

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL082125\
 Data File : VL042874.D
 Acq On : 21 Aug 2025 20:13
 Operator : SY/MD
 Sample : Q2898-03 10X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

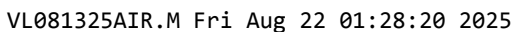
Quant Time: Aug 22 01:28:01 2025
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Aug 14 02:12:54 2025
 Response via : Initial Calibration

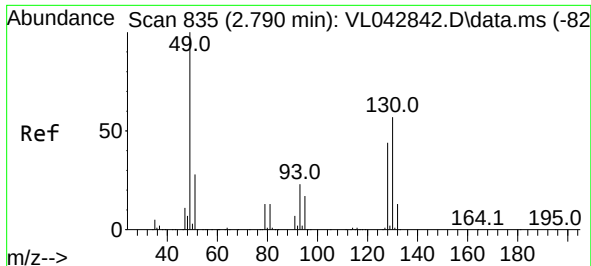
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	2.790	49	129498	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	383631	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	315784	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	239081	10.095	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.000%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	1.499	85	1101	0.058	ppbv #	85
4) Chloromethane	1.531	50	919	0.120	ppbv	99
6) Bromomethane	1.706	94	72	0.024	ppbv #	4
9) Propene	1.622	41	1415	0.156	ppbv	87
10) Heptane	4.988	43	503	0.021	ppbv #	26
11) Trichlorofluoromethane	1.881	101	501	0.027	ppbv #	62
13) Ethanol	1.431	45	321862	388.541	ppbv	86
15) Acetone	1.839	43	22011	1.285	ppbv	94
16) 1,3-Butadiene	1.622	39	924	0.119	ppbv #	48
17) tert-Butyl alcohol	2.049	59	924	0.045	ppbv #	40
19) Isopropyl Alcohol	1.431	45	321862	31.458	ppbv #	35
20) Methylene Chloride	2.065	84	1960	0.273	ppbv	87
23) Vinyl Acetate	2.476	43	3222	0.137	ppbv #	4
26) Hexane	2.829	57	2657	0.139	ppbv #	62
30) Cyclohexane	3.865	84	853	0.051	ppbv #	47
34) 2-Butanone	2.570	43	3176	0.123	ppbv #	82
36) Benzene	3.664	78	1710	0.047	ppbv #	89
39) 1,2-Dichloropropane	3.965	63	95000	7.081	ppbv #	26
40) 1,4-Dioxane	4.625	88	268	0.042	ppbv #	14
53) Toluene	6.952	91	1137	0.026	ppbv #	21

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

Quant Time: Aug 22 01:28:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL081325AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Aug 14 02:12:54 2025
Response via : Initial Calibration

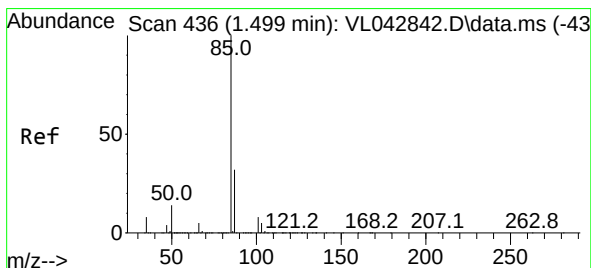
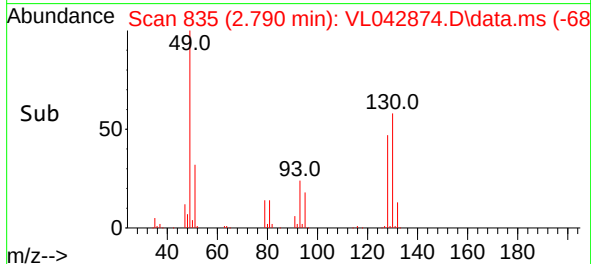
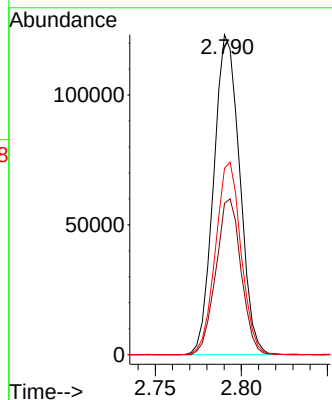
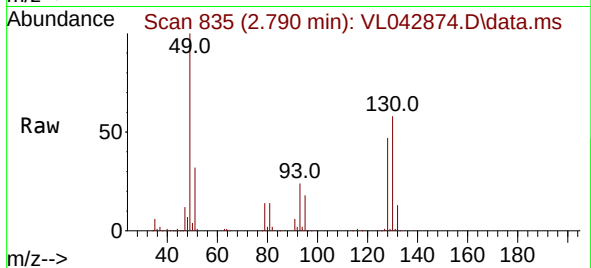




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 835
Delta R.T. 0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

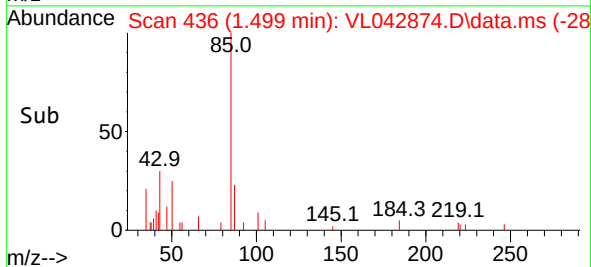
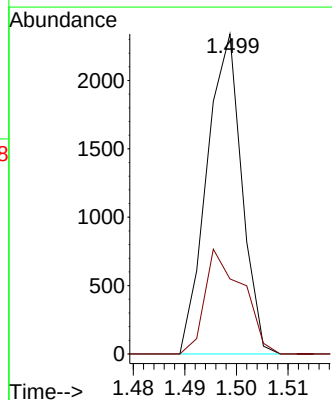
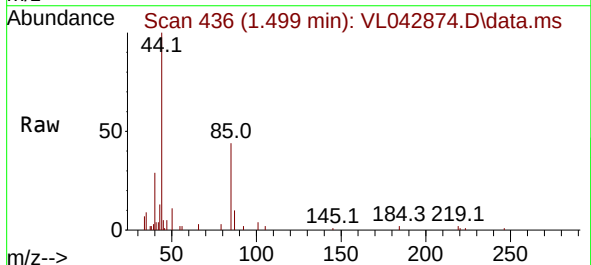
Instrument :
MSVOA_L
ClientSampleId :
OA1

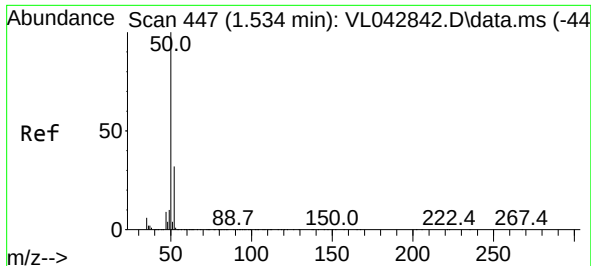
Tgt Ion: 49 Resp: 129498
Ion Ratio Lower Upper
49 100
128 47.2 23.7 71.1
130 59.3 30.6 91.6



#2
Dichlorodifluoromethane
Concen: 0.058 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 85 Resp: 1101
Ion Ratio Lower Upper
85 100
87 23.5 25.3 37.9

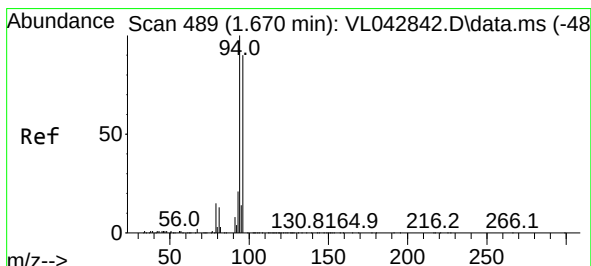
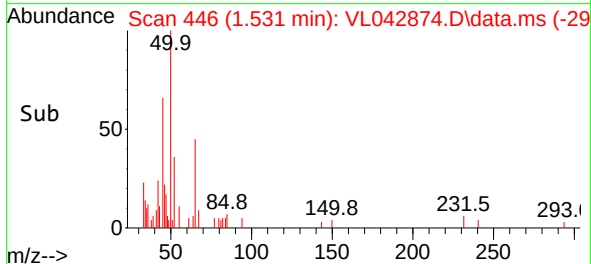
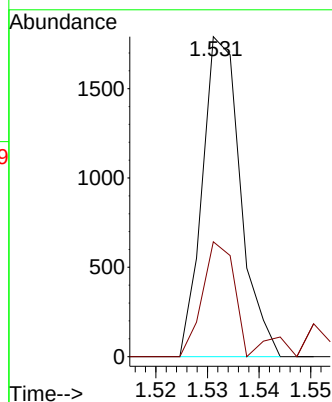
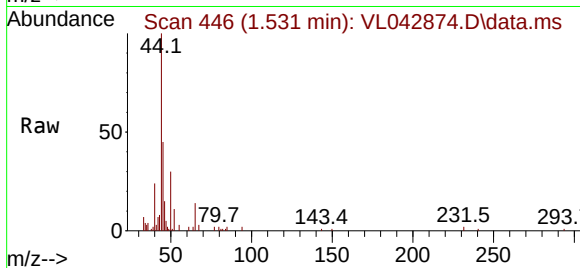




#4
Chloromethane
Concen: 0.120 ppbv
RT: 1.531 min Scan# 447
Delta R.T. -0.003 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

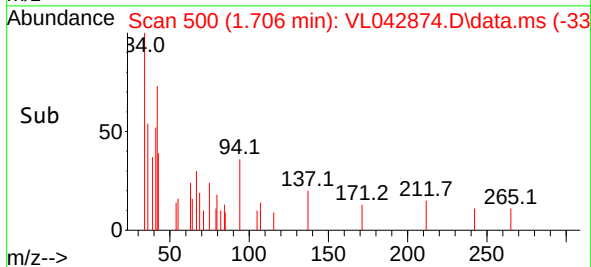
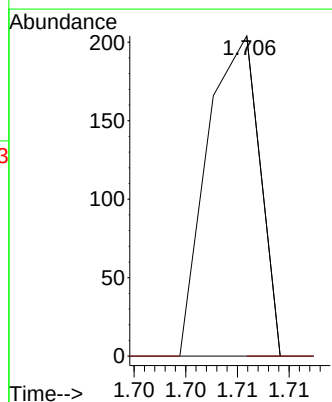
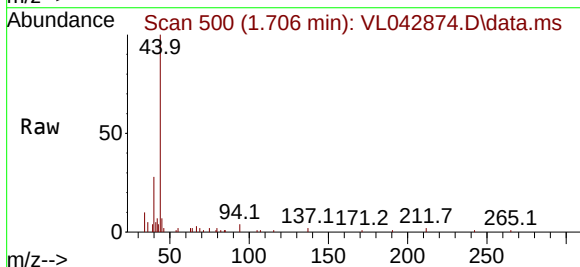
Instrument :
MSVOA_1
ClientSampleId :
OA1

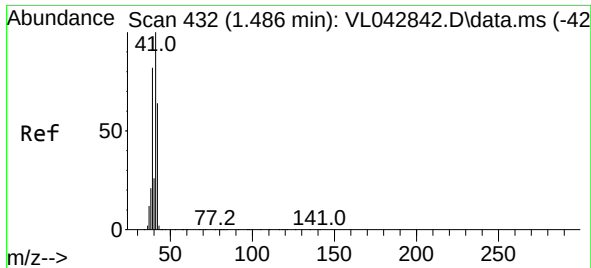
Tgt Ion: 50 Resp: 919
Ion Ratio Lower Upper
50 100
52 31.7 25.9 38.9



#6
Bromomethane
Concen: 0.024 ppbv
RT: 1.706 min Scan# 500
Delta R.T. 0.035 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 94 Resp: 72
Ion Ratio Lower Upper
94 100
96 0.0 72.1 108.1#





#9

Propene

Concen: 0.156 ppbv

RT: 1.622 min Scan# 41

Delta R.T. 0.136 min

Lab File: VL042874.D

Acq: 21 Aug 2025 20:13

Instrument :

MSVOA_L

ClientSampleId :

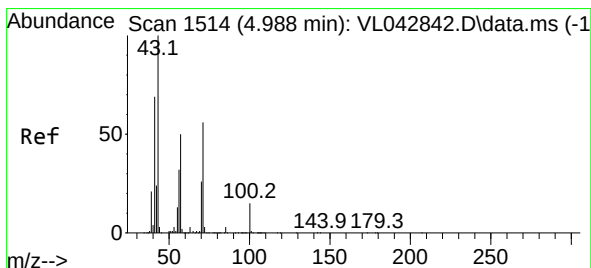
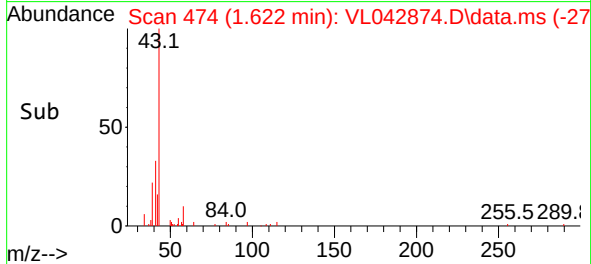
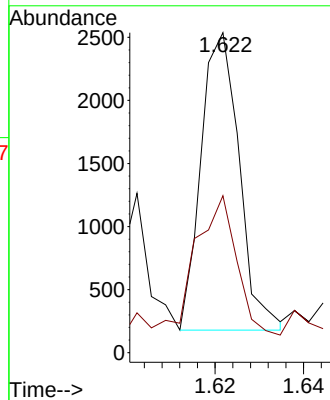
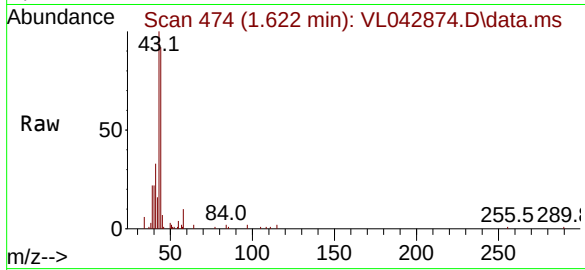
OA1

Tgt Ion: 41 Resp: 1415

Ion Ratio Lower Upper

41 100

42 76.5 53.0 79.4



#10

Heptane

Concen: 0.021 ppbv

RT: 4.988 min Scan# 1514

Delta R.T. -0.000 min

Lab File: VL042874.D

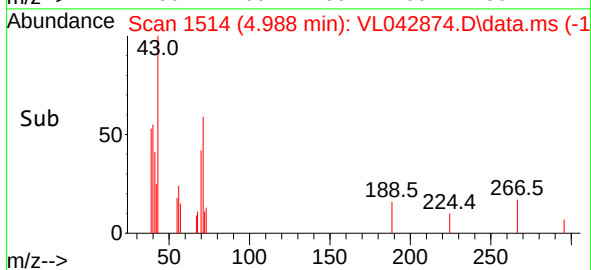
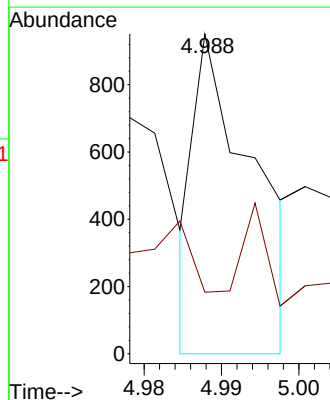
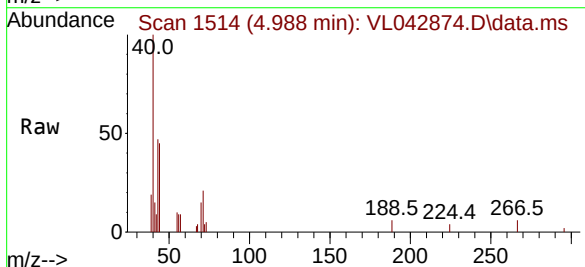
Acq: 21 Aug 2025 20:13

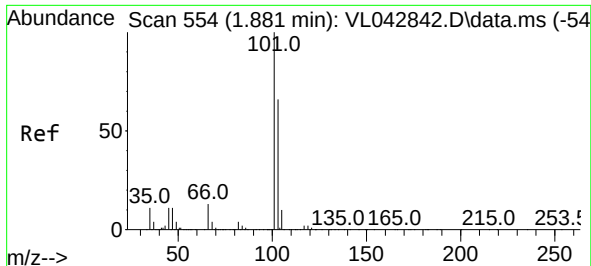
Tgt Ion: 43 Resp: 503

Ion Ratio Lower Upper

43 100

57 0.0 41.4 62.0#

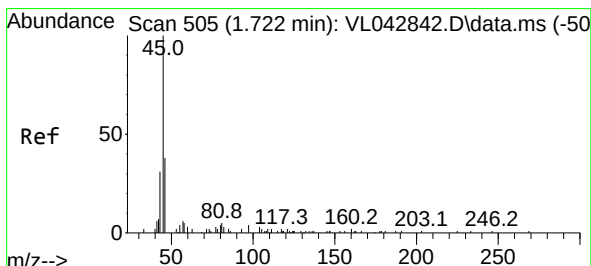
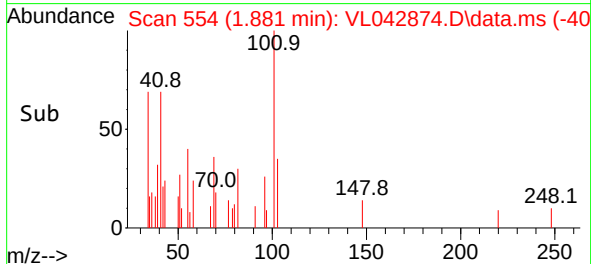
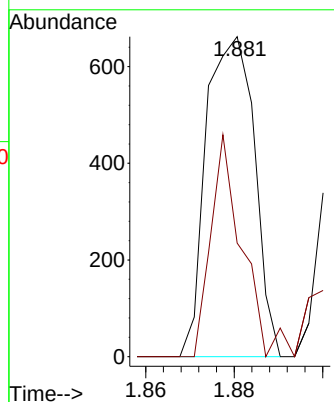
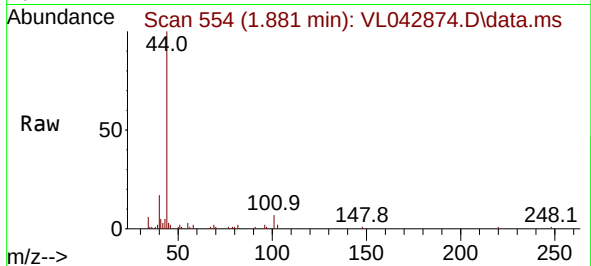




#11
 Trichlorofluoromethane
 Concen: 0.027 ppbv
 RT: 1.881 min Scan# 51
 Delta R.T. -0.000 min
 Lab File: VL042874.D
 Acq: 21 Aug 2025 20:13

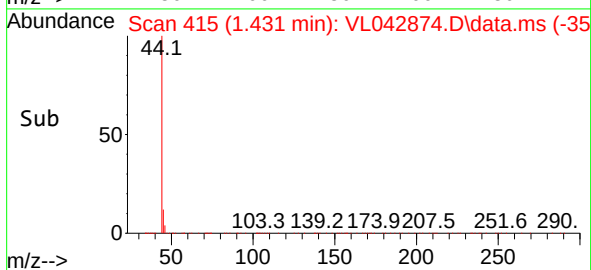
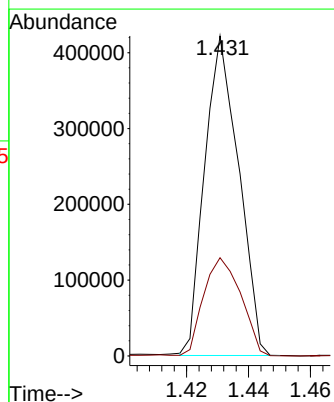
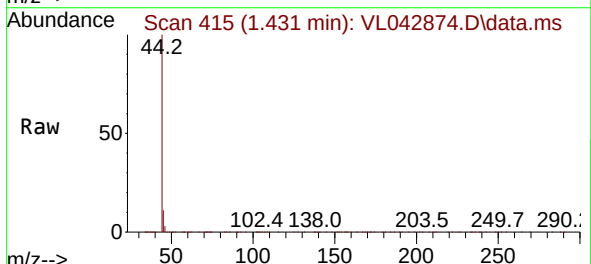
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

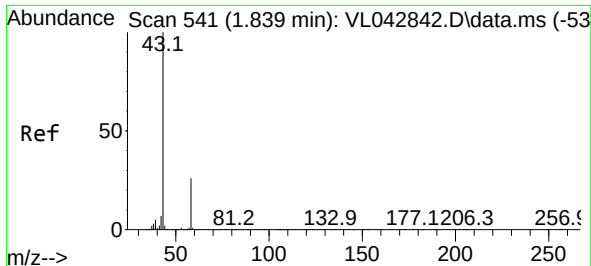
Tgt Ion:101 Resp: 501
 Ion Ratio Lower Upper
 101 100
 103 35.5 52.5 78.7#



#13
 Ethanol
 Concen: 388.541 ppbv
 RT: 1.431 min Scan# 415
 Delta R.T. -0.291 min
 Lab File: VL042874.D
 Acq: 21 Aug 2025 20:13

Tgt Ion: 45 Resp: 321862
 Ion Ratio Lower Upper
 45 100
 46 34.5 17.5 69.9

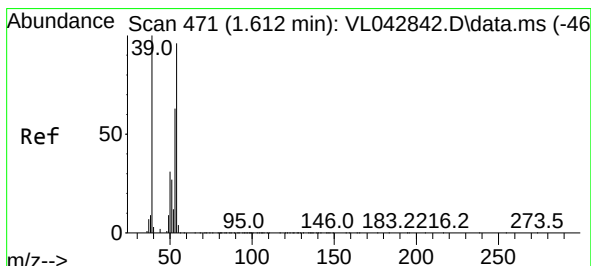
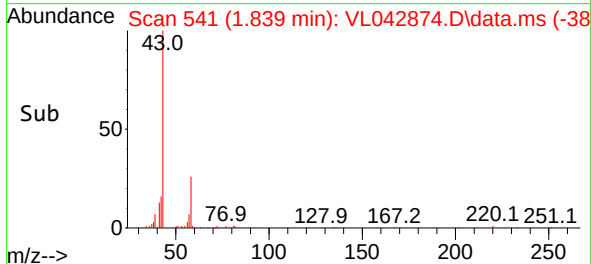
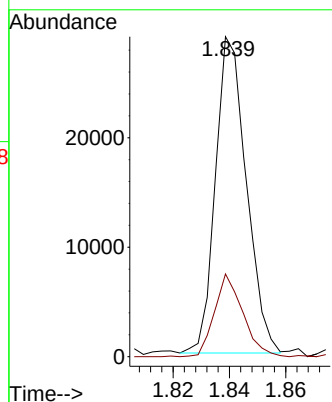
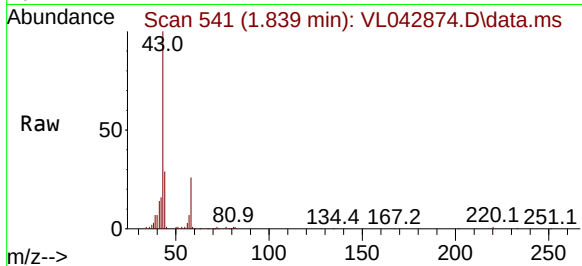




#15
Acetone
Concen: 1.285 ppbv
RT: 1.839 min Scan# 541
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

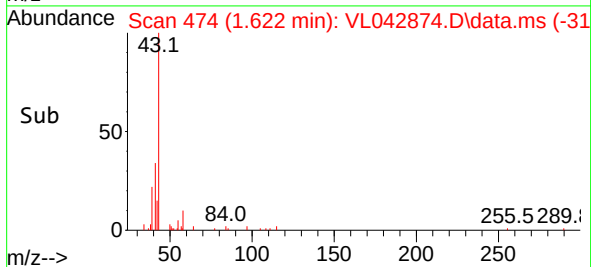
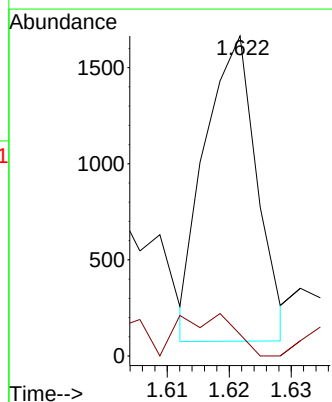
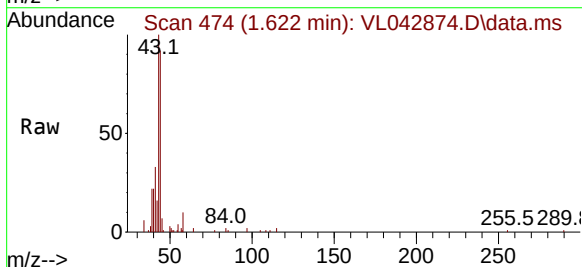
Instrument :
MSVOA_1
ClientSampleId :
OA1

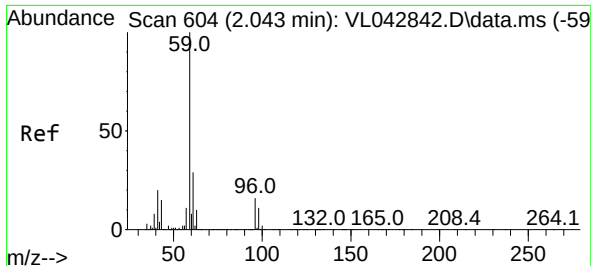
Tgt Ion: 43 Resp: 22011
Ion Ratio Lower Upper
43 100
58 24.7 22.4 33.6



#16
1,3-Butadiene
Concen: 0.119 ppbv
RT: 1.622 min Scan# 474
Delta R.T. 0.010 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 39 Resp: 924
Ion Ratio Lower Upper
39 100
54 33.7 63.6 95.4#





#17

tert-Butyl alcohol

Concen: 0.045 ppbv

RT: 2.049 min Scan# 604

Delta R.T. 0.006 min

Lab File: VL042874.D

Acq: 21 Aug 2025 20:13

Instrument :

MSVOA_L

ClientSampleId :

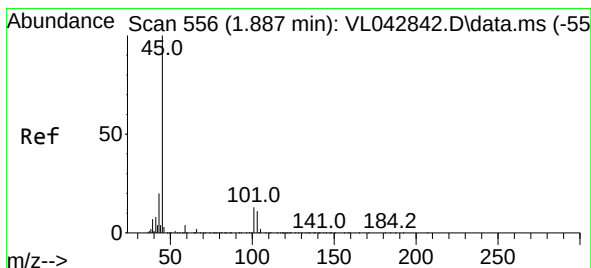
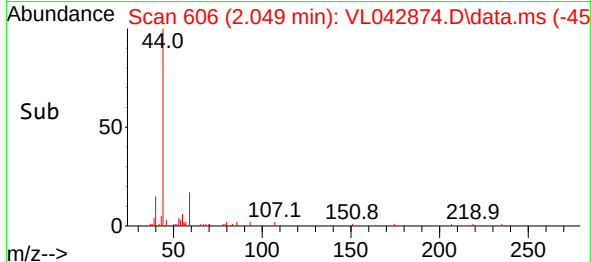
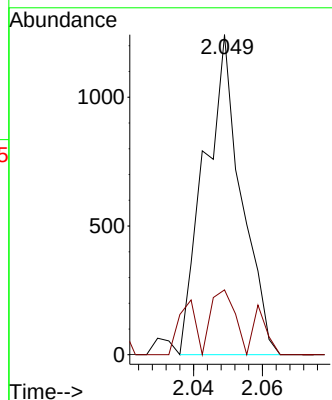
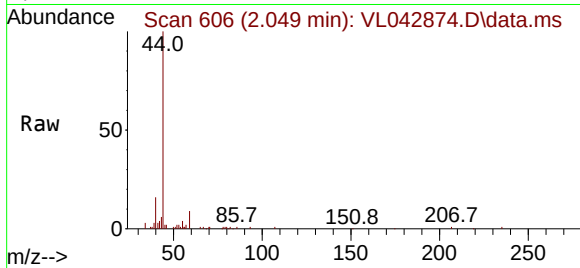
OA1

Tgt Ion: 59 Resp: 924

Ion Ratio Lower Upper

59 100

57 34.1 9.0 13.4#



#19

Isopropyl Alcohol

Concen: 31.458 ppbv

RT: 1.431 min Scan# 415

Delta R.T. -0.456 min

Lab File: VL042874.D

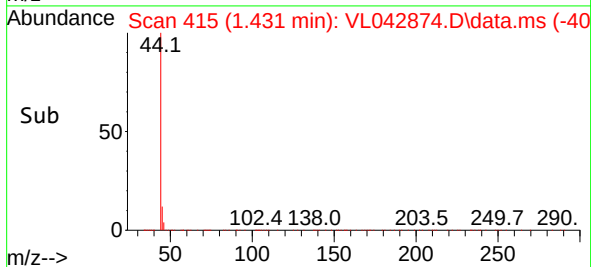
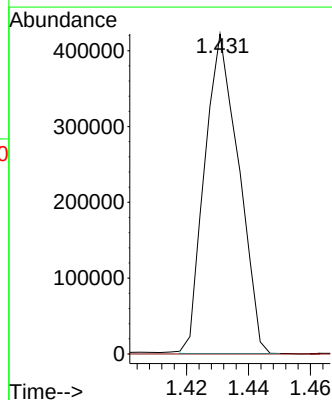
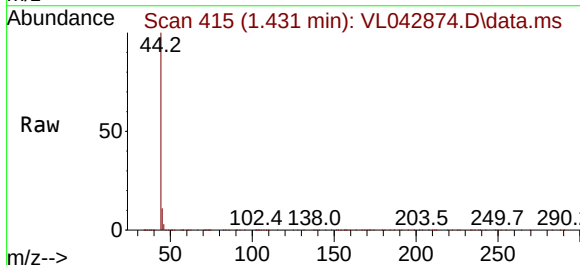
Acq: 21 Aug 2025 20:13

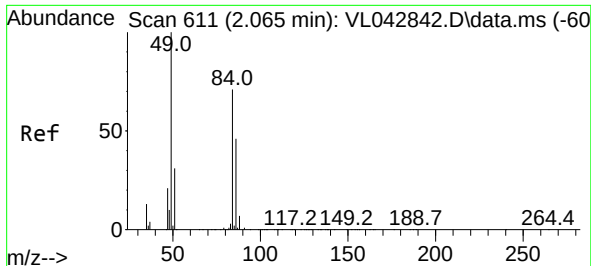
Tgt Ion: 45 Resp: 321862

Ion Ratio Lower Upper

45 100

58 0.1 32.7 49.1#

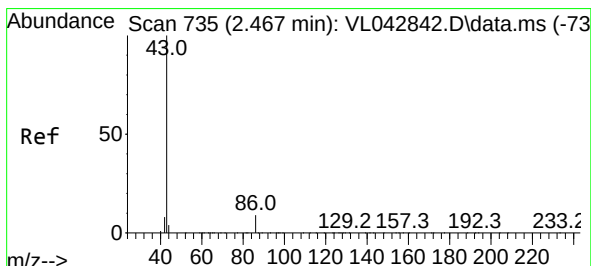
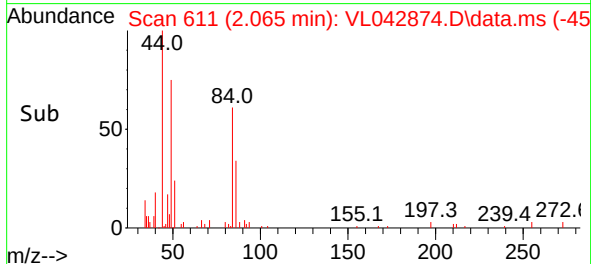
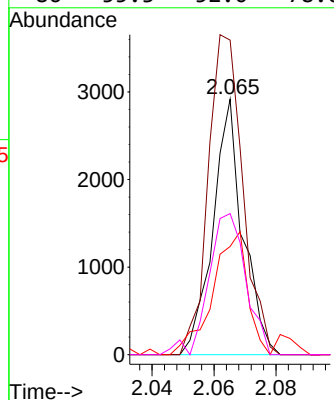
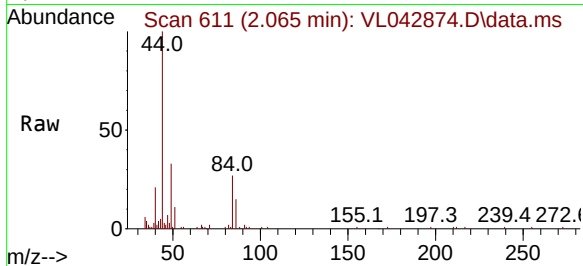




#20
Methylene Chloride
Concen: 0.273 ppbv
RT: 2.065 min Scan# 611
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

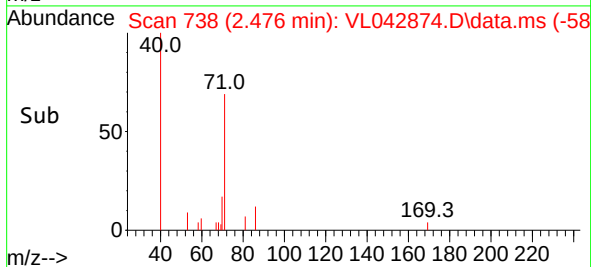
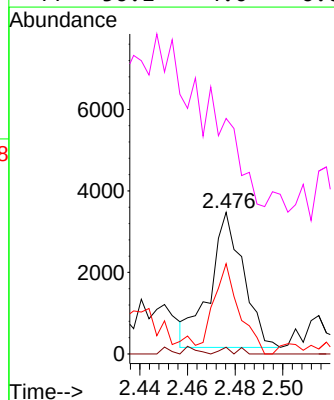
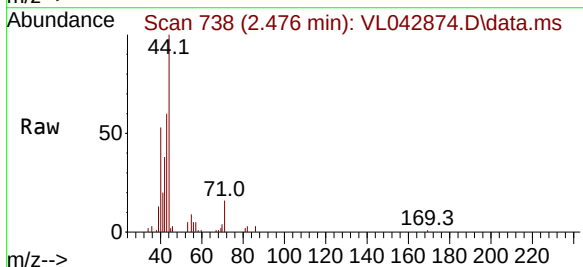
Instrument :
MSVOA_L
ClientSampleId :
OA1

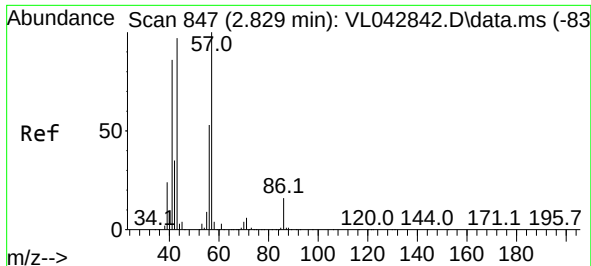
Tgt Ion: 84	Resp: 1960
Ion Ratio	Lower Upper
84 100	
49 123.1	112.3 168.5
51 38.7	36.0 54.0
86 55.3	52.0 78.0



#23
Vinyl Acetate
Concen: 0.137 ppbv
RT: 2.476 min Scan# 738
Delta R.T. 0.010 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt	Ion: 43	Resp:	3222
Ion	Ratio	Lower	Upper
43	100		
86	4.9	6.6	9.8#
42	60.9	7.0	10.6#
44	56.1	4.0	6.0#

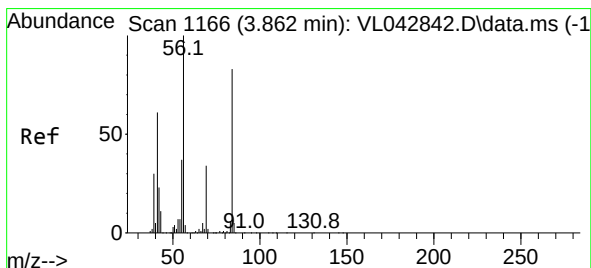
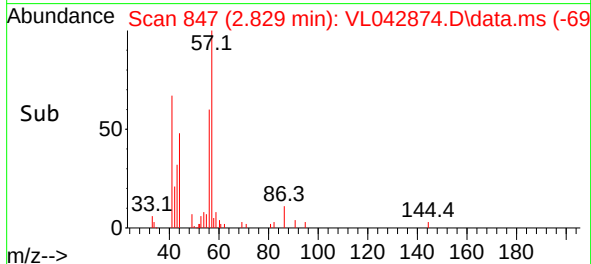
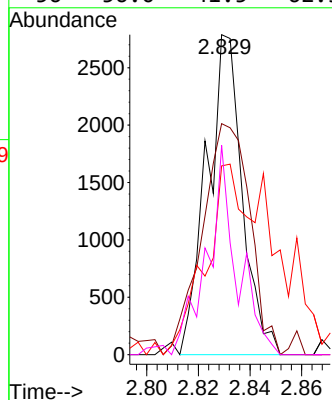
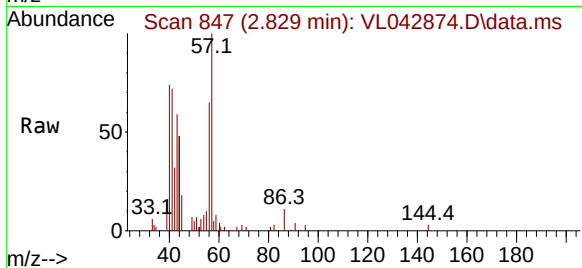




#26
Hexane
Concen: 0.139 ppbv
RT: 2.829 min Scan# 847
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

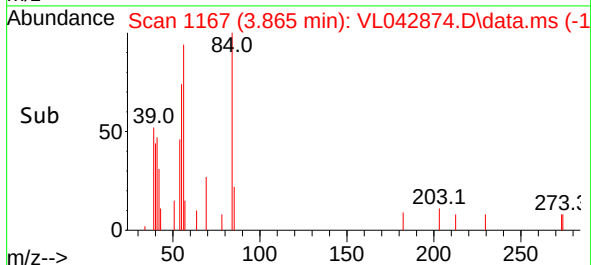
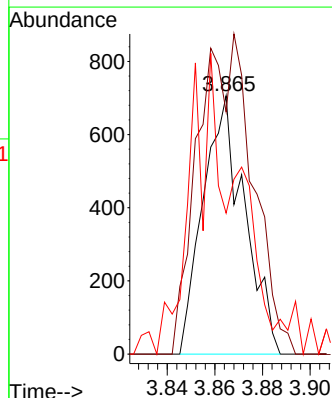
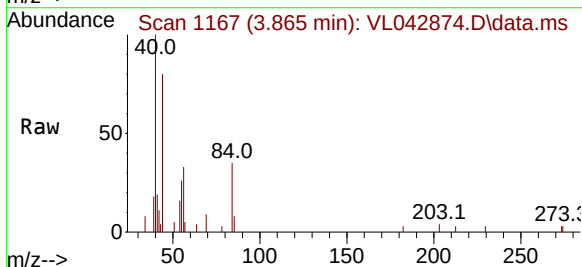
Instrument :
MSVOA_L
ClientSampleId :
OA1

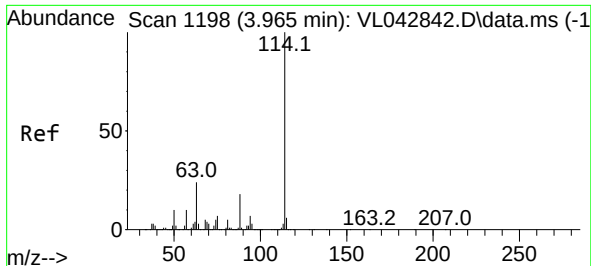
Tgt Ion:	57	Resp:	2657
Ion	Ratio	Lower	Upper
57	100		
41	103.4	68.6	103.0#
43	125.6	168.5	252.7#
56	56.0	41.5	62.3



#30
Cyclohexane
Concen: 0.051 ppbv
RT: 3.865 min Scan# 1167
Delta R.T. 0.003 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion:	84	Resp:	853
Ion	Ratio	Lower	Upper
84	100		
56	163.3	98.8	148.2#
41	146.2	61.3	91.9#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 3.968 min Scan# 1199

Delta R.T. 0.003 min

Lab File: VL042874.D

Acq: 21 Aug 2025 20:13

Instrument :

MSVOA_L

ClientSampleId :

OA1

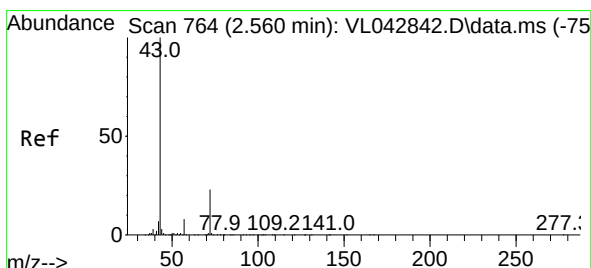
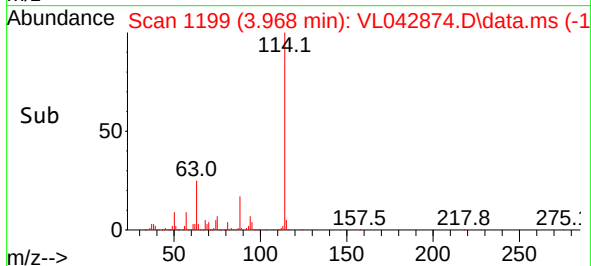
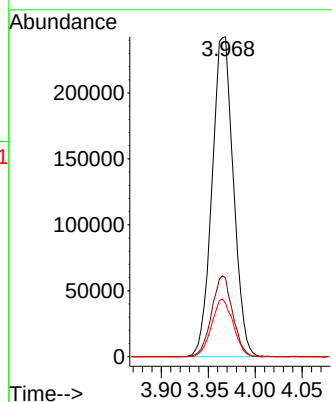
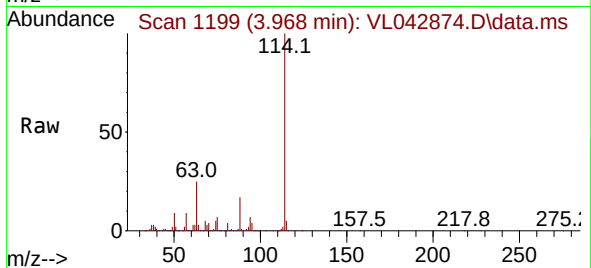
Tgt Ion:114 Resp: 383631

Ion Ratio Lower Upper

114 100

63 24.8 19.7 29.5

88 18.1 14.4 21.6



#34

2-Butanone

Concen: 0.123 ppbv

RT: 2.570 min Scan# 767

Delta R.T. 0.010 min

Lab File: VL042874.D

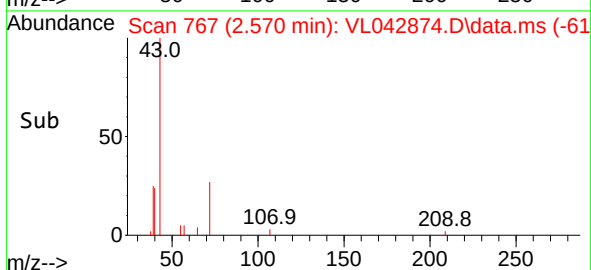
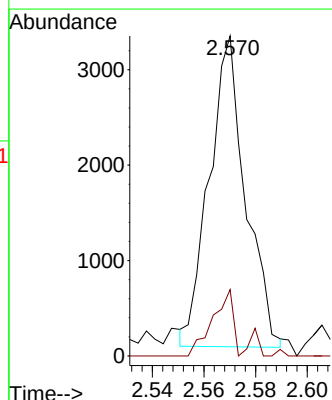
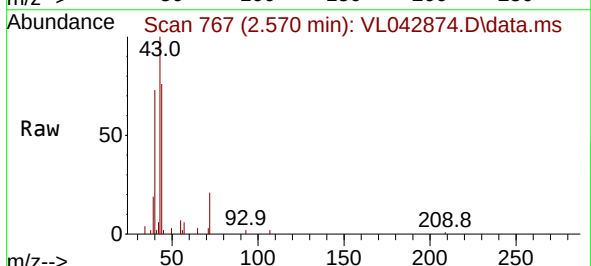
Acq: 21 Aug 2025 20:13

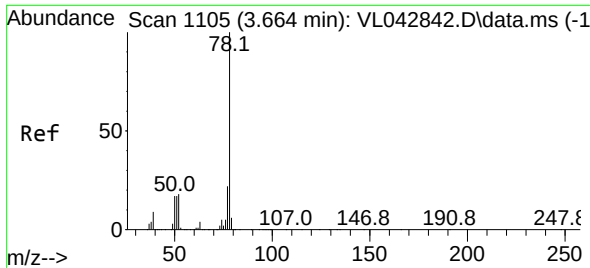
Tgt Ion: 43 Resp: 3176

Ion Ratio Lower Upper

43 100

72 14.7 18.6 28.0#

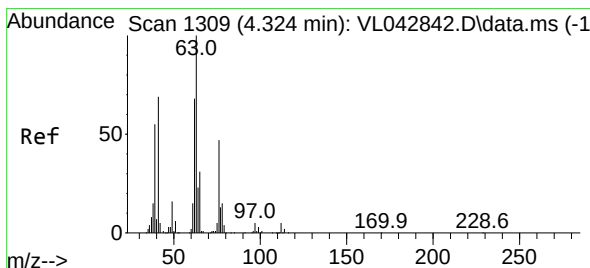
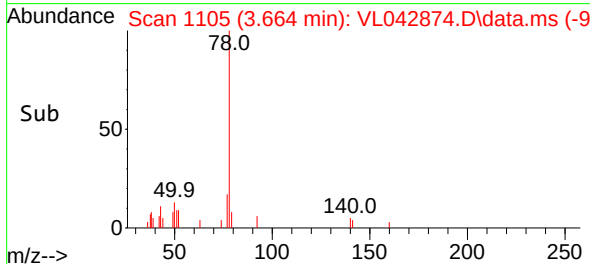
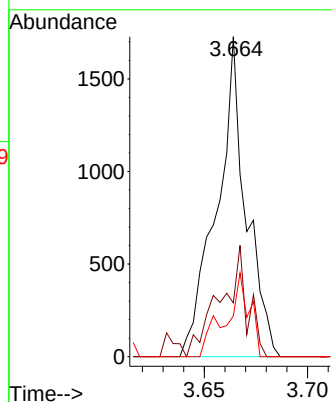
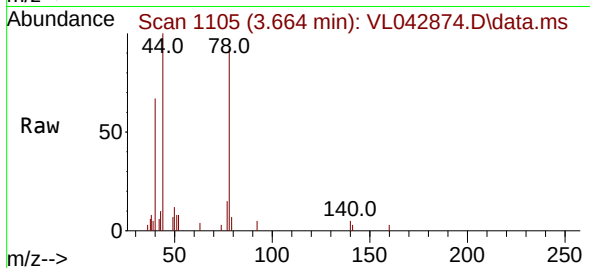




#36
Benzene
Concen: 0.047 ppbv
RT: 3.664 min Scan# 1105
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

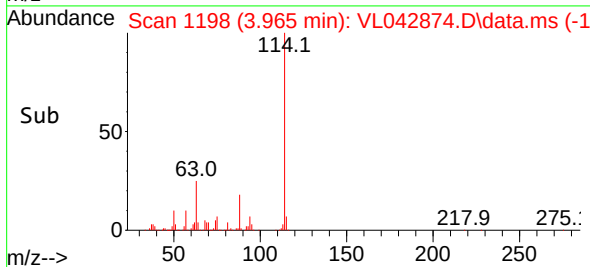
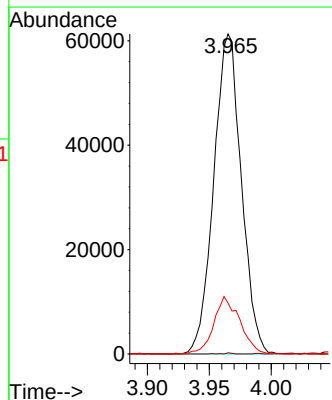
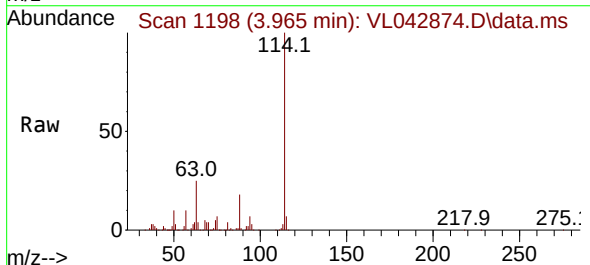
Instrument :
MSVOA_L
ClientSampleId :
OA1

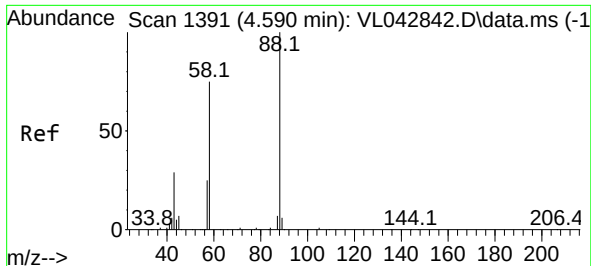
Tgt Ion: 78 Resp: 1710
Ion Ratio Lower Upper
78 100
77 16.8 17.7 26.5#
50 12.7 13.9 20.9#



#39
1,2-Dichloropropane
Concen: 7.081 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. -0.359 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 63 Resp: 95000
Ion Ratio Lower Upper
63 100
41 0.3 55.0 82.4#
62 15.9 54.4 81.6#

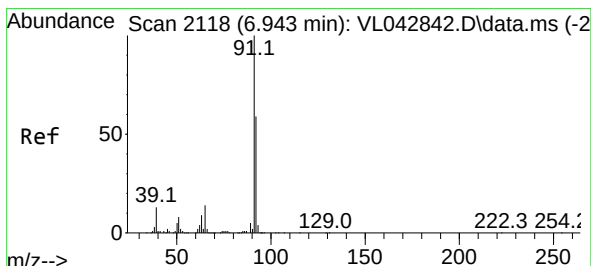
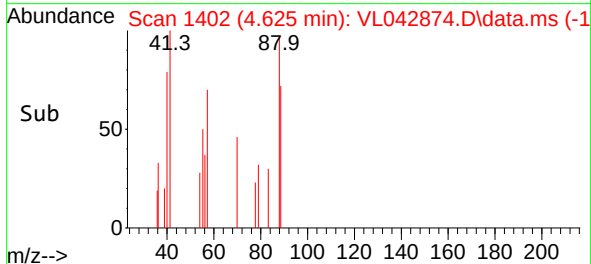
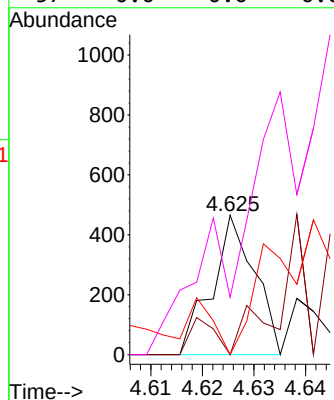
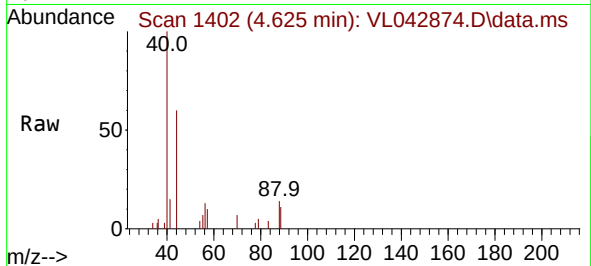




#40
1,4-Dioxane
Concen: 0.042 ppbv
RT: 4.625 min Scan# 1402
Delta R.T. 0.036 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

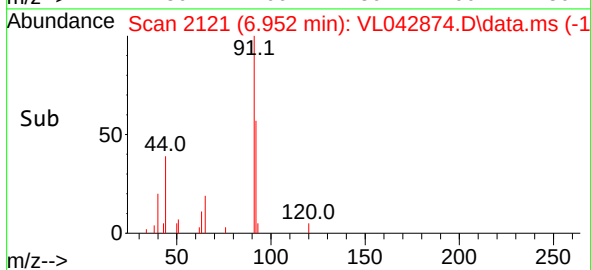
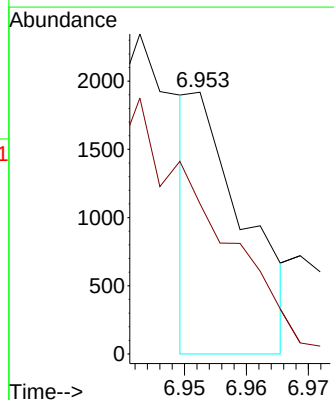
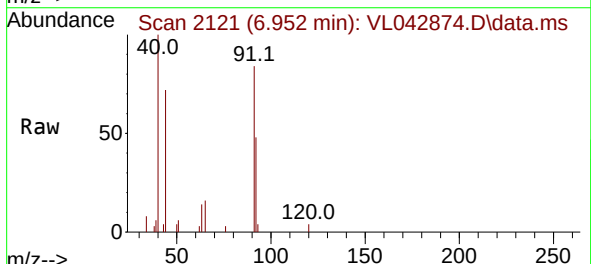
Instrument :
MSVOA_L
ClientSampleId :
OA1

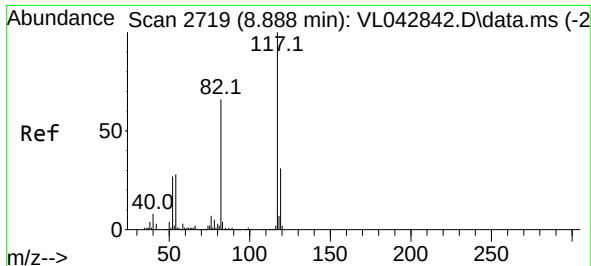
Tgt Ion: 88 Resp: 268
Ion Ratio Lower Upper
88 100
58 0.0 53.8 80.6#
43 76.5 22.8 34.2#
57 0.0 0.0 0.0



#53
Toluene
Concen: 0.026 ppbv
RT: 6.952 min Scan# 2121
Delta R.T. 0.010 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 91 Resp: 1137
Ion Ratio Lower Upper
91 100
92 0.0 47.8 71.6#

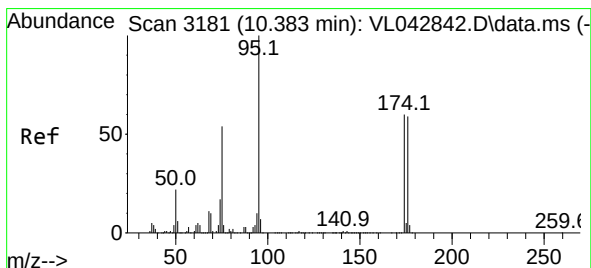
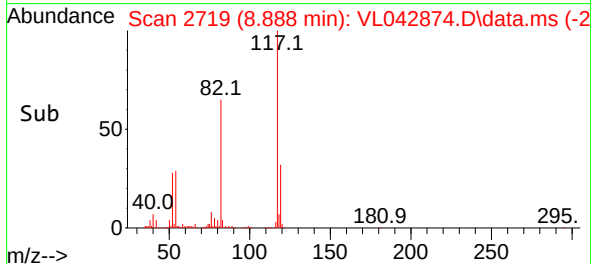
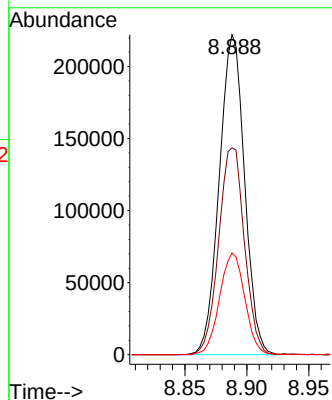
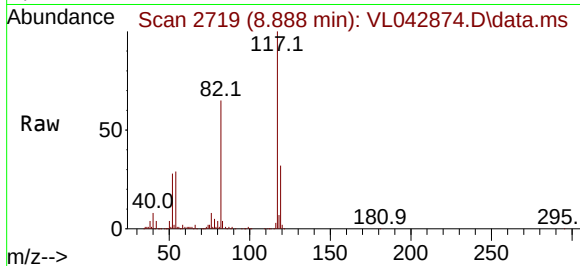




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Instrument :
MSVOA_1
ClientSampleId :
OA1

Tgt Ion:117 Resp: 315784
Ion Ratio Lower Upper
117 100
82 66.2 54.6 81.8
119 31.8 25.9 38.9



#68
1-Bromo-4-Fluorobenzene
Concen: 10.095 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. -0.003 min
Lab File: VL042874.D
Acq: 21 Aug 2025 20:13

Tgt Ion: 95 Resp: 239081
Ion Ratio Lower Upper
95 100
174 56.0 48.4 72.6
175 4.1 3.8 5.8

