

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031025\
 Data File : VL042123.D
 Acq On : 10 Mar 2025 14:06
 Operator : SY/MD
 Sample : Q1532-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 2

Quant Time: Mar 11 01:24:55 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	2.797	49	166689	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	387215	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	330250	10.000	ppbv	0.00

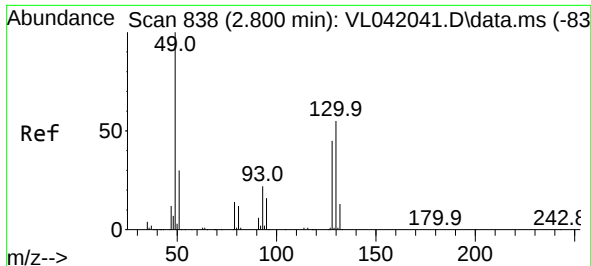
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	257155	10.121	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.200%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	8791	0.507	ppbv	99
3) Chlorodifluoromethane	1.470	51	23041	0.951	ppbv #	74
4) Chloromethane	1.538	50	6619	1.033	ppbv	93
6) Bromomethane	1.670	94	172	0.060	ppbv #	2
7) Chloroethane	1.463	64	17066	6.927	ppbv #	40
9) Propene	1.894	41	11574	1.173	ppbv	87
11) Trichlorofluoromethane	1.884	101	4086	0.235	ppbv	85
12) 1,1,2-Trichlorotrifluo...	2.146	101	1343	0.097	ppbv	97
13) Ethanol	1.729	45	64435	102.846	ppbv	88
15) Acetone	1.842	43	112970	7.674	ppbv	98
16) 1,3-Butadiene	1.606	39	1881	0.275	ppbv #	50
17) tert-Butyl alcohol	1.894	59	4238	0.230	ppbv	99
19) Isopropyl Alcohol	1.894	45	110681	13.090	ppbv #	35
20) Methylene Chloride	2.068	84	6629	1.191	ppbv	95
23) Vinyl Acetate	2.467	43	8799	0.850	ppbv #	82
25) Ethyl Acetate	2.852	43	8747	0.148	ppbv #	84
29) Chloroform	2.861	83	3349	0.104	ppbv #	77
30) Cyclohexane	3.874	84	1368	0.071	ppbv #	1
34) 2-Butanone	2.570	43	29478	0.977	ppbv	96
35) Carbon Tetrachloride	3.784	117	873	0.033	ppbv #	65
36) Benzene	3.671	78	5828	0.144	ppbv #	93
39) 1,2-Dichloropropane	3.978	63	99800	6.486	ppbv #	22
53) Toluene	6.956	91	12988	0.287	ppbv #	20
58) Ethyl Benzene	9.370	91	3070	0.050	ppbv	97
59) m/p-Xylene	9.545	91	15092	0.312	ppbv #	100
60) o-Xylene	9.976	91	4696	0.097	ppbv	93
61) Styrene	9.888	104	953	0.042	ppbv #	80
74) 1,2,4-Trimethylbenzene	11.552	105	3231	0.056	ppbv #	61

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

Quant Time: Mar 11 01:24:55 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

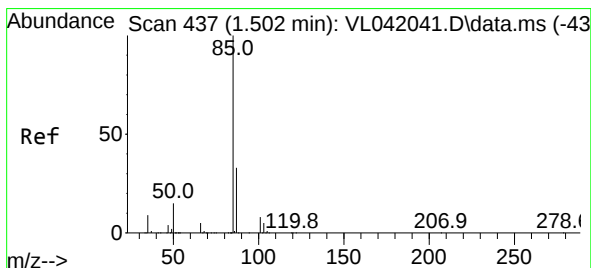
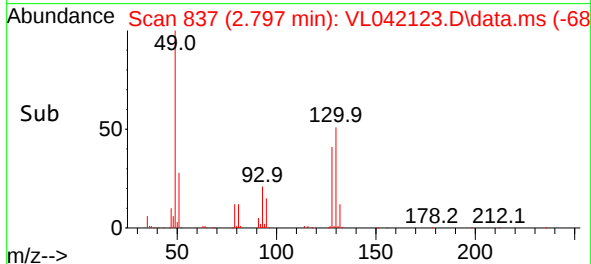
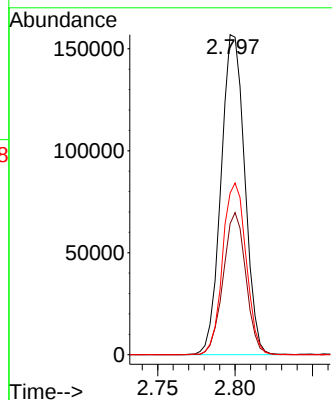
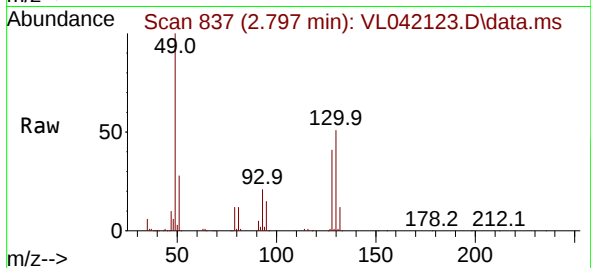




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 81
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

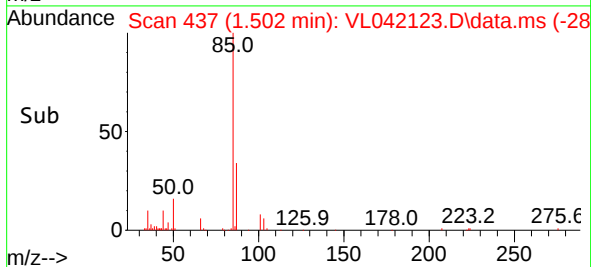
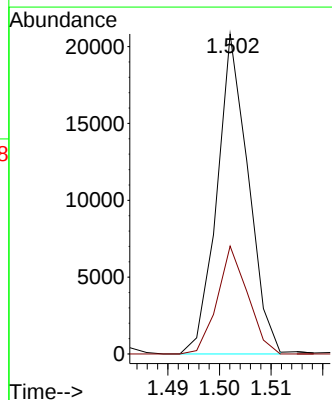
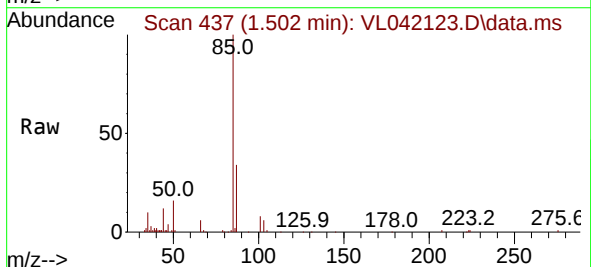
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MSVOA_L
ClientSampleId :
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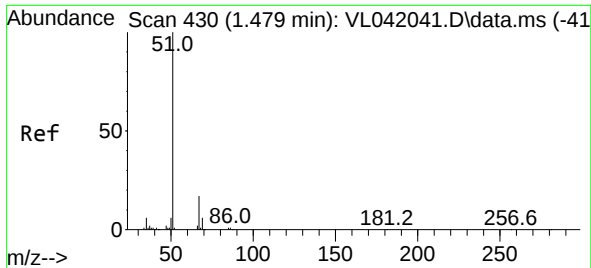
Tgt Ion: 49 Resp: 166689
Ion Ratio Lower Upper
49 100
128 42.6 21.6 64.8
130 53.2 27.8 83.4



#2
Dichlorodifluoromethane
Concen: 0.507 ppbv
RT: 1.502 min Scan# 437
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 85 Resp: 8791
Ion Ratio Lower Upper
85 100
87 33.7 26.4 39.6

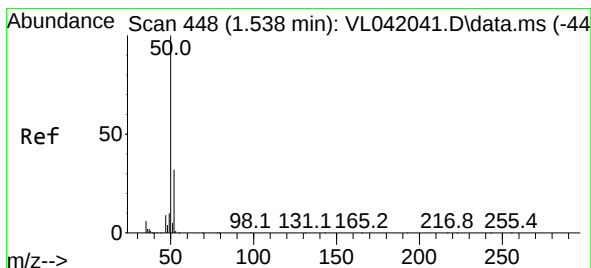
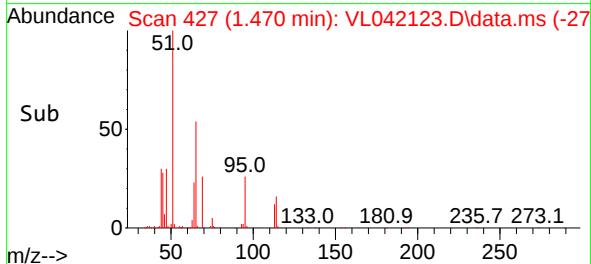
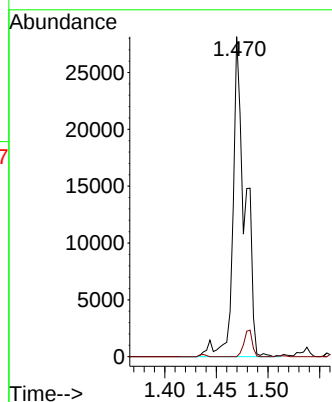
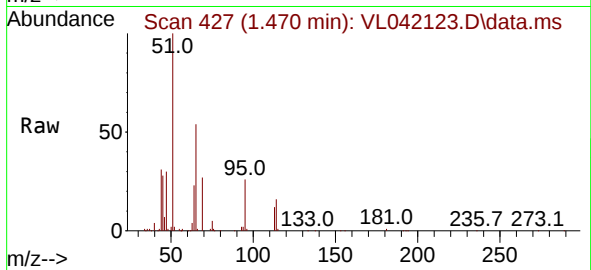




#3
Chlorodifluoromethane
Concen: 0.951 ppbv
RT: 1.470 min Scan# 430
Delta R.T. -0.010 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

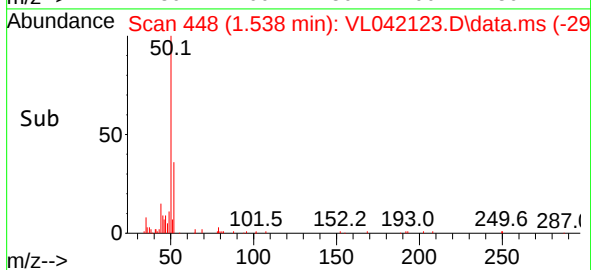
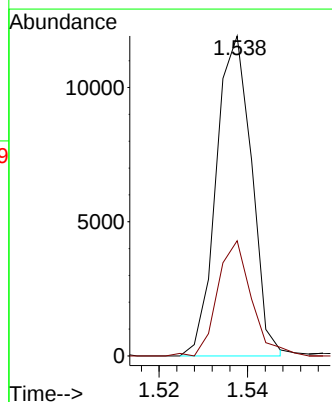
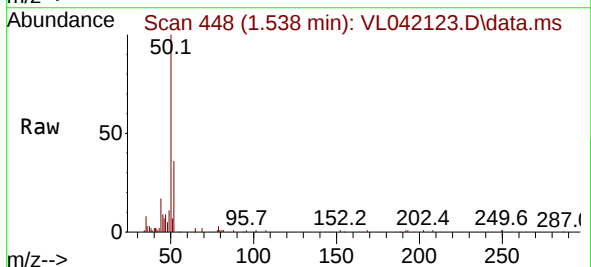
Instrument :
MSVOA_L
ClientSampleId :
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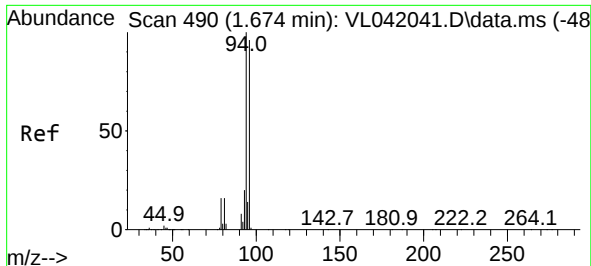
Tgt Ion: 51 Resp: 23041
Ion Ratio Lower Upper
51 100
67 5.6 13.7 20.5#



#4
Chloromethane
Concen: 1.033 ppbv
RT: 1.538 min Scan# 448
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 50 Resp: 6619
Ion Ratio Lower Upper
50 100
52 35.4 25.4 38.0

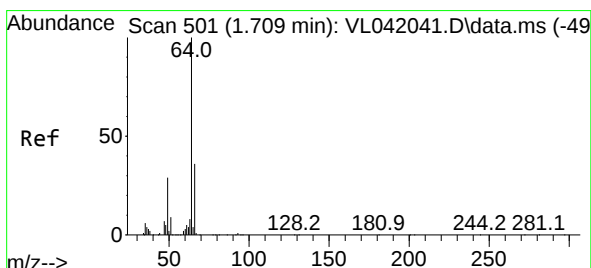
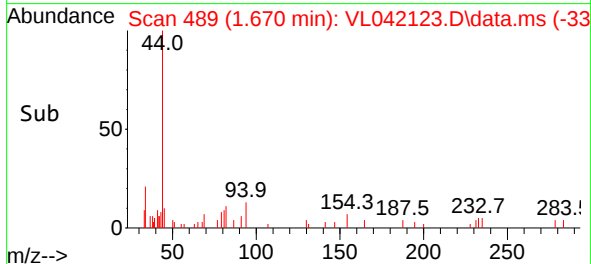
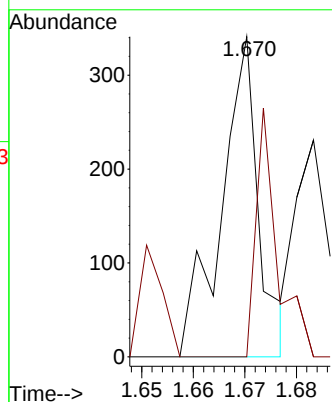
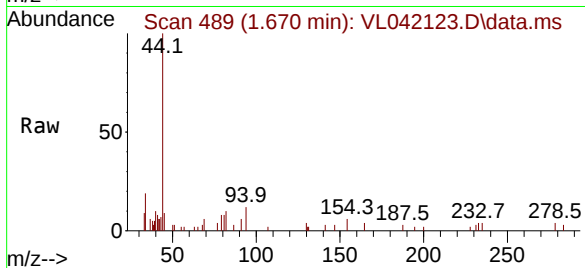




#6
Bromomethane
Concen: 0.060 ppbv
RT: 1.670 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

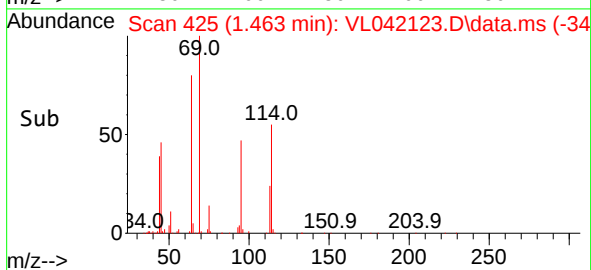
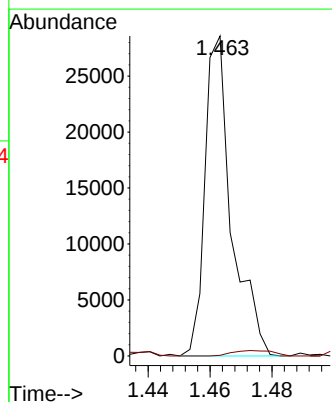
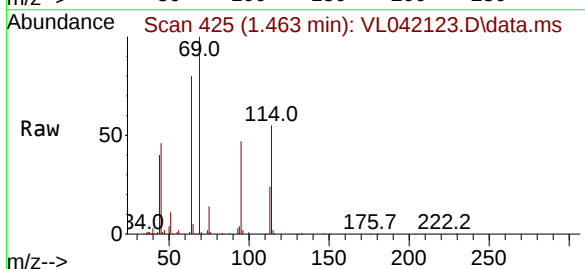
Instrument :
MSVOA_L
ClientSampleId :
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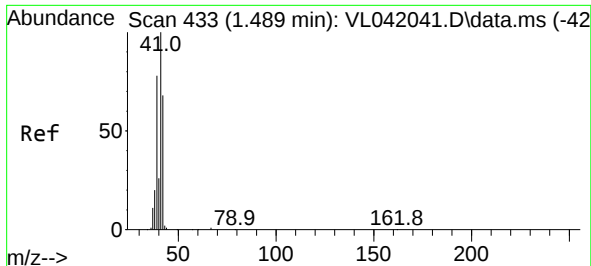
Tgt Ion: 94 Resp: 172
Ion Ratio Lower Upper
94 100
96 0.0 76.5 114.7#



#7
Chloroethane
Concen: 6.927 ppbv
RT: 1.463 min Scan# 425
Delta R.T. -0.246 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 64 Resp: 17066
Ion Ratio Lower Upper
64 100
66 0.2 28.4 42.6#





#9

Propene

Concen: 1.173 ppbv

RT: 1.894 min Scan# 51

Delta R.T. 0.404 min

Lab File: VL042123.D

Acq: 10 Mar 2025 14:06

Instrument :

MSVOA_L

ClientSampleId :

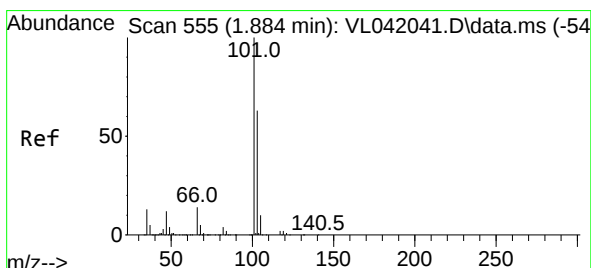
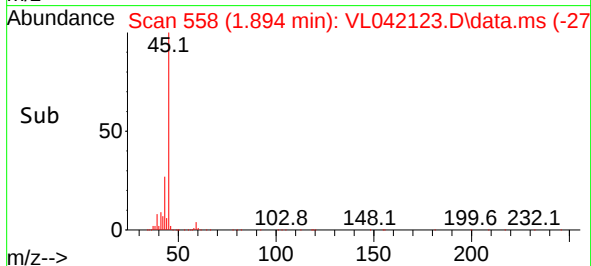
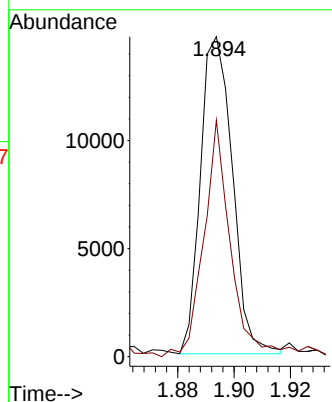
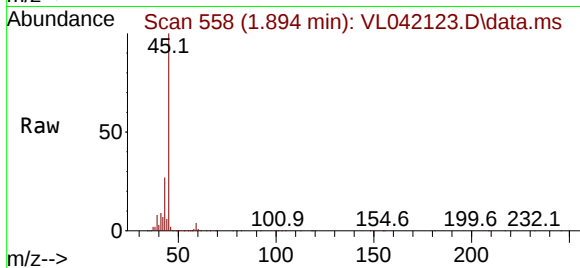
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Tgt Ion: 41 Resp: 11574

Ion Ratio Lower Upper

41 100

42 58.7 55.8 83.6



#11

Trichlorofluoromethane

Concen: 0.235 ppbv

RT: 1.884 min Scan# 555

Delta R.T. -0.000 min

Lab File: VL042123.D

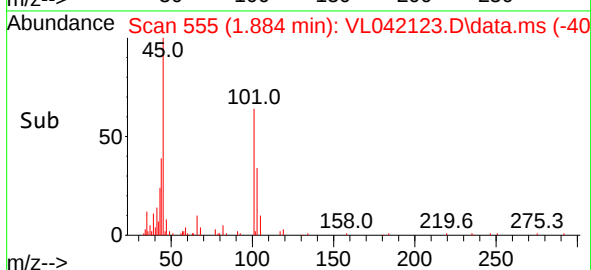
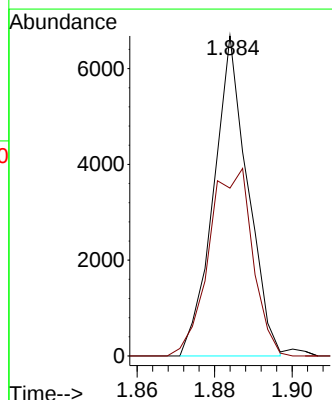
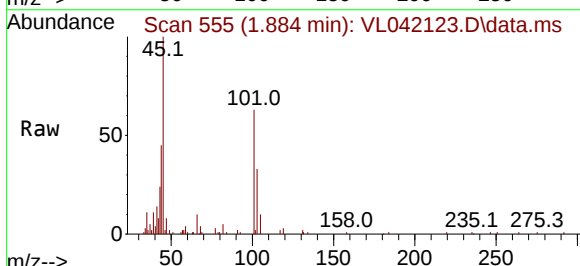
Acq: 10 Mar 2025 14:06

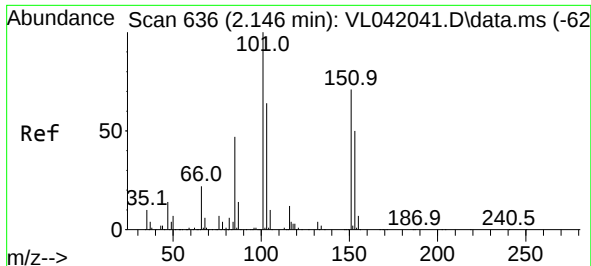
Tgt Ion:101 Resp: 4086

Ion Ratio Lower Upper

101 100

103 51.6 50.6 75.8

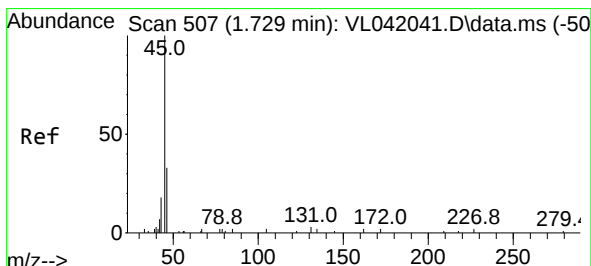
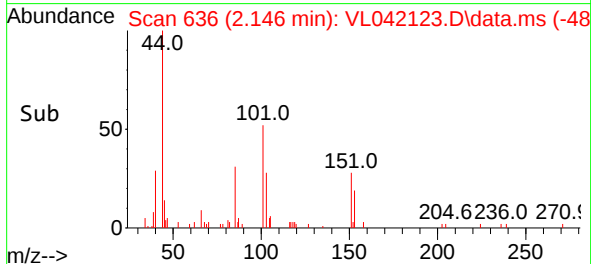
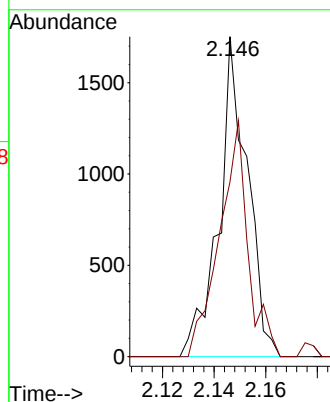
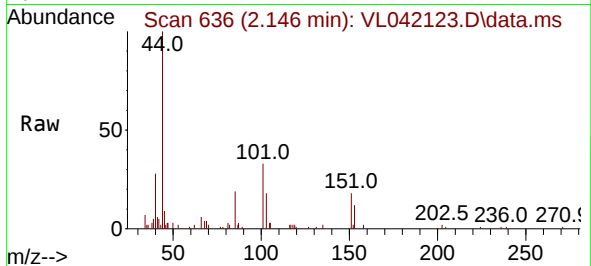




#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.097 ppbv
 RT: 2.146 min Scan# 61
 Delta R.T. -0.000 min
 Lab File: VL042123.D
 Acq: 10 Mar 2025 14:06

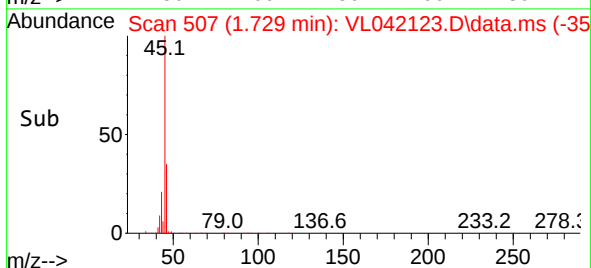
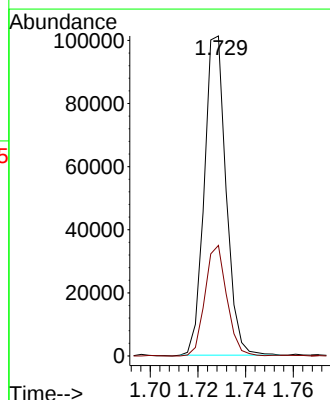
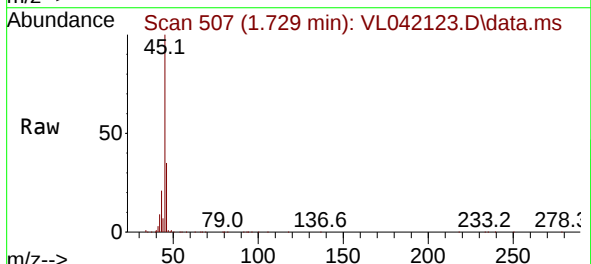
Instrument :
 MSVOA_L
 ClientSampleId :
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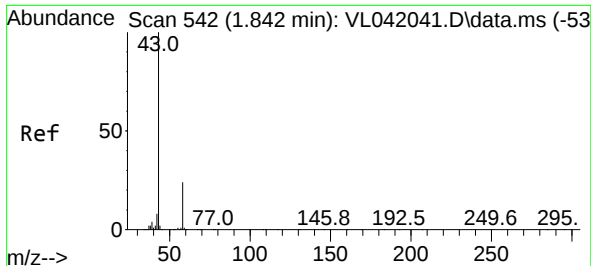
Tgt Ion:101 Resp: 1343
 Ion Ratio Lower Upper
 101 100
 151 75.9 62.6 94.0



#13
 Ethanol
 Concen: 102.846 ppbv
 RT: 1.729 min Scan# 507
 Delta R.T. -0.000 min
 Lab File: VL042123.D
 Acq: 10 Mar 2025 14:06

Tgt Ion: 45 Resp: 64435
 Ion Ratio Lower Upper
 45 100
 46 35.2 17.1 68.3

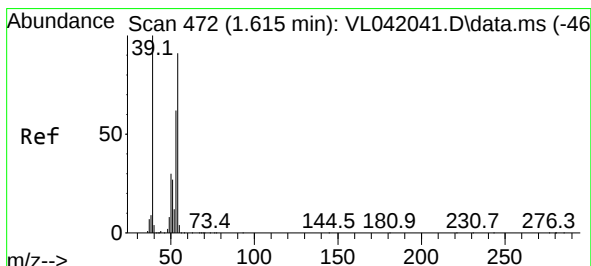
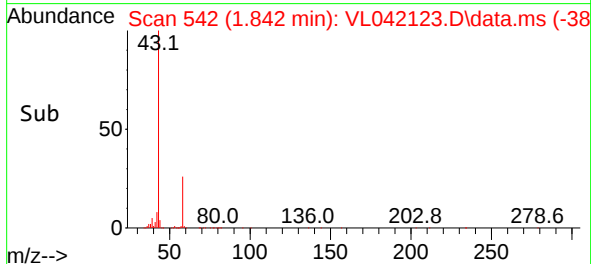
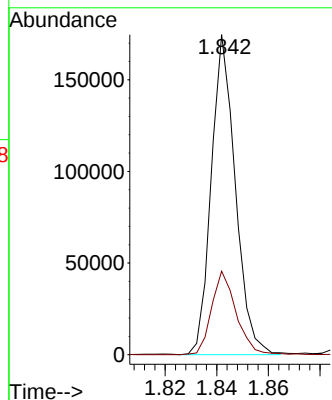
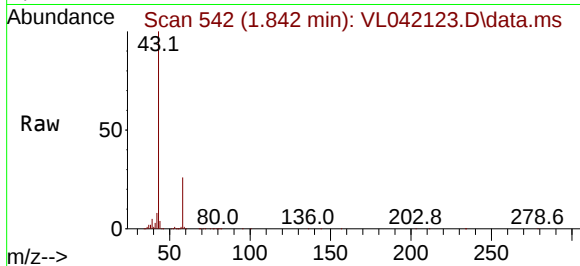




#15
Acetone
Concen: 7.674 ppbv
RT: 1.842 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

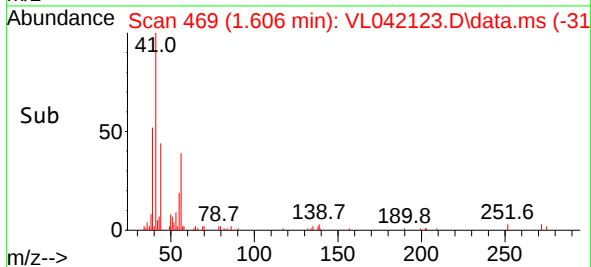
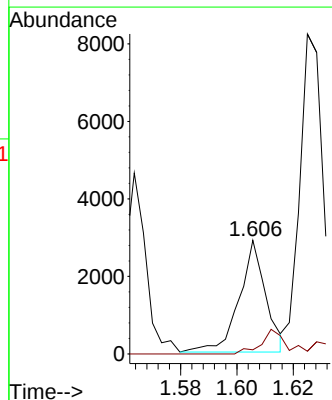
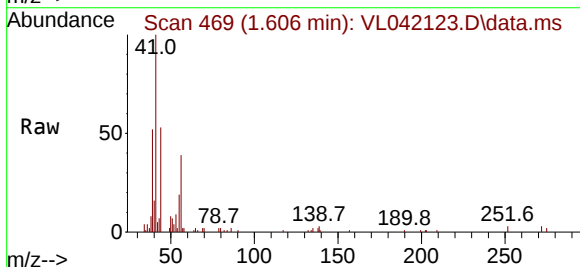
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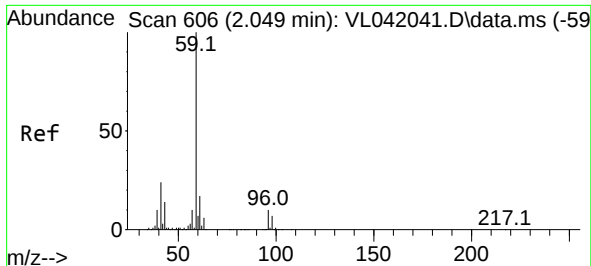
Tgt Ion: 43 Resp: 112970
Ion Ratio Lower Upper
43 100
58 26.7 20.7 31.1



#16
1,3-Butadiene
Concen: 0.275 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.010 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 39 Resp: 1881
Ion Ratio Lower Upper
39 100
54 32.1 59.6 89.4#

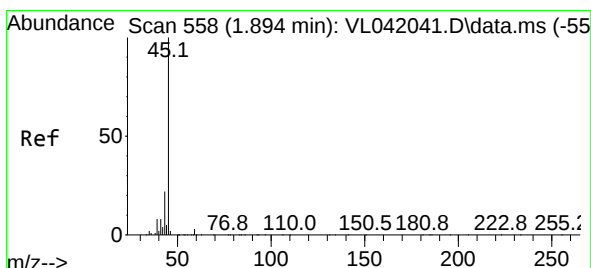
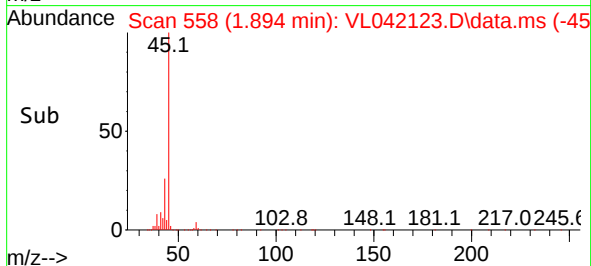
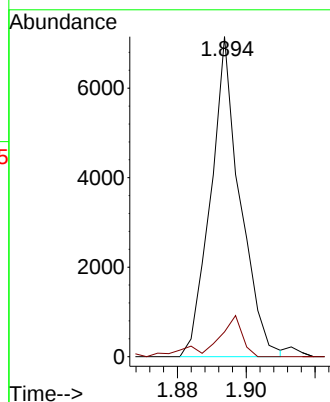
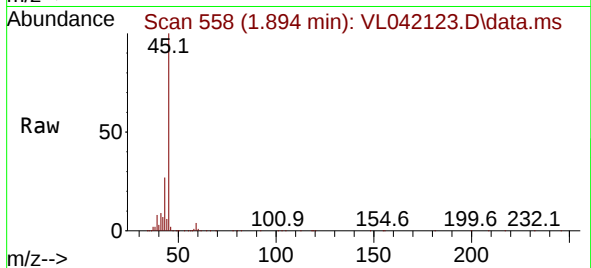




#17
tert-Butyl alcohol
Concen: 0.230 ppbv
RT: 1.894 min Scan# 51
Delta R.T. -0.155 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

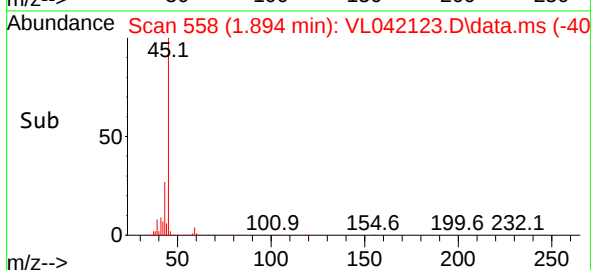
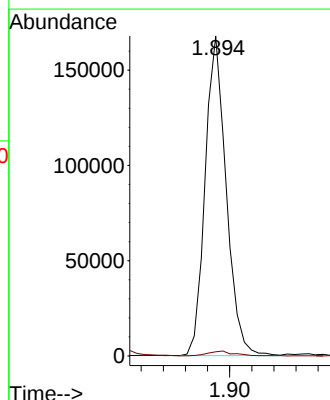
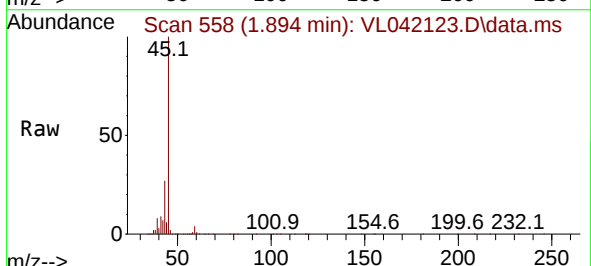
Instrument :
MSVOA_1
ClientSampleId :
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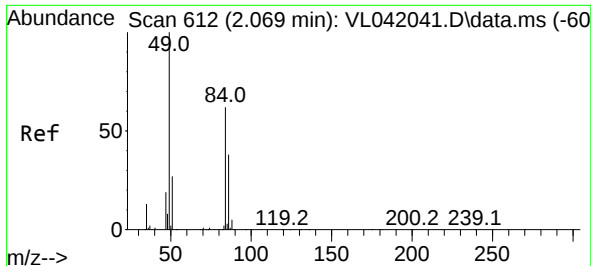
Tgt Ion: 59 Resp: 4238
Ion Ratio Lower Upper
59 100
57 11.2 9.3 13.9



#19
Isopropyl Alcohol
Concen: 13.090 ppbv
RT: 1.894 min Scan# 558
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 45 Resp: 110681
Ion Ratio Lower Upper
45 100
58 1.9 35.3 52.9#



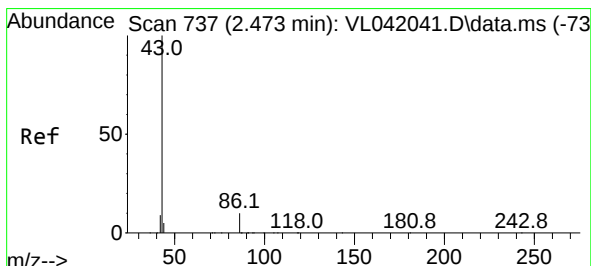
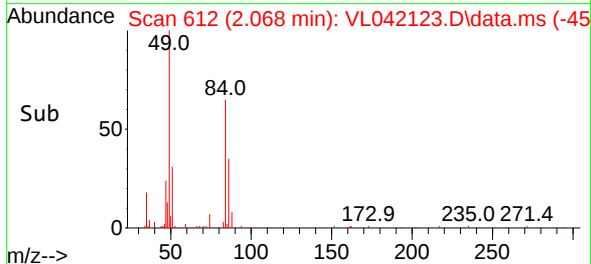
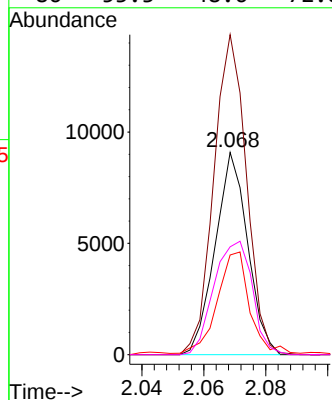
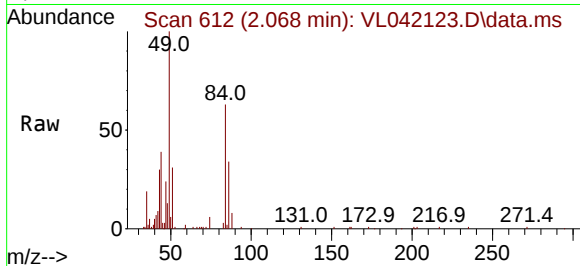


#20
Methylene Chloride
Concen: 1.191 ppbv
RT: 2.068 min Scan# 612
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Instrument :
MSVOA_L
ClientSampleId :
2

Tgt Ion: 84 Resp: 6629

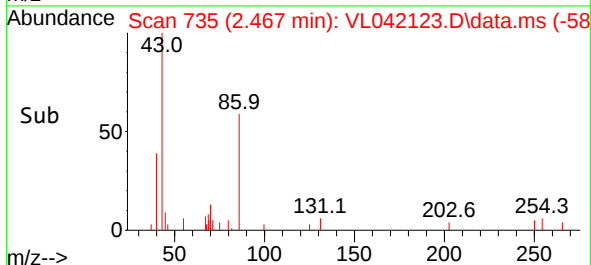
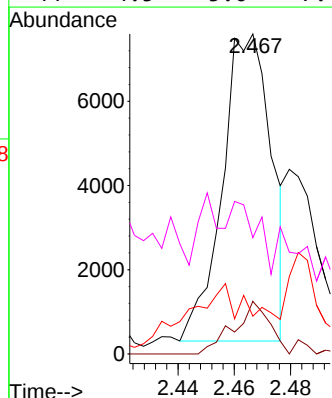
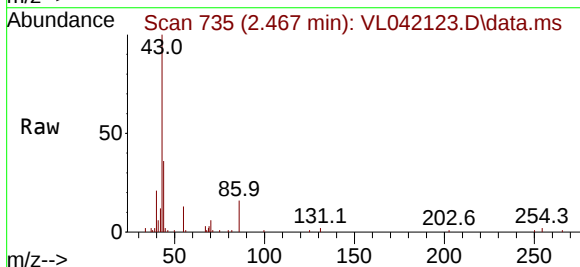
Ion	Ratio	Lower	Upper
84	100		
49	157.3	130.0	195.0
51	48.6	37.4	56.0
86	53.3	48.6	72.8

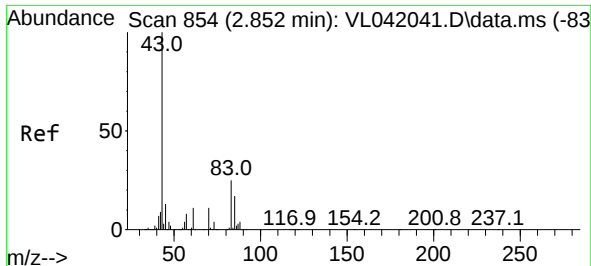


#23
Vinyl Acetate
Concen: 0.850 ppbv
RT: 2.467 min Scan# 735
Delta R.T. -0.007 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 43 Resp: 8799

Ion	Ratio	Lower	Upper
43	100		
86	17.1	7.0	10.4#
42	1.8	7.6	11.4#
44	4.5	5.0	7.4#

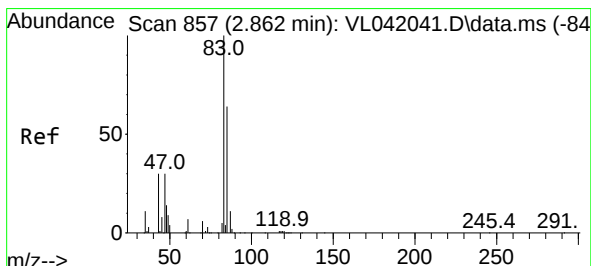
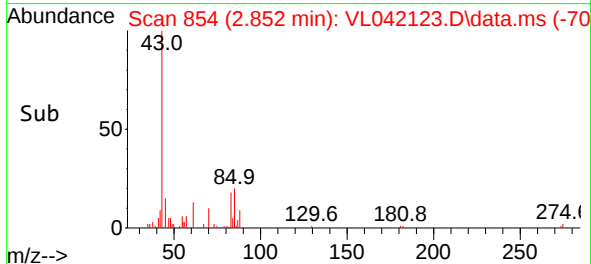
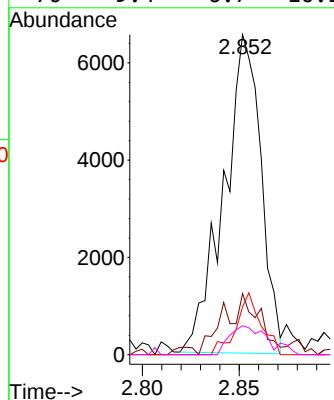
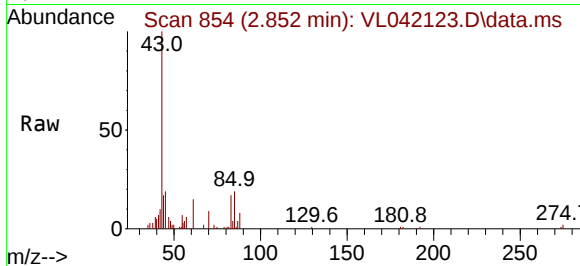




#25
Ethyl Acetate
Concen: 0.148 ppbv
RT: 2.852 min Scan# 854
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

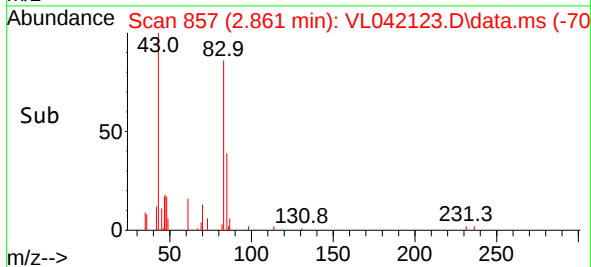
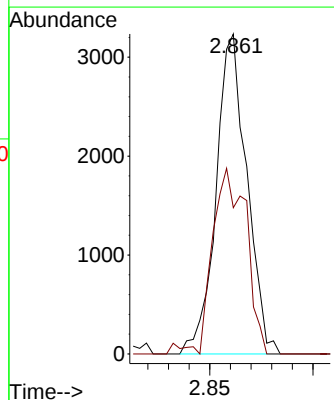
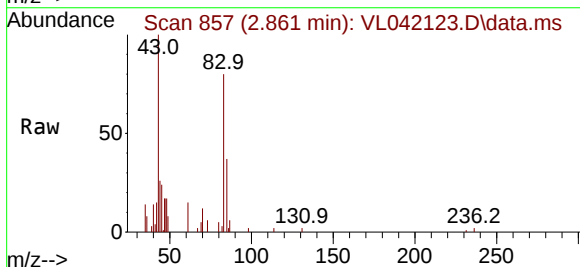
Instrument :
MSVOA_1
ClientSampleId :
2

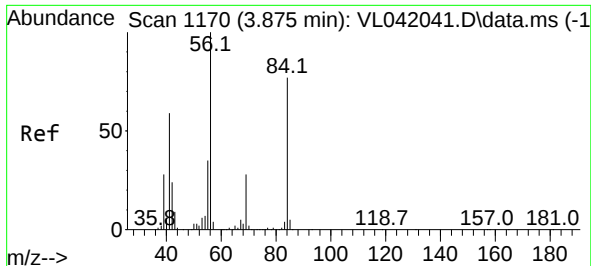
Tgt Ion: 43	Resp: 8747
Ion Ratio	Lower Upper
43 100	
45 22.0	8.1 12.1#
61 12.9	7.2 10.8#
70 9.4	6.7 10.1



#29
Chloroform
Concen: 0.104 ppbv
RT: 2.861 min Scan# 857
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 83	Resp: 3349		
Ion Ratio	Lower	Upper	
83 100			
85 45.7	51.2	76.8#	

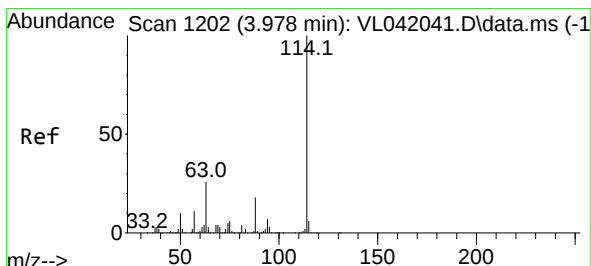
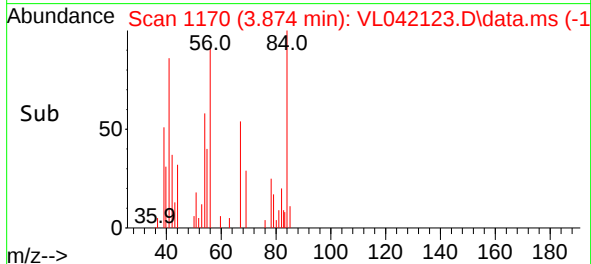
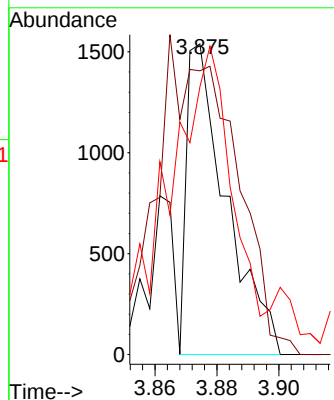
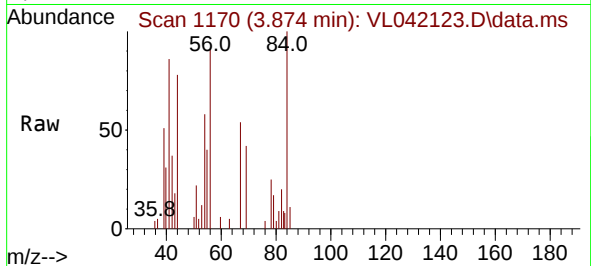




#30
Cyclohexane
Concen: 0.071 ppbv
RT: 3.874 min Scan# 1170
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

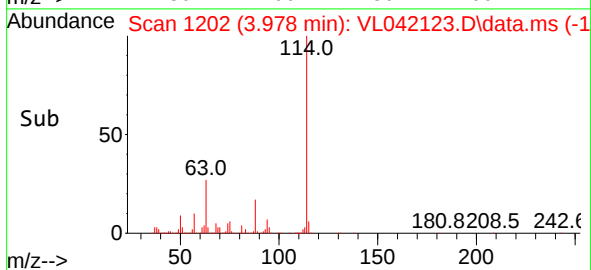
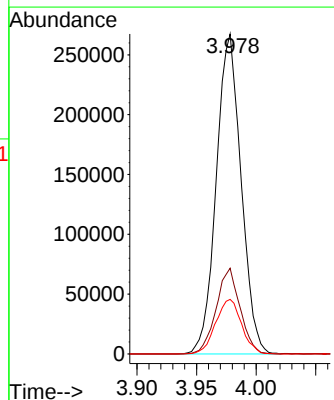
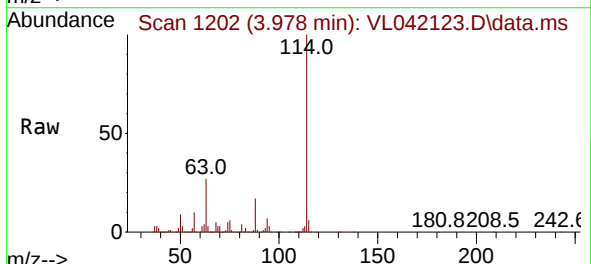
Instrument :
MSVOA_L
ClientSampleId :
2

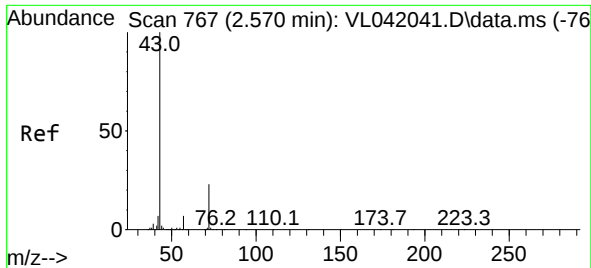
Tgt Ion: 84 Resp: 1368
Ion Ratio Lower Upper
84 100
56 0.0 101.5 152.3#
41 180.4 62.6 93.8#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.978 min Scan# 1202
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 114 Resp: 387215
Ion Ratio Lower Upper
114 100
63 25.9 20.1 30.1
88 17.8 14.3 21.5

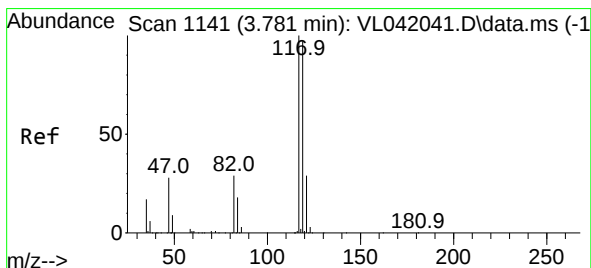
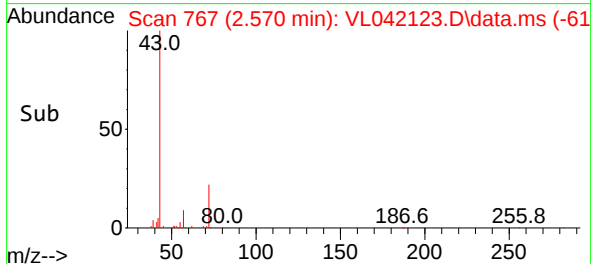
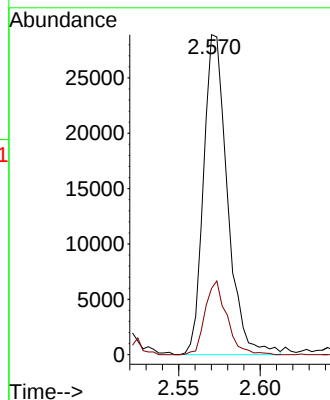
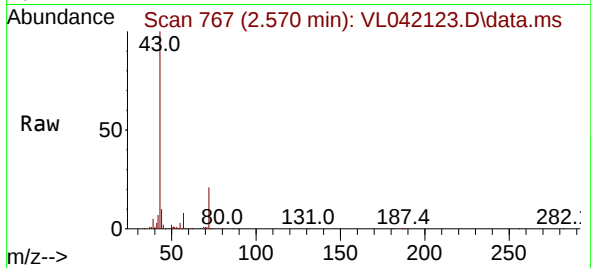




#34
2-Butanone
Concen: 0.977 ppbv
RT: 2.570 min Scan# 767
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

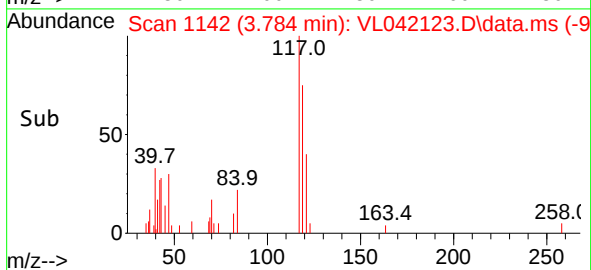
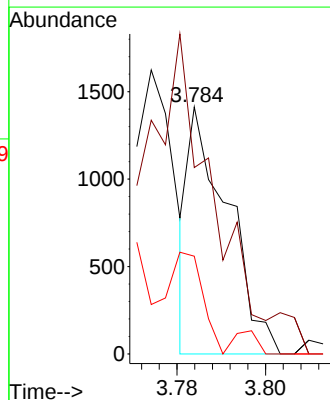
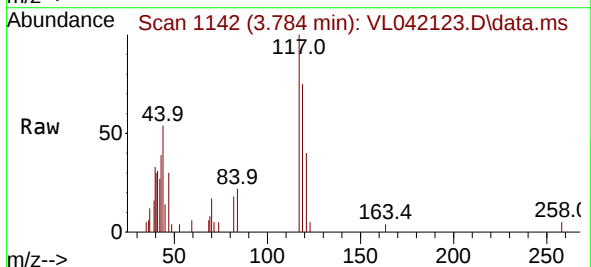
Instrument :
MSVOA_L
ClientSampleId :
2

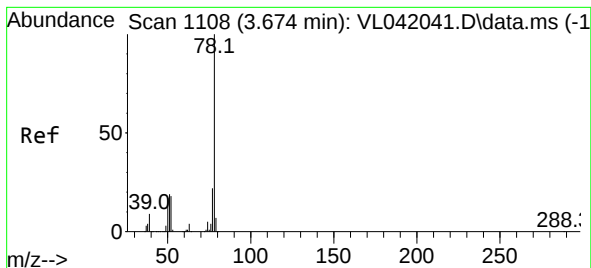
Tgt Ion: 43 Resp: 29478
Ion Ratio Lower Upper
43 100
72 21.0 18.5 27.7



#35
Carbon Tetrachloride
Concen: 0.033 ppbv
RT: 3.784 min Scan# 1142
Delta R.T. 0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 117 Resp: 873
Ion Ratio Lower Upper
117 100
119 58.7 77.8 116.8#
121 39.6 23.4 35.0#





#36

Benzene

Concen: 0.144 ppbv

RT: 3.671 min Scan# 1108

Delta R.T. -0.003 min

Lab File: VL042123.D

Acq: 10 Mar 2025 14:06

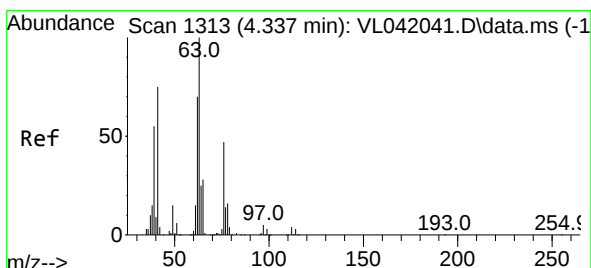
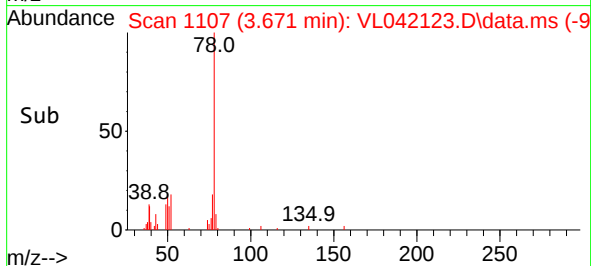
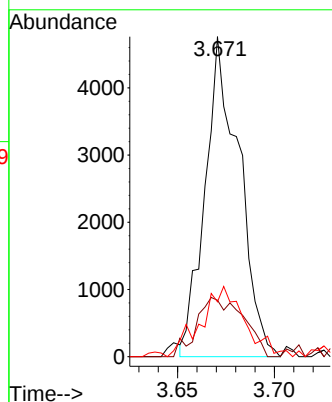
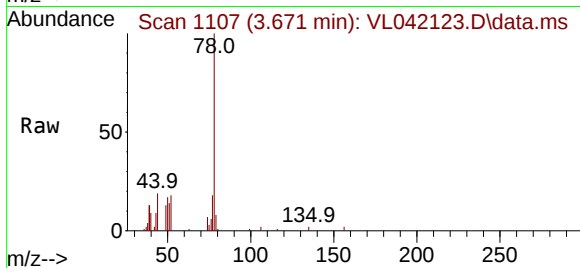
Instrument :

MSVOA_L

ClientSampleId :

2

Tgt Ion:	78	Resp:	5828
Ion Ratio	Lower	Upper	
78	100		
77	17.7	17.7	26.5#
50	15.5	13.9	20.9



#39

1,2-Dichloropropane

Concen: 6.486 ppbv

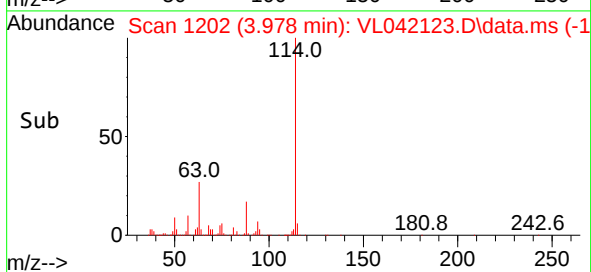
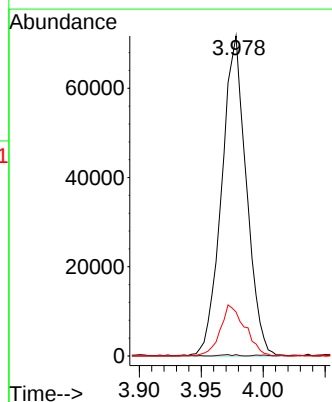
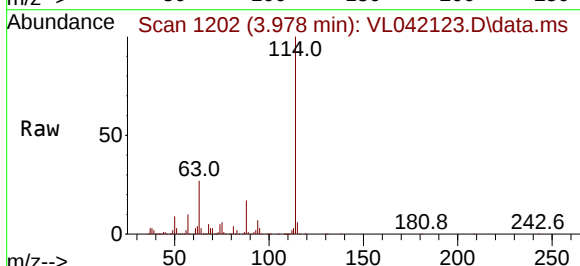
RT: 3.978 min Scan# 1202

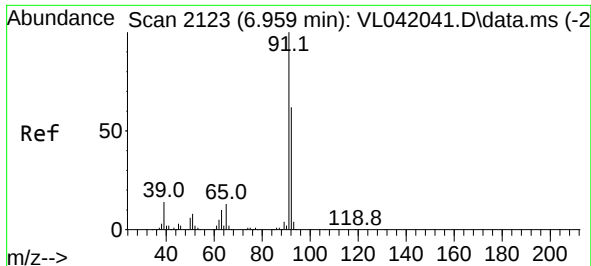
Delta R.T. -0.359 min

Lab File: VL042123.D

Acq: 10 Mar 2025 14:06

Tgt Ion:	63	Resp:	99800
Ion Ratio	Lower	Upper	
63	100		
41	0.4	60.1	90.1#
62	13.8	55.8	83.8#

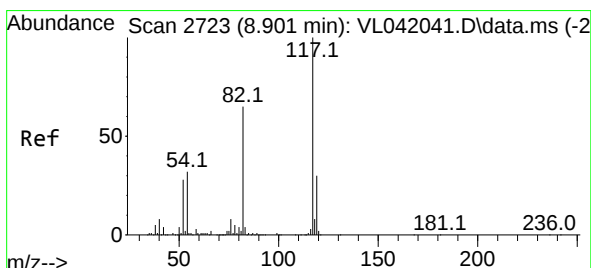
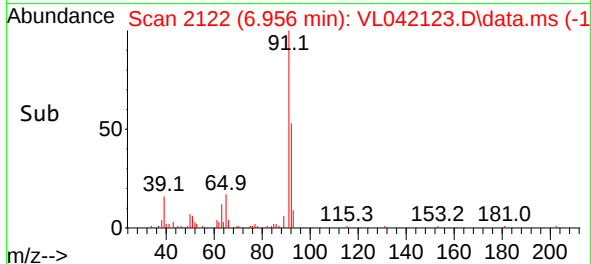
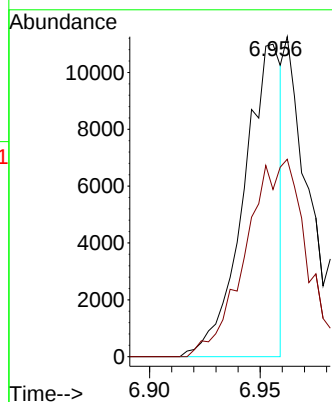
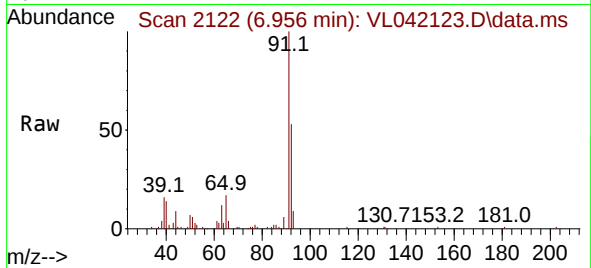




#53
Toluene
Concen: 0.287 ppbv
RT: 6.956 min Scan# 2123
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

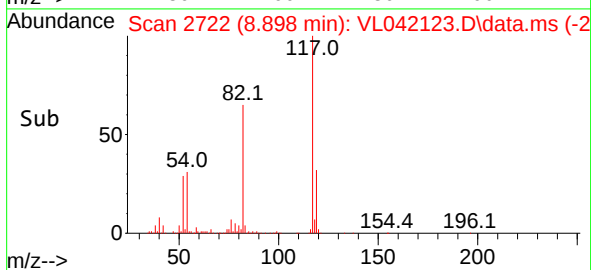
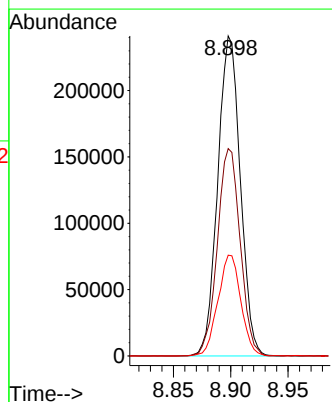
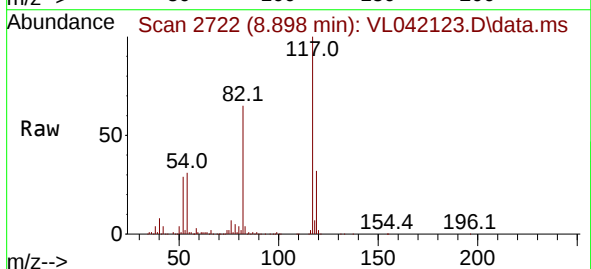
Instrument :
MSVOA_L
ClientSampleId :
2

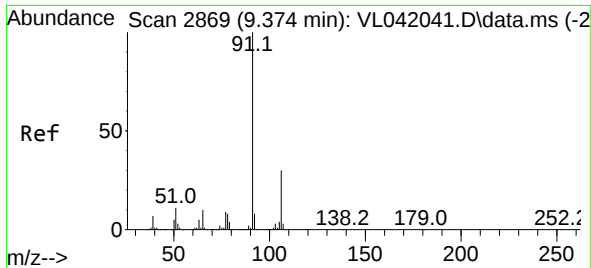
Tgt Ion: 91 Resp: 12988
Ion Ratio Lower Upper
91 100
92 0.0 49.0 73.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.898 min Scan# 2722
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 117 Resp: 330250
Ion Ratio Lower Upper
117 100
82 65.5 55.0 82.6
119 32.1 25.9 38.9

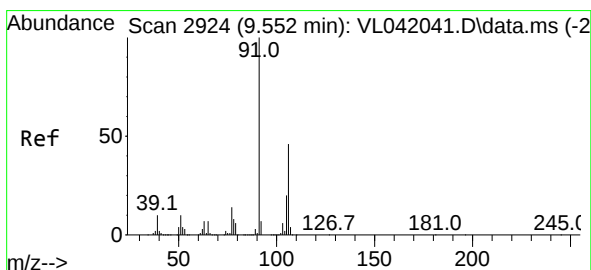
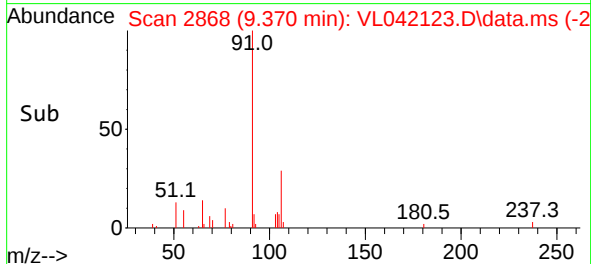
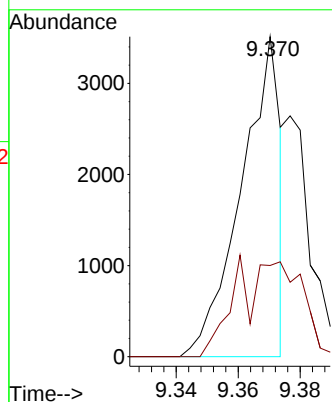
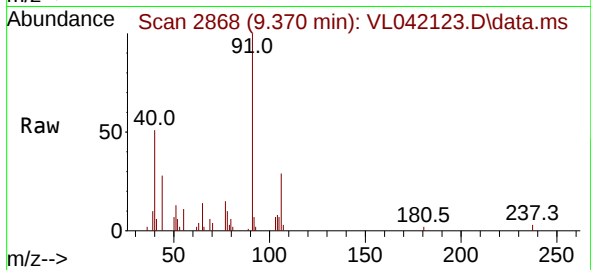




#58
Ethyl Benzene
Concen: 0.050 ppbv
RT: 9.370 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

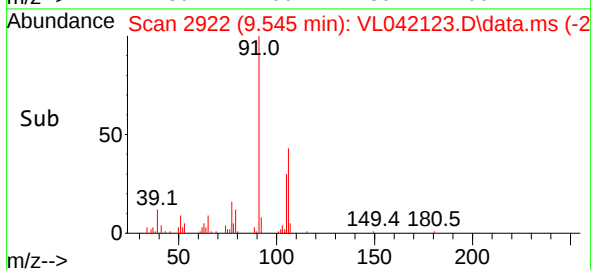
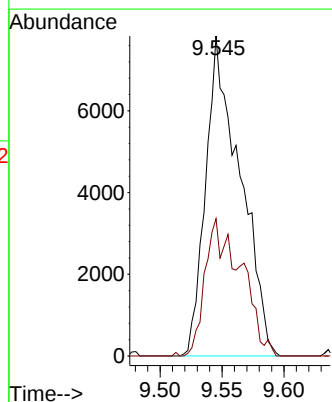
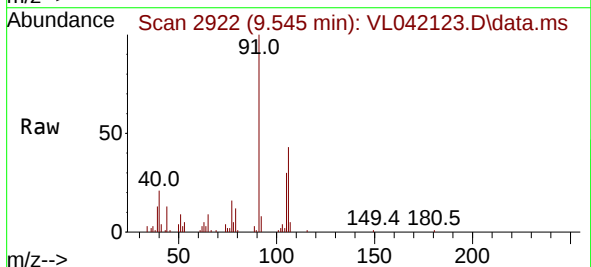
Instrument :
MSVOA_L
ClientSampleId :
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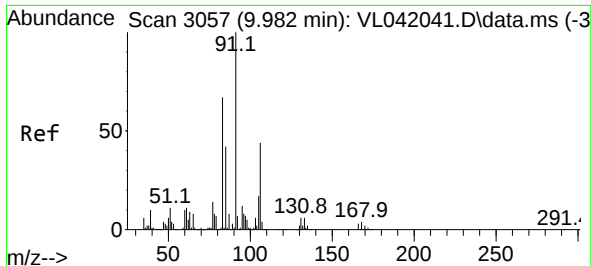
Tgt Ion: 91 Resp: 3070
Ion Ratio Lower Upper
91 100
106 28.5 24.2 36.2



#59
m/p-Xylene
Concen: 0.312 ppbv
RT: 9.545 min Scan# 2922
Delta R.T. -0.007 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 91 Resp: 15092
Ion Ratio Lower Upper
91 100
106 45.1 0.0 0.0#

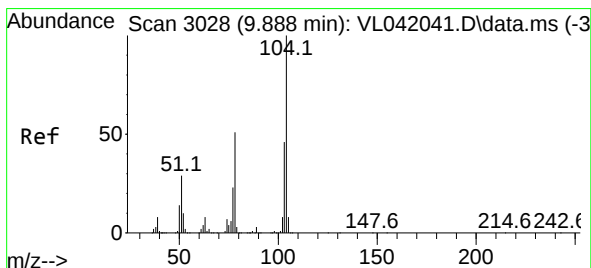
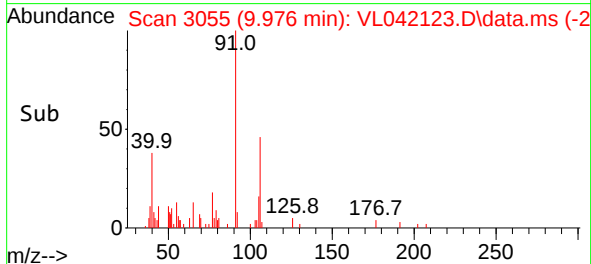
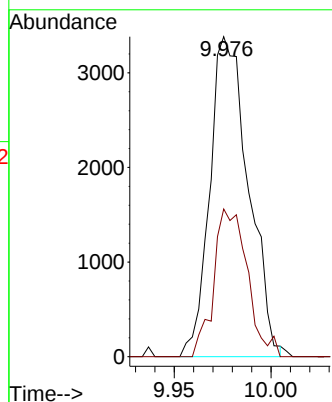
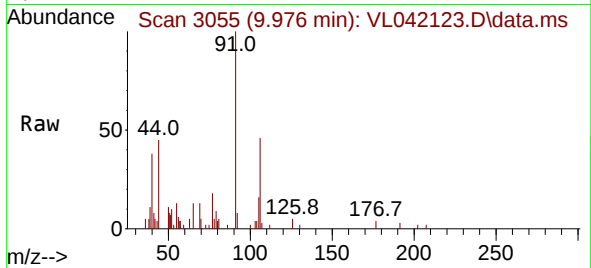




#60
o-Xylene
Concen: 0.097 ppbv
RT: 9.976 min Scan# 3055
Delta R.T. -0.007 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

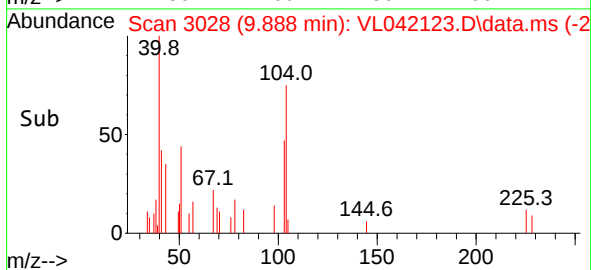
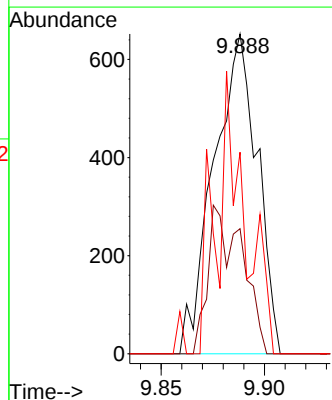
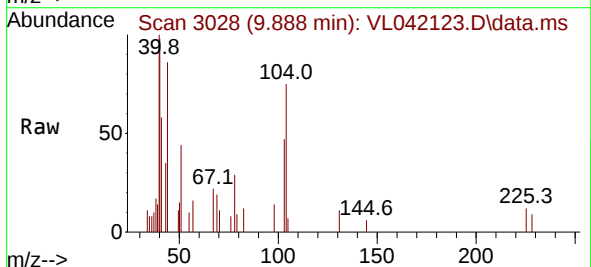
Instrument :
MSVOA_1
ClientSampleId :
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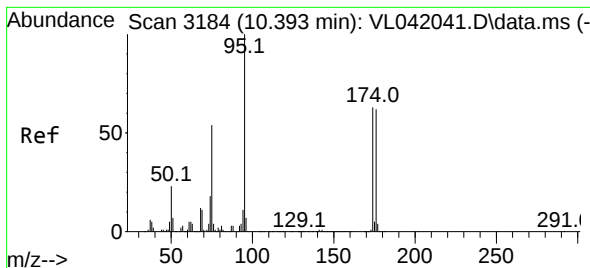
Tgt Ion: 91 Resp: 4696
Ion Ratio Lower Upper
91 100
106 40.0 22.3 66.8



#61
Styrene
Concen: 0.042 ppbv
RT: 9.888 min Scan# 3028
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 104 Resp: 953
Ion Ratio Lower Upper
104 100
78 36.5 41.0 61.4#
103 59.4 37.0 55.6#

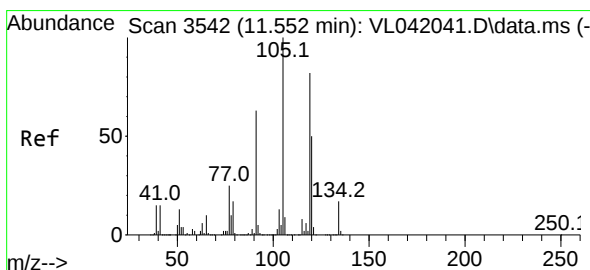
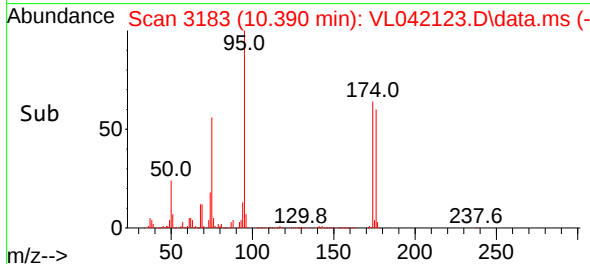
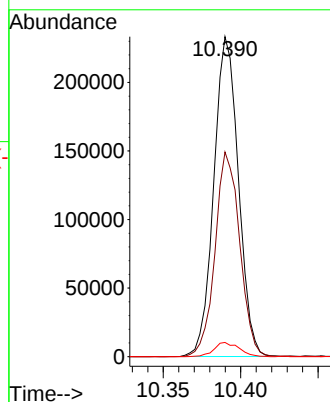
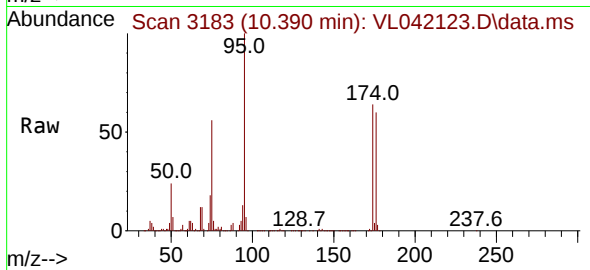




#68
1-Bromo-4-Fluorobenzene
Concen: 10.121 ppbv
RT: 10.390 min Scan# 3184
Delta R.T. -0.003 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Instrument :
MSVOA_L
ClientSampleId :
2

Tgt Ion: 95 Resp: 257155
Ion Ratio Lower Upper
95 100
174 64.4 51.8 77.6
175 4.6 3.9 5.9



#74
1,2,4-Trimethylbenzene
Concen: 0.056 ppbv
RT: 11.552 min Scan# 3542
Delta R.T. -0.000 min
Lab File: VL042123.D
Acq: 10 Mar 2025 14:06

Tgt Ion: 105 Resp: 3231
Ion Ratio Lower Upper
105 100
120 29.9 40.2 60.2#
91 21.8 51.4 77.2#
77 33.9 20.1 30.1#

