

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042125\
 Data File : VL042408.D
 Acq On : 21 Apr 2025 16:51
 Operator : SY/MD
 Sample : Q1844-01DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Apr 22 02:56:26 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 18 02:14:00 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	122330	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	334452	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	282542	10.000	ppbv	0.00

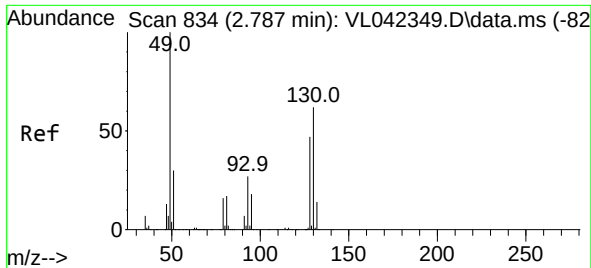
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	247631	10.666	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.700%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	1662	0.077	ppbv	97
3) Chlorodifluoromethane	1.476	51	5063	0.246	ppbv #	87
4) Chloromethane	1.557	50	507	0.059	ppbv #	87
9) Propene	1.560	41	14194	1.514	ppbv	91
13) Ethanol	1.722	45	4803	3.224	ppbv #	24
15) Acetone	1.839	43	13871	0.693	ppbv #	47
16) 1,3-Butadiene	1.622	39	139172	14.530	ppbv #	11
19) Isopropyl Alcohol	1.722	45	4803	0.432	ppbv #	1
20) Methylene Chloride	2.062	84	1332	0.170	ppbv	83
21) Allyl Chloride	1.622	41	285009	20.613	ppbv #	59
22) trans-1,2-Dichloroethene	2.726	96	794	0.089	ppbv	90
23) Vinyl Acetate	2.454	43	470	0.058	ppbv #	1
25) Ethyl Acetate	2.829	43	1713	0.035	ppbv #	79
26) Hexane	2.832	57	2836	0.142	ppbv #	29
27) Carbon Disulfide	2.153	76	3857	0.180	ppbv #	1
29) Chloroform	2.852	83	5357	0.190	ppbv	100
31) cis-1,2-Dichloroethene	2.726	61	2516	0.132	ppbv	97
34) 2-Butanone	2.564	43	1470	0.056	ppbv	100
36) Benzene	3.664	78	1484	0.041	ppbv #	89
38) Trichloroethene	4.551	130	23894	1.515	ppbv	87
39) 1,2-Dichloropropane	3.959	63	90379	6.723	ppbv #	23
52) Tetrachloroethene	8.234	164	1127974	80.897	ppbv	96
60) o-Xylene	9.536	91	2076	0.046	ppbv	91
74) 1,2,4-Trimethylbenzene	11.539	105	2797	0.049	ppbv #	63

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

Quant Time: Apr 22 02:56:26 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

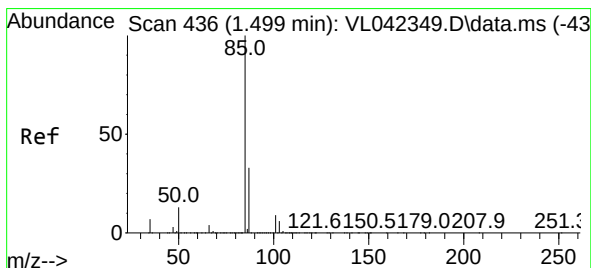
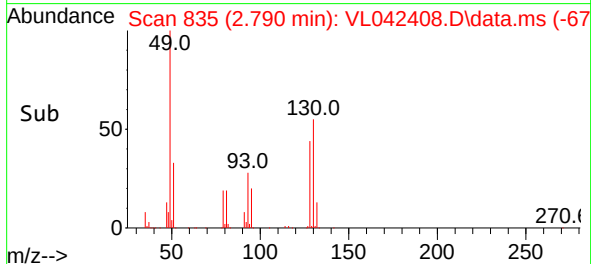
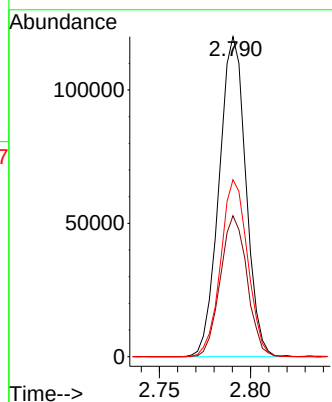
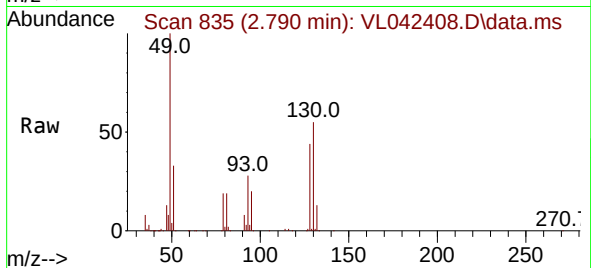




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.790 min Scan# 81
 Delta R.T. 0.003 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

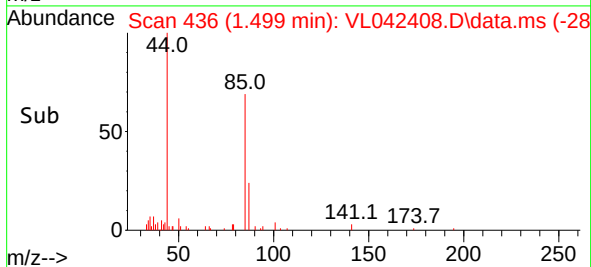
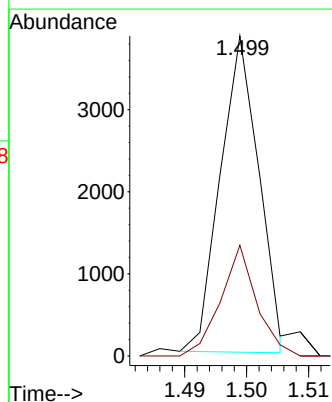
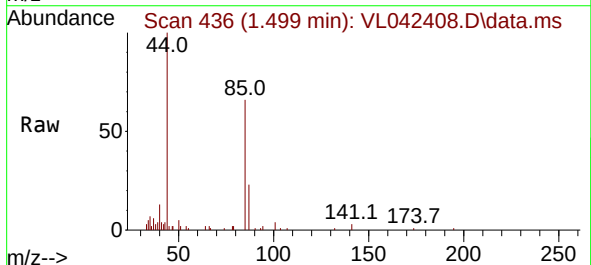
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

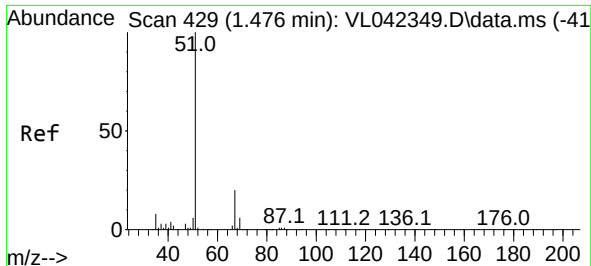
Tgt Ion: 49 Resp: 122330
 Ion Ratio Lower Upper
 49 100
 128 44.0 22.8 68.4
 130 55.7 29.3 88.0



#2
 Dichlorodifluoromethane
 Concen: 0.077 ppbv
 RT: 1.499 min Scan# 436
 Delta R.T. 0.000 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

Tgt Ion: 85 Resp: 1662
 Ion Ratio Lower Upper
 85 100
 87 35.1 26.6 39.8

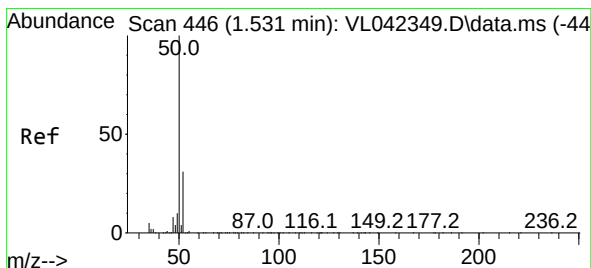
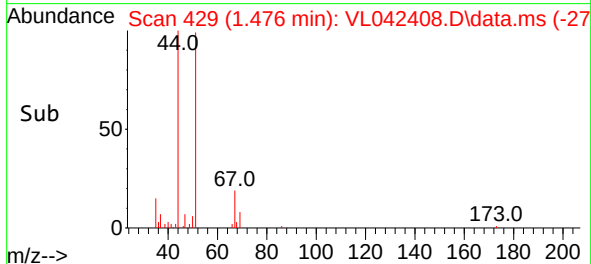
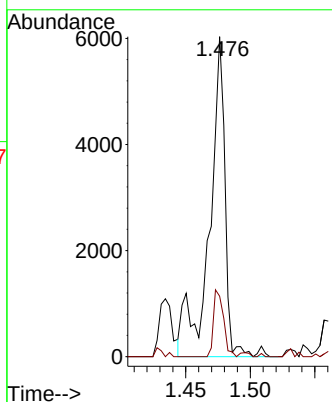
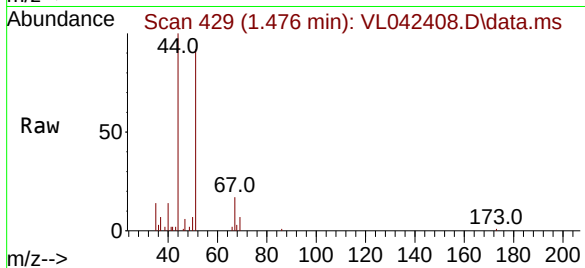




#3
Chlorodifluoromethane
Concen: 0.246 ppbv
RT: 1.476 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

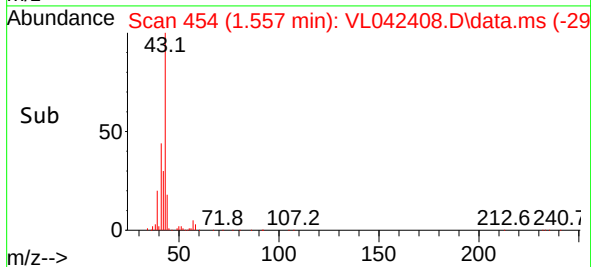
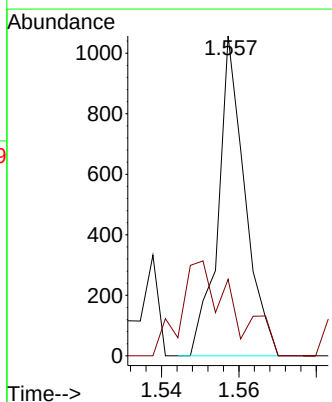
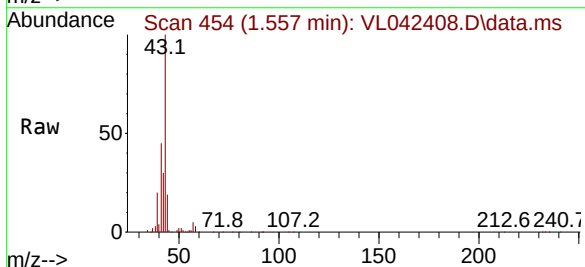
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

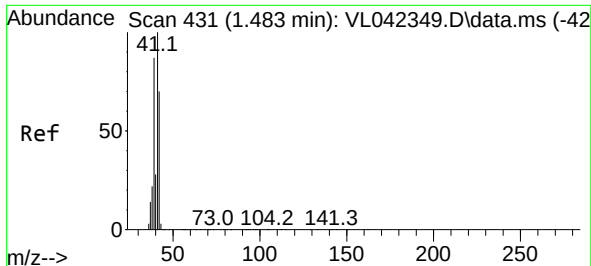
Tgt Ion: 51 Resp: 5063
Ion Ratio Lower Upper
51 100
67 14.2 16.2 24.4#



#4
Chloromethane
Concen: 0.059 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.026 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion: 50 Resp: 507
Ion Ratio Lower Upper
50 100
52 23.9 24.7 37.1#





#9

Propene

Concen: 1.514 ppbv

RT: 1.560 min Scan# 41

Delta R.T. 0.078 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

Instrument :

MSVOA_L

ClientSampleId :

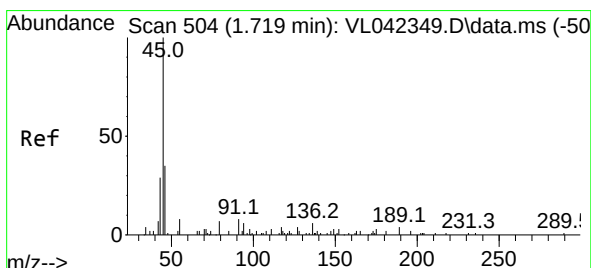
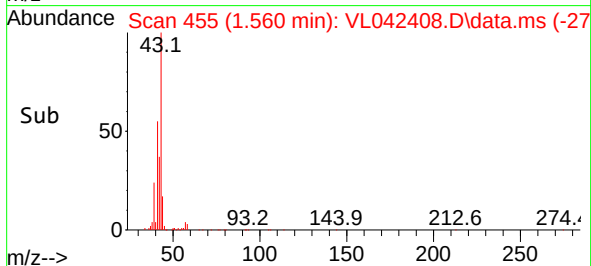
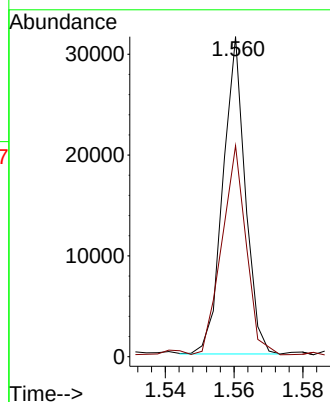
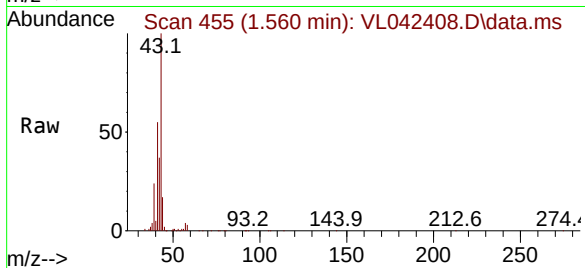
SV1DL

Tgt Ion: 41 Resp: 14194

Ion Ratio Lower Upper

41 100

42 77.3 56.2 84.4



#13

Ethanol

Concen: 3.224 ppbv

RT: 1.722 min Scan# 505

Delta R.T. 0.003 min

Lab File: VL042408.D

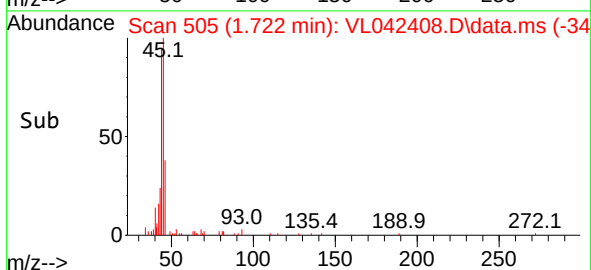
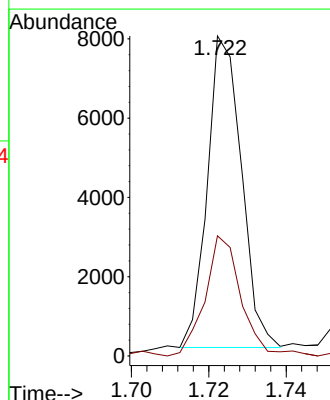
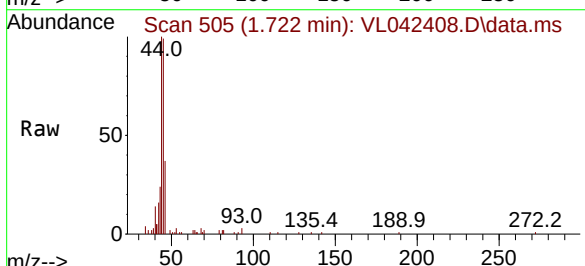
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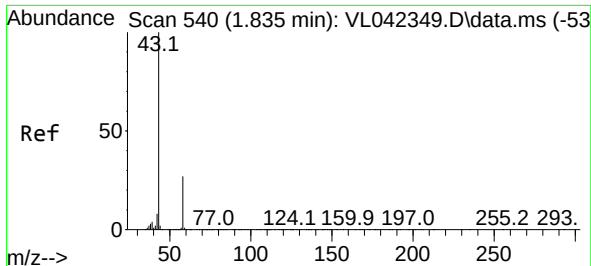
Tgt Ion: 45 Resp: 4803

Ion Ratio Lower Upper

45 100

46 0.0 21.9 87.7#

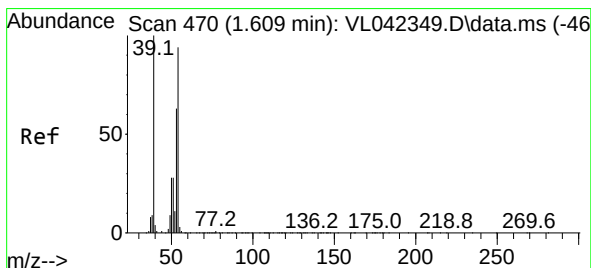
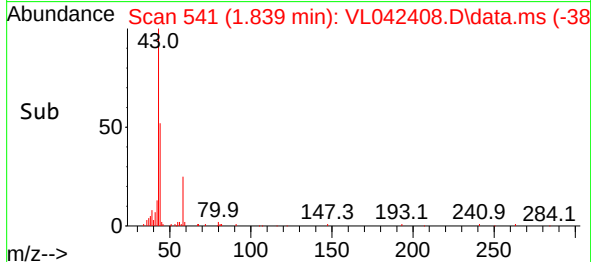
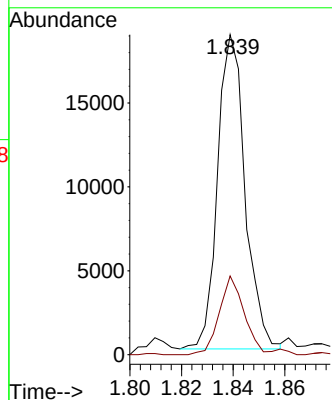
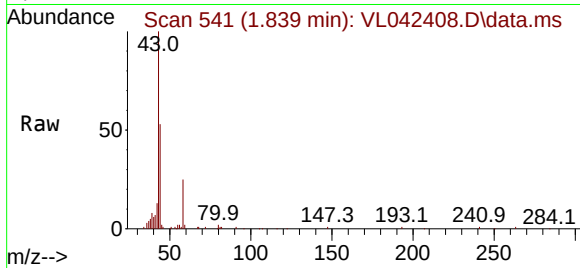




#15
Acetone
Concen: 0.693 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.003 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

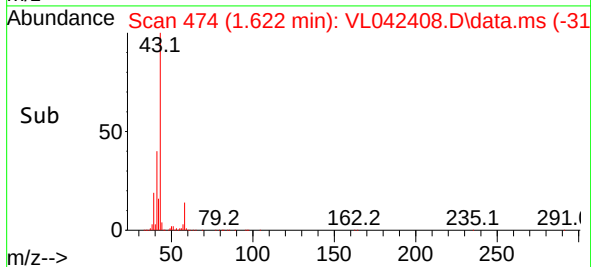
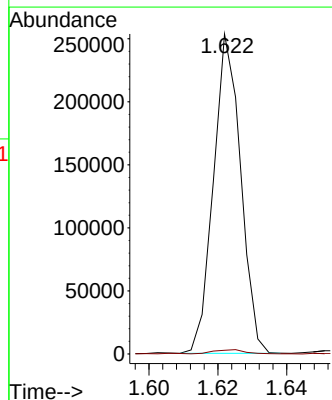
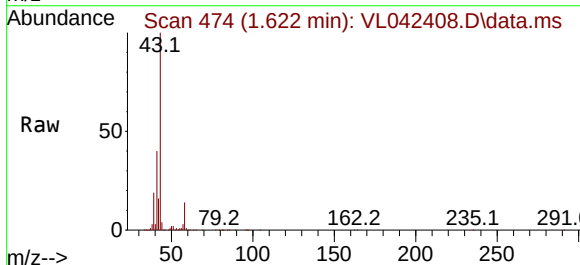
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

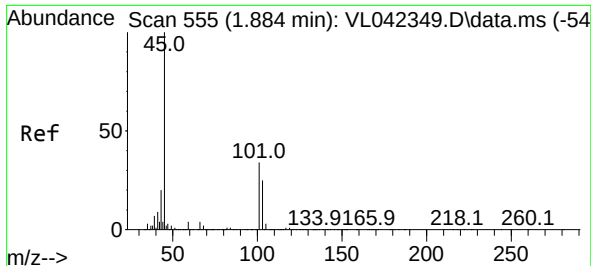
Tgt Ion: 43 Resp: 13871
Ion Ratio Lower Upper
43 100
58 0.0 22.4 33.6#



#16
1,3-Butadiene
Concen: 14.530 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.013 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion: 39 Resp: 139172
Ion Ratio Lower Upper
39 100
54 1.8 64.9 97.3#

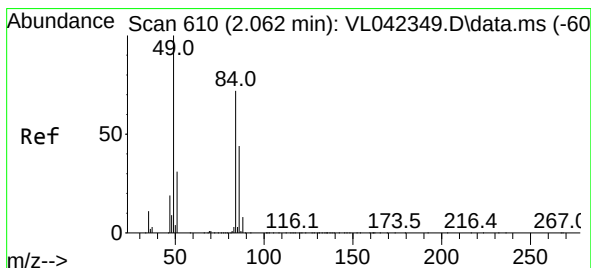
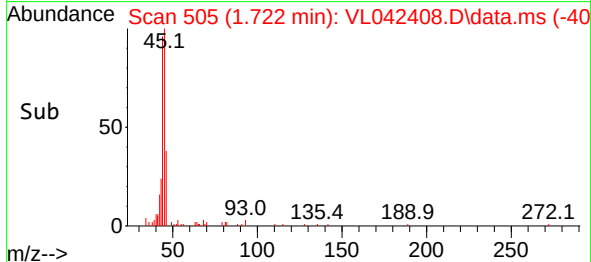
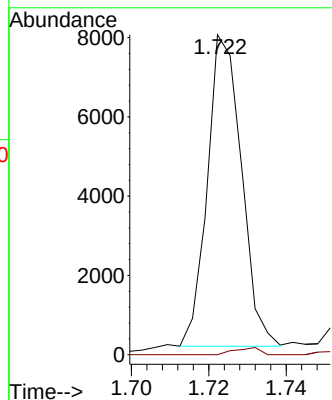
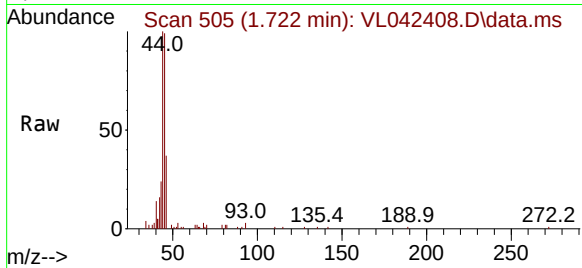




#19
Isopropyl Alcohol
Concen: 0.432 ppbv
RT: 1.722 min Scan# 50
Delta R.T. -0.162 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

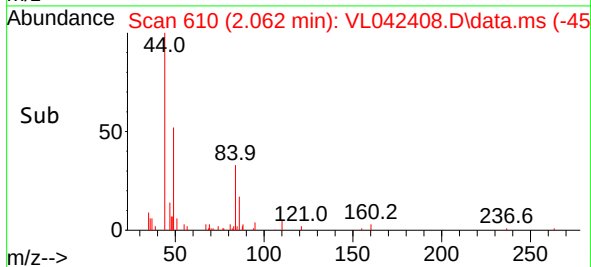
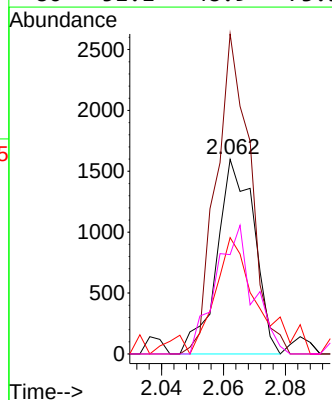
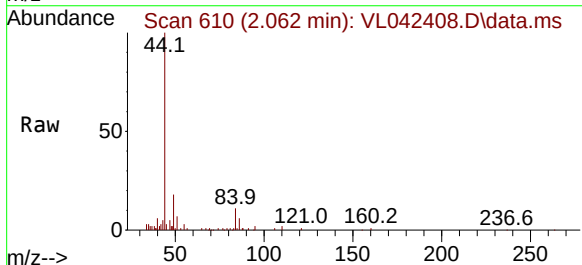
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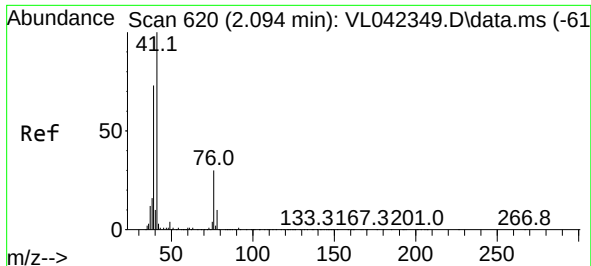
Tgt Ion: 45 Resp: 4803
Ion Ratio Lower Upper
45 100
58 1979.0 34.5 51.7#



#20
Methylene Chloride
Concen: 0.170 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion: 84 Resp: 1332
Ion Ratio Lower Upper
84 100
49 164.5 111.6 167.4
51 50.2 35.1 52.7
86 51.1 48.9 73.3

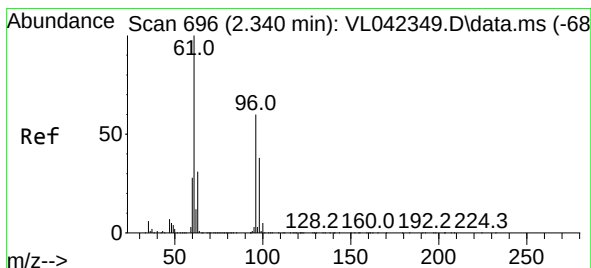
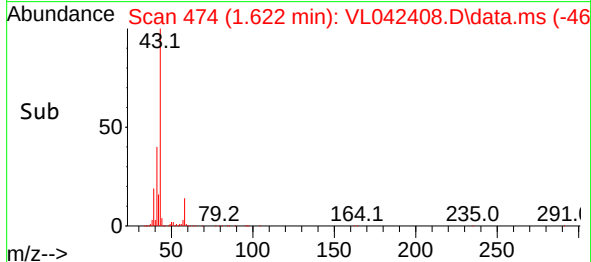
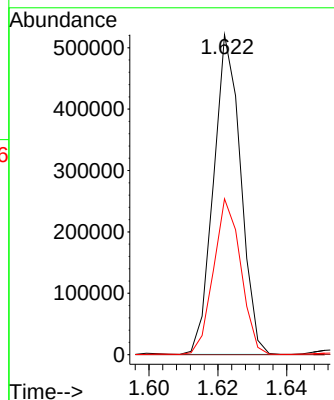
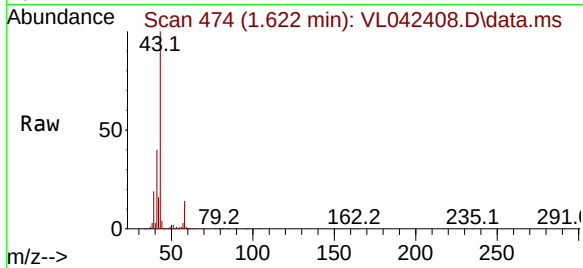




#21
 Allyl Chloride
 Concen: 20.613 ppbv
 RT: 1.622 min Scan# 41
 Delta R.T. -0.472 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

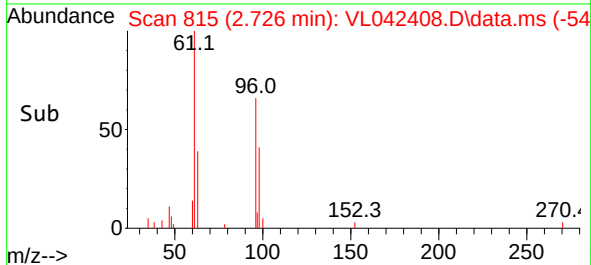
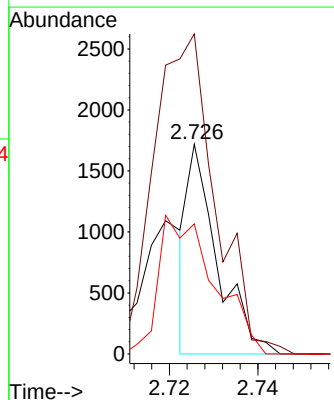
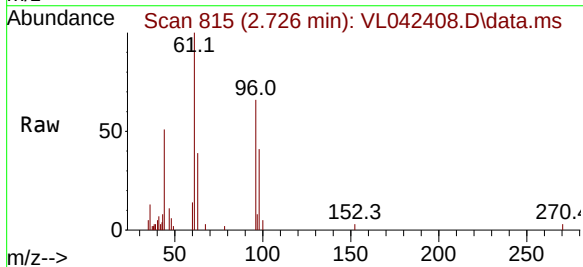
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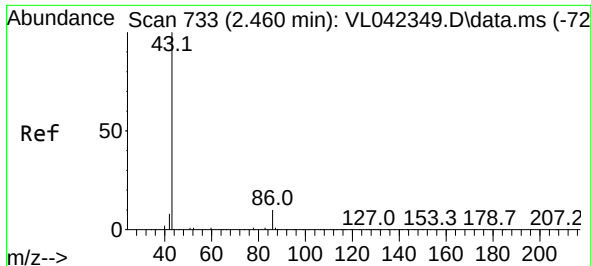
Tgt Ion: 41 Resp: 285009
 Ion Ratio Lower Upper
 41 100
 76 0.0 24.8 37.2#
 39 46.2 60.6 90.8#



#22
 trans-1,2-Dichloroethene
 Concen: 0.089 ppbv
 RT: 2.726 min Scan# 815
 Delta R.T. 0.385 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

Tgt Ion: 96 Resp: 794
 Ion Ratio Lower Upper
 96 100
 61 149.0 133.7 200.5
 98 62.0 50.3 75.5

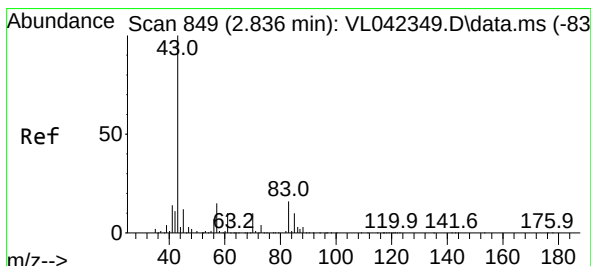
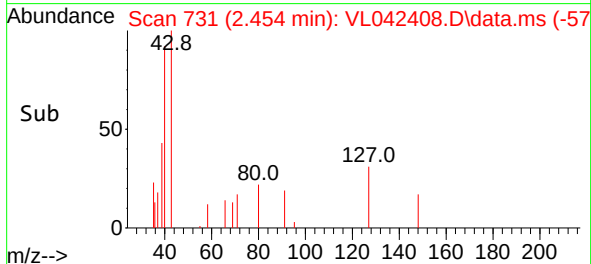
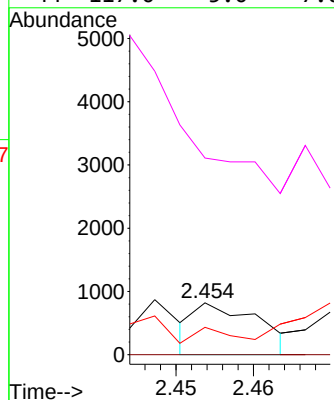
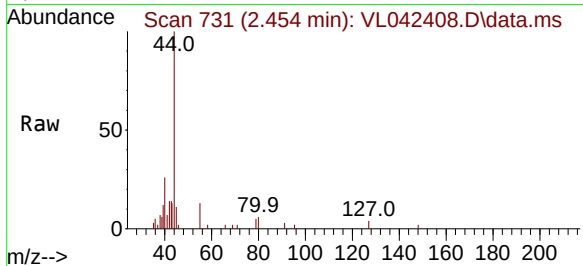




#23
 Vinyl Acetate
 Concen: 0.058 ppbv
 RT: 2.454 min Scan# 71
 Delta R.T. -0.006 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

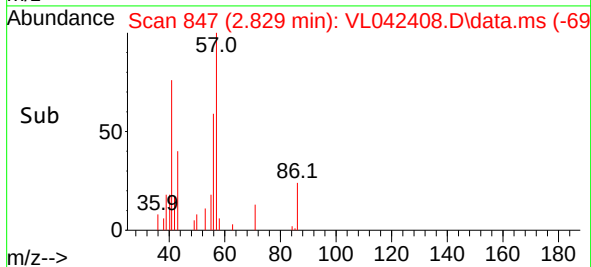
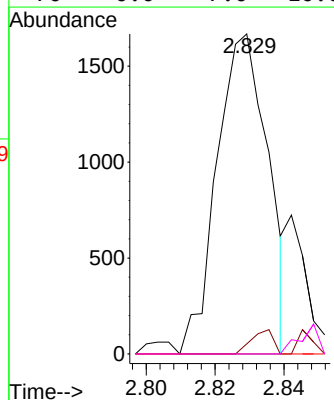
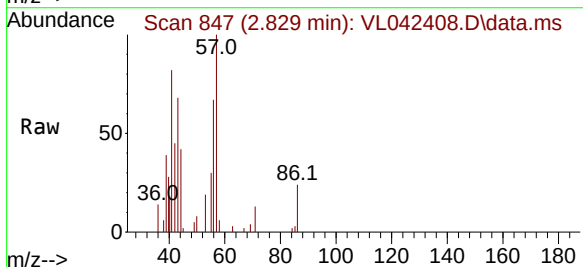
Instrument :
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 SV1DL

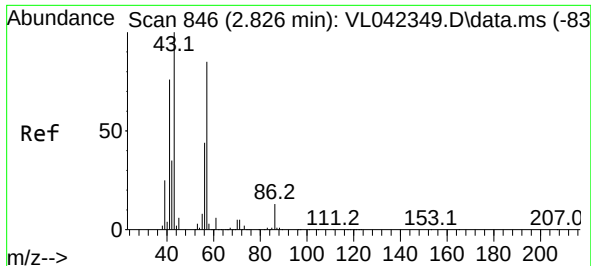
Tgt Ion:	43	Resp:	470
Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.5	9.7#
42	77.0	7.8	11.8#
44	117.0	5.0	7.6#



#25
 Ethyl Acetate
 Concen: 0.035 ppbv
 RT: 2.829 min Scan# 847
 Delta R.T. -0.006 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

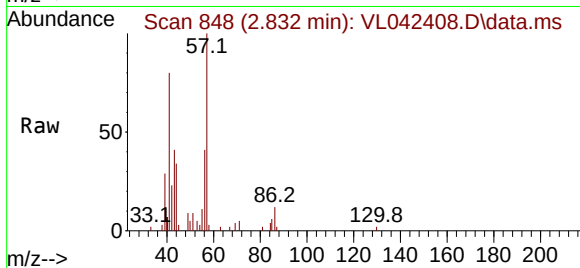
Tgt Ion:	43	Resp:	1713
Ion	Ratio	Lower	Upper
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45	5.4	8.3	12.5#
61	0.0	7.3	10.9#
70	0.0	7.0	10.6#





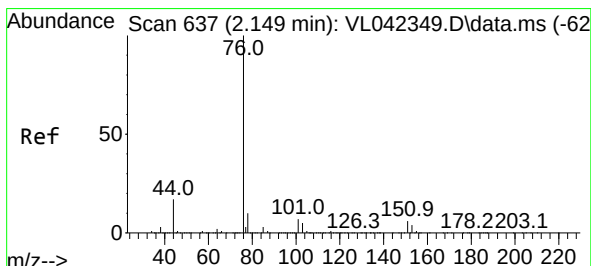
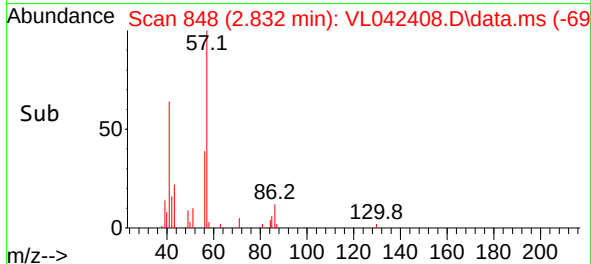
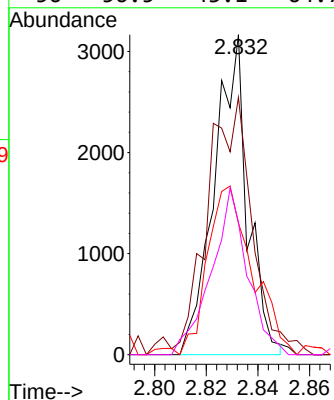
#26
Hexane
Concen: 0.142 ppbv
RT: 2.832 min Scan# 846
Delta R.T. 0.007 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Instrument :
MSVOA_L
ClientSampleId :
SV1DL



Tgt Ion: 57 Resp: 2836

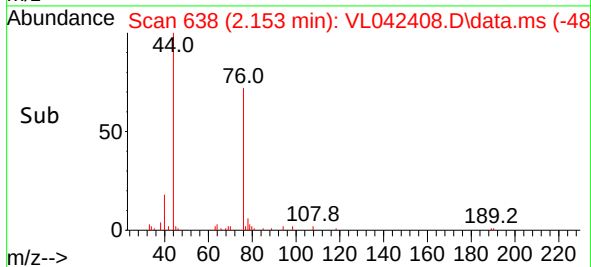
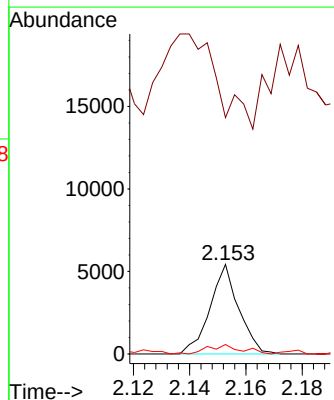
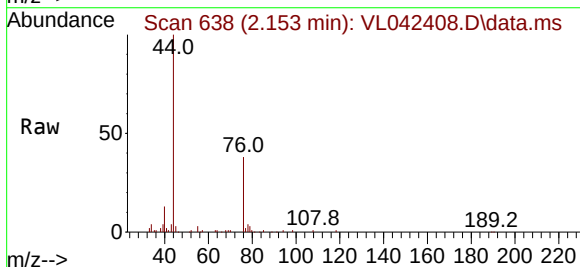
Ion	Ratio	Lower	Upper
57	100		
41	115.5	77.9	116.9
43	73.6	208.4	312.6#
56	56.5	43.1	64.7

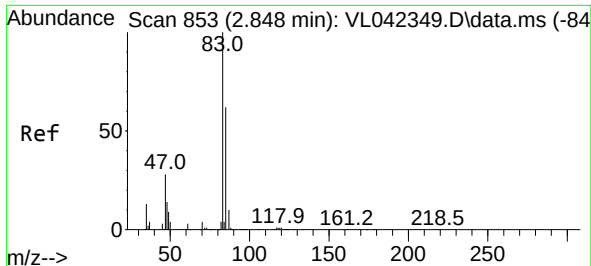


#27
Carbon Disulfide
Concen: 0.180 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.003 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion: 76 Resp: 3857

Ion	Ratio	Lower	Upper
76	100		
44	2195.6	15.5	23.3#
78	15.4	9.3	13.9#





#29

Chloroform

Concen: 0.190 ppbv

RT: 2.852 min Scan# 81

Delta R.T. 0.003 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

Instrument :

MSVOA_L

ClientSampleId :

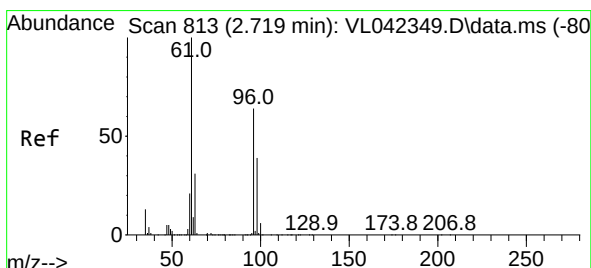
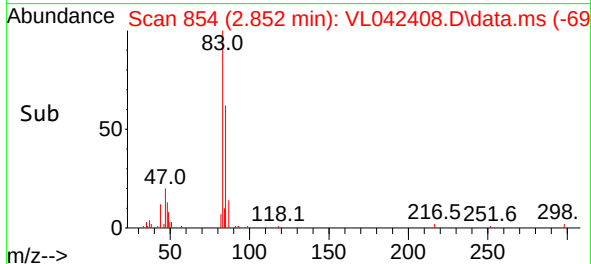
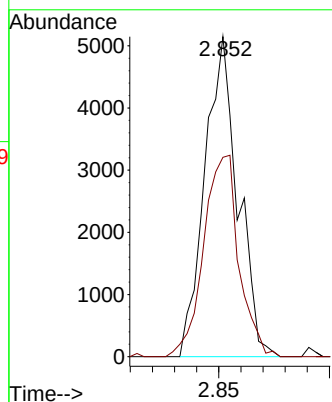
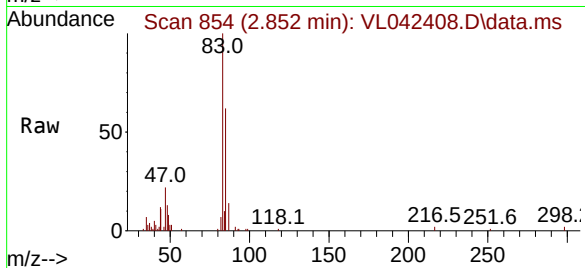
SV1DL

Tgt Ion: 83 Resp: 5357

Ion Ratio Lower Upper

83 100

85 62.3 50.0 75.0



#31

cis-1,2-Dichloroethene

Concen: 0.132 ppbv

RT: 2.726 min Scan# 815

Delta R.T. 0.007 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

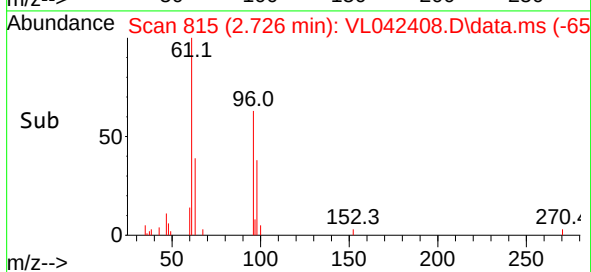
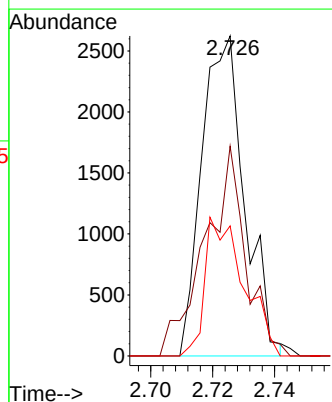
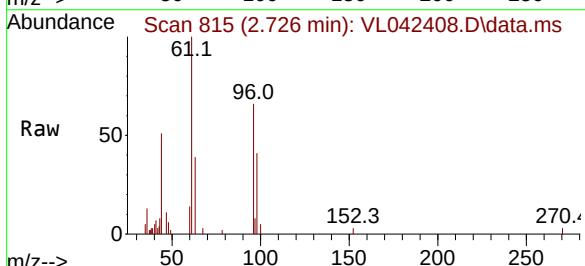
Tgt Ion: 61 Resp: 2516

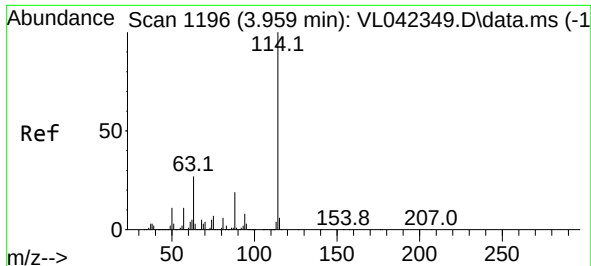
Ion Ratio Lower Upper

61 100

96 61.9 50.8 76.2

98 40.6 30.9 46.3





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.962 min Scan# 1197

Delta R.T. 0.003 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

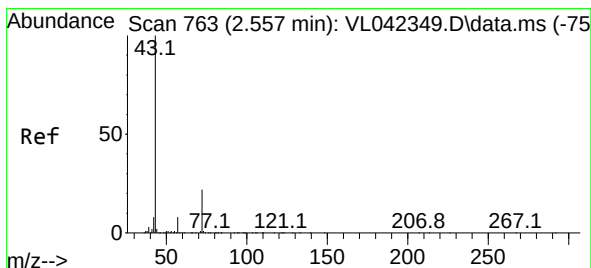
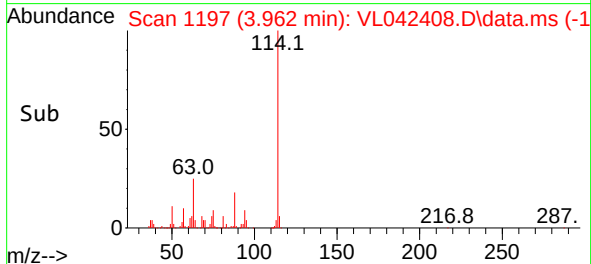
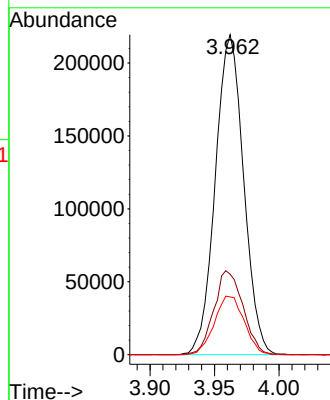
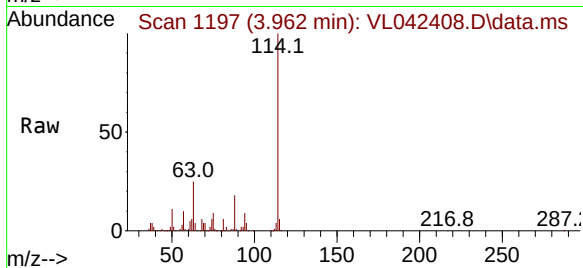
Tgt Ion:114 Resp: 334452

Ion Ratio Lower Upper

114 100

63 27.0 21.8 32.6

88 19.2 15.5 23.3



#34

2-Butanone

Concen: 0.056 ppbv

RT: 2.564 min Scan# 765

Delta R.T. 0.007 min

Lab File: VL042408.D

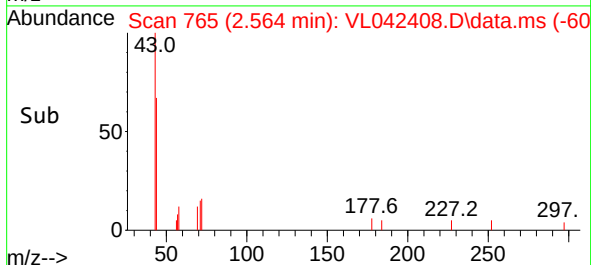
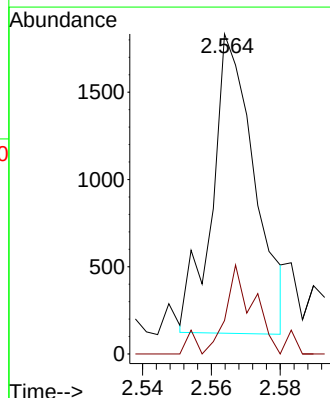
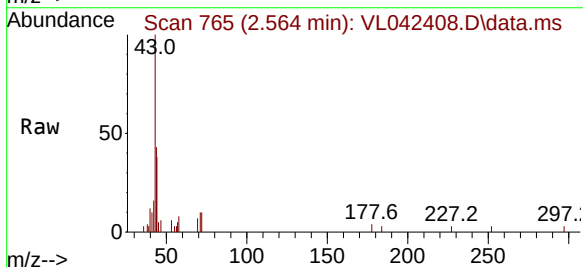
Acq: 21 Apr 2025 16:51

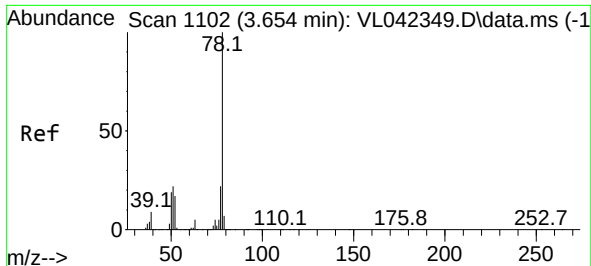
Tgt Ion: 43 Resp: 1470

Ion Ratio Lower Upper

43 100

72 22.9 18.2 27.2

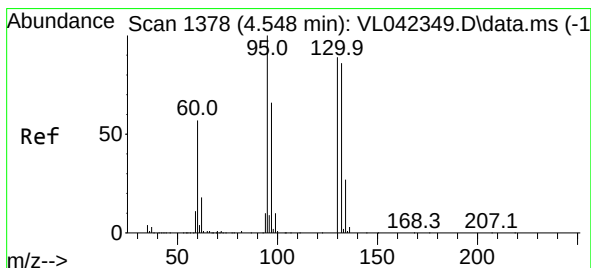
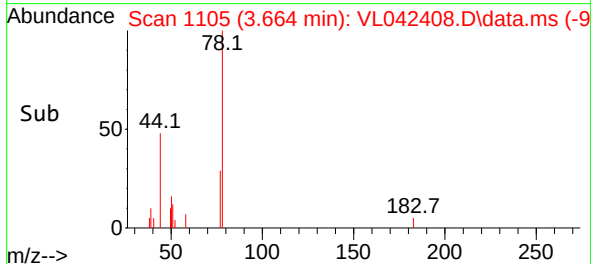
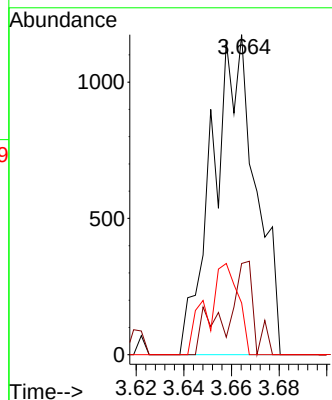
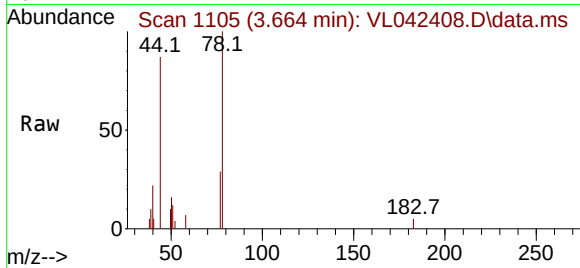




#36
Benzene
Concen: 0.041 ppbv
RT: 3.664 min Scan# 1102
Delta R.T. 0.010 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

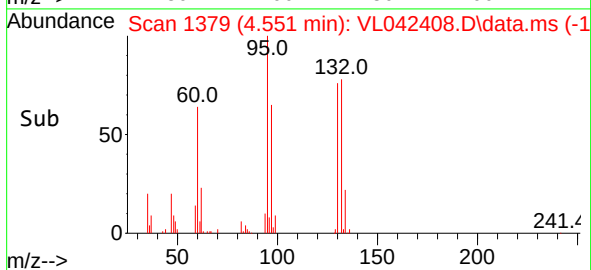
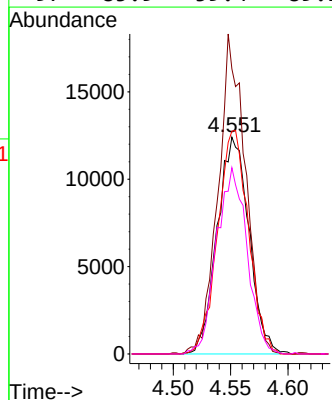
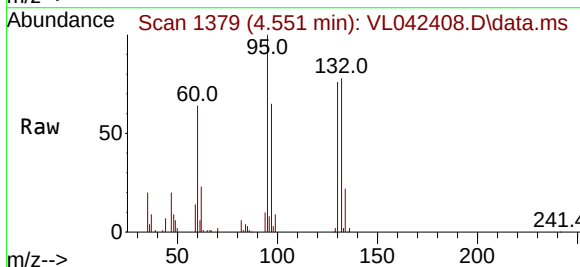
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

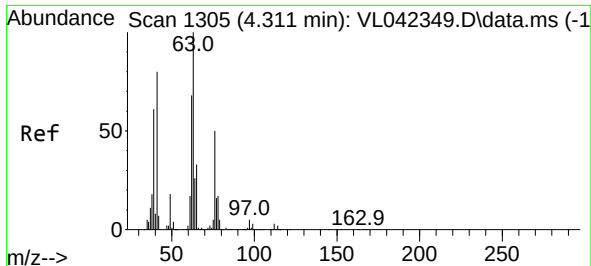
Tgt Ion: 78 Resp: 1484
Ion Ratio Lower Upper
78 100
77 28.5 17.4 26.0#
50 16.2 15.5 23.3



#38
Trichloroethene
Concen: 1.515 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion:130 Resp: 23894
Ion Ratio Lower Upper
130 100
95 131.5 89.8 134.6
132 102.7 77.7 116.5
97 85.9 59.4 89.2





#39

1,2-Dichloropropane

Concen: 6.723 ppbv

RT: 3.959 min Scan# 1196

Delta R.T. -0.353 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

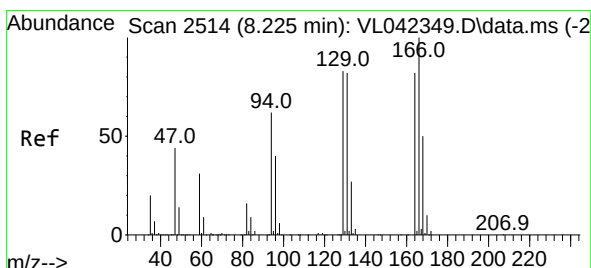
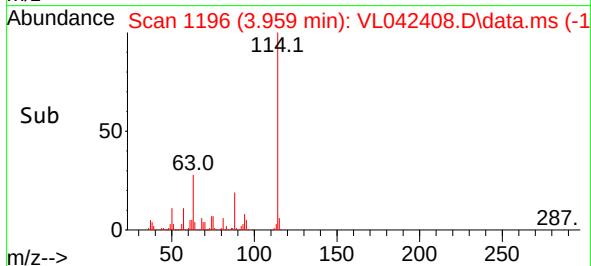
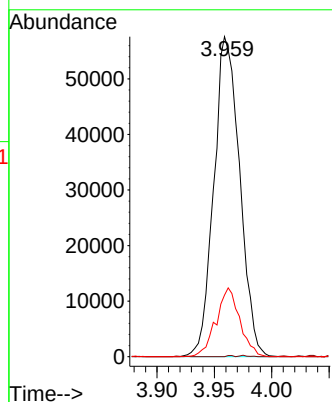
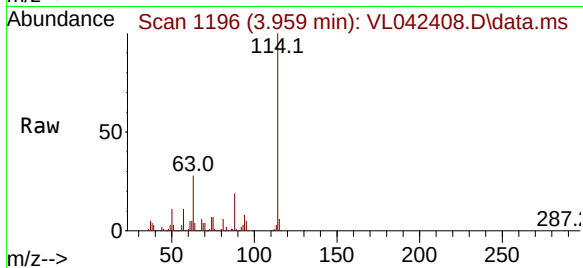
Tgt Ion: 63 Resp: 90379

Ion Ratio Lower Upper

63 100

41 0.0 64.2 96.2#

62 19.2 54.3 81.5#



#52

Tetrachloroethene

Concen: 80.897 ppbv

RT: 8.234 min Scan# 2517

Delta R.T. 0.010 min

Lab File: VL042408.D

Acq: 21 Apr 2025 16:51

Tgt Ion:164 Resp: 1127974

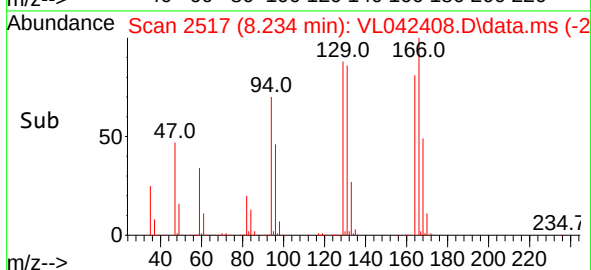
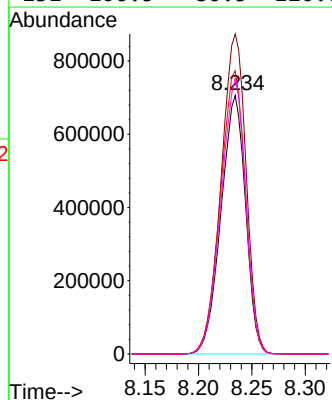
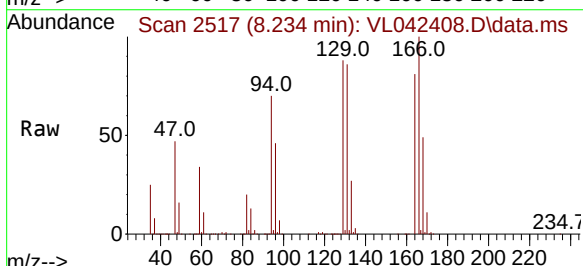
Ion Ratio Lower Upper

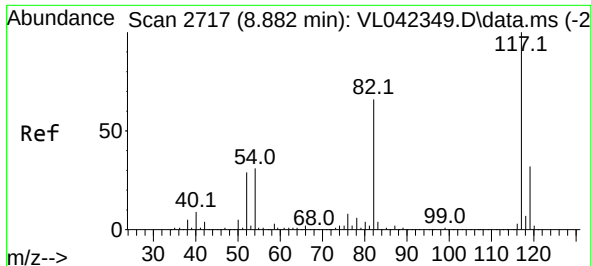
164 100

166 123.7 98.2 147.2

129 109.4 81.8 122.8

131 106.5 80.5 120.7

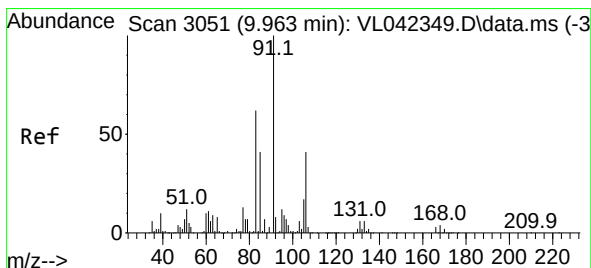
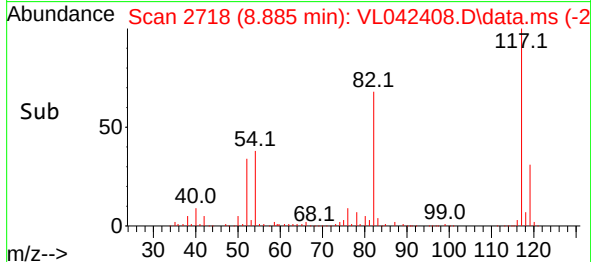
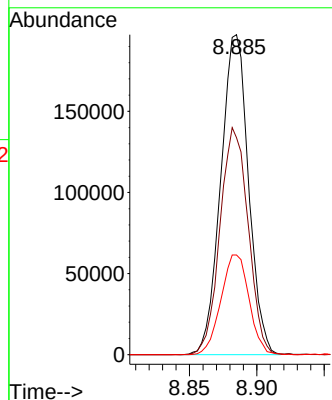
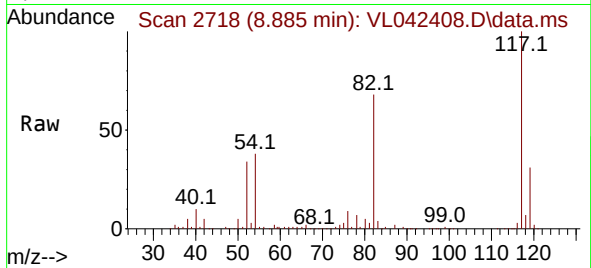




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2117
Delta R.T. 0.003 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

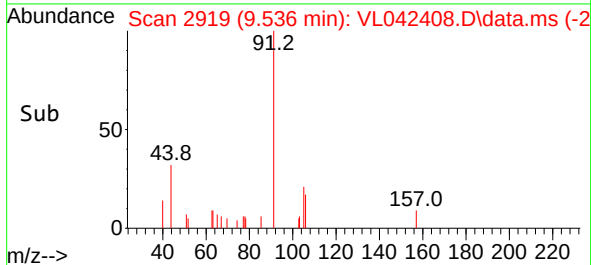
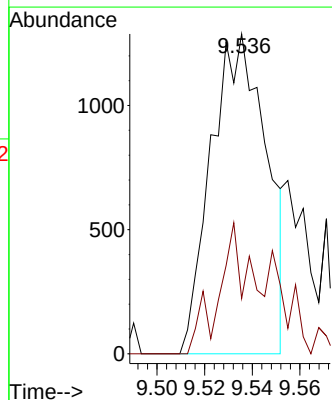
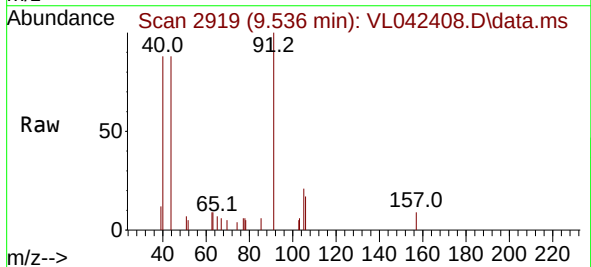
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

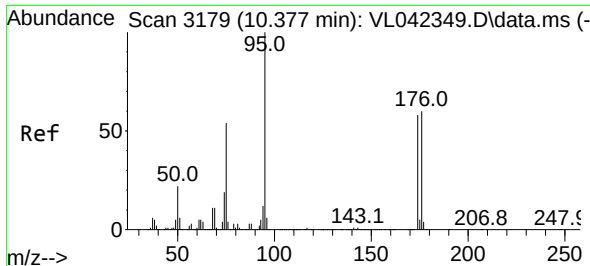
Tgt Ion:117 Resp: 282542
Ion Ratio Lower Upper
117 100
82 72.1 57.8 86.6
119 31.7 25.2 37.8



#60
o-Xylene
Concen: 0.046 ppbv
RT: 9.536 min Scan# 2919
Delta R.T. -0.427 min
Lab File: VL042408.D
Acq: 21 Apr 2025 16:51

Tgt Ion: 91 Resp: 2076
Ion Ratio Lower Upper
91 100
106 36.9 21.1 63.4

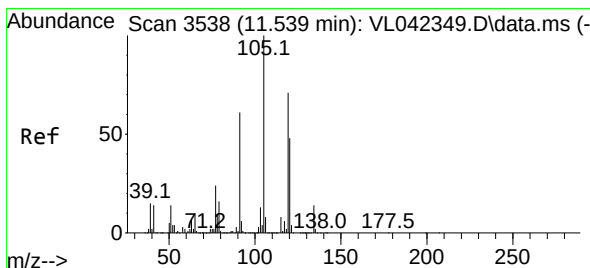
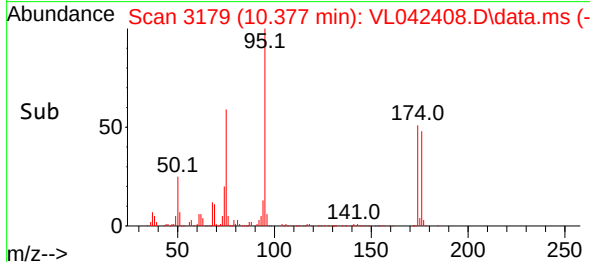
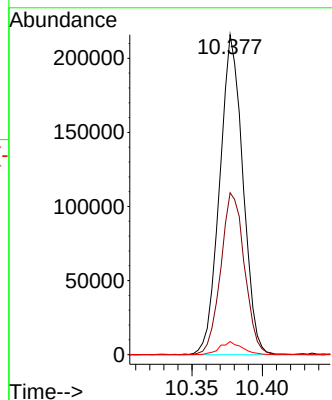
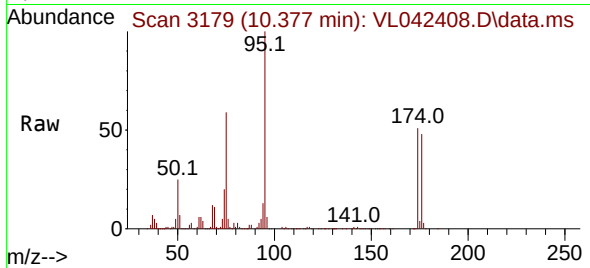




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.666 ppbv
 RT: 10.377 min Scan# 3179
 Delta R.T. 0.000 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

Instrument :
 MSVOA_1
 ClientSampleId :
 SV1DL

Tgt Ion: 95 Resp: 247631
 Ion Ratio Lower Upper
 95 100
 174 51.8 48.5 72.7
 175 3.9 3.7 5.5



#74
 1,2,4-Trimethylbenzene
 Concen: 0.049 ppbv
 RT: 11.539 min Scan# 3538
 Delta R.T. 0.000 min
 Lab File: VL042408.D
 Acq: 21 Apr 2025 16:51

Tgt Ion: 105 Resp: 2797
 Ion Ratio Lower Upper
 105 100
 120 36.1 38.1 57.1#
 91 11.4 48.8 73.2#
 77 22.4 19.0 28.4

