

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111125\
 Data File : VL043188.D
 Acq On : 11 Nov 2025 13:16
 Operator : SY/MD
 Sample : Q3530-15 0.1 MDL
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

Quant Time: Nov 12 00:20:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Oct 15 02:12:58 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.797	49	139068	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	370729	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.895	117	311024	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	225899	9.344	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.400%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.505	85	2112	0.107	ppbv	89
3) Chlorodifluoromethane	1.483	51	2565	0.120	ppbv	93
4) Chloromethane	1.538	50	994	0.127	ppbv	95
5) Vinyl Chloride	1.586	62	748	0.097	ppbv	99
6) Bromomethane	1.674	94	632	0.150	ppbv #	55
7) Chloroethane	1.709	64	534	0.170	ppbv #	68
8) Dichlorotetrafluoroethane	1.560	85	1761	0.110	ppbv	91
9) Propene	1.489	41	794	0.084	ppbv	86
11) Trichlorofluoromethane	1.884	101	2573	0.133	ppbv	93
12) 1,1,2-Trichlorotrifluo...	2.153	101	1899	0.122	ppbv	87
13) Ethanol	1.897	45	1301	0.371	ppbv #	38
14) Bromoethene	1.790	108	765	0.132	ppbv #	90
15) Acetone	1.845	43	3755	0.200	ppbv	95
16) 1,3-Butadiene	1.615	39	1103	0.123	ppbv	85
17) tert-Butyl alcohol	2.049	59	2868	0.111	ppbv	100
18) 1,1-Dichloroethene	2.043	96	758	0.112	ppbv #	67
19) Isopropyl Alcohol	1.897	45	1301	0.111	ppbv #	41
20) Methylene Chloride	2.069	84	2569	0.347	ppbv #	86
21) Allyl Chloride	2.104	41	1503	0.109	ppbv #	80
22) trans-1,2-Dichloroethene	2.350	96	1097	0.135	ppbv #	66
23) Vinyl Acetate	2.473	43	3699	0.135	ppbv #	75
24) 1,1-Dichloroethane	2.418	63	1885	0.120	ppbv #	95
25) Ethyl Acetate	2.849	43	4101	0.088	ppbv #	92
26) Hexane	2.839	57	1735	0.081	ppbv #	7
27) Carbon Disulfide	2.162	76	1982	0.101	ppbv #	1
28) Methyl tert-Butyl Ether	2.447	73	613	0.063	ppbv #	16
29) Chloroform	2.858	83	3253	0.105	ppbv	90
31) cis-1,2-Dichloroethene	2.732	61	1750	0.086	ppbv	91
32) 1,1,1-Trichloroethane	3.386	97	2015	0.062	ppbv #	55
34) 2-Butanone	2.570	43	3775	0.151	ppbv	96
35) Carbon Tetrachloride	3.778	117	3392	0.127	ppbv	92
36) Benzene	3.671	78	3792	0.109	ppbv #	92
37) 1,2-Dichloroethane	3.231	62	2835	0.141	ppbv	99
38) Trichloroethene	4.571	130	471	0.032	ppbv #	36
39) 1,2-Dichloropropane	3.972	63	95584	7.488	ppbv #	24
41) Tetrahydrofuran	3.078	42	1176	0.084	ppbv	95
42) Bromodichloromethane	4.516	83	877	0.032	ppbv #	80
43) Methyl Methacrylate	4.901	69	597	0.034	ppbv #	1
44) 2,2,4-Trimethylpentane	4.661	57	4524	0.077	ppbv #	78
47) 1,1,2-Trichloroethane	6.600	97	452	0.033	ppbv #	44
49) Bromoform	9.500	173	713	0.038	ppbv #	1
52) Tetrachloroethene	8.238	164	963	0.076	ppbv #	62
53) Toluene	6.953	91	2668	0.064	ppbv	98

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 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

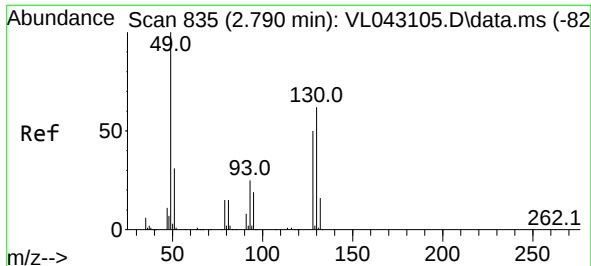
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

Quant Time: Nov 12 00:20:16 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101425AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Oct 15 02:12:58 2025
 Response via : Initial Calibration

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

54) 1,2-Dibromoethane	7.678	107	836	0.039	ppbv	97
56) 1,1,1,2-Tetrachloroethane	8.937	131	2783	0.142	ppbv #	1
57) Chlorobenzene	8.934	112	3370	0.116	ppbv	96
58) Ethyl Benzene	9.367	91	3701	0.069	ppbv	90
59) m/p-Xylene	9.545	91	3087	0.073	ppbv #	29
61) Styrene	9.885	104	676	0.036	ppbv #	44
62) Isopropylbenzene	10.549	105	5344	0.070	ppbv	95
63) 1,1,2,2-Tetrachloroethane	9.972	83	2871	0.102	ppbv	81
67) sec-Butylbenzene	11.779	105	5087	0.053	ppbv	96
69) p-Isopropyltoluene	11.934	119	3597	0.044	ppbv	96
70) n-Butylbenzene	12.293	91	3398	0.043	ppbv	97
71) 2-Chlorotoluene	10.911	91	4078	0.070	ppbv	98
72) 4-Ethyltoluene	11.134	105	2385	0.046	ppbv	97
73) 1,3,5-Trimethylbenzene	11.215	105	2279	0.053	ppbv #	74
74) 1,2,4-Trimethylbenzene	11.545	105	1938	0.041	ppbv #	90
75) 1,3-Dichlorobenzene	11.617	146	2108	0.076	ppbv	96
76) 1,4-Dichlorobenzene	11.678	146	1656	0.059	ppbv	79
77) 1,2-Dichlorobenzene	11.957	146	1803	0.067	ppbv	87
78) Hexachloro-1,3-Butadiene	13.892	225	2240	0.108	ppbv	98

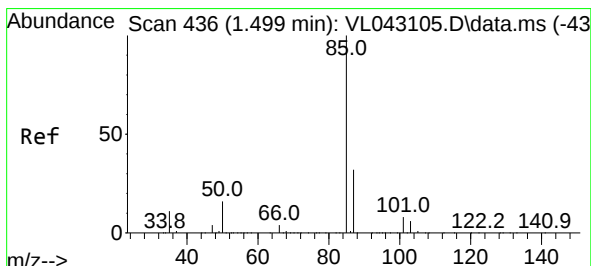
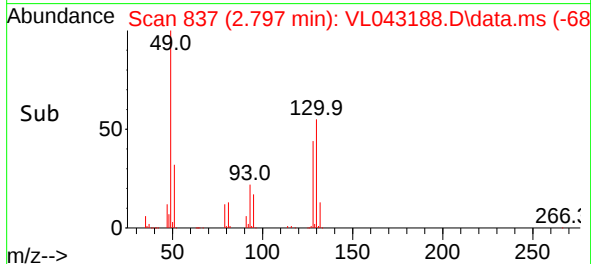
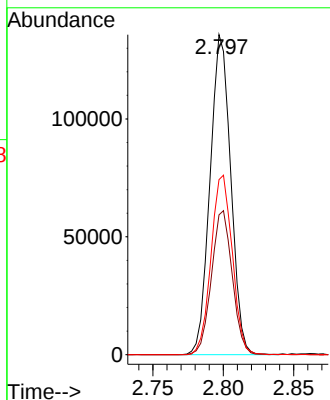
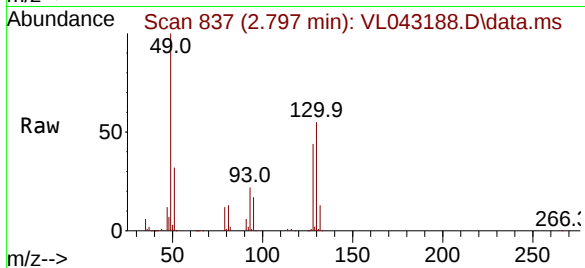
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.797 min Scan# 81
 Delta R.T. 0.007 min
 Lab File: VL043188.D
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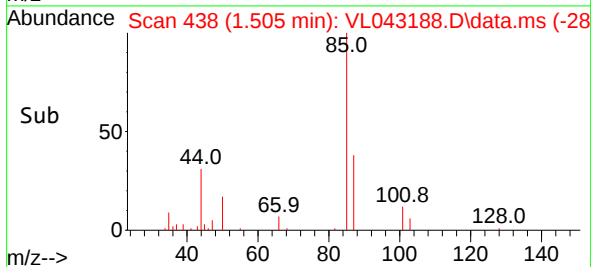
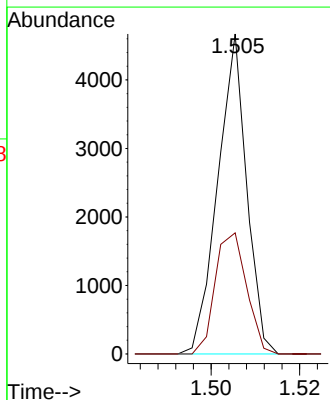
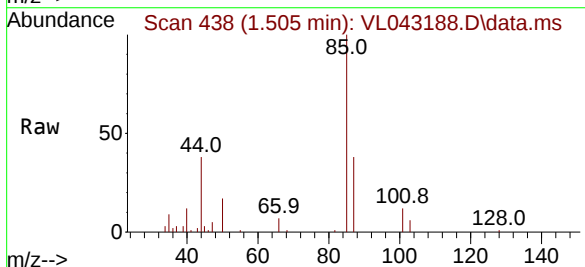
Instrument :
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 MDL-AIR-03-QT4-2025

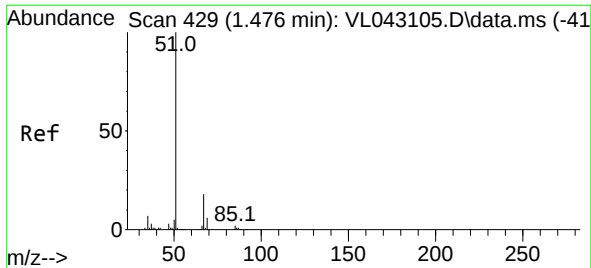
Tgt Ion: 49 Resp: 139068
 Ion Ratio Lower Upper
 49 100
 128 45.2 24.4 73.4
 130 57.5 31.0 93.0



#2
 Dichlorodifluoromethane
 Concen: 0.107 ppbv
 RT: 1.505 min Scan# 438
 Delta R.T. 0.006 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 85 Resp: 2112
 Ion Ratio Lower Upper
 85 100
 87 37.8 25.3 37.9





#3

Chlorodifluoromethane

Concen: 0.120 ppbv

RT: 1.483 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

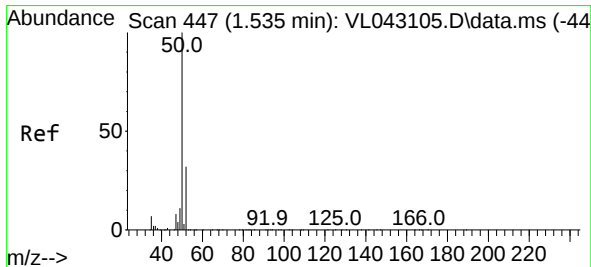
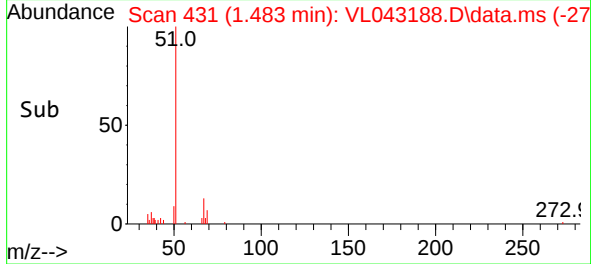
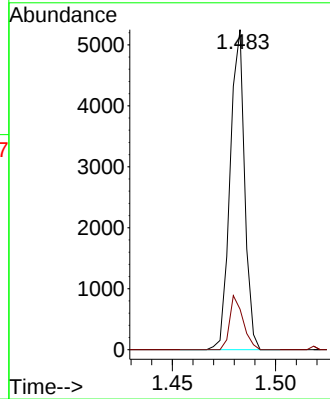
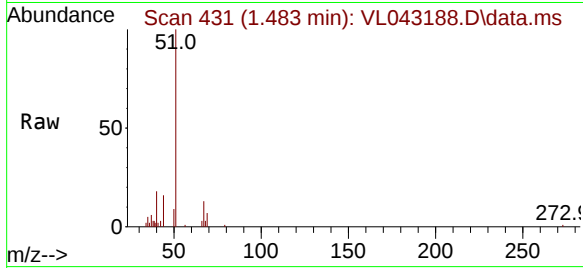
MDL-AIR-03-QT4-2025

Tgt Ion: 51 Resp: 2565

Ion Ratio Lower Upper

51 100

67 15.6 15.1 22.7



#4

Chloromethane

Concen: 0.127 ppbv

RT: 1.538 min Scan# 448

Delta R.T. 0.003 min

Lab File: VL043188.D

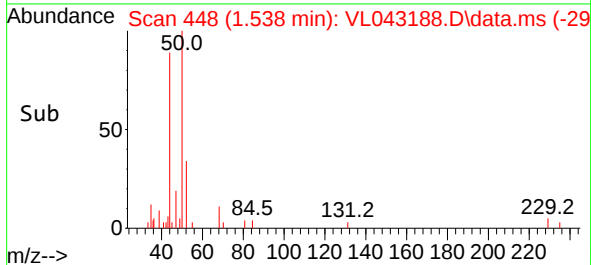
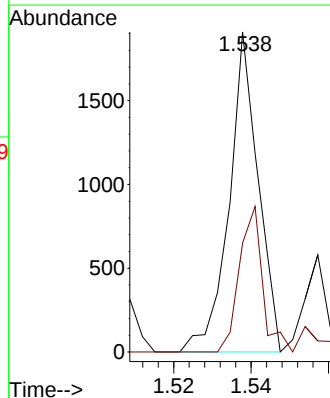
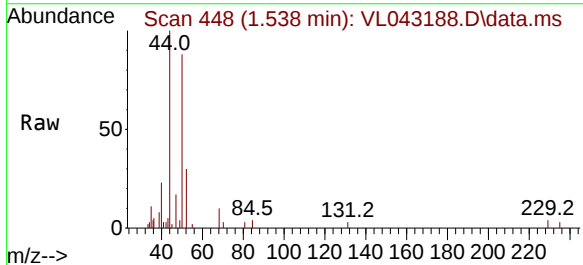
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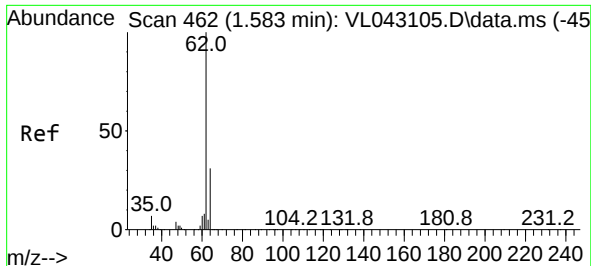
Tgt Ion: 50 Resp: 994

Ion Ratio Lower Upper

50 100

52 34.1 25.2 37.8

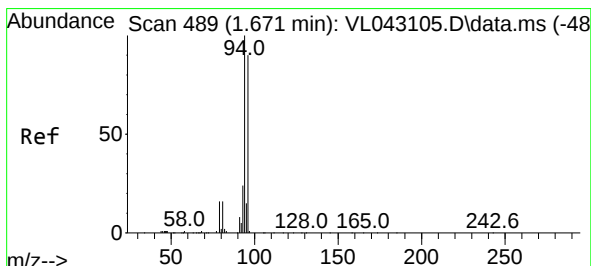
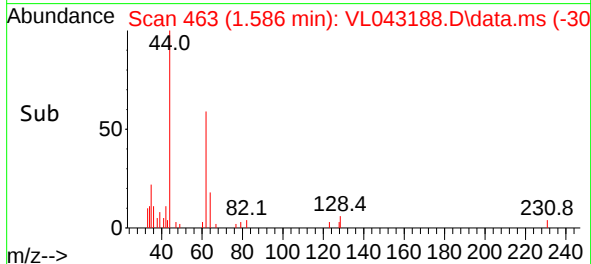
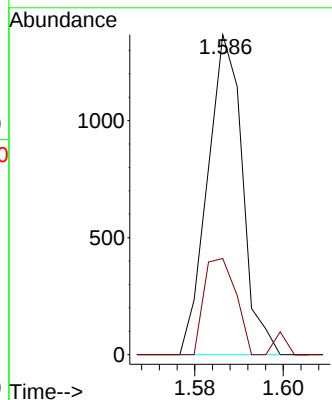
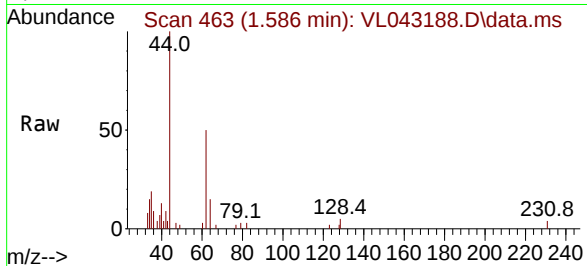




#5
 Vinyl Chloride
 Concen: 0.097 ppbv
 RT: 1.586 min Scan# 41
 Delta R.T. 0.003 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

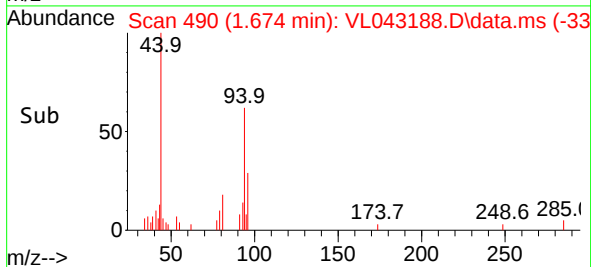
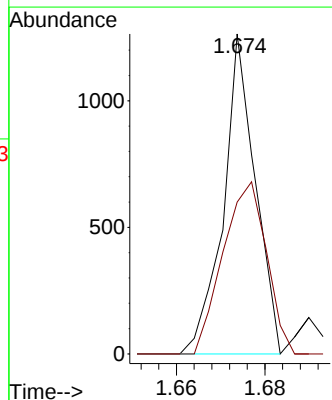
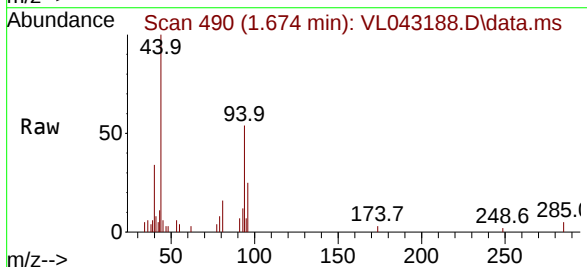
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

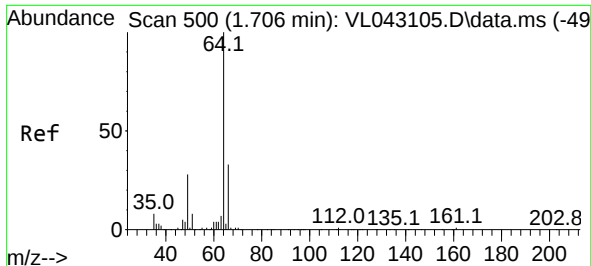
Tgt Ion: 62 Resp: 748
 Ion Ratio Lower Upper
 62 100
 64 30.1 24.6 36.8



#6
 Bromomethane
 Concen: 0.150 ppbv
 RT: 1.674 min Scan# 490
 Delta R.T. 0.003 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 94 Resp: 632
 Ion Ratio Lower Upper
 94 100
 96 47.5 72.2 108.4#

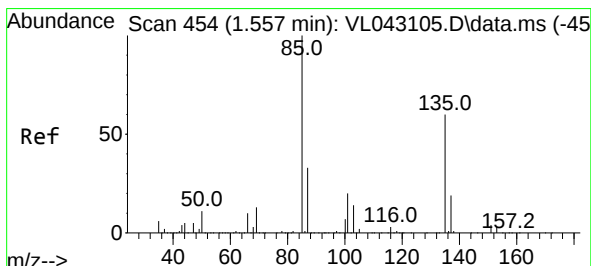
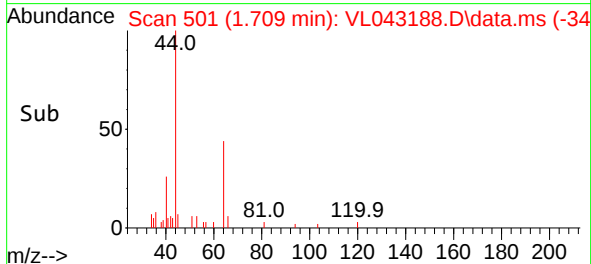
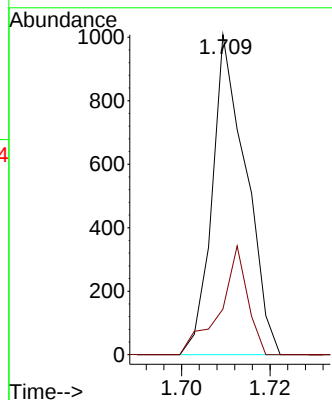
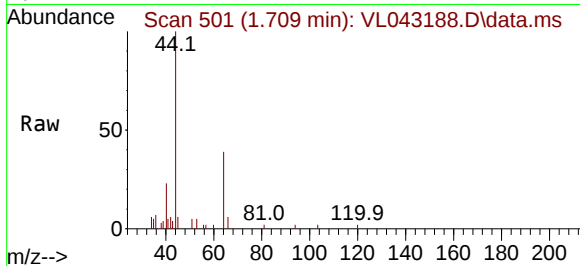




#7
Chloroethane
Concen: 0.170 ppbv
RT: 1.709 min Scan# 501
Delta R.T. 0.003 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

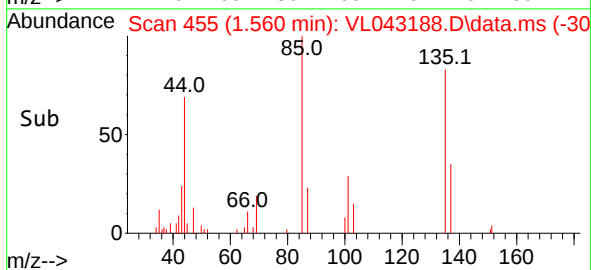
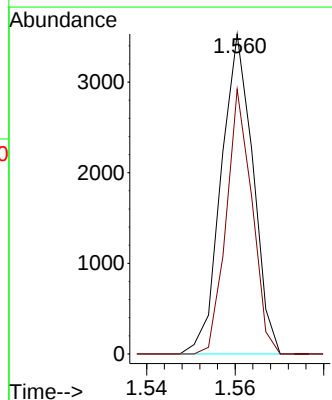
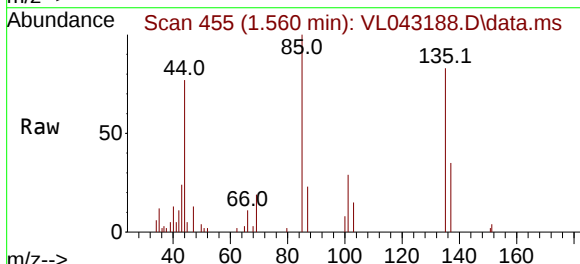
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

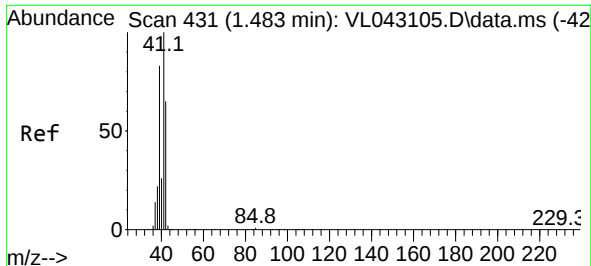
Tgt Ion: 64 Resp: 534
Ion Ratio Lower Upper
64 100
66 14.3 26.0 39.0#



#8
Dichlorotetrafluoroethane
Concen: 0.110 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.003 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 85 Resp: 1761
Ion Ratio Lower Upper
85 100
135 66.9 48.2 72.4





#9

Propene

Concen: 0.084 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

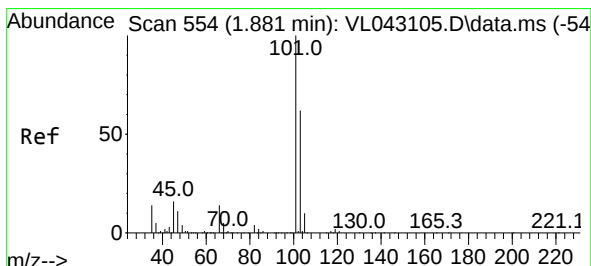
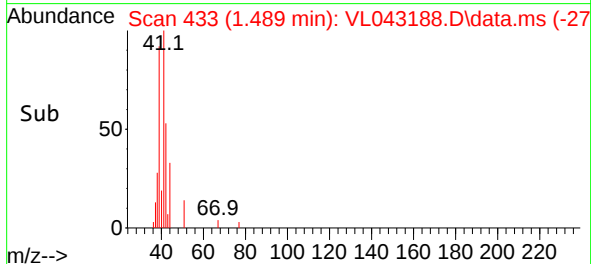
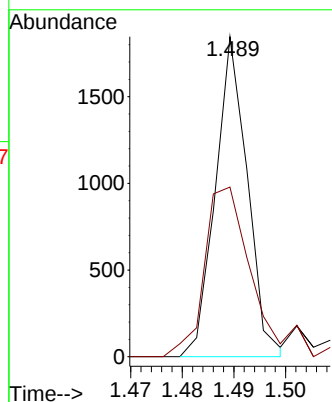
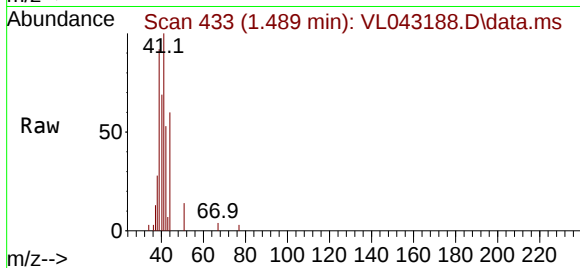
MDL-AIR-03-QT4-2025

Tgt Ion: 41 Resp: 794

Ion Ratio Lower Upper

41 100

42 80.2 55.1 82.7



#11

Trichlorofluoromethane

Concen: 0.133 ppbv

RT: 1.884 min Scan# 555

Delta R.T. 0.003 min

Lab File: VL043188.D

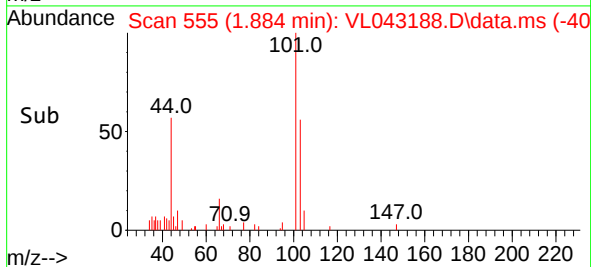
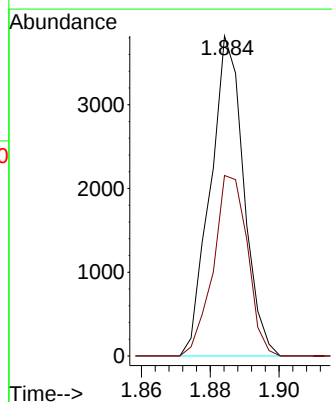
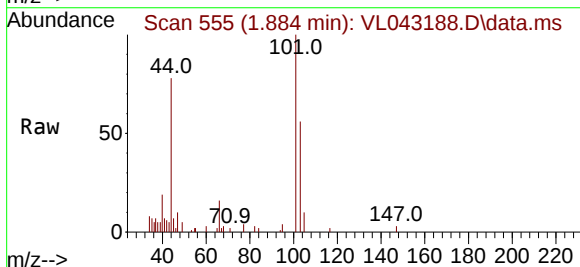
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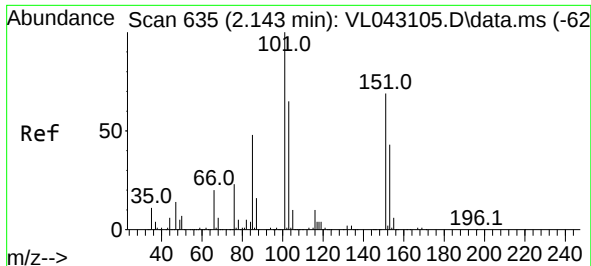
Tgt Ion: 101 Resp: 2573

Ion Ratio Lower Upper

101 100

103 56.4 49.3 73.9





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.122 ppbv

RT: 2.153 min Scan# 61

Delta R.T. 0.010 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

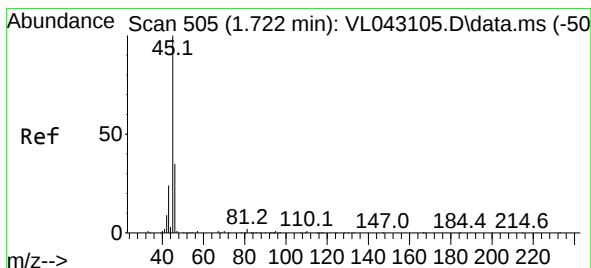
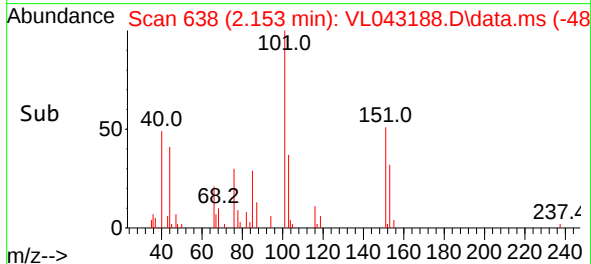
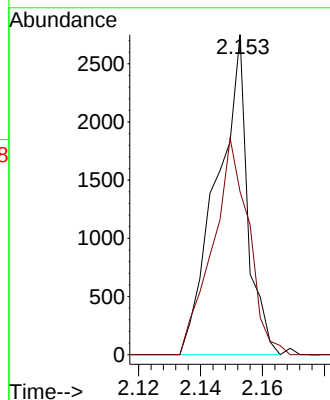
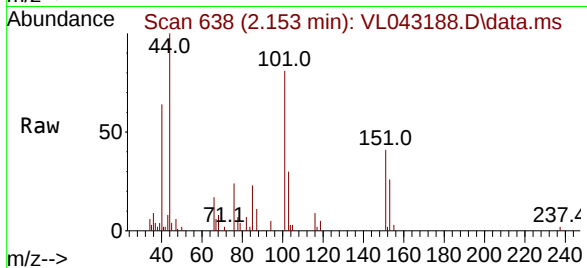
MDL-AIR-03-QT4-2025

Tgt Ion:101 Resp: 1899

Ion Ratio Lower Upper

101 100

151 79.3 54.7 82.1



#13

Ethanol

Concen: 0.371 ppbv

RT: 1.897 min Scan# 559

Delta R.T. 0.175 min

Lab File: VL043188.D

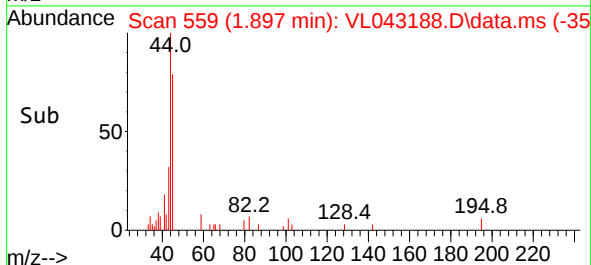
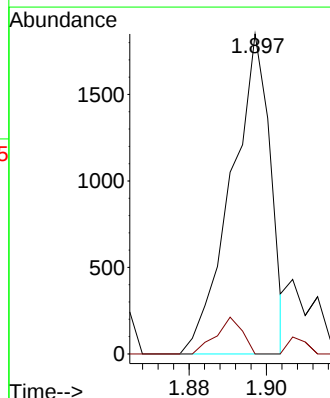
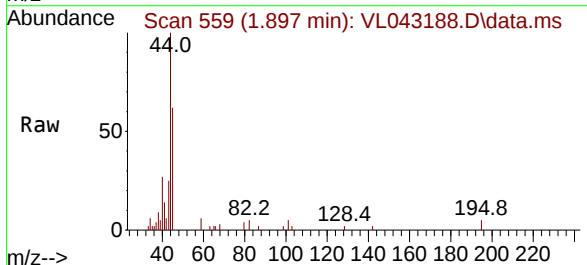
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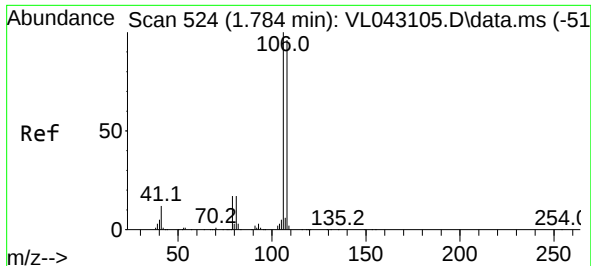
Tgt Ion: 45 Resp: 1301

Ion Ratio Lower Upper

45 100

46 0.0 14.7 58.9#

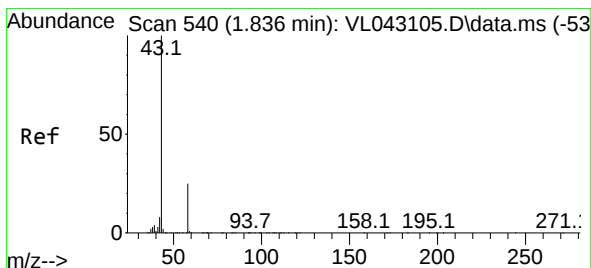
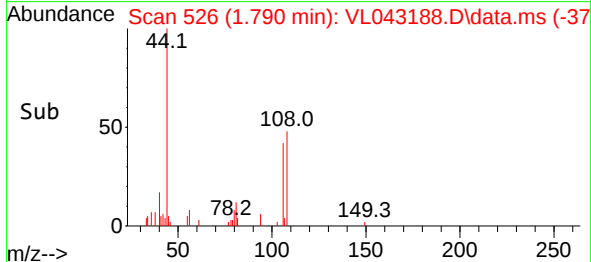
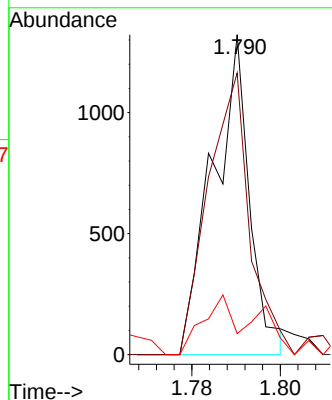
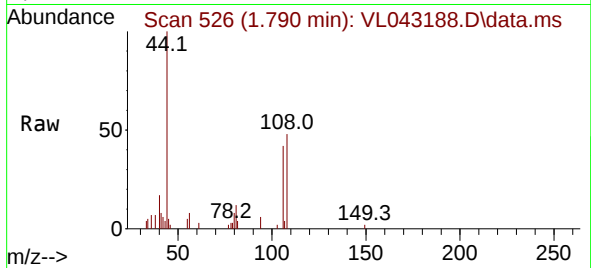




#14
Bromoethene
Concen: 0.132 ppbv
RT: 1.790 min Scan# 51
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

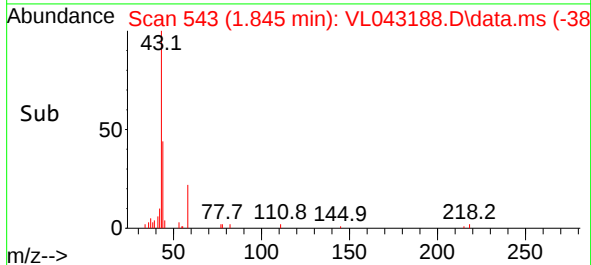
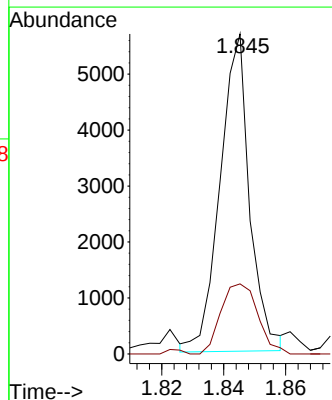
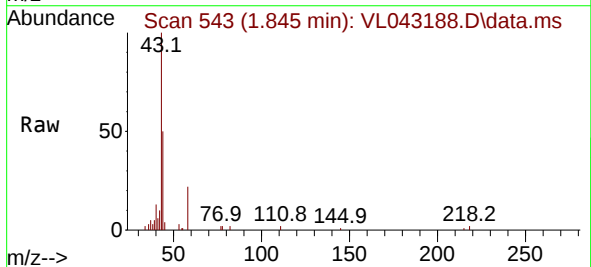
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

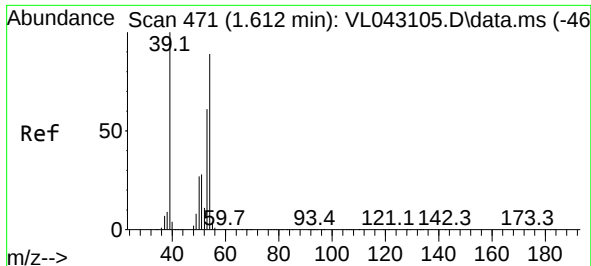
Tgt Ion:108 Resp: 765
Ion Ratio Lower Upper
108 100
106 102.9 84.4 126.6
79 43.5 15.3 22.9#



#15
Acetone
Concen: 0.200 ppbv
RT: 1.845 min Scan# 543
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 43 Resp: 3755
Ion Ratio Lower Upper
43 100
58 28.4 20.8 31.2

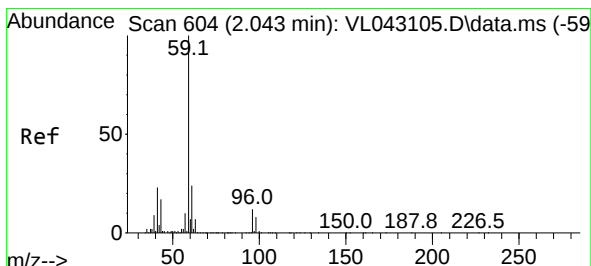
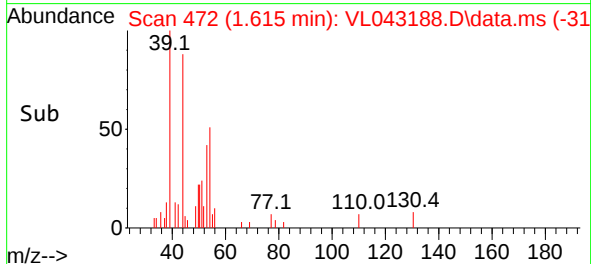
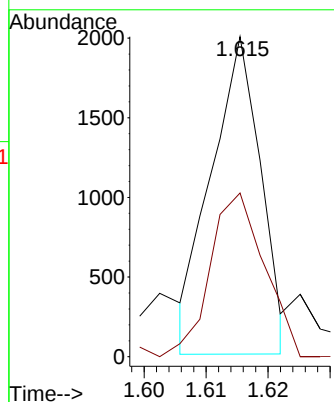
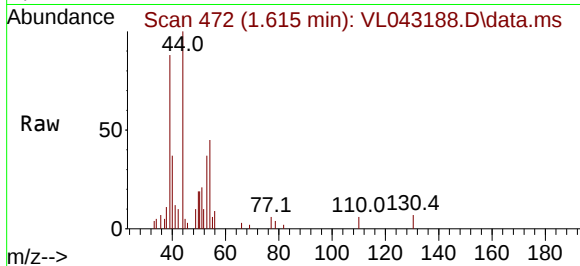




#16
1,3-Butadiene
Concen: 0.123 ppbv
RT: 1.615 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

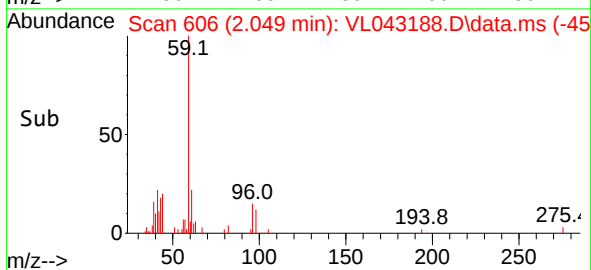
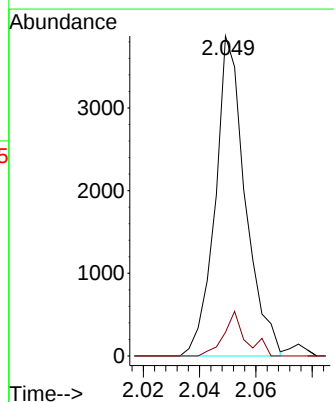
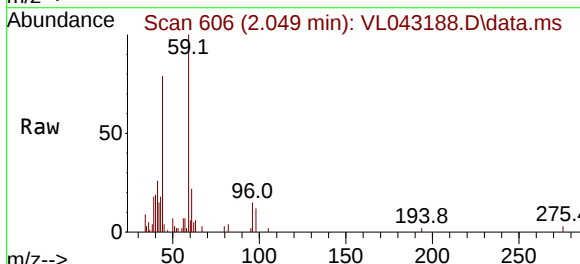
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

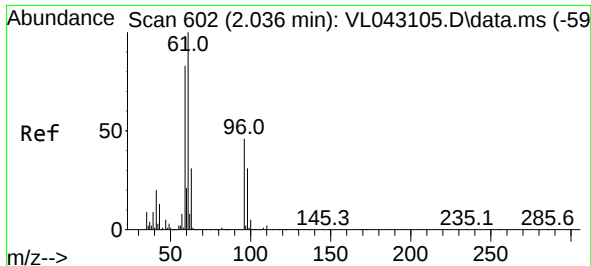
Tgt Ion: 39 Resp: 1103
Ion Ratio Lower Upper
39 100
54 61.2 59.0 88.4



#17
tert-Butyl alcohol
Concen: 0.111 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 59 Resp: 2868
Ion Ratio Lower Upper
59 100
57 10.2 8.2 12.4





#18

1,1-Dichloroethene

Concen: 0.112 ppbv

RT: 2.043 min Scan# 602

Delta R.T. 0.006 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2025

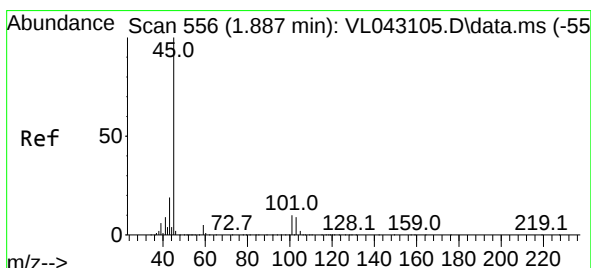
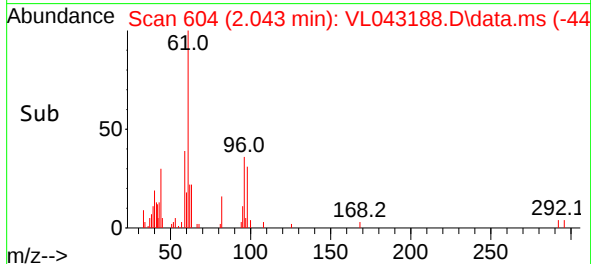
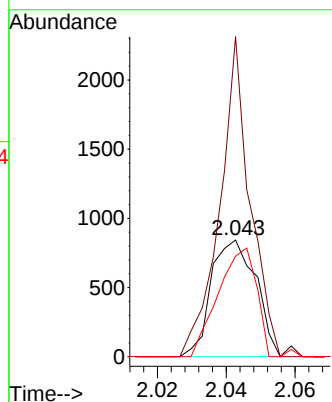
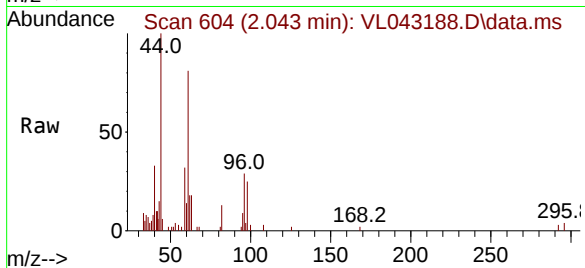
Tgt Ion: 96 Resp: 758

Ion Ratio Lower Upper

96 100

61 274.4 173.4 260.0#

98 86.1 53.2 79.8#



#19

Isopropyl Alcohol

Concen: 0.111 ppbv

RT: 1.897 min Scan# 559

Delta R.T. 0.010 min

Lab File: VL043188.D

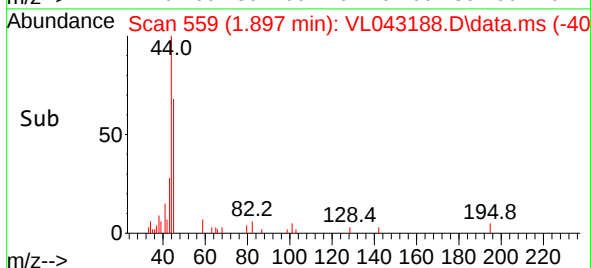
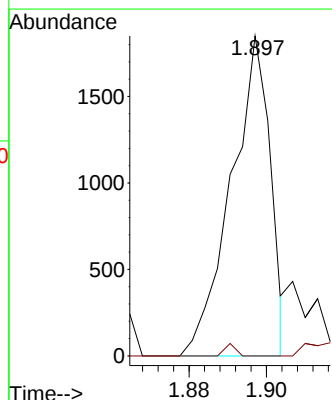
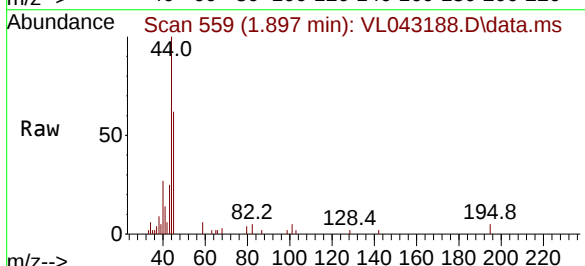
Acq: 11 Nov 2025 13:16

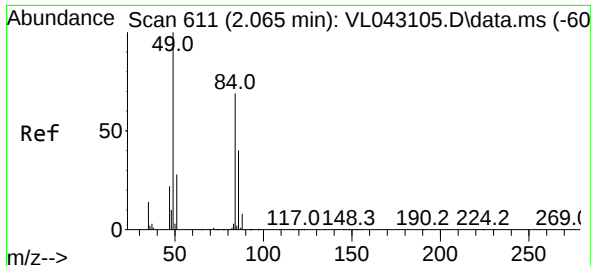
Tgt Ion: 45 Resp: 1301

Ion Ratio Lower Upper

45 100

58 3.1 31.3 46.9#

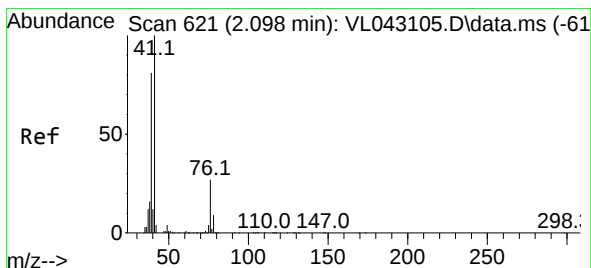
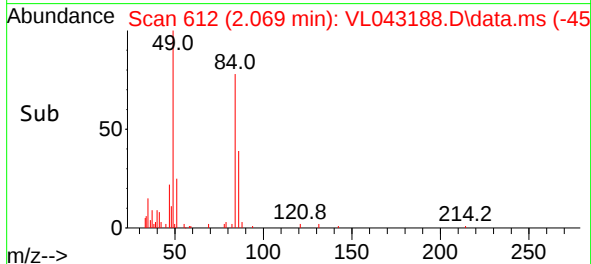
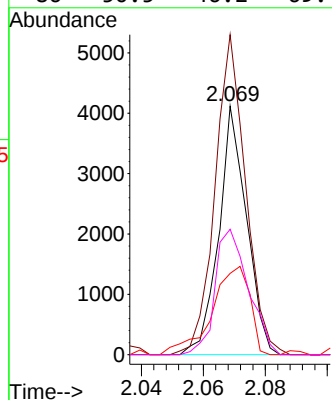
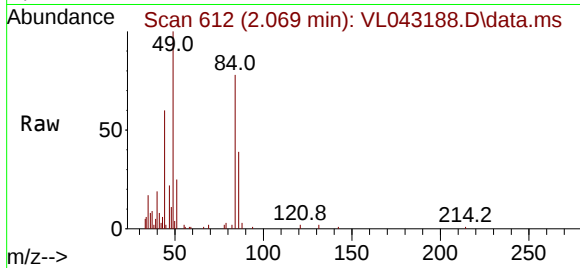




#20
Methylene Chloride
Concen: 0.347 ppbv
RT: 2.069 min Scan# 611
Delta R.T. 0.003 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

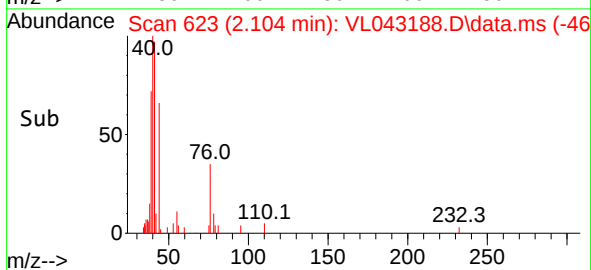
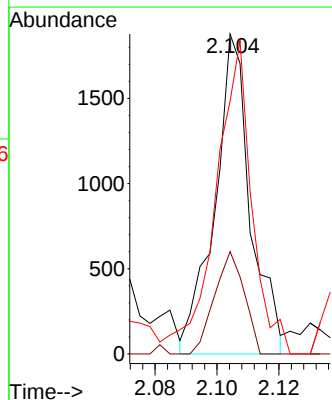
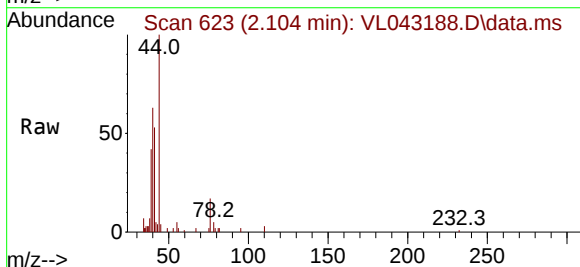
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

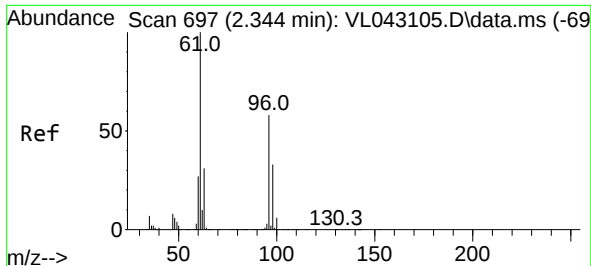
Tgt Ion:	84	Resp:	2569
Ion	Ratio	Lower	Upper
84	100		
49	127.3	116.6	175.0
51	32.7	34.8	52.2#
86	50.5	46.2	69.4



#21
Allyl Chloride
Concen: 0.109 ppbv
RT: 2.104 min Scan# 623
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion:	41	Resp:	1503
Ion	Ratio	Lower	Upper
41	100		
76	27.3	21.5	32.3
39	99.5	60.8	91.2#

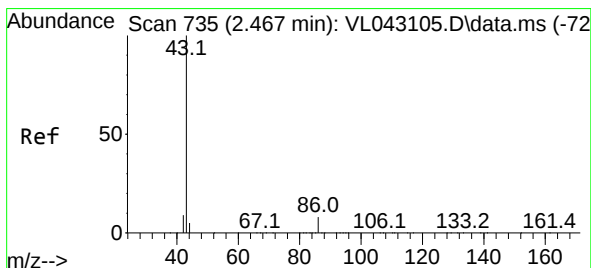
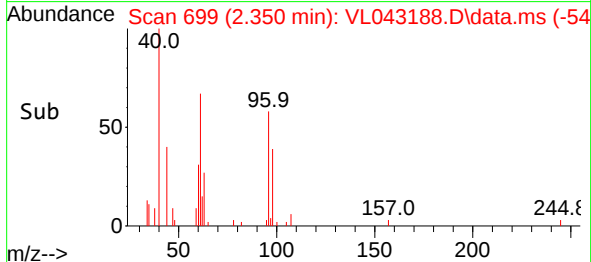
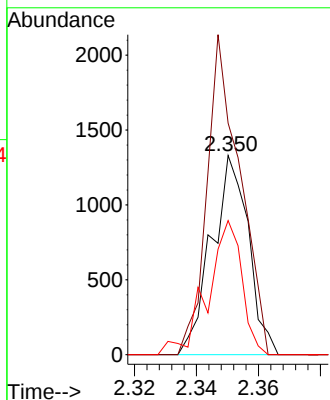
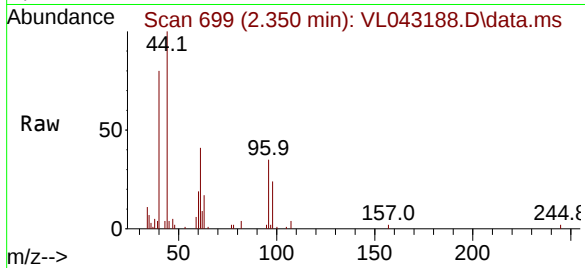




#22
trans-1,2-Dichloroethene
Concen: 0.135 ppbv
RT: 2.350 min Scan# 697
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

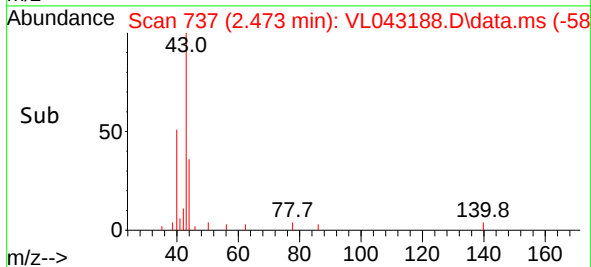
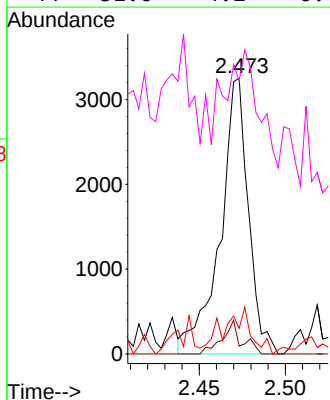
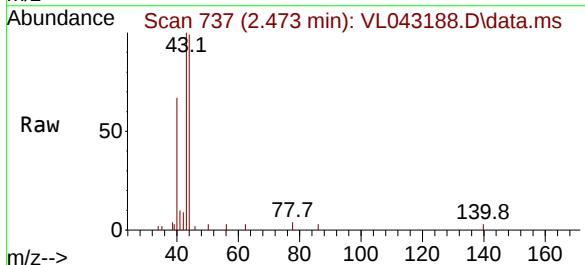
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

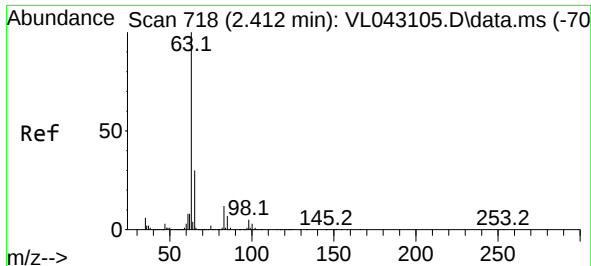
Tgt Ion: 96 Resp: 1097
Ion Ratio Lower Upper
96 100
61 116.2 137.0 205.6#
98 67.3 45.5 68.3



#23
Vinyl Acetate
Concen: 0.135 ppbv
RT: 2.473 min Scan# 737
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 43 Resp: 3699
Ion Ratio Lower Upper
43 100
86 2.8 6.2 9.2#
42 7.7 7.6 11.4
44 31.6 4.2 6.4#

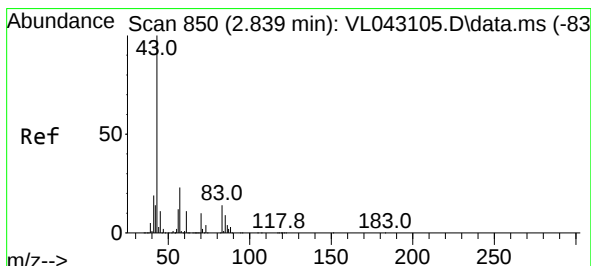
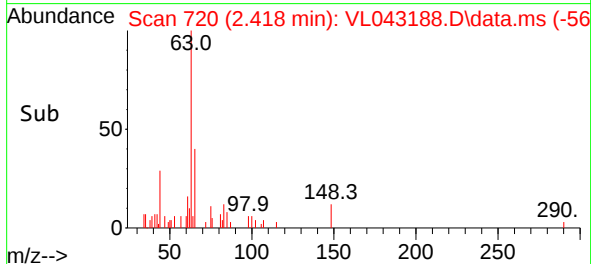
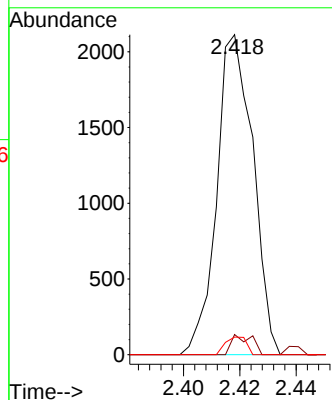
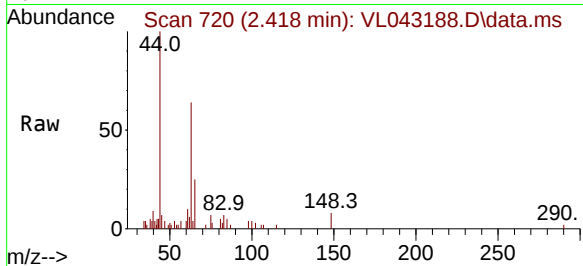




#24
 1,1-Dichloroethane
 Concen: 0.120 ppbv
 RT: 2.418 min Scan# 718
 Delta R.T. 0.006 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

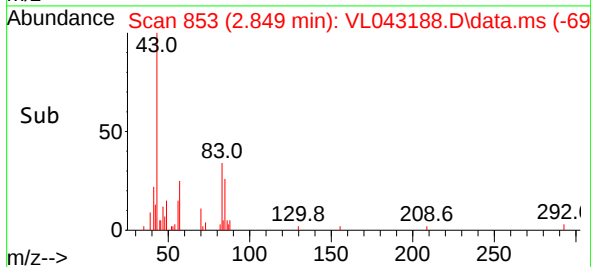
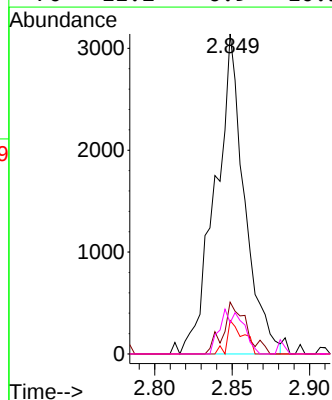
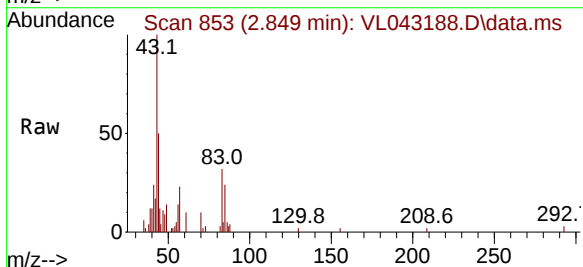
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

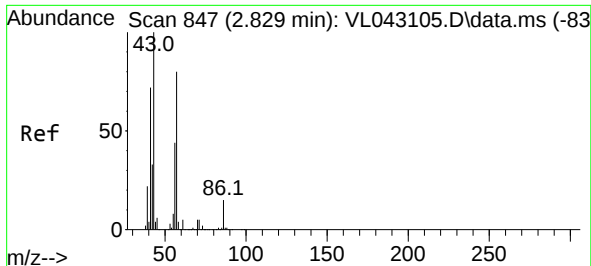
Tgt Ion: 63	Resp: 1885
Ion Ratio	Lower Upper
63 100	
98 6.3	2.6 7.8
100 5.5	1.5 4.4#



#25
 Ethyl Acetate
 Concen: 0.088 ppbv
 RT: 2.849 min Scan# 853
 Delta R.T. 0.010 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 43	Resp: 4101
Ion Ratio	Lower Upper
43 100	
45 12.8	7.8 11.8#
61 5.7	7.0 10.6#
70 11.2	6.9 10.3#

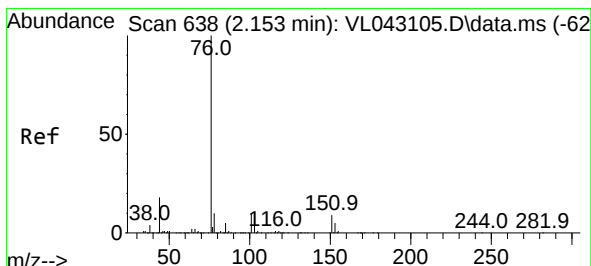
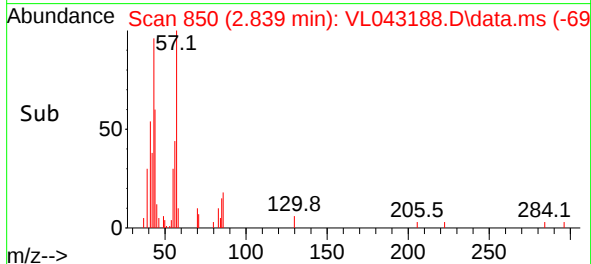
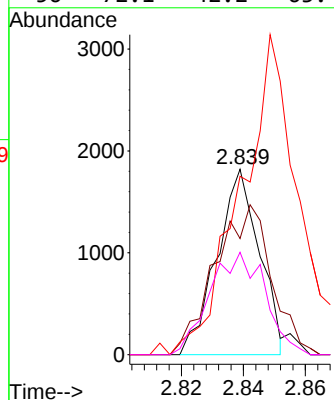
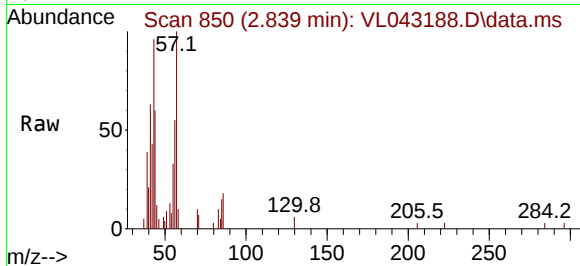




#26
Hexane
Concen: 0.081 ppbv
RT: 2.839 min Scan# 81
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

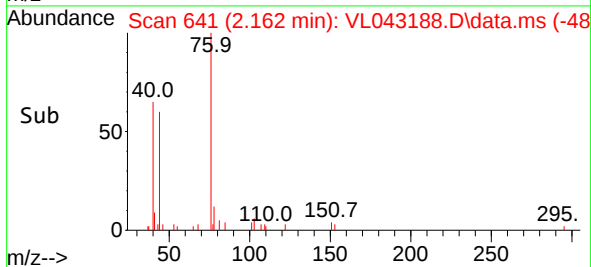
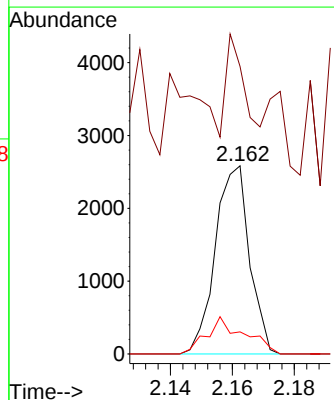
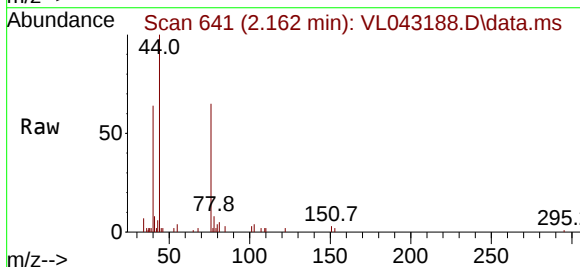
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

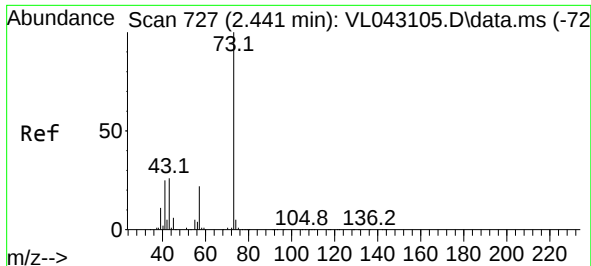
Tgt Ion: 57 Resp: 1735
Ion Ratio Lower Upper
57 100
41 109.9 71.4 107.0#
43 0.0 178.5 267.7#
56 72.1 42.2 63.4#



#27
Carbon Disulfide
Concen: 0.101 ppbv
RT: 2.162 min Scan# 641
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 76 Resp: 1982
Ion Ratio Lower Upper
76 100
44 279.5 16.7 25.1#
78 21.6 9.3 13.9#

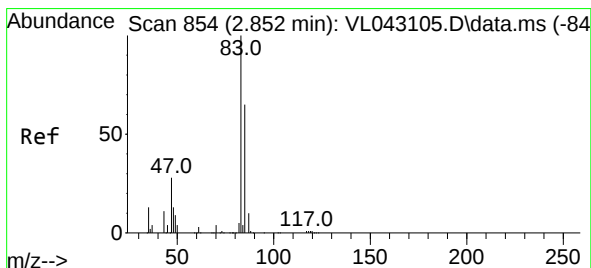
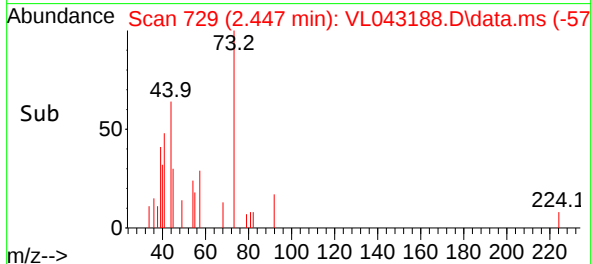
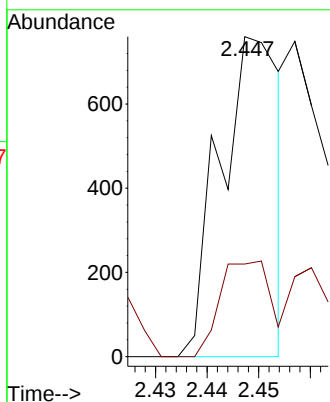
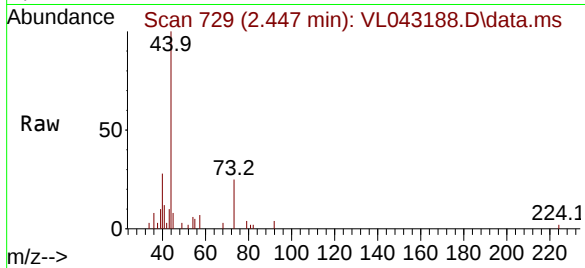




#28
Methyl tert-Butyl Ether
Concen: 0.063 ppbv
RT: 2.447 min Scan# 71
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

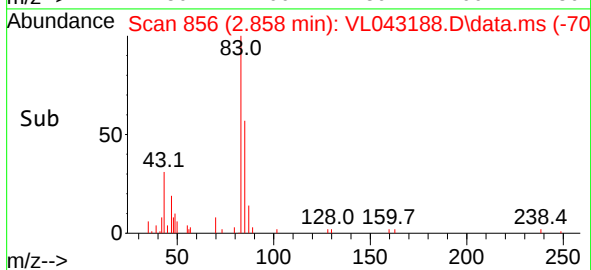
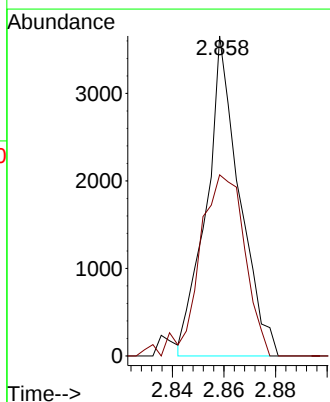
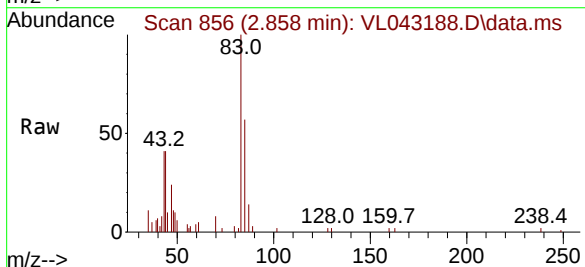
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

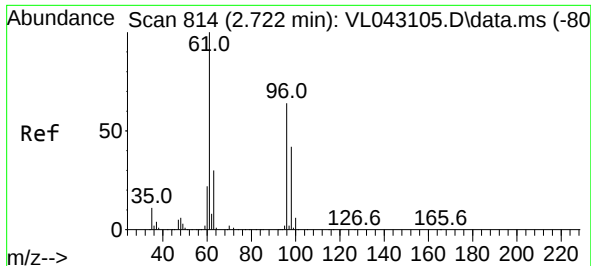
Tgt Ion: 73 Resp: 613
Ion Ratio Lower Upper
73 100
57 68.2 20.5 30.7#



#29
Chloroform
Concen: 0.105 ppbv
RT: 2.858 min Scan# 856
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 83 Resp: 3253
Ion Ratio Lower Upper
83 100
85 56.6 51.8 77.6

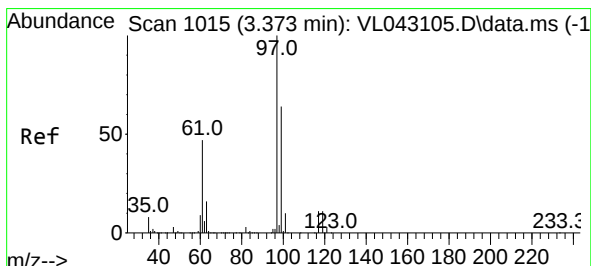
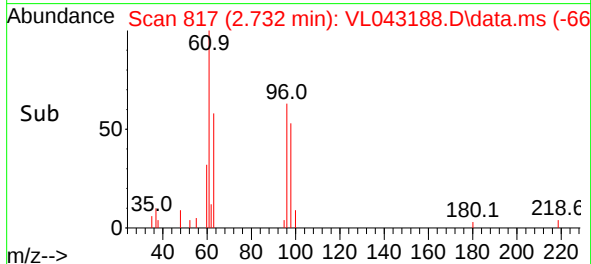
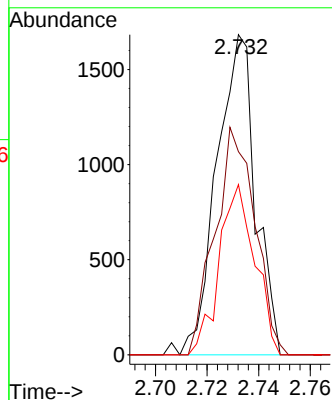
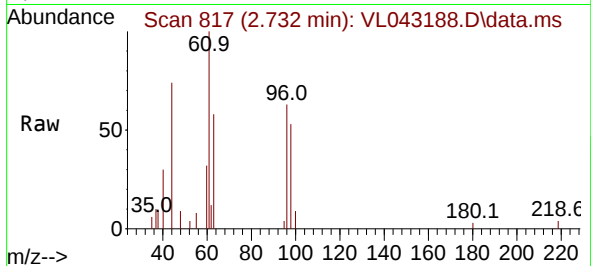




#31
 cis-1,2-Dichloroethene
 Concen: 0.086 ppbv
 RT: 2.732 min Scan# 814
 Delta R.T. 0.010 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

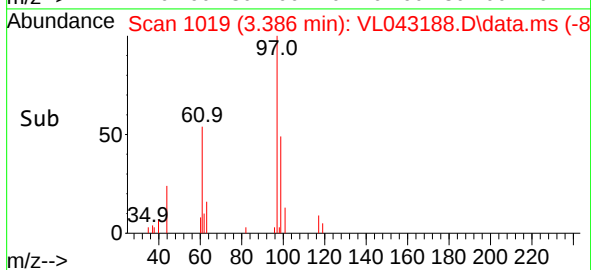
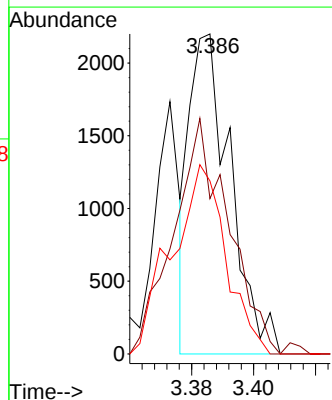
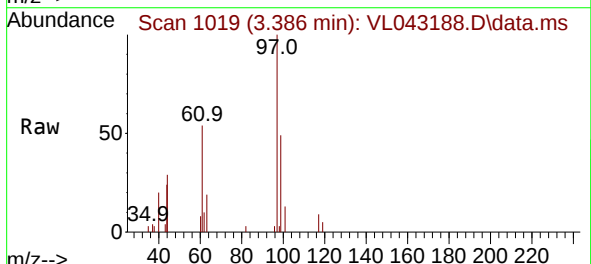
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

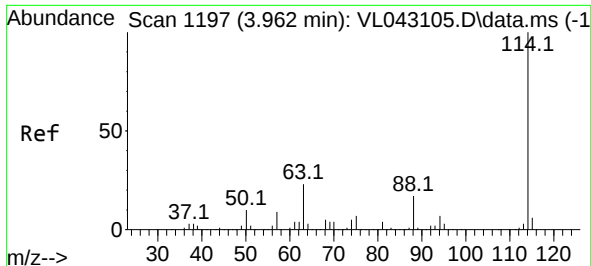
Tgt Ion: 61 Resp: 1750
 Ion Ratio Lower Upper
 61 100
 96 56.7 51.0 76.6
 98 47.5 33.5 50.3



#32
 1,1,1-Trichloroethane
 Concen: 0.062 ppbv
 RT: 3.386 min Scan# 1019
 Delta R.T. 0.013 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 97 Resp: 2015
 Ion Ratio Lower Upper
 97 100
 99 99.8 51.3 76.9#
 61 78.4 38.4 57.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.975 min Scan# 1197

Delta R.T. 0.013 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2025

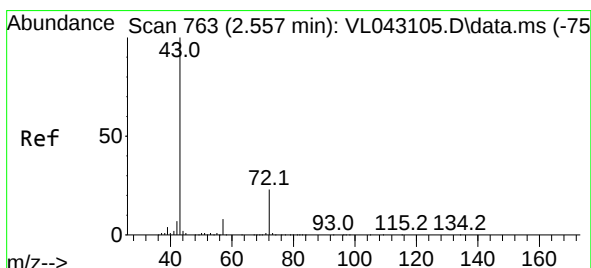
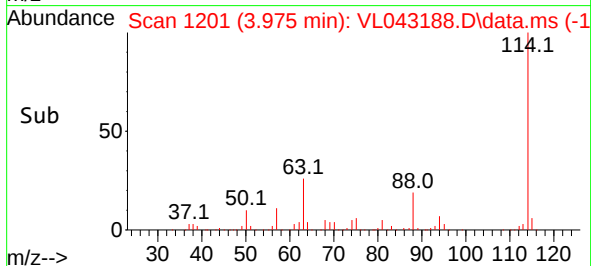
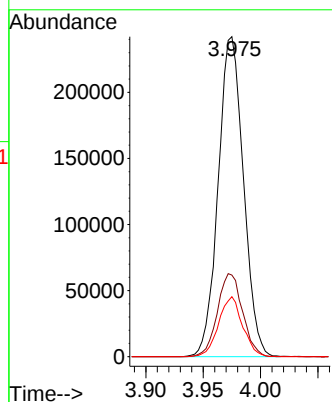
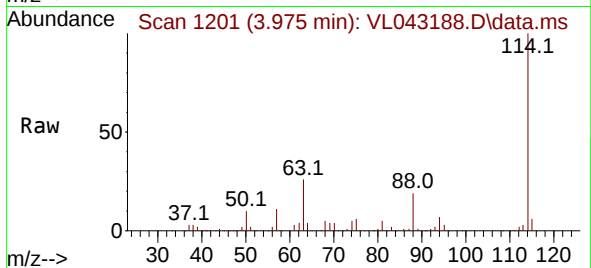
Tgt Ion:114 Resp: 370729

Ion Ratio Lower Upper

114 100

63 25.8 19.3 28.9

88 17.8 13.9 20.9



#34

2-Butanone

Concen: 0.151 ppbv

RT: 2.570 min Scan# 767

Delta R.T. 0.013 min

Lab File: VL043188.D

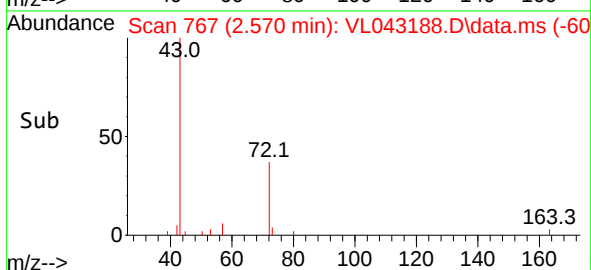
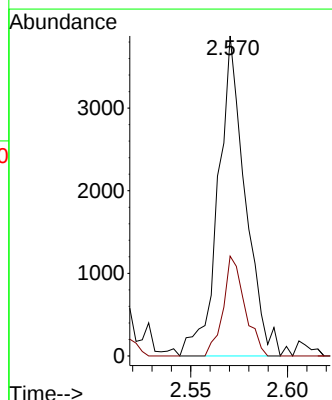
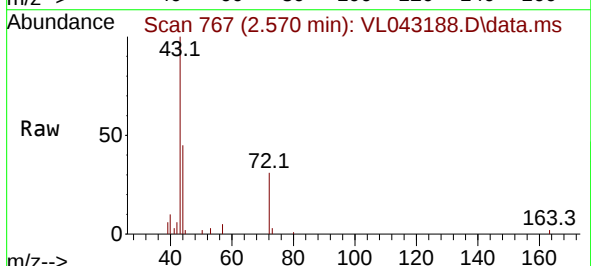
Acq: 11 Nov 2025 13:16

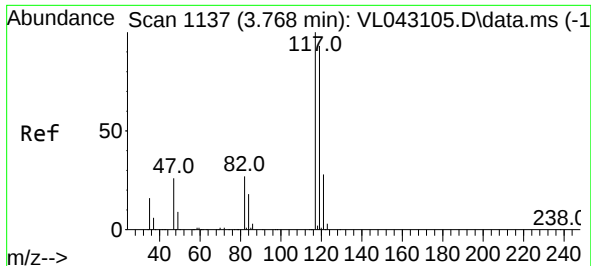
Tgt Ion: 43 Resp: 3775

Ion Ratio Lower Upper

43 100

72 24.7 18.4 27.6

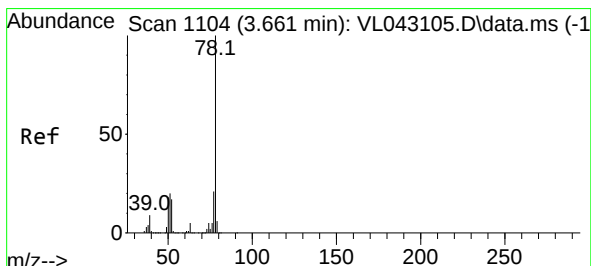
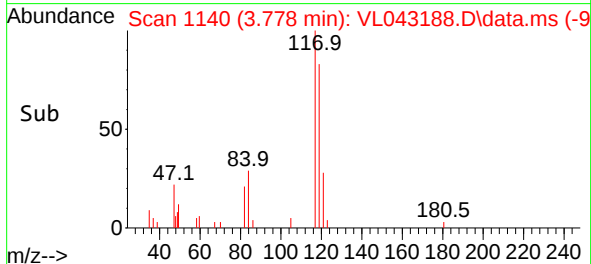
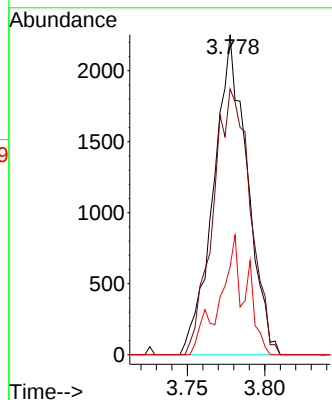
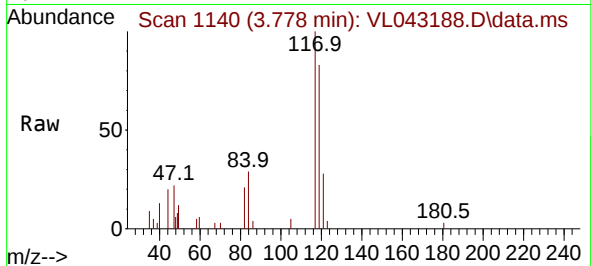




#35
Carbon Tetrachloride
Concen: 0.127 ppbv
RT: 3.778 min Scan# 1137
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

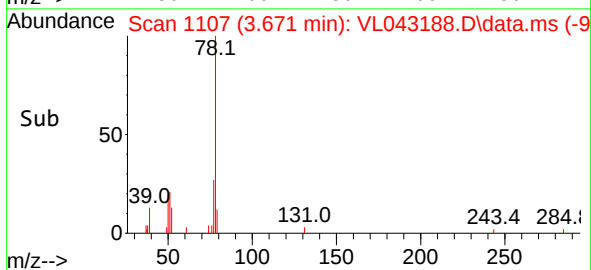
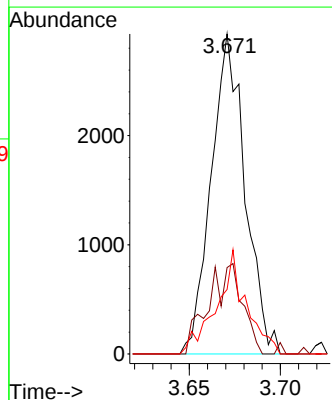
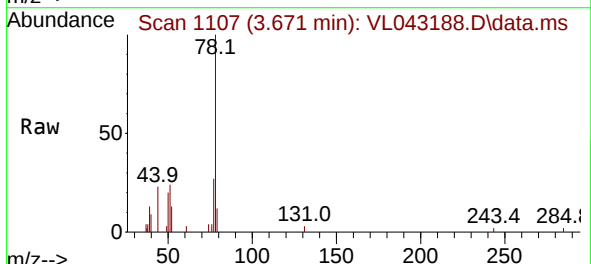
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

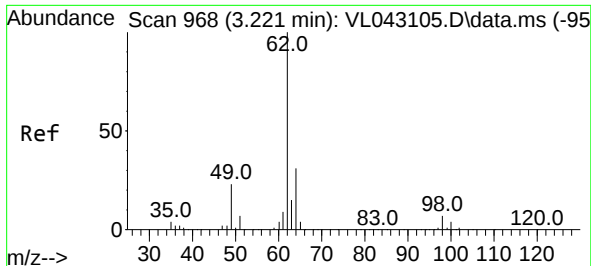
Tgt Ion: 117 Resp: 3392
Ion Ratio Lower Upper
117 100
119 83.1 74.1 111.1
121 27.5 22.2 33.2



#36
Benzene
Concen: 0.109 ppbv
RT: 3.671 min Scan# 1107
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 78 Resp: 3792
Ion Ratio Lower Upper
78 100
77 27.0 17.0 25.6#
50 20.1 14.6 22.0

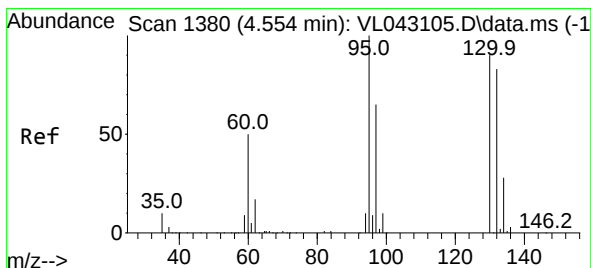
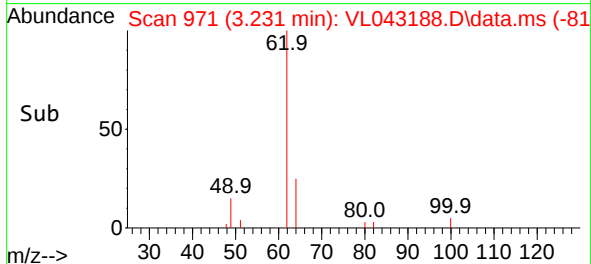
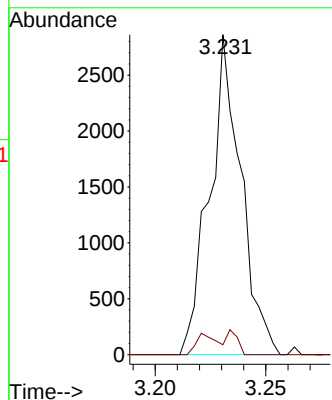
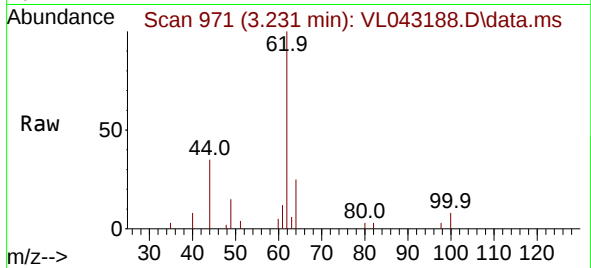




#37
1,2-Dichloroethane
Concen: 0.141 ppbv
RT: 3.231 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

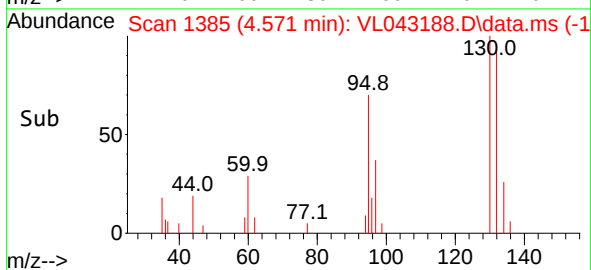
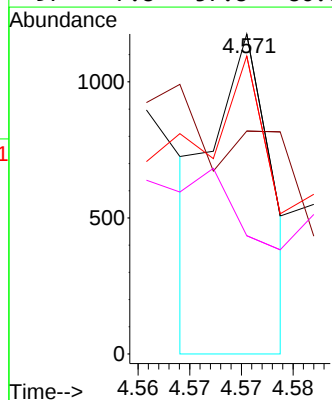
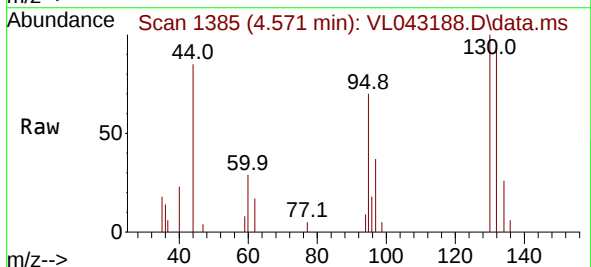
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

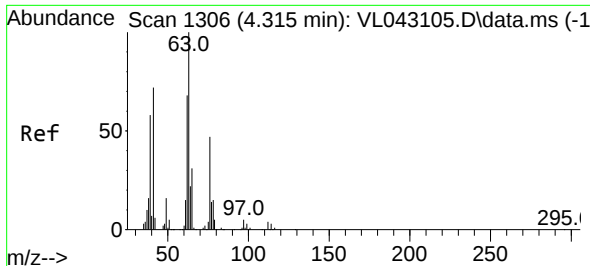
Tgt Ion: 62 Resp: 2835
Ion Ratio Lower Upper
62 100
98 7.0 5.8 8.6



#38
Trichloroethene
Concen: 0.032 ppbv
RT: 4.571 min Scan# 1385
Delta R.T. 0.016 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 130 Resp: 471
Ion Ratio Lower Upper
130 100
95 0.0 88.6 133.0#
132 86.7 73.4 110.0
97 7.8 57.8 86.6#





#39

1,2-Dichloropropane

Concen: 7.488 ppbv

RT: 3.972 min Scan# 1

Delta R.T. -0.343 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2025

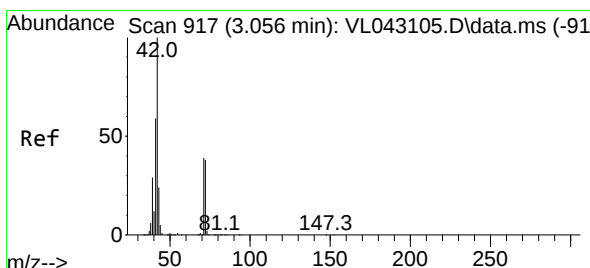
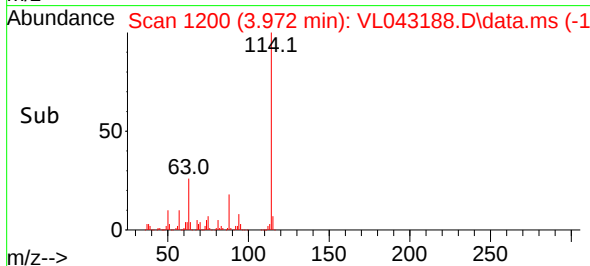
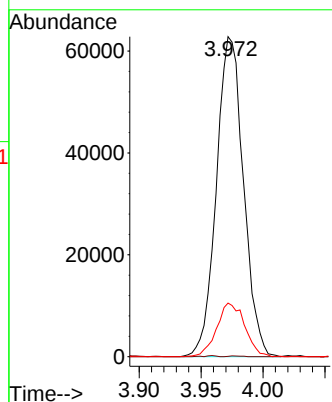
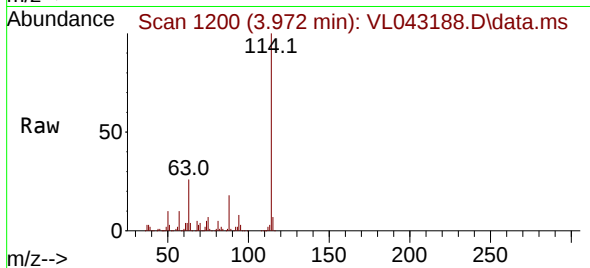
Tgt Ion: 63 Resp: 95584

Ion Ratio Lower Upper

63 100

41 0.1 58.0 87.0#

62 16.7 54.7 82.1#



#41

Tetrahydrofuran

Concen: 0.084 ppbv

RT: 3.078 min Scan# 924

Delta R.T. 0.023 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

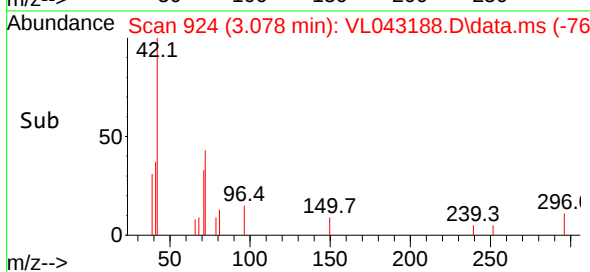
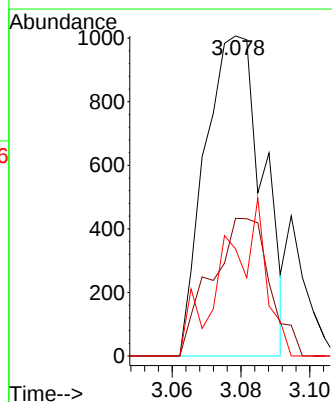
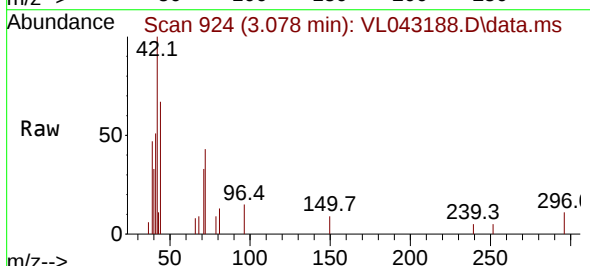
Tgt Ion: 42 Resp: 1176

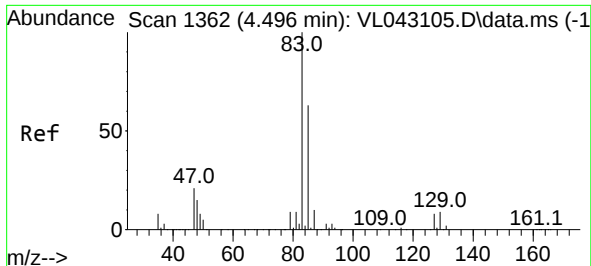
Ion Ratio Lower Upper

42 100

72 43.3 31.3 46.9

71 35.9 30.4 45.6

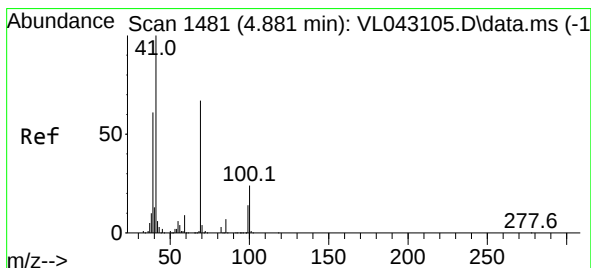
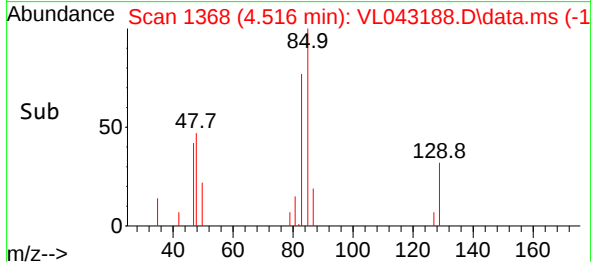
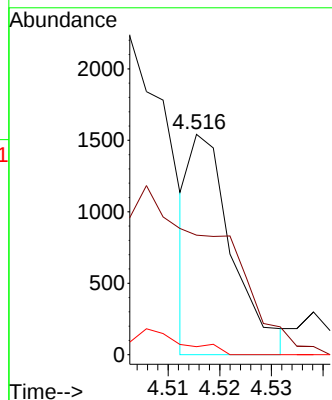
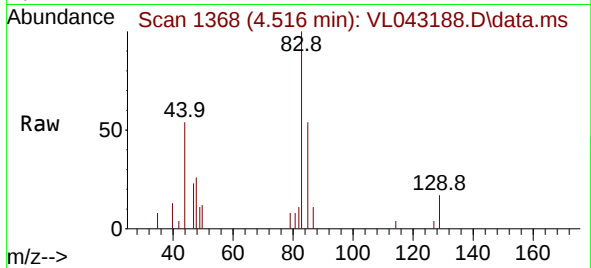




#42
Bromodichloromethane
Concen: 0.032 ppbv
RT: 4.516 min Scan# 1362
Delta R.T. 0.019 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

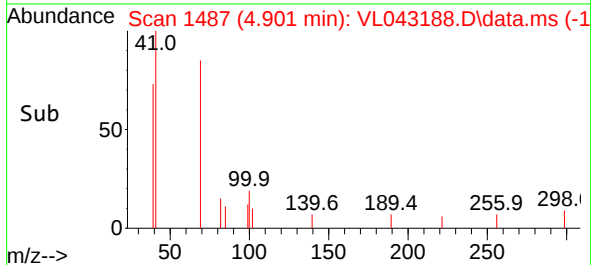
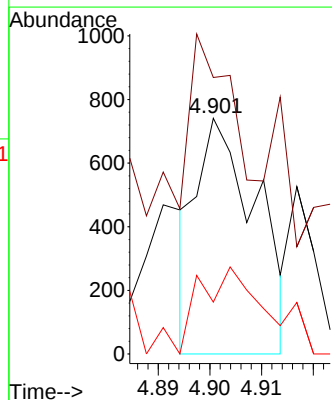
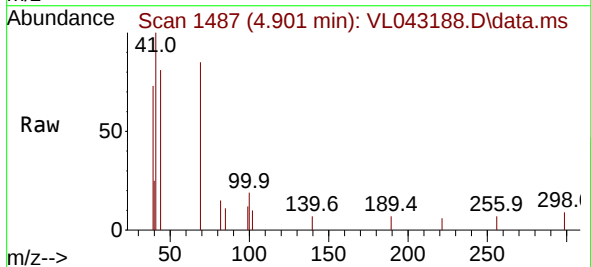
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

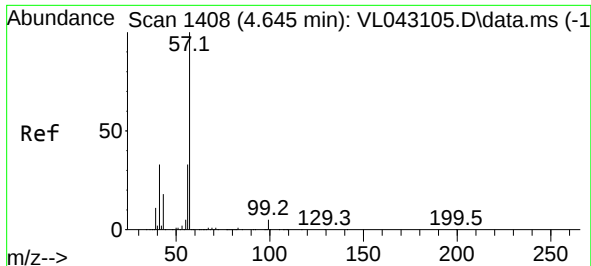
Tgt Ion: 83 Resp: 877
Ion Ratio Lower Upper
83 100
85 47.2 50.6 75.8#
127 4.1 6.3 9.5#



#43
Methyl Methacrylate
Concen: 0.034 ppbv
RT: 4.901 min Scan# 1487
Delta R.T. 0.019 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 69 Resp: 597
Ion Ratio Lower Upper
69 100
41 313.6 120.5 180.7#
100 52.4 29.0 43.4#

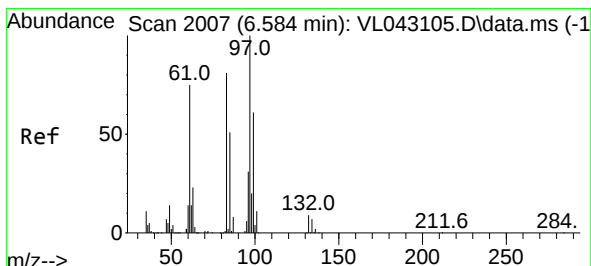
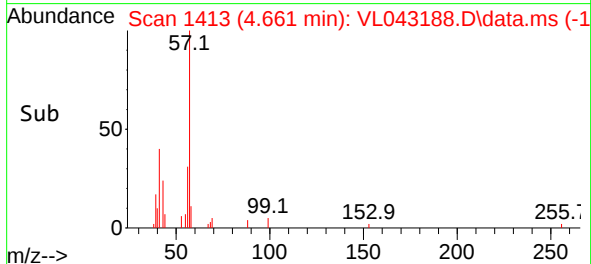
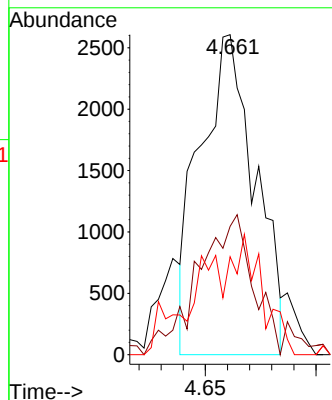
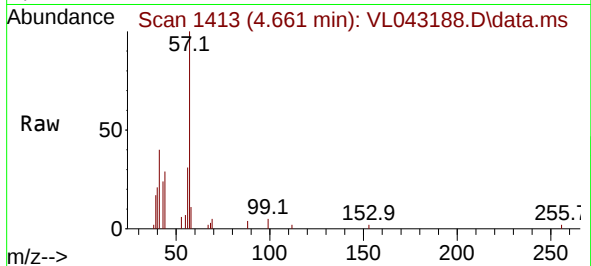




#44
 2,2,4-Trimethylpentane
 Concen: 0.077 ppbv
 RT: 4.661 min Scan# 1408
 Delta R.T. 0.016 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

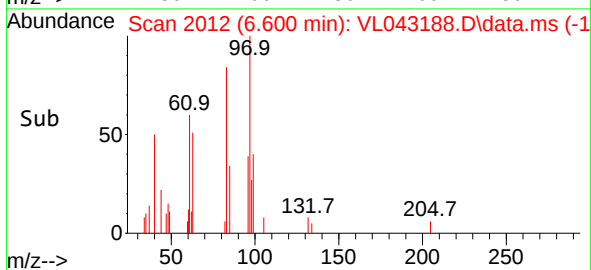
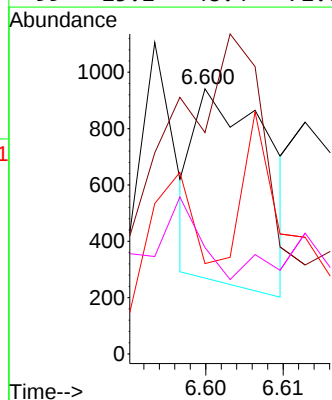
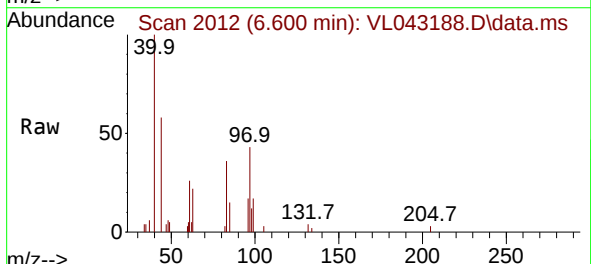
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

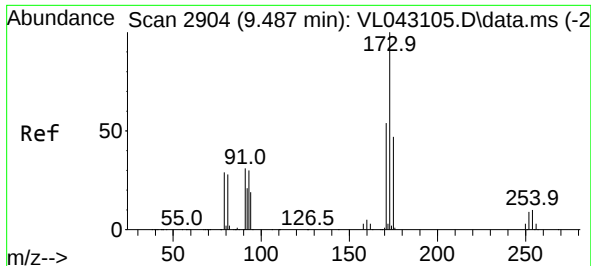
Tgt Ion: 57	Resp: 4524
Ion Ratio	Lower Upper
57 100	
41 48.1	26.3 39.5#
56 42.4	25.9 38.9#



#47
 1,1,2-Trichloroethane
 Concen: 0.033 ppbv
 RT: 6.600 min Scan# 2012
 Delta R.T. 0.016 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 97	Resp: 452
Ion Ratio	Lower Upper
97 100	
83 126.1	64.6 96.8#
85 0.0	40.6 60.8#
99 25.2	48.4 72.6#





#49

Bromoform

Concen: 0.038 ppbv

RT: 9.500 min Scan# 2904

Delta R.T. 0.013 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2025

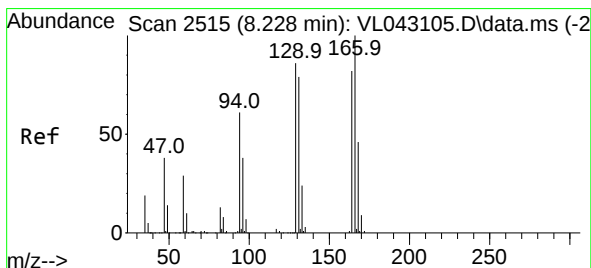
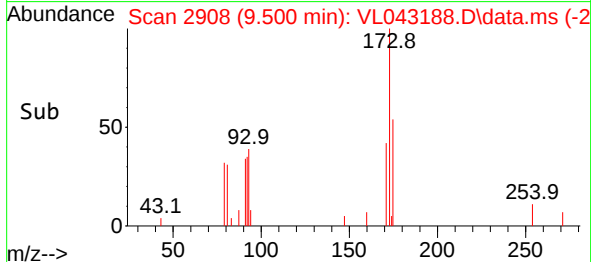
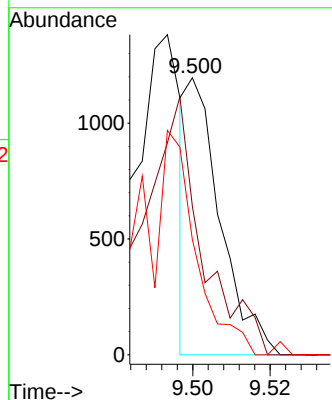
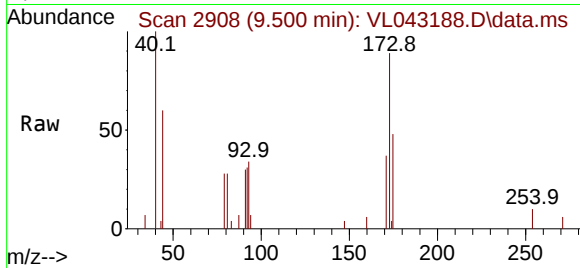
Tgt Ion:173 Resp: 713

Ion Ratio Lower Upper

173 100

175 164.7 38.8 58.2#

171 0.0 41.7 62.5#



#52

Tetrachloroethene

Concen: 0.076 ppbv

RT: 8.238 min Scan# 2518

Delta R.T. 0.010 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Tgt Ion:164 Resp: 963

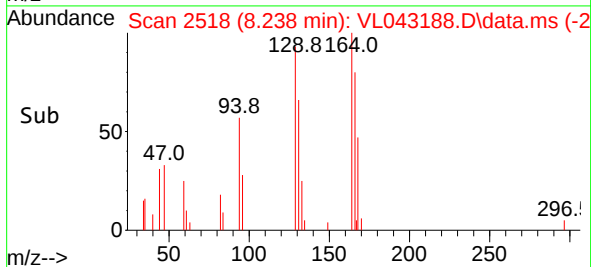
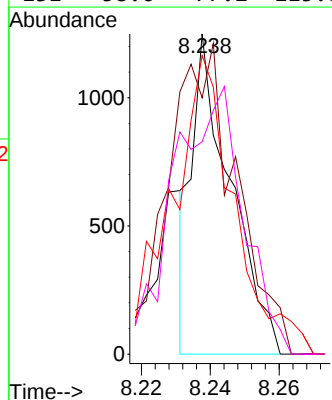
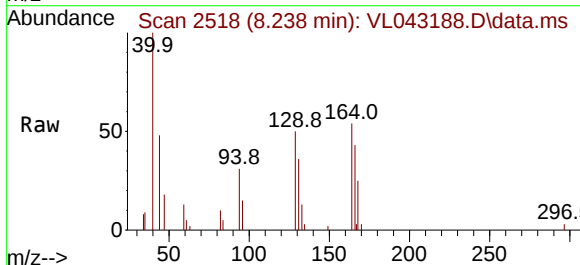
Ion Ratio Lower Upper

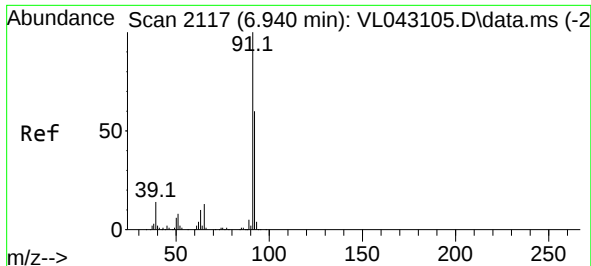
164 100

166 65.6 97.6 146.4#

129 80.7 84.5 126.7#

131 58.6 77.2 115.8#

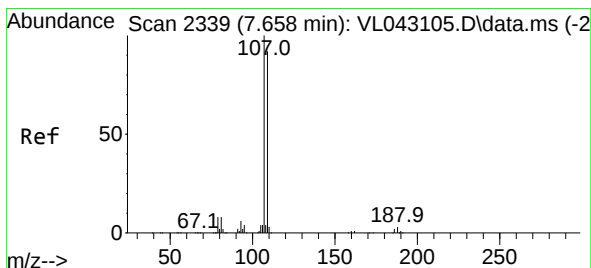
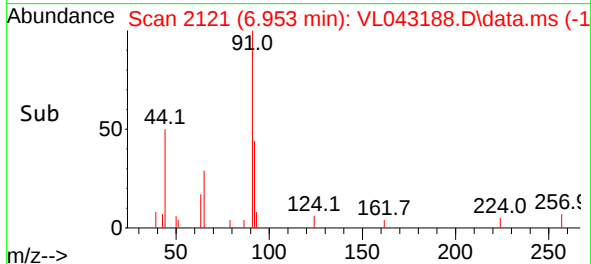
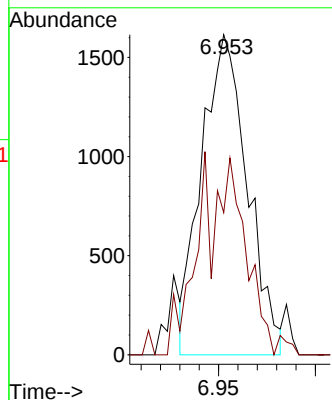
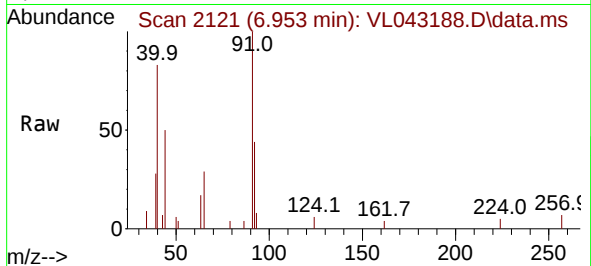




#53
Toluene
Concen: 0.064 ppbv
RT: 6.953 min Scan# 2117
Delta R.T. 0.013 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

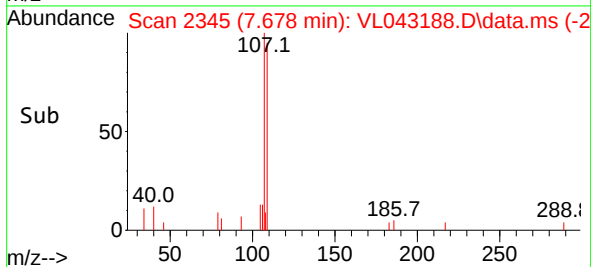
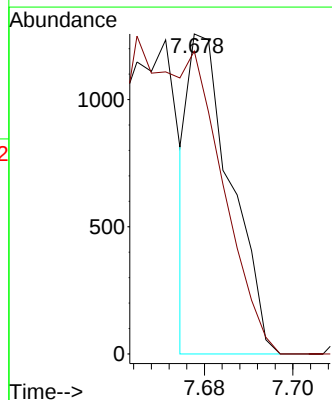
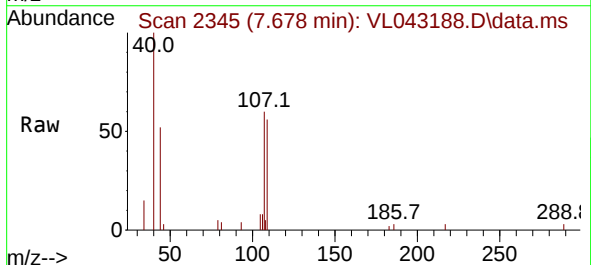
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

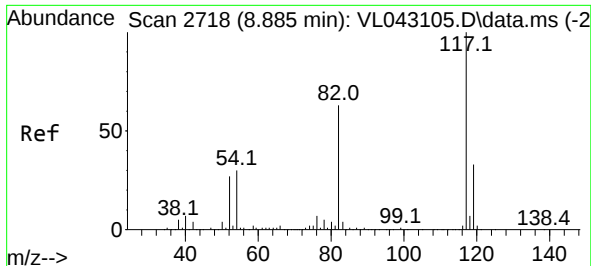
Tgt Ion: 91 Resp: 2668
Ion Ratio Lower Upper
91 100
92 62.5 48.8 73.2



#54
1,2-Dibromoethane
Concen: 0.039 ppbv
RT: 7.678 min Scan# 2345
Delta R.T. 0.019 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 107 Resp: 836
Ion Ratio Lower Upper
107 100
109 94.7 73.4 110.2

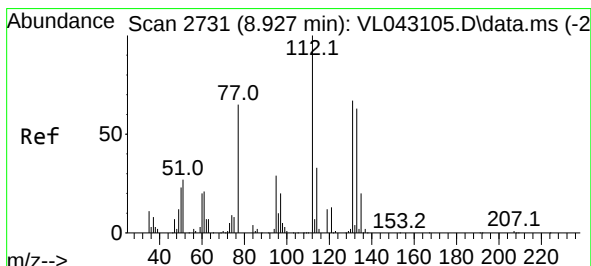
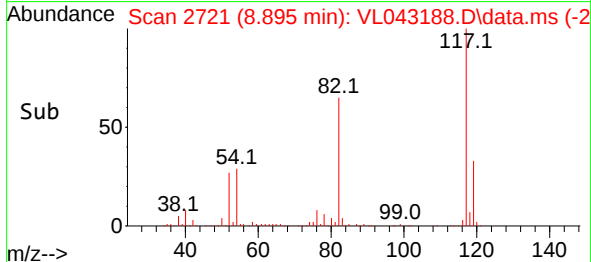
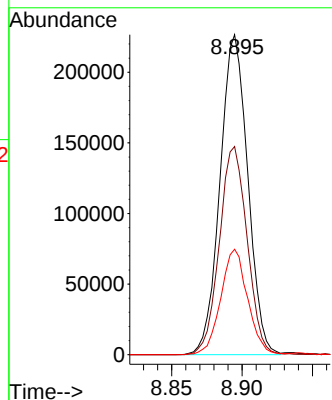
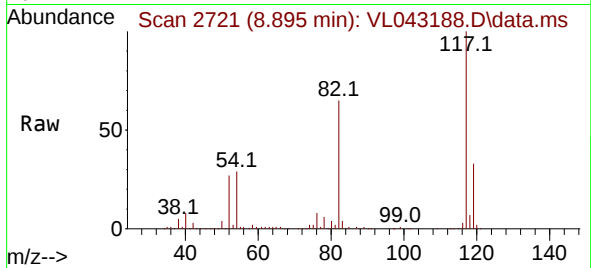




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

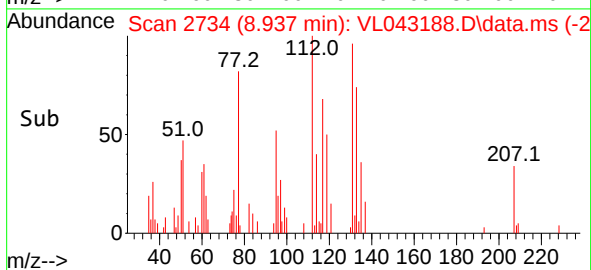
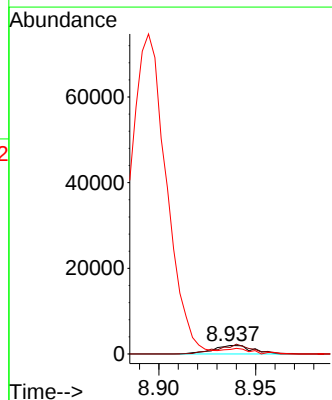
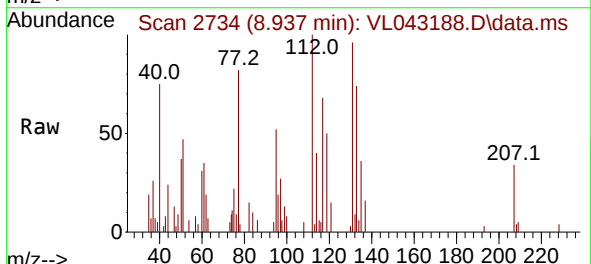
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

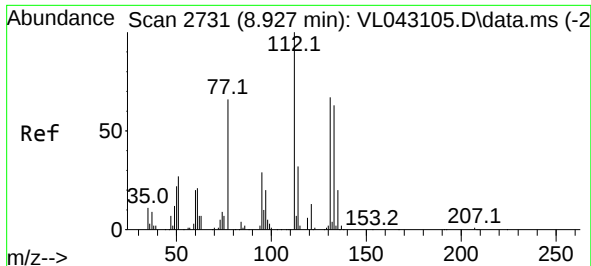
Tgt Ion:117 Resp: 311024
Ion Ratio Lower Upper
117 100
82 65.2 53.8 80.8
119 32.4 25.4 38.0



#56
1,1,1,2-Tetrachloroethane
Concen: 0.142 ppbv
RT: 8.937 min Scan# 2734
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion:131 Resp: 2783
Ion Ratio Lower Upper
131 100
133 103.3 75.7 113.5
119 3622.6 50.6 76.0#

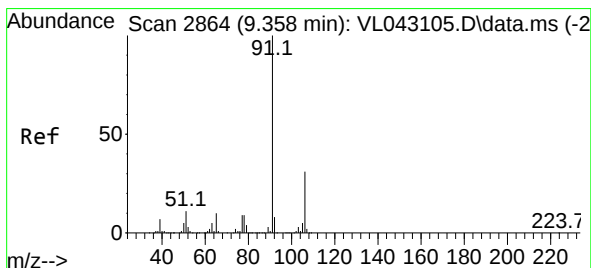
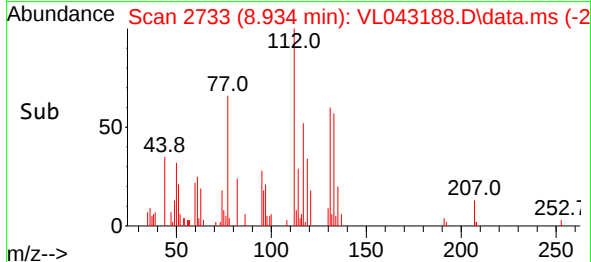
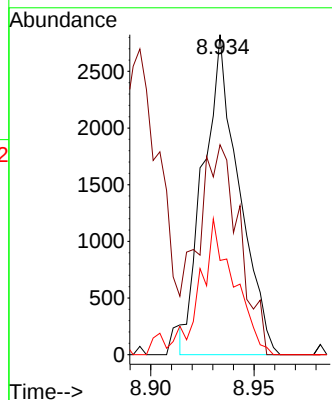
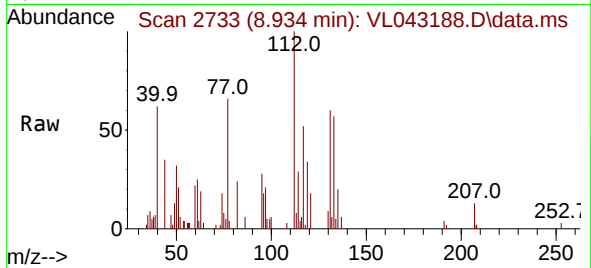




#57
Chlorobenzene
Concen: 0.116 ppbv
RT: 8.934 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

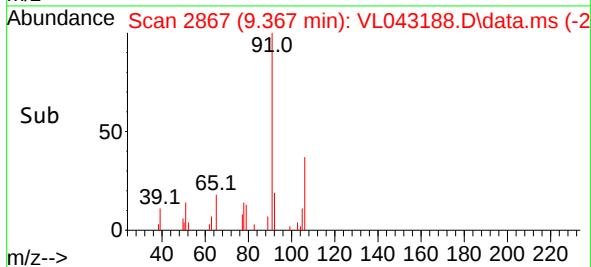
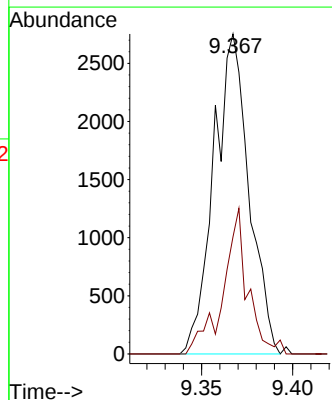
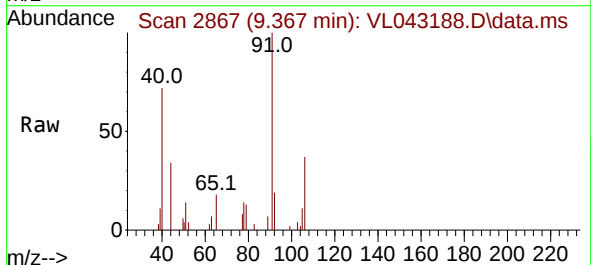
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

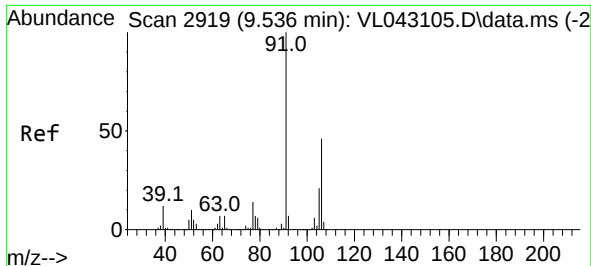
Tgt Ion:	112	Resp:	3370
Ion	Ratio	Lower	Upper
112	100		
77	69.3	53.3	79.9
114	29.4	29.3	35.8



#58
Ethyl Benzene
Concen: 0.069 ppbv
RT: 9.367 min Scan# 2867
Delta R.T. 0.010 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion:	91	Resp:	3701
Ion	Ratio	Lower	Upper
91	100		
106	36.6	24.8	37.2





#59

m/p-Xylene

Concen: 0.073 ppbv

RT: 9.545 min Scan# 2919

Delta R.T. 0.010 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

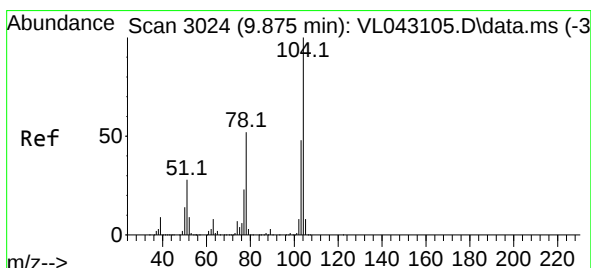
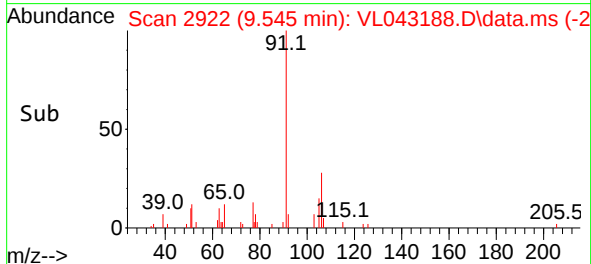
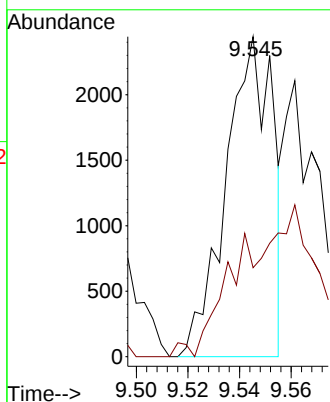
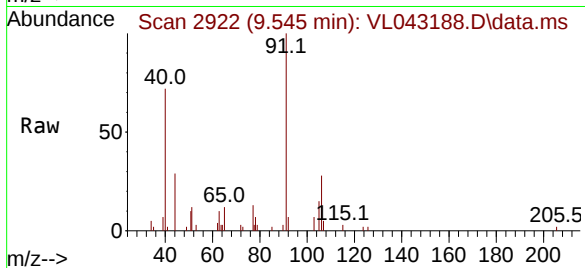
MDL-AIR-03-QT4-2025

Tgt Ion: 91 Resp: 3087

Ion Ratio Lower Upper

91 100

106 0.0 38.0 57.0#



#61

Styrene

Concen: 0.036 ppbv

RT: 9.885 min Scan# 3027

Delta R.T. 0.010 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

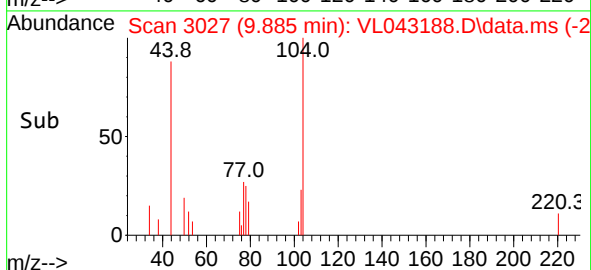
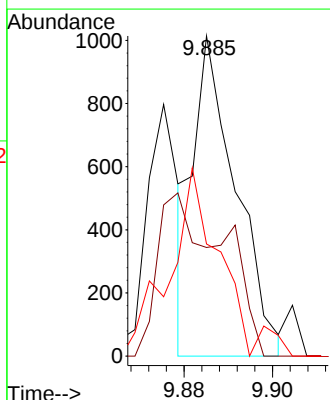
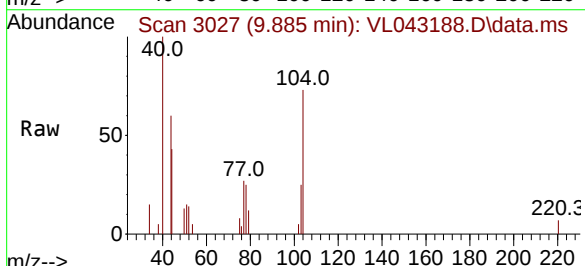
Tgt Ion: 104 Resp: 676

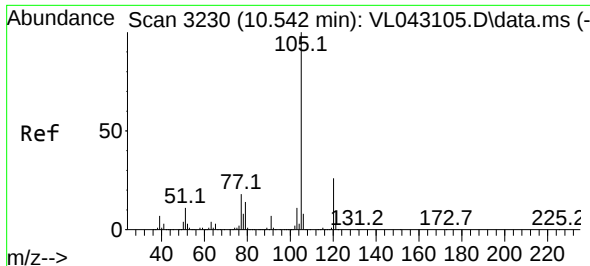
Ion Ratio Lower Upper

104 100

78 0.0 40.2 60.2#

103 71.0 36.9 55.3#

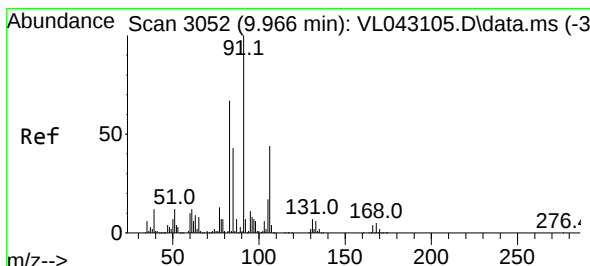
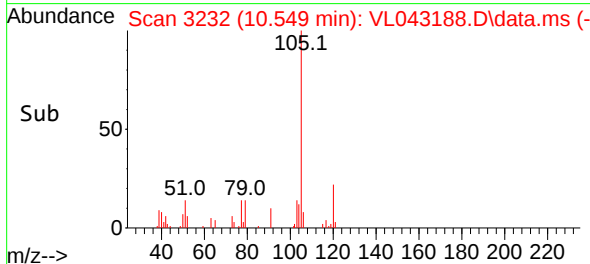
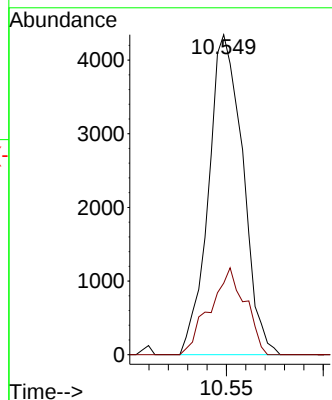
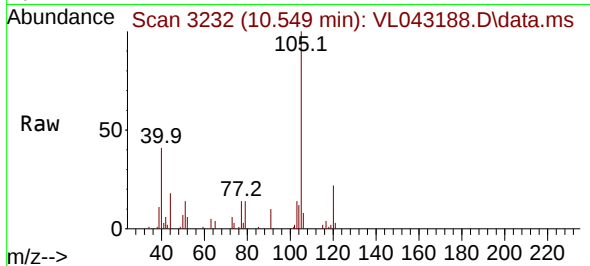




#62
Isopropylbenzene
Concen: 0.070 ppbv
RT: 10.549 min Scan# 31
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

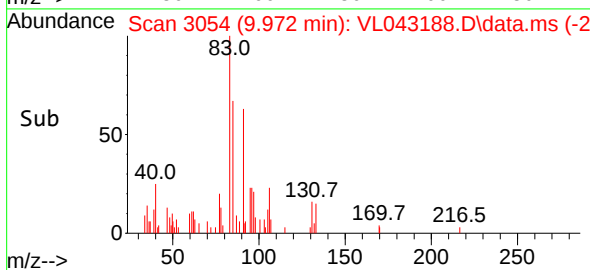
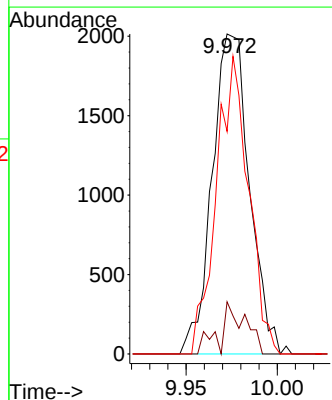
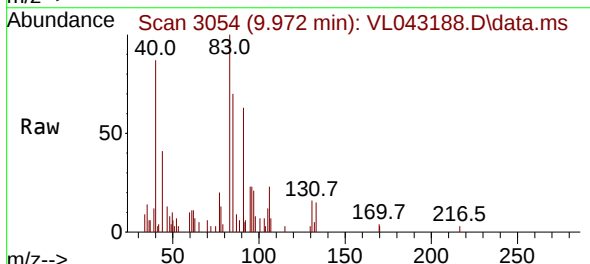
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

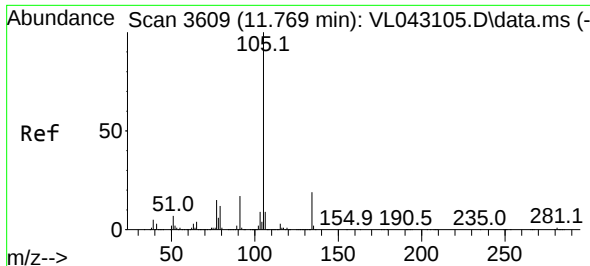
Tgt Ion:105 Resp: 5344
Ion Ratio Lower Upper
105 100
120 28.1 20.2 30.4



#63
1,1,2,2-Tetrachloroethane
Concen: 0.102 ppbv
RT: 9.972 min Scan# 3054
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 83 Resp: 2871
Ion Ratio Lower Upper
83 100
131 11.2 4.8 14.3
85 80.4 32.0 96.0

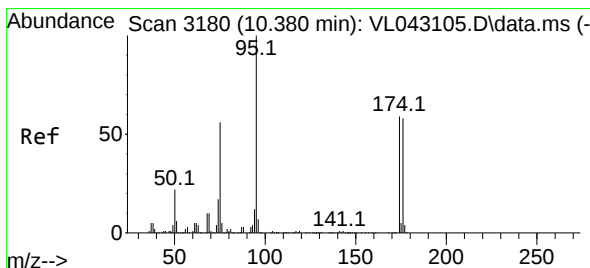
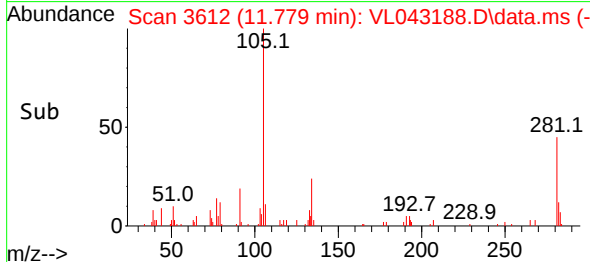
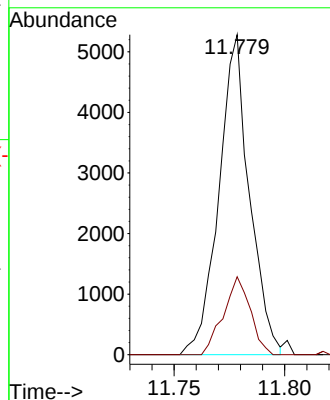
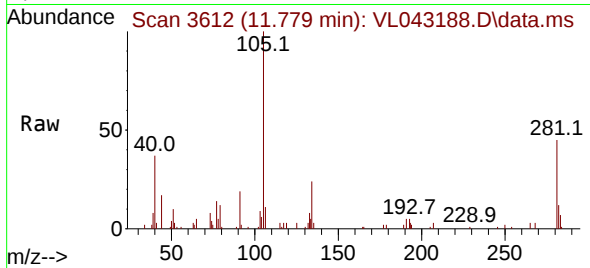




#67
 sec-Butylbenzene
 Concen: 0.053 ppbv
 RT: 11.779 min Scan# 3612
 Delta R.T. 0.010 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

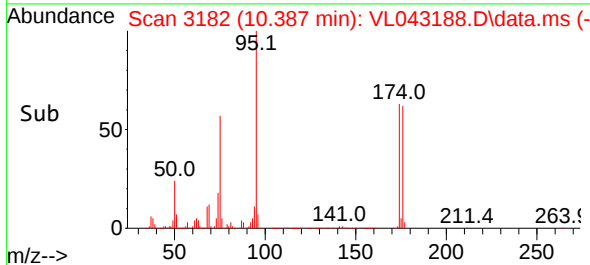
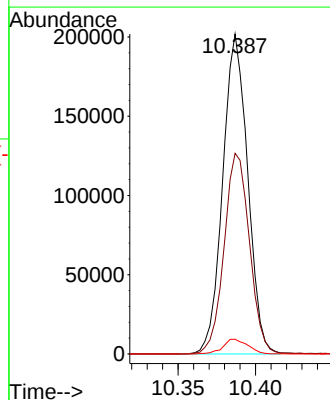
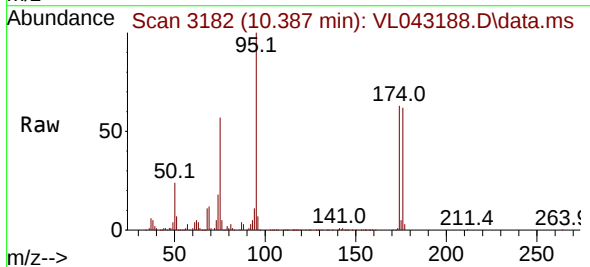
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

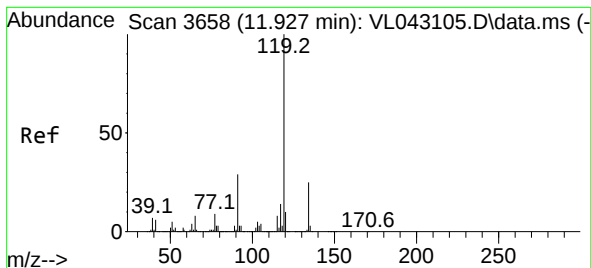
Tgt Ion:105 Resp: 5087
 Ion Ratio Lower Upper
 105 100
 134 21.3 15.5 23.3



#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.344 ppbv
 RT: 10.387 min Scan# 3182
 Delta R.T. 0.006 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

Tgt Ion: 95 Resp: 225899
 Ion Ratio Lower Upper
 95 100
 174 64.0 48.3 72.5
 175 4.6 3.8 5.8





#69

p-Isopropyltoluene

Concen: 0.044 ppbv

RT: 11.934 min Scan# 3071

Delta R.T. 0.006 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

Instrument :

MSVOA_L

ClientSampleId :

MDL-AIR-03-QT4-2025

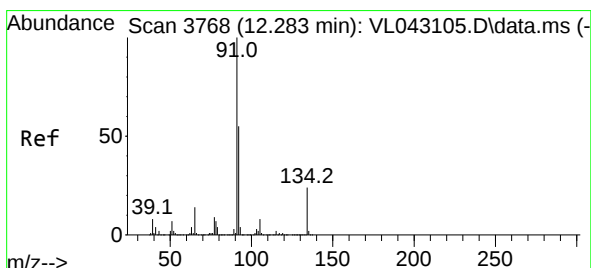
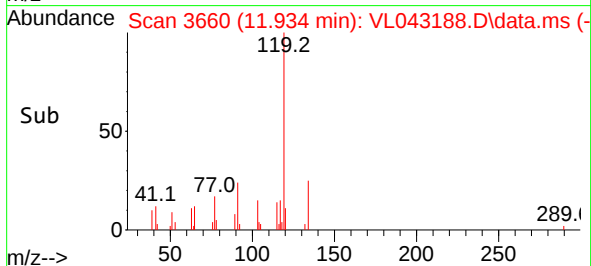
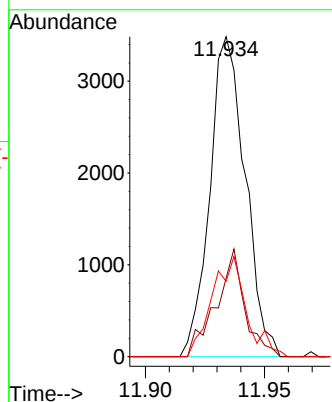
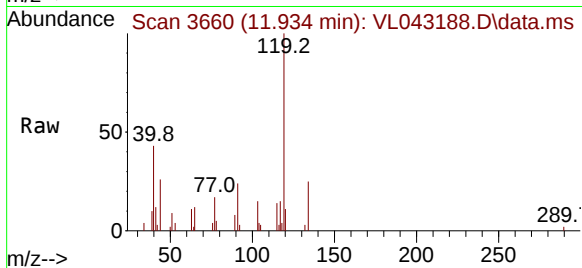
Tgt Ion:119 Resp: 3597

Ion Ratio Lower Upper

119 100

134 27.2 20.3 30.5

91 30.2 22.6 33.8



#70

n-Butylbenzene

Concen: 0.043 ppbv

RT: 12.293 min Scan# 3771

Delta R.T. 0.010 min

Lab File: VL043188.D

Acq: 11 Nov 2025 13:16

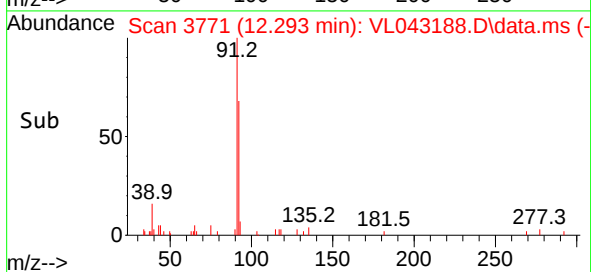
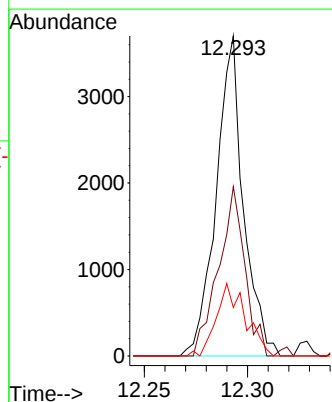
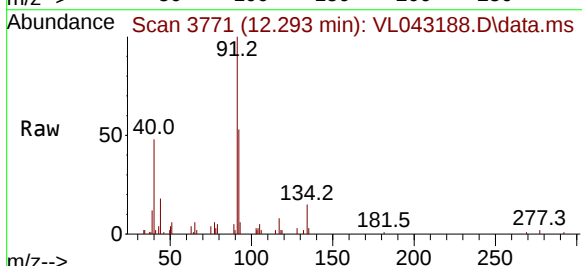
Tgt Ion: 91 Resp: 3398

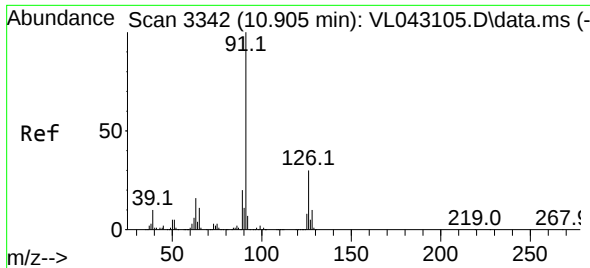
Ion Ratio Lower Upper

91 100

92 52.1 44.5 66.7

134 24.1 19.3 28.9

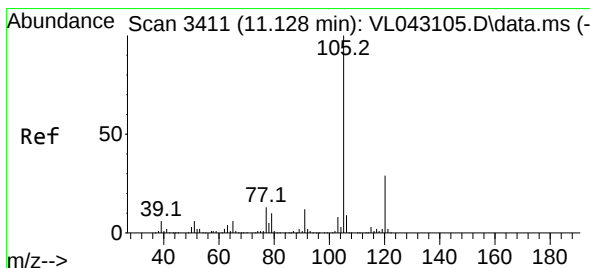
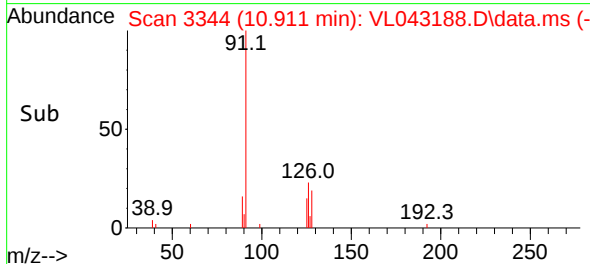
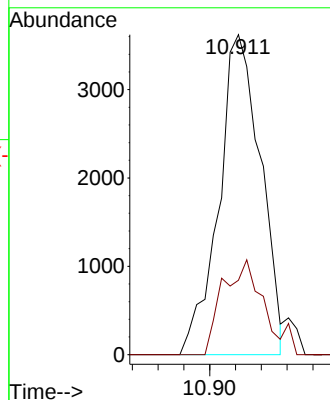
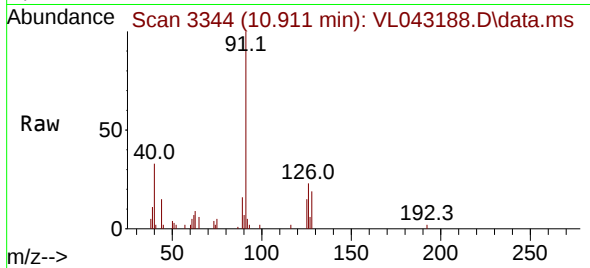




#71
2-Chlorotoluene
Concen: 0.070 ppbv
RT: 10.911 min Scan# 311
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

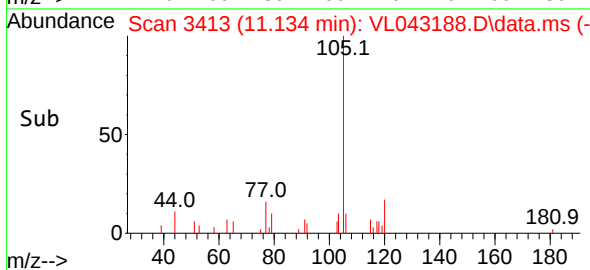
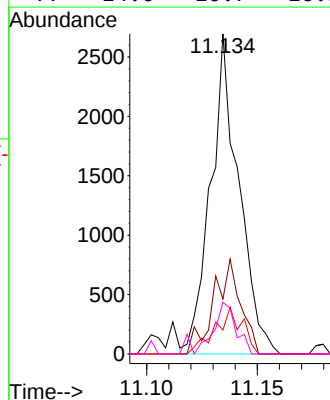
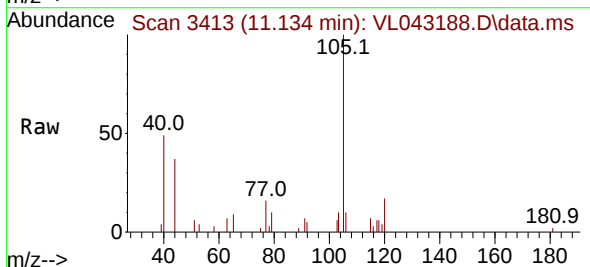
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

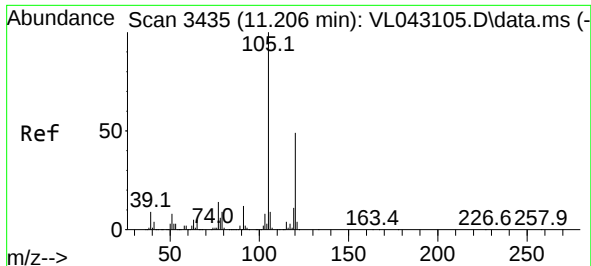
Tgt Ion: 91 Resp: 4078
Ion Ratio Lower Upper
91 100
126 29.1 12.0 48.0



#72
4-Ethyltoluene
Concen: 0.046 ppbv
RT: 11.134 min Scan# 3413
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion: 105 Resp: 2385
Ion Ratio Lower Upper
105 100
120 28.5 24.2 36.4
91 14.1 10.0 15.0
77 14.0 10.7 16.1

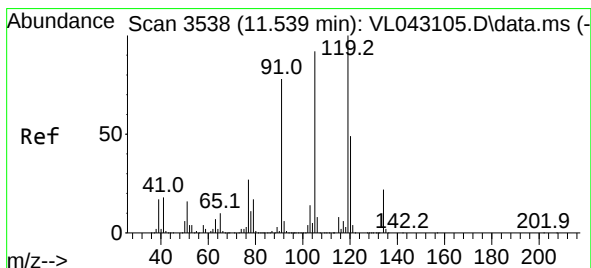
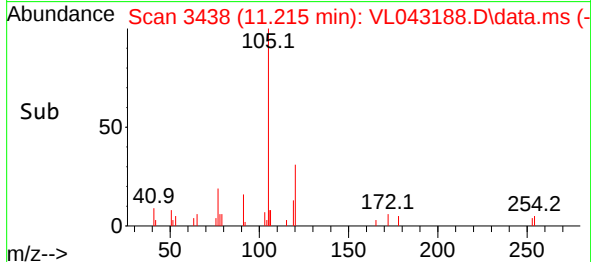
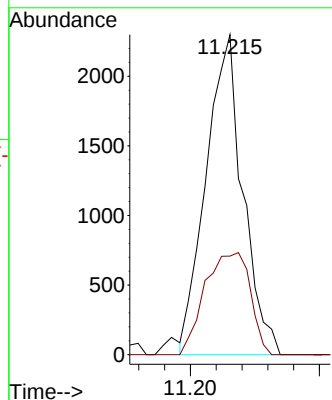
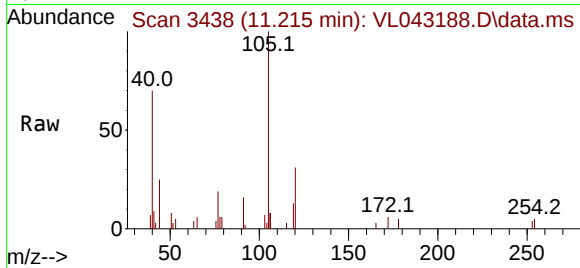




#73
 1,3,5-Trimethylbenzene
 Concen: 0.053 ppbv
 RT: 11.215 min Scan# 3435
 Delta R.T. 0.010 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

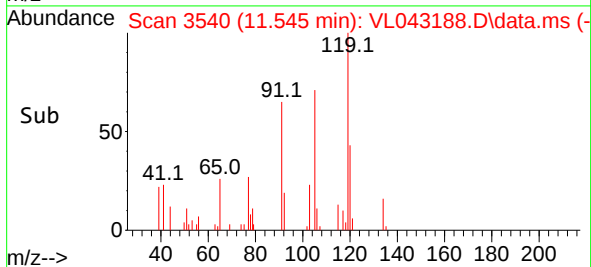
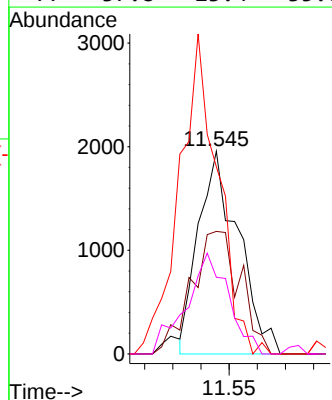
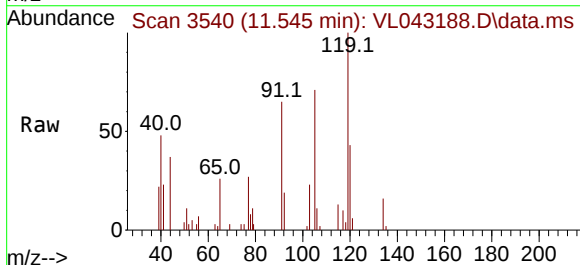
Instrument :
 MSVOA_L
 ClientSampleId :
 MDL-AIR-03-QT4-2025

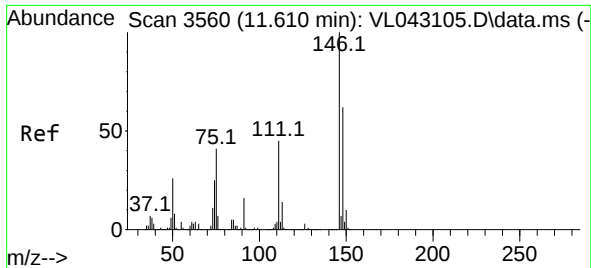
Tgt Ion:105 Resp: 2279
 Ion Ratio Lower Upper
 105 100
 120 30.8 39.0 58.6#



#74
 1,2,4-Trimethylbenzene
 Concen: 0.041 ppbv
 RT: 11.545 min Scan# 3540
 Delta R.T. 0.006 min
 Lab File: VL043188.D
 Acq: 11 Nov 2025 13:16

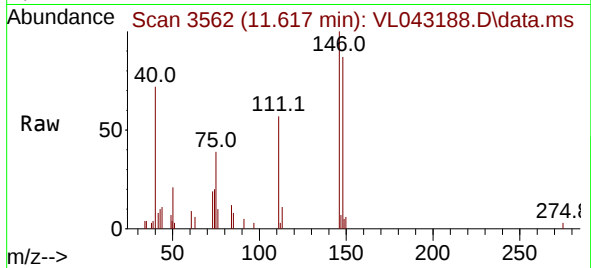
Tgt Ion:105 Resp: 1938
 Ion Ratio Lower Upper
 105 100
 120 60.4 42.8 64.2
 91 92.3 68.3 102.5
 77 37.8 23.4 35.0#



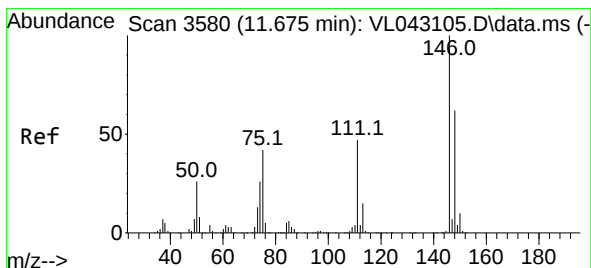
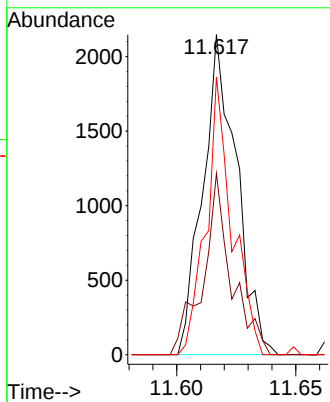
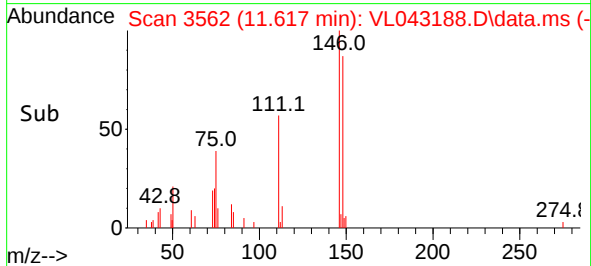


#75
1,3-Dichlorobenzene
Concen: 0.076 ppbv
RT: 11.617 min Scan# 3560
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

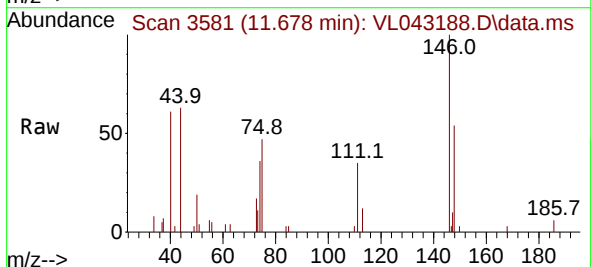
Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025



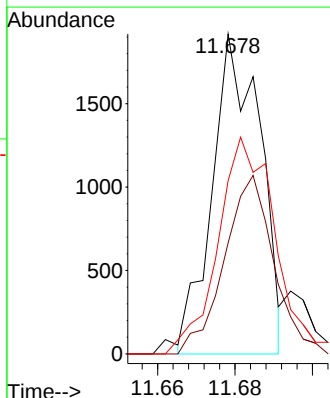
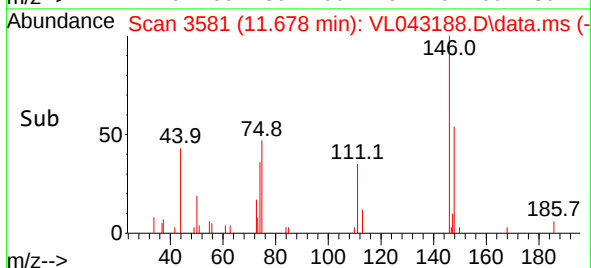
Tgt Ion:	146	Resp:	2108
Ion Ratio	Lower	Upper	
146	100		
111	47.8	23.3	69.9
148	67.2	31.6	95.0

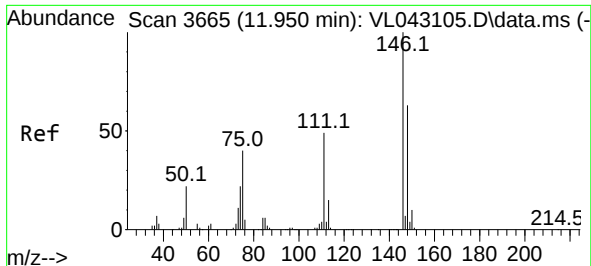


#76
1,4-Dichlorobenzene
Concen: 0.059 ppbv
RT: 11.678 min Scan# 3581
Delta R.T. 0.003 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16



Tgt Ion:	146	Resp:	1656
Ion Ratio	Lower	Upper	
146	100		
111	57.2	22.4	67.0
148	79.8	31.6	94.7

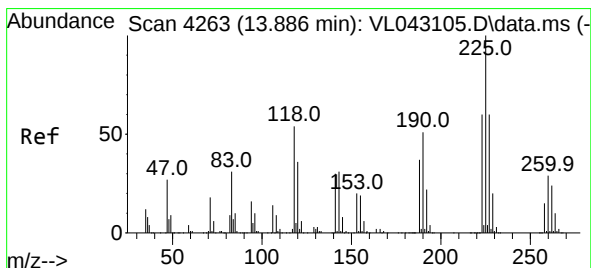
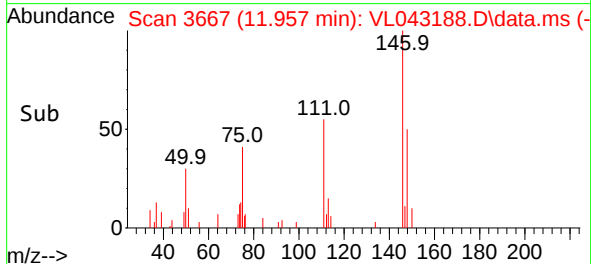
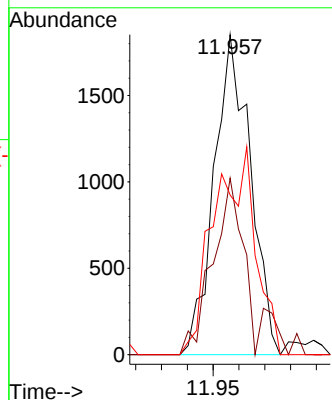
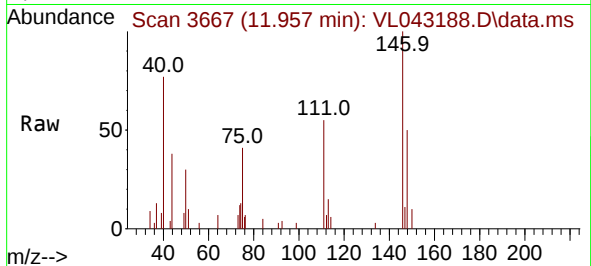




#77
1,2-Dichlorobenzene
Concen: 0.067 ppbv
RT: 11.957 min Scan# 3667
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Instrument :
MSVOA_L
ClientSampleId :
MDL-AIR-03-QT4-2025

Tgt Ion:146 Resp: 1803
Ion Ratio Lower Upper
146 100
111 53.9 24.0 72.0
148 75.3 31.1 93.3



#78
Hexachloro-1,3-Butadiene
Concen: 0.108 ppbv
RT: 13.892 min Scan# 4265
Delta R.T. 0.006 min
Lab File: VL043188.D
Acq: 11 Nov 2025 13:16

Tgt Ion:225 Resp: 2240
Ion Ratio Lower Upper
225 100
223 63.3 50.2 75.4
227 65.4 49.6 74.4

