

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
 Data File : VL042083.D
 Acq On : 03 Mar 2025 18:26
 Operator : SY/MD
 Sample : Q1430-04 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV4

Quant Time: Mar 04 00:20:58 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)

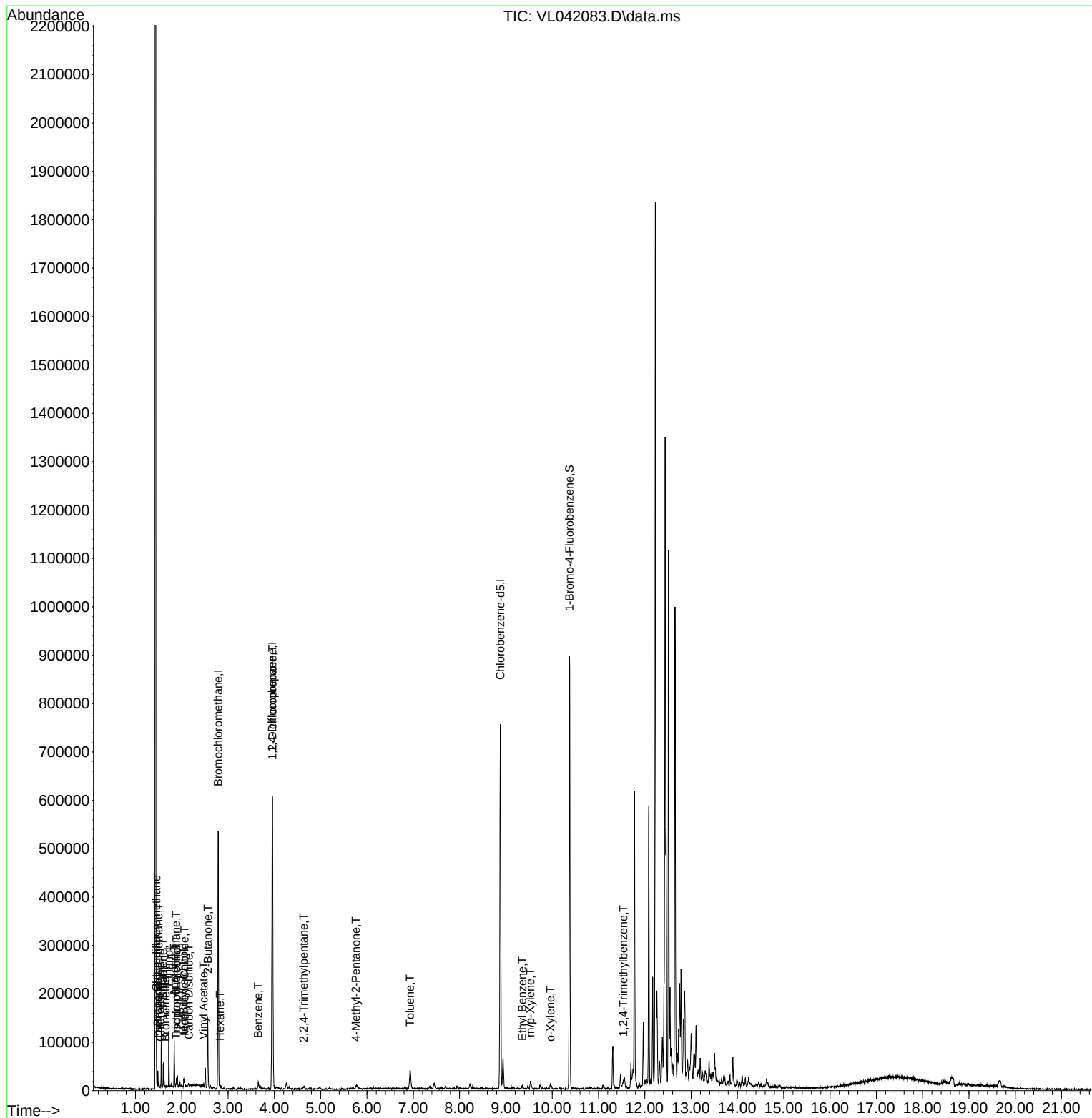
Internal Standards						
1) Bromochloromethane	2.787	49	159834	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.955	114	351160	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.878	117	298456	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	220011	9.582	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	2542	0.153	ppbv #	86
3) Chlorodifluoromethane	1.450	51	6952	0.299	ppbv #	76
4) Chloromethane	1.534	50	230	0.037	ppbv #	25
6) Bromomethane	1.651	94	84	0.030	ppbv #	2
9) Propene	1.482	41	6105	0.645	ppbv	85
11) Trichlorofluoromethane	1.877	101	1350	0.081	ppbv	84
13) Ethanol	1.719	45	41685	69.388	ppbv	92
15) Acetone	1.835	43	40072	2.839	ppbv #	82
16) 1,3-Butadiene	1.599	39	5226	0.796	ppbv #	28
17) tert-Butyl alcohol	2.042	59	4626	0.262	ppbv #	89
19) Isopropyl Alcohol	1.887	45	6886	0.849	ppbv #	45
20) Methylene Chloride	2.059	84	1758	0.329	ppbv	97
23) Vinyl Acetate	2.473	43	1882	0.190	ppbv #	60
26) Hexane	2.826	57	1404	0.061	ppbv #	64
27) Carbon Disulfide	2.149	76	2795	0.181	ppbv #	1
34) 2-Butanone	2.560	43	93192	3.406	ppbv	94
36) Benzene	3.651	78	3970	0.108	ppbv	97
39) 1,2-Dichloropropane	3.959	63	93882	6.728	ppbv #	23
44) 2,2,4-Trimethylpentane	4.635	57	2363	0.036	ppbv #	1
50) 4-Methyl-2-Pentanone	5.761	43	2347	0.066	ppbv #	38
53) Toluene	6.927	91	13471	0.328	ppbv #	20
58) Ethyl Benzene	9.354	91	2770	0.050	ppbv	98
59) m/p-Xylene	9.526	91	9044	0.207	ppbv #	100
60) o-Xylene	9.959	91	3395	0.077	ppbv	94
74) 1,2,4-Trimethylbenzene	11.536	105	4463	0.085	ppbv #	63

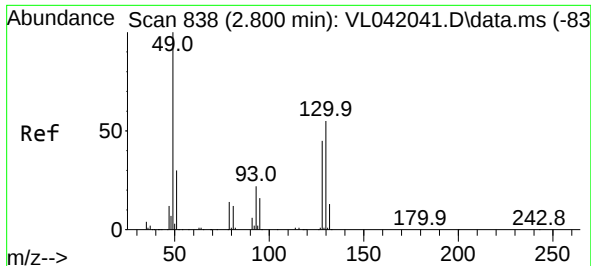
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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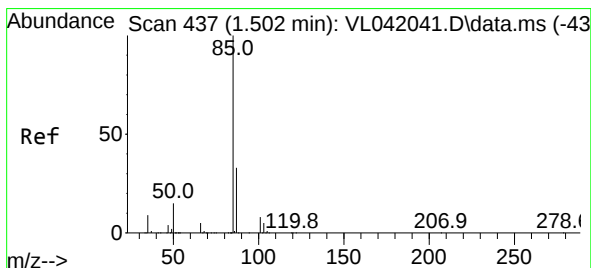
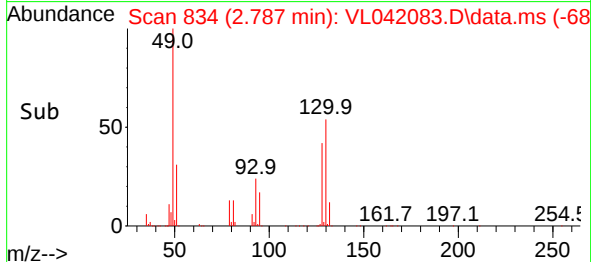
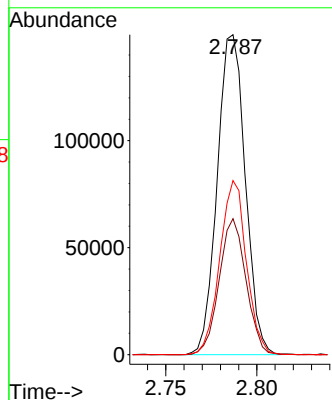
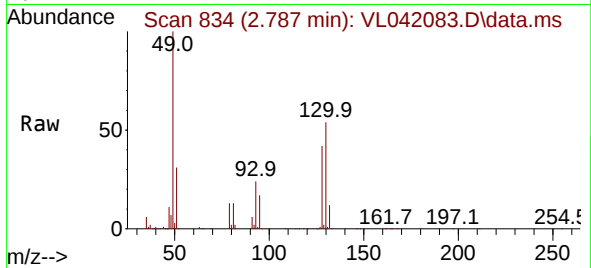




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 81
Delta R.T. -0.013 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

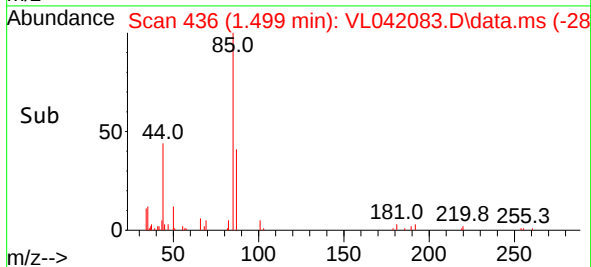
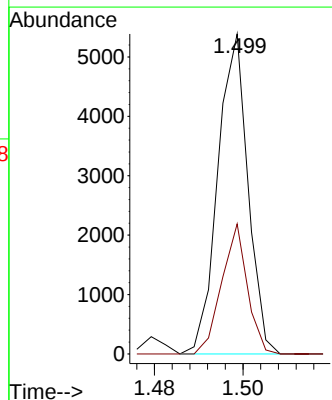
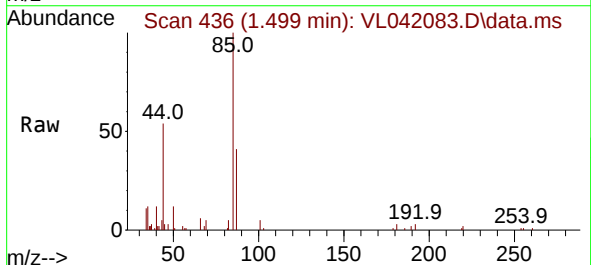
Instrument :
MSVOA_L
ClientSampleId :
SV4

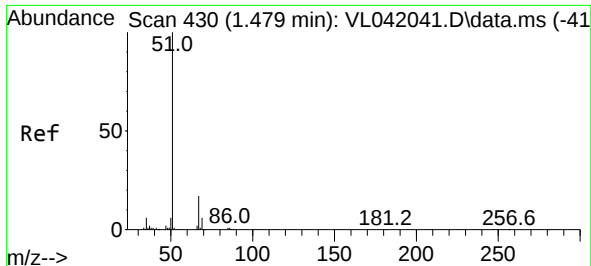
Tgt Ion: 49 Resp: 159834
Ion Ratio Lower Upper
49 100
128 40.8 21.6 64.8
130 51.9 27.8 83.4



#2
Dichlorodifluoromethane
Concen: 0.153 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.003 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 85 Resp: 2542
Ion Ratio Lower Upper
85 100
87 40.7 26.4 39.6

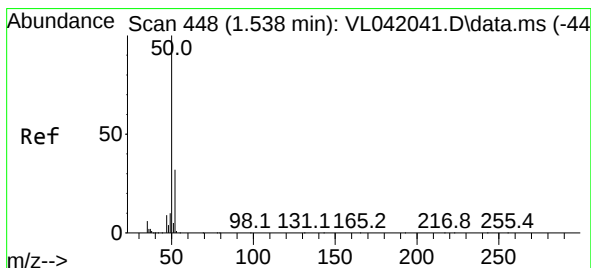
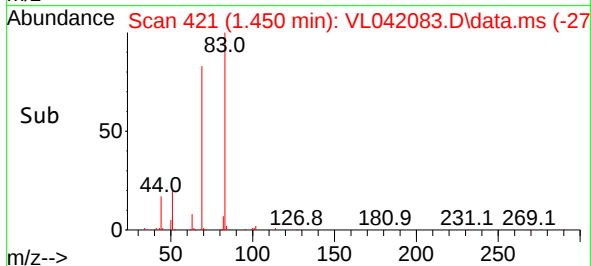
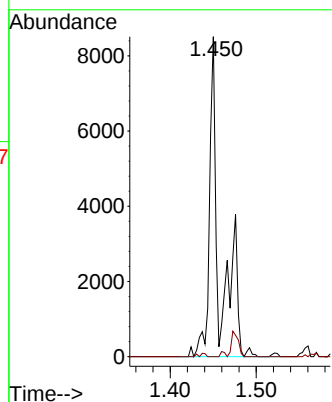
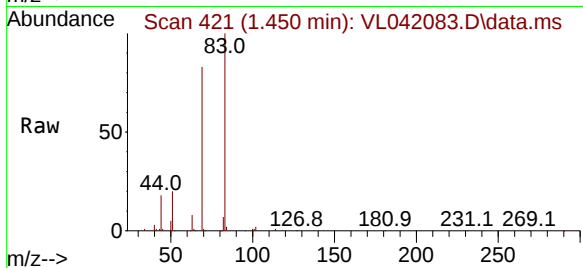




#3
Chlorodifluoromethane
Concen: 0.299 ppbv
RT: 1.450 min Scan# 41
Delta R.T. -0.029 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

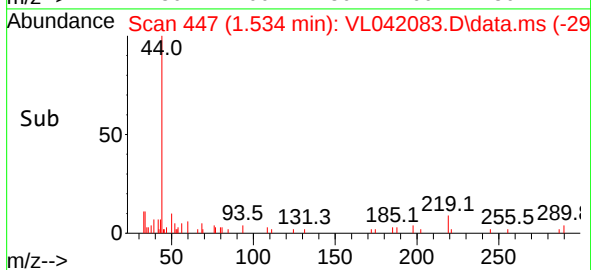
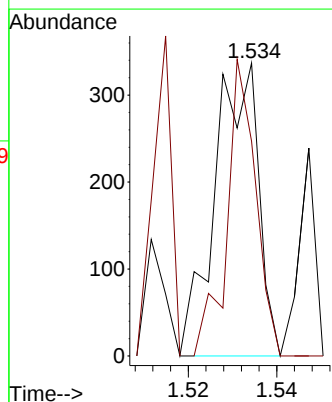
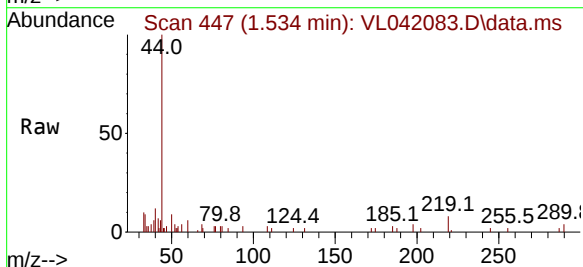
Instrument :
MSVOA_L
ClientSampleId :
SV4

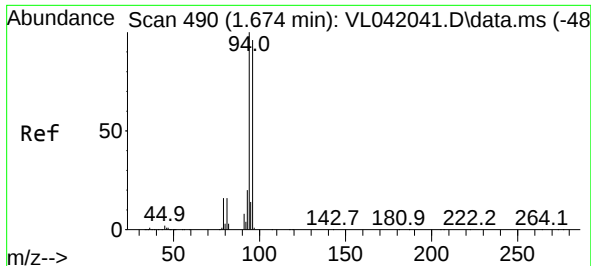
Tgt Ion: 51 Resp: 6952
Ion Ratio Lower Upper
51 100
67 6.7 13.7 20.5#



#4
Chloromethane
Concen: 0.037 ppbv
RT: 1.534 min Scan# 447
Delta R.T. -0.003 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 50 Resp: 230
Ion Ratio Lower Upper
50 100
52 73.3 25.4 38.0#

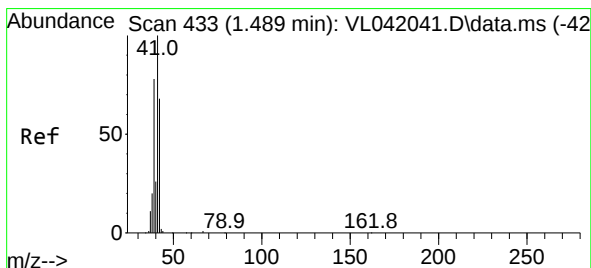
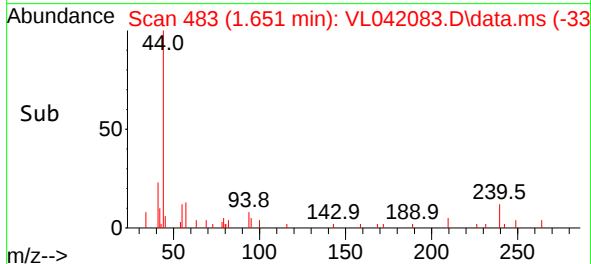
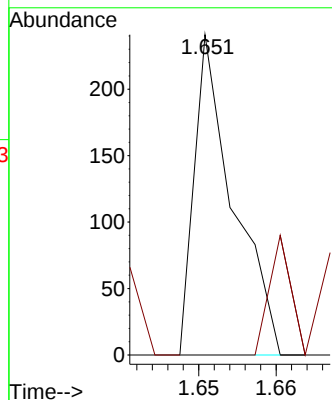
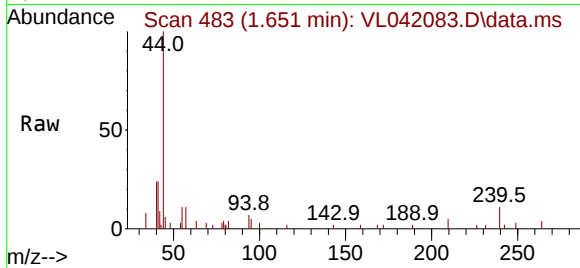




#6
Bromomethane
Concen: 0.030 ppbv
RT: 1.651 min Scan# 41
Delta R.T. -0.023 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

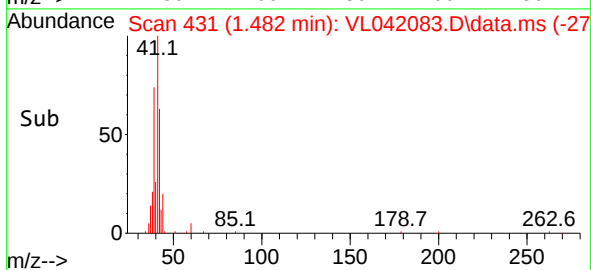
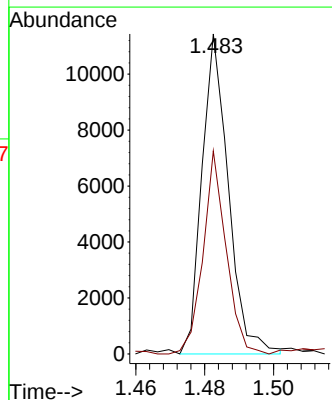
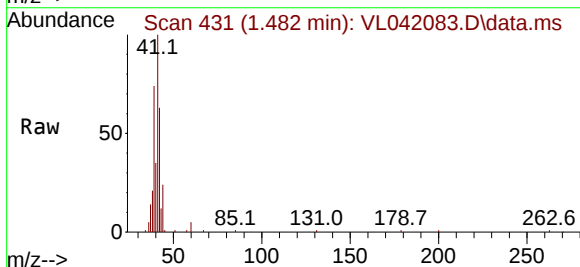
Instrument :
MSVOA_L
ClientSampleId :
SV4

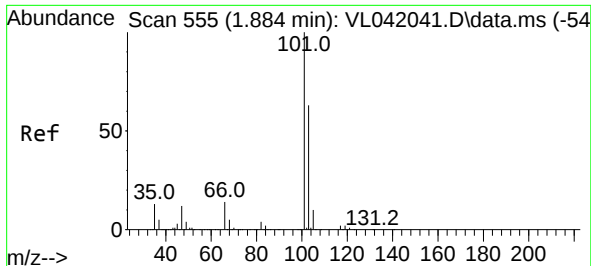
Tgt Ion: 94 Resp: 84
Ion Ratio Lower Upper
94 100
96 0.0 76.5 114.7#



#9
Propene
Concen: 0.645 ppbv
RT: 1.482 min Scan# 431
Delta R.T. -0.007 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 41 Resp: 6105
Ion Ratio Lower Upper
41 100
42 57.7 55.8 83.6

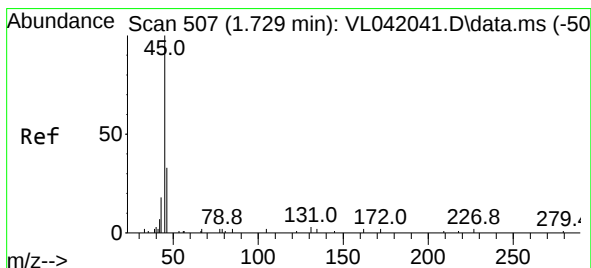
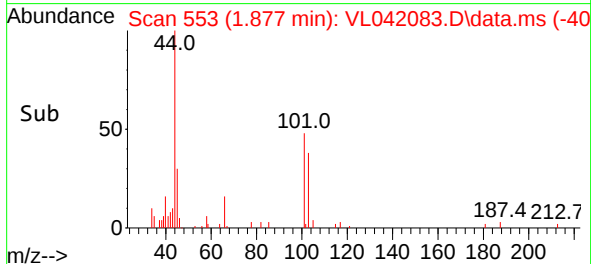
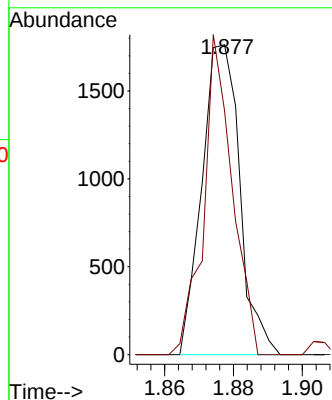
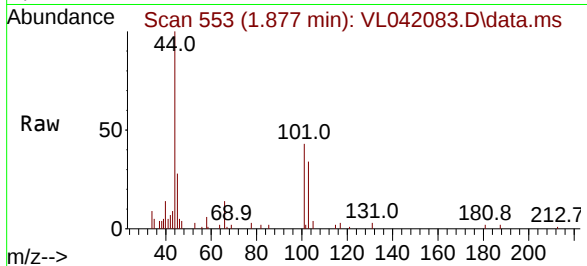




#11
Trichlorofluoromethane
Concen: 0.081 ppbv
RT: 1.877 min Scan# 51
Delta R.T. -0.007 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

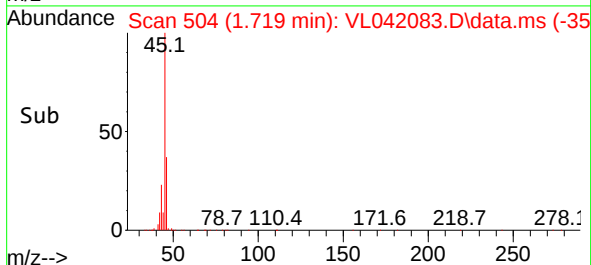
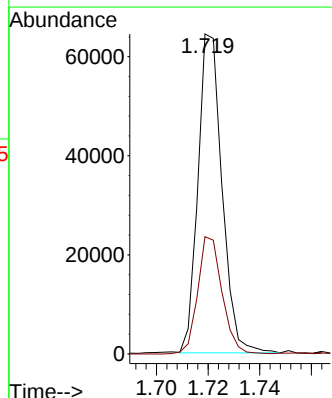
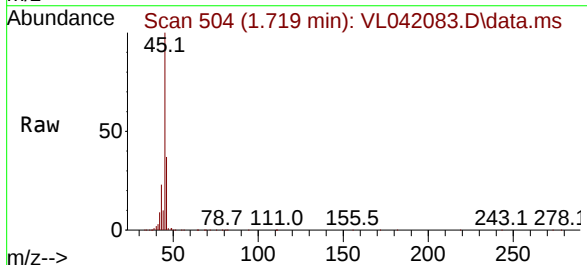
Instrument :
MSVOA_L
ClientSampleId :
SV4

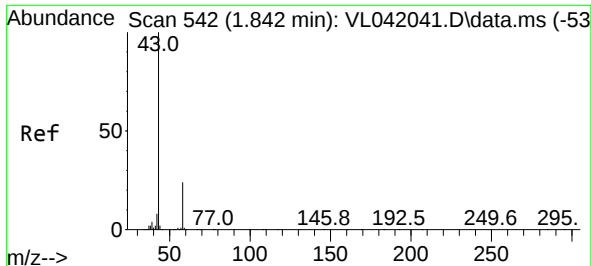
Tgt Ion:101 Resp: 1350
Ion Ratio Lower Upper
101 100
103 75.5 50.6 75.8



#13
Ethanol
Concen: 69.388 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.010 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 45 Resp: 41685
Ion Ratio Lower Upper
45 100
46 37.9 17.1 68.3

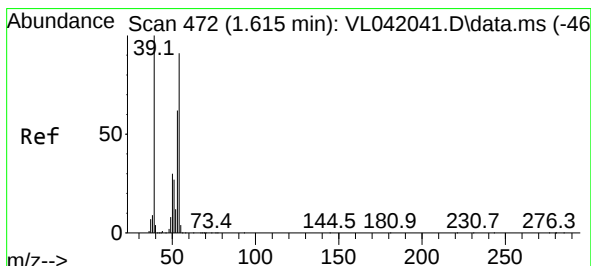
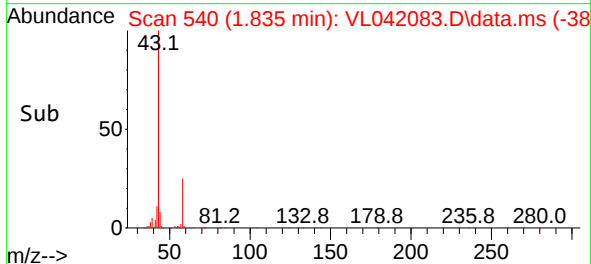
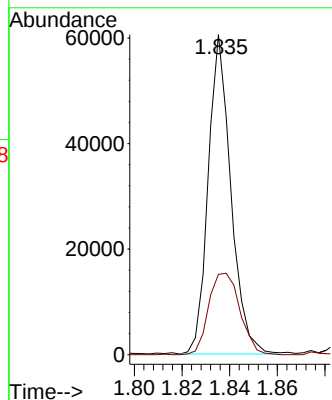
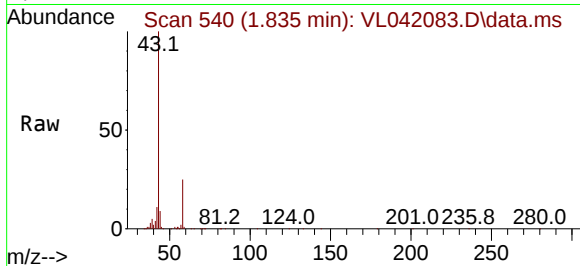




#15
Acetone
Concen: 2.839 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.007 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

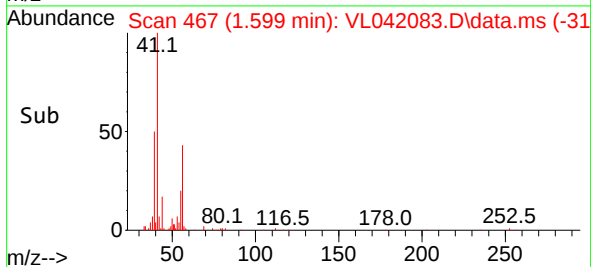
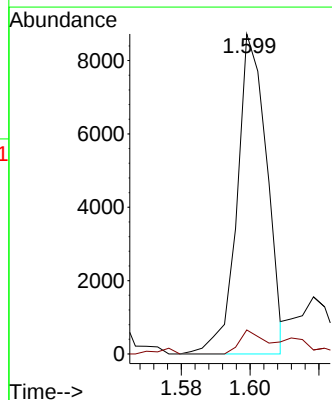
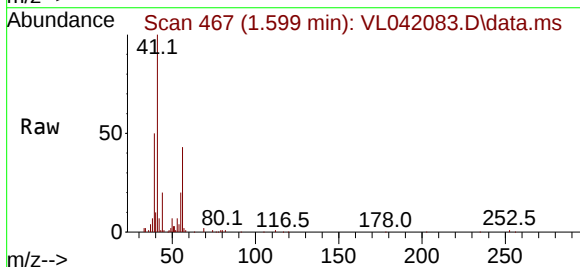
Instrument :
MSVOA_L
ClientSampleId :
SV4

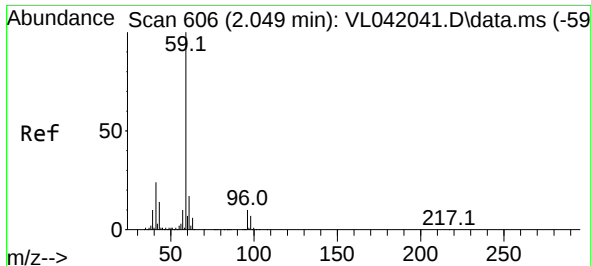
Tgt Ion: 43 Resp: 40072
Ion Ratio Lower Upper
43 100
58 35.0 20.7 31.1#



#16
1,3-Butadiene
Concen: 0.796 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.016 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 39 Resp: 5226
Ion Ratio Lower Upper
39 100
54 13.2 59.6 89.4#

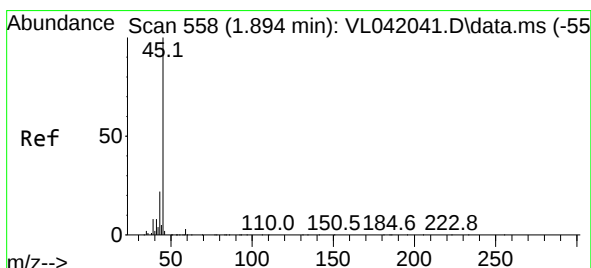
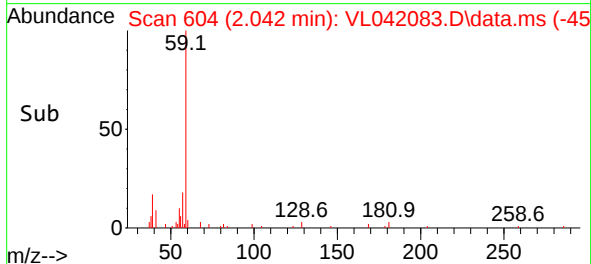
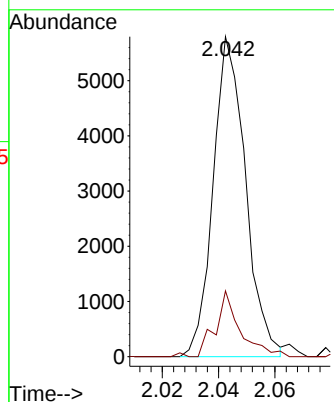
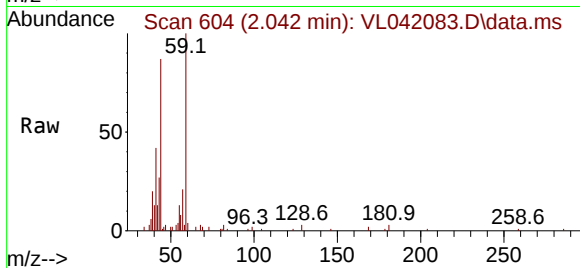




#17
tert-Butyl alcohol
Concen: 0.262 ppbv
RT: 2.042 min Scan# 604
Delta R.T. -0.007 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

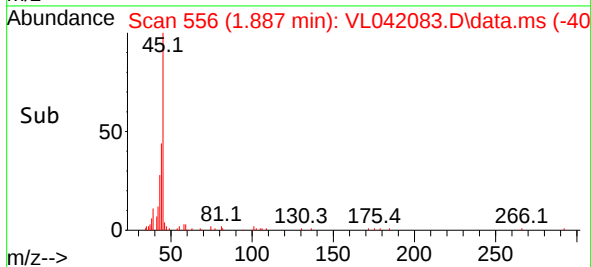
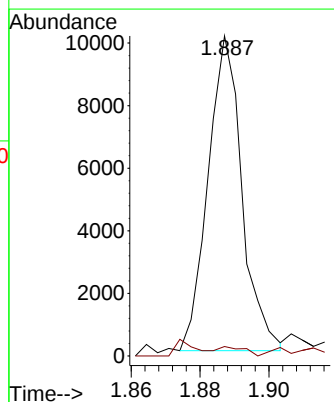
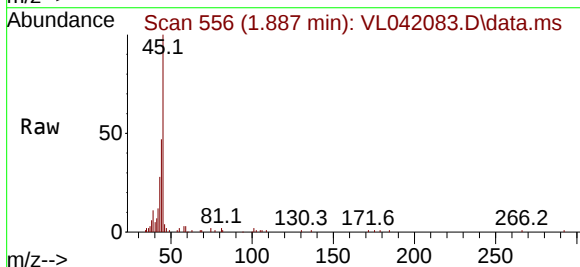
Instrument :
MSVOA_L
ClientSampleId :
SV4

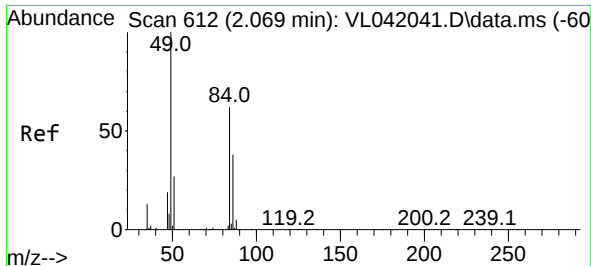
Tgt Ion: 59 Resp: 4626
Ion Ratio Lower Upper
59 100
57 15.8 9.3 13.9#



#19
Isopropyl Alcohol
Concen: 0.849 ppbv
RT: 1.887 min Scan# 556
Delta R.T. -0.007 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 45 Resp: 6886
Ion Ratio Lower Upper
45 100
58 8.7 35.3 52.9#



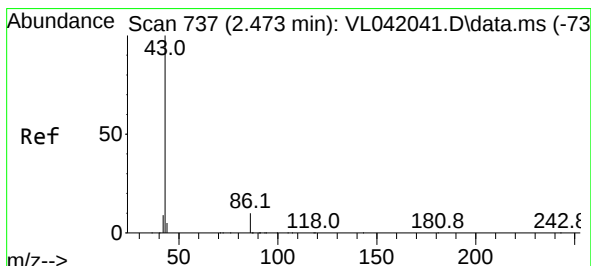
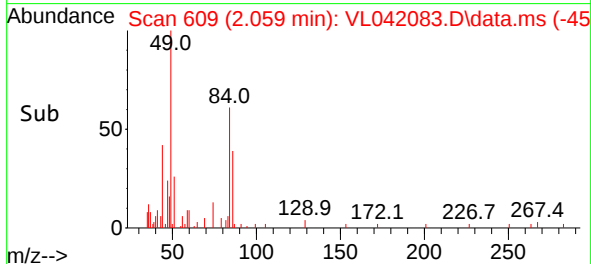
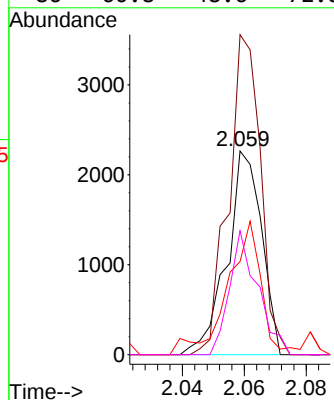
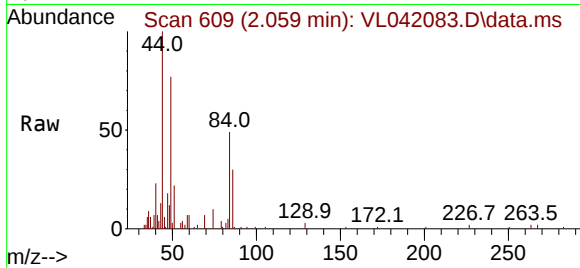


#20
Methylene Chloride
Concen: 0.329 ppbv
RT: 2.059 min Scan# 612
Delta R.T. -0.010 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Instrument :
MSVOA_L
ClientSampleId :
SV4

Tgt Ion: 84 Resp: 1758

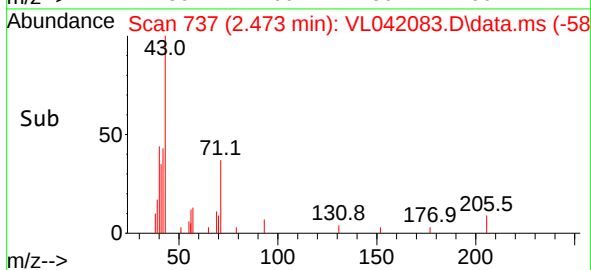
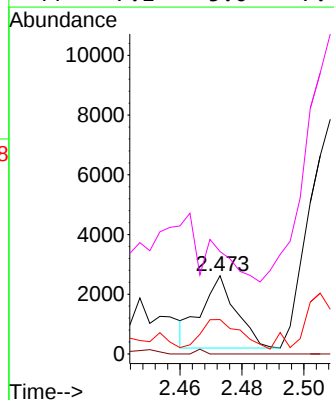
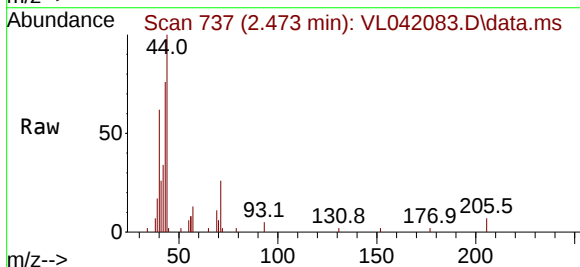
Ion	Ratio	Lower	Upper
84	100		
49	157.1	130.0	195.0
51	42.9	37.4	56.0
86	60.8	48.6	72.8

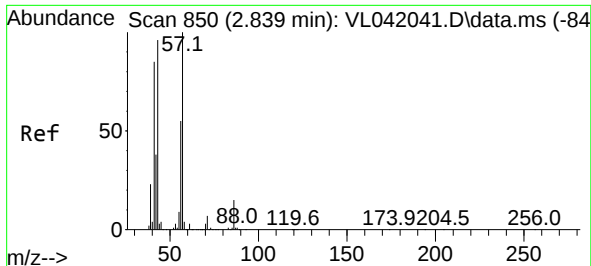


#23
Vinyl Acetate
Concen: 0.190 ppbv
RT: 2.473 min Scan# 737
Delta R.T. -0.000 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 43 Resp: 1882

Ion	Ratio	Lower	Upper
43	100		
86	0.0	7.0	10.4#
42	38.7	7.6	11.4#
44	7.1	5.0	7.4

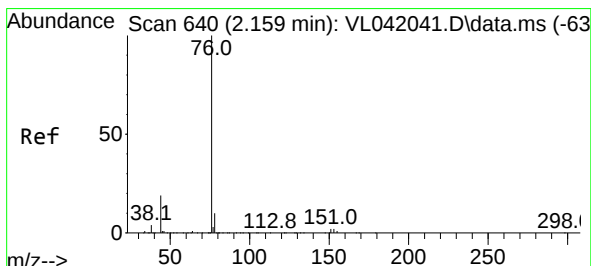
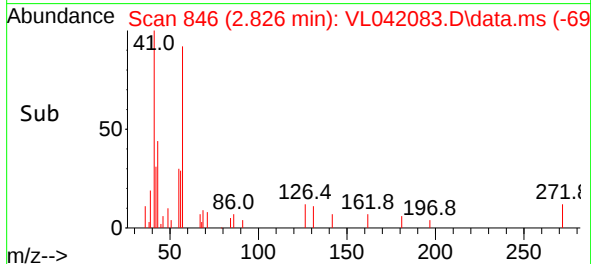
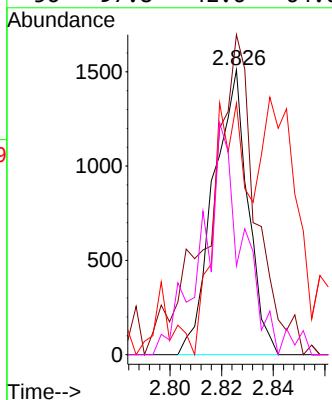
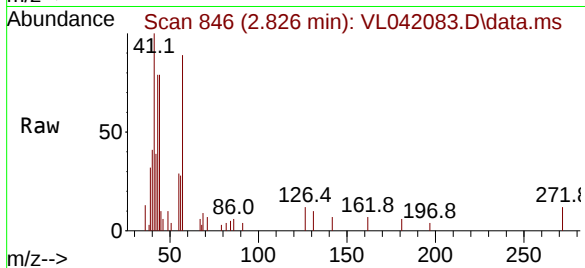




#26
Hexane
Concen: 0.061 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.013 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

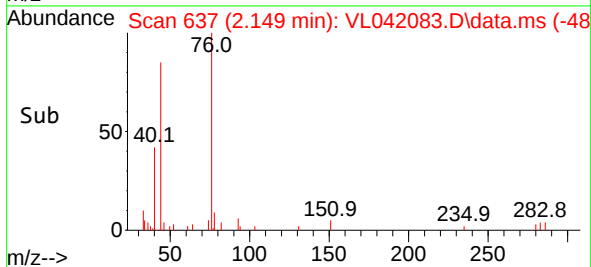
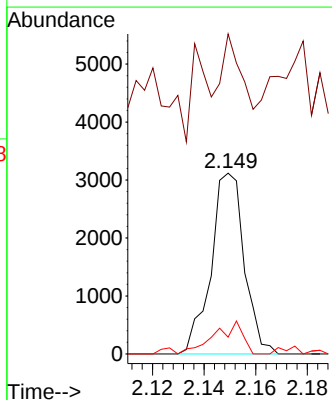
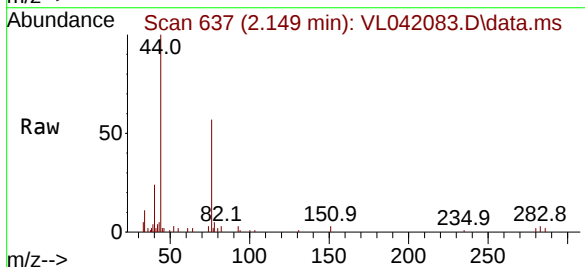
Instrument :
MSVOA_L
ClientSampleId :
SV4

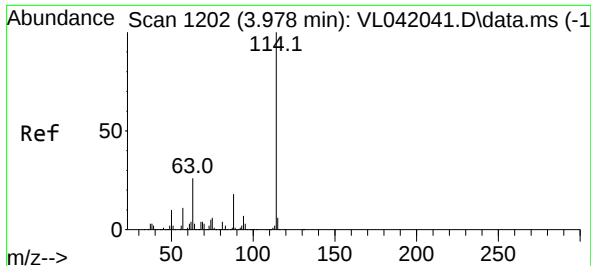
Tgt Ion: 57 Resp: 1404
Ion Ratio Lower Upper
57 100
41 157.5 70.6 106.0#
43 221.3 199.4 299.0
56 97.8 42.6 64.0#



#27
Carbon Disulfide
Concen: 0.181 ppbv
RT: 2.149 min Scan# 637
Delta R.T. -0.010 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 76 Resp: 2795
Ion Ratio Lower Upper
76 100
44 234.9 16.2 24.2#
78 25.7 9.4 14.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.955 min Scan# 1195

Delta R.T. -0.023 min

Lab File: VL042083.D

Acq: 03 Mar 2025 18:26

Instrument :

MSVOA_L

ClientSampleId :

SV4

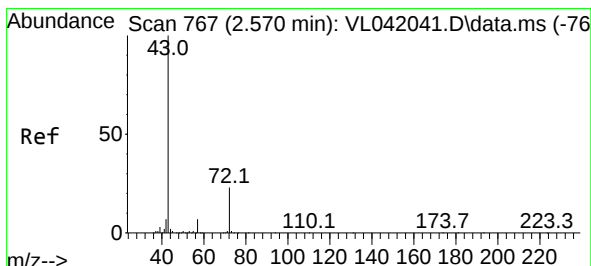
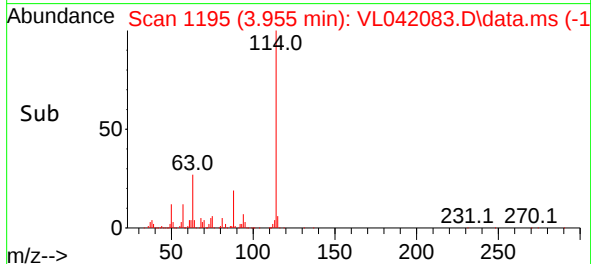
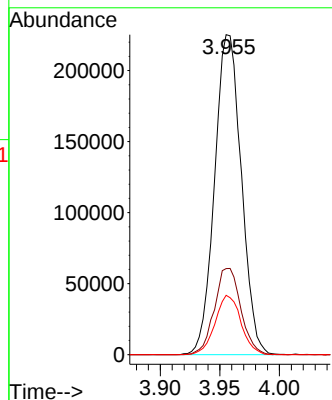
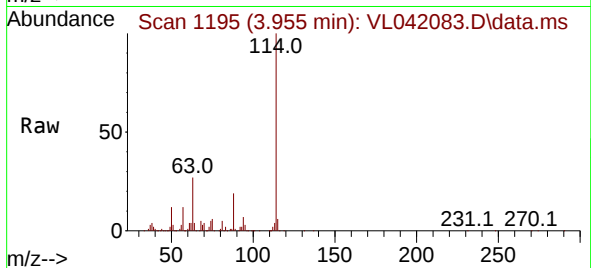
Tgt Ion:114 Resp: 351160

Ion Ratio Lower Upper

114 100

63 26.8 20.1 30.1

88 17.9 14.3 21.5



#34

2-Butanone

Concen: 3.406 ppbv

RT: 2.560 min Scan# 764

Delta R.T. -0.010 min

Lab File: VL042083.D

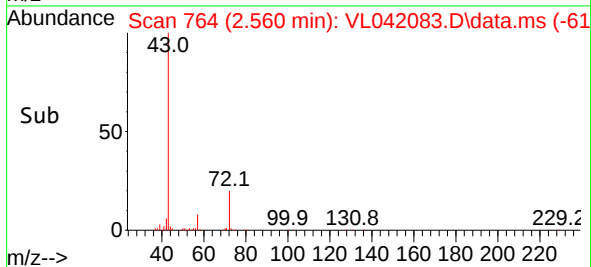
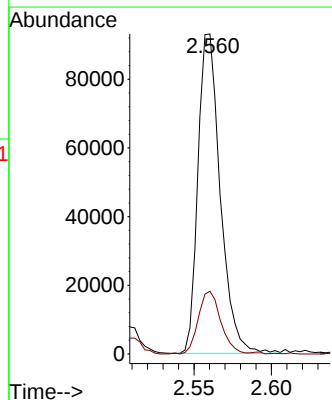
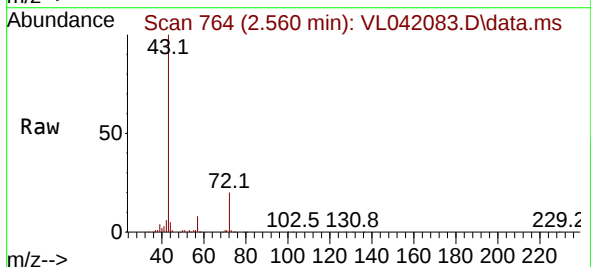
Acq: 03 Mar 2025 18:26

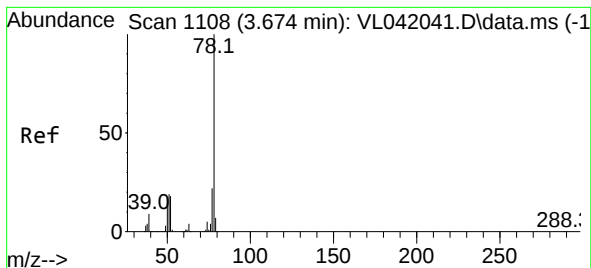
Tgt Ion: 43 Resp: 93192

Ion Ratio Lower Upper

43 100

72 20.2 18.5 27.7





#36

Benzene

Concen: 0.108 ppbv

RT: 3.651 min Scan# 1101

Delta R.T. -0.023 min

Lab File: VL042083.D

Acq: 03 Mar 2025 18:26

Instrument :

MSVOA_L

ClientSampleId :

SV4

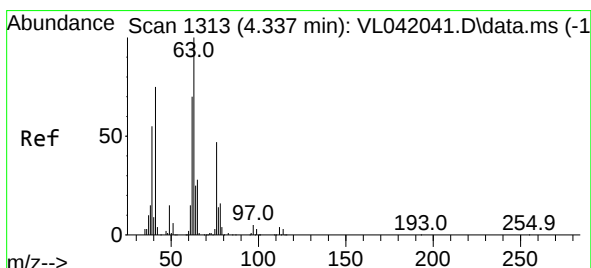
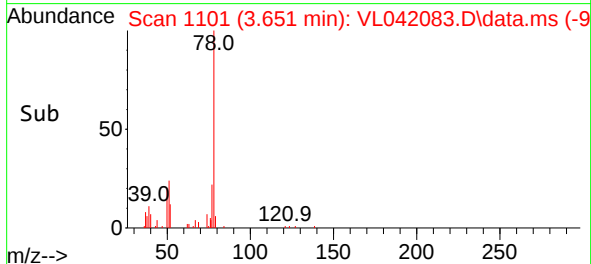
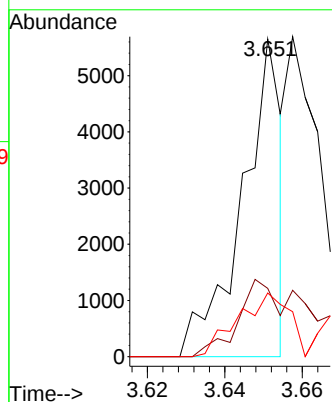
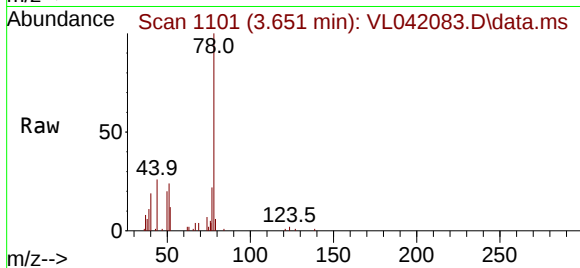
Tgt Ion: 78 Resp: 3970

Ion Ratio Lower Upper

78 100

77 21.5 17.7 26.5

50 20.1 13.9 20.9



#39

1,2-Dichloropropane

Concen: 6.728 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.379 min

Lab File: VL042083.D

Acq: 03 Mar 2025 18:26

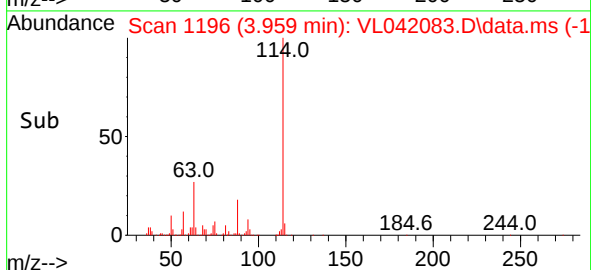
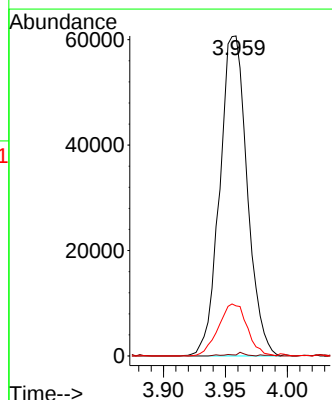
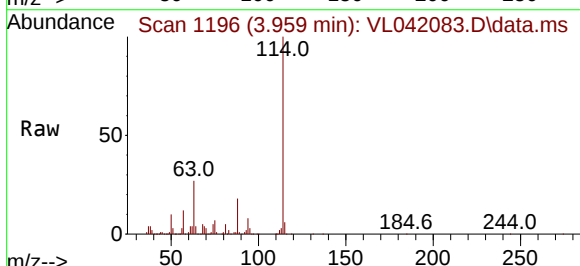
Tgt Ion: 63 Resp: 93882

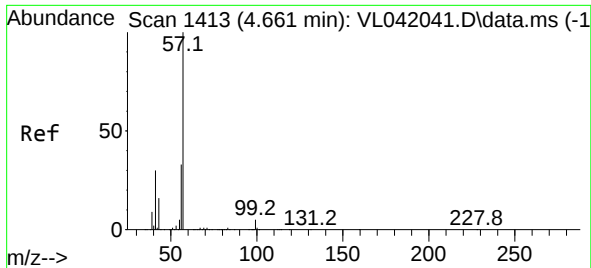
Ion Ratio Lower Upper

63 100

41 0.3 60.1 90.1#

62 15.7 55.8 83.8#

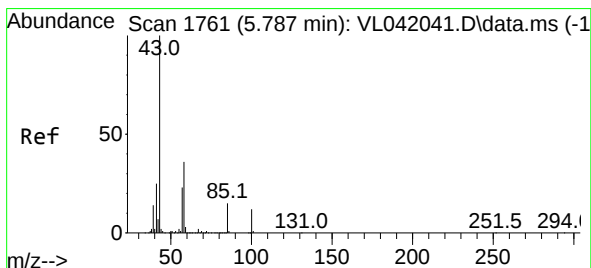
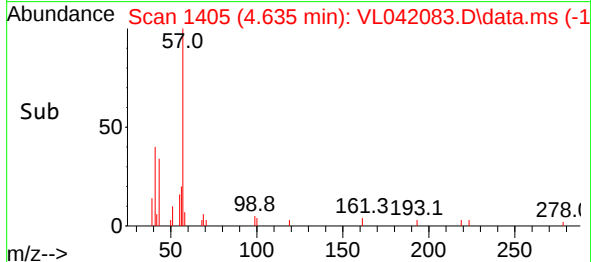
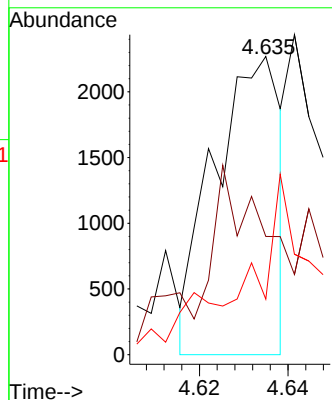
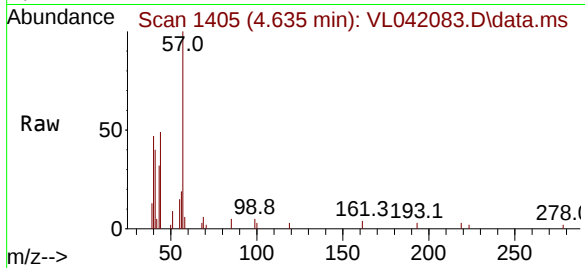




#44
2,2,4-Trimethylpentane
Concen: 0.036 ppbv
RT: 4.635 min Scan# 1413
Delta R.T. -0.026 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

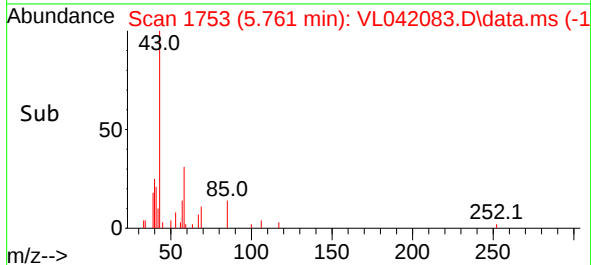
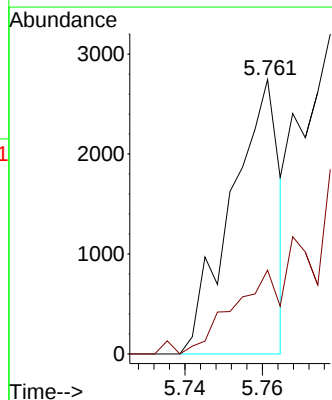
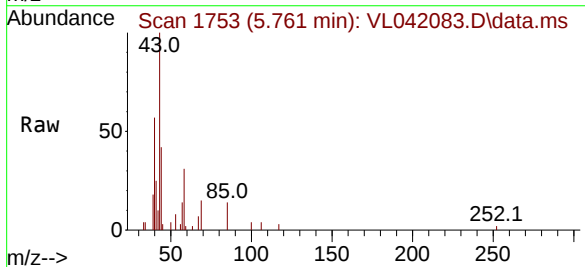
Instrument :
MSVOA_L
ClientSampleId :
SV4

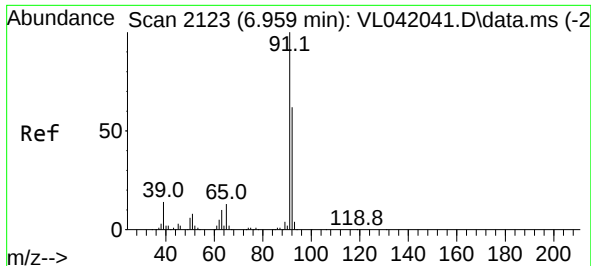
Tgt Ion: 57 Resp: 2363
Ion Ratio Lower Upper
57 100
41 110.3 24.4 36.6#
56 0.0 26.5 39.7#



#50
4-Methyl-2-Pentanone
Concen: 0.066 ppbv
RT: 5.761 min Scan# 1753
Delta R.T. -0.026 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 43 Resp: 2347
Ion Ratio Lower Upper
43 100
58 0.0 29.3 43.9#

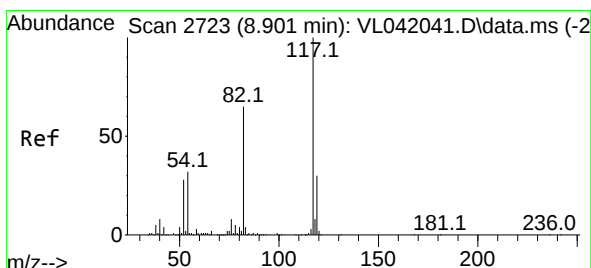
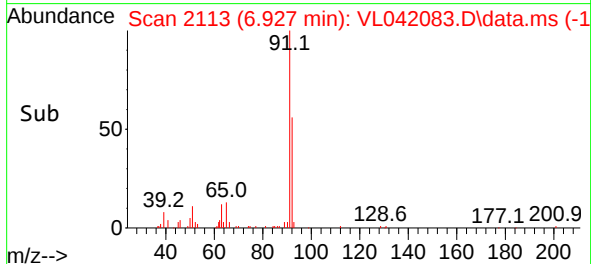
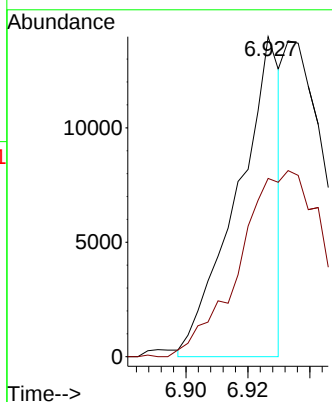
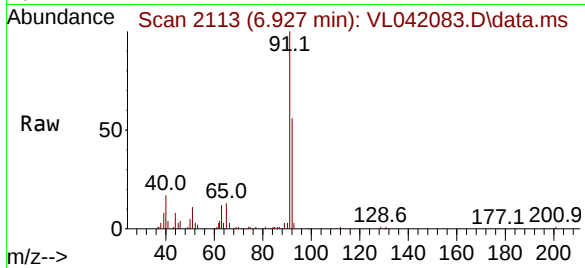




#53
Toluene
Concen: 0.328 ppbv
RT: 6.927 min Scan# 2123
Delta R.T. -0.033 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

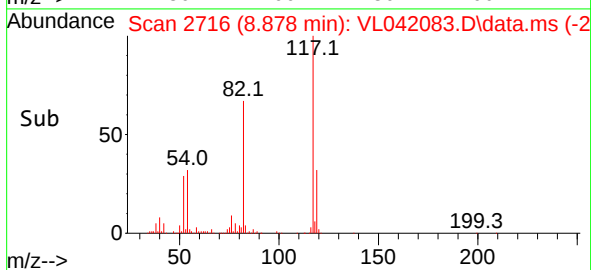
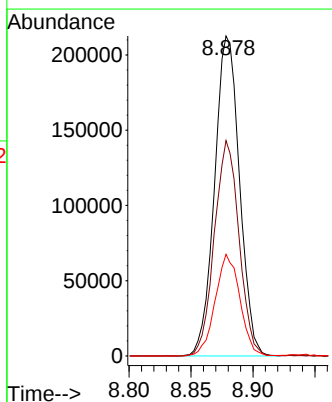
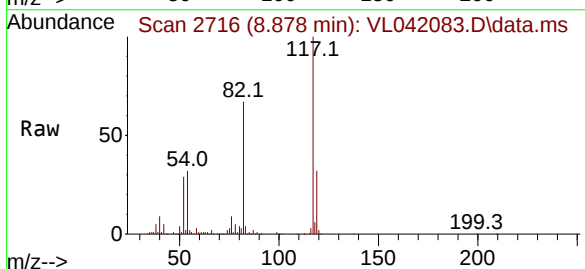
Instrument :
MSVOA_L
ClientSampleId :
SV4

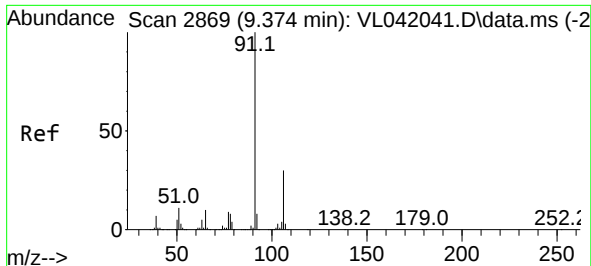
Tgt Ion: 91 Resp: 13471
Ion Ratio Lower Upper
91 100
92 0.0 49.0 73.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. -0.023 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

Tgt Ion: 117 Resp: 298456
Ion Ratio Lower Upper
117 100
82 66.6 55.0 82.6
119 31.5 25.9 38.9





#58

Ethyl Benzene

Concen: 0.050 ppbv

RT: 9.354 min Scan# 21

Delta R.T. -0.020 min

Lab File: VL042083.D

Acq: 03 Mar 2025 18:26

Instrument :

MSVOA_L

ClientSampleId :

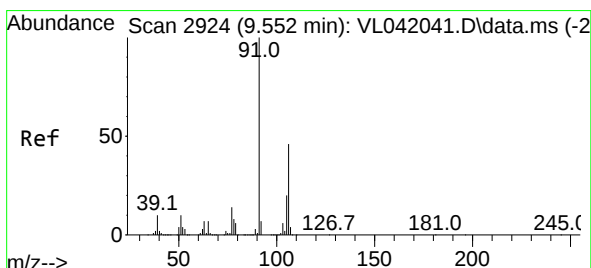
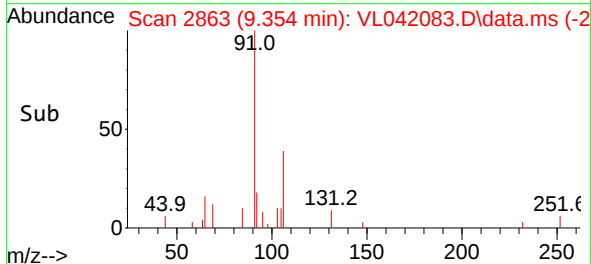
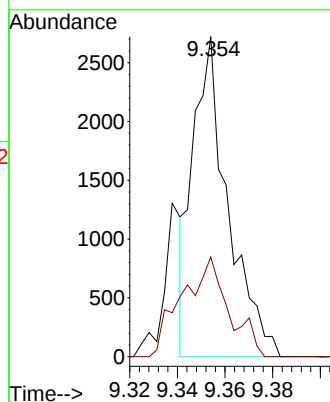
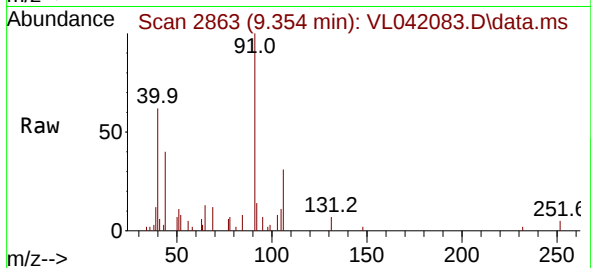
SV4

Tgt Ion: 91 Resp: 2770

Ion Ratio Lower Upper

91 100

106 31.2 24.2 36.2



#59

m/p-Xylene

Concen: 0.207 ppbv

RT: 9.526 min Scan# 2916

Delta R.T. -0.026 min

Lab File: VL042083.D

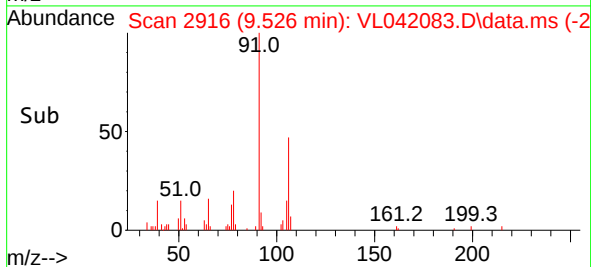
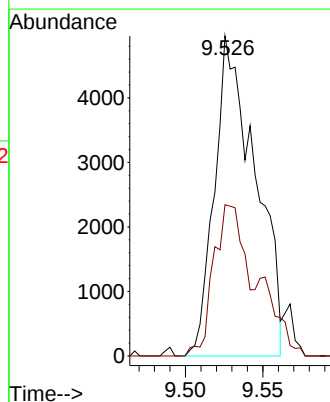
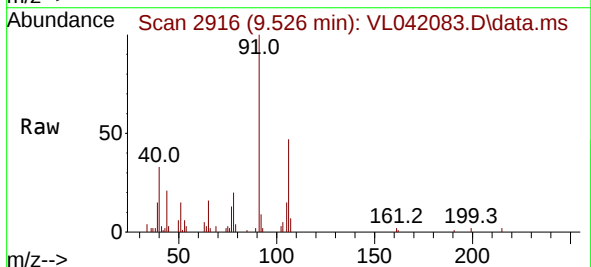
Acq: 03 Mar 2025 18:26

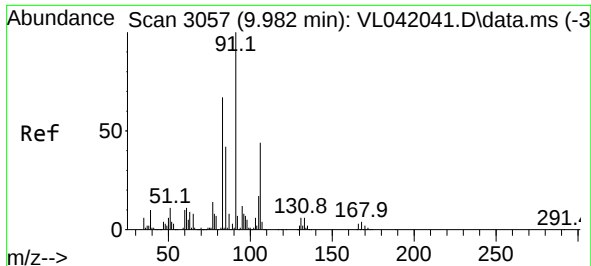
Tgt Ion: 91 Resp: 9044

Ion Ratio Lower Upper

91 100

106 49.7 0.0 0.0#

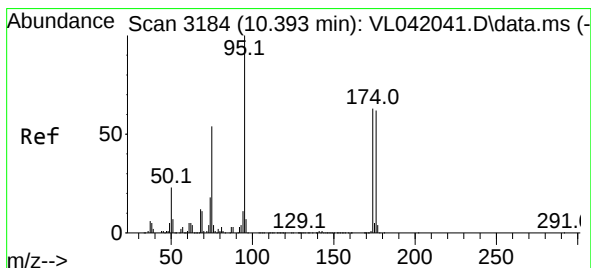
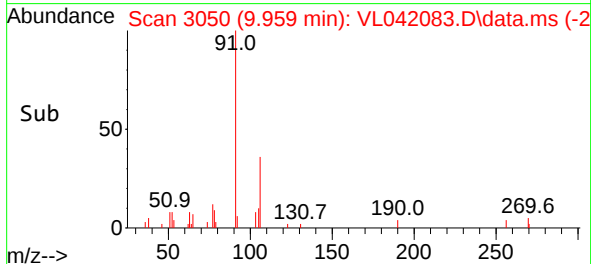
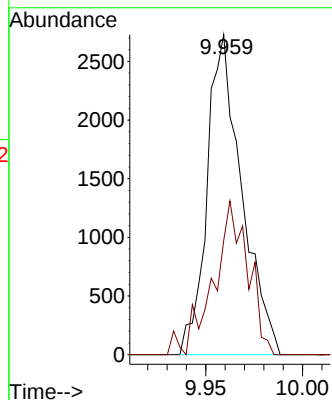
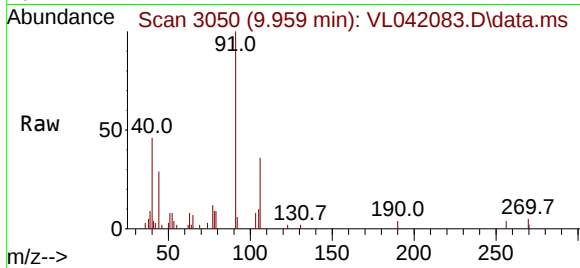




#60
o-Xylene
Concen: 0.077 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.023 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

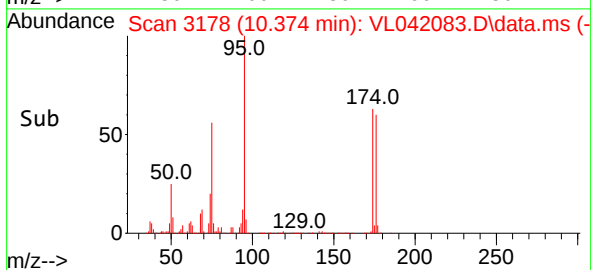
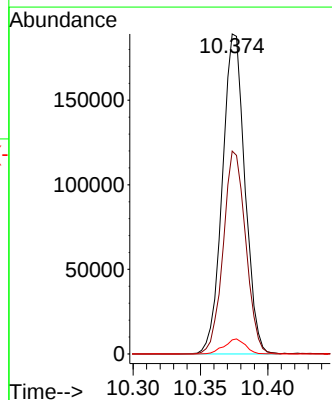
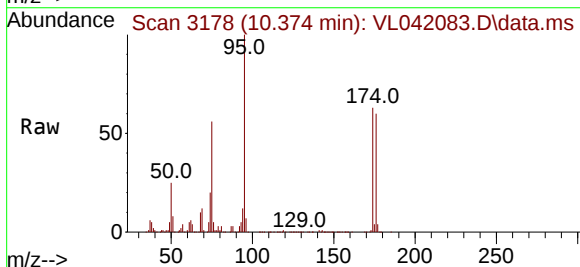
Instrument :
MSVOA_L
ClientSampleId :
SV4

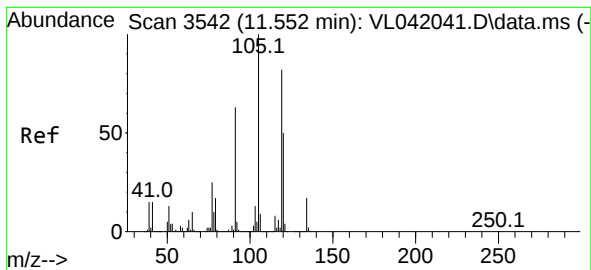
Tgt Ion: 91 Resp: 3395
Ion Ratio Lower Upper
91 100
106 48.3 22.3 66.8



#68
1-Bromo-4-Fluorobenzene
Concen: 9.582 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.020 min
Lab File: VL042083.D
Acq: 03 Mar 2025 18:26

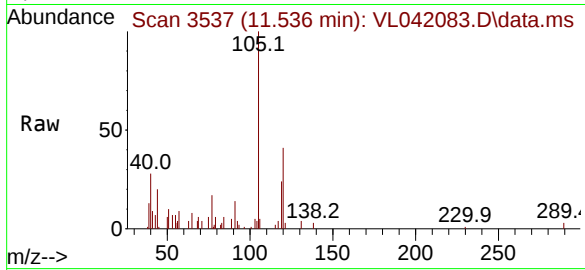
Tgt Ion: 95 Resp: 220011
Ion Ratio Lower Upper
95 100
174 63.5 51.8 77.6
175 4.5 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.085 ppbv
 RT: 11.536 min Scan# 31
 Delta R.T. -0.016 min
 Lab File: VL042083.D
 Acq: 03 Mar 2025 18:26

Instrument :
 MSVOA_L
 ClientSampleId :
 SV4



Tgt Ion:	105	Resp:	4463
Ion	Ratio	Lower	Upper
105	100		
120	41.2	40.2	60.2
91	14.1	51.4	77.2#
77	17.3	20.1	30.1#

