ERM

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Melville, New York 11747

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www.erm.com

4 June 2020

Justin Starr, P.G.
Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-7014

Reference: Former Macbeth Kollmorgen Facility, NYSDEC Site No. 3-36-037

Subject: MW-12 Annual Monitoring – 2020

Dear Mr. Starr:

In accordance with the monitoring requirements outlined for the above referenced site in the March 1997 Record of Decision (ROD) and subsequently modified during the September 14, 2001 conference call with Mr. John Rashak (NYSDEC) and H2M, bedrock monitoring well MW-12 was sampled on 30 January 2020 by ERM at the request of Fortive. After gauging water levels at the 14 on-site monitoring wells, MW-12 was purged and sampled via low-flow sampling methodology. MW-1 was abandoned in place on October 24 2019, as discussed further in the 2019 Q4 report previously submitted to NYSDEC on 3 December 2019. Groundwater elevations and contour maps will be presented in the 2022 Periodic Review Report (PRR).

SGS Accutest Laboratories (NYSDOH ID # 10983) analyzed the MW-12 groundwater sample for volatile organic compounds using United States Environmental Protection Agency (EPA) Method SW-846 8260C.

The 2020 analytical results indicate that trichloroethene (TCE) and total 1,2-dichloroethene (total 1,2-DCE) were detected at concentrations above the New York State Groundwater Quality Standards (NYSGQS). These concentrations (summarized on the following table) are consistent with results from the four previous quarters.

MW-12 Groundwater Sampling Summary

Compound	3/19/19	4/24/19	7/11/19	10/22/19	01/30/20	NYSGQ
TCE	**86.7**	**92.3**	**82.3**	**87.0**	**74.3**	5
Total 1,2-DCE	**184.6**	**172.3**	**203.5**	**193.99**	**163.91**	5

Notes: **Bold** = exceeds NYSGQS
Results reported in micrograms per liter (µg/L)

The full laboratory analytical report for the January 2020 sampling event is attached. An EQuIS Electronic Data Deliverable (EDD) will be sent to the NYSDEC prior to submittal of the next PRR.

If you have any questions, please call me at (631) 756-8960.

Yours sincerely,

Karen Pickering
Senior Project Manager

Enclosure: SGS Laboratories Analytical Report for MW-12

cc: David Bozaan, Fortive Corporation
Ernie Rossano, ERM
Joe Robb, ERM

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

ERM, Inc.

Fortive, New Windsor, NY

0501429

SGS Job Number: JD2571

Sampling Date: 01/30/20

Report to:

ERM, Incorporated
105 Maxess Road Suite 316
Melville, NY 11747-3851
Karen.Pickering@ERM.com

ATTN: Karen Pickering

Total number of pages in report: **129**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Laura Degenhardt
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (ANAB L2248)

Sections: 1 2 3 4 5 6 7

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SGS North America Inc.

Sample Summary

ERM, Inc.

Job No: JD2571

Fortive, New Windsor, NY
Project No: 0501429

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD2571-1	01/30/20	12:50	DD	01/31/20	AQ	Ground Water	MW-12-013020

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	ERM, Inc.	**Job No**	JD2571
Site:	Fortive, New Windsor, NY	**Report Date**	2/7/2020 8:49:04 AM

On 01/31/2020, 1 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.9 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD2571 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** V2E7090

- All samples were analyzed within the recommended method holding time.
- Sample(s) JD2274-37MS, JD2274-37MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Duplicate Recovery(s) for m,p-Xylene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for Chloroethane, cis-1,2-Dichloroethene, Toluene are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JD2571-1 for Freon 113: Associated CCV outside of control limits high, sample was ND.
- JD2571-1 for Chloromethane: Associated CCV outside of control limits low.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD2571
Account: ERM, Inc.
Project: Fortive, New Windsor, NY
Collected: 01/30/20

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD2571-1	**MW-12-013020**					
cis-1,2-Dichloroethene		163	1.0	0.51	ug/l	SW846 8260C
trans-1,2-Dichloroethene		0.91 J	1.0	0.54	ug/l	SW846 8260C
Trichloroethene		74.3	1.0	0.53	ug/l	SW846 8260C
Vinyl chloride		1.6	1.0	0.79	ug/l	SW846 8260C

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID: MW-12-013020
Lab Sample ID: JD2571-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Fortive, New Windsor, NY

Date Sampled: 01/30/20
Date Received: 01/31/20
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2E159317.D	1	02/06/20 03:20	ED	n/a	n/a	V2E7090
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [a]	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	163	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.91	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113 [b]	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-12-013020
Lab Sample ID: JD2571-1
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Fortive, New Windsor, NY

Date Sampled: 01/30/20
Date Received: 01/31/20
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	74.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	1.6	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		80-120%
17060-07-0	1,2-Dichloroethane-D4	108%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	99%		80-120%

(a) Associated CCV outside of control limits low.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW

CHAIN OF CUSTODY

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SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

FED-EX Tracking # | Bottle Order Control #
SGS Quote # | SGS Job # JD2571

Client / Reporting Information

Company Name: ERM
Street Address: 105 Maxess Rd
City: Melville State: NY Zip: 11747
Project Contact: Karen Pickering E-mail:
Phone #: 6317568900
Sampler(s) Name(s): Phone #:

Project Information

Project Name: Fortive - MacBeth
Street: 617 Little Britain Rd
City: New Windsor State:
Project #: 0501429
Client Purchase Order #:
Project Manager: Karen Pickering

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis

VOA 8260 OTC (20)

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB - Field Blank
EB-Equipment Blank
RB - Rinse Blank
TB - Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Grab (G) Comp (C)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	LAB USE ONLY
1	MW-12-013020		1/30	1250	DD	G	GW	3	3								X

V940

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via Labilink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria____
- [ ] CT RCP Criteria____
- [ ] State Forms
- [ ] EDD Format _____
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

INITIAL ASSESSMENT 2A(N)

LABEL VERIFICATION_____

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date / Time:	Received By:
1	Dan Ley	1/30 1640	1
2			2
3			3
4			4
5			5

Relinquished by: 2 — Date / Time: 1/30 1439 — Received By: 2

Custody Seal # | Intact | Not intact | Preserved where applicable | Absent | Therm. ID: | On Ice | Cooler Temp. °C

Y 2.2 0 CF

EHSA-QAC-0023-02-FORM-Dayton - Standard COC.xlsx

JD2571: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD2571 **Client:** _____ **Project:** _____

Date / Time Received: 1/31/2020 2:39:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 229517 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

Internal Sample Tracking Chronicle

ERM, Inc.

Job No: JD2571

Fortive, New Windsor, NY
Project No: 0501429

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD2571-1	Collected: 30-JAN-20 12:50 By: DD			Received: 31-JAN-20 By: DG		
MW-12-013020						
JD2571-1	SW846 8260C	06-FEB-20 03:20	ED			V8260TCL20

SGS Internal Chain of Custody

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY
Received: 01/31/20

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD2571-1.1	Secured Storage	Devin Gomez	02/05/20 18:47	Retrieve from Storage
JD2571-1.1	Devin Gomez	GCMS2E	02/05/20 18:47	Load on Instrument
JD2571-1.1	GCMS2E	Edward Durner	02/06/20 08:10	Unload from Instrument
JD2571-1.1	Edward Durner	Secured Storage	02/06/20 08:10	Return to Storage

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E7090-MB	2E159300.D	1	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	6.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.58	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	6.9	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.95	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	1.2	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	1.4	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	1.9	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	

Method Blank Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E7090-MB	2E159300.D	1	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.70	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.90	ug/l	
108-88-3	Toluene	ND	1.0	0.53	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.84	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	104%	81-124%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	97%	80-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E7090-BS	2E159298.D	1	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	167	84	42-150
71-43-2	Benzene	50	48.9	98	80-120
74-97-5	Bromochloromethane	50	53.4	107	84-121
75-27-4	Bromodichloromethane	50	52.2	104	83-120
75-25-2	Bromoform	50	56.0	112	76-129
74-83-9	Bromomethane	50	48.1	96	57-138
78-93-3	2-Butanone (MEK)	200	214	107	64-137
75-15-0	Carbon disulfide	50	53.0	106	64-137
56-23-5	Carbon tetrachloride	50	52.9	106	75-135
108-90-7	Chlorobenzene	50	49.5	99	84-117
75-00-3	Chloroethane	50	44.8	90	63-132
67-66-3	Chloroform	50	51.5	103	80-119
74-87-3	Chloromethane	50	37.8	76	46-136
110-82-7	Cyclohexane	50	50.8	102	64-137
96-12-8	1,2-Dibromo-3-chloropropane	50	47.1	94	72-127
124-48-1	Dibromochloromethane	50	54.1	108	80-123
106-93-4	1,2-Dibromoethane	50	51.8	104	84-117
95-50-1	1,2-Dichlorobenzene	50	49.3	99	84-119
541-73-1	1,3-Dichlorobenzene	50	49.7	99	81-117
106-46-7	1,4-Dichlorobenzene	50	50.3	101	82-117
75-71-8	Dichlorodifluoromethane	50	52.5	105	36-149
75-34-3	1,1-Dichloroethane	50	49.0	98	79-120
107-06-2	1,2-Dichloroethane	50	49.1	98	78-126
75-35-4	1,1-Dichloroethene	50	50.9	102	69-126
156-59-2	cis-1,2-Dichloroethene	50	51.7	103	80-120
156-60-5	trans-1,2-Dichloroethene	50	49.9	100	76-120
78-87-5	1,2-Dichloropropane	50	47.2	94	82-121
10061-01-5	cis-1,3-Dichloropropene	50	50.1	100	83-120
10061-02-6	trans-1,3-Dichloropropene	50	52.7	105	82-121
100-41-4	Ethylbenzene	50	49.3	99	80-120
76-13-1	Freon 113	50	61.6	123	62-182
591-78-6	2-Hexanone	200	200	100	65-132
98-82-8	Isopropylbenzene	50	49.5	99	83-120
79-20-9	Methyl Acetate	50	45.8	92	67-129
108-87-2	Methylcyclohexane	50	53.5	107	71-134
1634-04-4	Methyl Tert Butyl Ether	50	44.5	89	80-119

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2E7090-BS	2E159298.D	1	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	197	99	71-131
75-09-2	Methylene chloride	50	50.4	101	77-120
100-42-5	Styrene	50	53.0	106	82-122
79-34-5	1,1,2,2-Tetrachloroethane	50	48.1	96	76-119
127-18-4	Tetrachloroethene	50	52.3	105	70-131
108-88-3	Toluene	50	49.5	99	80-120
87-61-6	1,2,3-Trichlorobenzene	50	49.1	98	76-134
120-82-1	1,2,4-Trichlorobenzene	50	50.3	101	79-132
71-55-6	1,1,1-Trichloroethane	50	52.1	104	81-128
79-00-5	1,1,2-Trichloroethane	50	49.5	99	83-118
79-01-6	Trichloroethene	50	50.8	102	80-120
75-69-4	Trichlorofluoromethane	50	56.8	114	64-136
75-01-4	Vinyl chloride	50	41.2	82	51-135
	m,p-Xylene	100	98.6	99	80-120
95-47-6	o-Xylene	50	49.6	99	80-120
1330-20-7	Xylene (total)	150	148	99	80-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	101%	81-124%
2037-26-5	Toluene-D8	95%	80-120%
460-00-4	4-Bromofluorobenzene	96%	80-120%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD2274-37MS	2E159306.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37MSD	2E159307.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37 [a]	2E159302.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37	2E159303.D	200	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	JD2274-37 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	215		4000	3310	77	4000	3380	79	2	34-149/17
71-43-2	Benzene	85.7		1000	1010	92	1000	993	91	2	54-136/10
74-97-5	Bromochloromethane	ND		1000	1020	102	1000	1030	103	1	79-124/11
75-27-4	Bromodichloromethane	ND		1000	1010	101	1000	996	100	1	79-124/11
75-25-2	Bromoform	ND		1000	1090	109	1000	1080	108	1	71-130/11
74-83-9	Bromomethane	ND		1000	917	92	1000	913	91	0	53-142/14
78-93-3	2-Butanone (MEK)	ND		4000	4770	119	4000	4760	119	0	54-142/15
75-15-0	Carbon disulfide	ND		1000	975	98	1000	972	97	0	59-145/17
56-23-5	Carbon tetrachloride	ND		1000	986	99	1000	973	97	1	70-143/12
108-90-7	Chlorobenzene	11.8	J	1000	963	95	1000	950	94	1	78-123/10
75-00-3	Chloroethane	9330 [c]		1000	9370	4* [b]	1000	9370	4* [b]	0	57-141/14
67-66-3	Chloroform	ND		1000	976	98	1000	984	98	1	76-123/11
74-87-3	Chloromethane	ND		1000	724	72	1000	726	73	0	43-141/16
110-82-7	Cyclohexane	ND		1000	996	100	1000	961	96	4	51-155/16
96-12-8	1,2-Dibromo-3-chloropropane	ND		1000	928	93	1000	949	95	2	66-130/13
124-48-1	Dibromochloromethane	ND		1000	1030	103	1000	1020	102	1	76-125/11
106-93-4	1,2-Dibromoethane	ND		1000	1010	101	1000	999	100	1	78-119/11
95-50-1	1,2-Dichlorobenzene	11.4	J	1000	971	96	1000	973	96	0	77-123/11
541-73-1	1,3-Dichlorobenzene	ND		1000	963	96	1000	972	97	1	76-122/11
106-46-7	1,4-Dichlorobenzene	ND		1000	977	98	1000	974	97	0	76-122/11
75-71-8	Dichlorodifluoromethane	ND		1000	1070	107	1000	1030	103	4	31-159/16
75-34-3	1,1-Dichloroethane	344		1000	1230	89	1000	1230	89	0	73-126/11
107-06-2	1,2-Dichloroethane	18.0	J	1000	957	94	1000	948	93	1	72-131/11
75-35-4	1,1-Dichloroethene	79.3		1000	1000	92	1000	1020	94	2	63-136/14
156-59-2	cis-1,2-Dichloroethene	9540 [c]		1000	10100	56* [b]	1000	10100	56* [b]	0	60-136/11
156-60-5	trans-1,2-Dichloroethene	33.0		1000	969	94	1000	983	95	1	70-126/11
78-87-5	1,2-Dichloropropane	ND		1000	914	91	1000	909	91	1	78-124/10
10061-01-5	cis-1,3-Dichloropropene	ND		1000	955	96	1000	949	95	1	79-123/11
10061-02-6	trans-1,3-Dichloropropene	ND		1000	1010	101	1000	991	99	2	77-123/11
100-41-4	Ethylbenzene	1220		1000	2010	79	1000	1990	77	1	51-140/20
76-13-1	Freon 113	ND		1000	1160	116	1000	1120	112	4	60-192/14
591-78-6	2-Hexanone	ND		4000	3830	96	4000	3880	97	1	56-139/14
98-82-8	Isopropylbenzene	28.1		1000	983	95	1000	963	93	2	75-129/11
79-20-9	Methyl Acetate	ND		1000	878	88	1000	891	89	1	55-131/15
108-87-2	Methylcyclohexane	17.4	J	1000	1060	104	1000	996	98	6	57-155/13
1634-04-4	Methyl Tert Butyl Ether	ND		1000	848	85	1000	855	86	1	72-123/11

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD2274-37MS	2E159306.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37MSD	2E159307.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37 [a]	2E159302.D	20	02/05/20	ED	n/a	n/a	V2E7090
JD2274-37	2E159303.D	200	02/05/20	ED	n/a	n/a	V2E7090

The QC reported here applies to the following samples: **Method:** SW846 8260C

JD2571-1

CAS No.	Compound	JD2274-37 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	370		4000	4260	97	4000	4210	96	1	66-136/13
75-09-2	Methylene chloride	257		1000	1180	92	1000	1180	92	0	73-125/13
100-42-5	Styrene	ND		1000	1060	106	1000	1040	104	2	75-129/11
79-34-5	1,1,2,2-Tetrachloroethane	ND		1000	930	93	1000	946	95	2	71-122/11
127-18-4	Tetrachloroethene	ND		1000	1020	102	1000	989	99	3	61-139/11
108-88-3	Toluene	10300 [c]		1000	10300	0* [b]	1000	10100	-20* [b]	2	60-135/10
87-61-6	1,2,3-Trichlorobenzene	ND		1000	935	94	1000	934	93	0	70-138/13
120-82-1	1,2,4-Trichlorobenzene	ND		1000	977	98	1000	970	97	1	72-137/13
71-55-6	1,1,1-Trichloroethane	25.6		1000	1010	98	1000	984	96	3	74-138/12
79-00-5	1,1,2-Trichloroethane	ND		1000	954	95	1000	946	95	1	78-121/11
79-01-6	Trichloroethene	ND		1000	990	99	1000	962	96	3	62-141/10
75-69-4	Trichlorofluoromethane	ND		1000	1080	108	1000	1040	104	4	57-149/14
75-01-4	Vinyl chloride	1790		1000	2280	49	1000	2260	47	1	43-146/15
	m,p-Xylene	6170		2000	7300	57	2000	7150	49* [b]	2	50-144/20
95-47-6	o-Xylene	1210		1000	2060	85	1000	2040	83	1	63-134/10
1330-20-7	Xylene (total)	7380		3000	9350	66	3000	9190	60	2	56-139/20

CAS No.	Surrogate Recoveries	MS	MSD	JD2274-37	JD2274-37	Limits
1868-53-7	Dibromofluoromethane	101%	101%	102%	101%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	103%	105%	81-124%
2037-26-5	Toluene-D8	95%	94%	95%	95%	80-120%
460-00-4	4-Bromofluorobenzene	95%	96%	97%	99%	80-120%

(a) Diluted due to high concentration of target compound.
(b) Outside control limits due to high level in sample relative to spike amount.
(c) Result is from Run #2.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-BFB
Lab File ID: 2E156547.D
Instrument ID: GCMS2E
Injection Date: 10/09/19
Injection Time: 14:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16804	17.3		Pass
75	30.0 - 60.0% of mass 95	44533	45.9		Pass
95	Base peak, 100% relative abundance	97061	100.0		Pass
96	5.0 - 9.0% of mass 95	6930	7.14		Pass
173	Less than 2.0% of mass 174	530	0.55	(0.71) [a]	Pass
174	50.0 - 120.0% of mass 95	74171	76.4		Pass
175	5.0 - 9.0% of mass 174	5280	5.44	(7.12) [a]	Pass
176	95.0 - 101.0% of mass 174	72867	75.1	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	5060	5.21	(6.94) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E6949-IC6949	2E156548.D	10/09/19	15:27	00:29	Initial cal 0.2
V2E6949-IC6949	2E156549.D	10/09/19	15:58	01:00	Initial cal 0.5
V2E6949-IC6949	2E156550.D	10/09/19	16:29	01:31	Initial cal 1
V2E6949-IC6949	2E156551.D	10/09/19	16:59	02:01	Initial cal 2
V2E6949-IC6949	2E156552.D	10/09/19	17:29	02:31	Initial cal 4
V2E6949-IC6949	2E156553.D	10/09/19	18:00	03:02	Initial cal 8
V2E6949-IC6949	2E156554.D	10/09/19	18:30	03:32	Initial cal 20
V2E6949-ICC6949	2E156555.D	10/09/19	19:00	04:02	Initial cal 50
V2E6949-IC6949	2E156556.D	10/09/19	19:30	04:32	Initial cal 100
V2E6949-IC6949	2E156557.D	10/09/19	20:00	05:02	Initial cal 200
V2E6949-ICV6949	2E156560.D	10/09/19	21:32	06:34	Initial cal verification 50
V2E6949-ICV6949	2E156561.D	10/09/19	22:02	07:04	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-BFB2
Lab File ID: 2E156563.D
Instrument ID: GCMS2E
Injection Date: 10/10/19
Injection Time: 08:55

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	16357	16.8		Pass
75	30.0 - 60.0% of mass 95	45229	46.5		Pass
95	Base peak, 100% relative abundance	97245	100.0		Pass
96	5.0 - 9.0% of mass 95	6619	6.81		Pass
173	Less than 2.0% of mass 174	588	0.60	(0.80) [a]	Pass
174	50.0 - 120.0% of mass 95	73472	75.6		Pass
175	5.0 - 9.0% of mass 174	5514	5.67	(7.50) [a]	Pass
176	95.0 - 101.0% of mass 174	70725	72.7	(96.3) [a]	Pass
177	5.0 - 9.0% of mass 176	4868	5.01	(6.88) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E6949-ICV6949	2E156566.D	10/10/19	11:06	02:11	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E7090-BFB
Lab File ID: 2E159296.D
Instrument ID: GCMS2E
Injection Date: 02/05/20
Injection Time: 16:40

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18104	17.2		Pass
75	30.0 - 60.0% of mass 95	49664	47.1		Pass
95	Base peak, 100% relative abundance	105547	100.0		Pass
96	5.0 - 9.0% of mass 95	7411	7.02		Pass
173	Less than 2.0% of mass 174	722	0.68	(0.85) [a]	Pass
174	50.0 - 120.0% of mass 95	85195	80.7		Pass
175	5.0 - 9.0% of mass 174	6274	5.94	(7.36) [a]	Pass
176	95.0 - 101.0% of mass 174	82760	78.4	(97.1) [a]	Pass
177	5.0 - 9.0% of mass 176	5404	5.12	(6.53) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2E7090-CC6949	2E159296.D	02/05/20	16:40	00:00	Continuing cal 50
V2E7090-BS	2E159298.D	02/05/20	17:41	01:01	Blank Spike
V2E7090-MB	2E159300.D	02/05/20	18:42	02:02	Method Blank
ZZZZZZ	2E159301.D	02/05/20	19:12	02:32	(unrelated sample)
JD2274-37	2E159302.D	02/05/20	19:43	03:03	(used for QC only; not part of job JD2571)
JD2274-37	2E159303.D	02/05/20	20:13	03:33	(used for QC only; not part of job JD2571)
ZZZZZZ	2E159304.D	02/05/20	20:43	04:03	(unrelated sample)
ZZZZZZ	2E159305.D	02/05/20	21:14	04:34	(unrelated sample)
JD2274-37MS	2E159306.D	02/05/20	21:44	05:04	Matrix Spike
JD2274-37MSD	2E159307.D	02/05/20	22:15	05:35	Matrix Spike Duplicate
ZZZZZZ	2E159309.D	02/05/20	23:15	06:35	(unrelated sample)
ZZZZZZ	2E159310.D	02/05/20	23:46	07:06	(unrelated sample)
ZZZZZZ	2E159311.D	02/06/20	00:17	07:37	(unrelated sample)
ZZZZZZ	2E159312.D	02/06/20	00:47	08:07	(unrelated sample)
ZZZZZZ	2E159313.D	02/06/20	01:18	08:38	(unrelated sample)
ZZZZZZ	2E159314.D	02/06/20	01:49	09:09	(unrelated sample)
ZZZZZZ	2E159315.D	02/06/20	02:20	09:40	(unrelated sample)
ZZZZZZ	2E159316.D	02/06/20	02:50	10:10	(unrelated sample)
JD2571-1	2E159317.D	02/06/20	03:20	10:40	MW-12-013020
V2E7091-BS	2E159320.D	02/06/20	07:59	15:19	Blank Spike

Internal Standard Area Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Check Std:	V2E7090-CC6949	**Injection Date:**	02/05/20
Lab File ID:	2E159296.D	**Injection Time:**	16:40
Instrument ID:	GCMS2E	**Method:**	SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	118208	7.33	296422	9.55	460217	10.47	376637	13.61	192568	15.91
Upper Limit [a]	236416	7.83	592844	10.05	920434	10.97	753274	14.11	385136	16.41
Lower Limit [b]	59104	6.83	148211	9.05	230109	9.97	188319	13.11	96284	15.41

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V2E7090-BS	119417	7.33	313728	9.55	486654	10.47	398946	13.61	205967	15.91
V2E7090-MB	133485	7.33	316369	9.55	483347	10.47	394385	13.61	191613	15.91
ZZZZZZ	117330	7.32	305138	9.55	474297	10.47	381212	13.61	190134	15.91
JD2274-37	121652	7.32	321578	9.55	490818	10.47	398482	13.61	204738	15.91
JD2274-37	125191	7.32	314110	9.55	477438	10.47	388978	13.61	194494	15.91
ZZZZZZ	125853	7.32	312969	9.55	484739	10.47	393639	13.61	200602	15.91
ZZZZZZ	125859	7.33	312931	9.55	484563	10.47	398132	13.61	196906	15.91
JD2274-37MS	113068	7.33	320629	9.55	494748	10.47	406607	13.61	210254	15.91
JD2274-37MSD	115606	7.32	321809	9.55	503801	10.47	409771	13.61	207625	15.91
ZZZZZZ	134274	7.32	317216	9.55	491303	10.47	398316	13.61	194367	15.91
ZZZZZZ	129472	7.33	306607	9.55	481923	10.47	385612	13.61	185981	15.91
ZZZZZZ	132235	7.32	319018	9.55	489671	10.47	395505	13.61	194410	15.91
ZZZZZZ	132810	7.33	312002	9.55	481323	10.47	388798	13.61	192741	15.91
ZZZZZZ	136408	7.32	316986	9.55	482033	10.47	393826	13.61	192884	15.91
ZZZZZZ	136259	7.33	308938	9.55	478942	10.47	385377	13.61	187826	15.91
ZZZZZZ	127330	7.33	310260	9.55	479537	10.47	387780	13.61	187351	15.91
ZZZZZZ	121141	7.32	301875	9.55	470715	10.47	379211	13.61	184186	15.91
JD2571-1	127258	7.32	290524	9.55	449856	10.47	362248	13.61	176192	15.91
V2E7091-BS	129387	7.33	299663	9.55	471391	10.47	381639	13.61	194285	15.91

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = Chlorobenzene-D5
IS 5 = 1,4-Dichlorobenzene-d4

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Method: SW846 8260C **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD2571-1	2E159317.D	105	108	95	99
JD2274-37MS	2E159306.D	101	100	95	95
JD2274-37MSD	2E159307.D	101	100	94	96
V2E7090-BS	2E159298.D	102	101	95	96
V2E7090-MB	2E159300.D	102	104	94	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	81-124%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	80-120%

Initial Calibration Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICC6949
Lab FileID: 2E156555.D

Response Factor Report VOAMS2E

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Calibration Files
4 =2E156552.D 2 =2E156551.D 0.5 =2E156549.D 50 =2E156555.D
100 =2E156556.D 1 =2E156550.D 200 =2E156557.D 20 =2E156554.D
8 =2E156553.D 0.2 =2E156548.D = =

Compound	4	2	0.5	50	100	1	200	20	8	0.2	Avg	%RSD
1) I tert butyl alcohol-d9	----------ISTD----------											
2) ethanol	0.138	0.140	0.134	0.129	0.160	0.129	0.131	0.127			0.136	7.98
3) tertiary butyl alcohol	1.251	1.321	1.401	1.435	1.316	1.388	1.274	1.282			1.333	5.01
4) 1,4-dioxane	0.113	0.116	0.114	0.106		0.108	0.110	0.108			0.111	3.34
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.827	0.826	0.851	0.851	0.858	0.933	0.780	0.804	0.847		0.842	5.06
7) dichlorodifluoromethane	0.624	0.643	0.681	0.668	0.558	0.641	0.611	0.665			0.636	6.18
8) chloromethane	0.832	0.897	0.956	0.878	0.870	0.983	0.816	0.809	0.864		0.878	6.76
9) vinyl chloride	0.811	0.863	0.840	0.903	0.911	0.876	0.848	0.826	0.860	0.915	0.865	4.16
10) bromomethane	0.470	0.534	0.504	0.526	0.562		0.476	0.513			0.512	6.33
11) chloroethane	0.432	0.449	0.463	0.450	0.462	0.486	0.427	0.423	0.436		0.448	4.54
12) trichlorofluoromethane	0.728	0.752	0.571	0.770	0.777	0.715	0.743	0.698	0.763		0.724	8.69
13) 1,3-butadiene	0.565	0.566	0.565	0.612	0.626	0.607	0.578	0.559	0.592		0.586	4.21
14) vinyl bromide	0.394	0.440	0.398	0.424	0.441	0.414	0.421	0.391	0.415	0.446	0.418	4.76
15) ethyl ether	0.303	0.324	0.333	0.305	0.313	0.327	0.313	0.292	0.306		0.313	4.19
16) 2-chloropropane	0.947	1.074	0.964	0.963	1.147	0.920	0.891	0.966			0.984	8.57
17) acrolein	0.096		0.099	0.103		0.098	0.102	0.100			0.099	2.63
18) freon 113	0.360	0.364	0.382	0.405	0.331	0.406	0.362	0.392			0.375	6.85
19) 1,1-dichloroethene	0.759	0.753	0.790	0.780	0.798	0.791	0.766	0.735	0.759	0.763	0.769	2.58
20) acetone	0.146	0.146	0.135	0.128	0.205	0.126	0.133	0.138			0.145	17.52
21) acetonitrile	0.085		0.067	0.062		0.061	0.066	0.065			0.068	12.97
22) iodomethane	0.602	0.615	0.615	0.621	0.651	0.652	0.643	0.589	0.617		0.623	3.50
23) carbon disulfide												

1.309 1.332 1.396 1.377 1.428 1.452 1.367 1.297 1.353 1.468 1.378 4.23

24) methylene chloride
0.559 0.570 0.519 0.536 0.673 0.522 0.502 0.519 0.550 9.92

25) methyl acetate
0.380 0.371 0.370 0.366 0.361 0.360 0.368 0.368 1.89

26) methyl tert butyl ether
1.444 1.438 1.585 1.455 1.480 1.564 1.433 1.399 1.410 1.734 1.494 6.98

27) trans-1,2-dichloroethene
0.685 0.700 0.725 0.723 0.738 0.764 0.707 0.684 0.718 0.716 3.57

28) hexane
0.374 0.392 0.302 0.416 0.423 0.401 0.418 0.383 0.427 0.393 9.83

29) di-isopropyl ether
1.856 1.788 1.966 1.945 1.964 2.121 1.859 1.853 1.859 2.073 1.928 5.50

30) ethyl tert-butyl ether
1.633 1.639 1.706 1.708 1.727 1.801 1.653 1.632 1.660 1.609 1.677 3.47

31) 2-butanone
0.054 0.045 0.056 0.054 0.041 0.053 0.053 0.053 0.051 10.41

32) 1,1-dichloroethane
0.946 0.962 1.014 0.961 0.966 1.011 0.921 0.923 0.968 0.889 0.956 4.05

33) chloroprene
0.750 0.781 0.791 0.797 0.812 0.811 0.777 0.738 0.752 0.803 0.781 3.42

34) acrylonitrile
0.193 0.196 0.184 0.189 0.184 0.192 0.182 0.185 0.181 0.187 2.85

35) vinyl acetate
0.105 0.102 0.118 0.117 0.080 0.112 0.108 0.108 0.106 11.33

36) ethyl acetate
0.086 0.090 0.079 0.077 0.089 0.072 0.083 0.089 0.083 7.99

37) 2,2-dichloropropane
0.794 0.850 0.926 0.798 0.803 0.965 0.751 0.762 0.804 0.828 8.81

38) cis-1,2-dichloroethene
0.563 0.573 0.623 0.568 0.583 0.665 0.564 0.549 0.568 0.584 6.28

39) propionitrile
0.069 0.065 0.061 0.071 0.067 0.069 0.066 0.070 0.069 0.067 4.60

40) methyl acrylate
0.064 0.071 0.073 0.071 0.066 0.061 0.068 7.21

41) bromochloromethane
0.273 0.260 0.275 0.262 0.273 0.269 0.266 0.253 0.263 0.266 2.66

42) tetrahydrofuran
0.069 0.077 0.065 0.063 0.061 0.063 0.068 0.066 7.93

43) chloroform
0.888 0.886 0.987 0.865 0.888 0.954 0.853 0.829 0.881 0.892 5.49

44) t-butyl formate
0.510 0.488 0.515 0.525 0.526 0.574 0.501 0.512 0.505 0.518 4.67

45) 1,1-dichloropropene
0.695 0.697 0.761 0.724 0.736 0.737 0.710 0.679 0.698 0.715 3.64

46) carbon tetrachloride
0.654 0.659 0.679 0.684 0.708 0.701 0.683 0.643 0.672 0.690 0.677 3.04

47) isopropyl acetate
0.122 0.107 0.118 0.122 0.120 0.114 0.114 0.117 4.76

48) dibromofluoromethane (s)
0.443 0.447 0.429 0.445 0.450 0.445 0.449 0.444 0.442 0.431 0.442 1.59

49) methacrylonitrile
0.186 0.177 0.200 0.201 0.164 0.198 0.190 0.184 0.187 6.71

50) 1,1,1-trichloroethane
0.767 0.768 0.802 0.787 0.820 0.834 0.783 0.754 0.796 0.830 0.794 3.48

51) cyclohexane
0.767 0.833 0.849 0.851 0.749 0.827 0.768 0.847 0.811 5.24

52) iso-butyl alcohol
0.024 0.022 0.020 0.019 0.022 0.020 0.021 8.48

53) tert amyl alcohol

```
      0.033             0.028 0.025       0.024 0.028 0.030        0.028   11.05

54) I   1,4-difluorobenzene   ----------------ISTD---------------------
55)  1,2-dichloroethane-d4 (s)
      0.305 0.307 0.302 0.300 0.291 0.309 0.293 0.296 0.309 0.297  0.301    2.13
56)  2,2,4-trimethylpentane
      0.975 1.016       1.123 1.136 1.003 1.143 1.013 1.146        1.069    6.87
57)  n-butyl alcohol
      0.009 0.008       0.010 0.008 0.008 0.008 0.009 0.008        0.009#   6.65
58)  benzene
      1.374 1.388 1.513 1.370 1.390 1.530 1.339 1.310 1.362 1.724  1.430    8.74
59)  tert-amyl methyl ether
      1.065 1.072 1.198 1.070 1.072 1.140 1.031 1.017 1.040 1.335  1.104    8.81
60)  heptane    *This compound does not meet Initial Calibration criteria*
      0.220 0.231       0.262 0.263 0.210 0.265 0.238 0.267        0.244    9.25
61)  1,2-dichloroethane
      0.424 0.436       0.409 0.404 0.500 0.385 0.401 0.415        0.422    8.37
62)  ethyl acrylate
      0.366 0.356       0.402 0.396 0.347 0.392 0.375 0.374        0.376    5.21
63)  trichloroethene
      0.322 0.326 0.317 0.329 0.337 0.308 0.327 0.308 0.328 0.422  0.332    9.84
64)  2-nitropropane
      0.103             0.109 0.101       0.099 0.102 0.103        0.103    3.15
65)  2-chloroethyl vinyl ether
      0.196 0.190 0.182 0.210 0.209 0.200 0.204 0.199 0.198        0.199    4.51
66)  methyl methacrylate
      0.074 0.075       0.084 0.087       0.087 0.079 0.078        0.081    6.72
67)  1,2-dichloropropane
      0.353 0.341 0.359 0.364 0.366 0.403 0.354 0.349 0.355 0.380  0.362    4.95
68)  methylcyclohexane
      0.539 0.556       0.620 0.635 0.562 0.633 0.567 0.626        0.592    6.71
69)  dibromomethane
      0.182 0.187 0.187 0.191 0.193 0.209 0.191 0.184 0.185        0.190    4.30
70)  bromodichloromethane
      0.407 0.402 0.416 0.433 0.442 0.444 0.434 0.408 0.419 0.429  0.423    3.55
71)  epichlorohydrin
      0.031 0.029       0.031 0.030 0.030 0.030 0.030 0.029        0.030    2.24
72)  cis-1,3-dichloropropene
      0.551 0.546 0.521 0.574 0.582 0.560 0.571 0.539 0.542 0.548  0.553    3.35
73)  4-methyl-2-pentanone
      0.119 0.109 0.108 0.124 0.122 0.111 0.118 0.119 0.116        0.116    4.88
74)  3-methyl-1-butanol
      0.009 0.008       0.010 0.009       0.008 0.010 0.009        0.009#   7.36

75) I   chlorobenzene-d5      ----------------ISTD---------------------
76)  toluene-d8 (s)
      1.403 1.384 1.395 1.379 1.365 1.379 1.353 1.378 1.371 1.404  1.381    1.18
77)  toluene
      1.022 0.961 1.102 1.011 1.025 1.030 0.988 0.951 0.996 1.112  1.020    5.18
78)  ethyl methacrylate
      0.446 0.415 0.402 0.497 0.499 0.433 0.487 0.456 0.453 0.464  0.455    7.22
79)  trans-1,3-dichloropropene
      0.568 0.538 0.520 0.596 0.598 0.540 0.574 0.566 0.563 0.559  0.562    4.36
80)  1,1,2-trichloroethane
      0.296 0.289 0.296 0.284 0.286 0.271 0.276 0.275 0.275 0.280  0.283    3.10
81)  tetrachloroethene
      0.319 0.311 0.349 0.323 0.329 0.354 0.319 0.310 0.326 0.291  0.323    5.67
82)  2-hexanone
      0.132 0.120 0.106 0.142 0.136 0.115 0.129 0.133 0.130 0.105  0.125   10.15
83)  1,3-dichloropropane
```

0.616 0.590 0.589 0.594 0.590 0.627 0.565 0.571 0.582 0.630 0.596 3.74

84) butyl acetate
0.245 0.224 0.268 0.262 0.265 0.253 0.254 0.260 0.254 5.61

85) dibromochloromethane
0.354 0.337 0.397 0.380 0.397 0.357 0.388 0.359 0.355 0.327 0.365 6.73

86) 1,2-dibromoethane
0.367 0.343 0.353 0.377 0.385 0.381 0.371 0.362 0.365 0.309 0.361 6.16

87) n-butyl ether
1.757 1.717 1.771 1.863 1.864 1.872 1.792 1.715 1.746 1.664 1.776 4.02

88) chlorobenzene
1.069 1.046 1.103 1.069 1.094 1.055 1.066 1.026 1.044 1.107 1.068 2.51

89) 1,1,1,2-tetrachloroethane
0.384 0.375 0.366 0.390 0.399 0.381 0.392 0.377 0.375 0.371 0.381 2.67

90) ethylbenzene
1.855 1.799 1.936 1.861 1.898 1.842 1.813 1.759 1.825 1.937 1.853 3.13

91) m,p-xylene
0.704 0.714 0.715 0.726 0.743 0.714 0.713 0.689 0.709 0.759 0.719 2.78

92) o-xylene
1.499 1.451 1.538 1.508 1.514 1.531 1.456 1.434 1.456 1.558 1.495 2.85

93) styrene
1.085 1.050 1.026 1.201 1.226 1.068 1.191 1.107 1.119 1.069 1.114 6.21

94) butyl acrylate
0.672 0.625 0.628 0.776 0.779 0.657 0.758 0.714 0.685 0.533 0.683 11.35

95) bromoform
0.210 0.211 0.197 0.236 0.248 0.195 0.250 0.226 0.222 0.222 9.13

96) isopropylbenzene
1.796 1.787 1.789 1.879 1.893 1.834 1.834 1.773 1.803 1.976 1.836 3.44

97) cis-1,4-dichloro-2-butene
0.153 0.139 0.171 0.169 0.170 0.154 0.148 0.158 7.95

98) I 1,4-dichlorobenzene-d ----------ISTD----------

99) 4-bromofluorobenzene (s)
0.970 0.965 0.980 0.974 0.975 0.983 0.953 0.987 0.977 0.986 0.975 1.06

100) bromobenzene
0.859 0.863 0.841 0.874 0.894 0.913 0.870 0.851 0.854 0.934 0.875 3.38

101) 1,1,2,2-tetrachloroethane
0.862 0.795 0.794 0.869 0.858 0.947 0.834 0.848 0.826 0.797 0.843 5.47

102) trans-1,4-dichloro-2-butene
0.215 0.209 0.228 0.226 0.220 0.221 0.211 0.219 3.39

103) 1,2,3-trichloropropane
0.267 0.244 0.240 0.239 0.259 0.234 0.238 0.247 0.246 4.61

104) n-propylbenzene
4.047 4.174 4.332 4.279 4.292 4.395 4.090 4.154 4.210 4.573 4.255 3.66

105) 2-chlorotoluene
0.821 0.851 0.917 0.870 0.881 0.862 0.851 0.853 0.870 1.041 0.882 6.93

106) 4-chlorotoluene
2.507 2.477 2.699 2.526 2.546 2.723 2.459 2.472 2.517 2.741 2.567 4.29

107) 1,3,5-trimethylbenzene
2.906 2.916 3.105 3.068 3.114 3.075 2.984 2.919 2.988 3.295 3.037 3.96

108) tert-butylbenzene
2.542 2.493 2.615 2.657 2.706 2.733 2.644 2.538 2.570 2.588 2.609 2.94

109) 1,2,4-trimethylbenzene
2.922 2.805 3.124 3.079 3.102 3.023 2.999 2.969 3.023 3.101 3.015 3.25

110) sec-butylbenzene
3.633 3.695 4.011 3.977 4.010 3.991 3.859 3.790 3.801 3.984 3.875 3.61

111) 1,3-dichlorobenzene
1.682 1.623 1.667 1.653 1.688 1.683 1.665 1.617 1.638 1.894 1.681 4.69

112) p-isopropyltoluene
3.094 3.113 3.220 3.381 3.413 3.336 3.300 3.223 3.264 3.562 3.291 4.30

113) 1,4-dichlorobenzene

Initial Calibration Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICC6949
Lab FileID: 2E156555.D

```
       1.657 1.653 1.712 1.693 1.729 1.707 1.706 1.653 1.680 1.858  1.705    3.52
114)  1,2-dichlorobenzene
       1.642 1.578 1.744 1.645 1.666 1.682 1.640 1.607 1.606 1.904  1.671    5.60
115)  n-butylbenzene
       1.574 1.589 1.691 1.743 1.758 1.724 1.709 1.662 1.630 1.673  1.675    3.73
116)  1,2-dibromo-3-chloropropane
       0.191 0.179       0.195 0.195 0.198 0.191 0.184 0.184        0.189    3.54
117)  1,3,5-trichlorobenzene
       1.285 1.324 1.341 1.388 1.443 1.373 1.387 1.344 1.341 1.489  1.372    4.34
118)  1,2,4-trichlorobenzene
       1.169 1.146 1.234 1.241 1.291 1.155 1.234 1.194 1.175 1.353  1.219    5.36
119)  2-ethylhexyl acrylate
                     0.884 0.956       0.996 0.774 0.710        0.864   13.95
120)  hexachlorobutadiene
       0.519 0.624 0.548 0.602 0.612 0.567 0.592 0.582 0.579        0.580    5.60
121)  naphthalene
       2.617 2.585 2.575 2.863 2.880 2.666 2.723 2.799 2.661 2.835  2.720    4.28
122)  1,2,3-trichlorobenzene
       1.052 1.064 1.148 1.142 1.161 1.113 1.110 1.104 1.089 1.289  1.127    5.92
123)  hexachloroethane
       0.438 0.429       0.506 0.536       0.537 0.469 0.447        0.480    9.56
124)  benzyl chloride
       1.696 1.657 1.831 1.815 1.813 1.922 1.775 1.744 1.703        1.773    4.64
125)  2-methylnaphthalene
       1.304             1.509 1.566       1.512 1.429 1.321        1.440    7.52
126)  Bis(chloromethyl)ether
                                                                    0.000#  -1.00
127)  Ethylenimine
                                                                    0.000#  -1.00

128) I   pentafluorobenzene(a) ----------------ISTD---------------------
129)  Freon 142B
       0.733             0.751 0.790       0.750 0.657 0.680        0.727    6.80
130)  allyl chloride
       0.128 0.109       0.092 0.101       0.092 0.098 0.101        0.103   12.05
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M2E6949.M         Mon Jan 20 14:47:55 2020
```

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156560.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V2E6949\2E156560.D Vial: 14
Acq On : 9 Oct 2019 9:32 pm Operator: roberts
Sample : icv6949-50 Inst : VOAMS2E
Misc : MS37796,V2E6949,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Thu Oct 10 15:09:10 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	101	0.00	7.33
2		ethanol	0.136	0.142	-4.4	107	0.00	6.08
3	M	tertiary butyl alcohol	1.333	1.563	-17.3	113	-0.01	7.44
4		1,4-dioxane	0.111	0.117	-5.4	103	0.00	11.20
5	I	pentafluorobenzene	1.000	1.000	0.0	108	0.00	9.56
6	M	chlorodifluoromethane	0.842	0.916	-8.8	116	-0.01	4.01
7	M	dichlorodifluoromethane	0.636	0.780	-22.6	124	-0.01	3.99
8	M	chloromethane	0.878	1.104	-25.7	136	0.00	4.38
9	M	vinyl chloride	0.865	0.889	-2.8	107	-0.01	4.61
10	M	bromomethane	0.512	0.663	-29.5	142	-0.01	5.24
11	M	chloroethane	0.448	0.441	1.6	106	0.00	5.40
12	M	trichlorofluoromethane	0.724	0.837	-15.6	118	0.00	5.85
13		1,3-butadiene	0.586	0.791	-35.0#	140	0.00	4.64
14		vinyl bromide	0.418	0.473	-13.2	121	0.00	5.74
15	M	ethyl ether	0.313	0.337	-7.7	119	0.00	6.24
16		2-chloropropane	0.984	1.070	-8.7	120	0.00	6.43
17	M	acrolein	0.099	0.098	1.0	107	0.00	6.49
18		freon 113	0.375	0.446	-18.9	126	0.00	6.63
19	M	1,1-dichloroethene	0.769	0.804	-4.6	112	0.00	6.67
20	M	acetone	0.145	0.184	-26.9	148	-0.01	6.70
21		acetonitrile		----------NA----------				
22	M	iodomethane	0.623	0.894	-43.5#	156	0.00	6.94
23	M	carbon disulfide	1.378	1.835	-33.2#	144	0.00	7.07
24	M	methylene chloride	0.550	0.569	-3.5	119	0.00	7.38
25	M	methyl acetate	0.368	0.365	0.8	107	0.00	7.17
26	M	methyl tert butyl ether	1.494	1.549	-3.7	115	0.00	7.70
27	M	trans-1,2-dichloroethene	0.716	0.783	-9.4	117	0.00	7.75
28		hexane	0.393	0.451	-14.8	117	0.00	8.05
29	M	di-isopropyl ether	1.928	1.981	-2.7	110	0.00	8.30
30	M	ethyl tert-butyl ether	1.677	1.819	-8.5	115	0.00	8.76
31	M	2-butanone	0.051	0.068	-33.3#	132	0.00	9.01
32	M	1,1-dichloroethane	0.956	1.038	-8.6	117	0.00	8.31
33	M	chloroprene	0.781	0.886	-13.4	120	0.00	8.42
34	M	acrylonitrile		----------NA----------				
35	M	vinyl acetate	0.106	0.109	-2.8	101	0.00	8.30
36	M	ethyl acetate	0.083	0.078	6.0	107	0.00	9.04
37	M	2,2-dichloropropane	0.828	0.818	1.2	111	0.00	9.05
38	M	cis-1,2-dichloroethene	0.584	0.600	-2.7	114	0.00	9.05
39	M	propionitrile	0.067	0.076	-13.4	116	0.00	9.11
40		methyl acrylate	0.068	0.077	-13.2	118	0.00	9.11
41	M	bromochloromethane	0.266	0.290	-9.0	120	0.00	9.36

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156560.D

42	M	tetrahydrofuran	0.066	0.069	-4.5	115	0.00	9.40
43	M	chloroform	0.892	0.934	-4.7	117	0.00	9.41
44		t-butyl formate	0.518	0.388	25.1	80	0.00	9.44
45		1,1-dichloropropene	0.715	0.771	-7.8	115	0.00	9.85
46		carbon tetrachloride	0.677	0.743	-9.7	118	0.00	9.87
47		isopropyl acetate	0.117	0.122	-4.3	111	0.00	10.03
48	S	dibromofluoromethane (s)	0.442	0.447	-1.1	109	0.00	9.61
49	M	methacrylonitrile	0.187	0.219	-17.1	119	0.00	9.30
50	M	1,1,1-trichloroethane	0.794	0.841	-5.9	116	0.00	9.67
51		cyclohexane	0.811	0.926	-14.2	118	0.00	9.74
52		iso-butyl alcohol	0.021	0.022	-4.8	108	0.00	9.85
53		tert amyl alcohol	0.028	0.028	0.0	109	0.00	9.98
54	I	1,4-difluorobenzene	1.000	1.000	0.0	108	0.00	10.48
55	S	1,2-dichloroethane-d4 (s)	0.301	0.297	1.3	107	0.00	10.04
56		2,2,4-trimethylpentane	1.069	1.400	-31.0#	135	0.00	10.10
57	M	n-butyl alcohol	0.009	0.009#	0.0	106	0.00	10.60
58	M	benzene	1.430	1.477	-3.3	116	0.00	10.11
59		tert-amyl methyl ether	1.104	1.102	0.2	111	0.00	10.14
60	M	heptane	0.244	0.330	-35.2#	136	0.00	10.28
61	M	1,2-dichloroethane	0.422	0.425	-0.7	112	0.00	10.13
62		ethyl acrylate	0.376	0.412	-9.6	111	0.00	10.82
63	M	trichloroethene	0.332	0.363	-9.3	119	0.00	10.82
64	M	2-nitropropane	0.103	0.118	-14.6	117	0.00	11.60
65	M	2-chloroethyl vinyl ether	0.199	0.239	-20.1	123	0.00	11.61
66	M	methyl methacrylate	0.081	0.093	-14.8	119	0.00	11.09
67	M	1,2-dichloropropane	0.362	0.386	-6.6	114	0.00	11.09
68	M	methylcyclohexane	0.592	0.652	-10.1	113	0.00	11.04
69	M	dibromomethane	0.190	0.203	-6.8	114	0.00	11.25
70	M	bromodichloromethane	0.423	0.453	-7.1	113	0.00	11.37
71		epichlorohydrin	0.030	0.034	-13.3	117	0.00	11.74
72	M	cis-1,3-dichloropropene	0.553	0.613	-10.8	115	0.00	11.83
73	M	4-methyl-2-pentanone	0.116	0.130	-12.1	113	0.00	11.92
74	M	3-methyl-1-butanol	0.009	0.010#	-11.1	105	0.00	11.94
75	I	chlorobenzene-d5	1.000	1.000	0.0	109	0.00	13.62
76	S	toluene-d8 (s)	1.381	1.356	1.8	107	0.00	12.12
77		toluene	1.020	1.085	-6.4	117	0.00	12.19
78		ethyl methacrylate	0.455	0.536	-17.8	117	0.00	12.37
79		trans-1,3-dichloropropene	0.562	0.642	-14.2	117	0.00	12.39
80		1,1,2-trichloroethane	0.283	0.298	-5.3	114	0.00	12.60
81	M	tetrachloroethene		----------NA----------				
82		2-hexanone	0.125	0.154	-23.2	118	0.00	12.77
83	M	1,3-dichloropropane	0.596	0.632	-6.0	116	0.00	12.78
84	M	butyl acetate	0.254	0.279	-9.8	113	0.00	12.84
85	M	dibromochloromethane	0.365	0.416	-14.0	119	0.00	13.05
86	M	1,2-dibromoethane	0.361	0.404	-11.9	116	0.00	13.19
87		n-butyl ether	1.776	2.018	-13.6	118	0.00	13.56
88	M	chlorobenzene	1.068	1.168	-9.4	119	0.00	13.65
89	M	1,1,1,2-tetrachloroethane	0.381	0.421	-10.5	117	0.00	13.71
90	M	ethylbenzene	1.853	1.989	-7.3	116	0.00	13.71
91	M	m,p-xylene	0.719	0.785	-9.2	118	0.00	13.81
92	M	o-xylene	1.495	1.596	-6.8	115	0.00	14.23
93	M	styrene	1.114	1.285	-15.4	116	0.00	14.24
94		butyl acrylate	0.683	0.807	-18.2	113	0.00	14.05
95	M	bromoform	0.222	0.275	-23.9	127	0.00	14.50
96		isopropylbenzene	1.836	1.999	-8.9	116	0.00	14.56
97		cis-1,4-dichloro-2-butene	0.158	0.177	-12.0	113	0.00	14.63
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	15.92

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156560.D

99	S	4-bromofluorobenzene (s)	0.975	0.967	0.8	109	0.00	14.77
100	M	bromobenzene	0.875	0.943	-7.8	118	0.00	14.96
101	M	1,1,2,2-tetrachloroethane	0.843	0.896	-6.3	113	0.00	14.87
102	M	trans-1,4-dichloro-2-bute	0.219	0.242	-10.5	116	0.00	14.91
103	M	1,2,3-trichloropropane	0.246	0.257	-4.5	117	0.00	14.94
104	M	n-propylbenzene	4.255	4.551	-7.0	116	0.00	14.97
105	M	2-chlorotoluene	0.882	0.919	-4.2	115	0.00	15.12
106	M	4-chlorotoluene	2.567	2.721	-6.0	118	0.00	15.22
107	M	1,3,5-trimethylbenzene	3.037	3.262	-7.4	116	0.00	15.12
108	M	tert-butylbenzene	2.609	2.844	-9.0	117	0.00	15.46
109	M	1,2,4-trimethylbenzene	3.015	3.283	-8.9	116	0.00	15.51
110	M	sec-butylbenzene	3.875	4.206	-8.5	116	0.00	15.68
111	M	1,3-dichlorobenzene	1.681	1.811	-7.7	120	0.00	15.86
112	M	p-isopropyltoluene	3.291	3.628	-10.2	117	0.00	15.79
113	M	1,4-dichlorobenzene	1.705	1.831	-7.4	118	0.00	15.95
114	M	1,2-dichlorobenzene	1.671	1.763	-5.5	117	0.00	16.32
115	M	n-butylbenzene	1.675	1.819	-8.6	114	0.00	16.19
116	M	1,2-dibromo-3-chloropropa	0.189	0.198	-4.8	111	0.00	17.05
117		1,3,5-trichlorobenzene	1.372	1.524	-11.1	120	0.00	17.22
118	M	1,2,4-trichlorobenzene	1.219	1.306	-7.1	115	0.00	17.79
119		2-ethylhexyl acrylate	0.864	0.977	-13.1	121	0.00	17.76
120	M	hexachlorobutadiene	0.580	0.631	-8.8	115	0.00	17.90
121	M	naphthalene	2.720	3.017	-10.9	115	0.00	18.05
122	M	1,2,3-trichlorobenzene	1.127	1.196	-6.1	114	0.00	18.27
123	M	hexachloroethane	0.480	0.557	-16.0	120	0.00	16.57
124		benzyl chloride	1.773	2.271	-28.1	137	0.00	16.06
125		2-methylnaphthalene	1.440	1.693	-17.6	123	0.00	19.14
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E156555.D M2E6949.M Thu Oct 10 15:10:14 2019

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156561.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V2E6949\2E156561.D Vial: 15
Acq On : 9 Oct 2019 10:02 pm Operator: roberts
Sample : icv6949-50 Inst : VOAMS2E
Misc : MS37796,V2E6949,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Thu Oct 10 14:35:42 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	102	0.00	7.33
2		ethanol		----------NA----------				
3	M	tertiary butyl alcohol		----------NA----------				
4		1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	98	0.00	9.56
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10	M	bromomethane		----------NA----------				
11	M	chloroethane		----------NA----------				
12	M	trichlorofluoromethane		----------NA----------				
13		1,3-butadiene		----------NA----------				
14		vinyl bromide		----------NA----------				
15	M	ethyl ether		----------NA----------				
16		2-chloropropane		----------NA----------				
17	M	acrolein		----------NA----------				
18		freon 113		----------NA----------				
19	M	1,1-dichloroethene		----------NA----------				
20	M	acetone		----------NA----------				
21		acetonitrile	0.068	0.074	-8.8	108	0.00	7.14
22	M	iodomethane		----------NA----------				
23	M	carbon disulfide		----------NA----------				
24	M	methylene chloride		----------NA----------				
25	M	methyl acetate		----------NA----------				
26	M	methyl tert butyl ether		----------NA----------				
27	M	trans-1,2-dichloroethene		----------NA----------				
28		hexane		----------NA----------				
29	M	di-isopropyl ether		----------NA----------				
30	M	ethyl tert-butyl ether		----------NA----------				
31	M	2-butanone		----------NA----------				
32	M	1,1-dichloroethane		----------NA----------				
33	M	chloroprene		----------NA----------				
34	M	acrylonitrile	0.187	0.215	-15.0	111	0.00	7.70
35	M	vinyl acetate		----------NA----------				
36	M	ethyl acetate		----------NA----------				
37	M	2,2-dichloropropane		----------NA----------				
38	M	cis-1,2-dichloroethene		----------NA----------				
39	M	propionitrile		----------NA----------				
40		methyl acrylate		----------NA----------				
41	M	bromochloromethane		----------NA----------				

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156561.D

42	M	tetrahydrofuran		----------NA----------					
43	M	chloroform		----------NA----------					
44		t-butyl formate		----------NA----------					
45		1,1-dichloropropene		----------NA----------					
46		carbon tetrachloride		----------NA----------					
47		isopropyl acetate		----------NA----------					
48	S	dibromofluoromethane (s)	0.442	0.447	-1.1	98	0.00	9.62	
49	M	methacrylonitrile		----------NA----------					
50	M	1,1,1-trichloroethane		----------NA----------					
51		cyclohexane		----------NA----------					
52		iso-butyl alcohol		----------NA----------					
53		tert amyl alcohol		----------NA----------					
54	I	1,4-difluorobenzene	1.000	1.000	0.0	98	0.00	10.48	
55	S	1,2-dichloroethane-d4 (s)	0.301	0.309	-2.7	101	0.00	10.04	
56		2,2,4-trimethylpentane		----------NA----------					
57	M	n-butyl alcohol		----------NA----------					
58	M	benzene		----------NA----------					
59		tert-amyl methyl ether		----------NA----------					
60	M	heptane		----------NA----------					
61	M	1,2-dichloroethane		----------NA----------					
62		ethyl acrylate		----------NA----------					
63	M	trichloroethene		----------NA----------					
64	M	2-nitropropane		----------NA----------					
65	M	2-chloroethyl vinyl ether		----------NA----------					
66	M	methyl methacrylate		----------NA----------					
67	M	1,2-dichloropropane		----------NA----------					
68	M	methylcyclohexane		----------NA----------					
69	M	dibromomethane		----------NA----------					
70	M	bromodichloromethane		----------NA----------					
71		epichlorohydrin		----------NA----------					
72	M	cis-1,3-dichloropropene		----------NA----------					
73	M	4-methyl-2-pentanone		----------NA----------					
74	M	3-methyl-1-butanol		----------NA----------					
75	I	chlorobenzene-d5	1.000	1.000	0.0	99	0.00	13.62	
76	S	toluene-d8 (s)	1.381	1.361	1.4	98	0.00	12.12	
77		toluene		----------NA----------					
78		ethyl methacrylate		----------NA----------					
79		trans-1,3-dichloropropene		----------NA----------					
80		1,1,2-trichloroethane		----------NA----------					
81	M	tetrachloroethene	0.323	0.413	-27.9	126	0.00	12.77	
82		2-hexanone		----------NA----------					
83	M	1,3-dichloropropane		----------NA----------					
84	M	butyl acetate		----------NA----------					
85	M	dibromochloromethane		----------NA----------					
86	M	1,2-dibromoethane		----------NA----------					
87		n-butyl ether		----------NA----------					
88	M	chlorobenzene		----------NA----------					
89	M	1,1,1,2-tetrachloroethane		----------NA----------					
90	M	ethylbenzene		----------NA----------					
91	M	m,p-xylene		----------NA----------					
92	M	o-xylene		----------NA----------					
93	M	styrene		----------NA----------					
94		butyl acrylate		----------NA----------					
95	M	bromoform		----------NA----------					
96		isopropylbenzene		----------NA----------					
97		cis-1,4-dichloro-2-butene		----------NA----------					
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	96	0.00	15.92	

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156561.D

99	S	4-bromofluorobenzene (s)	0.975	0.995	-2.1	98	0.00	14.77
100	M	bromobenzene		----------NA----------				
101	M	1,1,2,2-tetrachloroethane		----------NA----------				
102	M	trans-1,4-dichloro-2-bute		----------NA----------				
103	M	1,2,3-trichloropropane		----------NA----------				
104	M	n-propylbenzene		----------NA----------				
105	M	2-chlorotoluene		----------NA----------				
106	M	4-chlorotoluene		----------NA----------				
107	M	1,3,5-trimethylbenzene		----------NA----------				
108	M	tert-butylbenzene		----------NA----------				
109	M	1,2,4-trimethylbenzene		----------NA----------				
110	M	sec-butylbenzene		----------NA----------				
111	M	1,3-dichlorobenzene		----------NA----------				
112	M	p-isopropyltoluene		----------NA----------				
113	M	1,4-dichlorobenzene		----------NA----------				
114	M	1,2-dichlorobenzene		----------NA----------				
115	M	n-butylbenzene		----------NA----------				
116	M	1,2-dibromo-3-chloropropa		----------NA----------				
117		1,3,5-trichlorobenzene		----------NA----------				
118	M	1,2,4-trichlorobenzene		----------NA----------				
119		2-ethylhexyl acrylate		----------NA----------				
120	M	hexachlorobutadiene		----------NA----------				
121	M	naphthalene		----------NA----------				
122	M	1,2,3-trichlorobenzene		----------NA----------				
123	M	hexachloroethane		----------NA----------				
124		benzyl chloride		----------NA----------				
125		2-methylnaphthalene		----------NA----------				
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E156555.D M2E6949.M Thu Oct 10 14:39:27 2019

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156566.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V2E6949\2E156566.D Vial: 2
Acq On : 10 Oct 2019 11:06 am Operator: roberts
Sample : icv6949-50 Inst : VOAMS2E
Misc : MS37796,V2E6949,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Thu Oct 10 14:35:42 2019
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	89	0.00	7.33
2		ethanol	0.136	0.151	-11.0	100	0.00	6.08
3	M	tertiary butyl alcohol	1.333	1.472	-10.4	93	0.00	7.45
4		1,4-dioxane	0.111	0.121	-9.0	94	0.00	11.21
5	I	pentafluorobenzene	1.000	1.000	0.0	93	0.00	9.56
6	M	chlorodifluoromethane	0.842	0.763	9.4	83	0.00	4.01
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10	M	bromomethane		----------NA----------				
11	M	chloroethane		----------NA----------				
12	M	trichlorofluoromethane		----------NA----------				
13		1,3-butadiene	0.586	0.638	-8.9	97	0.00	4.64
14		vinyl bromide		----------NA----------				
15	M	ethyl ether	0.313	0.284	9.3	86	0.00	6.24
16		2-chloropropane	0.984	0.943	4.2	91	0.00	6.44
17	M	acrolein		----------NA----------				
18		freon 113	0.375	0.386	-2.9	94	0.00	6.63
19	M	1,1-dichloroethene	0.769	0.698	9.2	83	0.00	6.67
20	M	acetone	0.145	0.162	-11.7	111	0.00	6.71
21		acetonitrile		----------NA----------				
22	M	iodomethane	0.623	0.734	-17.8	110	0.00	6.94
23	M	carbon disulfide	1.378	1.523	-10.5	103	0.00	7.07
24	M	methylene chloride	0.550	0.494	10.2	88	0.00	7.38
25	M	methyl acetate	0.368	0.322	12.5	81	0.00	7.17
26	M	methyl tert butyl ether	1.494	1.353	9.4	87	0.00	7.71
27	M	trans-1,2-dichloroethene	0.716	0.694	3.1	89	0.00	7.75
28		hexane		----------NA----------				
29	M	di-isopropyl ether	1.928	1.807	6.3	86	0.00	8.29
30	M	ethyl tert-butyl ether	1.677	1.637	2.4	89	0.00	8.76
31	M	2-butanone	0.051	0.059	-15.7	98	0.00	9.01
32	M	1,1-dichloroethane	0.956	0.925	3.2	89	0.00	8.32
33	M	chloroprene	0.781	0.785	-0.5	91	0.00	8.42
34	M	acrylonitrile		----------NA----------				
35	M	vinyl acetate	0.106	0.106	0.0	83	0.00	8.30
36	M	ethyl acetate	0.083	0.070	15.7	82	0.00	9.04
37	M	2,2-dichloropropane	0.828	0.782	5.6	91	0.00	9.05
38	M	cis-1,2-dichloroethene	0.584	0.530	9.2	87	0.00	9.05
39	M	propionitrile	0.067	0.070	-4.5	91	0.00	9.11
40		methyl acrylate	0.068	0.068	0.0	89	0.00	9.11
41	M	bromochloromethane	0.266	0.250	6.0	89	0.00	9.37

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156566.D

42	M	tetrahydrofuran	0.066	0.062	6.1	89	0.00	9.41
43	M	chloroform	0.892	0.844	5.4	91	0.00	9.41
44		t-butyl formate	0.518	0.382	26.3	68	0.00	9.45
45		1,1-dichloropropene	0.715	0.697	2.5	89	0.00	9.85
46		carbon tetrachloride	0.677	0.662	2.2	90	0.00	9.87
47		isopropyl acetate	0.117	0.107	8.5	84	0.00	10.03
48	S	dibromofluoromethane (s)	0.442	0.455	-2.9	95	0.00	9.62
49	M	methacrylonitrile	0.187	0.194	-3.7	90	0.00	9.30
50	M	1,1,1-trichloroethane	0.794	0.741	6.7	87	0.00	9.67
51		cyclohexane		----------NA----------				
52		iso-butyl alcohol	0.021	0.021	0.0	90	0.00	9.85
53		tert amyl alcohol	0.028	0.026	7.1	88	0.00	9.98
54	I	1,4-difluorobenzene	1.000	1.000	0.0	94	0.00	10.48
55	S	1,2-dichloroethane-d4 (s)	0.301	0.316	-5.0	99	0.00	10.04
56		2,2,4-trimethylpentane	1.069	1.385	-29.6	116	0.00	10.10
57	M	n-butyl alcohol	0.009	0.009#	0.0	90	0.00	10.60
58	M	benzene	1.430	1.300	9.1	89	0.00	10.11
59		tert-amyl methyl ether	1.104	0.978	11.4	86	0.00	10.14
60	M	heptane	0.244	0.335	-37.3#	120	0.00	10.28
61	M	1,2-dichloroethane	0.422	0.381	9.7	87	0.00	10.13
62		ethyl acrylate	0.376	0.366	2.7	86	0.00	10.82
63	M	trichloroethene	0.332	0.318	4.2	91	0.00	10.82
64	M	2-nitropropane	0.103	0.109	-5.8	95	0.00	11.60
65	M	2-chloroethyl vinyl ether	0.199	0.219	-10.1	98	0.00	11.61
66	M	methyl methacrylate	0.081	0.082	-1.2	92	0.00	11.09
67	M	1,2-dichloropropane	0.362	0.350	3.3	90	0.00	11.09
68	M	methylcyclohexane	0.592	0.599	-1.2	91	0.00	11.04
69	M	dibromomethane	0.190	0.179	5.8	88	0.00	11.25
70	M	bromodichloromethane	0.423	0.408	3.5	89	0.00	11.38
71		epichlorohydrin	0.030	0.032	-6.7	96	0.00	11.74
72	M	cis-1,3-dichloropropene	0.553	0.555	-0.4	91	0.00	11.83
73	M	4-methyl-2-pentanone	0.116	0.117	-0.9	89	0.00	11.92
74	M	3-methyl-1-butanol	0.009	0.009#	0.0	83	0.00	11.94
75	I	chlorobenzene-d5	1.000	1.000	0.0	96	0.00	13.62
76	S	toluene-d8 (s)	1.381	1.342	2.8	94	0.00	12.12
77		toluene	1.020	0.938	8.0	89	0.00	12.19
78		ethyl methacrylate	0.455	0.476	-4.6	92	0.00	12.38
79		trans-1,3-dichloropropene	0.562	0.576	-2.5	93	0.00	12.39
80		1,1,2-trichloroethane	0.283	0.270	4.6	92	0.00	12.60
81	M	tetrachloroethene		----------NA----------				
82		2-hexanone	0.125	0.137	-9.6	93	0.00	12.77
83	M	1,3-dichloropropane	0.596	0.563	5.5	91	0.00	12.78
84	M	butyl acetate	0.254	0.250	1.6	90	0.00	12.84
85	M	dibromochloromethane	0.365	0.369	-1.1	94	0.00	13.05
86	M	1,2-dibromoethane	0.361	0.314	13.0	80	0.00	13.20
87		n-butyl ether	1.776	1.820	-2.5	94	0.00	13.56
88	M	chlorobenzene	1.068	1.029	3.7	93	0.00	13.65
89	M	1,1,1,2-tetrachloroethane	0.381	0.372	2.4	92	0.00	13.71
90	M	ethylbenzene	1.853	1.759	5.1	91	0.00	13.70
91	M	m,p-xylene	0.719	0.691	3.9	92	0.00	13.81
92	M	o-xylene	1.495	1.424	4.7	91	0.00	14.23
93	M	styrene	1.114	1.132	-1.6	91	0.00	14.24
94		butyl acrylate	0.683	0.727	-6.4	90	0.00	14.05
95	M	bromoform	0.222	0.241	-8.6	98	0.00	14.50
96		isopropylbenzene	1.836	1.783	2.9	91	0.00	14.56
97		cis-1,4-dichloro-2-butene	0.158	0.165	-4.4	93	0.00	14.63
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	15.92

Initial Calibration Verification

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E6949-ICV6949
Lab FileID: 2E156566.D

99	S	4-bromofluorobenzene (s)	0.975	0.972	0.3	97	0.00	14.77
100	M	bromobenzene	0.875	0.826	5.6	92	0.00	14.96
101	M	1,1,2,2-tetrachloroethane	0.843	0.819	2.8	92	0.00	14.87
102	M	trans-1,4-dichloro-2-bute	0.219	0.226	-3.2	96	0.00	14.91
103	M	1,2,3-trichloropropane	0.246	0.220	10.6	89	0.00	14.94
104	M	n-propylbenzene	4.255	4.130	2.9	94	0.00	14.97
105	M	2-chlorotoluene	0.882	0.816	7.5	91	0.00	15.12
106	M	4-chlorotoluene	2.567	2.450	4.6	94	0.00	15.21
107	M	1,3,5-trimethylbenzene	3.037	2.871	5.5	91	0.00	15.12
108	M	tert-butylbenzene	2.609	2.516	3.6	92	0.00	15.46
109	M	1,2,4-trimethylbenzene	3.015	2.973	1.4	94	0.00	15.51
110	M	sec-butylbenzene	3.875	3.778	2.5	92	0.00	15.68
111	M	1,3-dichlorobenzene	1.681	1.606	4.5	95	0.00	15.86
112	M	p-isopropyltoluene	3.291	3.235	1.7	93	0.00	15.79
113	M	1,4-dichlorobenzene	1.705	1.634	4.2	94	0.00	15.95
114	M	1,2-dichlorobenzene	1.671	1.581	5.4	94	0.00	16.32
115	M	n-butylbenzene	1.675	1.679	-0.2	94	0.00	16.19
116	M	1,2-dibromo-3-chloropropa	0.189	0.176	6.9	87	0.00	17.05
117		1,3,5-trichlorobenzene	1.372	1.373	-0.1	96	0.00	17.22
118	M	1,2,4-trichlorobenzene	1.219	1.184	2.9	93	0.00	17.79
119		2-ethylhexyl acrylate	0.864	0.880	-1.9	97	0.00	17.76
120	M	hexachlorobutadiene	0.580	0.568	2.1	92	0.00	17.90
121	M	naphthalene	2.720	2.707	0.5	92	0.00	18.05
122	M	1,2,3-trichlorobenzene	1.127	1.071	5.0	91	0.00	18.27
123	M	hexachloroethane	0.480	0.491	-2.3	94	0.00	16.57
124		benzyl chloride	1.773	2.300	-29.7	123	0.00	16.06
125		2-methylnaphthalene	1.440	1.496	-3.9	97	0.00	19.14
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E156555.D M2E6949.M Thu Oct 10 14:39:30 2019

Continuing Calibration Summary

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Sample: V2E7090-CC6949
Lab FileID: 2E159296.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\kr...20\v2e7090\2e159296.d Vial: 13
Acq On : 5 Feb 2020 4:40 pm Operator: edwardd
Sample : cc6949-50 Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
Last Update : Mon Jan 20 11:39:19 2020
Response via : Multiple Level Calibration

Min. RRF : 0.010 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	tert butyl alcohol-d9	1.000	1.000	0.0	109	-0.01	7.33
2		ethanol	0.136	0.121	11.0	99	-0.01	6.07
3	M	tertiary butyl alcohol	1.333	1.542	-15.7	120	-0.02	7.44
4		1,4-dioxane	0.111	0.121	-9.0	115	-0.01	11.20
5	I	pentafluorobenzene	1.000	1.000	0.0	111	-0.01	9.55
6	M	chlorodifluoromethane	0.842	0.792	5.9	103	0.00	4.01
7	M	dichlorodifluoromethane	0.636	0.672	-5.7	109	-0.02	3.98
8	M	chloromethane	0.878	0.667	24.0#	84	0.00	4.39
9	M	vinyl chloride	0.865	0.715	17.3	88	0.00	4.63
10	M	bromomethane	0.512	0.494	3.5	109	0.00	5.25
11	M	chloroethane	0.448	0.408	8.9	100	0.00	5.40
12	M	trichlorofluoromethane	0.724	0.818	-13.0	118	0.00	5.86
13		1,3-butadiene	0.586	0.598	-2.0	108	0.00	4.65
14		vinyl bromide	0.418	0.436	-4.3	114	0.00	5.75
15	M	ethyl ether	0.313	0.307	1.9	111	-0.01	6.24
16		2-chloropropane	0.984	0.886	10.0	102	0.00	6.43
17	M	acrolein	0.099	0.090	9.1	101	-0.01	6.49
18		freon 113	0.375	0.453	-20.8#	131	0.00	6.63
19	M	1,1-dichloroethene	0.769	0.802	-4.3	114	-0.01	6.66
20	M	acetone	0.145	0.127	12.4	104	-0.01	6.70
21		acetonitrile	0.068	0.061	10.3	100	-0.01	7.13
22	M	iodomethane	0.623	0.686	-10.1	122	-0.01	6.94
23	M	carbon disulfide	1.378	1.479	-7.3	119	0.00	7.07
24	M	methylene chloride	0.550	0.562	-2.2	120	-0.02	7.37
25	M	methyl acetate	0.368	0.357	3.0	107	0.00	7.17
26	M	methyl tert butyl ether	1.494	1.358	9.1	103	-0.01	7.70
27	M	trans-1,2-dichloroethene	0.716	0.741	-3.5	113	-0.02	7.74
28		hexane	0.393	0.454	-15.5	121	0.00	8.04
29	M	di-isopropyl ether	1.928	1.840	4.6	105	-0.01	8.29
30	M	ethyl tert-butyl ether	1.677	1.613	3.8	105	-0.01	8.75
31	M	2-butanone	0.051	0.056	-9.8	111	-0.01	9.00
32	M	1,1-dichloroethane	0.956	0.957	-0.1	110	-0.01	8.31
33	M	chloroprene	0.781	0.829	-6.1	115	-0.02	8.41
34	M	acrylonitrile	0.187	0.186	0.5	109	-0.02	7.69
35	M	vinyl acetate	0.106	0.125	-17.9	118	0.00	8.30
36	M	ethyl acetate	0.083	0.075	9.6	105	-0.01	9.03
37	M	2,2-dichloropropane	0.828	0.783	5.4	109	-0.01	9.05
38	M	cis-1,2-dichloroethene	0.584	0.606	-3.8	118	-0.01	9.04
39	M	propionitrile	0.067	0.063	6.0	98	-0.01	9.10
40		methyl acrylate	0.068	0.073	-7.4	114	-0.02	9.10
41	M	bromochloromethane	0.266	0.290	-9.0	122	-0.01	9.35

Continuing Calibration Summary

Job Number: JD2571 **Sample:** V2E7090-CC6949
Account: ERMNYW ERM, Inc. **Lab FileID:** 2E159296.D
Project: Fortive, New Windsor, NY

42	M	tetrahydrofuran	0.066	0.064	3.0	109	-0.02	9.39
43	M	chloroform	0.892	0.918	-2.9	117	-0.01	9.41
44		t-butyl formate	0.518	0.379	26.8#	80	-0.01	9.44
45		1,1-dichloropropene	0.715	0.719	-0.6	110	-0.01	9.84
46		carbon tetrachloride	0.677	0.726	-7.2	117	0.00	9.87
47		isopropyl acetate	0.117	0.122	-4.3	114	-0.01	10.02
48	S	dibromofluoromethane (s)	0.442	0.452	-2.3	112	-0.01	9.61
49	M	methacrylonitrile	0.187	0.203	-8.6	112	-0.02	9.29
50	M	1,1,1-trichloroethane	0.794	0.840	-5.8	118	-0.01	9.66
51		cyclohexane	0.811	0.835	-3.0	109	0.00	9.74
52		iso-butyl alcohol	0.021	0.020	4.8	99	0.00	9.85
53		tert amyl alcohol	0.028	0.026	7.1	105	-0.02	9.97
54	I	1,4-difluorobenzene	1.000	1.000	0.0	109	-0.01	10.47
55	S	1,2-dichloroethane-d4 (s)	0.301	0.311	-3.3	113	-0.01	10.03
56		2,2,4-trimethylpentane	1.069	1.239	-15.9	121	-0.01	10.10
57	M	n-butyl alcohol	0.009	0.009#	0.0	107	-0.02	10.59
58	M	benzene	1.430	1.417	0.9	113	-0.02	10.10
59		tert-amyl methyl ether	1.104	1.025	7.2	105	-0.02	10.13
60	M	heptane	0.244	0.272	-11.5	114	-0.01	10.27
61	M	1,2-dichloroethane	0.422	0.423	-0.2	113	-0.01	10.12
62		ethyl acrylate	0.376	0.384	-2.1	105	-0.01	10.82
63	M	trichloroethene	0.332	0.341	-2.7	114	-0.01	10.82
64	M	2-nitropropane	0.103	0.103	0.0	104	-0.02	11.58
65	M	2-chloroethyl vinyl ether	0.199	0.197	1.0	103	-0.01	11.60
66	M	methyl methacrylate	0.081	0.086	-6.2	112	-0.01	11.08
67	M	1,2-dichloropropane	0.362	0.345	4.7	104	-0.02	11.07
68	M	methylcyclohexane	0.592	0.645	-9.0	114	-0.01	11.03
69	M	dibromomethane	0.190	0.199	-4.7	114	-0.01	11.24
70	M	bromodichloromethane	0.423	0.447	-5.7	113	-0.02	11.36
71		epichlorohydrin	0.030	0.032	-6.7	110	-0.01	11.72
72	M	cis-1,3-dichloropropene	0.553	0.552	0.2	105	-0.01	11.82
73	M	4-methyl-2-pentanone	0.116	0.119	-2.6	105	-0.01	11.91
74	M	3-methyl-1-butanol	0.009	0.009#	0.0	103	-0.01	11.93
75	I	chlorobenzene-d5	1.000	1.000	0.0	108	-0.01	13.61
76	S	toluene-d8 (s)	1.381	1.319	4.5	103	-0.01	12.11
77		toluene	1.020	1.027	-0.7	109	-0.01	12.18
78		ethyl methacrylate	0.455	0.482	-5.9	104	-0.01	12.37
79		trans-1,3-dichloropropene	0.562	0.593	-5.5	107	-0.01	12.37
80		1,1,2-trichloroethane	0.283	0.287	-1.4	109	-0.01	12.59
81	M	tetrachloroethene	0.323	0.335	-3.7	112	-0.01	12.76
82		2-hexanone	0.125	0.128	-2.4	97	-0.01	12.76
83	M	1,3-dichloropropane	0.596	0.579	2.9	105	-0.02	12.77
84	M	butyl acetate	0.254	0.251	1.2	100	-0.01	12.83
85	M	dibromochloromethane	0.365	0.394	-7.9	111	-0.01	13.04
86	M	1,2-dibromoethane	0.361	0.378	-4.7	108	-0.01	13.18
87		n-butyl ether	1.776	1.710	3.7	99	0.00	13.55
88	M	chlorobenzene	1.068	1.054	1.3	106	-0.02	13.64
89	M	1,1,1,2-tetrachloroethane	0.381	0.397	-4.2	110	-0.01	13.70
90	M	ethylbenzene	1.853	1.836	0.9	106	-0.01	13.70
91	M	m,p-xylene	0.719	0.713	0.8	106	-0.01	13.80
92	M	o-xylene	1.495	1.494	0.1	107	-0.01	14.22
93	M	styrene	1.114	1.174	-5.4	105	-0.01	14.23
94		butyl acrylate	0.683	0.716	-4.8	99	0.00	14.04
95	M	bromoform	0.222	0.250	-12.6	114	-0.01	14.49
96		isopropylbenzene	1.836	1.824	0.7	104	-0.01	14.55
97		cis-1,4-dichloro-2-butene	0.158	0.145	8.2	92	-0.01	14.62
98	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	108	-0.01	15.91

Continuing Calibration Summary

Job Number: JD2571 **Sample:** V2E7090-CC6949
Account: ERMNYW ERM, Inc. **Lab FileID:** 2E159296.D
Project: Fortive, New Windsor, NY

99	S	4-bromofluorobenzene (s)	0.975	0.945	3.1	105	-0.01	14.76
100	M	bromobenzene	0.875	0.905	-3.4	112	-0.01	14.95
101	M	1,1,2,2-tetrachloroethane	0.843	0.839	0.5	104	-0.02	14.85
102	M	trans-1,4-dichloro-2-bute	0.219	0.208	5.0	98	-0.01	14.90
103	M	1,2,3-trichloropropane	0.246	0.246	0.0	111	-0.02	14.93
104	M	n-propylbenzene	4.255	4.112	3.4	104	-0.01	14.96
105	M	2-chlorotoluene	0.882	0.840	4.8	104	-0.01	15.11
106	M	4-chlorotoluene	2.567	2.521	1.8	108	-0.01	15.21
107	M	1,3,5-trimethylbenzene	3.037	3.009	0.9	106	-0.01	15.11
108	M	tert-butylbenzene	2.609	2.616	-0.3	106	-0.01	15.45
109	M	1,2,4-trimethylbenzene	3.015	3.036	-0.7	106	-0.01	15.50
110	M	sec-butylbenzene	3.875	3.782	2.4	103	-0.01	15.67
111	M	1,3-dichlorobenzene	1.681	1.692	-0.7	111	-0.01	15.85
112	M	p-isopropyltoluene	3.291	3.237	1.6	103	-0.01	15.78
113	M	1,4-dichlorobenzene	1.705	1.706	-0.1	109	-0.01	15.93
114	M	1,2-dichlorobenzene	1.671	1.663	0.5	109	-0.01	16.31
115	M	n-butylbenzene	1.675	1.627	2.9	101	0.00	16.19
116	M	1,2-dibromo-3-chloropropa	0.189	0.181	4.2	100	-0.01	17.04
117		1,3,5-trichlorobenzene	1.372	1.392	-1.5	108	-0.01	17.21
118	M	1,2,4-trichlorobenzene	1.219	1.217	0.2	106	-0.01	17.78
119		2-ethylhexyl acrylate	0.864	0.561	35.1#	69	0.00	17.75
120	M	hexachlorobutadiene	0.580	0.553	4.7	99	-0.01	17.89
121	M	naphthalene	2.720	2.676	1.6	101	-0.01	18.04
122	M	1,2,3-trichlorobenzene	1.127	1.097	2.7	104	-0.01	18.26
123	M	hexachloroethane	0.480	0.519	-8.1	111	-0.01	16.56
124		benzyl chloride	1.773	1.866	-5.2	111	-0.01	16.05
125		2-methylnaphthalene	1.440	1.196	16.9	86	-0.01	19.13
126		Bis(chloromethyl)ether		----------NA----------				
127		Ethylenimine		----------NA----------				
128	I	pentafluorobenzene(a)	1.000	1.000	0.0	117	-0.01	9.55
129		Freon 142B		----------NA----------				
130		allyl chloride		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2E156555.D M2E6949.M Thu Feb 06 15:47:16 2020

Run Sequence Report

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Run ID: V2E6949	**Method:** SW846 8260C	**Instrument ID:** GCMS2E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2E6949-BFB	2E156547.D	10/09/19 14:58	n/a	BFB Tune
V2E6949-IC6949	2E156548.D	10/09/19 15:27	n/a	Initial cal 0.2
V2E6949-IC6949	2E156549.D	10/09/19 15:58	n/a	Initial cal 0.5
V2E6949-IC6949	2E156550.D	10/09/19 16:29	n/a	Initial cal 1
V2E6949-IC6949	2E156551.D	10/09/19 16:59	n/a	Initial cal 2
V2E6949-IC6949	2E156552.D	10/09/19 17:29	n/a	Initial cal 4
V2E6949-IC6949	2E156553.D	10/09/19 18:00	n/a	Initial cal 8
V2E6949-IC6949	2E156554.D	10/09/19 18:30	n/a	Initial cal 20
V2E6949-ICC6949	2E156555.D	10/09/19 19:00	n/a	Initial cal 50
V2E6949-IC6949	2E156556.D	10/09/19 19:30	n/a	Initial cal 100
V2E6949-IC6949	2E156557.D	10/09/19 20:00	n/a	Initial cal 200
V2E6949-ICV6949	2E156560.D	10/09/19 21:32	n/a	Initial cal verification 50
V2E6949-ICV6949	2E156561.D	10/09/19 22:02	n/a	Initial cal verification 50
V2E6949-BFB2	2E156563.D	10/10/19 08:55	n/a	BFB Tune
V2E6949-ICV6949	2E156566.D	10/10/19 11:06	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD2571
Account: ERMNYW ERM, Inc.
Project: Fortive, New Windsor, NY

Run ID: V2E7090 **Method:** SW846 8260C **Instrument ID:** GCMS2E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V2E7090-BFB	2E159296.D	02/05/20 16:40	n/a	BFB Tune
V2E7090-CC6949	2E159296.D	02/05/20 16:40	n/a	Continuing cal 50
V2E7090-BS	2E159298.D	02/05/20 17:41	n/a	Blank Spike
V2E7090-MB	2E159300.D	02/05/20 18:42	n/a	Method Blank
ZZZZZZ	2E159301.D	02/05/20 19:12	n/a	(unrelated sample)
JD2274-37	2E159302.D	02/05/20 19:43	n/a	(used for QC only; not part of job JD2571)
JD2274-37	2E159303.D	02/05/20 20:13	n/a	(used for QC only; not part of job JD2571)
ZZZZZZ	2E159304.D	02/05/20 20:43	n/a	(unrelated sample)
ZZZZZZ	2E159305.D	02/05/20 21:14	n/a	(unrelated sample)
JD2274-37MS	2E159306.D	02/05/20 21:44	n/a	Matrix Spike
JD2274-37MSD	2E159307.D	02/05/20 22:15	n/a	Matrix Spike Duplicate
ZZZZZZ	2E159309.D	02/05/20 23:15	n/a	(unrelated sample)
ZZZZZZ	2E159310.D	02/05/20 23:46	n/a	(unrelated sample)
ZZZZZZ	2E159311.D	02/06/20 00:17	n/a	(unrelated sample)
ZZZZZZ	2E159312.D	02/06/20 00:47	n/a	(unrelated sample)
ZZZZZZ	2E159313.D	02/06/20 01:18	n/a	(unrelated sample)
ZZZZZZ	2E159314.D	02/06/20 01:49	n/a	(unrelated sample)
ZZZZZZ	2E159315.D	02/06/20 02:20	n/a	(unrelated sample)
ZZZZZZ	2E159316.D	02/06/20 02:50	n/a	(unrelated sample)
JD2571-1	2E159317.D	02/06/20 03:20	n/a	MW-12-013020

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159317.d
Acq On : 6 Feb 2020 3:20 am
Operator : edwardd
Sample : JD2571-1 Inst : VOAMS2E
Misc : MS40882,V2E7090,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 15:41:56 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

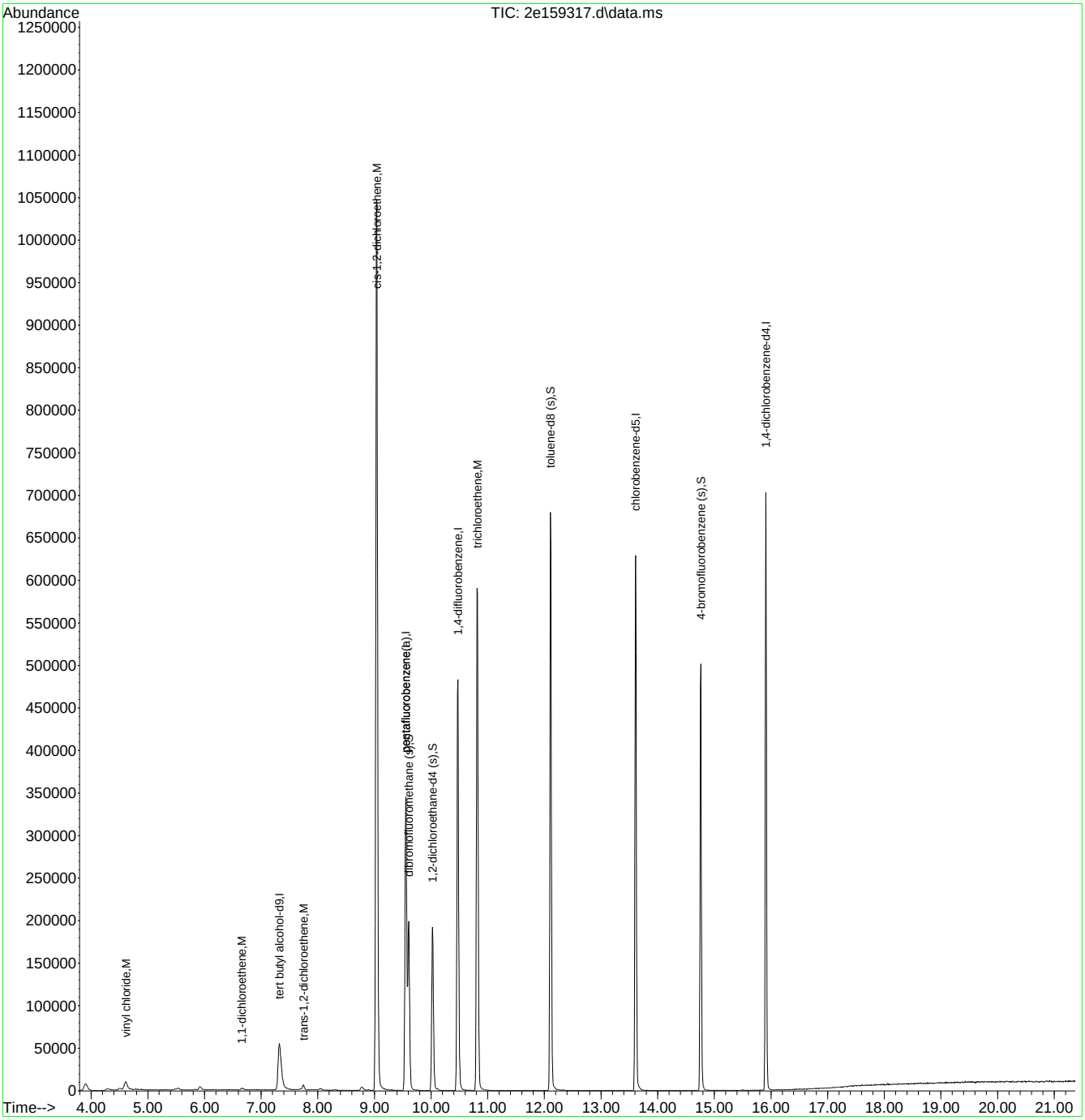
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.321	65	127258	500.00	ug/L	-0.02
5) pentafluorobenzene	9.554	168	290524	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	449856	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	362248	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	176192	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	290524	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.607	113	135250	52.61	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.22%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	145965	53.92	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 107.84%			
76) toluene-d8 (s)	12.108	98	476432	47.62	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.24%			
99) 4-bromofluorobenzene (s)	14.761	95	169914	49.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.90%			
Target Compounds						Qvalue
9) vinyl chloride	4.615	62	8261	1.64	ug/L	92
19) 1,1-dichloroethene	6.660	61	2011	0.45	ug/L	91
27) trans-1,2-dichloroethene	7.751	61	3783	0.91	ug/L	90
38) cis-1,2-dichloroethene	9.040	96	552277	162.72	ug/L #	82
63) trichloroethene	10.818	95	221993	74.27	ug/L	99

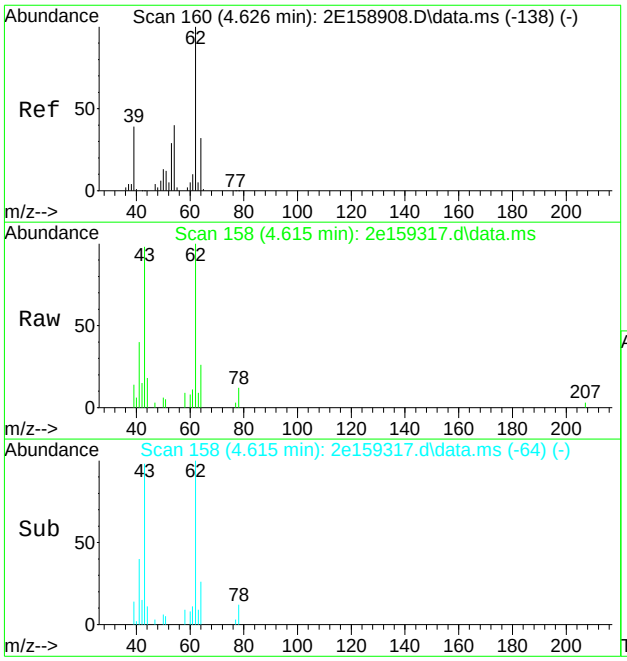
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159317.d
Acq On : 6 Feb 2020 3:20 am
Operator : edwardd
Sample : JD2571-1 Inst : VOAMS2E
Misc : MS40882,V2E7090,5,,,,1
ALS Vial : 34 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 15:41:56 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

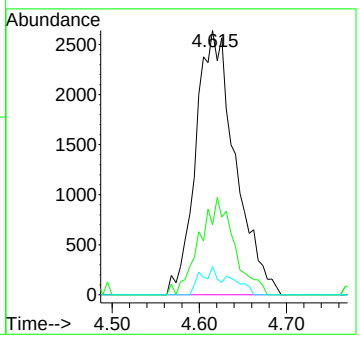


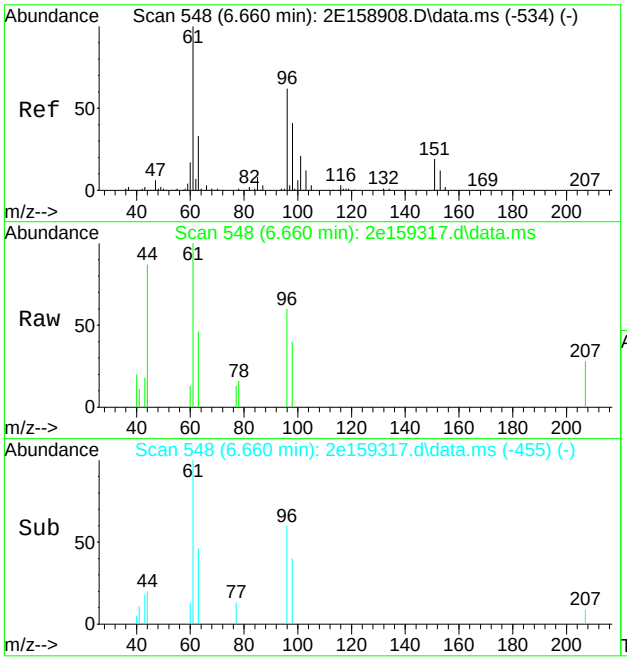


#9
vinyl chloride
Concen: 1.64 ug/L
RT: 4.615 min Scan# 158
Delta R.T. -0.005 min
Lab File: 2e159317.d
Acq: 6 Feb 2020 3:20 am

Tgt Ion: 62 Resp: 8261

Ion	Ratio	Lower	Upper
62	100		
64	26.4	0.9	60.9
61	10.8	0.0	38.3

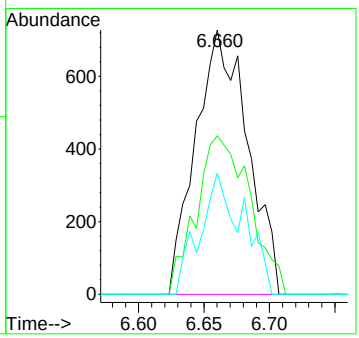


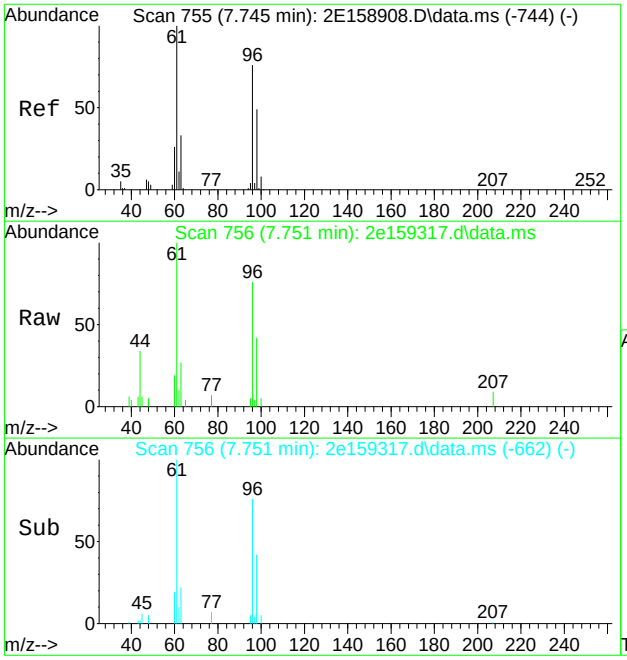


#19
1,1-dichloroethene
Concen: 0.45 ug/L
RT: 6.660 min Scan# 548
Delta R.T. -0.010 min
Lab File: 2e159317.d
Acq: 6 Feb 2020 3:20 am

Tgt Ion: 61 Resp: 2011

Ion	Ratio	Lower	Upper
61	100		
96	60.0	29.2	89.2
63	45.9	3.1	63.1

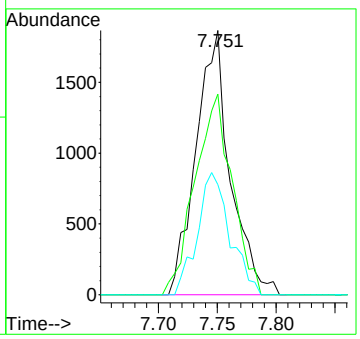


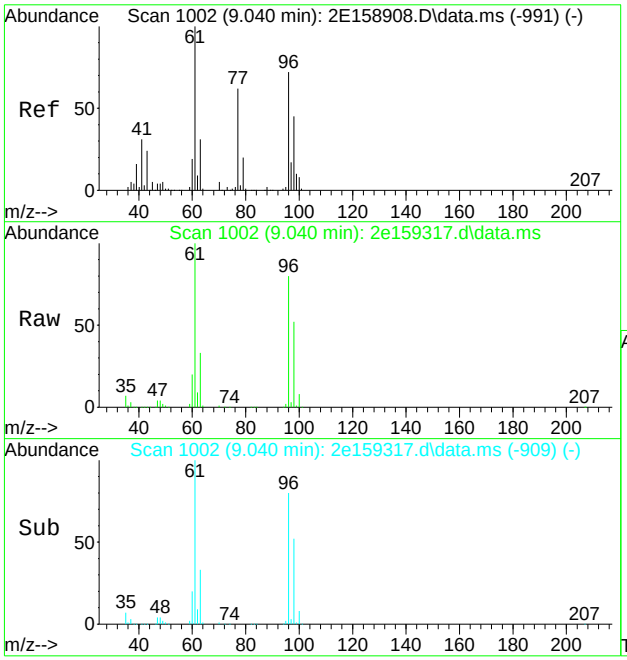


#27
trans-1,2-dichloroethene
Concen: 0.91 ug/L
RT: 7.751 min Scan# 756
Delta R.T. -0.005 min
Lab File: 2e159317.d
Acq: 6 Feb 2020 3:20 am

Tgt Ion: 61 Resp: 3783

Ion	Ratio	Lower	Upper
61	100		
96	75.9	34.9	94.9
98	41.6	13.8	73.8

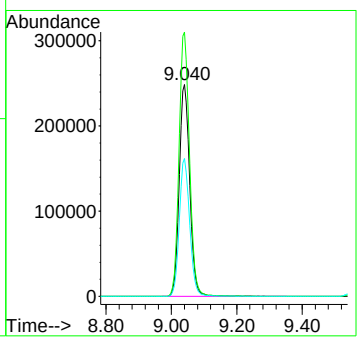


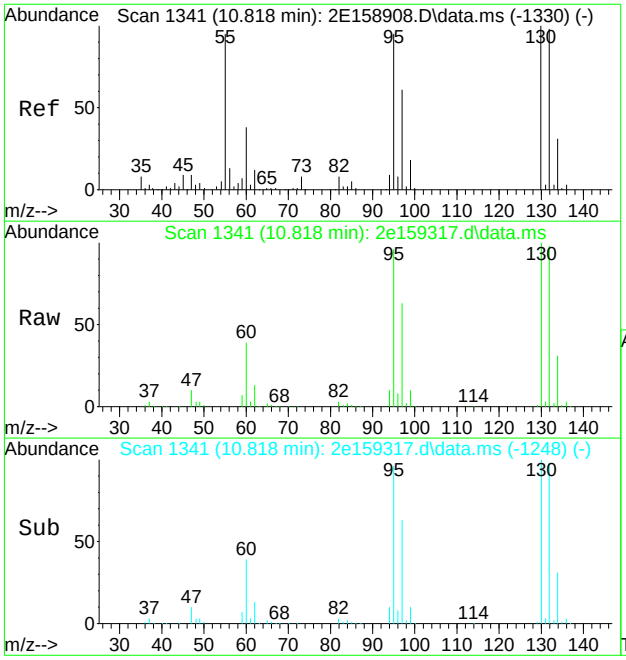


#38
cis-1,2-dichloroethene
Concen: 162.72 ug/L
RT: 9.040 min Scan# 1002
Delta R.T. -0.010 min
Lab File: 2e159317.d
Acq: 6 Feb 2020 3:20 am

Tgt Ion: 96 Resp: 552277

Ion	Ratio	Lower	Upper
96	100		
61	124.8	125.5	185.5#
98	65.0	33.2	93.2

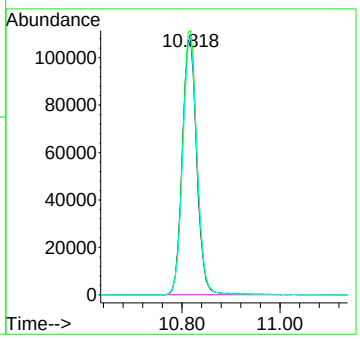




#63
trichloroethene
Concen: 74.27 ug/L
RT: 10.818 min Scan# 1341
Delta R.T. -0.010 min
Lab File: 2e159317.d
Acq: 6 Feb 2020 3:20 am

Tgt Ion: 95 Resp: 221993

Ion	Ratio	Lower	Upper
95	100		
130	103.7	72.8	132.8
132	101.5	69.6	129.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159300.d
Acq On : 5 Feb 2020 6:42 pm
Operator : edwardd
Sample : mb Inst : VOAMS2E
Misc : MS37677,V2E7090,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:13:03 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

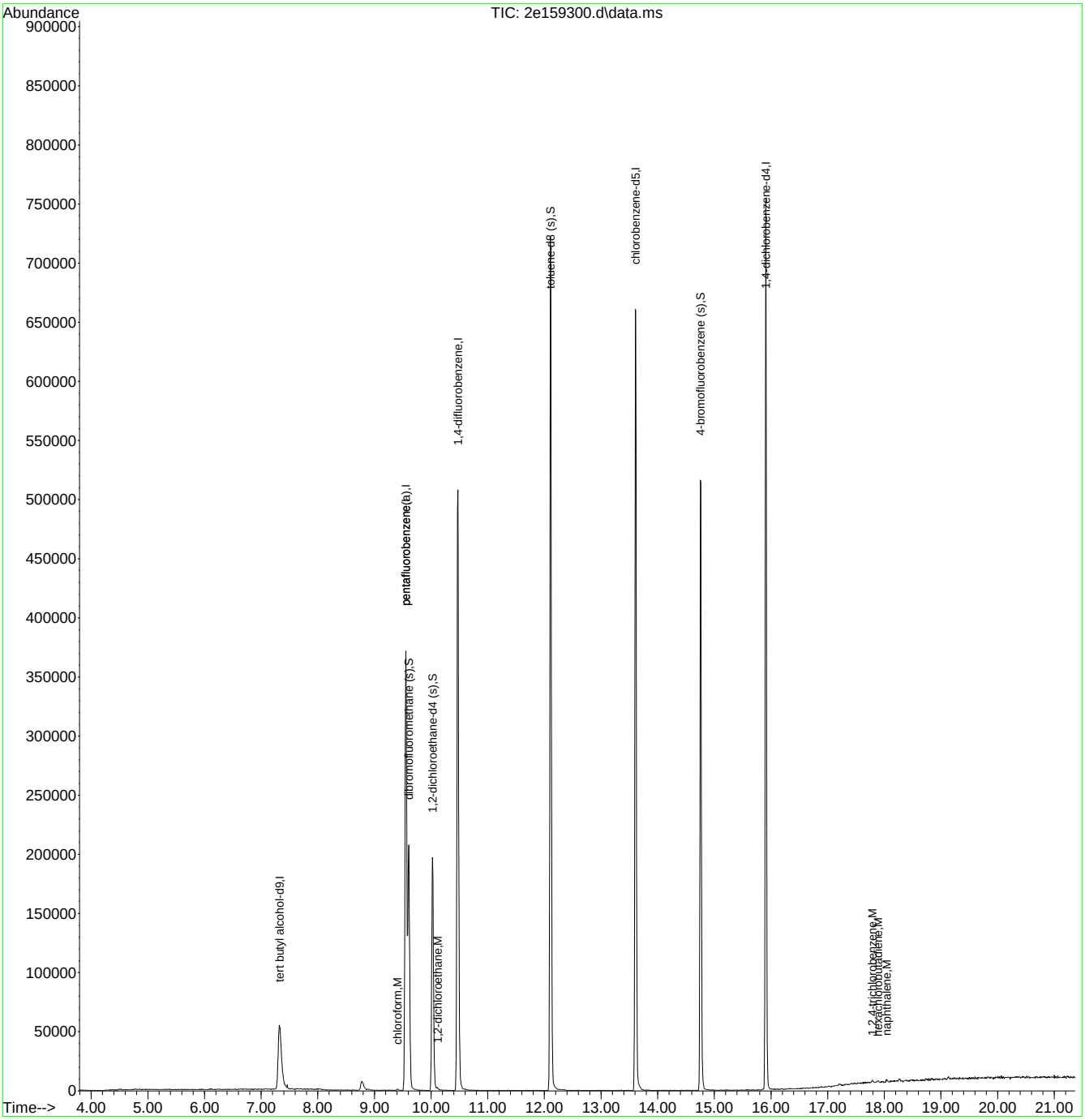
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.326	65	133485	500.00	ug/L	-0.01
5) pentafluorobenzene	9.554	168	316369	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	483347	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	394385	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	191613	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	316369	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.607	113	143193	51.15	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.30%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	151241	52.00	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.00%			
76) toluene-d8 (s)	12.108	98	509972	46.82	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 93.64%			
99) 4-bromofluorobenzene (s)	14.755	95	180526	48.31	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.62%			
Target Compounds						Qvalue
43) chloroform	9.407	83	990	0.18	ug/L	94
61) 1,2-dichloroethane	10.115	62	647	0.16	ug/L	68
118) 1,2,4-trichlorobenzene	17.791	180	776	0.17	ug/L	76
120) hexachlorobutadiene	17.885	225	445	0.20	ug/L	89
121) naphthalene	18.043	128	1447	0.14	ug/L	90

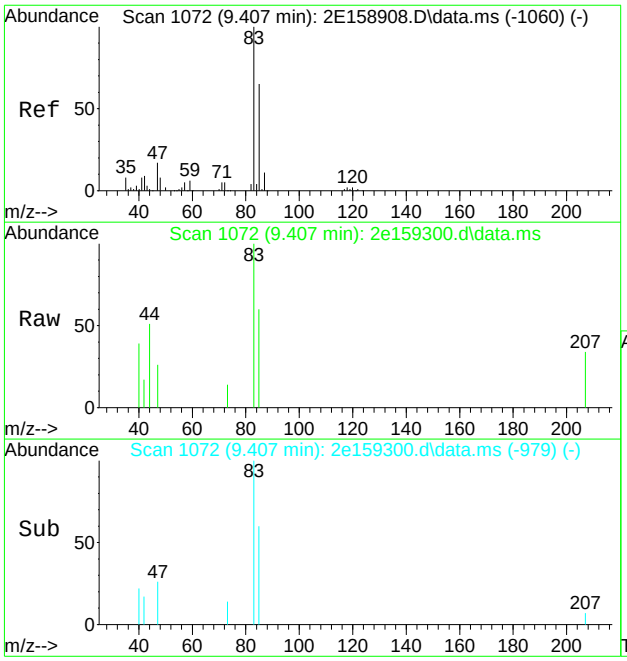
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159300.d
Acq On : 5 Feb 2020 6:42 pm
Operator : edwardd
Sample : mb Inst : VOAMS2E
Misc : MS37677,V2E7090,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:13:03 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

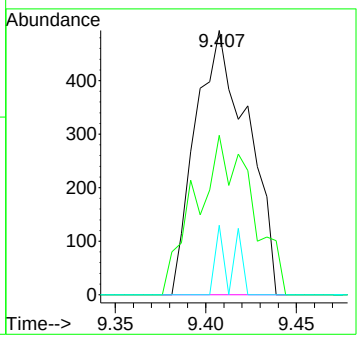


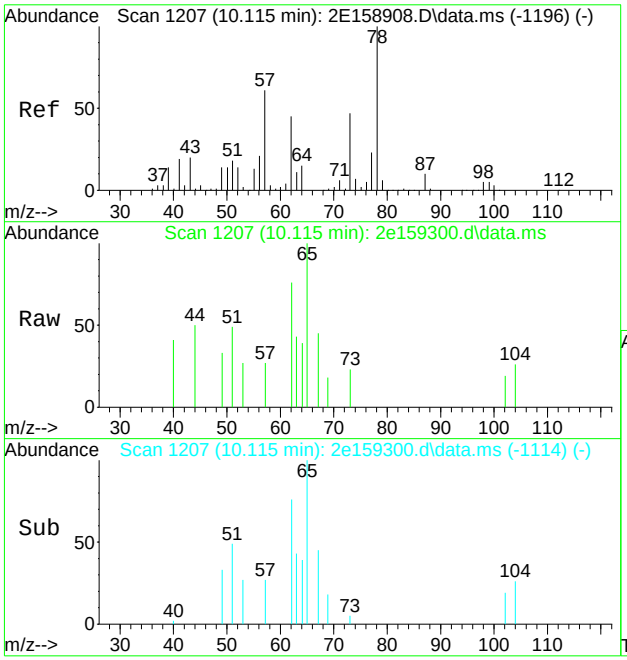


#43
chloroform
Concen: 0.18 ug/L
RT: 9.407 min Scan# 1072
Delta R.T. -0.010 min
Lab File: 2e159300.d
Acq: 5 Feb 2020 6:42 pm

Tgt Ion: 83 Resp: 990

Ion	Ratio	Lower	Upper
83	100		
85	60.3	35.0	95.0
47	26.3	0.0	53.5

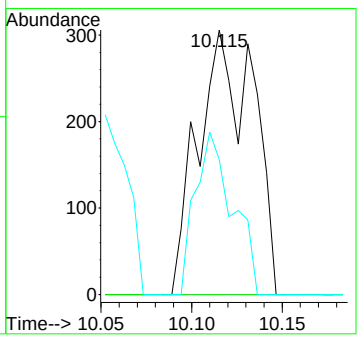


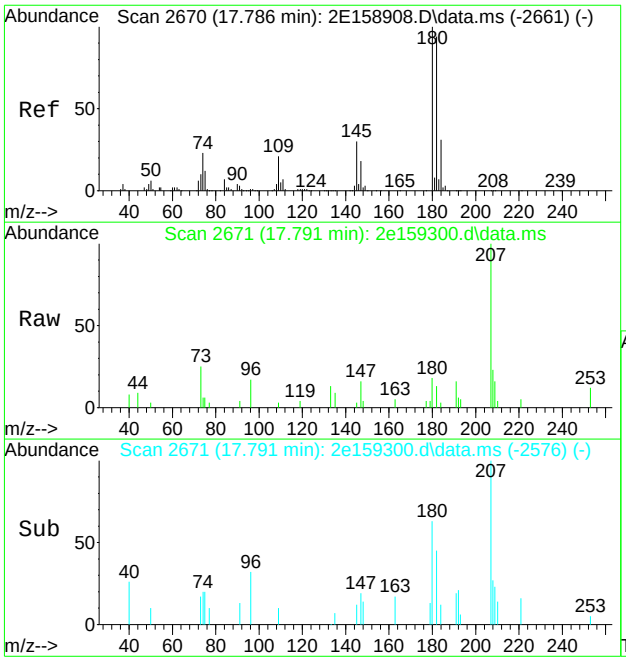


#61
1,2-dichloroethane
Concen: 0.16 ug/L
RT: 10.115 min Scan# 1207
Delta R.T. -0.010 min
Lab File: 2e159300.d
Acq: 5 Feb 2020 6:42 pm

Tgt Ion: 62 Resp: 647

Ion	Ratio	Lower	Upper
62	100		
98	0.0	0.0	40.7
64	51.0	2.4	62.4

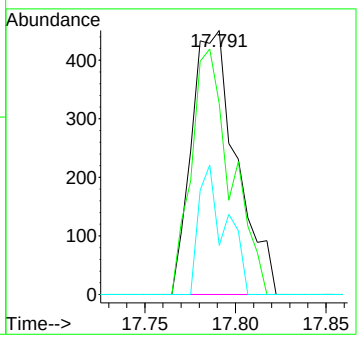


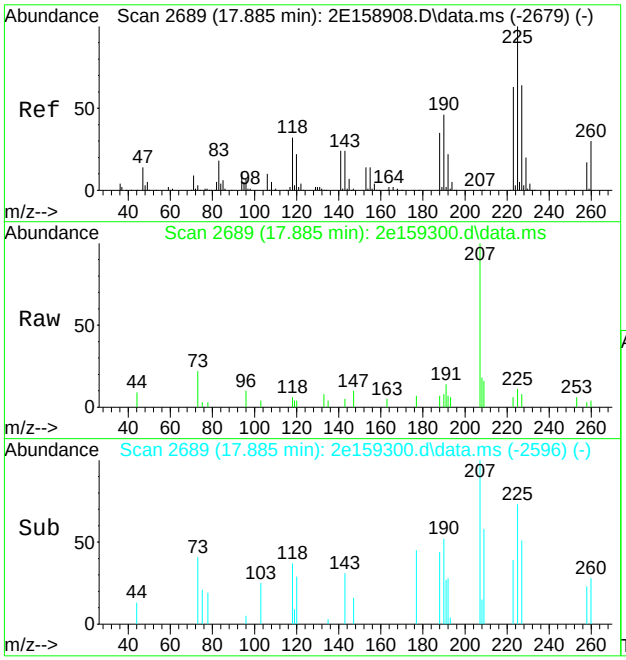


#118
1,2,4-trichlorobenzene
Concen: 0.17 ug/L
RT: 17.791 min Scan# 2671
Delta R.T. 0.000 min
Lab File: 2e159300.d
Acq: 5 Feb 2020 6:42 pm

Tgt Ion:180 Resp: 776

Ion	Ratio	Lower	Upper
180	100		
182	72.3	67.2	127.2
184	18.6	0.1	60.1

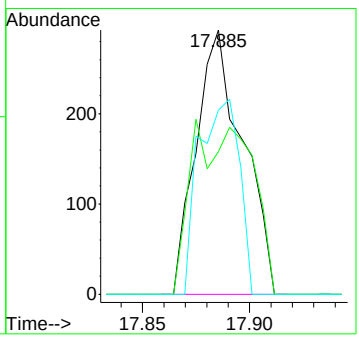


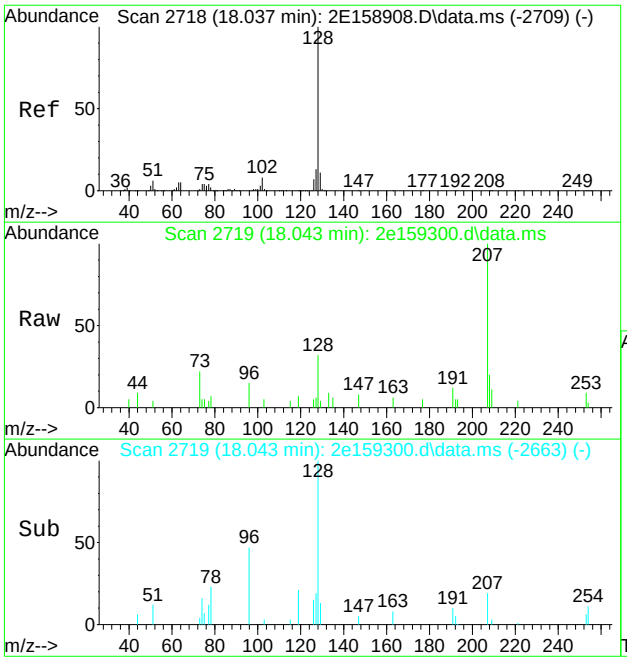


#120
hexachlorobutadiene
Concen: 0.20 ug/L
RT: 17.885 min Scan# 2689
Delta R.T. -0.010 min
Lab File: 2e159300.d
Acq: 5 Feb 2020 6:42 pm

Tgt Ion:225 Resp: 445

Ion	Ratio	Lower	Upper
225	100		
223	53.9	33.1	93.1
227	69.6	31.6	91.6

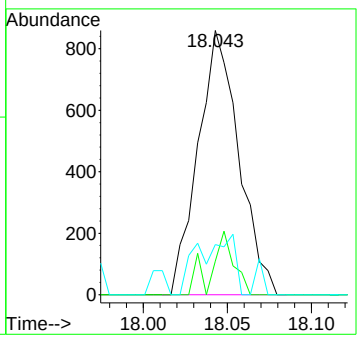




#121
naphthalene
Concen: 0.14 ug/L
RT: 18.043 min Scan# 2719
Delta R.T. -0.005 min
Lab File: 2e159300.d
Acq: 5 Feb 2020 6:42 pm

Tgt Ion:128 Resp: 1447

Ion	Ratio	Lower	Upper
128	100		
129	12.7	0.0	41.0
127	19.0	0.0	42.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159298.d
Acq On : 5 Feb 2020 5:41 pm
Operator : edwardd
Sample : bs Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:10:47 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.326	65	119417	500.00	ug/L	-0.01
5) pentafluorobenzene	9.554	168	313728	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	486654	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	398946	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	205967	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	313728	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.607	113	141743	51.05	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.10%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	148127	50.58	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.16%			
76) toluene-d8 (s)	12.108	98	522345	47.40	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.80%			
99) 4-bromofluorobenzene (s)	14.755	95	192093	47.83	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.66%			
Target Compounds						Qvalue
2) ethanol	6.073	45	146863	4520.35	ug/L	98
3) tertiary butyl alcohol	7.441	59	92709	291.11	ug/L	96
4) 1,4-dioxane	11.190	88	37871	1430.37	ug/L	99
6) chlorodifluoromethane	4.012	51	244450	46.28	ug/L	96
7) dichlorodifluoromethane	3.981	85	209711	52.53	ug/L	99
8) chloromethane	4.390	50	208201	37.78	ug/L	99
9) vinyl chloride	4.626	62	223675	41.20	ug/L	96
10) bromomethane	5.250	94	154681	48.14	ug/L	99
11) chloroethane	5.396	64	125856	44.82	ug/L	97
12) trichlorofluoromethane	5.858	101	258079	56.81	ug/L	96
13) 1,3-butadiene	4.647	54	181552	49.41	ug/L	97
14) vinyl bromide	5.753	106	136430	51.98	ug/L	99
15) ethyl ether	6.235	74	95960	48.86	ug/L	97
16) 2-chloropropane	6.429	43	268551	43.50	ug/L	93
17) acrolein	6.487	56	25815	41.35	ug/L	99
18) freon 113	6.629	151	144951	61.56	ug/L	93
19) 1,1-dichloroethene	6.660	61	245589	50.87	ug/L	98
20) acetone	6.697	43	151361	166.85	ug/L	98
21) acetonitrile	7.127	41	179711	421.93	ug/L	98
22) iodomethane	6.943	142	212944	54.50	ug/L	94
23) carbon disulfide	7.069	76	458550	53.03	ug/L	98
24) methylene chloride	7.368	84	173844	50.36	ug/L	91
25) methyl acetate	7.163	43	105882	45.84	ug/L	96
26) methyl tert butyl ether	7.698	73	417179	44.50	ug/L	97
27) trans-1,2-dichloroethene	7.740	61	224157	49.89	ug/L	94
28) hexane	8.039	56	135031	54.77	ug/L	93
29) di-isopropyl ether	8.285	45	562429	46.48	ug/L	93
30) ethyl tert-butyl ether	8.752	59	498483	47.38	ug/L	96
31) 2-butanone	9.004	72	68474	213.70	ug/L	92
32) 1,1-dichloroethane	8.301	63	294074	49.02	ug/L	99
33) chloroprene	8.411	53	252617	51.54	ug/L	97
34) acrylonitrile	7.693	53	55642	47.36	ug/L	93
35) vinyl acetate	8.291	86	37715	56.51	ug/L #	73
36) ethyl acetate	9.030	45	24130	46.32	ug/L #	73
37) 2,2-dichloropropane	9.040	77	240271	46.25	ug/L	100
38) cis-1,2-dichloroethene	9.040	96	189416	51.68	ug/L	89
39) propionitrile	9.098	54	188406	446.84	ug/L	92
40) methyl acrylate	9.103	85	22893	53.95	ug/L #	83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159298.d
Acq On : 5 Feb 2020 5:41 pm
Operator : edwardd
Sample : bs Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:10:47 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) bromochloromethane	9.350	128	89201	53.43	ug/L		85
42) tetrahydrofuran	9.392	72	19558	46.96	ug/L	#	81
43) chloroform	9.407	83	288444	51.52	ug/L		98
44) t-butyl formate	9.439	59	116193	35.78	ug/L		95
45) 1,1-dichloropropene	9.837	75	223930	49.90	ug/L		96
46) carbon tetrachloride	9.864	117	224939	52.93	ug/L		98
47) isopropyl acetate	10.021	87	37972	51.85	ug/L	#	74
49) methacrylonitrile	9.287	67	60074	51.06	ug/L		91
50) 1,1,1-trichloroethane	9.664	97	259476	52.08	ug/L		98
51) cyclohexane	9.738	84	258611	50.79	ug/L	#	86
52) iso-butyl alcohol	9.843	43	60274	452.92	ug/L		98
53) tert amyl alcohol	9.974	73	40649	232.60	ug/L		94
56) 2,2,4-trimethylpentane	10.099	57	589842	56.67	ug/L		98
57) n-butyl alcohol	10.598	56	217549	2580.74	ug/L		95
58) benzene	10.099	78	680045	48.86	ug/L		99
59) tert-amyl methyl ether	10.131	73	492884	45.87	ug/L		98
60) heptane	10.267	57	128328	53.94	ug/L		96
61) 1,2-dichloroethane	10.115	62	201559	49.10	ug/L		100
62) ethyl acrylate	10.813	55	183506	50.14	ug/L		99
63) trichloroethene	10.818	95	164245	50.79	ug/L		100
64) 2-nitropropane	11.583	41	47912	47.87	ug/L	#	50
65) 2-chloroethyl vinyl ether	11.599	63	466030	241.09	ug/L		97
66) methyl methacrylate	11.085	100	42013	53.47	ug/L	#	74
67) 1,2-dichloropropane	11.080	63	166268	47.16	ug/L		94
68) methylcyclohexane	11.033	83	308253	53.47	ug/L		98
69) dibromomethane	11.237	93	97032	52.52	ug/L		97
70) bromodichloromethane	11.363	83	215279	52.24	ug/L		98
71) epichlorohydrin	11.725	57	73339	250.26	ug/L		91
72) cis-1,3-dichloropropene	11.819	75	269813	50.09	ug/L		98
73) 4-methyl-2-pentanone	11.908	58	222465	196.57	ug/L		94
74) 3-methyl-1-butanol	11.929	70	86697	988.03	ug/L		96
77) toluene	12.181	92	402445	49.46	ug/L		100
78) ethyl methacrylate	12.364	69	190180	52.38	ug/L		97
79) trans-1,3-dichloropropene	12.375	75	236188	52.65	ug/L		97
80) 1,1,2-trichloroethane	12.590	83	111803	49.53	ug/L		96
81) tetrachloroethene	12.763	164	134723	52.28	ug/L		97
82) 2-hexanone	12.758	58	198682	199.75	ug/L		97
83) 1,3-dichloropropane	12.768	76	228471	48.08	ug/L		99
84) butyl acetate	12.831	56	96971	47.84	ug/L		87
85) dibromochloromethane	13.036	129	157594	54.10	ug/L		98
86) 1,2-dibromoethane	13.182	107	149458	51.82	ug/L		97
87) n-butyl ether	13.549	57	662862	46.77	ug/L		99
88) chlorobenzene	13.639	112	421316	49.45	ug/L		98
89) 1,1,1,2-tetrachloroethane	13.701	131	159110	52.34	ug/L		99
90) ethylbenzene	13.696	91	728692	49.30	ug/L		100
91) m,p-xylene	13.801	106	565566	98.62	ug/L		98
92) o-xylene	14.215	91	591230	49.58	ug/L		99
93) styrene	14.226	104	471014	52.98	ug/L		99
94) butyl acrylate	14.037	55	278547	51.13	ug/L		97
95) bromoform	14.488	173	99041	55.99	ug/L		98
96) isopropylbenzene	14.551	105	725415	49.51	ug/L		98
97) cis-1,4-dichloro-2-butene	14.624	75	56218	44.68	ug/L		96
100) bromobenzene	14.949	156	185635	51.48	ug/L		92
101) 1,1,2,2-tetrachloroethane	14.855	83	166866	48.06	ug/L		99
102) trans-1,4-dichloro-2-b...	14.897	53	41433	46.02	ug/L		98
103) 1,2,3-trichloropropane	14.928	110	47979	47.38	ug/L		97
104) n-propylbenzene	14.960	91	833695	47.57	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159298.d
Acq On : 5 Feb 2020 5:41 pm
Operator : edwardd
Sample : bs Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:10:47 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

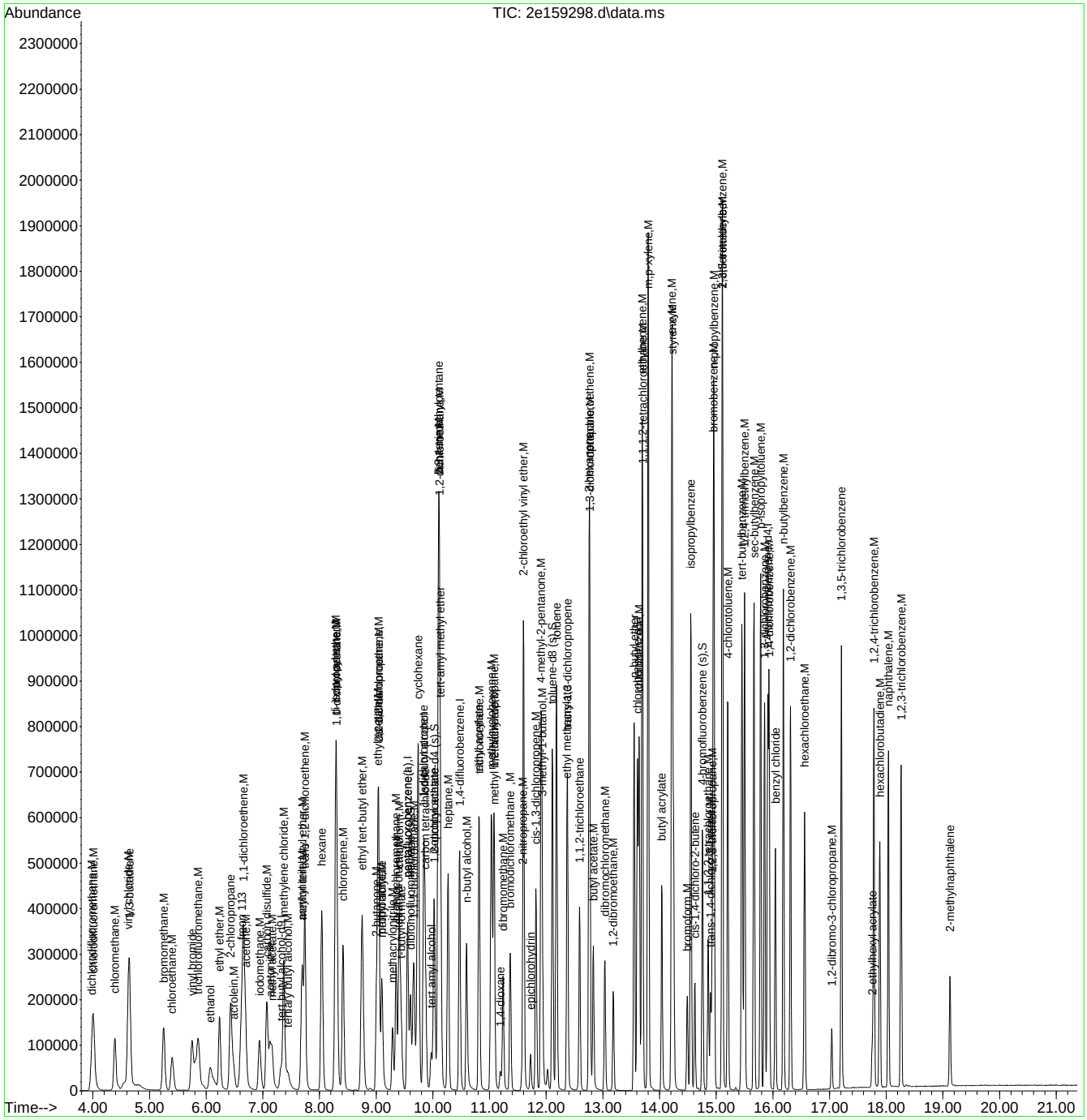
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 2-chlorotoluene	15.107	126	170690	47.00	ug/L	98
106) 4-chlorotoluene	15.206	91	514647	48.68	ug/L	99
107) 1,3,5-trimethylbenzene	15.107	105	608926	48.67	ug/L	97
108) tert-butylbenzene	15.453	119	533712	49.67	ug/L	97
109) 1,2,4-trimethylbenzene	15.500	105	609549	49.08	ug/L	99
110) sec-butylbenzene	15.668	105	769268	48.19	ug/L	99
111) 1,3-dichlorobenzene	15.851	146	343829	49.66	ug/L	99
112) p-isopropyltoluene	15.783	119	659104	48.62	ug/L	99
113) 1,4-dichlorobenzene	15.935	146	353357	50.31	ug/L	99
114) 1,2-dichlorobenzene	16.312	146	339742	49.34	ug/L	98
115) n-butylbenzene	16.187	92	331571	48.05	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.041	157	36733	47.06	ug/L	97
117) 1,3,5-trichlorobenzene	17.209	180	286251	50.66	ug/L	98
118) 1,2,4-trichlorobenzene	17.781	180	252393	50.26	ug/L	97
119) 2-ethylhexyl acrylate	17.754	70	23112	6.49	ug/L	96
120) hexachlorobutadiene	17.885	225	116289	48.64	ug/L	98
121) naphthalene	18.037	128	546533	48.77	ug/L	99
122) 1,2,3-trichlorobenzene	18.263	180	227767	49.05	ug/L	99
123) hexachloroethane	16.559	201	108387	54.78	ug/L	98
124) benzyl chloride	16.045	91	372268	50.97	ug/L	99
125) 2-methylnaphthalene	19.123	142	121282	20.45	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159298.d
Acq On : 5 Feb 2020 5:41 pm
Operator : edwardd
Sample : bs Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:10:47 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159306.d
Acq On : 5 Feb 2020 9:44 pm
Operator : edwardd
Sample : JD2274-37ms Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:12:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.326	65	113068	500.00	ug/L	-0.01
5) pentafluorobenzene	9.554	168	320629	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	494748	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	406607	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	210254	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	320629	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.601	113	142823	50.34	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.68%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	148656	49.93	ug/L	-0.01
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.86%			
76) toluene-d8 (s)	12.107	98	531961	47.37	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.74%			
99) 4-bromofluorobenzene (s)	14.755	95	194996	47.56	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.12%			
Target Compounds						Qvalue
2) ethanol	6.073	45	127576	4147.20	ug/L	93
3) tertiary butyl alcohol	7.436	59	85126	282.31	ug/L	96
4) 1,4-dioxane	11.190	88	30780	1227.83	ug/L	92
6) chlorodifluoromethane	4.007	51	223095	41.32	ug/L	98
7) dichlorodifluoromethane	3.981	85	217687	53.36	ug/L	97
8) chloromethane	4.384	50	204017	36.22	ug/L	99
9) vinyl chloride	4.620	62	631629	113.83	ug/L	98
10) bromomethane	5.244	94	150545	45.84	ug/L	98
11) chloroethane	5.396	64	1344532	468.49	ug/L	100
12) trichlorofluoromethane	5.852	101	250716	54.00	ug/L	95
13) 1,3-butadiene	4.641	54	164341	43.77	ug/L	97
14) vinyl bromide	5.753	106	138666	51.69	ug/L	97
15) ethyl ether	6.240	74	91238	45.45	ug/L	96
16) 2-chloropropane	6.429	43	253388	40.16	ug/L	92
17) acrolein	6.487	56	31874	49.96	ug/L	83
18) freon 113	6.628	151	139799	58.09	ug/L	95
19) 1,1-dichloroethene	6.660	61	247776	50.22	ug/L	96
20) acetone	6.697	43	153523	165.59	ug/L	97
21) acetonitrile	7.127	41	173066	397.58	ug/L	100
22) iodomethane	6.943	142	203515	50.97	ug/L	96
23) carbon disulfide	7.069	76	430608	48.73	ug/L	98
24) methylene chloride	7.368	84	208439	59.08	ug/L	92
25) methyl acetate	7.163	43	103626	43.90	ug/L	97
26) methyl tert butyl ether	7.693	73	406191	42.39	ug/L	97
27) trans-1,2-dichloroethene	7.740	61	222542	48.47	ug/L	93
28) hexane	8.039	56	137551	54.59	ug/L	94
29) di-isopropyl ether	8.285	45	544165	44.01	ug/L	90
30) ethyl tert-butyl ether	8.747	59	489148	45.49	ug/L	99
31) 2-butanone	9.004	72	78176	238.72	ug/L #	86
32) 1,1-dichloroethane	8.301	63	376872	61.47	ug/L	97
33) chloroprene	8.411	53	244922	48.90	ug/L	98
34) acrylonitrile	7.693	53	54239	45.18	ug/L	98
35) vinyl acetate	8.290	86	38080	55.83	ug/L #	57
36) ethyl acetate	9.030	45	22634	42.51	ug/L #	1
37) 2,2-dichloropropane	9.040	77	233104	43.90	ug/L #	67
38) cis-1,2-dichloroethene	9.035	96	1900943	507.50	ug/L #	81
39) propionitrile	9.098	54	181058	420.17	ug/L	94
40) methyl acrylate	9.108	85	21559	49.71	ug/L #	69

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159306.d
Acq On : 5 Feb 2020 9:44 pm
Operator : edwardd
Sample : JD2274-37ms Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:12:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) bromochloromethane	9.350	128	87436	51.24	ug/L	#	86
42) tetrahydrofuran	9.397	72	19086	44.84	ug/L		86
43) chloroform	9.407	83	279209	48.80	ug/L		98
44) t-butyl formate	9.439	59	113728	34.27	ug/L		93
45) 1,1-dichloropropene	9.837	75	215321	46.95	ug/L		95
46) carbon tetrachloride	9.863	117	214027	49.28	ug/L		97
47) isopropyl acetate	10.021	87	36757	49.11	ug/L	#	73
49) methacrylonitrile	9.287	67	59282	49.31	ug/L		89
50) 1,1,1-trichloroethane	9.659	97	256846	50.44	ug/L		96
51) cyclohexane	9.738	84	259248	49.82	ug/L	#	85
52) iso-butyl alcohol	9.842	43	53839	395.86	ug/L		97
53) tert amyl alcohol	9.968	73	37222	208.41	ug/L		89
56) 2,2,4-trimethylpentane	10.099	57	544992	51.50	ug/L		99
57) n-butyl alcohol	10.592	56	190688	2225.09	ug/L		97
58) benzene	10.099	78	713497	50.42	ug/L		99
59) tert-amyl methyl ether	10.131	73	484175	44.32	ug/L		98
60) heptane	10.267	57	122815	50.78	ug/L		97
61) 1,2-dichloroethane	10.115	62	199633	47.83	ug/L		99
62) ethyl acrylate	10.812	55	180352	48.47	ug/L		96
63) trichloroethene	10.818	95	162760	49.51	ug/L		98
64) 2-nitropropane	11.583	41	42899	42.16	ug/L	#	20
65) 2-chloroethyl vinyl ether	11.599	63	365257	185.87	ug/L		96
66) methyl methacrylate	11.080	100	40708	50.96	ug/L		98
67) 1,2-dichloropropane	11.080	63	163814	45.71	ug/L		91
68) methylcyclohexane	11.033	83	309418	52.80	ug/L		96
69) dibromomethane	11.237	93	92530	49.26	ug/L		92
70) bromodichloromethane	11.363	83	212597	50.75	ug/L		99
71) epichlorohydrin	11.725	57	69906	234.64	ug/L		96
72) cis-1,3-dichloropropene	11.819	75	261570	47.77	ug/L		99
73) 4-methyl-2-pentanone	11.908	58	245326	213.22	ug/L		92
74) 3-methyl-1-butanol	11.929	70	78332	878.10	ug/L		95
77) toluene	12.181	92	4254174	512.94	ug/L		96
78) ethyl methacrylate	12.370	69	185498	50.13	ug/L		94
79) trans-1,3-dichloropropene	12.375	75	230999	50.53	ug/L		97
80) 1,1,2-trichloroethane	12.590	83	109739	47.70	ug/L		97
81) tetrachloroethene	12.763	164	133624	50.87	ug/L		98
82) 2-hexanone	12.758	58	194213	191.58	ug/L		95
83) 1,3-dichloropropane	12.768	76	223475	46.15	ug/L		98
84) butyl acetate	12.831	56	95432	46.19	ug/L		91
85) dibromochloromethane	13.035	129	152914	51.51	ug/L		95
86) 1,2-dibromoethane	13.182	107	148233	50.43	ug/L		98
87) n-butyl ether	13.554	57	658184	45.57	ug/L		98
88) chlorobenzene	13.644	112	418223	48.16	ug/L		98
89) 1,1,1,2-tetrachloroethane	13.701	131	154160	49.75	ug/L		98
90) ethylbenzene	13.696	91	1515035	100.57	ug/L		100
91) m,p-xylene	13.801	106	2132753	364.89	ug/L		99
92) o-xylene	14.215	91	1249656	102.82	ug/L		100
93) styrene	14.226	104	479067	52.88	ug/L		93
94) butyl acrylate	14.042	55	276991	49.89	ug/L		97
95) bromoform	14.488	173	98066	54.39	ug/L		95
96) isopropylbenzene	14.551	105	734207	49.17	ug/L		99
97) cis-1,4-dichloro-2-butene	14.624	75	57284	44.67	ug/L		92
100) bromobenzene	14.949	156	183282	49.79	ug/L		92
101) 1,1,2,2-tetrachloroethane	14.855	83	164863	46.52	ug/L		99
102) trans-1,4-dichloro-2-b...	14.897	53	41366	45.00	ug/L		97
103) 1,2,3-trichloropropane	14.928	110	47478	45.93	ug/L		99
104) n-propylbenzene	14.960	91	834793	46.66	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159306.d
Acq On : 5 Feb 2020 9:44 pm
Operator : edwardd
Sample : JD2274-37ms Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:12:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

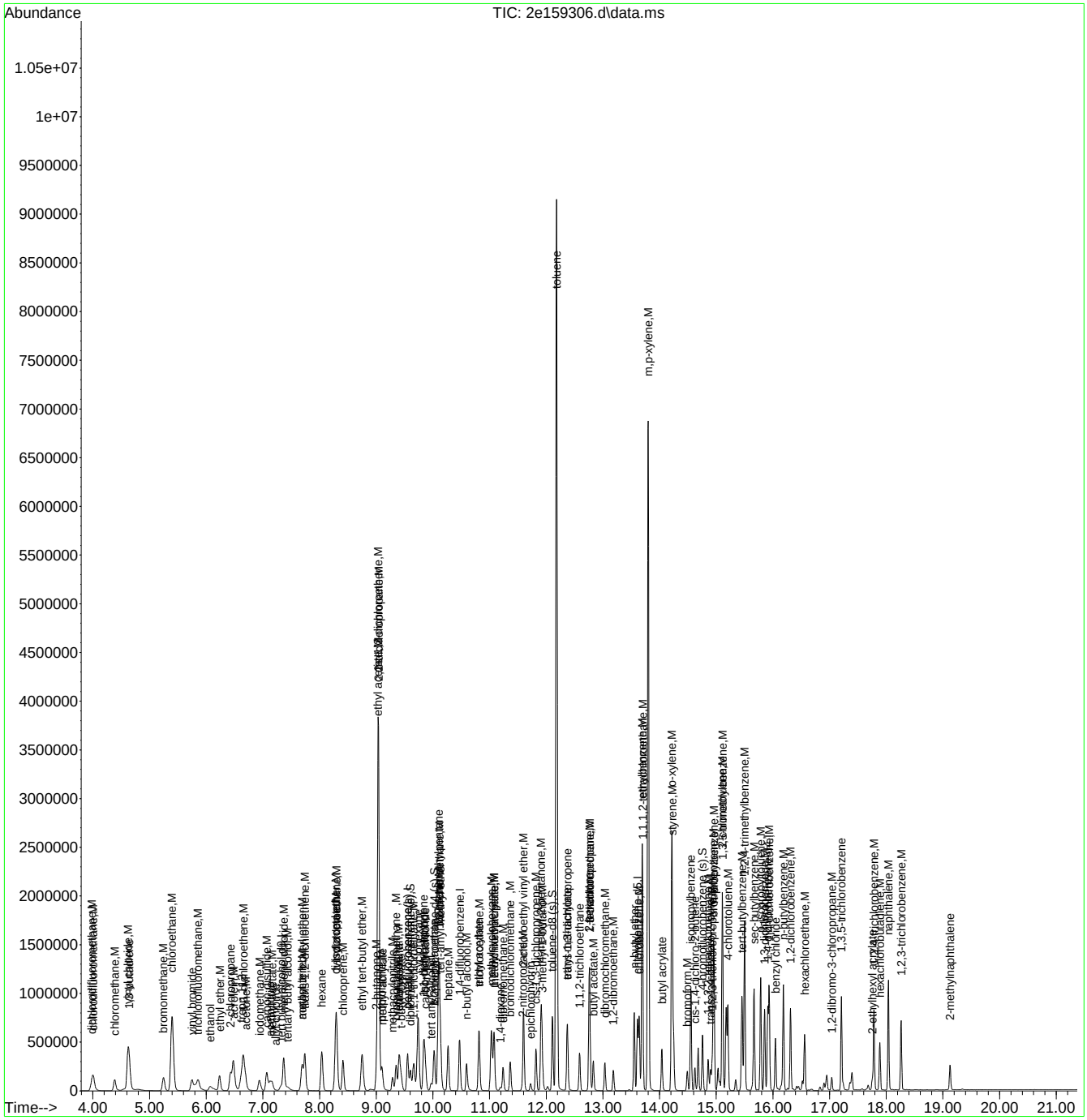
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 2-chlorotoluene	15.106	126	170692	46.04	ug/L	99
106) 4-chlorotoluene	15.206	91	506029	46.89	ug/L	100
107) 1,3,5-trimethylbenzene	15.112	105	660444	51.72	ug/L	99
108) tert-butylbenzene	15.458	119	512553	46.72	ug/L	99
109) 1,2,4-trimethylbenzene	15.500	105	815868	64.36	ug/L	99
110) sec-butylbenzene	15.667	105	743476	45.63	ug/L	100
111) 1,3-dichlorobenzene	15.851	146	340274	48.14	ug/L	99
112) p-isopropyltoluene	15.783	119	661800	47.83	ug/L	99
113) 1,4-dichlorobenzene	15.935	146	350332	48.87	ug/L	99
114) 1,2-dichlorobenzene	16.312	146	341375	48.57	ug/L	99
115) n-butylbenzene	16.186	92	324695	46.09	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.041	157	36980	46.41	ug/L	95
117) 1,3,5-trichlorobenzene	17.209	180	282307	48.95	ug/L	98
118) 1,2,4-trichlorobenzene	17.780	180	250534	48.87	ug/L	98
119) 2-ethylhexyl acrylate	17.754	70	25670	7.06	ug/L	89
120) hexachlorobutadiene	17.885	225	106871	43.79	ug/L	99
121) naphthalene	18.037	128	830372	72.59	ug/L	100
122) 1,2,3-trichlorobenzene	18.263	180	221526	46.74	ug/L	99
123) hexachloroethane	16.564	201	106579	52.77	ug/L	96
124) benzyl chloride	16.045	91	378894	50.82	ug/L	99
125) 2-methylnaphthalene	19.128	142	129837	21.44	ug/L	99
130) allyl chloride	7.226	78	530	0.80	ug/L #	7

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159306.d
Acq On : 5 Feb 2020 9:44 pm
Operator : edwardd
Sample : JD2274-37ms Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:12:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159307.d
Acq On : 5 Feb 2020 10:15 pm
Operator : edwardd
Sample : JD2274-37msd Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:45:04 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.321	65	115606	500.00	ug/L	-0.02
5) pentafluorobenzene	9.554	168	321809	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	503801	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	409771	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	207625	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	321809	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.601	113	144320	50.68	ug/L	-0.02
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.36%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	152165	50.19	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.38%			
76) toluene-d8 (s)	12.108	98	534411	47.22	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 94.44%			
99) 4-bromofluorobenzene (s)	14.755	95	195176	48.21	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.42%			
Target Compounds						Qvalue
2) ethanol	6.062	45	132901	4225.46	ug/L	97
3) tertiary butyl alcohol	7.441	59	87180	282.78	ug/L	93
4) 1,4-dioxane	11.190	88	31769	1239.46	ug/L	99
6) chlorodifluoromethane	4.002	51	224161	41.37	ug/L	99
7) dichlorodifluoromethane	3.976	85	211431	51.63	ug/L	99
8) chloromethane	4.374	50	205120	36.28	ug/L	98
9) vinyl chloride	4.610	62	630259	113.17	ug/L	99
10) bromomethane	5.244	94	150444	45.64	ug/L	98
11) chloroethane	5.391	64	1349268	468.42	ug/L	99
12) trichlorofluoromethane	5.853	101	242561	52.05	ug/L	95
13) 1,3-butadiene	4.636	54	163162	43.29	ug/L	96
14) vinyl bromide	5.748	106	138658	51.50	ug/L	97
15) ethyl ether	6.235	74	95156	47.23	ug/L	93
16) 2-chloropropane	6.429	43	259775	41.03	ug/L	91
17) acrolein	6.482	56	32139	50.19	ug/L	91
18) freon 113	6.629	151	135071	55.92	ug/L	93
19) 1,1-dichloroethene	6.655	61	253601	51.22	ug/L	96
20) acetone	6.692	43	157128	168.86	ug/L	99
21) acetonitrile	7.121	41	175474	401.63	ug/L	99
22) iodomethane	6.938	142	205168	51.19	ug/L	93
23) carbon disulfide	7.064	76	430911	48.59	ug/L	98
24) methylene chloride	7.368	84	208575	58.90	ug/L	91
25) methyl acetate	7.158	43	105498	44.53	ug/L	96
26) methyl tert butyl ether	7.693	73	411050	42.74	ug/L	98
27) trans-1,2-dichloroethene	7.735	61	226583	49.17	ug/L	96
28) hexane	8.034	56	128345	50.75	ug/L	90
29) di-isopropyl ether	8.280	45	555691	44.77	ug/L	99
30) ethyl tert-butyl ether	8.747	59	493684	45.74	ug/L	98
31) 2-butanone	8.998	72	78144	237.75	ug/L #	84
32) 1,1-dichloroethane	8.301	63	378253	61.47	ug/L	97
33) chloroprene	8.411	53	245289	48.79	ug/L	99
34) acrylonitrile	7.688	53	55085	45.71	ug/L	96
35) vinyl acetate	8.285	86	38459	56.18	ug/L #	78
36) ethyl acetate	9.019	45	21874	40.93	ug/L #	1
37) 2,2-dichloropropane	9.040	77	225360	42.29	ug/L #	65
38) cis-1,2-dichloroethene	9.035	96	1903183	506.23	ug/L #	82
39) propionitrile	9.098	54	182643	422.29	ug/L	94
40) methyl acrylate	9.103	85	22117	50.81	ug/L #	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159307.d
Acq On : 5 Feb 2020 10:15 pm
Operator : edwardd
Sample : JD2274-37msd Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:45:04 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41)	bromochloromethane	9.350	128	88294	51.56	ug/L		87
42)	tetrahydrofuran	9.392	72	19746	46.22	ug/L	#	83
43)	chloroform	9.402	83	282570	49.20	ug/L		96
44)	t-butyl formate	9.434	59	110947	33.31	ug/L		95
45)	1,1-dichloropropene	9.837	75	217582	47.27	ug/L		98
46)	carbon tetrachloride	9.864	117	211987	48.63	ug/L		100
47)	isopropyl acetate	10.021	87	37338	49.71	ug/L	#	81
49)	methacrylonitrile	9.287	67	60964	50.52	ug/L		93
50)	1,1,1-trichloroethane	9.659	97	251405	49.19	ug/L		97
51)	cyclohexane	9.738	84	250837	48.03	ug/L	#	86
52)	iso-butyl alcohol	9.843	43	55012	403.00	ug/L		97
53)	tert amyl alcohol	9.968	73	38315	213.74	ug/L		97
56)	2,2,4-trimethylpentane	10.100	57	519265	48.19	ug/L		99
57)	n-butyl alcohol	10.598	56	198032	2269.26	ug/L		98
58)	benzene	10.100	78	715409	49.65	ug/L		99
59)	tert-amyl methyl ether	10.131	73	486385	43.73	ug/L		98
60)	heptane	10.267	57	115941	47.08	ug/L		97
61)	1,2-dichloroethane	10.115	62	201441	47.40	ug/L		98
62)	ethyl acrylate	10.813	55	179750	47.44	ug/L		97
63)	trichloroethene	10.813	95	160955	48.08	ug/L		99
64)	2-nitropropane	11.578	41	40759	39.34	ug/L	#	1
65)	2-chloroethyl vinyl ether	11.599	63	290197	145.02	ug/L		97
66)	methyl methacrylate	11.080	100	40046	49.23	ug/L	#	94
67)	1,2-dichloropropane	11.075	63	165831	45.44	ug/L		97
68)	methylcyclohexane	11.033	83	297288	49.81	ug/L		97
69)	dibromomethane	11.237	93	92807	48.52	ug/L		91
70)	bromodichloromethane	11.363	83	212353	49.78	ug/L		99
71)	epichlorohydrin	11.725	57	69860	230.27	ug/L		98
72)	cis-1,3-dichloropropene	11.819	75	264510	47.44	ug/L		98
73)	4-methyl-2-pentanone	11.908	58	246876	210.72	ug/L		92
74)	3-methyl-1-butanol	11.929	70	80187	882.74	ug/L		97
77)	toluene	12.181	92	4217489	504.59	ug/L		96
78)	ethyl methacrylate	12.365	69	189174	50.73	ug/L		97
79)	trans-1,3-dichloropropene	12.375	75	228233	49.54	ug/L		96
80)	1,1,2-trichloroethane	12.590	83	109710	47.32	ug/L		99
81)	tetrachloroethene	12.763	164	130931	49.46	ug/L		97
82)	2-hexanone	12.758	58	198149	193.95	ug/L		97
83)	1,3-dichloropropane	12.768	76	224053	45.91	ug/L		99
84)	butyl acetate	12.831	56	96407	46.30	ug/L		96
85)	dibromochloromethane	13.036	129	153224	51.21	ug/L		97
86)	1,2-dibromoethane	13.182	107	147940	49.94	ug/L		98
87)	n-butyl ether	13.555	57	657274	45.15	ug/L		98
88)	chlorobenzene	13.639	112	415799	47.51	ug/L		97
89)	1,1,1,2-tetrachloroethane	13.701	131	155492	49.80	ug/L		99
90)	ethylbenzene	13.696	91	1512651	99.63	ug/L		99
91)	m,p-xylene	13.801	106	2106306	357.58	ug/L		99
92)	o-xylene	14.215	91	1246279	101.75	ug/L		99
93)	styrene	14.226	104	472831	51.78	ug/L		92
94)	butyl acrylate	14.042	55	279687	49.99	ug/L		96
95)	bromoform	14.488	173	97786	53.82	ug/L		96
96)	isopropylbenzene	14.551	105	724506	48.14	ug/L		99
97)	cis-1,4-dichloro-2-butene	14.624	75	57158	44.23	ug/L		91
100)	bromobenzene	14.949	156	180180	49.57	ug/L		92
101)	1,1,2,2-tetrachloroethane	14.855	83	165582	47.31	ug/L		99
102)	trans-1,4-dichloro-2-b...	14.897	53	43308	47.71	ug/L		99
103)	1,2,3-trichloropropane	14.928	110	47513	46.55	ug/L		95
104)	n-propylbenzene	14.960	91	821584	46.50	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159307.d
Acq On : 5 Feb 2020 10:15 pm
Operator : edwardd
Sample : JD2274-37msd Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:45:04 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

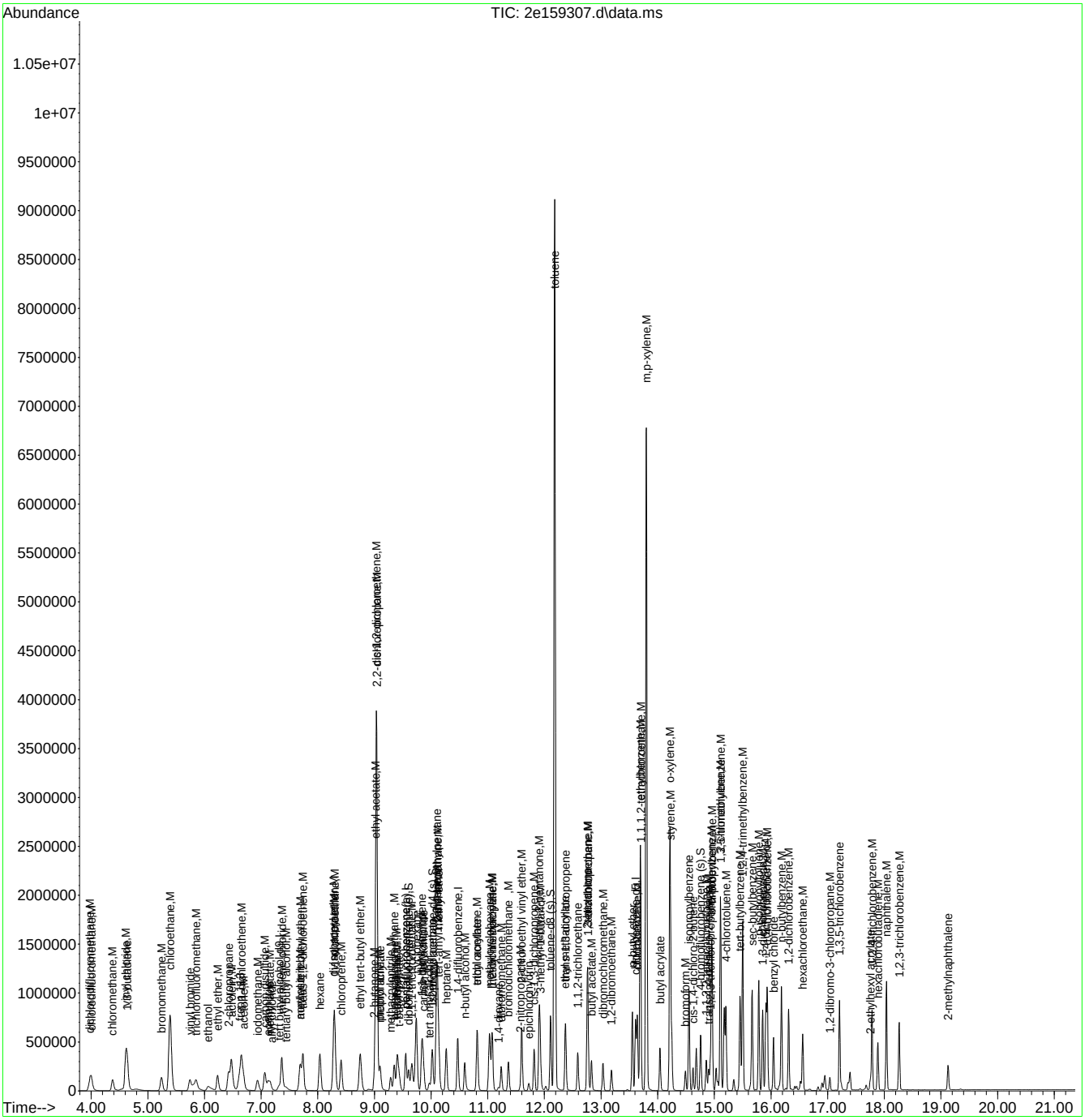
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 2-chlorotoluene	15.107	126	168779	46.10	ug/L	98
106) 4-chlorotoluene	15.206	91	498569	46.78	ug/L	99
107) 1,3,5-trimethylbenzene	15.112	105	655856	52.01	ug/L	99
108) tert-butylbenzene	15.453	119	510172	47.10	ug/L	100
109) 1,2,4-trimethylbenzene	15.500	105	806366	64.41	ug/L	98
110) sec-butylbenzene	15.668	105	736079	45.74	ug/L	99
111) 1,3-dichlorobenzene	15.851	146	339108	48.58	ug/L	97
112) p-isopropyltoluene	15.783	119	649564	47.54	ug/L	99
113) 1,4-dichlorobenzene	15.935	146	344857	48.71	ug/L	100
114) 1,2-dichlorobenzene	16.313	146	337783	48.67	ug/L	97
115) n-butylbenzene	16.187	92	322395	46.34	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.041	157	37322	47.43	ug/L	96
117) 1,3,5-trichlorobenzene	17.209	180	279437	49.06	ug/L	99
118) 1,2,4-trichlorobenzene	17.781	180	245435	48.48	ug/L	97
119) 2-ethylhexyl acrylate	17.754	70	25936	7.23	ug/L	93
120) hexachlorobutadiene	17.885	225	103595	42.98	ug/L	98
121) naphthalene	18.037	128	820042	72.59	ug/L	100
122) 1,2,3-trichlorobenzene	18.263	180	218671	46.72	ug/L	99
123) hexachloroethane	16.559	201	104605	52.45	ug/L	96
124) benzyl chloride	16.045	91	377811	51.32	ug/L	98
125) 2-methylnaphthalene	19.123	142	130681	21.86	ug/L	99
130) allyl chloride	7.190	78	204	0.31	ug/L #	1

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159307.d
Acq On : 5 Feb 2020 10:15 pm
Operator : edwardd
Sample : JD2274-37msd Inst : VOAMS2E
Misc : MS40758,V2E7090,5,,,,20
ALS Vial : 24 Sample Multiplier: 1

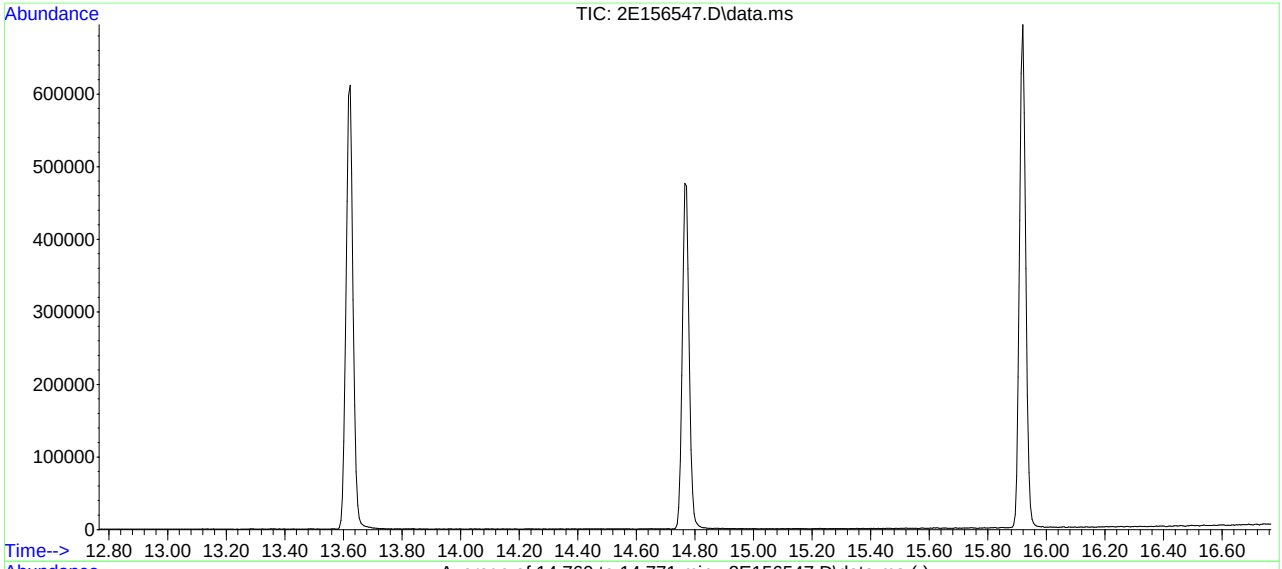
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 05 22:45:04 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

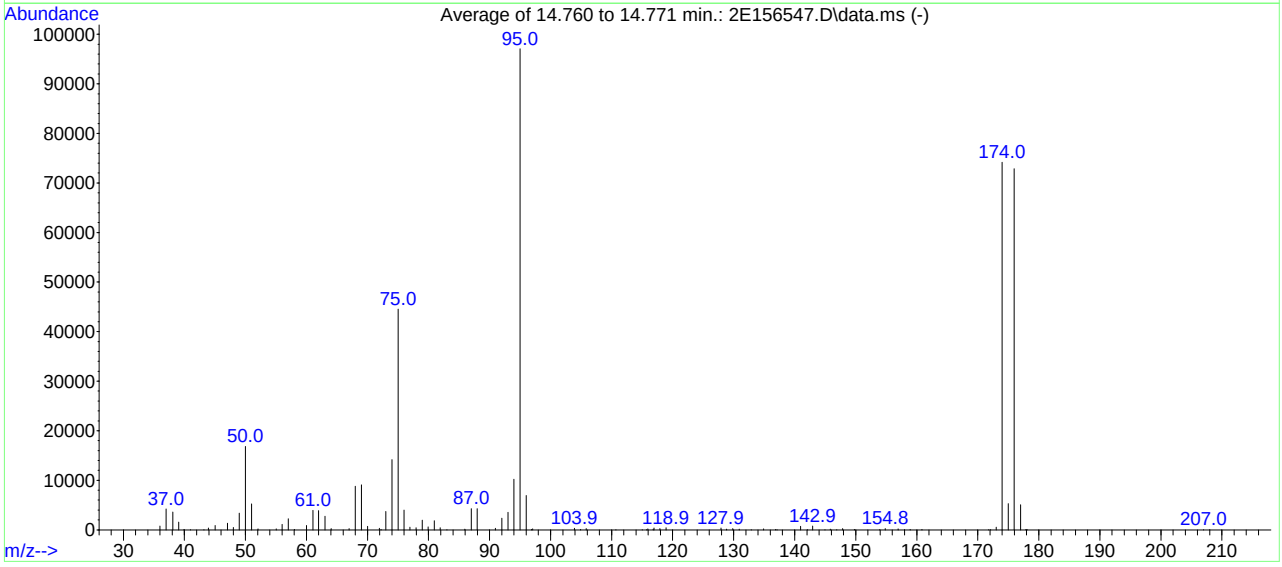


SW-846 Method 8260

Data File : C:\msdchem\1\data\V2E6949\2E156547.D Vial: 7
Acq On : 9 Oct 2019 2:58 pm Operator: roberts
Sample : bfb Inst : VOAMS2E
Misc : MS37796,V2E6949,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM





AutoFind: Scans 2093, 2094, 2095; Background Corrected with Scan 2084

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.3	16804	PASS
75	95	30	60	45.9	44533	PASS
95	95	100	100	100.0	97061	PASS
96	95	5	9	7.1	6930	PASS
173	174	0.00	2	0.7	530	PASS
174	95	50	120	76.4	74171	PASS
175	174	5	9	7.1	5280	PASS
176	174	95	101	98.2	72867	PASS
177	176	5	9	6.9	5060	PASS

2E156547.D M2E6949.M Thu Oct 10 14:31:16 2019

Average of 14.760 to 14.771 min.: 2E156547.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	795	49.00	3348	63.05	2723	76.00	3996
37.00	4236	50.00	16804	64.05	268	76.95	554
38.10	3614	51.00	5229	67.00	236	77.95	416
39.05	1563	52.05	224	68.00	8798	78.95	1943
39.95	60	55.05	202	69.00	9072	79.95	591
41.00	56	56.00	1111	70.00	706	80.95	1826
43.20	28	57.00	2222	71.95	295	81.90	402
43.95	365	58.05	88	72.20	115	83.00	39
45.05	859	60.00	874	73.00	3715	85.95	126
47.05	1337	61.05	3916	74.00	14187	87.00	4264
48.00	493	62.00	3849	75.00	44533	87.95	4260

Average of 14.760 to 14.771 min.: 2E156547.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
90.95	292	110.70	50	130.90	118	147.85	241
92.00	2362	115.00	23	132.90	52	149.80	90
93.00	3517	115.70	57	134.90	172	153.90	24
94.00	10224	115.95	183	136.90	77	154.85	239
95.00	97061	116.80	148	137.10	43	156.95	190
96.00	6930	116.95	354	140.95	720	158.00	24
96.90	96	117.90	285	142.10	28	158.90	83
97.05	175	118.90	423	142.95	788	160.85	111
103.90	319	127.90	371	144.95	56	171.80	24
104.90	106	128.85	140	145.85	125	172.10	28
105.85	287	129.85	273	146.90	36	173.00	530

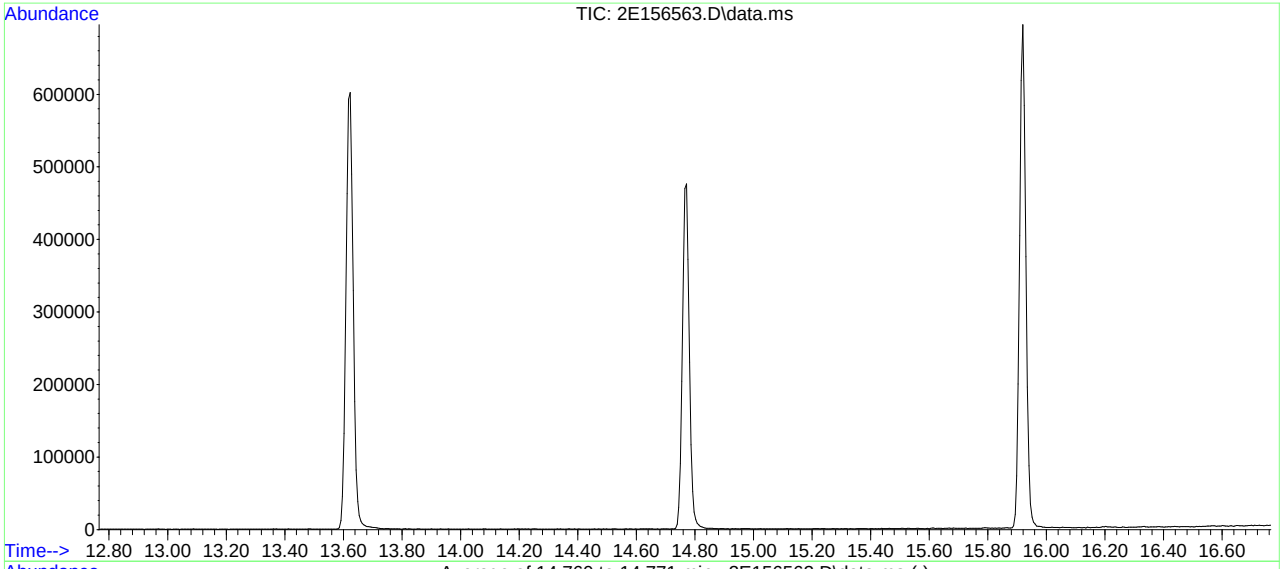
Average of 14.760 to 14.771 min.: 2E156547.D\data.ms
bfb
Modified:subtracted

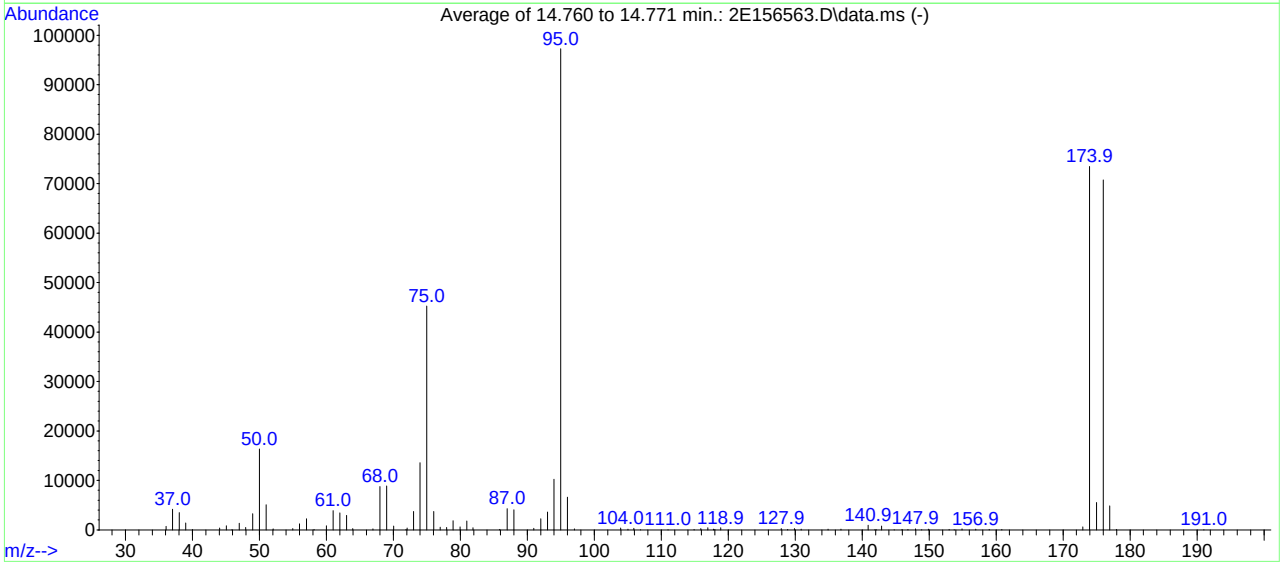
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.00	74171						
175.00	5280						
175.95	72867						
177.00	5060						
177.90	65						
178.05	108						
207.00	52						
208.00	24						

SW-846 Method 8260

Data File : C:\msdchem\1\data\V2E6949\2E156563.D Vial: 2
Acq On : 10 Oct 2019 8:55 am Operator: roberts
Sample : bfb2 Inst : VOAMS2E
Misc : MS37796,V2E6949,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM





AutoFind: Scans 2093, 2094, 2095; Background Corrected with Scan 2085

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.8	16357	PASS
75	95	30	60	46.5	45229	PASS
95	95	100	100	100.0	97245	PASS
96	95	5	9	6.8	6619	PASS
173	174	0.00	2	0.8	588	PASS
174	95	50	120	75.6	73472	PASS
175	174	5	9	7.5	5514	PASS
176	174	95	101	96.3	70725	PASS
177	176	5	9	6.9	4868	PASS

2E156563.D M2E6949.M Fri Oct 11 15:01:30 2019

Average of 14.760 to 14.771 min.: 2E156563.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	732	50.00	16357	63.95	254	77.00	548
37.05	4167	51.00	5087	66.95	210	77.95	474
38.05	3465	52.05	227	68.00	8754	78.90	1857
39.00	1375	55.00	240	69.00	8876	79.95	574
40.00	49	56.00	1212	70.05	759	80.95	1779
44.05	363	57.05	2253	71.90	107	81.90	400
45.05	819	58.15	94	72.05	350	85.85	81
45.90	30	60.00	805	73.00	3719	87.00	4282
47.00	1318	61.00	3906	74.00	13603	88.00	4067
47.95	456	62.00	3427	75.00	45229	90.95	298
49.00	3252	63.00	2925	76.05	3695	92.00	2212

Average of 14.760 to 14.771 min.: 2E156563.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.00	3603	115.90	275	140.90	912	153.75	56
94.00	10231	116.95	405	141.90	34	154.90	201
95.00	97245	117.80	168	142.10	31	156.95	136
96.00	6619	118.00	102	142.90	783	158.95	85
97.05	213	118.90	406	144.80	51	160.85	101
103.95	347	127.90	278	145.95	114	172.95	588
105.05	131	128.90	101	146.85	90	173.95	73472
105.90	328	129.90	264	147.95	228	175.00	5514
106.90	25	130.90	118	148.90	25	176.00	70725
111.00	30	134.90	168	149.90	148	176.95	4868
114.90	71	136.85	150	153.00	85	177.95	87

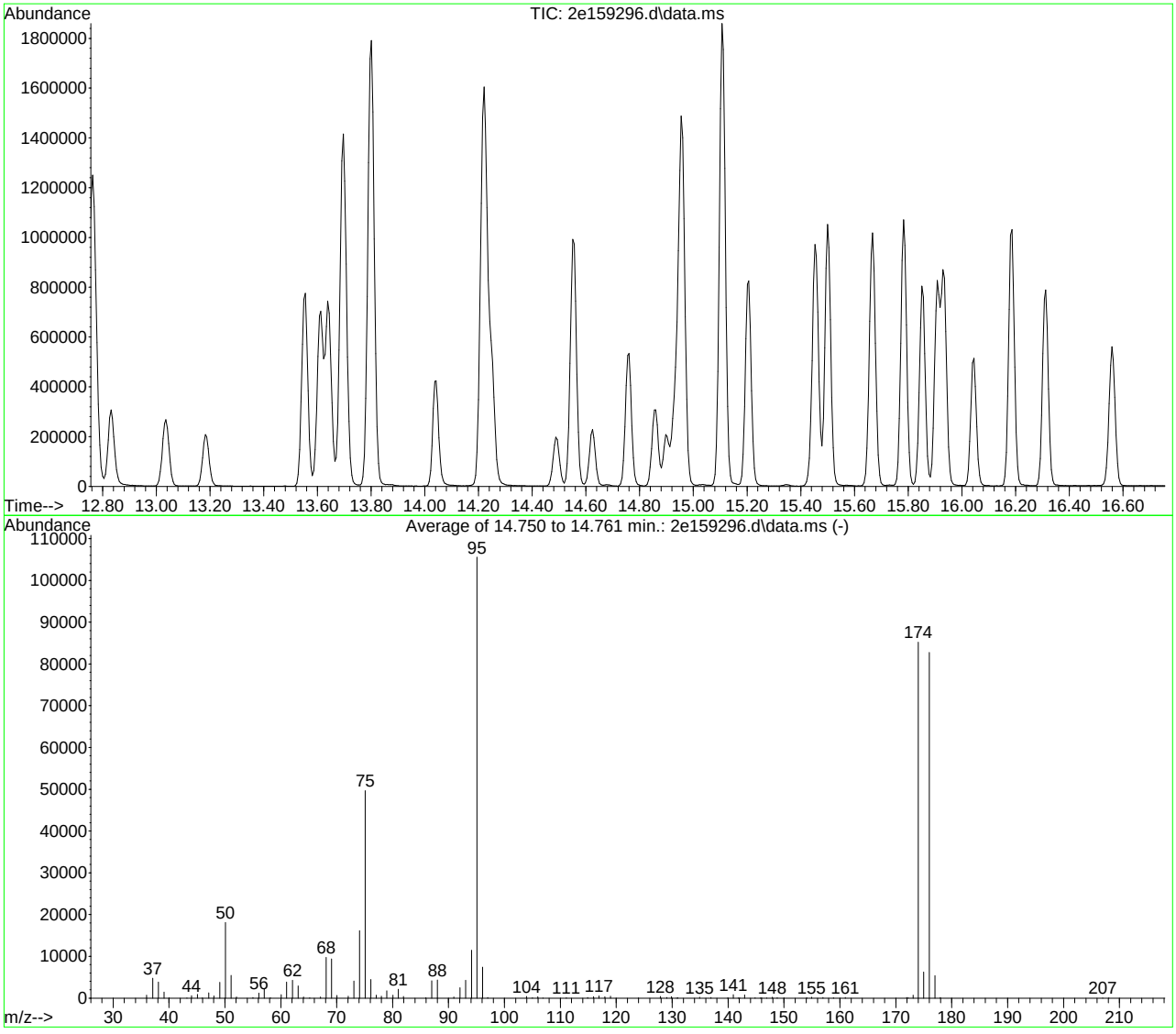
Average of 14.760 to 14.771 min.: 2E156563.D\data.ms
bfb2
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
191.00	24						

SW-846 Method 8260

Data File : C:\msdchem\1\data\kr...20\v2e7090\2e159296.d Vial: 13
Acq On : 5 Feb 2020 4:40 pm Operator: edwardd
Sample : bfb Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2E6949.M (RTE Integrator)
Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM



AutoFind: Scans 2091, 2092, 2093; Background Corrected with Scan 2083

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.2	18104	PASS
75	95	30	60	47.1	49664	PASS
95	95	100	100	100.0	105547	PASS
96	95	5	9	7.0	7411	PASS
173	174	0.00	2	0.8	722	PASS
174	95	50	120	80.7	85195	PASS
175	174	5	9	7.4	6274	PASS
176	174	95	101	97.1	82760	PASS
177	176	5	9	6.5	5404	PASS

2e159296.d M2E6949.M Thu Feb 06 12:07:20 2020

Average of 14.750 to 14.761 min.: 2e159296.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	730	49.10	3776	63.10	2945	76.10	4468
37.10	4753	50.10	18104	64.05	289	77.05	702
38.10	3858	51.10	5426	65.15	111	78.00	484
39.10	1479	52.05	291	67.10	277	78.95	1739
40.05	39	55.00	139	68.10	9764	80.05	714
43.20	29	56.05	1210	69.05	9403	81.00	2128
44.05	616	57.05	2146	70.05	633	81.95	380
45.10	917	58.15	123	72.05	481	85.95	124
45.95	51	60.05	861	73.05	4087	87.00	4182
47.10	1254	61.05	3824	74.10	16140	88.00	4357
48.05	535	62.10	4265	75.10	49664	90.95	299

Average of 14.750 to 14.761 min.: 2e159296.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	2515	114.90	139	134.90	198	147.90	197
93.05	4288	115.95	323	136.95	155	148.80	83
94.10	11461	116.90	504	139.90	27	150.00	52
95.10	105547	117.95	322	140.95	848	154.05	64
96.10	7411	118.95	450	141.80	31	154.95	196
97.00	179	124.00	31	142.10	31	156.95	161
103.95	423	127.90	429	142.95	779	158.85	109
105.00	73	129.05	160	144.85	101	160.95	128
105.95	362	129.85	354	145.80	42	171.95	146
106.90	58	130.80	47	146.00	78	172.20	69
111.05	69	131.00	70	146.90	60	173.10	722

Average of 14.750 to 14.761 min.: 2e159296.d\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.00	85195						
175.00	6274						
176.00	82760						
177.00	5404						
177.95	181						
207.00	55						
208.10	23						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156548.D
Acq On : 9 Oct 2019 3:27 pm
Operator : roberts
Sample : ic6949-0.2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:14:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.331	65	120996	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	292319	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	447138	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	356700	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	175585	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	126004	48.40	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.80%				
55) 1,2-dichloroethane-d4 (s)	10.037	65	132897	49.49	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.98%				
76) toluene-d8 (s)	12.118	98	500879	50.92	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.84%				
99) 4-bromofluorobenzene (s)	14.766	95	173122	50.63	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.26%				
Target Compounds							Qvalue
9) vinyl chloride	4.615	62	1070	0.20	ug/L		93
14) vinyl bromide	5.748	106	521	0.21	ug/L		94
19) 1,1-dichloroethene	6.665	61	892	0.20	ug/L		99
23) carbon disulfide	7.074	76	1717	0.21	ug/L		84
26) methyl tert butyl ether	7.714	73	2027	0.24	ug/L		95
29) di-isopropyl ether	8.296	45	2424	0.21	ug/L	#	43
30) ethyl tert-butyl ether	8.762	59	1881	0.19	ug/L		89
32) 1,1-dichloroethane	8.312	63	1040	0.19	ug/L		86
33) chloroprene	8.432	53	939	0.20	ug/L		84
46) carbon tetrachloride	9.879	117	807	0.20	ug/L		84
50) 1,1,1-trichloroethane	9.670	97	971	0.21	ug/L		86
58) benzene	10.110	78	3083	0.25	ug/L		91
59) tert-amyl methyl ether	10.147	73	2388	0.25	ug/L		88
63) trichloroethene	10.833	95	754	0.26	ug/L		92
67) 1,2-dichloropropane	11.090	63	679	0.21	ug/L		88
70) bromodichloromethane	11.384	83	767	0.20	ug/L		83
72) cis-1,3-dichloropropene	11.835	75	980	0.19	ug/L	#	65
77) toluene	12.197	92	1586	0.22	ug/L	#	83
78) ethyl methacrylate	12.396	69	662	0.19	ug/L		72
79) trans-1,3-dichloropropene	12.401	75	798	0.19	ug/L		99
80) 1,1,2-trichloroethane	12.606	83	400	0.20	ug/L	#	87
81) tetrachloroethene	12.768	164	415	0.18	ug/L		86
82) 2-hexanone	12.794	58	599	0.59	ug/L	#	92
83) 1,3-dichloropropane	12.789	76	899	0.21	ug/L		87
85) dibromochloromethane	13.051	129	466	0.17	ug/L		70
86) 1,2-dibromoethane	13.203	107	441	0.16	ug/L		92
87) n-butyl ether	13.565	57	2374	0.18	ug/L		97
88) chlorobenzene	13.649	112	1580	0.21	ug/L		83
89) 1,1,1,2-tetrachloroethane	13.712	131	530	0.19	ug/L	#	73
90) ethylbenzene	13.707	91	2763	0.21	ug/L		88
91) m,p-xylene	13.817	106	2167	0.42	ug/L	#	70
92) o-xylene	14.226	91	2223	0.21	ug/L		91
93) styrene	14.236	104	1525	0.18	ug/L		98
94) butyl acrylate	14.074	55	761	0.14	ug/L		89
96) isopropylbenzene	14.567	105	2819	0.21	ug/L		98
100) bromobenzene	14.965	156	656	0.21	ug/L	#	67
101) 1,1,2,2-tetrachloroethane	14.871	83	560	0.18	ug/L		69
104) n-propylbenzene	14.975	91	3212	0.21	ug/L		88
105) 2-chlorotoluene	15.122	126	731	0.24	ug/L	#	69
106) 4-chlorotoluene	15.217	91	1925	0.22	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156548.D
Acq On : 9 Oct 2019 3:27 pm
Operator : roberts
Sample : ic6949-0.2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:14:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

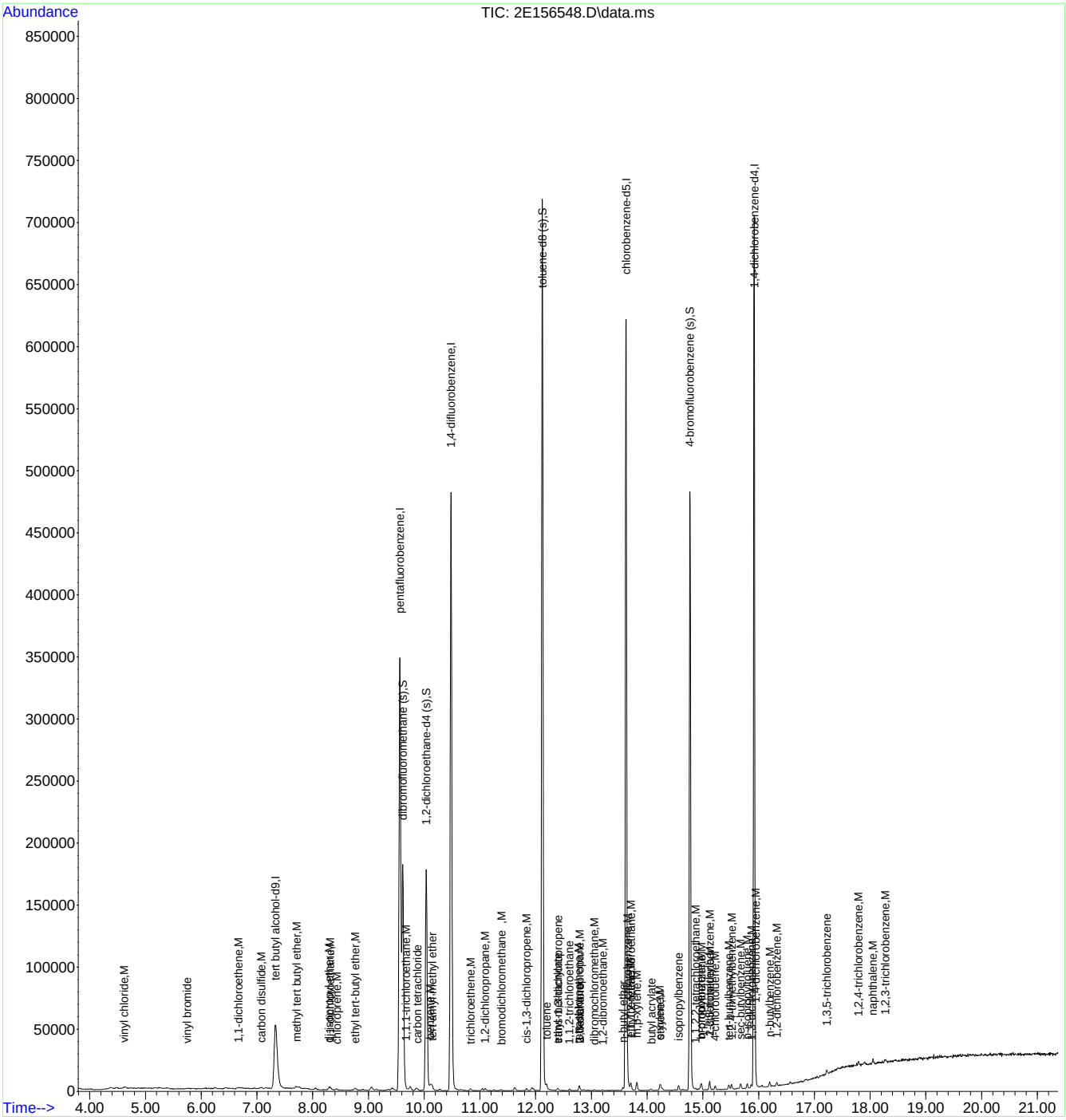
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,3,5-trimethylbenzene	15.122	105	2314	0.21	ug/L	89
108) tert-butylbenzene	15.463	119	1818	0.19	ug/L	95
109) 1,2,4-trimethylbenzene	15.516	105	2178	0.20	ug/L	99
110) sec-butylbenzene	15.678	105	2798	0.20	ug/L	88
111) 1,3-dichlorobenzene	15.872	146	1330	0.23	ug/L	83
112) p-isopropyltoluene	15.793	119	2502	0.21	ug/L	95
113) 1,4-dichlorobenzene	15.945	146	1305	0.22	ug/L	79
114) 1,2-dichlorobenzene	16.323	146	1337	0.23	ug/L	88
115) n-butylbenzene	16.197	92	1175	0.19	ug/L	96
117) 1,3,5-trichlorobenzene	17.220	180	1046	0.21	ug/L	86
118) 1,2,4-trichlorobenzene	17.791	180	950	0.22	ug/L	95
121) naphthalene	18.048	128	1991	0.20	ug/L	87
122) 1,2,3-trichlorobenzene	18.273	180	905	0.23	ug/L	76

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156548.D
Acq On : 9 Oct 2019 3:27 pm
Operator : roberts
Sample : ic6949-0.2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:14:52 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156549.D
Acq On : 9 Oct 2019 3:58 pm
Operator : roberts
Sample : ic6949-0.5
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 10 14:17:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.342	65	124945	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	290915	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	443931	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	358916	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	179950	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	124766	48.15	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.30%				
55) 1,2-dichloroethane-d4 (s)	10.036	65	133922	50.23	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.46%				
76) toluene-d8 (s)	12.118	98	500833	50.60	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.20%				
99) 4-bromofluorobenzene (s)	14.766	95	176410	50.34	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.68%				
Target Compounds							Qvalue
6) chlorodifluoromethane	4.017	51	2477	0.50	ug/L		93
8) chloromethane	4.390	50	2780	0.54	ug/L		93
9) vinyl chloride	4.626	62	2445	0.47	ug/L		88
11) chloroethane	5.396	64	1347	0.51	ug/L		85
12) trichlorofluoromethane	5.858	101	1661	0.37	ug/L		91
13) 1,3-butadiene	4.647	54	1643	0.46	ug/L		92
14) vinyl bromide	5.748	106	1157	0.47	ug/L		96
15) ethyl ether	6.256	74	969	0.55	ug/L	#	83
19) 1,1-dichloroethene	6.670	61	2297	0.51	ug/L		78
22) iodomethane	6.959	142	1789	0.50	ug/L		94
23) carbon disulfide	7.085	76	4060	0.51	ug/L		95
26) methyl tert butyl ether	7.730	73	4611	0.54	ug/L		97
27) trans-1,2-dichloroethene	7.761	61	2109	0.50	ug/L		85
28) hexane	8.065	56	880	0.36	ug/L	#	85
29) di-isopropyl ether	8.296	45	5719	0.51	ug/L	#	45
30) ethyl tert-butyl ether	8.773	59	4962	0.50	ug/L		97
32) 1,1-dichloroethane	8.322	63	2949	0.53	ug/L		93
33) chloroprene	8.437	53	2301	0.50	ug/L		87
34) acrylonitrile	7.714	53	535	0.49	ug/L		84
37) 2,2-dichloropropane	9.066	77	2693	0.58	ug/L		87
38) cis-1,2-dichloroethene	9.046	96	1813	0.55	ug/L	#	69
39) propionitrile	9.145	54	1772	4.29	ug/L		69
41) bromochloromethane	9.376	128	800	0.52	ug/L	#	69
43) chloroform	9.418	83	2870	0.57	ug/L		93
44) t-butyl formate	9.460	59	1498	0.49	ug/L	#	68
45) 1,1-dichloropropene	9.853	75	2213	0.53	ug/L		89
46) carbon tetrachloride	9.874	117	1976	0.50	ug/L		87
50) 1,1,1-trichloroethane	9.675	97	2333	0.51	ug/L		95
58) benzene	10.115	78	6716	0.55	ug/L		93
59) tert-amyl methyl ether	10.147	73	5317	0.56	ug/L		94
63) trichloroethene	10.828	95	1409	0.48	ug/L		92
65) 2-chloroethyl vinyl ether	11.625	63	4031	2.17	ug/L		94
67) 1,2-dichloropropane	11.090	63	1592	0.49	ug/L		89
69) dibromomethane	11.248	93	829	0.49	ug/L		87
70) bromodichloromethane	11.379	83	1845	0.48	ug/L		85
72) cis-1,3-dichloropropene	11.840	75	2312	0.45	ug/L		95
73) 4-methyl-2-pentanone	11.929	58	1918	1.74	ug/L		88
77) toluene	12.197	92	3956	0.54	ug/L	#	81
78) ethyl methacrylate	12.391	69	1443	0.40	ug/L		85
79) trans-1,3-dichloropropene	12.391	75	1868	0.44	ug/L		67

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156549.D
Acq On : 9 Oct 2019 3:58 pm
Operator : roberts
Sample : ic6949-0.5
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 10 14:17:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

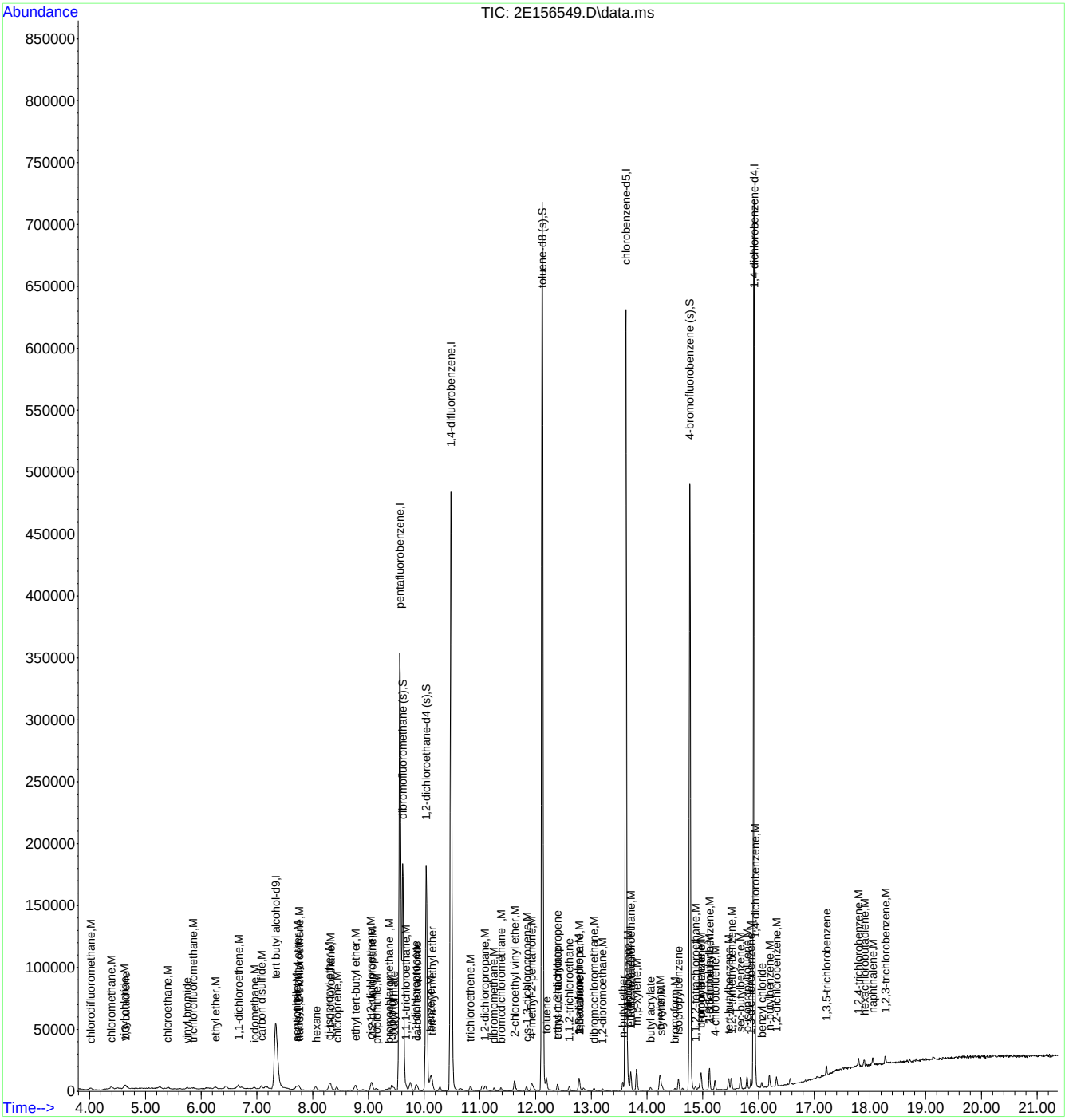
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
80)	1,1,2-trichloroethane	12.606	83	1062	0.52	ug/L	#	81
81)	tetrachloroethene	12.779	164	1251	0.54	ug/L		90
82)	2-hexanone	12.789	58	1517	1.49	ug/L	#	85
83)	1,3-dichloropropane	12.784	76	2115	0.50	ug/L		83
85)	dibromochloromethane	13.046	129	1425	0.52	ug/L		82
86)	1,2-dibromoethane	13.198	107	1268	0.47	ug/L		90
87)	n-butyl ether	13.565	57	6358	0.48	ug/L		97
88)	chlorobenzene	13.654	112	3958	0.52	ug/L		98
89)	1,1,1,2-tetrachloroethane	13.712	131	1314	0.47	ug/L		86
90)	ethylbenzene	13.707	91	6949	0.52	ug/L		96
91)	m,p-xylene	13.817	106	5133	0.98	ug/L		91
92)	o-xylene	14.231	91	5521	0.51	ug/L		94
93)	styrene	14.247	104	3682	0.43	ug/L		97
94)	butyl acrylate	14.063	55	2255	0.40	ug/L		89
95)	bromoform	14.498	173	707	0.42	ug/L		91
96)	isopropylbenzene	14.566	105	6421	0.48	ug/L		94
100)	bromobenzene	14.965	156	1514	0.48	ug/L		90
101)	1,1,2,2-tetrachloroethane	14.871	83	1428	0.46	ug/L		79
104)	n-propylbenzene	14.970	91	7795	0.51	ug/L		92
105)	2-chlorotoluene	15.117	126	1650	0.53	ug/L	#	78
106)	4-chlorotoluene	15.222	91	4856	0.53	ug/L		95
107)	1,3,5-trimethylbenzene	15.122	105	5587	0.51	ug/L		90
108)	tert-butylbenzene	15.463	119	4705	0.49	ug/L		95
109)	1,2,4-trimethylbenzene	15.515	105	5622	0.51	ug/L		90
110)	sec-butylbenzene	15.678	105	7217	0.50	ug/L		94
111)	1,3-dichlorobenzene	15.861	146	2999	0.50	ug/L		93
112)	p-isopropyltoluene	15.793	119	5794	0.48	ug/L		96
113)	1,4-dichlorobenzene	15.940	146	3081	0.51	ug/L		80
114)	1,2-dichlorobenzene	16.323	146	3138	0.53	ug/L		95
115)	n-butylbenzene	16.197	92	3043	0.49	ug/L		91
117)	1,3,5-trichlorobenzene	17.219	180	2413	0.48	ug/L		95
118)	1,2,4-trichlorobenzene	17.796	180	2220	0.50	ug/L		85
120)	hexachlorobutadiene	17.901	225	986	0.46	ug/L		91
121)	naphthalene	18.053	128	4633	0.45	ug/L		98
122)	1,2,3-trichlorobenzene	18.279	180	2066	0.50	ug/L		93
124)	benzyl chloride	16.061	91	3295	0.50	ug/L		92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156549.D
Acq On : 9 Oct 2019 3:58 pm
Operator : roberts
Sample : ic6949-0.5
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Oct 10 14:17:27 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156550.D
Acq On : 9 Oct 2019 4:29 pm
Operator : roberts
Sample : ic6949-1
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 14:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:33:26 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.336	65	118633	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	266713	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	416385	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	343722	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	169935	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	118668	50.28	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.56%				
55) 1,2-dichloroethane-d4 (s)	10.037	65	128560	51.31	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.62%				
76) toluene-d8 (s)	12.118	98	473927	49.92	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.84%				
99) 4-bromofluorobenzene (s)	14.766	95	167069	50.42	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.84%				
Target Compounds							Qvalue
2) ethanol	6.078	45	3807	117.95	ug/L		81
3) tertiary butyl alcohol	7.452	59	1561	4.93	ug/L		85
6) chlorodifluoromethane	4.018	51	4975	1.11	ug/L		94
7) dichlorodifluoromethane	3.997	85	2975	0.88	ug/L		85
8) chloromethane	4.385	50	5241	1.12	ug/L		94
9) vinyl chloride	4.610	62	4672	1.01	ug/L		89
10) bromomethane	5.265	94	2997	1.11	ug/L		83
11) chloroethane	5.402	64	2591	1.09	ug/L		99
12) trichlorofluoromethane	5.853	101	3816	0.99	ug/L		93
13) 1,3-butadiene	4.641	54	3240	1.04	ug/L		94
14) vinyl bromide	5.742	106	2208	0.99	ug/L		90
15) ethyl ether	6.251	74	1746	1.05	ug/L	#	81
16) 2-chloropropane	6.440	43	6116	1.17	ug/L		88
18) freon 113	6.650	151	1766	0.88	ug/L		93
19) 1,1-dichloroethene	6.671	61	4221	1.03	ug/L		98
20) acetone	6.723	43	4367	5.62	ug/L		89
22) iodomethane	6.943	142	3479	1.05	ug/L		97
23) carbon disulfide	7.079	76	7744	1.05	ug/L		88
24) methylene chloride	7.373	84	3592	1.22	ug/L		87
26) methyl tert butyl ether	7.719	73	8343	1.05	ug/L		93
27) trans-1,2-dichloroethene	7.756	61	4077	1.07	ug/L		97
28) hexane	8.065	56	2137	1.02	ug/L	#	48
29) di-isopropyl ether	8.301	45	11313	1.10	ug/L	#	74
30) ethyl tert-butyl ether	8.768	59	9608	1.07	ug/L		96
31) 2-butanone	9.030	72	868	3.19	ug/L	#	65
32) 1,1-dichloroethane	8.322	63	5393	1.06	ug/L		98
33) chloroprene	8.427	53	4328	1.04	ug/L		93
34) acrylonitrile	7.709	53	1025	1.03	ug/L		70
35) vinyl acetate	8.317	86	426	0.73	ug/L	#	1
36) ethyl acetate	9.067	45	473	1.08	ug/L	#	74
37) 2,2-dichloropropane	9.056	77	5150	1.17	ug/L		82
38) cis-1,2-dichloroethene	9.056	96	3547	1.14	ug/L		88
39) propionitrile	9.130	54	3665	10.22	ug/L		76
41) bromochloromethane	9.365	128	1436	1.01	ug/L	#	69
43) chloroform	9.418	83	5089	1.07	ug/L		92
44) t-butyl formate	9.455	59	3062	1.11	ug/L		77
45) 1,1-dichloropropene	9.858	75	3932	1.03	ug/L		97
46) carbon tetrachloride	9.874	117	3737	1.03	ug/L		93
49) methacrylonitrile	9.323	67	876	0.88	ug/L		88
50) 1,1,1-trichloroethane	9.675	97	4450	1.05	ug/L		84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156550.D
Acq On : 9 Oct 2019 4:29 pm
Operator : roberts
Sample : ic6949-1
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 14:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:33:26 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51)	cyclohexane	9.743	84	3998	0.92	ug/L	#	90
56)	2,2,4-trimethylpentane	10.099	57	8356	0.94	ug/L		86
57)	n-butyl alcohol	10.640	56	3474	48.17	ug/L		88
58)	benzene	10.110	78	12743	1.07	ug/L		95
59)	tert-amyl methyl ether	10.147	73	9491	1.03	ug/L		99
60)	heptane	10.283	57	1746	0.86	ug/L		85
61)	1,2-dichloroethane	10.126	62	4167	1.19	ug/L		91
62)	ethyl acrylate	10.854	55	2889	0.92	ug/L		86
63)	trichloroethene	10.828	95	2565	0.93	ug/L		78
65)	2-chloroethyl vinyl ether	11.615	63	8319	5.03	ug/L		98
67)	1,2-dichloropropane	11.090	63	3359	1.11	ug/L		82
68)	methylcyclohexane	11.043	83	4677	0.95	ug/L		92
69)	dibromomethane	11.253	93	1743	1.10	ug/L		90
70)	bromodichloromethane	11.379	83	3697	1.05	ug/L		92
71)	epichlorohydrin	11.751	57	1235	4.93	ug/L	#	57
72)	cis-1,3-dichloropropene	11.840	75	4665	1.01	ug/L		96
73)	4-methyl-2-pentanone	11.924	58	3698	3.82	ug/L		93
77)	toluene	12.191	92	7082	1.01	ug/L		93
78)	ethyl methacrylate	12.385	69	2974	0.95	ug/L		89
79)	trans-1,3-dichloropropene	12.396	75	3712	0.96	ug/L		92
80)	1,1,2-trichloroethane	12.600	83	1864	0.96	ug/L		93
81)	tetrachloroethene	12.773	164	2432	1.10	ug/L		93
82)	2-hexanone	12.779	58	3168	3.70	ug/L	#	85
83)	1,3-dichloropropane	12.784	76	4313	1.05	ug/L		94
84)	butyl acetate	12.857	56	1825	1.04	ug/L		92
85)	dibromochloromethane	13.046	129	2456	0.98	ug/L		98
86)	1,2-dibromoethane	13.198	107	2618	1.05	ug/L		86
87)	n-butyl ether	13.565	57	12868	1.05	ug/L		95
88)	chlorobenzene	13.654	112	7250	0.99	ug/L		96
89)	1,1,1,2-tetrachloroethane	13.712	131	2618	1.00	ug/L		84
90)	ethylbenzene	13.707	91	12664	0.99	ug/L		95
91)	m,p-xylene	13.812	106	9822	1.99	ug/L		99
92)	o-xylene	14.226	91	10525	1.02	ug/L		96
93)	styrene	14.241	104	7343	0.96	ug/L		95
94)	butyl acrylate	14.058	55	4515	0.96	ug/L		90
95)	bromoform	14.498	173	1343	0.88	ug/L		84
96)	isopropylbenzene	14.567	105	12606	1.00	ug/L		96
100)	bromobenzene	14.965	156	3103	1.04	ug/L		84
101)	1,1,2,2-tetrachloroethane	14.871	83	3217	1.12	ug/L		95
103)	1,2,3-trichloropropane	14.949	110	879	1.05	ug/L		95
104)	n-propylbenzene	14.970	91	14937	1.03	ug/L		99
105)	2-chlorotoluene	15.122	126	2930	0.98	ug/L		92
106)	4-chlorotoluene	15.217	91	9255	1.06	ug/L		92
107)	1,3,5-trimethylbenzene	15.122	105	10450	1.01	ug/L		96
108)	tert-butylbenzene	15.463	119	9287	1.05	ug/L		93
109)	1,2,4-trimethylbenzene	15.516	105	10274	1.00	ug/L		94
110)	sec-butylbenzene	15.678	105	13563	1.03	ug/L		99
111)	1,3-dichlorobenzene	15.867	146	5720	1.00	ug/L		97
112)	p-isopropyltoluene	15.793	119	11337	1.01	ug/L		98
113)	1,4-dichlorobenzene	15.945	146	5800	1.00	ug/L		91
114)	1,2-dichlorobenzene	16.323	146	5716	1.01	ug/L		94
115)	n-butylbenzene	16.197	92	5861	1.03	ug/L		91
116)	1,2-dibromo-3-chloropr...	17.052	157	672	1.04	ug/L		85
117)	1,3,5-trichlorobenzene	17.220	180	4666	1.00	ug/L		98
118)	1,2,4-trichlorobenzene	17.796	180	3924	0.95	ug/L		96
120)	hexachlorobutadiene	17.896	225	1927	0.98	ug/L		95
121)	naphthalene	18.053	128	9061	0.98	ug/L		99
122)	1,2,3-trichlorobenzene	18.279	180	3784	0.99	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156550.D
Acq On : 9 Oct 2019 4:29 pm
Operator : roberts
Sample : ic6949-1
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 14:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:33:26 2019
Response via : Initial Calibration

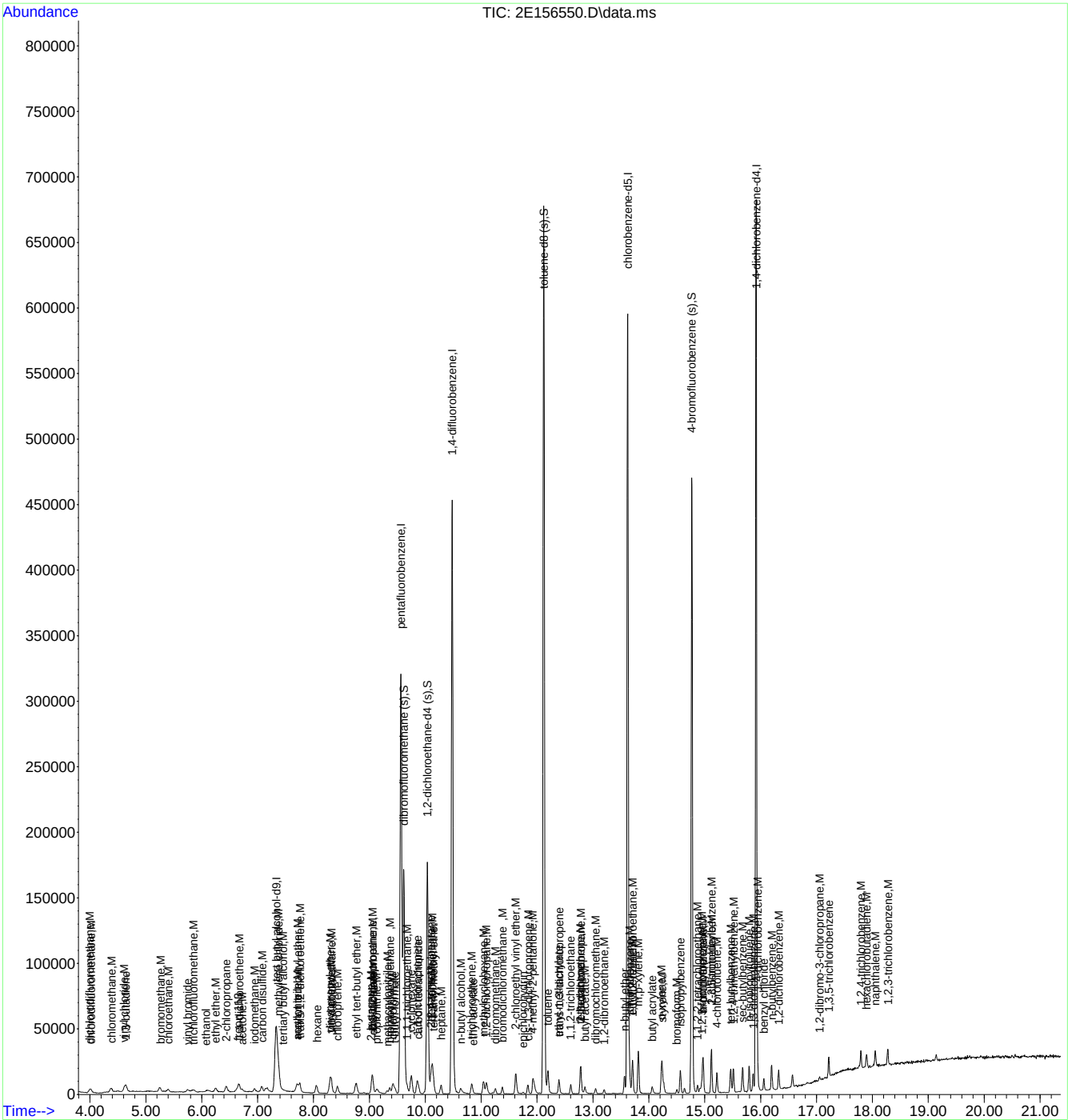
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
124) benzyl chloride	16.056	91	6534	1.08	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156550.D
Acq On : 9 Oct 2019 4:29 pm
Operator : roberts
Sample : ic6949-1
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Oct 10 14:35:36 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:33:26 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156551.D
Acq On : 9 Oct 2019 4:59 pm
Operator : roberts
Sample : ic6949-2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 10 14:24:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.336	65	122311	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	289736	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	446740	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	365669	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	185498	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	129456	50.16	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.32%				
55) 1,2-dichloroethane-d4 (s)	10.037	65	137158	51.12	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.24%				
76) toluene-d8 (s)	12.118	98	505962	50.18	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%				
99) 4-bromofluorobenzene (s)	14.766	95	179005	49.55	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.10%				
Target Compounds							Qvalue
2) ethanol	6.094	45	6846	208.53	ug/L		91
3) tertiary butyl alcohol	7.468	59	3231	9.43	ug/L		86
4) 1,4-dioxane	11.211	88	1417	50.66	ug/L	#	65
6) chlorodifluoromethane	4.023	51	9576	1.94	ug/L		96
7) dichlorodifluoromethane	3.991	85	7447	1.89	ug/L		96
8) chloromethane	4.395	50	10398	2.04	ug/L		97
9) vinyl chloride	4.626	62	9998	1.91	ug/L		97
10) bromomethane	5.255	94	6190	2.12	ug/L		95
11) chloroethane	5.407	64	5204	2.00	ug/L		95
12) trichlorofluoromethane	5.858	101	8710	1.95	ug/L		88
13) 1,3-butadiene	4.647	54	6558	1.85	ug/L		89
14) vinyl bromide	5.753	106	5105	2.08	ug/L		90
15) ethyl ether	6.246	74	3758	2.12	ug/L		97
16) 2-chloropropane	6.445	43	12445	2.23	ug/L		92
18) freon 113	6.650	151	4214	1.90	ug/L	#	77
19) 1,1-dichloroethene	6.671	61	8729	1.93	ug/L		98
20) acetone	6.723	43	6764	8.66	ug/L		94
22) iodomethane	6.948	142	7130	1.98	ug/L		98
23) carbon disulfide	7.080	76	15442	1.94	ug/L		96
24) methylene chloride	7.384	84	6610	2.20	ug/L		91
25) methyl acetate	7.179	43	4305	2.01	ug/L		88
26) methyl tert butyl ether	7.714	73	16667	1.98	ug/L		95
27) trans-1,2-dichloroethene	7.761	61	8111	1.94	ug/L		94
28) hexane	8.060	56	4548	1.89	ug/L	#	83
29) di-isopropyl ether	8.296	45	20727	1.84	ug/L	#	62
30) ethyl tert-butyl ether	8.768	59	19000	1.92	ug/L		90
31) 2-butanone	9.040	72	2082	6.43	ug/L	#	58
32) 1,1-dichloroethane	8.317	63	11150	2.00	ug/L		96
33) chloroprene	8.427	53	9046	1.96	ug/L		96
34) acrylonitrile	7.714	53	2266	2.07	ug/L		82
35) vinyl acetate	8.317	86	1181	1.73	ug/L	#	40
36) ethyl acetate	9.056	45	1043	2.28	ug/L	#	62
37) 2,2-dichloropropane	9.056	77	9850	2.13	ug/L		97
38) cis-1,2-dichloroethene	9.056	96	6645	2.02	ug/L		88
39) propionitrile	9.135	54	7496	18.20	ug/L		89
41) bromochloromethane	9.371	128	3008	1.98	ug/L		96
42) tetrahydrofuran	9.418	72	887	2.37	ug/L	#	37
43) chloroform	9.423	83	10266	2.05	ug/L		93
44) t-butyl formate	9.444	59	5660	1.86	ug/L		83
45) 1,1-dichloropropene	9.853	75	8076	1.93	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156551.D
Acq On : 9 Oct 2019 4:59 pm
Operator : roberts
Sample : ic6949-2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 10 14:24:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	carbon tetrachloride	9.869	117	7638	1.93	ug/L		91
47)	isopropyl acetate	10.031	87	1235	1.80	ug/L	#	50
49)	methacrylonitrile	9.318	67	2055	1.77	ug/L		97
50)	1,1,1-trichloroethane	9.675	97	8900	1.95	ug/L		99
51)	cyclohexane	9.748	84	9659	1.96	ug/L		95
56)	2,2,4-trimethylpentane	10.105	57	18155	1.81	ug/L		98
57)	n-butyl alcohol	10.629	56	7429	87.15	ug/L		100
58)	benzene	10.115	78	24802	2.03	ug/L		99
59)	tert-amyl methyl ether	10.141	73	19157	2.00	ug/L		96
60)	heptane	10.283	57	4124	1.76	ug/L		92
61)	1,2-dichloroethane	10.131	62	7788	2.13	ug/L		95
62)	ethyl acrylate	10.844	55	6359	1.77	ug/L		95
63)	trichloroethene	10.834	95	5822	1.98	ug/L		90
65)	2-chloroethyl vinyl ether	11.615	63	16970	9.06	ug/L		99
66)	methyl methacrylate	11.111	100	1344	1.78	ug/L	#	39
67)	1,2-dichloropropane	11.090	63	6086	1.87	ug/L		97
68)	methylcyclohexane	11.049	83	9933	1.79	ug/L		92
69)	dibromomethane	11.253	93	3334	1.95	ug/L		96
70)	bromodichloromethane	11.379	83	7192	1.86	ug/L		95
71)	epichlorohydrin	11.751	57	2635	9.39	ug/L		91
72)	cis-1,3-dichloropropene	11.830	75	9763	1.90	ug/L		95
73)	4-methyl-2-pentanone	11.924	58	7805	7.04	ug/L		99
74)	3-methyl-1-butanol	11.956	70	2995	33.72	ug/L	#	76
77)	toluene	12.197	92	14059	1.90	ug/L		98
78)	ethyl methacrylate	12.385	69	6077	1.67	ug/L		97
79)	trans-1,3-dichloropropene	12.391	75	7872	1.81	ug/L		95
80)	1,1,2-trichloroethane	12.600	83	4232	2.03	ug/L		93
81)	tetrachloroethene	12.779	164	4552	1.92	ug/L		99
82)	2-hexanone	12.779	58	7013	6.77	ug/L		96
83)	1,3-dichloropropane	12.779	76	8624	1.98	ug/L		89
84)	butyl acetate	12.852	56	3275	1.67	ug/L		89
85)	dibromochloromethane	13.046	129	4924	1.77	ug/L		99
86)	1,2-dibromoethane	13.198	107	5022	1.82	ug/L		84
87)	n-butyl ether	13.560	57	25121	1.84	ug/L		99
88)	chlorobenzene	13.649	112	15300	1.96	ug/L		89
89)	1,1,1,2-tetrachloroethane	13.712	131	5479	1.92	ug/L		93
90)	ethylbenzene	13.707	91	26320	1.93	ug/L		99
91)	m,p-xylene	13.817	106	20901	3.94	ug/L		94
92)	o-xylene	14.226	91	21217	1.92	ug/L		95
93)	styrene	14.242	104	15356	1.75	ug/L		96
94)	butyl acrylate	14.053	55	9139	1.61	ug/L		98
95)	bromoform	14.504	173	3084	1.79	ug/L		98
96)	isopropylbenzene	14.561	105	26138	1.90	ug/L		95
97)	cis-1,4-dichloro-2-butene	14.635	75	2038	1.63	ug/L		89
100)	bromobenzene	14.965	156	6407	1.98	ug/L		87
101)	1,1,2,2-tetrachloroethane	14.871	83	5902	1.83	ug/L		99
102)	trans-1,4-dichloro-2-b...	14.913	53	1548	1.83	ug/L		91
103)	1,2,3-trichloropropane	14.939	110	1812	2.04	ug/L		91
104)	n-propylbenzene	14.970	91	30973	1.95	ug/L		99
105)	2-chlorotoluene	15.122	126	6311	1.96	ug/L		89
106)	4-chlorotoluene	15.217	91	18377	1.96	ug/L		98
107)	1,3,5-trimethylbenzene	15.122	105	21637	1.90	ug/L		97
108)	tert-butylbenzene	15.463	119	18501	1.88	ug/L		94
109)	1,2,4-trimethylbenzene	15.510	105	20813	1.82	ug/L		99
110)	sec-butylbenzene	15.678	105	27414	1.86	ug/L		97
111)	1,3-dichlorobenzene	15.867	146	12039	1.96	ug/L		96
112)	p-isopropyltoluene	15.793	119	23096	1.84	ug/L		98
113)	1,4-dichlorobenzene	15.946	146	12268	1.95	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156551.D
Acq On : 9 Oct 2019 4:59 pm
Operator : roberts
Sample : ic6949-2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 10 14:24:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

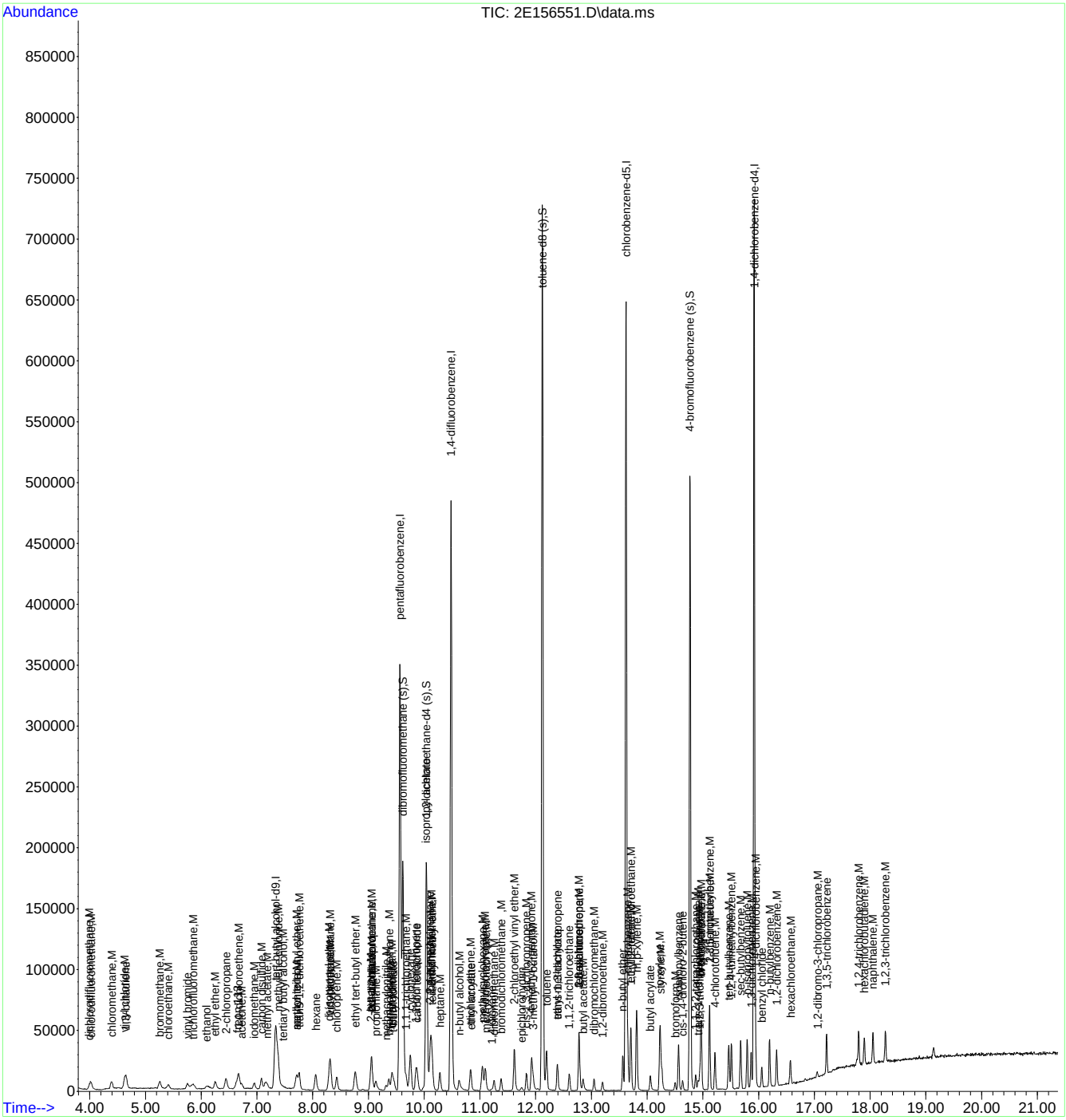
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
114) 1,2-dichlorobenzene	16.323	146	11711	1.92	ug/L	98
115) n-butylbenzene	16.197	92	11788	1.82	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.057	157	1325	1.83	ug/L #	77
117) 1,3,5-trichlorobenzene	17.220	180	9827	1.91	ug/L	96
118) 1,2,4-trichlorobenzene	17.796	180	8506	1.85	ug/L	97
120) hexachlorobutadiene	17.896	225	4627	2.07	ug/L	97
121) naphthalene	18.048	128	19183	1.81	ug/L	96
122) 1,2,3-trichlorobenzene	18.273	180	7892	1.86	ug/L	97
123) hexachloroethane	16.575	201	3184	1.70	ug/L	93
124) benzyl chloride	16.056	91	12298	1.83	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156551.D
Acq On : 9 Oct 2019 4:59 pm
Operator : roberts
Sample : ic6949-2
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Oct 10 14:24:24 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156552.D
Acq On : 9 Oct 2019 5:29 pm
Operator : roberts
Sample : ic6949-4
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 10 14:26:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.336	65	121356	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	283871	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	437228	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	354003	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	179581	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	125733	49.73	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.46%				
55) 1,2-dichloroethane-d4 (s)	10.042	65	133436	50.82	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.64%				
76) toluene-d8 (s)	12.118	98	496563	50.87	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.74%				
99) 4-bromofluorobenzene (s)	14.766	95	174185	49.81	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.62%				
Target Compounds							Qvalue
2) ethanol	6.104	45	13367	410.36	ug/L		92
3) tertiary butyl alcohol	7.462	59	6071	17.86	ug/L		92
4) 1,4-dioxane	11.216	88	2749	99.06	ug/L		93
6) chlorodifluoromethane	4.018	51	18777	3.88	ug/L		96
7) dichlorodifluoromethane	3.997	85	14167	3.67	ug/L		97
8) chloromethane	4.390	50	18902	3.79	ug/L		93
9) vinyl chloride	4.615	62	18407	3.59	ug/L		98
10) bromomethane	5.255	94	10681	3.73	ug/L		95
11) chloroethane	5.412	64	9805	3.84	ug/L		94
12) trichlorofluoromethane	5.863	101	16528	3.78	ug/L		99
13) 1,3-butadiene	4.652	54	12829	3.69	ug/L		98
14) vinyl bromide	5.748	106	8948	3.72	ug/L		92
15) ethyl ether	6.251	74	6879	3.97	ug/L		90
16) 2-chloropropane	6.440	43	21501	3.93	ug/L		93
17) acrolein	6.513	56	2174	3.87	ug/L		99
18) freon 113	6.644	151	8178	3.77	ug/L		93
19) 1,1-dichloroethene	6.665	61	17240	3.89	ug/L		96
20) acetone	6.718	43	13224	17.28	ug/L		82
21) acetonitrile	7.153	41	19359	50.81	ug/L		95
22) iodomethane	6.948	142	13661	3.88	ug/L		97
23) carbon disulfide	7.079	76	29731	3.80	ug/L		99
24) methylene chloride	7.378	84	12690	4.31	ug/L		94
25) methyl acetate	7.179	43	8639	4.11	ug/L		99
26) methyl tert butyl ether	7.709	73	32783	3.97	ug/L		97
27) trans-1,2-dichloroethene	7.756	61	15567	3.79	ug/L		99
28) hexane	8.049	56	8492	3.59	ug/L	#	87
29) di-isopropyl ether	8.296	45	42147	3.82	ug/L	#	74
30) ethyl tert-butyl ether	8.762	59	37086	3.83	ug/L		99
31) 2-butanone	9.025	72	4933	15.56	ug/L	#	85
32) 1,1-dichloroethane	8.327	63	21479	3.94	ug/L		98
33) chloroprene	8.432	53	17031	3.77	ug/L		97
34) acrylonitrile	7.714	53	4385	4.09	ug/L		97
35) vinyl acetate	8.317	86	2395	3.58	ug/L	#	74
36) ethyl acetate	9.051	45	1960	4.37	ug/L	#	86
37) 2,2-dichloropropane	9.056	77	18026	3.98	ug/L		97
38) cis-1,2-dichloroethene	9.056	96	12789	3.96	ug/L		96
39) propionitrile	9.124	54	15561	38.56	ug/L		86
40) methyl acrylate	9.130	85	1447	3.60	ug/L	#	63
41) bromochloromethane	9.365	128	6189	4.16	ug/L		90
42) tetrahydrofuran	9.407	72	1562	4.25	ug/L	#	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156552.D
Acq On : 9 Oct 2019 5:29 pm
Operator : roberts
Sample : ic6949-4
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 10 14:26:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	chloroform	9.418	83	20174	4.11	ug/L		99
44)	t-butyl formate	9.449	59	11588	3.89	ug/L		92
45)	1,1-dichloropropene	9.858	75	15785	3.84	ug/L		96
46)	carbon tetrachloride	9.879	117	14854	3.83	ug/L		94
47)	isopropyl acetate	10.037	87	2780	4.14	ug/L	#	77
49)	methacrylonitrile	9.308	67	4218	3.72	ug/L		94
50)	1,1,1-trichloroethane	9.675	97	17429	3.90	ug/L		97
51)	cyclohexane	9.748	84	17421	3.61	ug/L		93
52)	iso-butyl alcohol	9.864	43	5470	43.58	ug/L		88
53)	tert amyl alcohol	9.984	73	3697	23.64	ug/L		88
56)	2,2,4-trimethylpentane	10.105	57	34120	3.48	ug/L		96
57)	n-butyl alcohol	10.619	56	15456	185.26	ug/L		97
58)	benzene	10.115	78	48075	4.01	ug/L		96
59)	tert-amyl methyl ether	10.141	73	37241	3.98	ug/L		98
60)	heptane	10.283	57	7712	3.37	ug/L		96
61)	1,2-dichloroethane	10.131	62	14835	4.15	ug/L		91
62)	ethyl acrylate	10.839	55	12811	3.65	ug/L		93
63)	trichloroethene	10.828	95	11261	3.92	ug/L		98
64)	2-nitropropane	11.599	41	3603	3.79	ug/L	#	41
65)	2-chloroethyl vinyl ether	11.615	63	34214	18.66	ug/L		97
66)	methyl methacrylate	11.096	100	2598	3.52	ug/L	#	75
67)	1,2-dichloropropane	11.090	63	12335	3.87	ug/L		97
68)	methylcyclohexane	11.043	83	18870	3.48	ug/L		97
69)	dibromomethane	11.253	93	6378	3.81	ug/L		87
70)	bromodichloromethane	11.379	83	14244	3.76	ug/L		99
71)	epichlorohydrin	11.741	57	5352	19.48	ug/L		98
72)	cis-1,3-dichloropropene	11.835	75	19287	3.84	ug/L		96
73)	4-methyl-2-pentanone	11.924	58	16621	15.32	ug/L		98
74)	3-methyl-1-butanol	11.950	70	6337	72.89	ug/L		91
77)	toluene	12.191	92	28945	4.04	ug/L		99
78)	ethyl methacrylate	12.385	69	12622	3.59	ug/L		96
79)	trans-1,3-dichloropropene	12.391	75	16076	3.81	ug/L		96
80)	1,1,2-trichloroethane	12.600	83	8371	4.16	ug/L		88
81)	tetrachloroethene	12.773	164	9021	3.94	ug/L		95
82)	2-hexanone	12.773	58	14923	14.87	ug/L		97
83)	1,3-dichloropropane	12.784	76	17454	4.15	ug/L		97
84)	butyl acetate	12.847	56	6943	3.65	ug/L		93
85)	dibromochloromethane	13.046	129	10016	3.72	ug/L		99
86)	1,2-dibromoethane	13.198	107	10404	3.89	ug/L		96
87)	n-butyl ether	13.560	57	49769	3.77	ug/L		98
88)	chlorobenzene	13.654	112	30261	4.00	ug/L		97
89)	1,1,1,2-tetrachloroethane	13.712	131	10874	3.94	ug/L		92
90)	ethylbenzene	13.707	91	52548	3.99	ug/L		98
91)	m,p-xylene	13.812	106	39852	7.75	ug/L		98
92)	o-xylene	14.226	91	42445	3.98	ug/L		98
93)	styrene	14.236	104	30723	3.61	ug/L		99
94)	butyl acrylate	14.058	55	19038	3.47	ug/L		94
95)	bromoform	14.504	173	5945	3.56	ug/L		93
96)	isopropylbenzene	14.561	105	50874	3.82	ug/L		100
97)	cis-1,4-dichloro-2-butene	14.635	75	4333	3.58	ug/L		90
100)	bromobenzene	14.965	156	12341	3.93	ug/L		93
101)	1,1,2,2-tetrachloroethane	14.865	83	12378	3.97	ug/L		97
102)	trans-1,4-dichloro-2-b...	14.913	53	3084	3.76	ug/L		80
103)	1,2,3-trichloropropane	14.944	110	3832	4.45	ug/L		89
104)	n-propylbenzene	14.970	91	58135	3.78	ug/L		99
105)	2-chlorotoluene	15.117	126	11802	3.78	ug/L		94
106)	4-chlorotoluene	15.217	91	36019	3.97	ug/L		97
107)	1,3,5-trimethylbenzene	15.117	105	41745	3.79	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156552.D
Acq On : 9 Oct 2019 5:29 pm
Operator : roberts
Sample : ic6949-4
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 10 14:26:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

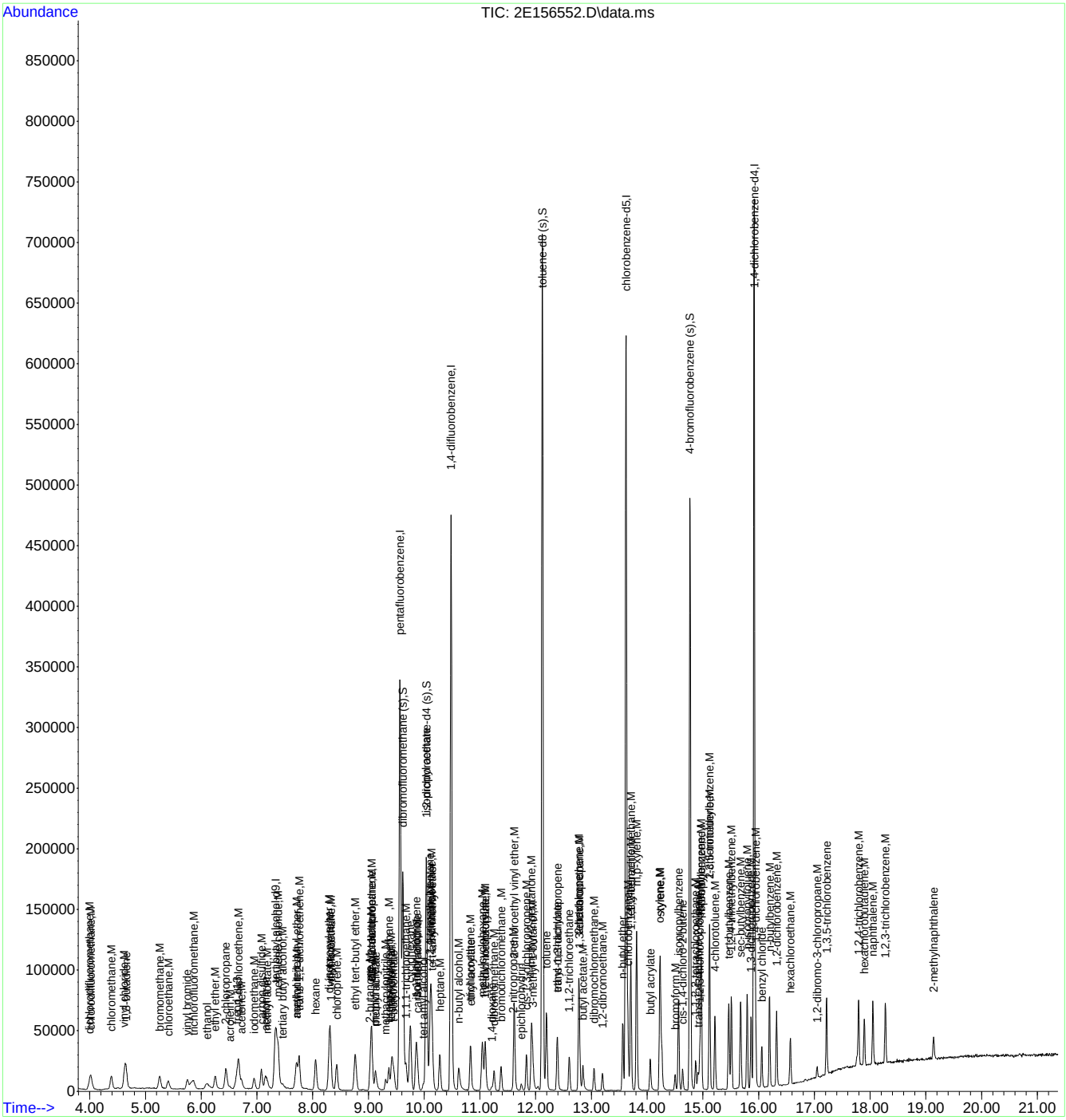
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.463	119	36525	3.83	ug/L	98
109) 1,2,4-trimethylbenzene	15.510	105	41977	3.80	ug/L	97
110) sec-butylbenzene	15.678	105	52200	3.65	ug/L	99
111) 1,3-dichlorobenzene	15.862	146	24170	4.07	ug/L	96
112) p-isopropyltoluene	15.793	119	44447	3.66	ug/L	97
113) 1,4-dichlorobenzene	15.945	146	23805	3.91	ug/L	99
114) 1,2-dichlorobenzene	16.323	146	23596	3.99	ug/L	98
115) n-butylbenzene	16.197	92	22615	3.61	ug/L	97
116) 1,2-dibromo-3-chloropr...	17.046	157	2740	3.91	ug/L	91
117) 1,3,5-trichlorobenzene	17.220	180	18459	3.70	ug/L	97
118) 1,2,4-trichlorobenzene	17.796	180	16798	3.77	ug/L	98
120) hexachlorobutadiene	17.896	225	7459	3.45	ug/L	97
121) naphthalene	18.048	128	37599	3.66	ug/L	99
122) 1,2,3-trichlorobenzene	18.273	180	15107	3.68	ug/L	95
123) hexachloroethane	16.569	201	6288	3.46	ug/L	95
124) benzyl chloride	16.056	91	24365	3.74	ug/L	97
125) 2-methylnaphthalene	19.138	142	9365	1.73	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156552.D
Acq On : 9 Oct 2019 5:29 pm
Operator : roberts
Sample : ic6949-4
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Oct 10 14:26:02 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156553.D
Acq On : 9 Oct 2019 6:00 pm
Operator : roberts
Sample : ic6949-8
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 10 14:09:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.336	65	122464	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	292378	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	454525	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	376827	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	190295	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	129258	49.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.26%			
55) 1,2-dichloroethane-d4 (s)	10.036	65	140256	51.38	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.76%			
76) toluene-d8 (s)	12.118	98	516815	49.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.48%			
99) 4-bromofluorobenzene (s)	14.766	95	186009	50.19	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.38%			
Target Compounds						Qvalue
2) ethanol	6.094	45	24907	757.71	ug/L	99
3) tertiary butyl alcohol	7.457	59	12563	36.62	ug/L	89
4) 1,4-dioxane	11.206	88	5300	189.25	ug/L	91
6) chlorodifluoromethane	4.012	51	39641	7.96	ug/L	95
7) dichlorodifluoromethane	3.991	85	31087	7.81	ug/L	99
8) chloromethane	4.384	50	40403	7.87	ug/L	99
9) vinyl chloride	4.610	62	40251	7.62	ug/L	99
10) bromomethane	5.250	94	23992	8.14	ug/L	98
11) chloroethane	5.402	64	20385	7.75	ug/L	99
12) trichlorofluoromethane	5.858	101	35680	7.92	ug/L	91
13) 1,3-butadiene	4.647	54	27715	7.74	ug/L	98
14) vinyl bromide	5.748	106	19399	7.83	ug/L	94
15) ethyl ether	6.246	74	14337	8.03	ug/L	95
16) 2-chloropropane	6.440	43	45175	8.02	ug/L	99
17) acrolein	6.508	56	4656	8.04	ug/L	87
18) freon 113	6.639	151	18324	8.20	ug/L	96
19) 1,1-dichloroethene	6.665	61	35504	7.79	ug/L	95
20) acetone	6.723	43	25861	32.81	ug/L	99
21) acetonitrile	7.147	41	30491	77.70	ug/L	98
22) iodomethane	6.948	142	28881	7.96	ug/L	98
23) carbon disulfide	7.074	76	63306	7.86	ug/L	98
24) methylene chloride	7.378	84	24293	8.01	ug/L	98
25) methyl acetate	7.179	43	17202	7.95	ug/L	95
26) methyl tert butyl ether	7.708	73	65975	7.75	ug/L	97
27) trans-1,2-dichloroethene	7.756	61	33588	7.95	ug/L	99
28) hexane	8.049	56	19954	8.20	ug/L	94
29) di-isopropyl ether	8.296	45	86973	7.65	ug/L	82
30) ethyl tert-butyl ether	8.762	59	77659	7.78	ug/L	97
31) 2-butanone	9.024	72	9848	30.15	ug/L	93
32) 1,1-dichloroethane	8.317	63	45284	8.06	ug/L	97
33) chloroprene	8.427	53	35162	7.55	ug/L	99
34) acrylonitrile	7.703	53	8474	7.67	ug/L	97
35) vinyl acetate	8.311	86	5073	7.37	ug/L #	75
36) ethyl acetate	9.051	45	4153	8.98	ug/L #	44
37) 2,2-dichloropropane	9.056	77	37614	8.06	ug/L	97
38) cis-1,2-dichloroethene	9.051	96	26548	7.99	ug/L	97
39) propionitrile	9.119	54	32052	77.12	ug/L	89
40) methyl acrylate	9.124	85	2835	6.85	ug/L #	86
41) bromochloromethane	9.360	128	12324	8.04	ug/L	97
42) tetrahydrofuran	9.418	72	3167	8.37	ug/L #	72

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156553.D
Acq On : 9 Oct 2019 6:00 pm
Operator : roberts
Sample : ic6949-8
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 10 14:09:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	chloroform	9.418	83	41196	8.14	ug/L		92
44)	t-butyl formate	9.449	59	23643	7.70	ug/L		92
45)	1,1-dichloropropene	9.848	75	32667	7.72	ug/L		94
46)	carbon tetrachloride	9.879	117	31417	7.86	ug/L		93
47)	isopropyl acetate	10.031	87	5340	7.72	ug/L	#	86
49)	methacrylonitrile	9.302	67	8624	7.38	ug/L		99
50)	1,1,1-trichloroethane	9.675	97	37217	8.09	ug/L		97
51)	cyclohexane	9.748	84	39610	7.98	ug/L		97
52)	iso-butyl alcohol	9.858	43	9316	72.05	ug/L		94
53)	tert amyl alcohol	9.989	73	6963	43.22	ug/L		96
56)	2,2,4-trimethylpentane	10.105	57	83372	8.17	ug/L		98
57)	n-butyl alcohol	10.613	56	30844	355.64	ug/L		97
58)	benzene	10.115	78	99069	7.95	ug/L		99
59)	tert-amyl methyl ether	10.141	73	75615	7.77	ug/L		98
60)	heptane	10.278	57	19425	8.16	ug/L		94
61)	1,2-dichloroethane	10.131	62	30209	8.12	ug/L		97
62)	ethyl acrylate	10.833	55	27228	7.45	ug/L		98
63)	trichloroethene	10.828	95	23854	7.99	ug/L		97
64)	2-nitropropane	11.609	41	7468	7.56	ug/L	#	3
65)	2-chloroethyl vinyl ether	11.615	63	72153	37.86	ug/L		99
66)	methyl methacrylate	11.095	100	5674	7.40	ug/L	#	94
67)	1,2-dichloropropane	11.090	63	25781	7.79	ug/L		95
68)	methylcyclohexane	11.038	83	45549	8.08	ug/L		97
69)	dibromomethane	11.253	93	13433	7.73	ug/L		95
70)	bromodichloromethane	11.379	83	30497	7.75	ug/L		99
71)	epichlorohydrin	11.740	57	10706	37.48	ug/L		93
72)	cis-1,3-dichloropropene	11.835	75	39391	7.55	ug/L		97
73)	4-methyl-2-pentanone	11.924	58	33783	29.95	ug/L		95
74)	3-methyl-1-butanol	11.945	70	12859	142.28	ug/L		95
77)	toluene	12.191	92	60058	7.88	ug/L		97
78)	ethyl methacrylate	12.380	69	27297	7.29	ug/L		95
79)	trans-1,3-dichloropropene	12.385	75	33928	7.56	ug/L		99
80)	1,1,2-trichloroethane	12.600	83	16596	7.74	ug/L		98
81)	tetrachloroethene	12.773	164	19634	8.05	ug/L		97
82)	2-hexanone	12.773	58	31307	29.31	ug/L		95
83)	1,3-dichloropropane	12.784	76	35073	7.83	ug/L		98
84)	butyl acetate	12.847	56	15686	7.75	ug/L		90
85)	dibromochloromethane	13.046	129	21376	7.46	ug/L		98
86)	1,2-dibromoethane	13.193	107	22000	7.73	ug/L		98
87)	n-butyl ether	13.560	57	105277	7.50	ug/L		99
88)	chlorobenzene	13.654	112	62964	7.82	ug/L		99
89)	1,1,1,2-tetrachloroethane	13.712	131	22639	7.70	ug/L		97
90)	ethylbenzene	13.707	91	110038	7.85	ug/L		99
91)	m,p-xylene	13.811	106	85478	15.62	ug/L		99
92)	o-xylene	14.226	91	87801	7.73	ug/L		99
93)	styrene	14.236	104	67467	7.46	ug/L		98
94)	butyl acrylate	14.053	55	41274	7.06	ug/L		100
95)	bromoform	14.503	173	13402	7.53	ug/L		95
96)	isopropylbenzene	14.561	105	108698	7.68	ug/L		99
97)	cis-1,4-dichloro-2-butene	14.635	75	8894	6.90	ug/L		96
100)	bromobenzene	14.960	156	26002	7.82	ug/L		95
101)	1,1,2,2-tetrachloroethane	14.870	83	25147	7.61	ug/L		95
102)	trans-1,4-dichloro-2-b...	14.912	53	6431	7.41	ug/L		96
103)	1,2,3-trichloropropane	14.944	110	7508	8.23	ug/L		98
104)	n-propylbenzene	14.970	91	128176	7.87	ug/L		99
105)	2-chlorotoluene	15.117	126	26500	8.01	ug/L		92
106)	4-chlorotoluene	15.217	91	76648	7.97	ug/L		99
107)	1,3,5-trimethylbenzene	15.117	105	90972	7.79	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156553.D
Acq On : 9 Oct 2019 6:00 pm
Operator : roberts
Sample : ic6949-8
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 10 14:09:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

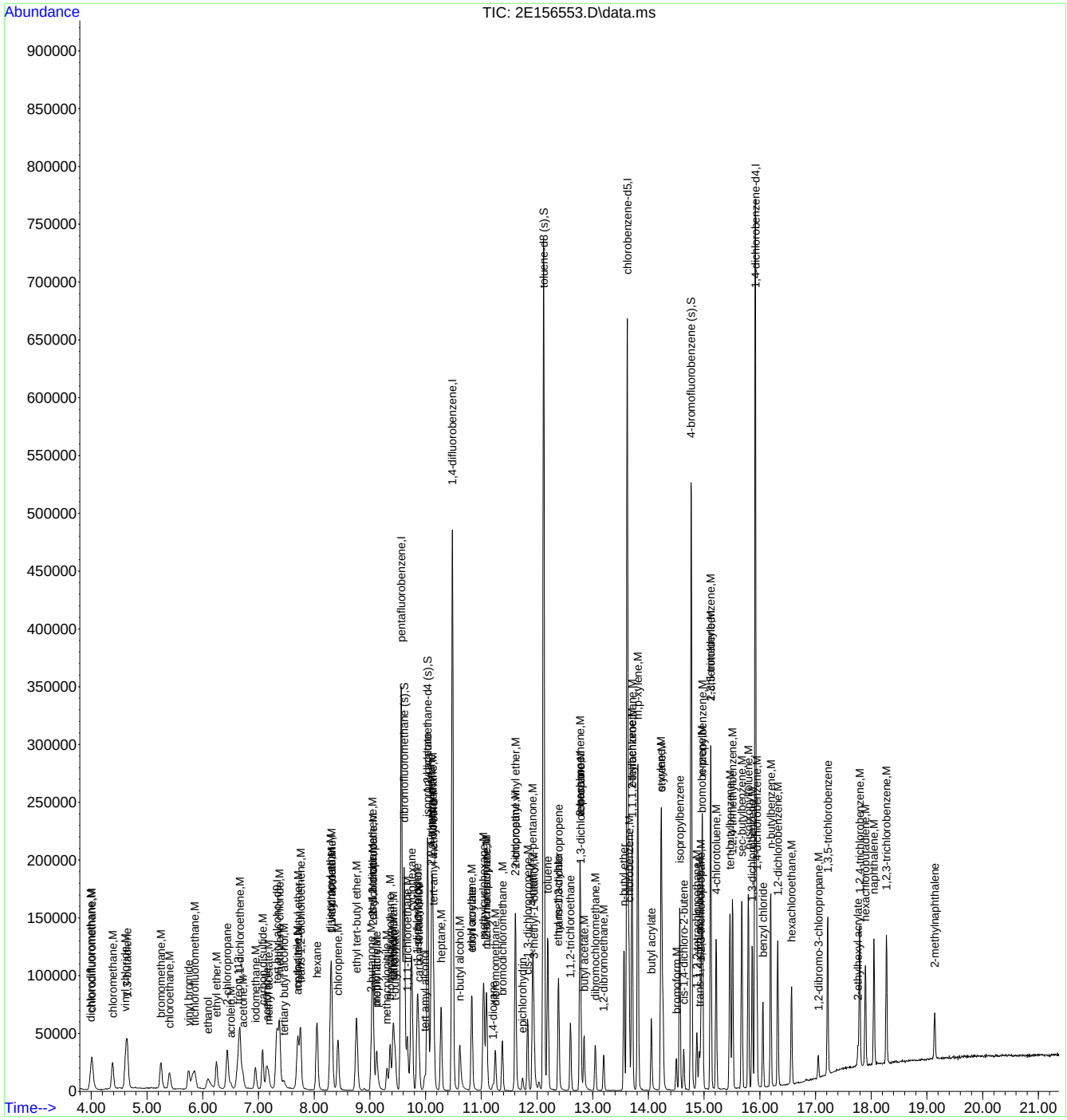
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.463	119	78247	7.74	ug/L	98
109) 1,2,4-trimethylbenzene	15.510	105	92055	7.86	ug/L	97
110) sec-butylbenzene	15.678	105	115731	7.65	ug/L	99
111) 1,3-dichlorobenzene	15.861	146	49872	7.93	ug/L	96
112) p-isopropyltoluene	15.793	119	99394	7.72	ug/L	99
113) 1,4-dichlorobenzene	15.945	146	51140	7.94	ug/L	98
114) 1,2-dichlorobenzene	16.323	146	48903	7.81	ug/L	98
115) n-butylbenzene	16.197	92	49642	7.48	ug/L	97
116) 1,2-dibromo-3-chloropr...	17.052	157	5589	7.52	ug/L	98
117) 1,3,5-trichlorobenzene	17.219	180	40833	7.73	ug/L	99
118) 1,2,4-trichlorobenzene	17.796	180	35775	7.57	ug/L	97
119) 2-ethylhexyl acrylate	17.759	70	4323	1.28	ug/L	97
120) hexachlorobutadiene	17.896	225	17618	7.69	ug/L	95
121) naphthalene	18.048	128	81025	7.43	ug/L	99
122) 1,2,3-trichlorobenzene	18.273	180	33170	7.63	ug/L	98
123) hexachloroethane	16.569	201	13625	7.07	ug/L	96
124) benzyl chloride	16.055	91	51837	7.51	ug/L	99
125) 2-methylnaphthalene	19.138	142	20104	3.50	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156553.D
Acq On : 9 Oct 2019 6:00 pm
Operator : roberts
Sample : ic6949-8
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Oct 10 14:09:53 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156554.D
Acq On : 9 Oct 2019 6:30 pm
Operator : roberts
Sample : ic6949-20
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 14:09:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.336	65	126048	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	287634	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	450579	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	370758	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	184808	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	127710	49.85	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.70%			
55) 1,2-dichloroethane-d4 (s)	10.037	65	133335	49.28	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.56%			
76) toluene-d8 (s)	12.118	98	510730	49.96	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.92%			
99) 4-bromofluorobenzene (s)	14.766	95	182330	50.66	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.32%			
Target Compounds						Qvalue
2) ethanol	6.094	45	66183	1956.13	ug/L	95
3) tertiary butyl alcohol	7.457	59	32120	90.96	ug/L	95
4) 1,4-dioxane	11.206	88	13910	482.58	ug/L	99
6) chlorodifluoromethane	4.018	51	92478	18.88	ug/L	98
7) dichlorodifluoromethane	3.997	85	70332	17.96	ug/L	99
8) chloromethane	4.390	50	93132	18.45	ug/L	99
9) vinyl chloride	4.621	62	95042	18.29	ug/L	99
10) bromomethane	5.250	94	54726	18.88	ug/L	97
11) chloroethane	5.402	64	48695	18.82	ug/L	99
12) trichlorofluoromethane	5.858	101	80362	18.14	ug/L	98
13) 1,3-butadiene	4.647	54	64273	18.25	ug/L	99
14) vinyl bromide	5.753	106	44988	18.46	ug/L	99
15) ethyl ether	6.251	74	33606	19.13	ug/L	96
16) 2-chloropropane	6.445	43	102534	18.49	ug/L	99
17) acrolein	6.503	56	11750	20.63	ug/L	92
18) freon 113	6.639	151	41705	18.96	ug/L	96
19) 1,1-dichloroethene	6.671	61	84524	18.84	ug/L	97
20) acetone	6.718	43	61336	79.10	ug/L	99
21) acetonitrile	7.142	41	76234	197.46	ug/L	99
22) iodomethane	6.948	142	67743	18.97	ug/L	98
23) carbon disulfide	7.074	76	149225	18.84	ug/L	98
24) methylene chloride	7.378	84	57813	19.37	ug/L	95
25) methyl acetate	7.179	43	41377	19.44	ug/L	99
26) methyl tert butyl ether	7.709	73	160929	19.22	ug/L	99
27) trans-1,2-dichloroethene	7.756	61	78725	18.93	ug/L	97
28) hexane	8.049	56	44031	18.39	ug/L #	88
29) di-isopropyl ether	8.296	45	213153	19.05	ug/L	95
30) ethyl tert-butyl ether	8.763	59	187811	19.12	ug/L	98
31) 2-butanone	9.019	72	24547	76.40	ug/L	95
32) 1,1-dichloroethane	8.317	63	106203	19.22	ug/L	97
33) chloroprene	8.427	53	84898	18.52	ug/L	98
34) acrylonitrile	7.703	53	21261	19.56	ug/L	98
35) vinyl acetate	8.301	86	12391	18.30	ug/L	96
36) ethyl acetate	9.040	45	9532	20.96	ug/L	95
37) 2,2-dichloropropane	9.056	77	87645	19.10	ug/L	97
38) cis-1,2-dichloroethene	9.051	96	63167	19.32	ug/L	99
39) propionitrile	9.119	54	80390	196.62	ug/L	99
40) methyl acrylate	9.124	85	7646	18.79	ug/L #	83
41) bromochloromethane	9.365	128	29157	19.33	ug/L	96
42) tetrahydrofuran	9.407	72	7191	19.32	ug/L	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156554.D
Acq On : 9 Oct 2019 6:30 pm
Operator : roberts
Sample : ic6949-20
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 14:09:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43) chloroform	9.418	83	95347	19.15	ug/L		98
44) t-butyl formate	9.455	59	58953	19.52	ug/L		97
45) 1,1-dichloropropene	9.848	75	78112	18.77	ug/L		97
46) carbon tetrachloride	9.879	117	73988	18.81	ug/L		99
47) isopropyl acetate	10.037	87	13136	19.31	ug/L	#	91
49) methacrylonitrile	9.303	67	21806	18.97	ug/L		98
50) 1,1,1-trichloroethane	9.675	97	86702	19.16	ug/L		99
51) cyclohexane	9.748	84	88337	18.09	ug/L	#	86
52) iso-butyl alcohol	9.858	43	25153	197.75	ug/L		92
53) tert amyl alcohol	9.984	73	16094	101.55	ug/L		88
56) 2,2,4-trimethylpentane	10.105	57	182581	18.05	ug/L		98
57) n-butyl alcohol	10.608	56	85589	995.50	ug/L		98
58) benzene	10.115	78	236031	19.12	ug/L		99
59) tert-amyl methyl ether	10.141	73	183377	19.02	ug/L		99
60) heptane	10.278	57	42887	18.18	ug/L		99
61) 1,2-dichloroethane	10.126	62	72222	19.59	ug/L		99
62) ethyl acrylate	10.828	55	67558	18.65	ug/L		99
63) trichloroethene	10.828	95	55429	18.72	ug/L		97
64) 2-nitropropane	11.604	41	18449	18.84	ug/L	#	27
65) 2-chloroethyl vinyl ether	11.610	63	179292	94.90	ug/L		98
66) methyl methacrylate	11.096	100	14251	18.76	ug/L		97
67) 1,2-dichloropropane	11.090	63	62856	19.16	ug/L		96
68) methylcyclohexane	11.043	83	102262	18.31	ug/L		99
69) dibromomethane	11.253	93	33107	19.21	ug/L		98
70) bromodichloromethane	11.379	83	73455	18.84	ug/L		98
71) epichlorohydrin	11.741	57	27420	96.84	ug/L		97
72) cis-1,3-dichloropropene	11.830	75	97096	18.76	ug/L		98
73) 4-methyl-2-pentanone	11.924	58	86007	76.92	ug/L		99
74) 3-methyl-1-butanol	11.945	70	35611	397.48	ug/L		95
77) toluene	12.191	92	141046	18.81	ug/L		98
78) ethyl methacrylate	12.380	69	67563	18.34	ug/L		98
79) trans-1,3-dichloropropene	12.385	75	83930	19.00	ug/L		99
80) 1,1,2-trichloroethane	12.600	83	40755	19.32	ug/L		97
81) tetrachloroethene	12.773	164	46006	19.18	ug/L		99
82) 2-hexanone	12.768	58	79023	75.19	ug/L		94
83) 1,3-dichloropropane	12.784	76	84727	19.22	ug/L		99
84) butyl acetate	12.842	56	37687	18.94	ug/L		91
85) dibromochloromethane	13.046	129	53292	18.91	ug/L		95
86) 1,2-dibromoethane	13.198	107	53724	19.20	ug/L		96
87) n-butyl ether	13.560	57	254289	18.40	ug/L		100
88) chlorobenzene	13.654	112	152093	19.19	ug/L		98
89) 1,1,1,2-tetrachloroethane	13.712	131	55887	19.33	ug/L		97
90) ethylbenzene	13.707	91	260798	18.90	ug/L		99
91) m,p-xylene	13.812	106	204368	37.96	ug/L		99
92) o-xylene	14.226	91	212683	19.02	ug/L		99
93) styrene	14.236	104	164102	18.43	ug/L		98
94) butyl acrylate	14.053	55	105903	18.41	ug/L		97
95) bromoform	14.498	173	33512	19.15	ug/L		95
96) isopropylbenzene	14.561	105	262948	18.87	ug/L		99
97) cis-1,4-dichloro-2-butene	14.635	75	22786	17.97	ug/L		97
100) bromobenzene	14.965	156	62909	19.48	ug/L		92
101) 1,1,2,2-tetrachloroethane	14.865	83	62658	19.51	ug/L		99
102) trans-1,4-dichloro-2-b...	14.913	53	16301	19.33	ug/L		94
103) 1,2,3-trichloropropane	14.939	110	17613	19.87	ug/L		96
104) n-propylbenzene	14.970	91	307107	19.42	ug/L		99
105) 2-chlorotoluene	15.117	126	63075	19.62	ug/L		100
106) 4-chlorotoluene	15.217	91	182711	19.57	ug/L		100
107) 1,3,5-trimethylbenzene	15.117	105	215809	19.03	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156554.D
Acq On : 9 Oct 2019 6:30 pm
Operator : roberts
Sample : ic6949-20
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 14:09:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

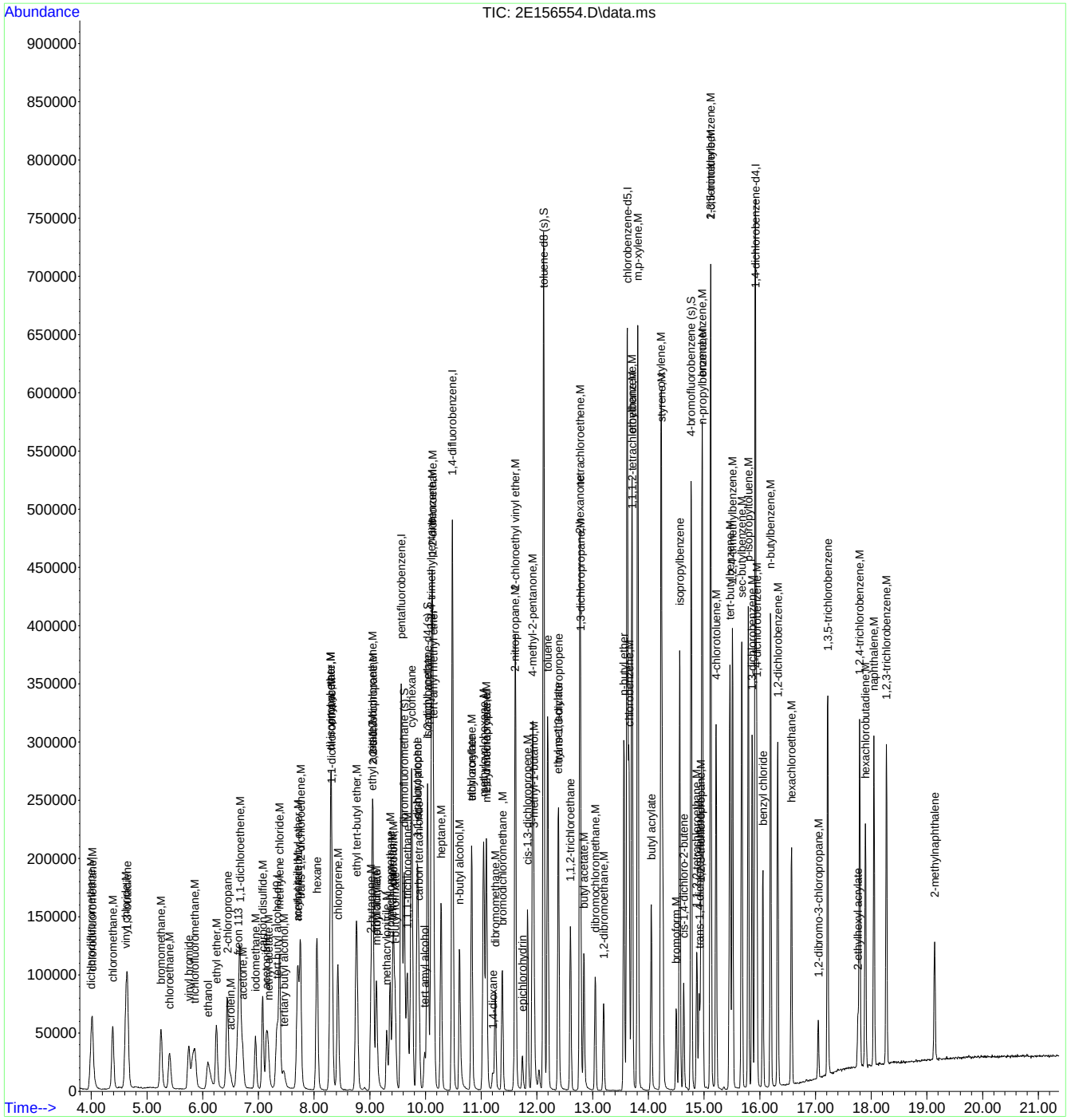
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.463	119	187642	19.10	ug/L	100
109) 1,2,4-trimethylbenzene	15.510	105	219487	19.29	ug/L	100
110) sec-butylbenzene	15.678	105	280171	19.06	ug/L	100
111) 1,3-dichlorobenzene	15.862	146	119548	19.57	ug/L	99
112) p-isopropyltoluene	15.793	119	238277	19.07	ug/L	100
113) 1,4-dichlorobenzene	15.945	146	122232	19.53	ug/L	98
114) 1,2-dichlorobenzene	16.323	146	118823	19.54	ug/L	98
115) n-butylbenzene	16.192	92	122831	19.07	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.052	157	13618	18.87	ug/L	97
117) 1,3,5-trichlorobenzene	17.220	180	99349	19.36	ug/L	100
118) 1,2,4-trichlorobenzene	17.791	180	88244	19.23	ug/L	99
119) 2-ethylhexyl acrylate	17.760	70	11447	3.50	ug/L	99
120) hexachlorobutadiene	17.896	225	43013	19.34	ug/L	98
121) naphthalene	18.048	128	206917	19.55	ug/L	100
122) 1,2,3-trichlorobenzene	18.273	180	81606	19.33	ug/L	98
123) hexachloroethane	16.569	201	34635	18.52	ug/L	99
124) benzyl chloride	16.056	91	128954	19.23	ug/L	98
125) 2-methylnaphthalene	19.139	142	52826	9.47	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156554.D
Acq On : 9 Oct 2019 6:30 pm
Operator : roberts
Sample : ic6949-20
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Oct 10 14:09:55 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156555.D
Acq On : 9 Oct 2019 7:00 pm
Operator : roberts
Sample : icc6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 14:09:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.336	65	108412	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	267932	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	420308	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	349962	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	178330	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	119322	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
55) 1,2-dichloroethane-d4 (s)	10.036	65	126204	50.00	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.00%			
76) toluene-d8 (s)	12.118	98	482517	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
99) 4-bromofluorobenzene (s)	14.766	95	173644	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.00%			
Target Compounds						Qvalue
2) ethanol	6.083	45	145499	5000.00	ug/L	100
3) tertiary butyl alcohol	7.452	59	75927	250.00	ug/L	100
4) 1,4-dioxane	11.206	88	30989	1250.00	ug/L	100
6) chlorodifluoromethane	4.017	51	228135	50.00	ug/L	100
7) dichlorodifluoromethane	3.996	85	182406	50.00	ug/L	100
8) chloromethane	4.384	50	235118	50.00	ug/L	100
9) vinyl chloride	4.620	62	241978	50.00	ug/L	100
10) bromomethane	5.255	94	135010	50.00	ug/L	100
11) chloroethane	5.402	64	120508	50.00	ug/L	100
12) trichlorofluoromethane	5.853	101	206319	50.00	ug/L	100
13) 1,3-butadiene	4.647	54	163994	50.00	ug/L	100
14) vinyl bromide	5.748	106	113530	50.00	ug/L	100
15) ethyl ether	6.246	74	81815	50.00	ug/L	100
16) 2-chloropropane	6.440	43	258244	50.00	ug/L	100
17) acrolein	6.497	56	26533	50.00	ug/L	100
18) freon 113	6.639	151	102448	50.00	ug/L	100
19) 1,1-dichloroethene	6.670	61	208906	50.00	ug/L	100
20) acetone	6.712	43	144461	200.00	ug/L	100
21) acetonitrile	7.142	41	179811	500.00	ug/L	100
22) iodomethane	6.948	142	166332	50.00	ug/L	100
23) carbon disulfide	7.074	76	368814	50.00	ug/L	100
24) methylene chloride	7.383	84	139047	50.00	ug/L	100
25) methyl acetate	7.174	43	99122	50.00	ug/L	100
26) methyl tert butyl ether	7.709	73	389904	50.00	ug/L	100
27) trans-1,2-dichloroethene	7.756	61	193663	50.00	ug/L	100
28) hexane	8.049	56	111540	50.00	ug/L	100
29) di-isopropyl ether	8.296	45	521012	50.00	ug/L	100
30) ethyl tert-butyl ether	8.762	59	457516	50.00	ug/L	100
31) 2-butanone	9.014	72	59857	200.00	ug/L	100
32) 1,1-dichloroethane	8.317	63	257420	50.00	ug/L	100
33) chloroprene	8.427	53	213454	50.00	ug/L	100
34) acrylonitrile	7.703	53	50623	50.00	ug/L	100
35) vinyl acetate	8.301	86	31540	50.00	ug/L	100
36) ethyl acetate	9.040	45	21180	50.00	ug/L	100
37) 2,2-dichloropropane	9.056	77	213723	50.00	ug/L	100
38) cis-1,2-dichloroethene	9.051	96	152281	50.00	ug/L	100
39) propionitrile	9.114	54	190430	500.00	ug/L	100
40) methyl acrylate	9.119	85	18952	50.00	ug/L	100
41) bromochloromethane	9.360	128	70268	50.00	ug/L	100
42) tetrahydrofuran	9.407	72	17335	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156555.D
Acq On : 9 Oct 2019 7:00 pm
Operator : roberts
Sample : icc6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 14:09:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43)	chloroform	9.418	83	231856	50.00	ug/L	100
44)	t-butyl formate	9.449	59	140659	50.00	ug/L	100
45)	1,1-dichloropropene	9.848	75	193857	50.00	ug/L	100
46)	carbon tetrachloride	9.874	117	183211	50.00	ug/L	100
47)	isopropyl acetate	10.031	87	31676	50.00	ug/L	100
49)	methacrylonitrile	9.302	67	53548	50.00	ug/L	100
50)	1,1,1-trichloroethane	9.675	97	210797	50.00	ug/L	100
51)	cyclohexane	9.743	84	227433	50.00	ug/L	100
52)	iso-butyl alcohol	9.853	43	59241	500.00	ug/L	100
53)	tert amyl alcohol	9.984	73	36907	250.00	ug/L	100
56)	2,2,4-trimethylpentane	10.110	57	471879	50.00	ug/L	100
57)	n-butyl alcohol	10.608	56	200499	2500.00	ug/L	100
58)	benzene	10.115	78	575868	50.00	ug/L	100
59)	tert-amyl methyl ether	10.147	73	449733	50.00	ug/L	100
60)	heptane	10.278	57	110018	50.00	ug/L	100
61)	1,2-dichloroethane	10.126	62	171944	50.00	ug/L	100
62)	ethyl acrylate	10.828	55	168932	50.00	ug/L	100
63)	trichloroethene	10.828	95	138086	50.00	ug/L	100
64)	2-nitropropane	11.599	41	45674	50.00	ug/L	100
65)	2-chloroethyl vinyl ether	11.609	63	440598	250.00	ug/L	100
66)	methyl methacrylate	11.090	100	35439	50.00	ug/L	100
67)	1,2-dichloropropane	11.090	63	153011	50.00	ug/L	100
68)	methylcyclohexane	11.043	83	260562	50.00	ug/L	100
69)	dibromomethane	11.248	93	80372	50.00	ug/L	100
70)	bromodichloromethane	11.379	83	181865	50.00	ug/L	100
71)	epichlorohydrin	11.735	57	66031	250.00	ug/L	100
72)	cis-1,3-dichloropropene	11.830	75	241371	50.00	ug/L	100
73)	4-methyl-2-pentanone	11.919	58	208598	200.00	ug/L	100
74)	3-methyl-1-butanol	11.940	70	83572	1000.00	ug/L	100
77)	toluene	12.191	92	353964	50.00	ug/L	100
78)	ethyl methacrylate	12.380	69	173905	50.00	ug/L	100
79)	trans-1,3-dichloropropene	12.385	75	208511	50.00	ug/L	100
80)	1,1,2-trichloroethane	12.600	83	99539	50.00	ug/L	100
81)	tetrachloroethene	12.773	164	113190	50.00	ug/L	100
82)	2-hexanone	12.768	58	198411	200.00	ug/L	100
83)	1,3-dichloropropane	12.784	76	208010	50.00	ug/L	100
84)	butyl acetate	12.841	56	93934	50.00	ug/L	100
85)	dibromochloromethane	13.046	129	132991	50.00	ug/L	100
86)	1,2-dibromoethane	13.193	107	132093	50.00	ug/L	100
87)	n-butyl ether	13.560	57	652069	50.00	ug/L	100
88)	chlorobenzene	13.654	112	373995	50.00	ug/L	100
89)	1,1,1,2-tetrachloroethane	13.712	131	136444	50.00	ug/L	100
90)	ethylbenzene	13.707	91	651243	50.00	ug/L	100
91)	m,p-xylene	13.811	106	508131	100.00	ug/L	100
92)	o-xylene	14.226	91	527691	50.00	ug/L	100
93)	styrene	14.236	104	420199	50.00	ug/L	100
94)	butyl acrylate	14.047	55	271514	50.00	ug/L	100
95)	bromoform	14.498	173	82602	50.00	ug/L	100
96)	isopropylbenzene	14.561	105	657521	50.00	ug/L	100
97)	cis-1,4-dichloro-2-butene	14.635	75	59830	50.00	ug/L	100
100)	bromobenzene	14.960	156	155776	50.00	ug/L	100
101)	1,1,2,2-tetrachloroethane	14.871	83	154935	50.00	ug/L	100
102)	trans-1,4-dichloro-2-b...	14.907	53	40678	50.00	ug/L	100
103)	1,2,3-trichloropropane	14.944	110	42767	50.00	ug/L	100
104)	n-propylbenzene	14.970	91	763057	50.00	ug/L	100
105)	2-chlorotoluene	15.117	126	155083	50.00	ug/L	100
106)	4-chlorotoluene	15.217	91	450506	50.00	ug/L	100
107)	1,3,5-trimethylbenzene	15.117	105	547185	50.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156555.D
Acq On : 9 Oct 2019 7:00 pm
Operator : roberts
Sample : icc6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 14:09:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

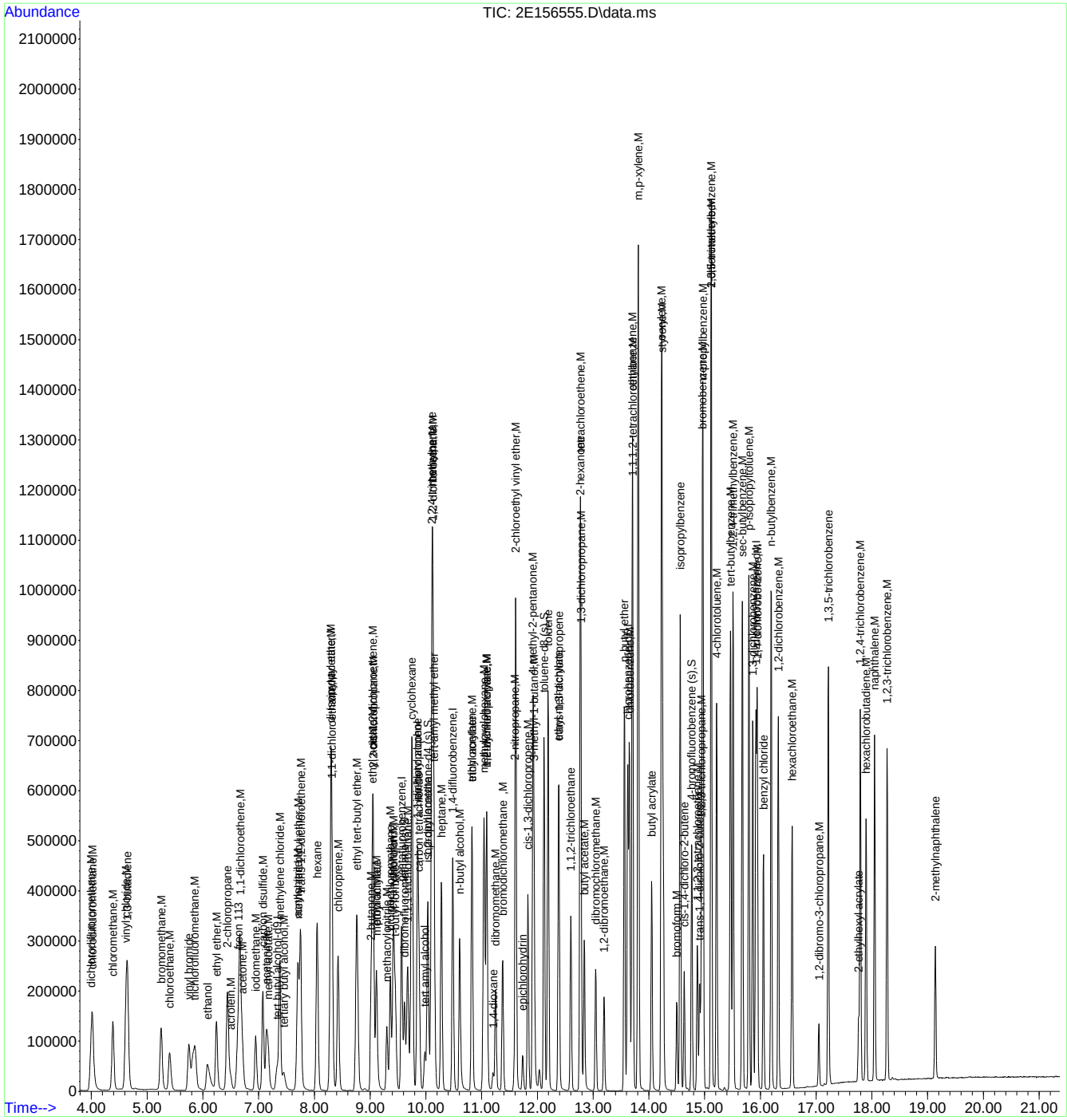
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.463	119	473884	50.00	ug/L	100
109) 1,2,4-trimethylbenzene	15.510	105	549054	50.00	ug/L	100
110) sec-butylbenzene	15.678	105	709158	50.00	ug/L	100
111) 1,3-dichlorobenzene	15.861	146	294762	50.00	ug/L	100
112) p-isopropyltoluene	15.793	119	602900	50.00	ug/L	100
113) 1,4-dichlorobenzene	15.945	146	301966	50.00	ug/L	100
114) 1,2-dichlorobenzene	16.323	146	293329	50.00	ug/L	100
115) n-butylbenzene	16.192	92	310787	50.00	ug/L	100
116) 1,2-dibromo-3-chloropr...	17.052	157	34828	50.00	ug/L	100
117) 1,3,5-trichlorobenzene	17.219	180	247581	50.00	ug/L	100
118) 1,2,4-trichlorobenzene	17.791	180	221394	50.00	ug/L	100
119) 2-ethylhexyl acrylate	17.759	70	31540	10.00	ug/L	100
120) hexachlorobutadiene	17.896	225	107296	50.00	ug/L	100
121) naphthalene	18.048	128	510646	50.00	ug/L	100
122) 1,2,3-trichlorobenzene	18.273	180	203658	50.00	ug/L	100
123) hexachloroethane	16.569	201	90252	50.00	ug/L	100
124) benzyl chloride	16.055	91	323616	50.00	ug/L	100
125) 2-methylnaphthalene	19.138	142	134517	25.00	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156555.D
Acq On : 9 Oct 2019 7:00 pm
Operator : roberts
Sample : icc6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Oct 10 14:09:57 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156556.D
Acq On : 9 Oct 2019 7:30 pm
Operator : roberts
Sample : ic6949-100
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 10 14:09:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.331	65	97589	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	275682	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	437894	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	368441	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	188046	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	123920	50.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.94%			
55) 1,2-dichloroethane-d4 (s)	10.036	65	127596	48.52	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.04%			
76) toluene-d8 (s)	12.118	98	502806	49.49	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.98%			
99) 4-bromofluorobenzene (s)	14.766	95	183338	50.06	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.12%			
Target Compounds						Qvalue
2) ethanol	6.078	45	251864	9615.07	ug/L	99
3) tertiary butyl alcohol	7.446	59	140020	512.17	ug/L	97
4) 1,4-dioxane	11.200	88	51682	2315.89	ug/L	94
6) chlorodifluoromethane	4.012	51	472891	100.73	ug/L	99
7) dichlorodifluoromethane	3.986	85	368433	98.15	ug/L	100
8) chloromethane	4.379	50	479863	99.18	ug/L	99
9) vinyl chloride	4.610	62	502464	100.91	ug/L	100
10) bromomethane	5.244	94	290109	104.42	ug/L	99
11) chloroethane	5.396	64	254789	102.74	ug/L	100
12) trichlorofluoromethane	5.847	101	428143	100.84	ug/L	99
13) 1,3-butadiene	4.641	54	345002	102.23	ug/L	98
14) vinyl bromide	5.742	106	243052	104.03	ug/L	97
15) ethyl ether	6.240	74	172476	102.44	ug/L	99
16) 2-chloropropane	6.434	43	530773	99.88	ug/L	99
17) acrolein	6.497	56	56623	103.70	ug/L	99
18) freon 113	6.639	151	223121	105.83	ug/L	99
19) 1,1-dichloroethene	6.665	61	440039	102.36	ug/L	97
20) acetone	6.702	43	282911	380.67	ug/L	97
21) acetonitrile	7.137	41	342579	925.83	ug/L	98
22) iodomethane	6.943	142	358700	104.80	ug/L	96
23) carbon disulfide	7.074	76	787578	103.77	ug/L	99
24) methylene chloride	7.378	84	295542	103.29	ug/L	97
25) methyl acetate	7.168	43	202026	99.04	ug/L	98
26) methyl tert butyl ether	7.708	73	816048	101.71	ug/L	99
27) trans-1,2-dichloroethene	7.750	61	406846	102.09	ug/L	97
28) hexane	8.049	56	233501	101.73	ug/L	95
29) di-isopropyl ether	8.296	45	1083128	101.02	ug/L	95
30) ethyl tert-butyl ether	8.757	59	951935	101.11	ug/L	98
31) 2-butanone	9.009	72	118375	384.41	ug/L	94
32) 1,1-dichloroethane	8.317	63	532602	100.54	ug/L	100
33) chloroprene	8.422	53	447745	101.93	ug/L	98
34) acrylonitrile	7.698	53	101396	97.33	ug/L	98
35) vinyl acetate	8.301	86	64747	99.76	ug/L #	86
36) ethyl acetate	9.035	45	42436	97.36	ug/L #	65
37) 2,2-dichloropropane	9.056	77	442851	100.69	ug/L	99
38) cis-1,2-dichloroethene	9.051	96	321643	102.64	ug/L	95
39) propionitrile	9.114	54	369203	942.14	ug/L	92
40) methyl acrylate	9.114	85	40407	103.61	ug/L #	91
41) bromochloromethane	9.360	128	150472	104.06	ug/L	96
42) tetrahydrofuran	9.407	72	34934	97.93	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156556.D
Acq On : 9 Oct 2019 7:30 pm
Operator : roberts
Sample : ic6949-100
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 10 14:09:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	chloroform	9.418	83	489611	102.62	ug/L		100
44)	t-butyl formate	9.444	59	290203	100.26	ug/L		96
45)	1,1-dichloropropene	9.848	75	405881	101.74	ug/L		98
46)	carbon tetrachloride	9.874	117	390352	103.54	ug/L		98
47)	isopropyl acetate	10.031	87	67148	103.01	ug/L		98
49)	methacrylonitrile	9.297	67	110982	100.72	ug/L		98
50)	1,1,1-trichloroethane	9.669	97	452070	104.21	ug/L		97
51)	cyclohexane	9.748	84	469408	100.30	ug/L	#	83
52)	iso-butyl alcohol	9.853	43	109273	896.35	ug/L		98
53)	tert amyl alcohol	9.984	73	69415	456.98	ug/L		96
56)	2,2,4-trimethylpentane	10.110	57	994690	101.16	ug/L		99
57)	n-butyl alcohol	10.603	56	359292	4300.05	ug/L		97
58)	benzene	10.110	78	1217550	101.47	ug/L		98
59)	tert-amyl methyl ether	10.141	73	939024	100.21	ug/L		99
60)	heptane	10.278	57	230235	100.43	ug/L		99
61)	1,2-dichloroethane	10.126	62	354035	98.82	ug/L		99
62)	ethyl acrylate	10.823	55	347138	98.62	ug/L		98
63)	trichloroethene	10.823	95	294746	102.44	ug/L		99
64)	2-nitropropane	11.599	41	88836	93.34	ug/L	#	78
65)	2-chloroethyl vinyl ether	11.609	63	916978	499.41	ug/L		98
66)	methyl methacrylate	11.090	100	76080	103.03	ug/L		96
67)	1,2-dichloropropane	11.090	63	320424	100.50	ug/L		98
68)	methylcyclohexane	11.043	83	555781	102.37	ug/L		98
69)	dibromomethane	11.248	93	169323	101.11	ug/L		98
70)	bromodichloromethane	11.379	83	387167	102.17	ug/L		99
71)	epichlorohydrin	11.735	57	130661	474.83	ug/L		98
72)	cis-1,3-dichloropropene	11.829	75	509604	101.32	ug/L		99
73)	4-methyl-2-pentanone	11.919	58	427206	393.15	ug/L		96
74)	3-methyl-1-butanol	11.940	70	152448	1750.89	ug/L		98
77)	toluene	12.191	92	754956	101.29	ug/L		98
78)	ethyl methacrylate	12.375	69	367442	100.35	ug/L		99
79)	trans-1,3-dichloropropene	12.385	75	440384	100.31	ug/L		98
80)	1,1,2-trichloroethane	12.600	83	210543	100.45	ug/L		97
81)	tetrachloroethene	12.773	164	242348	101.68	ug/L		95
82)	2-hexanone	12.768	58	400059	383.04	ug/L		96
83)	1,3-dichloropropane	12.778	76	434860	99.29	ug/L		98
84)	butyl acetate	12.841	56	192866	97.51	ug/L		95
85)	dibromochloromethane	13.046	129	292568	104.48	ug/L		99
86)	1,2-dibromoethane	13.193	107	283551	101.95	ug/L		96
87)	n-butyl ether	13.560	57	1373435	100.03	ug/L		99
88)	chlorobenzene	13.649	112	806103	102.36	ug/L		98
89)	1,1,1,2-tetrachloroethane	13.712	131	293743	102.24	ug/L		99
90)	ethylbenzene	13.707	91	1398332	101.97	ug/L		100
91)	m,p-xylene	13.811	106	1095282	204.74	ug/L		99
92)	o-xylene	14.226	91	1115744	100.42	ug/L		98
93)	styrene	14.236	104	903721	102.14	ug/L		99
94)	butyl acrylate	14.047	55	574048	100.41	ug/L		98
95)	bromoform	14.498	173	182781	105.09	ug/L		95
96)	isopropylbenzene	14.561	105	1394907	100.75	ug/L		100
97)	cis-1,4-dichloro-2-butene	14.635	75	124848	99.10	ug/L		99
100)	bromobenzene	14.960	156	336355	102.38	ug/L		91
101)	1,1,2,2-tetrachloroethane	14.870	83	322612	98.73	ug/L		99
102)	trans-1,4-dichloro-2-b...	14.907	53	85168	99.28	ug/L		93
103)	1,2,3-trichloropropane	14.939	110	89810	99.57	ug/L		96
104)	n-propylbenzene	14.970	91	1614256	100.31	ug/L		99
105)	2-chlorotoluene	15.117	126	331244	101.28	ug/L		97
106)	4-chlorotoluene	15.217	91	957472	100.78	ug/L		99
107)	1,3,5-trimethylbenzene	15.117	105	1171226	101.49	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156556.D
Acq On : 9 Oct 2019 7:30 pm
Operator : roberts
Sample : ic6949-100
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 10 14:09:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

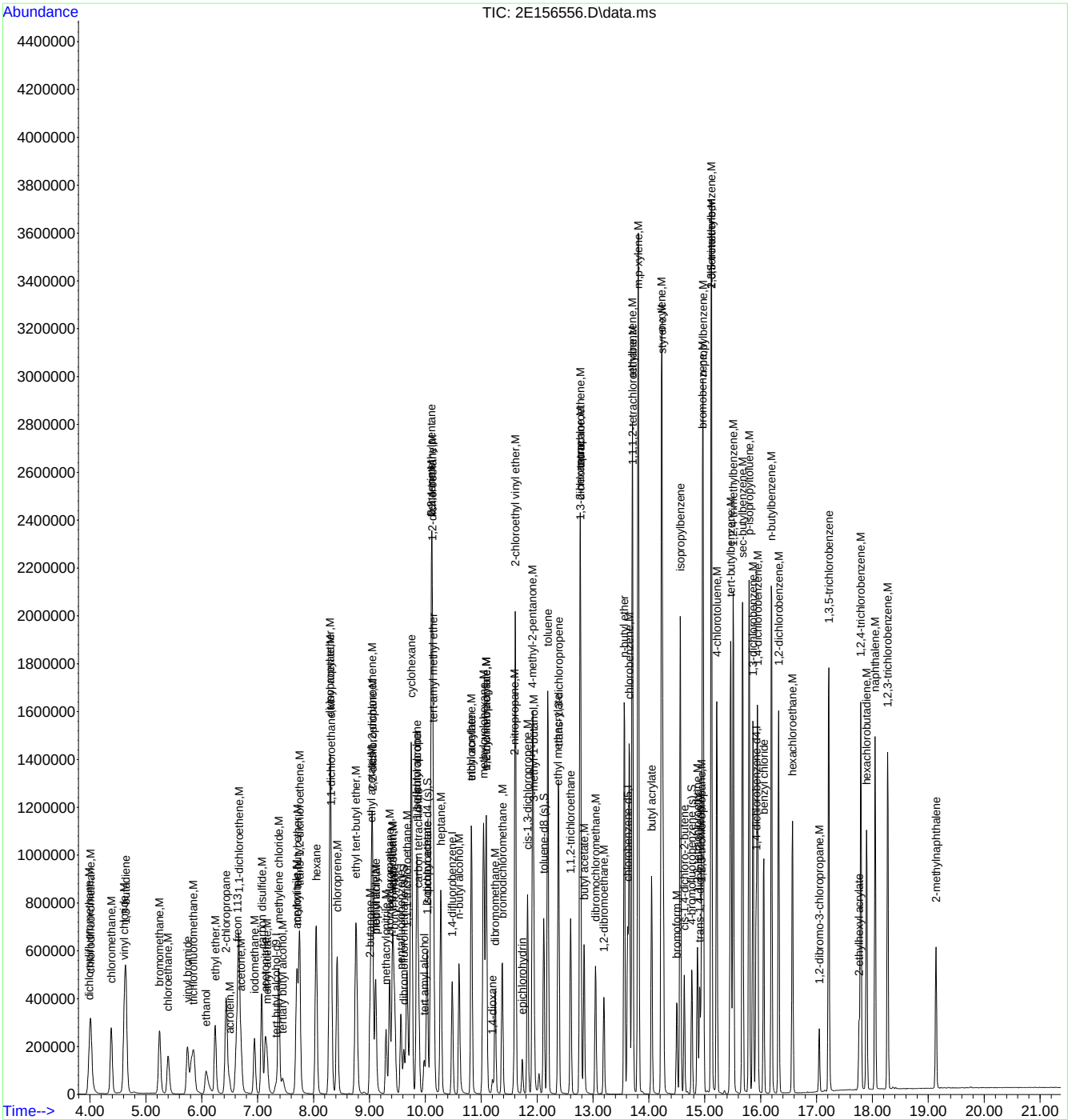
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.463	119	1017562	101.82	ug/L	99
109) 1,2,4-trimethylbenzene	15.510	105	1166463	100.74	ug/L	100
110) sec-butylbenzene	15.678	105	1508275	100.85	ug/L	99
111) 1,3-dichlorobenzene	15.861	146	634700	102.10	ug/L	99
112) p-isopropyltoluene	15.793	119	1283732	100.96	ug/L	100
113) 1,4-dichlorobenzene	15.945	146	650224	102.10	ug/L	99
114) 1,2-dichlorobenzene	16.323	146	626666	101.30	ug/L	98
115) n-butylbenzene	16.192	92	661090	100.86	ug/L	100
116) 1,2-dibromo-3-chloropr...	17.046	157	73189	99.64	ug/L	97
117) 1,3,5-trichlorobenzene	17.219	180	542779	103.95	ug/L	98
118) 1,2,4-trichlorobenzene	17.791	180	485382	103.96	ug/L	97
119) 2-ethylhexyl acrylate	17.759	70	71907	21.62	ug/L	97
120) hexachlorobutadiene	17.896	225	230299	101.77	ug/L	98
121) naphthalene	18.048	128	1083142	100.58	ug/L	99
122) 1,2,3-trichlorobenzene	18.273	180	436810	101.70	ug/L	100
123) hexachloroethane	16.569	201	201700	105.97	ug/L	97
124) benzyl chloride	16.055	91	681751	99.89	ug/L	99
125) 2-methylnaphthalene	19.138	142	294411	51.89	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156556.D
Acq On : 9 Oct 2019 7:30 pm
Operator : roberts
Sample : ic6949-100
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Oct 10 14:09:59 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156557.D
Acq On : 9 Oct 2019 8:00 pm
Operator : roberts
Sample : ic6949-200
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 10 14:10:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.336	65	100086	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	286904	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	454429	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	387591	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	200683	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	128871	50.43	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.86%			
55) 1,2-dichloroethane-d4 (s)	10.036	65	133078	48.76	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.52%			
76) toluene-d8 (s)	12.118	98	524478	49.07	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.14%			
99) 4-bromofluorobenzene (s)	14.771	95	191271	48.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.88%			
Target Compounds						Qvalue
2) ethanol	6.083	45	514702	19158.87	ug/L	97
3) tertiary butyl alcohol	7.452	59	277848	990.96	ug/L	98
4) 1,4-dioxane	11.200	88	108170	4726.21	ug/L	99
6) chlorodifluoromethane	4.017	51	894639	183.11	ug/L	99
7) dichlorodifluoromethane	3.996	85	735516	188.28	ug/L	100
8) chloromethane	4.384	50	936822	186.05	ug/L	99
9) vinyl chloride	4.615	62	972615	187.68	ug/L	98
10) bromomethane	5.244	94	553548	191.45	ug/L	98
11) chloroethane	5.402	64	490577	190.09	ug/L	98
12) trichlorofluoromethane	5.852	101	852885	193.02	ug/L	99
13) 1,3-butadiene	4.647	54	663677	188.97	ug/L	99
14) vinyl bromide	5.753	106	483359	198.80	ug/L	98
15) ethyl ether	6.246	74	359140	204.97	ug/L	97
16) 2-chloropropane	6.440	43	1055835	190.91	ug/L	99
17) acrolein	6.497	56	112303	197.63	ug/L	98
18) freon 113	6.639	151	466302	212.53	ug/L	99
19) 1,1-dichloroethene	6.670	61	879062	196.48	ug/L	97
20) acetone	6.707	43	578123	747.46	ug/L	96
21) acetonitrile	7.142	41	704235	1828.77	ug/L	99
22) iodomethane	6.948	142	737787	207.12	ug/L	96
23) carbon disulfide	7.074	76	1569363	198.69	ug/L	98
24) methylene chloride	7.378	84	599335	201.26	ug/L	98
25) methyl acetate	7.174	43	414409	195.22	ug/L	100
26) methyl tert butyl ether	7.708	73	1644107	196.89	ug/L	98
27) trans-1,2-dichloroethene	7.750	61	811195	195.59	ug/L	96
28) hexane	8.049	56	479396	200.69	ug/L	94
29) di-isopropyl ether	8.296	45	2132957	191.16	ug/L	94
30) ethyl tert-butyl ether	8.762	59	1897399	193.65	ug/L	98
31) 2-butanone	9.014	72	243983	761.31	ug/L	99
32) 1,1-dichloroethane	8.317	63	1056651	191.67	ug/L	99
33) chloroprene	8.422	53	891960	195.12	ug/L	98
34) acrylonitrile	7.698	53	208385	192.21	ug/L	97
35) vinyl acetate	8.296	86	128944	190.90	ug/L #	84
36) ethyl acetate	9.035	45	82156	181.12	ug/L #	47
37) 2,2-dichloropropane	9.056	77	861582	188.24	ug/L	98
38) cis-1,2-dichloroethene	9.051	96	647466	198.53	ug/L	96
39) propionitrile	9.114	54	752218	1844.45	ug/L	90
40) methyl acrylate	9.114	85	81449	200.67	ug/L	94
41) bromochloromethane	9.365	128	305811	203.21	ug/L	92
42) tetrahydrofuran	9.402	72	70034	188.64	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156557.D
Acq On : 9 Oct 2019 8:00 pm
Operator : roberts
Sample : ic6949-200
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 10 14:10:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
43)	chloroform	9.418	83	979077	197.18	ug/L		98
44)	t-butyl formate	9.449	59	575497	191.04	ug/L		95
45)	1,1-dichloropropene	9.848	75	814610	196.21	ug/L		98
46)	carbon tetrachloride	9.879	117	784282	199.88	ug/L		99
47)	isopropyl acetate	10.031	87	137328	202.44	ug/L		96
49)	methacrylonitrile	9.297	67	226879	197.84	ug/L		97
50)	1,1,1-trichloroethane	9.675	97	898651	199.06	ug/L		98
51)	cyclohexane	9.748	84	949214	194.88	ug/L	#	88
52)	iso-butyl alcohol	9.853	43	223365	1760.56	ug/L		96
53)	tert amyl alcohol	9.984	73	138164	874.01	ug/L		97
56)	2,2,4-trimethylpentane	10.110	57	2077213	203.57	ug/L		98
57)	n-butyl alcohol	10.608	56	733083	8454.40	ug/L		97
58)	benzene	10.115	78	2434274	195.49	ug/L		98
59)	tert-amyl methyl ether	10.147	73	1873487	192.65	ug/L		99
60)	heptane	10.278	57	481268	202.30	ug/L		100
61)	1,2-dichloroethane	10.126	62	699052	188.02	ug/L		99
62)	ethyl acrylate	10.823	55	712203	194.97	ug/L		98
63)	trichloroethene	10.828	95	594173	198.99	ug/L		97
64)	2-nitropropane	11.594	41	179640	181.89	ug/L	#	27
65)	2-chloroethyl vinyl ether	11.615	63	1853942	972.96	ug/L		97
66)	methyl methacrylate	11.090	100	158747	207.16	ug/L	#	88
67)	1,2-dichloropropane	11.090	63	643572	194.51	ug/L		98
68)	methylcyclohexane	11.043	83	1150819	204.25	ug/L		98
69)	dibromomethane	11.248	93	346318	199.27	ug/L		98
70)	bromodichloromethane	11.379	83	789298	200.71	ug/L		100
71)	epichlorohydrin	11.735	57	272586	954.55	ug/L		97
72)	cis-1,3-dichloropropene	11.829	75	1037773	198.83	ug/L		98
73)	4-methyl-2-pentanone	11.924	58	858058	760.92	ug/L		94
74)	3-methyl-1-butanol	11.940	70	301862	3340.79	ug/L		97
77)	toluene	12.191	92	1532172	195.42	ug/L		98
78)	ethyl methacrylate	12.375	69	754887	195.97	ug/L		99
79)	trans-1,3-dichloropropene	12.385	75	890284	192.76	ug/L		97
80)	1,1,2-trichloroethane	12.600	83	428485	194.34	ug/L		98
81)	tetrachloroethene	12.773	164	494090	197.07	ug/L		97
82)	2-hexanone	12.768	58	798025	726.32	ug/L		95
83)	1,3-dichloropropane	12.784	76	875810	190.08	ug/L		99
84)	butyl acetate	12.841	56	392915	188.84	ug/L		93
85)	dibromochloromethane	13.046	129	602213	204.43	ug/L		97
86)	1,2-dibromoethane	13.198	107	575712	196.76	ug/L		95
87)	n-butyl ether	13.560	57	2778936	192.40	ug/L		99
88)	chlorobenzene	13.654	112	1653099	199.55	ug/L		100
89)	1,1,1,2-tetrachloroethane	13.712	131	608423	201.31	ug/L		99
90)	ethylbenzene	13.707	91	2811043	194.87	ug/L		99
91)	m,p-xylene	13.811	106	2212303	393.11	ug/L		98
92)	o-xylene	14.226	91	2257562	193.14	ug/L		98
93)	styrene	14.236	104	1846711	198.41	ug/L		99
94)	butyl acrylate	14.047	55	1175799	195.51	ug/L		98
95)	bromoform	14.503	173	387561	211.82	ug/L		97
96)	isopropylbenzene	14.561	105	2843154	195.21	ug/L		99
97)	cis-1,4-dichloro-2-butene	14.635	75	263417	198.77	ug/L		99
100)	bromobenzene	14.960	156	698549	199.24	ug/L		95
101)	1,1,2,2-tetrachloroethane	14.870	83	669133	191.89	ug/L		100
102)	trans-1,4-dichloro-2-b...	14.907	53	176978	193.31	ug/L		95
103)	1,2,3-trichloropropane	14.944	110	187444	194.74	ug/L		97
104)	n-propylbenzene	14.970	91	3283129	191.17	ug/L		99
105)	2-chlorotoluene	15.117	126	682902	195.65	ug/L		96
106)	4-chlorotoluene	15.217	91	1973868	194.67	ug/L		99
107)	1,3,5-trimethylbenzene	15.122	105	2395490	194.51	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156557.D
Acq On : 9 Oct 2019 8:00 pm
Operator : roberts
Sample : ic6949-200
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 10 14:10:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration

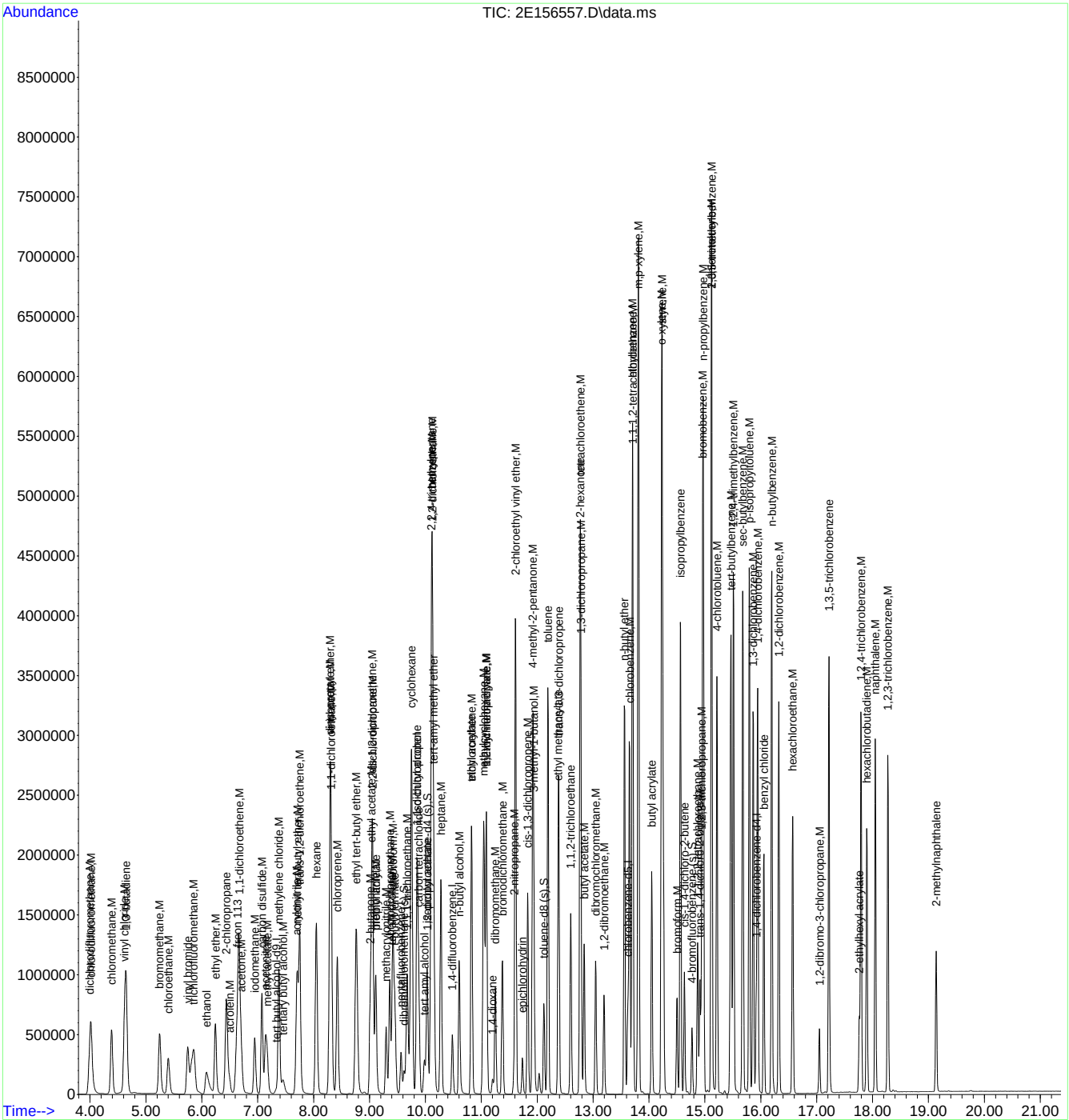
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) tert-butylbenzene	15.468	119	2122314	198.99	ug/L	96
109) 1,2,4-trimethylbenzene	15.510	105	2407029	194.78	ug/L	100
110) sec-butylbenzene	15.678	105	3097834	194.09	ug/L	99
111) 1,3-dichlorobenzene	15.861	146	1336546	201.46	ug/L	99
112) p-isopropyltoluene	15.793	119	2648914	195.21	ug/L	100
113) 1,4-dichlorobenzene	15.945	146	1369598	201.52	ug/L	99
114) 1,2-dichlorobenzene	16.323	146	1316710	199.44	ug/L	99
115) n-butylbenzene	16.197	92	1371830	196.12	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.052	157	153467	195.78	ug/L	98
117) 1,3,5-trichlorobenzene	17.219	180	1113101	199.76	ug/L	98
118) 1,2,4-trichlorobenzene	17.796	180	990678	198.82	ug/L	98
119) 2-ethylhexyl acrylate	17.759	70	159934	45.06	ug/L	99
120) hexachlorobutadiene	17.896	225	475012	196.70	ug/L	98
121) naphthalene	18.048	128	2185714	190.18	ug/L	100
122) 1,2,3-trichlorobenzene	18.273	180	890785	194.34	ug/L	99
123) hexachloroethane	16.569	201	430870	212.12	ug/L	97
124) benzyl chloride	16.055	91	1425194	195.67	ug/L	99
125) 2-methylnaphthalene	19.138	142	606761	100.21	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156557.D
Acq On : 9 Oct 2019 8:00 pm
Operator : roberts
Sample : ic6949-200
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Oct 10 14:10:01 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 07:42:35 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156560.D
Acq On : 9 Oct 2019 9:32 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 15:09:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 15:09:10 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.331	65	109844	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	289882	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	453356	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	380771	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	194846	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.612	113	129710	50.56	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.12%			
55) 1,2-dichloroethane-d4 (s)	10.036	65	134787	49.41	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 98.82%			
76) toluene-d8 (s)	12.118	98	516465	49.11	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.22%			
99) 4-bromofluorobenzene (s)	14.766	95	188496	49.61	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.22%			
Target Compounds						Qvalue
2) ethanol	6.078	45	155963	5218.81	ug/L	97
3) tertiary butyl alcohol	7.441	59	85832	293.01	ug/L	97
4) 1,4-dioxane	11.200	88	32068	1316.75	ug/L	99
6) chlorodifluoromethane	4.007	51	265575	54.41	ug/L	99
7) dichlorodifluoromethane	3.986	85	226169	61.31	ug/L	98
8) chloromethane	4.379	50	320027	62.85	ug/L	99
9) vinyl chloride	4.610	62	257812	51.39	ug/L	98
10) bromomethane	5.244	94	192054	64.68	ug/L	98
11) chloroethane	5.396	64	127708	49.22	ug/L	97
12) trichlorofluoromethane	5.847	101	242535	57.78	ug/L	97
13) 1,3-butadiene	4.641	54	229382	67.57	ug/L	99
14) vinyl bromide	5.742	106	137219	56.58	ug/L	100
15) ethyl ether	6.241	74	97683	53.82	ug/L	98
16) 2-chloropropane	6.435	43	310151	54.38	ug/L	98
17) acrolein	6.492	56	28509	49.42	ug/L	94
18) freon 113	6.634	151	129283	59.42	ug/L	96
19) 1,1-dichloroethene	6.665	61	232935	52.22	ug/L	99
20) acetone	6.702	43	213127	254.26	ug/L	98
22) iodomethane	6.943	142	259284	71.82	ug/L	98
23) carbon disulfide	7.074	76	532009	66.59	ug/L	98
24) methylene chloride	7.378	84	164989	51.72	ug/L	97
25) methyl acetate	7.169	43	105886	49.62	ug/L	99
26) methyl tert butyl ether	7.703	73	897835	103.65	ug/L	96
27) trans-1,2-dichloroethene	7.751	61	226979	54.68	ug/L	97
28) hexane	8.049	56	130673	57.36	ug/L	93
29) di-isopropyl ether	8.296	45	574183	51.36	ug/L	100
30) ethyl tert-butyl ether	8.757	59	527317	54.24	ug/L	99
31) 2-butanone	9.009	72	78716	265.87	ug/L #	85
32) 1,1-dichloroethane	8.312	63	300893	54.28	ug/L	100
33) chloroprene	8.422	53	256815	56.71	ug/L	98
35) vinyl acetate	8.301	86	31712	51.43	ug/L #	89
36) ethyl acetate	9.035	45	22675	47.11	ug/L #	77
37) 2,2-dichloropropane	9.051	77	237218	49.41	ug/L	99
38) cis-1,2-dichloroethene	9.051	96	174048	51.39	ug/L	95
39) propionitrile	9.108	54	220533	566.06	ug/L	99
40) methyl acrylate	9.114	85	22327	56.94	ug/L	95
41) bromochloromethane	9.360	128	84137	54.54	ug/L	96
42) tetrahydrofuran	9.402	72	19993	51.96	ug/L	92
43) chloroform	9.413	83	270720	52.33	ug/L	100
44) t-butyl formate	9.444	59	112584	37.52	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156560.D
Acq On : 9 Oct 2019 9:32 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 15:09:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 15:09:10 2019
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	1,1-dichloropropene	9.848	75	223566	53.92	ug/L		98
46)	carbon tetrachloride	9.874	117	215497	54.88	ug/L		98
47)	isopropyl acetate	10.031	87	35230	52.07	ug/L	#	91
49)	methacrylonitrile	9.297	67	63501	58.42	ug/L		98
50)	1,1,1-trichloroethane	9.669	97	243717	52.94	ug/L		97
51)	cyclohexane	9.743	84	268518	57.07	ug/L		99
52)	iso-butyl alcohol	9.853	43	64119	521.45	ug/L		98
53)	tert amyl alcohol	9.979	73	40249	249.26	ug/L		97
56)	2,2,4-trimethylpentane	10.105	57	634835	65.47	ug/L		99
57)	n-butyl alcohol	10.603	56	212862	2710.61	ug/L		98
58)	benzene	10.110	78	669718	51.65	ug/L		98
59)	tert-amyl methyl ether	10.141	73	499459	49.90	ug/L		99
60)	heptane	10.278	57	149726	67.56	ug/L		98
61)	1,2-dichloroethane	10.126	62	192547	50.35	ug/L		99
62)	ethyl acrylate	10.823	55	186856	54.80	ug/L		99
63)	trichloroethene	10.823	95	164388	54.57	ug/L		100
64)	2-nitropropane	11.599	41	53656	57.55	ug/L	#	78
65)	2-chloroethyl vinyl ether	11.609	63	541898	300.93	ug/L		99
66)	methyl methacrylate	11.090	100	42291	57.78	ug/L		94
67)	1,2-dichloropropane	11.085	63	174831	53.23	ug/L		96
68)	methylcyclohexane	11.043	83	295446	55.01	ug/L		99
69)	dibromomethane	11.248	93	91928	53.41	ug/L		97
70)	bromodichloromethane	11.373	83	205479	53.52	ug/L		99
71)	epichlorohydrin	11.735	57	77577	284.16	ug/L		99
72)	cis-1,3-dichloropropene	11.830	75	277973	55.40	ug/L		98
73)	4-methyl-2-pentanone	11.924	58	236600	224.42	ug/L		97
74)	3-methyl-1-butanol	11.940	70	88168	1078.60	ug/L		97
77)	toluene	12.191	92	413057	53.18	ug/L		100
78)	ethyl methacrylate	12.375	69	204228	58.93	ug/L		100
79)	trans-1,3-dichloropropene	12.385	75	244510	57.11	ug/L		99
80)	1,1,2-trichloroethane	12.600	83	113380	52.63	ug/L		95
82)	2-hexanone	12.768	58	234683	247.21	ug/L		100
83)	1,3-dichloropropane	12.779	76	240560	53.04	ug/L		99
84)	butyl acetate	12.842	56	106108	54.84	ug/L		95
85)	dibromochloromethane	13.046	129	158486	57.01	ug/L		97
86)	1,2-dibromoethane	13.193	107	153789	55.87	ug/L		96
87)	n-butyl ether	13.560	57	768343	56.80	ug/L		99
88)	chlorobenzene	13.649	112	444845	54.70	ug/L		99
89)	1,1,1,2-tetrachloroethane	13.712	131	160142	55.19	ug/L		99
90)	ethylbenzene	13.707	91	757327	53.68	ug/L		99
91)	m,p-xylene	13.811	106	597718	109.20	ug/L		100
92)	o-xylene	14.226	91	607660	53.39	ug/L		98
93)	styrene	14.236	104	489268	57.67	ug/L		98
94)	butyl acrylate	14.047	55	307417	59.13	ug/L		99
95)	bromoform	14.498	173	104536	61.91	ug/L		98
96)	isopropylbenzene	14.561	105	760977	54.42	ug/L		99
97)	cis-1,4-dichloro-2-butene	14.635	75	67452	56.17	ug/L		97
100)	bromobenzene	14.960	156	183817	53.88	ug/L		96
101)	1,1,2,2-tetrachloroethane	14.871	83	174620	53.17	ug/L		99
102)	trans-1,4-dichloro-2-b...	14.907	53	47207	55.42	ug/L		96
103)	1,2,3-trichloropropane	14.939	110	50034	52.23	ug/L		98
104)	n-propylbenzene	14.970	91	886807	53.49	ug/L		100
105)	2-chlorotoluene	15.117	126	179019	52.10	ug/L		96
106)	4-chlorotoluene	15.217	91	530225	53.01	ug/L		99
107)	1,3,5-trimethylbenzene	15.117	105	635499	53.70	ug/L		98
108)	tert-butylbenzene	15.463	119	554159	54.51	ug/L		98
109)	1,2,4-trimethylbenzene	15.510	105	639635	54.45	ug/L		100
110)	sec-butylbenzene	15.678	105	819463	54.27	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156560.D
Acq On : 9 Oct 2019 9:32 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 15:09:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 15:09:10 2019
Response via : Initial Calibration

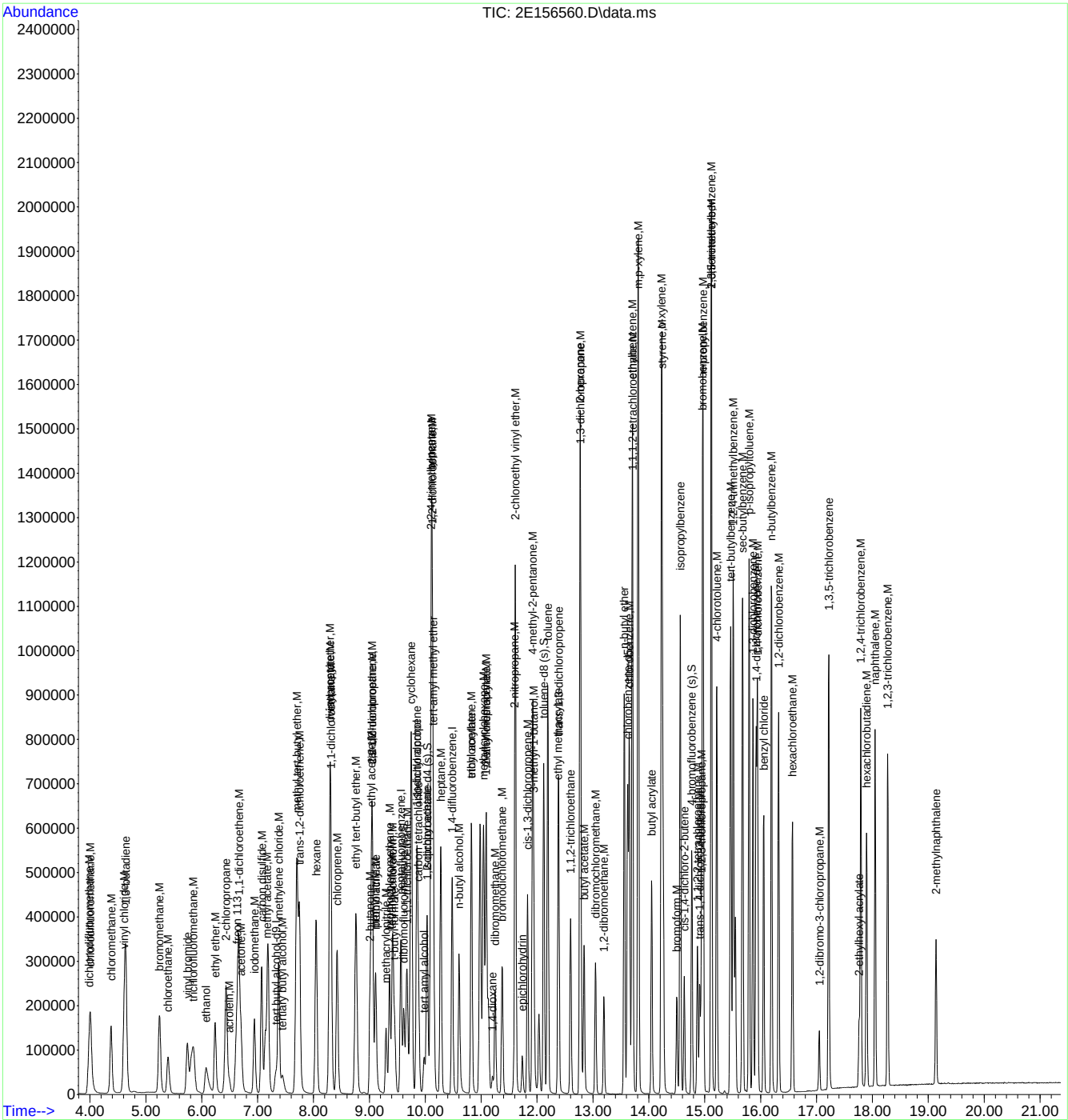
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
111) 1,3-dichlorobenzene	15.861	146	352900	53.88	ug/L	100
112) p-isopropyltoluene	15.793	119	706927	55.13	ug/L	99
113) 1,4-dichlorobenzene	15.945	146	356852	53.71	ug/L	100
114) 1,2-dichlorobenzene	16.323	146	343575	52.75	ug/L	98
115) n-butylbenzene	16.192	92	354364	54.28	ug/L	99
116) 1,2-dibromo-3-chloropr...	17.052	157	38505	52.15	ug/L	96
117) 1,3,5-trichlorobenzene	17.219	180	297008	55.57	ug/L	98
118) 1,2,4-trichlorobenzene	17.791	180	254541	53.58	ug/L	98
119) 2-ethylhexyl acrylate	17.759	70	38079	11.31	ug/L	100
120) hexachlorobutadiene	17.896	225	122871	54.32	ug/L	99
121) naphthalene	18.048	128	587838	55.45	ug/L	99
122) 1,2,3-trichlorobenzene	18.273	180	232967	53.04	ug/L	100
123) hexachloroethane	16.569	201	108594	58.02	ug/L	96
124) benzyl chloride	16.055	91	442581	64.06	ug/L	100
125) 2-methylnaphthalene	19.138	142	164920	29.39	ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156560.D
Acq On : 9 Oct 2019 9:32 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Oct 10 15:09:43 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 15:09:10 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156561.D
Acq On : 9 Oct 2019 10:02 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 10 14:38:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration

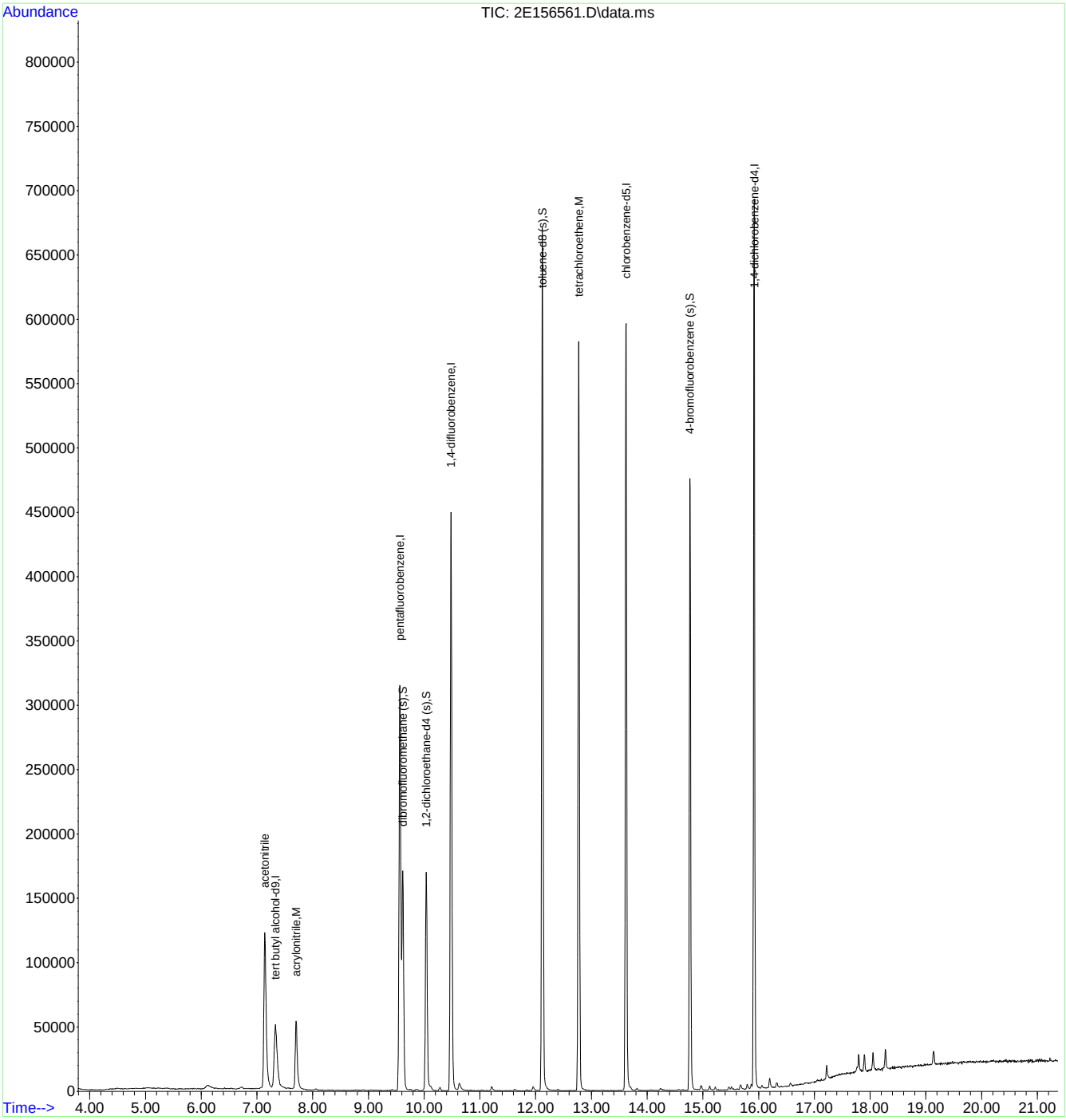
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.331	65	110328	500.00	ug/L	0.00
5) pentafluorobenzene	9.565	168	262549	50.00	ug/L	0.00
54) 1,4-difluorobenzene	10.482	114	413438	50.00	ug/L	0.00
75) chlorobenzene-d5	13.623	117	346092	50.00	ug/L	0.00
98) 1,4-dichlorobenzene-d4	15.919	152	170964	50.00	ug/L	0.00
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.617	113	117269	50.47	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.94%			
55) 1,2-dichloroethane-d4 (s)	10.037	65	127722	51.34	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.68%			
76) toluene-d8 (s)	12.118	98	471196	49.29	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.58%			
99) 4-bromofluorobenzene (s)	14.766	95	170092	51.02	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.04%			
Target Compounds						Qvalue
21) acetonitrile	7.142	41	193856	543.86	ug/L	99
34) acrylonitrile	7.703	53	56387	57.36	ug/L	100
81) tetrachloroethene	12.773	164	143009	63.97	ug/L	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156561.D
Acq On : 9 Oct 2019 10:02 pm
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Oct 10 14:38:09 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156566.D
Acq On : 10 Oct 2019 11:06 am
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:38:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	7.331	65	96273	500.00	ug/L		0.00
5) pentafluorobenzene	9.565	168	248750	50.00	ug/L		0.00
54) 1,4-difluorobenzene	10.482	114	394783	50.00	ug/L		0.00
75) chlorobenzene-d5	13.623	117	337161	50.00	ug/L		0.00
98) 1,4-dichlorobenzene-d4	15.919	152	173549	50.00	ug/L		0.00
System Monitoring Compounds							
48) dibromofluoromethane (s)	9.617	113	113251	51.45	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.90%				
55) 1,2-dichloroethane-d4 (s)	10.037	65	124698	52.49	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 104.98%				
76) toluene-d8 (s)	12.118	98	452536	48.59	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.18%				
99) 4-bromofluorobenzene (s)	14.766	95	168603	49.82	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.64%				
Target Compounds							Qvalue
2) ethanol	6.083	45	144900	5532.10	ug/L		98
3) tertiary butyl alcohol	7.447	59	70848	275.95	ug/L		98
4) 1,4-dioxane	11.206	88	29125	1364.49	ug/L		98
6) chlorodifluoromethane	4.012	51	189744	45.30	ug/L		95
13) 1,3-butadiene	4.642	54	158645	54.46	ug/L		99
15) ethyl ether	6.241	74	70756	45.43	ug/L		97
16) 2-chloropropane	6.440	43	234647	47.94	ug/L		99
18) freon 113	6.634	151	96132	51.49	ug/L		98
19) 1,1-dichloroethene	6.665	61	173594	45.35	ug/L		99
20) acetone	6.707	43	161040	223.89	ug/L		97
22) iodomethane	6.943	142	182659	58.96	ug/L		97
23) carbon disulfide	7.074	76	378782	55.25	ug/L		99
24) methylene chloride	7.378	84	122973	44.93	ug/L		98
25) methyl acetate	7.169	43	80073	43.72	ug/L		99
26) methyl tert butyl ether	7.709	73	673070	90.55	ug/L		99
27) trans-1,2-dichloroethene	7.751	61	172732	48.49	ug/L		98
29) di-isopropyl ether	8.291	45	449527	46.86	ug/L		95
30) ethyl tert-butyl ether	8.763	59	407159	48.81	ug/L		99
31) 2-butanone	9.014	72	58795	231.42	ug/L		99
32) 1,1-dichloroethane	8.317	63	229979	48.35	ug/L		99
33) chloroprene	8.422	53	195300	50.26	ug/L		98
35) vinyl acetate	8.301	86	26248	49.61	ug/L		100
36) ethyl acetate	9.035	45	17456	42.26	ug/L	#	79
37) 2,2-dichloropropane	9.051	77	194619	47.24	ug/L		99
38) cis-1,2-dichloroethene	9.051	96	131825	45.36	ug/L		96
39) propionitrile	9.109	54	173622	519.34	ug/L		98
40) methyl acrylate	9.114	85	16870	50.14	ug/L		100
41) bromochloromethane	9.366	128	62279	47.05	ug/L		93
42) tetrahydrofuran	9.407	72	15388	46.60	ug/L		93
43) chloroform	9.413	83	209859	47.28	ug/L		97
44) t-butyl formate	9.449	59	95079	36.92	ug/L		96
45) 1,1-dichloropropene	9.848	75	173500	48.76	ug/L		99
46) carbon tetrachloride	9.874	117	164713	48.88	ug/L		97
47) isopropyl acetate	10.031	87	26640	45.88	ug/L		98
49) methacrylonitrile	9.303	67	48258	51.73	ug/L		96
50) 1,1,1-trichloroethane	9.670	97	184394	46.67	ug/L		99
52) iso-butyl alcohol	9.853	43	53146	503.68	ug/L		94
53) tert amyl alcohol	9.979	73	32409	233.89	ug/L		91
56) 2,2,4-trimethylpentane	10.105	57	546723	64.75	ug/L		99
57) n-butyl alcohol	10.603	56	181296	2651.17	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156566.D
Acq On : 10 Oct 2019 11:06 am
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:38:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
58) benzene	10.110	78	513278	45.46	ug/L		100
59) tert-amyl methyl ether	10.142	73	386276	44.32	ug/L		99
60) heptane	10.278	57	132312	68.56	ug/L		99
61) 1,2-dichloroethane	10.126	62	150219	45.11	ug/L		100
62) ethyl acrylate	10.823	55	144524	48.68	ug/L		99
63) trichloroethene	10.823	95	125376	47.80	ug/L		99
64) 2-nitropropane	11.599	41	43174	53.17	ug/L	#	79
65) 2-chloroethyl vinyl ether	11.610	63	432301	275.69	ug/L		99
66) methyl methacrylate	11.090	100	32498	50.98	ug/L		98
67) 1,2-dichloropropane	11.090	63	138172	48.31	ug/L		99
68) methylcyclohexane	11.043	83	236408	50.55	ug/L		97
69) dibromomethane	11.248	93	70835	47.26	ug/L		98
70) bromodichloromethane	11.379	83	161059	48.18	ug/L		98
71) epichlorohydrin	11.735	57	63206	265.87	ug/L		99
72) cis-1,3-dichloropropene	11.830	75	219051	50.13	ug/L		99
73) 4-methyl-2-pentanone	11.919	58	184926	201.43	ug/L		100
74) 3-methyl-1-butanol	11.940	70	69574	977.41	ug/L		96
77) toluene	12.192	92	316210	45.98	ug/L		99
78) ethyl methacrylate	12.375	69	160647	52.35	ug/L		98
79) trans-1,3-dichloropropene	12.386	75	194076	51.19	ug/L		98
80) 1,1,2-trichloroethane	12.600	83	91096	47.75	ug/L		99
82) 2-hexanone	12.768	58	184265	219.20	ug/L		99
83) 1,3-dichloropropane	12.784	76	189760	47.25	ug/L		98
84) butyl acetate	12.842	56	84245	49.18	ug/L		93
85) dibromochloromethane	13.046	129	124421	50.54	ug/L		96
86) 1,2-dibromoethane	13.198	107	105886	43.44	ug/L		98
87) n-butyl ether	13.560	57	613774	51.24	ug/L		100
88) chlorobenzene	13.649	112	346860	48.17	ug/L		97
89) 1,1,1,2-tetrachloroethane	13.707	131	125369	48.79	ug/L		97
90) ethylbenzene	13.702	91	593218	47.49	ug/L		99
91) m,p-xylene	13.812	106	466073	96.16	ug/L		99
92) o-xylene	14.226	91	480081	47.64	ug/L		99
93) styrene	14.236	104	381829	50.82	ug/L		99
94) butyl acrylate	14.048	55	244963	53.21	ug/L		99
95) bromoform	14.498	173	81248	54.34	ug/L		97
96) isopropylbenzene	14.561	105	601167	48.55	ug/L		100
97) cis-1,4-dichloro-2-butene	14.635	75	55552	52.24	ug/L		98
100) bromobenzene	14.960	156	143337	47.17	ug/L		96
101) 1,1,2,2-tetrachloroethane	14.865	83	142105	48.58	ug/L		99
102) trans-1,4-dichloro-2-b...	14.907	53	39147	51.60	ug/L		98
103) 1,2,3-trichloropropane	14.944	110	38152	44.71	ug/L		94
104) n-propylbenzene	14.970	91	716739	48.53	ug/L		99
105) 2-chlorotoluene	15.117	126	141533	46.25	ug/L		98
106) 4-chlorotoluene	15.212	91	425137	47.72	ug/L		97
107) 1,3,5-trimethylbenzene	15.117	105	498257	47.27	ug/L		99
108) tert-butylbenzene	15.463	119	436721	48.23	ug/L		99
109) 1,2,4-trimethylbenzene	15.510	105	515971	49.31	ug/L		99
110) sec-butylbenzene	15.678	105	655612	48.74	ug/L		100
111) 1,3-dichlorobenzene	15.862	146	278661	47.76	ug/L		99
112) p-isopropyltoluene	15.793	119	561439	49.16	ug/L		99
113) 1,4-dichlorobenzene	15.946	146	283596	47.92	ug/L		100
114) 1,2-dichlorobenzene	16.323	146	274302	47.28	ug/L		99
115) n-butylbenzene	16.192	92	291453	50.12	ug/L		100
116) 1,2-dibromo-3-chloropr...	17.052	157	30460	46.31	ug/L		99
117) 1,3,5-trichlorobenzene	17.220	180	238209	50.04	ug/L		97
118) 1,2,4-trichlorobenzene	17.791	180	205503	48.56	ug/L		99
119) 2-ethylhexyl acrylate	17.760	70	30558	10.19	ug/L		98
120) hexachlorobutadiene	17.896	225	98589	48.93	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156566.D
Acq On : 10 Oct 2019 11:06 am
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:38:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration

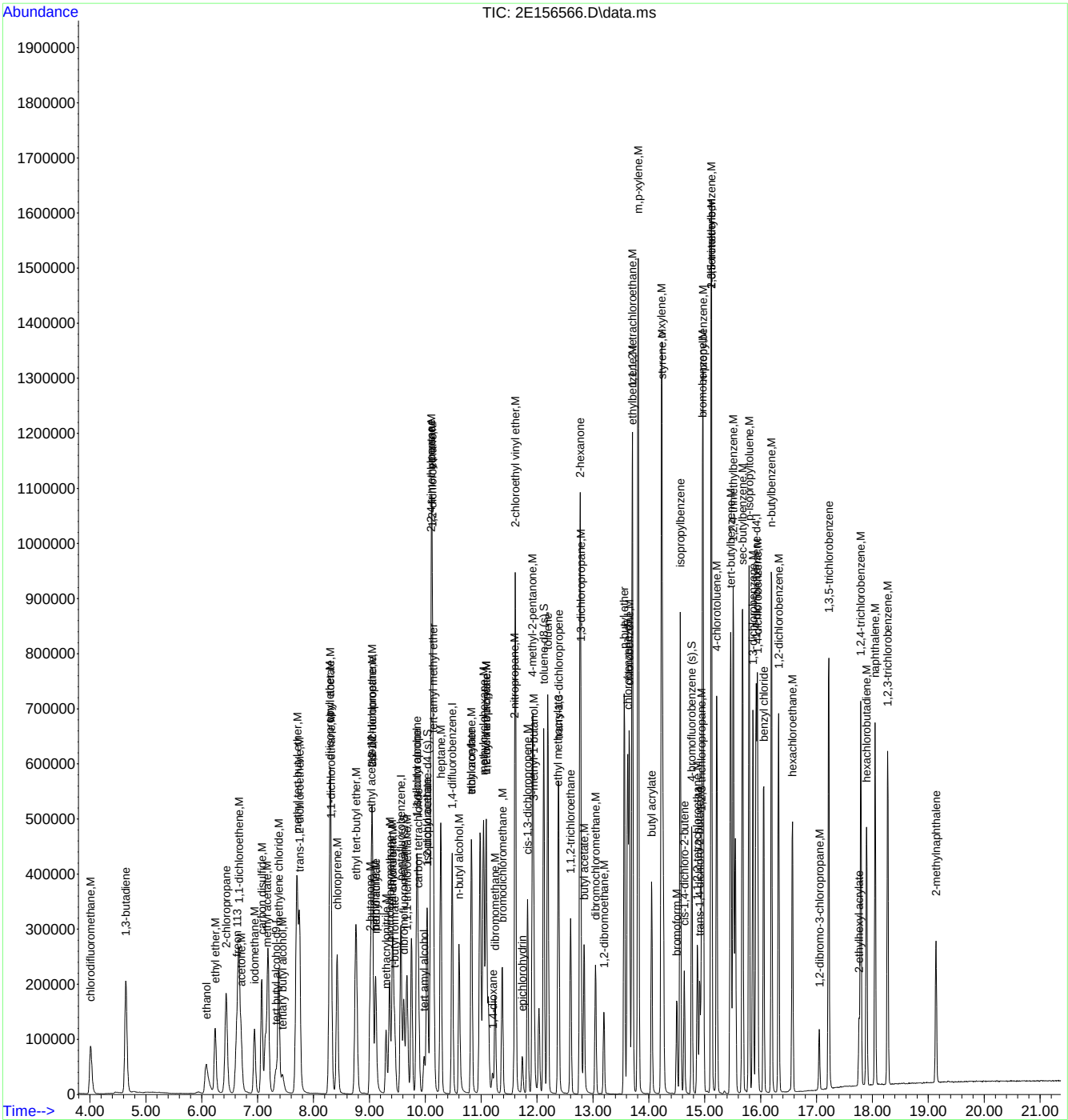
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
121) naphthalene	18.048	128	469783	49.75	ug/L	99
122) 1,2,3-trichlorobenzene	18.273	180	185870	47.51	ug/L	98
123) hexachloroethane	16.569	201	85181	51.10	ug/L	97
124) benzyl chloride	16.056	91	399159	64.86	ug/L	99
125) 2-methylnaphthalene	19.139	142	129818	25.97	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V2E6949\
Data File : 2E156566.D
Acq On : 10 Oct 2019 11:06 am
Operator : roberts
Sample : icv6949-50
Misc : MS37796,V2E6949,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Oct 10 14:38:58 2019
Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Thu Oct 10 14:35:42 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159296.d
Acq On : 5 Feb 2020 4:40 pm
Operator : edwardd
Sample : cc6949-50 Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:09:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	7.326	65	118208	500.00	ug/L	-0.01
5) pentafluorobenzene	9.554	168	296422	50.00	ug/L	-0.01
54) 1,4-difluorobenzene	10.472	114	460217	50.00	ug/L	-0.01
75) chlorobenzene-d5	13.612	117	376637	50.00	ug/L	-0.01
98) 1,4-dichlorobenzene-d4	15.909	152	192568	50.00	ug/L	-0.01
128) pentafluorobenzene(a)	9.554	168	296422	50.00	ug/L	-0.01
System Monitoring Compounds						
48) dibromofluoromethane (s)	9.607	113	134004	51.08	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.16%			
55) 1,2-dichloroethane-d4 (s)	10.026	65	143240	51.72	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.44%			
76) toluene-d8 (s)	12.108	98	496884	47.76	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 95.52%			
99) 4-bromofluorobenzene (s)	14.755	95	181928	48.45	ug/L	-0.01
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.90%			
Target Compounds						Qvalue
2) ethanol	6.073	45	143549	4463.54	ug/L	95
3) tertiary butyl alcohol	7.436	59	91136	289.10	ug/L	97
4) 1,4-dioxane	11.195	88	35768	1364.76	ug/L	99
6) chlorodifluoromethane	4.012	51	234819	47.05	ug/L	98
7) dichlorodifluoromethane	3.981	85	199167	52.80	ug/L	98
8) chloromethane	4.390	50	197636	37.95	ug/L	98
9) vinyl chloride	4.626	62	212054	41.34	ug/L	99
10) bromomethane	5.250	94	146498	48.25	ug/L	99
11) chloroethane	5.402	64	121081	45.64	ug/L	99
12) trichlorofluoromethane	5.858	101	242576	56.51	ug/L	95
13) 1,3-butadiene	4.647	54	177229	51.05	ug/L	98
14) vinyl bromide	5.748	106	129165	52.08	ug/L	99
15) ethyl ether	6.235	74	90875	48.97	ug/L	97
16) 2-chloropropane	6.435	43	262639	45.03	ug/L	90
17) acrolein	6.487	56	26700	45.27	ug/L	94
18) freon 113	6.634	151	134251	60.34	ug/L	93
19) 1,1-dichloroethene	6.660	61	237760	52.13	ug/L	97
20) acetone	6.702	43	150633	175.74	ug/L	99
21) acetonitrile	7.132	41	180173	447.71	ug/L	99
22) iodomethane	6.938	142	203224	55.05	ug/L	94
23) carbon disulfide	7.074	76	438363	53.66	ug/L	98
24) methylene chloride	7.368	84	166676	51.10	ug/L	94
25) methyl acetate	7.169	43	105938	48.55	ug/L	99
26) methyl tert butyl ether	7.698	73	402497	45.44	ug/L	97
27) trans-1,2-dichloroethene	7.740	61	219639	51.74	ug/L	95
28) hexane	8.044	56	134431	57.71	ug/L	92
29) di-isopropyl ether	8.285	45	545482	47.71	ug/L	93
30) ethyl tert-butyl ether	8.752	59	478195	48.10	ug/L	97
31) 2-butanone	9.004	72	66380	219.26	ug/L #	88
32) 1,1-dichloroethane	8.306	63	283647	50.04	ug/L	99
33) chloroprene	8.411	53	245817	53.08	ug/L	96
34) acrylonitrile	7.688	53	55114	49.65	ug/L	99
35) vinyl acetate	8.296	86	37106	58.85	ug/L #	62
36) ethyl acetate	9.030	45	22267	45.24	ug/L	95
37) 2,2-dichloropropane	9.046	77	232060	47.27	ug/L	99
38) cis-1,2-dichloroethene	9.040	96	179689	51.89	ug/L	92
39) propionitrile	9.103	54	185758	466.28	ug/L	85
40) methyl acrylate	9.103	85	21691	54.10	ug/L #	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159296.d
Acq On : 5 Feb 2020 4:40 pm
Operator : edwardd
Sample : cc6949-50 Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:09:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
41) bromochloromethane	9.350	128	85915	54.46	ug/L		88
42) tetrahydrofuran	9.392	72	18937	48.13	ug/L	#	78
43) chloroform	9.407	83	272107	51.44	ug/L		99
44) t-butyl formate	9.439	59	112269	36.59	ug/L		94
45) 1,1-dichloropropene	9.837	75	213134	50.27	ug/L		97
46) carbon tetrachloride	9.869	117	215182	53.59	ug/L		98
47) isopropyl acetate	10.021	87	36075	52.14	ug/L	#	85
49) methacrylonitrile	9.287	67	60204	54.16	ug/L		94
50) 1,1,1-trichloroethane	9.664	97	248953	52.88	ug/L		98
51) cyclohexane	9.738	84	247559	51.46	ug/L	#	84
52) iso-butyl alcohol	9.848	43	58565	465.77	ug/L		96
53) tert amyl alcohol	9.968	73	38907	235.63	ug/L		95
56) 2,2,4-trimethylpentane	10.099	57	570239	57.93	ug/L		98
57) n-butyl alcohol	10.592	56	214123	2686.01	ug/L		97
58) benzene	10.099	78	652112	49.54	ug/L		97
59) tert-amyl methyl ether	10.131	73	471508	46.40	ug/L		96
60) heptane	10.267	57	125078	55.60	ug/L		98
61) 1,2-dichloroethane	10.115	62	194772	50.17	ug/L		100
62) ethyl acrylate	10.818	55	176552	51.01	ug/L		98
63) trichloroethene	10.818	95	157005	51.34	ug/L		98
64) 2-nitropropane	11.583	41	47328	50.00	ug/L	#	39
65) 2-chloroethyl vinyl ether	11.599	63	453232	247.94	ug/L		97
66) methyl methacrylate	11.080	100	39515	53.18	ug/L	#	90
67) 1,2-dichloropropane	11.075	63	158692	47.60	ug/L		94
68) methylcyclohexane	11.033	83	296799	54.44	ug/L		98
69) dibromomethane	11.237	93	91466	52.35	ug/L		94
70) bromodichloromethane	11.363	83	205712	52.79	ug/L		97
71) epichlorohydrin	11.725	57	72765	262.56	ug/L		97
72) cis-1,3-dichloropropene	11.819	75	253991	49.86	ug/L		98
73) 4-methyl-2-pentanone	11.908	58	219230	204.84	ug/L		93
74) 3-methyl-1-butanol	11.929	70	86277	1039.73	ug/L		94
77) toluene	12.181	92	386681	50.33	ug/L		96
78) ethyl methacrylate	12.370	69	181354	52.91	ug/L		96
79) trans-1,3-dichloropropene	12.375	75	223241	52.72	ug/L		96
80) 1,1,2-trichloroethane	12.590	83	108264	50.81	ug/L		98
81) tetrachloroethene	12.763	164	126346	51.93	ug/L		96
82) 2-hexanone	12.758	58	192750	205.26	ug/L		99
83) 1,3-dichloropropane	12.768	76	218247	48.65	ug/L		98
84) butyl acetate	12.831	56	94378	49.32	ug/L		89
85) dibromochloromethane	13.036	129	148276	53.92	ug/L		98
86) 1,2-dibromoethane	13.182	107	142194	52.22	ug/L		96
87) n-butyl ether	13.555	57	644104	48.14	ug/L		98
88) chlorobenzene	13.639	112	397013	49.36	ug/L		96
89) 1,1,1,2-tetrachloroethane	13.701	131	149413	52.06	ug/L		98
90) ethylbenzene	13.696	91	691384	49.55	ug/L		100
91) m,p-xylene	13.801	106	537286	99.24	ug/L		97
92) o-xylene	14.215	91	562711	49.98	ug/L		100
93) styrene	14.226	104	442060	52.67	ug/L		99
94) butyl acrylate	14.042	55	269697	52.44	ug/L		96
95) bromoform	14.488	173	94107	56.35	ug/L		97
96) isopropylbenzene	14.551	105	687006	49.67	ug/L		99
97) cis-1,4-dichloro-2-butene	14.624	75	54761	46.10	ug/L		92
100) bromobenzene	14.949	156	174344	51.71	ug/L		94
101) 1,1,2,2-tetrachloroethane	14.855	83	161519	49.76	ug/L		97
102) trans-1,4-dichloro-2-b...	14.897	53	39963	47.47	ug/L		99
103) 1,2,3-trichloropropane	14.928	110	47347	50.01	ug/L		95
104) n-propylbenzene	14.960	91	791858	48.33	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159296.d
Acq On : 5 Feb 2020 4:40 pm
Operator : edwardd
Sample : cc6949-50 Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:09:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration

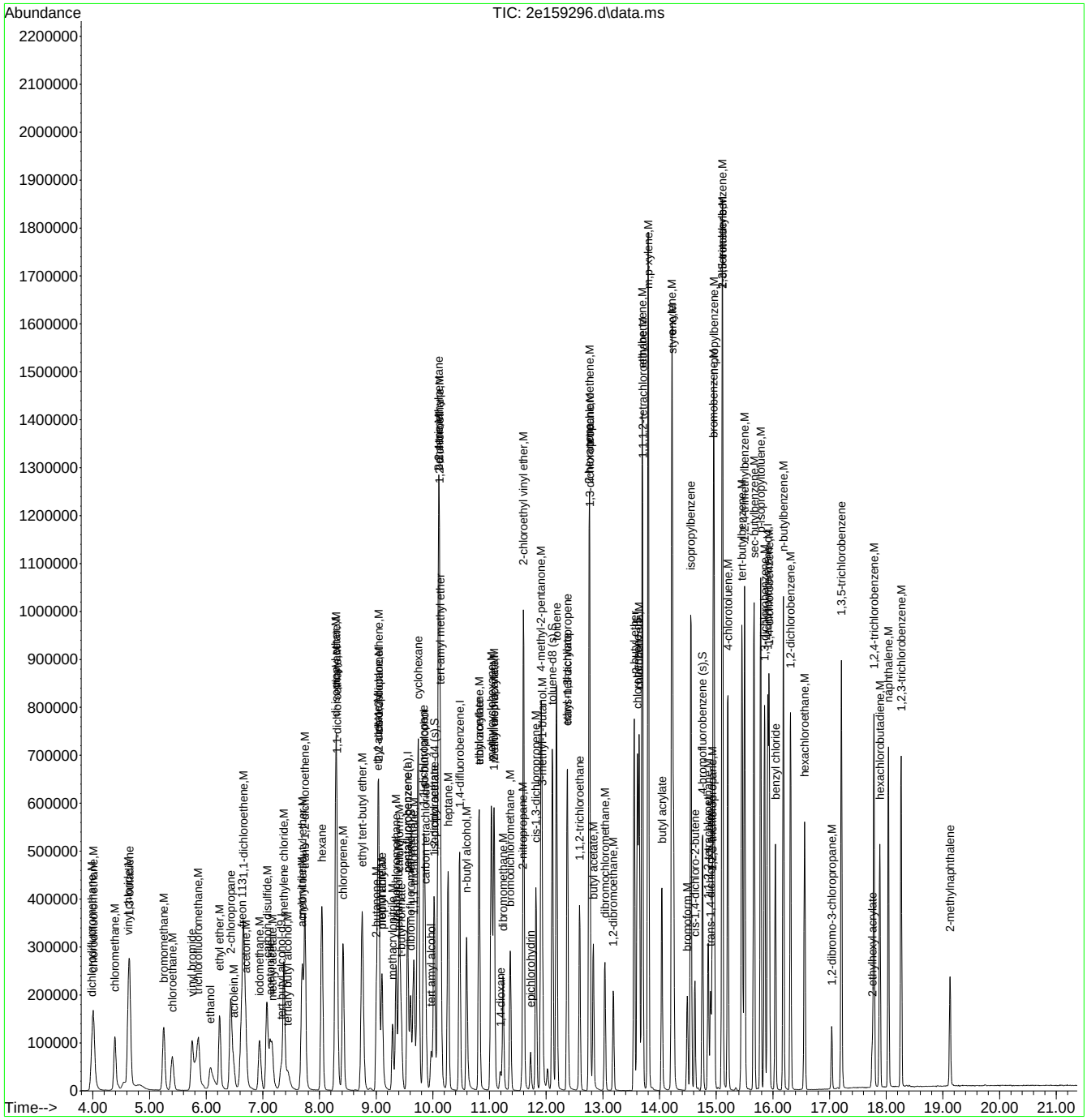
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 2-chlorotoluene	15.107	126	161850	47.66	ug/L	98
106) 4-chlorotoluene	15.206	91	485522	49.12	ug/L	99
107) 1,3,5-trimethylbenzene	15.107	105	579416	49.54	ug/L	97
108) tert-butylbenzene	15.453	119	503818	50.15	ug/L	98
109) 1,2,4-trimethylbenzene	15.500	105	584718	50.36	ug/L	97
110) sec-butylbenzene	15.668	105	728369	48.80	ug/L	100
111) 1,3-dichlorobenzene	15.851	146	325872	50.34	ug/L	98
112) p-isopropyltoluene	15.783	119	623347	49.19	ug/L	98
113) 1,4-dichlorobenzene	15.935	146	328439	50.02	ug/L	99
114) 1,2-dichlorobenzene	16.312	146	320244	49.75	ug/L	98
115) n-butylbenzene	16.187	92	313381	48.57	ug/L	98
116) 1,2-dibromo-3-chloropr...	17.041	157	34933	47.87	ug/L	98
117) 1,3,5-trichlorobenzene	17.209	180	268095	50.75	ug/L	97
118) 1,2,4-trichlorobenzene	17.781	180	234363	49.91	ug/L	98
119) 2-ethylhexyl acrylate	17.754	70	21621	6.50	ug/L	95
120) hexachlorobutadiene	17.885	225	106401	47.60	ug/L	98
121) naphthalene	18.037	128	515396	49.19	ug/L	99
122) 1,2,3-trichlorobenzene	18.263	180	211217	48.65	ug/L	98
123) hexachloroethane	16.559	201	99899	54.01	ug/L	99
124) benzyl chloride	16.045	91	359279	52.62	ug/L	100
125) 2-methylnaphthalene	19.128	142	115123	20.76	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\kristelv\february 2020\02072020\v2e7090\
Data File : 2e159296.d
Acq On : 5 Feb 2020 4:40 pm
Operator : edwardd
Sample : cc6949-50 Inst : VOAMS2E
Misc : MS40832,V2E7090,5,,,,1
ALS Vial : 13 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M2E6949.M
Quant Results File: M2E6949.RES
Quant Time: Feb 06 12:09:25 2020
Quant Title : SW-846 Method V8260C / EPA 624 , ZB624 60Mx0.25MMx1.4UM
QLast Update : Mon Jan 20 11:39:19 2020
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	ZB624(60mx0.25mmx1.4um)
STANDARDS	ABK v019-2688-22.56	EC v019-2688-40.8	Acrolein v019-2688-32.3 6		Method	V8260C
Standard Concentrations	100ppm-10,000 ppm	100 ppm	100 ppm		Init Calib Date	10/9/19
EXPIRATION	10/23/2019	10/14/2019	10/27/2019			
STANDARDS	ABK v019-2688-38.7	EC v019-2688-36.6	Acrolein v019-2688-39.2	Ext PA: V019-2688-4 1.1		
Standard Concentrations	100ppm-10,000 ppm	100 ppm	100 ppm	100/1000 ppm	Analysis Date	10/9/2019
EXPIRATION	11/3/19	10/10/19	11/3/19	11/9/19	Sequence loaded by	Robert Szot
INTERNAL SURROGATE	v019-2688-25				Data processed by	Robert Szot
Internal Surrogate Concentration	250/2500ppm				Batch ID	V2E6949
EXPIRATION	10/25/19				Matrix	AQ
					Approved By:	KANYAV
pH Paper Lot#	204518		Initial Calibration Method	M2E6949	Approved Date:	10/11/2019 12:40:12 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2E	156547	BFB		NA			5			1	ok	2:58 pm
2E	156548	IC6949-0.2		NA		8260 initial calibration	5			2	ok	1 uL ABK, EC, Acrolein / 500 mL DI H2O
2E	156549	IC6949-0.5		NA		8260 initial calibration	5			3	ok	2.5 uL ABK, EC, Acrolein / 500 mL DI H2O
2E	156550	IC6949-1		NA		8260 initial calibration	5			4	ok	5 uL ABK, EC, Acrolein / 500 mL DI H2O
2E	156551	IC6949-2		NA		8260 initial calibration	5			5	ok	4 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156552	IC6949-4		NA		8260 initial calibration	5			6	ok	8 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156553	IC6949-8		NA		8260 initial calibration	5			7	ok	16 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156554	IC6949-20		NA		8260 initial calibration	5			8	ok	40 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156555	ICC6949-50		NA		8260 initial calibration	5			9	ok	100 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156556	IC6949-100		NA		8260 initial calibration	5			10	ok	200 uL ABK, EC, Acrolein / 200 mL DI H2O
2E	156557	IC6949-200		NA		8260 initial calibration	5			11	ok	400 uL ABK, EC, Acrolein / 200 mL DI H2O

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2E	156558	IB		NA			5			12	ok	
2E	156559	IB		NA			5			13	ok	
2E	156560	ICV6949-50		NA		8260 initial calibration	5			14	ok	100 uL Ext ABK (-38.7), Ext EC, Ext Acrolein / 200 mL DI H2O
2E	156561	ICV6949-50		NA		8260 initial calibration	5			15	ok	100 uL Ext PA / 200 mL DI H2O
2E	156562	IB		NA			5			16	ok	
2E	156563	BFB2		NA			5			17	ok	
2E	156564	ICV6949-50		NA		8260 initial calibration	5			18	NG	internal standard 300% high after being idle for a short while
2E	156565	IB		NA			5			19	ok	
2E	156566	ICV6949-50		NA		8260 initial calibration	5			20	ok	100 uL Ext ABK (-38.1) / 200 mL DI H2O

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standards	ABK: V019-2692-77.9	EC: V019-2692-79.4	Acrolein: V019-2692-44.47		Column	ZB-624(60mx0.25mmx1.4um)
Standard Concentration	100-10,000ppm	100ppm	100ppm		Method	V8260C
Expiration Date	3/4/2020	2/10/2020	2/10/2020		Init Calib Date	10/9/2019
Internal Surrogate	V019-2692-36					
Internal Surrogate Concentration	250/2,500ppm				Analysis Date	2/5/2020
Expiration Date	02/06/2020				Sequence loaded by	Devin Gomez
					Data processed by	kristelv
					Batch ID	V2E7090
					Matrix	AQ
Initial Calibration Method	M2E6949				Approved By:	KANYAV
pH Paper Lot#	217518				Approved Date:	2/7/2020 1:30:59 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2E	159296	BFB/CC6949-50		NA			5			1	ok/ok	50uL ABK, EC, Acrolein/100mL (4:40pm)
2E	159297	CC6949-1		NA			5			2	ok	1uL ABK, EC, Acrolein/100mL
2E	159298	BS		NA			5			3	ok	50uL ABK, EC, Acrolein/100mL
2E	159299	IB		NA			5			4	ok	
2E	159300	MB		NA			5			5	ok	
2E	159301	JD2274-36	1	NA	MS40758	V8260MASTD	5		1	6	ok	
2E	159302	JD2274-37	2	20X	MS40758	V8260MASTD	2.5/50		1	7	ok	
2E	159303	JD2274-37	2	200X	MS40758	V8260MASTD	0.25/50		1	8	ok	too dilute
2E	159304	JD2274-38	1	20X	MS40758	V8260MASTD	2.5/50		1	9	ok	
2E	159305	JD2274-38	1	200X	MS40758	V8260MASTD	0.25/50		1	10	ok	too dilute
2E	159306	JD2274-37MS	2	20X	MS40758	V8260MASTD	2.5/50		1	11	ok	25uL ABK, EC, Acrolein/50mL

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
2E	159307	JD2274-37MSD	2	20X	MS40758	V8260MASTD	2.5/50		1	12	ok	25uL ABK, EC, Acrolein/50mL
2E	159308	IB		NA			5			13	ok	
2E	159309	JD2733-5	4	NA	MS40943	V8260TCL20+	5		1	14	ok	
2E	159310	JD2733-6	7	NA	MS40943	V8260TCL20+	5		1	15	ok	
2E	159311	JD1182-5	3	NA	MS40943	V8260TCL20+	5		1	16	ok	
2E	159312	JD2635-38	6	NA	MS40921	V8260TCL20+	5		1	17	ok	
2E	159313	JD2635-39	6	NA	MS40921	V8260TCL20+	5		1	18	ok	
2E	159314	JD2635-40	1	NA	MS40921	V8260TCL20+	5		1	19	ok	
2E	159315	JD2560-1	1	NA	MS40882	V8260NHF	5		1	20	ok	
2E	159316	JD2560-2	1	NA	MS40882	V8260NHF	5		1	21	ok	
2E	159317	JD2571-1	1	NA	MS40882	V8260TCL20	5		1	22	ok	3:20am