

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL092225\
 Data File : VL042961.D
 Acq On : 22 Sep 2025 17:28
 Operator : SY/MD
 Sample : Q3111-01DL 40X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: Sep 23 02:52:38 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL092225AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Sep 23 02:39:16 2025
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	2.790	49	156230	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	475755	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.888	117	424779	10.000	ppbv	0.01

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	311114	9.812	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.100%

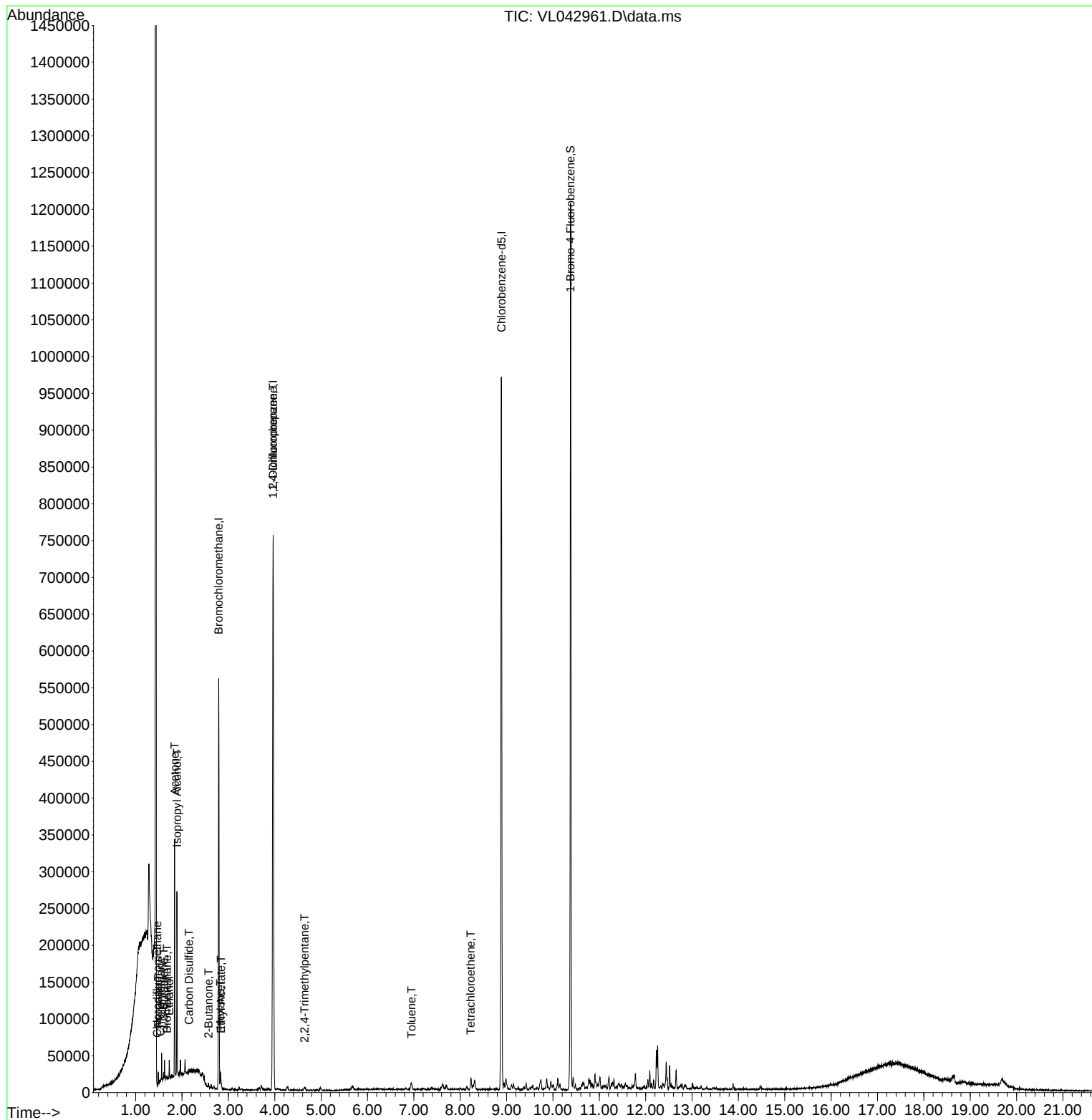
Target Compounds						Qvalue
3) Chlorodifluoromethane	1.466	51	1880	0.072	ppbv #	65
4) Chloromethane	1.534	50	305	0.032	ppbv	99
6) Bromomethane	1.677	94	119	0.039	ppbv #	33
9) Propene	1.486	41	2745	0.241	ppbv	94
13) Ethanol	1.722	45	8742	7.909	ppbv	100
15) Acetone	1.839	43	133763	6.574	ppbv	95
16) 1,3-Butadiene	1.606	39	1064	0.111	ppbv #	11
19) Isopropyl Alcohol	1.890	45	108806	8.895	ppbv	88
20) Methylene Chloride	2.065	84	2934	Below Cal		86
25) Ethyl Acetate	2.839	43	2208	0.043	ppbv #	75
26) Hexane	2.826	57	5865	0.250	ppbv #	78
27) Carbon Disulfide	2.149	76	2225	0.106	ppbv #	1
34) 2-Butanone	2.570	43	3852	0.116	ppbv	100
39) 1,2-Dichloropropane	3.962	63	116209	7.125	ppbv #	23
44) 2,2,4-Trimethylpentane	4.645	57	2547	0.033	ppbv #	26
52) Tetrachloroethene	8.228	164	1470	0.085	ppbv	88
53) Toluene	6.949	91	3991	0.075	ppbv #	46

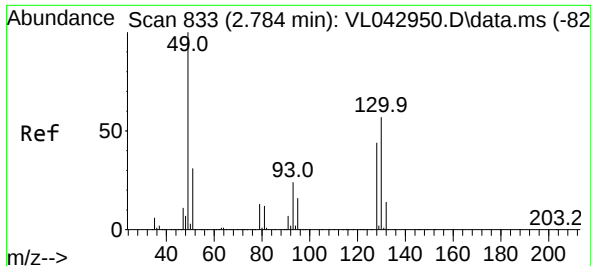
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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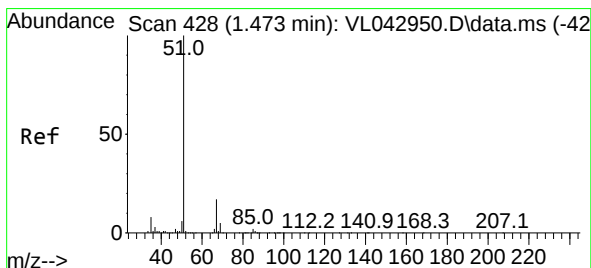
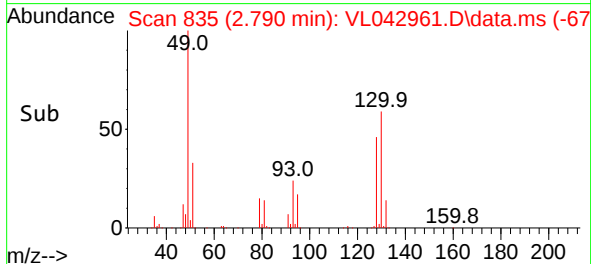
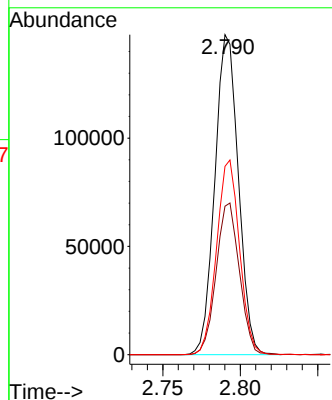
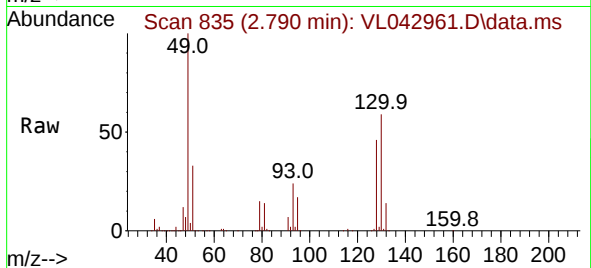




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 81
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

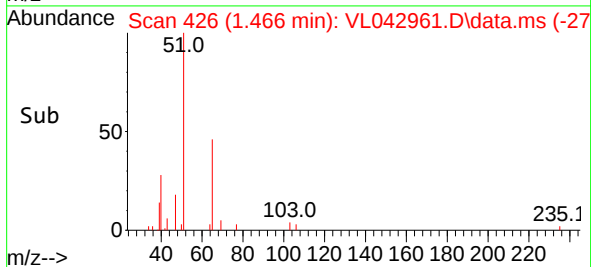
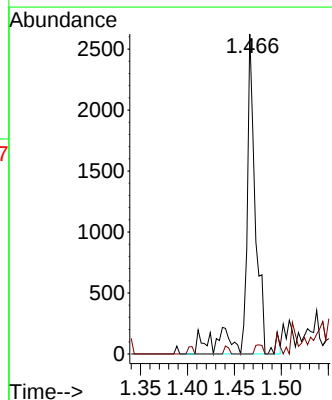
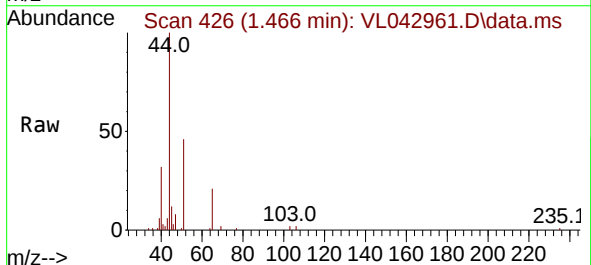
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

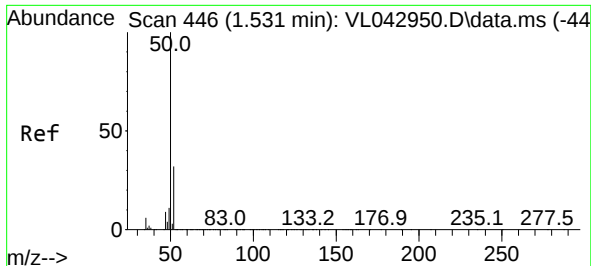
Tgt Ion: 49 Resp: 156230
Ion Ratio Lower Upper
49 100
128 46.9 22.9 68.8
130 59.5 29.1 87.3



#3
Chlorodifluoromethane
Concen: 0.072 ppbv
RT: 1.466 min Scan# 426
Delta R.T. -0.007 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 51 Resp: 1880
Ion Ratio Lower Upper
51 100
67 2.2 13.8 20.8#

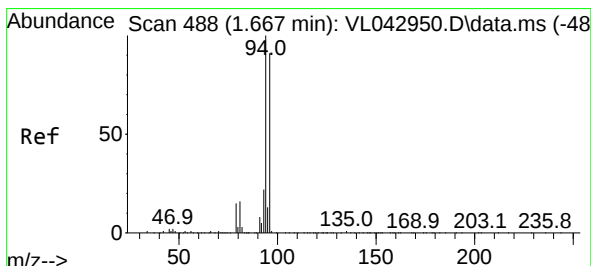
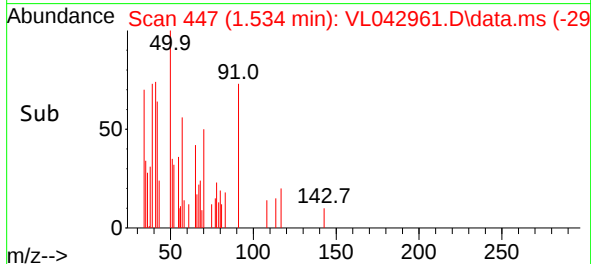
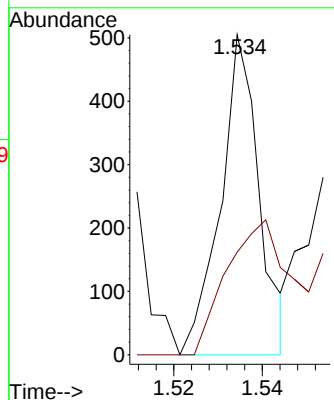
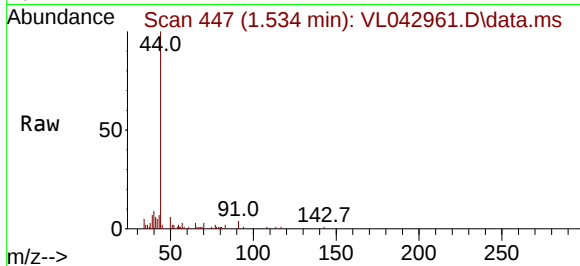




#4
Chloromethane
Concen: 0.032 ppbv
RT: 1.534 min Scan# 446
Delta R.T. 0.003 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

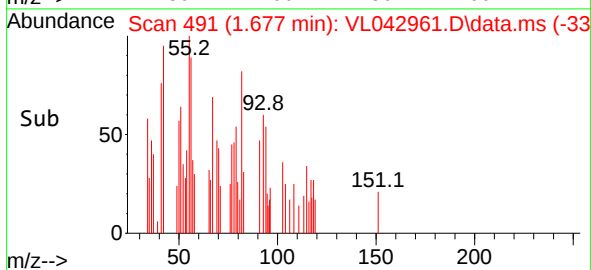
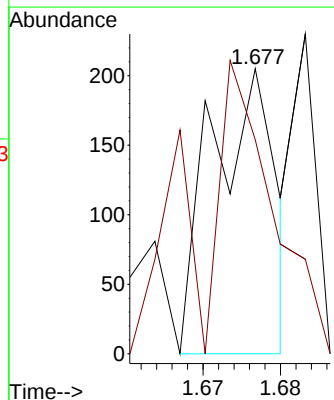
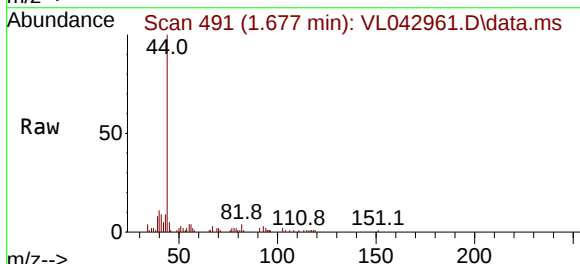
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

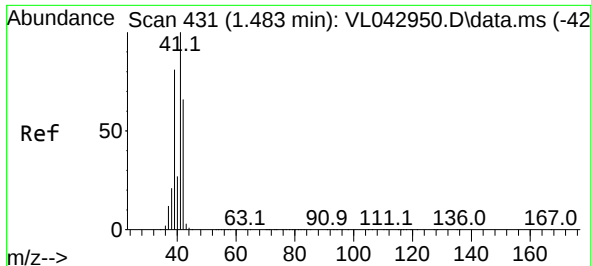
Tgt Ion: 50 Resp: 305
Ion Ratio Lower Upper
50 100
52 32.1 25.9 38.9



#6
Bromomethane
Concen: 0.039 ppbv
RT: 1.677 min Scan# 491
Delta R.T. 0.010 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 94 Resp: 119
Ion Ratio Lower Upper
94 100
96 26.9 72.6 108.8#





#9

Propene

Concen: 0.241 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.003 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

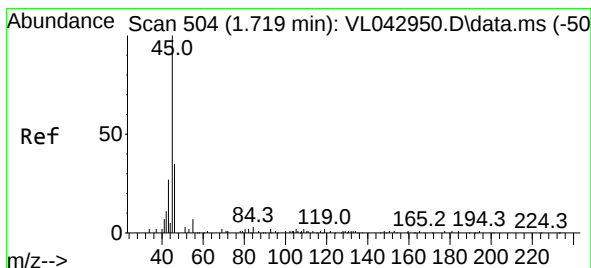
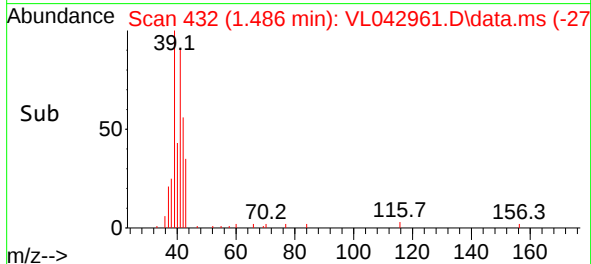
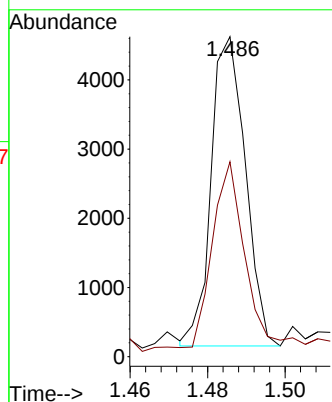
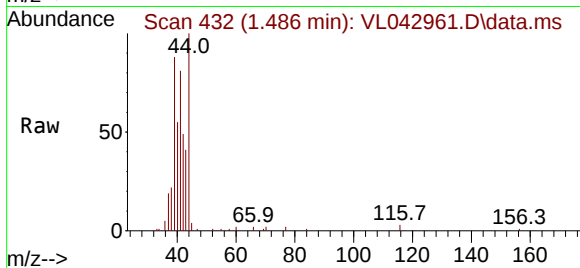
SV1DL

Tgt Ion: 41 Resp: 2745

Ion Ratio Lower Upper

41 100

42 76.5 57.4 86.2



#13

Ethanol

Concen: 7.909 ppbv

RT: 1.722 min Scan# 505

Delta R.T. 0.003 min

Lab File: VL042961.D

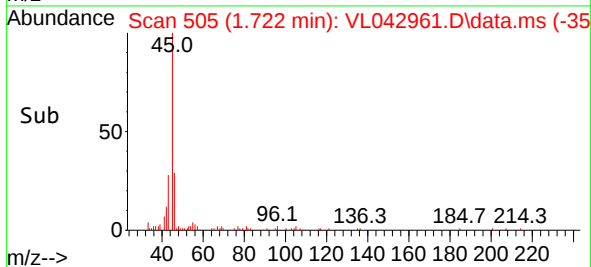
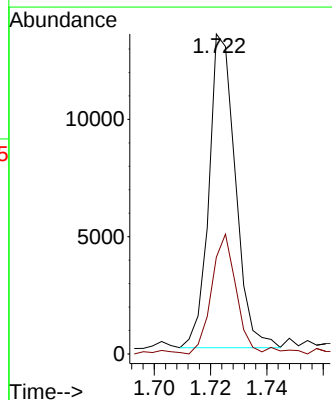
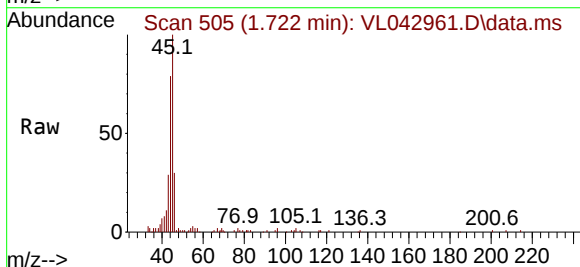
Acq: 22 Sep 2025 17:28

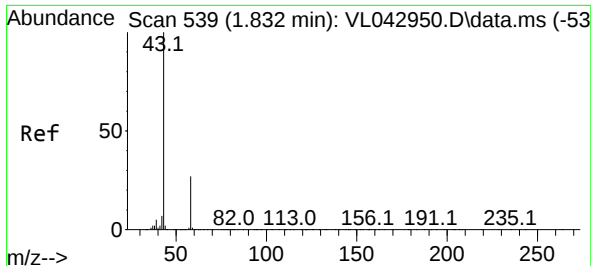
Tgt Ion: 45 Resp: 8742

Ion Ratio Lower Upper

45 100

46 40.7 16.2 64.6





#15

Acetone

Concen: 6.574 ppbv

RT: 1.839 min Scan# 54

Delta R.T. 0.006 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

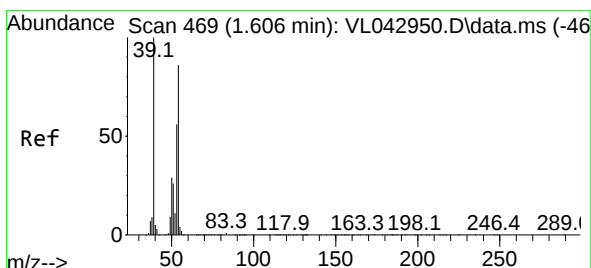
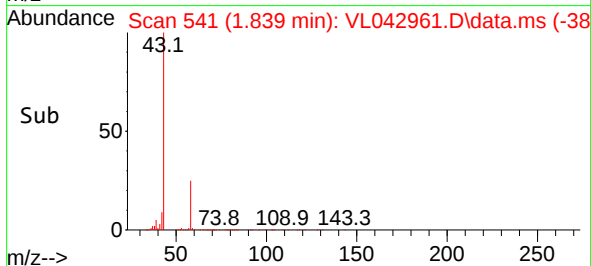
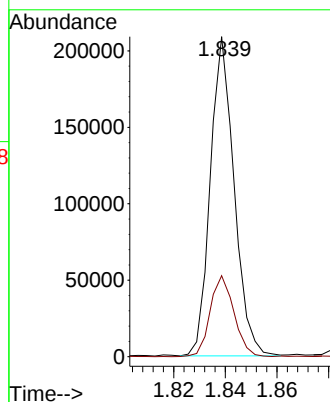
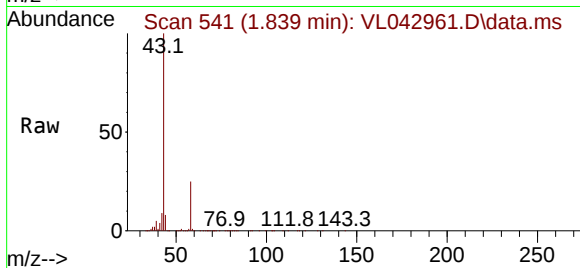
SV1DL

Tgt Ion: 43 Resp: 133763

Ion Ratio Lower Upper

43 100

58 25.3 22.3 33.5



#16

1,3-Butadiene

Concen: 0.111 ppbv

RT: 1.606 min Scan# 469

Delta R.T. -0.000 min

Lab File: VL042961.D

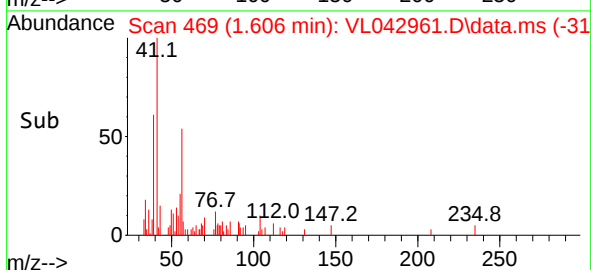
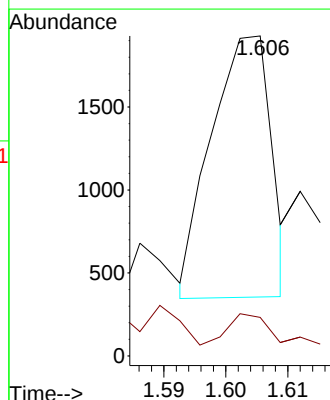
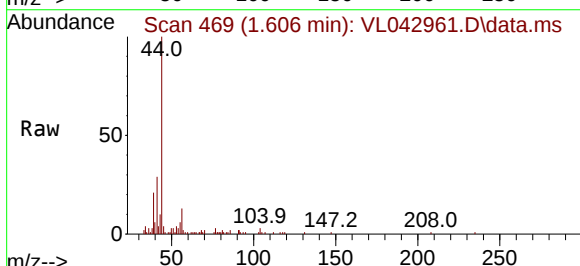
Acq: 22 Sep 2025 17:28

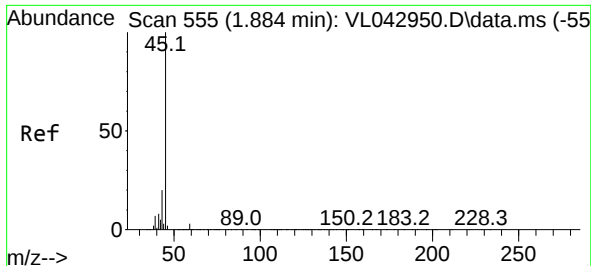
Tgt Ion: 39 Resp: 1064

Ion Ratio Lower Upper

39 100

54 0.0 60.8 91.2#

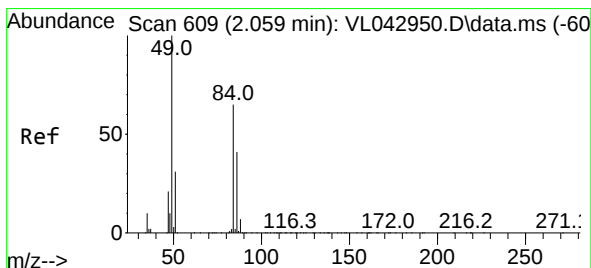
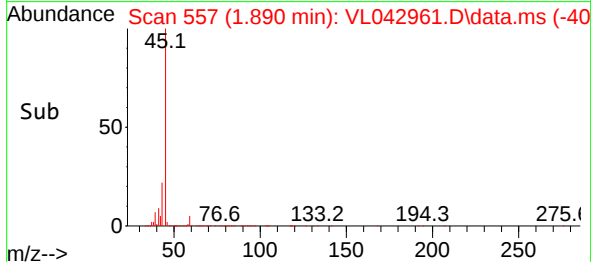
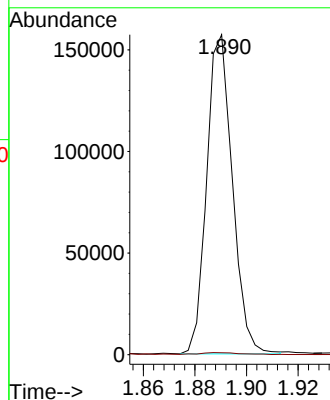
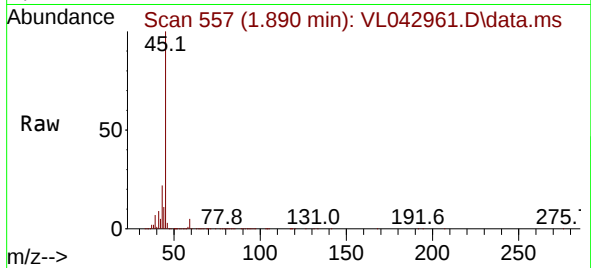




#19
Isopropyl Alcohol
Concen: 8.895 ppbv
RT: 1.890 min Scan# 511
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

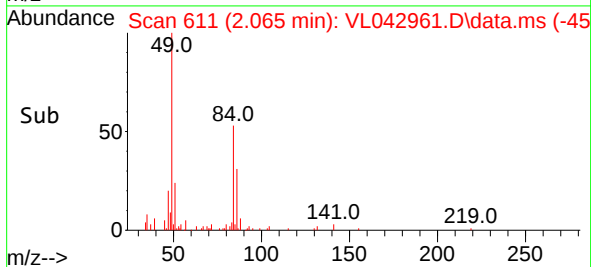
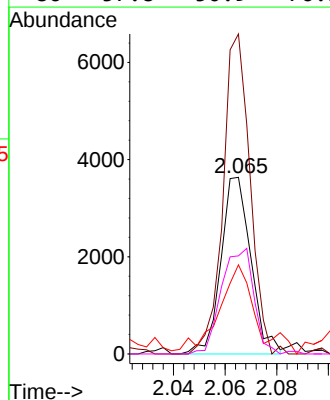
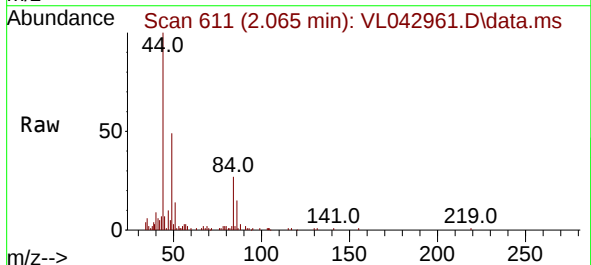
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

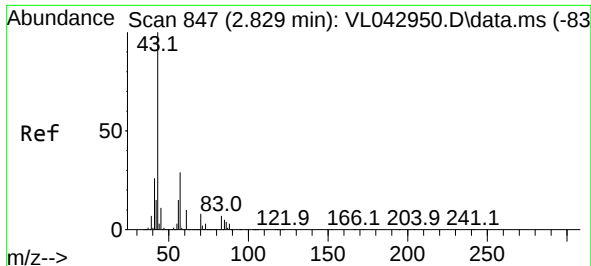
Tgt Ion: 45 Resp: 108806
Ion Ratio Lower Upper
45 100
58 31.6 31.0 46.6



#20
Methylene Chloride
Concen: Below Cal
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 84 Resp: 2934
Ion Ratio Lower Upper
84 100
49 181.2 124.1 186.1
51 49.4 39.8 59.8
86 57.8 50.9 76.3





#25

Ethyl Acetate

Concen: 0.043 ppbv

RT: 2.839 min Scan# 847

Delta R.T. 0.010 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

Tgt Ion: 43 Resp: 2208

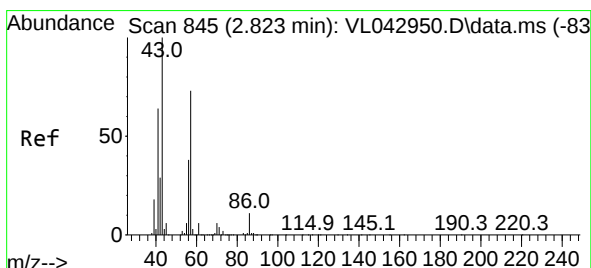
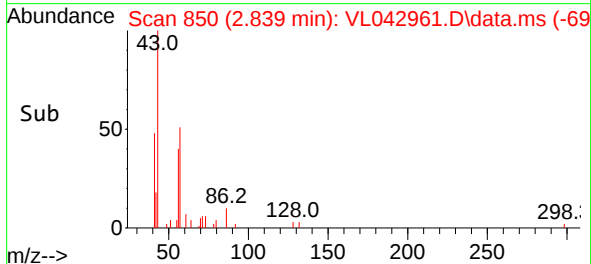
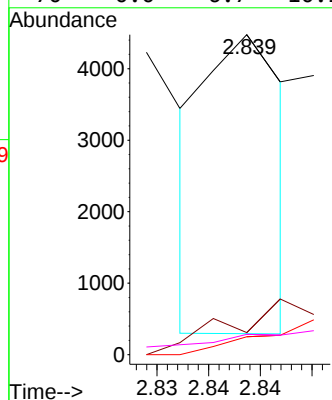
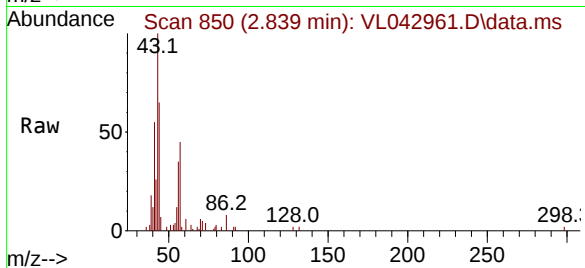
Ion Ratio Lower Upper

43 100

45 0.0 7.7 11.5#

61 0.0 7.1 10.7#

70 0.0 6.7 10.1#



#26

Hexane

Concen: 0.250 ppbv

RT: 2.826 min Scan# 846

Delta R.T. 0.003 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Tgt Ion: 57 Resp: 5865

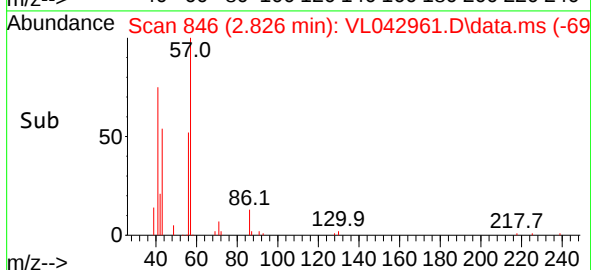
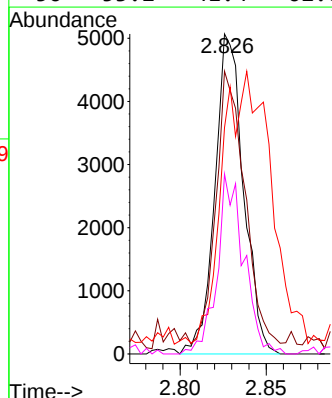
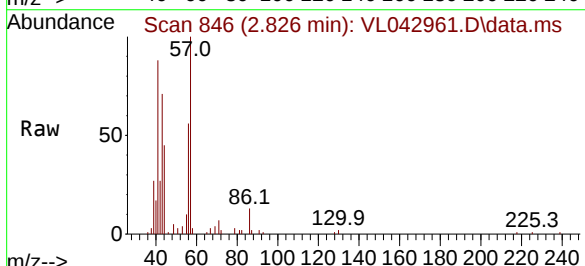
Ion Ratio Lower Upper

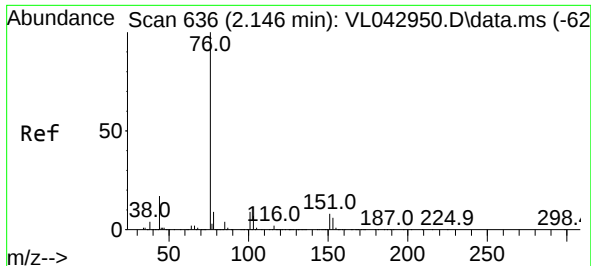
57 100

41 95.1 71.7 107.5

43 171.6 180.8 271.2#

56 53.2 41.4 62.0





#27

Carbon Disulfide

Concen: 0.106 ppbv

RT: 2.149 min Scan# 61

Delta R.T. 0.003 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

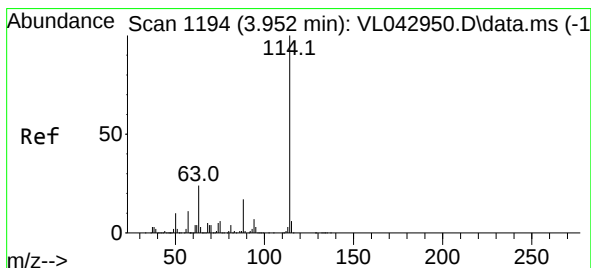
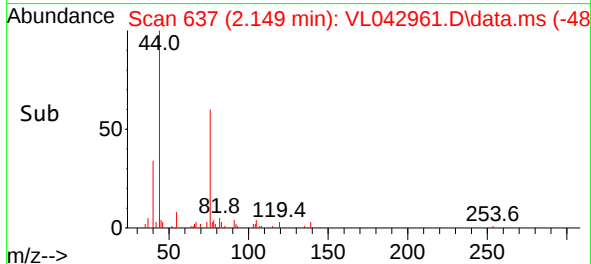
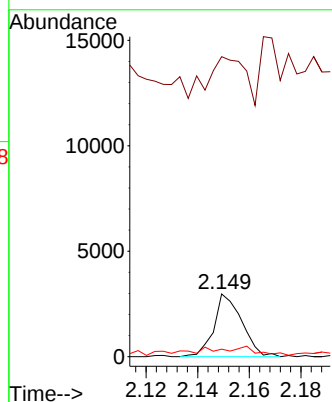
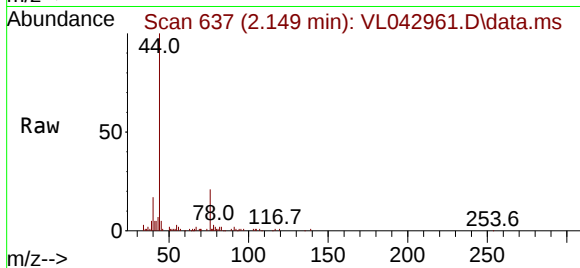
Tgt Ion: 76 Resp: 2225

Ion Ratio Lower Upper

76 100

44 1848.8 15.6 23.4#

78 26.8 8.9 13.3#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.965 min Scan# 1198

Delta R.T. 0.013 min

Lab File: VL042961.D

Acq: 22 Sep 2025 17:28

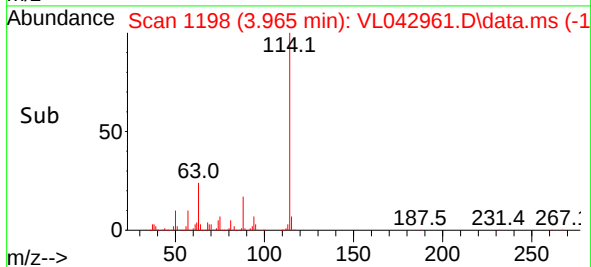
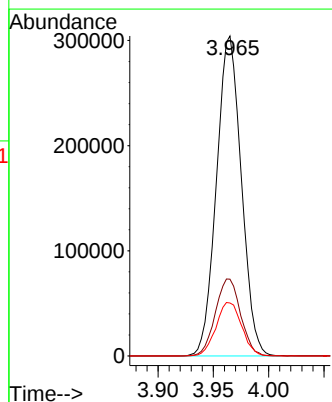
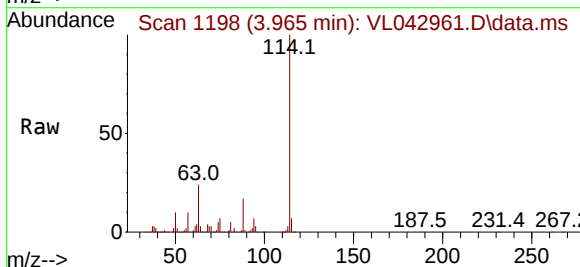
Tgt Ion: 114 Resp: 475755

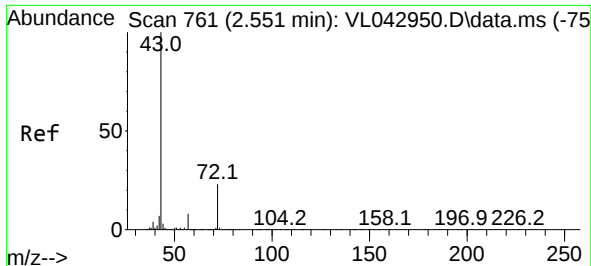
Ion Ratio Lower Upper

114 100

63 24.4 19.4 29.2

88 17.3 14.2 21.2

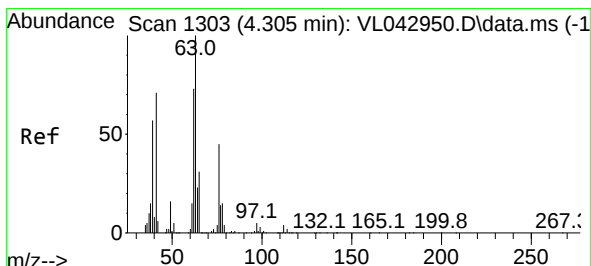
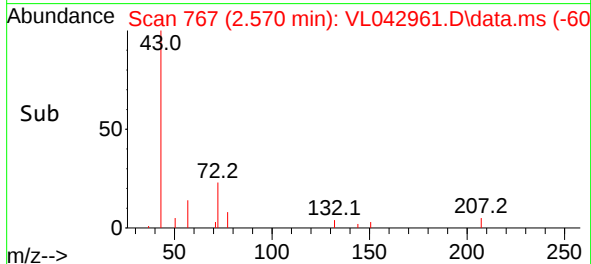
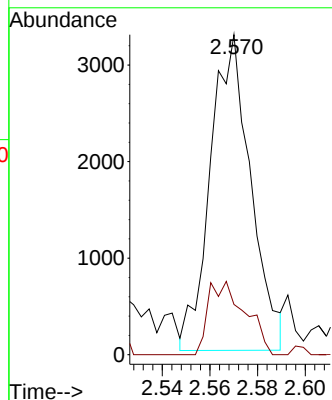
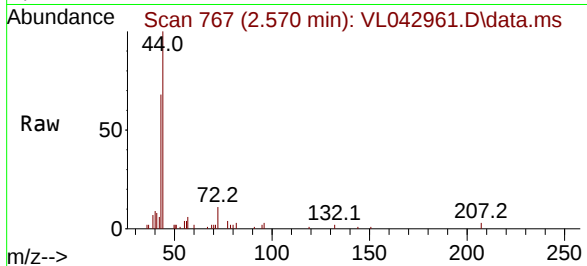




#34
2-Butanone
Concen: 0.116 ppbv
RT: 2.570 min Scan# 71
Delta R.T. 0.019 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

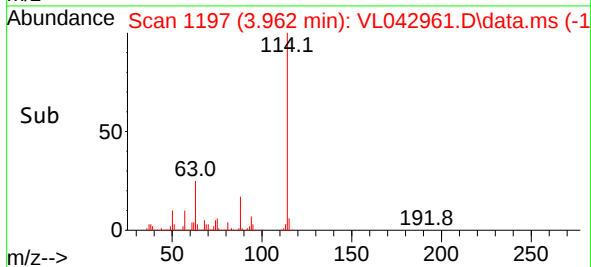
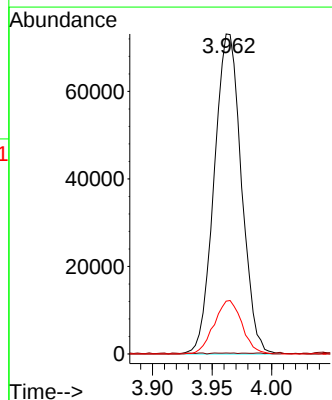
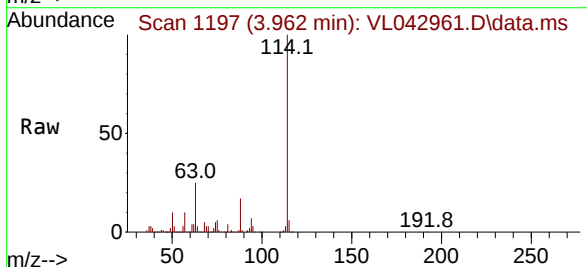
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

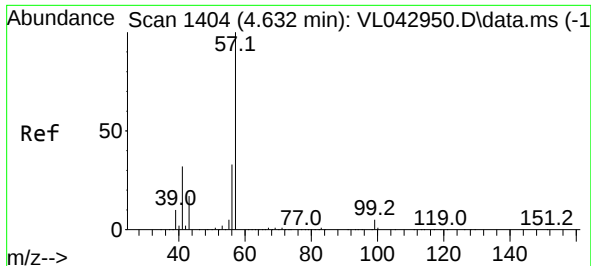
Tgt Ion: 43 Resp: 3852
Ion Ratio Lower Upper
43 100
72 22.1 17.7 26.5



#39
1,2-Dichloropropane
Concen: 7.125 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.343 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 63 Resp: 116209
Ion Ratio Lower Upper
63 100
41 0.2 57.5 86.3#
62 16.5 58.5 87.7#

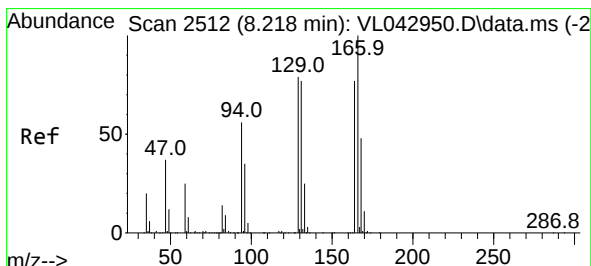
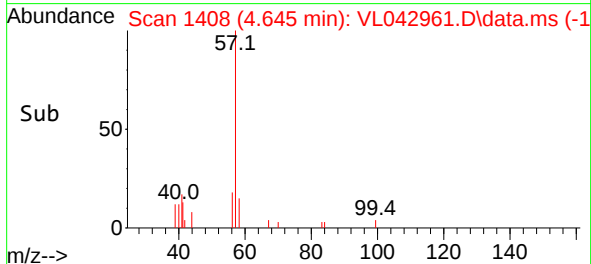
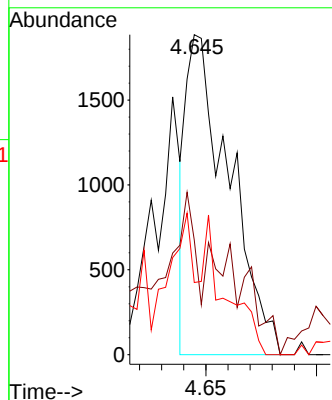
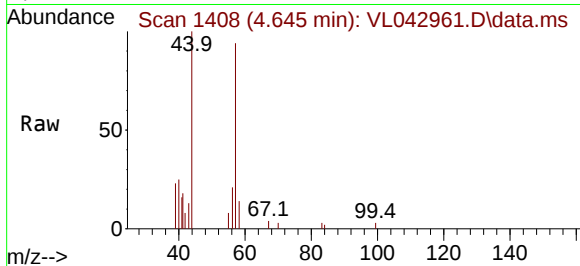




#44
 2,2,4-Trimethylpentane
 Concen: 0.033 ppbv
 RT: 4.645 min Scan# 1408
 Delta R.T. 0.013 min
 Lab File: VL042961.D
 Acq: 22 Sep 2025 17:28

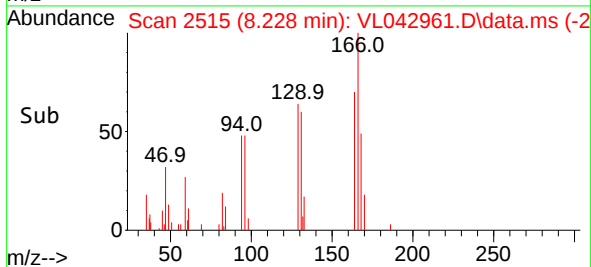
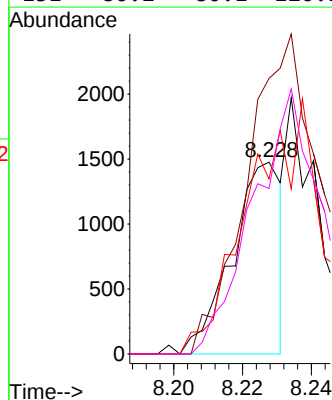
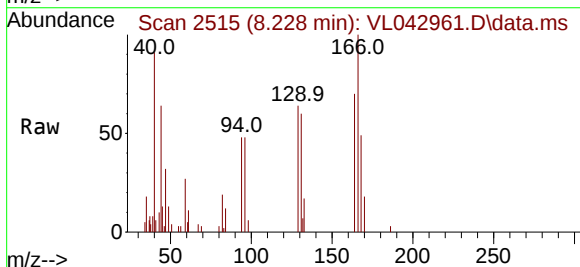
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

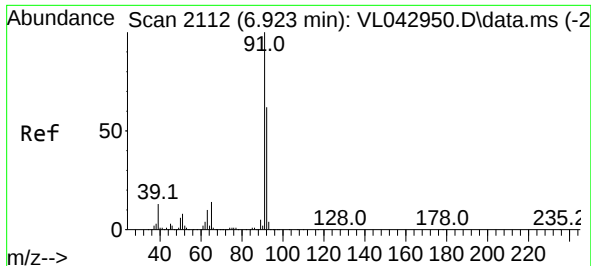
Tgt Ion: 57 Resp: 2547
 Ion Ratio Lower Upper
 57 100
 41 71.6 25.5 38.3#
 56 75.3 25.8 38.8#



#52
 Tetrachloroethene
 Concen: 0.085 ppbv
 RT: 8.228 min Scan# 2515
 Delta R.T. 0.010 min
 Lab File: VL042961.D
 Acq: 22 Sep 2025 17:28

Tgt Ion: 164 Resp: 1470
 Ion Ratio Lower Upper
 164 100
 166 143.6 103.5 155.3
 129 91.2 82.2 123.4
 131 86.2 80.1 120.1

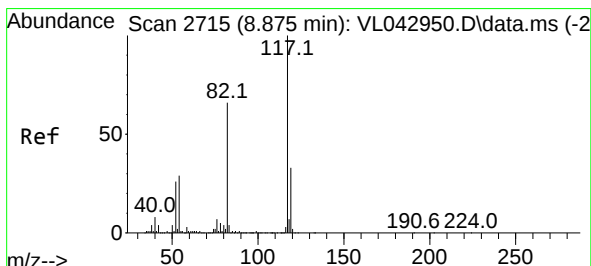
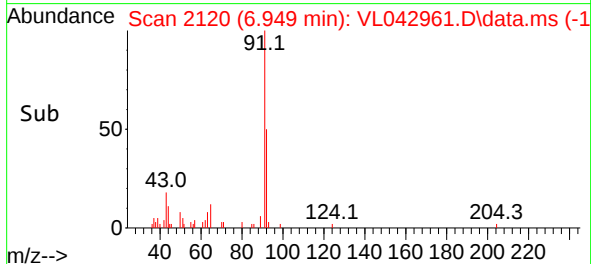
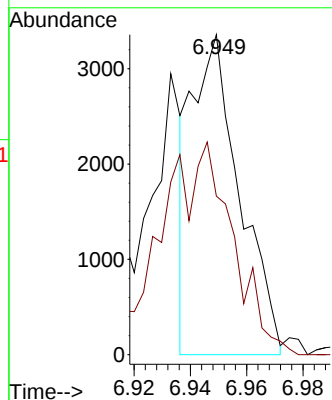
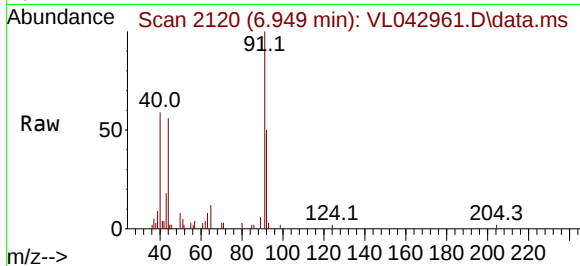




#53
Toluene
Concen: 0.075 ppbv
RT: 6.949 min Scan# 2112
Delta R.T. 0.026 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

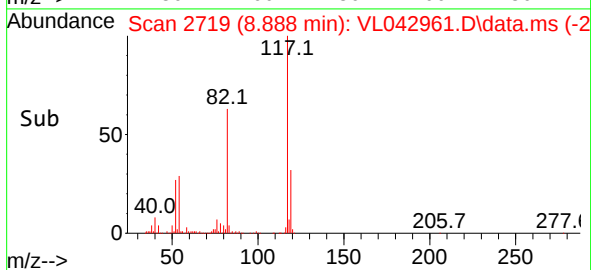
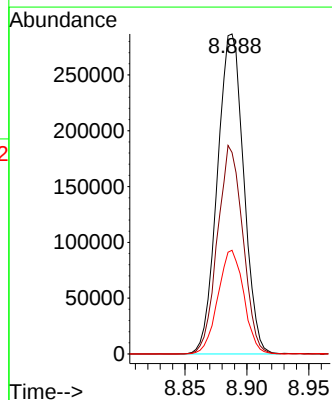
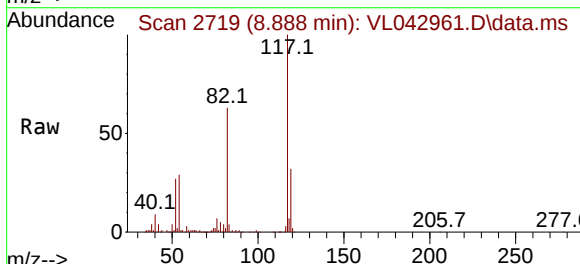
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

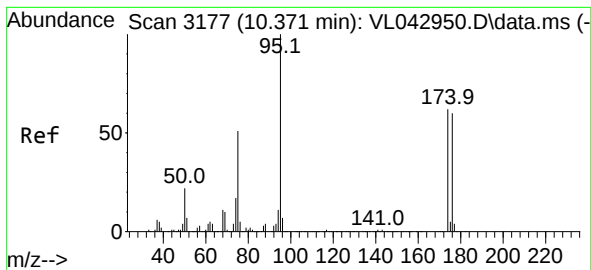
Tgt Ion: 91 Resp: 3991
Ion Ratio Lower Upper
91 100
92 100.8 48.2 72.2#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.013 min
Lab File: VL042961.D
Acq: 22 Sep 2025 17:28

Tgt Ion: 117 Resp: 424779
Ion Ratio Lower Upper
117 100
82 63.0 52.8 79.2
119 31.9 26.5 39.7





#68

1-Bromo-4-Fluorobenzene

Concen: 9.812 ppbv

RT: 10.380 min Scan# 31

Delta R.T. 0.010 min

Lab File: VL042961.D

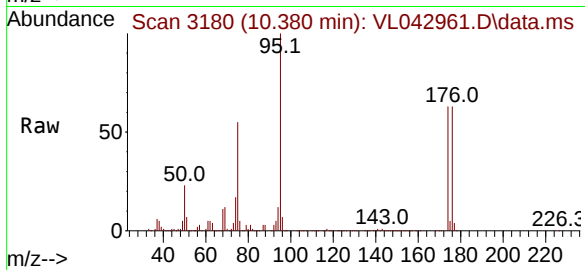
Acq: 22 Sep 2025 17:28

Instrument :

MSVOA_L

ClientSampleId :

SV1DL



Tgt Ion: 95 Resp: 311114

Ion Ratio Lower Upper

95 100

174 64.4 51.4 77.2

175 5.1 4.0 6.0

