

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030525\
 Data File : VL042102.D
 Acq On : 05 Mar 2025 13:47
 Operator : SY/MD
 Sample : Q1483-05DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Quant Time: Mar 06 01:07:47 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	2.803	49	170562	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.984	114	392915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.907	117	334296	10.000	ppbv	0.00

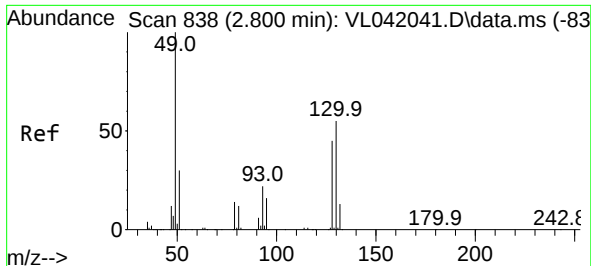
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.396	95	262749	10.216	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.200%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	1.450	85	684	0.039	ppbv	100
3) Chlorodifluoromethane	1.483	51	40148	1.620	ppbv	97
4) Chloromethane	1.538	50	621	0.095	ppbv #	45
9) Propene	1.489	41	4449	0.441	ppbv	84
11) Trichlorofluoromethane	1.890	101	1009	0.057	ppbv	90
13) Ethanol	1.440	45	219070	341.721	ppbv #	33
15) Acetone	1.848	43	60814	4.037	ppbv	97
16) 1,3-Butadiene	1.625	39	641	0.091	ppbv	86
19) Isopropyl Alcohol	1.440	45	219070	25.320	ppbv #	32
20) Methylene Chloride	2.075	84	1719	0.302	ppbv #	83
22) trans-1,2-Dichloroethene	2.356	96	1900	0.254	ppbv #	76
23) Vinyl Acetate	2.473	43	1294	0.122	ppbv #	35
24) 1,1-Dichloroethane	2.356	63	1373	0.099	ppbv #	1
25) Ethyl Acetate	2.845	43	10889	0.181	ppbv #	78
26) Hexane	2.848	57	14035	0.576	ppbv #	32
27) Carbon Disulfide	2.162	76	1064	0.064	ppbv #	1
29) Chloroform	2.868	83	10755	0.328	ppbv	92
31) cis-1,2-Dichloroethene	2.738	61	13882	0.602	ppbv	89
34) 2-Butanone	2.580	43	21497	0.702	ppbv	92
36) Benzene	3.683	78	2574	0.063	ppbv	98
38) Trichloroethene	4.580	130	489072	29.118	ppbv	95
39) 1,2-Dichloropropane	4.574	63	1233	0.079	ppbv #	1
51) 2-Hexanone	7.480	43	1323	0.049	ppbv #	28
52) Tetrachloroethene	8.305	164	8251469	585.993	ppbv	91
53) Toluene	6.972	91	4359	0.095	ppbv #	20
59) m/p-Xylene	9.555	91	3385	0.069	ppbv #	100
60) o-Xylene	9.985	91	3414	0.069	ppbv	67
71) 2-Chlorotoluene	11.008	91	4223	0.074	ppbv	69
72) 4-Ethyltoluene	11.141	105	1948	0.032	ppbv #	58
73) 1,3,5-Trimethylbenzene	11.228	105	2379	0.046	ppbv #	67

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

Instrument :
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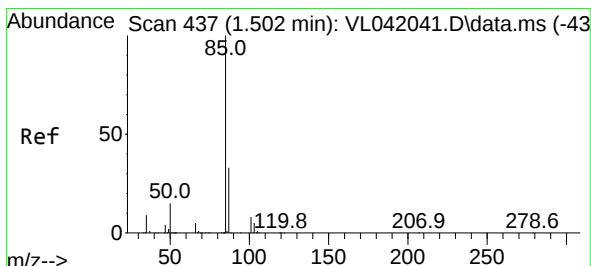
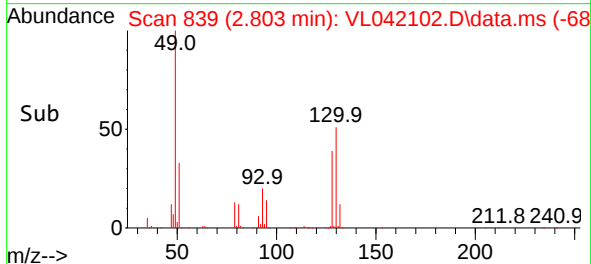
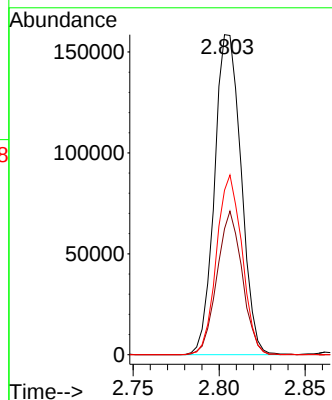
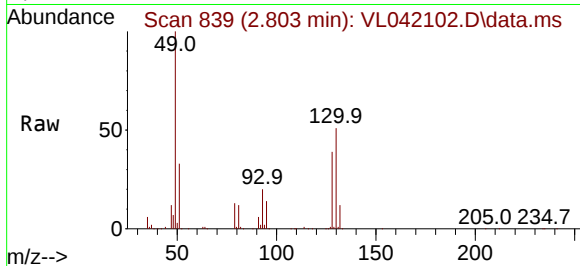
[illegible]



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.803 min Scan# 81
 Delta R.T. 0.003 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

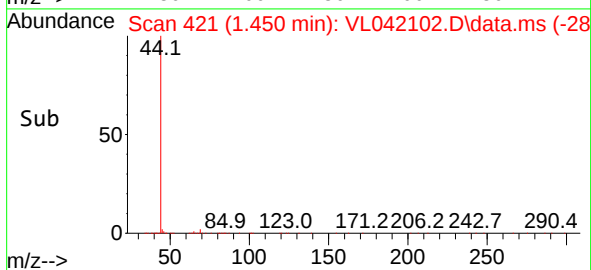
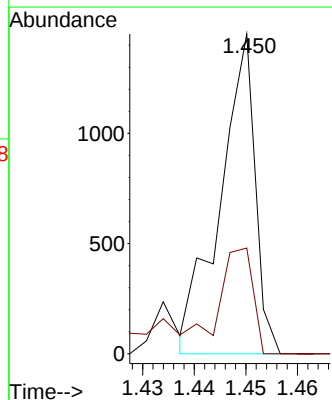
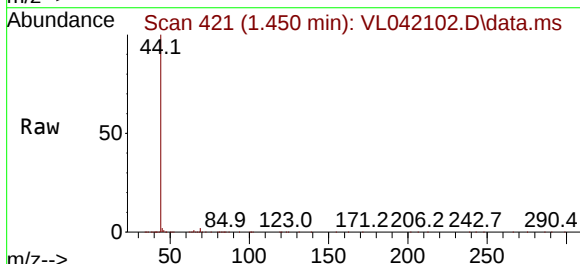
Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

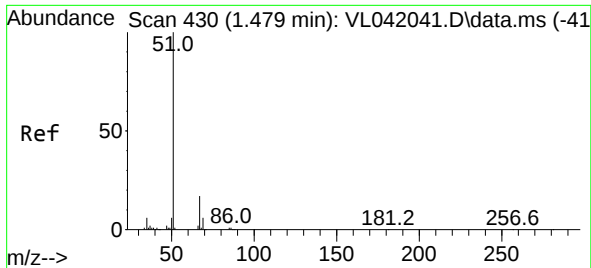
Tgt Ion: 49 Resp: 170562
 Ion Ratio Lower Upper
 49 100
 128 42.5 21.6 64.8
 130 53.8 27.8 83.4



#2
 Dichlorodifluoromethane
 Concen: 0.039 ppbv
 RT: 1.450 min Scan# 421
 Delta R.T. -0.052 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

Tgt Ion: 85 Resp: 684
 Ion Ratio Lower Upper
 85 100
 87 33.1 26.4 39.6





#3

Chlorodifluoromethane

Concen: 1.620 ppbv

RT: 1.483 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042102.D

Acq: 05 Mar 2025 13:47

Instrument :

MSVOA_L

ClientSampleId :

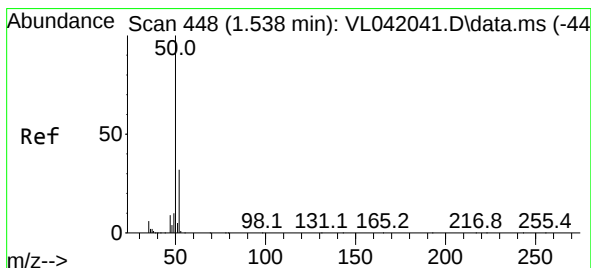
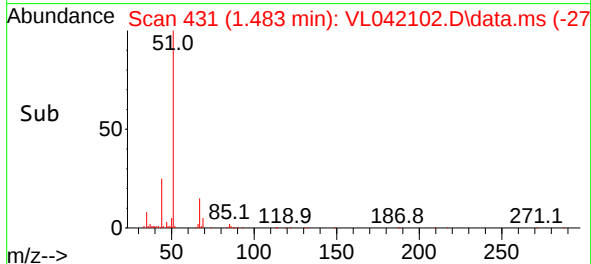
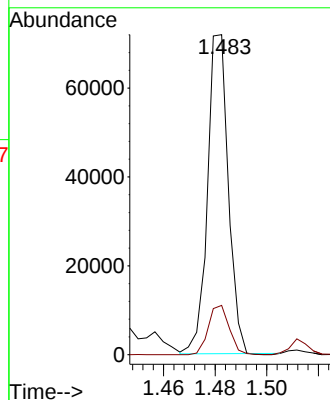
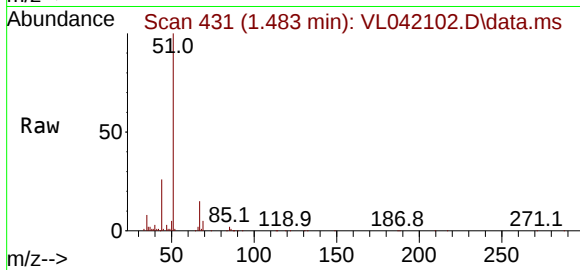
SV3

Tgt Ion: 51 Resp: 40148

Ion Ratio Lower Upper

51 100

67 15.9 13.7 20.5



#4

Chloromethane

Concen: 0.095 ppbv

RT: 1.538 min Scan# 448

Delta R.T. -0.000 min

Lab File: VL042102.D

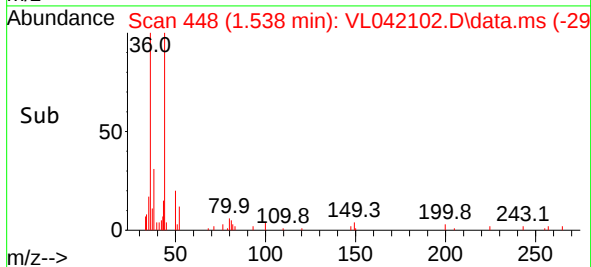
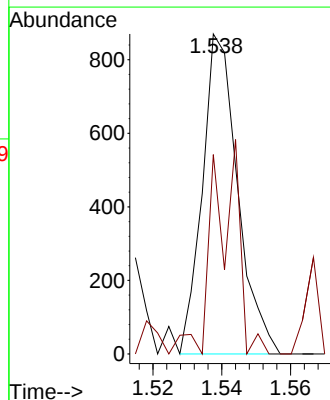
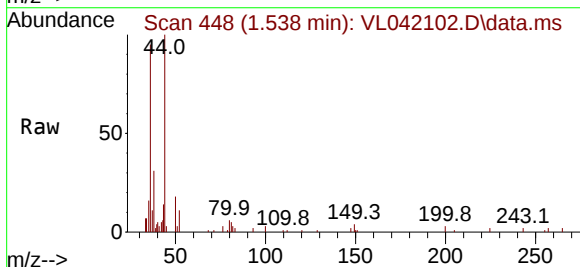
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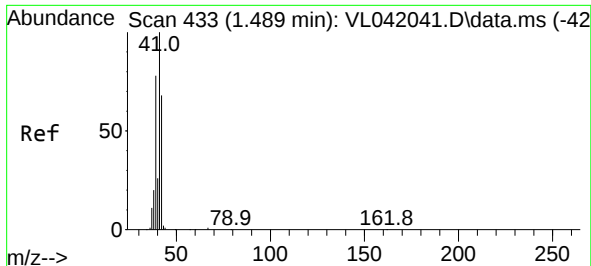
Tgt Ion: 50 Resp: 621

Ion Ratio Lower Upper

50 100

52 62.3 25.4 38.0#





#9

Propene

Concen: 0.441 ppbv

RT: 1.489 min Scan# 41

Delta R.T. -0.000 min

Lab File: VL042102.D

Acq: 05 Mar 2025 13:47

Instrument :

MSVOA_L

ClientSampleId :

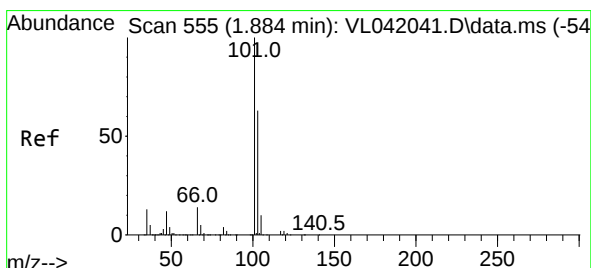
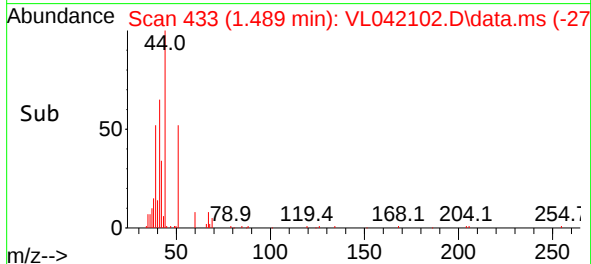
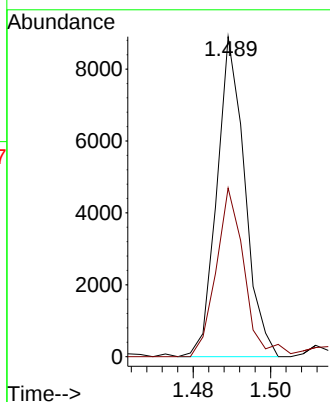
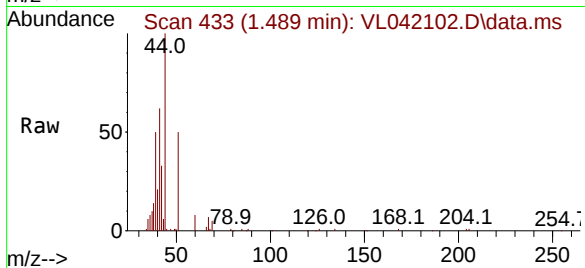
SV3

Tgt Ion: 41 Resp: 4449

Ion Ratio Lower Upper

41 100

42 56.2 55.8 83.6



#11

Trichlorofluoromethane

Concen: 0.057 ppbv

RT: 1.890 min Scan# 557

Delta R.T. 0.006 min

Lab File: VL042102.D

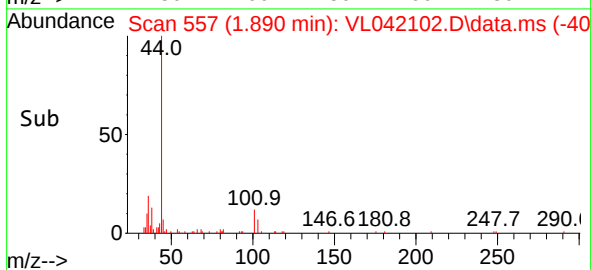
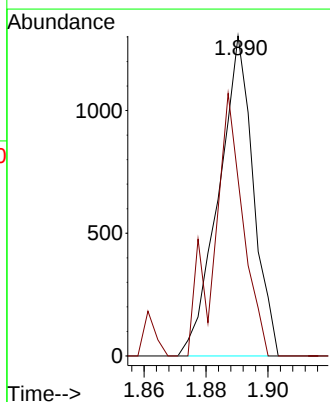
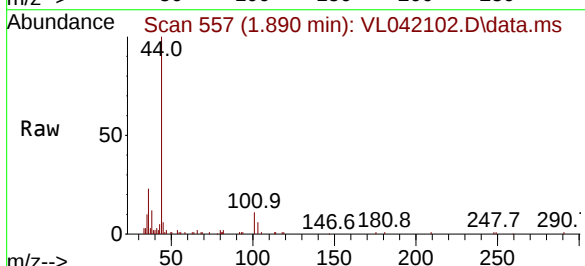
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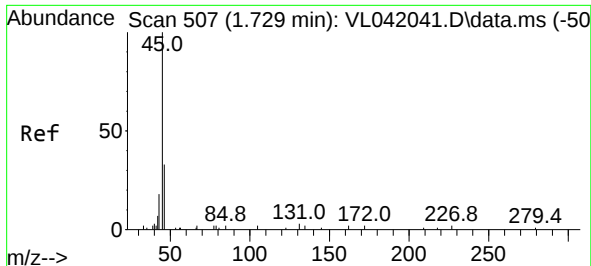
Tgt Ion:101 Resp: 1009

Ion Ratio Lower Upper

101 100

103 55.3 50.6 75.8

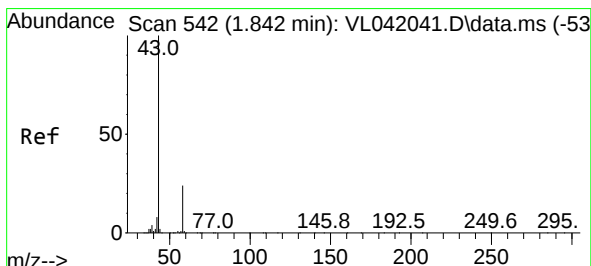
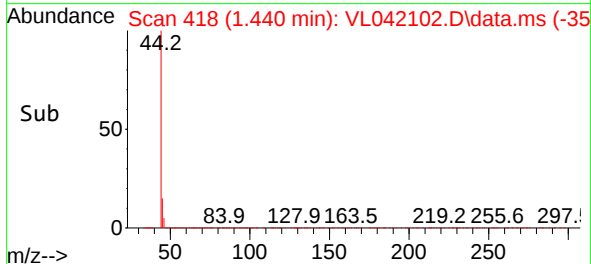
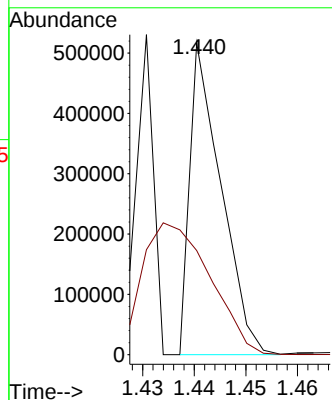
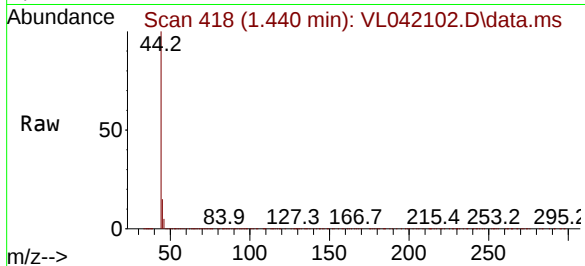




#13
Ethanol
Concen: 341.721 ppbv
RT: 1.440 min Scan# 418
Delta R.T. -0.288 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

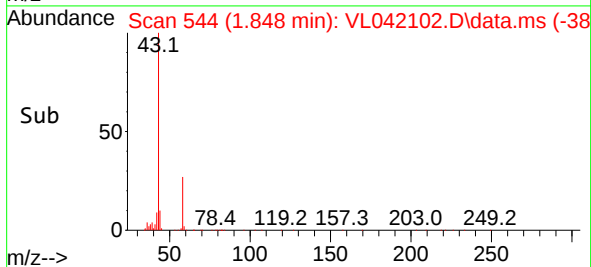
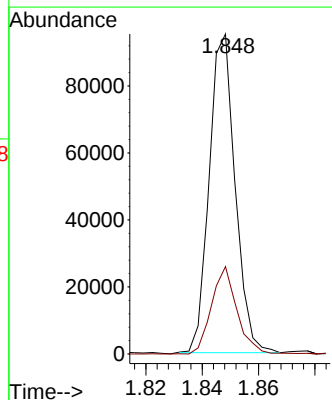
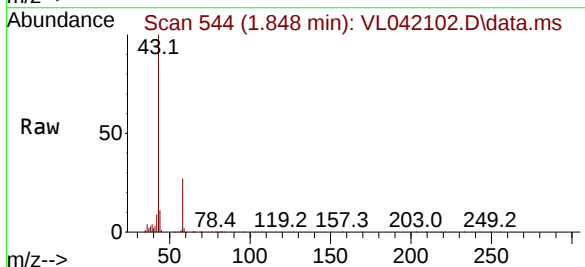
Instrument :
MSVOA_L
ClientSampleId :
SV3

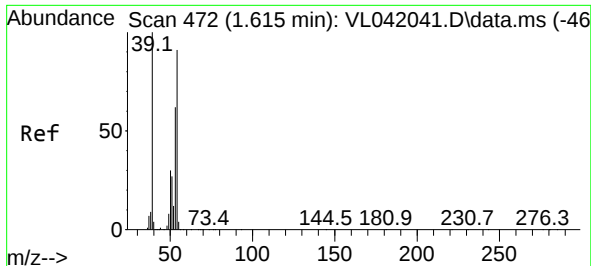
Tgt Ion: 45 Resp: 219070
Ion Ratio Lower Upper
45 100
46 0.0 17.1 68.3#



#15
Acetone
Concen: 4.037 ppbv
RT: 1.848 min Scan# 544
Delta R.T. 0.006 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 43 Resp: 60814
Ion Ratio Lower Upper
43 100
58 27.6 20.7 31.1

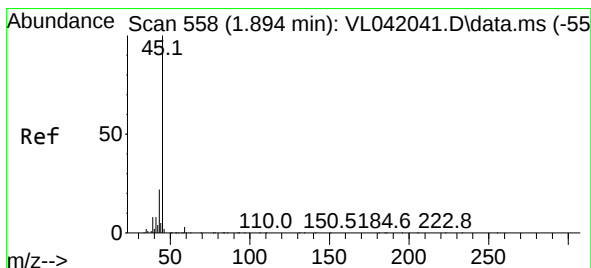
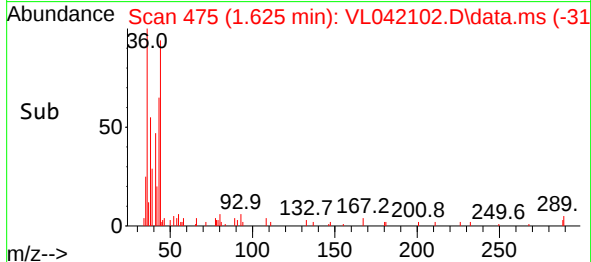
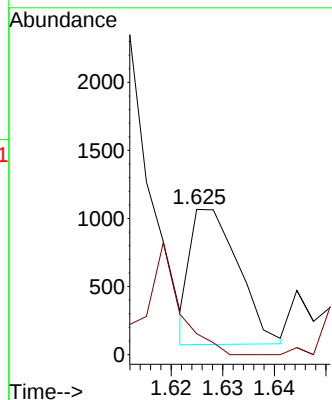
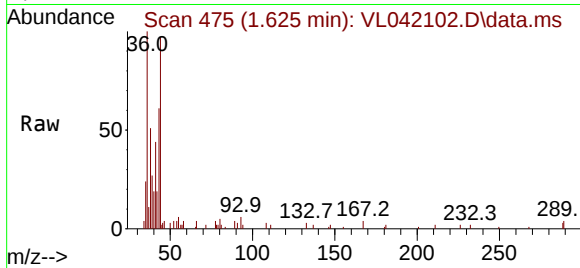




#16
1,3-Butadiene
Concen: 0.091 ppbv
RT: 1.625 min Scan# 41
Delta R.T. 0.010 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

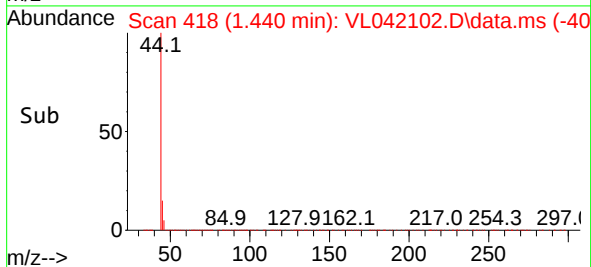
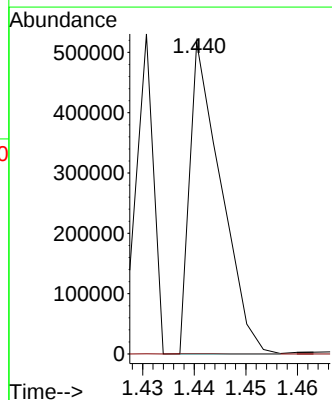
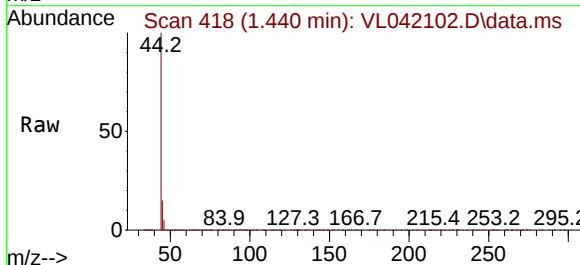
Instrument :
MSVOA_L
ClientSampleId :
SV3

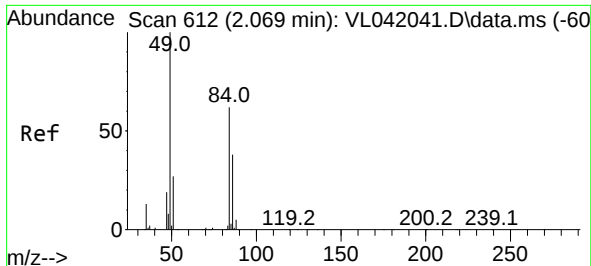
Tgt Ion: 39 Resp: 641
Ion Ratio Lower Upper
39 100
54 63.0 59.6 89.4



#19
Isopropyl Alcohol
Concen: 25.320 ppbv
RT: 1.440 min Scan# 418
Delta R.T. -0.453 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 45 Resp: 219070
Ion Ratio Lower Upper
45 100
58 0.0 35.3 52.9#

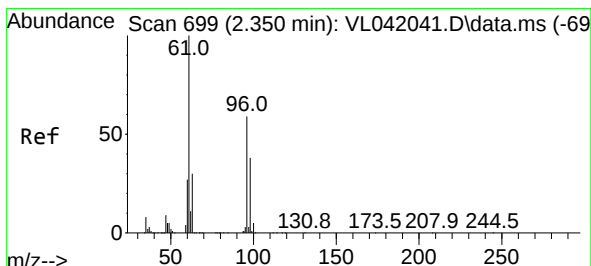
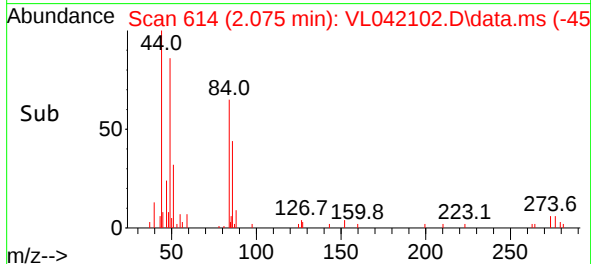
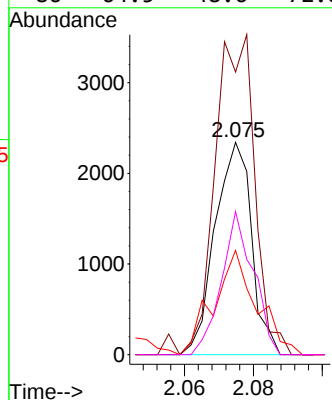
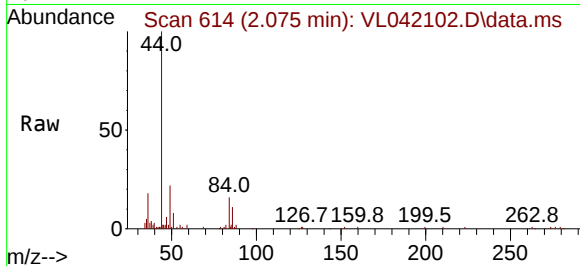




#20
Methylene Chloride
Concen: 0.302 ppbv
RT: 2.075 min Scan# 61
Delta R.T. 0.006 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

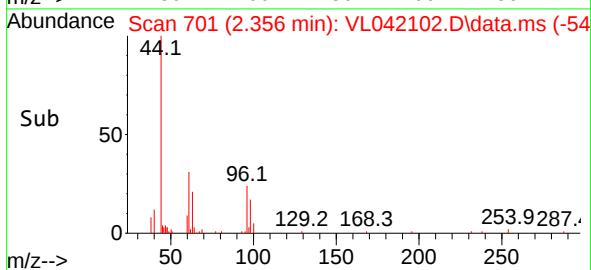
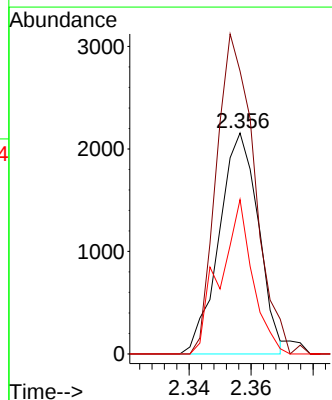
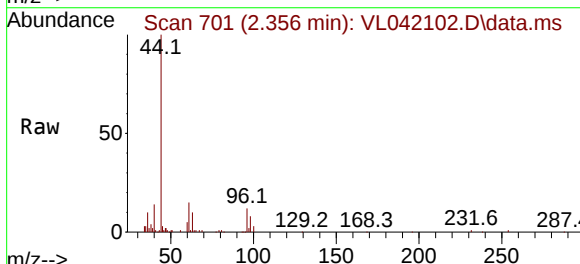
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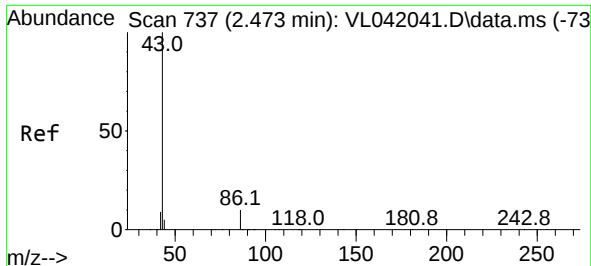
Tgt Ion: 84 Resp: 1719
Ion Ratio Lower Upper
84 100
49 127.3 130.0 195.0#
51 47.0 37.4 56.0
86 64.5 48.6 72.8



#22
trans-1,2-Dichloroethene
Concen: 0.254 ppbv
RT: 2.356 min Scan# 701
Delta R.T. 0.006 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 96 Resp: 1900
Ion Ratio Lower Upper
96 100
61 128.0 136.6 205.0#
98 69.9 51.8 77.6

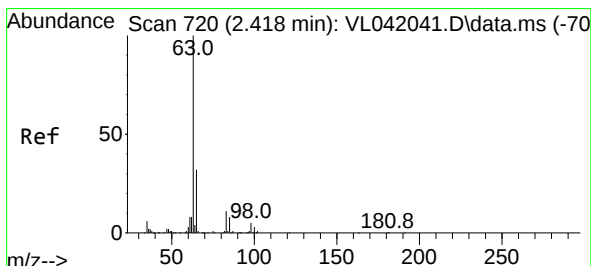
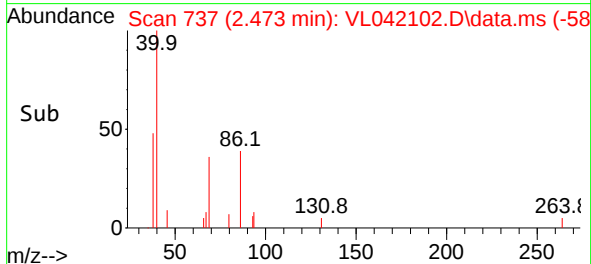
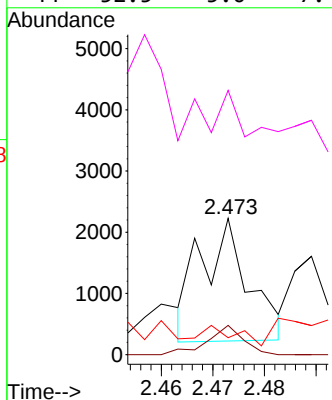
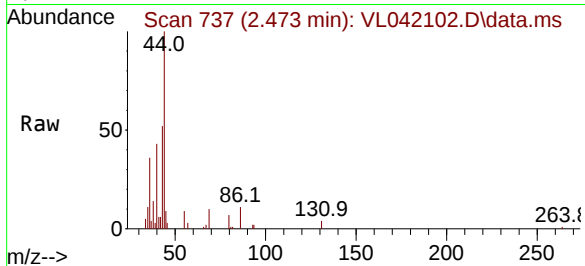




#23
 Vinyl Acetate
 Concen: 0.122 ppbv
 RT: 2.473 min Scan# 701
 Delta R.T. -0.000 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

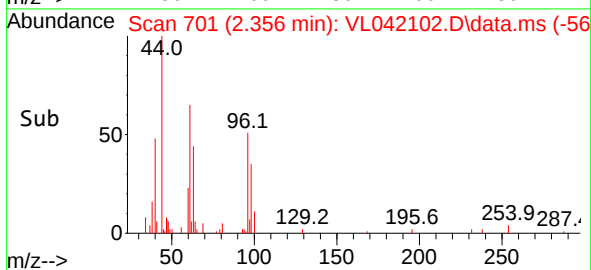
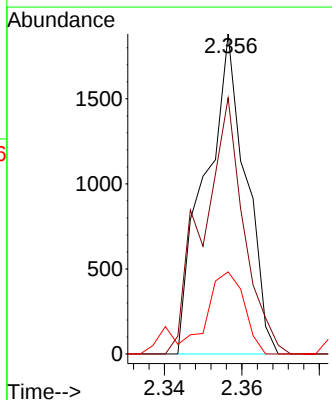
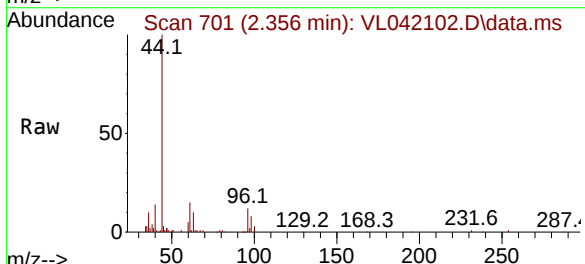
Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

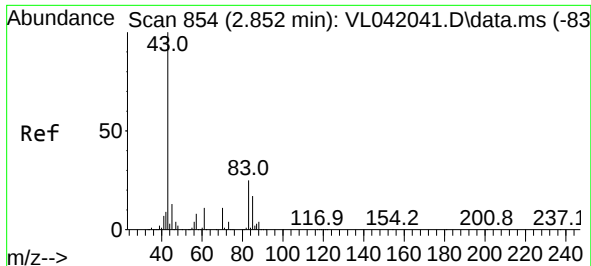
Tgt Ion:	43	Resp:	1294
Ion	Ratio	Lower	Upper
43	100		
86	30.5	7.0	10.4#
42	1.1	7.6	11.4#
44	52.5	5.0	7.4#



#24
 1,1-Dichloroethane
 Concen: 0.099 ppbv
 RT: 2.356 min Scan# 701
 Delta R.T. -0.062 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

Tgt Ion:	63	Resp:	1373
Ion	Ratio	Lower	Upper
63	100		
98	77.3	2.4	7.2#
100	25.7	1.7	5.0#

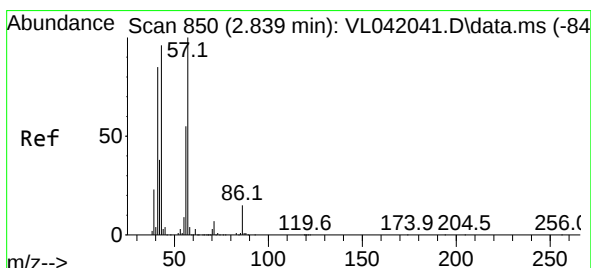
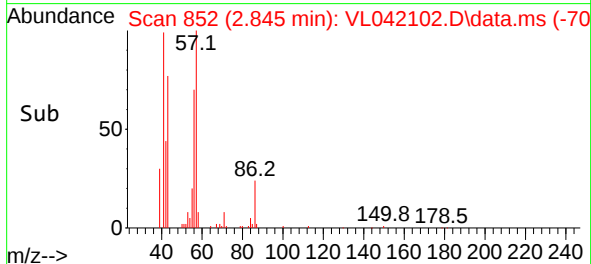
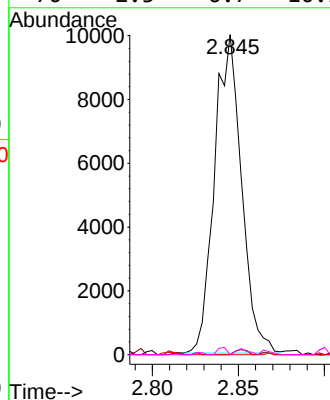
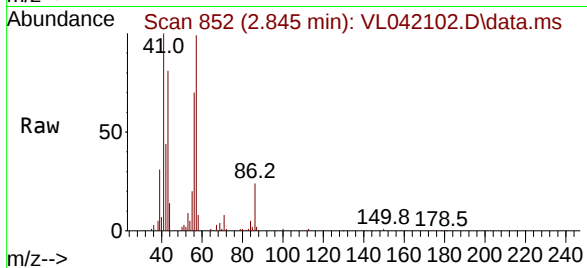




#25
Ethyl Acetate
Concen: 0.181 ppbv
RT: 2.845 min Scan# 81
Delta R.T. -0.007 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

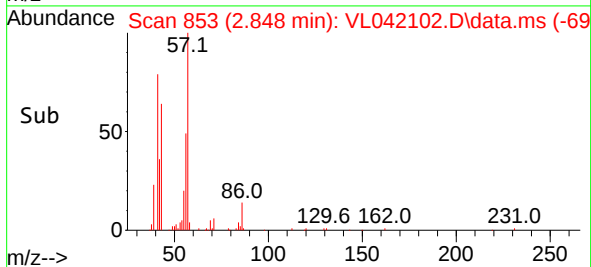
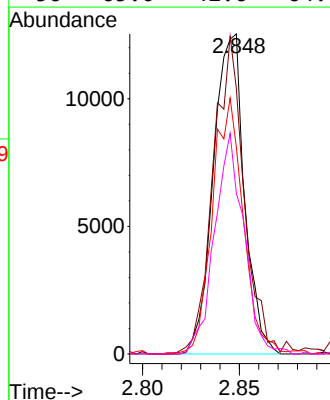
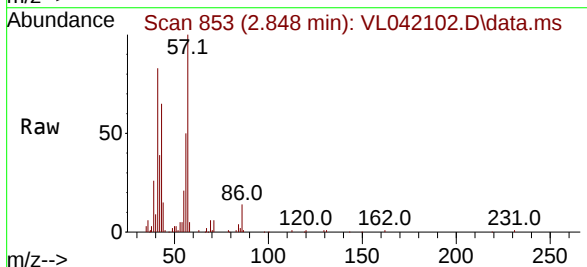
Instrument :
MSVOA_L
ClientSampleId :
SV3

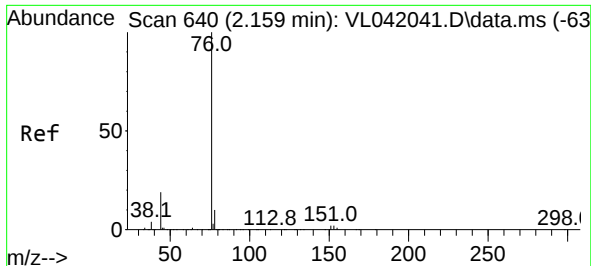
Tgt Ion: 43	Resp: 10889
Ion Ratio	Lower Upper
43 100	
45 0.9	8.1 12.1#
61 0.0	7.2 10.8#
70 2.3	6.7 10.1#



#26
Hexane
Concen: 0.576 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.010 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 57	Resp: 14035
Ion Ratio	Lower Upper
57 100	
41 101.8	70.6 106.0
43 79.6	199.4 299.0#
56 65.0	42.6 64.0#





#27

Carbon Disulfide

Concen: 0.064 ppbv

RT: 2.162 min Scan# 641

Delta R.T. 0.003 min

Lab File: VL042102.D

Acq: 05 Mar 2025 13:47

Instrument :

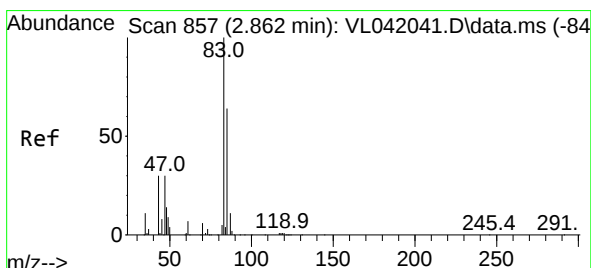
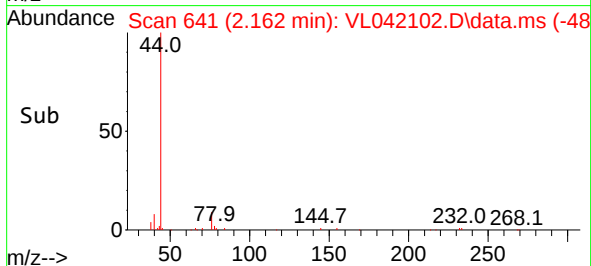
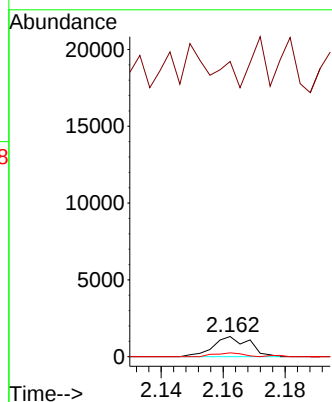
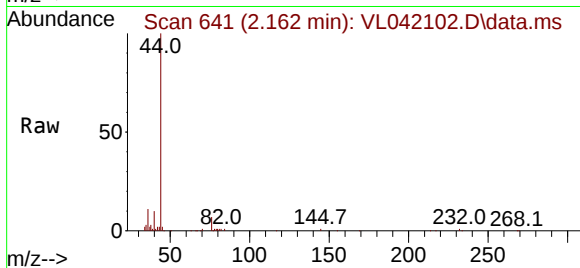
MSVOA_L

ClientSampleId :

SV3

Tgt Ion: 76 Resp: 1064

Ion	Ratio	Lower	Upper
76	100		
44	1821.6	16.2	24.2#
78	17.7	9.4	14.0#



#29

Chloroform

Concen: 0.328 ppbv

RT: 2.868 min Scan# 859

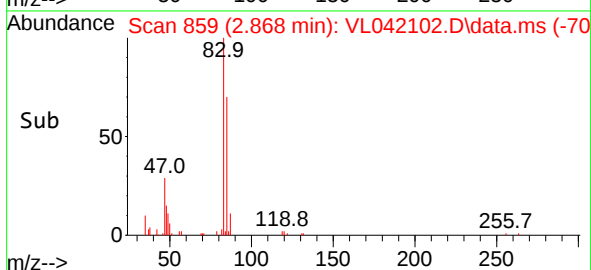
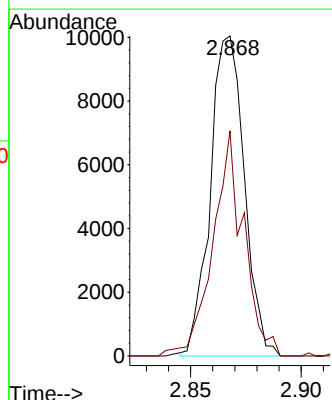
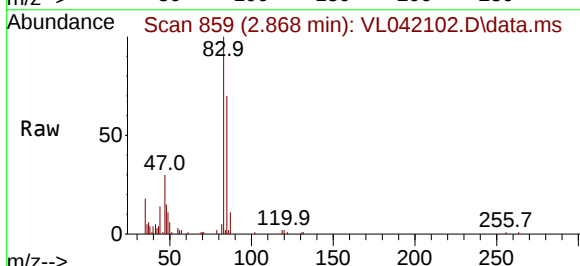
Delta R.T. 0.006 min

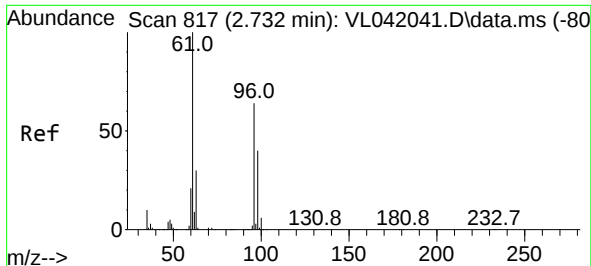
Lab File: VL042102.D

Acq: 05 Mar 2025 13:47

Tgt Ion: 83 Resp: 10755

Ion	Ratio	Lower	Upper
83	100		
85	70.4	51.2	76.8

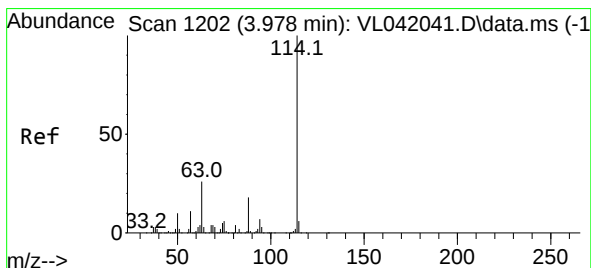
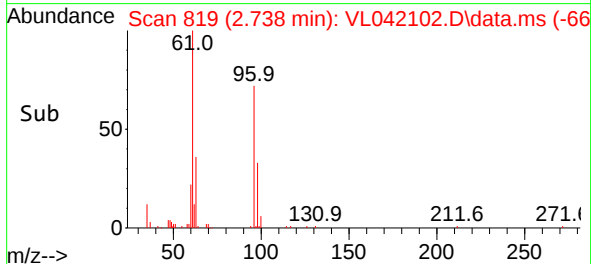
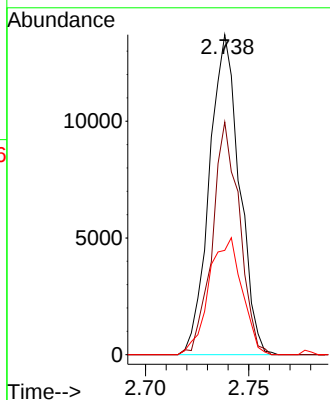
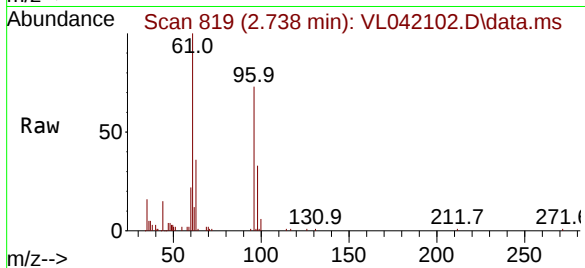




#31
 cis-1,2-Dichloroethene
 Concen: 0.602 ppbv
 RT: 2.738 min Scan# 817
 Delta R.T. 0.006 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

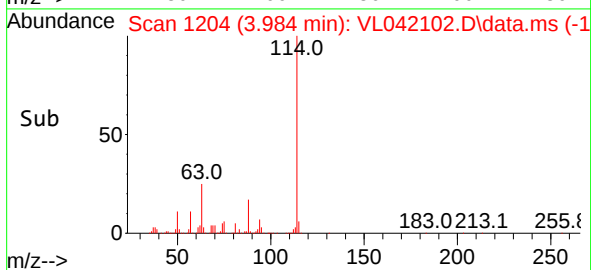
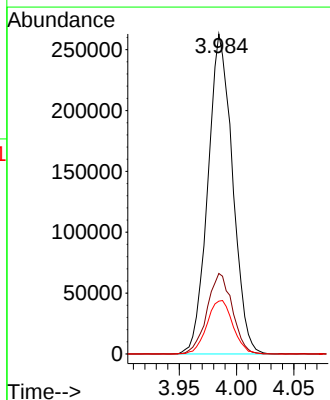
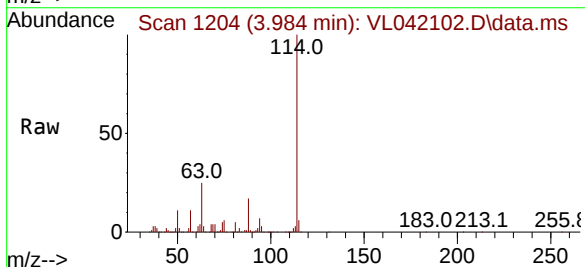
Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

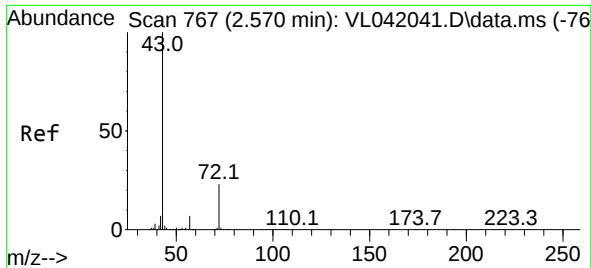
Tgt Ion:	61	Resp:	13882
Ion Ratio	Lower	Upper	
61	100		
96	72.7	51.5	77.3
98	32.6	32.0	48.0



#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 3.984 min Scan# 1204
 Delta R.T. 0.006 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

Tgt Ion:	114	Resp:	392915
Ion Ratio	Lower	Upper	
114	100		
63	25.8	20.1	30.1
88	17.6	14.3	21.5

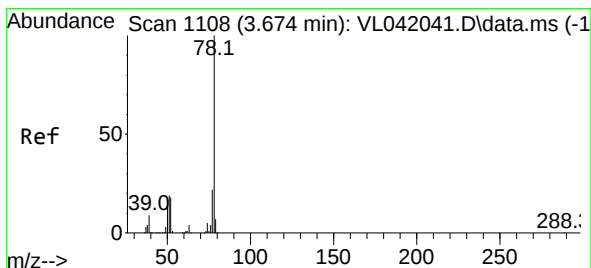
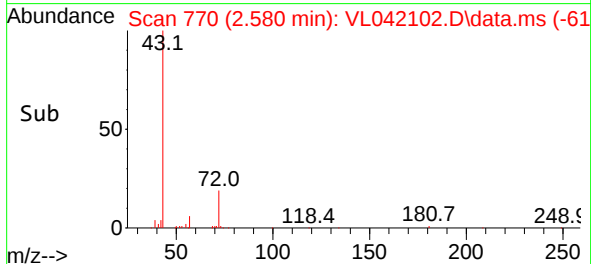
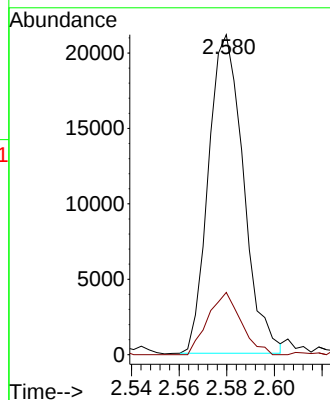
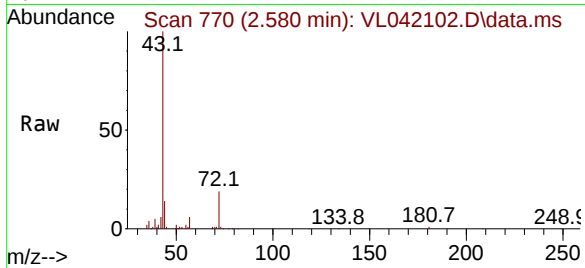




#34
2-Butanone
Concen: 0.702 ppbv
RT: 2.580 min Scan# 71
Delta R.T. 0.010 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

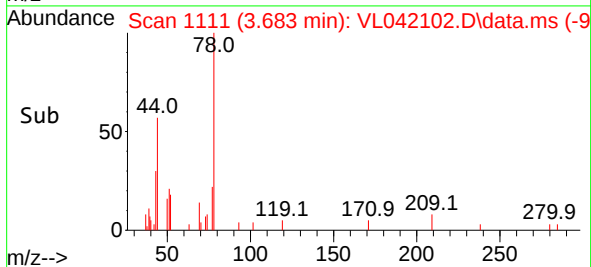
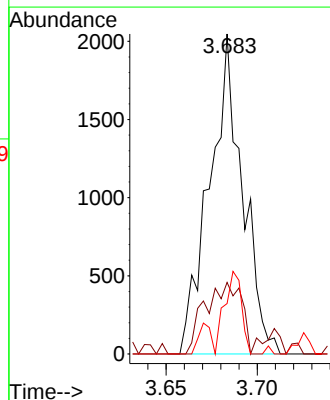
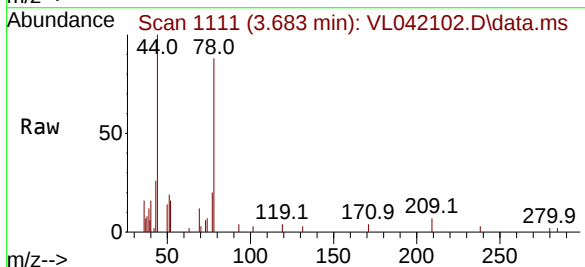
Instrument :
MSVOA_L
ClientSampleId :
SV3

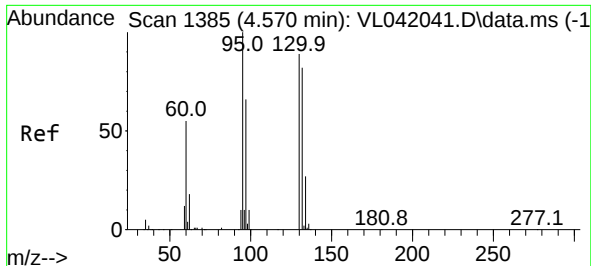
Tgt Ion: 43 Resp: 21497
Ion Ratio Lower Upper
43 100
72 19.3 18.5 27.7



#36
Benzene
Concen: 0.063 ppbv
RT: 3.683 min Scan# 1111
Delta R.T. 0.010 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 78 Resp: 2574
Ion Ratio Lower Upper
78 100
77 22.4 17.7 26.5
50 15.8 13.9 20.9



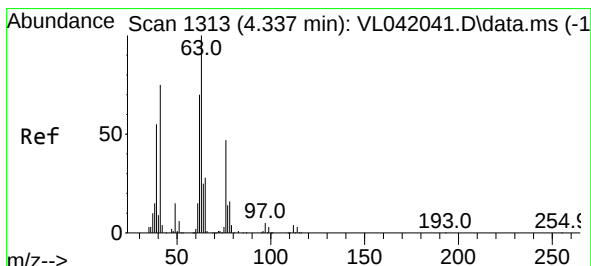
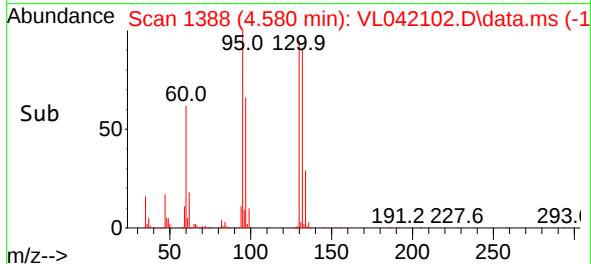
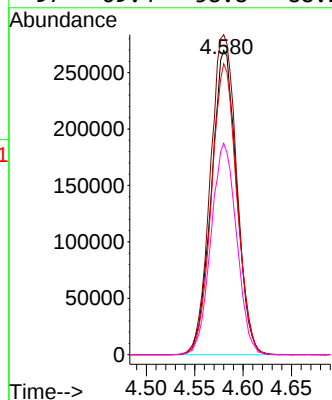
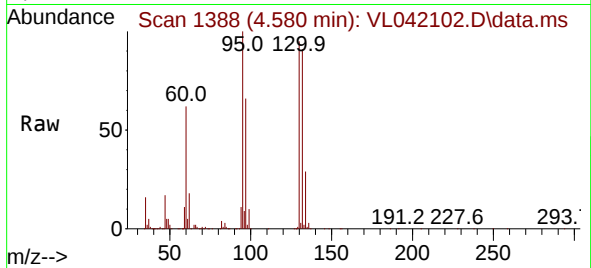


#38
 Trichloroethene
 Concen: 29.118 ppbv
 RT: 4.580 min Scan# 1385
 Delta R.T. 0.010 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

Instrument :
 MSVOA_L
 ClientSampleId :
 SV3

Tgt Ion:130 Resp: 489072

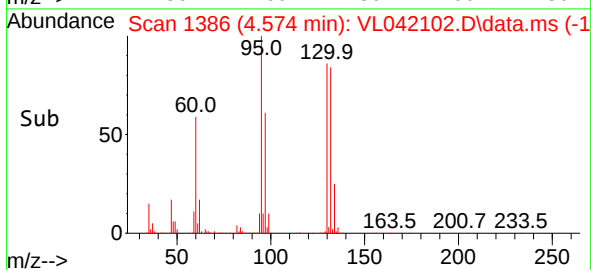
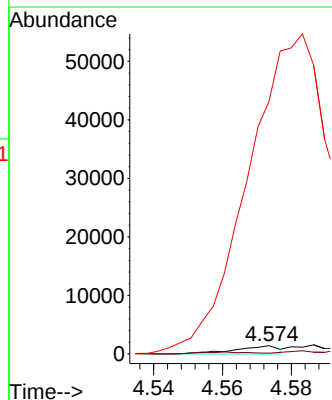
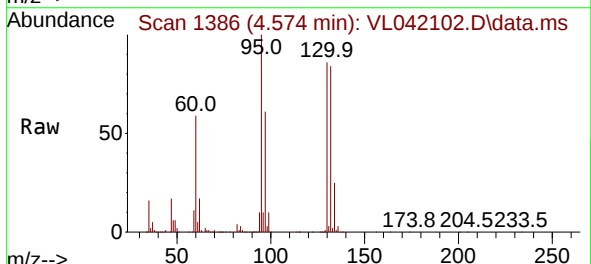
Ion	Ratio	Lower	Upper
130	100		
95	105.0	89.5	134.3
132	95.5	73.8	110.6
97	69.4	58.8	88.2

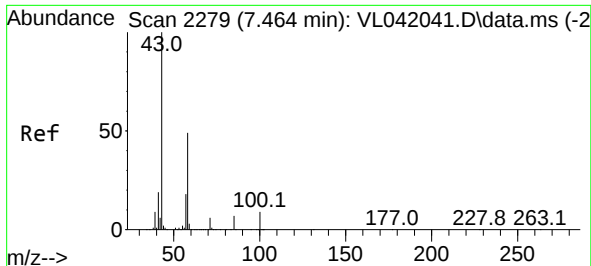


#39
 1,2-Dichloropropane
 Concen: 0.079 ppbv
 RT: 4.574 min Scan# 1386
 Delta R.T. 0.236 min
 Lab File: VL042102.D
 Acq: 05 Mar 2025 13:47

Tgt Ion: 63 Resp: 1233

Ion	Ratio	Lower	Upper
63	100		
41	5.3	60.1	90.1#
62	2911.5	55.8	83.8#

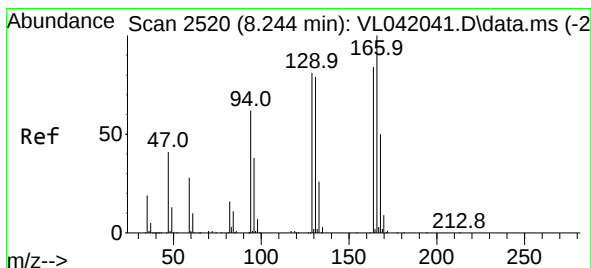
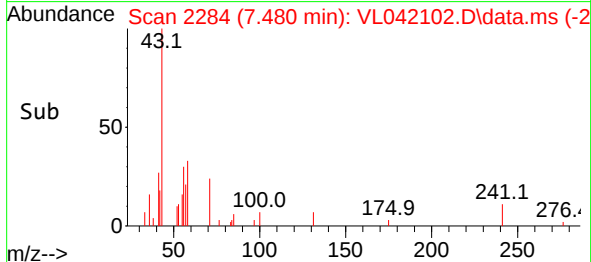
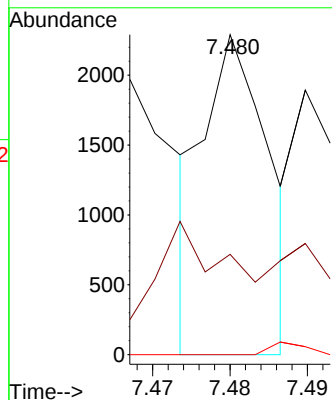
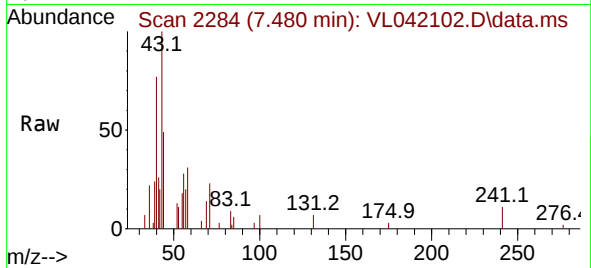




#51
2-Hexanone
Concen: 0.049 ppbv
RT: 7.480 min Scan# 21
Delta R.T. 0.016 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

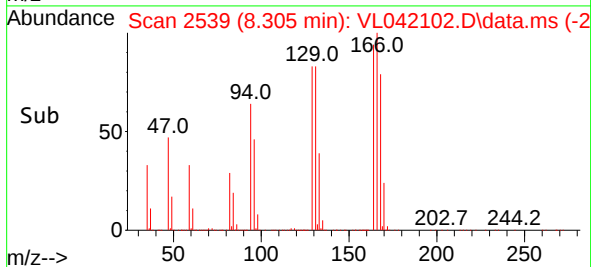
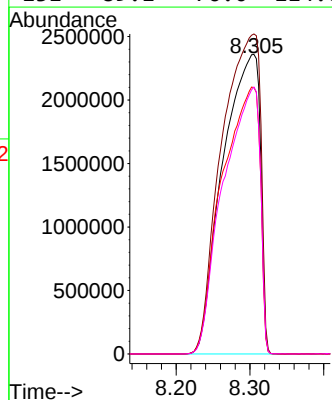
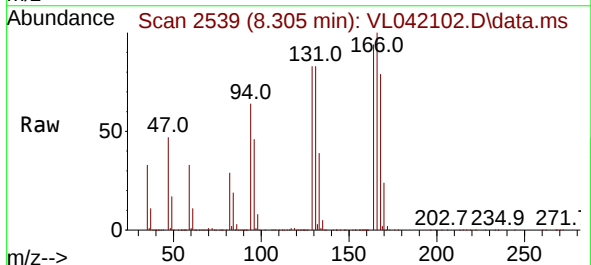
Instrument :
MSVOA_L
ClientSampleId :
SV3

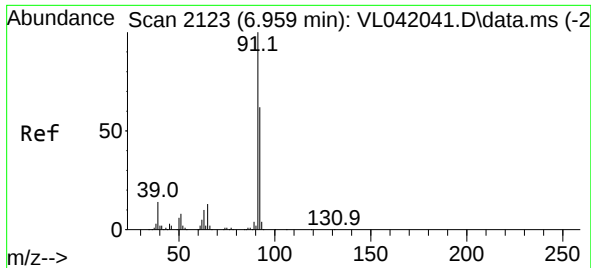
Tgt Ion: 43 Resp: 1323
Ion Ratio Lower Upper
43 100
58 0.0 39.0 58.6#
98 0.0 0.1 0.1#



#52
Tetrachloroethene
Concen: 585.993 ppbv
RT: 8.305 min Scan# 2539
Delta R.T. 0.061 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion:164 Resp: 8251469
Ion Ratio Lower Upper
164 100
166 106.8 95.7 143.5
129 88.9 77.1 115.7
131 89.1 76.0 114.0

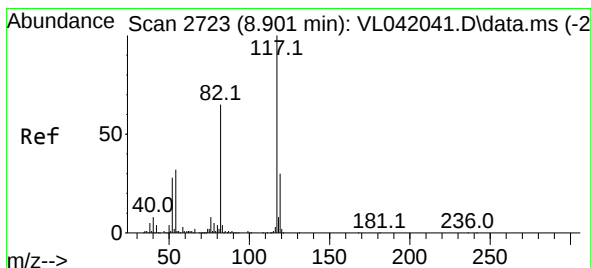
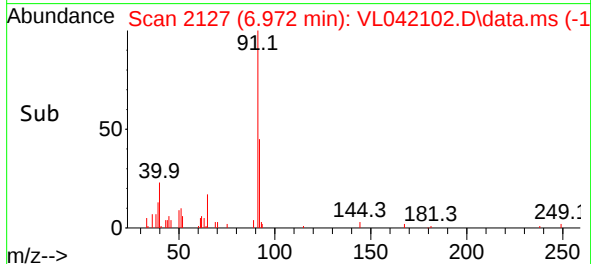
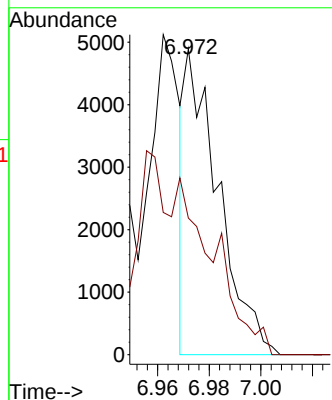
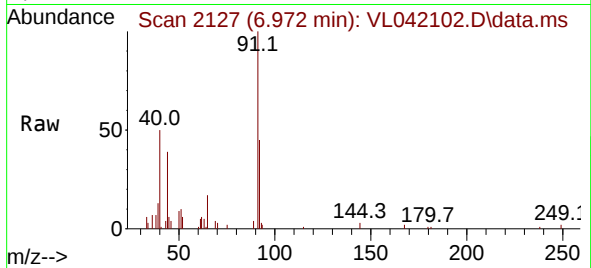




#53
Toluene
Concen: 0.095 ppbv
RT: 6.972 min Scan# 2127
Delta R.T. 0.013 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

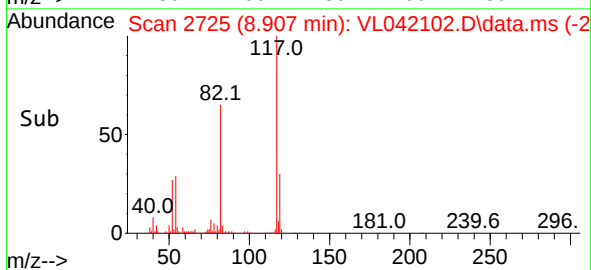
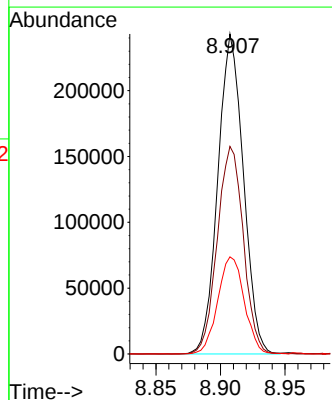
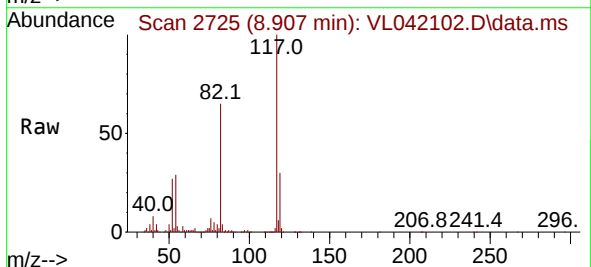
Instrument :
MSVOA_L
ClientSampleId :
SV3

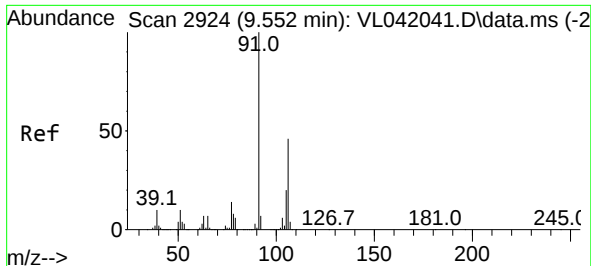
Tgt Ion: 91 Resp: 4359
Ion Ratio Lower Upper
91 100
92 0.0 49.0 73.6#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.907 min Scan# 2725
Delta R.T. 0.006 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 117 Resp: 334296
Ion Ratio Lower Upper
117 100
82 66.2 55.0 82.6
119 31.7 25.9 38.9





#59

m/p-Xylene

Concen: 0.069 ppbv

RT: 9.555 min Scan# 2924

Delta R.T. 0.003 min

Lab File: VL042102.D

Acq: 05 Mar 2025 13:47

Instrument :

MSVOA_L

ClientSampleId :

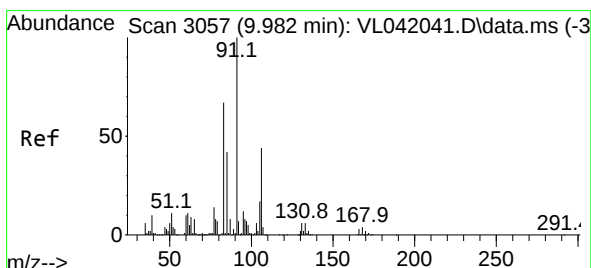
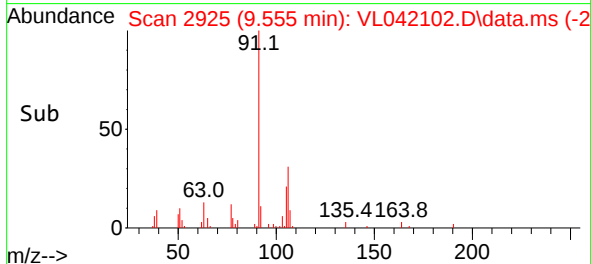
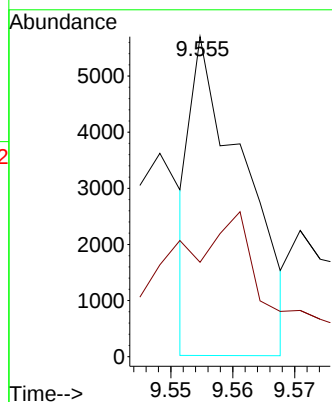
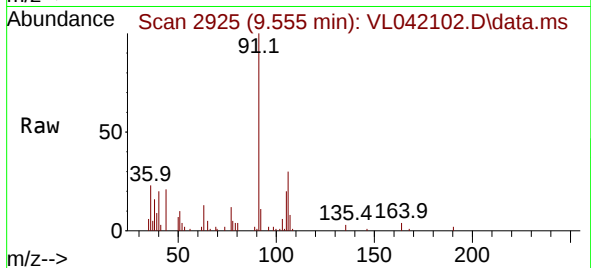
SV3

Tgt Ion: 91 Resp: 3385

Ion Ratio Lower Upper

91 100

106 110.6 0.0 0.0#



#60

o-Xylene

Concen: 0.069 ppbv

RT: 9.985 min Scan# 3058

Delta R.T. 0.003 min

Lab File: VL042102.D

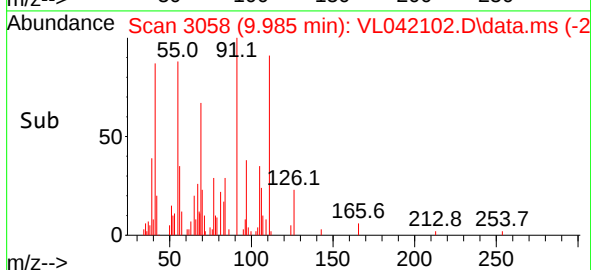
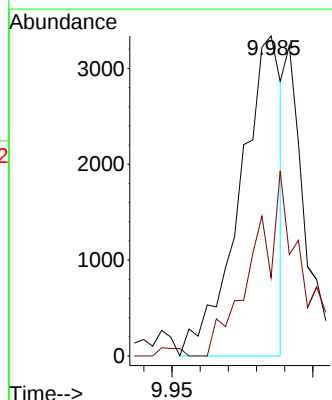
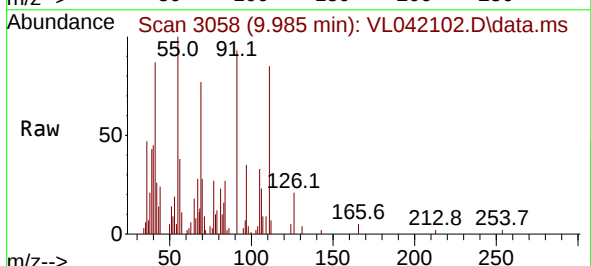
Acq: 05 Mar 2025 13:47

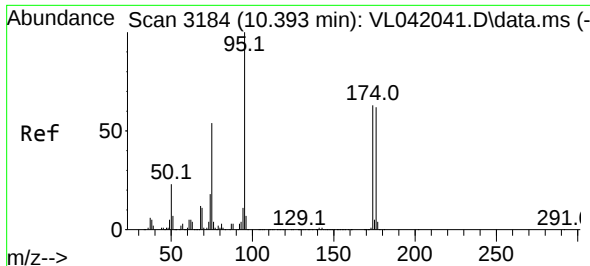
Tgt Ion: 91 Resp: 3414

Ion Ratio Lower Upper

91 100

106 65.8 22.3 66.8

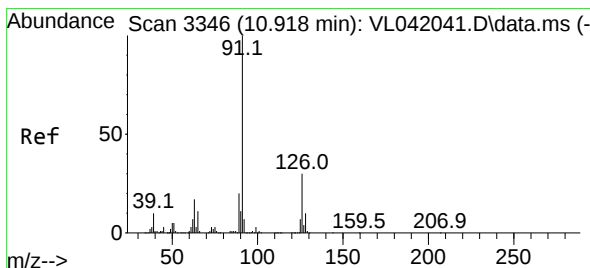
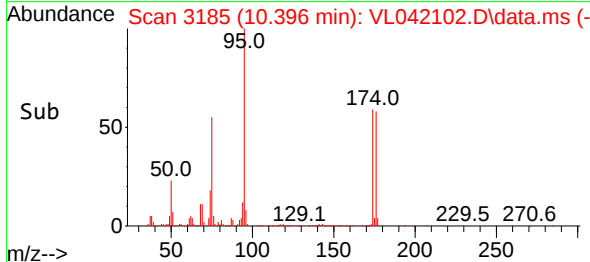
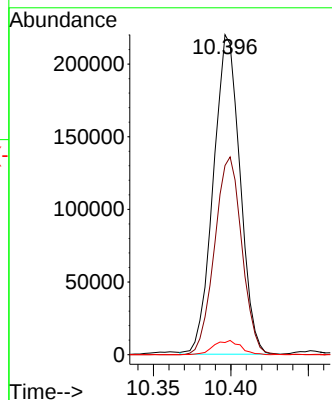
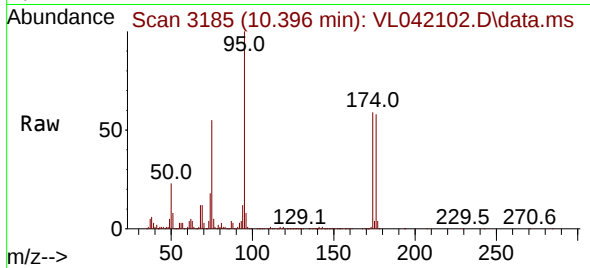




#68
1-Bromo-4-Fluorobenzene
Concen: 10.216 ppbv
RT: 10.396 min Scan# 3184
Delta R.T. 0.003 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

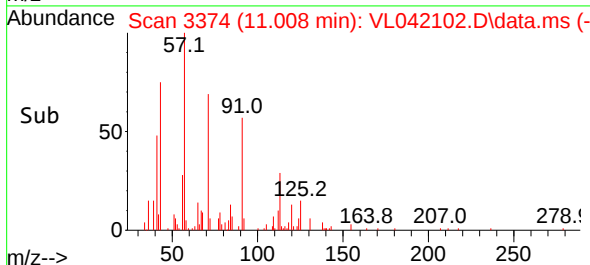
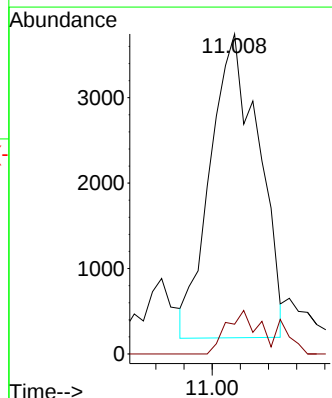
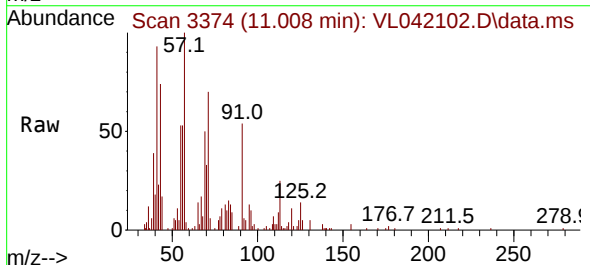
Instrument :
MSVOA_L
ClientSampleId :
SV3

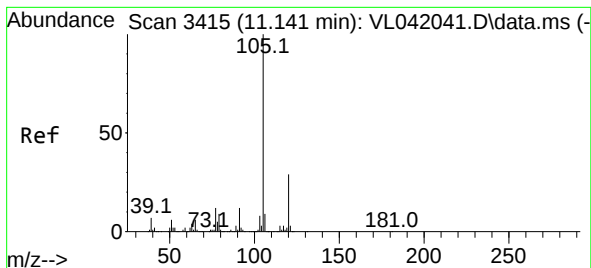
Tgt Ion: 95 Resp: 262749
Ion Ratio Lower Upper
95 100
174 63.6 51.8 77.6
175 4.6 3.9 5.9



#71
2-Chlorotoluene
Concen: 0.074 ppbv
RT: 11.008 min Scan# 3374
Delta R.T. 0.090 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion: 91 Resp: 4223
Ion Ratio Lower Upper
91 100
126 12.8 11.9 47.5

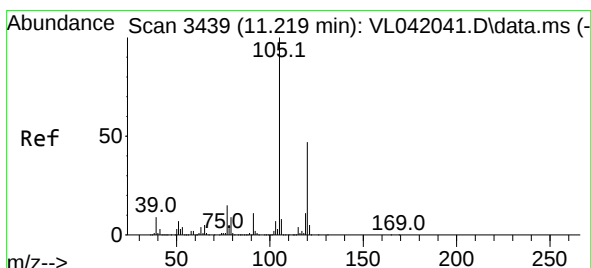
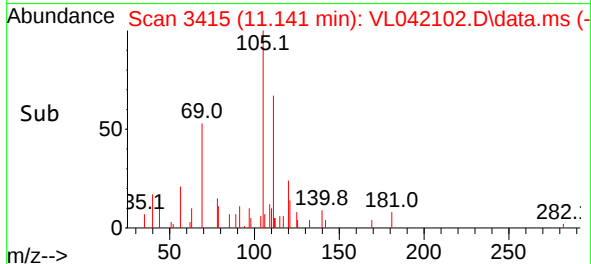
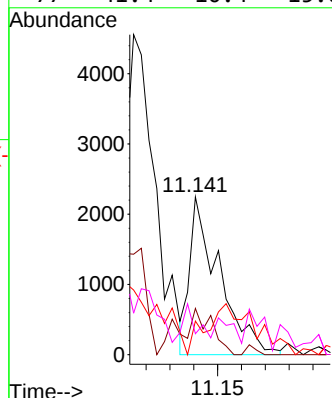
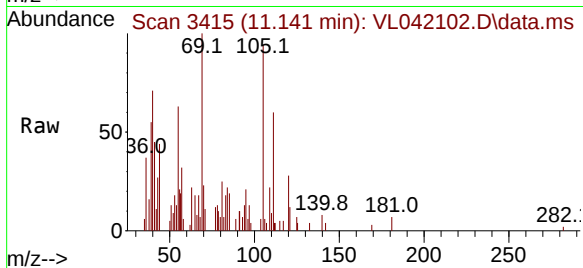




#72
4-Ethyltoluene
Concen: 0.032 ppbv
RT: 11.141 min Scan# 3415
Delta R.T. -0.000 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Instrument :
MSVOA_L
ClientSampleId :
SV3

Tgt Ion:	105	Resp:	1948
Ion	Ratio	Lower	Upper
105	100		
120	23.5	24.1	36.1#
91	44.8	10.2	15.4#
77	41.4	10.4	15.6#



#73
1,3,5-Trimethylbenzene
Concen: 0.046 ppbv
RT: 11.228 min Scan# 3442
Delta R.T. 0.010 min
Lab File: VL042102.D
Acq: 05 Mar 2025 13:47

Tgt Ion:	105	Resp:	2379
Ion	Ratio	Lower	Upper
105	100		
120	24.5	37.4	56.0#

