

Data Path : Z:\voasrv\HPCHEM1\MSVOA_X\Data\VX121622\
 Data File : VX033455.D
 Acq On : 16 Dec 2022 12:39
 Operator : JC/MD
 Sample : N6094-01 5X
 Misc : 5.0mL/MSVOA_X/WATER
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 MSVOA_X
 ClientSampleId :
 EFF-WW

Quant Time: Dec 17 07:45:50 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_X\Method\624X121222W.M
 Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
 QLast Update : Mon Dec 12 12:37:35 2022
 Response via : Initial Calibration

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

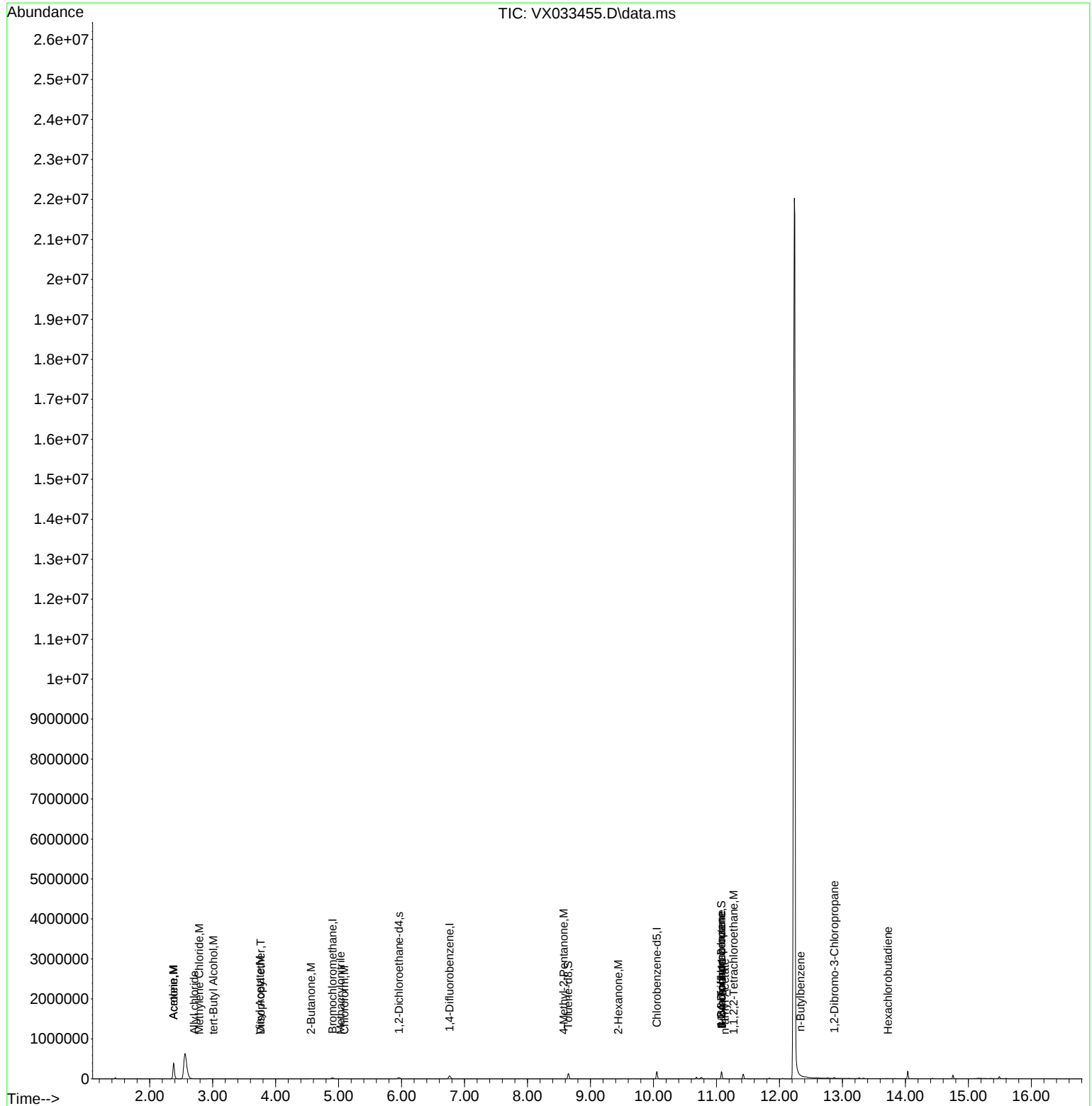
Internal Standards						
1) Bromochloromethane	4.904	128	11230	30.000	ug/l	0.00
28) 1,4-Difluorobenzene	6.763	114	77263	30.000	ug/l	0.00
57) Chlorobenzene-d5	10.055	117	83909	30.000	ug/l	0.00
System Monitoring Compounds						
27) 1,2-Dichloroethane-d4	5.958	65	31856	32.299	ug/l	0.00
Spiked Amount	30.000	Range	91 - 110	Recovery	=	107.667%
60) 4-Bromofluorobenzene	11.079	95	45530	29.297	ug/l	0.00
Spiked Amount	30.000	Range	63 - 112	Recovery	=	97.667%
63) Toluene-d8	8.647	98	81809	29.309	ug/l	0.00
Spiked Amount	30.000	Range	91 - 112	Recovery	=	97.700%
Target Compounds						
					Qvalue	
13) Acrolein	2.380	56	91	0.421	ug/l #	1
15) Acetone	2.380	58	133298	781.745	ug/l	94
17) Allyl chloride	2.709	41	581	0.366	ug/l #	75
18) Methylene Chloride	2.788	84	664	0.591	ug/l #	81
20) Diisopropyl ether	3.764	45	1585	0.474	ug/l #	80
23) tert-Butyl Alcohol	3.014	59	57	0.269	ug/l #	1
25) Chloroform	5.093	83	3599	1.604	ug/l	96
30) 2-Butanone	4.562	43	6908	9.463	ug/l #	90
35) Methacrylonitrile	5.032	41	213	0.285	ug/l #	39
42) Vinyl Acetate	3.751	43	508	0.201	ug/l #	73
47) n-amyl Acetate	11.134	43	1073	0.574	ug/l	97
56) Bromoform	11.085	173	394	0.385	ug/l #	1
58) 4-Methyl-2-Pentanone	8.574	43	649	0.478	ug/l #	81
59) 2-Hexanone	9.439	43	1252	1.207	ug/l #	81
71) 1,1,2,2-Tetrachloroethane	11.274	83	726	0.423	ug/l #	65
72) 1,2,3-Trichloropropane	11.079	75	23673	15.497	ug/l	40
77) t-1,4-Dichloro-2-butene	11.079	75	23673	46.609	ug/l #	9
85) n-Butylbenzene	12.335	91	1149	0.278	ug/l	61
88) 1,2-Dibromo-3-Chloropr...	12.872	75	607	1.624	ug/l #	1
90) Hexachlorobutadiene	13.725	225	318	0.466	ug/l	74

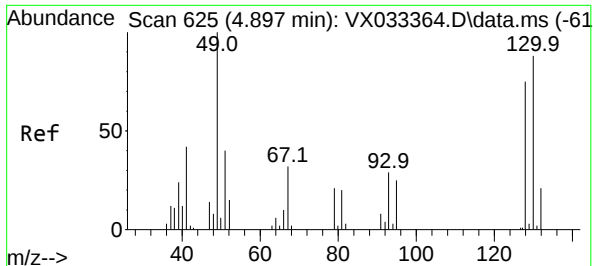
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : METHOD 624 VOLATILE ORGANIC ANALYSIS
QLast Update : Mon Dec 12 12:37:35 2022
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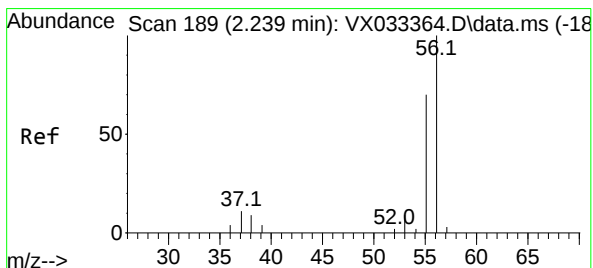
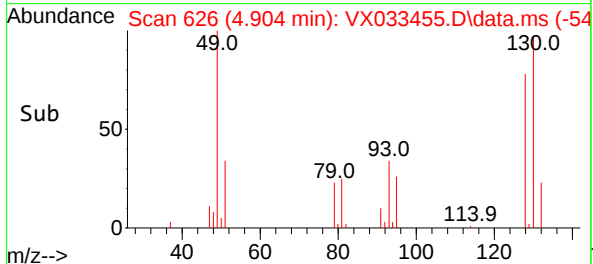
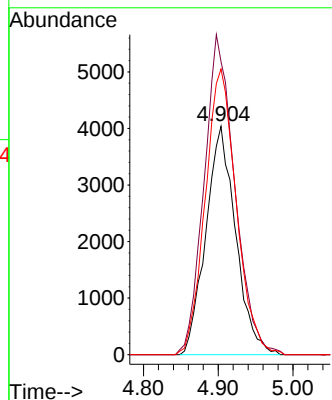
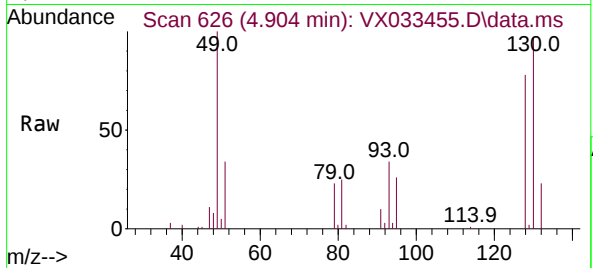




#1
Bromochloromethane
Concen: 30.000 ug/l
RT: 4.904 min Scan# 61
Delta R.T. 0.007 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

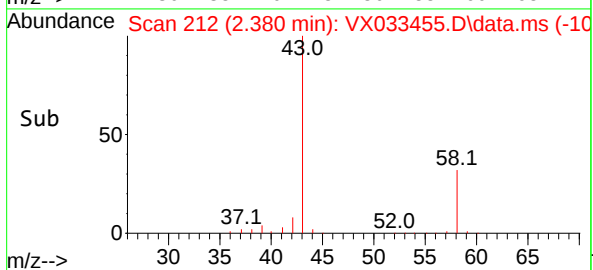
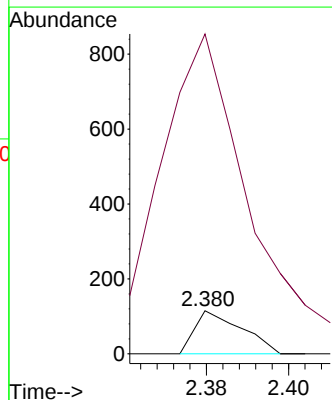
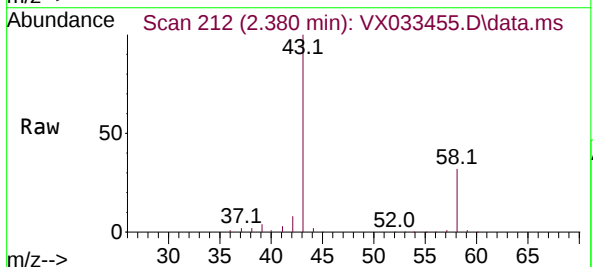
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

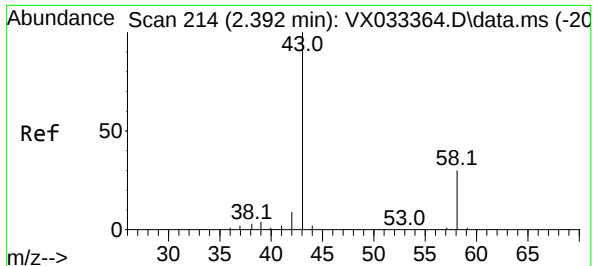
Tgt Ion:128 Resp: 11230
Ion Ratio Lower Upper
128 100
49 143.8 0.0 339.5
130 130.1 0.0 318.0



#13
Acrolein
Concen: 0.421 ug/l
RT: 2.380 min Scan# 212
Delta R.T. 0.140 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion: 56 Resp: 91
Ion Ratio Lower Upper
56 100
55 1439.6 57.2 85.8#

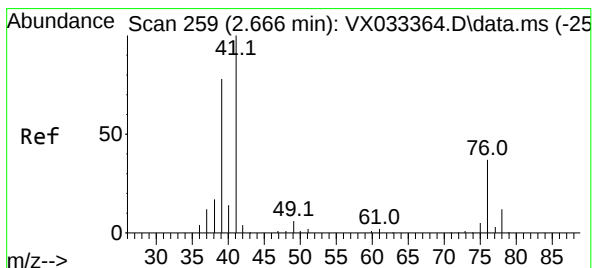
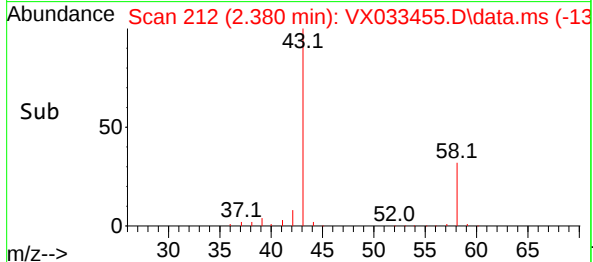
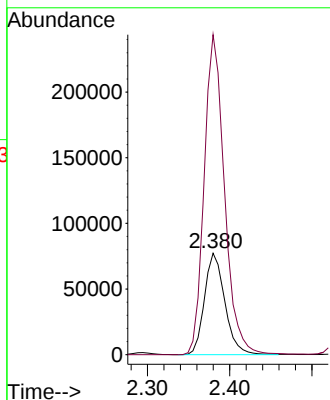
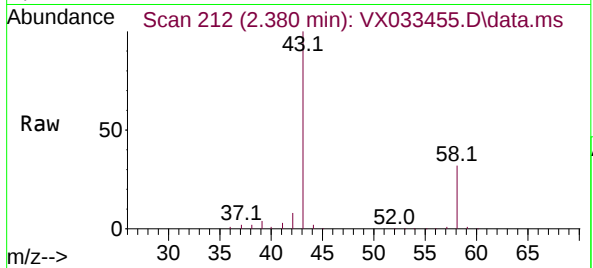




#15
Acetone
Concen: 781.745 ug/l
RT: 2.380 min Scan# 214
Delta R.T. -0.012 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

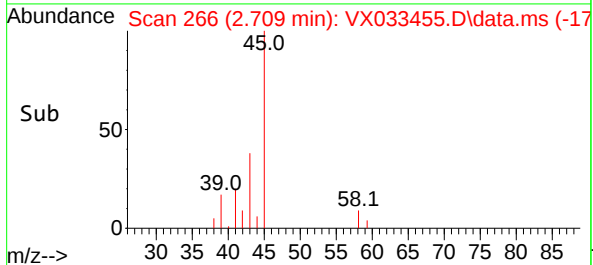
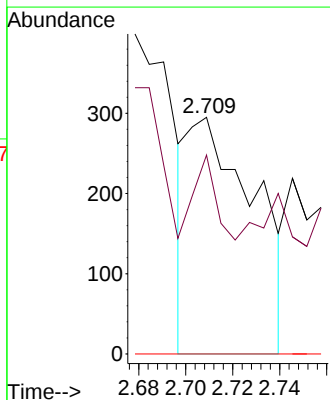
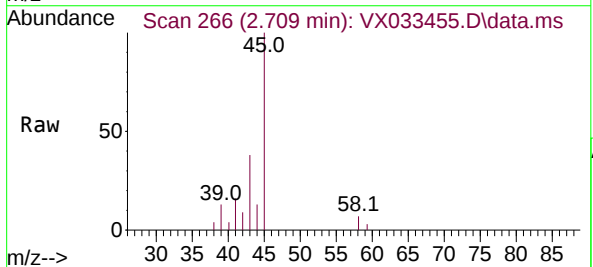
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

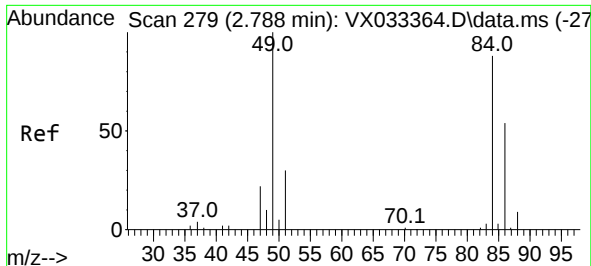
Tgt Ion: 58 Resp: 133298
Ion Ratio Lower Upper
58 100
43 315.5 262.9 394.3



#17
Allyl chloride
Concen: 0.366 ug/l
RT: 2.709 min Scan# 266
Delta R.T. 0.043 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion: 41 Resp: 581
Ion Ratio Lower Upper
41 100
39 71.7 39.1 117.2
76 0.0 18.6 55.8#





#18

Methylene Chloride

Concen: 0.591 ug/l

RT: 2.788 min Scan# 21

Delta R.T. 0.000 min

Lab File: VX033455.D

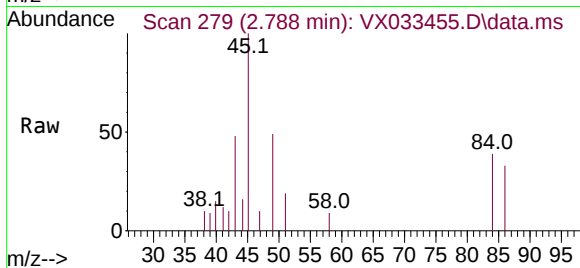
Acq: 16 Dec 2022 12:39

Instrument :

MSVOA_X

ClientSampleId :

EFF-WW



Tgt Ion: 84 Resp: 664

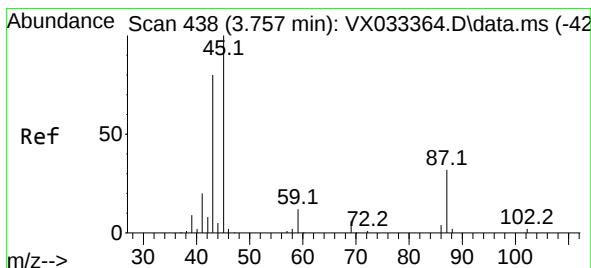
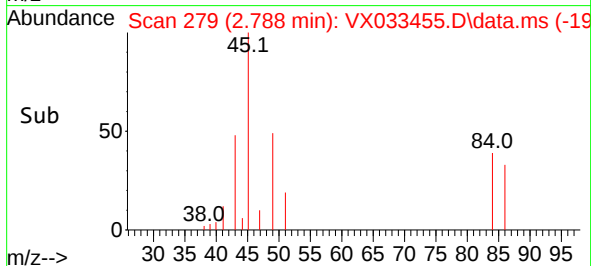
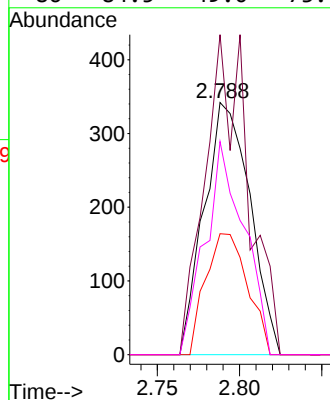
Ion Ratio Lower Upper

84 100

49 126.9 91.2 136.8

51 48.0 27.3 40.9#

86 84.5 49.0 73.4#



#20

Diisopropyl ether

Concen: 0.474 ug/l

RT: 3.764 min Scan# 439

Delta R.T. 0.006 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Tgt Ion: 45 Resp: 1585

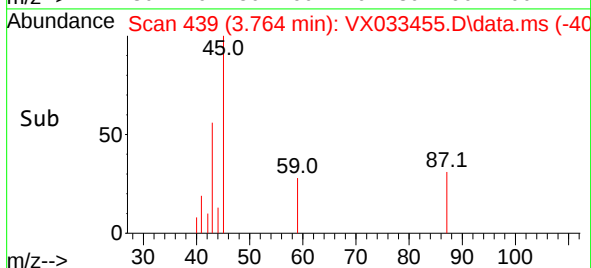
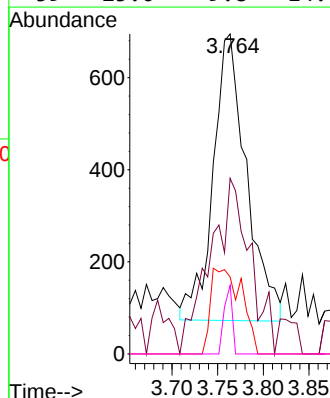
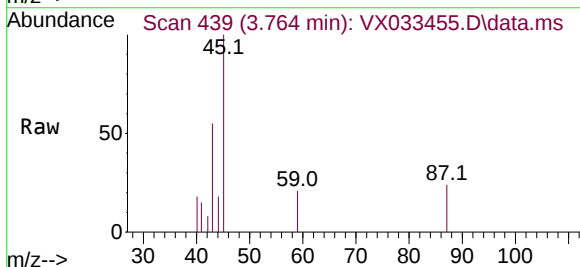
Ion Ratio Lower Upper

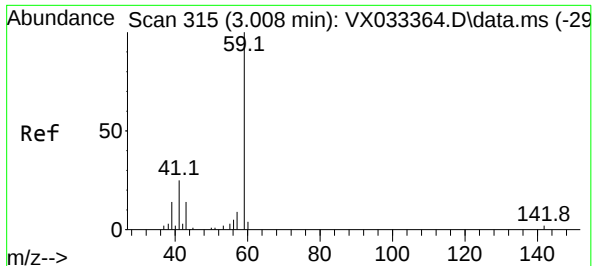
45 100

43 64.0 68.2 102.2#

87 28.1 25.5 38.3

59 25.0 9.8 14.6#

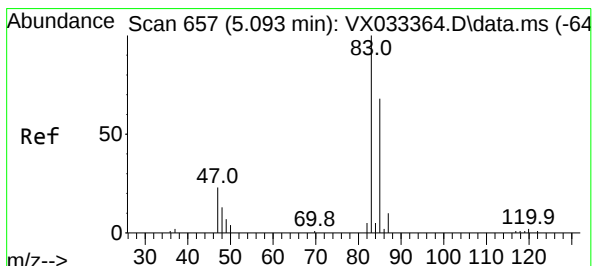
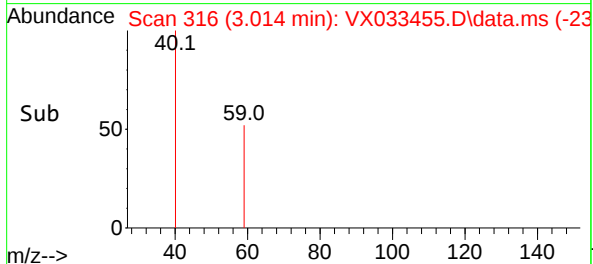
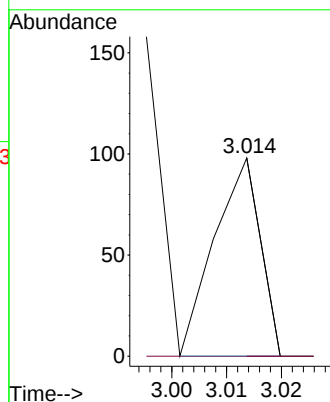
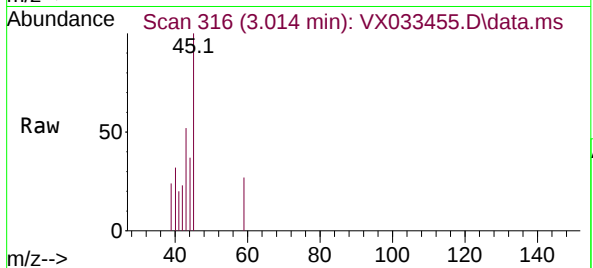




#23
tert-Butyl Alcohol
Concen: 0.269 ug/l
RT: 3.014 min Scan# 315
Delta R.T. 0.006 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

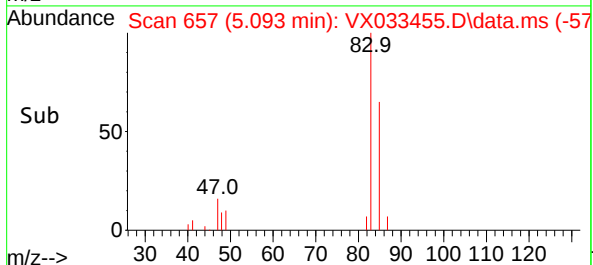
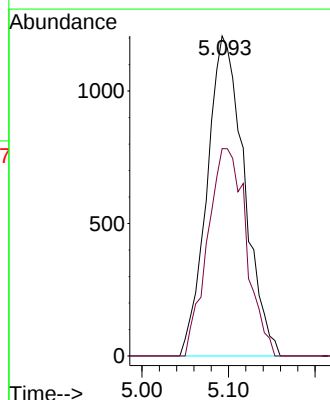
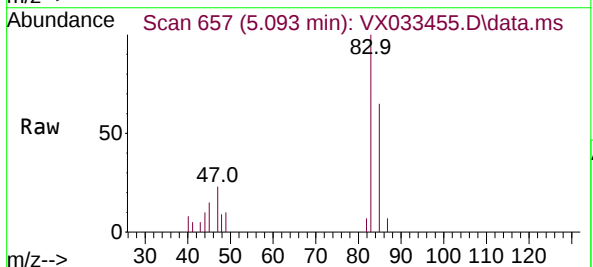
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

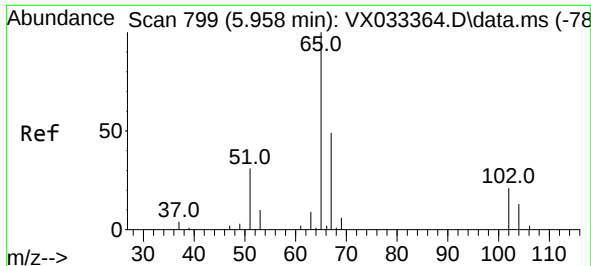
Tgt Ion: 59 Resp: 57
Ion Ratio Lower Upper
59 100
52 0.0 149.0 223.6#



#25
Chloroform
Concen: 1.604 ug/l
RT: 5.093 min Scan# 657
Delta R.T. 0.000 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion: 83 Resp: 3599
Ion Ratio Lower Upper
83 100
85 64.8 54.2 81.2





#27

1,2-Dichloroethane-d4

Concen: 32.299 ug/l

RT: 5.958 min Scan# 799

Delta R.T. 0.000 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Instrument :

MSVOA_X

ClientSampleId :

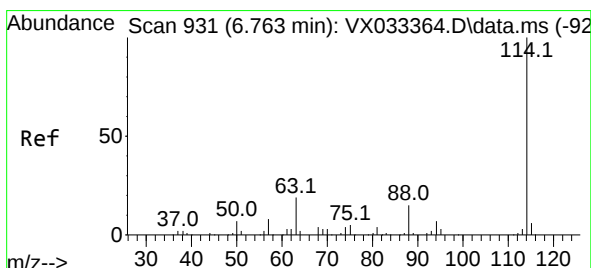
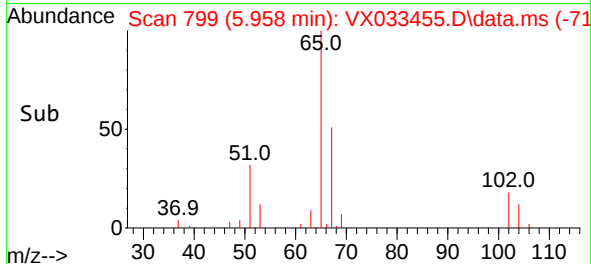
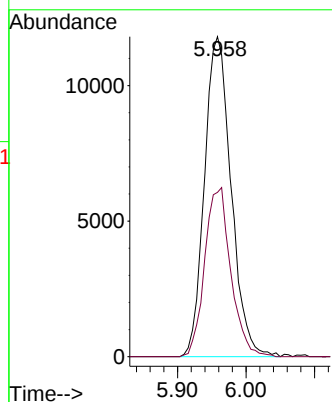
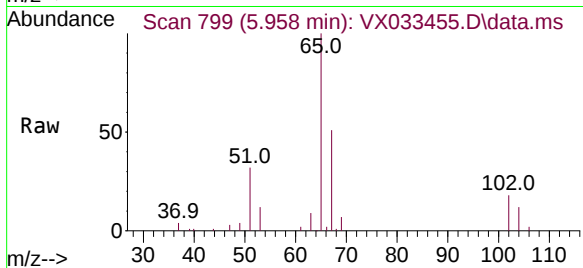
EFF-WW

Tgt Ion: 65 Resp: 31856

Ion Ratio Lower Upper

65 100

67 51.8 39.8 59.8



#28

1,4-Difluorobenzene

Concen: 30.000 ug/l

RT: 6.763 min Scan# 931

Delta R.T. 0.000 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

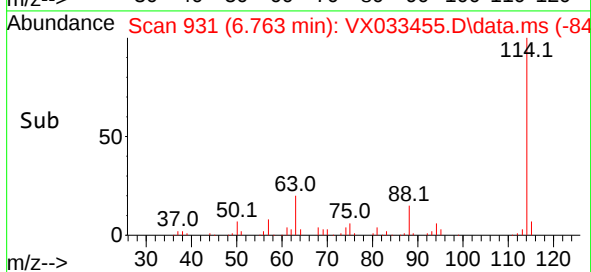
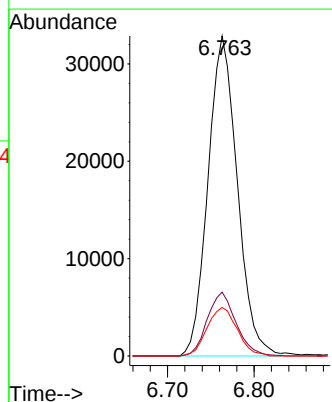
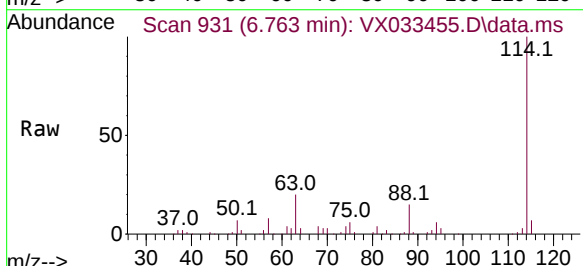
Tgt Ion: 114 Resp: 77263

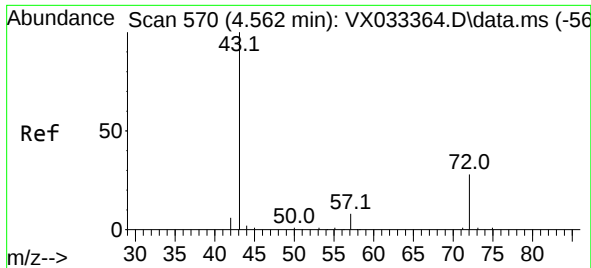
Ion Ratio Lower Upper

114 100

63 19.6 15.2 22.8

88 15.6 12.2 18.4

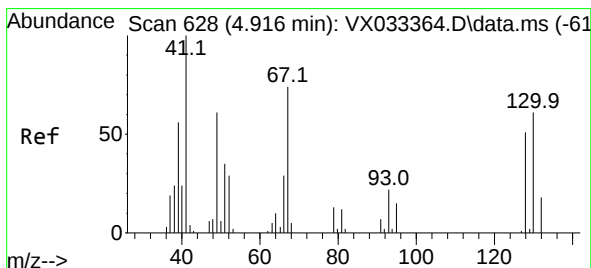
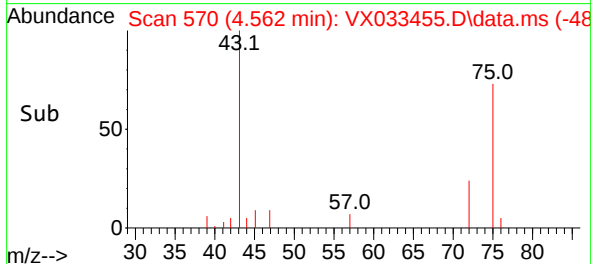
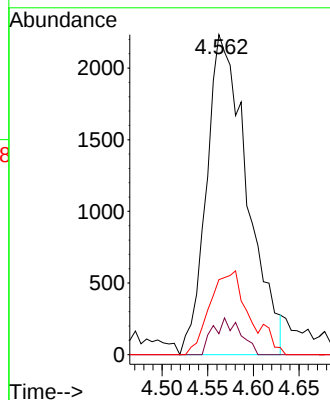
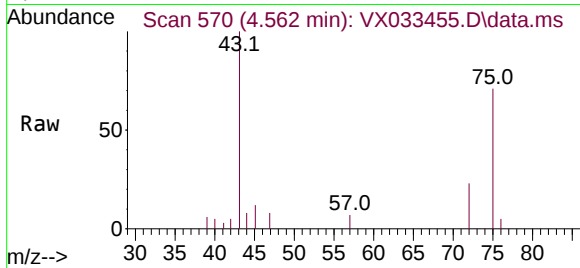




#30
2-Butanone
Concen: 9.463 ug/l
RT: 4.562 min Scan# 51
Delta R.T. 0.000 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

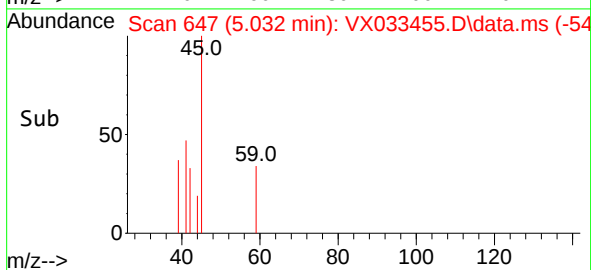
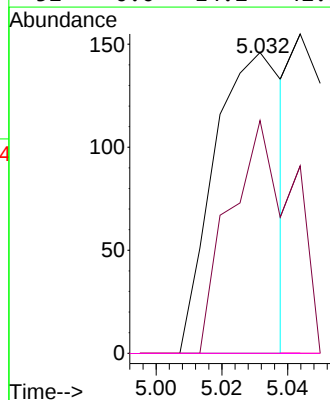
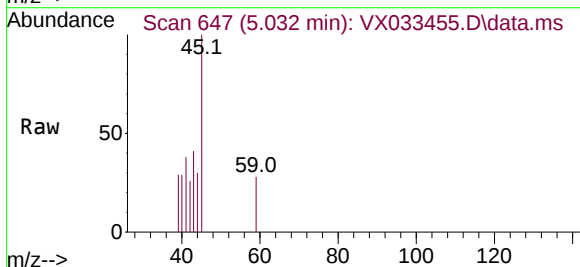
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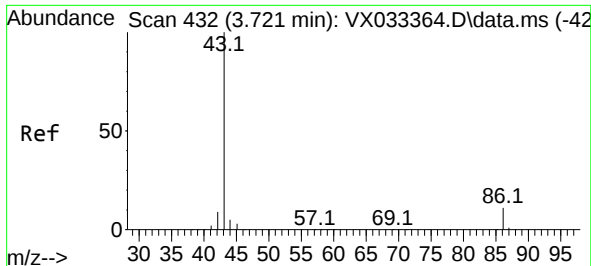
Tgt Ion:	43	Resp:	6908
Ion	Ratio	Lower	Upper
43	100		
57	5.1	6.6	9.8#
72	22.8	22.5	33.7



#35
Methacrylonitrile
Concen: 0.285 ug/l
RT: 5.032 min Scan# 647
Delta R.T. 0.116 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion:	41	Resp:	213
Ion	Ratio	Lower	Upper
41	100		
39	77.4	27.8	83.3
67	0.0	37.0	110.9#
52	0.0	14.2	42.8#

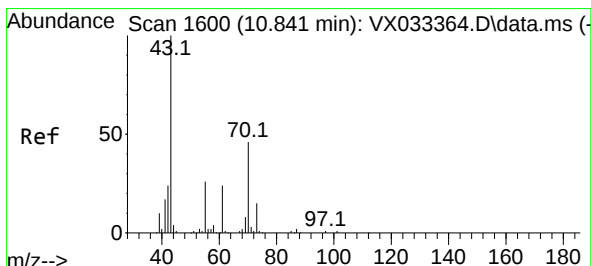
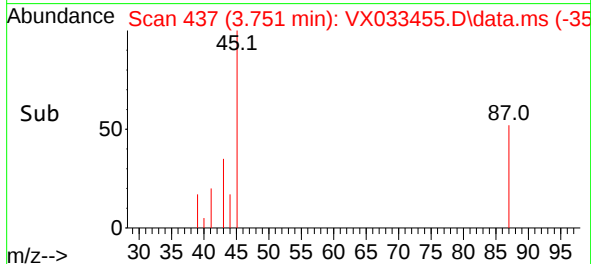
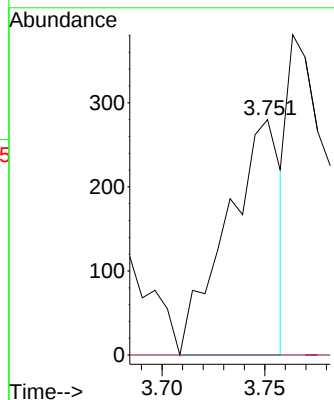
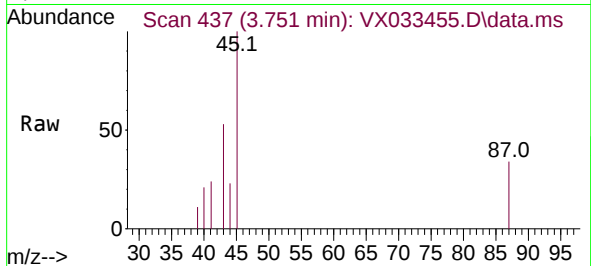




#42
 Vinyl Acetate
 Concen: 0.201 ug/l
 RT: 3.751 min Scan# 41
 Delta R.T. 0.031 min
 Lab File: VX033455.D
 Acq: 16 Dec 2022 12:39

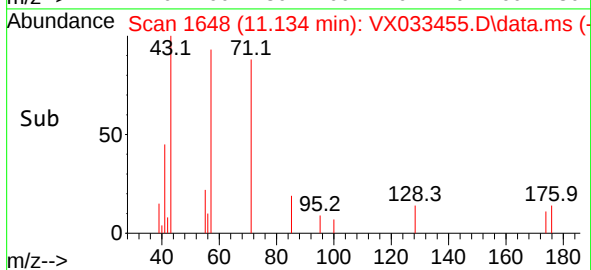
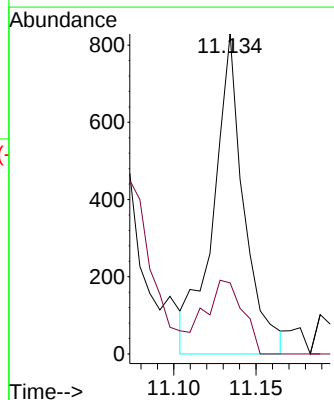
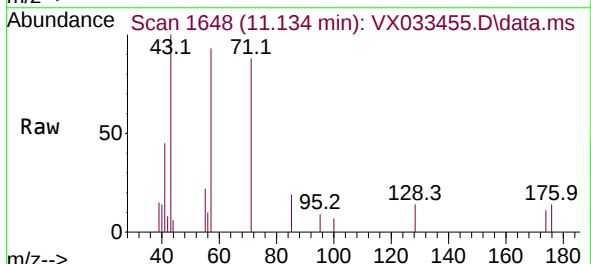
Instrument :
 MSVOA_X
 ClientSampleId :
 EFF-WW

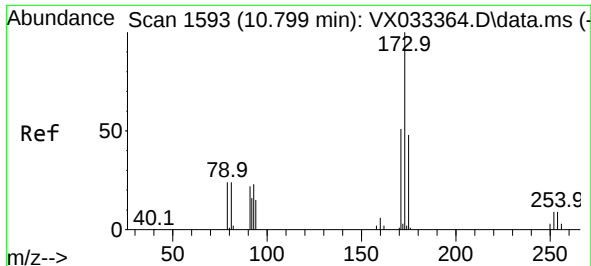
Tgt Ion: 43 Resp: 508
 Ion Ratio Lower Upper
 43 100
 86 0.0 7.8 11.8#



#47
 n-amy1 Acetate
 Concen: 0.574 ug/l
 RT: 11.134 min Scan# 1648
 Delta R.T. 0.293 min
 Lab File: VX033455.D
 Acq: 16 Dec 2022 12:39

Tgt Ion: 43 Resp: 1073
 Ion Ratio Lower Upper
 43 100
 55 27.4 20.6 30.8

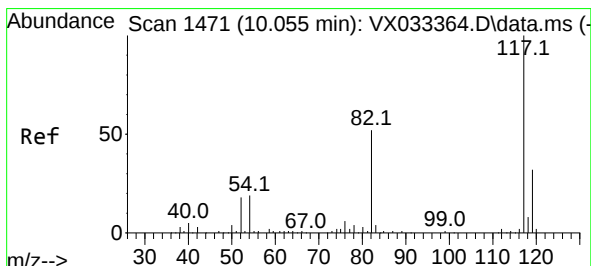
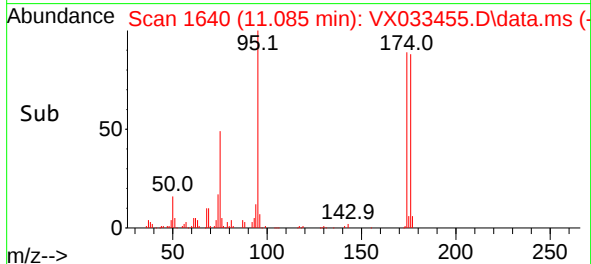
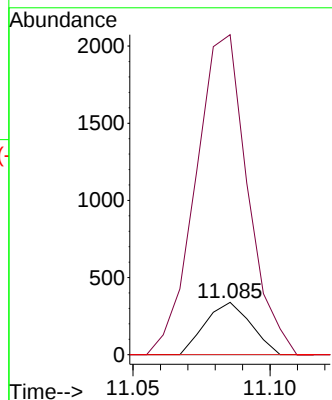
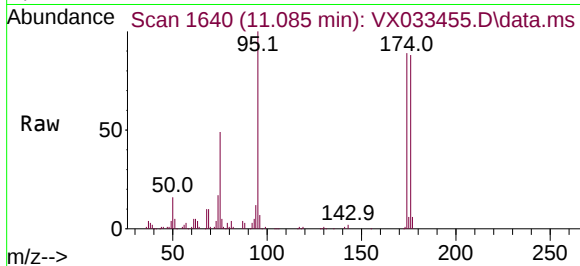




#56
Bromoform
Concen: 0.385 ug/l
RT: 11.085 min Scan# 1640
Delta R.T. 0.287 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

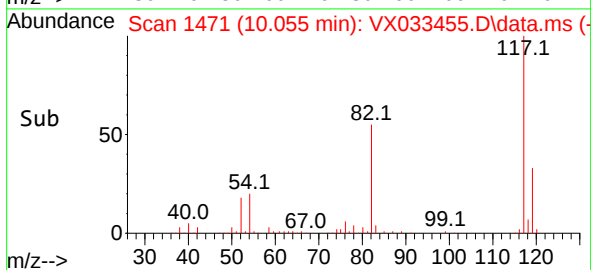
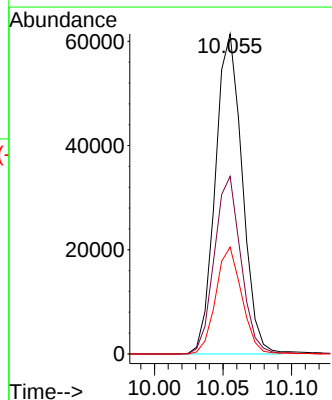
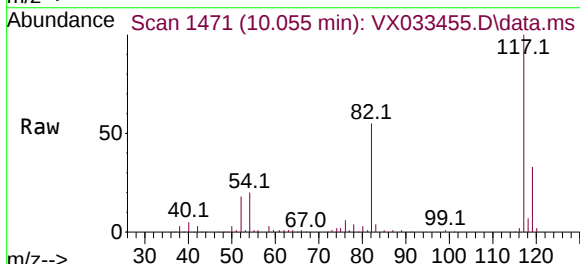
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

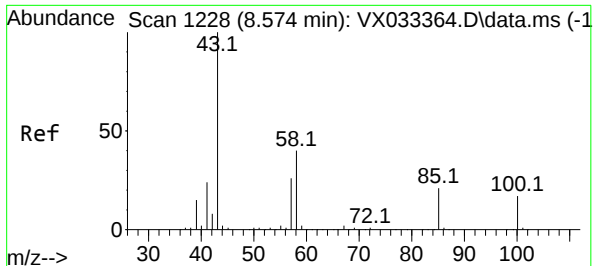
Tgt Ion:173 Resp: 394
Ion Ratio Lower Upper
173 100
175 695.2 39.6 59.4#
254 0.0 7.1 10.7#



#57
Chlorobenzene-d5
Concen: 30.000 ug/l
RT: 10.055 min Scan# 1471
Delta R.T. 0.000 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion:117 Resp: 83909
Ion Ratio Lower Upper
117 100
82 54.9 43.7 65.5
119 32.3 25.6 38.4





#58

4-Methyl-2-Pentanone

Concen: 0.478 ug/l

RT: 8.574 min Scan# 11

Delta R.T. 0.000 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Instrument :

MSVOA_X

ClientSampleId :

EFF-WW

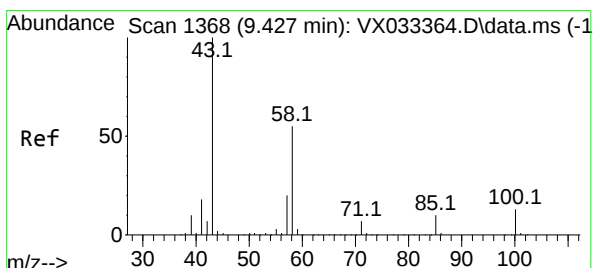
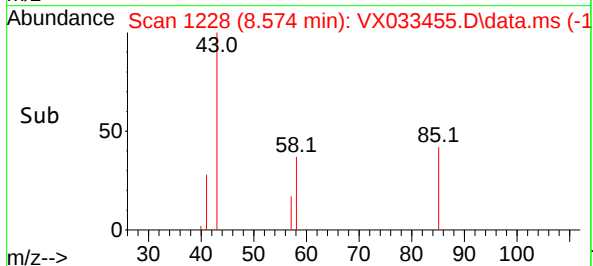
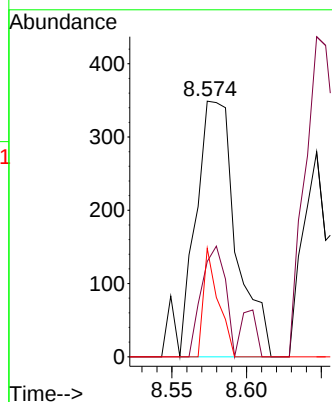
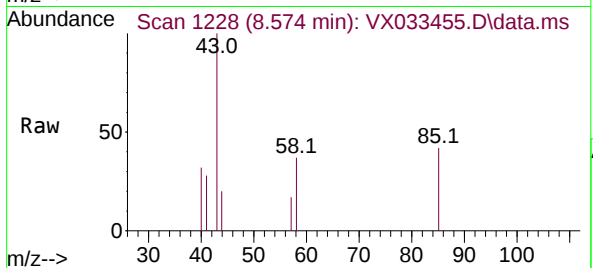
Tgt Ion: 43 Resp: 649

Ion Ratio Lower Upper

43 100

58 25.9 32.3 48.5#

85 15.7 16.6 24.8#



#59

2-Hexanone

Concen: 1.207 ug/l

RT: 9.439 min Scan# 1370

Delta R.T. 0.012 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

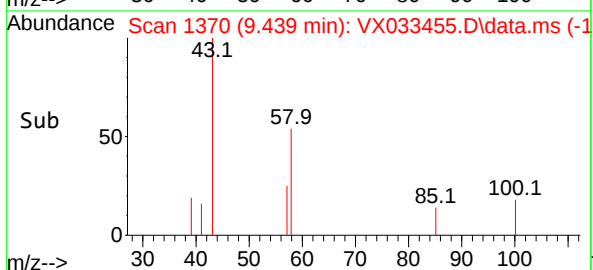
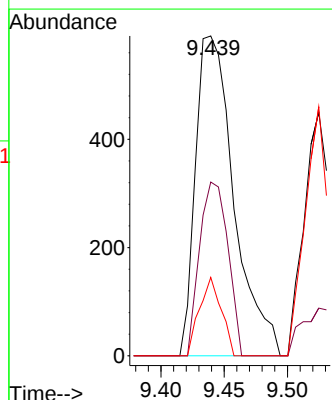
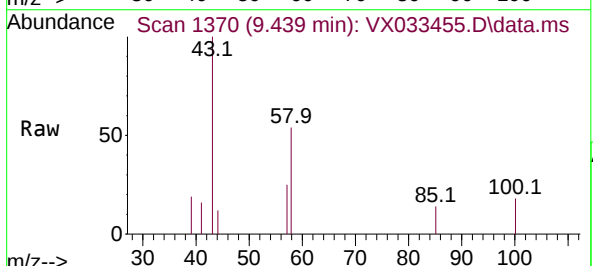
Tgt Ion: 43 Resp: 1252

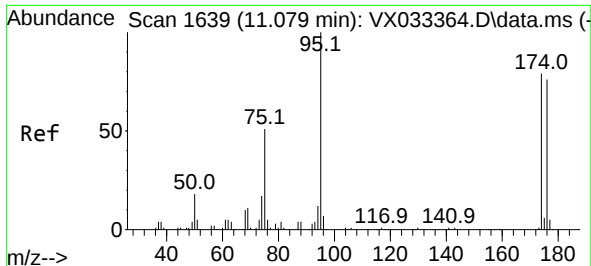
Ion Ratio Lower Upper

43 100

58 39.9 44.4 66.6#

57 13.9 16.2 24.2#

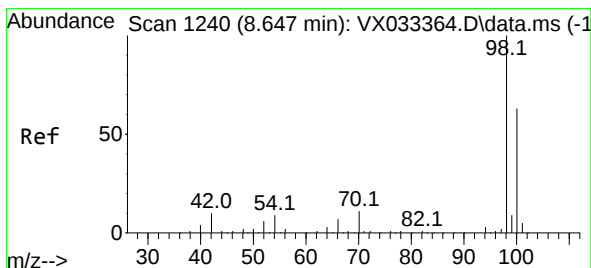
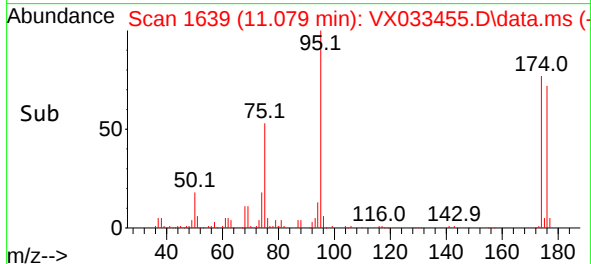
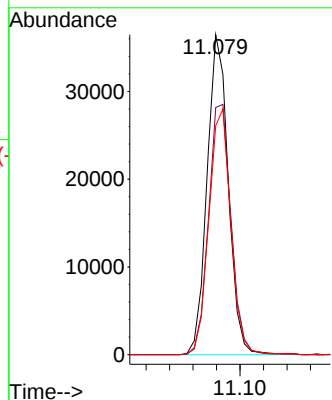
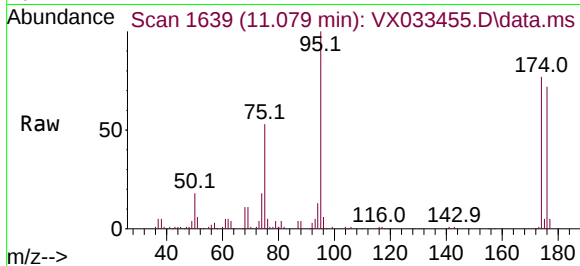




#60
4-Bromofluorobenzene
Concen: 29.297 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. 0.000 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

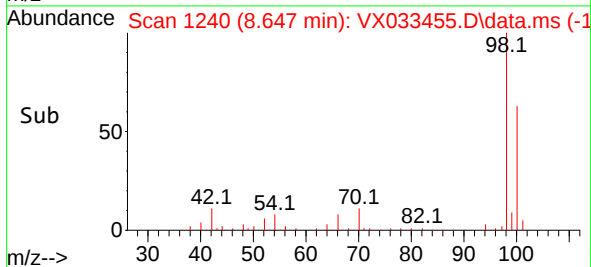
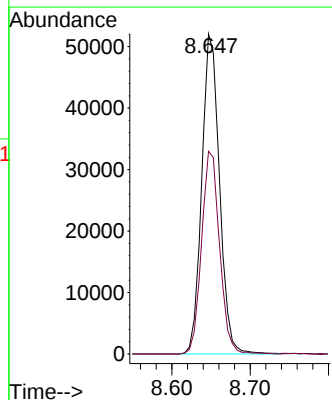
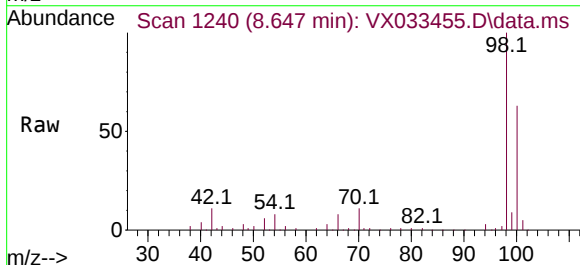
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

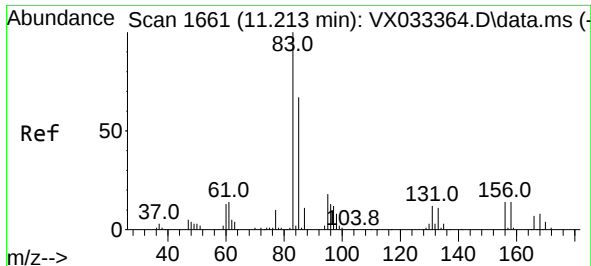
Tgt Ion: 95 Resp: 45530
Ion Ratio Lower Upper
95 100
174 83.3 65.9 98.9
176 79.5 63.3 94.9



#63
Toluene-d8
Concen: 29.309 ug/l
RT: 8.647 min Scan# 1240
Delta R.T. 0.000 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion: 98 Resp: 81809
Ion Ratio Lower Upper
98 100
100 64.4 51.4 77.2

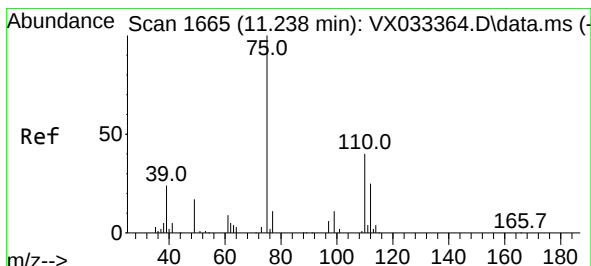
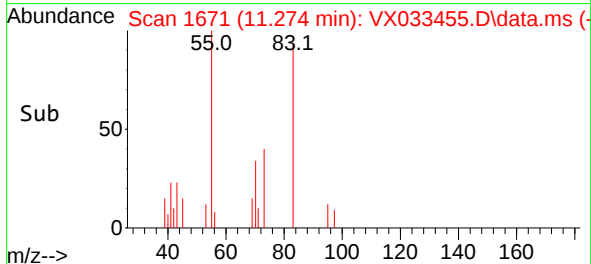
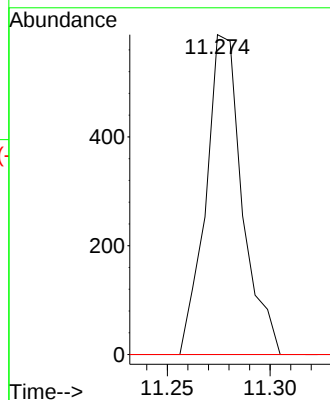
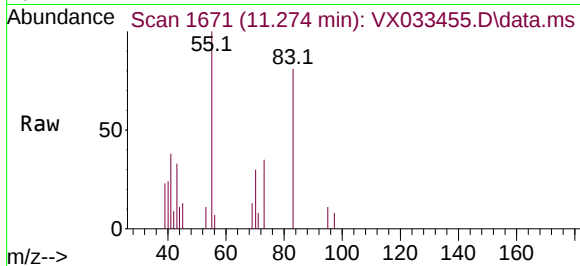




#71
1,1,2,2-Tetrachloroethane
Concen: 0.423 ug/l
RT: 11.274 min Scan# 1639
Delta R.T. 0.061 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

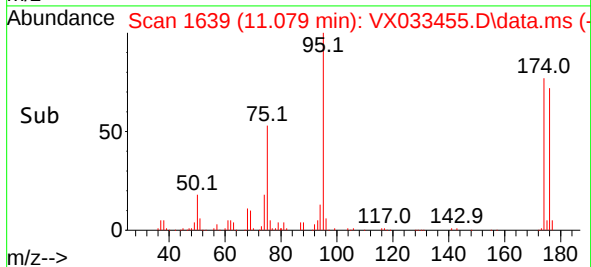
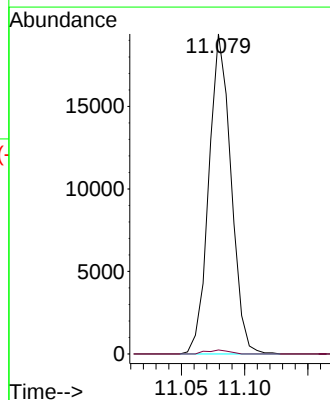
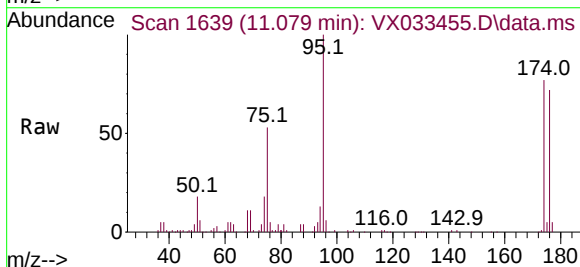
Instrument :
MSVOA_X
ClientSampleId :
EFF-WW

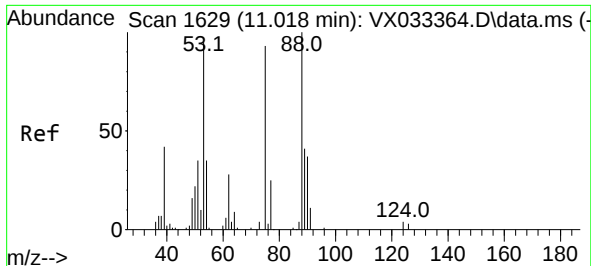
Tgt Ion: 83 Resp: 726
Ion Ratio Lower Upper
83 100
131 0.0 5.4 16.2#
85 36.6 32.6 97.7



#72
1,2,3-Trichloropropane
Concen: 15.497 ug/l
RT: 11.079 min Scan# 1639
Delta R.T. -0.158 min
Lab File: VX033455.D
Acq: 16 Dec 2022 12:39

Tgt Ion: 75 Resp: 23673
Ion Ratio Lower Upper
75 100
77 1.3 0.0 74.4





#77

t-1,4-Dichloro-2-butene

Concen: 46.609 ug/l

RT: 11.079 min Scan# 1

Delta R.T. 0.061 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Instrument :

MSVOA_X

ClientSampleId :

EFF-WW

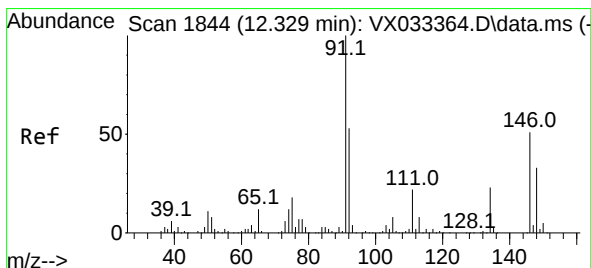
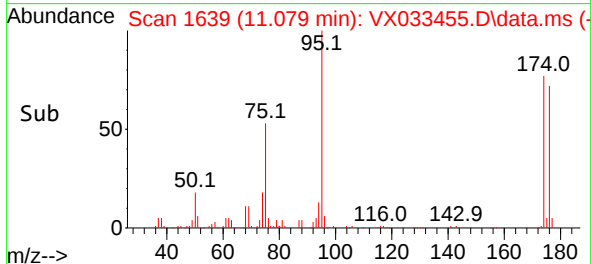
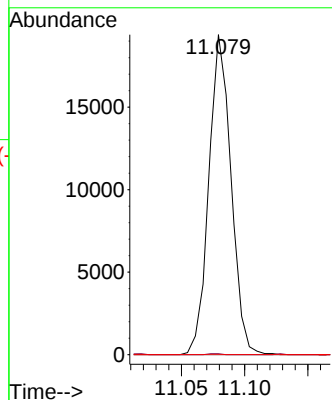
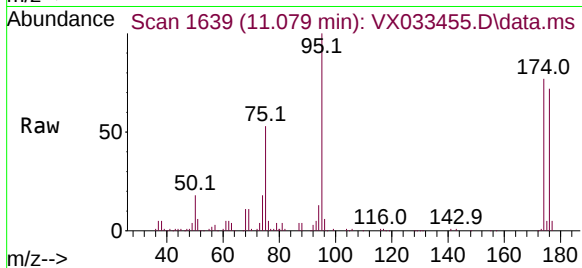
Tgt Ion: 75 Resp: 23673

Ion Ratio Lower Upper

75 100

53 0.3 51.4 154.3#

89 0.0 22.2 66.6#



#85

n-Butylbenzene

Concen: 0.278 ug/l

RT: 12.335 min Scan# 1845

Delta R.T. 0.006 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

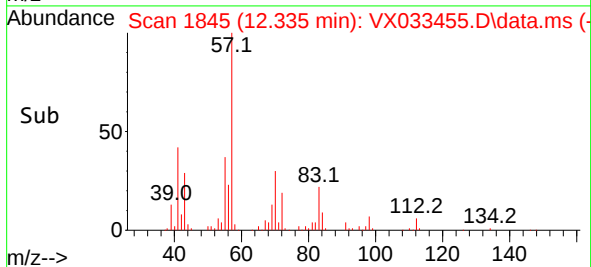
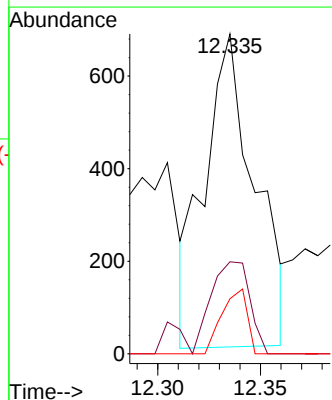
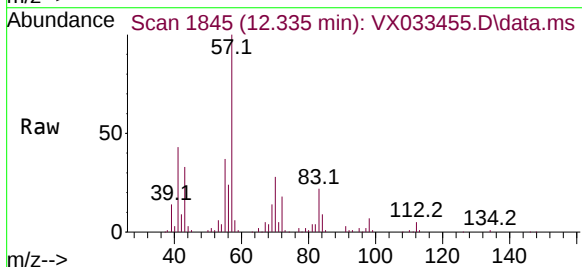
Tgt Ion: 91 Resp: 1149

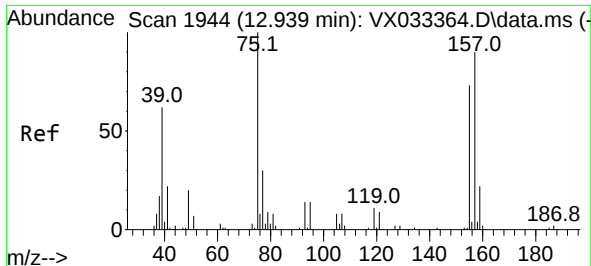
Ion Ratio Lower Upper

91 100

92 22.8 0.0 106.8

134 10.4 0.0 51.8





#88

1,2-Dibromo-3-Chloropropane

Concen: 1.624 ug/l

RT: 12.872 min Scan# 1944

Delta R.T. -0.067 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Instrument :

MSVOA_X

ClientSampleId :

EFF-WW

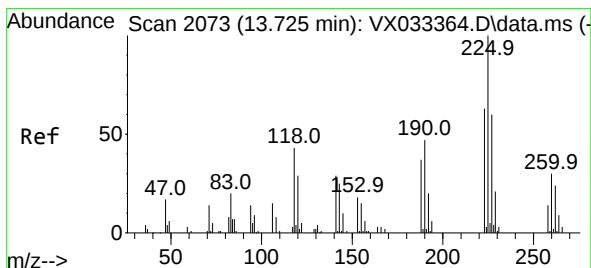
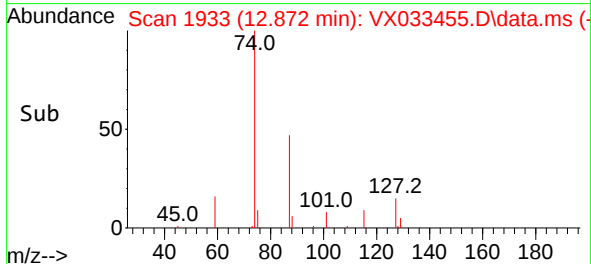
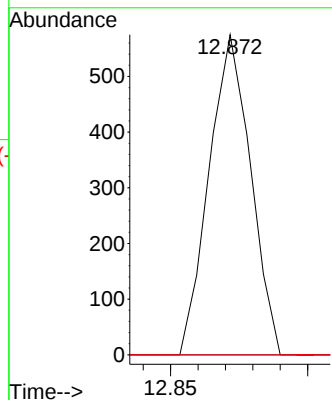
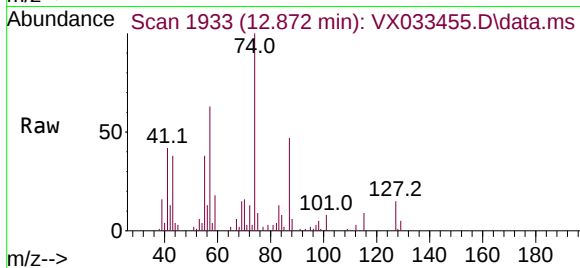
Tgt Ion: 75 Resp: 607

Ion Ratio Lower Upper

75 100

155 0.0 69.6 104.4#

157 0.0 84.8 127.2#



#90

Hexachlorobutadiene

Concen: 0.466 ug/l

RT: 13.725 min Scan# 2073

Delta R.T. 0.000 min

Lab File: VX033455.D

Acq: 16 Dec 2022 12:39

Tgt Ion: 225 Resp: 318

Ion Ratio Lower Upper

225 100

223 53.8 0.0 125.6

227 31.8 0.0 125.4

