

Data Path : Z:\voasrv\HPCHEM1\MSVOA_V\Data\VW062322\
 Data File : VW026547.D
 Acq On : 24 Jun 2022 11:53
 Operator : SY/MD
 Sample : N3401-13
 Misc : 25.0mL/MSVOA_V/WATER
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 MSVOA_V
 ClientSampleId :
 C0AF1

Quant Time: Jun 25 02:33:27 2022
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_V\Method\SFAMVTR062322WMA.M
 Quant Title : TRACE VOA SFAM1.0
 QLast Update : Sat Jun 25 02:21:54 2022
 Response via : Initial Calibration

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

Internal Standards						
1) 1,4-Difluorobenzene	5.622	114	235813	5.000	ug/L	0.00
28) Chlorobenzene-d5	8.853	117	197217	5.000	ug/L	0.00
58) 1,4-Dichlorobenzene-d4	11.249	152	104089	5.000	ug/L	0.00
System Monitoring Compounds						
4) Vinyl Chloride-d3	1.317	65	75023	3.956	ug/L	0.00
Spiked Amount	5.000	Range	40 - 130	Recovery	=	79.200%
7) Chloroethane-d5	1.580	69	65134	4.275	ug/L	0.00
Spiked Amount	5.000	Range	65 - 130	Recovery	=	85.600%
11) 1,1-Dichloroethene-d2	2.117	63	101058	2.999	ug/L	0.00
Spiked Amount	5.000	Range	60 - 125	Recovery	=	60.000%
20) 2-Butanone-d5	3.918	46	98077	52.018	ug/L	0.00
Spiked Amount	50.000	Range	40 - 130	Recovery	=	104.040%
24) Chloroform-d	4.358	84	134297	4.332	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	86.600%
26) 1,2-Dichloroethane-d4	5.040	65	55287	4.630	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	92.600%
32) Benzene-d6	5.056	84	278863	4.923	ug/L	0.00
Spiked Amount	5.000	Range	70 - 125	Recovery	=	98.400%
36) 1,2-Dichloropropane-d6	6.075	67	81469	5.230	ug/L	0.00
Spiked Amount	5.000	Range	60 - 140	Recovery	=	104.600%
41) Toluene-d8	7.323	98	239050	4.693	ug/L	0.00
Spiked Amount	5.000	Range	70 - 130	Recovery	=	93.800%
43) trans-1,3-Dichloroprop...	7.628	79	23160	5.752	ug/L	0.00
Spiked Amount	5.000	Range	55 - 130	Recovery	=	115.000%
46) 2-Hexanone-d5	8.091	63	85234	55.575	ug/L	0.00
Spiked Amount	50.000	Range	45 - 130	Recovery	=	111.160%
56) 1,1,2,2-Tetrachloroeth...	10.214	84	52940	5.195	ug/L	0.00
Spiked Amount	5.000	Range	65 - 120	Recovery	=	104.000%
66) 1,2-Dichlorobenzene-d4	11.622	152	88233	5.122	ug/L	0.00
Spiked Amount	5.000	Range	80 - 120	Recovery	=	102.400%
Target Compounds						
					Qvalue	
5) Vinyl chloride	1.323	62	2525	0.121	ug/L #	1
8) Chloroethane	1.597	64	688352	48.406	ug/L	93
12) 1,1-Dichloroethene	2.124	96	1333	0.084	ug/L #	1
14) Carbon disulfide	2.310	76	2815	0.067	ug/L #	94
15) Methyl Acetate	2.506	43	8877	2.574	ug/L #	47
18) trans-1,2-Dichloroethene	2.770	96	1222	0.075	ug/L	94
19) 1,1-Dichloroethane	3.201	63	48628	1.667	ug/L	98
21) 2-Butanone	3.773	43	14339	7.969	ug/L #	48
22) cis-1,2-Dichloroethene	3.928	96	4043	0.251	ug/L	93
29) 1,1,1-Trichloroethane	4.616	97	19612	0.808	ug/L	98
30) Cyclohexane	4.686	56	311174	16.195	ug/L	96
31) Carbon tetrachloride	4.622	117	2392	0.118	ug/L	96
33) Benzene	5.111	78	20910	0.363	ug/L	100
35) Methylcyclohexane	6.137	83	294607	13.155	ug/L	93
37) 1,2-Dichloropropane	6.133	63	2326	0.168	ug/L #	25
38) Bromodichloromethane	6.458	83	1098	0.067	ug/L #	1
39) cis-1,3-Dichloropropene	6.989	75	1531	0.110	ug/L #	1
40) 4-Methyl-2-pentanone	7.403	43	337530	71.999	ug/L #	42
44) trans-1,3-Dichloropropene	7.403	75	395335	38.101	ug/L #	1

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

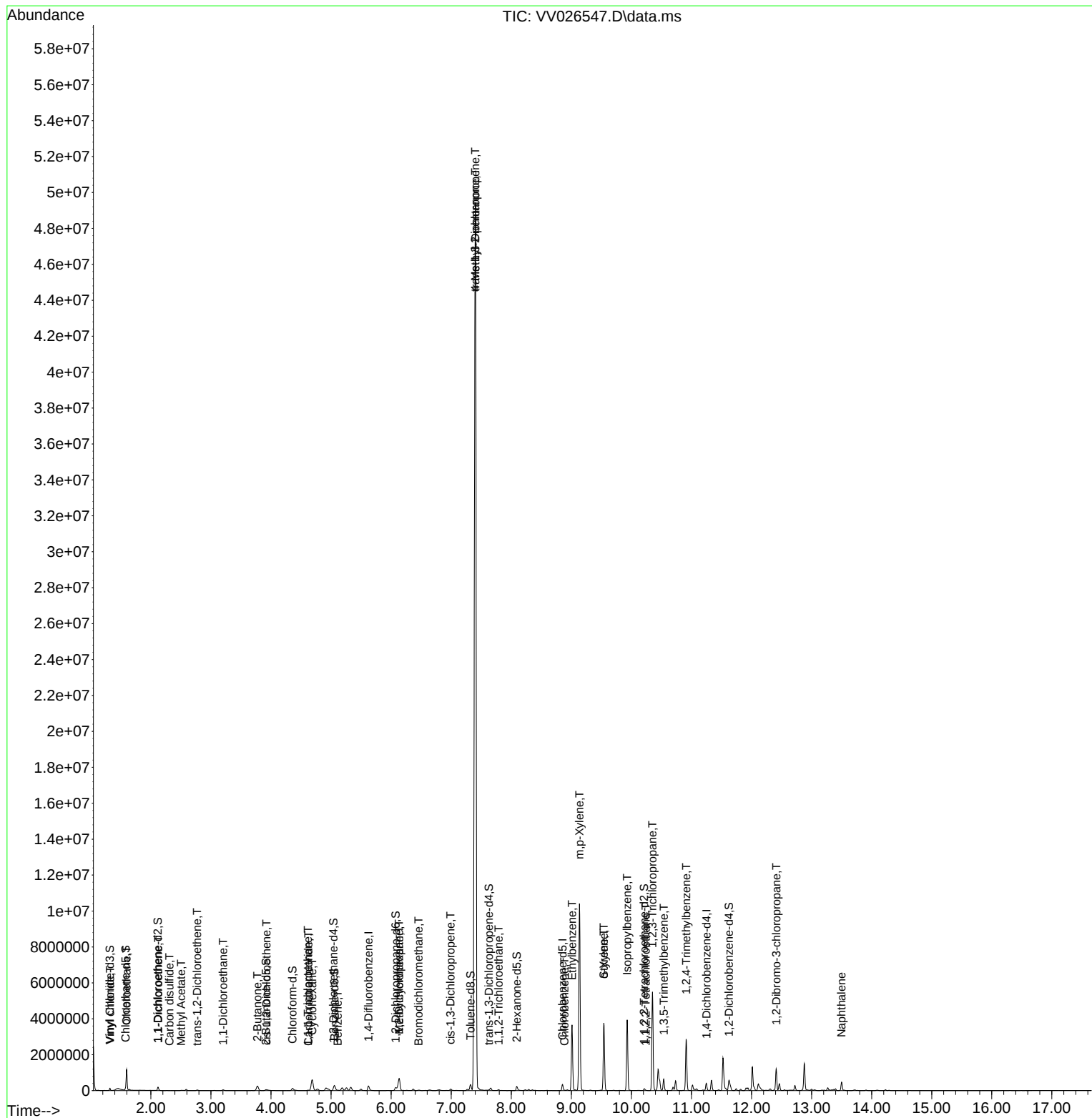
45) 1,1,2-Trichloroethane	7.789	97	18302	2.091	ug/L #	21
51) Chlorobenzene	8.886	112	5010	0.129	ug/L	98
52) Ethylbenzene	9.011	91	2482117	40.373	ug/L	100
53) m,p-Xylene	9.136	106	2949253	122.969	ug/L	96
54) o-Xylene	9.542	106	991634	44.049	ug/L	99
55) Styrene	9.542	104	49936	1.339	ug/L #	1
57) 1,1,2,2-Tetrachloroethane	10.239	83	1492	0.153	ug/L #	49
60) Isopropylbenzene	9.931	105	2504117	39.008	ug/L	100
61) 1,2,3-Trichloropropane	10.352	75	23360	3.466	ug/L #	1
62) 1,3,5-Trimethylbenzene	10.538	105	339873	6.698	ug/L	99
63) 1,2,4-Trimethylbenzene	10.911	105	1540393	30.785	ug/L	100
68) 1,2-Dibromo-3-chloropr...	12.413	75	4594	3.800	ug/L #	1
71) Naphthalene	13.500	128	376701	18.213	ug/L	99

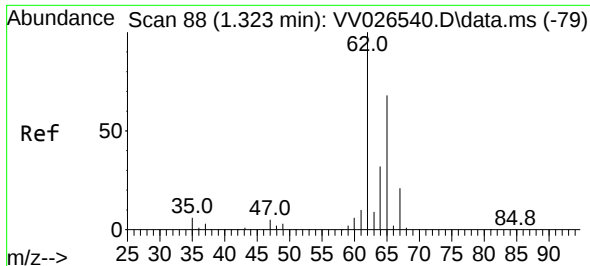
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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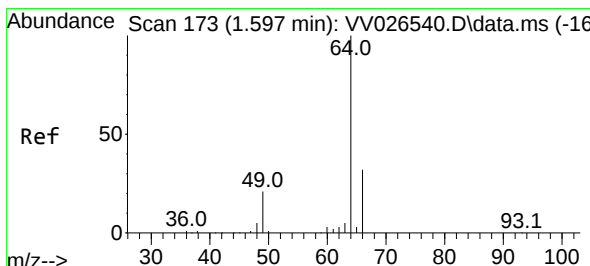
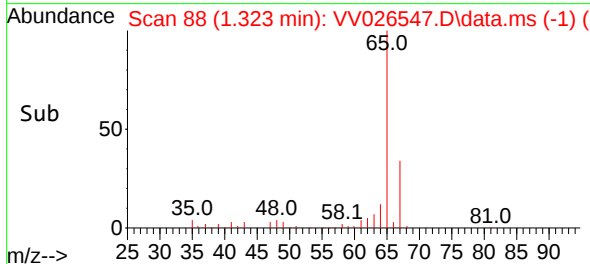
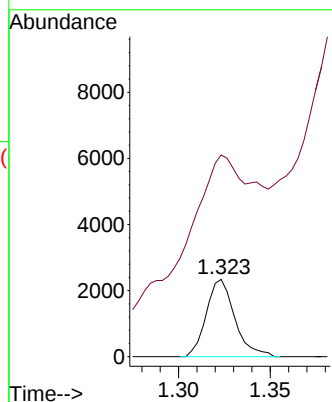
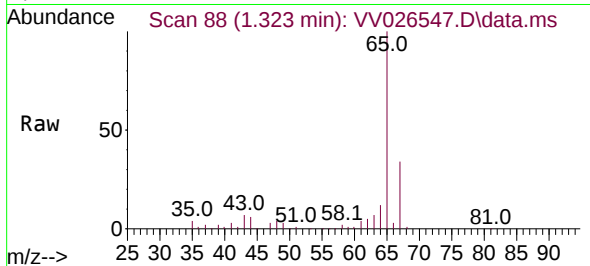




#5
 Vinyl chloride
 Concen: 0.121 ug/L
 RT: 1.323 min Scan# 88
 Delta R.T. -0.000 min
 Lab File: VV026547.D
 Acq: 24 Jun 2022 11:53

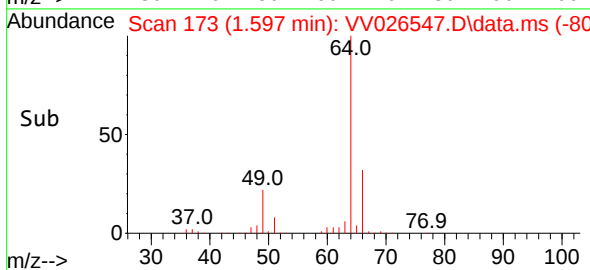
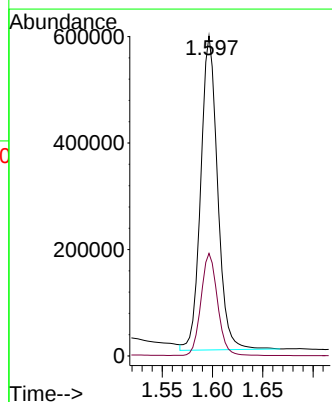
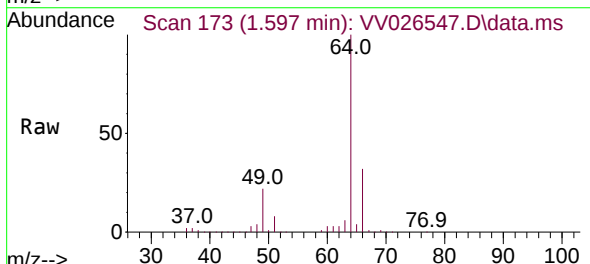
Instrument :
 MSVOA_V
 ClientSampleId :
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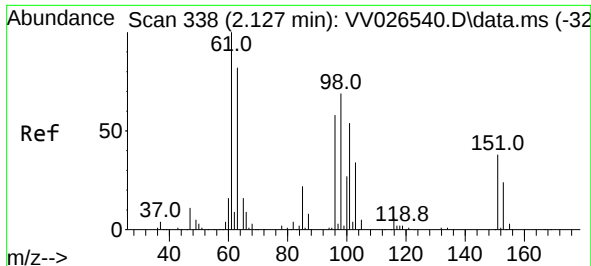
Tgt Ion: 62 Resp: 2525
 Ion Ratio Lower Upper
 62 100
 64 261.0 26.2 48.6#



#8
 Chloroethane
 Concen: 48.406 ug/L
 RT: 1.597 min Scan# 173
 Delta R.T. -0.000 min
 Lab File: VV026547.D
 Acq: 24 Jun 2022 11:53

Tgt Ion: 64 Resp: 688352
 Ion Ratio Lower Upper
 64 100
 66 32.1 20.0 37.2





#12

1,1-Dichloroethene

Concen: 0.084 ug/L

RT: 2.124 min Scan# 31

Delta R.T. -0.003 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

C0AF1

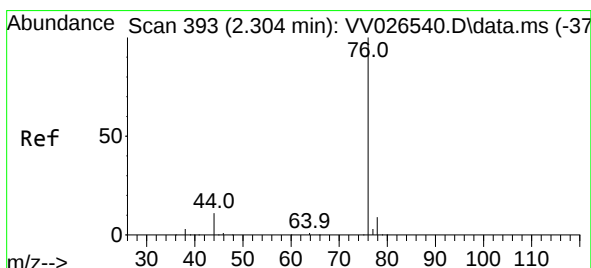
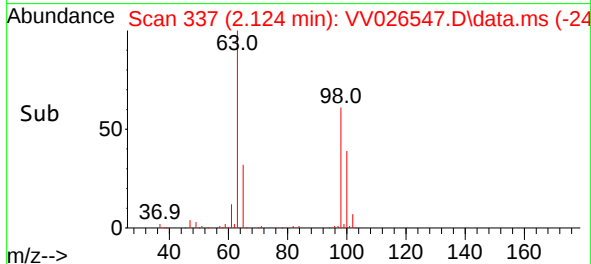
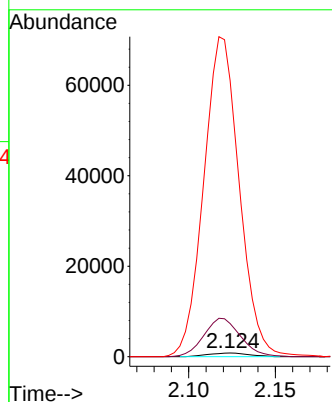
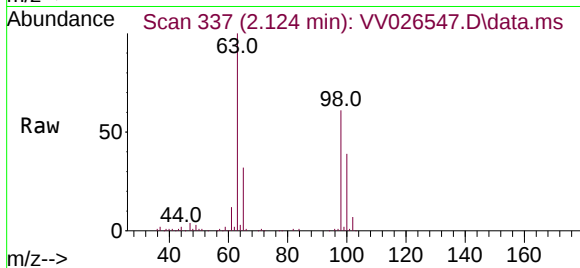
Tgt Ion: 96 Resp: 1333

Ion Ratio Lower Upper

96 100

61 895.6 115.4 214.4#

63 7464.1 87.4 162.2#



#14

Carbon disulfide

Concen: 0.067 ug/L

RT: 2.310 min Scan# 395

Delta R.T. 0.006 min

Lab File: VV026547.D

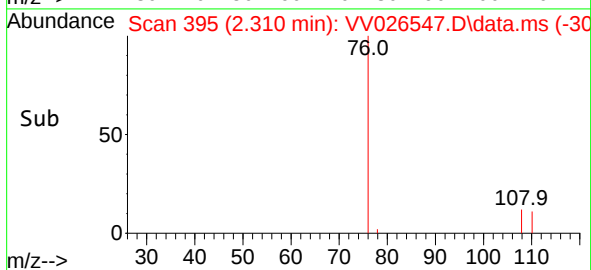
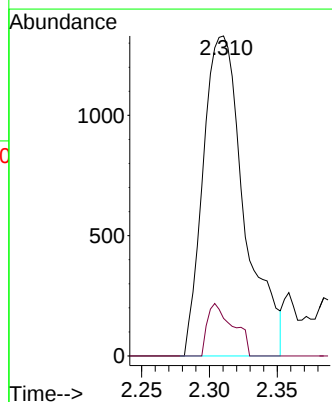
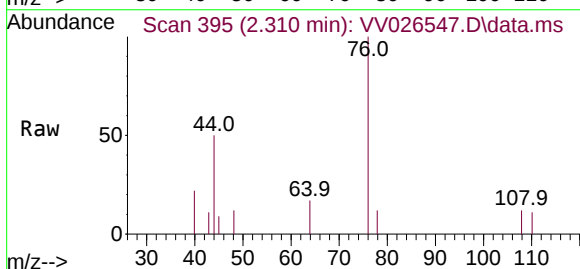
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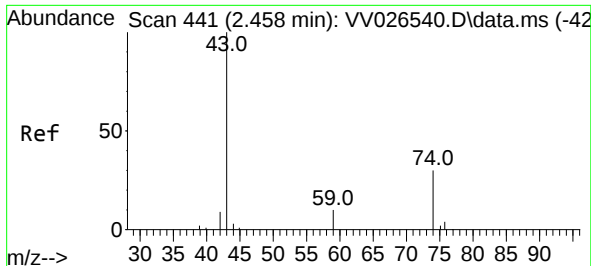
Tgt Ion: 76 Resp: 2815

Ion Ratio Lower Upper

76 100

78 11.7 7.8 11.6#

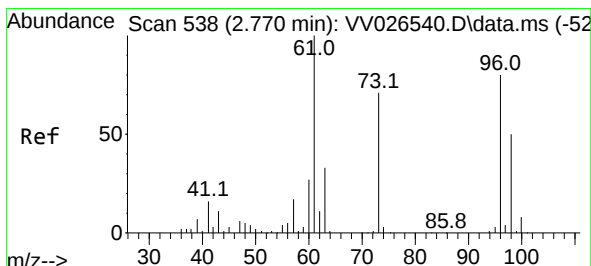
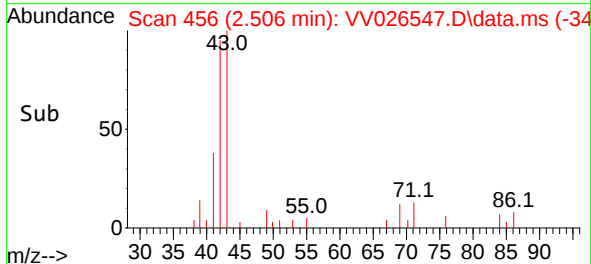
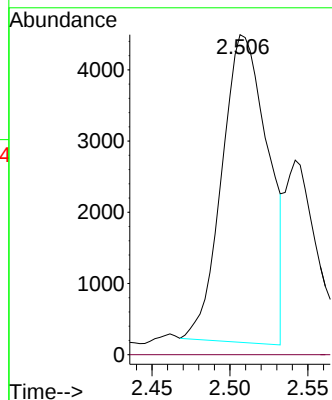
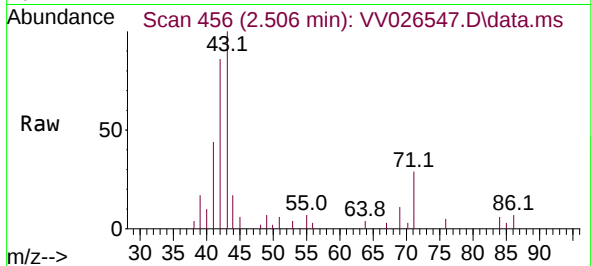




#15
Methyl Acetate
Concen: 2.574 ug/L
RT: 2.506 min Scan# 41
Delta R.T. 0.048 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

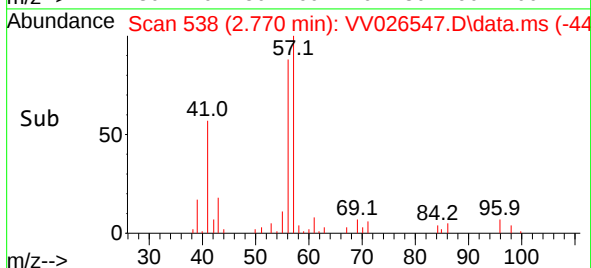
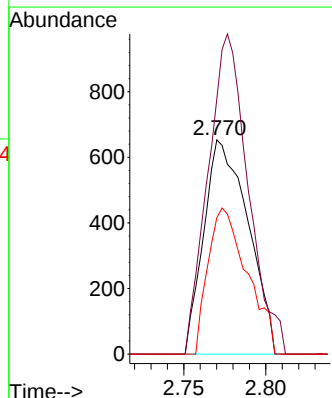
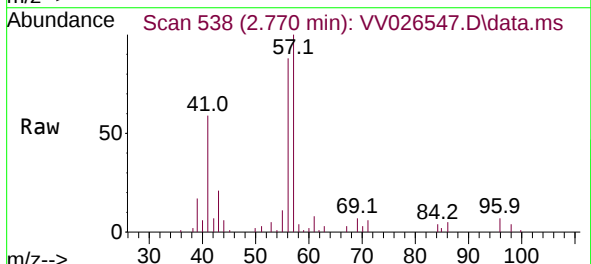
Instrument :
MSVOA_V
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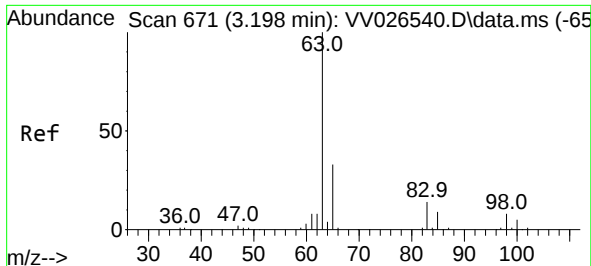
Tgt Ion: 43 Resp: 8877
Ion Ratio Lower Upper
43 100
74 0.0 22.1 33.1#



#18
trans-1,2-Dichloroethene
Concen: 0.075 ug/L
RT: 2.770 min Scan# 538
Delta R.T. -0.000 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 96 Resp: 1222
Ion Ratio Lower Upper
96 100
61 119.3 90.4 167.8
98 63.7 45.6 84.8





#19

1,1-Dichloroethane

Concen: 1.667 ug/L

RT: 3.201 min Scan# 61

Delta R.T. 0.003 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

C0AF1

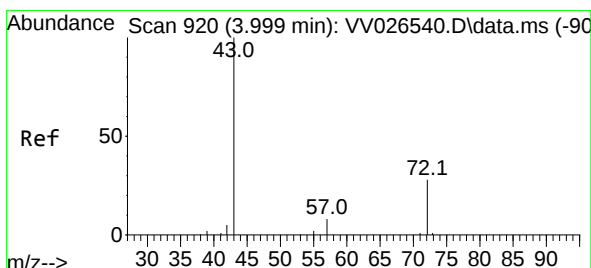
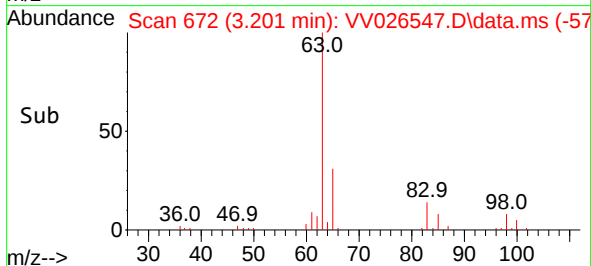
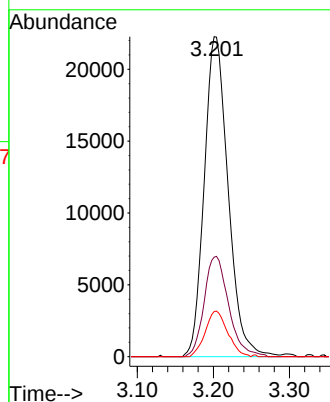
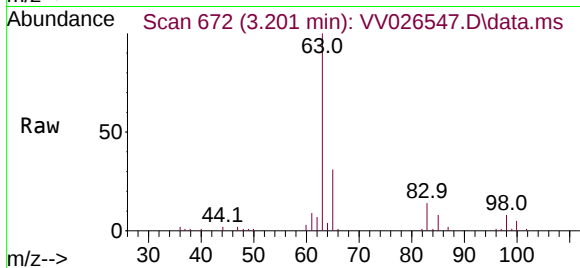
Tgt Ion: 63 Resp: 48628

Ion Ratio Lower Upper

63 100

65 31.1 23.0 42.6

83 14.1 10.2 19.0



#21

2-Butanone

Concen: 7.969 ug/L

RT: 3.773 min Scan# 850

Delta R.T. -0.225 min

Lab File: VV026547.D

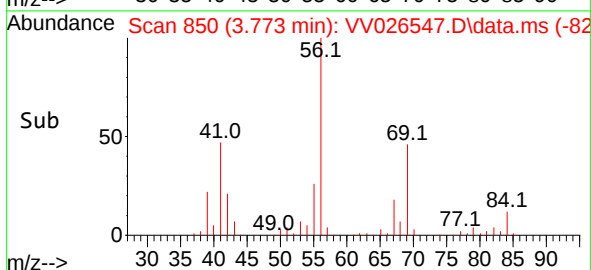
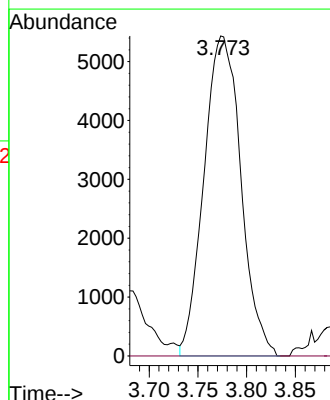
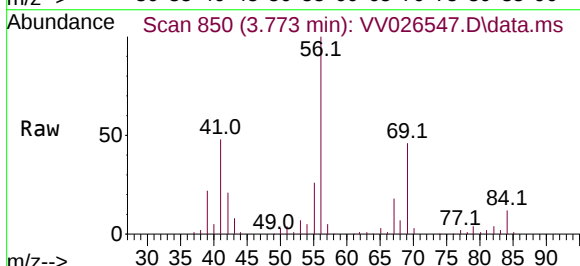
Acq: 24 Jun 2022 11:53

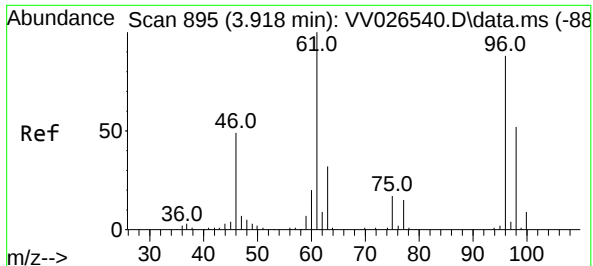
Tgt Ion: 43 Resp: 14339

Ion Ratio Lower Upper

43 100

72 0.0 13.5 40.5#





#22

cis-1,2-Dichloroethene

Concen: 0.251 ug/L

RT: 3.928 min Scan# 89

Delta R.T. 0.009 min

Lab File: VV026547.D

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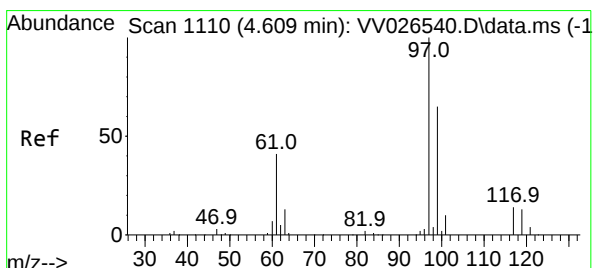
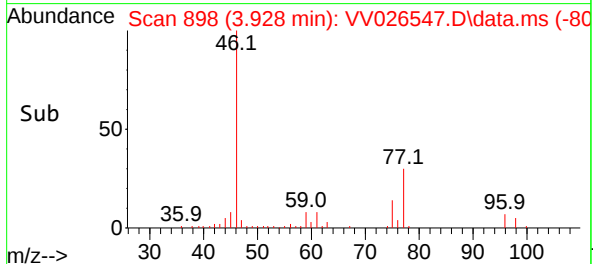
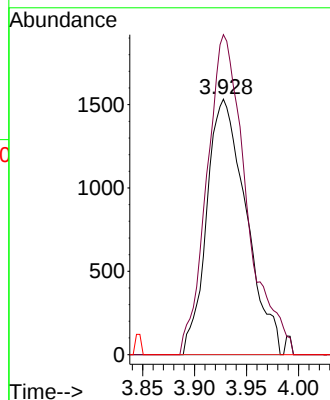
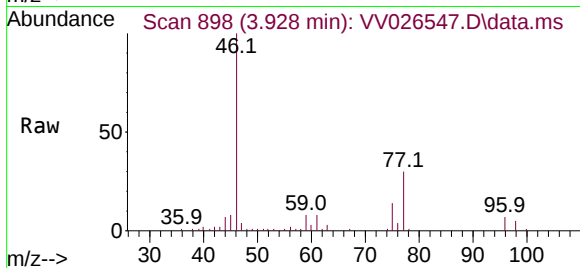
Tgt Ion: 96 Resp: 4043

Ion Ratio Lower Upper

96 100

61 125.2 82.0 152.2

68 0.0 0.0 0.0



#29

1,1,1-Trichloroethane

Concen: 0.808 ug/L

RT: 4.616 min Scan# 1112

Delta R.T. 0.006 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

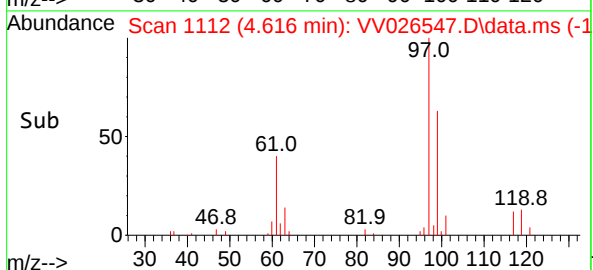
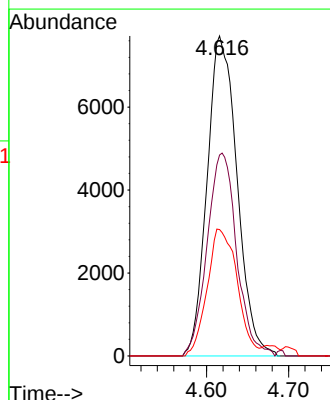
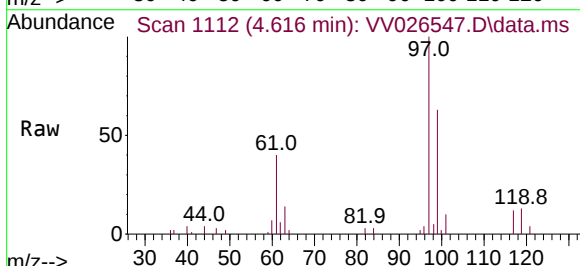
Tgt Ion: 97 Resp: 19612

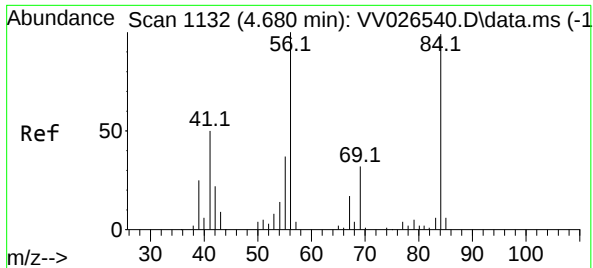
Ion Ratio Lower Upper

97 100

99 62.6 51.0 76.4

61 39.7 33.0 49.4

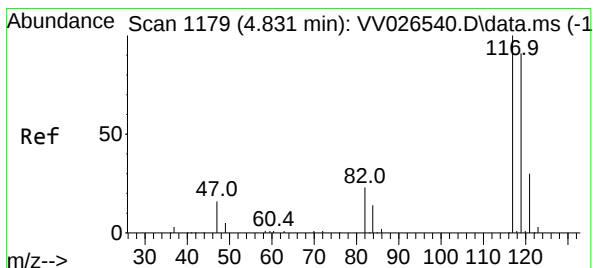
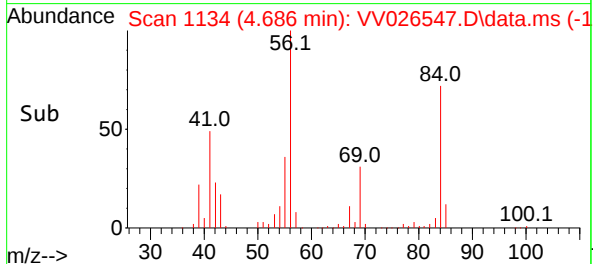
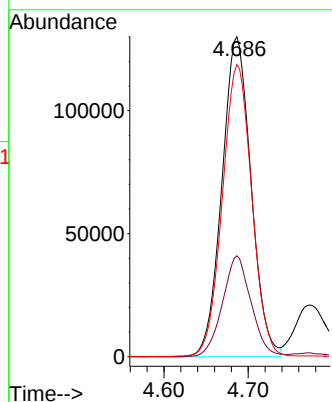
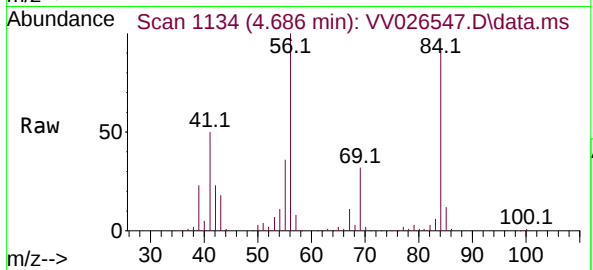




#30
Cyclohexane
Concen: 16.195 ug/L
RT: 4.686 min Scan# 1114
Delta R.T. 0.006 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

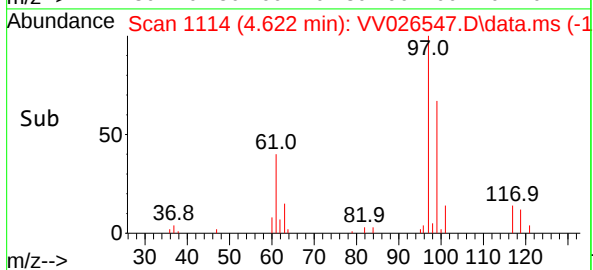
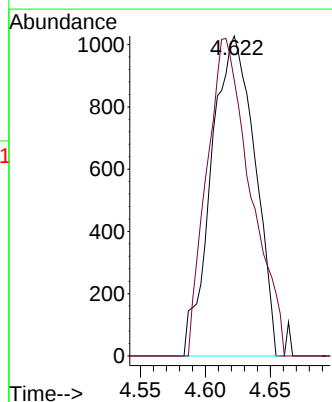
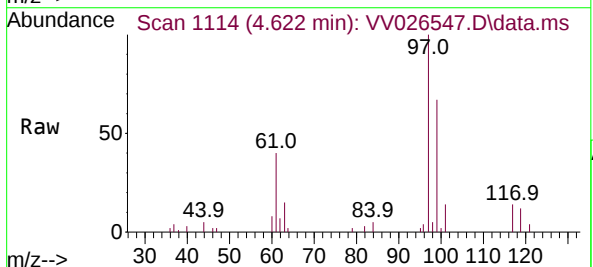
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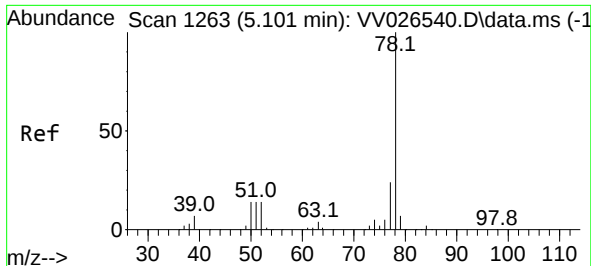
Tgt Ion: 56 Resp: 311174
Ion Ratio Lower Upper
56 100
69 31.0 25.4 38.2
84 92.2 77.8 116.6



#31
Carbon tetrachloride
Concen: 0.118 ug/L
RT: 4.622 min Scan# 1114
Delta R.T. -0.209 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 117 Resp: 2392
Ion Ratio Lower Upper
117 100
119 99.7 76.9 115.3

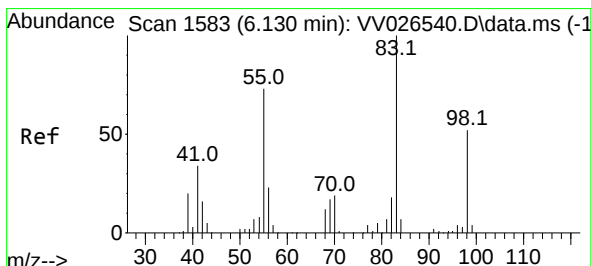
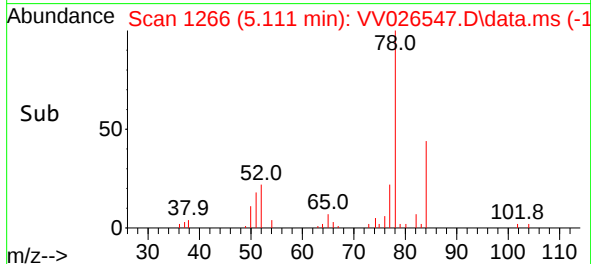
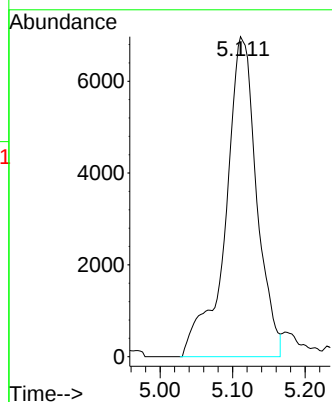
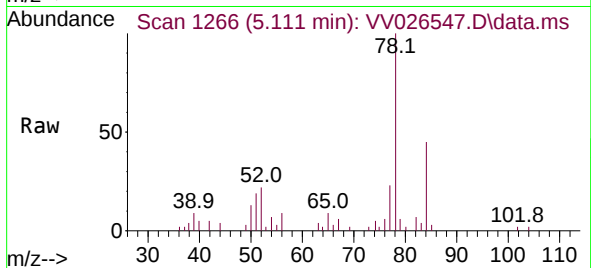




#33
Benzene
Concen: 0.363 ug/L
RT: 5.111 min Scan# 1266
Delta R.T. 0.010 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

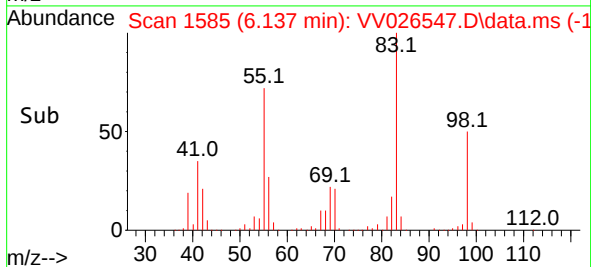
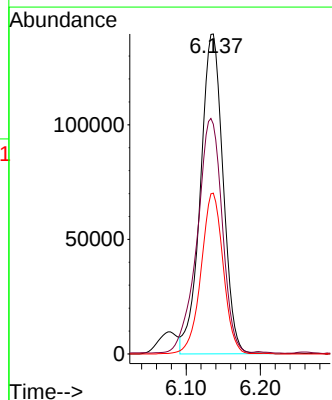
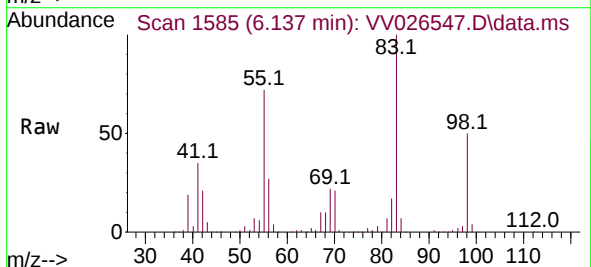
Instrument :
MSVOA_V
ClientSampleId :
C0AF1

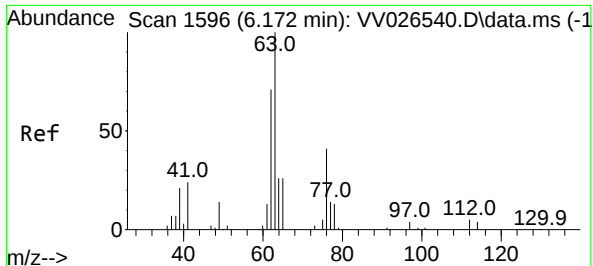
Tgt Ion: 78 Resp: 20910



#35
Methylcyclohexane
Concen: 13.155 ug/L
RT: 6.137 min Scan# 1585
Delta R.T. 0.006 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 83 Resp: 294607
Ion Ratio Lower Upper
83 100
55 81.2 57.0 85.4
98 49.3 39.8 59.8





#37

1,2-Dichloropropane

Concen: 0.168 ug/L

RT: 6.133 min Scan# 11

Delta R.T. -0.039 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

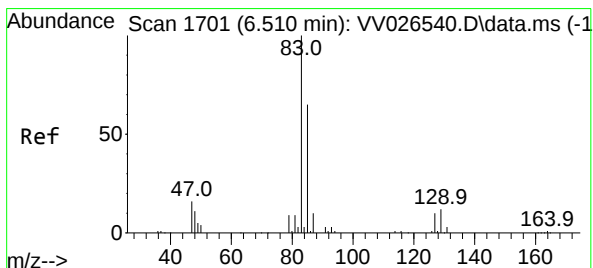
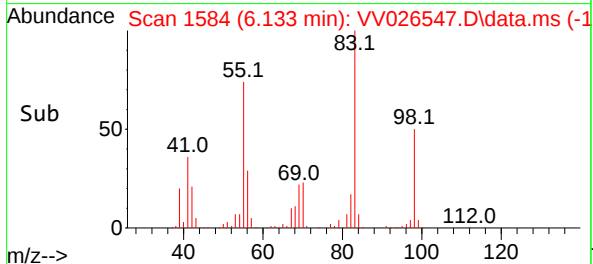
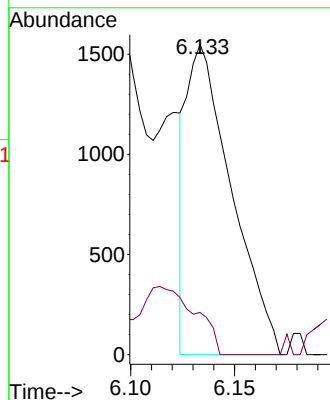
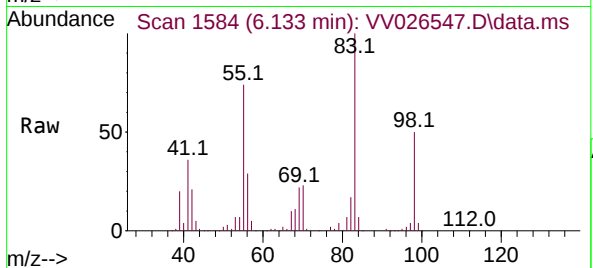
C0AF1

Tgt Ion: 63 Resp: 2326

Ion Ratio Lower Upper

63 100

112 30.2 4.2 6.4#



#38

Bromodichloromethane

Concen: 0.067 ug/L

RT: 6.458 min Scan# 1685

Delta R.T. -0.052 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

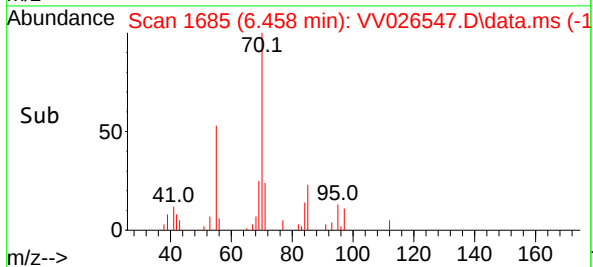
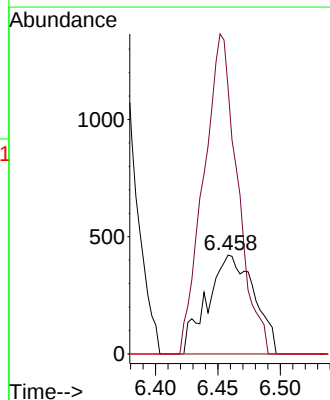
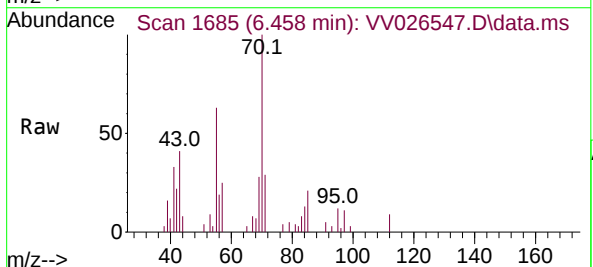
Tgt Ion: 83 Resp: 1098

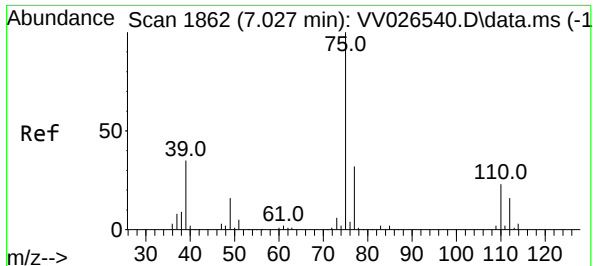
Ion Ratio Lower Upper

83 100

85 269.4 44.0 81.8#

127 0.0 6.6 10.0#





#39

cis-1,3-Dichloropropene

Concen: 0.110 ug/L

RT: 6.989 min Scan# 11

Delta R.T. -0.039 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

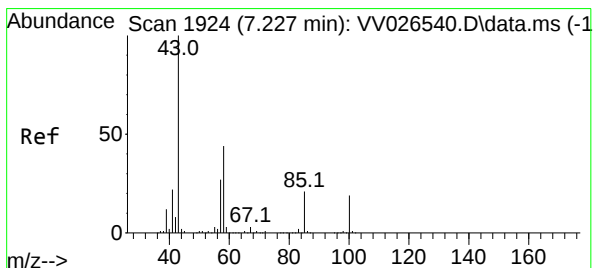
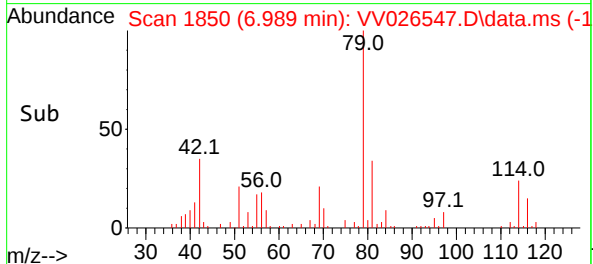
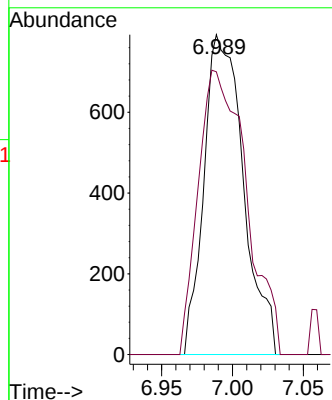
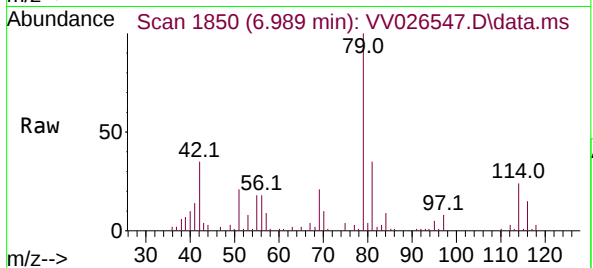
C0AF1

Tgt Ion: 75 Resp: 1531

Ion Ratio Lower Upper

75 100

77 88.4 22.8 42.4#



#40

4-Methyl-2-pentanone

Concen: 71.999 ug/L

RT: 7.403 min Scan# 1979

Delta R.T. 0.177 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

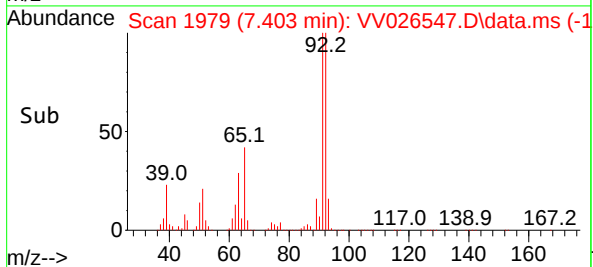
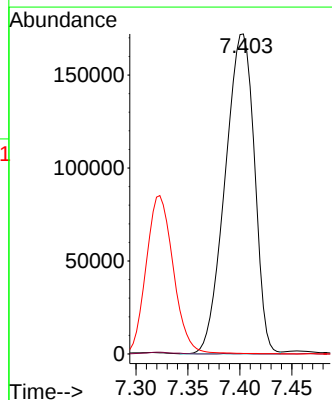
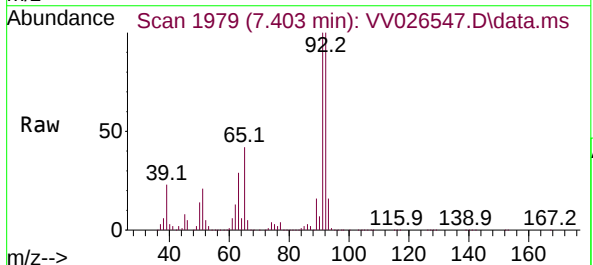
Tgt Ion: 43 Resp: 337530

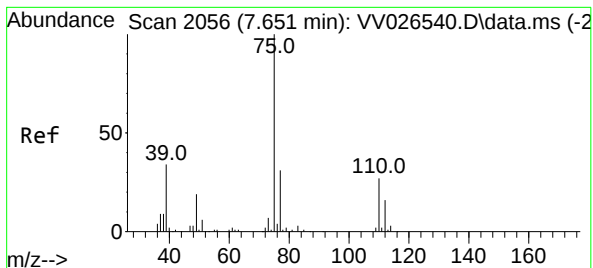
Ion Ratio Lower Upper

43 100

58 0.0 33.3 49.9#

100 0.0 14.3 21.5#





#44

trans-1,3-Dichloropropene

Concen: 38.101 ug/L

RT: 7.403 min Scan# 1979

Delta R.T. -0.248 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

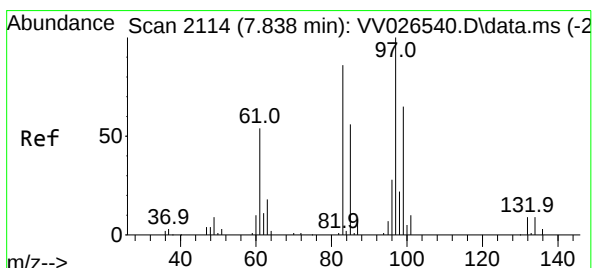
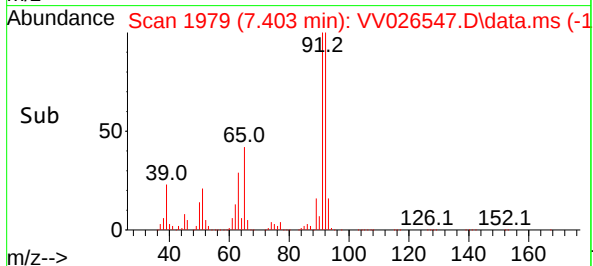
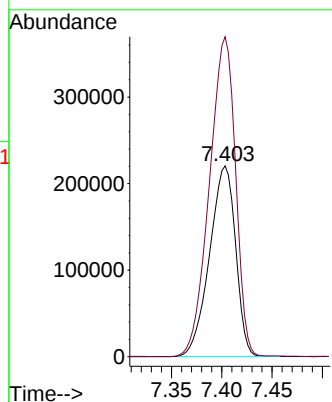
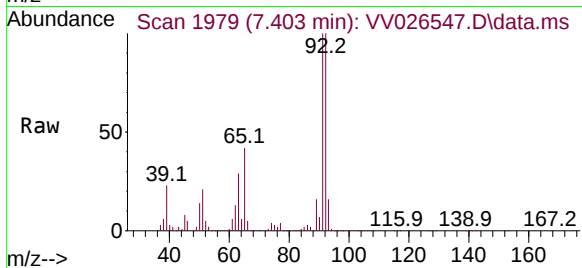
C0AF1

Tgt Ion: 75 Resp: 395335

Ion Ratio Lower Upper

75 100

77 167.6 23.1 42.9#



#45

1,1,2-Trichloroethane

Concen: 2.091 ug/L

RT: 7.789 min Scan# 2099

Delta R.T. -0.048 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Tgt Ion: 97 Resp: 18302

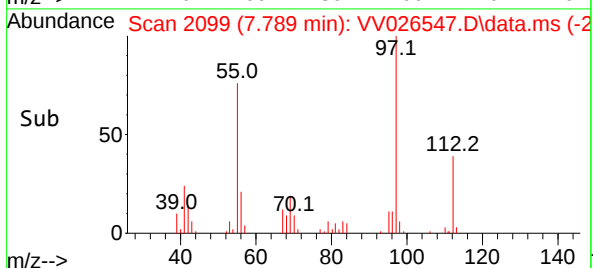
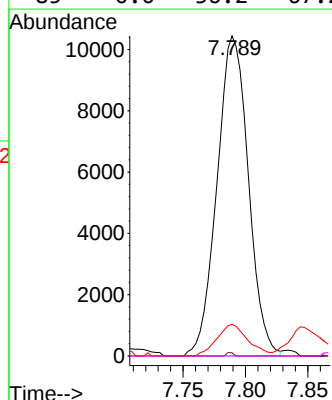
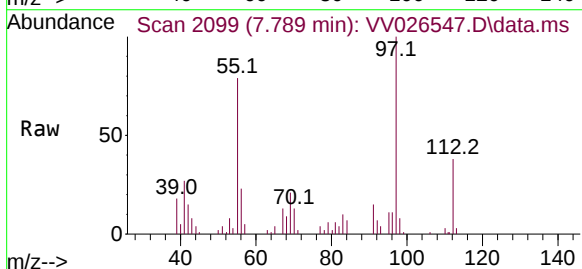
Ion Ratio Lower Upper

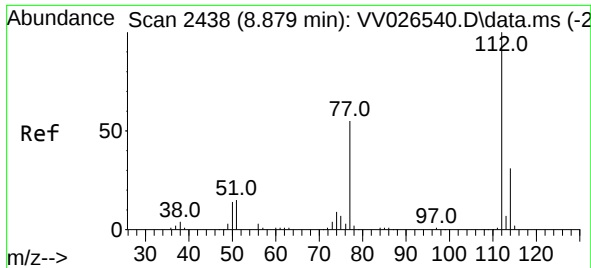
97 100

99 1.0 43.4 80.6#

83 9.9 58.0 107.8#

85 0.0 36.2 67.2#

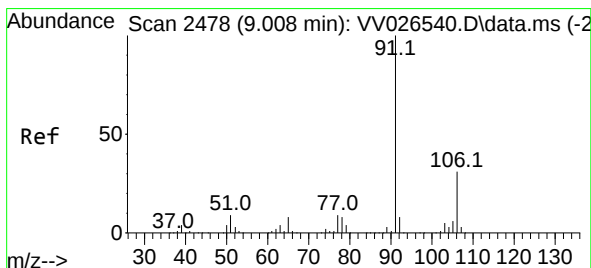
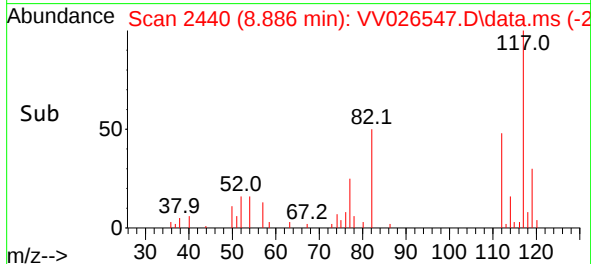
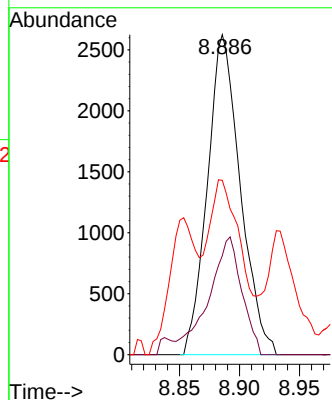
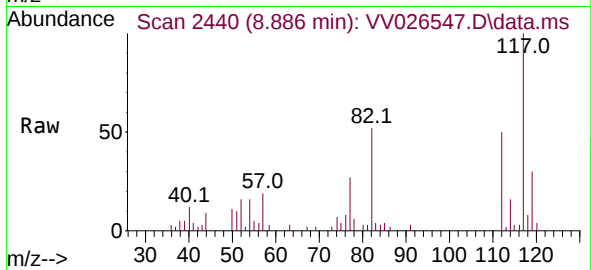




#51
Chlorobenzene
Concen: 0.129 ug/L
RT: 8.886 min Scan# 2440
Delta R.T. 0.006 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

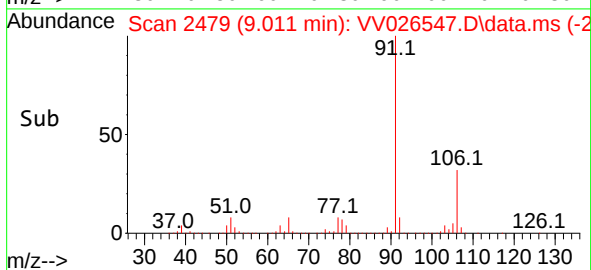
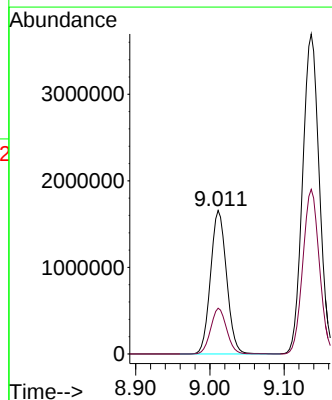
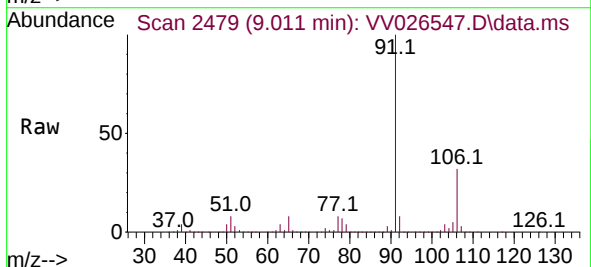
Instrument :
MSVOA_V
ClientSampleId :
C0AF1

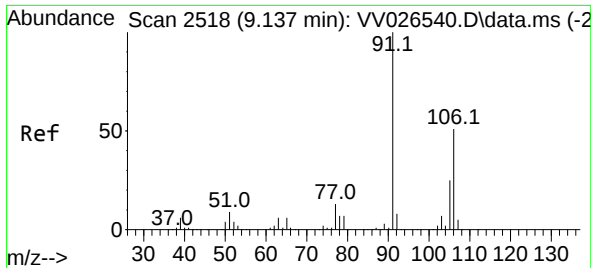
Tgt Ion:112 Resp: 5010
Ion Ratio Lower Upper
112 100
114 30.9 22.3 41.5
77 54.5 44.4 66.6



#52
Ethylbenzene
Concen: 40.373 ug/L
RT: 9.011 min Scan# 2479
Delta R.T. 0.003 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 91 Resp: 2482117
Ion Ratio Lower Upper
91 100
106 31.9 22.1 41.1

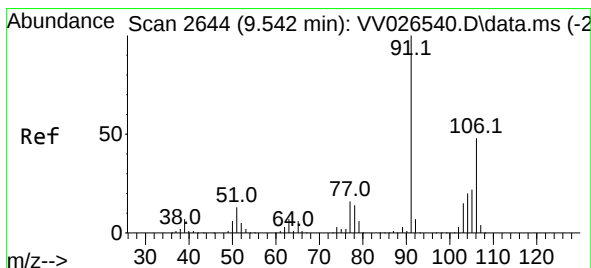
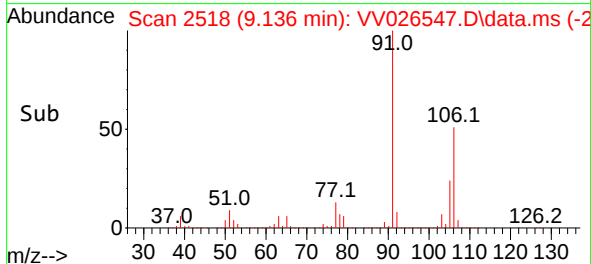
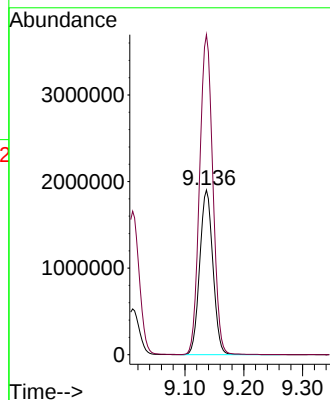
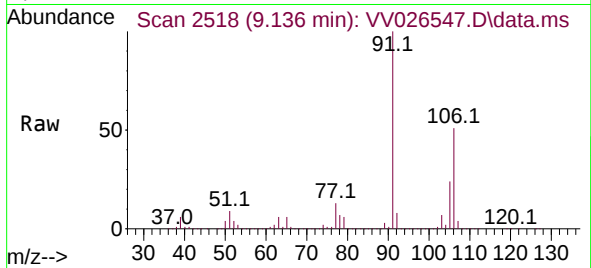




#53
m,p-Xylene
Concen: 122.969 ug/L
RT: 9.136 min Scan# 21
Delta R.T. -0.000 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

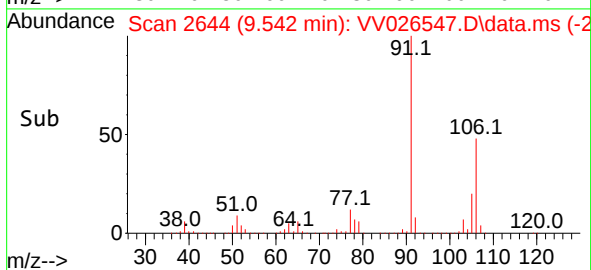
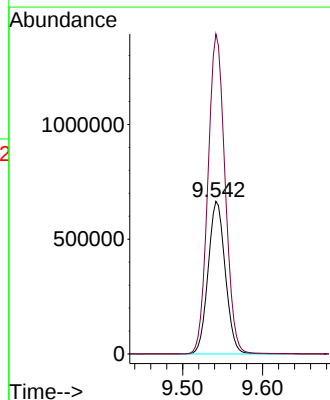
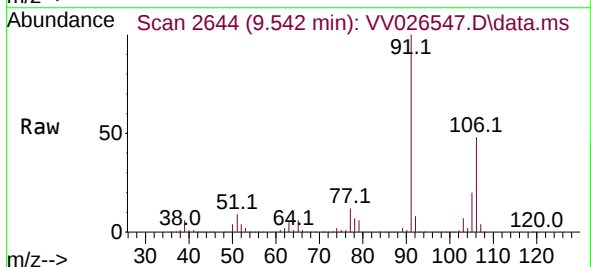
Instrument :
MSVOA_V
ClientSampleId :
C0AF1

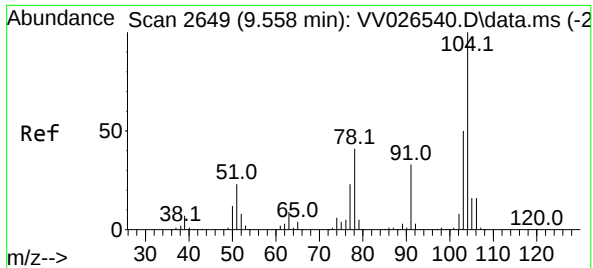
Tgt Ion:106 Resp: 2949253
Ion Ratio Lower Upper
106 100
91 194.4 139.9 259.9



#54
o-Xylene
Concen: 44.049 ug/L
RT: 9.542 min Scan# 2644
Delta R.T. -0.000 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion:106 Resp: 991634
Ion Ratio Lower Upper
106 100
91 209.7 147.5 273.9

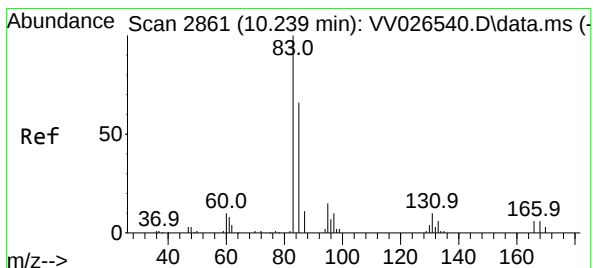
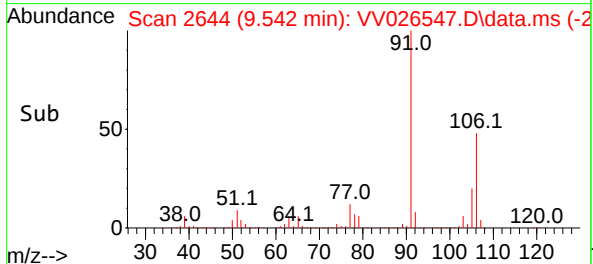
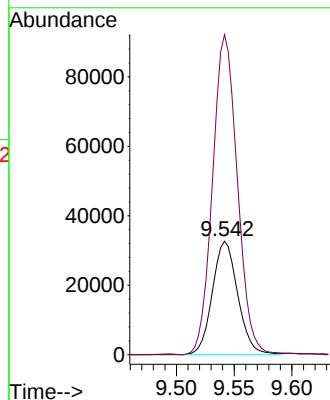
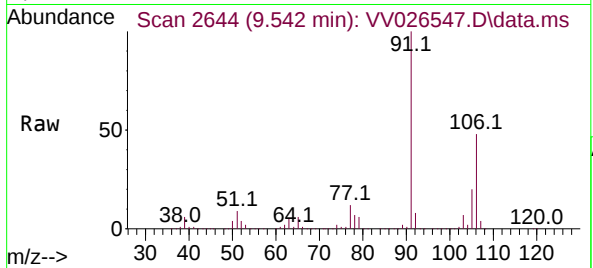




#55
Styrene
Concen: 1.339 ug/L
RT: 9.542 min Scan# 2644
Delta R.T. -0.016 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

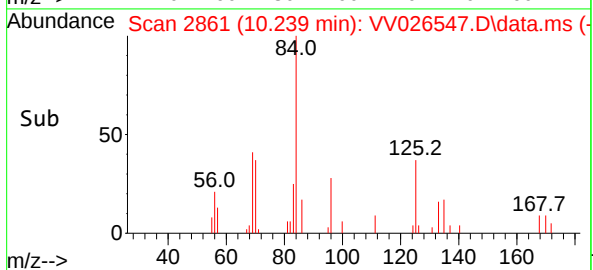
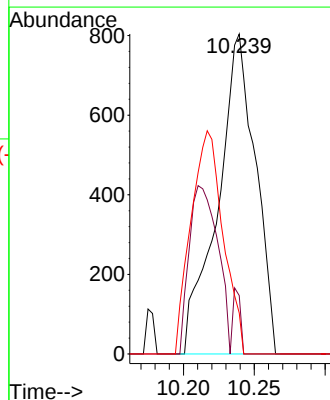
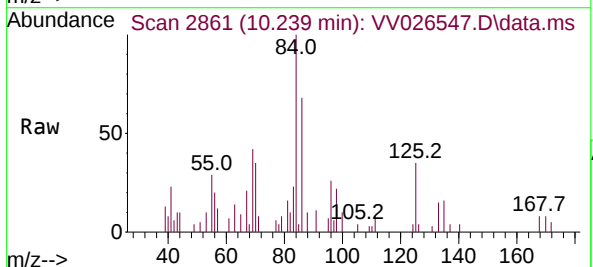
Instrument :
MSVOA_V
ClientSampleId :
C0AF1

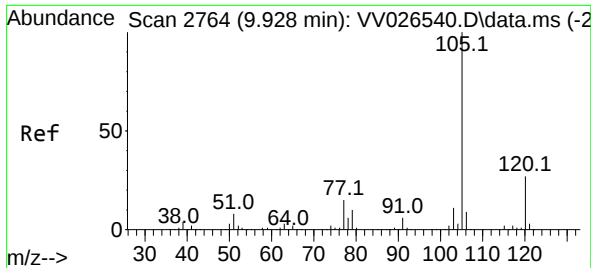
Tgt Ion:104 Resp: 49936
Ion Ratio Lower Upper
104 100
78 282.0 28.4 52.8#



#57
1,1,2,2-Tetrachloroethane
Concen: 0.153 ug/L
RT: 10.239 min Scan# 2861
Delta R.T. -0.000 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 83 Resp: 1492
Ion Ratio Lower Upper
83 100
85 18.3 44.3 82.3#
131 12.8 8.0 12.0#

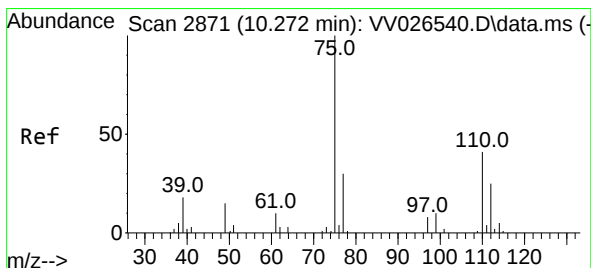
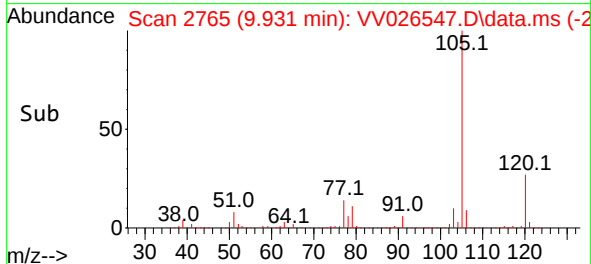
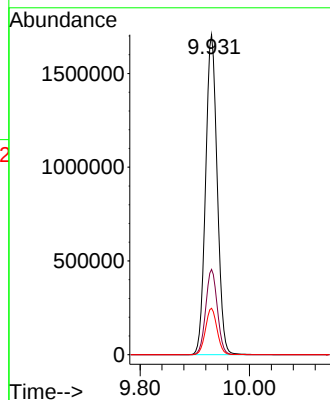
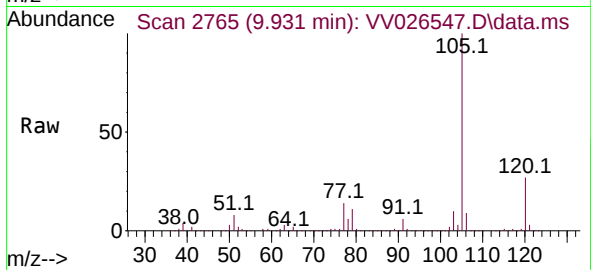




#60
Isopropylbenzene
Concen: 39.008 ug/L
RT: 9.931 min Scan# 21
Delta R.T. 0.003 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

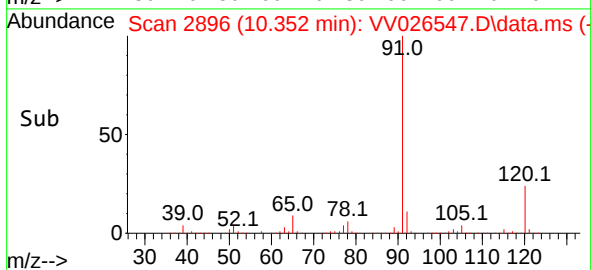
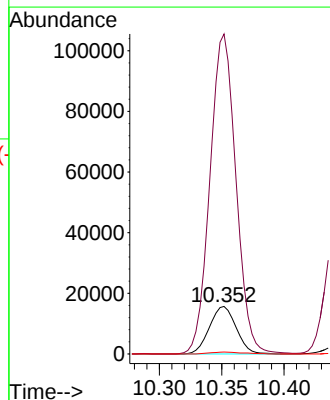
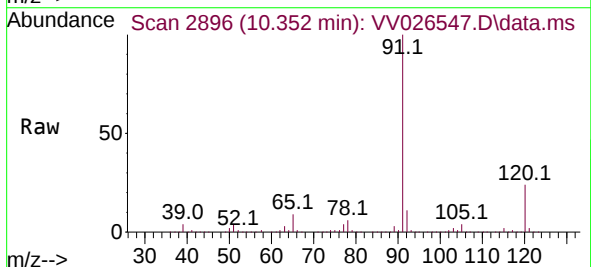
Instrument :
MSVOA_V
ClientSampleId :
C0AF1

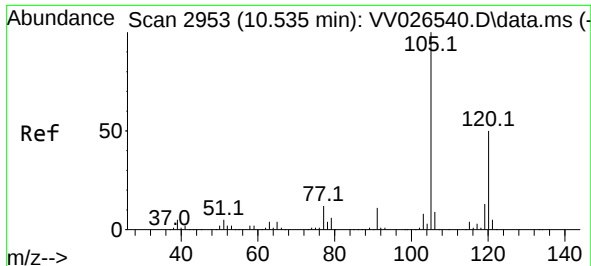
Tgt Ion:105 Resp: 2504117
Ion Ratio Lower Upper
105 100
120 26.7 21.4 32.2
77 14.5 11.6 17.4



#61
1,2,3-Trichloropropane
Concen: 3.466 ug/L
RT: 10.352 min Scan# 2896
Delta R.T. 0.080 min
Lab File: VV026547.D
Acq: 24 Jun 2022 11:53

Tgt Ion: 75 Resp: 23360
Ion Ratio Lower Upper
75 100
77 657.5 25.8 38.6#
110 4.9 32.5 48.7#





#62

1,3,5-Trimethylbenzene

Concen: 6.698 ug/L

RT: 10.538 min Scan# 2953

Delta R.T. 0.003 min

Lab File: VV026547.D

Acq: 24 Jun 2022 11:53

Instrument :

MSVOA_V

ClientSampleId :

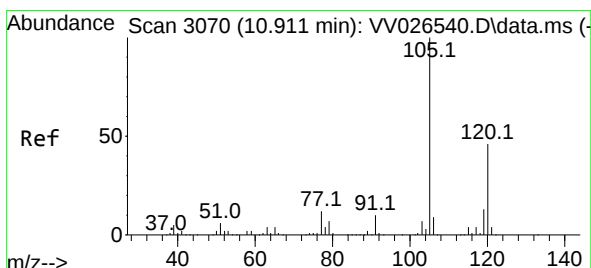
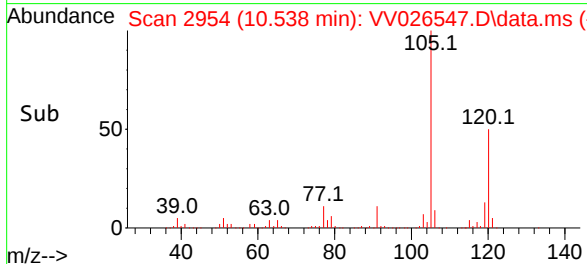
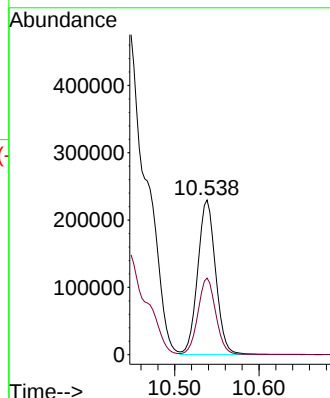
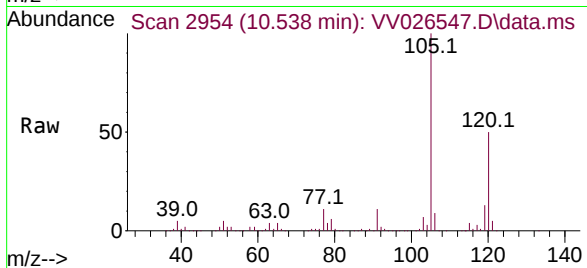
C0AF1

Tgt Ion:105 Resp: 339873

Ion Ratio Lower Upper

105 100

120 49.1 39.6 59.4



#63

1,2,4-Trimethylbenzene

Concen: 30.785 ug/L

RT: 10.911 min Scan# 3070

Delta R.T. -0.000 min

Lab File: VV026547.D

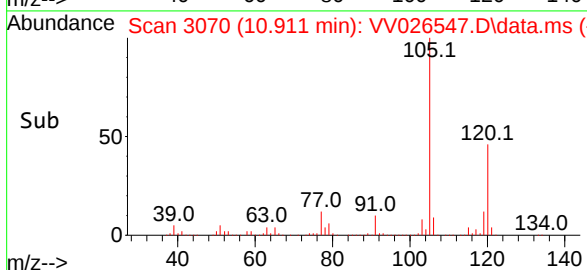
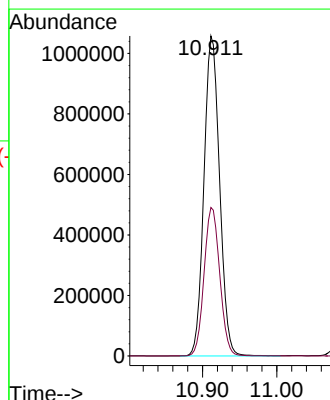
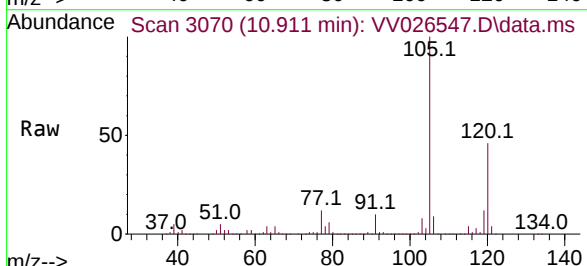
Acq: 24 Jun 2022 11:53

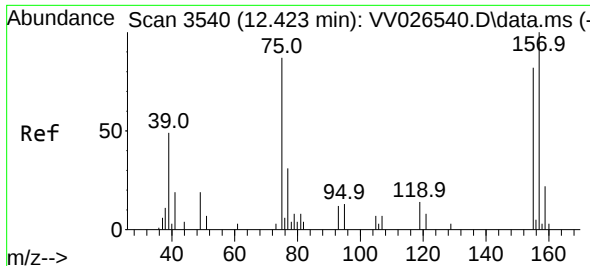
Tgt Ion:105 Resp: 1540393

Ion Ratio Lower Upper

105 100

120 46.6 37.4 56.2

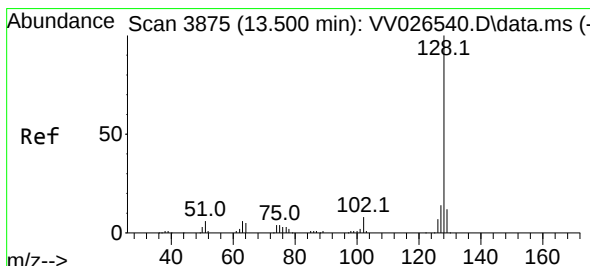
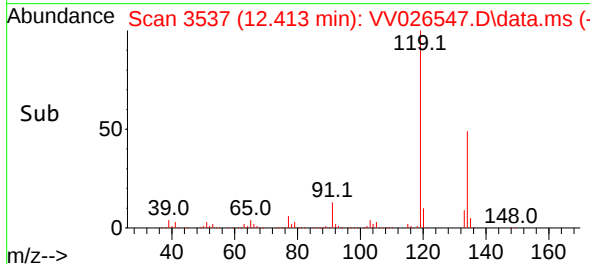
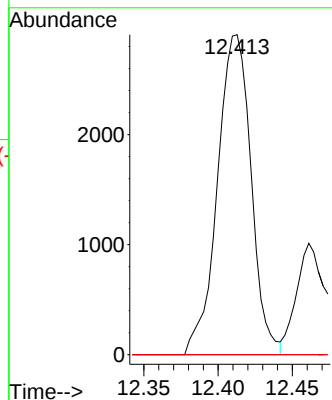
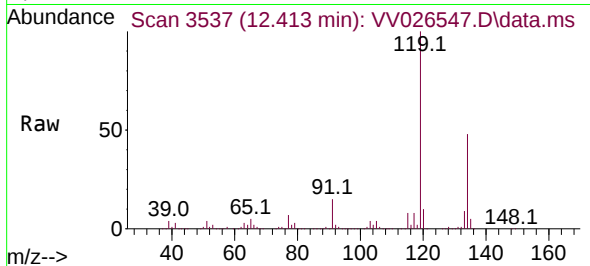




#68
 1,2-Dibromo-3-chloropropane
 Concen: 3.800 ug/L
 RT: 12.413 min Scan# 3537
 Delta R.T. -0.010 min
 Lab File: VV026547.D
 Acq: 24 Jun 2022 11:53

Instrument :
 MSVOA_V
 ClientSampleId :
 C0AF1

Tgt Ion: 75 Resp: 4594
 Ion Ratio Lower Upper
 75 100
 155 0.0 74.7 112.1#
 157 0.0 96.9 145.3#



#71
 Naphthalene
 Concen: 18.213 ug/L
 RT: 13.500 min Scan# 3875
 Delta R.T. -0.000 min
 Lab File: VV026547.D
 Acq: 24 Jun 2022 11:53

Tgt Ion: 128 Resp: 376701
 Ion Ratio Lower Upper
 128 100
 129 11.1 8.6 12.8
 127 12.9 10.2 15.4

