

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040424\
 Data File : VL041133.D
 Acq On : 4 Apr 2024 20:12
 Operator : SY/MD
 Sample : P1953-06
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

Quant Time: Apr 05 03:45:30 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL040424AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Fri Apr 05 03:20:09 2024
 Response via : Initial Calibration

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

Internal Standards						
1) Bromochloromethane	5.211	49	1182397	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.674	114	2972989	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.491	117	2794557	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.802	95	2203302	9.765	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.735	85	72114	0.355	ppbv	94
3) Chlorodifluoromethane	2.681	51	92736	0.509	ppbv #	84
4) Chloromethane	2.819	50	42445	0.616	ppbv	99
9) Propene	2.700	41	265762	4.587	ppbv	96
10) Heptane	7.597	43	22368	0.163	ppbv #	26
11) Trichlorofluoromethane	3.571	101	23749	0.129	ppbv	98
12) 1,1,2-Trichlorotrifluo...	4.076	101	7581	0.057	ppbv #	59
13) Ethanol	3.250	45	580857	43.044	ppbv	94
15) Acetone	3.478	43	1081959	8.451	ppbv	92
16) 1,3-Butadiene	2.989	39	27927	0.444	ppbv #	29
19) Isopropyl Alcohol	3.587	45	300189	3.816	ppbv #	97
20) Methylene Chloride	3.948	84	699086	13.239	ppbv	94
21) Allyl Chloride	3.970	41	27930	0.358	ppbv #	37
23) Vinyl Acetate	4.623	43	118178	0.890	ppbv #	1
25) Ethyl Acetate	5.234	43	320790	1.334	ppbv #	86
26) Hexane	5.234	57	349934	3.244	ppbv #	47
30) Cyclohexane	6.623	84	26970	0.311	ppbv #	1
34) 2-Butanone	4.806	43	140090	1.091	ppbv	97
35) Carbon Tetrachloride	6.517	117	7326	0.043	ppbv	86
36) Benzene	6.391	78	317878	1.458	ppbv	95
39) 1,2-Dichloropropane	6.674	63	776416	8.969	ppbv #	23
44) 2,2,4-Trimethylpentane	7.353	57	575642	1.593	ppbv	94
52) Tetrachloroethene	10.645	164	5261	0.075	ppbv #	56
53) Toluene	9.250	91	1470714	6.375	ppbv	99
58) Ethyl Benzene	12.118	91	181851	0.591	ppbv	97
59) m/p-Xylene	12.372	91	587267	2.115	ppbv	95
60) o-Xylene	13.089	91	201555	0.762	ppbv	95
61) Styrene	12.921	104	5347	0.046	ppbv #	1
73) 1,3,5-Trimethylbenzene	15.375	105	11989	0.046	ppbv #	64
74) 1,2,4-Trimethylbenzene	16.137	105	132092	0.442	ppbv #	71

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

Instrument :
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TIC: VL041133.D\data.ms

Abundance

Time-->

1,2-Dichloroethane, I

1,2-Dibromodisopropene, I

Bromochloromethane, I

Ethyl Acetate, T

Methylene Chloride, T

Acetone, T

Ethanol

1,1,2-Trichloroethane, T

1,1,2-Trichloroethane, T

Vinyl Acetate, T

2-Butanone, I

Carbon Tetrachloride, T

Heptane, T

2,2,4-Trimethylpentane, T

Toluene, T

Tetrachloroethene, T

Ethyl Benzene, T

m/p-Xylene, T

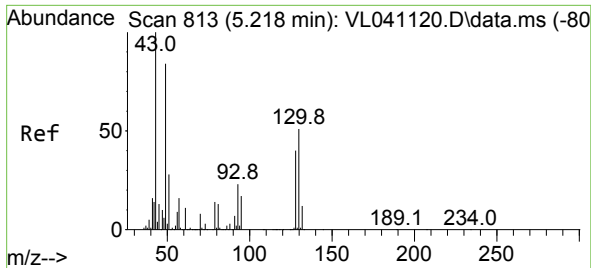
Styrene, T

o-Xylene, T

1-Bromo-4-Fluorobenzene, S

1,3,5-Trimethylbenzene, T

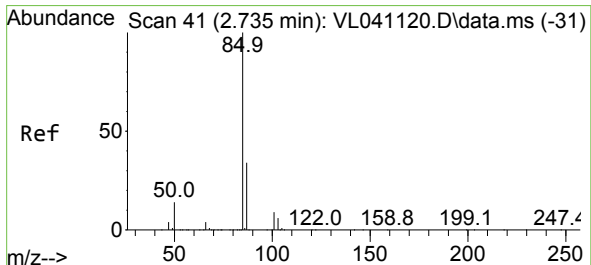
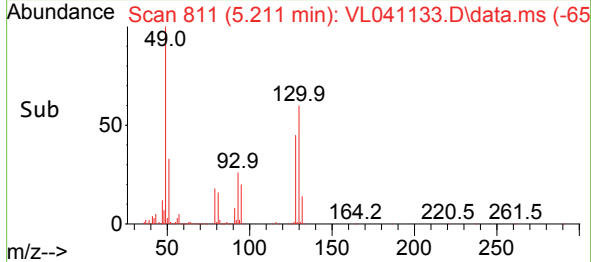
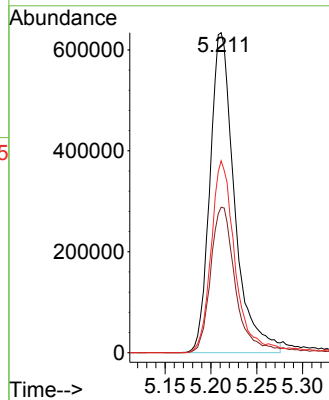
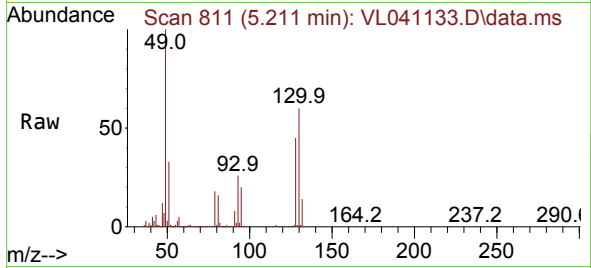
1,2,4-Trimethylbenzene, T



#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.211 min Scan# 81
 Delta R.T. -0.007 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

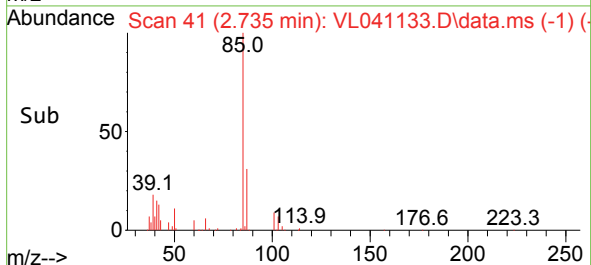
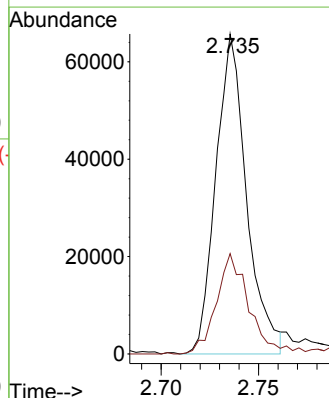
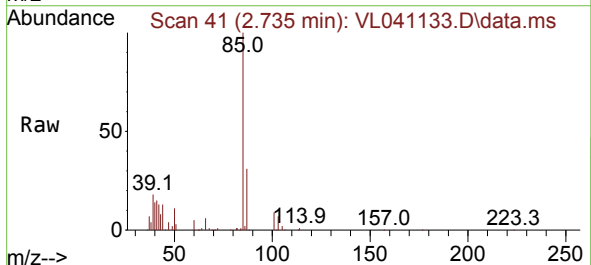
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

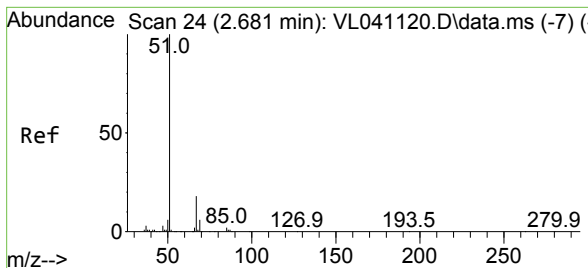
Tgt Ion: 49 Resp: 1182397
 Ion Ratio Lower Upper
 49 100
 128 47.5 23.8 71.5
 130 61.0 30.3 90.9



#2
 Dichlorodifluoromethane
 Concen: 0.355 ppbv
 RT: 2.735 min Scan# 41
 Delta R.T. 0.000 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

Tgt Ion: 85 Resp: 72114
 Ion Ratio Lower Upper
 85 100
 87 31.4 28.1 42.1

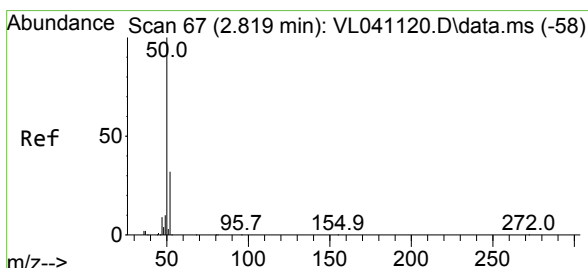
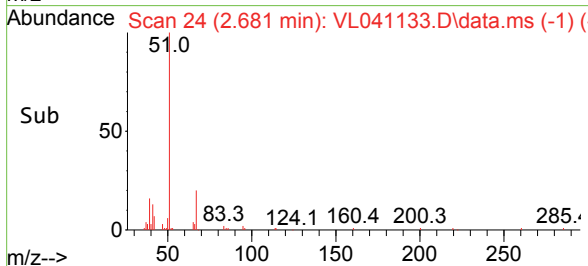
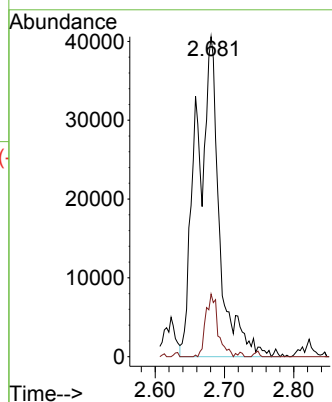
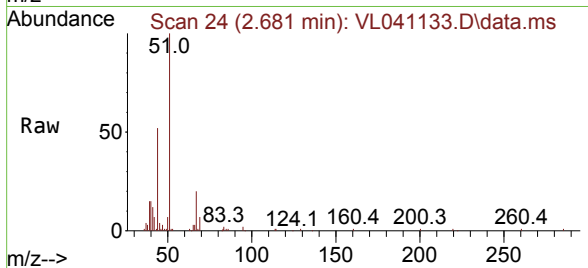




#3
Chlorodifluoromethane
Concen: 0.509 ppbv
RT: 2.681 min Scan# 24
Delta R.T. 0.000 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

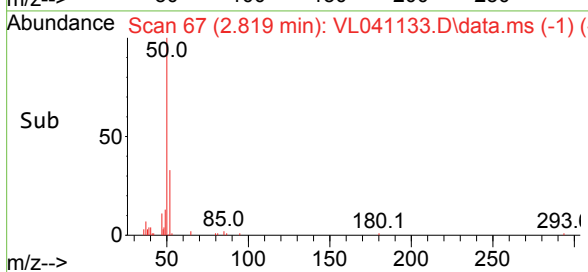
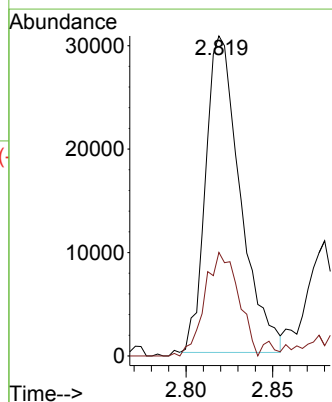
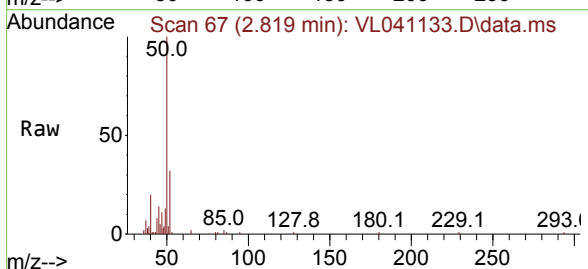
Instrument :
MSVOA_L
ClientSampleId :
OA1

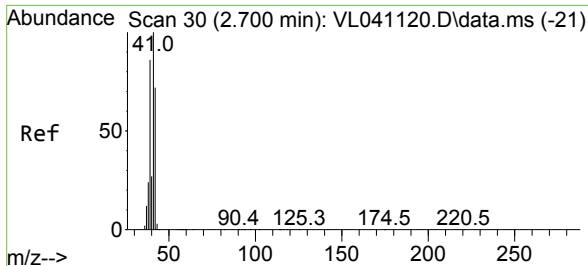
Tgt Ion: 51 Resp: 92736
Ion Ratio Lower Upper
51 100
67 11.2 14.5 21.7#



#4
Chloromethane
Concen: 0.616 ppbv
RT: 2.819 min Scan# 67
Delta R.T. 0.000 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 50 Resp: 42445
Ion Ratio Lower Upper
50 100
52 32.7 26.6 40.0

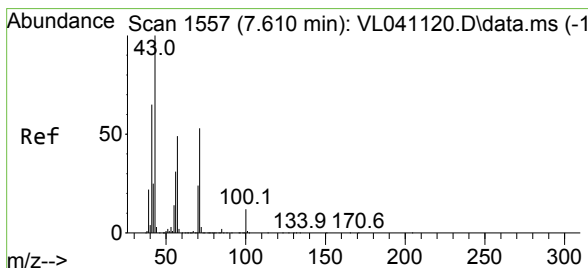
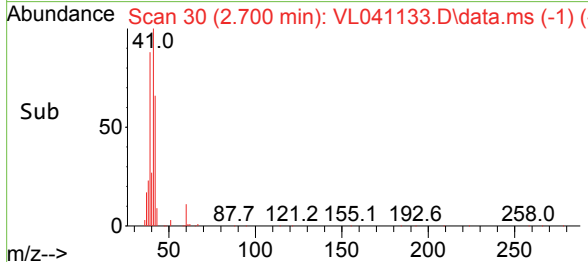
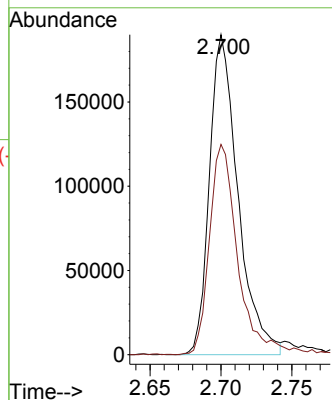
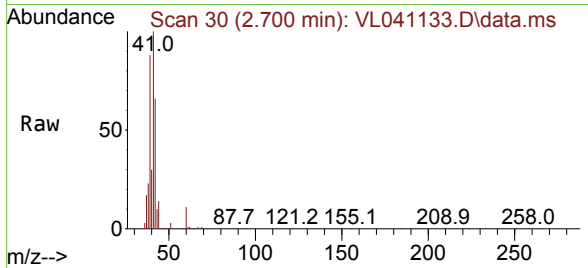




#9
 Propene
 Concen: 4.587 ppbv
 RT: 2.700 min Scan# 30
 Delta R.T. 0.000 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

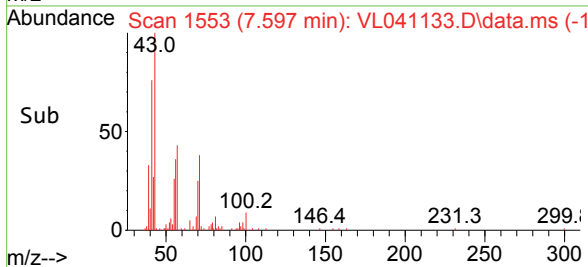
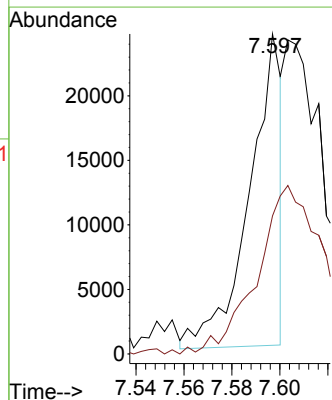
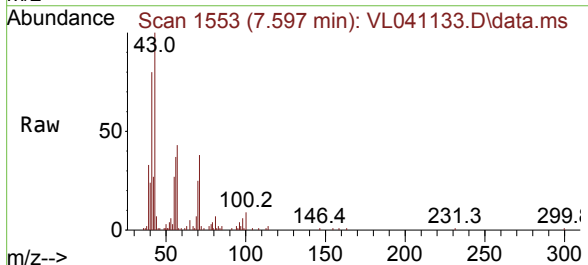
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

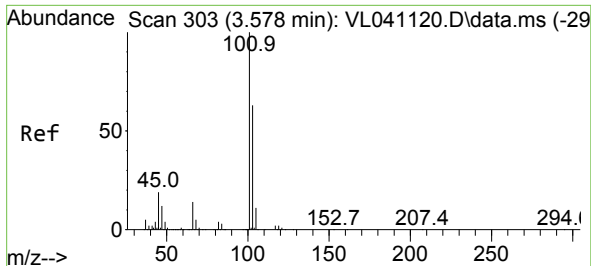
Tgt Ion: 41 Resp: 265762
 Ion Ratio Lower Upper
 41 100
 42 66.8 55.9 83.9



#10
 Heptane
 Concen: 0.163 ppbv
 RT: 7.597 min Scan# 1553
 Delta R.T. -0.013 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

Tgt Ion: 43 Resp: 22368
 Ion Ratio Lower Upper
 43 100
 57 0.0 41.0 61.6#

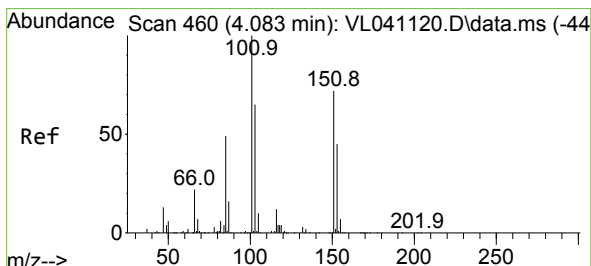
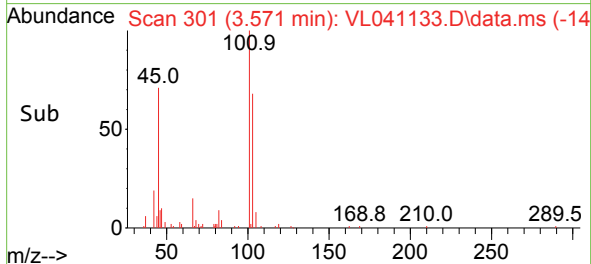
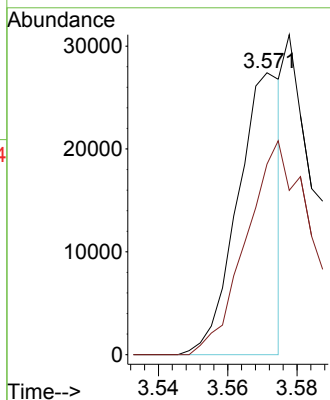
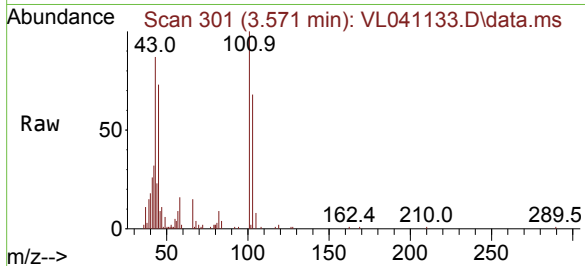




#11
Trichlorofluoromethane
Concen: 0.129 ppbv
RT: 3.571 min Scan# 303
Delta R.T. -0.006 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

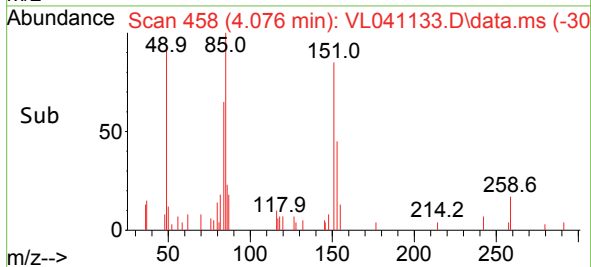
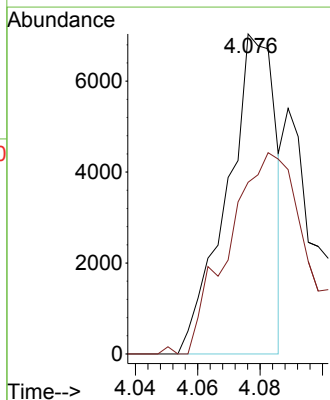
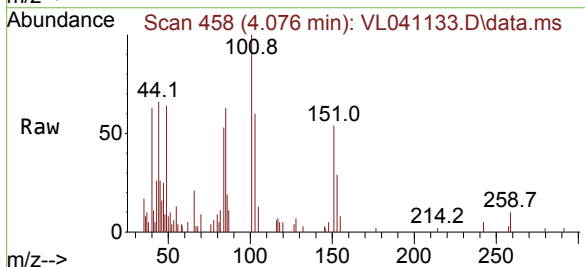
Instrument :
MSVOA_L
ClientSampleId :
OA1

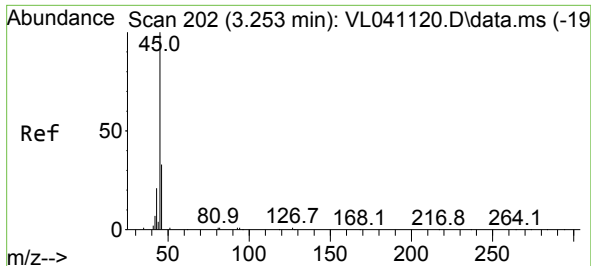
Tgt Ion:101 Resp: 23749
Ion Ratio Lower Upper
101 100
103 67.6 53.0 79.4



#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.057 ppbv
RT: 4.076 min Scan# 458
Delta R.T. -0.006 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion:101 Resp: 7581
Ion Ratio Lower Upper
101 100
151 103.4 55.8 83.8#

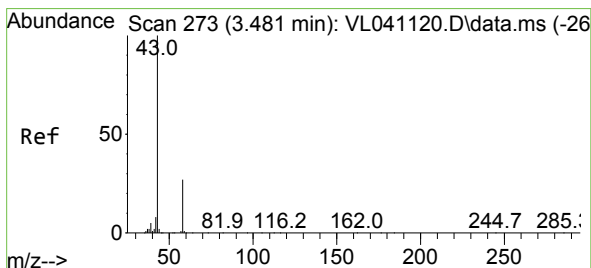
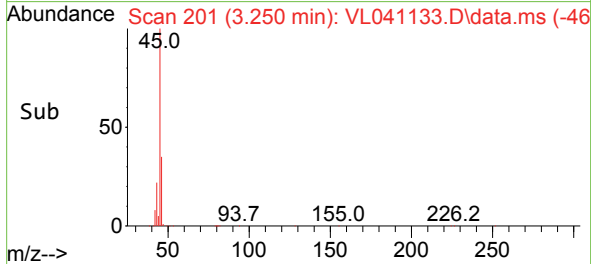
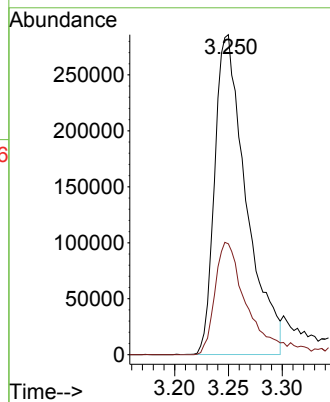
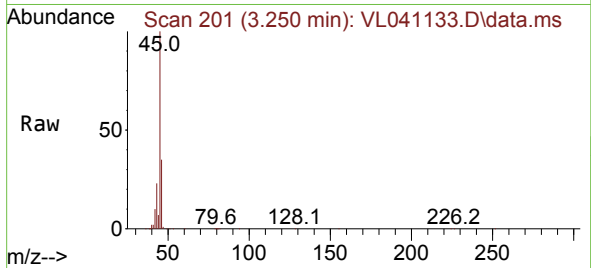




#13
Ethanol
Concen: 43.044 ppbv
RT: 3.250 min Scan# 201
Delta R.T. -0.003 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

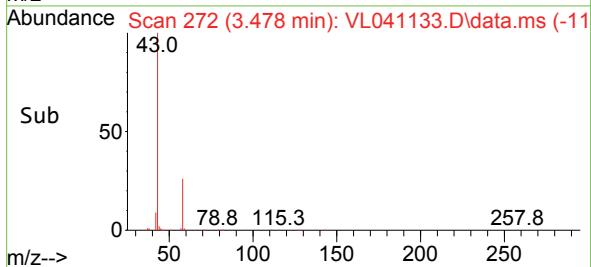
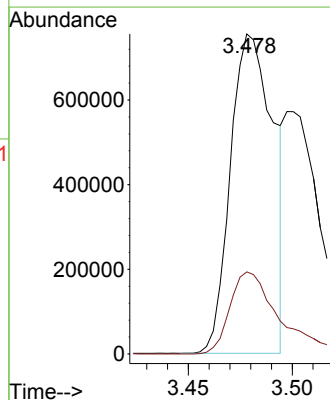
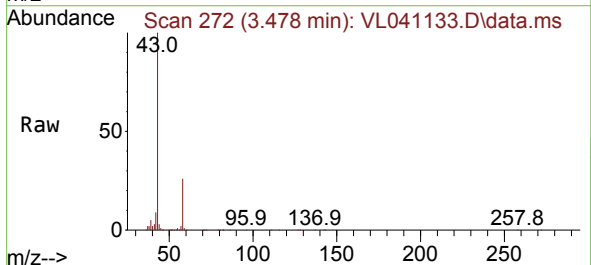
Instrument :
MSVOA_L
ClientSampleId :
OA1

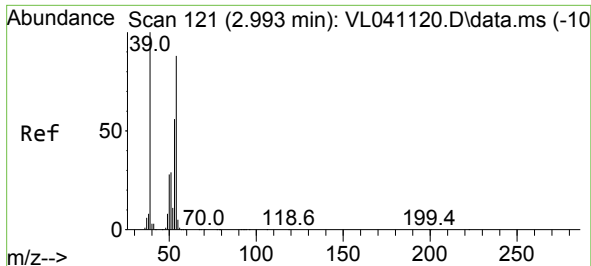
Tgt Ion: 45 Resp: 580857
Ion Ratio Lower Upper
45 100
46 39.7 14.6 58.2



#15
Acetone
Concen: 8.451 ppbv
RT: 3.478 min Scan# 272
Delta R.T. -0.003 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 43 Resp: 1081959
Ion Ratio Lower Upper
43 100
58 31.5 21.7 32.5





#16

1,3-Butadiene

Concen: 0.444 ppbv

RT: 2.989 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

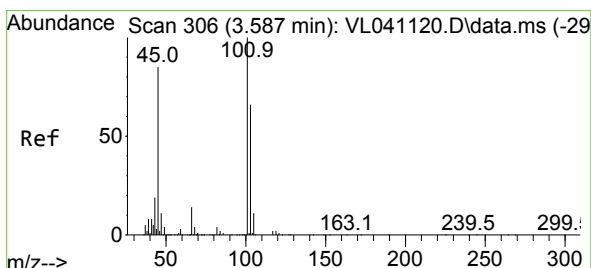
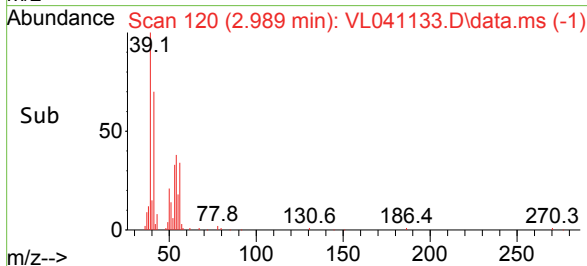
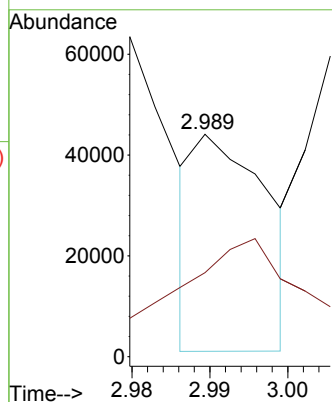
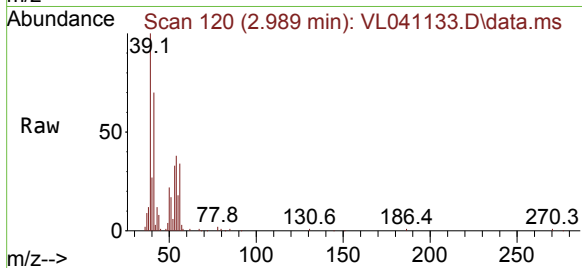
OA1

Tgt Ion: 39 Resp: 27927

Ion Ratio Lower Upper

39 100

54 142.3 64.0 96.0#



#19

Isopropyl Alcohol

Concen: 3.816 ppbv

RT: 3.587 min Scan# 306

Delta R.T. 0.000 min

Lab File: VL041133.D

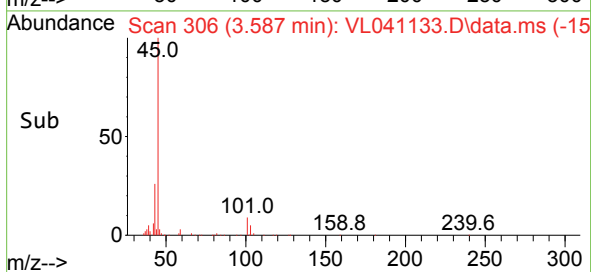
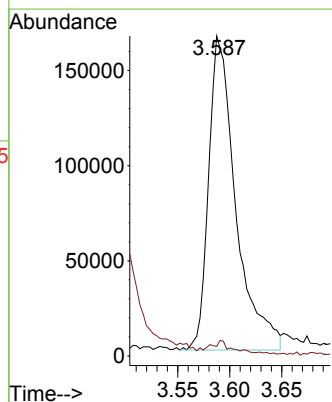
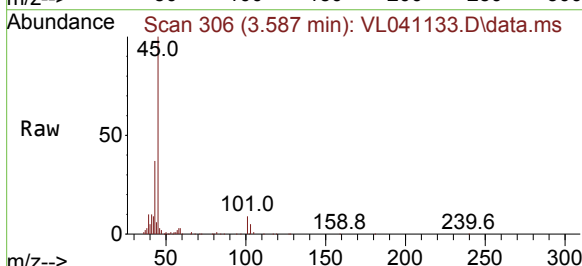
Acq: 4 Apr 2024 20:12

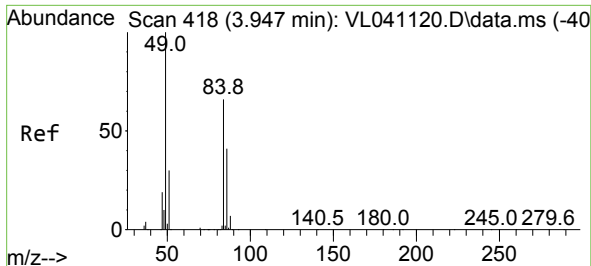
Tgt Ion: 45 Resp: 300189

Ion Ratio Lower Upper

45 100

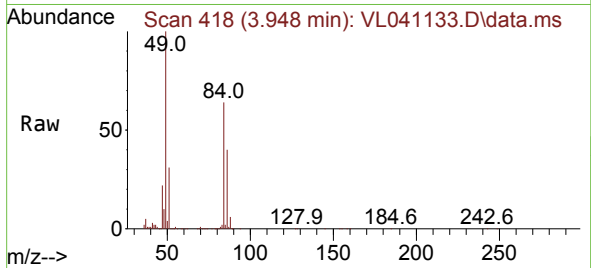
58 3.9 2.2 3.4#



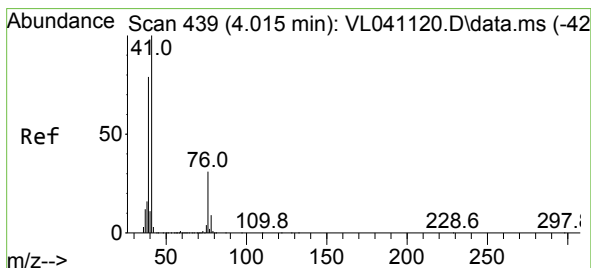
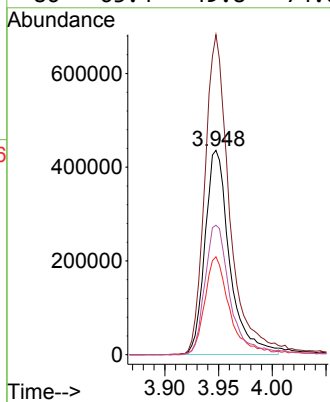
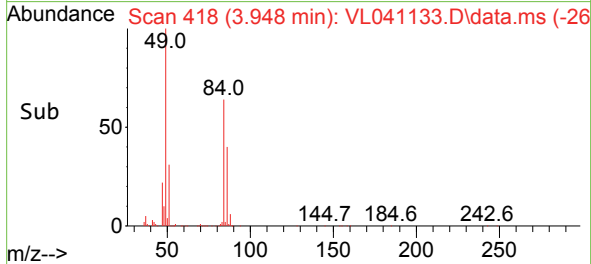


#20
Methylene Chloride
Concen: 13.239 ppbv
RT: 3.948 min Scan# 418
Delta R.T. 0.000 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

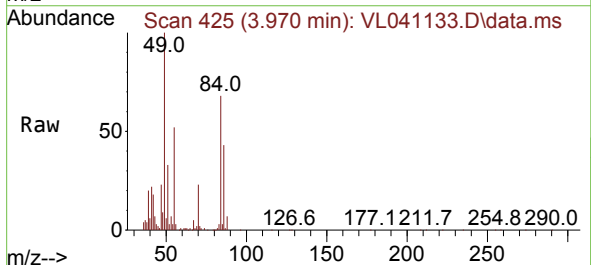
Instrument :
MSVOA_L
ClientSampleId :
OA1



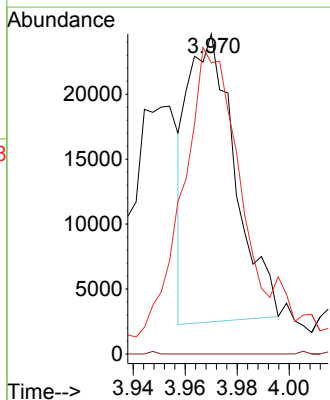
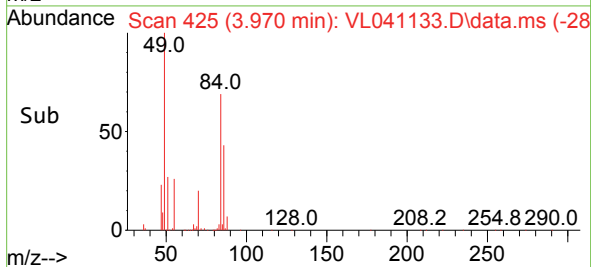
Tgt Ion: 84 Resp: 699086
Ion Ratio Lower Upper
84 100
49 156.7 117.0 175.6
51 47.5 34.9 52.3
86 63.4 49.8 74.6

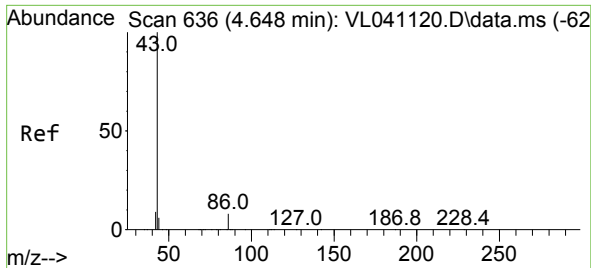


#21
Allyl Chloride
Concen: 0.358 ppbv
RT: 3.970 min Scan# 425
Delta R.T. -0.045 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12



Tgt Ion: 41 Resp: 27930
Ion Ratio Lower Upper
41 100
76 0.7 25.5 38.3#
39 144.2 67.4 101.2#

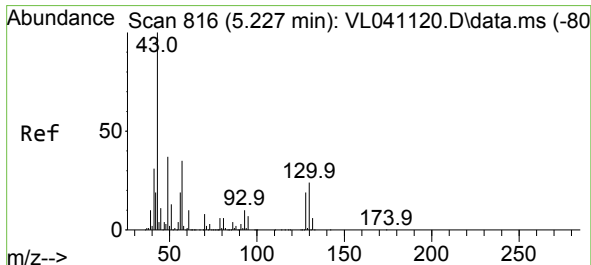
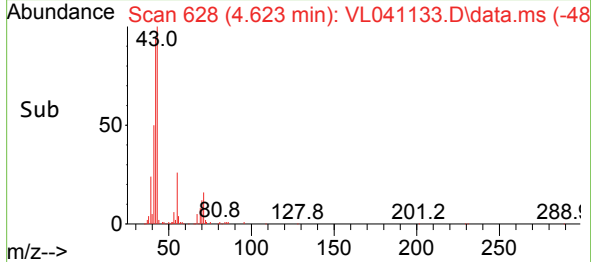
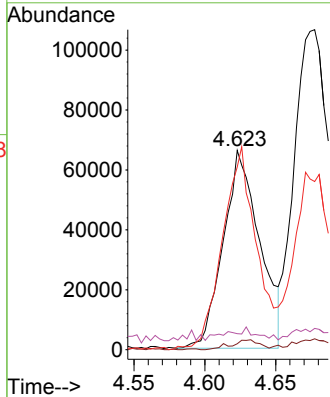
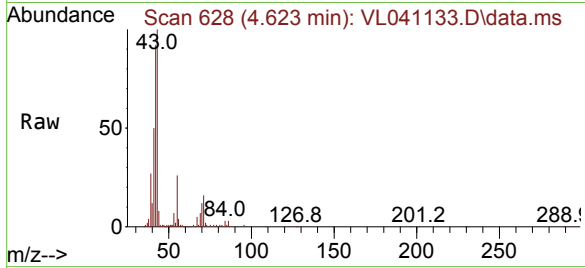




#23
 Vinyl Acetate
 Concen: 0.890 ppbv
 RT: 4.623 min Scan# 61
 Delta R.T. -0.026 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

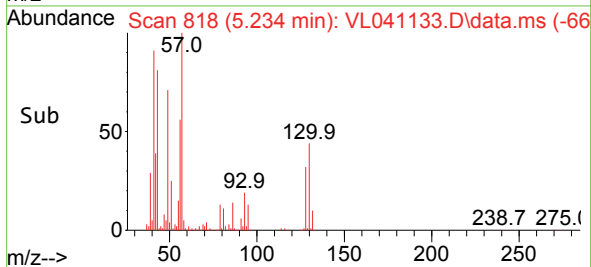
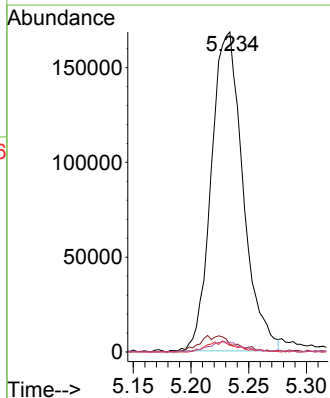
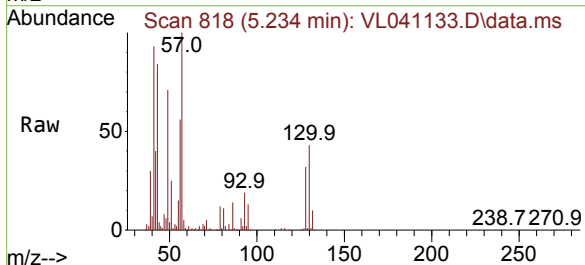
Instrument :
 MSVOA_L
 ClientSampleId :
 OA1

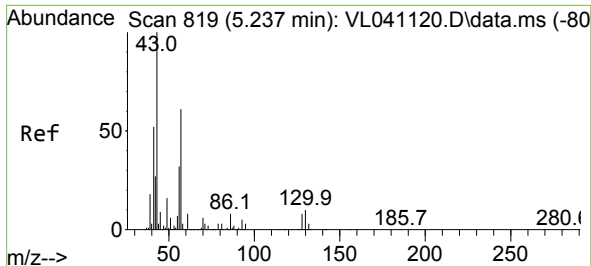
Tgt Ion: 43 Resp: 118178
 Ion Ratio Lower Upper
 43 100
 86 3.0 5.4 8.2#
 42 89.9 8.0 12.0#
 44 3.9 4.2 6.2#



#25
 Ethyl Acetate
 Concen: 1.334 ppbv
 RT: 5.234 min Scan# 818
 Delta R.T. 0.006 min
 Lab File: VL041133.D
 Acq: 4 Apr 2024 20:12

Tgt Ion: 43 Resp: 320790
 Ion Ratio Lower Upper
 43 100
 45 5.8 8.2 12.2#
 61 3.3 8.2 12.2#
 70 3.8 5.5 8.3#

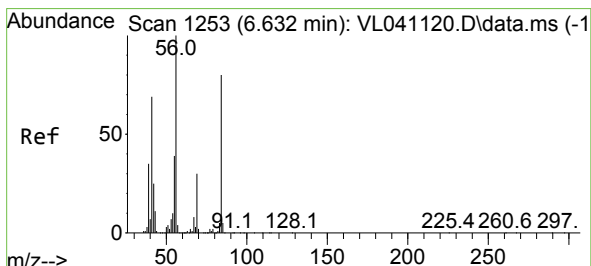
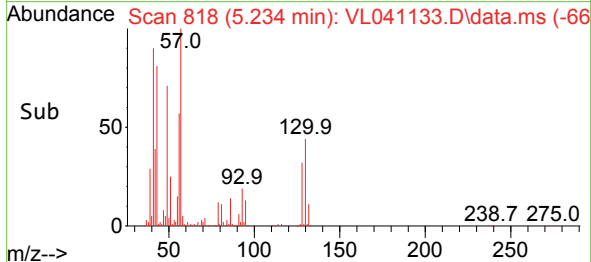
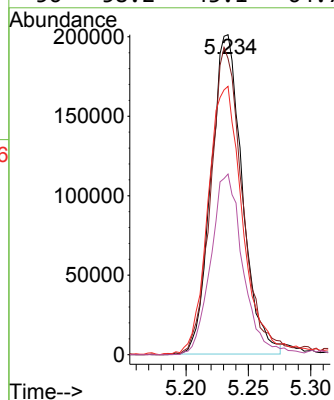
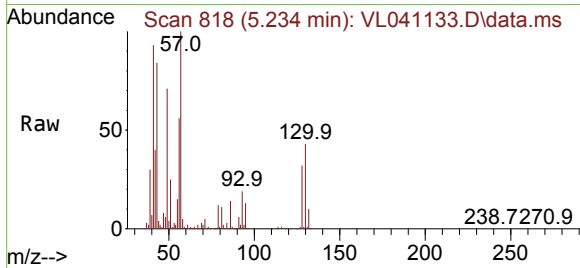




#26
Hexane
Concen: 3.244 ppbv
RT: 5.234 min Scan# 819
Delta R.T. -0.003 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

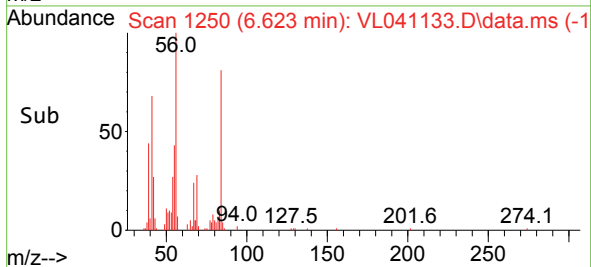
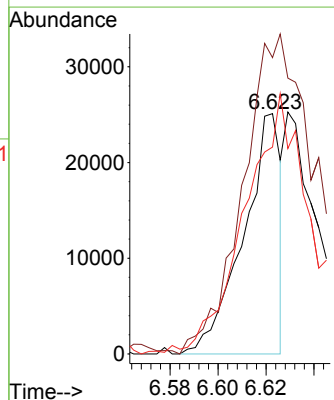
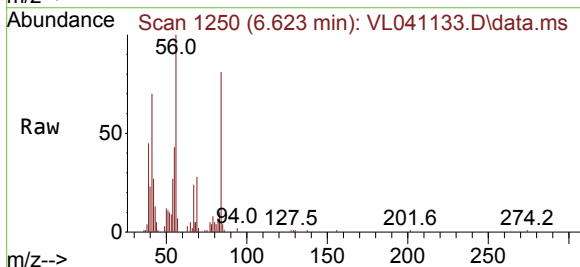
Instrument :
MSVOA_L
ClientSampleId :
OA1

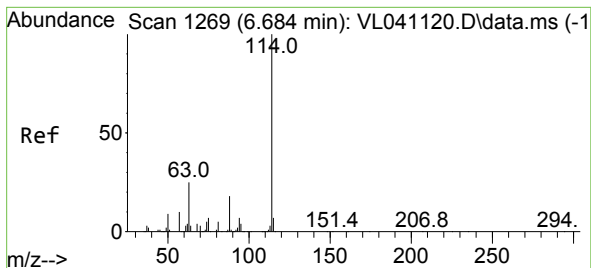
Tgt Ion: 57 Resp: 349934
Ion Ratio Lower Upper
57 100
41 101.5 73.8 110.6
43 95.5 184.2 276.2#
56 58.2 43.1 64.7



#30
Cyclohexane
Concen: 0.311 ppbv
RT: 6.623 min Scan# 1250
Delta R.T. -0.010 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 84 Resp: 26970
Ion Ratio Lower Upper
84 100
56 0.0 110.4 165.6#
41 0.0 70.6 105.8#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.674 min Scan# 1

Delta R.T. -0.010 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

OA1

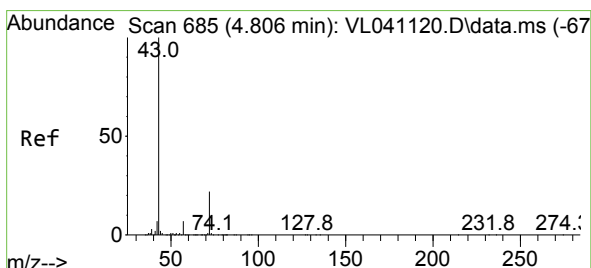
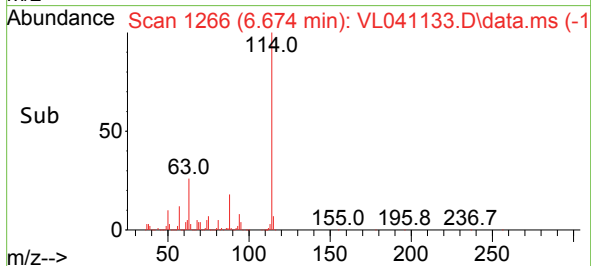
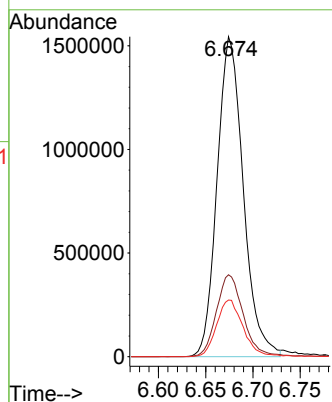
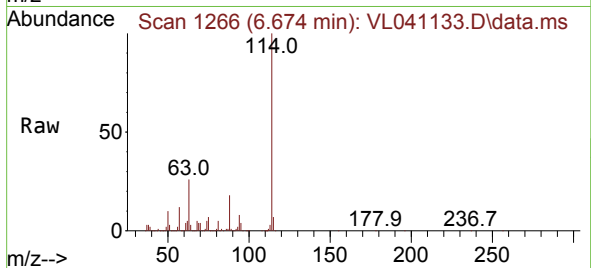
Tgt Ion:114 Resp: 2972989

Ion Ratio Lower Upper

114 100

63 26.5 21.0 31.6

88 18.1 14.6 22.0



#34

2-Butanone

Concen: 1.091 ppbv

RT: 4.806 min Scan# 685

Delta R.T. 0.000 min

Lab File: VL041133.D

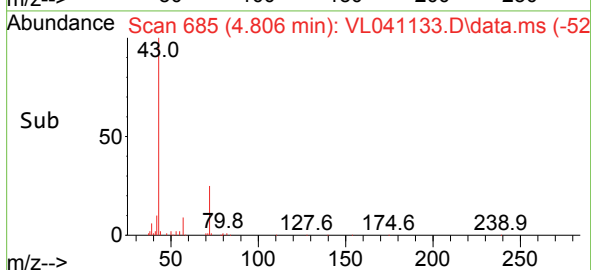
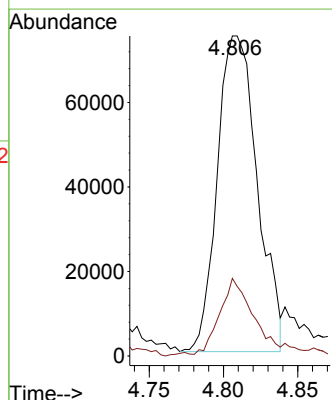
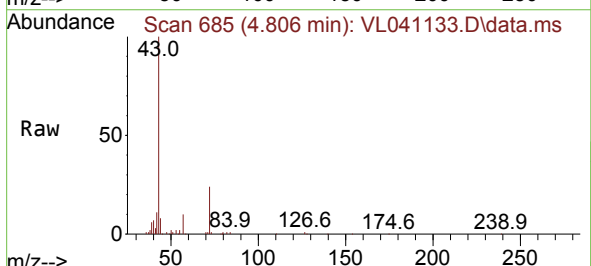
Acq: 4 Apr 2024 20:12

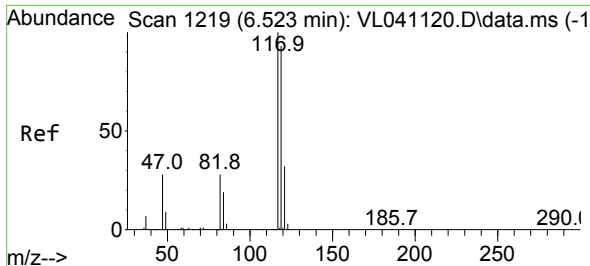
Tgt Ion: 43 Resp: 140090

Ion Ratio Lower Upper

43 100

72 22.9 17.4 26.0

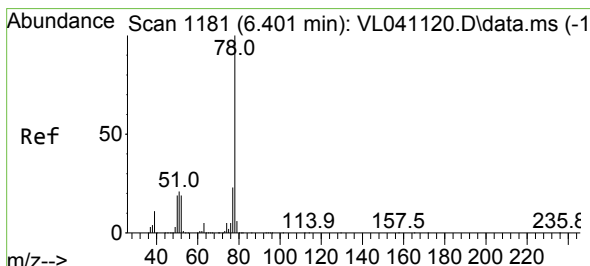
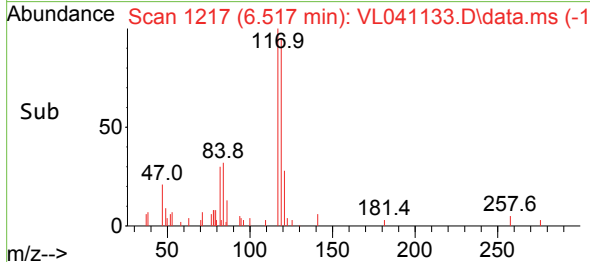
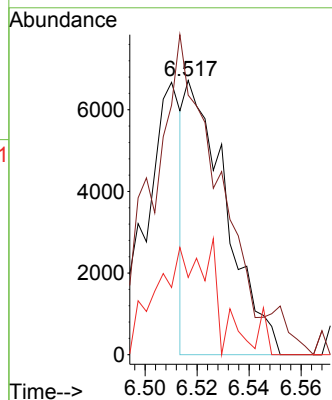
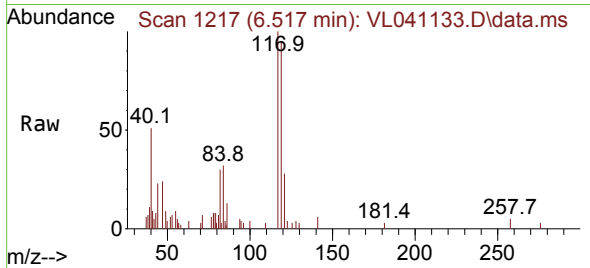




#35
Carbon Tetrachloride
Concen: 0.043 ppbv
RT: 6.517 min Scan# 1178
Delta R.T. -0.006 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

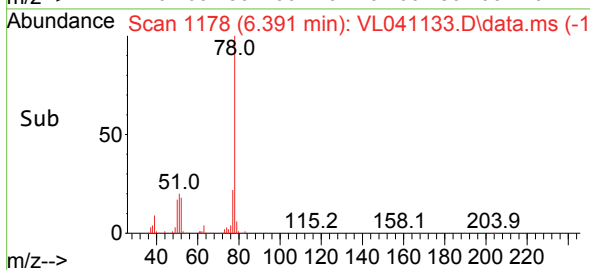
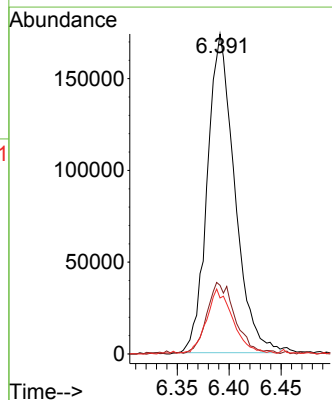
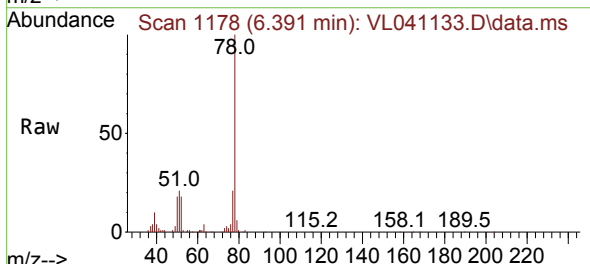
Instrument :
MSVOA_L
ClientSampleId :
OA1

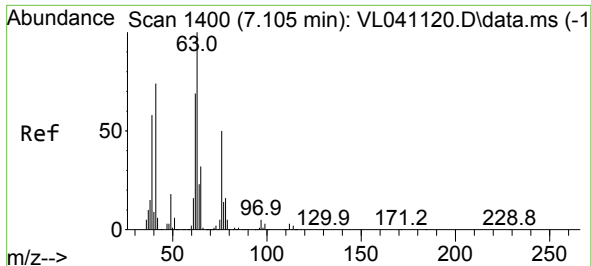
Tgt Ion:117 Resp: 7326
Ion Ratio Lower Upper
117 100
119 76.9 75.6 113.4
121 28.2 23.4 35.2



#36
Benzene
Concen: 1.458 ppbv
RT: 6.391 min Scan# 1178
Delta R.T. -0.010 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 78 Resp: 317878
Ion Ratio Lower Upper
78 100
77 21.4 18.8 28.2
50 17.2 15.5 23.3





#39

1,2-Dichloropropane

Concen: 8.969 ppbv

RT: 6.674 min Scan# 11

Delta R.T. -0.431 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

OA1

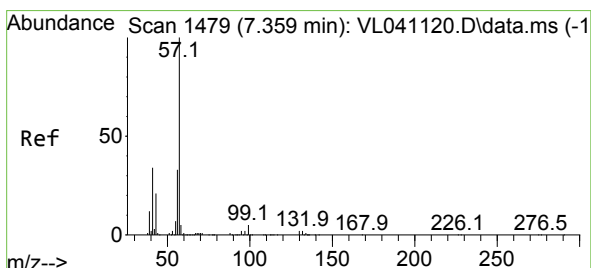
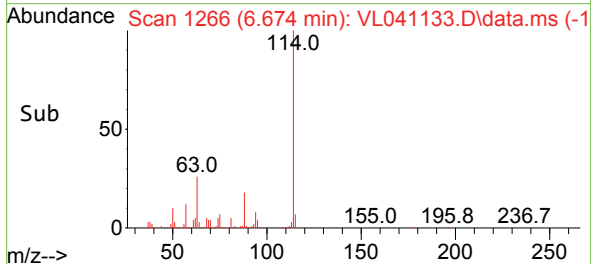
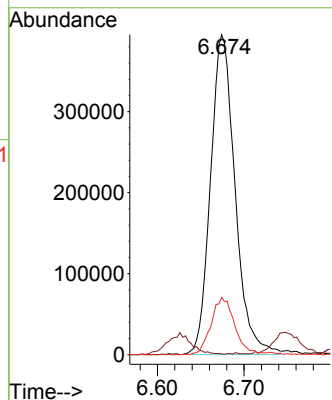
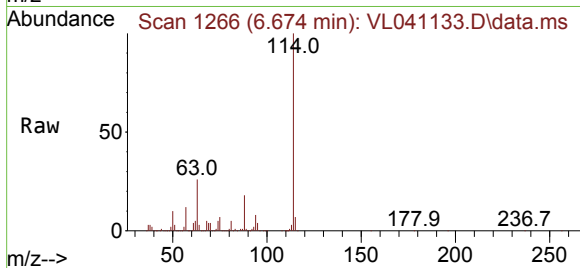
Tgt Ion: 63 Resp: 776416

Ion Ratio Lower Upper

63 100

41 0.0 62.2 93.4#

62 17.9 57.0 85.4#



#44

2,2,4-Trimethylpentane

Concen: 1.593 ppbv

RT: 7.353 min Scan# 1477

Delta R.T. -0.006 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

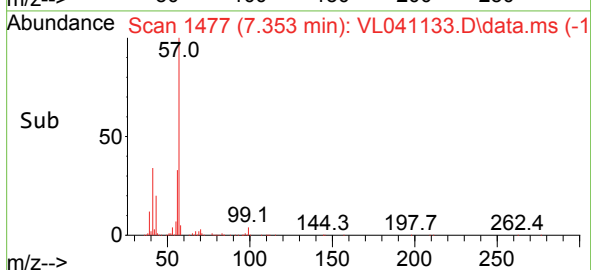
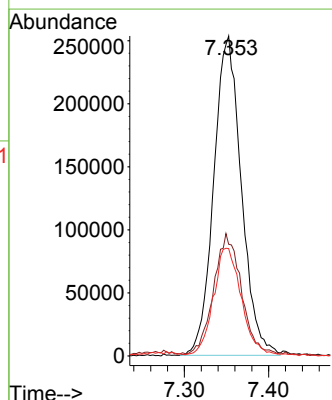
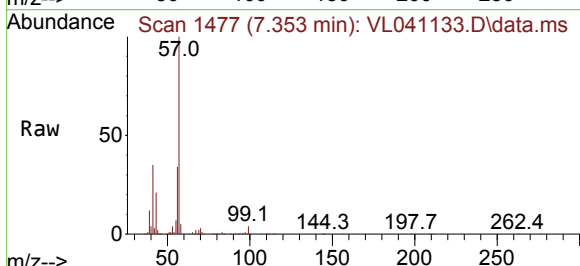
Tgt Ion: 57 Resp: 575642

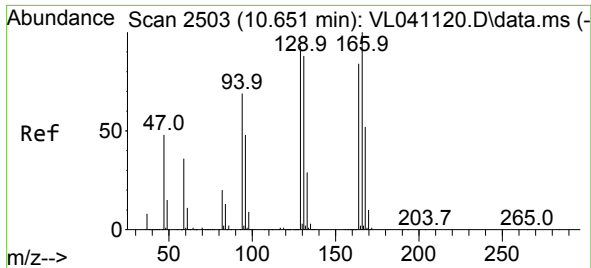
Ion Ratio Lower Upper

57 100

41 39.8 28.0 42.0

56 34.4 25.7 38.5

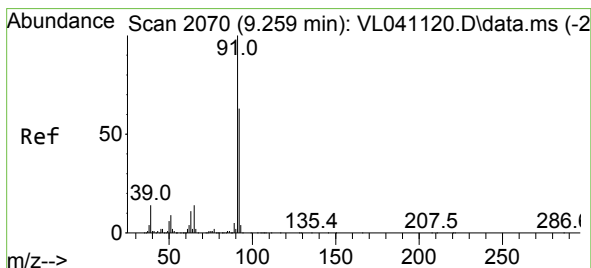
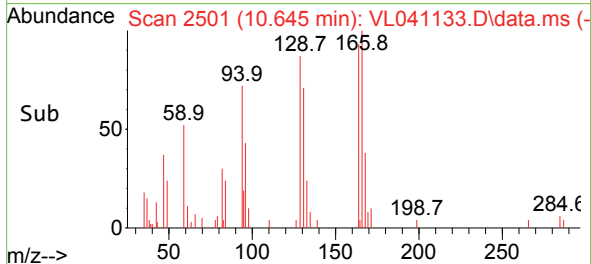
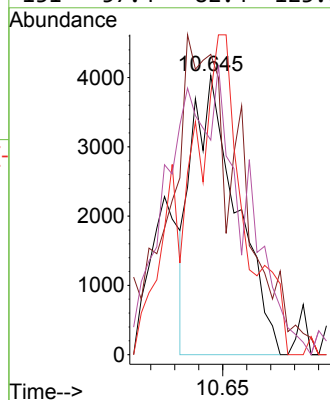
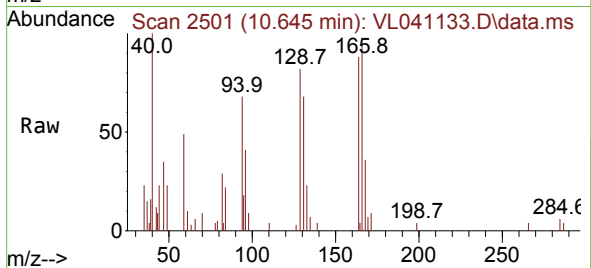




#52
Tetrachloroethene
Concen: 0.075 ppbv
RT: 10.645 min Scan# 210
Delta R.T. -0.006 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

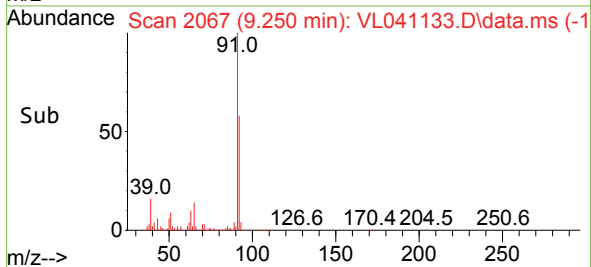
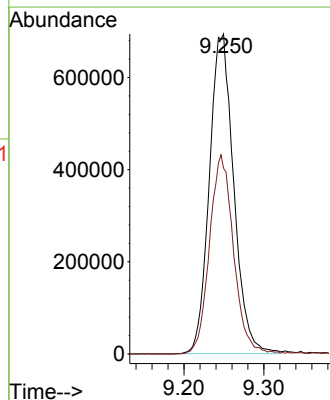
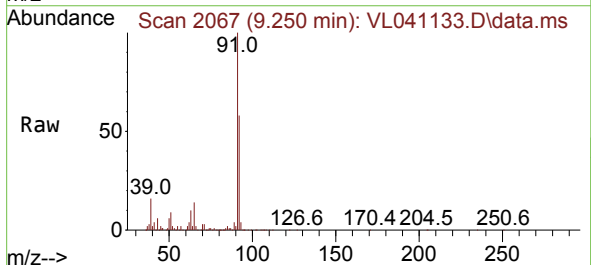
Instrument :
MSVOA_L
ClientSampleId :
OA1

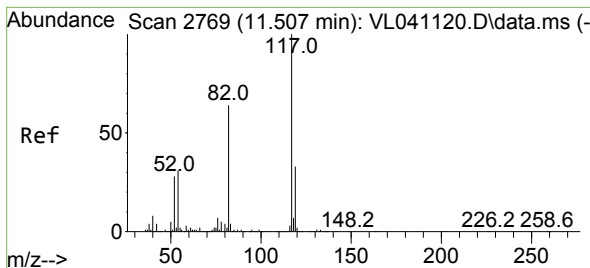
Tgt Ion:164 Resp: 5261
Ion Ratio Lower Upper
164 100
166 74.6 100.6 150.8#
129 65.2 87.2 130.8#
131 57.4 82.4 123.6#



#53
Toluene
Concen: 6.375 ppbv
RT: 9.250 min Scan# 2067
Delta R.T. -0.010 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 91 Resp: 1470714
Ion Ratio Lower Upper
91 100
92 61.6 48.9 73.3

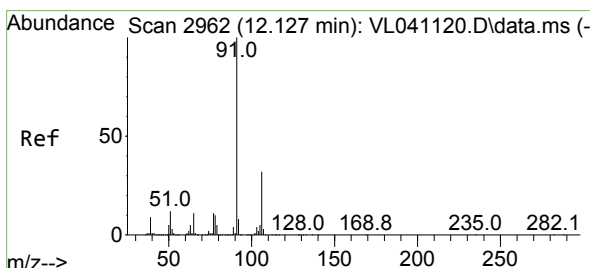
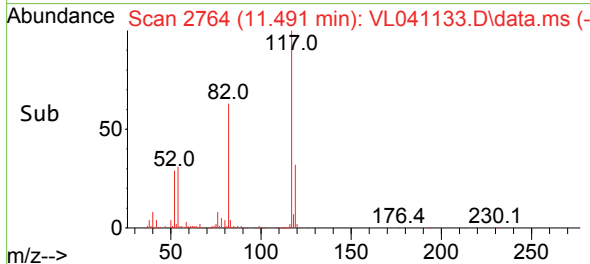
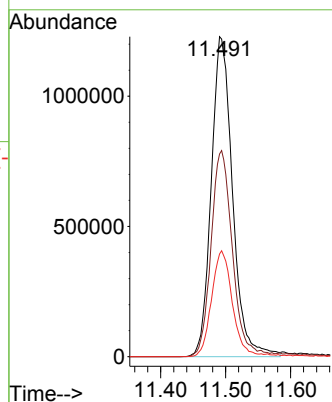
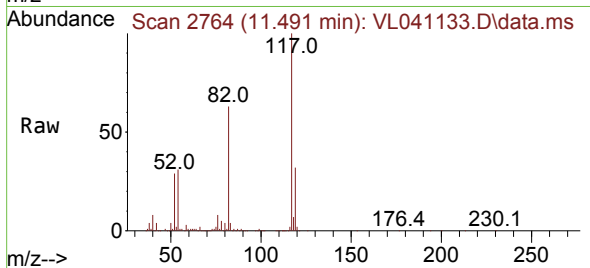




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.491 min Scan# 21
Delta R.T. -0.016 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

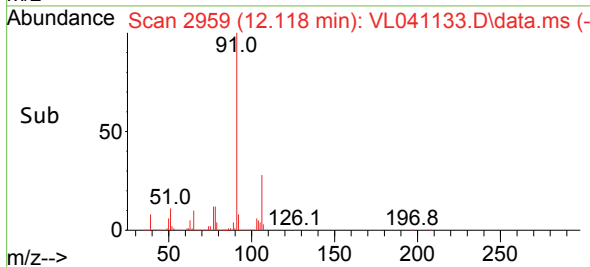
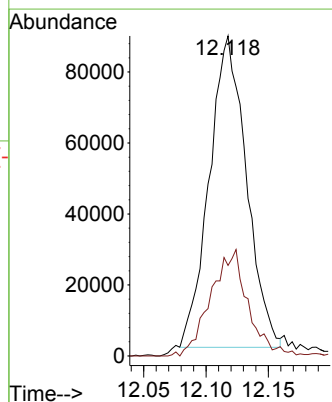
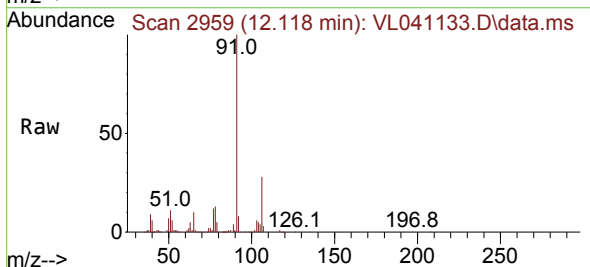
Instrument :
MSVOA_L
ClientSampleId :
OA1

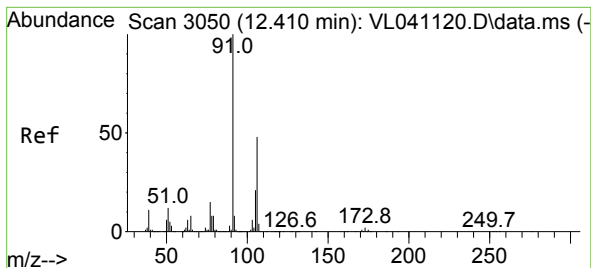
Tgt Ion:117 Resp: 2794557
Ion Ratio Lower Upper
117 100
82 67.0 51.4 77.2
119 33.4 23.7 35.5



#58
Ethyl Benzene
Concen: 0.591 ppbv
RT: 12.118 min Scan# 2959
Delta R.T. -0.010 min
Lab File: VL041133.D
Acq: 4 Apr 2024 20:12

Tgt Ion: 91 Resp: 181851
Ion Ratio Lower Upper
91 100
106 29.1 24.6 36.8





#59

m/p-Xylene

Concen: 2.115 ppbv

RT: 12.372 min Scan# 3050

Delta R.T. -0.039 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

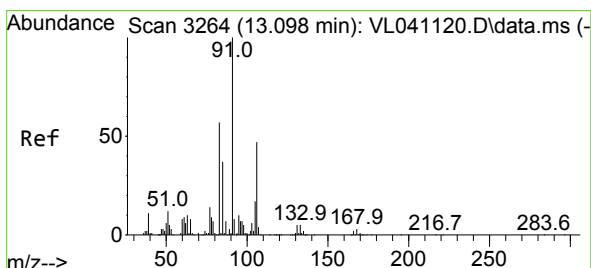
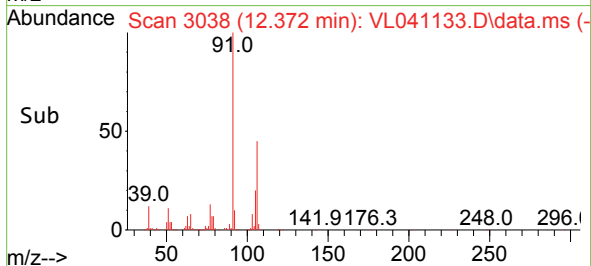
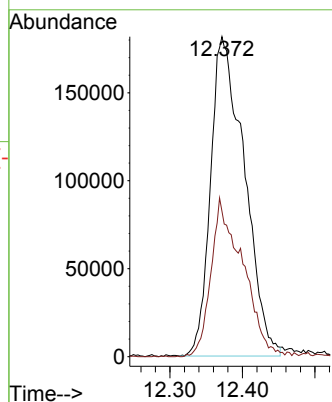
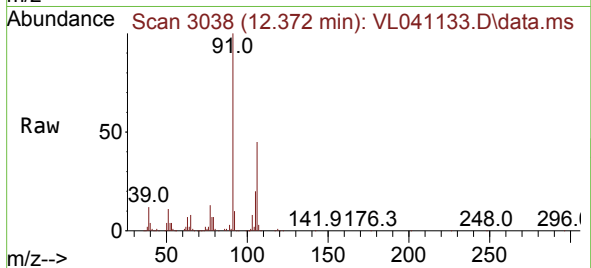
OA1

Tgt Ion: 91 Resp: 587267

Ion Ratio Lower Upper

91 100

106 47.6 35.4 53.2



#60

o-Xylene

Concen: 0.762 ppbv

RT: 13.089 min Scan# 3261

Delta R.T. -0.010 min

Lab File: VL041133.D

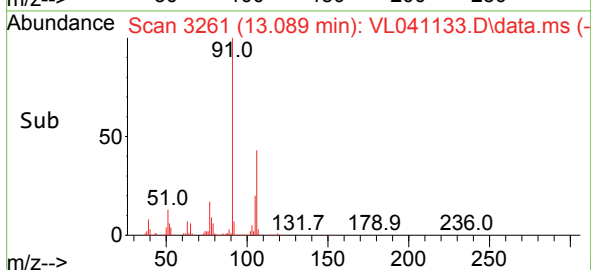
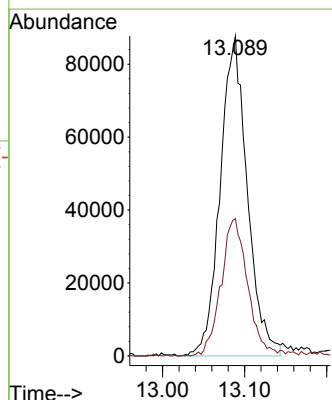
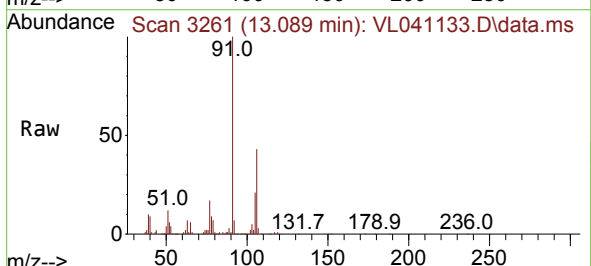
Acq: 4 Apr 2024 20:12

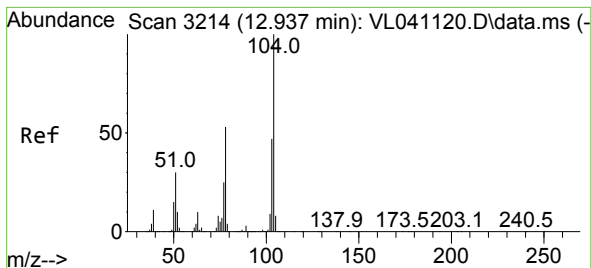
Tgt Ion: 91 Resp: 201555

Ion Ratio Lower Upper

91 100

106 41.7 22.4 67.3





#61

Styrene

Concen: 0.046 ppbv

RT: 12.921 min Scan# 31

Delta R.T. -0.016 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

OA1

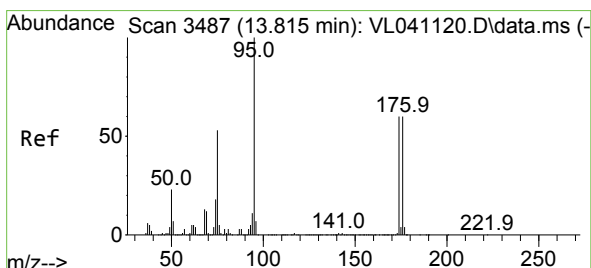
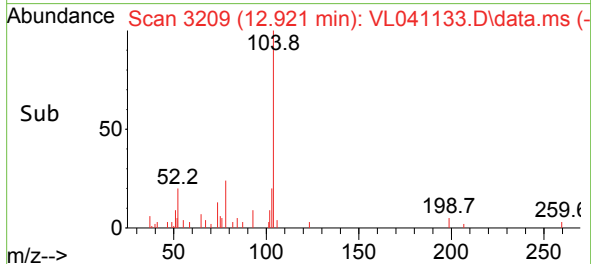
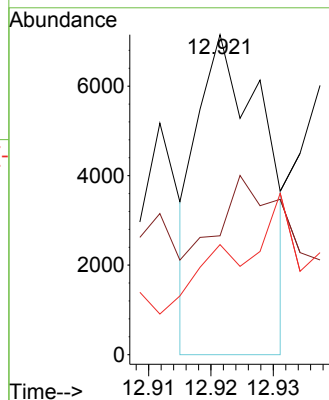
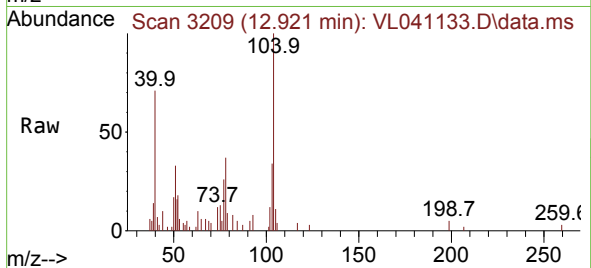
Tgt Ion:104 Resp: 5347

Ion Ratio Lower Upper

104 100

78 154.6 42.6 64.0#

103 0.0 37.3 55.9#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.765 ppbv

RT: 13.802 min Scan# 3483

Delta R.T. -0.013 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

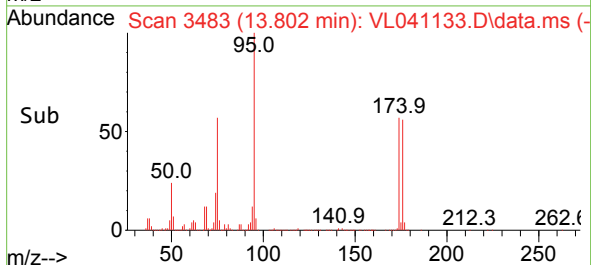
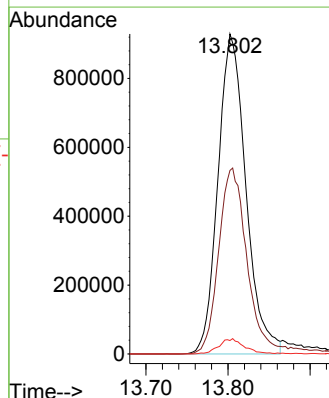
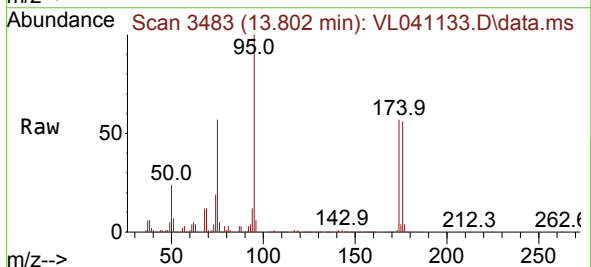
Tgt Ion: 95 Resp: 2203302

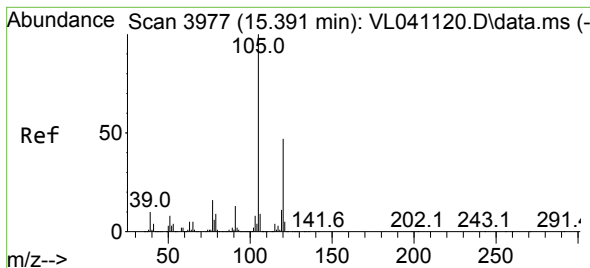
Ion Ratio Lower Upper

95 100

174 60.4 47.8 71.8

175 4.6 3.5 5.3





#73

1,3,5-Trimethylbenzene

Concen: 0.046 ppbv

RT: 15.375 min Scan# 3972

Delta R.T. -0.016 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Instrument :

MSVOA_L

ClientSampleId :

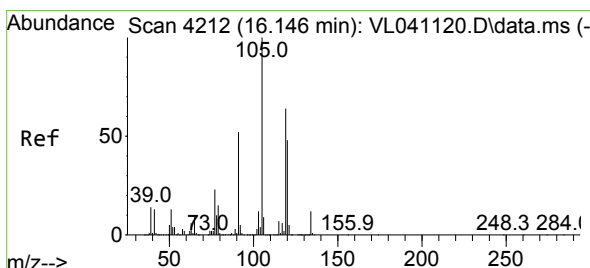
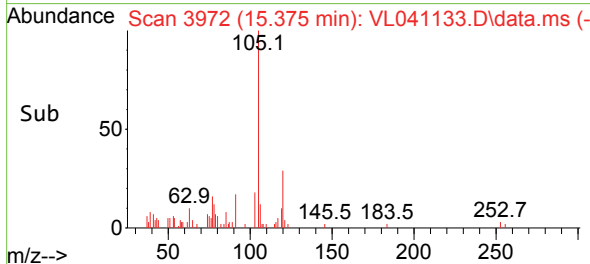
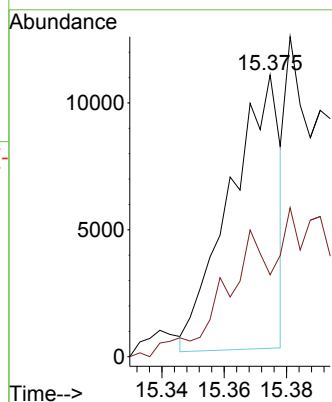
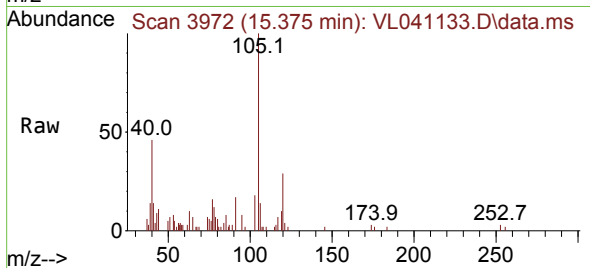
OA1

Tgt Ion:105 Resp: 11989

Ion Ratio Lower Upper

105 100

120 24.1 38.7 58.1#



#74

1,2,4-Trimethylbenzene

Concen: 0.442 ppbv

RT: 16.137 min Scan# 4209

Delta R.T. -0.010 min

Lab File: VL041133.D

Acq: 4 Apr 2024 20:12

Tgt Ion:105 Resp: 132092

Ion Ratio Lower Upper

105 100

120 44.2 40.4 60.6

91 12.7 41.4 62.0#

77 16.6 19.0 28.4#

