CompuChem

A Division Of

Liberty Analytical Corp.

8/22/2014

SMITA SUMBALY

WESTON SOLUTIONS

1090 KING GEORGES POST RD. SUITE 201

EDISON, NJ 088373703

Subject:

Report of Data - Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

WorkOrder: 1408024 VOA 8260B

Attn.: SMITA SUMBALY

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES 158

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

325663

CompuChem, a division of Liberty Analytical

Client: WESTON SOLUTIONS **Work:** 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ **Sdg:** 1408024

Lab ID	Client ID	Matrix	Date Sampled	Date Received
1408024-01	P001-S002-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-02	P001-S003-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-03	P001-S003-0002-02	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-04	P001-S006-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-05	P001-S001-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-06	P001-S004-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-07	P001-S005-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408024

Client Sample Id:	Analysis:	Lab Sample Id:
P001-S002-0002-01	SW 8260B	1408024-01
P001-S003-0002-01	SW 8260B	1408024-02
P001-S003-0002-02	SW 8260B	1408024-03
P001-S006-0002-01	SW 8260B	1408024-04
P001-S001-0002-01	SW 8260B	1408024-05

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester Name: Quentisha Forrester

Date: 08/20/2014 Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

ACCREDITED IN ACCORDANCE WITH nelac

I. SAMPLE DATA PACKAGE

GC/MS by SW-846

The Sample Data Package shall contain data for all samples in one Work Order/Sample Delivery Group (SDG), as follows:

A. SDG Narrative

B. Chain of Custody Records

C. Sample Preparation and Analysis Holding Time Data
(HOLDING TIME SUMMARY)

D. Surrogate Recovery Results
(SURROGATE STANDARD RECOVERY)

E. Laboratory Control Sample Results
(LCS/LCS DUPLICATE RECOVERY)

F. Matrix Spike Results
(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

G. Batch Summary
(PREPARATION BATCH SUMMARY)

H. Analysis Sequence Summary
(ANALYSIS SEQUENCE SUMMARY)

I. Instrument Performance Check
(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

J. Internal Standard Results
(INTERNAL STANDARD AREA AND RT SUMMARY)

K. Target Compound Results – Forms and Raw Data
(ANALYSIS DATA SHEET)

L. Initial Calibration and Second Source Calibration Verification Forms and Raw Data
(INITIAL CALIBRATION DATA) (SECOND-SOURCE CALIBRATION VERIFICATION)

M. Continuing Calibration Data – Forms and Raw Data
(CONTINUING CALIBRATION CHECK)

N. BFB / DFTPP or FC43 - Raw Data

O. Blank Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

P. Laboratory Control Sample Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

Q. Matrix Spike Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

R. GPC Data (if applicable)

S. Run Logs / Prep Sheets / Internal CoC Documents / Standard Info / Manual Integration Summary

A. SDG Narrative

CompuChem

A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408024
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS:	**P001-S002-0002-01**	**P001-S003-0002-01**
P001-S003-0002-02	**P001-S006-0002-01**	**P001-S001-0002-01**

The 5 soil samples listed above were received intact, properly refrigerated at 5.2°C, with proper documentation, in sealed shipping containers, on August 8, 2014. The samples were scheduled for the requested analysis of the volatile fraction. SW-846, 3rd Edition, Update 3, Method 5035/8260B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section, and all pertinent Laboratory notices for SDG# 1408024 are included in the sample data sections.

Volatiles

Analysis holding time requirements were met for these samples. The percent moisture value of the samples ranged from 4 to 22 percent.

There were volatile Project/Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in these samples. All of the system monitoring compounds met recovery criteria in the analysis of these samples. All of the internal standards met response and retention time criteria in the analysis of these samples.

Manual integrations were performed in this SDG, as indicated on the spreadsheet in section S. The reasons have been explained in the notice included in the narrative section of the SDG.

All Bromofluorobenzene (BFB) abundance criteria were met for tunes associated to this SDG. All QC criteria were met for all initial and continuing calibration standards associated to this SDG. The second source standard VSTD050FT (4H11002-SCV1) failed QC criteria.

The associated method blanks met all quality control criteria.

Duplicate matrix spikes were not requested with this SDG.
The associated Laboratory Control Sample (LCS) met all quality control criteria.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Case Reviewer
August 20, 2014

GC and GC/MS Column and Trap Specifications Table

COLUMNS

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	GC Laboratory				
DRO/ORO	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
√	Restek	clpest	0.32	0.5	30
√	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
RSK	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
GRO	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
√	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
√	Restek	RTX-5Sil MS	0.32	0.25	30
	HPLC Laboratory				
PAH	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
PAH	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
EXP	Restek	Pinnacle Cyano	4.6	5.0	25 cm
EXP	Restek	Allure C18	4.6	5.0	25 cm

TRAPS

	GC and GC/MS Volatiles Laboratory	
	Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C
		* 1.2 cm Carbopack B
√	Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)
		* 6 cm of Carboxen 1000 (Carbon molecular sieves)
		* 1 cm of Carboxen 1001 (Carbon molecular sieves)

Rev. 30

This table contains the GC columns (and volatile organic trap) used for the analysis of volatiles, semivolatiles, pesticides, and Aroclors by the requested analytical methods. Please see the SDG Narrative(s) for the specific fraction(s) relative to this SDG.
Note: This table also contains HPLC columns.

CompuChem

A division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.). This policy is also applicable to non-CLP data packages.

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

Revision 8 (01/29/2011)

ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408021-01	P001-S002-0002-01	P001-S002	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S002-0002-01	P001-S002	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S002-0002-01	P001-S002	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S002-0002-01	P001-S002	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408021-02	P001-S003-0002-01	P001-S003	VOCs	Soil	8/7/2014	6	5 gram Encore	0 C	Y
	P001-S003-0002-01	P001-S003	SVOC + PCB	Soil	8/7/2014	2	8 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Percent Moisture	Soil	8/7/2014	2	2 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Metals + Hg	Soil	8/7/2014	2	8 oz	0 C	Y
1408021-03	P001-S003-0002-02	P001-S003	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S003-0002-02	P001-S003	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S003-0002-02	P001-S003	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S003-0002-02	P001-S003	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408021-06	P001-S004-0002-01	P001-S004	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	~~P001-S005-0002-01~~	~~P001-S005~~	~~VOCs~~	~~Soil~~	~~8/7/2014~~	~~3~~	~~5 gram Encore~~	~~0 C~~	~~N~~
1408021-07	P001-S005-0002-01	P001-S005	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S005-0002-01	P001-S005	Percent Moisture *	Soil	8/7/2014	1	2 oz *	0 C	N
1408021-07	P001-S005-0002-01	P001-S005	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408021-04	P001-S006-0002-01	P001-S006	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S006-0002-01	P001-S006	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N

PL.

Special Instructions: RFP 306

*did not receive % moisture 2oz jar for P001-S005-0002-01 where VOA was crossed off 8/8/14 rec'd @ 5.2°C

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/7/14	Doe / CompuChem	8/8/14 0904	good condition 8/8/14

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408024-01	P001-S006-0002-01	P001-S006	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S006-0002-01	P001-S006	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408019-10	P001-UST01-LW-01	UST01	VOCs	Liquid Waste	8/7/2014	1	4 oz	None	N
	P001-UST01-LW-01	UST01	SVOC+PCB+PEST	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	RCRA	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	METALS+Hg	Liquid Waste	8/7/2014	1	500 ml	None	N
1408024-05	P001-S001-0002-01	P001-S001	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S001-0002-01	P001-S001	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S001-0002-01	P001-S001	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S001-0002-01	P001-S001	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N

Special Instructions: RFP 306

rec'd @ 5.2°C

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSES	(WESTON)	8/7/14	/ CompuChem	8/8/14 0904	good condition @ 8/8/14

Precautionary Measures Against Hidden Hazards in Laboratory Samples

Notice to Laboratory Personnel

Background

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) of 1980, as amended, Section 311 of the Clean Water Act (CWA), as amended, by the Oil Pollution Act of 1990 (OPA), Subtitle I of the Resource Conversation and Recovery Act (RCRA), and pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Presidential Decision Document (PDD) #39, the Environmental Protection Agency (EPA) has been delegated the responsibility to undertake response actions with respect to, as a general matter, the release or threat of release of oil, petroleum products, hazardous substances, or pollutant and contaminants, that pose an actual or potential threat to human health or welfare, or to the environment. EPA is responsible for conducting evaluations and cleanups of uncontrolled hazardous substance disposal sites and placing those that are considered to pose a significant threat to the public health or the environment on the National Priorities List (NPL).

EPA's successful implementation of these emergency response action responsibilities requires that technical support capabilities be provided in the form of a contracted Removal Support Team (RST) for EPA. The WESTON RST Contract EP-W-06-072, provides this support to EPA Region II.

Hazard Communication

The samples which accompany this notice were shipped to your laboratory for analysis in accordance with applicable D.O.T. or IATA Regulations and were collected by the WESTON RST and tentatively designated by the field response team, as either environmental or hazardous material samples.

In general, *Environmental Samples* are collected from streams, farm ponds, small lakes, wells, and off-site soil locations that are not reasonable expected to be contaminated with hazardous materials. Samples of on-site soils or water, and materials collected from drums, bulk storage tanks, obviously contaminated ponds, impoundments, lagoons, pools, and leachates from hazardous waste sites are considered *Hazardous Samples*. Samples which are obtained from a known radioactive material contamination site or which demonstrate beta or gamma activity greater than three times average background as scanned with a radiation survey meter are considered *Radioactive Samples*.

The samples which accompany this notice were tentatively classified by the field response team as:

XXX Environmental _____ Hazardous _____ Comb. (Enviro. & Hazard.) _____ Radioactive

The field team which collected the samples, used the following Level(s) of personal protection as designated by EPA and OSHA conventions to provide protection against possible radiological or chemical exposure:

_____ Level A _____ Level B _____ Level C XXX Level D

The information is intended for use as a guide for the safe handling of these laboratory samples in accordance with EPA and OSHA regulations. The Sample classification(s) and Levels of personal protection used by the WESTON RST are not represented to be, nor are they adequate or applicable in all situations, nor are they intended to serve as substitutes for professional/personal judgment.

Laboratory Name CompuChem *RFP No.* 306
Prepared by: Lisichenko, P *Date* 8/6/2014

WESTON Office: Region II RST, Edison, NJ; Phone: 732-585-4400 Fax: 732-225-7037

WORK ORDER

Printed: 8/11/2014 11:26:37AM

1408024

COMPUCHEM

Client:	**WESTON SOLUTIONS**	**Project Manager:**	**Cathy Dover**
Project:	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**	**Project Number:**	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**
SDG:	**1408024** **CASE:**	**Status:**	**Batched**

Report To:
WESTON SOLUTIONS
SMITA SUMBALY
1090 KING GEORGES POST RD. SUITE 201
EDISON, NJ 088373703
Phone: (732) 225-6116
Fax: -

Invoice To:
WESTON SOLUTIONS
SMITA SUMBALY
1090 KING GEORGES POST RD. SUITE 201
EDISON, NJ 088373703
Phone :(732) 225-6116
Fax: -

Date Due:	08/21/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/08/2014 09:04
Logged In By:	Cathy Dover	Date Logged In:	08/08/2014 17:09

J & B Flags?: **YES** Metals ND to? **MDL**	TICS?: **EPA-TICS** Spike Level: **FULL Spike**	Deliverable: **Level 4**	EDD : **61) CUSTOM EXCEL**

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-01 P001-S002-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
1408024-02 P001-S003-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern				**USE FOR QC**	
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)

WORK ORDER

Printed: 8/11/2014 11:26:37AM

1408024

COMPUCHEM

Client:	WESTON SOLUTIONS	Project Manager:	Cathy Dover
Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ	Project Number:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
SDG:	1408024 CASE:	Status:	Batched

Date Due: 08/21/2014 00:00 (13 day TAT)

Received By: Cathy Dover — Date Received: 08/08/2014 09:04

Logged In By: Cathy Dover — Date Logged In: 08/08/2014 17:09

J & B Flags?: YES Metals ND to? MDL	TICS?: EPA-TICS Spike Level: FULL Spike	Deliverable: Level 4	EDD : 61) CUSTOM EXCEL

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-03 P001-S003-0002-02 [Soil] Sampled 08/07/2014 00:00 Eastern					
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
1408024-04 P001-S006-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
1408024-05 P001-S001-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
1408024-06 P001-S004-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)

WORK ORDER

Printed: 8/11/2014 11:26:37AM

1408024

COMPUCHEM

Client:	**WESTON SOLUTIONS**	**Project Manager:**	**Cathy Dover**
Project:	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**	**Project Number:**	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**
SDG:	**1408024** **CASE:**	**Status:**	**Batched**

Date Due:	08/21/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/08/2014 09:04
Logged In By:	Cathy Dover	Date Logged In:	08/08/2014 17:09

J & B Flags?: **YES**	TICS?: **EPA-TICS**	Deliverable: **Level 4**	EDD : **61) CUSTOM EXCEL**
Metals ND to? **MDL**	Spike Level: **FULL Spike**		

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-07 P001-S005-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	

C. Sample Preparation and Analysis Holding Time Data

(HOLDING TIME SUMMARY)

Sample collection, receipt, preparation and analysis dates with method holding time requirements.

HOLDING TIME SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
P001-S002-0002-01	08/07/14	08/08/14	08/11/14	N/A	14	08/11/14	4.9	14	
P001-S003-0002-01	08/07/14	08/08/14	08/11/14	N/A	14	08/12/14	5.0	14	
P001-S003-0002-02	08/07/14	08/08/14	08/11/14	N/A	14	08/11/14	5.0	14	
P001-S006-0002-01	08/07/14	08/08/14	08/11/14	N/A	14	08/11/14	5.0	14	
P001-S001-0002-01	08/07/14	08/08/14	08/11/14	N/A	14	08/11/14	5.0	14	

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D. Surrogate Recovery Results

(SURROGATE STANDARD RECOVERY)

SURROGATE STANDARD RECOVERY

SW 8260B

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408024 Instrument: 5972hp59

Sequence: 4H11002 Calibration: 4081203

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4081111-BLK1) ug/kg wet				
Lab File ID: 4081111-BLK1R59.d	Analyzed: 08/11/14 20:49			
Dibromofluoromethane	50.00	95	71 - 141	
1,2-Dichloroethane-d4	50.00	99	70 - 139	
Toluene-d8	50.00	90	72 - 123	
Bromofluorobenzene	50.00	96	65 - 131	
LCS (4081111-BS1) ug/kg wet				
Lab File ID: 4081111-BS159.d	Analyzed: 08/11/14 21:19			
Dibromofluoromethane	50.00	100	71 - 141	
1,2-Dichloroethane-d4	50.00	103	70 - 139	
Toluene-d8	50.00	95	72 - 123	
Bromofluorobenzene	50.00	103	65 - 131	
P001-S002-0002-01 (1408024-01) ug/kg dry				
Lab File ID: 1408024-0159.d	Analyzed: 08/11/14 22:21			
Dibromofluoromethane	81.30	97	71 - 141	
1,2-Dichloroethane-d4	81.30	101	70 - 139	
Toluene-d8	81.30	95	72 - 123	
Bromofluorobenzene	81.30	98	65 - 131	
P001-S003-0002-02 (1408024-03) ug/kg dry				
Lab File ID: 1408024-0359.d	Analyzed: 08/11/14 22:52			
Dibromofluoromethane	70.65	93	71 - 141	
1,2-Dichloroethane-d4	70.65	102	70 - 139	
Toluene-d8	70.65	91	72 - 123	
Bromofluorobenzene	70.65	98	65 - 131	
P001-S006-0002-01 (1408024-04) ug/kg dry				
Lab File ID: 1408024-0459.d	Analyzed: 08/11/14 23:23			
Dibromofluoromethane	81.53	102	71 - 141	
1,2-Dichloroethane-d4	81.53	108	70 - 139	
Toluene-d8	81.53	94	72 - 123	
Bromofluorobenzene	81.53	101	65 - 131	

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SURROGATE STANDARD RECOVERY

SW 8260B

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408024 Instrument: 5972hp59

Sequence: 4H11002 Calibration: 4081203

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-S001-0002-01 (1408024-05) ug/kg dry				
Lab File ID: 1408024-0559.d	Analyzed: 08/11/14 23:54			
Dibromofluoromethane	88.19	99	71 - 141	
1,2-Dichloroethane-d4	88.19	106	70 - 139	
Toluene-d8	88.19	90	72 - 123	
Bromofluorobenzene	88.19	84	65 - 131	
P001-S003-0002-01 (1408024-02) ug/kg dry				
Lab File ID: 1408024-0259.d	Analyzed: 08/12/14 00:25			
Dibromofluoromethane	76.64	97	71 - 141	
1,2-Dichloroethane-d4	76.64	105	70 - 139	
Toluene-d8	76.64	97	72 - 123	
Bromofluorobenzene	76.64	88	65 - 131	

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SURROGATE STANDARD RECOVERY

SW 8260B

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408024 Instrument: 5972hp59

Sequence: 4H12003 Calibration: 4081203

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4081206-BLK1) ug/kg wet				
Lab File ID: 4081206-BLK159.d	Analyzed: 08/12/14 14:03			
Dibromofluoromethane	50.00	99	71 - 141	
1,2-Dichloroethane-d4	50.00	107	70 - 139	
Toluene-d8	50.00	97	72 - 123	
Bromofluorobenzene	50.00	105	65 - 131	
Matrix Spike (4081206-MS1) ug/kg dry				
Lab File ID: 4081206-MS159.d	Analyzed: 08/12/14 16:53			
Dibromofluoromethane	83.81	103	71 - 141	
1,2-Dichloroethane-d4	83.81	102	70 - 139	
Toluene-d8	83.81	99	72 - 123	
Bromofluorobenzene	83.81	105	65 - 131	

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW 8260B

P001-S003-0002-01MS

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081206-MS1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC.	Q	QC LIMITS REC.
Dichlorodifluoromethane	83.81	7.7 U	68.98	82		50 - 142
Chloromethane	83.81	7.7 U	75.38	90		52 - 150
Vinyl chloride	83.81	7.7 U	94.45	113		58 - 148
Bromomethane	83.81	7.7 U	94.39	113		50 - 150
Chloroethane	83.81	7.7 U	88.72	106		52 - 150
Trichlorofluoromethane	83.81	7.7 U	63.99	76		54 - 144
1,1-Dichloroethene	83.81	7.7 U	77.25	92		51 - 146
Acetone	209.5	320	173.4	68	*	50 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	83.81	7.7 U	63.99	76		50 - 149
Carbon disulfide	83.81	7.7 U	75.30	90		56 - 140
Methyl acetate	83.81	7.7 U	67.76	81		50 - 150
Methylene chloride	83.81	7.7 U	80.93 B	97		50 - 137
trans-1,2-Dichloroethene	83.81	7.7 U	79.18	94		65 - 122
Methyl tert-butyl ether	83.81	7.7 U	82.66	99		70 - 133
1,1-Dichloroethane	83.81	7.7 U	87.49	104		66 - 123
cis-1,2-Dichloroethene	83.81	7.7 U	82.33	98		69 - 127
2-Butanone	209.5	22	192.5	82		66 - 132
Chloroform	83.81	7.7 U	86.08	103		75 - 128
1,1,1-Trichloroethane	83.81	7.7 U	81.76	98		71 - 127
Cyclohexane	83.81	7.7 U	55.25	66		65 - 126
Carbon tetrachloride	83.81	7.7 U	76.90	92		67 - 132
1,2-Dichloroethane	83.81	7.7 U	86.31	103		56 - 141
Benzene	83.81	7.7 U	79.60	95		67 - 126
Trichloroethene	83.81	7.7 U	72.58	87		69 - 130
Methylcyclohexane	83.81	7.7 U	36.04	43	*	80 - 119
1,2-Dichloropropane	83.81	7.7 U	82.53	98		73 - 121
Bromodichloromethane	83.81	7.7 U	84.57	101		75 - 133
cis-1,3-Dichloropropene	83.81	7.7 U	80.59	96		87 - 127
4-Methyl-2-pentanone	209.5	19 U	199.6	95		67 - 125
Toluene	83.81	7.7 U	73.61 B	88		73 - 121

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW 8260B

P001-S003-0002-01MS

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081206-MS1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC.	Q	QC LIMITS REC.
trans-1,3-Dichloropropene	83.81	7.7 U	78.33	93		64 - 131
1,1,2-Trichloroethane	83.81	7.7 U	78.08	93		67 - 123
Tetrachloroethene	83.81	7.7 U	79.87	95		72 - 130
2-Hexanone	209.5	19 U	192.3	92		51 - 128
Dibromochloromethane	83.81	7.7 U	75.85	90		68 - 127
1,2-Dibromoethane	83.81	7.7 U	75.32	90		69 - 127
Chlorobenzene	83.81	7.7 U	70.05	84		71 - 120
Ethylbenzene	83.81	7.7 U	67.08	80		76 - 121
m,p-Xylene	167.6	15 U	132.8	79		76 - 130
o-Xylene	83.81	7.7 U	70.15	84		76 - 130
Styrene	83.81	7.7 U	70.83	85		68 - 126
Bromoform	83.81	7.7 U	79.88	95		64 - 134
Isopropylbenzene	83.81	7.7 U	68.50	82		68 - 126
1,1,2,2-Tetrachloroethane	83.81	7.7 U	78.90	94		66 - 128
1,3-Dichlorobenzene	83.81	7.7 U	63.63	76		74 - 119
1,4-Dichlorobenzene	83.81	7.7 U	60.34	72		72 - 115
1,2-Dichlorobenzene	83.81	7.7 U	62.44	74		67 - 126
1,2-Dibromo-3-chloropropane	83.81	7.7 U	72.64	87		72 - 127
1,2,4-Trichlorobenzene	83.81	7.7 U	48.33	58		57 - 133
Xylenes (total)		7.7 U	202.9	0		76 - 130

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW 8260B

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081206-MSD1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
Dichlorodifluoromethane	68.74	50.98	74	30	*	25	50 - 142
Chloromethane	68.74	58.40	85	25		25	52 - 150
Vinyl chloride	68.74	63.18	92	40	*	25	58 - 148
Bromomethane	68.74	56.56	82	50	*	25	50 - 150
Chloroethane	68.74	62.02	90	35	*	25	52 - 150
Trichlorofluoromethane	68.74	43.59	63	38	*	25	54 - 144
1,1-Dichloroethene	68.74	53.38	78	37	*	14	51 - 146
Acetone	171.8	127.2	-109	31	* *	25	50 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	68.74	43.59	63	38	*	25	50 - 149
Carbon disulfide	68.74	53.78	78	33	*	25	56 - 140
Methyl acetate	68.74	47.87	70	34	*	25	50 - 150
Methylene chloride	68.74	58.77 B	86	32	*	25	50 - 137
trans-1,2-Dichloroethene	68.74	55.16	80	36	*	25	65 - 122
Methyl tert-butyl ether	68.74	59.44	86	33	*	25	70 - 133
1,1-Dichloroethane	68.74	62.83	91	33	*	25	66 - 123
cis-1,2-Dichloroethene	68.74	57.15	83	36	*	25	69 - 127
2-Butanone	171.8	138.8	68	32	*	25	66 - 132
Chloroform	68.74	60.61	88	35	*	25	75 - 128
1,1,1-Trichloroethane	68.74	59.90	87	31	*	25	71 - 127
Cyclohexane	68.74	39.16	57	34	* *	25	65 - 126
Carbon tetrachloride	68.74	53.40	78	36	*	25	67 - 132
1,2-Dichloroethane	68.74	62.27	91	32	*	25	56 - 141
Benzene	68.74	57.84	84	32	*	11	67 - 126
Trichloroethene	68.74	52.45	76	32	*	14	69 - 130
Methylcyclohexane	68.74	23.60	34	42	* *	25	80 - 119
1,2-Dichloropropane	68.74	62.69	91	27	*	25	73 - 121
Bromodichloromethane	68.74	60.41	88	33	*	25	75 - 133
cis-1,3-Dichloropropene	68.74	60.72	88	28	*	25	87 - 127
4-Methyl-2-pentanone	171.8	141.3	82	34	*	25	67 - 125
Toluene	68.74	52.94 B	77	33	*	13	73 - 121
trans-1,3-Dichloropropene	68.74	59.06	86	28	*	25	64 - 131

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW 8260B

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081206-MSD1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
1,1,2-Trichloroethane	68.74	55.44	81	34	*	25	67 - 123
Tetrachloroethene	68.74	58.15	85	31	*	25	72 - 130
2-Hexanone	171.8	142.8	83	30	*	25	51 - 128
Dibromochloromethane	68.74	56.25	82	30	*	25	68 - 127
1,2-Dibromoethane	68.74	54.99	80	31	*	25	69 - 127
Chlorobenzene	68.74	52.48	76	29	*	13	71 - 120
Ethylbenzene	68.74	50.98	74	27	* *	25	76 - 121
m,p-Xylene	137.5	91.98	67	36	* *	25	76 - 130
o-Xylene	68.74	49.61	72	34	* *	25	76 - 130
Styrene	68.74	49.44	72	36	*	25	68 - 126
Bromoform	68.74	54.12	79	38	*	25	64 - 134
Isopropylbenzene	68.74	46.06	67	39	* *	25	68 - 126
1,1,2,2-Tetrachloroethane	68.74	54.30	79	37	*	25	66 - 128
1,3-Dichlorobenzene	68.74	41.34	60	42	* *	25	74 - 119
1,4-Dichlorobenzene	68.74	42.61	62	34	* *	25	72 - 115
1,2-Dichlorobenzene	68.74	44.43	65	34	* *	25	67 - 126
1,2-Dibromo-3-chloropropane	68.74	52.36	76	32	*	25	72 - 127
1,2,4-Trichlorobenzene	68.74	28.69	42	51	* *	25	57 - 133
Xylenes (total)		141.6	0	36	*	25	76 - 130

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E. Laboratory Control Sample Results

(LCS/LCS DUPLICATE RECOVERY)

LCS recovery or LCS/LCSD recovery with relative percent difference, and quality control acceptance criteria.

LCS / LCS DUPLICATE SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081111-BS1 Matrix: Soil Client ID: VLCSFT Batch: 4081111

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
Dichlorodifluoromethane	50.00	49.41	99		50 - 142
Chloromethane	50.00	47.88	96		52 - 150
Vinyl chloride	50.00	54.83	110		58 - 148
Bromomethane	50.00	49.84	100		50 - 150
Chloroethane	50.00	56.49	113		52 - 150
Trichlorofluoromethane	50.00	53.54	107		54 - 144
1,1-Dichloroethene	50.00	49.64	99		51 - 146
Acetone	125.0	162.7	130		50 - 147
1,1,2-Trichloro-1,2,2-trifluoroethane	50.00	53.54	107		50 - 149
Carbon disulfide	50.00	51.89	104		56 - 140
Methyl acetate	50.00	32.60	65		50 - 150
Methylene chloride	50.00	50.25	101		50 - 137
trans-1,2-Dichloroethene	50.00	53.46	107		65 - 122
Methyl tert-butyl ether	50.00	51.45	103		70 - 133
1,1-Dichloroethane	50.00	53.71	107		66 - 123
cis-1,2-Dichloroethene	50.00	51.73	103		69 - 127
2-Butanone	125.0	127.5	102		66 - 132
Chloroform	50.00	54.48	109		75 - 128
1,1,1-Trichloroethane	50.00	55.33	111		71 - 127
Cyclohexane	50.00	56.07	112		65 - 126
Carbon tetrachloride	50.00	54.75	110		67 - 132
1,2-Dichloroethane	50.00	51.53	103		56 - 141
Benzene	50.00	53.40	107		67 - 126
Trichloroethene	50.00	51.98	104		69 - 130
Methylcyclohexane	50.00	53.09	106		80 - 119
1,2-Dichloropropane	50.00	47.60	95		73 - 121
Bromodichloromethane	50.00	51.80	104		75 - 133

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LCS / LCS DUPLICATE SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081111-BS1 Matrix: Soil Client ID: VLCSFT Batch: 4081111

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
cis-1,3-Dichloropropene	50.00	52.06	104		87 - 127
4-Methyl-2-pentanone	125.0	125.6	100		67 - 125
Toluene	50.00	52.29	105		73 - 121
trans-1,3-Dichloropropene	50.00	51.56	103		64 - 131
1,1,2-Trichloroethane	50.00	51.52	103		67 - 123
Tetrachloroethene	50.00	49.09	98		72 - 130
2-Hexanone	125.0	120.7	97		51 - 128
Dibromochloromethane	50.00	49.98	100		68 - 127
1,2-Dibromoethane	50.00	50.26	101		69 - 127
Chlorobenzene	50.00	51.03	102		71 - 120
Ethylbenzene	50.00	51.87	104		76 - 121
m,p-Xylene	100.0	102.1	102		76 - 130
o-Xylene	50.00	51.45	103		76 - 130
Styrene	50.00	51.54	103		68 - 126
Bromoform	50.00	51.40	103		64 - 134
Isopropylbenzene	50.00	54.17	108		68 - 126
1,1,2,2-Tetrachloroethane	50.00	50.46	101		66 - 128
1,3-Dichlorobenzene	50.00	51.77	104		74 - 119
1,4-Dichlorobenzene	50.00	50.40	101		72 - 115
1,2-Dichlorobenzene	50.00	52.01	104		67 - 126
1,2-Dibromo-3-chloropropane	50.00	46.18	92		72 - 127
1,2,4-Trichlorobenzene	50.00	49.16	98		57 - 133

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G. Batch Summary

(PREPARATION BATCH SUMMARY)

Client Sample IDs, cross-referenced with Lab Sample IDs, with sample preparation details.

PREPARATION BATCH SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Batch: 4081111 Matrix: Soil Preparation: EPA 5035A

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL/WT (g)	FINAL VOL/WT (mL)
P001-S002-0002-01	1408024-01	08/11/14 20:49	3.39	5.00
P001-S003-0002-01	1408024-02	08/11/14 20:49	3.39	5.00
P001-S003-0002-02	1408024-03	08/11/14 20:49	3.68	5.00
P001-S006-0002-01	1408024-04	08/11/14 20:49	3.93	5.00
P001-S001-0002-01	1408024-05	08/11/14 20:49	3.10	5.00
VBLKFT	4081111-BLK1	08/11/14 20:49	5.00	5.00
VLCSFT	4081111-BS1	08/11/14 20:49	5.00	5.00

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H. Analysis Sequence Summary

(ANALYSIS SEQUENCE SUMMARY)

ANALYSIS SEQUENCE SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
BFBFT	4H11002-TUN1	4H11002-TUN159.d	08/11/14 13:58:00
VSTD010FT	4H11002-CAL2	4H11002-CAL259.d	08/11/14 14:26:00
VSTD005FT	4H11002-CAL1	4H11002-CAL159.d	08/11/14 14:57:00
VSTD200FT	4H11002-CAL6	4H11002-CAL659.d	08/11/14 15:28:00
VSTD100FT	4H11002-CAL5	4H11002-CAL559.d	08/11/14 15:58:00
VSTD050FT	4H11002-CAL4	4H11002-CAL459.d	08/11/14 16:29:00
VSTD020FT	4H11002-CAL3	4H11002-CAL3R59.d	08/11/14 18:02:00
VSTD050FT	4H11002-SCV1	4H11002-SCV159.d	08/11/14 19:16:00
VBLKFT	4081111-BLK1	4081111-BLK1R59.d	08/11/14 20:49:00
VLCSFT	4081111-BS1	4081111-BS159.d	08/11/14 21:19:00
P001-S002-0002-01	1408024-01	1408024-0159.d	08/11/14 22:21:00
P001-S003-0002-02	1408024-03	1408024-0359.d	08/11/14 22:52:00
P001-S006-0002-01	1408024-04	1408024-0459.d	08/11/14 23:23:00
P001-S001-0002-01	1408024-05	1408024-0559.d	08/11/14 23:54:00
P001-S003-0002-01	1408024-02	1408024-0259.d	08/12/14 00:25:00

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ANALYSIS SEQUENCE SUMMARY

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H12003 Calibration: 4081203 Instrument: 5972hp59

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
BFBFU	4H12003-TUN1	4H12003-TUN159.d	08/12/14 12:55:00
VSTD050FU	4H12003-ICV1	4H12003-ICV159.d	08/12/14 13:20:00
VBLKFU	4081206-BLK1	4081206-BLK159.d	08/12/14 14:03:00
P001-S003-0002-01MS	4081206-MS1	4081206-MS159.d	08/12/14 16:53:00

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I. Instrument Performance Check

(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW 8260B

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4H11002-TUN159.d	Injection Date:	08/11/14
Instrument ID:	5972hp59	Injection Time:	13:58
Sequence:	4H11002	Lab Sample ID:	4H11002-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	18.8	PASS
75	30 - 60% of 95	44.6	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	7.05	PASS
173	Less than 2% of 174	0	PASS
174	(Greater than 50% of 95)	87.5	PASS
175	5 - 9% of 174	7.21	PASS
176	(Greater than 95% but less then 101%)	97.1	PASS
177	5 - 9% of 176	6.73	PASS

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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW 8260B

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4H12003-TUN159.d	Injection Date:	08/12/14
Instrument ID:	5972hp59	Injection Time:	12:55
Sequence:	4H12003	Lab Sample ID:	4H12003-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15 - 40% of 95	19.6	PASS
75	30 - 60% of 95	46.3	PASS
95	Base peak, 100% relative abundance	100	PASS
96	5 - 9% of 95	6.85	PASS
173	Less than 2% of 174	0	PASS
174	(Greater than 50% of 95)	79	PASS
175	5 - 9% of 174	7.34	PASS
176	(Greater than 95% but less then 101%)	95.9	PASS
177	5 - 9% of 176	6.48	PASS

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J. Internal Standard Results

(INTERNAL STANDARD AREA AND RT SUMMARY)

INTERNAL STANDARD AREA AND RT SUMMARY
SW 8260B

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H11002	Instrument:	5972hp59
		Calibration:	4081203

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (4H11002-SCV1)			Lab File ID: 4H11002-SCV159.d			Analyzed: 08/11/14 19:16			
Fluorobenzene	526430	12.975	572729	12.979	92	50 - 200	-0.0040	+/-0.50	
Chlorobenzene-d5	454884	15.638	482139	15.642	94	50 - 200	-0.0040	+/-0.50	
1,4-Dichlorobenzene-d4	216289	17.413	240480	17.417	90	50 - 200	-0.0040	+/-0.50	
Blank (4081111-BLK1)			Lab File ID: 4081111-BLK1R59.d			Analyzed: 08/11/14 20:49			
Fluorobenzene	484385	12.98	572729	12.979	85	50 - 200	0.0010	+/-0.50	
Chlorobenzene-d5	438382	15.633	482139	15.642	91	50 - 200	-0.0090	+/-0.50	
1,4-Dichlorobenzene-d4	207296	17.417	240480	17.417	86	50 - 200	0.0000	+/-0.50	
LCS (4081111-BS1)			Lab File ID: 4081111-BS159.d			Analyzed: 08/11/14 21:19			
Fluorobenzene	494265	12.973	572729	12.979	86	50 - 200	-0.0060	+/-0.50	
Chlorobenzene-d5	435731	15.636	482139	15.642	90	50 - 200	-0.0060	+/-0.50	
1,4-Dichlorobenzene-d4	213728	17.411	240480	17.417	89	50 - 200	-0.0060	+/-0.50	
P001-S002-0002-01 (1408024-01)			Lab File ID: 1408024-0159.d			Analyzed: 08/11/14 22:21			
Fluorobenzene	430911	12.97	572729	12.979	75	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	358746	15.633	482139	15.642	74	50 - 200	-0.0090	+/-0.50	
1,4-Dichlorobenzene-d4	147477	17.418	240480	17.417	61	50 - 200	0.0010	+/-0.50	
P001-S003-0002-02 (1408024-03)			Lab File ID: 1408024-0359.d			Analyzed: 08/11/14 22:52			
Fluorobenzene	464445	12.977	572729	12.979	81	50 - 200	-0.0020	+/-0.50	
Chlorobenzene-d5	386551	15.639	482139	15.642	80	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	159392	17.414	240480	17.417	66	50 - 200	-0.0030	+/-0.50	
P001-S006-0002-01 (1408024-04)			Lab File ID: 1408024-0459.d			Analyzed: 08/11/14 23:23			
Fluorobenzene	442325	12.97	572729	12.979	77	50 - 200	-0.0090	+/-0.50	
Chlorobenzene-d5	382594	15.633	482139	15.642	79	50 - 200	-0.0090	+/-0.50	
1,4-Dichlorobenzene-d4	163392	17.418	240480	17.417	68	50 - 200	0.0010	+/-0.50	
P001-S001-0002-01 (1408024-05)			Lab File ID: 1408024-0559.d			Analyzed: 08/11/14 23:54			
Fluorobenzene	393934	12.976	572729	12.979	69	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	313715	15.638	482139	15.642	65	50 - 200	-0.0040	+/-0.50	
1,4-Dichlorobenzene-d4	138057	17.413	240480	17.417	57	50 - 200	-0.0040	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW 8260B

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H11002	Instrument:	5972hp59
		Calibration:	4081203

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
P001-S003-0002-01 (1408024-02)			Lab File ID: 1408024-0259.d			Analyzed: 08/12/14 00:25			
Fluorobenzene	385992	12.981	572729	12.979	67	50 - 200	0.0020	+/-0.50	
Chlorobenzene-d5	329862	15.634	482139	15.642	68	50 - 200	-0.0080	+/-0.50	
1,4-Dichlorobenzene-d4	160015	17.419	240480	17.417	67	50 - 200	0.0020	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW 8260B

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H12003	Instrument:	5972hp59
		Calibration:	4081203

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (4H12003-ICV1)			Lab File ID: 4H12003-ICV159.d			Analyzed: 08/12/14 13:20			
Fluorobenzene	499015	12.976	572729	12.979	87	50 - 200	-0.0030	+/-0.50	
Chlorobenzene-d5	435687	15.639	482139	15.642	90	50 - 200	-0.0030	+/-0.50	
1,4-Dichlorobenzene-d4	209576	17.424	240480	17.417	87	50 - 200	0.0070	+/-0.50	
Blank (4081206-BLK1)			Lab File ID: 4081206-BLK159.d			Analyzed: 08/12/14 14:03			
Fluorobenzene	455979	12.981	499015	12.976	91	50 - 200	0.0050	+/-0.50	
Chlorobenzene-d5	400241	15.643	435687	15.639	92	50 - 200	0.0040	+/-0.50	
1,4-Dichlorobenzene-d4	188769	17.428	209576	17.424	90	50 - 200	0.0040	+/-0.50	
Matrix Spike (4081206-MS1)			Lab File ID: 4081206-MS159.d			Analyzed: 08/12/14 16:53			
Fluorobenzene	434438	12.989	499015	12.976	87	50 - 200	0.0130	+/-0.50	
Chlorobenzene-d5	383618	15.652	435687	15.639	88	50 - 200	0.0130	+/-0.50	
1,4-Dichlorobenzene-d4	168711	17.427	209576	17.424	81	50 - 200	0.0030	+/-0.50	

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K. Target Compound Results

(ANALYSIS DATA SHEETS)

Analysis Data Sheets (ADS), Tentatively Identified Compounds (TICs), and Surrogate Recovery Results

Sample data shall be arranged in packets with the Analysis Data Sheet, followed by the raw data for volatile or semivolatile samples. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results (ANALYSIS DATA SHEET)
Tabulated results (identification and quantitation) and Tentatively Identified Compounds (TICs) shall be included.

b. Reconstructed Ion Chromatograms (RICs)
Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: Client Sample ID Number, date and time of analysis, instrument ID, Lab file ID, and analyst ID.

d. Quantitation Report for target analytes and TICs.
Include a printout of the Extracted Ion Current Profile (EICP) for all manual changes to all compounds, internal standards, and surrogate compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of target analytes plus TICs identified in the sample.
- The spectra shall include the following information: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.
- The compound name must be clearly marked.

ANALYSIS DATA SHEET

SW 8260B

P001-S001-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0559.d Sampled: 08/07/14 00:00

Initial/Final: 3.1g / 5mL Lab ID: 1408024-05 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 23:54

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.78	8.8	U J
74-87-3	Chloromethane		0.56	8.8	U
75-01-4	Vinyl chloride		0.74	8.8	U J
74-83-9	Bromomethane		1.0	8.8	U J
75-00-3	Chloroethane		1.3	8.8	U
75-69-4	Trichlorofluoromethane		0.53	8.8	U
75-35-4	1,1-Dichloroethene		1.9	8.8	U
67-64-1	Acetone		8.8	22	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.90	8.8	U
75-15-0	Carbon disulfide		0.25	8.8	U
79-20-9	Methyl acetate		2.5	8.8	U
75-09-2	Methylene chloride		0.86	8.8	U
156-60-5	trans-1,2-Dichloroethene		1.8	8.8	U
1634-04-4	Methyl tert-butyl ether		0.69	8.8	U
75-34-3	1,1-Dichloroethane		0.83	8.8	U
156-59-2	cis-1,2-Dichloroethene		0.74	8.8	U
78-93-3	2-Butanone		2.3	22	U
67-66-3	Chloroform		0.55	8.8	U
71-55-6	1,1,1-Trichloroethane		0.88	8.8	U
110-82-7	Cyclohexane		0.55	8.8	U J
56-23-5	Carbon tetrachloride		0.79	8.8	U
107-06-2	1,2-Dichloroethane		0.48	8.8	U
71-43-2	Benzene		0.55	8.8	U
79-01-6	Trichloroethene		0.56	8.8	U
108-87-2	Methylcyclohexane		0.49	8.8	U J
78-87-5	1,2-Dichloropropane		1.1	8.8	U
75-27-4	Bromodichloromethane		0.67	8.8	U
10061-01-5	cis-1,3-Dichloropropene		0.69	8.8	U
108-10-1	4-Methyl-2-pentanone		2.3	22	U
108-88-3	Toluene		0.60	8.8	U
10061-02-6	trans-1,3-Dichloropropene		0.72	8.8	U
79-00-5	1,1,2-Trichloroethane		1.3	8.8	U
127-18-4	Tetrachloroethene		2.8	8.8	U J
591-78-6	2-Hexanone		1.8	22	U
124-48-1	Dibromochloromethane		0.99	8.8	U

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ANALYSIS DATA SHEET

SW 8260B

P001-S001-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0559.d Sampled: 08/07/14 00:00

Initial/Final: 3.1g / 5mL Lab ID: 1408024-05 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 23:54

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.39	8.8	U
108-90-7	Chlorobenzene		0.44	8.8	U
100-41-4	Ethylbenzene		1.0	8.8	U
179601-23-1	m,p-Xylene		0.25	18	U
95-47-6	o-Xylene		0.67	8.8	U
100-42-5	Styrene		0.14	8.8	U
75-25-2	Bromoform		1.9	8.8	U
98-82-8	Isopropylbenzene		0.39	8.8	U
79-34-5	1,1,2,2-Tetrachloroethane		0.65	8.8	U
541-73-1	1,3-Dichlorobenzene		0.48	8.8	U
106-46-7	1,4-Dichlorobenzene		0.37	8.8	U
95-50-1	1,2-Dichlorobenzene		0.63	8.8	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.8	U
120-82-1	1,2,4-Trichlorobenzene		0.62	8.8	U
1330-20-7	Xylenes (total)		0.25	8.8	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	88.19	87.48	99	71 - 141	
1,2-Dichloroethane-d4	88.19	93.20	106	70 - 139	
Toluene-d8	88.19	79.39	90	72 - 123	
Bromofluorobenzene	88.19	74.02	84	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

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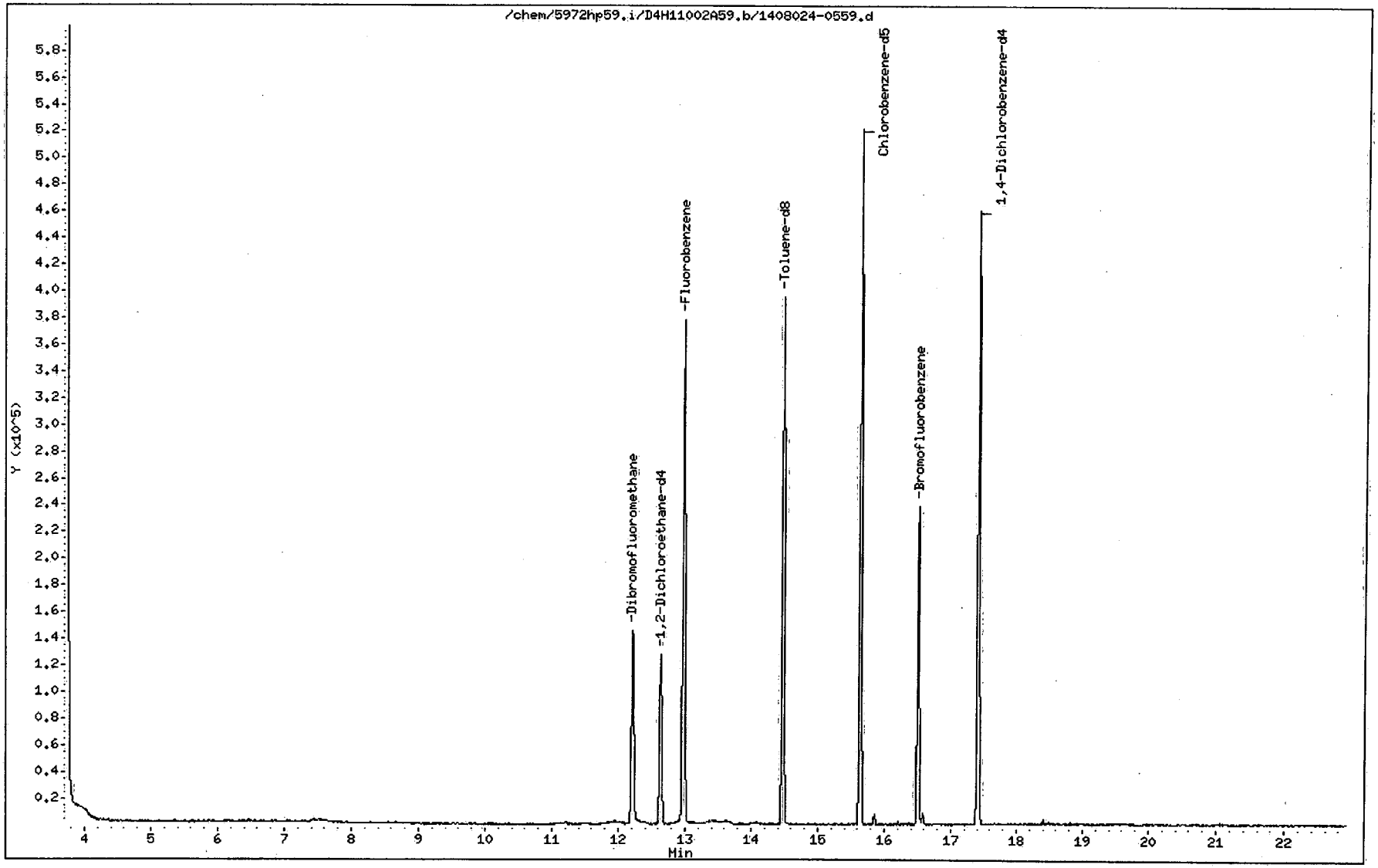
Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Date : 11-AUG-2014 23:54
Client ID: P001-S001-0002-01
Sample Info: 1408024-05:JAO

Instrument: 5972hp59.i

Operator: JAO

Column phase: SPB-624

Column diameter: 0.32



Robert Hu 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Lab Smp Id: 1408024-05 Client Smp ID: P001-S001-0002-01
Inj Date : 11-AUG-2014 23:54
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-05:JAO
Misc Info : P001-S001-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	3.10000	Weight of sample extracted (g)
M	9.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.976	12.972	(1.000)	393934	250.000	
* 2 Chlorobenzene-d5	117	15.638	15.634	(1.000)	313715	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.413	17.419	(1.000)	138057	250.000	
$ 4 Dibromofluoromethane	113	12.207	12.212	(0.941)	111080	247.985	87.9068
$ 5 1,2-Dichloroethane-d4	65	12.631	12.636	(0.973)	100336	264.188	93.6506
$ 6 Toluene-d8	98	14.465	14.471	(0.925)	288304	225.049	79.7762
$ 7 Bromofluorobenzene	95	16.506	16.502	(0.948)	92494	209.829	74.3810
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	Compound Not Detected.					
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

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Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	Compound Not Detected.					
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	Compound Not Detected.					
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0559.d
Lab Smp Id: 1408024-05 Client Smp ID: P001-S001-0002-01
Inj Date : 11-AUG-2014 23:54
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-05:JAO
Misc Info : P001-S001-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

ANALYSIS DATA SHEET
SW 8260B

P001-S002-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0159.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-01 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 9 Analyzed: 08/11/14 22:21

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.72	8.1	U J
74-87-3	Chloromethane		0.52	8.1	U
75-01-4	Vinyl chloride		0.68	8.1	U J
74-83-9	Bromomethane		0.94	8.1	U J
75-00-3	Chloroethane		1.2	8.1	U
75-69-4	Trichlorofluoromethane		0.49	8.1	U
75-35-4	1,1-Dichloroethene		1.8	8.1	U
67-64-1	Acetone		8.1	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.83	8.1	U
75-15-0	Carbon disulfide		0.23	8.1	U
79-20-9	Methyl acetate		2.3	8.1	U
75-09-2	Methylene chloride		0.80	8.1	U
156-60-5	trans-1,2-Dichloroethene		1.6	8.1	U
1634-04-4	Methyl tert-butyl ether		0.63	8.1	U
75-34-3	1,1-Dichloroethane		0.76	8.1	U
156-59-2	cis-1,2-Dichloroethene		0.68	8.1	U
78-93-3	2-Butanone		2.1	20	U
67-66-3	Chloroform		0.50	8.1	U
71-55-6	1,1,1-Trichloroethane		0.81	8.1	U
110-82-7	Cyclohexane		0.50	8.1	U J
56-23-5	Carbon tetrachloride		0.73	8.1	U
107-06-2	1,2-Dichloroethane		0.44	8.1	U
71-43-2	Benzene		0.50	8.1	U
79-01-6	Trichloroethene		0.52	8.1	U
108-87-2	Methylcyclohexane		0.46	8.1	U J
78-87-5	1,2-Dichloropropane		1.0	8.1	U
75-27-4	Bromodichloromethane		0.62	8.1	U
10061-01-5	cis-1,3-Dichloropropene		0.63	8.1	U
108-10-1	4-Methyl-2-pentanone		2.1	20	U
108-88-3	Toluene		0.55	8.1	U
10061-02-6	trans-1,3-Dichloropropene		0.67	8.1	U
79-00-5	1,1,2-Trichloroethane		1.2	8.1	U
127-18-4	Tetrachloroethene		2.6	8.1	U J
591-78-6	2-Hexanone		1.6	20	U
124-48-1	Dibromochloromethane		0.91	8.1	U

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ANALYSIS DATA SHEET

SW 8260B

P001-S002-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Preparation: EPA 5035A | File ID: 1408024-0159.d | Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL | Lab ID: 1408024-01 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Prepared: 08/11/14 20:49

% Moisture: 9 | Analyzed: 08/11/14 22:21

Batch: 4081111 | Sequence: 4H11002 | Calibration: 4081203 | Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.36	8.1	U
108-90-7	Chlorobenzene		0.41	8.1	U
100-41-4	Ethylbenzene		0.94	8.1	U
179601-23-1	m,p-Xylene		0.23	16	U
95-47-6	o-Xylene		0.62	8.1	U
100-42-5	Styrene		0.13	8.1	U J
75-25-2	Bromoform		1.8	8.1	U
98-82-8	Isopropylbenzene		0.36	8.1	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.60	8.1	U
541-73-1	1,3-Dichlorobenzene		0.44	8.1	U
106-46-7	1,4-Dichlorobenzene		0.34	8.1	U
95-50-1	1,2-Dichlorobenzene		0.59	8.1	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.1	U
120-82-1	1,2,4-Trichlorobenzene		0.57	8.1	U
1330-20-7	Xylenes (total)		0.23	8.1	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	81.30	78.97	97	71 - 141	
1,2-Dichloroethane-d4	81.30	82.08	101	70 - 139	
Toluene-d8	81.30	76.93	95	72 - 123	
Bromofluorobenzene	81.30	79.58	98	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

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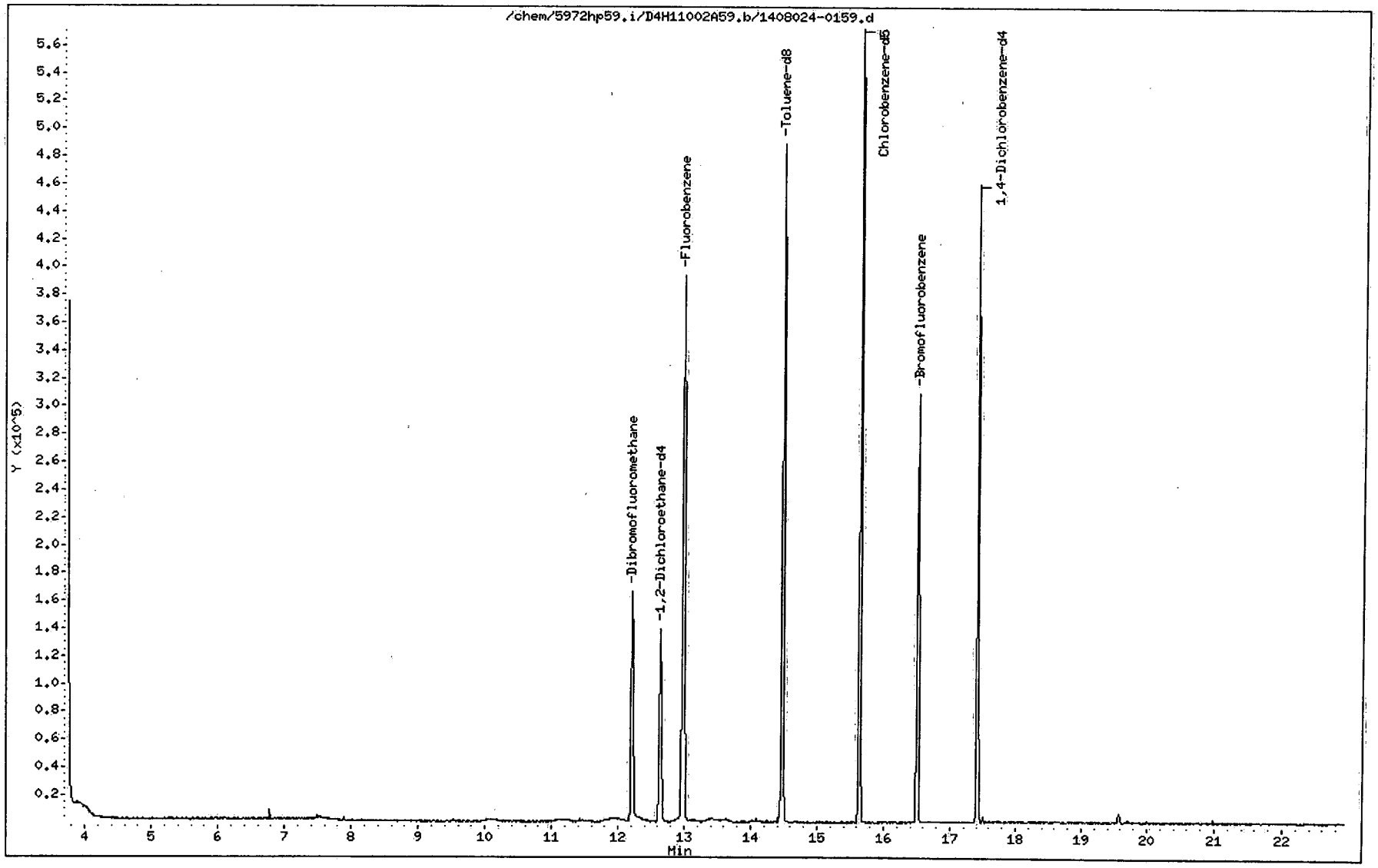
Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Date : 11-AUG-2014 22:21
Client ID: P001-S002-0002-01
Sample Info: 1408024-01:JAO

Instrument: 5972hp59.i

Operator: JAO

Column phase: SPB-624

Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Lab Smp Id: 1408024-01 Client Smp ID: P001-S002-0002-01
Inj Date : 11-AUG-2014 22:21
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-01:JAO
Misc Info : P001-S002-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	3.39000	Weight of sample extracted (g)
M	9.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.970	12.972	(1.000)	430911	250.000	
* 2 Chlorobenzene-d5	117	15.633	15.634	(1.000)	358746	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.418	17.419	(1.000)	147477	250.000	
$ 4 Dibromofluoromethane	113	12.211	12.212	(0.941)	118983	242.834	78.7171
$ 5 1,2-Dichloroethane-d4	65	12.635	12.636	(0.974)	104859	252.405	81.8196
$ 6 Toluene-d8	98	14.469	14.471	(0.926)	346542	236.554	76.6812
$ 7 Bromofluorobenzene	95	16.500	16.502	(0.947)	115234	244.718	79.3278
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	Compound Not Detected.					
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	Compound Not Detected.					
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	Compound Not Detected.					
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0159.d
Lab Smp Id: 1408024-01 Client Smp ID: P001-S002-0002-01
Inj Date : 11-AUG-2014 22:21
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-01:JAO
Misc Info : P001-S002-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0259.d Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL Lab ID: 1408024-02 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/12/14 00:25

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.67	7.7	U
74-87-3	Chloromethane		0.49	7.7	U
75-01-4	Vinyl chloride		0.64	7.7	U
74-83-9	Bromomethane		0.89	7.7	U
75-00-3	Chloroethane		1.1	7.7	U
75-69-4	Trichlorofluoromethane		0.46	7.7	U
75-35-4	1,1-Dichloroethene		1.7	7.7	U
67-64-1	Acetone	320	7.7	19	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.78	7.7	U
75-15-0	Carbon disulfide		0.21	7.7	U
79-20-9	Methyl acetate		2.1	7.7	U
75-09-2	Methylene chloride		0.75	7.7	U
156-60-5	trans-1,2-Dichloroethene		1.5	7.7	U
1634-04-4	Methyl tert-butyl ether		0.60	7.7	U
75-34-3	1,1-Dichloroethane		0.72	7.7	U
156-59-2	cis-1,2-Dichloroethene		0.64	7.7	U
78-93-3	2-Butanone	22	2.0	19	
67-66-3	Chloroform		0.48	7.7	U
71-55-6	1,1,1-Trichloroethane		0.77	7.7	U
110-82-7	Cyclohexane		0.48	7.7	U
56-23-5	Carbon tetrachloride		0.69	7.7	U
107-06-2	1,2-Dichloroethane		0.41	7.7	U
71-43-2	Benzene		0.48	7.7	U
79-01-6	Trichloroethene		0.49	7.7	U
108-87-2	Methylcyclohexane		0.43	7.7	U
78-87-5	1,2-Dichloropropane		0.97	7.7	U
75-27-4	Bromodichloromethane		0.58	7.7	U
10061-01-5	cis-1,3-Dichloropropene		0.60	7.7	U
108-10-1	4-Methyl-2-pentanone		2.0	19	U
108-88-3	Toluene		0.52	7.7	U
10061-02-6	trans-1,3-Dichloropropene		0.63	7.7	U
79-00-5	1,1,2-Trichloroethane		1.1	7.7	U
127-18-4	Tetrachloroethene		2.5	7.7	U
591-78-6	2-Hexanone		1.5	19	U
124-48-1	Dibromochloromethane		0.86	7.7	U

Environmental Testing Laboratories

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[redacted]

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Preparation: EPA 5035A | File ID: 1408024-0259.d | Sampled: 08/07/14 00:00

Initial/Final: 3.39g / 5mL | Lab ID: 1408024-02 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Prepared: 08/11/14 20:49

% Moisture: 4 | Analyzed: 08/12/14 00:25

Batch: 4081111 | Sequence: 4H11002 | Calibration: 4081203 | Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.34	7.7	U
108-90-7	Chlorobenzene		0.38	7.7	U
100-41-4	Ethylbenzene		0.89	7.7	U
179601-23-1	m,p-Xylene		0.21	15	U
95-47-6	o-Xylene		0.58	7.7	U
100-42-5	Styrene		0.12	7.7	U J
75-25-2	Bromoform		1.7	7.7	U
98-82-8	Isopropylbenzene		0.34	7.7	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.57	7.7	U
541-73-1	1,3-Dichlorobenzene		0.41	7.7	U
106-46-7	1,4-Dichlorobenzene		0.32	7.7	U
95-50-1	1,2-Dichlorobenzene		0.55	7.7	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	7.7	U
120-82-1	1,2,4-Trichlorobenzene		0.54	7.7	U
1330-20-7	Xylenes (total)		0.21	7.7	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	76.64	74.48	97	71 - 141	
1,2-Dichloroethane-d4	76.64	80.30	105	70 - 139	
Toluene-d8	76.64	74.59	97	72 - 123	
Bromofluorobenzene	76.64	67.70	88	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

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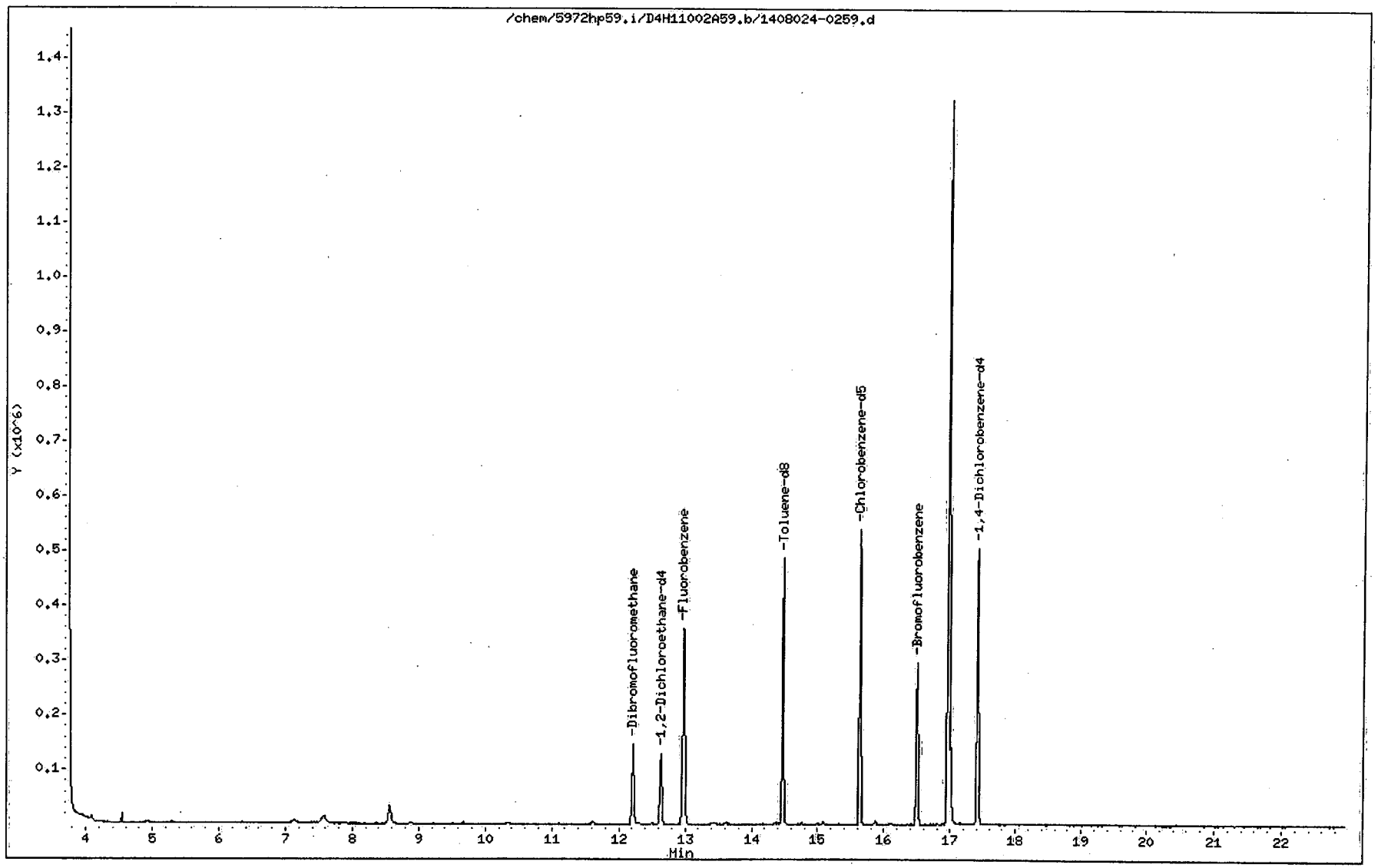
Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Date : 12-AUG-2014 00:25
Client ID: P001-S003-0002-01
Sample Info: 1408024-02;JAO

Instrument: 5972hp59.i

Operator: JAO
Column diameter: 0.32

Column phase: SPB-624



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Lab Smp Id: 1408024-02 Client Smp ID: P001-S003-0002-01
Inj Date : 12-AUG-2014 00:25
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-02:JAO
Misc Info : P001-S003-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	3.39000	Weight of sample extracted (g)
M	4.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.981	12.972	(1.000)	385992	250.000	
* 2 Chlorobenzene-d5	117	15.634	15.634	(1.000)	329862	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.419	17.419	(1.000)	160015	250.000	
$ 4 Dibromofluoromethane	113	12.212	12.212	(0.941)	106625	242.937	74.6488
$ 5 1,2-Dichloroethane-d4	65	12.636	12.636	(0.973)	97470	261.923	80.4826
$ 6 Toluene-d8	98	14.470	14.471	(0.926)	327719	243.293	74.7583
$ 7 Bromofluorobenzene	95	16.502	16.502	(0.947)	112824	220.826	67.8547
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	Compound Not Detected.					
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	8.563	8.564	(0.660)	80506	1027.57	315.747
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	11.610	11.611	(0.894)	9812	70.2026	21.5716(M)
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

Robin Hamm 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Report Date: 12-Aug-2014 11:29

QC Flag Legend

M - Compound response manually integrated.

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Report Date: 12-Aug-2014 11:29

CompuChem

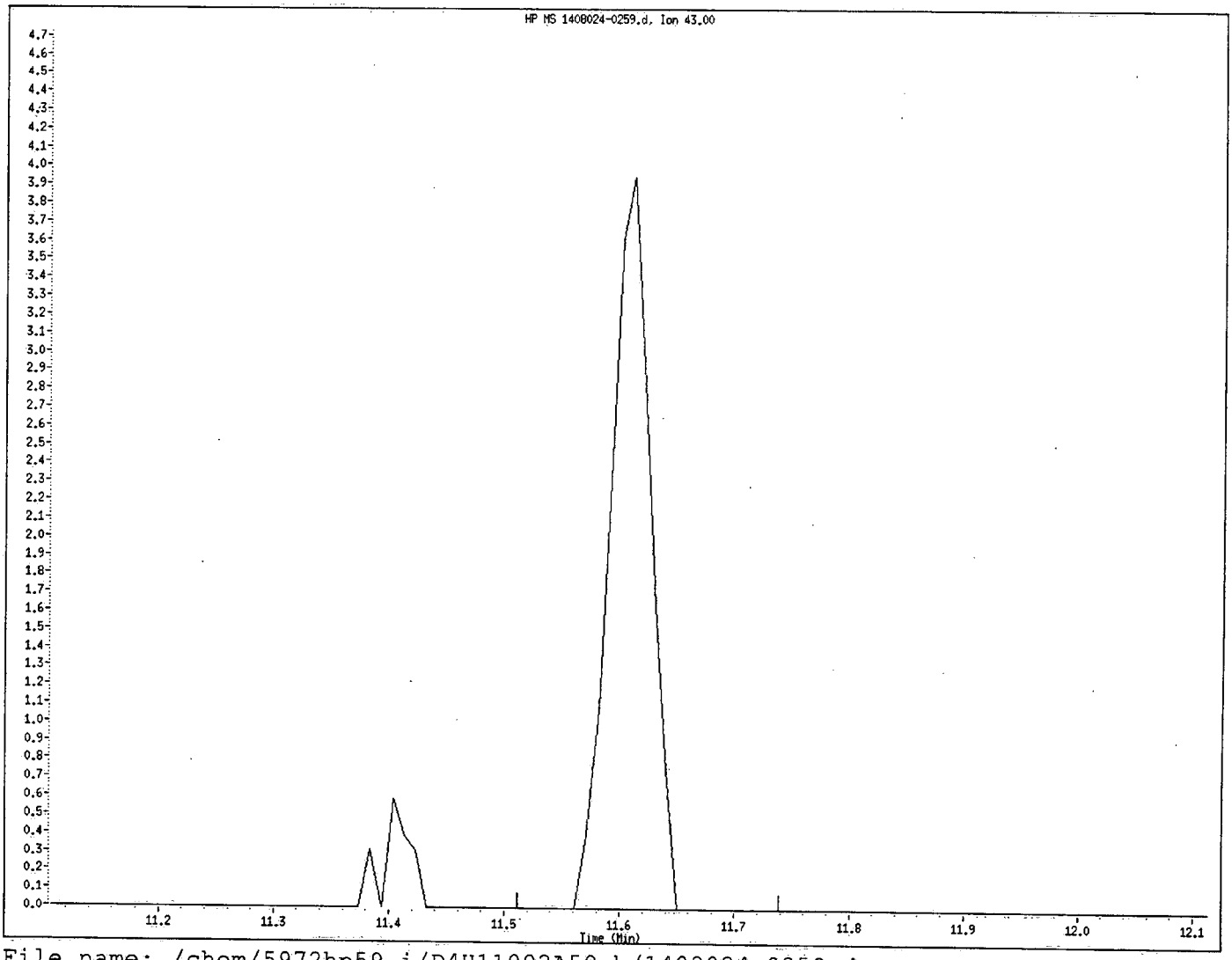
SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Lab Smp Id: 1408024-02 Client Smp ID: P001-S003-0002-01
Inj Date : 12-AUG-2014 00:25
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-02:JAO
Misc Info : P001-S003-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

2-butanone CAS Number 78-93-3 Area = 9812 Manually integrated



File name: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d
Client ID: P001-S003-0002-01
Instrument ID: 5972hp59.i
Injection Date and Time: 12-AUG-2014 00:25
Retention Time: 11.61
Operator ID: JAO

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d

Date : 12-AUG-2014 00:25

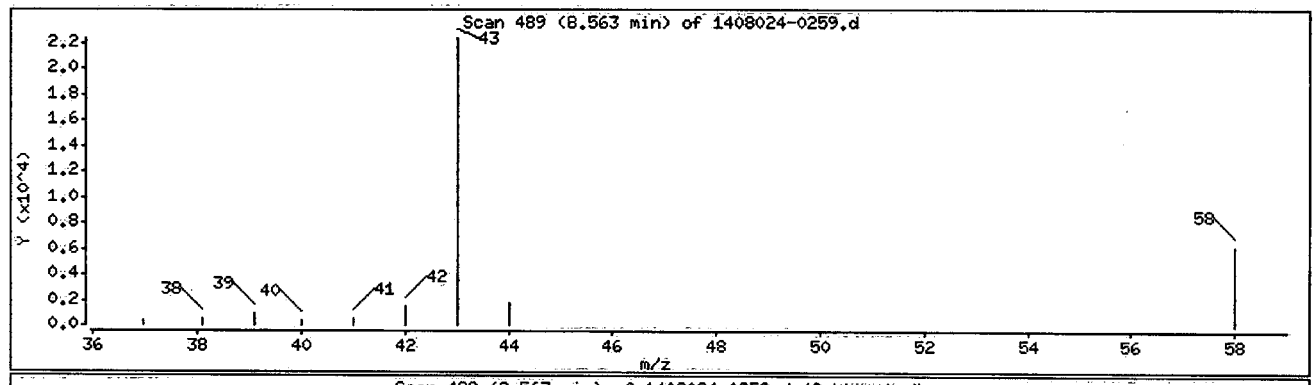
Client ID: P001-S003-0002-01 Instrument: 5972hp59.i

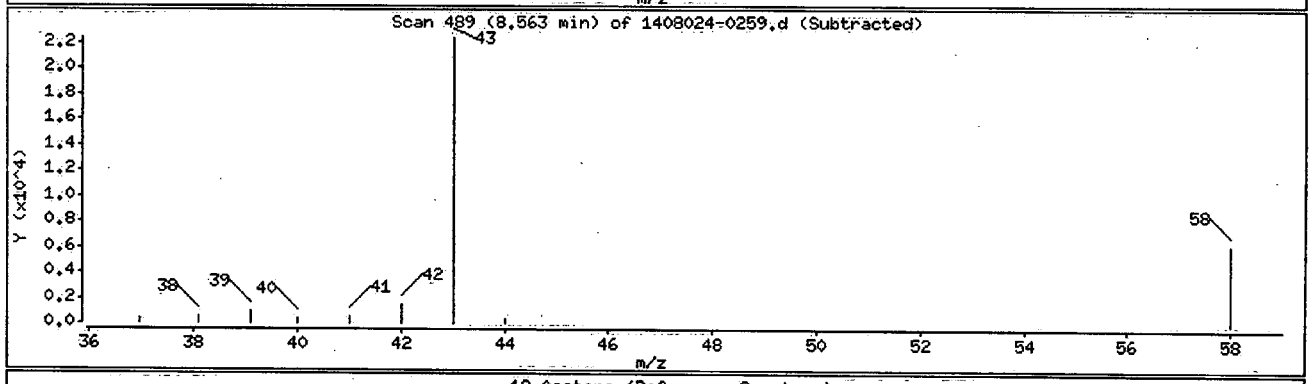
Sample Info: 1408024-02:JAO

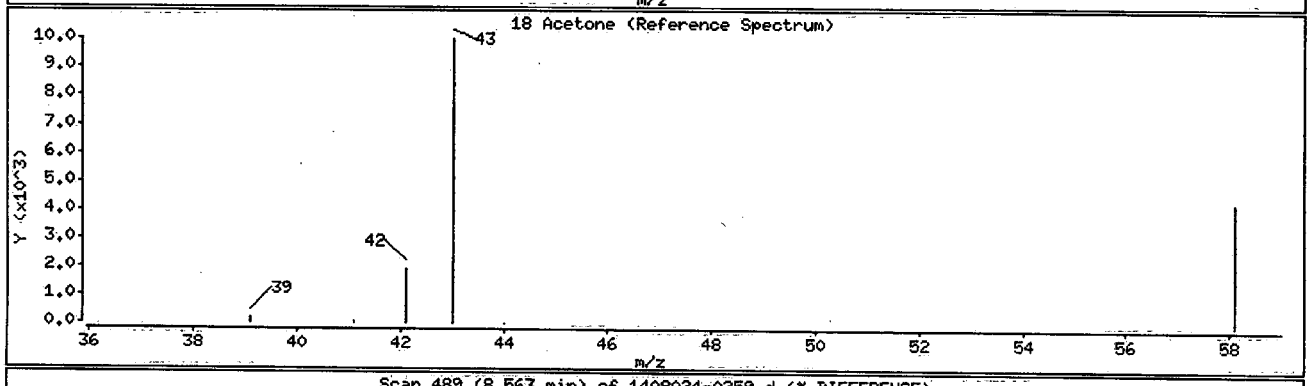
Operator: JAO

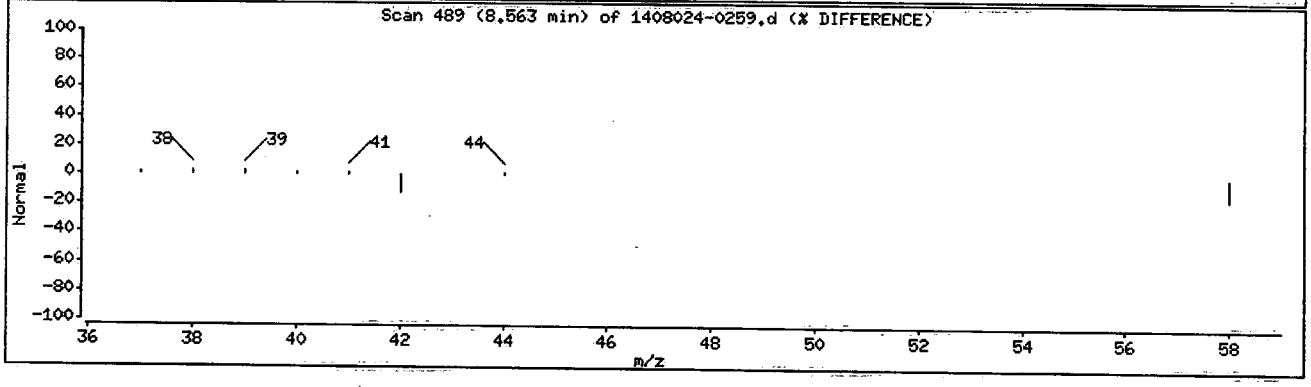
Column phase: SPB-624 Column diameter: 0.32

18 Acetone Concentration: 315.747 ug/Kg









Rolando Hernandez 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0259.d

Date : 12-AUG-2014 00:25

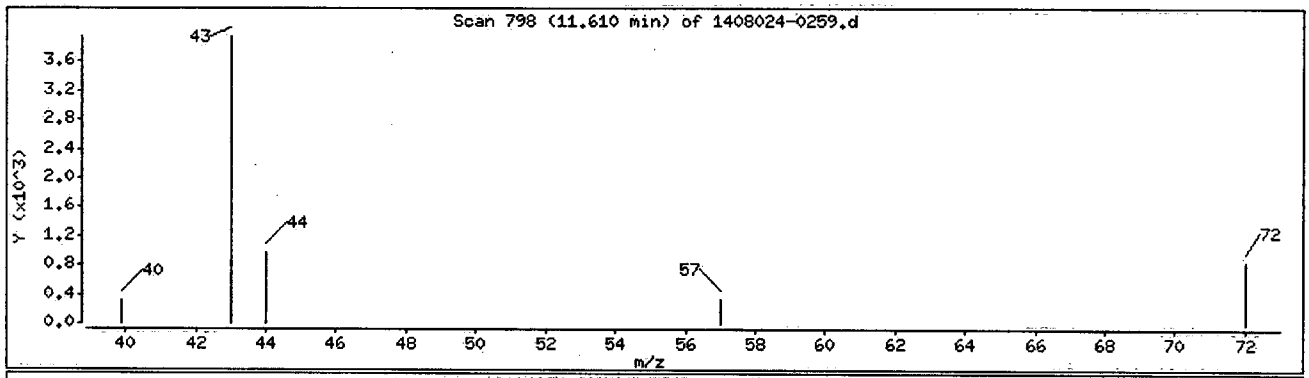
Client ID: P001-S003-0002-01 | Instrument: 5972hp59.i

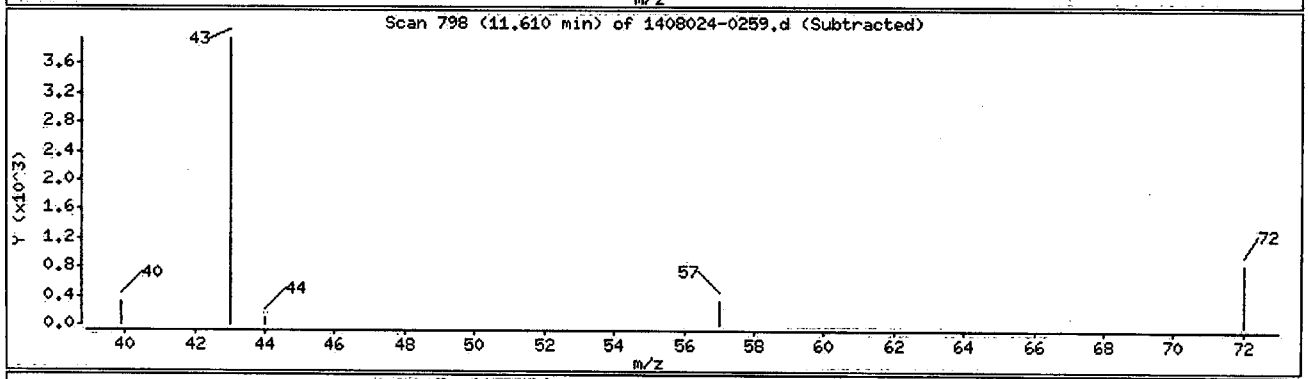
Sample Info: 1408024-02:JAO

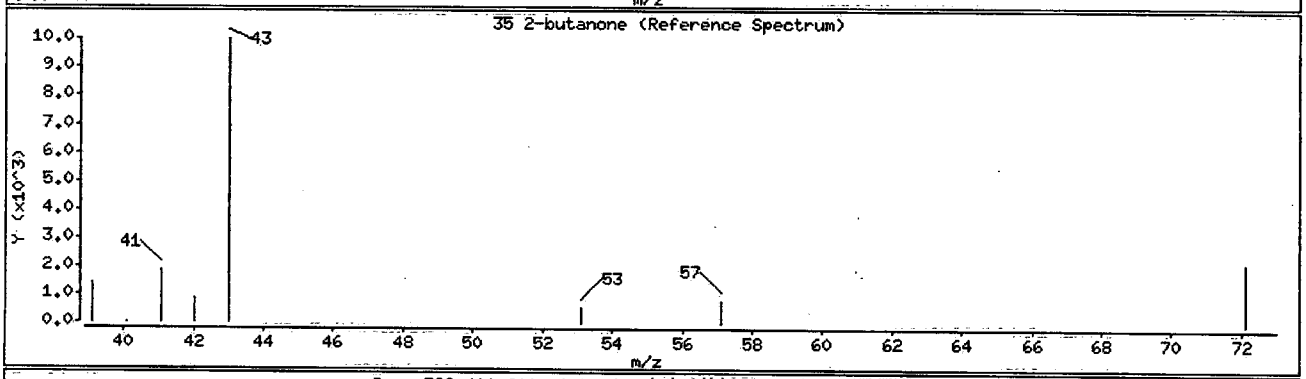
Operator: JAO

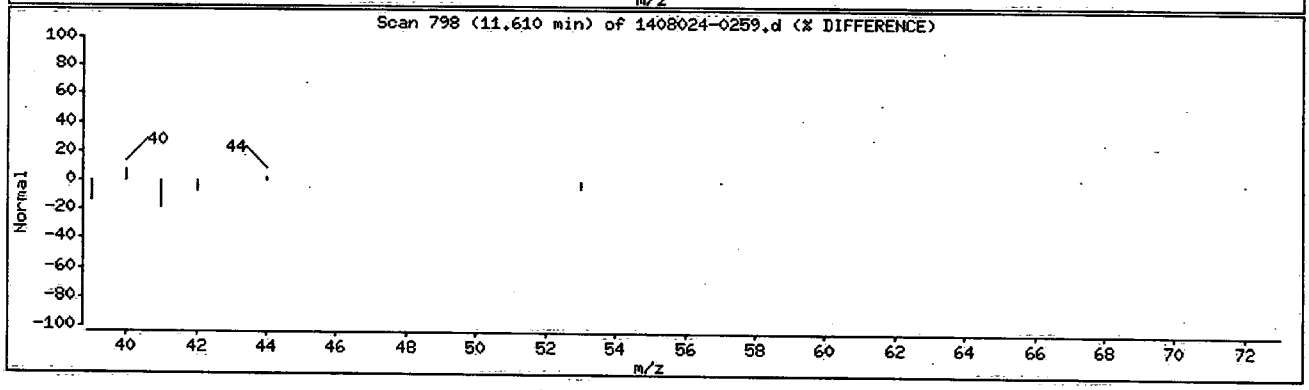
Column phase: SPB-624 | Column diameter: 0.32

35 2-butanone | Concentration: 21.5716 ug/Kg









Robin Ha 8/12/2014

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-02

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0359.d Sampled: 08/07/14 00:00

Initial/Final: 3.68g / 5mL Lab ID: 1408024-03 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 4 Analyzed: 08/11/14 22:52

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.62	7.1	U J
74-87-3	Chloromethane		0.45	7.1	U
75-01-4	Vinyl chloride		0.59	7.1	U J
74-83-9	Bromomethane	4.7	0.82	7.1	J
75-00-3	Chloroethane		1.0	7.1	U
75-69-4	Trichlorofluoromethane		0.42	7.1	U
75-35-4	1,1-Dichloroethene		1.6	7.1	U
67-64-1	Acetone		7.1	18	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.72	7.1	U
75-15-0	Carbon disulfide		0.20	7.1	U
79-20-9	Methyl acetate		2.0	7.1	U
75-09-2	Methylene chloride		0.69	7.1	U
156-60-5	trans-1,2-Dichloroethene		1.4	7.1	U
1634-04-4	Methyl tert-butyl ether		0.55	7.1	U
75-34-3	1,1-Dichloroethane		0.66	7.1	U
156-59-2	cis-1,2-Dichloroethene		0.59	7.1	U
78-93-3	2-Butanone		1.8	18	U
67-66-3	Chloroform		0.44	7.1	U
71-55-6	1,1,1-Trichloroethane		0.71	7.1	U
110-82-7	Cyclohexane		0.44	7.1	U J
56-23-5	Carbon tetrachloride		0.64	7.1	U
107-06-2	1,2-Dichloroethane		0.38	7.1	U
71-43-2	Benzene		0.44	7.1	U
79-01-6	Trichloroethene		0.45	7.1	U
108-87-2	Methylcyclohexane		0.40	7.1	U J
78-87-5	1,2-Dichloropropane		0.89	7.1	U
75-27-4	Bromodichloromethane		0.54	7.1	U
10061-01-5	cis-1,3-Dichloropropene		0.55	7.1	U
108-10-1	4-Methyl-2-pentanone		1.8	18	U
108-88-3	Toluene		0.48	7.1	U
10061-02-6	trans-1,3-Dichloropropene		0.58	7.1	U
79-00-5	1,1,2-Trichloroethane		1.0	7.1	U
127-18-4	Tetrachloroethene		2.3	7.1	U J
591-78-6	2-Hexanone		1.4	18	U
124-48-1	Dibromochloromethane		0.79	7.1	U

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

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[redacted]

ANALYSIS DATA SHEET

SW 8260B

P001-S003-0002-02

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Preparation: EPA 5035A | File ID: 1408024-0359.d | Sampled: 08/07/14 00:00

Initial/Final: 3.68g / 5mL | Lab ID: 1408024-03 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Prepared: 08/11/14 20:49

% Moisture: 4 | Analyzed: 08/11/14 22:52

Batch: 4081111 | Sequence: 4H11002 | Calibration: 4081203 | Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.31	7.1	U
108-90-7	Chlorobenzene		0.35	7.1	U
100-41-4	Ethylbenzene		0.82	7.1	U
179601-23-1	m,p-Xylene		0.20	14	U
95-47-6	o-Xylene		0.54	7.1	U
100-42-5	Styrene		0.11	7.1	U
75-25-2	Bromoform		1.6	7.1	U
98-82-8	Isopropylbenzene		0.31	7.1	U
79-34-5	1,1,2,2-Tetrachloroethane		0.52	7.1	U
541-73-1	1,3-Dichlorobenzene		0.38	7.1	U
106-46-7	1,4-Dichlorobenzene		0.30	7.1	U
95-50-1	1,2-Dichlorobenzene		0.51	7.1	U
96-12-8	1,2-Dibromo-3-chloropropane		0.92	7.1	U
120-82-1	1,2,4-Trichlorobenzene		0.49	7.1	U
1330-20-7	Xylenes (total)		0.20	7.1	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	70.65	65.93	93	71 - 141	
1,2-Dichloroethane-d4	70.65	72.09	102	70 - 139	
Toluene-d8	70.65	64.32	91	72 - 123	
Bromofluorobenzene	70.65	69.54	98	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

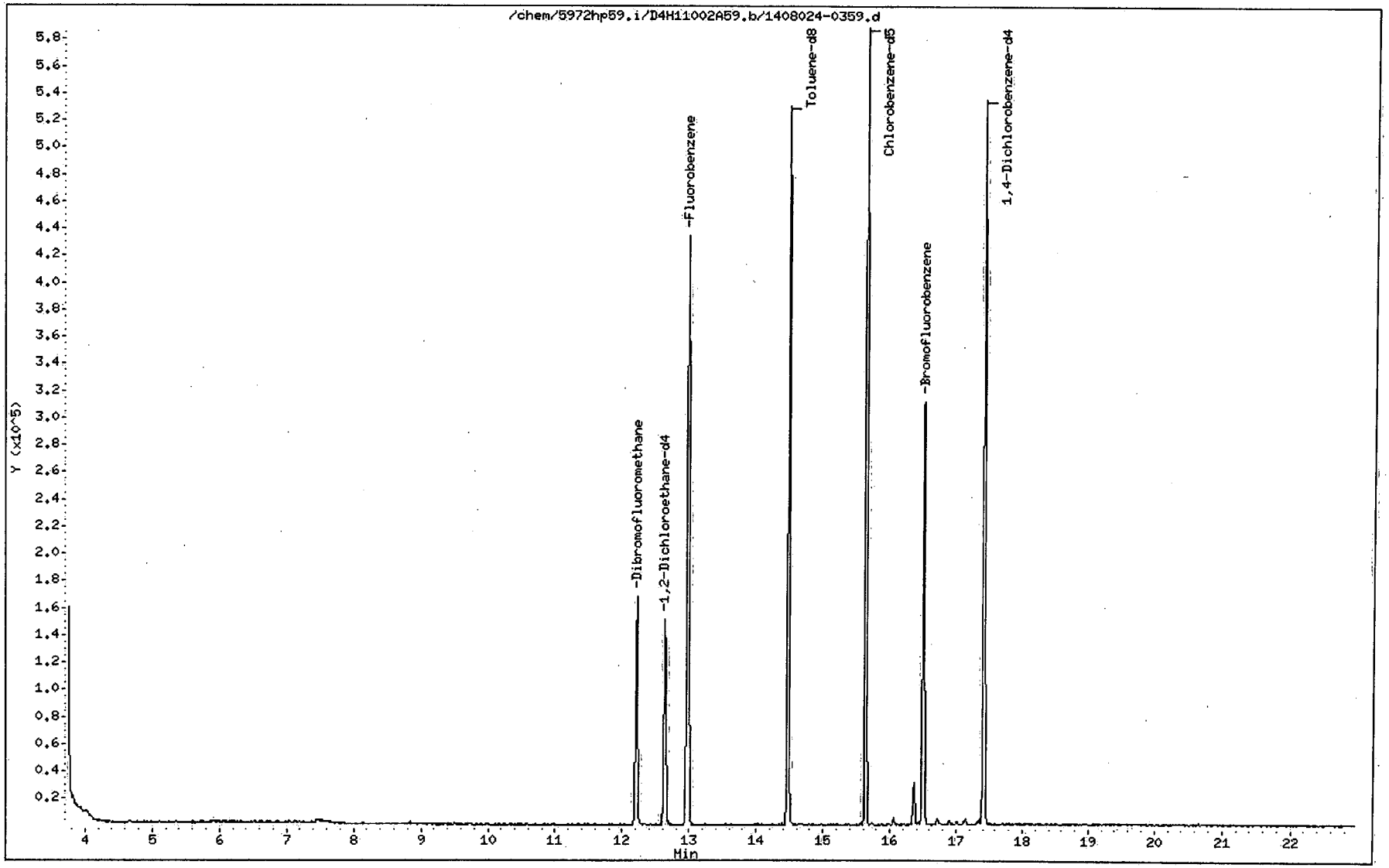
Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Date : 11-AUG-2014 22:52
Client ID: P001-S003-0002-02
Sample Info: 1408024-03;JAO

Instrument: 5972hp59.i

Operator: JAO

Column phase: SPB-624

Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Lab Smp Id: 1408024-03 Client Smp ID: P001-S003-0002-02
Inj Date : 11-AUG-2014 22:52
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-03:JAO
Misc Info : P001-S003-0002-02
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	3.68000	Weight of sample extracted (g)
M	4.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.977	12.972	(1.000)	464445	250.000	
* 2 Chlorobenzene-d5	117	15.639	15.634	(1.000)	386551	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.414	17.419	(1.000)	159392	250.000	
$ 4 Dibromofluoromethane	113	12.207	12.212	(0.941)	123203	233.292	66.0360
$ 5 1,2-Dichloroethane-d4	65	12.632	12.636	(0.973)	114220	255.087	72.2053
$ 6 Toluene-d8	98	14.466	14.471	(0.925)	359258	227.594	64.4231
$ 7 Bromofluorobenzene	95	16.497	16.502	(0.947)	125222	246.051	69.6475
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	5.916	5.931	(0.456)	2418	16.4872	4.66690(a)
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	Compound Not Detected.					
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	Compound Not Detected.					
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Report Date: 12-Aug-2014 11:29

QC Flag Legend

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

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d
Lab Smp Id: 1408024-03 Client Smp ID: P001-S003-0002-02
Inj Date : 11-AUG-2014 22:52
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-03:JAO
Misc Info : P001-S003-0002-02
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0359.d

Date : 11-AUG-2014 22:52

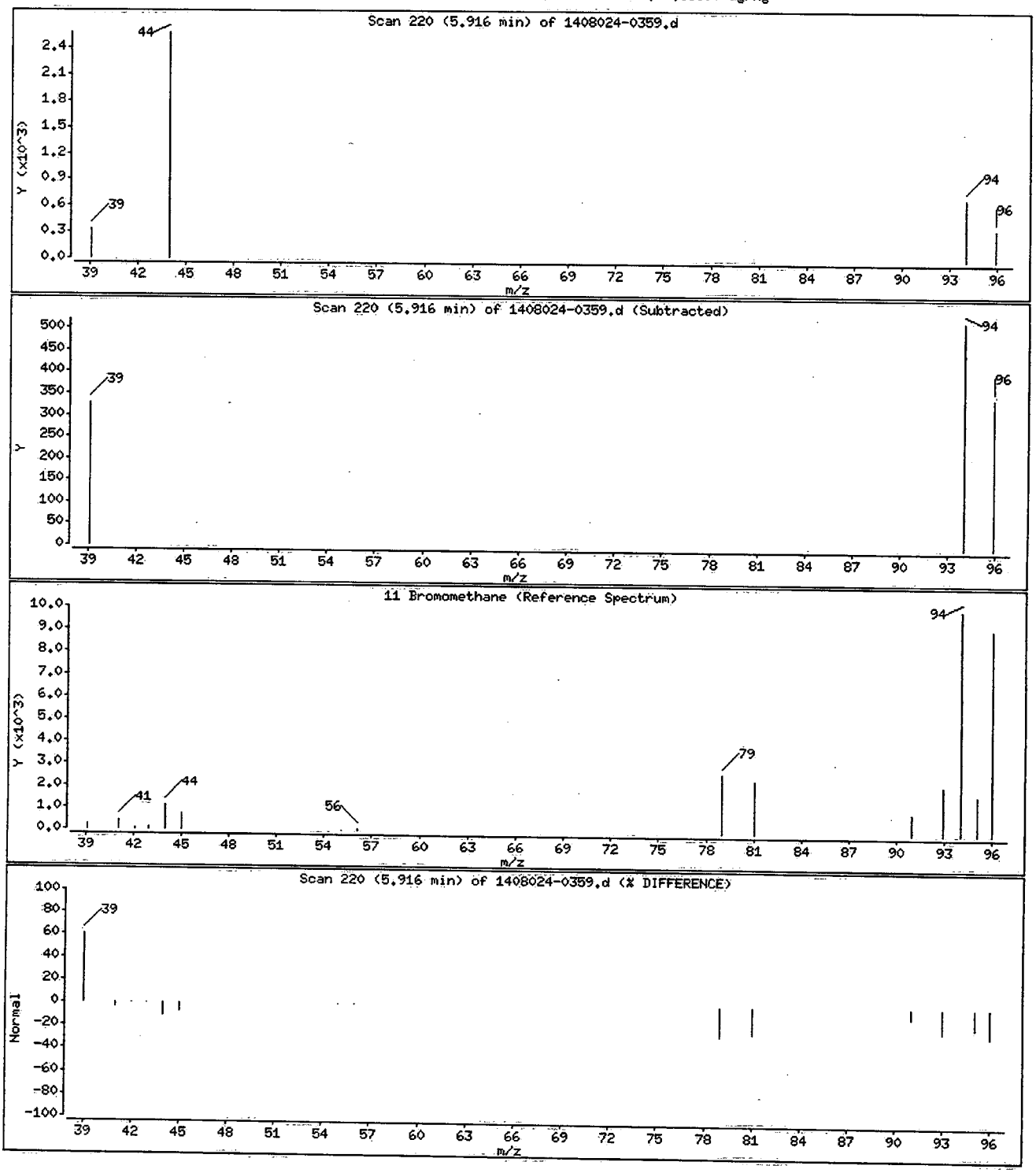
Client ID: P001-S003-0002-02 Instrument: 5972hp59.i

Sample Info: 1408024-03:JAO

Operator: JAO

Column phase: SPB-624 Column diameter: 0.32

11 Bromomethane Concentration: 4.66690 ug/Kg



Rahdw Hani 8/12/2014

ANALYSIS DATA SHEET

SW 8260B

P001-S006-0002-01

Client: WESTON SOLUTIONS SDG 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Preparation: EPA 5035A File ID: 1408024-0459.d Sampled: 08/07/14 00:00

Initial/Final: 3.93g / 5mL Lab ID: 1408024-04 Received: 08/08/14 09:04

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: 22 Analyzed: 08/11/14 23:23

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.72	8.2	U J
74-87-3	Chloromethane		0.52	8.2	U
75-01-4	Vinyl chloride		0.68	8.2	U J
74-83-9	Bromomethane		0.95	8.2	U J
75-00-3	Chloroethane		1.2	8.2	U
75-69-4	Trichlorofluoromethane		0.49	8.2	U
75-35-4	1,1-Dichloroethene		1.8	8.2	U
67-64-1	Acetone		8.2	20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.83	8.2	U
75-15-0	Carbon disulfide		0.23	8.2	U
79-20-9	Methyl acetate		2.3	8.2	U
75-09-2	Methylene chloride		0.80	8.2	U
156-60-5	trans-1,2-Dichloroethene		1.6	8.2	U
1634-04-4	Methyl tert-butyl ether		0.64	8.2	U
75-34-3	1,1-Dichloroethane		0.77	8.2	U
156-59-2	cis-1,2-Dichloroethene		0.68	8.2	U
78-93-3	2-Butanone		2.1	20	U
67-66-3	Chloroform		0.51	8.2	U
71-55-6	1,1,1-Trichloroethane		0.82	8.2	U
110-82-7	Cyclohexane		0.51	8.2	U J
56-23-5	Carbon tetrachloride		0.73	8.2	U
107-06-2	1,2-Dichloroethane		0.44	8.2	U
71-43-2	Benzene		0.51	8.2	U
79-01-6	Trichloroethene		0.52	8.2	U
108-87-2	Methylcyclohexane		0.46	8.2	U J
78-87-5	1,2-Dichloropropane		1.0	8.2	U
75-27-4	Bromodichloromethane		0.62	8.2	U
10061-01-5	cis-1,3-Dichloropropene		0.64	8.2	U
108-10-1	4-Methyl-2-pentanone		2.1	20	U
108-88-3	Toluene		0.55	8.2	U
10061-02-6	trans-1,3-Dichloropropene		0.67	8.2	U
79-00-5	1,1,2-Trichloroethane		1.2	8.2	U
127-18-4	Tetrachloroethene		2.6	8.2	U J
591-78-6	2-Hexanone		1.6	20	U
124-48-1	Dibromochloromethane		0.91	8.2	U

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[redacted]

ANALYSIS DATA SHEET

SW 8260B

P001-S006-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Preparation: EPA 5035A | File ID: 1408024-0459.d | Sampled: 08/07/14 00:00

Initial/Final: 3.93g / 5mL | Lab ID: 1408024-04 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Prepared: 08/11/14 20:49

% Moisture: 22 | Analyzed: 08/11/14 23:23

Batch: 4081111 | Sequence: 4H11002 | Calibration: 4081203 | Instrument: 5972hp59

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
106-93-4	1,2-Dibromoethane		0.36	8.2	U
108-90-7	Chlorobenzene		0.41	8.2	U
100-41-4	Ethylbenzene		0.95	8.2	U
179601-23-1	m,p-Xylene		0.23	16	U
95-47-6	o-Xylene		0.62	8.2	U
100-42-5	Styrene		0.13	8.2	U J
75-25-2	Bromoform		1.8	8.2	U
98-82-8	Isopropylbenzene		0.36	8.2	U J
79-34-5	1,1,2,2-Tetrachloroethane		0.60	8.2	U
541-73-1	1,3-Dichlorobenzene		0.44	8.2	U
106-46-7	1,4-Dichlorobenzene		0.34	8.2	U
95-50-1	1,2-Dichlorobenzene		0.59	8.2	U
96-12-8	1,2-Dibromo-3-chloropropane		1.1	8.2	U
120-82-1	1,2,4-Trichlorobenzene		0.57	8.2	U
1330-20-7	Xylenes (total)		0.23	8.2	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Dibromofluoromethane	81.53	82.78	102	71 - 141	
1,2-Dichloroethane-d4	81.53	88.09	108	70 - 139	
Toluene-d8	81.53	76.99	94	72 - 123	
Bromofluorobenzene	81.53	82.17	101	65 - 131	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

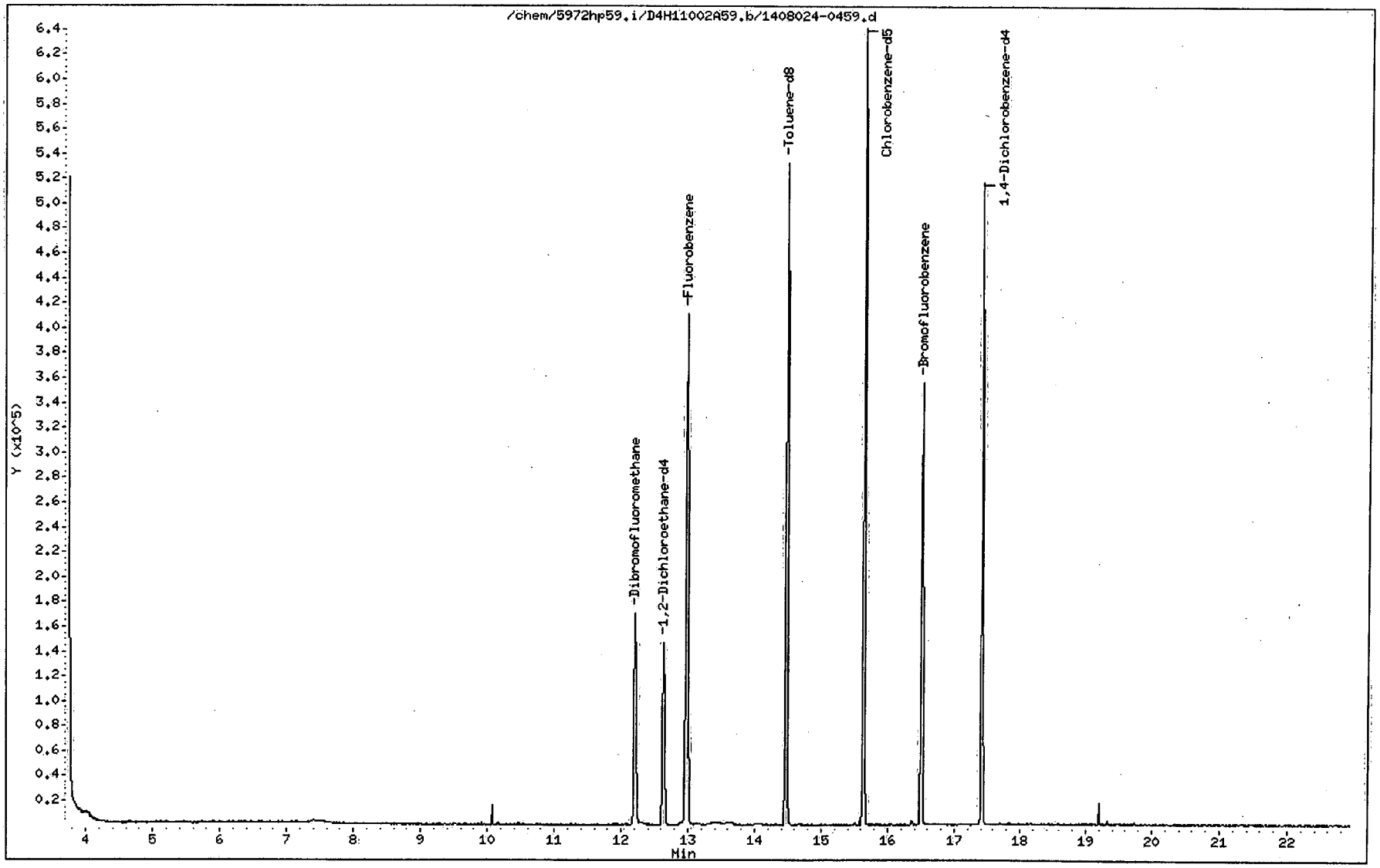
Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Date : 11-AUG-2014 23:23
Client ID: P001-S006-0002-01
Sample Info: 1408024-04:JAO

Instrument: 5972hp59.i

Operator: JAO

Column phase: SPB-624

Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Lab Smp Id: 1408024-04 Client Smp ID: P001-S006-0002-01
Inj Date : 11-AUG-2014 23:23
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-04:JAO
Misc Info : P001-S006-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	3.93000	Weight of sample extracted (g)
M	22.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.970	12.972	(1.000)	442325	250.000	
* 2 Chlorobenzene-d5	117	15.633	15.634	(1.000)	382594	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.418	17.419	(1.000)	163392	250.000	
$ 4 Dibromofluoromethane	113	12.211	12.212	(0.941)	127672	253.844	82.8095
$ 5 1,2-Dichloroethane-d4	65	12.635	12.636	(0.974)	115190	270.118	88.1184
$ 6 Toluene-d8	98	14.469	14.471	(0.926)	368859	236.093	77.0187
$ 7 Bromofluorobenzene	95	16.500	16.502	(0.947)	131458	251.980	82.2014
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	Compound Not Detected.					
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	Compound Not Detected.					
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	Compound Not Detected.					
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/1408024-0459.d
Lab Smp Id: 1408024-04 Client Smp ID: P001-S006-0002-01
Inj Date : 11-AUG-2014 23:23
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 1408024-04:JAO
Misc Info : P001-S006-0002-01
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

L. Initial Calibration and Second Source Calibration Verification Data

(INITIAL CALIBRATION DATA) (SECOND-SOURCE CALIBRATION VERIFICATION)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level, from lowest to highest. The calibration is followed by the second source calibration verification form.

(1) RICs and Quantitation reports for the initial calibration and the second source calibration verification. Spectra not required.

(2) EICPs displaying each manual integration.

INITIAL CALIBRATION DATA

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Dichlorodifluoromethane	5	0.3513147	10	0.363159	20	0.3129638	50	0.3339328	100	0.3351162	200	0.2875017
Dichlorodifluoromethane	5	0.3513147	10	0.363159	20	0.3129638	50	0.3339328	100	0.3351162	200	0.2875017
Chloromethane	5	0.3030251	10	0.317772	20	0.2510039	50	0.2670932	100	0.2844673	200	0.2949715
Chloromethane	5	0.3030251	10	0.317772	20	0.2510039	50	0.2670932	100	0.2844673	200	0.2949715
Vinyl chloride	5	0.1804234	10	0.1622733	20	0.1581551	50	0.1840783	100	0.183227	200	0.1683116
Vinyl chloride	5	0.1804234	10	0.1622733	20	0.1581551	50	0.1840783	100	0.183227	200	0.1683116
Bromomethane	5	0.0875999	10	8.493095E-02	20	6.293795E-02	50	7.033169E-02	100	9.204189E-02	200	7.581688E-02
Bromomethane	5	0.0875999	10	8.493095E-02	20	6.293795E-02	50	7.033169E-02	100	9.204189E-02	200	7.581688E-02
Chloroethane	5	7.991703E-02	10	5.867381E-02	20	7.533569E-02	50	7.228375E-02	100	7.561367E-02	200	7.231435E-02
Chloroethane	5	7.991703E-02	10	5.867381E-02	20	7.533569E-02	50	7.228375E-02	100	7.561367E-02	200	7.231435E-02
Trichlorofluoromethane	5	0.2564894	10	0.2730182	20	0.2655255	50	0.2793468	100	0.281866	200	0.2794083
Trichlorofluoromethane	5	0.2564894	10	0.2730182	20	0.2655255	50	0.2793468	100	0.281866	200	0.2794083
1,1-Dichloroethene	5	0.1862189	10	0.2084562	20	0.1903096	50	0.2131968	100	0.2174985	200	0.2081785
1,1-Dichloroethene	5	0.1862189	10	0.2084562	20	0.1903096	50	0.2131968	100	0.2174985	200	0.2081785
Acetone	12.5	6.179844E-02	25	5.122268E-02	50	4.729359E-02	125	4.285168E-02	250	5.055059E-02	500	~~3.823338E-02~~
Acetone	12.5	6.179844E-02	25	5.122268E-02	50	4.729359E-02	125	4.285168E-02	250	5.055059E-02	500	~~3.823338E-02~~
1,1,2-Trichloro-1,2,2-trifluoroethar	5	0.2564894	10	0.2730182	20	0.2655255	50	0.2793468	100	0.281866	200	0.2794083
1,1,2-Trichloro-1,2,2-trifluoroethar	5	0.2564894	10	0.2730182	20	0.2655255	50	0.2793468	100	0.281866	200	0.2794083
Carbon disulfide	5	0.7435411	10	0.7507209	20	0.7483661	50	0.8016235	100	0.8374059	200	0.7904372
Carbon disulfide	5	0.7435411	10	0.7507209	20	0.7483661	50	0.8016235	100	0.8374059	200	0.7904372
Methyl acetate	5	0.2656974	10	0.2319185	20	0.2115191	50	0.2119082	100	0.2338919	200	0.1945398
Methyl acetate	5	0.2656974	10	0.2319185	20	0.2115191	50	0.2119082	100	0.2338919	200	0.1945398
Methylene chloride	5	0.2580718	10	0.2480997	20	0.2425134	50	0.251564	100	0.2569718	200	0.2534295
Methylene chloride	5	0.2580718	10	0.2480997	20	0.2425134	50	0.251564	100	0.2569718	200	0.2534295
trans-1,2-Dichloroethene	5	0.216245	10	0.2336641	20	0.2216971	50	0.2392755	100	0.2396454	200	0.2290287
trans-1,2-Dichloroethene	5	0.216245	10	0.2336641	20	0.2216971	50	0.2392755	100	0.2396454	200	0.2290287
Methyl tert-butyl ether	5	0.5028749	10	0.5404557	20	0.4843988	50	0.5302194	100	0.5306015	200	0.4991525

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INITIAL CALIBRATION DATA

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Methyl tert-butyl ether	5	0.5028749	10	0.5404557	20	0.4843988	50	0.5302194	100	0.5306015	200	0.4991525
1,1-Dichloroethane	5	0.3946475	10	0.4225564	20	0.3884673	50	0.4170454	100	0.417069	200	0.4002523
1,1-Dichloroethane	5	0.3946475	10	0.4225564	20	0.3884673	50	0.4170454	100	0.417069	200	0.4002523
cis-1,2-Dichloroethene	5	0.2385691	10	0.2633131	20	0.2466316	50	0.2685441	100	0.2643098	200	0.2597351
cis-1,2-Dichloroethene	5	0.2385691	10	0.2633131	20	0.2466316	50	0.2685441	100	0.2643098	200	0.2597351
2-Butanone	12.5	0.1014519	25	0.1064613	50	8.700471E-02	125	8.977509E-02	250	8.474056E-02	500	7.371357E-02
2-Butanone	12.5	0.1014519	25	0.1064613	50	8.700471E-02	125	8.977509E-02	250	8.474056E-02	500	7.371357E-02
Chloroform	5	0.3900149	10	0.4397687	20	0.3791906	50	0.4197116	100	0.4091943	200	0.4099916
Chloroform	5	0.3900149	10	0.4397687	20	0.3791906	50	0.4197116	100	0.4091943	200	0.4099916
1,1,1-Trichloroethane	5	0.2923873	10	0.3197528	20	0.3115352	50	0.3272193	100	0.3306771	200	0.3328874
1,1,1-Trichloroethane	5	0.2923873	10	0.3197528	20	0.3115352	50	0.3272193	100	0.3306771	200	0.3328874
Cyclohexane	5	0.2105829	10	0.2262926	20	0.2191993	50	0.2529923	100	0.2645744	200	0.2508974
Cyclohexane	5	0.2105829	10	0.2262926	20	0.2191993	50	0.2529923	100	0.2645744	200	0.2508974
Carbon tetrachloride	5	0.2777269	10	0.2995467	20	0.2884464	50	0.3081911	100	0.3112229	200	0.3063694
Carbon tetrachloride	5	0.2777269	10	0.2995467	20	0.2884464	50	0.3081911	100	0.3112229	200	0.3063694
1,2-Dichloroethane	5	0.2707876	10	0.2930796	20	0.2585739	50	0.2785925	100	0.2692424	200	0.2596031
1,2-Dichloroethane	5	0.2707876	10	0.2930796	20	0.2585739	50	0.2785925	100	0.2692424	200	0.2596031
Benzene	5	0.8376037	10	0.8860315	20	0.8354092	50	0.8938608	100	0.919596	200	0.8831629
Benzene	5	0.8376037	10	0.8860315	20	0.8354092	50	0.8938608	100	0.919596	200	0.8831629
Trichloroethene	5	0.2370821	10	0.2456395	20	0.2370241	50	0.2512602	100	0.2497025	200	0.251611
Trichloroethene	5	0.2370821	10	0.2456395	20	0.2370241	50	0.2512602	100	0.2497025	200	0.251611
Methylcyclohexane	5	0.1976383	10	0.2207662	20	0.2115574	50	0.2401328	100	0.2627187	200	0.2470862
Methylcyclohexane	5	0.1976383	10	0.2207662	20	0.2115574	50	0.2401328	100	0.2627187	200	0.2470862
1,2-Dichloropropane	5	0.2458707	10	0.2495197	20	0.2278816	50	0.2300442	100	0.2220092	200	0.1946138
1,2-Dichloropropane	5	0.2458707	10	0.2495197	20	0.2278816	50	0.2300442	100	0.2220092	200	0.1946138
Bromodichloromethane	5	0.3143874	10	0.3329131	20	0.3087593	50	0.3318707	100	0.3419572	200	0.3261204
Bromodichloromethane	5	0.3143874	10	0.3329131	20	0.3087593	50	0.3318707	100	0.3419572	200	0.3261204

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INITIAL CALIBRATION DATA

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
cis-1,3-Dichloropropene	5	0.338046	10	0.3618746	20	0.315989	50	0.3739413	100	0.3734126	200	0.3627831
cis-1,3-Dichloropropene	5	0.338046	10	0.3618746	20	0.315989	50	0.3739413	100	0.3734126	200	0.3627831
4-Methyl-2-pentanone	12.5	0.2469255	25	0.267586	50	0.2510204	125	0.257656	250	0.228062	500	0.2118507
4-Methyl-2-pentanone	12.5	0.2469255	25	0.267586	50	0.2510204	125	0.257656	250	0.228062	500	0.2118507
Toluene	5	0.6224444	10	0.5972934	20	0.6175764	50	0.6704913	100	0.6686039	200	0.6487133
Toluene	5	0.6224444	10	0.5972934	20	0.6175764	50	0.6704913	100	0.6686039	200	0.6487133
trans-1,3-Dichloropropene	5	0.3811493	10	0.338544	20	0.330748	50	0.3883216	100	0.3653227	200	0.3435542
trans-1,3-Dichloropropene	5	0.3811493	10	0.338544	20	0.330748	50	0.3883216	100	0.3653227	200	0.3435542
1,1,2-Trichloroethane	5	0.2488804	10	0.2324668	20	0.2248694	50	0.241476	100	0.2302765	200	0.2212345
1,1,2-Trichloroethane	5	0.2488804	10	0.2324668	20	0.2248694	50	0.241476	100	0.2302765	200	0.2212345
Tetrachloroethene	5	0.2095824	10	0.2079583	20	0.2028959	50	0.2416295	100	0.2414491	200	0.2300284
Tetrachloroethene	5	0.2095824	10	0.2079583	20	0.2028959	50	0.2416295	100	0.2414491	200	0.2300284
2-Hexanone	12.5	0.1788914	25	0.2129876	50	0.1702833	125	0.1899402	250	0.1762137	500	0.1427097
2-Hexanone	12.5	0.1788914	25	0.2129876	50	0.1702833	125	0.1899402	250	0.1762137	500	0.1427097
Dibromochloromethane	5	0.2811018	10	0.3013378	20	0.2951387	50	0.3253792	100	0.3069098	200	0.3062155
Dibromochloromethane	5	0.2811018	10	0.3013378	20	0.2951387	50	0.3253792	100	0.3069098	200	0.3062155
1,2-Dibromoethane	5	0.2667492	10	0.2654471	20	0.2551586	50	0.2732677	100	0.2583525	200	0.2520868
1,2-Dibromoethane	5	0.2667492	10	0.2654471	20	0.2551586	50	0.2732677	100	0.2583525	200	0.2520868
Chlorobenzene	5	0.7956699	10	0.7742748	20	0.7589607	50	0.8086631	100	0.8104909	200	0.7444864
Chlorobenzene	5	0.7956699	10	0.7742748	20	0.7589607	50	0.8086631	100	0.8104909	200	0.7444864
Ethylbenzene	5	0.3707111	10	0.3393214	20	0.3667012	50	0.3745186	100	0.3996559	200	0.3721722
Ethylbenzene	5	0.3707111	10	0.3393214	20	0.3667012	50	0.3745186	100	0.3996559	200	0.3721722
m,p-Xylene	10	0.4789743	20	0.4338271	40	0.4387247	100	0.5021259	200	0.5044332	400	0.4619483
m,p-Xylene	10	0.4789743	20	0.4338271	40	0.4387247	100	0.5021259	200	0.5044332	400	0.4619483
o-Xylene	5	0.4377191	10	0.4371461	20	0.4318686	50	0.4759706	100	0.4959022	200	0.4488243
o-Xylene	5	0.4377191	10	0.4371461	20	0.4318686	50	0.4759706	100	0.4959022	200	0.4488243
Styrene	5	0.7035616	10	0.7224671	20	0.7222982	50	0.8057697	100	0.8246783	200	0.7659278

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INITIAL CALIBRATION DATA

SW 8260B

Client: WESTON SOLUTIONS. SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Styrene	5	0.7035616	10	0.7224671	20	0.7222982	50	0.8057697	100	0.8246783	200	0.7659278
Bromoform	5	0.3640368	10	0.4117368	20	0.3616306	50	0.4102462	100	0.3918225	200	0.3866514
Bromoform	5	0.3640368	10	0.4117368	20	0.3616306	50	0.4102462	100	0.3918225	200	0.3866514
Isopropylbenzene	5	0.9901921	10	0.9924491	20	1.008532	50	1.152139	100	1.215874	200	1.151526
Isopropylbenzene	5	0.9901921	10	0.9924491	20	1.008532	50	1.152139	100	1.215874	200	1.151526
1,1,2,2-Tetrachloroethane	5	0.7387444	10	0.8018289	20	0.6858236	50	0.7175815	100	0.6983702	200	0.6445638
1,1,2,2-Tetrachloroethane	5	0.7387444	10	0.8018289	20	0.6858236	50	0.7175815	100	0.6983702	200	0.6445638
1,3-Dichlorobenzene	5	1.217743	10	1.149457	20	1.1465	50	1.274979	100	1.286228	200	1.248864
1,3-Dichlorobenzene	5	1.217743	10	1.149457	20	1.1465	50	1.274979	100	1.286228	200	1.248864
1,4-Dichlorobenzene	5	1.276797	10	1.202225	20	1.16737	50	1.291118	100	1.31732	200	1.25834
1,4-Dichlorobenzene	5	1.276797	10	1.202225	20	1.16737	50	1.291118	100	1.31732	200	1.25834
1,2-Dichlorobenzene	5	1.154585	10	1.071299	20	1.034133	50	1.184685	100	1.198762	200	1.098421
1,2-Dichlorobenzene	5	1.154585	10	1.071299	20	1.034133	50	1.184685	100	1.198762	200	1.098421
1,2-Dibromo-3-chloropropane	5	0.1142774	10	0.1347983	20	0.1231287	50	0.1262766	100	0.1283303	200	0.1123288
1,2-Dibromo-3-chloropropane	5	0.1142774	10	0.1347983	20	0.1231287	50	0.1262766	100	0.1283303	200	0.1123288
1,2,4-Trichlorobenzene	5	0.7698446	10	0.7079927	20	0.6796585	50	0.7938706	100	0.8065819	200	0.7877331
1,2,4-Trichlorobenzene	5	0.7698446	10	0.7079927	20	0.6796585	50	0.7938706	100	0.8065819	200	0.7877331
Xylenes (total)	15	0.4652226	30	0.4349334	60	0.4364393	150	0.4934075	300	0.5015896	600	0.4575736
Xylenes (total)	15	0.4652226	30	0.4349334	60	0.4364393	150	0.4934075	300	0.5015896	600	0.4575736
Dibromofluoromethane	5	0.2841516	10	0.3127159	20	0.2825304	50	0.2733928	100	0.2720311	200	0.2807823
Dibromofluoromethane	5	0.2841516	10	0.3127159	20	0.2825304	50	0.2733928	100	0.2720311	200	0.2807823
1,2-Dichloroethane-d4	5	0.2539348	10	0.2747186	20	0.2445509	50	0.2268368	100	0.2256425	200	0.2204578
1,2-Dichloroethane-d4	5	0.2539348	10	0.2747186	20	0.2445509	50	0.2268368	100	0.2256425	200	0.2204578
Toluene-d8	5	1.030972	10	1.075842	20	0.9611364	50	1.03745	100	0.991771	200	1.02817
Toluene-d8	5	1.030972	10	1.075842	20	0.9611364	50	1.03745	100	0.991771	200	1.02817
Bromofluorobenzene	5	0.7748152	10	0.8317888	20	0.7996937	50	0.7922156	100	0.7814277	200	0.8094587
Bromofluorobenzene	5	0.7748152	10	0.8317888	20	0.7996937	50	0.7922156	100	0.7814277	200	0.8094587

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INITIAL CALIBRATION DATA (Continued)

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Dichlorodifluoromethane	0.3306647	8.214676	4.181167	5.727986E-02			CCC (15)	
Dichlorodifluoromethane	0.3306647	8.214676	4.181167	5.727986E-02			CCC (15)	
Chloromethane	0.2863888	8.500741	4.670833	0.1440777			CCC (15)	
Chloromethane	0.2863888	8.500741	4.670833	0.1440777			CCC (15)	
Vinyl chloride	0.1727448	6.546555	4.9635	0.1191118			CCC (30)	
Vinyl chloride	0.1727448	6.546555	4.9635	0.1191118			CCC (30)	
Bromomethane	7.894321E-02	14.13378	5.908667	0.3496826			CCC (15)	
Bromomethane	7.894321E-02	14.13378	5.908667	0.3496826			CCC (15)	
Chloroethane	7.235638E-02	10.03997	6.2045	0.1932364			CCC (15)	
Chloroethane	7.235638E-02	10.03997	6.2045	0.1932364			CCC (15)	
Trichlorofluoromethane	0.272609	3.622132	8.341	0.1256134			CCC (15)	
Trichlorofluoromethane	0.272609	3.622132	8.341	0.1256134			CCC (15)	
1,1-Dichloroethene	0.2039764	6.231018	8.382166	8.165967E-02			CCC (30)	
1,1-Dichloroethene	0.2039764	6.231018	8.382166	8.165967E-02			CCC (30)	
Acetone	0.0507434	13.81814	8.564	0.0474308			CCC (15)	
Acetone	0.0507434	13.81814	8.564	0.0474308			CCC (15)	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.272609	3.622132	8.341	0.1256134			CCC (15)	
1,1,2-Trichloro-1,2,2-trifluoroethane	0.272609	3.622132	8.341	0.1256134			CCC (15)	
Carbon disulfide	0.7786825	4.821827	8.889833	4.514961E-02			CCC (15)	
Carbon disulfide	0.7786825	4.821827	8.889833	4.514961E-02			CCC (15)	
Methyl acetate	0.2249125	11.00662	9.251333	0.0443635			CCC (15)	
Methyl acetate	0.2249125	11.00662	9.251333	0.0443635			CCC (15)	
Methylene chloride	0.251775	2.307251	9.507833	4.157838E-02			CCC (15)	
Methylene chloride	0.251775	2.307251	9.507833	4.157838E-02			CCC (15)	
trans-1,2-Dichloroethene	0.229926	4.133096	9.978	5.448146E-02			CCC (15)	
trans-1,2-Dichloroethene	0.229926	4.133096	9.978	5.448146E-02			CCC (15)	
Methyl tert-butyl ether	0.5146171	4.307324	9.953333	4.268428E-02			CCC (15)	

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INITIAL CALIBRATION DATA (Continued)

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Methyl tert-butyl ether	0.5146171	4.307324	9.953333	4.268428E-02			CCC (15)	
1,1-Dichloroethane	0.406673	3.451715	10.7455	4.435573E-02			CCC (15)	
1,1-Dichloroethane	0.406673	3.451715	10.7455	4.435573E-02			CCC (15)	
cis-1,2-Dichloroethene	0.2568505	4.544033	11.61667	2.417234E-02			CCC (15)	
cis-1,2-Dichloroethene	0.2568505	4.544033	11.61667	2.417234E-02			CCC (15)	
2-Butanone	9.052452E-02	13.09307	11.60667	1.864815E-02			CCC (15)	
2-Butanone	9.052452E-02	13.09307	11.60667	1.864815E-02			CCC (15)	
Chloroform	0.4079786	5.263018	12.011	0.0269008			CCC (30)	
Chloroform	0.4079786	5.263018	12.011	0.0269008			CCC (30)	
1,1,1-Trichloroethane	0.3190765	4.776208	12.24267	4.761563E-02			CCC (15)	
1,1,1-Trichloroethane	0.3190765	4.776208	12.24267	4.761563E-02			CCC (15)	
Cyclohexane	0.2374232	9.106926	12.27217	4.958073E-02			CCC (15)	
Cyclohexane	0.2374232	9.106926	12.27217	4.958073E-02			CCC (15)	
Carbon tetrachloride	0.2985839	4.370266	12.41683	3.528831E-02			CCC (15)	
Carbon tetrachloride	0.2985839	4.370266	12.41683	3.528831E-02			CCC (15)	
1,2-Dichloroethane	0.2716465	4.743208	12.721	2.028136E-02			CCC (15)	
1,2-Dichloroethane	0.2716465	4.743208	12.721	2.028136E-02			CCC (15)	
Benzene	0.875944	3.784062	12.66183	1.814962E-02			CCC (15)	
Benzene	0.875944	3.784062	12.66183	1.814962E-02			CCC (15)	
Trichloroethene	0.2453866	2.768899	13.36033	2.508287E-02			CCC (15)	
Trichloroethene	0.2453866	2.768899	13.36033	2.508287E-02			CCC (15)	
Methylcyclohexane	0.2299833	10.53973	13.533	3.268968E-02			CCC (15)	
Methylcyclohexane	0.2299833	10.53973	13.533	3.268968E-02			CCC (15)	
1,2-Dichloropropane	0.2283232	8.61945	13.61017	2.635624E-02			CCC (30)	
1,2-Dichloropropane	0.2283232	8.61945	13.61017	2.635624E-02			CCC (30)	
Bromodichloromethane	0.3260014	3.804159	13.85183	3.753253E-02			CCC (15)	
Bromodichloromethane	0.3260014	3.804159	13.85183	3.753253E-02			CCC (15)	

Environmental Testing Laboratories

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INITIAL CALIBRATION DATA (Continued)

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
cis-1,3-Dichloropropene	0.3543411	6.450704	14.25117	3.078818E-02			CCC (15)	
cis-1,3-Dichloropropene	0.3543411	6.450704	14.25117	3.078818E-02			CCC (15)	
4-Methyl-2-pentanone	0.2438501	8.380439	14.3365	1.227761E-02			CCC (15)	
4-Methyl-2-pentanone	0.2438501	8.380439	14.3365	1.227761E-02			CCC (15)	
Toluene	0.6375204	4.664669	14.52567	1.542295E-02			CCC (30)	
Toluene	0.6375204	4.664669	14.52567	1.542295E-02			CCC (30)	
trans-1,3-Dichloropropene	0.35794	6.656899	14.71133	1.808778E-02			CCC (15)	
trans-1,3-Dichloropropene	0.35794	6.656899	14.71133	1.808778E-02			CCC (15)	
1,1,2-Trichloroethane	0.2332006	4.439948	14.86917	1.586593E-02			CCC (15)	
1,1,2-Trichloroethane	0.2332006	4.439948	14.86917	1.586593E-02			CCC (15)	
Tetrachloroethene	0.2222573	7.906399	14.97583	0.0324141			CCC (15)	
Tetrachloroethene	0.2222573	7.906399	14.97583	0.0324141			CCC (15)	
2-Hexanone	0.1785043	12.95556	14.999	1.292677E-02			CCC (15)	
2-Hexanone	0.1785043	12.95556	14.999	1.292677E-02			CCC (15)	
Dibromochloromethane	0.3026805	4.832907	15.1945	1.797523E-02			CCC (15)	
Dibromochloromethane	0.3026805	4.832907	15.1945	1.797523E-02			CCC (15)	
1,2-Dibromoethane	0.2618436	3.053495	15.31283	1.186326E-02			CCC (15)	
1,2-Dibromoethane	0.2618436	3.053495	15.31283	1.186326E-02			CCC (15)	
Chlorobenzene	0.782091	3.481639	15.65967	1.128522E-02			CCC (15)	
Chlorobenzene	0.782091	3.481639	15.65967	1.128522E-02			CCC (15)	
Ethylbenzene	0.3705134	5.19938	15.68917	1.752845E-02			CCC (30)	
Ethylbenzene	0.3705134	5.19938	15.68917	1.752845E-02			CCC (30)	
m,p-Xylene	0.4700056	6.488204	15.76983	2.658179E-02			CCC (15)	
m,p-Xylene	0.4700056	6.488204	15.76983	2.658179E-02			CCC (15)	
o-Xylene	0.4545718	5.653494	16.08367	8.310831E-03			CCC (15)	
o-Xylene	0.4545718	5.653494	16.08367	8.310831E-03			CCC (15)	
Styrene	0.7574505	6.545324	16.092	3.985397E-03			CCC (15)	

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INITIAL CALIBRATION DATA (Continued)

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4081203 Instrument: 5972hp59

Calibration Date: 8/11/2014 1:58:23PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Styrene	0.7574505	6.545324	16.092	3.985397E-03			CCC (15)	
Bromoform	0.3876874	5.584573	16.29083	2.210071E-02			CCC (15)	
Bromoform	0.3876874	5.584573	16.29083	2.210071E-02			CCC (15)	
Isopropylbenzene	1.085119	9.16594	16.33017	1.298754E-02			CCC (15)	
Isopropylbenzene	1.085119	9.16594	16.33017	1.298754E-02			CCC (15)	
1,1,2,2-Tetrachloroethane	0.7144854	7.458007	16.567	8.503808E-03			CCC (15)	
1,1,2,2-Tetrachloroethane	0.7144854	7.458007	16.567	8.503808E-03			CCC (15)	
1,3-Dichlorobenzene	1.220628	4.999886	17.36567	1.987999E-02			CCC (15)	
1,3-Dichlorobenzene	1.220628	4.999886	17.36567	1.987999E-02			CCC (15)	
1,4-Dichlorobenzene	1.252195	4.530487	17.43467	1.899544E-02			CCC (15)	
1,4-Dichlorobenzene	1.252195	4.530487	17.43467	1.899544E-02			CCC (15)	
1,2-Dichlorobenzene	1.123647	5.864892	17.77817	1.315562E-02			CCC (15)	
1,2-Dichlorobenzene	1.123647	5.864892	17.77817	1.315562E-02			CCC (15)	
1,2-Dibromo-3-chloropropane	0.12319	6.965073	18.47683	2.285639E-02			CCC (15)	
1,2-Dibromo-3-chloropropane	0.12319	6.965073	18.47683	2.285639E-02			CCC (15)	
1,2,4-Trichlorobenzene	0.7576136	6.809734	19.35767	2.299718E-02			CCC (15)	
1,2,4-Trichlorobenzene	0.7576136	6.809734	19.35767	2.299718E-02			CCC (15)	
Xylenes (total)	0.464861	6.023757	16.08367	8.310831E-03			CCC (15)	
Xylenes (total)	0.464861	6.023757	16.08367	8.310831E-03			CCC (15)	
Dibromofluoromethane	0.2842674	5.199892	12.20817	2.535694E-02			CCC (15)	
Dibromofluoromethane	0.2842674	5.199892	12.20817	2.535694E-02			CCC (15)	
1,2-Dichloroethane-d4	0.2410236	8.653941	12.63217	1.300017E-02			CCC (15)	
1,2-Dichloroethane-d4	0.2410236	8.653941	12.63217	1.300017E-02			CCC (15)	
Toluene-d8	1.02089	3.885444	14.468	3.131023E-02			CCC (15)	
Toluene-d8	1.02089	3.885444	14.468	3.131023E-02			CCC (15)	
Bromofluorobenzene	0.7982333	2.580342	16.501	2.642773E-02			CCC (15)	
Bromofluorobenzene	0.7982333	2.580342	16.501	2.642773E-02			CCC (15)	

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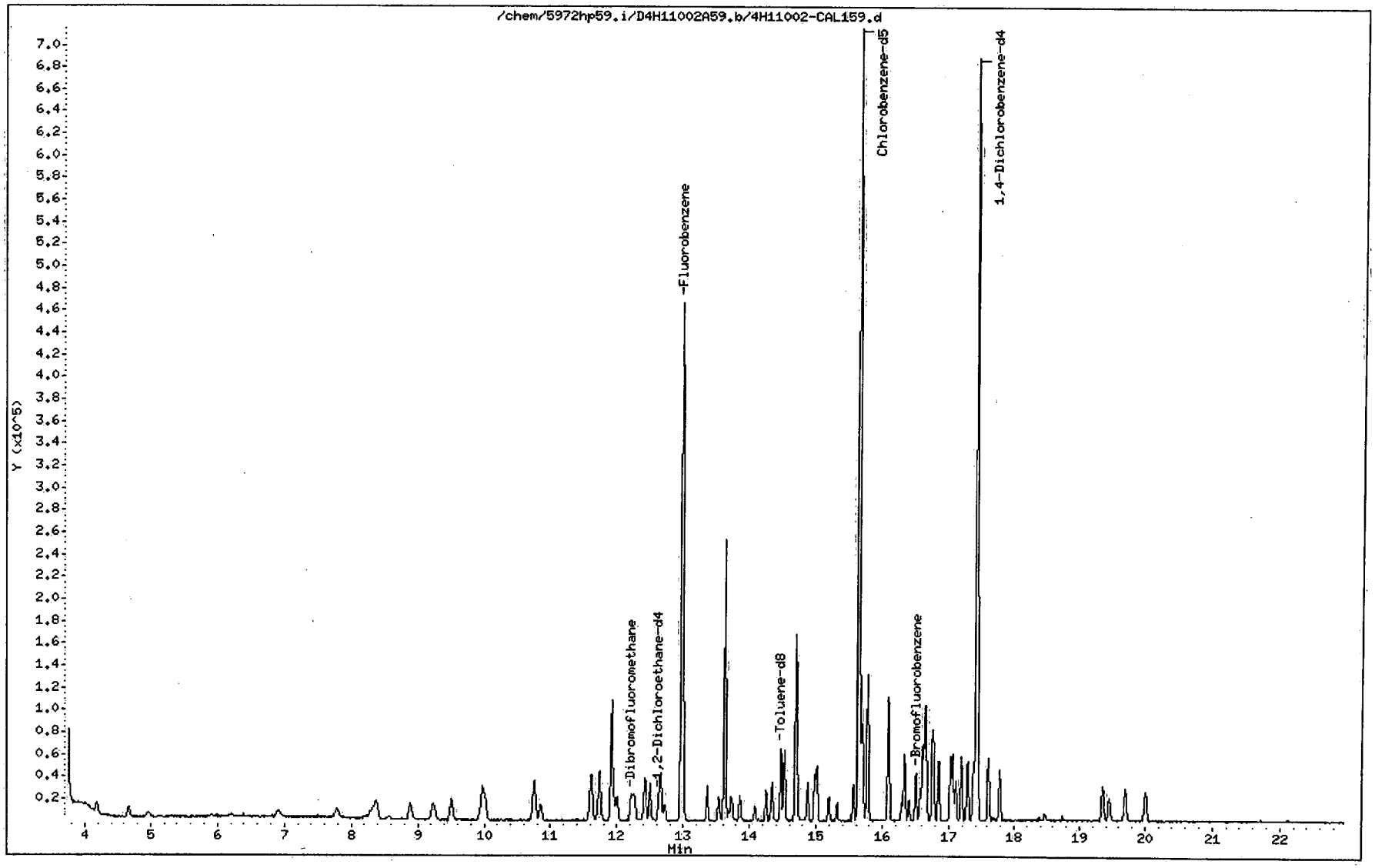
Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Date : 11-AUG-2014 14:57
Client ID: VSTD005FT
Sample Info: 4H11002-CAL1:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



Robert Ham 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Report Date: 12-Aug-2014 11:28

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Lab Smp Id: 4H11002-CAL1 Client Smp ID: VSTD005FT
Inj Date : 11-AUG-2014 14:57
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL1:JAO
Misc Info : VSTD005FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:28 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 14:57 Cal File: 4H11002-CAL159.d
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Fluorobenzene	96	12.976	12.976	(1.000)	524544	250.000	
* 2 Chlorobenzene-d5	117	15.638	15.638	(1.000)	452185	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.413	17.413	(1.000)	219291	250.000	
$ 4 Dibromofluoromethane	113	12.207	12.207	(0.941)	14905	25.0000	25.0000
$ 5 1,2-Dichloroethane-d4	65	12.631	12.631	(0.973)	13320	25.0000	25.0000
$ 6 Toluene-d8	98	14.465	14.465	(0.925)	46619	25.0000	25.0000
$ 7 Bromofluorobenzene	95	16.506	16.506	(0.948)	16991	25.0000	25.0000
8 Dichlorodifluoromethane	85	4.180	4.180	(0.322)	18428	25.0000	25.0000
9 Chloromethane	50	4.673	4.673	(0.360)	15895	25.0000	25.0000
10 Vinyl Chloride	62	4.959	4.959	(0.382)	9464	25.0000	25.0000
11 Bromomethane	94	5.925	5.925	(0.457)	4595	25.0000	25.0000(M)
12 Chloroethane	64	6.211	6.211	(0.479)	4192	25.0000	25.0000
13 Trichlorofluoromethane	101	8.341	8.341	(0.643)	13454	25.0000	25.0000
14 Acrolein	56	8.193	8.193	(0.631)	3729	250.000	250.000
15 1,1,1-trichloro-2,2,2-trifluo	117	8.272	8.272	(0.637)	4254	25.0000	25.0000

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Report Date: 12-Aug-2014 11:28

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.341	8.341	(0.643)	13454	25.0000	25.0000
17 1,1-Dichloroethene	96	8.381	8.381	(0.646)	9768	25.0000	25.0000
18 Acetone	43	8.568	8.568	(0.660)	8104	62.5000	62.5000
19 Iodomethane	142	8.765	8.765	(0.675)	2060	25.0000	25.0000(M)
20 Carbon disulfide	76	8.893	8.893	(0.685)	39002	25.0000	25.0000
21 3-Chloropropene	76	9.229	9.229	(0.711)	5136	25.0000	25.0000
22 Acetonitrile	41	9.229	9.229	(0.711)	15017	25.0000	25.0000
23 Methyl acetate	43	9.248	9.248	(0.713)	13937	25.0000	25.0000
24 Methylene Chloride	84	9.505	9.505	(0.732)	13537	25.0000	25.0000
25 Acrylonitrile	53	10.018	10.018	(0.772)	24569	250.000	250.000
26 Methyl-tert-butyl ether	73	9.958	9.958	(0.767)	26378	25.0000	25.0000
28 trans-1,2-Dichloroethene	96	9.978	9.978	(0.769)	11343	25.0000	25.0000
29 trans-1,2-DCE (part of total)	96	9.978	9.978	(0.769)	11343	25.0000	25.0000
31 Isopropyl ether	45	10.757	10.757	(0.829)	35891	25.0000	25.0000
32 1,1-Dichloroethane	63	10.747	10.747	(0.828)	20701	25.0000	25.0000
33 Vinyl acetate	43	10.757	10.757	(0.829)	16631	25.0000	25.0000(M)
34 Chloroprene	53	10.856	10.856	(0.837)	12725	25.0000	25.0000
35 2-butanone	43	11.605	11.605	(0.894)	13304	62.5000	62.5000
36 2,2-Dichloropropane	77	11.595	11.595	(0.894)	15813	25.0000	25.0000
37 cis-1,2-Dichloroethene	96	11.615	11.615	(0.895)	12514	25.0000	25.0000
38 cis-1,2-DCE (part of total)	96	11.615	11.615	(0.895)	12514	25.0000	25.0000
39 Propionitrile	54	11.743	11.743	(0.905)	57997	1250.00	1250.00
40 Methacrylonitrile	41	11.921	11.921	(0.919)	66808	250.000	250.000
41 Bromochloromethane	128	11.940	11.940	(0.920)	6255	25.0000	25.0000
42 Chloroform	83	12.009	12.009	(0.926)	20458	25.0000	25.0000
43 1,1,1-Trichloroethane	97	12.236	12.236	(0.943)	15337	25.0000	25.0000
44 Cyclohexane	56	12.266	12.266	(0.945)	11046	25.0000	25.0000
46 1,1-dichloropropene	75	12.424	12.424	(0.957)	14339	25.0000	25.0000
47 Isobutyl alcohol	43	12.493	12.493	(0.963)	25208	1250.00	1250.00
48 Carbon Tetrachloride	117	12.414	12.414	(0.957)	14568	25.0000	25.0000
49 Benzene	78	12.660	12.660	(0.976)	43936	25.0000	25.0000
50 1,2-Dichloroethane	62	12.719	12.719	(0.980)	14204	25.0000	25.0000
51 Trichloroethene	130	13.360	13.360	(1.030)	12436	25.0000	25.0000
52 Methylcyclohexane	83	13.528	13.528	(1.043)	10367	25.0000	25.0000
53 Methylmethacrylate	100	13.627	13.627	(1.050)	40616	250.000	250.000
54 1,2-Dichloropropane	63	13.617	13.617	(1.049)	12897	25.0000	25.0000
55 1,4-dioxane	88	13.696	13.696	(1.055)	6160	1250.00	1250.00
56 Dibromomethane	174	13.735	13.735	(1.059)	7502	25.0000	25.0000
57 Bromodichloromethane	83	13.854	13.854	(1.068)	16491	25.0000	25.0000
58 cis-1,3-Dichloropropene	75	14.248	14.248	(1.098)	17732	25.0000	25.0000
59 4-Methyl-2-pentanone	43	14.337	14.337	(0.917)	27914	62.5000	62.5000
60 Toluene	92	14.524	14.524	(0.929)	28146	25.0000	25.0000
61 Ethylmethacrylate	99	14.692	14.692	(0.939)	15702	250.000	250.000
62 trans-1,3-Dichloropropene	75	14.711	14.711	(0.941)	17235	25.0000	25.0000
63 1,1,2-Trichloroethane	97	14.869	14.869	(0.951)	11254	25.0000	25.0000
64 2-hexanone	43	14.997	14.997	(0.959)	20223	62.5000	62.5000
65 2-chloroethyl vinyl ether	63	14.080	14.080	(1.085)	4331	25.0000	25.0000

Robin Hamm 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Report Date: 12-Aug-2014 11:28

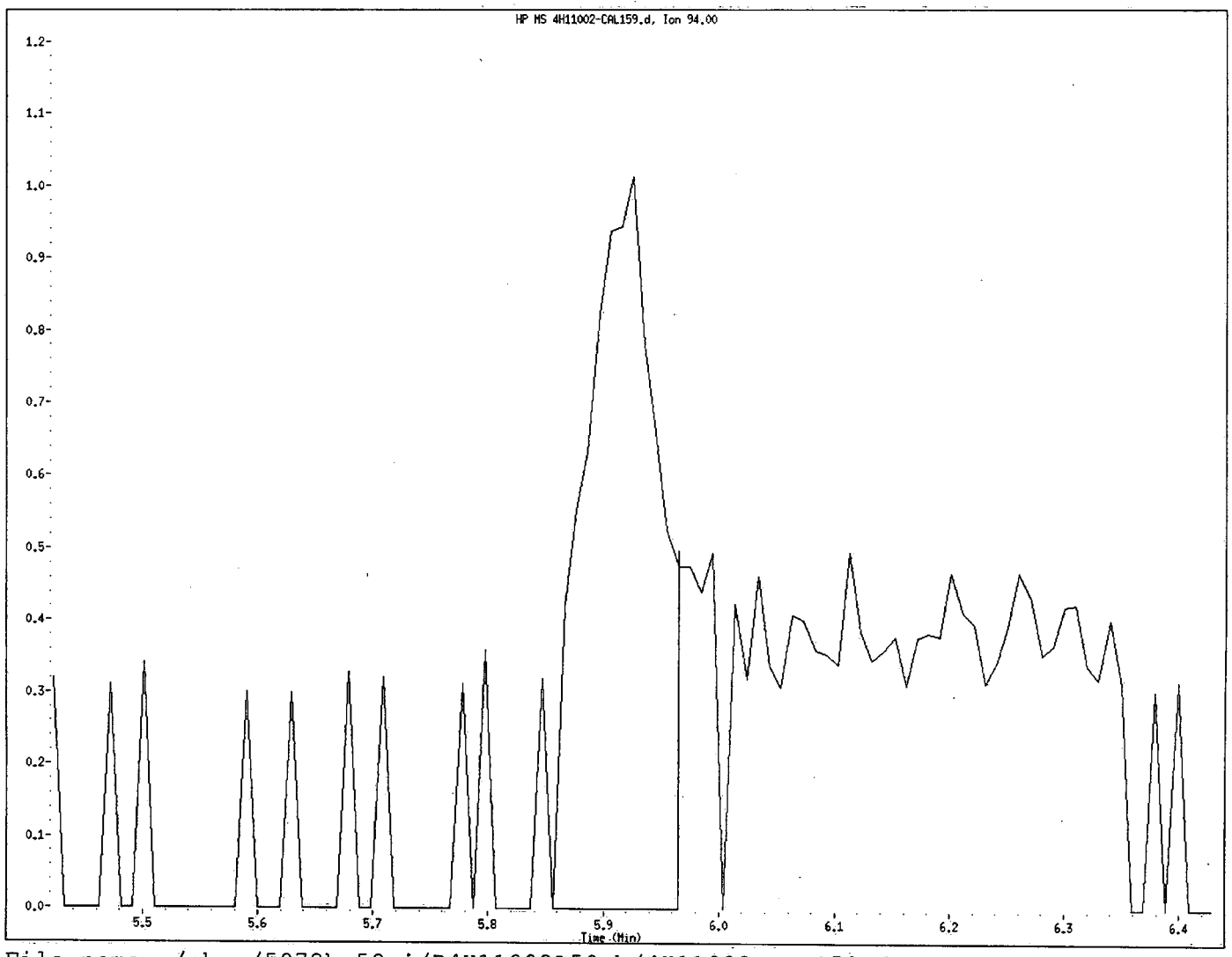
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.017	15.017	(0.960)	17370	25.0000	25.0000
67 Tetrachloroethene	164	14.978	14.978	(0.958)	9477	25.0000	25.0000
68 Dibromochloromethane	129	15.195	15.195	(0.972)	12711	25.0000	25.0000
69 1,2-Dibromoethane	107	15.313	15.313	(0.979)	12062	25.0000	25.0000
70 1-Chlorohexane	55	15.560	15.560	(0.995)	8276	25.0000	25.0000
71 Chlorobenzene	112	15.658	15.658	(1.001)	35979	25.0000	25.0000
72 Ethylbenzene	106	15.688	15.688	(1.003)	16763	25.0000	25.0000
73 1,1,1,2-Tetrachloroethane	131	15.707	15.707	(1.004)	12389	25.0000	25.0000
74 m,p-Xylene	106	15.767	15.767	(1.008)	43317	50.0000	50.0000
75 m,p-Xylene (part of total)	106	15.767	15.767	(1.008)	43317	50.0000	50.0000
76 o-Xylene	106	16.082	16.082	(1.028)	19793	25.0000	25.0000
77 o-Xylene (part of total)	106	16.082	16.082	(1.028)	19793	25.0000	25.0000
78 Styrene	104	16.092	16.092	(1.029)	31814	25.0000	25.0000
79 Bromoform	173	16.289	16.289	(0.935)	7983	25.0000	25.0000 (M)
80 Isopropyl Benzene	105	16.329	16.329	(1.044)	44775	25.0000	25.0000
81 1,1,2,2-Tetrachloroethane	83	16.565	16.565	(0.951)	16200	25.0000	25.0000
82 trans-1,4-dichloro-2-butene	53	16.595	16.595	(1.061)	15526	100.000	100.000
83 1,2,3-Trichloropropane	110	16.634	16.634	(1.064)	3931	25.0000	25.0000
84 Bromobenzene	156	16.654	16.654	(1.065)	14349	25.0000	25.0000
85 n-Propyl Benzene	91	16.634	16.634	(0.955)	66990	25.0000	25.0000
86 1,3,5-Trimethyl Benzene	105	16.743	16.743	(0.961)	38331	25.0000	25.0000
87 2-Chlorotoluene	91	16.763	16.763	(0.963)	42288	25.0000	25.0000
88 4-Chlorotoluene	91	16.851	16.851	(0.968)	39664	25.0000	25.0000
89 tert-Butyl Benzene	119	17.019	17.019	(0.977)	38894	25.0000	25.0000
90 1,2,4-Trimethyl Benzene	105	17.058	17.058	(0.980)	41185	25.0000	25.0000
91 Pentachloroethane	167	17.108	17.108	(0.982)	7751	25.0000	25.0000
92 sec-Butyl Benzene	105	17.187	17.187	(0.987)	51351	25.0000	25.0000
93 p-Isopropyl Toluene	119	17.275	17.275	(0.992)	39602	25.0000	25.0000
94 1,3-Dichlorobenzene	146	17.364	17.364	(0.997)	26704	25.0000	25.0000
95 1,4-Dichlorobenzene	146	17.433	17.433	(1.001)	27999	25.0000	25.0000
96 n-Butyl Benzene	91	17.611	17.611	(1.011)	41605	25.0000	25.0000
97 1,2-Dichlorobenzene	146	17.778	17.778	(1.021)	25319	25.0000	25.0000
98 1,2-Dibromo-3-Chloropropane	157	18.469	18.469	(1.061)	2506	25.0000	25.0000
99 1,2,4-Trichlorobenzene	180	19.356	19.356	(1.112)	16882	25.0000	25.0000
100 Hexachlorobutadiene	225	19.455	19.455	(1.117)	6953	25.0000	25.0000
101 Naphthalene	128	19.701	19.701	(1.131)	37131	25.0000	25.0000
102 1,2,3-Trichlorobenzene	180	20.007	20.007	(1.149)	15699	25.0000	25.0000
M 103 1,2-Dichloroethene (total)	96				23857	50.0000	50.0000
M 104 Xylene (total)	106				63110	75.0000	75.0000

QC Flag Legend

M - Compound response manually integrated.

8/12/2014

Bromomethane CAS Number 74-83-9 Area = 4595 Manually integrated



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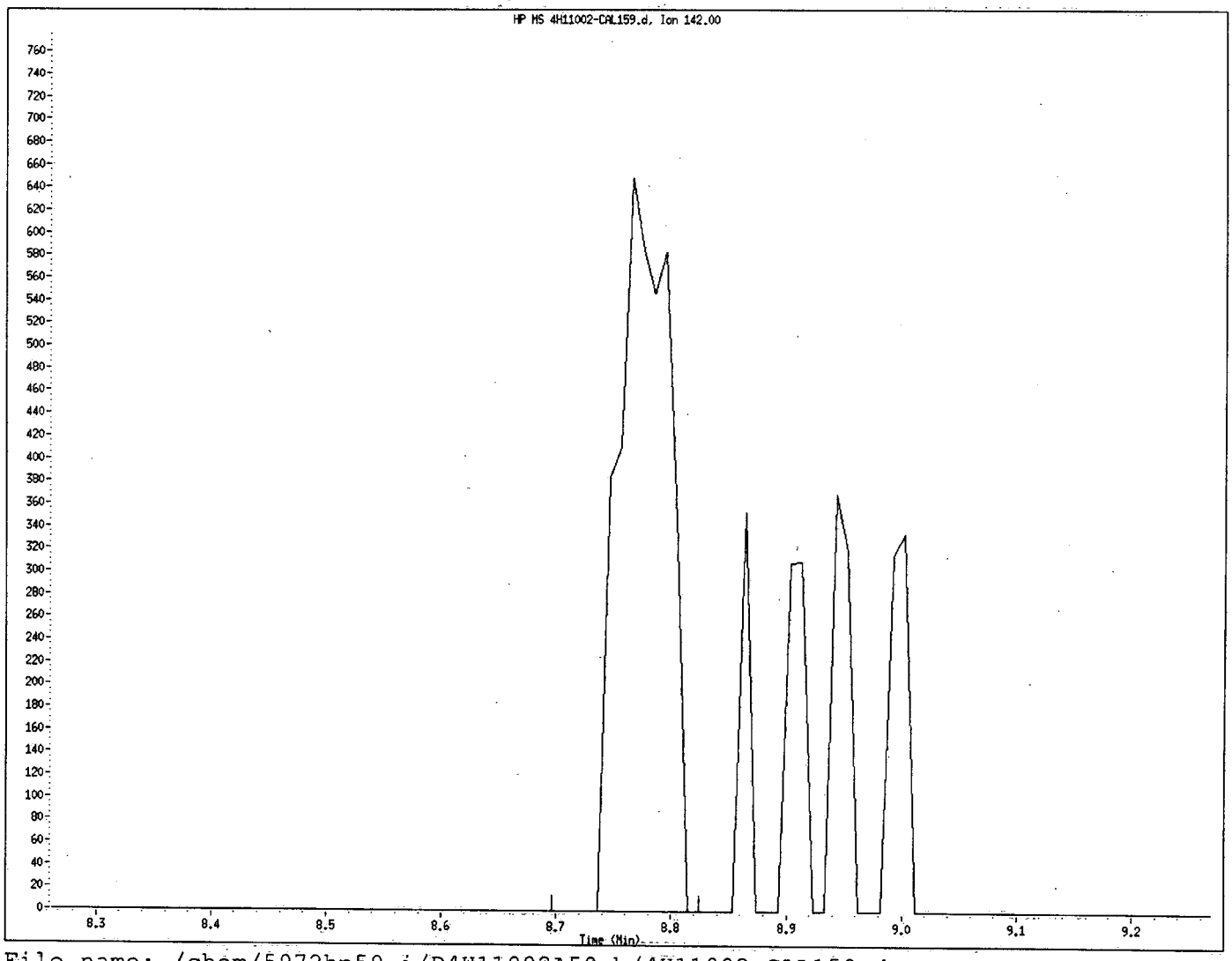
Client ID: VSTD005FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:57
Retention Time: 5.93
Operator ID: JAO

8/12/2014

Iodomethane CAS Number 74-88-4 Area = 2060 Manually integrated



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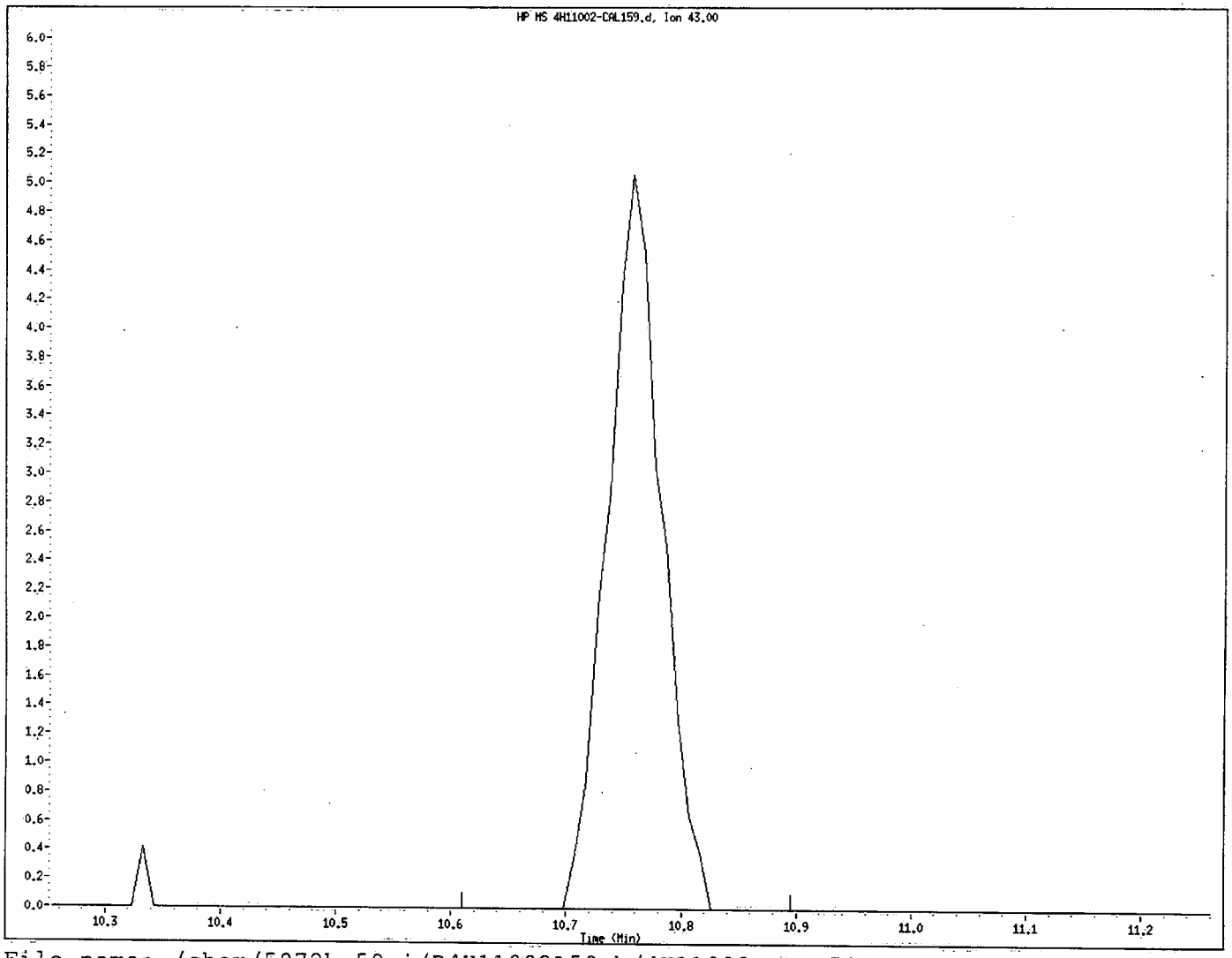
Client ID: VSTD005FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:57
Retention Time: 8.77
Operator ID: JAO

8/12/2014

Vinyl acetate CAS Number 108-05-4 Area = 16631 Manually integrated



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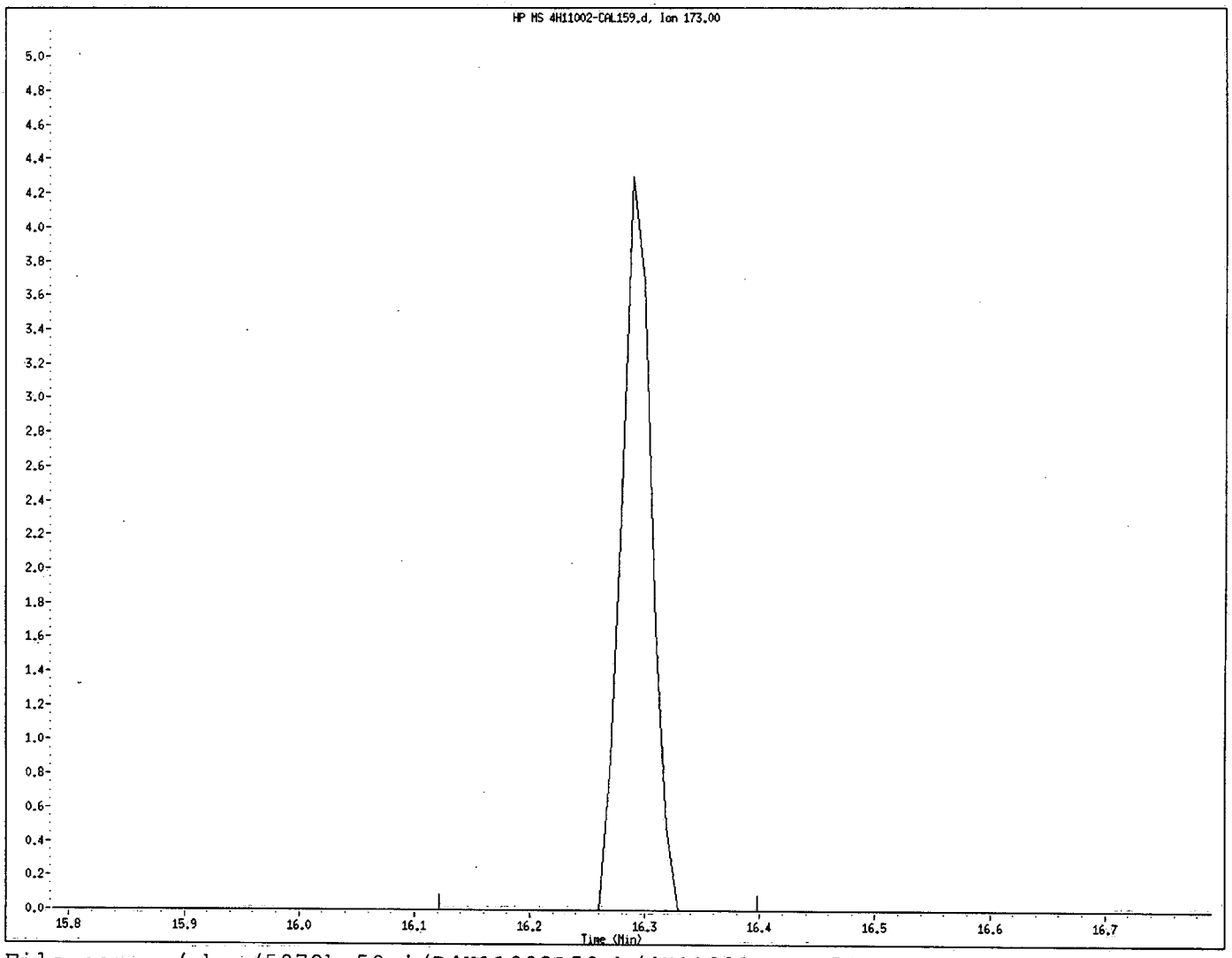
Client ID: VSTD005FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:57
Retention Time: 10.76
Operator ID: JAO

8/12/2014

Bromoform CAS Number 75-25-2 Area = 7983 Manually integrated

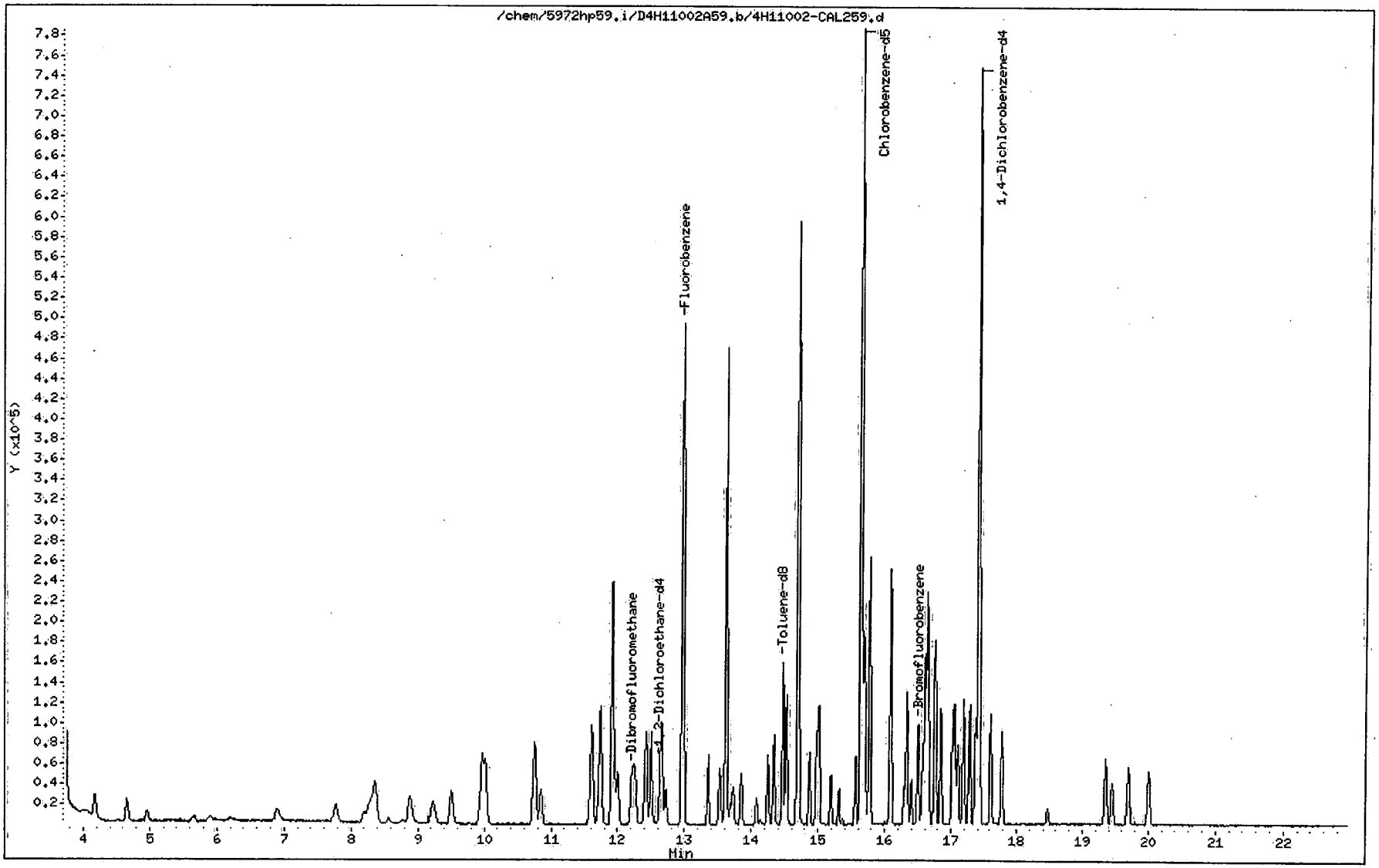


File name: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL159.d
Client ID: VSTD005FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:57
Retention Time: 16.29
Operator ID: JAO

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
Date : 11-AUG-2014 14:26
Client ID: VSTD010FT
Sample Info: 4H11002-CAL2:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
Lab Smp Id: 4H11002-CAL2 Client Smp ID: VSTD010FT
Inj Date : 11-AUG-2014 14:26
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL2:JAO
Misc Info : VSTD010FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 14:26 Cal File: 4H11002-CAL259.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Fluorobenzene	96	12.966	12.966	(1.000)	552802	250.000	
* 2 Chlorobenzene-d5	117	15.638	15.638	(1.000)	501663	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.413	17.413	(1.000)	236316	250.000	
$ 4 Dibromofluoromethane	113	12.206	12.206	(0.941)	34574	50.0000	52.3929
$ 5 1,2-Dichloroethane-d4	65	12.630	12.630	(0.974)	30373	50.0000	51.9657
$ 6 Toluene-d8	98	14.464	14.464	(0.925)	107942	50.0000	51.0649
$ 7 Bromofluorobenzene	95	16.496	16.496	(0.947)	39313	50.0000	51.7731
8 Dichlorodifluoromethane	85	4.179	4.179	(0.322)	40151	50.0000	50.8289
9 Chloromethane	50	4.662	4.662	(0.360)	35133	50.0000	51.1877
10 Vinyl Chloride	62	4.958	4.958	(0.382)	17941	50.0000	47.3519
11 Bromomethane	94	5.895	5.895	(0.455)	9390	50.0000	49.2265(M)
12 Chloroethane	64	6.201	6.201	(0.478)	6487	50.0000	42.3360
13 Trichlorofluoromethane	101	8.321	8.321	(0.642)	30185	50.0000	51.5608
14 Acrolein	56	8.193	8.193	(0.632)	18027	500.000	696.379
15 1,1,1-trichloro-2,2,2-trifluo	117	8.272	8.272	(0.638)	9695	50.0000	51.9523

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.321	8.321	(0.642)	30185	50.0000	51.5608
17 1,1-Dichloroethene	96	8.370	8.370	(0.646)	23047	50.0000	52.8172
18 Acetone	43	8.558	8.558	(0.660)	14158	125.000	113.303
19 Iodomethane	142	8.755	8.755	(0.675)	11119	50.0000	50.0000
20 Carbon disulfide	76	8.883	8.883	(0.685)	83000	50.0000	50.2402
21 3-Chloropropene	76	9.218	9.218	(0.711)	7360	50.0000	40.4721
22 Acetonitrile	41	9.218	9.218	(0.711)	22829	50.0000	41.9027
23 Methyl acetate	43	9.248	9.248	(0.713)	25641	50.0000	46.6059
24 Methylene Chloride	84	9.504	9.504	(0.733)	27430	50.0000	49.0149
25 Acrylonitrile	53	10.017	10.017	(0.773)	80237	500.000	500.000
26 Methyl-tert-butyl ether	73	9.948	9.948	(0.767)	59753	50.0000	51.8010
28 trans-1,2-Dichloroethene	96	9.968	9.968	(0.769)	25834	50.0000	51.9359
29 trans-1,2-DCE (part of total)	96	9.968	9.968	(0.769)	25834	50.0000	51.9359
31 Isopropyl ether	45	10.757	10.757	(0.830)	81865	50.0000	51.9732
32 1,1-Dichloroethane	63	10.737	10.737	(0.828)	46718	50.0000	51.7076
33 Vinyl acetate	43	10.757	10.757	(0.830)	38105	50.0000	52.0853(M)
34 Chloroprene	53	10.855	10.855	(0.837)	30963	50.0000	53.5840
35 2-butanone	43	11.605	11.605	(0.895)	29426	125.000	128.012
36 2,2-Dichloropropane	77	11.595	11.595	(0.894)	33241	50.0000	49.9333
37 cis-1,2-Dichloroethene	96	11.615	11.615	(0.896)	29112	50.0000	52.4651
38 cis-1,2-DCE (part of total)	96	11.615	11.615	(0.896)	29112	50.0000	52.4651
39 Propionitrile	54	11.743	11.743	(0.906)	159756	2500.00	2832.57
40 Methacrylonitrile	41	11.910	11.910	(0.919)	168982	500.000	545.462
41 Bromochloromethane	128	11.930	11.930	(0.920)	10226	50.0000	43.6823
42 Chloroform	83	12.009	12.009	(0.926)	48621	50.0000	52.9980
43 1,1,1-Trichloroethane	97	12.236	12.236	(0.944)	35352	50.0000	52.2352
44 Cyclohexane	56	12.265	12.265	(0.946)	25019	50.0000	51.7980
46 1,1-dichloropropene	75	12.423	12.423	(0.958)	32263	50.0000	51.6324
47 Isobutyl alcohol	43	12.492	12.492	(0.963)	68463	2500.00	2815.21
48 Carbon Tetrachloride	117	12.413	12.413	(0.957)	33118	50.0000	51.8899
49 Benzene	78	12.660	12.660	(0.976)	97960	50.0000	51.4048
50 1,2-Dichloroethane	62	12.719	12.719	(0.981)	32403	50.0000	51.9767
51 Trichloroethene	130	13.360	13.360	(1.030)	27158	50.0000	50.8864
52 Methylcyclohexane	83	13.528	13.528	(1.043)	24408	50.0000	52.7638
53 Methylmethacrylate	100	13.626	13.626	(1.051)	76902	500.000	473.214
54 1,2-Dichloropropane	63	13.607	13.607	(1.049)	27587	50.0000	50.3683
55 1,4-dioxane	88	13.695	13.695	(1.056)	16159	2500.00	2772.39
56 Dibromomethane	174	13.735	13.735	(1.059)	15539	50.0000	49.5642
57 Bromodichloromethane	83	13.843	13.843	(1.068)	36807	50.0000	51.4310
58 cis-1,3-Dichloropropene	75	14.248	14.248	(1.099)	40009	50.0000	51.7022
59 4-Methyl-2-pentanone	43	14.336	14.336	(0.917)	67119	125.000	130.019
60 Toluene	92	14.524	14.524	(0.929)	59928	50.0000	48.9690
61 Ethylmethacrylate	99	14.691	14.691	(0.939)	63283	500.000	500.000
62 trans-1,3-Dichloropropene	75	14.711	14.711	(0.941)	33967	50.0000	47.0400
63 1,1,2-Trichloroethane	97	14.869	14.869	(0.951)	23324	50.0000	48.2950
64 2-hexanone	43	14.997	14.997	(0.959)	53424	125.000	135.876
65 2-chloroethyl vinyl ether	63	14.080	14.080	(1.086)	10373	50.0000	53.1904

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
Report Date: 12-Aug-2014 11:29

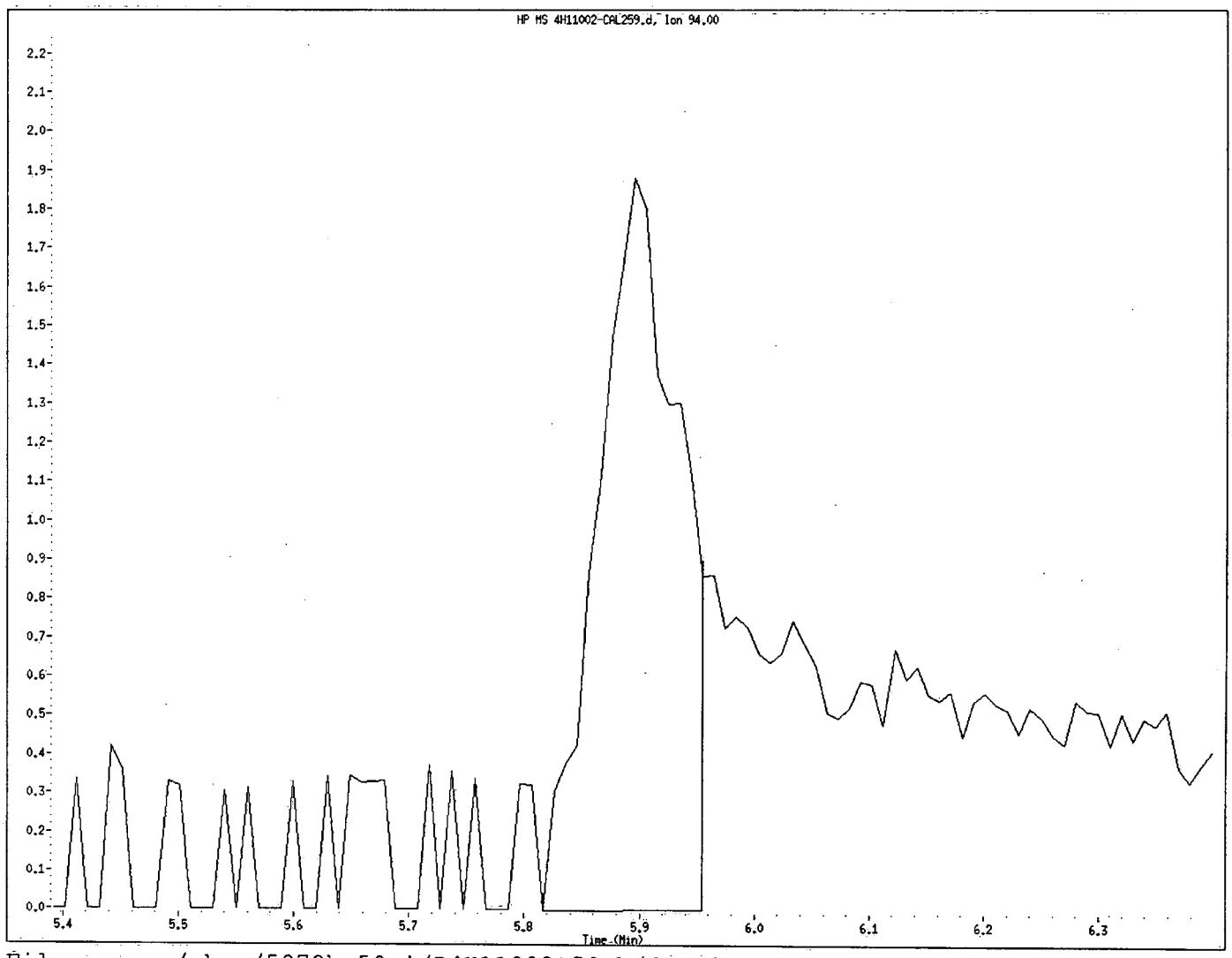
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.017	15.017	(0.960)	41329	50.0000	51.7452
67 Tetrachloroethene	164	14.967	14.967	(0.957)	20865	50.0000	49.8055
68 Dibromochloromethane	129	15.194	15.194	(0.972)	30234	50.0000	51.7372
69 1,2-Dibromoethane	107	15.313	15.313	(0.979)	26633	50.0000	49.8777
70 1-Chlorohexane	55	15.549	15.549	(0.994)	17058	50.0000	48.1577
71 Chlorobenzene	112	15.658	15.658	(1.001)	77685	50.0000	49.3186
72 Ethylbenzene	106	15.687	15.687	(1.003)	34045	50.0000	47.7896
73 1,1,1,2-Tetrachloroethane	131	15.707	15.707	(1.004)	26390	50.0000	48.9799
74 m,p-Xylene	106	15.766	15.766	(1.008)	87054	100.000	95.0540
75 m,p-Xylene (part of total)	106	15.766	15.766	(1.008)	87054	100.000	95.0540
76 o-Xylene	106	16.082	16.082	(1.028)	43860	50.0000	49.9673
77 o-Xylene (part of total)	106	16.082	16.082	(1.028)	43860	50.0000	49.9673
78 Styrene	104	16.092	16.092	(1.029)	72487	50.0000	50.6629
79 Bromoform	173	16.289	16.289	(0.935)	19460	50.0000	53.0744
80 Isopropyl Benzene	105	16.328	16.328	(1.044)	99575	50.0000	50.0569
81 1,1,2,2-Tetrachloroethane	83	16.565	16.565	(0.951)	37897	50.0000	52.0474
82 trans-1,4-dichloro-2-butene	53	16.595	16.595	(1.061)	37880	200.000	209.485
83 1,2,3-Trichloropropane	110	16.634	16.634	(1.064)	8721	50.0000	49.9964
84 Bromobenzene	156	16.654	16.654	(1.065)	30392	50.0000	48.8381
85 n-Propyl Benzene	91	16.634	16.634	(0.955)	136845	50.0000	48.6600
86 1,3,5-Trimethyl Benzene	105	16.742	16.742	(0.961)	81760	50.0000	49.7403
87 2-Chlorotoluene	91	16.762	16.762	(0.963)	88310	50.0000	49.2109
88 4-Chlorotoluene	91	16.841	16.841	(0.967)	81105	50.0000	48.6849
89 tert-Butyl Benzene	119	17.019	17.019	(0.977)	76667	50.0000	47.7693
90 1,2,4-Trimethyl Benzene	105	17.058	17.058	(0.980)	83322	50.0000	48.4186
91 Pentachloroethane	167	17.107	17.107	(0.982)	16782	50.0000	50.1142
92 sec-Butyl Benzene	105	17.186	17.186	(0.987)	103935	50.0000	48.4296
93 p-Isopropyl Toluene	119	17.275	17.275	(0.992)	87929	50.0000	50.7433
94 1,3-Dichlorobenzene	146	17.364	17.364	(0.997)	54327	50.0000	48.5577
95 1,4-Dichlorobenzene	146	17.433	17.433	(1.001)	56821	50.0000	48.4959
96 n-Butyl Benzene	91	17.610	17.610	(1.011)	78950	50.0000	46.8212
97 1,2-Dichlorobenzene	146	17.778	17.778	(1.021)	50633	50.0000	48.1291
98 1,2-Dibromo-3-Chloropropane	157	18.478	18.478	(1.061)	6371	50.0000	54.1194
99 1,2,4-Trichlorobenzene	180	19.356	19.356	(1.112)	33462	50.0000	47.9073
100 Hexachlorobutadiene	225	19.454	19.454	(1.117)	12809	50.0000	50.0000
101 Naphthalene	128	19.701	19.701	(1.131)	72571	50.0000	47.5568
102 1,2,3-Trichlorobenzene	180	20.006	20.006	(1.149)	30575	50.0000	47.4689
M 103 1,2-Dichloroethene (total)	96				54946	100.000	104.430
M 104 Xylene (total)	106				130914	150.000	145.021

QC Flag Legend

M - Compound response manually integrated.

8/12/2014

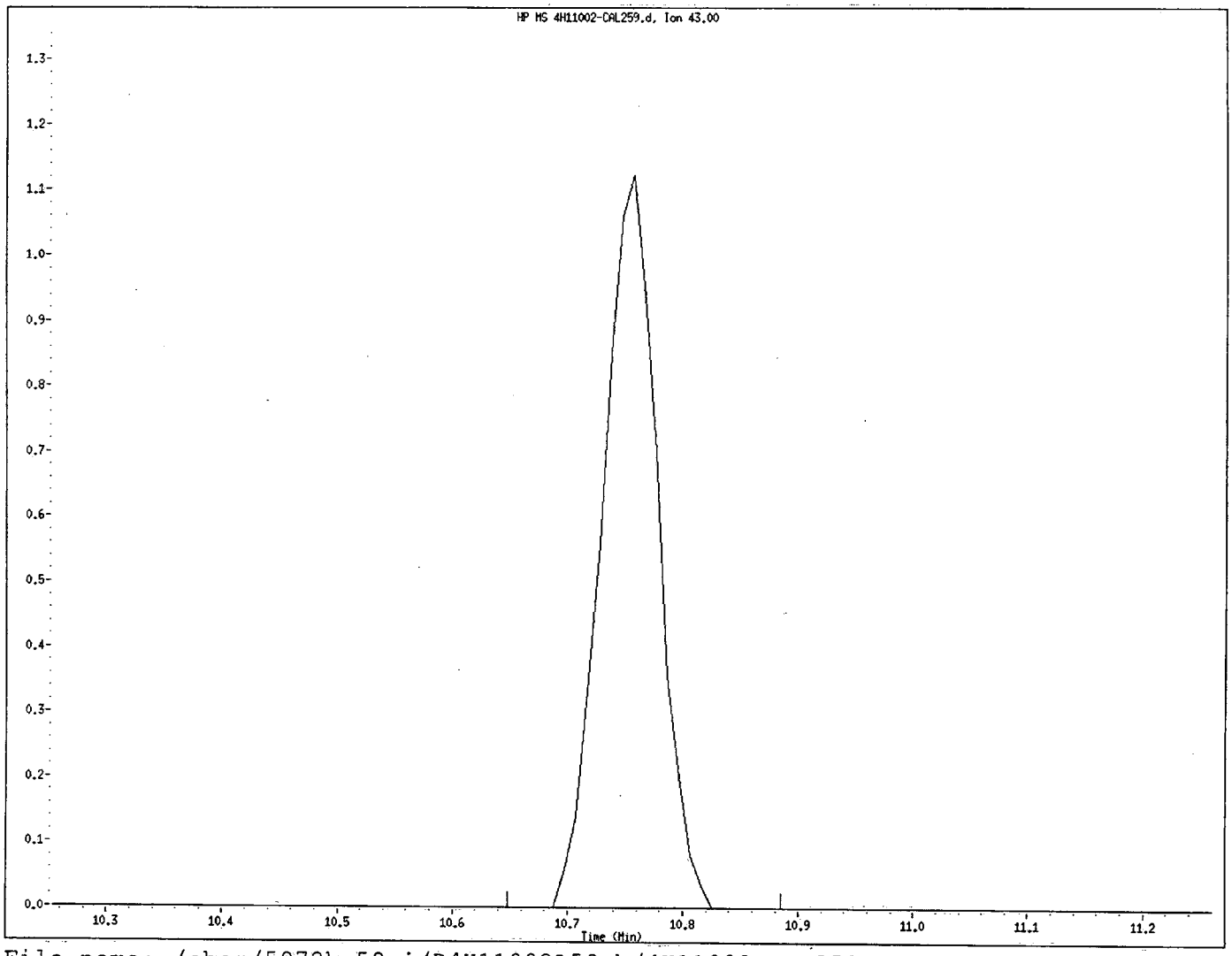
Bromomethane CAS Number 74-83-9 Area = 9390 Manually integrated



File name: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL259.d
Client ID: VSTD010FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:26
Retention Time: 5.90
Operator ID: JAO

8/12/2014

Vinyl acetate CAS Number 108-05-4 Area = 38105 Manually integrated



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Client ID: VSTD010FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 14:26
Retention Time: 10.76
Operator ID: JAO

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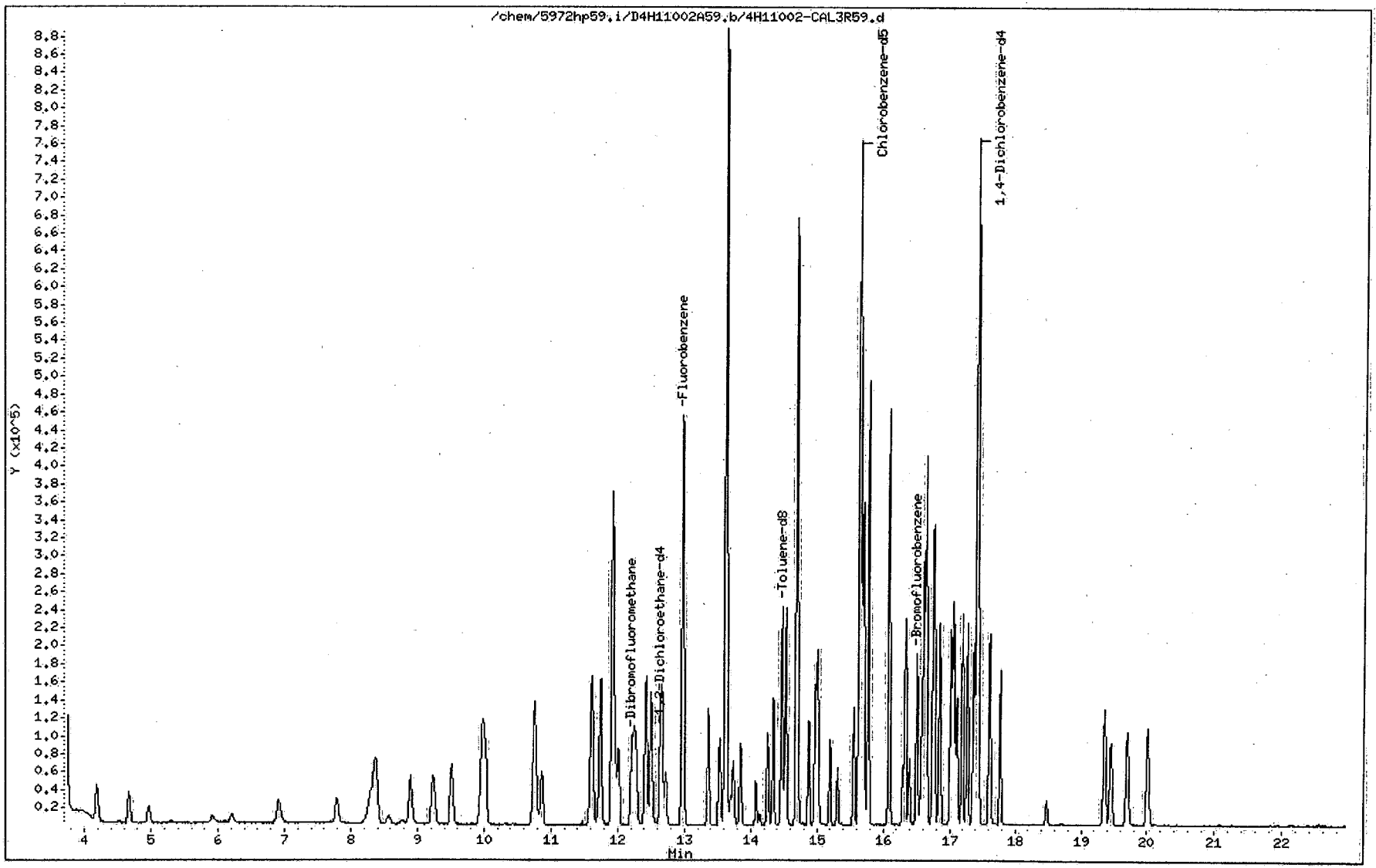
Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Date : 11-AUG-2014 18:02
Client ID: VSTD020FT
Sample Info: 4H11002-CAL3:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Lab Smp Id: 4H11002-CAL3 Client Smp ID: VSTD020FT
Inj Date : 11-AUG-2014 18:02
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL3:JAO
Misc Info : VSTD020FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 11 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
* 1 Fluorobenzene	96	12.972	12.972	(1.000)	521466	250.000	
* 2 Chlorobenzene-d5	117	15.634	15.634	(1.000)	458166	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.419	17.419	(1.000)	229516	250.000	
$ 4 Dibromofluoromethane	113	12.212	12.212	(0.941)	58932	100.000	99.3890
$ 5 1,2-Dichloroethane-d4	65	12.636	12.636	(0.974)	51010	100.000	101.463
$ 6 Toluene-d8	98	14.471	14.471	(0.926)	176144	100.000	94.1469
$ 7 Bromofluorobenzene	95	16.502	16.502	(0.947)	73417	100.000	100.183
8 Dichlorodifluoromethane	85	4.185	4.185	(0.323)	65280	100.000	94.6469
9 Chloromethane	50	4.678	4.678	(0.361)	52356	100.000	87.6444
10 Vinyl Chloride	62	4.964	4.964	(0.383)	32989	100.000	91.5542
11 Bromomethane	94	5.931	5.931	(0.457)	13128	100.000	79.7256
12 Chloroethane	64	6.207	6.207	(0.478)	15714	100.000	104.118
13 Trichlorofluoromethane	101	8.347	8.347	(0.643)	55385	100.000	97.4016
14 Acrolein	56	8.199	8.199	(0.632)	7274	1000.00	296.700
15 1,1,1-trichloro-2,2,2-trifluo	117	8.288	8.288	(0.639)	17958	100.000	94.1341

Robin Hamm 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.347	8.347	(0.643)	55385	100.000	97.4016
17 1,1-Dichloroethene	96	8.386	8.386	(0.647)	39696	100.000	93.2998
18 Acetone	43	8.564	8.564	(0.660)	24662	250.000	233.004
19 Iodomethane	142	8.781	8.781	(0.677)	10618	100.000	69.0300
20 Carbon disulfide	76	8.889	8.889	(0.685)	156099	100.000	96.1067
21 3-Chloropropene	76	9.224	9.224	(0.711)	19776	100.000	104.809
22 Acetonitrile	41	9.234	9.234	(0.712)	54289	100.000	100.811
23 Methyl acetate	43	9.254	9.254	(0.713)	44120	100.000	94.0450
24 Methylene Chloride	84	9.510	9.510	(0.733)	50585	100.000	96.3215
25 Acrylonitrile	53	10.023	10.023	(0.773)	96460	1000.00	754.969
26 Methyl-tert-butyl ether	73	9.954	9.954	(0.767)	101039	100.000	94.1280
28 trans-1,2-Dichloroethene	96	9.984	9.984	(0.770)	46243	100.000	96.4211
29 trans-1,2-DCE (part of total)	96	9.984	9.984	(0.770)	46243	100.000	96.4211
31 Isopropyl ether	45	10.763	10.763	(0.830)	137921	100.000	94.1566
32 1,1-Dichloroethane	63	10.743	10.743	(0.828)	81029	100.000	95.5233
33 Vinyl acetate	43	10.753	10.753	(0.829)	60440	100.000	90.7053(M)
34 Chloroprene	53	10.861	10.861	(0.837)	53643	100.000	93.8055
35 2-butanone	43	11.611	11.611	(0.895)	45370	250.000	240.279
36 2,2-Dichloropropane	77	11.601	11.601	(0.894)	59542	100.000	94.5831
37 cis-1,2-Dichloroethene	96	11.621	11.621	(0.896)	51444	100.000	96.0215
38 cis-1,2-DCE (part of total)	96	11.621	11.621	(0.896)	51444	100.000	96.0215
39 Propionitrile	54	11.749	11.749	(0.906)	225223	5000.00	4512.14
40 Methacrylonitrile	41	11.916	11.916	(0.919)	242889	1000.00	933.335
41 Bromochloromethane	128	11.936	11.936	(0.920)	21867	100.000	99.3520
42 Chloroform	83	12.015	12.015	(0.926)	79094	100.000	92.9437
43 1,1,1-Trichloroethane	97	12.242	12.242	(0.944)	64982	100.000	97.6365
44 Cyclohexane	56	12.271	12.271	(0.946)	45722	100.000	92.3243
46 1,1-dichloropropene	75	12.429	12.429	(0.958)	58302	100.000	95.9686
47 Isobutyl alcohol	43	12.498	12.498	(0.963)	105136	5000.00	5006.58
48 Carbon Tetrachloride	117	12.419	12.419	(0.957)	60166	100.000	96.6048
49 Benzene	78	12.666	12.666	(0.976)	174255	100.000	95.3724
50 1,2-Dichloroethane	62	12.725	12.725	(0.981)	53935	100.000	95.1876
51 Trichloroethene	130	13.356	13.356	(1.030)	49440	100.000	96.5921
52 Methylcyclohexane	83	13.534	13.534	(1.043)	44128	100.000	91.9882
53 Methylmethacrylate	100	13.632	13.632	(1.051)	150838	1000.00	1057.84
54 1,2-Dichloropropane	63	13.613	13.613	(1.049)	47533	100.000	99.8066
55 1,4-dioxane	88	13.692	13.692	(1.055)	26428	5000.00	5057.35
56 Dibromomethane	174	13.741	13.741	(1.059)	28278	100.000	94.8338
57 Bromodichloromethane	83	13.849	13.849	(1.068)	64403	100.000	94.7111
58 cis-1,3-Dichloropropene	75	14.254	14.254	(1.099)	65911	100.000	89.1765
59 4-Methyl-2-pentanone	43	14.332	14.332	(0.917)	115009	250.000	257.351
60 Toluene	92	14.530	14.530	(0.929)	113181	100.000	96.8716
61 Ethylmethacrylate	99	14.687	14.687	(0.939)	69133	1000.00	717.858
62 trans-1,3-Dichloropropene	75	14.707	14.707	(0.941)	60615	100.000	92.4032
63 1,1,2-Trichloroethane	97	14.865	14.865	(0.951)	41211	100.000	96.4274
64 2-hexanone	43	15.003	15.003	(0.960)	78018	250.000	238.486
65 2-chloroethyl vinyl ether	63	14.076	14.076	(1.085)	18370	100.000	89.4753

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Report Date: 12-Aug-2014 11:29

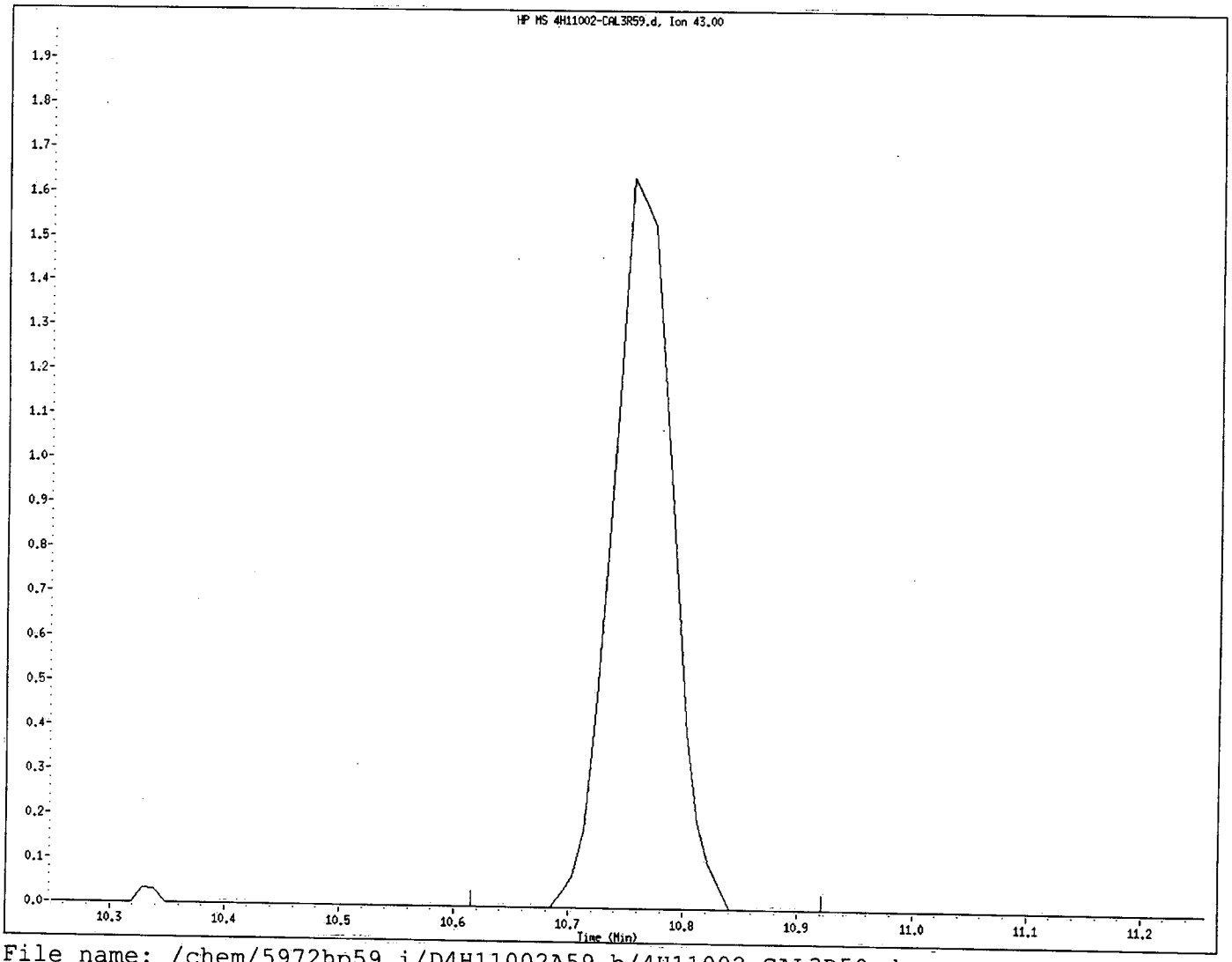
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.013	15.013	(0.960)	69995	100.000	97.8911
67 Tetrachloroethene	164	14.973	14.973	(0.958)	37184	100.000	91.2888
68 Dibromochloromethane	129	15.190	15.190	(0.972)	54089	100.000	97.5083
69 1,2-Dibromoethane	107	15.309	15.309	(0.979)	46762	100.000	97.4469
70 1-Chlorohexane	55	15.555	15.555	(0.995)	30963	100.000	92.1930
71 Chlorobenzene	112	15.664	15.664	(1.002)	139092	100.000	97.0425
72 Ethylbenzene	106	15.693	15.693	(1.004)	67204	100.000	98.9711
73 1,1,1,2-Tetrachloroethane	131	15.703	15.703	(1.004)	48145	100.000	95.0644
74 m,p-Xylene	106	15.772	15.772	(1.009)	160807	200.000	186.689
75 m,p-Xylene (part of total)	106	15.772	15.772	(1.009)	160807	200.000	186.689
76 o-Xylene	106	16.088	16.088	(1.029)	79147	100.000	95.0056
77 o-Xylene (part of total)	106	16.088	16.088	(1.029)	79147	100.000	95.0056
78 Styrene	104	16.088	16.088	(1.029)	132373	100.000	95.3591
79 Bromoform	173	16.295	16.295	(0.935)	33200	100.000	93.2789
80 Isopropyl Benzene	105	16.334	16.334	(1.045)	184830	100.000	92.9421
81 1,1,2,2-Tetrachloroethane	83	16.571	16.571	(0.951)	62963	100.000	95.9885
82 trans-1,4-dichloro-2-butene	53	16.601	16.601	(1.062)	61861	400.000	400.303
83 1,2,3-Trichloropropane	110	16.630	16.630	(1.064)	14860	100.000	97.5449
84 Bromobenzene	156	16.660	16.660	(1.066)	57554	100.000	95.8036
85 n-Propyl Benzene	91	16.640	16.640	(0.955)	258430	100.000	92.2230
86 1,3,5-Trimethyl Benzene	105	16.748	16.748	(0.961)	158327	100.000	94.4327
87 2-Chlorotoluene	91	16.768	16.768	(0.963)	163025	100.000	94.8975
88 4-Chlorotoluene	91	16.847	16.847	(0.967)	151223	100.000	93.9072
89 tert-Butyl Benzene	119	17.015	17.015	(0.977)	148503	100.000	91.0633
90 1,2,4-Trimethyl Benzene	105	17.054	17.054	(0.979)	164108	100.000	94.6696
91 Pentachloroethane	167	17.103	17.103	(0.982)	30449	100.000	89.6000
92 sec-Butyl Benzene	105	17.192	17.192	(0.987)	217093	100.000	96.9001
93 p-Isopropyl Toluene	119	17.271	17.271	(0.991)	161600	100.000	89.3006
94 1,3-Dichlorobenzene	146	17.370	17.370	(0.997)	105256	100.000	93.9270
95 1,4-Dichlorobenzene	146	17.439	17.439	(1.001)	107172	100.000	93.2259
96 n-Butyl Benzene	91	17.616	17.616	(1.011)	157669	100.000	89.2064
97 1,2-Dichlorobenzene	146	17.774	17.774	(1.020)	94940	100.000	92.0336
98 1,2-Dibromo-3-Chloropropane	157	18.474	18.474	(1.061)	11304	100.000	99.9502
99 1,2,4-Trichlorobenzene	180	19.362	19.362	(1.112)	62397	100.000	89.7104
100 Hexachlorobutadiene	225	19.450	19.450	(1.117)	29567	100.000	86.6689
101 Naphthalene	128	19.697	19.697	(1.131)	133827	100.000	92.0132
102 1,2,3-Trichlorobenzene	180	20.003	20.003	(1.148)	57094	100.000	89.8872
M 103 1,2-Dichloroethene (total)	96				97687	200.000	192.420
M 104 Xylene (total)	106				239954	300.000	281.695

QC Flag Legend

M - Compound response manually integrated.

8/12/2014

Vinyl acetate CAS Number 108-05-4 Area = 60440 Manually integrated

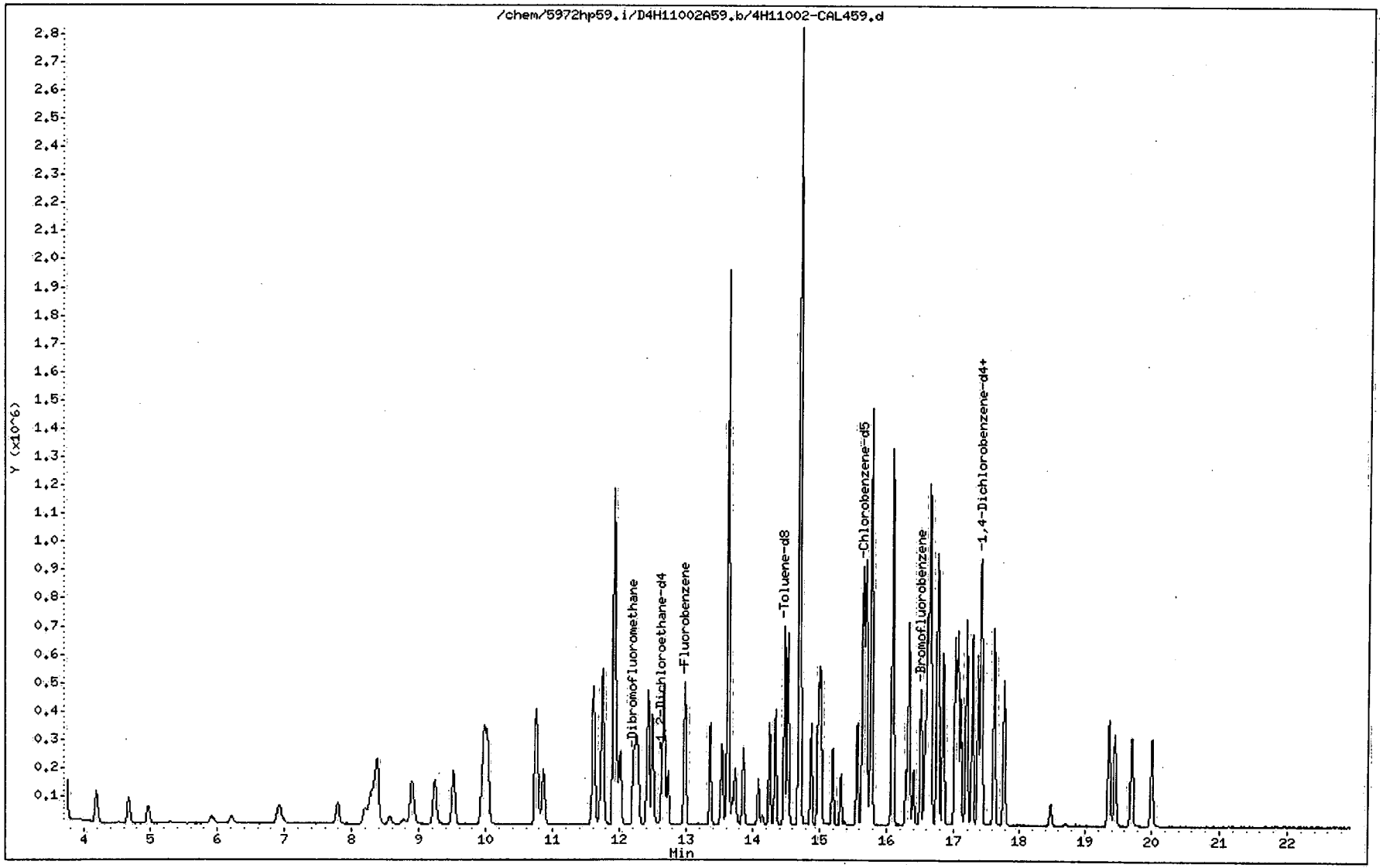


File name: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL3R59.d
Client ID: VSTD020FT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 18:02
Retention Time: 10.75
Operator ID: JAO

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL459.d
Date : 11-AUG-2014 16:29
Client ID: VSTD050FT
Sample Info: 4H11002-CAL4:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



Robin A 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL459.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL459.d
Lab Smp Id: 4H11002-CAL4 Client Smp ID: VSTD050FT
Inj Date : 11-AUG-2014 16:29
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL4:JAO
Misc Info : VSTD050FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 16:29 Cal File: 4H11002-CAL459.d
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 Fluorobenzene	96	12.979	12.979	(1.000)	572729	250.000	
* 2 Chlorobenzene-d5	117	15.642	15.642	(1.000)	482139	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.417	17.417	(1.000)	240480	250.000	
$ 4 Dibromofluoromethane	113	12.210	12.210	(0.941)	156580	250.000	240.143
$ 5 1,2-Dichloroethane-d4	65	12.634	12.634	(0.973)	129916	250.000	235.976
$ 6 Toluene-d8	98	14.468	14.468	(0.925)	500195	250.000	251.116
$ 7 Bromofluorobenzene	95	16.500	16.500	(0.947)	190512	250.000	248.206
8 Dichlorodifluoromethane	85	4.183	4.183	(0.322)	191253	250.000	249.796
9 Chloromethane	50	4.676	4.676	(0.360)	152972	250.000	227.533
10 Vinyl Chloride	62	4.972	4.972	(0.383)	105427	250.000	261.977
11 Bromomethane	94	5.919	5.919	(0.456)	40281	250.000	214.049
12 Chloroethane	64	6.215	6.215	(0.479)	41399	250.000	251.823
13 Trichlorofluoromethane	101	8.345	8.345	(0.643)	159990	250.000	254.855
14 Acrolein	56	8.197	8.197	(0.632)	93962	2500.00	3059.27
15 1,1,1-trichloro-2,2,2-trifluo	117	8.285	8.285	(0.638)	55696	250.000	262.739

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL459.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.345	8.345	(0.643)	159990	250.000	254.855
17 1,1-Dichloroethene	96	8.384	8.384	(0.646)	122104	250.000	257.846
18 Acetone	43	8.562	8.562	(0.660)	61356	625.000	518.978
19 Iodomethane	142	8.778	8.778	(0.676)	50779	250.000	209.383
20 Carbon disulfide	76	8.887	8.887	(0.685)	459113	250.000	255.377
21 3-Chloropropene	76	9.232	9.232	(0.711)	55475	250.000	270.291
22 Acetonitrile	41	9.232	9.232	(0.711)	155172	250.000	262.781
23 Methyl acetate	43	9.252	9.252	(0.713)	121366	250.000	232.773
24 Methylene Chloride	84	9.508	9.508	(0.733)	144078	250.000	247.966
25 Acrylonitrile	53	10.021	10.021	(0.772)	376593	2500.00	2804.40
26 Methyl-tert-butyl ether	73	9.952	9.952	(0.767)	303672	250.000	254.590
28 trans-1,2-Dichloroethene	96	9.982	9.982	(0.769)	137040	250.000	258.317
29 trans-1,2-DCE (part of total)	96	9.982	9.982	(0.769)	137040	250.000	258.317
31 Isopropyl ether	45	10.761	10.761	(0.829)	405630	250.000	249.219
32 1,1-Dichloroethane	63	10.751	10.751	(0.828)	238854	250.000	254.101
33 Vinyl acetate	43	10.761	10.761	(0.829)	188869	250.000	253.365
34 Chloroprene	53	10.859	10.859	(0.837)	166444	250.000	261.766
35 2-butanone	43	11.609	11.609	(0.894)	128542	625.000	615.043
36 2,2-Dichloropropane	77	11.599	11.599	(0.894)	177510	250.000	253.986
37 cis-1,2-Dichloroethene	96	11.619	11.619	(0.895)	153803	250.000	259.318
38 cis-1,2-DCE (part of total)	96	11.619	11.619	(0.895)	153803	250.000	259.318
39 Propionitrile	54	11.747	11.747	(0.905)	753795	12500.0	13486.7
40 Methacrylonitrile	41	11.924	11.924	(0.919)	755481	2500.00	2608.42
41 Bromochloromethane	128	11.934	11.934	(0.919)	61551	250.000	254.295
42 Chloroform	83	12.013	12.013	(0.926)	240381	250.000	253.611
43 1,1,1-Trichloroethane	97	12.250	12.250	(0.944)	187408	250.000	255.174
44 Cyclohexane	56	12.279	12.279	(0.946)	144896	250.000	262.366
46 1,1-dichloropropene	75	12.437	12.437	(0.958)	174417	250.000	259.313
47 Isobutyl alcohol	43	12.496	12.496	(0.963)	298176	12500.0	12931.6
48 Carbon Tetrachloride	117	12.417	12.417	(0.957)	176510	250.000	256.304
49 Benzene	78	12.664	12.664	(0.976)	511940	250.000	252.774
50 1,2-Dichloroethane	62	12.723	12.723	(0.980)	159558	250.000	253.948
51 Trichloroethene	130	13.364	13.364	(1.030)	143904	250.000	254.251
52 Methylcyclohexane	83	13.532	13.532	(1.043)	137531	250.000	256.916
53 Methylmethacrylate	100	13.630	13.630	(1.050)	339207	2500.00	2197.74
54 1,2-Dichloropropane	63	13.610	13.610	(1.049)	131753	250.000	251.787
55 1,4-dioxane	88	13.699	13.699	(1.055)	73468	12500.0	12830.1
56 Dibromomethane	174	13.739	13.739	(1.059)	83800	250.000	253.263
57 Bromodichloromethane	83	13.857	13.857	(1.068)	190072	250.000	251.837
58 cis-1,3-Dichloropropene	75	14.251	14.251	(1.098)	214167	250.000	258.239
59 4-Methyl-2-pentanone	43	14.340	14.340	(0.917)	310565	625.000	664.292
60 Toluene	92	14.528	14.528	(0.929)	323270	250.000	261.294
61 Ethylmethacrylate	99	14.695	14.695	(0.939)	315295	2500.00	2634.02
62 trans-1,3-Dichloropropene	75	14.715	14.715	(0.941)	187225	250.000	267.161
63 1,1,2-Trichloroethane	97	14.873	14.873	(0.951)	116425	250.000	257.035
64 2-hexanone	43	15.001	15.001	(0.959)	228944	625.000	658.971
65 2-chloroethyl vinyl ether	63	14.084	14.084	(1.085)	60646	250.000	263.406

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL459.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.021	15.021	(0.960)	203069	250.000	268.746
67 Tetrachloroethene	164	14.981	14.981	(0.958)	116499	250.000	267.136
68 Dibromochloromethane	129	15.198	15.198	(0.972)	156878	250.000	267.415
69 1,2-Dibromoethane	107	15.316	15.316	(0.979)	131753	250.000	259.582
70 1-Chlorohexane	55	15.563	15.563	(0.995)	88300	250.000	246.001
71 Chlorobenzene	112	15.662	15.662	(1.001)	389888	250.000	256.974
72 Ethylbenzene	106	15.691	15.691	(1.003)	180570	250.000	252.183
73 1,1,1,2-Tetrachloroethane	131	15.711	15.711	(1.004)	134427	250.000	249.769
74 m,p-Xylene	106	15.770	15.770	(1.008)	484189	500.000	527.153
75 m,p-Xylene (part of total)	106	15.770	15.770	(1.008)	484189	500.000	527.153
76 o-Xylene	106	16.086	16.086	(1.028)	229484	250.000	259.180
77 o-Xylene (part of total)	106	16.086	16.086	(1.028)	229484	250.000	259.180
78 Styrene	104	16.096	16.096	(1.029)	388493	250.000	263.502
79 Bromoform	173	16.293	16.293	(0.935)	98656	250.000	261.038
80 Isopropyl Benzene	105	16.332	16.332	(1.044)	555491	250.000	261.746
81 1,1,2,2-Tetrachloroethane	83	16.569	16.569	(0.951)	172564	250.000	249.085
82 trans-1,4-dichloro-2-butene	53	16.598	16.598	(1.061)	161180	1000.00	991.286
83 1,2,3-Trichloropropane	110	16.638	16.638	(1.064)	40900	250.000	253.882
84 Bromobenzene	156	16.658	16.658	(1.065)	170971	250.000	268.194
85 n-Propyl Benzene	91	16.638	16.638	(0.955)	774422	250.000	259.720
86 1,3,5-Trimethyl Benzene	105	16.746	16.746	(0.961)	468184	250.000	263.578
87 2-Chlorotoluene	91	16.766	16.766	(0.963)	456971	250.000	251.312
88 4-Chlorotoluene	91	16.845	16.845	(0.967)	423963	250.000	248.246
89 tert-Butyl Benzene	119	17.022	17.022	(0.977)	460672	250.000	264.875
90 1,2,4-Trimethyl Benzene	105	17.062	17.062	(0.980)	481758	250.000	262.445
91 Pentachloroethane	167	17.101	17.101	(0.982)	97480	250.000	268.191
92 sec-Butyl Benzene	105	17.190	17.190	(0.987)	636385	250.000	269.431
93 p-Isopropyl Toluene	119	17.279	17.279	(0.992)	520390	250.000	268.708
94 1,3-Dichlorobenzene	146	17.368	17.368	(0.997)	306607	250.000	257.998
95 1,4-Dichlorobenzene	146	17.437	17.437	(1.001)	310488	250.000	254.325
96 n-Butyl Benzene	91	17.614	17.614	(1.011)	493049	250.000	260.614
97 1,2-Dichlorobenzene	146	17.782	17.782	(1.021)	284893	250.000	259.447
98 1,2-Dibromo-3-Chloropropane	157	18.482	18.482	(1.061)	30367	250.000	256.238
99 1,2,4-Trichlorobenzene	180	19.360	19.360	(1.112)	190910	250.000	256.682
100 Hexachlorobutadiene	225	19.458	19.458	(1.117)	98660	250.000	262.488
101 Naphthalene	128	19.705	19.705	(1.131)	412804	250.000	266.625
102 1,2,3-Trichlorobenzene	180	20.010	20.010	(1.149)	173904	250.000	256.127
M 103 1,2-Dichloroethene (total)	96				290843	500.000	517.691
M 104 Xylene (total)	106				713673	750.000	786.333

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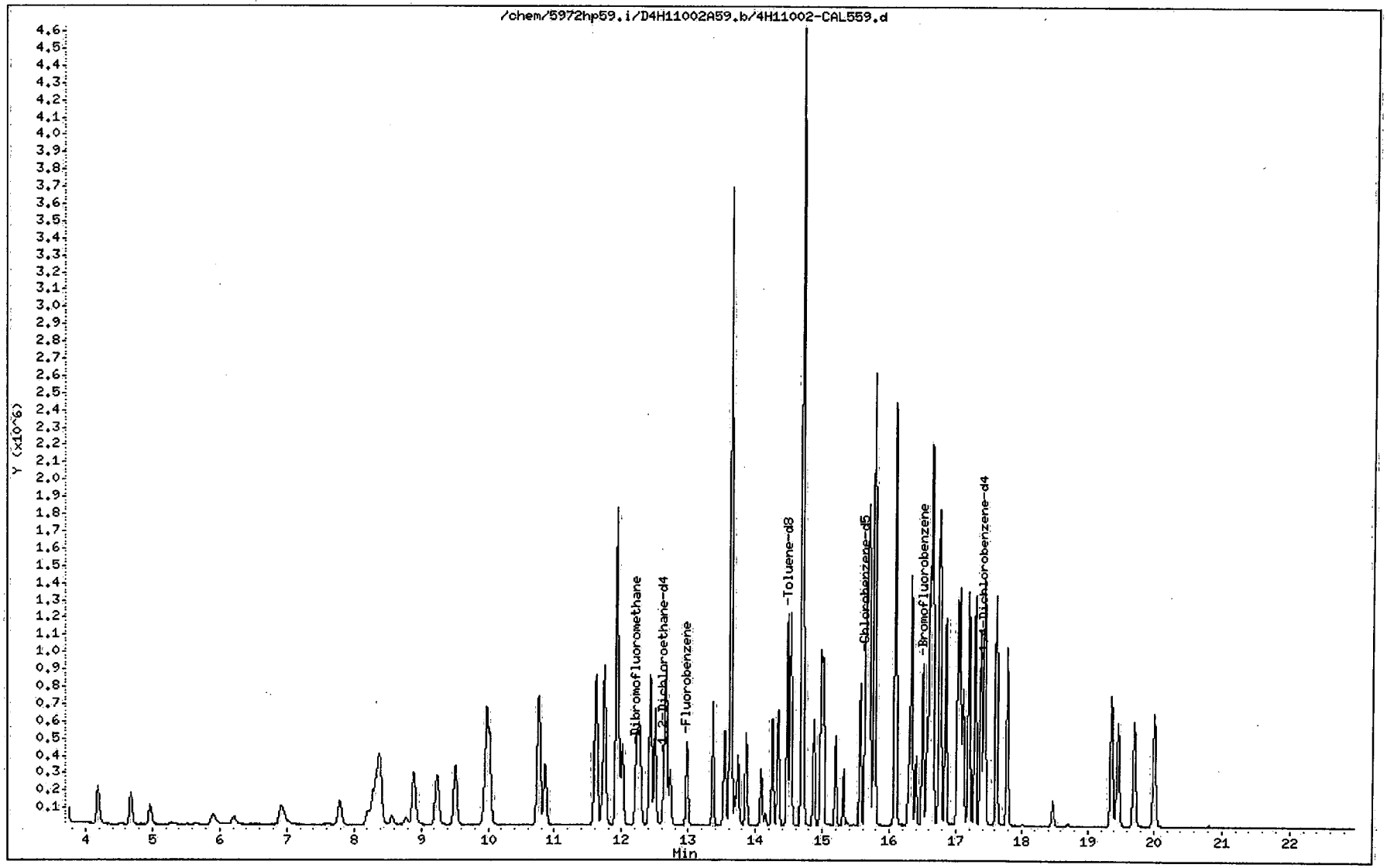
Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL559.d
Date : 11-AUG-2014 15:58
Client ID: VSTD100FT
Sample Info: 4H11002-CAL5:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL559.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL559.d
Lab Smp Id: 4H11002-CAL5 Client Smp ID: VSTD100FT
Inj Date : 11-AUG-2014 15:58
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL5:JAO
Misc Info : VSTD100FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 15:58 Cal File: 4H11002-CAL559.d
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 Fluorobenzene	96	12.976	12.976	(1.000)	531068	250.000	
* 2 Chlorobenzene-d5	117	15.639	15.639	(1.000)	463545	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.414	17.414	(1.000)	233838	250.000	
$ 4 Dibromofluoromethane	113	12.207	12.207	(0.941)	288934	500.000	473.229
$ 5 1,2-Dichloroethane-d4	65	12.631	12.631	(0.973)	239663	500.000	462.973
$ 6 Toluene-d8	98	14.475	14.475	(0.926)	919461	500.000	480.654
$ 7 Bromofluorobenzene	95	16.506	16.506	(0.948)	365455	500.000	488.776
8 Dichlorodifluoromethane	85	4.180	4.180	(0.322)	355939	500.000	501.261
9 Chloromethane	50	4.673	4.673	(0.360)	302143	500.000	474.019
10 Vinyl Chloride	62	4.969	4.969	(0.383)	194612	500.000	527.853
11 Bromomethane	94	5.906	5.906	(0.455)	97761	500.000	540.803(M)
12 Chloroethane	64	6.211	6.211	(0.479)	80312	500.000	527.809
13 Trichlorofluoromethane	101	8.351	8.351	(0.644)	299380	500.000	516.815
14 Acrolein	56	8.203	8.203	(0.632)	131637	5000.00	4895.95
15 1,1,1-trichloro-2,2,2-trifluo	117	8.282	8.282	(0.638)	105929	500.000	545.861

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL559.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.351	8.351	(0.644)	299380	500.000	516.815
17 1,1-Dichloroethene	96	8.391	8.391	(0.647)	231013	500.000	530.256
18 Acetone	43	8.568	8.568	(0.660)	134229	1250.00	1158.91
19 Iodomethane	142	8.775	8.775	(0.676)	94233	500.000	501.881
20 Carbon disulfide	76	8.894	8.894	(0.685)	889439	500.000	536.437
21 3-Chloropropene	76	9.229	9.229	(0.711)	106694	500.000	572.237
22 Acetonitrile	41	9.229	9.229	(0.711)	298463	500.000	552.149
23 Methyl acetate	43	9.258	9.258	(0.713)	248425	500.000	505.140
24 Methylene Chloride	84	9.515	9.515	(0.733)	272939	500.000	505.565
25 Acrylonitrile	53	10.018	10.018	(0.772)	604883	5000.00	5046.96
26 Methyl-tert-butyl ether	73	9.959	9.959	(0.767)	563571	500.000	511.896
28 trans-1,2-Dichloroethene	96	9.978	9.978	(0.769)	254536	500.000	521.772
29 trans-1,2-DCE (part of total)	96	9.978	9.978	(0.769)	254536	500.000	521.772
31 Isopropyl ether	45	10.767	10.767	(0.830)	779136	500.000	515.851
32 1,1-Dichloroethane	63	10.748	10.748	(0.828)	442984	500.000	510.324
33 Vinyl acetate	43	10.767	10.767	(0.830)	343867	500.000	499.160
34 Chloroprene	53	10.856	10.856	(0.837)	300785	500.000	516.226
35 2-butanone	43	11.605	11.605	(0.894)	225015	1250.00	1156.50
36 2,2-Dichloropropane	77	11.596	11.596	(0.894)	322951	500.000	500.331
37 cis-1,2-Dichloroethene	96	11.615	11.615	(0.895)	280733	500.000	515.260
38 cis-1,2-DCE (part of total)	96	11.615	11.615	(0.895)	280733	500.000	515.260
39 Propionitrile	54	11.743	11.743	(0.905)	1254133	25000.0	24686.1
40 Methacrylonitrile	41	11.921	11.921	(0.919)	1235233	5000.00	4649.82
41 Bromochloromethane	128	11.941	11.941	(0.920)	114665	500.000	513.099
42 Chloroform	83	12.010	12.010	(0.926)	434620	500.000	496.303
43 1,1,1-Trichloroethane	97	12.246	12.246	(0.944)	351224	500.000	518.423
44 Cyclohexane	56	12.276	12.276	(0.946)	281014	500.000	555.626
46 1,1-dichloropropene	75	12.434	12.434	(0.958)	327641	500.000	530.268
47 Isobutyl alcohol	43	12.503	12.503	(0.964)	512949	25000.0	24200.2
48 Carbon Tetrachloride	117	12.424	12.424	(0.957)	330561	500.000	520.934
49 Benzene	78	12.661	12.661	(0.976)	976736	500.000	521.550
50 1,2-Dichloroethane	62	12.720	12.720	(0.980)	285972	500.000	492.796
51 Trichloroethene	130	13.361	13.361	(1.030)	265218	500.000	507.507
52 Methylcyclohexane	83	13.538	13.538	(1.043)	279043	500.000	566.076
53 Methylmethacrylate	100	13.627	13.627	(1.050)	672053	5000.00	4513.93
54 1,2-Dichloropropane	63	13.607	13.607	(1.049)	235804	500.000	486.855
55 1,4-dioxane	88	13.696	13.696	(1.055)	132861	25000.0	25188.7
56 Dibromomethane	174	13.735	13.735	(1.059)	159858	500.000	522.733
57 Bromodichloromethane	83	13.854	13.854	(1.068)	363205	500.000	519.937
58 cis-1,3-Dichloropropene	75	14.258	14.258	(1.099)	396615	500.000	520.031
59 4-Methyl-2-pentanone	43	14.337	14.337	(0.917)	528585	1250.00	1194.76
60 Toluene	92	14.524	14.524	(0.929)	619856	500.000	527.071
61 Ethylmethacrylate	99	14.692	14.692	(0.939)	524178	5000.00	4991.05
62 trans-1,3-Dichloropropene	75	14.712	14.712	(0.941)	338687	500.000	511.452
63 1,1,2-Trichloroethane	97	14.870	14.870	(0.951)	213487	500.000	493.701
64 2-hexanone	43	14.998	14.998	(0.959)	408415	1250.00	1239.54
65 2-chloroethyl vinyl ether	63	14.081	14.081	(1.085)	121056	500.000	574.739

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL559.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.017	15.017	(0.960)	354486	500.000	497.275
67 Tetrachloroethene	164	14.978	14.978	(0.958)	223845	500.000	543.181
68 Dibromochloromethane	129	15.195	15.195	(0.972)	284533	500.000	513.414
69 1,2-Dibromoethane	107	15.313	15.313	(0.979)	239516	500.000	495.576
70 1-Chlorohexane	55	15.560	15.560	(0.995)	193086	500.000	557.282
71 Chlorobenzene	112	15.658	15.658	(1.001)	751398	500.000	518.727
72 Ethylbenzene	106	15.688	15.688	(1.003)	370517	500.000	539.397
73 1,1,1,2-Tetrachloroethane	131	15.708	15.708	(1.004)	272551	500.000	526.598
74 m,p-Xylene	106	15.777	15.777	(1.009)	935310	1000.00	1073.73
75 m,p-Xylene (part of total)	106	15.777	15.777	(1.009)	935310	1000.00	1073.73
76 o-Xylene	106	16.082	16.082	(1.028)	459746	500.000	545.070
77 o-Xylene (part of total)	106	16.082	16.082	(1.028)	459746	500.000	545.070
78 Styrene	104	16.092	16.092	(1.029)	764551	500.000	546.754
79 Bromoform	173	16.290	16.290	(0.935)	183246	500.000	504.196
80 Isopropyl Benzene	105	16.329	16.329	(1.044)	1127225	500.000	559.017
81 1,1,2,2-Tetrachloroethane	83	16.566	16.566	(0.951)	326611	500.000	484.389
82 trans-1,4-dichloro-2-butene	53	16.605	16.605	(1.062)	307856	2000.00	1965.04
83 1,2,3-Trichloropropane	110	16.635	16.635	(1.064)	77522	500.000	502.463
84 Bromobenzene	156	16.654	16.654	(1.065)	323532	500.000	537.649
85 n-Propyl Benzene	91	16.635	16.635	(0.955)	1518969	500.000	529.032
86 1,3,5-Trimethyl Benzene	105	16.743	16.743	(0.961)	906329	500.000	531.960
87 2-Chlorotoluene	91	16.773	16.773	(0.963)	894845	500.000	506.765
88 4-Chlorotoluene	91	16.852	16.852	(0.968)	844906	500.000	507.886
89 tert-Butyl Benzene	119	17.019	17.019	(0.977)	896509	500.000	538.116
90 1,2,4-Trimethyl Benzene	105	17.059	17.059	(0.980)	933847	500.000	529.770
91 Pentachloroethane	167	17.108	17.108	(0.982)	179988	500.000	518.691
92 sec-Butyl Benzene	105	17.187	17.187	(0.987)	1197748	500.000	531.838
93 p-Isopropyl Toluene	119	17.276	17.276	(0.992)	986382	500.000	533.780
94 1,3-Dichlorobenzene	146	17.364	17.364	(0.997)	601538	500.000	524.746
95 1,4-Dichlorobenzene	146	17.433	17.433	(1.001)	616079	500.000	521.228
96 n-Butyl Benzene	91	17.611	17.611	(1.011)	1016607	500.000	558.547
97 1,2-Dichlorobenzene	146	17.779	17.779	(1.021)	560632	500.000	530.066
98 1,2-Dibromo-3-Chloropropane	157	18.479	18.479	(1.061)	60017	500.000	524.081
99 1,2,4-Trichlorobenzene	180	19.356	19.356	(1.112)	377219	500.000	525.092
100 Hexachlorobutadiene	225	19.455	19.455	(1.117)	190787	500.000	524.893
101 Naphthalene	128	19.701	19.701	(1.131)	790793	500.000	534.153
102 1,2,3-Trichlorobenzene	180	20.007	20.007	(1.149)	360513	500.000	549.413
M 103 1,2-Dichloroethene (total)	96				535269	1000.00	1036.67
M 104 Xylene (total)	106				1395056	1500.00	1618.80

QC Flag Legend

M - Compound response manually integrated.

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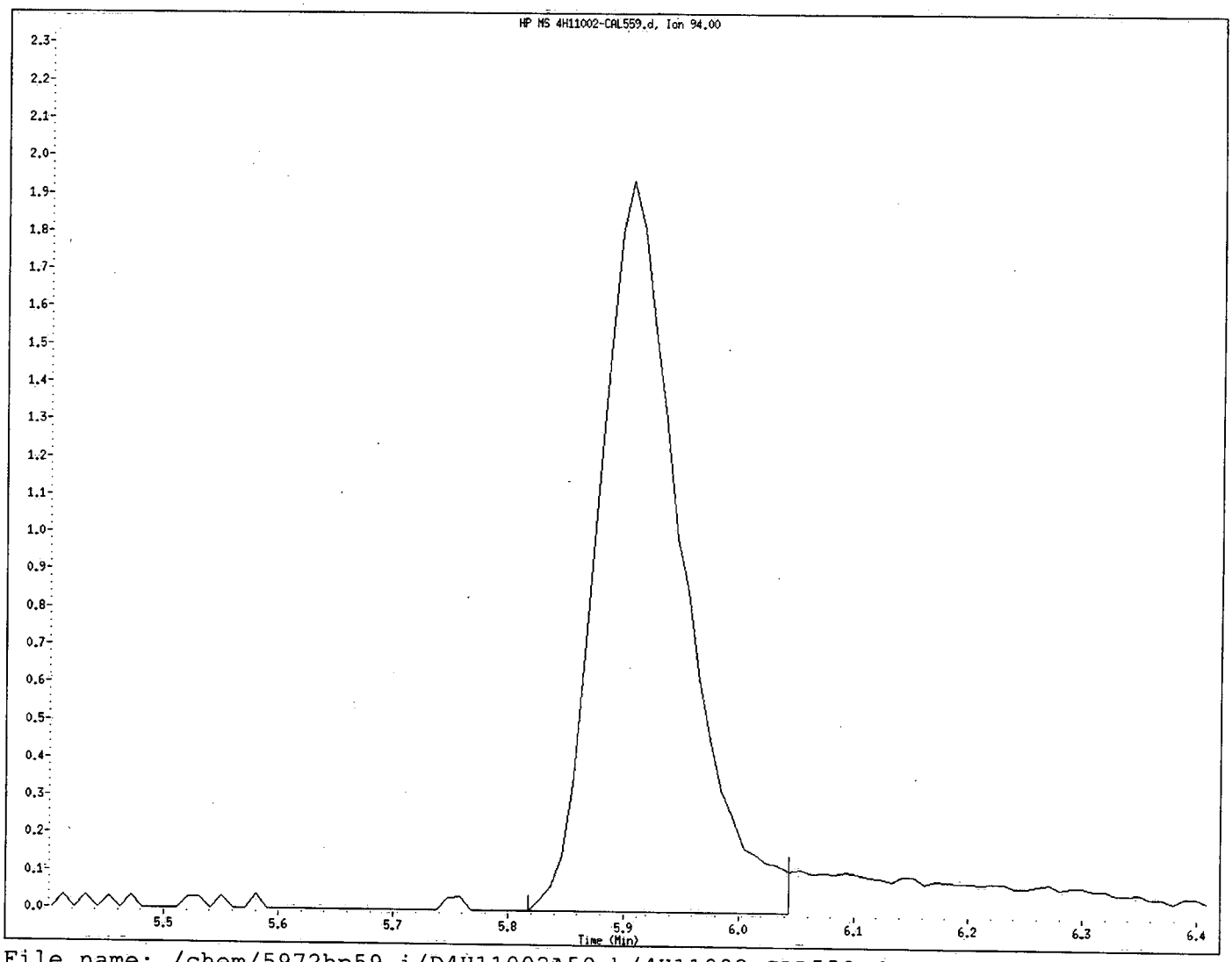
Bromomethane CAS Number 74-83-9 Area = 97761 Manually integrated



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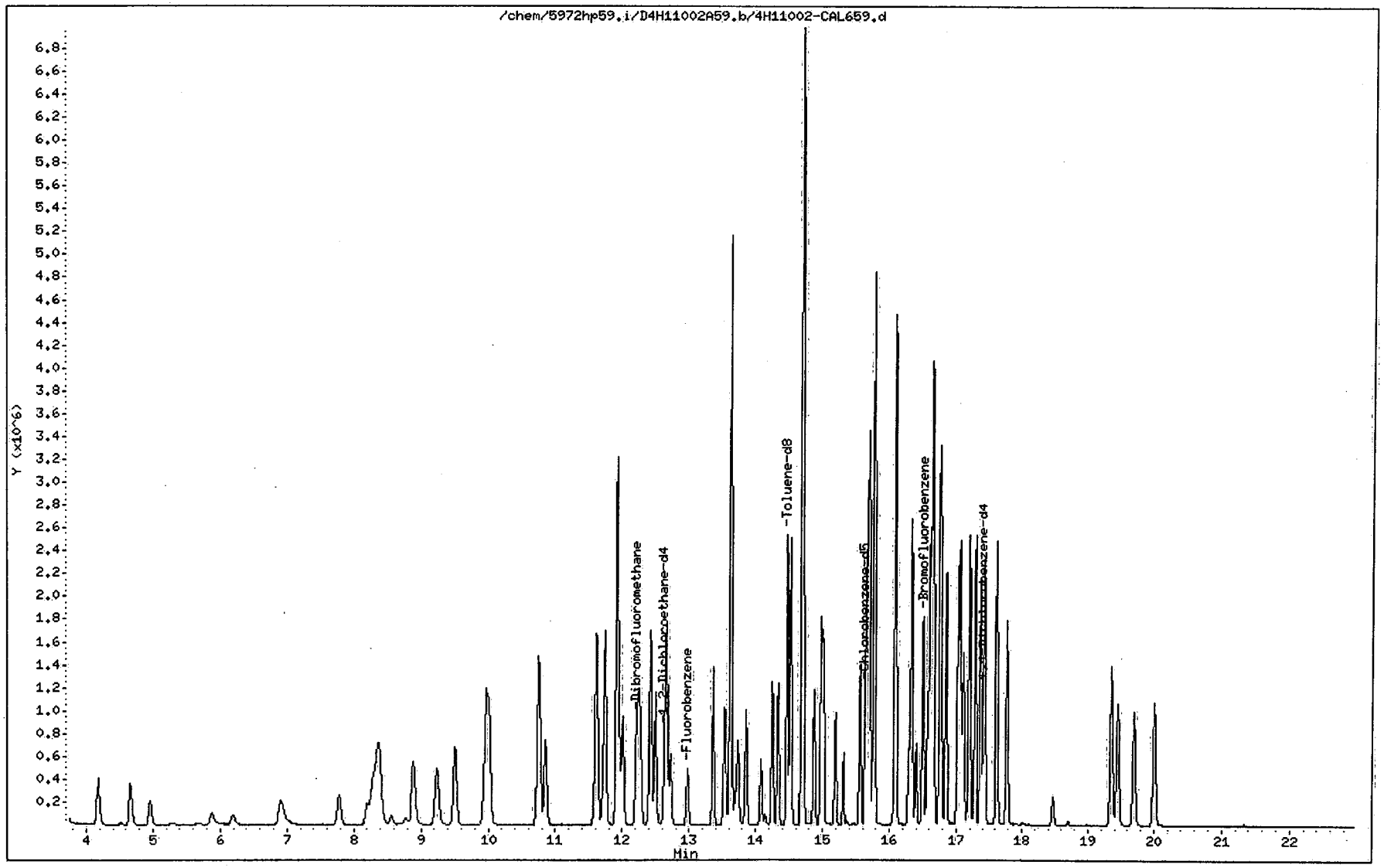
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 15:58
Retention Time: 5.91
Operator ID: JAO

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL659.d
Date : 11-AUG-2014 15:28
Client ID: VSTD200FT
Sample Info: 4H11002-CAL6:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL659.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL659.d
Lab Smp Id: 4H11002-CAL6 Client Smp ID: VSTD200FT
Inj Date : 11-AUG-2014 15:28
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-CAL6:JAO
Misc Info : VSTD200FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 15:28 Cal File: 4H11002-CAL659.d
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	ON-COL (ng)
* 1 Fluorobenzene	96	12.976	12.976	(1.000)	530403	250.000	
* 2 Chlorobenzene-d5	117	15.639	15.639	(1.000)	450565	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.414	17.414	(1.000)	222848	250.000	
$ 4 Dibromofluoromethane	113	12.207	12.207	(0.941)	595711	1000.00	959.776
$ 5 1,2-Dichloroethane-d4	65	12.631	12.631	(0.973)	467726	1000.00	882.878
$ 6 Toluene-d8	98	14.465	14.465	(0.925)	1853030	1000.00	983.900
$ 7 Bromofluorobenzene	95	16.496	16.496	(0.947)	721545	1000.00	1005.10(A)
8 Dichlorodifluoromethane	85	4.180	4.180	(0.322)	609967	1000.00	860.805
9 Chloromethane	50	4.663	4.663	(0.359)	625815	1000.00	966.308
10 Vinyl Chloride	62	4.959	4.959	(0.382)	357092	1000.00	988.115
11 Bromomethane	94	5.876	5.876	(0.453)	160854	1000.00	915.856
12 Chloroethane	64	6.182	6.182	(0.476)	153423	1000.00	1028.63(A)
13 Trichlorofluoromethane	101	8.341	8.341	(0.643)	592796	1000.00	1036.23(A)
14 Acrolein	56	8.193	8.193	(0.631)	314428	10000.0	11628.5(A)
15 1,1,1-trichloro-2,2,2-trifluo	117	8.272	8.272	(0.637)	205565	1000.00	1094.07(A)

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL659.d
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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.341	8.341	(0.643)	592796	1000.00	1036.23(A)
17 1,1-Dichloroethene	96	8.381	8.381	(0.646)	441674	1000.00	1035.97(A)
18 Acetone	43	8.568	8.568	(0.660)	202791	2500.00	1691.43
19 Iodomethane	142	8.765	8.765	(0.675)	138549	1000.00	1000.00
20 Carbon disulfide	76	8.893	8.893	(0.685)	1677001	1000.00	1037.91(A)
21 3-Chloropropene	76	9.229	9.229	(0.711)	182778	1000.00	1031.19(A)
22 Acetonitrile	41	9.229	9.229	(0.711)	517837	1000.00	993.734
23 Methyl acetate	43	9.248	9.248	(0.713)	412738	1000.00	843.191
24 Methylene Chloride	84	9.505	9.505	(0.732)	537679	1000.00	1000.91(A)
25 Acrylonitrile	53	10.018	10.018	(0.772)	1186165	10000.0	9995.60
26 Methyl-tert-butyl ether	73	9.949	9.949	(0.767)	1059008	1000.00	970.810
28 trans-1,2-Dichloroethene	96	9.978	9.978	(0.769)	485910	1000.00	1012.00(A)
29 trans-1,2-DCE (part of total)	96	9.978	9.978	(0.769)	485910	1000.00	1012.00(A)
31 Isopropyl ether	45	10.757	10.757	(0.829)	1455041	1000.00	974.864
32 1,1-Dichloroethane	63	10.747	10.747	(0.828)	849180	1000.00	986.283
33 Vinyl acetate	43	10.757	10.757	(0.829)	661353	1000.00	960.690
34 Chloroprene	53	10.856	10.856	(0.837)	618058	1000.00	1073.69(A)
35 2-butanone	43	11.605	11.605	(0.894)	390979	2500.00	1963.07
36 2,2-Dichloropropane	77	11.595	11.595	(0.894)	656104	1000.00	1017.97(A)
37 cis-1,2-Dichloroethene	96	11.615	11.615	(0.895)	551057	1000.00	1023.09(A)
38 cis-1,2-DCE (part of total)	96	11.615	11.615	(0.895)	551057	1000.00	1023.09(A)
39 Propionitrile	54	11.743	11.743	(0.905)	2231351	50000.0	43793.2
40 Methacrylonitrile	41	11.921	11.921	(0.919)	2200514	10000.0	8104.64
41 Bromochloromethane	128	11.941	11.941	(0.920)	214512	1000.00	969.561
42 Chloroform	83	12.010	12.010	(0.926)	869843	1000.00	992.095
43 1,1,1-Trichloroethane	97	12.246	12.246	(0.944)	706258	1000.00	1056.75(A)
44 Cyclohexane	56	12.276	12.276	(0.946)	532307	1000.00	1094.39(A)
46 1,1-dichloropropene	75	12.434	12.434	(0.958)	614873	1000.00	1016.90(A)
47 Isobutyl alcohol	43	12.503	12.503	(0.964)	875923	50000.0	40940.1
48 Carbon Tetrachloride	117	12.414	12.414	(0.957)	649997	1000.00	1040.14(A)
49 Benzene	78	12.660	12.660	(0.976)	1873729	1000.00	1016.38(A)
50 1,2-Dichloroethane	62	12.720	12.720	(0.980)	550777	1000.00	945.765
51 Trichloroethene	130	13.361	13.361	(1.030)	533821	1000.00	1027.92(A)
52 Methylcyclohexane	83	13.538	13.538	(1.043)	524221	1000.00	1113.85(A)
53 Methylmethacrylate	100	13.627	13.627	(1.050)	954285	10000.0	6120.14
54 1,2-Dichloropropane	63	13.607	13.607	(1.049)	412895	1000.00	846.142
55 1,4-dioxane	88	13.696	13.696	(1.055)	228977	50000.0	43575.1
56 Dibromomethane	174	13.735	13.735	(1.059)	300781	1000.00	999.937
57 Bromodichloromethane	83	13.854	13.854	(1.068)	691901	1000.00	1005.08(A)
58 cis-1,3-Dichloropropene	75	14.248	14.248	(1.098)	769685	1000.00	1024.13(A)
59 4-Methyl-2-pentanone	43	14.337	14.337	(0.917)	954525	2500.00	2187.45
60 Toluene	92	14.524	14.524	(0.929)	1169150	1000.00	1041.58(A)
61 Ethylmethacrylate	99	14.692	14.692	(0.939)	917203	10000.0	10000.0(A)
62 trans-1,3-Dichloropropene	75	14.712	14.712	(0.941)	619174	1000.00	969.353
63 1,1,2-Trichloroethane	97	14.869	14.869	(0.951)	398722	1000.00	944.664
64 2-hexanone	43	14.998	14.998	(0.959)	643000	2500.00	2002.14
65 2-chloroethyl vinyl ether	63	14.080	14.080	(1.085)	225418	1000.00	1127.75(A)

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Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-CAL659.d
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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)
66 1,3-Dichloropropane	76	15.017	15.017	(0.960)	647766	1000.00	933.173
67 Tetrachloroethene	164	14.978	14.978	(0.958)	414571	1000.00	1065.65(A)
68 Dibromochloromethane	129	15.195	15.195	(0.972)	551880	1000.00	1033.75(A)
69 1,2-Dibromoethane	107	15.313	15.313	(0.979)	454326	1000.00	964.270
70 1-Chlorohexane	55	15.560	15.560	(0.995)	335482	1000.00	1035.71(A)
71 Chlorobenzene	112	15.658	15.658	(1.001)	1341758	1000.00	965.014
72 Ethylbenzene	106	15.688	15.688	(1.003)	670751	1000.00	1031.71(A)
73 1,1,1,2-Tetrachloroethane	131	15.708	15.708	(1.004)	514645	1000.00	1041.46(A)
74 m,p-Xylene	106	15.767	15.767	(1.008)	1665102	2000.00	2016.14(A)
75 m,p-Xylene (part of total)	106	15.767	15.767	(1.008)	1665102	2000.00	2016.14(A)
76 o-Xylene	106	16.082	16.082	(1.028)	808898	1000.00	1017.21(A)
77 o-Xylene (part of total)	106	16.082	16.082	(1.028)	808898	1000.00	1017.21(A)
78 Styrene	104	16.092	16.092	(1.029)	1380401	1000.00	1048.28(A)
79 Bromoform	173	16.289	16.289	(0.935)	344658	1000.00	997.874
80 Isopropyl Benzene	105	16.329	16.329	(1.044)	2075350	1000.00	1102.23(A)
81 1,1,2,2-Tetrachloroethane	83	16.566	16.566	(0.951)	574559	1000.00	884.929
82 trans-1,4-dichloro-2-butene	53	16.605	16.605	(1.062)	538758	4000.00	3517.45
83 1,2,3-Trichloropropane	110	16.635	16.635	(1.064)	135822	1000.00	907.188
84 Bromobenzene	156	16.654	16.654	(1.065)	592836	1000.00	1039.66(A)
85 n-Propyl Benzene	91	16.635	16.635	(0.955)	2745969	1000.00	1023.35(A)
86 1,3,5-Trimethyl Benzene	105	16.743	16.743	(0.961)	1667136	1000.00	1049.12(A)
87 2-Chlorotoluene	91	16.763	16.763	(0.963)	1641154	1000.00	979.666
88 4-Chlorotoluene	91	16.851	16.851	(0.968)	1589213	1000.00	1007.71(A)
89 tert-Butyl Benzene	119	17.019	17.019	(0.977)	1615164	1000.00	1043.81(A)
90 1,2,4-Trimethyl Benzene	105	17.059	17.059	(0.980)	1694068	1000.00	1028.86(A)
91 Pentachloroethane	167	17.108	17.108	(0.982)	348144	1000.00	1066.05(A)
92 sec-Butyl Benzene	105	17.187	17.187	(0.987)	2254482	1000.00	1073.21(A)
93 p-Isopropyl Toluene	119	17.276	17.276	(0.992)	1896102	1000.00	1101.48(A)
94 1,3-Dichlorobenzene	146	17.364	17.364	(0.997)	1113227	1000.00	1036.10(A)
95 1,4-Dichlorobenzene	146	17.433	17.433	(1.001)	1121674	1000.00	1010.08(A)
96 n-Butyl Benzene	91	17.611	17.611	(1.011)	1820341	1000.00	1092.09(A)
97 1,2-Dichlorobenzene	146	17.778	17.778	(1.021)	979124	1000.00	991.264
98 1,2-Dibromo-3-Chloropropane	157	18.479	18.479	(1.061)	100129	1000.00	932.436
99 1,2,4-Trichlorobenzene	180	19.356	19.356	(1.112)	702179	1000.00	1043.09(A)
100 Hexachlorobutadiene	225	19.455	19.455	(1.117)	343206	1000.00	1000.08(A)
101 Naphthalene	128	19.701	19.701	(1.131)	1258245	1000.00	912.592
102 1,2,3-Trichlorobenzene	180	20.007	20.007	(1.149)	599424	1000.00	991.210
M 103 1,2-Dichloroethene (total)	96				1036967	2000.00	2035.73(A)
M 104 Xylene (total)	106				2474000	3000.00	3033.35

QC Flag Legend

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

8/12/2014

Second Source Calibration Verification

SECOND-SOURCE CALIBRATION VERIFICATION

SW 8260B

Client: WESTON SOLUTIONS SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp59 Calibration: 4081203

Lab File ID: 4H11002-SCV159.d Standard ID: 4H07015

Sequence: 4H11002 Injection Date: 08/11/14

Lab Sample ID: 4H11002-SCV1 InjectionTime: 19:16

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Dichlorodifluoromethane	50.00	61.51	23.0 *	20.00
Chloromethane	50.00	55.91	11.8	20.00
Vinyl chloride	50.00	64.14	28.3 *	20.00
Bromomethane	50.00	61.76	23.5 *	20.00
Chloroethane	50.00	58.44	16.9	20.00
Trichlorofluoromethane	50.00	58.57	17.1	20.00
Acrolein	500.0	1090	118 *	20.00
1,1-Dichloroethene	50.00	52.50	5.0	20.00
1,1,1-Trichloro-2,2,2-trifluoroethane	50.00	63.66	27.3 *	20.00
Acetone	125.0	104.6	-16.3	20.00
Iodomethane	50.00	42.61	-14.8	20.00
1,1,2-Trichloro-1,2,2-trifluoroethane	50.00	58.57	17.1	20.00
Carbon disulfide	50.00	55.20	10.4	20.00
3-Chloropropene	50.00	50.82	1.6	20.00
Acetonitrile	50.00	50.18	0.4	20.00
Methyl acetate	50.00	43.14	-13.7	20.00
Methylene chloride	50.00	49.08	-1.8	20.00
Acrylonitrile	500.0	553.6	10.7	20.00
trans-1,2-Dichloroethene	50.00	54.29	8.6	20.00
Methyl tert-butyl ether	50.00	52.33	4.7	20.00
1,1-Dichloroethane	50.00	51.96	3.9	20.00

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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SECOND-SOURCE CALIBRATION VERIFICATION

SW 8260B

Client: WESTON SOLUTIONS

SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp59

Calibration: 4081203

Lab File ID: 4H11002-SCV159.d

Standard ID: 4H07015

Sequence: 4H11002

Injection Date: 08/11/14

Lab Sample ID: 4H11002-SCV1

InjectionTime: 19:16

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chloroprene	50.00	57.85	15.7	20.00
Vinyl acetate	50.00	49.65	-0.7	20.00
Isopropyl Ether	50.00	52.13	4.3	20.00
cis-1,2-Dichloroethene	50.00	53.85	7.7	20.00
2,2-Dichloropropane	50.00	54.79	9.6	20.00
Propionitrile	2500	2341	-6.4	20.00
2-Butanone	125.0	112.7	-9.8	20.00
Methacrylonitrile	500.0	460.2	-8.0	20.00
Bromochloromethane	50.00	56.34	12.7	20.00
Chloroform	50.00	52.66	5.3	20.00
1,1,1-Trichloroethane	50.00	54.31	8.6	20.00
Cyclohexane	50.00	81.08	62.2 *	20.00
1,1-Dichloropropene	50.00	57.96	15.9	20.00
Carbon tetrachloride	50.00	54.44	8.9	20.00
1,2-Dichloroethane	50.00	51.33	2.7	20.00
Isobutyl alcohol	2500	2062	-17.5	20.00
Benzene	50.00	54.43	8.9	20.00
Trichloroethene	50.00	55.16	10.3	20.00
Methylcyclohexane	50.00	85.43	70.9 *	20.00
1,2-Dichloropropane	50.00	53.79	7.6	20.00
Dibromomethane	50.00	52.21	4.4	20.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW 8260B

Client: WESTON SOLUTIONS

SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp59

Calibration: 4081203

Lab File ID: 4H11002-SCV159.d

Standard ID: 4H07015

Sequence: 4H11002

Injection Date: 08/11/14

Lab Sample ID: 4H11002-SCV1

InjectionTime: 19:16

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
1,4-Dioxane	2500	2050	-18.0	20.00
Methyl Methacrylate	500.0	433.1	-13.4	20.00
Bromodichloromethane	50.00	46.37	-7.3	20.00
2-Chloroethylvinyl ether	50.00	45.51	-9.0	20.00
cis-1,3-Dichloropropene	50.00	54.12	8.2	20.00
4-Methyl-2-pentanone	125.0	119.1	-4.7	20.00
Toluene	50.00	54.59	9.2	20.00
trans-1,3-Dichloropropene	50.00	53.49	7.0	20.00
1,1,2-Trichloroethane	50.00	51.08	2.2	20.00
Ethyl Methacrylate	500.0	475.6	-4.9	20.00
1,3-Dichloropropane	50.00	49.50	-1.0	20.00
Tetrachloroethene	50.00	60.50	21.0 *	20.00
2-Hexanone	125.0	114.8	-8.1	20.00
1-Chlorohexane	50.00	101.5	103 *	20.00
Dibromochloromethane	50.00	48.03	-3.9	20.00
1,2-Dibromoethane	50.00	51.89	3.8	20.00
Chlorobenzene	50.00	54.34	8.7	20.00
1,1,1,2-Tetrachloroethane	50.00	53.26	6.5	20.00
Ethylbenzene	50.00	56.07	12.1	20.00
m,p-Xylene	100.0	113.6	13.6	20.00
o-Xylene	50.00	57.25	14.5	20.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW 8260B

Client: WESTON SOLUTIONS

SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp59

Calibration: 4081203

Lab File ID: 4H11002-SCV159.d

Standard ID: 4H07015

Sequence: 4H11002

Injection Date: 08/11/14

Lab Sample ID: 4H11002-SCV1

InjectionTime: 19:16

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Styrene	50.00	39.87	-20.3 *	20.00
Bromoform	50.00	48.92	-2.2	20.00
Isopropylbenzene	50.00	62.08	24.2 *	20.00
1,1,2,2-Tetrachloroethane	50.00	51.31	2.6	20.00
1,2,3-Trichloropropane	50.00	48.40	-3.2	20.00
Bromobenzene	50.00	51.83	3.7	20.00
trans-1,4-Dichloro-2-butene	200.0	209.4	4.7	20.00
n-Propylbenzene	50.00	59.48	19.0	20.00
2-Chlorotoluene	50.00	58.33	16.7	20.00
4-Chlorotoluene	50.00	59.37	18.7	20.00
1,3,5-Trimethylbenzene	50.00	61.01	22.0 *	20.00
Pentachloroethane	50.00	84.95	69.9 *	20.00
tert-Butylbenzene	50.00	61.77	23.5 *	20.00
1,2,4-Trimethylbenzene	50.00	61.15	22.3 *	20.00
sec-Butylbenzene	50.00	64.51	29.0 *	20.00
1,3-Dichlorobenzene	50.00	57.23	14.5	20.00
p-Isopropyltoluene	50.00	63.09	26.2 *	20.00
1,4-Dichlorobenzene	50.00	57.30	14.6	20.00
1,2-Dichlorobenzene	50.00	57.85	15.7	20.00
n-Butylbenzene	50.00	66.56	33.1 *	20.00
1,2-Dibromo-3-chloropropane	50.00	50.74	1.5	20.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW 8260B

Client: WESTON SOLUTIONS

SDG: 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp59

Calibration: 4081203

Lab File ID: 4H11002-SCV159.d

Standard ID: 4H07015

Sequence: 4H11002

Injection Date: 08/11/14

Lab Sample ID: 4H11002-SCV1

InjectionTime: 19:16

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
1,2,4-Trichlorobenzene	50.00	58.42	16.8	20.00
Hexachlorobutadiene	50.00	63.57	27.1 *	20.00
Naphthalene	50.00	55.62	11.2	20.00
1,2,3-Trichlorobenzene	50.00	57.47	14.9	20.00
Diethyl ether	50.00	0.000		20.00
Tetrahydrofuran	200.0	0.000		20.00
Dibromofluoromethane	50.00	46.71	-6.6	20.00
1,2-Dichloroethane-d4	50.00	46.01	-8.0	20.00
Toluene-d8	50.00	49.40	-1.2	20.00
Bromofluorobenzene	50.00	52.29	4.6	20.00

* Values outside of QC limits

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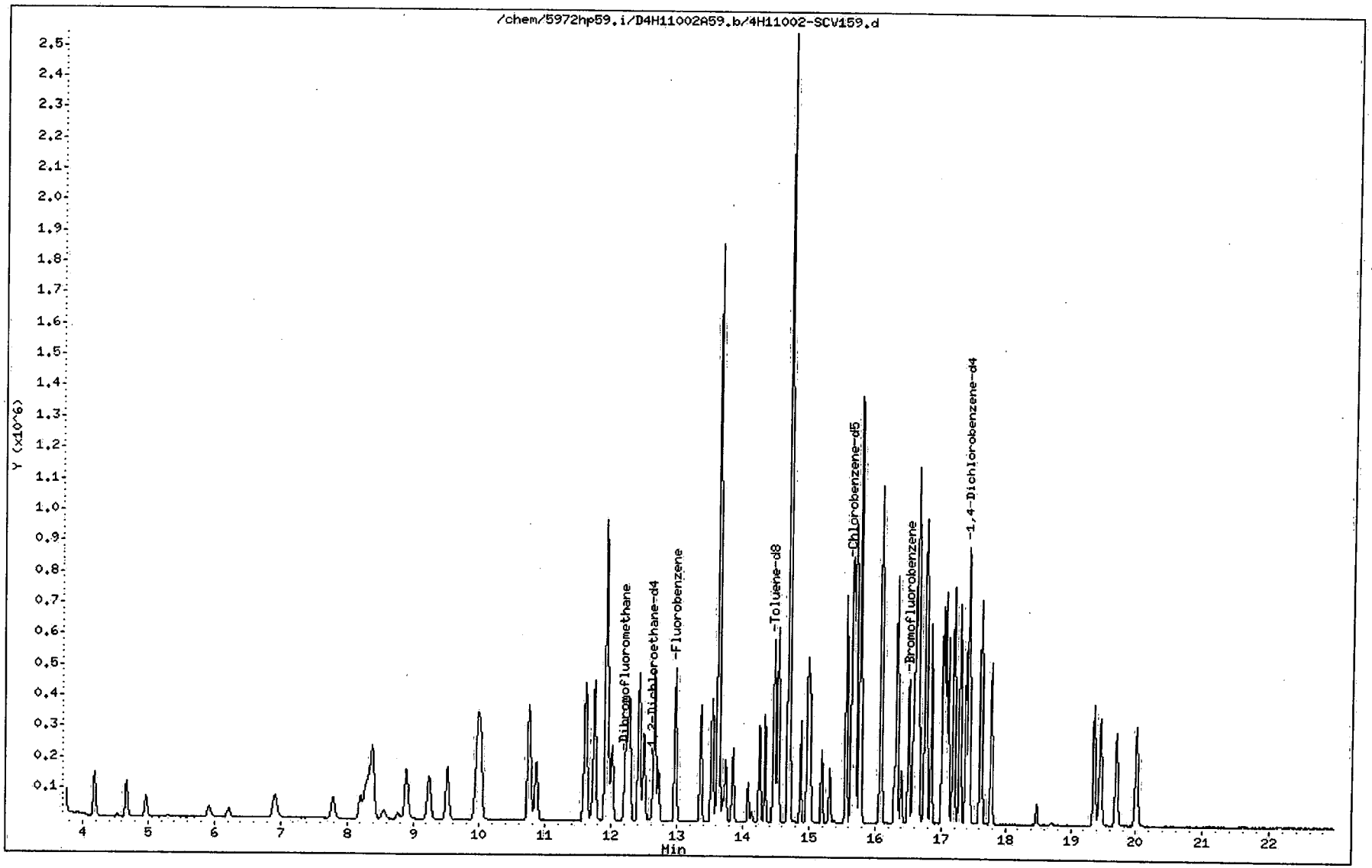
Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Date : 11-AUG-2014 19:16
Client ID: VSTD050FT
Sample Info: 4H11002-SCV1:JAO
Purge Volume: 5.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



Robert Ai 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Report Date: 12-Aug-2014 11:30

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Lab Smp Id: 4H11002-SCV1 Client Smp ID: VSTD050FT
Inj Date : 11-AUG-2014 19:16
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-SCV1:JAO
Misc Info : VSTD050FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:30 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 13 QC Sample: QCCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SCV.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * 1/(Vo) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vo	5.00000	volume of water
DF	1.00000	dilution factor

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
* 1 Fluorobenzene	96	12.975	12.972	(1.000)	526430	250.000	
* 2 Chlorobenzene-d5	117	15.638	15.634	(1.000)	454884	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.413	17.419	(1.000)	216289	250.000	
$ 4 Dibromofluoromethane	113	12.206	12.212	(0.941)	139814	233.573	46.7146
$ 5 1,2-Dichloroethane-d4	65	12.630	12.636	(0.973)	116750	230.036	46.0073
$ 6 Toluene-d8	98	14.474	14.471	(0.926)	458803	246.994	49.3988
$ 7 Bromofluorobenzene	95	16.506	16.502	(0.948)	180563	261.460	52.2919
8 Dichlorodifluoromethane	85	4.179	4.185	(0.322)	214141	307.547	61.5094(R)
9 Chloromethane	50	4.672	4.678	(0.360)	168591	279.562	55.9123
10 Vinyl Chloride	62	4.968	4.964	(0.383)	116664	320.724	64.1448(R)
11 Bromomethane	94	5.915	5.931	(0.456)	51332	308.797	61.7594(R)
12 Chloroethane	64	6.210	6.207	(0.479)	44522	292.211	58.4423
13 Trichlorofluoromethane	101	8.350	8.347	(0.644)	168112	292.859	58.5717
14 Acrolein	56	8.202	8.199	(0.632)	134844	5448.31	1089.66(R)
15 1,1,1-trichloro-2,2,2-trifluo	117	8.291	8.288	(0.639)	61302	318.309	63.6618(R)

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Report Date: 12-Aug-2014 11:30

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
16 1,1,2-trichloro-1,2,2-trifluo	101	8.350	8.347	(0.644)	168112	292.859	58.5717
17 1,1-Dichloroethene	96	8.380	8.386	(0.646)	112754	262.513	52.5027
18 Acetone	43	8.557	8.564	(0.660)	55892	523.082	104.616
19 Iodomethane	142	8.774	8.781	(0.676)	46404	213.047	42.6094
20 Carbon disulfide	76	8.893	8.889	(0.685)	452586	276.020	55.2039
21 3-Chloropropene	76	9.228	9.224	(0.711)	48397	254.076	50.8152
22 Acetonitrile	41	9.228	9.234	(0.711)	136399	250.896	50.1793
23 Methyl acetate	43	9.258	9.254	(0.713)	102147	215.681	43.1362
24 Methylene Chloride	84	9.514	9.510	(0.733)	130092	245.379	49.0758
25 Acrylonitrile	53	10.017	10.023	(0.772)	334975	2768.24	553.648
26 Methyl-tert-butyl ether	73	9.948	9.954	(0.767)	283513	261.630	52.3261
28 trans-1,2-Dichloroethene	96	9.977	9.984	(0.769)	131435	271.470	54.2941
29 trans-1,2-DCE (part of total)	96	9.977	9.984	(0.769)	131435	271.470	54.2941
31 Isopropyl ether	45	10.766	10.763	(0.830)	385451	260.660	52.1320
32 1,1-Dichloroethane	63	10.747	10.743	(0.828)	222490	259.815	51.9630
33 Vinyl acetate	43	10.756	10.753	(0.829)	166998	248.259	49.6518
34 Chloroprene	53	10.865	10.861	(0.837)	166976	289.237	57.8475
35 2-butanone	43	11.605	11.611	(0.894)	107450	563.689	112.738
36 2,2-Dichloropropane	77	11.595	11.601	(0.894)	174105	273.960	54.7920
37 cis-1,2-Dichloroethene	96	11.614	11.621	(0.895)	145614	269.229	53.8458
38 cis-1,2-DCE (part of total)	96	11.614	11.621	(0.895)	145614	269.229	53.8458
39 Propionitrile	54	11.743	11.749	(0.905)	589781	11704.3	2340.86
40 Methacrylonitrile	41	11.920	11.916	(0.919)	604521	2301.05	460.210
41 Bromochloromethane	128	11.940	11.936	(0.920)	62590	281.694	56.3388
42 Chloroform	83	12.009	12.015	(0.926)	226212	263.316	52.6632
43 1,1,1-Trichloroethane	97	12.245	12.242	(0.944)	182461	271.565	54.3131
44 Cyclohexane	56	12.275	12.271	(0.946)	202686	405.415	81.0830(R)
46 1,1-dichloropropene	75	12.433	12.429	(0.958)	177739	289.810	57.9621
47 Isobutyl alcohol	43	12.492	12.498	(0.963)	218528	10308.2	2061.64
48 Carbon Tetrachloride	117	12.423	12.419	(0.957)	171132	272.185	54.4370
49 Benzene	78	12.670	12.666	(0.976)	501955	272.137	54.4274
50 1,2-Dichloroethane	62	12.719	12.725	(0.980)	146795	256.629	51.3259
51 Trichloroethene	130	13.360	13.356	(1.030)	142505	275.790	55.1580
52 Methylcyclohexane	83	13.537	13.534	(1.043)	206860	427.149	85.4299(R)
53 Methylmethacrylate	100	13.626	13.632	(1.050)	311714	2165.46	433.093
54 1,2-Dichloropropane	63	13.606	13.613	(1.049)	129304	268.944	53.7887
55 1,4-dioxane	88	13.695	13.692	(1.055)	54067	10248.9	2049.77
56 Dibromomethane	174	13.735	13.741	(1.059)	78576	261.030	52.2059
57 Bromodichloromethane	83	13.853	13.849	(1.068)	159174	231.874	46.3748
58 cis-1,3-Dichloropropene	75	14.247	14.254	(1.098)	201897	270.587	54.1175
59 4-Methyl-2-pentanone	43	14.336	14.332	(0.917)	264254	595.577	119.115
60 Toluene	92	14.523	14.530	(0.929)	316592	272.926	54.5852
61 Ethylmethacrylate	99	14.691	14.687	(0.939)	265185	2377.82	475.565
62 trans-1,3-Dichloropropene	75	14.711	14.707	(0.941)	174183	267.445	53.4891
63 1,1,2-Trichloroethane	97	14.869	14.865	(0.951)	108371	255.401	51.0802
64 2-hexanone	43	14.997	15.003	(0.959)	186512	574.245	114.849
65 2-chloroethyl vinyl ether	63	14.080	14.076	(1.085)	47164	227.557	45.5114

Robin Hu 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Report Date: 12-Aug-2014 11:30

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)
66 1,3-Dichloropropane	76	15.017	15.013	(0.960)	175690	247.483	49.4966
67 Tetrachloroethene	164	14.977	14.973	(0.958)	122324	302.479	60.4958(R)
68 Dibromochloromethane	129	15.194	15.190	(0.972)	132251	240.134	48.0268
69 1,2-Dibromoethane	107	15.312	15.309	(0.979)	123599	259.425	51.8851
70 1-Chlorohexane	55	15.559	15.555	(0.995)	169248	507.576	101.515
71 Chlorobenzene	112	15.657	15.664	(1.001)	386651	271.707	54.3414
72 Ethylbenzene	106	15.687	15.693	(1.003)	189017	280.373	56.0746
73 1,1,1,2-Tetrachloroethane	131	15.707	15.703	(1.004)	133895	266.289	53.2578
74 m,p-Xylene	106	15.776	15.772	(1.009)	485658	567.893	113.579
75 m,p-Xylene (part of total)	106	15.776	15.772	(1.009)	485658	567.893	113.579
76 o-Xylene	106	16.081	16.088	(1.028)	236748	286.235	57.2471
77 o-Xylene (part of total)	106	16.081	16.088	(1.028)	236748	286.235	57.2471
78 Styrene	104	16.091	16.088	(1.029)	274725	199.335	39.8670(R)
79 Bromoform	173	16.298	16.295	(0.936)	82049	244.623	48.9246
80 Isopropyl Benzene	105	16.328	16.334	(1.044)	612860	310.401	62.0802(R)
81 1,1,2,2-Tetrachloroethane	83	16.565	16.571	(0.951)	158594	256.566	51.3132
82 trans-1,4-dichloro-2-butene	53	16.604	16.601	(1.062)	160674	1047.22	209.445
83 1,2,3-Trichloropropane	110	16.634	16.630	(1.064)	36602	241.999	48.3997
84 Bromobenzene	156	16.653	16.660	(1.065)	154555	259.126	51.8252
85 n-Propyl Benzene	91	16.634	16.640	(0.955)	785364	297.403	59.4807
86 1,3,5-Trimethyl Benzene	105	16.752	16.748	(0.962)	481970	305.046	61.0093(R)
87 2-Chlorotoluene	91	16.772	16.768	(0.963)	472186	291.670	58.3341
88 4-Chlorotoluene	91	16.851	16.847	(0.968)	450493	296.857	59.3714
89 tert-Butyl Benzene	119	17.018	17.015	(0.977)	474671	308.873	61.7746(R)
90 1,2,4-Trimethyl Benzene	105	17.058	17.054	(0.980)	499426	305.725	61.1449(R)
91 Pentachloroethane	167	17.107	17.103	(0.982)	136030	424.765	84.9529(R)
92 sec-Butyl Benzene	105	17.186	17.192	(0.987)	680967	322.540	64.5079(R)
93 p-Isopropyl Toluene	119	17.275	17.271	(0.992)	537909	315.428	63.0856(R)
94 1,3-Dichlorobenzene	146	17.363	17.370	(0.997)	302163	286.130	57.2260
95 1,4-Dichlorobenzene	146	17.442	17.439	(1.002)	310353	286.477	57.2954
96 n-Butyl Benzene	91	17.610	17.616	(1.011)	554333	332.812	66.5624(R)
97 1,2-Dichlorobenzene	146	17.778	17.774	(1.021)	281187	289.248	57.8497
98 1,2-Dibromo-3-Chloropropane	157	18.478	18.474	(1.061)	27040	253.710	50.7419
99 1,2,4-Trichlorobenzene	180	19.355	19.362	(1.112)	191474	292.124	58.4249
100 Hexachlorobutadiene	225	19.454	19.450	(1.117)	106439	317.833	63.5666(R)
101 Naphthalene	128	19.701	19.697	(1.131)	381148	278.086	55.6171
102 1,2,3-Trichlorobenzene	180	20.006	20.003	(1.149)	171997	287.347	57.4694
M 103 1,2-Dichloroethene (total)	96				277049	540.576	108.115
M 104 Xylene (total)	106				722406	854.129	170.826

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Report Date: 12-Aug-2014 11:30

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4H11002-SCV159.d
Lab Smp Id: 4H11002-SCV1 Client Smp ID: VSTD050FT
Inj Date : 11-AUG-2014 19:16
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4H11002-SCV1:JAO
Misc Info : VSTD050FT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:30 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 13 QC Sample: QCCHECK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: SCV.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

N. BFB / DFTPP or FC-43 Data

For each 12-hour period, per instrument utilized, include:

Bar Graph Spectrum and Tabulated Relative Abundances

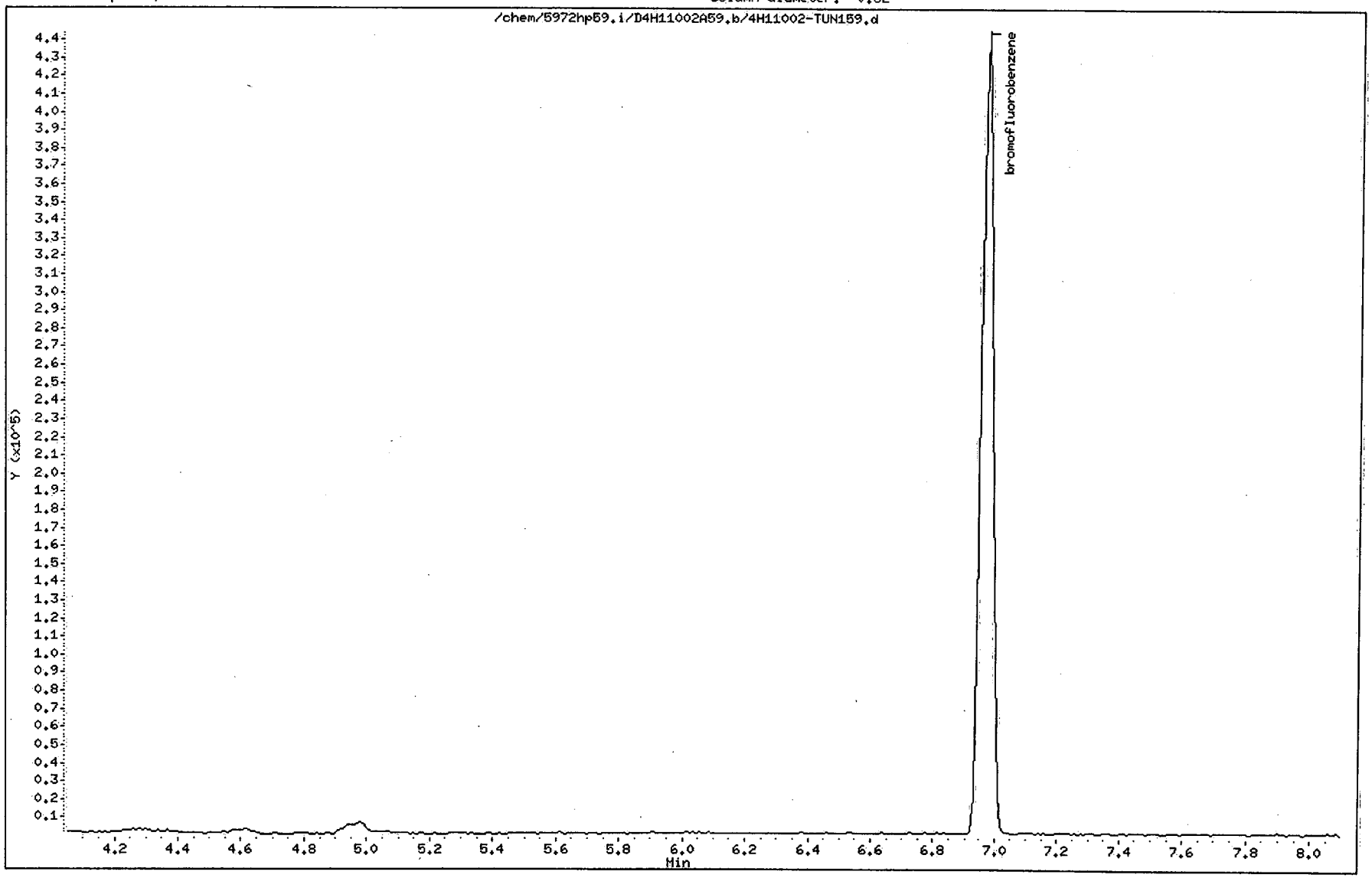
Mass Listing

RIC

PFTBA (Perfluoro-tri-n-butylamine) scan, showing the relative abundance of the key ions and the Instrument Operating Conditions

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-TUN159.d
Date : 11-AUG-2014 13:58
Client ID: BFBFT
Sample Info: 4H11002-TUN1:JAO
Volume Injected (uL): 2.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-TUN159.d

Date : 11-AUG-2014 13:58

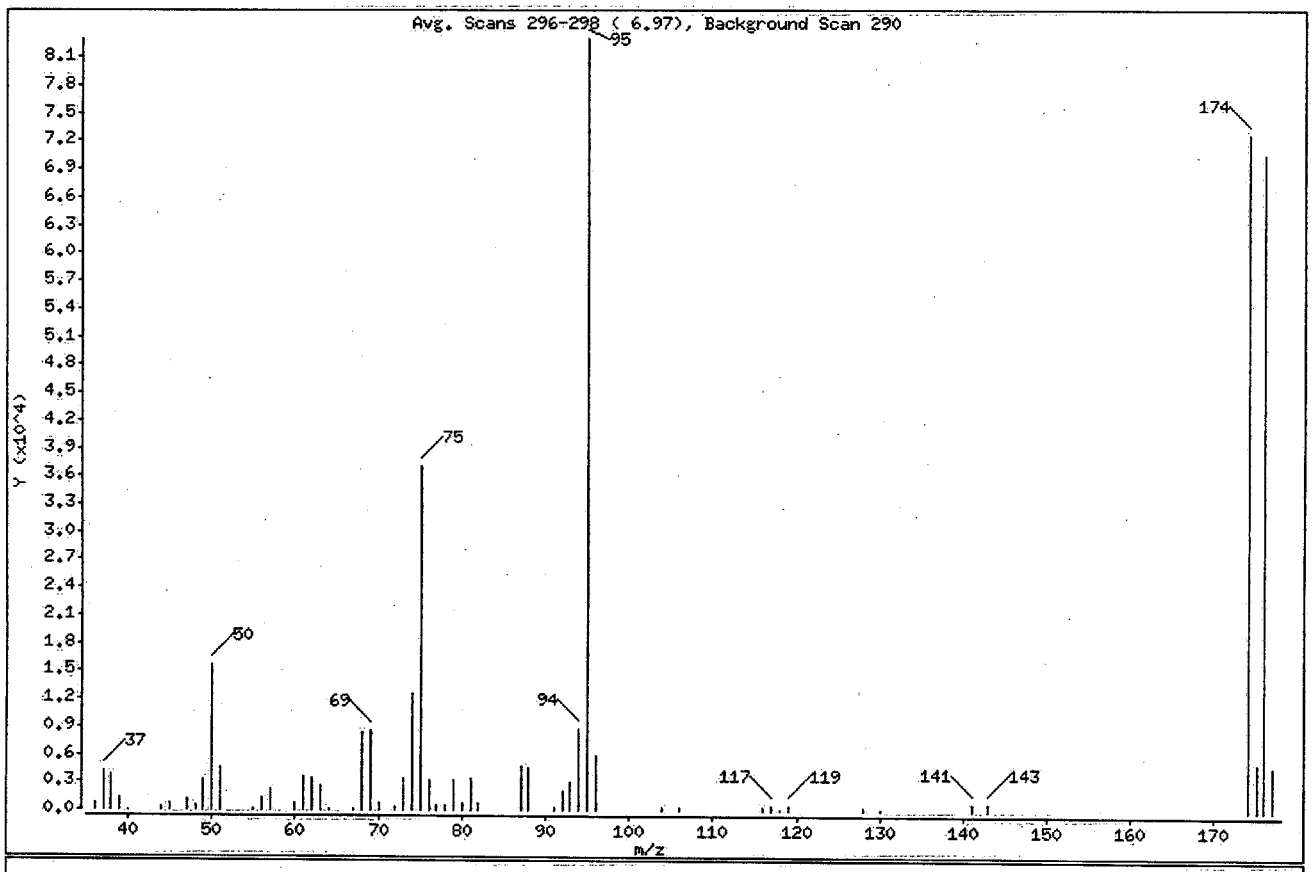
Client ID: BFBFT | Instrument: 5972hp59.i

Sample Info: 4H11002-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

1 bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.77
75	30.00 - 60.00% of mass 95	44.61
96	5.00 - 9.00% of mass 95	7.05
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	87.53
175	5.00 - 9.00% of mass 174	6.31 (7.21)
176	95.00 - 101.00% of mass 174	84.99 (97.10)
177	5.00 - 9.00% of mass 176	5.72 (6.73)

Rolando Hernandez 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4H11002-TUN159.d

Date : 11-AUG-2014 13:58

Client ID: BFBFT | Instrument: 5972hp59.i

Sample Info: 4H11002-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

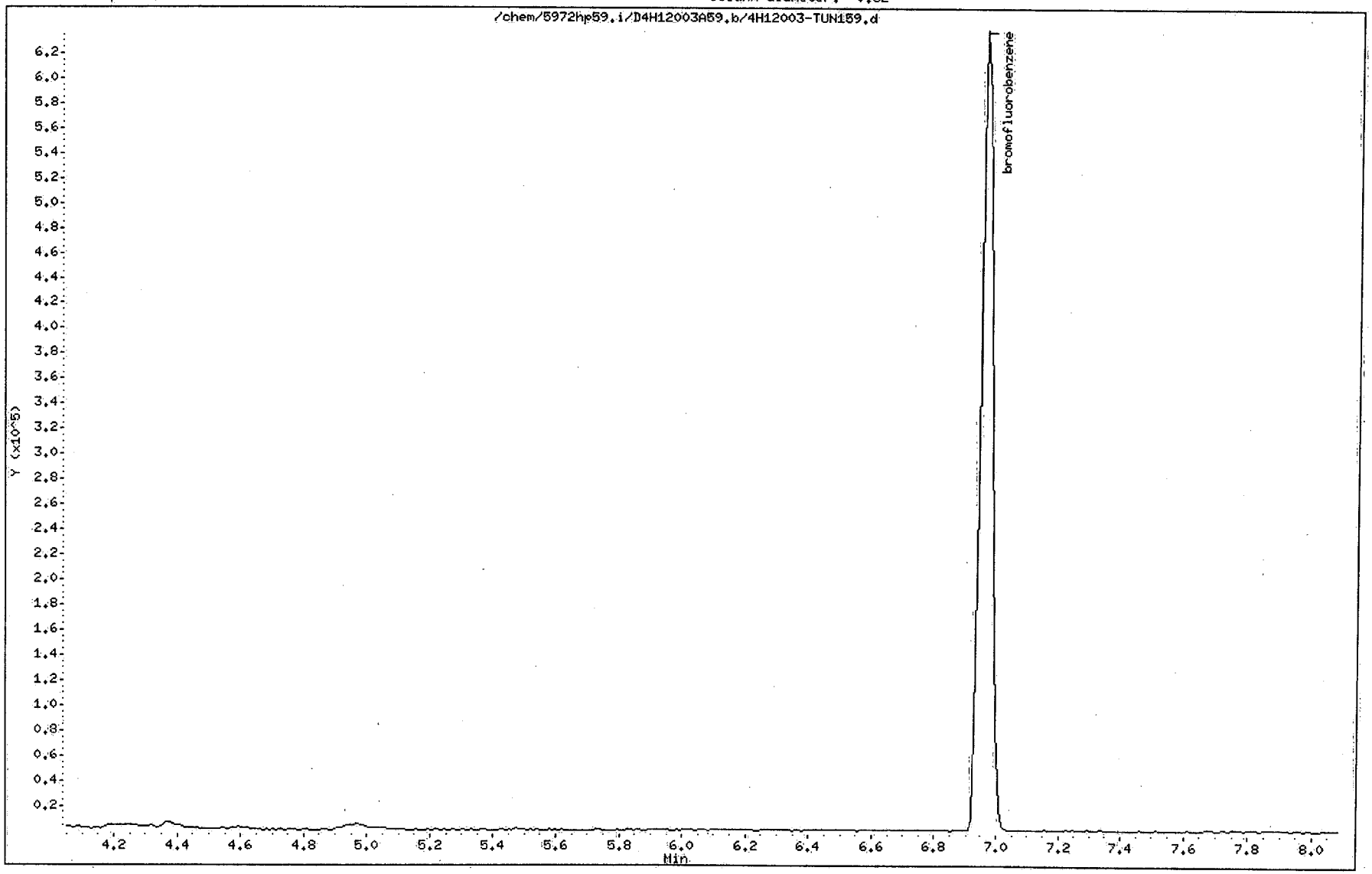
Data File: 4H11002-TUN159.d
Spectrum: Avg. Scans 296-298 (6.97), Background Scan 290
Location of Maximum: 95.00
Number of points: 57

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	817	60.00	789	78.00	516	116.00	363
37.00	4179	61.00	3651	79.00	3302	117.00	529
38.00	3744	62.00	3450	80.00	800	118.00	245
39.00	1366	63.00	2650	81.00	3358	119.00	482
40.00	11	64.00	114	82.00	709	128.00	373
44.00	473	67.00	112	87.00	4710	130.00	235
45.00	828	68.00	8328	88.00	4601	141.00	743
47.00	1204	69.00	8507	91.00	405	143.00	799
48.00	511	70.00	673	92.00	2071	174.00	72616
49.00	3237	72.00	388	93.00	3092	175.00	5236
50.00	15575	73.00	3433	94.00	8701	176.00	70512
51.00	4536	74.00	12588	95.00	82960	177.00	4746
55.00	103	75.00	37008	96.00	5847		
56.00	1310	76.00	3203	104.00	432		
57.00	2236	77.00	575	106.00	402		

Rolando Hernandez 8/12/2014

Data File: /chem/5972hp59.i/D4H12003A59.b/4H12003-TUN159.d
Date : 12-AUG-2014 12:55
Client ID: BFBFU
Sample Info: 4H12003-TUN1:JAO
Volume Injected (uL): 2.0
Column phase: SPB-624

Instrument: 5972hp59.i
Operator: JAO
Column diameter: 0.32



8/13/2014

Data File: /chem/5972hp59.i/D4H12003A59.b/4H12003-TUN159.d

Date : 12-AUG-2014 12:55

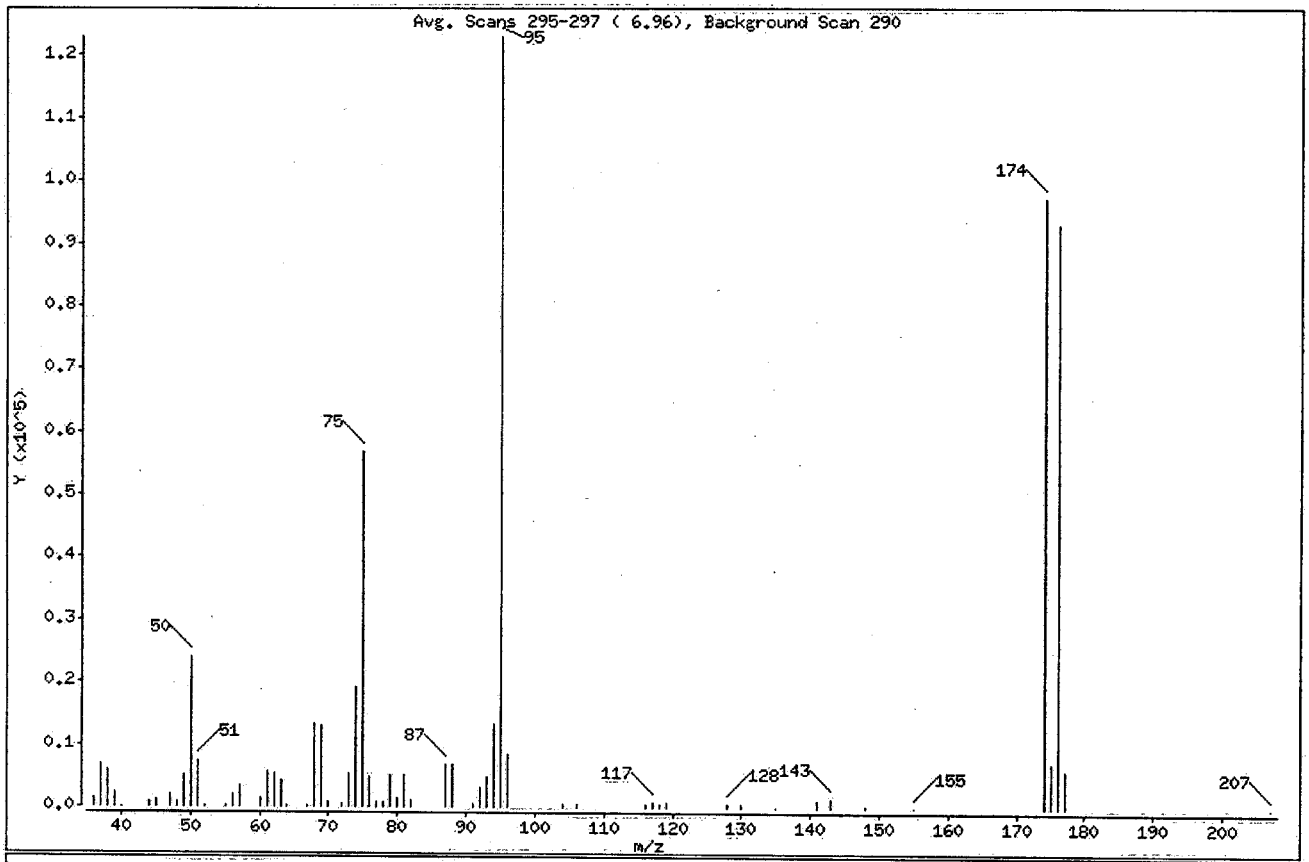
Client ID: BFBFU | Instrument: 5972hp59.i

Sample Info: 4H12003-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

1 bromofluorobenzene



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.59
75	30.00 - 60.00% of mass 95	46.28
96	5.00 - 9.00% of mass 95	6.85
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	78.99
175	5.00 - 9.00% of mass 174	5.80 (7.34)
176	95.00 - 101.00% of mass 174	75.73 (95.87)
177	5.00 - 9.00% of mass 176	4.90 (6.48)

Rolando A 8/13/2014

Data File: /chem/5972hp59.i/D4H12003A59.b/4H12003-TUN159.d

Date : 12-AUG-2014 12:55

Client ID: BFBFU | Instrument: 5972hp59.i

Sample Info: 4H12003-TUN1:JAO

Volume Injected (uL): 2.0 | Operator: JAO

Column phase: SPB-624 | Column diameter: 0.32

Data File: 4H12003-TUN159.d

Spectrum: Avg. Scans 295-297 (6.96), Background Scan 290

Location of Maximum: 95.00

Number of points: 62

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1338	60.00	1310	79.00	5064	118.00	532
37.00	6701	61.00	5763	80.00	1289	119.00	714
38.00	5906	62.00	5248	81.00	5028	128.00	543
39.00	2191	63.00	4225	82.00	1063	130.00	484
40.00	41	64.00	420	87.00	6908	135.00	100
44.00	737	67.00	250	88.00	6858	141.00	1212
45.00	1266	68.00	13182	91.00	607	143.00	1275
47.00	1868	69.00	13066	92.00	3125	148.00	207
48.00	840	70.00	952	93.00	4682	155.00	110
49.00	5043	72.00	641	94.00	13201	174.00	97104
50.00	24080	73.00	5289	95.00	122936	175.00	7127
51.00	7358	74.00	19152	96.00	8415	176.00	93096
52.00	379	75.00	56888	104.00	588	177.00	6030
55.00	412	76.00	4764	106.00	591	207.00	107
56.00	1948	77.00	921	116.00	535		
57.00	3461	78.00	810	117.00	802		

Robin Hamm 8/13/2014

O. Blank Data

Arranged by type of blank (method or instrument where applicable) in chronological order, by instrument.

Tabulated Results and TICs shall be included. (ANALYSIS DATA SHEET)

RIC and Quantitation reports.

Target compound spectra with lab-generated standard Spectra and GC/MS library search spectra for TICs.

ANALYSIS DATA SHEET

SW 8260B

VBLKFT

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 5035A File ID: 4081111-BLK1R59.d QC Type: Blank

Initial/Final: 5g / 5mL Lab ID: 4081111-BLK1 Column ID: SPB-624

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: NA Analyzed: 08/11/14 20:49

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane		0.44	5.0	U
74-87-3	Chloromethane		0.32	5.0	U
75-01-4	Vinyl chloride		0.42	5.0	U
74-83-9	Bromomethane		0.58	5.0	U
75-00-3	Chloroethane		0.71	5.0	U
75-69-4	Trichlorofluoromethane		0.30	5.0	U
75-35-4	1,1-Dichloroethene		1.1	5.0	U
67-64-1	Acetone		5.0	13	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		0.51	5.0	U
75-15-0	Carbon disulfide		0.14	5.0	U
79-20-9	Methyl acetate		1.4	5.0	U
75-09-2	Methylene chloride		0.49	5.0	U
156-60-5	trans-1,2-Dichloroethene		1.0	5.0	U
1634-04-4	Methyl tert-butyl ether		0.39	5.0	U
75-34-3	1,1-Dichloroethane		0.47	5.0	U
156-59-2	cis-1,2-Dichloroethene		0.42	5.0	U
78-93-3	2-Butanone		1.3	13	U
67-66-3	Chloroform		0.31	5.0	U
71-55-6	1,1,1-Trichloroethane		0.50	5.0	U
110-82-7	Cyclohexane		0.31	5.0	U
56-23-5	Carbon tetrachloride		0.45	5.0	U
107-06-2	1,2-Dichloroethane		0.27	5.0	U
71-43-2	Benzene		0.31	5.0	U
79-01-6	Trichloroethene		0.32	5.0	U
108-87-2	Methylcyclohexane		0.28	5.0	U
78-87-5	1,2-Dichloropropane		0.63	5.0	U
75-27-4	Bromodichloromethane		0.38	5.0	U
10061-01-5	cis-1,3-Dichloropropene		0.39	5.0	U
108-10-1	4-Methyl-2-pentanone		1.3	13	U
108-88-3	Toluene		0.34	5.0	U
10061-02-6	trans-1,3-Dichloropropene		0.41	5.0	U
79-00-5	1,1,2-Trichloroethane		0.72	5.0	U
127-18-4	Tetrachloroethene		1.6	5.0	U
591-78-6	2-Hexanone		1.0	13	U

Environmental Testing Laboratories, Inc. CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

VBLKFT

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 5035A File ID: 4081111-BLK1R59.d QC Type: Blank

Initial/Final: 5g / 5mL Lab ID: 4081111-BLK1 Column ID: SPB-624

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: NA Analyzed: 08/11/14 20:49

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
124-48-1	Dibromochloromethane		0.56	5.0	U
106-93-4	1,2-Dibromoethane		0.22	5.0	U
108-90-7	Chlorobenzene		0.25	5.0	U
100-41-4	Ethylbenzene		0.58	5.0	U
179601-23-1	m,p-Xylene		0.14	10	U
95-47-6	o-Xylene		0.38	5.0	U
100-42-5	Styrene		0.080	5.0	U
75-25-2	Bromoform		1.1	5.0	U
98-82-8	Isopropylbenzene		0.22	5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.37	5.0	U
541-73-1	1,3-Dichlorobenzene		0.27	5.0	U
106-46-7	1,4-Dichlorobenzene		0.21	5.0	U
95-50-1	1,2-Dichlorobenzene		0.36	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane		0.65	5.0	U
120-82-1	1,2,4-Trichlorobenzene		0.35	5.0	U
1330-20-7	Xylenes (total)		0.14	5.0	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.00	47.39	95	71 - 141	
1,2-Dichloroethane-d4	50.00	49.25	99	70 - 139	
Toluene-d8	50.00	44.84	90	72 - 123	
Bromofluorobenzene	50.00	47.92	96	65 - 131	

CAS NO.	TICS	CONC.(ug/kg wet)	Response	R.T.	% Match	Q

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

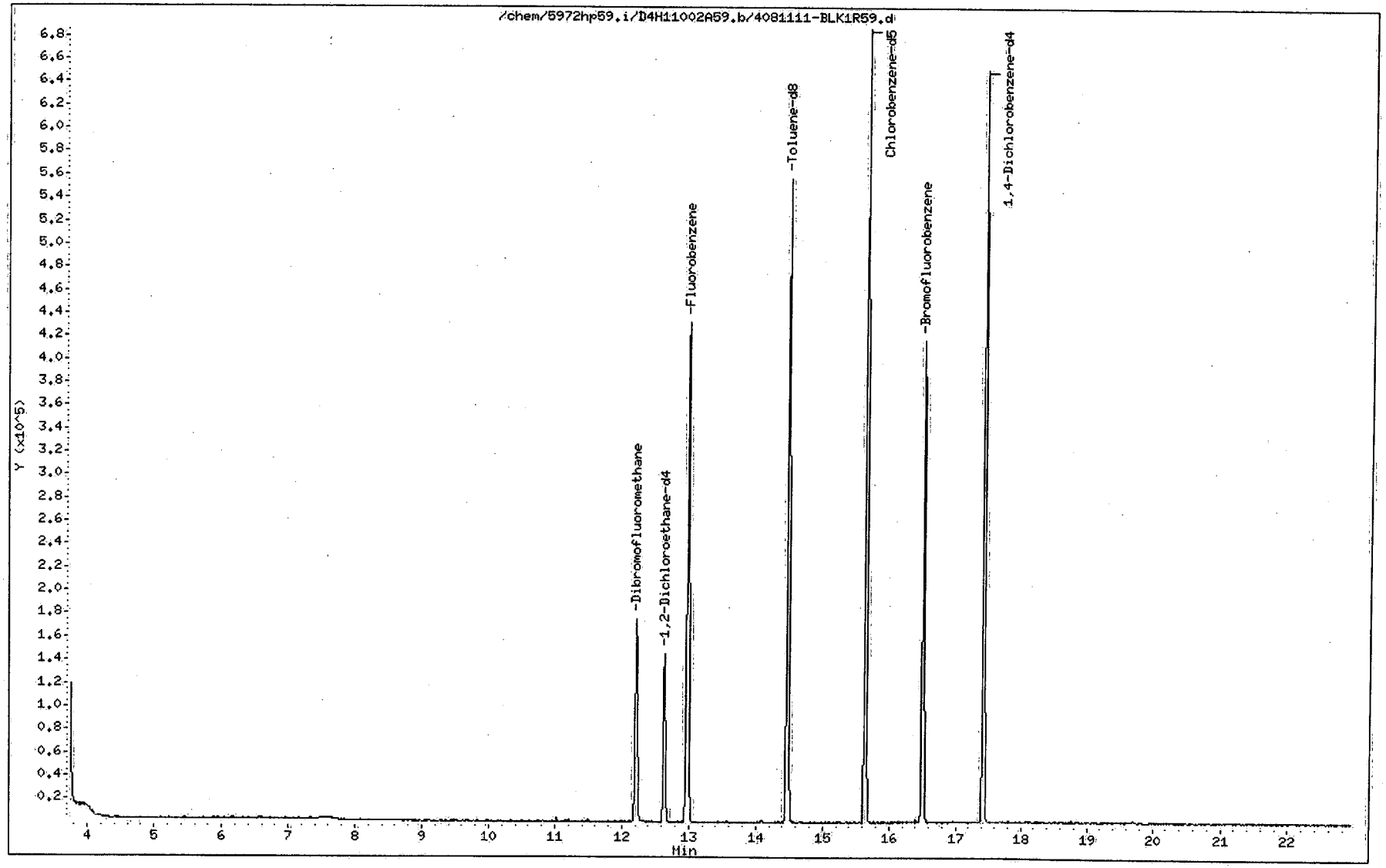
ACCREDITED IN ACCORDANCE WITH nelac

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Date : 11-AUG-2014 20:49
Client ID: VBLKFT
Sample Info: 4081111-BLK1:JAO

Column phase: SPB-624

Instrument: 5972hp59.i

Operator: JAO
Column diameter: 0.32



Robert A. 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Lab Smp Id: 4081111-BLK1 Client Smp ID: VBLKFT
Inj Date : 11-AUG-2014 20:49
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4081111-BLK1:JAO
Misc Info : VBLKFT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.980	12.972	(1.000)	484385	250.000	
* 2 Chlorobenzene-d5	117	15.633	15.634	(1.000)	438382	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.417	17.419	(1.000)	207296	250.000	
$ 4 Dibromofluoromethane	113	12.211	12.212	(0.941)	130494	236.926	47.3852
$ 5 1,2-Dichloroethane-d4	65	12.635	12.636	(0.973)	115008	246.274	49.2547
$ 6 Toluene-d8	98	14.469	14.471	(0.926)	401334	224.189	44.8378
$ 7 Bromofluorobenzene	95	16.500	16.502	(0.947)	158579	239.588	47.9176
8 Dichlorodifluoromethane	85	Compound Not Detected.					
9 Chloromethane	50	Compound Not Detected.					
10 Vinyl Chloride	62	Compound Not Detected.					
11 Bromomethane	94	Compound Not Detected.					
12 Chloroethane	64	Compound Not Detected.					
13 Trichlorofluoromethane	101	Compound Not Detected.					
17 1,1-Dichloroethene	96	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Report Date: 12-Aug-2014 11:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
18 Acetone	43	Compound Not Detected.					
16 1,1,2-trichloro-1,2,2-trifluo	101	Compound Not Detected.					
20 Carbon disulfide	76	Compound Not Detected.					
23 Methyl acetate	43	Compound Not Detected.					
24 Methylene Chloride	84	Compound Not Detected.					
28 trans-1,2-Dichloroethene	96	Compound Not Detected.					
26 Methyl-tert-butyl ether	73	Compound Not Detected.					
32 1,1-Dichloroethane	63	Compound Not Detected.					
37 cis-1,2-Dichloroethene	96	Compound Not Detected.					
35 2-butanone	43	Compound Not Detected.					
42 Chloroform	83	Compound Not Detected.					
43 1,1,1-Trichloroethane	97	Compound Not Detected.					
44 Cyclohexane	56	Compound Not Detected.					
48 Carbon Tetrachloride	117	Compound Not Detected.					
50 1,2-Dichloroethane	62	Compound Not Detected.					
49 Benzene	78	Compound Not Detected.					
51 Trichloroethene	130	Compound Not Detected.					
52 Methylcyclohexane	83	Compound Not Detected.					
54 1,2-Dichloropropane	63	Compound Not Detected.					
57 Bromodichloromethane	83	Compound Not Detected.					
58 cis-1,3-Dichloropropene	75	Compound Not Detected.					
59 4-Methyl-2-pentanone	43	Compound Not Detected.					
60 Toluene	92	Compound Not Detected.					
62 trans-1,3-Dichloropropene	75	Compound Not Detected.					
63 1,1,2-Trichloroethane	97	Compound Not Detected.					
67 Tetrachloroethene	164	Compound Not Detected.					
64 2-hexanone	43	Compound Not Detected.					
68 Dibromochloromethane	129	Compound Not Detected.					
69 1,2-Dibromoethane	107	Compound Not Detected.					
71 Chlorobenzene	112	Compound Not Detected.					
72 Ethylbenzene	106	Compound Not Detected.					
75 m,p-Xylene (part of total)	106	Compound Not Detected.					
77 o-Xylene (part of total)	106	Compound Not Detected.					
78 Styrene	104	Compound Not Detected.					
79 Bromoform	173	Compound Not Detected.					
80 Isopropyl Benzene	105	Compound Not Detected.					
81 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.					
94 1,3-Dichlorobenzene	146	Compound Not Detected.					
95 1,4-Dichlorobenzene	146	Compound Not Detected.					
97 1,2-Dichlorobenzene	146	Compound Not Detected.					
98 1,2-Dibromo-3-Chloropropane	157	Compound Not Detected.					
99 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
M 104 Xylene (total)	106	Compound Not Detected.					

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Report Date: 12-Aug-2014 11:29

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4081111-BLK1R59.d
Lab Smp Id: 4081111-BLK1 Client Smp ID: VBLKFT
Inj Date : 11-AUG-2014 20:49
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4081111-BLK1:JAO
Misc Info : VBLKFT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:29 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 16 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

P. Laboratory Control Sample Data

Tabulated Results (ANALYSIS DATA SHEET)

RIC and Quantitation report

ANALYSIS DATA SHEET

SW 8260B

VLCSFT

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 5035A File ID: 4081111-BS159.d QC Type: LCS

Initial/Final: 5g / 5mL Lab ID: 4081111-BS1 Column ID: SPB-624

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: NA Analyzed: 08/11/14 21:19

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
75-71-8	Dichlorodifluoromethane	49.41	0.44	5.0	
74-87-3	Chloromethane	47.88	0.32	5.0	
75-01-4	Vinyl chloride	54.83	0.42	5.0	
74-83-9	Bromomethane	49.84	0.58	5.0	
75-00-3	Chloroethane	56.49	0.71	5.0	
75-69-4	Trichlorofluoromethane	53.54	0.30	5.0	
75-35-4	1,1-Dichloroethene	49.64	1.1	5.0	
67-64-1	Acetone	162.7	5.0	13	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	53.54	0.51	5.0	
75-15-0	Carbon disulfide	51.89	0.14	5.0	
79-20-9	Methyl acetate	32.60	1.4	5.0	
75-09-2	Methylene chloride	50.25	0.49	5.0	
156-60-5	trans-1,2-Dichloroethene	53.46	1.0	5.0	
1634-04-4	Methyl tert-butyl ether	51.45	0.39	5.0	
75-34-3	1,1-Dichloroethane	53.71	0.47	5.0	
156-59-2	cis-1,2-Dichloroethene	51.73	0.42	5.0	
78-93-3	2-Butanone	127.5	1.3	13	
67-66-3	Chloroform	54.48	0.31	5.0	
71-55-6	1,1,1-Trichloroethane	55.33	0.50	5.0	
110-82-7	Cyclohexane	56.07	0.31	5.0	
56-23-5	Carbon tetrachloride	54.75	0.45	5.0	
107-06-2	1,2-Dichloroethane	51.53	0.27	5.0	
71-43-2	Benzene	53.40	0.31	5.0	
79-01-6	Trichloroethene	51.98	0.32	5.0	
108-87-2	Methylcyclohexane	53.09	0.28	5.0	
78-87-5	1,2-Dichloropropane	47.60	0.63	5.0	
75-27-4	Bromodichloromethane	51.80	0.38	5.0	
10061-01-5	cis-1,3-Dichloropropene	52.06	0.39	5.0	
108-10-1	4-Methyl-2-pentanone	125.6	1.3	13	
108-88-3	Toluene	52.29	0.34	5.0	
10061-02-6	trans-1,3-Dichloropropene	51.56	0.41	5.0	
79-00-5	1,1,2-Trichloroethane	51.52	0.72	5.0	
127-18-4	Tetrachloroethene	49.09	1.6	5.0	
591-78-6	2-Hexanone	120.7	1.0	13	

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

ANALYSIS DATA SHEET

SW 8260B

VLCSFT

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 5035A File ID: 4081111-BS159.d QC Type: LCS

Initial/Final: 5g / 5mL Lab ID: 4081111-BS1 Column ID: SPB-624

Dilution: 1 pH: Prepared: 08/11/14 20:49

% Moisture: NA Analyzed: 08/11/14 21:19

Batch: 4081111 Sequence: 4H11002 Calibration: 4081203 Instrument: 5972hp59

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
124-48-1	Dibromochloromethane	49.98	0.56	5.0	
106-93-4	1,2-Dibromoethane	50.26	0.22	5.0	
108-90-7	Chlorobenzene	51.03	0.25	5.0	
100-41-4	Ethylbenzene	51.87	0.58	5.0	
179601-23-1	m,p-Xylene	102.1	0.14	10	
95-47-6	o-Xylene	51.45	0.38	5.0	
100-42-5	Styrene	51.54	0.080	5.0	
75-25-2	Bromoform	51.40	1.1	5.0	
98-82-8	Isopropylbenzene	54.17	0.22	5.0	
79-34-5	1,1,2,2-Tetrachloroethane	50.46	0.37	5.0	
541-73-1	1,3-Dichlorobenzene	51.77	0.27	5.0	
106-46-7	1,4-Dichlorobenzene	50.40	0.21	5.0	
95-50-1	1,2-Dichlorobenzene	52.01	0.36	5.0	
96-12-8	1,2-Dibromo-3-chloropropane	46.18	0.65	5.0	
120-82-1	1,2,4-Trichlorobenzene	49.16	0.35	5.0	
1330-20-7	Xylenes (total)	153.6	0.14	5.0	

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Dibromofluoromethane	50.00	50.24	100	71 - 141	
1,2-Dichloroethane-d4	50.00	51.62	103	70 - 139	
Toluene-d8	50.00	47.55	95	72 - 123	
Bromofluorobenzene	50.00	51.56	103	65 - 131	

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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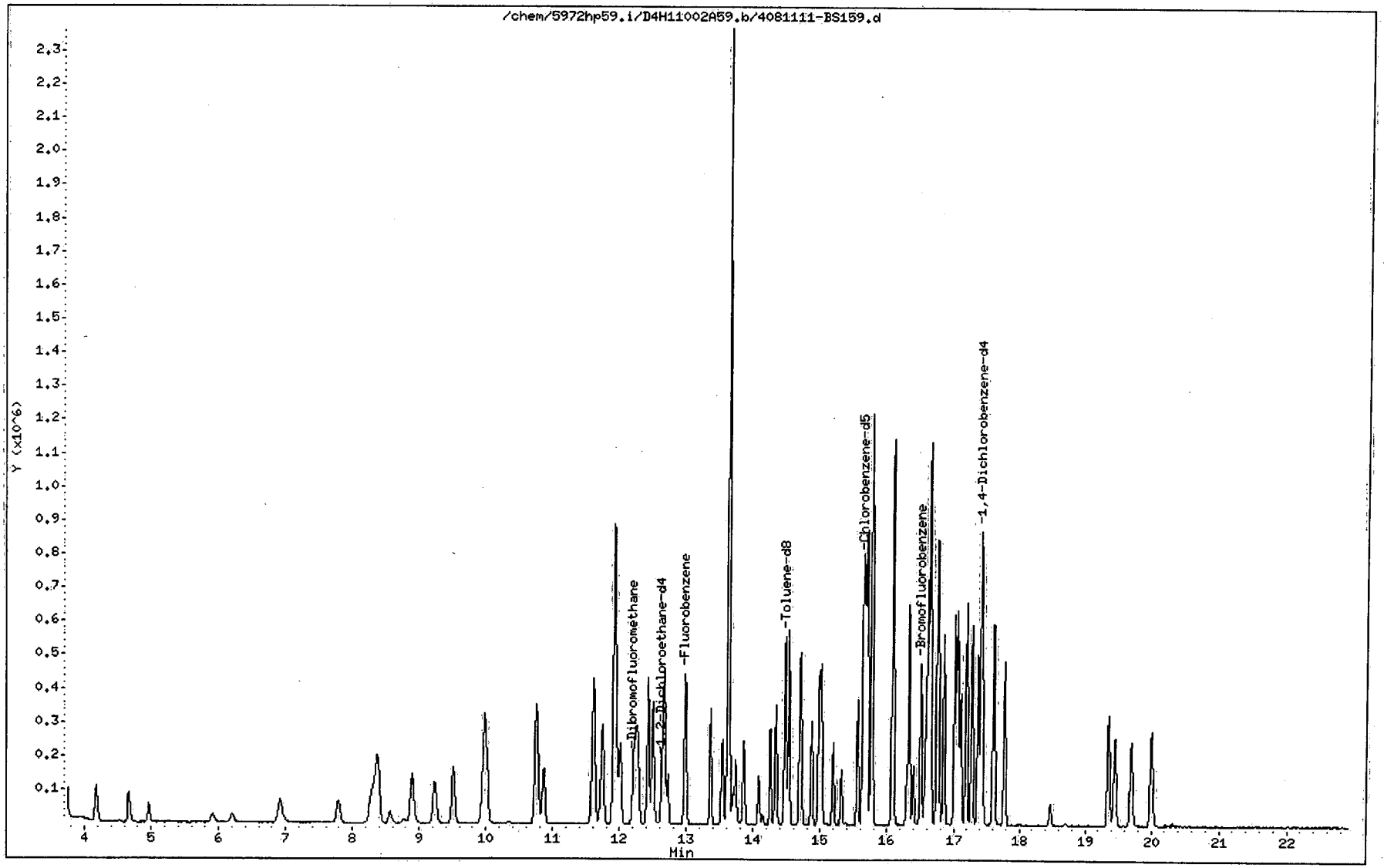
Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Date : 11-AUG-2014 21:19
Client ID: VLCSFT
Sample Info: 4081111-BS1:JAO

Column phase: SPB-624

Instrument: 5972hp59.i

Operator: JAO
Column diameter: 0.32



8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Report Date: 12-Aug-2014 11:30

CompuChem

SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Lab Smp Id: 4081111-BS1 Client Smp ID: VLCSFT
Inj Date : 11-AUG-2014 21:19
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4081111-BS1:JAO
Misc Info : VLCSFT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:30 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 17 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

Concentration Formula: Amt * DF * (1/Ws)*(100/(100-M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Ws	5.00000	Weight of sample extracted (g)
M	0.00000	% Moisture (not decanted)
Va	100.00000	

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
* 1 Fluorobenzene	96	12.973	12.972	(1.000)	494265	250.000	
* 2 Chlorobenzene-d5	117	15.636	15.634	(1.000)	435731	250.000	
* 3 1,4-Dichlorobenzene-d4	152	17.411	17.419	(1.000)	213728	250.000	
$ 4 Dibromofluoromethane	113	12.204	12.212	(0.941)	141179	251.202	50.2404
$ 5 1,2-Dichloroethane-d4	65	12.628	12.636	(0.973)	122993	258.108	51.6215
$ 6 Toluene-d8	98	14.472	14.471	(0.926)	423051	237.758	47.5516
$ 7 Bromofluorobenzene	95	16.504	16.502	(0.948)	175929	257.802	51.5604
8 Dichlorodifluoromethane	85	4.177	4.185	(0.322)	161504	247.045	49.4089
9 Chloromethane	50	4.670	4.678	(0.360)	135562	239.421	47.8842
10 Vinyl Chloride	62	4.966	4.964	(0.383)	93627	274.142	54.8285
11 Bromomethane	94	5.913	5.931	(0.456)	38893	249.194	49.8387
12 Chloroethane	64	6.199	6.207	(0.478)	40407	282.462	56.4924
13 Trichlorofluoromethane	101	8.349	8.347	(0.643)	144279	267.697	53.5393
14 Acrolein	56	8.191	8.199	(0.631)	4380	188.489	37.6977(aR)

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Report Date: 12-Aug-2014 11:30

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
15 1,1,1-trichloro-2,2,2-trifluo	117	8.280	8.288	(0.638)	48364	267.471	53.4943
16 1,1,2-trichloro-1,2,2-trifluo	101	8.349	8.347	(0.643)	144279	267.697	53.5393
17 1,1-Dichloroethene	96	8.388	8.386	(0.647)	100093	248.201	49.6402
18 Acetone	43	8.565	8.564	(0.660)	81606	813.435	162.687
19 Iodomethane	142	8.773	8.781	(0.676)	28113	135.507	27.1015
20 Carbon disulfide	76	8.901	8.889	(0.686)	399394	259.431	51.8861
21 3-Chloropropene	76	9.226	9.224	(0.711)	44707	249.978	49.9956
22 Acetonitrile	41	9.226	9.234	(0.711)	130006	254.699	50.9398
23 Methyl acetate	43	9.256	9.254	(0.713)	72484	163.008	32.6016
24 Methylene Chloride	84	9.512	9.510	(0.733)	125074	251.266	50.2533
25 Acrylonitrile	53	10.015	10.023	(0.772)	161876	1390.75	278.151
26 Methyl-tert-butyl ether	73	9.956	9.954	(0.767)	261750	257.266	51.4532
28 trans-1,2-Dichloroethene	96	9.976	9.984	(0.769)	121504	267.290	53.4580
29 trans-1,2-DCE (part of total)	96	9.976	9.984	(0.769)	121504	267.290	53.4580
31 Isopropyl ether	45	10.755	10.763	(0.829)	367198	264.476	52.8952
32 1,1-Dichloroethane	63	10.745	10.743	(0.828)	215902	268.529	53.7058
33 Vinyl acetate	43	10.765	10.753	(0.830)	158984	251.726	50.3452(M)
34 Chloroprene	53	10.863	10.861	(0.837)	143339	264.451	52.8902
35 2-butanone	43	11.603	11.611	(0.894)	114094	637.495	127.499
36 2,2-Dichloropropane	77	11.603	11.601	(0.894)	148883	249.518	49.9036
37 cis-1,2-Dichloroethene	96	11.613	11.621	(0.895)	131336	258.633	51.7266
38 cis-1,2-DCE (part of total)	96	11.613	11.621	(0.895)	131336	258.633	51.7266
39 Propionitrile	54	11.741	11.749	(0.905)	405207	8564.71	1712.94
40 Methacrylonitrile	41	11.918	11.916	(0.919)	592704	2402.89	480.578
41 Bromochloromethane	128	11.938	11.936	(0.920)	56698	271.782	54.3565
42 Chloroform	83	12.007	12.015	(0.925)	219708	272.388	54.4777
43 1,1,1-Trichloroethane	97	12.244	12.242	(0.944)	174530	276.666	55.3331
44 Cyclohexane	56	12.273	12.271	(0.946)	131589	280.335	56.0669
46 1,1-dichloropropene	75	12.431	12.429	(0.958)	157721	273.906	54.7812
47 Isobutyl alcohol	43	12.500	12.498	(0.963)	257936	12958.9	2591.78
48 Carbon Tetrachloride	117	12.421	12.419	(0.957)	161609	273.766	54.7532
49 Benzene	78	12.668	12.666	(0.976)	462419	267.017	53.4035
50 1,2-Dichloroethane	62	12.717	12.725	(0.980)	138370	257.643	51.5286
51 Trichloroethene	130	13.358	13.356	(1.030)	126093	259.908	51.9817
52 Methylcyclohexane	83	13.536	13.534	(1.043)	120705	265.466	53.0932
53 Methylmethacrylate	100	13.634	13.632	(1.051)	414008	3063.26	612.652
54 1,2-Dichloropropane	63	13.605	13.613	(1.049)	107443	238.017	47.6034
55 1,4-dioxane	88	13.693	13.692	(1.055)	66027	13330.5	2666.10
56 Dibromomethane	174	13.733	13.741	(1.059)	72961	258.150	51.6299
57 Bromodichloromethane	83	13.851	13.849	(1.068)	166940	259.013	51.8026
58 cis-1,3-Dichloropropene	75	14.255	14.254	(1.099)	182364	260.314	52.0628
59 4-Methyl-2-pentanone	43	14.334	14.332	(0.917)	266907	627.998	125.600
60 Toluene	92	14.531	14.530	(0.929)	290515	261.454	52.2909
61 Ethylmethacrylate	99	14.689	14.687	(0.939)	40204	514.275	102.855(R)
62 trans-1,3-Dichloropropene	75	14.709	14.707	(0.941)	160844	257.820	51.5640
63 1,1,2-Trichloroethane	97	14.867	14.865	(0.951)	104697	257.588	51.5177
64 2-hexanone	43	14.995	15.003	(0.959)	187787	603.585	120.717

Robin Hamm 8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Report Date: 12-Aug-2014 11:30

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/Kg)
65 2-chloroethyl vinyl ether	63	14.078	14.076	(1.085)	51734	265.850	53.1699
66 1,3-Dichloropropane	76	15.015	15.013	(0.960)	174106	256.032	51.2064
67 Tetrachloroethene	164	14.975	14.973	(0.958)	95081	245.448	49.0896
68 Dibromochloromethane	129	15.192	15.190	(0.972)	131843	249.916	49.9832
69 1,2-Dibromoethane	107	15.311	15.309	(0.979)	114686	251.299	50.2597
70 1-Chlorohexane	55	15.557	15.555	(0.995)	85633	268.102	53.6205
71 Chlorobenzene	112	15.656	15.664	(1.001)	347779	255.134	51.0267
72 Ethylbenzene	106	15.685	15.693	(1.003)	167493	259.367	51.8734
73 1,1,1,2-Tetrachloroethane	131	15.705	15.703	(1.004)	118094	245.188	49.0376
74 m,p-Xylene	106	15.774	15.772	(1.009)	418282	510.608	102.122
75 m,p-Xylene (part of total)	106	15.774	15.772	(1.009)	418282	510.608	102.122
76 o-Xylene	106	16.080	16.088	(1.028)	203800	257.231	51.4462
77 o-Xylene (part of total)	106	16.080	16.088	(1.028)	203800	257.231	51.4462
78 Styrene	104	16.090	16.088	(1.029)	340209	257.699	51.5398
79 Bromoform	173	16.297	16.295	(0.936)	85181	257.004	51.4008
80 Isopropyl Benzene	105	16.326	16.334	(1.044)	512228	270.837	54.1674
81 1,1,2,2-Tetrachloroethane	83	16.563	16.571	(0.951)	154107	252.294	50.4589
82 trans-1,4-dichloro-2-butene	53	16.602	16.601	(1.062)	153604	1045.15	209.030
83 1,2,3-Trichloropropane	110	16.632	16.630	(1.064)	37669	260.001	52.0001
84 Bromobenzene	156	16.652	16.660	(1.065)	146897	257.113	51.4225
85 n-Propyl Benzene	91	16.632	16.640	(0.955)	712077	272.882	54.5764
86 1,3,5-Trimethyl Benzene	105	16.750	16.748	(0.962)	416363	266.680	53.3361
87 2-Chlorotoluene	91	16.770	16.768	(0.963)	420690	262.975	52.5950
88 4-Chlorotoluene	91	16.849	16.847	(0.968)	387657	258.512	51.7023
89 tert-Butyl Benzene	119	17.017	17.015	(0.977)	404648	266.463	53.2926
90 1,2,4-Trimethyl Benzene	105	17.056	17.054	(0.980)	421737	261.261	52.2521
91 Pentachloroethane	167	17.105	17.103	(0.982)	84589	267.301	53.4602
92 sec-Butyl Benzene	105	17.184	17.192	(0.987)	576089	276.134	55.2268
93 p-Isopropyl Toluene	119	17.273	17.271	(0.992)	434826	258.036	51.6072
94 1,3-Dichlorobenzene	146	17.372	17.370	(0.998)	270133	258.865	51.7729
95 1,4-Dichlorobenzene	146	17.441	17.439	(1.002)	269771	252.001	50.4002
96 n-Butyl Benzene	91	17.608	17.616	(1.011)	457871	278.192	55.6384
97 1,2-Dichlorobenzene	146	17.776	17.774	(1.021)	249804	260.045	52.0089
98 1,2-Dibromo-3-Chloropropane	157	18.476	18.474	(1.061)	24318	230.904	46.1807
99 1,2,4-Trichlorobenzene	180	19.354	19.362	(1.112)	159206	245.805	49.1609
100 Hexachlorobutadiene	225	19.452	19.450	(1.117)	78785	239.254	47.8509
101 Naphthalene	128	19.699	19.697	(1.131)	317311	234.284	46.8568
102 1,2,3-Trichlorobenzene	180	20.004	20.003	(1.149)	143405	242.450	48.4901
M 103 1,2-Dichloroethene (total)	96				252840	525.444	105.089
M 104 Xylene (total)	106				622082	767.839	153.568

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.

8/12/2014

Data File: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Report Date: 12-Aug-2014 11:30

CompuChem

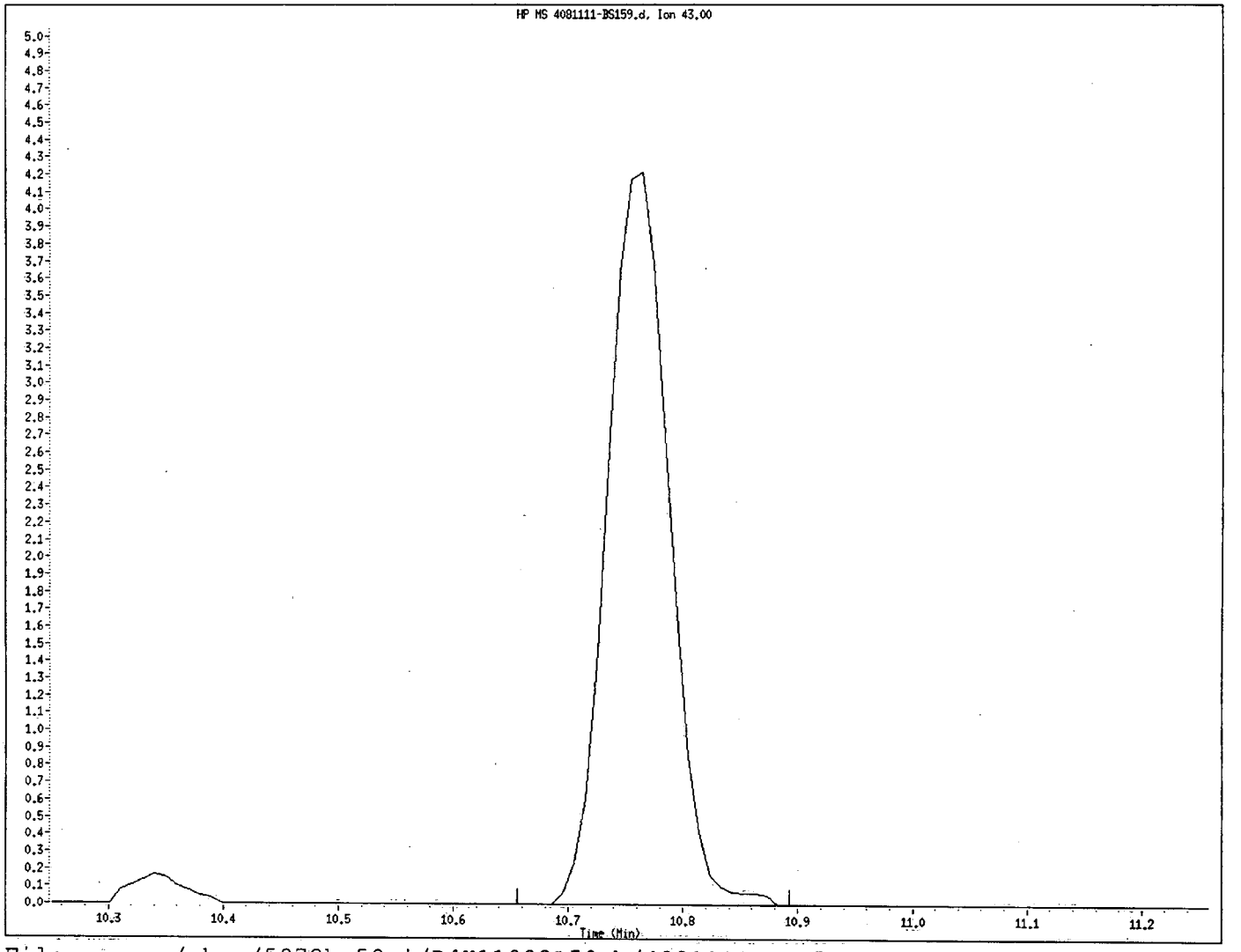
SW846 UPDATE III METHOD 8260B QUANT & RATIO REPORT

Data file : /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Lab Smp Id: 4081111-BS1 Client Smp ID: VLCSFT
Inj Date : 11-AUG-2014 21:19
Operator : JAO Inst ID: 5972hp59.i
Smp Info : 4081111-BS1:JAO
Misc Info : VLCSFT
Comment :
Method : /chem/5972hp59.i/D4H11002A59.b/8260B_5ppbv5.m
Meth Date : 12-Aug-2014 11:30 ron Quant Type: ISTD
Cal Date : 11-AUG-2014 18:02 Cal File: 4H11002-CAL3R59.d
Als bottle: 17 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: DC.sub
Target Version: 3.50
Processing Host: dante

- NO TENTATIVELY IDENTIFIED COMPOUNDS -

8/12/2014

Vinyl acetate CAS Number 108-05-4 Area = 158984 Manually integrated



File name: /chem/5972hp59.i/D4H11002A59.b/4081111-BS159.d
Client ID: VLCSFT
Instrument ID: 5972hp59.i
Injection Date and Time: 11-AUG-2014 21:19
Retention Time: 10.76
Operator ID: JAO

8/12/2014

S. Run Logs / Prep Sheets / Internal CoC Documents / Standard Preparation Information / Manual Integration Summary

Run Logs

COMPUCHEM a Division of Liberty Analytical Corp DATE 8/11/14 INITIAL TIME OF TUNE 1358 SHIFT/S(A) ✓ (B)____ (C)____

GC/MS VOLATILE RUN LOG TIME TUNE EXPIRES 0158 LINKER /METHOD____

COMPUCHEM LOGBOOK 11 NNN 32 (5972hp59) METHOD: (8260B) SOM01.2 (Circle one) or Other: 5 ppb

MAINTENANCE none

	FILE NAME	pH	Vial	DATE	TIME	Client ID	SDG#	INJ. VOL.*	DF+	CHEMIST	COMMENTS (ETC.)/ DISPOSITION
1	4H11002-TUN1	—	—	8/11/14	1358	BFBFT	—	2uL	—	JAO	LCD=SCD
2	—CAL2	—	—	/ /	1426	VSTD010FT	—	5mL	—		4F019029
3	—CAL1	—	—	/ /	1457	VSTD005FT	—		—		28 no acetone
4	—CAL6	—	—	/ /	1528	VSTD200FT	—		—		33 no
5	—CAL5	—	—	/ /	1558	VSTD100FT	—		—		32 iodo-
6	—CAL4	—	—	/ /	1629	VSTD050FT	—		—		31 methane
7	—CAL3	—	—	/ /	1700	VSTD020FT	—		—		30
8	—CAL1R	—	—	/ /	1732	VSTD005FT	—		—		28
9	—CAL3R	—	—	/ /	1802	VSTD020FT	—		—		30
10	—CAL5R	—	—	/ /	1833	VSTD100FT	—		—		32
11	—SCV1	—	—	/ /	1916	VSTD050FT	—		—		4H07015
12	—SCV1R	—	—	/ /	1947	VSTD050FT	—		—		
13	4081111-BLK1	—	—	/ /	2018	VBLKFT	1408024	5.0	—		
14	—BLK1R	—	—	/ /	2049				—		
15	—BS1	—	—	/ /	2119	VLCSFT		5mL	—		Arochlor
16	4H11002-IBL1	—	—	/ /	2150	VIBLKFT	—		—		
17	1408024-01	—	A	/ /	2221	P001-S002-0002-01	1408024	3.39	—		
18	—03	—	A	/ /	2252	-S003-0002-01		3.38		8-11-14	
19	—04	—	A	/ /	2323	-S006-0002-01		3.93	—		
20	—05	—	A	/ /	2354	-S001-0002-01		3.10	—		
21	—02	—	A	8/12/14	0025	-S003-0002-01		3.39	—		
22	4081111-MS1	—	B	/ /	0055	MS		3.53	—		
23	—MSD1	—	C	/ /	0126	MSD		3.50	—		
24	4081111-BS1R	—	—	/ /	0157	VLCSFT	—	5mL	—		

*On-column sample aliquot +Not applicable to soil matrix

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation

Tune (ID #7008) Lot No.: 4G19001 Calibration Group Code / Lot No.: 4F19031

Internal Standard Lot No.: 4H01003 Surrogate Lot No.: 4F16001

REVIEWED BY: TAJ Date 8/12/14

9/19/12: bm

COMPUCHEM a Division of Liberty Analytical Corp DATE 8/12/14 INITIAL TIME OF TUNE 1255 SHIFT/S(A) ✓ (B)____ (C)____

GC/MS VOLATILE RUN LOG TIME TUNE EXPIRES 0055 LINKER /METHOD ____

COMPUCHEM LOGBOOK 11 NNN 32 (5972hp59) METHOD: 8260B SOM01.2 (Circle one) or Other: 5 ppb

MAINTENANCE none

		FILE NAME		pH	Vial	DATE	TIME	Client ID	SDG#	INJ VOL	DF+	CHEMIST	COMMENTS (ETC.) / DISPOSITION
1		4H12003-TUN1		—	—	8/12/14	1255	BFBFU	—	2uL	—	JAO	LCD=ESCD
2		-ICV1		—	—	/ /	1320	VSTD050FU	—	5mL	—		
3		4081206-BLK1		—	—	/ /	1403	VBLKFU	VARIOUS	5.0	—		
4		4081207-BLK1		—	—	/ /	1434	VBLKFV		100uL 5mL	—		
5		4081206-BS1		—	—	/ /	1521	VLCSFU		5mL	—		M. Level 4C18041
6		~~4081207-BS1~~		—	—	/ /	1552	VLCSFV			—		
7		~~-BSD1~~		—	—	/ /	1623	VLCSDFV			—		
8		4081206-MS1		—	D	/ /	1653	P001-S003-0002-01MS	1408024	3.10	—		
9		-MSD1		—	E	/ /	1724	MSD		3.78	—		
10		4H12003-IBL1		—	—	/ /	1825	VIBLKFV	—	5mL	—		
11		1408019-01		—	Jar	/ /	1856	P001-COMP01-LW-01	1408019	5uL	—		M. Level [5g/5mL Me OH]
12		-02	DW	—		/ /	1927	-DR0314-LW-01		5uL	—		
13		-04		—		/ /	1958	-DR0310-LW-01		5uL	—		
14		-05	DW	—		/ /	2029	-DR0312-LW-01		5uL	—		10% rule
15		-07		—		/ /	2100	-DR0302-LW-01		5uL	—		
16		-06	DW	—		/ /	2202	-DR0702-SW-01		5uL	—		
17		-02D		—		/ /	2305	-DR0314-LW-01		100uL	—		
18		-05D		—		/ /	2337	-DR0312-LW-01		100uL	—		
19		-06D	DW	—		8/13/14	0007	-DR0702-SW-01		100uL	—		
20		-08D	DW	—		/ /	0038	-DR0501-LW-01		100uL	—		
21		-08	DW	—		/ /	2131	-DR0501-LW-01		5uL	—		
22						/ /							
23						/ /							
24						/ /							

JAO 8-13-14

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation

*On-column sample aliquot +Not applicable to soil matrix

Tune (ID #7008) Lot No.: 4G19001 Calibration Group Code / Lot No.: 4F19031

Internal Standard Lot No.: 4H01018 Surrogate Lot No.: 4F16001

REVIEWED BY: TAJ Date 8/13/14

9/19/12: bm

7/31/2013

VOA Internal Chain of Custody Sheet

Dept: PM

Matrix Soil **Batch:** 4080903 **Status:** Batched **Analysis:** VOA-8260B 5PPB

Lab Id	Client Id	Received	Container	Preparation
1408024-01 A	P001-S002-0002-01	08/08/14	5d_Encore, frozen	EPA 5035A
1408024-02 A	P001-S003-0002-01	08/08/14	5d_Encore, frozen	EPA 5035A
1408024-03 A	P001-S003-0002-02	08/08/14	5d_Encore, frozen	EPA 5035A
1408024-04 A	P001-S006-0002-01	08/08/14	5d_Encore, frozen	EPA 5035A
1408024-05 A	P001-S001-0002-01	08/08/14	5d_Encore, frozen	EPA 5035A

Relinquished By	Date/Time	Received By	Date/Time
f. #6	8-11-14	JAD	8-11-14
JAD	8-11-14	f. #6	8-11-14
f. #6	8-12-14	JAD	8-12-14
JAD	8-12-14	f. #6	8-12-14

Custody_Voa.rpt (Rev. 0 3/11/2011)

taken from freezer #6

COMPUCHEM

a Division of Liberty Analytical

Logbook 11 O (4) 16

EnCore™ Preparation Log

-238 / -243 / -233

SDG: 1408024 Prepared By: Joann Ockerlander Date: 8-11-14

	Prep Number	Lab ID	Date	Time	Weight of Jar (g)*	Weight of Jar + Sample (g)	Weight of Sample (g)	
1	1408024-01A		8-11-14	~~8-11-14~~ 1820	27.92	31.31	3.39	
2	B				28.04	30.55		
3	C				28.08	31.14		
4	-02A				28.17	31.56	3.39	
5	B				28.13	31.66	3.53	MS
6	C				28.21	31.71	3.50	MSD
7	D				28.18	31.28	3.10	MS(R)
8	E				28.32	32.10	3.78	MSD(R)
9	F				28.29	31.72		
10	-03A				28.15	31.83	3.68	
11	B				28.34	32.04		
12	C				28.17	31.78		
13	-04A				28.34	32.27	3.93	
14	B				28.38	32.28		
15	C				28.54	32.55		
16	-05A				28.01	31.11	3.10	
17	B				28.19	32.04		
18	1408024-05C			1955	28.22	32.03		
19								
20								
21								
22								
23								
24								
25								

8-11-14

Volume of Methanol Added: N/A frozen

Lot Numbers of Preservatives: Sodium Bisulfate: N/A Methanol: N/A

Reviewed By: TAJ Date: 8/13/14

*Weight of Jar for Sodium Bisulfate preserved Encores is the sum of the weights of the vial, preservative and stir bar
*Weight of Jar for Methanol preserved Encores is the sum of the weights of the vial and preservative

Note: The insertion of "N/A" for "Volume of Methanol Added" and "Lot Numbers of Preservatives: Sodium Bisulfate:_____ Methanol:_____" indicates a freezing option was employed, with or without the addition of water.

9/16/10:jad

2346

Manual Integration Report

CompuChem
A Division Of
Liberty Analytical Corp.

Manual Integration Summary

Client: WESTON SOLUTIONS
Work Order: 1408024
Sdg: 1408024
Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Case:

Analysis: VOA-8260B 5PPB
Sample Type: Field Sample
Lab Id: 1408024-02
Client Id: P001-S003-0002-01
Instrument: 5972hp59

Analyte	Type	M Flag
2-Butanone	TARGET	M

Sample Total: 1

Analysis: VOA-8260B 5PPB
Sample Type: Cal Standard
Lab Id: 4H11002-CAL1
Client Id: VSTD005FT
Instrument: 5972hp59

Analyte	Type	M Flag
Bromoform	TARGET	M
Bromomethane	TARGET	M
Iodomethane	TARGET	M
Vinyl acetate	TARGET	M

Sample Total: 4

Analysis: VOA-8260B 5PPB
Sample Type: Cal Standard
Lab Id: 4H11002-CAL2
Client Id: VSTD010FT
Instrument: 5972hp59

Analyte	Type	M Flag
Bromomethane	TARGET	M
Vinyl acetate	TARGET	M

Sample Total: 2

Analysis: VOA-8260B 5PPB
Sample Type: Cal Standard
Lab Id: 4H11002-CAL3
Client Id: VSTD020FT
Instrument: 5972hp59

Analyte	Type	M Flag
Vinyl acetate	TARGET	M

Sample Total: 1

Client:	WESTON SOLUTIONS	**Project:**	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Work Order:	1408024	**Case:**	
Sdg:	1408024		

Analysis: VOA-8260B 5PPB **Sample Type:** Cal Standard

Lab Id: 4H11002-CAL5 **Client Id:** VSTD100FT **Instrument:** 5972hp59

Analyte	Type	M Flag
Bromomethane	TARGET	M

Sample Total: 1

Total Manual Integrations: 9