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

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Automated Report

Technical Report for

Intercontinental Terminals

CARDILCL: Deer Park Release

SGS Job Number: TD39353

Sampling Dates: 05/18/19 - 05/19/19

Report to:

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Crystal Lake, IL 60014
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Total number of pages in report: 170

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.

John Watson
Technical Director

Client Service contact: Erika Garcia 713-271-4700

Certifications: TX (T104704220-19-32) AR (14-016-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) NJ (TX010) OK (2018-129) VA (10171)

90016250

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SGS North America Inc.

Sample Summary

Intercontinental Terminals

Job No: TD39353

CARDILCL: Deer Park Release

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TD39353-1	05/18/19	11:30		05/19/19	AQ	Water	WW-20190518-002-DAY16
TD39353-2	05/19/19	11:30		05/19/19	AQ	Water	WW-20190519-002-DAY17
TD39353-2A	05/19/19	11:30		05/19/19	AQ	Water	WW-20190519-002-DAY17

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client:	Intercontinental Terminals	**Job No**	TD39353
Site:	CARDILCL: Deer Park Release	**Report Date**	5/28/2019 2:21:07 PM

2 Samples were collected between 05/18/2019 and 05/19/2019 and received intact at SGS North America Inc (SGS) Houston on 05/19/2019 and properly preserved in 1 cooler at 1.8 Deg C. The samples received an SGS job number of TD39353. A listing of the Laboratory Sample ID, Client Sample ID, and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

MS Volatiles By Method SW846 8260C

Matrix: AQ **Batch ID:** VX4025

- All samples were analyzed within the recommended method holding time.
- Samples TD39309-2MS, TD39309-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- TD39353-1: Sample composited prior to analysis per client request.

General Chemistry By Method ASTM D6503-99

Matrix: AQ **Batch ID:** MB18075

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

General Chemistry By Method SM 3500CR B-2011

Matrix: AQ **Batch ID:** GN98575

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples TD39353-2DUP, TD39353-2MS were used as the QC samples for Chromium, Hexavalent.

General Chemistry By Method SM 5210B-2011

Matrix: AQ **Batch ID:** GP53177

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample TD39379-2DUP was used as the QC sample for Carbonaceous Bod, 5 Day.

SGS certifies that this report meets the project requirements for analytical data produced for the samples as received at SGS and as stated on the COC. SGS certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SGS Quality Manual except as noted above. This report is to be used in its entirety. SGS is not responsible for any assumptions of data quality if partial data packages are used.

Summary of Hits

Job Number: TD39353
Account: Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Collected: 05/18/19 thru 05/19/19

3

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TD39353-1	**WW-20190518-002-DAY16**					
No hits reported in this sample.						
TD39353-2	**WW-20190519-002-DAY17**					
Enterococci		40.7	1		mpn/100ml	ASTM D6503-99
TD39353-2A	**WW-20190519-002-DAY17**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	WW-20190518-002-DAY16		
Lab Sample ID:	TD39353-1	**Date Sampled:**	05/18/19
Matrix:	AQ - Water	**Date Received:**	05/19/19
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	CARDILCL: Deer Park Release		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	X0128843.D	1	05/22/19 00:48	FT	n/a	n/a	VX4025
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	MDL	Units	Q
106-89-8	Epichlorohydrin	ND	10	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-122%
17060-07-0	1,2-Dichloroethane-D4	118%		68-124%
2037-26-5	Toluene-D8	116%		80-119%
460-00-4	4-Bromofluorobenzene	109%		72-126%

(a) Sample composited prior to analysis per client request.

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

SGS North America Inc.

Report of Analysis

Client Sample ID:	WW-20190519-002-DAY17		
Lab Sample ID:	TD39353-2	**Date Sampled:**	05/19/19
Matrix:	AQ - Water	**Date Received:**	05/19/19
		Percent Solids:	n/a
Project:	CARDILCL: Deer Park Release		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chromium, Hexavalent	< 0.010	0.010	mg/l	1	05/20/19 09:30	PA	SM 3500CR B-2011
Enterococci	40.7	1	mpn/100ml	1	05/19/19 14:45	MS	ASTM D6503-99

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	WW-20190519-002-DAY17		
Lab Sample ID:	TD39353-2A	**Date Sampled:**	05/19/19
Matrix:	AQ - Water	**Date Received:**	05/19/19
		Percent Solids:	n/a
Project:	CARDILCL: Deer Park Release		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Carbonaceous Bod, 5 Day	< 2.0	2.0	mg/l	1	05/20/19 18:27	MC	SM 5210B-2011

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS

CHAIN OF CUSTODY

10165 Harwin Dr. Ste 150 Houston, TX 77036
TEL 713-271-4700 FAX 713-271-4770
www.accutest.com

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FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: TD39353

Client / Reporting Information

Company Name: InterContinental Terminal Co
Street Address: 1943 Battleground Rd.
City: Deer Park State: TX Zip: 77536
Project Contact: Cheryl Henne E-mail: Cheryl.Randle@cardno.com
Phone #: Fax #:
Sampler(s) Name(s): R Nakamura Phone #: 8054155956

Project Information

Project Name: Deer Park Fire
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

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

Requested Analyses

Accutest Sample #	Field ID / Point of Collection	Collection Date	Time	Sampled By	Matrix	# of bottles	HCl	NaOH	ZA/NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	TSP	Na2SO4	ENCORE	OTHER	Epichlorohydrin by 8260	Enterococci	Hexavalent Chromium	CBOD	Matrix Codes / LAB USE ONLY
1	WW-20190518-002-DAY16	5/18/19	1130	SH,RN	WW	4	X												X				
2	WW-20190519-002-DAY17	5/19/19	1130	SH,RN	WW	3												1		X	X	X	

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

Turnaround Time (Business days)

- ☐ Standard
- ☐ 5 Day *RUSH*
- ☐ 4 Day *RUSH*
- ☐ 3 Day *RUSH*
- ☐ 2 Day *RUSH*
- ☐ 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Approved By (Accutest PM): / Date:

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULT1 (Level 3+4)
- ☐ REDT1 (Level 3+4)
- ☐ Commercial "C"
- ☐ TRRP
- ☐ EDD Format
- ☐ Other _____

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC & Surrogate Summary

Comments / Special Instructions

*** Composite vials for V8260EPICH ***

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 R Nakamura	5/19/19 1230	2 [signature]	2 [signature]	5-19-19 1330	2 [signature] 5/19/19 1330
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal #	☐ Intact ☐ Not intact	Preserved where applicable ☐ On Ice ☐ Cooler Temp.

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TD39353: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: TD39353 **Client:** ITC **Project:** DEER PARK FIRE

Date / Time Received: 5/19/2019 **Delivery Method:** **Airbill #'s:**

No. Coolers: 1 **Therm ID:** IR-3; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (1.8/1.8);

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:		
3. Cooler media:	Ice (Bag)	

Quality Control Preservation	Y	or N	N/A	WTB	STB
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:	☐	☐	☑

Comments

Sample Receipt Log

Job #: TD39353 **Date / Time Received:** 5/19/2019 1:30:00 PM **Initials:** EC

Client: ITC

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TD39353-1	40ml	1	VR 251	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-3	1.8	0	1.8
1	TD39353-1	40ml	2	VR 251	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-3	1.8	0	1.8
1	TD39353-1	40ml	3	VR 251	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-3	1.8	0	1.8
1	TD39353-1	40ml	4	VR 251	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-3	1.8	0	1.8
1	TD39353-2	1000ml	1	3A	N/P	Note #2 - Preservative check not applicable.	IR-3	1.8	0	1.8
1	TD39353-2	250ml	2	3A	N/P	Note #2 - Preservative check not applicable.	IR-3	1.8	0	1.8
1	TD39353-2	Spec Cup	3	MICRO	Na2S2O3	Note #2 - Preservative check not applicable.	IR-3	1.8	0	1.8

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

Method Blank Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX4025-MB	X0128821.D	1	05/21/19	FT	n/a	n/a	VX4025

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

TD39353-1

CAS No.	Compound	Result	RL	MDL	Units	Q
106-89-8	Epichlorohydrin	ND	10	2.2	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	72-122%
17060-07-0	1,2-Dichloroethane-D4	117%	68-124%
2037-26-5	Toluene-D8	116%	80-119%
460-00-4	4-Bromofluorobenzene	108%	72-126%

Blank Spike Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX4025-BS	X0128819.D	1	05/21/19	FT	n/a	n/a	VX4025

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

TD39353-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
106-89-8	Epichlorohydrin	125	98.4	79	48-134

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	72-122%
17060-07-0	1,2-Dichloroethane-D4	114%	68-124%
2037-26-5	Toluene-D8	116%	80-119%
460-00-4	4-Bromofluorobenzene	107%	72-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TD39309-2MS	X0128823.D	5	05/21/19	FT	n/a	n/a	VX4025
TD39309-2MSD	X0128824.D	5	05/21/19	FT	n/a	n/a	VX4025
TD39309-2	X0128844.D	2	05/22/19	FT	n/a	n/a	VX4025
TD39309-2 [a]	X0128822.D	5	05/21/19	FT	n/a	n/a	VX4025

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

TD39353-1

CAS No.	Compound	TD39309-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
106-89-8	Epichlorohydrin	20	U	625	449	72	625	481	77	7	48-134/29

CAS No.	Surrogate Recoveries	MS	MSD	TD39309-2	TD39309-2	Limits
1868-53-7	Dibromofluoromethane	106%	103%	104%		72-122%
17060-07-0	1,2-Dichloroethane-D4	115%	110%	118%		68-124%
2037-26-5	Toluene-D8	116%	118%	116%		80-119%
460-00-4	4-Bromofluorobenzene	109%	107%	108%		72-126%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4007-BFB
Lab File ID: X0128486.D
Instrument ID: GCMSX
Injection Date: 05/08/19
Injection Time: 11:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	9234	21.9		Pass
75	30.0 - 60.0% of mass 95	20720	49.1		Pass
95	Base peak, 100% relative abundance	42213	100.0		Pass
96	5.0 - 9.0% of mass 95	2807	6.65		Pass
173	Less than 2.0% of mass 174	130	0.31	(0.40) [a]	Pass
174	50.0 - 100.0% of mass 95	32195	76.3		Pass
175	5.0 - 9.0% of mass 174	2195	5.20	(6.82) [a]	Pass
176	95.0 - 101.0% of mass 174	32160	76.2	(99.9) [a]	Pass
177	5.0 - 9.0% of mass 176	2065	4.89	(6.42) [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
VX4007-IC4007	X0128490.D	05/08/19	13:00	01:43	Initial cal 0.5
VX4007-IC4007	X0128491.D	05/08/19	13:26	02:09	Initial cal 1
VX4007-IC4007	X0128492.D	05/08/19	13:51	02:34	Initial cal 2
VX4007-IC4007	X0128493.D	05/08/19	14:17	03:00	Initial cal 5
VX4007-IC4007	X0128494.D	05/08/19	14:42	03:25	Initial cal 20
VX4007-ICC4007	X0128495.D	05/08/19	15:08	03:51	Initial cal 40
VX4007-IC4007	X0128496.D	05/08/19	15:33	04:16	Initial cal 70
VX4007-IC4007	X0128497.D	05/08/19	15:59	04:42	Initial cal 100
VX4007-IC4007	X0128498.D	05/08/19	16:25	05:08	Initial cal 200
VX4007-ICV4007	X0128501.D	05/08/19	17:42	06:25	Initial cal verification 40

Instrument Performance Check (BFB)

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4025-BFB
Lab File ID: X0128817.D
Instrument ID: GCMSX
Injection Date: 05/21/19
Injection Time: 13:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	7253	22.8		Pass
75	30.0 - 60.0% of mass 95	15924	50.2		Pass
95	Base peak, 100% relative abundance	31752	100.0		Pass
96	5.0 - 9.0% of mass 95	2112	6.65		Pass
173	Less than 2.0% of mass 174	54	0.17	(0.23) [a]	Pass
174	50.0 - 100.0% of mass 95	23011	72.5		Pass
175	5.0 - 9.0% of mass 174	1653	5.21	(7.18) [a]	Pass
176	95.0 - 101.0% of mass 174	22608	71.2	(98.2) [a]	Pass
177	5.0 - 9.0% of mass 176	1466	4.62	(6.48) [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
VX4026-CC4007	X0128818.D	05/21/19	14:12	00:26	Continuing cal 20
VX4025-BS	X0128819.D	05/21/19	14:37	00:51	Blank Spike
VX4025-MB	X0128821.D	05/21/19	15:28	01:42	Method Blank
TD39309-2	X0128822.D	05/21/19	15:54	02:08	(used for QC only; not part of job TD39353)
TD39309-2MS	X0128823.D	05/21/19	16:19	02:33	Matrix Spike
TD39309-2MSD	X0128824.D	05/21/19	16:45	02:59	Matrix Spike Duplicate
ZZZZZZ	X0128825.D	05/21/19	17:10	03:24	(unrelated sample)
ZZZZZZ	X0128826.D	05/21/19	17:36	03:50	(unrelated sample)
ZZZZZZ	X0128827.D	05/21/19	18:01	04:15	(unrelated sample)
ZZZZZZ	X0128828.D	05/21/19	18:27	04:41	(unrelated sample)
ZZZZZZ	X0128829.D	05/21/19	18:52	05:06	(unrelated sample)
ZZZZZZ	X0128830.D	05/21/19	19:17	05:31	(unrelated sample)
ZZZZZZ	X0128831.D	05/21/19	19:43	05:57	(unrelated sample)
ZZZZZZ	X0128832.D	05/21/19	20:08	06:22	(unrelated sample)
ZZZZZZ	X0128833.D	05/21/19	20:33	06:47	(unrelated sample)
ZZZZZZ	X0128836.D	05/21/19	21:50	08:04	(unrelated sample)
ZZZZZZ	X0128837.D	05/21/19	22:15	08:29	(unrelated sample)
ZZZZZZ	X0128838.D	05/21/19	22:41	08:55	(unrelated sample)
ZZZZZZ	X0128839.D	05/21/19	23:06	09:20	(unrelated sample)
ZZZZZZ	X0128840.D	05/21/19	23:32	09:46	(unrelated sample)
ZZZZZZ	X0128842.D	05/22/19	00:23	10:37	(unrelated sample)
TD39353-1	X0128843.D	05/22/19	00:48	11:02	WW-20190518-002-DAY16
TD39309-2	X0128844.D	05/22/19	01:14	11:28	(used for QC only; not part of job TD39353)
VX4025-ECC4007	X0128845.D	05/22/19	01:39	11:53	Ending cal 40

Instrument Performance Check (BFB)

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4025-BFB
Lab File ID: X0128817.D
Instrument ID: GCMSX
Injection Date: 05/21/19
Injection Time: 13:46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VX4026-BS	X0128846.D	05/22/19	02:05	12:19	Blank Spike
VX4026-MB	X0128848.D	05/22/19	02:55	13:09	Method Blank

Internal Standard Area Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Check Std: VX4026-CC4007 **Injection Date:** 05/21/19
Lab File ID: X0128818.D **Injection Time:** 14:12
Instrument ID: GCMSX **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	400266	4.39	699144	5.13	591048	8.32	251174	10.58
Upper Limit [a]	800532	4.89	1398288	5.63	1182096	8.82	502348	11.08
Lower Limit [b]	200133	3.89	349572	4.63	295524	7.82	125587	10.08

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VX4025-BS	418115	4.39	722148	5.13	611548	8.32	261350	10.58
VX4025-MB	404250	4.39	702341	5.13	592158	8.32	245300	10.58
TD39309-2	407000	4.39	704119	5.13	589865	8.32	240377	10.58
TD39309-2MS	419124	4.39	723896	5.13	614944	8.32	256794	10.58
TD39309-2MSD	435588	4.39	740908	5.13	618332	8.32	259773	10.58
ZZZZZZ	425989	4.39	736745	5.13	620634	8.32	255848	10.58
ZZZZZZ	425204	4.39	726520	5.13	609095	8.32	246484	10.58
ZZZZZZ	414083	4.39	712768	5.13	595259	8.32	241544	10.58
ZZZZZZ	408216	4.39	699741	5.13	586403	8.32	244287	10.58
ZZZZZZ	398639	4.39	689045	5.13	576860	8.32	235995	10.58
ZZZZZZ	408070	4.39	713581	5.13	610212	8.32	253180	10.58
ZZZZZZ	404077	4.39	702485	5.13	593487	8.32	241306	10.58
ZZZZZZ	396246	4.39	687839	5.13	575793	8.32	234753	10.58
ZZZZZZ	388407	4.39	677867	5.13	572532	8.32	245334	10.58
ZZZZZZ	405893	4.39	709645	5.13	596882	8.32	241906	10.58
ZZZZZZ	388420	4.39	676952	5.13	562247	8.32	226201	10.58
ZZZZZZ	387503	4.39	667107	5.13	558426	8.32	230184	10.58
ZZZZZZ	391882	4.39	682154	5.13	572118	8.32	235113	10.58
ZZZZZZ	392937	4.39	687680	5.13	574459	8.32	232487	10.58
ZZZZZZ	368736	4.39	644011	5.13	541511	8.32	216360	10.58
TD39353-1 [c]	376543	4.39	656403	5.13	552991	8.32	225022	10.58
TD39309-2	409690	4.39	697665	5.13	585453	8.32	241766	10.58
VX4025-ECC4007	404297	4.39	692960	5.13	585968	8.32	248298	10.58
ZZZZZZ	401609	4.39	706608	5.13	605093	8.32	254840	10.58
ZZZZZZ	402915	4.39	707142	5.13	594698	8.32	243438	10.58
TD39398-1	393355	4.39	681429	5.13	569082	8.32	230842	10.58
TD39398-1MS	405176	4.39	699762	5.13	601911	8.32	258161	10.58
TD39398-1MSD	423782	4.39	726940	5.13	613508	8.32	257673	10.58
ZZZZZZ	388691	4.39	676356	5.13	585518	8.32	241275	10.58
ZZZZZZ	416121	4.39	736304	5.13	629718	8.32	261115	10.58
ZZZZZZ	396682	4.39	695268	5.13	597072	8.32	250089	10.58

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5

Internal Standard Area Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Check Std:	VX4026-CC4007	**Injection Date:**	05/21/19
Lab File ID:	X0128818.D	**Injection Time:**	14:12
Instrument ID:	GCMSX	**Method:**	SW846 8260C

Lab	IS 1		IS 2		IS 3		IS 4	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

IS 4 = 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.
(c) Sample composited prior to analysis per client request.

Internal Standard Area Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Check Std: VX4025-CC4007 **Injection Date:** 05/21/19
Lab File ID: X0128818.D **Injection Time:** 14:12
Instrument ID: GCMSX **Method:** SW846 8260C

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	400266	4.39	699144	5.13	591048	8.32	251174	10.58
Upper Limit [a]	800532	4.89	1398288	5.63	1182096	8.82	502348	11.08
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Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
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ZZZZZZ	425989	4.39	736745	5.13	620634	8.32	255848	10.58
ZZZZZZ	425204	4.39	726520	5.13	609095	8.32	246484	10.58
ZZZZZZ	414083	4.39	712768	5.13	595259	8.32	241544	10.58
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ZZZZZZ	408070	4.39	713581	5.13	610212	8.32	253180	10.58
ZZZZZZ	404077	4.39	702485	5.13	593487	8.32	241306	10.58
ZZZZZZ	396246	4.39	687839	5.13	575793	8.32	234753	10.58
ZZZZZZ	388407	4.39	677867	5.13	572532	8.32	245334	10.58
ZZZZZZ	405893	4.39	709645	5.13	596882	8.32	241906	10.58
ZZZZZZ	388420	4.39	676952	5.13	562247	8.32	226201	10.58
ZZZZZZ	387503	4.39	667107	5.13	558426	8.32	230184	10.58
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TD39353-1 [c]	376543	4.39	656403	5.13	552991	8.32	225022	10.58
TD39309-2	409690	4.39	697665	5.13	585453	8.32	241766	10.58
VX4025-ECC4007	404297	4.39	692960	5.13	585968	8.32	248298	10.58

IS 1 = Pentafluorobenzene
IS 2 = 1,4-Difluorobenzene
IS 3 = Chlorobenzene-D5
IS 4 = 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.
(c) Sample composited prior to analysis per client request.

Surrogate Recovery Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

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
TD39353-1	X0128843.D	106	118	116	109
TD39309-2MS	X0128823.D	106	115	116	109
TD39309-2MSD	X0128824.D	103	110	118	107
VX4025-BS	X0128819.D	106	114	116	107
VX4025-MB	X0128821.D	103	117	116	108

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	72-122%
S2 = 1,2-Dichloroethane-D4	68-124%
S3 = Toluene-D8	80-119%
S4 = 4-Bromofluorobenzene	72-126%

Initial Calibration Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4007-ICC4007
Lab FileID: X0128495.D

```
                    Response Factor Report  GC MS X

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Calibration Files
40  =X0128495.D  20  =X0128494.D  1   =X0128491.D  100 =X0128497.D
200 =X0128498.D  5   =X0128493.D  2   =X0128492.D  9   =X0128490.D
70  =X0128496.D      =

 Compound
           40    20    1     100   200   5     2     9     70      Avg    %RSD
-------------------------------------------------------------------------------

1) I   Pentafluorobenzene    ----------------ISTD---------------------
2)  Dichlorodifluoromethane
          0.653 0.744 0.694 0.714 0.642 0.907 0.811       0.652   0.727   12.67
3)  Chloromethane
          0.794 0.800 0.896 0.741 0.689 0.947 0.866       0.764   0.812   10.52
4)  Vinyl Chloride
          0.646 0.669 0.718 0.626 0.581 0.791 0.744       0.631   0.676   10.29
5)  1,3-Butadiene
          0.407 0.428 0.453 0.397 0.363 0.497 0.485       0.394   0.428   10.93
6)  Ethylene Oxide
          0.095 0.099 0.163 0.080 0.067 0.120 0.129 0.267 0.087   0.123   49.75
           ---- Quadratic regression ----  Coefficient =  0.9994
             Response Ratio = 0.07984 + 0.09703 *A + -0.00015 *A^2

7)  Bromomethane
          0.207 0.210 0.296 0.195       0.271 0.261       0.203   0.235   17.23
8)  Chloroethane
          0.237 0.269 0.346             0.333 0.327 0.458 0.155   0.304   31.42
           ---- Quadratic regression ----  Coefficient =  0.9987
             Response Ratio = 0.00098 + 0.32462 *A + -0.12019 *A^2

9)  Vinyl Bromide
          0.382 0.381 0.371 0.356       0.428 0.375 0.530 0.379   0.400   14.08
10)  Trichlorofluoromethane
          0.806 0.869 0.857 0.823 0.663 1.020 0.896       0.811   0.843   11.88
11)  Ethyl Alcohol
          0.056 0.055 0.063 0.056       0.060 0.055       0.056   0.057    5.28
12)  Ethyl Ether
          0.387 0.380 0.354 0.382 0.362 0.404 0.378 0.568 0.389   0.401   16.08
13)  Propylene Oxide
          0.136 0.131 0.131 0.155 0.174 0.128 0.134       0.145   0.142   11.12
14)  Acrolein
          0.175 0.169 0.170 0.172 0.162 0.184 0.169 0.250 0.172   0.180   14.89
15)  1,1-Dichloroethene
          0.616 0.613 0.620 0.609 0.559 0.680 0.617 0.882 0.622   0.646   14.46
16)  Freon 113
          0.356 0.389 0.339 0.392 0.362 0.433 0.395       0.360   0.378    7.92
17)  Acetone
          0.377 0.373 0.488 0.358 0.333 0.437 0.441       0.363   0.396   13.30
18)  Isopropyl Alcohol
          0.113 0.110 0.130 0.117 0.124 0.120 0.115       0.116   0.118    5.43
19)  Iodomethane
          0.569 0.508 0.305 0.611 0.604 0.440 0.345 0.476 0.597   0.495   22.93
           ---- Quadratic regression ----  Coefficient =  0.9983
```

Response Ratio = -0.00404 + 0.57051 *A + 0.01023 *A^2

20)	Methyl acetate											
		0.818	0.795	0.807	0.784	0.719	0.864	0.826	1.233	0.801	0.849	17.51
21)	Carbon Disulfide											
		0.950	0.902	0.816	0.969	0.913	0.981	0.899	1.311	0.973	0.968	14.30
22)	Allyl Chloride											
		0.251	0.239	0.219	0.255	0.237	0.250	0.218	0.287	0.253	0.245	8.48
23)	Acetonitrile											
		0.090	0.088	0.126	0.085	0.080	0.100	0.098		0.087	0.094	15.31
24)	Methylene Chloride											
		0.715	0.714	1.014	0.675	0.626	0.874	0.945		0.688	0.781	18.28
25)	Tert Butyl Alcohol											
		0.185	0.178	0.180	0.190	0.183	0.187	0.149	0.204	0.190	0.183	8.10
26)	trans-1,2-Dichloroethene											
		0.631	0.630	0.615	0.624	0.578	0.698	0.640	0.921	0.642	0.664	15.24
27)	Acrylonitrile											
		0.370	0.360	0.351	0.353	0.328	0.393	0.361	0.545	0.360	0.380	16.88
28)	Hexane											
		0.402	0.450	0.396	0.432	0.382	0.500	0.461		0.393	0.427	9.61
29)	Methyl Tert Butyl Ether											
		1.309	1.246	1.161	1.319	1.238	1.327	1.204	1.841	1.311	1.329	15.10
30)	1,1-Dichloroethane											
		0.794	0.781	0.713	0.780	0.739	0.834	0.789	1.068	0.795	0.810	12.65
31)	Vinyl acetate											
		1.433	1.319	0.980	1.440	1.324	1.261	1.064	1.464	1.446	1.303	13.45
32)	Di-isopropyl ether											
		1.863	1.806	1.662	1.818	1.689	1.909	1.797	2.597	1.843	1.887	14.71
33)	Chloroprene											
		0.764	0.753	0.713	0.750	0.698	0.838	0.759	1.072	0.764	0.790	14.27
34)	Ethyl tert-butyl ether											
		1.443	1.389	1.287	1.450	1.382	1.460	1.378	1.998	1.454	1.471	13.95
35)	Ethyl Acetate											
		1.087	1.066	1.271	0.981	1.063	1.135	1.029	1.647	0.965	1.138	18.55
36)	2,2-Dichloropropane											
		0.607	0.597	0.549	0.628	0.608	0.633	0.568	0.865	0.624	0.631	14.58
37)	cis-1,2-Dichloroethene											
		0.671	0.666	0.654	0.662	0.630	0.711	0.683	1.011	0.675	0.707	16.42
38)	2-Butanone											
		0.618	0.602	0.530	0.621	0.489	0.665	0.638		0.651	0.602	10.16
39)	Propionitrile											
		0.171	0.167	0.166	0.164	0.154	0.185	0.167	0.249	0.166	0.176	16.06
40)	Methacrylonitrile											
		0.578	0.572	0.555	0.535	0.478	0.629	0.562		0.553	0.558	7.65
41)	Bromochloromethane											
		0.272	0.272	0.242	0.269	0.261	0.282	0.270	0.374	0.271	0.279	13.27
42)	Chloroform											
		0.848	0.845	0.875	0.810	0.755	0.930	0.849		0.829	0.843	5.98
43)	Tetrahydrofuran											
		0.398	0.385	0.555	0.390	0.368	0.430	0.528		0.392	0.431	16.43
44)	1,1,1-Trichloroethane											
		0.758	0.740	0.674	0.761	0.732	0.817	0.722	1.029	0.767	0.778	13.09
45)	Dibromofluoromethane											
		0.528	0.531	0.523	0.531	0.522	0.537	0.532	0.534	0.532	0.530	0.91
46)	Cyclohexane											
		0.633	0.684	0.633	0.662	0.603	0.783	0.703		0.626	0.666	8.63
47)	1,1-Dichloropropene											
		0.426	0.435	0.544	0.408	0.378	0.518	0.506		0.416	0.454	13.32

48) I 1,4-Difluorobenzene ----------ISTD----------

Initial Calibration Summary

Job Number: TD39353 **Sample:** VX4007-ICC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128495.D
Project: CARDILCL: Deer Park Release

```
49)  Carbon Tetrachloride
           0.401 0.397 0.516 0.420 0.410 0.444 0.449       0.407   0.431    9.15
50)  1,2-Dichloroethane-d4
           0.285 0.282 0.292 0.284 0.281 0.290 0.297 0.297 0.280   0.288    2.37
51)  Isobutyl Alcohol
           0.042 0.038 0.033 0.048       0.034 0.031 0.046 0.046   0.040   17.18
52)  Benzene
           1.021 0.998 1.001 0.994 0.939 1.090 1.034       1.009   1.011    4.19
53)  1,2-Dichloroethane
           0.416 0.404 0.408 0.402 0.379 0.442 0.407 0.625 0.403   0.432   17.25
54)  2,2,4-Trimethylpentane
           0.490 0.550 0.459 0.502 0.447 0.623 0.561       0.459   0.511   12.05
55)  tert-amyl methyl ether
           0.752 0.699 0.663 0.768 0.742 0.741 0.668 0.997 0.759   0.754   13.13
56)  Crotonaldehyde
           0.086 0.085 0.103 0.086 0.082 0.083 0.080       0.086   0.086    8.30
57)  n-Butyl Alcohol
           0.035 0.034 0.029 0.039 0.038 0.033 0.026 0.037 0.037   0.034   13.01
58)  Trichloroethene
           0.305 0.293 0.279 0.305 0.297 0.326 0.310 0.425 0.306   0.316   13.56
59)  Methylcyclohexane
           0.287 0.309 0.260 0.317 0.290 0.342 0.306 0.458 0.289   0.318   18.06
60)  Methyl Methacrylate
           0.456 0.434 0.373 0.448 0.420 0.449 0.380 0.560 0.449   0.441   12.23
61)  1,2-Dichloropropane
           0.276 0.265 0.237 0.273 0.261 0.272 0.257 0.390 0.274   0.278   15.73
62)  Dibromomethane
           0.210 0.205 0.205 0.211 0.203 0.211 0.199 0.282 0.209   0.215   11.89
63)  1,4-Dioxane
           0.009 0.009 0.009 0.009 0.009 0.010 0.009 0.013 0.009   0.010   12.01
64)  Bromodichloromethane
           0.365 0.349 0.363 0.369 0.361 0.367 0.354 0.570 0.365   0.385   18.10
65)  2-Nitropropane
           0.154 0.137 0.108 0.164 0.159 0.117 0.094 0.172 0.159   0.141   19.75
66)  2-Chloroethyl vinyl ether
           0.248 0.237 0.198 0.232 0.205 0.243 0.217 0.310 0.240   0.237   13.74
67)  1-Bromo-2-Chloroethane
           0.402 0.385 0.384 0.391 0.374 0.406 0.370 0.571 0.394   0.409   15.17
68)  Epichlorohydrin
           0.071 0.069 0.067 0.071 0.067 0.072 0.061 0.099 0.070   0.072   15.02
69)  4-Methyl-2-pentanone
           0.684 0.681 0.704 0.629 0.544 0.727 0.657 1.017 0.650   0.699   18.63
70)  cis-1,3-Dichloropropene
           0.464 0.444 0.367 0.471 0.449 0.442 0.378 0.577 0.468   0.451   13.44

71) I   Chlorobenzene-d5      ----------------ISTD---------------------
72)  Toluene-d8
           1.118 1.133 1.121 1.080 1.035 1.126 1.113 1.109 1.102   1.104    2.73
73)  Toluene
           1.217 1.220 1.585 1.172 1.100 1.380 1.404       1.201   1.285   12.35
74)  Ethyl Methacrylate
           0.439 0.406 0.304 0.442 0.416 0.387 0.319 0.454 0.439   0.401   13.64
75)  trans-1,3-Dichloropropene
           0.408 0.378 0.316 0.424 0.412 0.365 0.322 0.453 0.417   0.388   12.06
76)  1,1,2-Trichloroethane
           0.242 0.232 0.222 0.236 0.219 0.250 0.227 0.337 0.238   0.245   14.68
77)  Tetrachloroethene
           0.313 0.309 0.283 0.317 0.311 0.332 0.300 0.439 0.317   0.325   13.88
78)  2-hexanone
           0.584 0.578 0.551 0.534 0.465 0.598 0.516 0.750 0.557   0.570   13.73
```

Initial Calibration Summary

Job Number: TD39353 **Sample:** VX4007-ICC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128495.D
Project: CARDILCL: Deer Park Release

```
 79)  1,3-Dichloropropane
            0.477 0.459 0.432 0.469 0.442 0.496 0.426 0.679 0.470   0.483   15.84
 80)  Dibromochloromethane
            0.353 0.326 0.306 0.368 0.364 0.340 0.306 0.509 0.359   0.359   16.97
 81)  n-Butyl Acetate
            0.909 0.868 0.741 0.859 0.767 0.876 0.744 1.046 0.882   0.855   11.26
 82)  1,2-Dibromoethane
            0.346 0.328 0.303 0.340 0.327 0.346 0.314 0.465 0.343   0.346   13.62
 83)  1-Chlorohexane
            0.354 0.344 0.319 0.358 0.336 0.378 0.367       0.359   0.352    5.26
 84)  Chlorobenzene
            0.858 0.847 0.807 0.851 0.809 0.898 0.825 1.193 0.854   0.882   13.56
 85)  1,1,1,2-Tetrachloroethane
            0.328 0.306 0.268 0.336 0.330 0.307 0.284 0.401 0.332   0.321   11.73
 86)  Ethylbenzene
            1.353 1.319 1.290 1.315 1.232 1.420 1.267 1.932 1.341   1.385   15.30
 87)  m,p-Xylene
            1.047 1.031 0.938 1.010 0.932 1.088 0.978 1.457 1.029   1.057   14.97
 88)  o-Xylene
            1.073 1.051 0.962 1.054 0.998 1.097 0.974 1.473 1.071   1.084   14.14
 89)  Styrene
            0.899 0.869 0.725 0.885 0.835 0.892 0.776 1.045 0.895   0.869   10.27
 90)  Bromoform
            0.234 0.208 0.197 0.255 0.263 0.214 0.192 0.288 0.246   0.233   13.95

 91) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
 92)  Isopropylbenzene
            2.580 2.549 2.257 2.582 2.488 2.649 2.366 3.480 2.627   2.620   13.24
 93)  Cyclohexanone
            0.070 0.073 0.064 0.070 0.067 0.071 0.075 0.096 0.072   0.073   12.44
 94)  4-Bromofluorobenzene
            1.045 1.049 1.040 1.026 1.032 1.042 1.047 1.039 1.038   1.040    0.71
 95)  Bromobenzene
            0.734 0.720 0.690 0.748 0.737 0.759 0.697 0.967 0.753   0.756   10.94
 96)  1,1,2,2-Tetrachloroethane
            0.987 0.989 0.980 0.962 0.910 1.001 0.916 1.335 0.983   1.007   12.62
 97)  Trans-1,4-Dichloro-2-Butene
            0.265 0.251 0.232 0.284 0.285 0.251 0.209 0.326 0.279   0.264   12.90
 98)  1,2,3-Trichloropropane
            0.351 0.357 0.325 0.349 0.336 0.372 0.340 0.510 0.353   0.366   15.16
 99)  n-Propylbenzene
            3.020 2.981 2.730 2.959 2.771 3.110 2.770 4.105 3.047   3.055   13.63
100)  2-Chlorotoluene
            1.924 1.906 1.729 1.886 1.742 2.009 1.791 2.718 1.925   1.959   15.28
101)  4-Chlorotoluene
            2.213 2.210 2.109 2.146 2.029 2.310 2.037 3.115 2.194   2.263   14.67
102)  1,3,5-Trimethylbenzene
            2.171 2.141 1.886 2.161 2.058 2.192 1.938 2.840 2.192   2.176   12.57
103)  Butyl Methacrylate
            0.869 0.784       0.907 0.871 0.661 0.514       0.915   0.789   19.01
104)  alpha-Methylstyrene
            1.279 1.249 1.015 1.278 1.233 1.226 1.047 1.423 1.292   1.227   10.21
105)  Pentachloroethane
            0.394 0.373 0.343 0.413 0.414 0.366 0.322 0.419 0.408   0.383    9.06
106)  sec-Butylbenzene
            2.372 2.331 2.072 2.357 2.234 2.485 2.117 3.128 2.394   2.388   12.90
107)  1,3-Dichlorobenzene
            1.290 1.271 1.232 1.298 1.266 1.318 1.193 1.888 1.303   1.340   15.61
108)  4-Isopropyltoluene
            2.096 2.041 1.702 2.113 2.011 2.118 1.843 2.591 2.143   2.073   11.72
```

Initial Calibration Summary

Job Number: TD39353 **Sample:** VX4007-ICC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128495.D
Project: CARDILCL: Deer Park Release

```
109)  1,4-Dichlorobenzene
            1.349 1.329 1.303 1.336 1.295 1.392 1.290 2.005 1.349   1.405   16.16
110)  tert-Butylbenzene
            1.151 1.143 1.096 1.129 1.061 1.245 1.095 1.647 1.153   1.191   14.99
111)  Dicyclopentadiene
            2.286 2.348 2.981 2.174 2.007 2.616 2.659       2.249   2.415   13.03
112)  n-Butylbenzene
            2.093 2.077 1.858 2.018 1.864 2.208 1.951 2.681 2.077   2.092   11.86
113)  1,2-Dichlorobenzene
            1.245 1.231 1.167 1.241 1.203 1.281 1.212 1.730 1.256   1.285   13.23
114)  1,2,4-Trimethylbenzene
            2.212 2.180 1.878 2.183 2.080 2.230 2.020 2.867 2.220   2.208   12.37
115)  Benzyl Chloride
            2.937 2.663 1.812 3.170 3.109 2.231 1.807 2.570 3.125   2.603   20.89
             ---- Quadratic regression ----  Coefficient =  0.9981
               Response Ratio = -0.01984 + 2.98064 *A + 0.04234 *A^2

116)  p-Diethylbenzene
            1.196 1.176 0.973 1.201 1.134 1.188 1.050 1.502 1.216   1.182   12.26
117)  Hexachloroethane
            0.346 0.322 0.278 0.374 0.378 0.310 0.289 0.406 0.366   0.341   12.84
118)  1,2-Dibromo-3-Chloropropane
            0.229 0.221 0.190 0.239 0.240 0.215 0.189 0.286 0.238   0.227   12.93
119)  1,2,4-Trichlorobenzene
            0.636 0.613 0.550 0.656 0.633 0.613 0.573 0.803 0.651   0.637   11.24
120)  1,3-Diethylbenzene
            1.213 1.191 1.029 1.210 1.150 1.201 1.038 1.592 1.234   1.207   13.52
121)  Hexachlorobutadiene
            0.210 0.209 0.184 0.214 0.205 0.225 0.202 0.263 0.221   0.215   10.11
122)  Naphthalene
            2.632 2.530 2.194 2.710 2.573 2.425 2.069 3.017 2.707   2.540   11.21
123)  1,2,3-Trichlorobenzene
            0.577 0.560 0.523 0.587 0.563 0.571 0.526 0.751 0.593   0.584   11.55
124)  2-Methylnaphthalene
                                                                    0.000   -1.00

125) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
126)  TPH-GRO (C6-C10)
                                                                    0.000   -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          VX4007C.m         Thu May 09 11:48:01 2019
```

Initial Calibration Verification

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Sample: VX4007-ICV4007
Lab FileID: X0128501.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VX4007\X0128501.D          Vial: 20
Acq On    :  8 May 2019   5:42 pm                    Operator: firatt
Sample    : icv4007-40                               Inst    : GC MS X
Misc      : ms24683,VX4007,5,,,5,,WATER              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 07:51:32 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	50.000	50.000	0.0	110	0.00	4.39
2	p	Dichlorodifluoromethane		----------NA----------				
3	P	Chloromethane		----------NA----------				
4	p	Vinyl Chloride		----------NA----------				
5		1,3-Butadiene	40.000	45.250	-13.1	132	0.00	1.15
		----------	Amount	Calc.	%Drift	----------		
6		Ethylene Oxide	2000.000	2118.527	-5.9	113	0.00	1.35
		----------	Amount	Calc.	%Drift	----------		
7	p	Bromomethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
8	p	Chloroethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
9		Vinyl Bromide	40.000	40.859	-2.1	118	0.00	1.57
10	p	Trichlorofluoromethane		----------NA----------				
11		Ethyl Alcohol	400.000	397.166	0.7	112	0.00	1.86
12		Ethyl Ether	40.000	39.168	2.1	112	0.00	1.86
13		Propylene Oxide	40.000	46.129	-15.3	133	0.00	1.93
14		Acrolein	200.000	177.690	11.2	101	0.00	2.03
15	p	1,1-Dichloroethene	40.000	40.022	-0.1	116	0.00	2.04
16	p	Freon 113	40.000	44.942	-12.4	132	0.00	2.02
17	p	Acetone	200.000	195.642	2.2	113	0.00	2.17
18		Isopropyl Alcohol	400.000	384.558	3.9	111	0.00	2.32
		----------	Amount	Calc.	%Drift	----------		
19		Iodomethane	40.000	37.608	6.0	105	0.00	2.18
		----------	Amount	Calc.	%Drift	----------		
20	p	Methyl acetate	200.000	202.427	-1.2	116	0.00	2.45
21	p	Carbon Disulfide	40.000	44.616	-11.5	126	0.00	2.20
22		Allyl Chloride	40.000	37.893	5.3	102	0.00	2.40
23		Acetonitrile	200.000	198.336	0.8	115	0.00	2.49
24	p	Methylene Chloride	40.000	37.619	6.0	113	0.00	2.55
25		Tert Butyl Alcohol	400.000	391.455	2.1	107	0.00	2.69
26	p	trans-1,2-Dichloroethene	40.000	37.995	5.0	110	0.00	2.75
27		Acrylonitrile	200.000	191.429	4.3	109	0.00	2.86
28		Hexane	40.000	45.975	-14.9	135	0.00	2.95
29	p	Methyl Tert Butyl Ether	40.000	41.753	-4.4	117	0.00	2.75
30	P	1,1-Dichloroethane	40.000	39.115	2.2	110	0.00	3.21

Initial Calibration Verification

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4007-ICV4007
Lab FileID: X0128501.D

31		Vinyl acetate	100.000	113.758	-13.8	114	0.00	3.27
32		Di-isopropyl ether	40.000	41.232	-3.1	115	0.00	3.22
33		Chloroprene	40.000	35.537	11.2	101	0.00	3.25
34		Ethyl tert-butyl ether	40.000	39.489	1.3	111	0.00	3.58
35		Ethyl Acetate	100.000	93.492	6.5	108	0.00	3.89
36		2,2-Dichloropropane	40.000	36.738	8.2	105	0.00	3.75
37	p	cis-1,2-Dichloroethene	40.000	37.361	6.6	109	0.00	3.80
38	p	2-Butanone	200.000	217.296	-8.6	117	0.00	3.85
39		Propionitrile	200.000	198.547	0.7	113	0.00	3.99
40		Methacrylonitrile	200.000	222.553	-11.3	119	0.00	4.10
41		Bromochloromethane	40.000	40.831	-2.1	116	0.00	4.04
42	p	Chloroform	40.000	38.149	4.6	105	0.00	4.13
43		Tetrahydrofuran	40.000	38.144	4.6	114	0.00	4.04
44	p	1,1,1-Trichloroethane	40.000	37.890	5.3	107	0.00	4.25
45	S	Dibromofluoromethane	50.000	49.171	1.7	109	0.00	4.30
46	p	Cyclohexane	40.000	43.987	-10.0	128	0.00	4.21
47		1,1-Dichloropropene	40.000	36.526	8.7	108	0.00	4.42
48	I	1,4-Difluorobenzene	50.000	50.000	0.0	111	0.00	5.13
49	p	Carbon Tetrachloride	40.000	36.859	7.9	110	0.00	4.37
50	S	1,2-Dichloroethane-d4	50.000	47.932	4.1	107	0.00	4.67
51		Isobutyl Alcohol	400.000	427.160	-6.8	112	0.00	4.70
52	p	Benzene	40.000	39.211	2.0	107	0.00	4.63
53	p	1,2-Dichloroethane	40.000	36.688	8.3	105	0.00	4.75
54		2,2,4-Trimethylpentane	40.000	42.190	-5.5	122	0.00	4.63
55		tert-amyl methyl ether	40.000	39.144	2.1	109	0.00	4.76
56		Crotonaldehyde	200.000	194.041	3.0	108	0.00	5.11
57		n-Butyl Alcohol	400.000	420.701	-5.2	114	0.00	5.43
58	p	Trichloroethene	40.000	37.830	5.4	109	0.00	5.35
59	p	Methylcyclohexane	40.000	41.838	-4.6	128	0.00	5.46
60		Methyl Methacrylate	40.000	41.905	-4.8	112	0.00	5.82
61	p	1,2-Dichloropropane	40.000	38.273	4.3	107	0.00	5.66
62		Dibromomethane	40.000	36.864	7.8	105	0.00	5.79
63		1,4-Dioxane	800.000	767.173	4.1	109	0.00	5.81
64	p	Bromodichloromethane	40.000	36.827	7.9	108	0.00	5.98
65		2-Nitropropane	200.000	203.424	-1.7	103	0.00	6.36
66		2-Chloroethyl vinyl ether	200.000	203.312	-1.7	107	0.00	6.39
67		1-Bromo-2-Chloroethane	40.000	37.487	6.3	106	0.00	6.34
68		Epichlorohydrin	200.000	190.613	4.7	107	0.00	6.48
69	p	4-Methyl-2-pentanone	200.000	186.546	6.7	106	0.00	6.73
70	p	cis-1,3-Dichloropropene	40.000	37.800	5.5	102	0.00	6.52
71	I	Chlorobenzene-d5	50.000	50.000	0.0	110	0.00	8.32
72	S	Toluene-d8	50.000	50.209	-0.4	109	0.00	6.75
73	p	Toluene	40.000	36.286	9.3	105	0.00	6.83
74		Ethyl Methacrylate	40.000	43.119	-7.8	108	0.00	7.27
75	p	trans-1,3-Dichloropropene	40.000	40.856	-2.1	107	0.00	7.20
76	p	1,1,2-Trichloroethane	40.000	37.191	7.0	103	0.00	7.39
77	p	Tetrachloroethene	40.000	37.995	5.0	108	0.00	7.39
78	p	2-hexanone	200.000	192.696	3.7	103	0.00	7.66
79		1,3-Dichloropropane	40.000	36.077	9.8	100	0.00	7.56
80	p	Dibromochloromethane	40.000	37.461	6.3	105	0.00	7.75
81		n-Butyl Acetate	100.000	97.713	2.3	101	0.00	7.79
82	p	1,2-Dibromoethane	40.000	37.751	5.6	104	0.00	7.86
83		1-Chlorohexane	40.000	41.149	-2.9	113	0.00	8.35
84	P	Chlorobenzene	40.000	36.907	7.7	104	0.00	8.35
85		1,1,1,2-Tetrachloroethane	40.000	38.632	3.4	104	0.00	8.46
86	p	Ethylbenzene	40.000	36.812	8.0	104	0.00	8.45
87	p	m,p-Xylene	80.000	74.274	7.2	103	0.00	8.58
88	p	o-Xylene	40.000	37.363	6.6	104	0.00	8.97

Initial Calibration Verification

Job Number: TD39353 **Sample:** VX4007-ICV4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128501.D
Project: CARDILCL: Deer Park Release

89	p	Styrene	40.000	38.191	4.5	102	0.00	9.00
90	P	Bromoform	40.000	37.813	5.5	104	0.00	9.18
91	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	109	0.00	10.58
92	p	Isopropylbenzene	40.000	39.048	2.4	108	0.00	9.32
93		Cyclohexanone	200.000	219.654	-9.8	125	0.00	9.47
94	S	4-Bromofluorobenzene	50.000	49.998	0.0	109	0.00	9.50
95		Bromobenzene	40.000	36.696	8.3	103	0.00	9.62
96	P	1,1,2,2-Tetrachloroethane	40.000	36.642	8.4	102	0.00	9.70
97		Trans-1,4-Dichloro-2-Bute	40.000	38.433	3.9	105	0.00	9.77
98		1,2,3-Trichloropropane	40.000	35.464	11.3	101	0.00	9.74
99		n-Propylbenzene	40.000	36.804	8.0	102	0.00	9.72
100		2-Chlorotoluene	40.000	36.539	8.7	102	0.00	9.80
101		4-Chlorotoluene	40.000	36.363	9.1	101	0.00	9.92
102		1,3,5-Trimethylbenzene	40.000	37.275	6.8	102	0.00	9.90
103		Butyl Methacrylate	40.000	41.440	-3.6	103	0.00	10.03
104		alpha-Methylstyrene	40.000	39.851	0.4	104	0.00	10.12
105		Pentachloroethane	40.000	39.730	0.7	106	0.00	10.23
106		sec-Butylbenzene	40.000	37.051	7.4	102	0.00	10.39
107	p	1,3-Dichlorobenzene	40.000	36.643	8.4	104	0.00	10.51
108		4-Isopropyltoluene	40.000	37.359	6.6	101	0.00	10.54
109	p	1,4-Dichlorobenzene	40.000	35.667	10.8	101	0.00	10.60
110		tert-Butylbenzene	40.000	35.333	11.7	100	0.00	10.19
111		Dicyclopentadiene	40.000	40.491	-1.2	117	0.00	10.56
112		n-Butylbenzene	40.000	36.803	8.0	100	0.00	10.91
113	p	1,2-Dichlorobenzene	40.000	36.021	9.9	101	0.00	10.94
114		1,2,4-Trimethylbenzene	40.000	37.179	7.1	101	0.00	10.25
		----------	Amount	Calc.	%Drift		----------	
115		Benzyl Chloride	40.000	35.513	11.2	98	0.00	10.75
		----------	Amount	Calc.	%Drift		----------	
116		p-Diethylbenzene	40.000	39.522	1.2	107	0.00	10.89
117		Hexachloroethane	40.000	38.186	4.5	103	0.00	11.12
118	p	1,2-Dibromo-3-Chloropropa	40.000	37.768	5.6	103	0.00	11.68
119	p	1,2,4-Trichlorobenzene	40.000	36.605	8.5	100	0.00	12.40
120		1,3-Diethylbenzene	40.000	39.407	1.5	107	0.00	10.82
121		Hexachlorobutadiene	40.000	35.656	10.9	100	0.00	12.51
122		Naphthalene	40.000	37.570	6.1	99	0.00	12.62
123		1,2,3-Trichlorobenzene	40.000	36.128	9.7	100	0.00	12.83
124		2-Methylnaphthalene		----------NA----------				
125	I	1,4-Dichlorobenzene-d4a	50.000	50.000	0.0	109	0.00	10.58
126	H	TPH-GRO (C6-C10)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X0128495.D VX4007C.m Thu May 09 11:17:24 2019

Initial Calibration Verification

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Sample: VX4008-ICV4007
Lab FileID: X0128506.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VX4008\X0128506.D          Vial: 5
Acq On    :  9 May 2019  12:12 pm                    Operator: firatt
Sample    : icv4007-40                               Inst    : GC MS X
Misc      : ms24683,VX4008,5,,,5,,WATER              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 11:33:09 2019
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	50.000	50.000	0.0	107	0.00	4.39
2	p	Dichlorodifluoromethane	40.000	35.015	12.5	104	0.00	0.92
3	P	Chloromethane	40.000	32.808	18.0	90	0.00	1.06
4	p	Vinyl Chloride	40.000	35.984	10.0	101	0.00	1.12
5		1,3-Butadiene		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
6		Ethylene Oxide		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
7	p	Bromomethane	40.000	43.102	-7.8	131	0.00	1.36
		----------	Amount	Calc.	%Drift		----------	
8	p	Chloroethane	40.000	49.540	-23.8	115	0.00	1.43
		----------	Amount	Calc.	%Drift		----------	
9		Vinyl Bromide		----------NA----------				
10	p	Trichlorofluoromethane	40.000	45.208	-13.0	127	0.00	1.60
11		Ethyl Alcohol		----------NA----------				
12		Ethyl Ether		----------NA----------				
13		Propylene Oxide		----------NA----------				
14		Acrolein		----------NA----------				
15	p	1,1-Dichloroethene		----------NA----------				
16	p	Freon 113		----------NA----------				
17	p	Acetone		----------NA----------				
18		Isopropyl Alcohol		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
19		Iodomethane		----------NA----------				
		----------	Amount	Calc.	%Drift		----------	
20	p	Methyl acetate		----------NA----------				
21	p	Carbon Disulfide		----------NA----------				
22		Allyl Chloride		----------NA----------				
23		Acetonitrile		----------NA----------				
24	p	Methylene Chloride		----------NA----------				
25		Tert Butyl Alcohol		----------NA----------				
26	p	trans-1,2-Dichloroethene		----------NA----------				
27		Acrylonitrile		----------NA----------				
28		Hexane		----------NA----------				
29	p	Methyl Tert Butyl Ether		----------NA----------				
30	P	1,1-Dichloroethane		----------NA----------				

Initial Calibration Verification

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4008-ICV4007
Lab FileID: X0128506.D

31		Vinyl acetate		----------NA----------				
32		Di-isopropyl ether		----------NA----------				
33		Chloroprene		----------NA----------				
34		Ethyl tert-butyl ether		----------NA----------				
35		Ethyl Acetate		----------NA----------				
36		2,2-Dichloropropane		----------NA----------				
37	p	cis-1,2-Dichloroethene		----------NA----------				
38	p	2-Butanone		----------NA----------				
39		Propionitrile		----------NA----------				
40		Methacrylonitrile		----------NA----------				
41		Bromochloromethane		----------NA----------				
42	p	Chloroform		----------NA----------				
43		Tetrahydrofuran		----------NA----------				
44	p	1,1,1-Trichloroethane		----------NA----------				
45	S	Dibromofluoromethane	50.000	48.876	2.2	105	0.00	4.30
46	p	Cyclohexane		----------NA----------				
47		1,1-Dichloropropene		----------NA----------				
48	I	1,4-Difluorobenzene	50.000	50.000	0.0	105	0.00	5.13
49	p	Carbon Tetrachloride		----------NA----------				
50	S	1,2-Dichloroethane-d4	50.000	49.102	1.8	104	0.00	4.67
51		Isobutyl Alcohol		----------NA----------				
52	p	Benzene		----------NA----------				
53	p	1,2-Dichloroethane		----------NA----------				
54		2,2,4-Trimethylpentane		----------NA----------				
55		tert-amyl methyl ether		----------NA----------				
56		Crotonaldehyde		----------NA----------				
57		n-Butyl Alcohol		----------NA----------				
58	p	Trichloroethene		----------NA----------				
59	p	Methylcyclohexane		----------NA----------				
60		Methyl Methacrylate		----------NA----------				
61	p	1,2-Dichloropropane		----------NA----------				
62		Dibromomethane		----------NA----------				
63		1,4-Dioxane		----------NA----------				
64	p	Bromodichloromethane		----------NA----------				
65		2-Nitropropane		----------NA----------				
66		2-Chloroethyl vinyl ether		----------NA----------				
67		1-Bromo-2-Chloroethane		----------NA----------				
68		Epichlorohydrin		----------NA----------				
69	p	4-Methyl-2-pentanone		----------NA----------				
70	p	cis-1,3-Dichloropropene		----------NA----------				
71	I	Chlorobenzene-d5	50.000	50.000	0.0	106	0.00	8.32
72	S	Toluene-d8	50.000	50.279	-0.6	105	0.00	6.75
73	p	Toluene		----------NA----------				
74		Ethyl Methacrylate		----------NA----------				
75	p	trans-1,3-Dichloropropene		----------NA----------				
76	p	1,1,2-Trichloroethane		----------NA----------				
77	p	Tetrachloroethene		----------NA----------				
78	p	2-hexanone		----------NA----------				
79		1,3-Dichloropropane		----------NA----------				
80	p	Dibromochloromethane		----------NA----------				
81		n-Butyl Acetate		----------NA----------				
82	p	1,2-Dibromoethane		----------NA----------				
83		1-Chlorohexane		----------NA----------				
84	P	Chlorobenzene		----------NA----------				
85		1,1,1,2-Tetrachloroethane		----------NA----------				
86	p	Ethylbenzene		----------NA----------				
87	p	m,p-Xylene		----------NA----------				
88	p	o-Xylene		----------NA----------				

Initial Calibration Verification

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Sample: VX4008-ICV4007
Lab FileID: X0128506.D

89	p	Styrene		----------NA----------				
90	P	Bromoform		----------NA----------				
91	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	103	0.00	10.58
92	p	Isopropylbenzene		----------NA----------				
93		Cyclohexanone		----------NA----------				
94	S	4-Bromofluorobenzene	50.000	49.555	0.9	101	0.00	9.50
95		Bromobenzene		----------NA----------				
96	P	1,1,2,2-Tetrachloroethane		----------NA----------				
97		Trans-1,4-Dichloro-2-Bute		----------NA----------				
98		1,2,3-Trichloropropane		----------NA----------				
99		n-Propylbenzene		----------NA----------				
100		2-Chlorotoluene		----------NA----------				
101		4-Chlorotoluene		----------NA----------				
102		1,3,5-Trimethylbenzene		----------NA----------				
103		Butyl Methacrylate		----------NA----------				
104		alpha-Methylstyrene		----------NA----------				
105		Pentachloroethane		----------NA----------				
106		sec-Butylbenzene		----------NA----------				
107	p	1,3-Dichlorobenzene		----------NA----------				
108		4-Isopropyltoluene		----------NA----------				
109	p	1,4-Dichlorobenzene		----------NA----------				
110		tert-Butylbenzene		----------NA----------				
111		Dicyclopentadiene		----------NA----------				
112		n-Butylbenzene		----------NA----------				
113	p	1,2-Dichlorobenzene		----------NA----------				
114		1,2,4-Trimethylbenzene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
115		Benzyl Chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
116		p-Diethylbenzene		----------NA----------				
117		Hexachloroethane		----------NA----------				
118	p	1,2-Dibromo-3-Chloropropa		----------NA----------				
119	p	1,2,4-Trichlorobenzene		----------NA----------				
120		1,3-Diethylbenzene		----------NA----------				
121		Hexachlorobutadiene		----------NA----------				
122		Naphthalene		----------NA----------				
123		1,2,3-Trichlorobenzene		----------NA----------				
124		2-Methylnaphthalene		----------NA----------				
125	I	1,4-Dichlorobenzene-d4a	50.000	50.000	0.0	103	0.00	10.58
126	H	TPH-GRO (C6-C10)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X0128495.D VX4007C.m Thu May 09 12:35:31 2019

6.7.3

6

Continuing Calibration Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Sample: VX4026-CC4007
Lab FileID: X0128818.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VX4025\X0128818.D          Vial: 2
Acq On    : 21 May 2019   2:12 pm                    Operator: firatt
Sample    : cc4007-20                                Inst    : GC MS X
Misc      : ms24750,VX4026,5,,,5,,WATER              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 11:33:09 2019
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	50.000	50.000	0.0	91	0.00	4.39
2	p	Dichlorodifluoromethane	20.000	19.988	0.1	89	0.00	0.92
3	P	Chloromethane	20.000	19.222	3.9	88	0.00	1.06
4	p	Vinyl Chloride	20.000	18.306	8.5	84	0.00	1.12
5		1,3-Butadiene	20.000	20.125	-0.6	91	0.00	1.15
		----------	Amount	Calc.	%Drift	----------		
6		Ethylene Oxide	1000.000	1320.101	-32.0#	116	0.00	1.35
		----------	Amount	Calc.	%Drift	----------		
7	p	Bromomethane	20.000	18.038	9.8	91	0.00	1.36
		----------	Amount	Calc.	%Drift	----------		
8	p	Chloroethane	20.000	17.739	11.3	85	0.00	1.43
		----------	Amount	Calc.	%Drift	----------		
9		Vinyl Bromide	20.000	18.137	9.3	86	0.00	1.57
10	p	Trichlorofluoromethane	20.000	19.432	2.8	85	0.00	1.60
11		Ethyl Alcohol	200.000	192.150	3.9	91	0.00	1.86
12		Ethyl Ether	20.000	19.251	3.7	92	0.00	1.86
13		Propylene Oxide	20.000	19.296	3.5	94	0.00	1.93
14		Acrolein	100.000	91.382	8.6	88	0.00	2.03
15	p	1,1-Dichloroethene	20.000	19.584	2.1	94	0.00	2.04
16	p	Freon 113	20.000	20.533	-2.7	90	0.00	2.02
17	p	Acetone	100.000	99.651	0.3	96	0.00	2.17
18		Isopropyl Alcohol	200.000	153.763	23.1#	75	0.00	2.31
		----------	Amount	Calc.	%Drift	----------		
19		Iodomethane	20.000	16.574	17.1	83	0.00	2.18
		----------	Amount	Calc.	%Drift	----------		
20	p	Methyl acetate	100.000	98.888	1.1	96	0.00	2.45
21	p	Carbon Disulfide	20.000	18.511	7.4	90	0.00	2.21
22		Allyl Chloride	20.000	18.792	6.0	88	0.00	2.40
23		Acetonitrile	100.000	98.347	1.7	96	0.00	2.49
24	p	Methylene Chloride	20.000	18.451	7.7	91	0.00	2.54
25		Tert Butyl Alcohol	200.000	161.324	19.3	75	0.00	2.68
26	p	trans-1,2-Dichloroethene	20.000	19.334	3.3	92	0.00	2.75
27		Acrylonitrile	100.000	97.303	2.7	93	0.00	2.85
28		Hexane	20.000	21.690	-8.5	93	0.00	2.94
29	p	Methyl Tert Butyl Ether	20.000	18.436	7.8	89	0.00	2.74
30	P	1,1-Dichloroethane	20.000	19.298	3.5	91	0.00	3.20

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4026-CC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128818.D
Project: CARDILCL: Deer Park Release

31		Vinyl acetate	50.000	46.885	6.2	84	0.00	3.27
32		Di-isopropyl ether	20.000	19.145	4.3	91	0.00	3.22
33		Chloroprene	20.000	19.626	1.9	93	0.00	3.25
34		Ethyl tert-butyl ether	20.000	18.064	9.7	87	0.00	3.58
35		Ethyl Acetate	50.000	47.236	5.5	91	0.00	3.89
36		2,2-Dichloropropane	20.000	17.901	10.5	86	0.00	3.75
37	p	cis-1,2-Dichloroethene	20.000	19.154	4.2	92	0.00	3.80
38	p	2-Butanone	100.000	102.786	-2.8	93	0.00	3.85
39		Propionitrile	100.000	93.800	6.2	90	0.00	3.99
40		Methacrylonitrile	100.000	106.530	-6.5	94	0.00	4.10
41		Bromochloromethane	20.000	18.253	8.7	85	0.00	4.04
42	p	Chloroform	20.000	19.810	1.0	90	0.00	4.13
43		Tetrahydrofuran	20.000	18.614	6.9	94	0.00	4.04
44	p	1,1,1-Trichloroethane	20.000	18.438	7.8	88	0.00	4.25
45	S	Dibromofluoromethane	50.000	52.768	-5.5	95	0.00	4.30
46	p	Cyclohexane	20.000	20.848	-4.2	92	0.00	4.21
47		1,1-Dichloropropene	20.000	20.102	-0.5	95	0.00	4.42
48	I	1,4-Difluorobenzene	50.000	50.000	0.0	94	0.00	5.13
49	p	Carbon Tetrachloride	20.000	17.129	14.4	87	0.00	4.37
50	S	1,2-Dichloroethane-d4	50.000	57.451	-14.9	110	0.00	4.67
51		Isobutyl Alcohol	200.000	134.992	32.5#	67	0.00	4.69
52	p	Benzene	20.000	19.031	4.8	91	0.00	4.63
53	p	1,2-Dichloroethane	20.000	18.653	6.7	94	0.00	4.75
54		2,2,4-Trimethylpentane	20.000	21.378	-6.9	93	0.00	4.64
55		tert-amyl methyl ether	20.000	17.178	14.1	87	0.00	4.76
56		Crotonaldehyde	100.000	86.724	13.3	83	0.00	5.11
57		n-Butyl Alcohol	200.000	151.247	24.4#	72	0.03	5.46
58	p	Trichloroethene	20.000	18.038	9.8	92	0.00	5.36
59	p	Methylcyclohexane	20.000	19.028	4.9	92	0.00	5.46
60		Methyl Methacrylate	20.000	18.467	7.7	88	0.00	5.82
61	p	1,2-Dichloropropane	20.000	17.814	10.9	88	0.00	5.66
62		Dibromomethane	20.000	17.803	11.0	88	0.00	5.79
63		1,4-Dioxane	400.000	327.640	18.1	80	0.00	5.81
64	p	Bromodichloromethane	20.000	16.781	16.1	87	0.00	5.98
65		2-Nitropropane	100.000	91.316	8.7	88	0.00	6.36
66		2-Chloroethyl vinyl ether	100.000	92.351	7.6	87	0.00	6.39
67		1-Bromo-2-Chloroethane	20.000	18.153	9.2	90	0.00	6.34
68		Epichlorohydrin	100.000	86.982	13.0	85	0.00	6.47
69	p	4-Methyl-2-pentanone	100.000	90.822	9.2	88	0.00	6.73
70	p	cis-1,3-Dichloropropene	20.000	18.062	9.7	86	0.00	6.52
71	I	Chlorobenzene-d5	50.000	50.000	0.0	82	0.00	8.32
72	S	Toluene-d8	50.000	58.216	-16.4	93	0.00	6.75
73	p	Toluene	20.000	19.758	1.2	85	0.00	6.83
74		Ethyl Methacrylate	20.000	20.440	-2.2	83	0.00	7.27
75	p	trans-1,3-Dichloropropene	20.000	19.816	0.9	83	0.00	7.20
76	p	1,1,2-Trichloroethane	20.000	20.075	-0.4	86	0.00	7.39
77	p	Tetrachloroethene	20.000	20.326	-1.6	87	0.00	7.39
78	p	2-hexanone	100.000	106.075	-6.1	86	0.00	7.66
79		1,3-Dichloropropane	20.000	20.379	-1.9	88	0.00	7.56
80	p	Dibromochloromethane	20.000	17.836	10.8	80	0.00	7.75
81		n-Butyl Acetate	50.000	53.085	-6.2	86	0.00	7.79
82	p	1,2-Dibromoethane	20.000	19.801	1.0	85	0.00	7.86
83		1-Chlorohexane	20.000	20.136	-0.7	84	0.00	8.35
84	P	Chlorobenzene	20.000	18.970	5.2	81	0.00	8.35
85		1,1,1,2-Tetrachloroethane	20.000	18.497	7.5	79	0.00	8.46
86	p	Ethylbenzene	20.000	19.543	2.3	84	0.00	8.45
87	p	m,p-Xylene	40.000	39.845	0.4	84	0.00	8.58
88	p	o-Xylene	20.000	19.654	1.7	83	0.00	8.96

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4026-CC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128818.D
Project: CARDILCL: Deer Park Release

89	p	Styrene	20.000	19.752	1.2	81	0.00	9.00
90	P	Bromoform	20.000	16.412	17.9	75	0.00	9.18
91	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	75	0.00	10.58
92	p	Isopropylbenzene	20.000	21.052	-5.3	81	0.00	9.32
93		Cyclohexanone	100.000	92.370	7.6	69	0.00	9.47
94	S	4-Bromofluorobenzene	50.000	53.352	-6.7	79	0.00	9.50
95		Bromobenzene	20.000	19.777	1.1	78	0.00	9.62
96	P	1,1,2,2-Tetrachloroethane	20.000	20.634	-3.2	79	0.00	9.70
97		Trans-1,4-Dichloro-2-Bute	20.000	20.014	-0.1	79	0.00	9.77
98		1,2,3-Trichloropropane	20.000	20.669	-3.3	80	0.00	9.73
99		n-Propylbenzene	20.000	21.328	-6.6	82	0.00	9.71
100		2-Chlorotoluene	20.000	21.145	-5.7	82	0.00	9.80
101		4-Chlorotoluene	20.000	21.109	-5.5	81	0.00	9.92
102		1,3,5-Trimethylbenzene	20.000	21.095	-5.5	80	0.00	9.90
103		Butyl Methacrylate	20.000	19.995	0.0	75	0.00	10.03
104		alpha-Methylstyrene	20.000	20.949	-4.7	77	0.00	10.12
105		Pentachloroethane	20.000	16.878	15.6	65	0.00	10.23
106		sec-Butylbenzene	20.000	20.991	-5.0	81	0.00	10.39
107	p	1,3-Dichlorobenzene	20.000	19.120	4.4	76	0.00	10.51
108		4-Isopropyltoluene	20.000	20.795	-4.0	79	0.00	10.54
109	p	1,4-Dichlorobenzene	20.000	19.273	3.6	77	0.00	10.60
110		tert-Butylbenzene	20.000	21.485	-7.4	84	0.00	10.19
111		Dicyclopentadiene	20.000	21.789	-8.9	84	0.00	10.56
112		n-Butylbenzene	20.000	21.272	-6.4	80	0.00	10.91
113	p	1,2-Dichlorobenzene	20.000	19.727	1.4	77	0.00	10.94
114		1,2,4-Trimethylbenzene	20.000	21.138	-5.7	80	0.00	10.25
		----------	Amount	Calc.	%Drift		----------	
115		Benzyl Chloride	20.000	16.778	16.1	69	0.00	10.75
		----------	Amount	Calc.	%Drift		----------	
116		p-Diethylbenzene	20.000	19.989	0.1	75	0.00	10.89
117		Hexachloroethane	20.000	18.825	5.9	75	0.00	11.12
118	p	1,2-Dibromo-3-Chloropropa	20.000	21.269	-6.3	82	0.00	11.68
119	p	1,2,4-Trichlorobenzene	20.000	18.476	7.6	72	0.00	12.40
120		1,3-Diethylbenzene	20.000	20.344	-1.7	77	0.00	10.82
121		Hexachlorobutadiene	20.000	19.277	3.6	74	0.00	12.51
122		Naphthalene	20.000	20.815	-4.1	78	0.00	12.62
123		1,2,3-Trichlorobenzene	20.000	18.937	5.3	74	0.00	12.83
124		2-Methylnaphthalene		----------NA----------				
125	I	1,4-Dichlorobenzene-d4a	50.000	50.000	0.0	75	0.00	10.58
126	H	TPH-GRO (C6-C10)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X0128494.D VX4007C.m Tue May 21 14:54:09 2019

6.7.4

6

Continuing Calibration Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Sample: VX4025-CC4007
Lab FileID: X0128818.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VX4025\X0128818.D          Vial: 2
Acq On    : 21 May 2019   2:12 pm                    Operator: firatt
Sample    : cc4007-20                                Inst    : GC MS X
Misc      : ms24750,VX4026,5,,,5,,WATER              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 11:33:09 2019
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	50.000	50.000	0.0	91	0.00	4.39
2	p	Dichlorodifluoromethane	20.000	19.988	0.1	89	0.00	0.92
3	P	Chloromethane	20.000	19.222	3.9	88	0.00	1.06
4	p	Vinyl Chloride	20.000	18.306	8.5	84	0.00	1.12
5		1,3-Butadiene	20.000	20.125	-0.6	91	0.00	1.15
		----------	Amount	Calc.	%Drift	----------		
6		Ethylene Oxide	1000.000	1320.101	-32.0#	116	0.00	1.35
		----------	Amount	Calc.	%Drift	----------		
7	p	Bromomethane	20.000	18.038	9.8	91	0.00	1.36
		----------	Amount	Calc.	%Drift	----------		
8	p	Chloroethane	20.000	17.739	11.3	85	0.00	1.43
		----------	Amount	Calc.	%Drift	----------		
9		Vinyl Bromide	20.000	18.137	9.3	86	0.00	1.57
10	p	Trichlorofluoromethane	20.000	19.432	2.8	85	0.00	1.60
11		Ethyl Alcohol	200.000	192.150	3.9	91	0.00	1.86
12		Ethyl Ether	20.000	19.251	3.7	92	0.00	1.86
13		Propylene Oxide	20.000	19.296	3.5	94	0.00	1.93
14		Acrolein	100.000	91.382	8.6	88	0.00	2.03
15	p	1,1-Dichloroethene	20.000	19.584	2.1	94	0.00	2.04
16	p	Freon 113	20.000	20.533	-2.7	90	0.00	2.02
17	p	Acetone	100.000	99.651	0.3	96	0.00	2.17
18		Isopropyl Alcohol	200.000	153.763	23.1#	75	0.00	2.31
		----------	Amount	Calc.	%Drift	----------		
19		Iodomethane	20.000	16.574	17.1	83	0.00	2.18
		----------	Amount	Calc.	%Drift	----------		
20	p	Methyl acetate	100.000	98.888	1.1	96	0.00	2.45
21	p	Carbon Disulfide	20.000	18.511	7.4	90	0.00	2.21
22		Allyl Chloride	20.000	18.792	6.0	88	0.00	2.40
23		Acetonitrile	100.000	98.347	1.7	96	0.00	2.49
24	p	Methylene Chloride	20.000	18.451	7.7	91	0.00	2.54
25		Tert Butyl Alcohol	200.000	161.324	19.3	75	0.00	2.68
26	p	trans-1,2-Dichloroethene	20.000	19.334	3.3	92	0.00	2.75
27		Acrylonitrile	100.000	97.303	2.7	93	0.00	2.85
28		Hexane	20.000	21.690	-8.5	93	0.00	2.94
29	p	Methyl Tert Butyl Ether	20.000	18.436	7.8	89	0.00	2.74
30	P	1,1-Dichloroethane	20.000	19.298	3.5	91	0.00	3.20

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4025-CC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128818.D
Project: CARDILCL: Deer Park Release

31		Vinyl acetate	50.000	46.885	6.2	84	0.00	3.27
32		Di-isopropyl ether	20.000	19.145	4.3	91	0.00	3.22
33		Chloroprene	20.000	19.626	1.9	93	0.00	3.25
34		Ethyl tert-butyl ether	20.000	18.064	9.7	87	0.00	3.58
35		Ethyl Acetate	50.000	47.236	5.5	91	0.00	3.89
36		2,2-Dichloropropane	20.000	17.901	10.5	86	0.00	3.75
37	p	cis-1,2-Dichloroethene	20.000	19.154	4.2	92	0.00	3.80
38	p	2-Butanone	100.000	102.786	-2.8	93	0.00	3.85
39		Propionitrile	100.000	93.800	6.2	90	0.00	3.99
40		Methacrylonitrile	100.000	106.530	-6.5	94	0.00	4.10
41		Bromochloromethane	20.000	18.253	8.7	85	0.00	4.04
42	p	Chloroform	20.000	19.810	1.0	90	0.00	4.13
43		Tetrahydrofuran	20.000	18.614	6.9	94	0.00	4.04
44	p	1,1,1-Trichloroethane	20.000	18.438	7.8	88	0.00	4.25
45	S	Dibromofluoromethane	50.000	52.768	-5.5	95	0.00	4.30
46	p	Cyclohexane	20.000	20.848	-4.2	92	0.00	4.21
47		1,1-Dichloropropene	20.000	20.102	-0.5	95	0.00	4.42
48	I	1,4-Difluorobenzene	50.000	50.000	0.0	94	0.00	5.13
49	p	Carbon Tetrachloride	20.000	17.129	14.4	87	0.00	4.37
50	S	1,2-Dichloroethane-d4	50.000	57.451	-14.9	110	0.00	4.67
51		Isobutyl Alcohol	200.000	134.992	32.5#	67	0.00	4.69
52	p	Benzene	20.000	19.031	4.8	91	0.00	4.63
53	p	1,2-Dichloroethane	20.000	18.653	6.7	94	0.00	4.75
54		2,2,4-Trimethylpentane	20.000	21.378	-6.9	93	0.00	4.64
55		tert-amyl methyl ether	20.000	17.178	14.1	87	0.00	4.76
56		Crotonaldehyde	100.000	86.724	13.3	83	0.00	5.11
57		n-Butyl Alcohol	200.000	151.247	24.4#	72	0.03	5.46
58	p	Trichloroethene	20.000	18.038	9.8	92	0.00	5.36
59	p	Methylcyclohexane	20.000	19.028	4.9	92	0.00	5.46
60		Methyl Methacrylate	20.000	18.467	7.7	88	0.00	5.82
61	p	1,2-Dichloropropane	20.000	17.814	10.9	88	0.00	5.66
62		Dibromomethane	20.000	17.803	11.0	88	0.00	5.79
63		1,4-Dioxane	400.000	327.640	18.1	80	0.00	5.81
64	p	Bromodichloromethane	20.000	16.781	16.1	87	0.00	5.98
65		2-Nitropropane	100.000	91.316	8.7	88	0.00	6.36
66		2-Chloroethyl vinyl ether	100.000	92.351	7.6	87	0.00	6.39
67		1-Bromo-2-Chloroethane	20.000	18.153	9.2	90	0.00	6.34
68		Epichlorohydrin	100.000	86.982	13.0	85	0.00	6.47
69	p	4-Methyl-2-pentanone	100.000	90.822	9.2	88	0.00	6.73
70	p	cis-1,3-Dichloropropene	20.000	18.062	9.7	86	0.00	6.52
71	I	Chlorobenzene-d5	50.000	50.000	0.0	82	0.00	8.32
72	S	Toluene-d8	50.000	58.216	-16.4	93	0.00	6.75
73	p	Toluene	20.000	19.758	1.2	85	0.00	6.83
74		Ethyl Methacrylate	20.000	20.440	-2.2	83	0.00	7.27
75	p	trans-1,3-Dichloropropene	20.000	19.816	0.9	83	0.00	7.20
76	p	1,1,2-Trichloroethane	20.000	20.075	-0.4	86	0.00	7.39
77	p	Tetrachloroethene	20.000	20.326	-1.6	87	0.00	7.39
78	p	2-hexanone	100.000	106.075	-6.1	86	0.00	7.66
79		1,3-Dichloropropane	20.000	20.379	-1.9	88	0.00	7.56
80	p	Dibromochloromethane	20.000	17.836	10.8	80	0.00	7.75
81		n-Butyl Acetate	50.000	53.085	-6.2	86	0.00	7.79
82	p	1,2-Dibromoethane	20.000	19.801	1.0	85	0.00	7.86
83		1-Chlorohexane	20.000	20.136	-0.7	84	0.00	8.35
84	P	Chlorobenzene	20.000	18.970	5.2	81	0.00	8.35
85		1,1,1,2-Tetrachloroethane	20.000	18.497	7.5	79	0.00	8.46
86	p	Ethylbenzene	20.000	19.543	2.3	84	0.00	8.45
87	p	m,p-Xylene	40.000	39.845	0.4	84	0.00	8.58
88	p	o-Xylene	20.000	19.654	1.7	83	0.00	8.96

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4025-CC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128818.D
Project: CARDILCL: Deer Park Release

89	p	Styrene	20.000	19.752	1.2	81	0.00	9.00
90	P	Bromoform	20.000	16.412	17.9	75	0.00	9.18
91	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	75	0.00	10.58
92	p	Isopropylbenzene	20.000	21.052	-5.3	81	0.00	9.32
93		Cyclohexanone	100.000	92.370	7.6	69	0.00	9.47
94	S	4-Bromofluorobenzene	50.000	53.352	-6.7	79	0.00	9.50
95		Bromobenzene	20.000	19.777	1.1	78	0.00	9.62
96	P	1,1,2,2-Tetrachloroethane	20.000	20.634	-3.2	79	0.00	9.70
97		Trans-1,4-Dichloro-2-Bute	20.000	20.014	-0.1	79	0.00	9.77
98		1,2,3-Trichloropropane	20.000	20.669	-3.3	80	0.00	9.73
99		n-Propylbenzene	20.000	21.328	-6.6	82	0.00	9.71
100		2-Chlorotoluene	20.000	21.145	-5.7	82	0.00	9.80
101		4-Chlorotoluene	20.000	21.109	-5.5	81	0.00	9.92
102		1,3,5-Trimethylbenzene	20.000	21.095	-5.5	80	0.00	9.90
103		Butyl Methacrylate	20.000	19.995	0.0	75	0.00	10.03
104		alpha-Methylstyrene	20.000	20.949	-4.7	77	0.00	10.12
105		Pentachloroethane	20.000	16.878	15.6	65	0.00	10.23
106		sec-Butylbenzene	20.000	20.991	-5.0	81	0.00	10.39
107	p	1,3-Dichlorobenzene	20.000	19.120	4.4	76	0.00	10.51
108		4-Isopropyltoluene	20.000	20.795	-4.0	79	0.00	10.54
109	p	1,4-Dichlorobenzene	20.000	19.273	3.6	77	0.00	10.60
110		tert-Butylbenzene	20.000	21.485	-7.4	84	0.00	10.19
111		Dicyclopentadiene	20.000	21.789	-8.9	84	0.00	10.56
112		n-Butylbenzene	20.000	21.272	-6.4	80	0.00	10.91
113	p	1,2-Dichlorobenzene	20.000	19.727	1.4	77	0.00	10.94
114		1,2,4-Trimethylbenzene	20.000	21.138	-5.7	80	0.00	10.25
		----------	Amount	Calc.	%Drift		----------	
115		Benzyl Chloride	20.000	16.778	16.1	69	0.00	10.75
		----------	Amount	Calc.	%Drift		----------	
116		p-Diethylbenzene	20.000	19.989	0.1	75	0.00	10.89
117		Hexachloroethane	20.000	18.825	5.9	75	0.00	11.12
118	p	1,2-Dibromo-3-Chloropropa	20.000	21.269	-6.3	82	0.00	11.68
119	p	1,2,4-Trichlorobenzene	20.000	18.476	7.6	72	0.00	12.40
120		1,3-Diethylbenzene	20.000	20.344	-1.7	77	0.00	10.82
121		Hexachlorobutadiene	20.000	19.277	3.6	74	0.00	12.51
122		Naphthalene	20.000	20.815	-4.1	78	0.00	12.62
123		1,2,3-Trichlorobenzene	20.000	18.937	5.3	74	0.00	12.83
124		2-Methylnaphthalene		----------NA----------				
125	I	1,4-Dichlorobenzene-d4a	50.000	50.000	0.0	75	0.00	10.58
126	H	TPH-GRO (C6-C10)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X0128494.D VX4007C.m Tue May 21 14:54:09 2019

Continuing Calibration Summary

Job Number: TD39353
Account: ITCTXDP Intercontinental Terminals
Project: CARDILCL: Deer Park Release
Sample: VX4025-ECC4007
Lab FileID: X0128845.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\VX4025\X0128845.D          Vial: 29
Acq On    : 22 May 2019   1:39 am                    Operator: firatt
Sample    : ecc4007-40                               Inst    : GC MS X
Misc      : ms24749,VX4025,5,,,5,,WATER              Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title        : SW846 8260C and EPA 624/624.1
Last Update  : Thu May 09 11:33:09 2019
Response via : Multiple Level Calibration

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

		Compound	Amount	Calc.	%Drift	Area%	Dev(min)	R.T.
1	I	Pentafluorobenzene	50.000	50.000	0.0	93	0.00	4.39
2	p	Dichlorodifluoromethane	40.000	35.008	12.5	91	0.00	0.92
3	P	Chloromethane	40.000	34.971	12.6	83	0.00	1.05
4	p	Vinyl Chloride	40.000	33.477	16.3	82	0.00	1.12
5		1,3-Butadiene	40.000	40.325	-0.8	99	0.00	1.15
		----------	Amount	Calc.	%Drift	----------		
6		Ethylene Oxide	2000.000	2682.400	-34.1#	118	0.00	1.35
		----------	Amount	Calc.	%Drift	----------		
7	p	Bromomethane	40.000	34.722	13.2	92	0.00	1.36
		----------	Amount	Calc.	%Drift	----------		
8	p	Chloroethane	40.000	36.326	9.2	85	0.00	1.43
		----------	Amount	Calc.	%Drift	----------		
9		Vinyl Bromide	40.000	36.533	8.7	89	0.00	1.57
10	p	Trichlorofluoromethane	40.000	35.135	12.2	86	0.00	1.60
11		Ethyl Alcohol	400.000	382.329	4.4	91	0.00	1.85
12		Ethyl Ether	40.000	38.973	2.6	94	0.00	1.86
13		Propylene Oxide	40.000	38.021	4.9	92	0.00	1.93
14		Acrolein	200.000	176.559	11.7	85	0.00	2.03
15	p	1,1-Dichloroethene	40.000	42.263	-5.7	103	0.00	2.04
16	p	Freon 113	40.000	43.528	-8.8	108	0.00	2.02
17	p	Acetone	200.000	188.405	5.8	92	0.00	2.17
18		Isopropyl Alcohol	400.000	337.466	15.6	82	0.00	2.31
		----------	Amount	Calc.	%Drift	----------		
19		Iodomethane	40.000	39.751	0.6	93	0.00	2.18
		----------	Amount	Calc.	%Drift	----------		
20	p	Methyl acetate	200.000	199.560	0.2	97	0.00	2.44
21	p	Carbon Disulfide	40.000	41.292	-3.2	98	0.00	2.20
22		Allyl Chloride	40.000	37.701	5.7	86	0.00	2.40
23		Acetonitrile	200.000	184.822	7.6	90	0.00	2.49
24	p	Methylene Chloride	40.000	37.862	5.3	96	0.00	2.54
25		Tert Butyl Alcohol	400.000	349.615	12.6	81	0.00	2.69
26	p	trans-1,2-Dichloroethene	40.000	40.058	-0.1	98	0.00	2.75
27		Acrylonitrile	200.000	176.817	11.6	85	0.00	2.85
28		Hexane	40.000	41.224	-3.1	102	0.00	2.94
29	p	Methyl Tert Butyl Ether	40.000	38.961	2.6	92	0.00	2.74
30	P	1,1-Dichloroethane	40.000	39.882	0.3	95	0.00	3.20

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4025-ECC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128845.D
Project: CARDILCL: Deer Park Release

31		Vinyl acetate	100.000	112.840	-12.8	96	0.00	3.27
32		Di-isopropyl ether	40.000	39.654	0.9	94	0.00	3.22
33		Chloroprene	40.000	38.971	2.6	94	0.00	3.25
34		Ethyl tert-butyl ether	40.000	38.234	4.4	91	0.00	3.58
35		Ethyl Acetate	100.000	90.041	10.0	88	0.00	3.89
36		2,2-Dichloropropane	40.000	30.108	24.7#	73	0.00	3.75
37	p	cis-1,2-Dichloroethene	40.000	39.041	2.4	96	0.00	3.80
38	p	2-Butanone	200.000	198.677	0.7	90	0.00	3.85
39		Propionitrile	200.000	178.088	11.0	86	0.00	3.99
40		Methacrylonitrile	200.000	203.901	-2.0	92	0.00	4.10
41		Bromochloromethane	40.000	37.643	5.9	90	0.00	4.04
42	p	Chloroform	40.000	40.077	-0.2	93	0.00	4.13
43		Tetrahydrofuran	40.000	36.653	8.4	92	0.00	4.04
44	p	1,1,1-Trichloroethane	40.000	38.729	3.2	93	0.00	4.25
45	S	Dibromofluoromethane	50.000	52.204	-4.4	98	0.00	4.30
46	p	Cyclohexane	40.000	43.045	-7.6	105	0.00	4.21
47		1,1-Dichloropropene	40.000	39.769	0.6	99	0.00	4.42
48	I	1,4-Difluorobenzene	50.000	50.000	0.0	95	0.00	5.13
49	p	Carbon Tetrachloride	40.000	35.736	10.7	91	0.00	4.37
50	S	1,2-Dichloroethane-d4	50.000	57.002	-14.0	109	0.00	4.67
51		Isobutyl Alcohol	400.000	363.236	9.2	82	0.00	4.70
52	p	Benzene	40.000	38.928	2.7	92	0.00	4.63
53	p	1,2-Dichloroethane	40.000	38.355	4.1	95	0.00	4.75
54		2,2,4-Trimethylpentane	40.000	38.918	2.7	96	0.00	4.63
55		tert-amyl methyl ether	40.000	36.351	9.1	87	0.00	4.76
56		Crotonaldehyde	200.000	177.100	11.5	85	0.00	5.10
57		n-Butyl Alcohol	400.000	359.563	10.1	84	0.00	5.43
58	p	Trichloroethene	40.000	35.952	10.1	89	0.00	5.36
59	p	Methylcyclohexane	40.000	38.633	3.4	102	0.00	5.46
60		Methyl Methacrylate	40.000	38.479	3.8	88	0.00	5.82
61	p	1,2-Dichloropropane	40.000	37.491	6.3	90	0.00	5.66
62		Dibromomethane	40.000	37.091	7.3	90	0.00	5.79
63		1,4-Dioxane	800.000	659.834	17.5	81	0.00	5.82
64	p	Bromodichloromethane	40.000	34.974	12.6	88	0.00	5.98
65		2-Nitropropane	200.000	201.824	-0.9	88	0.00	6.36
66		2-Chloroethyl vinyl ether	200.000	184.959	7.5	84	0.00	6.40
67		1-Bromo-2-Chloroethane	40.000	36.766	8.1	89	0.00	6.34
68		Epichlorohydrin	200.000	166.809	16.6	81	0.00	6.48
69	p	4-Methyl-2-pentanone	200.000	173.856	13.1	84	0.00	6.73
70	p	cis-1,3-Dichloropropene	40.000	36.455	8.9	84	0.00	6.52
71	I	Chlorobenzene-d5	50.000	50.000	0.0	83	0.00	8.32
72	S	Toluene-d8	50.000	57.820	-15.6	94	0.00	6.75
73	p	Toluene	40.000	39.814	0.5	87	0.00	6.83
74		Ethyl Methacrylate	40.000	44.045	-10.1	83	0.00	7.27
75	p	trans-1,3-Dichloropropene	40.000	41.656	-4.1	82	0.00	7.20
76	p	1,1,2-Trichloroethane	40.000	41.276	-3.2	86	0.00	7.39
77	p	Tetrachloroethene	40.000	40.865	-2.2	88	0.00	7.39
78	p	2-hexanone	200.000	204.866	-2.4	83	0.00	7.66
79		1,3-Dichloropropane	40.000	41.493	-3.7	87	0.00	7.56
80	p	Dibromochloromethane	40.000	38.722	3.2	81	0.00	7.75
81		n-Butyl Acetate	100.000	110.083	-10.1	86	0.00	7.79
82	p	1,2-Dibromoethane	40.000	41.210	-3.0	85	0.00	7.86
83		1-Chlorohexane	40.000	40.925	-2.3	84	0.00	8.35
84	P	Chlorobenzene	40.000	38.774	3.1	83	0.00	8.35
85		1,1,1,2-Tetrachloroethane	40.000	40.137	-0.3	81	0.00	8.46
86	p	Ethylbenzene	40.000	40.166	-0.4	85	0.00	8.45
87	p	m,p-Xylene	80.000	81.496	-1.9	85	0.00	8.58
88	p	o-Xylene	40.000	40.389	-1.0	84	0.00	8.97

Continuing Calibration Summary

Job Number: TD39353 **Sample:** VX4025-ECC4007
Account: ITCTXDP Intercontinental Terminals **Lab FileID:** X0128845.D
Project: CARDILCL: Deer Park Release

89	p	Styrene	40.000	41.248	-3.1	82	0.00	9.00
90	P	Bromoform	40.000	36.749	8.1	76	0.00	9.18
91	I	1,4-Dichlorobenzene-d4	50.000	50.000	0.0	74	0.00	10.58
92	p	Isopropylbenzene	40.000	43.625	-9.1	82	0.00	9.32
93		Cyclohexanone	200.000	178.453	10.8	69	0.00	9.47
94	S	4-Bromofluorobenzene	50.000	53.710	-7.4	79	0.00	9.50
95		Bromobenzene	40.000	41.308	-3.3	79	0.00	9.62
96	P	1,1,2,2-Tetrachloroethane	40.000	44.220	-10.5	83	0.00	9.70
97		Trans-1,4-Dichloro-2-Bute	40.000	41.656	-4.1	77	0.00	9.77
98		1,2,3-Trichloropropane	40.000	43.421	-8.6	84	0.00	9.73
99		n-Propylbenzene	40.000	43.992	-10.0	82	0.00	9.72
100		2-Chlorotoluene	40.000	43.678	-9.2	82	0.00	9.80
101		4-Chlorotoluene	40.000	43.457	-8.6	82	0.00	9.92
102		1,3,5-Trimethylbenzene	40.000	43.520	-8.8	81	0.00	9.90
103		Butyl Methacrylate	40.000	47.890	-19.7	80	0.00	10.03
104		alpha-Methylstyrene	40.000	42.860	-7.1	76	0.00	10.12
105		Pentachloroethane	40.000	42.209	-5.5	76	0.00	10.23
106		sec-Butylbenzene	40.000	42.972	-7.4	80	0.00	10.39
107	p	1,3-Dichlorobenzene	40.000	40.106	-0.3	77	0.00	10.51
108		4-Isopropyltoluene	40.000	42.568	-6.4	78	0.00	10.54
109	p	1,4-Dichlorobenzene	40.000	39.763	0.6	77	0.00	10.60
110		tert-Butylbenzene	40.000	43.330	-8.3	83	0.00	10.19
111		Dicyclopentadiene	40.000	42.758	-6.9	84	0.00	10.56
112		n-Butylbenzene	40.000	42.011	-5.0	78	0.00	10.91
113	p	1,2-Dichlorobenzene	40.000	40.733	-1.8	78	0.00	10.94
114		1,2,4-Trimethylbenzene	40.000	43.653	-9.1	81	0.00	10.25
		----------	Amount	Calc.	%Drift	----------		
115		Benzyl Chloride	40.000	26.213	34.5#	49	0.00	10.75
		----------	Amount	Calc.	%Drift	----------		
116		p-Diethylbenzene	40.000	40.399	-1.0	74	0.00	10.89
117		Hexachloroethane	40.000	40.369	-0.9	74	0.00	11.12
118	p	1,2-Dibromo-3-Chloropropa	40.000	44.901	-12.3	83	0.00	11.68
119	p	1,2,4-Trichlorobenzene	40.000	39.576	1.1	73	0.00	12.39
120		1,3-Diethylbenzene	40.000	41.616	-4.0	77	0.00	10.82
121		Hexachlorobutadiene	40.000	39.538	1.2	75	0.00	12.51
122		Naphthalene	40.000	44.487	-11.2	79	0.00	12.61
123		1,2,3-Trichlorobenzene	40.000	40.387	-1.0	76	0.00	12.83
124		2-Methylnaphthalene		----------NA----------				
125	I	1,4-Dichlorobenzene-d4a	50.000	50.000	0.0	74	0.00	10.58
126	H	TPH-GRO (C6-C10)		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
X0128495.D VX4007C.m Wed May 22 10:17:55 2019

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128843.D
Acq On : 22 May 2019 12:48 am
Operator : firatt
Sample : td39353-1 comp
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 22 07:41:26 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

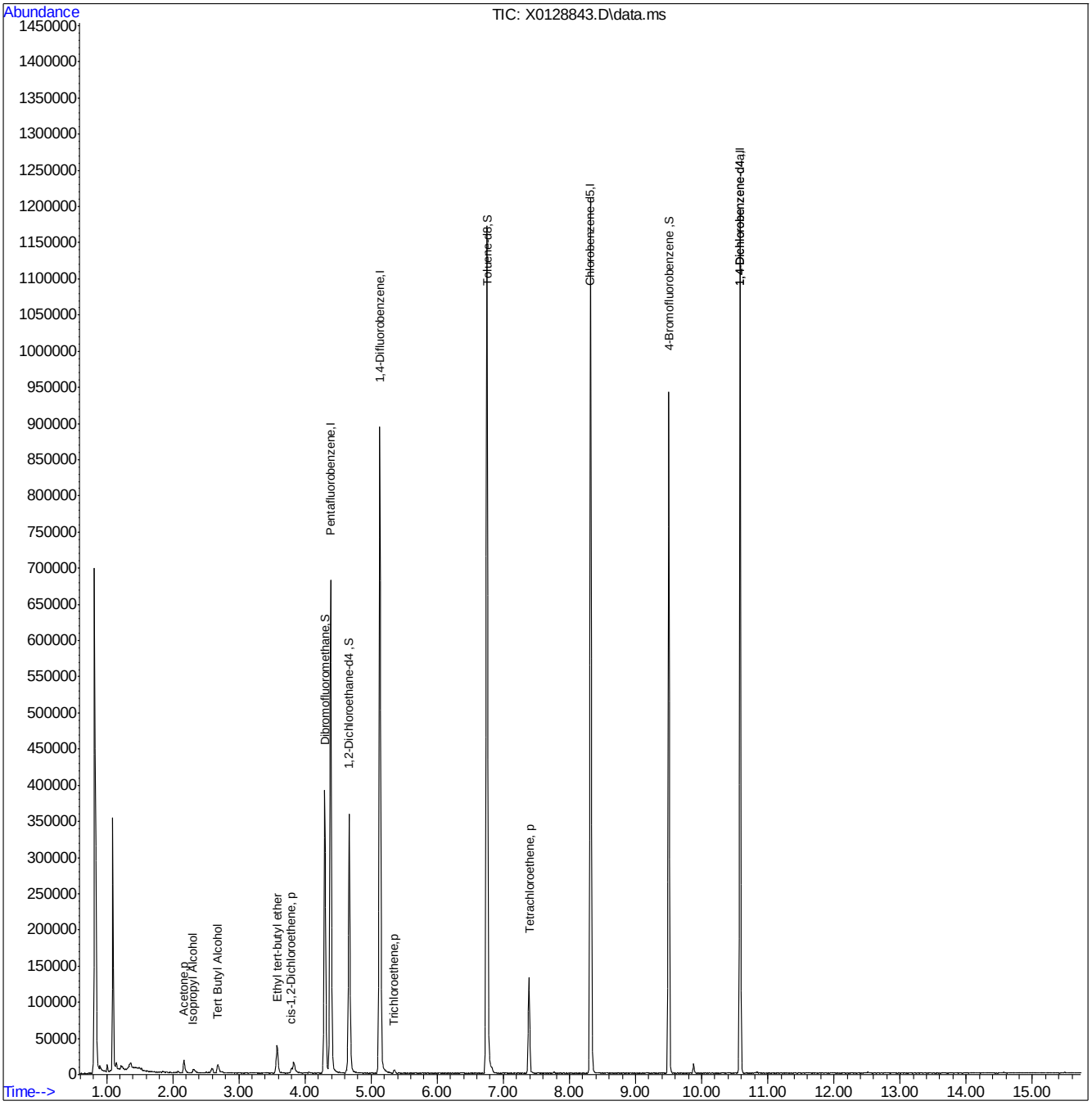
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	376543	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	656403	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	552991	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	225022	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	225022	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	211788	53.07	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.14%			
50) 1,2-Dichloroethane-d4	4.669	65	223659	59.23	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 118.46%			
72) Toluene-d8	6.753	98	708394	58.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 116.00%			
94) 4-Bromofluorobenzene	9.501	95	255365	54.58	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 109.16%			
Target Compounds						Qvalue
17) Acetone	2.173	43	20070	6.73	ug/L	99
18) Isopropyl Alcohol	2.311	45	7619	8.55	ug/L	92
25) Tert Butyl Alcohol	2.686	59	12898	9.36	ug/L	91
34) Ethyl tert-butyl ether	3.582	59	29108	2.63	ug/L	94
37) cis-1,2-Dichloroethene	3.796	61	4092	0.77	ug/L	94
58) Trichloroethene	5.348	95	1605	0.39	ug/L #	62
77) Tetrachloroethene	7.391	166	32019	8.92	ug/L	96

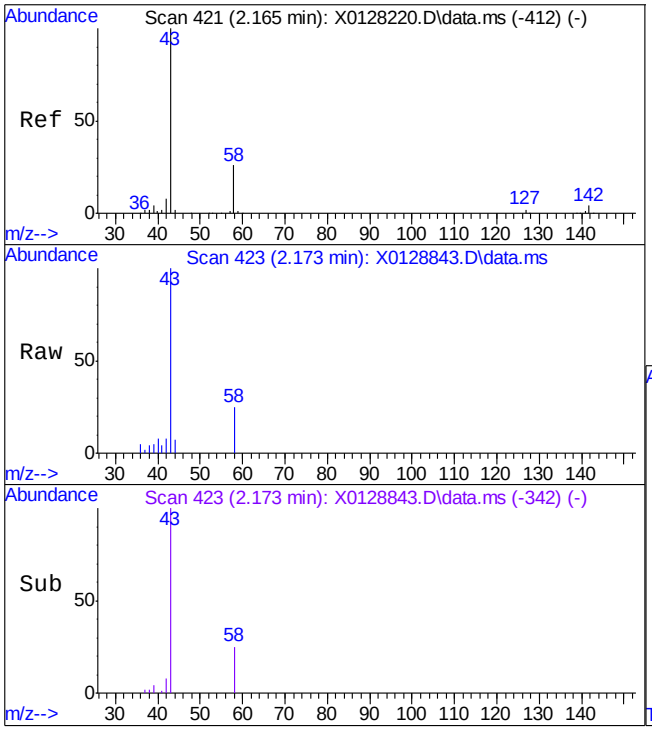
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128843.D
Acq On : 22 May 2019 12:48 am
Operator : firatt
Sample : td39353-1 comp
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 27 Sample Multiplier: 1

Quant Time: May 22 07:41:26 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

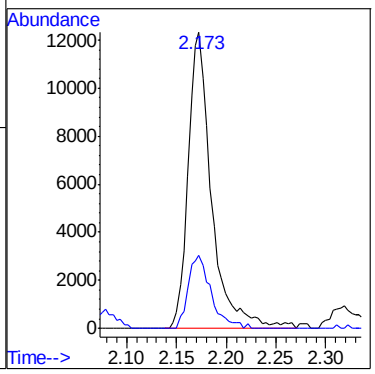


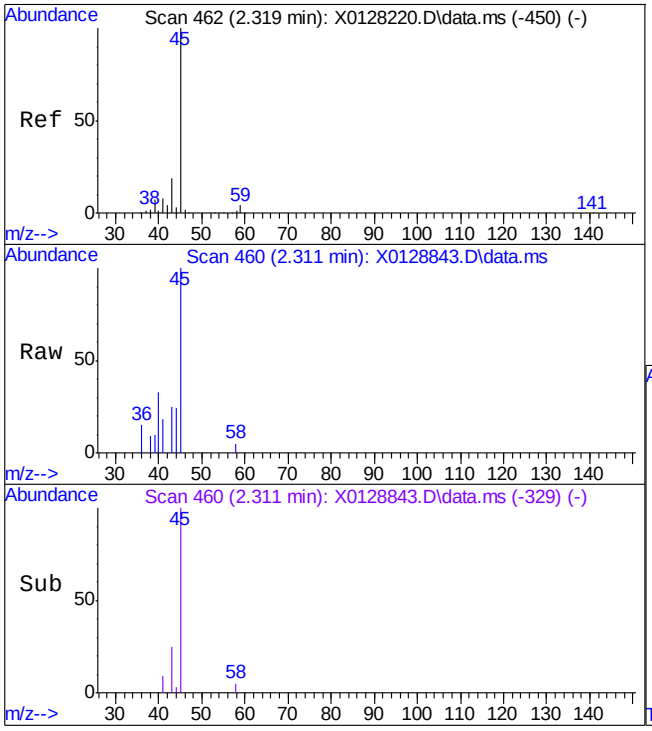


#17
Acetone
Concen: 6.73 ug/L
RT: 2.173 min Scan# 423
Delta R.T. 0.004 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 43 Resp: 20070

Ion	Ratio	Lower	Upper
43	100		
58	24.8	0.0	55.4

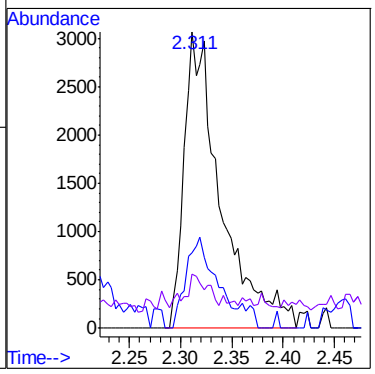


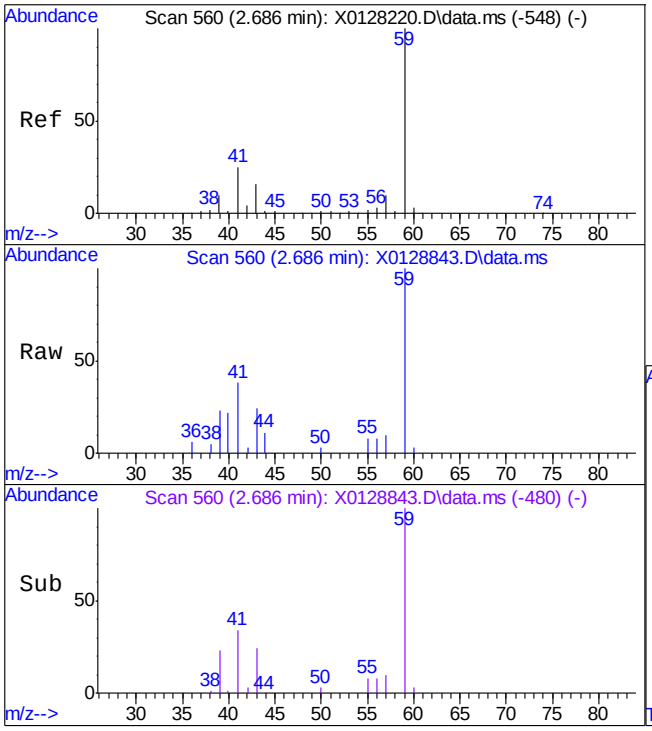


#18
Isopropyl Alcohol
Concen: 8.55 ug/L
RT: 2.311 min Scan# 460
Delta R.T. -0.008 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 45 Resp: 7619

Ion	Ratio	Lower	Upper
45	100		
43	25.3	0.0	51.2
41	10.2	0.0	37.7

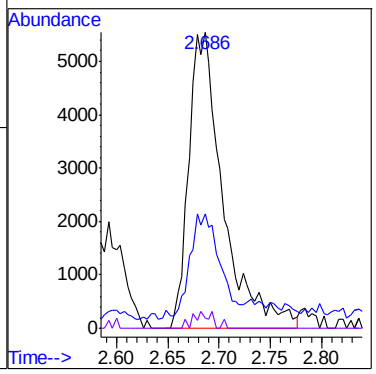


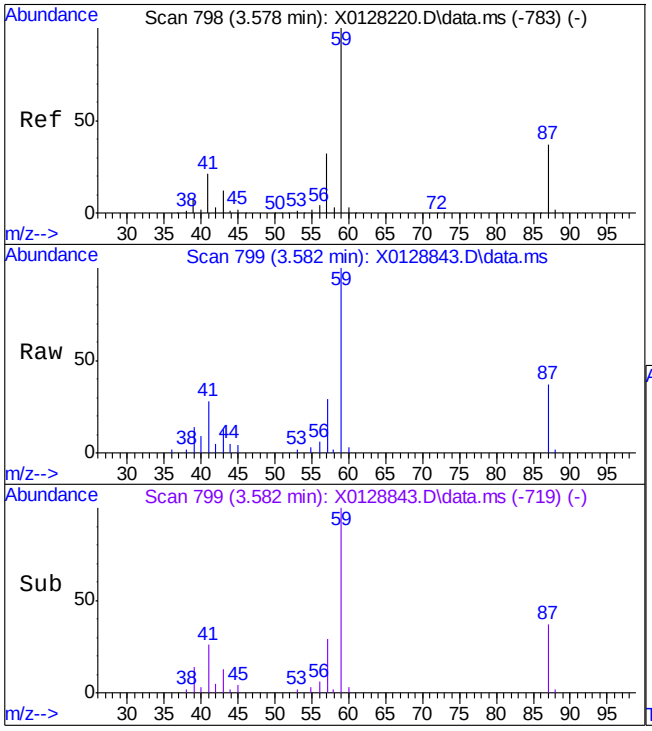


#25
Tert Butyl Alcohol
Concen: 9.36 ug/L
RT: 2.686 min Scan# 560
Delta R.T. 0.000 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 59 Resp: 12898

Ion	Ratio	Lower	Upper
59	100		
41	32.8	0.0	57.7
42	3.4	0.0	34.1

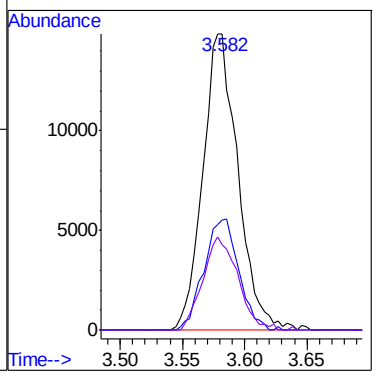


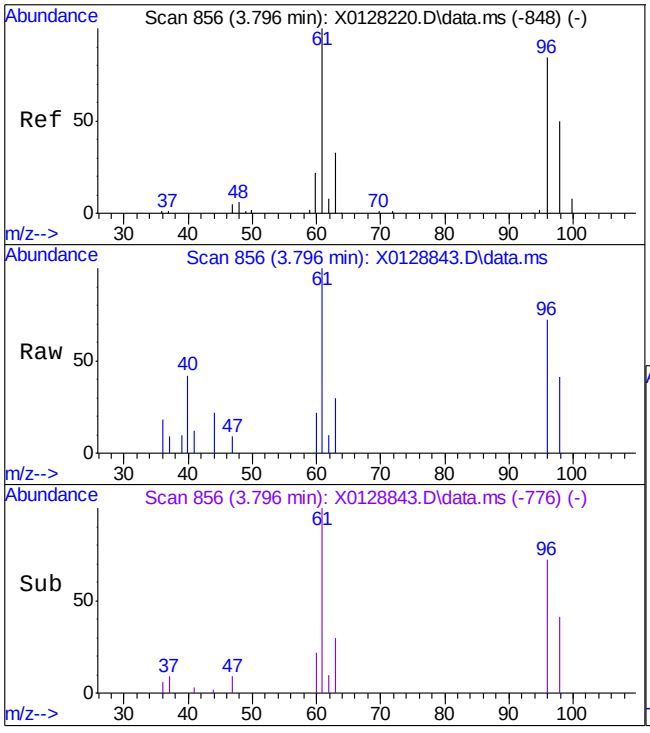


#34
Ethyl tert-butyl ether
Concen: 2.63 ug/L
RT: 3.582 min Scan# 799
Delta R.T. 0.000 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 59 Resp: 29108

Ion	Ratio	Lower	Upper
59	100		
87	37.0	10.3	70.3
57	28.7	2.4	62.4

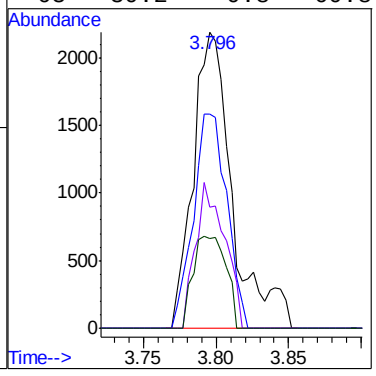


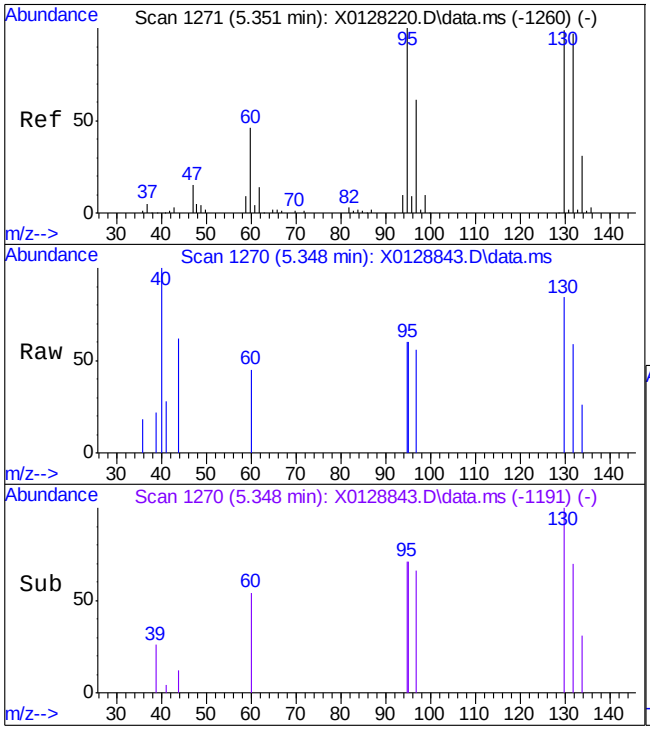


#37
cis-1,2-Dichloroethene
Concen: 0.77 ug/L
RT: 3.796 min Scan# 856
Delta R.T. -0.000 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 61 Resp: 4092

Ion	Ratio	Lower	Upper
61	100		
96	72.3	45.6	105.6
98	40.9	19.2	79.2
63	30.2	0.8	60.8

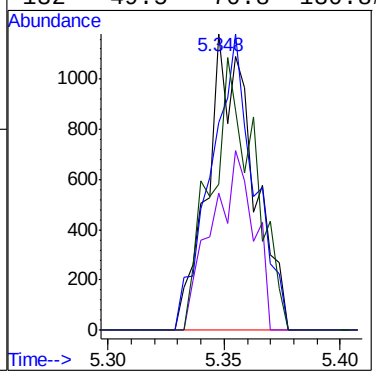


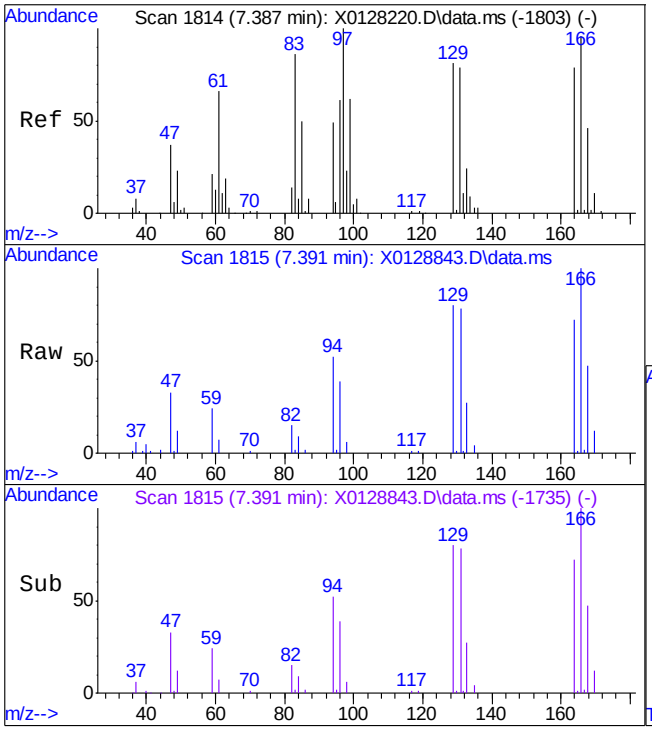


#58
Trichloroethene
Concen: 0.39 ug/L
RT: 5.348 min Scan# 1270
Delta R.T. -0.003 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion: 95 Resp: 1605

Ion	Ratio	Lower	Upper
95	100		
130	70.3	74.8	134.8#
97	46.4	35.9	95.9
132	49.5	70.8	130.8#

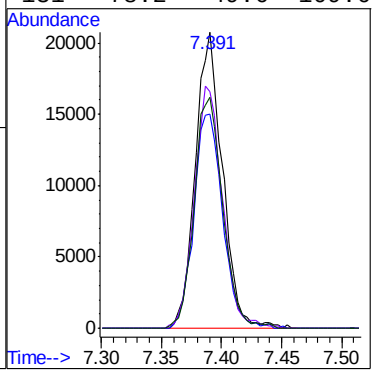




#77
Tetrachloroethene
Concen: 8.92 ug/L
RT: 7.391 min Scan# 1815
Delta R.T. -0.000 min
Lab File: X0128843.D
Acq: 22 May 2019 12:48 am

Tgt Ion:166 Resp: 32019

Ion	Ratio	Lower	Upper
166	100		
164	72.5	50.2	110.2
129	79.8	52.2	112.2
131	78.2	49.6	109.6



7.11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128821.D
Acq On : 21 May 2019 3:28 pm
Operator : firatt
Sample : mb
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 21 15:45:09 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

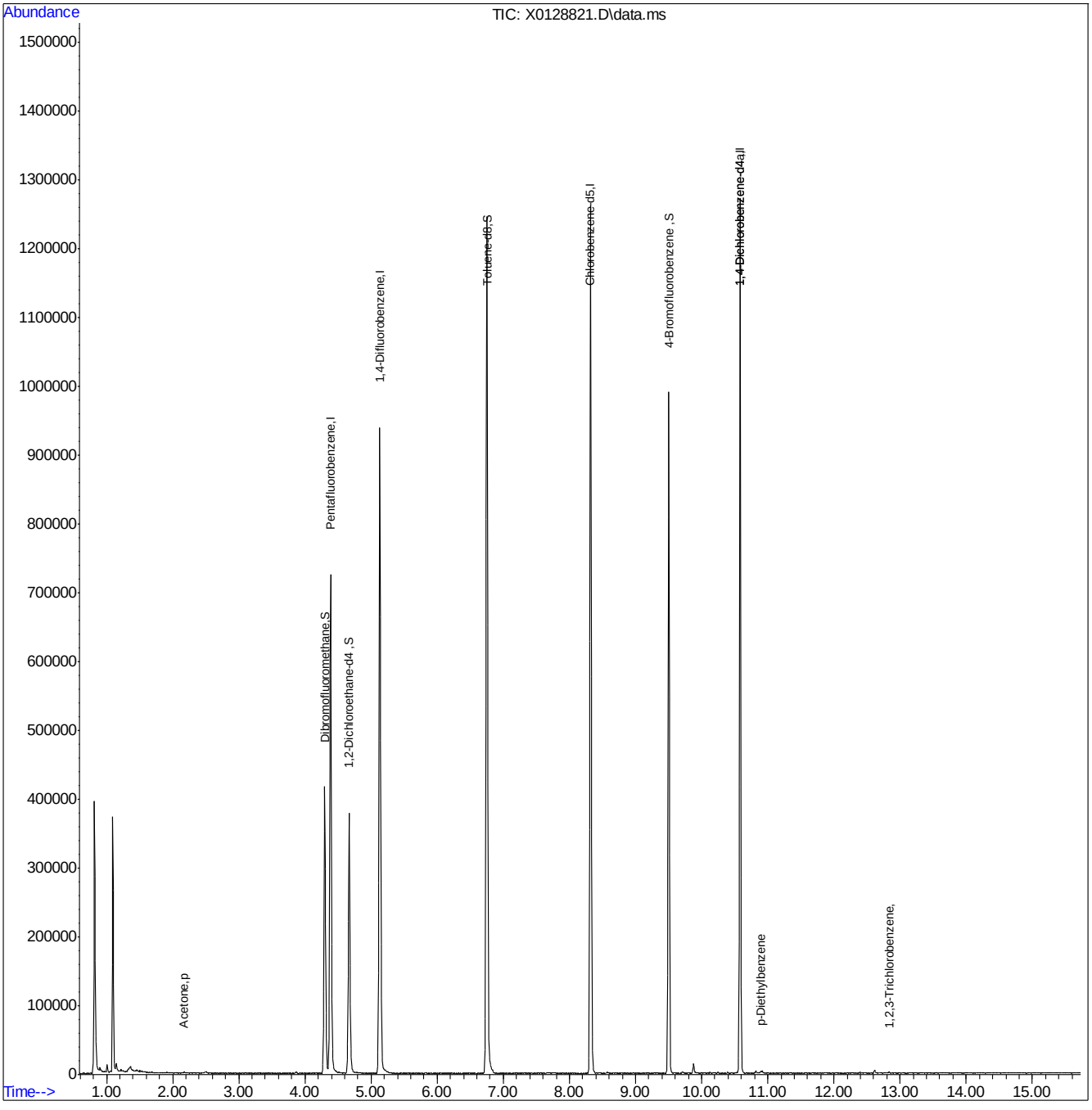
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	404250	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	702341	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	592158	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	245300	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	245300	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	221043	51.59	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 103.18%			
50) 1,2-Dichloroethane-d4	4.669	65	235634	58.32	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 116.64%			
72) Toluene-d8	6.753	98	756800	57.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 115.74%			
94) 4-Bromofluorobenzene	9.501	95	274874	53.89	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 107.78%			
Target Compounds						Qvalue
17) Acetone	2.173	43	2007	0.63	ug/L	95
116) p-Diethylbenzene	10.896	119	1164	0.20	ug/L	62
123) 1,2,3-Trichlorobenzene	12.837	180	610	0.21	ug/L	83

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

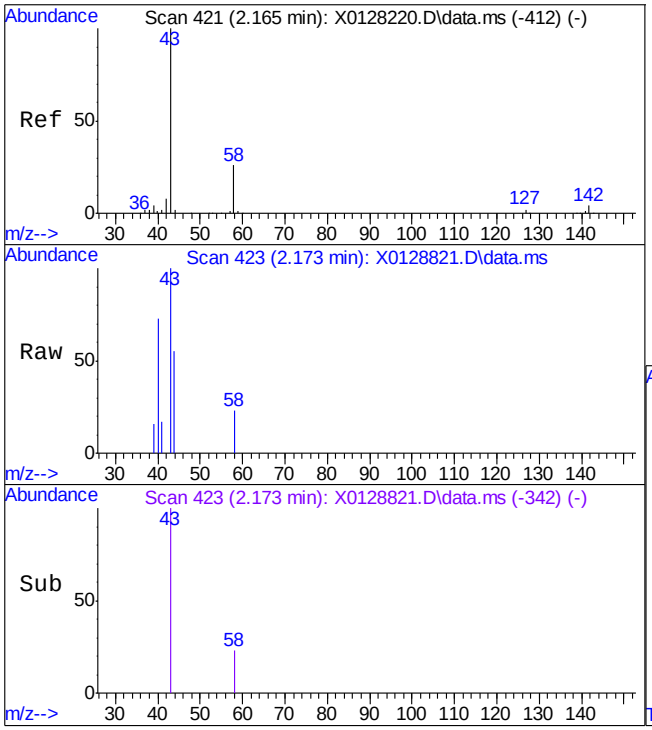
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128821.D
Acq On : 21 May 2019 3:28 pm
Operator : firatt
Sample : mb
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 21 15:45:09 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



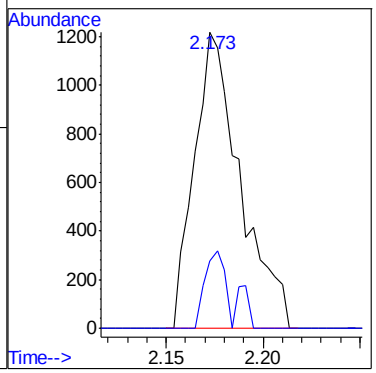
VX4007C.m Tue May 21 15:45:20 2019 Page: 2

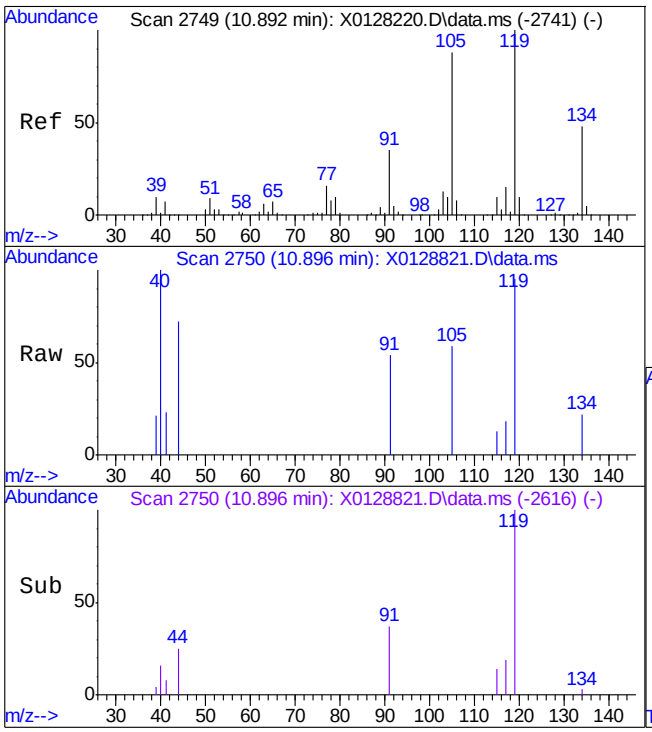


#17
Acetone
Concen: 0.63 ug/L
RT: 2.173 min Scan# 423
Delta R.T. 0.004 min
Lab File: X0128821.D
Acq: 21 May 2019 3:28 pm

Tgt Ion: 43 Resp: 2007

Ion	Ratio	Lower	Upper
43	100		
58	22.9	0.0	55.4

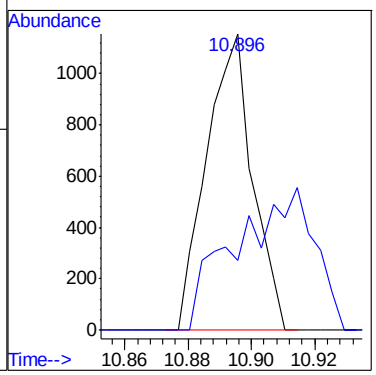


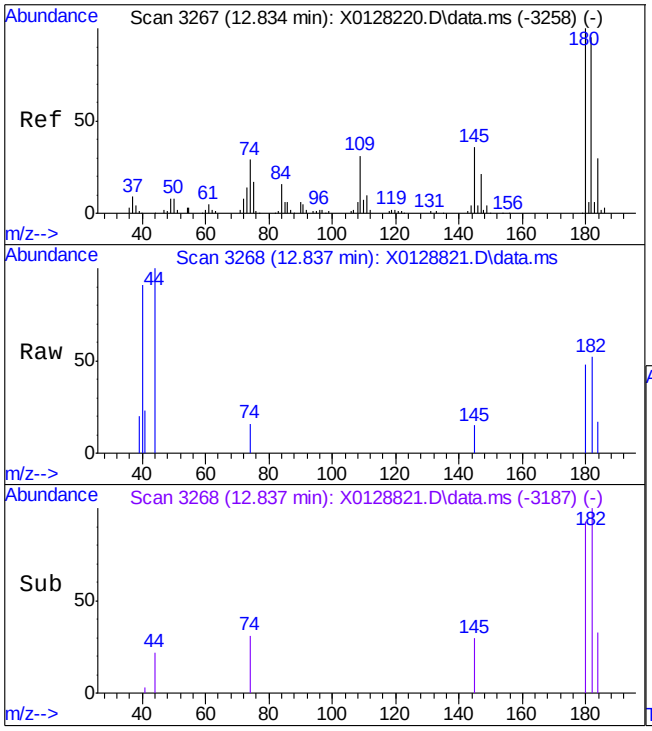


#116
p-Diethylbenzene
Concen: 0.20 ug/L
RT: 10.896 min Scan# 2750
Delta R.T. 0.004 min
Lab File: X0128821.D
Acq: 21 May 2019 3:28 pm

Tgt Ion:119 Resp: 1164

Ion	Ratio	Lower	Upper
119	100		
134	23.5	19.2	79.2

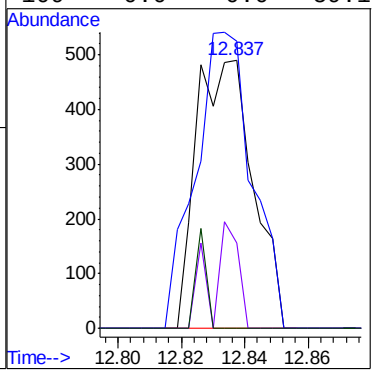




#123
1,2,3-Trichlorobenzene
Concen: 0.21 ug/L
RT: 12.837 min Scan# 3268
Delta R.T. 0.003 min
Lab File: X0128821.D
Acq: 21 May 2019 3:28 pm

Tgt Ion:180 Resp: 610

Ion	Ratio	Lower	Upper
180	100		
182	107.1	67.8	127.8
145	32.0	5.3	65.3
109	0.0	0.0	59.1



7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128819.D
Acq On : 21 May 2019 2:37 pm
Operator : firatt
Sample : bs
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 14:54:22 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	418115	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	722148	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	611548	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	261350	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	261350	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	234840	52.99	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.98%			
50) 1,2-Dichloroethane-d4	4.669	65	237789	57.24	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 114.48%			
72) Toluene-d8	6.753	98	782574	57.94	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 115.88%			
94) 4-Bromofluorobenzene	9.505	95	291240	53.59	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 107.18%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	158795	26.11	ug/L	100
3) Chloromethane	1.055	50	173233	25.51	ug/L	100
4) Vinyl Chloride	1.123	62	135665	24.01	ug/L	99
5) 1,3-Butadiene	1.145	54	115120	32.16	ug/L	99
6) Ethylene Oxide	1.351	44	1213743	1529.24	ug/L	99
7) Bromomethane	1.355	94	52134	26.58	ug/L	99
8) Chloroethane	1.430	64	49414	21.46	ug/L	100
9) Vinyl Bromide	1.569	106	83391	24.93	ug/L	97
10) Trichlorofluoromethane	1.599	101	210883	29.91	ug/L	99
11) Ethyl Alcohol	1.857	45	99441	207.56	ug/L	96
12) Ethyl Ether	1.857	59	66609	19.88	ug/L	96
13) Propylene Oxide	1.929	43	26572	22.42	ug/L	91
14) Acrolein	2.026	56	140142	92.92	ug/L	97
15) 1,1-Dichloroethene	2.041	61	141000	26.08	ug/L	98
16) Freon 113	2.022	101	94066	29.73	ug/L	99
17) Acetone	2.169	43	365959	110.44	ug/L	99
18) Isopropyl Alcohol	2.315	45	187901	189.93	ug/L	97
19) Iodomethane	2.184	142	118748	25.02	ug/L	98
20) Methyl acetate	2.446	43	809289	113.93	ug/L	98
21) Carbon Disulfide	2.202	76	227301	28.07	ug/L	99
22) Allyl Chloride	2.401	76	45071	21.96	ug/L #	86
23) Acetonitrile	2.495	40	88201	111.97	ug/L	99
24) Methylene Chloride	2.543	49	147184	22.53	ug/L	96
25) Tert Butyl Alcohol	2.686	59	287713	188.05	ug/L	96
26) trans-1,2-Dichloroethene	2.753	61	131960	23.75	ug/L	97
27) Acrylonitrile	2.855	53	332218	104.47	ug/L	99
28) Hexane	2.948	57	117198	32.83	ug/L	99
29) Methyl Tert Butyl Ether	2.742	73	252407	22.72	ug/L	54
30) 1,1-Dichloroethane	3.203	63	157632	23.27	ug/L	98
31) Vinyl acetate	3.271	43	645074	59.19	ug/L	98
32) Di-isopropyl ether	3.222	45	376269	23.85	ug/L	98
33) Chloroprene	3.252	53	152179	23.03	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128819.D
Acq On : 21 May 2019 2:37 pm
Operator : firatt
Sample : bs
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 14:54:22 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	268745	21.85 ug/L	98
35) Ethyl Acetate	3.886	43	497208	52.24 ug/L	99
36) 2,2-Dichloropropane	3.751	77	119881	22.73 ug/L	93
37) cis-1,2-Dichloroethene	3.796	61	131240	22.19 ug/L	96
38) 2-Butanone	3.848	43	611415	121.49 ug/L	99
39) Propionitrile	3.987	54	156671	106.18 ug/L	99
40) Methacrylonitrile	4.099	41	600603	128.78 ug/L	97
41) Bromochloromethane	4.039	128	51221	21.94 ug/L #	82
42) Chloroform	4.129	83	162592	23.08 ug/L	97
43) Tetrahydrofuran	4.043	42	75239	20.89 ug/L	96
44) 1,1,1-Trichloroethane	4.245	97	148737	22.86 ug/L	97
46) Cyclohexane	4.212	56	170146	30.56 ug/L	99
47) 1,1-Dichloropropene	4.422	39	94645	24.94 ug/L	92
49) Carbon Tetrachloride	4.369	119	137768	22.15 ug/L	98
51) Isobutyl Alcohol	4.695	43	104631	182.33 ug/L	100
52) Benzene	4.631	78	328608	22.51 ug/L	99
53) 1,2-Dichloroethane	4.751	62	133832	21.47 ug/L	98
54) 2,2,4-Trimethylpentane	4.631	57	217841	29.50 ug/L	97
55) tert-amyl methyl ether	4.759	73	222885	20.46 ug/L	97
56) Crotonaldehyde	5.104	41	120966	96.96 ug/L	96
57) n-Butyl Alcohol	5.456	56	106370	215.01 ug/L #	15
58) Trichloroethene	5.351	95	99525	21.79 ug/L	96
59) Methylcyclohexane	5.460	83	124254	27.09 ug/L	98
60) Methyl Methacrylate	5.824	41	147288	23.12 ug/L	96
61) 1,2-Dichloropropane	5.659	63	87015	21.64 ug/L	97
62) Dibromomethane	5.790	93	62634	20.17 ug/L	95
63) 1,4-Dioxane	5.812	88	53808	381.42 ug/L	98
64) Bromodichloromethane	5.981	83	111963	20.14 ug/L	97
65) 2-Nitropropane	6.356	41	202757	99.85 ug/L	96
66) 2-Chloroethyl vinyl ether	6.393	63	372988	109.14 ug/L	97
67) 1-Bromo-2-Chloroethane	6.345	63	125379	21.25 ug/L	100
68) Epichlorohydrin	6.476	57	102092	98.37 ug/L	97
69) 4-Methyl-2-pentanone	6.727	43	1053018	104.26 ug/L	98
70) cis-1,3-Dichloropropene	6.521	75	133572	20.51 ug/L	98
73) Toluene	6.824	91	366701	23.33 ug/L	97
74) Ethyl Methacrylate	7.274	69	122374	24.98 ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	113922	23.98 ug/L	96
76) 1,1,2-Trichloroethane	7.387	83	69328	23.16 ug/L	96
77) Tetrachloroethene	7.387	166	97437	24.54 ug/L	98
78) 2-hexanone	7.660	43	838394	120.16 ug/L	97
79) 1,3-Dichloropropane	7.563	76	134676	22.78 ug/L	95
80) Dibromochloromethane	7.750	129	93938	21.40 ug/L	99
81) n-Butyl Acetate	7.788	43	624212	59.71 ug/L	98
82) 1,2-Dibromoethane	7.859	107	96511	22.82 ug/L	99
83) 1-Chlorohexane	8.346	91	117539	27.31 ug/L	92
84) Chlorobenzene	8.346	112	241856	22.41 ug/L	98
85) 1,1,1,2-Tetrachloroethane	8.455	131	88598	22.54 ug/L	99
86) Ethylbenzene	8.448	91	400695	23.65 ug/L	99
87) m,p-Xylene	8.575	91	619509	47.94 ug/L	99
88) o-Xylene	8.965	91	310797	23.45 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128819.D
Acq On : 21 May 2019 2:37 pm
Operator : firatt
Sample : bs
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 14:54:22 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

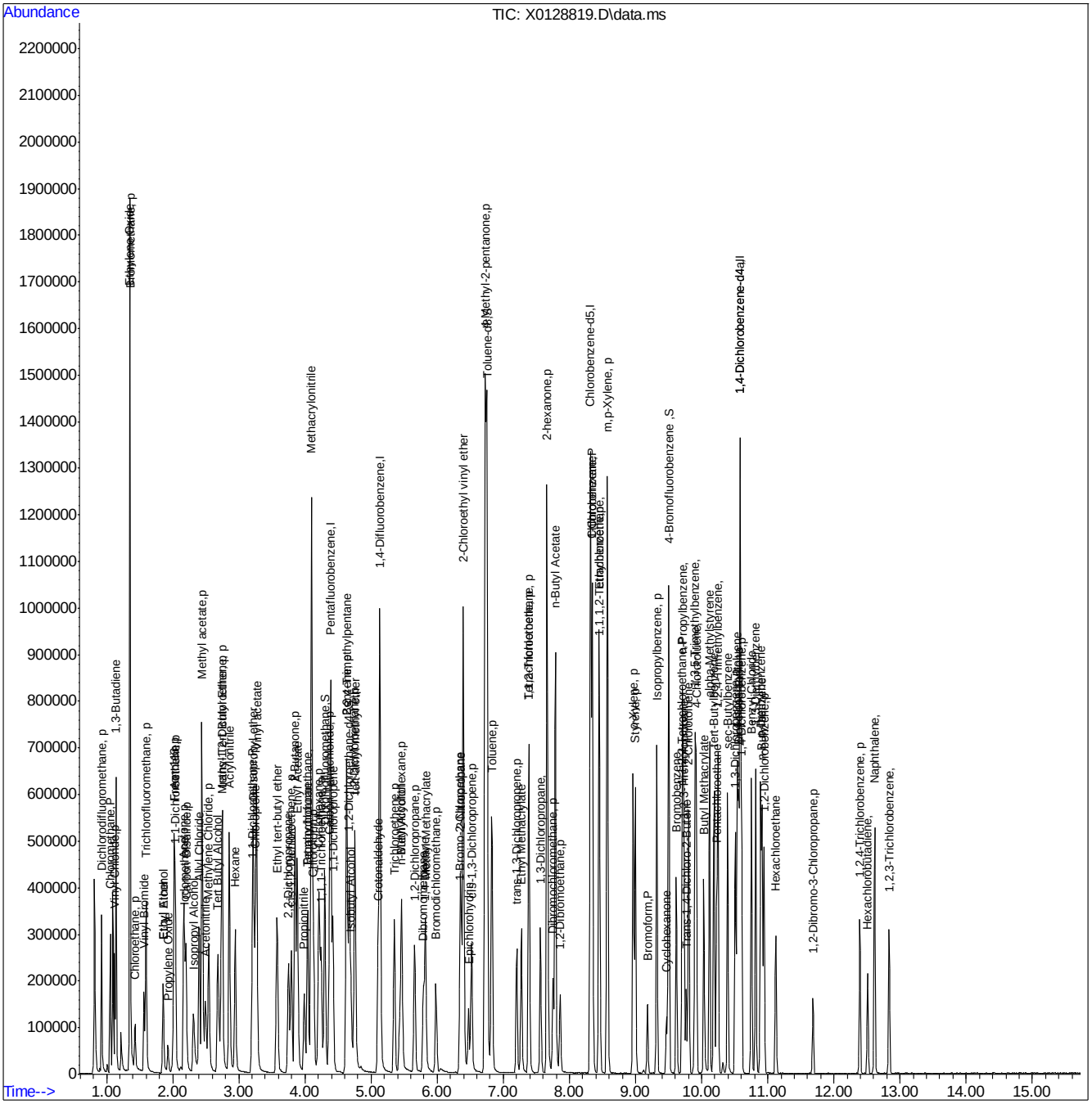
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
89)	Styrene	8.995	104	245519	23.10 ug/L	97
90)	Bromoform	9.182	173	54744	19.21 ug/L	100
92)	Isopropylbenzene	9.321	105	373829	27.30 ug/L	100
93)	Cyclohexanone	9.467	55	45440	119.08 ug/L	95
95)	Bromobenzene	9.617	156	91790	23.23 ug/L	96
96)	1,1,2,2-Tetrachloroethane	9.703	83	128218	24.36 ug/L	99
97)	Trans-1,4-Dichloro-2-B...	9.771	53	32054	23.19 ug/L	88
98)	1,2,3-Trichloropropane	9.733	110	43927	22.96 ug/L	94
99)	n-Propylbenzene	9.718	91	417862	26.17 ug/L	98
100)	2-Chlorotoluene	9.805	91	258261	25.22 ug/L	99
101)	4-Chlorotoluene	9.917	91	300444	25.40 ug/L	96
102)	1,3,5-Trimethylbenzene	9.902	105	288995	25.41 ug/L	95
103)	Butyl Methacrylate	10.033	69	102302	24.81 ug/L	97
104)	alpha-Methylstyrene	10.120	118	166538	25.97 ug/L	94
105)	Pentachloroethane	10.228	167	45257	22.58 ug/L	100
106)	sec-Butylbenzene	10.393	105	330739	26.50 ug/L	100
107)	1,3-Dichlorobenzene	10.509	146	163338	23.32 ug/L	98
108)	4-Isopropyltoluene	10.536	119	271330	25.04 ug/L	98
109)	1,4-Dichlorobenzene	10.603	146	167774	22.84 ug/L	98
110)	tert-Butylbenzene	10.187	91	160491	25.78 ug/L	97
111)	Dicyclopentadiene	10.558	66	379455	30.06 ug/L	97
112)	n-Butylbenzene	10.914	91	290730	26.59 ug/L	99
113)	1,2-Dichlorobenzene	10.944	146	152979	22.77 ug/L	98
114)	1,2,4-Trimethylbenzene	10.247	105	289440	25.08 ug/L	99
115)	Benzyl Chloride	10.753	91	328484	21.29 ug/L	97
116)	p-Diethylbenzene	10.892	119	163991	26.55 ug/L	97
117)	Hexachloroethane	11.120	119	43227	24.25 ug/L	93
118)	1,2-Dibromo-3-Chloropr...	11.683	75	28808	24.23 ug/L	94
119)	1,2,4-Trichlorobenzene	12.395	180	74152	22.28 ug/L	97
120)	1,3-Diethylbenzene	10.817	119	165237	26.20 ug/L	97
121)	Hexachlorobutadiene	12.511	225	28397	25.29 ug/L	97
122)	Naphthalene	12.616	128	324199	24.42 ug/L	100
123)	1,2,3-Trichlorobenzene	12.837	180	68960	22.61 ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128819.D
Acq On : 21 May 2019 2:37 pm
Operator : firatt
Sample : bs
Misc : ms24748,VX4025,5,,,5,,WATER
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 21 14:54:22 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Stephanie Coch
05/22/19 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:15:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	419124	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	723896	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	614944	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	256794	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	256794	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	236326	53.20	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 106.40%			
50) 1,2-Dichloroethane-d4	4.669	65	238621	57.30	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 114.60%			
72) Toluene-d8	6.753	98	786282	57.89	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 115.78%			
94) 4-Bromofluorobenzene	9.501	95	290043	54.32	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 108.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	147482	24.19	ug/L	98
3) Chloromethane	1.052	50	165012	24.24	ug/L	99
4) Vinyl Chloride	1.123	62	142494	25.16	ug/L	98
5) 1,3-Butadiene	1.145	54	112562	31.37	ug/L	99
6) Ethylene Oxide	1.351	44	763961	925.43	ug/L	100
7) Bromomethane	1.355	94	50891	25.88	ug/L	98
8) Chloroethane	1.430	64	47480	20.37	ug/L	98
9) Vinyl Bromide	1.569	106	81562	24.32	ug/L	97
10) Trichlorofluoromethane	1.595	101	200009	28.30	ug/L	100
11) Ethyl Alcohol	1.854	45	97481	202.98	ug/L	97
12) Ethyl Ether	1.854	59	69102	20.58	ug/L	98
13) Propylene Oxide	1.929	43	3746	3.15	ug/L	75
14) Acrolein	2.026	56	130740	86.47	ug/L	99
15) 1,1-Dichloroethene	2.041	61	142874	26.37	ug/L	97
16) Freon 113	2.023	101	94656	29.84	ug/L	96
17) Acetone	2.165	43	367018	110.49	ug/L	99
18) Isopropyl Alcohol	2.311	45	178588	180.08	ug/L	97
19) Iodomethane	2.184	142	112943	23.77	ug/L	96
20) Methyl acetate	2.442	43	800924	112.48	ug/L	98
21) Carbon Disulfide	2.202	76	221449	27.29	ug/L	100
22) Allyl Chloride	2.401	76	44353	21.56	ug/L	88
23) Acetonitrile	2.491	40	87728	111.10	ug/L	99
24) Methylene Chloride	2.544	49	148051	22.60	ug/L	95
25) Tert Butyl Alcohol	2.682	59	283142	184.62	ug/L	96
26) trans-1,2-Dichloroethene	2.750	61	133460	23.96	ug/L	96
27) Acrylonitrile	2.855	53	331630	104.04	ug/L	100
28) Hexane	2.948	57	115114	32.17	ug/L	100
29) Methyl Tert Butyl Ether	2.742	73	249266	22.38	ug/L	72
30) 1,1-Dichloroethane	3.203	63	156404	23.03	ug/L	97
31) Vinyl acetate	3.271	43	633721	58.00	ug/L	99
32) Di-isopropyl ether	3.218	45	371111	23.46	ug/L	97
33) Chloroprene	3.252	53	151409	22.86	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:15:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	263792	21.39	ug/L	98
35) Ethyl Acetate	3.886	43	487223	51.07	ug/L	99
36) 2,2-Dichloropropane	3.751	77	113594	21.48	ug/L	88
37) cis-1,2-Dichloroethene	3.796	61	234192	39.51	ug/L	97
38) 2-Butanone	3.848	43	611902	121.29	ug/L	98
39) Propionitrile	3.987	54	155716	105.28	ug/L	98
40) Methacrylonitrile	4.099	41	598153	127.95	ug/L	97
41) Bromochloromethane	4.039	128	50835	21.73	ug/L	89
42) Chloroform	4.129	83	231848	32.82	ug/L	98
43) Tetrahydrofuran	4.047	42	76377	21.15	ug/L	97
44) 1,1,1-Trichloroethane	4.245	97	146176	22.42	ug/L	99
46) Cyclohexane	4.212	56	168427	30.18	ug/L	95
47) 1,1-Dichloropropene	4.422	39	94045	24.72	ug/L	90
49) Carbon Tetrachloride	4.373	119	264283	42.39	ug/L	98
51) Isobutyl Alcohol	4.692	43	99731	173.37	ug/L	99
52) Benzene	4.632	78	326365	22.31	ug/L	98
53) 1,2-Dichloroethane	4.752	62	133790	21.41	ug/L	99
54) 2,2,4-Trimethylpentane	4.635	57	212060	28.65	ug/L	95
55) tert-amyl methyl ether	4.759	73	218579	20.01	ug/L	98
56) Crotonaldehyde	5.104	41	107775	86.18	ug/L	95
57) n-Butyl Alcohol	5.434	56	38864m	78.37	ug/L	
58) Trichloroethene	5.351	95	304510	66.51	ug/L	99
59) Methylcyclohexane	5.464	83	124643	27.11	ug/L	99
60) Methyl Methacrylate	5.820	41	143135	22.41	ug/L	94
61) 1,2-Dichloropropane	5.662	63	86760	21.53	ug/L	96
62) Dibromomethane	5.790	93	61772	19.84	ug/L	95
63) 1,4-Dioxane	5.816	88	51673	365.40	ug/L	92
64) Bromodichloromethane	5.985	83	111283	19.97	ug/L	99
65) 2-Nitropropane	6.356	41	181481	89.16	ug/L	97
67) 1-Bromo-2-Chloroethane	6.345	63	126321	21.36	ug/L	98
68) Epichlorohydrin	6.476	57	93495	89.87	ug/L	98
69) 4-Methyl-2-pentanone	6.727	43	1044158	103.13	ug/L	98
70) cis-1,3-Dichloropropene	6.521	75	131263	20.11	ug/L	96
73) Toluene	6.828	91	360837	22.83	ug/L	97
74) Ethyl Methacrylate	7.274	69	121455	24.65	ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	111630	23.37	ug/L	98
76) 1,1,2-Trichloroethane	7.387	83	75830	25.19	ug/L	93
77) Tetrachloroethene	7.387	166	384657	96.34	ug/L	98
78) 2-hexanone	7.664	43	826499	117.80	ug/L	96
79) 1,3-Dichloropropane	7.563	76	133469	22.45	ug/L	97
80) Dibromochloromethane	7.754	129	92568	20.97	ug/L	99
81) n-Butyl Acetate	7.788	43	618102	58.80	ug/L	99
82) 1,2-Dibromoethane	7.859	107	93979	22.09	ug/L	98
83) 1-Chlorohexane	8.346	91	114820	26.53	ug/L	90
84) Chlorobenzene	8.346	112	239810	22.10	ug/L	98
85) 1,1,1,2-Tetrachloroethane	8.455	131	87295	22.09	ug/L	98
86) Ethylbenzene	8.448	91	396804	23.29	ug/L	100
87) m,p-Xylene	8.575	91	603636	46.45	ug/L	98
88) o-Xylene	8.965	91	303937	22.80	ug/L	97
89) Styrene	8.995	104	222000	20.77	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:15:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

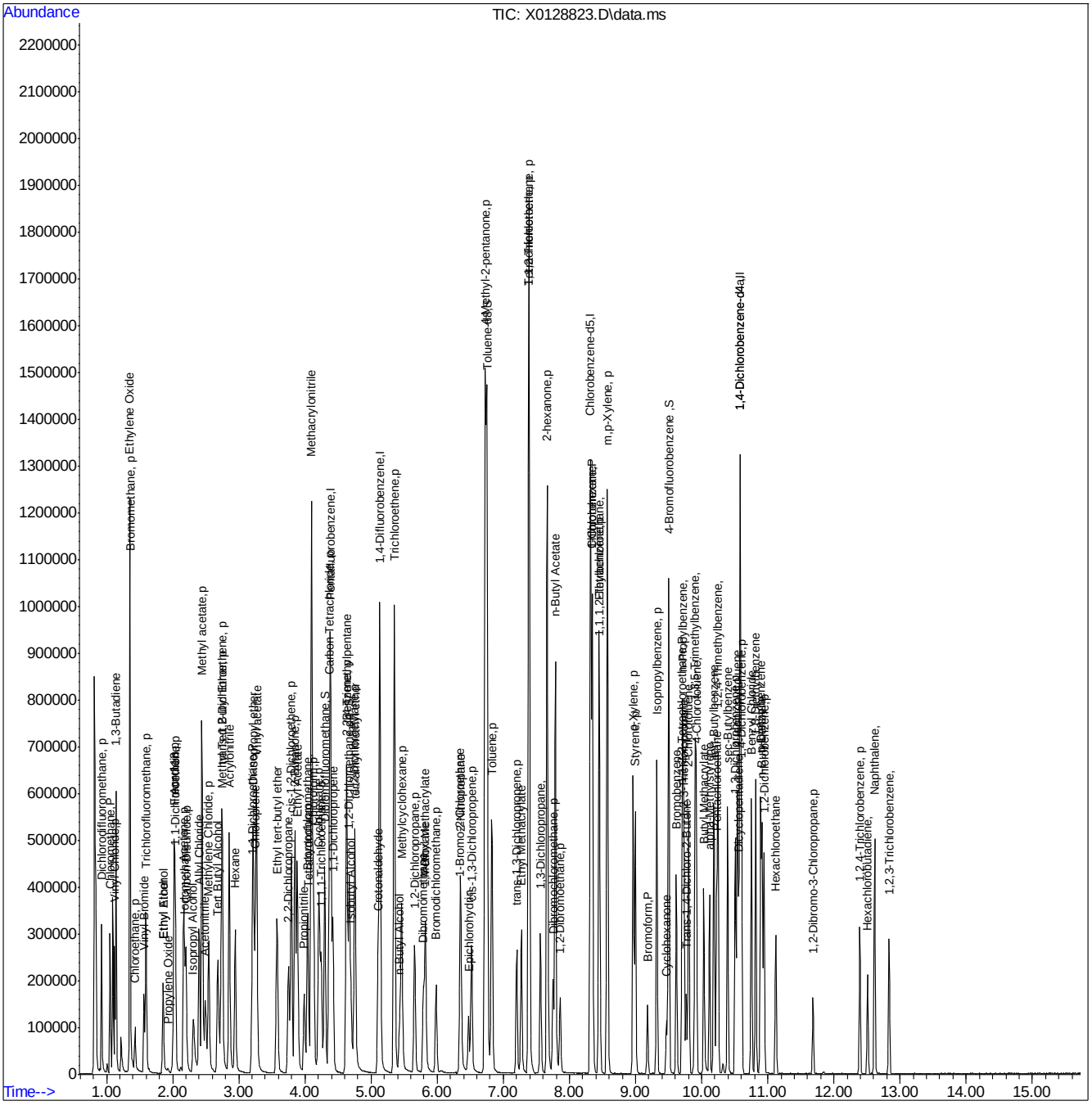
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
90)	Bromoform	9.182	173	54107	18.88	ug/L		99
92)	Isopropylbenzene	9.321	105	360858	26.82	ug/L		98
93)	Cyclohexanone	9.467	55	42676	113.82	ug/L		97
95)	Bromobenzene	9.617	156	88868	22.89	ug/L		97
96)	1,1,2,2-Tetrachloroethane	9.703	83	128514	24.85	ug/L		96
97)	Trans-1,4-Dichloro-2-B...	9.767	53	31393	23.11	ug/L	#	84
98)	1,2,3-Trichloropropane	9.733	110	43266	23.02	ug/L		95
99)	n-Propylbenzene	9.718	91	404745	25.80	ug/L		98
100)	2-Chlorotoluene	9.805	91	252993	25.15	ug/L		98
101)	4-Chlorotoluene	9.921	91	290990	25.04	ug/L		96
102)	1,3,5-Trimethylbenzene	9.902	105	278934	24.96	ug/L		99
103)	Butyl Methacrylate	10.033	69	99094	24.46	ug/L		95
104)	alpha-Methylstyrene	10.120	118	89679	14.23	ug/L		97
105)	Pentachloroethane	10.228	167	48527	24.64	ug/L		96
106)	sec-Butylbenzene	10.393	105	317818	25.92	ug/L		99
107)	1,3-Dichlorobenzene	10.509	146	157912	22.95	ug/L		98
108)	4-Isopropyltoluene	10.536	119	261994	24.61	ug/L		98
109)	1,4-Dichlorobenzene	10.603	146	161983	22.44	ug/L		99
110)	tert-Butylbenzene	10.183	91	155337	25.39	ug/L		96
111)	Dicyclopentadiene	10.558	66	224520	18.10	ug/L		97
112)	n-Butylbenzene	10.914	91	275286	25.63	ug/L		99
113)	1,2-Dichlorobenzene	10.944	146	149678	22.68	ug/L		99
114)	1,2,4-Trimethylbenzene	10.247	105	281987	24.87	ug/L		98
115)	Benzyl Chloride	10.753	91	309462	20.43	ug/L		97
116)	p-Diethylbenzene	10.892	119	157555	25.96	ug/L		98
117)	Hexachloroethane	11.120	119	42634	24.34	ug/L		95
118)	1,2-Dibromo-3-Chloropr...	11.683	75	28153	24.10	ug/L		87
119)	1,2,4-Trichlorobenzene	12.391	180	69283	21.19	ug/L		97
120)	1,3-Diethylbenzene	10.817	119	158283	25.54	ug/L		100
121)	Hexachlorobutadiene	12.511	225	26414	23.94	ug/L		98
122)	Naphthalene	12.616	128	300502	23.04	ug/L		100
123)	1,2,3-Trichlorobenzene	12.834	180	62738	20.93	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:15:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



Manual Integration Approval Summary

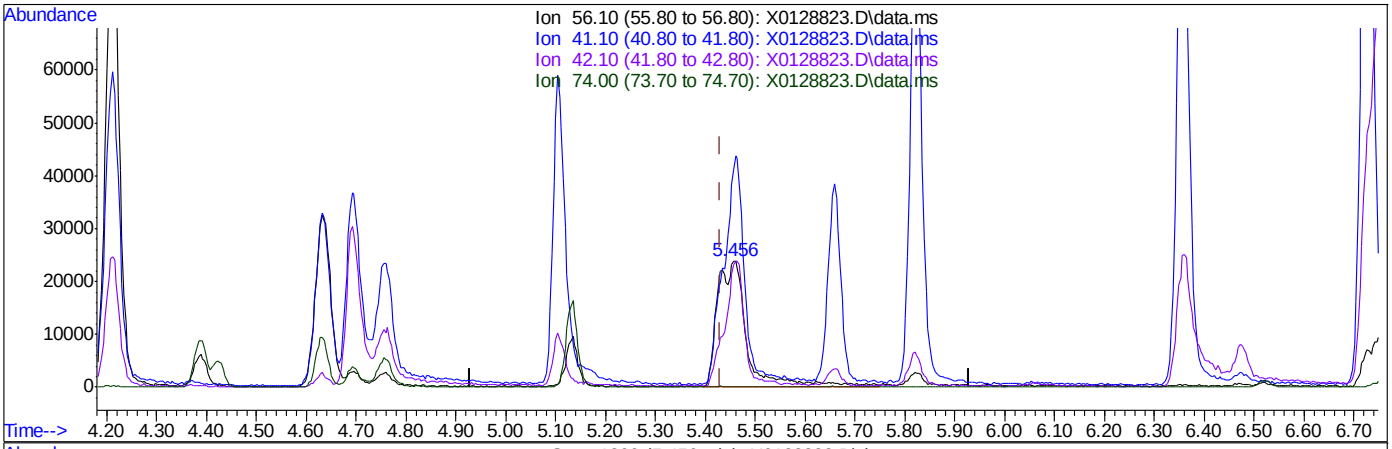
Sample Number:	TD39309-2MS	**Method:**	SW846 8260C
Lab FileID:	X0128823.D	**Analyst approved:**	05/21/19 17:15 Zeeshan Qayyum
Injection Time:	05/21/19 16:19	**Supervisor approved:**	05/22/19 12:05 Stephanie Coch

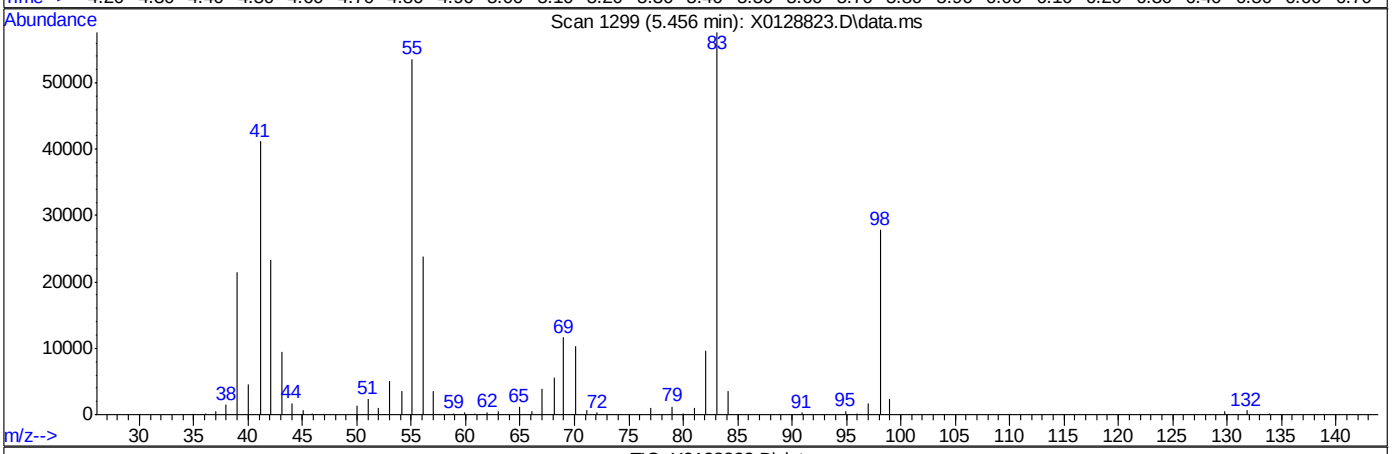
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Butyl Alcohol	71-36-3		5.43	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:05:17 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration





TIC: X0128823.D\data.ms

(57) n-Butyl Alcohol

5.456min (+0.026) 200.88ug/L

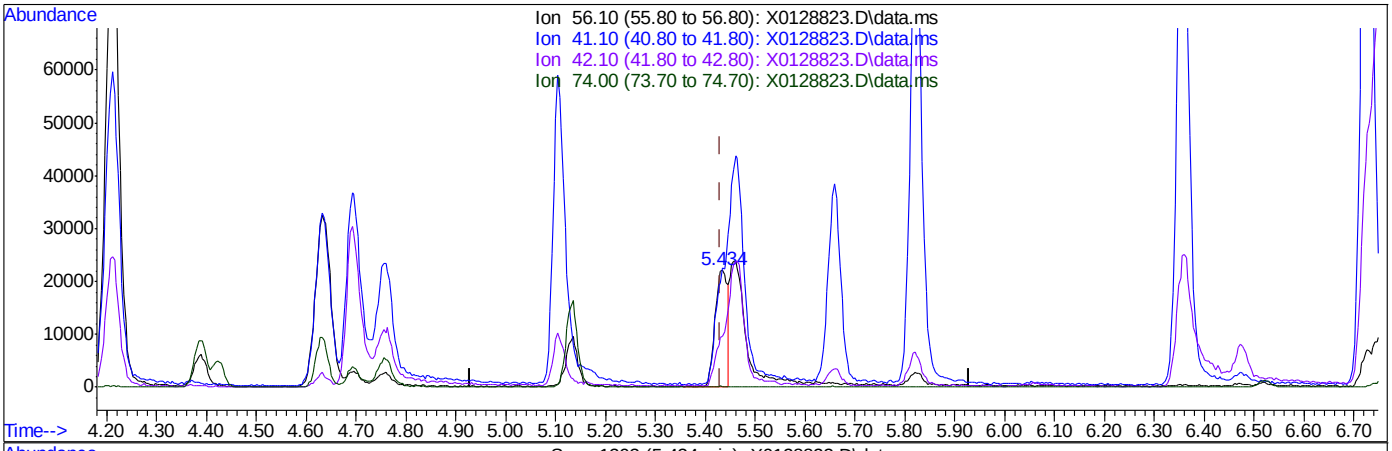
response 99621

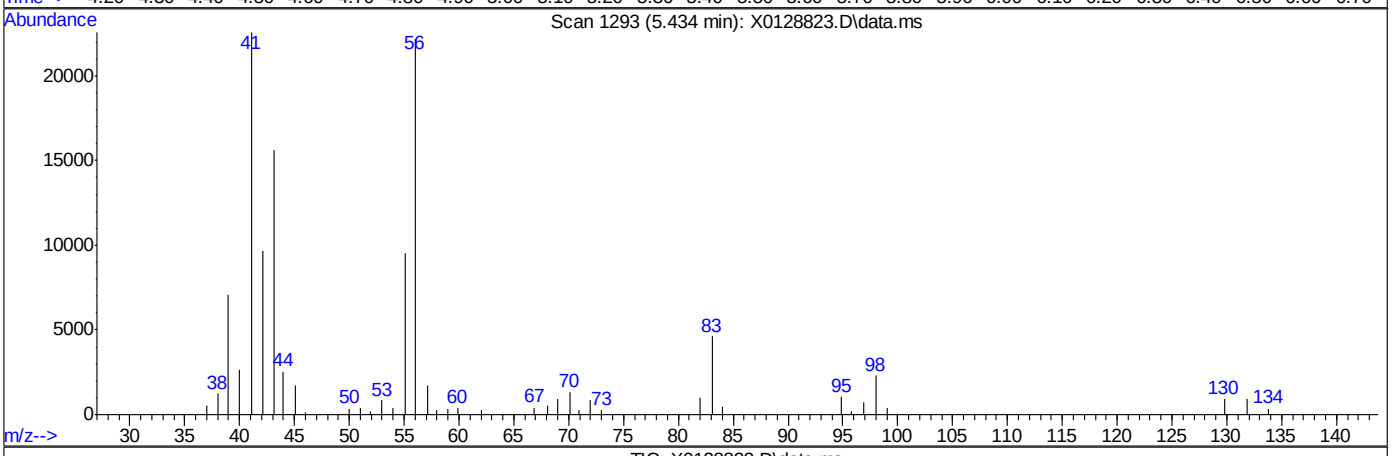
Ion	Exp%	Act%
56.10	100	100
41.10	86.10	169.24#
42.10	35.90	96.39#
74.00	0.80	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128823.D
Acq On : 21 May 2019 4:19 pm
Operator : firatt
Sample : td39309-2ms,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 21 17:05:17 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration





TIC: X0128823.D\data.ms

(57) n-Butyl Alcohol

5.434min (+0.004) 78.37ug/L m

response 38864

Ion	Exp%	Act%
56.10	100	100
41.10	86.10	101.73
42.10	35.90	43.68
74.00	0.80	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Stephanie Coch
05/22/19 12:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:43 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	435588	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	740908	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	618332	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	259773	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	259773	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	236990	51.33	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 102.66%			
50) 1,2-Dichloroethane-d4	4.669	65	234162	54.94	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 109.88%			
72) Toluene-d8	6.750	98	803417	58.83	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 117.66%			
94) 4-Bromofluorobenzene	9.501	95	289301	53.56	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 107.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	154596	24.40	ug/L	100
3) Chloromethane	1.055	50	168740	23.85	ug/L	99
4) Vinyl Chloride	1.123	62	143203	24.33	ug/L	99
5) 1,3-Butadiene	1.145	54	115530	30.98	ug/L	100
6) Ethylene Oxide	1.351	44	734587	850.96	ug/L	99
7) Bromomethane	1.355	94	54750	26.79	ug/L	94
8) Chloroethane	1.430	64	47840	19.61	ug/L	100
9) Vinyl Bromide	1.569	106	85061	24.41	ug/L	97
10) Trichlorofluoromethane	1.599	101	206807	28.15	ug/L	99
11) Ethyl Alcohol	1.858	45	104611	209.59	ug/L	98
12) Ethyl Ether	1.858	59	69003	19.77	ug/L	94
13) Propylene Oxide	1.929	43	2807	2.27	ug/L #	69
14) Acrolein	2.026	56	141676	90.16	ug/L	99
15) 1,1-Dichloroethene	2.041	61	147496	26.19	ug/L	98
16) Freon 113	2.022	101	97998	29.73	ug/L	98
17) Acetone	2.165	43	386441	111.94	ug/L	98
18) Isopropyl Alcohol	2.315	45	203651	197.59	ug/L	98
19) Iodomethane	2.184	142	120993	24.48	ug/L	99
20) Methyl acetate	2.442	43	840588	113.59	ug/L	98
21) Carbon Disulfide	2.202	76	233116	27.64	ug/L	99
22) Allyl Chloride	2.401	76	46776	21.88	ug/L	89
23) Acetonitrile	2.495	40	89373	108.91	ug/L	98
24) Methylene Chloride	2.547	49	151280	22.22	ug/L	98
25) Tert Butyl Alcohol	2.682	59	318268	199.68	ug/L	96
26) trans-1,2-Dichloroethene	2.753	61	139035	24.02	ug/L	96
27) Acrylonitrile	2.855	53	348295	105.14	ug/L	99
28) Hexane	2.945	57	114097	30.68	ug/L	95
29) Methyl Tert Butyl Ether	2.742	73	262508	22.68	ug/L	81
30) 1,1-Dichloroethane	3.203	63	163715	23.19	ug/L	99
31) Vinyl acetate	3.271	43	671542	59.14	ug/L	98
32) Di-isopropyl ether	3.218	45	392268	23.86	ug/L	99
33) Chloroprene	3.252	53	158601	23.04	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:43 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	279017	21.77 ug/L	99
35) Ethyl Acetate	3.886	43	513174	51.76 ug/L	98
36) 2,2-Dichloropropane	3.754	77	121007	22.02 ug/L	98
37) cis-1,2-Dichloroethene	3.796	61	239264	38.84 ug/L	99
38) 2-Butanone	3.848	43	645684	123.15 ug/L	98
39) Propionitrile	3.991	54	167324	108.86 ug/L	99
40) Methacrylonitrile	4.099	41	625155	128.67 ug/L	98
41) Bromochloromethane	4.043	128	52317	21.51 ug/L	89
42) Chloroform	4.129	83	237217	32.32 ug/L	98
43) Tetrahydrofuran	4.043	42	80113	21.35 ug/L	99
44) 1,1,1-Trichloroethane	4.245	97	156471	23.09 ug/L	96
46) Cyclohexane	4.212	56	176738	30.47 ug/L	97
47) 1,1-Dichloropropene	4.422	39	97199	24.59 ug/L	90
49) Carbon Tetrachloride	4.369	119	272074	42.63 ug/L	97
51) Isobutyl Alcohol	4.692	43	116849	198.47 ug/L	98
52) Benzene	4.632	78	341747	22.82 ug/L	98
53) 1,2-Dichloroethane	4.752	62	138222	21.61 ug/L	98
54) 2,2,4-Trimethylpentane	4.632	57	211928	27.97 ug/L	96
55) tert-amyl methyl ether	4.759	73	229973	20.57 ug/L	97
56) Crotonaldehyde	5.104	41	115533	90.26 ug/L	97
57) n-Butyl Alcohol	5.430	56	46255m	91.13 ug/L	
58) Trichloroethene	5.351	95	309886	66.13 ug/L	98
59) Methylcyclohexane	5.464	83	128255	27.26 ug/L	98
60) Methyl Methacrylate	5.824	41	151661	23.20 ug/L	95
61) 1,2-Dichloropropane	5.659	63	87955	21.32 ug/L	97
62) Dibromomethane	5.790	93	64299	20.18 ug/L	95
63) 1,4-Dioxane	5.812	88	57314	395.98 ug/L	97
64) Bromodichloromethane	5.981	83	115430	20.24 ug/L	99
65) 2-Nitropropane	6.356	41	197926	95.00 ug/L	96
67) 1-Bromo-2-Chloroethane	6.345	63	131828	21.78 ug/L	98
68) Epichlorohydrin	6.476	57	102518	96.28 ug/L	98
69) 4-Methyl-2-pentanone	6.727	43	1098633	106.02 ug/L	99
70) cis-1,3-Dichloropropene	6.521	75	135365	20.26 ug/L	97
73) Toluene	6.828	91	374112	23.54 ug/L	99
74) Ethyl Methacrylate	7.274	69	127220	25.68 ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	118333	24.63 ug/L	96
76) 1,1,2-Trichloroethane	7.387	83	77429	25.58 ug/L	97
77) Tetrachloroethene	7.391	166	388570	96.79 ug/L	97
78) 2-hexanone	7.664	43	882083	125.03 ug/L	97
79) 1,3-Dichloropropane	7.563	76	139224	23.29 ug/L	95
80) Dibromochloromethane	7.750	129	96808	21.81 ug/L	98
81) n-Butyl Acetate	7.788	43	649530	61.45 ug/L	97
82) 1,2-Dibromoethane	7.859	107	98448	23.02 ug/L	98
83) 1-Chlorohexane	8.350	91	119998	27.57 ug/L	95
84) Chlorobenzene	8.346	112	249098	22.83 ug/L	98
85) 1,1,1,2-Tetrachloroethane	8.455	131	90771	22.84 ug/L	99
86) Ethylbenzene	8.448	91	411200	24.00 ug/L	99
87) m,p-Xylene	8.575	91	627979	48.06 ug/L	97
88) o-Xylene	8.965	91	317067	23.66 ug/L	97
89) Styrene	8.995	104	227615	21.18 ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:43 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

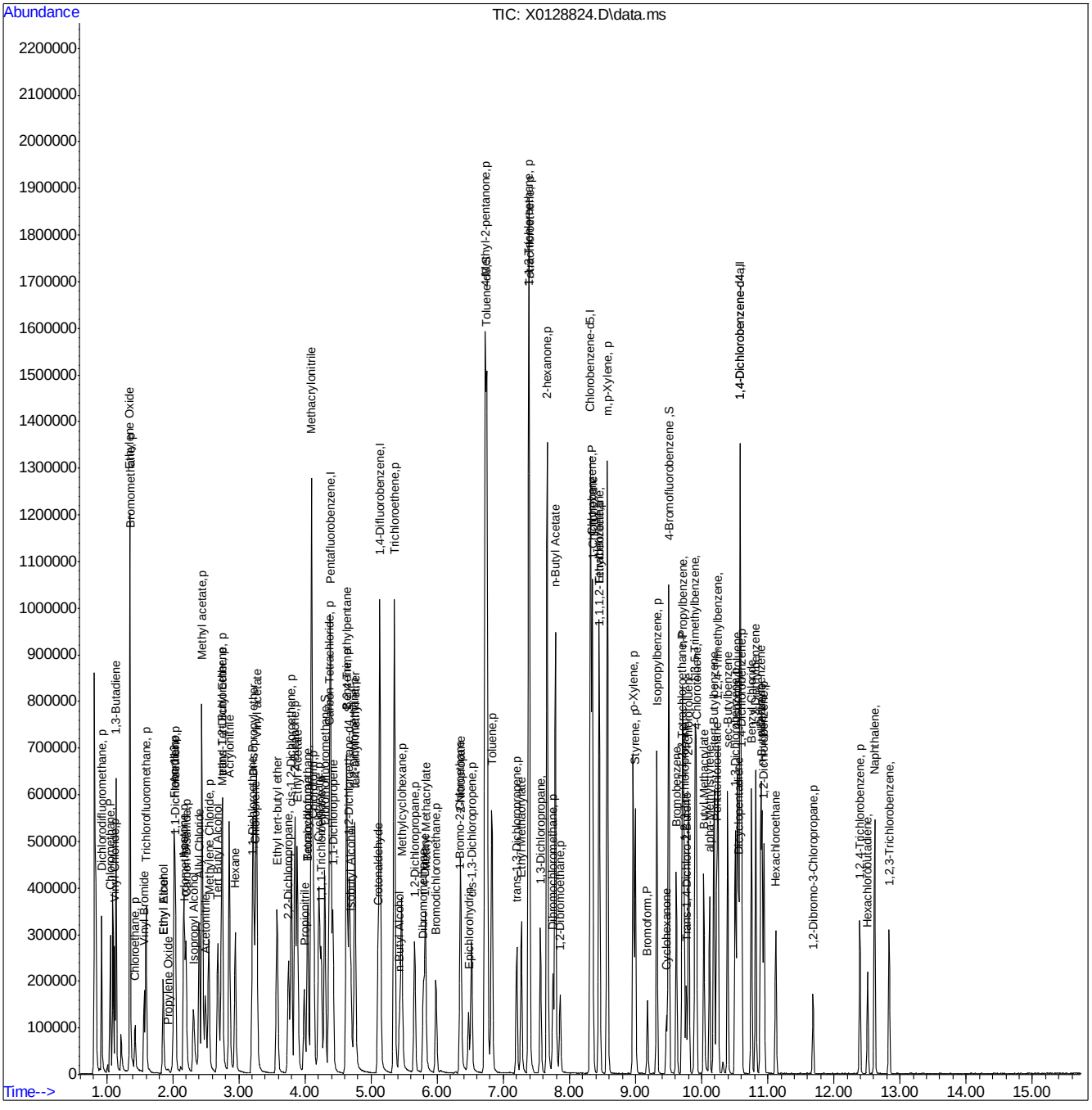
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
90)	Bromoform	9.179	173	57981	20.12 ug/L	97
92)	Isopropylbenzene	9.321	105	381251	28.01 ug/L	100
93)	Cyclohexanone	9.467	55	48818	128.71 ug/L	97
95)	Bromobenzene	9.617	156	92468	23.54 ug/L	100
96)	1,1,2,2-Tetrachloroethane	9.703	83	135742	25.95 ug/L	99
97)	Trans-1,4-Dichloro-2-B...	9.771	53	33899	24.67 ug/L	89
98)	1,2,3-Trichloropropane	9.737	110	45736	24.05 ug/L	99
99)	n-Propylbenzene	9.718	91	423960	26.71 ug/L	97
100)	2-Chlorotoluene	9.805	91	261323	25.68 ug/L	99
101)	4-Chlorotoluene	9.921	91	303616	25.83 ug/L	98
102)	1,3,5-Trimethylbenzene	9.902	105	292698	25.89 ug/L	99
103)	Butyl Methacrylate	10.033	69	107009	26.11 ug/L	98
104)	alpha-Methylstyrene	10.120	118	91434	14.34 ug/L	97
105)	Pentachloroethane	10.228	167	51918	26.06 ug/L	97
106)	sec-Butylbenzene	10.393	105	332702	26.82 ug/L	99
107)	1,3-Dichlorobenzene	10.509	146	166183	23.87 ug/L	98
108)	4-Isopropyltoluene	10.539	119	277562	25.77 ug/L	98
109)	1,4-Dichlorobenzene	10.603	146	171044	23.42 ug/L	97
110)	tert-Butylbenzene	10.187	91	163049	26.35 ug/L	96
111)	Dicyclopentadiene	10.558	66	224603	17.90 ug/L	95
112)	n-Butylbenzene	10.914	91	287331	26.44 ug/L	99
113)	1,2-Dichlorobenzene	10.941	146	155370	23.27 ug/L	95
114)	1,2,4-Trimethylbenzene	10.247	105	294197	25.65 ug/L	99
115)	Benzyl Chloride	10.753	91	324596	21.17 ug/L	97
116)	p-Diethylbenzene	10.892	119	163510	26.63 ug/L	97
117)	Hexachloroethane	11.120	119	43558	24.58 ug/L	98
118)	1,2-Dibromo-3-Chloropr...	11.683	75	30486	25.80 ug/L	90
119)	1,2,4-Trichlorobenzene	12.395	180	73975	22.37 ug/L	97
120)	1,3-Diethylbenzene	10.817	119	166989	26.64 ug/L	99
121)	Hexachlorobutadiene	12.511	225	27997	25.08 ug/L	98
122)	Naphthalene	12.616	128	329070	24.94 ug/L	99
123)	1,2,3-Trichlorobenzene	12.834	180	69218	22.83 ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:43 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



Manual Integration Approval Summary

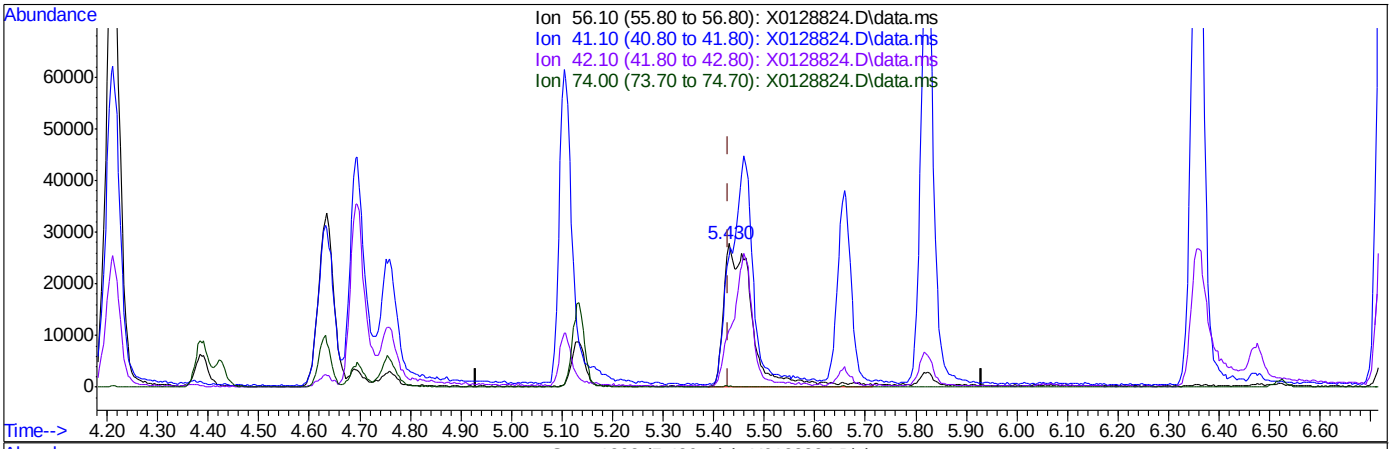
Sample Number:	TD39309-2MSD	**Method:**	SW846 8260C
Lab FileID:	X0128824.D	**Analyst approved:**	05/21/19 17:15 Zeeshan Qayyum
Injection Time:	05/21/19 16:45	**Supervisor approved:**	05/22/19 12:05 Stephanie Coch

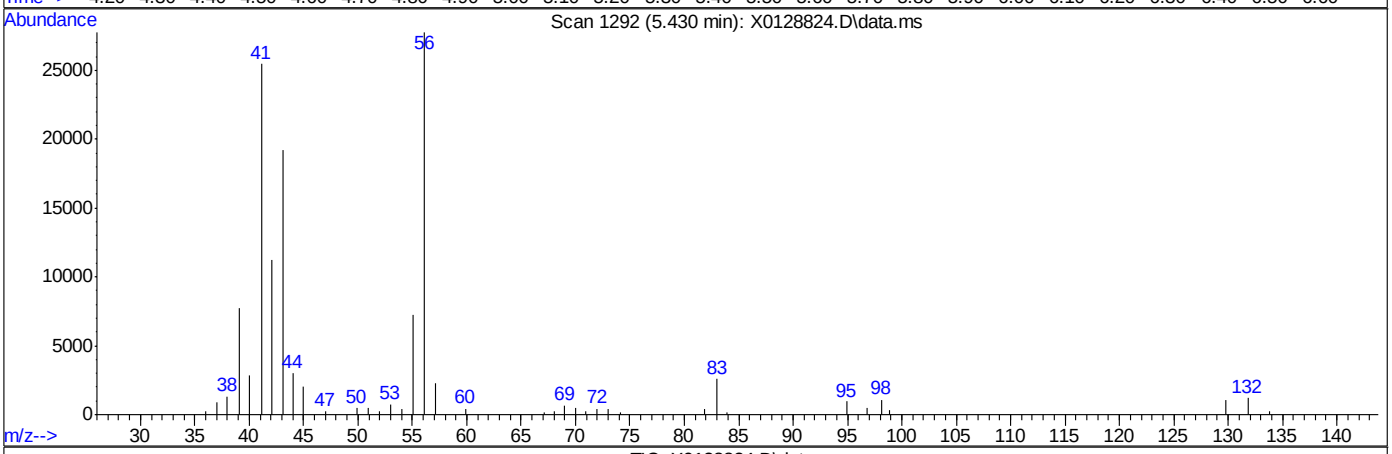
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Butyl Alcohol	71-36-3		5.43	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:09 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration





TIC: X0128824.D\data.ms

(57) n-Butyl Alcohol

5.430min (0.000) 216.88ug/L

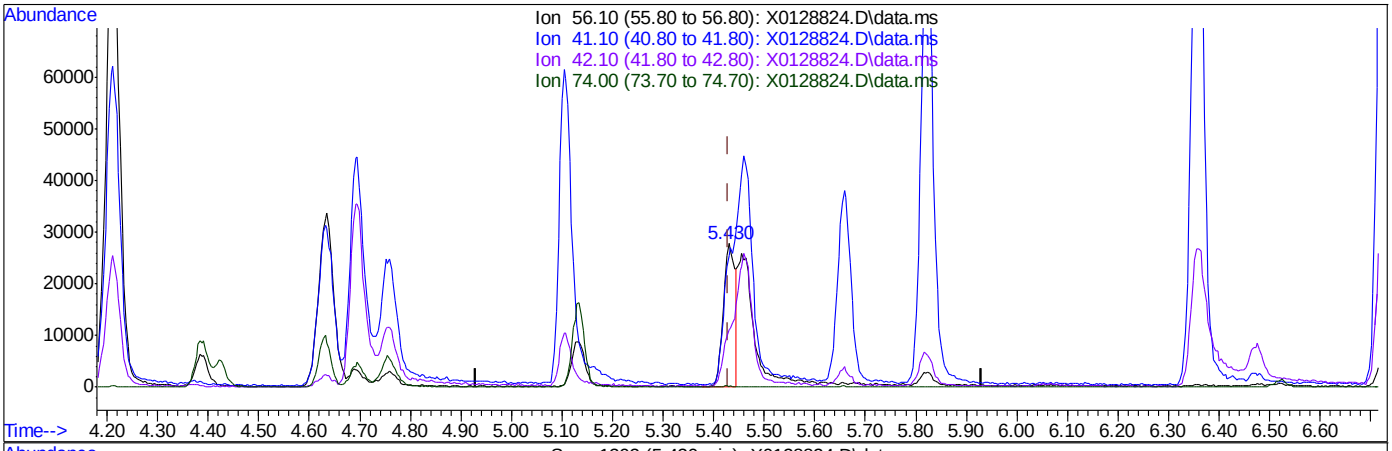
response 110085

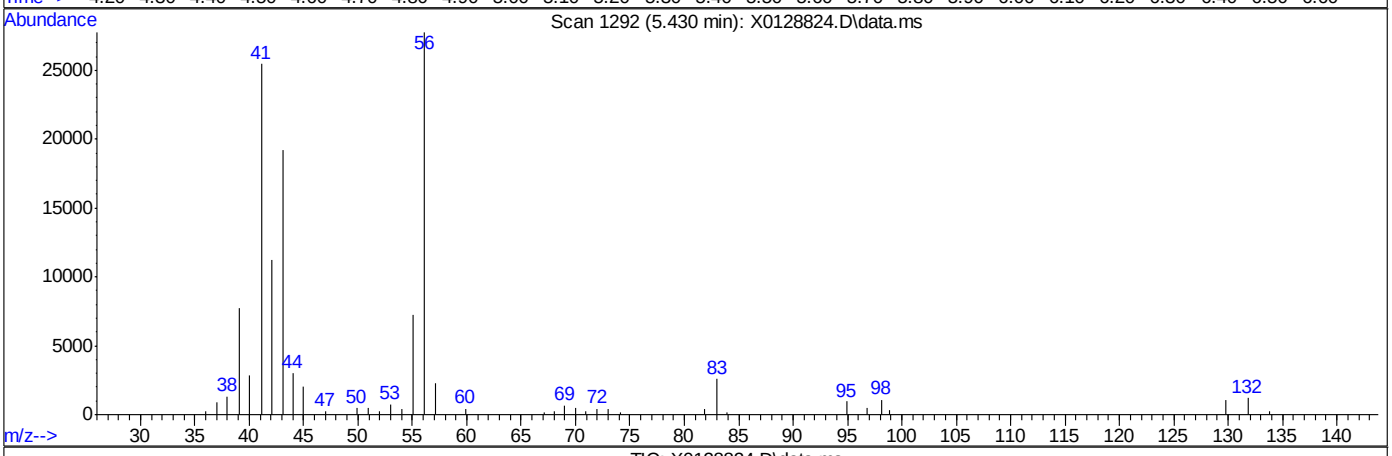
Ion	Exp%	Act%
56.10	100	100
41.10	86.10	89.59
42.10	35.90	40.47
74.00	0.80	0.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128824.D
Acq On : 21 May 2019 4:45 pm
Operator : firatt
Sample : td39309-2msd,5x
Misc : ms24749,VX4025,5,,,5,5,WATER
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 21 17:15:09 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration





TIC: X0128824.D\data.ms

(57) n-Butyl Alcohol

5.430min (0.000) 91.13ug/L m

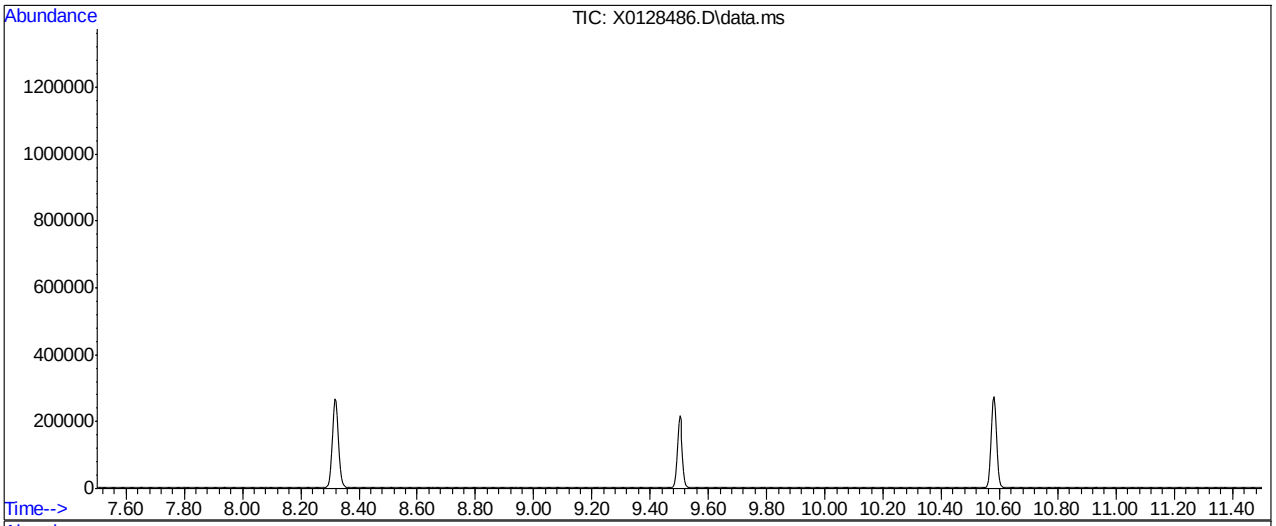
response 46255

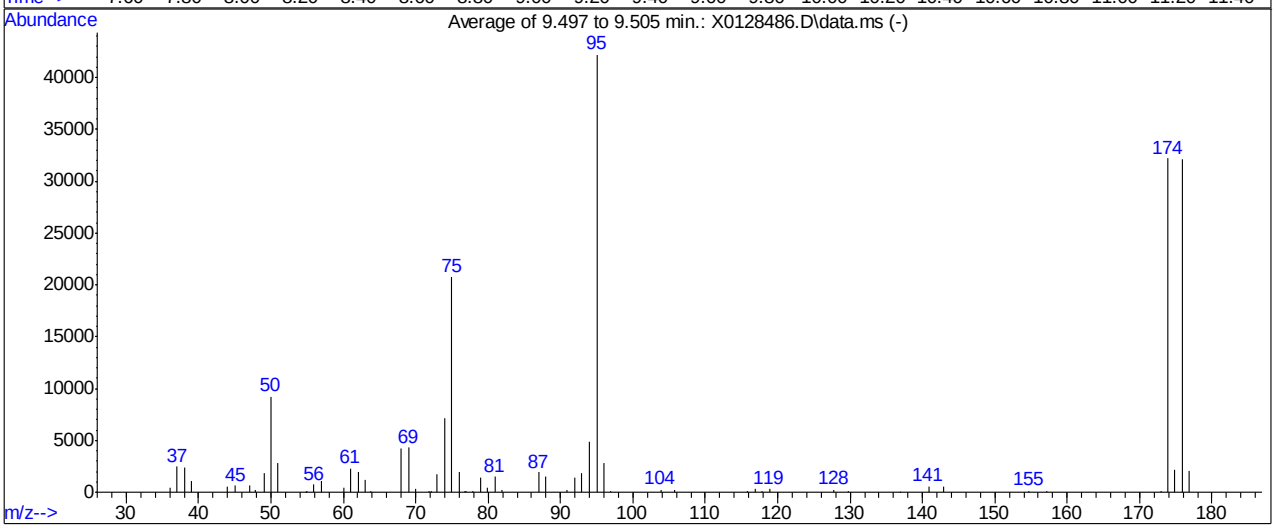
Ion	Exp%	Act%
56.10	100	100
41.10	86.10	91.78
42.10	35.90	40.47
74.00	0.80	0.67

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\VX4007\X0128486.D Vial: 5
Acq On : 8 May 2019 11:17 am Operator: firatt
Sample : bfb Inst : GC MS X
Misc : ms24683,VX4007,5,,,5,,WATER Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title : SW846 8260C and EPA 624/624.1





AutoFind: Scans 2377, 2378, 2379; Background Corrected with Scan 2368

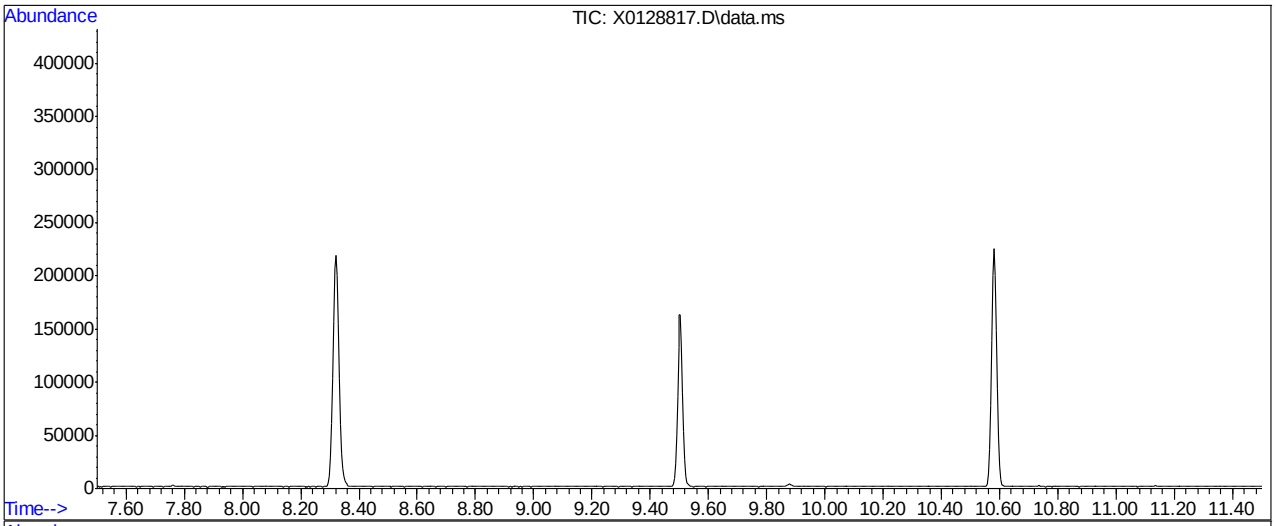
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	9234	PASS
75	95	30	60	49.1	20720	PASS
95	95	100	100	100.0	42213	PASS
96	95	5	9	6.6	2807	PASS
173	174	0.00	2	0.4	130	PASS
174	95	50	100	76.3	32195	PASS
175	174	5	9	6.8	2195	PASS
176	174	95	101	99.9	32160	PASS
177	176	5	9	6.4	2065	PASS

X0128486.D VX4007C.m Thu May 09 11:18:49 2019

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\VX4025\X0128817.D Vial: 1
Acq On : 21 May 2019 1:46 pm Operator: firatt
Sample : bfb Inst : GC MS X
Misc : ms24750,VX4026,5,,,5,,WATER Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\msdchem\1\METHODS\VX4007C.m (RTE Integrator)
Title : SW846 8260C and EPA 624/624.1



AutoFind: Scans 2377, 2378, 2379; Background Corrected with Scan 2369

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.8	7253	PASS
75	95	30	60	50.2	15924	PASS
95	95	100	100	100.0	31752	PASS
96	95	5	9	6.7	2112	PASS
173	174	0.00	2	0.2	54	PASS
174	95	50	100	72.5	23011	PASS
175	174	5	9	7.2	1653	PASS
176	174	95	101	98.2	22608	PASS
177	176	5	9	6.5	1466	PASS

X0128817.D VX4007C.m Tue May 21 14:53:55 2019

Manual Integrations APPROVED (compounds with "m" flag)
John Watson
05/10/19 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:08:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	451131	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	757939	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	745306	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	344596	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	344596	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	240817	50.50	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 101.00%			
50) 1,2-Dichloroethane-d4	4.669	65	225249	52.07	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 104.14%			
72) Toluene-d8	6.753	98	826601	49.58	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 99.16%			
94) 4-Bromofluorobenzene	9.501	95	358077	49.72	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	5706	0.97	ug/L	95
3) Chloromethane	1.056	50	5906	0.82	ug/L	100
4) Vinyl Chloride	1.123	62	5066	0.87	ug/L	90
5) 1,3-Butadiene	1.145	54	3227	0.88	ug/L	96
6) Ethylene Oxide	1.352	44	60305	70.10	ug/L	96
7) Bromomethane	1.359	94	1928	1.03	ug/L	84
8) Chloroethane	1.434	64	2067	0.96	ug/L	96
9) Vinyl Bromide	1.569	106	2389	0.69	ug/L	95
10) Trichlorofluoromethane	1.599	101	5902	0.81	ug/L	96
11) Ethyl Alcohol	1.854	45	3882	7.64	ug/L	89
12) Ethyl Ether	1.858	59	2562	0.73	ug/L	87
13) Propylene Oxide	1.933	43	1014	0.83	ug/L	86
14) Acrolein	2.026	56	5647	3.58	ug/L	100
15) 1,1-Dichloroethene	2.041	61	3980	0.72	ug/L	97
16) Freon 113	2.023	101	2712	0.85	ug/L	94
17) Acetone	2.173	43	17458	5.13	ug/L	99
18) Isopropyl Alcohol	2.319	45	9304	9.13	ug/L	91
19) Iodomethane	2.184	142	2148	0.42	ug/L #	91
20) Methyl acetate	2.450	43	27803	3.77	ug/L	98
21) Carbon Disulfide	2.203	76	5914	0.69	ug/L	99
22) Allyl Chloride	2.401	76	1293	0.57	ug/L #	82
23) Acetonitrile	2.499	40	3321	4.10	ug/L	87
24) Methylene Chloride	2.544	49	7490	1.16	ug/L	92
25) Tert Butyl Alcohol	2.690	59	9219	5.53	ug/L	98
26) trans-1,2-Dichloroethene	2.754	61	4157	0.73	ug/L	96
27) Acrylonitrile	2.859	53	12300	3.68	ug/L	93
28) Hexane	2.949	57	3175	0.88	ug/L	98
29) Methyl Tert Butyl Ether	2.750	73	8305	0.70	ug/L	61
30) 1,1-Dichloroethane	3.203	63	4816	0.67	ug/L	93
31) Vinyl acetate	3.271	43	16512	1.28	ug/L	97
32) Di-isopropyl ether	3.218	45	11716	0.70	ug/L	95
33) Chloroprene	3.256	53	4838	0.70	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:08:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:35 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	9015	0.69 ug/L	96
35) Ethyl Acetate	3.889	43	18571	1.89 ug/L	96
36) 2,2-Dichloropropane	3.751	77	3901	0.71 ug/L	73
37) cis-1,2-Dichloroethene	3.800	61	4562	0.75 ug/L	95
38) 2-Butanone	3.856	43	20879	3.74 ug/L	97
39) Propionitrile	3.994	54	5615	3.64 ug/L	95
40) Methacrylonitrile	4.099	41	20015	3.84 ug/L	94
41) Bromochloromethane	4.039	128	1685	0.69 ug/L	89
42) Chloroform	4.129	83	6226	0.81 ug/L	92
43) Tetrahydrofuran	4.062	42	3621	1.01 ug/L	93
44) 1,1,1-Trichloroethane	4.246	97	4644	0.68 ug/L	94
46) Cyclohexane	4.208	56	4820	0.84 ug/L	92
47) 1,1-Dichloropropene	4.422	39	3522	0.92 ug/L	88
49) Carbon Tetrachloride	4.381	119	6591	1.08 ug/L #	1
51) Isobutyl Alcohol	4.699	43	3500	5.52 ug/L	92
52) Benzene	4.628	78	12248	0.79 ug/L	98
53) 1,2-Dichloroethane	4.748	62	4740	0.75 ug/L	92
54) 2,2,4-Trimethylpentane	4.628	57	6500	0.87 ug/L	84
55) tert-amyl methyl ether	4.763	73	7559	0.66 ug/L	90
56) Crotonaldehyde	5.112	41	6616	5.09 ug/L #	56
57) n-Butyl Alcohol	5.460	56	2840	5.36 ug/L #	42
58) Trichloroethene	5.351	95	3225	0.70 ug/L	95
59) Methylcyclohexane	5.460	83	3470	0.80 ug/L	88
60) Methyl Methacrylate	5.820	41	4243	0.61 ug/L	98
61) 1,2-Dichloropropane	5.659	63	2959	0.71 ug/L	85
62) Dibromomethane	5.790	93	2140	0.67 ug/L	87
63) 1,4-Dioxane	5.816	88	1935	13.47 ug/L	82
64) Bromodichloromethane	5.985	83	4320	0.78 ug/L	95
65) 2-Nitropropane	6.356	41	6535	2.80 ug/L	81
66) 2-Chloroethyl vinyl ether	6.394	63	11742	3.12 ug/L	89
67) 1-Bromo-2-Chloroethane	6.345	63	4326	0.71 ug/L	95
68) Epichlorohydrin	6.476	57	3760	3.51 ug/L	81
69) 4-Methyl-2-pentanone	6.731	43	38558	3.72 ug/L	94
70) cis-1,3-Dichloropropene	6.517	75	4374	0.62 ug/L	92
73) Toluene	6.825	91	19601	1.08 ug/L	95
74) Ethyl Methacrylate	7.274	69	3380	0.52 ug/L	92
75) trans-1,3-Dichloropropene	7.200	75	3379	0.56 ug/L	97
76) 1,1,2-Trichloroethane	7.387	83	2511	0.70 ug/L	92
77) Tetrachloroethene	7.387	166	3275	0.70 ug/L	96
78) 2-hexanone	7.664	43	27942	3.21 ug/L	96
79) 1,3-Dichloropropane	7.563	76	5058	0.71 ug/L	97
80) Dibromochloromethane	7.754	129	3792	0.72 ug/L	92
81) n-Butyl Acetate	7.788	43	19497	1.44 ug/L	94
82) 1,2-Dibromoethane	7.859	107	3465	0.67 ug/L	93
83) 1-Chlorohexane	8.350	91	5124	0.97 ug/L	92
84) Chlorobenzene	8.350	112	8889	0.70 ug/L	99
85) 1,1,1,2-Tetrachloroethane	8.452	131	2988	0.61 ug/L	82
86) Ethylbenzene	8.448	91	14403	0.71 ug/L	91
87) m,p-Xylene	8.572	91	21712	1.39 ug/L	98
88) o-Xylene	8.965	91	10975	0.69 ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:08:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:35 2019
Response via : Initial Calibration

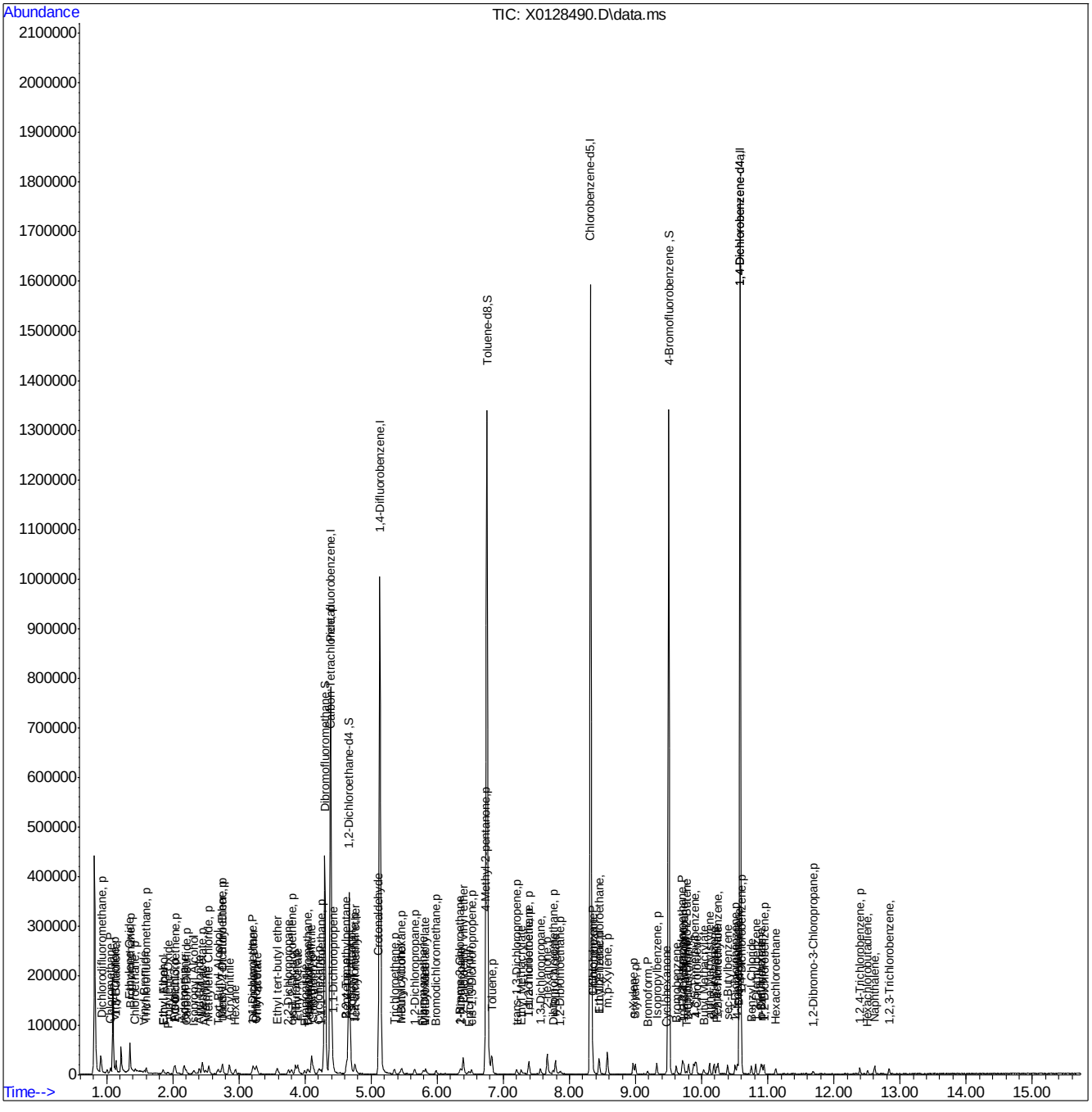
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
89) Styrene	8.995	104	7787	0.58 ug/L	96
90) Bromoform	9.183	173	2143	0.62 ug/L	92
92) Isopropylbenzene	9.321	105	11991	0.67 ug/L	89
93) Cyclohexanone	9.467	55	1650	3.41 ug/L	85
95) Bromobenzene	9.621	156	3333	0.66 ug/L	92
96) 1,1,2,2-Tetrachloroethane	9.700	83	4599	0.68 ug/L	96
97) Trans-1,4-Dichloro-2-B...	9.771	53	1123	0.62 ug/L #	44
98) 1,2,3-Trichloropropane	9.734	110	1756	0.73 ug/L	92
99) n-Propylbenzene	9.719	91	14144	0.68 ug/L	98
100) 2-Chlorotoluene	9.801	91	9365	0.71 ug/L	98
101) 4-Chlorotoluene	9.917	91	10734	0.70 ug/L	91
102) 1,3,5-Trimethylbenzene	9.902	105	9788	0.65 ug/L	93
103) Butyl Methacrylate	10.034	69	2518	0.42 ug/L	88
104) alpha-Methylstyrene	10.120	118	4903	0.56 ug/L	92
105) Pentachloroethane	10.225	167	1443	0.53 ug/L	87
106) sec-Butylbenzene	10.393	105	10778	0.66 ug/L	100
107) 1,3-Dichlorobenzene	10.510	146	6506	0.73 ug/L	94
108) 4-Isopropyltoluene	10.540	119	8927	0.62 ug/L	93
109) 1,4-Dichlorobenzene	10.603	146	6910	0.74 ug/L	86
110) tert-Butylbenzene	10.187	91	5675	0.72 ug/L	88
111) Dicyclopentadiene	10.558	66	17356	1.10 ug/L	96
112) n-Butylbenzene	10.914	91	9237	0.64 ug/L	98
113) 1,2-Dichlorobenzene	10.944	146	5962	0.69 ug/L	88
114) 1,2,4-Trimethylbenzene	10.247	105	9880	0.65 ug/L	96
115) Benzyl Chloride	10.753	91	8855	0.44 ug/L	95
116) p-Diethylbenzene	10.892	119	5176	0.63 ug/L	97
117) Hexachloroethane	11.117	119	1400	0.59 ug/L	88
118) 1,2-Dibromo-3-Chloropr...	11.683	75	985	0.62 ug/L	83
119) 1,2,4-Trichlorobenzene	12.391	180	2768	0.63 ug/L	95
120) 1,3-Diethylbenzene	10.821	119	5487	0.66 ug/L	99
121) Hexachlorobutadiene	12.511	225	908m	0.63 ug/L	
122) Naphthalene	12.616	128	10395	0.57 ug/L	96
123) 1,2,3-Trichlorobenzene	12.834	180	2589	0.65 ug/L	92

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:08:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:35 2019
Response via : Initial Calibration



Manual Integration Approval Summary

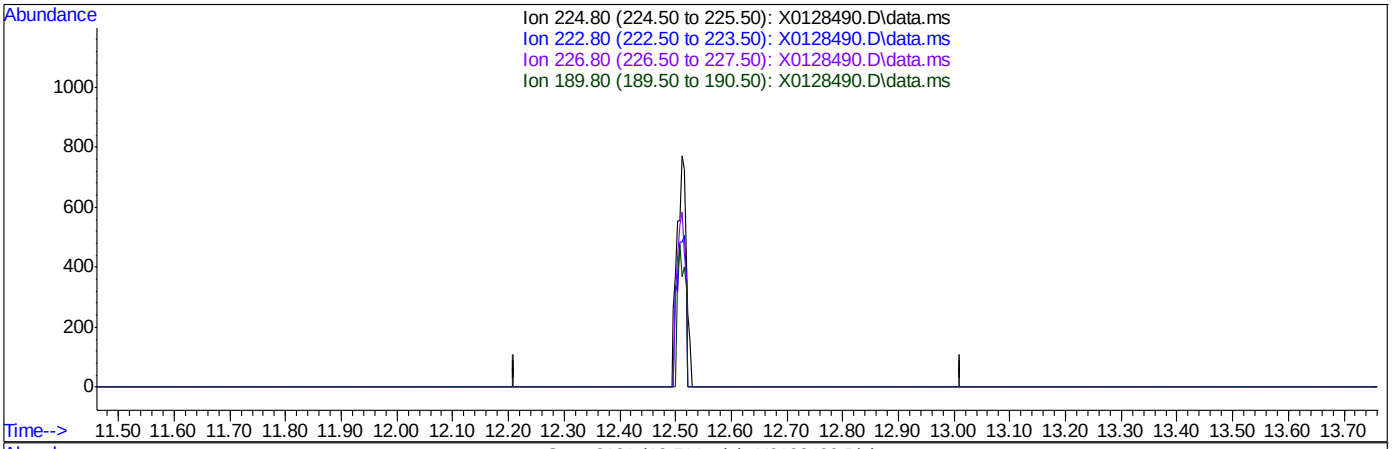
Sample Number:	VX4007-IC4007	**Method:**	SW846 8260C
Lab FileID:	X0128490.D	**Analyst approved:**	05/09/19 12:34 Firat Tastan
Injection Time:	05/08/19 13:00	**Supervisor approved:**	05/10/19 10:19 John Watson

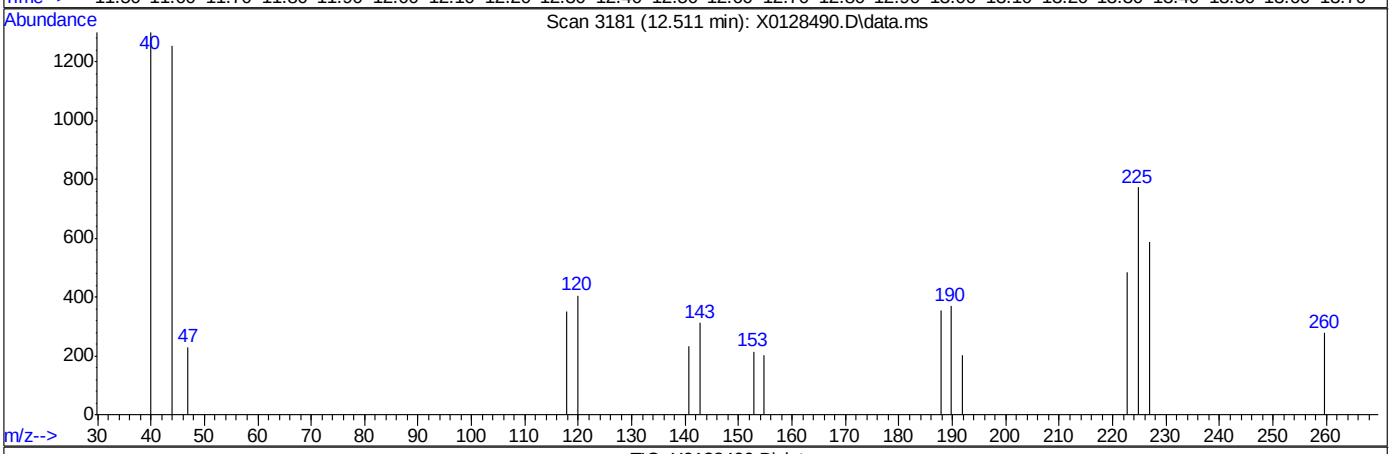
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexachlorobutadiene	87-68-3		12.51	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:06:10 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:06:02 2019
Response via : Initial Calibration





TIC: X0128490.D\data.ms

(121) Hexachlorobutadiene ( )

12.511min (-12.511) 0.00ug/L

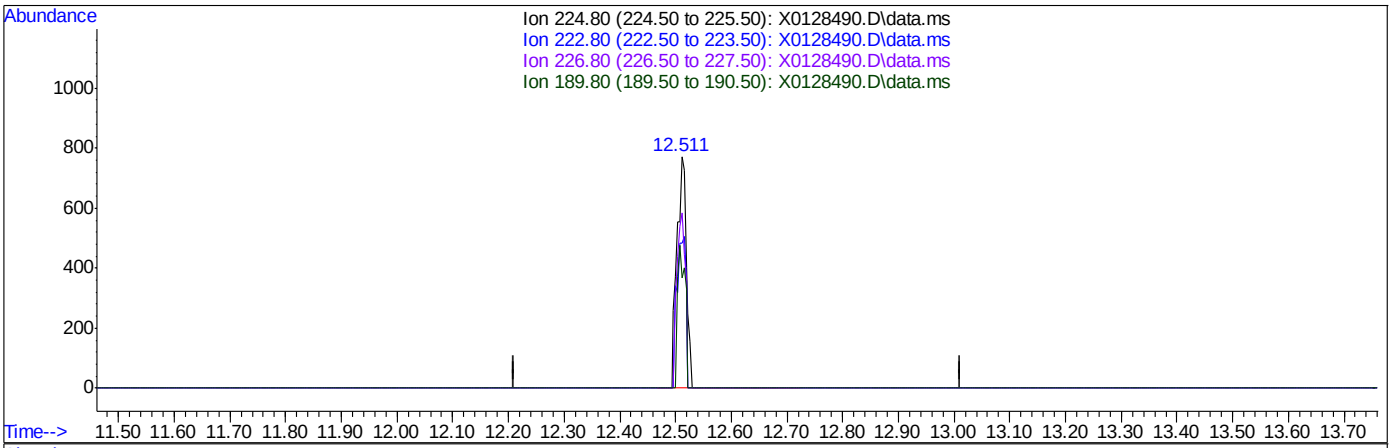
response 0

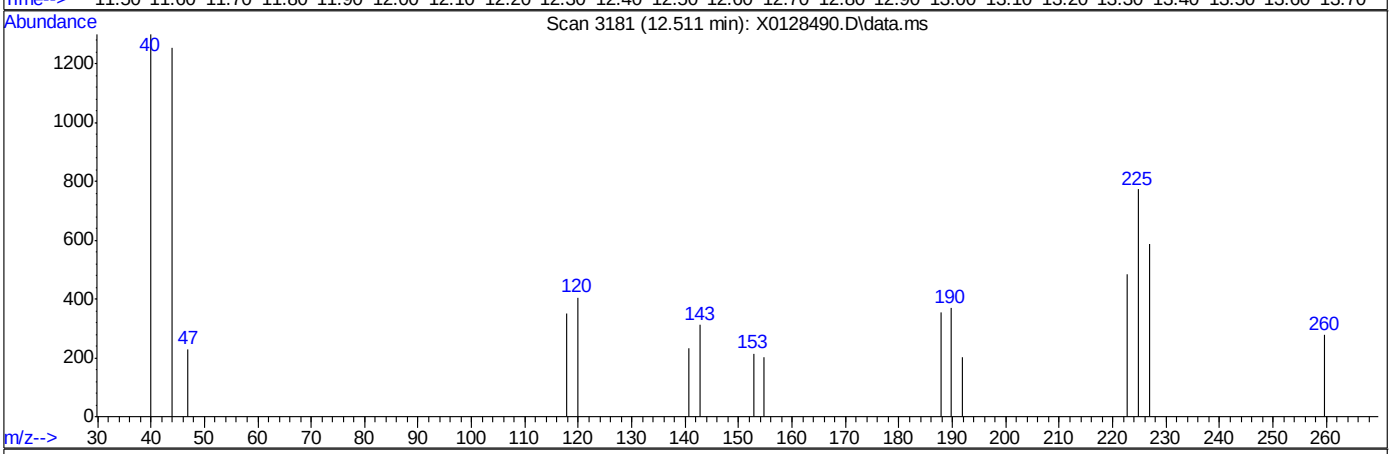
Ion	Exp%	Act%
224.80	100	0.00
222.80	62.90	0.00#
226.80	61.10	0.00#
189.80	53.20	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128490.D
Acq On : 8 May 2019 1:00 pm
Operator : firatt
Sample : ic4007-0.5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 09 07:08:40 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:35 2019
Response via : Initial Calibration





TIC: X0128490.D\data.ms

(121) Hexachlorobutadiene ( )

12.511min (+0.000) 0.63ug/L m

response 908

Ion	Exp%	Act%
224.80	100	100
222.80	62.90	62.56
226.80	61.10	75.91
189.80	53.20	47.67

Manual Integrations APPROVED (compounds with "m" flag)
John Watson
05/10/19 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:10:00 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	440325	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	740426	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	718128	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	333541	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	333541	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	230479	49.27	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.54%			
50) 1,2-Dichloroethane-d4	4.669	65	216217	50.13	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 100.26%			
72) Toluene-d8	6.753	98	805176	50.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 100.66%			
94) 4-Bromofluorobenzene	9.501	95	346936	49.91	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	6114	0.72	ug/L	97
3) Chloromethane	1.052	50	7890	0.85	ug/L	93
4) Vinyl Chloride	1.123	62	6319	0.81	ug/L	95
5) 1,3-Butadiene	1.145	54	3988	0.81	ug/L	96
6) Ethylene Oxide	1.351	44	71797	44.96	ug/L	98
7) Bromomethane	1.355	94	2610	0.93	ug/L	99
8) Chloroethane	1.434	64	3047	0.99	ug/L	96
9) Vinyl Bromide	1.569	106	3269	0.81	ug/L	92
10) Trichlorofluoromethane	1.599	101	7545	0.81	ug/L	97
11) Ethyl Alcohol	1.854	45	5532	8.82	ug/L	95
12) Ethyl Ether	1.854	59	3120	0.74	ug/L	95
13) Propylene Oxide	1.929	43	1158	0.73	ug/L	81
14) Acrolein	2.026	56	7495	4.00	ug/L	97
15) 1,1-Dichloroethene	2.041	61	5459	0.83	ug/L	95
16) Freon 113	2.026	101	2984	0.71	ug/L	94
17) Acetone	2.172	43	21475	4.24	ug/L	95
18) Isopropyl Alcohol	2.319	45	11474	8.16	ug/L	85
19) Iodomethane	2.184	142	2688	0.58	ug/L #	97
20) Methyl acetate	2.446	43	35522	3.93	ug/L	99
21) Carbon Disulfide	2.202	76	7184	0.72	ug/L	97
22) Allyl Chloride	2.397	76	1926	0.81	ug/L #	86
23) Acetonitrile	2.491	40	5553	5.32	ug/L #	77
24) Methylene Chloride	2.544	49	8930	0.85	ug/L	93
25) Tert Butyl Alcohol	2.686	59	15842	9.25	ug/L	93
26) trans-1,2-Dichloroethene	2.753	61	5420	0.79	ug/L	90
27) Acrylonitrile	2.855	53	15476	3.84	ug/L	97
28) Hexane	2.948	57	3490	0.72	ug/L	92
29) Methyl Tert Butyl Ether	2.750	73	10223	0.74	ug/L	59
30) 1,1-Dichloroethane	3.211	63	6275	0.77	ug/L	91
31) Vinyl acetate	3.271	43	21578	1.69	ug/L	96
32) Di-isopropyl ether	3.222	45	14637	0.75	ug/L	94
33) Chloroprene	3.248	53	6276	0.78	ug/L	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:10:00 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	11331	0.75	ug/L		92
35) Ethyl Acetate	3.889	43	27991m	2.33	ug/L		
36) 2,2-Dichloropropane	3.754	77	4835	0.75	ug/L		88
37) cis-1,2-Dichloroethene	3.799	61	5757	0.78	ug/L		82
38) 2-Butanone	3.856	43	23345m	3.43	ug/L		
39) Propionitrile	3.994	54	7306	3.95	ug/L		97
40) Methacrylonitrile	4.099	41	24436	3.79	ug/L		98
41) Bromochloromethane	4.039	128	2134	0.75	ug/L		91
42) Chloroform	4.129	83	7707	0.79	ug/L		98
43) Tetrahydrofuran	4.058	42	4884	0.92	ug/L		94
44) 1,1,1-Trichloroethane	4.249	97	5936	0.75	ug/L		95
46) Cyclohexane	4.208	56	5577	0.74	ug/L		89
47) 1,1-Dichloropropene	4.418	39	4795	0.90	ug/L		91
49) Carbon Tetrachloride	4.373	119	7641	0.81	ug/L	#	1
51) Isobutyl Alcohol	4.695	43	4872	7.48	ug/L		90
52) Benzene	4.632	78	14816	0.76	ug/L		96
53) 1,2-Dichloroethane	4.751	62	6036	0.78	ug/L		92
54) 2,2,4-Trimethylpentane	4.632	57	6790	0.68	ug/L		93
55) tert-amyl methyl ether	4.759	73	9817	0.76	ug/L		92
56) Crotonaldehyde	5.115	41	7650	3.97	ug/L	#	1
57) n-Butyl Alcohol	5.434	56	4275	7.97	ug/L		91
58) Trichloroethene	5.348	95	4134	0.76	ug/L		91
59) Methylcyclohexane	5.464	83	3847	0.70	ug/L		94
60) Methyl Methacrylate	5.824	41	5527	0.73	ug/L		97
61) 1,2-Dichloropropane	5.659	63	3503	0.71	ug/L		92
62) Dibromomethane	5.794	93	3039	0.83	ug/L		89
63) 1,4-Dioxane	5.820	88	2813	17.08	ug/L		91
64) Bromodichloromethane	5.985	83	5380	0.78	ug/L		94
65) 2-Nitropropane	6.360	41	8001	3.31	ug/L	#	79
66) 2-Chloroethyl vinyl ether	6.393	63	14686	3.55	ug/L		95
67) 1-Bromo-2-Chloroethane	6.345	63	5682	0.79	ug/L		91
68) Epichlorohydrin	6.476	57	4928	3.92	ug/L		90
69) 4-Methyl-2-pentanone	6.731	43	52132	4.14	ug/L		97
70) cis-1,3-Dichloropropene	6.521	75	5428	0.70	ug/L		89
73) Toluene	6.824	91	22768	0.82	ug/L		96
74) Ethyl Methacrylate	7.274	69	4373	0.68	ug/L		90
75) trans-1,3-Dichloropropene	7.199	75	4542	0.73	ug/L		97
76) 1,1,2-Trichloroethane	7.387	83	3183	0.77	ug/L		94
77) Tetrachloroethene	7.387	166	4066	0.75	ug/L		96
78) 2-hexanone	7.668	43	39551	4.13	ug/L		97
79) 1,3-Dichloropropane	7.563	76	6205	0.75	ug/L		96
80) Dibromochloromethane	7.754	129	4391	0.71	ug/L		96
81) n-Butyl Acetate	7.788	43	26604	1.89	ug/L		98
82) 1,2-Dibromoethane	7.863	107	4353	0.75	ug/L		96
83) 1-Chlorohexane	8.346	91	4584	0.61	ug/L		91
84) Chlorobenzene	8.346	112	11592	0.79	ug/L		95
85) 1,1,1,2-Tetrachloroethane	8.455	131	3856	0.74	ug/L		93
86) Ethylbenzene	8.448	91	18528	0.79	ug/L		92
87) m,p-Xylene	8.575	91	26952	1.50	ug/L		97
88) o-Xylene	8.965	91	13820	0.76	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:10:00 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration

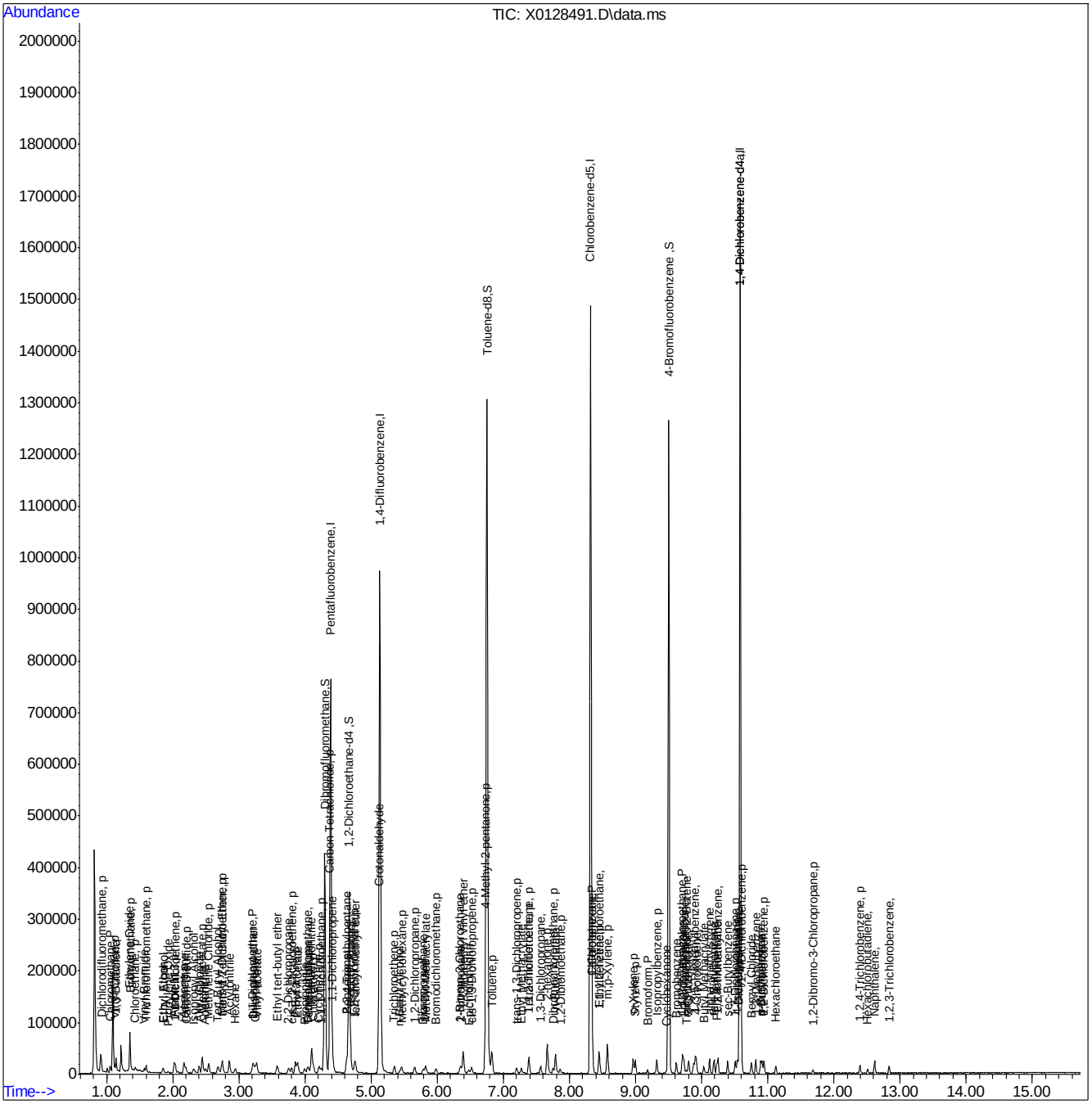
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	Styrene	8.999	104	10417	0.75	ug/L		98
90)	Bromoform	9.182	173	2836	0.76	ug/L		86
92)	Isopropylbenzene	9.325	105	15053	0.74	ug/L		87
93)	Cyclohexanone	9.467	55	2141	3.87	ug/L		90
95)	Bromobenzene	9.617	156	4603	0.81	ug/L		88
96)	1,1,2,2-Tetrachloroethane	9.703	83	6535	0.84	ug/L		96
97)	Trans-1,4-Dichloro-2-B...	9.771	53	1546	0.78	ug/L	#	72
98)	1,2,3-Trichloropropane	9.737	110	2170	0.76	ug/L		80
99)	n-Propylbenzene	9.715	91	18213	0.77	ug/L		97
100)	2-Chlorotoluene	9.805	91	11534	0.74	ug/L		98
101)	4-Chlorotoluene	9.921	91	14071	0.79	ug/L		95
102)	1,3,5-Trimethylbenzene	9.902	105	12582	0.75	ug/L		98
103)	Butyl Methacrylate	10.030	69	3483	1.15	ug/L		86
104)	alpha-Methylstyrene	10.120	118	6773	0.75	ug/L		91
105)	Pentachloroethane	10.224	167	2286	0.84	ug/L		72
106)	sec-Butylbenzene	10.393	105	13820	0.75	ug/L		96
107)	1,3-Dichlorobenzene	10.509	146	8221	0.78	ug/L		93
108)	4-Isopropyltoluene	10.539	119	11357	0.73	ug/L		98
109)	1,4-Dichlorobenzene	10.603	146	8693	0.78	ug/L		89
110)	tert-Butylbenzene	10.183	91	7308	0.78	ug/L		91
111)	Dicyclopentadiene	10.558	66	19884	0.81	ug/L		91
112)	n-Butylbenzene	10.914	91	12396	0.78	ug/L		94
113)	1,2-Dichlorobenzene	10.940	146	7787	0.78	ug/L		95
114)	1,2,4-Trimethylbenzene	10.247	105	12527	0.74	ug/L		93
115)	Benzyl Chloride	10.749	91	12088	0.66	ug/L		93
116)	p-Diethylbenzene	10.892	119	6488	0.72	ug/L		99
117)	Hexachloroethane	11.120	119	1857	0.74	ug/L		83
118)	1,2-Dibromo-3-Chloropr...	11.686	75	1267	0.74	ug/L		99
119)	1,2,4-Trichlorobenzene	12.391	180	3671	0.76	ug/L		90
120)	1,3-Diethylbenzene	10.821	119	6867	0.73	ug/L		96
121)	Hexachlorobutadiene	12.511	225	1228	0.78	ug/L		95
122)	Naphthalene	12.616	128	14637	0.78	ug/L		99
123)	1,2,3-Trichlorobenzene	12.834	180	3490	0.79	ug/L		88

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:10:00 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration



Manual Integration Approval Summary

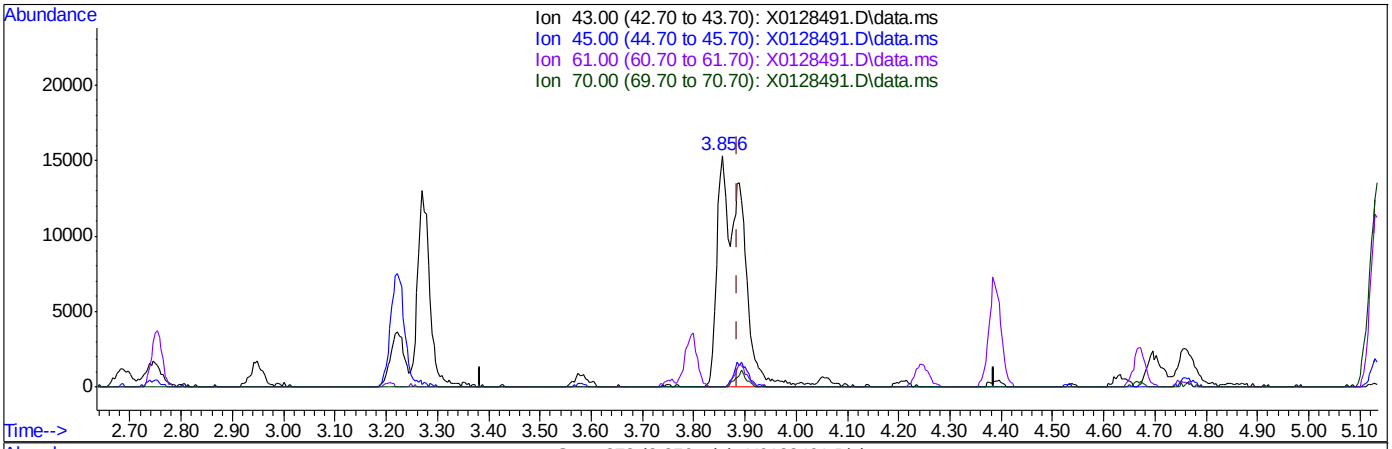
Sample Number:	VX4007-IC4007	**Method:**	SW846 8260C
Lab FileID:	X0128491.D	**Analyst approved:**	05/09/19 12:34 Firat Tastan
Injection Time:	05/08/19 13:26	**Supervisor approved:**	05/10/19 10:19 John Watson

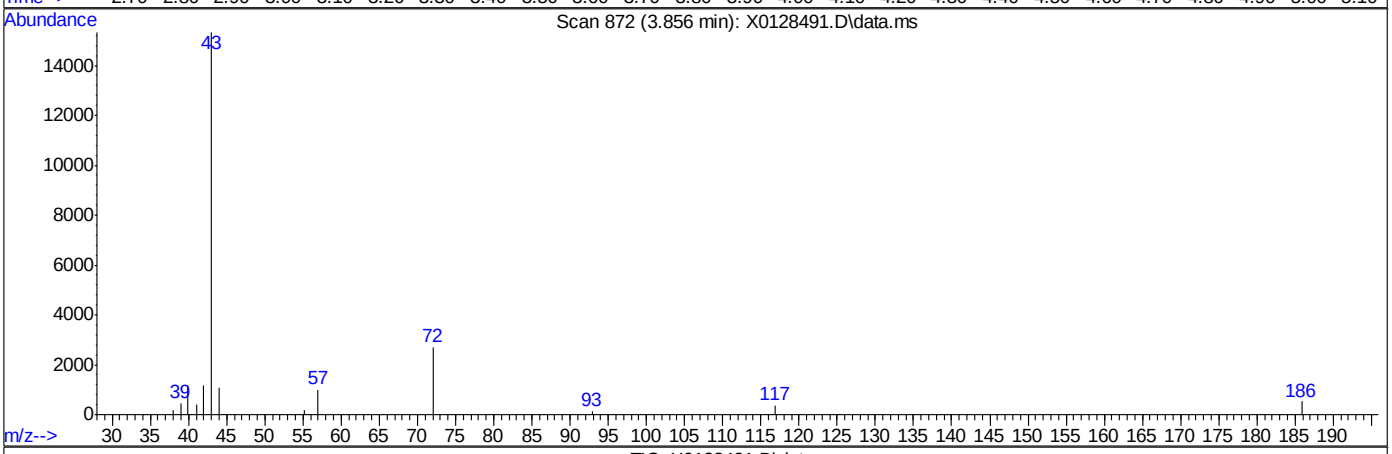
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl ethyl ketone	78-93-3		3.86	Overlapping peak
Ethyl Acetate	141-78-6		3.89	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:09:05 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration





TIC: X0128491.D\data.ms

(35) Ethyl Acetate

3.856min (-0.030) 4.23ug/L

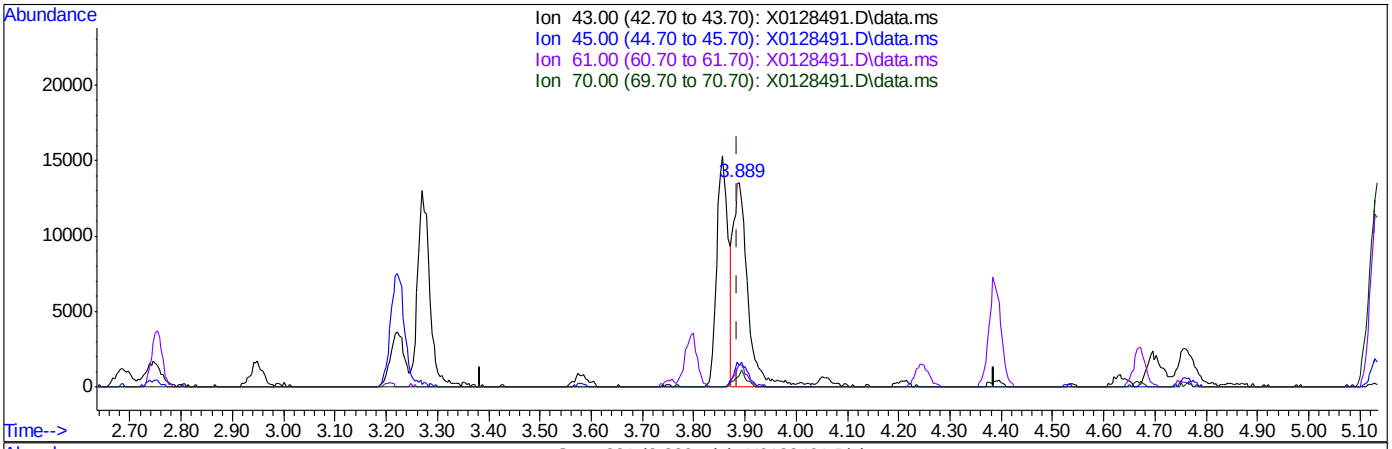
response 50936

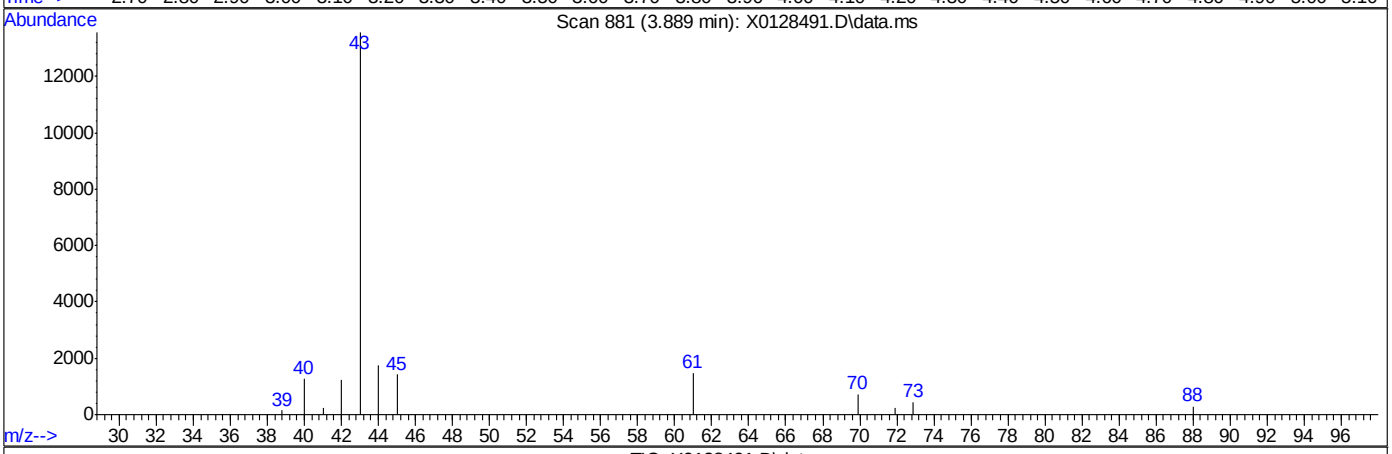
Ion	Exp%	Act%
43.00	100	100
45.00	13.60	0.00
61.00	11.20	0.00
70.00	8.30	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:09:05 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration





TIC: X0128491.D\data.ms

(35) Ethyl Acetate

3.889min (+0.004) 2.33ug/L m

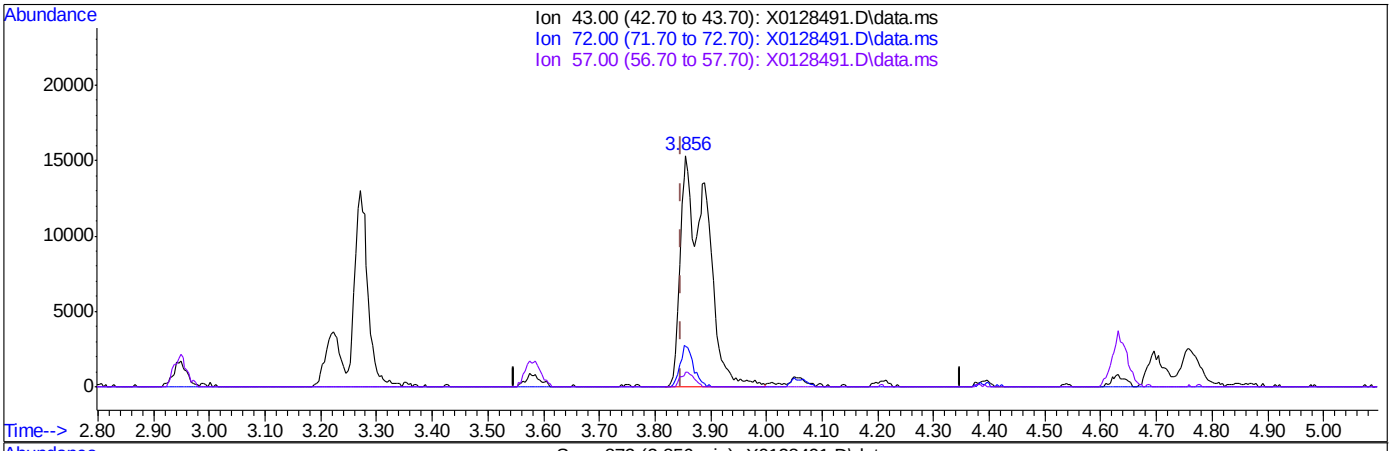
response 27991

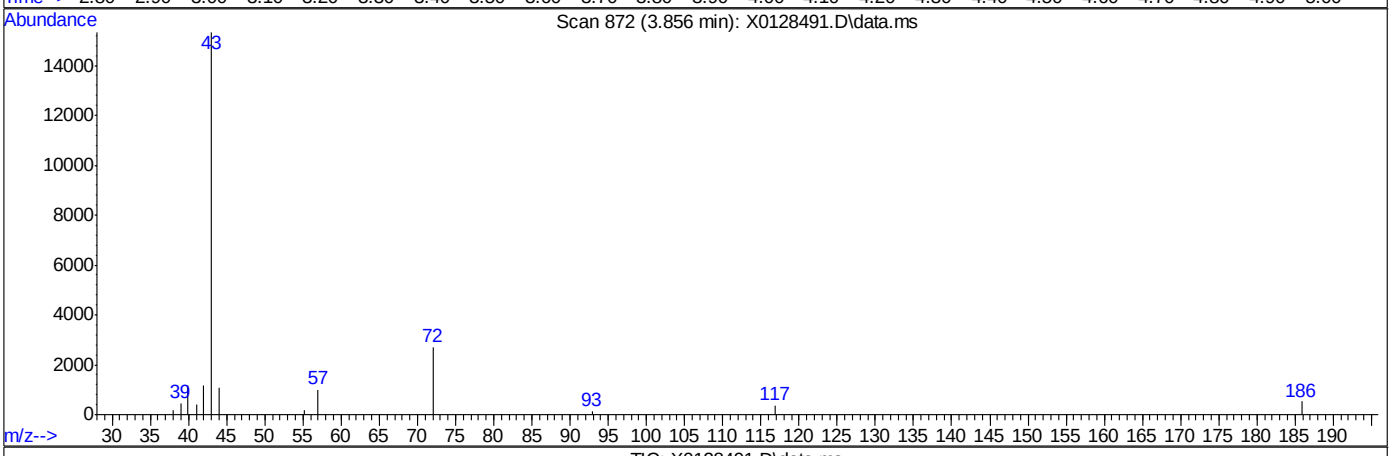
Ion	Exp%	Act%
43.00	100	100
45.00	13.60	10.47
61.00	11.20	10.97
70.00	8.30	5.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:09:05 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration





TIC: X0128491.D\data.ms

(38) 2-Butanone (p)

3.856min (+0.007) 7.49ug/L

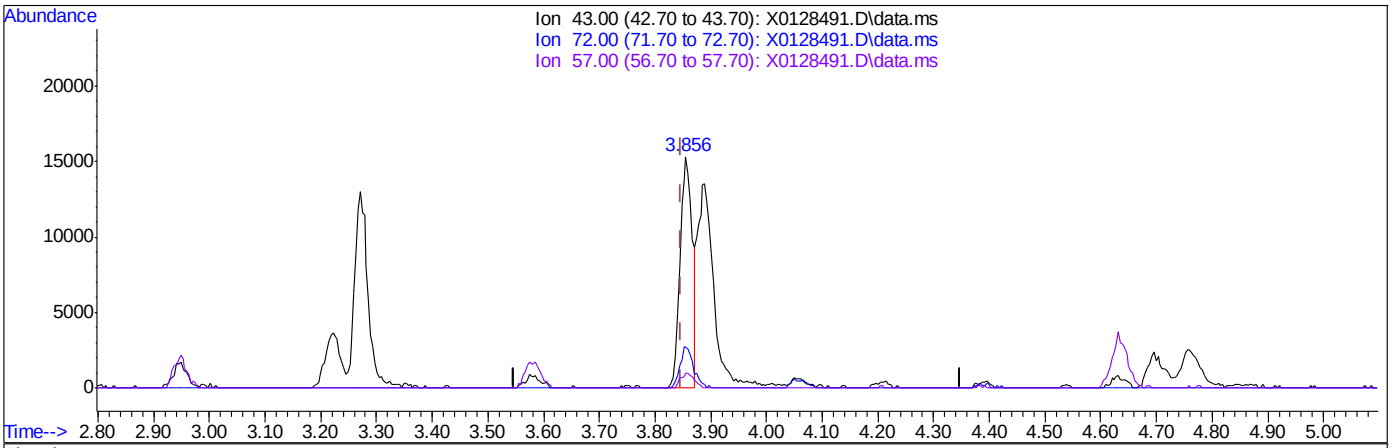
response 50936

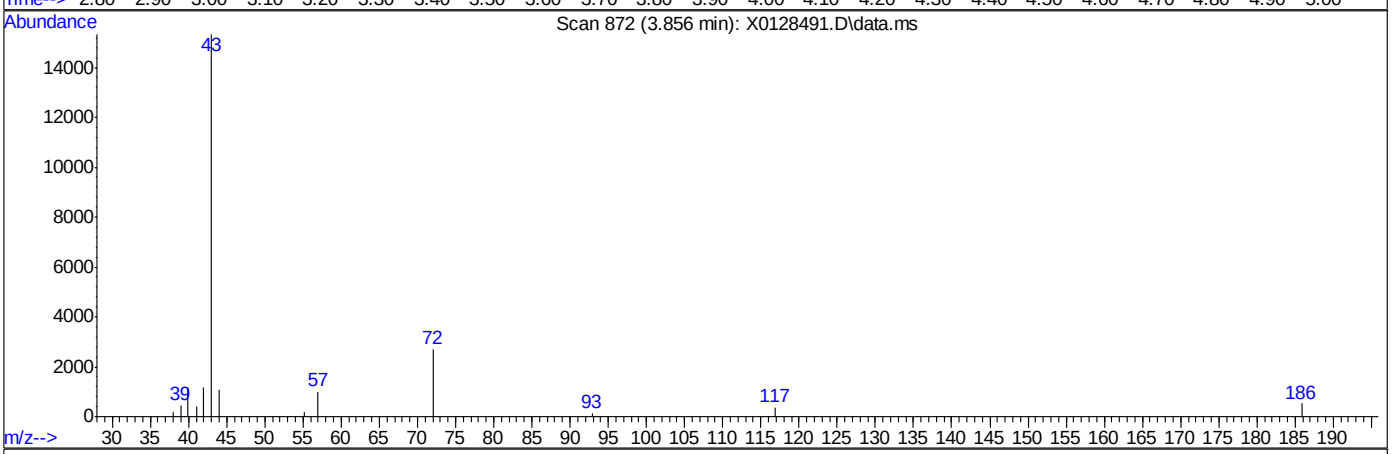
Ion	Exp%	Act%
43.00	100	100
72.00	18.10	17.66
57.00	6.70	6.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128491.D
Acq On : 8 May 2019 1:26 pm
Operator : firatt
Sample : ic4007-1
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 09 07:09:05 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:09:01 2019
Response via : Initial Calibration





TIC: X0128491.D\data.ms

(38) 2-Butanone (p)

3.856min (+0.007) 3.43ug/L m

response 23345

Ion	Exp%	Act%
43.00	100	100
72.00	18.10	17.66
57.00	6.70	6.47
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
John Watson
05/10/19 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:39 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	431840	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	735425	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	716686	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	331792	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	331792	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	229542	50.28	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.56%			
50) 1,2-Dichloroethane-d4	4.669	65	218668	51.00	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 102.00%			
72) Toluene-d8	6.753	98	798009	49.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 99.76%			
94) 4-Bromofluorobenzene	9.501	95	347369	50.27	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 100.54%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	14008	1.86	ug/L	98
3) Chloromethane	1.055	50	14958	1.73	ug/L	100
4) Vinyl Chloride	1.123	62	12847	1.79	ug/L	98
5) 1,3-Butadiene	1.145	54	8374	1.85	ug/L	99
6) Ethylene Oxide	1.352	44	111827	73.88	ug/L	99
7) Bromomethane	1.355	94	4508	1.68	ug/L	96
8) Chloroethane	1.434	64	5647	1.88	ug/L	98
9) Vinyl Bromide	1.569	106	6471	1.75	ug/L	90
10) Trichlorofluoromethane	1.599	101	15473	1.81	ug/L	97
11) Ethyl Alcohol	1.854	45	9536	16.14	ug/L	95
12) Ethyl Ether	1.858	59	6538	1.73	ug/L	90
13) Propylene Oxide	1.929	43	2308	1.63	ug/L #	72
14) Acrolein	2.026	56	14560	8.49	ug/L	94
15) 1,1-Dichloroethene	2.041	61	10657	1.75	ug/L	96
16) Freon 113	2.023	101	6828	1.83	ug/L	96
17) Acetone	2.169	43	38110	8.08	ug/L	94
18) Isopropyl Alcohol	2.311	45	19946	15.41	ug/L	97
19) Iodomethane	2.184	142	5967	1.54	ug/L	96
20) Methyl acetate	2.446	43	71297	8.67	ug/L	98
21) Carbon Disulfide	2.203	76	15529	1.75	ug/L	99
22) Allyl Chloride	2.401	76	3771	1.73	ug/L	95
23) Acetonitrile	2.499	40	8437	8.07	ug/L	95
24) Methylene Chloride	2.547	49	16327	1.67	ug/L	93
25) Tert Butyl Alcohol	2.686	59	25783	15.74	ug/L	90
26) trans-1,2-Dichloroethene	2.754	61	11057	1.77	ug/L	94
27) Acrylonitrile	2.859	53	31190	8.55	ug/L	99
28) Hexane	2.949	57	7966	1.84	ug/L	97
29) Methyl Tert Butyl Ether	2.746	73	20803	1.68	ug/L	55
30) 1,1-Dichloroethane	3.203	63	13636	1.84	ug/L	91
31) Vinyl acetate	3.271	43	45942	4.12	ug/L	96
32) Di-isopropyl ether	3.218	45	31040	1.76	ug/L	96
33) Chloroprene	3.252	53	13105	1.79	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:39 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Ethyl tert-butyl ether	3.582	59	23799	1.75	ug/L		92
35) Ethyl Acetate	3.889	43	44455	3.86	ug/L		98
36) 2,2-Dichloropropane	3.754	77	9810	1.69	ug/L		96
37) cis-1,2-Dichloroethene	3.799	61	11804	1.76	ug/L		89
38) 2-Butanone	3.856	43	55125	9.23	ug/L		99
39) Propionitrile	3.994	54	14397	8.54	ug/L		98
40) Methacrylonitrile	4.099	41	48570	8.35	ug/L		99
41) Bromochloromethane	4.039	128	4667	1.83	ug/L		97
42) Chloroform	4.129	83	14669	1.64	ug/L		97
43) Tetrahydrofuran	4.054	42	9124	1.81	ug/L		95
44) 1,1,1-Trichloroethane	4.246	97	12478	1.76	ug/L		97
46) Cyclohexane	4.208	56	12144	1.81	ug/L		92
47) 1,1-Dichloropropene	4.422	39	8742	1.73	ug/L		89
49) Carbon Tetrachloride	4.373	119	13221m	1.51	ug/L		
51) Isobutyl Alcohol	4.695	43	9006	15.19	ug/L		98
52) Benzene	4.632	78	30403	1.70	ug/L		97
53) 1,2-Dichloroethane	4.752	62	11971	1.69	ug/L		97
54) 2,2,4-Trimethylpentane	4.632	57	16510	1.86	ug/L		96
55) tert-amyl methyl ether	4.763	73	19653	1.66	ug/L		94
56) Crotonaldehyde	5.115	41	11812	6.63	ug/L		69
57) n-Butyl Alcohol	5.456	56	7559	15.22	ug/L	#	50
58) Trichloroethene	5.351	95	9106	1.84	ug/L		87
59) Methylcyclohexane	5.464	83	9014	1.83	ug/L		97
60) Methyl Methacrylate	5.824	41	11193	1.64	ug/L		97
61) 1,2-Dichloropropane	5.659	63	7547	1.71	ug/L		94
62) Dibromomethane	5.794	93	5843	1.71	ug/L		85
63) 1,4-Dioxane	5.820	88	5225	33.58	ug/L		92
64) Bromodichloromethane	5.989	83	10404	1.63	ug/L		93
65) 2-Nitropropane	6.356	41	13871	6.51	ug/L		97
66) 2-Chloroethyl vinyl ether	6.397	63	31853	8.59	ug/L		97
67) 1-Bromo-2-Chloroethane	6.345	63	10889	1.64	ug/L		93
68) Epichlorohydrin	6.476	57	8968	7.74	ug/L		93
69) 4-Methyl-2-pentanone	6.727	43	96623	8.19	ug/L		99
70) cis-1,3-Dichloropropene	6.525	75	11111	1.61	ug/L		93
73) Toluene	6.828	91	40238	1.55	ug/L		98
74) Ethyl Methacrylate	7.274	69	9136	1.60	ug/L		92
75) trans-1,3-Dichloropropene	7.199	75	9218	1.64	ug/L		99
76) 1,1,2-Trichloroethane	7.387	83	6520	1.70	ug/L		98
77) Tetrachloroethene	7.387	166	8612	1.74	ug/L		95
78) 2-hexanone	7.664	43	74029	8.22	ug/L		98
79) 1,3-Dichloropropane	7.563	76	12214	1.61	ug/L		91
80) Dibromochloromethane	7.754	129	8763	1.57	ug/L		92
81) n-Butyl Acetate	7.788	43	53297	4.14	ug/L		99
82) 1,2-Dibromoethane	7.859	107	8992	1.69	ug/L		96
83) 1-Chlorohexane	8.350	91	10523	1.62	ug/L		92
84) Chlorobenzene	8.347	112	23653	1.73	ug/L		94
85) 1,1,1,2-Tetrachloroethane	8.455	131	8153	1.71	ug/L		94
86) Ethylbenzene	8.448	91	36321	1.66	ug/L		96
87) m,p-Xylene	8.575	91	56048	3.41	ug/L		98
88) o-Xylene	8.965	91	27914	1.67	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:39 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration

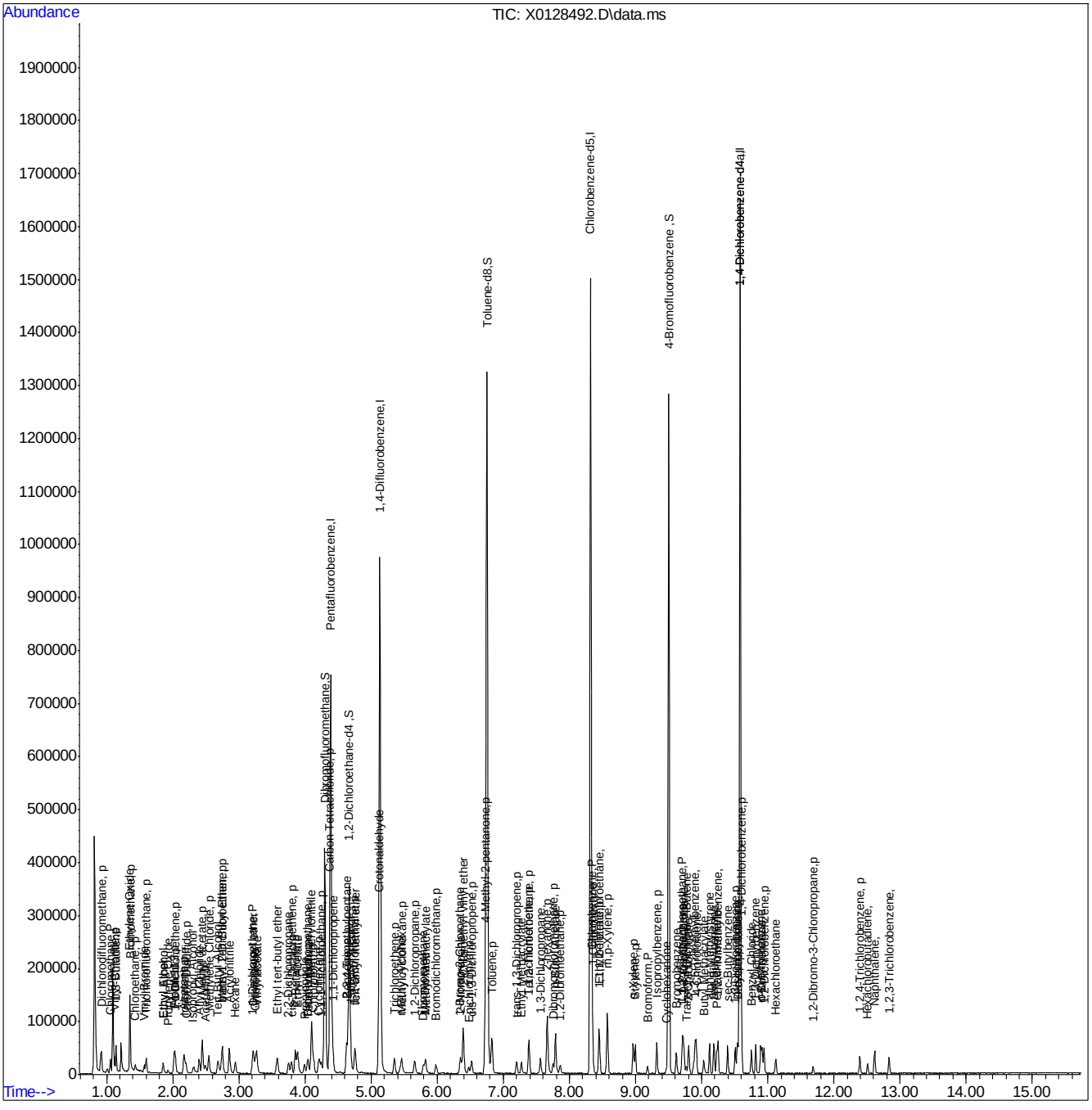
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	Styrene	8.999	104	22249	1.74	ug/L		98
90)	Bromoform	9.182	173	5509	1.60	ug/L		96
92)	Isopropylbenzene	9.321	105	31404	1.71	ug/L		95
93)	Cyclohexanone	9.471	55	4959	9.74	ug/L		98
95)	Bromobenzene	9.617	156	9249	1.75	ug/L		88
96)	1,1,2,2-Tetrachloroethane	9.704	83	12152	1.66	ug/L		96
97)	Trans-1,4-Dichloro-2-B...	9.767	53	2768	1.52	ug/L	#	70
98)	1,2,3-Trichloropropane	9.734	110	4508	1.72	ug/L		96
99)	n-Propylbenzene	9.719	91	36764	1.69	ug/L		98
100)	2-Chlorotoluene	9.805	91	23763	1.69	ug/L		96
101)	4-Chlorotoluene	9.917	91	27029	1.64	ug/L		98
102)	1,3,5-Trimethylbenzene	9.898	105	25720	1.69	ug/L		95
103)	Butyl Methacrylate	10.030	69	6824	2.15	ug/L		94
104)	alpha-Methylstyrene	10.120	118	13899	1.69	ug/L		99
105)	Pentachloroethane	10.228	167	4270	1.67	ug/L		94
106)	sec-Butylbenzene	10.393	105	28093	1.68	ug/L		97
107)	1,3-Dichlorobenzene	10.506	146	15833	1.62	ug/L		97
108)	4-Isopropyltoluene	10.540	119	24458	1.73	ug/L		99
109)	1,4-Dichlorobenzene	10.599	146	17125	1.66	ug/L		86
110)	tert-Butylbenzene	10.183	91	14535	1.69	ug/L		91
111)	Dicyclopentadiene	10.555	66	35284	1.55	ug/L		99
112)	n-Butylbenzene	10.914	91	25893	1.77	ug/L		99
113)	1,2-Dichlorobenzene	10.944	146	16079	1.75	ug/L		97
114)	1,2,4-Trimethylbenzene	10.247	105	26812	1.74	ug/L		96
115)	Benzyl Chloride	10.753	91	23983	1.48	ug/L		94
116)	p-Diethylbenzene	10.892	119	13934	1.72	ug/L		100
117)	Hexachloroethane	11.121	119	3833	1.68	ug/L		93
118)	1,2-Dibromo-3-Chloropr...	11.683	75	2509	1.61	ug/L		89
119)	1,2,4-Trichlorobenzene	12.395	180	7605	1.73	ug/L		96
120)	1,3-Diethylbenzene	10.817	119	13781	1.62	ug/L		98
121)	Hexachlorobutadiene	12.511	225	2675	1.84	ug/L		84
122)	Naphthalene	12.616	128	27464	1.58	ug/L		94
123)	1,2,3-Trichlorobenzene	12.834	180	6986	1.71	ug/L		90

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:39 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration



VX4007C.m Thu May 09 11:17:46 2019 Page: 4

Manual Integration Approval Summary

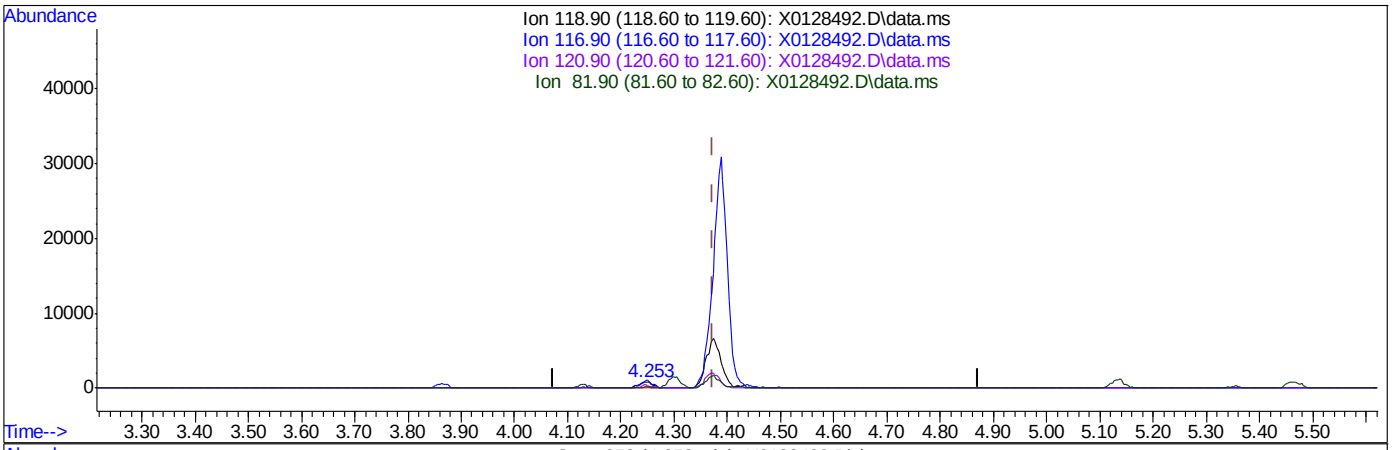
Sample Number:	VX4007-IC4007	**Method:**	SW846 8260C
Lab FileID:	X0128492.D	**Analyst approved:**	05/09/19 12:34 Firat Tastan
Injection Time:	05/08/19 13:51	**Supervisor approved:**	05/10/19 10:19 John Watson

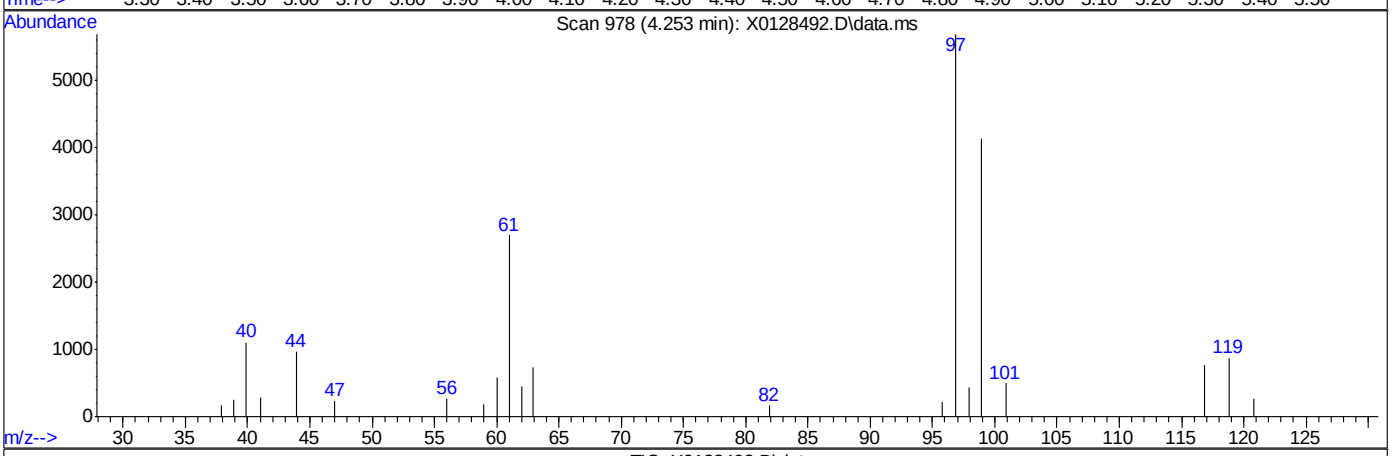
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon tetrachloride	56-23-5		4.37	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:23 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration





TIC: X0128492.D\data.ms

(49) Carbon Tetrachloride (p)

4.253min (-0.120) 0.17ug/L

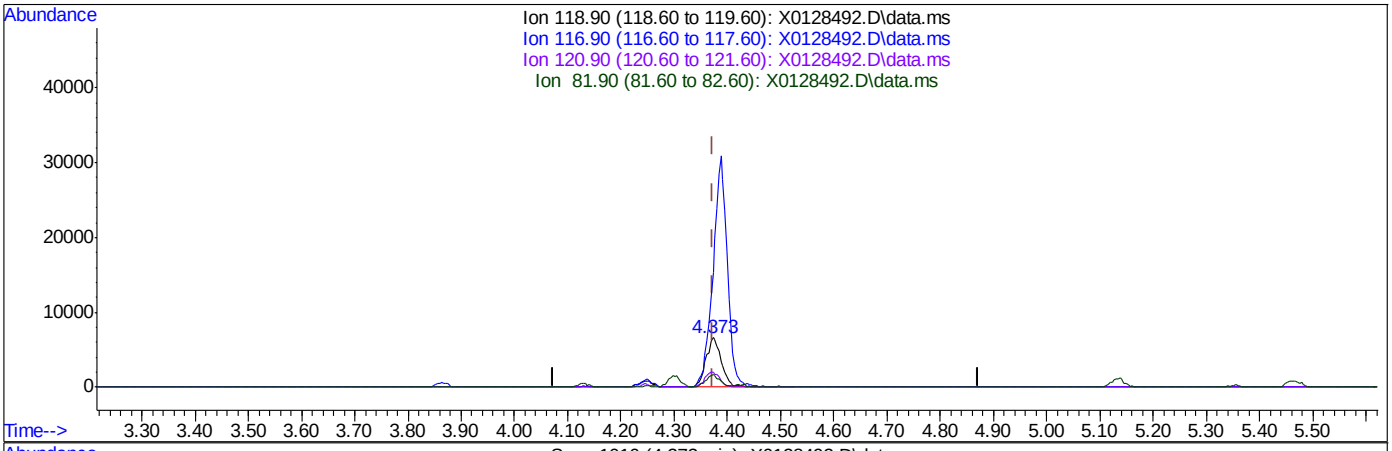
response 1478

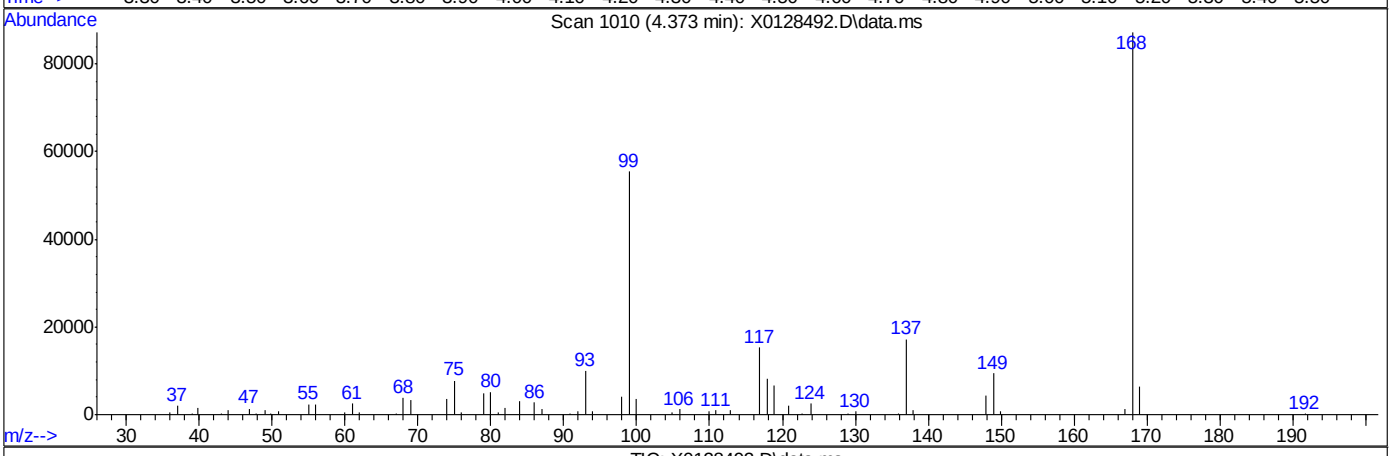
Ion	Exp%	Act%
118.90	100	100
116.90	112.60	87.84
120.90	32.10	29.93
81.90	22.70	18.92

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128492.D
Acq On : 8 May 2019 1:51 pm
Operator : firatt
Sample : ic4007-2
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 09 07:10:23 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:10:06 2019
Response via : Initial Calibration





(49) Carbon Tetrachloride (p)

4.373min (+0.000) 1.51ug/L m

response 13221

Ion	Exp%	Act%
118.90	100	100
116.90	112.60	231.78#
120.90	32.10	30.91
81.90	22.70	25.15

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128493.D
Acq On : 8 May 2019 2:17 pm
Operator : firatt
Sample : ic4007-5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 09 07:11:28 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:01 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	424559	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	721212	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	698221	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	324781	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	324781	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	228016	50.73	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 101.46%			
50) 1,2-Dichloroethane-d4	4.669	65	209418	49.56	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 99.12%			
72) Toluene-d8	6.753	98	786315	50.48	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 100.96%			
94) 4-Bromofluorobenzene	9.501	95	338446	49.96	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	38519	5.30	ug/L	99
3) Chloromethane	1.055	50	40198	4.90	ug/L	98
4) Vinyl Chloride	1.123	62	33564	4.90	ug/L	99
5) 1,3-Butadiene	1.145	54	21092	4.82	ug/L	91
6) Ethylene Oxide	1.352	44	255516	183.71	ug/L	99
7) Bromomethane	1.359	94	11490	4.54	ug/L	99
8) Chloroethane	1.434	64	14129	4.86	ug/L	94
9) Vinyl Bromide	1.569	106	18177	5.17	ug/L	96
10) Trichlorofluoromethane	1.599	101	43326	5.28	ug/L	98
11) Ethyl Alcohol	1.858	45	25591	46.30	ug/L	93
12) Ethyl Ether	1.858	59	17162	4.79	ug/L	99
13) Propylene Oxide	1.929	43	5435	4.09	ug/L	97
14) Acrolein	2.026	56	38968	24.03	ug/L	98
15) 1,1-Dichloroethene	2.045	61	28854	4.97	ug/L	94
16) Freon 113	2.026	101	18400	5.13	ug/L	96
17) Acetone	2.169	43	92666	20.99	ug/L	96
18) Isopropyl Alcohol	2.315	45	50760	42.33	ug/L	93
19) Iodomethane	2.188	142	18675	5.19	ug/L	98
20) Methyl acetate	2.446	43	183325	23.45	ug/L	99
21) Carbon Disulfide	2.206	76	41658	4.94	ug/L	100
22) Allyl Chloride	2.405	76	10633	5.14	ug/L #	84
23) Acetonitrile	2.495	40	21215	21.69	ug/L	98
24) Methylene Chloride	2.547	49	37105	4.03	ug/L	97
25) Tert Butyl Alcohol	2.686	59	79265	51.99	ug/L	95
26) trans-1,2-Dichloroethene	2.750	61	29613	4.97	ug/L	96
27) Acrylonitrile	2.855	53	83356	24.12	ug/L	98
28) Hexane	2.952	57	21213	5.09	ug/L	88
29) Methyl Tert Butyl Ether	2.746	73	56345	4.81	ug/L	58
30) 1,1-Dichloroethane	3.207	63	35388	4.96	ug/L	98
31) Vinyl acetate	3.271	43	133828	12.76	ug/L	96
32) Di-isopropyl ether	3.222	45	81056	4.82	ug/L	95
33) Chloroprene	3.252	53	35559	5.06	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128493.D
Acq On : 8 May 2019 2:17 pm
Operator : firatt
Sample : ic4007-5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 09 07:11:28 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:01 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	61969	4.78	ug/L		96
35) Ethyl Acetate	3.889	43	120499	11.28	ug/L		99
36) 2,2-Dichloropropane	3.754	77	26866	4.89	ug/L		89
37) cis-1,2-Dichloroethene	3.796	61	30201	4.71	ug/L		95
38) 2-Butanone	3.852	43	141129	24.51	ug/L		99
39) Propionitrile	3.991	54	39199	24.54	ug/L		97
40) Methacrylonitrile	4.099	41	133557	24.36	ug/L		99
41) Bromochloromethane	4.043	128	11965	4.87	ug/L		86
42) Chloroform	4.133	83	39494	4.71	ug/L		99
43) Tetrahydrofuran	4.051	42	18255	3.77	ug/L		96
44) 1,1,1-Trichloroethane	4.249	97	34683	5.13	ug/L		97
46) Cyclohexane	4.216	56	33235	5.15	ug/L		97
47) 1,1-Dichloropropene	4.422	39	21994	4.59	ug/L		89
49) Carbon Tetrachloride	4.369	119	32017	3.97	ug/L		88
51) Isobutyl Alcohol	4.695	43	24553	44.94	ug/L		98
52) Benzene	4.635	78	78605	4.67	ug/L		99
53) 1,2-Dichloroethane	4.755	62	31885	4.76	ug/L		96
54) 2,2,4-Trimethylpentane	4.635	57	44906	5.26	ug/L		96
55) tert-amyl methyl ether	4.763	73	53432	4.81	ug/L		99
56) Crotonaldehyde	5.108	41	29860	18.65	ug/L		92
57) n-Butyl Alcohol	5.453	56	24142	52.71	ug/L	#	34
58) Trichloroethene	5.351	95	23476	4.93	ug/L		94
59) Methylcyclohexane	5.460	83	24661	5.22	ug/L		92
60) Methyl Methacrylate	5.824	41	32374	5.07	ug/L		92
61) 1,2-Dichloropropane	5.662	63	19634	4.70	ug/L		96
62) Dibromomethane	5.794	93	15236	4.72	ug/L		99
63) 1,4-Dioxane	5.820	88	14473	98.81	ug/L		94
64) Bromodichloromethane	5.985	83	26457	4.44	ug/L		98
65) 2-Nitropropane	6.360	41	42364	22.22	ug/L		97
66) 2-Chloroethyl vinyl ether	6.393	63	87671	24.99	ug/L		95
67) 1-Bromo-2-Chloroethane	6.345	63	29270	4.70	ug/L		99
68) Epichlorohydrin	6.472	57	26097	24.34	ug/L		90
69) 4-Methyl-2-pentanone	6.727	43	261982	23.72	ug/L		99
70) cis-1,3-Dichloropropene	6.521	75	31858	4.95	ug/L		94
73) Toluene	6.828	91	96376	4.04	ug/L		95
74) Ethyl Methacrylate	7.274	69	27007	5.10	ug/L		97
75) trans-1,3-Dichloropropene	7.203	75	25507	4.87	ug/L		97
76) 1,1,2-Trichloroethane	7.387	83	17472	4.87	ug/L		98
77) Tetrachloroethene	7.387	166	23204	4.98	ug/L		98
78) 2-hexanone	7.664	43	208765	24.90	ug/L		99
79) 1,3-Dichloropropane	7.563	76	34645	4.93	ug/L		98
80) Dibromochloromethane	7.750	129	23752	4.62	ug/L		96
81) n-Butyl Acetate	7.788	43	152976	12.74	ug/L		98
82) 1,2-Dibromoethane	7.863	107	24162	4.85	ug/L		96
83) 1-Chlorohexane	8.347	91	26399	4.38	ug/L		89
84) Chlorobenzene	8.347	112	62727	4.88	ug/L		98
85) 1,1,1,2-Tetrachloroethane	8.459	131	21430	4.79	ug/L		99
86) Ethylbenzene	8.448	91	99136	4.86	ug/L		98
87) m,p-Xylene	8.575	91	151873	9.84	ug/L		99
88) o-Xylene	8.965	91	76597	4.90	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128493.D
Acq On : 8 May 2019 2:17 pm
Operator : firatt
Sample : ic4007-5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 09 07:11:28 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:01 2019
Response via : Initial Calibration

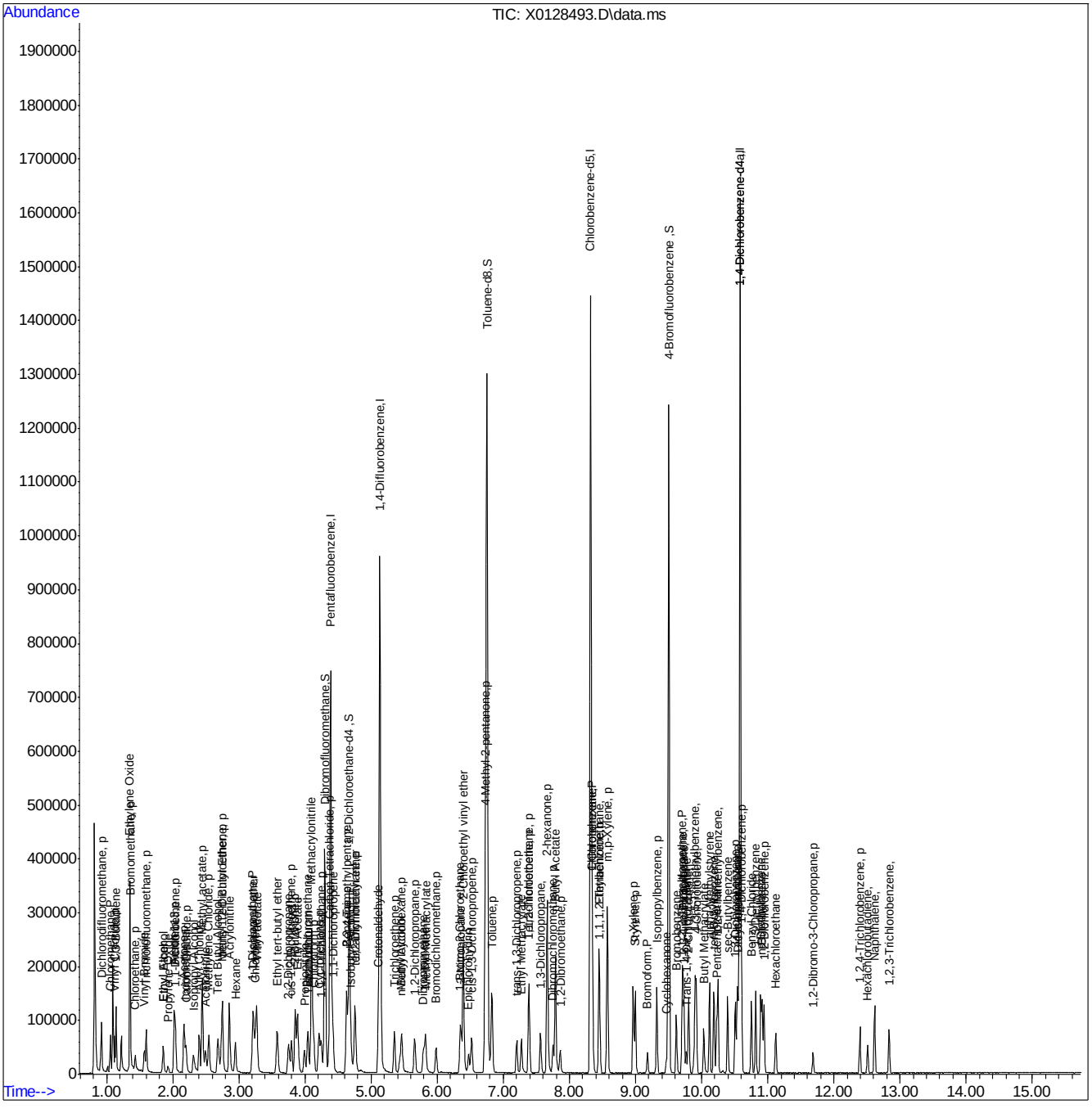
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	Styrene	8.999	104	62300	5.18	ug/L		98
90)	Bromoform	9.179	173	14929	4.70	ug/L		98
92)	Isopropylbenzene	9.321	105	86037	4.96	ug/L		100
93)	Cyclohexanone	9.467	55	11519	23.27	ug/L		95
95)	Bromobenzene	9.617	156	24649	4.92	ug/L		100
96)	1,1,2,2-Tetrachloroethane	9.704	83	32497	4.75	ug/L		94
97)	Trans-1,4-Dichloro-2-B...	9.767	53	8146	4.87	ug/L	#	71
98)	1,2,3-Trichloropropane	9.734	110	12082	4.88	ug/L		97
99)	n-Propylbenzene	9.715	91	100996	4.93	ug/L		99
100)	2-Chlorotoluene	9.805	91	65263	4.92	ug/L		99
101)	4-Chlorotoluene	9.917	91	75040	4.88	ug/L		97
102)	1,3,5-Trimethylbenzene	9.902	105	71191	4.96	ug/L		98
103)	Butyl Methacrylate	10.033	69	21476	6.80	ug/L		98
104)	alpha-Methylstyrene	10.120	118	39826	5.15	ug/L		86
105)	Pentachloroethane	10.225	167	11888	4.96	ug/L		95
106)	sec-Butylbenzene	10.393	105	80697	5.13	ug/L		100
107)	1,3-Dichlorobenzene	10.509	146	42805	4.70	ug/L		97
108)	4-Isopropyltoluene	10.539	119	68803	5.15	ug/L		99
109)	1,4-Dichlorobenzene	10.603	146	45217	4.68	ug/L		98
110)	tert-Butylbenzene	10.187	91	40436	4.99	ug/L		94
111)	Dicyclopentadiene	10.554	66	84961	4.04	ug/L		98
112)	n-Butylbenzene	10.914	91	71697	5.14	ug/L		98
113)	1,2-Dichlorobenzene	10.944	146	41618	4.79	ug/L		96
114)	1,2,4-Trimethylbenzene	10.247	105	72437	4.97	ug/L		99
115)	Benzyl Chloride	10.753	91	72446	4.89	ug/L		94
116)	p-Diethylbenzene	10.892	119	38577	5.03	ug/L		95
117)	Hexachloroethane	11.121	119	10069	4.70	ug/L		91
118)	1,2-Dibromo-3-Chloropr...	11.683	75	6972	4.80	ug/L		95
119)	1,2,4-Trichlorobenzene	12.395	180	19916	4.79	ug/L		97
120)	1,3-Diethylbenzene	10.817	119	38997	4.93	ug/L		99
121)	Hexachlorobutadiene	12.511	225	7296	5.23	ug/L		97
122)	Naphthalene	12.616	128	78746	4.89	ug/L		99
123)	1,2,3-Trichlorobenzene	12.834	180	18538	4.80	ug/L		95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128493.D
Acq On : 8 May 2019 2:17 pm
Operator : firatt
Sample : ic4007-5
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 09 07:11:28 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:01 2019
Response via : Initial Calibration



VX4007C.m Thu May 09 11:17:49 2019 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128494.D
Acq On : 8 May 2019 2:42 pm
Operator : firatt
Sample : ic4007-20
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 07:11:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:33 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	441719	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	744011	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	722672	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	334611	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	334611	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	234655	50.03	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.06%			
50) 1,2-Dichloroethane-d4	4.669	65	209705	48.19	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 96.38%			
72) Toluene-d8	6.753	98	818775	50.68	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 101.36%			
94) 4-Bromofluorobenzene	9.501	95	350911	50.29	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 100.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	131427	17.18	ug/L	100
3) Chloromethane	1.055	50	141413	16.63	ug/L	100
4) Vinyl Chloride	1.123	62	118206	16.64	ug/L	99
5) 1,3-Butadiene	1.145	54	75705	16.76	ug/L	98
6) Ethylene Oxide	1.352	44	877946	640.66	ug/L	99
7) Bromomethane	1.355	94	37076	14.35	ug/L	98
8) Chloroethane	1.430	64	47567	15.82	ug/L	98
9) Vinyl Bromide	1.569	106	67282	18.26	ug/L	100
10) Trichlorofluoromethane	1.599	101	153584	17.79	ug/L	98
11) Ethyl Alcohol	1.858	45	97334	171.79	ug/L	99
12) Ethyl Ether	1.858	59	67064	18.14	ug/L	98
13) Propylene Oxide	1.929	43	23166	17.39	ug/L	96
14) Acrolein	2.026	56	149373	89.21	ug/L	100
15) 1,1-Dichloroethene	2.041	61	108277	17.95	ug/L	99
16) Freon 113	2.023	101	68740	18.31	ug/L	97
17) Acetone	2.169	43	329351	74.07	ug/L	99
18) Isopropyl Alcohol	2.315	45	194935	161.18	ug/L	99
19) Iodomethane	2.184	142	89764	23.79	ug/L	98
20) Methyl acetate	2.446	43	702388	87.43	ug/L	99
21) Carbon Disulfide	2.206	76	159346	18.20	ug/L	98
22) Allyl Chloride	2.401	76	42173	19.48	ug/L #	84
23) Acetonitrile	2.491	40	77621	78.36	ug/L	95
24) Methylene Chloride	2.544	49	126203	13.71	ug/L	96
25) Tert Butyl Alcohol	2.682	59	314530	196.72	ug/L	99
26) trans-1,2-Dichloroethene	2.754	61	111297	17.97	ug/L	97
27) Acrylonitrile	2.855	53	318198	89.12	ug/L	98
28) Hexane	2.949	57	79467	18.26	ug/L	99
29) Methyl Tert Butyl Ether	2.742	73	220226	18.22	ug/L	56
30) 1,1-Dichloroethane	3.207	63	138041	18.61	ug/L	98
31) Vinyl acetate	3.271	43	582595	53.17	ug/L	99
32) Di-isopropyl ether	3.218	45	319011	18.37	ug/L	98
33) Chloroprene	3.252	53	133084	18.17	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128494.D
Acq On : 8 May 2019 2:42 pm
Operator : firatt
Sample : ic4007-20
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 07:11:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:33 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	245421	18.36	ug/L	97
35) Ethyl Acetate	3.886	43	471005	43.21	ug/L	99
36) 2,2-Dichloropropane	3.751	77	105412	18.52	ug/L	97
37) cis-1,2-Dichloroethene	3.796	61	117745	17.87	ug/L	98
38) 2-Butanone	3.852	43	532096	89.18	ug/L	100
39) Propionitrile	3.991	54	147472	89.07	ug/L	97
40) Methacrylonitrile	4.099	41	505269	89.03	ug/L	99
41) Bromochloromethane	4.043	128	48101	18.91	ug/L	97
42) Chloroform	4.133	83	149298	17.31	ug/L	98
43) Tetrahydrofuran	4.047	42	68098	14.20	ug/L	95
44) 1,1,1-Trichloroethane	4.249	97	130776	18.50	ug/L	98
46) Cyclohexane	4.216	56	120811	17.90	ug/L	99
47) 1,1-Dichloropropene	4.422	39	76802	15.66	ug/L	94
49) Carbon Tetrachloride	4.369	119	118270	14.83	ug/L	99
51) Isobutyl Alcohol	4.692	43	112544	203.81	ug/L	99
52) Benzene	4.632	78	296987	17.32	ug/L	99
53) 1,2-Dichloroethane	4.752	62	120227	17.58	ug/L	98
54) 2,2,4-Trimethylpentane	4.635	57	163615	18.39	ug/L	98
55) tert-amyl methyl ether	4.759	73	208063	18.30	ug/L	99
56) Crotonaldehyde	5.108	41	126757	80.87	ug/L	99
57) n-Butyl Alcohol	5.430	56	100230	209.86	ug/L	95
58) Trichloroethene	5.351	95	87165	17.81	ug/L	97
59) Methylcyclohexane	5.464	83	91908	18.69	ug/L	99
60) Methyl Methacrylate	5.824	41	129065	19.55	ug/L	100
61) 1,2-Dichloropropane	5.659	63	78958	18.54	ug/L	96
62) Dibromomethane	5.790	93	60926	18.49	ug/L	98
63) 1,4-Dioxane	5.816	88	55917	370.94	ug/L	98
64) Bromodichloromethane	5.985	83	103980	17.31	ug/L	98
65) 2-Nitropropane	6.356	41	203860	106.02	ug/L	97
66) 2-Chloroethyl vinyl ether	6.394	63	351939	97.25	ug/L	100
67) 1-Bromo-2-Chloroethane	6.345	63	114649	18.07	ug/L	100
68) Epichlorohydrin	6.476	57	102853	93.48	ug/L	100
69) 4-Methyl-2-pentanone	6.727	43	1013712	89.89	ug/L	100
70) cis-1,3-Dichloropropene	6.521	75	132073	19.93	ug/L	99
73) Toluene	6.828	91	352718	14.85	ug/L	97
74) Ethyl Methacrylate	7.274	69	117292	21.33	ug/L	98
75) trans-1,3-Dichloropropene	7.203	75	109359	20.29	ug/L	98
76) 1,1,2-Trichloroethane	7.387	83	67178	18.18	ug/L	97
77) Tetrachloroethene	7.391	166	89438	18.55	ug/L	97
78) 2-hexanone	7.664	43	836043	96.42	ug/L	98
79) 1,3-Dichloropropane	7.563	76	132820	18.30	ug/L	94
80) Dibromochloromethane	7.754	129	94331	18.00	ug/L	99
81) n-Butyl Acetate	7.788	43	626997	50.25	ug/L	99
82) 1,2-Dibromoethane	7.859	107	94767	18.48	ug/L	98
83) 1-Chlorohexane	8.347	91	99319	16.32	ug/L	97
84) Chlorobenzene	8.347	112	244783	18.49	ug/L	98
85) 1,1,1,2-Tetrachloroethane	8.455	131	88519	19.27	ug/L	97
86) Ethylbenzene	8.448	91	381177	18.16	ug/L	99
87) m,p-Xylene	8.575	91	595921	37.43	ug/L	100
88) o-Xylene	8.965	91	303753	18.84	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128494.D
Acq On : 8 May 2019 2:42 pm
Operator : firatt
Sample : ic4007-20
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 07:11:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:33 2019
Response via : Initial Calibration

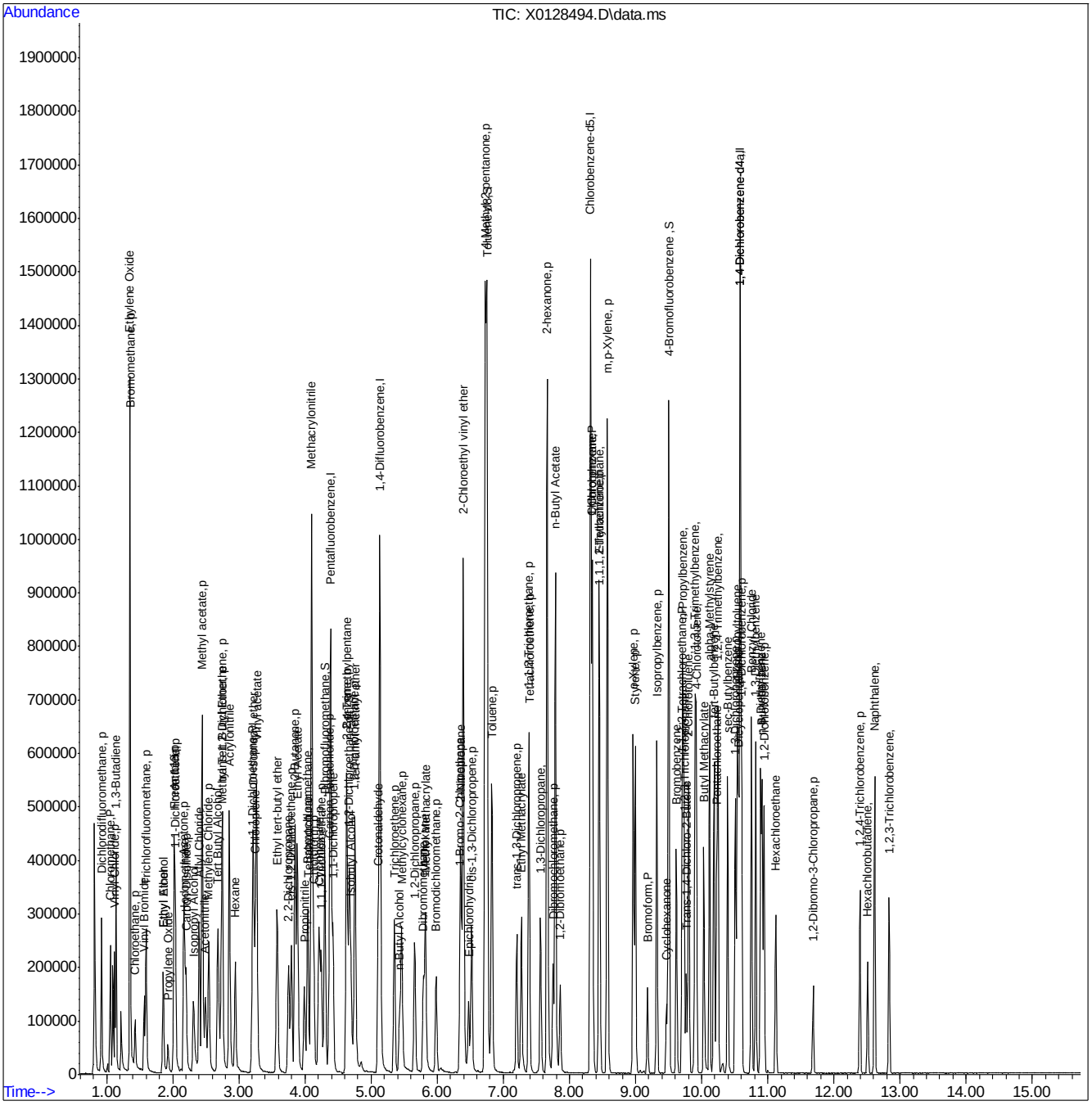
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
89)	Styrene	8.999	104	251264	20.04 ug/L	99
90)	Bromoform	9.182	173	60220	18.53 ug/L	98
92)	Isopropylbenzene	9.321	105	341227	19.12 ug/L	99
93)	Cyclohexanone	9.467	55	48770	96.97 ug/L	99
95)	Bromobenzene	9.617	156	96339	18.71 ug/L	97
96)	1,1,2,2-Tetrachloroethane	9.704	83	132319	18.95 ug/L	98
97)	Trans-1,4-Dichloro-2-B...	9.767	53	33641	19.61 ug/L	87
98)	1,2,3-Trichloropropane	9.737	110	47780	18.81 ug/L	96
99)	n-Propylbenzene	9.719	91	398942	18.94 ug/L	99
100)	2-Chlorotoluene	9.805	91	255174	18.74 ug/L	99
101)	4-Chlorotoluene	9.921	91	295766	18.75 ug/L	99
102)	1,3,5-Trimethylbenzene	9.902	105	286617	19.42 ug/L	98
103)	Butyl Methacrylate	10.033	69	104975	30.08 ug/L	99
104)	alpha-Methylstyrene	10.120	118	167194	20.85 ug/L	98
105)	Pentachloroethane	10.228	167	49950	20.25 ug/L	97
106)	sec-Butylbenzene	10.393	105	311952	19.15 ug/L	100
107)	1,3-Dichlorobenzene	10.510	146	170126	18.36 ug/L	99
108)	4-Isopropyltoluene	10.540	119	273155	19.72 ug/L	100
109)	1,4-Dichlorobenzene	10.603	146	177828	18.10 ug/L	97
110)	tert-Butylbenzene	10.187	91	152942	18.33 ug/L	99
111)	Dicyclopentadiene	10.558	66	314213	15.07 ug/L	99
112)	n-Butylbenzene	10.914	91	277952	19.25 ug/L	100
113)	1,2-Dichlorobenzene	10.944	146	164769	18.55 ug/L	98
114)	1,2,4-Trimethylbenzene	10.247	105	291792	19.45 ug/L	99
115)	Benzyl Chloride	10.753	91	356366	23.45 ug/L	98
116)	p-Diethylbenzene	10.892	119	157412	19.91 ug/L	98
117)	Hexachloroethane	11.121	119	43065	19.75 ug/L	97
118)	1,2-Dibromo-3-Chloropr...	11.683	75	29597	19.95 ug/L	98
119)	1,2,4-Trichlorobenzene	12.395	180	82028	19.30 ug/L	99
120)	1,3-Diethylbenzene	10.817	119	159432	19.61 ug/L	97
121)	Hexachlorobutadiene	12.511	225	27976	19.29 ug/L	98
122)	Naphthalene	12.616	128	338686	20.51 ug/L	99
123)	1,2,3-Trichlorobenzene	12.834	180	74981	19.00 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128494.D
Acq On : 8 May 2019 2:42 pm
Operator : firatt
Sample : ic4007-20
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 07:11:55 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:11:33 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128495.D
Acq On : 8 May 2019 3:08 pm
Operator : firatt
Sample : icc4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 07:08:27 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	433777	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	728925	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	708045	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	335492	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	335492	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	229250	50.00	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.00%			
50) 1,2-Dichloroethane-d4	4.669	65	208010	50.00	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 100.00%			
72) Toluene-d8	6.753	98	791930	50.00	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 100.00%			
94) 4-Bromofluorobenzene	9.505	95	350586	50.00	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 100.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	226567	40.00	ug/L	100
3) Chloromethane	1.055	50	275645	40.00	ug/L	100
4) Vinyl Chloride	1.123	62	224095	40.00	ug/L	100
5) 1,3-Butadiene	1.145	54	141077	40.00	ug/L	100
6) Ethylene Oxide	1.352	44	1654258	2000.00	ug/L	100
7) Bromomethane	1.355	94	71731	40.00	ug/L	100
8) Chloroethane	1.430	64	82400	40.00	ug/L	100
9) Vinyl Bromide	1.565	106	132411	40.00	ug/L	100
10) Trichlorofluoromethane	1.595	101	279648	40.00	ug/L	100
11) Ethyl Alcohol	1.858	45	195444	400.00	ug/L	100
12) Ethyl Ether	1.858	59	134326	40.00	ug/L	100
13) Propylene Oxide	1.933	43	47152	40.00	ug/L	100
14) Acrolein	2.026	56	303519	200.00	ug/L	100
15) 1,1-Dichloroethene	2.041	61	213809	40.00	ug/L	100
16) Freon 113	2.023	101	123399	40.00	ug/L	100
17) Acetone	2.169	43	654579	200.00	ug/L	100
18) Isopropyl Alcohol	2.319	45	391949	400.00	ug/L	100
19) Iodomethane	2.184	142	197287	40.00	ug/L	100
20) Methyl acetate	2.446	43	1420084	200.00	ug/L	100
21) Carbon Disulfide	2.206	76	329549	40.00	ug/L	100
22) Allyl Chloride	2.401	76	87140	40.00	ug/L	100
23) Acetonitrile	2.495	40	155624	200.00	ug/L	100
24) Methylene Chloride	2.547	49	248167	40.00	ug/L	100
25) Tert Butyl Alcohol	2.686	59	641026	399.89	ug/L	100
26) trans-1,2-Dichloroethene	2.754	61	218939	40.00	ug/L	100
27) Acrylonitrile	2.858	53	642489	200.00	ug/L	100
28) Hexane	2.948	57	139501	40.00	ug/L	100
29) Methyl Tert Butyl Ether	2.746	73	454269	40.00	ug/L	100
30) 1,1-Dichloroethane	3.207	63	275689	40.00	ug/L	100
31) Vinyl acetate	3.271	43	1242910	100.00	ug/L	100
32) Di-isopropyl ether	3.222	45	646436	40.00	ug/L	100
33) Chloroprene	3.252	53	265104	40.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128495.D
Acq On : 8 May 2019 3:08 pm
Operator : firatt
Sample : icc4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 07:08:27 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:21 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.582	59	500708	40.00	ug/L	100
35) Ethyl Acetate	3.886	43	942707	100.00	ug/L	100
36) 2,2-Dichloropropane	3.754	77	210707	40.00	ug/L	100
37) cis-1,2-Dichloroethene	3.796	61	232694	40.00	ug/L	100
38) 2-Butanone	3.848	43	1072178	200.00	ug/L	100
39) Propionitrile	3.991	54	296560	200.00	ug/L	100
40) Methacrylonitrile	4.099	41	1003404	200.00	ug/L	100
41) Bromochloromethane	4.043	128	94365	40.00	ug/L	100
42) Chloroform	4.133	83	294218	40.00	ug/L	100
43) Tetrahydrofuran	4.043	42	138228	40.00	ug/L	100
44) 1,1,1-Trichloroethane	4.249	97	263063	40.00	ug/L	100
46) Cyclohexane	4.212	56	219655	40.00	ug/L	99
47) 1,1-Dichloropropene	4.425	39	147670	40.00	ug/L	100
49) Carbon Tetrachloride	4.373	119	233917	40.00	ug/L	100
51) Isobutyl Alcohol	4.695	43	243822	399.45	ug/L	100
52) Benzene	4.632	78	595469	40.00	ug/L	100
53) 1,2-Dichloroethane	4.752	62	242477	40.00	ug/L	100
54) 2,2,4-Trimethylpentane	4.635	57	285884	40.00	ug/L	100
55) tert-amyl methyl ether	4.759	73	438622	40.00	ug/L	100
56) Crotonaldehyde	5.108	41	249812	200.00	ug/L	100
57) n-Butyl Alcohol	5.430	56	203927	400.00	ug/L	100
58) Trichloroethene	5.351	95	177983	40.00	ug/L	100
59) Methylcyclohexane	5.464	83	167147	40.00	ug/L	100
60) Methyl Methacrylate	5.824	41	266156	40.00	ug/L	100
61) 1,2-Dichloropropane	5.659	63	160666	40.00	ug/L	100
62) Dibromomethane	5.790	93	122242	40.00	ug/L	100
63) 1,4-Dioxane	5.812	88	110512	800.00	ug/L	100
64) Bromodichloromethane	5.985	83	212743	40.00	ug/L	100
65) 2-Nitropropane	6.360	41	448407	200.00	ug/L	100
66) 2-Chloroethyl vinyl ether	6.397	63	723571	200.00	ug/L	100
67) 1-Bromo-2-Chloroethane	6.345	63	234265	40.00	ug/L	100
68) Epichlorohydrin	6.472	57	205796	200.00	ug/L	100
69) 4-Methyl-2-pentanone	6.727	43	1994973	200.00	ug/L	100
70) cis-1,3-Dichloropropene	6.521	75	270315	40.00	ug/L	100
73) Toluene	6.828	91	689334	40.00	ug/L	100
74) Ethyl Methacrylate	7.274	69	248781	40.00	ug/L	100
75) trans-1,3-Dichloropropene	7.203	75	230978	40.00	ug/L	100
76) 1,1,2-Trichloroethane	7.387	83	137191	40.00	ug/L	100
77) Tetrachloroethene	7.391	166	177320	40.00	ug/L	100
78) 2-hexanone	7.664	43	1655271	200.00	ug/L	100
79) 1,3-Dichloropropane	7.563	76	270324	40.00	ug/L	100
80) Dibromochloromethane	7.754	129	199968	40.00	ug/L	100
81) n-Butyl Acetate	7.788	43	1287558	100.00	ug/L	100
82) 1,2-Dibromoethane	7.859	107	195955	40.00	ug/L	100
83) 1-Chlorohexane	8.346	91	200265	40.00	ug/L	100
84) Chlorobenzene	8.346	112	485864	40.00	ug/L	100
85) 1,1,1,2-Tetrachloroethane	8.459	131	185833	40.00	ug/L	100
86) Ethylbenzene	8.448	91	766519	40.00	ug/L	100
87) m,p-Xylene	8.575	91	1186184	80.00	ug/L	100
88) o-Xylene	8.965	91	607599	40.00	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128495.D
Acq On : 8 May 2019 3:08 pm
Operator : firatt
Sample : icc4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 07:08:27 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:21 2019
Response via : Initial Calibration

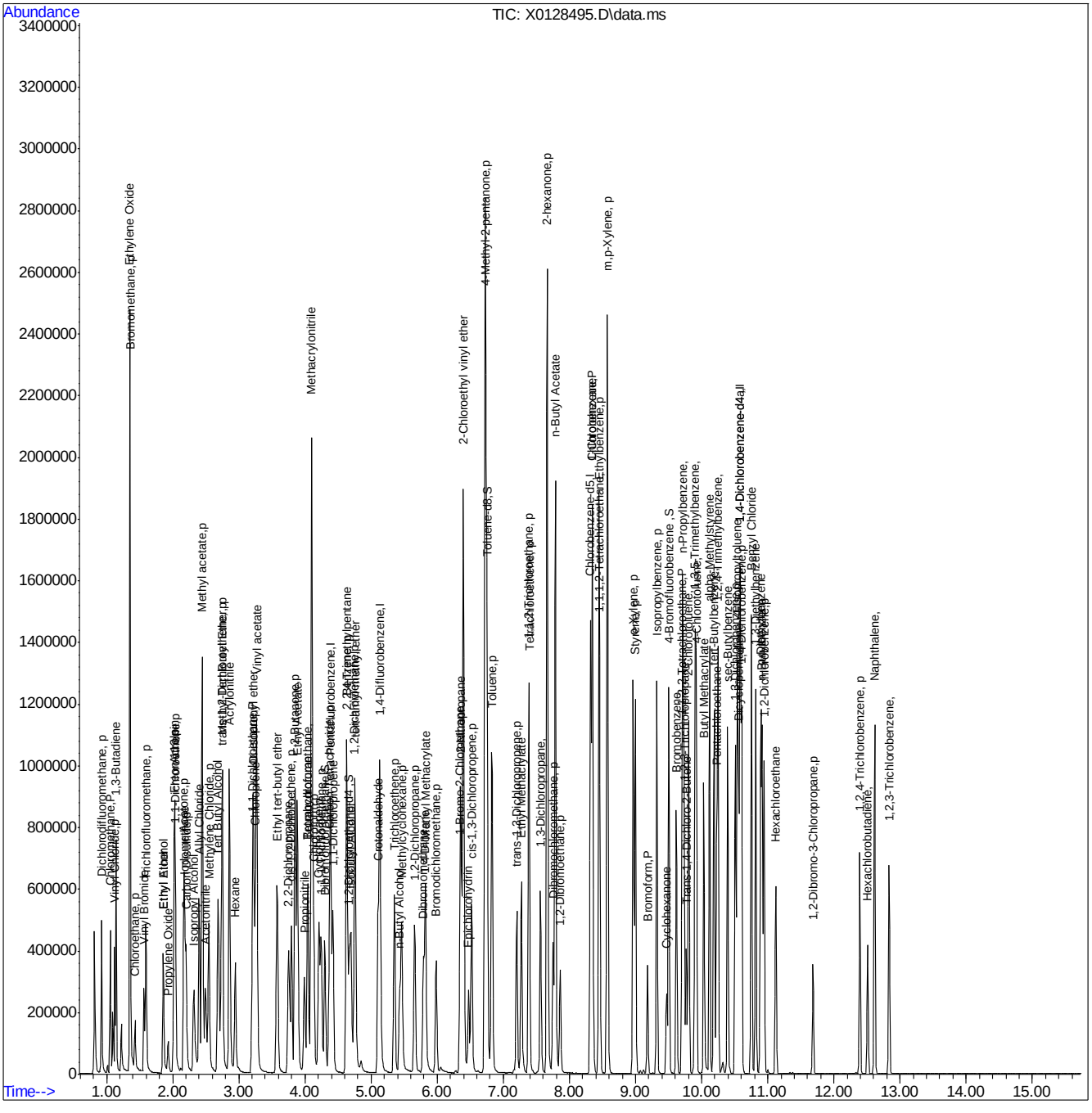
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Styrene	8.999	104	509318	40.00	ug/L	100
90)	Bromoform	9.182	173	132266	40.00	ug/L	100
92)	Isopropylbenzene	9.321	105	692333	40.00	ug/L	100
93)	Cyclohexanone	9.467	55	94149	200.00	ug/L	100
95)	Bromobenzene	9.621	156	196950	40.00	ug/L	100
96)	1,1,2,2-Tetrachloroethane	9.704	83	264917	40.00	ug/L	100
97)	Trans-1,4-Dichloro-2-B...	9.767	53	71080	40.00	ug/L	100
98)	1,2,3-Trichloropropane	9.737	110	94312	40.00	ug/L	100
99)	n-Propylbenzene	9.718	91	810504	40.00	ug/L	100
100)	2-Chlorotoluene	9.805	91	516493	40.00	ug/L	100
101)	4-Chlorotoluene	9.921	91	593970	40.00	ug/L	100
102)	1,3,5-Trimethylbenzene	9.902	105	582815	40.00	ug/L	100
103)	Butyl Methacrylate	10.033	69	233294	40.00	ug/L	100
104)	alpha-Methylstyrene	10.120	118	343237	40.00	ug/L	100
105)	Pentachloroethane	10.228	167	105722	40.00	ug/L	100
106)	sec-Butylbenzene	10.393	105	636587	40.00	ug/L	100
107)	1,3-Dichlorobenzene	10.509	146	346290	40.00	ug/L	100
108)	4-Isopropyltoluene	10.539	119	562421	40.00	ug/L	100
109)	1,4-Dichlorobenzene	10.603	146	362101	40.00	ug/L	100
110)	tert-Butylbenzene	10.187	91	308967	40.00	ug/L	100
111)	Dicyclopentadiene	10.558	66	613658	40.00	ug/L	100
112)	n-Butylbenzene	10.914	91	561795	40.00	ug/L	100
113)	1,2-Dichlorobenzene	10.944	146	334127	40.00	ug/L	100
114)	1,2,4-Trimethylbenzene	10.247	105	593690	40.00	ug/L	100
115)	Benzyl Chloride	10.753	91	788185	40.00	ug/L	100
116)	p-Diethylbenzene	10.892	119	320987	40.01	ug/L	100
117)	Hexachloroethane	11.120	119	92816	40.00	ug/L	100
118)	1,2-Dibromo-3-Chloropr...	11.683	75	61384	40.00	ug/L	100
119)	1,2,4-Trichlorobenzene	12.395	180	170766	40.00	ug/L	100
120)	1,3-Diethylbenzene	10.817	119	325443	40.00	ug/L	100
121)	Hexachlorobutadiene	12.511	225	56375	40.00	ug/L	100
122)	Naphthalene	12.616	128	706530	40.00	ug/L	100
123)	1,2,3-Trichlorobenzene	12.834	180	154730	40.00	ug/L	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128495.D
Acq On : 8 May 2019 3:08 pm
Operator : firatt
Sample : icc4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 09 07:08:27 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:08:21 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128496.D
Acq On : 8 May 2019 3:33 pm
Operator : firatt
Sample : ic4007-70
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 07:12:19 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	453065	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	760534	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	739258	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	345895	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	345895	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	240879	50.07	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 100.14%			
50) 1,2-Dichloroethane-d4	4.669	65	212719	48.11	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 96.22%			
72) Toluene-d8	6.753	98	814337	49.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 98.34%			
94) 4-Bromofluorobenzene	9.501	95	358898	49.71	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	413682	53.99	ug/L	100
3) Chloromethane	1.055	50	484589	57.17	ug/L	98
4) Vinyl Chloride	1.123	62	400527	56.55	ug/L	100
5) 1,3-Butadiene	1.145	54	249674	55.39	ug/L	100
6) Ethylene Oxide	1.352	44	2765018	2092.50	ug/L	99
7) Bromomethane	1.355	94	128451	50.87	ug/L	100
8) Chloroethane	1.427	64	98502	33.10	ug/L	91
9) Vinyl Bromide	1.562	106	240160	64.49	ug/L	98
10) Trichlorofluoromethane	1.591	101	514459	59.18	ug/L	97
11) Ethyl Alcohol	1.858	45	354125	624.03	ug/L	98
12) Ethyl Ether	1.858	59	247033	66.18	ug/L	93
13) Propylene Oxide	1.933	43	91781	68.68	ug/L	96
14) Acrolein	2.026	56	545892	323.68	ug/L	99
15) 1,1-Dichloroethene	2.038	61	394308	64.83	ug/L	99
16) Freon 113	2.019	101	228559	60.22	ug/L	99
17) Acetone	2.173	43	1152673	264.14	ug/L	98
18) Isopropyl Alcohol	2.326	45	737882	614.71	ug/L	97
19) Iodomethane	2.184	142	378760	94.88	ug/L	98
20) Methyl acetate	2.446	43	2539164	314.74	ug/L	100
21) Carbon Disulfide	2.203	76	617122	69.75	ug/L	99
22) Allyl Chloride	2.401	76	160568	72.63	ug/L	99
23) Acetonitrile	2.499	40	275913	281.71	ug/L	94
24) Methylene Chloride	2.544	49	436384	48.79	ug/L	99
25) Tert Butyl Alcohol	2.694	59	1207838	738.52	ug/L	95
26) trans-1,2-Dichloroethene	2.750	61	407197	65.20	ug/L	100
27) Acrylonitrile	2.859	53	1141997	317.59	ug/L	99
28) Hexane	2.945	57	249207	56.65	ug/L	98
29) Methyl Tert Butyl Ether	2.746	73	831416	68.06	ug/L	60
30) 1,1-Dichloroethane	3.203	63	503946	67.02	ug/L	98
31) Vinyl acetate	3.271	43	2292669	201.86	ug/L	99
32) Di-isopropyl ether	3.222	45	1168714	66.52	ug/L	99
33) Chloroprene	3.252	53	484897	65.55	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128496.D
Acq On : 8 May 2019 3:33 pm
Operator : firatt
Sample : ic4007-70
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 07:12:19 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	922152	68.19	ug/L	99
35) Ethyl Acetate	3.886	43	1529505	139.97	ug/L	99
36) 2,2-Dichloropropane	3.754	77	395514	68.59	ug/L	95
37) cis-1,2-Dichloroethene	3.796	61	428238	64.50	ug/L	98
38) 2-Butanone	3.852	43	2064821	343.60	ug/L	99
39) Propionitrile	3.994	54	526602	315.83	ug/L	99
40) Methacrylonitrile	4.103	41	1752837	306.72	ug/L	99
41) Bromochloromethane	4.043	128	171721	66.42	ug/L	98
42) Chloroform	4.133	83	525708	60.78	ug/L	100
43) Tetrahydrofuran	4.043	42	248903	53.18	ug/L	98
44) 1,1,1-Trichloroethane	4.249	97	486529	67.95	ug/L	99
46) Cyclohexane	4.212	56	397074	58.37	ug/L	97
47) 1,1-Dichloropropene	4.425	39	263881	54.44	ug/L	99
49) Carbon Tetrachloride	4.369	119	433678	55.59	ug/L	96
51) Isobutyl Alcohol	4.699	43	493237	871.05	ug/L	99
52) Benzene	4.632	78	1074098	62.69	ug/L	99
53) 1,2-Dichloroethane	4.752	62	429114	62.65	ug/L	99
54) 2,2,4-Trimethylpentane	4.632	57	489106	54.50	ug/L	100
55) tert-amyl methyl ether	4.759	73	808419	70.54	ug/L	97
56) Crotonaldehyde	5.108	41	456525	294.31	ug/L	98
57) n-Butyl Alcohol	5.434	56	393735	799.93	ug/L	96
58) Trichloroethene	5.351	95	326037	66.37	ug/L	98
59) Methylcyclohexane	5.464	83	307958	61.93	ug/L	98
60) Methyl Methacrylate	5.820	41	478155	71.11	ug/L	100
61) 1,2-Dichloropropane	5.659	63	291799	67.84	ug/L	98
62) Dibromomethane	5.790	93	222682	66.96	ug/L	99
63) 1,4-Dioxane	5.816	88	201470	1323.48	ug/L	98
64) Bromodichloromethane	5.985	83	389074	64.81	ug/L	99
65) 2-Nitropropane	6.360	41	846752	426.53	ug/L	99
66) 2-Chloroethyl vinyl ether	6.397	63	1277131	346.82	ug/L	99
67) 1-Bromo-2-Chloroethane	6.345	63	419766	65.77	ug/L	100
68) Epichlorohydrin	6.476	57	374576	336.71	ug/L	99
69) 4-Methyl-2-pentanone	6.727	43	3458614	305.18	ug/L	98
70) cis-1,3-Dichloropropene	6.521	75	497902	73.55	ug/L	98
73) Toluene	6.828	91	1242970	53.45	ug/L	100
74) Ethyl Methacrylate	7.274	69	454286	79.86	ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	431146	78.02	ug/L	98
76) 1,1,2-Trichloroethane	7.387	83	245839	66.03	ug/L	96
77) Tetrachloroethene	7.391	166	327671	67.24	ug/L	99
78) 2-hexanone	7.664	43	2883869	327.09	ug/L	99
79) 1,3-Dichloropropane	7.563	76	486297	66.45	ug/L	99
80) Dibromochloromethane	7.754	129	371644	70.48	ug/L	99
81) n-Butyl Acetate	7.788	43	2282159	178.64	ug/L	99
82) 1,2-Dibromoethane	7.863	107	355233	68.60	ug/L	99
83) 1-Chlorohexane	8.347	91	371835	61.62	ug/L	98
84) Chlorobenzene	8.347	112	883689	66.07	ug/L	98
85) 1,1,1,2-Tetrachloroethane	8.455	131	343413	73.54	ug/L	98
86) Ethylbenzene	8.448	91	1387812	65.63	ug/L	100
87) m,p-Xylene	8.575	91	2130477	132.24	ug/L	99
88) o-Xylene	8.965	91	1108857	67.88	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128496.D
Acq On : 8 May 2019 3:33 pm
Operator : firatt
Sample : ic4007-70
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 07:12:19 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:00 2019
Response via : Initial Calibration

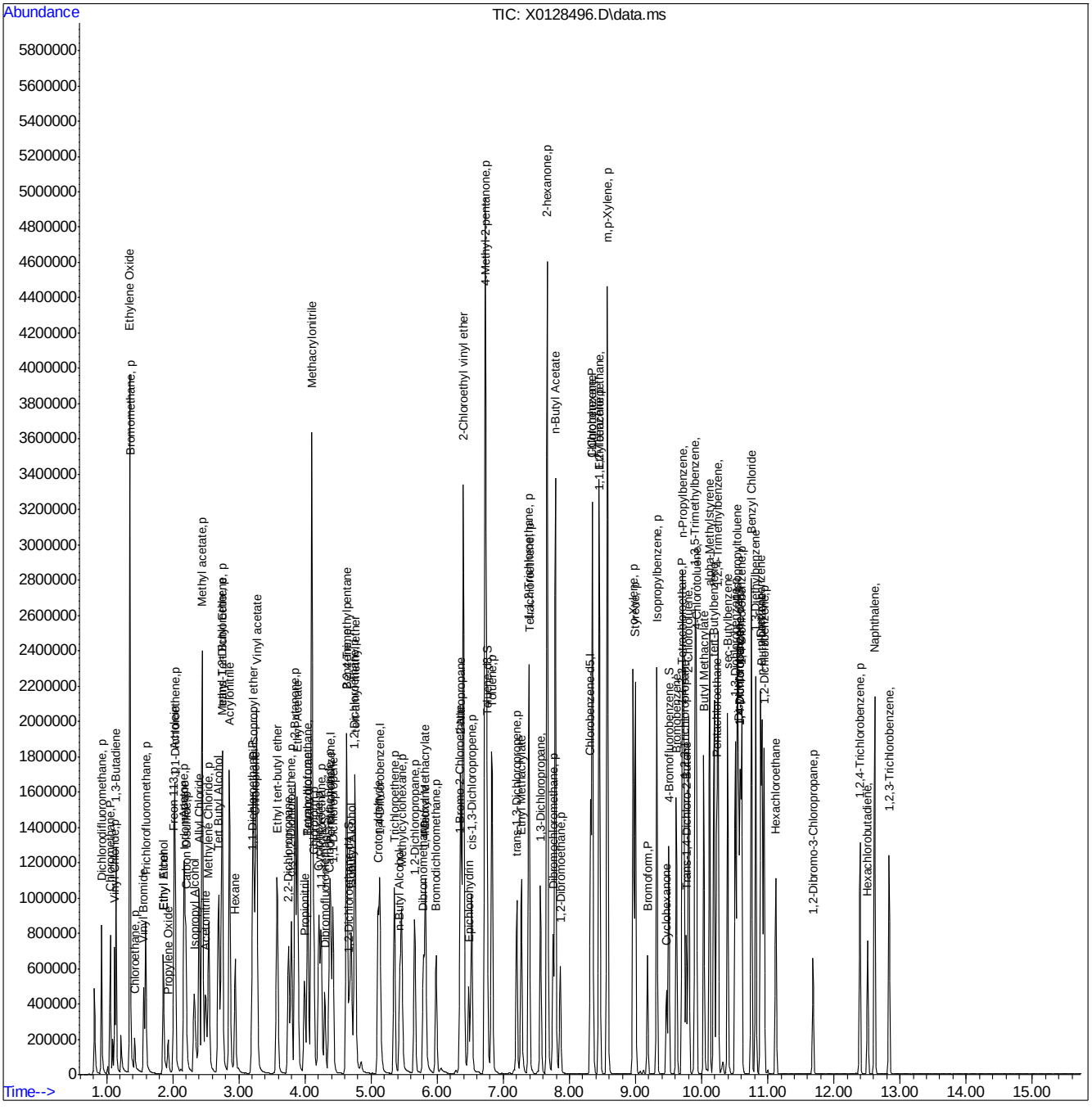
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Styrene	8.999	104	925804	72.16	ug/L	99
90)	Bromoform	9.182	173	254853	77.60	ug/L	99
92)	Isopropylbenzene	9.321	105	1272244	69.48	ug/L	99
93)	Cyclohexanone	9.467	55	173781	335.95	ug/L	98
95)	Bromobenzene	9.617	156	364775	69.28	ug/L	98
96)	1,1,2,2-Tetrachloroethane	9.704	83	475914	66.51	ug/L	98
97)	Trans-1,4-Dichloro-2-B...	9.767	53	135114	76.43	ug/L	97
98)	1,2,3-Trichloropropane	9.737	110	171176	65.84	ug/L	98
99)	n-Propylbenzene	9.719	91	1475741	68.39	ug/L	99
100)	2-Chlorotoluene	9.805	91	932420	66.96	ug/L	99
101)	4-Chlorotoluene	9.921	91	1062671	65.86	ug/L	99
102)	1,3,5-Trimethylbenzene	9.902	105	1061246	69.89	ug/L	100
103)	Butyl Methacrylate	10.033	69	443111	113.31	ug/L	98
104)	alpha-Methylstyrene	10.120	118	625482	74.93	ug/L	96
105)	Pentachloroethane	10.228	167	197418	77.26	ug/L	100
106)	sec-Butylbenzene	10.393	105	1159334	69.33	ug/L	98
107)	1,3-Dichlorobenzene	10.510	146	631032	66.80	ug/L	99
108)	4-Isopropyltoluene	10.540	119	1037732	72.64	ug/L	99
109)	1,4-Dichlorobenzene	10.603	146	653441	65.38	ug/L	99
110)	tert-Butylbenzene	10.187	91	558335	65.65	ug/L	98
111)	Dicyclopentadiene	10.558	66	1089293	52.70	ug/L	99
112)	n-Butylbenzene	10.914	91	1005674	67.79	ug/L	99
113)	1,2-Dichlorobenzene	10.944	146	608379	67.08	ug/L	99
114)	1,2,4-Trimethylbenzene	10.247	105	1075262	69.66	ug/L	98
115)	Benzyl Chloride	10.753	91	1513462	93.64	ug/L	100
116)	p-Diethylbenzene	10.892	119	588781	72.08	ug/L	98
117)	Hexachloroethane	11.121	119	177445	78.88	ug/L	97
118)	1,2-Dibromo-3-Chloropr...	11.683	75	115387	75.28	ug/L	96
119)	1,2,4-Trichlorobenzene	12.395	180	315370	72.19	ug/L	97
120)	1,3-Diethylbenzene	10.817	119	597798	71.37	ug/L	98
121)	Hexachlorobutadiene	12.511	225	107165	71.89	ug/L	96
122)	Naphthalene	12.616	128	1310911	76.47	ug/L	100
123)	1,2,3-Trichlorobenzene	12.834	180	287364	71.04	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128496.D
Acq On : 8 May 2019 3:33 pm
Operator : firatt
Sample : ic4007-70
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 09 07:12:19 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:00 2019
Response via : Initial Calibration



VX4007C.m Thu May 09 11:17:58 2019 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128497.D
Acq On : 8 May 2019 3:59 pm
Operator : firatt
Sample : ic4007-100
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 09 07:12:48 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:28 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	460976	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	766249	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	749784	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	355254	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	355254	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	244600	49.96	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 99.92%			
50) 1,2-Dichloroethane-d4	4.673	65	217244	49.03	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 98.06%			
72) Toluene-d8	6.753	98	809863	48.33	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 96.66%			
94) 4-Bromofluorobenzene	9.501	95	364327	49.17	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 98.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	658592	87.32	ug/L	100
3) Chloromethane	1.055	50	682716	81.29	ug/L	99
4) Vinyl Chloride	1.123	62	577319	82.38	ug/L	100
5) 1,3-Butadiene	1.145	54	366444	82.35	ug/L	100
6) Ethylene Oxide	1.348	44	3690799	2912.50	ug/L	100
7) Bromomethane	1.355	94	179757	72.81	ug/L	99
8) Chloroethane	1.427	64	129774	46.35	ug/L	92
9) Vinyl Bromide	1.558	106	327783	87.49	ug/L	99
10) Trichlorofluoromethane	1.592	101	758824	87.73	ug/L	99
11) Ethyl Alcohol	1.861	45	511784	900.34	ug/L	95
12) Ethyl Ether	1.861	59	351951	93.40	ug/L	91
13) Propylene Oxide	1.933	43	142536	105.11	ug/L	97
14) Acrolein	2.030	56	793047	467.18	ug/L	100
15) 1,1-Dichloroethene	2.038	61	561432	91.69	ug/L	98
16) Freon 113	2.015	101	361516	95.52	ug/L	98
17) Acetone	2.176	43	1650811	385.31	ug/L	98
18) Isopropyl Alcohol	2.338	45	1079602	899.62	ug/L	97
19) Iodomethane	2.184	142	563053	131.93	ug/L	97
20) Methyl acetate	2.446	43	3613232	446.62	ug/L	99
21) Carbon Disulfide	2.203	76	893681	99.33	ug/L	100
22) Allyl Chloride	2.401	76	234925	103.88	ug/L	99
23) Acetonitrile	2.502	40	393259	405.95	ug/L	96
24) Methylene Chloride	2.547	49	621993	71.44	ug/L	98
25) Tert Butyl Alcohol	2.701	59	1755419	1046.69	ug/L	94
26) trans-1,2-Dichloroethene	2.750	61	575534	91.47	ug/L	98
27) Acrylonitrile	2.862	53	1629550	451.37	ug/L	99
28) Hexane	2.945	57	397925	91.40	ug/L	99
29) Methyl Tert Butyl Ether	2.746	73	1215928	98.22	ug/L	58
30) 1,1-Dichloroethane	3.203	63	719477	94.62	ug/L	99
31) Vinyl acetate	3.271	43	3319800	281.12	ug/L	100
32) Di-isopropyl ether	3.222	45	1676286	94.44	ug/L	99
33) Chloroprene	3.252	53	691371	92.70	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128497.D
Acq On : 8 May 2019 3:59 pm
Operator : firatt
Sample : ic4007-100
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 09 07:12:48 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:28 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.582	59	1336765	97.52	ug/L	99
35) Ethyl Acetate	3.886	43	2260325	209.28	ug/L	100
36) 2,2-Dichloropropane	3.751	77	578953	98.96	ug/L	91
37) cis-1,2-Dichloroethene	3.796	61	610520	91.40	ug/L	98
38) 2-Butanone	3.852	43	2863277	469.52	ug/L	99
39) Propionitrile	3.994	54	756635	452.31	ug/L	99
40) Methacrylonitrile	4.103	41	2464294	431.44	ug/L	99
41) Bromochloromethane	4.043	128	247958	94.95	ug/L	98
42) Chloroform	4.133	83	746605	86.46	ug/L	100
43) Tetrahydrofuran	4.043	42	359204	78.11	ug/L	98
44) 1,1,1-Trichloroethane	4.249	97	701643	96.72	ug/L	98
46) Cyclohexane	4.212	56	609942	90.27	ug/L	98
47) 1,1-Dichloropropene	4.422	39	375931	78.73	ug/L	99
49) Carbon Tetrachloride	4.369	119	643953	84.41	ug/L	96
51) Isobutyl Alcohol	4.703	43	738183	1250.25	ug/L	98
52) Benzene	4.632	78	1523525	89.59	ug/L	99
53) 1,2-Dichloroethane	4.755	62	615465	90.54	ug/L	98
54) 2,2,4-Trimethylpentane	4.632	57	768751	87.80	ug/L	100
55) tert-amyl methyl ether	4.759	73	1176308	101.77	ug/L	95
56) Crotonaldehyde	5.108	41	659734	431.96	ug/L	98
57) n-Butyl Alcohol	5.441	56	595675	1177.16	ug/L	92
58) Trichloroethene	5.351	95	468161	95.29	ug/L	96
59) Methylcyclohexane	5.464	83	485713	98.58	ug/L	98
60) Methyl Methacrylate	5.824	41	686544	101.11	ug/L	99
61) 1,2-Dichloropropane	5.659	63	418958	97.11	ug/L	98
62) Dibromomethane	5.790	93	323149	97.05	ug/L	99
63) 1,4-Dioxane	5.816	88	289716	1903.85	ug/L	97
64) Bromodichloromethane	5.985	83	566211	94.62	ug/L	98
65) 2-Nitropropane	6.360	41	1254838	608.38	ug/L	99
66) 2-Chloroethyl vinyl ether	6.397	63	1781248	480.74	ug/L	99
67) 1-Bromo-2-Chloroethane	6.345	63	599235	94.01	ug/L	98
68) Epichlorohydrin	6.480	57	540441	484.82	ug/L	99
69) 4-Methyl-2-pentanone	6.731	43	4822886	430.26	ug/L	97
70) cis-1,3-Dichloropropene	6.525	75	721471	105.02	ug/L	96
73) Toluene	6.828	91	1756958	77.10	ug/L	100
74) Ethyl Methacrylate	7.274	69	663164	112.68	ug/L	97
75) trans-1,3-Dichloropropene	7.203	75	636517	111.74	ug/L	99
76) 1,1,2-Trichloroethane	7.387	83	353397	94.36	ug/L	97
77) Tetrachloroethene	7.391	166	475250	96.69	ug/L	99
78) 2-hexanone	7.664	43	4003115	451.89	ug/L	99
79) 1,3-Dichloropropane	7.563	76	703104	95.42	ug/L	98
80) Dibromochloromethane	7.754	129	551527	103.03	ug/L	99
81) n-Butyl Acetate	7.788	43	3218932	247.70	ug/L	99
82) 1,2-Dibromoethane	7.863	107	510590	97.49	ug/L	99
83) 1-Chlorohexane	8.347	91	537350	89.32	ug/L	97
84) Chlorobenzene	8.350	112	1275890	94.81	ug/L	97
85) 1,1,1,2-Tetrachloroethane	8.455	131	503870	105.62	ug/L	99
86) Ethylbenzene	8.448	91	1972346	92.79	ug/L	99
87) m,p-Xylene	8.575	91	3030317	186.94	ug/L	99
88) o-Xylene	8.965	91	1580935	95.84	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128497.D
Acq On : 8 May 2019 3:59 pm
Operator : firatt
Sample : ic4007-100
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 09 07:12:48 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:28 2019
Response via : Initial Calibration

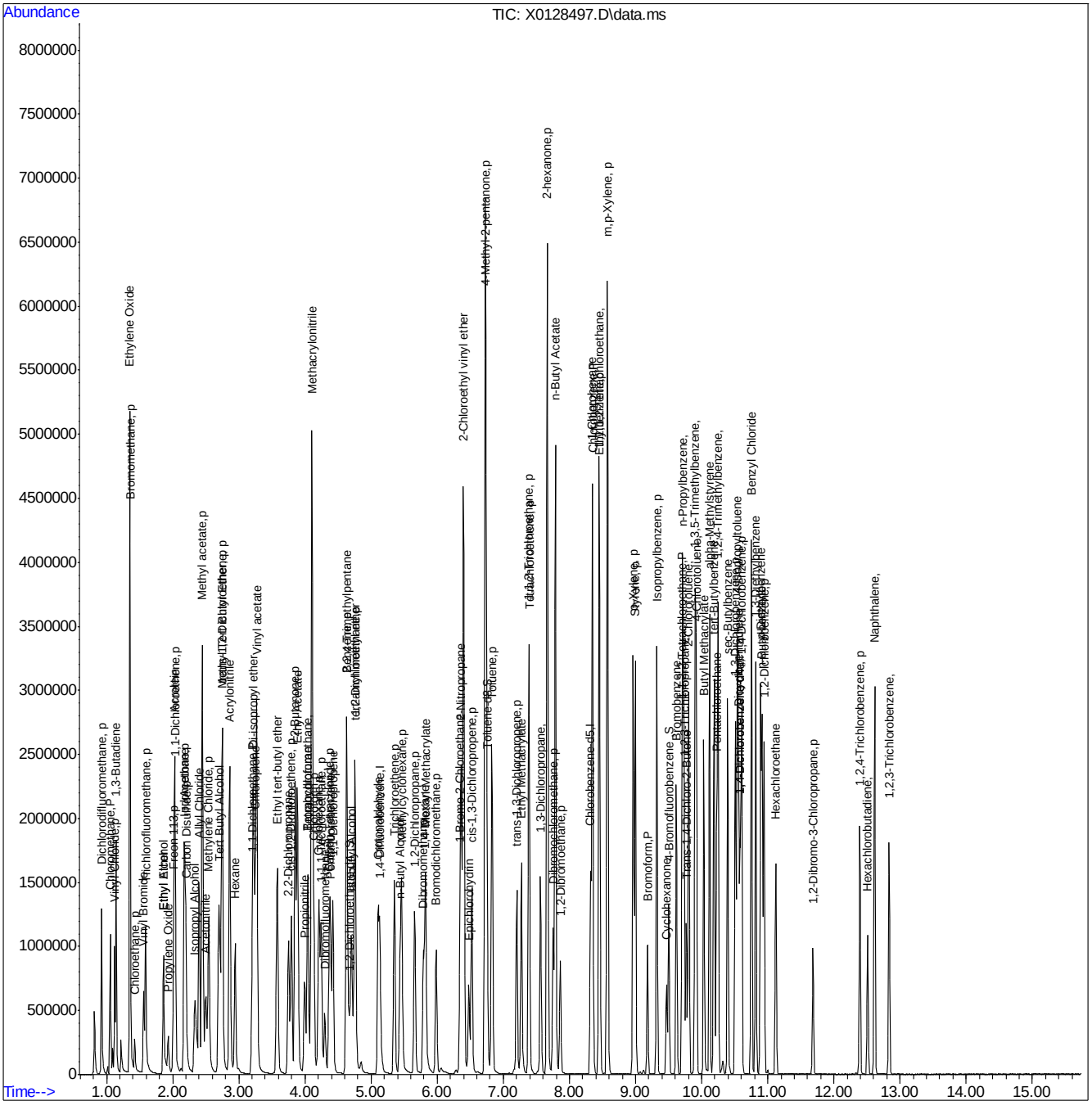
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Styrene	8.999	104	1327657	101.58	ug/L	99
90)	Bromoform	9.183	173	383051	113.24	ug/L	99
92)	Isopropylbenzene	9.321	105	1834784	97.67	ug/L	99
93)	Cyclohexanone	9.467	55	247466	468.48	ug/L	99
95)	Bromobenzene	9.617	156	531213	98.38	ug/L	99
96)	1,1,2,2-Tetrachloroethane	9.704	83	683438	93.66	ug/L	100
97)	Trans-1,4-Dichloro-2-B...	9.767	53	201517	109.55	ug/L	93
98)	1,2,3-Trichloropropane	9.737	110	248238	93.76	ug/L	97
99)	n-Propylbenzene	9.719	91	2102435	95.18	ug/L	98
100)	2-Chlorotoluene	9.805	91	1339888	94.27	ug/L	98
101)	4-Chlorotoluene	9.921	91	1524844	92.80	ug/L	99
102)	1,3,5-Trimethylbenzene	9.902	105	1535732	98.50	ug/L	99
103)	Butyl Methacrylate	10.033	69	644379	147.41	ug/L	99
104)	alpha-Methylstyrene	10.120	118	907873	104.84	ug/L	98
105)	Pentachloroethane	10.228	167	293412	110.17	ug/L	99
106)	sec-Butylbenzene	10.393	105	1674335	97.62	ug/L	98
107)	1,3-Dichlorobenzene	10.510	146	921941	95.65	ug/L	99
108)	4-Isopropyltoluene	10.540	119	1501309	101.77	ug/L	99
109)	1,4-Dichlorobenzene	10.603	146	949483	93.38	ug/L	99
110)	tert-Butylbenzene	10.187	91	801835	92.62	ug/L	98
111)	Dicyclopentadiene	10.558	66	1544656	75.43	ug/L	98
112)	n-Butylbenzene	10.914	91	1433498	94.51	ug/L	99
113)	1,2-Dichlorobenzene	10.944	146	881981	95.25	ug/L	97
114)	1,2,4-Trimethylbenzene	10.247	105	1551225	97.92	ug/L	98
115)	Benzyl Chloride	10.753	91	2252609	129.45	ug/L	99
116)	p-Diethylbenzene	10.892	119	853076	101.26	ug/L	99
117)	Hexachloroethane	11.121	119	265734	112.97	ug/L	95
118)	1,2-Dibromo-3-Chloropr...	11.683	75	169777	106.70	ug/L	94
119)	1,2,4-Trichlorobenzene	12.395	180	465962	103.39	ug/L	98
120)	1,3-Diethylbenzene	10.817	119	859865	99.68	ug/L	97
121)	Hexachlorobutadiene	12.511	225	152254	99.07	ug/L	96
122)	Naphthalene	12.616	128	1925743	107.95	ug/L	99
123)	1,2,3-Trichlorobenzene	12.834	180	417289	100.23	ug/L	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128497.D
Acq On : 8 May 2019 3:59 pm
Operator : firatt
Sample : ic4007-100
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 09 07:12:48 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:12:28 2019
Response via : Initial Calibration



VX4007C.m Thu May 09 11:18:01 2019 Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
John Watson
05/10/19 10:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:30 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.392	168	482381	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	794426	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	782916	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.585	152	366826	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.585	152	366826	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	251646	49.12	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.24%			
50) 1,2-Dichloroethane-d4	4.669	65	223402	48.75	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 97.50%			
72) Toluene-d8	6.753	98	810545	46.51	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 93.02%			
94) 4-Bromofluorobenzene	9.501	95	378444	49.57	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.14%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	1238566	159.46	ug/L	99
3) Chloromethane	1.056	50	1329858	154.94	ug/L	99
4) Vinyl Chloride	1.123	62	1121608	156.39	ug/L	100
5) 1,3-Butadiene	1.145	54	701338	154.02	ug/L	100
6) Ethylene Oxide	1.348	44	6464533	5143.38	ug/L	99
7) Bromomethane	1.352	94	314896	126.18	ug/L	99
8) Chloroethane	1.427	64	235800	86.27	ug/L	89
9) Vinyl Bromide	1.554	106	394850	102.32	ug/L	100
10) Trichlorofluoromethane	1.580	101	1280182	143.64	ug/L	97
11) Ethyl Alcohol	1.865	45	625187	1064.30	ug/L	94
12) Ethyl Ether	1.865	59	699244	178.81	ug/L #	85
13) Propylene Oxide	1.936	43	336256	235.46	ug/L	96
14) Acrolein	2.034	56	1566809	889.34	ug/L	100
15) 1,1-Dichloroethene	2.034	61	1079522	170.24	ug/L	97
16) Freon 113	2.011	101	699012	177.49	ug/L	98
17) Acetone	2.184	43	3213512	737.93	ug/L	96
18) Isopropyl Alcohol	2.379	45	2401139	1936.35	ug/L	85
19) Iodomethane	2.180	142	1165347	250.92	ug/L	95
20) Methyl acetate	2.454	43	6935442	830.31	ug/L	98
21) Carbon Disulfide	2.195	76	1761989	187.30	ug/L	100
22) Allyl Chloride	2.401	76	457304	192.31	ug/L	99
23) Acetonitrile	2.510	40	771694	779.58	ug/L	98
24) Methylene Chloride	2.547	49	1207520	137.44	ug/L	99
25) Tert Butyl Alcohol	2.724	59	3528622	1998.95	ug/L	97
26) trans-1,2-Dichloroethene	2.750	61	1115909	171.31	ug/L	97
27) Acrylonitrile	2.870	53	3162300	847.36	ug/L	99
28) Hexane	2.941	57	736455	163.41	ug/L	98
29) Methyl Tert Butyl Ether	2.750	73	2389443	184.86	ug/L #	42
30) 1,1-Dichloroethane	3.203	63	1424963	180.30	ug/L	99
31) Vinyl acetate	3.275	43	6384748	508.75	ug/L	99
32) Di-isopropyl ether	3.226	45	3258589	176.67	ug/L	99
33) Chloroprene	3.252	53	1347579	174.25	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:30 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
34) Ethyl tert-butyl ether	3.582	59	2665650	186.41 ug/L	99
35) Ethyl Acetate	3.889	43	5125442m	462.93 ug/L	
36) 2,2-Dichloropropane	3.755	77	1172597	191.79 ug/L	87
37) cis-1,2-Dichloroethene	3.796	61	1216165	175.88 ug/L	98
38) 2-Butanone	3.860	43	4718468m	745.08 ug/L	
39) Propionitrile	4.006	54	1483238	857.55 ug/L	99
40) Methacrylonitrile	4.114	41	4607929	784.39 ug/L	97
41) Bromochloromethane	4.043	128	502657	185.11 ug/L	94
42) Chloroform	4.137	83	1456619	163.97 ug/L	99
43) Tetrahydrofuran	4.047	42	709562	151.60 ug/L	96
44) 1,1,1-Trichloroethane	4.246	97	1413195	186.93 ug/L	98
46) Cyclohexane	4.212	56	1163092	166.52 ug/L	96
47) 1,1-Dichloropropene	4.422	39	728847	149.85 ug/L	98
49) Carbon Tetrachloride	4.369	119	1302339	167.92 ug/L	94
51) Isobutyl Alcohol	4.725	43	2605552	4127.36 ug/L	99
52) Benzene	4.632	78	2984259	171.49 ug/L	99
53) 1,2-Dichloroethane	4.755	62	1203508	172.82 ug/L	98
54) 2,2,4-Trimethylpentane	4.632	57	1419054	158.74 ug/L	99
55) tert-amyl methyl ether	4.763	73	2356344	196.19 ug/L	96
56) Crotonaldehyde	5.112	41	1300694	835.64 ug/L	99
57) n-Butyl Alcohol	5.456	56	1216434	2268.40 ug/L	76
58) Trichloroethene	5.355	95	942418	186.12 ug/L	94
59) Methylcyclohexane	5.460	83	922193	180.84 ug/L	89
60) Methyl Methacrylate	5.824	41	1335047	189.38 ug/L	96
61) 1,2-Dichloropropane	5.659	63	830116	186.26 ug/L	96
62) Dibromomethane	5.790	93	646515	187.97 ug/L	98
63) 1,4-Dioxane	5.828	88	568677	3626.27 ug/L	98
64) Bromodichloromethane	5.985	83	1148664	186.40 ug/L	98
65) 2-Nitropropane	6.367	41	2533481	1153.48 ug/L	98
66) 2-Chloroethyl vinyl ether	6.405	63	3252207	850.70 ug/L	97
67) 1-Bromo-2-Chloroethane	6.349	63	1188057	181.12 ug/L	99
68) Epichlorohydrin	6.484	57	1064976	924.99 ug/L	99
69) 4-Methyl-2-pentanone	6.735	43	8646325	757.20 ug/L	95
70) cis-1,3-Dichloropropene	6.525	75	1427152	199.12 ug/L	95
73) Toluene	6.832	91	3444358	149.02 ug/L	100
74) Ethyl Methacrylate	7.278	69	1302312	208.60 ug/L	96
75) trans-1,3-Dichloropropene	7.203	75	1290814	213.87 ug/L	97
76) 1,1,2-Trichloroethane	7.391	83	684777	176.34 ug/L	96
77) Tetrachloroethene	7.391	166	972434	190.27 ug/L	99
78) 2-hexanone	7.672	43	7282417	796.87 ug/L	96
79) 1,3-Dichloropropane	7.567	76	1384428	180.98 ug/L	97
80) Dibromochloromethane	7.758	129	1138415	202.90 ug/L	99
81) n-Butyl Acetate	7.792	43	6005534	443.08 ug/L	96
82) 1,2-Dibromoethane	7.863	107	1025509	188.12 ug/L	99
83) 1-Chlorohexane	8.350	91	1053185	169.93 ug/L	95
84) Chlorobenzene	8.350	112	2533191	181.46 ug/L	97
85) 1,1,1,2-Tetrachloroethane	8.459	131	1032173	205.77 ug/L	99
86) Ethylbenzene	8.452	91	3857134	175.37 ug/L	98
87) m,p-Xylene	8.579	91	5839731	347.84 ug/L	98
88) o-Xylene	8.965	91	3126216	182.44 ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:30 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration

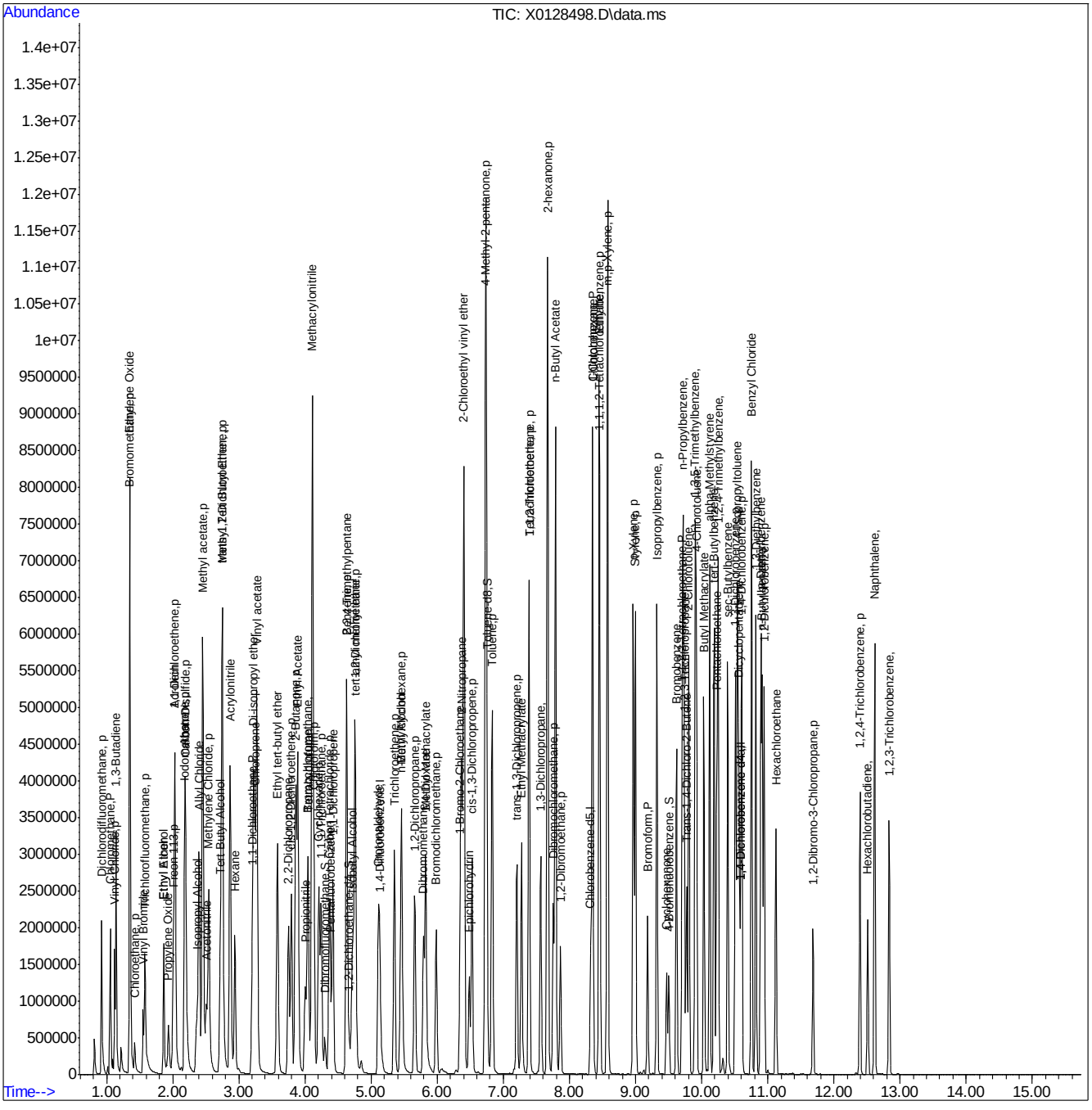
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
89)	Styrene	8.999	104	2613764	191.13 ug/L	98
90)	Bromoform	9.183	173	823619	229.38 ug/L	99
92)	Isopropylbenzene	9.321	105	3650529	188.75 ug/L	98
93)	Cyclohexanone	9.467	55	491306	907.90 ug/L	97
95)	Bromobenzene	9.621	156	1081421	194.35 ug/L	100
96)	1,1,2,2-Tetrachloroethane	9.704	83	1335476	178.66 ug/L	98
97)	Trans-1,4-Dichloro-2-B...	9.771	53	417482	217.21 ug/L #	85
98)	1,2,3-Trichloropropane	9.737	110	492826	181.69 ug/L	96
99)	n-Propylbenzene	9.719	91	4066589	179.37 ug/L	97
100)	2-Chlorotoluene	9.805	91	2556074	175.42 ug/L	98
101)	4-Chlorotoluene	9.921	91	2977128	177.06 ug/L	98
102)	1,3,5-Trimethylbenzene	9.902	105	3019864	187.93 ug/L	100
103)	Butyl Methacrylate	10.034	69	1278602	267.42 ug/L	99
104)	alpha-Methylstyrene	10.123	118	1809905	201.20 ug/L	99
105)	Pentachloroethane	10.232	167	607972	218.30 ug/L	99
106)	sec-Butylbenzene	10.393	105	3278109	185.65 ug/L	98
107)	1,3-Dichlorobenzene	10.510	146	1857890	187.70 ug/L	99
108)	4-Isopropyltoluene	10.540	119	2951222	193.32 ug/L	99
109)	1,4-Dichlorobenzene	10.607	146	1899683	182.44 ug/L	98
110)	tert-Butylbenzene	10.187	91	1557485	175.85 ug/L	96
111)	Dicyclopentadiene	10.558	66	2944773	143.68 ug/L	98
112)	n-Butylbenzene	10.914	91	2734639	175.81 ug/L	98
113)	1,2-Dichlorobenzene	10.944	146	1764605	185.66 ug/L	98
114)	1,2,4-Trimethylbenzene	10.251	105	3051637	187.03 ug/L	98
115)	Benzyl Chloride	10.753	91	4562531	244.91 ug/L	97
116)	p-Diethylbenzene	10.896	119	1664008	190.98 ug/L	99
117)	Hexachloroethane	11.124	119	554384	224.60 ug/L	93
118)	1,2-Dibromo-3-Chloropr...	11.683	75	352765	212.93 ug/L	91
119)	1,2,4-Trichlorobenzene	12.395	180	929418	198.88 ug/L	98
120)	1,3-Diethylbenzene	10.821	119	1687093	189.48 ug/L	96
121)	Hexachlorobutadiene	12.511	225	301110	189.96 ug/L	98
122)	Naphthalene	12.616	128	3775196	202.94 ug/L	99
123)	1,2,3-Trichlorobenzene	12.834	180	825922	192.07 ug/L	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:30 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration



Manual Integration Approval Summary

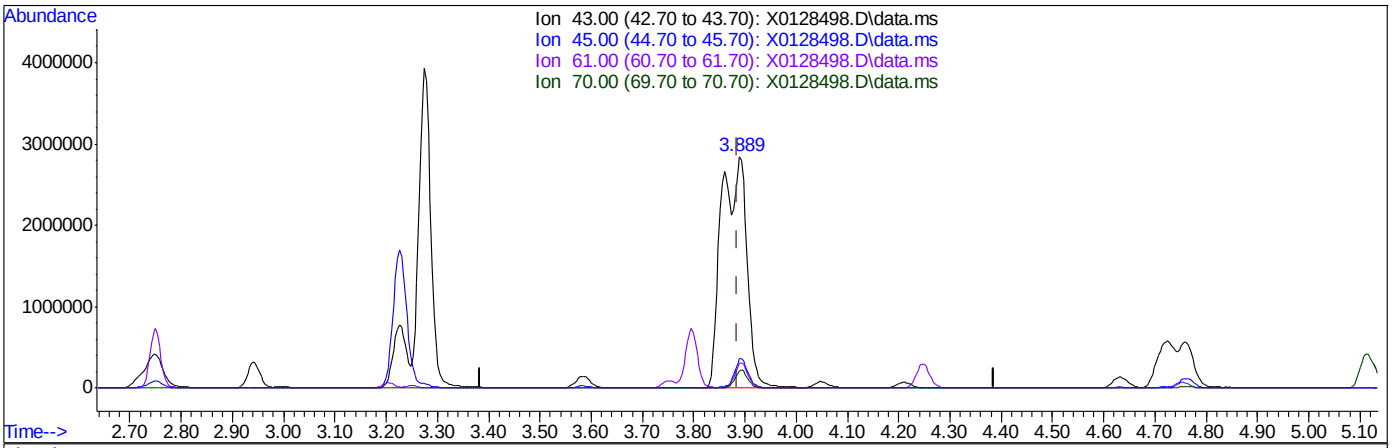
Sample Number:	VX4007-IC4007	**Method:**	SW846 8260C
Lab FileID:	X0128498.D	**Analyst approved:**	05/09/19 12:34 Firat Tastan
Injection Time:	05/08/19 16:25	**Supervisor approved:**	05/10/19 10:19 John Watson

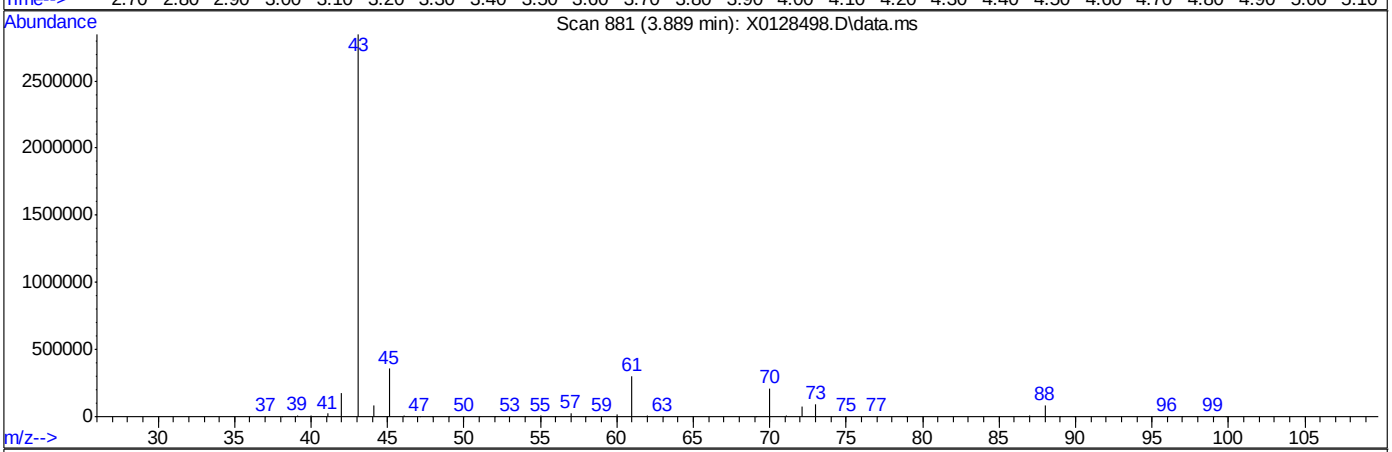
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methyl ethyl ketone	78-93-3		3.86	Overlapping peak
Ethyl Acetate	141-78-6		3.89	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration





TIC: X0128498.D\data.ms

(35) Ethyl Acetate

3.889min (+0.004) 890.02ug/L

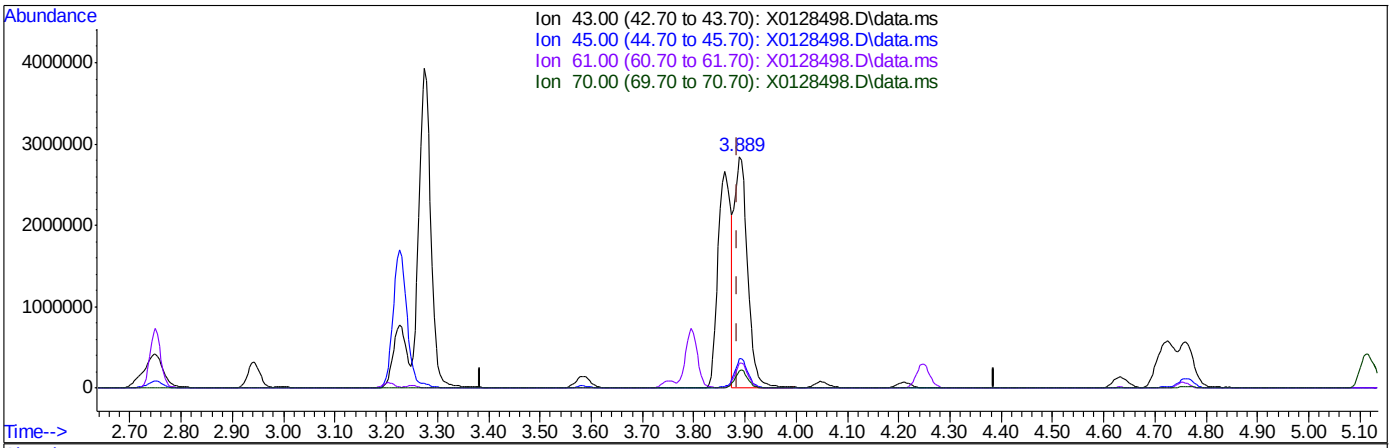
response 9853980

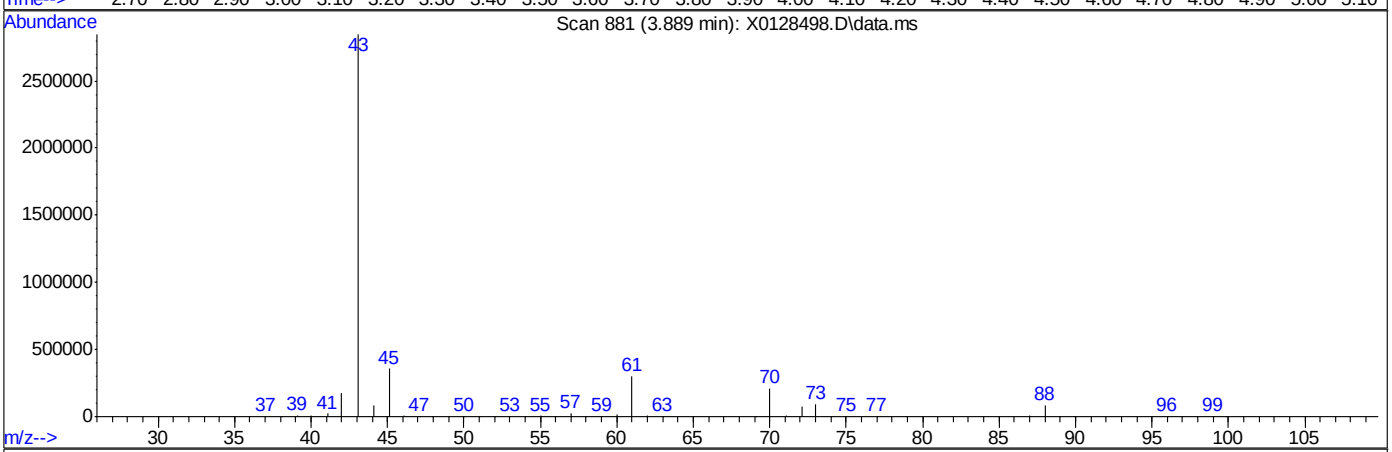
Ion	Exp%	Act%
43.00	100	100
45.00	13.60	12.55
61.00	11.20	10.61
70.00	8.30	7.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration





TIC: X0128498.D\data.ms

(35) Ethyl Acetate

3.889min (+0.004) 462.93ug/L m

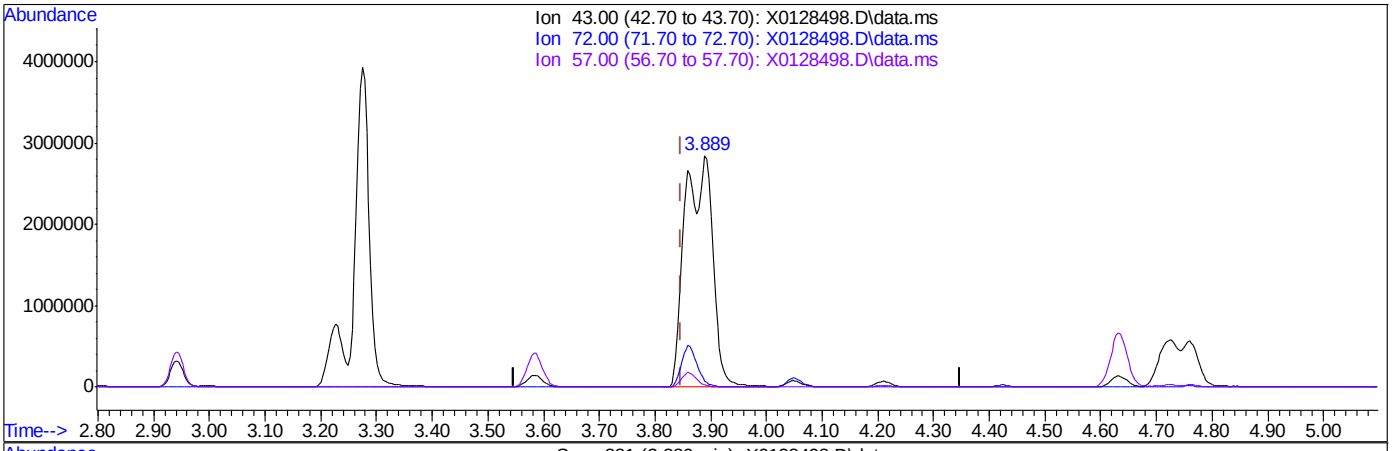
response 5125442

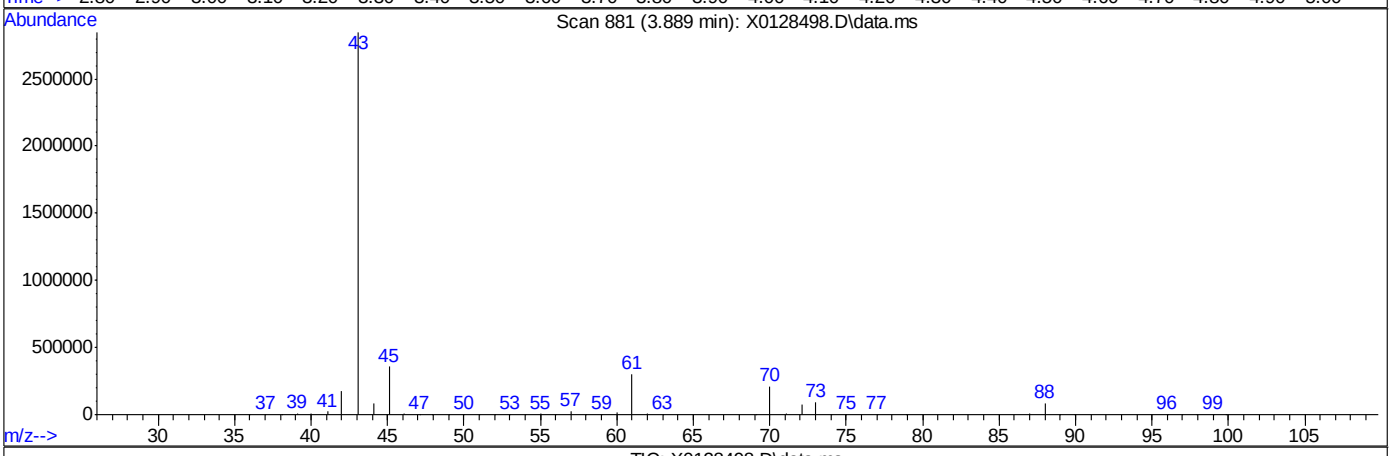
Ion	Exp%	Act%
43.00	100	100
45.00	13.60	12.56
61.00	11.20	10.65
70.00	8.30	7.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration





TIC: X0128498.D\data.ms

(38) 2-Butanone (p)

3.889min (+0.041) 1556.01ug/L

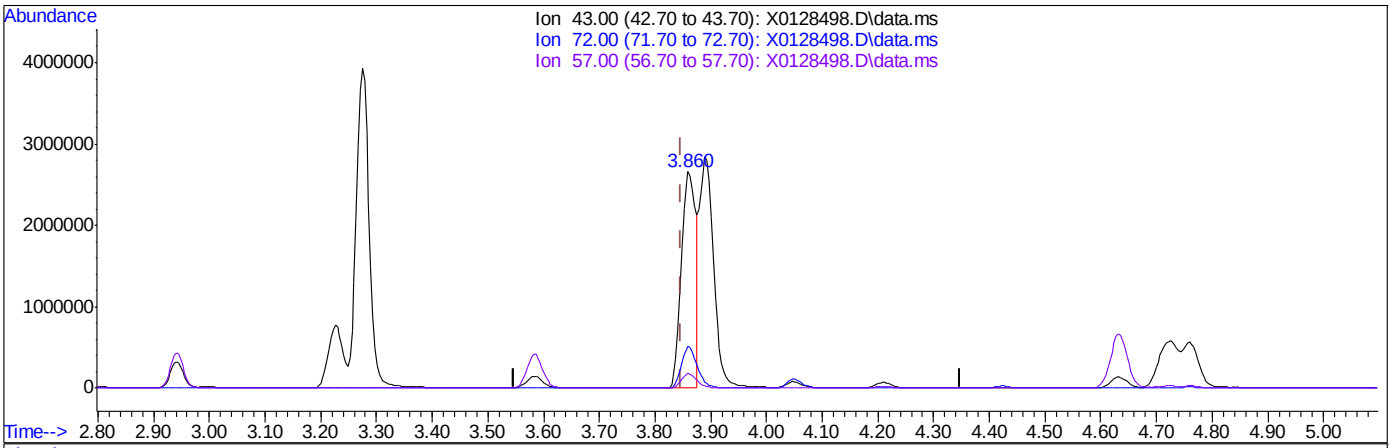
response 9853980

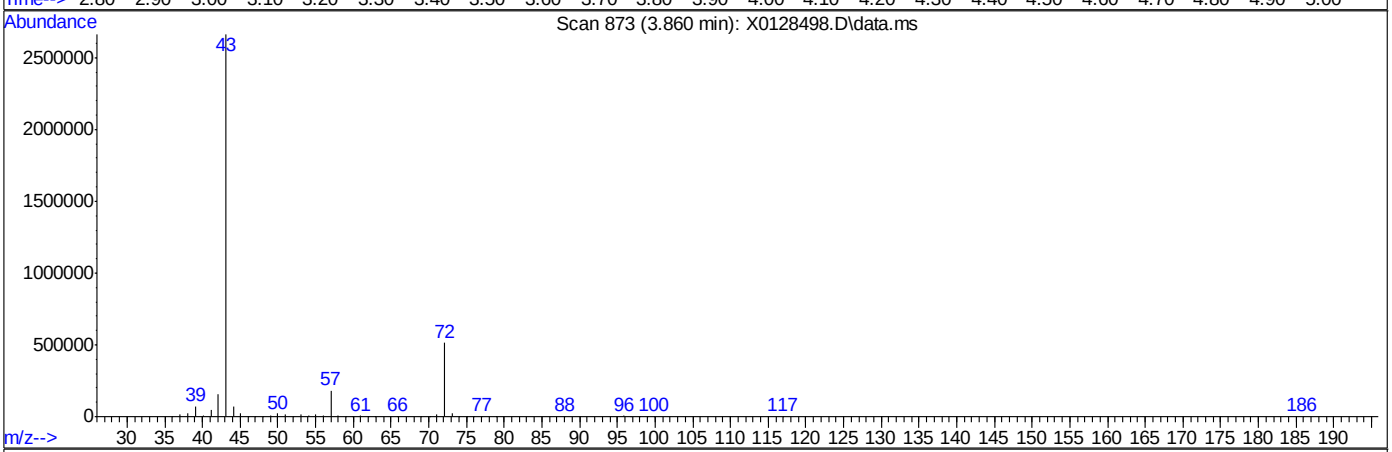
Ion	Exp%	Act%
43.00	100	100
72.00	18.10	2.66
57.00	6.70	0.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128498.D
Acq On : 8 May 2019 4:25 pm
Operator : firatt
Sample : ic4007-200
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 09 07:13:04 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:13:00 2019
Response via : Initial Calibration





TIC: X0128498.D\data.ms

(38) 2-Butanone (p)

3.860min (+0.011) 745.08ug/L m

response 4718468

Ion	Exp%	Act%
43.00	100	100
72.00	18.10	19.24
57.00	6.70	6.79
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128501.D
Acq On : 8 May 2019 5:42 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 11:17:12 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:51:12 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	479109	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	807162	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	778819	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.584	152	366235	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.584	152	366235	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	249695	49.17	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 98.34%			
50) 1,2-Dichloroethane-d4	4.669	65	222554	47.93	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 95.86%			
72) Toluene-d8	6.753	98	863622	50.21	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 100.42%			
94) 4-Bromofluorobenzene	9.501	95	380738	50.00	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 100.00%			
Target Compounds						Qvalue
5) 1,3-Butadiene	1.145	54	185579	45.25	ug/L	99
6) Ethylene Oxide	1.352	44	1875040	2118.53	ug/L	99
9) Vinyl Bromide	1.565	106	156608	40.86	ug/L	99
11) Ethyl Alcohol	1.858	45	218040	397.17	ug/L	99
12) Ethyl Ether	1.858	59	150340	39.17	ug/L	98
13) Propylene Oxide	1.933	43	62638	46.13	ug/L	99
14) Acrolein	2.026	56	307100	177.69	ug/L	99
15) 1,1-Dichloroethene	2.041	61	247896	40.02	ug/L	97
16) Freon 113	2.019	101	162938	44.94	ug/L	99
17) Acetone	2.169	43	742888	195.64	ug/L	98
18) Isopropyl Alcohol	2.319	45	435955	384.56	ug/L	100
19) Iodomethane	2.184	142	206430	37.61	ug/L	100
20) Methyl acetate	2.446	43	1647718	202.43	ug/L	99
21) Carbon Disulfide	2.203	76	413924	44.62	ug/L	100
22) Allyl Chloride	2.401	76	89114	37.89	ug/L	99
23) Acetonitrile	2.495	40	179023	198.34	ug/L	96
24) Methylene Chloride	2.547	49	281663	37.62	ug/L	99
25) Tert Butyl Alcohol	2.686	59	686283	391.46	ug/L	96
26) trans-1,2-Dichloroethene	2.754	61	241901	37.99	ug/L	98
27) Acrylonitrile	2.859	53	697524	191.43	ug/L	100
28) Hexane	2.949	57	188057	45.97	ug/L	97
29) Methyl Tert Butyl Ether	2.746	73	531525	41.75	ug/L	63
30) 1,1-Dichloroethane	3.207	63	303685	39.12	ug/L	97
31) Vinyl acetate	3.271	43	1420723	113.76	ug/L	100
32) Di-isopropyl ether	3.222	45	745552	41.23	ug/L	99
33) Chloroprene	3.252	53	269056	35.54	ug/L	99
34) Ethyl tert-butyl ether	3.578	59	556628	39.49	ug/L	98
35) Ethyl Acetate	3.886	43	1019619	93.49	ug/L	99
36) 2,2-Dichloropropane	3.751	77	222070	36.74	ug/L	97
37) cis-1,2-Dichloroethene	3.796	61	253157	37.36	ug/L	98
38) 2-Butanone	3.852	43	1253144	217.30	ug/L	99
39) Propionitrile	3.991	54	335682	198.55	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128501.D
Acq On : 8 May 2019 5:42 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 11:17:12 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:51:12 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) Methacrylonitrile	4.103	41	1189316	222.55	ug/L	100
41) Bromochloromethane	4.043	128	109210	40.83	ug/L	96
42) Chloroform	4.129	83	308023	38.15	ug/L	98
43) Tetrahydrofuran	4.043	42	157453	38.14	ug/L	96
44) 1,1,1-Trichloroethane	4.246	97	282446	37.89	ug/L	99
46) Cyclohexane	4.212	56	280621	43.99	ug/L	96
47) 1,1-Dichloropropene	4.422	39	158826	36.53	ug/L	96
49) Carbon Tetrachloride	4.369	119	256253	36.86	ug/L	98
51) Isobutyl Alcohol	4.695	43	273984	427.16	ug/L	98
52) Benzene	4.632	78	639718	39.21	ug/L	99
53) 1,2-Dichloroethane	4.752	62	255676	36.69	ug/L	99
54) 2,2,4-Trimethylpentane	4.632	57	348205	42.19	ug/L	97
55) tert-amyl methyl ether	4.759	73	476663	39.14	ug/L	97
56) Crotonaldehyde	5.108	41	270570	194.04	ug/L	97
57) n-Butyl Alcohol	5.430	56	232636	420.70	ug/L	97
58) Trichloroethene	5.351	95	193121	37.83	ug/L	98
59) Methylcyclohexane	5.460	83	214461	41.84	ug/L	98
60) Methyl Methacrylate	5.824	41	298382	41.90	ug/L	98
61) 1,2-Dichloropropane	5.659	63	171987	38.27	ug/L	99
62) Dibromomethane	5.790	93	127964	36.86	ug/L	99
63) 1,4-Dioxane	5.812	88	120969	767.17	ug/L	96
64) Bromodichloromethane	5.985	83	228841	36.83	ug/L	100
65) 2-Nitropropane	6.360	41	461701	203.42	ug/L	98
66) 2-Chloroethyl vinyl ether	6.394	63	776619	203.31	ug/L	99
67) 1-Bromo-2-Chloroethane	6.345	63	247210	37.49	ug/L	99
68) Epichlorohydrin	6.476	57	221120	190.61	ug/L	98
69) 4-Methyl-2-pentanone	6.727	43	2105906	186.55	ug/L	99
70) cis-1,3-Dichloropropene	6.521	75	275131	37.80	ug/L	99
73) Toluene	6.828	91	726197	36.29	ug/L	99
74) Ethyl Methacrylate	7.274	69	269062	43.12	ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	247189	40.86	ug/L	99
76) 1,1,2-Trichloroethane	7.387	83	141779	37.19	ug/L	97
77) Tetrachloroethene	7.391	166	192131	38.00	ug/L	98
78) 2-hexanone	7.664	43	1712256	192.70	ug/L	100
79) 1,3-Dichloropropane	7.563	76	271639	36.08	ug/L	98
80) Dibromochloromethane	7.754	129	209420	37.46	ug/L	99
81) n-Butyl Acetate	7.788	43	1300804	97.71	ug/L	100
82) 1,2-Dibromoethane	7.863	107	203368	37.75	ug/L	100
83) 1-Chlorohexane	8.347	91	225563	41.15	ug/L	96
84) Chlorobenzene	8.350	112	507262	36.91	ug/L	97
85) 1,1,1,2-Tetrachloroethane	8.455	131	193387	38.63	ug/L	99
86) Ethylbenzene	8.448	91	794404	36.81	ug/L	98
87) m,p-Xylene	8.575	91	1222452	74.27	ug/L	98
88) o-Xylene	8.965	91	630662	37.36	ug/L	99
89) Styrene	8.999	104	516977	38.19	ug/L	99
90) Bromoform	9.182	173	137265	37.81	ug/L	99
92) Isopropylbenzene	9.321	105	749301	39.05	ug/L	99
93) Cyclohexanone	9.467	55	117459	219.65	ug/L	97
95) Bromobenzene	9.621	156	203223	36.70	ug/L	99
96) 1,1,2,2-Tetrachloroethane	9.704	83	270207	36.64	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128501.D
Acq On : 8 May 2019 5:42 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 11:17:12 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:51:12 2019
Response via : Initial Calibration

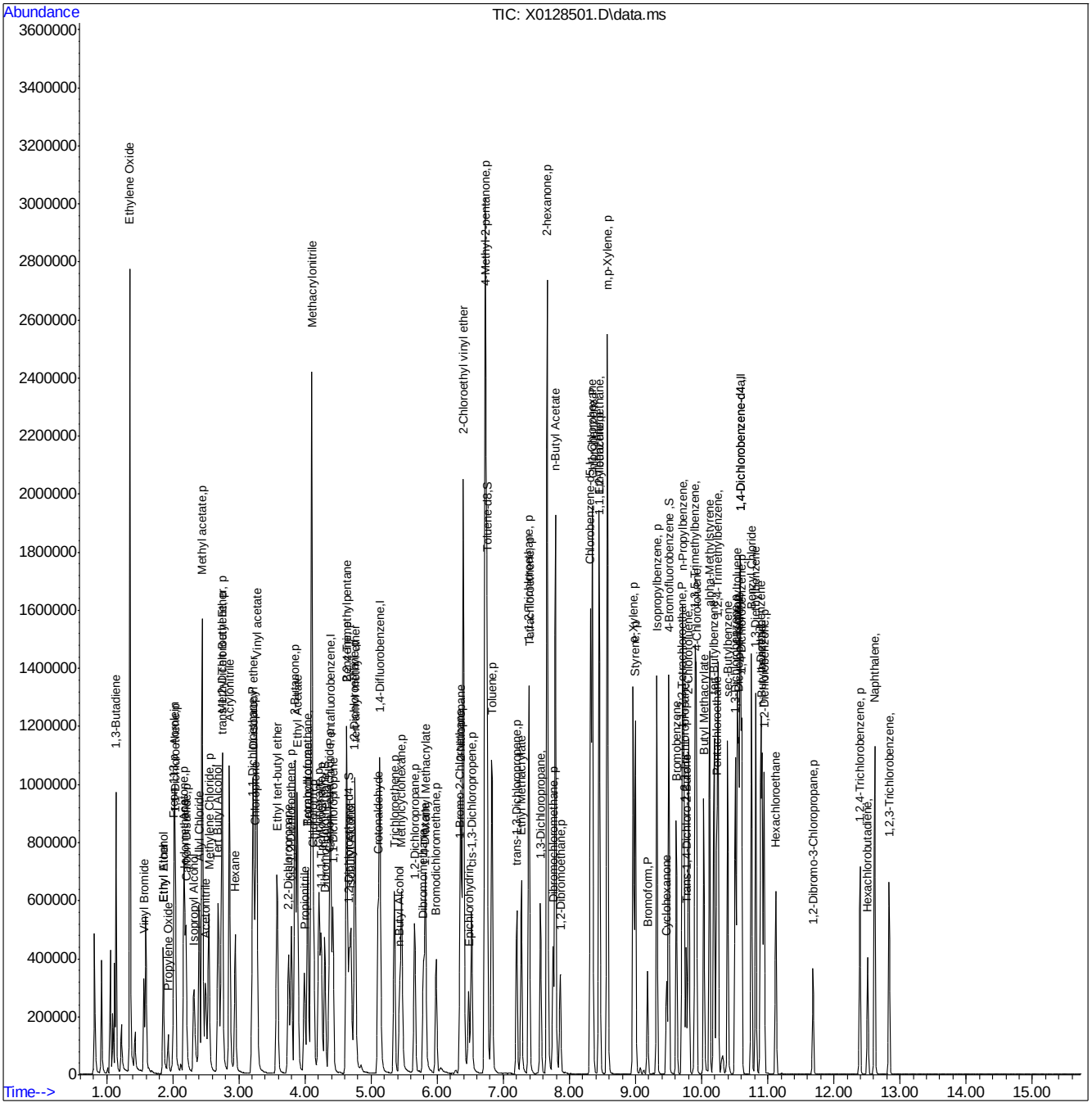
	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
97)	Trans-1,4-Dichloro-2-B...	9.767	53	74456	38.43 ug/L	97
98)	1,2,3-Trichloropropane	9.737	110	95063	35.46 ug/L	96
99)	n-Propylbenzene	9.719	91	823498	36.80 ug/L	99
100)	2-Chlorotoluene	9.805	91	524304	36.54 ug/L	99
101)	4-Chlorotoluene	9.921	91	602646	36.36 ug/L	99
102)	1,3,5-Trimethylbenzene	9.902	105	594003	37.28 ug/L	99
103)	Butyl Methacrylate	10.033	69	239462	41.44 ug/L	99
104)	alpha-Methylstyrene	10.120	118	358147	39.85 ug/L	97
105)	Pentachloroethane	10.228	167	111596	39.73 ug/L	99
106)	sec-Butylbenzene	10.393	105	647960	37.05 ug/L	98
107)	1,3-Dichlorobenzene	10.509	146	359640	36.64 ug/L	99
108)	4-Isopropyltoluene	10.539	119	567290	37.36 ug/L	99
109)	1,4-Dichlorobenzene	10.603	146	367177	35.67 ug/L	99
110)	tert-Butylbenzene	10.187	91	308244	35.33 ug/L	98
111)	Dicyclopentadiene	10.558	66	716240	40.49 ug/L	98
112)	n-Butylbenzene	10.914	91	563855	36.80 ug/L	98
113)	1,2-Dichlorobenzene	10.944	146	339083	36.02 ug/L	98
114)	1,2,4-Trimethylbenzene	10.247	105	601265	37.18 ug/L	99
115)	Benzyl Chloride	10.753	91	775882	35.51 ug/L	100
116)	p-Diethylbenzene	10.892	119	342076	39.52 ug/L	99
117)	Hexachloroethane	11.121	119	95389	38.19 ug/L	99
118)	1,2-Dibromo-3-Chloropr...	11.683	75	62919	37.77 ug/L	94
119)	1,2,4-Trichlorobenzene	12.395	180	170686	36.61 ug/L	98
120)	1,3-Diethylbenzene	10.817	119	348267	39.41 ug/L	97
121)	Hexachlorobutadiene	12.511	225	56112	35.66 ug/L	96
122)	Naphthalene	12.616	128	698919	37.57 ug/L	99
123)	1,2,3-Trichlorobenzene	12.834	180	154424	36.13 ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4007\
Data File : X0128501.D
Acq On : 8 May 2019 5:42 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4007,5,,,5,,WATER
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 11:17:12 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 07:51:12 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4008\
Data File : X0128506.D
Acq On : 9 May 2019 12:12 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4008,5,,,5,,WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 12:35:21 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

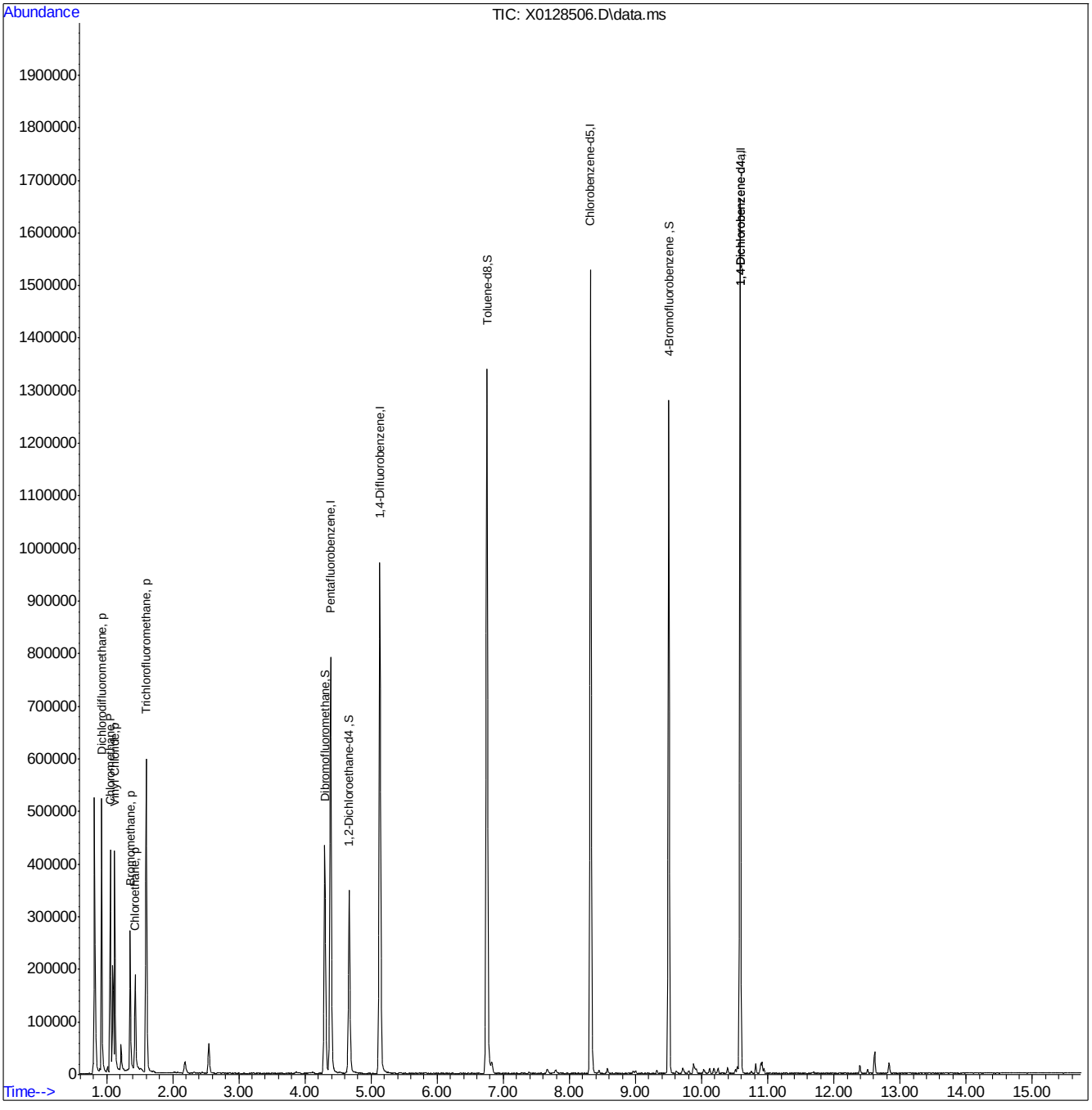
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	464779	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	767592	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	747381	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.584	152	344688	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.584	152	344688	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	240770	48.88	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 97.76%			
50) 1,2-Dichloroethane-d4	4.669	65	216808	49.10	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 98.20%			
72) Toluene-d8	6.753	98	829909	50.28	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 100.56%			
94) 4-Bromofluorobenzene	9.501	95	355163	49.55	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 99.10%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	236692	35.01	ug/L	100
3) Chloromethane	1.055	50	247678	32.81	ug/L	99
4) Vinyl Chloride	1.123	62	226013	35.98	ug/L	100
7) Bromomethane	1.359	94	93983	43.10	ug/L	99
8) Chloroethane	1.434	64	95109	49.54	ug/L	98
10) Trichlorofluoromethane	1.599	101	354345	45.21	ug/L	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4008\
Data File : X0128506.D
Acq On : 9 May 2019 12:12 pm
Operator : firatt
Sample : icv4007-40
Misc : ms24683,VX4008,5,,,5,,WATER
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 09 12:35:21 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	400266	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	699144	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	591048	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	251174	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	251174	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	223865	52.77	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.54%			
50) 1,2-Dichloroethane-d4	4.669	65	231052	57.45	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 114.90%			
72) Toluene-d8	6.753	98	759914	58.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 116.44%			
94) 4-Bromofluorobenzene	9.501	95	278638	53.35	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 106.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	116360	19.99	ug/L	96
3) Chloromethane	1.055	50	124967	19.22	ug/L	99
4) Vinyl Chloride	1.123	62	99021	18.31	ug/L	98
5) 1,3-Butadiene	1.145	54	68955	20.13	ug/L	94
6) Ethylene Oxide	1.352	44	1014225	1320.10	ug/L	99
7) Bromomethane	1.355	94	33872	18.04	ug/L	95
8) Chloroethane	1.430	64	40438	17.74	ug/L	96
9) Vinyl Bromide	1.569	106	58078	18.14	ug/L	96
10) Trichlorofluoromethane	1.599	101	131173	19.43	ug/L	98
11) Ethyl Alcohol	1.858	45	88129	192.15	ug/L	96
12) Ethyl Ether	1.858	59	61731	19.25	ug/L	97
13) Propylene Oxide	1.929	43	21890	19.30	ug/L	93
14) Acrolein	2.026	56	131945	91.38	ug/L	99
15) 1,1-Dichloroethene	2.041	61	101342	19.58	ug/L	98
16) Freon 113	2.023	101	62193	20.53	ug/L	97
17) Acetone	2.169	43	316125	99.65	ug/L	97
18) Isopropyl Alcohol	2.315	45	145629	153.76	ug/L	95
19) Iodomethane	2.184	142	74528	16.57	ug/L	99
20) Methyl acetate	2.446	43	672467	98.89	ug/L	98
21) Carbon Disulfide	2.206	76	143472	18.51	ug/L	99
22) Allyl Chloride	2.401	76	36920	18.79	ug/L #	80
23) Acetonitrile	2.491	40	74162	98.35	ug/L	100
24) Methylene Chloride	2.544	49	115413	18.45	ug/L	94
25) Tert Butyl Alcohol	2.682	59	236284	161.32	ug/L	92
26) trans-1,2-Dichloroethene	2.753	61	102840	19.33	ug/L	98
27) Acrylonitrile	2.855	53	296206	97.30	ug/L	99
28) Hexane	2.945	57	74122	21.69	ug/L	96
29) Methyl Tert Butyl Ether	2.742	73	196070	18.44	ug/L	54
30) 1,1-Dichloroethane	3.203	63	125168	19.30	ug/L	97
31) Vinyl acetate	3.271	43	489191	46.89	ug/L	98
32) Di-isopropyl ether	3.218	45	289206	19.14	ug/L	97
33) Chloroprene	3.252	53	124141	19.63	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	212732	18.06	ug/L		97
35) Ethyl Acetate	3.886	43	430381	47.24	ug/L		98
36) 2,2-Dichloropropane	3.754	77	90402	17.90	ug/L		91
37) cis-1,2-Dichloroethene	3.796	61	108428	19.15	ug/L		98
38) 2-Butanone	3.848	43	495221	102.79	ug/L		98
39) Propionitrile	3.987	54	132490	93.80	ug/L		99
40) Methacrylonitrile	4.099	41	475611	106.53	ug/L		99
41) Bromochloromethane	4.043	128	40788	18.25	ug/L		89
42) Chloroform	4.129	83	133628	19.81	ug/L		95
43) Tetrahydrofuran	4.043	42	64191	18.61	ug/L		97
44) 1,1,1-Trichloroethane	4.245	97	114824	18.44	ug/L		96
46) Cyclohexane	4.212	56	111114	20.85	ug/L		98
47) 1,1-Dichloropropene	4.422	39	73025	20.10	ug/L		91
49) Carbon Tetrachloride	4.373	119	103150	17.13	ug/L		94
51) Isobutyl Alcohol	4.692	43	74998	134.99	ug/L		99
52) Benzene	4.632	78	268936	19.03	ug/L		98
53) 1,2-Dichloroethane	4.752	62	112591	18.65	ug/L		98
54) 2,2,4-Trimethylpentane	4.635	57	152825	21.38	ug/L		95
55) tert-amyl methyl ether	4.759	73	181185	17.18	ug/L		100
56) Crotonaldehyde	5.108	41	104744	86.72	ug/L		98
57) n-Butyl Alcohol	5.460	56	72443	151.25	ug/L	#	2
58) Trichloroethene	5.355	95	79760	18.04	ug/L		95
59) Methylcyclohexane	5.460	83	84483	19.03	ug/L		97
60) Methyl Methacrylate	5.820	41	113897	18.47	ug/L		94
61) 1,2-Dichloropropane	5.659	63	69337	17.81	ug/L		97
62) Dibromomethane	5.790	93	53530	17.80	ug/L		94
63) 1,4-Dioxane	5.812	88	44749	327.64	ug/L		96
64) Bromodichloromethane	5.985	83	90320	16.78	ug/L		98
65) 2-Nitropropane	6.356	41	179519	91.32	ug/L		97
66) 2-Chloroethyl vinyl ether	6.393	63	305558	92.35	ug/L		97
67) 1-Bromo-2-Chloroethane	6.345	63	103691	18.15	ug/L		99
68) Epichlorohydrin	6.472	57	87400	86.98	ug/L		97
69) 4-Methyl-2-pentanone	6.727	43	888071	90.82	ug/L		98
70) cis-1,3-Dichloropropene	6.521	75	113873	18.06	ug/L		94
73) Toluene	6.828	91	300091	19.76	ug/L		98
74) Ethyl Methacrylate	7.274	69	96795	20.44	ug/L		99
75) trans-1,3-Dichloropropene	7.199	75	90987	19.82	ug/L		96
76) 1,1,2-Trichloroethane	7.387	83	58077	20.07	ug/L		99
77) Tetrachloroethene	7.391	166	78003	20.33	ug/L		96
78) 2-hexanone	7.664	43	715308	106.07	ug/L		97
79) 1,3-Dichloropropane	7.563	76	116449	20.38	ug/L		94
80) Dibromochloromethane	7.750	129	75669	17.84	ug/L		96
81) n-Butyl Acetate	7.788	43	536315	53.09	ug/L		97
82) 1,2-Dibromoethane	7.859	107	80953	19.80	ug/L		96
83) 1-Chlorohexane	8.346	91	83768	20.14	ug/L		95
84) Chlorobenzene	8.346	112	197868	18.97	ug/L		97
85) 1,1,1,2-Tetrachloroethane	8.455	131	70269	18.50	ug/L		99
86) Ethylbenzene	8.448	91	320059	19.54	ug/L		100
87) m,p-Xylene	8.575	91	497689	39.85	ug/L		98
88) o-Xylene	8.965	91	251771	19.65	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

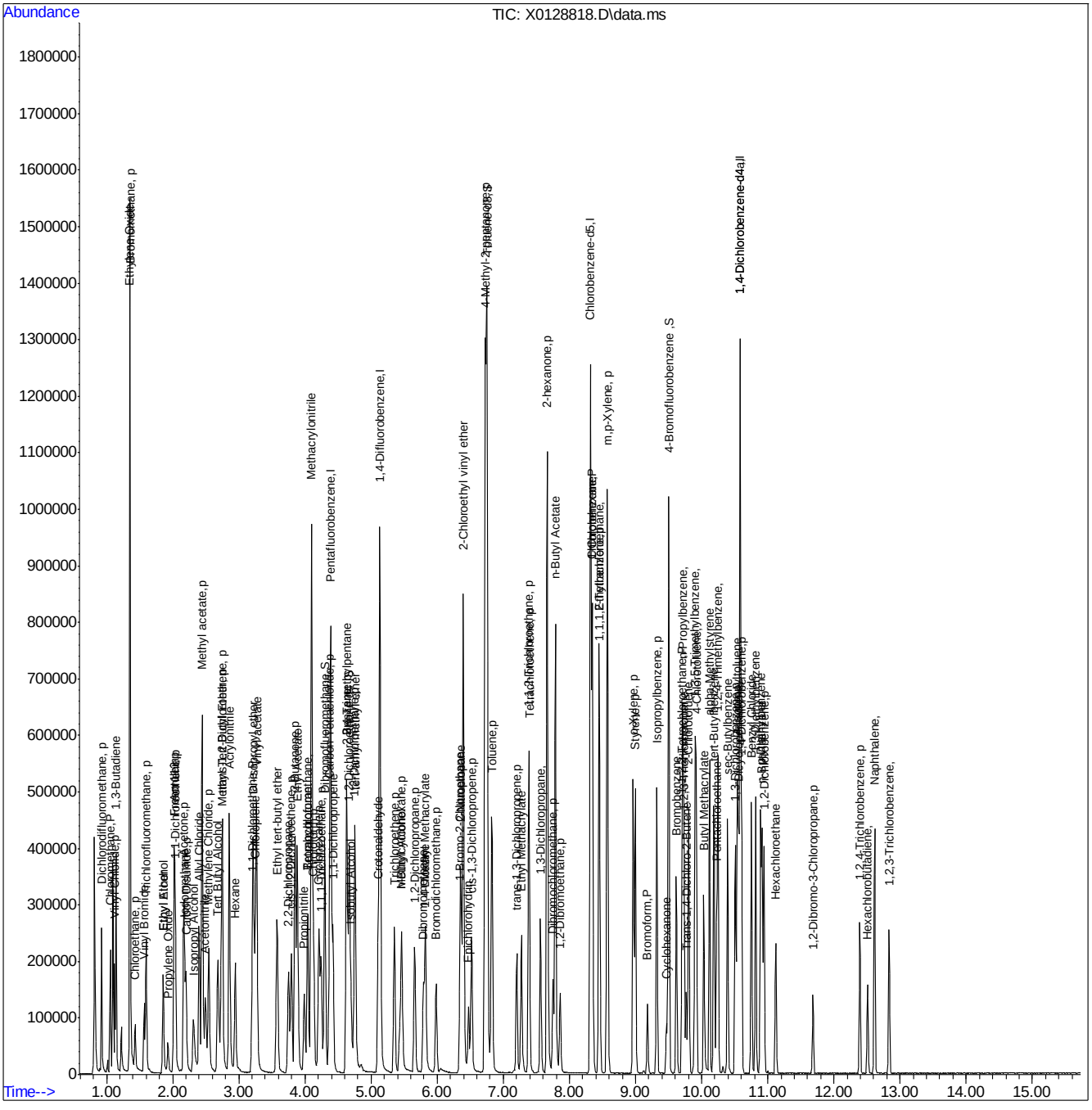
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	Styrene	8.999	104	202908	19.75	ug/L		97
90)	Bromoform	9.179	173	45214	16.41	ug/L		96
92)	Isopropylbenzene	9.321	105	277057	21.05	ug/L		99
93)	Cyclohexanone	9.467	55	33876	92.37	ug/L		97
95)	Bromobenzene	9.621	156	75113	19.78	ug/L		98
96)	1,1,2,2-Tetrachloroethane	9.703	83	104355	20.63	ug/L		100
97)	Trans-1,4-Dichloro-2-B...	9.771	53	26591	20.01	ug/L	#	85
98)	1,2,3-Trichloropropane	9.733	110	37998	20.67	ug/L		95
99)	n-Propylbenzene	9.715	91	327287	21.33	ug/L		97
100)	2-Chlorotoluene	9.805	91	208086	21.14	ug/L		97
101)	4-Chlorotoluene	9.917	91	239937	21.11	ug/L		95
102)	1,3,5-Trimethylbenzene	9.902	105	230549	21.09	ug/L		96
103)	Butyl Methacrylate	10.033	69	79241	20.00	ug/L		95
104)	alpha-Methylstyrene	10.120	118	129122	20.95	ug/L		96
105)	Pentachloroethane	10.228	167	32513	16.88	ug/L		100
106)	sec-Butylbenzene	10.393	105	251768	20.99	ug/L		97
107)	1,3-Dichlorobenzene	10.509	146	128701	19.12	ug/L		98
108)	4-Isopropyltoluene	10.539	119	216561	20.79	ug/L		99
109)	1,4-Dichlorobenzene	10.603	146	136074	19.27	ug/L		97
110)	tert-Butylbenzene	10.187	91	128547	21.48	ug/L		94
111)	Dicyclopentadiene	10.558	66	264330	21.79	ug/L		96
112)	n-Butylbenzene	10.914	91	223520	21.27	ug/L		99
113)	1,2-Dichlorobenzene	10.944	146	127357	19.73	ug/L		98
114)	1,2,4-Trimethylbenzene	10.247	105	234444	21.14	ug/L		99
115)	Benzyl Chloride	10.753	91	247441	16.78	ug/L		96
116)	p-Diethylbenzene	10.892	119	118655	19.99	ug/L		98
117)	Hexachloroethane	11.120	119	32251	18.83	ug/L		94
118)	1,2-Dibromo-3-Chloropr...	11.683	75	24301	21.27	ug/L		88
119)	1,2,4-Trichlorobenzene	12.395	180	59086	18.48	ug/L		98
120)	1,3-Diethylbenzene	10.817	119	123310	20.34	ug/L		98
121)	Hexachlorobutadiene	12.511	225	20806	19.28	ug/L		96
122)	Naphthalene	12.616	128	265572	20.82	ug/L		100
123)	1,2,3-Trichlorobenzene	12.834	180	55512	18.94	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



VX4007C.m Tue May 21 17:17:01 2019 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	400266	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	699144	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	591048	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	251174	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	251174	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	223865	52.77	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 105.54%			
50) 1,2-Dichloroethane-d4	4.669	65	231052	57.45	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 114.90%			
72) Toluene-d8	6.753	98	759914	58.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 116.44%			
94) 4-Bromofluorobenzene	9.501	95	278638	53.35	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 106.70%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	116360	19.99	ug/L	96
3) Chloromethane	1.055	50	124967	19.22	ug/L	99
4) Vinyl Chloride	1.123	62	99021	18.31	ug/L	98
5) 1,3-Butadiene	1.145	54	68955	20.13	ug/L	94
6) Ethylene Oxide	1.352	44	1014225	1320.10	ug/L	99
7) Bromomethane	1.355	94	33872	18.04	ug/L	95
8) Chloroethane	1.430	64	40438	17.74	ug/L	96
9) Vinyl Bromide	1.569	106	58078	18.14	ug/L	96
10) Trichlorofluoromethane	1.599	101	131173	19.43	ug/L	98
11) Ethyl Alcohol	1.858	45	88129	192.15	ug/L	96
12) Ethyl Ether	1.858	59	61731	19.25	ug/L	97
13) Propylene Oxide	1.929	43	21890	19.30	ug/L	93
14) Acrolein	2.026	56	131945	91.38	ug/L	99
15) 1,1-Dichloroethene	2.041	61	101342	19.58	ug/L	98
16) Freon 113	2.023	101	62193	20.53	ug/L	97
17) Acetone	2.169	43	316125	99.65	ug/L	97
18) Isopropyl Alcohol	2.315	45	145629	153.76	ug/L	95
19) Iodomethane	2.184	142	74528	16.57	ug/L	99
20) Methyl acetate	2.446	43	672467	98.89	ug/L	98
21) Carbon Disulfide	2.206	76	143472	18.51	ug/L	99
22) Allyl Chloride	2.401	76	36920	18.79	ug/L #	80
23) Acetonitrile	2.491	40	74162	98.35	ug/L	100
24) Methylene Chloride	2.544	49	115413	18.45	ug/L	94
25) Tert Butyl Alcohol	2.682	59	236284	161.32	ug/L	92
26) trans-1,2-Dichloroethene	2.753	61	102840	19.33	ug/L	98
27) Acrylonitrile	2.855	53	296206	97.30	ug/L	99
28) Hexane	2.945	57	74122	21.69	ug/L	96
29) Methyl Tert Butyl Ether	2.742	73	196070	18.44	ug/L	54
30) 1,1-Dichloroethane	3.203	63	125168	19.30	ug/L	97
31) Vinyl acetate	3.271	43	489191	46.89	ug/L	98
32) Di-isopropyl ether	3.218	45	289206	19.14	ug/L	97
33) Chloroprene	3.252	53	124141	19.63	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	212732	18.06	ug/L		97
35) Ethyl Acetate	3.886	43	430381	47.24	ug/L		98
36) 2,2-Dichloropropane	3.754	77	90402	17.90	ug/L		91
37) cis-1,2-Dichloroethene	3.796	61	108428	19.15	ug/L		98
38) 2-Butanone	3.848	43	495221	102.79	ug/L		98
39) Propionitrile	3.987	54	132490	93.80	ug/L		99
40) Methacrylonitrile	4.099	41	475611	106.53	ug/L		99
41) Bromochloromethane	4.043	128	40788	18.25	ug/L		89
42) Chloroform	4.129	83	133628	19.81	ug/L		95
43) Tetrahydrofuran	4.043	42	64191	18.61	ug/L		97
44) 1,1,1-Trichloroethane	4.245	97	114824	18.44	ug/L		96
46) Cyclohexane	4.212	56	111114	20.85	ug/L		98
47) 1,1-Dichloropropene	4.422	39	73025	20.10	ug/L		91
49) Carbon Tetrachloride	4.373	119	103150	17.13	ug/L		94
51) Isobutyl Alcohol	4.692	43	74998	134.99	ug/L		99
52) Benzene	4.632	78	268936	19.03	ug/L		98
53) 1,2-Dichloroethane	4.752	62	112591	18.65	ug/L		98
54) 2,2,4-Trimethylpentane	4.635	57	152825	21.38	ug/L		95
55) tert-amyl methyl ether	4.759	73	181185	17.18	ug/L		100
56) Crotonaldehyde	5.108	41	104744	86.72	ug/L		98
57) n-Butyl Alcohol	5.460	56	72443	151.25	ug/L	#	2
58) Trichloroethene	5.355	95	79760	18.04	ug/L		95
59) Methylcyclohexane	5.460	83	84483	19.03	ug/L		97
60) Methyl Methacrylate	5.820	41	113897	18.47	ug/L		94
61) 1,2-Dichloropropane	5.659	63	69337	17.81	ug/L		97
62) Dibromomethane	5.790	93	53530	17.80	ug/L		94
63) 1,4-Dioxane	5.812	88	44749	327.64	ug/L		96
64) Bromodichloromethane	5.985	83	90320	16.78	ug/L		98
65) 2-Nitropropane	6.356	41	179519	91.32	ug/L		97
66) 2-Chloroethyl vinyl ether	6.393	63	305558	92.35	ug/L		97
67) 1-Bromo-2-Chloroethane	6.345	63	103691	18.15	ug/L		99
68) Epichlorohydrin	6.472	57	87400	86.98	ug/L		97
69) 4-Methyl-2-pentanone	6.727	43	888071	90.82	ug/L		98
70) cis-1,3-Dichloropropene	6.521	75	113873	18.06	ug/L		94
73) Toluene	6.828	91	300091	19.76	ug/L		98
74) Ethyl Methacrylate	7.274	69	96795	20.44	ug/L		99
75) trans-1,3-Dichloropropene	7.199	75	90987	19.82	ug/L		96
76) 1,1,2-Trichloroethane	7.387	83	58077	20.07	ug/L		99
77) Tetrachloroethene	7.391	166	78003	20.33	ug/L		96
78) 2-hexanone	7.664	43	715308	106.07	ug/L		97
79) 1,3-Dichloropropane	7.563	76	116449	20.38	ug/L		94
80) Dibromochloromethane	7.750	129	75669	17.84	ug/L		96
81) n-Butyl Acetate	7.788	43	536315	53.09	ug/L		97
82) 1,2-Dibromoethane	7.859	107	80953	19.80	ug/L		96
83) 1-Chlorohexane	8.346	91	83768	20.14	ug/L		95
84) Chlorobenzene	8.346	112	197868	18.97	ug/L		97
85) 1,1,1,2-Tetrachloroethane	8.455	131	70269	18.50	ug/L		99
86) Ethylbenzene	8.448	91	320059	19.54	ug/L		100
87) m,p-Xylene	8.575	91	497689	39.85	ug/L		98
88) o-Xylene	8.965	91	251771	19.65	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

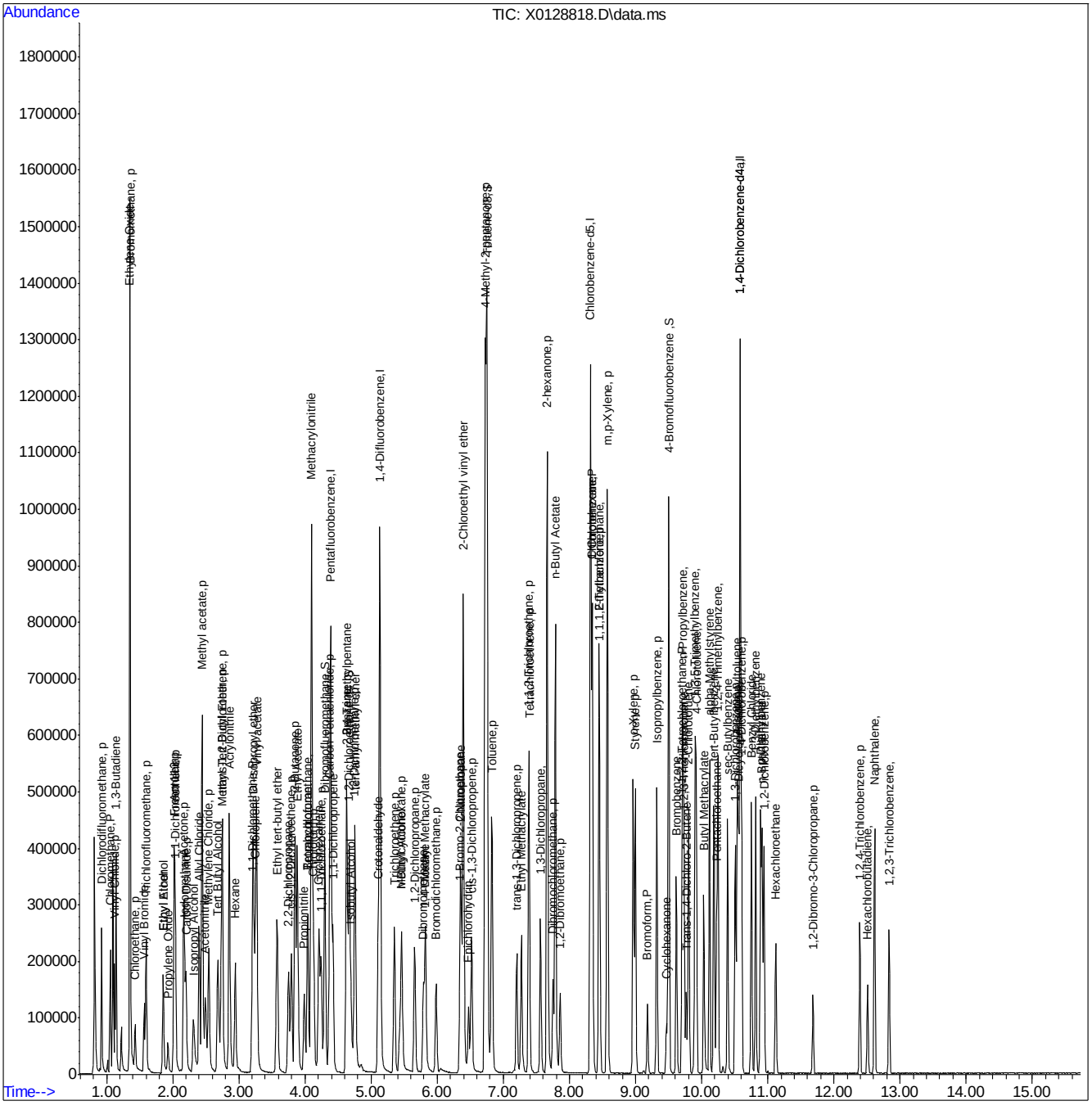
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89)	Styrene	8.999	104	202908	19.75	ug/L		97
90)	Bromoform	9.179	173	45214	16.41	ug/L		96
92)	Isopropylbenzene	9.321	105	277057	21.05	ug/L		99
93)	Cyclohexanone	9.467	55	33876	92.37	ug/L		97
95)	Bromobenzene	9.621	156	75113	19.78	ug/L		98
96)	1,1,2,2-Tetrachloroethane	9.703	83	104355	20.63	ug/L		100
97)	Trans-1,4-Dichloro-2-B...	9.771	53	26591	20.01	ug/L	#	85
98)	1,2,3-Trichloropropane	9.733	110	37998	20.67	ug/L		95
99)	n-Propylbenzene	9.715	91	327287	21.33	ug/L		97
100)	2-Chlorotoluene	9.805	91	208086	21.14	ug/L		97
101)	4-Chlorotoluene	9.917	91	239937	21.11	ug/L		95
102)	1,3,5-Trimethylbenzene	9.902	105	230549	21.09	ug/L		96
103)	Butyl Methacrylate	10.033	69	79241	20.00	ug/L		95
104)	alpha-Methylstyrene	10.120	118	129122	20.95	ug/L		96
105)	Pentachloroethane	10.228	167	32513	16.88	ug/L		100
106)	sec-Butylbenzene	10.393	105	251768	20.99	ug/L		97
107)	1,3-Dichlorobenzene	10.509	146	128701	19.12	ug/L		98
108)	4-Isopropyltoluene	10.539	119	216561	20.79	ug/L		99
109)	1,4-Dichlorobenzene	10.603	146	136074	19.27	ug/L		97
110)	tert-Butylbenzene	10.187	91	128547	21.48	ug/L		94
111)	Dicyclopentadiene	10.558	66	264330	21.79	ug/L		96
112)	n-Butylbenzene	10.914	91	223520	21.27	ug/L		99
113)	1,2-Dichlorobenzene	10.944	146	127357	19.73	ug/L		98
114)	1,2,4-Trimethylbenzene	10.247	105	234444	21.14	ug/L		99
115)	Benzyl Chloride	10.753	91	247441	16.78	ug/L		96
116)	p-Diethylbenzene	10.892	119	118655	19.99	ug/L		98
117)	Hexachloroethane	11.120	119	32251	18.83	ug/L		94
118)	1,2-Dibromo-3-Chloropr...	11.683	75	24301	21.27	ug/L		88
119)	1,2,4-Trichlorobenzene	12.395	180	59086	18.48	ug/L		98
120)	1,3-Diethylbenzene	10.817	119	123310	20.34	ug/L		98
121)	Hexachlorobutadiene	12.511	225	20806	19.28	ug/L		96
122)	Naphthalene	12.616	128	265572	20.82	ug/L		100
123)	1,2,3-Trichlorobenzene	12.834	180	55512	18.94	ug/L		99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128818.D
Acq On : 21 May 2019 2:12 pm
Operator : firatt
Sample : cc4007-20
Misc : ms24750,VX4026,5,,,5,,WATER
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 21 14:34:59 2019
Quant Method : C:\msdchem\1\METHODS\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128845.D
Acq On : 22 May 2019 1:39 am
Operator : firatt
Sample : ecc4007-40
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 22 05:32:01 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Pentafluorobenzene	4.388	168	404297	50.00	ug/L	0.00
48) 1,4-Difluorobenzene	5.134	114	692960	50.00	ug/L	0.00
71) Chlorobenzene-d5	8.320	117	585968	50.00	ug/L	0.00
91) 1,4-Dichlorobenzene-d4	10.581	152	248298	50.00	ug/L	0.00
125) 1,4-Dichlorobenzene-d4a	10.581	152	248298	50.00	ug/L	0.00
System Monitoring Compounds						
45) Dibromofluoromethane	4.302	113	223700	52.20	ug/L	0.00
Spiked Amount 50.000	Range 72 - 122		Recovery = 104.40%			
50) 1,2-Dichloroethane-d4	4.669	65	227217	57.00	ug/L	0.00
Spiked Amount 50.000	Range 68 - 124		Recovery = 114.00%			
72) Toluene-d8	6.753	98	748263	57.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 119		Recovery = 115.64%			
94) 4-Bromofluorobenzene	9.501	95	277298	53.71	ug/L	0.00
Spiked Amount 50.000	Range 72 - 126		Recovery = 107.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.924	85	205850	35.01	ug/L	100
3) Chloromethane	1.052	50	229651	34.97	ug/L	100
4) Vinyl Chloride	1.123	62	182907	33.48	ug/L	99
5) 1,3-Butadiene	1.145	54	139556	40.32	ug/L	97
6) Ethylene Oxide	1.352	44	1957010	2682.40	ug/L	100
7) Bromomethane	1.355	94	65859	34.72	ug/L	98
8) Chloroethane	1.427	64	70101	36.33	ug/L	99
9) Vinyl Bromide	1.565	106	118163	36.53	ug/L	98
10) Trichlorofluoromethane	1.595	101	239558	35.14	ug/L	96
11) Ethyl Alcohol	1.854	45	177120	382.33	ug/L	97
12) Ethyl Ether	1.858	59	126234	38.97	ug/L	97
13) Propylene Oxide	1.929	43	43567	38.02	ug/L	95
14) Acrolein	2.026	56	257498	176.56	ug/L	100
15) 1,1-Dichloroethene	2.038	61	220904	42.26	ug/L	97
16) Freon 113	2.023	101	133169	43.53	ug/L	98
17) Acetone	2.169	43	603699	188.41	ug/L	98
18) Isopropyl Alcohol	2.315	45	322832	337.47	ug/L	99
19) Iodomethane	2.184	142	184355	39.75	ug/L	98
20) Methyl acetate	2.442	43	1370734	199.56	ug/L	99
21) Carbon Disulfide	2.202	76	323270	41.29	ug/L	98
22) Allyl Chloride	2.401	76	74818	37.70	ug/L #	83
23) Acetonitrile	2.491	40	140776	184.82	ug/L	99
24) Methylene Chloride	2.544	49	239217	37.86	ug/L	97
25) Tert Butyl Alcohol	2.686	59	517223	349.62	ug/L	97
26) trans-1,2-Dichloroethene	2.750	61	215217	40.06	ug/L	97
27) Acrylonitrile	2.855	53	543678	176.82	ug/L	99
28) Hexane	2.945	57	142293	41.22	ug/L	95
29) Methyl Tert Butyl Ether	2.742	73	418532	38.96	ug/L	72
30) 1,1-Dichloroethane	3.203	63	261291	39.88	ug/L	98
31) Vinyl acetate	3.271	43	1189202	112.84	ug/L	99
32) Di-isopropyl ether	3.222	45	605049	39.65	ug/L	97
33) Chloroprene	3.252	53	248988	38.97	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128845.D
Acq On : 22 May 2019 1:39 am
Operator : firatt
Sample : ecc4007-40
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 22 05:32:01 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
34) Ethyl tert-butyl ether	3.578	59	454783	38.23	ug/L	98
35) Ethyl Acetate	3.886	43	828653	90.04	ug/L	99
36) 2,2-Dichloropropane	3.754	77	153577	30.11	ug/L	95
37) cis-1,2-Dichloroethene	3.796	61	223233	39.04	ug/L	99
38) 2-Butanone	3.848	43	966859	198.68	ug/L	99
39) Propionitrile	3.991	54	254077	178.09	ug/L	98
40) Methacrylonitrile	4.099	41	919498	203.90	ug/L	97
41) Bromochloromethane	4.039	128	84961	37.64	ug/L	89
42) Chloroform	4.129	83	273059	40.08	ug/L	97
43) Tetrahydrofuran	4.043	42	127674	36.65	ug/L	98
44) 1,1,1-Trichloroethane	4.245	97	243622	38.73	ug/L	97
46) Cyclohexane	4.212	56	231733	43.05	ug/L	97
47) 1,1-Dichloropropene	4.422	39	145926	39.77	ug/L	91
49) Carbon Tetrachloride	4.369	119	213289	35.74	ug/L	99
51) Isobutyl Alcohol	4.695	43	200019	363.24	ug/L	99
52) Benzene	4.632	78	545242	38.93	ug/L	98
53) 1,2-Dichloroethane	4.752	62	229473	38.36	ug/L	98
54) 2,2,4-Trimethylpentane	4.632	57	275757	38.92	ug/L	94
55) tert-amyl methyl ether	4.759	73	380025	36.35	ug/L	98
56) Crotonaldehyde	5.104	41	212007	177.10	ug/L	97
57) n-Butyl Alcohol	5.430	56	170697	359.56	ug/L	97
58) Trichloroethene	5.355	95	157567	35.95	ug/L	98
59) Methylcyclohexane	5.464	83	170016	38.63	ug/L	99
60) Methyl Methacrylate	5.824	41	235220	38.48	ug/L	97
61) 1,2-Dichloropropane	5.659	63	144636	37.49	ug/L	94
62) Dibromomethane	5.790	93	110536	37.09	ug/L	94
63) 1,4-Dioxane	5.816	88	89323	659.83	ug/L	96
64) Bromodichloromethane	5.985	83	186579	34.97	ug/L	98
65) 2-Nitropropane	6.356	41	393258	201.82	ug/L	97
66) 2-Chloroethyl vinyl ether	6.397	63	606553	184.96	ug/L	98
67) 1-Bromo-2-Chloroethane	6.345	63	208154	36.77	ug/L	100
68) Epichlorohydrin	6.476	57	166128	166.81	ug/L	97
69) 4-Methyl-2-pentanone	6.727	43	1684958	173.86	ug/L	98
70) cis-1,3-Dichloropropene	6.525	75	227800	36.45	ug/L	99
73) Toluene	6.828	91	599508	39.81	ug/L	98
74) Ethyl Methacrylate	7.274	69	206783	44.04	ug/L	99
75) trans-1,3-Dichloropropene	7.203	75	189619	41.66	ug/L	98
76) 1,1,2-Trichloroethane	7.387	83	118388	41.28	ug/L	99
77) Tetrachloroethene	7.391	166	155474	40.87	ug/L	98
78) 2-hexanone	7.664	43	1369631	204.87	ug/L	97
79) 1,3-Dichloropropane	7.563	76	235057	41.49	ug/L	93
80) Dibromochloromethane	7.754	129	162867	38.72	ug/L	99
81) n-Butyl Acetate	7.788	43	1102592	110.08	ug/L	97
82) 1,2-Dibromoethane	7.863	107	167032	41.21	ug/L	99
83) 1-Chlorohexane	8.346	91	168785	40.92	ug/L	96
84) Chlorobenzene	8.346	112	400952	38.77	ug/L	97
85) 1,1,1,2-Tetrachloroethane	8.455	131	151171	40.14	ug/L	99
86) Ethylbenzene	8.448	91	652156	40.17	ug/L	100
87) m,p-Xylene	8.575	91	1009183	81.50	ug/L	97
88) o-Xylene	8.965	91	512927	40.39	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128845.D
Acq On : 22 May 2019 1:39 am
Operator : firatt
Sample : ecc4007-40
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 22 05:32:01 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration

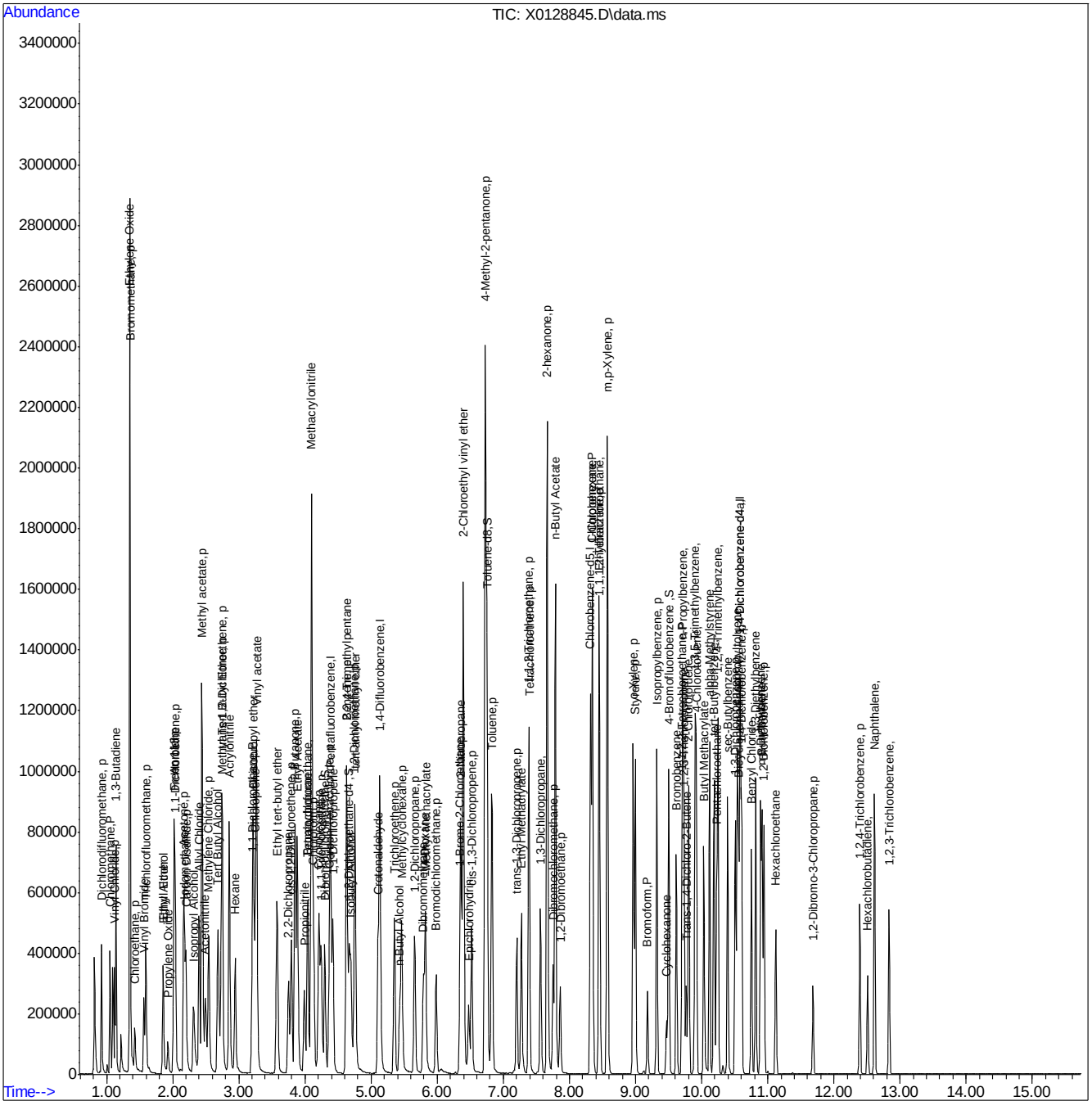
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Styrene	8.999	104	420095	41.25	ug/L	98
90)	Bromoform	9.179	173	100370	36.75	ug/L	98
92)	Isopropylbenzene	9.321	105	567556	43.63	ug/L	99
93)	Cyclohexanone	9.467	55	64697	178.45	ug/L	97
95)	Bromobenzene	9.617	156	155095	41.31	ug/L	99
96)	1,1,2,2-Tetrachloroethane	9.703	83	221080	44.22	ug/L	100
97)	Trans-1,4-Dichloro-2-B...	9.767	53	54712	41.66	ug/L	87
98)	1,2,3-Trichloropropane	9.733	110	78912	43.42	ug/L	97
99)	n-Propylbenzene	9.718	91	667348	43.99	ug/L	99
100)	2-Chlorotoluene	9.805	91	424906	43.68	ug/L	98
101)	4-Chlorotoluene	9.921	91	488289	43.46	ug/L	97
102)	1,3,5-Trimethylbenzene	9.902	105	470190	43.52	ug/L	98
103)	Butyl Methacrylate	10.033	69	187616	47.89	ug/L	96
104)	alpha-Methylstyrene	10.120	118	261145	42.86	ug/L	96
105)	Pentachloroethane	10.228	167	80379	42.21	ug/L	99
106)	sec-Butylbenzene	10.393	105	509504	42.97	ug/L	100
107)	1,3-Dichlorobenzene	10.509	146	266870	40.11	ug/L	98
108)	4-Isopropyltoluene	10.539	119	438241	42.57	ug/L	97
109)	1,4-Dichlorobenzene	10.603	146	277527	39.76	ug/L	97
110)	tert-Butylbenzene	10.187	91	256285	43.33	ug/L	98
111)	Dicyclopentadiene	10.558	66	512781	42.76	ug/L	97
112)	n-Butylbenzene	10.914	91	436374	42.01	ug/L	99
113)	1,2-Dichlorobenzene	10.941	146	259966	40.73	ug/L	97
114)	1,2,4-Trimethylbenzene	10.247	105	478633	43.65	ug/L	99
115)	Benzyl Chloride	10.753	91	385968	26.21	ug/L	98
116)	p-Diethylbenzene	10.892	119	237065	40.40	ug/L	98
117)	Hexachloroethane	11.120	119	68367	40.37	ug/L	99
118)	1,2-Dibromo-3-Chloropr...	11.683	75	50714	44.90	ug/L	94
119)	1,2,4-Trichlorobenzene	12.391	180	125112	39.58	ug/L	95
120)	1,3-Diethylbenzene	10.817	119	249352	41.62	ug/L	99
121)	Hexachlorobutadiene	12.511	225	42184	39.54	ug/L	96
122)	Naphthalene	12.612	128	561092	44.49	ug/L	100
123)	1,2,3-Trichlorobenzene	12.834	180	117038	40.39	ug/L	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\VX4025\
Data File : X0128845.D
Acq On : 22 May 2019 1:39 am
Operator : firatt
Sample : ecc4007-40
Misc : ms24749,VX4025,5,,,5,,WATER
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 22 05:32:01 2019
Quant Method : C:\msdchem\1\methods\VX4007C.m
Quant Title : SW846 8260C and EPA 624/624.1
QLast Update : Thu May 09 11:33:09 2019
Response via : Initial Calibration



VX4007C.m Wed May 22 10:18:06 2019 Page: 4

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	RTX624
Initial Calib Std	MV13140	MV13142	MV13129		Method	8260C
BFB	MV13138				Init Calib Date	5/8/2019
ICV	MV13144	MV13133	MV13141			
CC	MV13140	MV13142	MV13129			
BS/MS/MSD	MV13144	MV13133	MV13141		Analysis Date	5/8/2019
BS/MS/MSD Spike AMT	12.5UL/40ML	10UL/40ML	5UL/40ML		Sequence loaded by	FIRATT
Internal	MV13119				Data processed by	FIRATT
Surr	MV13119				Batch ID	VX4007
					Matrix	AQ
					Approved By:	ANALYST (FIRATT)
pH Paper Lot#	NA				Approved Date:	5/9/2019 12:50:43 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128482	BLK	NA	NA	NA	8260C	5	NA	NA	1	N	CLEANUP BLANK
X	128483	BFB	NA	NA	NA	8260C	5	NA	NA	2	N	40UL/40ML
X	128484	BFB	NA	NA	NA	8260C	5	NA	NA	3	N	40UL/40ML
X	128485	BFB	NA	NA	NA	8260C	5	NA	NA	4	N	40UL/40ML
X	128486	BFB	NA	NA	NA	8260C	5	NA	NA	5	Y	40UL/40ML
X	128487	CC3989-20	NA	NA	NA	8260C	5	NA	NA	6	N	(10+5+10)UL/50ML
X	128488	BLK	NA	NA	NA	8260C	5	NA	NA	7	N	CLEANUP BLANK
X	128489	BLK	NA	NA	NA	8260C	5	NA	NA	8	N	CLEANUP BLANK
X	128490	IC4007-0,5	NA	NA	NA	8260C	5	NA	NA	9	Y	(1+0.5+1)UL/200ML
X	128491	IC4007-1	NA	NA	NA	8260C	5	NA	NA	10	Y	(1+0.5+1)UL/100ML
X	128492	IC4007-2	NA	NA	NA	8260C	5	NA	NA	11	Y	(2+1+2)UL/100ML
X	128493	IC4007-5	NA	NA	NA	8260C	5	NA	NA	12	Y	(5+2.5+5)UL/100ML

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128494	IC4007-20	NA	NA	NA	8260C	5	NA	NA	13	Y	(10+5+10)UL/50ML
X	128495	ICC4007-40	NA	NA	NA	8260C	5	NA	NA	14	Y	(20+10+20)UL/50ML
X	128496	IC4007-70	NA	NA	NA	8260C	5	NA	NA	15	Y	(35+17.5+35)UL/50ML
X	128497	IC4007-100	NA	NA	NA	8260C	5	NA	NA	16	Y	(50+25+50)UL/50ML
X	128498	IC4007-200	NA	NA	NA	8260C	5	NA	NA	17	Y	(100+50+100)UL/50ML
X	128499	BLK	NA	NA	NA	8260C	5	NA	NA	18	N	CLEANUP BLANK
X	128500	BLK	NA	NA	NA	8260C	5	NA	NA	19	N	CLEANUP BLANK
X	128501	ICV4007-40	NA	NA	NA	8260C	5	NA	NA	20	Y	(25+20+10)UL/50ML RR FOR GASES

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	RTX624
Initial Calib Std	MV13140	MV13142	MV13129		Method	8260C/624
BFB	MV13138				Init Calib Date	5/8/2019
ICV	MV13144	MV13133	MV13141			
CC	MV13140	MV13142	MV13145			
BS/MS/MSD	MV13144	MV13133	MV13146		Analysis Date	5/9/2019
BS/MS/MSD Spike AMT	12.5UL/40ML	10UL/40ML	5UL/40ML		Sequence loaded by	FIRATT
Internal	MV13119				Data processed by	FIRATT / CHERRY M
Surr	MV13119				Batch ID	VX4008
					Matrix	AQ
					Approved By:	FIRATT
pH Paper Lot#	NA				Approved Date:	5/10/2019 9:22:23 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128502	BLK	NA	NA	NA	8260C	5	NA	NA	1	N	CLEANUP BLANK
X	128503	BFB	NA	NA	NA	8260C	5	NA	NA	2	Y	40UL/40ML
X	128504	CC4007-20	NA	NA	NA	8260C	5	NA	NA	3	N	(10+5+10)UL/50ML
X	128505	CC4007-40	NA	NA	NA	8260C	5	NA	NA	4	Y	(20+10+20)UL/50ML
X	128506	ICV4007-40 GASES	NA	NA	NA	8260C	5	NA	NA	5	Y	10UL/50ML GASES ONLY
X	128507	BS	NA	NA	NA	8260C	5	NA	NA	6	Y	(12.5+10+5)UL/40ML
X	128508	BSD	NA	NA	NA	8260C	5	NA	NA	7	Y	(12.5+10+5)UL/40ML
X	128509	BLK	NA	NA	NA	8260C	5	NA	NA	8	N	CLEANUP BLANK
X	128510	BLK	NA	NA	NA	8260C	5	NA	NA	9	N	CLEANUP BLANK
X	128511	MB	NA	NA	NA	8260C	5	NA	NA	10	Y	
X	128512	TD38312-1	NA	NA	MS24697	V8260STD	5	NA	NA	11	Y	(1+0.5+1)UL/200ML RR
X	128513	TD38312-2	NA	NA	MS24697	V8260STD	5	NA	NA	12	Y	(1+0.5+1)UL/100ML

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128514	TD37071-1	NA	NA	MS24698	V624TCL	5	NA	NA	13	Y	(1.25+1+0.5)UL/100ML RR
X	128515	TD37071-2	NA	NA	MS24698	V624TCL	5	NA	NA	14	Y	(2.5+2+1)UL/100ML
X	128516	TD38312-3	NA	NA	MS24697	V8260STD	5	NA	NA	15	Y	(5+2.5+5)UL/200ML
X	128517	TD37071-3	NA	NA	MS24698	V624TCL	5	NA	NA	16	Y	(6.25+5+2.5)UL/100ML
X	128518	TD38312-3A	NA	NA	MS24697	V8260STD	5	NA	NA	17	Y	(5+2.5+5)UL/50ML
X	128519	TD38699-1	4	NA	MS24697	V826012DCA	5	NA	<2	18	Y	
X	128520	TD38692-1	7	NA	MS24697	V8260BENZ	5	NA	<2	19	Y	Vial contains headspace.
X	128521	TD38718-1	8	NA	MS24697	V8260SL	5	NA	<2	20	Y	2X FOR BROMOFORM
X	128522	TD38798-1	NA	5X	MS24693	V8260BTX	5	NA	>2	21	Y	Vial contains headspace. 10ML/50ML RR FOR TOLUENE

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	RTX624
Initial Calib Std	MV13140	MV13142	MV13129		Method	8260C/624
BFB	MV13138				Init Calib Date	5/8/2019
ICV	MV13144	MV13133	MV13141			
CC	MV13152	MV13151	MV13145			
BS/MS/MSD	MV13144	MV13133	MV13153		Analysis Date	5/21/2019
BS/MS/MSD Spike AMT	12.5UL/40ML	10UL/40ML	5UL/40ML		Sequence loaded by	FIRATT
Internal	MV13137				Data processed by	FIRATT / CHERRY
Surr	MV13137				Batch ID	VX4025
					Matrix	AQ
Potassium Iodide-Starch Test Paper #	RV170619				Approved By:	FIRATT
pH Paper Lot#	WHATMAN 10D3581				Approved Date:	5/22/2019 11:45:28 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128817	BFB	NA	NA	NA	8260C	5	NA	NA	1	Y	40UL/40ML
X	128818	CC4007-20	NA	NA	NA	8260C	5	NA	NA	2	Y	(10+5+10)UL/50ML
X	128819	BS	NA	NA	NA	8260C	5	NA	NA	3	Y	(12.5+10+5)UL/40ML
X	128820	BLK	NA	NA	NA	8260C	5	NA	NA	4	N	CLEANUP BLANK
X	128821	MB	NA	NA	NA	8260C	5	NA	NA	5	Y	
X	128822	TD39309-2	11	5X	MS24749	V8260SL2	5	NA	<2	6	Y	10ML/50ML
X	128823	TD39309-2MS	11	5X	MS24749	V8260SL2	5	NA	<2	7	Y	(10ML/50ML)/(12.5+10+5)UL/40ML
X	128824	TD39309-2MSD	11	5X	MS24749	V8260SL2	5	NA	<2	8	Y	(10ML/50ML)/(12.5+10+5)UL/40ML
X	128825	TD39246-6	4	100X	MS24738	V8260SL2	5	NA	>2	9	Y	500UL/50ML
X	128826	TD39363-41	2	NA	MS24749	V8260BTX	5	NA	<2	10	Y	
X	128827	TD39344-7	3	NA	MS24749	V8260SL	5	NA	>2	11	Y	
X	128828	TD39364-1	1	NA	MS24749	V8260STD	5	NA	<2	12	Y	

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128829	TD39364-4	3	NA	MS24749	V8260STD	5	NA	<2	13	Y	
X	128830	TD39364-2	5	NA	MS24749	V8260STD	5	NA	<2	14	Y	
X	128831	TD39364-3	5	NA	MS24749	V8260STD	5	NA	<2	15	Y	
X	128832	TD39307-24		50X	MS24740	V8260STD	5	NA	<2	16	Y	1ML/50ML
X	128833	TD39291-11	1	NA	MS24740	V8260SL2	5	NA	<2	17	Y	CORR RR FOR F/D 50X
X	128834	TD39309-1	4	NA	MS24749	V8260SL2	5	NA	<2	18	N	CORR RR POSSIBLE C/O
X	128835	TD39309-3	5	5X	MS24749	V8260SL2	5	NA	<2	19	N	10ML/50ML; CORR RR O/D 1X
X	128836	TD39309-4	3	NA	MS24749	V8260SL2	5	NA	<2	20	Y	RR CO
X	128837	TD39309-5	3	NA	MS24749	V8260SL2	5	NA	<2	21	Y	RR CO
X	128838	TD39309-6	1	NA	MS24749	V8260SL2	5	NA	<2	22	Y	
X	128839	TD39345-1	1	NA	MS24749	V8260SL2	5	NA	<2	23	Y	RR CO
X	128840	TD39345-2	2	NA	MS24749	V8260SL2	5	NA	<2	24	Y	
X	128841	TD39345-4	1	NA	MS24749	V8260SL2	5	NA	<2	25	N	CORR RR FOR F/D 50X
X	128842	TD39346-1	COMP	NA	MS24749	V8260EPICH	5	NA	<2	26	Y	
X	128843	TD39353-1	COMP	NA	MS24749	V8260EPICH	5	NA	<2	27	Y	
X	128844	TD39309-2	5	2X	MS24749	V8260SL2	5	NA	<2	28	Y	25ML/50ML
X	128845	ECC4007-40	NA	NA	NA	624	5	NA	NA	29	Y	(20+10+20)UL/50ML
X	128846	BS	NA	NA	NA	624	5	NA	NA	30	Y	(12.5+10+5)UL/40ML
X	128847	BLK	NA	NA	NA	624	5	NA	NA	31	N	CLEANUP BLANK
X	128848	MB	NA	NA	NA	624	5	NA	NA	32	Y	
X	128849	TD39398-2	4	NA	MS24750	V624SL2	5	N	>2	33	Y	RR CO

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128850	TD39398-3	1	NA	MS24750	V624SL2	5	N	>2	34	Y	RR CO
X	128851	TD39398-1	1	NA	MS24750	V624SL2	5	N	>2	35	Y	RR CO
X	128852	TD39398-1MS	2	NA	MS24750	V624SL2	5	N	>2	36	Y	(12.5+10+5)UL/40ML
X	128853	TD39398-1MSD	3	NA	MS24750	V624SL2	5	N	>2	37	Y	(12.5+10+5)UL/40ML
X	128854	BLK	NA	NA	NA	624	5	NA	NA	38	N	CLEANUP BLANK
X	128855	TD39446-1	3	NA	MS24750	V624SL2	5	N	>2	39	Y	RR CO
X	128856	TD39446-2	3	NA	MS24750	V624SL2	5	N	>2	40	Y	
X	128857	TD39446-3	6	NA	MS24750	V624SL2	5	N	>2	41	Y	

GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	RTX624
Initial Calib Std	MV13140	MV13142	MV13129		Method	8260C/624
BFB	MV13138				Init Calib Date	5/8/2019
ICV	MV13144	MV13133	MV13141			
CC	MV13152	MV13151	MV13145			
BS/MS/MSD	MV13144	MV13133	MV13153		Analysis Date	5/21/2019
BS/MS/MSD Spike AMT	12.5UL/40ML	10UL/40ML	5UL/40ML		Sequence loaded by	FIRATT
Internal	MV13137				Data processed by	FIRATT / CHERRY
Surr	MV13137				Batch ID	VX4026
					Matrix	AQ
Potassium Iodide-Starch Test Paper #	RV170619				Approved By:	FIRATT
pH Paper Lot#	WHATMAN 10D3581				Approved Date:	5/22/2019 11:45:49 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128817	BFB	NA	NA	NA	8260C	5	NA	NA	1	Y	40UL/40ML
X	128818	CC4007-20	NA	NA	NA	8260C	5	NA	NA	2	Y	(10+5+10)UL/50ML
X	128819	BS	NA	NA	NA	8260C	5	NA	NA	3	Y	(12.5+10+5)UL/40ML
X	128820	BLK	NA	NA	NA	8260C	5	NA	NA	4	N	CLEANUP BLANK
X	128821	MB	NA	NA	NA	8260C	5	NA	NA	5	Y	
X	128822	TD39309-2	11	5X	MS24749	V8260SL2	5	NA	<2	6	Y	10ML/50ML
X	128823	TD39309-2MS	11	5X	MS24749	V8260SL2	5	NA	<2	7	Y	(10ML/50ML)/(12.5+10+5)UL/40ML
X	128824	TD39309-2MSD	11	5X	MS24749	V8260SL2	5	NA	<2	8	Y	(10ML/50ML)/(12.5+10+5)UL/40ML
X	128825	TD39246-6	4	100X	MS24738	V8260SL2	5	NA	>2	9	Y	500UL/50ML
X	128826	TD39363-41	2	NA	MS24749	V8260BTX	5	NA	<2	10	Y	
X	128827	TD39344-7	3	NA	MS24749	V8260SL	5	NA	>2	11	Y	
X	128828	TD39364-1	1	NA	MS24749	V8260STD	5	NA	<2	12	Y	

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128829	TD39364-4	3	NA	MS24749	V8260STD	5	NA	<2	13	Y	
X	128830	TD39364-2	5	NA	MS24749	V8260STD	5	NA	<2	14	Y	
X	128831	TD39364-3	5	NA	MS24749	V8260STD	5	NA	<2	15	Y	
X	128832	TD39307-24		50X	MS24740	V8260STD	5	NA	<2	16	Y	1ML/50ML
X	128833	TD39291-11	1	NA	MS24740	V8260SL2	5	NA	<2	17	Y	CORR RR FOR F/D 50X
X	128834	TD39309-1	4	NA	MS24749	V8260SL2	5	NA	<2	18	N	CORR RR POSSIBLE C/O
X	128835	TD39309-3	5	5X	MS24749	V8260SL2	5	NA	<2	19	N	10ML/50ML; CORR RR O/D 1X
X	128836	TD39309-4	3	NA	MS24749	V8260SL2	5	NA	<2	20	Y	RR CO
X	128837	TD39309-5	3	NA	MS24749	V8260SL2	5	NA	<2	21	Y	RR CO
X	128838	TD39309-6	1	NA	MS24749	V8260SL2	5	NA	<2	22	Y	
X	128839	TD39345-1	1	NA	MS24749	V8260SL2	5	NA	<2	23	Y	RR CO
X	128840	TD39345-2	2	NA	MS24749	V8260SL2	5	NA	<2	24	Y	
X	128841	TD39345-4	1	NA	MS24749	V8260SL2	5	NA	<2	25	N	CORR RR FOR F/D 50X
X	128842	TD39346-1	COMP	NA	MS24749	V8260EPICH	5	NA	<2	26	Y	
X	128843	TD39353-1	COMP	NA	MS24749	V8260EPICH	5	NA	<2	27	Y	
X	128844	TD39309-2	5	2X	MS24749	V8260SL2	5	NA	<2	28	Y	25ML/50ML
X	128845	ECC4007-40	NA	NA	NA	624	5	NA	NA	29	Y	(20+10+20)UL/50ML
X	128846	BS	NA	NA	NA	624	5	NA	NA	30	Y	(12.5+10+5)UL/40ML
X	128847	BLK	NA	NA	NA	624	5	NA	NA	31	N	CLEANUP BLANK
X	128848	MB	NA	NA	NA	624	5	NA	NA	32	Y	
X	128849	TD39398-2	4	NA	MS24750	V624SL2	5	N	>2	33	Y	RR CO

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	CL	pH	ALS #	Status	Comments
X	128850	TD39398-3	1	NA	MS24750	V624SL2	5	N	>2	34	Y	RR CO
X	128851	TD39398-1	1	NA	MS24750	V624SL2	5	N	>2	35	Y	RR CO
X	128852	TD39398-1MS	2	NA	MS24750	V624SL2	5	N	>2	36	Y	(12.5+10+5)UL/40ML
X	128853	TD39398-1MSD	3	NA	MS24750	V624SL2	5	N	>2	37	Y	(12.5+10+5)UL/40ML
X	128854	BLK	NA	NA	NA	624	5	NA	NA	38	N	CLEANUP BLANK
X	128855	TD39446-1	3	NA	MS24750	V624SL2	5	N	>2	39	Y	RR CO
X	128856	TD39446-2	3	NA	MS24750	V624SL2	5	N	>2	40	Y	
X	128857	TD39446-3	6	NA	MS24750	V624SL2	5	N	>2	41	Y	

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD39353
Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Carbonaceous Bod, 5 Day	GP53177/GN98618	2.0	0.0	mg/l	198	198	100.0	81-112%
Chromium, Hexavalent	GN98575	0.010	0.0	mg/l	.1	0.10	104.0	90-108%
Enterococci	MB18075	1	<1	mpn/100ml				

Associated Samples:
Batch GN98575: TD39353-2
Batch GP53177: TD39353-2A
Batch MB18075: TD39353-2
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD39353
Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Carbonaceous Bod, 5 Day	GP53177/GN98618	TD39379-2	mg/l	1.5	1.6	6.5	0-20%
Chromium, Hexavalent	GN98575	TD39353-2	mg/l	0.0	0.0	0.0	0-11%

Associated Samples:
Batch GN98575: TD39353-2
Batch GP53177: TD39353-2A
(*) Outside of QC limits

8.2
8

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: TD39353
Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GN98575	TD39353-2	mg/l	0.0	.1	0.10	95.0	80-120%

Associated Samples:
Batch GN98575: TD39353-2
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

8.3
8

SGS Instrument Runlog
Inorganics Analyses

Login Number: TD39353
Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

File ID: A052019CBOD5.TXT Date Analyzed: 05/20/19 Methods: SM 5210B-2011
Analyst: MC Run ID: GN98618
Parameters: Carbonaceous Bod, 5 Day

Time	Sample Description	Dilution Factor	PS Recov	Comments
18:22	GP53177-MB1	1		
18:25	GP53177-B1	1		
18:27	TD39353-2A	1		
18:27	TD39379-2	1		(sample used for QC only; not part of login TD39353)
18:28	GP53177-D1	1		
18:29	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: TD39353
Account: ITCTXDP - Intercontinental Terminals
Project: CARDILCL: Deer Park Release

File ID: A052019CBOD5.TXT Date Analyzed: 05/20/19 Methods: SM 5210B-2011
Run ID: GN98618 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits

(!) Outside of QC limits

General Chemistry

Raw Data

Hexavalent Chromium

Bottle #	Sample #	Sample Absorbance	BKGRD Abs	CCV/CCB Times	Y Values Corr Sample Absorbance	X Values Conc(mg/l)	Final Vol. (ml)	Sam Vol. (ml)	Dilution	Final Conc.	Units	MDL	RDL
	Test Title:	XCr			1			Method:	SM18 CRD				
	GN Batch:	GN98575											
	Analyst:	PA											
	Prep Date:	5/20/2019	9:30	18:50		Note: Use 4 for CLP list pointer, 1 for reg. List pointer.							
	Analysis Date:	5/20/2019											
	Instrument ID:	WC SPEC1											
										Corr. Coef:	0.99961		
	Cal. Blk.	0	NA	NA	0.000	0.0000							
	0.01	0.011	NA	NA	0.011	0.0100				Slope:	0.9153		
	0.05	0.046	NA	NA	0.046	0.0500							
	0.1	0.090	NA	NA	0.090	0.1000				Y intercept:	-0.0008		
	0.2	0.175	NA	NA	0.175	0.2000							
	0.4	0.369	NA	NA	0.369	0.4000							
			NA	NA			Final Vol.	Sam. Vol.					
			NA	NA			(ml)	(ml)	Dilution	Final Conc.	Units	MDL	RDL
	ICV	0.092	NA	NA	0.092	0.1014	NA	NA	NA	NA	mg/l	0.002	0.010
	ICB	0.000	NA	NA	0.000	0.0008	NA	NA	NA	NA	mg/l	0.002	0.010
	GN98575-MB1	0.000	0.000	NA	0.000	0.0008	25.0	25.0	1	0.001	mg/l	0.002	0.010
	GN98575-B1	0.094	0.000	NA	0.094	0.1035	25.0	25.0	1	0.104	mg/l	0.002	0.010
2	GN98575-S1	0.093	0.000	NA	0.093	0.1024	25.0	25.0	1	0.102	mg/l	0.002	0.010
2	GN98575-D1	0.006	0.000	NA	0.006	0.0074	25.0	25.0	1	0.007	mg/l	0.002	0.010
2	TD39353-2	0.006	0.000	NA	0.006	0.0074	25.0	25.0	1	0.007	mg/l	0.002	0.010
	CCV	0.271	0.000	NA	0.271	0.2969	25.0	25.0	1	0.297	mg/l	0.002	0.010
	CCB	0.000	0.000	NA	0.000	0.0008	25.0	25.0	1	0.001	mg/l	0.002	0.010
2	TD39376-2	0.004	0.000	NA	0.004	0.0052	25.0	25.0	1	0.005	mg/l	0.002	0.010
	CCV	0.273	0.000	NA	0.273	0.2991	25.0	25.0	1	0.299	mg/l	0.002	0.010
	CCB	0.000	0.000	NA	0.000	0.0008	25.0	25.0	1	0.001	mg/l	0.002	0.010

pk 5/20/19

EZh 05/21/19

Hexavalent Chromium

SW846 7196A, SM3500 C-D online, SM3500 Cr -B online

GN: 98575

Date/Time: 5/20/19 09:30/18:50

Instrument: WC SPEC1

Analyst: PA

Standard Curve

CONC, mg/L	ABS
0	0
0.010	0.011
0.050	0.046
0.100	0.090
0.200	0.175
0.400	0.369

Sources

Primary Std. GN/M/229C
2nd Source GN/BC3208
10%H2SO4 WC-01370
DiPhenCarb -69
Spike Std. -71
pH Lot No. HC275000

Lab Number	Initial pH	Final pH	Bottle Number	Initial Wt / Vol	Final Vol, mL	Dilution Factor	Percent Solids	Absorb
ICV				25	25	1		0.092
ICB								0.000
GN98575-MB1								0.000
-B1								0.095
-S1	7		2					0.093
-D1	7		2					0.006
TD39353-2	7		2					0.006
CCV								0.271
CCB								0.000
TD39376-2	7		2	25	25	1		0.004
CCV								0.273
CCB								0.002

PA 5/20/19

Reviewed by: EMoS 5/20/19

Data Scanned ☐

Laboratory Notebook: WC2017-083

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Form: GN017-3

SGS

BOD SM 5210B / CBOD SM 5210B Log Book

Date/Time On: 5/20/19 1819
Analyst: ME
BOD Standard ID: GN 190520A
Incubator ID: 0
Warm Up Start Time: 11:00
DPD Reagent: GN190206A
EZ BOD Computer File Name: a05 20190bod .txt
pH/TRC Calibration Logbook #: WC2019-027

25% H_2SO_4: WC011-156B
25% NaOH: WC011 156A
Bottle ID #: EX 2345-136
BOD Seed ID#: WC026-096
CBOD Seed ID#: WC026-097
Reviewer: EZH
Date: 05/28/19

Date/Time Off 05-25-19 /13:1
Analyst: P.K
Na_2SO_3: WC026-094
BGP: 53176 BGN: 98617
CGP: 53177 CGN: 98618
Dilution Water ID #: WC026-09
Balance ID: WC2Bal1
Data Scanned: ☐

Lab No.	Bottle #	Temperature	Prepared Dilution	Volume(ml)	Initial pH	Adjusted pH	Initial TRC	Adjusted TRC	Seed Amt. Added (ml)
Dilution Blank*	NA	NA	1	300ml	NA	NA	NA	NA	NA
BOD Method Blank*	NA	NA	1	300ml	NA	NA	NA	NA	3ml
CBOD Method Blank*	NA	NA	1	300ml	NA	NA	NA	NA	3ml
BOD Seed 9	NA	NA	1	300ml	NA	NA	NA	NA	9ml
BOD Seed 15	NA	NA	1	300ml	NA	NA	NA	NA	15ml
BOD Seed 20	NA	NA	1	300ml	NA	NA	NA	NA	20ml
BOD Seed 25	NA	NA	1	300ml	NA	NA	NA	NA	25ml
CBOD Seed 9	NA	NA	1	300ml	NA	NA	NA	NA	9ml
CBOD Seed 15	NA	NA	1	300ml	NA	NA	NA	NA	15ml
CBOD Seed 20	NA	NA	1	300ml	NA	NA	NA	NA	20ml
CBOD Seed 25	NA	NA	1	300ml	NA	NA	NA	NA	25ml
BOD LCS(198ppm)	NA	NA	3	1.5ml	NA	NA	NA	NA	3ml
CBOD LCS(198ppm)	NA	NA	3	1.5ml	NA	NA	NA	NA	3ml
(C) TD39353-2A	1	19.5	1X	50,100,300	8.32	7.18	0	N	3ml
39379-2	1	19.8		50,100,300	7.22	N	10	N	3ml
39379-2D	1	19.8		50,100,300	7.22	N	0	N	3ml
(B) TD39372A	1	20.5		50,100,300	8.00	N	0	N	3ml
39361-2	1	20.1		10,50,100	7.18	N	1.40 2X	Y	3ml
39361-1	2	20.8		0.5,1,5,10	7.94	N	0	N	3ml
39367-2	1	17.6		0.5,1,5,10	7.42	N	0	N	3ml

Continued on next page

Correction Codes: #1 - Review Error Correction #2 - Transcription Error #3 - Computer Miscalculation #4 - Analyst Error Correction
Analytical Codes: #A – Sample Composited in the Lab #B – Sample Filtered in the Lab #C – Color Interference/ TRC by test strip
*Any sample dilution greater than 200 ml will require the addition of a Nutrient Pillow.

GN096-02; 08/30/18

0 SGS

BOD SM 5210B / CBOD SM 5210B Log Book

Lab No.	Bottle #	Temperature	Prepared Dilution	Volume(ml)	Initial pH	Adjusted pH	Initial TRC	Adjusted TRC	Seed Amt. Added (ml)
(C) TD39 3762✓	1	20.0	1X	50,100,300	8.34	7.18	0	N	3ml
(B) TD39372-1✓	3	20.5		50,100,300	7.68	N	0	N	3ml
39372-D1✓	3	20.5		50,100,300	7.68	N	0	N	3ml
39374-1✓	1	20.0		50,100,300	7.88	N	0	N	3ml
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ML 5/20/19

GN096-02; 08/30/18

BOD AutoEZ

Accutest Gulf Coast Laboratories Inc.

BOD Worksheet - bod05-20-19.bod Data Summary Printed 05-25-2019

	Parametei	Set	QA	Refr_Name	Refr_DATE	VC	Value	Unit	Run ID
1	BOD5	QA	0	BOD-DB	05/20/19	<	0.04	mg/L	bod05-20-19.bod201:
2	CBOD5	QA	0	CBOD-DB	05/20/19	<	0.01	mg/L	bod05-20-19.bod201:
3	BOD5	QA	0	Seed Control	05/20/19		70.8	mg/L	bod05-20-19.bod201:
4	CBOD5	QA	0	Seed Control	05/20/19		64.7	mg/L	bod05-20-19.bod201:
5	BOD5	QA	0	GP53176-MB1	05/20/19	<	-0.10	mg/L	bod05-20-19.bod201:
6	CBOD5	QA	0	GP53177-MB1	05/20/19	<	-0.26	mg/L	bod05-20-19.bod201:
7	BOD5	QA	S	GP53176-B1	05/20/19		211	mg/L	bod05-20-19.bod201:
8	CBOD5	QA	S	GP53177-B1	05/20/19		198	mg/L	bod05-20-19.bod201:
9	CBOD5	SWL	0	TD39353-2A	05/20/19	<	0.85	mg/L	bod05-20-19.bod201:
10	CBOD5	SWL	0	TD39379-2	05/20/19		1.48	mg/L	bod05-20-19.bod201:
11	CBOD5	SWL	0	GP53177-D1	05/20/19		1.56	mg/L	bod05-20-19.bod201:
12	CBOD5	SWL	0	TD39376-2 X	05/20/19	<	0.76	mg/L	bod05-20-19.bod201:
13	BOD5	SWL	0	TD39357-2A	05/20/19		2.37	mg/L	bod05-20-19.bod201:
14	BOD5	SWL	0	TD39361-2 30x	05/20/19		55.3	mg/L	bod05-20-19.bod201:
15	BOD5	SWL	0	TD39372-1	05/20/19		2.31	mg/L	bod05-20-19.bod201:
16	BOD5	SWL	0	GP53176-D1	05/20/19		2.26	mg/L	bod05-20-19.bod201:
17	BOD5	SWL	0	TD39374-1 3x	05/20/19		9.20	mg/L	bod05-20-19.bod201:
18	BOD5	SWL	0	TD39361-1 30x	05/20/19		170	mg/L	bod05-20-19.bod201:
19	BOD5	SWL	0	TD39367-2 60x	05/20/19		252	mg/L	bod05-20-19.bod201:
20									

B- GN 98617

C- GN 98618

MC / P.K 05/25/2019

EHo 5/28/19

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BOD AutoEZ™ Fast & Precise Automated BOD Reader

ACCUTEST GULF COAST LABORATORIES INC.

BOD WORKSHEET -bod05-20-19.bod

Method: EPA 405.1(BOD) BOD Seed Lot_ 080401-1-0217-57
SM 5210(CBOD) CBOD Seed Lot_ 250405-1-0709-2

Set Code:	Sample Date	Seed Name	Seed Volume	Setup	By	Second read by
*SWL	??/??/?? to ??/??/??	DS1	3 ml	18:42 05/20/19	II	II PK PK
*SWL	??/??/?? to ??/??/??	DS2	3 ml	18:42 05/20/19	II	II PK PK

Bottle	Seed	Vol	Type	Set	QA	Sample Name	Sample Date	DO Initial	DO Final	BOD (PPM)	Probe Number	Initial DO Run Information Date	Initial DO Run Information Sample Time	Initial DO Run Information Calib Time	Final DO Run Information Date	Final DO Run Information Sample Time	Final DO Run Information Calib Time
1		300	B	QA	0	BOD-DB	05/20/19	8.58	8.54	0.04*	1	05-20-19	18:19	18:14	05-25-19	13:10	13:07
2		300	C	QA	0	CBOD-DB	05/20/19	8.58	8.57	0.01*	2	05-20-19	18:19	18:14	05-25-19	13:10	13:07
3	DS1	9	B	QA	0	Seed Control	05/20/19	8.56	6.46	70.0	3	05-20-19	18:19	18:14	05-25-19	13:10	13:07
4	DS1	15	B	QA	0	Seed Control	05/20/19	8.56	5.13	68.6	4	05-20-19	18:19	18:14	05-25-19	13:10	13:07
5	DS1	20	B	QA	0	Seed Control	05/20/19	8.56	3.68	73.2	1	05-20-19	18:21	18:14	05-25-19	13:12	13:07
6	DS1	25	B	QA	0	Seed Control	05/20/19	8.56	2.61	71.4	2	05-20-19	18:21	18:14	05-25-19	13:12	13:07
7	DS2	9	C	QA	0	Seed Control	05/20/19	8.51	6.81	56.7	3	05-20-19	18:21	18:14	05-25-19	13:12	13:07
8	DS2	15	C	QA	0	Seed Control	05/20/19	8.56	5.25	66.2	4	05-20-19	18:21	18:14	05-25-19	13:12	13:07
9	DS2	20	C	QA	0	Seed Control	05/20/19	8.56	4.11	66.8	1	05-20-19	18:22	18:14	05-25-19	13:13	13:07
10	DS2	25	C	QA	0	Seed Control	05/20/19	8.52	2.77	69.0	2	05-20-19	18:22	18:14	05-25-19	13:13	13:07
11	S1	300	B	QA	0	GP53176-MB1	05/20/19	8.50	7.89	-0.10*	3	05-20-19	18:22	18:14	05-25-19	13:13	13:07
12	S2	300	C	QA	0	GP53177-MB1	05/20/19	8.56	8.17	-0.26*	4	05-20-19	18:22	18:14	05-25-19	13:13	13:07
13	S1	3	B	QA	3	GP53176-B1	05/20/19	8.52	5.64	217	1	05-20-19	18:24	18:14	05-25-19	13:15	13:07
14	S1	3	B	QA	3	GP53176-B1	05/20/19	8.50	5.63	216	2	05-20-19	18:24	18:14	05-25-19	13:15	13:07
15	S1	3	B	QA	3	GP53176-B1	05/20/19	8.52	5.82	199	3	05-20-19	18:24	18:14	05-25-19	13:15	13:07
16	S2	3	C	QA	3	GP53177-B1	05/20/19	8.51	6.06	180	4	05-20-19	18:24	18:14	05-25-19	13:15	13:07
17	S2	3	C	QA	3	GP53177-B1	05/20/19	8.59	5.83	211	1	05-20-19	18:25	18:14	05-25-19	13:16	13:07
18	S2	3	C	QA	3	GP53177-B1	05/20/19	8.53	5.85	203	2	05-20-19	18:25	18:14	05-25-19	13:16	13:07
19	S2	50	C	SW	0	TD39353-2A	05/20/19	8.53	8.07	-1.12*	3	05-20-19	18:25	18:14	05-25-19	13:16	13:07
20	S2	100	C	SW	0	TD39353-2A	05/20/19	8.58	8.07	-0.41*	4	05-20-19	18:25	18:14	05-25-19	13:16	13:07
21	S2	300	C	SW	0	TD39353-2A	05/20/19	9.24	7.74	0.85* ✓	1	05-20-19	18:27	18:14	05-25-19	13:17	13:07
22	S2	50	C	SW	0	TD39379-2	05/20/19	8.50	7.75	0.62*	2	05-20-19	18:27	18:14	05-25-19	13:17	13:07
23	S2	100	C	SW	0	TD39379-2	05/20/19	8.38	7.41	0.97*	3	05-20-19	18:27	18:14	05-25-19	13:17	13:07
24	S2	300	C	SW	0	TD39379-2	05/20/19	7.95	5.82	1.48 ✓	4	05-20-19	18:27	18:14	05-25-19	13:17	13:07
25	S2	50	C	SW	0	GP53177-D1	05/20/19	8.50	7.80	0.32*	1	05-20-19	18:28	18:14	05-25-19	13:19	13:07
26	S2	100	C	SW	0	GP53177-D1	05/20/19	8.43	7.36	1.27*	2	05-20-19	18:28	18:14	05-25-19	13:19	13:07
27	S2	300	C	SW	0	GP53177-D1	05/20/19	7.89	5.68	1.56 ✓	3	05-20-19	18:28	18:14	05-25-19	13:19	13:07
28	S2	50	C	SW	0	TD39376-2	05/20/19	8.49	8.04	-1.18*	4	05-20-19	18:28	18:14	05-25-19	13:19	13:07
29	S2	100	C	SW	0	TD39376-2	05/20/19	8.63	7.95	0.10*	1	05-20-19	18:29	18:14	05-25-19	13:20	13:07

GN98618

QC Reports:

Raw Data GN98618: Carbonaceous Bod, 5 Day page 4 of 5

SGS

SGS

Bottle	Seed	Vol	Type	Set	QA	Sample Name	Sample Date	DO Initial	DO Final	BOD (PPM)	Probe Number	Initial DO Run Information Date	Initial DO Run Information Sample Time	Initial DO Run Information Calib Time	Final DO Run Information Date	Final DO Run Information Sample Time	Final DO Run Information Calib Time
30	S2	300	C	SW	0	TD39376-2A	05/20/19	8.92	7.51	0.76*	2	05-20-19	18:29	18:14	05-25-19	13:20	13:07
31	S1	50	B	SW	0	TD39357-2A	05/20/19	8.51	7.60	1.21*	3	05-20-19	18:29	18:14	05-25-19	13:20	13:07
32	S1	100	B	SW	0	TD39357-2A	05/20/19	8.39	7.15	1.60*	4	05-20-19	18:29	18:14	05-25-19	13:20	13:07
33	S1	300	B	SW	0	TD39357-2A	05/20/19	8.13	5.05	2.37	1	05-20-19	18:31	18:14	05-25-19	13:22	13:07
34	S1	10	B	SW	0	TD39361-2	05/20/19	8.55	6.00	55.3	2	05-20-19	18:31	18:14	05-25-19	13:22	13:07
35	S1	50	B	SW	0	TD39361-2	05/20/19	8.47	0.04	46.3*	3	05-20-19	18:31	18:14	05-25-19	13:22	13:07
36	S1	100	B	SW	0	TD39361-2	05/20/19	8.30	0.03	22.7*	4	05-20-19	18:31	18:14	05-25-19	13:22	13:07
37	S1	50	B	SW	0	TD39372-1	05/20/19	8.51	7.26	3.25*	1	05-20-19	18:33	18:14	05-25-19	13:23	13:07
38	S1	100	B	SW	0	TD39372-1	05/20/19	8.57	7.11	2.26*	2	05-20-19	18:33	18:14	05-25-19	13:23	13:07
39	S1	300	B	SW	0	TD39372-1	05/20/19	8.39	5.37	2.31	3	05-20-19	18:33	18:14	05-25-19	13:23	13:07
40	S1	50	B	SW	0	GP53176-D1	05/20/19	8.60	7.45	2.65*	4	05-20-19	18:33	18:14	05-25-19	13:23	13:07
41	S1	100	B	SW	0	GP53176-D1	05/20/19	8.47	7.17	1.78*	1	05-20-19	18:35	18:14	05-25-19	13:25	13:07
42	S1	300	B	SW	0	GP53176-D1	05/20/19	8.39	5.42	2.26	2	05-20-19	18:35	18:14	05-25-19	13:25	13:07
43	S1	50	B	SW	0	TD39374-1	05/20/19	8.57	6.31	9.31	3	05-20-19	18:35	18:14	05-25-19	13:25	13:07
44	S1	100	B	SW	0	TD39374-1	05/20/19	8.68	4.94	9.10	4	05-20-19	18:35	18:14	05-25-19	13:25	13:07
45	S1	300	B	SW	0	TD39374-1	05/20/19	8.86	0.01	8.14*	1	05-20-19	18:36	18:14	05-25-19	13:26	13:07
46	S1	.5	B	SW	0	TD39361-1	05/20/19	8.49	7.66	73.2*	2	05-20-19	18:36	18:14	05-25-19	13:26	13:07
47	S1	1	B	SW	0	TD39361-1	05/20/19	8.50	7.39	121*	3	05-20-19	18:36	18:14	05-25-19	13:26	13:07
48	S1	5	B	SW	0	TD39361-1	05/20/19	8.40	5.22	148	4	05-20-19	18:36	18:14	05-25-19	13:26	13:07
49	S1	10	B	SW	0	TD39361-1	05/20/19	8.25	1.15	192	1	05-20-19	18:38	18:14	05-25-19	13:28	13:07
50	S1	.5	B	SW	0	TD39367-2	05/20/19	8.51	7.49	187*	2	05-20-19	18:38	18:14	05-25-19	13:28	13:07
51	S1	1	B	SW	0	TD39367-2	05/20/19	8.52	6.97	253*	3	05-20-19	18:38	18:14	05-25-19	13:28	13:07
52	S1	5	B	SW	0	TD39367-2	05/20/19	8.42	3.52	252	4	05-20-19	18:38	18:14	05-25-19	13:28	13:07
53	S1	10	B	SW	0	TD39367-2	05/20/19	8.39	0.01	230*	1	05-20-19	18:39	18:14	05-25-19	13:29	13:07

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SGS

Enterococci

ASTM-D6503-99

MB 18075

Qauntitray 2000	Lot#: MP017	Exp Date: 12-21-21		Batch
Dilution Water	Lot#: NA	Exp Date: NA		Pipette ID
Enterolert Media	Lot#: RP610	Exp Date: 8-4-19		Incubator# 4 e 4/4/-5°C
Pos. Control Organism Enterococcus Faecium	Lot#: 5MB 29-3	Exp Date: 5-30-19	☑ Positive	☐ Negative
			ResCl2 Test Strip Lot#:	1-18-18

Sample ID	Sample Volume mLs	Flourescent Wells Counted	Dilution Factor	Result (MPN/100 mL)	Residual CL2
+	100mL	49 large 48 small		>2419.6	
Comments:					
X/—	100mL	0 large 0 small		<1	
Comments:					
—	100mL	0 large 0 small		<1	
Comments:					
BLANK	100mL	0 large 0 small		<1	
Comments:					
T039353-2	100mL	7 large 30 small		40.7	☐ Pres. ☑ Abs.
Comments:					
		large small			☐ Pres. ☐ Abs.
Comments:					
		large small			☐ Pres. ☐ Abs.
Comments:					

*Use the IDEXX Quanti-Tray / 2000 MPN Table to tabulate results. Data Scanned ☐

Form: MB005-06; 02/13/19

Analyst / Date / Time Run	WJ 5-19-19 1445	Analyst / Date / Time Read	MS 5-20-19 1445
Peer Review By / Date	05/20/19	Supervisor Signature	ETH

Laboratory Notebook: MB2019-005