

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050224\
 Data File : VL041199.D
 Acq On : 2 May 2024 17:17
 Operator : SY/MD
 Sample : P2334-04
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 BA-03-SS01-20240425

Quant Time: May 03 03:42:05 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri May 03 03:34:47 2024
 Response via : Initial Calibration

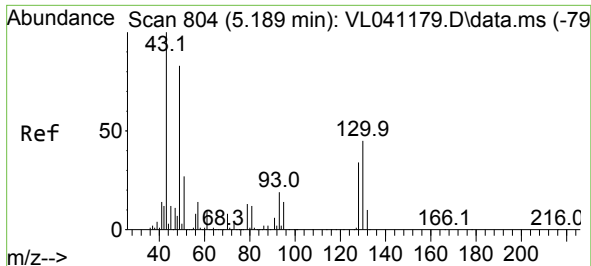
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards							
1) Bromochloromethane		5.195	49	886708	10.000	ppbv	0.00
33) 1,4-Difluorobenzene		6.658	114	2227666	10.000	ppbv	0.00
55) Chlorobenzene-d5		11.468	117	1995196	10.000	ppbv	0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene		13.780	95	1511660	10.036	ppbv	0.00
Spiked Amount		10.000	Range	65 - 135	Recovery	= 100.400%	
Target Compounds						Qvalue	
2) Dichlorodifluoromethane		2.739	85	59175	0.493	ppbv #	82
3) Chlorodifluoromethane		2.658	51	710262	5.274	ppbv #	62
4) Chloromethane		2.819	50	17797	0.337	ppbv	93
9) Propene		2.710	41	43825	0.832	ppbv #	69
10) Heptane		7.587	43	7034	0.055	ppbv #	65
11) Trichlorofluoromethane		3.568	101	29386	0.241	ppbv	98
13) Ethanol		3.240	45	874919	74.055	ppbv	99
15) Acetone		3.475	43	614529	5.872	ppbv	98
16) 1,3-Butadiene		2.973	39	2203	0.042	ppbv	96
17) tert-Butyl alcohol		3.893	59	7494	0.066	ppbv #	78
19) Isopropyl Alcohol		3.584	45	377696	5.500	ppbv #	44
20) Methylene Chloride		3.938	84	1119865	30.773	ppbv	98
23) Vinyl Acetate		4.626	43	4686	0.041	ppbv #	1
25) Ethyl Acetate		5.214	43	719031	3.442	ppbv #	80
26) Hexane		5.218	57	956783	10.264	ppbv #	42
30) Cyclohexane		6.600	84	2877	0.039	ppbv #	1
31) cis-1,2-Dichloroethene		5.208	61	6205	0.071	ppbv #	26
34) 2-Butanone		4.796	43	57233	0.505	ppbv #	90
35) Carbon Tetrachloride		6.497	117	5991	0.048	ppbv #	71
36) Benzene		6.375	78	23168	0.124	ppbv	97
38) Trichloroethene		7.288	130	4166	0.060	ppbv	86
39) 1,2-Dichloropropane		6.655	63	575197	7.984	ppbv #	23
41) Tetrahydrofuran		5.214	42	362121	4.412	ppbv #	52
44) 2,2,4-Trimethylpentane		7.340	57	11374	0.035	ppbv #	40
52) Tetrachloroethene		10.613	164	11227	0.171	ppbv	87
53) Toluene		9.224	91	142681	0.658	ppbv	99
59) m/p-Xylene		12.381	91	24474	0.106	ppbv #	1
60) o-Xylene		13.063	91	15411	0.072	ppbv	94
74) 1,2,4-Trimethylbenzene		16.114	105	8223	0.034	ppbv #	63

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

Quant Time: May 03 03:42:05 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL042924AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri May 03 03:34:47 2024
Response via : Initial Calibration

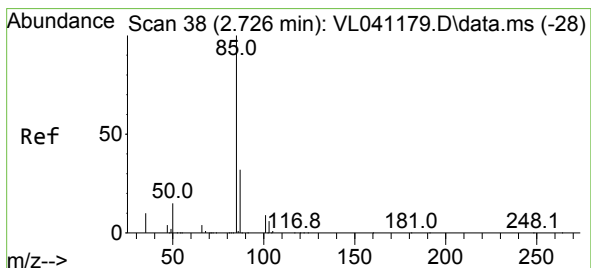
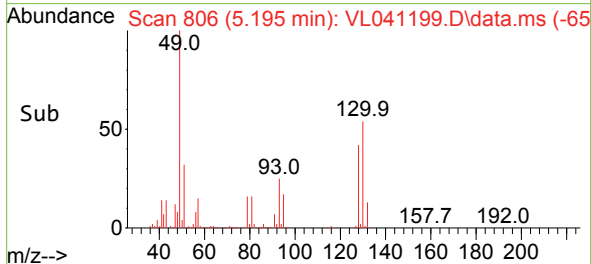
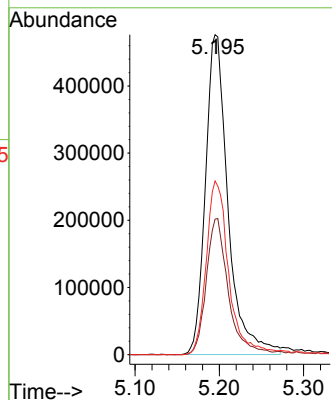
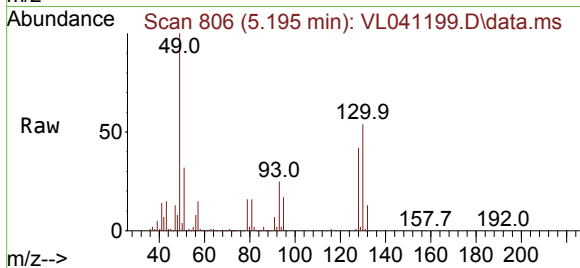




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.195 min Scan# 804
 Delta R.T. 0.003 min
 Lab File: VL041199.D
 Acq: 2 May 2024 17:17

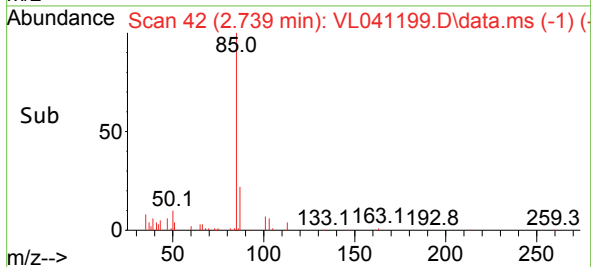
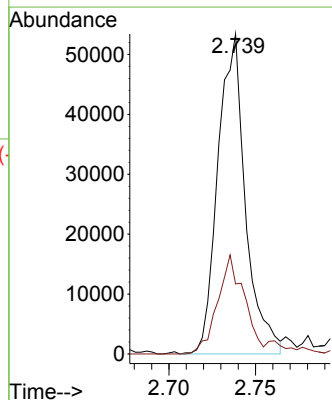
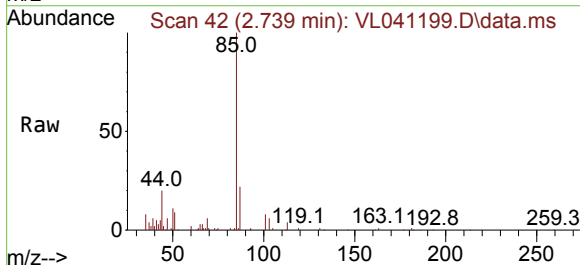
Instrument :
 MSVOA_L
 ClientSampleId :
 BA-03-SS01-20240425

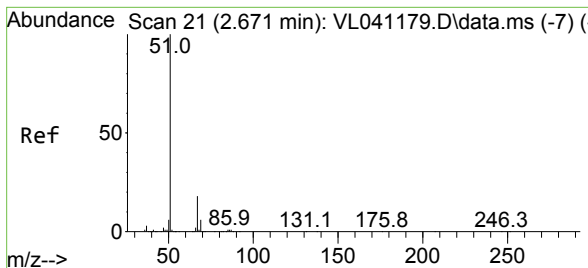
Tgt Ion: 49 Resp: 886708
 Ion Ratio Lower Upper
 49 100
 128 43.3 21.5 64.5
 130 55.9 27.2 81.6



#2
 Dichlorodifluoromethane
 Concen: 0.493 ppbv
 RT: 2.739 min Scan# 42
 Delta R.T. 0.010 min
 Lab File: VL041199.D
 Acq: 2 May 2024 17:17

Tgt Ion: 85 Resp: 59175
 Ion Ratio Lower Upper
 85 100
 87 21.9 25.7 38.5





#3

Chlorodifluoromethane

Concen: 5.274 ppbv

RT: 2.658 min Scan# 11

Delta R.T. -0.016 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

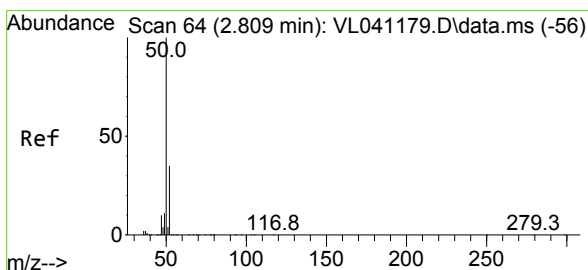
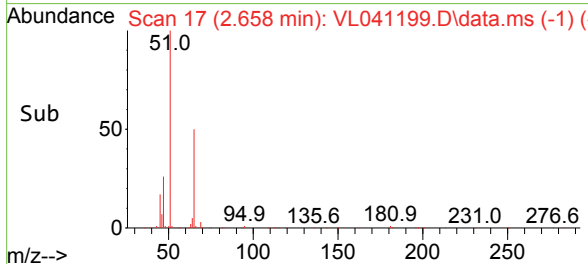
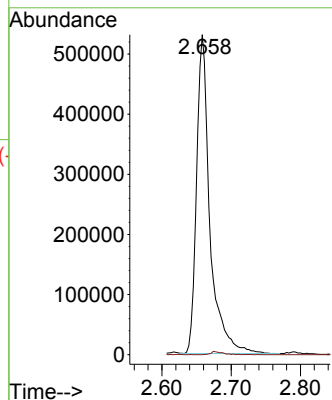
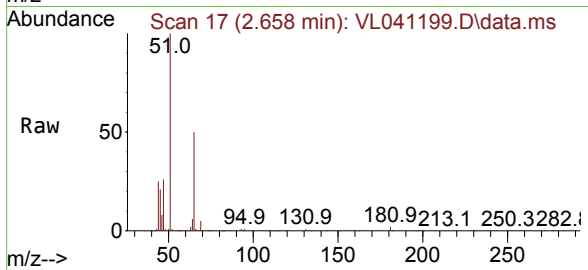
BA-03-SS01-20240425

Tgt Ion: 51 Resp: 710262

Ion Ratio Lower Upper

51 100

67 0.9 14.0 21.0#



#4

Chloromethane

Concen: 0.337 ppbv

RT: 2.819 min Scan# 67

Delta R.T. 0.007 min

Lab File: VL041199.D

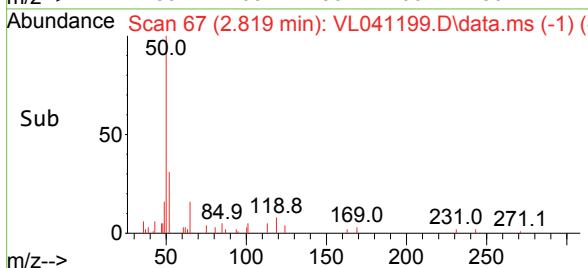
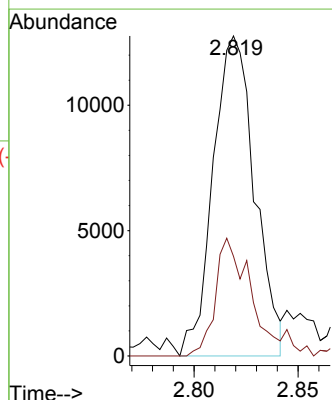
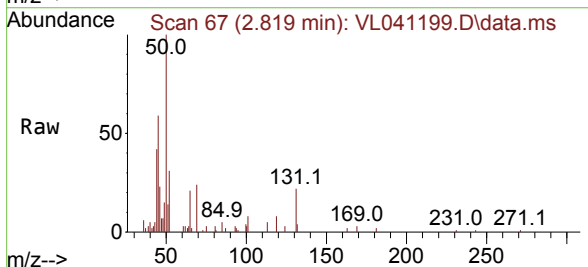
Acq: 2 May 2024 17:17

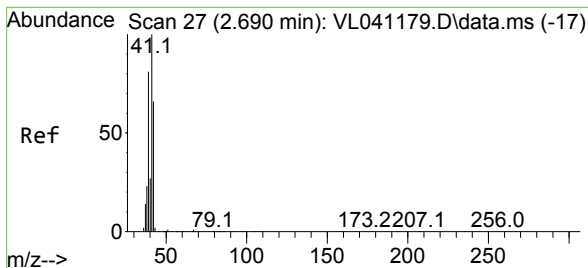
Tgt Ion: 50 Resp: 17797

Ion Ratio Lower Upper

50 100

52 31.1 28.3 42.5





#9

Propene

Concen: 0.832 ppbv

RT: 2.710 min Scan# 31

Delta R.T. 0.016 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

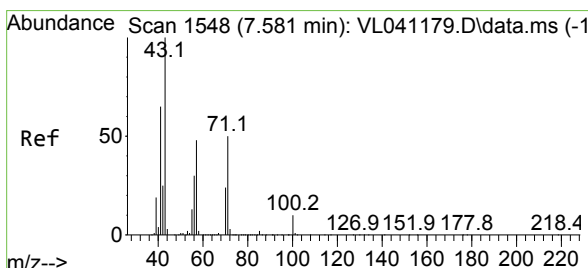
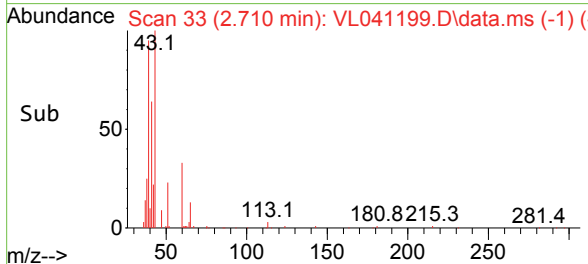
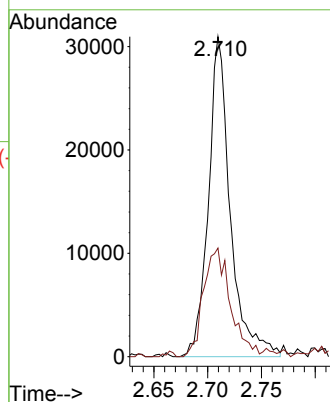
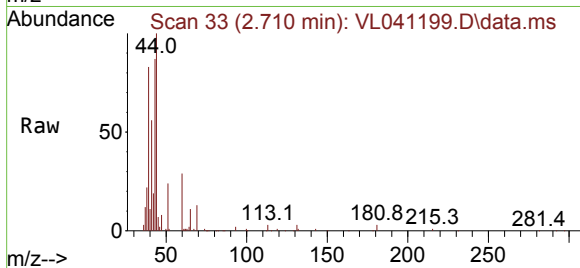
BA-03-SS01-20240425

Tgt Ion: 41 Resp: 43825

Ion Ratio Lower Upper

41 100

42 44.2 55.3 82.9#



#10

Heptane

Concen: 0.055 ppbv

RT: 7.587 min Scan# 1550

Delta R.T. 0.006 min

Lab File: VL041199.D

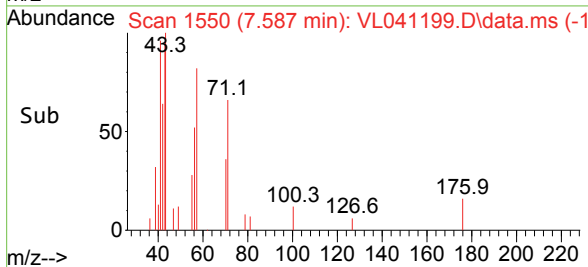
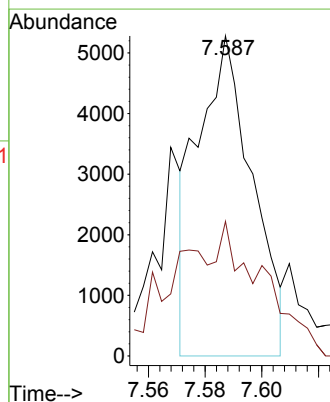
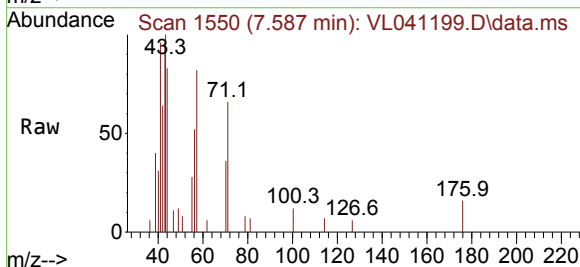
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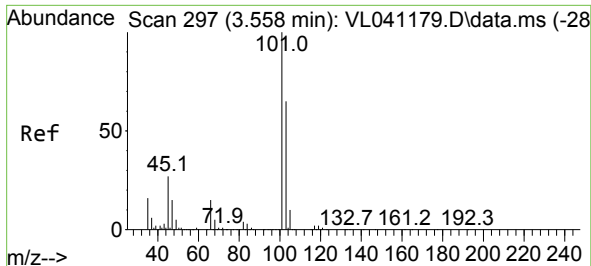
Tgt Ion: 43 Resp: 7034

Ion Ratio Lower Upper

43 100

57 72.4 38.7 58.1#

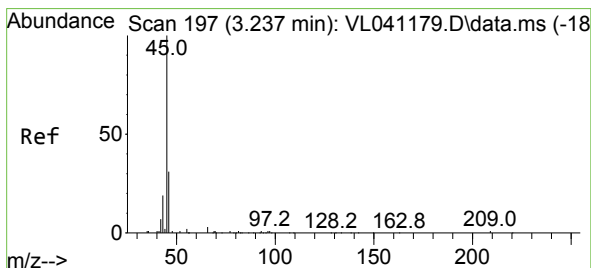
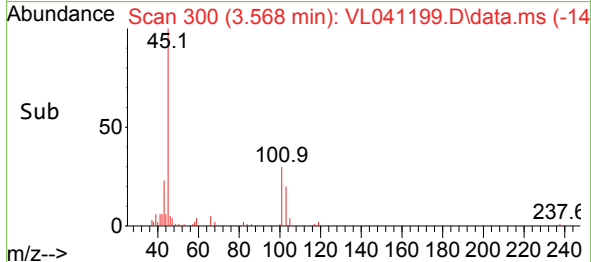
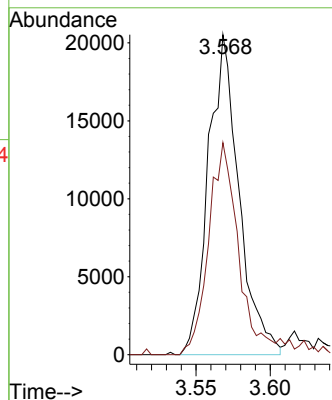
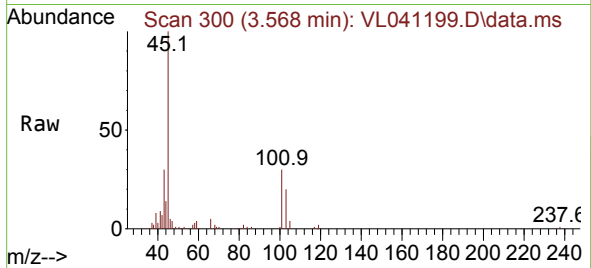




#11
Trichlorofluoromethane
Concen: 0.241 ppbv
RT: 3.568 min Scan# 30
Delta R.T. 0.010 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

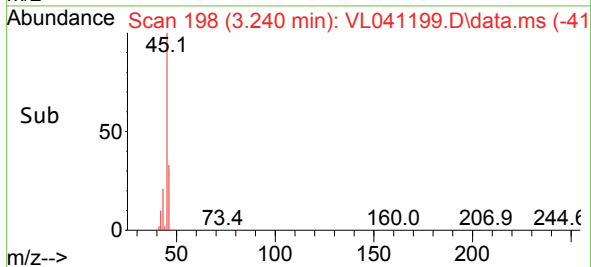
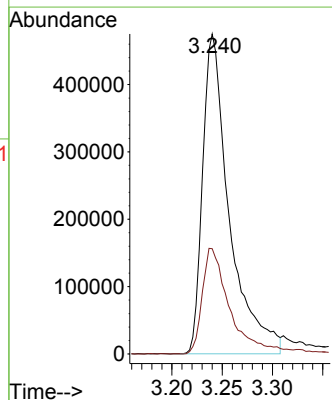
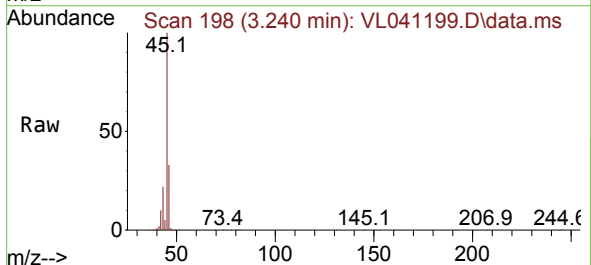
Instrument :
MSVOA_L
ClientSampleId :
BA-03-SS01-20240425

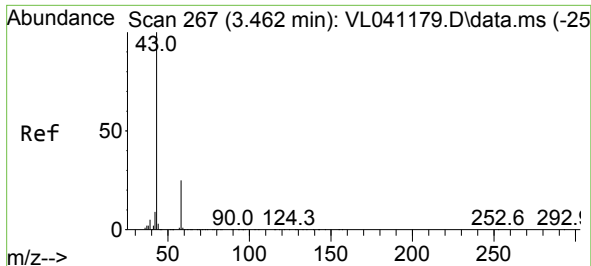
Tgt Ion:101 Resp: 29386
Ion Ratio Lower Upper
101 100
103 66.3 51.6 77.4



#13
Ethanol
Concen: 74.055 ppbv
RT: 3.240 min Scan# 198
Delta R.T. 0.003 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

Tgt Ion: 45 Resp: 874919
Ion Ratio Lower Upper
45 100
46 36.1 14.8 59.0

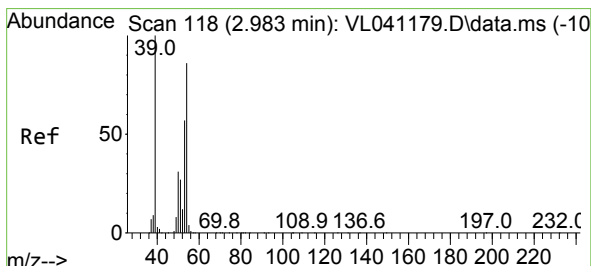
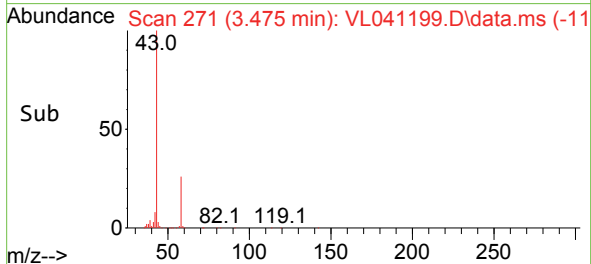
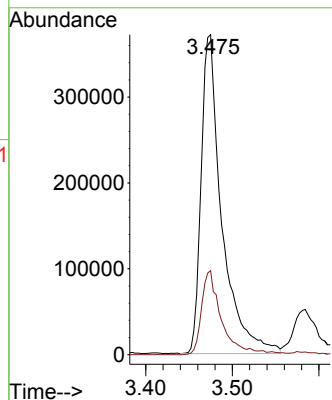
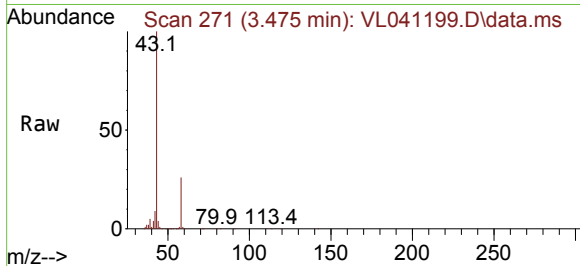




#15
Acetone
Concen: 5.872 ppbv
RT: 3.475 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

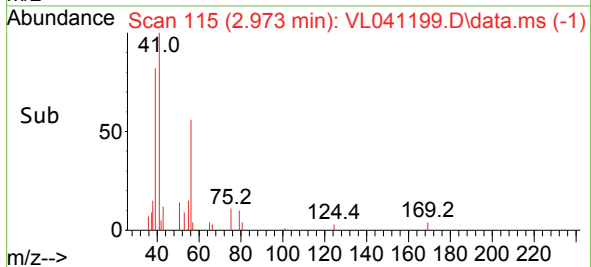
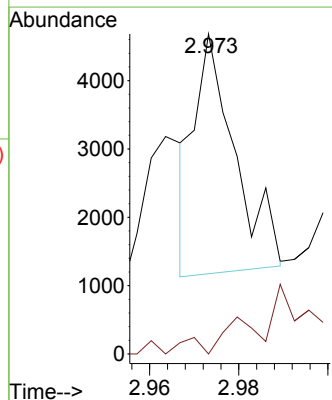
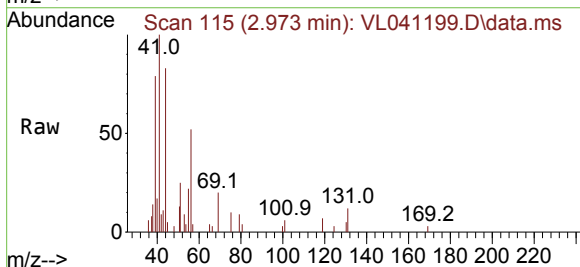
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ClientSampleId :
BA-03-SS01-20240425

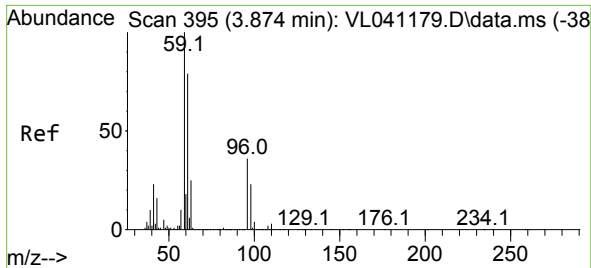
Tgt Ion: 43 Resp: 614529
Ion Ratio Lower Upper
43 100
58 25.7 21.4 32.0



#16
1,3-Butadiene
Concen: 0.042 ppbv
RT: 2.973 min Scan# 115
Delta R.T. -0.010 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

Tgt Ion: 39 Resp: 2203
Ion Ratio Lower Upper
39 100
54 74.6 62.2 93.4





#17

tert-Butyl alcohol

Concen: 0.066 ppbv

RT: 3.893 min Scan# 401

Delta R.T. 0.019 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

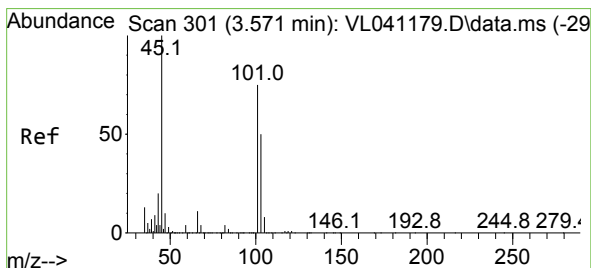
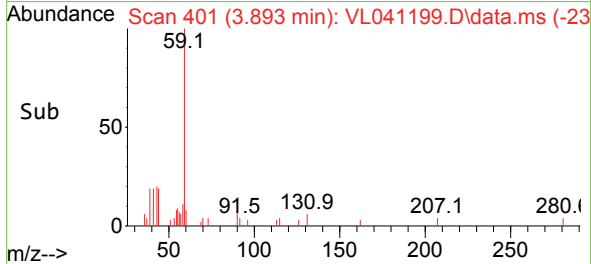
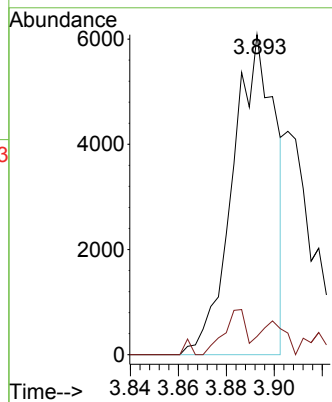
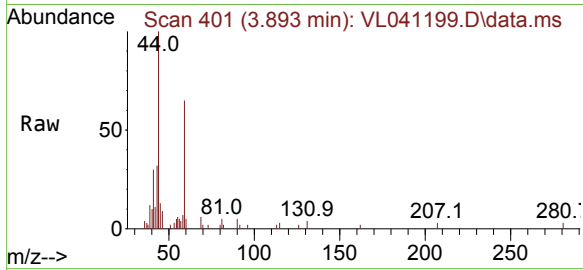
BA-03-SS01-20240425

Tgt Ion: 59 Resp: 7494

Ion Ratio Lower Upper

59 100

57 18.6 8.4 12.6#



#19

Isopropyl Alcohol

Concen: 5.500 ppbv

RT: 3.584 min Scan# 305

Delta R.T. 0.013 min

Lab File: VL041199.D

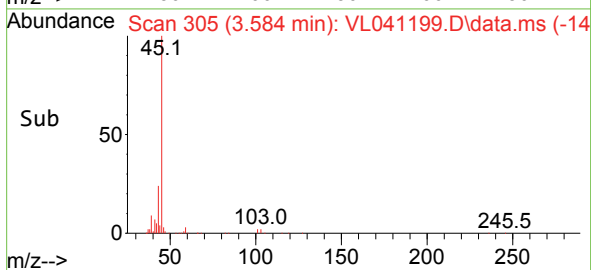
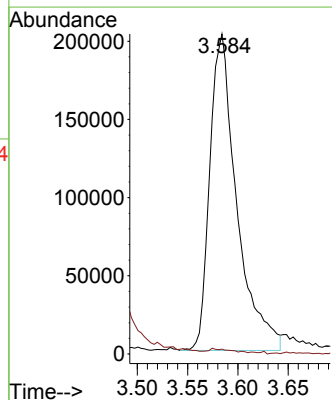
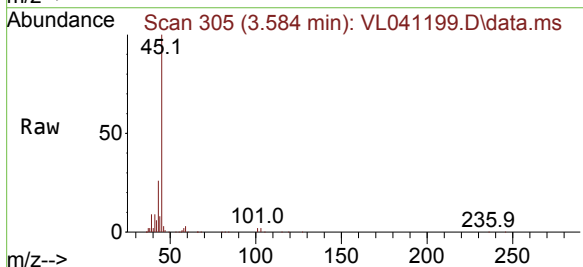
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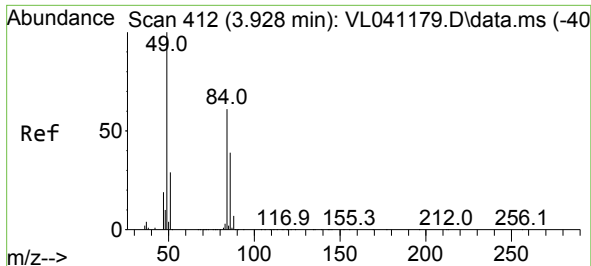
Tgt Ion: 45 Resp: 377696

Ion Ratio Lower Upper

45 100

58 1.7 26.8 40.2#





#20

Methylene Chloride

Concen: 30.773 ppbv

RT: 3.938 min Scan# 411

Delta R.T. 0.007 min

Lab File: VL041199.D

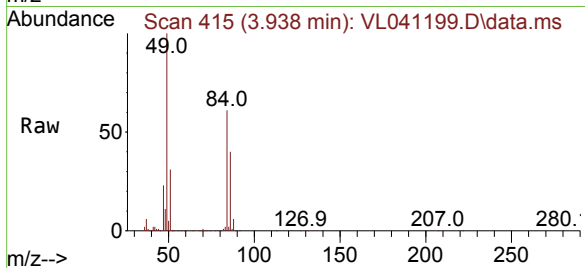
Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

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Tgt Ion: 84 Resp: 1119865

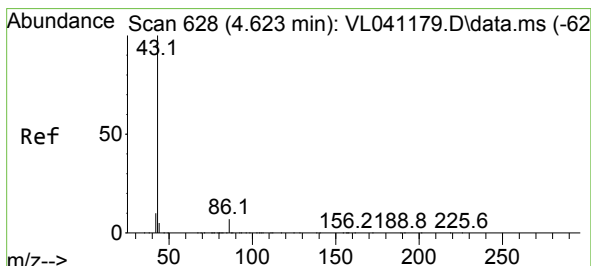
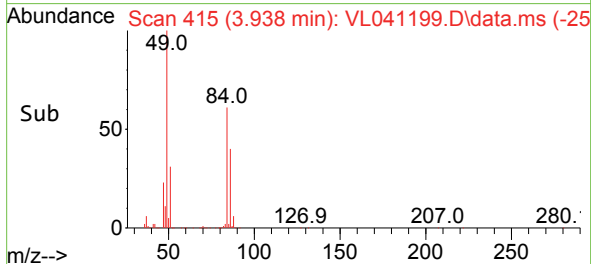
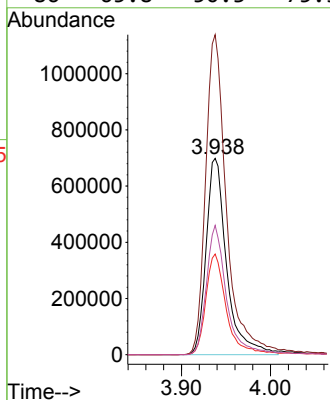
Ion Ratio Lower Upper

84 100

49 163.0 130.4 195.6

51 51.3 38.0 57.0

86 65.8 50.3 75.5



#23

Vinyl Acetate

Concen: 0.041 ppbv

RT: 4.626 min Scan# 629

Delta R.T. 0.000 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Tgt Ion: 43 Resp: 4686

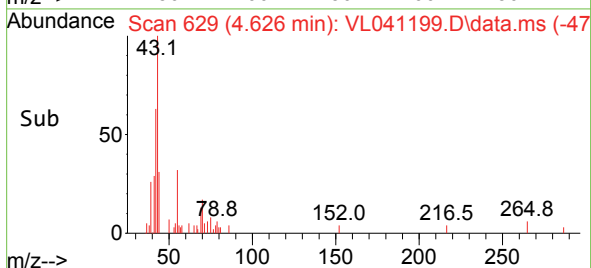
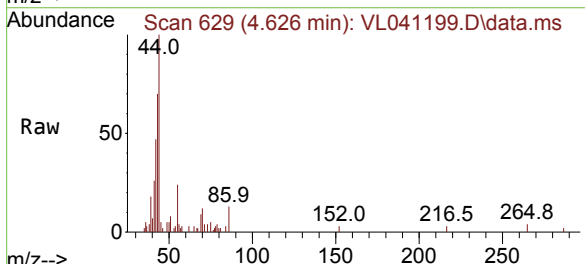
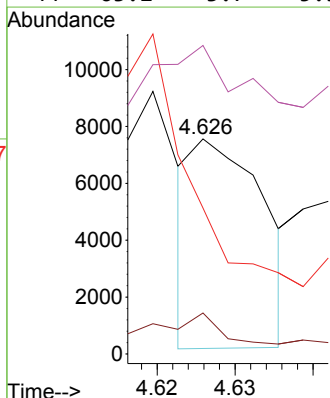
Ion Ratio Lower Upper

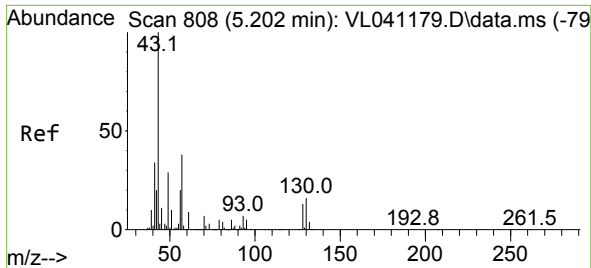
43 100

86 34.7 4.9 7.3#

42 72.1 8.0 12.0#

44 63.2 3.7 5.5#

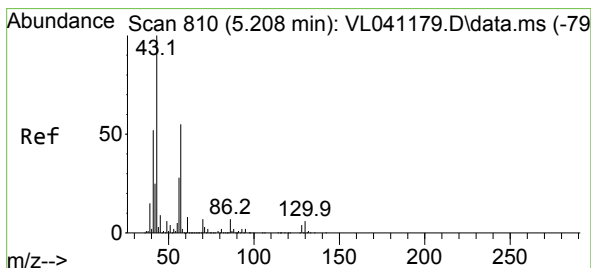
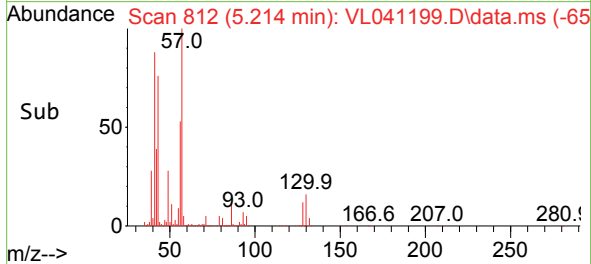
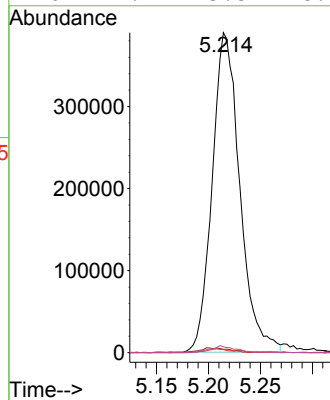
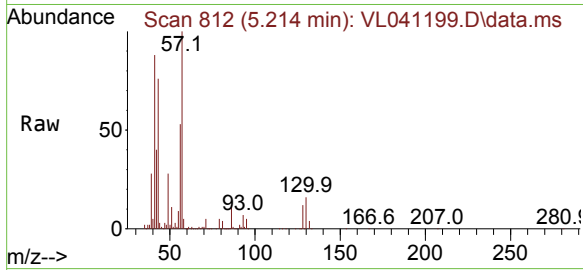




#25
Ethyl Acetate
Concen: 3.442 ppbv
RT: 5.214 min Scan# 812
Delta R.T. 0.013 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

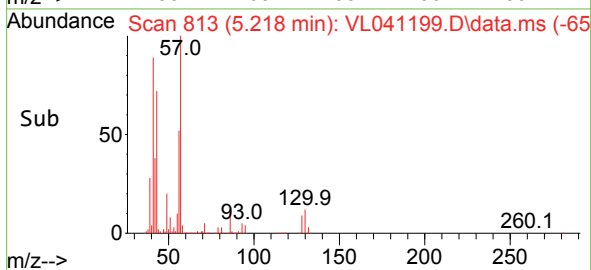
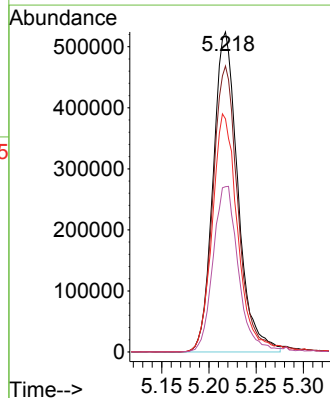
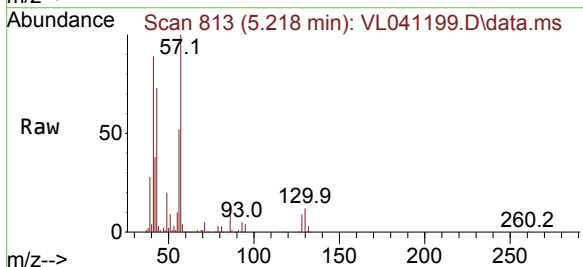
Instrument :
MSVOA_L
ClientSampleId :
BA-03-SS01-20240425

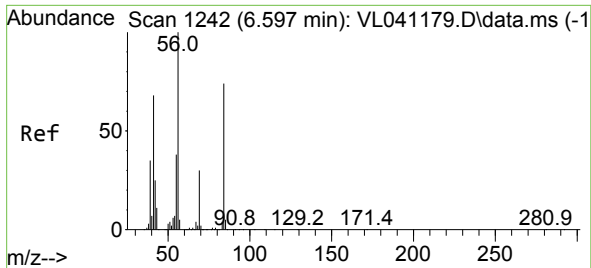
Tgt Ion: 43 Resp: 719031
Ion Ratio Lower Upper
43 100
45 2.0 8.2 12.2#
61 1.2 7.7 11.5#
70 2.1 5.8 8.6#



#26
Hexane
Concen: 10.264 ppbv
RT: 5.218 min Scan# 813
Delta R.T. 0.007 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

Tgt Ion: 57 Resp: 956783
Ion Ratio Lower Upper
57 100
41 91.8 75.8 113.8
43 77.3 187.0 280.4#
56 53.8 42.7 64.1

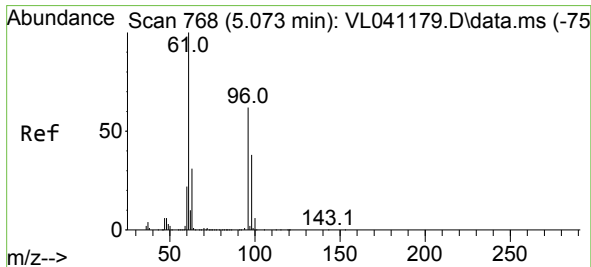
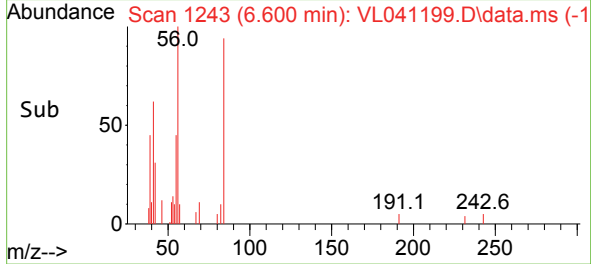
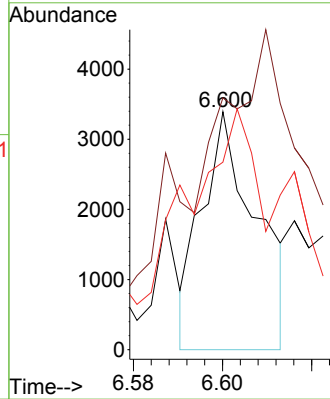
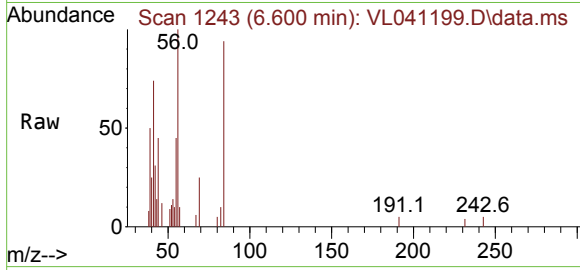




#30
Cyclohexane
Concen: 0.039 ppbv
RT: 6.600 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

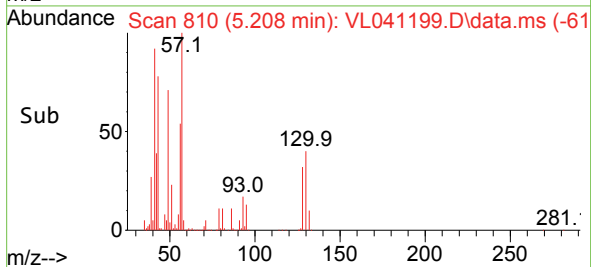
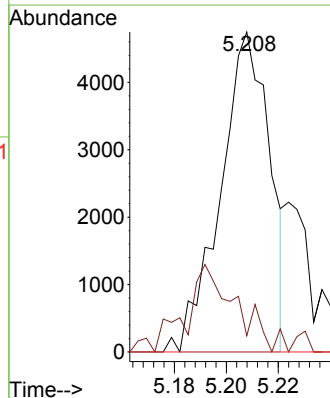
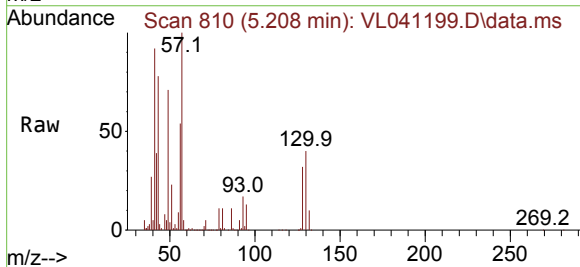
Instrument :
MSVOA_L
ClientSampleId :
BA-03-SS01-20240425

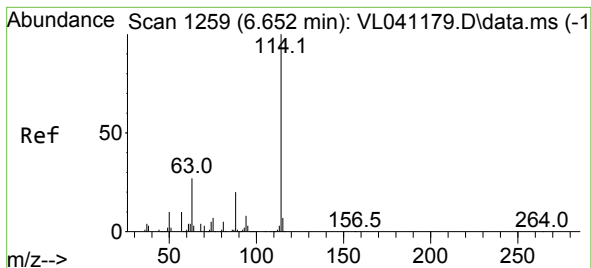
Tgt Ion: 84 Resp: 2877
Ion Ratio Lower Upper
84 100
56 0.0 116.8 175.2#
41 265.4 73.8 110.8#



#31
cis-1,2-Dichloroethene
Concen: 0.071 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.132 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

Tgt Ion: 61 Resp: 6205
Ion Ratio Lower Upper
61 100
96 0.0 49.8 74.6#
98 0.0 30.0 45.0#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.658 min Scan# 11

Delta R.T. 0.007 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

BA-03-SS01-20240425

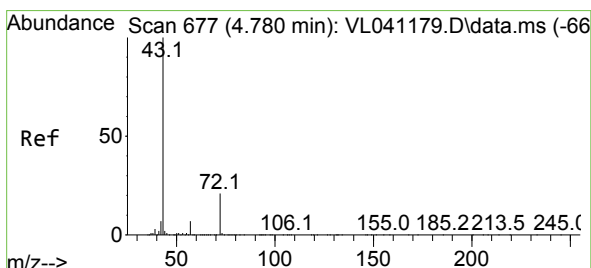
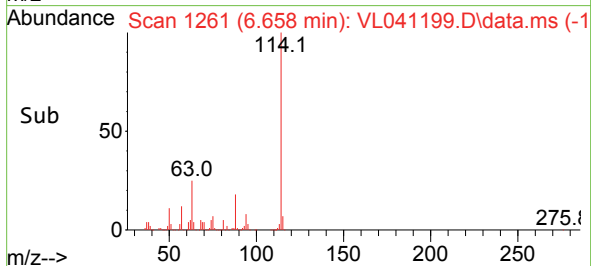
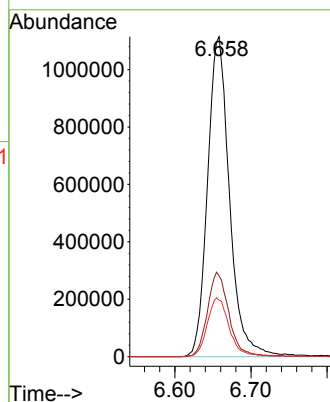
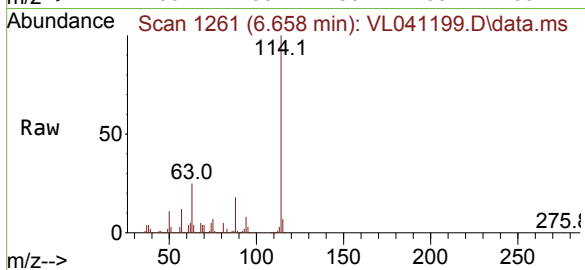
Tgt Ion:114 Resp: 2227666

Ion Ratio Lower Upper

114 100

63 26.2 21.8 32.6

88 18.5 15.2 22.8



#34

2-Butanone

Concen: 0.505 ppbv

RT: 4.796 min Scan# 682

Delta R.T. 0.013 min

Lab File: VL041199.D

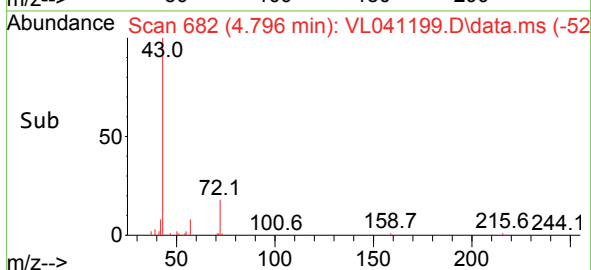
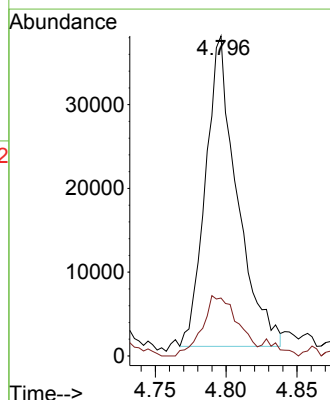
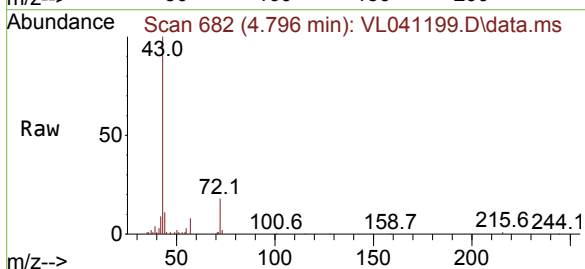
Acq: 2 May 2024 17:17

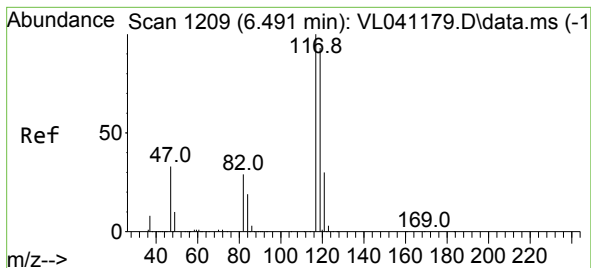
Tgt Ion: 43 Resp: 57233

Ion Ratio Lower Upper

43 100

72 26.2 17.3 25.9#





#35

Carbon Tetrachloride

Concen: 0.048 ppbv

RT: 6.497 min Scan# 1173

Delta R.T. 0.007 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

BA-03-SS01-20240425

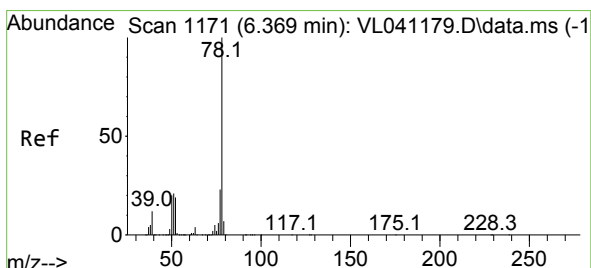
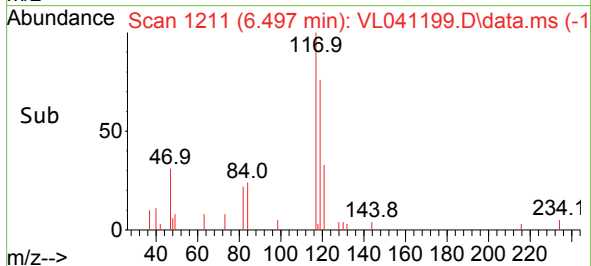
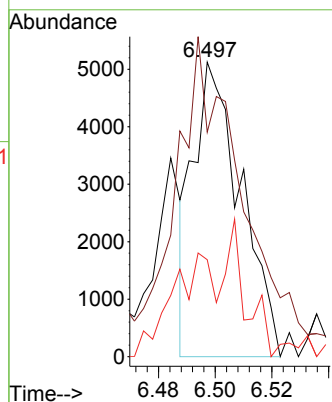
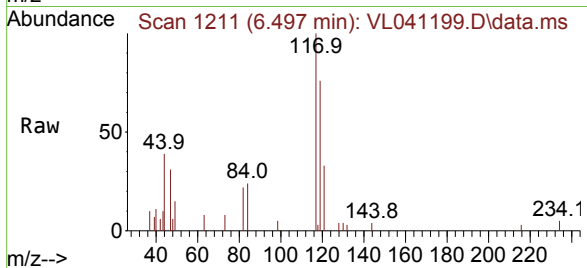
Tgt Ion:117 Resp: 5991

Ion Ratio Lower Upper

117 100

119 56.2 74.3 111.5#

121 28.7 23.8 35.8



#36

Benzene

Concen: 0.124 ppbv

RT: 6.375 min Scan# 1173

Delta R.T. 0.007 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

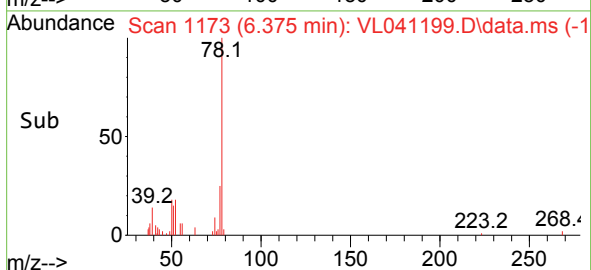
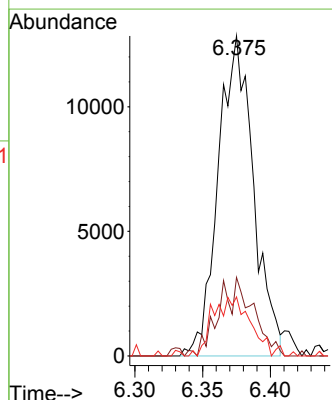
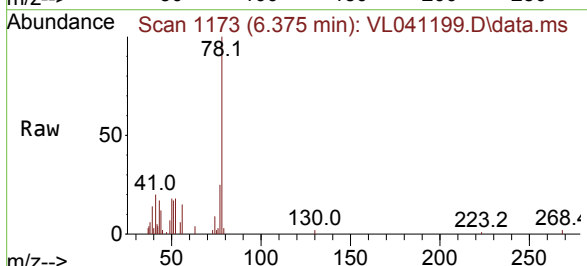
Tgt Ion: 78 Resp: 23168

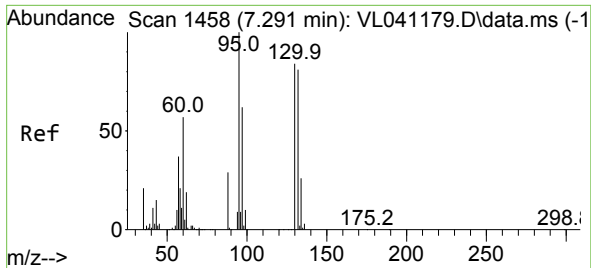
Ion Ratio Lower Upper

78 100

77 22.9 18.3 27.5

50 17.2 15.9 23.9

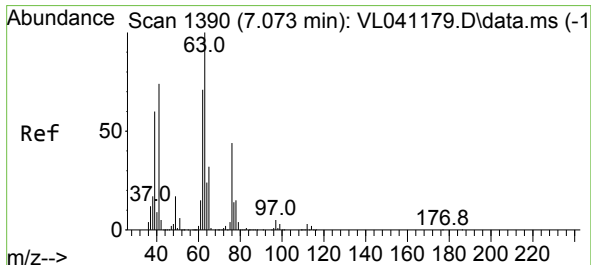
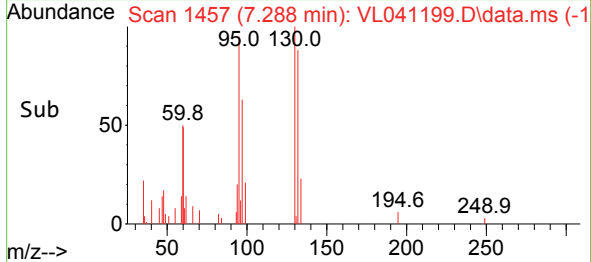
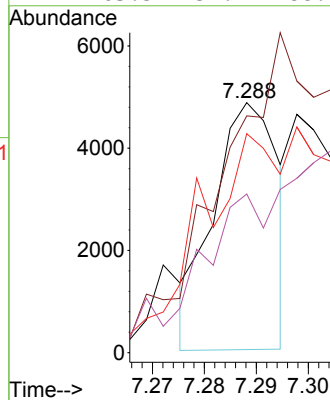
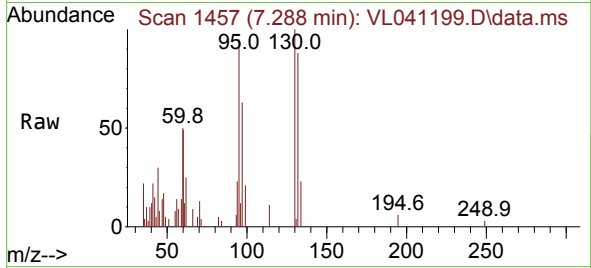




#38
 Trichloroethene
 Concen: 0.060 ppbv
 RT: 7.288 min Scan# 1457
 Delta R.T. 0.000 min
 Lab File: VL041199.D
 Acq: 2 May 2024 17:17

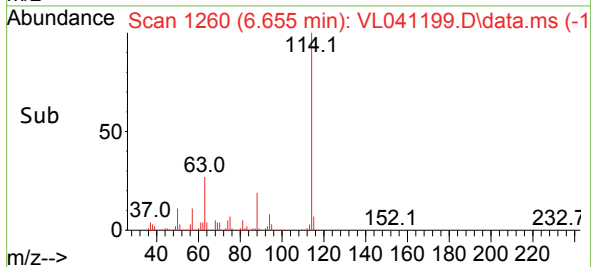
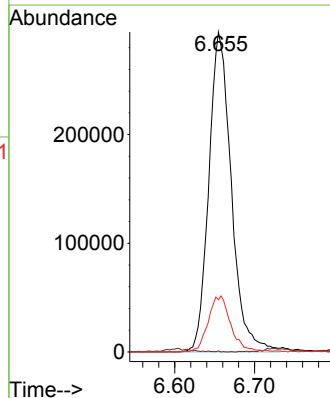
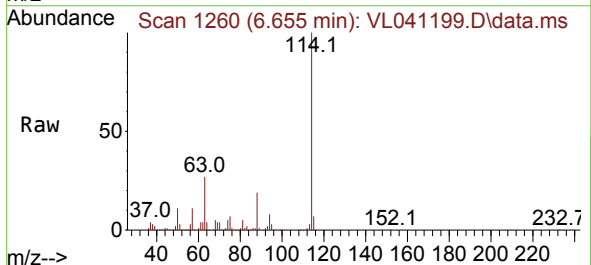
Instrument :
 MSVOA_L
 ClientSampleId :
 BA-03-SS01-20240425

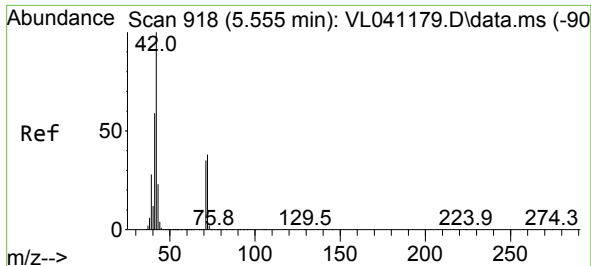
Tgt Ion:130	Resp:	4166	
Ion	Ratio	Lower	Upper
130	100		
95	101.2	95.0	142.6
132	83.7	77.0	115.4
97	63.5	59.1	88.7



#39
 1,2-Dichloropropane
 Concen: 7.984 ppbv
 RT: 6.655 min Scan# 1260
 Delta R.T. -0.418 min
 Lab File: VL041199.D
 Acq: 2 May 2024 17:17

Tgt Ion: 63	Resp: 575197
Ion Ratio	Lower Upper
63 100	
41 0.0	59.4 89.0#
62 16.3	56.8 85.2#

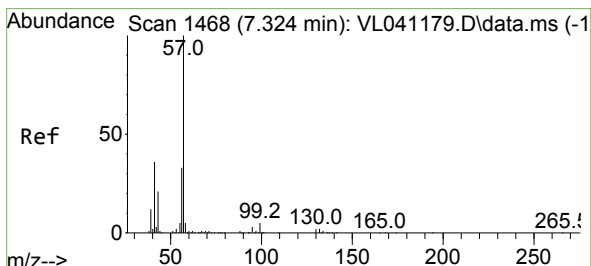
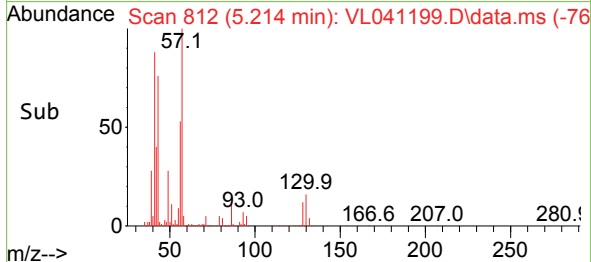
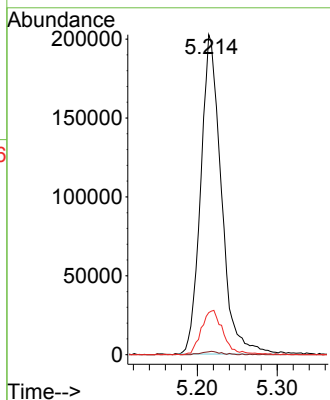
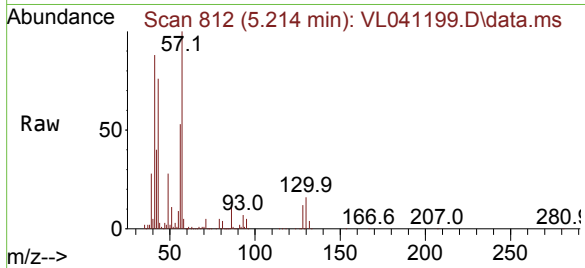




#41
Tetrahydrofuran
Concen: 4.412 ppbv
RT: 5.214 min Scan# 81
Delta R.T. -0.338 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

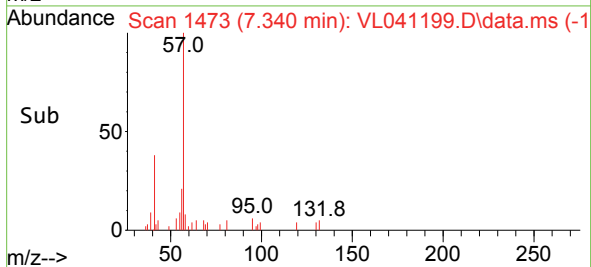
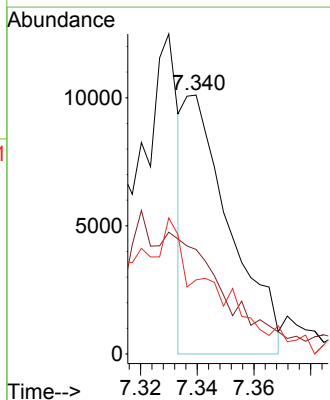
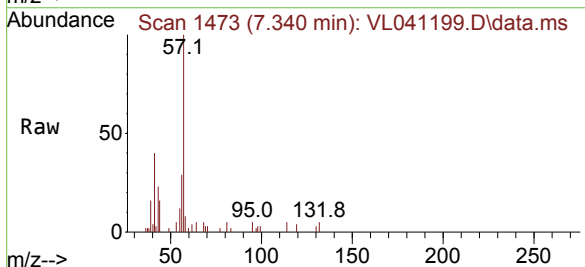
Instrument :
MSVOA_L
ClientSampleId :
BA-03-SS01-20240425

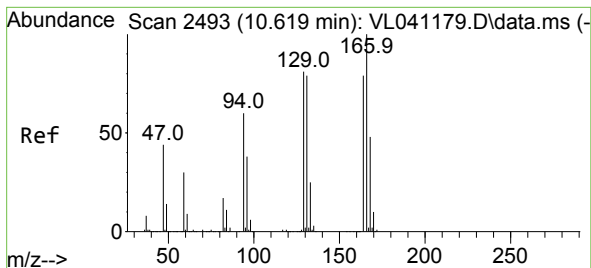
Tgt Ion: 42 Resp: 362121
Ion Ratio Lower Upper
42 100
72 1.0 29.4 44.0#
71 15.0 29.1 43.7#



#44
2,2,4-Trimethylpentane
Concen: 0.035 ppbv
RT: 7.340 min Scan# 1473
Delta R.T. 0.013 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

Tgt Ion: 57 Resp: 11374
Ion Ratio Lower Upper
57 100
41 0.0 29.5 44.3#
56 0.0 25.3 37.9#





#52

Tetrachloroethene

Concen: 0.171 ppbv

RT: 10.613 min Scan# 2493

Delta R.T. 0.000 min

Lab File: VL041199.D

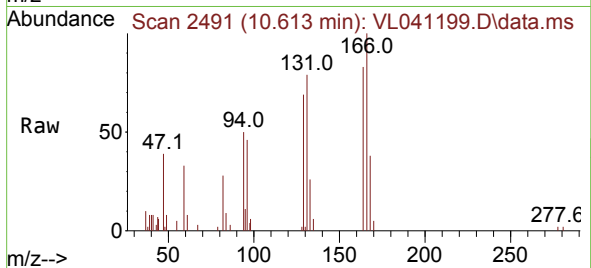
Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

BA-03-SS01-20240425



Tgt Ion:164 Resp: 11227

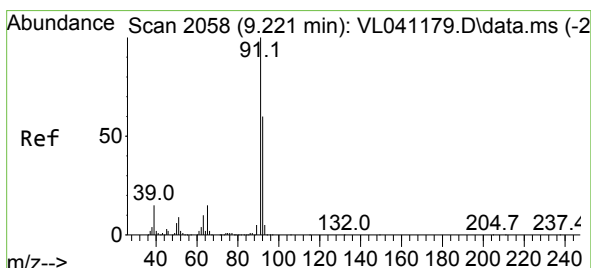
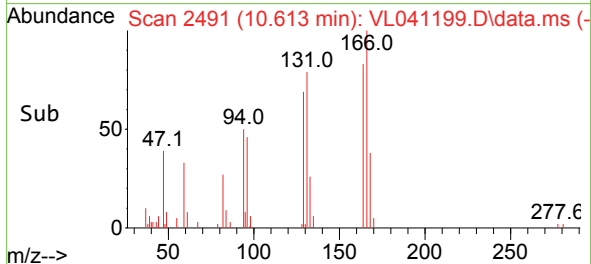
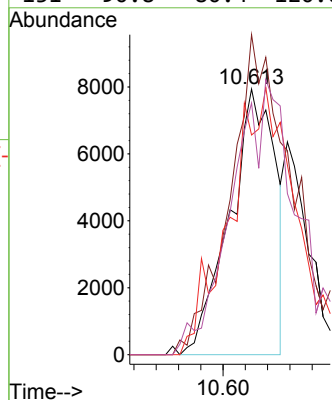
Ion Ratio Lower Upper

164 100

166 114.9 101.1 151.7

129 82.7 81.7 122.5

131 90.8 80.4 120.6



#53

Toluene

Concen: 0.658 ppbv

RT: 9.224 min Scan# 2059

Delta R.T. 0.003 min

Lab File: VL041199.D

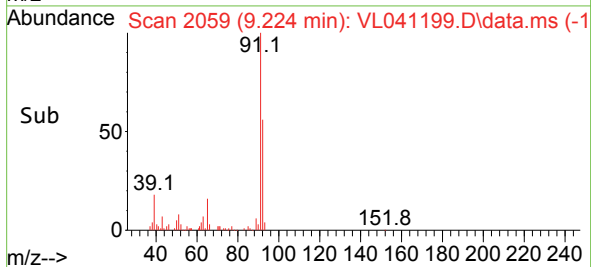
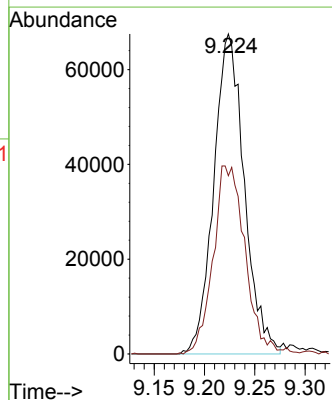
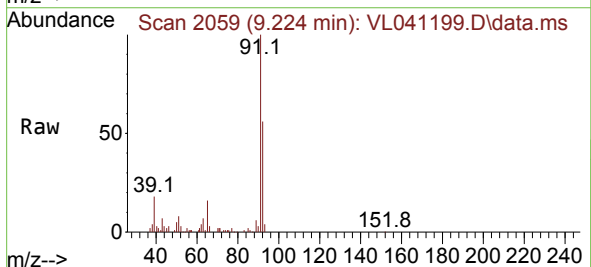
Acq: 2 May 2024 17:17

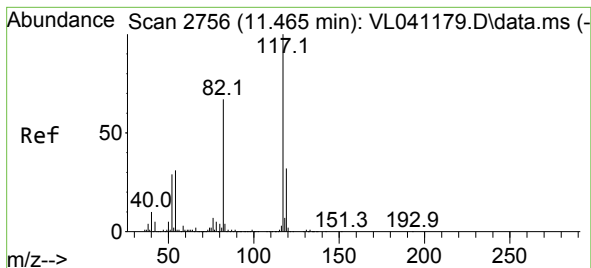
Tgt Ion: 91 Resp: 142681

Ion Ratio Lower Upper

91 100

92 61.4 48.2 72.4





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.468 min Scan# 21

Delta R.T. 0.003 min

Lab File: VL041199.D

Acq: 2 May 2024 17:17

Instrument :

MSVOA_L

ClientSampleId :

BA-03-SS01-20240425

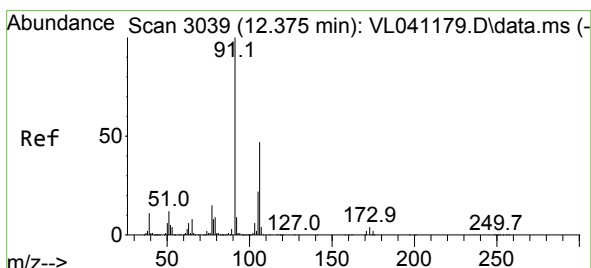
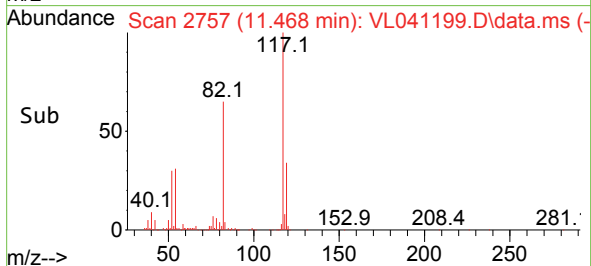
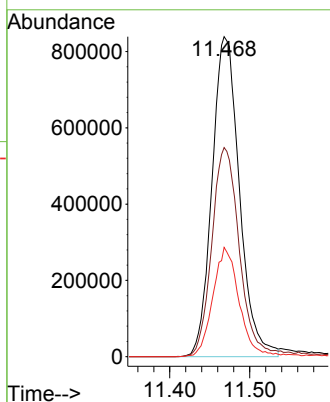
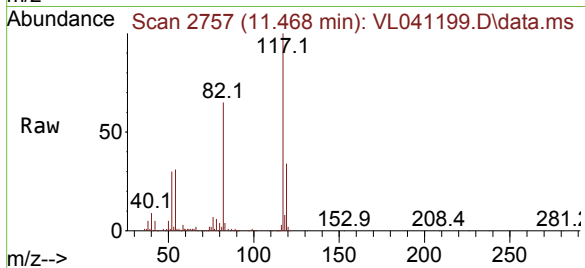
Tgt Ion:117 Resp: 1995196

Ion Ratio Lower Upper

117 100

82 67.6 53.6 80.4

119 33.1 27.2 40.8



#59

m/p-Xylene

Concen: 0.106 ppbv

RT: 12.381 min Scan# 3041

Delta R.T. 0.010 min

Lab File: VL041199.D

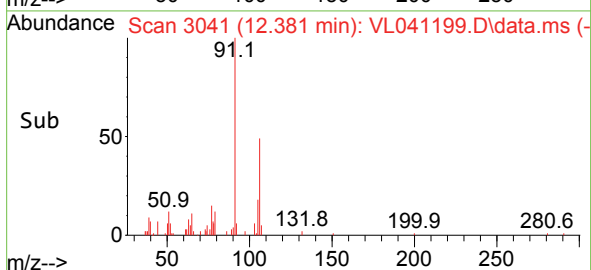
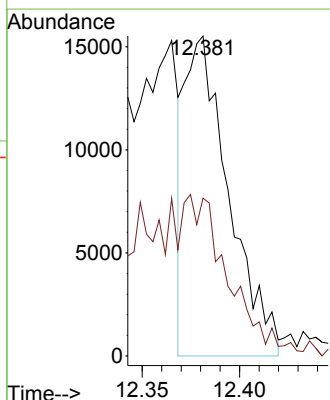
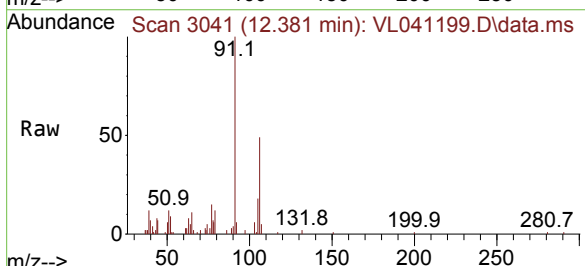
Acq: 2 May 2024 17:17

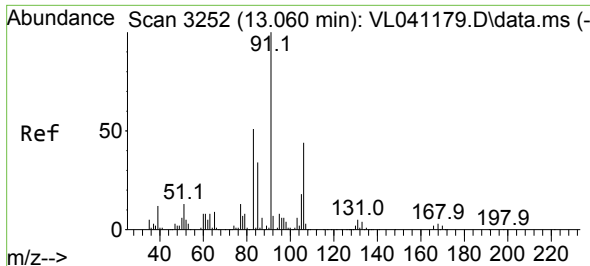
Tgt Ion: 91 Resp: 24474

Ion Ratio Lower Upper

91 100

106 114.5 35.7 53.5#

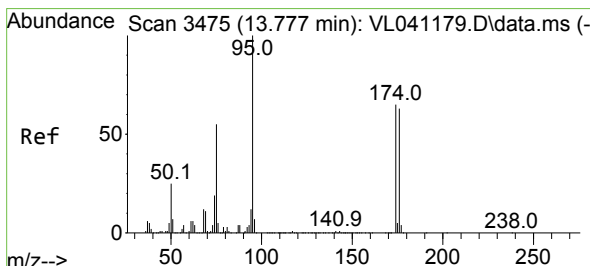
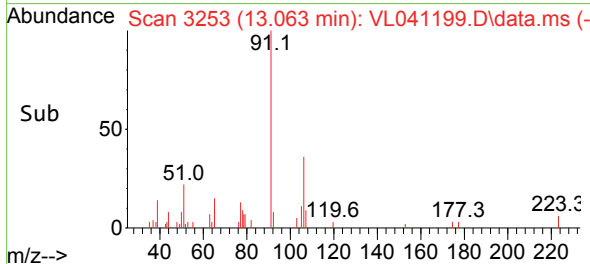
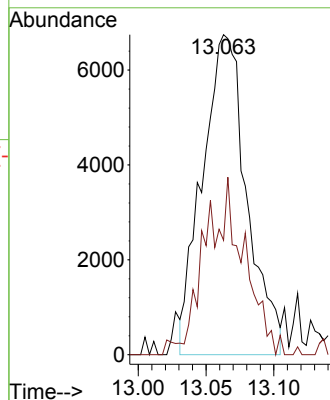
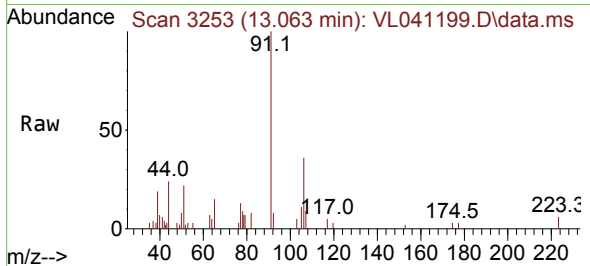




#60
o-Xylene
Concen: 0.072 ppbv
RT: 13.063 min Scan# 31
Delta R.T. 0.007 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

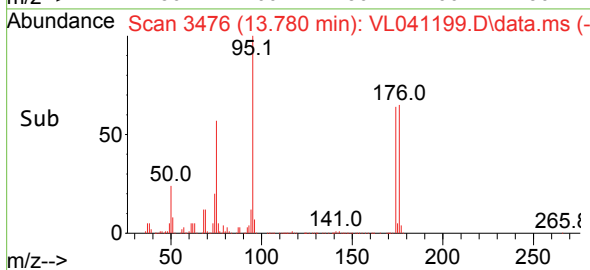
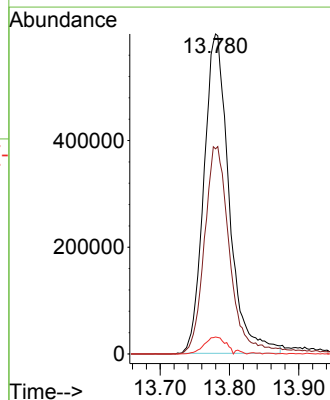
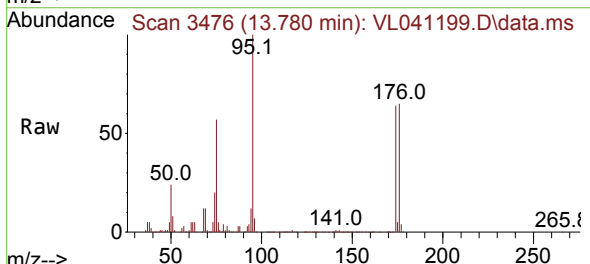
Instrument :
MSVOA_L
ClientSampleId :
BA-03-SS01-20240425

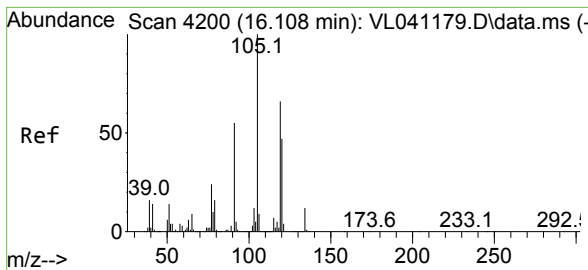
Tgt Ion: 91 Resp: 15411
Ion Ratio Lower Upper
91 100
106 48.8 22.4 67.3



#68
1-Bromo-4-Fluorobenzene
Concen: 10.036 ppbv
RT: 13.780 min Scan# 3476
Delta R.T. 0.007 min
Lab File: VL041199.D
Acq: 2 May 2024 17:17

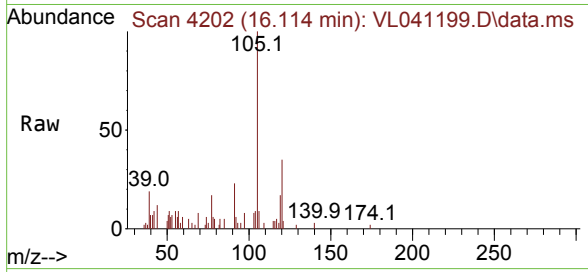
Tgt Ion: 95 Resp: 1511660
Ion Ratio Lower Upper
95 100
174 67.0 53.6 80.4
175 4.9 4.2 6.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.034 ppbv
 RT: 16.114 min Scan# 41
 Delta R.T. 0.010 min
 Lab File: VL041199.D
 Acq: 2 May 2024 17:17

Instrument :
 MSVOA_L
 ClientSampleId :
 BA-03-SS01-20240425



Tgt Ion:	105	Resp:	8223
Ion	Ratio	Lower	Upper
105	100		
120	30.8	37.8	56.6#
91	15.1	44.3	66.5#
77	14.6	19.0	28.4#

