

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL112025\
 Data File : VL043268.D
 Acq On : 20 Nov 2025 16:54
 Operator : SY/MD
 Sample : Q3655-02DL 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2DL

Quant Time: Nov 21 00:40:59 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Wed Nov 19 01:11:25 2025
 Response via : Initial Calibration

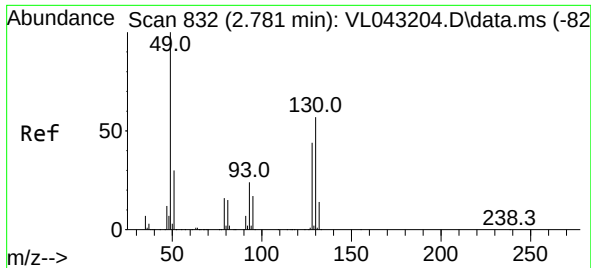
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.781	49	101802	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	271004	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.872	117	205327	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	146175	9.712	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.100%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	800	0.056	ppbv #	28
3) Chlorodifluoromethane	1.463	51	7264	0.514	ppbv #	62
4) Chloromethane	1.531	50	943	0.176	ppbv	91
6) Bromomethane	1.667	94	298	0.105	ppbv #	75
8) Dichlorotetrafluoroethane	1.499	85	800	0.067	ppbv #	17
9) Propene	1.483	41	901	0.150	ppbv #	1
11) Trichlorofluoromethane	1.874	101	453	0.033	ppbv	98
13) Ethanol	1.719	45	2891	1.371	ppbv #	38
15) Acetone	1.832	43	68558	4.847	ppbv	98
16) 1,3-Butadiene	1.599	39	897	0.142	ppbv #	12
17) tert-Butyl alcohol	2.039	59	610	0.033	ppbv	98
19) Isopropyl Alcohol	1.884	45	10003	1.252	ppbv #	1
20) Methylene Chloride	2.059	84	4589	0.343	ppbv #	88
23) Vinyl Acetate	2.447	43	2999	0.176	ppbv #	78
25) Ethyl Acetate	2.823	43	2905	0.095	ppbv #	78
26) Hexane	2.823	57	3399	0.254	ppbv #	42
27) Carbon Disulfide	2.149	76	796	0.058	ppbv #	1
34) 2-Butanone	2.557	43	4785	0.250	ppbv	100
38) Trichloroethene	4.528	130	338	0.033	ppbv #	32
39) 1,2-Dichloropropane	3.946	63	66861	7.039	ppbv #	24
41) Tetrahydrofuran	3.056	42	356	0.034	ppbv #	37
52) Tetrachloroethene	8.212	164	53043	5.494	ppbv	96

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

Quant Time: Nov 21 00:40:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL111825AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Nov 19 01:11:25 2025
Response via : Initial Calibration

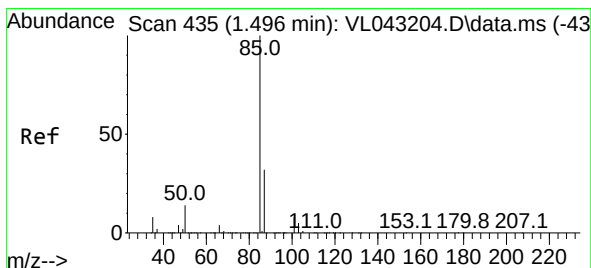
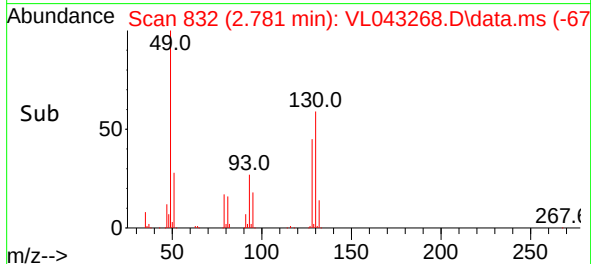
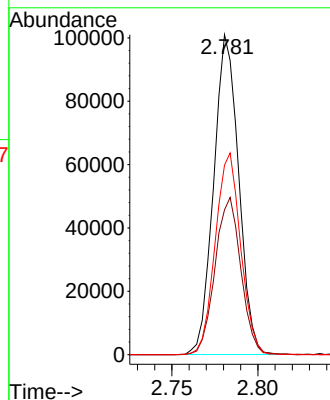
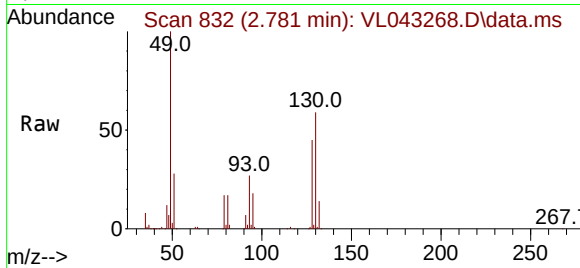




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 2.781 min Scan# 81
 Delta R.T. -0.000 min
 Lab File: VL043268.D
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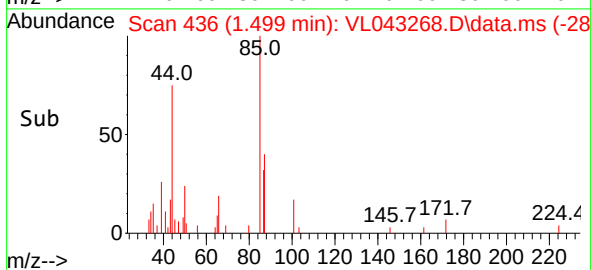
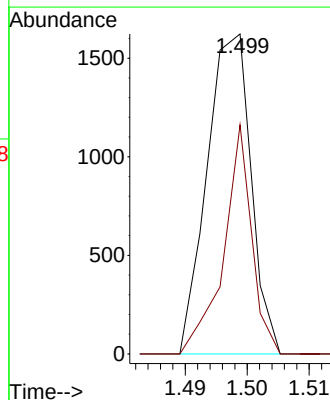
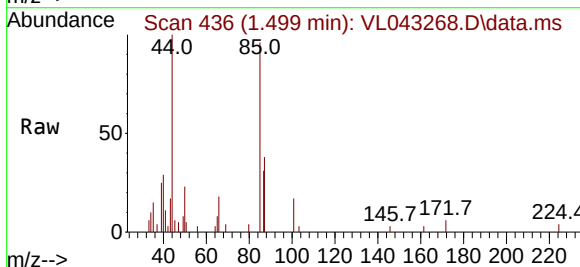
Instrument :
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 SG-2DL

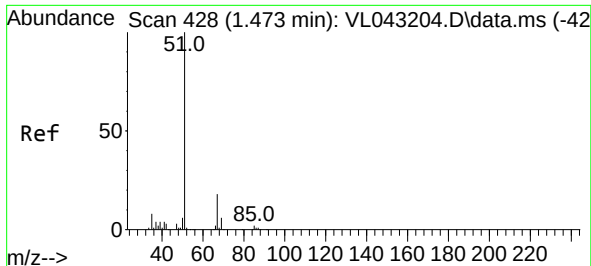
Tgt Ion: 49 Resp: 101802
 Ion Ratio Lower Upper
 49 100
 128 51.0 23.0 69.0
 130 64.2 29.9 89.7



#2
 Dichlorodifluoromethane
 Concen: 0.056 ppbv
 RT: 1.499 min Scan# 436
 Delta R.T. 0.003 min
 Lab File: VL043268.D
 Acq: 20 Nov 2025 16:54

Tgt Ion: 85 Resp: 800
 Ion Ratio Lower Upper
 85 100
 87 71.6 25.4 38.2#

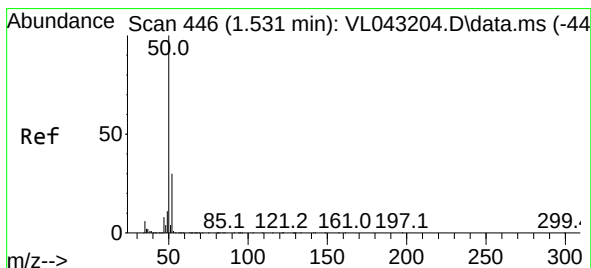
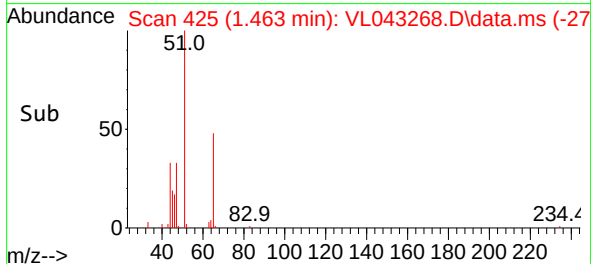
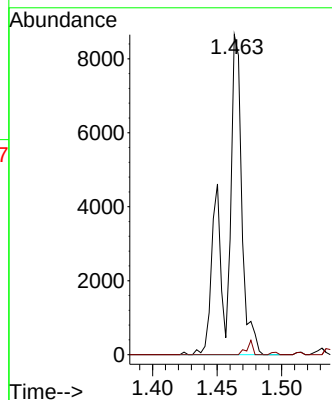
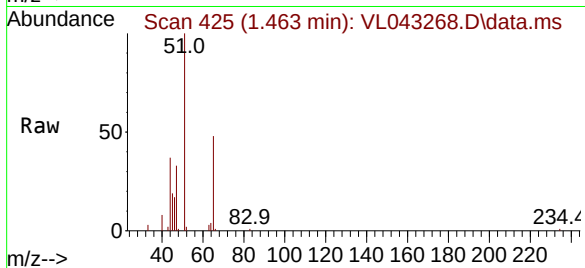




#3
Chlorodifluoromethane
Concen: 0.514 ppbv
RT: 1.463 min Scan# 41
Delta R.T. -0.010 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

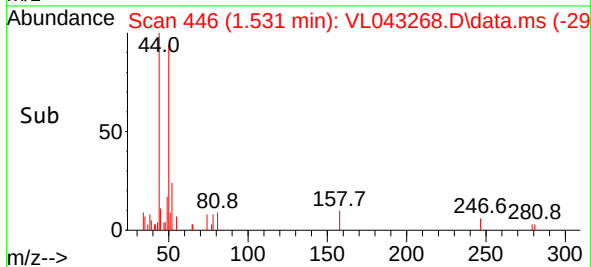
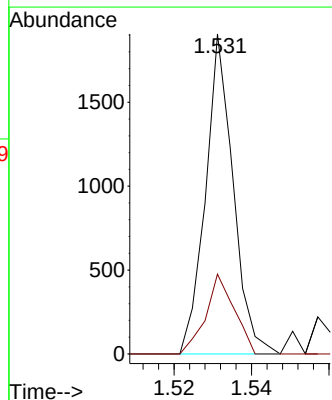
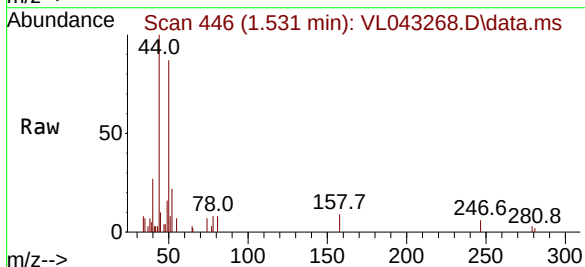
Instrument :
MSVOA_L
ClientSampleId :
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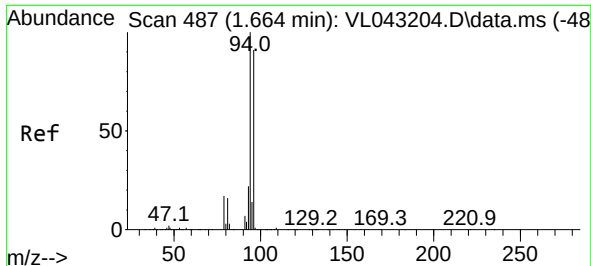
Tgt Ion: 51 Resp: 7264
Ion Ratio Lower Upper
51 100
67 1.7 14.9 22.3#



#4
Chloromethane
Concen: 0.176 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 50 Resp: 943
Ion Ratio Lower Upper
50 100
52 25.0 24.1 36.1

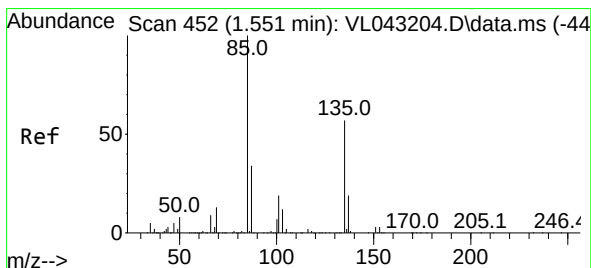
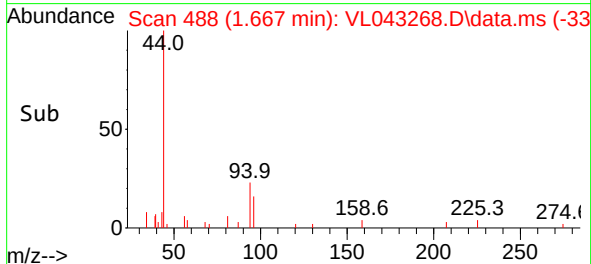
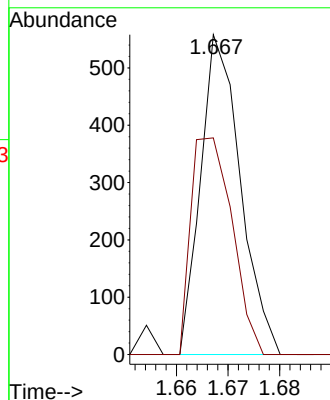
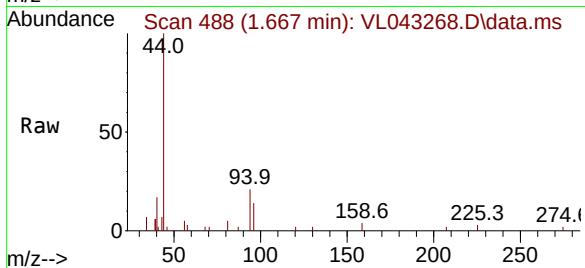




#6
Bromomethane
Concen: 0.105 ppbv
RT: 1.667 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

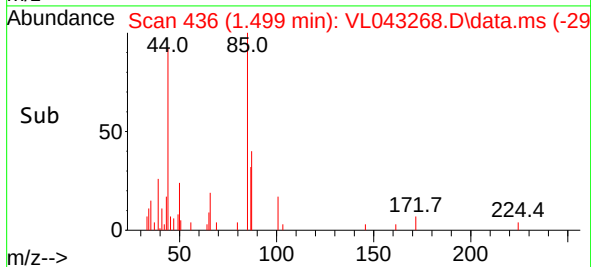
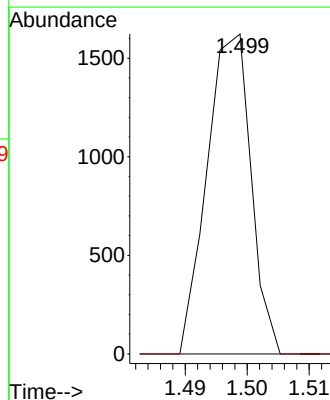
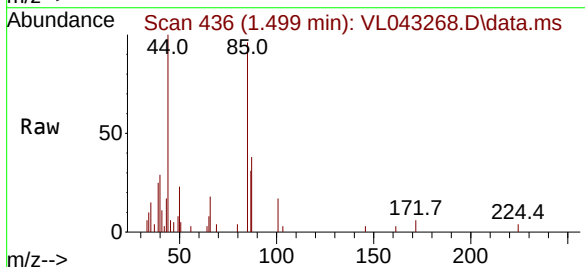
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MSVOA_L
ClientSampleId :
SG-2DL

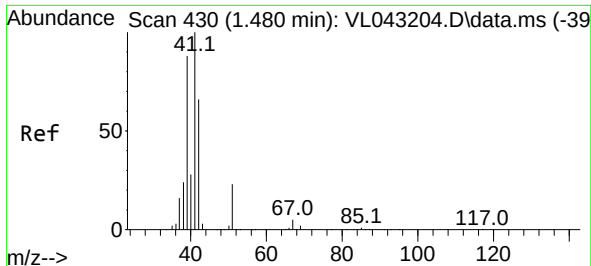
Tgt Ion: 94 Resp: 298
Ion Ratio Lower Upper
94 100
96 67.7 72.9 109.3#



#8
Dichlorotetrafluoroethane
Concen: 0.067 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.052 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 85 Resp: 800
Ion Ratio Lower Upper
85 100
135 0.0 52.6 79.0#





#9

Propene

Concen: 0.150 ppbv

RT: 1.483 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL043268.D

Acq: 20 Nov 2025 16:54

Instrument :

MSVOA_L

ClientSampleId :

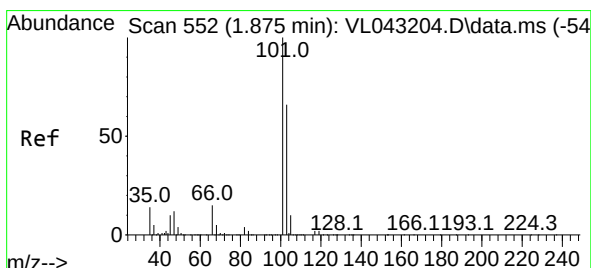
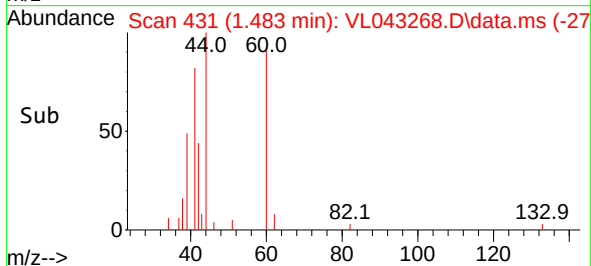
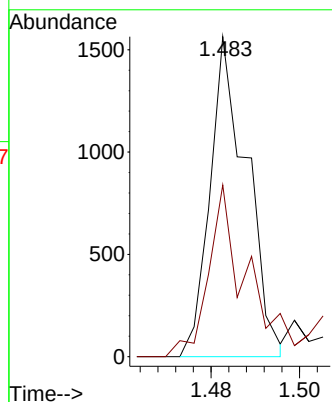
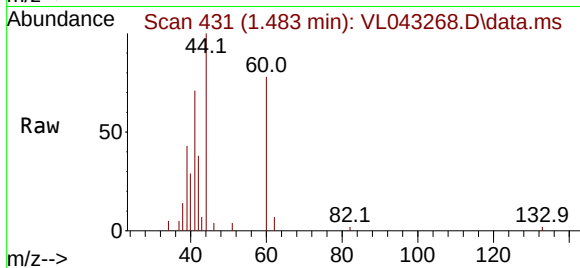
SG-2DL

Tgt Ion: 41 Resp: 901

Ion Ratio Lower Upper

41 100

42 76.0 3.7 5.5#



#11

Trichlorofluoromethane

Concen: 0.033 ppbv

RT: 1.874 min Scan# 552

Delta R.T. -0.000 min

Lab File: VL043268.D

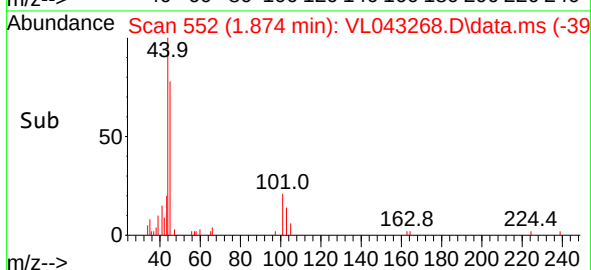
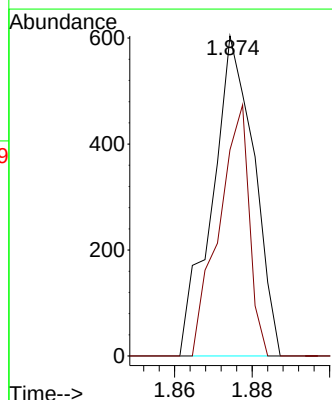
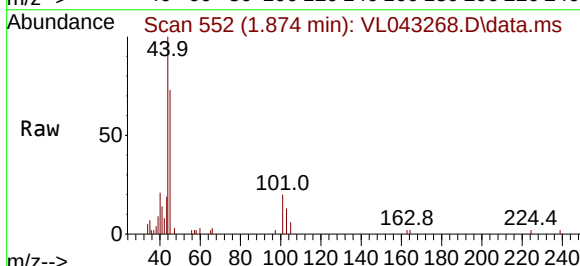
Acq: 20 Nov 2025 16:54

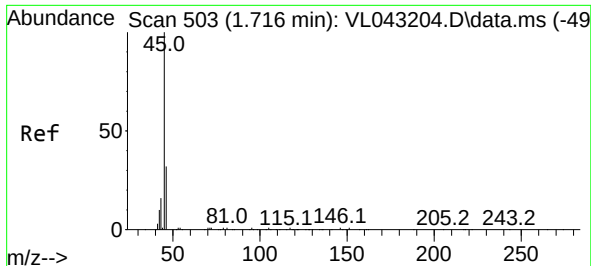
Tgt Ion:101 Resp: 453

Ion Ratio Lower Upper

101 100

103 64.4 52.6 79.0

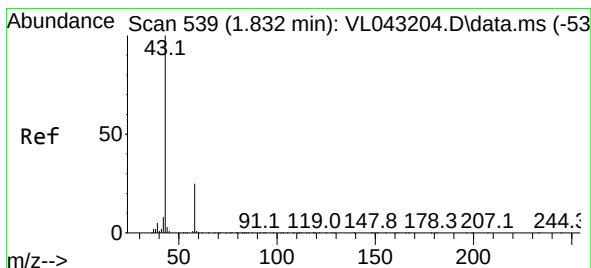
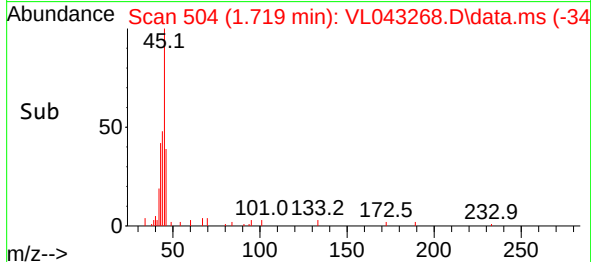
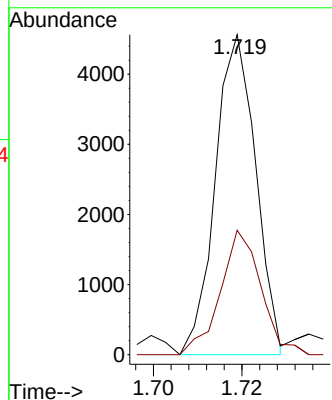
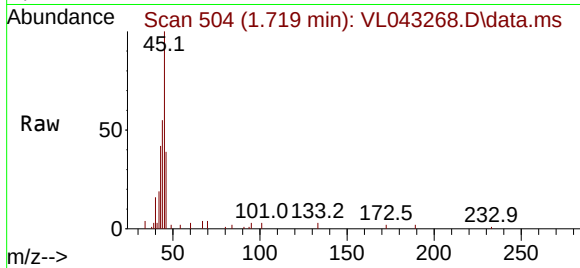




#13
Ethanol
Concen: 1.371 ppbv
RT: 1.719 min Scan# 503
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

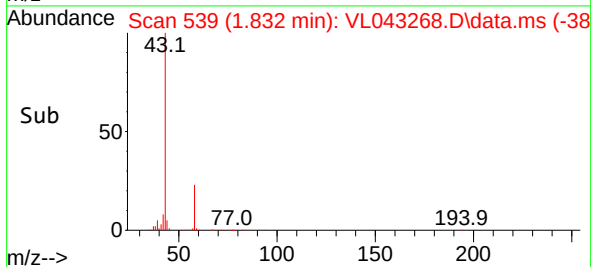
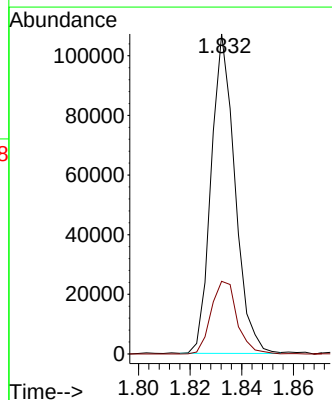
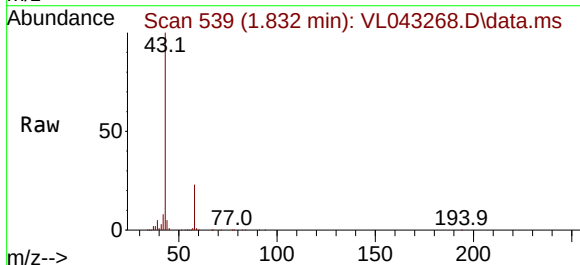
Instrument :
MSVOA_1
ClientSampleId :
SG-2DL

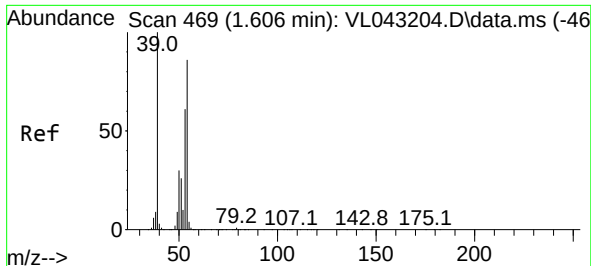
Tgt Ion: 45 Resp: 2891
Ion Ratio Lower Upper
45 100
46 0.0 15.0 59.8#



#15
Acetone
Concen: 4.847 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 43 Resp: 68558
Ion Ratio Lower Upper
43 100
58 25.0 20.7 31.1

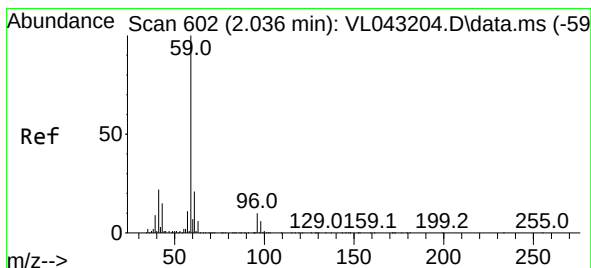
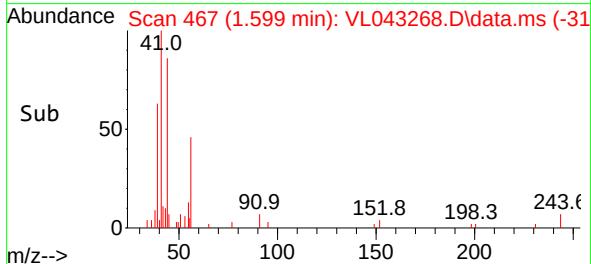
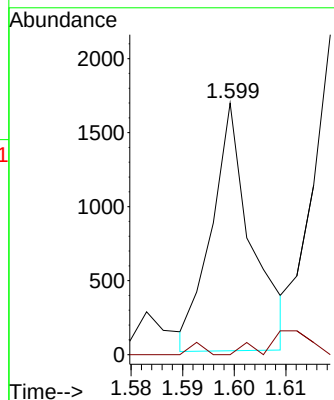
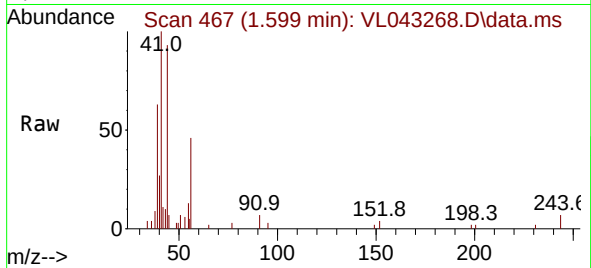




#16
1,3-Butadiene
Concen: 0.142 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

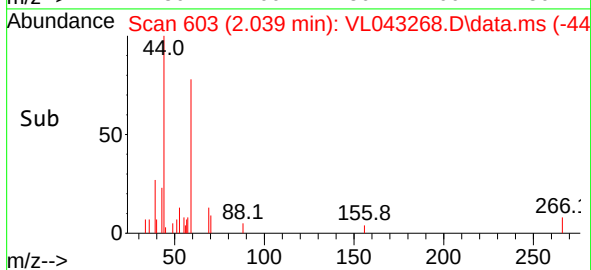
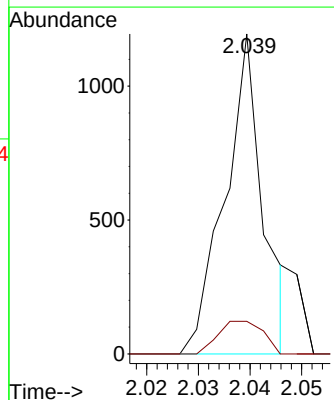
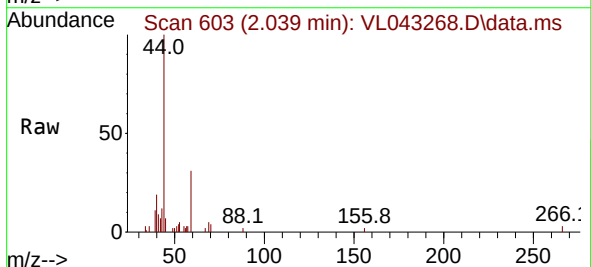
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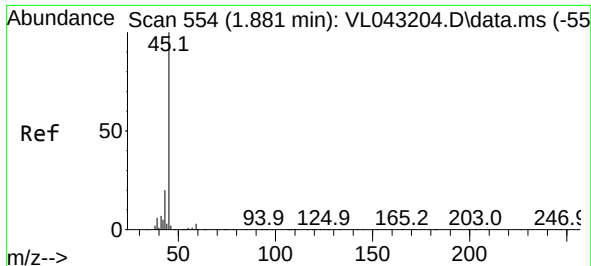
Tgt Ion: 39 Resp: 897
Ion Ratio Lower Upper
39 100
54 0.0 59.4 89.2#



#17
tert-Butyl alcohol
Concen: 0.033 ppbv
RT: 2.039 min Scan# 603
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 59 Resp: 610
Ion Ratio Lower Upper
59 100
57 12.1 9.0 13.4

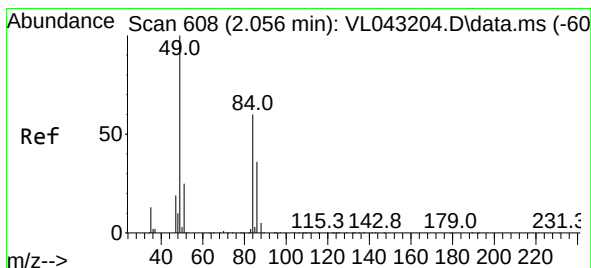
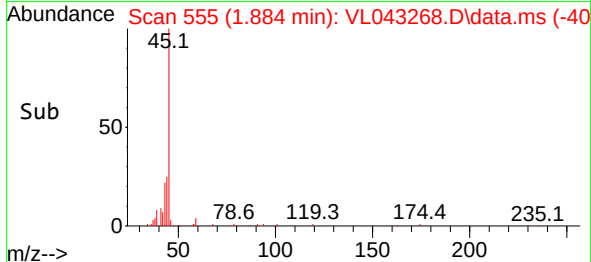
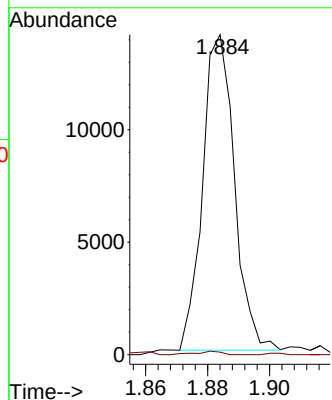
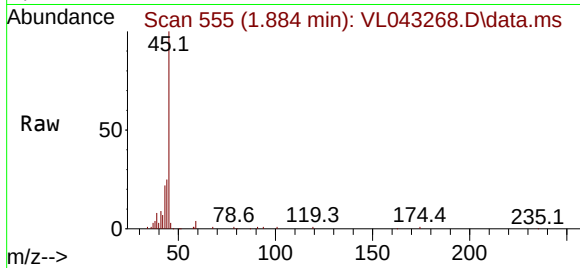




#19
Isopropyl Alcohol
Concen: 1.252 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

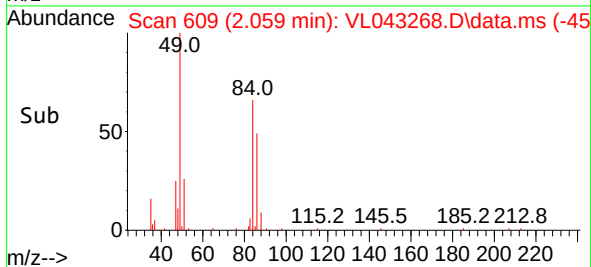
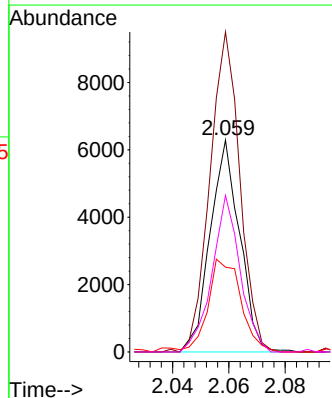
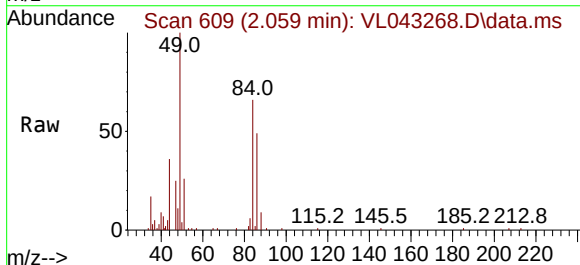
Instrument :
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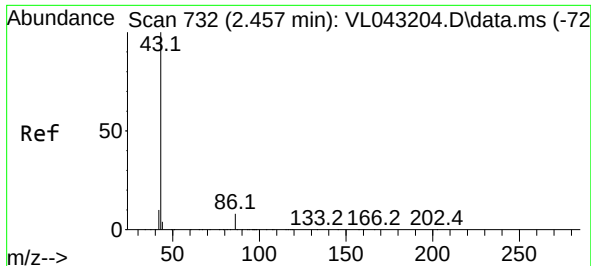
Tgt Ion: 45 Resp: 10003
Ion Ratio Lower Upper
45 100
58 171.2 31.3 46.9#



#20
Methylene Chloride
Concen: 0.343 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 84 Resp: 4589
Ion Ratio Lower Upper
84 100
49 151.0 132.9 199.3
51 40.0 34.8 52.2
86 73.9 48.2 72.2#

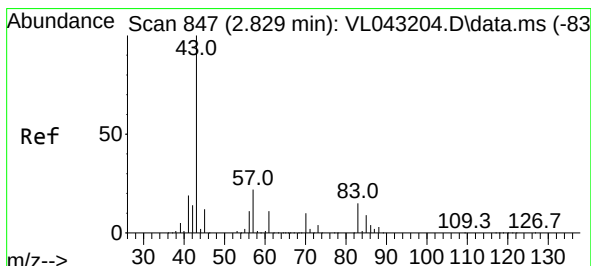
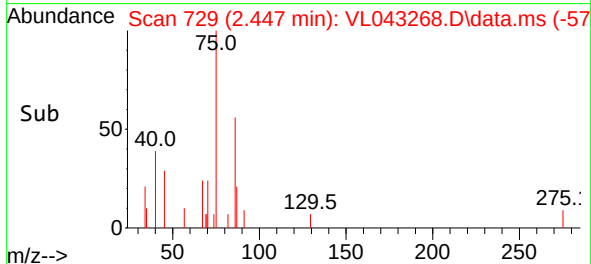
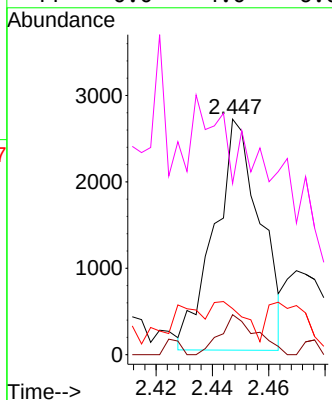
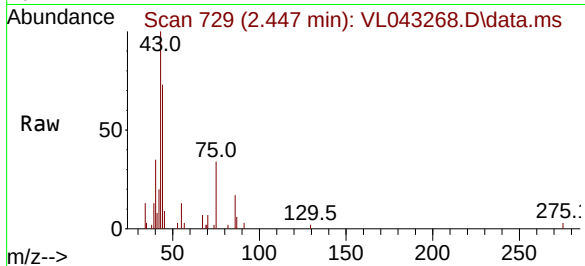




#23
 Vinyl Acetate
 Concen: 0.176 ppbv
 RT: 2.447 min Scan# 71
 Delta R.T. -0.010 min
 Lab File: VL043268.D
 Acq: 20 Nov 2025 16:54

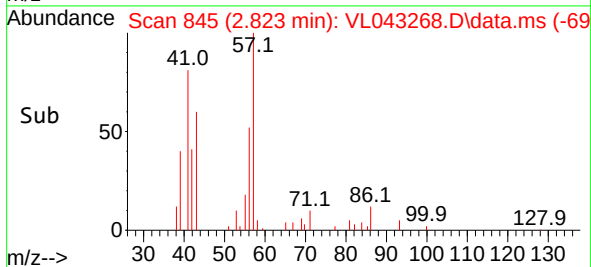
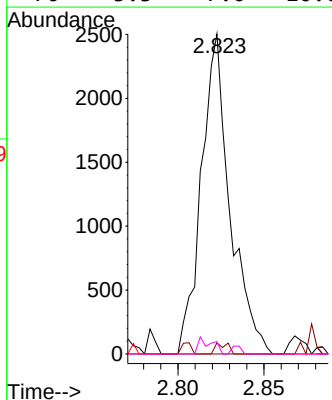
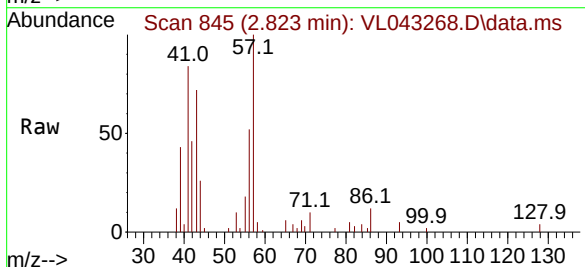
Instrument :
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 ClientSampleId :
 SG-2DL

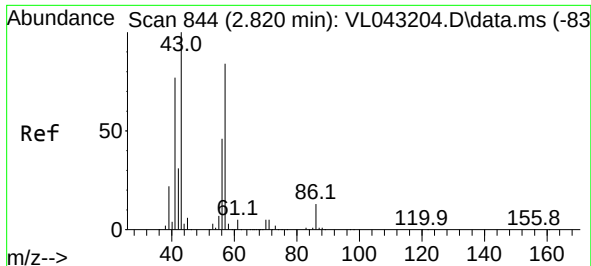
Tgt Ion:	43	Resp:	2999
Ion	Ratio	Lower	Upper
43	100		
86	14.5	6.2	9.2#
42	0.0	8.0	12.0#
44	0.0	4.0	6.0#



#25
 Ethyl Acetate
 Concen: 0.095 ppbv
 RT: 2.823 min Scan# 845
 Delta R.T. -0.007 min
 Lab File: VL043268.D
 Acq: 20 Nov 2025 16:54

Tgt Ion:	43	Resp:	2905
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.1	12.1#
61	0.0	7.0	10.4#
70	3.3	7.0	10.6#

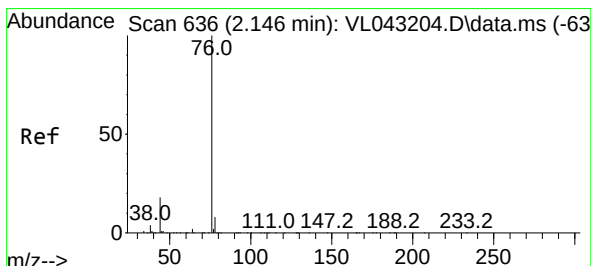
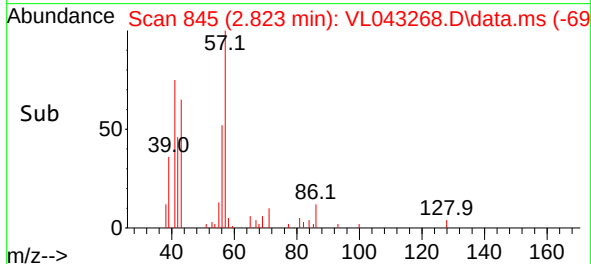
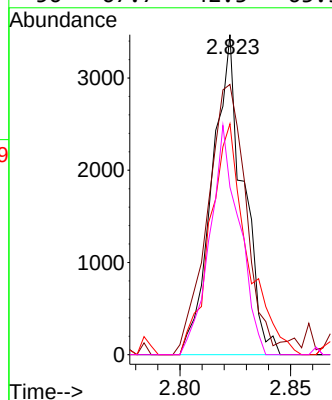
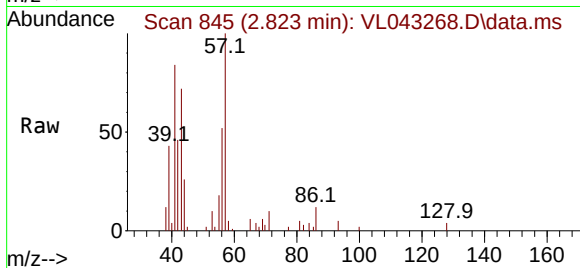




#26
Hexane
Concen: 0.254 ppbv
RT: 2.823 min Scan# 844
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

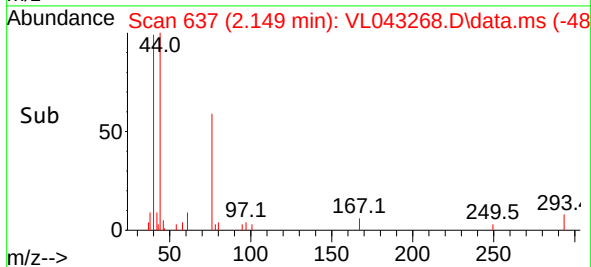
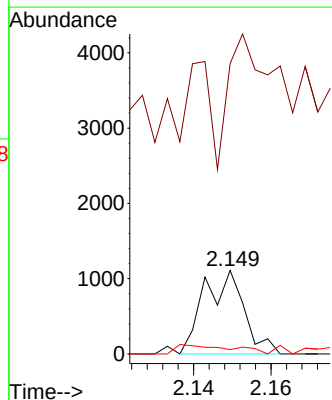
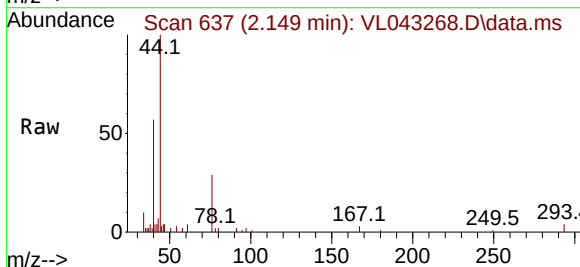
Instrument :
MSVOA_L
ClientSampleId :
SG-2DL

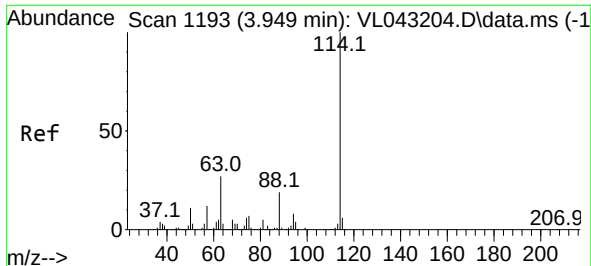
Tgt Ion:	57	Resp:	3399
Ion	Ratio	Lower	Upper
57	100		
41	110.1	74.6	111.8
43	88.4	179.0	268.4#
56	67.7	42.3	63.5#



#27
Carbon Disulfide
Concen: 0.058 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion:	76	Resp:	796
Ion	Ratio	Lower	Upper
76	100		
44	196.2	16.1	24.1#
78	0.0	9.6	14.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.949 min Scan# 1193

Delta R.T. -0.000 min

Lab File: VL043268.D

Acq: 20 Nov 2025 16:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2DL

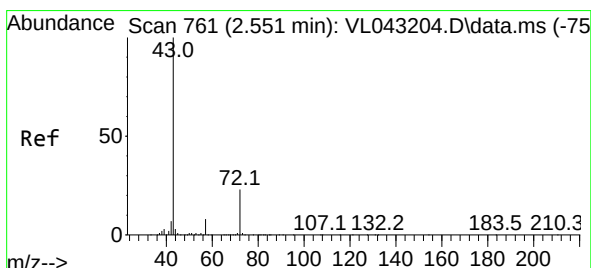
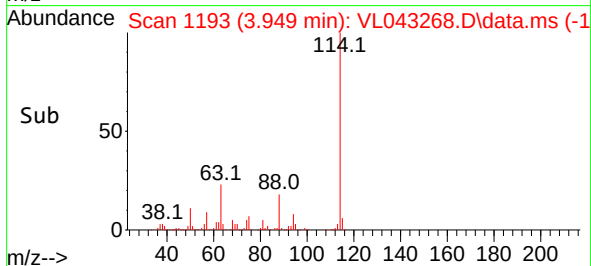
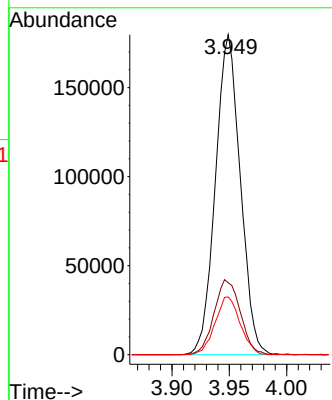
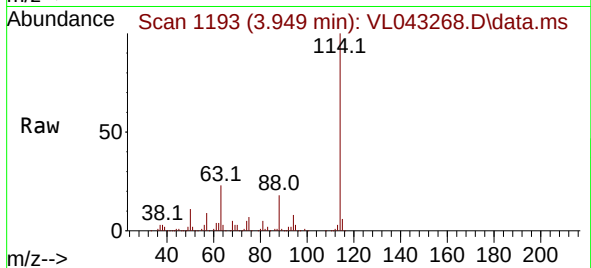
Tgt Ion:114 Resp: 271004

Ion Ratio Lower Upper

114 100

63 24.7 21.0 31.6

88 18.3 14.9 22.3



#34

2-Butanone

Concen: 0.250 ppbv

RT: 2.557 min Scan# 763

Delta R.T. 0.006 min

Lab File: VL043268.D

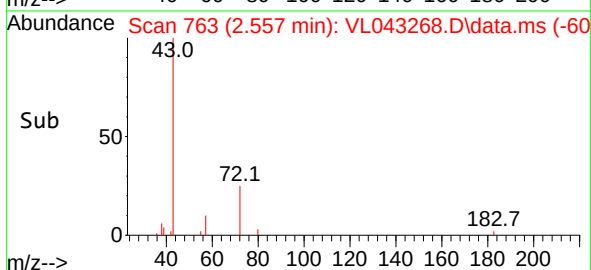
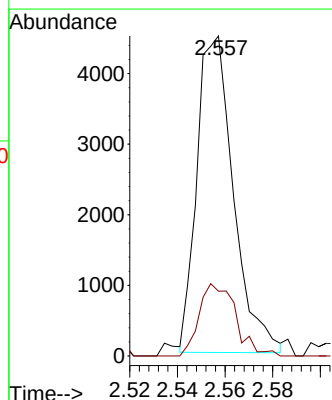
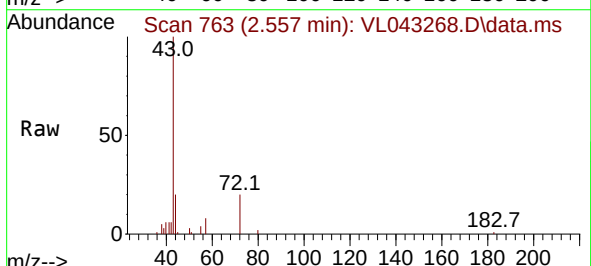
Acq: 20 Nov 2025 16:54

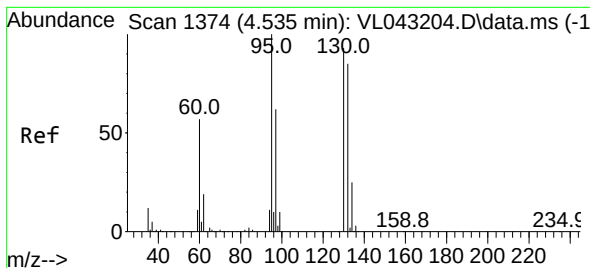
Tgt Ion: 43 Resp: 4785

Ion Ratio Lower Upper

43 100

72 22.8 18.1 27.1





#38

Trichloroethene

Concen: 0.033 ppbv

RT: 4.528 min Scan# 1192

Delta R.T. -0.007 min

Lab File: VL043268.D

Acq: 20 Nov 2025 16:54

Instrument :

MSVOA_L

ClientSampleId :

SG-2DL

Tgt Ion:130 Resp: 338

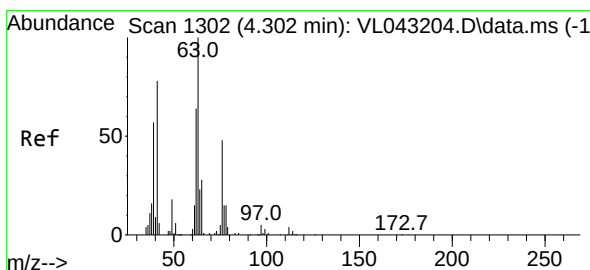
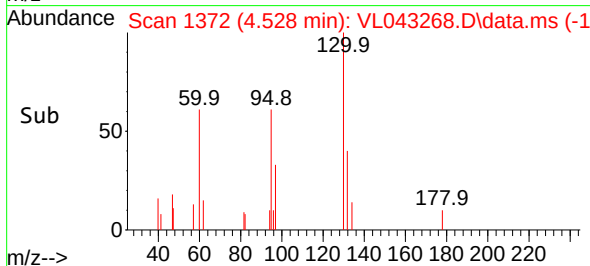
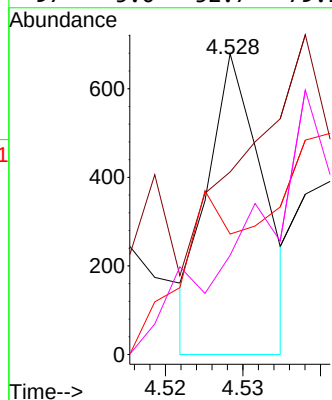
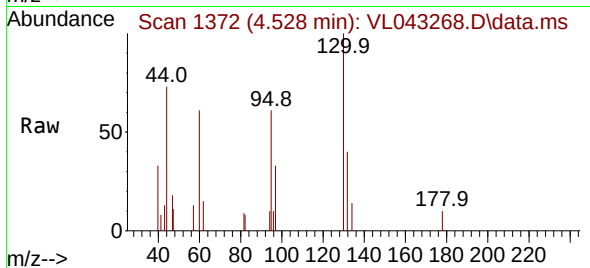
Ion Ratio Lower Upper

130 100

95 45.2 85.7 128.5#

132 23.4 73.4 110.0#

97 5.0 52.7 79.1#



#39

1,2-Dichloropropane

Concen: 7.039 ppbv

RT: 3.946 min Scan# 1192

Delta R.T. -0.356 min

Lab File: VL043268.D

Acq: 20 Nov 2025 16:54

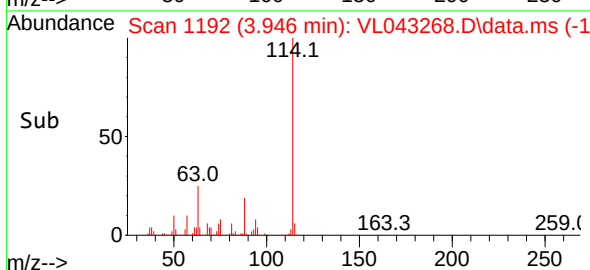
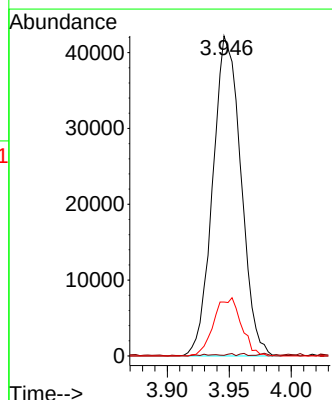
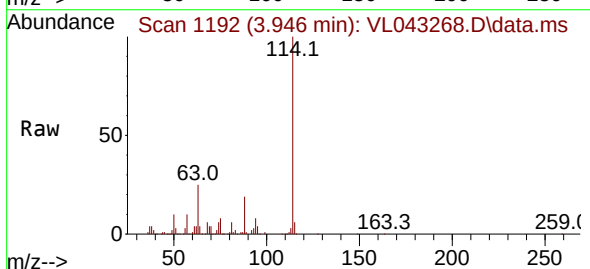
Tgt Ion: 63 Resp: 66861

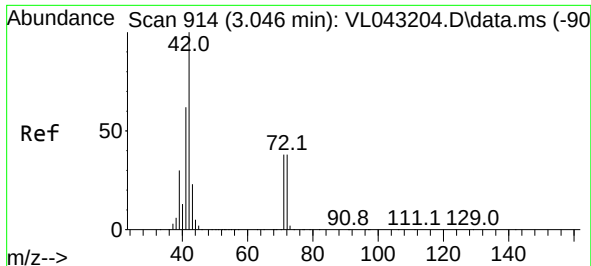
Ion Ratio Lower Upper

63 100

41 0.1 62.6 93.8#

62 16.8 51.0 76.6#

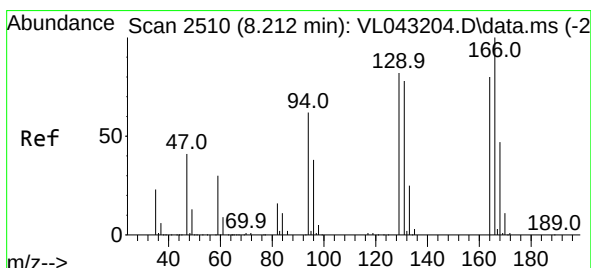
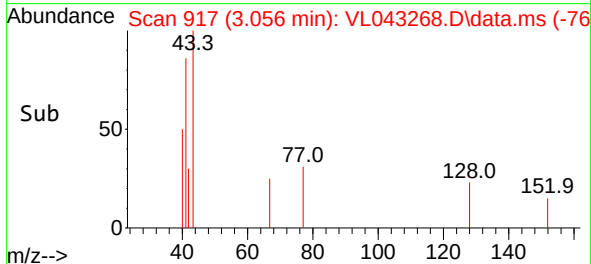
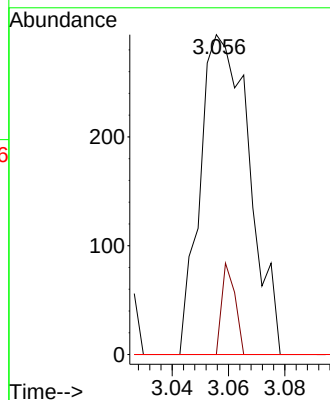
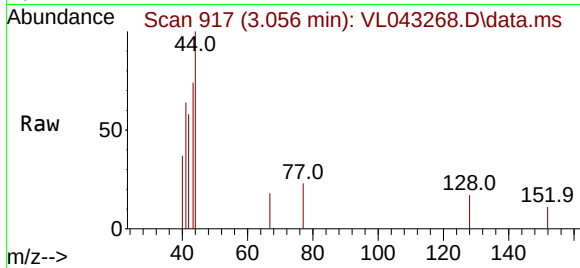




#41
Tetrahydrofuran
Concen: 0.034 ppbv
RT: 3.056 min Scan# 914
Delta R.T. 0.010 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

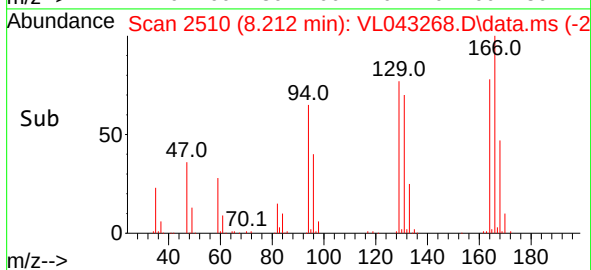
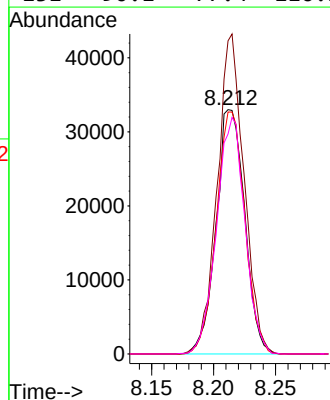
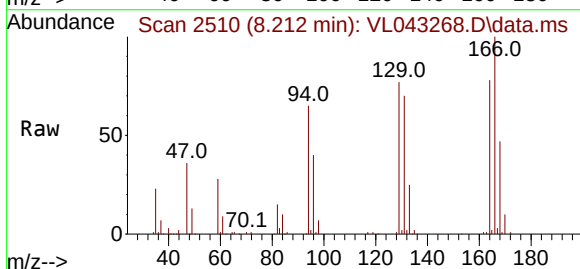
Instrument :
MSVOA_L
ClientSampleId :
SG-2DL

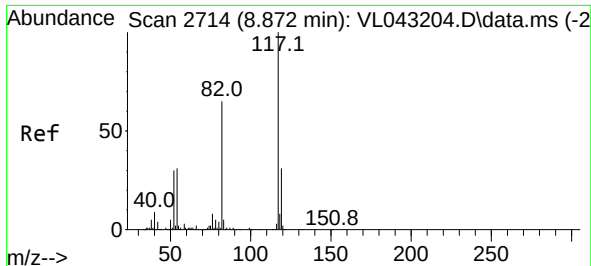
Tgt Ion: 42 Resp: 356
Ion Ratio Lower Upper
42 100
72 0.0 30.6 46.0#
71 0.0 30.5 45.7#



#52
Tetrachloroethene
Concen: 5.494 ppbv
RT: 8.212 min Scan# 2510
Delta R.T. -0.000 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 164 Resp: 53043
Ion Ratio Lower Upper
164 100
166 128.2 99.4 149.2
129 99.0 81.8 122.8
131 90.1 77.4 116.2

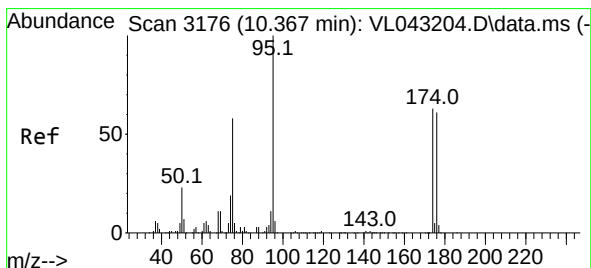
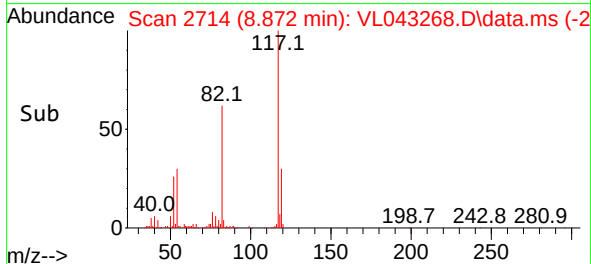
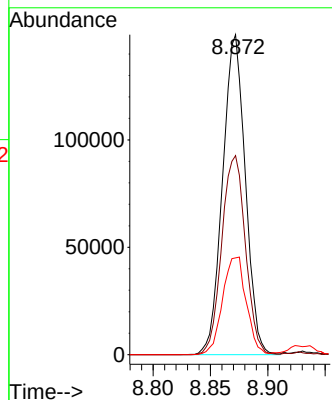
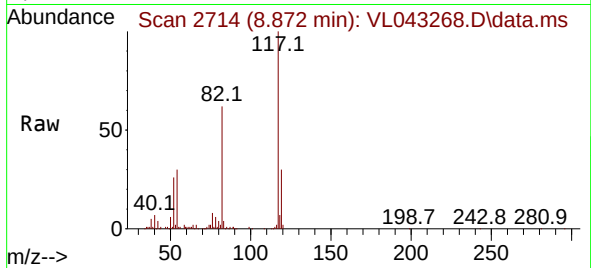




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Instrument :
MSVOA_L
ClientSampleId :
SG-2DL

Tgt Ion:117 Resp: 205327
Ion Ratio Lower Upper
117 100
82 64.9 56.1 84.1
119 32.0 25.0 37.6



#68
1-Bromo-4-Fluorobenzene
Concen: 9.712 ppbv
RT: 10.367 min Scan# 3176
Delta R.T. -0.000 min
Lab File: VL043268.D
Acq: 20 Nov 2025 16:54

Tgt Ion: 95 Resp: 146175
Ion Ratio Lower Upper
95 100
174 66.0 50.2 75.2
175 4.9 4.1 6.1

