September 15, 2017

Dawn Denham
Weston Solutions, Inc.
5599 San Felipe, Suite 700
Houston, Texas 77056
TEL: (713) 985-6610
FAX (713) 985-6703

Order No.: 1709107

RE: Spector-Harvey Sampling

Dear Dawn Denham:

DHL Analytical, Inc. received 3 sample(s) on 9/14/2017 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. Thank you for using DHL Analytical.

Sincerely,

John DuPont
General Manager

This report was performed under the accreditation of the State of Texas Laboratory Certification Number: T104704211-17-19

Table of Contents

DHL ANALYTICAL
2300 Double Creek Dr. ■ Round Rock, TX 78664
Phone (512) 388-8222 ■ FAX (512) 388-8229
Web: www.dhlanalytical.com
E-Mail: login@dhlanalytical.com

№ 77935

CHAIN-OF-CUSTODY

CLIENT: Weston Solutions
ADDRESS: 5599 San Felipe, Suite 700, Houston, TX 77056
PHONE: 713-995-6660 FAX/E-MAIL:
DATA REPORTED TO: Dawn Denham
ADDITIONAL REPORT COPIES TO:

DATE: 9/13/17 PAGE 1 OF 1
PO #: DHL WORK ORDER #: 1709107
PROJECT LOCATION OR NAME: Harvey Superfund
CLENT PROJECT #: 02444.034.001.0001 COLLECTOR: M. Kanarek, E. Omerza

Authorize 5% surcharge for TRRP Report? ☒ Yes ☐ No

S=SOIL W=WATER A=AIR L=LIQUID SE=SEDIMENT
P=PAINT SL=SLUDGE O=OTHER SO=SOLID

PRESERVATION: HCl | HNO_3 | H_2SO_4 ☐ NaOH ☐ | ICE | UNPRESERVED

ANALYSES: BTEX ☐ MTBE ☐ [METHOD 8021] | TPH 1005 ☐ TPH 1006 ☐ HOLD 1006 ☐ | GRO [METHOD 8015] ☐ DRO [METHOD 8105] ☐ | VOC 8260 ☒ VOC 624 ☐ VOC 8260/5035 ☐ | SVOC 8270 ☐ PAH 8270 ☐ HOLD PAH ☐ SVOC 625 ☐ | 8270 PEST ☐ 625 PEST/PCB ☐ 608 PCB ☐ 8082 PCB ☐ 8270 PCB ☐ | 8270 O-P PEST ☐ 8082 PCB ☐ T PHOS, AMMONIA ☐ | 8321 HERB ☐ T PHOS, AMMONIA ☐ | METALS 6020 ☐ METALS 200.8 ☐ DISS. METALS ☐ | RCRA ☐ TX11 ☐ ☐ | PH ☐ HEX CHROM ☐ ALKALINITY ☐ COD ☐ | CHLORIDE ☐ ANIONS ☐ | TCLP-SVOC ☐ VOC ☐ PEST ☐ HERB ☐ | TCLP-METALS ☐ RCRA 8 ☐ TX-11 ☐ Pb ☐ | RCI ☐ FLASHPOINT ☐ DGAS ☐ | TDS ☐ TSS ☐ % MOISTURE ☐ CYANIDE ☐

Field Sample I.D.	DHL Lab #	Date	Time	Matrix	Container Type	# of Containers	HCl	HNO_3	H_2SO_4 ☐ NaOH ☐	ICE	UNPRESERVED	ANALYSES	FIELD NOTES
Spector TB	01	9/13/17	0900	W	40 mL VOA	3	1			X	2	X	hold
Spector W-1	02	1	1130	W	1	3	1			X	2	X	see table in FSP
Spector FB	03	9/13/17	1146	W	40 mL VOA	3	1			X	2	X	for specific analytes

RELINQUISHED BY: (Signature) DATE/TIME 9/13/17 16:30 RECEIVED BY: (Signature) FedEx
RELINQUISHED BY: (Signature) FedEx 9/14/17 9:55 DATE/TIME RECEIVED BY: (Signature)
RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

☐ DHL DISPOSAL @ $5.00 each ☐ Return 3

TURN AROUND TIME
RUSH ☐ CALL FIRST
1 DAY ☐ CALL FIRST
2 DAY ☐
NORMAL ☐
OTHER ☒ 3 day

LABORATORY USE ONLY:
RECEIVING TEMP: 1.5 THERM #: 78
CUSTODY SEALS: ☐ BROKEN ☒ INTACT ☐ NOT USED
CARRIER: ☐ LONE STAR ☒ FEDEX ☐ UPS ☐ OTHER
☐ COURIER DELIVERY
☐ HAND DELIVERED

State Superfund Site	Soil COCs	Soil Analytical Methods	Water COCs	Water Analytical Methods
Industrial Road	lead	SW6020A	None	N/A
	PCBs (as Aroclors)	SW8082A		
International Creosoting	Arsenic	SW6020A	Arsenic	SW6020A
	Chromium		Chromium	
	benzo(a)pyrene	SW8270D	benzo(a)pyrene	SW8270D
	benzo(a)anthracene		benzo(a)anthracene	
	benzo(b)fluoroanthene		benzo(b)fluoroanthene	
	carbazole		carbazole	
	vinyl chloride	SW8260C	vinyl chloride	SW8260C
Jensen Drive Scrap	lead	SW6020A	lead	SW6020A
	arsenic		arsenic	
	PCBs (as Aroclors)	SW8082A	PCBs (as Aroclors)	SW8082A
Maintech International	Benzo(a)pyrene	SW8270D	None	N/A
	chrysene			
Spector Salvage Yard	None	N/A	Carbon tetrachloride	SW8260C
			chloroform	
			Methylene chloride	
Toups	None	N/A	pentachlorophenol	SW8270D
			lead	SW6020A

ORIGIN ID:EIXA (727) 560-0426
MICHAEL KANAREK

5599 SAN FELIPE ST STE 700

HOUSTON, TX 77056
UNITED STATES US

SHIP DATE: 13SEP17
ACTWGT: 14.00 LB
CAD: 006994251/SSFE1802
DIMS: 11x9x10 IN

BILL THIRD PARTY

TO SAMPLE RECEIVING
DHL ANALYTICAL
2300 DOUBLE CREEK DR

ROUND ROCK TX 78664
(512) 388-8222
INV:
PO:
REF:
DEPT:

FedEx
Express

2 of 3
MPS# 0263 7877 1899 9024
Mstr# 7877 1899 9013

THU - 14 SEP 10:30A
PRIORITY OVERNIGHT

0201

A8 BSMA

78664
TX-US AUS

DHL Analytical, Inc.

Sample Receipt Checklist

Client Name **Weston Solutions, Inc.**

Date Received: **9/14/2017**

Work Order Number **1709107**

Received by **EL**

Checklist completed by: _____ 9/14/2017
Signature | Date

Reviewed by: _____ 9/14/2017
Initials | Date

Carrier name FedEx 1day

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	1.5 °C
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH<2 acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____
Water - ph>9 (S) or ph>12 (CN) acceptable upon receipt?	Yes ☐	No ☐	NA ☑ LOT #
	Adjusted? _____		Checked by _____

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: Spector-Harvey Sampling	**LRC Date:** 9/15/17
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 1709107
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-Custody (C-O-C)					
R1	OI	**1)** Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	**X**				**R1-01**
		2) Were all departures from standard conditions described in an exception report?			**X**		
R2	OI	**Sample and Quality Control (QC) Identification**					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	**X**				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	**X**				
R3	OI	**Test Reports**					
		1) Were all samples prepared and analyzed within holding times?	**X**				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	**X**				
		3) Were calculations checked by a peer or supervisor?	**X**				
		4) Were all analyte identifications checked by a peer or supervisor?	**X**				
		5) Were sample detection limits reported for all analytes not detected?	**X**				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			**X**		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			**X**		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per EPA Method 5035?			**X**		
		9) If required for the project, TICs reported?			**X**		
R4	O	**Surrogate Recovery Data**					
		1) Were surrogates added prior to extraction?	**X**				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?	**X**				
R5	OI	**Test Reports/Summary Forms for Blank Samples**					
		1) Were appropriate type(s) of blanks analyzed?	**X**				
		2) Were blanks analyzed at the appropriate frequency?	**X**				
		3) Where method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	**X**				
		4) Were blank concentrations < MDL?	**X**				
		5) For analyte(s) detected in a blank sample, was the concentration, unadjusted for sample specific factors, in all associated field samples, **greater** than 10 times the concentration in the blank sample?			**X**		
R6	OI	**Laboratory Control Samples (LCS):**					
		1) Were all COCs included in the LCS?	**X**				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	**X**				
		3) Were LCSs analyzed at the required frequency?	**X**				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	**X**				
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	**X**				
		6) Was the LCSD RPD within QC limits (if applicable)?	**X**				
R7	OI	**Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data**					
		1) Were the project/method specified analytes included in the MS and MSD?			**X**		
		2) Were MS/MSD analyzed at the appropriate frequency?			**X**		
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			**X**		
		4) Were MS/MSD RPDs within laboratory QC limits?			**X**		
R8	OI	**Analytical Duplicate Data**					
		1) Were appropriate analytical duplicates analyzed for each matrix?			**X**		
		2) Were analytical duplicates analyzed at the appropriate frequency?			**X**		
		3) Were RPDs or relative standard deviations within the laboratory QC limits?			**X**		
R9	OI	**Method Quantitation Limits (MQLs):**					
		1) Are the MQLs for each method analyte included in the laboratory data package?	**X**				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	**X**				
		3) Are unadjusted MQLs and DCSs included in the laboratory data package?	**X**				
R10	OI	**Other Problems/Anomalies**					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?				**X**	
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	**X**				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	**X**				

Laboratory Name: DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: Spector-Harvey Sampling	**LRC Date:** 9/15/17
Reviewer Name: Carlos Castro	**Laboratory Work Order:** 1709107
Prep Batch Number(s): See Prep Dates Report	**Run Batch:** See Analytical Dates Report

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial Calibration (ICAL)**					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	**X**				
		2) Were percent RSDs or correlation coefficient criteria met?	**X**				
		3) Was the number of standards recommended in the method used for all analytes?	**X**				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	**X**				
		5) Are ICAL data available for all instruments used?	**X**				
		6) Has the initial calibration curve been verified using an appropriate second source standard?	**X**				
S2	OI	**Initial and Continuing calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB):**					
		1) Was the CCV analyzed at the method-required frequency?	**X**				
		2) Were percent differences for each analyte within the method-required QC limits?	**X**				
		3) Was the ICAL curve verified for each analyte?	**X**				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			**X**		
S3	O	**Mass Spectral Tuning:**					
		1) Was the appropriate compound for the method used for tuning?	**X**				
		2) Were ion abundance data within the method-required QC limits?	**X**				
S4	O	**Internal Standards (IS):**					
		1) Were IS area counts and retention times within the method-required QC limits?	**X**				
S5	OI	**Raw Data (NELAC Section 5.5.10)**					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	**X**				
		2) Were data associated with manual integrations flagged on the raw data?	**X**				
S6	O	**Dual Column Confirmation**					
		1) Did dual column confirmation results meet the method-required QC?			**X**		
S7	O	**Tentatively Identified Compounds (TICs):**					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			**X**		
S8	I	**Interference Check Sample (ICS) Results:**					
		1) Were percent recoveries within method QC limits?			**X**		
S9	I	**Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions**					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			**X**		
S10	OI	**Method Detection Limit (MDL) Studies**					
		1) Was a MDL study performed for each reported analyte?	**X**				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	**X**				
S11	OI	**Proficiency Test Reports:**					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	**X**				
S12	OI	**Standards Documentation**					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	**X**				
S13	OI	**Compound/Analyte Identification Procedures**					
		1) Are the procedures for compound/analyte identification documented?	**X**				
S14	OI	**Demonstration of Analyst Competency (DOC)**					
		1) Was DOC conducted consistent with NELAC Chapter 5 – Appendix C?	**X**				
		2) Is documentation of the analyst's competency up-to-date and on file?	**X**				
S15	OI	**Verification/Validation Documentation for Methods** (NELAC Chapter 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	**X**				
S16	OI	**Laboratory Standard Operating Procedures (SOPs):**					
		1) Are laboratory SOPs current and on file for each method performed?	**X**				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page – RG-366/TRRP-13

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

R1 Field chain-of-custody documentation;
R2 Sample identification cross-reference;
R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC Chapter 5,
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
R5 Test reports/summary forms for blank samples;
R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) The amount of analyte measured in the duplicate,
  b) The calculated RPD, and
  c) The laboratory's QC limits for analytical duplicates.
R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix;
R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in the Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory is not accredited under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge that all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information or data affecting the quality of the data has been knowingly withheld.

This laboratory was last inspected by TCEQ on March 27, 2017. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Name: John DuPont
Official Title: General Manager

Signature

09/15/17

Date

Name: Scott Schroeder
Official Title: Technical Director

DHL Analytical, Inc. **Date:** *15-Sep-17*

CLIENT: Weston Solutions, Inc.
Project: Spector-Harvey Sampling
Lab Order: 1709107

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Method SW8260C - Volatile Organics Analysis

Exception Report R1-01

The samples were received on and log-in performed on 9/14/17. A total of 3 samples were received and 2 were analyzed. The samples arrived in good condition and were properly packaged.

DHL Analytical, Inc.

Date: *15-Sep-17*

CLIENT: Weston Solutions, Inc.
Project: Spector-Harvey Sampling
Lab Order: 1709107

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1709107-01	Spector TB		09/13/17 08:00 AM	9/14/2017
1709107-02	Spector W-1		09/13/17 11:30 AM	9/14/2017
1709107-03	Spector FB		09/13/17 11:40 AM	9/14/2017

Lab Order: 1709107
Client: Weston Solutions, Inc.
Project: Spector-Harvey Sampling

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1709107-02A	Spector W-1	09/13/17 11:30 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	09/14/17 09:53 AM	82366
1709107-03A	Spector FB	09/13/17 11:40 AM	Field Blank	SW5030C	Purge and Trap Water GC/MS	09/14/17 09:53 AM	82366

Lab Order: 1709107
Client: Weston Solutions, Inc.
Project: Spector-Harvey Sampling

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1709107-02A	Spector W-1	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	82366	1	09/14/17 03:10 PM	GCMS5_170914A
1709107-03A	Spector FB	Field Blank	SW8260C	8260 Water Volatiles by GC/MS	82366	1	09/14/17 01:12 PM	GCMS5_170914A

DHL Analytical, Inc.

Date: *15-Sep-17*

CLIENT:	Weston Solutions, Inc.	**Client Sample ID:**	Spector W-1
Project:	Spector-Harvey Sampling	**Lab ID:**	1709107-02
Project No:	02444.034.001.0001	**Collection Date:**	09/13/17 11:30 AM
Lab Order:	1709107	**Matrix:**	AQUEOUS

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Carbon tetrachloride	<0.000300	0.000300	0.00100		mg/L	1	09/14/17 03:10 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	09/14/17 03:10 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/14/17 03:10 PM
IS: 1,4-Dichlorobenzene-d4	76.8	0	50-200		%REC	1	09/14/17 03:10 PM
IS: Chlorobenzene-d5	79.4	0	50-200		%REC	1	09/14/17 03:10 PM
IS: Fluorobenzene	76.6	0	50-200		%REC	1	09/14/17 03:10 PM
Surr: 1,2-Dichloroethane-d4	110	0	72-119		%REC	1	09/14/17 03:10 PM
Surr: 4-Bromofluorobenzene	97.7	0	76-119		%REC	1	09/14/17 03:10 PM
Surr: Dibromofluoromethane	101	0	85-115		%REC	1	09/14/17 03:10 PM
Surr: Toluene-d8	97.3	0	81-120		%REC	1	09/14/17 03:10 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAC certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

DHL Analytical, Inc.

Date: *15-Sep-17*

CLIENT:	Weston Solutions, Inc.	**Client Sample ID:**	Spector FB
Project:	Spector-Harvey Sampling	**Lab ID:**	1709107-03
Project No:	02444.034.001.0001	**Collection Date:**	09/13/17 11:40 AM
Lab Order:	1709107	**Matrix:**	FIELD BLANK

Analyses	Result	SDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		**SW8260C**					Analyst: **DEW**
Carbon tetrachloride	<0.000300	0.000300	0.00100		mg/L	1	09/14/17 01:12 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	09/14/17 01:12 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	09/14/17 01:12 PM
IS: 1,4-Dichlorobenzene-d4	78.1	0	50-200		%REC	1	09/14/17 01:12 PM
IS: Chlorobenzene-d5	82.3	0	50-200		%REC	1	09/14/17 01:12 PM
IS: Fluorobenzene	79.2	0	50-200		%REC	1	09/14/17 01:12 PM
Surr: 1,2-Dichloroethane-d4	110	0	72-119		%REC	1	09/14/17 01:12 PM
Surr: 4-Bromofluorobenzene	99.5	0	76-119		%REC	1	09/14/17 01:12 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	1	09/14/17 01:12 PM
Surr: Toluene-d8	97.1	0	81-120		%REC	1	09/14/17 01:12 PM

Qualifiers:

ND - Not Detected at the SDL
J - Analyte detected between SDL and RL
B - Analyte detected in the associated Method Blank
DF- Dilution Factor
N - Parameter not NELAC certified
See Final Page of Report for MQLs and MDLs
S - Spike Recovery outside control limits
C - Sample Result or QC discussed in Case Narrative
RL - Reporting Limit (MQL adjusted for moisture and sample size)
SDL - Sample Detection Limit
E - TPH pattern not Gas or Diesel Range Pattern

CLIENT: Weston Solutions, Inc.
Work Order: 1709107
Project: Spector-Harvey Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_170706A

Sample ID **DCS-81295**	Batch ID: **81295**	TestNo: **SW8260C**	Units: **mg/L**
SampType: **DCS**	Run ID: **GCMS5_170706A**	Analysis Date: **7/6/2017 12:55:00 PM**	Prep Date: **7/6/2017**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon tetrachloride	0.000922	0.00100	0.000464	0	199	10	400	0	0	
Chloroform	0.000442	0.00100	0.000464	0	95.3	10	400	0	0	

Sample ID **DCS2/LQV1-81295**	Batch ID: **81295**	TestNo: **SW8260C**	Units: **mg/L**
SampType: **DCS2**	Run ID: **GCMS5_170706A**	Analysis Date: **7/6/2017 1:19:00 PM**	Prep Date: **7/6/2017**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methylene chloride	0.00176	0.00250	0.00186	0	94.4	10	400	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Weston Solutions, Inc.
Work Order: 1709107
Project: Spector-Harvey Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_170914A

The QC data in batch 82366 applies to the following samples: 1709107-02A, 1709107-03A

Sample ID **LCS-82366** Batch ID: **82366** TestNo: **SW8260C** Units: **mg/L**
SampType: **LCS** Run ID: **GCMS5_170914A** Analysis Date: **9/14/2017 10:27:00 AM** Prep Date: **9/14/2017**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon tetrachloride	0.0249	0.00100	0.0232	0	107	66	138			
Chloroform	0.0262	0.00100	0.0232	0	113	69	128			
Methylene chloride	0.0254	0.00250	0.0232	0	110	63	137			
IS: 1,4-Dichlorobenzene-d4	0.200		0.200		82.0	50	200			
IS: Chlorobenzene-d5	0.200		0.200		84.0	50	200			
IS: Fluorobenzene	0.200		0.200		80.8	50	200			
Surr: 1,2-Dichloroethane-d4	225		200.0		112	72	119			
Surr: 4-Bromofluorobenzene	199		200.0		99.4	76	119			
Surr: Dibromofluoromethane	206		200.0		103	85	115			
Surr: Toluene-d8	196		200.0		98.2	81	120			

Sample ID **LCSD-82366** Batch ID: **82366** TestNo: **SW8260C** Units: **mg/L**
SampType: **LCSD** Run ID: **GCMS5_170914A** Analysis Date: **9/14/2017 10:50:00 AM** Prep Date: **9/14/2017**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon tetrachloride	0.0258	0.00100	0.0232	0	111	66	138	3.73	20	
Chloroform	0.0247	0.00100	0.0232	0	106	69	128	6.23	20	
Methylene chloride	0.0238	0.00250	0.0232	0	102	63	137	6.77	20	
IS: 1,4-Dichlorobenzene-d4	0.200		0.200		83.2	50	200	0	0	
IS: Chlorobenzene-d5	0.200		0.200		84.5	50	200	0	0	
IS: Fluorobenzene	0.200		0.200		82.1	50	200	0	0	
Surr: 1,2-Dichloroethane-d4	224		200.0		112	72	119	0	0	
Surr: 4-Bromofluorobenzene	200		200.0		99.8	76	119	0	0	
Surr: Dibromofluoromethane	205		200.0		102	85	115	0	0	
Surr: Toluene-d8	198		200.0		99.1	81	120	0	0	

Sample ID **MB-82366** Batch ID: **82366** TestNo: **SW8260C** Units: **mg/L**
SampType: **MBLK** Run ID: **GCMS5_170914A** Analysis Date: **9/14/2017 11:38:00 AM** Prep Date: **9/14/2017**

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon tetrachloride	<0.000300	0.00100								
Chloroform	<0.000300	0.00100								
Methylene chloride	<0.00250	0.00250								
IS: 1,4-Dichlorobenzene-d4	0.200		0.200		80.9	50	200			
IS: Chlorobenzene-d5	0.200		0.200		85.1	50	200			
IS: Fluorobenzene	0.200		0.200		81.3	50	200			
Surr: 1,2-Dichloroethane-d4	217		200.0		109	72	119			
Surr: 4-Bromofluorobenzene	200		200.0		99.8	76	119			
Surr: Dibromofluoromethane	206		200.0		103	85	115			
Surr: Toluene-d8	195		200.0		97.6	81	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Weston Solutions, Inc.
Work Order: 1709107
Project: Spector-Harvey Sampling

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS5_170914A

Sample ID **ICV-170914**	Batch ID: **R94155**	TestNo: **SW8260C**	Units: **mg/L**
SampType: **ICV**	Run ID: **GCMS5_170914A**	Analysis Date: **9/14/2017 9:40:00 AM**	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Carbon tetrachloride	0.0479	0.00100	0.0464	0	103	80	120			
Chloroform	0.0487	0.00100	0.0464	0	105	80	120			
Methylene chloride	0.0470	0.00250	0.0464	0	101	80	120			
IS: 1,4-Dichlorobenzene-d4	0.200		0.200		81.2	50	200			
IS: Chlorobenzene-d5	0.200		0.200		80.8	50	200			
IS: Fluorobenzene	0.200		0.200		78.9	50	200			
Surr: 1,2-Dichloroethane-d4	217		200.0		108	72	119			
Surr: 4-Bromofluorobenzene	198		200.0		99.0	76	119			
Surr: Dibromofluoromethane	206		200.0		103	85	115			
Surr: Toluene-d8	198		200.0		99.1	81	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

DHL Analytical, Inc.

Date: *15-Sep-17*

CLIENT: Weston Solutions, Inc.
Work Order: 1709107
Project: Spector-Harvey Sampling

MQL SUMMARY REPORT

TestNo: SW8260C	MDL	MQL
Analyte	**mg/L**	**mg/L**
Carbon tetrachloride	0.000300	0.00100
Chloroform	0.000300	0.00100
Methylene chloride	0.00250	0.00250

Qualifiers: MQL -Method Quantitation Limit as defined by TRRP
MDL -Method Detection Limit as defined by TRRP

GCMS5
For

DHL Work Order
1709107

GCMS5_170914A
For

DHL Work Order
1709107

Lab Data Review Check List
EPA Method 8260 / 624 - Volatile Organic Compounds by GC/MS

Project Number(s): SEE RUN LOG	**Run ID: GCMS5_170914A**
Batch Number(s): SEE RUN LOG	**SOP:** ORGANICS-Volatiles-01
Matrix:	

Review Item	Yes	No	N/A	2nd Level Review
Data Folder Contents 1. Is the Prep Batch Report included? Check and record the following: ***Prep Start/End Dates, Sample Amounts, Bottle #s, pH (H_2O samples)***	X			x
2. Are the reagents and spikes listed on the Prep Batch Report current with a valid expiration date? ***All standard/QC sample preparations shall be documented in LIMS***	X			
3. Is the Run Log and instrument sequence included? ***Check the Test Code, Sample Type, Batch ID, and Analysis Date/Time***	X			
4. Is the System Verification - Tune Report included? ***Date/Tme of Tune starts 12-hour analysis window***	X			
5. Is the Evaluate Continuing Calibration Report included?	X			

Daily Demonstration of Performance

QC items that do not meet method/SOP/project requirements will be described on the run log. All variances that impact data quality will be described in the Variance/Comment Section on page 2.

Review Item	Frequency	Limits	Pass	Fail (List Batch/Sample) **See Run Log**	2nd Level Review
BFB Tune	Before ICAL Every 12 hours	See Tune Eval Report	X		x
Initial Calibration Curve (ICAL) (minimum: 5 Standards)	Prior to samples and when ICV fails	Avg. RF - %RSD ≤ 15% Curve (COD) - R^2 ≥ 0.990	X		
SSCV - (Second Source)	After calibration (ICAL)	70-130% non-DoD 80-120% DoD	X		
ICV - (Daily Initial Cal Verification)	Every 12 hours	ISTDs Area% (50-200) Surrogates %R (See LIMS) 8260 %R (80-120) for >80% analytes reported Analytes %R (70-130) TCEQ Analytes %R (80-120) DoD	X		

Review Item	Frequency	Limits	Pass	Fail	N/A	Review
Method Blank (MB) System Blank (SYS Blank)	Every Batch (MB) Daily (SYS BL)	< MDL / <½ RL (DoD) or <1/10 the sample/reg limit	X			x
Lab Control Sample (LCS)	Every Batch/20 samples	See LIMS	X			
Lab Control Sample Dup (LCSD)	Insufficient sample Sample Matrix	See LIMS	X			
LCSD - RPD	Every LCS/LCSD	≤ 20 (Aq) / ≤ 30 (Soil&DoD)	X			
Field Samples	Up to 20 per prep batch	ISTDs Area% (50-200%) Surrogates %R (See LIMS) RRT ± 0.06 RRT Standard Q value > 70 - check for #	X			
Matrix Spike (MS)	Every Batch/20 samples	See LIMS			X	
Matrix Spike Duplicate (MSD) (MSD is N/A for Method 624)	Every Prep Batch except Method 624	See LIMS			X	
MSD - RPD (MSD is N/A for Method 624)	Every MS/MSD except Method 624	≤ 20 (Aq) / ≤ 30 (Soil&DoD)			X	

Lab Data Review Check List
EPA Method 8260 / 624 - Volatile Organic Compounds by GC/MS

Review Item	Criteria	Yes	No	N/A	2nd Level Review
Sample Analysis 1. Are all sample hold times met? ***14 days for <2 (Aq) except for Vinyl Chloride, Styrene, 2-CEVE.** ****No BTEX**	3 days (Aq)-Acrolein			X	x
	7 days (Aq)-pH>2-Full+BTEX	X			
	14 days (Soil)			X	
	14 days (Aq)-pH≤2*	X			
	14 days (Aq)-pH>2**			X	
2. Are all manual integrations signed (Before & After)?	Sign(Before & After)/LIMS Comment/MI Form(DoD)			X	
3. Are all samples with concentrations > the highest ICAL STD diluted and reanalyzed?				X	
Review Item #3 is N/A ONLY if all sample results are within Calibration range or NO if dilution is in different folder					
4. Is mass spectra reviewed/verified if Q value is <70 and/or # flag for results >MDL (<92 for Acetone)?	Q value <70 - All hits Q value <92 - Acetone			X	x
5. Are ALL reported analytes > MDL (+ J flags) highlighted by the analyst?		X	**Return to analyst if NO**		

VARIANCE REPORT

QC items that do not meet method/SOP/project requirements will be described on the run log. All variances that impact data quality will be described in this section.

NON-CONFORMANCES / VARIANCE 1. Are all non-conformances included and noted?	All deviations from the method and SOP that affect data quality			X	x
2. Are all corrective actions included?				X	
3. Does the variance require approval by the Technical Director/General Manager/QA Manager?				X	

Approved by: Date:

Description and Corrective Actions of QC items that do not meet method/SOP/project requirements:

****INCLUDE VARIANCE ITEM / REASON / CORRECTIVE ACTION / IMPACT ON DATA****

VARIANCE ITEM	REASON	CORRECTIVE ACTION
___ Hold Time exceeded (7D/14D/Meth 5035 ASAP)	___ Sample Received out of HT	___ Reanalyze QC to confirm
___ ICV out of control (± 20% DoD/30%)	___ Carryover from previous run	___ Recalibrate
___ LCS ___ LCSD out of control (See LIMS)	___ Cross contamination	___ Reprep/Reanalyze sample
___ MB/SYS BL out of control (> MDL / >½ RL)	___ Lab Artifact	___ Reprep/Reanalyze Batch
___ Internal Standard(s) out of control limits	___ Prep Spike error (describe)	___ Reanalyze Batch/Sample/QC
___ 2 or more Surrogates out of control limits	___ High Levels of target analytes	___ Verify H2O/reagents are clean
___ RPD out of control for LCS/LCSD (>20/30%)	___ High Levels of non-targets	___ Reanalyze sample to confirm
___ MS ___ MSD out of control (See LIMS)	___ Insufficient sample for QC	___ Sample results ND w/ dilution
___ RPD out of control for MS/MSD (>20/30%)	___ Prep Error	___ Client notified and approved
___ No MS/MSD prepared - LCS/LCSD used instead	___ Analytical Error	___ Flag data / Case narrative
___ Missing QC (other than MS/MSD)	___ Client Request	___ Instrument Maintenance
___ QC sample(s) was mis-spiked	___ Matrix Effect	___ Accept data
___ Headspace Present	___ Other (describe below)	___ Confirmed by reanalysis
___ Other (describe below)	___ Cannot reanalyze (HT out/Lack of Sample)	

General Comments and Impact on Data:

Analyst: Don Winston Date of Completion: 09/15/17

Second-Level Review: Janice Whitt Date: 9/15/2017

REVIEWED BY
By Janice Whitt at 2:22:18 PM, 9/15/2017

DHL Analytical, Inc.

Run ID: GCMS5_170914A **Run No.:** 94155

Analytical Run Date: 9/14/2017 **InstrumentID:** GCMS5

Analyst: Don Winston **Column:** Rtx-VMS (30m x 0.25mm ID x 1.4µm df)

Calibration ID: 793 **Column ID:** 0.25mm

Column Length: 30m

Cal Comments: 170817X.M
SSCV out: Acetone low (73.82%) for DoD. IPA and TBA high in SSCV. All other compounds within 20%. No MI

SampID	DF	TestCode	SampType	Batch ID	Analysis Date/Time	Q	Comments
ICV-170914	1	8260_W_AF2	ICV	R94155	9/14/2017 9:40:00 AM		
LCS-82366	1	8260_W_AF2	LCS	82366	9/14/2017 10:27:00 AM		
LCSD-82366	1	8260_W_AF2	LCSD	82366	9/14/2017 10:50:00 AM		Insufficient sample for MS/MSD.
MB-82366	1	8260_W_AF2	MBLK	82366	9/14/2017 11:38:00 AM		
1709097-02A	1	8260_W_AF2	SAMP	82366	9/14/2017 12:01:00 PM		
1709099-03A	1	8260_W_AF2	SAMP	82366	9/14/2017 12:25:00 PM		
1709100-02A	1	8260_W_AF2	SAMP	82366	9/14/2017 12:49:00 PM		
1709107-03A	1	8260_W_AF2	SAMP	82366	9/14/2017 1:12:00 PM		
1709108-03A	1	8260_W_AF2	SAMP	82366	9/14/2017 1:36:00 PM		
1709097-01A	1	8260_W_AF2	SAMP	82366	9/14/2017 1:59:00 PM		
1709099-01A	1	8260_W_AF2	SAMP	82366	9/14/2017 2:23:00 PM		
1709100-01A	1	8260_W_AF2	SAMP	82366	9/14/2017 2:46:00 PM		
1709107-02A	1	8260_W_AF2	SAMP	82366	9/14/2017 3:10:00 PM		
1709108-02A	1	8260_W_AF2	SAMP	82366	9/14/2017 3:34:00 PM		
1709091-01A	1	8260_W_AF2	SAMP	82366	9/14/2017 4:21:00 PM		

Std ID	Std Name	Type	Exp. Date
VAVP170913	5000 ppm ACROLEIN AND VINYL A	ICV	10/13/2017
VCDP170913	200 PPM CARBON DISULFIDE STA	ICV	10/13/2017
VCEP170913	200 PPM 2-CHLOROETHYLVINYLE	ICV	10/13/2017
VGP170913	200 PPM GAS STANDARD	ICV	10/13/2017
VIMP170913	200 PPM IODOMETHANE STANDA	ICV	10/13/2017
VKP170515B	2000 PPM KETONE STANDARD	ICV	02/16/2018
VLP170913	8260 Liquid Std. + Adds (200, 400,	ICV	10/13/2017
VMTP170913	200 PPM MIXED STANDARD	ICV	10/13/2017
VPNP170913	5000 PPM ISOPROPYL ALCOHOL	ICV	10/13/2017
VSI170912-1	25 PPM ISTD/SURROGATE 8260	ICV	12/12/2017

Sequence Name: C:\msdchem\1\sequence\170914.s
Comment:
Operator:
Data Path: c:\msdchem\1\DATA\170914\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	1	17091401	170817X	ICV-170914
2)	Sample	2	17091402	170817X	LCS-82365
3)	Sample	3	17091403	170817X	LCS-82366
4)	Sample	4	17091404	170817X	LCSD-82366
5)	Sample	5	17091405	170817X	MB-82365
6)	Sample	6	17091406	170817X	MB-82366
7)	Sample	7	17091407	170817X	1709097-02A
8)	Sample	8	17091408	170817X	1709099-03A
9)	Sample	9	17091409	170817X	1709100-02A
10)	Sample	10	17091410	170817X	1709107-03A
11)	Sample	11	17091411	170817X	1709108-03A
12)	Sample	12	17091412	170817X	1709097-01A
13)	Sample	13	17091413	170817X	1709099-01A
14)	Sample	14	17091414	170817X	1709100-01A
15)	Sample	15	17091415	170817X	1709107-02A
16)	Sample	16	17091416	170817X	1709108-02A
17)	Sample	17	17091417	170817X	1709103-01A
18)	Sample	18	17091418	170817X	1709091-01A
19)	Sample	19	17091419	170817X	1709116-01B
20)	Sample	20	17091420	170817X	1709116-02B
21)	Sample	21	17091421	170817X	1709116-04B
22)	Sample	22	17091422	170817X	1709118-01A
23)	Sample	23	17091423	170817X	1709119-01A
24)	Sample	24	17091424	170817X	1709116-01BMS

DHL Analytical, Inc.

PREP BATCH REPORT

Prep Start Date: **9/14/2017 9:53:50 AM**
Digestion:
Prep End Date: **9/14/2017 4:21:00 PM**

Prep Batch **82366** Prep Code: **5030_W_MS** Technician: **Don Winston**

Prep Factor Units: **mL/mL**

Equipment List

Pipette # 27

Sample ID	Matrix	pH	SampAmt	Fin Vol	Factor	Bottle #	Vessel	Cleanup
1709091-01A	Aqueous	<2	5	5	1.000	1 of 2		
1709097-01A	Aqueous	>3	5	5	1.000	1 of 3		
1709097-02A	Aqueous	>3	5	5	1.000	1 of 3		
1709099-01A	Aqueous	>3	5	5	1.000	1 of 3		
1709099-03A	Field Blank	>3	5	5	1.000	1 of 3		
1709100-01A	Aqueous	>3	5	5	1.000	1 of 3		
1709100-02A	Field Blank	>3	5	5	1.000	1 of 3		
1709107-02A	Aqueous	>3	5	5	1.000	2 of 3		
1709107-03A	Field Blank	>3	5	5	1.000	1 of 3		
1709108-02A	Aqueous	>3	5	5	1.000	2 of 3		
1709108-03A	Field Blank	>3	5	5	1.000	1 of 3		
LCS-82366	Aqueous		5	5	1.000	of		
LCSD-82366	Aqueous		5	5	1.000	of		
MB-82366	Aqueous		5	5	1.000	of		

Number	Reagent Name	Amt	Units	Exp. Da
8086	pH paper 0-3	1	paper	12/15/2025
11586	VOA Vials	1	vial	07/17/2027

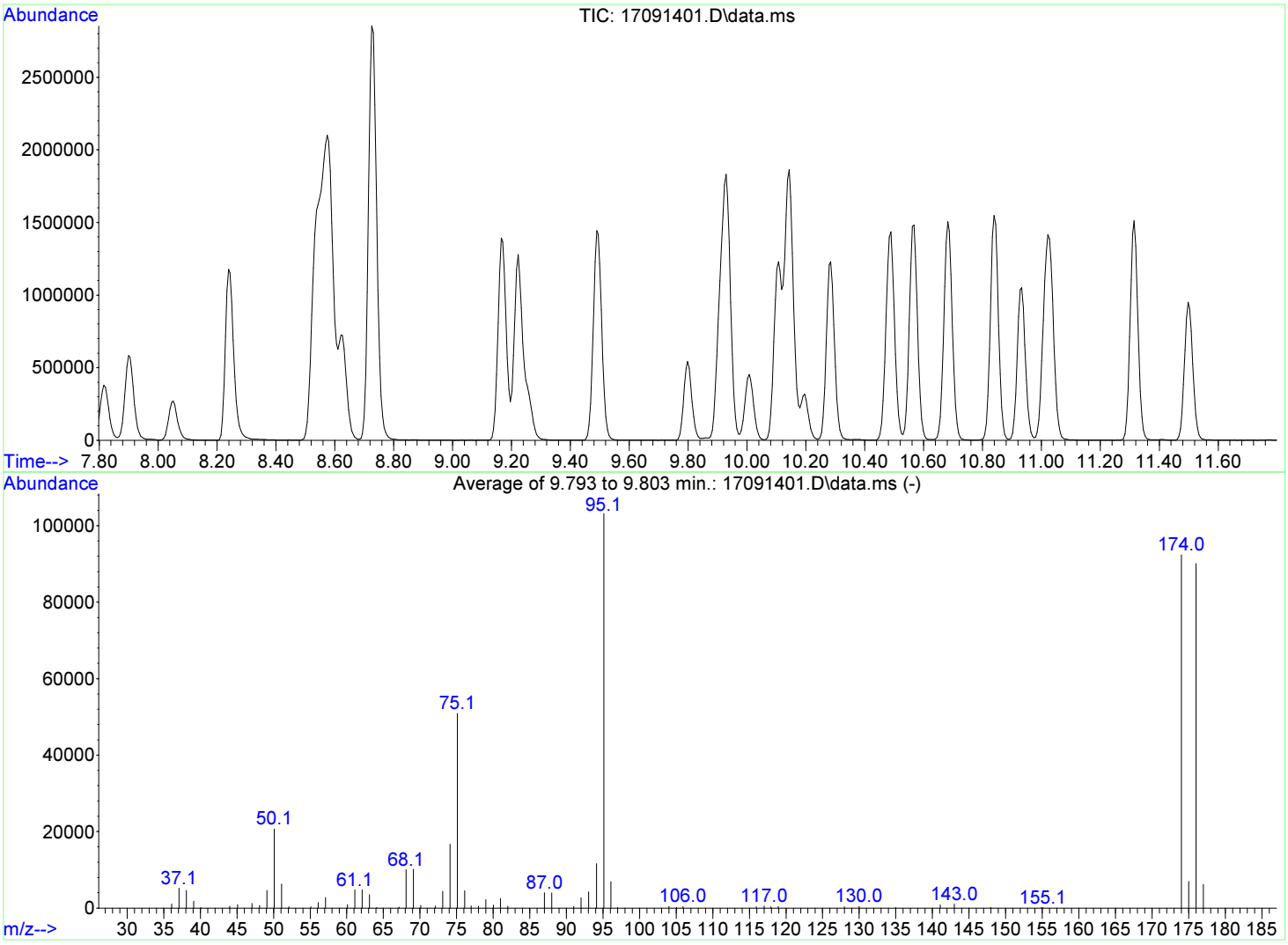
REVIEWED BY
By Janice Whitt at 1:28:55 PM, 9/15/2017

Spk ID	Spike Name	SampType	Amt (mL or g)	Exp. Date
VAVP170913	5000 ppm ACROLEIN AND VINYL ACET		0.0005	10/13/2017
VCDP170913	200 PPM CARBON DISULFIDE STANDA		0.005	10/13/2017
VCEP170913	200 PPM 2-CHLOROETHYLVINYLETHE		0.005	10/13/2017
VGP170913	200 PPM GAS STANDARD		0.005	10/13/2017
VIMP170913	200 PPM IODOMETHANE STANDARD		0.005	10/13/2017
VKP170515B	2000 PPM KETONE STANDARD		0.0025	02/16/2018
VLP170913	8260 Liquid Std. + Adds (200, 400, 1000,		0.005	10/13/2017
VMTP170913	200 PPM MIXED STANDARD		0.005	10/13/2017

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Integration File: Rteint.p

Method : C:\msdchem\1\methods\170817X.M
Title : M-8260S
Last Update : Thu Aug 17 14:33:11 2017



AutoFind: Scans 1589, 1590, 1591; Background Corrected with Scan 1580

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.0	20661	PASS
75	95	30	60	49.3	50923	PASS
95	95	100	100	100.0	103200	PASS
96	95	5	9	6.7	6908	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	89.6	92435	PASS
175	174	5	9	7.5	6957	PASS
176	174	95	101	97.5	90088	PASS
177	176	5	9	6.8	6170	PASS

REVIEWED BY
By Janice Whitt at 1:28:57 PM, 9/15/2017

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 09:57:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	Fluorobenzene	1.000	1.000	0.0	80	0.00
2	CP	Dichlorodifluoromethane	2.541	2.467	2.9	81	0.00
3	CP	Chloromethane	2.660	2.730	-2.6	83	0.00
4	CP	Vinyl chloride	2.332	2.293	1.7	81	0.00
5	CP	Bromomethane	0.787	0.690	12.3	80	0.00
6	CP	Chloroethane	0.998	1.018	-2.0	89	0.00
7	CP	Trichlorofluoromethane	3.125	3.491	-11.7	91	0.00
8	CP	Trichlorotrifluoroethane	2.026	2.021	0.2	80	0.00
9		Acrolein	0.321	0.333	-3.7	77	0.00
10		Isopropyl Alcohol	0.025	0.017	32.0	43	0.02
11	CP	Acetone	0.499	0.422	15.4	67	0.00
12		Iodomethane	1.266	1.129	10.8	60	0.00
13	CP	1,1-Dichloroethene	1.710	1.717	-0.4	81	0.00
14	CP	Carbon disulfide	5.777	5.802	-0.4	82	0.00
15	CP	Methylene chloride	1.866	1.803	3.4	81	0.00
16	CP	Methyl Acetate	1.496	1.380	7.8	71	0.00
17	CP	trans-1,2-Dichloroethene	1.848	1.869	-1.1	82	0.00
18		Acrylonitrile	0.655	0.660	-0.8	71	0.00
19	CP	MTBE	5.000	5.296	-5.9	84	0.00
20		Tert-Butanol	0.098	0.075	23.5	55	0.00
21		Isopropyl Ether	6.674	6.634	0.6	79	0.00
22	CP	1,1-Dichloroethane	3.376	3.468	-2.7	83	0.00
23		Vinyl acetate	4.006	4.461	-11.4	86	0.00
24		Ethyl-Tert-butyl Ether	5.602	5.878	-4.9	84	0.00
25	CP	cis-1,2-Dichloroethene	2.025	2.017	0.4	81	0.00
26		2,2-Dichloropropane	2.484	2.899	-16.7	95	0.00
27		Bromochloromethane	0.860	0.886	-3.0	85	0.00
28	CP	Cyclohexane	3.262	3.029	7.1	77	0.00
29	CP	Chloroform	3.383	3.549	-4.9	85	0.00
30	s	Dibromofluoromethane	0.247	0.255	-3.2	82	0.00
31		1,1-Dichloropropene	2.724	2.801	-2.8	82	0.00
32	s	1,2-Dichloroethane-d4	0.311	0.337	-8.4	88	0.00
33	CP	1,1,1-Trichloroethane	2.865	3.205	-11.9	88	0.00
34	CP	1,2-Dichloroethane	2.422	2.641	-9.0	90	0.00
35	CP	Benzene	7.687	7.686	0.0	81	0.00
36	CP	2-Butanone	0.906	0.815	10.0	67	0.00
37	CP	Carbon tetrachloride	2.406	2.574	-7.0	86	0.00
38		Tert-amyl Methyl Ether	4.654	4.925	-5.8	84	0.00
39	CP	Trichloroethene	2.047	2.104	-2.8	83	0.00
40	CP	Methyl Cyclohexane	3.350	3.198	4.5	78	0.00
41	T	Dibromomethane	1.084	1.106	-2.0	83	0.00
42	CP	Bromodichloromethane	2.219	2.469	-11.3	87	0.00
43	CP	1,2-Dichloropropane	1.922	1.938	-0.8	80	0.00
44	T	2-Chloroethylvinylether	1.365	1.382	-1.2	80	0.00
45	CP	cis-1,3-Dichloropropene	2.746	2.941	-7.1	84	0.00
46	CP	trans-1,3-Dichloropropene	2.184	2.445	-12.0	86	0.00
47	CP	1,1,2-Trichloroethane	1.498	1.544	-3.1	82	0.00
48	CP	Toluene	4.803	4.787	0.3	80	0.00
49	i	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
50	CP	4-Methyl-2-pentanone	2.955	2.738	7.3	72	0.00
51	s	Toluene-d8	1.330	1.318	0.9	80	0.00
52	CP	2-Hexanone	2.080	1.902	8.6	70	0.00
53	CP	Dibromochloromethane	2.230	2.451	-9.9	87	0.00

Evaluate Continuing Calibration Report

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 09:57:10 2017
Quant Method : C:\MSDCHEM\1\METHODS\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 50% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
54		1,3-Dichloropropane	3.826	3.846	-0.5	82	0.00
55	CP	Tetrachloroethene	2.463	2.473	-0.4	82	0.00
56	CP	1,2-Dibromoethane	2.243	2.288	-2.0	81	0.00
57	CP	Chlorobenzene	7.003	7.034	-0.4	82	0.00
58		1,1,1,2-Tetrachloroethane	2.196	2.395	-9.1	87	0.00
59	CP	Ethylbenzene	3.936	3.929	0.2	81	0.00
60	CP	Bromoform	1.435	1.594	-11.1	85	0.00
61	CP	Styrene	6.836	7.138	-4.4	82	0.00
62		1-Chlorohexane	3.173	3.099	2.3	82	0.00
63	CP	m,p-Xylene	4.747	4.803	-1.2	81	0.00
64	CP	o-Xylene	4.522	4.593	-1.6	81	0.00
65	CP	Isopropylbenzene	11.539	11.905	-3.2	82	0.00
66	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	82	0.00
67		Bromobenzene	5.948	5.830	2.0	83	0.00
68	CP	1,1,2,2-Tetrachloroethane	5.712	5.313	7.0	79	0.00
69	T	1,2,3-Trichloropropane	1.744	1.708	2.1	81	0.00
70	s	4-Bromofluorobenzene	0.991	0.981	1.0	82	0.00
71		1,4-Dichloro-2-butene	1.739	1.671	3.9	78	0.00
72	T	n-Propylbenzene	29.539	29.324	0.7	83	0.00
73		2-Chlorotoluene	18.515	18.525	-0.1	84	0.00
74		1,3,5-Trimethylbenzene	19.670	19.986	-1.6	84	0.00
75		4-Chlorotoluene	17.148	17.277	-0.8	85	0.00
76		tert-Butylbenzene	17.567	17.689	-0.7	85	0.00
77		1,2,4-Trimethylbenzene	19.762	20.149	-2.0	84	0.00
78		sec-Butylbenzene	26.231	25.931	1.1	83	0.00
79	CP	1,3-Dichlorobenzene	10.885	10.680	1.9	83	0.00
80		p-Isopropyltoluene	21.507	22.061	-2.6	84	0.00
81	CP	1,4-Dichlorobenzene	11.205	10.910	2.6	84	0.00
82	CP	1,2-Dichlorobenzene	9.827	9.691	1.4	83	0.00
83	CP	1,2-Dibromo-3-chloropr...	0.901	0.923	-2.4	78	0.00
84		n-Butylbenzene	19.489	19.988	-2.6	85	0.00
85	CP	1,2,4-Trichlorobenzene	6.542	6.793	-3.8	86	0.00
86		Hexachlorobutadiene	3.506	3.690	-5.2	91	0.00
87		Naphthalene	15.754	15.152	3.8	78	0.00
88		1,2,3-Trichlorobenzene	5.769	5.838	-1.2	84	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 13:47:17 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	599582	200.00	ug/L		79
49) Chlorobenzene-d5	8.548	117	430405	200.00	ug/L		81
66) 1,4-Dichlorobenzene-d4	11.012	152	215469	200.00	ug/L		81
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	153072	206.42	ug/L		0.00
Spiked Amount 200.000			Recovery = 103.21%				
32) 1,2-Dichloroethane-d4	5.410	65	202239	216.88	ug/L		0.00
Spiked Amount 200.000			Recovery = 108.44%				
51) Toluene-d8	7.057	98	567307	198.15	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.08%				
70) 4-Bromofluorobenzene	9.798	95	211446	198.10	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.05%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	343117	45.049	ug/L		99
3) Chloromethane	1.770	50	379813	47.630	ug/L		99
4) Vinyl chloride	1.848	62	318901	45.617	ug/L		100
5) Bromomethane	2.162	94	95945	40.653	ug/L		97
6) Chloroethane	2.287	64	141598	47.331	ug/L		100
7) Trichlorofluoromethane	2.429	101	485625	51.835	ug/L		99
8) Trichlorotrifluoroethane	2.946	101	281176	46.301	ug/L	#	98
9) Acrolein	3.203	56	115895	112.593	ug/L		100
10) Isopropyl Alcohol	3.386	45	5870	92.906	ug/L	#	100
11) Acetone	3.459	43	293634	199.915	ug/L		96
12) Iodomethane	3.041	142	157063	35.451	ug/L		96
13) 1,1-Dichloroethene	2.910	96	238874	46.599	ug/L		95
14) Carbon disulfide	2.941	76	807129	46.605	ug/L		99
15) Methylene chloride	3.428	84	250870	46.956	ug/L		99
16) Methyl Acetate	3.574	43	191969	42.792	ug/L		97
17) trans-1,2-Dichloroethene	3.574	96	259948	46.925	ug/L		99
18) Acrylonitrile	4.139	53	183560	82.153	ug/L		99
19) MTBE	3.658	73	736632	49.146	ug/L		98
20) Tert-Butanol	3.731	59	52051	187.604	ug/L	#	100
21) Isopropyl Ether	3.987	45	922769	46.117	ug/L		99
22) 1,1-Dichloroethane	4.108	63	482448	47.664	ug/L		99
23) Vinyl acetate	4.306	43	1551325	122.900	ug/L		99
24) Ethyl-Tert-butyl Ether	4.296	59	817601	48.686	ug/L		99
25) cis-1,2-Dichloroethene	4.573	96	280587	46.226	ug/L		98
26) 2,2-Dichloropropane	4.662	77	403310	54.166	ug/L		98
27) Bromochloromethane	4.740	128	123283	47.828	ug/L		99
28) Cyclohexane	4.756	84	421386	43.087	ug/L		98
29) Chloroform	4.798	83	493632	48.667	ug/L		99
31) 1,1-Dichloropropene	5.091	75	389628	47.714	ug/L		99
33) 1,1,1-Trichloroethane	4.981	97	445854	51.905	ug/L		99
34) 1,2-Dichloroethane	5.467	62	367314	50.597	ug/L		100
35) Benzene	5.300	78	1069084	46.393	ug/L		99
36) 2-Butanone	5.044	43	566562	208.676	ug/L		100
37) Carbon tetrachloride	4.929	117	358006	47.869	ug/L		98
38) Tert-amyl Methyl Ether	5.384	73	685122	49.099	ug/L		99
39) Trichloroethene	5.807	130	292723	47.707	ug/L		97
40) Methyl Cyclohexane	5.807	55	444840	44.299	ug/L		98
41) Dibromomethane	6.179	93	153893	47.365	ug/L		99
42) Bromodichloromethane	6.315	83	343399	51.627	ug/L		99
43) 1,2-Dichloropropane	6.257	63	269556	46.790	ug/L		97
44) 2-Chloroethylvinylether	6.812	63	192295	46.977	ug/L		99
45) cis-1,3-Dichloropropene	6.880	75	409060	49.682	ug/L		98

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 13:47:17 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

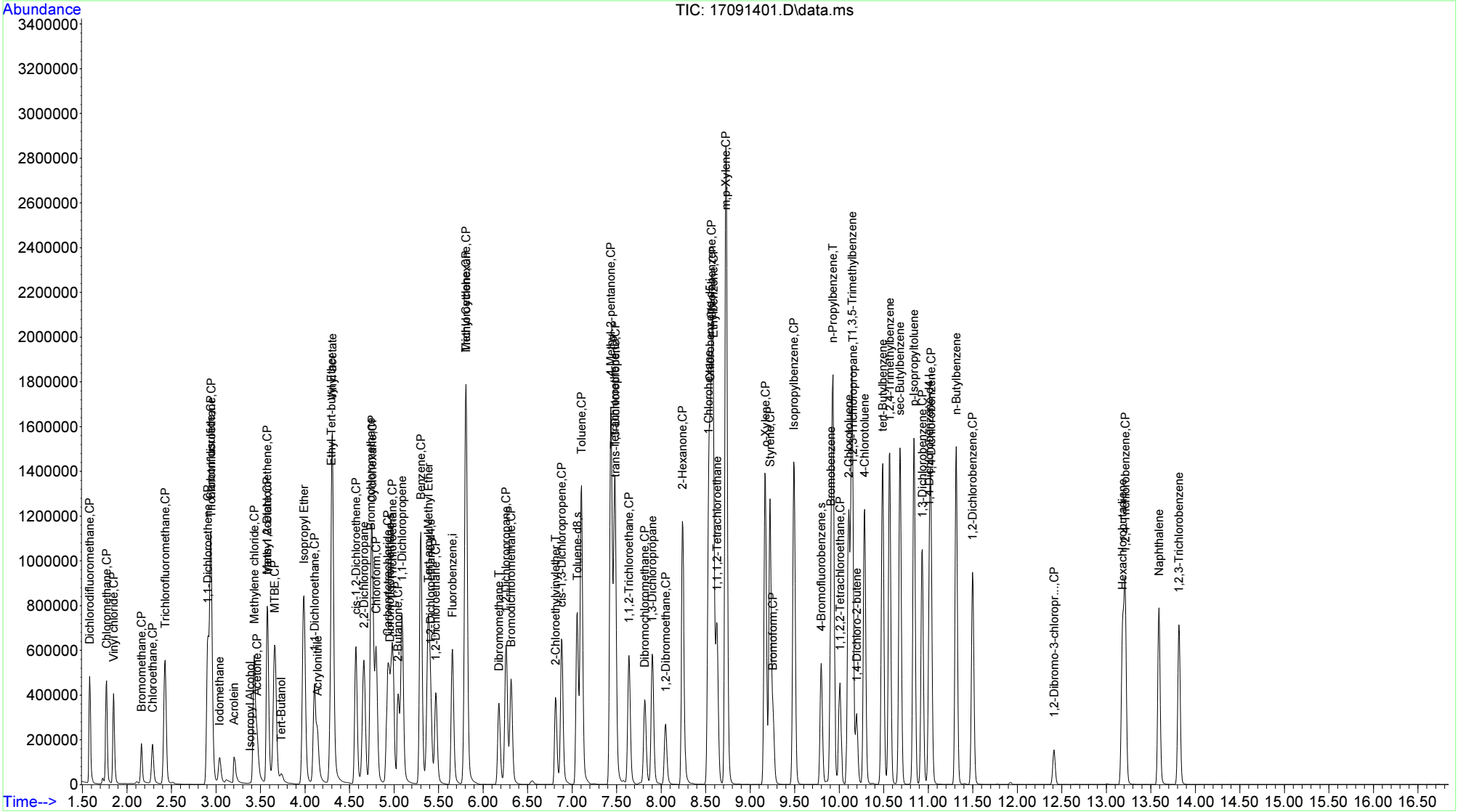
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	340141	51.955	ug/L	99
47) 1,1,2-Trichloroethane	7.638	97	214720	47.798	ug/L	99
48) Toluene	7.105	92	665880	46.248	ug/L	97
50) 4-Methyl-2-pentanone	7.434	43	1367027	214.991	ug/L	99
52) 2-Hexanone	8.239	43	949767	212.177	ug/L	98
53) Dibromochloromethane	7.816	129	244757	49.656	ug/L	100
54) 1,3-Dichloropropane	7.900	76	384007	46.633	ug/L	99
55) Tetrachloroethene	7.476	164	246981	46.597	ug/L	99
56) 1,2-Dibromoethane	8.051	107	228466	47.339	ug/L	100
57) Chlorobenzene	8.564	112	702396	46.608	ug/L	99
58) 1,1,1,2-Tetrachloroethane	8.627	131	239180	49.798	ug/L	98
59) Ethylbenzene	8.585	106	392343	46.317	ug/L	96
60) Bromoform	9.254	173	159151	49.285	ug/L	99
61) Styrene	9.223	104	712712	48.446	ug/L	99
62) 1-Chlorohexane	8.532	55	309462	45.315	ug/L	97
63) m,p-Xylene	8.726	106	959108	93.891	ug/L	96
64) o-Xylene	9.170	106	458678	47.129	ug/L	98
65) Isopropylbenzene	9.490	105	1188720	47.871	ug/L	98
67) Bromobenzene	9.908	156	291449	45.484	ug/L	98
68) 1,1,2,2-Tetrachloroethane	10.007	83	265598	43.159	ug/L	99
69) 1,2,3-Trichloropropane	10.154	110	85390	45.456	ug/L	98
71) 1,4-Dichloro-2-butene	10.196	53	83556	44.612	ug/L	95
72) n-Propylbenzene	9.929	91	1465870	46.062	ug/L	98
73) 2-Chlorotoluene	10.107	91	926062	46.427	ug/L	98
74) 1,3,5-Trimethylbenzene	10.143	105	999068	47.144	ug/L	99
75) 4-Chlorotoluene	10.285	91	863653	46.749	ug/L	100
76) tert-Butylbenzene	10.488	119	884265	46.724	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	1007229	47.308	ug/L	98
78) sec-Butylbenzene	10.682	105	1296254	45.869	ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	533896	45.528	ug/L	99
80) p-Isopropyltoluene	10.839	119	1102824	47.596	ug/L	99
81) 1,4-Dichlorobenzene	11.032	146	545381	45.177	ug/L	99
82) 1,2-Dichlorobenzene	11.498	146	484418	45.756	ug/L	100
83) 1,2-Dibromo-3-chloropr...	12.413	75	46139	45.423	ug/L	94
84) n-Butylbenzene	11.315	91	999178	47.587	ug/L	100
85) 1,2,4-Trichlorobenzene	13.213	180	339563	48.181	ug/L	99
86) Hexachlorobutadiene	13.182	225	184446	48.834	ug/L	98
87) Naphthalene	13.590	128	757417	44.626	ug/L	99
88) 1,2,3-Trichlorobenzene	13.815	180	291843	46.960	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091401.D
Acq On : 14 Sep 2017 9:40 am
Operator :
Sample : ICV-170914
Misc : ICV
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 14 13:47:17 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091403.D
Acq On : 14 Sep 2017 10:27 am
Operator :
Sample : LCS-82366
Misc : LCS
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 13:47:24 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	614137	200.00	ug/L		81
49) Chlorobenzene-d5	8.548	117	447723	200.00	ug/L		84
66) 1,4-Dichlorobenzene-d4	11.011	152	217482	200.00	ug/L		82
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	156092	205.50	ug/L		0.00
Spiked Amount 200.000			Recovery = 102.75%				
32) 1,2-Dichloroethane-d4	5.410	65	214652	224.74	ug/L		0.00
Spiked Amount 200.000			Recovery = 112.37%				
51) Toluene-d8	7.057	98	584724	196.33	ug/L		0.00
Spiked Amount 200.000			Recovery = 98.17%				
70) 4-Bromofluorobenzene	9.798	95	214201	198.83	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.42%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	167955	21.529	ug/L		99
3) Chloromethane	1.770	50	183009	22.406	ug/L		100
4) Vinyl chloride	1.848	62	159610	22.290	ug/L		100
5) Bromomethane	2.162	94	40860	16.902	ug/L		97
6) Chloroethane	2.282	64	68840	22.465	ug/L		98
7) Trichlorofluoromethane	2.423	101	238345	24.838	ug/L		100
8) Trichlorotrifluoroethane	2.946	101	162073	26.056	ug/L		98
9) Acrolein	3.208	56	51428	51.046	ug/L		98
10) Isopropyl Alcohol	3.386	45	6130	94.593	ug/L	#	100
11) Acetone	3.464	43	176979	117.409	ug/L		98
12) Iodomethane	3.041	142	64400	17.182	ug/L		98
13) 1,1-Dichloroethene	2.910	96	132138	25.166	ug/L		98
14) Carbon disulfide	2.941	76	440263	24.819	ug/L		99
15) Methylene chloride	3.428	84	140406	25.432	ug/L		100
16) Methyl Acetate	3.579	43	115075	25.043	ug/L		98
17) trans-1,2-Dichloroethene	3.579	96	142062	25.037	ug/L		99
18) Acrylonitrile	4.144	53	104359	46.330	ug/L		98
19) MTBE	3.663	73	416245	27.113	ug/L		98
20) Tert-Butanol	3.741	59	41682	148.083	ug/L	#	100
21) Isopropyl Ether	3.987	45	520459	25.394	ug/L		99
22) 1,1-Dichloroethane	4.108	63	265921	25.649	ug/L		100
23) Vinyl acetate	4.311	43	718746	56.194	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	461585	26.835	ug/L		99
25) cis-1,2-Dichloroethene	4.573	96	156173	25.119	ug/L		98
26) 2,2-Dichloropropane	4.662	77	214886	28.176	ug/L		97
27) Bromochloromethane	4.746	128	69649	26.380	ug/L		96
28) Cyclohexane	4.756	84	242544	24.212	ug/L		100
29) Chloroform	4.803	83	272695	26.247	ug/L		99
31) 1,1-Dichloropropene	5.091	75	214382	25.631	ug/L		99
33) 1,1,1-Trichloroethane	4.981	97	240825	27.372	ug/L		99
34) 1,2-Dichloroethane	5.473	62	204623	27.518	ug/L		99
35) Benzene	5.300	78	594871	25.202	ug/L		100
36) 2-Butanone	5.049	43	340079	122.289	ug/L		99
37) Carbon tetrachloride	4.934	117	188602	24.879	ug/L		99
38) Tert-amyl Methyl Ether	5.389	73	380724	26.638	ug/L		99
39) Trichloroethene	5.813	130	161655	25.722	ug/L		94
40) Methyl Cyclohexane	5.807	55	256700	24.957	ug/L		98
41) Dibromomethane	6.179	93	86986	26.138	ug/L		98
42) Bromodichloromethane	6.320	83	185116	27.171	ug/L		99
43) 1,2-Dichloropropane	6.262	63	150798	25.555	ug/L		98
44) 2-Chloroethylvinylether	6.817	63	113659	27.108	ug/L		97
45) cis-1,3-Dichloropropene	6.885	75	223213	26.468	ug/L		98

Data Path : C:\msdchem\1\data\170914\
Data File : 17091403.D
Acq On : 14 Sep 2017 10:27 am
Operator :
Sample : LCS-82366
Misc : LCS
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 13:47:24 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

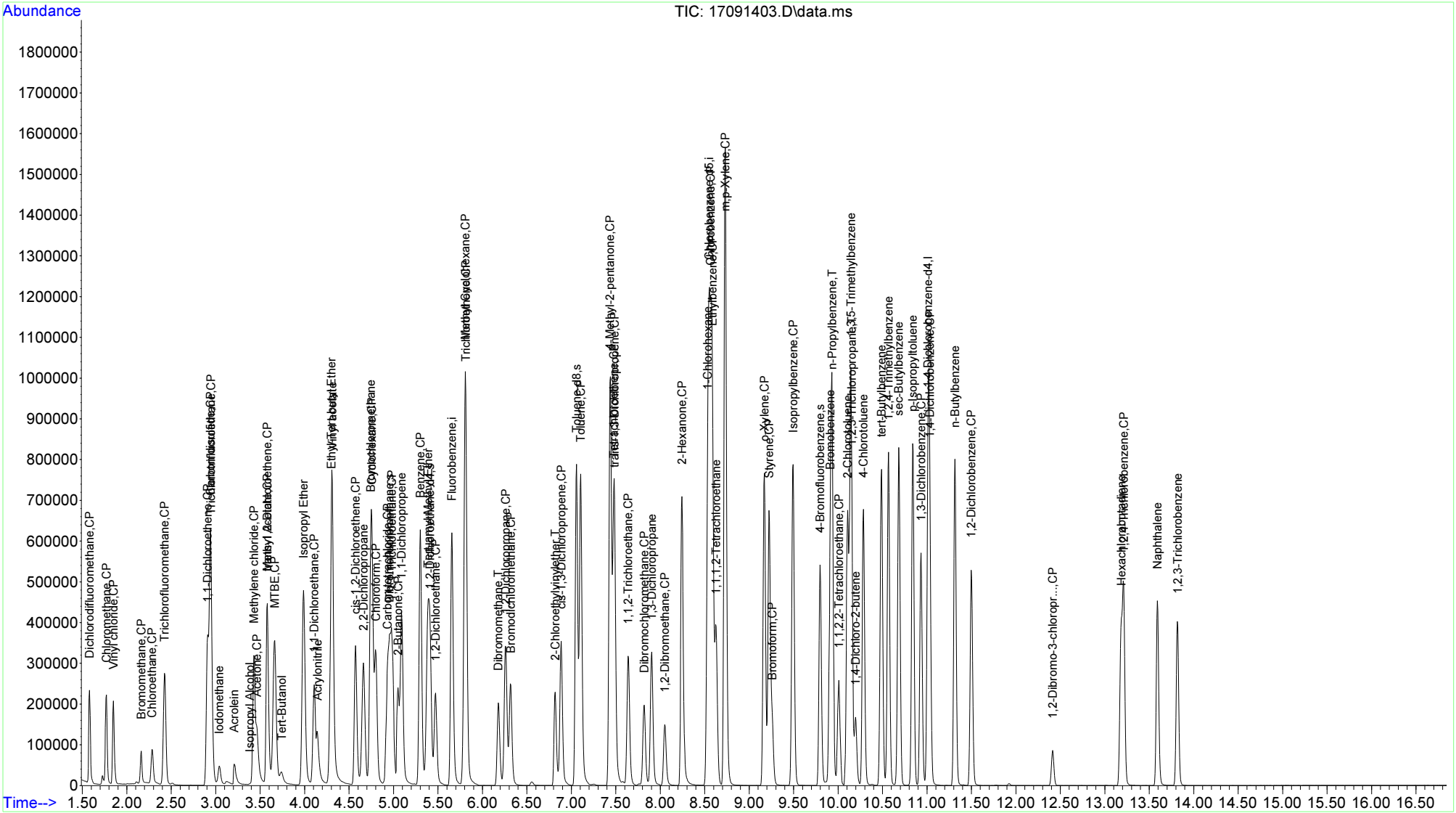
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	184121	27.457	ug/L	99
47) 1,1,2-Trichloroethane	7.638	97	122179	26.553	ug/L	97
48) Toluene	7.104	92	373162	25.303	ug/L	98
50) 4-Methyl-2-pentanone	7.434	43	822885	124.409	ug/L	98
52) 2-Hexanone	8.245	43	574309	123.338	ug/L	99
53) Dibromochloromethane	7.821	129	131095	26.141	ug/L	100
54) 1,3-Dichloropropane	7.905	76	218253	25.479	ug/L	100
55) Tetrachloroethene	7.476	164	135633	24.599	ug/L	97
56) 1,2-Dibromoethane	8.051	107	129478	25.790	ug/L	99
57) Chlorobenzene	8.564	112	389261	24.830	ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.626	131	126691	25.810	ug/L	99
59) Ethylbenzene	8.585	106	217937	24.733	ug/L	98
60) Bromoform	9.259	173	83622	25.714	ug/L	100
61) Styrene	9.223	104	392012	25.616	ug/L	98
62) 1-Chlorohexane	8.532	55	170008	23.932	ug/L	95
63) m,p-Xylene	8.731	106	528467	49.733	ug/L	97
64) o-Xylene	9.170	106	254818	25.170	ug/L	98
65) Isopropylbenzene	9.495	105	656513	25.416	ug/L	99
67) Bromobenzene	9.913	156	163103	25.218	ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.007	83	150597	24.245	ug/L	97
69) 1,2,3-Trichloropropane	10.154	110	48602	25.633	ug/L	96
71) 1,4-Dichloro-2-butene	10.196	53	45084	23.848	ug/L	92
72) n-Propylbenzene	9.934	91	800639	24.926	ug/L	99
73) 2-Chlorotoluene	10.107	91	505596	25.113	ug/L	98
74) 1,3,5-Trimethylbenzene	10.143	105	544042	25.435	ug/L	99
75) 4-Chlorotoluene	10.284	91	470761	25.246	ug/L	99
76) tert-Butylbenzene	10.488	119	477889	25.018	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	543801	25.305	ug/L	98
78) sec-Butylbenzene	10.682	105	705178	24.722	ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	292769	24.735	ug/L	98
80) p-Isopropyltoluene	10.839	119	599202	25.621	ug/L	100
81) 1,4-Dichlorobenzene	11.032	146	303564	24.913	ug/L	99
82) 1,2-Dichlorobenzene	11.498	146	271249	25.384	ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	26341	26.367	ug/L	87
84) n-Butylbenzene	11.315	91	537863	25.379	ug/L	100
85) 1,2,4-Trichlorobenzene	13.213	180	188172	26.453	ug/L	99
86) Hexachlorobutadiene	13.187	225	99683	26.148	ug/L	99
87) Naphthalene	13.590	128	439571	25.659	ug/L	99
88) 1,2,3-Trichlorobenzene	13.820	180	164841	26.279	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091403.D
Acq On : 14 Sep 2017 10:27 am
Operator :
Sample : LCS-82366
Misc : LCS
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 14 13:47:24 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091404.D
Acq On : 14 Sep 2017 10:50 am
Operator :
Sample : LCSD-82366
Misc : LCSD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 13:47:27 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	623770	200.00	ug/L		82
49) Chlorobenzene-d5	8.548	117	449990	200.00	ug/L		84
66) 1,4-Dichlorobenzene-d4	11.012	152	220713	200.00	ug/L		83
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	157784	204.52	ug/L		0.00
Spiked Amount 200.000			Recovery = 102.26%				
32) 1,2-Dichloroethane-d4	5.410	65	217169	223.86	ug/L		0.00
Spiked Amount 200.000			Recovery = 111.93%				
51) Toluene-d8	7.058	98	593372	198.23	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.11%				
70) 4-Bromofluorobenzene	9.798	95	218218	199.59	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	164682	20.783	ug/L		100
3) Chloromethane	1.770	50	170924	20.603	ug/L		99
4) Vinyl chloride	1.848	62	155785	21.420	ug/L		100
5) Bromomethane	2.162	94	38439	15.655	ug/L		99
6) Chloroethane	2.282	64	67182	21.586	ug/L		100
7) Trichlorofluoromethane	2.424	101	232381	23.842	ug/L		99
8) Trichlorotrifluoroethane	2.947	101	152274	24.102	ug/L	#	99
9) Acrolein	3.208	56	60671	58.672	ug/L		99
10) Isopropyl Alcohol	3.391	45	5585	85.284	ug/L	#	100
11) Acetone	3.464	43	163928	106.971	ug/L		98
12) Iodomethane	3.041	142	61959	16.521	ug/L		97
13) 1,1-Dichloroethene	2.910	96	124923	23.425	ug/L		97
14) Carbon disulfide	2.941	76	415795	23.078	ug/L		99
15) Methylene chloride	3.428	84	133408	23.766	ug/L		99
16) Methyl Acetate	3.579	43	110547	23.686	ug/L		97
17) trans-1,2-Dichloroethene	3.579	96	135713	23.548	ug/L		97
18) Acrylonitrile	4.144	53	103347	45.211	ug/L		100
19) MTBE	3.663	73	392981	25.202	ug/L		98
20) Tert-Butanol	3.736	59	40689	142.442	ug/L	#	100
21) Isopropyl Ether	3.987	45	495228	23.790	ug/L		99
22) 1,1-Dichloroethane	4.108	63	254995	24.215	ug/L		98
23) Vinyl acetate	4.312	43	802265	61.578	ug/L		99
24) Ethyl-Tert-butyl Ether	4.301	59	437232	25.026	ug/L		99
25) cis-1,2-Dichloroethene	4.573	96	152922	24.217	ug/L		97
26) 2,2-Dichloropropane	4.662	77	201604	26.026	ug/L		97
27) Bromochloromethane	4.746	128	66046	24.629	ug/L		96
28) Cyclohexane	4.756	84	231890	22.791	ug/L		100
29) Chloroform	4.803	83	260235	24.661	ug/L		99
31) 1,1-Dichloropropene	5.091	75	203755	23.984	ug/L		100
33) 1,1,1-Trichloroethane	4.986	97	227136	25.417	ug/L		100
34) 1,2-Dichloroethane	5.473	62	193673	25.644	ug/L		99
35) Benzene	5.300	78	567435	23.669	ug/L		99
36) 2-Butanone	5.049	43	329620	116.698	ug/L		99
37) Carbon tetrachloride	4.934	117	198947	25.824	ug/L		99
38) Tert-amyl Methyl Ether	5.384	73	364749	25.126	ug/L		100
39) Trichloroethene	5.813	130	153410	24.033	ug/L		96
40) Methyl Cyclohexane	5.808	55	240935	23.063	ug/L		96
41) Dibromomethane	6.179	93	81958	24.247	ug/L		99
42) Bromodichloromethane	6.315	83	174198	25.174	ug/L		100
43) 1,2-Dichloropropane	6.263	63	143104	23.877	ug/L		98
44) 2-Chloroethylvinylether	6.817	63	98097	23.035	ug/L		98
45) cis-1,3-Dichloropropene	6.885	75	211589	24.702	ug/L		99

Data Path : C:\msdchem\1\data\170914\
Data File : 17091404.D
Acq On : 14 Sep 2017 10:50 am
Operator :
Sample : LCSD-82366
Misc : LCSD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 13:47:27 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

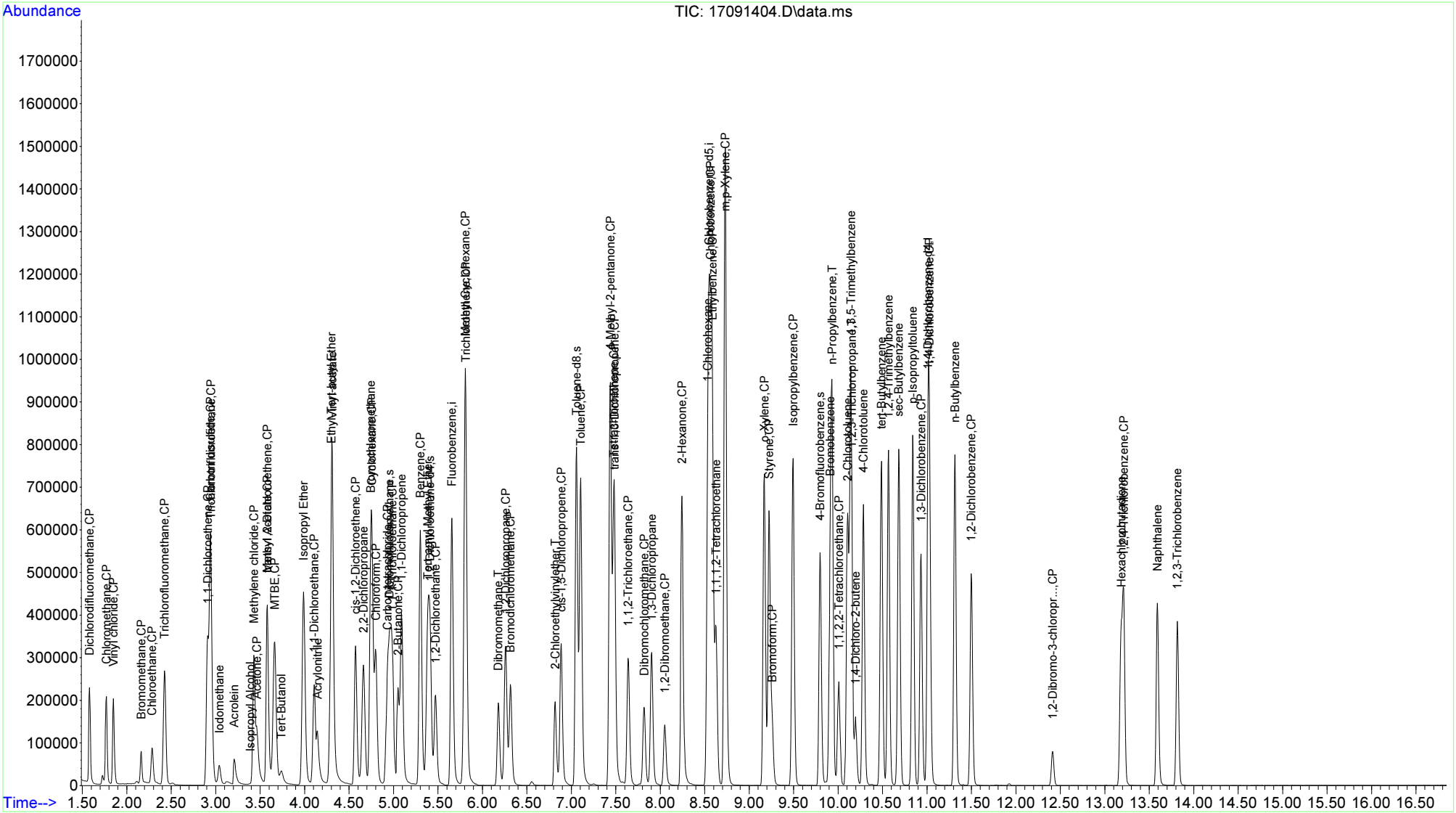
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	172102	25.268	ug/L	97
47) 1,1,2-Trichloroethane	7.638	97	114414	24.482	ug/L	99
48) Toluene	7.105	92	355600	23.740	ug/L	97
50) 4-Methyl-2-pentanone	7.439	43	773942	116.420	ug/L	99
52) 2-Hexanone	8.245	43	547014	116.884	ug/L	99
53) Dibromochloromethane	7.821	129	121943	24.243	ug/L	100
54) 1,3-Dichloropropane	7.905	76	205999	23.927	ug/L	100
55) Tetrachloroethene	7.476	164	131028	23.644	ug/L	99
56) 1,2-Dibromoethane	8.051	107	121989	24.176	ug/L	97
57) Chlorobenzene	8.564	112	371822	23.599	ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	119102	24.174	ug/L	99
59) Ethylbenzene	8.585	106	208185	23.507	ug/L	93
60) Bromoform	9.259	173	77548	23.800	ug/L	99
61) Styrene	9.223	104	373098	24.257	ug/L	99
62) 1-Chlorohexane	8.532	55	162039	22.695	ug/L	96
63) m,p-Xylene	8.731	106	508046	47.570	ug/L	99
64) o-Xylene	9.171	106	242594	23.841	ug/L	98
65) Isopropylbenzene	9.495	105	624658	24.061	ug/L	99
67) Bromobenzene	9.913	156	154283	23.505	ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.007	83	143342	22.739	ug/L	100
69) 1,2,3-Trichloropropane	10.154	110	46333	24.079	ug/L	98
71) 1,4-Dichloro-2-butene	10.196	53	41702	21.736	ug/L	87
72) n-Propylbenzene	9.934	91	763718	23.428	ug/L	98
73) 2-Chlorotoluene	10.107	91	482454	23.613	ug/L	99
74) 1,3,5-Trimethylbenzene	10.143	105	520675	23.986	ug/L	98
75) 4-Chlorotoluene	10.285	91	449568	23.757	ug/L	98
76) tert-Butylbenzene	10.489	119	460534	23.756	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	525677	24.104	ug/L	98
78) sec-Butylbenzene	10.682	105	681726	23.550	ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	280050	23.314	ug/L	99
80) p-Isopropyltoluene	10.839	119	570721	24.046	ug/L	99
81) 1,4-Dichlorobenzene	11.027	146	287455	23.246	ug/L	98
82) 1,2-Dichlorobenzene	11.498	146	255816	23.589	ug/L	100
83) 1,2-Dibromo-3-chloropr...	12.413	75	24874	24.603	ug/L	91
84) n-Butylbenzene	11.315	91	520924	24.220	ug/L	99
85) 1,2,4-Trichlorobenzene	13.214	180	177805	24.629	ug/L	99
86) Hexachlorobutadiene	13.187	225	93548	24.180	ug/L	98
87) Naphthalene	13.590	128	418672	24.082	ug/L	99
88) 1,2,3-Trichlorobenzene	13.815	180	155692	24.457	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091404.D
Acq On : 14 Sep 2017 10:50 am
Operator :
Sample : LCSD-82366
Misc : LCSD
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 14 13:47:27 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091406.D
Acq On : 14 Sep 2017 11:38 am
Operator :
Sample : MB-82366
Misc : MBLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 13:47:33 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

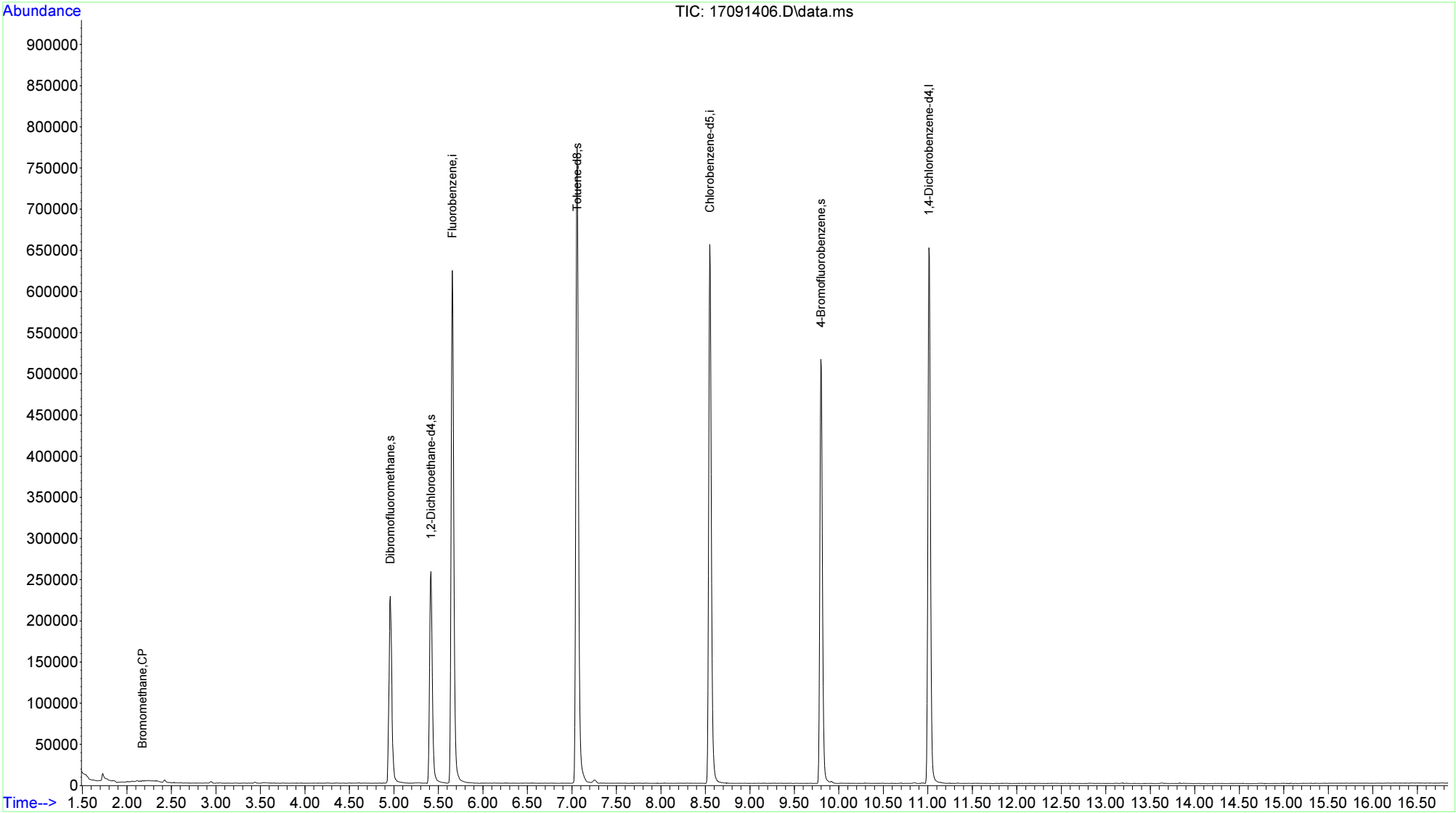
Compound	R.T.	QIon	Response	Conc	Units	%Rec
Internal Standards						
1) Fluorobenzene	5.656	96	617991	200.00	ug/L	81
49) Chlorobenzene-d5	8.548	117	453348	200.00	ug/L	85
66) 1,4-Dichlorobenzene-d4	11.012	152	214745	200.00	ug/L	81
System Monitoring Compounds						Dev(Min)
30) Dibromofluoromethane	4.960	113	157272	205.76	ug/L	0.00
Spiked Amount 200.000			Recovery = 102.88%			
32) 1,2-Dichloroethane-d4	5.415	65	208641	217.08	ug/L	0.00
Spiked Amount 200.000			Recovery = 108.54%			
51) Toluene-d8	7.058	98	588529	195.16	ug/L	0.00
Spiked Amount 200.000			Recovery = 97.58%			
70) 4-Bromofluorobenzene	9.798	95	212248	199.52	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.76%			
Target Compounds						Qvalue
5) Bromomethane	2.173	94	1097	0.451	ug/L #	11
11) Acetone	3.522	43	564	Below Cal	#	44
15) Methylene chloride	3.433	84	575	Below Cal	#	63

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091406.D
Acq On : 14 Sep 2017 11:38 am
Operator :
Sample : MB-82366
Misc : MBLK
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 14 13:47:33 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091410.D
Acq On : 14 Sep 2017 1:12 pm
Operator :
Sample : 1709107-03A
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 14 13:48:08 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

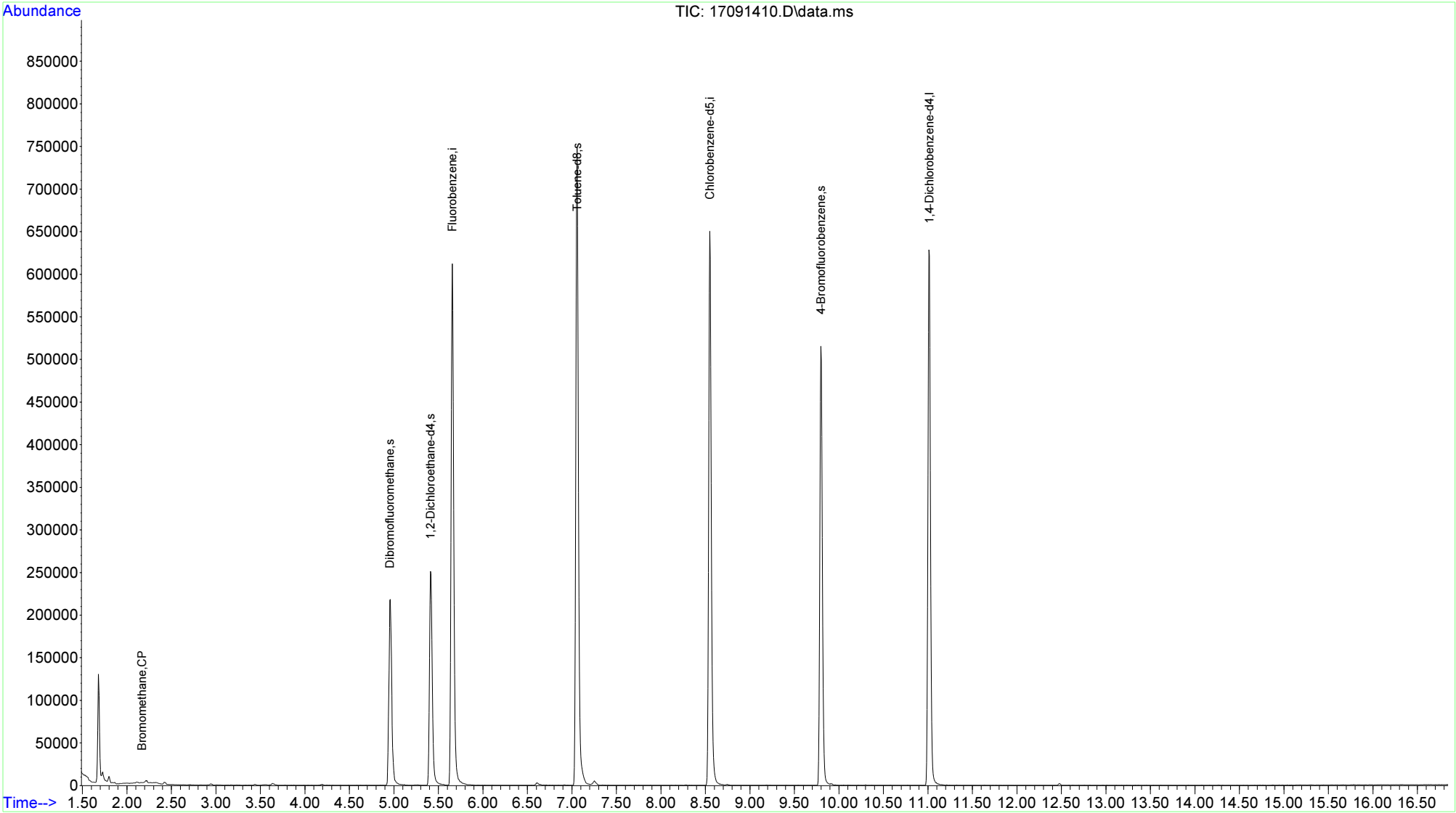
Compound	R.T.	QIon	Response	Conc	Units	%Rec
Internal Standards						
1) Fluorobenzene	5.656	96	601690	200.00	ug/L	79
49) Chlorobenzene-d5	8.548	117	438411	200.00	ug/L	82
66) 1,4-Dichlorobenzene-d4	11.017	152	207351	200.00	ug/L	78
System Monitoring Compounds						Dev(Min)
30) Dibromofluoromethane	4.955	113	152352	204.73	ug/L	0.00
Spiked Amount 200.000			Recovery = 102.36%			
32) 1,2-Dichloroethane-d4	5.410	65	206181	220.34	ug/L	0.00
Spiked Amount 200.000			Recovery = 110.17%			
51) Toluene-d8	7.058	98	566226	194.16	ug/L	0.00
Spiked Amount 200.000			Recovery = 97.08%			
70) 4-Bromofluorobenzene	9.798	95	204422	199.02	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.51%			
Target Compounds						Qvalue
5) Bromomethane	2.167	94	722	0.305	ug/L #	11
11) Acetone	3.543	43	1436	Below Cal	#	44
15) Methylene chloride	3.438	84	290	Below Cal	#	84

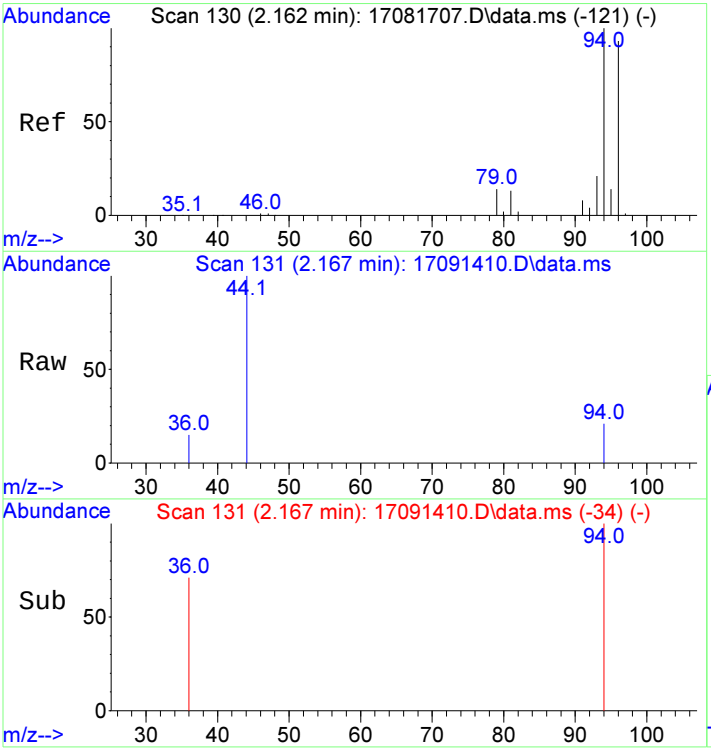
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091410.D
Acq On : 14 Sep 2017 1:12 pm
Operator :
Sample : 1709107-03A
Misc : SAMP
ALS Vial : 10 Sample Multiplier: 1

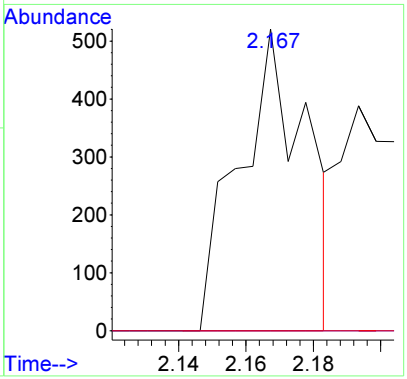
Quant Time: Sep 14 13:48:08 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration





#5
Bromomethane
Concen: 0.305 ug/L
RT: 2.167 min Scan# 131
Delta R.T. 0.005 min
Lab File: 17091410.D
Acq: 14 Sep 2017 1:12 pm
QValue: 11
Tgt Ion: 94 Resp: 722

Ion	Ratio	Lower	Upper
94	100		
96	0.0	73.0	113.0#
79	0.0	0.0	34.1



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091415.D
Acq On : 14 Sep 2017 3:10 pm
Operator :
Sample : 1709107-02A
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 14 15:30:27 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

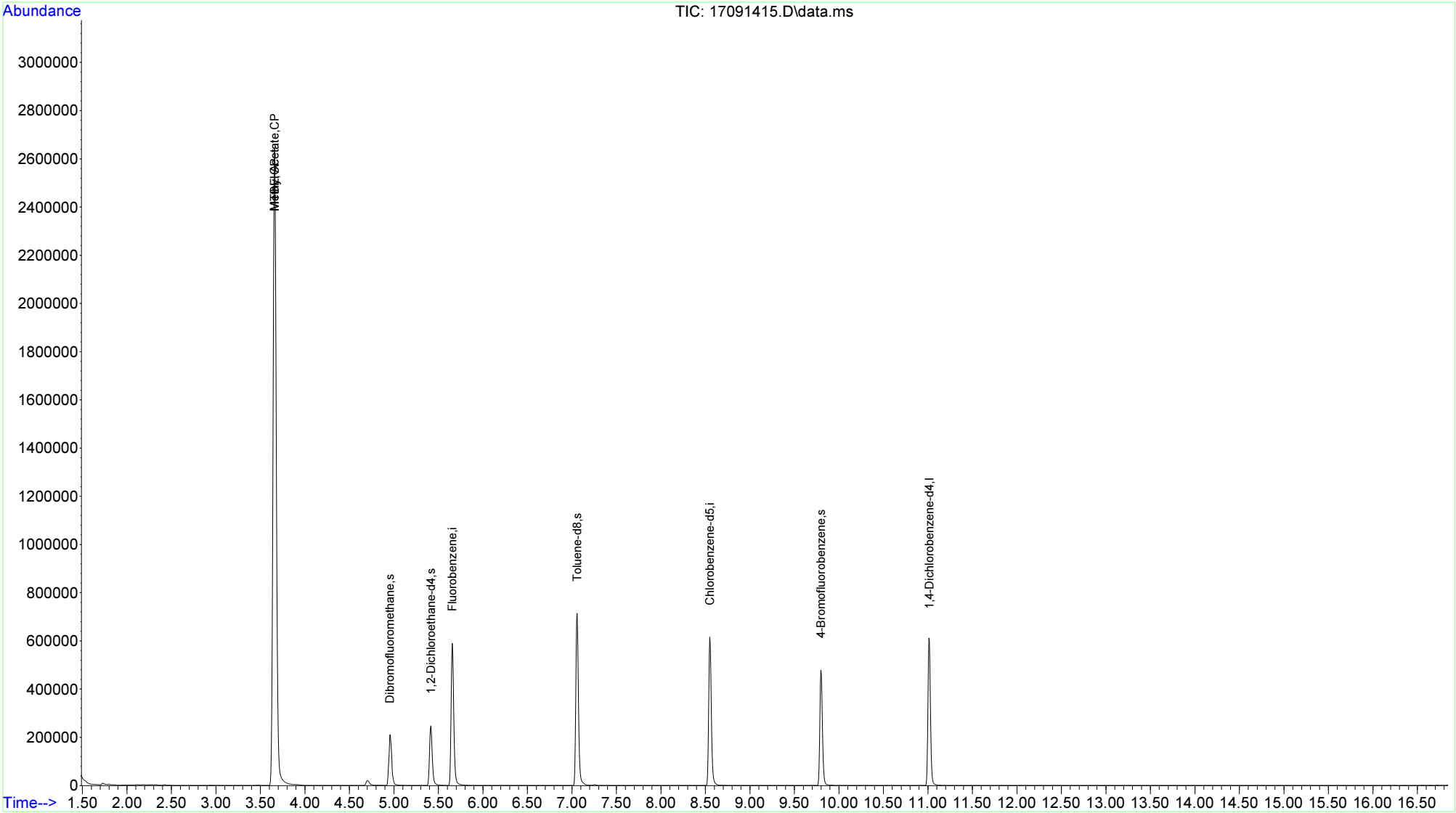
Compound	R.T.	QIon	Response	Conc Units	%Rec
Internal Standards					
1) Fluorobenzene	5.656	96	582215	200.00 ug/L	77
49) Chlorobenzene-d5	8.548	117	422982	200.00 ug/L	79
66) 1,4-Dichlorobenzene-d4	11.017	152	203714	200.00 ug/L	77
System Monitoring Compounds					Dev(Min)
30) Dibromofluoromethane	4.955	113	145310	201.79 ug/L	0.00
Spiked Amount 200.000			Recovery	= 100.90%	
32) 1,2-Dichloroethane-d4	5.415	65	199503	220.33 ug/L	0.00
Spiked Amount 200.000			Recovery	= 110.17%	
51) Toluene-d8	7.058	98	547314	194.52 ug/L	0.00
Spiked Amount 200.000			Recovery	= 97.26%	
70) 4-Bromofluorobenzene	9.798	95	197217	195.43 ug/L	0.00
Spiked Amount 200.000			Recovery	= 97.72%	
Target Compounds					Qvalue
15) Methylene chloride	3.433	84	79	Below Cal #	75
16) Methyl Acetate	3.658	43	727804	167.073 ug/L	87
19) MTBE	3.658	73	3092980	212.512 ug/L	99
20) Tert-Butanol	3.742	59	2026	Below Cal #	100

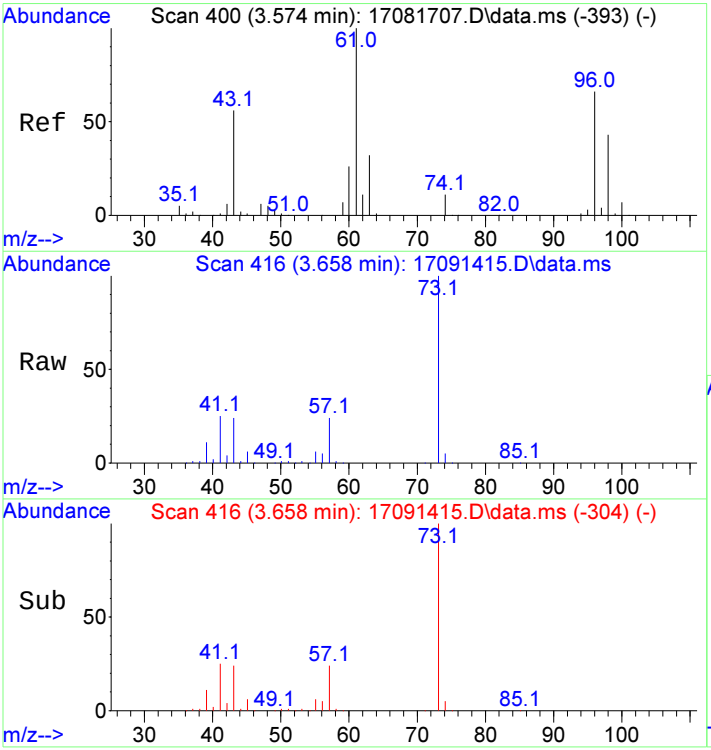
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170914\
Data File : 17091415.D
Acq On : 14 Sep 2017 3:10 pm
Operator :
Sample : 1709107-02A
Misc : SAMP
ALS Vial : 15 Sample Multiplier: 1

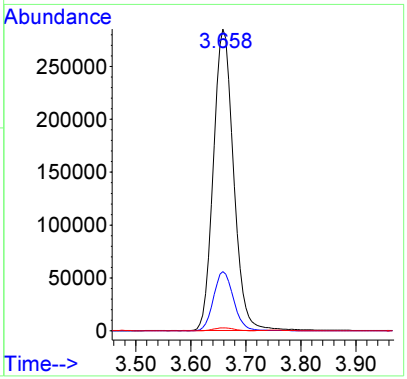
Quant Time: Sep 14 15:30:27 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

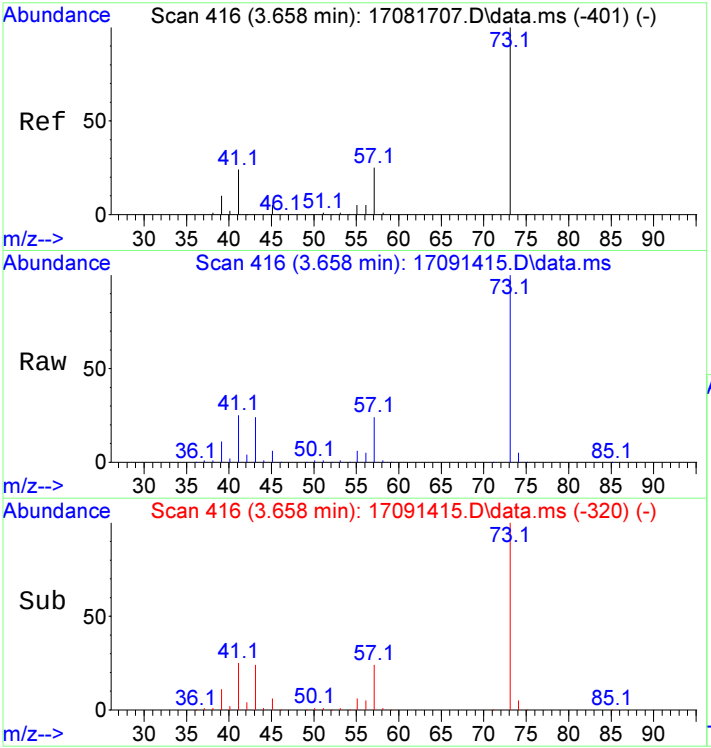




#16
Methyl Acetate
Concen: 167.073 ug/L
RT: 3.658 min Scan# 416
Delta R.T. 0.084 min
Lab File: 17091415.D
Acq: 14 Sep 2017 3:10 pm
QValue: 87
Tgt Ion: 43 Resp: 727804

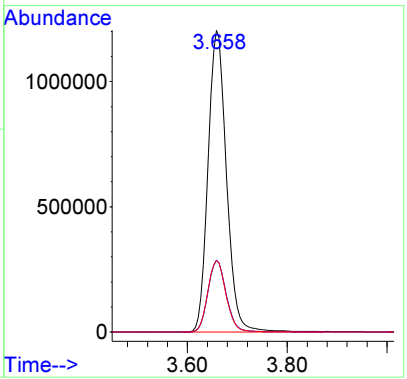
Ion	Ratio	Lower	Upper
43	100		
74	19.6	0.1	40.1
59	1.0	0.0	33.2





#19
MTBE
Concen: 212.512 ug/L
RT: 3.658 min Scan# 416
Delta R.T. 0.000 min
Lab File: 17091415.D
Acq: 14 Sep 2017 3:10 pm
QValue: 99
Tgt Ion: 73 Resp: 3092980

Ion	Ratio	Lower	Upper
73	100		
57	23.9	4.5	44.5
43	23.7	2.9	42.9



GCMS5
Calibration Curve
For

DHL Work Order
1709107

CAL ID: 793

Method 8260C Calibration Curve Sheet

Instrument ID: GCMS #5 **Calibration File Name: GCMS5_170817X.CAL**

Review Item	Acceptance Criteria	Yes	No	N/A	2nd Level Review
1. Are all standards within expiration dates?	Primary Stocks = 1 year Intermediate Standards = 6 months	X			X
2. Are all manual integrations listed on MI tracking form? **(DoD Projects only)**	Manual Integration Tracking Form			X	X
3. Has the BFB tune been performed prior to ICAL?	BFB Tune Eval Report MUST PASS – No Variance allowed	X			X
4. Does the ICAL curve meet criteria? Use average RF only if %RSD < 15%	Response Factor Report Minimum RFs - Table 4 %RSD ≤ 15% COD R^2 ≥ 0.990	X			X
5. Does the low calibration point have all analytes printed out? Cross-check RF report - some analytes have elevated MDLS (ketones, Iodomethane, alcohols, late eluters)	All analytes that are used in the low point must be printed out	X			X
6. Has the low point been reprocessed under the new ICAL curve and meets criteria?	70-130% recovery 0.928 ppb (0.6496-1.2064) 4.64 ppb (3.248-6.032)	X			X
7. Has the SSCV been analyzed and meets criteria?	80-120% recovery - DOD 46.4 ppb (37.12-55.68) 116 ppb (92.8-139.2) 70-130% - TCEQ QAPP 46.4 ppb (32.48-60.32) 116 ppb (81.2-150.8)		X		X

Second-Level Review: Date: **08/23/2017**

Table 4 - Minimum RF for ICAL and ICV

Volatile Compounds	Min RF	Volatile Compounds	Min RF
Dichlorodifluoromethane	0.100	1,2-Dichloropropane	0.100
Chloromethane	0.100	Bromodichloromethane	0.200
Vinyl chloride	0.100	cis-1,3-Dichloropropene	0.200
Bromomethane	0.100	Trans-1,3-Dichloropropene	0.100
Chloroethane	0.100	4-Methyl-2-pentanone	0.100
Trichlorofluoromethane	0.100	Toluene	0.400
1,1-Dichloroethene	0.100	1,1,2-Trichloroethane	0.100
1,1,2-Trichloro-1,2,2-trifluoroethane	0.100	Tetrachloroethene	0.200
Acetone	0.100	2-Hexanone	0.100
Carbon disulfide	0.100	Dibromochloromethane	0.100
Methyl Acetate	0.100	1,2-Dibromoethane	0.100
Methylene chloride	0.100	Chlorobenzene	0.500
trans-1,2-Dichloroethene	0.100	Ethylbenzene	0.100
cis-1,2-Dichloroethene	0.100	meta-/para-Xylene	0.100
Methyl tert-Butyl Ether	0.100	ortho-Xylene	0.300
1,1-Dichloroethane	0.200	Styrene	0.300
2-Butanone	0.100	Bromoform	0.100
Chloroform	0.200	Isopropylbenzene	0.100
1,1,1-Trichloroethane	0.100	1,1,2,2-Tetrachloroethane	0.300
Cyclohexane	0.100	1,3-Dichlorobenzene	0.600
Carbon tetrachloride	0.100	1,4-Dichlorobenzene	0.500
Benzene	0.500	1,2-Dichlorobenzene	0.400
1,2-Dichloroethane	0.100	1,2-Dibromo-3-chloropropane	0.050
Trichloroethene	0.200	1,2,4-Trichlorobenzene	0.200
Methylcyclohexane	0.100		

ICAL Comments: **SSCV out: Acetone low for DOD in SSCV (73.82%). IPA and TBA high in SSCV. All other compounds within 20%. No Manual Integrations.**

GCMS5_170817X
CALIBRATION CURVE

Standards	Conc.	Standard DHL ID	Level 1 0.928 ppb	Spike 4.64 ppb	Level 2 4.64 ppb	Level 3 9.28 ppb	Level 4 18.6 ppb	Level 5 27.8 ppb	Level 6 46.4 ppb
Liquids + Added Stds	200 ppm*	VLP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
Gas	200 ppm	VGP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
Carbon Disulfide	200 ppm	VCDP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
Ketone	200 ppm	VKP170816-1	5x of 23.2 ppb*	5 µL*	5 µL**	10 µL**	***2 µl*	***3 µl*	***5 µL*
2-CEVE	200 ppm	VCEP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
Iodomethane	200 ppm	VIMP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
IPA	500 ppm	VPNP170816-1	5x of 46.4 ppb**	4 µL**	2 µL**	4 µL**	6 µL**	8 µL**	10 µL**
Acrolein/ Vinyl Acetate	500 ppm	VAVP170816-1	5x of 46.4 ppb**	4 µL**	2 µL**	4 µL**	6 µL**	8 µL**	10 µL**
MCyclo/Acet/Freon/Cyhex	200 ppm	VMTP170816	5x of 4.64 ppb	1 µL	1 µL	2 µL	4 µL	6 µL	10 µL
*In liquid std: Acrylonitrile = 400 ppm & Tert-Butanol = 1000 pp			**9.28 ppb *4.64 ppb	**46.4ppb *23.2 ppb	**23.2ppb	**46.4ppb	**69.6ppb *92.8 ppb	** 92.8ppb *139 ppb ***2000 ppb ketones VKP170515B	**116ppb *232 ppb

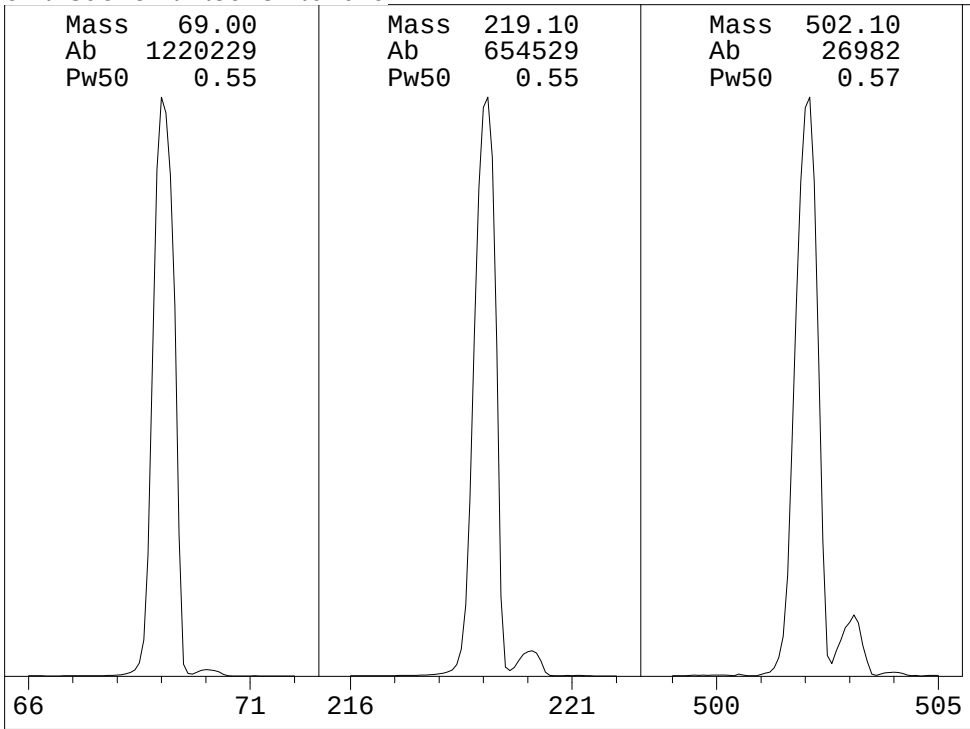
Standards	Conc.	Standard DHL ID	Level 7 92.8 ppb	Level 8 186 ppb
Liquids	2,000ppm	VLP170815A	2 µL	4 µL
Gas	2,000ppm	VGP170515C	2 µL	4 µL
Carbon Disulfide	2,000ppm	VCDP160823-01B	2 µL	4 µL
Ketone	2,000ppm	VKP170515B	10 µL***	20 µL***
2-CEVE	2,000ppm	VCEP170202A	2 µL	4 µL
Iodomethane	2,000ppm	VIMP170515A	2 µL	4 µL
IPA	5,000ppm	VPNP170816	2 µL**	4 µL**
Acrolein/ Vinyl Acetate	5,000ppm	VAVP170816	2 µL**	4 µL**
Acrylonitrile	4,000ppm	VANP170815	2 µL	4 µL
Oxygenated Gasoline	2,000ppm	VOGAP160823-01B	2 µL	4 µL
1,4-dichloro-2-butene	2,000ppm	VDBP160823-01B	2 µL	4 µL
1-Chlorohexane	2,000ppm	VCHP160823-01B	2 µL	4 µL
Methyl Acetate	2,000ppm	VMAP170815	2 µL	4 µL
Methyl Cyclohexane	1,000ppm	VMCP170515A	4 µL	8 µL
Cyclohexane	2,000ppm	VCP160823-01A	2 µL	4 µL
Freon 113	2,000ppm	VTTP160823-01B	2 µL	4 µL
			**232 ppb ***464 ppb	**464 ppb ***928 ppb

SSCV			Amount
Standards	Conc.	DHL ID#	46.4 ppb
Liquids	2000ppm	VLS170515A	1 µL
Gas	200ppm	VGS151013-01N	1 µL
Carbon Disulfide	5,000ppm	VCDS160114-01A	1 µL **
Ketone	5,000ppm	VKS160114-01A	1 µL **
2-CEVE	2,000ppm	VCES140730-01D	1 µL
Iodomethane	5,000ppm	VIMS160114-01A	1 µL
IPA	2,000ppm	VPNS170816	1 µL **
Acrolein/ Vinyl Acetate	5,000ppm	VAVS170816	1 µL**
Acrylonitrile	4,000ppm	VANS170815	1 µL*
Oxygenated Gasoline	2,000ppm	VOGAS160114-01A	1 µL
1,4-dichloro-2-butene	2,000ppm	VDBS160823-01A	1 µL
1-Chlorohexane	1,000ppm	VCHS160114-01A	2 µL
Methyl Acetate	1,000ppm	VMAS160824-01A	2 µL
Methyl Cyclohexane	1,000ppm	VMCS160824-01B	2 µL
Cyclohexane	1,000ppm	VCS150508-01B	2 µL
Freon 113	1,000ppm	VTTS160824-01B	2 µL
		*92.8 ppb	**116 ppb

Don Winston — 8-21-2017 — 08/23/2017

Analyst — Date — 2nd Level Review

Thu Aug 17 11:04:40 2017 Instrument: GCMS #5
C:\msdchem\1\5973N\bfb.u US90440011

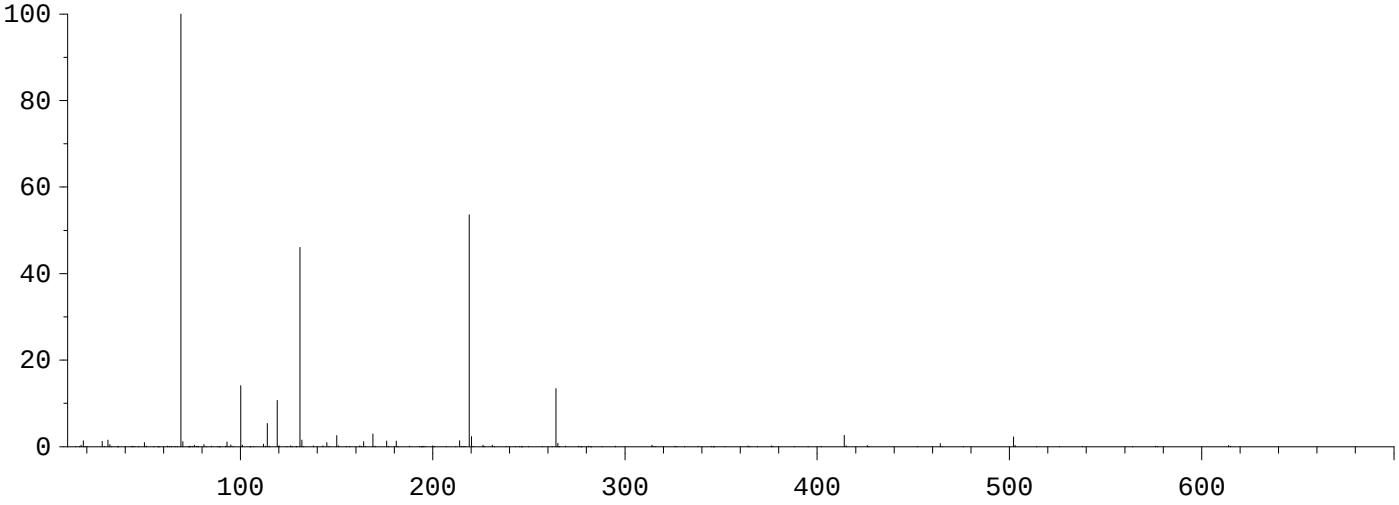


Ion Pol	Pos	MassGain	126
		MassOffs	-10
Emission	34.6	AmuGain	2220
EIEnrgy	69.9	AmuOffs	130
Filament	2	Wid219	-0.035
		DC Pol	Pos
Repeller	31.63		
IonFcus	97.7	HEDEnab	On
EntLens	0.0	EMVolts	1541
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Foreline	50
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
154 peaks Base: 69.10 Abundance: 1073152



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	1073152	100.00	70.10	12385	1.15
219.10	575360	53.61	220.10	25416	4.42
502.10	24200	2.26	503.10	2604	10.76

Air/Water Check: H20~1.41% N2~1.24% O2~0.49% CO2~0.15% N2/H2O~87.64%

Column(1) Flow: 0.8 Column(2): 0 ml/min. Interface Temp: 230

Ramp Criteria:
Ion Focus Maximum 128 volts using ion 69; EM Gain 93572
Repeller Maximum 40 volts using ion 69; Gain Factor 0.94

MassGain Values(Samples): 130(3) 124(2) 128(1) 127(0) 126(FS)

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	130.0	130.0	130.0	130.0	130.0	130.0	130.0
Entrance Lens Offset:	17.8	16.6	16.3	17.1	16.8	17.3	17.3
Target Abund(%):	1.0	100.0	45.0	55.0	2.4	2.0	
Actual Tune Abund(%):	1.0	100.0	46.1	53.6	2.6	2.3	

Thu Aug 17 11:06:11 2017 Instrument: GCMS #5
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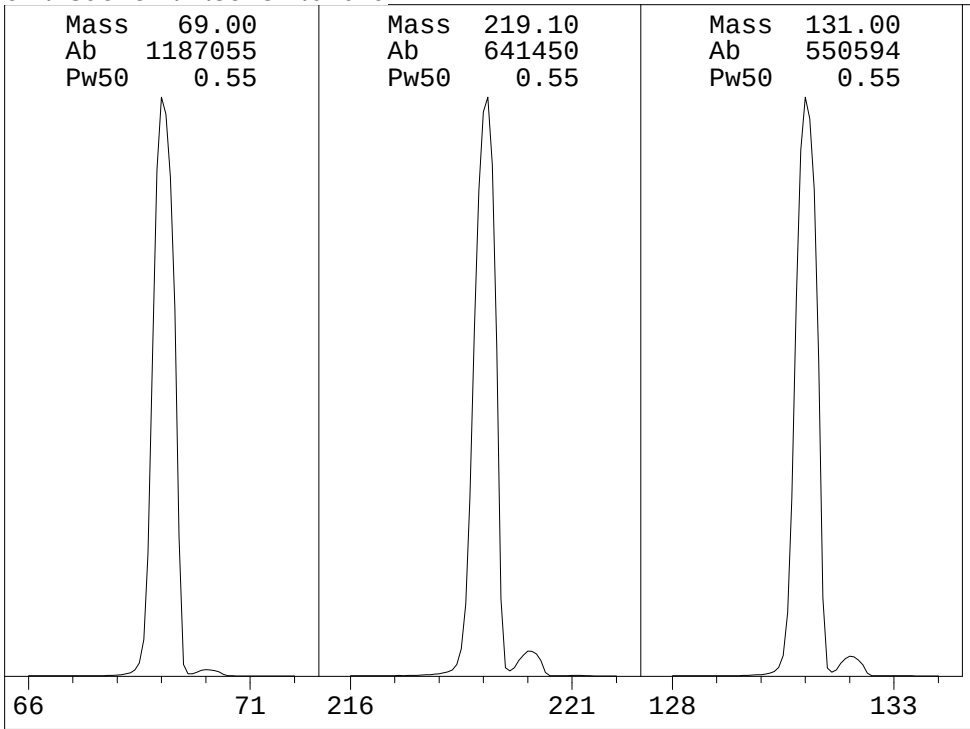
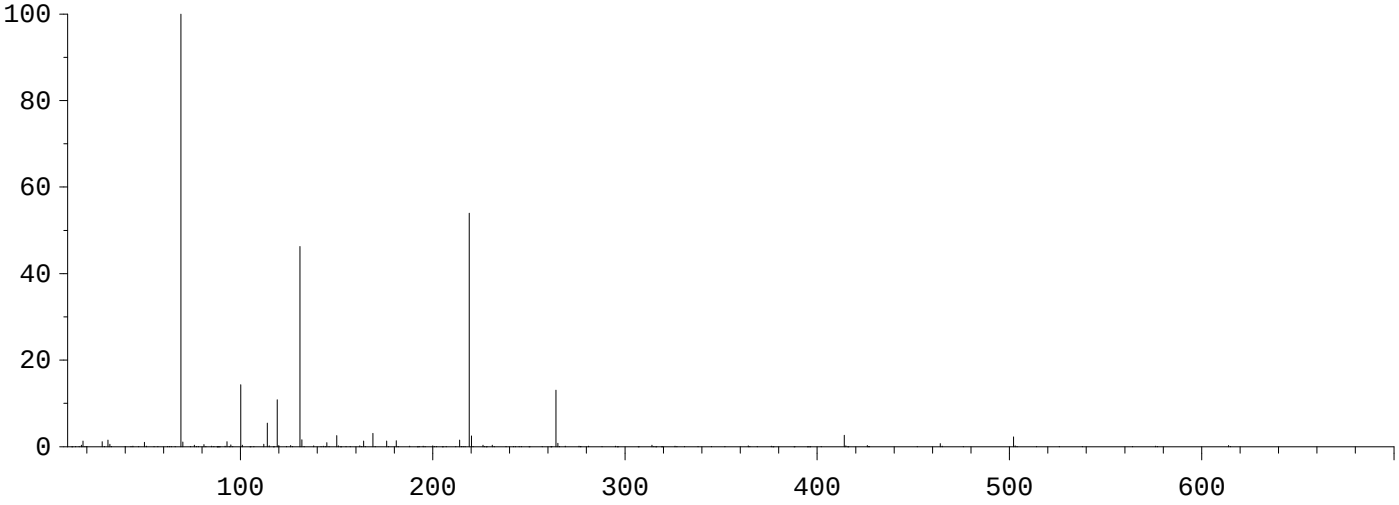


Ion Pol	Pos	MassGain	126
		MassOffs	-10
Emission	34.6	AmuGain	2220
EIEnrgy	69.9	AmuOffs	130
Filament	2	Wid219	-0.035
		DC Pol	Pos
Repeller	31.63		
IonFcus	97.7	HEDEnab	On
EntLens	0.0	EMVolts	1541
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Foreline	50
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
163 peaks Base: 69.10 Abundance: 1050624



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	1050624	100.00	70.10	11057	1.05
219.10	567360	54.00	220.10	26064	4.59
131.00	486080	46.27	132.00	16576	3.41

Air/Water Check: H20~1.34% N2~1.14% O2~0.55% CO2~0.15% N2/H2O~85.33%

Column(1) Flow: 0.8 Column(2): 0 ml/min. Interface Temp: 230

Ramp Criteria:
Ion Focus Maximum 128 volts using ion 69; EM Gain 99771
Repeller Maximum 40 volts using ion 69; Gain Factor 1.00

MassGain Values(Samples): 130(3) 124(2) 128(1) 127(0) 126(FS)

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	130.0	130.0	130.0	130.0	130.0	130.0	130.0
Entrance Lens Offset:	17.8	16.6	16.3	17.1	16.8	17.3	17.3
Target Abund(%):	1.0	100.0	45.0	55.0	2.4	2.0	
Actual Tune Abund(%):	1.0	100.0	46.3	54.0	2.6	2.3	

Thu Aug 17 11:07:34 2017 Instrument: GCMS #5
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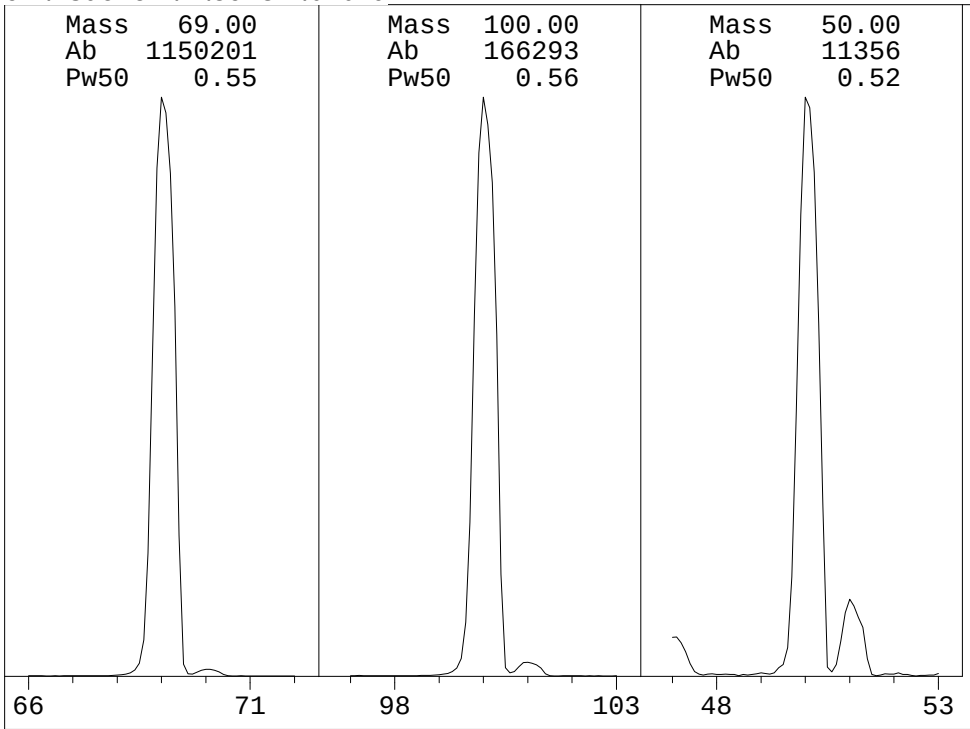
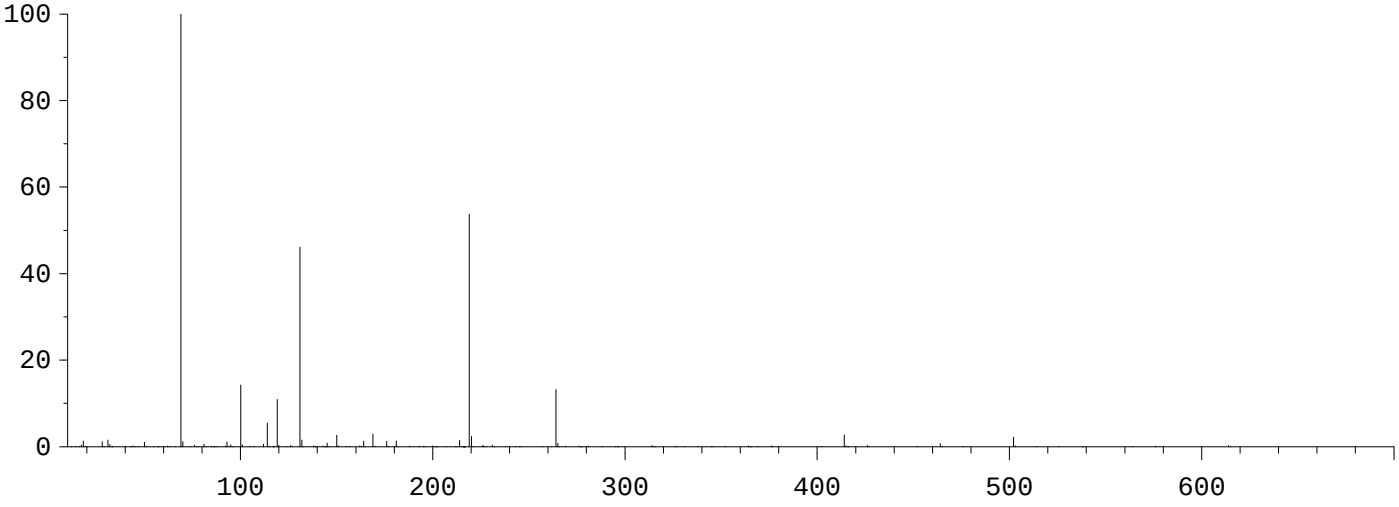


Ion Pol	Pos	MassGain	126
		MassOffs	-10
Emission	34.6	AmuGain	2220
EIEnrgy	69.9	AmuOffs	130
Filament	2	Wid219	-0.035
		DC Pol	Pos
Repeller	31.63		
IonFcus	97.7	HEDEnab	On
EntLens	0.0	EMVolts	1541
EntOffs	Var		
		Samples	8
PFTBA	Open	Averages	3
		Stepsize	0.10

Temperatures and Pressures:

MS Source	230	Foreline	50
MS Quad	150		

Scan: 10.00 - 700.00 Samples: 8 Thresh: 100 Step: 0.10
152 peaks Base: 69.10 Abundance: 1018048



Mass	Abund	Rel Abund	Iso Mass	Iso Abund	Iso Ratio
69.10	1018048	100.00	70.10	11762	1.16
100.10	145088	14.25	101.10	3864	2.66
50.10	10281	1.01	51.10	1266	12.31

Air/Water Check: H20~1.27% N2~1.16% O2~0.49% CO2~0.16% N2/H2O~91.10%

Column(1) Flow: 0.8 Column(2): 0 ml/min. Interface Temp: 230

Ramp Criteria:
Ion Focus Maximum 128 volts using ion 69; EM Gain 89069
Repeller Maximum 40 volts using ion 69; Gain Factor 0.89

MassGain Values(Samples): 130(3) 124(2) 128(1) 127(0) 126(FS)

TARGET MASS:	50	69	131	219	414	502	800
Amu Offset:	130.0	130.0	130.0	130.0	130.0	130.0	130.0
Entrance Lens Offset:	17.8	16.6	16.3	17.1	16.8	17.3	17.3
Target Abund(%):	1.0	100.0	45.0	55.0	2.4	2.0	
Actual Tune Abund(%):	1.0	100.0	46.1	52.8	2.7	2.2	

Response Factor Report GCMS #5

Method Path : C:\msdchem\1\methods\
Method File : 170817X.M
Title : M-8260S
Last Update : Thu Aug 17 14:33:11 2017
Response Via : Initial Calibration

Calibration Files
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186 =17081708.D

		Compound	.928	4.64	9.28	18.6	27.8	46.4	92.8	186	Avg	%RSD	Fit	RSD/CF	Constant	Linear	Quad
1)	i	Fluorobenzene	----------ISTD----------														
2)	CP	Dichlorodifluo...	2.580	2.585	2.515	2.503	2.502	2.424	2.700	2.517	2.541	3.22	A	0.032	0.0000	2.5406	0.0000
3)	CP	Chloromethane	3.057	2.579	2.725	2.585	2.641	2.609	2.685	2.398	2.660	7.05	A	0.070	0.0000	2.6599	0.0000
4)	CP	Vinyl chloride	2.445	2.373	2.287	2.330	2.352	2.248	2.398	2.222	2.332	3.26	A	0.033	0.0000	2.3319	0.0000
5)	CP	Bromomethane	0.968	0.753	0.697	0.731	0.771	0.687	0.837	0.854	0.787	11.97	A	0.120	0.0000	0.7873	0.0000
6)	CP	Chloroethane	1.146	0.989	1.052	0.977	1.004	0.912	0.997	0.908	0.998	7.65	A	0.076	0.0000	0.9979	0.0000
7)	CP	Trichlorofluor...	3.158	3.215	3.134	3.135	3.164	3.053	3.194	2.948	3.125	2.77	A	0.028	0.0000	3.1251	0.0000
8)	CP	Trichlorotrifl...	1.936	2.105	2.066	2.160	2.071	2.009	1.988	1.871	2.026	4.64	A	0.046	0.0000	2.0257	0.0000
9)		Acrolein	0.204	0.307	0.348	0.318	0.329	0.346	0.357	0.360	0.321	15.85	*Q	0.999	-0.0064	0.3520	0.0049
10)		Isopropyl Alcohol		0.011	0.017	0.025	0.024	0.031	0.025	0.046	0.025	44.07	*Q	0.993	0.0027	0.0078	0.0159
11)	CP	Acetone		0.498	0.522	0.486	0.491	0.505	0.483	0.508	0.499	2.70	*Q	1.000	0.0045	0.4802	0.0053
12)		Iodomethane		0.467	0.673	1.035	1.343	1.488	1.890	1.966	1.266	45.36	*Q	0.996	-0.0357	1.5952	0.4730
13)	CP	1,1-Dichloroet...	1.718	1.739	1.725	1.688	1.725	1.687	1.708	1.690	1.710	1.16	A	0.012	0.0000	1.7099	0.0000
14)	CP	Carbon disulfide		5.834	5.902	5.784	5.838	5.611	5.861	5.608	5.777	2.07	A	0.021	0.0000	5.7768	0.0000
15)	CP	Methylene chlo...	2.341	1.875	1.859	1.775	1.798	1.775	1.776	1.727	1.866	10.63	*Q	1.000	0.0025	1.7867	-0.0643
16)	CP	Methyl Acetate		1.165	1.419	1.539	1.499	1.544	1.652	1.656	1.496	11.25	A	0.113	0.0000	1.4964	0.0000
17)	CP	trans-1,2-Dich...	1.899	1.928	1.850	1.811	1.838	1.821	1.834	1.802	1.848	2.38	A	0.024	0.0000	1.8479	0.0000
18)		Acrylonitrile	0.137	0.666	0.740	0.704	0.717	0.736	0.775	0.764	0.655	32.37	*Q	1.000	-0.0055	0.7553	0.0081
19)	CP	MTBE	4.741	4.961	4.973	4.943	4.966	5.014	5.344	5.055	5.000	3.34	A	0.033	0.0000	4.9997	0.0000
20)		Tert-Butanol	0.080	0.093	0.096	0.091	0.091	0.109	0.099	0.127	0.098	14.23	*Q	0.998	0.0038	0.0791	0.0100
21)		Isopropyl Ether	6.317	6.759	6.722	6.679	6.770	6.699	7.001	6.448	6.674	3.13	A	0.031	0.0000	6.6744	0.0000
22)	CP	1,1-Dichloroet...	3.376	3.470	3.432	3.338	3.377	3.326	3.367	3.325	3.376	1.53	A	0.015	0.0000	3.3763	0.0000
23)		Vinyl acetate	3.271	4.067	4.136	4.051	4.147	4.124	4.303	3.952	4.006	7.83	*Q	0.999	-0.0533	4.4039	-0.1736
24)		Ethyl-Tert-but...	5.501	5.698	5.596	5.542	5.636	5.592	5.864	5.384	5.602	2.53	A	0.025	0.0000	5.6017	0.0000
25)	CP	cis-1,2-Dichlo...	2.103	2.112	2.035	2.021	2.015	1.980	1.975	1.955	2.025	2.85	A	0.028	0.0000	2.0247	0.0000
26)		2,2-Dichloropr...	2.412	2.478	2.410	2.349	2.410	2.418	2.661	2.730	2.484	5.50	A	0.055	0.0000	2.4836	0.0000
27)		Bromochloromet...	0.945	0.885	0.886	0.880	0.872	0.827	0.817	0.767	0.860	6.34	A	0.063	0.0000	0.8598	0.0000
28)	CP	Cyclohexane			3.243	3.402	3.259	3.150	3.352	3.167	3.262	3.06	A	0.031	0.0000	3.2623	0.0000
29)	CP	Chloroform	3.439	3.489	3.450	3.334	3.370	3.337	3.368	3.280	3.383	2.07	A	0.021	0.0000	3.3834	0.0000
30)	s	Dibromofluorom...	0.246	0.247	0.250	0.249	0.247	0.247	0.248	0.245	0.247	0.62	A	0.006	0.0000	0.2474	0.0000
31)		1,1-Dichloropr...	2.665	2.776	2.771	2.680	2.747	2.709	2.740	2.702	2.724	1.51	A	0.015	0.0000	2.7238	0.0000
32)	s	1,2-Dichloroet...	0.309	0.314	0.318	0.321	0.307	0.306	0.306	0.307	0.311	1.93	A	0.019	0.0000	0.3110	0.0000
33)	CP	1,1,1-Trichlor...	2.662	2.906	2.865	2.795	2.899	2.903	2.943	2.949	2.865	3.32	A	0.033	0.0000	2.8652	0.0000
34)	CP	1,2-Dichloroet...	2.626	2.518	2.416	2.370	2.388	2.346	2.379	2.330	2.422	4.15	A	0.042	0.0000	2.4216	0.0000
35)	CP	Benzene	7.882	7.954	7.891	7.634	7.674	7.585	7.538	7.335	7.687	2.74	A	0.027	0.0000	7.6868	0.0000
36)	CP	2-Butanone	0.643	0.880	0.976	0.932	0.935	0.975	0.933	0.971	0.906	12.23	A	0.122	0.0000	0.9056	0.0000
37)	CP	Carbon tetrach...	2.378	2.326	2.234	2.280	2.310	2.372	2.798	2.545	2.406	7.63	*Q	0.996	-0.0026	2.4728	0.1375
38)		Tert-amyl Meth...	4.296	4.653	4.607	4.503	4.662	4.678	5.062	4.776	4.654	4.70	A	0.047	0.0000	4.6545	0.0000
39)	CP	Trichloroethene	2.054	2.112	2.114	2.021	2.086	2.025	2.018	1.944	2.047	2.79	A	0.028	0.0000	2.0467	0.0000
40)	CP	Methyl Cyclohe...			3.357	3.436	3.367	3.266	3.538	3.133	3.350	4.16	A	0.042	0.0000	3.3496	0.0000
41)	T	Dibromomethane	1.142	1.096	1.086	1.065	1.078	1.056	1.077	1.070	1.084	2.46	A	0.025	0.0000	1.0838	0.0000
42)	CP	Bromodichlorom...	2.011	2.188	2.190	2.196	2.249	2.251	2.340	2.325	2.219	4.62	A	0.046	0.0000	2.2187	0.0000
43)	CP	1,2-Dichloropr...	1.866	1.950	1.929	1.916	1.949	1.924	1.940	1.900	1.922	1.47	A	0.015	0.0000	1.9217	0.0000

Method Path : C:\msdchem\1\methods\
Method File : 170817X.M
Title : M-8260S

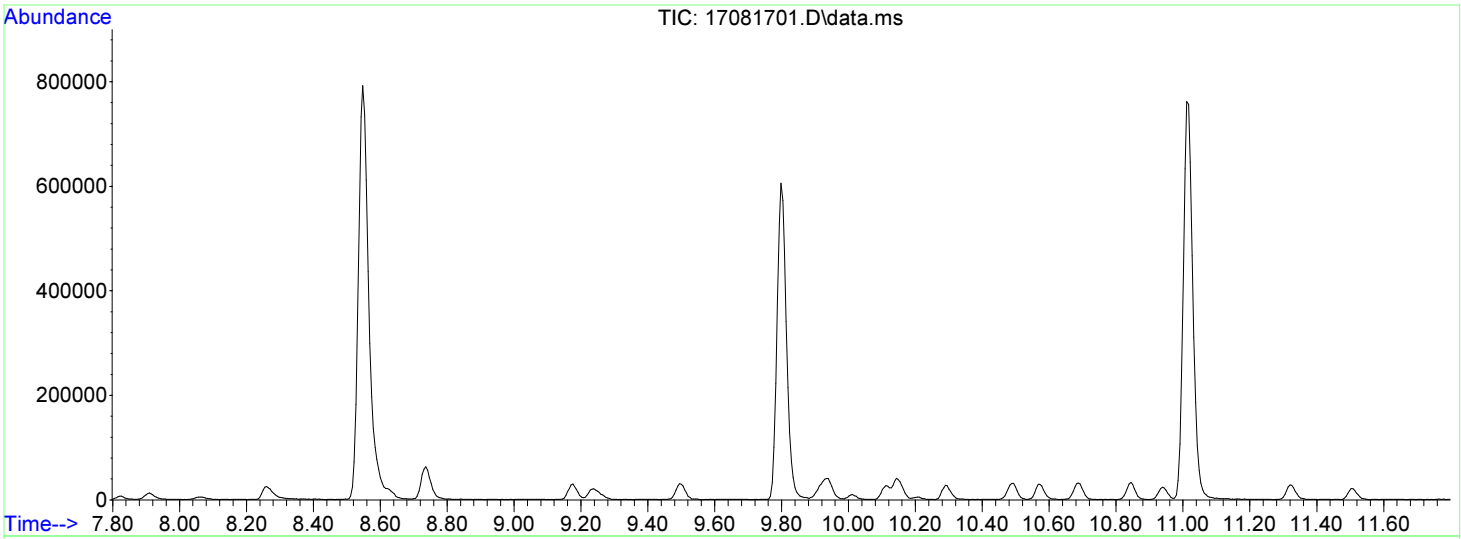
44)	T	2-Chloroethylv...		1.308	1.370	1.362	1.379	1.412	1.361	1.365	2.46	A	0.025	0.0000	1.3654	0.0000
45)	CP	cis-1,3-Dichlo...	2.621	2.631	2.638	2.704	2.781	2.797	2.909	2.889	2.746	4.20	A	0.042	0.0000	2.7464	0.0000
46)	CP	trans-1,3-Dich...	2.074	2.057	2.092	2.105	2.189	2.254	2.355	2.343	2.184	5.54	A	0.055	0.0000	2.1838	0.0000
47)	CP	1,1,2-Trichlor...	1.396	1.540	1.540	1.499	1.510	1.494	1.519	1.490	1.498	3.06	A	0.031	0.0000	1.4985	0.0000
48)	CP	Toluene	4.891	5.028	4.883	4.751	4.816	4.746	4.732	4.574	4.803	2.82	A	0.028	0.0000	4.8027	0.0000
49)	i	Chlorobenzene-d5	----------ISTD----------														
50)	CP	4-Methyl-2-pen...	2.450	3.062	3.105	3.104	3.062	3.026	2.942	2.886	2.955	7.37	A	0.074	0.0000	2.9547	0.0000
51)	s	Toluene-d8	1.301	1.318	1.306	1.321	1.335	1.313	1.347	1.402	1.330	2.46	A	0.025	0.0000	1.3304	0.0000
52)	CP	2-Hexanone	1.635	2.036	2.184	2.186	2.150	2.175	2.117	2.158	2.080	8.96	A	0.090	0.0000	2.0800	0.0000
53)	CP	Dibromochlorom...	2.032	2.091	2.074	2.162	2.251	2.260	2.432	2.539	2.230	8.05	*Q	1.000	-0.0017	2.2041	0.3752
54)		1,3-Dichloropr...	3.830	3.834	3.770	3.775	3.821	3.758	3.878	3.946	3.826	1.64	A	0.016	0.0000	3.8264	0.0000
55)	CP	Tetrachloroethene	2.551	2.572	2.496	2.387	2.470	2.404	2.428	2.395	2.463	2.91	A	0.029	0.0000	2.4630	0.0000
56)	CP	1,2-Dibromoethane	2.091	2.196	2.209	2.224	2.255	2.241	2.325	2.399	2.243	4.06	A	0.041	0.0000	2.2426	0.0000
57)	CP	Chlorobenzene	7.368	7.237	7.012	6.875	6.972	6.830	6.929	6.799	7.003	2.87	A	0.029	0.0000	7.0029	0.0000
58)		1,1,1,2-Tetrac...	2.120	2.103	2.039	2.116	2.207	2.202	2.354	2.424	2.196	6.02	*Q	1.000	-0.0010	2.1623	0.2954
59)	CP	Ethylbenzene	4.025	4.029	3.927	3.845	3.959	3.857	3.962	3.886	3.936	1.79	A	0.018	0.0000	3.9362	0.0000
60)	CP	Bromoform	1.239	1.254	1.311	1.368	1.448	1.493	1.631	1.732	1.435	12.39	*Q	0.999	-0.0019	1.4227	0.3468
61)	CP	Styrene	6.001	6.760	6.828	6.776	7.000	6.970	7.180	7.174	6.836	5.49	A	0.055	0.0000	6.8361	0.0000
62)		1-Chlorohexane		3.479	3.204	3.015	3.061	3.007	3.203	3.243	3.173	5.23	A	0.052	0.0000	3.1734	0.0000
63)	CP	m,p-Xylene	4.748	4.987	4.796	4.701	4.778	4.704	4.718	4.542	4.747	2.61	A	0.026	0.0000	4.7468	0.0000
64)	CP	o-Xylene	4.371	4.579	4.485	4.411	4.582	4.512	4.623	4.617	4.522	2.09	A	0.021	0.0000	4.5225	0.0000
65)	CP	Isopropylbenzene	1.113	1.170	1.155	1.133	1.164	1.152	1.174	1.170	1.154	E1 1.85	A	0.019	0.0000	11.5387	0.0000
66)	I	1,4-Dichlorobenzen...	----------ISTD----------														
67)		Bromobenzene	6.633	6.073	5.844	5.856	5.908	5.772	5.794	5.702	5.948	5.01	A	0.050	0.0000	5.9477	0.0000
68)	CP	1,1,2,2-Tetrac...	6.006	5.854	5.762	5.592	5.561	5.555	5.586	5.780	5.712	2.90	A	0.029	0.0000	5.7121	0.0000
69)	T	1,2,3-Trichlor...	1.675	1.864	1.826	1.734	1.738	1.727	1.690	1.695	1.744	3.86	A	0.039	0.0000	1.7436	0.0000
70)	s	4-Bromofluorob...	0.999	0.989	0.973	0.992	0.995	0.984	0.981	1.014	0.991	1.26	A	0.013	0.0000	0.9907	0.0000
71)		1,4-Dichloro-2...	1.580	1.575	1.689	1.671	1.733	1.759	1.870	2.031	1.739	8.75	A	0.087	0.0000	1.7385	0.0000
72)	T	n-Propylbenzene	3.050	3.072	3.010	2.926	2.981	2.918	2.874	2.801	2.954	E1 3.11	A	0.031	0.0000	29.5391	0.0000
73)		2-Chlorotoluene	1.948	1.910	1.847	1.814	1.844	1.817	1.824	1.808	1.851	E1 2.75	A	0.028	0.0000	18.5146	0.0000
74)		1,3,5-Trimethy...		2.046	1.999	1.953	1.993	1.964	1.934	1.881	1.967	E1 2.68	A	0.027	0.0000	19.6704	0.0000
75)		4-Chlorotoluene	1.804	1.739	1.729	1.676	1.711	1.679	1.701	1.680	1.715	E1 2.50	A	0.025	0.0000	17.1479	0.0000
76)		tert-Butylbenzene	1.793	1.841	1.777	1.727	1.762	1.714	1.732	1.708	1.757	E1 2.60	A	0.026	0.0000	17.5665	0.0000
77)		1,2,4-Trimethy...		2.031	1.986	1.974	1.999	1.967	1.958	1.919	1.976	E1 1.76	A	0.018	0.0000	19.7624	0.0000
78)		sec-Butylbenzene	2.679	2.728	2.686	2.598	2.636	2.585	2.568	2.504	2.623	E1 2.78	A	0.028	0.0000	26.2310	0.0000
79)	CP	1,3-Dichlorobe...	1.232	1.114	1.072	1.049	1.068	1.055	1.064	1.053	1.088	E1 5.66	A	0.057	0.0000	10.8848	0.0000
80)		p-Isopropyltol...	2.109	2.225	2.175	2.141	2.174	2.152	2.142	2.089	2.151	E1 1.95	A	0.020	0.0000	21.5071	0.0000
81)	CP	1,4-Dichlorobe...	1.331	1.153	1.110	1.083	1.082	1.067	1.080	1.058	1.121	E1 8.04	A	0.080	0.0000	11.2054	0.0000
82)	CP	1,2-Dichlorobe...	1.067	1.013	0.965	0.962	0.973	0.958	0.964	0.960	0.983	E1 3.90	A	0.039	0.0000	9.8270	0.0000
83)	CP	1,2-Dibromo-3-...	0.604	0.845	0.928	0.852	0.930	0.974	0.979	1.097	0.901	15.97	*Q	1.000	-0.0013	0.9011	0.2094
84)		n-Butylbenzene	1.920	1.986	1.966	1.930	1.963	1.942	1.966	1.919	1.949	E1 1.27	A	0.013	0.0000	19.4894	0.0000
85)	CP	1,2,4-Trichlor...		6.384	6.468	6.473	6.553	6.534	6.621	6.759	6.542	1.86	A	0.019	0.0000	6.5417	0.0000
86)		Hexachlorobuta...	4.458	3.404	3.316	3.286	3.345	3.358	3.396	3.483	3.506	11.11	A	0.111	0.0000	3.5058	0.0000
87)		Naphthalene		1.463	1.583	1.538	1.616	1.606	1.577	1.645	1.575	E1 3.80	A	0.038	0.0000	15.7539	0.0000
88)		1,2,3-Trichlor...		5.725	5.785	5.702	5.755	5.759	5.741	5.913	5.769	1.20	A	0.012	0.0000	5.7685	0.0000

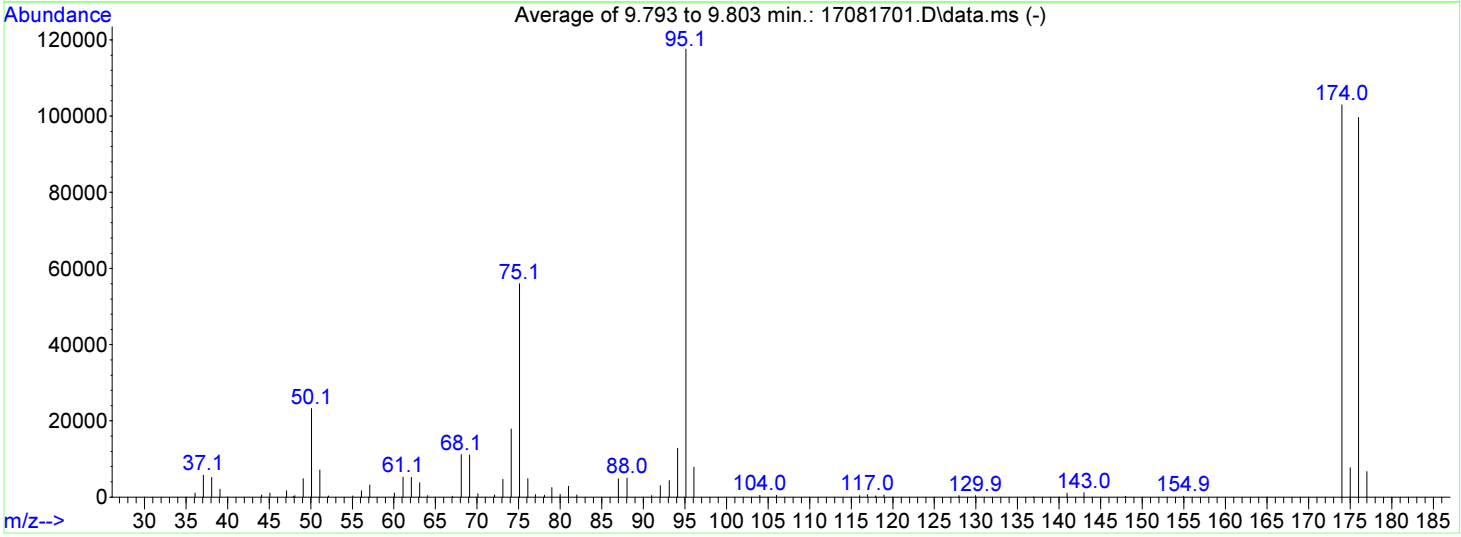
(#) = Out of Range

Data Path : C:\msdchem\1\data\170817\
Data File : 17081701.D
Acq On : 17 Aug 2017 11:13 am
Operator :
Sample : CAL1 0.928 ppb
Misc : CAL1
ALS Vial : 1 Sample Multiplier: 1

Integration File: Rteint.p

Method : C:\msdchem\1\methods\170817X.M
Title : M-8260S
Last Update : Thu Aug 17 14:33:11 2017





AutoFind: Scans 1589, 1590, 1591; Background Corrected with Scan 1581

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.7	23211	PASS
75	95	30	60	47.6	55981	PASS
95	95	100	100	100.0	117605	PASS
96	95	5	9	6.7	7826	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	200	87.5	102936	PASS
175	174	5	9	7.4	7660	PASS
176	174	95	101	96.8	99661	PASS
177	176	5	9	6.7	6640	PASS

REVIEWED/APPROVED
By Sherri Herschmann at 9:35:05 AM, 8/23/2017

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081701.D
Acq On : 17 Aug 2017 11:13 am
Operator :
Sample : CAL1 0.928 ppb
Misc : CAL1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 13:40:02 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	%Rec
Internal Standards					
1) Fluorobenzene	5.656	96	745921	200.00 ug/L	98
49) Chlorobenzene-d5	8.548	117	532981	200.00 ug/L	100
66) 1,4-Dichlorobenzene-d4	11.017	152	247595	200.00 ug/L	93
System Monitoring Compounds					Dev(Min)
30) Dibromofluoromethane	4.955	113	183615	199.03 ug/L	0.00
Spiked Amount 200.000			Recovery =	99.52%	
32) 1,2-Dichloroethane-d4	5.410	65	230121	198.37 ug/L	0.00
Spiked Amount 200.000			Recovery =	99.19%	
51) Toluene-d8	7.058	98	693214	195.53 ug/L	0.00
Spiked Amount 200.000			Recovery =	97.77%	
70) 4-Bromofluorobenzene	9.798	95	247286	201.62 ug/L	0.00
Spiked Amount 200.000			Recovery =	100.81%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.581	85	8928	0.942 ug/L	97
3) Chloromethane	1.770	50	10580	1.066 ug/L	95
4) Vinyl chloride	1.848	62	8464	0.973 ug/L	98
5) Bromomethane	2.162	94	3349	1.141 ug/L	95
6) Chloroethane	2.288	64	3965	1.065 ug/L	89
7) Trichlorofluoromethane	2.424	101	10929	0.938 ug/L	90
8) Trichlorotrifluoroethane	2.947	101	6700	0.887 ug/L #	94
9) Acrolein	3.234	56	7061	9.021 ug/L	94
10) Isopropyl Alcohol	0.000		0	N.D.	
11) Acetone	3.501	43	8634	2.965 ug/L	95
12) Iodomethane	3.041	142	745	4.567 ug/L #	44
13) 1,1-Dichloroethene	2.910	96	5947	0.933 ug/L	98
14) Carbon disulfide	2.941	76	21496	0.998 ug/L	98
15) Methylene chloride	3.433	84	8104	0.940 ug/L	97
16) Methyl Acetate	3.663	43	6496	1.164 ug/L	81
17) trans-1,2-Dichloroethene	3.590	96	6571	0.953 ug/L	86
18) Acrylonitrile	4.202	53	949	1.785 ug/L	91
19) MTBE	3.663	73	16409	0.880 ug/L	96
20) Tert-Butanol	3.757	59	1386	Below Cal #	100
21) Isopropyl Ether	3.993	45	21865	0.878 ug/L	99
22) 1,1-Dichloroethane	4.113	63	11684	0.928 ug/L	98
23) Vinyl acetate	4.322	43	113200	9.331 ug/L	99
24) Ethyl-Tert-butyl Ether	4.312	59	19039	0.911 ug/L	100
25) cis-1,2-Dichloroethene	4.578	96	7277	0.964 ug/L	96
26) 2,2-Dichloropropane	4.667	77	8349	0.901 ug/L	99
27) Bromochloromethane	4.746	128	3272	1.020 ug/L	98
28) Cyclohexane	4.751	84	10107	0.831 ug/L	98
29) Chloroform	4.803	83	11904	0.943 ug/L	97
31) 1,1-Dichloropropene	5.091	75	9224	0.908 ug/L	93
33) 1,1,1-Trichloroethane	4.981	97	9215	0.862 ug/L	98
34) 1,2-Dichloroethane	5.478	62	9088	1.006 ug/L	98
35) Benzene	5.305	78	27279	0.952 ug/L	99
36) 2-Butanone	5.086	43	11130	3.295 ug/L	88
37) Carbon tetrachloride	4.934	117	8231	1.105 ug/L	87
38) Tert-amyl Methyl Ether	5.389	73	14869	0.857 ug/L #	88
39) Trichloroethene	5.813	130	7110	0.931 ug/L	97
40) Methyl Cyclohexane	5.802	55	10434	0.835 ug/L	93
41) Dibromomethane	6.184	93	3954	0.978 ug/L	96
42) Bromodichloromethane	6.320	83	6959	0.841 ug/L	99
43) 1,2-Dichloropropane	6.263	63	6458	0.901 ug/L	95
44) 2-Chloroethylvinylether	6.838	63	3100	0.609 ug/L	93
45) cis-1,3-Dichloropropene	6.890	75	9071	0.886 ug/L	92

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081701.D
Acq On : 17 Aug 2017 11:13 am
Operator :
Sample : CAL1 0.928 ppb
Misc : CAL1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 13:40:02 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

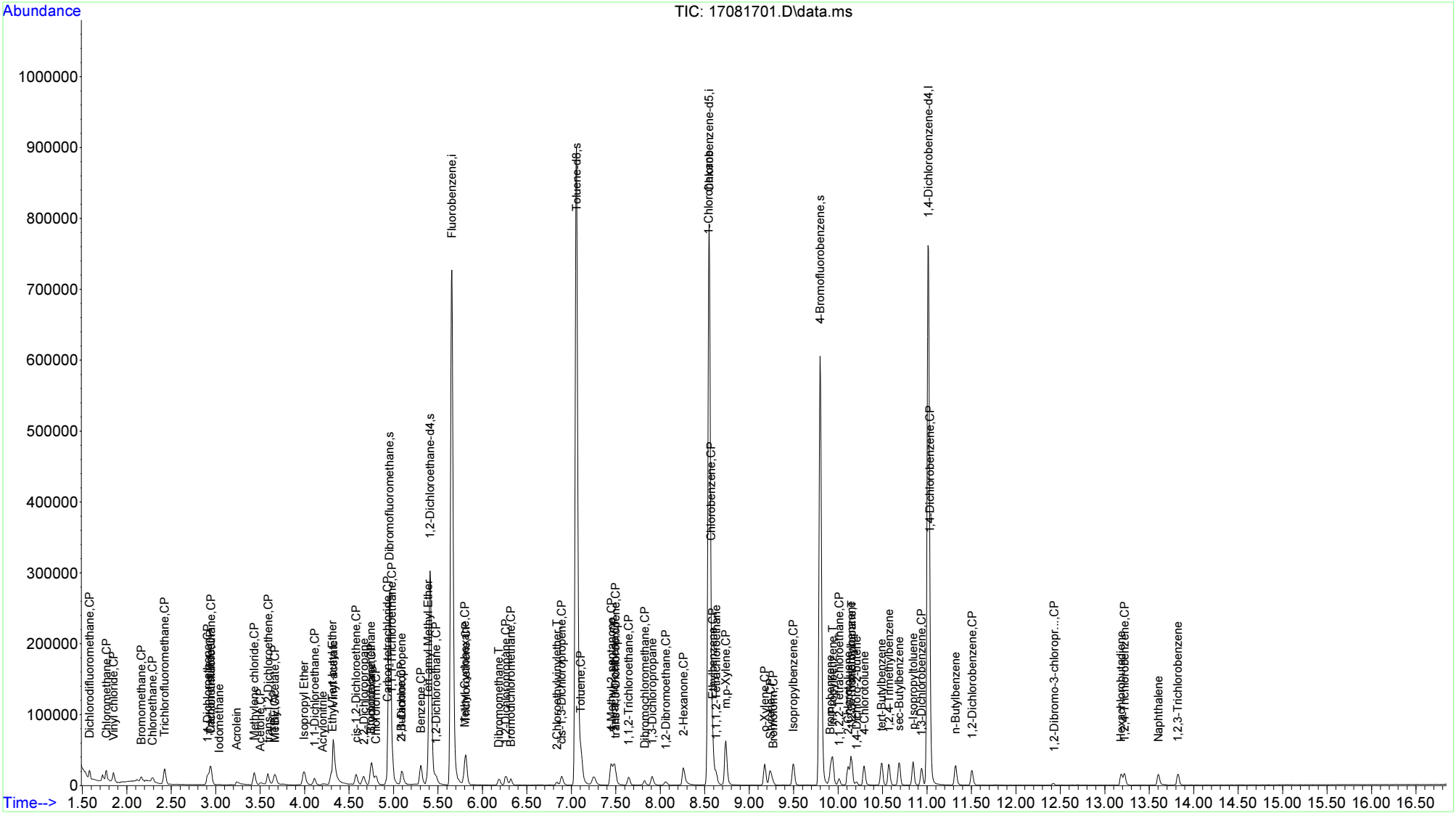
Compound	R.T.	QIon	Response	Conc	Units		%Rec
46) trans-1,3-Dichloropropene	7.497	75	7179	0.881	ug/L		96
47) 1,1,2-Trichloroethane	7.643	97	4830	0.864	ug/L		91
48) Toluene	7.105	92	16928	0.945	ug/L		100
50) 4-Methyl-2-pentanone	7.450	43	30298	3.848	ug/L		93
52) 2-Hexanone	8.260	43	20223	3.648	ug/L		90
53) Dibromochloromethane	7.826	129	5024	1.008	ug/L		83
54) 1,3-Dichloropropane	7.910	76	9471	0.929	ug/L		96
55) Tetrachloroethene	7.486	164	6308	0.961	ug/L		95
56) 1,2-Dibromoethane	8.062	107	5172	0.865	ug/L		98
57) Chlorobenzene	8.569	112	18221	0.976	ug/L		93
58) 1,1,1,2-Tetrachloroethane	8.627	131	5243	1.001	ug/L		82
59) Ethylbenzene	8.590	106	9954	0.949	ug/L		86
60) Bromoform	9.270	173	3063	1.071	ug/L		88
61) Styrene	9.239	104	14840	0.815	ug/L		98
62) 1-Chlorohexane	8.543	55	12721	1.504	ug/L	#	62
63) m,p-Xylene	8.736	106	23535	1.861	ug/L		98
64) o-Xylene	9.176	106	10810	0.897	ug/L		88
65) Isopropylbenzene	9.495	105	27515	0.895	ug/L		99
67) Bromobenzene	9.913	156	7620	1.035	ug/L		93
68) 1,1,2,2-Tetrachloroethane	10.013	83	6900	0.976	ug/L		94
69) 1,2,3-Trichloropropane	10.154	110	1924	0.891	ug/L		99
71) 1,4-Dichloro-2-butene	10.206	53	1815	0.843	ug/L	#	46
72) n-Propylbenzene	9.939	91	35035	0.958	ug/L		97
73) 2-Chlorotoluene	10.112	91	22382	0.977	ug/L		97
74) 1,3,5-Trimethylbenzene	10.143	105	22066	0.906	ug/L		99
75) 4-Chlorotoluene	10.295	91	20723	0.976	ug/L		97
76) tert-Butylbenzene	10.489	119	20594	0.947	ug/L		96
77) 1,2,4-Trimethylbenzene	10.572	105	22386	0.915	ug/L		96
78) sec-Butylbenzene	10.687	105	30778	0.948	ug/L		99
79) 1,3-Dichlorobenzene	10.938	146	14158	1.051	ug/L		99
80) p-Isopropyltoluene	10.844	119	24230	0.910	ug/L		93
81) 1,4-Dichlorobenzene	11.032	146	15293	1.102	ug/L		89
82) 1,2-Dichlorobenzene	11.508	146	12255	1.007	ug/L		96
83) 1,2-Dibromo-3-chloropr...	12.429	75	694	0.914	ug/L	#	82
84) n-Butylbenzene	11.320	91	22054	0.914	ug/L		97
85) 1,2,4-Trichlorobenzene	13.224	180	9099	1.124	ug/L		90
86) Hexachlorobutadiene	13.182	225	5122	1.180	ug/L		98
87) Naphthalene	13.601	128	20042	1.028	ug/L		96
88) 1,2,3-Trichlorobenzene	13.820	180	8184	1.146	ug/L		91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081701.D
Acq On : 17 Aug 2017 11:13 am
Operator :
Sample : CAL1 0.928 ppb
Misc : CAL1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Aug 18 13:40:02 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081702.D
Acq On : 17 Aug 2017 11:37 am
Operator :
Sample : CAL2 4.64 ppb
Misc : CAL2
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 13:40:06 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	%Rec
Internal Standards						
1) Fluorobenzene	5.656	96	741400	200.00	ug/L	98
49) Chlorobenzene-d5	8.548	117	527040	200.00	ug/L	99
66) 1,4-Dichlorobenzene-d4	11.017	152	247565	200.00	ug/L	93
System Monitoring Compounds						Dev(Min)
30) Dibromofluoromethane	4.955	113	183273	199.87	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.94%			
32) 1,2-Dichloroethane-d4	5.415	65	232674	201.79	ug/L	0.00
Spiked Amount 200.000			Recovery = 100.90%			
51) Toluene-d8	7.058	98	694616	198.13	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.06%			
70) 4-Bromofluorobenzene	9.798	95	244814	199.63	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.81%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.582	85	44457	4.720	ug/L	98
3) Chloromethane	1.770	50	44368	4.500	ug/L	99
4) Vinyl chloride	1.848	62	40809	4.721	ug/L	99
5) Bromomethane	2.162	94	12947	4.436	ug/L	92
6) Chloroethane	2.288	64	17005	4.597	ug/L	92
7) Trichlorofluoromethane	2.429	101	55298	4.773	ug/L	98
8) Trichlorotrifluoroethane	2.947	101	36208	4.822	ug/L #	97
9) Acrolein	3.224	56	26397	23.838	ug/L	96
10) Isopropyl Alcohol	3.423	45	938	Below Cal	#	100
11) Acetone	3.480	43	42866	22.198	ug/L	97
12) Iodomethane	3.041	142	8033	5.781	ug/L	93
13) 1,1-Dichloroethene	2.910	96	29906	4.718	ug/L	96
14) Carbon disulfide	2.941	76	100356	4.686	ug/L	99
15) Methylene chloride	3.433	84	32251	4.596	ug/L	98
16) Methyl Acetate	3.600	43	20032	3.611	ug/L	91
17) trans-1,2-Dichloroethene	3.585	96	33163	4.841	ug/L	96
18) Acrylonitrile	4.170	53	22921	9.630	ug/L	97
19) MTBE	3.663	73	85334	4.604	ug/L	94
20) Tert-Butanol	3.752	59	8038	17.566	ug/L #	100
21) Isopropyl Ether	3.993	45	116265	4.699	ug/L	99
22) 1,1-Dichloroethane	4.113	63	59688	4.769	ug/L	99
23) Vinyl acetate	4.317	43	349729	23.957	ug/L	99
24) Ethyl-Tert-butyl Ether	4.306	59	98003	4.719	ug/L	99
25) cis-1,2-Dichloroethene	4.578	96	36336	4.841	ug/L	98
26) 2,2-Dichloropropane	4.667	77	42624	4.630	ug/L	100
27) Bromochloromethane	4.746	128	15220	4.775	ug/L	99
28) Cyclohexane	4.761	84	56096	4.639	ug/L	96
29) Chloroform	4.803	83	60008	4.784	ug/L	98
31) 1,1-Dichloropropene	5.091	75	47756	4.730	ug/L	98
33) 1,1,1-Trichloroethane	4.986	97	49984	4.706	ug/L	98
34) 1,2-Dichloroethane	5.473	62	43314	4.825	ug/L	96
35) Benzene	5.305	78	136818	4.801	ug/L	100
36) 2-Butanone	5.065	43	75682	22.543	ug/L	99
37) Carbon tetrachloride	4.934	117	40009	4.572	ug/L	99
38) Tert-amyl Methyl Ether	5.389	73	80026	4.638	ug/L	94
39) Trichloroethene	5.813	130	36332	4.789	ug/L	97
40) Methyl Cyclohexane	5.808	55	58813	4.737	ug/L	97
41) Dibromomethane	6.184	93	18844	4.690	ug/L	99
42) Bromodichloromethane	6.320	83	37643	4.577	ug/L	99
43) 1,2-Dichloropropane	6.263	63	33547	4.709	ug/L	97
44) 2-Chloroethylvinylether	6.827	63	21088	4.166	ug/L	97
45) cis-1,3-Dichloropropene	6.890	75	45263	4.446	ug/L	97

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081702.D
Acq On : 17 Aug 2017 11:37 am
Operator :
Sample : CAL2 4.64 ppb
Misc : CAL2
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 13:40:06 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

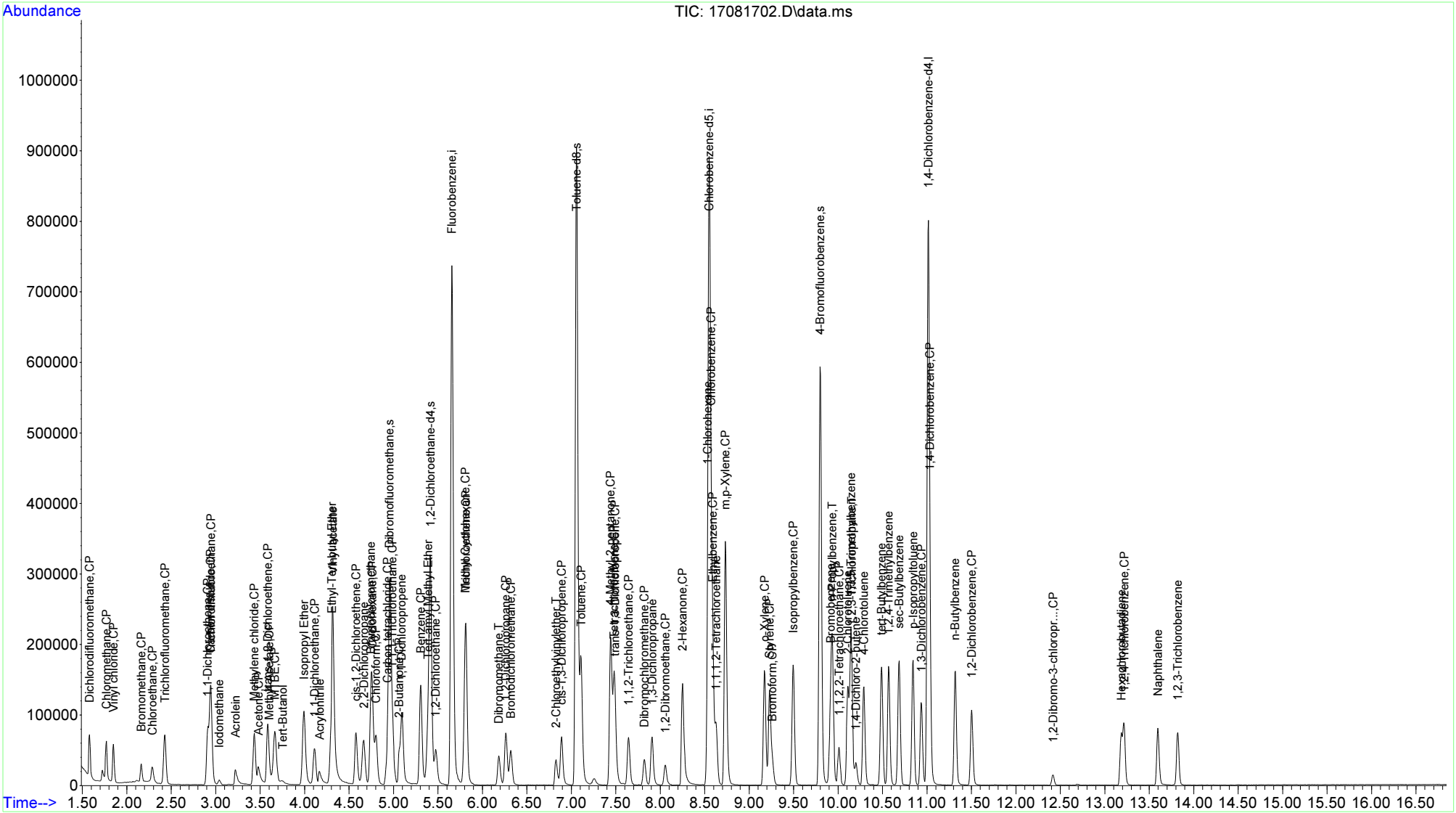
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.492	75	35384	4.371	ug/L	94
47) 1,1,2-Trichloroethane	7.643	97	26489	4.769	ug/L	98
48) Toluene	7.110	92	86485	4.858	ug/L	98
50) 4-Methyl-2-pentanone	7.439	43	187213	24.044	ug/L	97
52) 2-Hexanone	8.250	43	124444	22.703	ug/L	99
53) Dibromochloromethane	7.821	129	25568	4.538	ug/L	100
54) 1,3-Dichloropropane	7.910	76	46875	4.649	ug/L	95
55) Tetrachloroethene	7.481	164	31453	4.846	ug/L	98
56) 1,2-Dibromoethane	8.057	107	26852	4.544	ug/L	99
57) Chlorobenzene	8.569	112	88495	4.795	ug/L	97
58) 1,1,1,2-Tetrachloroethane	8.627	131	25713	4.590	ug/L	97
59) Ethylbenzene	8.590	106	49261	4.749	ug/L	99
60) Bromoform	9.260	173	15339	4.333	ug/L	95
61) Styrene	9.228	104	82653	4.588	ug/L	96
62) 1-Chlorohexane	8.533	55	42538	5.087	ug/L	85
63) m,p-Xylene	8.731	106	121950	9.749	ug/L	99
64) o-Xylene	9.176	106	55984	4.698	ug/L	98
65) Isopropylbenzene	9.495	105	143053	4.705	ug/L	97
67) Bromobenzene	9.919	156	34879	4.738	ug/L	97
68) 1,1,2,2-Tetrachloroethane	10.013	83	33623	4.755	ug/L	97
69) 1,2,3-Trichloropropane	10.154	110	10707	4.961	ug/L	90
71) 1,4-Dichloro-2-butene	10.201	53	9047	4.204	ug/L	87
72) n-Propylbenzene	9.934	91	176442	4.826	ug/L	100
73) 2-Chlorotoluene	10.107	91	109713	4.787	ug/L	97
74) 1,3,5-Trimethylbenzene	10.143	105	117497	4.826	ug/L	99
75) 4-Chlorotoluene	10.290	91	99880	4.706	ug/L	100
76) tert-Butylbenzene	10.489	119	105745	4.863	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	116636	4.768	ug/L	96
78) sec-Butylbenzene	10.687	105	156658	4.825	ug/L	100
79) 1,3-Dichlorobenzene	10.938	146	63974	4.748	ug/L	99
80) p-Isopropyltoluene	10.844	119	127769	4.799	ug/L	98
81) 1,4-Dichlorobenzene	11.033	146	66222	4.774	ug/L	98
82) 1,2-Dichlorobenzene	11.503	146	58172	4.782	ug/L	96
83) 1,2-Dibromo-3-chloropr...	12.419	75	4855	4.621	ug/L	93
84) n-Butylbenzene	11.315	91	114089	4.729	ug/L	98
85) 1,2,4-Trichlorobenzene	13.219	180	36669	4.528	ug/L	98
86) Hexachlorobutadiene	13.187	225	19552	4.505	ug/L	97
87) Naphthalene	13.595	128	84030	4.309	ug/L	95
88) 1,2,3-Trichlorobenzene	13.820	180	32881	4.605	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081702.D
Acq On : 17 Aug 2017 11:37 am
Operator :
Sample : CAL2 4.64 ppb
Misc : CAL2
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 13:40:06 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081703.D
Acq On : 17 Aug 2017 12:00 pm
Operator :
Sample : CAL3 9.28 ppb
Misc : CAL3
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 13:40:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	735801	200.00	ug/L		97
49) Chlorobenzene-d5	8.548	117	532403	200.00	ug/L		100
66) 1,4-Dichlorobenzene-d4	11.012	152	253155	200.00	ug/L		95
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.960	113	183885	202.06	ug/L		0.00
Spiked Amount 200.000			Recovery = 101.03%				
32) 1,2-Dichloroethane-d4	5.415	65	234261	204.71	ug/L		0.00
Spiked Amount 200.000			Recovery = 102.35%				
51) Toluene-d8	7.058	98	695300	196.33	ug/L		0.00
Spiked Amount 200.000			Recovery = 98.17%				
70) 4-Bromofluorobenzene	9.798	95	246288	196.40	ug/L		0.00
Spiked Amount 200.000			Recovery = 98.20%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.582	85	85864	9.186	ug/L		100
3) Chloromethane	1.770	50	93025	9.506	ug/L		99
4) Vinyl chloride	1.848	62	78097	9.103	ug/L		99
5) Bromomethane	2.162	94	23812	8.221	ug/L		95
6) Chloroethane	2.288	64	35913	9.782	ug/L		95
7) Trichlorofluoromethane	2.429	101	106997	9.306	ug/L		99
8) Trichlorotrifluoroethane	2.947	101	70534	9.464	ug/L		99
9) Acrolein	3.213	56	59338	49.299	ug/L		99
10) Isopropyl Alcohol	3.407	45	2837	23.109	ug/L	#	100
11) Acetone	3.470	43	89041	48.417	ug/L		99
12) Iodomethane	3.041	142	22982	8.287	ug/L		98
13) 1,1-Dichloroethene	2.910	96	58883	9.360	ug/L		98
14) Carbon disulfide	2.941	76	201492	9.481	ug/L		100
15) Methylene chloride	3.433	84	63453	9.392	ug/L		98
16) Methyl Acetate	3.590	43	48452	8.801	ug/L		99
17) trans-1,2-Dichloroethene	3.580	96	63171	9.292	ug/L		98
18) Acrylonitrile	4.155	53	50604	19.639	ug/L		99
19) MTBE	3.663	73	169801	9.231	ug/L		98
20) Tert-Butanol	3.742	59	16358	45.255	ug/L	#	100
21) Isopropyl Ether	3.993	45	229484	9.346	ug/L		99
22) 1,1-Dichloroethane	4.108	63	117177	9.433	ug/L		99
23) Vinyl acetate	4.312	43	705955	46.418	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	191064	9.271	ug/L		99
25) cis-1,2-Dichloroethene	4.579	96	69490	9.329	ug/L		98
26) 2,2-Dichloropropane	4.667	77	82282	9.005	ug/L		99
27) Bromochloromethane	4.751	128	30260	9.566	ug/L		93
28) Cyclohexane	4.762	84	110709	9.224	ug/L		97
29) Chloroform	4.803	83	117778	9.462	ug/L		98
31) 1,1-Dichloropropene	5.091	75	94608	9.441	ug/L		98
33) 1,1,1-Trichloroethane	4.986	97	97802	9.278	ug/L		99
34) 1,2-Dichloroethane	5.473	62	82482	9.258	ug/L		98
35) Benzene	5.306	78	269423	9.527	ug/L		97
36) 2-Butanone	5.054	43	166574	49.994	ug/L		99
37) Carbon tetrachloride	4.934	117	76281	8.577	ug/L		100
38) Tert-amyl Methyl Ether	5.389	73	157283	9.185	ug/L		98
39) Trichloroethene	5.813	130	72173	9.585	ug/L		95
40) Methyl Cyclohexane	5.808	55	114621	9.301	ug/L		99
41) Dibromomethane	6.184	93	37091	9.302	ug/L		97
42) Bromodichloromethane	6.320	83	74753	9.158	ug/L		98
43) 1,2-Dichloropropane	6.263	63	65866	9.316	ug/L		96
44) 2-Chloroethylvinylether	6.822	63	44663	8.891	ug/L		98
45) cis-1,3-Dichloropropene	6.885	75	90074	8.915	ug/L		100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081703.D
Acq On : 17 Aug 2017 12:00 pm
Operator :
Sample : CAL3 9.28 ppb
Misc : CAL3
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 13:40:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

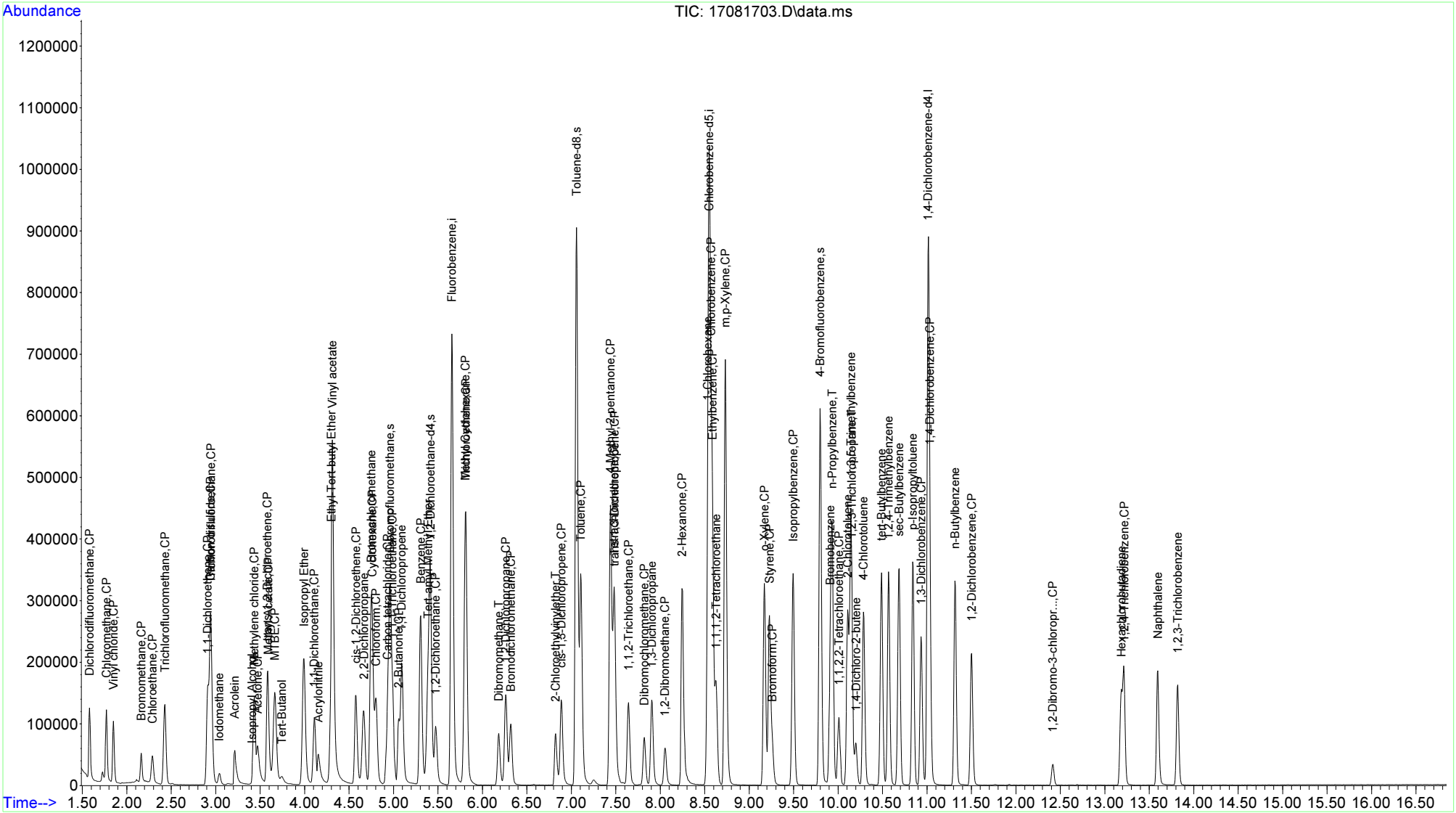
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.487	75	71418	8.889	ug/L	97
47) 1,1,2-Trichloroethane	7.643	97	52594	9.540	ug/L	99
48) Toluene	7.105	92	166726	9.436	ug/L	98
50) 4-Methyl-2-pentanone	7.439	43	383494	48.757	ug/L	98
52) 2-Hexanone	8.245	43	269758	48.718	ug/L	99
53) Dibromochloromethane	7.821	129	51233	8.819	ug/L	99
54) 1,3-Dichloropropane	7.905	76	93124	9.142	ug/L	99
55) Tetrachloroethene	7.481	164	61665	9.405	ug/L	94
56) 1,2-Dibromoethane	8.051	107	54574	9.141	ug/L	96
57) Chlorobenzene	8.569	112	173213	9.292	ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	50381	8.792	ug/L	96
59) Ethylbenzene	8.585	106	97011	9.258	ug/L	99
60) Bromoform	9.260	173	32389	8.724	ug/L	95
61) Styrene	9.228	104	168677	9.269	ug/L	99
62) 1-Chlorohexane	8.533	55	79162	9.371	ug/L	90
63) m,p-Xylene	8.731	106	237466	18.793	ug/L	98
64) o-Xylene	9.171	106	110788	9.203	ug/L	99
65) Isopropylbenzene	9.495	105	285437	9.293	ug/L	100
67) Bromobenzene	9.913	156	68647	9.118	ug/L	97
68) 1,1,2,2-Tetrachloroethane	10.008	83	67686	9.361	ug/L	98
69) 1,2,3-Trichloropropane	10.154	110	21448	9.718	ug/L	98
71) 1,4-Dichloro-2-butene	10.201	53	19840	9.016	ug/L	82
72) n-Propylbenzene	9.934	91	353614	9.457	ug/L	98
73) 2-Chlorotoluene	10.107	91	216913	9.256	ug/L	98
74) 1,3,5-Trimethylbenzene	10.144	105	234791	9.430	ug/L	99
75) 4-Chlorotoluene	10.285	91	203038	9.354	ug/L	98
76) tert-Butylbenzene	10.489	119	208689	9.385	ug/L	100
77) 1,2,4-Trimethylbenzene	10.567	105	233271	9.325	ug/L	100
78) sec-Butylbenzene	10.687	105	315493	9.502	ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	125961	9.142	ug/L	100
80) p-Isopropyltoluene	10.839	119	255430	9.383	ug/L	99
81) 1,4-Dichlorobenzene	11.033	146	130439	9.196	ug/L	99
82) 1,2-Dichlorobenzene	11.503	146	113338	9.112	ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	10904	9.742	ug/L	93
84) n-Butylbenzene	11.315	91	230965	9.362	ug/L	100
85) 1,2,4-Trichlorobenzene	13.219	180	75979	9.176	ug/L	96
86) Hexachlorobutadiene	13.188	225	38946	8.776	ug/L	98
87) Naphthalene	13.595	128	185891	9.322	ug/L	100
88) 1,2,3-Trichlorobenzene	13.820	180	67955	9.307	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081703.D
Acq On : 17 Aug 2017 12:00 pm
Operator :
Sample : CAL3 9.28 ppb
Misc : CAL3
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 13:40:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081704.D
Acq On : 17 Aug 2017 12:24 pm
Operator :
Sample : CAL4 18.6 ppb
Misc : CAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 13:40:14 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	740562	200.00	ug/L		97
49) Chlorobenzene-d5	8.548	117	527258	200.00	ug/L		99
66) 1,4-Dichlorobenzene-d4	11.017	152	250995	200.00	ug/L		95
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	184350	201.27	ug/L		0.00
Spiked Amount 200.000			Recovery = 100.64%				
32) 1,2-Dichloroethane-d4	5.415	65	237888	206.55	ug/L		0.00
Spiked Amount 200.000			Recovery = 103.28%				
51) Toluene-d8	7.058	98	696628	198.62	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.31%				
70) 4-Bromofluorobenzene	9.798	95	248997	200.26	ug/L		0.00
Spiked Amount 200.000			Recovery = 100.13%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.582	85	172385	18.324	ug/L		99
3) Chloromethane	1.770	50	178051	18.078	ug/L		100
4) Vinyl chloride	1.848	62	160497	18.588	ug/L		100
5) Bromomethane	2.162	94	50380	17.283	ug/L		99
6) Chloroethane	2.288	64	67268	18.205	ug/L		98
7) Trichlorofluoromethane	2.429	101	215923	18.660	ug/L		100
8) Trichlorotrifluoroethane	2.947	101	148754	19.832	ug/L	#	99
9) Acrolein	3.208	56	81841	66.134	ug/L		97
10) Isopropyl Alcohol	3.396	45	6324	81.345	ug/L	#	100
11) Acetone	3.464	43	166937	91.569	ug/L		100
12) Iodomethane	3.041	142	71274	16.152	ug/L		100
13) 1,1-Dichloroethene	2.910	96	116231	18.357	ug/L		99
14) Carbon disulfide	2.941	76	398344	18.622	ug/L		99
15) Methylene chloride	3.433	84	122230	18.259	ug/L		98
16) Methyl Acetate	3.585	43	105980	19.127	ug/L		99
17) trans-1,2-Dichloroethene	3.580	96	124722	18.228	ug/L		99
18) Acrylonitrile	4.150	53	96940	36.041	ug/L		99
19) MTBE	3.663	73	340433	18.389	ug/L		98
20) Tert-Butanol	3.742	59	31420	92.228	ug/L	#	100
21) Isopropyl Ether	3.987	45	459965	18.611	ug/L		99
22) 1,1-Dichloroethane	4.108	63	229865	18.386	ug/L		98
23) Vinyl acetate	4.312	43	1043902	67.331	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	381707	18.403	ug/L		100
25) cis-1,2-Dichloroethene	4.573	96	139218	18.570	ug/L		98
26) 2,2-Dichloropropane	4.662	77	161791	17.593	ug/L		98
27) Bromochloromethane	4.746	128	60610	19.037	ug/L		94
28) Cyclohexane	4.762	84	234329	19.399	ug/L		98
29) Chloroform	4.803	83	229642	18.330	ug/L		99
31) 1,1-Dichloropropene	5.091	75	184608	18.304	ug/L		99
33) 1,1,1-Trichloroethane	4.986	97	192466	18.141	ug/L		99
34) 1,2-Dichloroethane	5.473	62	163213	18.202	ug/L		99
35) Benzene	5.300	78	525797	18.473	ug/L		99
36) 2-Butanone	5.054	43	320327	95.522	ug/L		98
37) Carbon tetrachloride	4.934	117	157059	17.283	ug/L		97
38) Tert-amyl Methyl Ether	5.389	73	310136	17.995	ug/L		98
39) Trichloroethene	5.813	130	139196	18.367	ug/L		97
40) Methyl Cyclohexane	5.808	55	236648	19.080	ug/L		99
41) Dibromomethane	6.179	93	73320	18.270	ug/L		96
42) Bromodichloromethane	6.320	83	151233	18.408	ug/L		100
43) 1,2-Dichloropropane	6.263	63	131925	18.540	ug/L		99
44) 2-Chloroethylvinylether	6.817	63	94389	18.669	ug/L		98
45) cis-1,3-Dichloropropene	6.885	75	186229	18.312	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081704.D
Acq On : 17 Aug 2017 12:24 pm
Operator :
Sample : CAL4 18.6 ppb
Misc : CAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 13:40:14 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

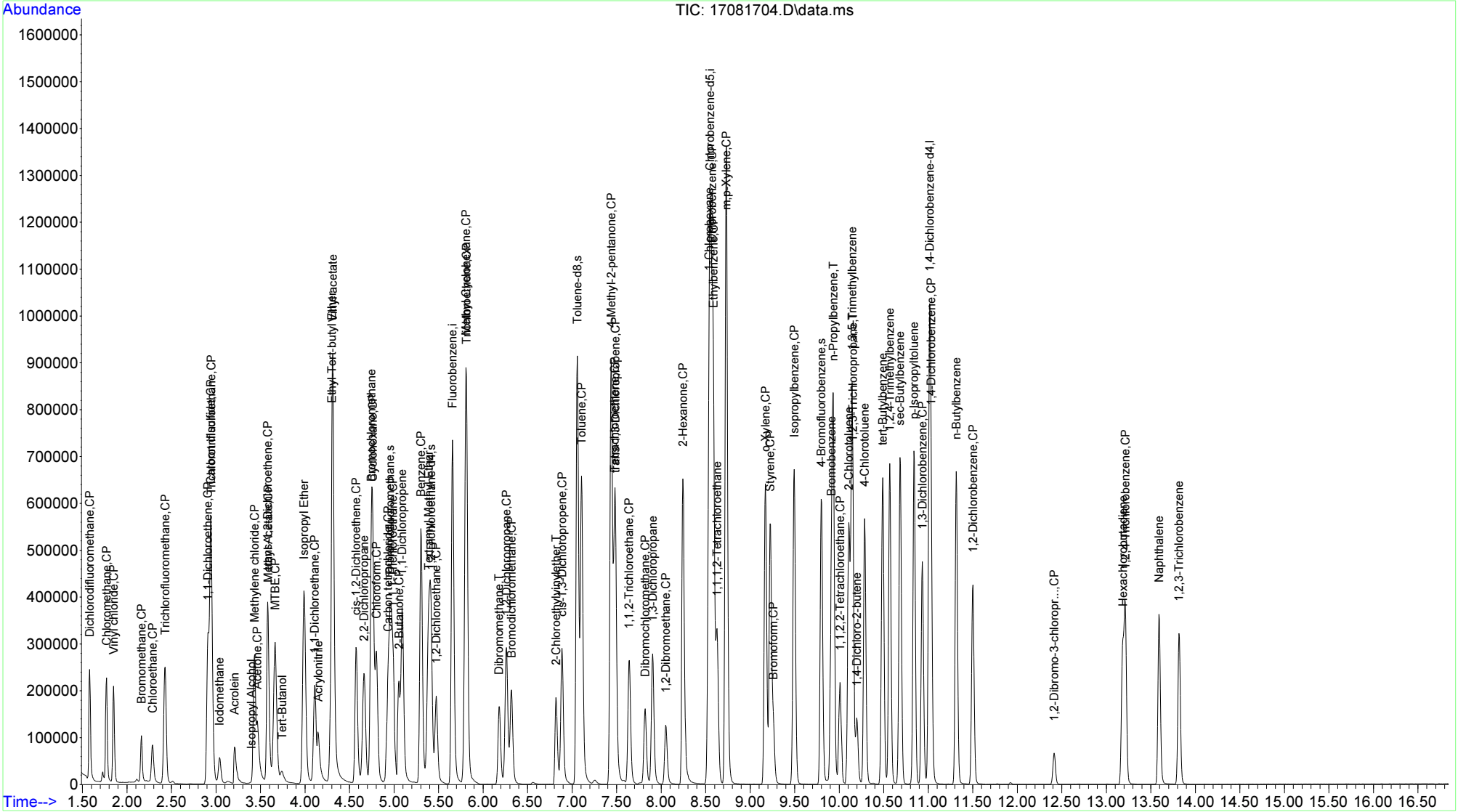
Compound	R.T.	QIon	Response	Conc Units	%Rec
46) trans-1,3-Dichloropropene	7.487	75	144997	17.931 ug/L	98
47) 1,1,2-Trichloroethane	7.638	97	103221	18.603 ug/L	99
48) Toluene	7.105	92	327222	18.400 ug/L	98
50) 4-Methyl-2-pentanone	7.439	43	759364	97.487 ug/L	98
52) 2-Hexanone	8.245	43	534740	97.517 ug/L	99
53) Dibromochloromethane	7.821	129	105996	18.116 ug/L	99
54) 1,3-Dichloropropane	7.905	76	185108	18.350 ug/L	100
55) Tetrachloroethene	7.476	164	117044	18.026 ug/L	99
56) 1,2-Dibromoethane	8.051	107	109040	18.443 ug/L	100
57) Chlorobenzene	8.569	112	337129	18.261 ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	103745	18.068 ug/L	97
59) Ethylbenzene	8.585	106	188552	18.170 ug/L	96
60) Bromoform	9.260	173	67080	17.765 ug/L	98
61) Styrene	9.223	104	332252	18.436 ug/L	99
62) 1-Chlorohexane	8.538	55	147832	17.671 ug/L	93
63) m,p-Xylene	8.731	106	461042	36.843 ug/L	99
64) o-Xylene	9.171	106	216284	18.141 ug/L	100
65) Isopropylbenzene	9.495	105	555327	18.256 ug/L	100
67) Bromobenzene	9.913	156	136703	18.314 ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.008	83	130529	18.209 ug/L	100
69) 1,2,3-Trichloropropane	10.154	110	40479	18.499 ug/L	99
71) 1,4-Dichloro-2-butene	10.196	53	39015	17.882 ug/L	89
72) n-Propylbenzene	9.934	91	682897	18.421 ug/L	98
73) 2-Chlorotoluene	10.107	91	423493	18.226 ug/L	98
74) 1,3,5-Trimethylbenzene	10.143	105	455770	18.463 ug/L	98
75) 4-Chlorotoluene	10.285	91	391123	18.175 ug/L	100
76) tert-Butylbenzene	10.489	119	403136	18.286 ug/L	98
77) 1,2,4-Trimethylbenzene	10.567	105	460723	18.577 ug/L	98
78) sec-Butylbenzene	10.682	105	606433	18.422 ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	244975	17.934 ug/L	99
80) p-Isopropyltoluene	10.839	119	499863	18.520 ug/L	100
81) 1,4-Dichlorobenzene	11.033	146	252815	17.978 ug/L	98
82) 1,2-Dichlorobenzene	11.503	146	224472	18.202 ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	19889	17.524 ug/L	100
84) n-Butylbenzene	11.315	91	450487	18.418 ug/L	100
85) 1,2,4-Trichlorobenzene	13.214	180	151087	18.404 ug/L	100
86) Hexachlorobutadiene	13.187	225	76709	17.435 ug/L	99
87) Naphthalene	13.590	128	359081	18.162 ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	133091	18.384 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081704.D
Acq On : 17 Aug 2017 12:24 pm
Operator :
Sample : CAL4 18.6 ppb
Misc : CAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 13:40:14 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081705.D
Acq On : 17 Aug 2017 12:47 pm
Operator :
Sample : CAL5 27.8 ppb
Misc : CAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 13:40:18 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	%Rec
Internal Standards						
1) Fluorobenzene	5.656	96	744812	200.00	ug/L	98
49) Chlorobenzene-d5	8.548	117	528835	200.00	ug/L	99
66) 1,4-Dichlorobenzene-d4	11.012	152	252728	200.00	ug/L	95
System Monitoring Compounds						Dev(Min)
30) Dibromofluoromethane	4.960	113	183890	199.62	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.81%			
32) 1,2-Dichloroethane-d4	5.415	65	228402	197.18	ug/L	0.00
Spiked Amount 200.000			Recovery = 98.59%			
51) Toluene-d8	7.058	98	705968	200.69	ug/L	0.00
Spiked Amount 200.000			Recovery = 100.35%			
70) 4-Bromofluorobenzene	9.798	95	251523	200.91	ug/L	0.00
Spiked Amount 200.000			Recovery = 100.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.581	85	259028	27.377	ug/L	99
3) Chloromethane	1.770	50	273465	27.607	ug/L	100
4) Vinyl chloride	1.848	62	243485	28.038	ug/L	99
5) Bromomethane	2.162	94	79838	27.232	ug/L	95
6) Chloroethane	2.288	64	103899	27.958	ug/L	99
7) Trichlorofluoromethane	2.429	101	327514	28.142	ug/L	99
8) Trichlorotrifluoroethane	2.947	101	214408	28.422	ug/L #	97
9) Acrolein	3.208	56	113804	89.902	ug/L	99
10) Isopropyl Alcohol	3.396	45	8269	104.098	ug/L #	100
11) Acetone	3.464	43	254264	139.260	ug/L	99
12) Iodomethane	3.041	142	139014	26.807	ug/L	100
13) 1,1-Dichloroethene	2.910	96	178558	28.040	ug/L	99
14) Carbon disulfide	2.941	76	604446	28.096	ug/L	99
15) Methylene chloride	3.433	84	186106	27.833	ug/L	99
16) Methyl Acetate	3.579	43	155215	27.852	ug/L	99
17) trans-1,2-Dichloroethene	3.579	96	190271	27.650	ug/L	99
18) Acrylonitrile	4.144	53	148384	54.046	ug/L	99
19) MTBE	3.663	73	514124	27.613	ug/L	99
20) Tert-Butanol	3.736	59	47325	138.810	ug/L #	100
21) Isopropyl Ether	3.987	45	700874	28.197	ug/L	99
22) 1,1-Dichloroethane	4.108	63	349617	27.806	ug/L	99
23) Vinyl acetate	4.312	43	1433196	91.458	ug/L	100
24) Ethyl-Tert-butyl Ether	4.301	59	583494	27.970	ug/L	100
25) cis-1,2-Dichloroethene	4.573	96	208633	27.670	ug/L	99
26) 2,2-Dichloropropane	4.667	77	249487	26.974	ug/L	100
27) Bromochloromethane	4.746	128	90231	28.180	ug/L	96
28) Cyclohexane	4.756	84	337408	27.773	ug/L	99
29) Chloroform	4.803	83	348902	27.691	ug/L	96
31) 1,1-Dichloropropene	5.091	75	284405	28.037	ug/L	99
33) 1,1,1-Trichloroethane	4.986	97	300138	28.128	ug/L	99
34) 1,2-Dichloroethane	5.473	62	247263	27.419	ug/L	99
35) Benzene	5.300	78	794474	27.754	ug/L	100
36) 2-Butanone	5.049	43	484243	143.579	ug/L	100
37) Carbon tetrachloride	4.934	117	239202	26.000	ug/L	99
38) Tert-amyl Methyl Ether	5.389	73	482616	27.843	ug/L	99
39) Trichloroethene	5.813	130	215917	28.328	ug/L	97
40) Methyl Cyclohexane	5.808	55	348609	27.947	ug/L	100
41) Dibromomethane	6.179	93	111602	27.651	ug/L	98
42) Bromodichloromethane	6.320	83	232839	28.180	ug/L	99
43) 1,2-Dichloropropane	6.263	63	201792	28.197	ug/L	100
44) 2-Chloroethylvinylether	6.817	63	140999	27.729	ug/L	98
45) cis-1,3-Dichloropropene	6.885	75	287955	28.154	ug/L	99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081705.D
Acq On : 17 Aug 2017 12:47 pm
Operator :
Sample : CAL5 27.8 ppb
Misc : CAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 13:40:18 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

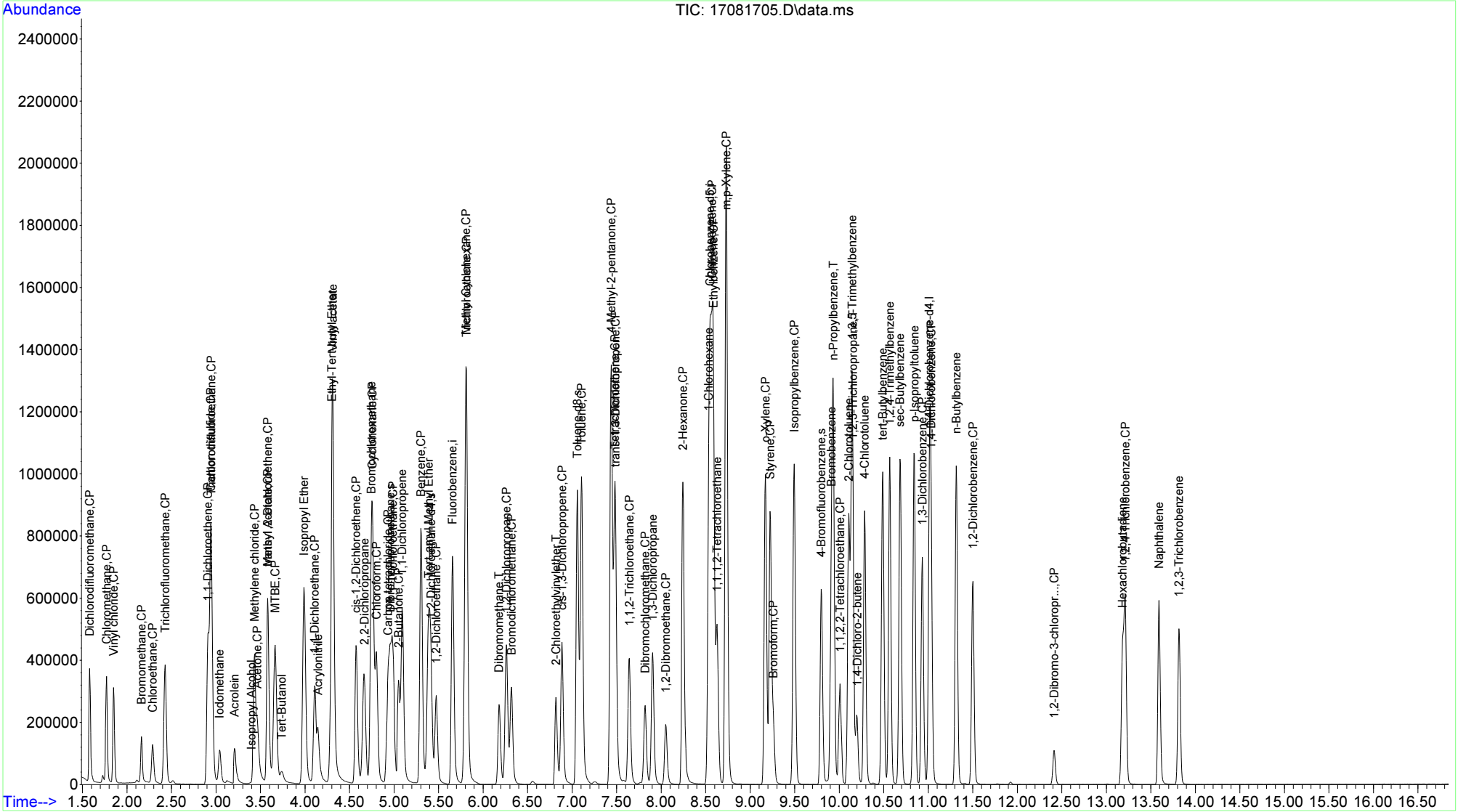
Compound	R.T.	QIon	Response	Conc Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	226671	27.872 ug/L	99
47) 1,1,2-Trichloroethane	7.643	97	156371	28.022 ug/L	99
48) Toluene	7.105	92	498547	27.874 ug/L	99
50) 4-Methyl-2-pentanone	7.439	43	1125406	144.049 ug/L	99
52) 2-Hexanone	8.245	43	790095	143.654 ug/L	99
53) Dibromochloromethane	7.821	129	165460	27.882 ug/L	100
54) 1,3-Dichloropropane	7.905	76	280869	27.760 ug/L	99
55) Tetrachloroethene	7.481	164	181577	27.881 ug/L	99
56) 1,2-Dibromoethane	8.051	107	165778	27.956 ug/L	99
57) Chlorobenzene	8.569	112	512515	27.678 ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	162247	27.936 ug/L	98
59) Ethylbenzene	8.585	106	291020	27.961 ug/L	98
60) Bromoform	9.259	173	106466	27.635 ug/L	96
61) Styrene	9.223	104	514581	28.468 ug/L	99
62) 1-Chlorohexane	8.532	55	225039	26.819 ug/L	96
63) m,p-Xylene	8.731	106	702477	55.969 ug/L	98
64) o-Xylene	9.171	106	336804	28.165 ug/L	97
65) Isopropylbenzene	9.495	105	855636	28.044 ug/L	100
67) Bromobenzene	9.913	156	207542	27.614 ug/L	98
68) 1,1,2,2-Tetrachloroethane	10.007	83	195357	27.065 ug/L	98
69) 1,2,3-Trichloropropane	10.154	110	61050	27.708 ug/L	97
71) 1,4-Dichloro-2-butene	10.201	53	60874	27.710 ug/L	89
72) n-Propylbenzene	9.934	91	1047065	28.051 ug/L	97
73) 2-Chlorotoluene	10.107	91	647721	27.685 ug/L	100
74) 1,3,5-Trimethylbenzene	10.143	105	700262	28.172 ug/L	100
75) 4-Chlorotoluene	10.285	91	601002	27.736 ug/L	99
76) tert-Butylbenzene	10.489	119	619024	27.887 ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	702303	28.123 ug/L	98
78) sec-Butylbenzene	10.682	105	926138	27.941 ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	375104	27.271 ug/L	99
80) p-Isopropyltoluene	10.844	119	763682	28.100 ug/L	99
81) 1,4-Dichlorobenzene	11.033	146	380156	26.848 ug/L	98
82) 1,2-Dichlorobenzene	11.503	146	341919	27.535 ug/L	98
83) 1,2-Dibromo-3-chloropr...	12.413	75	32680	28.077 ug/L	99
84) n-Butylbenzene	11.315	91	689411	27.993 ug/L	99
85) 1,2,4-Trichlorobenzene	13.214	180	230200	27.848 ug/L	99
86) Hexachlorobutadiene	13.182	225	117516	26.527 ug/L	98
87) Naphthalene	13.590	128	567547	28.510 ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	202168	27.735 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081705.D
Acq On : 17 Aug 2017 12:47 pm
Operator :
Sample : CAL5 27.8 ppb
Misc : CAL
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 13:40:18 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081706.D
Acq On : 17 Aug 2017 1:11 pm
Operator :
Sample : CAL6 46.4 ppb
Misc : CAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 13:40:22 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	753410	200.00	ug/L		99
49) Chlorobenzene-d5	8.548	117	539247	200.00	ug/L		101
66) 1,4-Dichlorobenzene-d4	11.012	152	261527	200.00	ug/L		99
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.960	113	186259	199.89	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.94%				
32) 1,2-Dichloroethane-d4	5.410	65	230573	196.78	ug/L		0.00
Spiked Amount 200.000			Recovery = 98.39%				
51) Toluene-d8	7.057	98	707889	197.35	ug/L		0.00
Spiked Amount 200.000			Recovery = 98.67%				
70) 4-Bromofluorobenzene	9.798	95	257228	198.55	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.28%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	423648	44.265	ug/L		99
3) Chloromethane	1.770	50	456110	45.520	ug/L		98
4) Vinyl chloride	1.848	62	392969	44.735	ug/L		100
5) Bromomethane	2.162	94	120036	40.476	ug/L		100
6) Chloroethane	2.288	64	159356	42.391	ug/L		99
7) Trichlorofluoromethane	2.429	101	533667	45.333	ug/L		99
8) Trichlorotrifluoroethane	2.946	101	351217	46.026	ug/L		99
9) Acrolein	3.208	56	151250	116.766	ug/L		98
10) Isopropyl Alcohol	3.381	45	13533	152.745	ug/L	#	100
11) Acetone	3.459	43	440971	238.781	ug/L		99
12) Iodomethane	3.041	142	260110	44.784	ug/L		99
13) 1,1-Dichloroethene	2.910	96	294952	45.790	ug/L		99
14) Carbon disulfide	2.941	76	980697	45.065	ug/L		99
15) Methylene chloride	3.433	84	310228	46.200	ug/L		98
16) Methyl Acetate	3.579	43	269960	47.890	ug/L		98
17) trans-1,2-Dichloroethene	3.579	96	318298	45.726	ug/L		99
18) Acrylonitrile	4.144	53	257276	91.424	ug/L		98
19) MTBE	3.663	73	876482	46.537	ug/L		99
20) Tert-Butanol	3.736	59	95198	265.378	ug/L	#	100
21) Isopropyl Ether	3.987	45	1170912	46.570	ug/L		99
22) 1,1-Dichloroethane	4.108	63	581396	45.712	ug/L		100
23) Vinyl acetate	4.312	43	1801988	113.584	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	977463	46.321	ug/L		100
25) cis-1,2-Dichloroethene	4.573	96	346137	45.382	ug/L		99
26) 2,2-Dichloropropane	4.662	77	422681	45.177	ug/L		100
27) Bromochloromethane	4.746	128	144558	44.631	ug/L		96
28) Cyclohexane	4.761	84	550660	44.809	ug/L		98
29) Chloroform	4.803	83	583199	45.757	ug/L		99
31) 1,1-Dichloropropene	5.091	75	473433	46.140	ug/L		99
33) 1,1,1-Trichloroethane	4.986	97	507500	47.019	ug/L		100
34) 1,2-Dichloroethane	5.473	62	409976	44.943	ug/L		99
35) Benzene	5.300	78	1325829	45.787	ug/L		100
36) 2-Butanone	5.049	43	851836	249.688	ug/L		99
37) Carbon tetrachloride	4.934	117	414572	44.176	ug/L		99
38) Tert-amyl Methyl Ether	5.389	73	817717	46.637	ug/L		99
39) Trichloroethene	5.813	130	353900	45.901	ug/L		99
40) Methyl Cyclohexane	5.807	55	570874	45.242	ug/L		99
41) Dibromomethane	6.179	93	184614	45.219	ug/L		99
42) Bromodichloromethane	6.320	83	393490	47.079	ug/L		100
43) 1,2-Dichloropropane	6.262	63	336311	46.458	ug/L		100
44) 2-Chloroethylvinylether	6.817	63	241109	46.876	ug/L		100
45) cis-1,3-Dichloropropene	6.885	75	488887	47.254	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081706.D
Acq On : 17 Aug 2017 1:11 pm
Operator :
Sample : CAL6 46.4 ppb
Misc : CAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 13:40:22 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

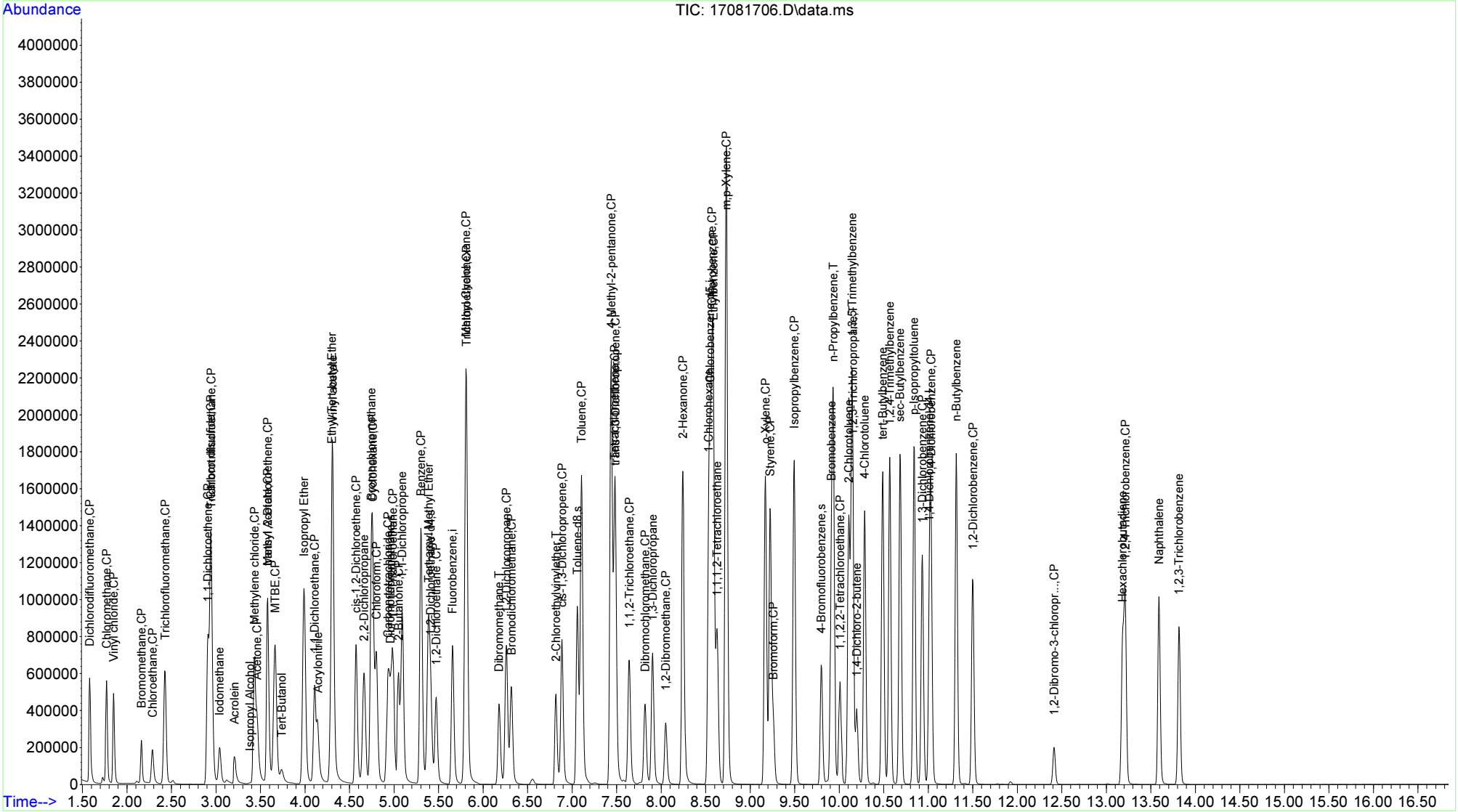
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	394061	47.901	ug/L	98
47) 1,1,2-Trichloroethane	7.643	97	261108	46.257	ug/L	99
48) Toluene	7.105	92	829517	45.850	ug/L	99
50) 4-Methyl-2-pentanone	7.439	43	1892629	237.574	ug/L	99
52) 2-Hexanone	8.245	43	1360423	242.575	ug/L	98
53) Dibromochloromethane	7.821	129	282780	45.941	ug/L	100
54) 1,3-Dichloropropane	7.905	76	470198	45.575	ug/L	100
55) Tetrachloroethene	7.476	164	300806	45.297	ug/L	99
56) 1,2-Dibromoethane	8.051	107	280384	46.370	ug/L	98
57) Chlorobenzene	8.569	112	854520	45.257	ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	275465	45.902	ug/L	99
59) Ethylbenzene	8.585	106	482533	45.466	ug/L	98
60) Bromoform	9.259	173	186787	46.341	ug/L	98
61) Styrene	9.223	104	872020	47.311	ug/L	100
62) 1-Chlorohexane	8.532	55	376210	43.970	ug/L	97
63) m,p-Xylene	8.731	106	1176970	91.962	ug/L	100
64) o-Xylene	9.171	106	564496	46.294	ug/L	99
65) Isopropylbenzene	9.495	105	1441759	46.342	ug/L	99
67) Bromobenzene	9.913	156	350182	45.025	ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.007	83	337075	45.128	ug/L	98
69) 1,2,3-Trichloropropane	10.154	110	104797	45.963	ug/L	99
71) 1,4-Dichloro-2-butene	10.196	53	106740	46.953	ug/L	91
72) n-Propylbenzene	9.934	91	1770745	45.843	ug/L	99
73) 2-Chlorotoluene	10.107	91	1102158	45.524	ug/L	99
74) 1,3,5-Trimethylbenzene	10.143	105	1191749	46.333	ug/L	99
75) 4-Chlorotoluene	10.285	91	1018981	45.443	ug/L	100
76) tert-Butylbenzene	10.489	119	1040153	45.282	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	1193311	46.177	ug/L	98
78) sec-Butylbenzene	10.682	105	1568699	45.734	ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	640284	44.985	ug/L	100
80) p-Isopropyltoluene	10.839	119	1305609	46.424	ug/L	100
81) 1,4-Dichlorobenzene	11.032	146	647255	44.173	ug/L	99
82) 1,2-Dichlorobenzene	11.503	146	580997	45.213	ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	59112	47.805	ug/L	97
84) n-Butylbenzene	11.315	91	1178055	46.225	ug/L	99
85) 1,2,4-Trichlorobenzene	13.213	180	396454	46.346	ug/L	99
86) Hexachlorobutadiene	13.182	225	203759	44.447	ug/L	99
87) Naphthalene	13.590	128	974540	47.307	ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	349418	46.323	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081706.D
Acq On : 17 Aug 2017 1:11 pm
Operator :
Sample : CAL6 46.4 ppb
Misc : CAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 13:40:22 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081707.D
Acq On : 17 Aug 2017 1:37 pm
Operator :
Sample : CAL7 92.8 ppb
Misc : CAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 13:40:26 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	759768	200.00	ug/L		100
49) Chlorobenzene-d5	8.548	117	532717	200.00	ug/L		100
66) 1,4-Dichlorobenzene-d4	11.012	152	265339	200.00	ug/L		100
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	188148	200.22	ug/L		0.00
Spiked Amount 200.000			Recovery =	100.11%			
32) 1,2-Dichloroethane-d4	5.415	65	232738	196.97	ug/L		0.00
Spiked Amount 200.000			Recovery =	98.48%			
51) Toluene-d8	7.058	98	717692	202.53	ug/L		0.00
Spiked Amount 200.000			Recovery =	101.27%			
70) 4-Bromofluorobenzene	9.798	95	260207	197.97	ug/L		0.00
Spiked Amount 200.000			Recovery =	98.98%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.582	85	951918	98.630	ug/L		100
3) Chloromethane	1.770	50	946446	93.664	ug/L		100
4) Vinyl chloride	1.848	62	845274	95.419	ug/L		100
5) Bromomethane	2.162	94	294949	98.623	ug/L		100
6) Chloroethane	2.288	64	351446	92.708	ug/L		100
7) Trichlorofluoromethane	2.429	101	1126162	94.862	ug/L		100
8) Trichlorotrifluoroethane	2.947	101	700811	91.071	ug/L		100
9) Acrolein	3.203	56	315041	235.406	ug/L		100
10) Isopropyl Alcohol	3.370	45	21854	211.533	ug/L	#	100
11) Acetone	3.459	43	852203	453.967	ug/L		100
12) Iodomethane	3.041	142	666397	99.702	ug/L		100
13) 1,1-Dichloroethene	2.910	96	602081	92.689	ug/L		100
14) Carbon disulfide	2.941	76	2066266	94.155	ug/L		100
15) Methylene chloride	3.428	84	625951	93.521	ug/L		100
16) Methyl Acetate	3.574	43	582476	102.464	ug/L		100
17) trans-1,2-Dichloroethene	3.574	96	646683	92.124	ug/L		100
18) Acrylonitrile	4.139	53	547259	190.236	ug/L		100
19) MTBE	3.658	73	1883836	99.186	ug/L		100
20) Tert-Butanol	3.731	59	173628	443.926	ug/L	#	100
21) Isopropyl Ether	3.987	45	2468227	97.346	ug/L		100
22) 1,1-Dichloroethane	4.108	63	1186878	92.536	ug/L		100
23) Vinyl acetate	4.306	43	3792617	240.520	ug/L		100
24) Ethyl-Tert-butyl Ether	4.296	59	2067272	97.146	ug/L		100
25) cis-1,2-Dichloroethene	4.573	96	696386	90.539	ug/L		100
26) 2,2-Dichloropropane	4.662	77	938226	99.441	ug/L		100
27) Bromochloromethane	4.741	128	287888	88.139	ug/L		100
28) Cyclohexane	4.756	84	1181717	95.355	ug/L		100
29) Chloroform	4.798	83	1187391	92.382	ug/L		100
31) 1,1-Dichloropropene	5.091	75	965926	93.349	ug/L		100
33) 1,1,1-Trichloroethane	4.986	97	1037422	95.311	ug/L		100
34) 1,2-Dichloroethane	5.468	62	838695	91.171	ug/L		100
35) Benzene	5.300	78	2657373	91.003	ug/L		100
36) 2-Butanone	5.044	43	1645024	478.150	ug/L		100
37) Carbon tetrachloride	4.934	117	986412	102.311	ug/L		100
38) Tert-amyl Methyl Ether	5.384	73	1784485	100.923	ug/L		100
39) Trichloroethene	5.808	130	711332	91.488	ug/L		100
40) Methyl Cyclohexane	5.808	55	1247172	98.013	ug/L		100
41) Dibromomethane	6.179	93	379784	92.245	ug/L		100
42) Bromodichloromethane	6.315	83	824959	97.877	ug/L		100
43) 1,2-Dichloropropane	6.257	63	683770	93.665	ug/L		100
44) 2-Chloroethylvinylether	6.812	63	497602	95.933	ug/L		100
45) cis-1,3-Dichloropropene	6.880	75	1025671	98.307	ug/L		100

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081707.D
Acq On : 17 Aug 2017 1:37 pm
Operator :
Sample : CAL7 92.8 ppb
Misc : CAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 13:40:26 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

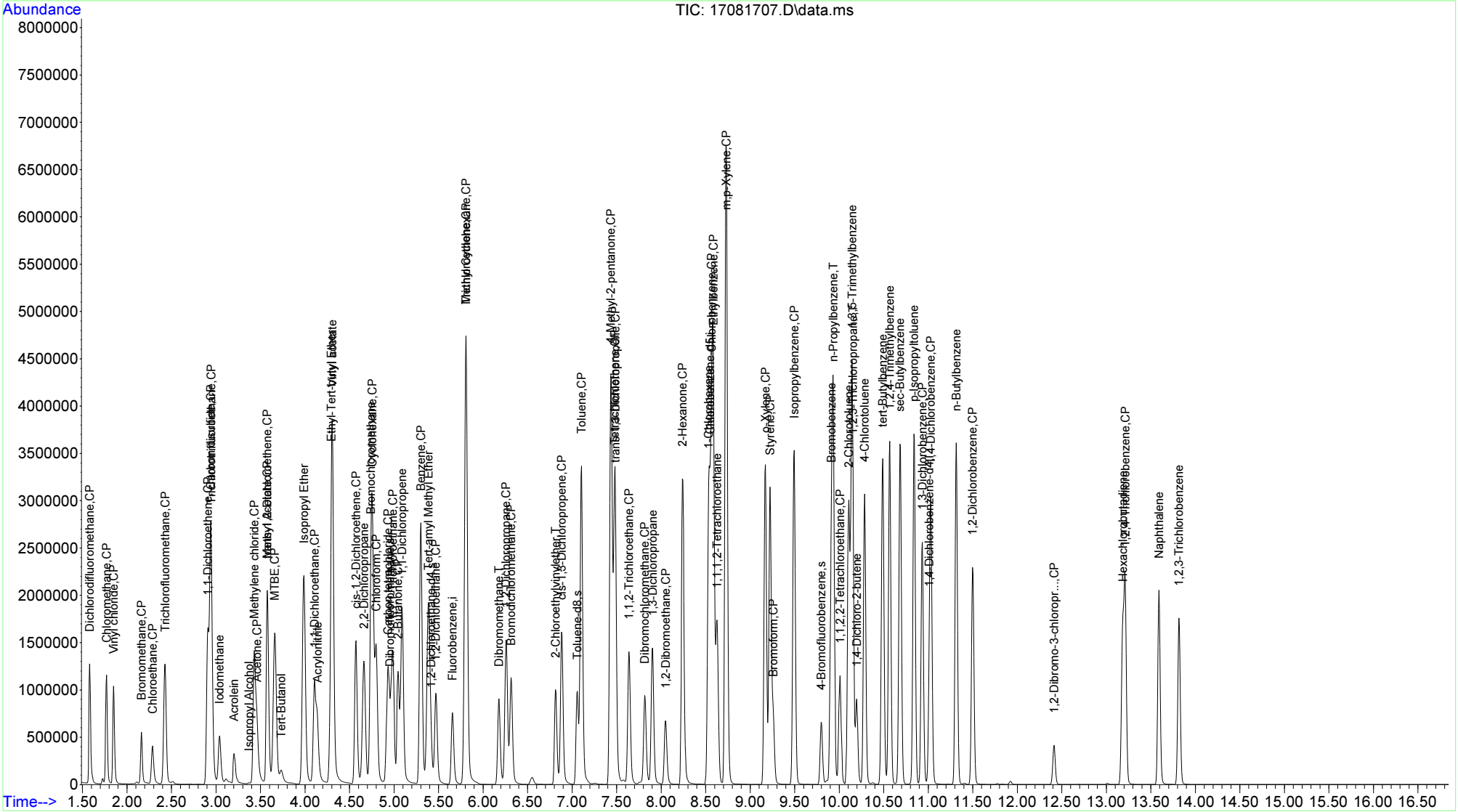
Compound	R.T.	QIon	Response	Conc Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	830235	100.077 ug/L	100
47) 1,1,2-Trichloroethane	7.638	97	535444	94.063 ug/L	100
48) Toluene	7.105	92	1668270	91.439 ug/L	100
50) 4-Methyl-2-pentanone	7.434	43	3636281	462.043 ug/L	100
52) 2-Hexanone	8.240	43	2616395	472.244 ug/L	100
53) Dibromochloromethane	7.816	129	601141	94.886 ug/L	100
54) 1,3-Dichloropropane	7.905	76	958666	94.060 ug/L	100
55) Tetrachloroethene	7.476	164	600083	91.471 ug/L	100
56) 1,2-Dibromoethane	8.051	107	574809	96.227 ug/L	100
57) Chlorobenzene	8.564	112	1712704	91.820 ug/L	100
58) 1,1,1,2-Tetrachloroethane	8.627	131	581777	94.946 ug/L	100
59) Ethylbenzene	8.585	106	979372	93.412 ug/L	100
60) Bromoform	9.260	173	403180	95.534 ug/L	100
61) Styrene	9.223	104	1774751	97.468 ug/L	100
62) 1-Chlorohexane	8.533	55	791834	93.680 ug/L	100
63) m,p-Xylene	8.731	106	2337475	184.877 ug/L	100
64) o-Xylene	9.171	106	1142720	94.863 ug/L	100
65) Isopropylbenzene	9.495	105	2902224	94.429 ug/L	100
67) Bromobenzene	9.913	156	713364	90.404 ug/L	100
68) 1,1,2,2-Tetrachloroethane	10.007	83	687718	90.749 ug/L	100
69) 1,2,3-Trichloropropane	10.154	110	208028	89.928 ug/L	100
71) 1,4-Dichloro-2-butene	10.196	53	230180	99.798 ug/L	100
72) n-Propylbenzene	9.934	91	3538123	90.283 ug/L	100
73) 2-Chlorotoluene	10.107	91	2246132	91.443 ug/L	100
74) 1,3,5-Trimethylbenzene	10.143	105	2380538	91.220 ug/L	100
75) 4-Chlorotoluene	10.285	91	2093978	92.043 ug/L	100
76) tert-Butylbenzene	10.489	119	2132133	91.487 ug/L	100
77) 1,2,4-Trimethylbenzene	10.567	105	2411073	91.960 ug/L	100
78) sec-Butylbenzene	10.682	105	3161843	90.856 ug/L	100
79) 1,3-Dichlorobenzene	10.933	146	1310068	90.720 ug/L	100
80) p-Isopropyltoluene	10.839	119	2636800	92.411 ug/L	100
81) 1,4-Dichlorobenzene	11.027	146	1329243	89.414 ug/L	100
82) 1,2-Dichlorobenzene	11.498	146	1187307	91.069 ug/L	100
83) 1,2-Dibromo-3-chloropr...	12.413	75	120578	91.440 ug/L	100
84) n-Butylbenzene	11.315	91	2420223	93.602 ug/L	100
85) 1,2,4-Trichlorobenzene	13.214	180	815116	93.920 ug/L	100
86) Hexachlorobutadiene	13.187	225	418098	89.891 ug/L	100
87) Naphthalene	13.590	128	1941076	92.872 ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	706812	92.357 ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081707.D
Acq On : 17 Aug 2017 1:37 pm
Operator :
Sample : CAL7 92.8 ppb
Misc : CAL
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 13:40:26 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081708.D
Acq On : 17 Aug 2017 2:00 pm
Operator :
Sample : CAL8 186 ppb
Misc : CAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 13:40:30 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	%Rec
Internal Standards						
1) Fluorobenzene	5.656	96	773632	200.00	ug/L	102
49) Chlorobenzene-d5	8.548	117	520945	200.00	ug/L	98
66) 1,4-Dichlorobenzene-d4	11.012	152	261033	200.00	ug/L	98
System Monitoring Compounds						Dev(Min)
30) Dibromofluoromethane	4.955	113	189494	198.04	ug/L	0.00
Spiked Amount 200.000			Recovery = 99.02%			
32) 1,2-Dichloroethane-d4	5.415	65	237799	197.64	ug/L	0.00
Spiked Amount 200.000			Recovery = 98.82%			
51) Toluene-d8	7.058	98	730575	210.83	ug/L	0.00
Spiked Amount 200.000			Recovery = 105.42%			
70) 4-Bromofluorobenzene	9.798	95	264644	204.66	ug/L	0.00
Spiked Amount 200.000			Recovery = 102.33%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.582	85	1810824	184.261	ug/L	99
3) Chloromethane	1.770	50	1725015	167.655	ug/L	100
4) Vinyl chloride	1.848	62	1598392	177.202	ug/L	100
5) Bromomethane	2.162	94	614576	201.816	ug/L	99
6) Chloroethane	2.282	64	653447	169.284	ug/L	99
7) Trichlorofluoromethane	2.429	101	2120718	175.437	ug/L	100
8) Trichlorotrifluoroethane	2.942	101	1345802	171.753	ug/L #	99
9) Acrolein	3.203	56	645524	462.910	ug/L	99
10) Isopropyl Alcohol	3.360	45	82861	465.737	ug/L #	100
11) Acetone	3.459	43	1821815	931.211	ug/L	99
12) Iodomethane	3.041	142	1414830	183.721	ug/L	98
13) 1,1-Dichloroethene	2.905	96	1215997	183.845	ug/L	98
14) Carbon disulfide	2.942	76	4034542	180.551	ug/L	99
15) Methylene chloride	3.428	84	1242480	185.706	ug/L	99
16) Methyl Acetate	3.569	43	1191754	205.886	ug/L	99
17) trans-1,2-Dichloroethene	3.574	96	1296330	181.361	ug/L	99
18) Acrylonitrile	4.139	53	1099911	370.534	ug/L	100
19) MTBE	3.658	73	3636613	188.041	ug/L	99
20) Tert-Butanol	3.731	59	454427	930.381	ug/L #	100
21) Isopropyl Ether	3.988	45	4639481	179.701	ug/L	100
22) 1,1-Dichloroethane	4.108	63	2392287	183.174	ug/L	100
23) Vinyl acetate	4.307	43	7093682	460.653	ug/L	99
24) Ethyl-Tert-butyl Ether	4.296	59	3873901	178.782	ug/L	99
25) cis-1,2-Dichloroethene	4.573	96	1406603	179.599	ug/L	99
26) 2,2-Dichloropropane	4.662	77	1964336	204.466	ug/L	100
27) Bromochloromethane	4.741	128	551616	165.855	ug/L	96
28) Cyclohexane	4.756	84	2278558	180.566	ug/L	99
29) Chloroform	4.803	83	2360072	180.329	ug/L	99
31) 1,1-Dichloropropene	5.091	75	1944126	184.517	ug/L	100
33) 1,1,1-Trichloroethane	4.987	97	2121793	191.442	ug/L	99
34) 1,2-Dichloroethane	5.473	62	1676279	178.956	ug/L	99
35) Benzene	5.300	78	5277655	177.497	ug/L	99
36) 2-Butanone	5.044	43	3483980	994.521	ug/L	98
37) Carbon tetrachloride	4.934	117	1830892	182.379	ug/L	100
38) Tert-amyl Methyl Ether	5.384	73	3435989	190.842	ug/L	99
39) Trichloroethene	5.808	130	1398701	176.671	ug/L	100
40) Methyl Cyclohexane	5.808	55	2254298	173.986	ug/L	99
41) Dibromomethane	6.179	93	769728	183.607	ug/L	98
42) Bromodichloromethane	6.315	83	1672726	194.903	ug/L	99
43) 1,2-Dichloropropane	6.263	63	1366733	183.865	ug/L	99
44) 2-Chloroethylvinylether	6.812	63	979184	185.394	ug/L	99
45) cis-1,3-Dichloropropene	6.885	75	2078657	195.663	ug/L	99

Data Path : C:\msdchem\1\data\170817\
Data File : 17081708.D
Acq On : 17 Aug 2017 2:00 pm
Operator :
Sample : CAL8 186 ppb
Misc : CAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 13:40:30 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

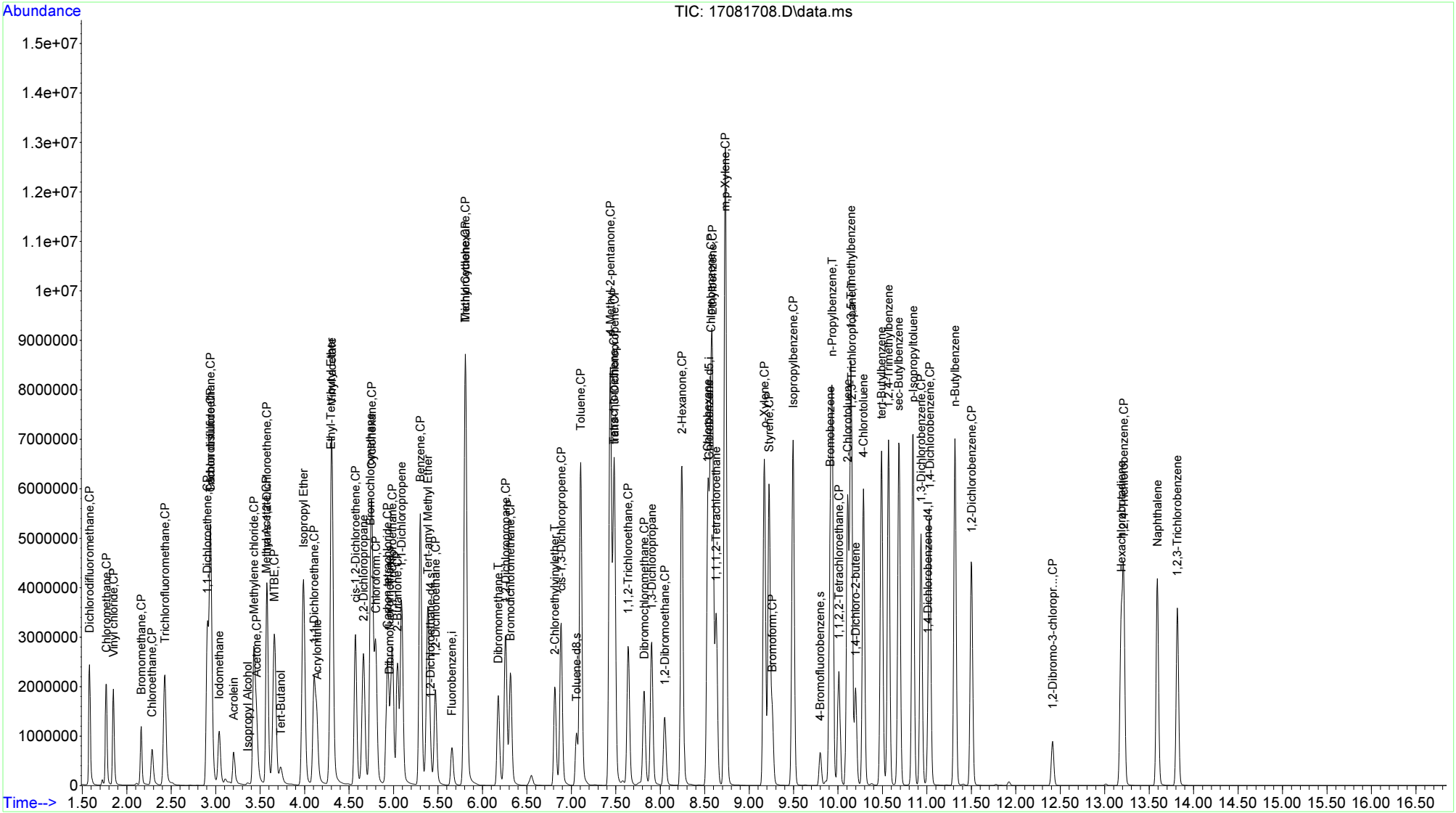
Compound	R.T.	QIon	Response	Conc Units	%Rec
46) trans-1,3-Dichloropropene	7.487	75	1685751	199.560 ug/L	100
47) 1,1,2-Trichloroethane	7.638	97	1071889	184.927 ug/L	100
48) Toluene	7.105	92	3291153	177.157 ug/L	100
50) 4-Methyl-2-pentanone	7.440	43	6976778	906.535 ug/L	98
52) 2-Hexanone	8.245	43	5216415	962.808 ug/L	98
53) Dibromochloromethane	7.821	129	1230157	185.224 ug/L	99
54) 1,3-Dichloropropane	7.905	76	1911657	191.802 ug/L	100
55) Tetrachloroethene	7.476	164	1160493	180.892 ug/L	96
56) 1,2-Dibromoethane	8.051	107	1162216	198.960 ug/L	100
57) Chlorobenzene	8.569	112	3294026	180.588 ug/L	98
58) 1,1,1,2-Tetrachloroethane	8.627	131	1174451	185.189 ug/L	98
59) Ethylbenzene	8.585	106	1882481	183.607 ug/L	100
60) Bromoform	9.260	173	838949	184.959 ug/L	99
61) Styrene	9.223	104	3475504	195.186 ug/L	99
62) 1-Chlorohexane	8.533	55	1571269	190.095 ug/L	95
63) m,p-Xylene	8.731	106	4400849	355.940 ug/L	99
64) o-Xylene	9.171	106	2237034	189.905 ug/L	98
65) Isopropylbenzene	9.495	105	5667995	188.586 ug/L	99
67) Bromobenzene	9.913	156	1384298	178.325 ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.008	83	1403190	188.215 ug/L	99
69) 1,2,3-Trichloropropane	10.154	110	411579	180.855 ug/L	99
71) 1,4-Dichloro-2-butene	10.196	53	493010	217.278 ug/L	98
72) n-Propylbenzene	9.934	91	6799457	176.364 ug/L	100
73) 2-Chlorotoluene	10.107	91	4388213	181.597 ug/L	99
74) 1,3,5-Trimethylbenzene	10.144	105	4566396	177.867 ug/L	99
75) 4-Chlorotoluene	10.285	91	4079134	182.260 ug/L	99
76) tert-Butylbenzene	10.489	119	4145373	180.806 ug/L	98
77) 1,2,4-Trimethylbenzene	10.567	105	4658517	180.610 ug/L	100
78) sec-Butylbenzene	10.682	105	6079645	177.581 ug/L	99
79) 1,3-Dichlorobenzene	10.933	146	2555454	179.880 ug/L	99
80) p-Isopropyltoluene	10.844	119	5070304	180.629 ug/L	98
81) 1,4-Dichlorobenzene	11.033	146	2568578	175.630 ug/L	100
82) 1,2-Dichlorobenzene	11.503	146	2331100	181.751 ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	266241	186.335 ug/L	99
84) n-Butylbenzene	11.315	91	4659494	183.179 ug/L	98
85) 1,2,4-Trichlorobenzene	13.214	180	1640805	192.176 ug/L	100
86) Hexachlorobutadiene	13.188	225	845463	184.774 ug/L	99
87) Naphthalene	13.590	128	3994475	194.270 ug/L	99
88) 1,2,3-Trichlorobenzene	13.815	180	1435454	190.660 ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081708.D
Acq On : 17 Aug 2017 2:00 pm
Operator :
Sample : CAL8 186 ppb
Misc : CAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 13:40:30 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:26:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	770028	200.00	ug/L		101
49) Chlorobenzene-d5	8.548	117	541896	200.00	ug/L		102
66) 1,4-Dichlorobenzene-d4	11.012	152	266556	200.00	ug/L		100
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	188767	198.21	ug/L		0.00
Spiked Amount 200.000			Recovery =	99.11%			
32) 1,2-Dichloroethane-d4	5.415	65	234628	195.92	ug/L		0.00
Spiked Amount 200.000			Recovery =	97.96%			
51) Toluene-d8	7.057	98	729146	202.28	ug/L		0.00
Spiked Amount 200.000			Recovery =	101.14%			
70) 4-Bromofluorobenzene	9.798	95	263423	199.50	ug/L		0.00
Spiked Amount 200.000			Recovery =	99.75%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	473529	48.410	ug/L		100
3) Chloromethane	1.770	50	477113	46.588	ug/L		99
4) Vinyl chloride	1.848	62	423351	47.153	ug/L		99
5) Bromomethane	2.162	94	144183	47.569	ug/L		99
6) Chloroethane	2.287	64	160350	41.735	ug/L		99
7) Trichlorofluoromethane	2.429	101	573627	47.676	ug/L		99
8) Trichlorotrifluoroethane	2.946	101	337643	43.292	ug/L	#	99
9) Acrolein	3.208	56	163810	123.460	ug/L		99
10) Isopropyl Alcohol	3.381	45	20544	201.267	ug/L	#	100
11) Acetone	3.464	43	162503	85.636	ug/L		98
12) Iodomethane	3.041	142	333586	54.399	ug/L		99
13) 1,1-Dichloroethene	2.910	96	347275	52.750	ug/L		99
14) Carbon disulfide	2.941	76	2792802	125.566	ug/L		100
15) Methylene chloride	3.433	84	328252	47.854	ug/L		97
16) Methyl Acetate	3.574	43	308159	53.486	ug/L		100
17) trans-1,2-Dichloroethene	3.579	96	348764	49.022	ug/L		98
18) Acrylonitrile	4.139	53	265460	92.278	ug/L		99
19) MTBE	3.658	73	1001431	52.024	ug/L		99
20) Tert-Butanol	3.736	59	116575	311.793	ug/L	#	100
21) Isopropyl Ether	3.987	45	1344043	52.302	ug/L		100
22) 1,1-Dichloroethane	4.108	63	657052	50.545	ug/L		99
23) Vinyl acetate	4.306	43	1998050	123.255	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	1140078	52.861	ug/L		100
25) cis-1,2-Dichloroethene	4.573	96	361772	46.408	ug/L		99
26) 2,2-Dichloropropane	4.662	77	496190	51.890	ug/L		98
27) Bromochloromethane	4.740	128	154820	46.768	ug/L		98
28) Cyclohexane	4.756	84	650820	51.816	ug/L		99
29) Chloroform	4.803	83	618744	47.499	ug/L		99
31) 1,1-Dichloropropene	5.091	75	503988	48.057	ug/L		99
33) 1,1,1-Trichloroethane	4.986	97	537427	48.717	ug/L		99
34) 1,2-Dichloroethane	5.467	62	430384	46.162	ug/L		99
35) Benzene	5.300	78	1410696	47.666	ug/L		99
36) 2-Butanone	5.049	43	372860	106.933	ug/L		98
37) Carbon tetrachloride	4.934	117	508402	52.837	ug/L		100
38) Tert-amyl Methyl Ether	5.389	73	972854	54.287	ug/L		100
39) Trichloroethene	5.807	130	380953	48.344	ug/L		97
40) Methyl Cyclohexane	5.807	55	485669	37.659	ug/L		98
41) Dibromomethane	6.179	93	198486	47.568	ug/L		98
42) Bromodichloromethane	6.315	83	421055	49.290	ug/L		100
43) 1,2-Dichloropropane	6.257	63	360327	48.701	ug/L		100
44) 2-Chloroethylvinylether	6.817	63	254150	48.345	ug/L		99
45) cis-1,3-Dichloropropene	6.885	75	503620	47.627	ug/L		99

73.82%

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:26:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

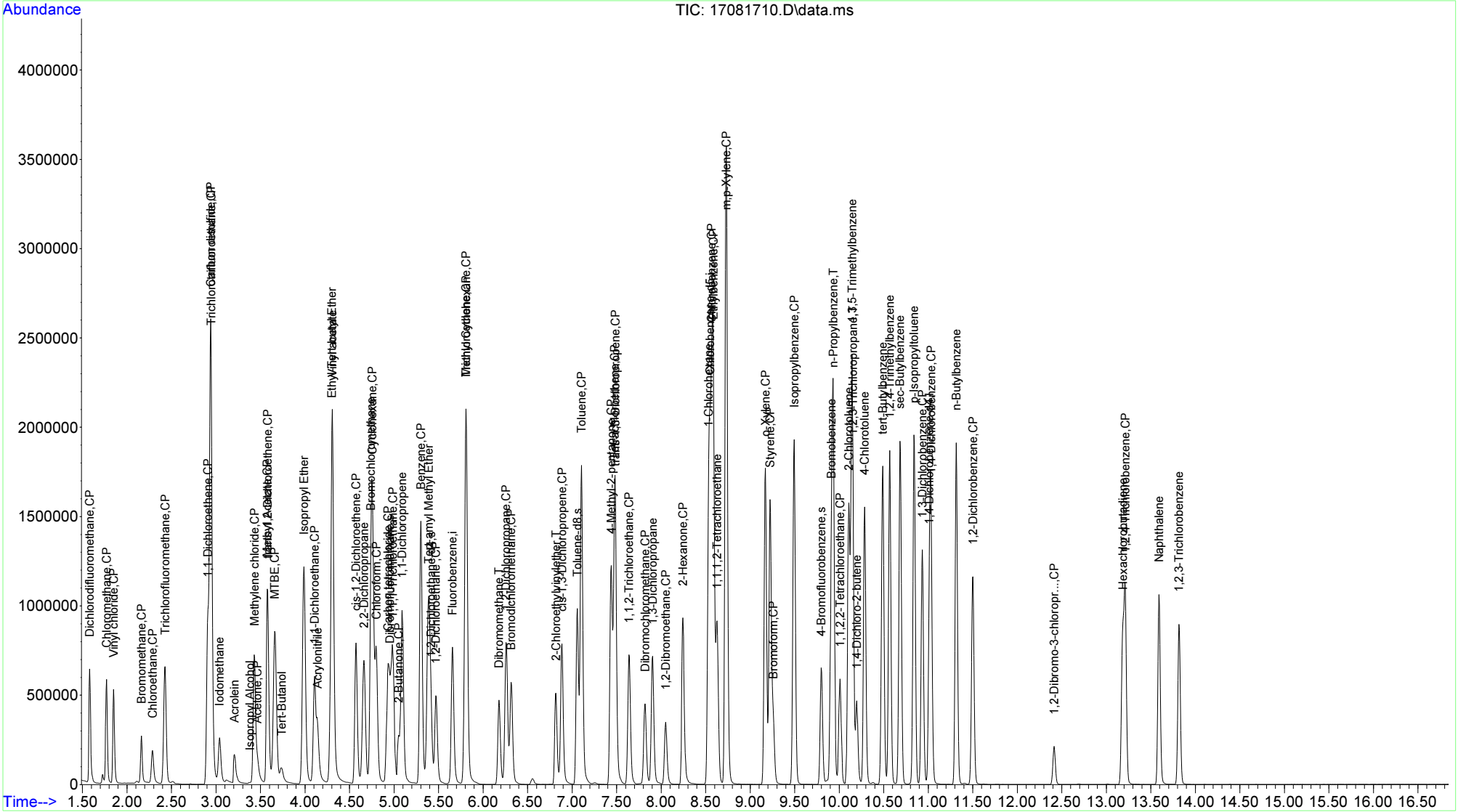
Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	431671	51.341	ug/L	99
47) 1,1,2-Trichloroethane	7.638	97	280433	48.608	ug/L	100
48) Toluene	7.105	92	886165	47.924	ug/L	99
50) 4-Methyl-2-pentanone	7.439	43	1024479	127.970	ug/L	100
52) 2-Hexanone	8.245	43	755885	134.122	ug/L	98
53) Dibromochloromethane	7.821	129	296480	47.850	ug/L	99
54) 1,3-Dichloropropane	7.905	76	474975	45.813	ug/L	100
55) Tetrachloroethene	7.476	164	320415	48.014	ug/L	100
56) 1,2-Dibromoethane	8.051	107	294649	48.491	ug/L	99
57) Chlorobenzene	8.564	112	900595	47.464	ug/L	100
58) 1,1,1,2-Tetrachloroethane	8.627	131	301814	49.906	ug/L	99
59) Ethylbenzene	8.585	106	515006	48.289	ug/L	98
60) Bromoform	9.259	173	197297	48.571	ug/L	98
61) Styrene	9.223	104	929755	50.197	ug/L	99
62) 1-Chlorohexane	8.532	55	416929	48.491	ug/L	99
63) m,p-Xylene	8.731	106	1235934	96.097	ug/L	99
64) o-Xylene	9.170	106	594340	48.504	ug/L	99
65) Isopropylbenzene	9.495	105	1579317	50.516	ug/L	100
67) Bromobenzene	9.913	156	368009	46.425	ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.007	83	357933	47.016	ug/L	98
69) 1,2,3-Trichloropropane	10.154	110	108959	46.886	ug/L	99
71) 1,4-Dichloro-2-butene	10.196	53	121106	52.268	ug/L	95
72) n-Propylbenzene	9.934	91	1834746	46.604	ug/L	99
73) 2-Chlorotoluene	10.107	91	1173638	47.562	ug/L	99
74) 1,3,5-Trimethylbenzene	10.143	105	1265059	48.255	ug/L	99
75) 4-Chlorotoluene	10.285	91	1076361	47.097	ug/L	100
76) tert-Butylbenzene	10.489	119	1089991	46.556	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	1232011	46.775	ug/L	100
78) sec-Butylbenzene	10.682	105	1674266	47.891	ug/L	99
79) 1,3-Dichlorobenzene	10.933	146	672800	46.377	ug/L	99
80) p-Isopropyltoluene	10.839	119	1394034	48.633	ug/L	100
81) 1,4-Dichlorobenzene	11.032	146	682033	45.669	ug/L	99
82) 1,2-Dichlorobenzene	11.503	146	609665	46.549	ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	61845	49.000	ug/L	98
84) n-Butylbenzene	11.315	91	1258186	48.438	ug/L	99
85) 1,2,4-Trichlorobenzene	13.213	180	417881	47.929	ug/L	99
86) Hexachlorobutadiene	13.187	225	218022	46.661	ug/L	99
87) Naphthalene	13.590	128	1018454	48.506	ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	365558	47.548	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:26:10 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration



Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:40:34 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		%Rec
Internal Standards							
1) Fluorobenzene	5.656	96	770028	200.00	ug/L		101
49) Chlorobenzene-d5	8.548	117	541896	200.00	ug/L		102
66) 1,4-Dichlorobenzene-d4	11.012	152	266556	200.00	ug/L		100
System Monitoring Compounds							Dev(Min)
30) Dibromofluoromethane	4.955	113	188767	198.21	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.11%				
32) 1,2-Dichloroethane-d4	5.415	65	234628	195.92	ug/L		0.00
Spiked Amount 200.000			Recovery = 97.96%				
51) Toluene-d8	7.057	98	729146	202.28	ug/L		0.00
Spiked Amount 200.000			Recovery = 101.14%				
70) 4-Bromofluorobenzene	9.798	95	263423	199.50	ug/L		0.00
Spiked Amount 200.000			Recovery = 99.75%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.581	85	473529	48.410	ug/L		100
3) Chloromethane	1.770	50	477113	46.588	ug/L		99
4) Vinyl chloride	1.848	62	423351	47.153	ug/L		99
5) Bromomethane	2.162	94	144183	47.569	ug/L		99
6) Chloroethane	2.287	64	160350	41.735	ug/L		99
7) Trichlorofluoromethane	2.429	101	573627	47.676	ug/L		99
8) Trichlorotrifluoroethane	2.946	101	337643	43.292	ug/L	#	99
9) Acrolein	3.208	56	163810	123.460	ug/L		99
10) Isopropyl Alcohol	3.381	45	20544	201.267	ug/L	#	100
11) Acetone	3.464	43	162503	85.636	ug/L		98
12) Iodomethane	3.041	142	333586	54.399	ug/L		99
13) 1,1-Dichloroethene	2.910	96	347275	52.750	ug/L		99
14) Carbon disulfide	2.941	76	2792802	125.566	ug/L		100
15) Methylene chloride	3.433	84	328252	47.854	ug/L		97
16) Methyl Acetate	3.574	43	308159	53.486	ug/L		100
17) trans-1,2-Dichloroethene	3.579	96	348764	49.022	ug/L		98
18) Acrylonitrile	4.139	53	265460	92.278	ug/L		99
19) MTBE	3.658	73	1001431	52.024	ug/L		99
20) Tert-Butanol	3.736	59	116575	311.793	ug/L	#	100
21) Isopropyl Ether	3.987	45	1344043	52.302	ug/L		100
22) 1,1-Dichloroethane	4.108	63	657052	50.545	ug/L		99
23) Vinyl acetate	4.306	43	1998050	123.255	ug/L		100
24) Ethyl-Tert-butyl Ether	4.301	59	1140078	52.861	ug/L		100
25) cis-1,2-Dichloroethene	4.573	96	361772	46.408	ug/L		99
26) 2,2-Dichloropropane	4.662	77	496190	51.890	ug/L		98
27) Bromochloromethane	4.740	128	154820	46.768	ug/L		98
28) Cyclohexane	4.756	84	650820	51.816	ug/L		99
29) Chloroform	4.803	83	618744	47.499	ug/L		99
31) 1,1-Dichloropropene	5.091	75	503988	48.057	ug/L		99
33) 1,1,1-Trichloroethane	4.986	97	537427	48.717	ug/L		99
34) 1,2-Dichloroethane	5.467	62	430384	46.162	ug/L		99
35) Benzene	5.300	78	1410696	47.666	ug/L		99
36) 2-Butanone	5.049	43	372860	106.933	ug/L		98
37) Carbon tetrachloride	4.934	117	508402	52.837	ug/L		100
38) Tert-amyl Methyl Ether	5.389	73	972854	54.287	ug/L		100
39) Trichloroethene	5.807	130	380953	48.344	ug/L		97
40) Methyl Cyclohexane	5.807	55	485669	37.659	ug/L		98
41) Dibromomethane	6.179	93	198486	47.568	ug/L		98
42) Bromodichloromethane	6.315	83	421055	49.290	ug/L		100
43) 1,2-Dichloropropane	6.257	63	360327	48.701	ug/L		100
44) 2-Chloroethylvinylether	6.817	63	254150	48.345	ug/L		99
45) cis-1,3-Dichloropropene	6.885	75	503620	47.627	ug/L		99

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:40:34 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	%Rec
46) trans-1,3-Dichloropropene	7.486	75	431671	51.341	ug/L	99
47) 1,1,2-Trichloroethane	7.638	97	280433	48.608	ug/L	100
48) Toluene	7.105	92	886165	47.924	ug/L	99
50) 4-Methyl-2-pentanone	7.439	43	1024479	127.970	ug/L	100
52) 2-Hexanone	8.245	43	755885	134.122	ug/L	98
53) Dibromochloromethane	7.821	129	296480	47.850	ug/L	99
54) 1,3-Dichloropropane	7.905	76	474975	45.813	ug/L	100
55) Tetrachloroethene	7.476	164	320415	48.014	ug/L	100
56) 1,2-Dibromoethane	8.051	107	294649	48.491	ug/L	99
57) Chlorobenzene	8.564	112	900595	47.464	ug/L	100
58) 1,1,1,2-Tetrachloroethane	8.627	131	301814	49.906	ug/L	99
59) Ethylbenzene	8.585	106	515006	48.289	ug/L	98
60) Bromoform	9.259	173	197297	48.571	ug/L	98
61) Styrene	9.223	104	929755	50.197	ug/L	99
62) 1-Chlorohexane	8.532	55	416929	48.491	ug/L	99
63) m,p-Xylene	8.731	106	1235934	96.097	ug/L	99
64) o-Xylene	9.170	106	594340	48.504	ug/L	99
65) Isopropylbenzene	9.495	105	1579317	50.516	ug/L	100
67) Bromobenzene	9.913	156	368009	46.425	ug/L	99
68) 1,1,2,2-Tetrachloroethane	10.007	83	357933	47.016	ug/L	98
69) 1,2,3-Trichloropropane	10.154	110	108959	46.886	ug/L	99
71) 1,4-Dichloro-2-butene	10.196	53	121106	52.268	ug/L	95
72) n-Propylbenzene	9.934	91	1834746	46.604	ug/L	99
73) 2-Chlorotoluene	10.107	91	1173638	47.562	ug/L	99
74) 1,3,5-Trimethylbenzene	10.143	105	1265059	48.255	ug/L	99
75) 4-Chlorotoluene	10.285	91	1076361	47.097	ug/L	100
76) tert-Butylbenzene	10.489	119	1089991	46.556	ug/L	99
77) 1,2,4-Trimethylbenzene	10.567	105	1232011	46.775	ug/L	100
78) sec-Butylbenzene	10.682	105	1674266	47.891	ug/L	99
79) 1,3-Dichlorobenzene	10.933	146	672800	46.377	ug/L	99
80) p-Isopropyltoluene	10.839	119	1394034	48.633	ug/L	100
81) 1,4-Dichlorobenzene	11.032	146	682033	45.669	ug/L	99
82) 1,2-Dichlorobenzene	11.503	146	609665	46.549	ug/L	99
83) 1,2-Dibromo-3-chloropr...	12.413	75	61845	49.000	ug/L	98
84) n-Butylbenzene	11.315	91	1258186	48.438	ug/L	99
85) 1,2,4-Trichlorobenzene	13.213	180	417881	47.929	ug/L	99
86) Hexachlorobutadiene	13.187	225	218022	46.661	ug/L	99
87) Naphthalene	13.590	128	1018454	48.506	ug/L	100
88) 1,2,3-Trichlorobenzene	13.815	180	365558	47.548	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\data\170817\
Data File : 17081710.D
Acq On : 17 Aug 2017 3:43 pm
Operator :
Sample : SSCV 46.4 ppb
Misc : ICV
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 13:40:34 2017
Quant Method : C:\msdchem\1\methods\170817X.M
Quant Title : M-8260S
QLast Update : Thu Aug 17 14:33:11 2017
Response via : Initial Calibration