

Cover Page

Order ID : Q1083

Project ID : Transfer Station-SPDES

Client : Tully Environmental, Inc

Lab Sample Number

Q1083-01
Q1083-02

Client Sample Number

001-WILLETS-PT-BLVD(DEC)
002-35TH-AVE(DEC)

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 1/17/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

DATA REPORTING QUALIFIERS- ORGANIC

For reporting results, the following “ Results Qualifiers” are used:

Value	If the result is a value greater than or equal to the detection limit, report the value
U	Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. “10 U”. This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
ND	Indicates the analyte was analyzed for, but not detected
J	Indicates an estimated value. This flag is used: (1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.) (2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as “12 B”.
E	Indicates the analyte ‘s concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a “P”.
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1083

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: KETAN PATEL

Date: 01/17/2025

LAB CHRONICLE

OrderID:	Q1083	OrderDate:	1/15/2025 10:55:00 AM
Client:	Tully Environmental, Inc	Project:	Transfer Station-SPDES
Contact:	Dean Devoe	Location:	N41,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1083-01	001-WILLETS-PT-BLV D(DEC)	Water			01/14/25			01/15/25
			VOC-BTEX	624.1			01/16/25	
Q1083-02	002-35TH-AVE(DEC)	Water			01/14/25			01/15/25
			VOC-BTEX	624.1			01/16/25	

Hit Summary Sheet
SW-846

SDG No.: Q1083
Client: Tully Environmental, Inc

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Client ID: Q1083-01	001-WILLETS-PT-BLVD(DEC) 001-WILLETS-PT-BLVD Water		Toluene	62.9		0.72	5.00	ug/L
			Total Voc :	62.9				
			Total Concentration:	62.9				
Client ID: Q1083-02	002-35TH-AVE(DEC) 002-35TH-AVE(DEC) Water		Toluene	83.2		0.72	5.00	ug/L
			Total Voc :	83.2				
			Total Concentration:	83.2				



QC SUMMARY

Surrogate Summary

SDG No.: Q1083

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits	
						Low	High
Q1083-01	001-WILLETS-PT-BLVD(DEC)	1,2-Dichloroethane-d4	30	30.6	102	91	110
		Toluene-d8	30	31.2	104	91	112
		4-Bromofluorobenzene	30	30.5	102	63	112
Q1083-02	002-35TH-AVE(DEC)	1,2-Dichloroethane-d4	30	30.0	100	91	110
		Toluene-d8	30	31.3	104	91	112
		4-Bromofluorobenzene	30	29.4	98	63	112
VX0116WBL01	VX0116WBL01	1,2-Dichloroethane-d4	30	29.4	98	91	110
		Toluene-d8	30	31.4	105	91	112
		4-Bromofluorobenzene	30	28.8	96	63	112
VX0116WBS01	VX0116WBS01	1,2-Dichloroethane-d4	30	29.9	100	91	110
		Toluene-d8	30	30.7	102	91	112
		4-Bromofluorobenzene	30	30.1	101	63	112
VX0116WBSD0	VX0116WBSD01	1,2-Dichloroethane-d4	30	29.1	97	91	110
		Toluene-d8	30	30.0	100	91	112
		4-Bromofluorobenzene	30	30.7	102	63	112

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1083

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Datafile : VX044666.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0116WBS01	Benzene	20	20.7	ug/L	104			65	135	
	Toluene	20	21.3	ug/L	106			70	130	
	Ethyl Benzene	20	21.2	ug/L	106			60	140	
	m/p-Xylenes	40	43.4	ug/L	109			87	111	
	o-Xylene	20	21.7	ug/L	109			87	111	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1083

Client: Tully Environmental, Inc

Analytical Method: SW624.1

Datafile : VX044667.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Low	Limits High	RPD
VX0116WBSD01	Benzene	20	20.9	ug/L	104	0		65	135	20
	Toluene	20	20.3	ug/L	102	4		70	130	20
	Ethyl Benzene	20	20.2	ug/L	101	5		60	140	20
	m/p-Xylenes	40	41.7	ug/L	104	5		87	111	20
	o-Xylene	20	20.9	ug/L	104	5		87	111	20

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VX0116WBL01

Lab Name: CHEMTECH

Contract: TULL01

Lab Code: CHEM Case No.: Q1083

SAS No.: Q1083 SDG NO.: Q1083

Lab File ID: VX044668.D

Lab Sample ID: VX0116WBL01

Date Analyzed: 01/16/2025

Time Analyzed: 13:05

GC Column: DB-624UI ID: 0.18 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSVOA_X

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VX0116WBS01	VX0116WBS01	VX044666.D	01/16/2025
VX0116WBSD01	VX0116WBSD01	VX044667.D	01/16/2025
001-WILLETS-PT-BLVD (DEC)	Q1083-01	VX044669.D	01/16/2025
002-35TH-AVE (DEC)	Q1083-02	VX044670.D	01/16/2025

COMMENTS: _____



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: TULL01
Lab Code: CHEM Case No.: Q1083 SAS No.: Q1083 SDG NO.: Q1083
Lab File ID: VX044658.D BFB Injection Date: 01/16/2025
Instrument ID: MSVOA_X BFB Injection Time: 08:02
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: Y/N N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.2
75	30.0 - 60.0% of mass 95	48.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 100.0% of mass 95	66.7
175	5.0 - 9.0% of mass 174	4.7 (7) 1
176	95.0 - 101.0% of mass 174	64.7 (97) 1
177	5.0 - 9.0% of mass 176	4.3 (6.6) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDIC005	VSTDIC005	VX044659.D	01/16/2025	08:39
VSTDIC020	VSTDIC020	VX044660.D	01/16/2025	09:02
VSTDIC050	VSTDIC050	VX044661.D	01/16/2025	09:25
VSTDIC100	VSTDIC100	VX044662.D	01/16/2025	09:49
VSTDIC150	VSTDIC150	VX044663.D	01/16/2025	10:12
VX0116WBS01	VX0116WBS01	VX044666.D	01/16/2025	12:15
VX0116WBSD01	VX0116WBSD01	VX044667.D	01/16/2025	12:42
VX0116WBL01	VX0116WBL01	VX044668.D	01/16/2025	13:05
001-WILLETS-PT-BLVD (DEC)	Q1083-01	VX044669.D	01/16/2025	13:33
002-35TH-AVE (DEC)	Q1083-02	VX044670.D	01/16/2025	13:55

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: TULL01
Lab Code: CHEM Case No.: Q1083 SAS No.: Q1083 SDG NO.: Q1083
Lab File ID: VX044660.D Date Analyzed: 01/16/2025
Instrument ID: MSVOA_X Time Analyzed: 09:02
GC Column: DB-624UI ID: 0.18 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	33434	4.89	183316	6.76	165841	10.05
UPPER LIMIT	66868	5.391	366632	7.257	331682	10.549
LOWER LIMIT	16717	4.391	91658	6.257	82920.5	9.549
EPA SAMPLE NO.						
001-WILLETTS-PT-BLVD (DEC)	34454	4.89	193425	6.76	171637	10.05
002-35TH-AVE (DEC)	31297	4.89	176011	6.76	149063	10.06
VX0116WBL01	31761	4.89	169032	6.76	146905	10.06
VX0116WBS01	28646	4.89	161068	6.75	140626	10.05
VX0116WBSD01	29143	4.89	154664	6.75	141140	10.05

IS1 = Bromochloromethane
IS2 = 1,4-Difluorobenzene
IS3 = Chlorobenzene-d5

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.



SAMPLE DATA

Report of Analysis

Client:	Tully Environmental, Inc	Date Collected:	01/14/25
Project:	Transfer Station-SPDES	Date Received:	01/15/25
Client Sample ID:	001-WILLETS-PT-BLVD(DEC)	SDG No.:	Q1083
Lab Sample ID:	Q1083-01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-BTEX
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044669.D	1		01/16/25 13:33	VX011625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	62.9		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.6		91 - 110	102%	SPK: 30
2037-26-5	Toluene-d8	31.2		91 - 112	104%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.5		63 - 112	102%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	34500	4.891			
540-36-3	1,4-Difluorobenzene	193000	6.757			
3114-55-4	Chlorobenzene-d5	172000	10.049			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044669.D
 Acq On : 16 Jan 2025 13:33
 Operator :
 Sample : Q1083-01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 12 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 001-WILLETS-PT-BLVD(DEC)

Quant Time: Jan 17 01:31:06 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

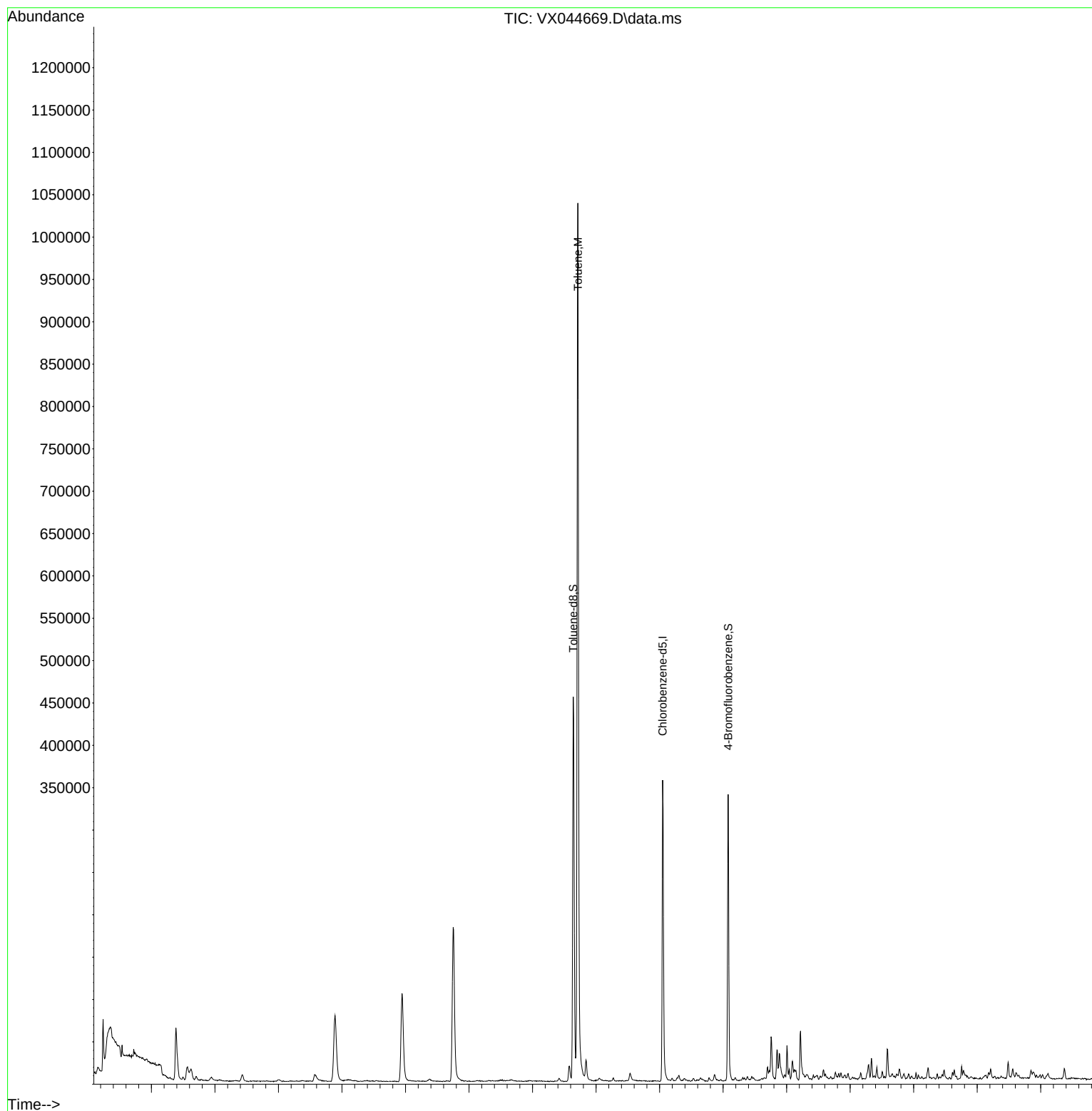
Internal Standards						
1) Bromochloromethane	4.891	128	34454	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	193425	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	171637	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	101647	30.560	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	101.867%
60) 4-Bromofluorobenzene	11.079	95	101727	30.514	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	101.700%
63) Toluene-d8	8.641	98	291561	31.232	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	104.100%
Target Compounds						
					Qvalue	
12) Methyl Acetate	2.709	43	5007	1.348	ug/l #	88
15) Acetone	2.386	58	23128	63.664	ug/l	98
16) Carbon Disulfide	2.495	76	3912	0.553	ug/l	97
30) 2-Butanone	4.568	43	16011	8.663	ug/l #	57
58) 4-Methyl-2-Pentanone	8.580	43	13356	3.692	ug/l	96
62) Toluene	8.714	91	710756	62.889	ug/l	99
67) m/p-Xylenes	10.305	106	1779	0.392	ug/l	97
76) 1,3,5-Trimethylbenzene	11.451	105	2149	0.231	ug/l	89
80) 1,2,4-Trimethylbenzene	11.756	105	7286	0.777	ug/l	88
82) p-Isopropyltoluene	12.006	119	16955	1.808	ug/l	98
91) Naphthalene	13.780	128	7185	0.654	ug/l	98

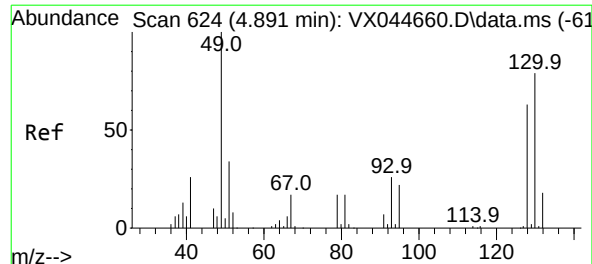
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044669.D
Acq On : 16 Jan 2025 13:33
Operator :
Sample : Q1083-01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
001-WILLETS-PT-BLVD(DEC)

Quant Time: Jan 17 01:31:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.891 min Scan# 62

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

001-WILLETS-PT-BLVD(DEC)

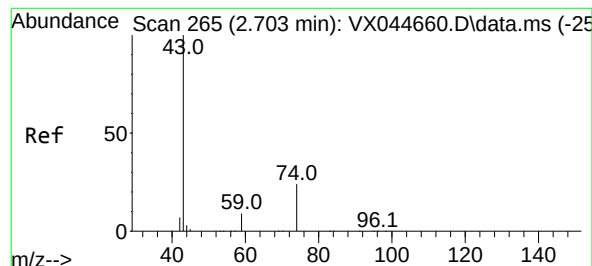
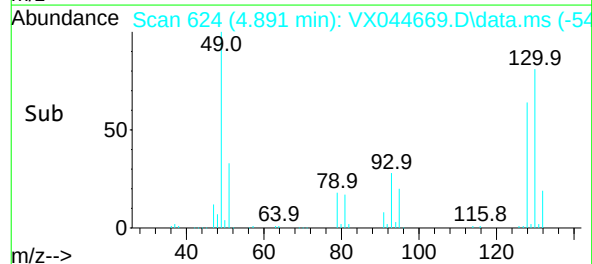
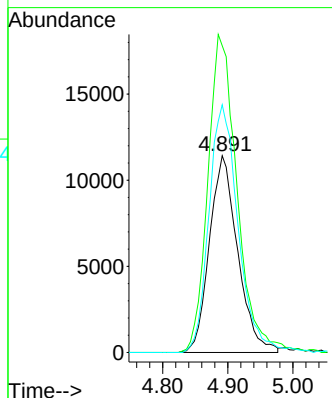
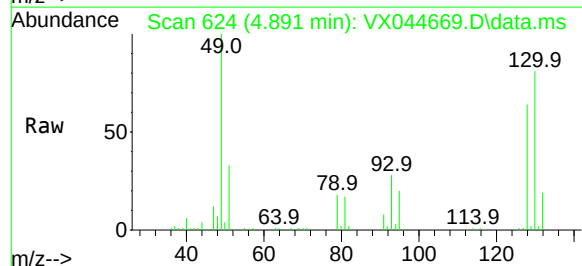
Tgt Ion:128 Resp: 34454

Ion Ratio Lower Upper

128 100

49 164.0 0.0 411.5

130 129.9 0.0 324.3



#12

Methyl Acetate

Concen: 1.348 ug/l

RT: 2.709 min Scan# 266

Delta R.T. 0.006 min

Lab File: VX044669.D

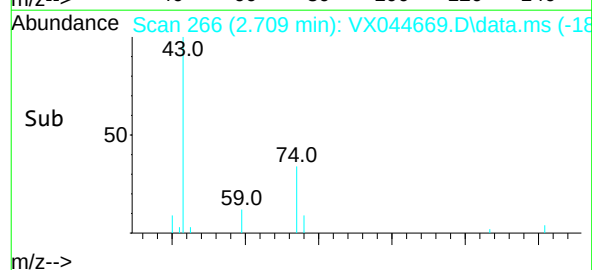
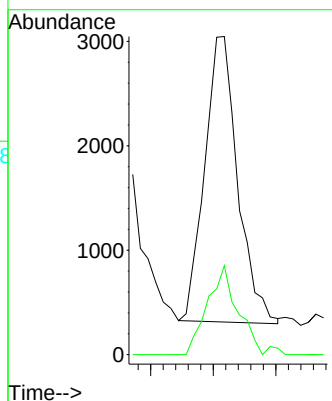
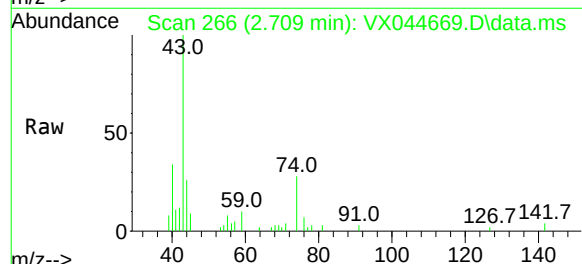
Acq: 16 Jan 2025 13:33

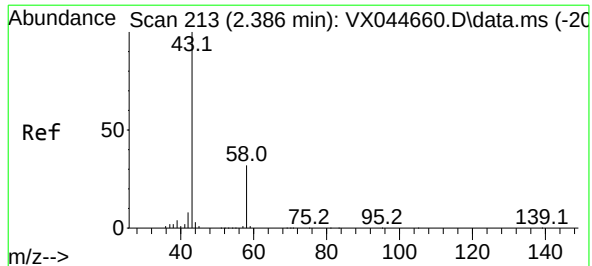
Tgt Ion: 43 Resp: 5007

Ion Ratio Lower Upper

43 100

74 30.3 19.4 29.2#





#15

Acetone

Concen: 63.664 ug/l

RT: 2.386 min Scan# 211

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

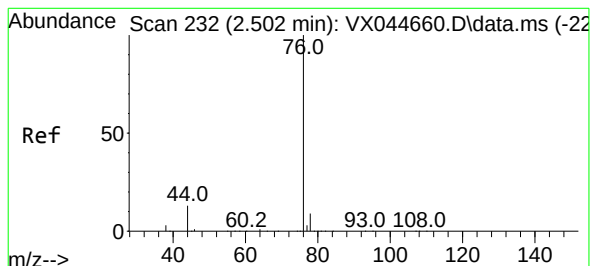
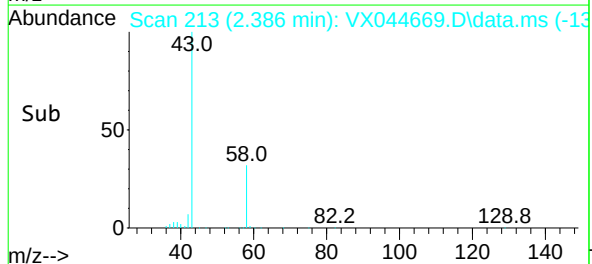
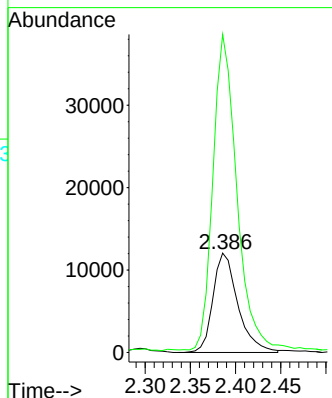
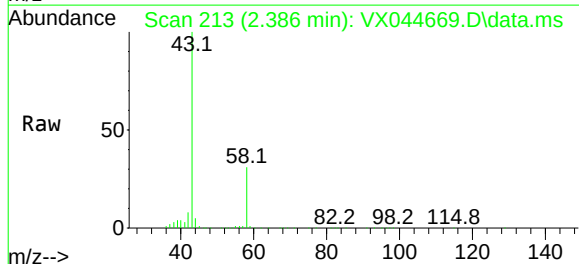
001-WILLETS-PT-BLVD(DEC)

Tgt Ion: 58 Resp: 23128

Ion Ratio Lower Upper

58 100

43 317.5 251.0 376.4



#16

Carbon Disulfide

Concen: 0.553 ug/l

RT: 2.495 min Scan# 231

Delta R.T. -0.006 min

Lab File: VX044669.D

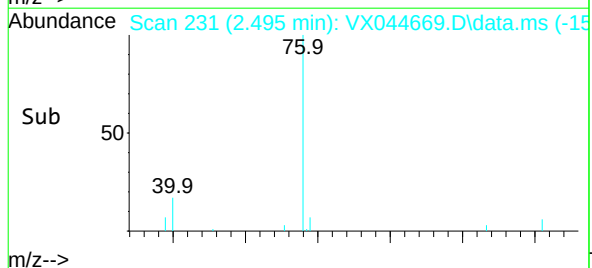
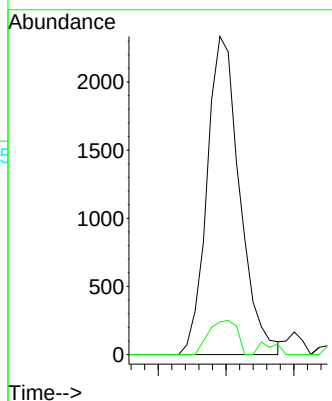
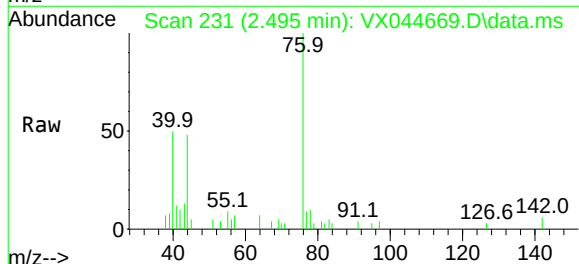
Acq: 16 Jan 2025 13:33

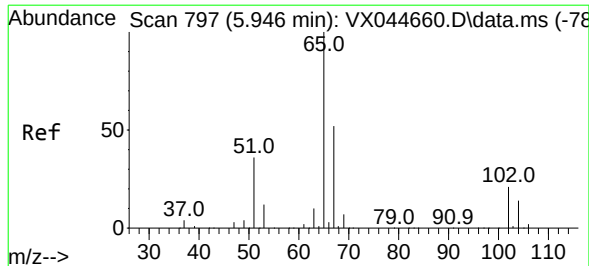
Tgt Ion: 76 Resp: 3912

Ion Ratio Lower Upper

76 100

78 10.3 7.3 10.9

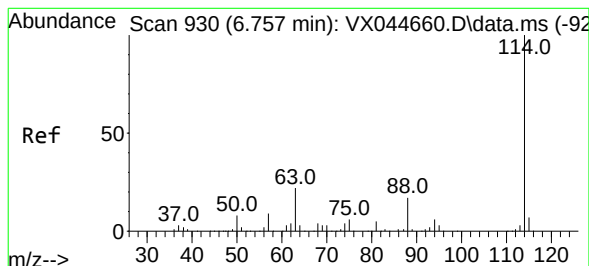
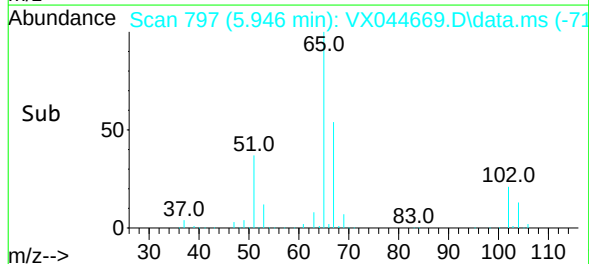
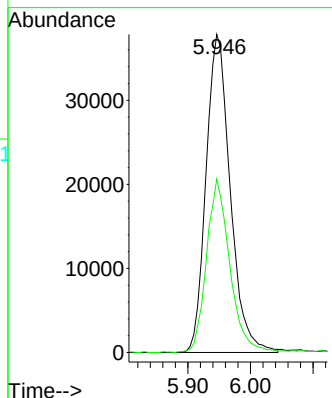
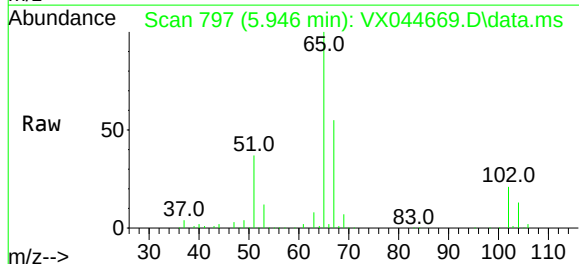




#27
1,2-Dichloroethane-d4
Concen: 30.560 ug/l
RT: 5.946 min Scan# 79
Delta R.T. 0.000 min
Lab File: VX044669.D
Acq: 16 Jan 2025 13:33

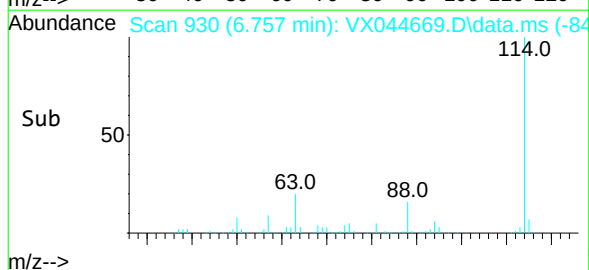
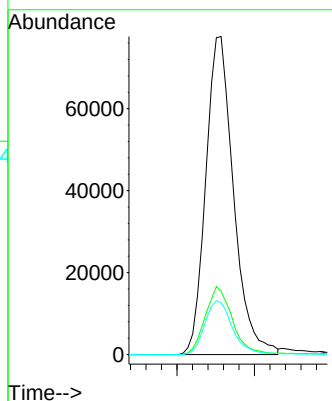
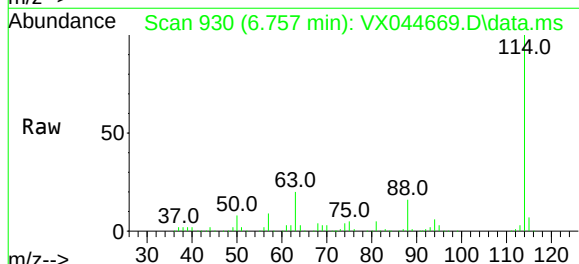
Instrument :
MSVOA_X
ClientSampleId :
001-WILLETS-PT-BLVD(DEC)

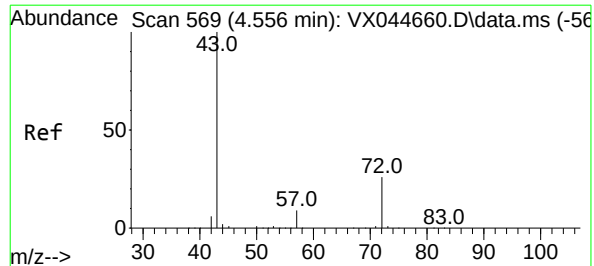
Tgt Ion: 65 Resp: 101647
Ion Ratio Lower Upper
65 100
67 52.5 41.4 62.2



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. 0.000 min
Lab File: VX044669.D
Acq: 16 Jan 2025 13:33

Tgt Ion: 114 Resp: 193425
Ion Ratio Lower Upper
114 100
63 20.8 16.6 24.8
88 16.7 13.4 20.2





#30

2-Butanone

Concen: 8.663 ug/l

RT: 4.568 min Scan# 571

Delta R.T. 0.012 min

Lab File: VX044669.D

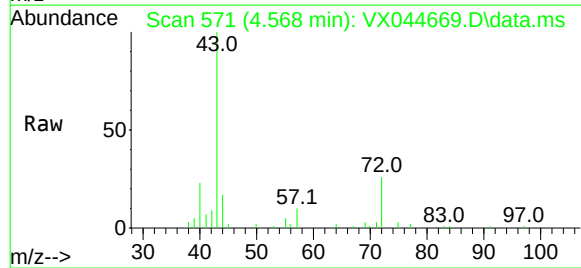
Acq: 16 Jan 2025 13:33

Instrument :

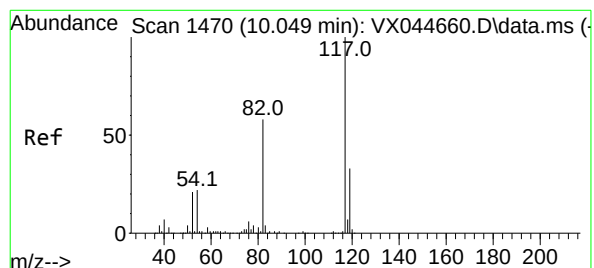
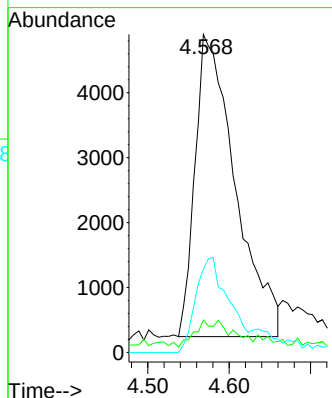
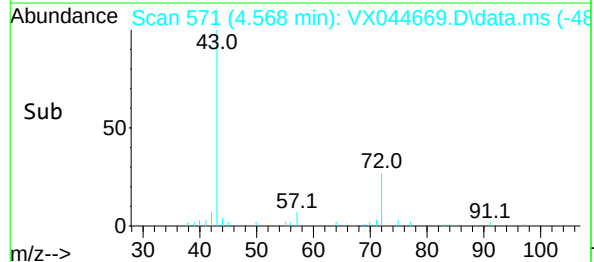
MSVOA_X

ClientSampleId :

001-WILLETS-PT-BLVD(DEC)



Tgt Ion:	43	Resp:	16011
Ion	Ratio	Lower	Upper
43	100		
57	4.0	6.4	9.6#
72	0.0	21.5	32.3#



#57

Chlorobenzene-d5

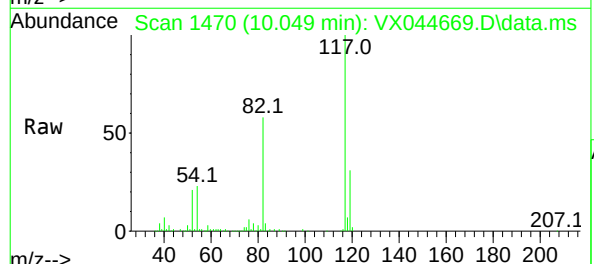
Concen: 30.000 ug/l

RT: 10.049 min Scan# 1470

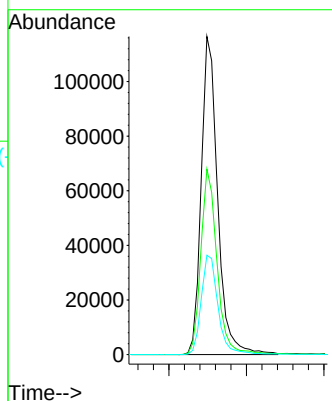
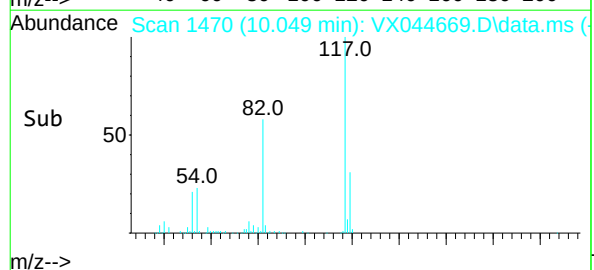
Delta R.T. 0.000 min

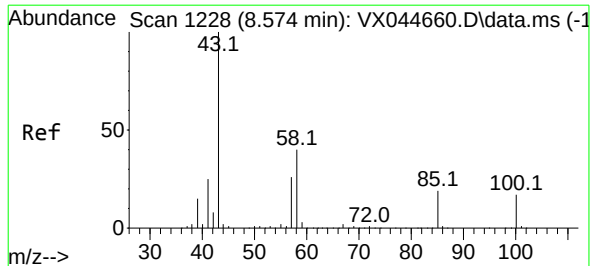
Lab File: VX044669.D

Acq: 16 Jan 2025 13:33



Tgt Ion:	117	Resp:	171637
Ion	Ratio	Lower	Upper
117	100		
82	57.4	45.8	68.6
119	31.9	25.8	38.6





#58

4-Methyl-2-Pentanone

Concen: 3.692 ug/l

RT: 8.580 min Scan# 1228

Delta R.T. 0.006 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

001-WILLETS-PT-BLVD(DEC)

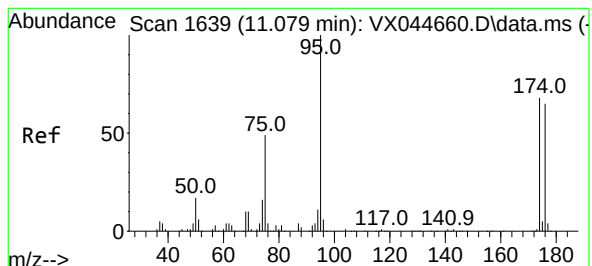
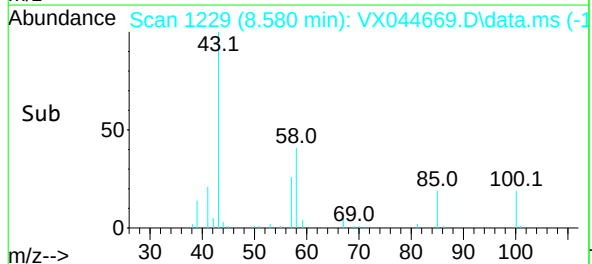
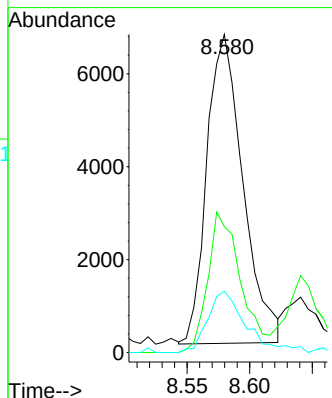
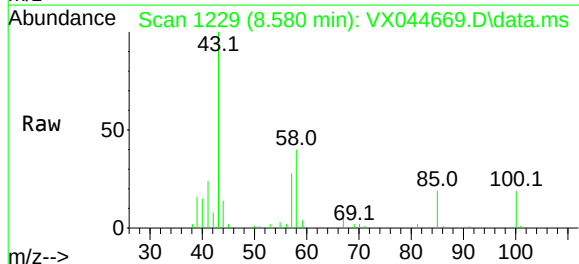
Tgt Ion: 43 Resp: 13356

Ion Ratio Lower Upper

43 100

58 41.7 31.7 47.5

85 21.0 15.0 22.6



#60

4-Bromofluorobenzene

Concen: 30.514 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

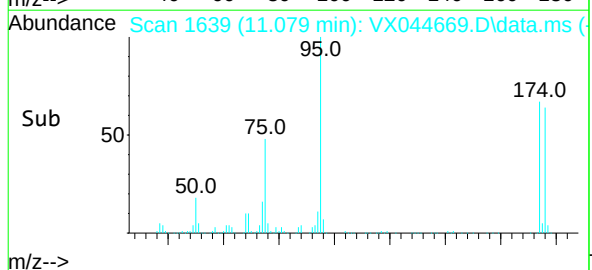
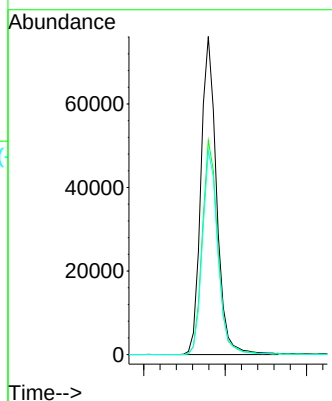
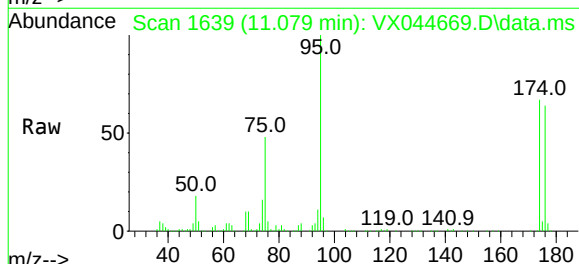
Tgt Ion: 95 Resp: 101727

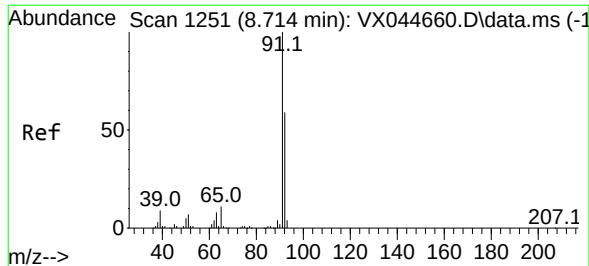
Ion Ratio Lower Upper

95 100

174 66.7 54.6 81.8

176 63.6 52.8 79.2





#62

Toluene

Concen: 62.889 ug/l

RT: 8.714 min Scan# 1251

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

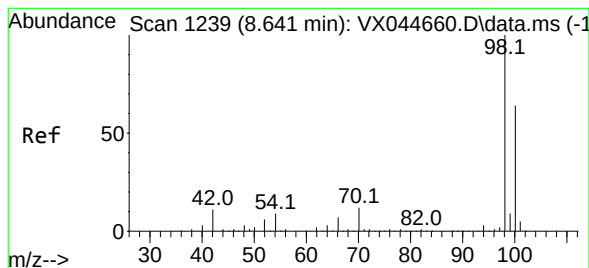
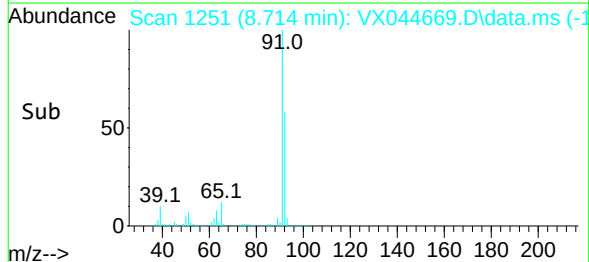
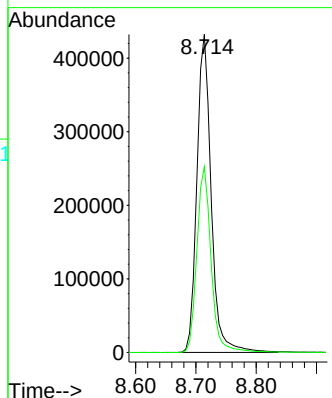
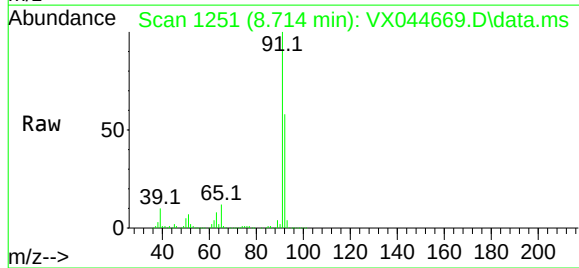
001-WILLETS-PT-BLVD(DEC)

Tgt Ion: 91 Resp: 710756

Ion Ratio Lower Upper

91 100

92 58.1 47.3 70.9



#63

Toluene-d8

Concen: 31.232 ug/l

RT: 8.641 min Scan# 1239

Delta R.T. 0.000 min

Lab File: VX044669.D

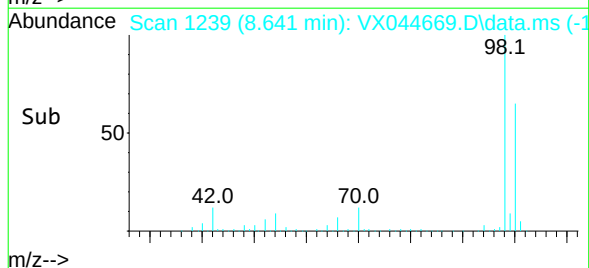
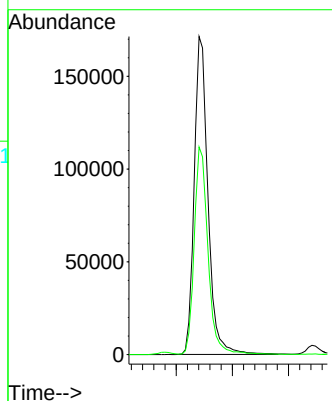
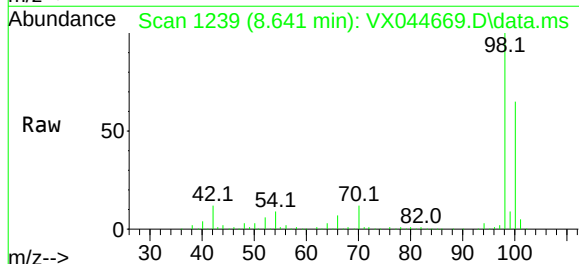
Acq: 16 Jan 2025 13:33

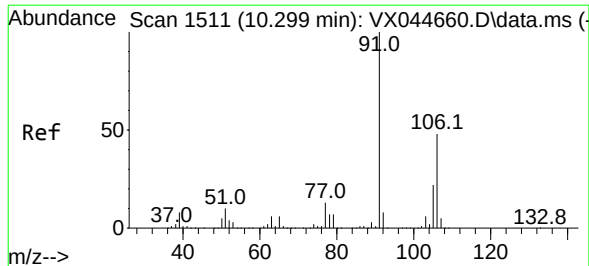
Tgt Ion: 98 Resp: 291561

Ion Ratio Lower Upper

98 100

100 64.6 53.6 80.4





#67

m/p-Xylenes

Concen: 0.392 ug/l

RT: 10.305 min Scan# 1511

Delta R.T. 0.006 min

Lab File: VX044669.D

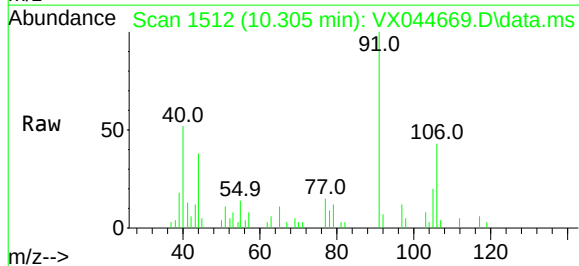
Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

001-WILLETS-PT-BLVD(DEC)

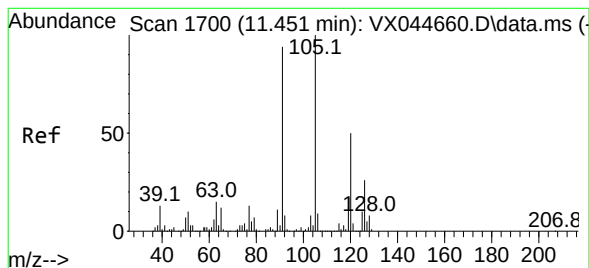
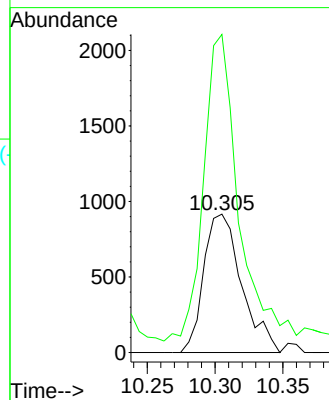
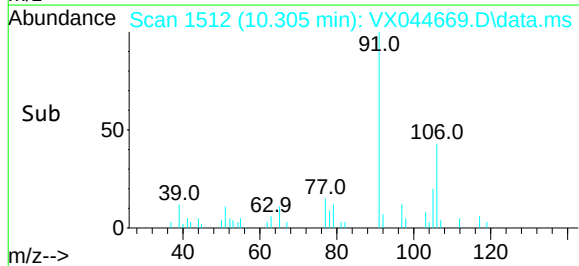


Tgt Ion:106 Resp: 1779

Ion Ratio Lower Upper

106 100

91 213.1 166.8 250.2



#76

1,3,5-Trimethylbenzene

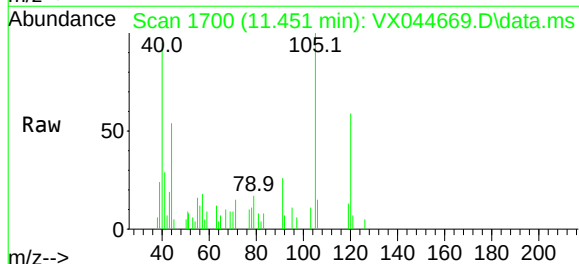
Concen: 0.231 ug/l

RT: 11.451 min Scan# 1700

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

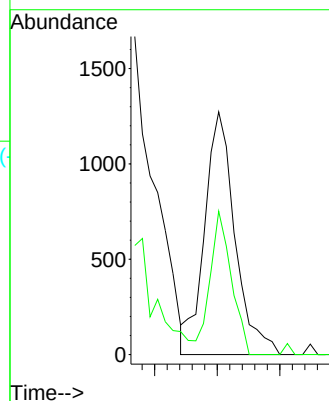
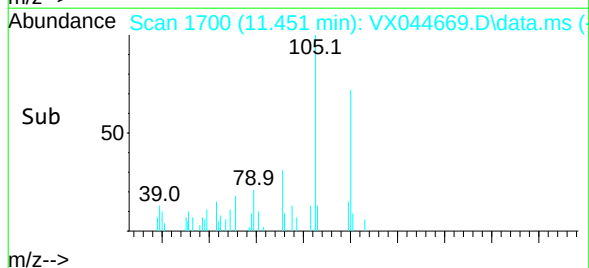


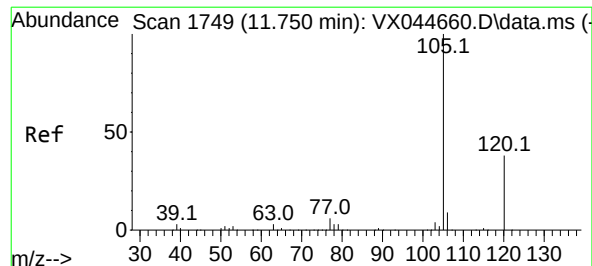
Tgt Ion:105 Resp: 2149

Ion Ratio Lower Upper

105 100

120 41.1 0.0 96.8





#80

1,2,4-Trimethylbenzene

Concen: 0.777 ug/l

RT: 11.756 min Scan# 1749

Delta R.T. 0.006 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

Instrument :

MSVOA_X

ClientSampleId :

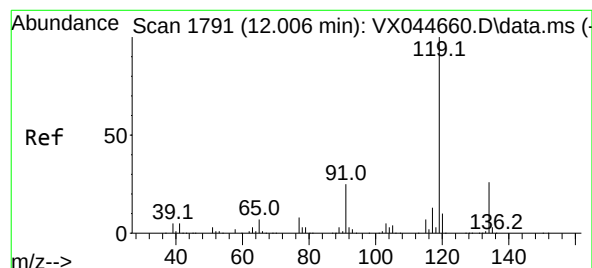
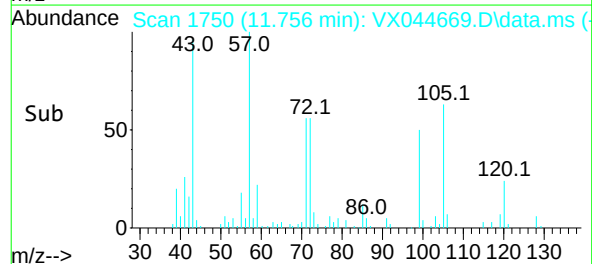
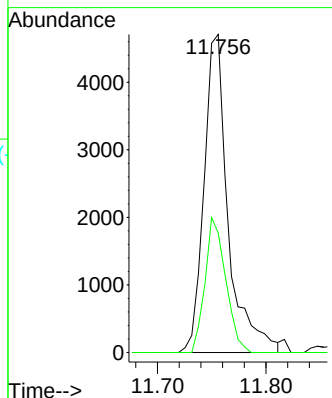
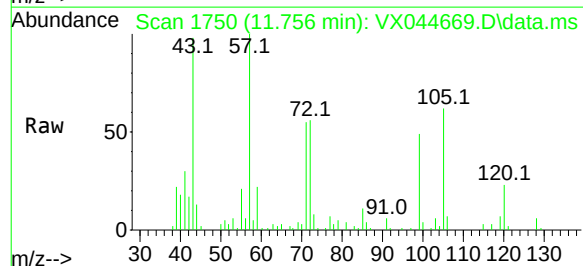
001-WILLETS-PT-BLVD(DEC)

Tgt Ion:105 Resp: 7286

Ion Ratio Lower Upper

105 100

120 36.2 0.0 88.4



#82

p-Isopropyltoluene

Concen: 1.808 ug/l

RT: 12.006 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VX044669.D

Acq: 16 Jan 2025 13:33

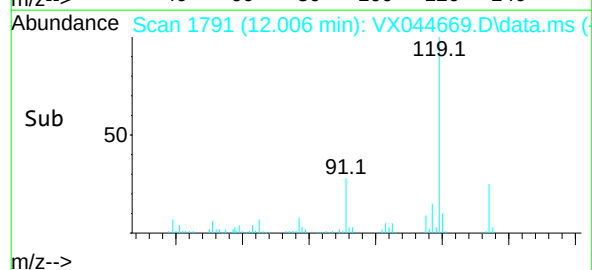
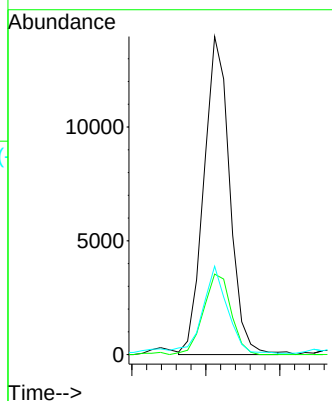
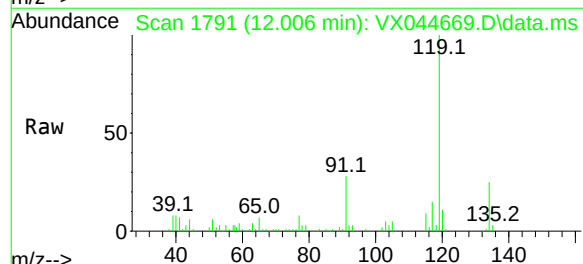
Tgt Ion:119 Resp: 16955

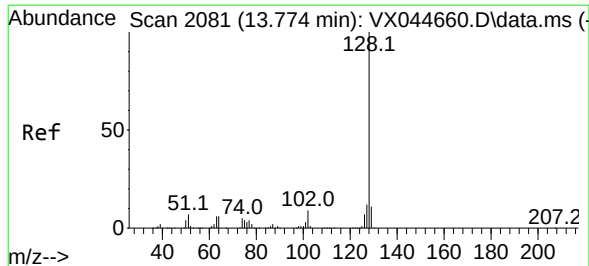
Ion Ratio Lower Upper

119 100

134 27.0 0.0 52.2

91 25.8 0.0 50.2





#91

Naphthalene

Concen: 0.654 ug/l

RT: 13.780 min Scan# 2081

Delta R.T. 0.006 min

Lab File: VX044669.D

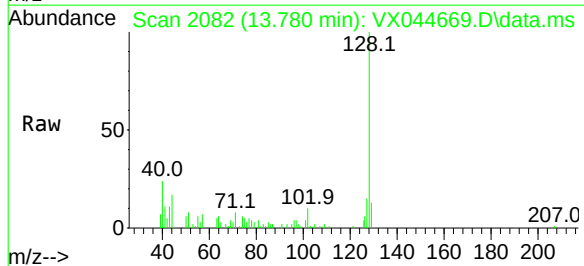
Acq: 16 Jan 2025 13:33

Instrument :

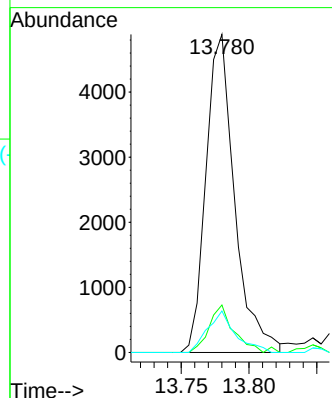
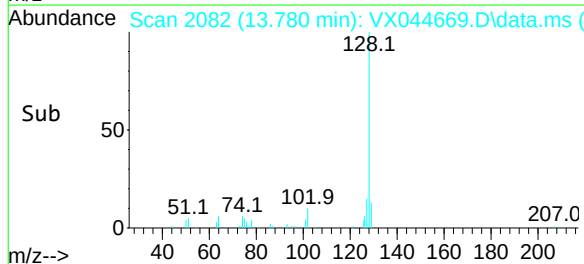
MSVOA_X

ClientSampleId :

001-WILLETS-PT-BLVD(DEC)



Tgt Ion:	128	Resp:	7185
Ion	Ratio	Lower	Upper
128	100		
127	12.7	10.2	15.4
129	12.7	9.0	13.6



Report of Analysis

Client:	Tully Environmental, Inc	Date Collected:	01/14/25
Project:	Transfer Station-SPDES	Date Received:	01/15/25
Client Sample ID:	002-35TH-AVE(DEC)	SDG No.:	Q1083
Lab Sample ID:	Q1083-02	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5	Units:	mL
Soil Aliquot Vol:			uL
GC Column:	DB-624UI	ID :	0.18
Prep Method :		Level :	LOW
		Final Vol:	5000
		Test:	VOC-BTEX

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044670.D	1		01/16/25 13:55	VX011625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	83.2		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	30.0		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	31.3		91 - 112	104%	SPK: 30
460-00-4	4-Bromofluorobenzene	29.4		63 - 112	98%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	31300	4.891			
540-36-3	1,4-Difluorobenzene	176000	6.757			
3114-55-4	Chlorobenzene-d5	149000	10.055			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044670.D
 Acq On : 16 Jan 2025 13:55
 Operator :
 Sample : Q1083-02
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 13 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 002-35TH-AVE(DEC)

Quant Time: Jan 17 01:31:29 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

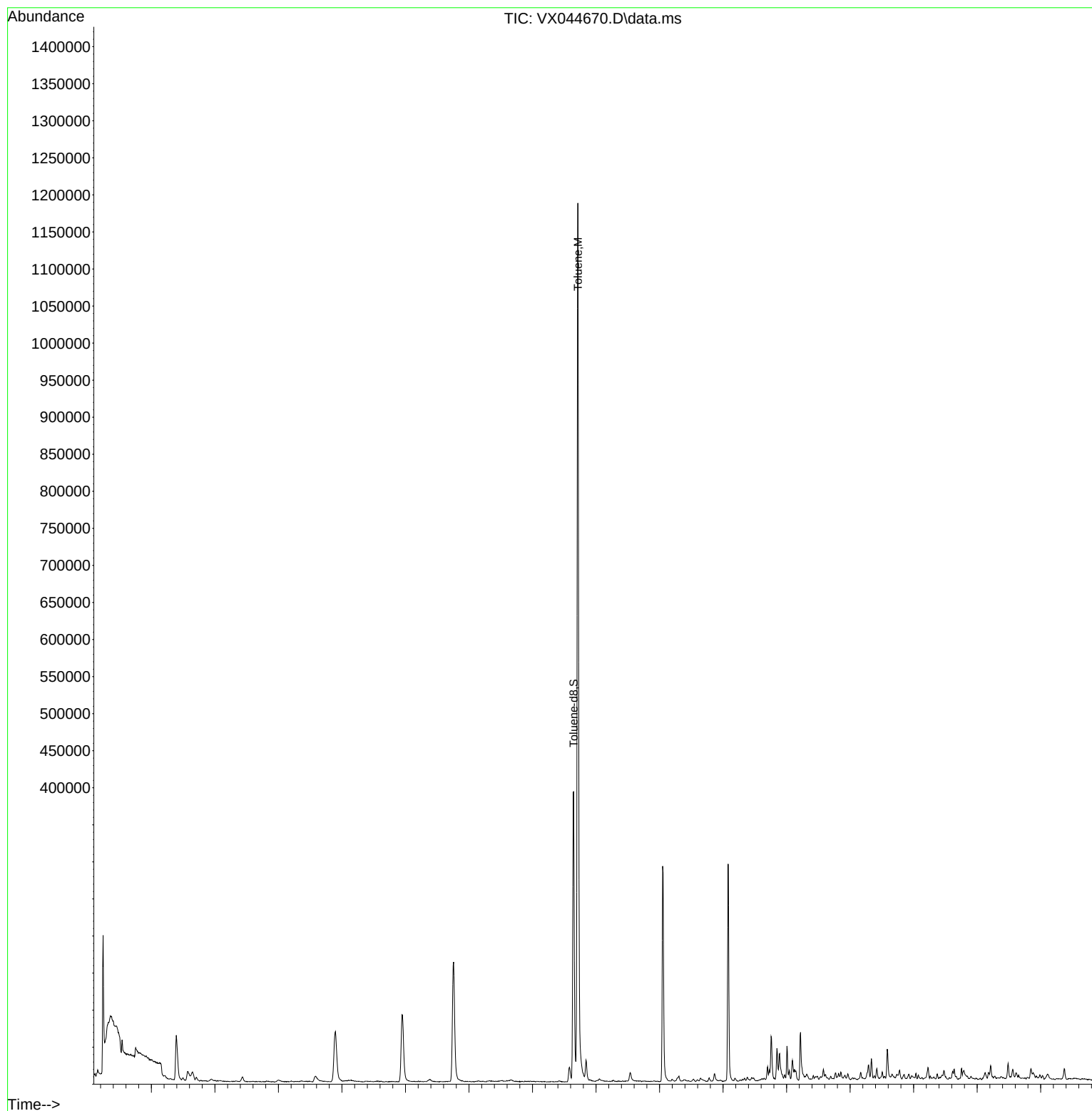
Internal Standards						
1) Bromochloromethane	4.891	128	31297	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	176011	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	149063	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	90648	30.002	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	= 100.000%	
60) 4-Bromofluorobenzene	11.079	95	85127	29.402	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	= 98.000%	
63) Toluene-d8	8.647	98	254016	31.331	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	= 104.433%	
Target Compounds						Qvalue
12) Methyl Acetate	2.709	43	5396	1.599	ug/l	95
15) Acetone	2.392	58	23021	69.762	ug/l	94
16) Carbon Disulfide	2.496	76	4143	0.645	ug/l #	93
30) 2-Butanone	4.581	43	18054	10.735	ug/l #	78
58) 4-Methyl-2-Pentanone	8.580	43	15540	4.946	ug/l	98
62) Toluene	8.714	91	816783	83.215	ug/l	99
67) m/p-Xylenes	10.305	106	1787	0.454	ug/l	98
68) o-Xylene	10.640	106	1016	0.257	ug/l	79
76) 1,3,5-Trimethylbenzene	11.451	105	1923	0.238	ug/l	92
80) 1,2,4-Trimethylbenzene	11.750	105	8397	1.032	ug/l	87
82) p-Isopropyltoluene	12.006	119	19096	2.344	ug/l	99
91) Naphthalene	13.780	128	6938	0.727	ug/l	98

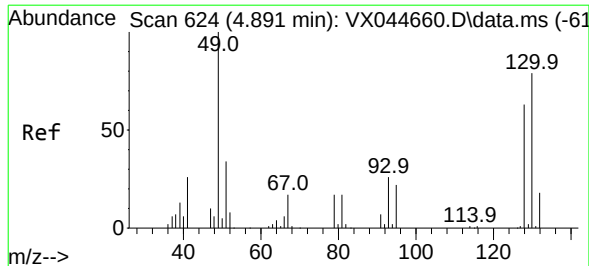
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044670.D
Acq On : 16 Jan 2025 13:55
Operator :
Sample : Q1083-02
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
002-35TH-AVE(DEC)

Quant Time: Jan 17 01:31:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.891 min Scan# 624

Delta R.T. 0.000 min

Lab File: VX044670.D

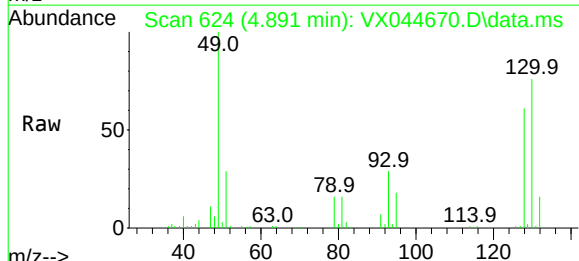
Acq: 16 Jan 2025 13:55

Instrument :

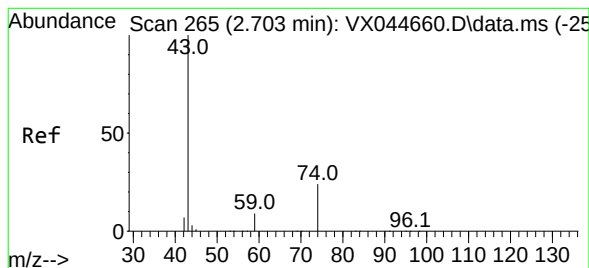
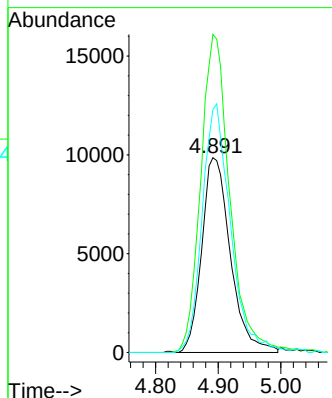
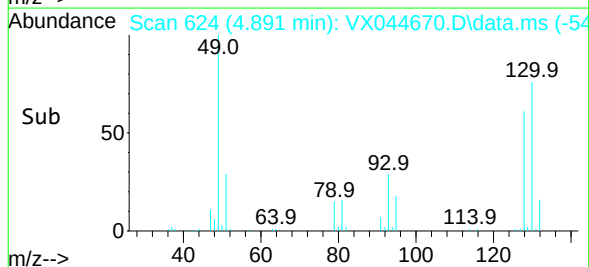
MSVOA_X

ClientSampleId :

002-35TH-AVE(DEC)



Tgt Ion:	128	Resp:	31297
Ion	Ratio	Lower	Upper
128	100		
49	165.6	0.0	411.5
130	124.4	0.0	324.3



#12

Methyl Acetate

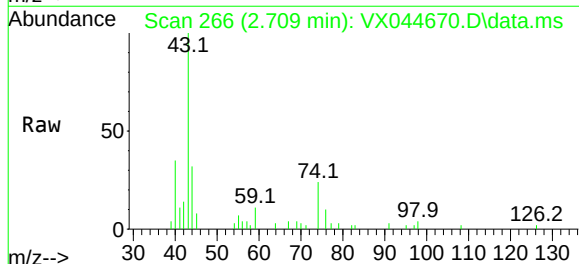
Concen: 1.599 ug/l

RT: 2.709 min Scan# 266

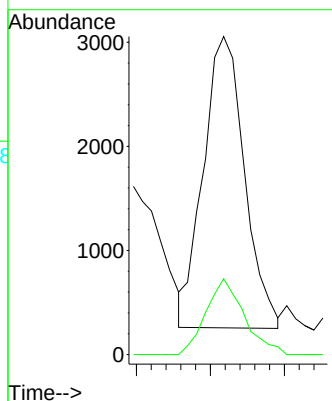
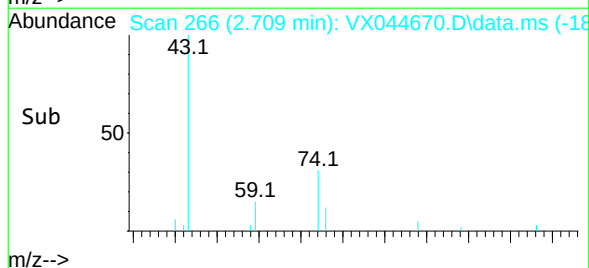
Delta R.T. 0.006 min

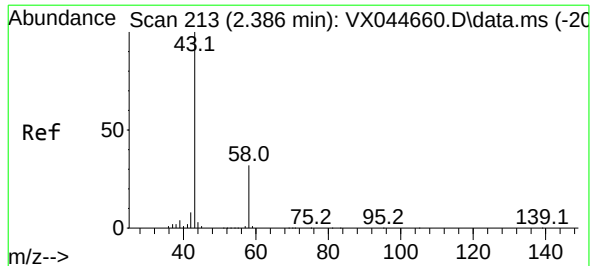
Lab File: VX044670.D

Acq: 16 Jan 2025 13:55



Tgt Ion:	43	Resp:	5396
Ion	Ratio	Lower	Upper
43	100		
74	26.8	19.4	29.2





#15

Acetone

Concen: 69.762 ug/l

RT: 2.392 min Scan# 21

Delta R.T. 0.006 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

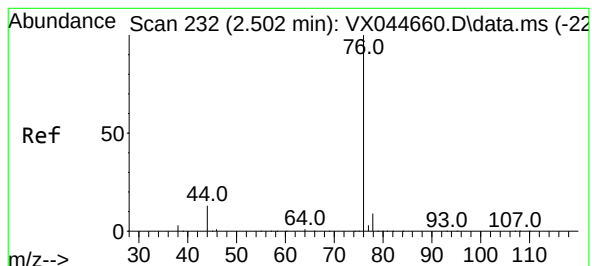
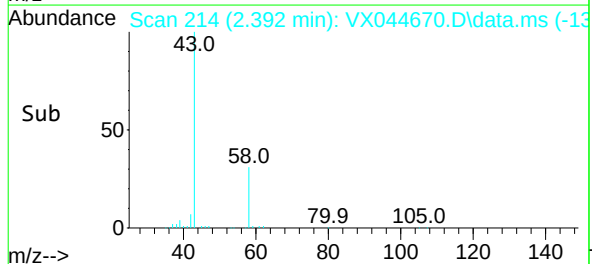
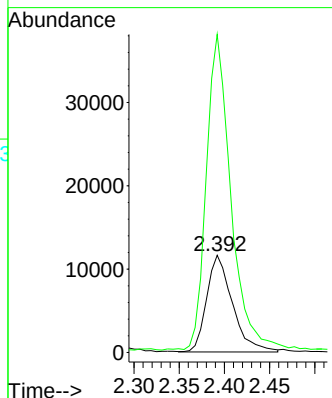
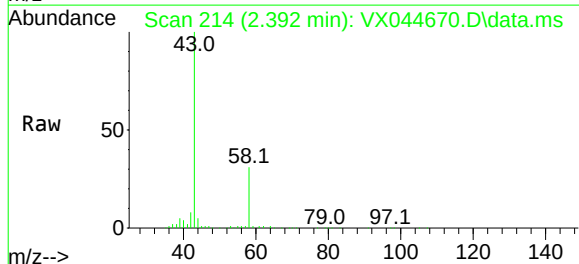
002-35TH-AVE(DEC)

Tgt Ion: 58 Resp: 23021

Ion Ratio Lower Upper

58 100

43 326.4 251.0 376.4



#16

Carbon Disulfide

Concen: 0.645 ug/l

RT: 2.496 min Scan# 231

Delta R.T. -0.006 min

Lab File: VX044670.D

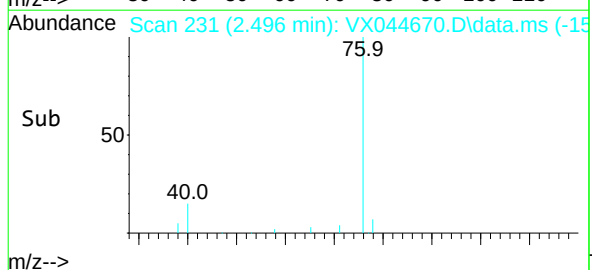
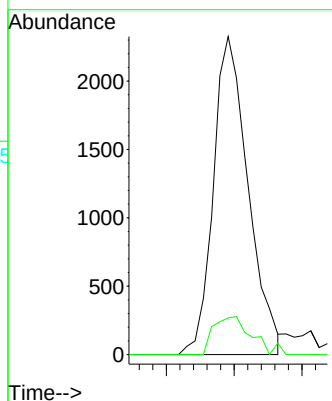
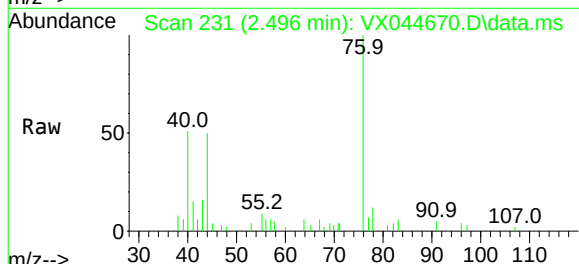
Acq: 16 Jan 2025 13:55

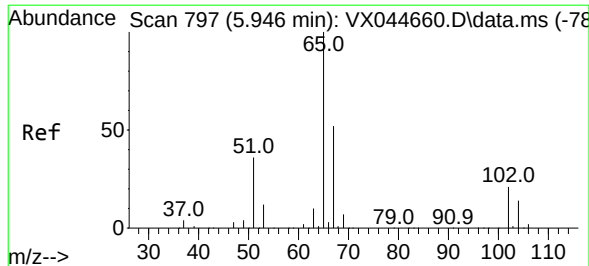
Tgt Ion: 76 Resp: 4143

Ion Ratio Lower Upper

76 100

78 11.5 7.3 10.9#

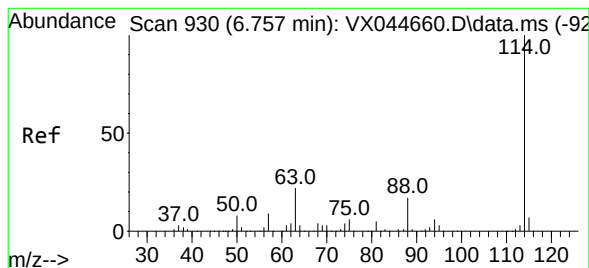
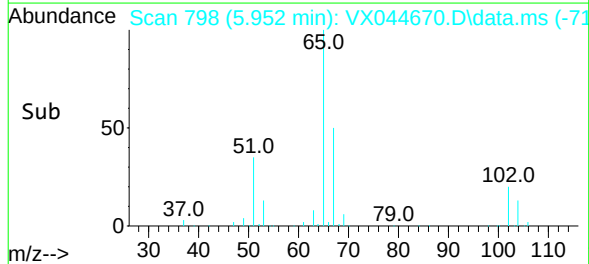
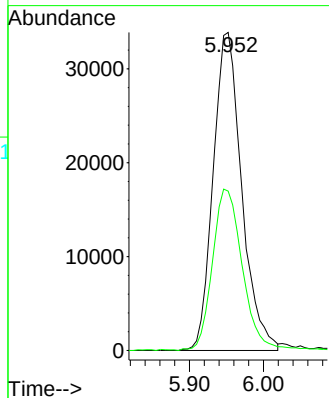
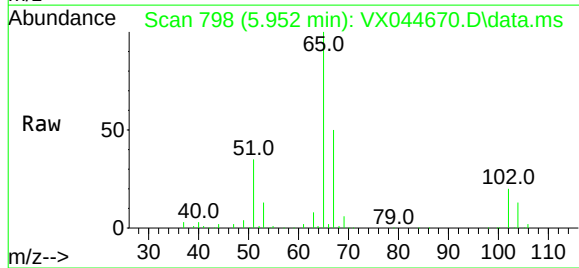




#27
1,2-Dichloroethane-d4
Concen: 30.002 ug/l
RT: 5.952 min Scan# 79
Delta R.T. 0.006 min
Lab File: VX044670.D
Acq: 16 Jan 2025 13:55

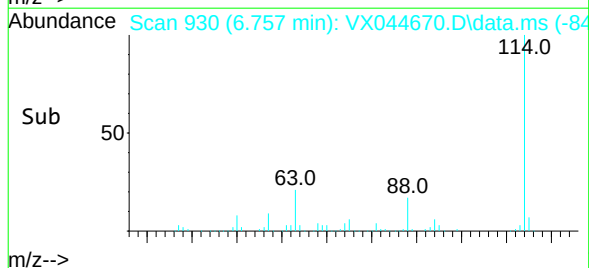
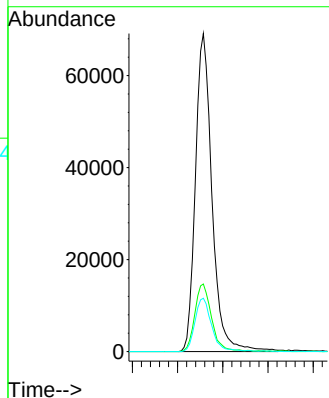
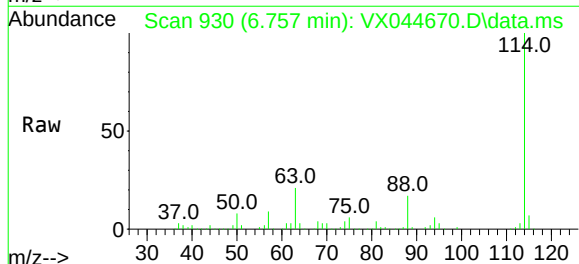
Instrument :
MSVOA_X
ClientSampleId :
002-35TH-AVE(DEC)

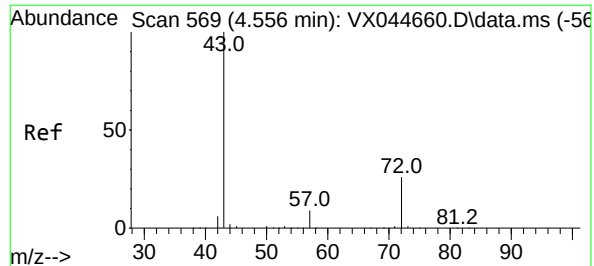
Tgt Ion: 65 Resp: 90648
Ion Ratio Lower Upper
65 100
67 53.0 41.4 62.2



#28
1,4-Difluorobenzene
Concen: 30.000 ug/l
RT: 6.757 min Scan# 930
Delta R.T. 0.000 min
Lab File: VX044670.D
Acq: 16 Jan 2025 13:55

Tgt Ion: 114 Resp: 176011
Ion Ratio Lower Upper
114 100
63 21.2 16.6 24.8
88 16.7 13.4 20.2





#30

2-Butanone

Concen: 10.735 ug/l

RT: 4.581 min Scan# 57

Delta R.T. 0.025 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

002-35TH-AVE(DEC)

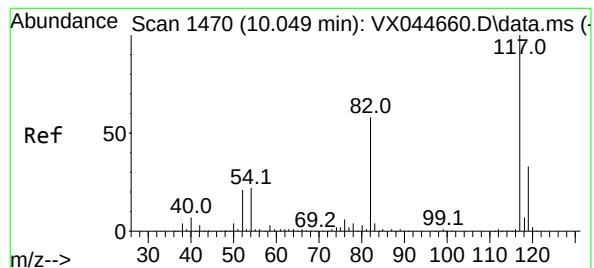
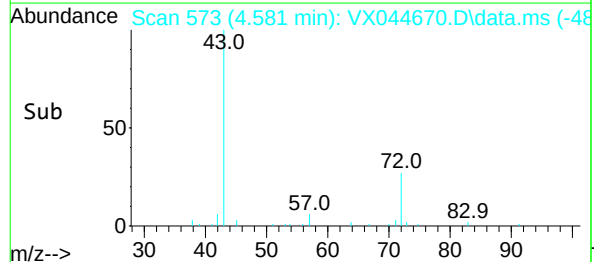
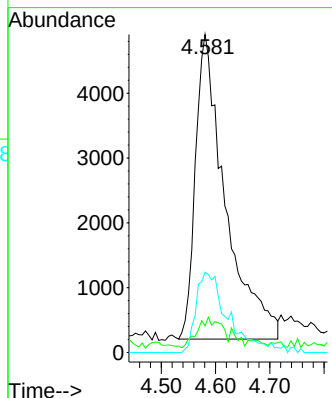
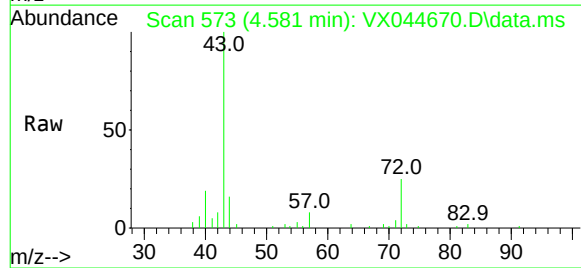
Tgt Ion: 43 Resp: 18054

Ion Ratio Lower Upper

43 100

57 4.9 6.4 9.6#

72 13.8 21.5 32.3#



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. 0.006 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

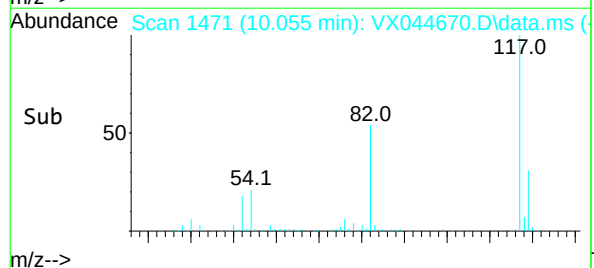
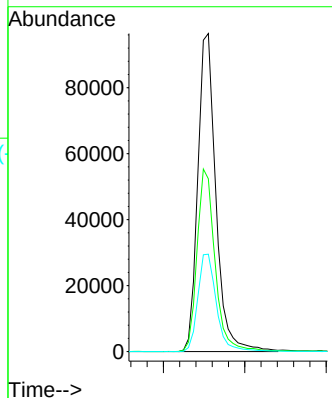
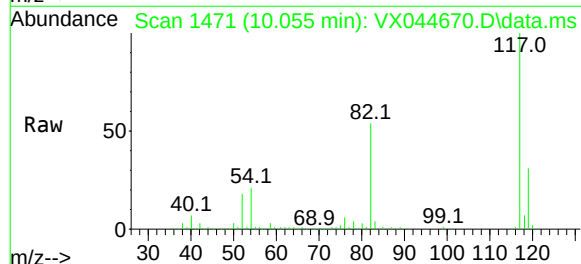
Tgt Ion: 117 Resp: 149063

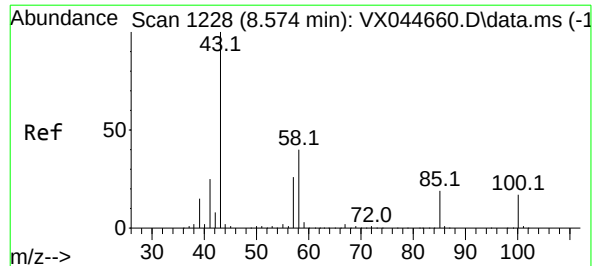
Ion Ratio Lower Upper

117 100

82 57.1 45.8 68.6

119 31.5 25.8 38.6





#58

4-Methyl-2-Pentanone

Concen: 4.946 ug/l

RT: 8.580 min Scan# 1228

Delta R.T. 0.006 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

002-35TH-AVE(DEC)

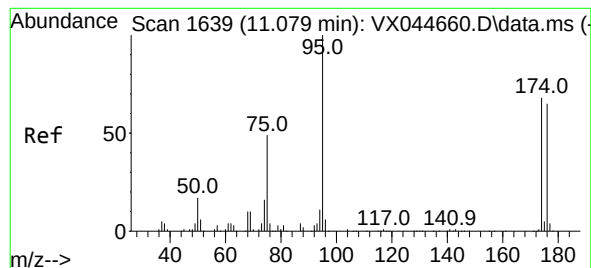
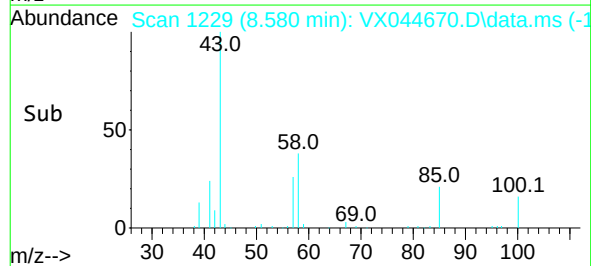
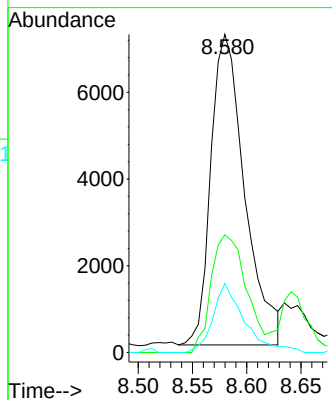
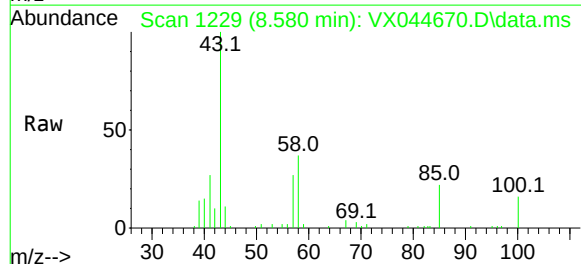
Tgt Ion: 43 Resp: 15540

Ion Ratio Lower Upper

43 100

58 39.3 31.7 47.5

85 20.7 15.0 22.6



#60

4-Bromofluorobenzene

Concen: 29.402 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. 0.000 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

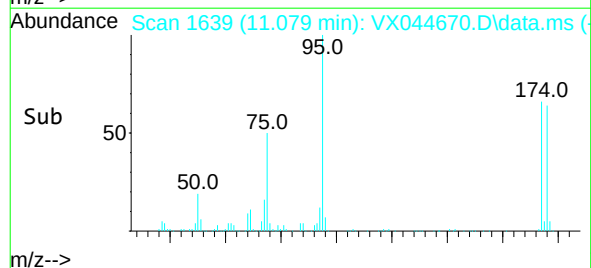
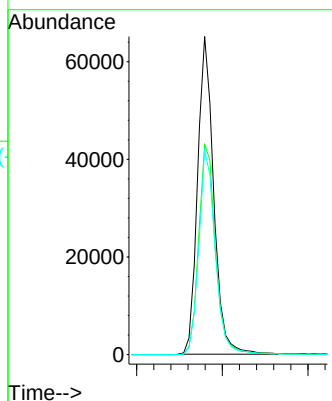
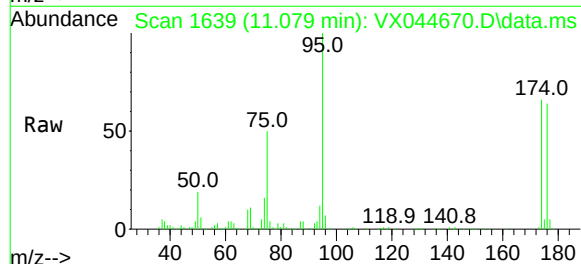
Tgt Ion: 95 Resp: 85127

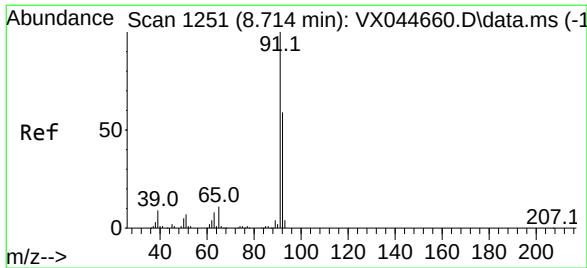
Ion Ratio Lower Upper

95 100

174 68.9 54.6 81.8

176 65.7 52.8 79.2





#62

Toluene

Concen: 83.215 ug/l

RT: 8.714 min Scan# 12

Delta R.T. 0.000 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

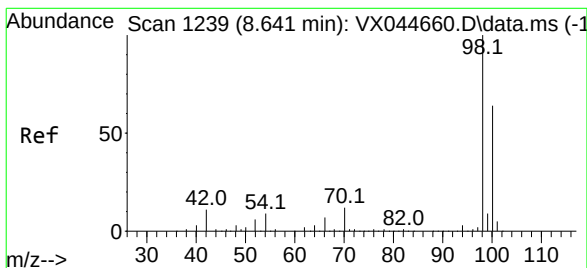
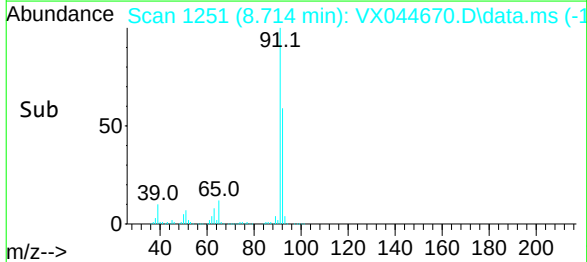
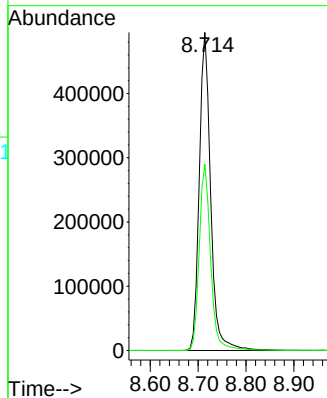
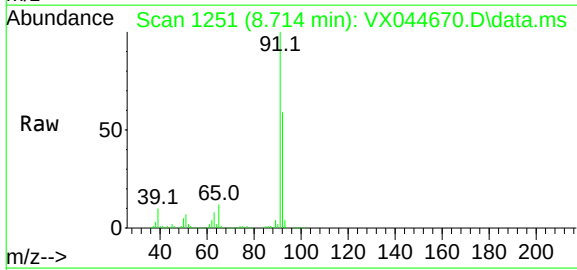
002-35TH-AVE(DEC)

Tgt Ion: 91 Resp: 816783

Ion Ratio Lower Upper

91 100

92 58.7 47.3 70.9



#63

Toluene-d8

Concen: 31.331 ug/l

RT: 8.647 min Scan# 1240

Delta R.T. 0.006 min

Lab File: VX044670.D

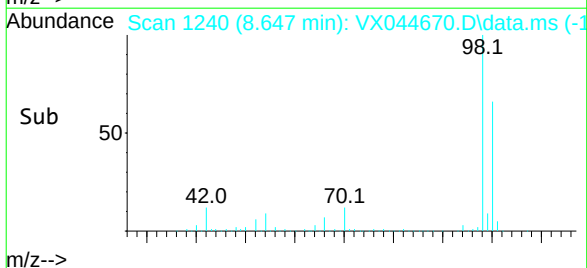
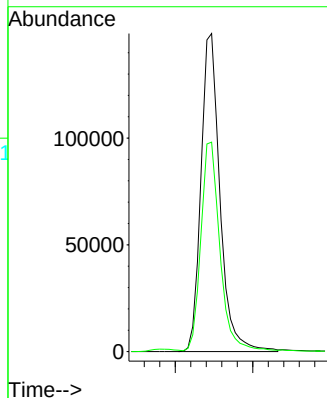
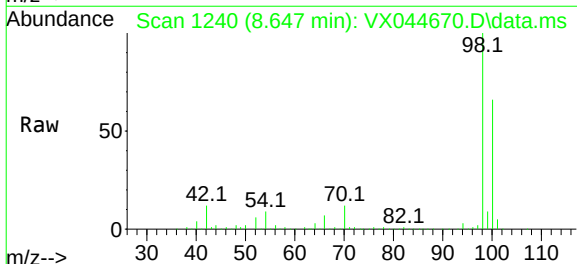
Acq: 16 Jan 2025 13:55

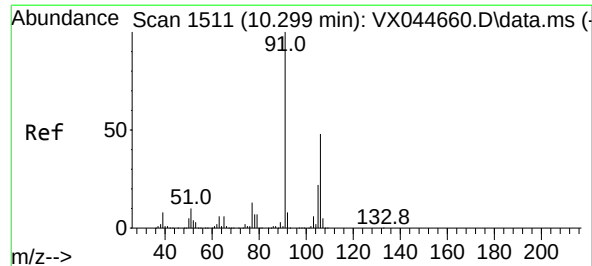
Tgt Ion: 98 Resp: 254016

Ion Ratio Lower Upper

98 100

100 65.9 53.6 80.4





#67

m/p-Xylenes

Concen: 0.454 ug/l

RT: 10.305 min Scan# 1511

Delta R.T. 0.006 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

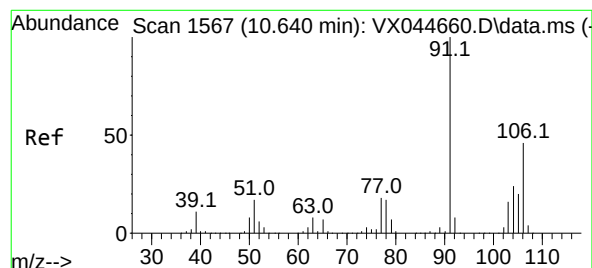
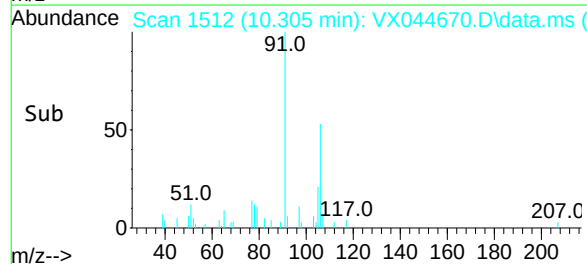
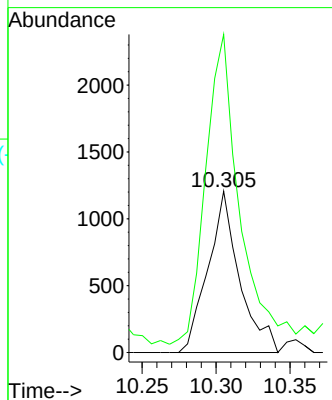
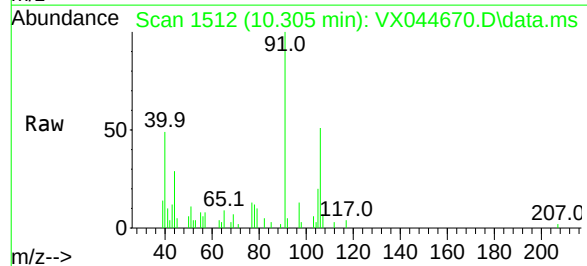
002-35TH-AVE(DEC)

Tgt Ion:106 Resp: 1787

Ion Ratio Lower Upper

106 100

91 204.8 166.8 250.2



#68

o-Xylene

Concen: 0.257 ug/l

RT: 10.640 min Scan# 1567

Delta R.T. 0.000 min

Lab File: VX044670.D

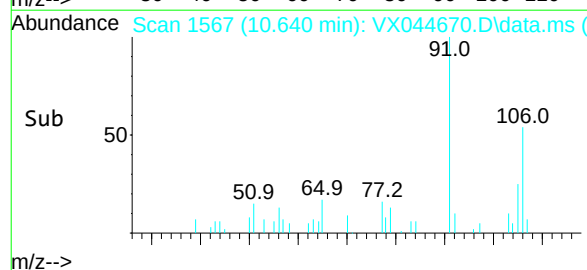
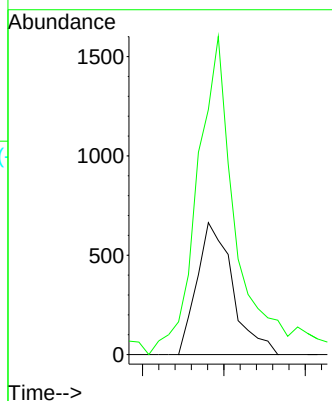
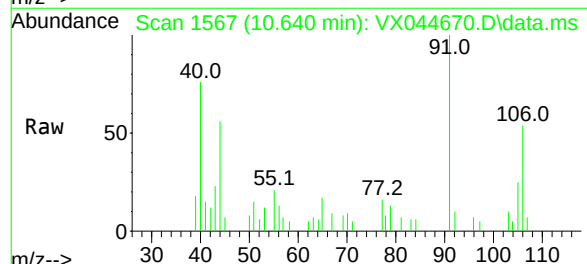
Acq: 16 Jan 2025 13:55

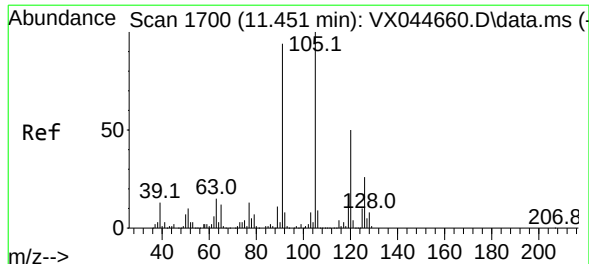
Tgt Ion:106 Resp: 1016

Ion Ratio Lower Upper

106 100

91 252.6 109.7 329.1





#76

1,3,5-Trimethylbenzene

Concen: 0.238 ug/l

RT: 11.451 min Scan# 1700

Delta R.T. 0.000 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

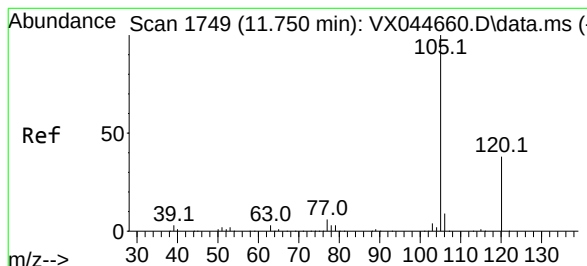
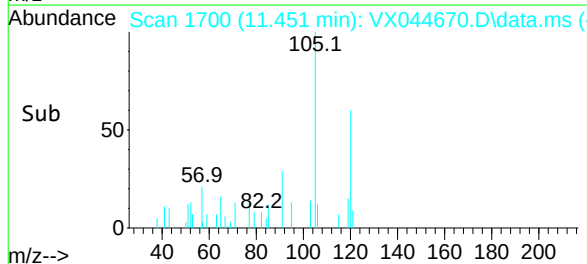
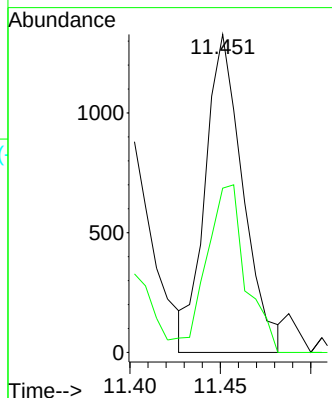
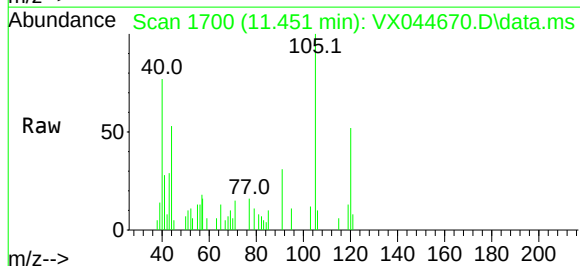
002-35TH-AVE(DEC)

Tgt Ion:105 Resp: 1923

Ion Ratio Lower Upper

105 100

120 54.1 0.0 96.8



#80

1,2,4-Trimethylbenzene

Concen: 1.032 ug/l

RT: 11.750 min Scan# 1749

Delta R.T. 0.000 min

Lab File: VX044670.D

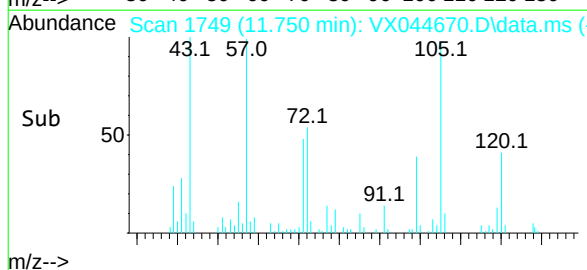
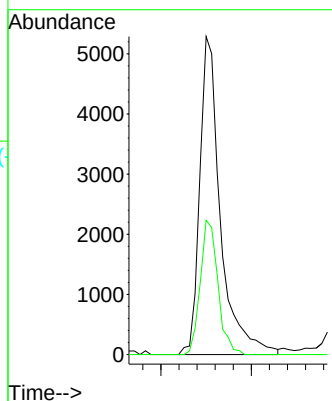
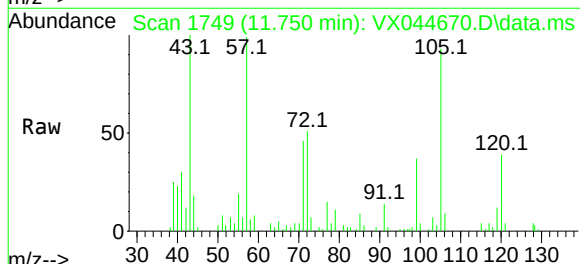
Acq: 16 Jan 2025 13:55

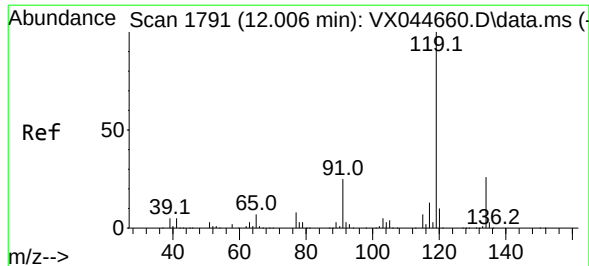
Tgt Ion:105 Resp: 8397

Ion Ratio Lower Upper

105 100

120 36.1 0.0 88.4





#82

p-Isopropyltoluene

Concen: 2.344 ug/l

RT: 12.006 min Scan# 1791

Delta R.T. 0.000 min

Lab File: VX044670.D

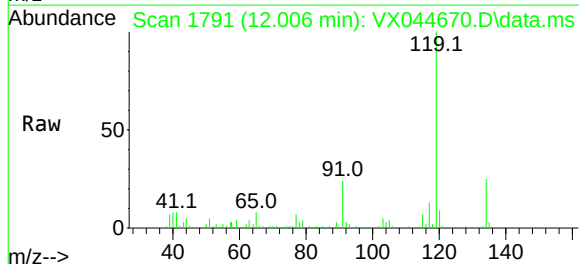
Acq: 16 Jan 2025 13:55

Instrument :

MSVOA_X

ClientSampleId :

002-35TH-AVE(DEC)



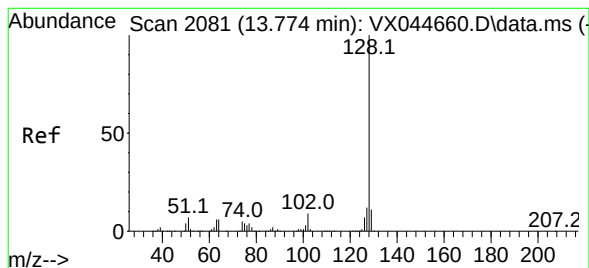
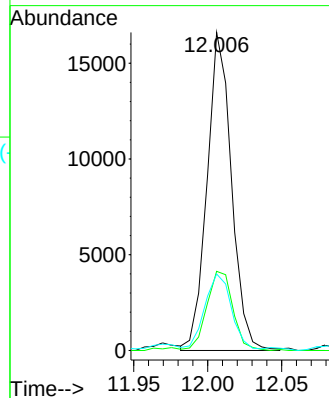
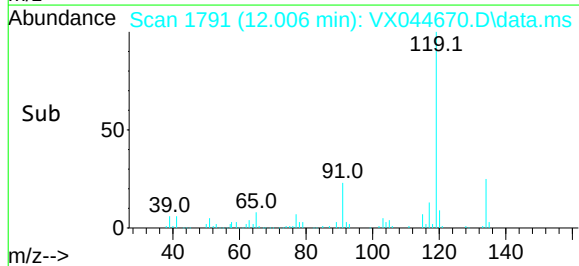
Tgt Ion:119 Resp: 19096

Ion Ratio Lower Upper

119 100

134 26.5 0.0 52.2

91 25.5 0.0 50.2



#91

Naphthalene

Concen: 0.727 ug/l

RT: 13.780 min Scan# 2082

Delta R.T. 0.006 min

Lab File: VX044670.D

Acq: 16 Jan 2025 13:55

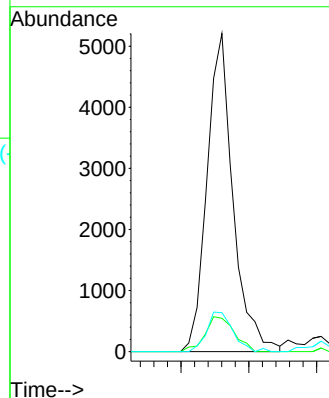
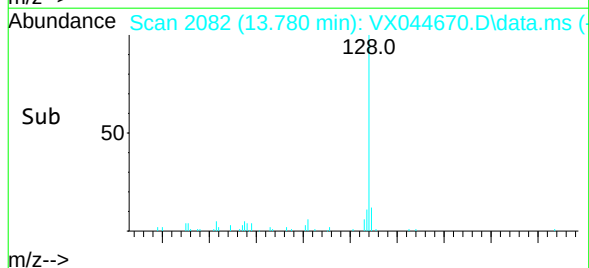
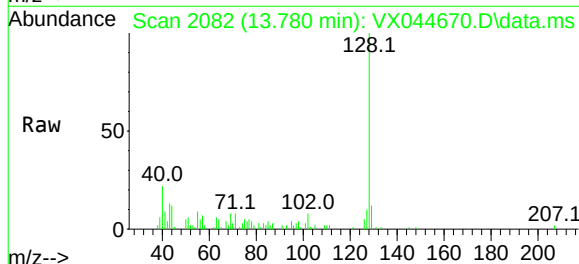
Tgt Ion:128 Resp: 6938

Ion Ratio Lower Upper

128 100

127 12.3 10.2 15.4

129 12.3 9.0 13.6





CALIBRATION SUMMARY



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECH Contract: TULL01
 Lab Code: CHEM Case No.: Q1083 SAS No.: Q1083 SDG No.: Q1083
 Instrument ID: MSVOA_X Calibration Date(s): 01/16/2025 01/16/2025
 Heated Purge: (Y/N) N Calibration Time(s): 08:39 10:12
 GC Column: DB-624UI ID: 0.18 (mm)

LAB FILE ID:		RRF005 = VX044659.D		RRF020 = VX044660.D		RRF050 = VX044661.D		
		RRF100 = VX044662.D		RRF150 = VX044663.D		RRF =		
COMPOUND	RRF005	RRF020	RRF050	RRF100	RRF150	RRF	RRF	% RSD
Benzene	1.720	1.726	1.635	1.681	1.562		1.665	4.1
Toluene	2.097	1.972	1.935	2.023	1.850		1.975	4.7
Ethyl Benzene	2.213	2.181	2.126	2.228	2.031		2.156	3.7
m/p-Xylenes	0.838	0.817	0.780	0.808	0.719		0.792	5.8
o-Xylene	0.841	0.823	0.787	0.800	0.726		0.795	5.5
1,2-Dichloroethane-d4	2.935	2.867	2.905	2.916	2.857		2.896	1.1
Toluene-d8	1.674	1.620	1.622	1.634	1.609		1.632	1.5
4-Bromofluorobenzene	0.579	0.578	0.588	0.586	0.582		0.583	0.7

* Compounds with required minimum RRF and maximum %RSD values.
 All other compounds must meet a minimum RRF of 0.010.
 RRF of 1,4-Dioxane = Value should be divide by 1000.

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 624X011625W.M
 Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 Last Update : Fri Jan 17 01:21:41 2025
 Response Via : Initial Calibration

Calibration Files

5 =VX044659.D 20 =VX044660.D 50 =VX044661.D 100 =VX044662.D 150 =VX044663.D

	Compound	5	20	50	100	150	Avg	%RSD
1) I	Bromochloromethane	-----ISTD-----						
2) M	Dichlorodifluoro...	2.532	2.647	2.555	2.990	2.611	2.667	6.98
3) M	Chloromethane	2.821	2.891	2.775	2.910	2.632	2.806	3.97
4) M	Vinyl Chloride	2.718	2.750	2.650	2.953	2.656	2.745	4.49
5) M	Bromomethane	0.720	0.648	0.619	0.683	0.647	0.663	5.89
6) M	Chloroethane	0.337	0.431	0.443	0.506	0.459	0.435	14.18
7) M	Trichlorofluorom...	3.012	2.966	2.841	3.281	2.932	3.006	5.52
8) T	Diethyl Ether	1.186	1.152	1.114	1.214	1.133	1.160	3.48
9)	1,1,2-Trichlorot...	2.135	2.090	2.010	2.424	2.111	2.154	7.34
10) M	1,1-Dichloroethene	2.310	2.167	2.109	2.359	2.134	2.216	5.05
11)	Methyl Iodide	3.030	3.123	3.066	3.170	2.965	3.071	2.60
12)	Methyl Acetate	3.129	3.141	3.211	3.540	3.155	3.235	5.35
13) M	Acrolein	0.481	0.295	0.325	0.353	0.335	0.358	20.13
14) M	Acrylonitrile	1.225	1.195	1.163	1.234	1.078	1.179	5.35
15) M	Acetone	0.336	0.311	0.307	0.335	0.292	0.316	6.01
16) M	Carbon Disulfide	6.007	6.100	6.013	6.600	6.072	6.158	4.06
17)	Allyl chloride	3.852	4.047	3.933	4.277	3.871	3.996	4.37
18) M	Methylene Chloride	2.516	2.531	2.426	2.551	2.375	2.480	3.05
19) M	trans-1,2-Dichlo...	2.273	2.202	2.143	2.306	2.094	2.203	4.00
20) T	Diisopropyl ether	7.531	7.477	7.136	7.411	6.711	7.253	4.68
21) M	1,1-Dichloroethane	4.238	4.335	4.228	4.546	4.166	4.303	3.46
22) M	cis-1,2-Dichloro...	2.682	2.813	2.656	2.863	2.622	2.727	3.84
23) M	tert-Butyl Alcohol	0.665	0.584	0.542	0.568	0.492	0.570	11.14
24) M	Methyl tert-Buty...	7.881	7.826	7.445	7.974	7.263	7.678	4.00
25) M	Chloroform	4.285	4.354	4.180	4.469	4.089	4.275	3.46
26)	Cyclohexane	3.790	3.587	3.386	3.928	3.390	3.616	6.66
27) s	1,2-Dichloroetha...	2.935	2.867	2.905	2.916	2.857	2.896	1.14
28) I	1,4-Difluorobenzene	-----ISTD-----						
29)	1,1-Dichloropropene	0.533	0.520	0.505	0.550	0.501	0.522	3.88
30) M	2-Butanone	0.302	0.295	0.285	0.292	0.260	0.287	5.57
31)	2,2-Dichloropropane	0.766	0.729	0.693	0.741	0.681	0.722	4.84
32) M	1,1,1-Trichloroe...	0.729	0.702	0.665	0.708	0.654	0.692	4.54
33) M	Carbon Tetrachlo...	0.616	0.587	0.558	0.605	0.551	0.583	4.83
34) M	Benzene	1.720	1.726	1.635	1.681	1.562	1.665	4.09
35)	Methacrylonitrile	0.329	0.324	0.317	0.333	0.299	0.320	4.15
36) M	1,2-Dichloroethane	0.610	0.616	0.579	0.607	0.563	0.595	3.81
37) M	Trichloroethene	0.394	0.405	0.394	0.424	0.393	0.402	3.29
38)	Methylcyclohexane	0.728	0.692	0.669	0.776	0.680	0.709	6.16
39) M	1,2-Dichloropropane	0.416	0.428	0.415	0.423	0.394	0.415	3.17
40)	Dibromomethane	0.319	0.314	0.302	0.313	0.295	0.309	3.22
41) M	Bromodichloromet...	0.667	0.655	0.628	0.638	0.598	0.637	4.14
42) M	Vinyl Acetate	1.208	1.187	1.120	1.142	1.035	1.138	5.94
43)	Ethyl Acetate	0.539	0.592	0.552	0.593	0.535	0.562	5.11
44)	Isopropyl Acetate	1.016	1.043	1.000	1.033	0.959	1.010	3.26
45) T	1,4-Dioxane	0.011	0.010	0.010	0.009	0.008	0.010	9.48
46)	Methyl methacrylate	0.506	0.509	0.495	0.501	0.462	0.494	3.83
47)	n-amyl Acetate	0.883	0.902	0.847	0.840	0.767	0.848	6.11
48) M	t-1,3-Dichloropr...	0.673	0.696	0.675	0.685	0.635	0.673	3.38
49) T	cis-1,3-Dichloro...	0.737	0.748	0.719	0.731	0.671	0.721	4.16
50) M	1,1,2-Trichloroe...	0.425	0.419	0.398	0.391	0.355	0.397	6.96
51)	Ethyl methacrylate	0.711	0.720	0.704	0.688	0.630	0.691	5.22
52)	1,3-Dichloropropane	0.737	0.718	0.678	0.680	0.624	0.687	6.35
53) M	Dibromochloromet...	0.507	0.503	0.469	0.468	0.428	0.475	6.76
54) M	1,2-Dibromoethane	0.449	0.440	0.417	0.414	0.380	0.420	6.44
55) M	2-Chloroethyl vi...	0.376	0.351	0.338	0.309	0.302	0.335	9.10
56) M	Bromoform	0.340	0.324	0.314	0.310	0.287	0.315	6.19

Method Path : Z:\voasrv\HPCHEM1\MSVOA_X\Method\
 Method File : 624X011625W.M

57) I	Chlorobenzene-d5	-----ISTD-----						
58) M	4-Methyl-2-Penta...	0.685	0.649	0.618	0.638	0.572	0.632	6.60
59) M	2-Hexanone	0.503	0.474	0.451	0.470	0.417	0.463	6.86
60) S	4-Bromofluoroben...	0.579	0.578	0.588	0.586	0.582	0.583	0.75
61) M	Tetrachloroethene	0.365	0.350	0.349	0.387	0.348	0.360	4.71
62) M	Toluene	2.097	1.972	1.935	2.023	1.850	1.975	4.69
63) S	Toluene-d8	1.674	1.620	1.622	1.634	1.609	1.632	1.53
64) M	Chlorobenzene	1.275	1.230	1.215	1.256	1.157	1.227	3.70
65)	1,1,1,2-Tetrachl...	0.460	0.445	0.433	0.449	0.417	0.441	3.68
66) M	Ethyl Benzene	2.213	2.181	2.126	2.228	2.031	2.156	3.71
67) M	m/p-Xylenes	0.838	0.817	0.780	0.808	0.719	0.792	5.82
68) M	o-Xylene	0.841	0.823	0.787	0.800	0.726	0.795	5.53
69) M	Styrene	1.363	1.358	1.291	1.322	1.196	1.306	5.19
70)	Isopropylbenzene	2.139	2.047	1.942	2.041	1.828	1.999	5.92
71) M	1,1,2,2-Tetrachl...	0.749	0.684	0.650	0.671	0.607	0.672	7.74
72)	1,2,3-Trichlorop...	0.594	0.582	0.560	0.574	0.518	0.565	5.19
73)	Bromobenzene	0.488	0.476	0.458	0.470	0.437	0.466	4.16
74)	n-propylbenzene	2.310	2.311	2.237	2.371	2.126	2.271	4.13
75)	2-Chlorotoluene	1.514	1.469	1.400	1.437	1.318	1.428	5.22
76)	1,3,5-Trimethylb...	1.743	1.677	1.602	1.640	1.457	1.624	6.59
77)	t-1,4-Dichloro-2...	0.283	0.267	0.259	0.278	0.251	0.268	4.92
78)	4-Chlorotoluene	1.655	1.609	1.552	1.602	1.448	1.573	5.03
79)	tert-butylbenzene	1.815	1.730	1.625	1.675	1.496	1.668	7.17
80)	1,2,4-Trimethylb...	1.748	1.689	1.602	1.660	1.492	1.638	5.93
81)	sec-Butylbenzene	2.100	2.035	1.947	2.048	1.830	1.992	5.33
82)	p-Isopropyltoluene	1.701	1.683	1.602	1.690	1.520	1.639	4.71
83) M	1,3-Dichlorobenzene	0.829	0.841	0.819	0.858	0.789	0.827	3.13
84) M	1,4-Dichlorobenzene	0.809	0.833	0.797	0.841	0.775	0.811	3.30
85)	n-Butylbenzene	1.363	1.419	1.407	1.536	1.379	1.421	4.80
86) T	Hexachloroethane	0.395	0.360	0.346	0.367	0.335	0.361	6.39
87) M	1,2-Dichlorobenzene	0.873	0.852	0.816	0.836	0.754	0.826	5.51
88)	1,2-Dibromo-3-Ch...	0.185	0.159	0.153	0.163	0.150	0.162	8.44
89)	1,2,4-Trichlorob...	0.477	0.496	0.506	0.562	0.526	0.513	6.33
90)	Hexachlorobutadiene	0.202	0.199	0.190	0.207	0.194	0.199	3.36
91) M	Naphthalene	1.885	1.938	1.905	2.019	1.857	1.921	3.24
92)	1,2,3-Trichlorob...	0.492	0.526	0.518	0.554	0.522	0.522	4.29

(#) = Out of Range

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044659.D
 Acq On : 16 Jan 2025 08:39
 Operator :
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC005

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 00:59:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	31935	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	175523	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	154224	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	93745	30.407	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 101.367%			
60) 4-Bromofluorobenzene	11.079	95	89238	29.790	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 99.300%			
63) Toluene-d8	8.641	98	258118	30.772	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 102.567%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	13478m	5.255	ug/l	
3) Chloromethane	1.294	50	15014	5.027	ug/l	99
4) Vinyl Chloride	1.374	62	14464	4.949	ug/l	93
5) Bromomethane	1.593	94	3833	5.432	ug/l	97
6) Chloroethane	1.660	64	1795	3.804	ug/l	91
7) Trichlorofluoromethane	1.867	101	16029	5.008	ug/l	96
8) Diethyl Ether	2.130	74	6314	5.114	ug/l	96
9) 1,1,2-Trichlorotrifluo...	2.319	101	11362	4.955	ug/l	99
10) 1,1-Dichloroethene	2.306	96	12297	5.213	ug/l	93
11) Methyl Iodide	2.441	142	16127	4.934	ug/l	98
12) Methyl Acetate	2.703	43	16652	4.835	ug/l	100
13) Acrolein	2.233	56	12799	33.611	ug/l	99
14) Acrylonitrile	3.062	53	32592	25.973	ug/l	99
15) Acetone	2.386	58	8941	26.553	ug/l	95
16) Carbon Disulfide	2.501	76	31970	4.877	ug/l	98
17) Allyl chloride	2.654	41	20504	4.820	ug/l	99
18) Methylene Chloride	2.782	84	13392	5.071	ug/l	88
19) trans-1,2-Dichloroethene	3.081	96	12096	5.157	ug/l	90
20) Diisopropyl ether	3.757	45	40086	5.192	ug/l #	86
21) 1,1-Dichloroethane	3.599	63	22559	4.925	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	14274	4.917	ug/l	94
23) tert-Butyl Alcohol	2.977	59	17704m	32.520	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	41947	5.132	ug/l	100
25) Chloroform	5.080	83	22809	5.012	ug/l	98
26) Cyclohexane	5.452	56	20174	5.241	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	15595	5.108	ug/l	96
30) 2-Butanone	4.562	43	44109	26.301	ug/l	99
31) 2,2-Dichloropropane	4.458	77	22402m	5.303	ug/l	
32) 1,1,1-Trichloroethane	5.373	97	21324	5.270	ug/l	100
33) Carbon Tetrachloride	5.659	117	18012	5.277	ug/l	94
34) Benzene	6.025	78	50311	5.165	ug/l	100
35) Methacrylonitrile	4.922	41	9621	5.133	ug/l	96
36) 1,2-Dichloroethane	6.080	62	17847	5.125	ug/l #	92
37) Trichloroethene	7.116	130	11515	4.896	ug/l	98
38) Methylcyclohexane	7.366	83	21311	5.138	ug/l	99
39) 1,2-Dichloropropane	7.421	63	12181	5.015	ug/l	93
40) Dibromomethane	7.574	93	9326	5.165	ug/l	96
41) Bromodichloromethane	7.818	83	19506	5.231	ug/l	97
42) Vinyl Acetate	3.715	43	176672	26.526	ug/l	99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044659.D
 Acq On : 16 Jan 2025 08:39
 Operator :
 Sample : VSTDICC005
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 2 Sample Multiplier: 1

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC005

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025

Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 00:59:56 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Jan 17 00:59:31 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.714	43	15761	4.791	ug/l	# 95
44) Isopropyl Acetate	6.342	43	29728	5.030	ug/l	99
45) 1,4-Dioxane	7.671	88	6188	109.953	ug/l	98
46) Methyl methacrylate	7.696	41	14808	5.119	ug/l	91
47) n-amyl Acetate	10.841	43	25825	5.207	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	19698	5.005	ug/l	99
49) cis-1,3-Dichloropropene	8.360	75	21573	5.112	ug/l	98
50) 1,1,2-Trichloroethane	9.147	97	12425	5.334	ug/l	95
51) Ethyl methacrylate	9.116	69	20798	5.148	ug/l	95
52) 1,3-Dichloropropane	9.305	76	21568	5.362	ug/l	99
53) Dibromochloromethane	9.518	129	14835	5.338	ug/l	97
54) 1,2-Dibromoethane	9.610	107	13144	5.346	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	55031	28.109	ug/l	100
56) Bromoform	10.799	173	9949	5.399	ug/l	97
58) 4-Methyl-2-Pentanone	8.574	43	88064	27.090	ug/l	100
59) 2-Hexanone	9.433	43	64656	27.167	ug/l	99
61) Tetrachloroethene	9.269	164	9388	5.075	ug/l	94
62) Toluene	8.714	91	53894	5.307	ug/l	97
64) Chlorobenzene	10.073	112	32777	5.197	ug/l	97
65) 1,1,1,2-Tetrachloroethane	10.159	131	11815	5.215	ug/l	97
66) Ethyl Benzene	10.189	91	56887	5.133	ug/l	99
67) m/p-Xylenes	10.299	106	43104	10.581	ug/l	99
68) o-Xylene	10.640	106	21611	5.286	ug/l	99
69) Styrene	10.652	104	35022	5.217	ug/l	99
70) Isopropylbenzene	10.957	105	54978	5.349	ug/l	98
71) 1,1,2,2-Tetrachloroethane	11.207	83	19252	5.562	ug/l	99
72) 1,2,3-Trichloropropane	11.238	75	15260m	5.249	ug/l	
73) Bromobenzene	11.195	156	12540	5.237	ug/l	98
74) n-propylbenzene	11.299	91	59373	5.082	ug/l	99
75) 2-Chlorotoluene	11.360	91	38923	5.300	ug/l	99
76) 1,3,5-Trimethylbenzene	11.451	105	44812	5.369	ug/l	98
77) t-1,4-Dichloro-2-butene	11.018	75	7275	5.290	ug/l	95
78) 4-Chlorotoluene	11.451	91	42547	5.261	ug/l	100
79) tert-butylbenzene	11.713	119	46656	5.441	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	44923	5.334	ug/l	99
81) sec-Butylbenzene	11.890	105	53980	5.272	ug/l	98
82) p-Isopropyltoluene	12.006	119	43716	5.187	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	21317	5.012	ug/l	99
84) 1,4-Dichlorobenzene	12.042	146	20782	4.984	ug/l	100
85) n-Butylbenzene	12.329	91	35040	4.797	ug/l	99
86) Hexachloroethane	12.536	117	10162	5.481	ug/l	99
87) 1,2-Dichlorobenzene	12.335	146	22448	5.286	ug/l	96
88) 1,2-Dibromo-3-Chloropr...	12.945	75	4748	5.705	ug/l	95
89) 1,2,4-Trichlorobenzene	13.585	180	12251	4.642	ug/l	99
90) Hexachlorobutadiene	13.719	225	5203	5.096	ug/l	98
91) Naphthalene	13.774	128	48452	4.907	ug/l	100
92) 1,2,3-Trichlorobenzene	13.963	180	12639	4.708	ug/l	98

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

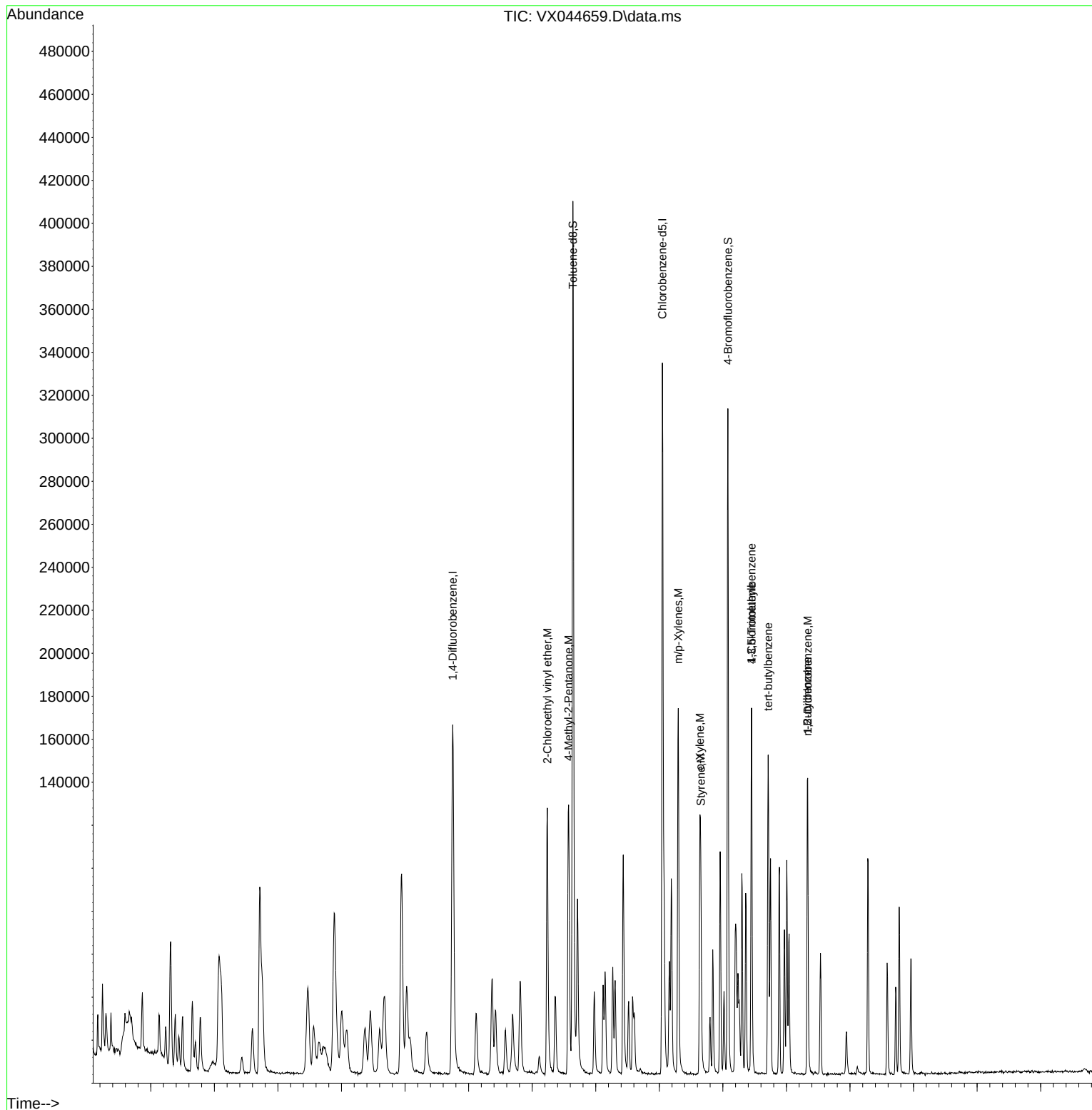
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044659.D
Acq On : 16 Jan 2025 08:39
Operator :
Sample : VSTDIC005
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC005

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 00:59:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044660.D
 Acq On : 16 Jan 2025 09:02
 Operator :
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	33434	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	183316	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	165841	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	95855	29.698	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	99.000%		
60) 4-Bromofluorobenzene	11.079	95	95915	29.776	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.267%		
63) Toluene-d8	8.641	98	268606	29.779	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.267%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	59011	21.978	ug/l	100
3) Chloromethane	1.301	50	64444	20.609	ug/l	100
4) Vinyl Chloride	1.374	62	61288	20.032	ug/l	100
5) Bromomethane	1.593	94	14449	19.557	ug/l	100
6) Chloroethane	1.666	64	9612	19.455	ug/l	100
7) Trichlorofluoromethane	1.867	101	66116	19.733	ug/l	100
8) Diethyl Ether	2.136	74	25682	19.869	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.319	101	46585	19.407	ug/l	100
10) 1,1-Dichloroethene	2.313	96	48300	19.557	ug/l	100
11) Methyl Iodide	2.447	142	69610	20.341	ug/l	100
12) Methyl Acetate	2.703	43	70020	19.421	ug/l	100
13) Acrolein	2.239	56	32834	82.358	ug/l	100
14) Acrylonitrile	3.062	53	133148	101.348	ug/l	100
15) Acetone	2.386	58	34632	98.240	ug/l	100
16) Carbon Disulfide	2.502	76	135960	19.810	ug/l	100
17) Allyl chloride	2.654	41	90204	20.254	ug/l	100
18) Methylene Chloride	2.782	84	56413	20.405	ug/l	100
19) trans-1,2-Dichloroethene	3.081	96	49084	19.989	ug/l	100
20) Diisopropyl ether	3.757	45	166654	20.616	ug/l	100
21) 1,1-Dichloroethane	3.605	63	96629	20.151	ug/l	100
22) cis-1,2-Dichloroethene	4.483	96	62694	20.628	ug/l	100
23) tert-Butyl Alcohol	2.977	59	65050m	114.131	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	174439	20.386	ug/l	100
25) Chloroform	5.086	83	97039	20.366	ug/l	100
26) Cyclohexane	5.458	56	79956	19.839	ug/l #	100
29) 1,1-Dichloropropene	5.684	75	63605	19.948	ug/l	100
30) 2-Butanone	4.556	43	180079	102.811	ug/l	100
31) 2,2-Dichloropropane	4.471	77	89122	20.198	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	85820	20.310	ug/l	100
33) Carbon Tetrachloride	5.666	117	71722	20.121	ug/l	100
34) Benzene	6.031	78	210959	20.737	ug/l	100
35) Methacrylonitrile	4.922	41	39575	20.216	ug/l	100
36) 1,2-Dichloroethane	6.080	62	75287	20.699	ug/l	100
37) Trichloroethene	7.123	130	49474	20.143	ug/l	100
38) Methylcyclohexane	7.373	83	84540	19.514	ug/l	100
39) 1,2-Dichloropropane	7.421	63	52299	20.616	ug/l	100
40) Dibromomethane	7.580	93	38410	20.366	ug/l	100
41) Bromodichloromethane	7.818	83	80017	20.548	ug/l	100
42) Vinyl Acetate	3.715	43	725170	104.251	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044660.D
 Acq On : 16 Jan 2025 09:02
 Operator :
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.715	43	72396m	21.071	ug/l	
44) Isopropyl Acetate	6.336	43	127474	20.652	ug/l	100
45) 1,4-Dioxane	7.677	88	25021	425.692	ug/l	100
46) Methyl methacrylate	7.690	41	62145	20.568	ug/l	100
47) n-amyl Acetate	10.841	43	110225	21.278	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	85014	20.683	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	91440	20.747	ug/l	100
50) 1,1,2-Trichloroethane	9.147	97	51190	21.040	ug/l	100
51) Ethyl methacrylate	9.116	69	88025	20.861	ug/l	100
52) 1,3-Dichloropropane	9.305	76	87800	20.900	ug/l	100
53) Dibromochloromethane	9.519	129	61431	21.165	ug/l	100
54) 1,2-Dibromoethane	9.604	107	53825	20.963	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	214240	104.779	ug/l	100
56) Bromoform	10.799	173	39538	20.544	ug/l	100
58) 4-Methyl-2-Pentanone	8.574	43	358614	102.588	ug/l	100
59) 2-Hexanone	9.433	43	261785	102.292	ug/l	100
61) Tetrachloroethene	9.269	164	38724	19.466	ug/l	100
62) Toluene	8.714	91	218070	19.970	ug/l	100
64) Chlorobenzene	10.073	112	136037	20.059	ug/l	100
65) 1,1,1,2-Tetrachloroethane	10.159	131	49228	20.207	ug/l	100
66) Ethyl Benzene	10.189	91	241177	20.238	ug/l	100
67) m/p-Xylenes	10.299	106	180626	41.233	ug/l	100
68) o-Xylene	10.640	106	90982	20.694	ug/l	100
69) Styrene	10.652	104	150095	20.793	ug/l	100
70) Isopropylbenzene	10.957	105	226317	20.476	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	75650	20.326	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	64385m	20.597	ug/l	
73) Bromobenzene	11.195	156	52618	20.435	ug/l	100
74) n-propylbenzene	11.299	91	255513	20.339	ug/l	100
75) 2-Chlorotoluene	11.360	91	162457	20.573	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	185378	20.653	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	29516	19.959	ug/l	100
78) 4-Chlorotoluene	11.451	91	177891	20.455	ug/l	100
79) tert-butylbenzene	11.713	119	191290	20.745	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	186763	20.623	ug/l	100
81) sec-Butylbenzene	11.890	105	224992	20.434	ug/l	100
82) p-Isopropyltoluene	12.006	119	186107	20.537	ug/l	100
83) 1,3-Dichlorobenzene	11.969	146	92976	20.330	ug/l	100
84) 1,4-Dichlorobenzene	12.036	146	92092	20.540	ug/l	100
85) n-Butylbenzene	12.329	91	156896	19.973	ug/l	100
86) Hexachloroethane	12.536	117	39754	19.941	ug/l	100
87) 1,2-Dichlorobenzene	12.335	146	94144	20.614	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	12.939	75	17538	19.597	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	54885	19.338	ug/l	100
90) Hexachlorobutadiene	13.725	225	21996	20.036	ug/l	100
91) Naphthalene	13.774	128	214309	20.183	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	58101	20.127	ug/l	100

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

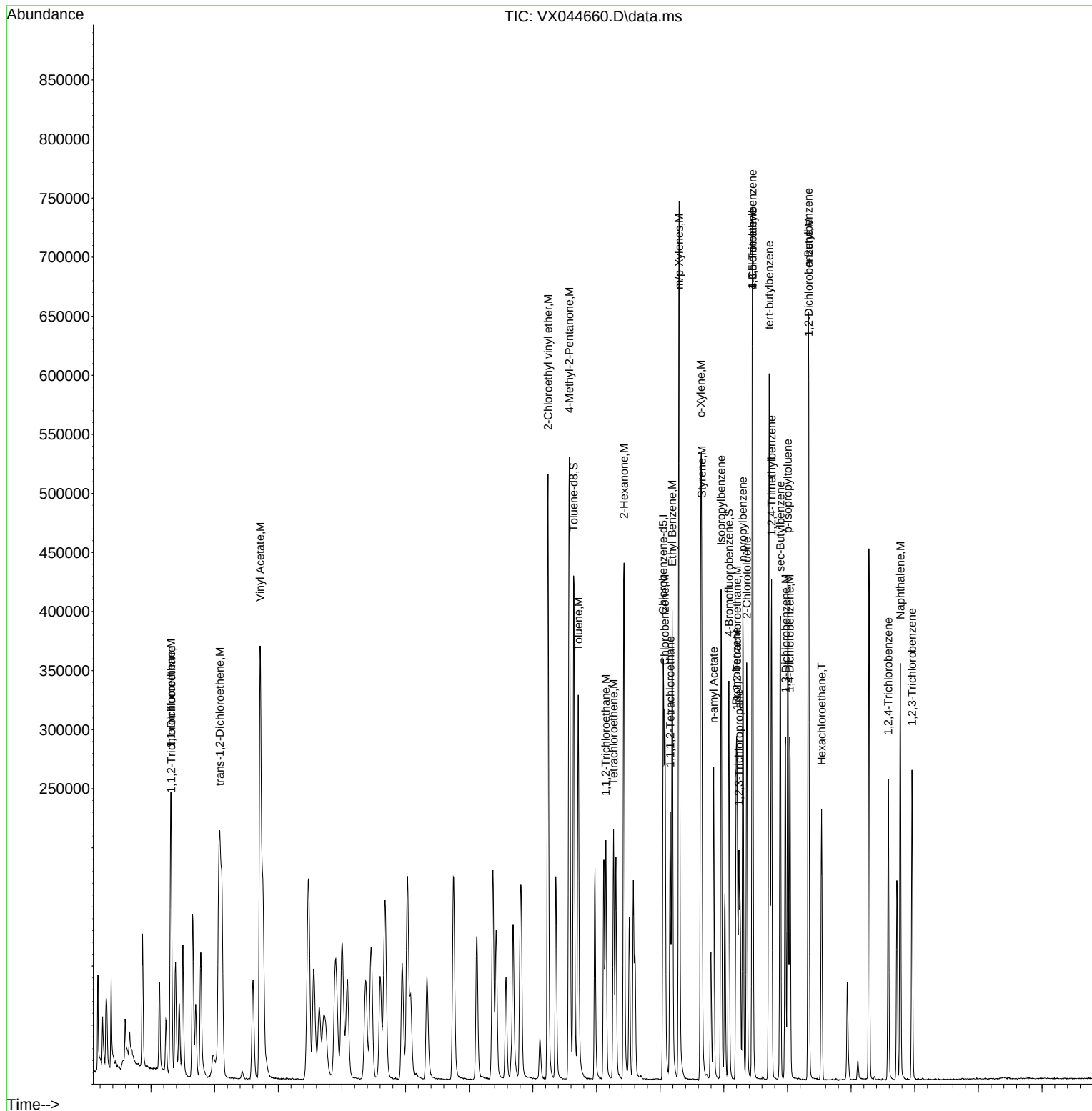
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\  
Data File : VX044660.D  
Acq On    : 16 Jan 2025   09:02  
Operator  :  
Sample    : VSTDICCC020  
Misc      : 5.0mL/MSVOA_X/WATER  
ALS Vial  : 3      Sample Multiplier: 1
```

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044661.D
 Acq On : 16 Jan 2025 09:25
 Operator :
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:01:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	31946	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	176401	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	156058	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	92806	30.092	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.300%			
60) 4-Bromofluorobenzene	11.079	95	91788	30.281	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.933%			
63) Toluene-d8	8.647	98	253105	29.819	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 99.400%			
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.166	85	136053	53.031	ug/l	99
3) Chloromethane	1.294	50	147748	49.450	ug/l	98
4) Vinyl Chloride	1.374	62	141110	48.270	ug/l	98
5) Bromomethane	1.593	94	32943	46.667	ug/l	100
6) Chloroethane	1.660	64	23580	49.950	ug/l	98
7) Trichlorofluoromethane	1.867	101	151253	47.245	ug/l	100
8) Diethyl Ether	2.136	74	59325	48.034	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.319	101	106998	46.650	ug/l	99
10) 1,1-Dichloroethene	2.306	96	112301	47.590	ug/l	94
11) Methyl Iodide	2.441	142	163230	49.919	ug/l	98
12) Methyl Acetate	2.703	43	170946	49.623	ug/l	100
13) Acrolein	2.233	56	86575	227.272	ug/l	99
14) Acrylonitrile	3.062	53	309583	246.621	ug/l	100
15) Acetone	2.386	58	81812	242.884	ug/l	94
16) Carbon Disulfide	2.501	76	320132	48.818	ug/l	100
17) Allyl chloride	2.654	41	209402	49.209	ug/l	99
18) Methylene Chloride	2.782	84	129192	48.907	ug/l	99
19) trans-1,2-Dichloroethene	3.081	96	114074	48.618	ug/l	98
20) Diisopropyl ether	3.757	45	379943	49.191	ug/l	97
21) 1,1-Dichloroethane	3.605	63	225092	49.127	ug/l	97
22) cis-1,2-Dichloroethene	4.477	96	141413	48.695	ug/l	98
23) tert-Butyl Alcohol	2.977	59	144322m	265.008	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	396412	48.485	ug/l	99
25) Chloroform	5.086	83	222532	48.880	ug/l	96
26) Cyclohexane	5.458	56	180292	46.819	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	148511	48.402	ug/l	99
30) 2-Butanone	4.556	43	419491	248.886	ug/l	99
31) 2,2-Dichloropropane	4.465	77	203849	48.011	ug/l	99
32) 1,1,1-Trichloroethane	5.373	97	195383	48.051	ug/l	99
33) Carbon Tetrachloride	5.672	117	164089	47.839	ug/l	98
34) Benzene	6.031	78	480821	49.118	ug/l	99
35) Methacrylonitrile	4.916	41	93262	49.509	ug/l	98
36) 1,2-Dichloroethane	6.080	62	170346	48.671	ug/l	99
37) Trichloroethene	7.116	130	115805	48.998	ug/l	95
38) Methylcyclohexane	7.373	83	196645	47.170	ug/l	99
39) 1,2-Dichloropropane	7.427	63	121901	49.937	ug/l	97
40) Dibromomethane	7.574	93	88733	48.894	ug/l	99
41) Bromodichloromethane	7.818	83	184753	49.303	ug/l	99
42) Vinyl Acetate	3.715	43	1646712	246.012	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044661.D
 Acq On : 16 Jan 2025 09:25
 Operator :
 Sample : VSTDICC050
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC050

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:01:44 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	162349	49.103	ug/l #	94
44) Isopropyl Acetate	6.336	43	293976	49.493	ug/l	98
45) 1,4-Dioxane	7.671	88	56732	1003.041	ug/l	98
46) Methyl methacrylate	7.690	41	145468	50.033	ug/l	99
47) n-amyl Acetate	10.841	43	248981	49.948	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	198307	50.138	ug/l	99
49) cis-1,3-Dichloropropene	8.360	75	211446	49.856	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	117115	50.024	ug/l	97
51) Ethyl methacrylate	9.116	69	206891	50.954	ug/l	99
52) 1,3-Dichloropropane	9.305	76	199192	49.275	ug/l	98
53) Dibromochloromethane	9.518	129	137982	49.404	ug/l	98
54) 1,2-Dibromoethane	9.604	107	122664	49.646	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	496129	252.154	ug/l	100
56) Bromoform	10.799	173	92355	49.868	ug/l	99
58) 4-Methyl-2-Pentanone	8.574	43	804113	244.450	ug/l	99
59) 2-Hexanone	9.433	43	586563	243.566	ug/l	99
61) Tetrachloroethene	9.269	164	90750	48.479	ug/l	98
62) Toluene	8.714	91	503289	48.978	ug/l	98
64) Chlorobenzene	10.073	112	316113	49.533	ug/l	98
65) 1,1,1,2-Tetrachloroethane	10.159	131	112521	49.083	ug/l	99
66) Ethyl Benzene	10.189	91	552973	49.310	ug/l	99
67) m/p-Xylenes	10.299	106	405714	98.422	ug/l	99
68) o-Xylene	10.640	106	204604	49.454	ug/l	100
69) Styrene	10.652	104	335834	49.440	ug/l	100
70) Isopropylbenzene	10.957	105	505061	48.560	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.213	83	168965	48.244	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	145534m	49.476	ug/l	
73) Bromobenzene	11.195	156	119195	49.194	ug/l	99
74) n-propylbenzene	11.299	91	581862	49.219	ug/l	100
75) 2-Chlorotoluene	11.360	91	364136	49.004	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	416769	49.342	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	67311	48.369	ug/l	97
78) 4-Chlorotoluene	11.451	91	403646	49.323	ug/l	100
79) tert-butylbenzene	11.713	119	422625	48.705	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	416772	48.906	ug/l	99
81) sec-Butylbenzene	11.890	105	506286	48.863	ug/l	100
82) p-Isopropyltoluene	12.006	119	416615	48.855	ug/l	100
83) 1,3-Dichlorobenzene	11.969	146	213035	49.501	ug/l	100
84) 1,4-Dichlorobenzene	12.036	146	207367	49.151	ug/l	100
85) n-Butylbenzene	12.329	91	365981	49.510	ug/l	98
86) Hexachloroethane	12.536	117	89957	47.953	ug/l	99
87) 1,2-Dichlorobenzene	12.335	146	212294	49.399	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	39899	47.378	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	131622	49.284	ug/l	99
90) Hexachlorobutadiene	13.725	225	49464	47.882	ug/l	98
91) Naphthalene	13.774	128	495557	49.597	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	134623	49.560	ug/l	99

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

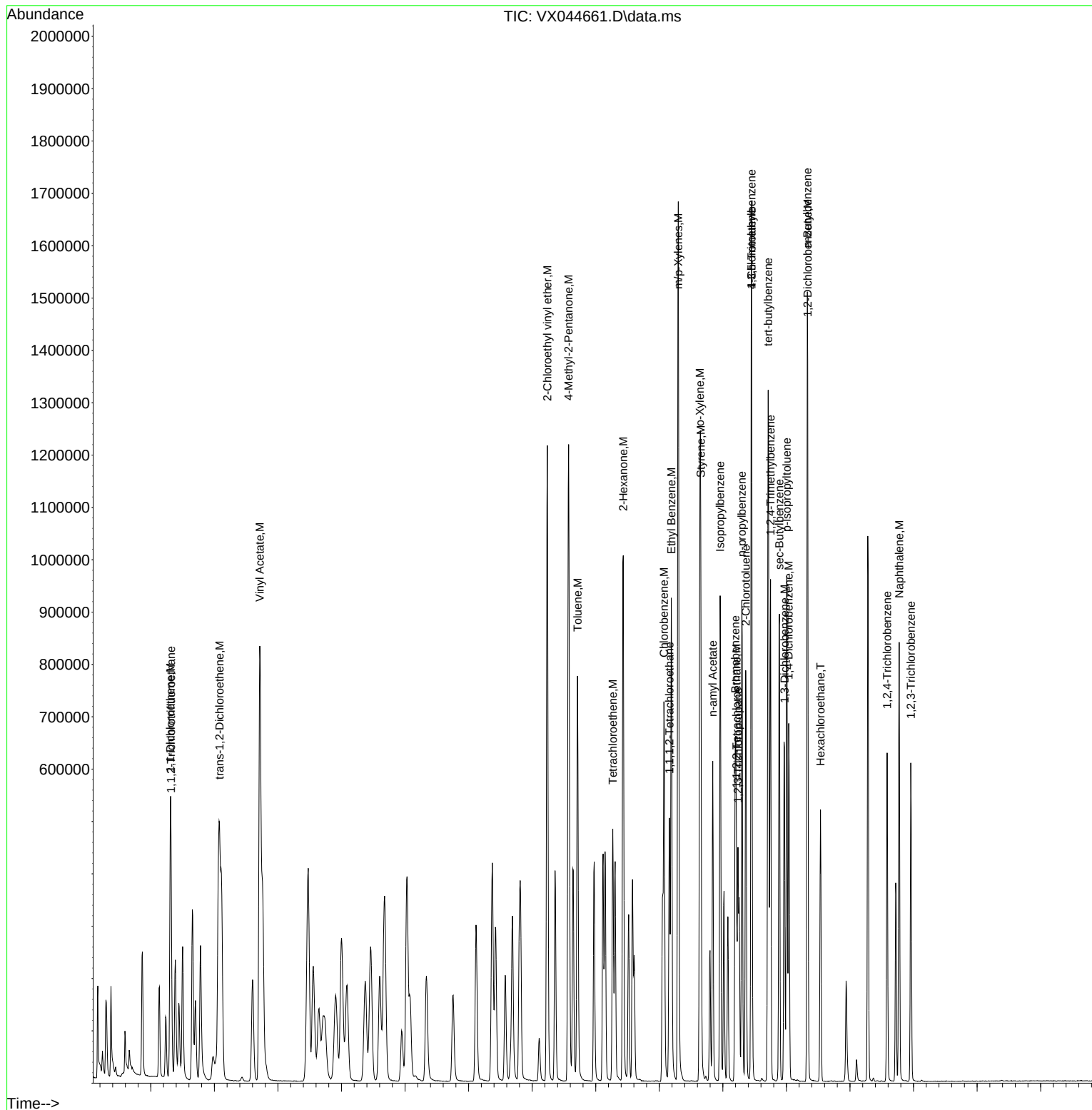
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044661.D
Acq On : 16 Jan 2025 09:25
Operator :
Sample : VSTDIC050
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDIC050

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:01:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044662.D
 Acq On : 16 Jan 2025 09:49
 Operator :
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC100

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:02:40 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	26822	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	152295	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	129735	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	78213	30.205	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery = 100.700%			
60) 4-Bromofluorobenzene	11.079	95	76025	30.170	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery = 100.567%			
63) Toluene-d8	8.647	98	211985	30.042	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery = 100.133%			
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	267360m	124.121	ug/l	
3) Chloromethane	1.294	50	260185	103.718	ug/l	100
4) Vinyl Chloride	1.374	62	264006	107.561	ug/l	97
5) Bromomethane	1.593	94	61090	103.072	ug/l	97
6) Chloroethane	1.660	64	45219	114.088	ug/l	95
7) Trichlorofluoromethane	1.861	101	293373	109.142	ug/l	98
8) Diethyl Ether	2.136	74	108527	104.658	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.313	101	216700	112.529	ug/l	98
10) 1,1-Dichloroethene	2.307	96	210933	106.464	ug/l	96
11) Methyl Iodide	2.441	142	283426	103.236	ug/l	98
12) Methyl Acetate	2.703	43	316480	109.420	ug/l	99
13) Acrolein	2.239	56	157728	493.161	ug/l	99
14) Acrylonitrile	3.062	53	551693	523.451	ug/l	100
15) Acetone	2.386	58	149940	530.181	ug/l	94
16) Carbon Disulfide	2.495	76	590082	107.175	ug/l	100
17) Allyl chloride	2.654	41	382410	107.032	ug/l	99
18) Methylene Chloride	2.782	84	228084	102.839	ug/l	98
19) trans-1,2-Dichloroethene	3.081	96	206160	104.651	ug/l	97
20) Diisopropyl ether	3.757	45	662597	102.175	ug/l	95
21) 1,1-Dichloroethane	3.599	63	406465	105.660	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	255966	104.980	ug/l	98
23) tert-Butyl Alcohol	3.044	59	253812m	555.091	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	712903	103.853	ug/l	99
25) Chloroform	5.086	83	399572	104.534	ug/l	96
26) Cyclohexane	5.458	56	351156	108.611	ug/l #	100
29) 1,1-Dichloropropene	5.684	75	279081	105.354	ug/l	99
30) 2-Butanone	4.556	43	740025	508.557	ug/l	100
31) 2,2-Dichloropropane	4.465	77	376371	102.674	ug/l	98
32) 1,1,1-Trichloroethane	5.373	97	359473	102.399	ug/l	99
33) Carbon Tetrachloride	5.666	117	306978	103.662	ug/l	97
34) Benzene	6.025	78	853368	100.973	ug/l	99
35) Methacrylonitrile	4.916	41	168983	103.905	ug/l	98
36) 1,2-Dichloroethane	6.080	62	308254	102.014	ug/l	100
37) Trichloroethene	7.117	130	215237	105.483	ug/l	95
38) Methylcyclohexane	7.373	83	393920	109.448	ug/l	99
39) 1,2-Dichloropropane	7.421	63	214812	101.928	ug/l	98
40) Dibromomethane	7.574	93	159130	101.563	ug/l	99
41) Bromodichloromethane	7.818	83	324068	100.170	ug/l	98
42) Vinyl Acetate	3.715	43	2899515	501.741	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044662.D
 Acq On : 16 Jan 2025 09:49
 Operator :
 Sample : VSTDICC100
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 5 Sample Multiplier: 1

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC100

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025

Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:02:40 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Jan 17 00:59:31 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	301278	105.547	ug/l	# 94
44) Isopropyl Acetate	6.336	43	524207	102.223	ug/l	99
45) 1,4-Dioxane	7.671	88	95678	1959.377	ug/l	96
46) Methyl methacrylate	7.690	41	254259	101.293	ug/l	99
47) n-amyl Acetate	10.842	43	426497	99.102	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	347499	101.765	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	370879	101.289	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	198320	98.117	ug/l	99
51) Ethyl methacrylate	9.116	69	349309	99.647	ug/l	98
52) 1,3-Dichloropropane	9.305	76	345352	98.954	ug/l	99
53) Dibromochloromethane	9.519	129	237742	98.596	ug/l	98
54) 1,2-Dibromoethane	9.604	107	210275	98.575	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	784090	461.586	ug/l	100
56) Bromoform	10.799	173	157528	98.522	ug/l	100
58) 4-Methyl-2-Pentanone	8.574	43	1379048	504.291	ug/l	99
59) 2-Hexanone	9.433	43	1016466	507.718	ug/l	99
61) Tetrachloroethene	9.269	164	167502	107.635	ug/l	98
62) Toluene	8.714	91	874711	102.394	ug/l	99
64) Chlorobenzene	10.073	112	543310	102.407	ug/l	99
65) 1,1,1,2-Tetrachloroethane	10.159	131	193974	101.781	ug/l	100
66) Ethyl Benzene	10.189	91	963283	103.326	ug/l	98
67) m/p-Xylenes	10.299	106	698697	203.888	ug/l	99
68) o-Xylene	10.640	106	346159	100.645	ug/l	100
69) Styrene	10.653	104	571513	101.207	ug/l	99
70) Isopropylbenzene	10.957	105	882679	102.087	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.213	83	290188	99.668	ug/l	98
72) 1,2,3-Trichloropropane	11.238	75	248182m	101.490	ug/l	
73) Bromobenzene	11.195	156	203263	100.912	ug/l	98
74) n-propylbenzene	11.305	91	1025231	104.320	ug/l	100
75) 2-Chlorotoluene	11.360	91	621611	100.627	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	709035	100.977	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	120113	103.824	ug/l	98
78) 4-Chlorotoluene	11.451	91	692856	101.840	ug/l	99
79) tert-butylbenzene	11.713	119	724166	100.390	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	717847	101.327	ug/l	99
81) sec-Butylbenzene	11.890	105	885682	102.823	ug/l	100
82) p-Isopropyltoluene	12.006	119	730972	103.112	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	371118	103.731	ug/l	99
84) 1,4-Dichlorobenzene	12.036	146	363763	103.715	ug/l	99
85) n-Butylbenzene	12.329	91	664449	108.125	ug/l	99
86) Hexachloroethane	12.536	117	158825	101.842	ug/l	99
87) 1,2-Dichlorobenzene	12.335	146	361432	101.166	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	70386	100.538	ug/l	99
89) 1,2,4-Trichlorobenzene	13.585	180	243086	109.487	ug/l	99
90) Hexachlorobutadiene	13.725	225	89590	104.321	ug/l	96
91) Naphthalene	13.774	128	872913	105.089	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	239785	106.185	ug/l	99

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

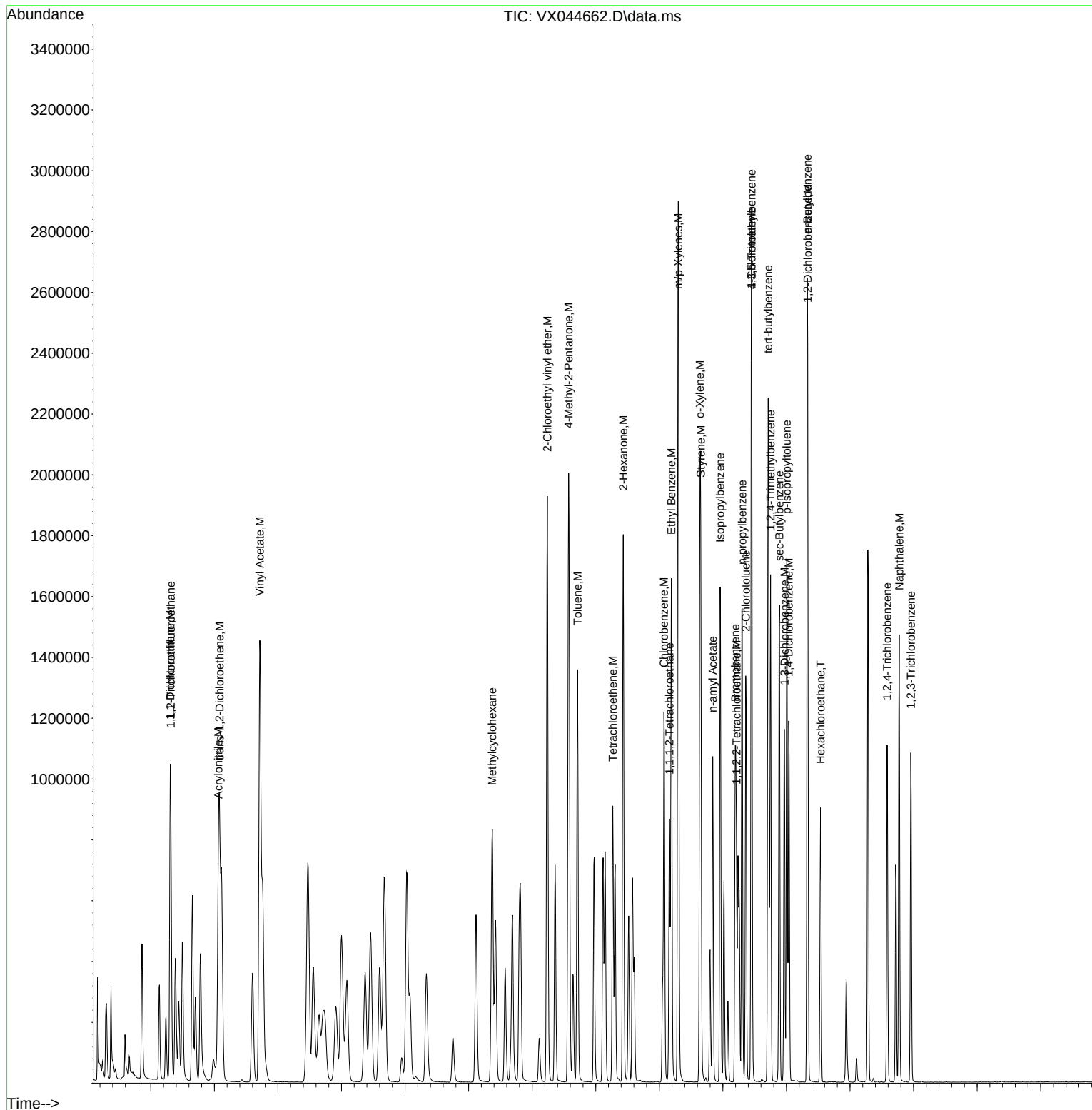
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044662.D
Acq On    : 16 Jan 2025   09:49
Operator  :
Sample    : VSTDICC100
Misc      : 5.0mL/MSVOA_X/WATER
ALS Vial  : 5      Sample Multiplier: 1
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Instrument :
MSVOA_X
ClientSampleId :
VSTDICC100

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:02:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044663.D
 Acq On : 16 Jan 2025 10:12
 Operator :
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICC150

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:03:33 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	30265	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	168670	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	142579	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	86477	29.598	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	98.667%		
60) 4-Bromofluorobenzene	11.079	95	83031	29.982	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.933%		
63) Toluene-d8	8.647	98	229453	29.588	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	98.633%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	395126	162.568	ug/l	98
3) Chloromethane	1.301	50	398267	140.701	ug/l	99
4) Vinyl Chloride	1.374	62	401934	145.127	ug/l	98
5) Bromomethane	1.593	94	97919	146.415	ug/l	99
6) Chloroethane	1.660	64	69505	155.413	ug/l	94
7) Trichlorofluoromethane	1.867	101	443749	146.306	ug/l	98
8) Diethyl Ether	2.136	74	171385	146.474	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.319	101	319509	147.041	ug/l	99
10) 1,1-Dichloroethene	2.306	96	322881	144.428	ug/l	93
11) Methyl Iodide	2.441	142	448651	144.827	ug/l	96
12) Methyl Acetate	2.703	43	477398	146.278	ug/l	100
13) Acrolein	2.239	56	253627	702.790	ug/l	98
14) Acrylonitrile	3.068	53	815430	685.671	ug/l	100
15) Acetone	2.386	58	221043	692.682	ug/l	91
16) Carbon Disulfide	2.502	76	918806	147.895	ug/l	100
17) Allyl chloride	2.654	41	585850	145.319	ug/l	99
18) Methylene Chloride	2.782	84	359344	143.590	ug/l	97
19) trans-1,2-Dichloroethene	3.081	96	316848	142.541	ug/l	98
20) Diisopropyl ether	3.764	45	1015552	138.787	ug/l #	87
21) 1,1-Dichloroethane	3.599	63	630418	145.234	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	396803	144.228	ug/l	98
23) tert-Butyl Alcohol	3.044	59	372252m	721.506	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	1099111	141.899	ug/l	98
25) Chloroform	5.086	83	618756	143.460	ug/l	97
26) Cyclohexane	5.458	56	512956	140.607	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	422203	143.910	ug/l	99
30) 2-Butanone	4.556	43	1096527	680.393	ug/l	100
31) 2,2-Dichloropropane	4.465	77	574023	141.392	ug/l	99
32) 1,1,1-Trichloroethane	5.373	97	551364	141.813	ug/l	98
33) Carbon Tetrachloride	5.666	117	464930	141.758	ug/l	99
34) Benzene	6.031	78	1317009	140.704	ug/l	99
35) Methacrylonitrile	4.922	41	252183	140.009	ug/l	97
36) 1,2-Dichloroethane	6.080	62	475153	141.982	ug/l	99
37) Trichloroethene	7.117	130	331784	146.814	ug/l	96
38) Methylcyclohexane	7.373	83	573341	143.834	ug/l	100
39) 1,2-Dichloropropane	7.421	63	331963	142.224	ug/l	99
40) Dibromomethane	7.574	93	248648	143.290	ug/l	99
41) Bromodichloromethane	7.818	83	504431	140.783	ug/l	99
42) Vinyl Acetate	3.721	43	4362962	681.685	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044663.D
 Acq On : 16 Jan 2025 10:12
 Operator :
 Sample : VSTDICC150
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 6 Sample Multiplier: 1

Instrument :

MSVOA_X

ClientSampleId :

VSTDICC150

Manual Integrations

APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025

Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:03:33 2025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M

Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS

QLast Update : Fri Jan 17 00:59:31 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	450860	142.615	ug/l	# 94
44) Isopropyl Acetate	6.336	43	808776	142.404	ug/l	99
45) 1,4-Dioxane	7.671	88	138476	2560.521	ug/l	97
46) Methyl methacrylate	7.690	41	389600	140.143	ug/l	98
47) n-amyl Acetate	10.841	43	646879	135.718	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	535738	141.659	ug/l	99
49) cis-1,3-Dichloropropene	8.360	75	565857	139.536	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	299288	133.695	ug/l	99
51) Ethyl methacrylate	9.116	69	531002	136.772	ug/l	98
52) 1,3-Dichloropropane	9.305	76	526192	136.132	ug/l	99
53) Dibromochloromethane	9.519	129	360540	135.007	ug/l	97
54) 1,2-Dibromoethane	9.604	107	320334	135.590	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	1273435	676.879	ug/l	99
56) Bromoform	10.799	173	241837	136.568	ug/l	99
58) 4-Methyl-2-Pentanone	8.574	43	2037971	678.112	ug/l	100
59) 2-Hexanone	9.433	43	1486312	675.525	ug/l	100
61) Tetrachloroethene	9.269	164	247777	144.876	ug/l	98
62) Toluene	8.714	91	1318975	140.491	ug/l	99
64) Chlorobenzene	10.073	112	824684	141.439	ug/l	100
65) 1,1,1,2-Tetrachloroethane	10.159	131	297569	142.074	ug/l	99
66) Ethyl Benzene	10.189	91	1447790	141.307	ug/l	99
67) m/p-Xylenes	10.299	106	1025226	272.222	ug/l	100
68) o-Xylene	10.640	106	517475	136.901	ug/l	99
69) Styrene	10.653	104	852764	137.409	ug/l	98
70) Isopropylbenzene	10.957	105	1303283	137.153	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.213	83	432603	135.197	ug/l	98
72) 1,2,3-Trichloropropane	11.238	75	369195m	137.376	ug/l	
73) Bromobenzene	11.195	156	311401	140.672	ug/l	99
74) n-propylbenzene	11.305	91	1515701	140.333	ug/l	100
75) 2-Chlorotoluene	11.360	91	939369	138.367	ug/l	99
76) 1,3,5-Trimethylbenzene	11.451	105	1038367	134.557	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	178978	140.770	ug/l	98
78) 4-Chlorotoluene	11.451	91	1032107	138.039	ug/l	100
79) tert-butylbenzene	11.713	119	1066193	134.489	ug/l	98
80) 1,2,4-Trimethylbenzene	11.750	105	1063526	136.597	ug/l	99
81) sec-Butylbenzene	11.890	105	1304251	137.776	ug/l	100
82) p-Isopropyltoluene	12.006	119	1083858	139.117	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	562506	143.062	ug/l	100
84) 1,4-Dichlorobenzene	12.043	146	552693	143.387	ug/l	100
85) n-Butylbenzene	12.329	91	983220	145.585	ug/l	99
86) Hexachloroethane	12.536	117	238874	139.374	ug/l	99
87) 1,2-Dichlorobenzene	12.335	146	537434	136.879	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	106892	138.929	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	374862	153.630	ug/l	100
90) Hexachlorobutadiene	13.725	225	138461	146.704	ug/l	98
91) Naphthalene	13.774	128	1323609	144.994	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	371865	149.840	ug/l	99

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

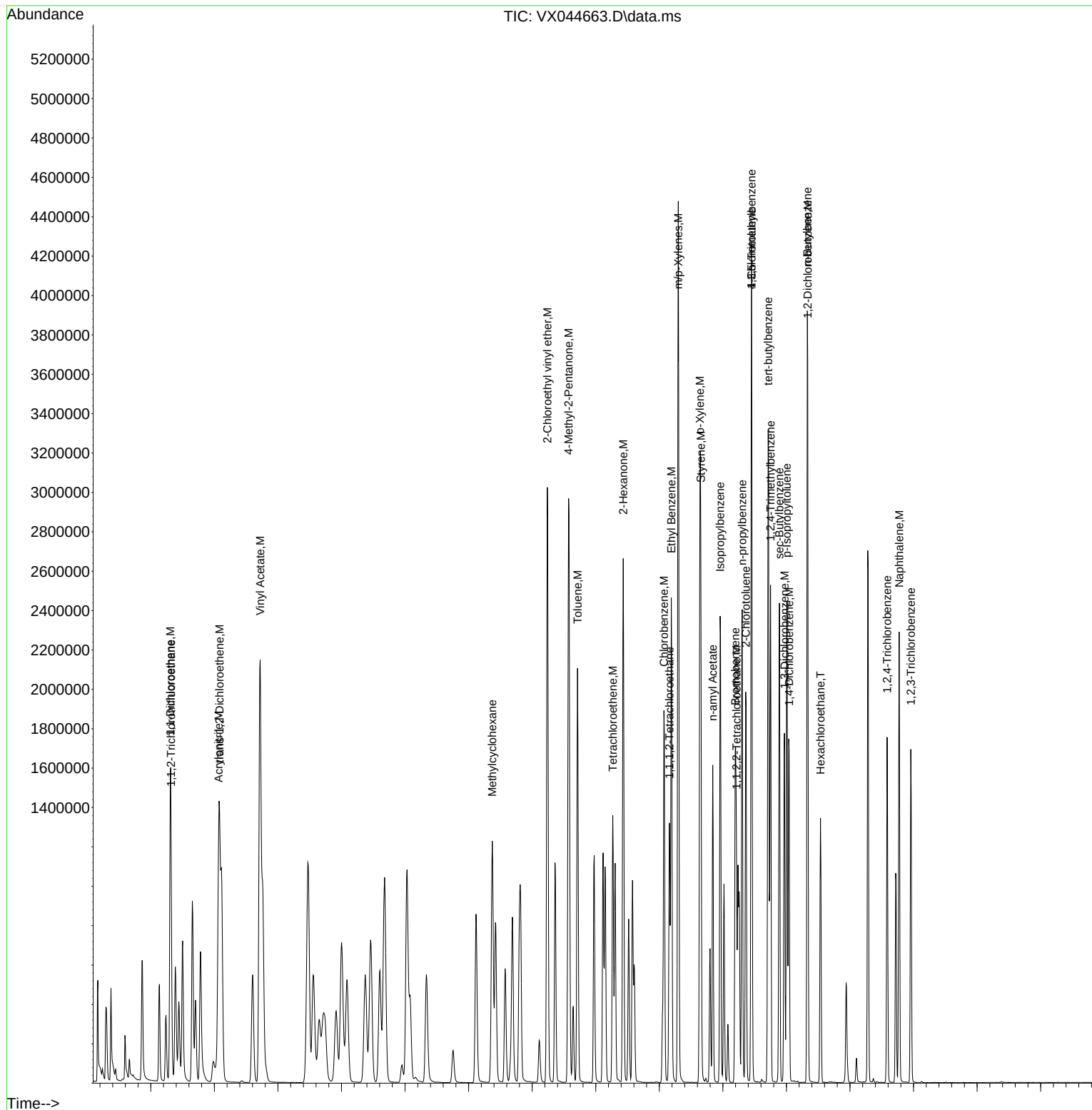
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044663.D
Acq On : 16 Jan 2025 10:12
Operator :
Sample : VSTDICC150
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VSTDICC150

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:03:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX011625

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.885	128	29298	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	160571	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	139330	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	84347	29.821	ug/l	0.00
Spiked Amount 30.000	Range	91 - 110	Recovery	=	99.400%	
60) 4-Bromofluorobenzene	11.079	95	80701	29.820	ug/l	0.00
Spiked Amount 30.000	Range	63 - 112	Recovery	=	99.400%	
63) Toluene-d8	8.641	98	232185	30.639	ug/l	0.00
Spiked Amount 30.000	Range	91 - 112	Recovery	=	102.133%	
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	53424	20.509	ug/l	100
3) Chloromethane	1.295	50	52336	19.100	ug/l	98
4) Vinyl Chloride	1.374	62	54565	20.352	ug/l	96
5) Bromomethane	1.593	94	12546	19.362	ug/l	96
6) Chloroethane	1.660	64	8061	18.963	ug/l	90
7) Trichlorofluoromethane	1.868	101	62375	21.244	ug/l	98
8) Diethyl Ether	2.130	74	23504	20.751	ug/l	99
9) 1,1,2-Trichlorotrifluo...	2.319	101	45499	21.630	ug/l	97
10) 1,1-Dichloroethene	2.307	96	44362	20.500	ug/l	94
11) Methyl Iodide	2.441	142	59655	19.893	ug/l	99
12) Methyl Acetate	2.703	43	66878	21.168	ug/l	99
13) Acrolein	2.233	56	35040	100.289	ug/l	95
14) Acrylonitrile	3.063	53	122153	106.105	ug/l	99
15) Acetone	2.380	58	35259	114.138	ug/l	96
16) Carbon Disulfide	2.502	76	124187	20.650	ug/l	98
17) Allyl chloride	2.654	41	81222	20.812	ug/l	98
18) Methylene Chloride	2.782	84	47896	19.777	ug/l	97
19) trans-1,2-Dichloroethene	3.081	96	44022	20.458	ug/l	98
20) Diisopropyl ether	3.751	45	149298	21.077	ug/l	91
21) 1,1-Dichloroethane	3.599	63	86579	20.604	ug/l	97
22) cis-1,2-Dichloroethene	4.477	96	54227	20.361	ug/l	97
23) tert-Butyl Alcohol	2.977	59	58148m	104.428	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	154776	20.642	ug/l	100
25) Chloroform	5.087	83	85547	20.489	ug/l	100
26) Cyclohexane	5.452	56	75766	21.454	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	58948	21.106	ug/l	98
30) 2-Butanone	4.550	43	164211	107.032	ug/l	99
31) 2,2-Dichloropropane	4.459	77	80657	20.869	ug/l	98
32) 1,1,1-Trichloroethane	5.367	97	75959	20.522	ug/l	98
33) Carbon Tetrachloride	5.666	117	65248	20.898	ug/l	98
34) Benzene	6.025	78	186228	20.899	ug/l	99
35) Methacrylonitrile	4.916	41	35936	20.958	ug/l	97
36) 1,2-Dichloroethane	6.074	62	65234	20.476	ug/l	99
37) Trichloroethene	7.117	130	44428	20.651	ug/l	96
38) Methylcyclohexane	7.367	83	82917	21.851	ug/l	99
39) 1,2-Dichloropropane	7.421	63	46323	20.847	ug/l	99
40) Dibromomethane	7.574	93	33792	20.456	ug/l	98
41) Bromodichloromethane	7.812	83	69184	20.283	ug/l	99
42) Vinyl Acetate	3.715	43	653209	107.208	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICSVX011625

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.709	43	63189	20.996	ug/l	# 94
44) Isopropyl Acetate	6.330	43	112593	20.825	ug/l	99
45) 1,4-Dioxane	7.665	88	20798	403.967	ug/l	98
46) Methyl methacrylate	7.690	41	52648	19.893	ug/l	97
47) n-amyl Acetate	10.842	43	94494	20.825	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	72357	20.098	ug/l	97
49) cis-1,3-Dichloropropene	8.360	75	78714	20.389	ug/l	98
50) 1,1,2-Trichloroethane	9.147	97	44166	20.759	ug/l	96
51) Ethyl methacrylate	9.116	69	75458	20.416	ug/l	99
52) 1,3-Dichloropropane	9.305	76	75839	20.610	ug/l	99
53) Dibromochloromethane	9.519	129	50936	20.035	ug/l	97
54) 1,2-Dibromoethane	9.604	107	46228	20.554	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	186582	104.044	ug/l	99
56) Bromoform	10.799	173	33539	19.895	ug/l	99
58) 4-Methyl-2-Pentanone	8.568	43	319324	108.729	ug/l	100
59) 2-Hexanone	9.427	43	234903	109.252	ug/l	100
61) Tetrachloroethene	9.269	164	34875	20.867	ug/l	98
62) Toluene	8.714	91	189672	20.674	ug/l	98
64) Chlorobenzene	10.073	112	116597	20.464	ug/l	97
65) 1,1,1,2-Tetrachloroethane	10.159	131	42670	20.848	ug/l	99
66) Ethyl Benzene	10.189	91	208544	20.829	ug/l	99
67) m/p-Xylenes	10.299	106	155664	42.296	ug/l	99
68) o-Xylene	10.640	106	78615	21.283	ug/l	98
69) Styrene	10.653	104	128207	21.140	ug/l	99
70) Isopropylbenzene	10.957	105	195561	21.060	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	67246	21.542	ug/l	97
72) 1,2,3-Trichloropropane	11.238	75	56182m	21.393	ug/l	
73) Bromobenzene	11.195	156	44149	20.409	ug/l	99
74) n-propylbenzene	11.299	91	222144	21.062	ug/l	100
75) 2-Chlorotoluene	11.360	91	141333	21.314	ug/l	98
76) 1,3,5-Trimethylbenzene	11.451	105	158538	21.023	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	25324	20.382	ug/l	100
78) 4-Chlorotoluene	11.451	91	151852	20.783	ug/l	99
79) tert-butylbenzene	11.713	119	164869	21.282	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	159250	20.931	ug/l	99
81) sec-Butylbenzene	11.890	105	198156	21.421	ug/l	99
82) p-Isopropyltoluene	12.006	119	159684	20.974	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	79203	20.613	ug/l	99
84) 1,4-Dichlorobenzene	12.036	146	78388	20.811	ug/l	99
85) n-Butylbenzene	12.329	91	137083	20.771	ug/l	99
86) Hexachloroethane	12.536	117	34558	20.633	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	81365	21.206	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	12.939	75	15325	20.383	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	47882	20.081	ug/l	99
90) Hexachlorobutadiene	13.725	225	18952	20.548	ug/l	97
91) Naphthalene	13.774	128	188608	21.143	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	48948	20.183	ug/l	100

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

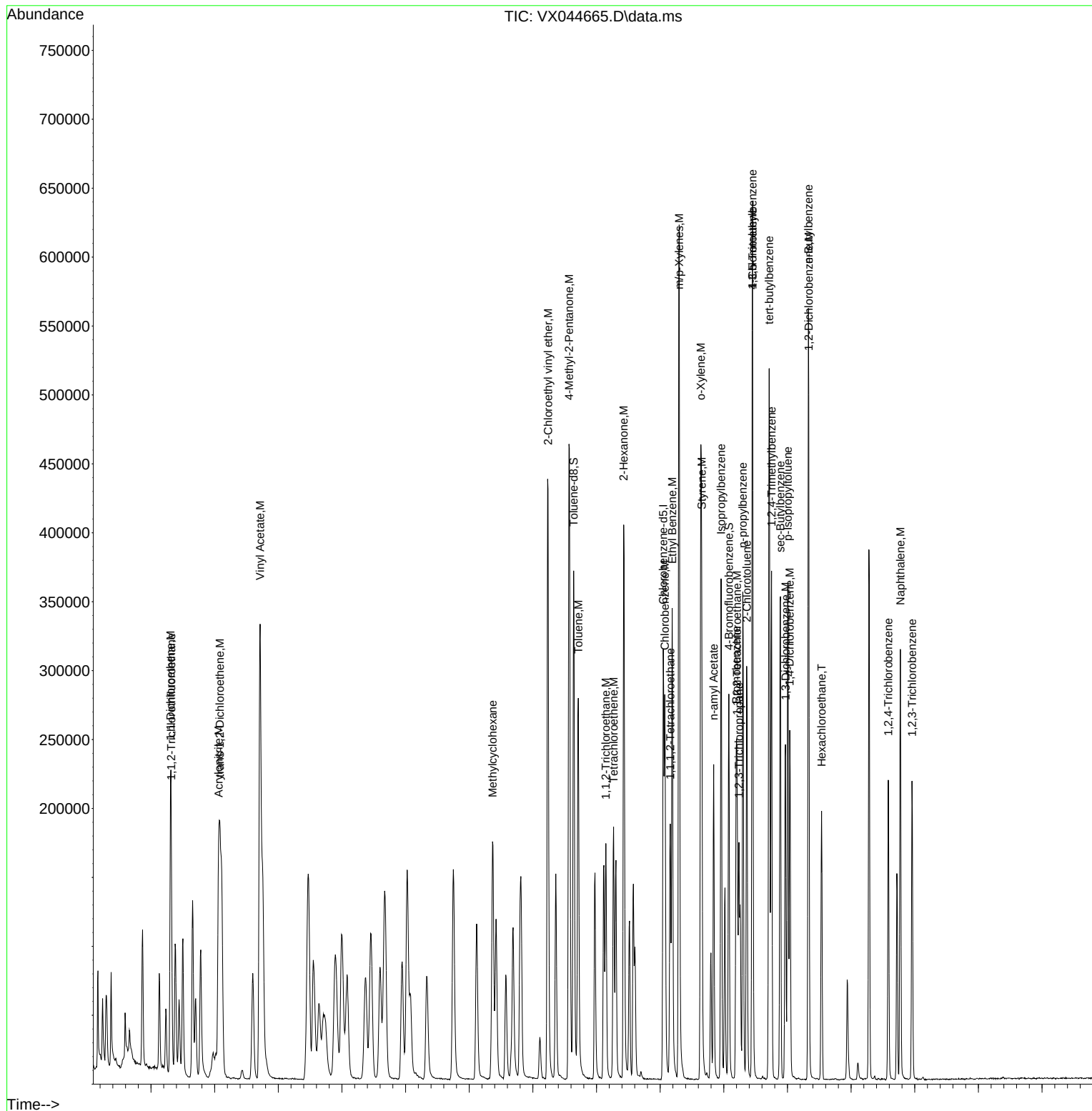
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044665.D
Acq On : 16 Jan 2025 11:45
Operator :
Sample : VSTDICV020
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
ICVVX011625

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:23:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration



Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX011625

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	1.000	1.000	0.0	88	0.00
2 M	Dichlorodifluoromethane	2.667	2.735	-2.5	91	0.00
3 M	Chloromethane	2.806	2.680	4.5	81	0.00
4 M	Vinyl Chloride	2.745	2.794	-1.8	89	0.00
5 M	Bromomethane	0.663	0.642	3.2	87	0.00
6 M	Chloroethane	0.435	0.413	5.1	84	0.00
7 M	Trichlorofluoromethane	3.006	3.193	-6.2	94	0.00
8 T	Diethyl Ether	1.160	1.203	-3.7	92	0.00
9	1,1,2-Trichlorotrifluoroeth	2.154	2.329	-8.1	98	0.00
10 M	1,1-Dichloroethene	2.216	2.271	-2.5	92	0.00
11	Methyl Iodide	3.071	3.054	0.6	86	0.00
12	Methyl Acetate	3.235	3.424	-5.8	96	0.00
13 M	Acrolein	0.358	0.359	-0.3	107	0.00
14 M	Acrylonitrile	1.179	1.251	-6.1	92	0.00
15 M	Acetone	0.316	0.361	-14.2	102	0.00
16 M	Carbon Disulfide	6.158	6.358	-3.2	91	0.00
17	Allyl chloride	3.996	4.158	-4.1	90	0.00
18 M	Methylene Chloride	2.480	2.452	1.1	85	0.00
19 M	trans-1,2-Dichloroethene	2.203	2.254	-2.3	90	0.00
20 T	Diisopropyl ether	7.253	7.644	-5.4	90	0.00
21 M	1,1-Dichloroethane	4.303	4.433	-3.0	90	0.00
22 M	cis-1,2-Dichloroethene	2.727	2.776	-1.8	86	0.00
23 M	tert-Butyl Alcohol	0.570	0.595	-4.4	89	0.00
24 M	Methyl tert-Butyl Ether	7.678	7.924	-3.2	89	0.00
25 M	Chloroform	4.275	4.380	-2.5	88	0.00
26	Cyclohexane	3.616	3.879	-7.3	95	0.00
27 s	1,2-Dichloroethane-d4	2.896	2.879	0.6	88	0.00
28 I	1,4-Difluorobenzene	1.000	1.000	0.0	88	0.00
29	1,1-Dichloropropene	0.522	0.551	-5.6	93	0.00
30 M	2-Butanone	0.287	0.307	-7.0	91	0.00
31	2,2-Dichloropropane	0.722	0.753	-4.3	91	-0.01
32 M	1,1,1-Trichloroethane	0.692	0.710	-2.6	89	0.00
33 M	Carbon Tetrachloride	0.583	0.610	-4.6	91	0.00
34 M	Benzene	1.665	1.740	-4.5	88	0.00
35	Methacrylonitrile	0.320	0.336	-5.0	91	0.00
36 M	1,2-Dichloroethane	0.595	0.609	-2.4	87	0.00
37 M	Trichloroethene	0.402	0.415	-3.2	90	0.00
38	Methylcyclohexane	0.709	0.775	-9.3	98	0.00
39 M	1,2-Dichloropropane	0.415	0.433	-4.3	89	0.00
40	Dibromomethane	0.309	0.316	-2.3	88	0.00
41 M	Bromodichloromethane	0.637	0.646	-1.4	86	0.00
42 M	Vinyl Acetate	1.138	1.220	-7.2	90	0.00
43	Ethyl Acetate	0.562	0.590	-5.0	87	0.00
44	Isopropyl Acetate	1.010	1.052	-4.2	88	0.00
45 T	1,4-Dioxane	0.010	0.010	0.0	83	-0.01
46	Methyl methacrylate	0.494	0.492	0.4	85	0.00
47	n-amyl Acetate	0.848	0.883	-4.1	86	0.00
48 M	t-1,3-Dichloropropene	0.673	0.676	-0.4	85	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX011625

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	0.721	0.735	-1.9	86	0.00
50 M	1,1,2-Trichloroethane	0.397	0.413	-4.0	86	0.00
51	Ethyl methacrylate	0.691	0.705	-2.0	86	0.00
52	1,3-Dichloropropane	0.687	0.708	-3.1	86	0.00
53 M	Dibromochloromethane	0.475	0.476	-0.2	83	0.00
54 M	1,2-Dibromoethane	0.420	0.432	-2.9	86	0.00
55 M	2-Chloroethyl vinyl ether	0.335	0.349	-4.2	87	0.00
56 M	Bromoform	0.315	0.313	0.6	85	0.00
57 I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00
58 M	4-Methyl-2-Pentanone	0.632	0.688	-8.9	89	0.00
59 M	2-Hexanone	0.463	0.506	-9.3	90	0.00
60 S	4-Bromofluorobenzene	0.583	0.579	0.7	84	0.00
61 M	Tetrachloroethene	0.360	0.375	-4.2	90	0.00
62 M	Toluene	1.975	2.042	-3.4	87	0.00
63 S	Toluene-d8	1.632	1.666	-2.1	86	0.00
64 M	Chlorobenzene	1.227	1.255	-2.3	86	0.00
65	1,1,1,2-Tetrachloroethane	0.441	0.459	-4.1	87	0.00
66 M	Ethyl Benzene	2.156	2.245	-4.1	86	0.00
67 M	m/p-Xylenes	0.792	0.838	-5.8	86	0.00
68 M	o-Xylene	0.795	0.846	-6.4	86	0.00
69 M	Styrene	1.306	1.380	-5.7	85	0.00
70	Isopropylbenzene	1.999	2.105	-5.3	86	0.00
71 M	1,1,2,2-Tetrachloroethane	0.672	0.724	-7.7	89	0.00
72	1,2,3-Trichloropropane	0.565	0.605	-7.1	87	0.00
73	Bromobenzene	0.466	0.475	-1.9	84	0.00
74	n-propylbenzene	2.271	2.392	-5.3	87	0.00
75	2-Chlorotoluene	1.428	1.522	-6.6	87	0.00
76	1,3,5-Trimethylbenzene	1.624	1.707	-5.1	86	0.00
77	t-1,4-Dichloro-2-butene	0.268	0.273	-1.9	86	0.00
78	4-Chlorotoluene	1.573	1.635	-3.9	85	0.00
79	tert-butylbenzene	1.668	1.775	-6.4	86	0.00
80	1,2,4-Trimethylbenzene	1.638	1.714	-4.6	85	0.00
81	sec-Butylbenzene	1.992	2.133	-7.1	88	0.00
82	p-Isopropyltoluene	1.639	1.719	-4.9	86	0.00
83 M	1,3-Dichlorobenzene	0.827	0.853	-3.1	85	0.00
84 M	1,4-Dichlorobenzene	0.811	0.844	-4.1	85	0.00
85	n-Butylbenzene	1.421	1.476	-3.9	87	0.00
86 T	Hexachloroethane	0.361	0.372	-3.0	87	0.00
87 M	1,2-Dichlorobenzene	0.826	0.876	-6.1	86	0.00
88	1,2-Dibromo-3-Chloropropane	0.162	0.165	-1.9	87	0.00
89	1,2,4-Trichlorobenzene	0.513	0.515	-0.4	87	0.00
90	Hexachlorobutadiene	0.199	0.204	-2.5	86	0.00
91 M	Naphthalene	1.921	2.031	-5.7	88	0.00
92	1,2,3-Trichlorobenzene	0.522	0.527	-1.0	84	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX011625

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	Bromochloromethane	30.000	30.000	0.0	88	0.00
2 M	Dichlorodifluoromethane	20.000	20.509	-2.5	91	0.00
3 M	Chloromethane	20.000	19.100	4.5	81	0.00
4 M	Vinyl Chloride	20.000	20.352	-1.8	89	0.00
5 M	Bromomethane	20.000	19.362	3.2	87	0.00
6 M	Chloroethane	20.000	18.963	5.2	84	0.00
7 M	Trichlorofluoromethane	20.000	21.244	-6.2	94	0.00
8 T	Diethyl Ether	20.000	20.751	-3.8	92	0.00
9	1,1,2-Trichlorotrifluoroeth	20.000	21.630	-8.1	98	0.00
10 M	1,1-Dichloroethene	20.000	20.500	-2.5	92	0.00
11	Methyl Iodide	20.000	19.893	0.5	86	0.00
12	Methyl Acetate	20.000	21.168	-5.8	96	0.00
13 M	Acrolein	100.000	100.289	-0.3	107	0.00
14 M	Acrylonitrile	100.000	106.105	-6.1	92	0.00
15 M	Acetone	100.000	114.138	-14.1	102	0.00
16 M	Carbon Disulfide	20.000	20.650	-3.2	91	0.00
17	Allyl chloride	20.000	20.812	-4.1	90	0.00
18 M	Methylene Chloride	20.000	19.777	1.1	85	0.00
19 M	trans-1,2-Dichloroethene	20.000	20.458	-2.3	90	0.00
20 T	Diisopropyl ether	20.000	21.077	-5.4	90	0.00
21 M	1,1-Dichloroethane	20.000	20.604	-3.0	90	0.00
22 M	cis-1,2-Dichloroethene	20.000	20.361	-1.8	86	0.00
23 M	tert-Butyl Alcohol	100.000	104.428	-4.4	89	0.00
24 M	Methyl tert-Butyl Ether	20.000	20.642	-3.2	89	0.00
25 M	Chloroform	20.000	20.489	-2.4	88	0.00
26	Cyclohexane	20.000	21.454	-7.3	95	0.00
27 s	1,2-Dichloroethane-d4	30.000	29.821	0.6	88	0.00
28 I	1,4-Difluorobenzene	30.000	30.000	0.0	88	0.00
29	1,1-Dichloropropene	20.000	21.106	-5.5	93	0.00
30 M	2-Butanone	100.000	107.032	-7.0	91	0.00
31	2,2-Dichloropropane	20.000	20.869	-4.3	91	-0.01
32 M	1,1,1-Trichloroethane	20.000	20.522	-2.6	89	0.00
33 M	Carbon Tetrachloride	20.000	20.898	-4.5	91	0.00
34 M	Benzene	20.000	20.899	-4.5	88	0.00
35	Methacrylonitrile	20.000	20.958	-4.8	91	0.00
36 M	1,2-Dichloroethane	20.000	20.476	-2.4	87	0.00
37 M	Trichloroethene	20.000	20.651	-3.3	90	0.00
38	Methylcyclohexane	20.000	21.851	-9.3	98	0.00
39 M	1,2-Dichloropropane	20.000	20.847	-4.2	89	0.00
40	Dibromomethane	20.000	20.456	-2.3	88	0.00
41 M	Bromodichloromethane	20.000	20.283	-1.4	86	0.00
42 M	Vinyl Acetate	100.000	107.208	-7.2	90	0.00
43	Ethyl Acetate	20.000	20.996	-5.0	87	0.00
44	Isopropyl Acetate	20.000	20.825	-4.1	88	0.00
45 T	1,4-Dioxane	400.000	403.967	-1.0	83	-0.01
46	Methyl methacrylate	20.000	19.893	0.5	85	0.00
47	n-amyl Acetate	20.000	20.825	-4.1	86	0.00
48 M	t-1,3-Dichloropropene	20.000	20.098	-0.5	85	0.00

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044665.D
 Acq On : 16 Jan 2025 11:45
 Operator :
 Sample : VSTDICV020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 ICVVX011625

Quant Time: Jan 17 01:23:46 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
49 T	cis-1,3-Dichloropropene	20.000	20.389	-1.9	86	0.00
50 M	1,1,2-Trichloroethane	20.000	20.759	-3.8	86	0.00
51	Ethyl methacrylate	20.000	20.416	-2.1	86	0.00
52	1,3-Dichloropropane	20.000	20.610	-3.0	86	0.00
53 M	Dibromochloromethane	20.000	20.035	-0.2	83	0.00
54 M	1,2-Dibromoethane	20.000	20.554	-2.8	86	0.00
55 M	2-Chloroethyl vinyl ether	100.000	104.044	-4.0	87	0.00
56 M	Bromoform	20.000	19.895	0.5	85	0.00
57 I	Chlorobenzene-d5	30.000	30.000	0.0	84	0.00
58 M	4-Methyl-2-Pentanone	100.000	108.729	-8.7	89	0.00
59 M	2-Hexanone	100.000	109.252	-9.3	90	0.00
60 S	4-Bromofluorobenzene	30.000	29.820	0.6	84	0.00
61 M	Tetrachloroethene	20.000	20.867	-4.3	90	0.00
62 M	Toluene	20.000	20.674	-3.4	87	0.00
63 S	Toluene-d8	30.000	30.639	-2.1	86	0.00
64 M	Chlorobenzene	20.000	20.464	-2.3	86	0.00
65	1,1,1,2-Tetrachloroethane	20.000	20.848	-4.2	87	0.00
66 M	Ethyl Benzene	20.000	20.829	-4.1	86	0.00
67 M	m/p-Xylenes	40.000	42.296	-5.7	86	0.00
68 M	o-Xylene	20.000	21.283	-6.4	86	0.00
69 M	Styrene	20.000	21.140	-5.7	85	0.00
70	Isopropylbenzene	20.000	21.060	-5.3	86	0.00
71 M	1,1,2,2-Tetrachloroethane	20.000	21.542	-7.7	89	0.00
72	1,2,3-Trichloropropane	20.000	21.393	-7.0	87	0.00
73	Bromobenzene	20.000	20.409	-2.0	84	0.00
74	n-propylbenzene	20.000	21.062	-5.3	87	0.00
75	2-Chlorotoluene	20.000	21.314	-6.6	87	0.00
76	1,3,5-Trimethylbenzene	20.000	21.023	-5.1	86	0.00
77	t-1,4-Dichloro-2-butene	20.000	20.382	-1.9	86	0.00
78	4-Chlorotoluene	20.000	20.783	-3.9	85	0.00
79	tert-butylbenzene	20.000	21.282	-6.4	86	0.00
80	1,2,4-Trimethylbenzene	20.000	20.931	-4.7	85	0.00
81	sec-Butylbenzene	20.000	21.421	-7.1	88	0.00
82	p-Isopropyltoluene	20.000	20.974	-4.9	86	0.00
83 M	1,3-Dichlorobenzene	20.000	20.613	-3.1	85	0.00
84 M	1,4-Dichlorobenzene	20.000	20.811	-4.1	85	0.00
85	n-Butylbenzene	20.000	20.771	-3.9	87	0.00
86 T	Hexachloroethane	20.000	20.633	-3.2	87	0.00
87 M	1,2-Dichlorobenzene	20.000	21.206	-6.0	86	0.00
88	1,2-Dibromo-3-Chloropropane	20.000	20.383	-1.9	87	0.00
89	1,2,4-Trichlorobenzene	20.000	20.081	-0.4	87	0.00
90	Hexachlorobutadiene	20.000	20.548	-2.7	86	0.00
91 M	Naphthalene	20.000	21.143	-5.7	88	0.00
92	1,2,3-Trichlorobenzene	20.000	20.183	-0.9	84	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TULL01

Lab Code: CHEM Case No.: Q1083 SAS No.: Q1083 SDG No.: Q1083

Instrument ID: MSVOA_X Calibration Date/Time: 01/16/2025 09:02

Lab File ID: VX044660.D Init. Calib. Date(s): 01/16/2025 01/16/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:39 10:12

GC Column: DB-624UI ID: 0.18 (mm)

COMPOUND	RRF	RRF020	MIN RRF	%D	MAX%D
Benzene	1.665	1.726		3.66	
Toluene	1.975	1.972		-0.15	
Ethyl Benzene	2.156	2.181		1.16	
m/p-Xylenes	0.792	0.817		3.16	
o-Xylene	0.795	0.823		3.52	
1,2-Dichloroethane-d4	2.896	2.867		-1	
Toluene-d8	1.632	1.620		-0.74	
4-Bromofluorobenzene	0.583	0.578		-0.86	

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044660.D
 Acq On : 16 Jan 2025 09:02
 Operator :
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	33434	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	183316	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	165841	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	95855	29.698	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	99.000%		
60) 4-Bromofluorobenzene	11.079	95	95915	29.776	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	99.267%		
63) Toluene-d8	8.641	98	268606	29.779	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.267%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	59011	21.978	ug/l	100
3) Chloromethane	1.301	50	64444	20.609	ug/l	100
4) Vinyl Chloride	1.374	62	61288	20.032	ug/l	100
5) Bromomethane	1.593	94	14449	19.557	ug/l	100
6) Chloroethane	1.666	64	9612	19.455	ug/l	100
7) Trichlorofluoromethane	1.867	101	66116	19.733	ug/l	100
8) Diethyl Ether	2.136	74	25682	19.869	ug/l	100
9) 1,1,2-Trichlorotrifluo...	2.319	101	46585	19.407	ug/l	100
10) 1,1-Dichloroethene	2.313	96	48300	19.557	ug/l	100
11) Methyl Iodide	2.447	142	69610	20.341	ug/l	100
12) Methyl Acetate	2.703	43	70020	19.421	ug/l	100
13) Acrolein	2.239	56	32834	82.358	ug/l	100
14) Acrylonitrile	3.062	53	133148	101.348	ug/l	100
15) Acetone	2.386	58	34632	98.240	ug/l	100
16) Carbon Disulfide	2.502	76	135960	19.810	ug/l	100
17) Allyl chloride	2.654	41	90204	20.254	ug/l	100
18) Methylene Chloride	2.782	84	56413	20.405	ug/l	100
19) trans-1,2-Dichloroethene	3.081	96	49084	19.989	ug/l	100
20) Diisopropyl ether	3.757	45	166654	20.616	ug/l	100
21) 1,1-Dichloroethane	3.605	63	96629	20.151	ug/l	100
22) cis-1,2-Dichloroethene	4.483	96	62694	20.628	ug/l	100
23) tert-Butyl Alcohol	2.977	59	65050m	114.131	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	174439	20.386	ug/l	100
25) Chloroform	5.086	83	97039	20.366	ug/l	100
26) Cyclohexane	5.458	56	79956	19.839	ug/l #	100
29) 1,1-Dichloropropene	5.684	75	63605	19.948	ug/l	100
30) 2-Butanone	4.556	43	180079	102.811	ug/l	100
31) 2,2-Dichloropropane	4.471	77	89122	20.198	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	85820	20.310	ug/l	100
33) Carbon Tetrachloride	5.666	117	71722	20.121	ug/l	100
34) Benzene	6.031	78	210959	20.737	ug/l	100
35) Methacrylonitrile	4.922	41	39575	20.216	ug/l	100
36) 1,2-Dichloroethane	6.080	62	75287	20.699	ug/l	100
37) Trichloroethene	7.123	130	49474	20.143	ug/l	100
38) Methylcyclohexane	7.373	83	84540	19.514	ug/l	100
39) 1,2-Dichloropropane	7.421	63	52299	20.616	ug/l	100
40) Dibromomethane	7.580	93	38410	20.366	ug/l	100
41) Bromodichloromethane	7.818	83	80017	20.548	ug/l	100
42) Vinyl Acetate	3.715	43	725170	104.251	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044660.D
 Acq On : 16 Jan 2025 09:02
 Operator :
 Sample : VSTDICCC020
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VSTDICCC020

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 00:59:31 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.715	43	72396m	21.071	ug/l	
44) Isopropyl Acetate	6.336	43	127474	20.652	ug/l	100
45) 1,4-Dioxane	7.677	88	25021	425.692	ug/l	100
46) Methyl methacrylate	7.690	41	62145	20.568	ug/l	100
47) n-amyl Acetate	10.841	43	110225	21.278	ug/l	100
48) t-1,3-Dichloropropene	8.976	75	85014	20.683	ug/l	100
49) cis-1,3-Dichloropropene	8.360	75	91440	20.747	ug/l	100
50) 1,1,2-Trichloroethane	9.147	97	51190	21.040	ug/l	100
51) Ethyl methacrylate	9.116	69	88025	20.861	ug/l	100
52) 1,3-Dichloropropane	9.305	76	87800	20.900	ug/l	100
53) Dibromochloromethane	9.519	129	61431	21.165	ug/l	100
54) 1,2-Dibromoethane	9.604	107	53825	20.963	ug/l	100
55) 2-Chloroethyl vinyl ether	8.238	63	214240	104.779	ug/l	100
56) Bromoform	10.799	173	39538	20.544	ug/l	100
58) 4-Methyl-2-Pentanone	8.574	43	358614	102.588	ug/l	100
59) 2-Hexanone	9.433	43	261785	102.292	ug/l	100
61) Tetrachloroethene	9.269	164	38724	19.466	ug/l	100
62) Toluene	8.714	91	218070	19.970	ug/l	100
64) Chlorobenzene	10.073	112	136037	20.059	ug/l	100
65) 1,1,1,2-Tetrachloroethane	10.159	131	49228	20.207	ug/l	100
66) Ethyl Benzene	10.189	91	241177	20.238	ug/l	100
67) m/p-Xylenes	10.299	106	180626	41.233	ug/l	100
68) o-Xylene	10.640	106	90982	20.694	ug/l	100
69) Styrene	10.652	104	150095	20.793	ug/l	100
70) Isopropylbenzene	10.957	105	226317	20.476	ug/l	100
71) 1,1,2,2-Tetrachloroethane	11.207	83	75650	20.326	ug/l	100
72) 1,2,3-Trichloropropane	11.238	75	64385m	20.597	ug/l	
73) Bromobenzene	11.195	156	52618	20.435	ug/l	100
74) n-propylbenzene	11.299	91	255513	20.339	ug/l	100
75) 2-Chlorotoluene	11.360	91	162457	20.573	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	185378	20.653	ug/l	100
77) t-1,4-Dichloro-2-butene	11.018	75	29516	19.959	ug/l	100
78) 4-Chlorotoluene	11.451	91	177891	20.455	ug/l	100
79) tert-butylbenzene	11.713	119	191290	20.745	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	186763	20.623	ug/l	100
81) sec-Butylbenzene	11.890	105	224992	20.434	ug/l	100
82) p-Isopropyltoluene	12.006	119	186107	20.537	ug/l	100
83) 1,3-Dichlorobenzene	11.969	146	92976	20.330	ug/l	100
84) 1,4-Dichlorobenzene	12.036	146	92092	20.540	ug/l	100
85) n-Butylbenzene	12.329	91	156896	19.973	ug/l	100
86) Hexachloroethane	12.536	117	39754	19.941	ug/l	100
87) 1,2-Dichlorobenzene	12.335	146	94144	20.614	ug/l	100
88) 1,2-Dibromo-3-Chloropr...	12.939	75	17538	19.597	ug/l	100
89) 1,2,4-Trichlorobenzene	13.585	180	54885	19.338	ug/l	100
90) Hexachlorobutadiene	13.725	225	21996	20.036	ug/l	100
91) Naphthalene	13.774	128	214309	20.183	ug/l	100
92) 1,2,3-Trichlorobenzene	13.957	180	58101	20.127	ug/l	100

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

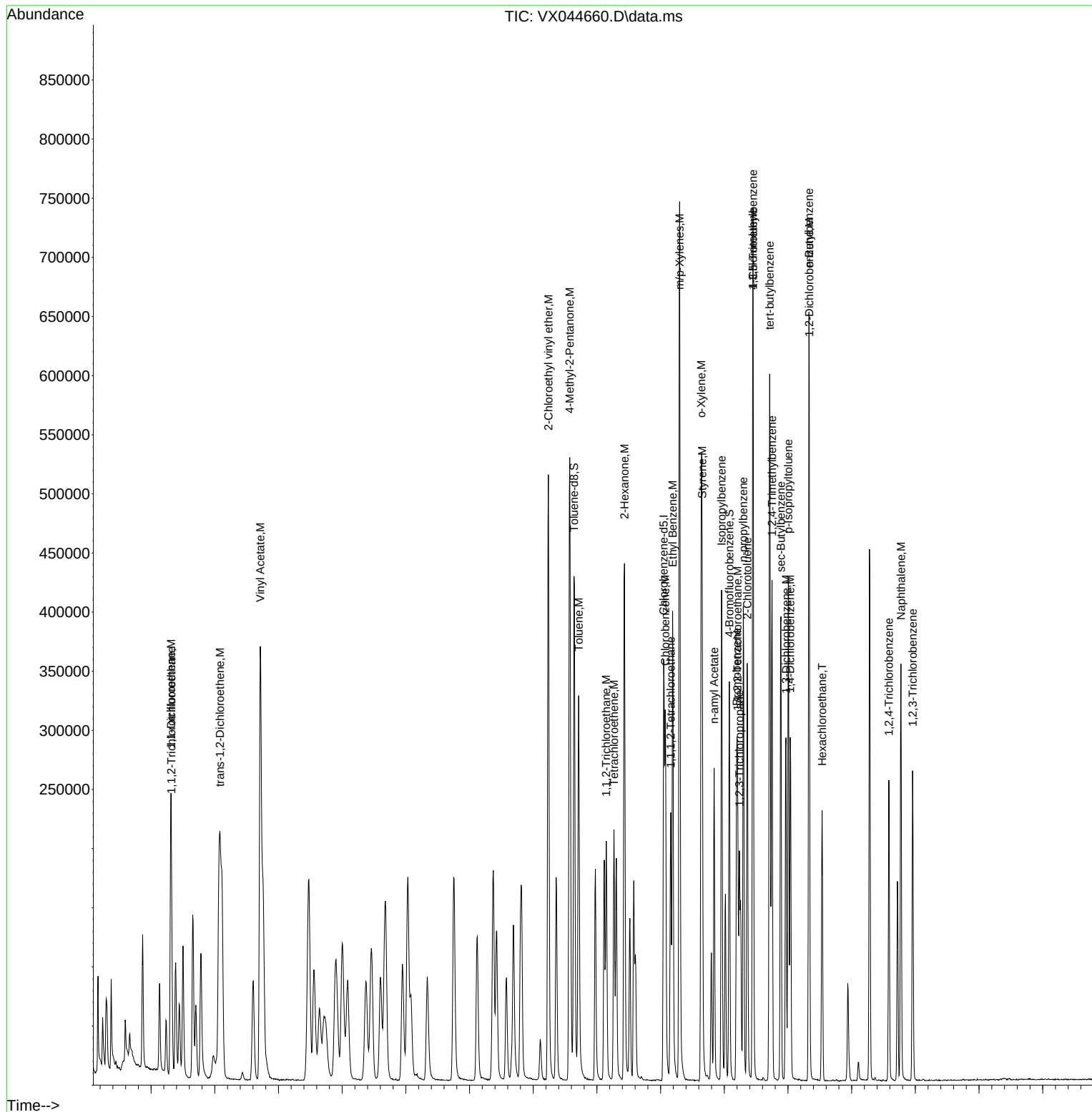
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Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\  
Data File : VX044660.D  
Acq On    : 16 Jan 2025   09:02  
Operator  :  
Sample    : VSTDICCC020  
Misc      : 5.0mL/MSVOA_X/WATER  
ALS Vial  : 3    Sample Multiplier: 1
```

Instrument :
MSVOA_X
ClientSampleId :
VSTDICCC020

Manual Integrations

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:00:56 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 00:59:31 2025
Response via : Initial Calibration





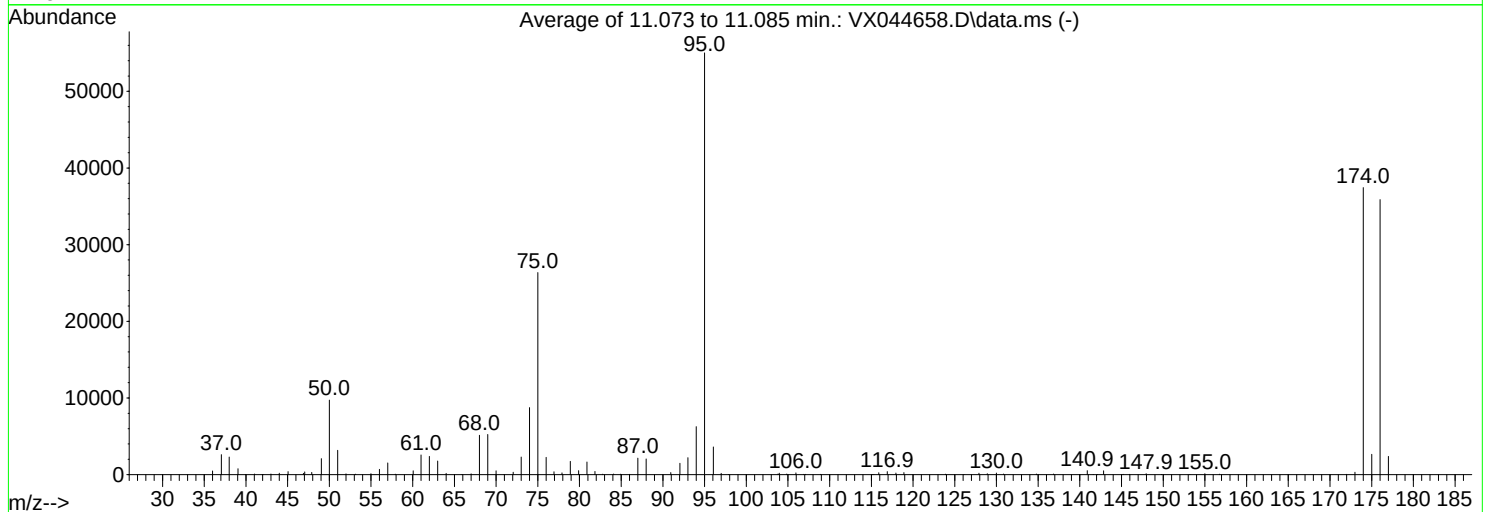
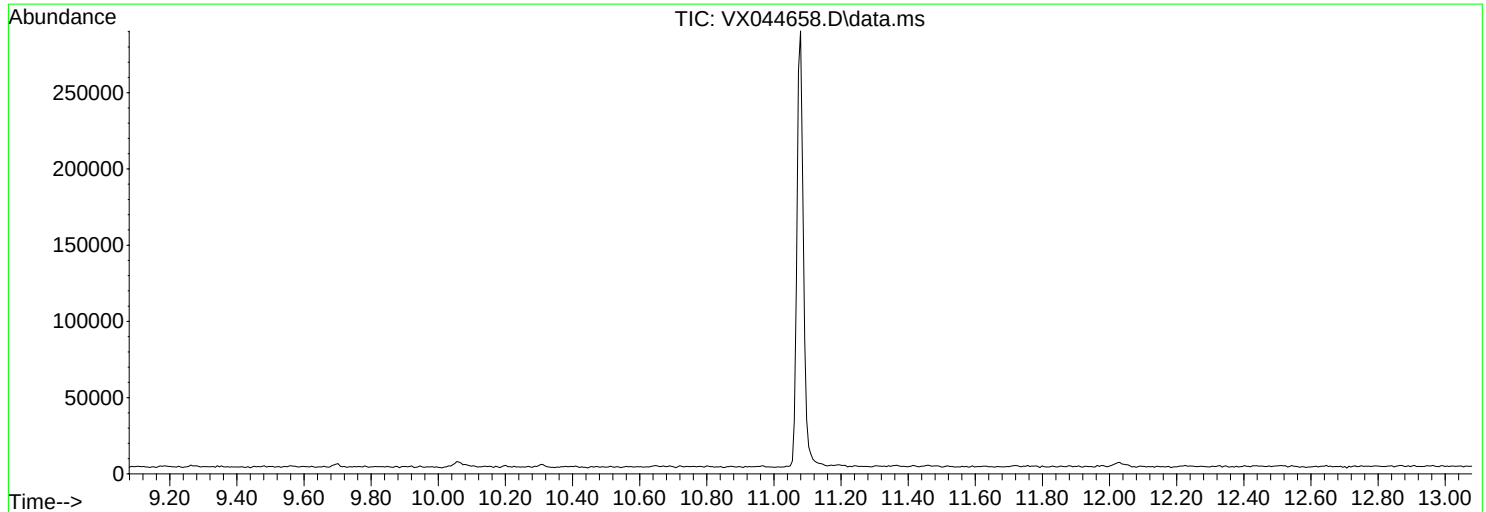
QC SAMPLE DATA

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044658.D
Acq On : 16 Jan 2025 08:02
Operator :
Sample : BFB
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\82X102824W.M
Title : SW846 8260
Last Update : Mon Oct 28 13:41:34 2024



AutoFind: Scans 1638, 1639, 1640; Background Corrected with Scan 1630

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.7	9723	PASS
75	95	30	60	47.9	26357	PASS
95	95	100	100	100.0	55021	PASS
96	95	5	9	6.6	3607	PASS
173	174	0.00	2	0.8	316	PASS
174	95	50	100	68.1	37445	PASS
175	174	5	9	7.1	2650	PASS
176	174	95	101	95.8	35883	PASS
177	176	5	9	6.6	2384	PASS

Report of Analysis

Client:	Tully Environmental, Inc			Date Collected:	
Project:	Transfer Station-SPDES			Date Received:	
Client Sample ID:	VX0116WBL01			SDG No.:	Q1083
Lab Sample ID:	VX0116WBL01			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOC-BTEX
GC Column:	DB-624UI	ID :	0.18	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044668.D	1		01/16/25 13:05	VX011625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
71-43-2	Benzene	0.69	U	0.69	5.00	ug/L
108-88-3	Toluene	0.72	U	0.72	5.00	ug/L
100-41-4	Ethyl Benzene	0.73	U	0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	1.70	U	1.70	10.0	ug/L
95-47-6	o-Xylene	0.82	U	0.82	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.5		91 - 110	98%	SPK: 30
2037-26-5	Toluene-d8	31.4		91 - 112	105%	SPK: 30
460-00-4	4-Bromofluorobenzene	28.7		63 - 112	96%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	31800	4.891			
540-36-3	1,4-Difluorobenzene	169000	6.757			
3114-55-4	Chlorobenzene-d5	147000	10.055			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044668.D
 Acq On : 16 Jan 2025 13:05
 Operator :
 Sample : VX0116WBL01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 11 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0116WBL01

Quant Time: Jan 17 01:30:45 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.891	128	31761	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.757	114	169032	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	146905	30.000	ug/l	0.00

System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.952	65	90316	29.455	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	98.200%
60) 4-Bromofluorobenzene	11.079	95	82031	28.749	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	95.833%
63) Toluene-d8	8.647	98	251184	31.437	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	104.800%

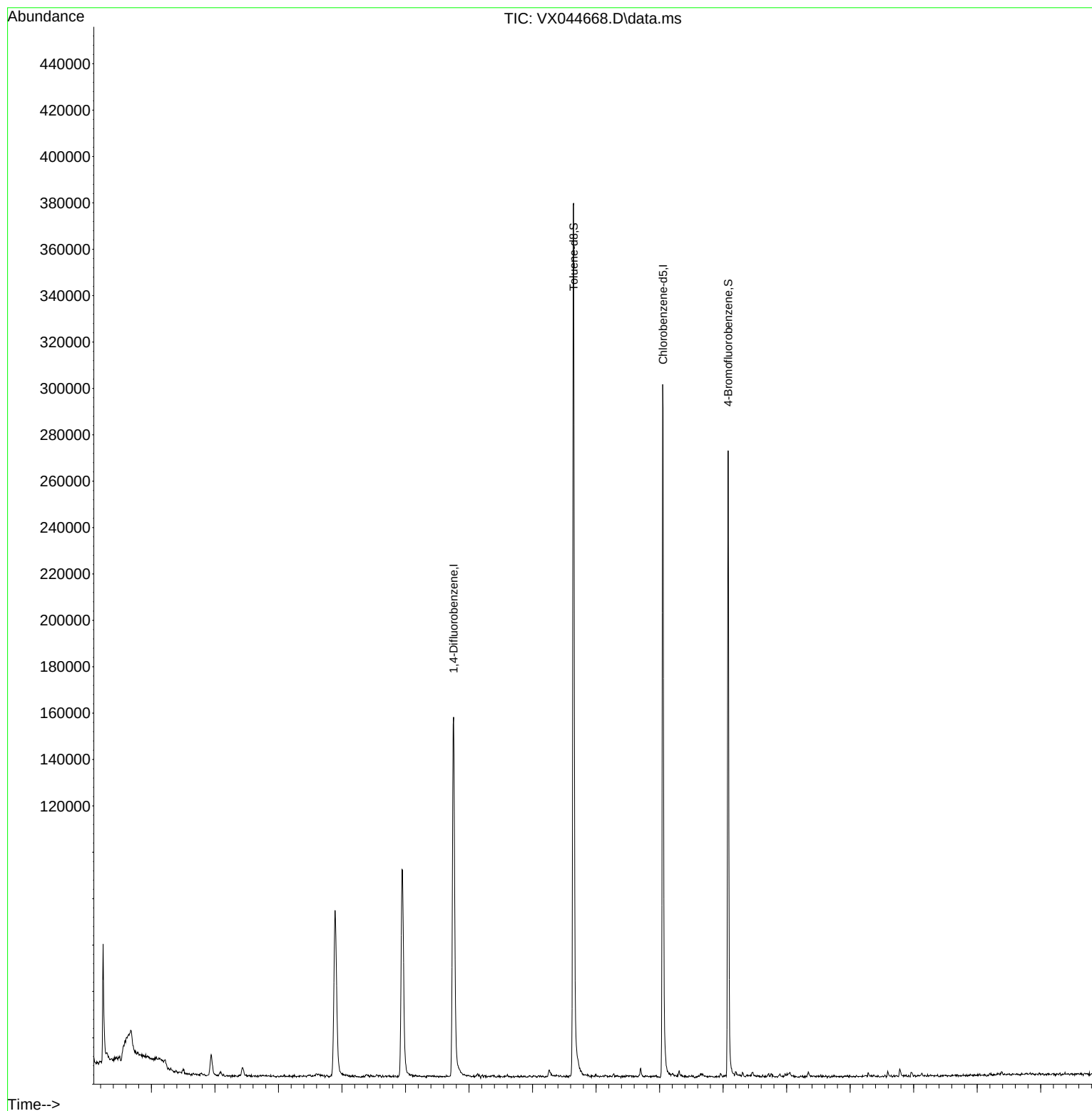
Target Compounds	Qvalue

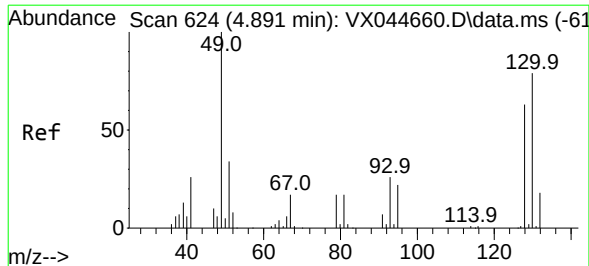
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044668.D
Acq On : 16 Jan 2025 13:05
Operator :
Sample : VX0116WBL01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0116WBL01

Quant Time: Jan 17 01:30:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 30.000 ug/l

RT: 4.891 min Scan# 62

Delta R.T. 0.000 min

Lab File: VX044668.D

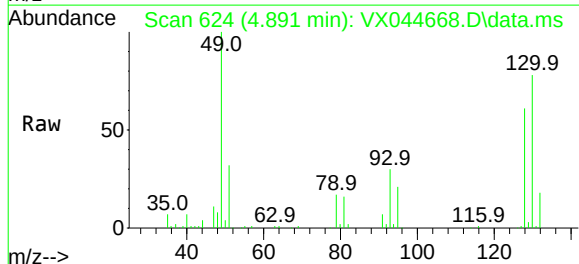
Acq: 16 Jan 2025 13:05

Instrument :

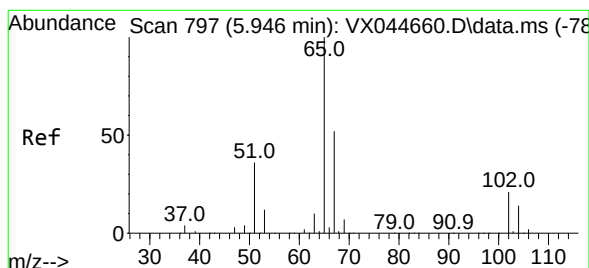
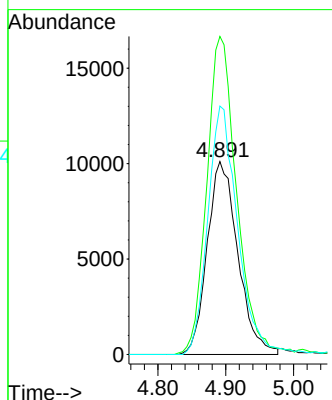
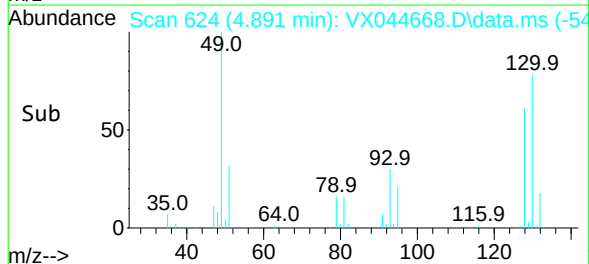
MSVOA_X

ClientSampleId :

VX0116WBL01



Tgt Ion:	128	Resp:	31761
Ion	Ratio	Lower	Upper
128	100		
49	159.9	0.0	411.5
130	125.2	0.0	324.3



#27

1,2-Dichloroethane-d4

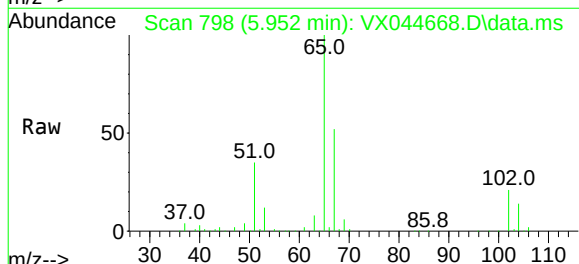
Concen: 29.455 ug/l

RT: 5.952 min Scan# 798

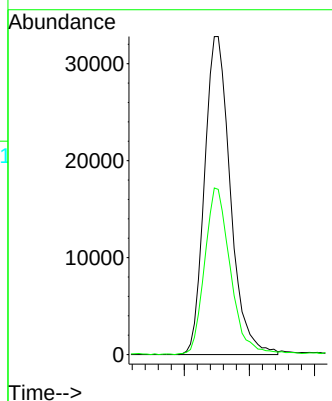
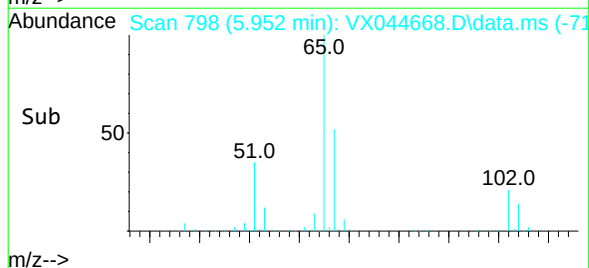
Delta R.T. 0.006 min

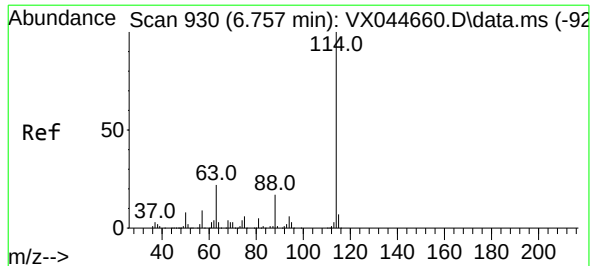
Lab File: VX044668.D

Acq: 16 Jan 2025 13:05



Tgt Ion:	65	Resp:	90316
Ion	Ratio	Lower	Upper
65	100		
67	52.1	41.4	62.2





#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.757 min Scan# 930

Delta R.T. 0.000 min

Lab File: VX044668.D

Acq: 16 Jan 2025 13:05

Instrument :

MSVOA_X

ClientSampleId :

VX0116WBL01

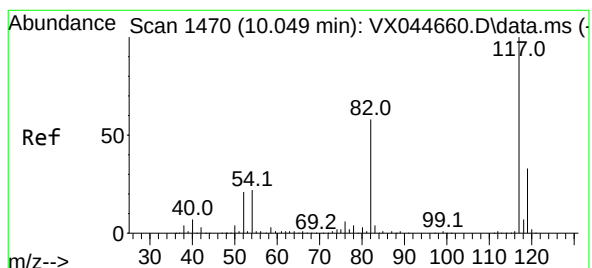
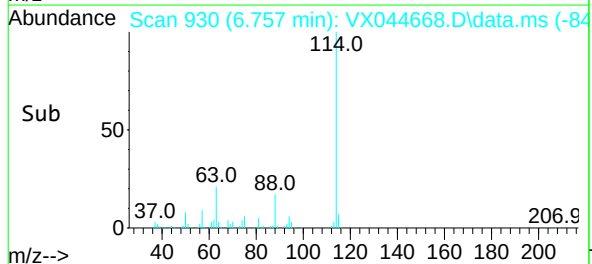
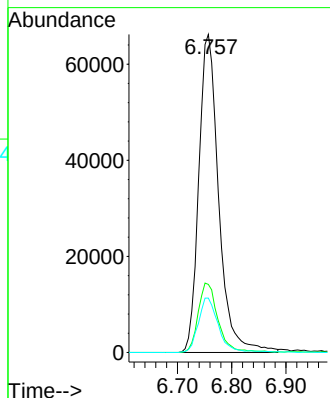
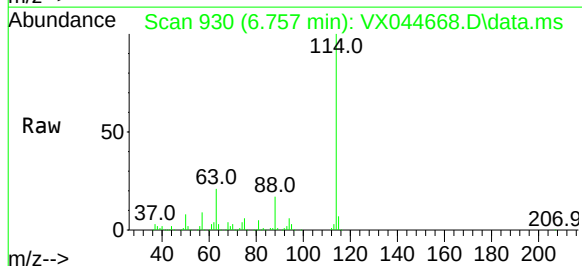
Tgt Ion:114 Resp: 169032

Ion Ratio Lower Upper

114 100

63 21.6 16.6 24.8

88 16.9 13.4 20.2



#57

Chlorobenzene-d5

Concen: 30.000 ug/l

RT: 10.055 min Scan# 1471

Delta R.T. 0.006 min

Lab File: VX044668.D

Acq: 16 Jan 2025 13:05

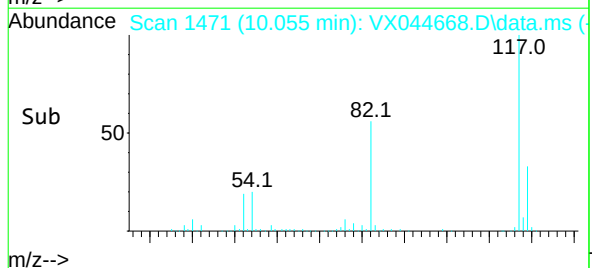
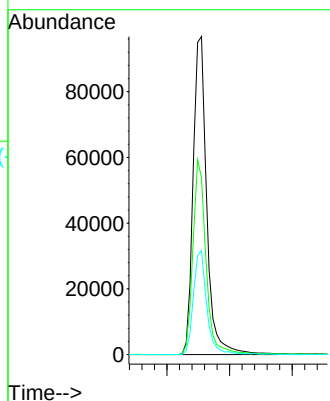
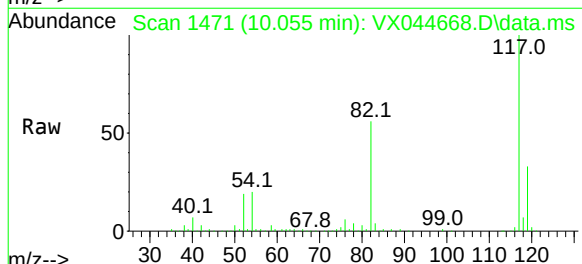
Tgt Ion:117 Resp: 146905

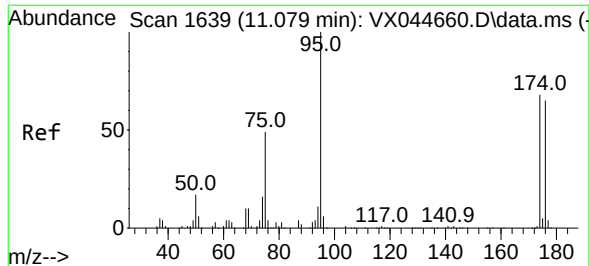
Ion Ratio Lower Upper

117 100

82 58.4 45.8 68.6

119 32.0 25.8 38.6





#60

4-Bromofluorobenzene

Concen: 28.749 ug/l

RT: 11.079 min Scan# 1639

Delta R.T. 0.000 min

Lab File: VX044668.D

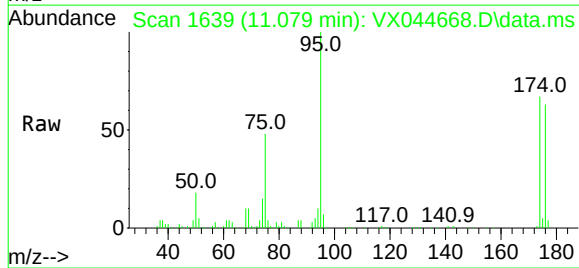
Acq: 16 Jan 2025 13:05

Instrument :

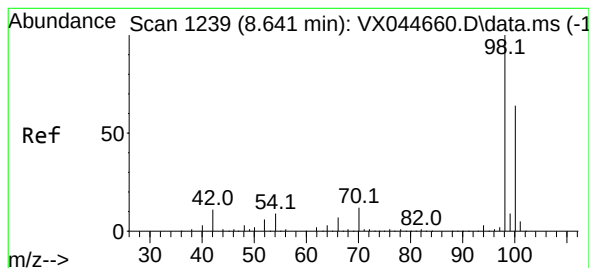
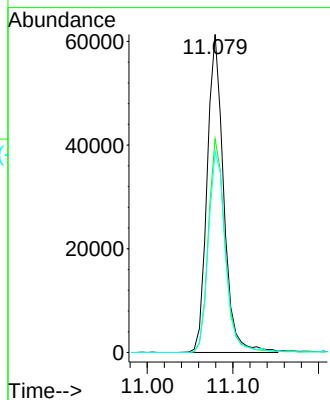
MSVOA_X

ClientSampleId :

VX0116WBL01



Tgt Ion:	95	Resp:	82031
Ion	Ratio	Lower	Upper
95	100		
174	67.9	54.6	81.8
176	64.7	52.8	79.2



#63

Toluene-d8

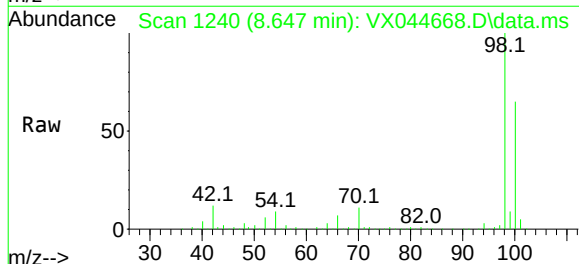
Concen: 31.437 ug/l

RT: 8.647 min Scan# 1240

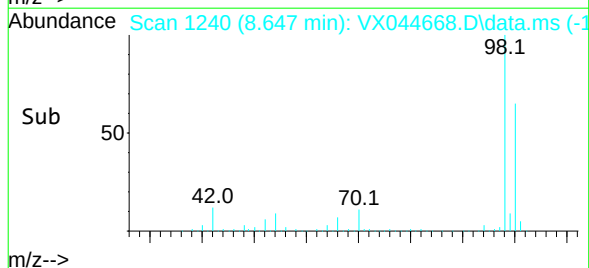
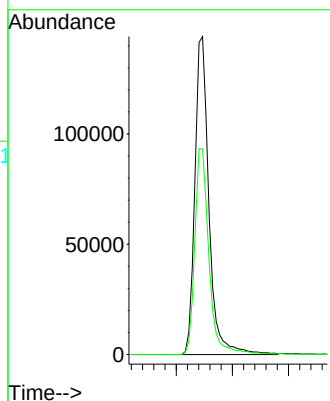
Delta R.T. 0.006 min

Lab File: VX044668.D

Acq: 16 Jan 2025 13:05



Tgt Ion:	98	Resp:	251184
Ion	Ratio	Lower	Upper
98	100		
100	65.2	53.6	80.4



Report of Analysis

Client:	Tully Environmental, Inc			Date Collected:	
Project:	Transfer Station-SPDES			Date Received:	
Client Sample ID:	VX0116WBS01			SDG No.:	Q1083
Lab Sample ID:	VX0116WBS01			Matrix:	Water
Analytical Method:	E624.1			% Solid:	0
Sample Wt/Vol:	5	Units:	mL	Final Vol:	5000 uL
Soil Aliquot Vol:			uL	Test:	VOC-BTEX
GC Column:	DB-624UI	ID :	0.18	Level :	LOW
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044666.D	1		01/16/25 12:15	VX011625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
71-43-2	Benzene	20.7		0.69	5.00	ug/L
108-88-3	Toluene	21.3		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	21.2		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	43.4		1.70	10.0	ug/L
95-47-6	o-Xylene	21.7		0.82	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.9		91 - 110	100%	SPK: 30
2037-26-5	Toluene-d8	30.7		91 - 112	102%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.2		63 - 112	101%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	28600	4.885			
540-36-3	1,4-Difluorobenzene	161000	6.751			
3114-55-4	Chlorobenzene-d5	141000	10.049			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044666.D
 Acq On : 16 Jan 2025 12:15
 Operator :
 Sample : VX0116WBS01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0116WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.885	128	28646	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	161068	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	140626	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	82676	29.896	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	99.667%		
60) 4-Bromofluorobenzene	11.079	95	82354	30.151	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	100.500%		
63) Toluene-d8	8.641	98	234772	30.695	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	102.300%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	53644m	21.062	ug/l	
3) Chloromethane	1.301	50	55468	20.703	ug/l	99
4) Vinyl Chloride	1.374	62	54617	20.835	ug/l	98
5) Bromomethane	1.593	94	12579	19.855	ug/l	97
6) Chloroethane	1.660	64	8157	19.625	ug/l	99
7) Trichlorofluoromethane	1.868	101	59616	20.766	ug/l	100
8) Diethyl Ether	2.130	74	22534	20.347	ug/l	98
9) 1,1,2-Trichlorotrifluoro...	2.319	101	44215	21.498	ug/l	99
10) 1,1-Dichloroethene	2.307	96	42986	20.316	ug/l	95
11) Methyl Iodide	2.441	142	59633	20.338	ug/l	99
12) Methyl Acetate	2.703	43	67172	21.745	ug/l	97
13) Acrolein	2.233	56	31492	92.186	ug/l	98
14) Acrylonitrile	3.062	53	125390	111.396	ug/l	100
15) Acetone	2.386	58	35094	116.189	ug/l	99
16) Carbon Disulfide	2.502	76	121993	20.746	ug/l	99
17) Allyl chloride	2.654	41	80203	21.019	ug/l	95
18) Methylene Chloride	2.782	84	47967	20.257	ug/l	99
19) trans-1,2-Dichloroethene	3.081	96	43887	20.859	ug/l	99
20) Diisopropyl ether	3.757	45	147353	21.276	ug/l	98
21) 1,1-Dichloroethane	3.599	63	86072	20.950	ug/l	96
22) cis-1,2-Dichloroethene	4.477	96	54221	20.822	ug/l	98
23) tert-Butyl Alcohol	2.977	59	60925m	111.906	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	153650	20.958	ug/l	98
25) Chloroform	5.080	83	86031	21.074	ug/l	97
26) Cyclohexane	5.458	56	75656	21.910	ug/l #	99
29) 1,1-Dichloropropene	5.684	75	59004	21.061	ug/l	99
30) 2-Butanone	4.556	43	170160	110.567	ug/l	99
31) 2,2-Dichloropropane	4.465	77	78718	20.305	ug/l	100
32) 1,1,1-Trichloroethane	5.373	97	75532	20.344	ug/l	98
33) Carbon Tetrachloride	5.666	117	63350	20.227	ug/l	99
34) Benzene	6.025	78	185201	20.720	ug/l	99
35) Methacrylonitrile	4.916	41	35847	20.841	ug/l	98
36) 1,2-Dichloroethane	6.080	62	66201	20.715	ug/l	100
37) Trichloroethene	7.117	130	43327	20.077	ug/l	93
38) Methylcyclohexane	7.373	83	82233	21.603	ug/l	100
39) 1,2-Dichloropropane	7.421	63	44731	20.069	ug/l	99
40) Dibromomethane	7.574	93	33904	20.460	ug/l	98
41) Bromodichloromethane	7.818	83	69875	20.422	ug/l	99
42) Vinyl Acetate	3.715	43	651542	106.604	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044666.D
 Acq On : 16 Jan 2025 12:15
 Operator :
 Sample : VX0116WBS01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0116WBS01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:07 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.709	43	66567	22.050	ug/l	# 97
44) Isopropyl Acetate	6.336	43	115313	21.262	ug/l	99
45) 1,4-Dioxane	7.671	88	22029	426.557	ug/l	99
46) Methyl methacrylate	7.690	41	55535	20.919	ug/l	98
47) n-amyl Acetate	10.842	43	97092	21.332	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	74132	20.527	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	80553	20.801	ug/l	98
50) 1,1,2-Trichloroethane	9.147	97	45067	21.117	ug/l	98
51) Ethyl methacrylate	9.116	69	78385	21.143	ug/l	98
52) 1,3-Dichloropropane	9.305	76	78159	21.175	ug/l	99
53) Dibromochloromethane	9.519	129	52705	20.667	ug/l	98
54) 1,2-Dibromoethane	9.604	107	46527	20.623	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	213218	118.530	ug/l	99
56) Bromoform	10.799	173	34344	20.310	ug/l	98
58) 4-Methyl-2-Pentanone	8.568	43	327477	110.478	ug/l	100
59) 2-Hexanone	9.433	43	242671	111.825	ug/l	100
61) Tetrachloroethene	9.269	164	35664	21.142	ug/l	99
62) Toluene	8.714	91	197514	21.330	ug/l	98
64) Chlorobenzene	10.073	112	122046	21.222	ug/l	98
65) 1,1,1,2-Tetrachloroethane	10.159	131	42978	20.805	ug/l	99
66) Ethyl Benzene	10.189	91	214000	21.177	ug/l	98
67) m/p-Xylenes	10.299	106	161293	43.422	ug/l	100
68) o-Xylene	10.640	106	81063	21.744	ug/l	99
69) Styrene	10.653	104	131432	21.472	ug/l	99
70) Isopropylbenzene	10.957	105	201025	21.449	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.213	83	69701	22.122	ug/l	95
72) 1,2,3-Trichloropropane	11.238	75	58065m	21.906	ug/l	
73) Bromobenzene	11.195	156	45546	20.861	ug/l	99
74) n-propylbenzene	11.299	91	229406	21.550	ug/l	99
75) 2-Chlorotoluene	11.360	91	145209	21.697	ug/l	99
76) 1,3,5-Trimethylbenzene	11.451	105	166549	21.882	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	25808	20.580	ug/l	98
78) 4-Chlorotoluene	11.451	91	157409	21.345	ug/l	99
79) tert-butylbenzene	11.713	119	169187	21.638	ug/l	100
80) 1,2,4-Trimethylbenzene	11.750	105	165173	21.509	ug/l	100
81) sec-Butylbenzene	11.890	105	204493	21.902	ug/l	99
82) p-Isopropyltoluene	12.006	119	164534	21.412	ug/l	99
83) 1,3-Dichlorobenzene	11.969	146	80958	20.876	ug/l	99
84) 1,4-Dichlorobenzene	12.043	146	80775	21.247	ug/l	99
85) n-Butylbenzene	12.329	91	139667	20.968	ug/l	99
86) Hexachloroethane	12.536	117	35119	20.775	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	81019	20.921	ug/l	98
88) 1,2-Dibromo-3-Chloropr...	12.945	75	16207	21.357	ug/l	99
89) 1,2,4-Trichlorobenzene	13.585	180	48252	20.050	ug/l	99
90) Hexachlorobutadiene	13.719	225	19172	20.595	ug/l	98
91) Naphthalene	13.774	128	194561	21.609	ug/l	99
92) 1,2,3-Trichlorobenzene	13.963	180	50711	20.717	ug/l	100

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

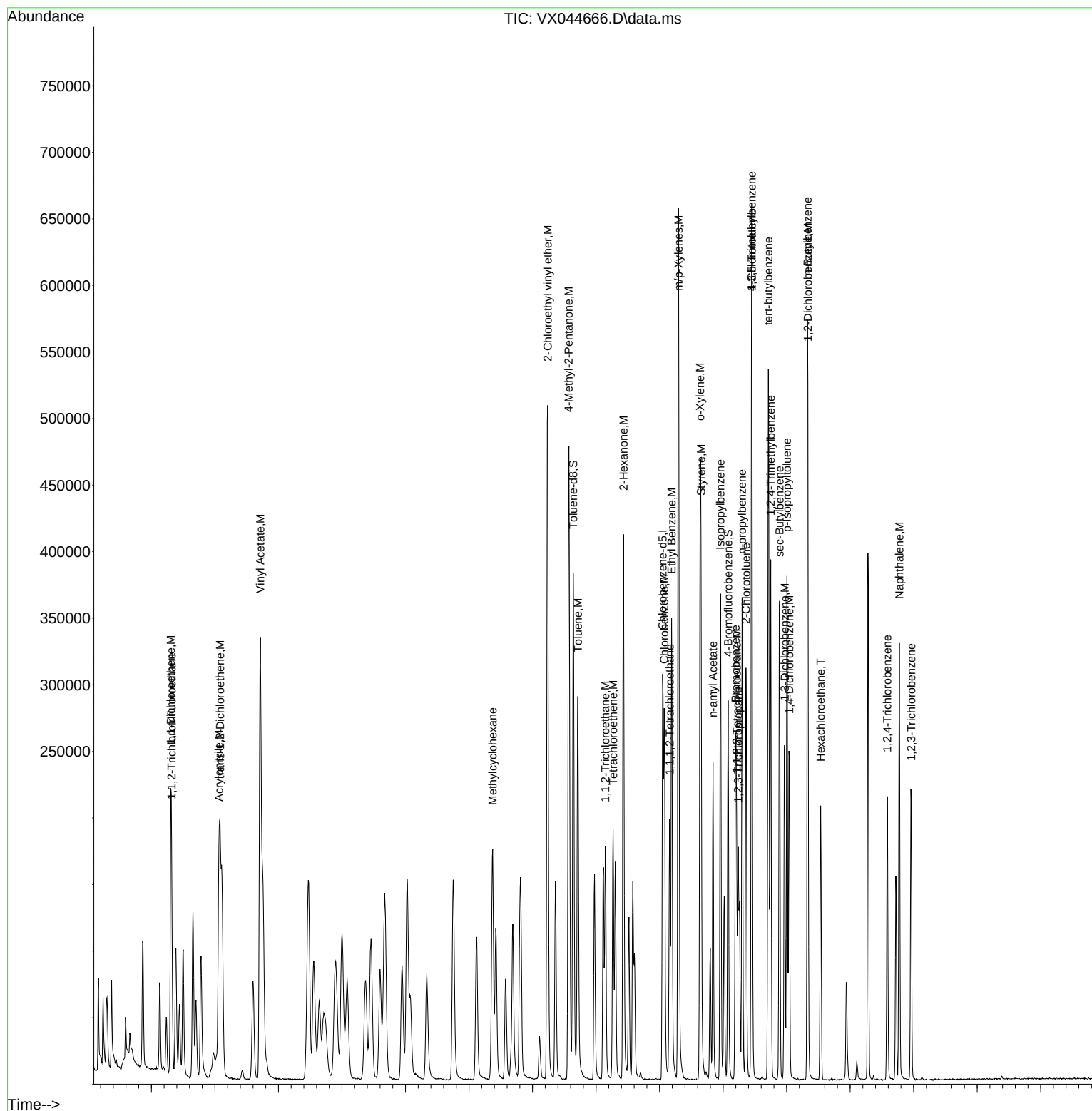
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044666.D
Acq On : 16 Jan 2025 12:15
Operator :
Sample : VX0116WBS01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0116WBS01

Manual Integrations APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration



Report of Analysis

Client:	Tully Environmental, Inc	Date Collected:	
Project:	Transfer Station-SPDES	Date Received:	
Client Sample ID:	VX0116WBSD01	SDG No.:	Q1083
Lab Sample ID:	VX0116WBSD01	Matrix:	Water
Analytical Method:	E624.1	% Solid:	0
Sample Wt/Vol:	5 Units: mL	Final Vol:	5000 uL
Soil Aliquot Vol:	uL	Test:	VOC-BTEX
GC Column:	DB-624UI ID : 0.18	Level :	LOW
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VX044667.D	1		01/16/25 12:42	VX011625

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
71-43-2	Benzene	20.9		0.69	5.00	ug/L
108-88-3	Toluene	20.3		0.72	5.00	ug/L
100-41-4	Ethyl Benzene	20.2		0.73	5.00	ug/L
179601-23-1	m/p-Xylenes	41.7		1.70	10.0	ug/L
95-47-6	o-Xylene	20.9		0.82	5.00	ug/L
SURROGATES						
17060-07-0	1,2-Dichloroethane-d4	29.1		91 - 110	97%	SPK: 30
2037-26-5	Toluene-d8	30.0		91 - 112	100%	SPK: 30
460-00-4	4-Bromofluorobenzene	30.7		63 - 112	102%	SPK: 30
INTERNAL STANDARDS						
74-97-5	Bromochloromethane	29100	4.885			
540-36-3	1,4-Difluorobenzene	155000	6.751			
3114-55-4	Chlorobenzene-d5	141000	10.049			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044667.D
 Acq On : 16 Jan 2025 12:42
 Operator :
 Sample : VX0116WBSD01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0116WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	4.885	128	29143	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.751	114	154664	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.049	117	141140	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.946	65	81817	29.081	ug/l	0.00
Spiked Amount 30.000	Range 91 - 110		Recovery =	96.933%		
60) 4-Bromofluorobenzene	11.079	95	84152	30.697	ug/l	0.00
Spiked Amount 30.000	Range 63 - 112		Recovery =	102.333%		
63) Toluene-d8	8.641	98	230128	29.978	ug/l	0.00
Spiked Amount 30.000	Range 91 - 112		Recovery =	99.933%		
Target Compounds					Qvalue	
2) Dichlorodifluoromethane	1.166	85	50299	19.412	ug/l	94
3) Chloromethane	1.294	50	53276	19.546	ug/l	98
4) Vinyl Chloride	1.374	62	49013	18.379	ug/l	98
5) Bromomethane	1.593	94	12364	19.183	ug/l	99
6) Chloroethane	1.660	64	8486	20.068	ug/l	94
7) Trichlorofluoromethane	1.867	101	56431	19.322	ug/l	98
8) Diethyl Ether	2.130	74	21881	19.421	ug/l	97
9) 1,1,2-Trichlorotrifluo...	2.319	101	41466	19.818	ug/l	98
10) 1,1-Dichloroethene	2.306	96	40895	18.998	ug/l	94
11) Methyl Iodide	2.441	142	59694	20.011	ug/l	100
12) Methyl Acetate	2.697	43	64826	20.628	ug/l	99
13) Acrolein	2.233	56	28835	82.969	ug/l	99
14) Acrylonitrile	3.062	53	122799	107.234	ug/l	99
15) Acetone	2.380	58	32401	105.444	ug/l	96
16) Carbon Disulfide	2.501	76	115603	19.324	ug/l	99
17) Allyl chloride	2.654	41	77211	19.889	ug/l	98
18) Methylene Chloride	2.782	84	47436	19.691	ug/l	98
19) trans-1,2-Dichloroethene	3.081	96	41639	19.453	ug/l	99
20) Diisopropyl ether	3.757	45	144618	20.525	ug/l	98
21) 1,1-Dichloroethane	3.599	63	82410	19.716	ug/l	98
22) cis-1,2-Dichloroethene	4.477	96	52477	19.808	ug/l	100
23) tert-Butyl Alcohol	2.971	59	60519m	109.264	ug/l	
24) Methyl tert-Butyl Ether	3.111	73	151415	20.301	ug/l	100
25) Chloroform	5.086	83	81568	19.640	ug/l	95
26) Cyclohexane	5.452	56	71351	20.311	ug/l #	100
29) 1,1-Dichloropropene	5.684	75	54850	20.389	ug/l	99
30) 2-Butanone	4.550	43	165507	111.997	ug/l	99
31) 2,2-Dichloropropane	4.465	77	74335	19.968	ug/l	99
32) 1,1,1-Trichloroethane	5.367	97	71131	19.952	ug/l	98
33) Carbon Tetrachloride	5.666	117	60964	20.271	ug/l	99
34) Benzene	6.025	78	179036	20.860	ug/l	98
35) Methacrylonitrile	4.922	41	36212	21.925	ug/l	98
36) 1,2-Dichloroethane	6.080	62	63614	20.730	ug/l	99
37) Trichloroethene	7.117	130	40784	19.681	ug/l	96
38) Methylcyclohexane	7.373	83	75031	20.528	ug/l	100
39) 1,2-Dichloropropane	7.421	63	45140	21.091	ug/l	99
40) Dibromomethane	7.580	93	32524	20.440	ug/l	98
41) Bromodichloromethane	7.818	83	67065	20.412	ug/l	98
42) Vinyl Acetate	3.715	43	640784	109.185	ug/l	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
 Data File : VX044667.D
 Acq On : 16 Jan 2025 12:42
 Operator :
 Sample : VX0116WBSD01
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 VX0116WBSD01

Manual Integrations
 APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
 Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:55 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Fri Jan 17 01:21:41 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
43) Ethyl Acetate	4.708	43	65139	22.471	ug/l #	94
44) Isopropyl Acetate	6.336	43	114704	22.025	ug/l	100
45) 1,4-Dioxane	7.665	88	23338	470.615	ug/l	97
46) Methyl methacrylate	7.690	41	56196	22.045	ug/l	96
47) n-amyl Acetate	10.841	43	100947	23.097	ug/l	99
48) t-1,3-Dichloropropene	8.976	75	72372	20.869	ug/l	98
49) cis-1,3-Dichloropropene	8.360	75	77206	20.762	ug/l	99
50) 1,1,2-Trichloroethane	9.147	97	45741	22.320	ug/l	98
51) Ethyl methacrylate	9.116	69	77938	21.893	ug/l	98
52) 1,3-Dichloropropane	9.305	76	76648	21.626	ug/l	99
53) Dibromochloromethane	9.518	129	51589	21.067	ug/l	98
54) 1,2-Dibromoethane	9.604	107	46846	21.625	ug/l	99
55) 2-Chloroethyl vinyl ether	8.238	63	182886	105.878	ug/l	99
56) Bromoform	10.799	173	34859	21.468	ug/l	100
58) 4-Methyl-2-Pentanone	8.567	43	335782	112.867	ug/l	100
59) 2-Hexanone	9.427	43	246848	113.336	ug/l	99
61) Tetrachloroethene	9.269	164	34028	20.099	ug/l	98
62) Toluene	8.714	91	188382	20.270	ug/l	97
64) Chlorobenzene	10.073	112	117343	20.330	ug/l	100
65) 1,1,1,2-Tetrachloroethane	10.159	131	42389	20.445	ug/l	98
66) Ethyl Benzene	10.189	91	204802	20.193	ug/l	97
67) m/p-Xylenes	10.299	106	155513	41.713	ug/l	100
68) o-Xylene	10.640	106	78193	20.897	ug/l	100
69) Styrene	10.652	104	129327	21.051	ug/l	99
70) Isopropylbenzene	10.957	105	194064	20.631	ug/l	99
71) 1,1,2,2-Tetrachloroethane	11.207	83	71004	22.454	ug/l	97
72) 1,2,3-Trichloropropane	11.238	75	59524m	22.375	ug/l	
73) Bromobenzene	11.195	156	45269	20.658	ug/l	99
74) n-propylbenzene	11.299	91	220790	20.665	ug/l	100
75) 2-Chlorotoluene	11.360	91	141132	21.011	ug/l	100
76) 1,3,5-Trimethylbenzene	11.451	105	162403	21.260	ug/l	99
77) t-1,4-Dichloro-2-butene	11.018	75	26030	20.682	ug/l	98
78) 4-Chlorotoluene	11.451	91	154949	20.935	ug/l	100
79) tert-butylbenzene	11.713	119	168407	21.459	ug/l	99
80) 1,2,4-Trimethylbenzene	11.750	105	163274	21.184	ug/l	100
81) sec-Butylbenzene	11.890	105	195627	20.876	ug/l	99
82) p-Isopropyltoluene	12.006	119	160023	20.749	ug/l	100
83) 1,3-Dichlorobenzene	11.969	146	80445	20.668	ug/l	99
84) 1,4-Dichlorobenzene	12.042	146	79657	20.876	ug/l	99
85) n-Butylbenzene	12.329	91	138064	20.652	ug/l	100
86) Hexachloroethane	12.536	117	34851	20.542	ug/l	98
87) 1,2-Dichlorobenzene	12.335	146	83183	21.402	ug/l	99
88) 1,2-Dibromo-3-Chloropr...	12.939	75	16131	21.179	ug/l	98
89) 1,2,4-Trichlorobenzene	13.585	180	47913	19.836	ug/l	98
90) Hexachlorobutadiene	13.725	225	18666	19.979	ug/l	98
91) Naphthalene	13.774	128	191902	21.236	ug/l	99
92) 1,2,3-Trichlorobenzene	13.957	180	50326	20.485	ug/l	99

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

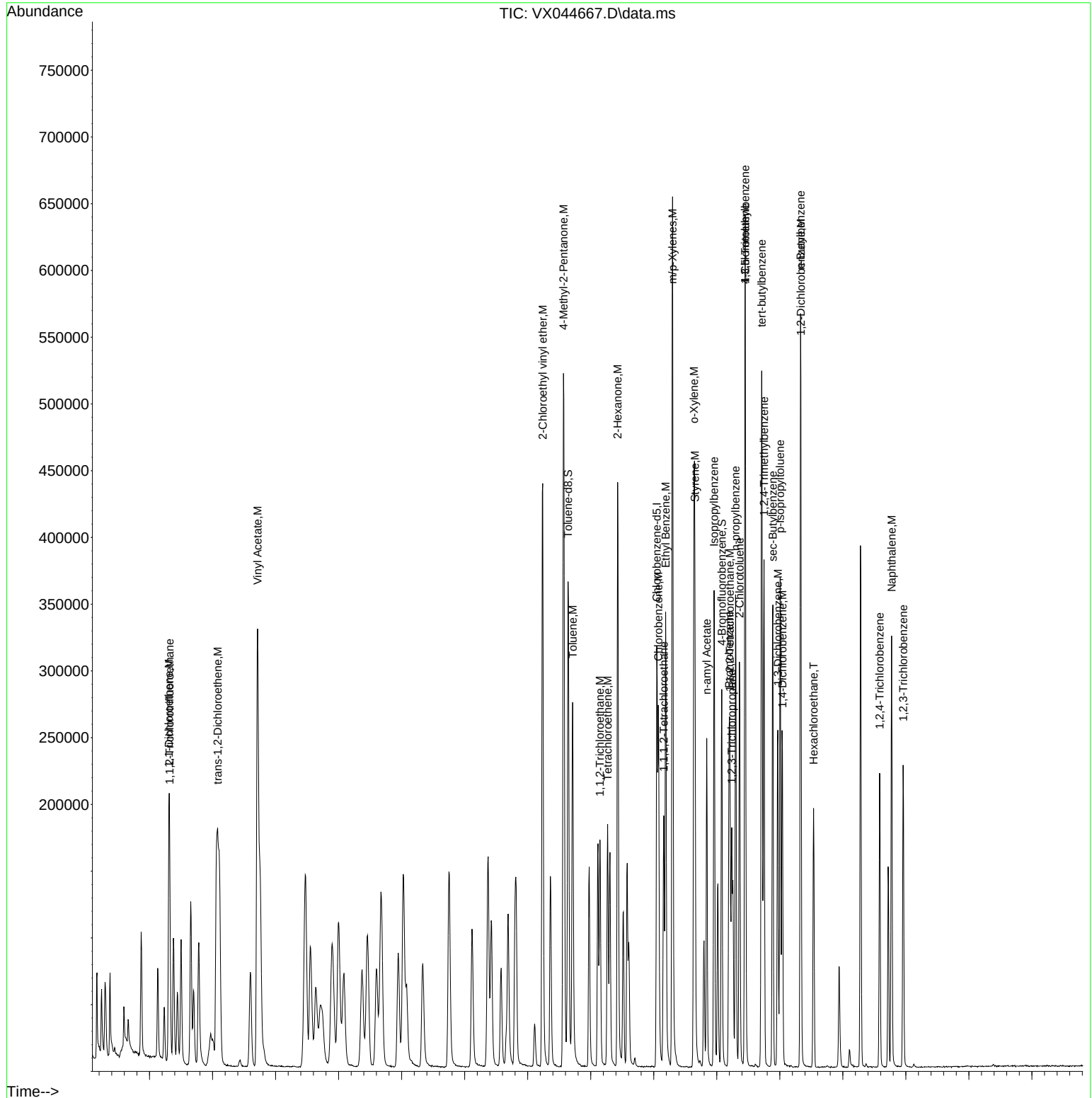
Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX011625\
Data File : VX044667.D
Acq On : 16 Jan 2025 12:42
Operator :
Sample : VX0116WBSD01
Misc : 5.0mL/MSVOA_X/WATER
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_X
ClientSampleId :
VX0116WBSD01

Manual Integrations
APPROVED

Reviewed By :Mahesh Dadoda 01/17/2025
Supervised By :Semsettin Yesilyurt 01/17/2025

Quant Time: Jan 17 01:29:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X011625W.M
Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Fri Jan 17 01:21:41 2025
Response via : Initial Calibration





284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

Manual Integration Report

Sequence:

VX011625

Instrument

MSVOA_x

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason

Instrument ID: **MSVOA_X**

Daily Analysis Runlog For Sequence/QC Batch ID # VX011625

Review By	Mahesh Dadoda	Review On	1/17/2025 6:39:05 AM
Supervise By	Semsettin Yesilyurt	Supervise On	1/17/2025 6:41:46 AM
SubDirectory	VX011625	HP Acquire Method	HP Processing Method 624X011625W.M
STD. NAME	STD REF.#		
Tune/Reschk	VP132565		
Initial Calibration Stds	VP132567,VP132568,VP132569,VP132570,VP132571		
CCC	VP132566,VP132573		
Internal Standard/PEM			
ICV/I.BLK	VP132572		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VX044658.D	16 Jan 2025 08:02	 	Ok
2	VSTDIC005	VX044659.D	16 Jan 2025 08:39	 	Ok,M
3	VSTDICCC020	VX044660.D	16 Jan 2025 09:02	 	Ok,M
4	VSTDIC050	VX044661.D	16 Jan 2025 09:25	 	Ok,M
5	VSTDIC100	VX044662.D	16 Jan 2025 09:49	 	Ok,M
6	VSTDIC150	VX044663.D	16 Jan 2025 10:12	 	Ok,M
7	IBLK	VX044664.D	16 Jan 2025 10:35	 	Ok
8	VSTDICV020	VX044665.D	16 Jan 2025 11:45	 	Ok,M
9	VX0116WBS01	VX044666.D	16 Jan 2025 12:15	 	Ok,M
10	VX0116WBSD01	VX044667.D	16 Jan 2025 12:42	 	Ok,M
11	VX0116WBL01	VX044668.D	16 Jan 2025 13:05	 	Ok
12	Q1083-01	VX044669.D	16 Jan 2025 13:33	 	Ok
13	Q1083-02	VX044670.D	16 Jan 2025 13:55	 	Ok
14	IBLK	VX044671.D	16 Jan 2025 14:18	 	Ok
15	P4368-09 2.5PPB	VX044672.D	16 Jan 2025 14:46	 	Ok,M
16	VSTDCCC020	VX044673.D	16 Jan 2025 16:04	 	Ok,M

M : Manual Integration

Instrument ID: MSVOA_X

Daily Analysis Runlog For Sequence/QC Batch ID # VX011625

Review By	Mahesh Dadoda	Review On	1/17/2025 6:39:05 AM
Supervise By	Semsettin Yesilyurt	Supervise On	1/17/2025 6:41:46 AM
SubDirectory	VX011625	HP Acquire Method	HP Processing Method 624X011625W.M

STD. NAME	STD REF.#
Tune/Reschk	VP132565
Initial Calibration Stds	VP132567,VP132568,VP132569,VP132570,VP132571
CCC	VP132566,VP132573
Internal Standard/PEM	
ICV/I.BLK	VP132572
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VX044658.D	16 Jan 2025 08:02		 	Ok
2	VSTDIC005	VSTDIC005	VX044659.D	16 Jan 2025 08:39	V13516	 	Ok,M
3	VSTDIC020	VSTDIC020	VX044660.D	16 Jan 2025 09:02		 	Ok,M
4	VSTDIC050	VSTDIC050	VX044661.D	16 Jan 2025 09:25		 	Ok,M
5	VSTDIC100	VSTDIC100	VX044662.D	16 Jan 2025 09:49		 	Ok,M
6	VSTDIC150	VSTDIC150	VX044663.D	16 Jan 2025 10:12		 	Ok,M
7	IBLK	IBLK	VX044664.D	16 Jan 2025 10:35		 	Ok
8	VSTDICV020	ICVVX011625	VX044665.D	16 Jan 2025 11:45		 	Ok,M
9	VX0116WBS01	VX0116WBS01	VX044666.D	16 Jan 2025 12:15		 	Ok,M
10	VX0116WBSD01	VX0116WBSD01	VX044667.D	16 Jan 2025 12:42		 	Ok,M
11	VX0116WBL01	VX0116WBL01	VX044668.D	16 Jan 2025 13:05		 	Ok
12	Q1083-01	001-WILLET-PT-BLVD	VX044669.D	16 Jan 2025 13:33	vial A pH<2	 	Ok
13	Q1083-02	002-35TH-AVE(DEC)	VX044670.D	16 Jan 2025 13:55	vial A pH<2	 	Ok
14	IBLK	IBLK	VX044671.D	16 Jan 2025 14:18		 	Ok
15	P4368-09 2.5PPB	MDL-WATER-03-QT4-2	VX044672.D	16 Jan 2025 14:46		 	Ok,M
16	VSTDIC020	VSTDIC020EC	VX044673.D	16 Jan 2025 16:04		 	Ok,M

M : Manual Integration



SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 • Fax (908) 789-8922

www.chemtech.net

CHEMTECH PROJECT NO.

QUOTE NO.

COC Number 2041665

Q1083

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Tully Environmental Inc

ADDRESS: 57 Seaview Blvd

CITY: Pt Washington STATE: NY ZIP: 11650

ATTENTION: D Dene

PHONE: 718 4467000 FAX: 718 4585199

CLIENT PROJECT INFORMATION

PROJECT NAME: Transfer Station SPDES

PROJECT NO.: 25213 LOCATION:

PROJECT MANAGER:

e-mail:

PHONE:

FAX:

CLIENT BILLING INFORMATION

BILL TO: Same

PO#:

ADDRESS:

CITY:

STATE:

ZIP:

ATTENTION:

PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) ASAP DAYS*

HARDCOPY (DATA PACKAGE): DAYS*

EDD: DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)

☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP

☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B

+ Raw Data ☐ Other

☐ EDD FORMAT

ISS BIEY

PRESERVATIVES

COMMENTS

← Specify Preservatives

A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

CHEMTECH
SAMPLE
ID

PROJECT
SAMPLE IDENTIFICATION

SAMPLE
MATRIX

SAMPLE
TYPE

SAMPLE
COLLECTION

COMP

GRAB

DATE

TIME

OF BOTTLES

1

2

3

4

5

6

7

8

9

1.

001 Wilets Pt Blvd (Dec)

W

X

1/14 1pm

X

X

2.

002 35th Ave (Dec)

W

X

1/15 1pm

X

X

3.

4.

5.

6.

7.

8.

9.

10.

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:

DATE/TIME:

RECEIVED BY:

1. D Dene

1/14/25

1051 1-15-25

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.7°C

Comments:

RELINQUISHED BY SAMPLER:

DATE/TIME:

RECEIVED BY:

RELINQUISHED BY SAMPLER:

DATE/TIME:

RECEIVED BY:

3.

3.

Page ____ of ____

CLIENT: ☐ Hand Delivered ☐ Other

CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete

☐ YES ☐ NO



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER**Order ID :** Q1083 TULL01**Order Date :** 1/15/2025 10:55:00 AM**Project Mgr :****Client Name :** Tully Environmental, Inc**Project Name :** Transfer Station-SPDES**Report Type :** Results Only**Client Contact :** Dean Devoe**Receive DateTime :** 1/15/2025 10:51:00 AM**EDD Type :** EXCEL NOCLEANUP**Invoice Name :** Tully Environmental, Inc**Purchase Order :****Hard Copy Date :****Invoice Contact :** Dean Devoe**Date Signoff :**

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1083-01	001-WILLETS-PT-BLVD(DEC)	Water	01/14/2025	13:00	VOC-BTEX		624.1	10 Bus. Days	
Q1083-02	002-35TH-AVE(DEC)	Water	01/14/2025	13:00	VOC-BTEX		624.1	10 Bus. Days	

Relinquished By :**Date / Time :****Received By :****Date / Time :****Storage Area :** VOA Refridgerator Room