

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL052925\
 Data File : VL042590.D
 Acq On : 29 May 2025 17:55
 Operator : SY/MD
 Sample : Q2124-01DL 20X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Quant Time: May 30 02:11:12 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 30 02:01:56 2025
 Response via : Initial Calibration

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

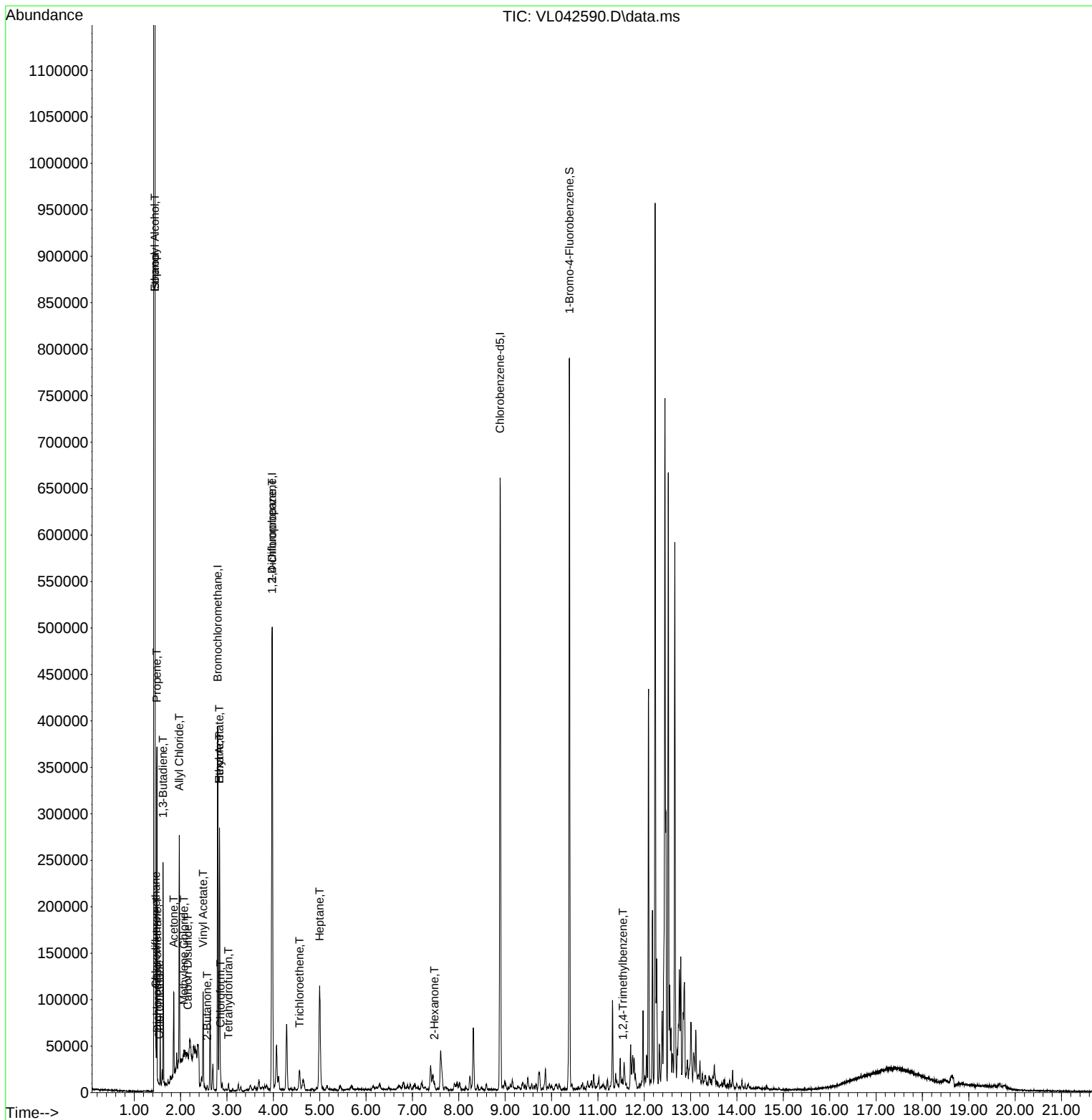
Internal Standards						
1) Bromochloromethane	2.800	49	109658	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.975	114	314559	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.891	117	278591	10.000	ppbv	0.00

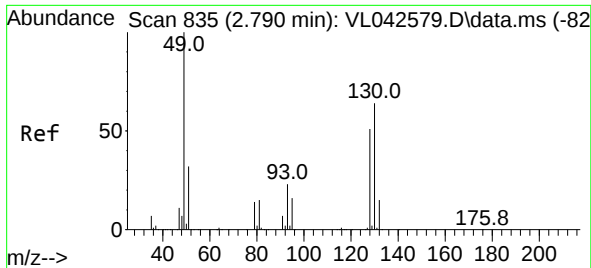
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	209427	10.028	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.300%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	438	0.032	ppbv #	80
3) Chlorodifluoromethane	1.463	51	2950	0.159	ppbv #	73
4) Chloromethane	1.535	50	164	0.031	ppbv #	63
9) Propene	1.489	41	25753	3.445	ppbv #	67
10) Heptane	4.998	43	52482	2.491	ppbv	98
13) Ethanol	1.444	45	85920	96.449	ppbv #	1
15) Acetone	1.852	43	20877	1.581	ppbv #	63
16) 1,3-Butadiene	1.622	39	15518	2.480	ppbv #	18
19) Isopropyl Alcohol	1.444	45	85920	10.881	ppbv #	39
20) Methylene Chloride	2.072	84	1221	0.280	ppbv	94
21) Allyl Chloride	1.971	41	40944	4.393	ppbv #	55
23) Vinyl Acetate	2.486	43	32868	1.841	ppbv #	47
25) Ethyl Acetate	2.839	43	50811	1.406	ppbv #	77
26) Hexane	2.839	57	72379	4.407	ppbv #	41
27) Carbon Disulfide	2.156	76	1080	0.086	ppbv #	1
29) Chloroform	2.862	83	5962	0.279	ppbv	100
34) 2-Butanone	2.573	43	3661	0.163	ppbv	98
38) Trichloroethene	4.564	130	1000	0.076	ppbv #	82
39) 1,2-Dichloropropane	3.972	63	74713	6.522	ppbv #	24
41) Tetrahydrofuran	3.033	42	1175	0.089	ppbv #	39
51) 2-Hexanone	7.477	43	908	0.037	ppbv #	1
74) 1,2,4-Trimethylbenzene	11.542	105	1281	0.030	ppbv #	67

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

Quant Time: May 30 02:11:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL052925AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri May 30 02:01:56 2025
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 2.800 min Scan# 835

Delta R.T. 0.010 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

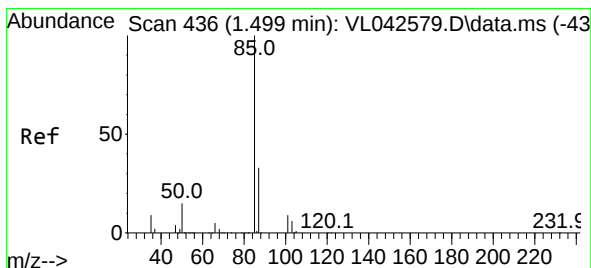
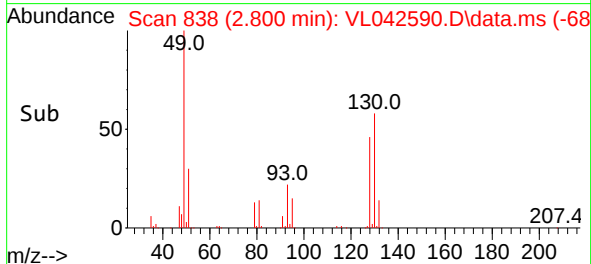
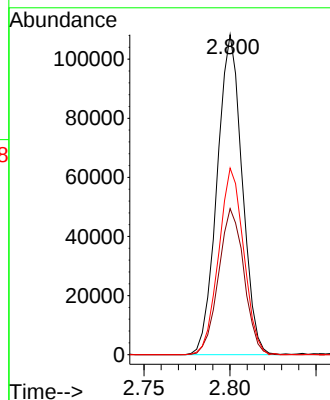
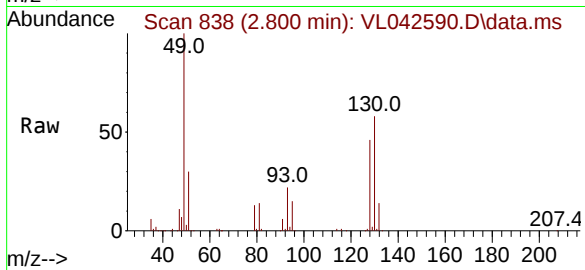
Tgt Ion: 49 Resp: 109658

Ion Ratio Lower Upper

49 100

128 46.1 24.2 72.6

130 58.2 30.4 91.2



#2

Dichlorodifluoromethane

Concen: 0.032 ppbv

RT: 1.499 min Scan# 436

Delta R.T. 0.000 min

Lab File: VL042590.D

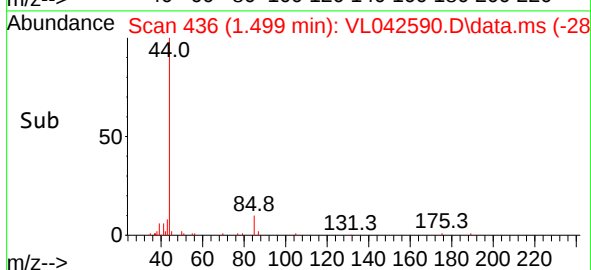
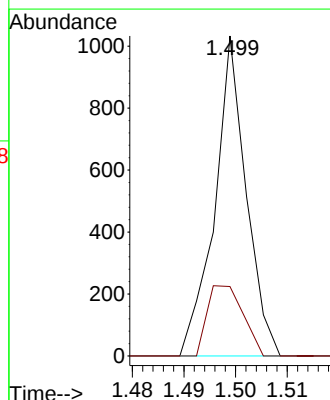
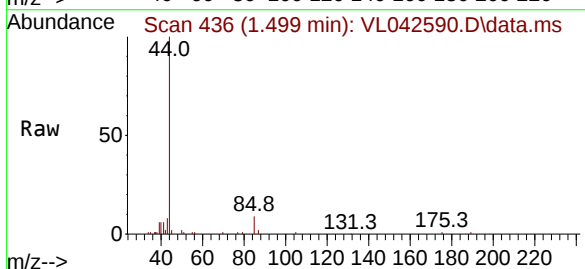
Acq: 29 May 2025 17:55

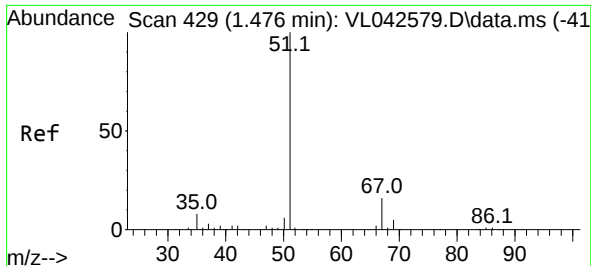
Tgt Ion: 85 Resp: 438

Ion Ratio Lower Upper

85 100

87 21.7 26.6 39.8#

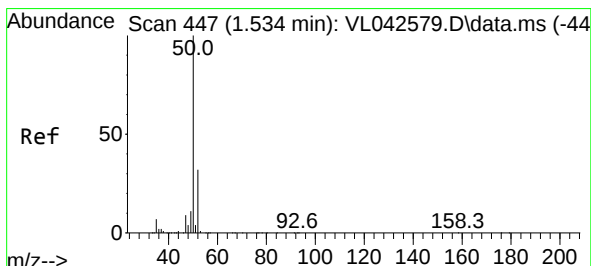
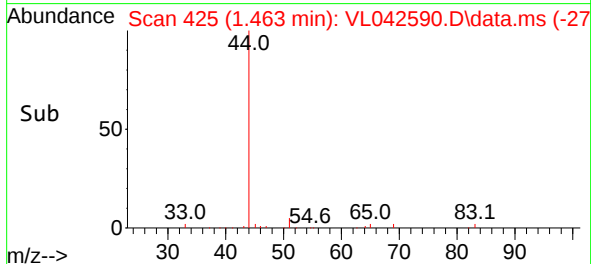
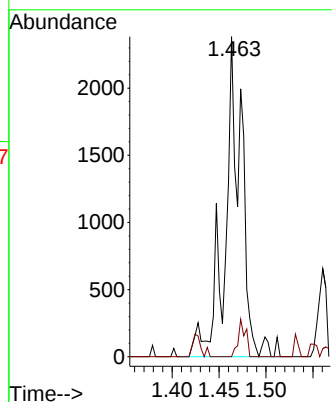
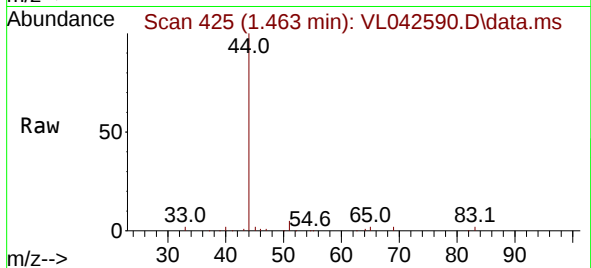




#3
Chlorodifluoromethane
Concen: 0.159 ppbv
RT: 1.463 min Scan# 41
Delta R.T. -0.013 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

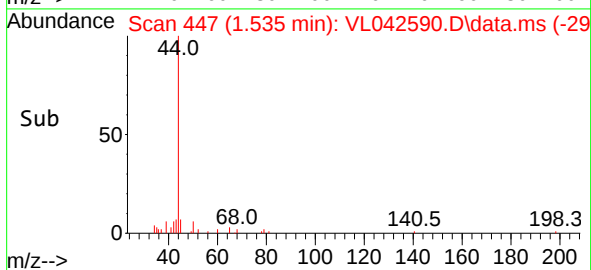
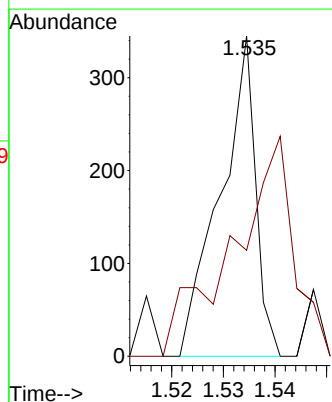
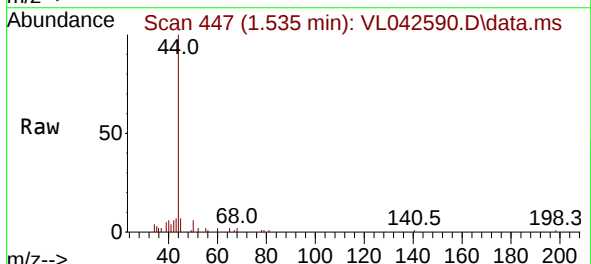
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

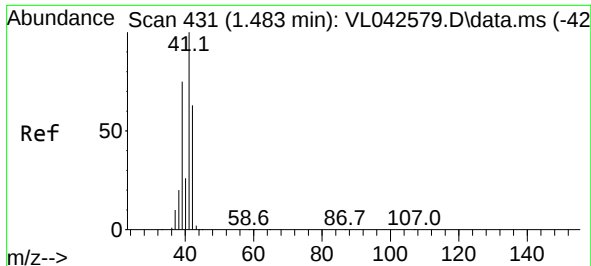
Tgt Ion: 51 Resp: 2950
Ion Ratio Lower Upper
51 100
67 5.2 13.4 20.2#



#4
Chloromethane
Concen: 0.031 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.000 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion: 50 Resp: 164
Ion Ratio Lower Upper
50 100
52 11.6 25.8 38.6#





#9

Propene

Concen: 3.445 ppbv

RT: 1.489 min Scan# 41

Delta R.T. 0.007 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

Instrument :

MSVOA_L

ClientSampleId :

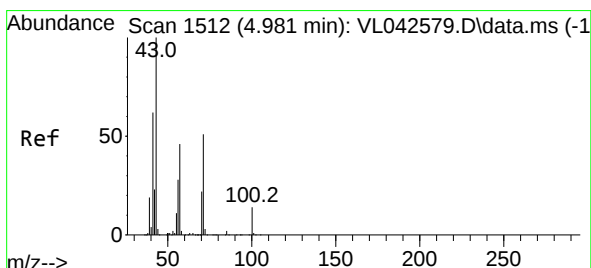
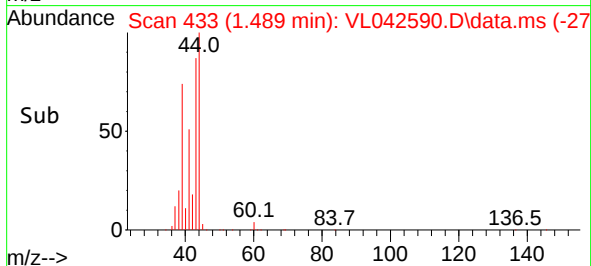
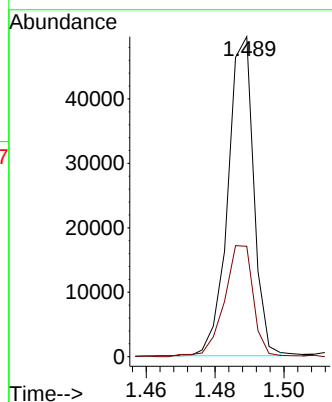
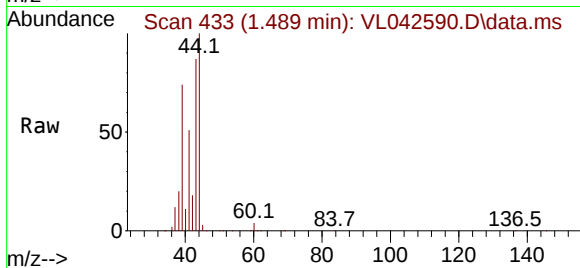
SV1DL

Tgt Ion: 41 Resp: 25753

Ion Ratio Lower Upper

41 100

42 40.4 53.3 79.9#



#10

Heptane

Concen: 2.491 ppbv

RT: 4.998 min Scan# 1517

Delta R.T. 0.016 min

Lab File: VL042590.D

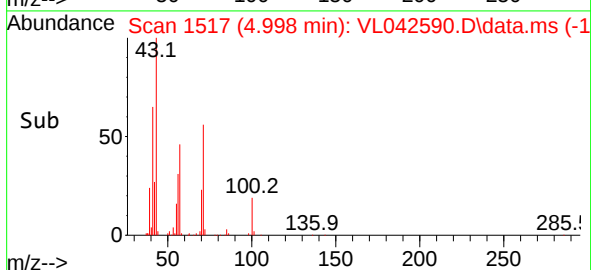
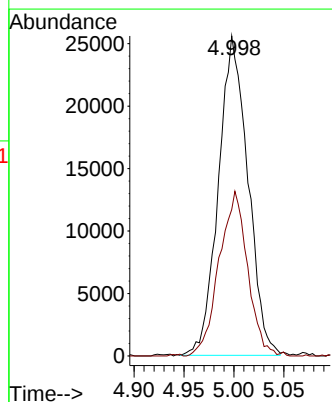
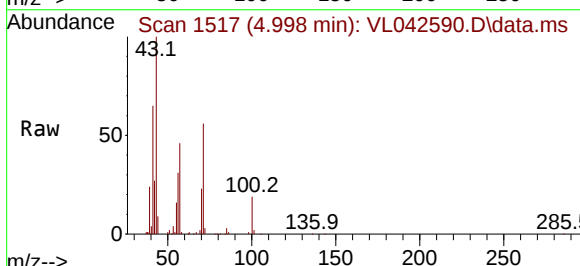
Acq: 29 May 2025 17:55

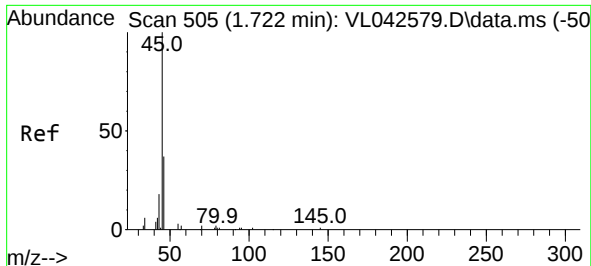
Tgt Ion: 43 Resp: 52482

Ion Ratio Lower Upper

43 100

57 50.0 38.9 58.3





#13

Ethanol

Concen: 96.449 ppbv

RT: 1.444 min Scan# 419

Delta R.T. -0.278 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

Instrument :

MSVOA_L

ClientSampleId :

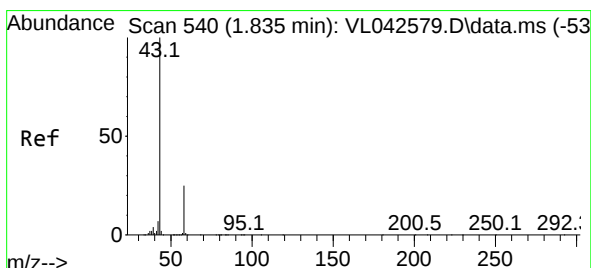
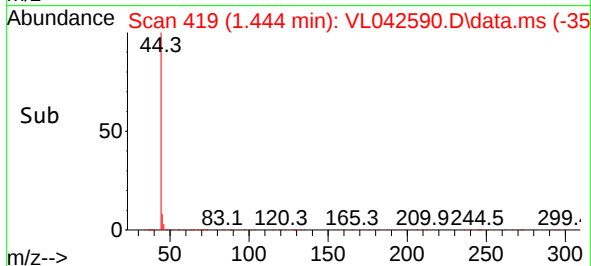
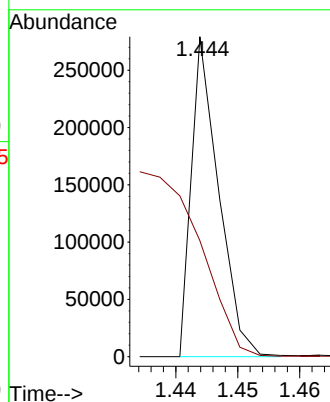
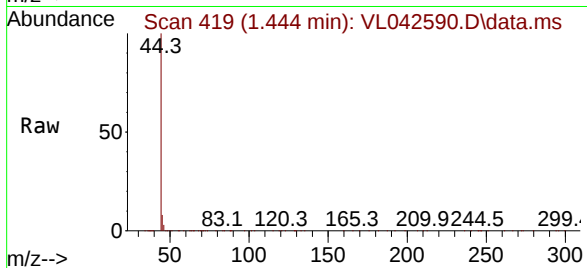
SV1DL

Tgt Ion: 45 Resp: 85920

Ion Ratio Lower Upper

45 100

46 270.5 14.5 58.1#



#15

Acetone

Concen: 1.581 ppbv

RT: 1.852 min Scan# 545

Delta R.T. 0.016 min

Lab File: VL042590.D

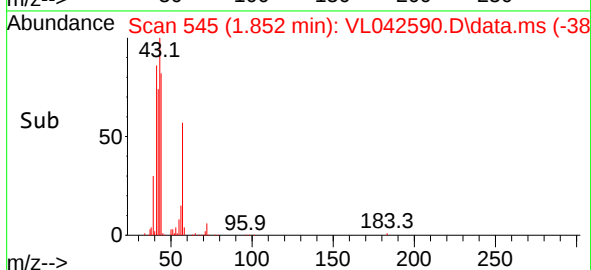
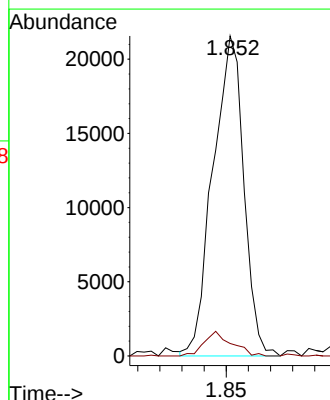
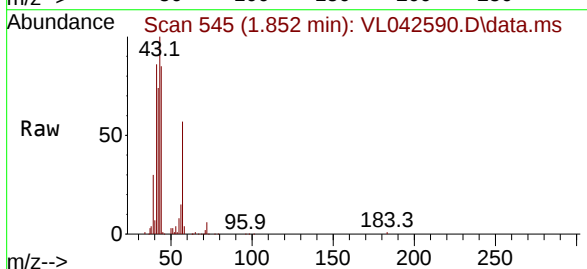
Acq: 29 May 2025 17:55

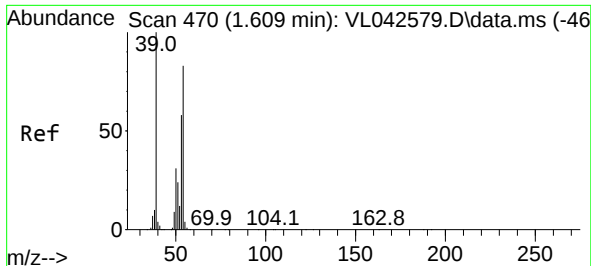
Tgt Ion: 43 Resp: 20877

Ion Ratio Lower Upper

43 100

58 7.1 21.0 31.4#

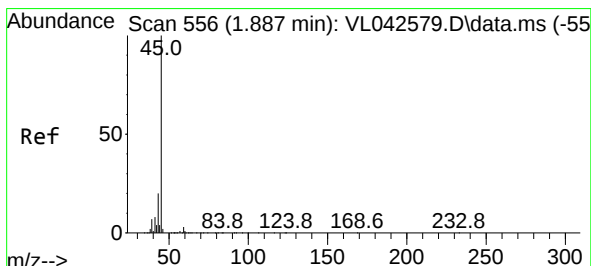
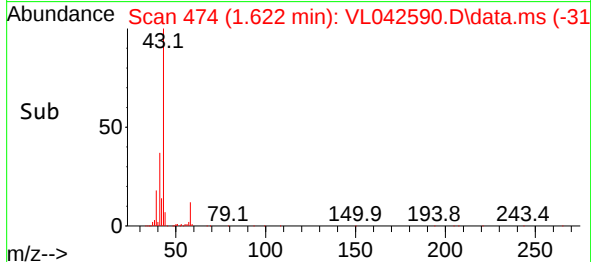
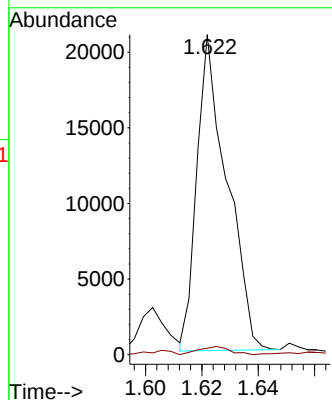
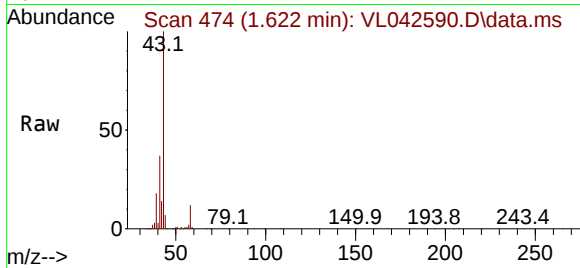




#16
1,3-Butadiene
Concen: 2.480 ppbv
RT: 1.622 min Scan# 419
Delta R.T. 0.013 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

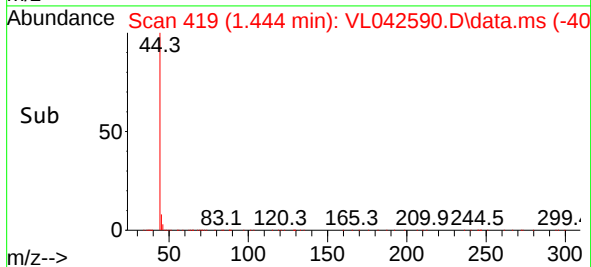
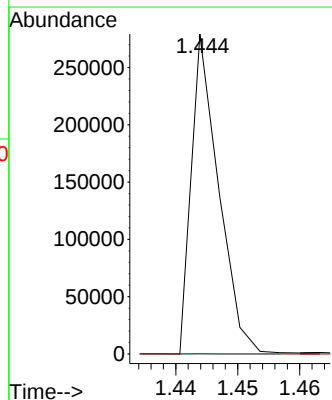
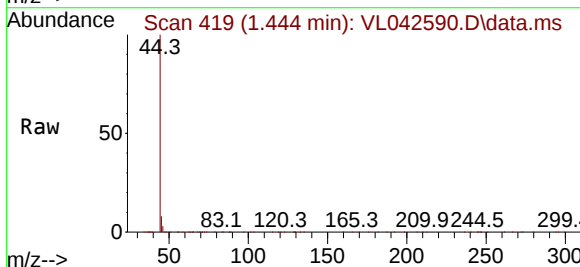
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

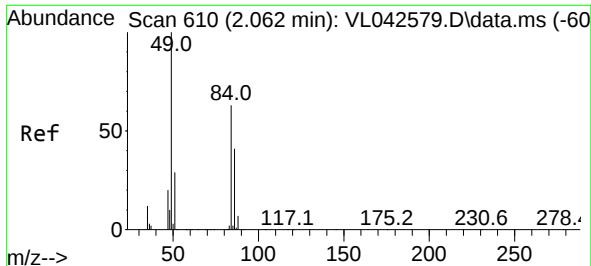
Tgt Ion: 39 Resp: 15518
Ion Ratio Lower Upper
39 100
54 4.0 57.9 86.9#



#19
Isopropyl Alcohol
Concen: 10.881 ppbv
RT: 1.444 min Scan# 419
Delta R.T. -0.443 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion: 45 Resp: 85920
Ion Ratio Lower Upper
45 100
58 0.6 29.4 44.2#

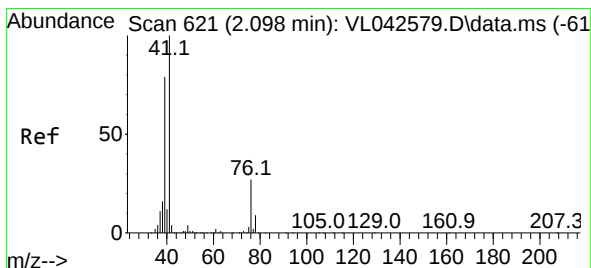
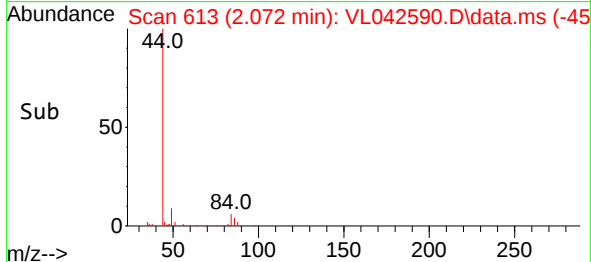
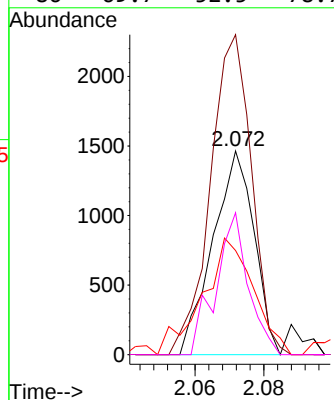
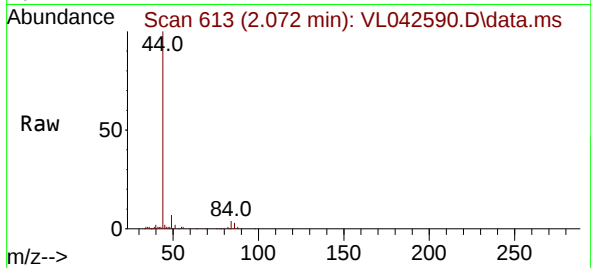




#20
Methylene Chloride
Concen: 0.280 ppbv
RT: 2.072 min Scan# 61
Delta R.T. 0.010 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

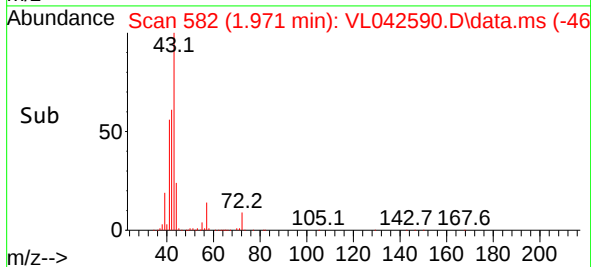
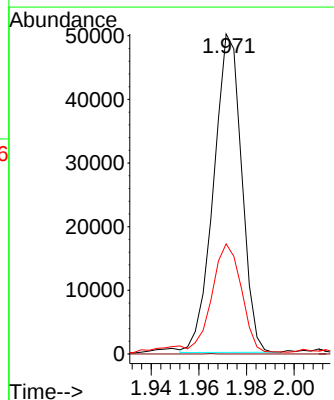
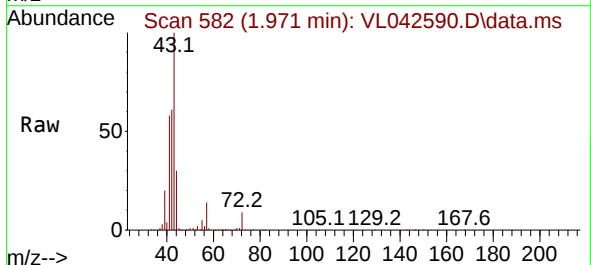
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

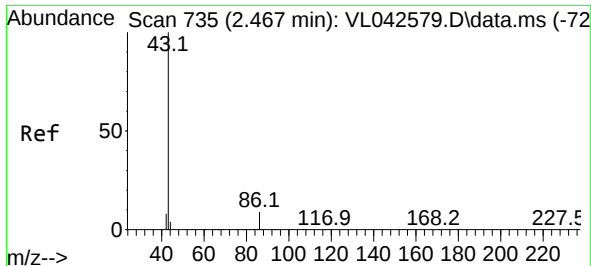
Tgt Ion: 84	Resp:	1221	
Ion	Ratio	Lower	Upper
84	100		
49	153.4	128.8	193.2
51	42.9	38.6	57.8
86	69.7	52.5	78.7



#21
Allyl Chloride
Concen: 4.393 ppbv
RT: 1.971 min Scan# 582
Delta R.T. -0.126 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion: 41	Resp: 40944
Ion Ratio	Lower Upper
41 100	
76 0.0	21.2 31.8#
39 39.2	60.9 91.3#

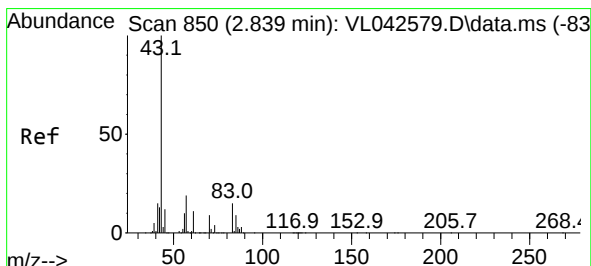
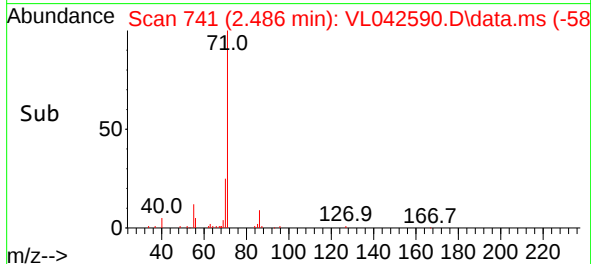
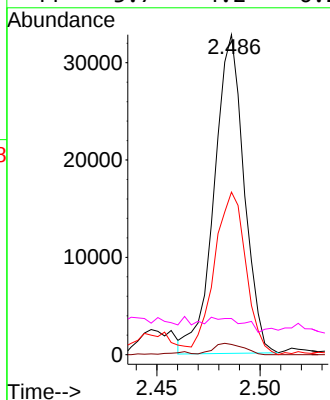
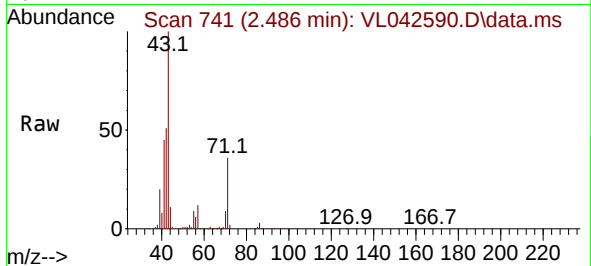




#23
 Vinyl Acetate
 Concen: 1.841 ppbv
 RT: 2.486 min Scan# 741
 Delta R.T. 0.020 min
 Lab File: VL042590.D
 Acq: 29 May 2025 17:55

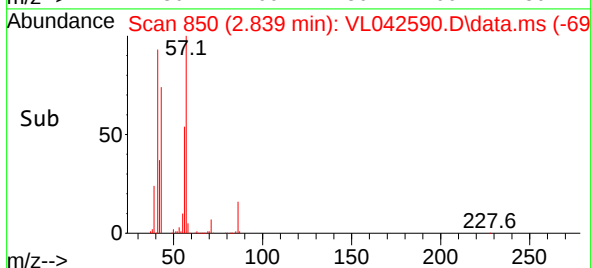
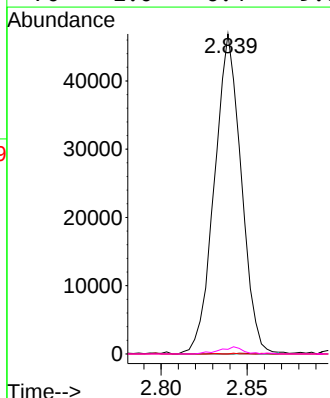
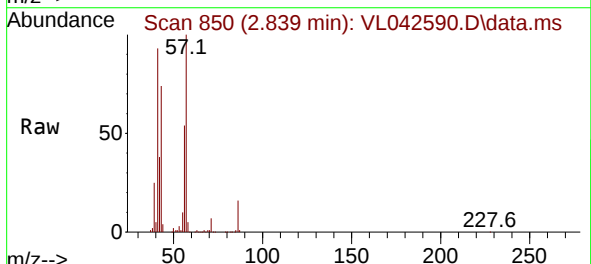
Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

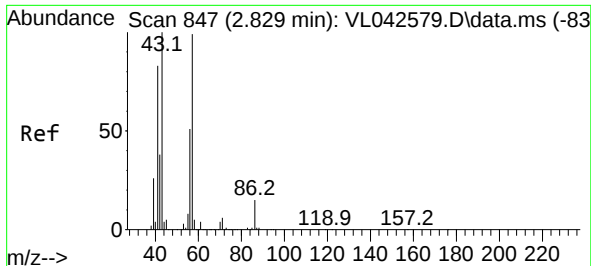
Tgt Ion: 43	Resp: 32868
Ion Ratio	Lower Upper
43 100	
86 3.2	6.6 9.8#
42 51.1	7.0 10.4#
44 3.7	4.2 6.2#



#25
 Ethyl Acetate
 Concen: 1.406 ppbv
 RT: 2.839 min Scan# 850
 Delta R.T. 0.000 min
 Lab File: VL042590.D
 Acq: 29 May 2025 17:55

Tgt	Ion: 43	Resp:	50811
Ion	Ratio	Lower	Upper
43	100		
45	0.6	8.2	12.2#
61	0.1	7.1	10.7#
70	2.0	6.4	9.6#

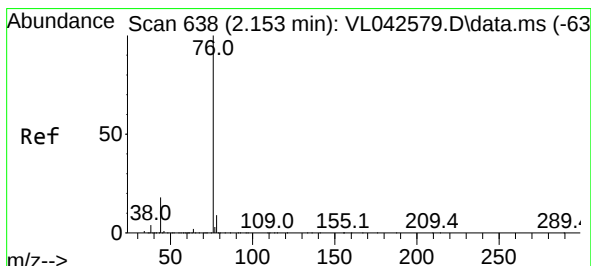
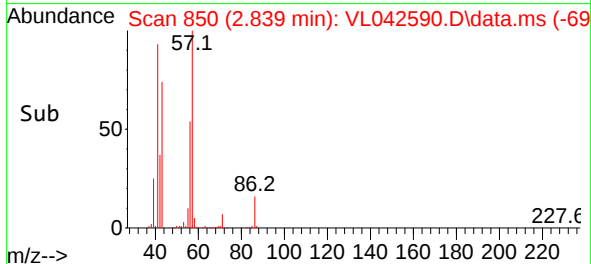
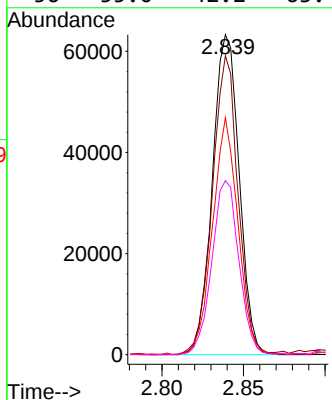
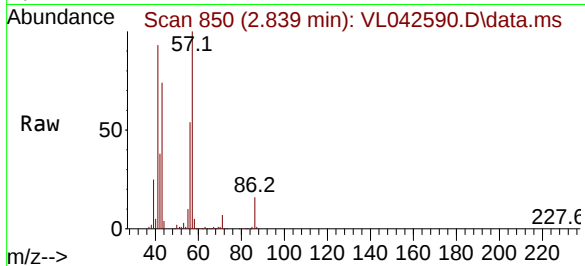




#26
Hexane
Concen: 4.407 ppbv
RT: 2.839 min Scan# 847
Delta R.T. 0.010 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

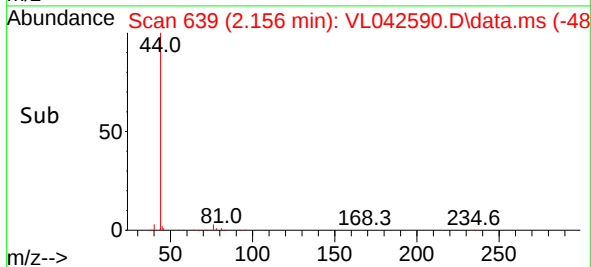
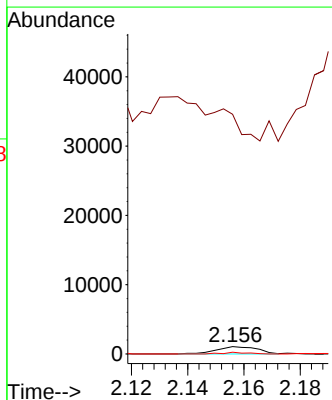
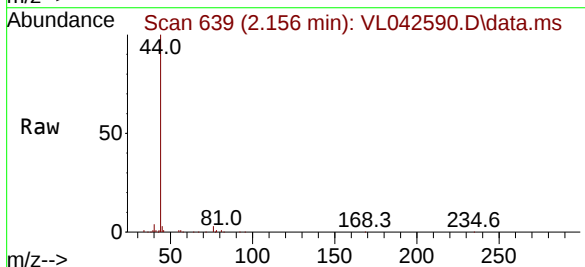
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

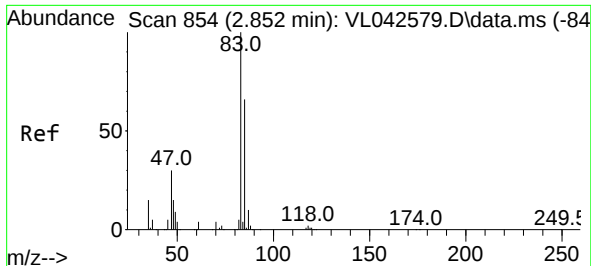
Tgt Ion: 57 Resp: 72379
Ion Ratio Lower Upper
57 100
41 90.0 70.6 106.0
43 71.0 181.1 271.7#
56 55.0 42.2 63.4



#27
Carbon Disulfide
Concen: 0.086 ppbv
RT: 2.156 min Scan# 639
Delta R.T. 0.003 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion: 76 Resp: 1080
Ion Ratio Lower Upper
76 100
44 8260.2 21.3 31.9#
78 12.7 9.4 14.0





#29

Chloroform

Concen: 0.279 ppbv

RT: 2.862 min Scan# 81

Delta R.T. 0.010 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

Instrument :

MSVOA_L

ClientSampleId :

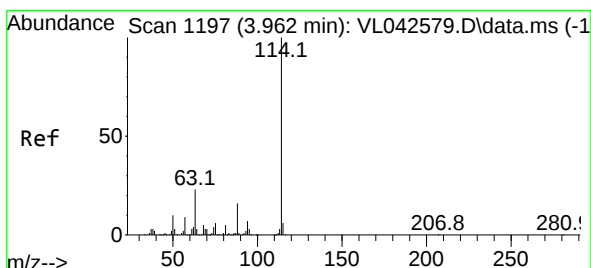
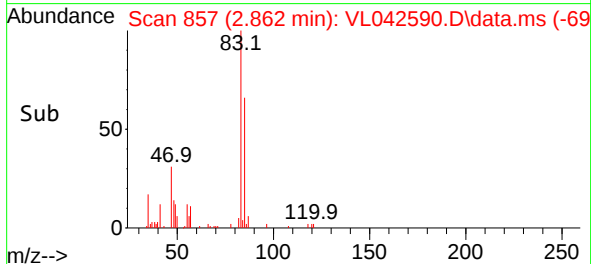
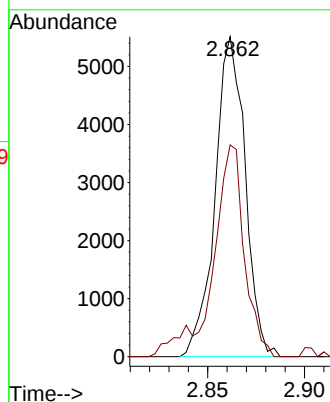
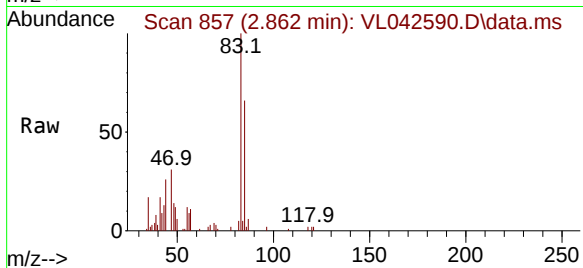
SV1DL

Tgt Ion: 83 Resp: 5962

Ion Ratio Lower Upper

83 100

85 66.2 52.8 79.2



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.975 min Scan# 1201

Delta R.T. 0.013 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

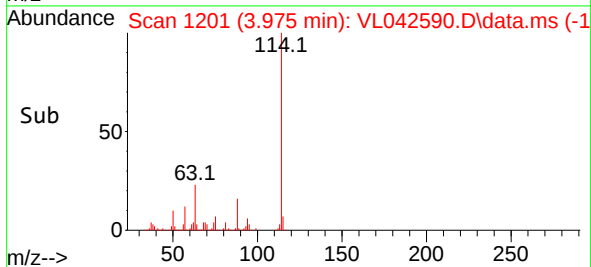
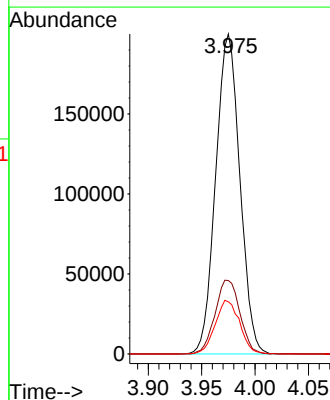
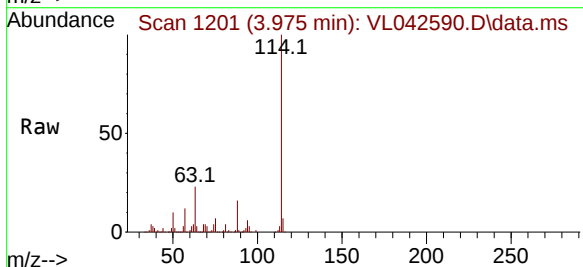
Tgt Ion: 114 Resp: 314559

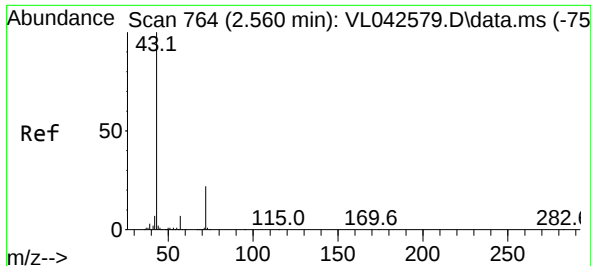
Ion Ratio Lower Upper

114 100

63 23.8 19.0 28.6

88 17.0 13.6 20.4

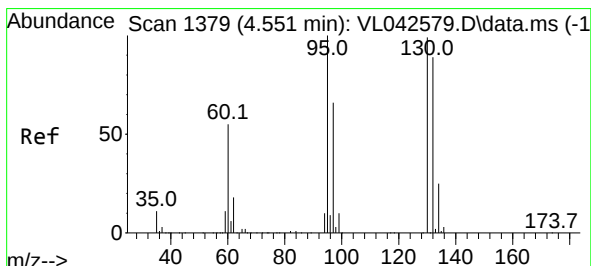
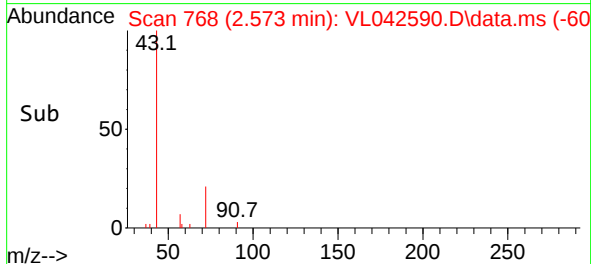
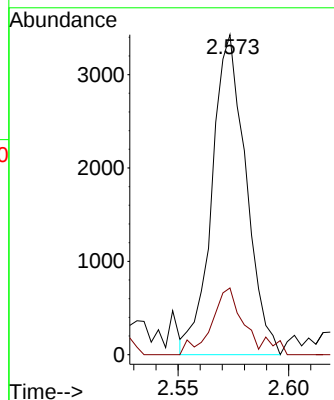
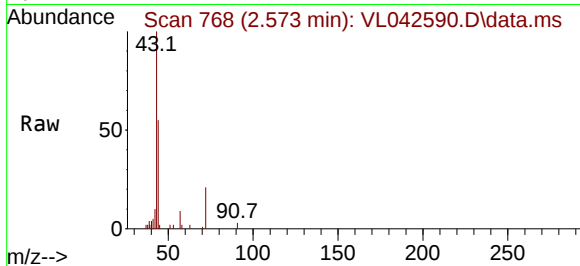




#34
2-Butanone
Concen: 0.163 ppbv
RT: 2.573 min Scan# 768
Delta R.T. 0.013 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

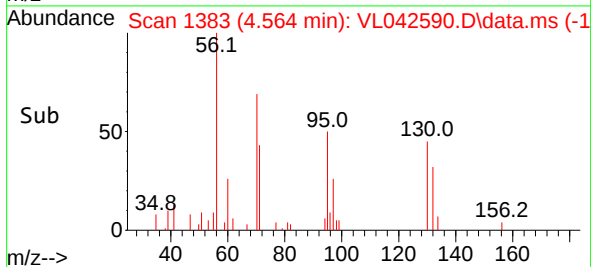
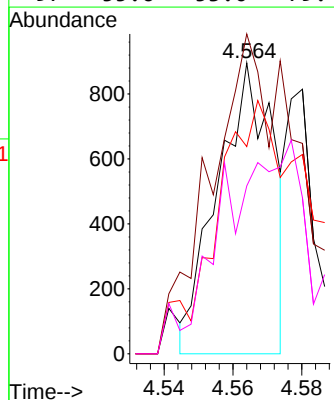
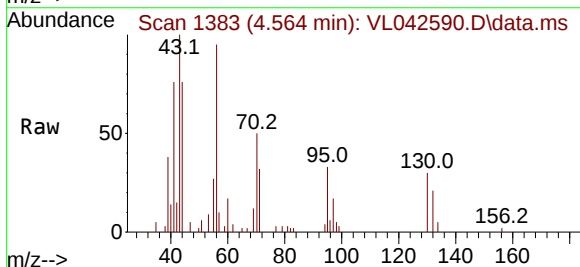
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

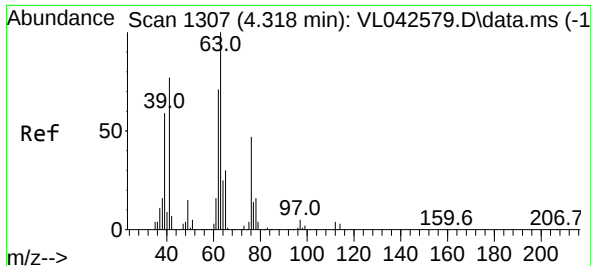
Tgt Ion: 43 Resp: 3661
Ion Ratio Lower Upper
43 100
72 21.0 17.7 26.5



#38
Trichloroethene
Concen: 0.076 ppbv
RT: 4.564 min Scan# 1383
Delta R.T. 0.013 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion:130 Resp: 1000
Ion Ratio Lower Upper
130 100
95 91.5 80.6 121.0
132 59.2 71.8 107.6#
97 55.6 53.0 79.4





#39

1,2-Dichloropropane

Concen: 6.522 ppbv

RT: 3.972 min Scan# 11

Delta R.T. -0.346 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

Instrument :

MSVOA_L

ClientSampleId :

SV1DL

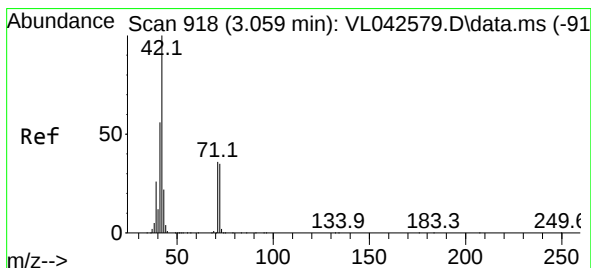
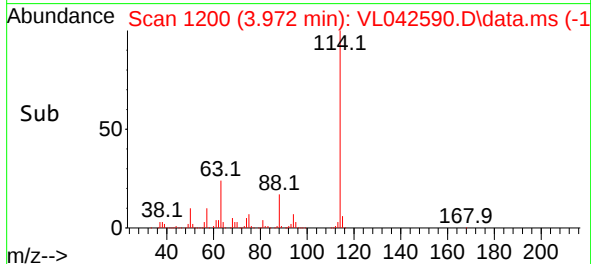
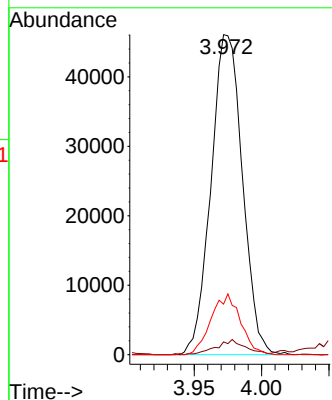
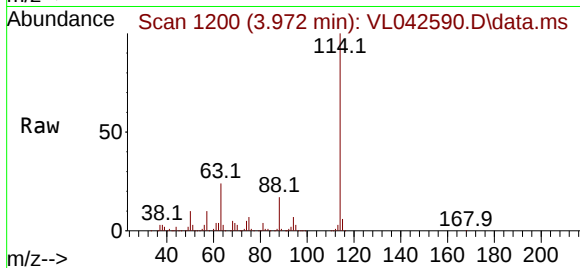
Tgt Ion: 63 Resp: 74713

Ion Ratio Lower Upper

63 100

41 4.0 61.8 92.6#

62 15.8 56.6 85.0#



#41

Tetrahydrofuran

Concen: 0.089 ppbv

RT: 3.033 min Scan# 910

Delta R.T. -0.026 min

Lab File: VL042590.D

Acq: 29 May 2025 17:55

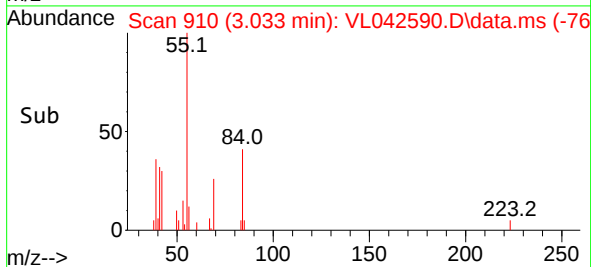
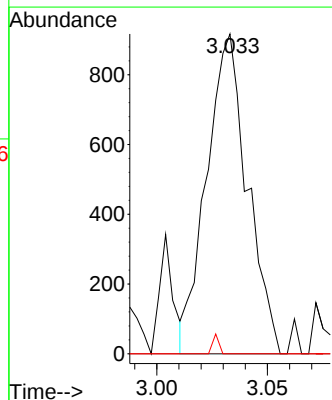
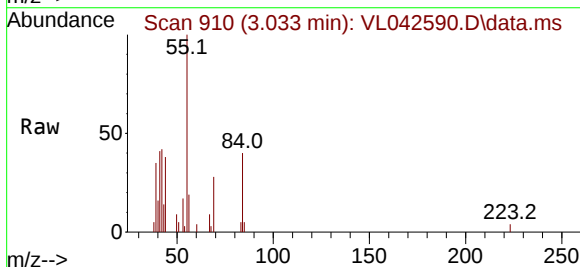
Tgt Ion: 42 Resp: 1175

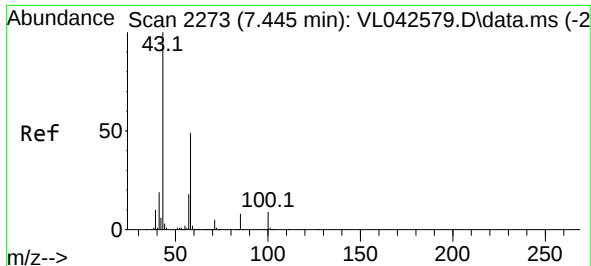
Ion Ratio Lower Upper

42 100

72 0.0 28.9 43.3#

71 0.0 28.5 42.7#

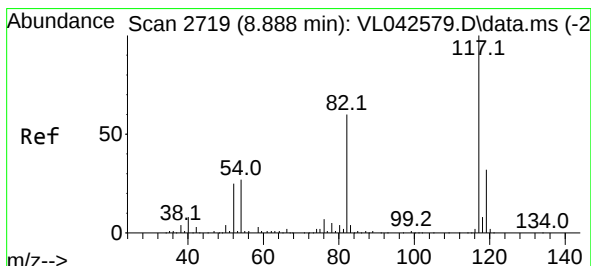
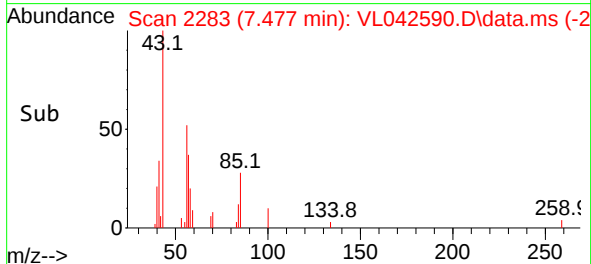
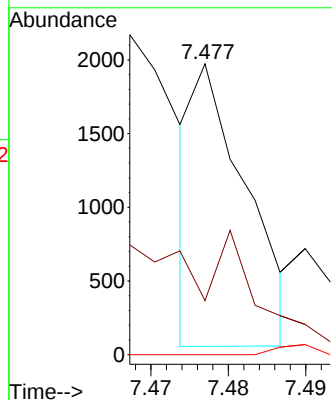
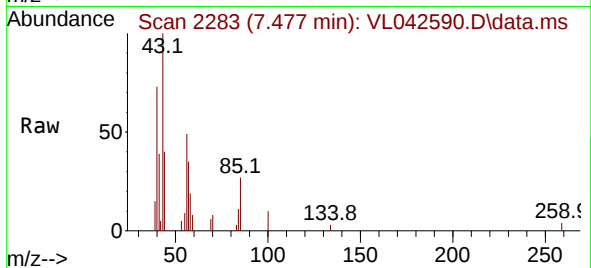




#51
2-Hexanone
Concen: 0.037 ppbv
RT: 7.477 min Scan# 21
Delta R.T. 0.032 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

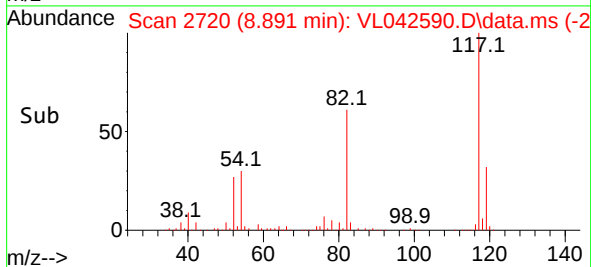
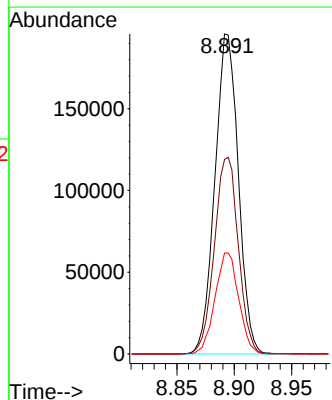
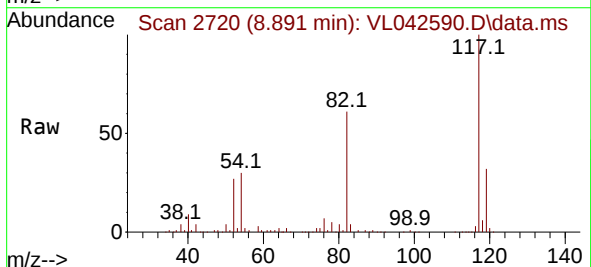
Instrument :
MSVOA_L
ClientSampleId :
SV1DL

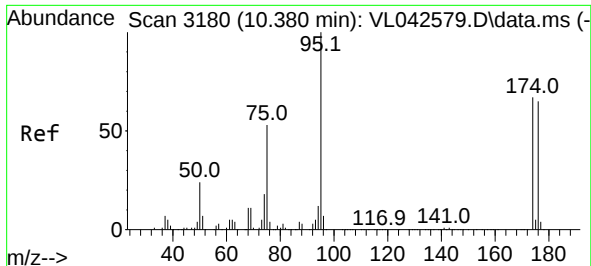
Tgt Ion: 43 Resp: 908
Ion Ratio Lower Upper
43 100
58 151.9 39.9 59.9#
98 0.0 0.1 0.1#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.891 min Scan# 2720
Delta R.T. 0.003 min
Lab File: VL042590.D
Acq: 29 May 2025 17:55

Tgt Ion: 117 Resp: 278591
Ion Ratio Lower Upper
117 100
82 62.7 51.2 76.8
119 31.9 26.3 39.5

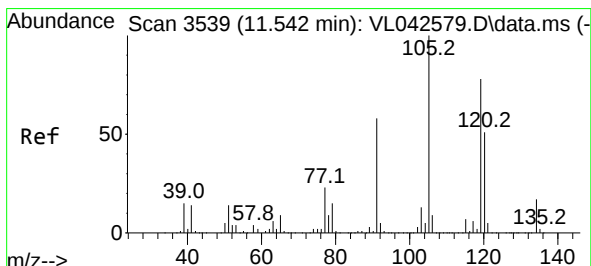
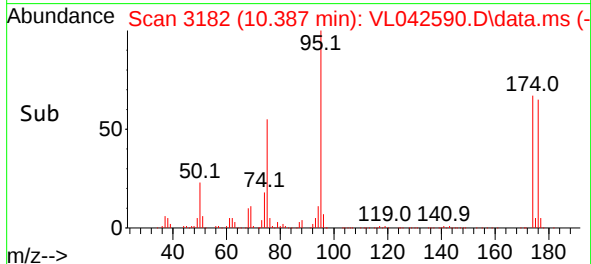
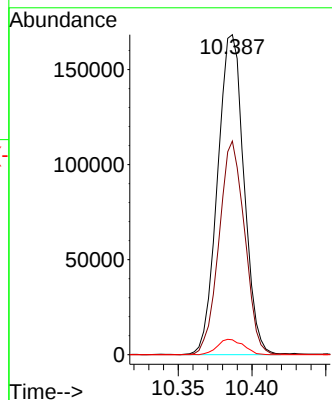
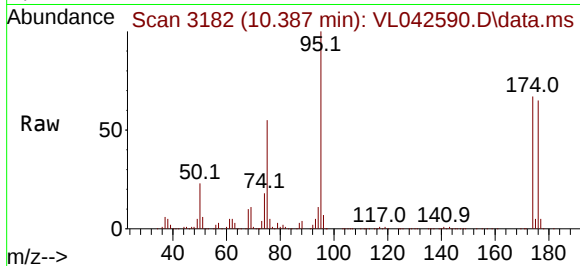




#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.028 ppbv
 RT: 10.387 min Scan# 3182
 Delta R.T. 0.007 min
 Lab File: VL042590.D
 Acq: 29 May 2025 17:55

Instrument :
 MSVOA_L
 ClientSampleId :
 SV1DL

Tgt Ion: 95 Resp: 209427
 Ion Ratio Lower Upper
 95 100
 174 65.1 53.1 79.7
 175 4.8 4.2 6.2



#74
 1,2,4-Trimethylbenzene
 Concen: 0.030 ppbv
 RT: 11.542 min Scan# 3539
 Delta R.T. 0.000 min
 Lab File: VL042590.D
 Acq: 29 May 2025 17:55

Tgt Ion: 105 Resp: 1281
 Ion Ratio Lower Upper
 105 100
 120 36.0 40.8 61.2#
 91 17.2 46.8 70.2#
 77 23.1 18.2 27.2

