

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
 Data File : VL042081.D
 Acq On : 03 Mar 2025 17:24
 Operator : SY/MD
 Sample : Q1430-02 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV2

Quant Time: Mar 04 00:20:05 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Feb 26 01:08:36 2025
 Response via : Initial Calibration

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

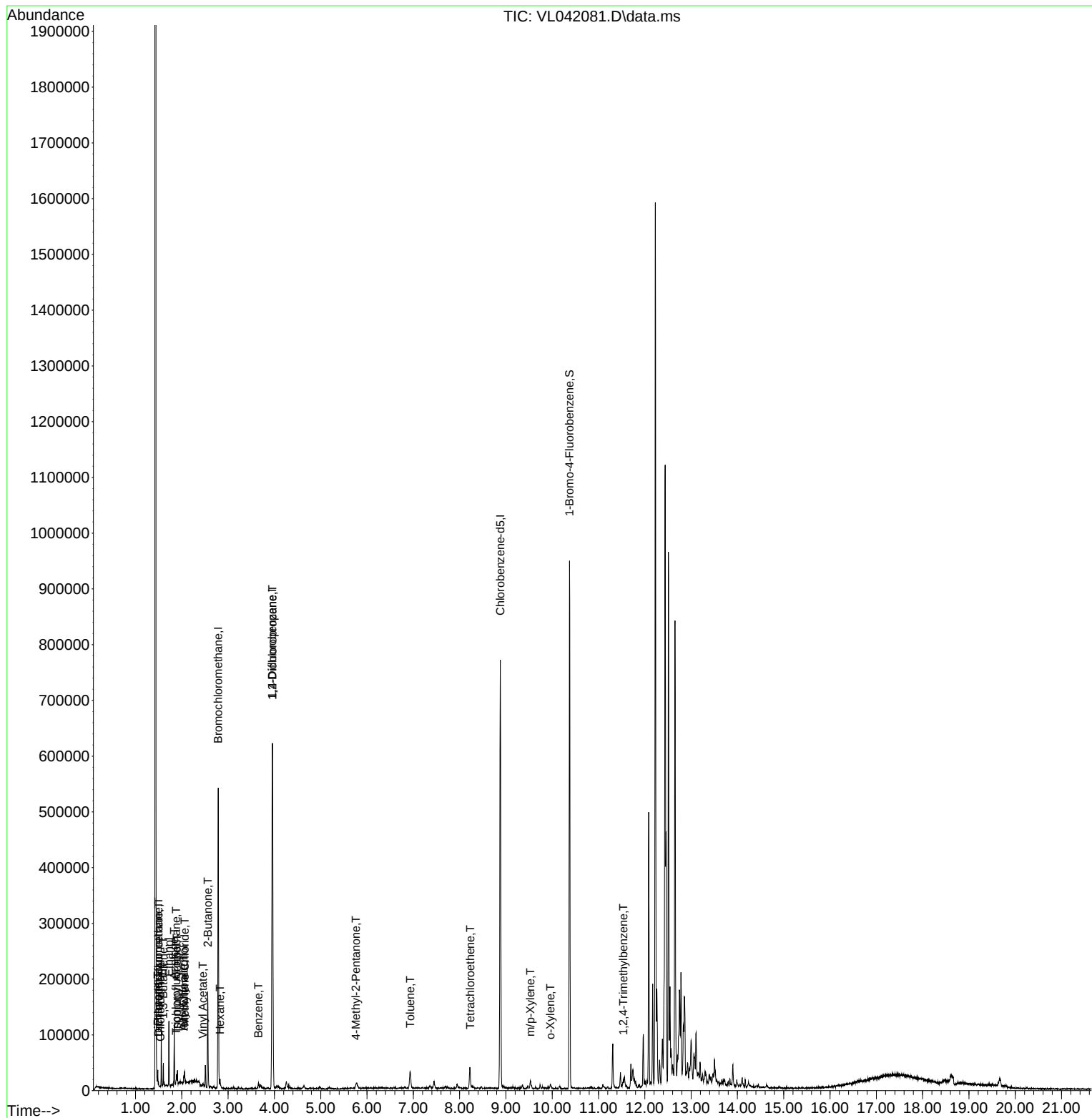
Internal Standards						
1) Bromochloromethane	2.787	49	163018	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.955	114	364560	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.878	117	307983	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	232727	9.822	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.200%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	2256	0.133	ppbv #	86
4) Chloromethane	1.534	50	193	0.031	ppbv	95
8) Dichlorotetrafluoroethane	1.496	85	2256	0.162	ppbv #	18
9) Propene	1.483	41	4140	0.429	ppbv	99
11) Trichlorofluoromethane	1.877	101	1461	0.086	ppbv	97
13) Ethanol	1.722	45	40109	65.460	ppbv	90
15) Acetone	1.835	43	43625	3.030	ppbv #	78
16) 1,3-Butadiene	1.602	39	4322	0.645	ppbv #	24
17) tert-Butyl alcohol	2.046	59	4938	0.274	ppbv #	87
19) Isopropyl Alcohol	1.890	45	7366	0.891	ppbv #	1
20) Methylene Chloride	2.062	84	2944	0.541	ppbv #	88
21) Allyl Chloride	2.046	41	1504	0.145	ppbv #	35
23) Vinyl Acetate	2.454	43	1198	0.118	ppbv #	26
26) Hexane	2.826	57	2777	0.119	ppbv #	46
34) 2-Butanone	2.560	43	112646	3.966	ppbv	93
36) Benzene	3.654	78	5456	0.143	ppbv #	84
39) 1,2-Dichloropropane	3.959	63	95722	6.608	ppbv #	23
50) 4-Methyl-2-Pentanone	5.758	43	2442	0.066	ppbv #	38
52) Tetrachloroethene	8.231	164	1858	0.142	ppbv	90
53) Toluene	6.936	91	21630	0.507	ppbv	98
59) m/p-Xylene	9.526	91	4132	0.092	ppbv #	100
60) o-Xylene	9.959	91	3373	0.074	ppbv	100
74) 1,2,4-Trimethylbenzene	11.536	105	4584	0.085	ppbv #	69

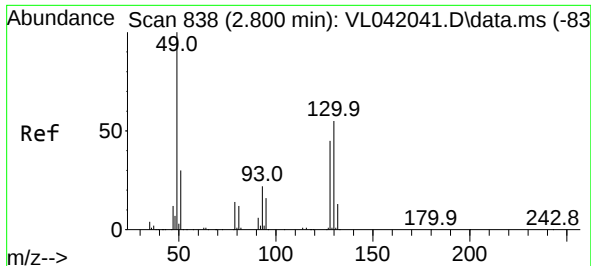
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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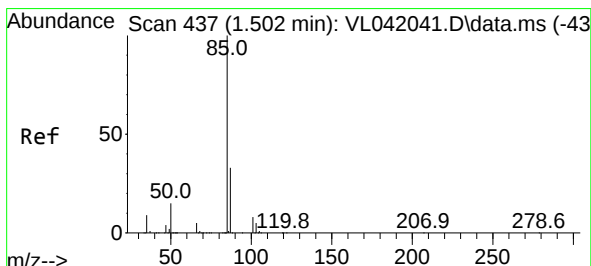
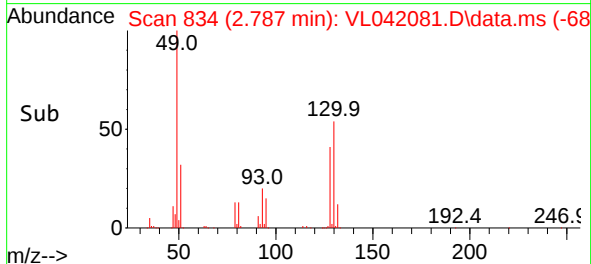
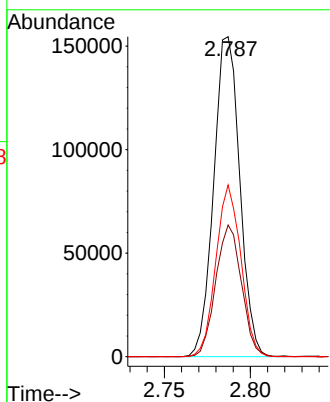
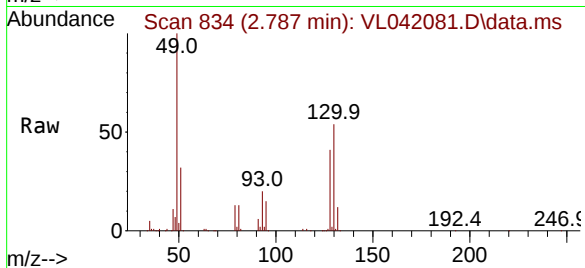




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. -0.013 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

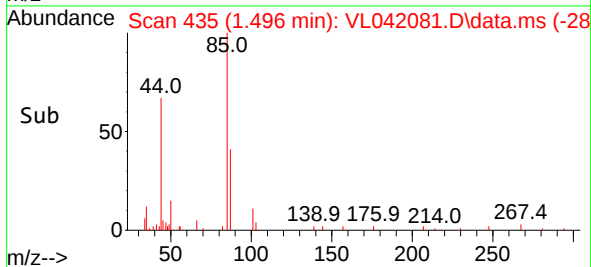
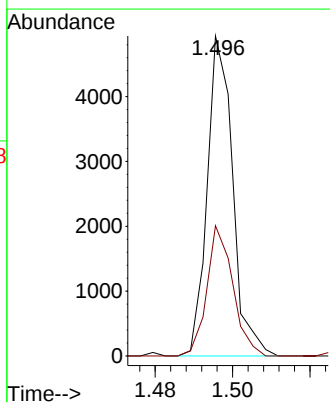
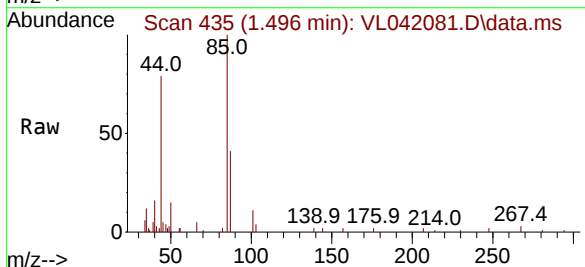
Instrument :
MSVOA_L
ClientSampleId :
SV2

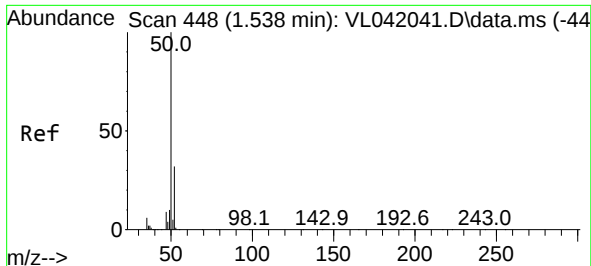
Tgt Ion: 49 Resp: 163018
Ion Ratio Lower Upper
49 100
128 40.5 21.6 64.8
130 51.3 27.8 83.4



#2
Dichlorodifluoromethane
Concen: 0.133 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.007 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 85 Resp: 2256
Ion Ratio Lower Upper
85 100
87 40.7 26.4 39.6#

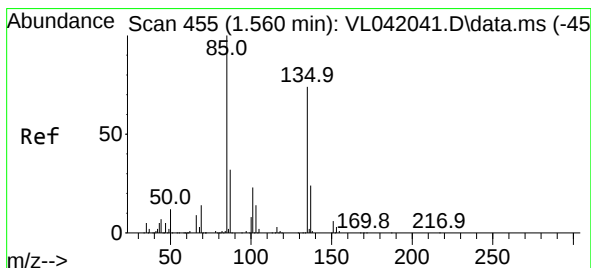
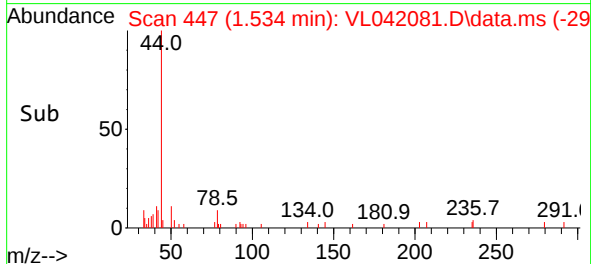
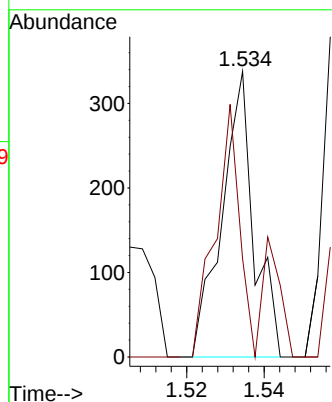
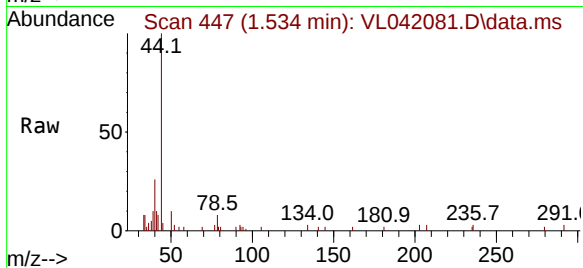




#4
Chloromethane
Concen: 0.031 ppbv
RT: 1.534 min Scan# 448
Delta R.T. -0.003 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

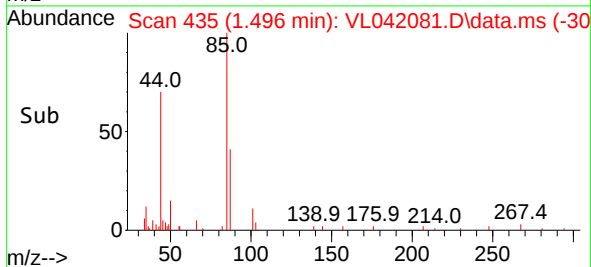
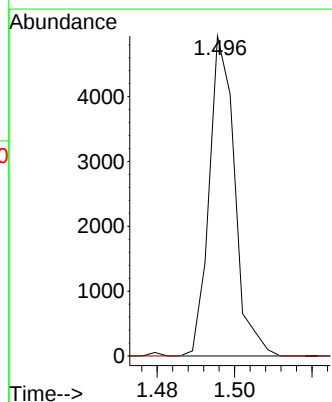
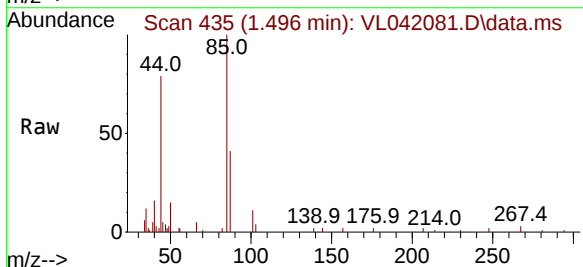
Instrument :
MSVOA_L
ClientSampleId :
SV2

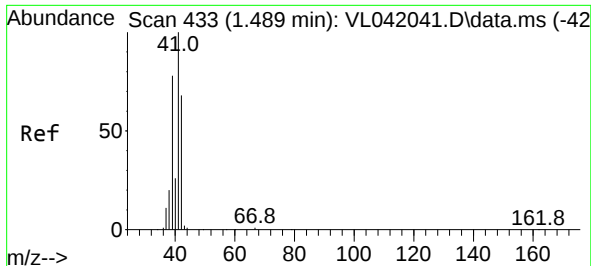
Tgt Ion: 50 Resp: 193
Ion Ratio Lower Upper
50 100
52 34.3 25.4 38.0



#8
Dichlorotetrafluoroethane
Concen: 0.162 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.065 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 85 Resp: 2256
Ion Ratio Lower Upper
85 100
135 2.2 54.6 81.8#





#9

Propene

Concen: 0.429 ppbv

RT: 1.483 min Scan# 41

Delta R.T. -0.007 min

Lab File: VL042081.D

Acq: 03 Mar 2025 17:24

Instrument :

MSVOA_L

ClientSampleId :

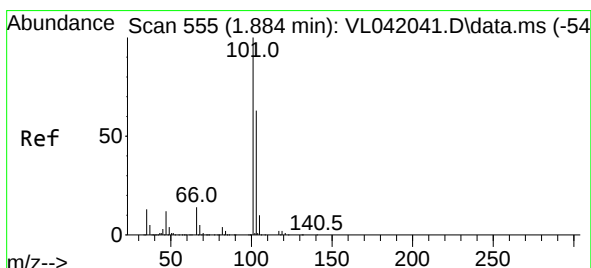
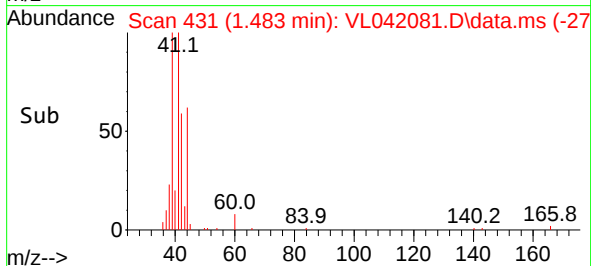
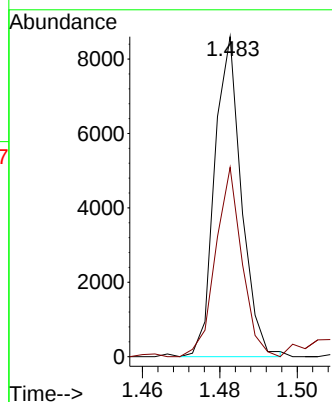
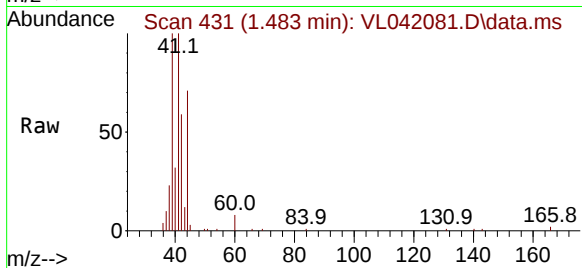
SV2

Tgt Ion: 41 Resp: 4140

Ion Ratio Lower Upper

41 100

42 70.4 55.8 83.6



#11

Trichlorofluoromethane

Concen: 0.086 ppbv

RT: 1.877 min Scan# 553

Delta R.T. -0.007 min

Lab File: VL042081.D

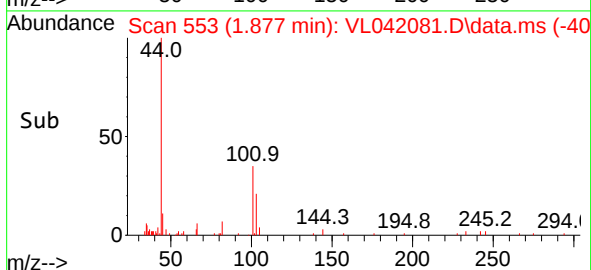
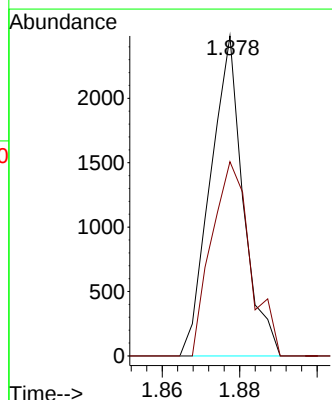
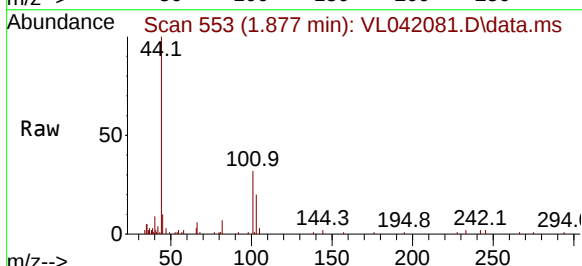
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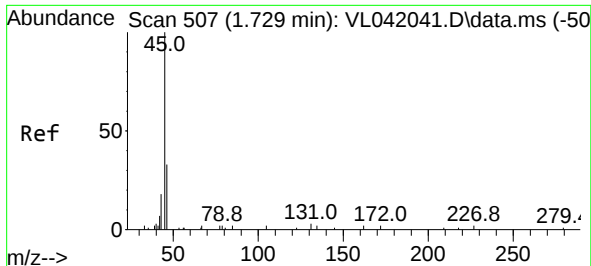
Tgt Ion:101 Resp: 1461

Ion Ratio Lower Upper

101 100

103 60.7 50.6 75.8

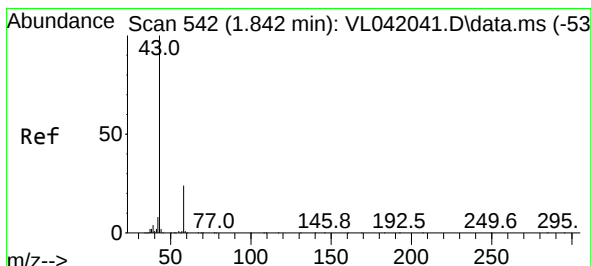
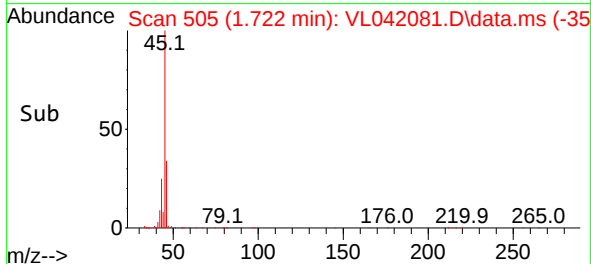
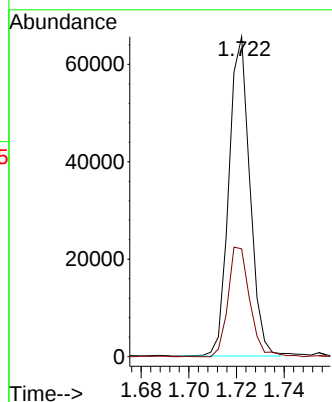
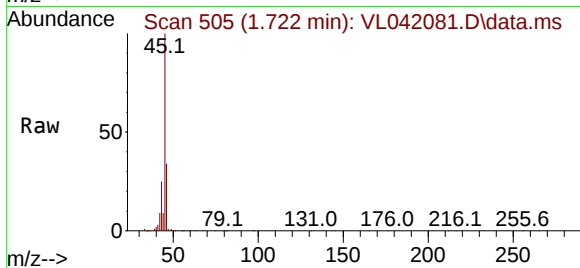




#13
Ethanol
Concen: 65.460 ppbv
RT: 1.722 min Scan# 50
Delta R.T. -0.007 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

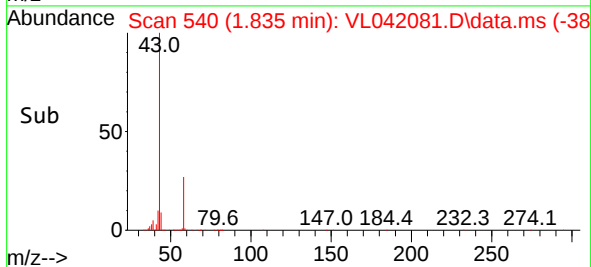
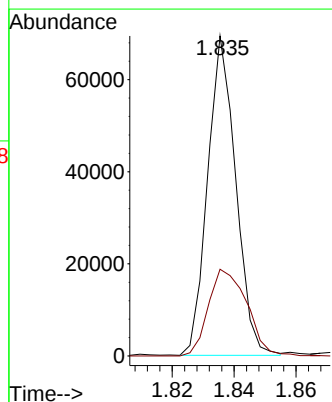
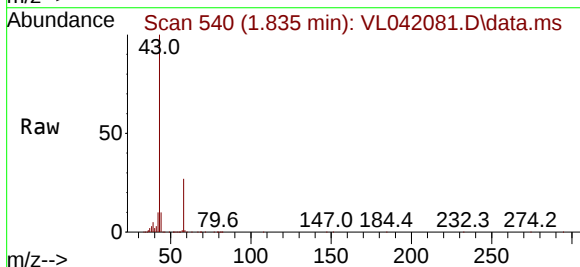
Instrument :
MSVOA_L
ClientSampleId :
SV2

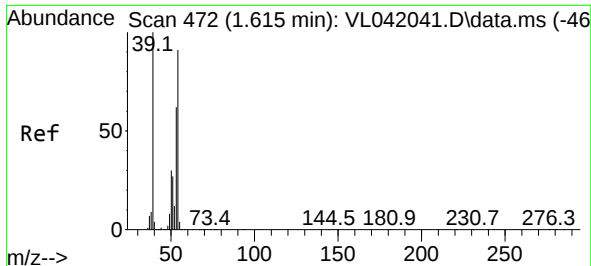
Tgt Ion: 45 Resp: 40109
Ion Ratio Lower Upper
45 100
46 36.2 17.1 68.3



#15
Acetone
Concen: 3.030 ppbv
RT: 1.835 min Scan# 540
Delta R.T. -0.007 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 43 Resp: 43625
Ion Ratio Lower Upper
43 100
58 37.2 20.7 31.1#

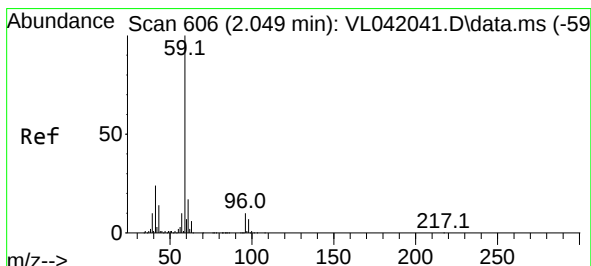
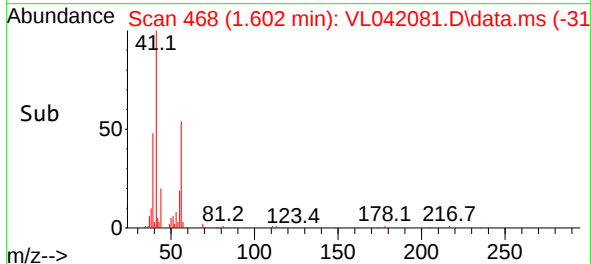
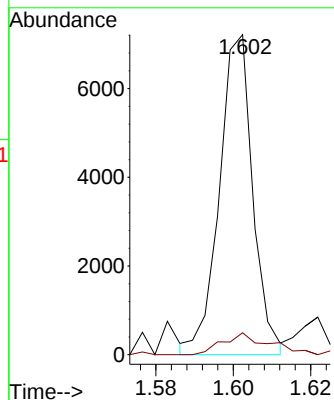
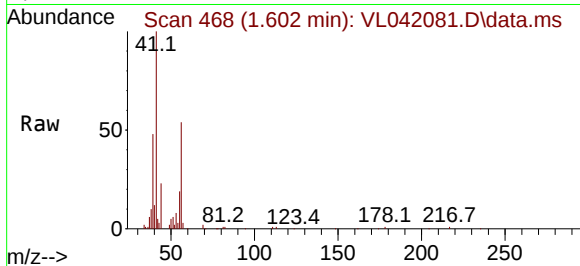




#16
1,3-Butadiene
Concen: 0.645 ppbv
RT: 1.602 min Scan# 41
Delta R.T. -0.013 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

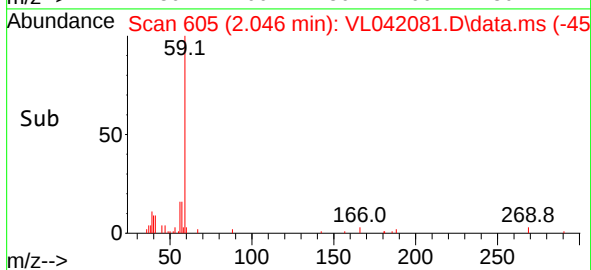
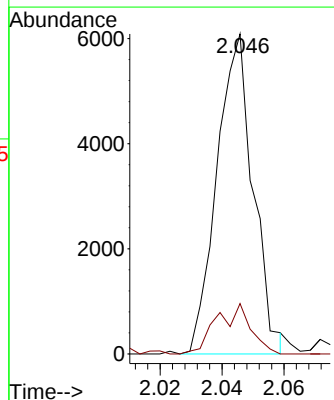
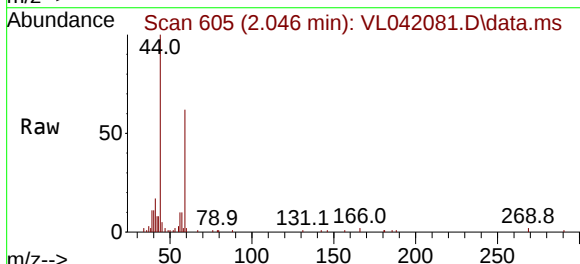
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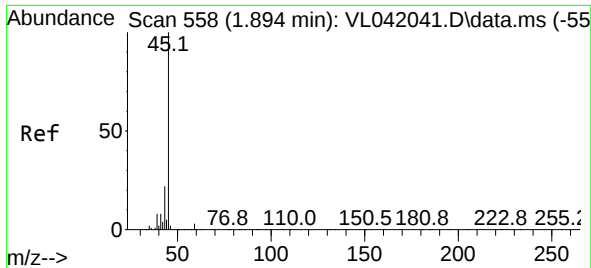
Tgt Ion: 39 Resp: 4322
Ion Ratio Lower Upper
39 100
54 10.4 59.6 89.4#



#17
tert-Butyl alcohol
Concen: 0.274 ppbv
RT: 2.046 min Scan# 605
Delta R.T. -0.003 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 59 Resp: 4938
Ion Ratio Lower Upper
59 100
57 16.7 9.3 13.9#

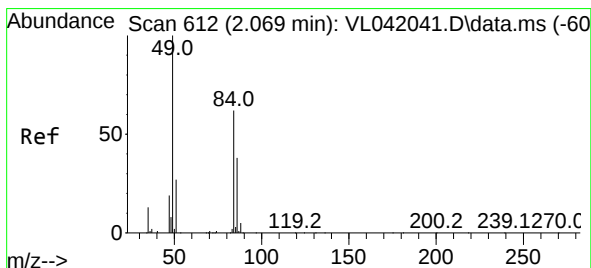
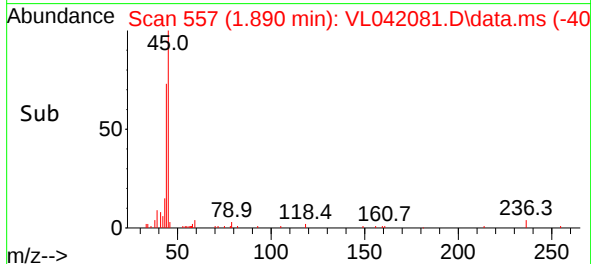
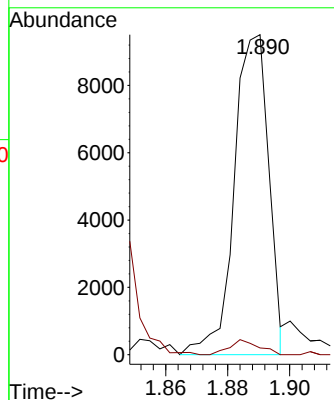
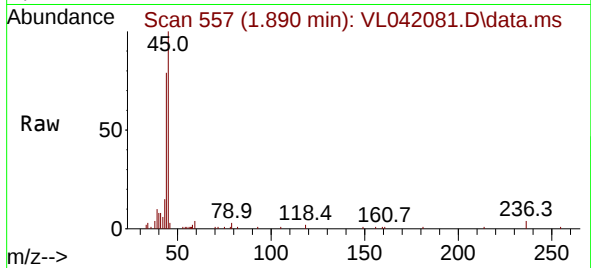




#19
Isopropyl Alcohol
Concen: 0.891 ppbv
RT: 1.890 min Scan# 51
Delta R.T. -0.003 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

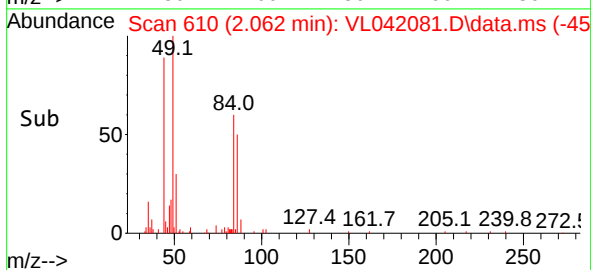
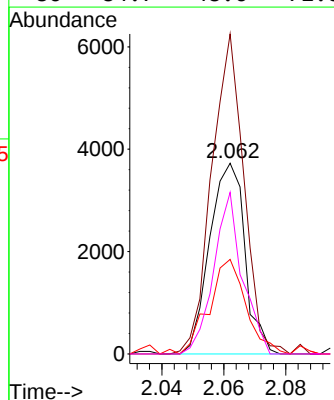
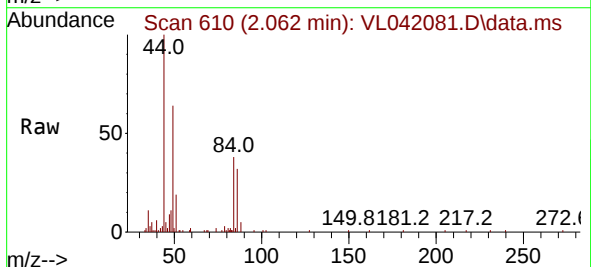
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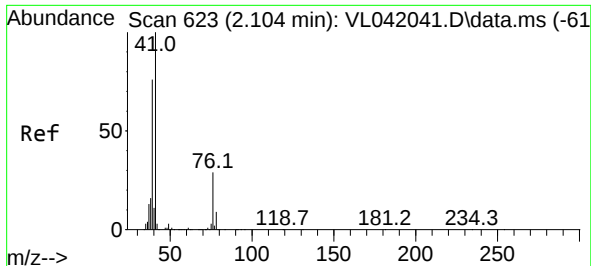
Tgt Ion: 45 Resp: 7366
Ion Ratio Lower Upper
45 100
58 220.4 35.3 52.9#



#20
Methylene Chloride
Concen: 0.541 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.007 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 84 Resp: 2944
Ion Ratio Lower Upper
84 100
49 171.1 130.0 195.0
51 49.6 37.4 56.0
86 84.7 48.6 72.8#

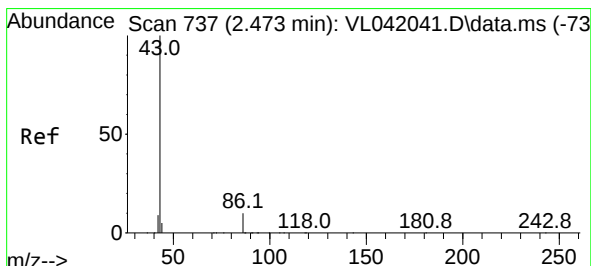
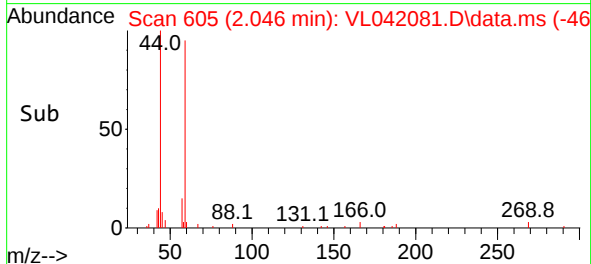
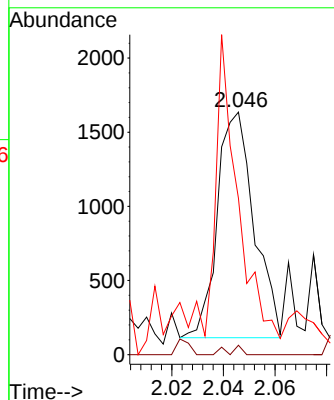
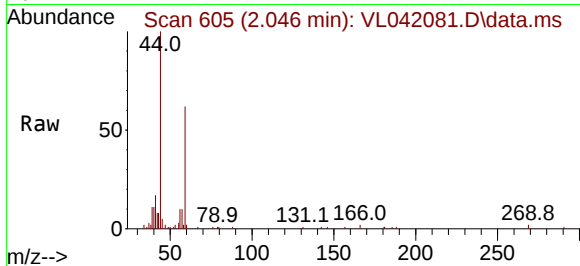




#21
 Allyl Chloride
 Concen: 0.145 ppbv
 RT: 2.046 min Scan# 605
 Delta R.T. -0.058 min
 Lab File: VL042081.D
 Acq: 03 Mar 2025 17:24

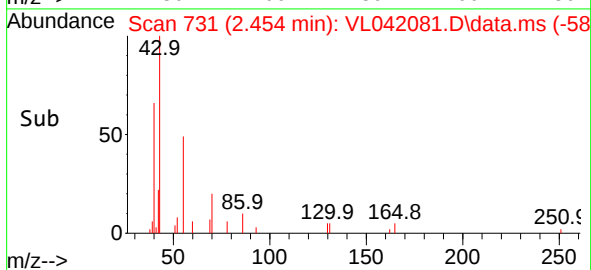
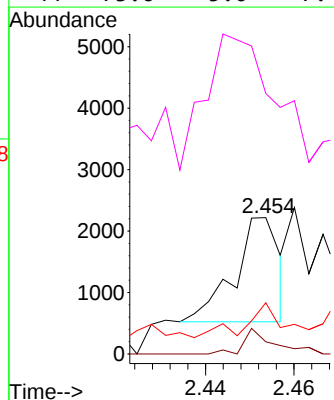
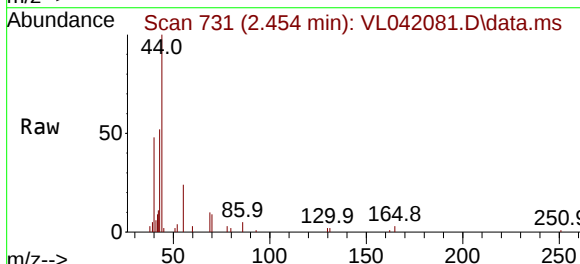
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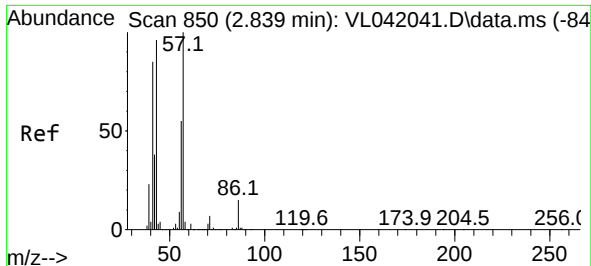
Tgt Ion: 41 Resp: 1504
 Ion Ratio Lower Upper
 41 100
 76 3.0 23.8 35.6#
 39 141.6 63.8 95.6#



#23
 Vinyl Acetate
 Concen: 0.118 ppbv
 RT: 2.454 min Scan# 731
 Delta R.T. -0.019 min
 Lab File: VL042081.D
 Acq: 03 Mar 2025 17:24

Tgt Ion: 43 Resp: 1198
 Ion Ratio Lower Upper
 43 100
 86 11.7 7.0 10.4#
 42 28.8 7.6 11.4#
 44 73.6 5.0 7.4#

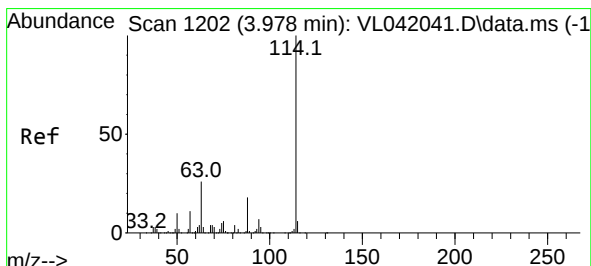
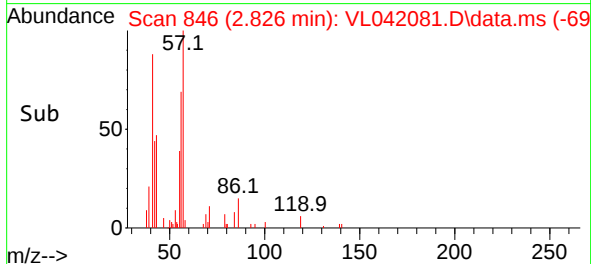
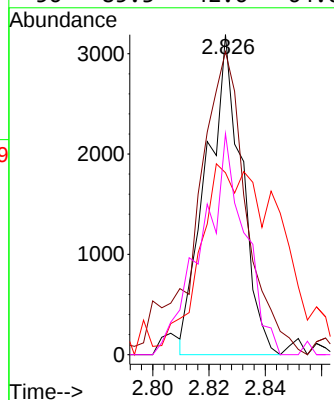
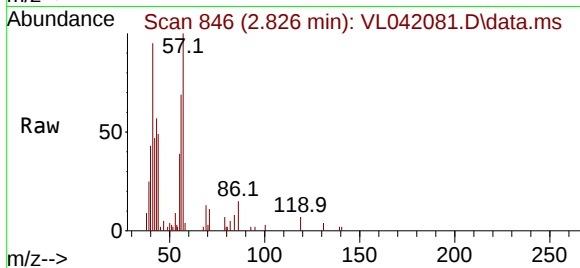




#26
Hexane
Concen: 0.119 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.013 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

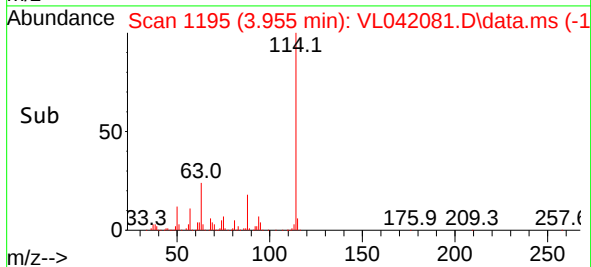
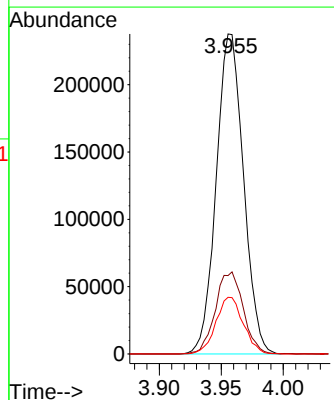
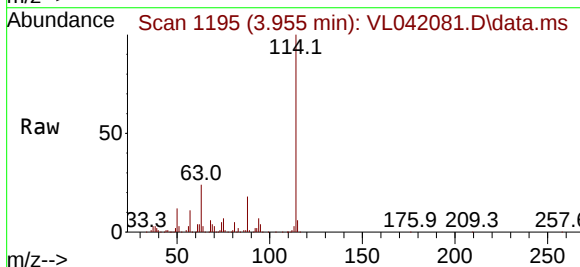
Instrument :
MSVOA_L
ClientSampleId :
SV2

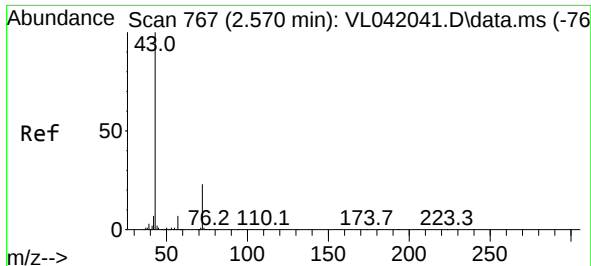
Tgt Ion: 57	Resp: 2777
Ion Ratio	Lower Upper
57 100	
41 141.8	70.6 106.0#
43 153.0	199.4 299.0#
56 85.3	42.6 64.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.023 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion:114	Resp: 364560
Ion Ratio	Lower Upper
114 100	
63 26.3	20.1 30.1
88 17.8	14.3 21.5

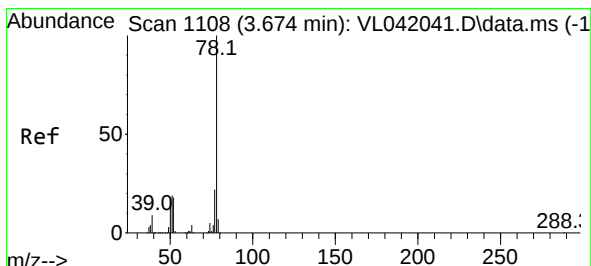
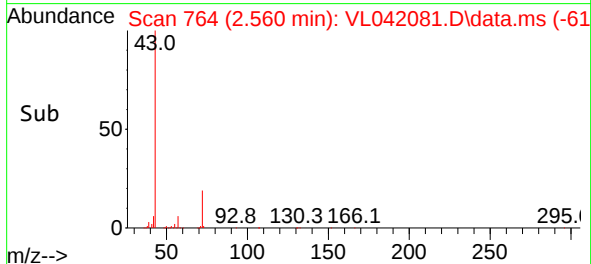
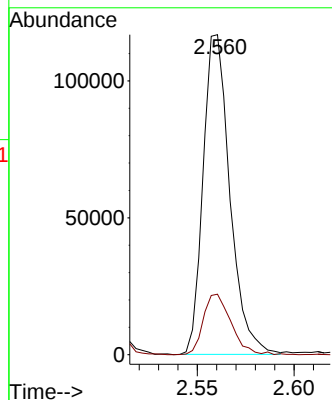
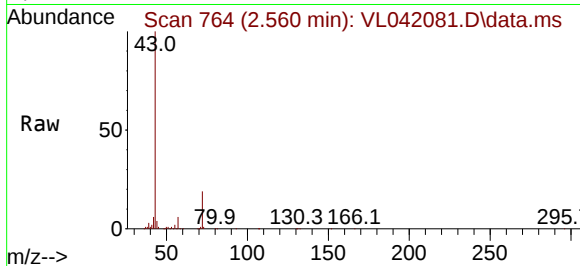




#34
2-Butanone
Concen: 3.966 ppbv
RT: 2.560 min Scan# 764
Delta R.T. -0.010 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

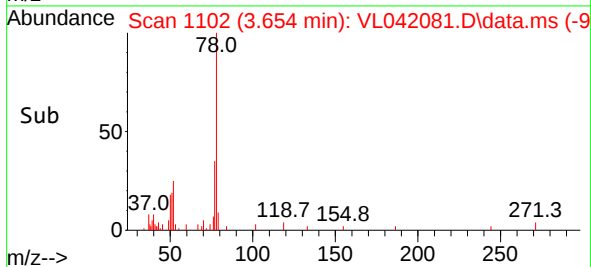
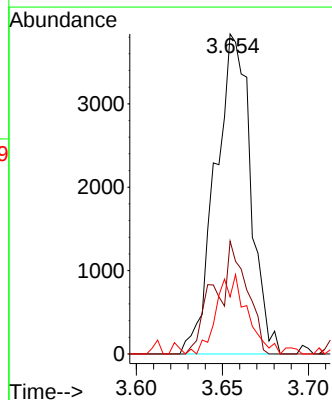
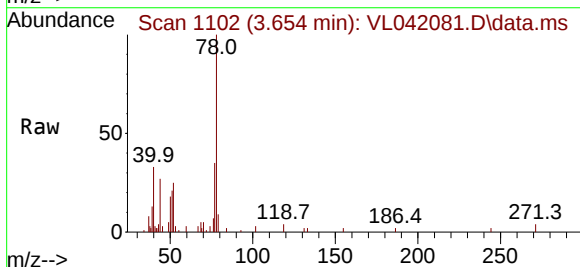
Instrument :
MSVOA_L
ClientSampleId :
SV2

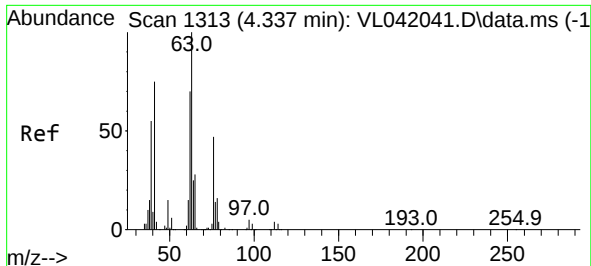
Tgt Ion: 43 Resp: 112646
Ion Ratio Lower Upper
43 100
72 19.6 18.5 27.7



#36
Benzene
Concen: 0.143 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.020 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 78 Resp: 5456
Ion Ratio Lower Upper
78 100
77 35.3 17.7 26.5#
50 17.8 13.9 20.9





#39

1,2-Dichloropropane

Concen: 6.608 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.379 min

Lab File: VL042081.D

Acq: 03 Mar 2025 17:24

Instrument :

MSVOA_L

ClientSampleId :

SV2

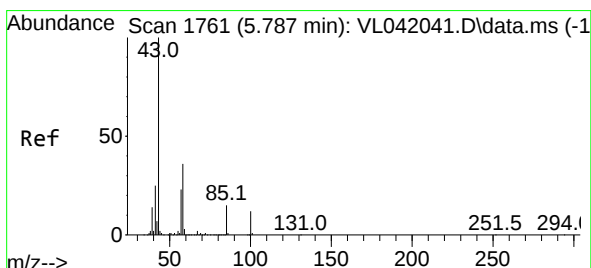
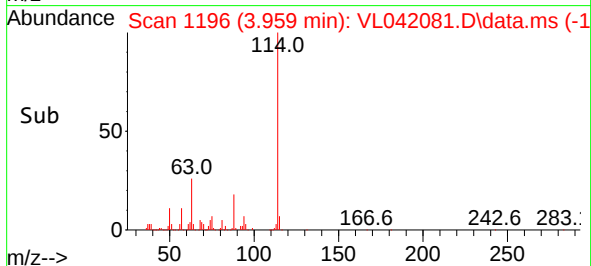
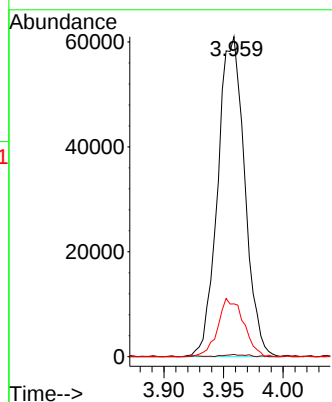
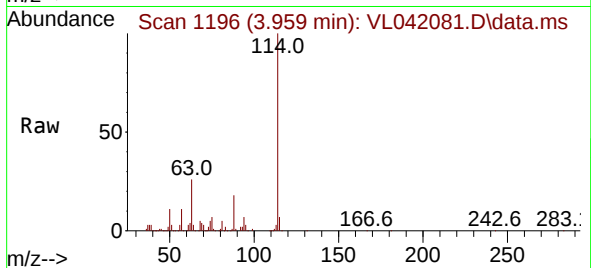
Tgt Ion: 63 Resp: 95722

Ion Ratio Lower Upper

63 100

41 0.7 60.1 90.1#

62 16.5 55.8 83.8#



#50

4-Methyl-2-Pentanone

Concen: 0.066 ppbv

RT: 5.758 min Scan# 1752

Delta R.T. -0.029 min

Lab File: VL042081.D

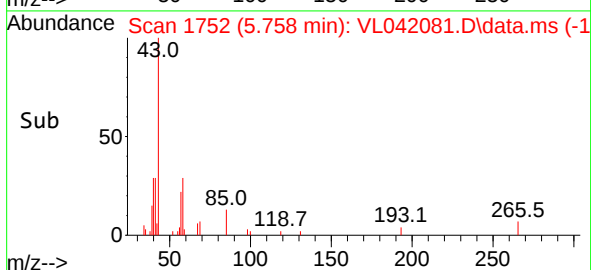
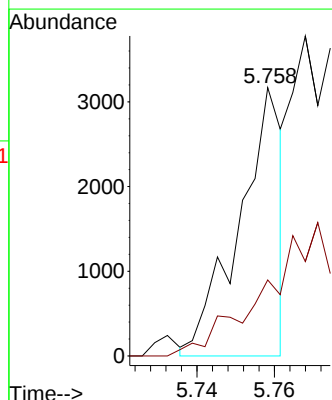
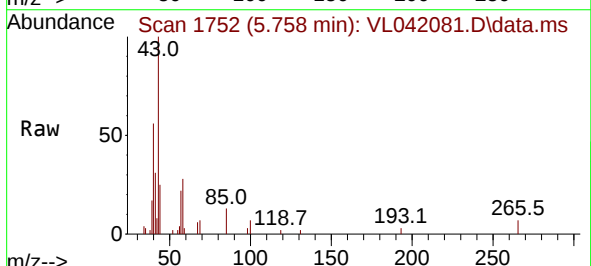
Acq: 03 Mar 2025 17:24

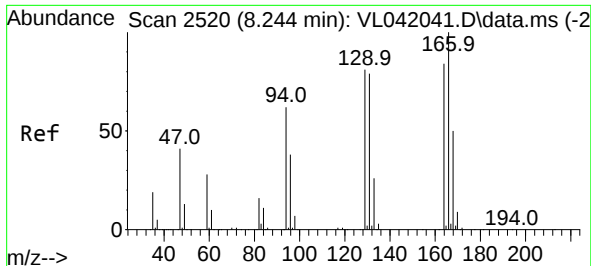
Tgt Ion: 43 Resp: 2442

Ion Ratio Lower Upper

43 100

58 0.0 29.3 43.9#

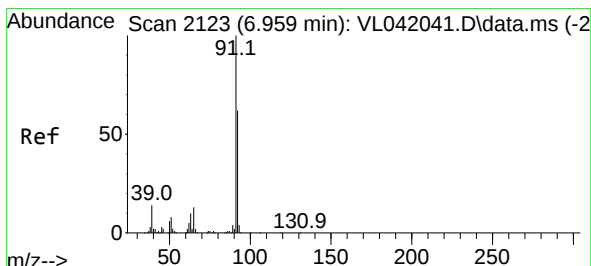
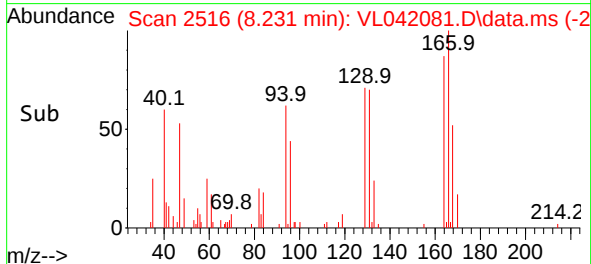
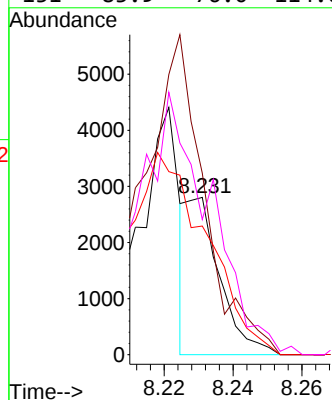
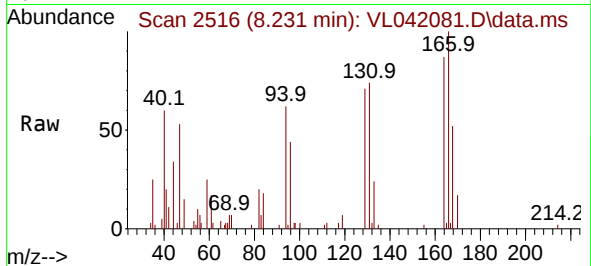




#52
Tetrachloroethene
Concen: 0.142 ppbv
RT: 8.231 min Scan# 2116
Delta R.T. -0.013 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

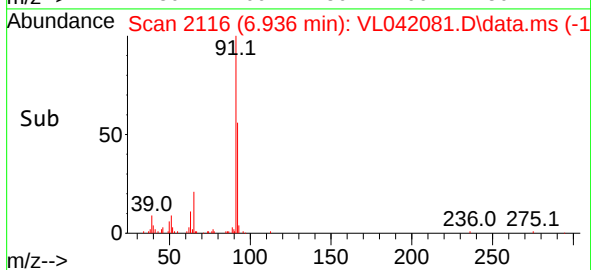
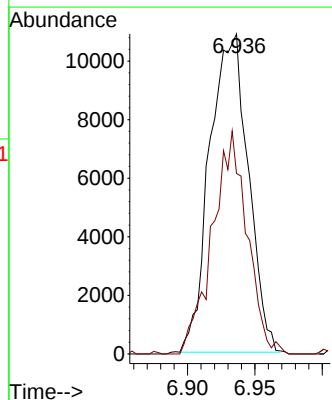
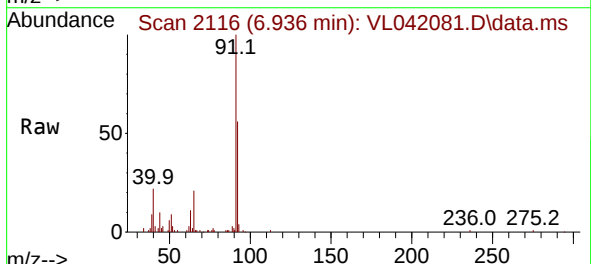
Instrument :
MSVOA_L
ClientSampleId :
SV2

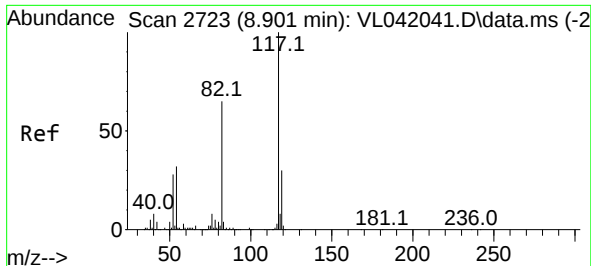
Tgt Ion:164 Resp: 1858
Ion Ratio Lower Upper
164 100
166 115.5 95.7 143.5
129 81.9 77.1 115.7
131 83.9 76.0 114.0



#53
Toluene
Concen: 0.507 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. -0.023 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 91 Resp: 21630
Ion Ratio Lower Upper
91 100
92 63.2 49.0 73.6

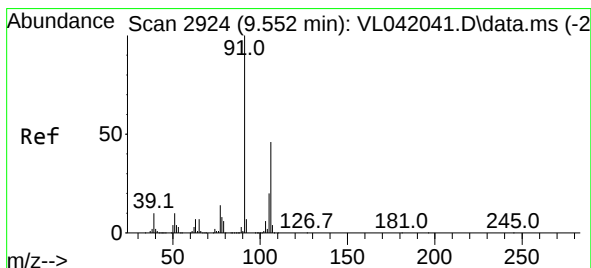
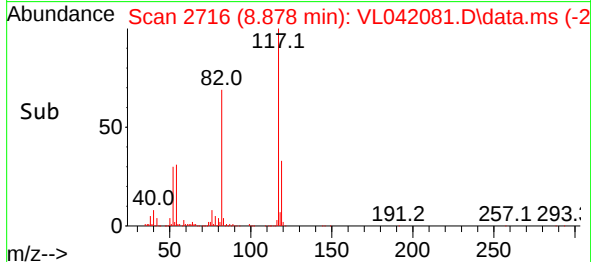
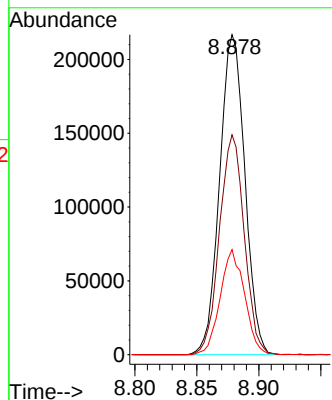
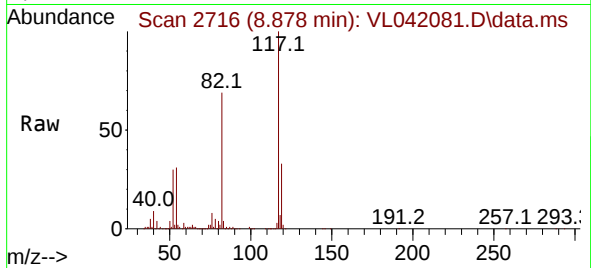




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2117
Delta R.T. -0.023 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

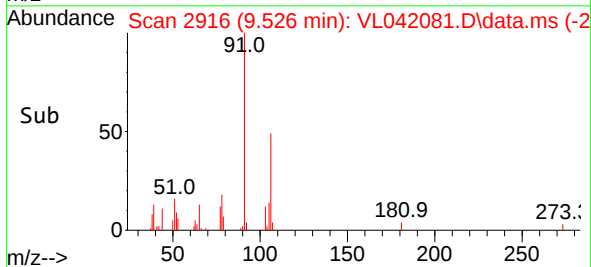
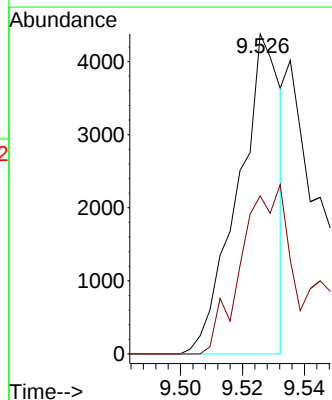
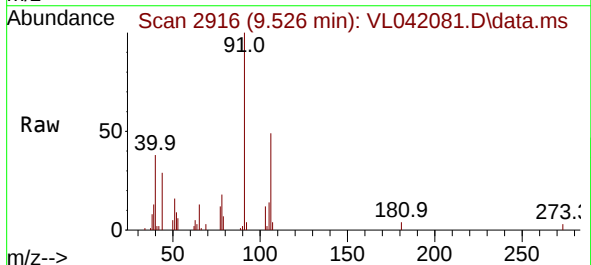
Instrument :
MSVOA_L
ClientSampleId :
SV2

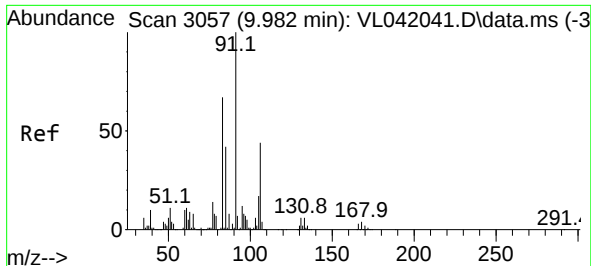
Tgt Ion:117 Resp: 307983
Ion Ratio Lower Upper
117 100
82 67.4 55.0 82.6
119 31.8 25.9 38.9



#59
m/p-Xylene
Concen: 0.092 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Tgt Ion: 91 Resp: 4132
Ion Ratio Lower Upper
91 100
106 0.0 0.0 0.0

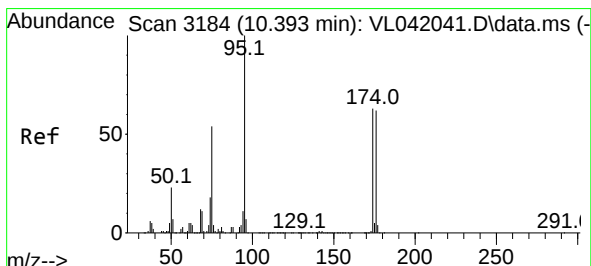
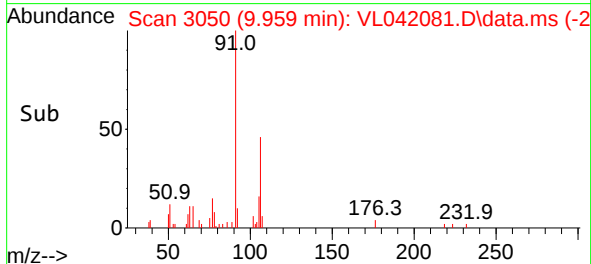
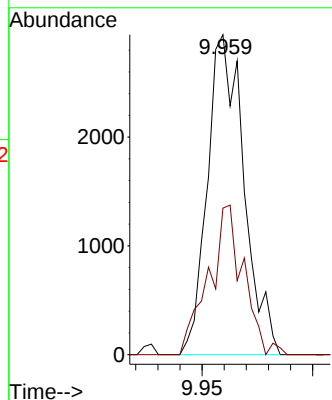
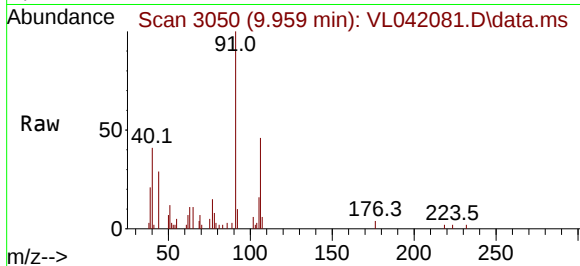




#60
o-Xylene
Concen: 0.074 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.023 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

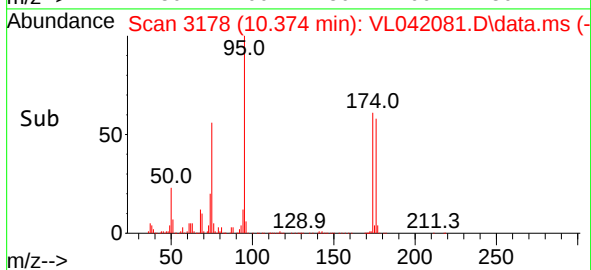
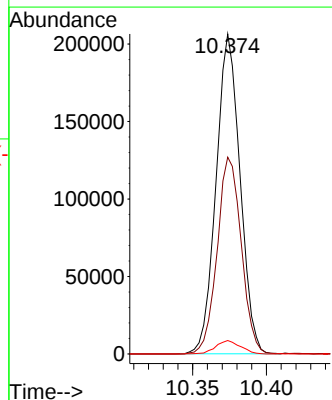
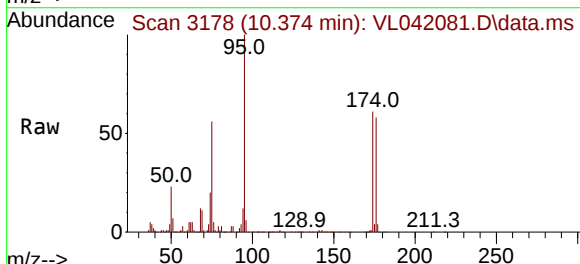
Instrument :
MSVOA_L
ClientSampleId :
SV2

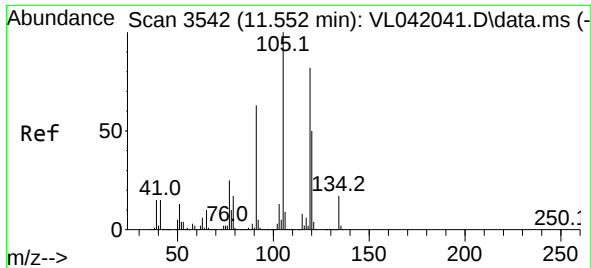
Tgt Ion: 91 Resp: 3373
Ion Ratio Lower Upper
91 100
106 44.4 22.3 66.8



#68
1-Bromo-4-Fluorobenzene
Concen: 9.822 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.019 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

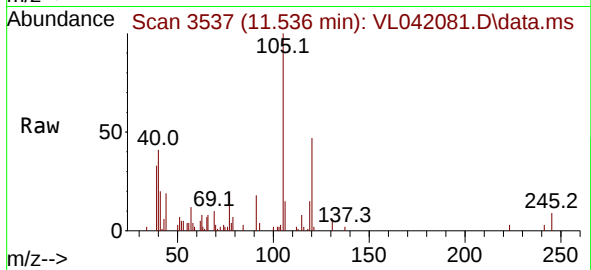
Tgt Ion: 95 Resp: 232727
Ion Ratio Lower Upper
95 100
174 62.2 51.8 77.6
175 4.4 3.9 5.9





#74
1,2,4-Trimethylbenzene
Concen: 0.085 ppbv
RT: 11.536 min Scan# 31
Delta R.T. -0.016 min
Lab File: VL042081.D
Acq: 03 Mar 2025 17:24

Instrument :
MSVOA_L
ClientSampleId :
SV2



Tgt Ion:	105	Resp:	4584
Ion	Ratio	Lower	Upper
105	100		
120	47.2	40.2	60.2
91	18.1	51.4	77.2#
77	18.8	20.1	30.1#

