

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120825\
 Data File : VL043319.D
 Acq On : 08 Dec 2025 18:46
 Operator : SY/MD
 Sample : Q3797-05
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Quant Time: Dec 09 00:14:45 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)

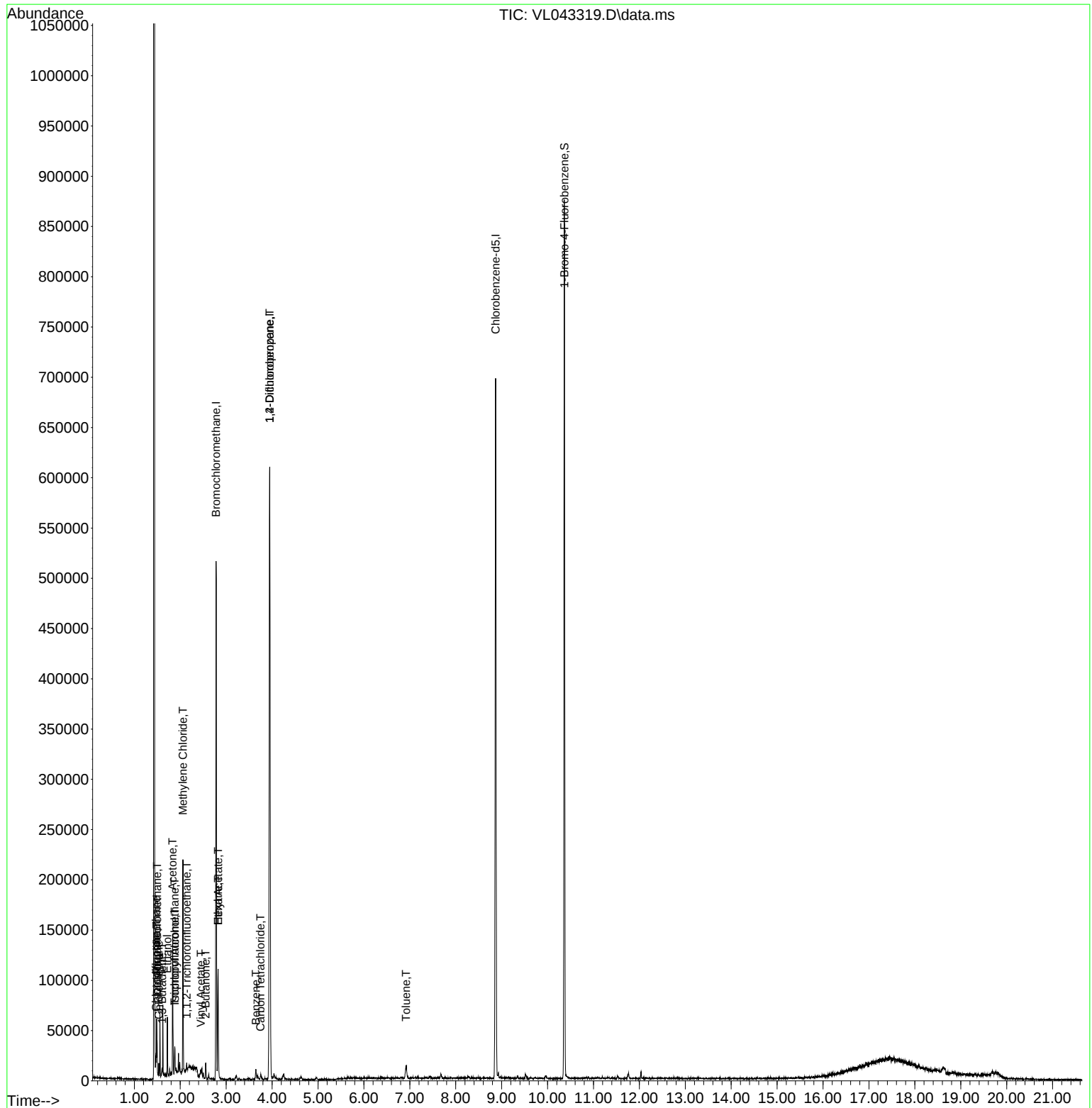
Internal Standards						
1) Bromochloromethane	2.781	49	138687	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.949	114	355402	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.869	117	281292	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.364	95	204428	9.915	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.100%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.496	85	8984	0.459	ppbv	98
3) Chlorodifluoromethane	1.473	51	10471	0.544	ppbv #	84
4) Chloromethane	1.531	50	3531	0.483	ppbv	93
9) Propene	1.486	41	4725	0.578	ppbv #	1
11) Trichlorofluoromethane	1.878	101	4739	0.250	ppbv	91
12) 1,1,2-Trichlorotrifluo...	2.140	101	1089	0.074	ppbv	95
13) Ethanol	1.719	45	18516	6.446	ppbv	95
15) Acetone	1.832	43	61041	3.168	ppbv	99
16) 1,3-Butadiene	1.602	39	899	0.105	ppbv	83
19) Isopropyl Alcohol	1.884	45	7221	0.663	ppbv #	1
20) Methylene Chloride	2.059	84	29596	4.805	ppbv	95
23) Vinyl Acetate	2.447	43	3961	0.170	ppbv #	85
25) Ethyl Acetate	2.823	43	19129	0.460	ppbv #	84
26) Hexane	2.823	57	21888	1.201	ppbv #	45
34) 2-Butanone	2.554	43	8752	0.349	ppbv	91
35) Carbon Tetrachloride	3.748	117	846	0.031	ppbv	100
36) Benzene	3.648	78	5266	0.155	ppbv #	92
39) 1,2-Dichloropropane	3.949	63	88766	7.126	ppbv #	23
53) Toluene	6.920	91	8694	0.216	ppbv	91

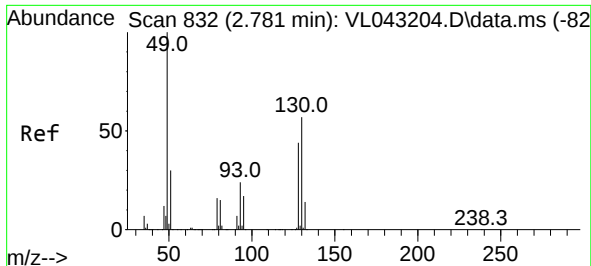
(#) = qualifier out of range (m) = manual integration (+) = signals summed

```
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL120825\  
Data File : VL043319.D  
Acq On    : 08 Dec 2025   18:46  
Operator  : SY/MD  
Sample    : Q3797-05  
Misc      : 400mL/MSVOA_L  
ALS Vial  : 1    Sample Multiplier: 1
```

Instrument :
MSVOA_L
ClientSampleId :
OA1

Quant Time: Dec 09 00:14:45 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

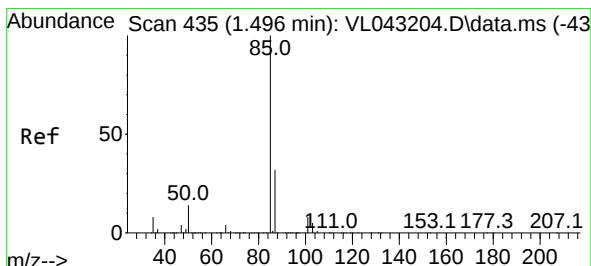
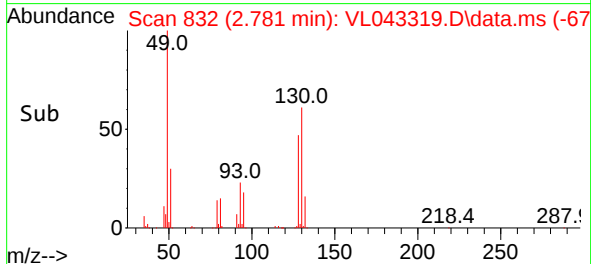
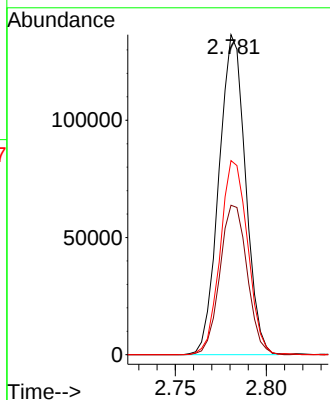
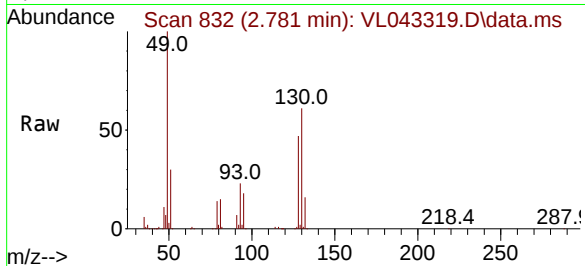




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.781 min Scan# 832
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

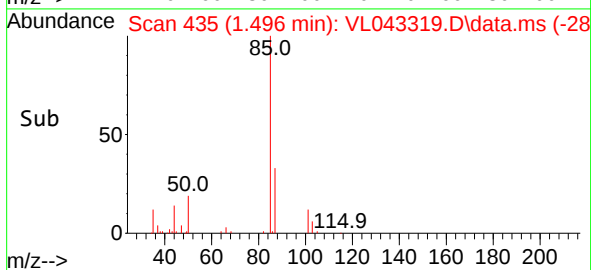
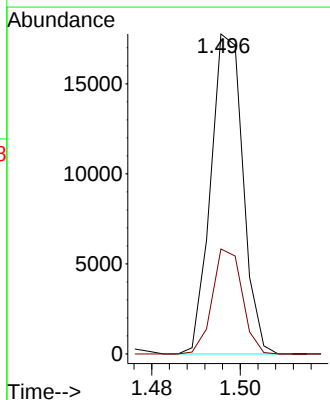
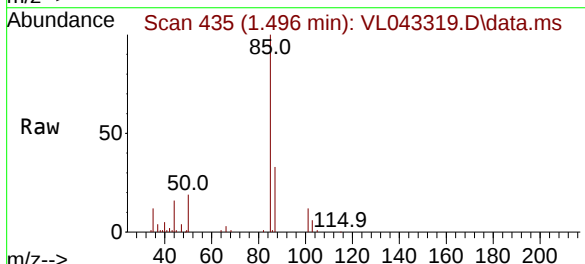
Instrument :
MSVOA_L
ClientSampleId :
OA1

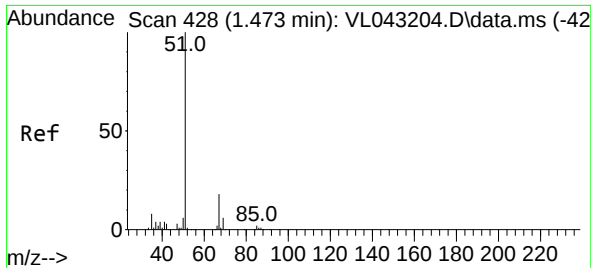
Tgt Ion: 49 Resp: 138687
Ion Ratio Lower Upper
49 100
128 47.9 23.0 69.0
130 62.6 29.9 89.7



#2
Dichlorodifluoromethane
Concen: 0.459 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 85 Resp: 8984
Ion Ratio Lower Upper
85 100
87 32.8 25.4 38.2

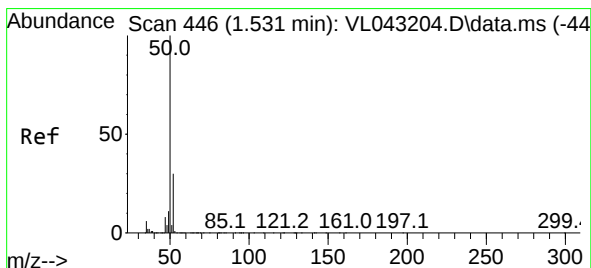
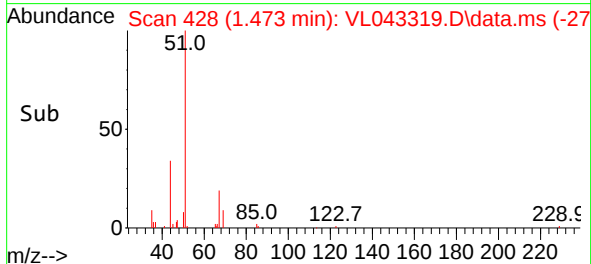
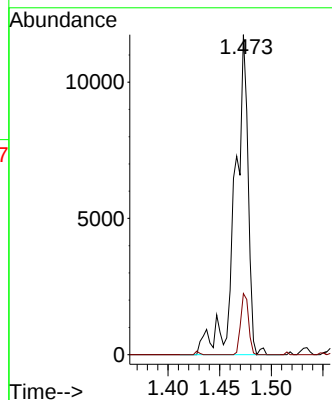
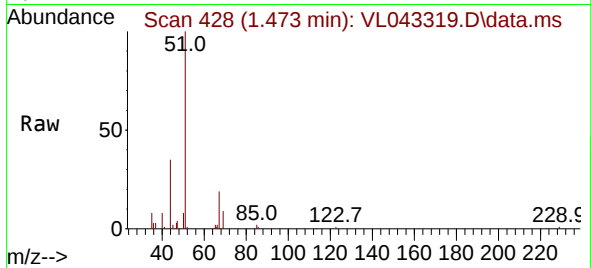




#3
Chlorodifluoromethane
Concen: 0.544 ppbv
RT: 1.473 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

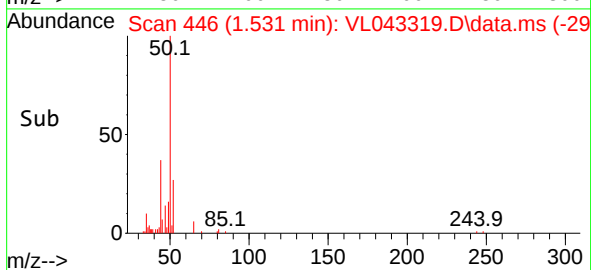
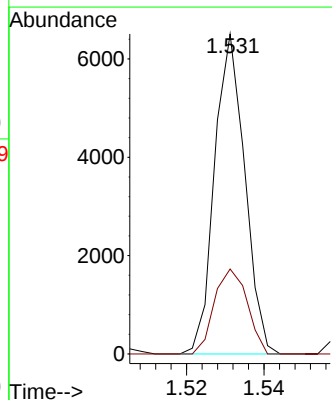
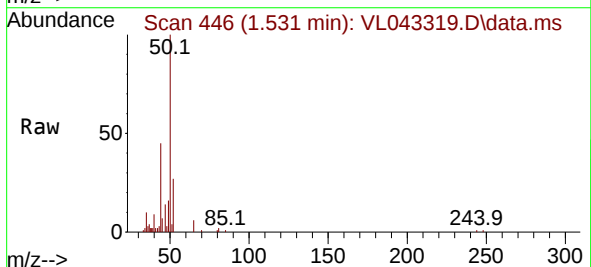
Instrument :
MSVOA_L
ClientSampleId :
OA1

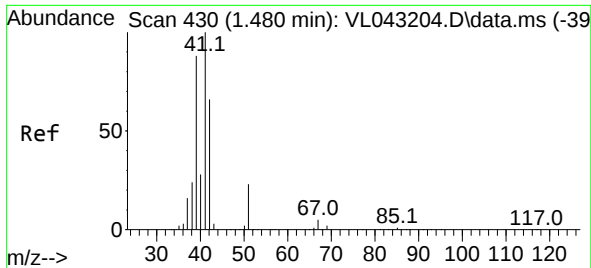
Tgt Ion: 51 Resp: 10471
Ion Ratio Lower Upper
51 100
67 11.3 14.9 22.3#



#4
Chloromethane
Concen: 0.483 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 50 Resp: 3531
Ion Ratio Lower Upper
50 100
52 26.6 24.1 36.1





#9

Propene

Concen: 0.578 ppbv

RT: 1.486 min Scan# 41

Delta R.T. 0.006 min

Lab File: VL043319.D

Acq: 08 Dec 2025 18:46

Instrument :

MSVOA_L

ClientSampleId :

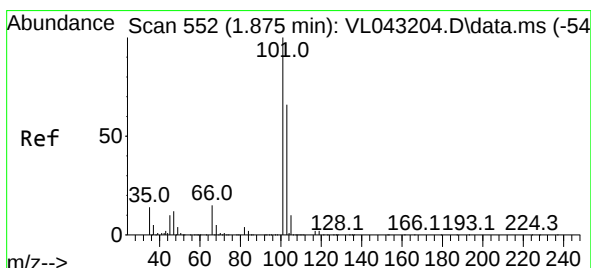
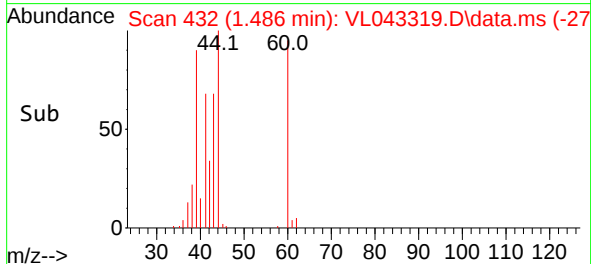
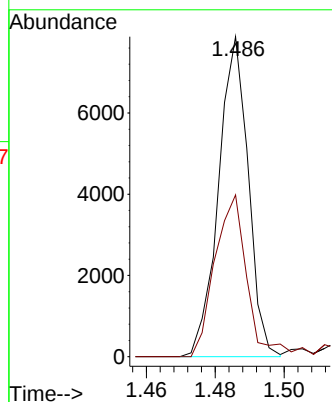
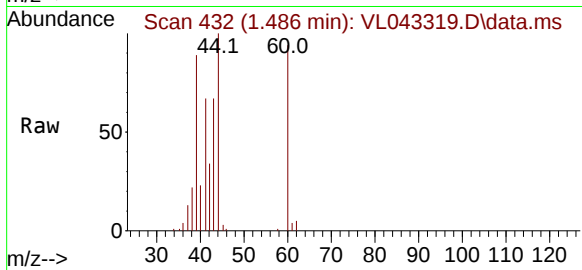
OA1

Tgt Ion: 41 Resp: 4725

Ion Ratio Lower Upper

41 100

42 58.9 3.7 5.5#



#11

Trichlorofluoromethane

Concen: 0.250 ppbv

RT: 1.878 min Scan# 553

Delta R.T. 0.003 min

Lab File: VL043319.D

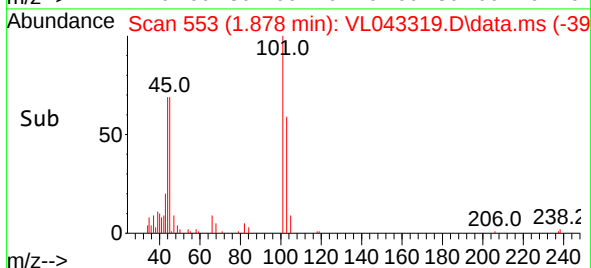
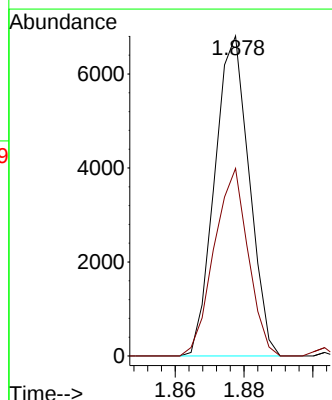
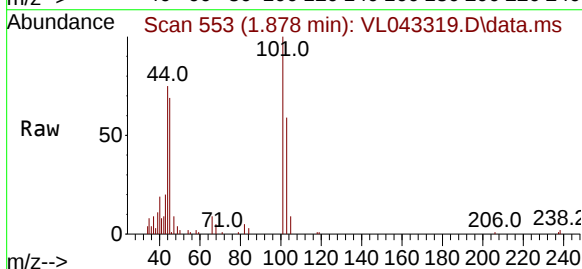
Acq: 08 Dec 2025 18:46

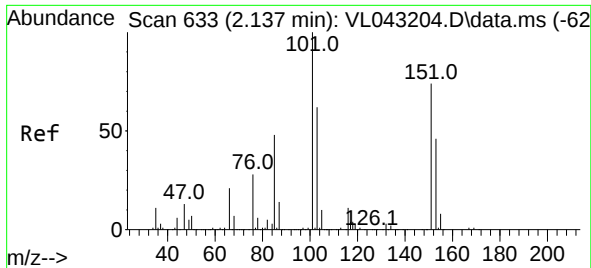
Tgt Ion: 101 Resp: 4739

Ion Ratio Lower Upper

101 100

103 58.6 52.6 79.0

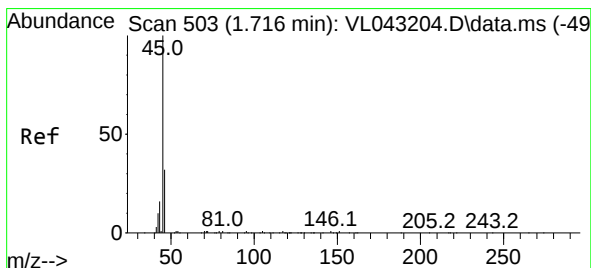
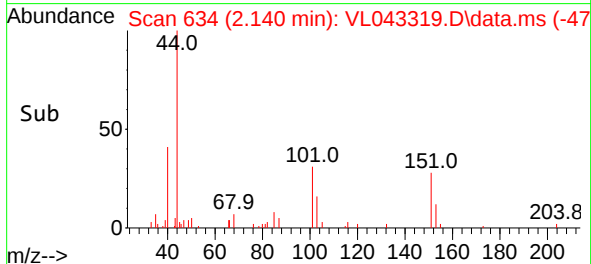
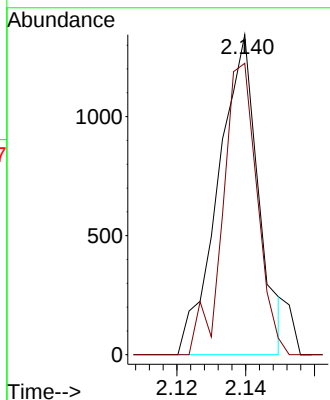
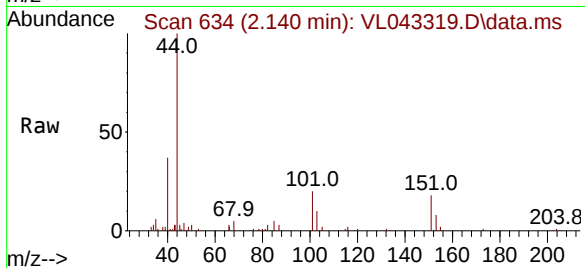




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.074 ppbv
RT: 2.140 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

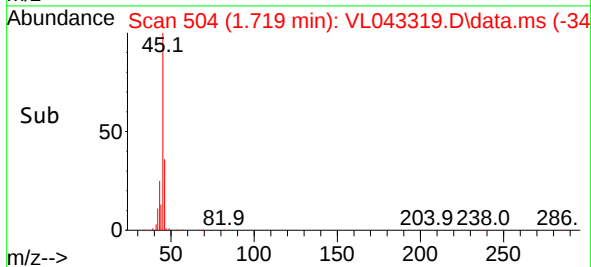
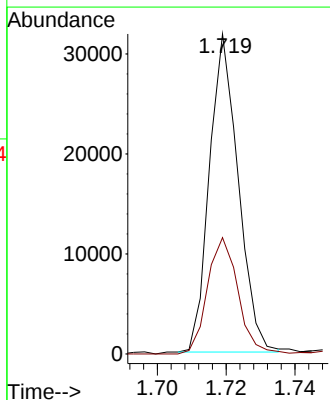
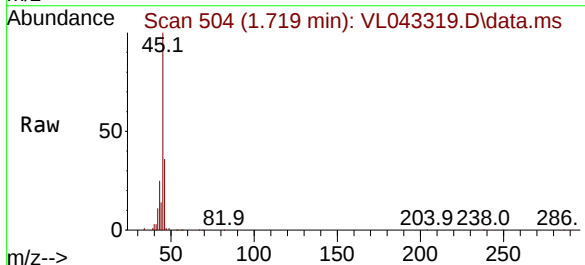
Instrument :
MSVOA_L
ClientSampleId :
OA1

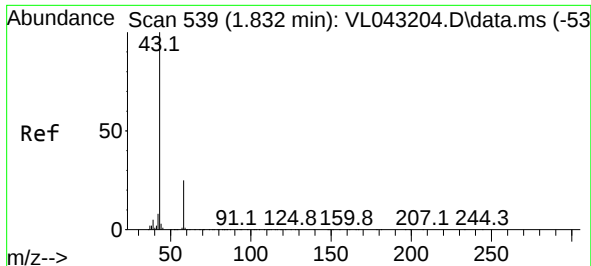
Tgt Ion:101 Resp: 1089
Ion Ratio Lower Upper
101 100
151 78.1 59.2 88.8



#13
Ethanol
Concen: 6.446 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 45 Resp: 18516
Ion Ratio Lower Upper
45 100
46 40.1 15.0 59.8

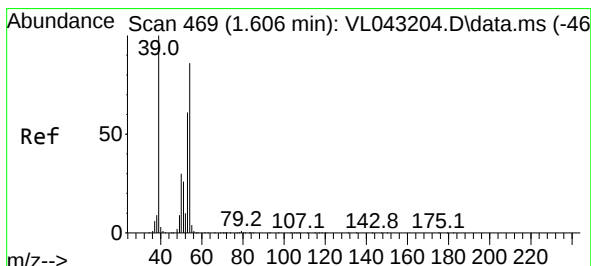
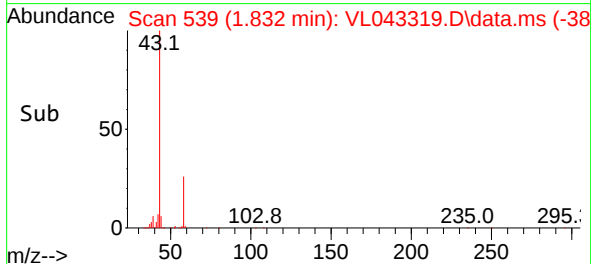
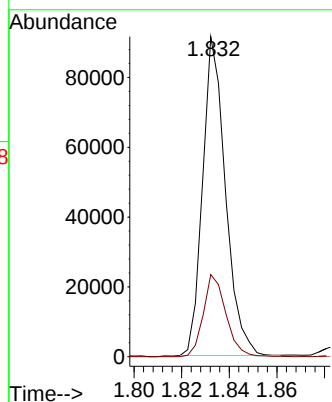
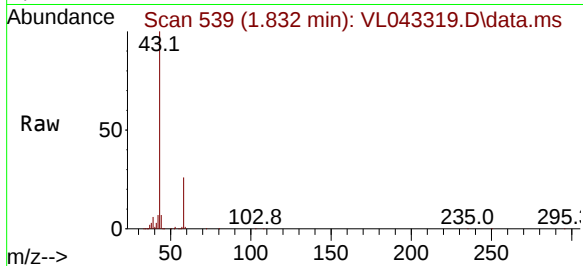




#15
Acetone
Concen: 3.168 ppbv
RT: 1.832 min Scan# 51
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

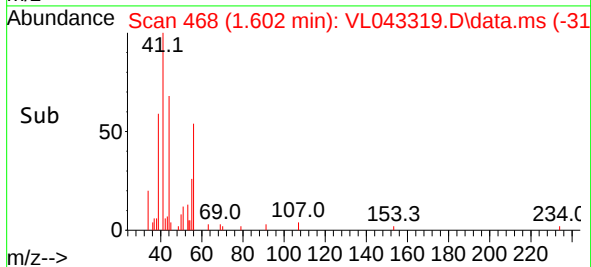
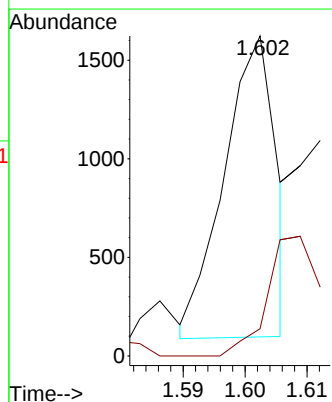
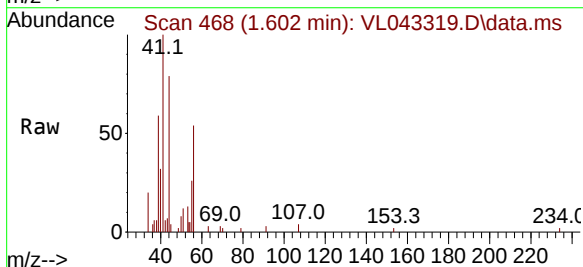
Instrument :
MSVOA_L
ClientSampleId :
OA1

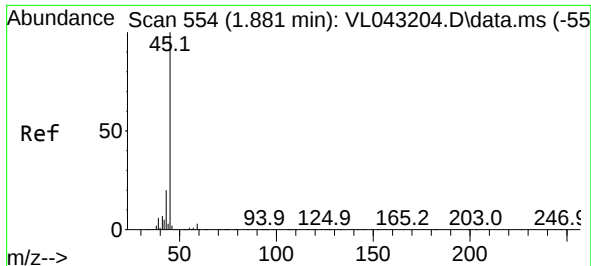
Tgt Ion: 43 Resp: 61041
Ion Ratio Lower Upper
43 100
58 25.4 20.7 31.1



#16
1,3-Butadiene
Concen: 0.105 ppbv
RT: 1.602 min Scan# 468
Delta R.T. -0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 39 Resp: 899
Ion Ratio Lower Upper
39 100
54 60.3 59.4 89.2

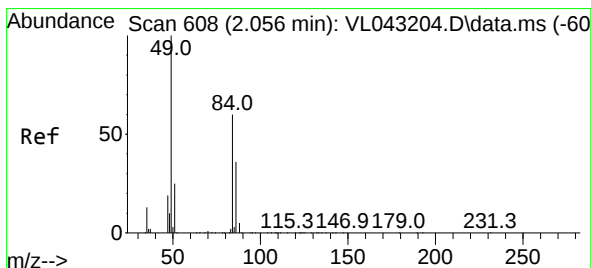
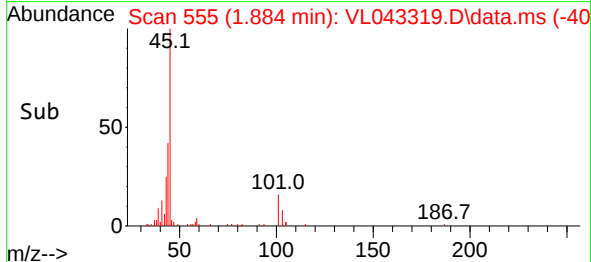
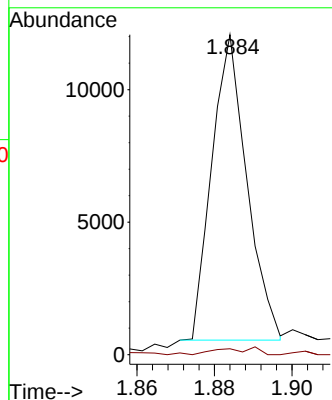
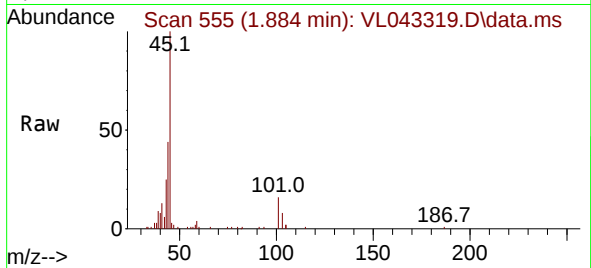




#19
Isopropyl Alcohol
Concen: 0.663 ppbv
RT: 1.884 min Scan# 51
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

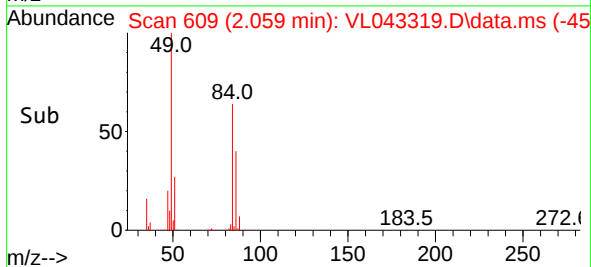
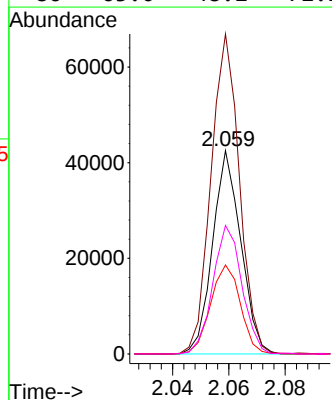
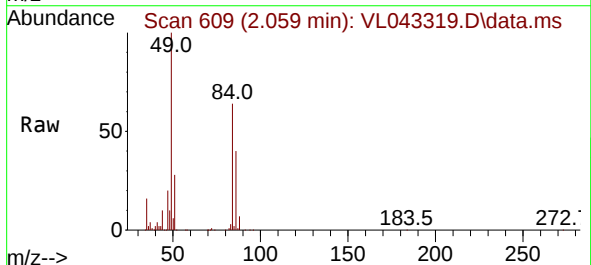
Instrument :
MSVOA_L
ClientSampleId :
OA1

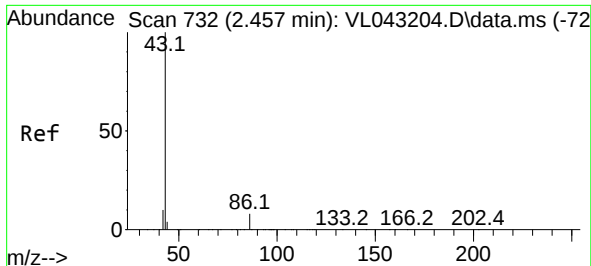
Tgt Ion: 45 Resp: 7221
Ion Ratio Lower Upper
45 100
58 214.9 31.3 46.9#



#20
Methylene Chloride
Concen: 4.805 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 84 Resp: 29596
Ion Ratio Lower Upper
84 100
49 157.1 132.9 199.3
51 43.4 34.8 52.2
86 63.0 48.2 72.2

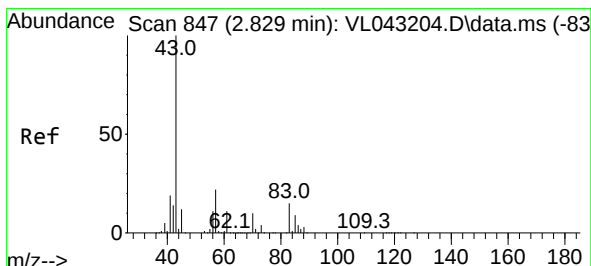
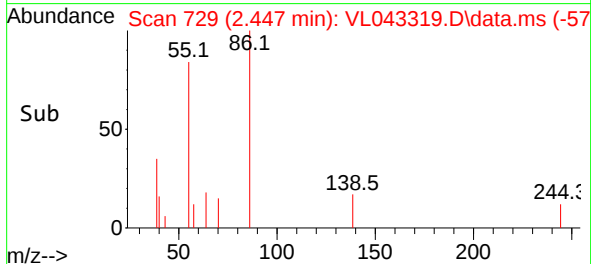
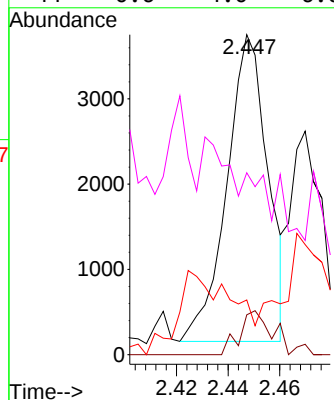
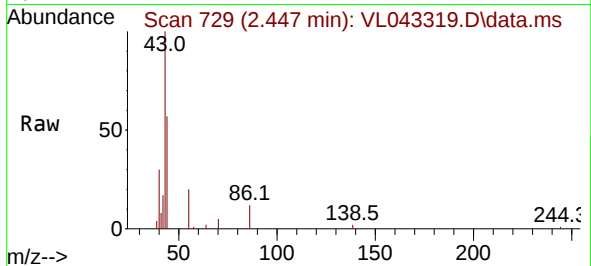




#23
 Vinyl Acetate
 Concen: 0.170 ppbv
 RT: 2.447 min Scan# 71
 Delta R.T. -0.010 min
 Lab File: VL043319.D
 Acq: 08 Dec 2025 18:46

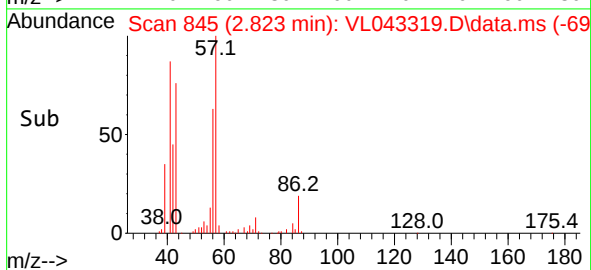
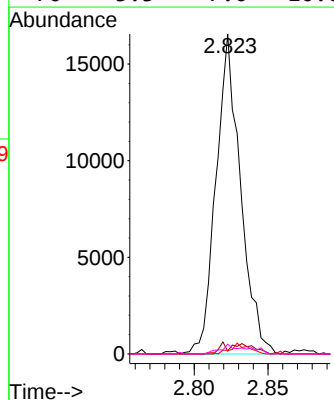
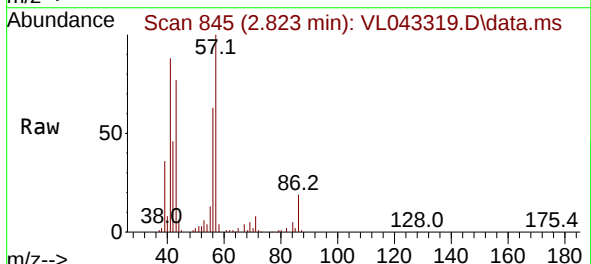
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

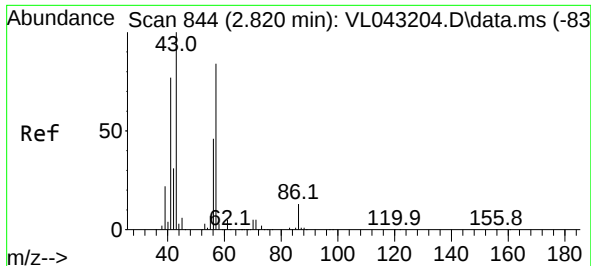
Tgt Ion:	43	Resp:	3961
Ion	Ratio	Lower	Upper
43	100		
86	13.0	6.2	9.2#
42	3.9	8.0	12.0#
44	0.6	4.0	6.0#



#25
 Ethyl Acetate
 Concen: 0.460 ppbv
 RT: 2.823 min Scan# 845
 Delta R.T. -0.007 min
 Lab File: VL043319.D
 Acq: 08 Dec 2025 18:46

Tgt Ion:	43	Resp:	19129
Ion	Ratio	Lower	Upper
43	100		
45	3.9	8.1	12.1#
61	2.7	7.0	10.4#
70	3.3	7.0	10.6#

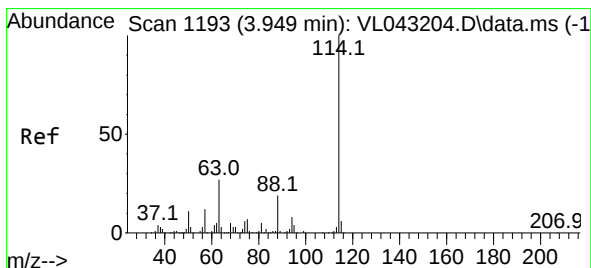
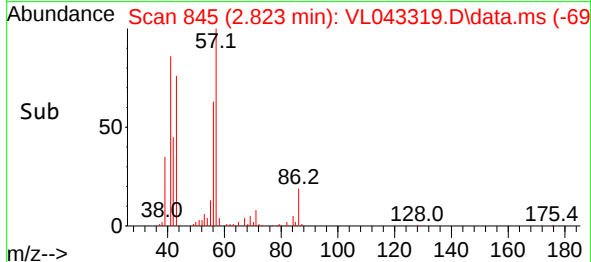
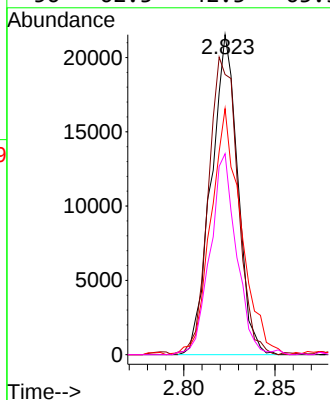
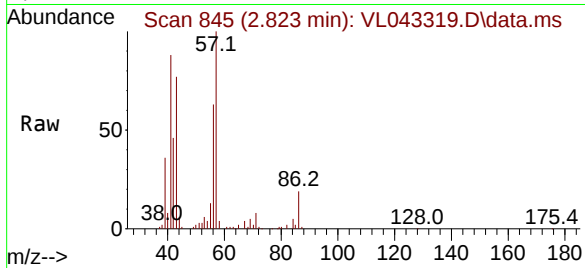




#26
Hexane
Concen: 1.201 ppbv
RT: 2.823 min Scan# 844
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

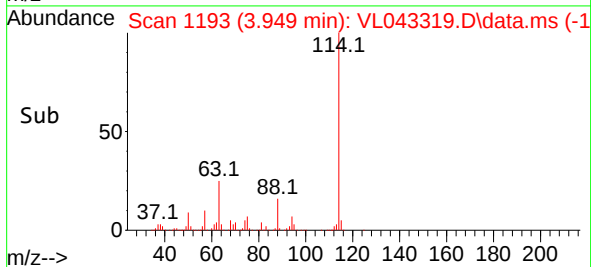
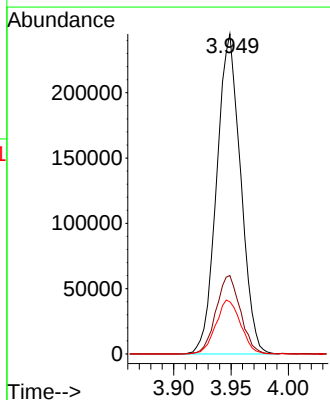
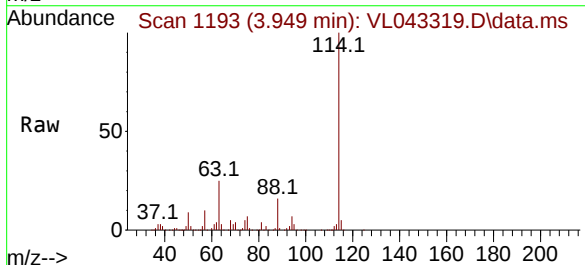
Instrument :
MSVOA_L
ClientSampleId :
OA1

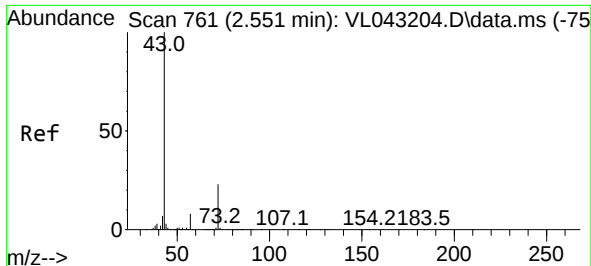
Tgt Ion: 57 Resp: 21888
Ion Ratio Lower Upper
57 100
41 103.2 74.6 111.8
43 88.8 179.0 268.4#
56 62.3 42.3 63.5



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 114 Resp: 355402
Ion Ratio Lower Upper
114 100
63 25.0 21.0 31.6
88 17.4 14.9 22.3

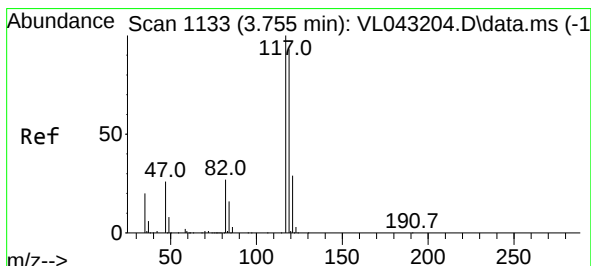
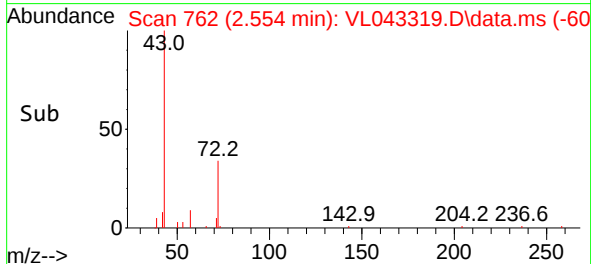
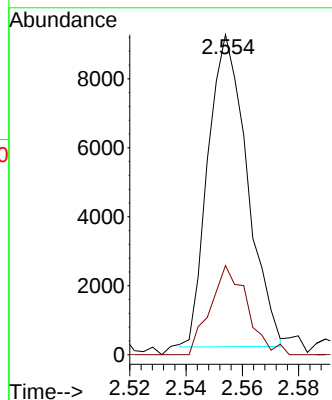
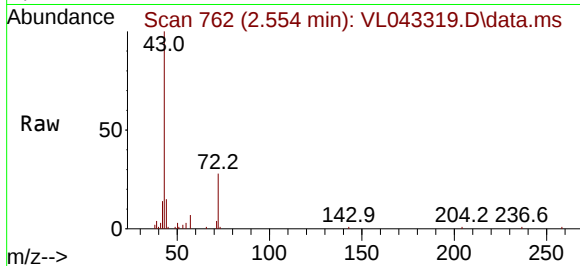




#34
2-Butanone
Concen: 0.349 ppbv
RT: 2.554 min Scan# 761
Delta R.T. 0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

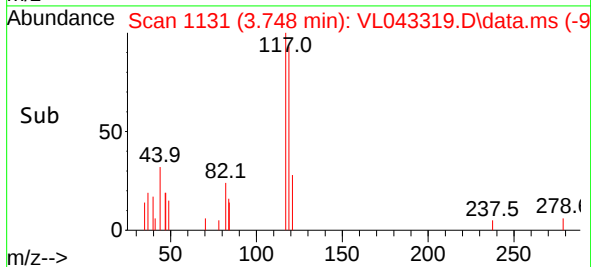
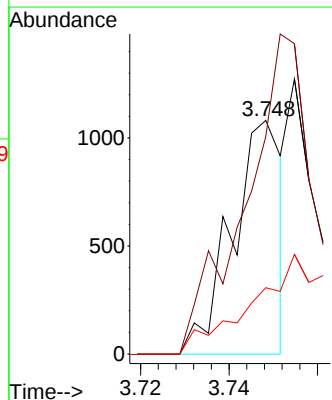
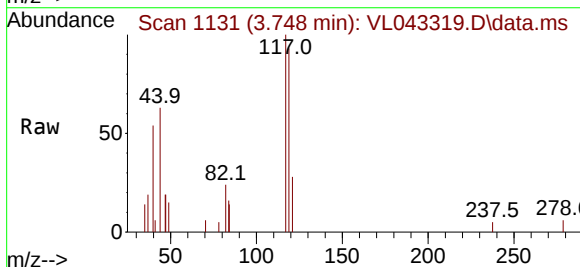
Instrument :
MSVOA_L
ClientSampleId :
OA1

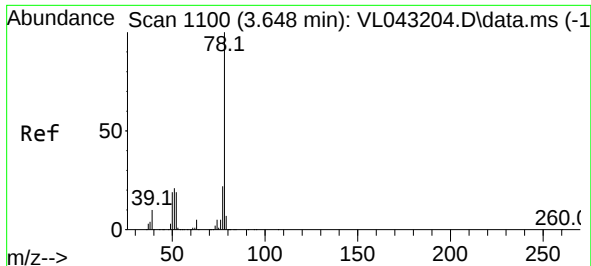
Tgt Ion: 43 Resp: 8752
Ion Ratio Lower Upper
43 100
72 26.9 18.1 27.1



#35
Carbon Tetrachloride
Concen: 0.031 ppbv
RT: 3.748 min Scan# 1131
Delta R.T. -0.007 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 117 Resp: 846
Ion Ratio Lower Upper
117 100
119 93.2 74.6 112.0
121 28.4 23.2 34.8

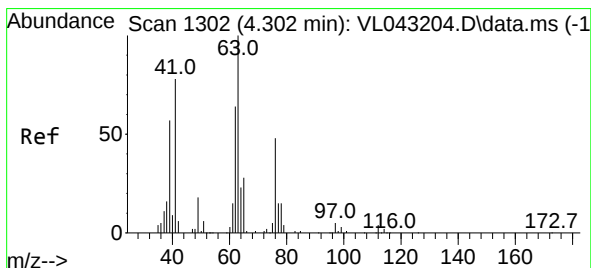
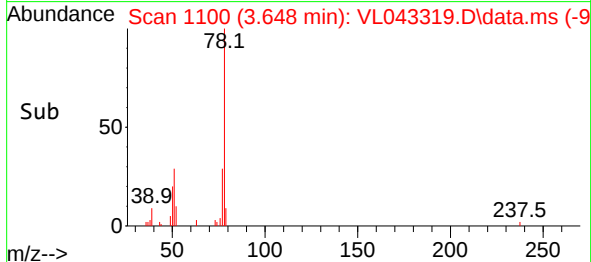
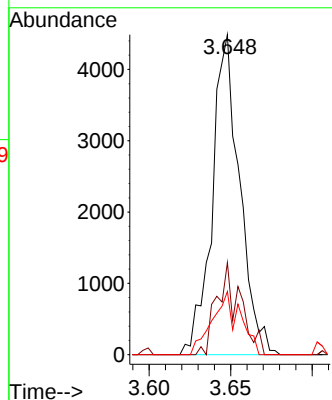
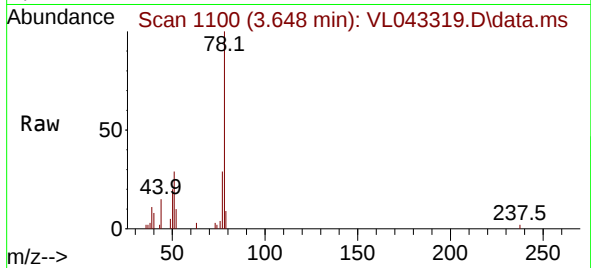




#36
Benzene
Concen: 0.155 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

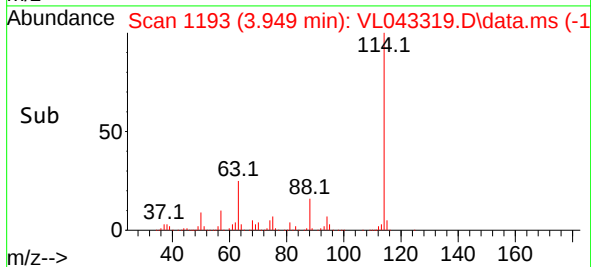
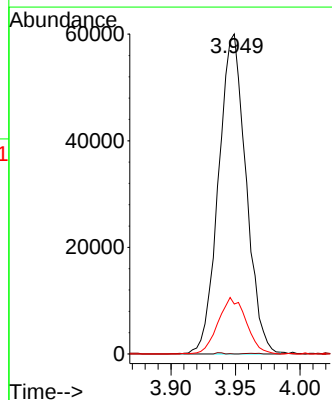
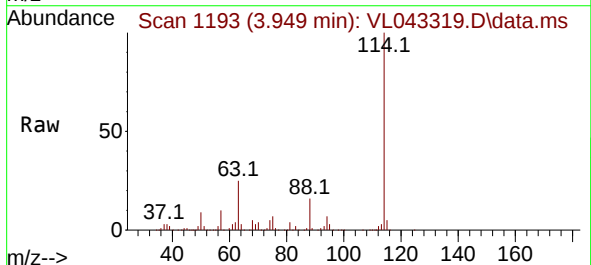
Instrument :
MSVOA_1
ClientSampleId :
OA1

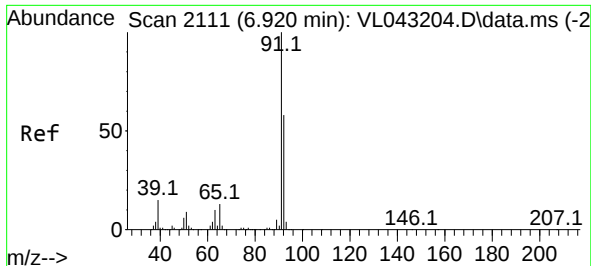
Tgt Ion: 78 Resp: 5266
Ion Ratio Lower Upper
78 100
77 28.8 17.5 26.3#
50 19.8 15.5 23.3



#39
1,2-Dichloropropane
Concen: 7.126 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.353 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 63 Resp: 88766
Ion Ratio Lower Upper
63 100
41 0.0 62.6 93.8#
62 15.6 51.0 76.6#

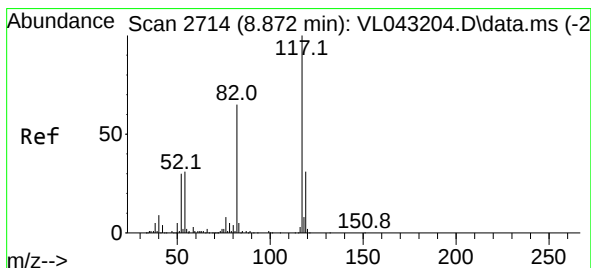
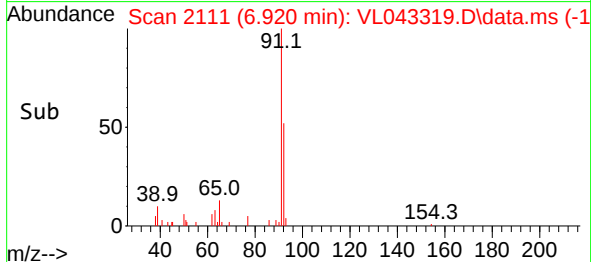
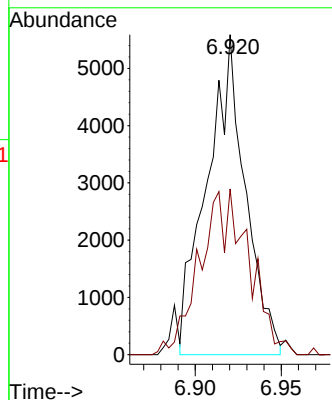
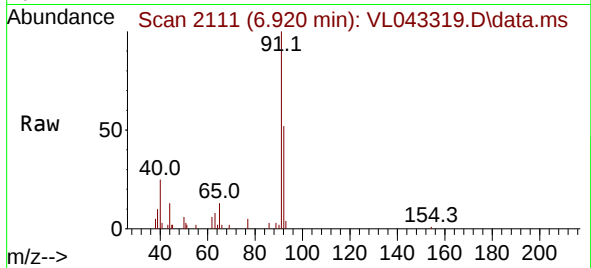




#53
Toluene
Concen: 0.216 ppbv
RT: 6.920 min Scan# 2111
Delta R.T. -0.000 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

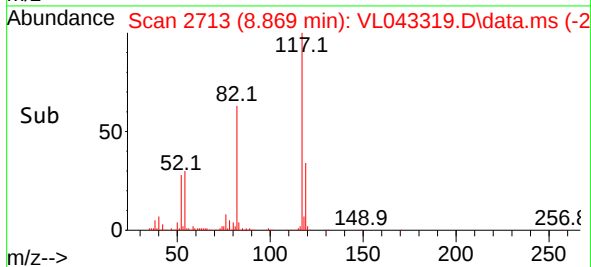
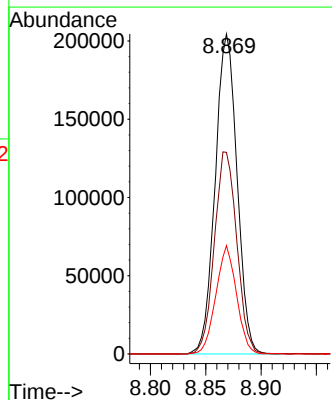
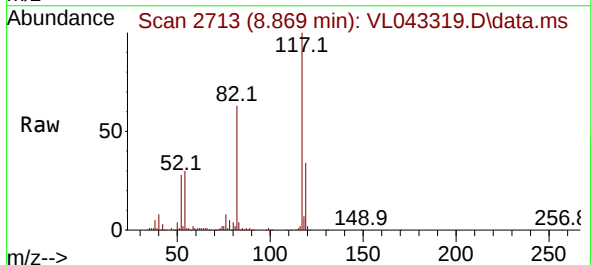
Instrument :
MSVOA_L
ClientSampleId :
OA1

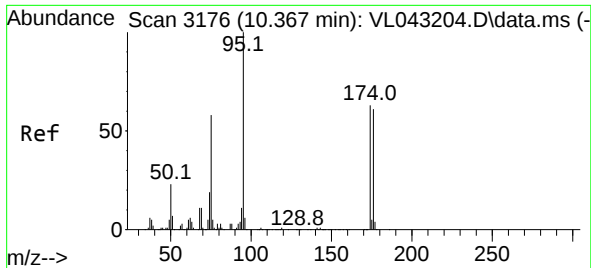
Tgt Ion: 91 Resp: 8694
Ion Ratio Lower Upper
91 100
92 65.8 47.4 71.0



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.869 min Scan# 2713
Delta R.T. -0.003 min
Lab File: VL043319.D
Acq: 08 Dec 2025 18:46

Tgt Ion: 117 Resp: 281292
Ion Ratio Lower Upper
117 100
82 64.7 56.1 84.1
119 32.0 25.0 37.6





#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.915 ppbv
 RT: 10.364 min Scan# 31
 Delta R.T. -0.003 min
 Lab File: VL043319.D
 Acq: 08 Dec 2025 18:46

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Tgt Ion: 95 Resp: 204428
 Ion Ratio Lower Upper
 95 100
 174 69.5 50.2 75.2
 175 4.9 4.1 6.1

