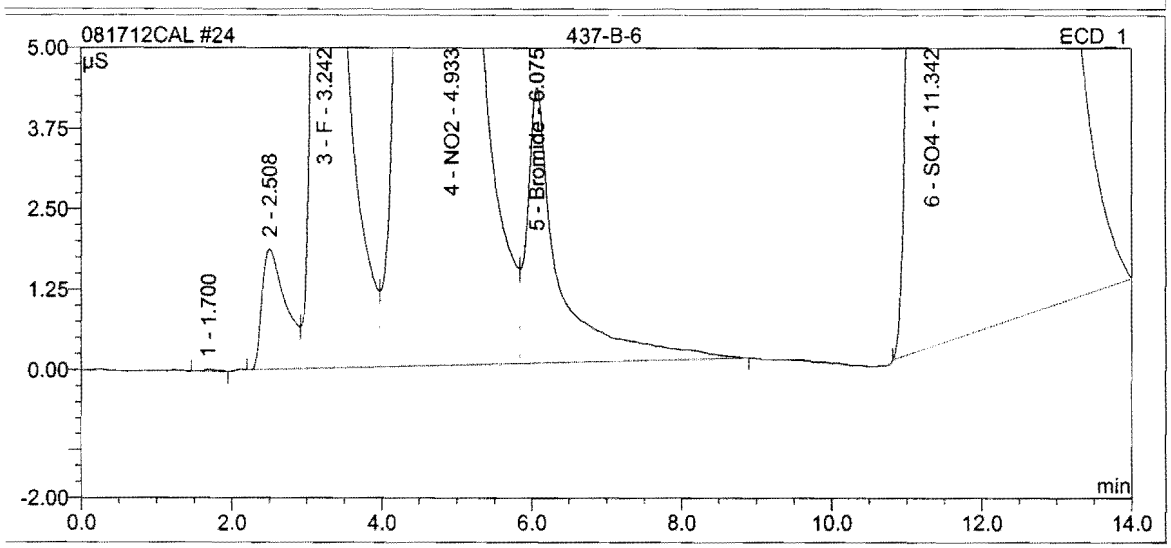


Integration Report - ECD_1

Sample Name:	**437-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 17:53**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.24	F	M	7.061	16.355	14658.0779
4	4.93	NO2	M	152.646	327.524	484415.1307
5	6.08	Bromide	MB	2.130	4.270	16299.4980
6	11.34	SO4	BMB	246.820	288.337	998108.6651
		TOTAL:		408.66	636.49	1513481.37





Integration Report - ECD_1

Sample Name:	**437-B-6 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:09**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	1.251	4.204	2597.2025
3	4.51	Cl	M	26.831	92.499	70658.2903
4	5.91	Bromide	MB	0.319	0.738	2444.2543
6	11.75	SO4	BMB	44.164	71.062	178594.3993
		TOTAL:		72.57	168.50	254294.15

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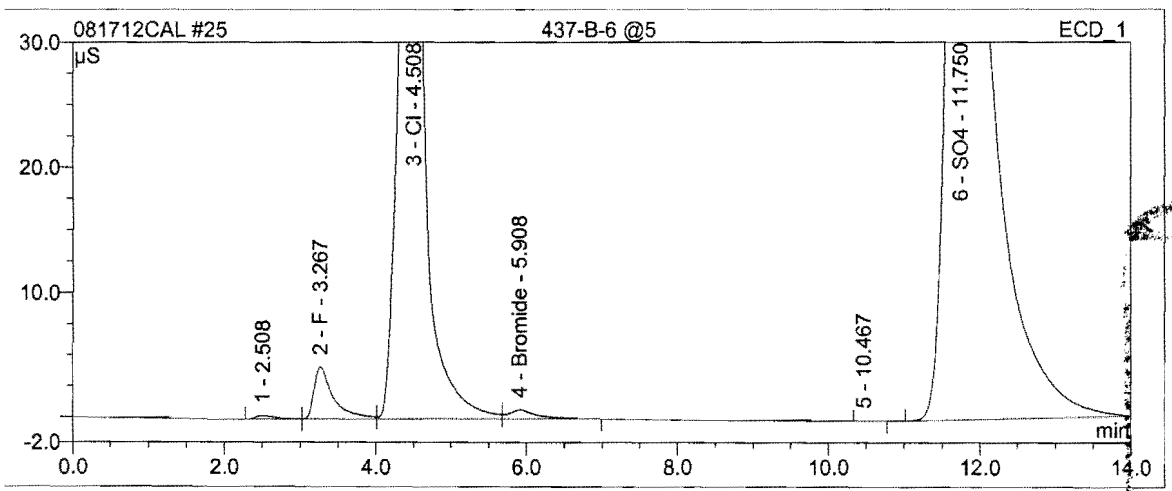
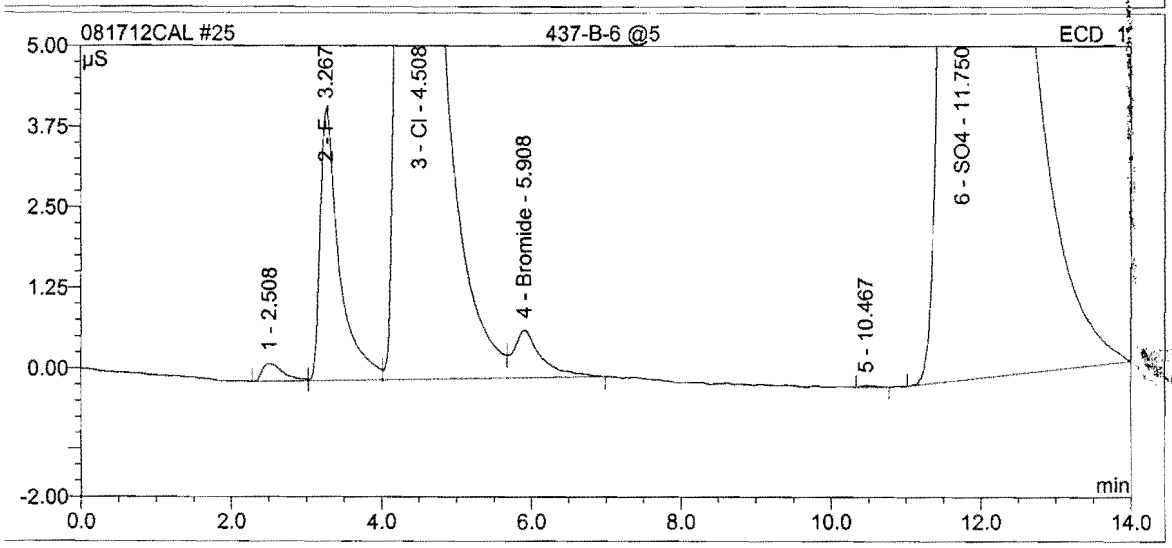
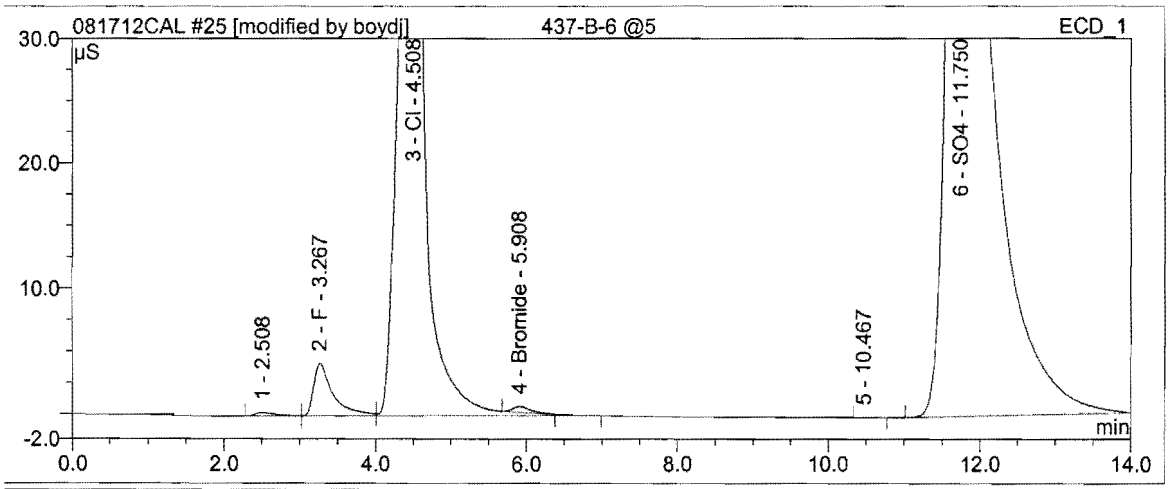


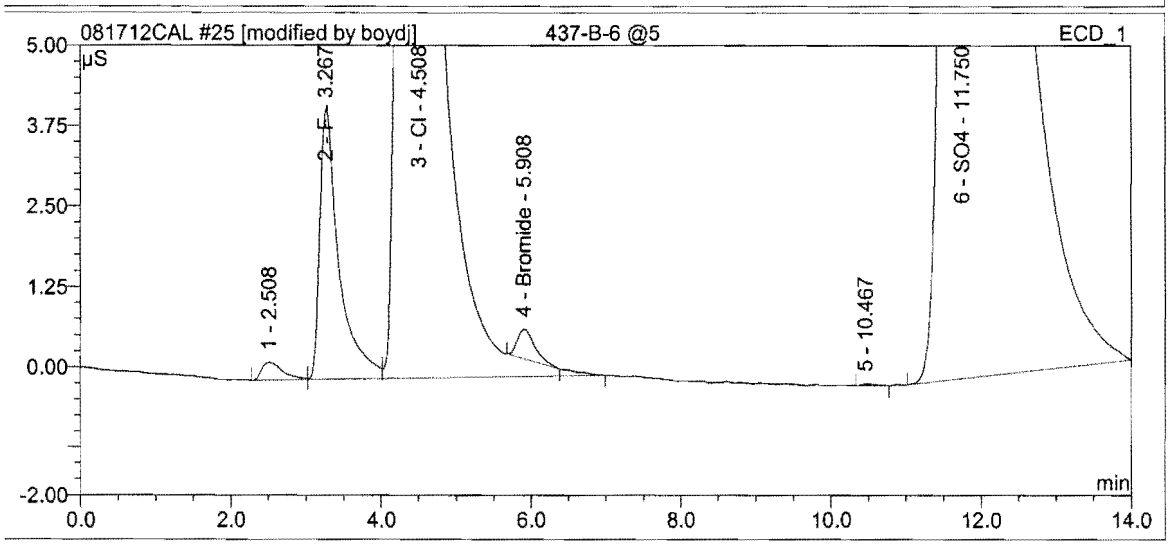


Integration Report - ECD_1

Sample Name:	**437-B-6 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:09**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	1.251	4.204	2597.2025
3	4.51	Cl	MB*	27.024	92.499	71165.9147
4	5.91	Bromide	Rd*	0.127	0.462	969.2686
6	11.75	SO4	BMB	44.164	71.062	178594.3993
TOTAL:				72.57	168.23	253326.79





Integration Report - ECD_1

Sample Name:	**437-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:25**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.30	F	Rd	0.078	0.187	162.3384
3	4.83	NO2	M	18.313	93.458	58116.5713
4	6.08	Bromide	MB	0.258	0.537	1974.6694
5	6.68	NO3	Rd	0.002	0.018	1.9432
6	12.15	SO4	BMB	0.362	0.609	1462.5645
		TOTAL:		19.01	94.81	61718.09

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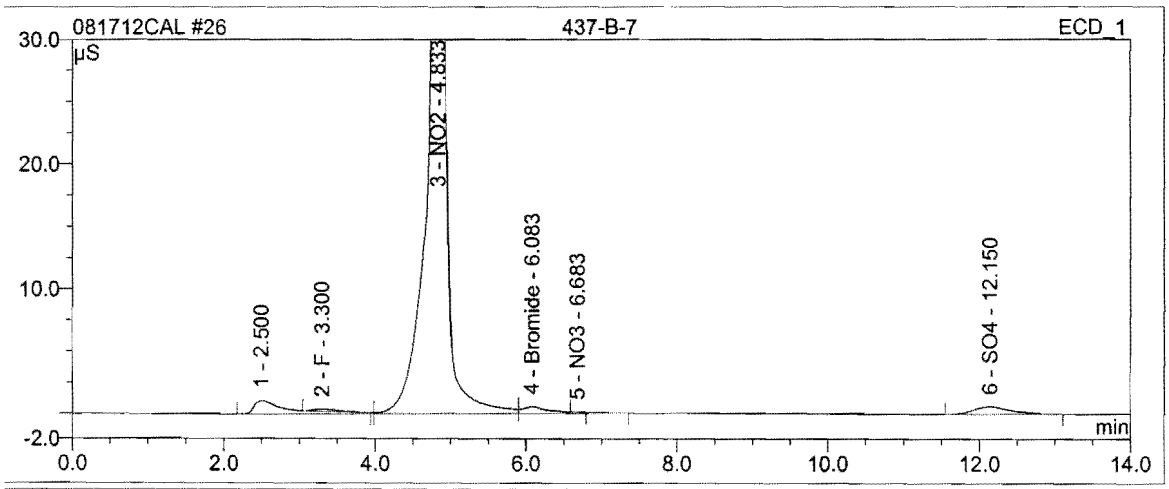
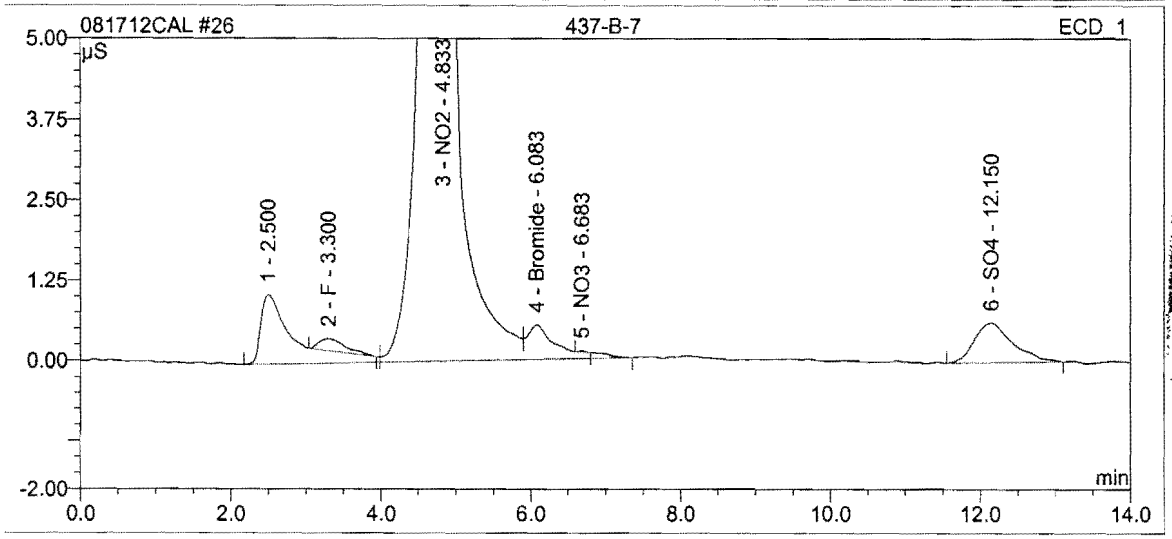
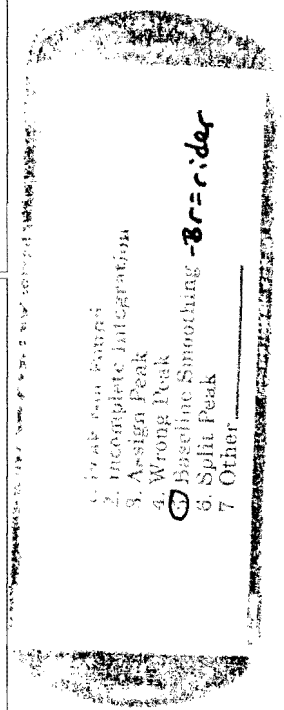


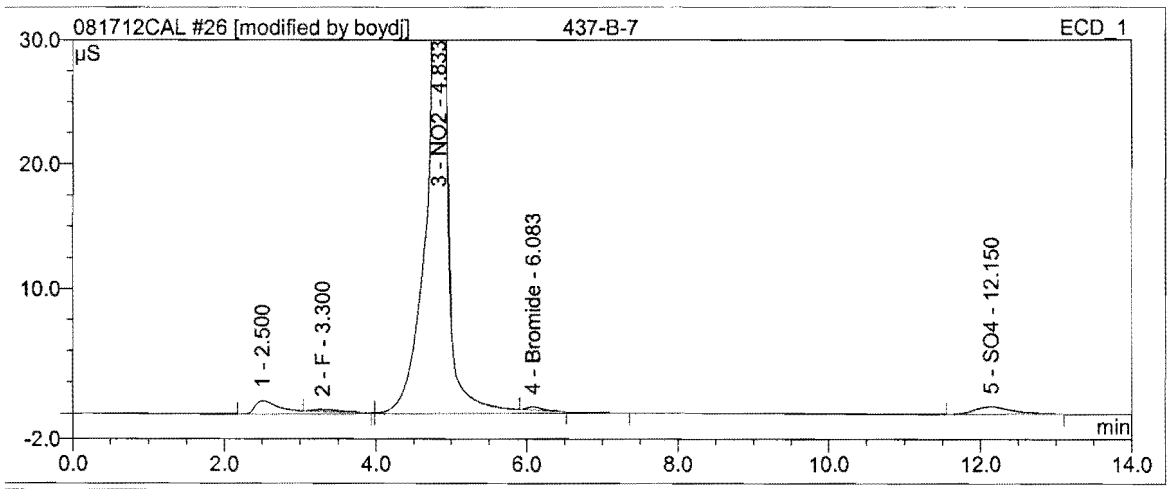


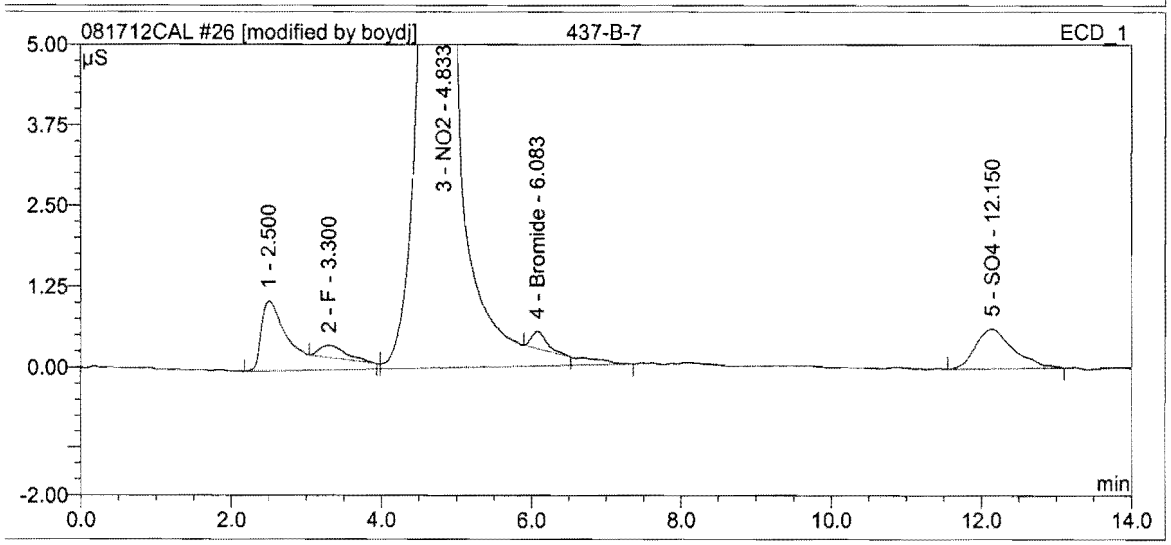


Integration Report - ECD_1

Sample Name:	**437-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:25**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.30	F	Rd	0.078	0.187	162.3384
3	4.83	NO2	MB*	18.509	93.458	58736.4539
4	6.08	Bromide	Rd*	0.065	0.270	493.7253
5	12.15	SO4	BMB	0.362	0.609	1462.5645
		TOTAL:		19.01	94.52	60855.08

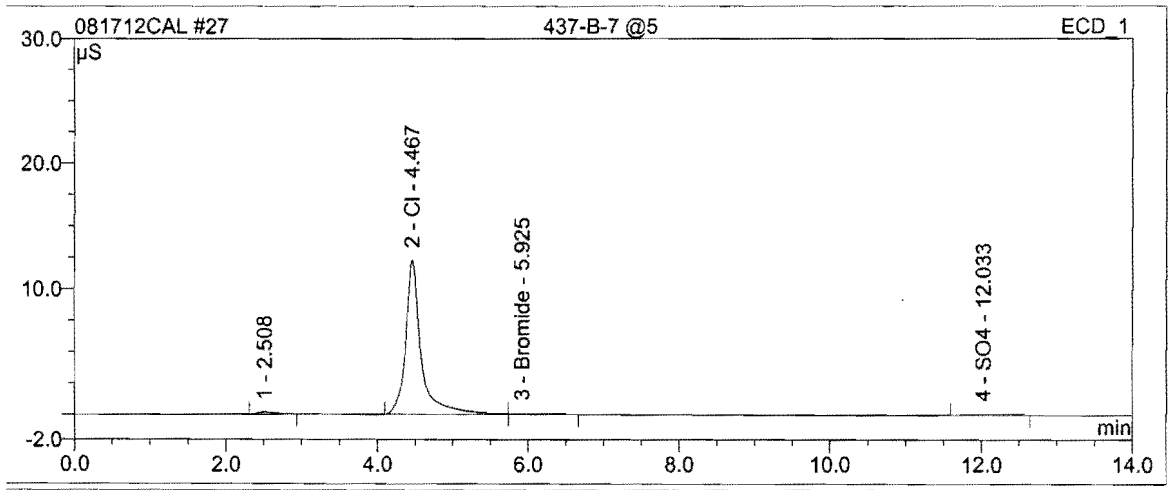


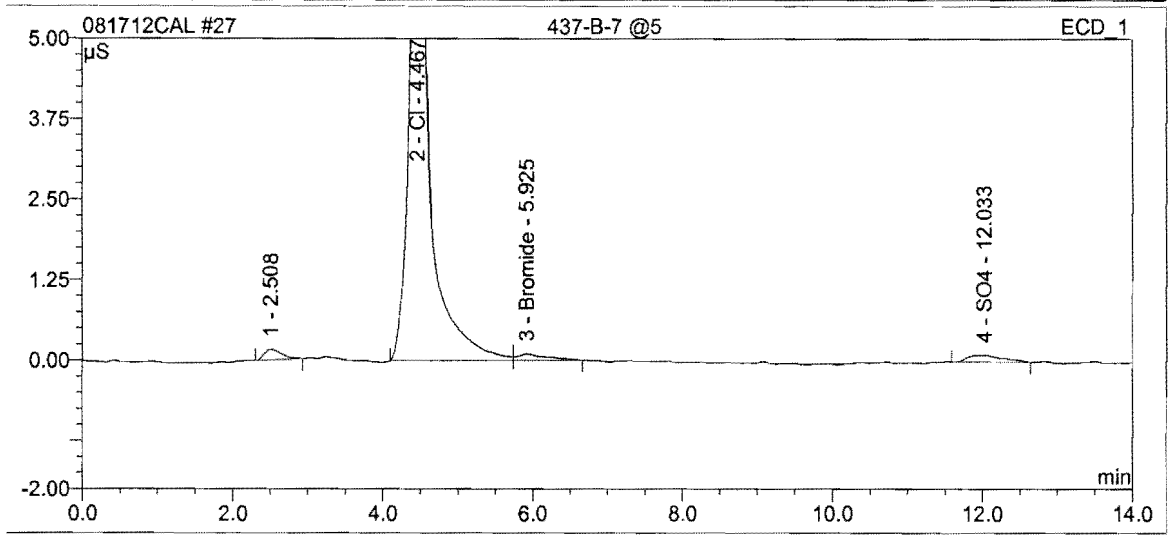


Integration Report - ECD_1

Sample Name:	**437-B-7 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:42**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	4.47	Cl	BM	2.963	12.274	7804.2107
3	5.93	Bromide	MB	0.045	0.100	347.0341
4	12.03	SO4	BMB	0.058	0.108	232.6858
		TOTAL:		3.07	12.48	8383.93





Integration Report - ECD_1

Sample Name:	**437-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:58**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	M	4.461	9.611	9260.6636
3	4.91	NO2	M	116.860	290.305	370847.7163
4	6.05	Bromide	MB	1.351	2.155	10335.4714
		TOTAL:		122.67	302.07	390443.85

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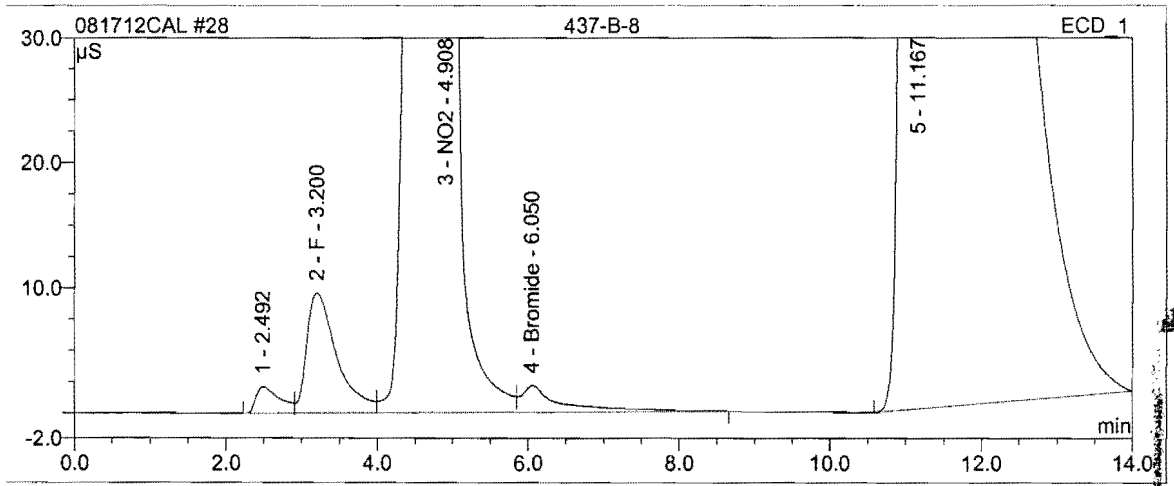
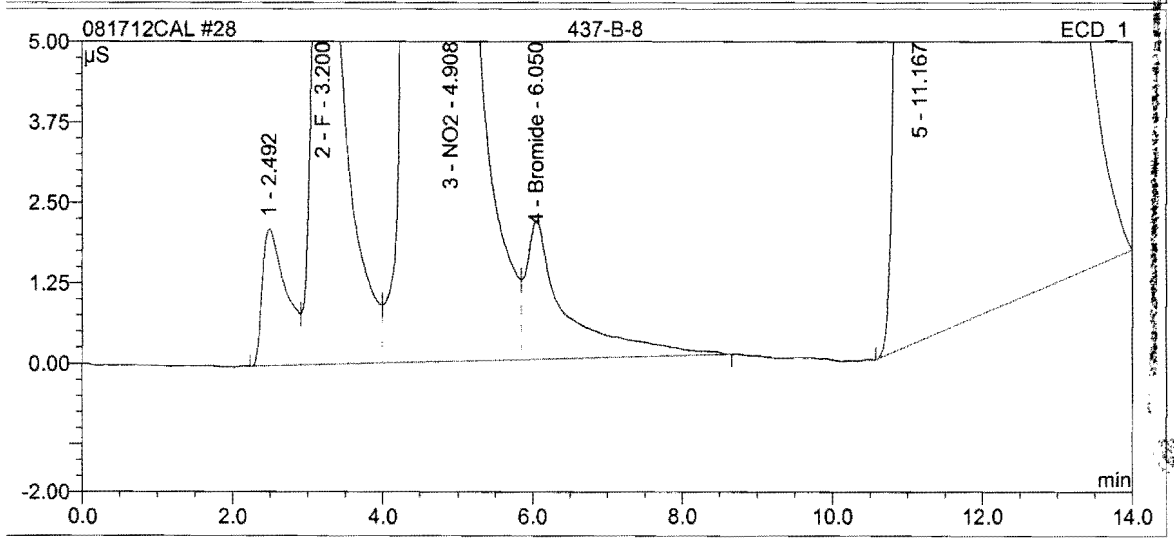


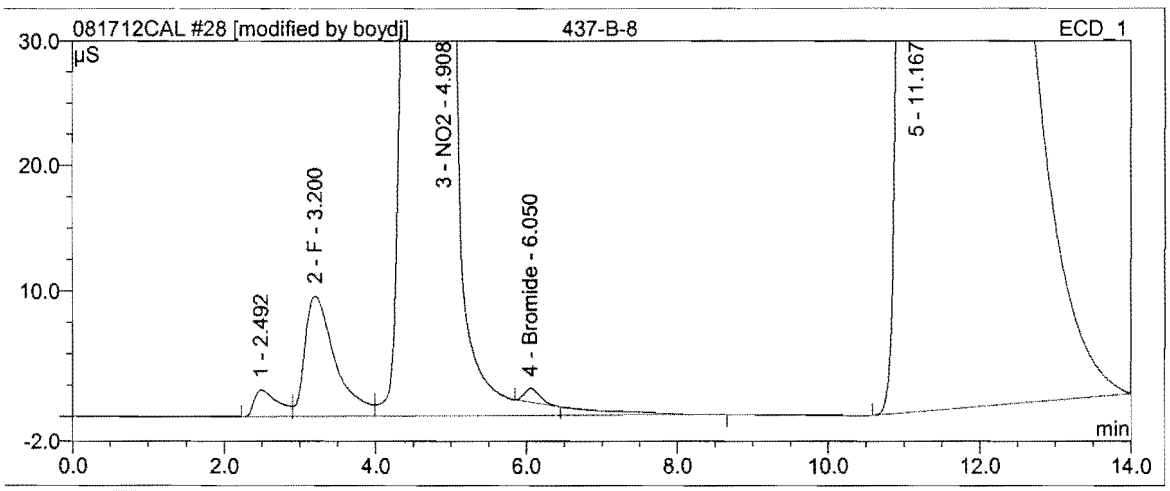


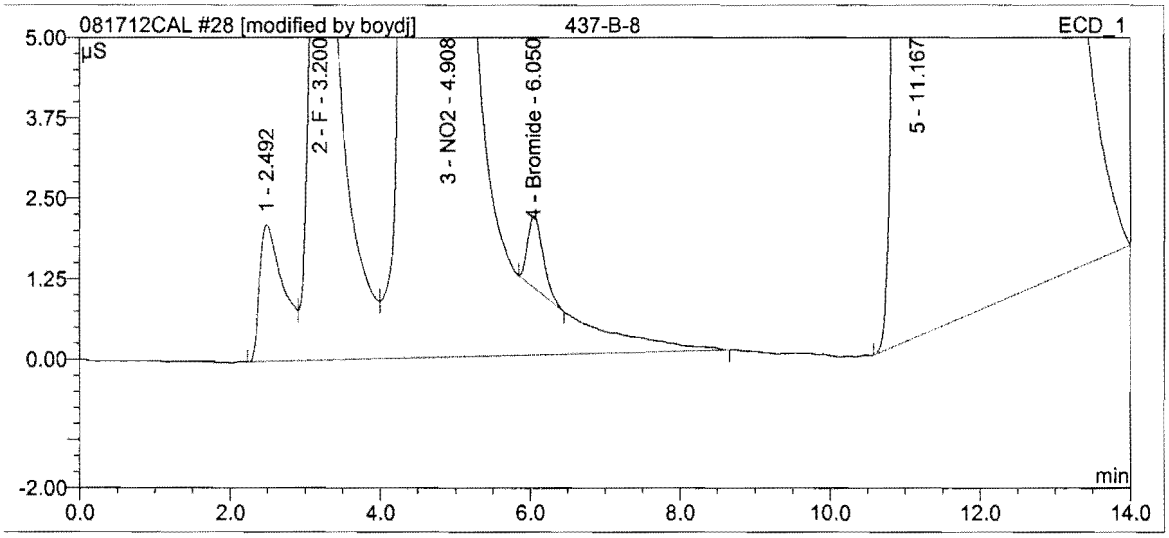
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
Q Baseline Smoothing -Br=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 18:58**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	M	4.461	9.611	9260.6636
3	4.91	NO2	MB*	117.944	290.305	374288.2762
4	6.05	Bromide	Rd*	0.267	1.107	2039.4550
		TOTAL:		122.67	301.02	385588.39

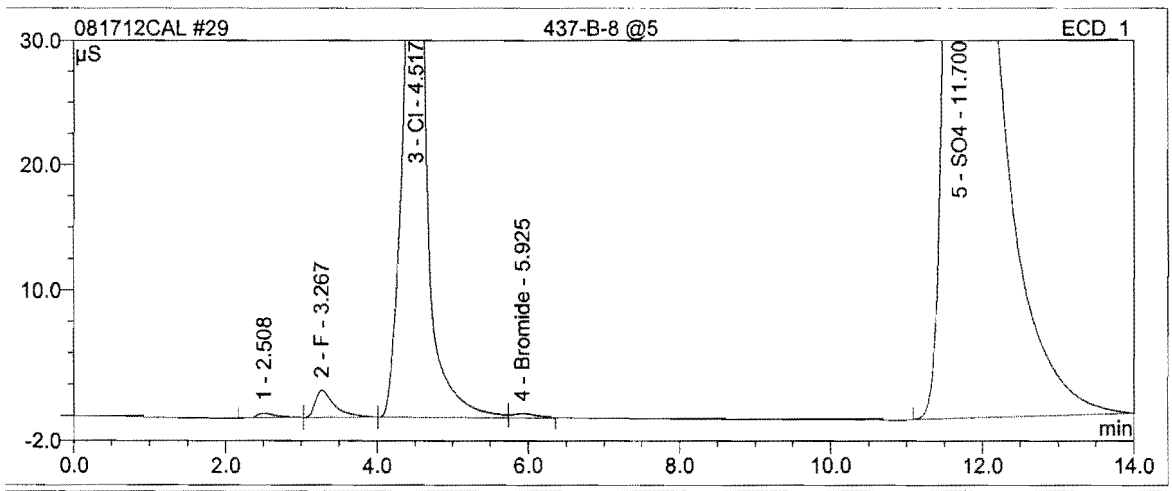


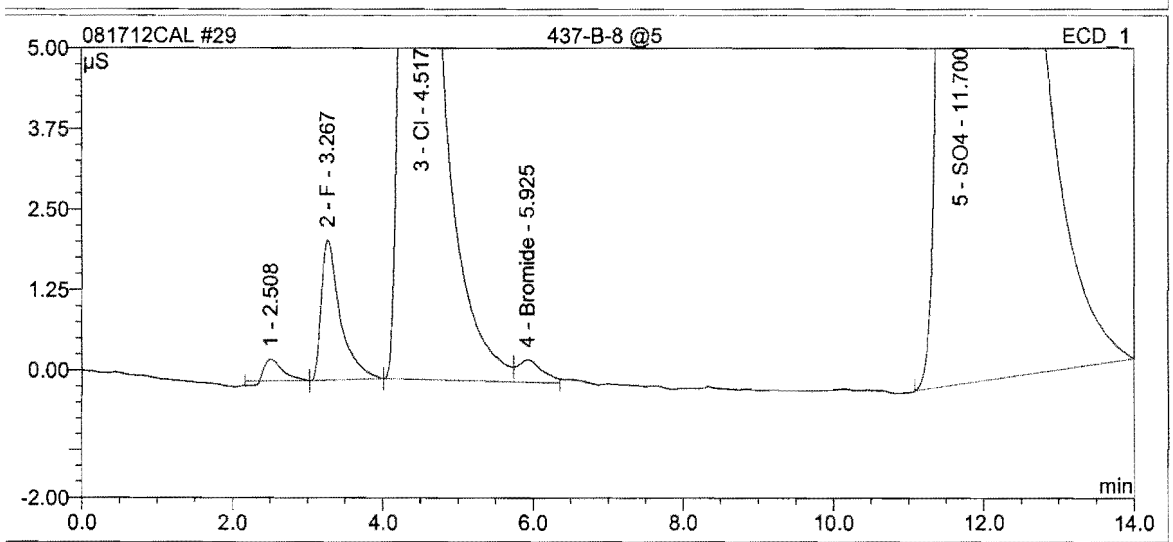


Integration Report - ECD_1

Sample Name:	**437-B-8 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 19:15**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	bMb	0.637	2.179	1323.2478
3	4.52	Cl	bM	20.191	75.535	53171.5537
4	5.93	Bromide	M	0.135	0.351	1031.8593
5	11.70	SO4	BMB	60.713	94.993	245517.2746
		TOTAL:		81.68	173.06	301043.94

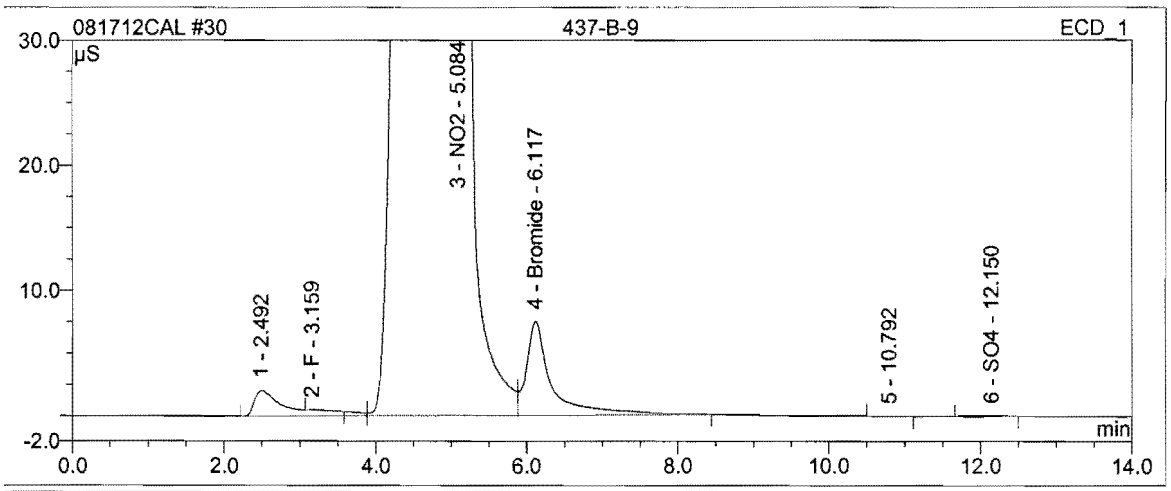


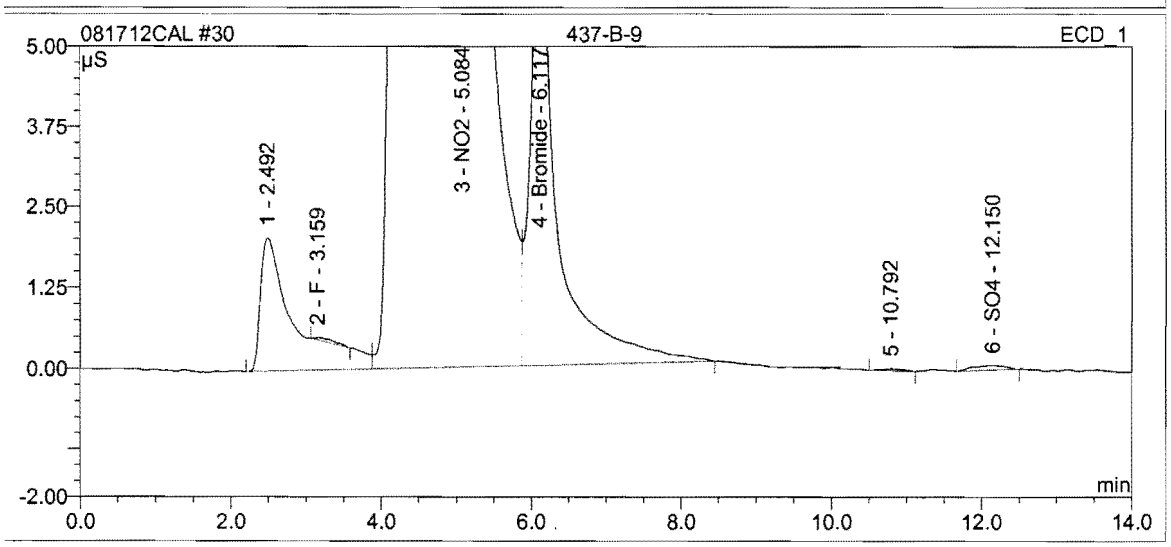


Integration Report - ECD_1

Sample Name:	**437-B-9**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 19:31**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.16	F	Rd	0.017	0.041	34.6126
3	5.08	NO2	M	220.466	373.702	699636.2947
4	6.12	Bromide	MB	2.946	7.486	22539.1200
6	12.15	SO4	BMB	0.035	0.071	142.6110
TOTAL:				223.46	381.30	722352.64





Integration Report - ECD_1

Sample Name:	**437-B-9 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 19:48**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.32	F	Rd	0.009	0.040	19.1478
4	5.93	Bromide	MB	0.560	1.245	4283.9020
		TOTAL:		0.57	1.29	4303.05

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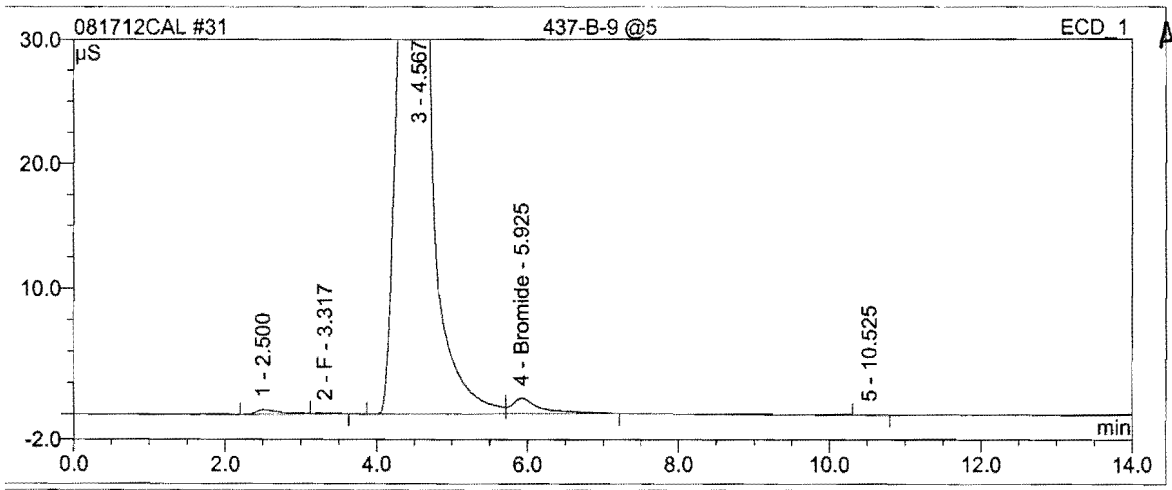
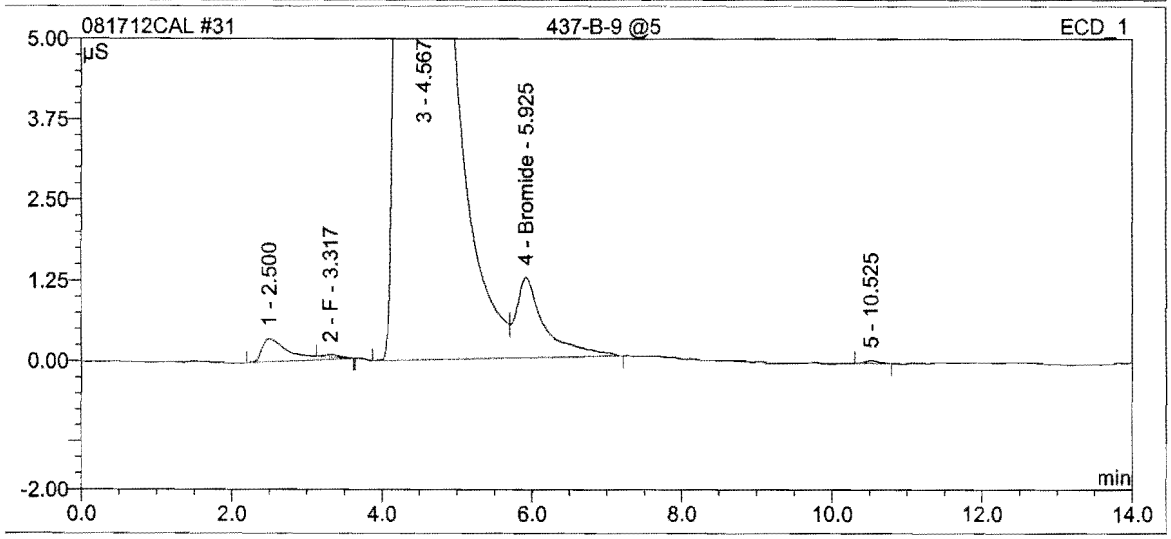


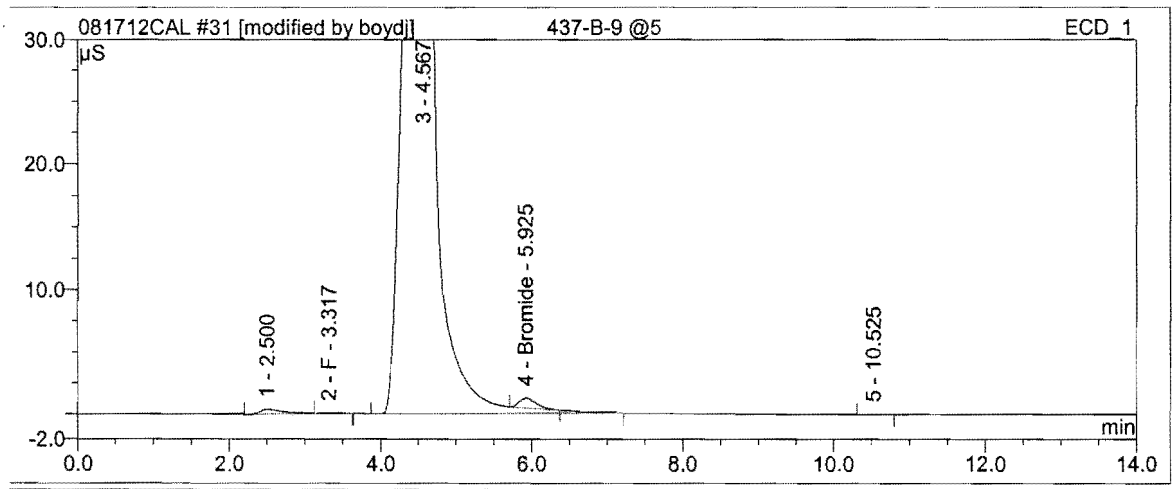


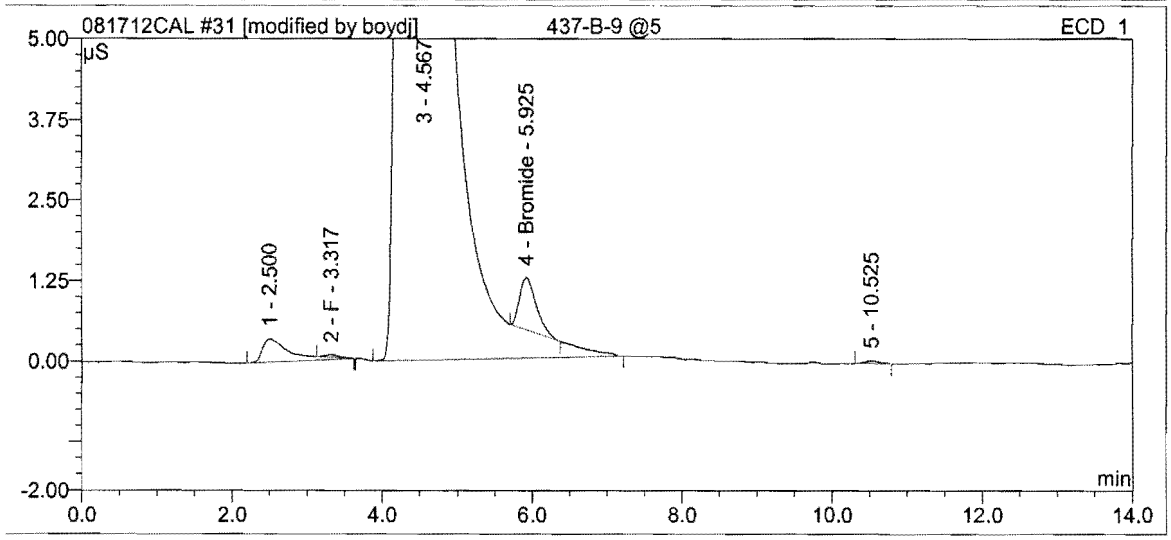
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -Br=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**437-B-9 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 19:48**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.32	F	Rd	0.009	0.040	19.1478
4	5.93	Bromide	Rd*	0.211	0.810	1613.1068
		TOTAL:		0.22	0.85	1632.25





Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 20:04**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.471	1.589	977.4697
3	4.32	Cl	M	0.700	2.200	1843.0154
4	4.90	NO2	Rd	0.049	0.211	155.1639
5	5.87	Bromide	M	0.228	0.730	1744.8371
6	6.53	NO3	MB	0.309	0.796	332.2855
7	9.70	OPO4	BMB	0.712	1.307	7423.4580
8	11.90	SO4	bMB	1.846	3.007	7463.4667
		TOTAL:		4.31	9.84	19939.70

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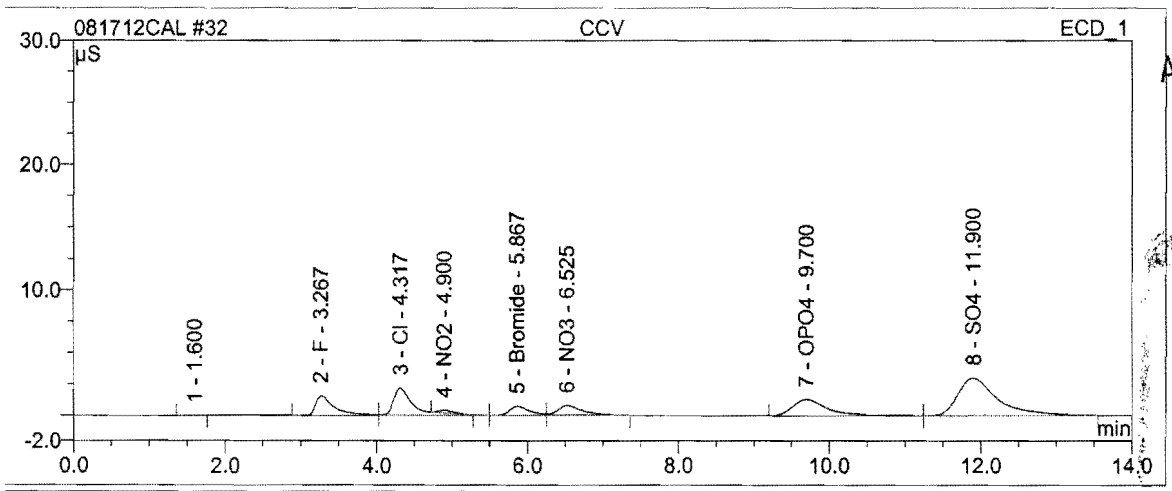
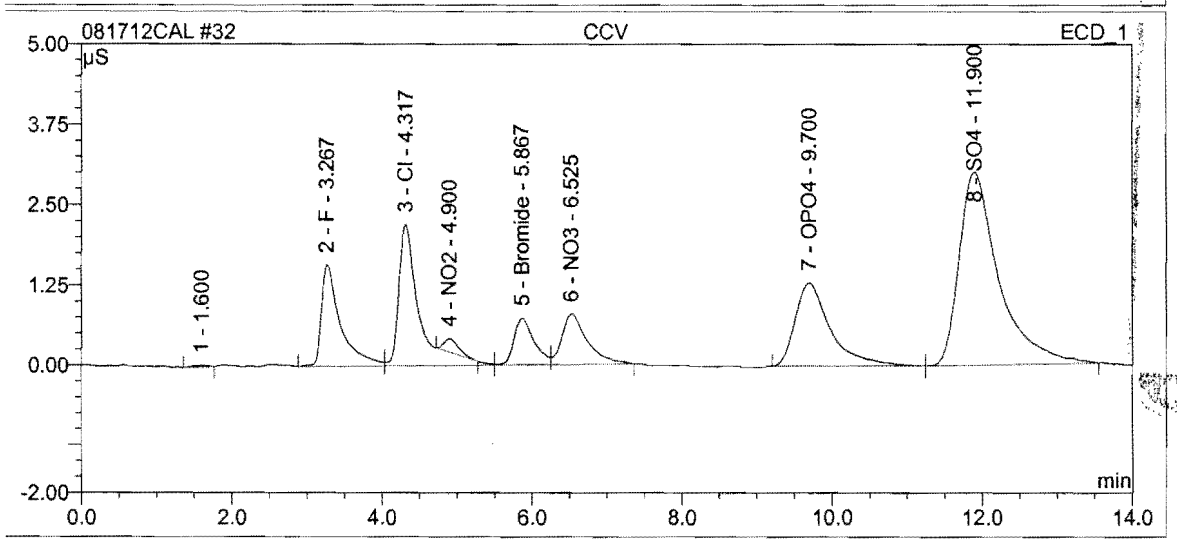




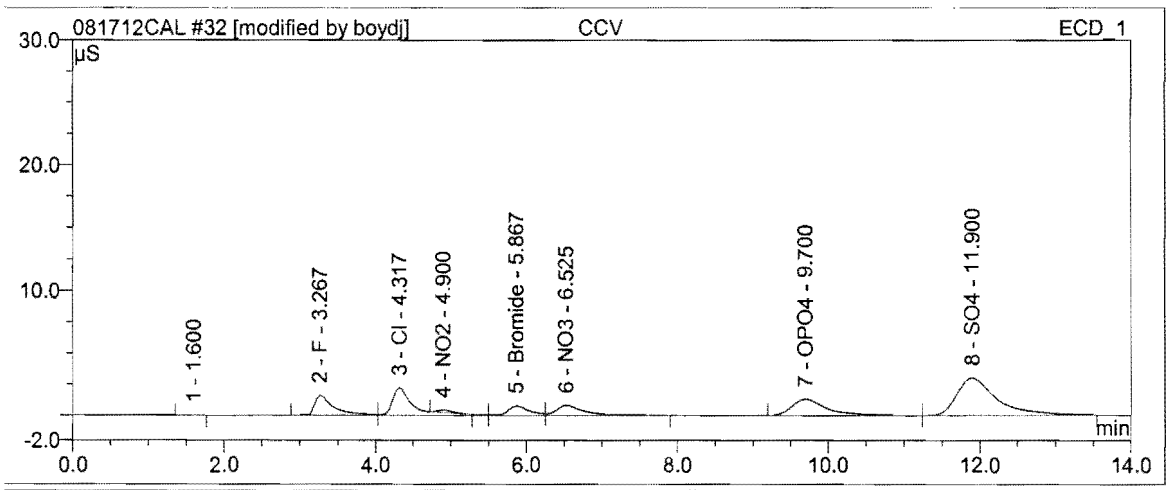
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing
6. Split Peak
7. Other

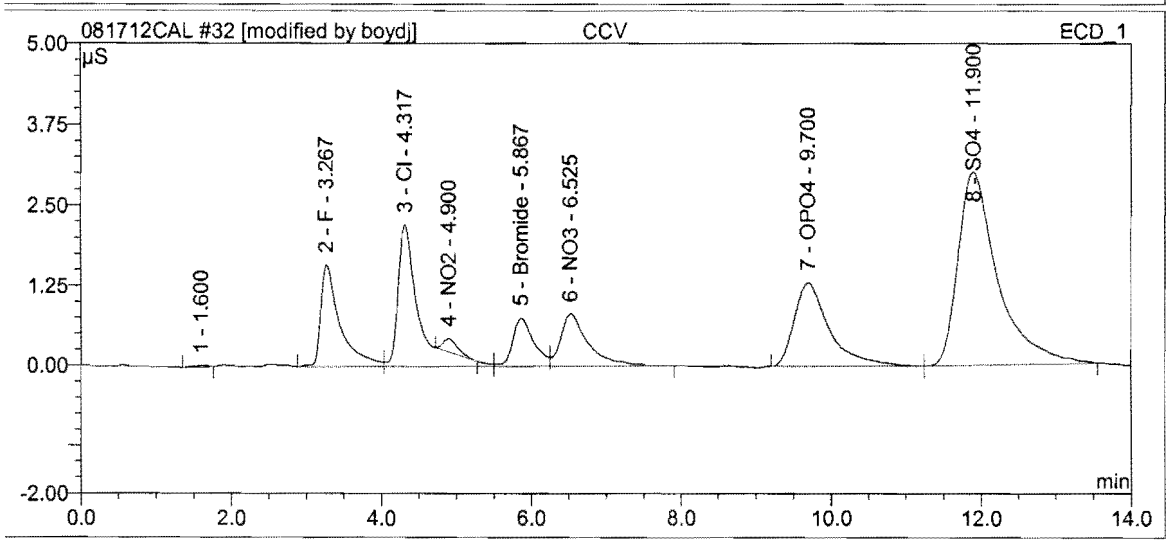
-NO3 delimiter pulled right

Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 20:04**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM *	0.476	1.592	987.5324
3	4.32	Cl	M *	0.720	2.210	1896.3358
4	4.90	NO2	Rd	0.049	0.211	155.1639
5	5.87	Bromide	M *	0.244	0.752	1870.7214
6	6.53	NO3	MB*	0.349	0.823	374.4471
7	9.70	OPO4	BMb*	0.712	1.307	7423.4580
8	11.90	SO4	bMB	1.846	3.007	7463.4667
		TOTAL:		4.40	9.90	20171.13

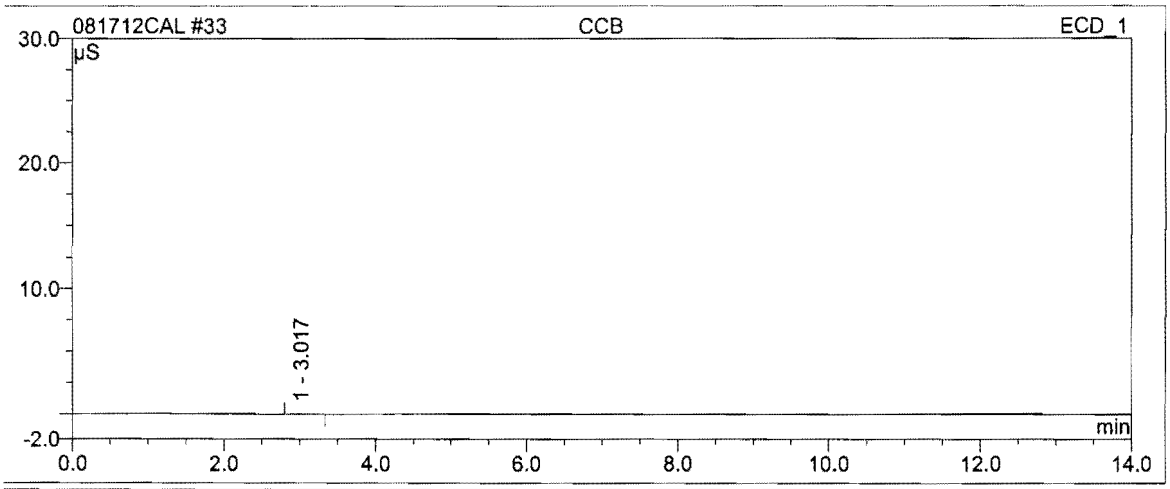


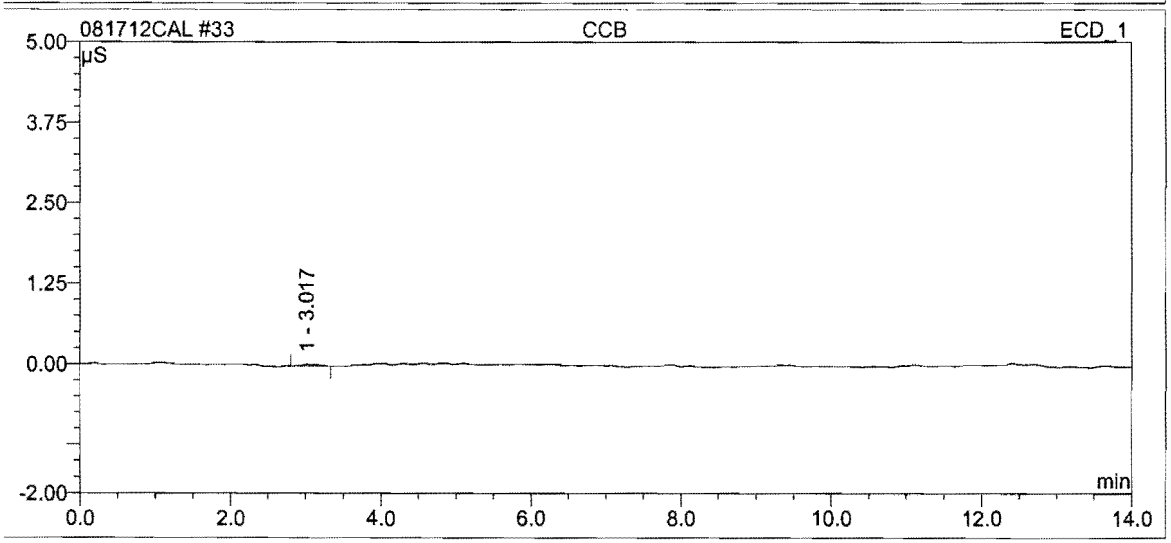


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 20:20**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
TOTAL:				0.00	0.00	0.00

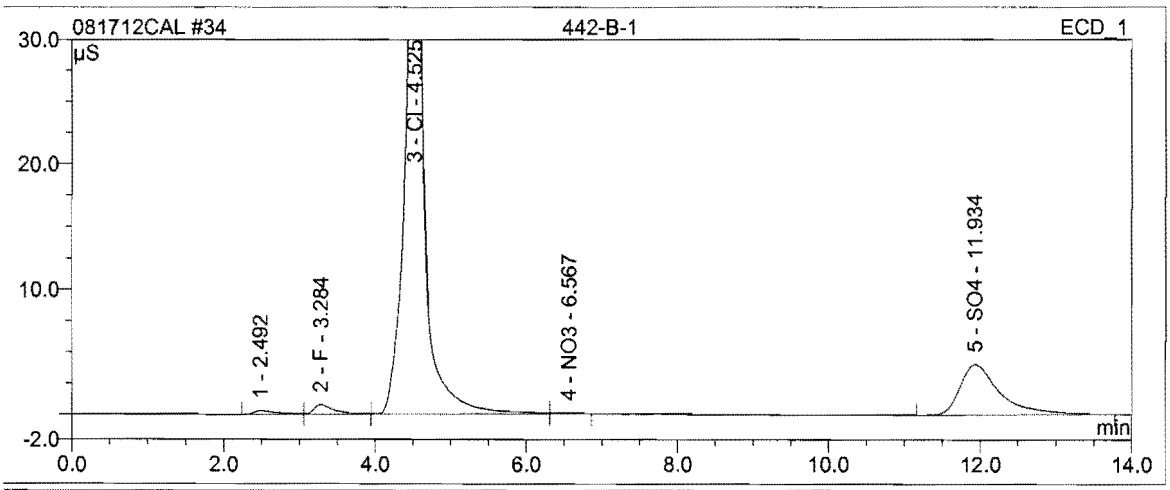


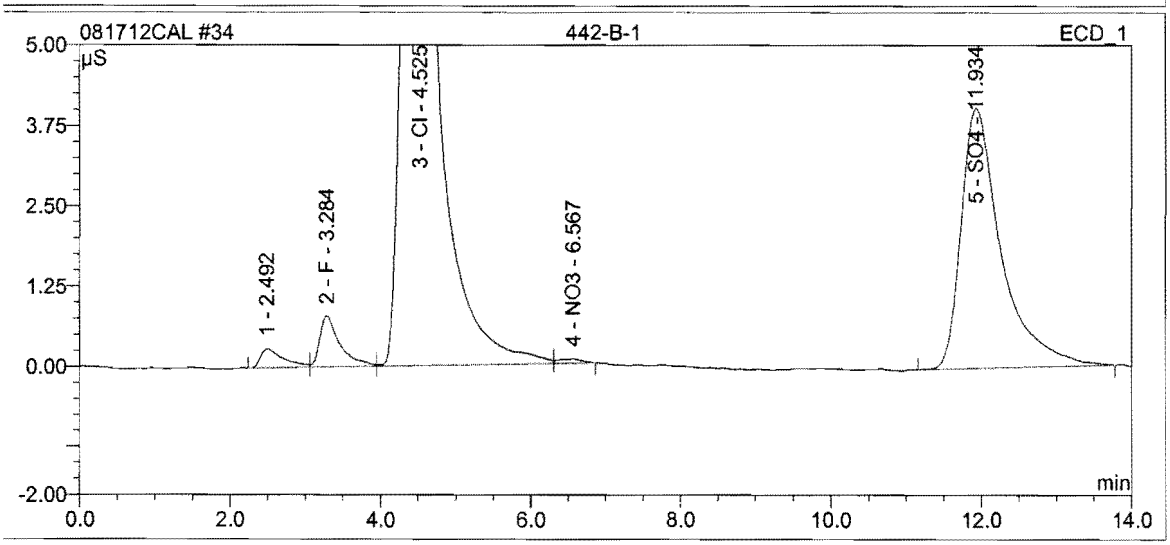


Integration Report - ECD_1

Sample Name:	**442-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 20:37**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.248	0.793	514.8883
3	4.53	Cl	M	14.013	56.956	36901.9068
4	6.57	NO3	MB	0.025	0.072	26.9034
5	11.93	SO4	BMB	2.500	4.043	10110.5497
TOTAL:				16.79	61.86	47554.25

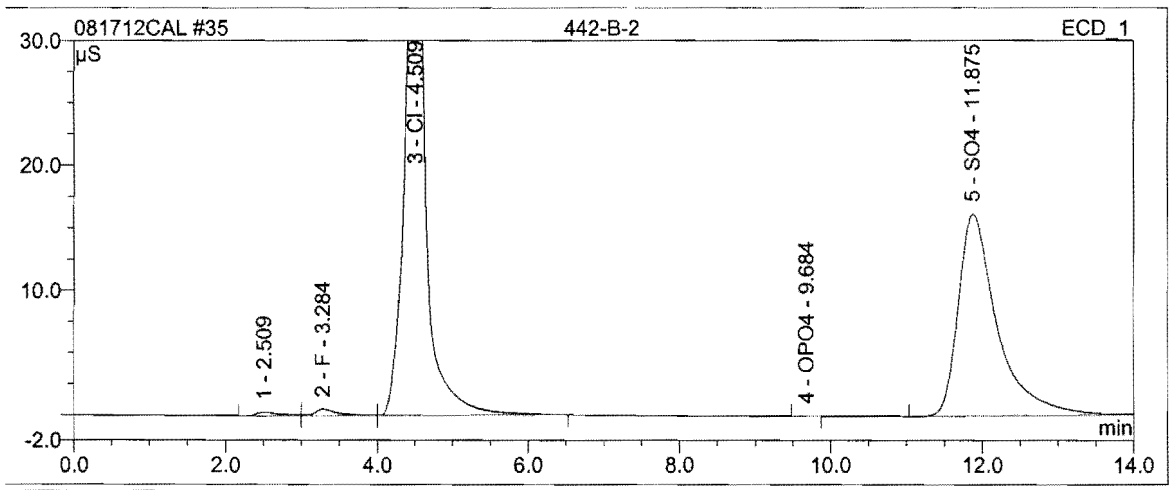


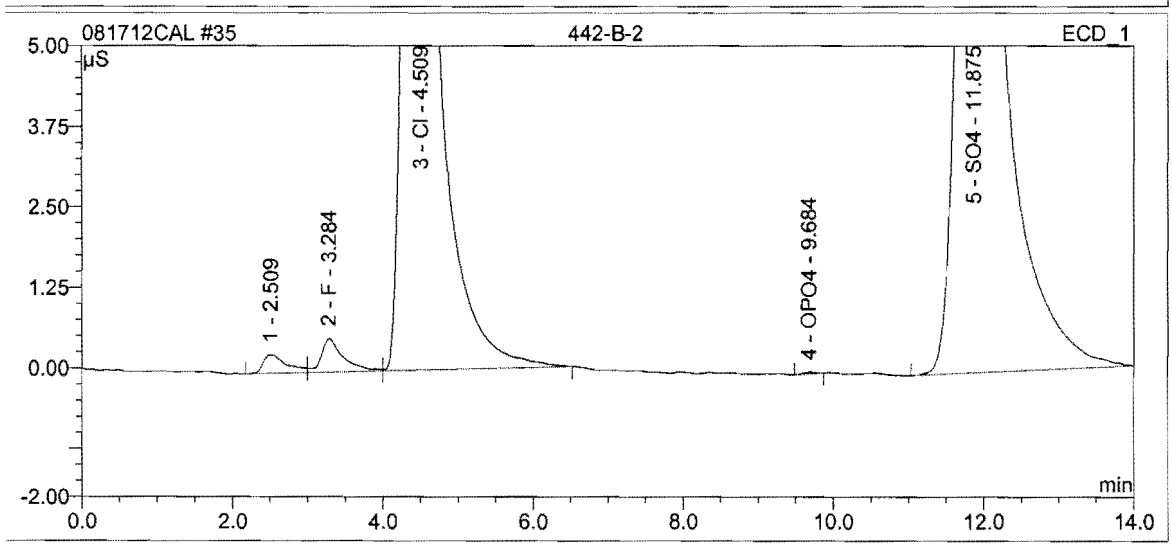


Integration Report - ECD_1

Sample Name:	**442-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 20:53**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.177	0.517	366.8060
3	4.51	Cl	MB	15.688	62.424	41314.1992
4	9.68	OPO4	BMB	0.005	0.029	53.6882
5	11.88	SO4	BMB	9.653	16.164	39035.1077
		TOTAL:		25.52	79.13	80769.80





Integration Report - ECD_1

Sample Name:	**442-B-2 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:10**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	1.108	3.540	2299.1510
3	4.51	Cl	M	16.505	64.980	43465.9615
4	5.92	Bromide	M	0.369	1.057	2823.9795
5	6.57	NO3	MB	0.395	0.958	424.7274
6	9.77	OPO4	BMB	0.273	0.476	2850.7780
7	11.88	SO4	BMB	10.671	18.062	43153.9742
		TOTAL:		29.32	89.07	95018.57

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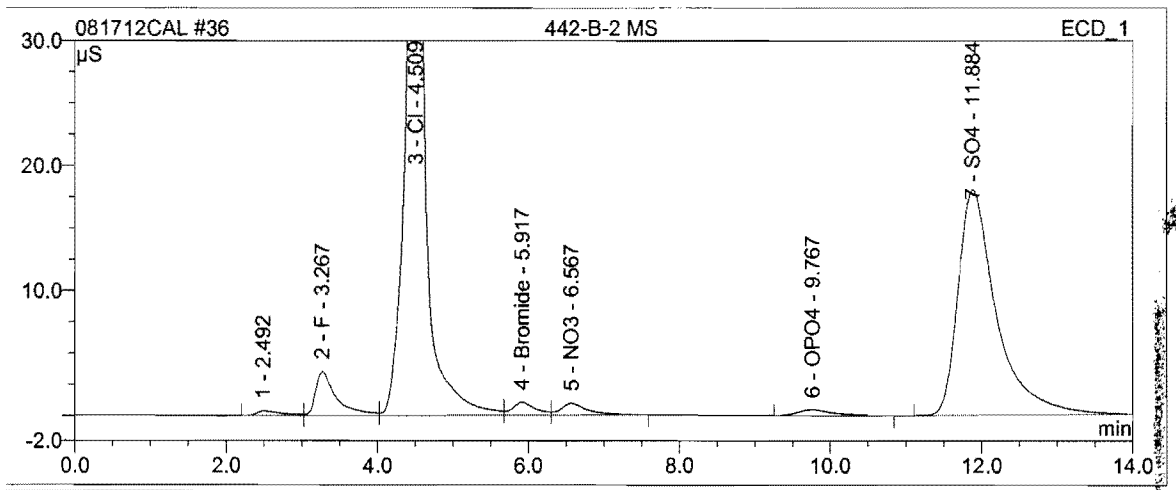
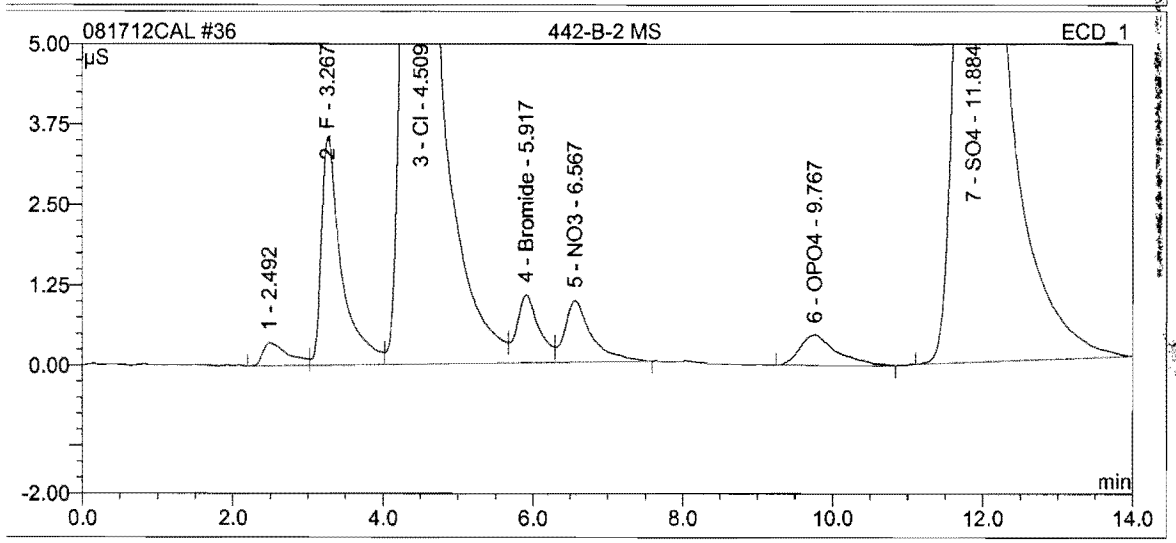
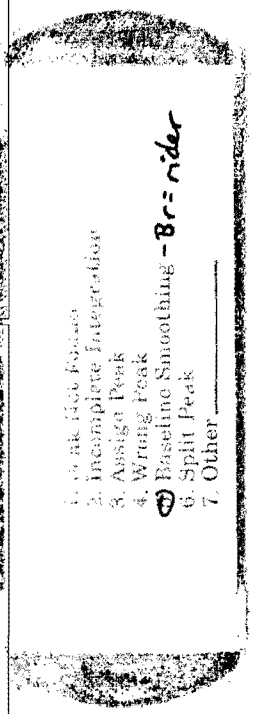


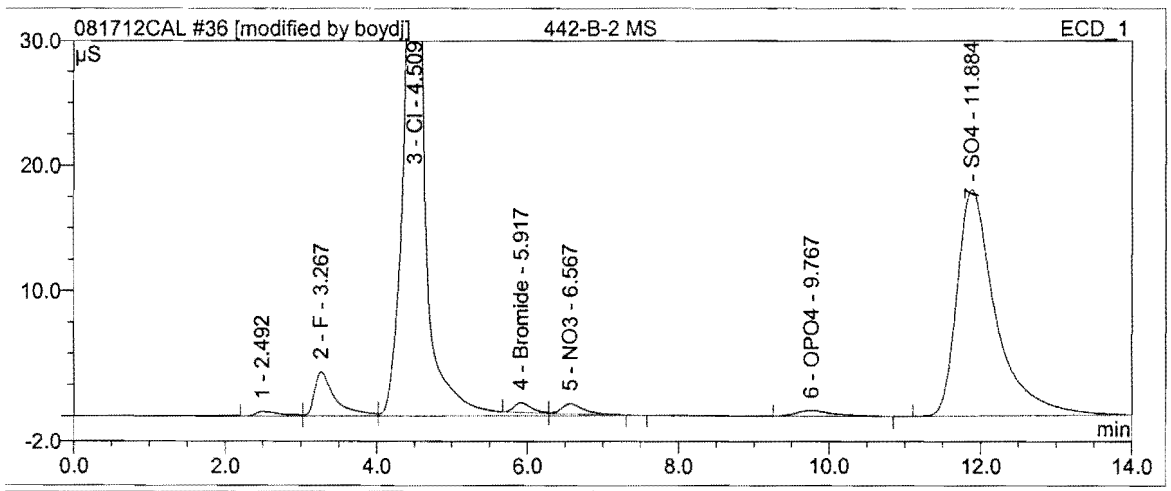


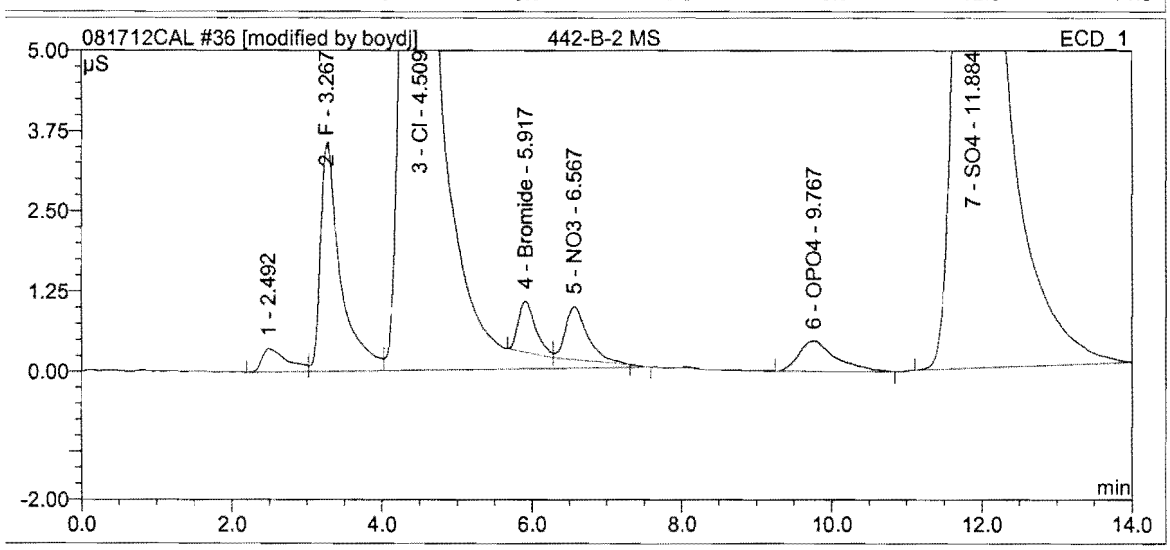


Integration Report - ECD_1

Sample Name:	**442-B-2 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:10**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	1.108	3.540	2299.1510
3	4.51	Cl	MB*	16.769	64.980	44161.0824
4	5.92	Bromide	Rd*	0.217	0.798	1658.3681
5	6.57	NO3	Rd*	0.284	0.823	304.8436
6	9.77	OPO4	BMB	0.273	0.476	2850.7780
7	11.88	SO4	BMB	10.671	18.062	43153.9742
		TOTAL:		29.32	88.68	94428.20





Integration Report - ECD_1

Sample Name:	**442-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:26**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.188	0.406	391.2130
3	4.68	NO2	M	28.735	113.307	91188.6294
4	5.98	Bromide	MB	0.281	0.470	2150.2429
5	11.88	SO4	BMB	22.890	38.685	92564.3749
		TOTAL:		52.09	152.87	186294.46

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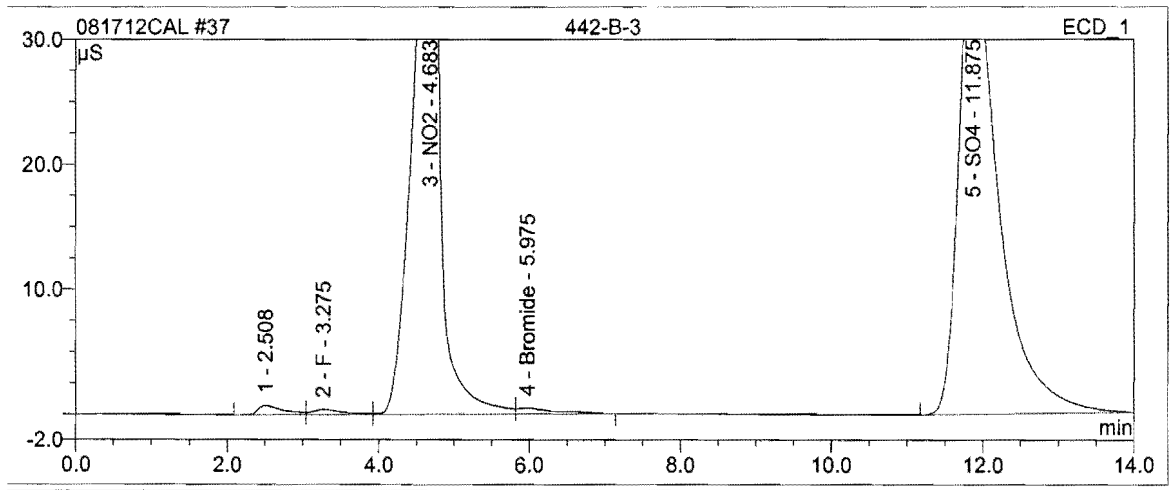
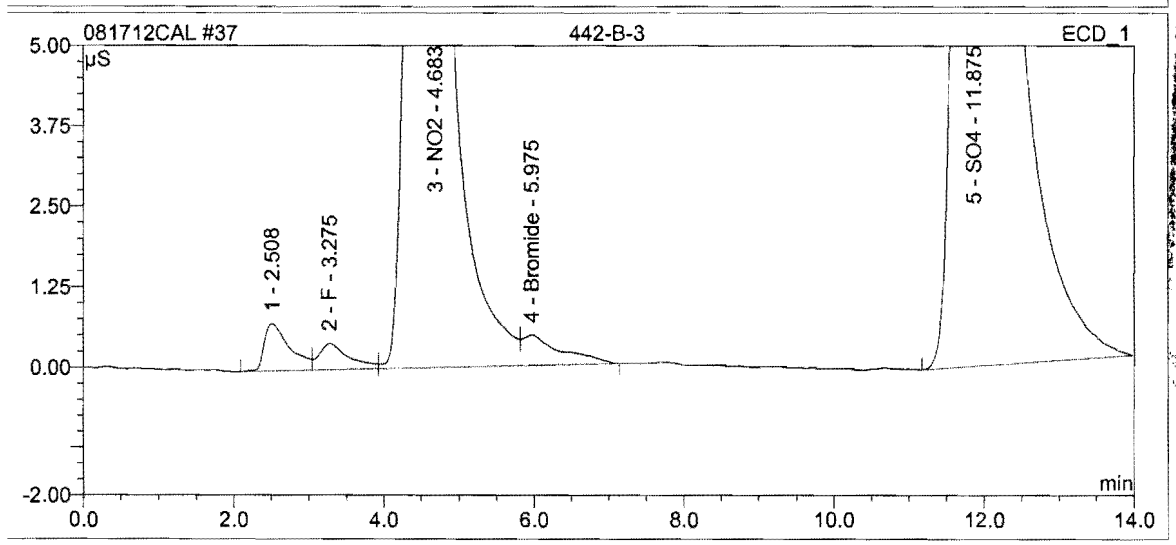
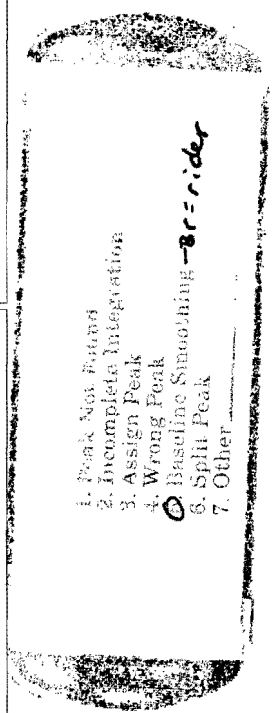


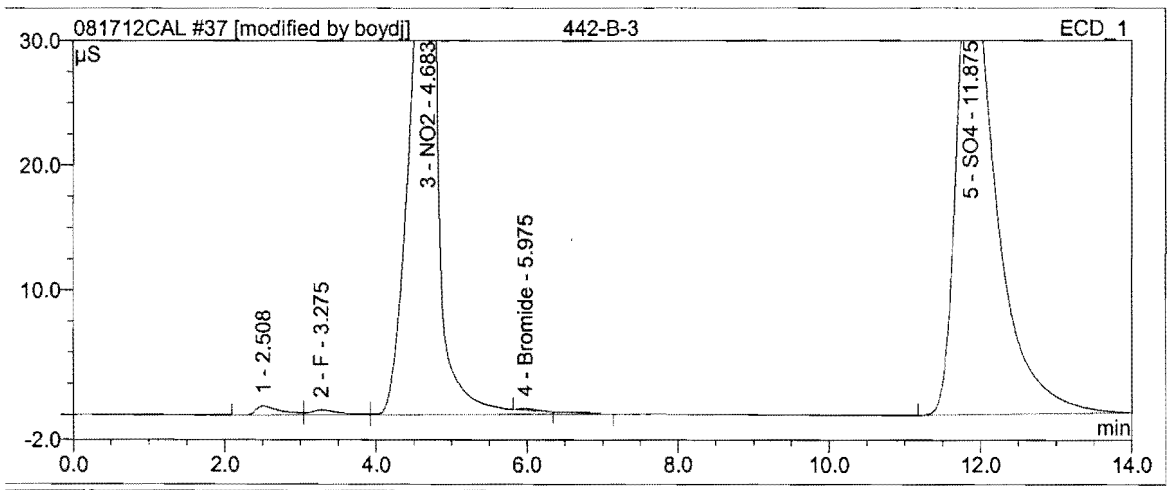


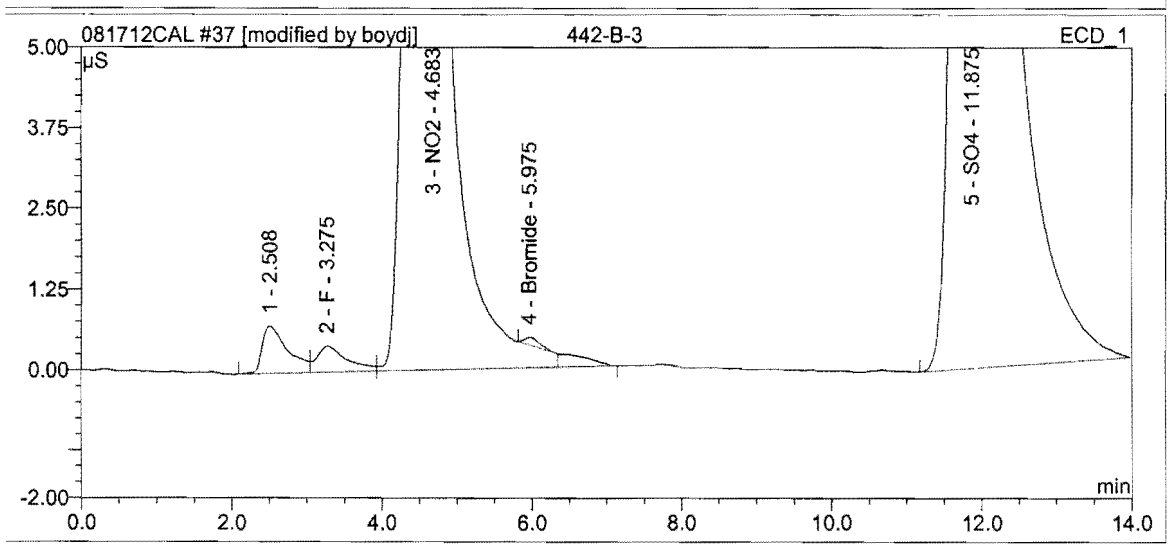


Integration Report - ECD_1

Sample Name:	**442-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:26**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.188	0.406	391.2130
3	4.68	NO2	MB*	28.987	113.307	91987.6103
4	5.98	Bromide	Rd*	0.029	0.122	223.6973
5	11.88	SO4	BMB	22.890	38.685	92564.3749
TOTAL:				52.09	152.52	185166.90





Integration Report - ECD_1

Sample Name:	**442-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:42**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	Rd	0.044	0.141	91.6355
3	4.71	NO2	bM	4.831	26.225	15330.0060
4	6.02	Bromide	MB	0.049	0.169	371.8851
5	12.02	SO4	BMB	9.297	15.895	37594.0562
		TOTAL:		14.22	42.43	53387.58

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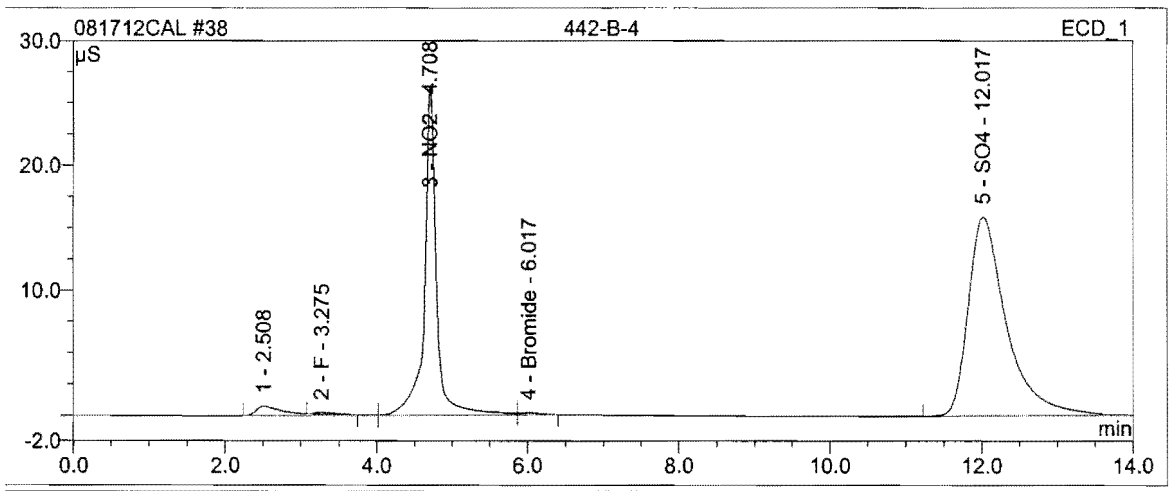
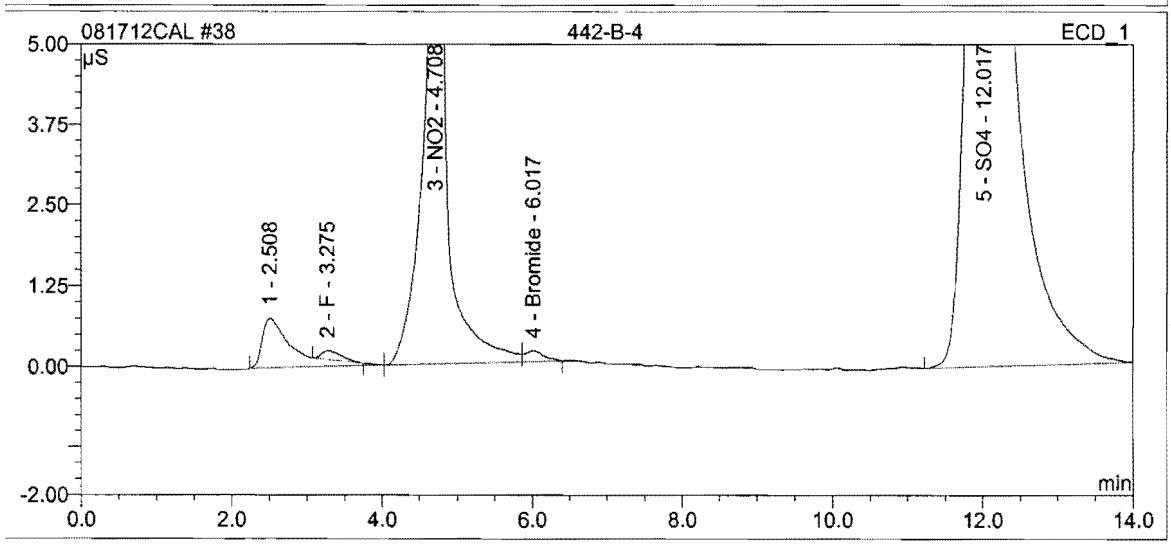


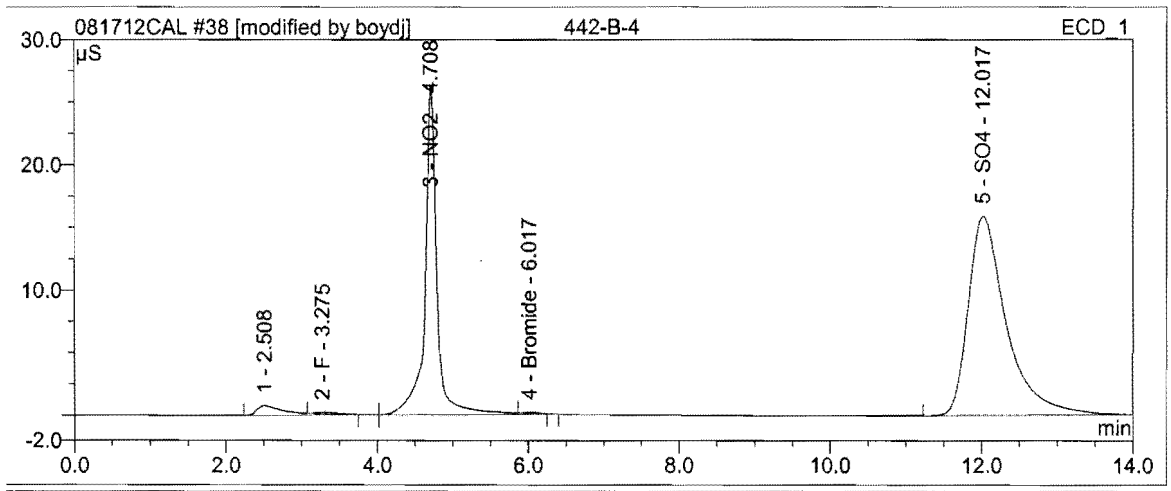


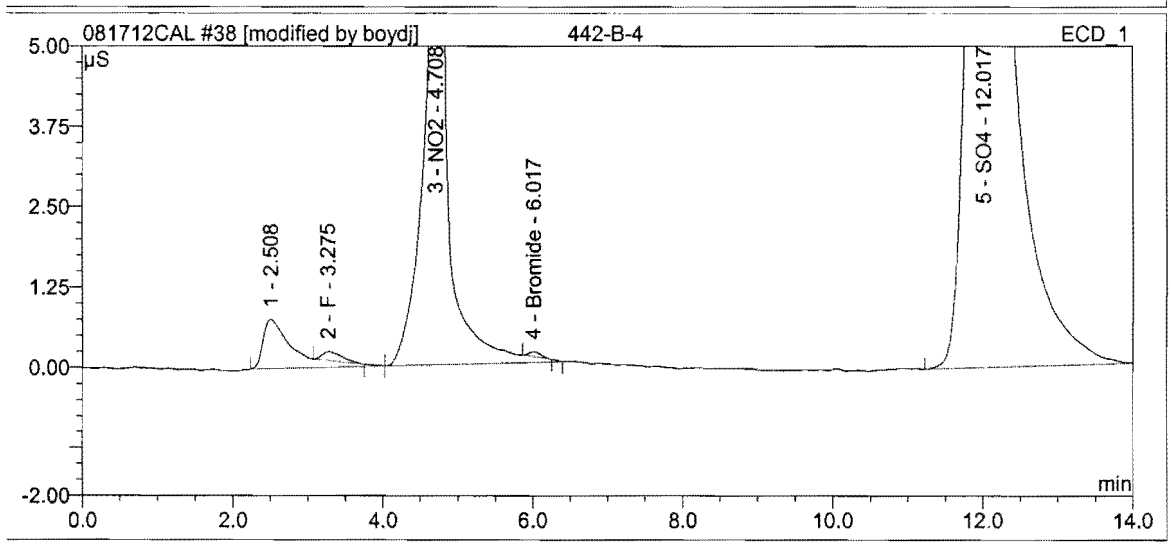
1. Incorrect Integration
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Brrider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:42**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	Rd	0.044	0.141	91.6355
3	4.71	NO2	bMB*	4.864	26.225	15436.5794
4	6.02	Bromide	Rd*	0.015	0.081	114.8415
5	12.02	SO4	BMB	9.297	15.895	37594.0562
		TOTAL:		14.22	42.34	53237.11





Integration Report - ECD_1

Sample Name:	**442-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:59**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	M	0.277	0.583	574.4782
3	4.74	NO2	M	1.649	7.480	5231.4329
4	6.04	Bromide	MB	0.055	0.186	420.6341
6	12.19	SO4	BMB	0.051	0.110	204.7168
		TOTAL:		2.03	8.36	6431.26

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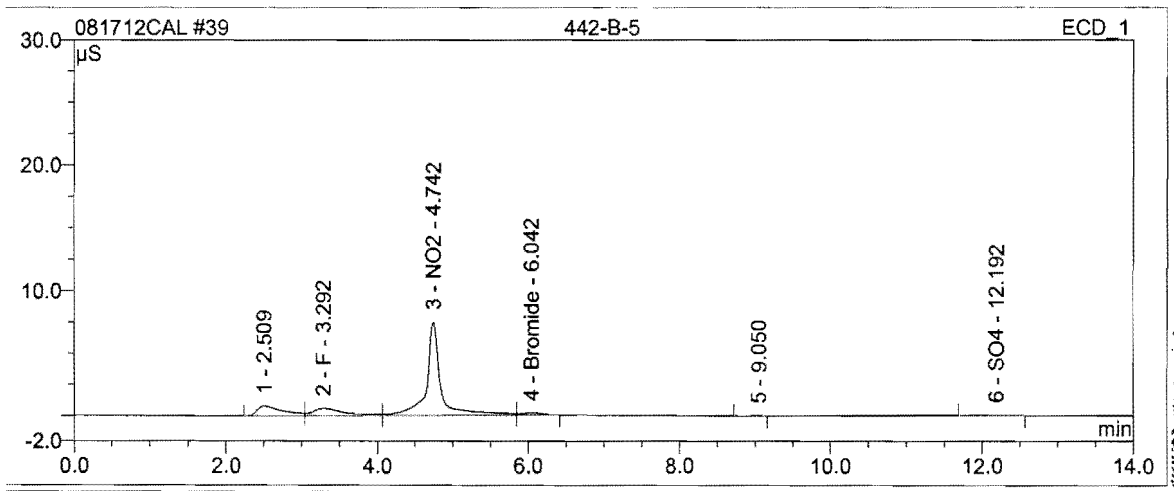
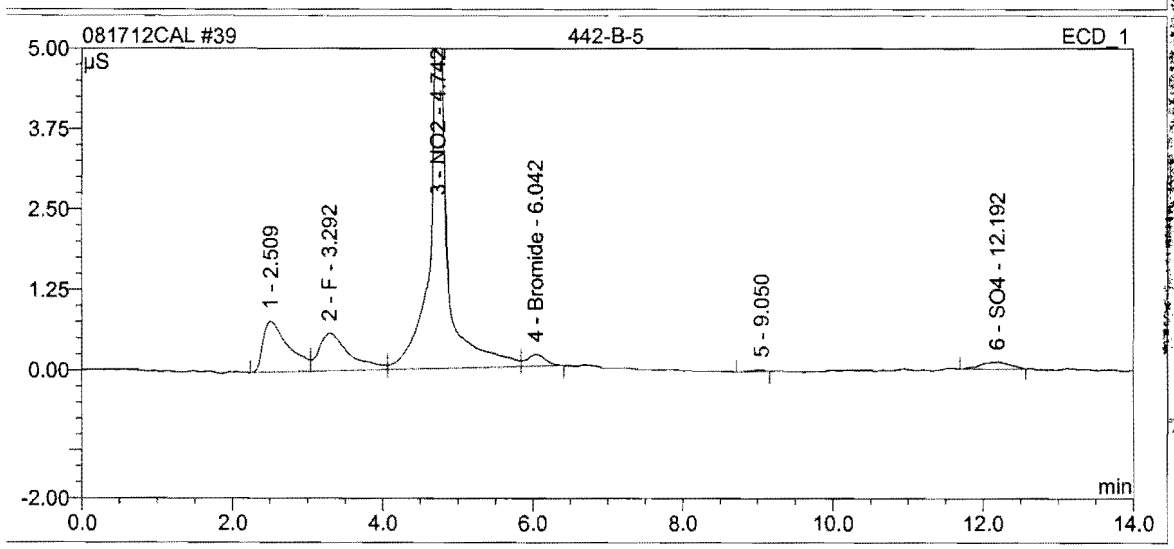
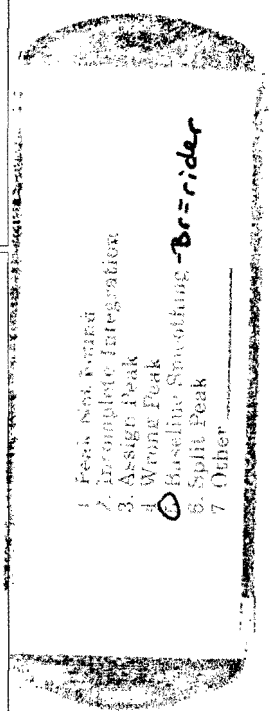


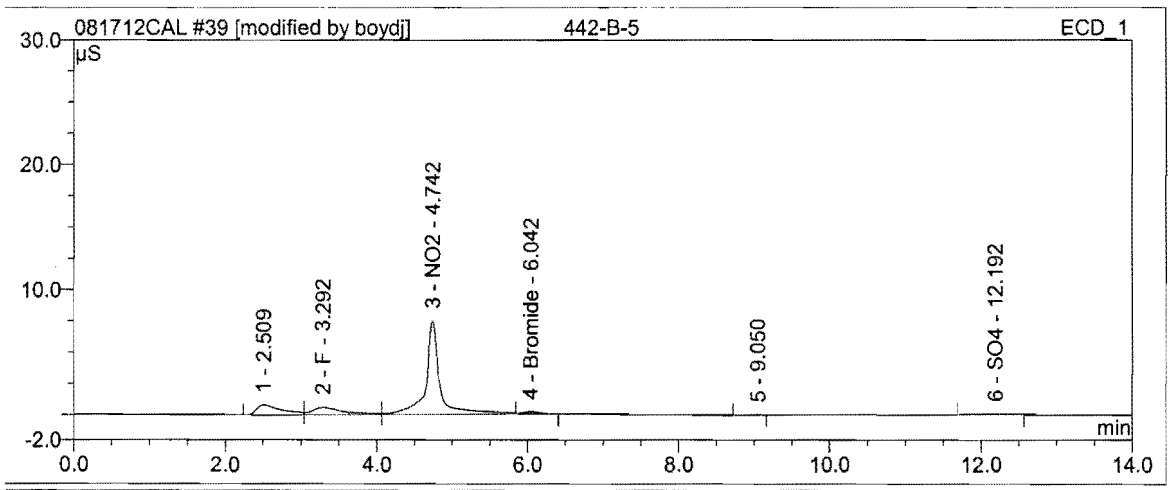


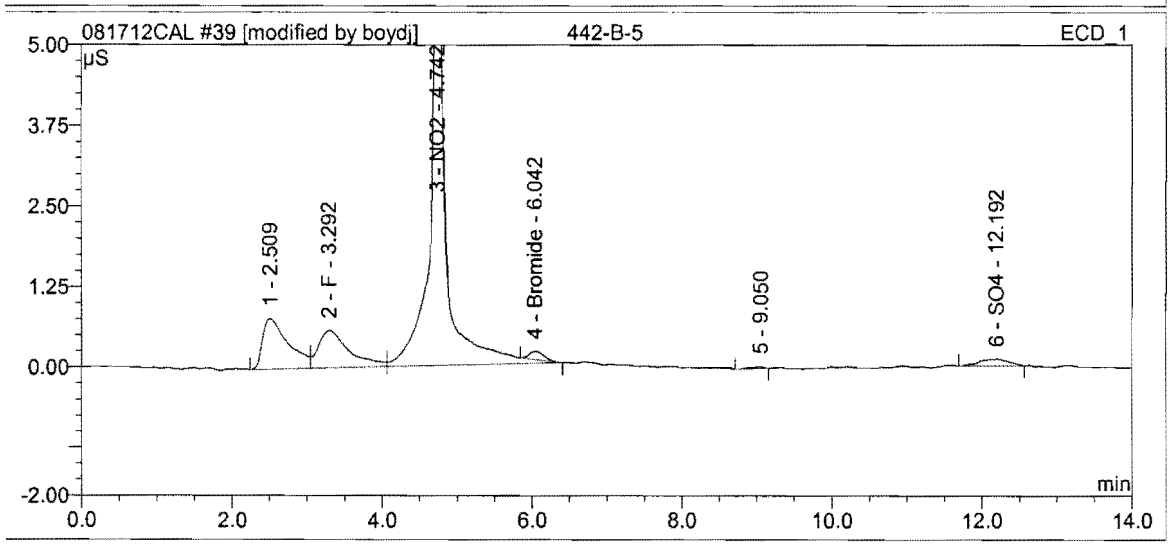


Integration Report - ECD_1

Sample Name:	**442-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 21:59**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	M	0.277	0.583	574.4782
3	4.74	NO2	MB*	1.673	7.480	5310.5760
4	6.04	Bromide	Rd*	0.030	0.129	229.7366
6	12.19	SO4	BMB	0.051	0.110	204.7168
		TOTAL:		2.03	8.30	6319.51

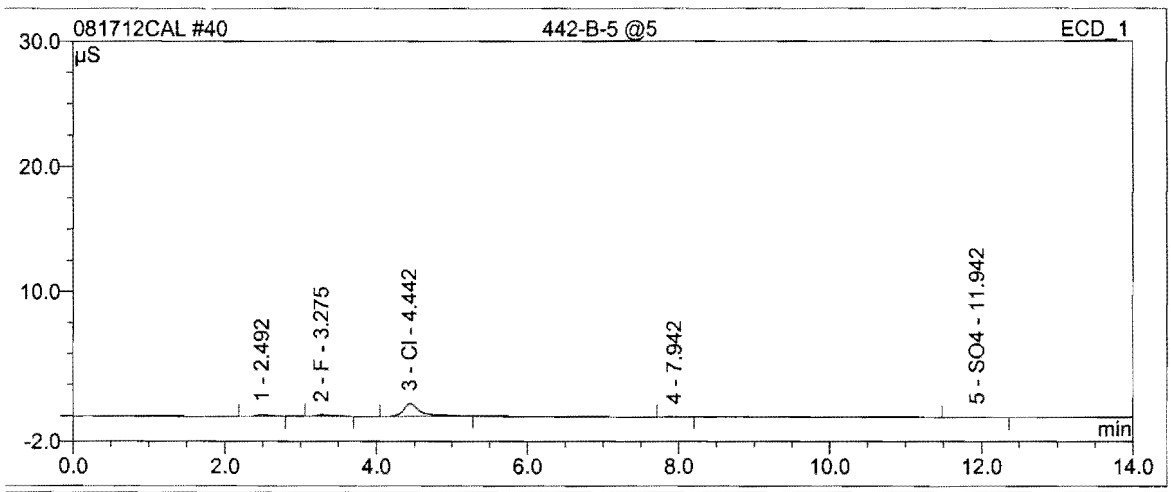


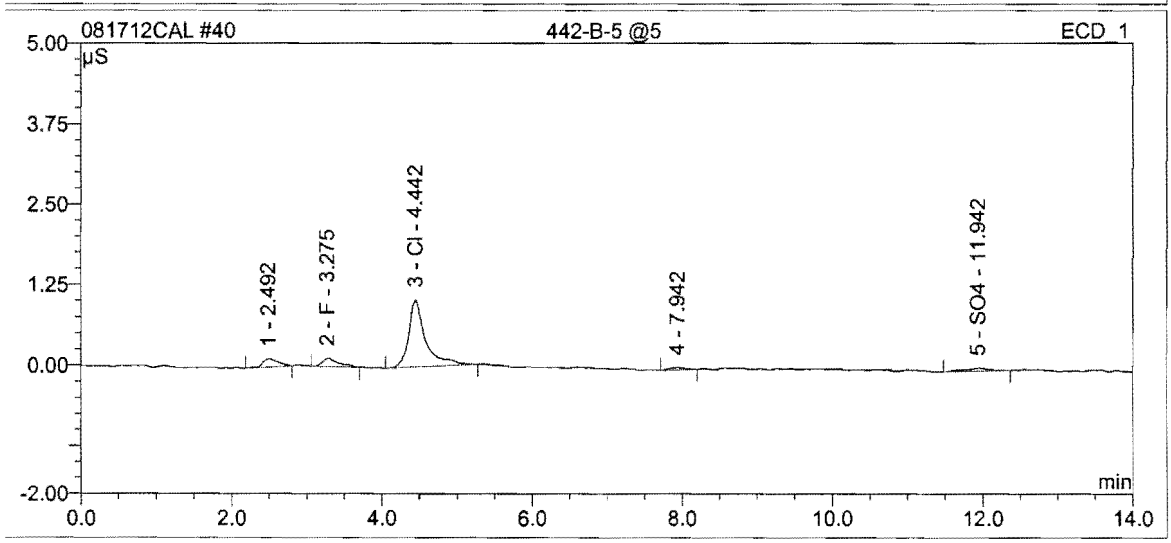


Integration Report - ECD_1

Sample Name:	**442-B-5 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 22:15**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	BMB	0.033	0.128	67.7789
3	4.44	Cl	BMB	0.272	1.035	716.9278
5	11.94	SO4	BMB	0.021	0.049	82.9154
		TOTAL:		0.33	1.21	867.62





Integration Report - ECD_1

Sample Name:	**442-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 22:32**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.180	0.460	373.6335
3	4.66	NO2	M	27.799	107.121	88217.5117
4	5.91	Bromide	M	0.133	0.356	1016.6635
5	6.62	NO3	MB	0.145	0.355	155.5205
6	11.89	SO4	BMB	15.022	25.164	60748.8751
		TOTAL:		43.28	133.46	150512.20

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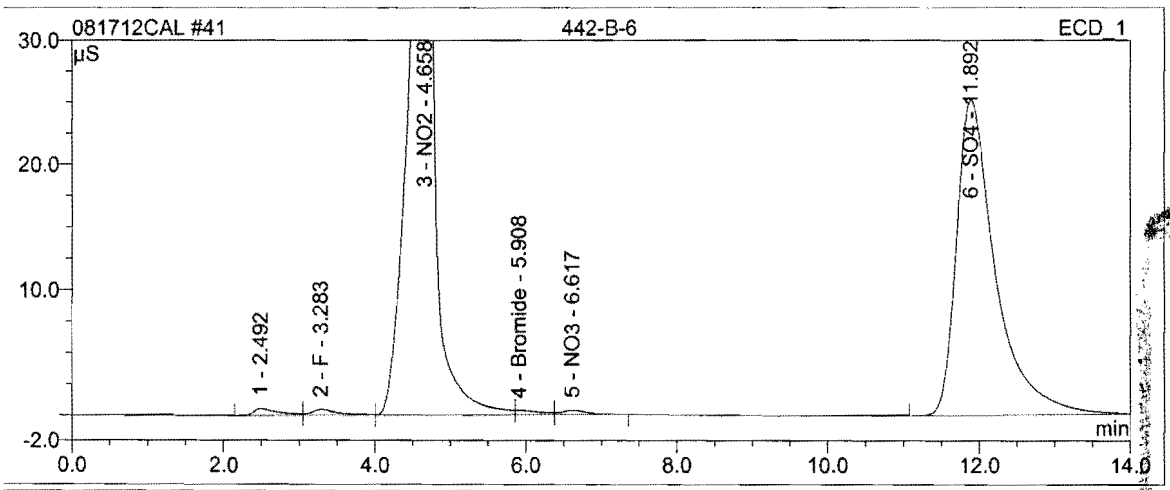
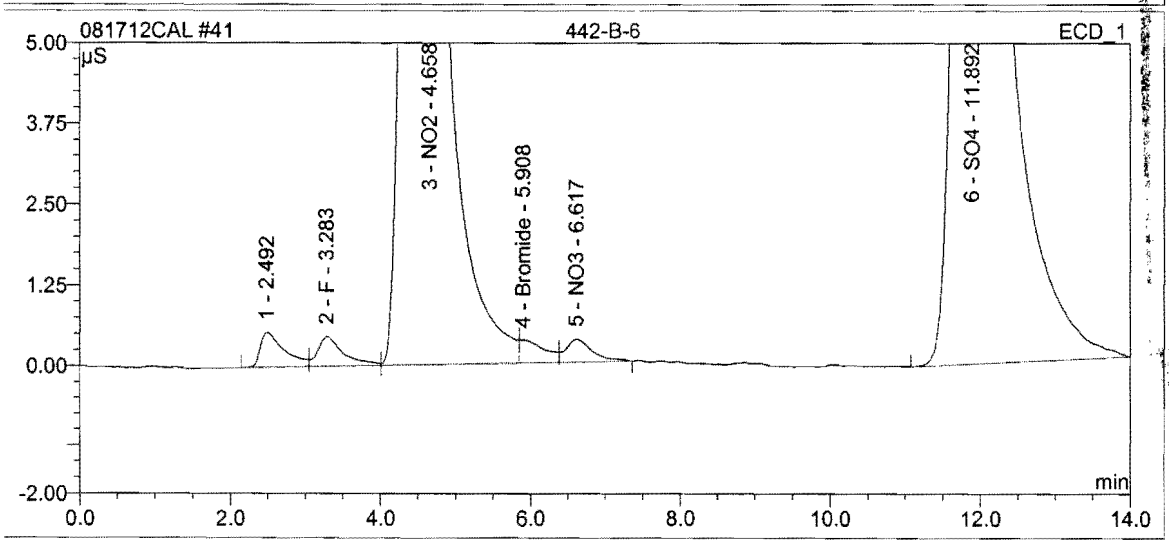


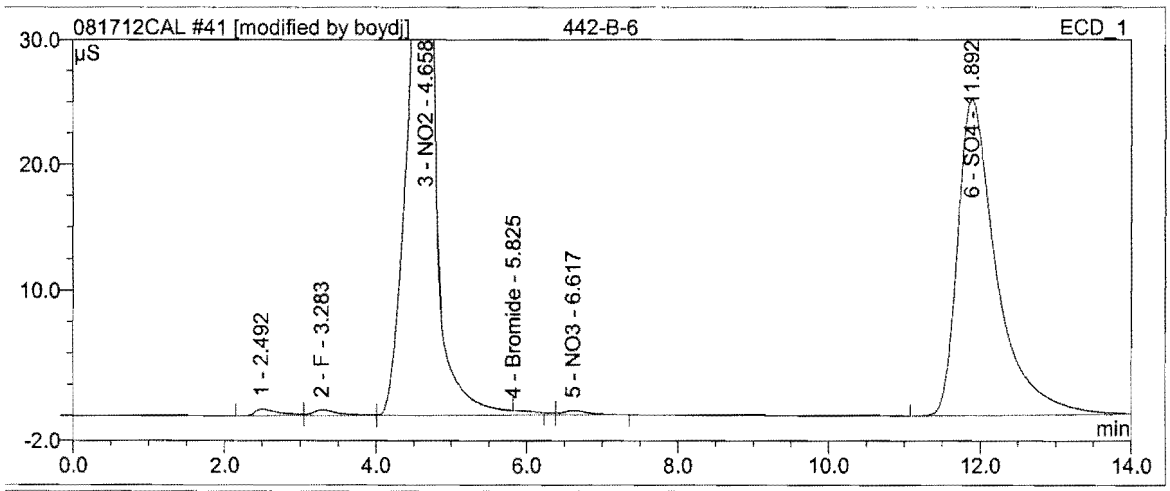


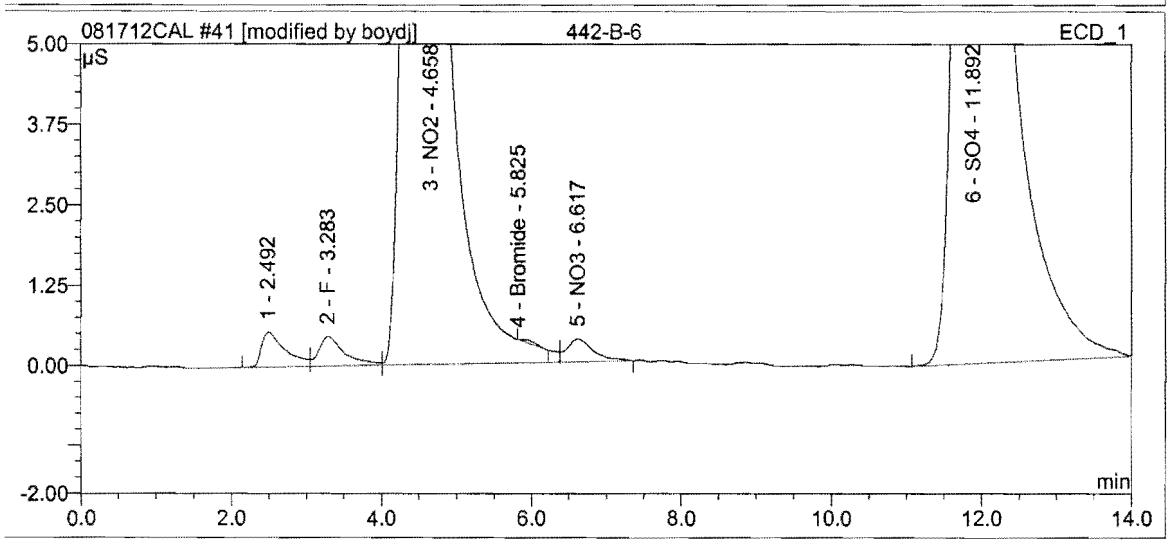
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -Brrider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**442-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 22:32**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.180	0.460	373.6335
3	4.66	NO2	M *	27.922	107.121	88608.3878
4	5.83	Bromide	Rd*	0.010	0.001	74.1640
5	6.62	NO3	MB	0.145	0.355	155.5205
6	11.89	SO4	BMB	15.022	25.164	60748.8751
		TOTAL:		43.28	133.10	149960.58





Integration Report - ECD_1

Sample Name:	**453-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 22:48**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	Rd	0.056	0.142	115.4875
3	4.87	NO2	M	42.074	165.503	133519.6809
4	6.08	Bromide	MB	0.349	0.775	2668.5284
		TOTAL:		42.48	166.42	136303.70

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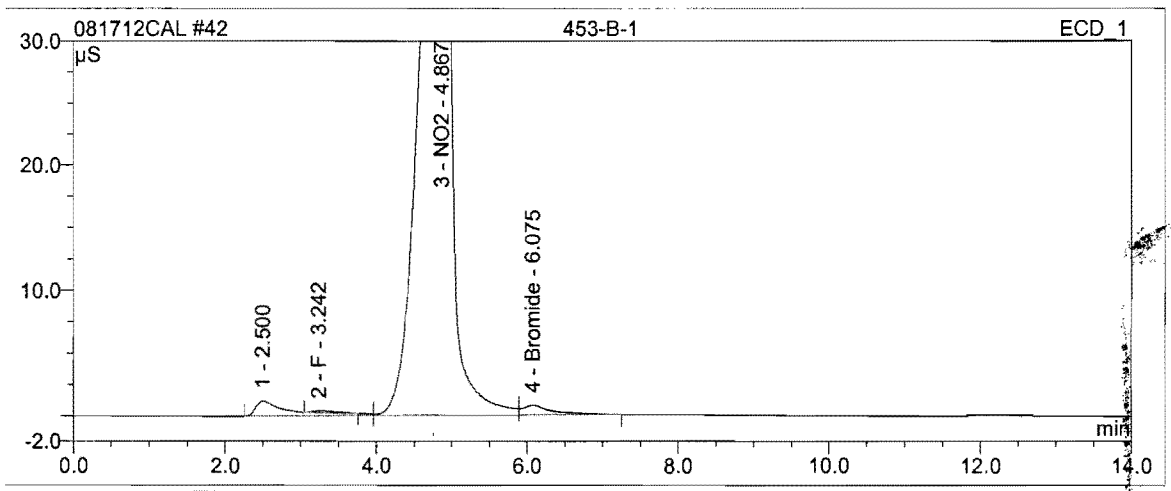
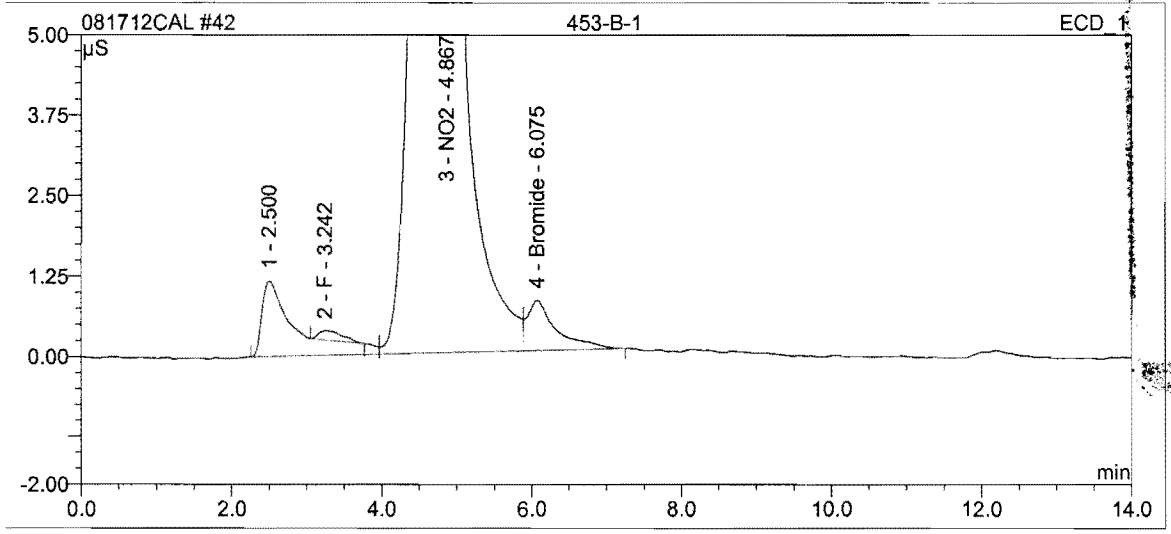
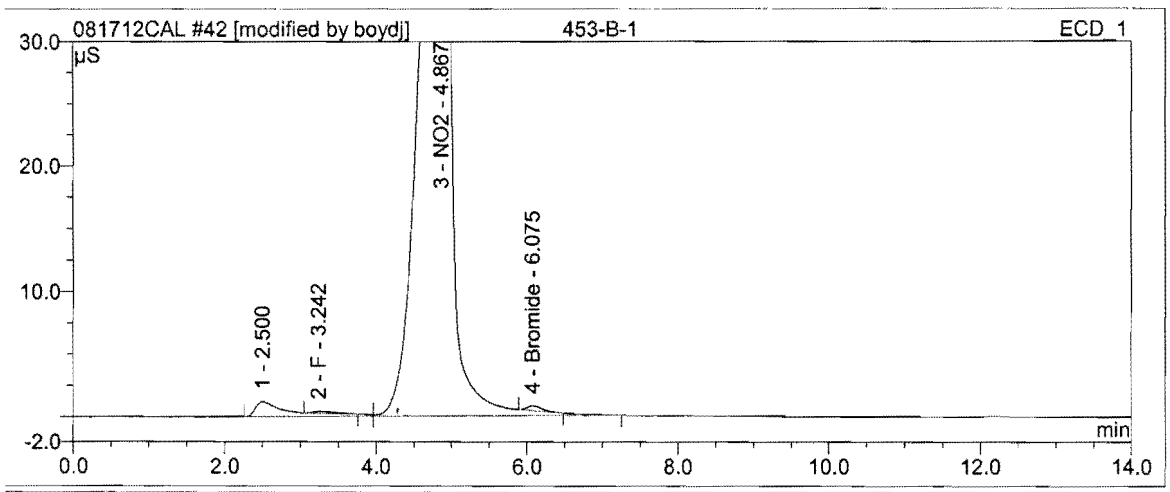


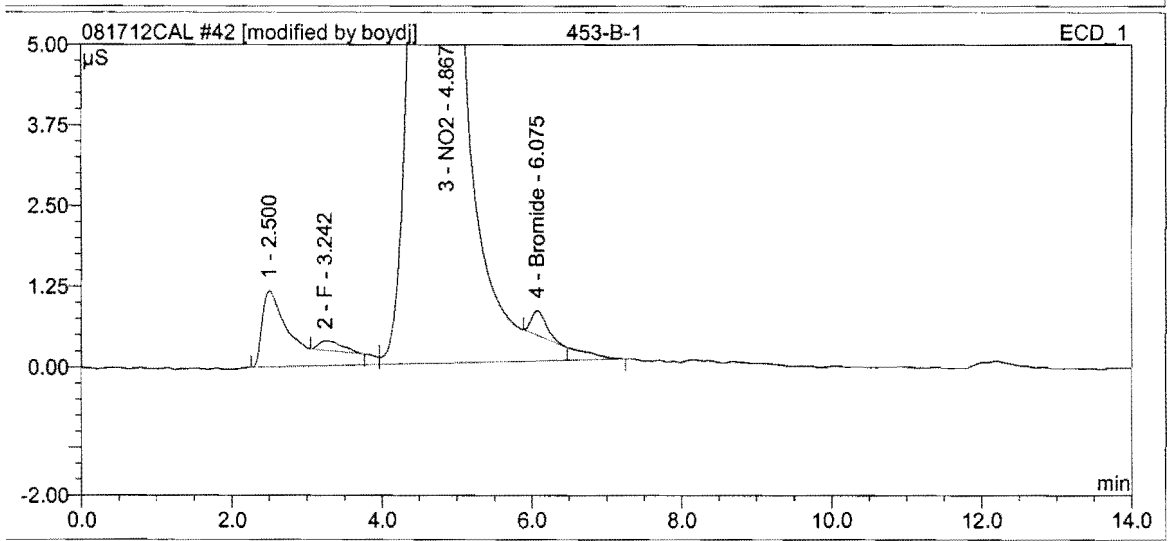


Integration Report - ECD_1

Sample Name:	**453-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 22:48**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	Rd	0.056	0.142	115.4875
3	4.87	NO2	MB*	42.334	165.503	134345.7899
4	6.08	Bromide	Rd*	0.088	0.378	676.5771
		TOTAL:		42.48	166.02	135137.85

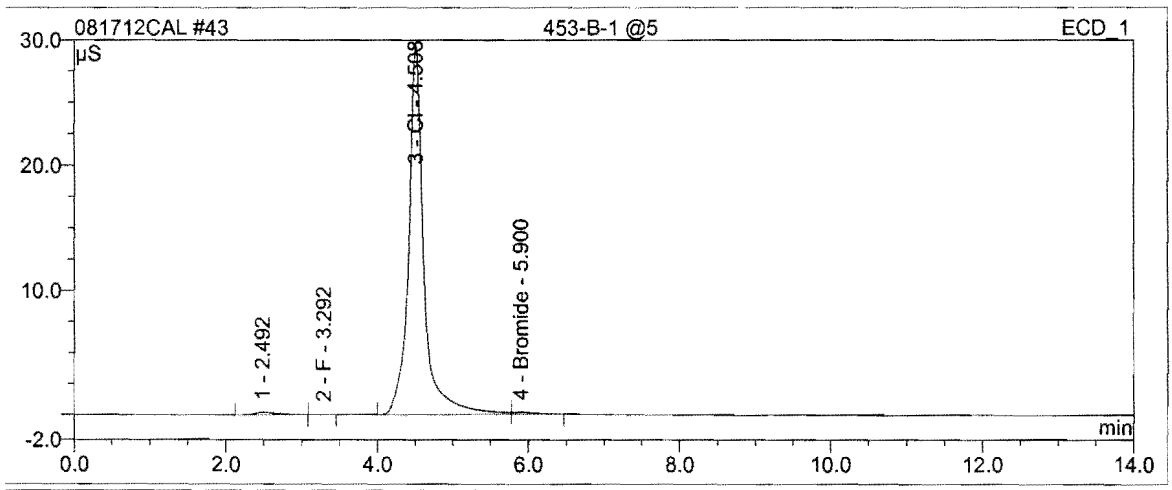


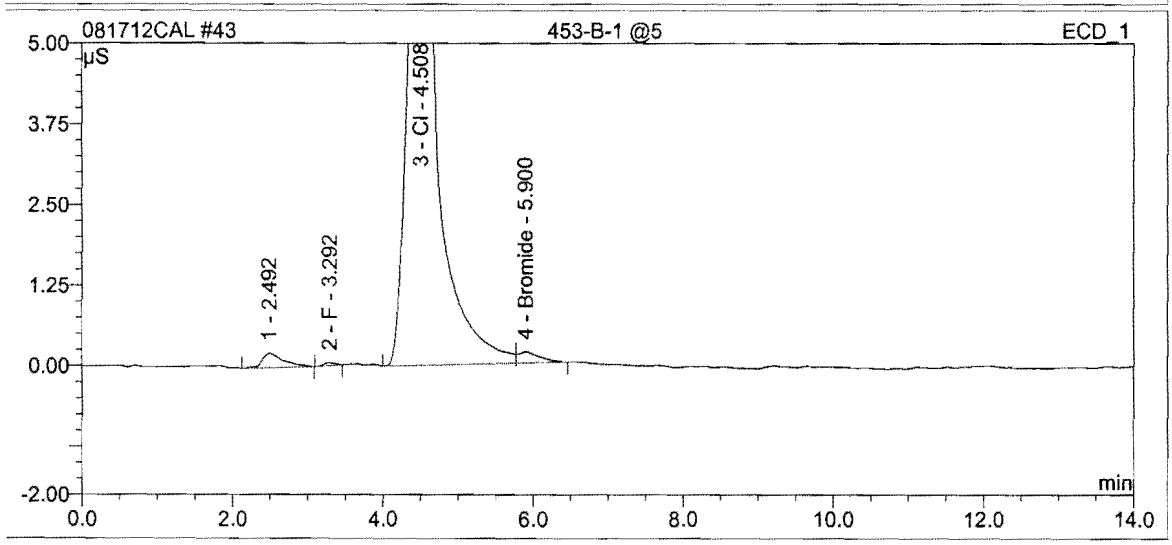


Integration Report - ECD_1

Sample Name:	**453-B-1 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 23:04**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	BMB	0.009	0.046	18.4045
3	4.51	Cl	BM	6.972	29.678	18360.6589
4	5.90	Bromide	MB	0.058	0.175	443.5122
		TOTAL:		7.04	29.90	18822.58





Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 23:21**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.433	1.540	898.3766
3	4.32	Cl	M	0.700	2.215	1843.8306
4	4.88	NO2	Rd	0.048	0.209	152.3510
5	5.87	Bromide	M	0.250	0.769	1915.2742
6	6.52	NO3	MB	0.333	0.816	358.1293
7	9.70	OPO4	BM	0.751	1.323	7834.1003
8	11.90	SO4	MB	1.901	3.022	7689.0268
		TOTAL:		4.42	9.89	20691.09

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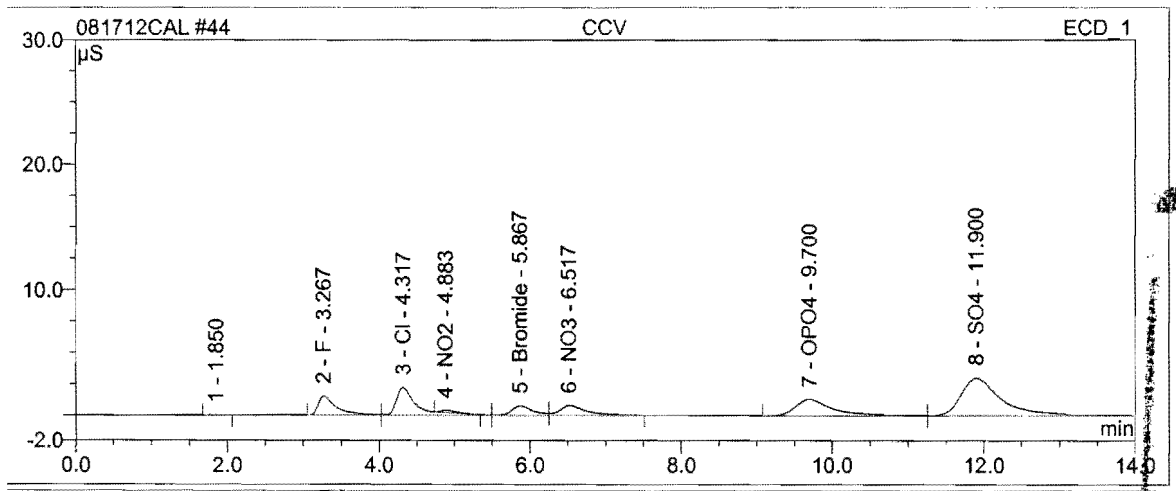
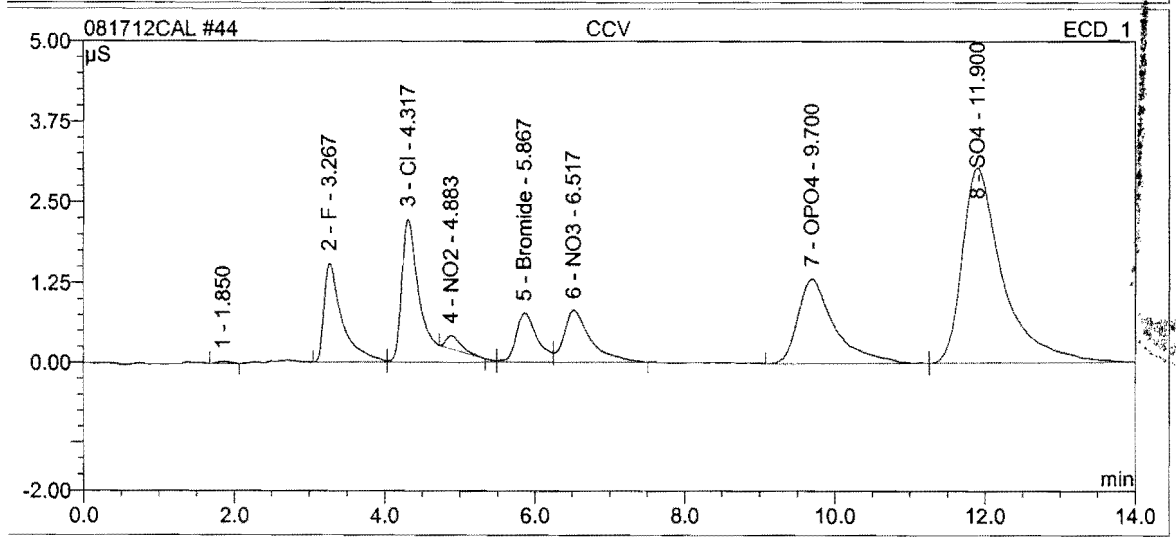


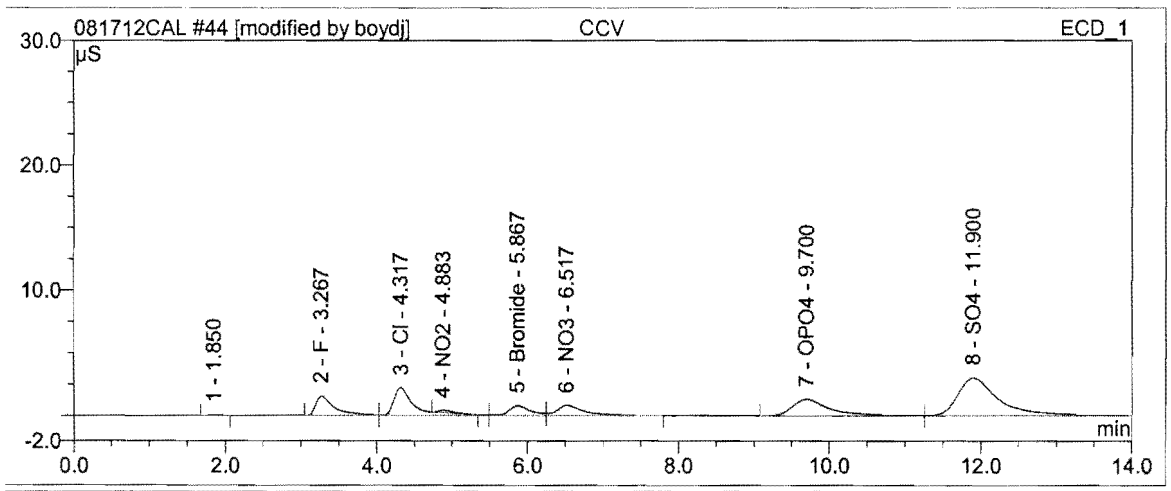


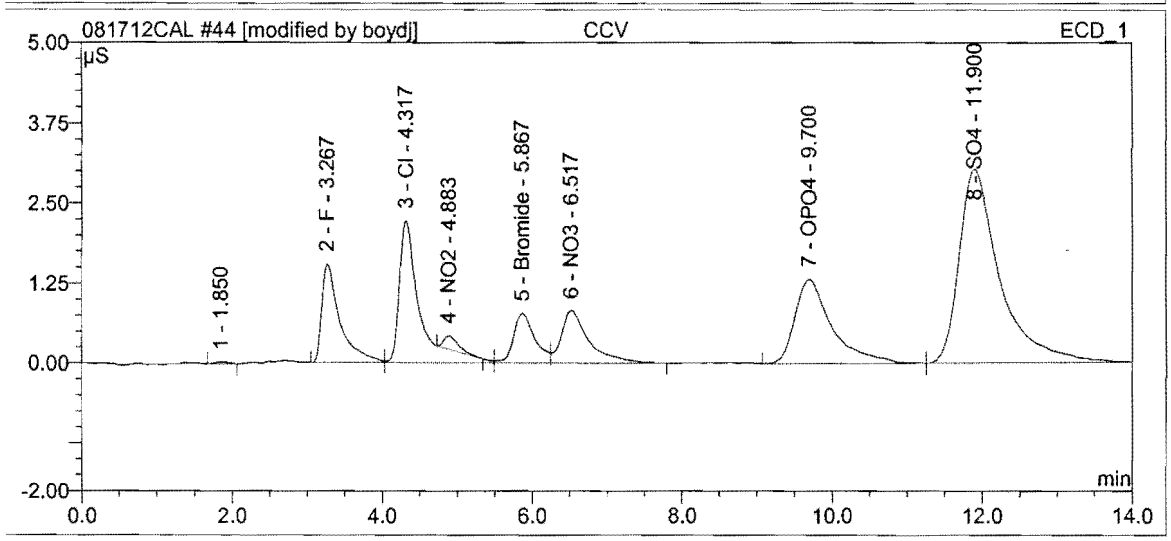
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 23:21**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM *	0.434	1.541	901.4080
3	4.32	Cl	M *	0.708	2.218	1863.6857
4	4.88	NO2	Rd	0.048	0.209	152.3510
5	5.87	Bromide	M *	0.257	0.778	1964.6845
6	6.52	NO3	MB*	0.351	0.827	376.7010
7	9.70	OPO4	BM	0.751	1.323	7834.1003
8	11.90	SO4	MB	1.901	3.022	7689.0268
		TOTAL:		4.45	9.92	20781.96

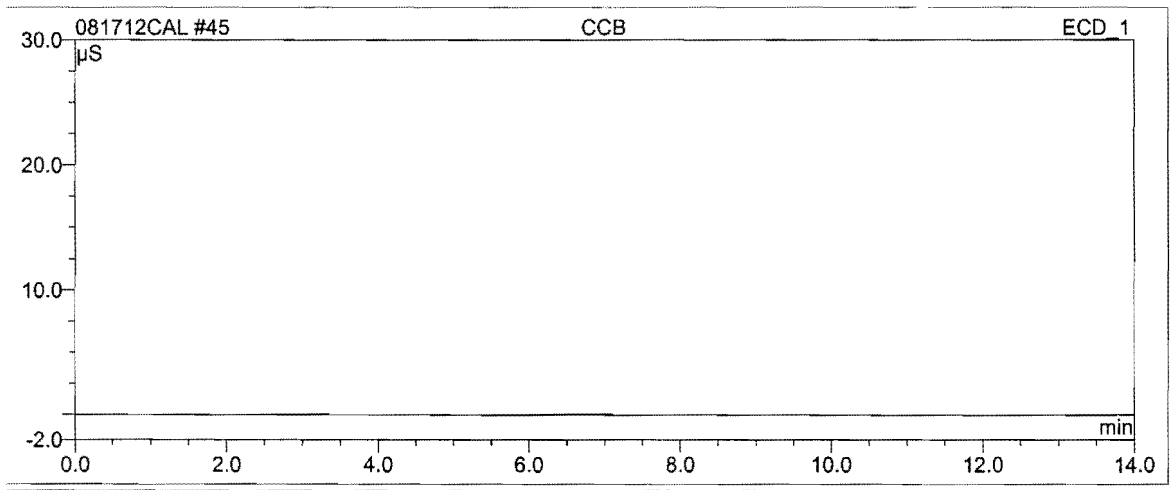


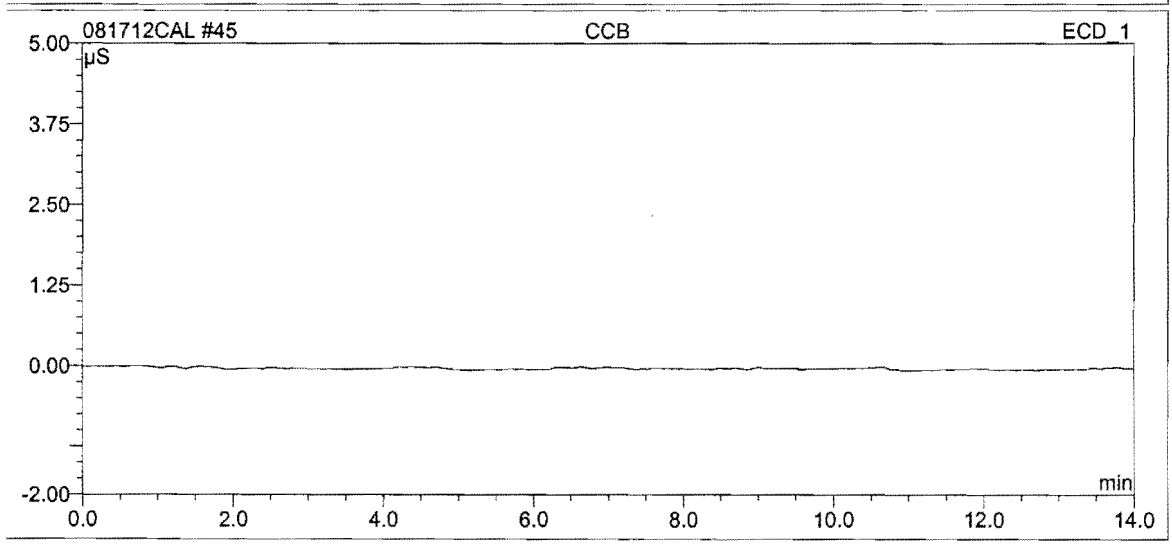


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 23:37**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00

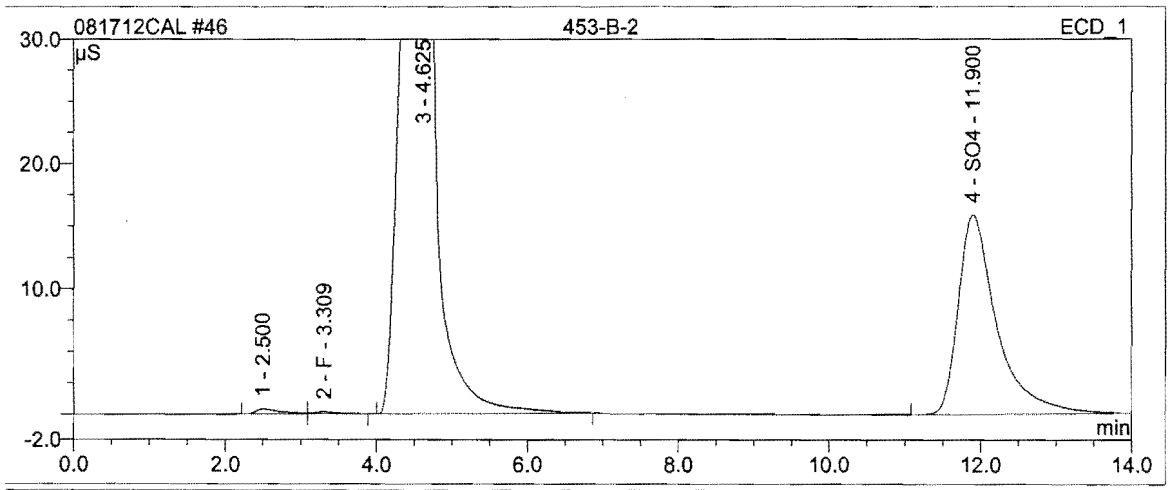


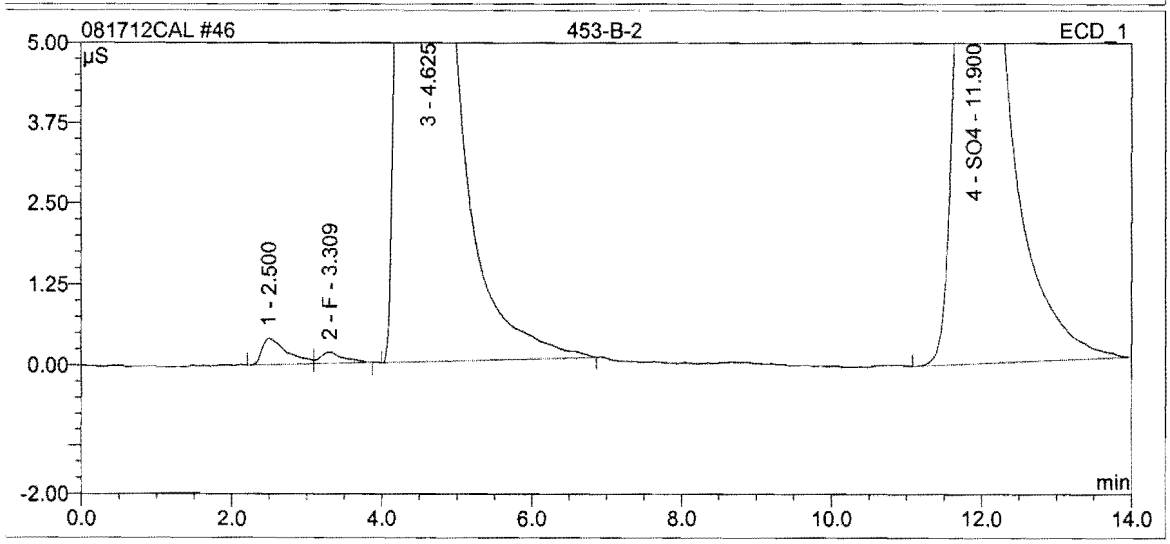


Integration Report - ECD_1

Sample Name:	**453-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**17.08.12 23:54**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.31	F	MB	0.062	0.171	128.5709
4	11.90	SO4	BMB	9.428	15.876	38126.9645
		TOTAL:		9.49	16.05	38255.54





Integration Report - ECD_1

Sample Name:	**453-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 00:10**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	Rd	0.135	0.313	280.4304
3	5.13	NO2	M	216.167	371.040	685994.7555
4	6.12	Bromide	MB	1.664	3.218	12729.3992
5	12.10	SO4	BMB	0.077	0.154	310.5194
		TOTAL:		218.04	374.73	699315.10

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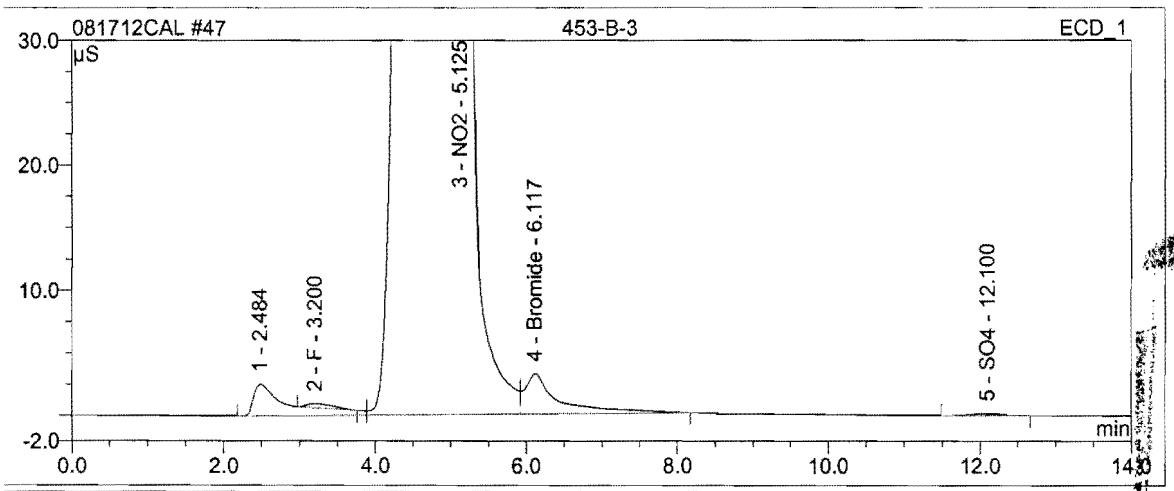
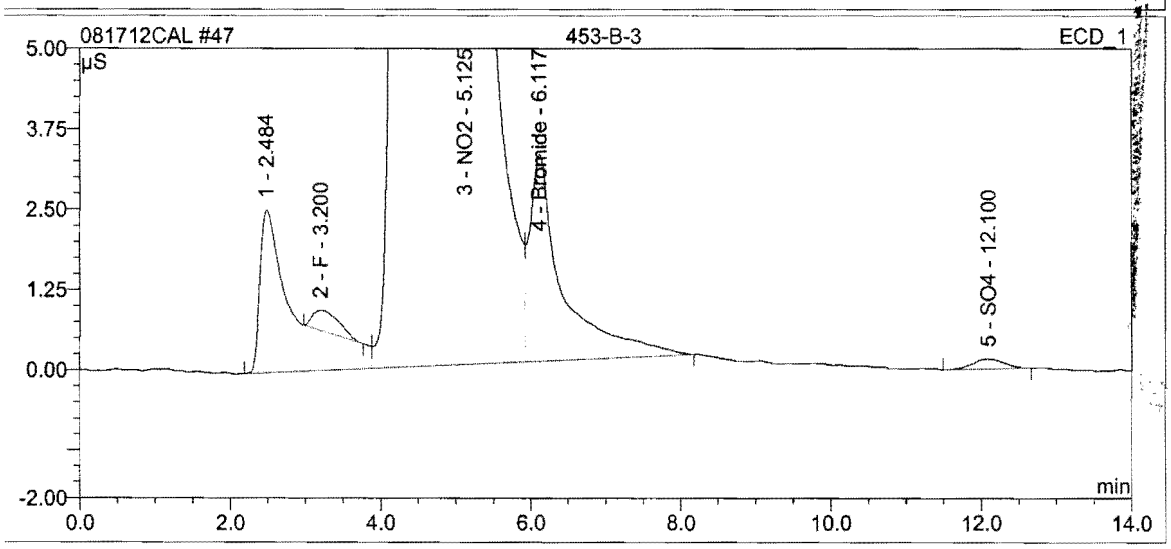


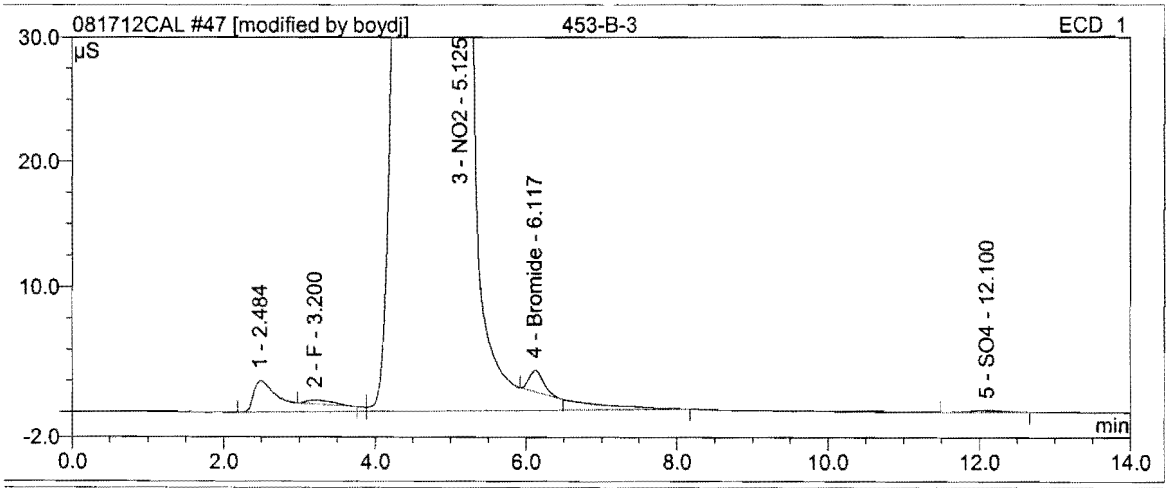


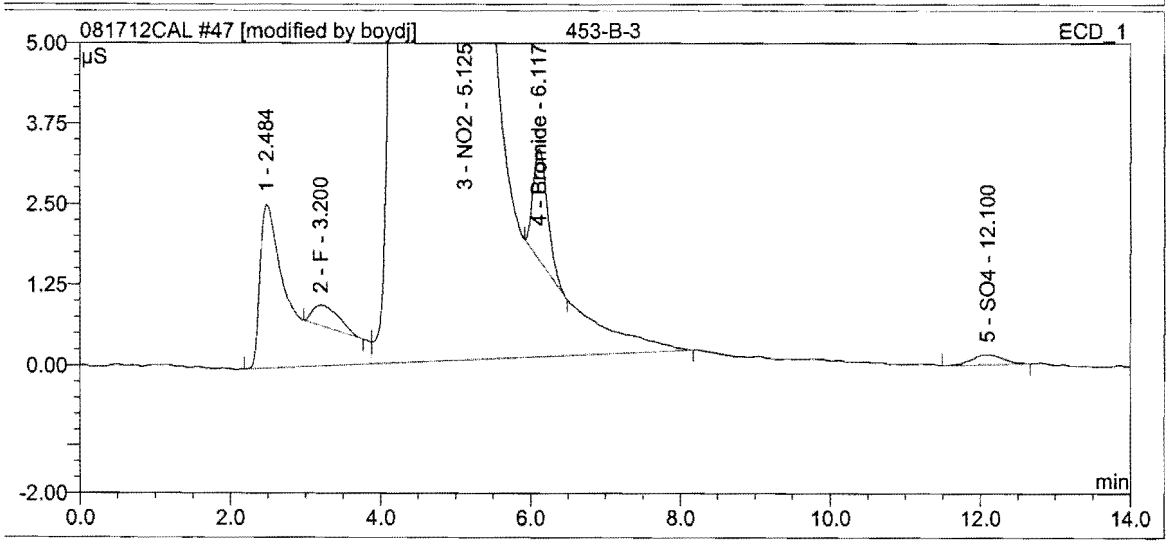
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Brenda
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**453-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 00:10**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	Rd	0.135	0.313	280.4304
3	5.13	NO2	MB*	217.444	371.040	690048.0961
4	6.12	Bromide	Rd*	0.386	1.722	2955.8202
5	12.10	SO4	BMB	0.077	0.154	310.5194
		TOTAL:		218.04	373.23	693594.87

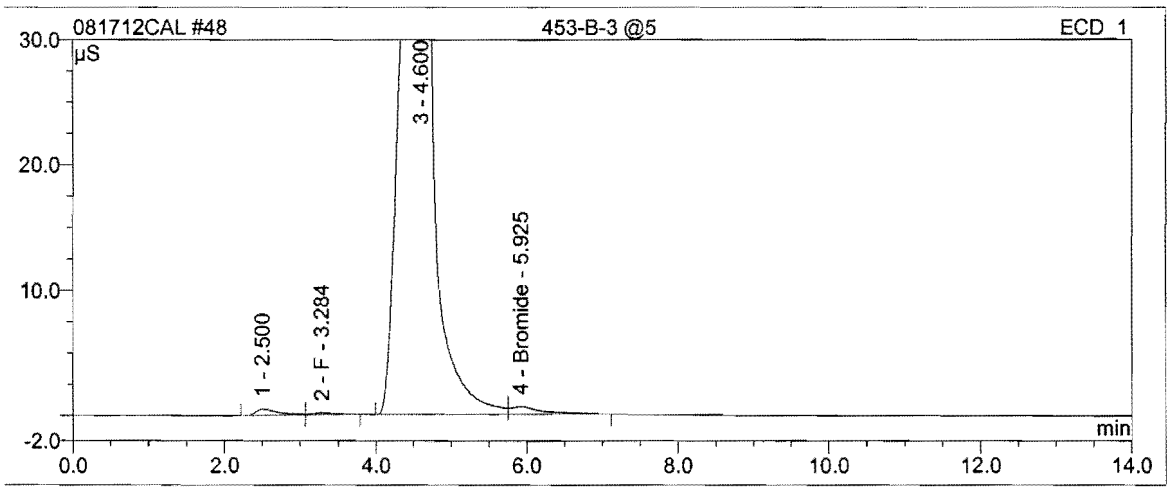


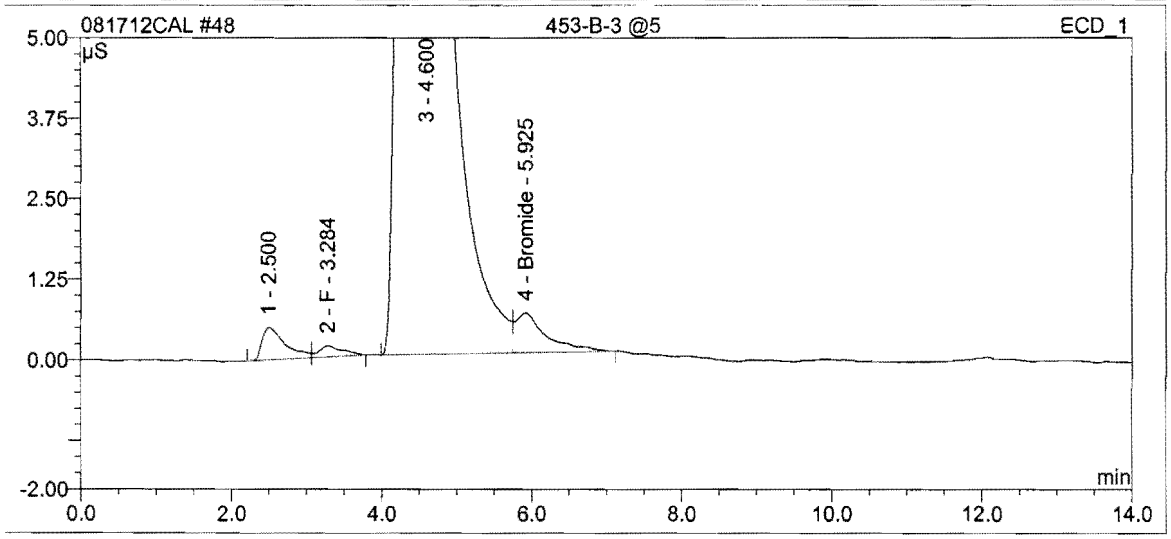


Integration Report - ECD_1

Sample Name:	**453-B-3 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 00:26**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	MB	0.063	0.171	131.6637
4	5.93	Bromide	MB	0.293	0.611	2239.9815
		TOTAL:		0.36	0.78	2371.65

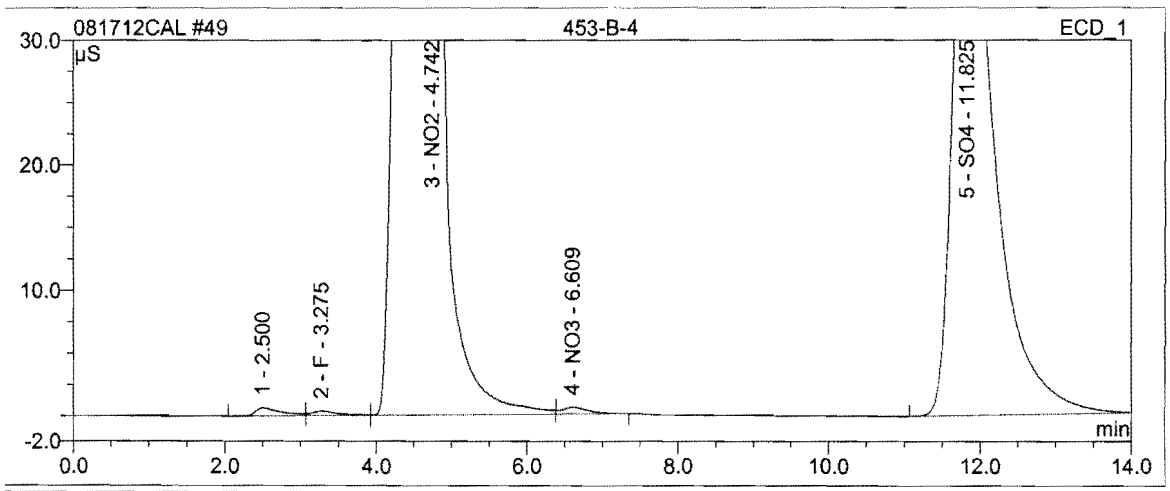


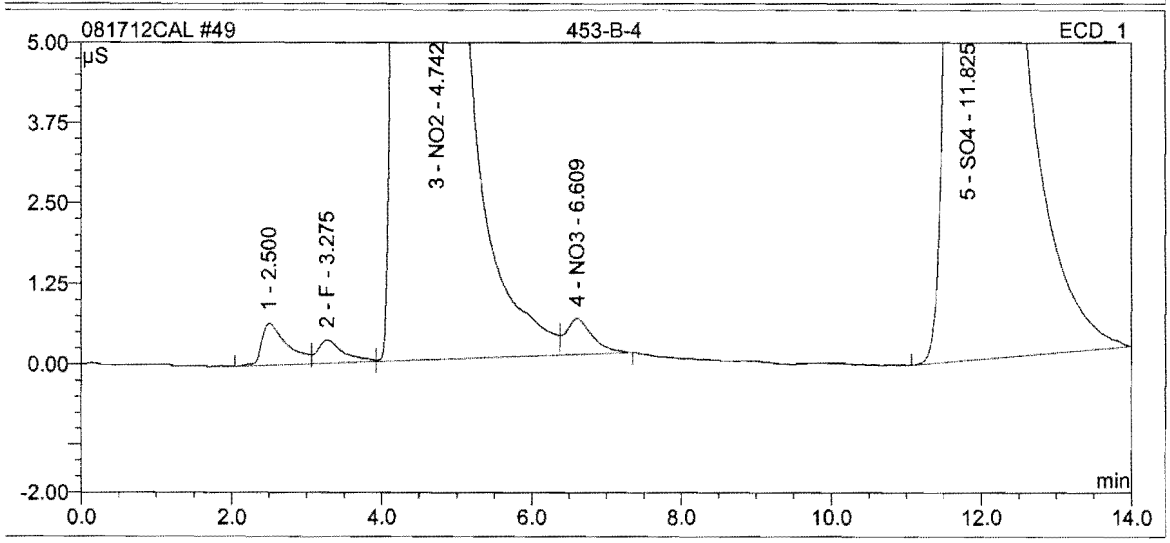


Integration Report - ECD_1

Sample Name:	**453-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 00:43**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.144	0.360	299.7690
3	4.74	NO2	M	92.065	228.454	292163.4188
4	6.61	NO3	MB	0.229	0.561	246.2638
5	11.83	SO4	BMB	29.812	50.033	120555.9447
TOTAL:				122.25	279.41	413265.40

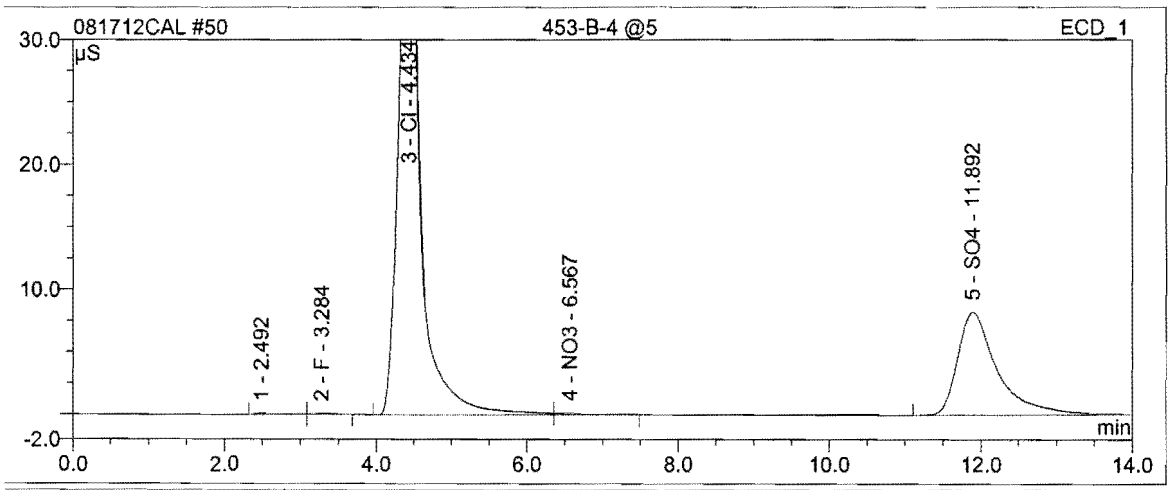


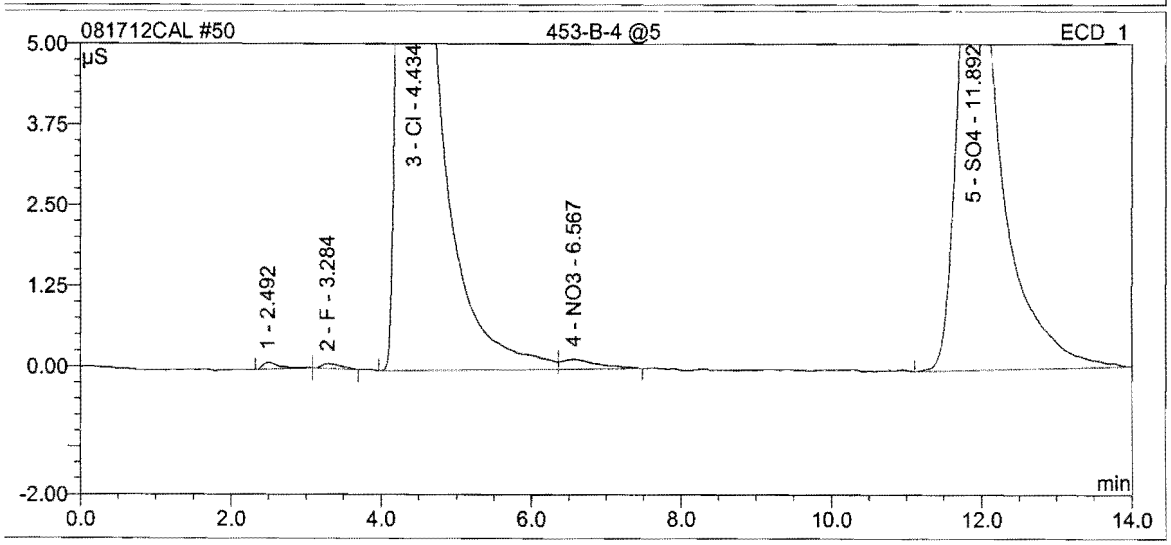


Integration Report - ECD_1

Sample Name:	**453-B-4 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 00:59**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	bMB	0.023	0.073	47.5220
3	4.43	Cl	BM	15.951	56.848	42005.6583
4	6.57	NO3	MB	0.087	0.155	93.8674
5	11.89	SO4	BMB	5.035	8.234	20362.5632
		TOTAL:		21.10	65.31	62509.61





Integration Report - ECD_1

Sample Name:	**453-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 01:16**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.21	F	Rd	0.063	0.167	129.8802
3	5.06	NO2	M	206.006	360.414	653748.9280
4	6.09	Bromide	MB	1.782	2.893	13635.7725
5	6.66	NO3	Rd	0.020	0.065	21.8289
6	9.83	OPO4	BMB	0.006	0.031	66.4586
7	12.05	SO4	BMB	3.694	6.150	14936.0662
		TOTAL:		211.57	369.72	682538.93

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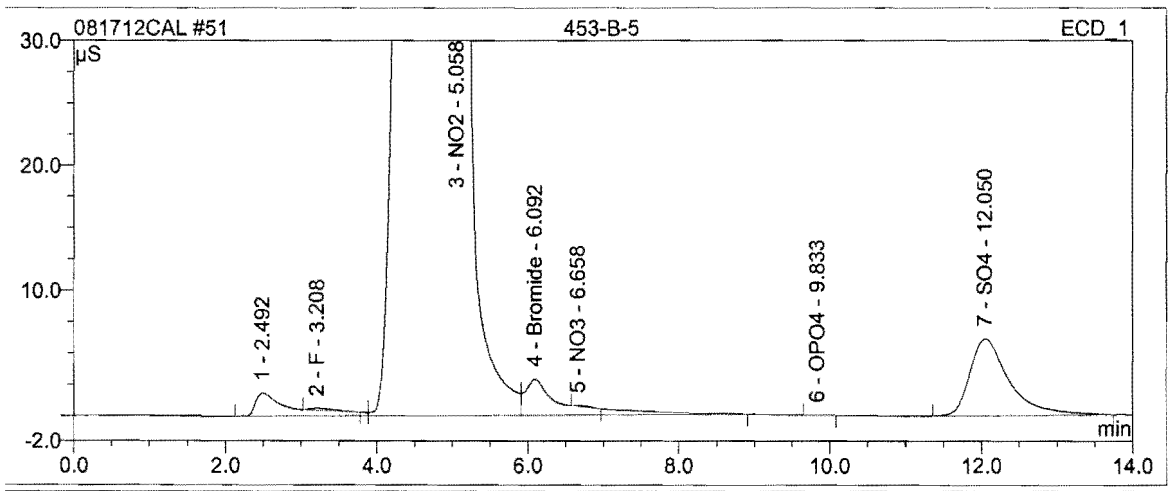
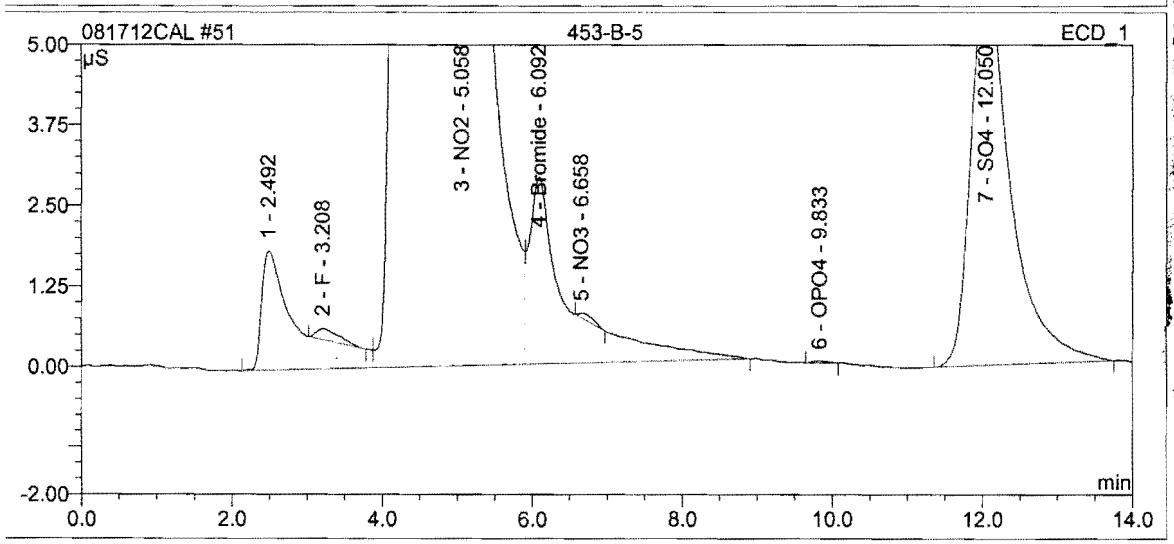


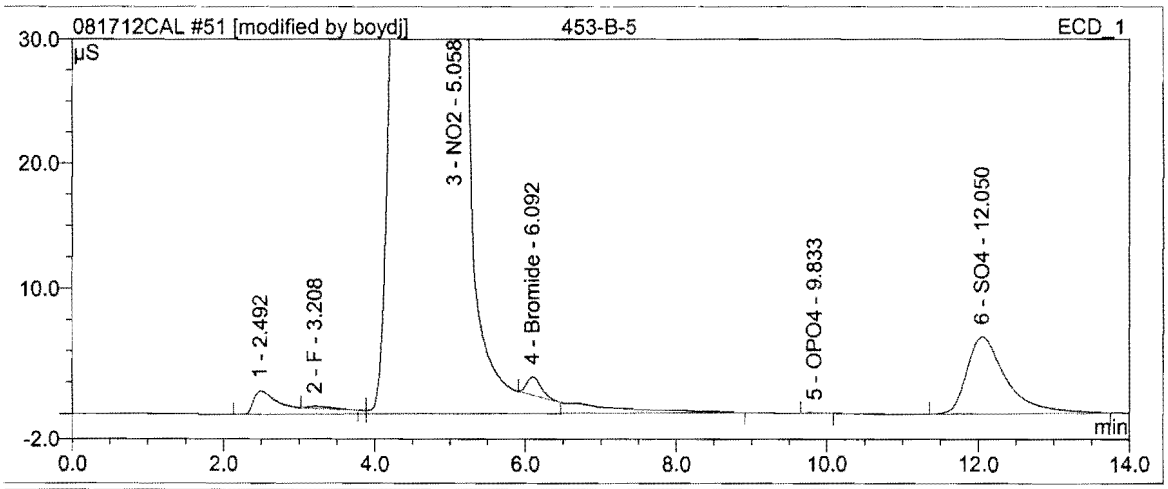


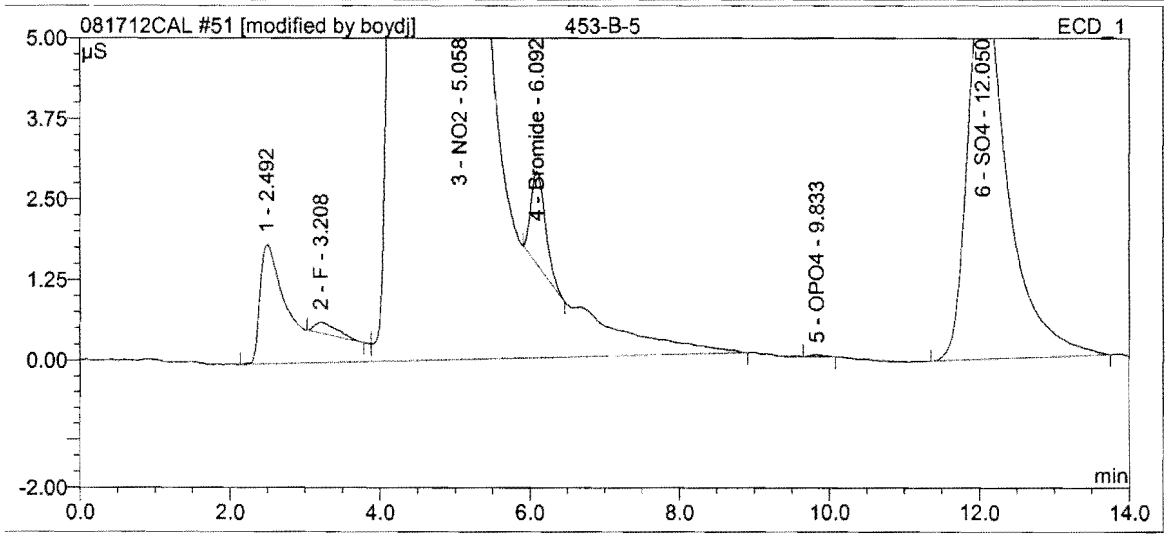
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing -Br=rider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**453-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 01:16**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.21	F	Rd	0.063	0.167	129.8802
3	5.06	NO2	MB*	207.486	360.414	658444.3439
4	6.09	Bromide	Rd*	0.323	1.437	2469.4886
5	9.83	OPO4	BMB	0.006	0.031	66.4586
6	12.05	SO4	BMB	3.694	6.150	14936.0662
		TOTAL:		211.57	368.20	676046.24

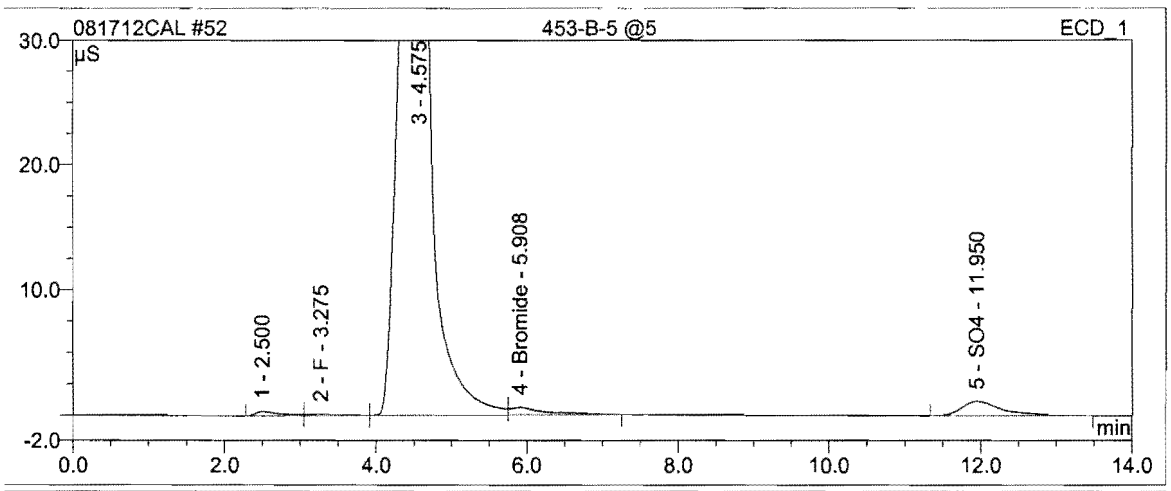


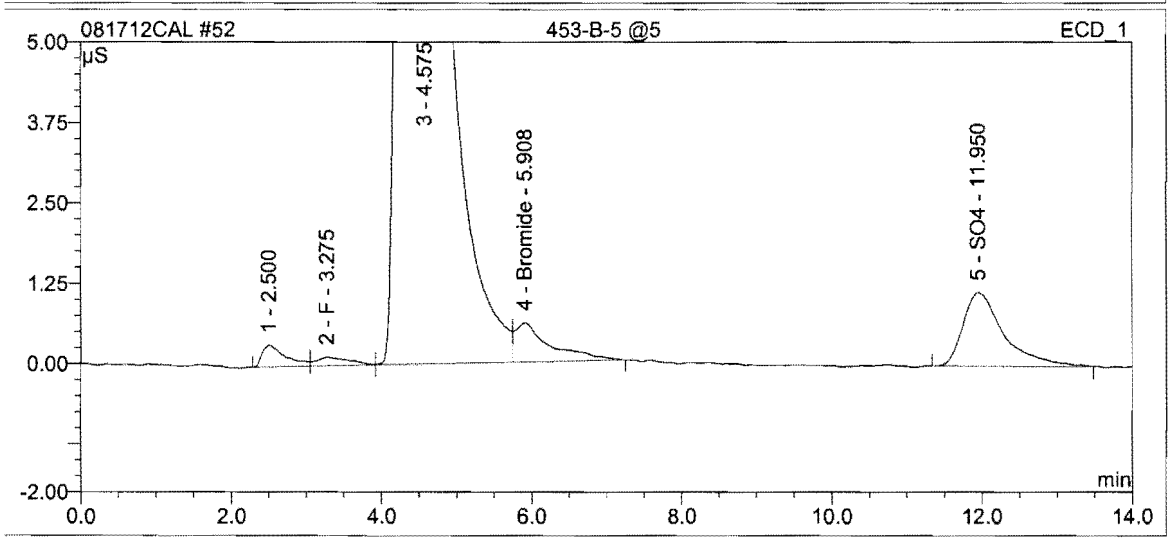


Integration Report - ECD_1

Sample Name:	**453-B-5 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 01:32**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.068	0.135	140.7723
4	5.91	Bromide	MB	0.333	0.607	2549.8889
5	11.95	SO4	BMB	0.716	1.141	2893.4662
		TOTAL:		1.12	1.88	5584.13

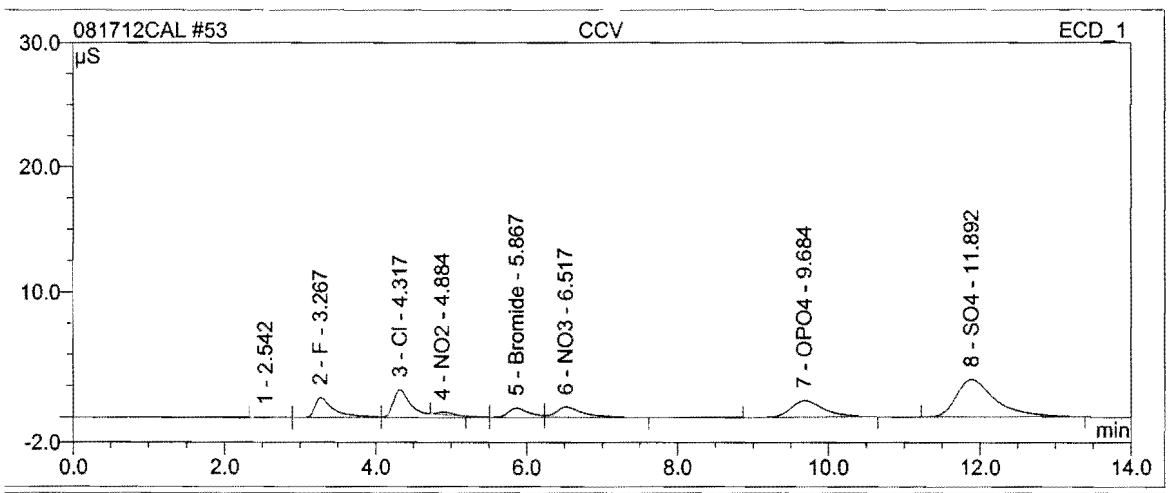


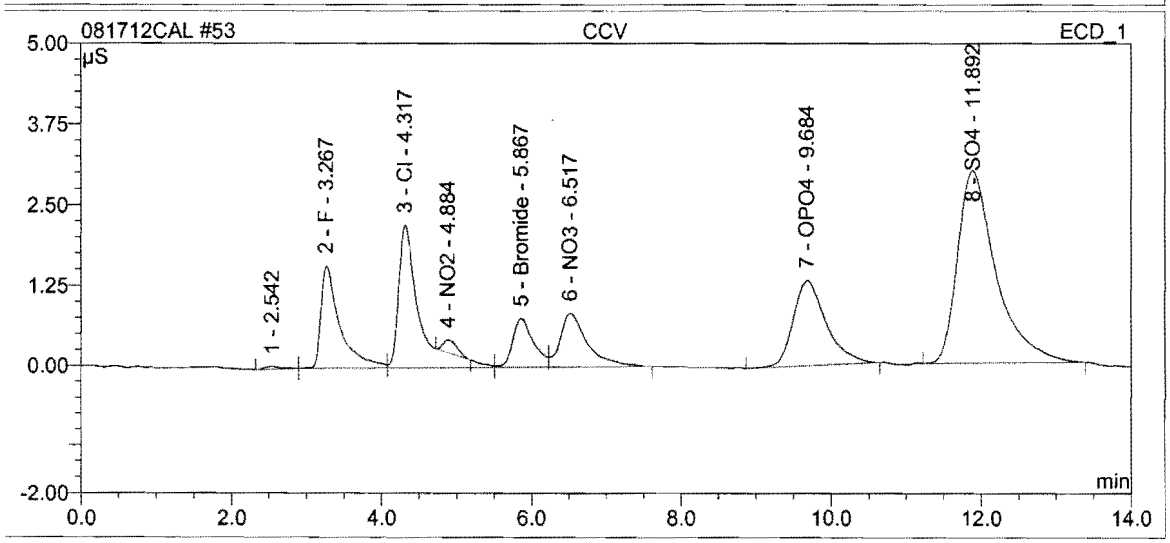


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 01:48**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	bM	0.469	1.589	973.6915
3	4.32	Cl	M	0.721	2.219	1898.4768
4	4.88	NO2	Rd	0.045	0.197	142.0310
5	5.87	Bromide	M	0.248	0.762	1895.1439
6	6.52	NO3	MB	0.356	0.842	382.5591
7	9.68	OPO4	BMB	0.678	1.330	7073.2026
8	11.89	SO4	BMB	1.785	2.987	7220.1410
		TOTAL:		4.30	9.93	19585.25

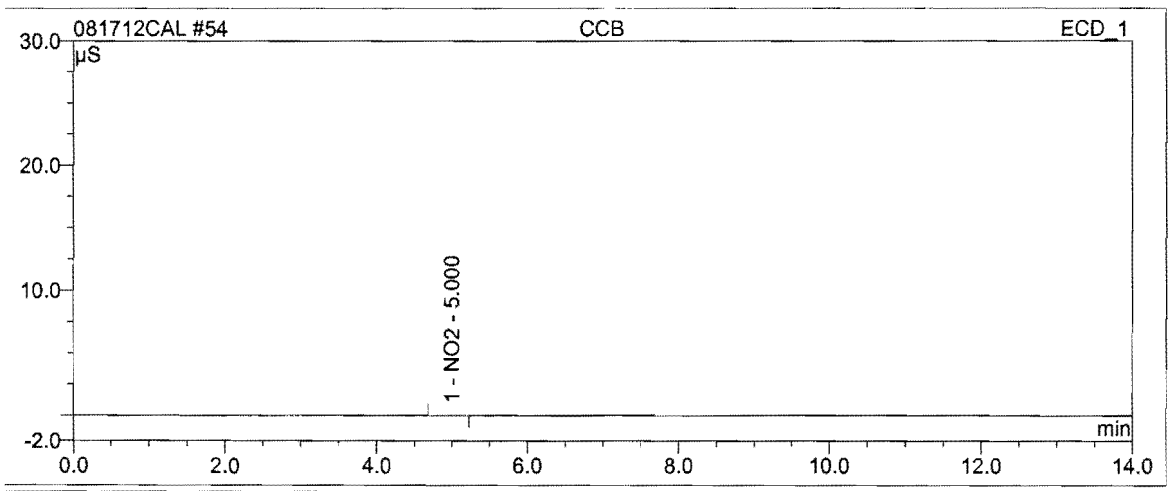


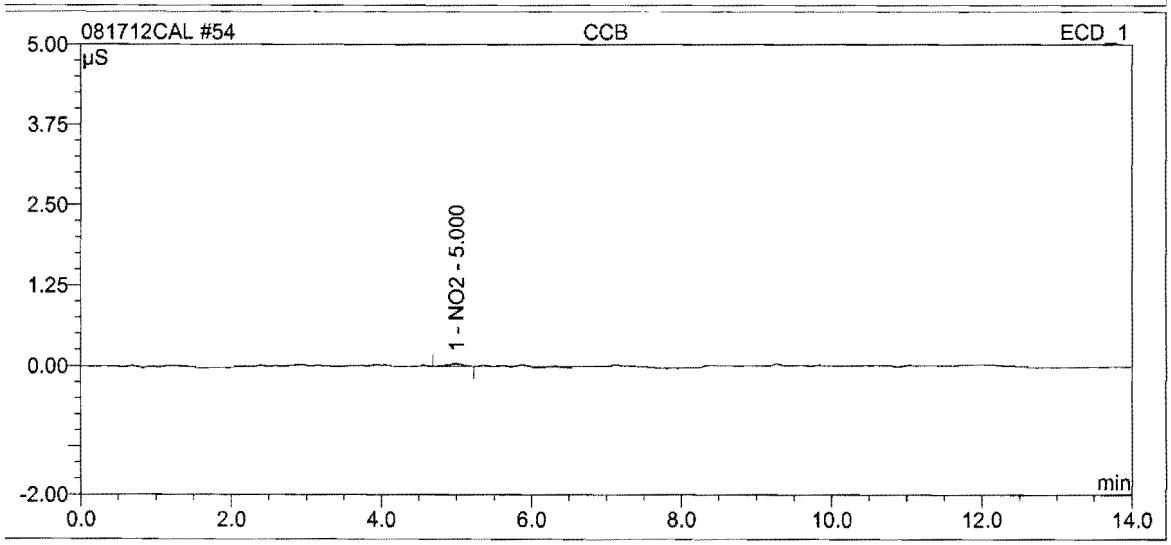


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 02:05**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	5.00	NO2	BMB	0.011	0.041	34.0275
		TOTAL:		0.01	0.04	34.03

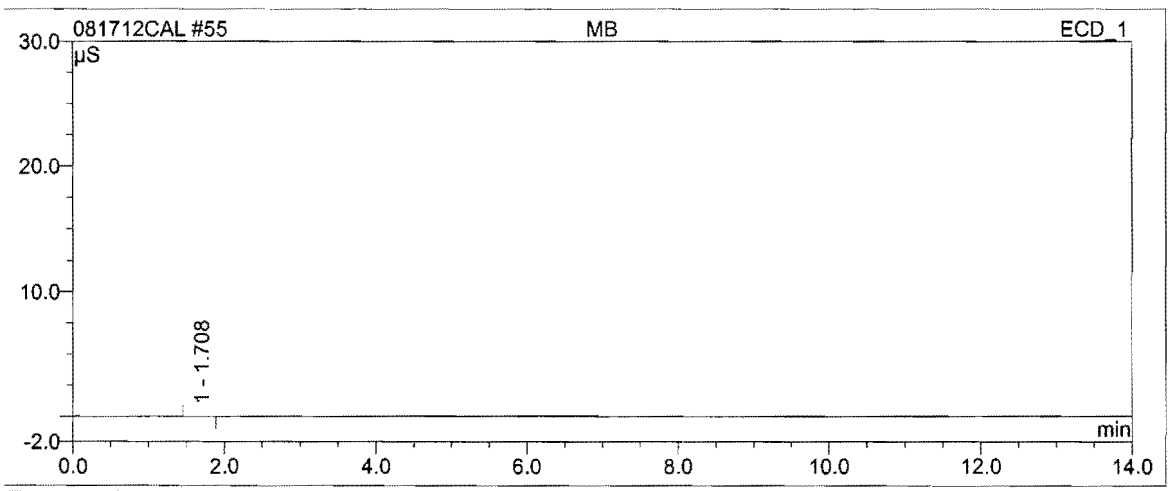


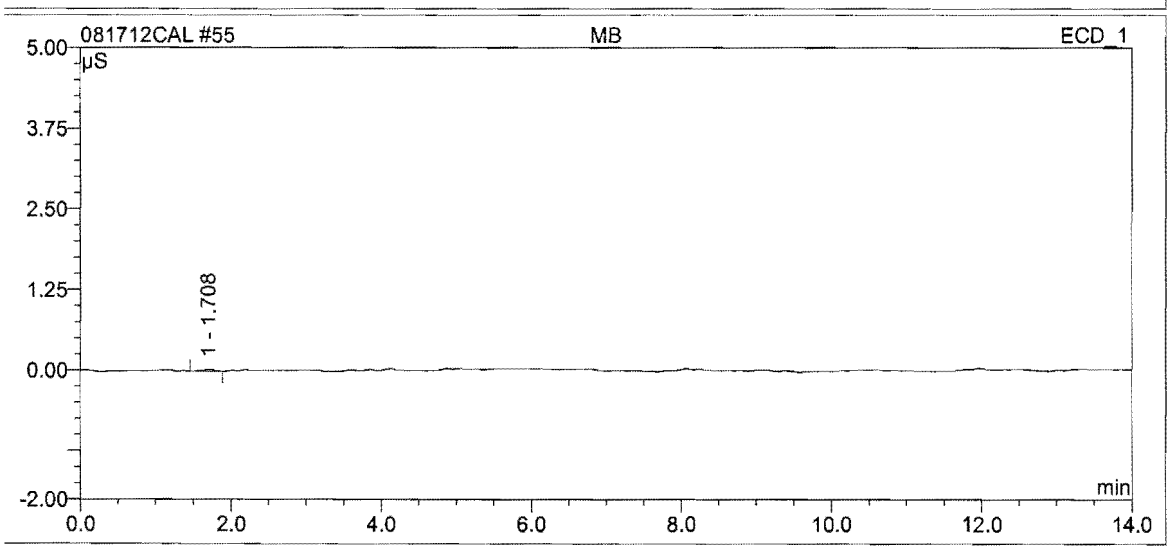


Integration Report - ECD_1

Sample Name:	**MB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 02:21**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 02:38**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.449	1.580	932.0364
3	4.32	Cl	M	0.729	2.229	1919.0132
4	4.88	NO2	Rd	0.046	0.198	144.7726
5	5.86	Bromide	M	0.245	0.764	1875.0077
6	6.52	NO3	MB	0.322	0.803	345.9199
7	9.68	OPO4	BMB	0.732	1.326	7629.2419
8	11.88	SO4	BMB	1.876	3.028	7587.1281
		TOTAL:		4.40	9.93	20433.12

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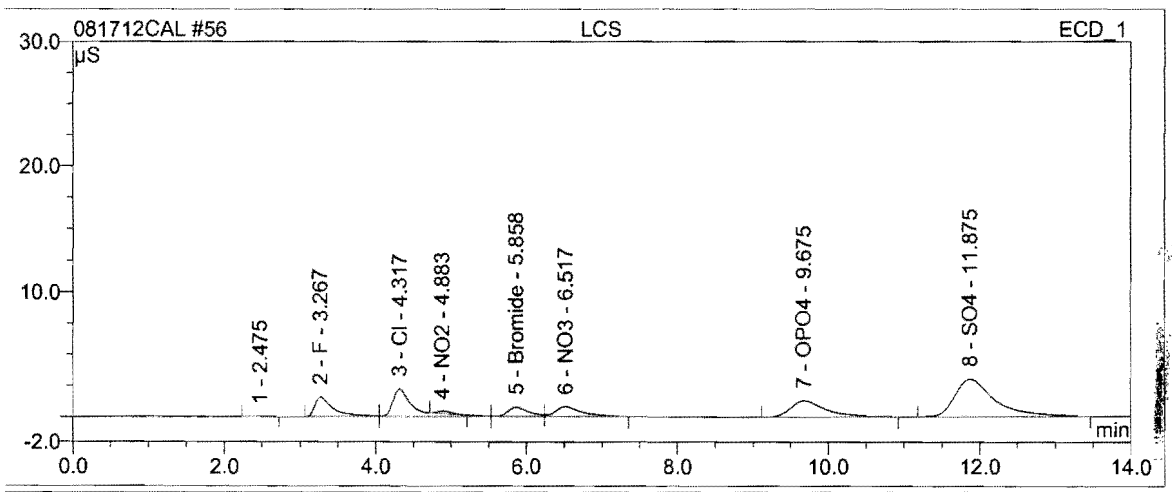
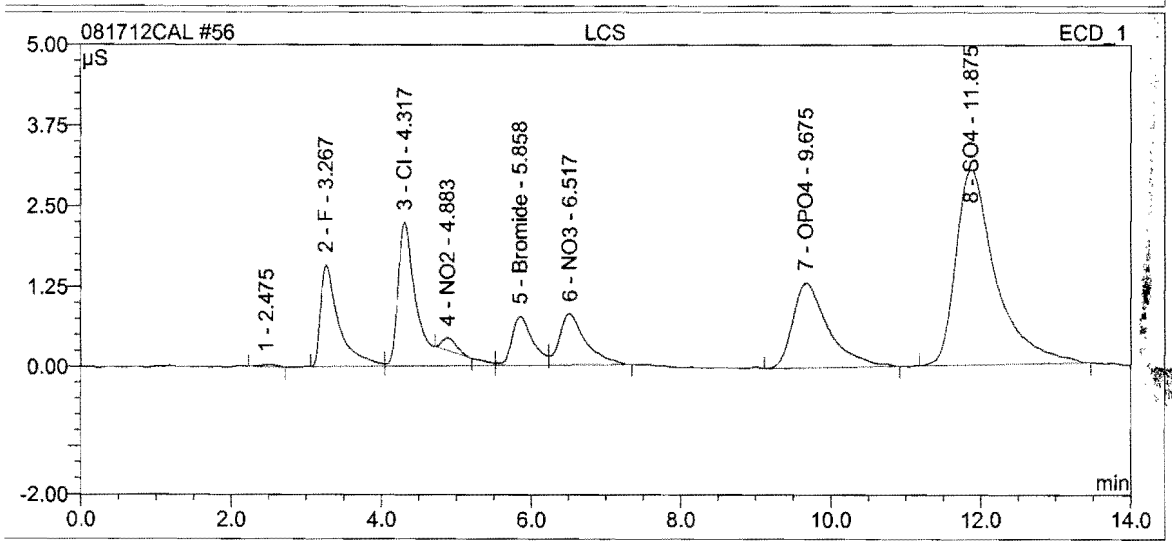


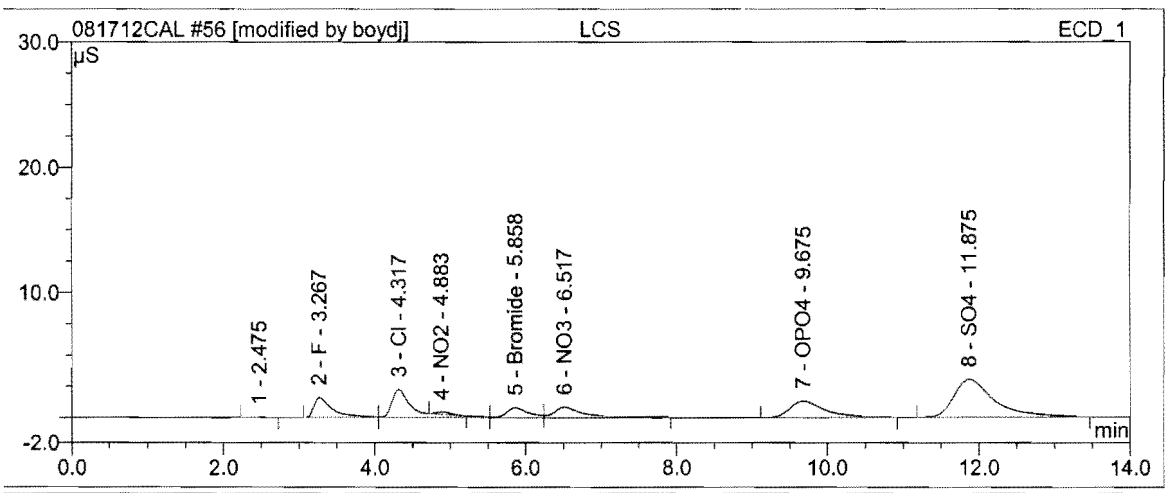


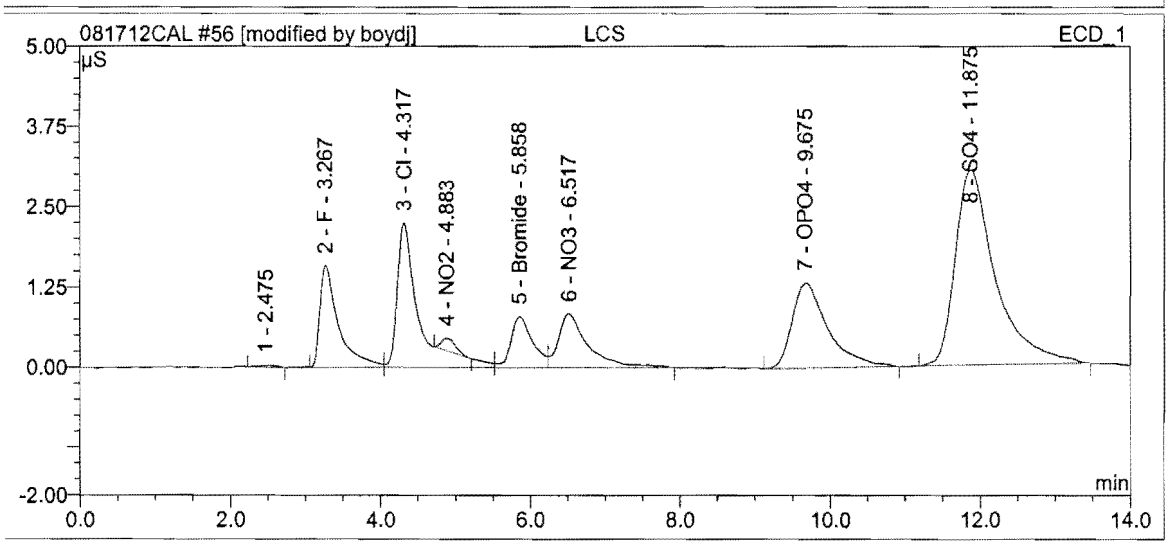
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**LCS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 02:38**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM *	0.454	1.582	942.8751
3	4.32	Cl	M *	0.756	2.242	1990.3686
4	4.88	NO2	Rd	0.046	0.198	144.7726
5	5.86	Bromide	M *	0.267	0.793	2039.6071
6	6.52	NO3	MB*	0.382	0.839	410.7521
7	9.68	OPO4	BMB	0.732	1.326	7629.2419
8	11.88	SO4	BMB	1.876	3.028	7587.1281
		TOTAL:		4.51	10.01	20744.75

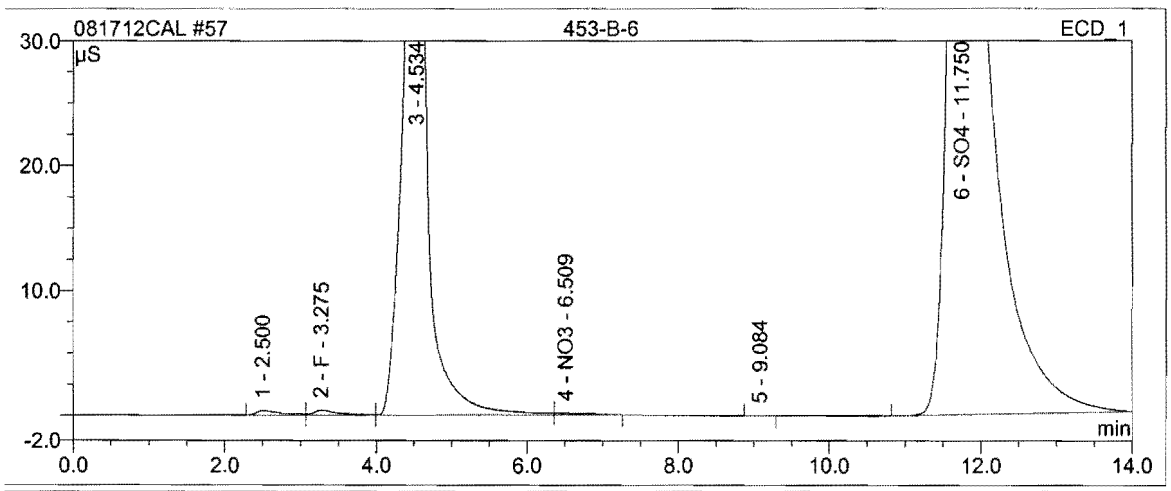


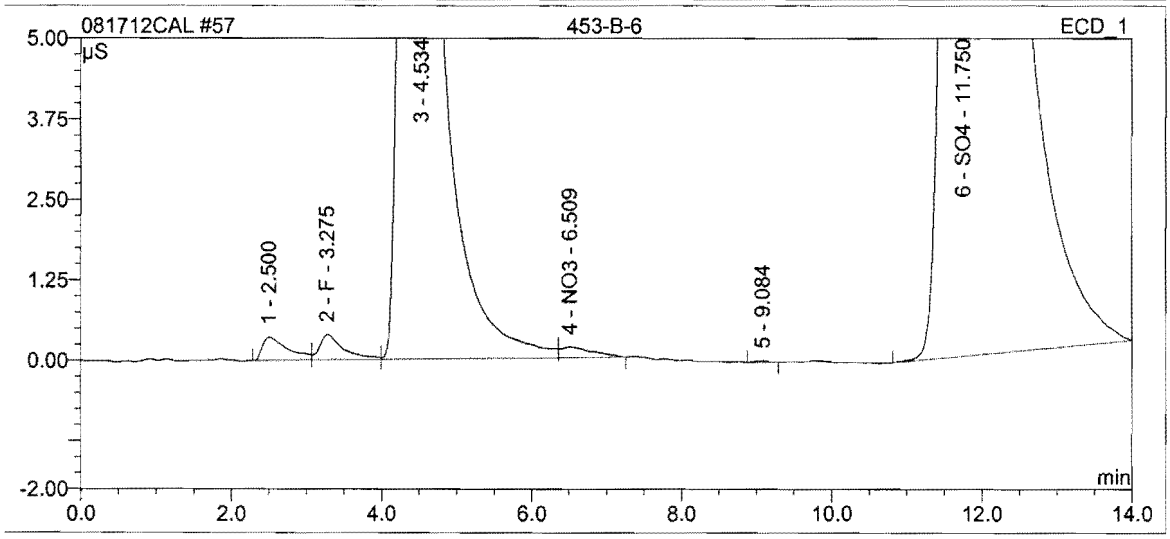


Integration Report - ECD_1

Sample Name:	**453-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 02:54**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.145	0.395	301.7524
4	6.51	NO3	MB	0.083	0.168	88.9477
6	11.75	SO4	BMB	38.804	63.354	156917.2348
		TOTAL:		39.03	63.92	157307.93

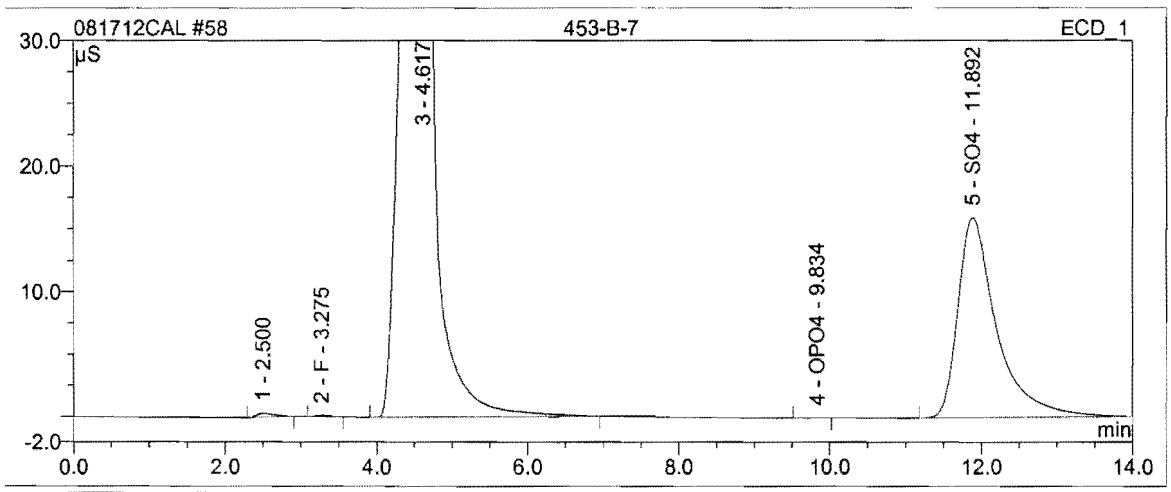


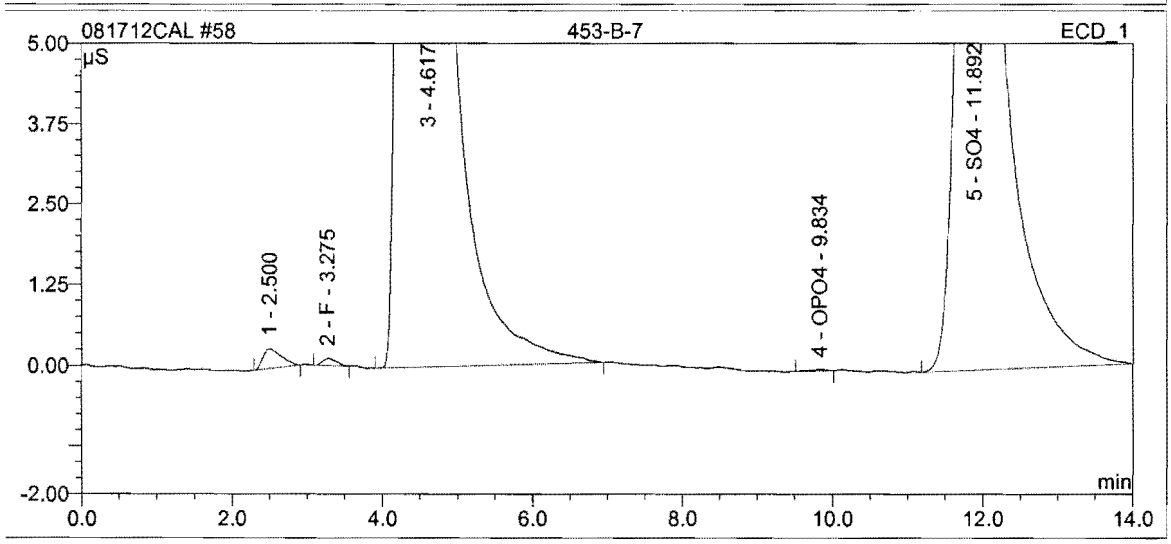


Integration Report - ECD_1

Sample Name:	**453-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 03:11**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	BMB	0.024	0.111	50.0898
4	9.83	OPO4	BMB	0.006	0.021	63.1903
5	11.89	SO4	BMB	9.491	15.953	38379.6573
		TOTAL:		9.52	16.08	38492.94





Integration Report - ECD_1

Sample Name:	**453-B-7 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 03:27**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	bM	0.810	2.647	1682.3045
4	5.95	Bromide	M	0.441	1.233	3377.8989
5	6.59	NO3	M	0.415	1.009	445.8183
6	9.78	OPO4	BMB	0.147	0.289	1537.3970
7	11.90	SO4	BMB	10.555	17.879	42681.1195
		TOTAL:		12.37	23.06	49724.54

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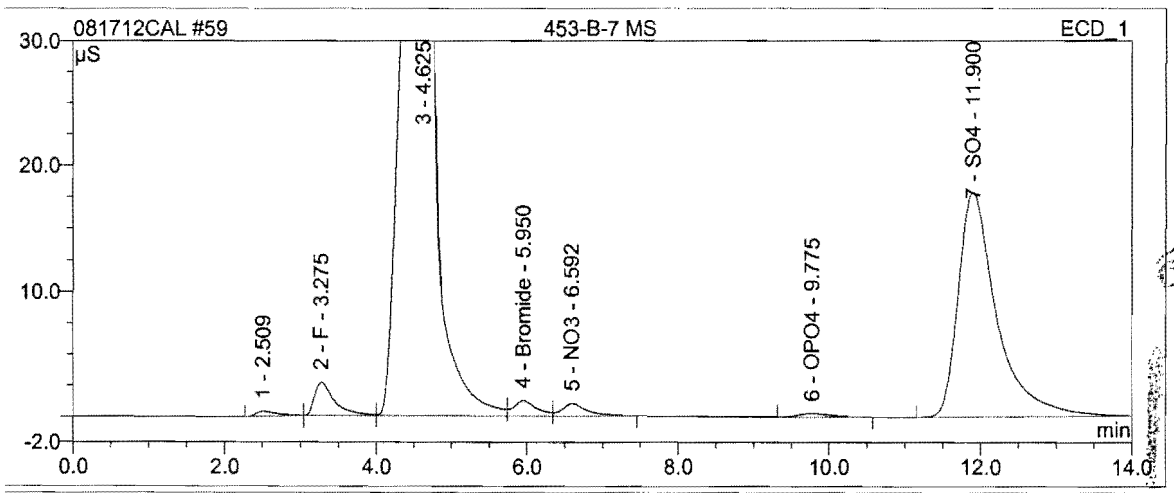
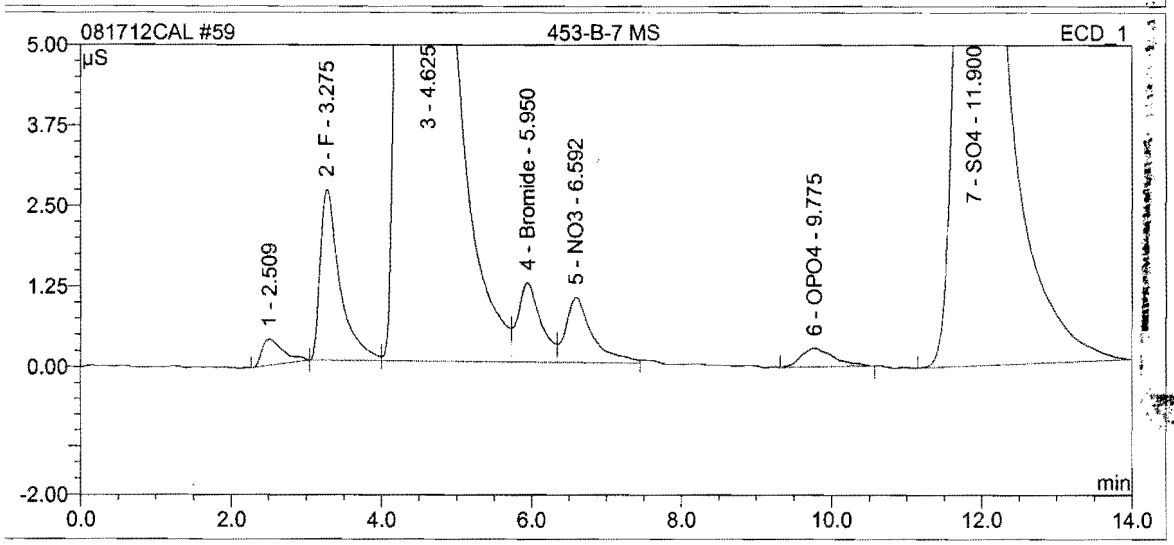


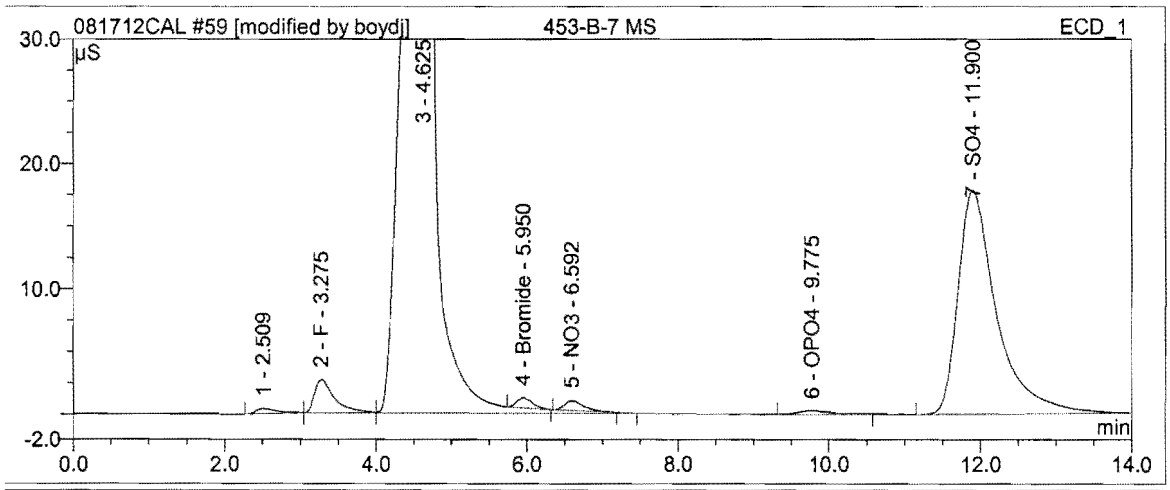


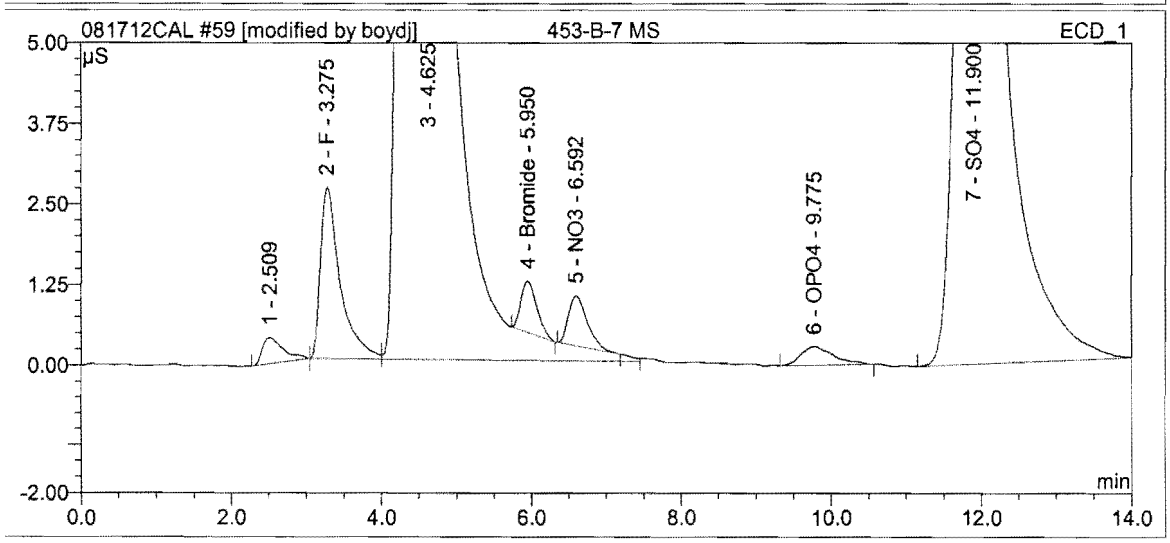
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Brrider
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**453-B-7 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 03:27**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	bM	0.810	2.647	1682.3045
4	5.95	Bromide	Rd*	0.197	0.796	1507.2454
5	6.59	NO3	Rd*	0.229	0.775	245.9062
6	9.78	OPO4	BMB	0.147	0.289	1537.3970
7	11.90	SO4	BMB	10.555	17.879	42681.1195
		TOTAL:		11.94	22.39	47653.97





Integration Report - ECD_1

Sample Name:	**453-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 03:43**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	M	0.141	0.358	292.7132
4	5.93	Bromide	MB	0.043	0.144	329.7451
5	6.61	NO3	BMB	0.024	0.084	25.6330
6	11.94	SO4	BMB	6.628	11.106	26802.5945
TOTAL:				6.84	11.69	27450.69

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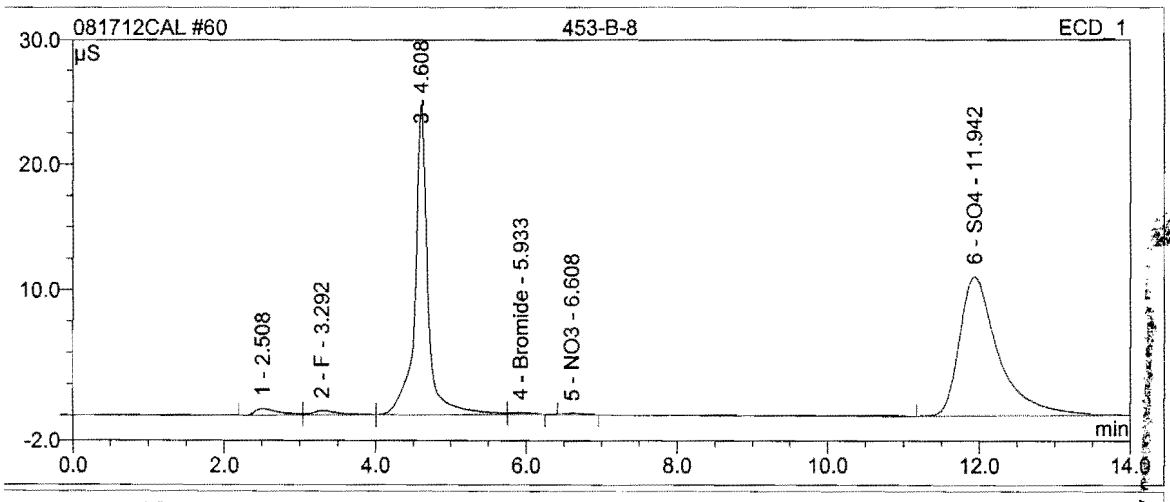
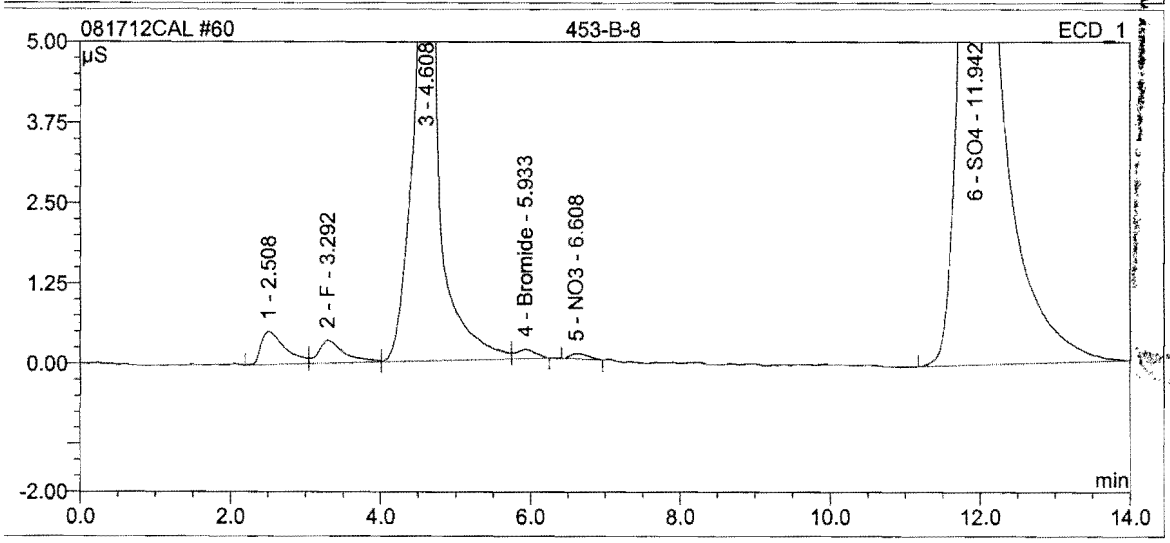
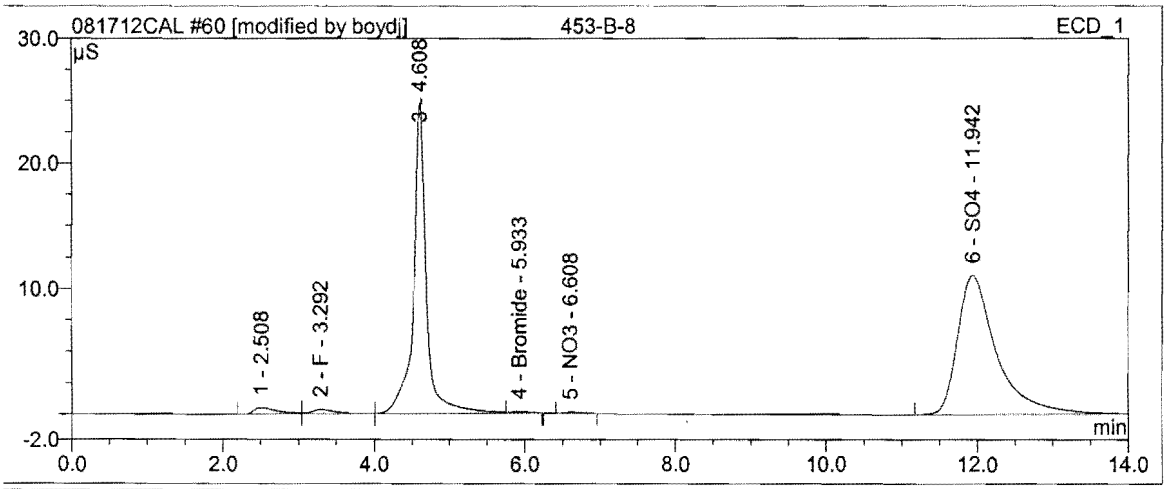


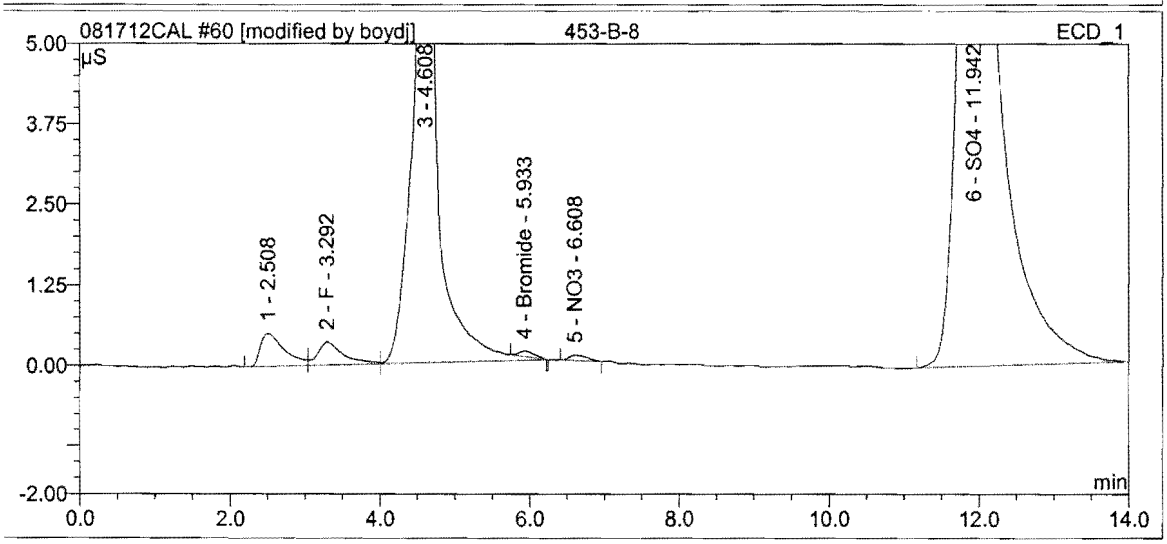


Integration Report - ECD_1

Sample Name:	**453-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 03:43**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.29	F	M	0.141	0.358	292.7132
4	5.93	Bromide	Rd*	0.021	0.089	163.6849
5	6.61	NO3	BMB	0.024	0.084	25.6330
6	11.94	SO4	BMB	6.628	11.106	26802.5945
		TOTAL:		6.81	11.64	27284.63

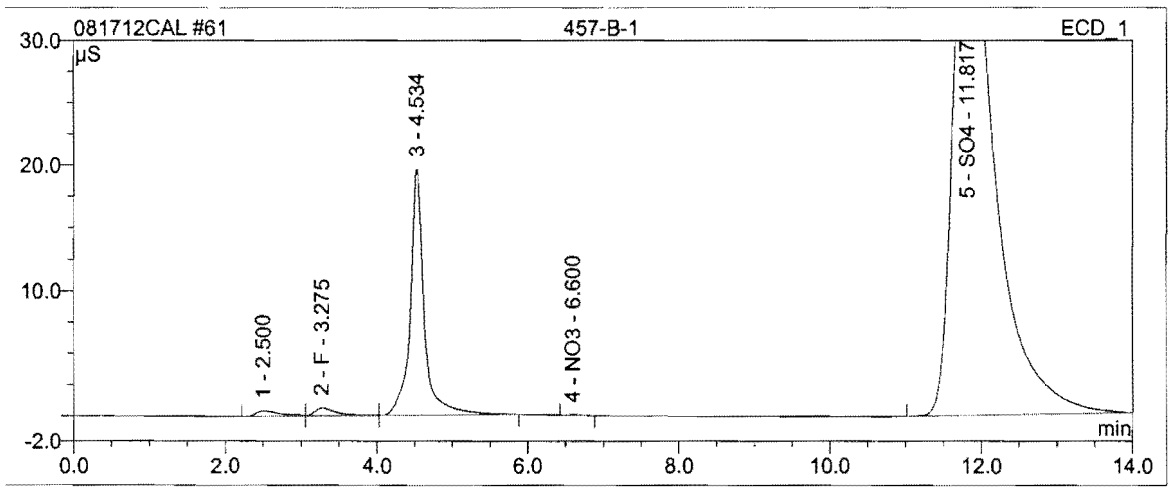


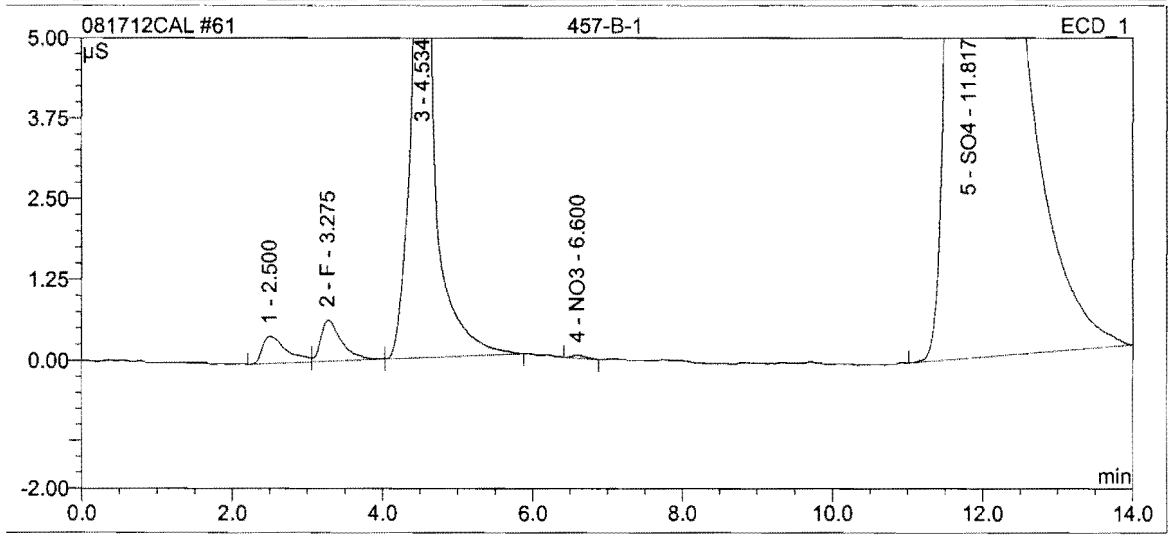


Integration Report - ECD_1

Sample Name:	**457-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:00**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.203	0.635	422.2626
4	6.60	NO3	BMB	0.010	0.049	10.6756
5	11.82	SO4	BMB	27.866	46.552	112687.7535
TOTAL:				28.08	47.24	113120.69





Integration Report - ECD_1

Sample Name:	**457-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:16**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.218	0.575	453.4167
4	5.96	Bromide	MB	0.039	0.094	296.6083
5	11.98	SO4	BMB	0.939	1.546	3796.3648
		TOTAL:		1.20	2.22	4546.39

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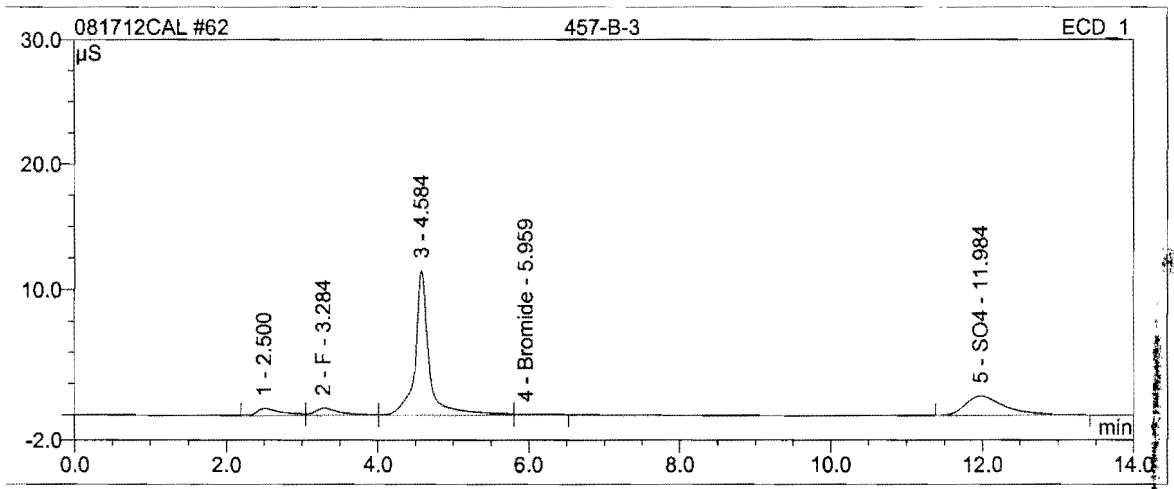
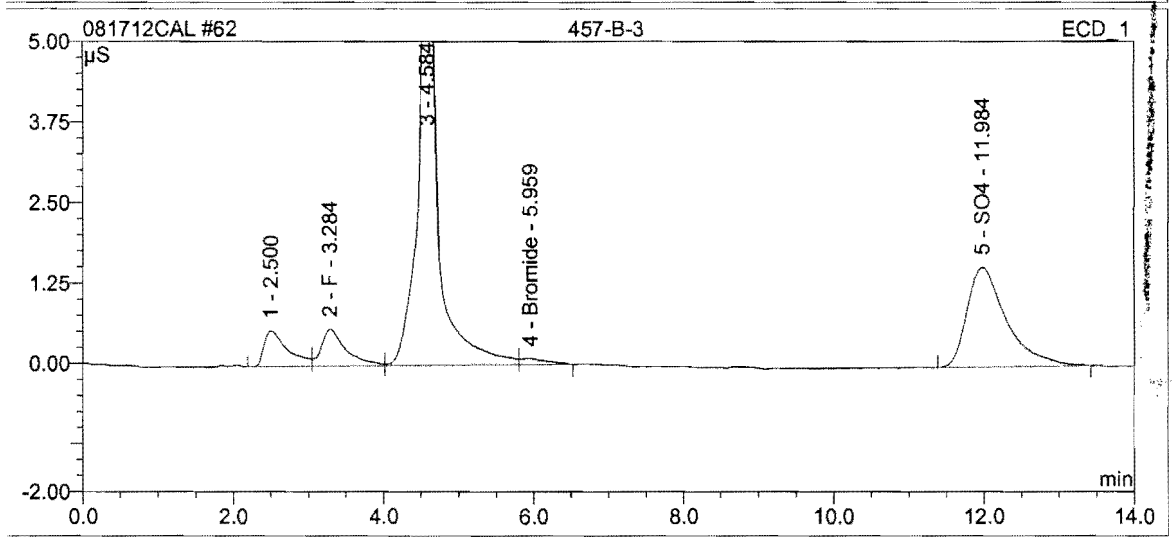
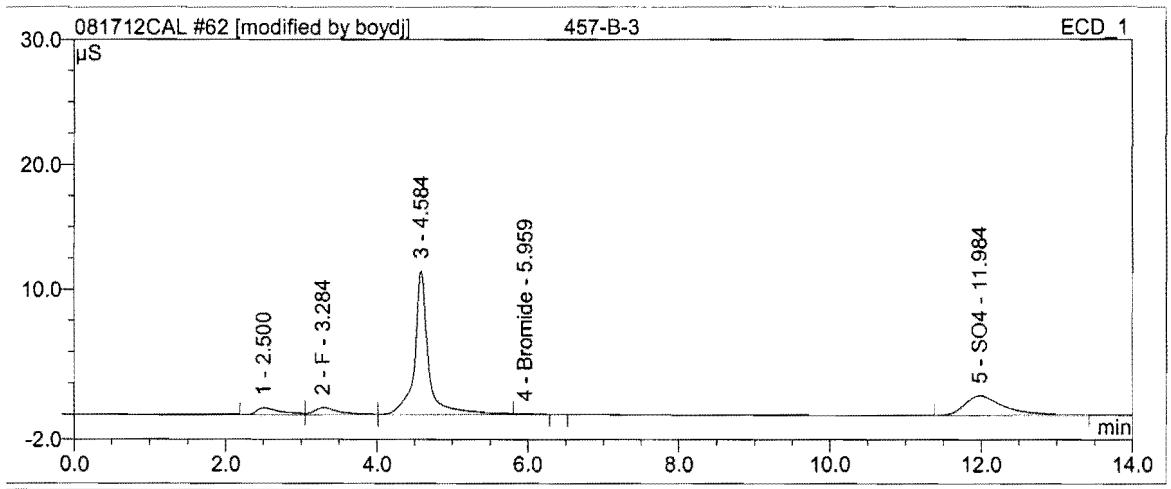


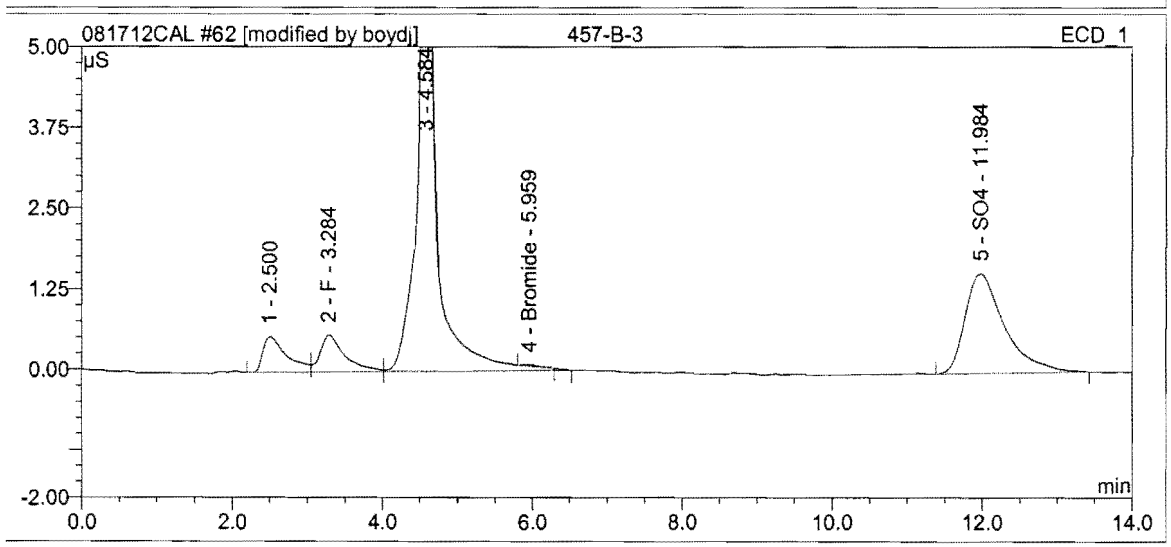


Integration Report - ECD_1

Sample Name:	**457-B-3**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:16**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.218	0.575	453.4167
4	5.96	Bromide	Rd*	0.007	0.027	51.6922
5	11.98	SO4	BMB	0.939	1.546	3796.3648
		TOTAL:		1.16	2.15	4301.47





Integration Report - ECD_1

Sample Name:	**457-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:33**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	0.099	0.237	206.1304
3	4.65	NO2	M	17.570	79.290	55757.3237
4	5.97	Bromide	MB	0.186	0.395	1425.5634
5	6.59	NO3	Rd	0.003	0.025	3.5579
6	11.83	SO4	BMB	31.154	51.865	125984.5668
		TOTAL:		49.01	131.81	183377.14

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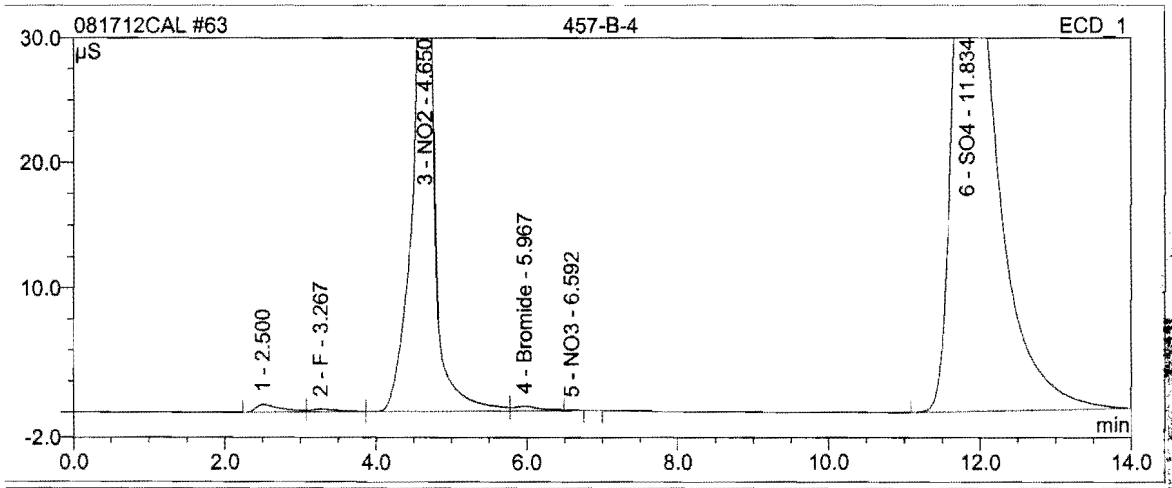
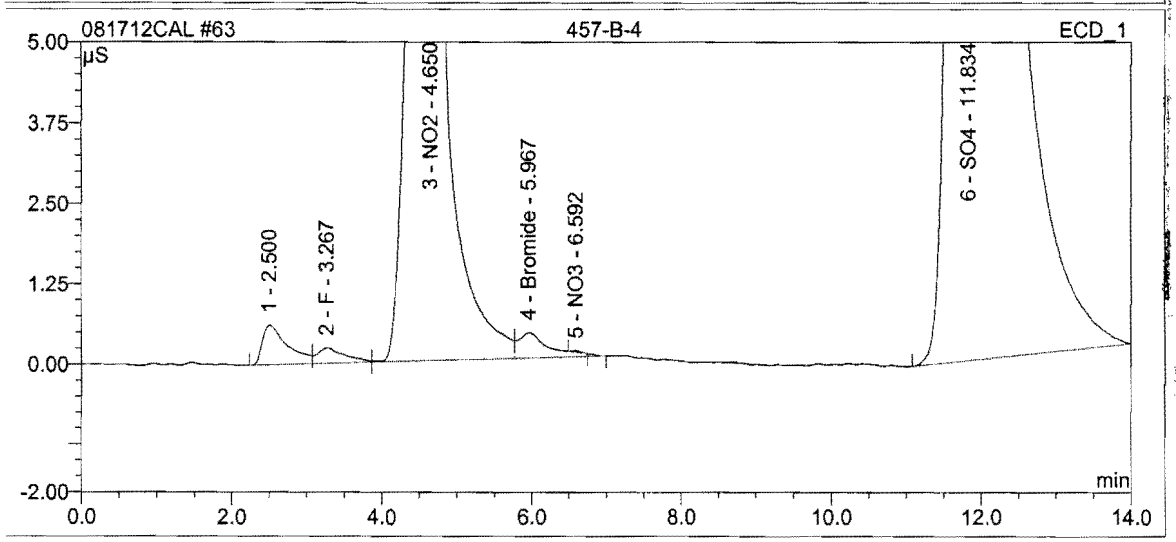
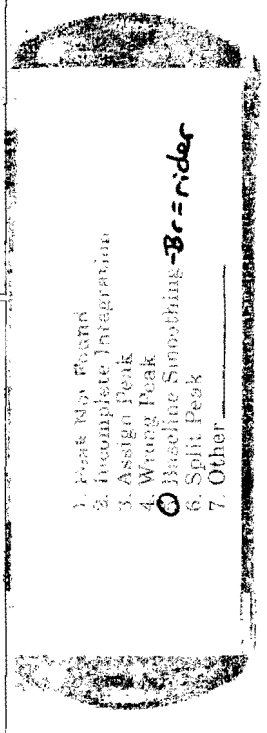


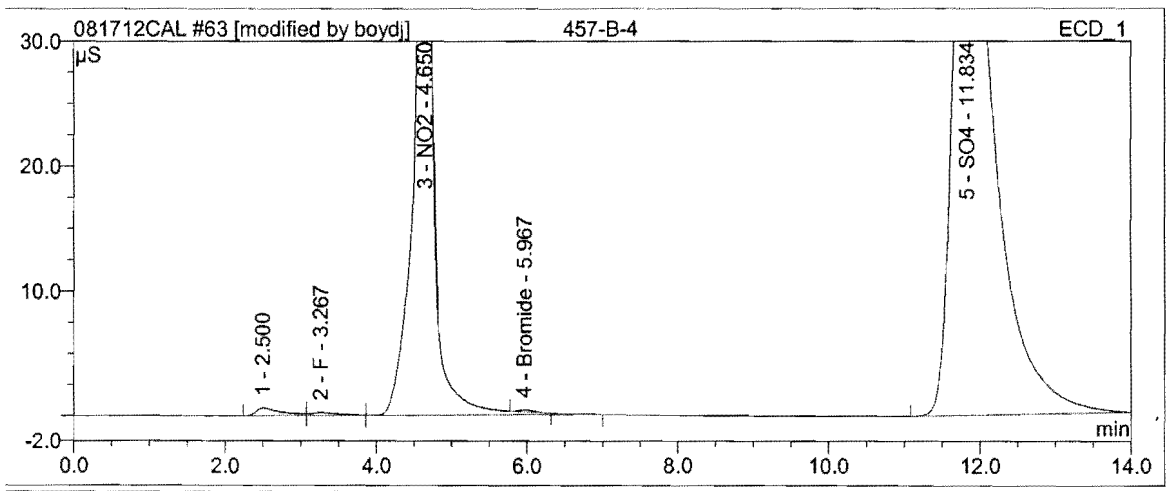


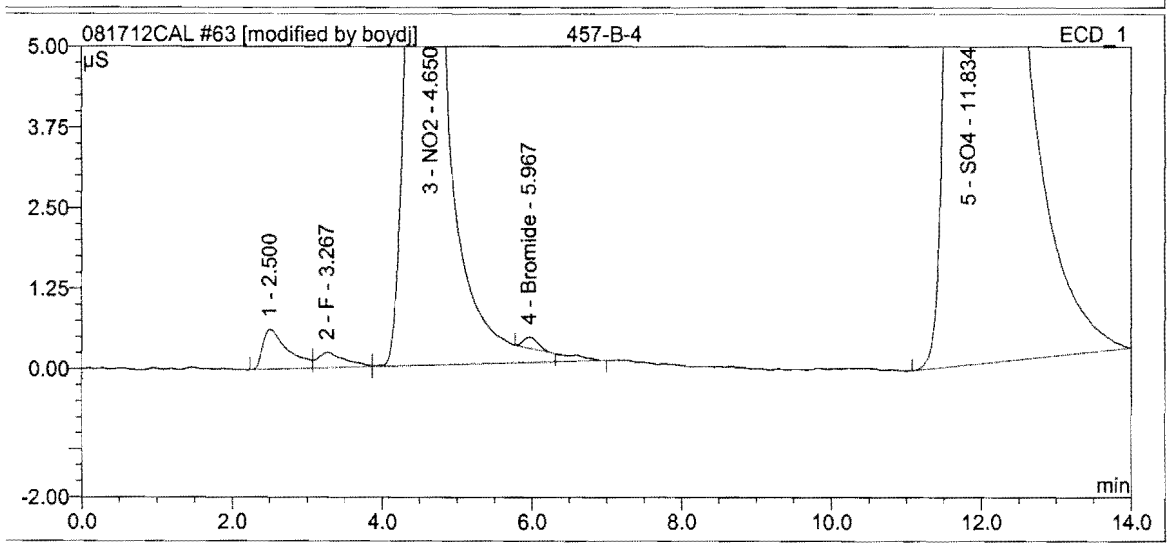


Integration Report - ECD_1

Sample Name:	**457-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:33**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	0.099	0.237	206.1304
3	4.65	NO2	MB*	17.720	79.290	56232.3845
4	5.97	Bromide	Rd*	0.040	0.173	305.3762
5	11.83	SO4	BMB	31.154	51.865	125984.5668
		TOTAL:		49.01	131.57	182728.46

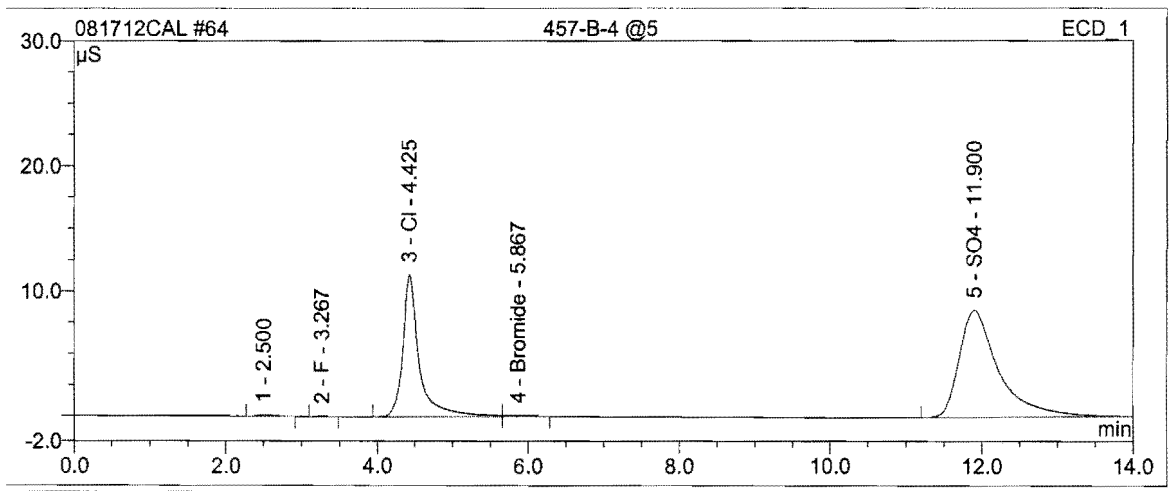


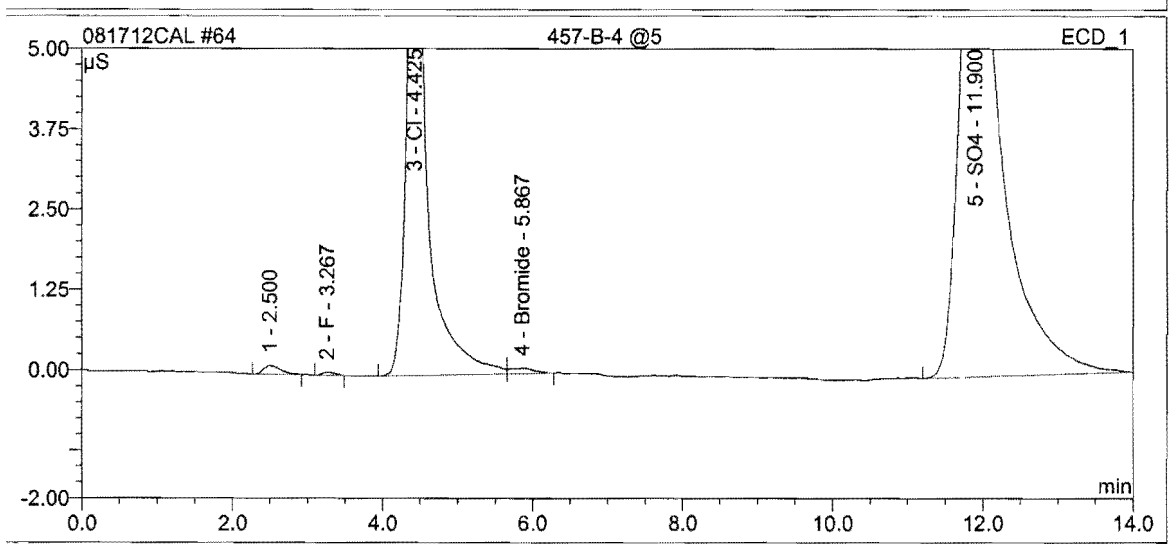


Integration Report - ECD_1

Sample Name:	**457-B-4 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 04:49**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BMB	0.010	0.048	19.9888
3	4.43	Cl	BM	2.886	11.376	7600.0523
4	5.87	Bromide	MB	0.032	0.085	241.4591
5	11.90	SO4	BMB	5.204	8.557	21042.9829
TOTAL:				8.13	20.07	28904.48





Integration Report - ECD_1

Sample Name:	**457-B-4 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:05**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.943	2.336	1958.1462
3	4.72	NO2	M	18.663	89.086	59227.1228
4	6.01	Bromide	M	0.474	1.426	3629.7085
5	6.64	NO3	MB	0.428	1.048	460.0732
6	9.81	OPO4	BMB	0.065	0.147	681.7299
7	11.89	SO4	BMB	32.325	53.864	130719.5512
		TOTAL:		52.90	147.91	196676.33

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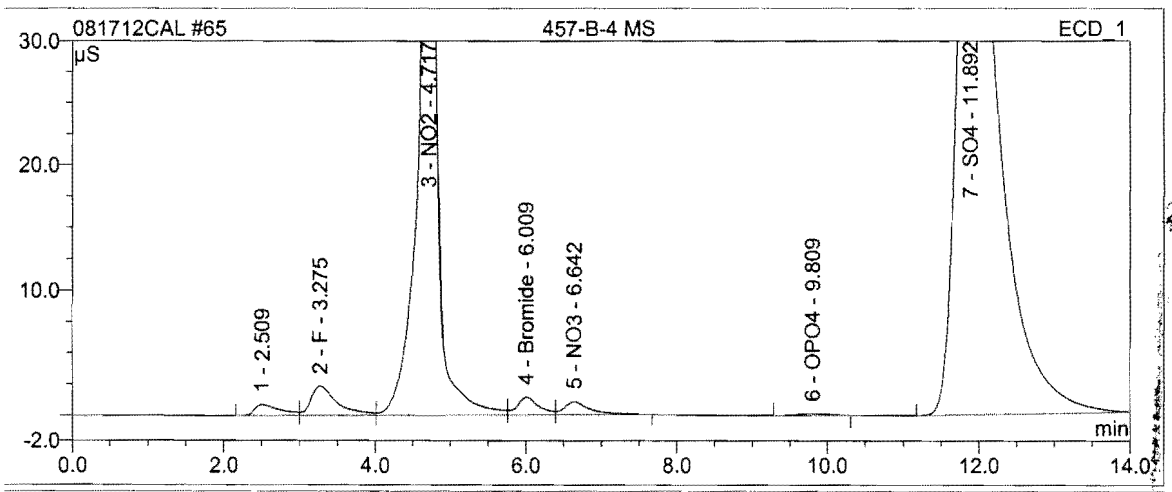
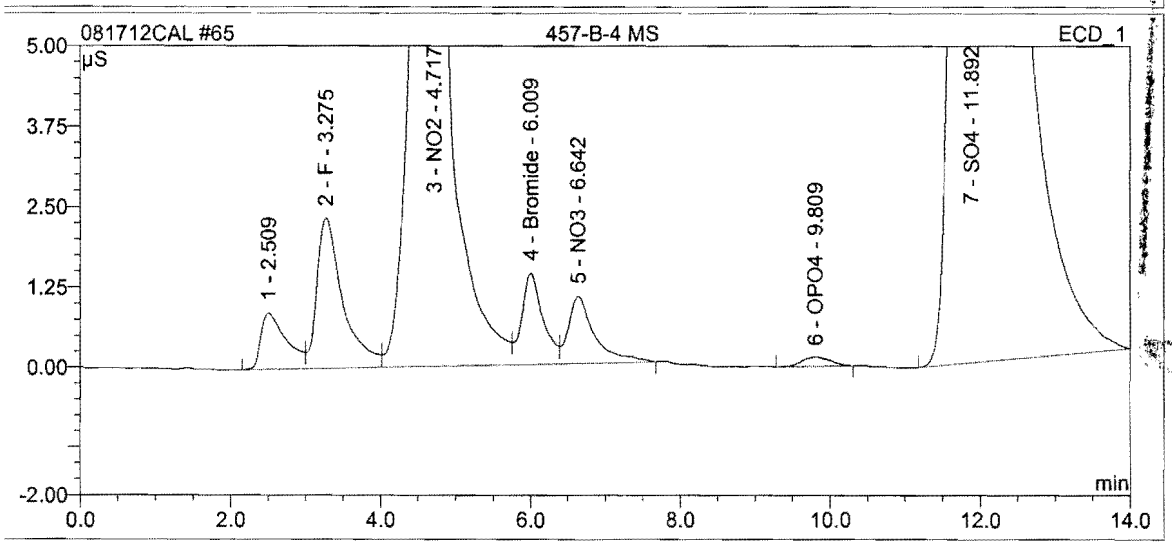
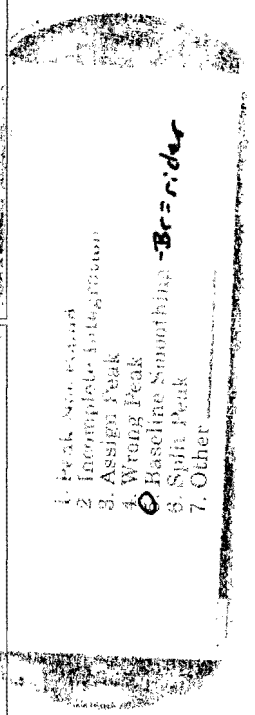


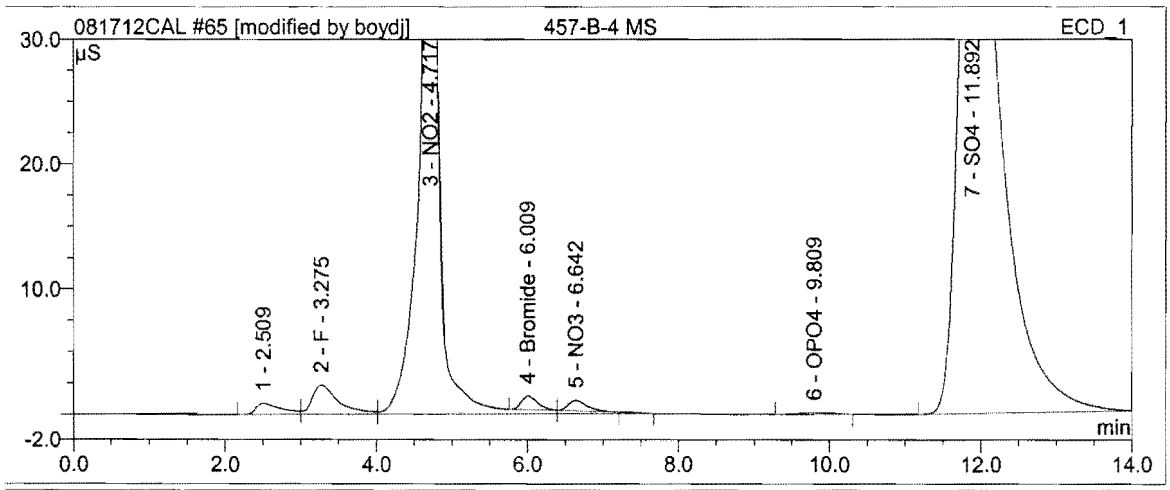


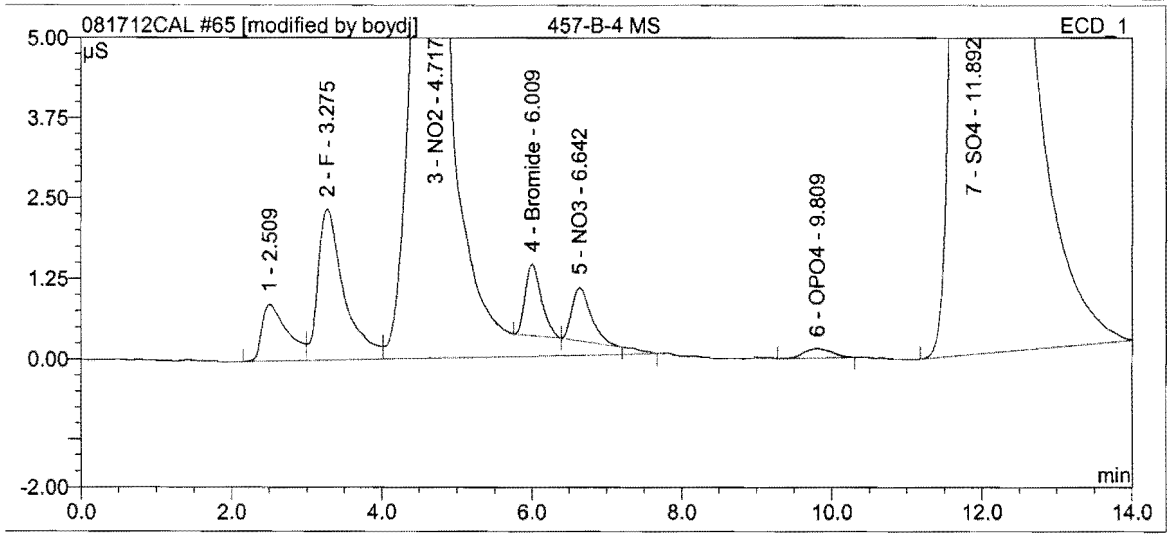


Integration Report - ECD_1

Sample Name:	**457-B-4 MS**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:05**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.943	2.336	1958.1462
3	4.72	NO2	MB*	19.045	89.086	60438.9931
4	6.01	Bromide	Rd*	0.276	1.105	2114.3380
5	6.64	NO3	Rd*	0.245	0.824	262.6298
6	9.81	OPO4	BMB	0.065	0.147	681.7299
7	11.89	SO4	BMB	32.325	53.864	130719.5512
		TOTAL:		52.90	147.36	196175.39

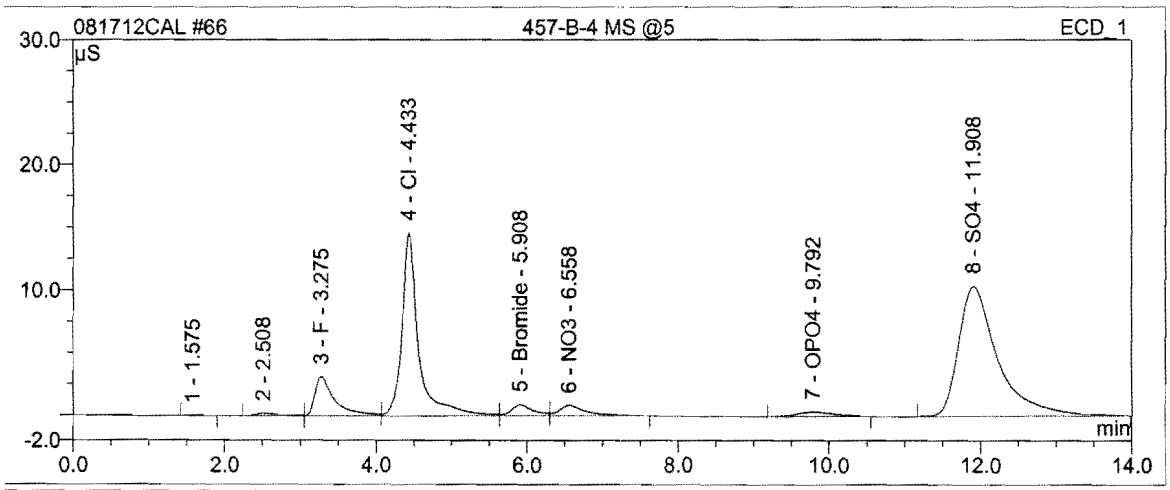


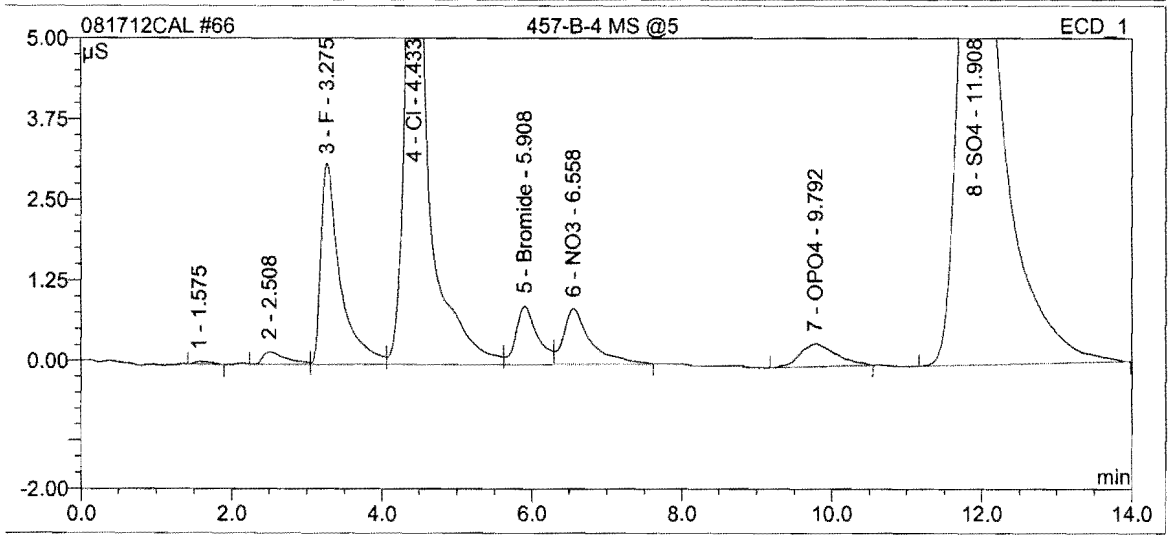


Integration Report - ECD_1

Sample Name:	**457-B-4 MS @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:22**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.28	F	M	0.935	3.123	1941.3975
4	4.43	Cl	M	3.730	14.632	9822.5575
5	5.91	Bromide	M	0.303	0.905	2319.2733
6	6.56	NO3	MB	0.364	0.866	390.9819
7	9.79	OPO4	BMB	0.205	0.362	2137.9766
8	11.91	SO4	BMB	6.247	10.385	25262.6607
		TOTAL:		11.78	30.27	41874.85





Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:38**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM	0.429	1.562	891.4918
2	4.32	Cl	M	1.305	4.344	3437.8636
3	4.88	NO2	Rd	0.035	0.164	111.1666
4	5.87	Bromide	M	0.222	0.739	1701.4760
5	6.52	NO3	MB	0.277	0.765	297.3837
6	9.69	OPO4	BMB	0.732	1.339	7635.9172
7	11.90	SO4	BMB	1.929	3.051	7799.6256
TOTAL:				4.93	11.96	21874.92

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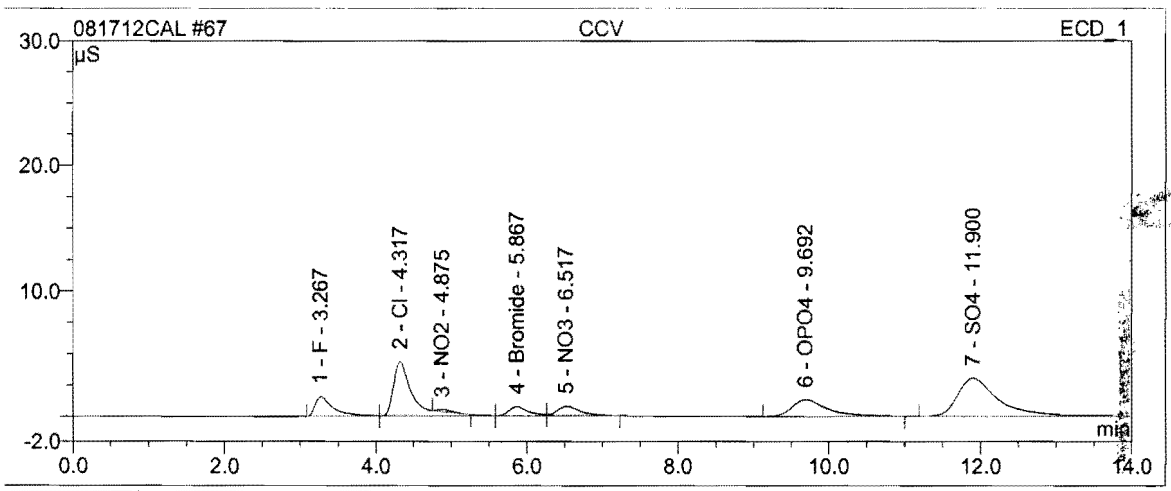
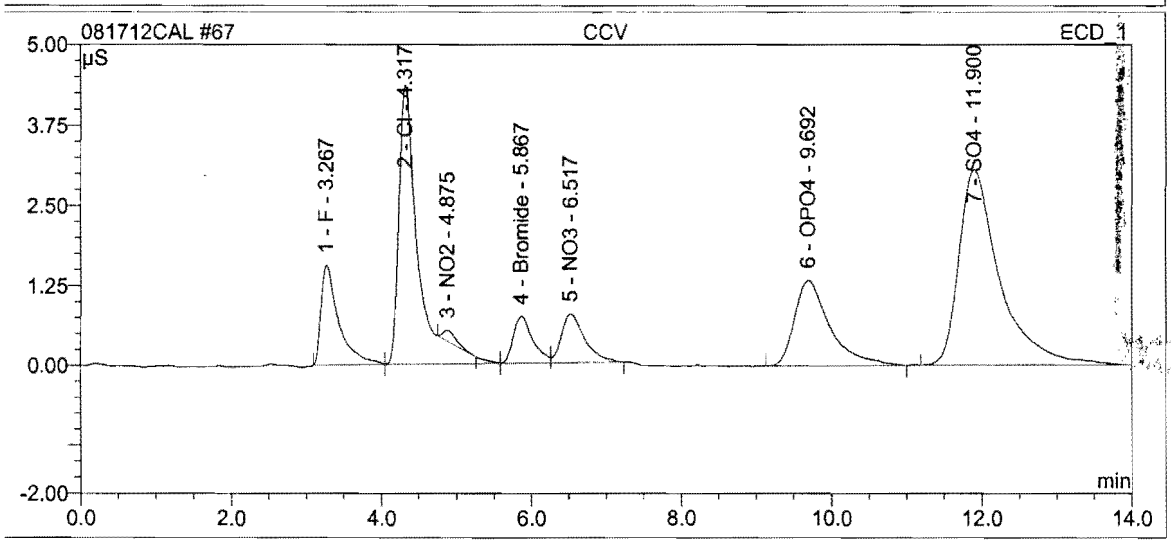


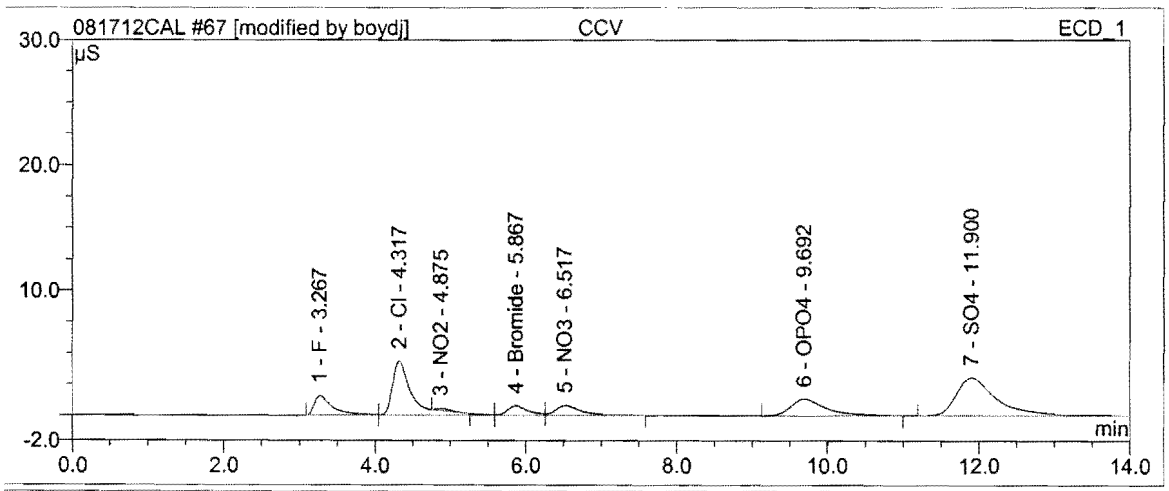


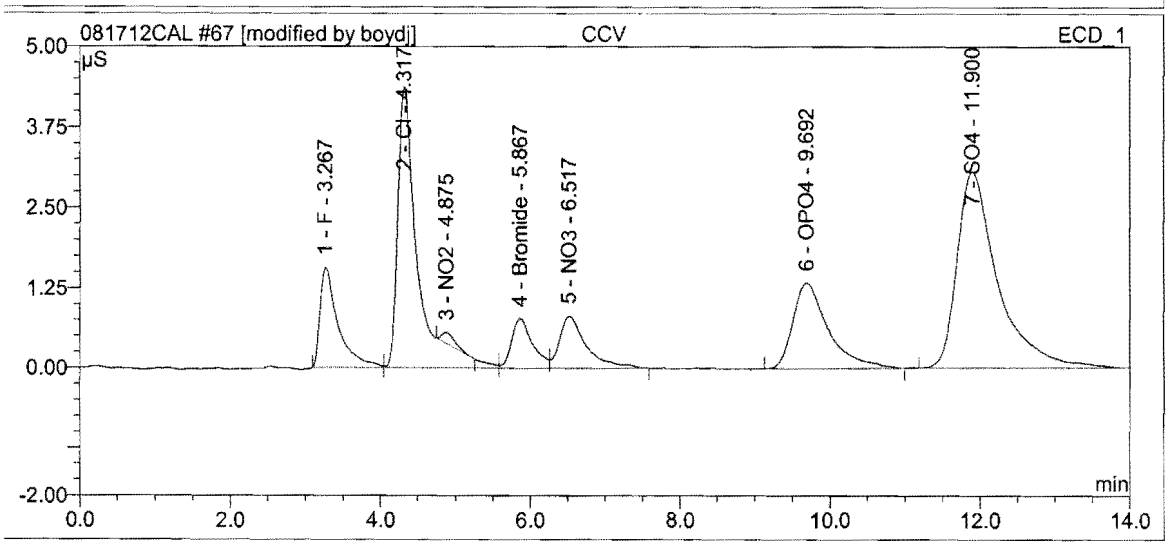
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - NO3 delimiter pulled right
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:38**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM *	0.435	1.564	903.9657
2	4.32	Cl	M *	1.340	4.360	3529.0609
3	4.88	NO2	Rd	0.035	0.164	111.1666
4	5.87	Bromide	M *	0.247	0.775	1892.8419
5	6.52	NO3	MB*	0.334	0.810	358.2044
6	9.69	OPO4	BMB	0.732	1.339	7635.9172
7	11.90	SO4	BMB	1.929	3.051	7799.6256
		TOTAL:		5.05	12.06	22230.78

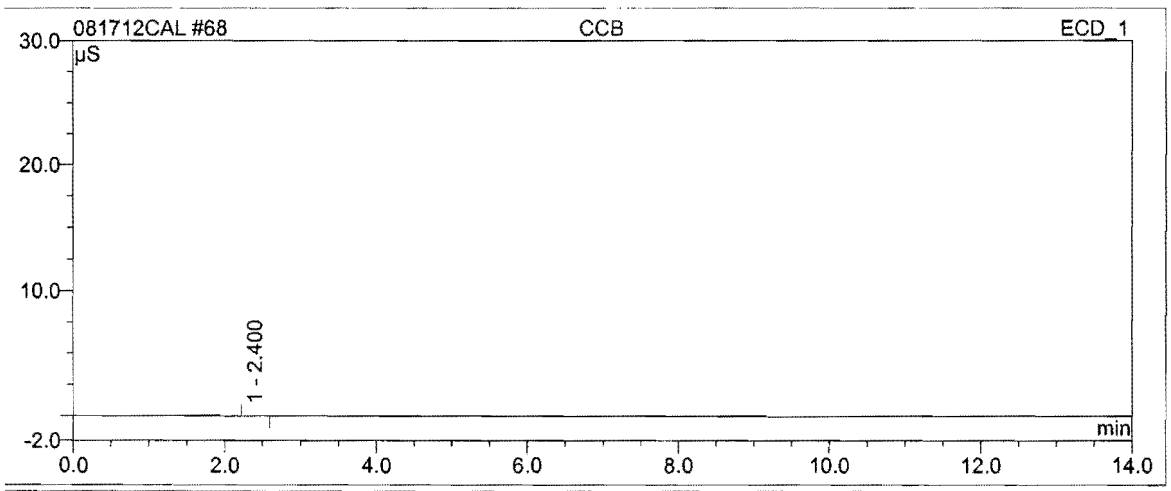


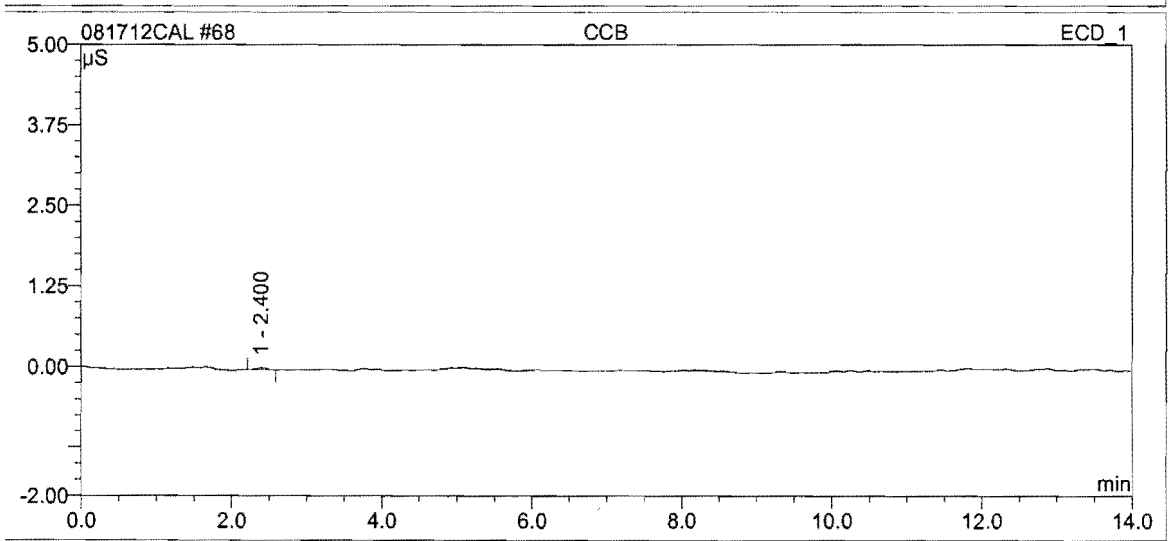


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 05:55**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**457-B-4 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 06:11**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.832	2.192	1727.0328
3	4.68	NO2	M	18.671	85.707	59252.8709
4	5.98	Bromide	M	0.481	1.444	3680.0495
5	6.62	NO3	MB	0.495	1.104	532.0712
6	11.83	SO4	BMB	32.029	53.181	129522.1639
		TOTAL:		52.51	143.63	194714.19

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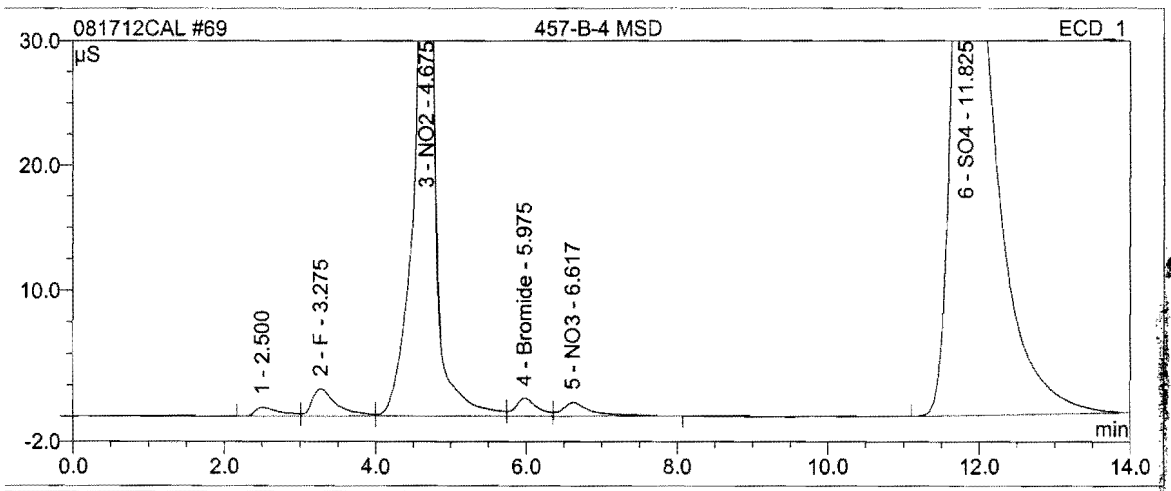
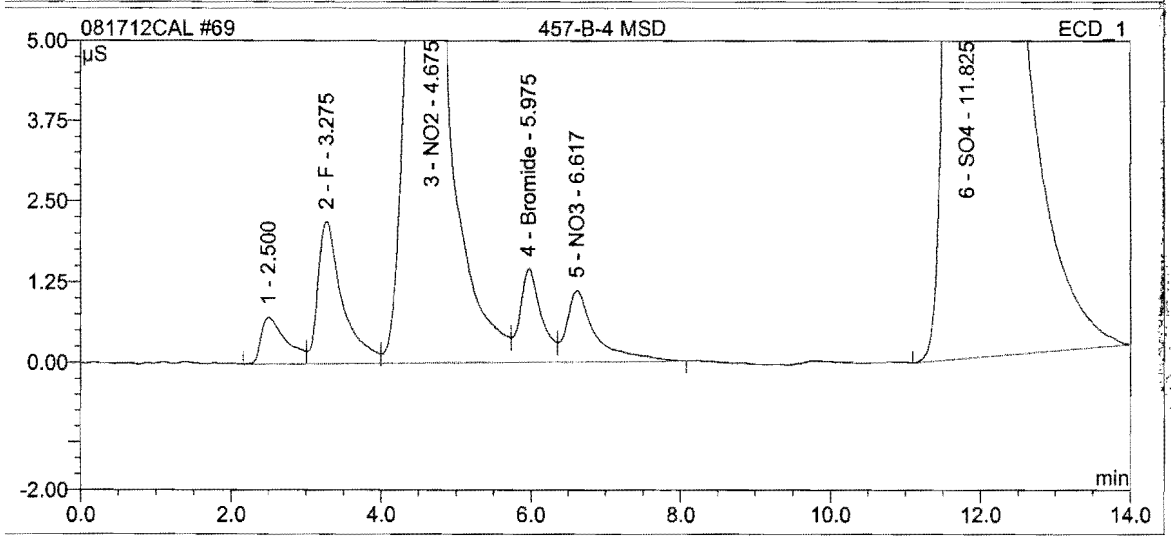
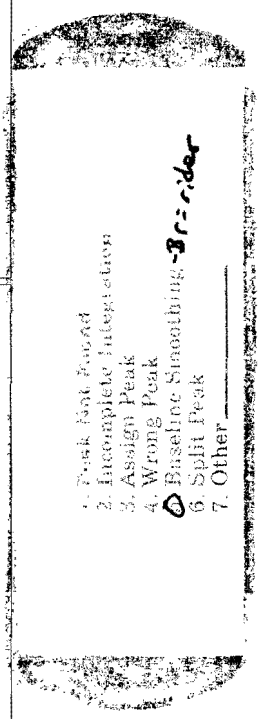


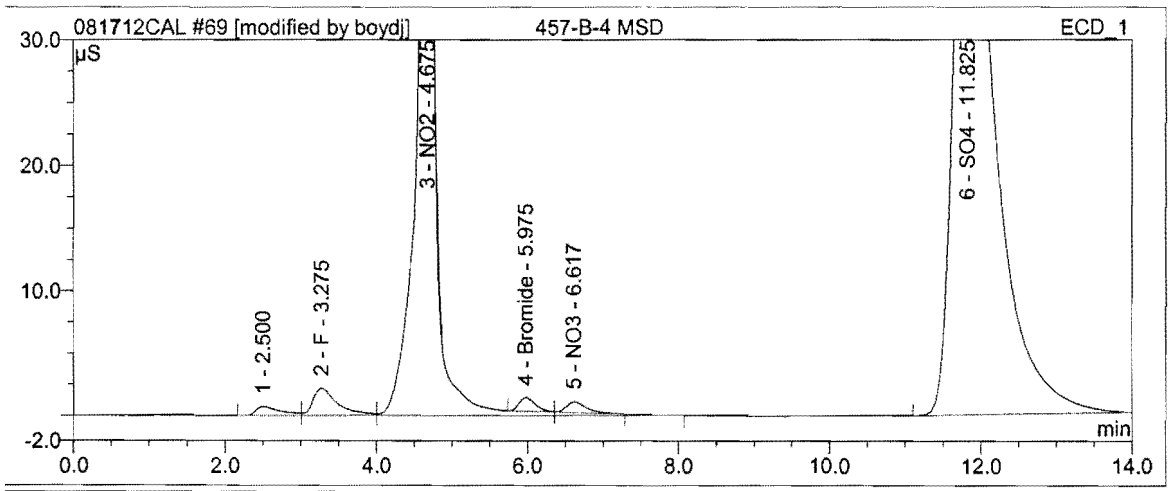


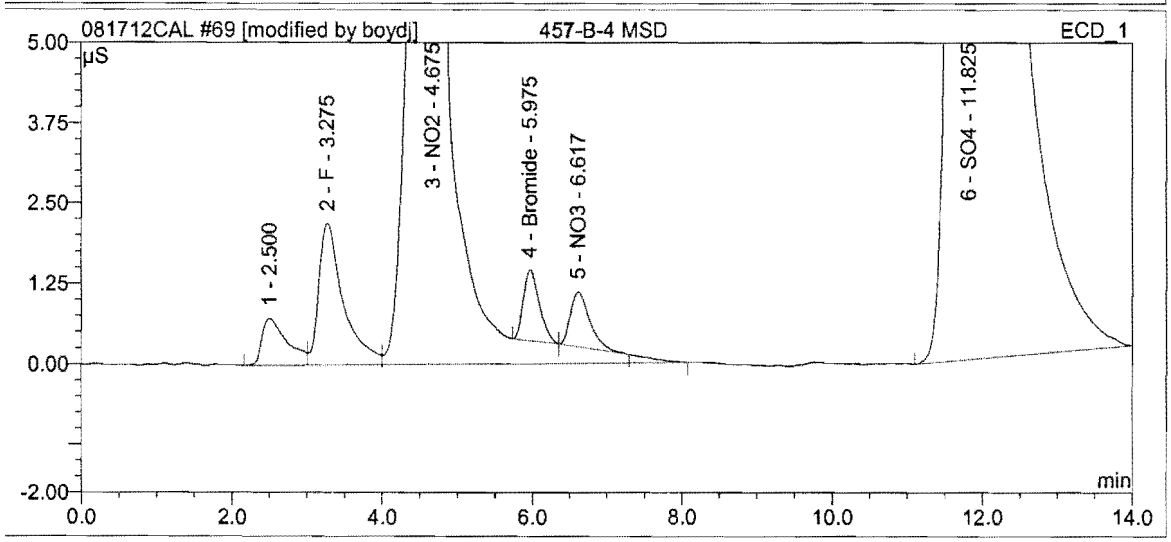


Integration Report - ECD_1

Sample Name:	**457-B-4 MSD**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 06:11**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.832	2.192	1727.0328
3	4.68	NO2	MB*	19.120	85.707	60677.0382
4	5.98	Bromide	Rd*	0.271	1.093	2071.2065
5	6.62	NO3	Rd*	0.257	0.853	275.8996
6	11.83	SO4	BMB	32.029	53.181	129522.1639
		TOTAL:		52.51	143.03	194273.34

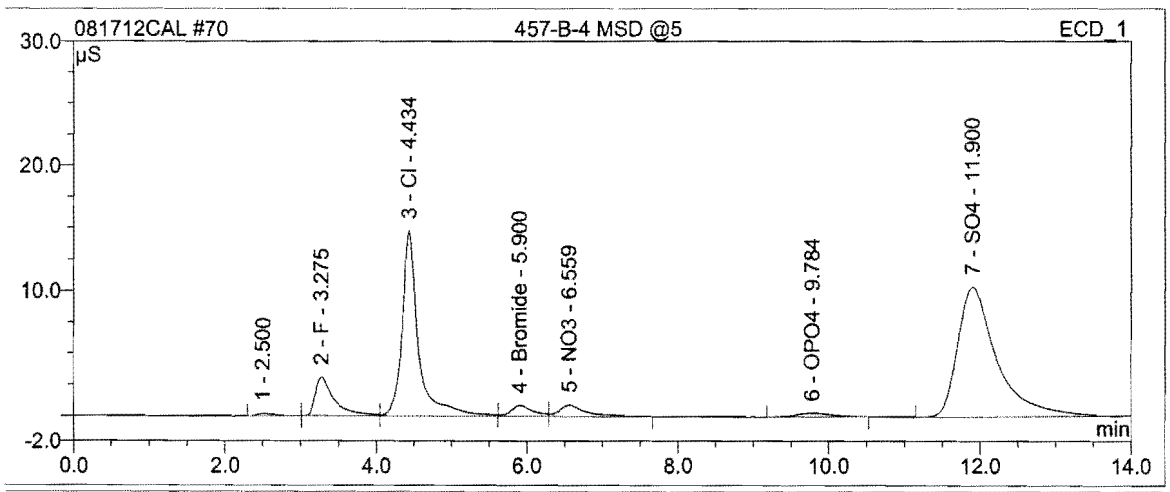


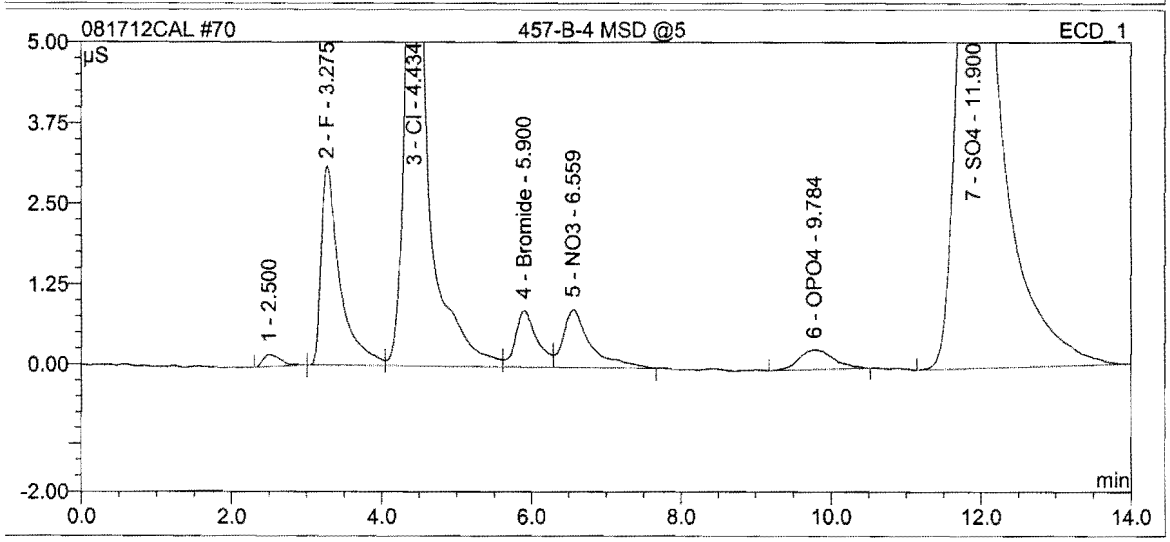


Integration Report - ECD_1

Sample Name:	**457-B-4 MSD @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 06:27**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	bM	0.896	3.093	1859.5369
3	4.43	Cl	M	3.721	14.753	9797.8587
4	5.90	Bromide	M	0.295	0.879	2255.4436
5	6.56	NO3	MB	0.382	0.904	410.3693
6	9.78	OPO4	BMB	0.167	0.305	1743.4695
7	11.90	SO4	BMB	6.258	10.379	25304.9697
		TOTAL:		11.72	30.31	41371.65





Integration Report - ECD_1

Sample Name:	**457-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 06:44**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	Rd	0.046	0.139	95.5394
3	4.79	NO2	M	70.711	207.674	224396.2157
4	6.01	Bromide	MB	0.563	1.046	4306.3924
5	12.04	SO4	BMB	0.093	0.172	374.5976
		TOTAL:		71.41	209.03	229172.75

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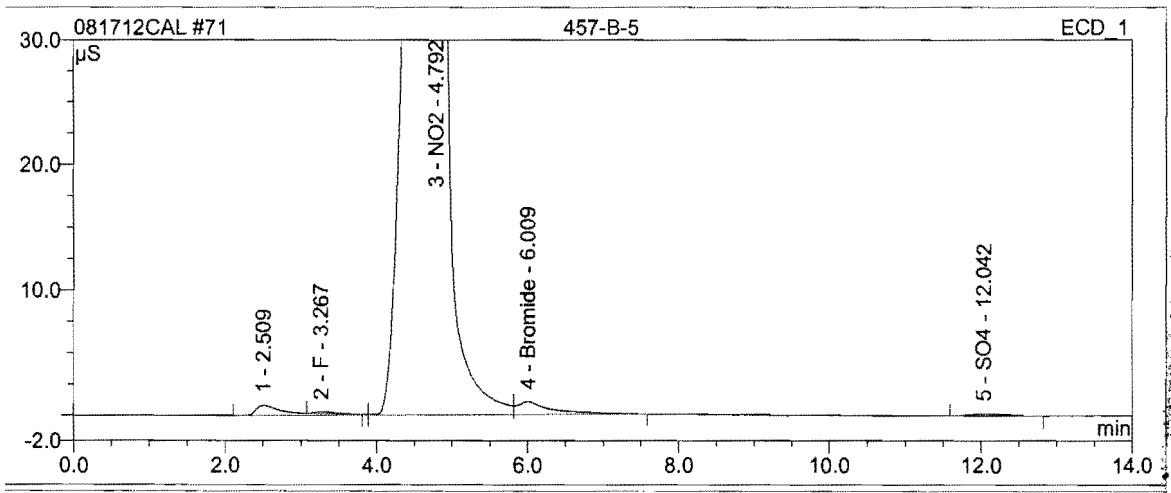
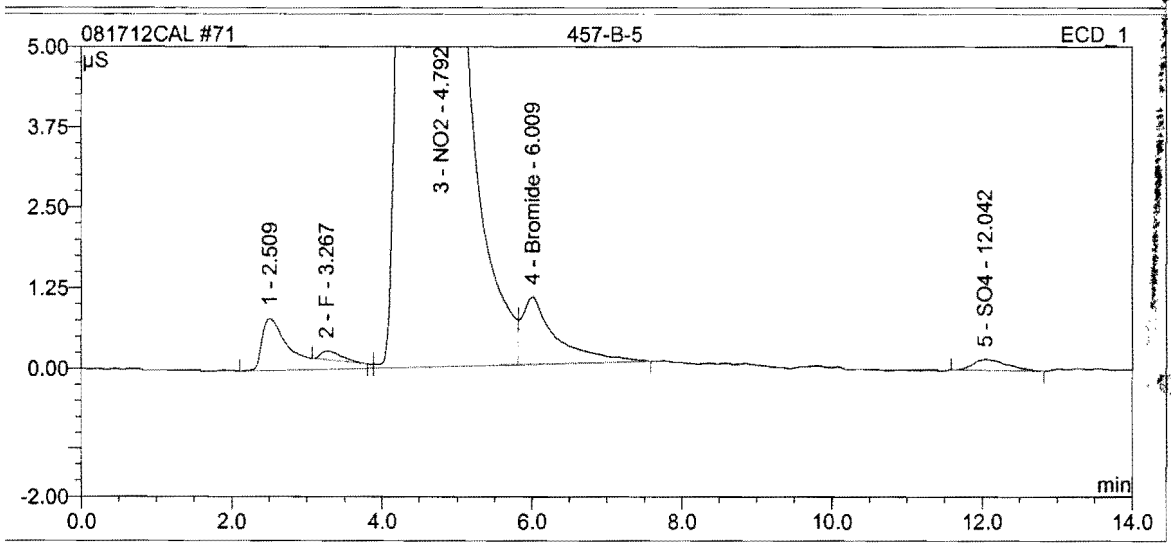
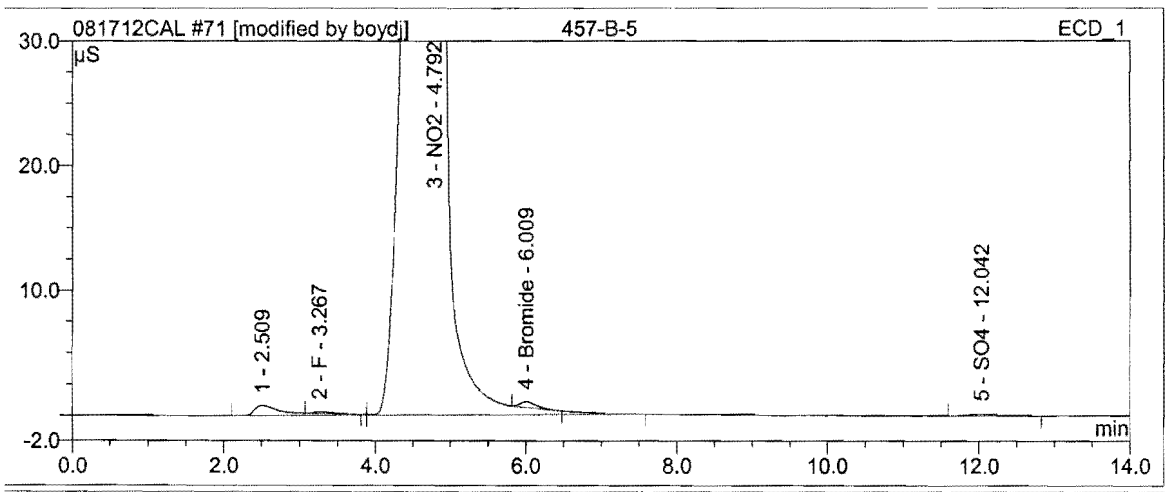


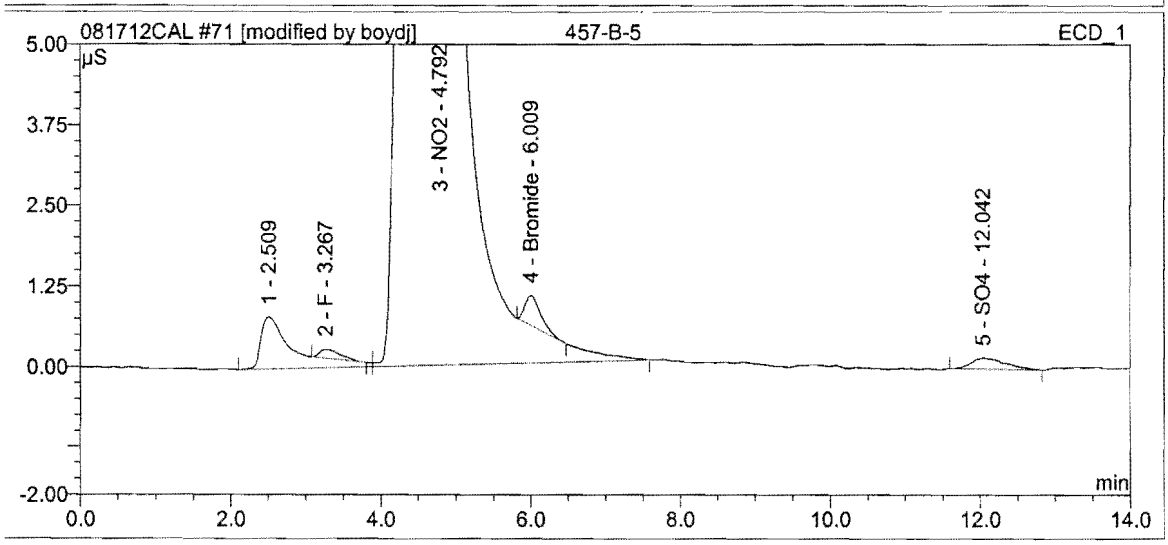


Integration Report - ECD_1

Sample Name:	**457-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 06:44**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	Rd	0.046	0.139	95.5394
3	4.79	NO2	MB*	71.158	207.674	225816.6661
4	6.01	Bromide	Rd*	0.115	0.467	881.3702
5	12.04	SO4	BMB	0.093	0.172	374.5976
		TOTAL:		71.41	208.45	227168.17

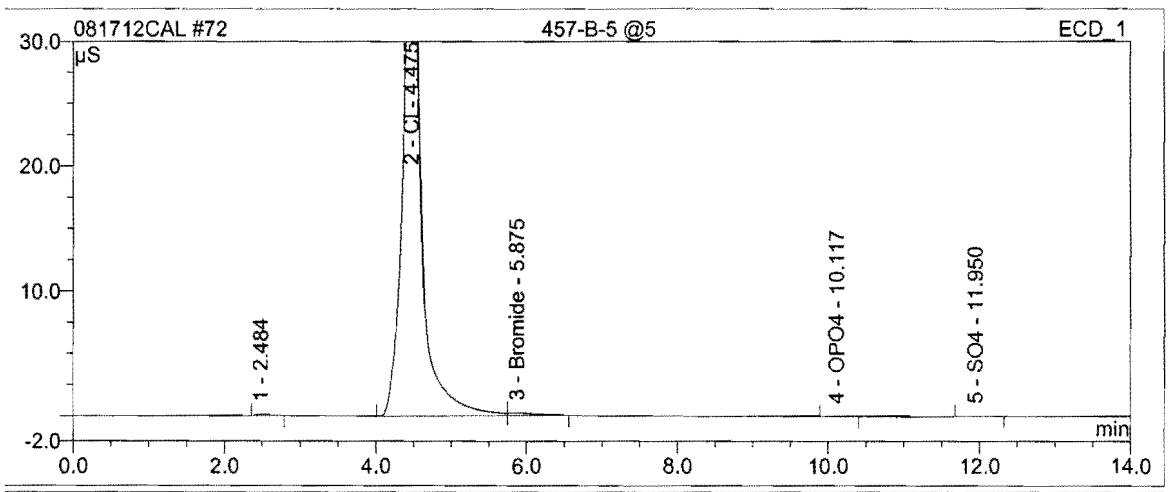


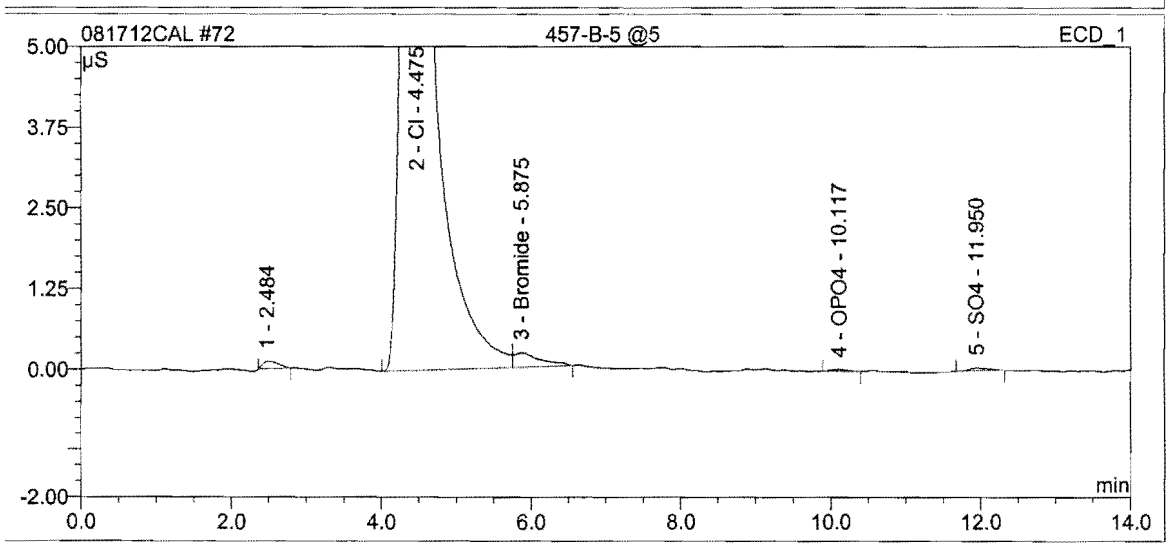


Integration Report - ECD_1

Sample Name:	**457-B-5 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:00**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	4.48	Cl	BM	11.947	46.979	31460.8051
3	5.88	Bromide	MB	0.091	0.222	696.3890
4	10.12	OPO4	BMB	0.009	0.034	88.9094
5	11.95	SO4	BMB	0.013	0.047	51.1484
		TOTAL:		12.06	47.28	32297.25





Integration Report - ECD_1

Sample Name:	**457-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:17**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	Rd	0.012	0.026	25.6018
3	5.10	NO2	M	116.937	292.017	371092.2228
4	6.14	Bromide	MB	1.174	2.340	8979.7045
5	12.08	SO4	BMB	0.094	0.164	381.5614
TOTAL:				118.22	294.55	380479.09

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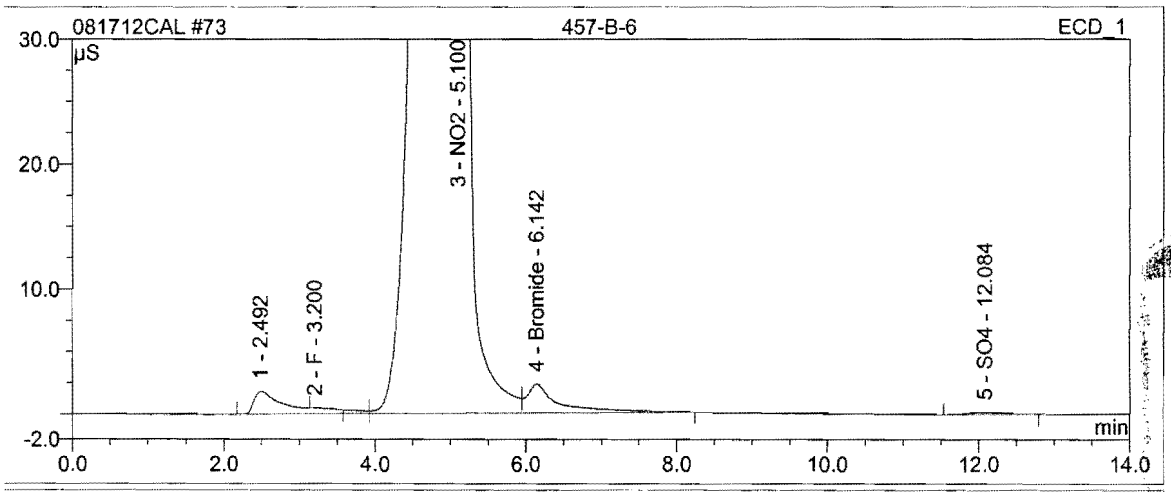
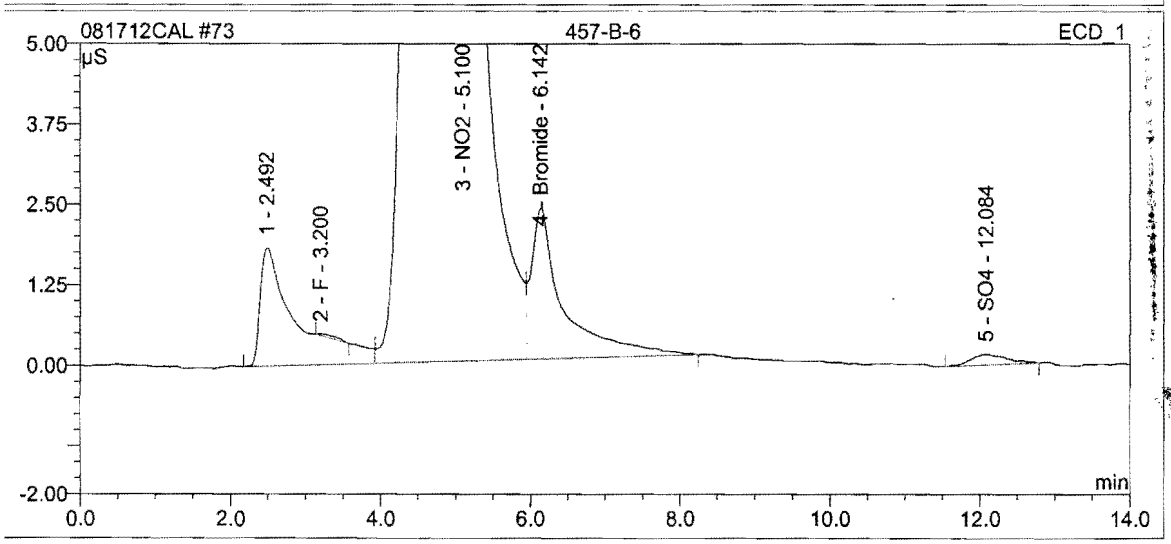


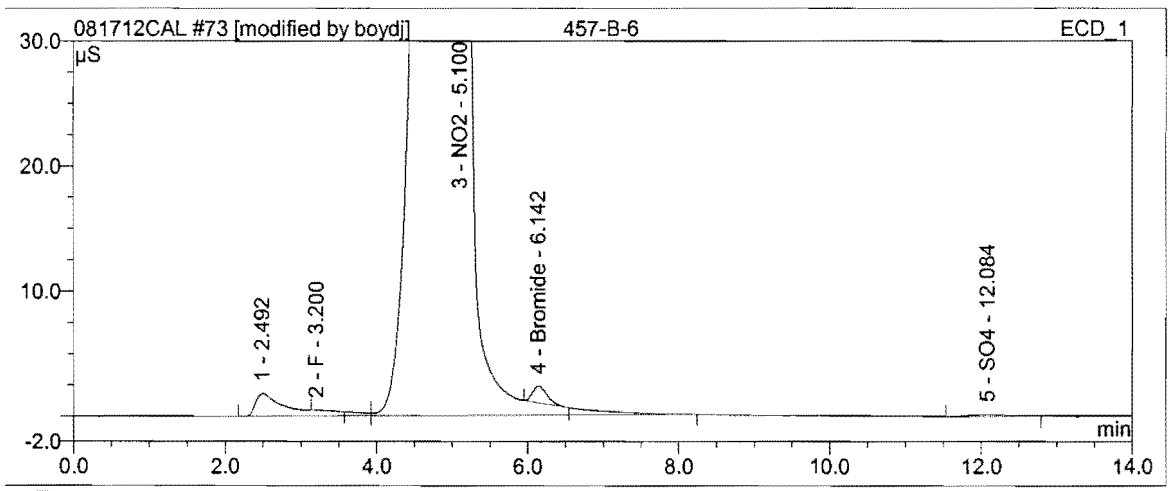


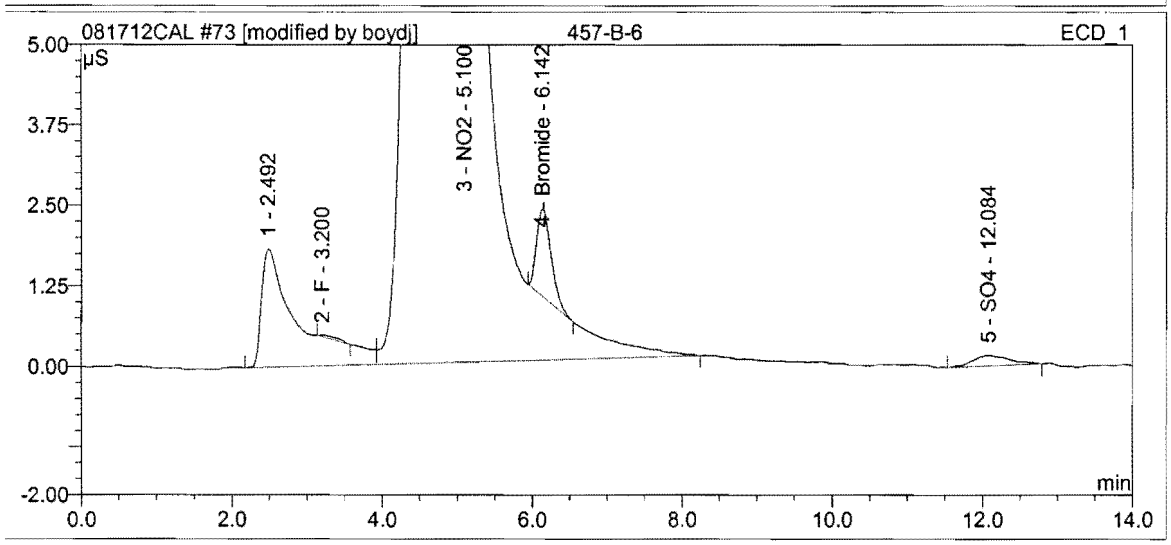
1. Incomplete Integration
2. Assign Peak
3. Wrong Peak
4. Baseline Smoothing - Broader
5. Split Peak
6. Other

Integration Report - ECD_1

Sample Name:	**457-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:17**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.20	F	Rd	0.012	0.026	25.6018
3	5.10	NO2	MB*	117.803	292.017	373841.7669
4	6.14	Bromide	Rd*	0.307	1.353	2349.9073
5	12.08	SO4	BMB	0.094	0.164	381.5614
		TOTAL:		118.22	293.56	376598.84

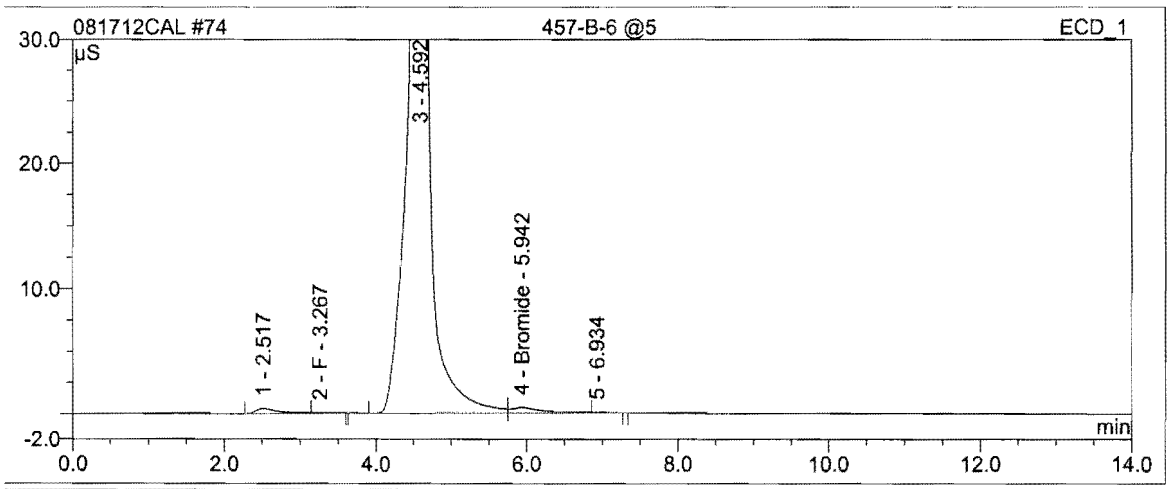


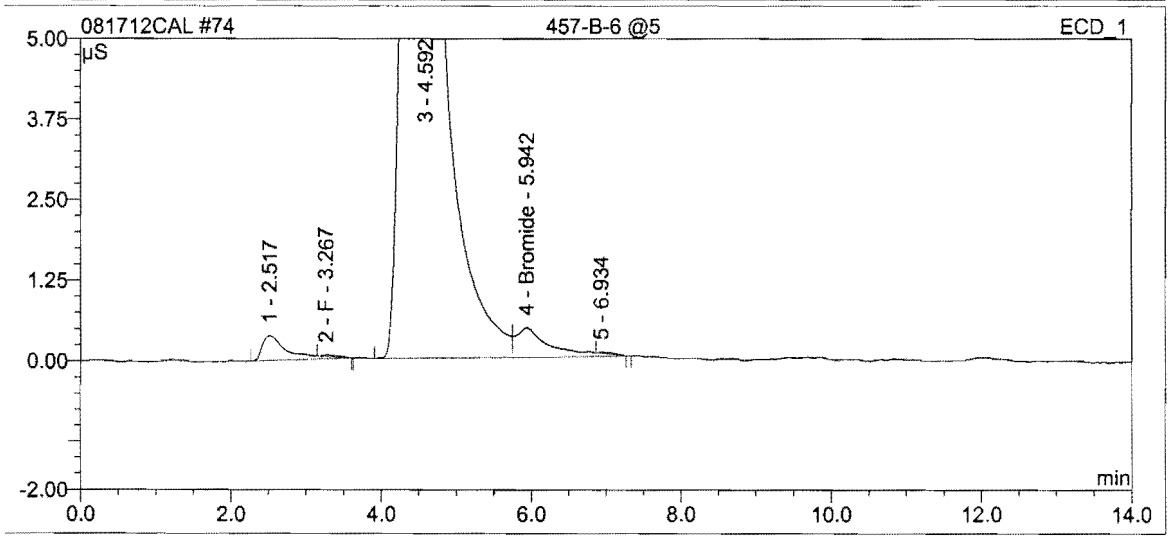


Integration Report - ECD_1

Sample Name:	**457-B-6 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:33**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	Rd	0.006	0.024	13.1521
4	5.94	Bromide	MB	0.238	0.455	1820.3042
		TOTAL:		0.24	0.48	1833.46





Integration Report - ECD_1

Sample Name:	**457-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:49**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.23	F	M	7.646	20.403	15872.6632
3	4.66	NO2	M	78.502	211.331	249120.2545
4	5.89	Bromide	MB	0.608	0.946	4652.6227
5	11.79	SO4	BMB	23.316	39.958	94285.2494
		TOTAL:		110.07	272.64	363930.79

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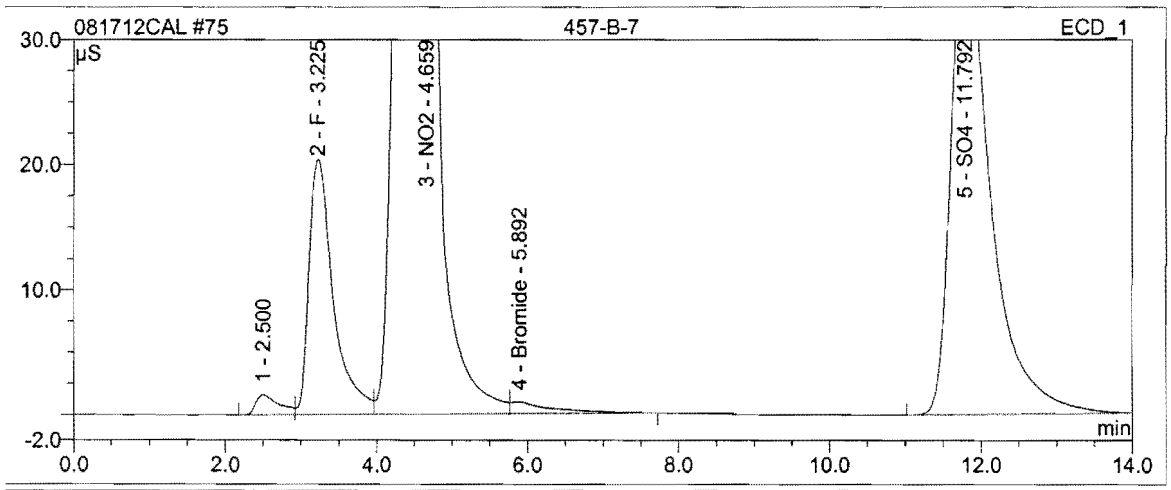
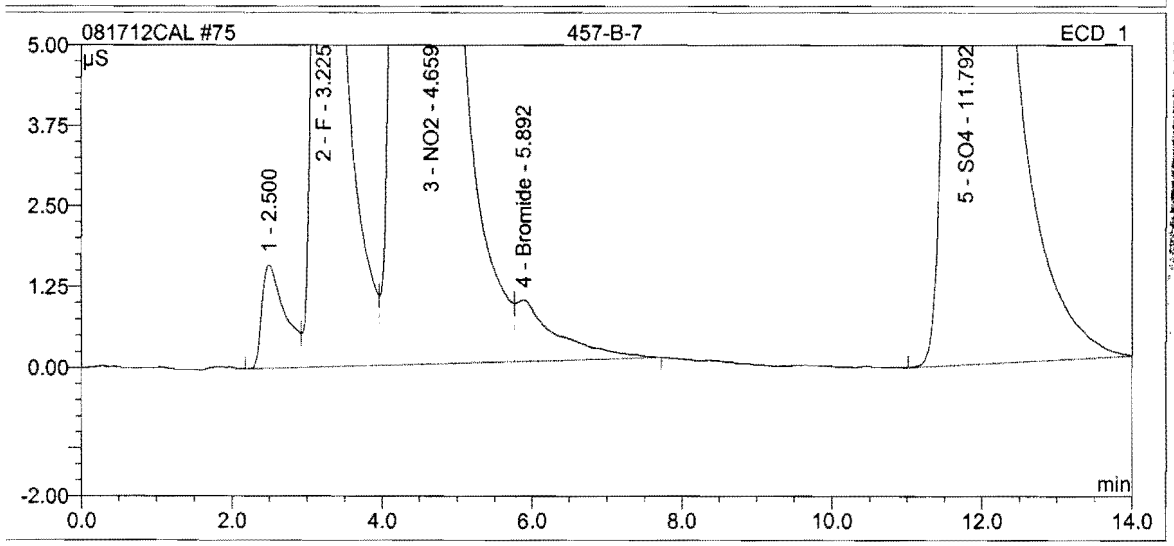
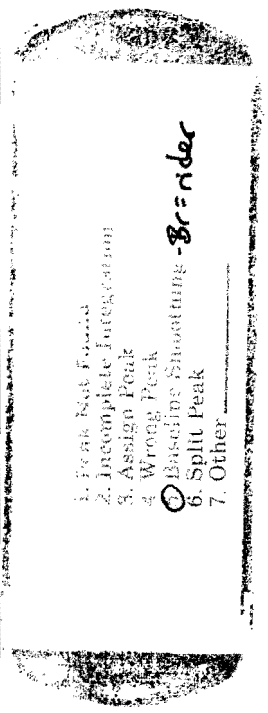


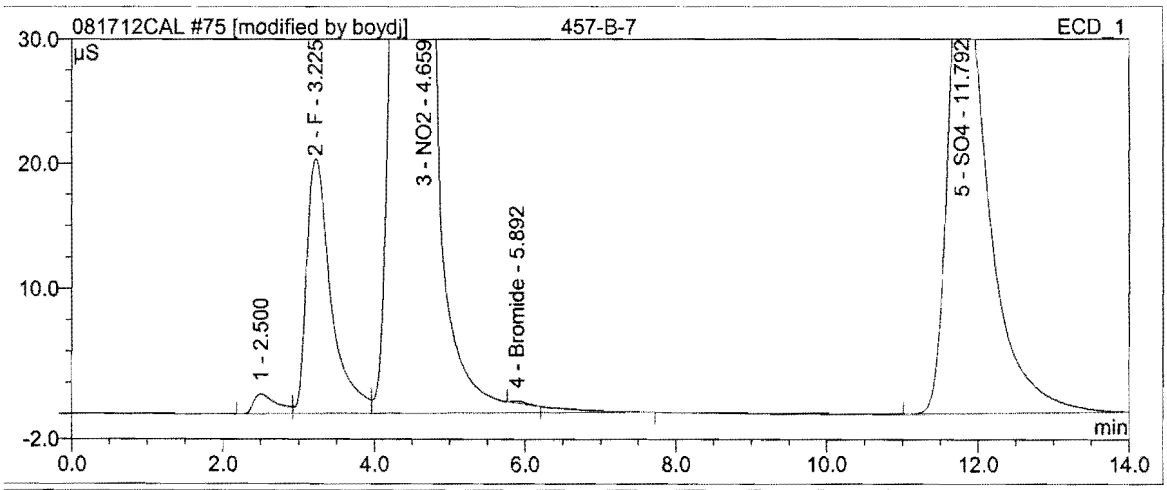


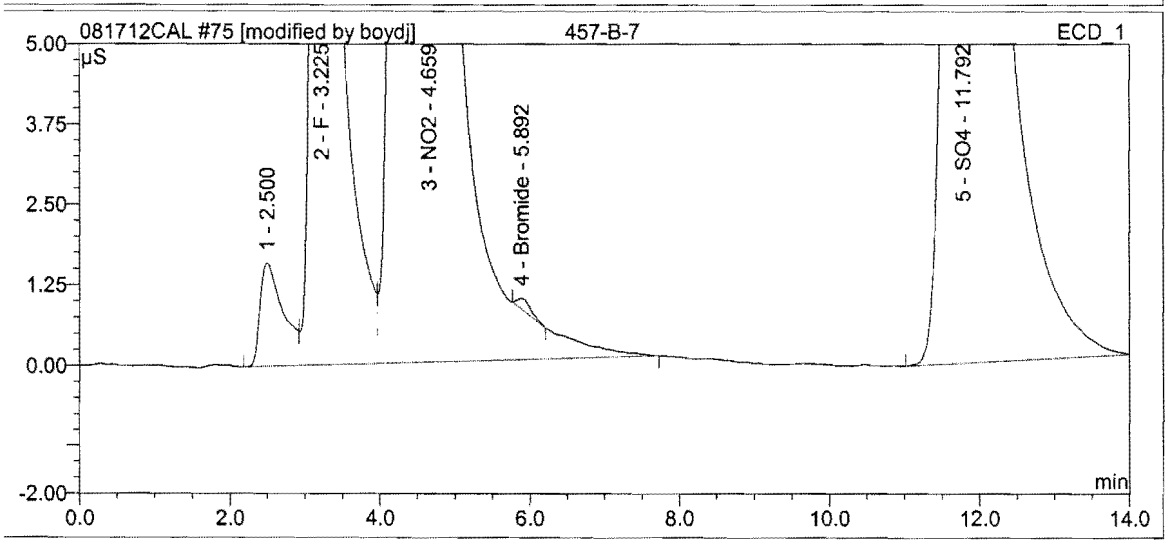


Integration Report - ECD_1

Sample Name:	**457-B-7**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 07:49**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.23	F	M	7.646	20.403	15872.6632
3	4.66	NO2	MB*	79.074	211.331	250935.4748
4	5.89	Bromide	Rd*	0.036	0.165	275.6726
5	11.79	SO4	BMB	23.316	39.958	94285.2494
		TOTAL:		110.07	271.86	361369.06

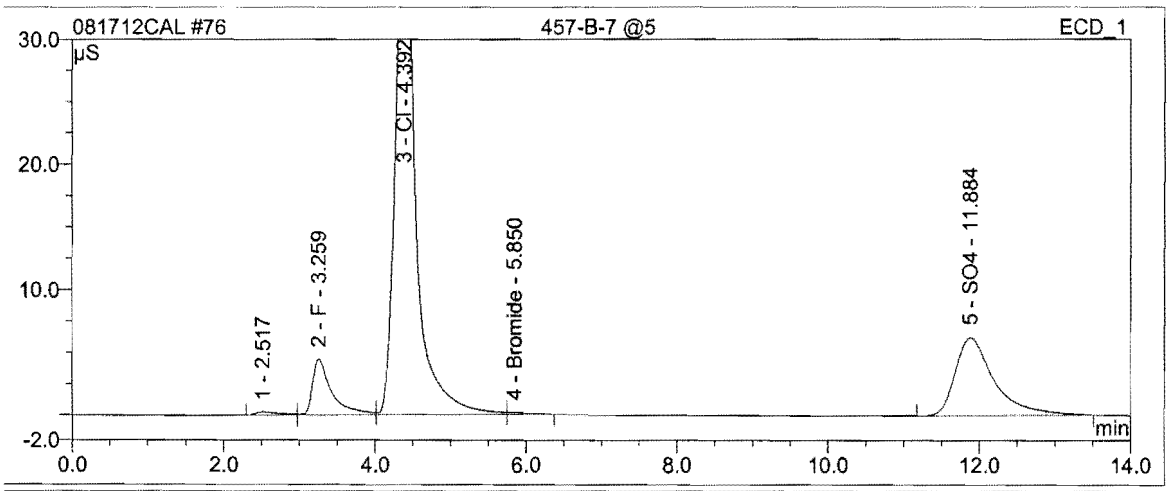


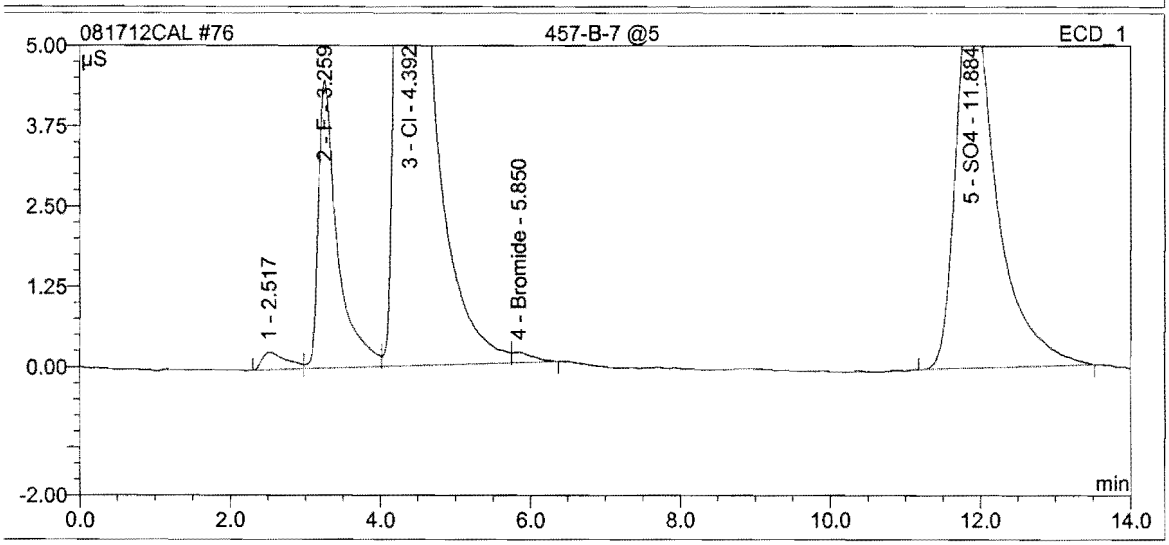


Integration Report - ECD_1

Sample Name:	**457-B-7 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 08:06**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.26	F	M	1.321	4.476	2742.2036
3	4.39	Cl	M	13.215	47.278	34802.3454
4	5.85	Bromide	MB	0.050	0.160	380.4460
5	11.88	SO4	BMB	3.725	6.240	15065.2949
		TOTAL:		18.31	58.15	52990.29





Integration Report - ECD_1

Sample Name:	**457-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 08:22**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.102	0.215	212.4289
3	4.64	NO2	M	17.923	79.599	56876.1485
4	5.97	Bromide	MB	0.169	0.399	1293.8110
5	6.54	NO3	Rd	0.007	0.027	7.5582
6	11.82	SO4	BMB	31.171	52.027	126049.9203
		TOTAL:		49.37	132.27	184439.87

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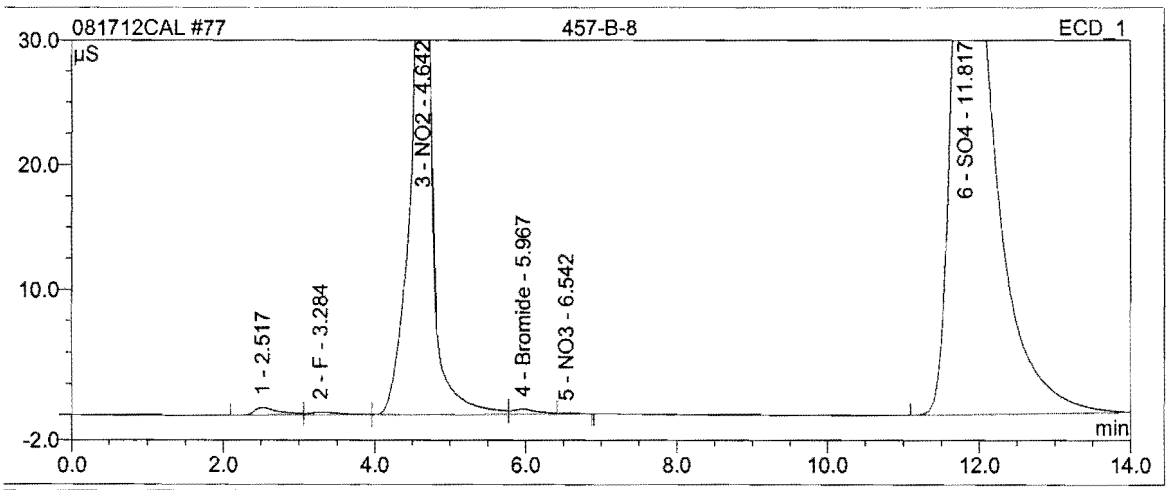
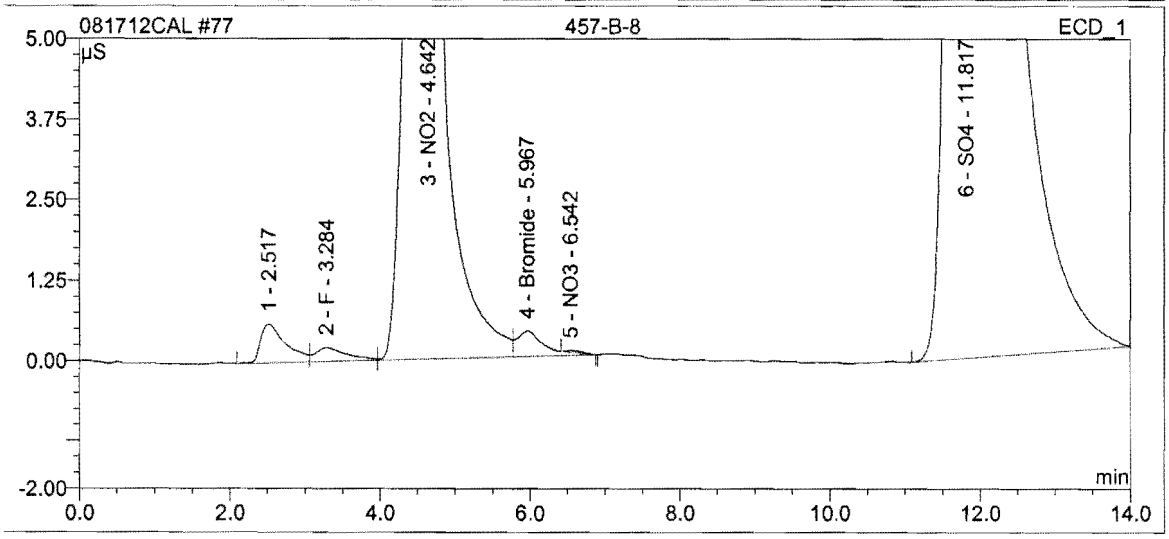
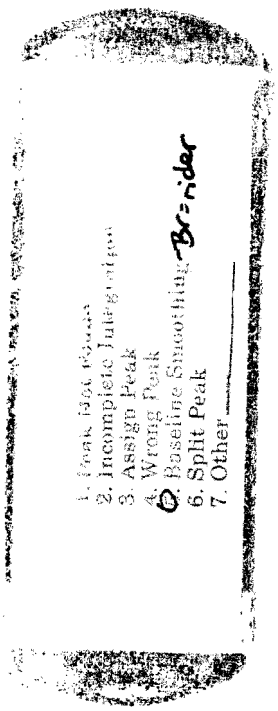


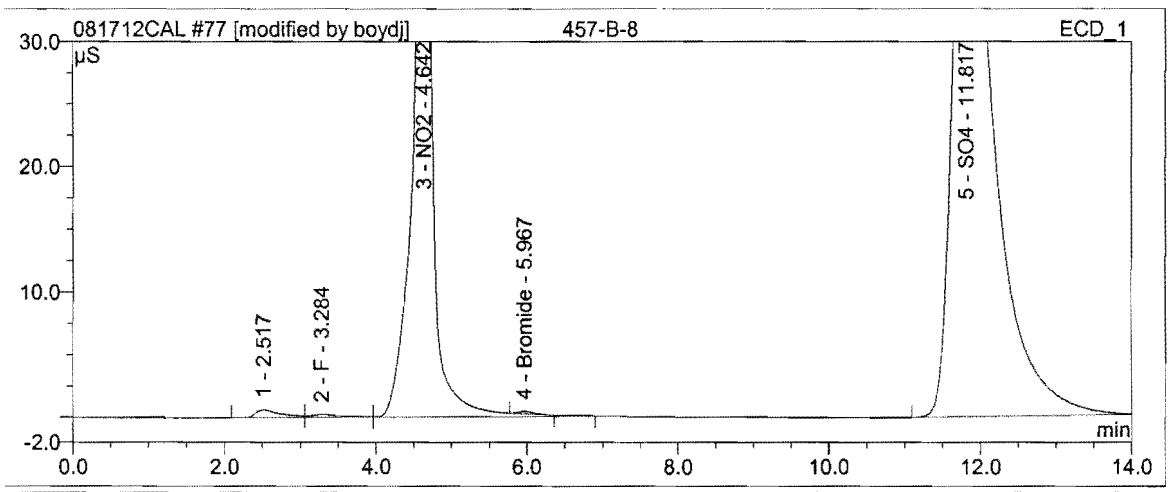


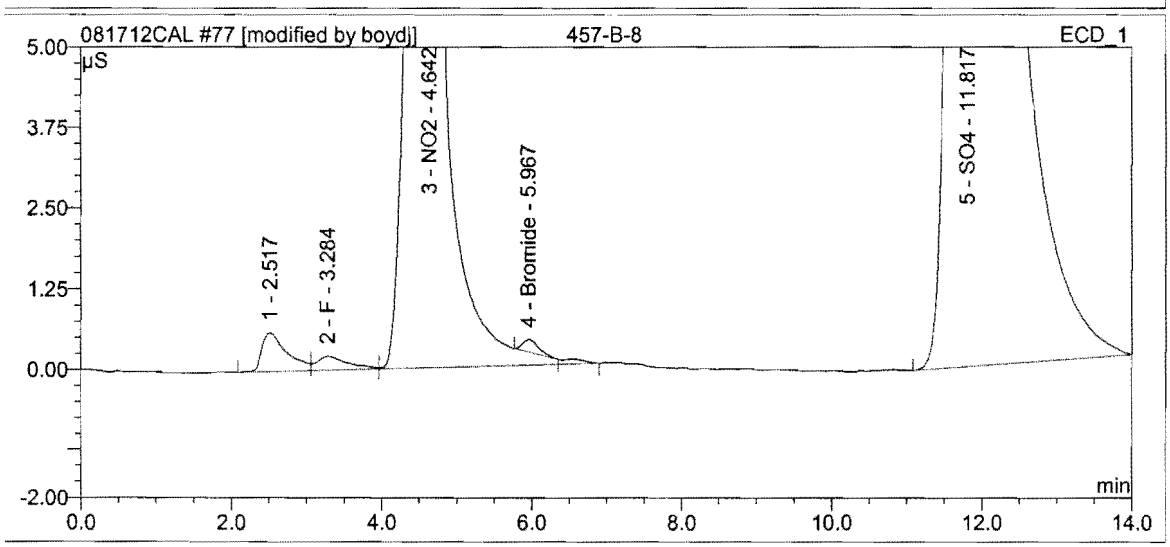


Integration Report - ECD_1

Sample Name:	**457-B-8**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 08:22**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.102	0.215	212.4289
3	4.64	NO2	MB*	18.049	79.599	57277.4670
4	5.97	Bromide	Rd*	0.050	0.197	379.9570
5	11.82	SO4	BMB	31.171	52.027	126049.9203
		TOTAL:		49.37	132.04	183919.77

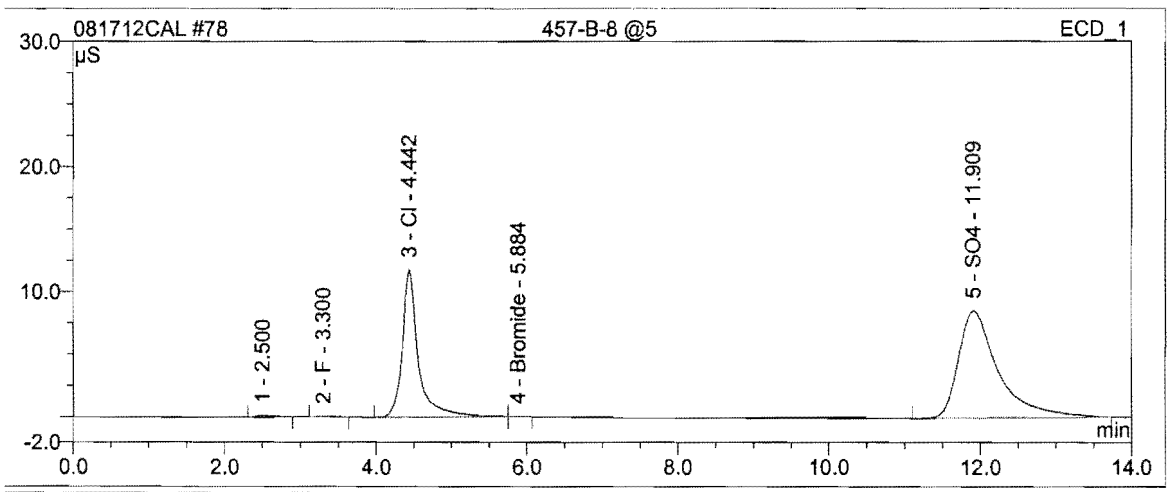


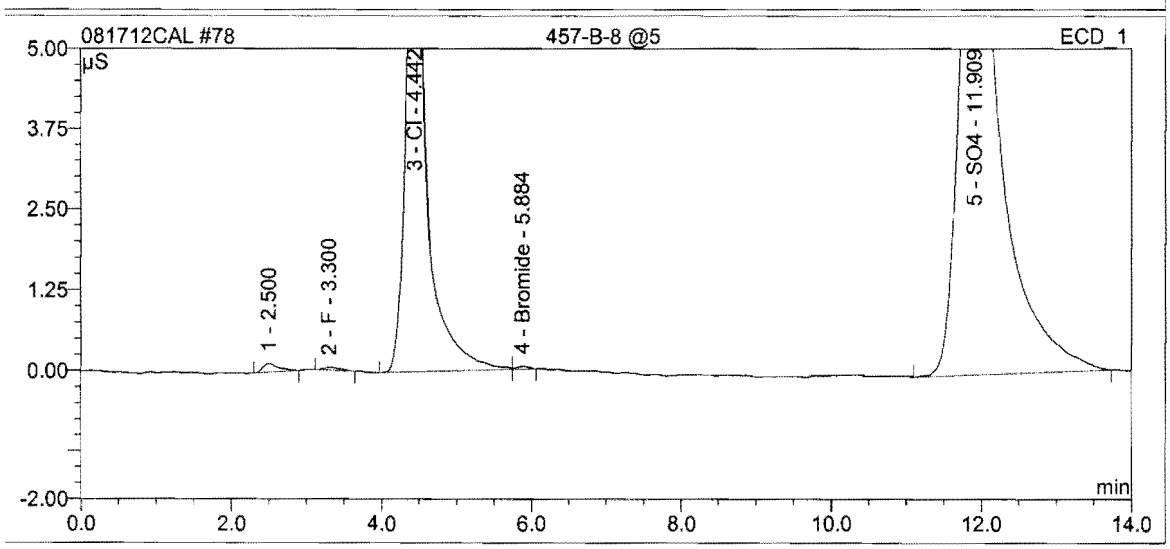


Integration Report - ECD_1

Sample Name:	**457-B-8 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 08:39**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.30	F	BMB	0.012	0.048	25.2876
3	4.44	Cl	BM	2.901	11.775	7640.8997
4	5.88	Bromide	MB	0.008	0.044	64.8503
5	11.91	SO4	BMB	5.207	8.544	21055.6771
		TOTAL:		8.13	20.41	28786.71

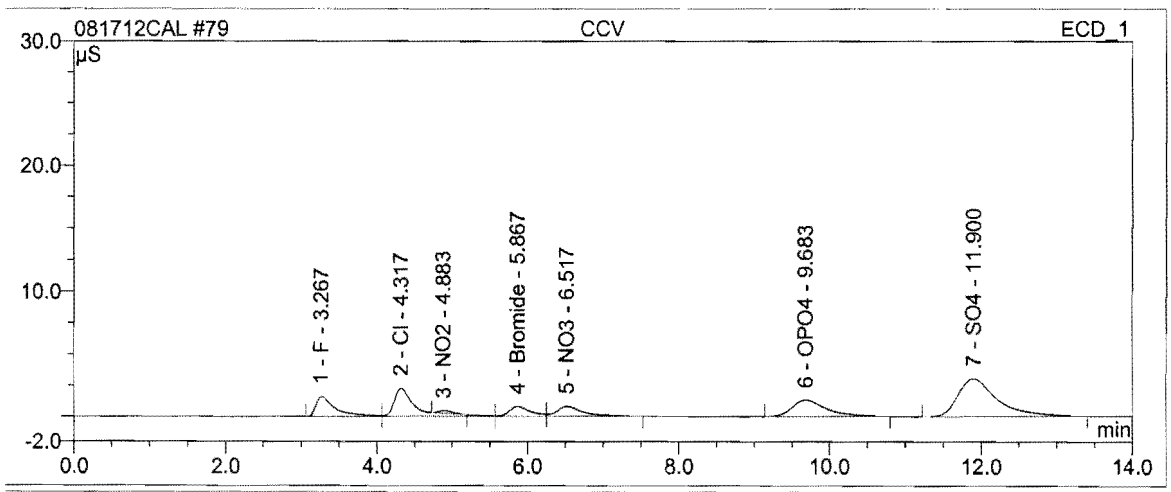


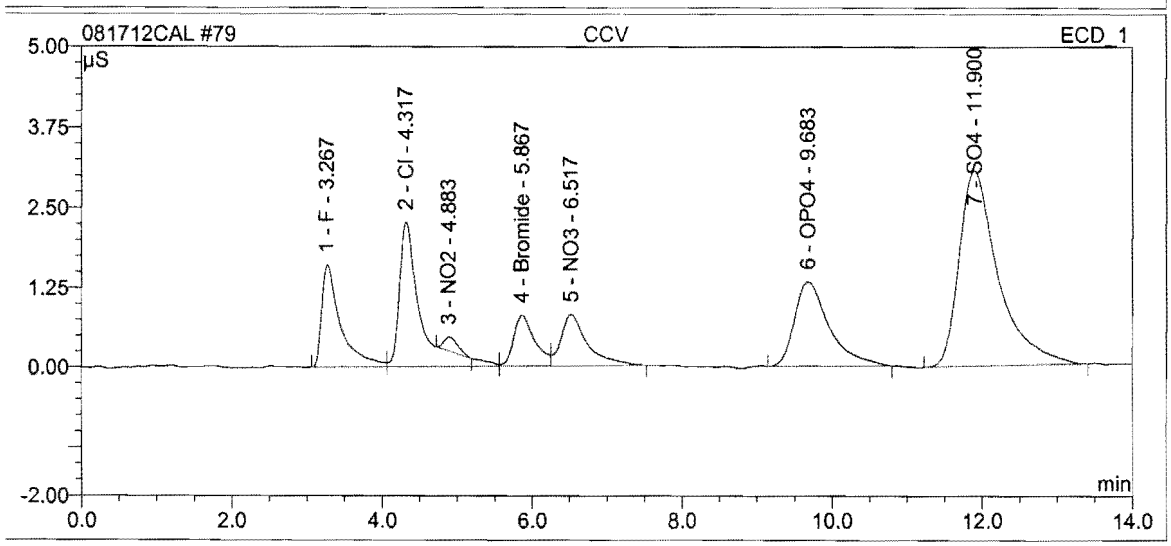


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 08:55**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.27	F	BM	0.471	1.606	977.4763
2	4.32	Cl	M	0.749	2.268	1972.7464
3	4.88	NO2	Rd	0.049	0.219	155.3567
4	5.87	Bromide	M	0.262	0.803	2002.6781
5	6.52	NO3	MB	0.332	0.813	356.6751
6	9.68	OPO4	BMB	0.716	1.329	7463.1307
7	11.90	SO4	BMB	1.849	3.052	7476.9894
		TOTAL:		4.43	10.09	20405.05

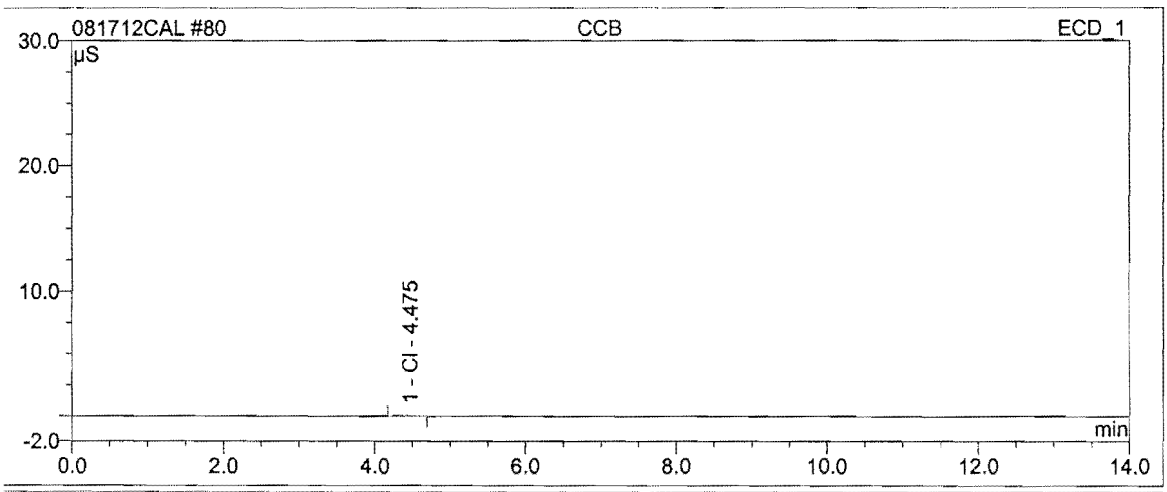


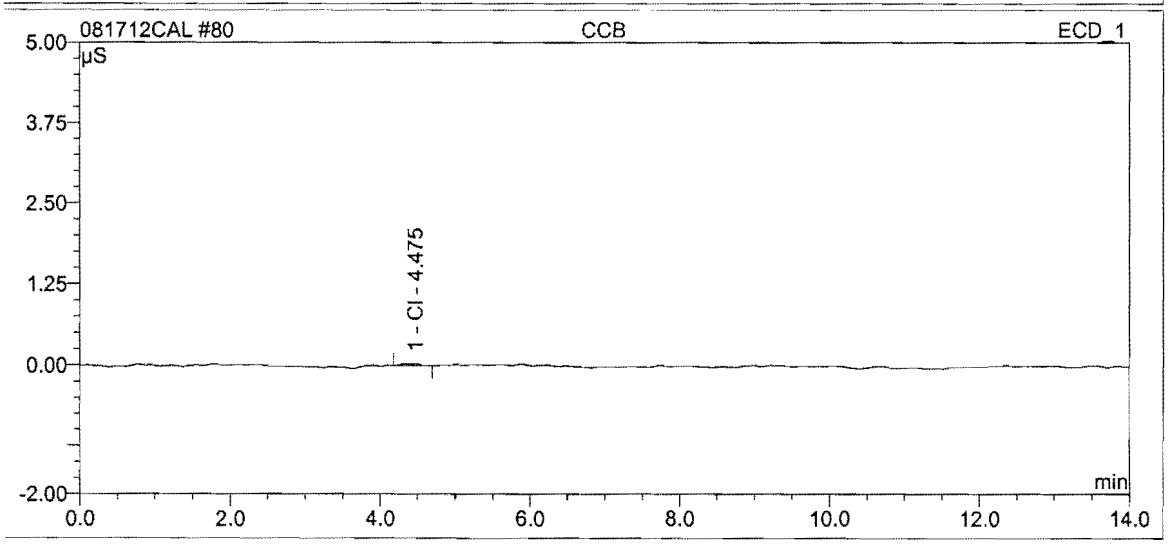


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 09:12**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	4.48	Cl	BMB	0.008	0.029	21.9315
TOTAL:				0.01	0.03	21.93





Integration Report - ECD_1

Sample Name:	**468-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 09:28**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	M	0.769	1.589	1595.5983
3	4.93	NO2	M	195.292	343.239	619747.3241
4	6.02	Bromide	MB	2.028	3.899	15519.3775
5	11.91	SO4	BMB	13.723	23.630	55493.8354
		TOTAL:		211.81	372.36	692356.14

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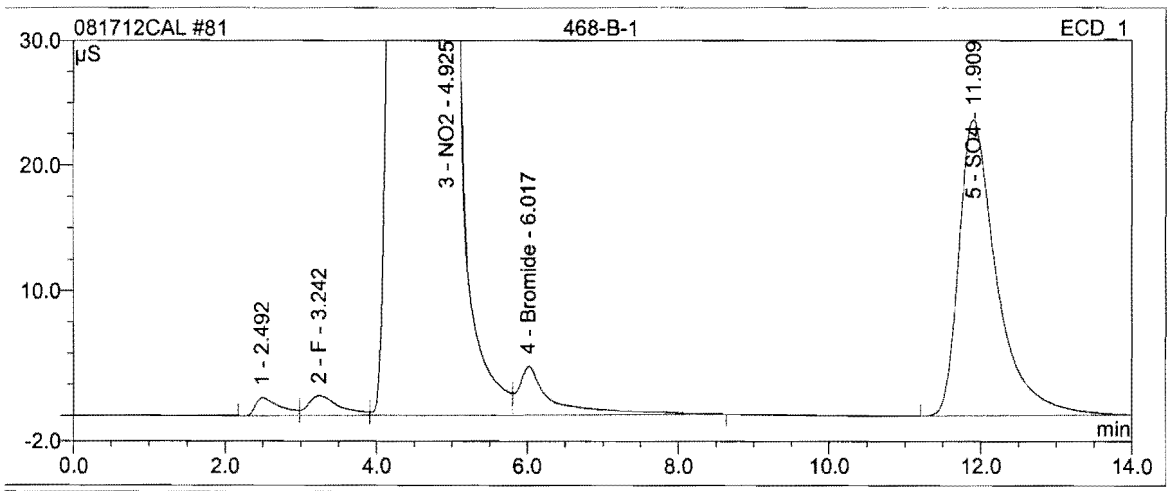
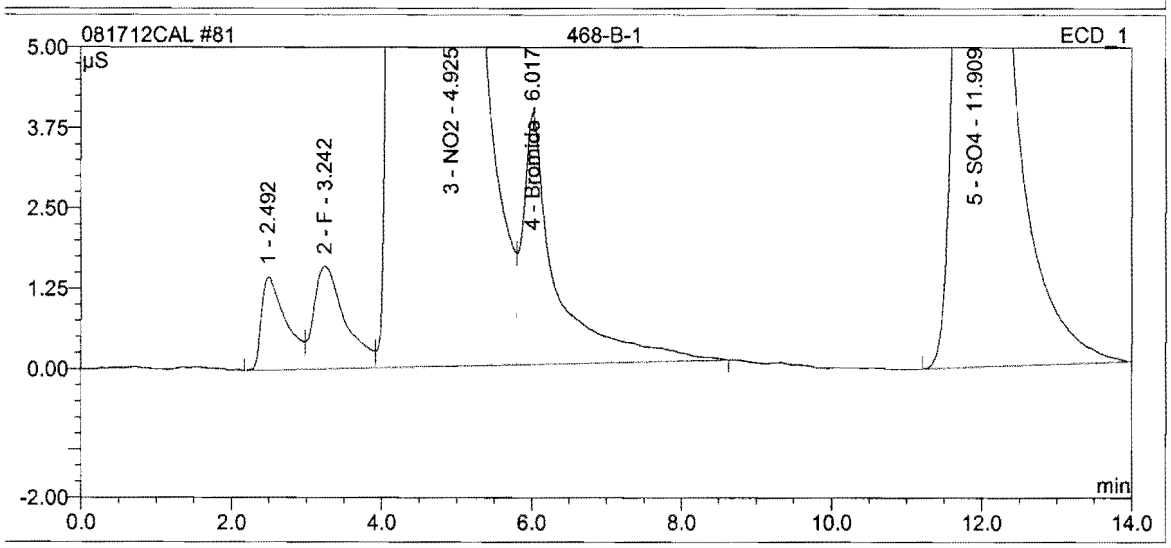
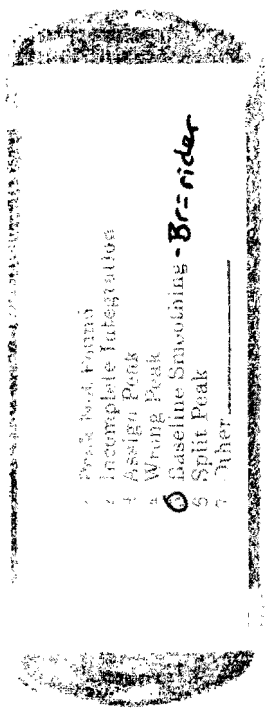


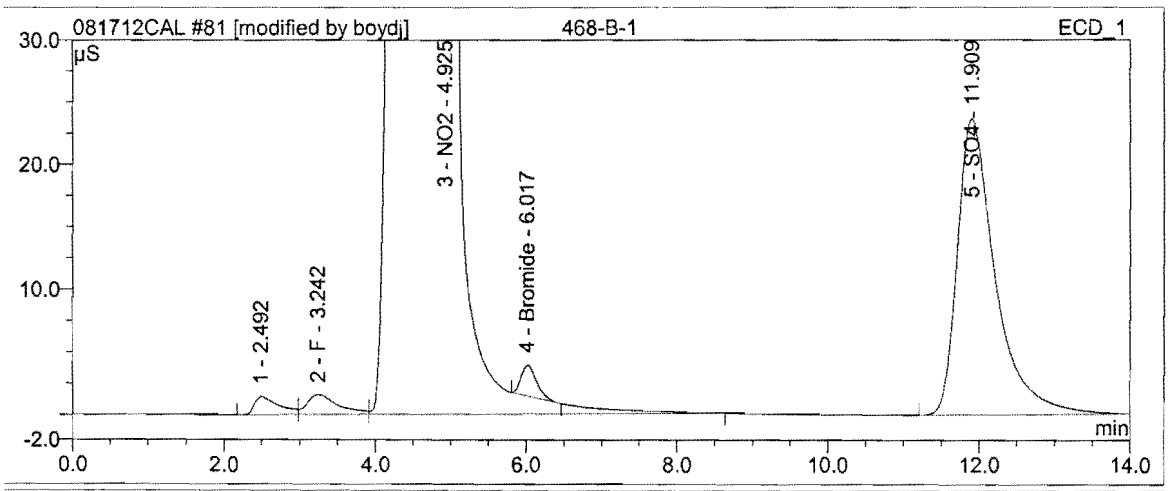


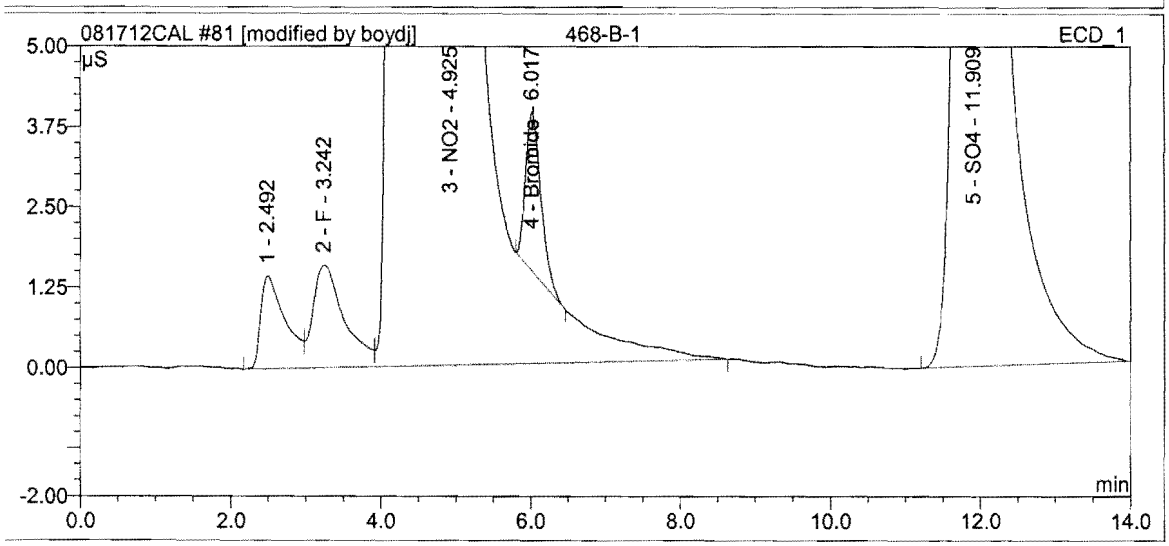


Integration Report - ECD_1

Sample Name:	**468-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 09:28**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	M	0.769	1.589	1595.5983
3	4.93	NO2	MB*	196.731	343.239	624316.0624
4	6.02	Bromide	Rd*	0.588	2.455	4502.9808
5	11.91	SO4	BMB	13.723	23.630	55493.8354
		TOTAL:		211.81	370.91	685908.48

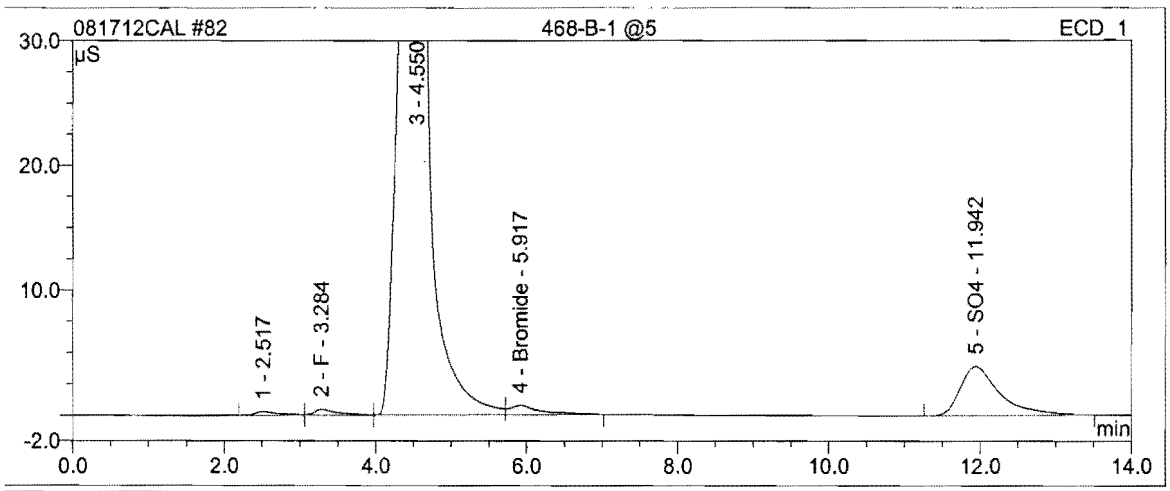


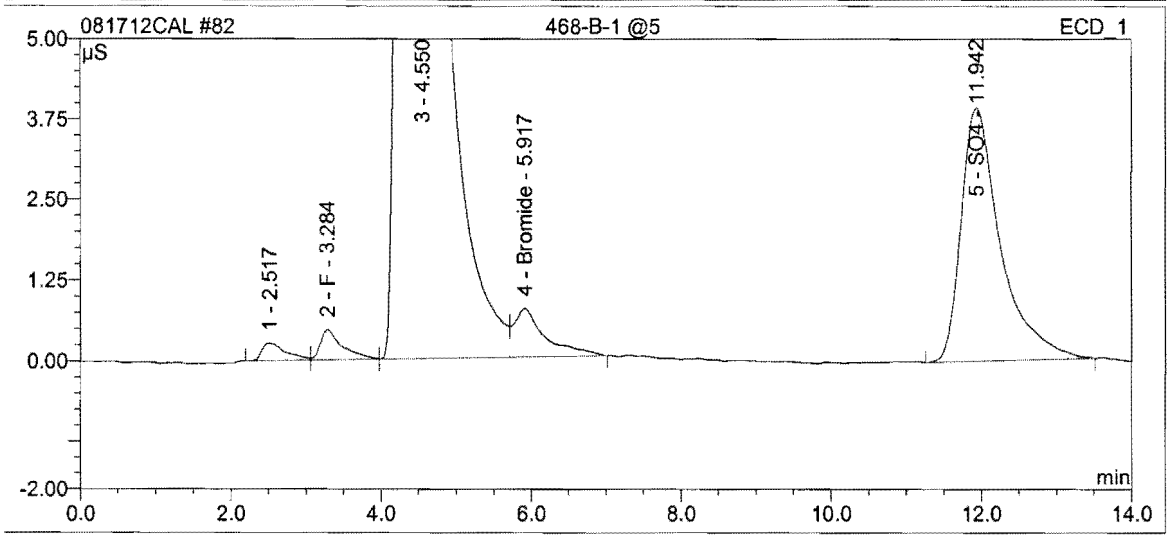


Integration Report - ECD_1

Sample Name:	**468-B-1 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 09:44**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	M	0.158	0.467	328.4965
4	5.92	Bromide	MB	0.363	0.750	2774.5998
5	11.94	SO4	BMB	2.384	3.926	9640.5321
		TOTAL:		2.90	5.14	12743.63





Integration Report - ECD_1

Sample Name:	**468-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:01**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.23	F	Rd	0.013	0.052	27.4731
3	4.97	NO2	M	216.270	361.021	686320.0907
4	6.04	Bromide	MB	1.974	3.820	15105.6981
5	6.67	NO3	Rd	0.123	0.482	132.5971
6	12.04	SO4	BMB	0.135	0.233	546.8357
		TOTAL:		218.52	365.61	702132.69

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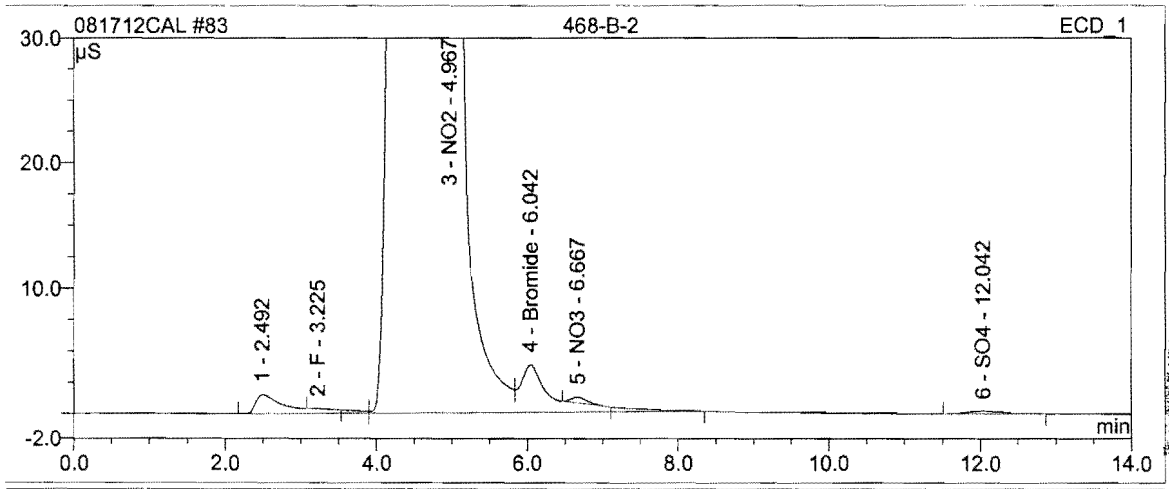
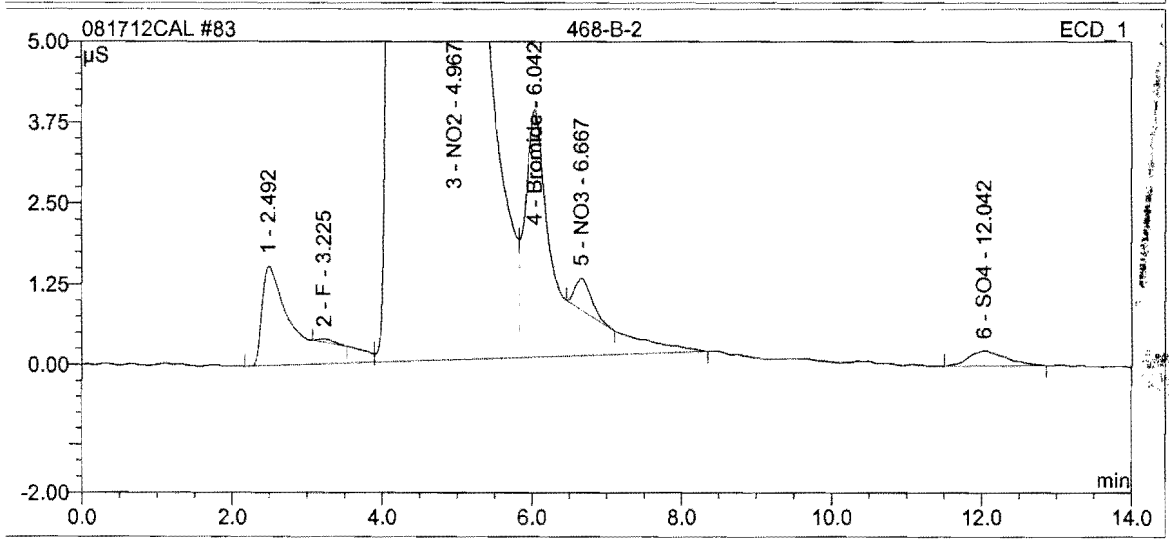
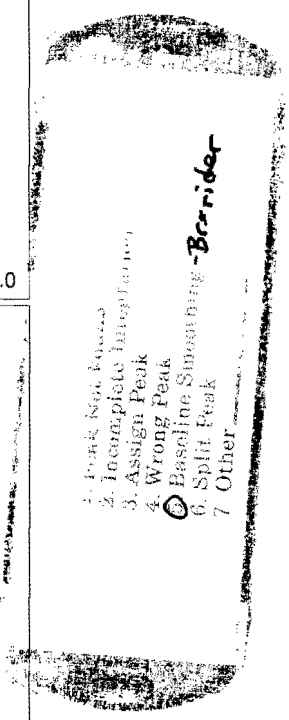


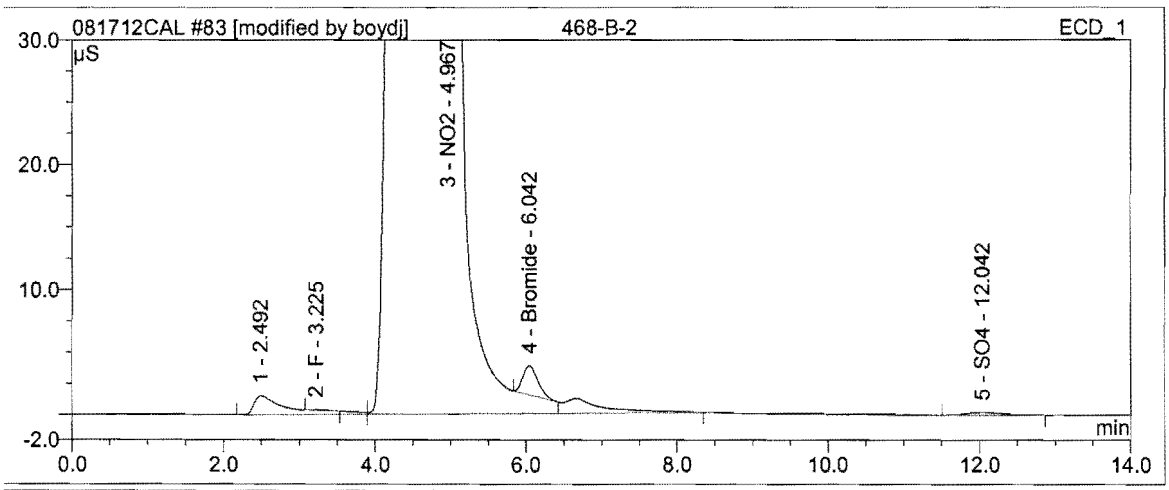


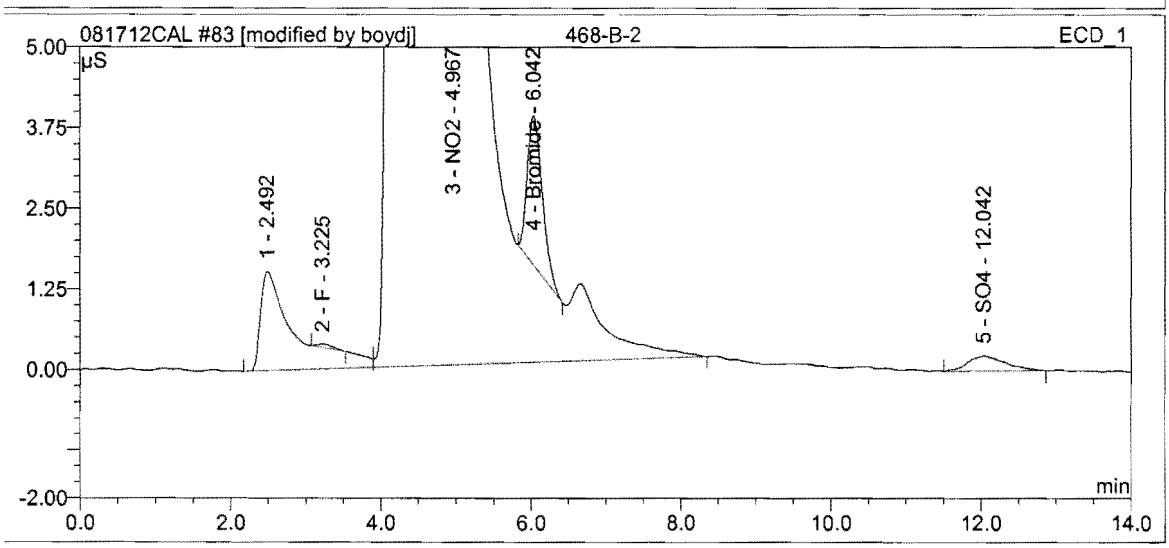


Integration Report - ECD_1

Sample Name:	**468-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:01**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.23	F	Rd	0.013	0.052	27.4731
3	4.97	NO2	MB*	217.824	361.021	691251.3838
4	6.04	Bromide	Rd*	0.544	2.319	4159.8224
5	12.04	SO4	BMB	0.135	0.233	546.8357
		TOTAL:		218.52	363.63	695985.51

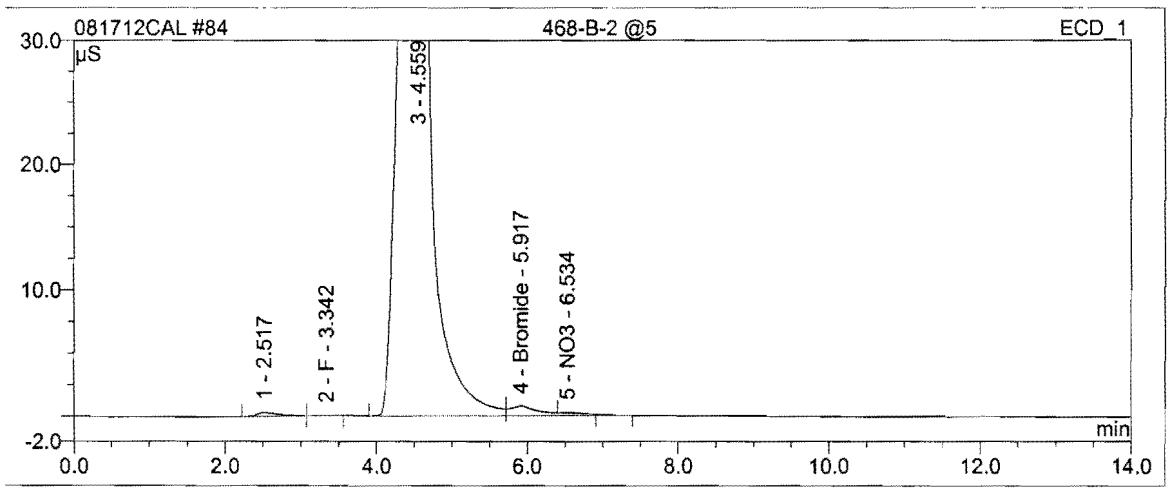


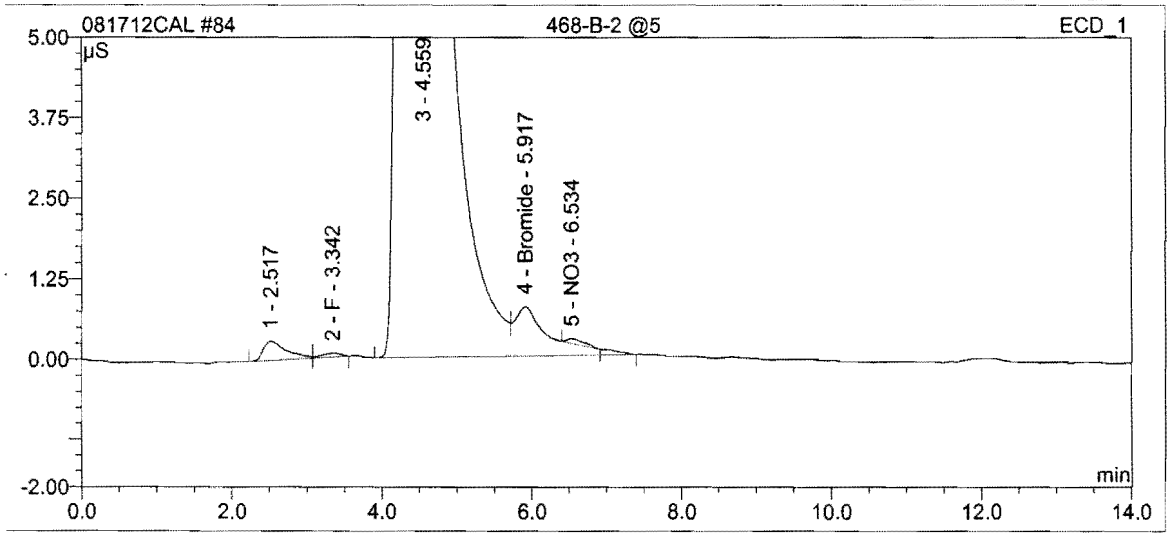


Integration Report - ECD_1

Sample Name:	**468-B-2 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:17**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.34	F	MB	0.018	0.060	36.5946
4	5.92	Bromide	MB	0.436	0.769	3333.1531
5	6.53	NO3	Rd	0.022	0.076	23.2257
		TOTAL:		0.47	0.90	3392.97





Integration Report - ECD_1

Sample Name:	**468-B-3 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:34**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	4.73	NO2	BM	43.733	145.993	138783.9563
3	6.00	Bromide	MB	0.511	1.077	3910.9776
4	9.77	OPO4	BMB	0.116	0.257	1212.4630
		TOTAL:		44.36	147.33	143907.40

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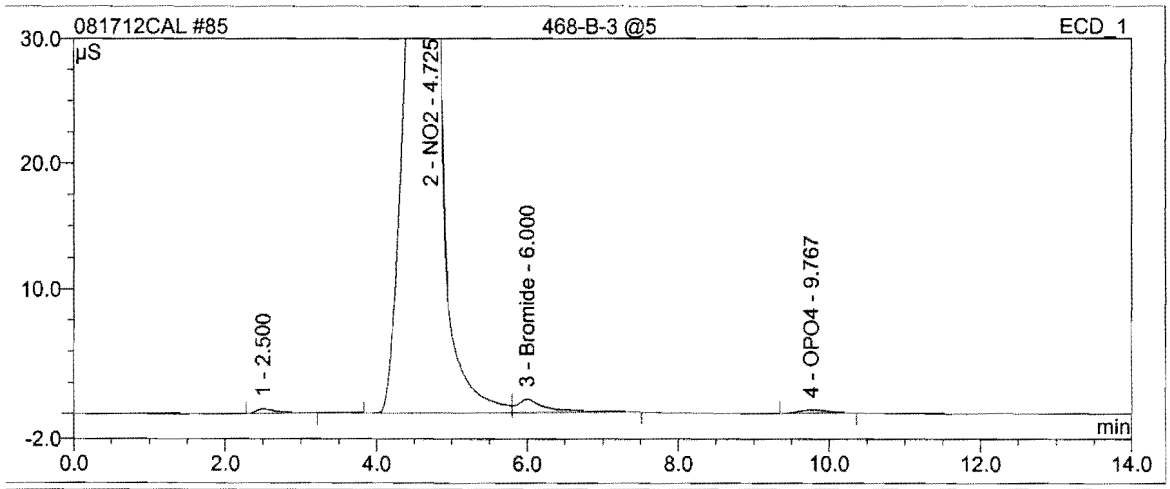
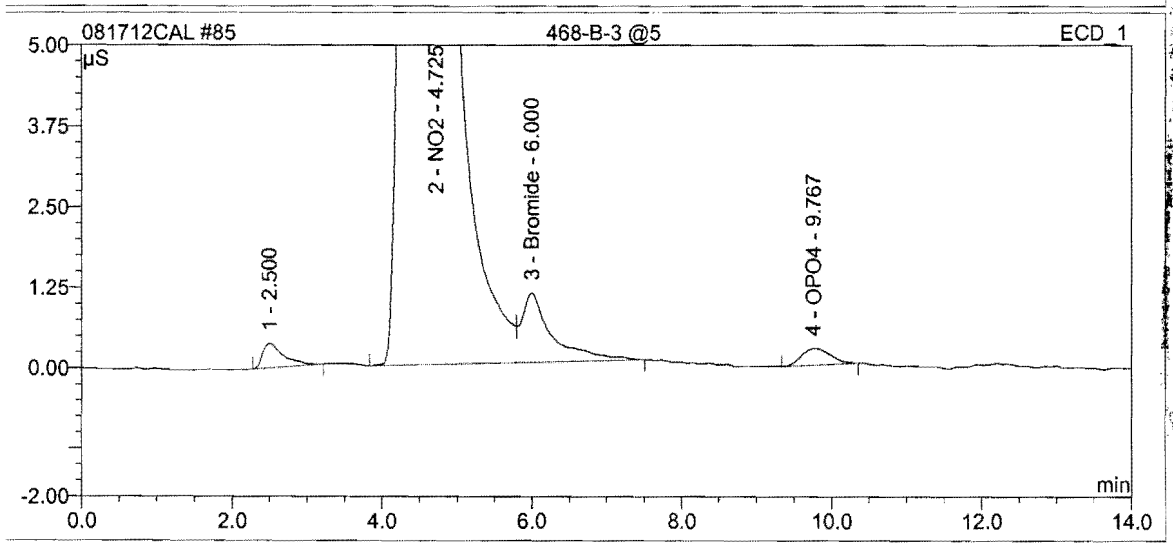
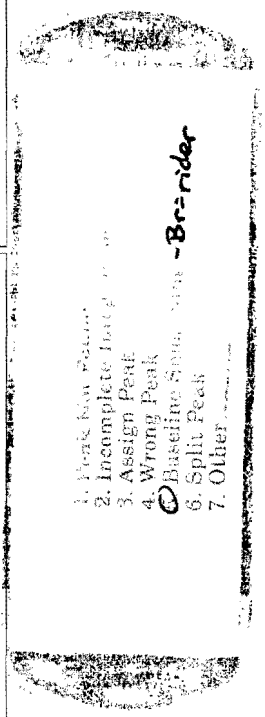


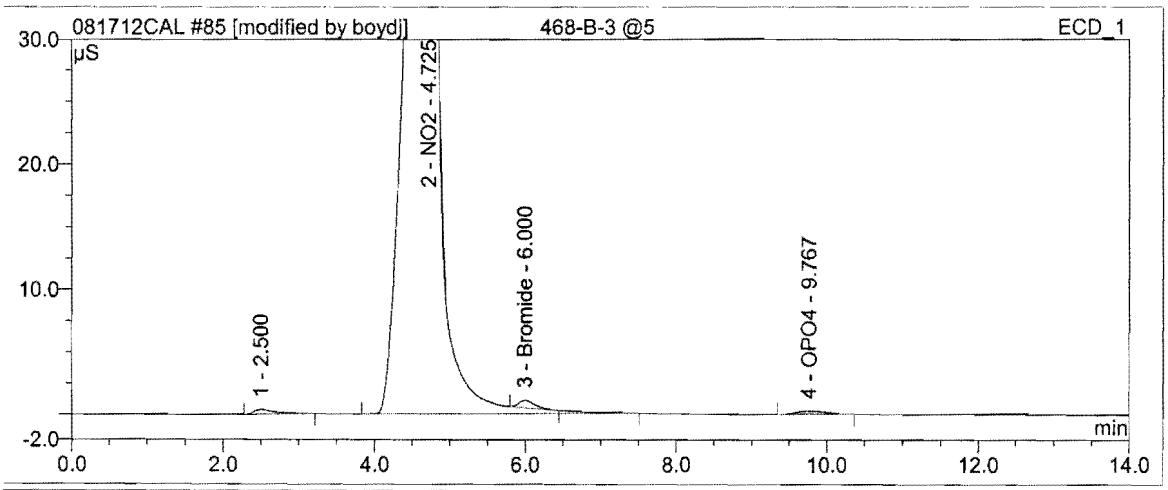


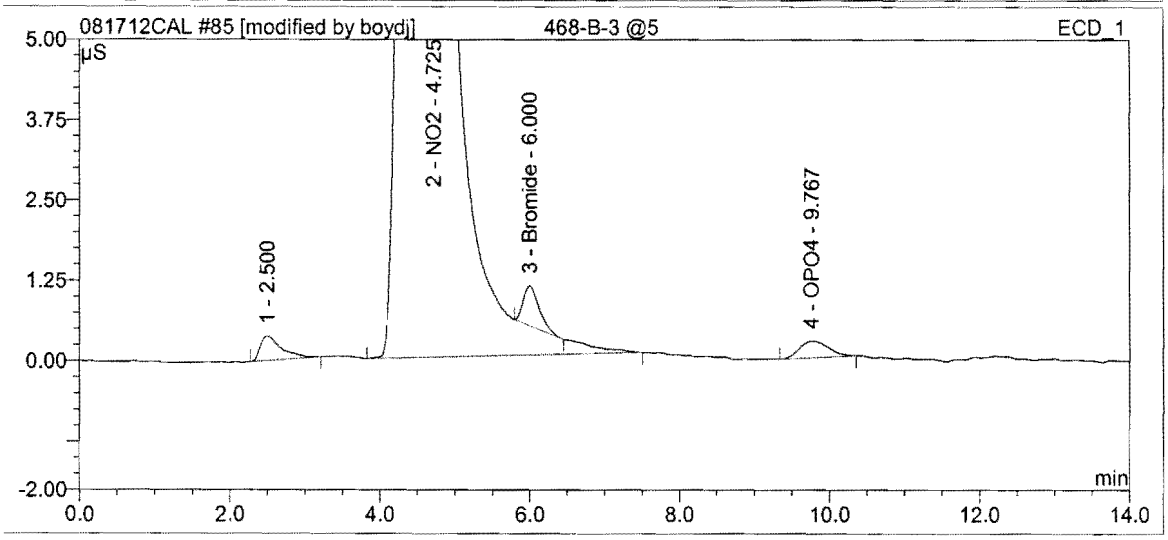


Integration Report - ECD_1

Sample Name:	**468-B-3 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:34**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	4.73	NO2	BMB*	44.091	145.993	139919.5597
3	6.00	Bromide	Rd*	0.153	0.619	1172.7459
4	9.77	OPO4	BMB	0.116	0.257	1212.4630
		TOTAL:		44.36	146.87	142304.77

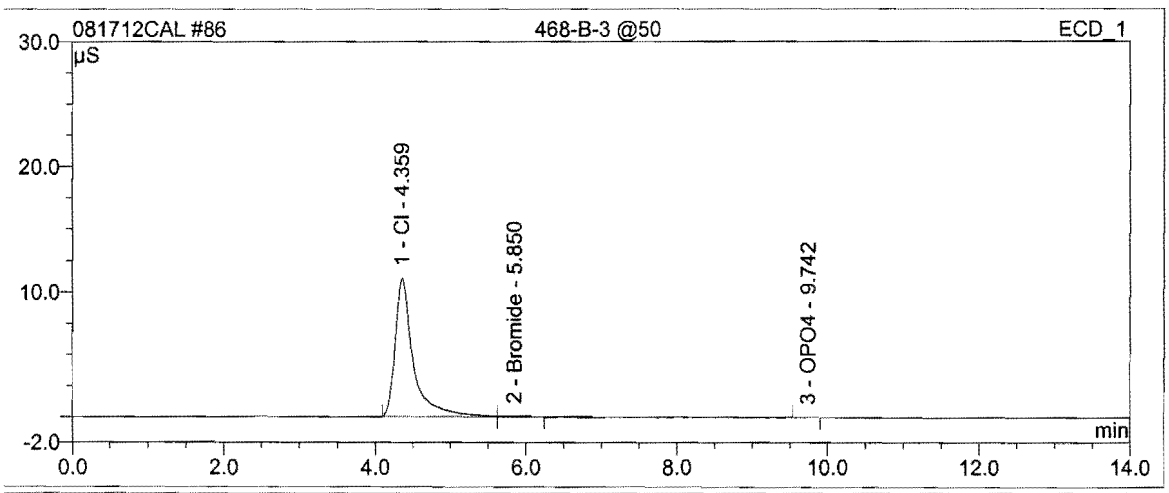


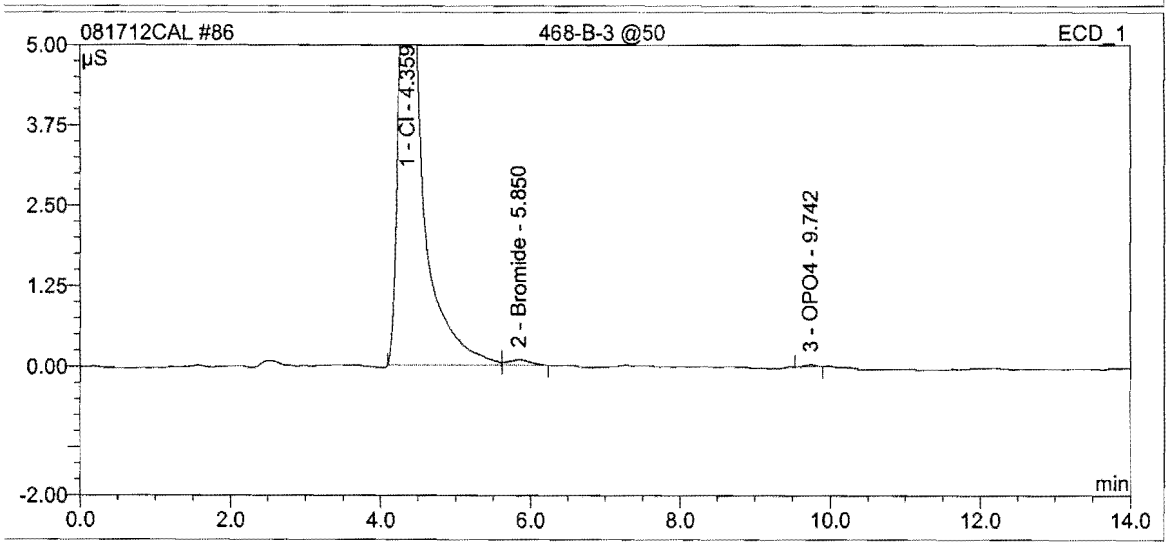


Integration Report - ECD_1

Sample Name:	**468-B-3 @50**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 10:50**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	4.36	Cl	BM	3.102	11.085	8167.7043
2	5.85	Bromide	MB	0.030	0.086	227.4812
3	9.74	OPO4	BMB	0.005	0.031	54.6751
		TOTAL:		3.14	11.20	8449.86





Integration Report - ECD_1

Sample Name:	**468-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 11:06**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.22	F	Rd	0.009	0.043	17.7478
4	4.98	NO2	M	112.059	272.618	355611.7869
5	6.08	Bromide	MB	1.524	3.332	11658.7951
6	6.66	NO3	Rd	0.017	0.063	18.7830
		TOTAL:		113.61	276.06	367307.11

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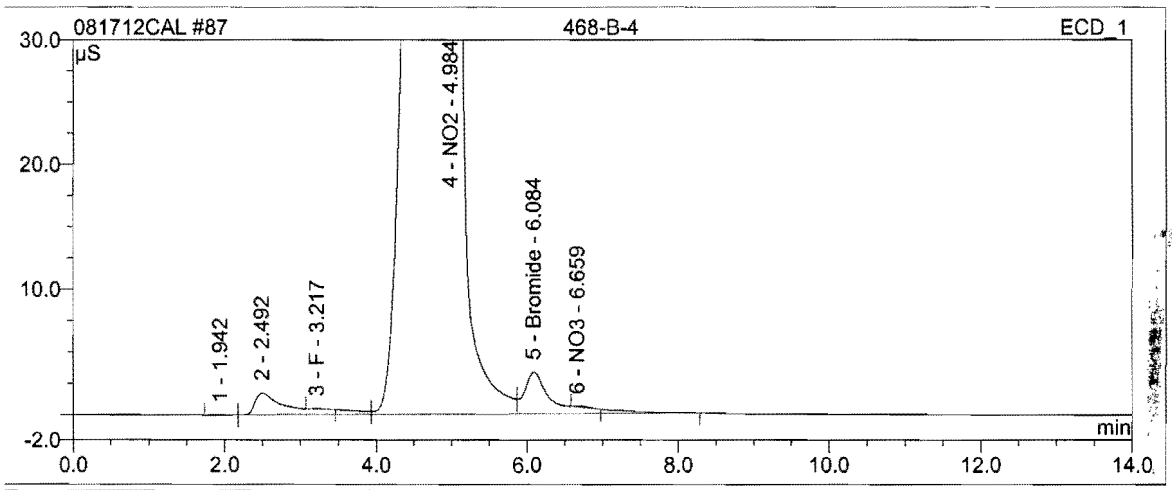
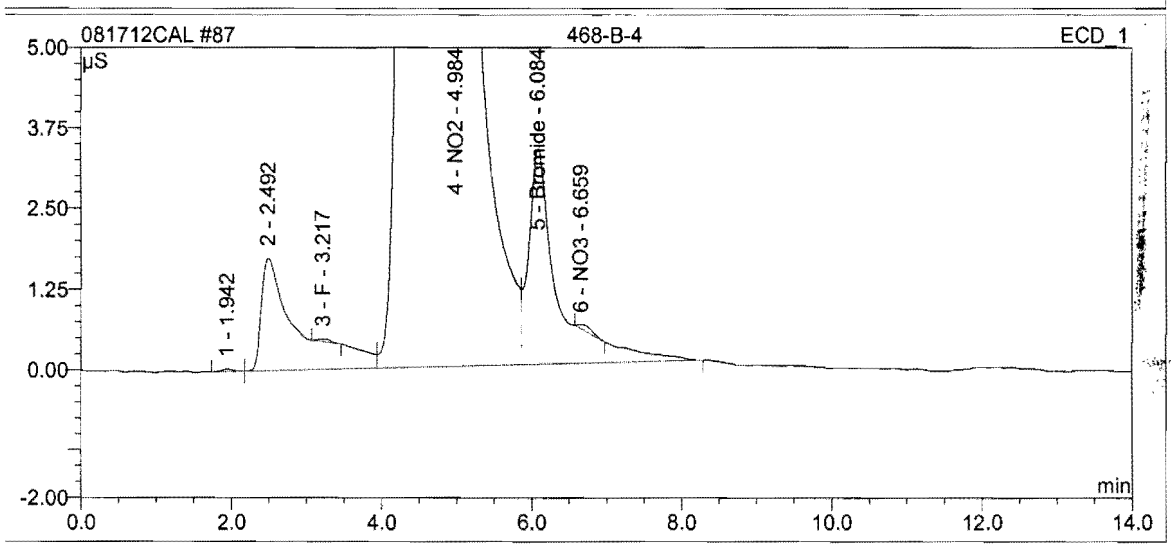
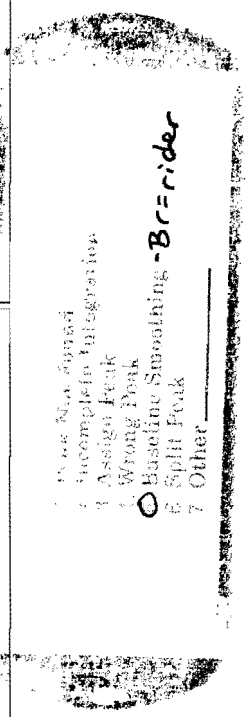


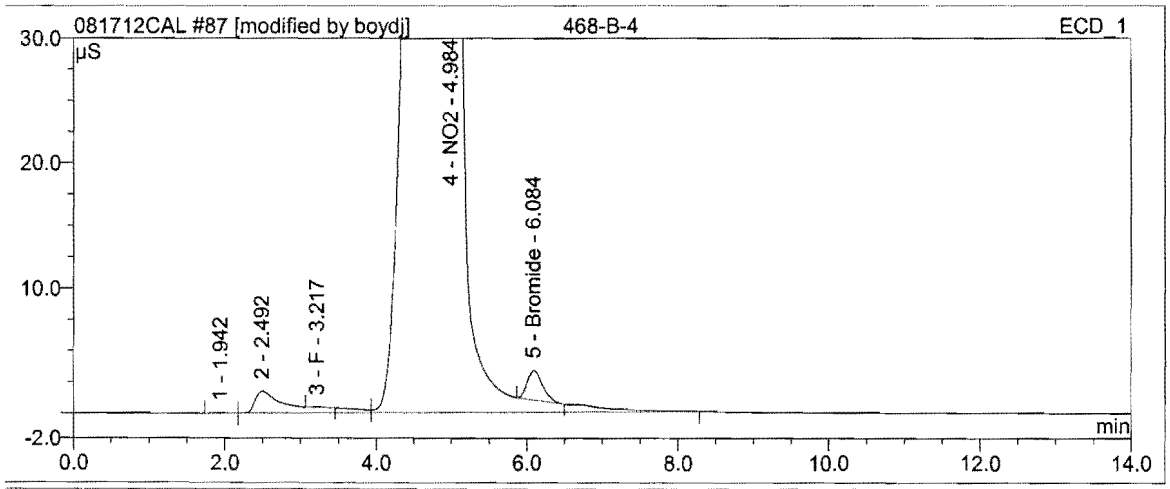


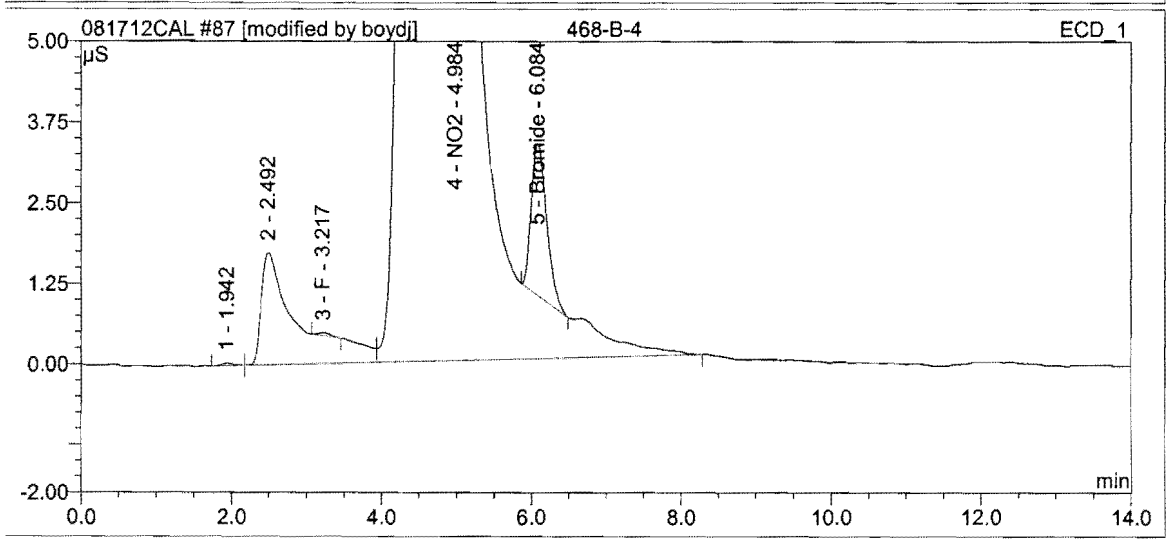


Integration Report - ECD_1

Sample Name:	**468-B-4**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 11:06**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.22	F	Rd	0.009	0.043	17.7478
4	4.98	NO2	MB*	113.038	272.618	358719.0598
5	6.08	Bromide	Rd*	0.562	2.350	4300.2103
		TOTAL:		113.61	275.01	363037.02

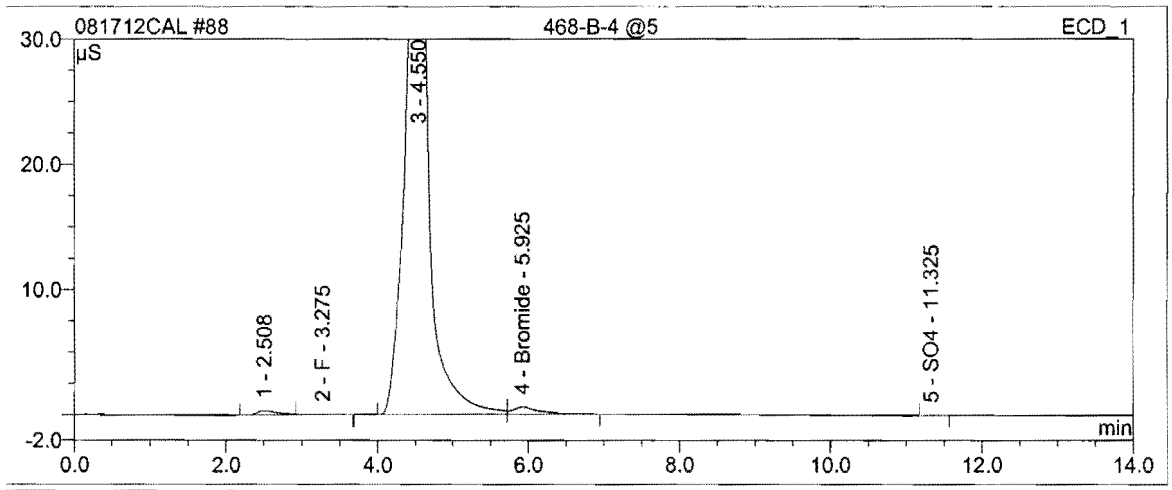


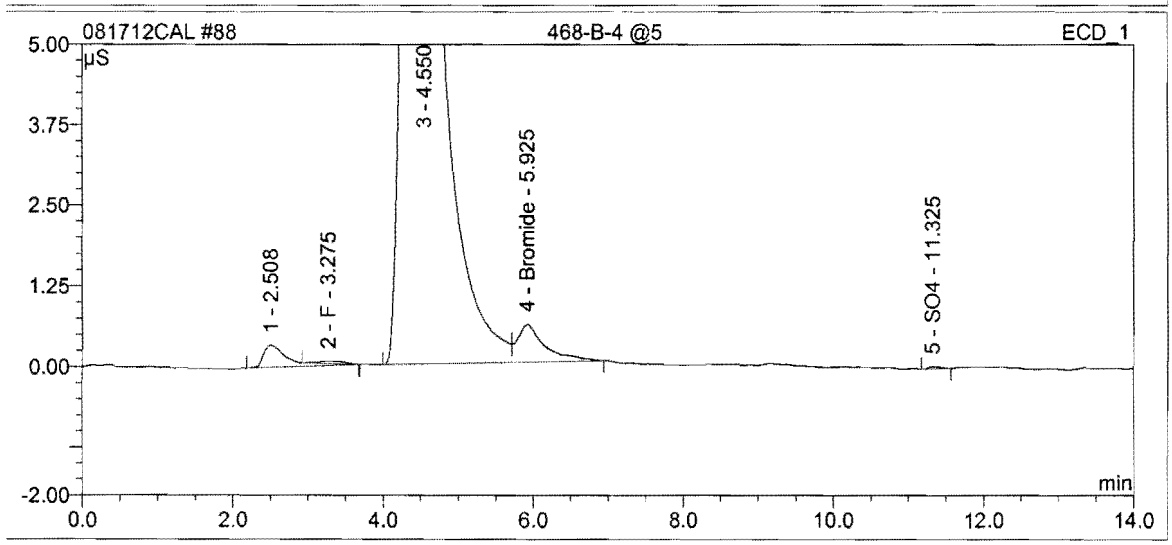


Integration Report - ECD_1

Sample Name:	**468-B-4 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 11:23**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	Rd	0.016	0.042	32.6072
4	5.93	Bromide	MB	0.249	0.582	1908.2214
5	11.33	SO4	BMB	0.007	0.036	26.8099
TOTAL:				0.27	0.66	1967.64

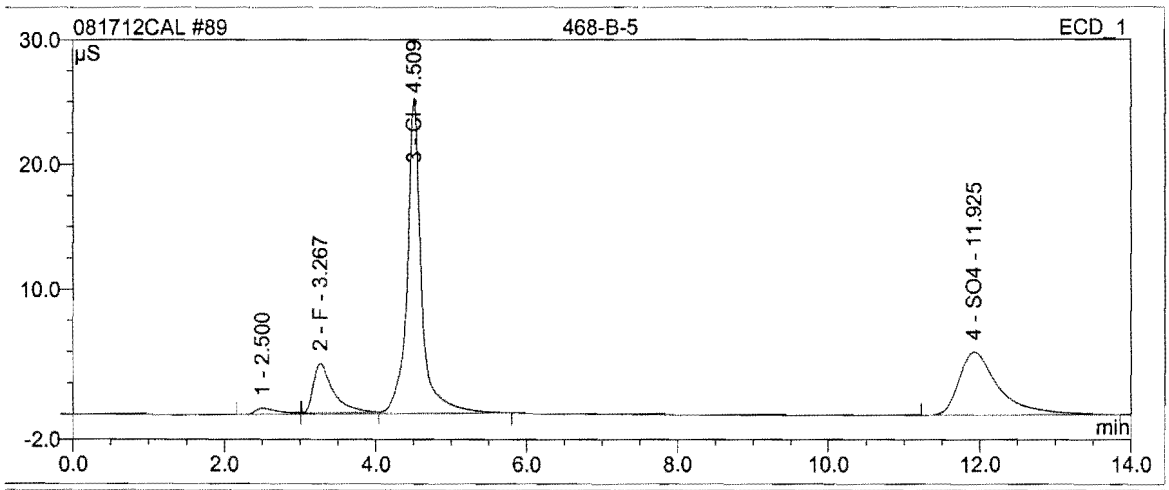


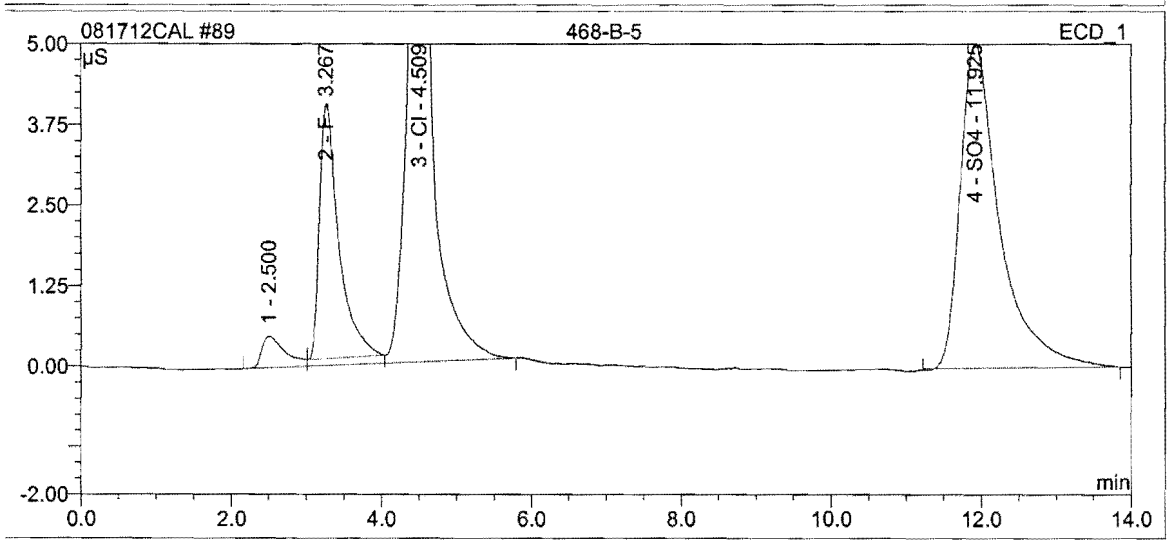


Integration Report - ECD_1

Sample Name:	**468-B-5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 11:39**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	Ru	1.178	3.949	2445.4147
3	4.51	Cl	MB	5.684	25.224	14969.1153
4	11.93	SO4	MB	3.055	5.035	12355.1836
		TOTAL:		9.92	34.21	29769.71

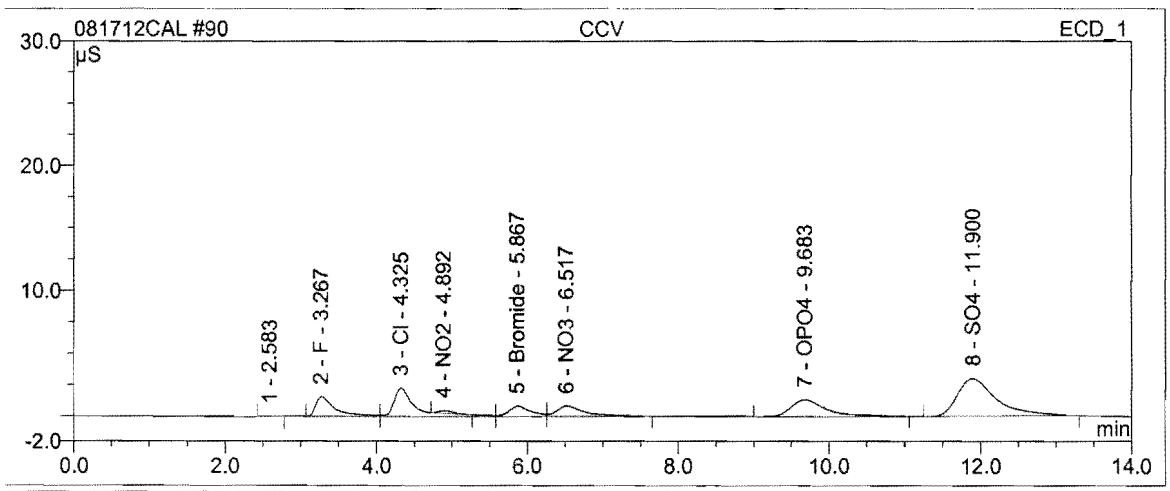


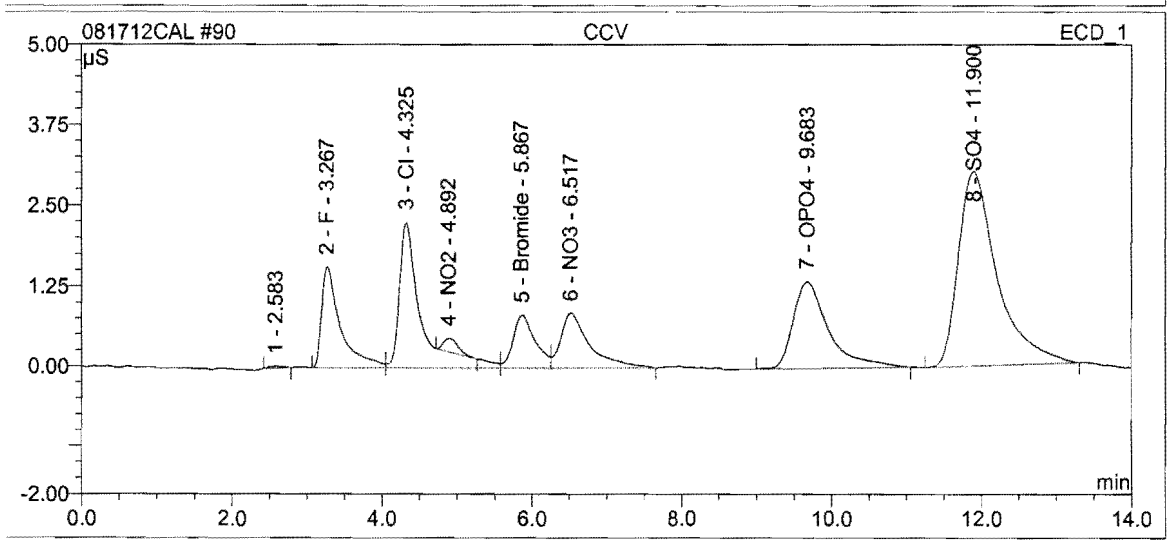


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 11:56**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	BM	0.461	1.571	956.0153
3	4.33	Cl	M	0.767	2.255	2020.9997
4	4.89	NO2	Rd	0.050	0.217	157.6666
5	5.87	Bromide	M	0.283	0.828	2165.7697
6	6.52	NO3	MB	0.383	0.861	411.7000
7	9.68	OPO4	BMB	0.744	1.348	7756.1453
8	11.90	SO4	BMB	1.810	3.007	7320.4534
		TOTAL:		4.50	10.09	20788.75

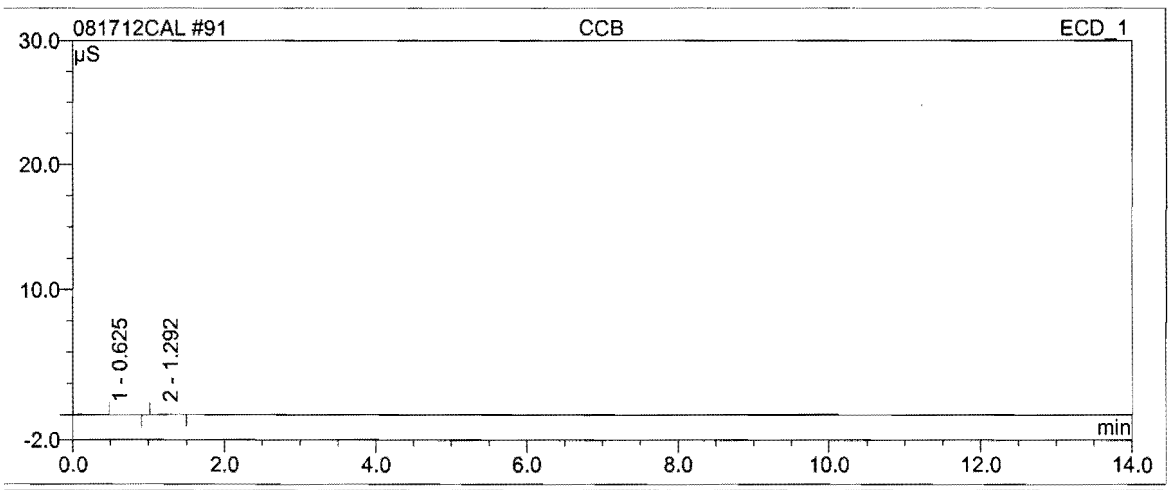


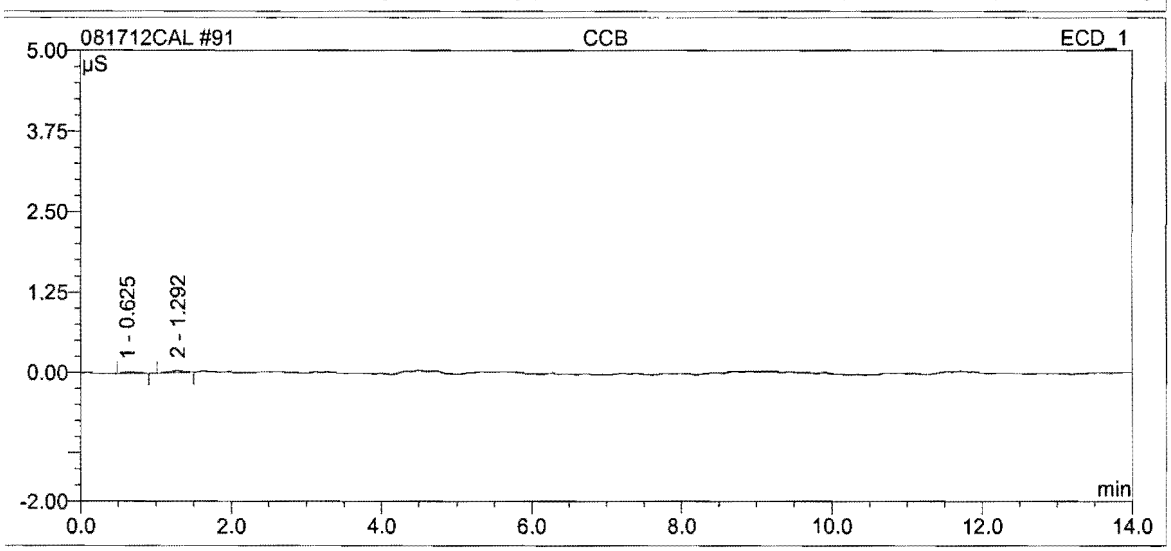


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 12:12**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**468-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 12:28**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	M	0.847	1.680	1758.9050
3	4.98	NO2	M	193.239	342.812	613234.6008
4	6.05	Bromide	M	1.809	3.813	13843.0276
5	11.93	SO4	BMB	13.622	23.260	55085.8616
		TOTAL:		209.52	371.57	683922.40

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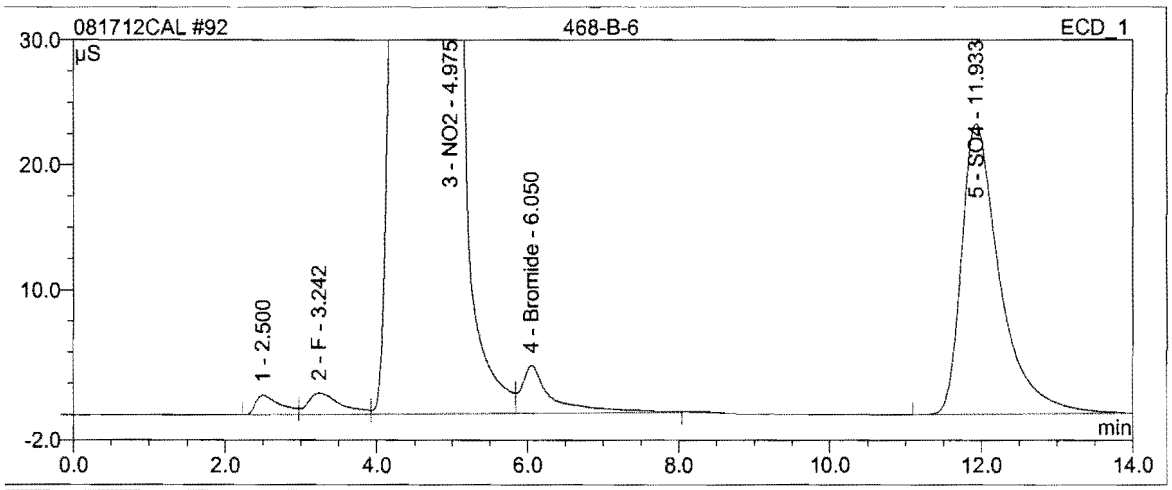
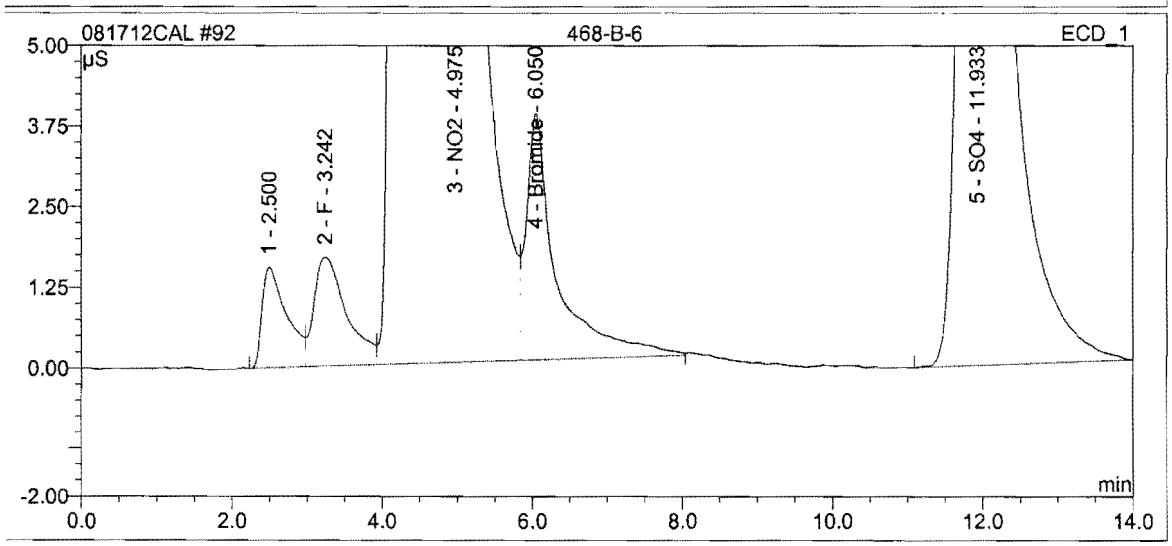
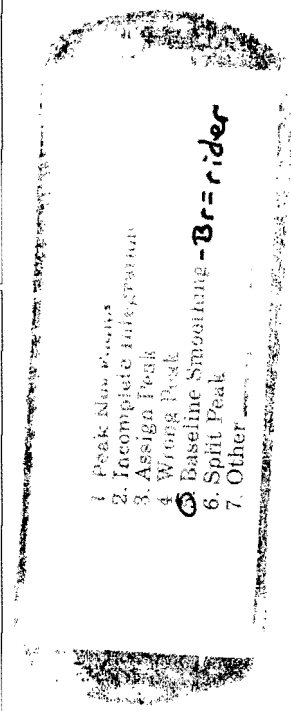


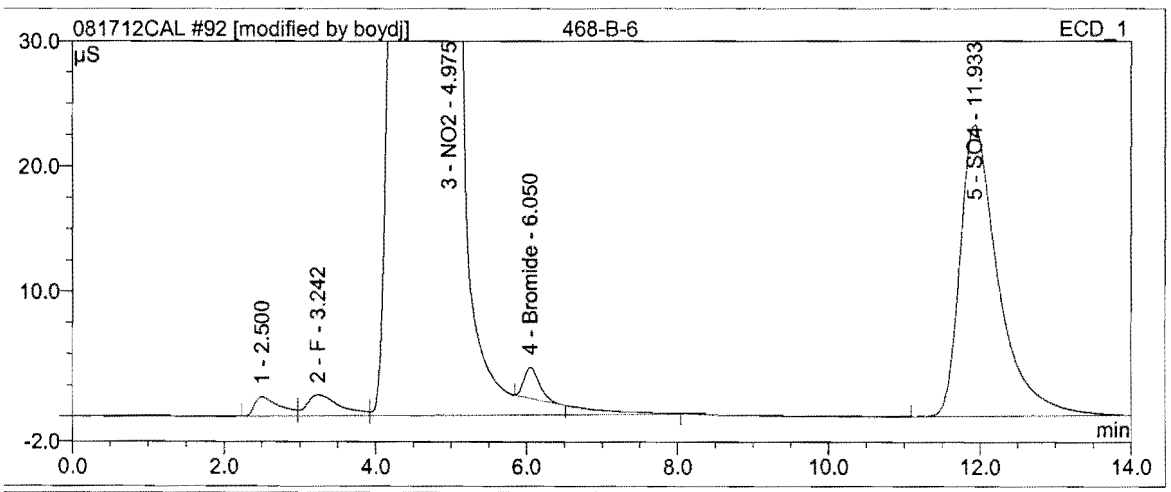


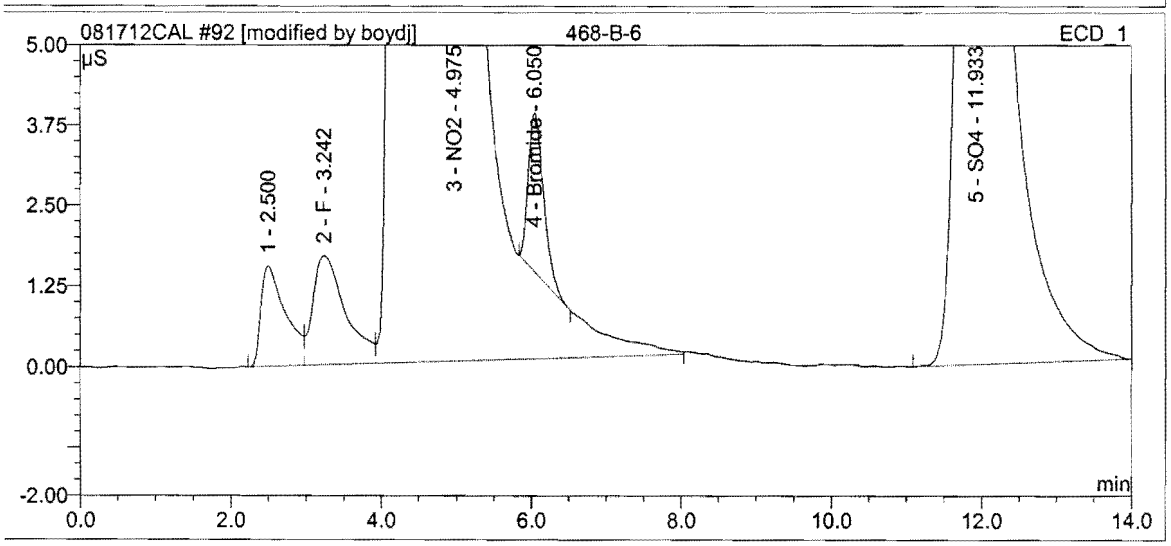


Integration Report - ECD_1

Sample Name:	**468-B-6**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 12:28**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.24	F	M	0.847	1.680	1758.9050
3	4.98	NO2	M *	194.456	342.812	617095.6750
4	6.05	Bromide	Rd*	0.592	2.478	4532.9420
5	11.93	SO4	BMB	13.622	23.260	55085.8616
		TOTAL:		209.52	370.23	678473.38

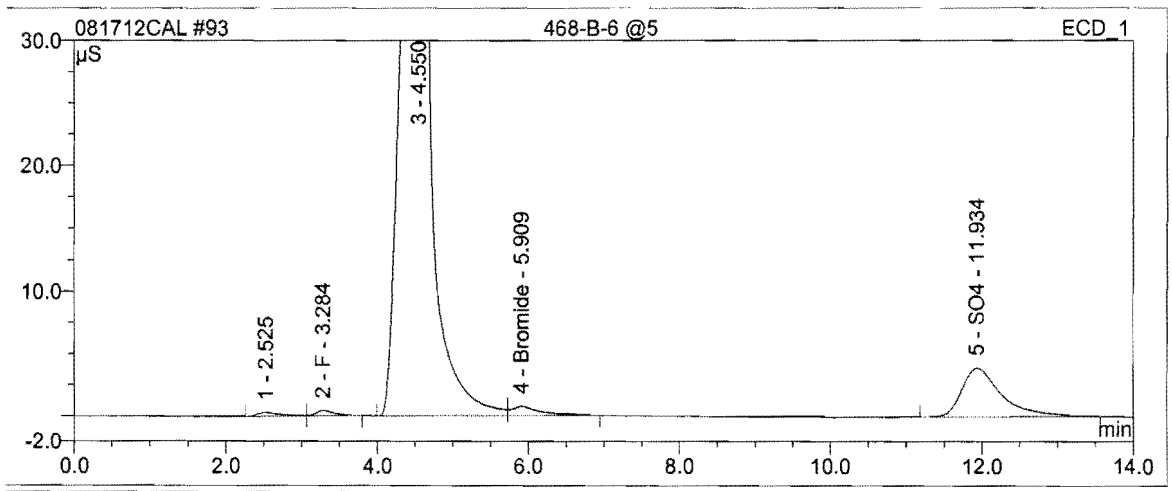


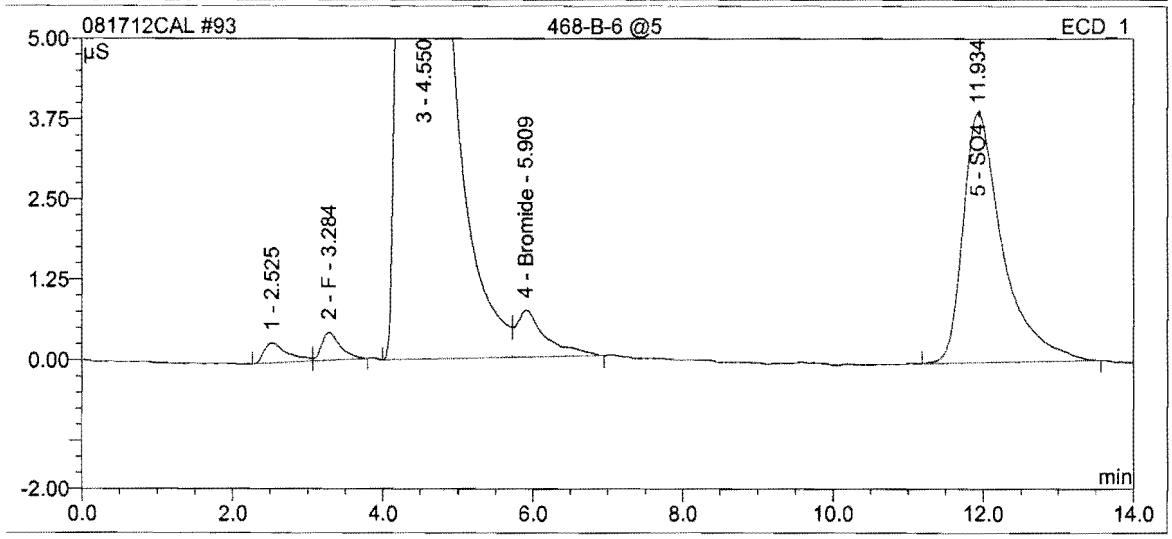


Integration Report - ECD_1

Sample Name:	**468-B-6 @5**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 12:45**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.28	F	MB	0.123	0.431	255.8553
4	5.91	Bromide	MB	0.334	0.729	2557.0365
5	11.93	SO4	BMB	2.375	3.891	9605.5551
TOTAL:				2.83	5.05	12418.45

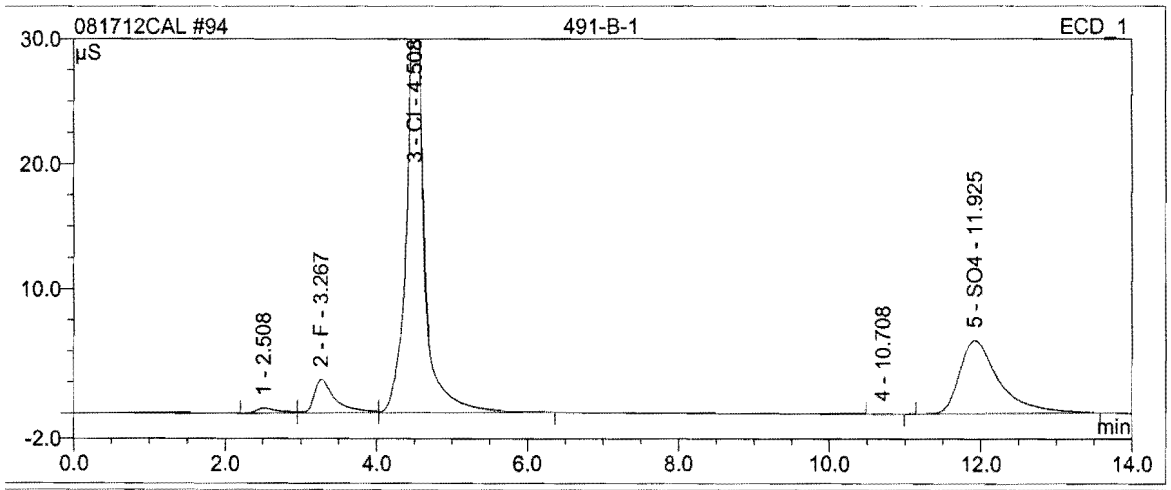


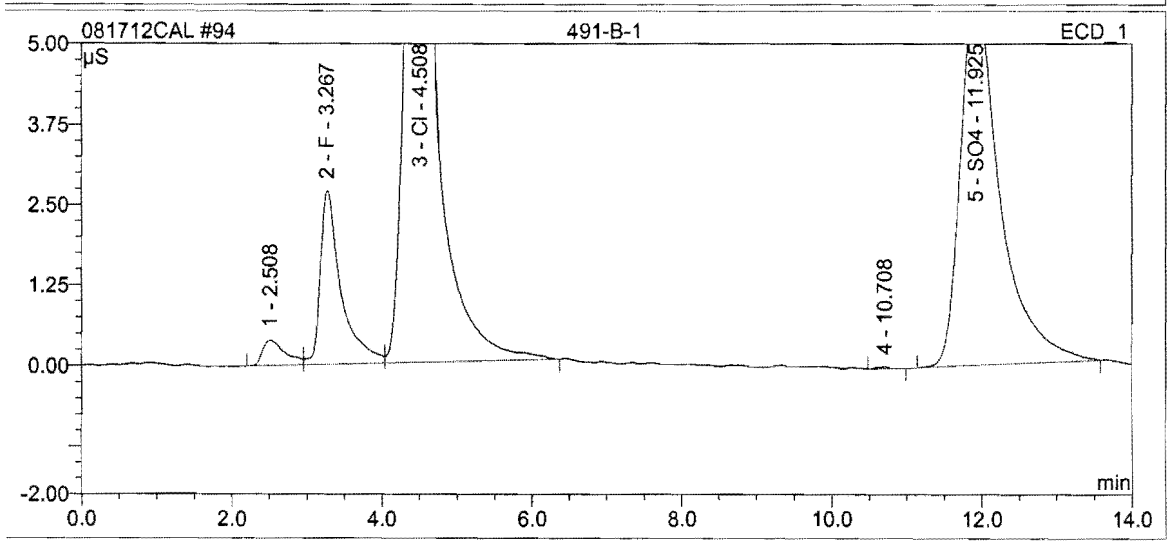


Integration Report - ECD_1

Sample Name:	**491-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:01**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.27	F	M	0.863	2.688	1790.7733
3	4.51	Cl	MB	9.609	40.903	25304.1088
5	11.93	SO4	BMB	3.515	5.849	14213.5969
		TOTAL:		13.99	49.44	41308.48





Integration Report - ECD_1

Sample Name:	**491-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:18**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.25	F	M	3.037	8.606	6304.8454
4	5.92	Bromide	MB	0.390	0.790	2981.5310
6	11.86	SO4	BMB	11.275	19.189	45596.0006
		TOTAL:		14.70	28.59	54882.38

MF
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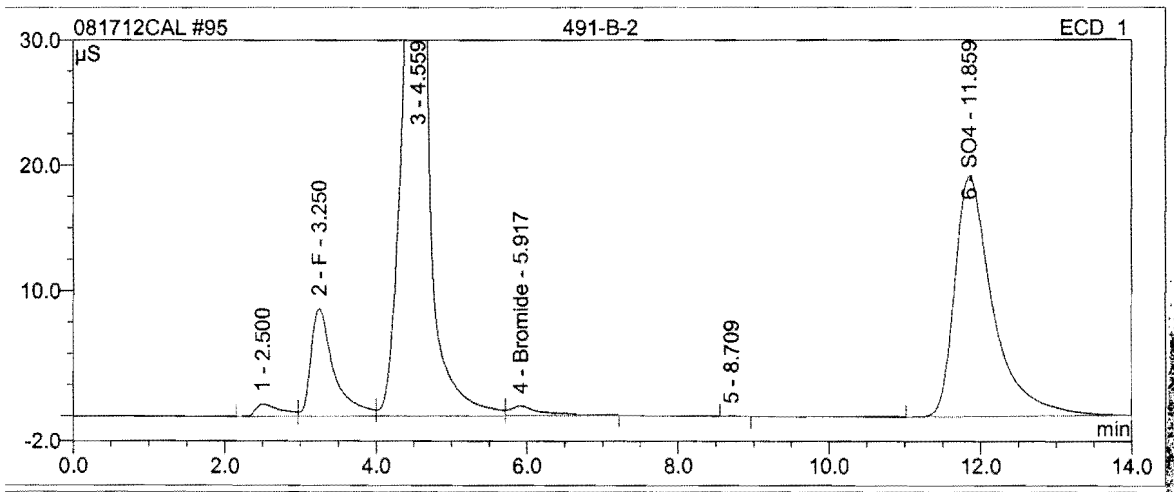
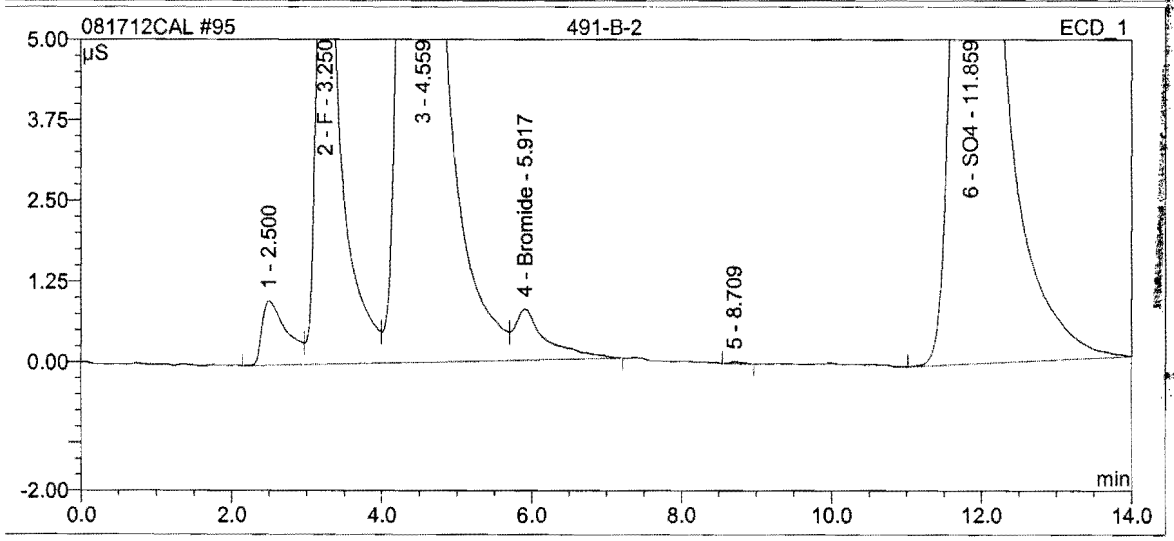
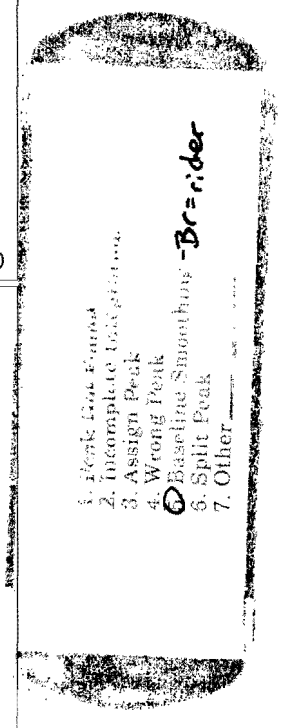


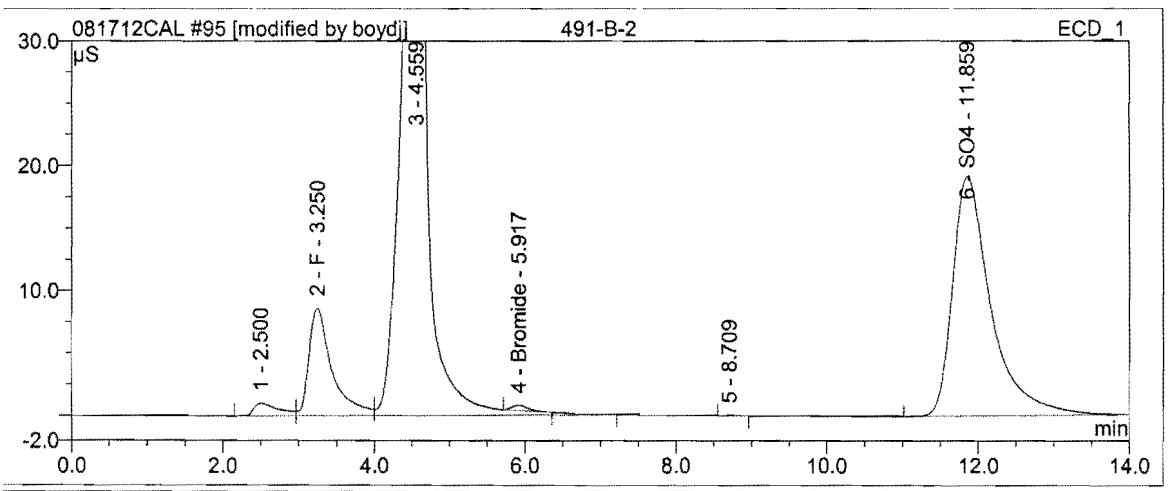


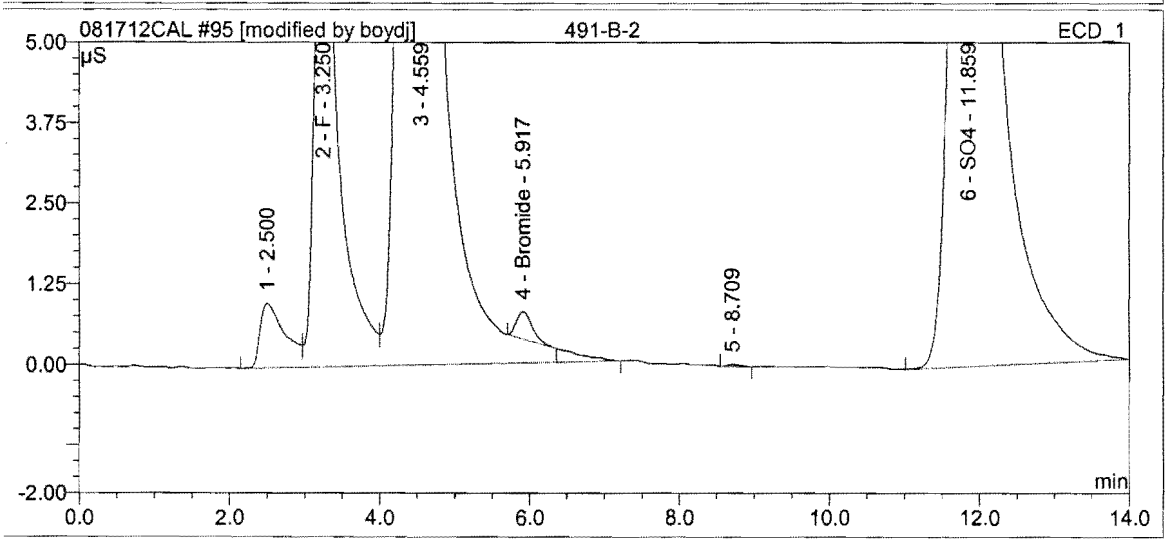


Integration Report - ECD_1

Sample Name:	**491-B-2**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:18**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
2	3.25	F	M	3.037	8.606	6304.8454
4	5.92	Bromide	Rd*	0.106	0.426	807.7718
6	11.86	SO4	BMB	11.275	19.189	45596.0006
		TOTAL:		14.42	28.22	52708.62





Integration Report - ECD_1

Sample Name:	**492-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:34**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.24	F	M	1.308	3.848	2714.9247
5	5.90	Bromide	M	0.457	1.173	3497.5513
6	6.55	NO3	MB	0.424	0.999	455.4607
7	11.80	SO4	BMB	23.922	40.559	96736.1117
		TOTAL:		26.11	46.58	103404.05

MI
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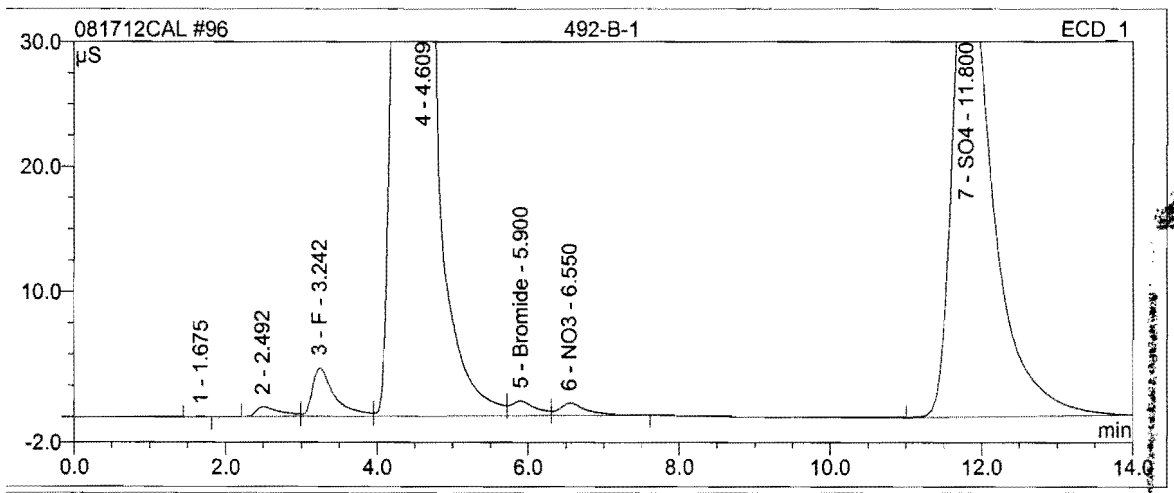
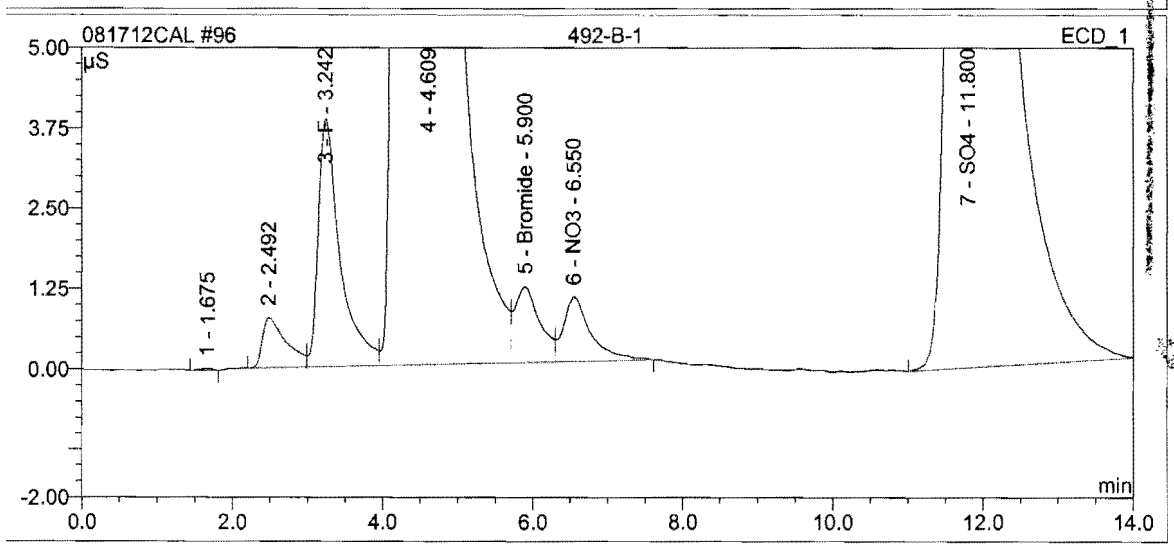


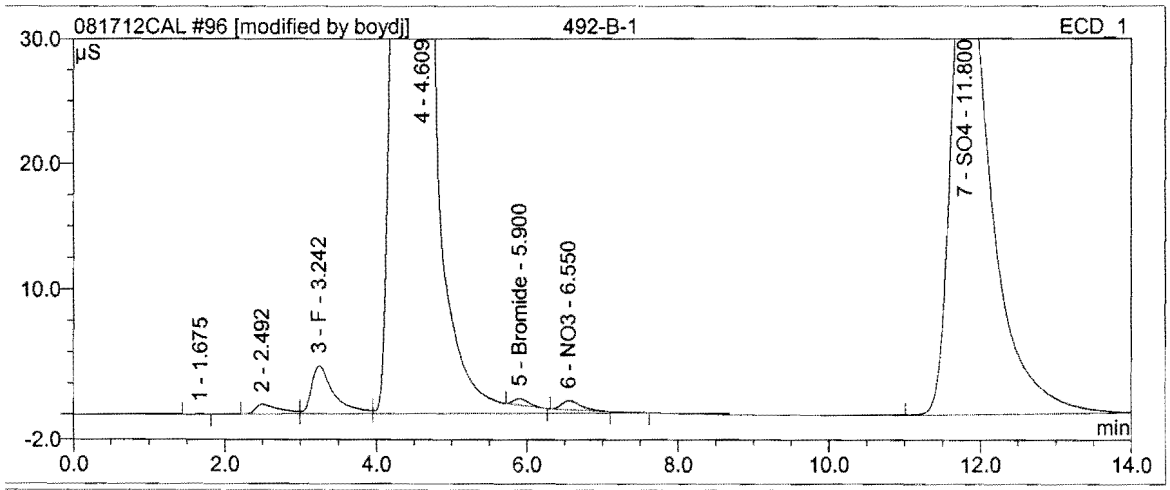


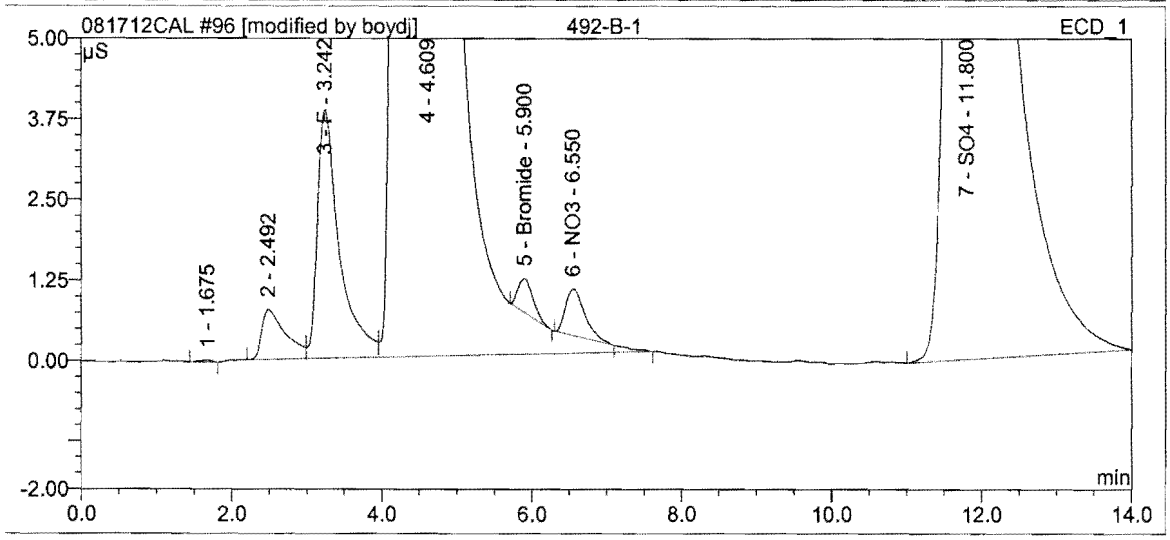
1. Peak Not Found
2. Incomplete Integration
3. Assign Peak
4. Wrong Peak
5. Baseline Smoothing - Broader
6. Split Peak
7. Other

Integration Report - ECD_1

Sample Name:	**492-B-1**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:34**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
3	3.24	F	M	1.308	3.848	2714.9247
5	5.90	Bromide	Rd*	0.122	0.520	936.7194
6	6.55	NO3	Rd*	0.217	0.723	233.0901
7	11.80	SO4	BMB	23.922	40.559	96736.1117
		TOTAL:		25.57	45.65	100620.85

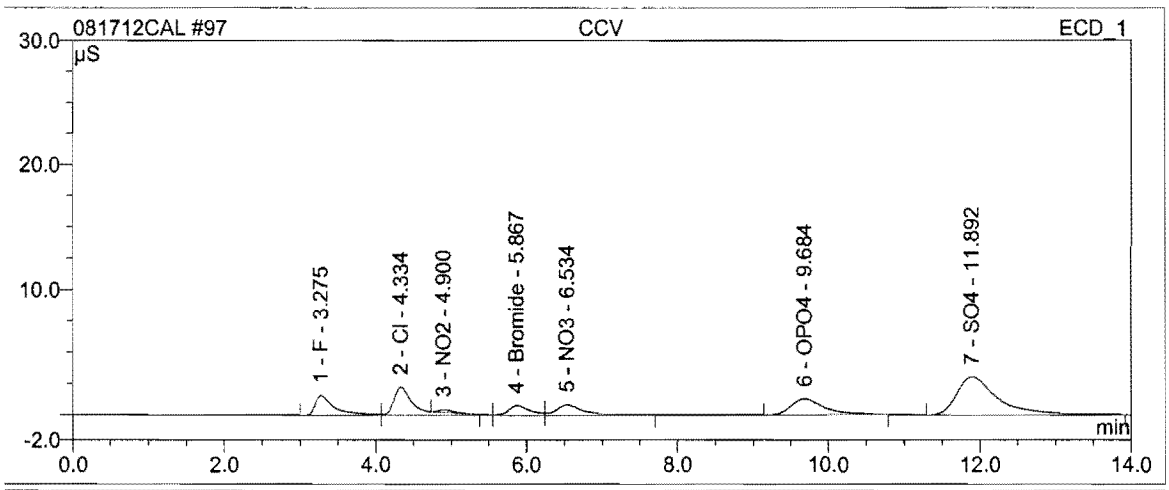


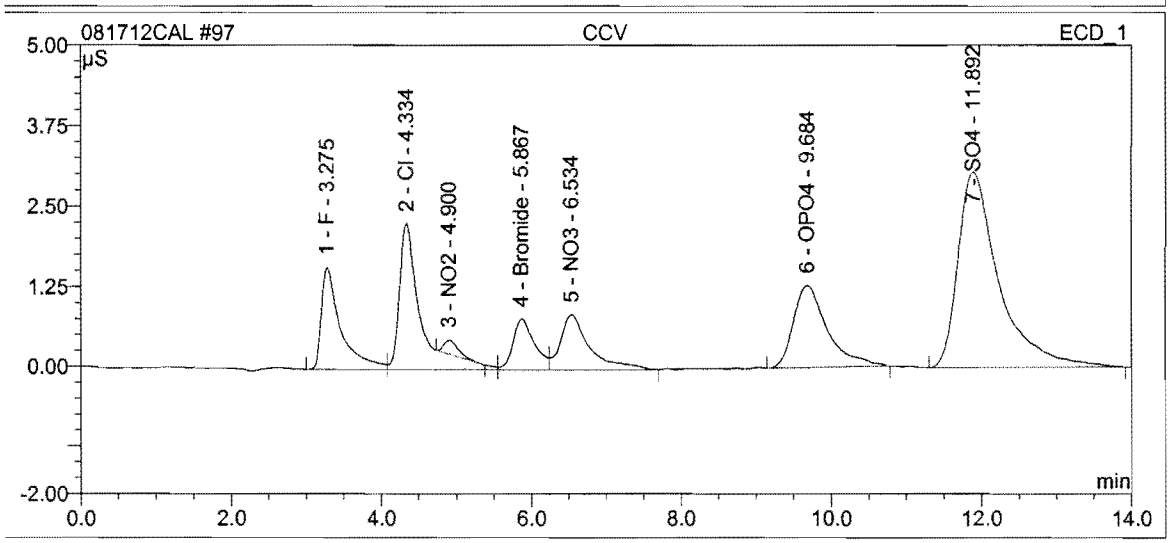


Integration Report - ECD_1

Sample Name:	**CCV**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 13:50**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
1	3.28	F	BM	0.476	1.588	988.9885
2	4.33	Cl	M	0.753	2.271	1982.9789
3	4.90	NO2	Rd	0.051	0.220	162.6132
4	5.87	Bromide	M	0.264	0.796	2023.4649
5	6.53	NO3	MB	0.387	0.865	415.3113
6	9.68	OPO4	BMB	0.674	1.286	7030.9185
7	11.89	SO4	BMB	1.929	3.035	7799.0955
		TOTAL:		4.53	10.06	20403.37

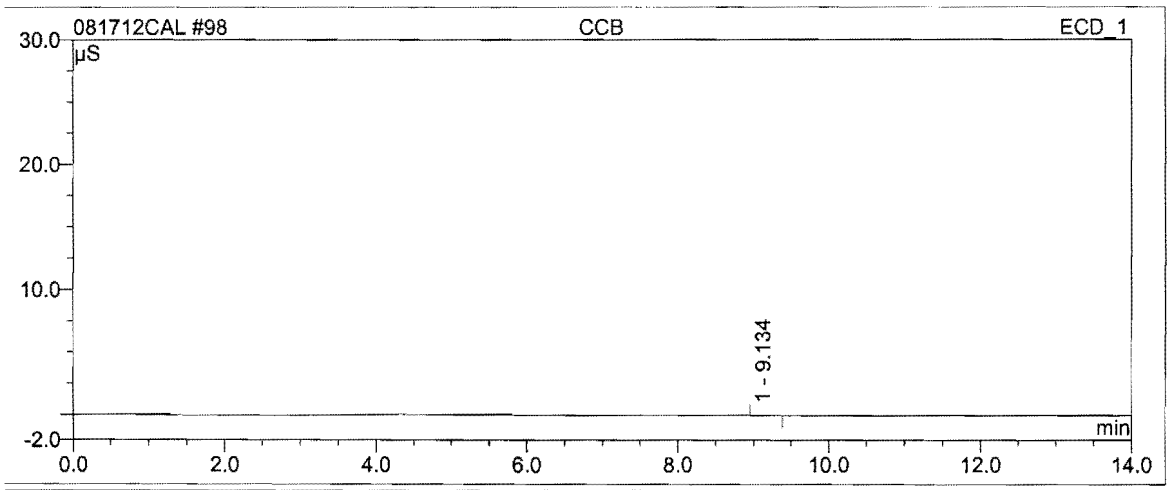


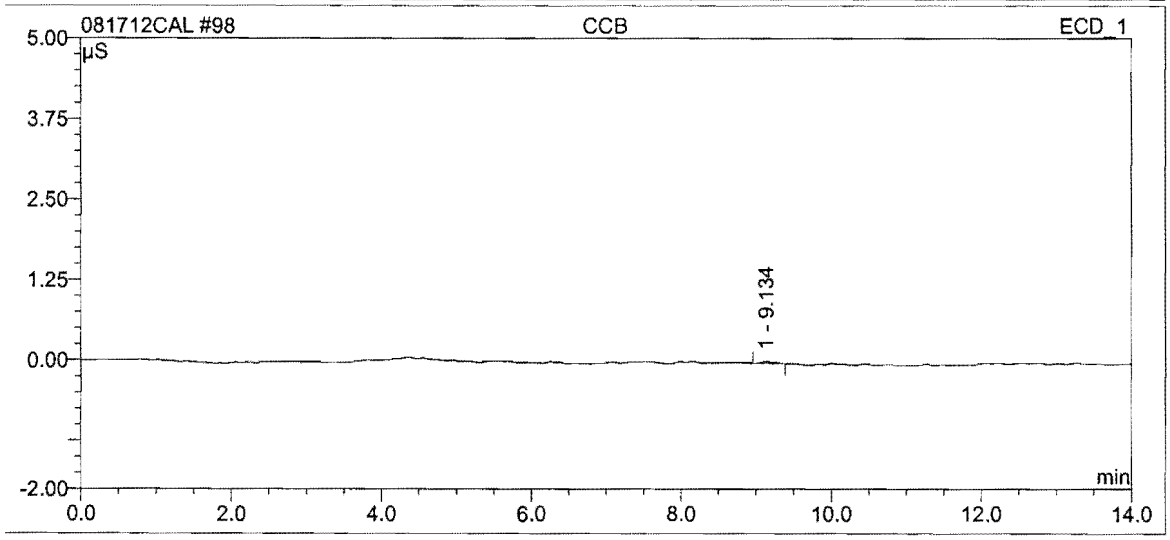


Integration Report - ECD_1

Sample Name:	**CCB**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Routine**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 14:07**	*Run Time:*	**14.00**

No. ECD_1	Time ECD_1 min	Peak Name ECD_1	Type ECD_1	Area ECD_1 µS*min	Height ECD_1 µS	Amount ECD_1
		TOTAL:		0.00	0.00	0.00





Integration Report - ECD_1

Sample Name:	**END**	*Inj. Vol.:*	**50.0**
Sample Type:	**unknown**	*Dilution Factor:*	**1.0000**
Program:	**Claire_Shutdown**	*Operator:*	**n.a.**
Inj. Date/Time:	**18.08.12 14:23**	*Run Time:*	**n.a.**

n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
		TOTAL:		0.00	0.00	0.00

081712CAL #99 END ECD_1

Can't open raw data file "C:\Chromel\data\CLAIRE\Sequences\12AUG\081712CAL.SEQ\ECD_1.CHL\17807.acd".
The system cannot find the file specified.

081712CAL #99 END ECD_1

Can't open raw data file "C:\Chromel\data\CLAIRE\Sequences\12AUG\081712CAL.SEQ\ECD_1.CHL\17807.acd".
The system cannot find the file specified.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9518 Batch Start Date: 08/22/12 15:29 Batch Analyst: Clarke, Jill

Batch Method: 310.1 Batch End Date: 08/22/12 18:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	Initial pH	BuretStart1	BuretStop1	TitrantVolume1	BuretStart2
MB 160-9518/1		310.1		200 mL	5.30 SU	0 mL	.10 mL	0.1 mL	.10 mL
LLCS 160-9518/2		310.1		50 mL	10.25 SU	0 mL	9.4 mL	9.4 mL	0 mL
LCS 160-9518/3		310.1		50 mL	10.46 SU	0 mL	18.6 mL	18.6 mL	0 mL
160-437-C-1	PZ-113-AS	310.1	T	50 mL	6.46 SU	0 mL	32.3 mL	32.3 mL	0 mL
160-437-C-2	D-3	310.1	T	50 mL	6.82 SU	0 mL	26.3 mL	26.3 mL	0 mL
160-437-C-3	PZ-112-AS	310.1	T	50 mL	6.62 SU	0 mL	27.8 mL	27.8 mL	0 mL
160-437-C-4	I-11	310.1	T	50 mL	6.64 SU	0 mL	41.4 mL	41.4 mL	0 mL
160-437-C-5	PZ-207-AS	310.1	T	50 mL	6.69 SU	0 mL	32.4 mL	32.4 mL	0 mL
160-437-C-6	D-12	310.1	T	50 mL	6.72 SU	0 mL	48.2 mL	48.2 mL	0 mL
160-437-C-7	PZ-305-AI	310.1	T	50 mL	6.54 SU	0 mL	49.6 mL	49.6 mL	0 mL
160-437-B-8	S-10	310.1	T	50 mL	6.48 SU	0 mL	40.2 mL	40.2 mL	0 mL
160-437-C-9	DUP 05	310.1	T	50 mL	6.90 SU	0 mL	27.4 mL	27.4 mL	0 mL
160-437-C-1 MS	PZ-113-AS	310.1	T	50 mL	6.81 SU	0 mL	33.3 mL	33.3 mL	0 mL
160-437-C-1 MSD	PZ-113-AS	310.1	T	50 mL	6.80 SU	0 mL	33.5 mL	33.5 mL	0 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	BuretStop2	TitrantVolume2	CalcMsg	carb	hydr	bCarb
MB 160-9518/1		310.1		.15 mL	0.05 mL	Case 4	2 mg/L	1 mg/L	0 mg/L
LLCS 160-9518/2		310.1		0 mL	0 mL	Case 5	0 mg/L	188 mg/L	0 mg/L
LCS 160-9518/3		310.1		0 mL	0 mL	Case 5	0 mg/L	372 mg/L	0 mg/L
160-437-C-1	PZ-113-AS	310.1	T	0 mL	0 mL	Case 5	0 mg/L	646 mg/L	0 mg/L
160-437-C-2	D-3	310.1	T	0 mL	0 mL	Case 5	0 mg/L	526 mg/L	0 mg/L
160-437-C-3	PZ-112-AS	310.1	T	0 mL	0 mL	Case 5	0 mg/L	556 mg/L	0 mg/L
160-437-C-4	I-11	310.1	T	0 mL	0 mL	Case 5	0 mg/L	828 mg/L	0 mg/L
160-437-C-5	PZ-207-AS	310.1	T	0 mL	0 mL	Case 5	0 mg/L	648 mg/L	0 mg/L
160-437-C-6	D-12	310.1	T	0 mL	0 mL	Case 5	0 mg/L	964 mg/L	0 mg/L
160-437-C-7	PZ-305-AI	310.1	T	0 mL	0 mL	Case 5	0 mg/L	992 mg/L	0 mg/L
160-437-B-8	S-10	310.1	T	0 mL	0 mL	Case 5	0 mg/L	804 mg/L	0 mg/L
160-437-C-9	DUP 05	310.1	T	0 mL	0 mL	Case 5	0 mg/L	548 mg/L	0 mg/L
160-437-C-1 MS	PZ-113-AS	310.1	T	0 mL	0 mL	Case 5	0 mg/L	666 mg/L	0 mg/L
160-437-C-1 MSD	PZ-113-AS	310.1	T	0 mL	0 mL	Case 5	0 mg/L	670 mg/L	0 mg/L

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	Alk Int. 00002		

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9518 Batch Start Date: 08/22/12 15:29 Batch Analyst: Clarke, Jill

Batch Method: 310.1 Batch End Date: 08/22/12 18:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	pAlk	tAlk	FinalAmount	Alk Int. 00002		
MB 160-9518/1		310.1		2 mg/L	3 mg/L	50 mL			
LLCS 160-9518/2		310.1		188 mg/L	188 mg/L	50 mL	10 mL		
LCS 160-9518/3		310.1		372 mg/L	372 mg/L	50 mL	20 mL		
160-437-C-1	PZ-113-AS	310.1	T	646 mg/L	646 mg/L	50 mL			
160-437-C-2	D-3	310.1	T	526 mg/L	526 mg/L	50 mL			
160-437-C-3	PZ-112-AS	310.1	T	556 mg/L	556 mg/L	50 mL			
160-437-C-4	I-11	310.1	T	828 mg/L	828 mg/L	50 mL			
160-437-C-5	PZ-207-AS	310.1	T	648 mg/L	648 mg/L	50 mL			
160-437-C-6	D-12	310.1	T	964 mg/L	964 mg/L	50 mL			
160-437-C-7	PZ-305-AI	310.1	T	992 mg/L	992 mg/L	50 mL			
160-437-B-8	S-10	310.1	T	804 mg/L	804 mg/L	50 mL			
160-437-C-9	DUP 05	310.1	T	548 mg/L	548 mg/L	50 mL			
160-437-C-1 MS	PZ-113-AS	310.1	T	666 mg/L	666 mg/L	50 mL	1 mL		
160-437-C-1 MSD	PZ-113-AS	310.1	T	670 mg/L	670 mg/L	50 mL	1 mL		

Batch Notes	
pH Buffer 1 ID	020499
pH Buffer 2 ID	020383, 013789
pH Buffer 3 ID	026006
First End time	18:27
Nominal Amount Used	50 mL
Probe ID	5 Star #4
First Start time	15:52
Normality of first Titrant	.02 N

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9057 Batch Start Date: 08/13/12 19:04 Batch Analyst: Boyd, Jacob

Batch Method: 300.0 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	IC Iodide Cal 00002	IC Iodide QC 00002			
ICV 160-9057/7		300.0		5 mL		0.02 mL			
ICB 160-9057/8		300.0		5 mL					
CCV 160-9057/19		300.0		5 mL	0.02 mL				
CCB 160-9057/20		300.0		5 mL					
MB 160-9057/25		300.0		5 mL					
LCS 160-9057/26		300.0		5 mL		0.02 mL			
160-437-B-1	PZ-113-AS	300.0	T	5 mL					
160-437-B-1 MS	PZ-113-AS	300.0	T	5 mL		0.02 mL			
160-437-B-1 MSD	PZ-113-AS	300.0	T	5 mL		0.02 mL			
160-437-B-2	D-3	300.0	T	5 mL					
CCV 160-9057/31		300.0		5 mL	0.02 mL				
CCB 160-9057/32		300.0		5 mL					
160-437-B-3	PZ-112-AS	300.0	T	5 mL					
160-437-B-4	I-11	300.0	T	5 mL					
160-437-B-5	PZ-207-AS	300.0	T	5 mL					
160-437-B-6	D-12	300.0	T	5 mL					
160-437-B-7	PZ-305-AI	300.0	T	5 mL					
160-437-B-8	S-10	300.0	T	5 mL					
160-437-B-9	DUP 05	300.0	T	5 mL					
CCV 160-9057/43		300.0		5 mL	0.02 mL				
CCB 160-9057/44		300.0		5 mL					

Batch Notes	
Balance ID	1123051741
Eluent 1 Lot	25065
Pipette ID	IC-5, IC-3, WC-A

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9484 Batch Start Date: 08/17/12 11:29 Batch Analyst: Boyd, Jacob

Batch Method: 300.0 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	FinalAmount	IC 2nd Source 00001	IC Cal High 00006	IC MS Soln 00002		
ICV 160-9484/7		300.0		5 mL	2 mL				
ICB 160-9484/8		300.0		5 mL					
MB 160-9484/9		300.0		5 mL					
LCS 160-9484/10		300.0		5 mL	2 mL				
160-437-B-1	PZ-113-AS	300.0	T	5 mL					
160-437-B-1 MS	PZ-113-AS	300.0	T	5 mL			0.1 mL		
160-437-B-1 MSD	PZ-113-AS	300.0	T	5 mL			0.1 mL		
160-437-B-2	D-3	300.0	T	5 mL					
160-437-B-2 ^5	D-3	300.0	T	5 mL					
160-437-B-3	PZ-112-AS	300.0	T	5 mL					
160-437-B-3 ^5	PZ-112-AS	300.0	T	5 mL					
160-437-B-4	I-11	300.0	T	5 mL					
160-437-B-4 ^5	I-11	300.0	T	5 mL					
CCV 160-9484/20		300.0		5 mL		2 mL			
CCB 160-9484/21		300.0		5 mL					
160-437-B-5	PZ-207-AS	300.0	T	5 mL					
160-437-B-5 ^5	PZ-207-AS	300.0	T	5 mL					
160-437-B-6	D-12	300.0	T	5 mL					
160-437-B-6 ^5	D-12	300.0	T	5 mL					
160-437-B-7	PZ-305-AI	300.0	T	5 mL					
160-437-B-7 ^5	PZ-305-AI	300.0	T	5 mL					
160-437-B-8	S-10	300.0	T	5 mL					
160-437-B-8 ^5	S-10	300.0	T	5 mL					
160-437-B-9	DUP 05	300.0	T	5 mL					
160-437-B-9 ^5	DUP 05	300.0	T	5 mL					
CCV 160-9484/32		300.0		5 mL		2 mL			
CCB 160-9484/33		300.0		5 mL					

Batch Notes	
Balance ID	1123051741
Eluent 1 Lot	Conc. Eluent ID: 17597, Working Eluent ID: 17591
Pipette ID	IC-5, IC-3, WC-A

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica St. Louis Job No.: 160-437-1

SDG No.:

Batch Number: 9484 Batch Start Date: 08/17/12 11:29 Batch Analyst: Boyd, Jacob

Batch Method: 300.0 Batch End Date:

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

CWL 287

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
EMSI - Paul Rosasco		8/9/12	159324
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of**
City / **State** / **Zip Code**	**Site Contact**: S. Tamborski	**Lab Contact**	**Analysis (Attach list if more space is needed)**
Project Name and Location (State): West Lake OU-1	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	VOC 8260B	SVOC 8270C	Diss Metals	Tot Metals	Alkalinity	Bromide	Sulfide	Special Instructions/ Conditions of Receipt
PZ-113-A5	8/8/12	0935		X			3		2	3			X	X	X	X	X	X	X	
D-3	↓	1000		X			3		2	3			X	X	X	X	X	X	X	
PZ-112-A5		1048		X			3		2	3			X	X	X	X	X	X	X	
I-11		1143		X			3		2	3			X	X	X	X	X	X	X	
PZ-307-A5		1255		X			3		2	3			X	X	X	X	X	X	X	
D-12		1416		X			3		2	3			X	X	X	X	X	X	X	
PZ-305-A1		1430		X			3		2	3			X	X	X	X	X	X	X	
S-10		1502		X			3		2	3			X	X	X	X	X	X	X	
Dup 05	↓	—		X			3		2	3			X	X	X	X	X	X	X	
Trip Blank	8/8/12	—		X						3			X							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☑ Other Std

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Paul Rosasco	8/9/12	0725	1. Received By	8/9/2012	0725
2. Relinquished By	8/9/2012	0810	2. Received By	8/9/12	0810
3. Relinquished By	Date	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

09/20/2012

Login Sample Receipt Checklist

Client: Engineering Management Support, Inc.

Job Number: 160-437-1

Login Number: 437

List Source: TestAmerica St. Louis

List Number: 1

Creator: Daniels, Brian

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3,3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	False	1 VIAL FOR PZ-207-AS HAS PEA SIZE HEADSPACE
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	