

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020724\
 Data File : VL041047.D
 Acq On : 7 Feb 2024 22:46
 Operator : SY/MD
 Sample : P1392-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

Quant Time: Feb 08 02:47:08 2024
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Feb 08 02:04:13 2024
 Response via : Initial Calibration

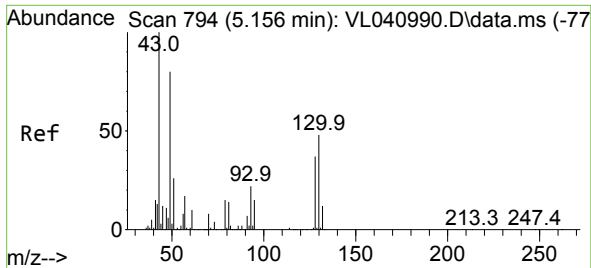
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.173	49	1049730	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.629	114	2605131	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.442	117	2409625	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.751	95	1886228	10.364	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.716	85	110761	0.478	ppbv	93
3) Chlorodifluoromethane	2.661	51	63414	0.359	ppbv	94
4) Chloromethane	2.800	50	53025	0.801	ppbv	99
5) Vinyl Chloride	2.903	62	2739	0.042	ppbv #	77
7) Chloroethane	3.179	64	675	0.029	ppbv #	42
9) Propene	2.681	41	866556	14.963	ppbv	88
10) Heptane	7.565	43	6051	0.042	ppbv #	28
11) Trichlorofluoromethane	3.546	101	40793	0.218	ppbv	87
12) 1,1,2-Trichlorotrifluo...	4.047	101	3552	0.026	ppbv #	1
13) Ethanol	3.227	45	41292	2.992	ppbv	71
15) Acetone	3.452	43	851036	6.340	ppbv #	84
16) 1,3-Butadiene	2.954	39	402630	6.270	ppbv #	36
17) tert-Butyl alcohol	3.877	59	20242	0.184	ppbv #	83
19) Isopropyl Alcohol	3.578	45	15940	0.205	ppbv #	92
20) Methylene Chloride	3.915	84	1200657	23.244	ppbv	95
21) Allyl Chloride	3.976	41	2163	0.027	ppbv #	17
23) Vinyl Acetate	4.600	43	56232	0.406	ppbv #	76
25) Ethyl Acetate	5.195	43	731163	3.004	ppbv #	77
26) Hexane	5.195	57	1009650	9.732	ppbv #	39
27) Carbon Disulfide	4.108	76	12671	0.094	ppbv #	1
30) Cyclohexane	6.587	84	2663	0.031	ppbv #	1
34) 2-Butanone	4.771	43	320565	2.583	ppbv	97
36) Benzene	6.349	78	132483	0.616	ppbv	92
39) 1,2-Dichloropropane	6.632	63	678955	8.011	ppbv #	24
41) Tetrahydrofuran	5.192	42	398264	4.726	ppbv #	51
43) Methyl Methacrylate	7.452	69	2594	0.031	ppbv #	1
44) 2,2,4-Trimethylpentane	7.304	57	25002	0.069	ppbv #	9
51) 2-Hexanone	9.542	43	15303	0.097	ppbv #	31
53) Toluene	9.198	91	111139	0.472	ppbv	98
58) Ethyl Benzene	12.066	91	6869	0.021	ppbv #	62
59) m/p-Xylene	12.352	91	134680	0.477	ppbv	96
69) p-Isopropyltoluene	16.966	119	8403	0.021	ppbv #	9

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

Quant Time: Feb 08 02:47:08 2024
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL012324AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Feb 08 02:04:13 2024
Response via : Initial Calibration





#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.173 min Scan# 79
 Delta R.T. 0.007 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

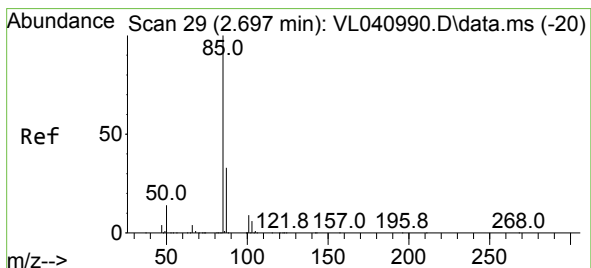
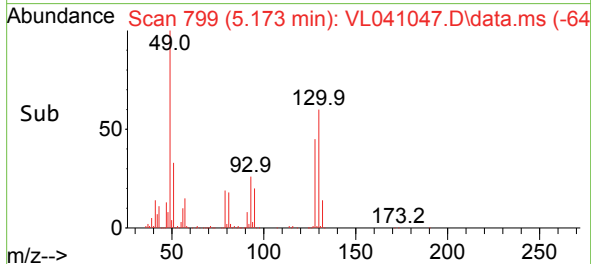
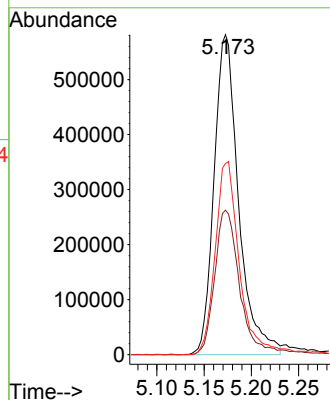
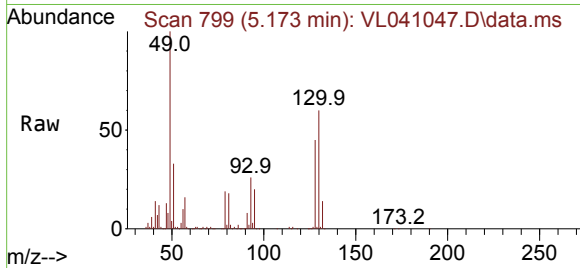
Instrument :

MSVOA_L

ClientSampleId :

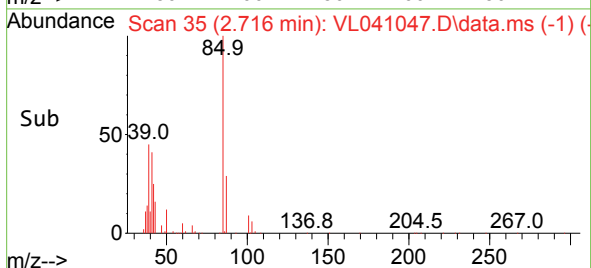
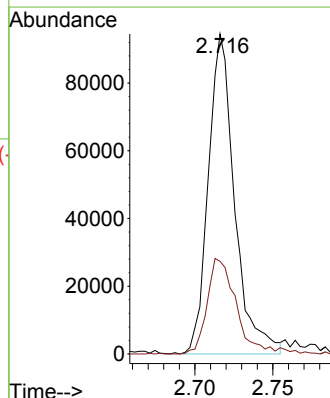
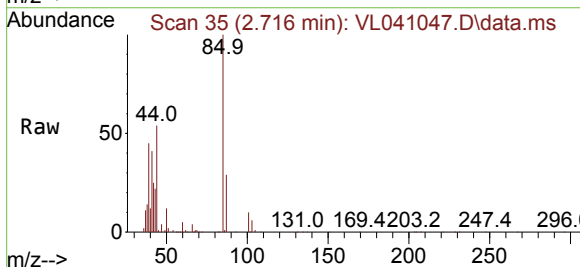
SV-2

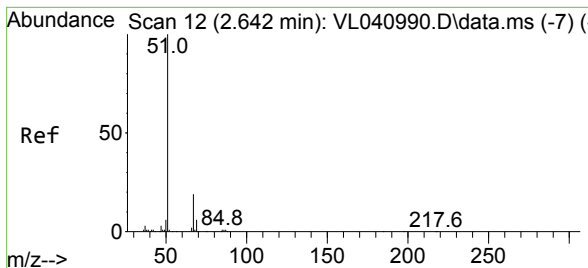
Tgt Ion: 49 Resp: 1049730
 Ion Ratio Lower Upper
 49 100
 128 47.2 23.9 71.7
 130 61.1 31.1 93.5



#2
 Dichlorodifluoromethane
 Concen: 0.478 ppbv
 RT: 2.716 min Scan# 35
 Delta R.T. 0.013 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

Tgt Ion: 85 Resp: 110761
 Ion Ratio Lower Upper
 85 100
 87 29.0 26.3 39.5





#3

Chlorodifluoromethane

Concen: 0.359 ppbv

RT: 2.661 min Scan# 11

Delta R.T. 0.013 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

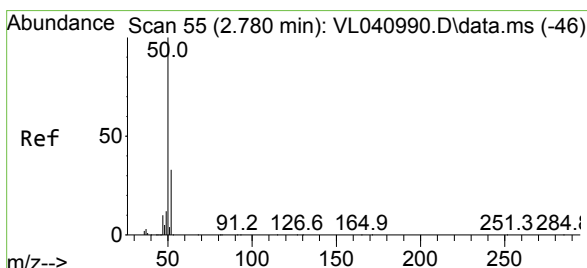
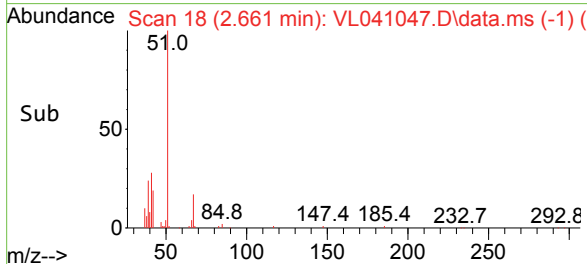
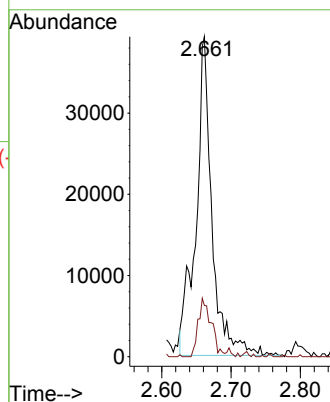
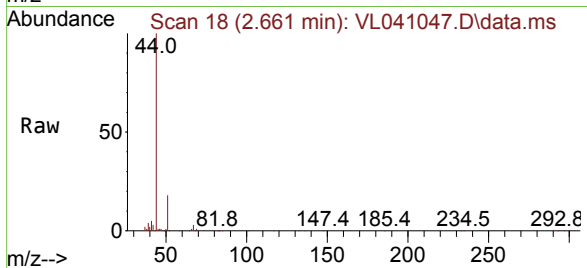
SV-2

Tgt Ion: 51 Resp: 63414

Ion Ratio Lower Upper

51 100

67 15.8 14.8 22.2



#4

Chloromethane

Concen: 0.801 ppbv

RT: 2.800 min Scan# 61

Delta R.T. 0.013 min

Lab File: VL041047.D

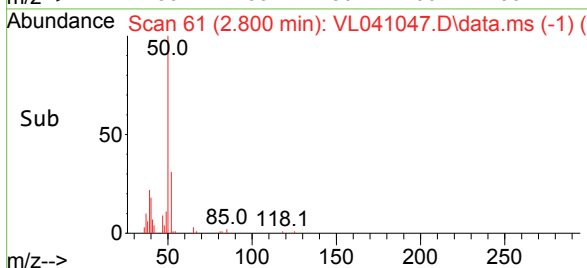
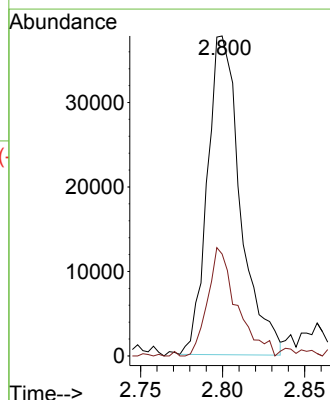
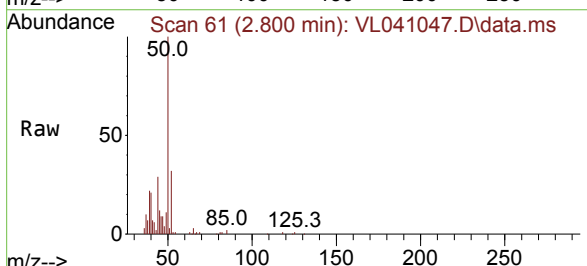
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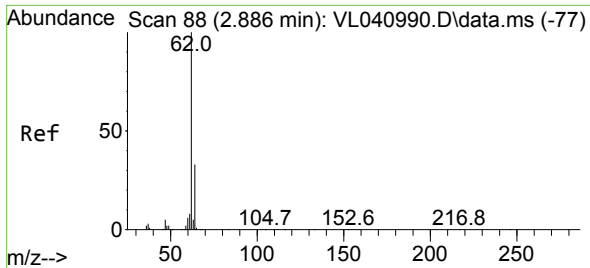
Tgt Ion: 50 Resp: 53025

Ion Ratio Lower Upper

50 100

52 32.0 26.2 39.4

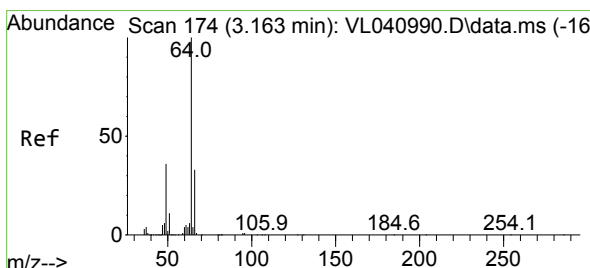
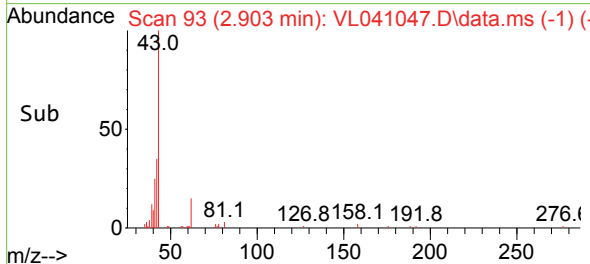
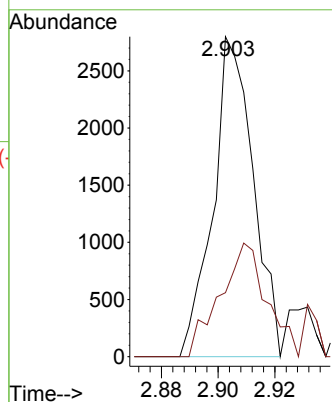
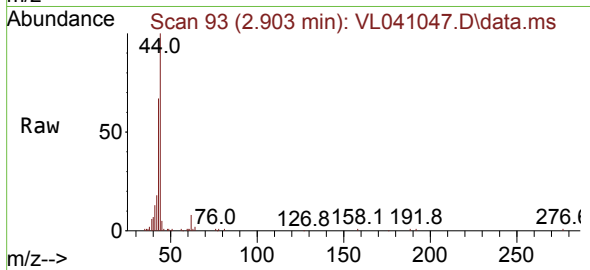




#5
 Vinyl Chloride
 Concen: 0.042 ppbv
 RT: 2.903 min Scan# 91
 Delta R.T. 0.010 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

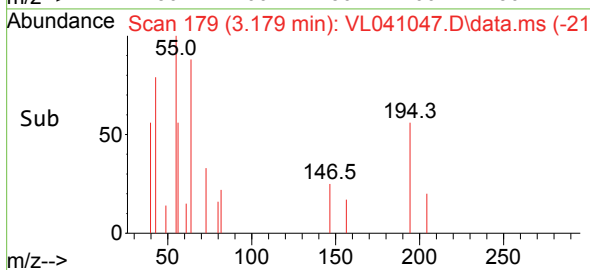
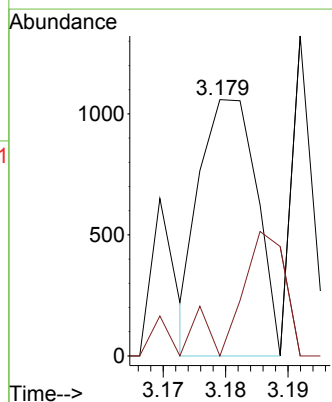
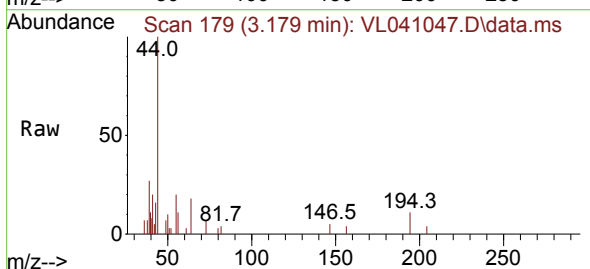
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

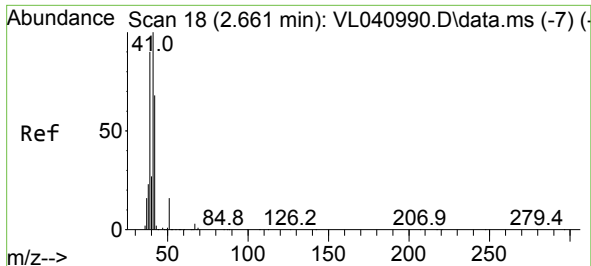
Tgt Ion: 62 Resp: 2739
 Ion Ratio Lower Upper
 62 100
 64 20.0 26.6 40.0#



#7
 Chloroethane
 Concen: 0.029 ppbv
 RT: 3.179 min Scan# 179
 Delta R.T. 0.007 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

Tgt Ion: 64 Resp: 675
 Ion Ratio Lower Upper
 64 100
 66 0.0 26.0 39.0#

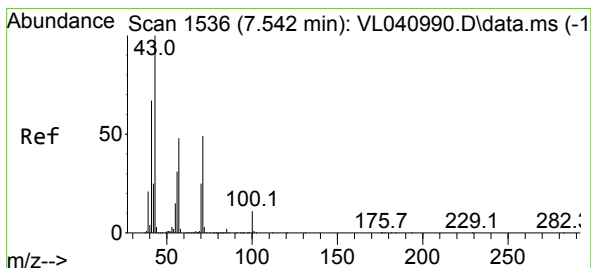
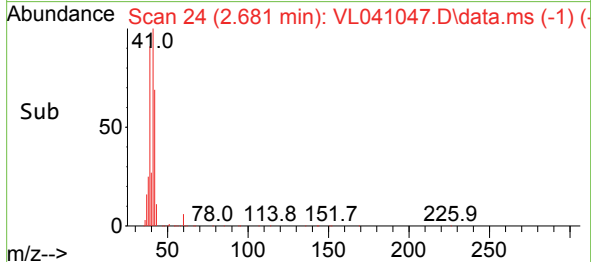
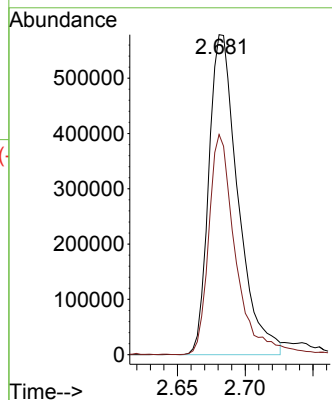
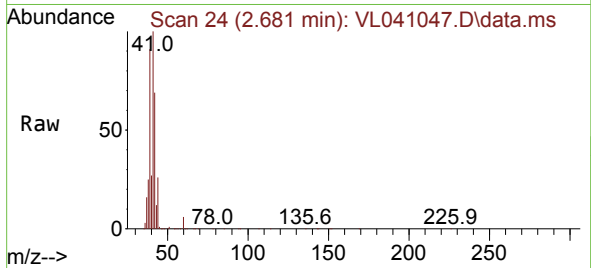




#9
 Propene
 Concen: 14.963 ppbv
 RT: 2.681 min Scan# 24
 Delta R.T. 0.013 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

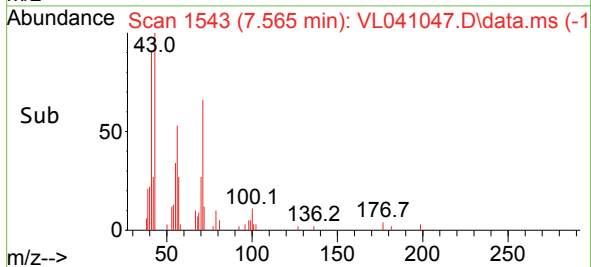
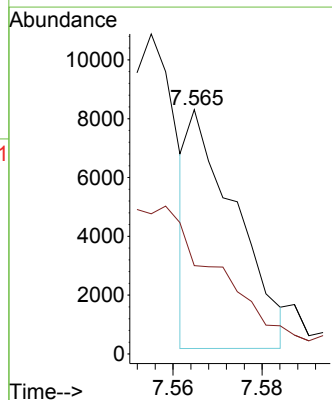
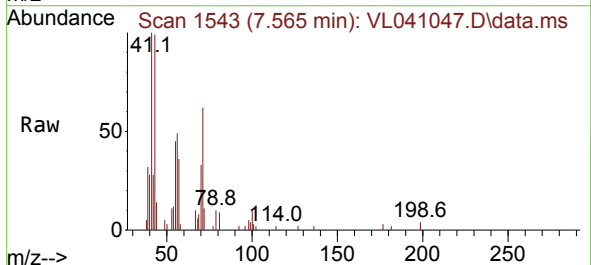
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

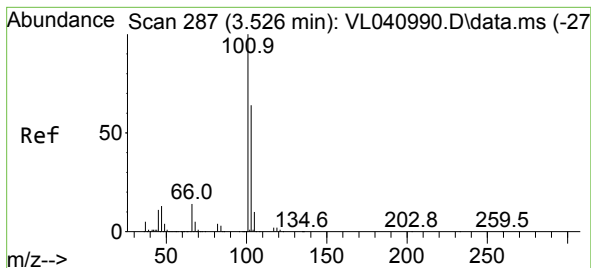
Tgt Ion: 41 Resp: 866556
 Ion Ratio Lower Upper
 41 100
 42 63.8 59.0 88.4



#10
 Heptane
 Concen: 0.042 ppbv
 RT: 7.565 min Scan# 1543
 Delta R.T. 0.013 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

Tgt Ion: 43 Resp: 6051
 Ion Ratio Lower Upper
 43 100
 57 0.0 39.4 59.2#





#11

Trichlorofluoromethane

Concen: 0.218 ppbv

RT: 3.546 min Scan# 293

Delta R.T. 0.013 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

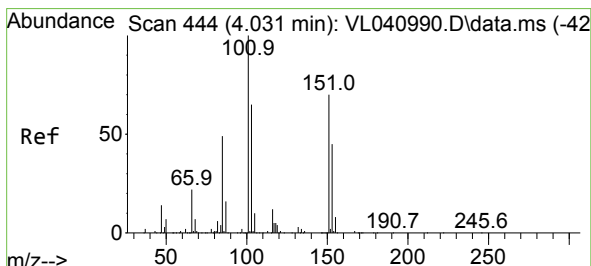
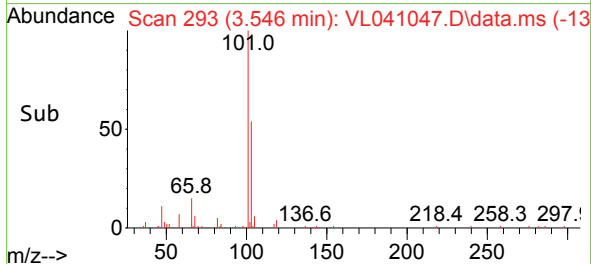
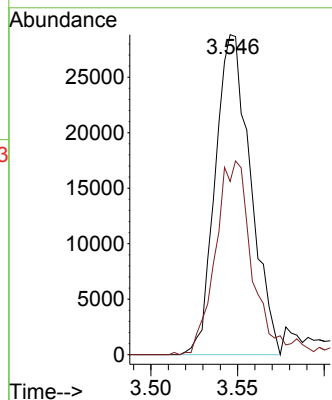
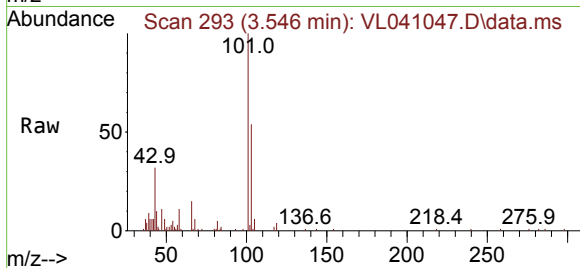
SV-2

Tgt Ion:101 Resp: 40793

Ion Ratio Lower Upper

101 100

103 54.2 51.4 77.2



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.026 ppbv

RT: 4.047 min Scan# 449

Delta R.T. 0.007 min

Lab File: VL041047.D

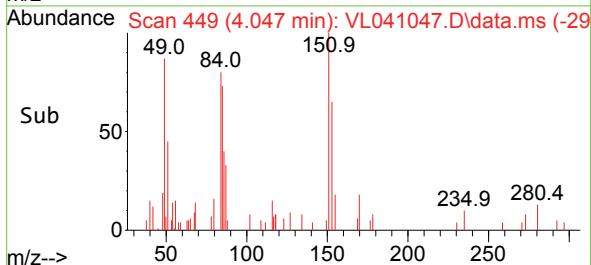
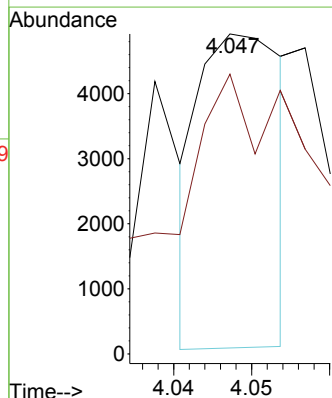
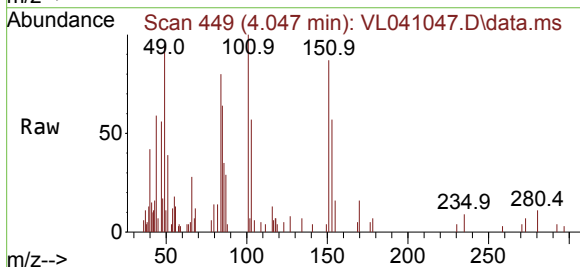
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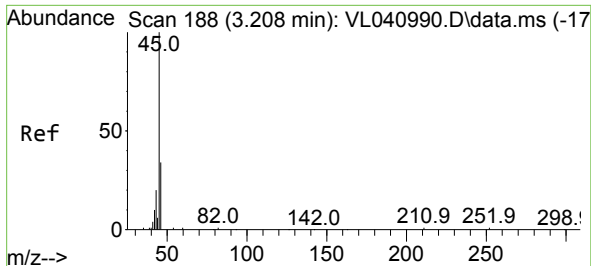
Tgt Ion:101 Resp: 3552

Ion Ratio Lower Upper

101 100

151 192.9 56.6 85.0#

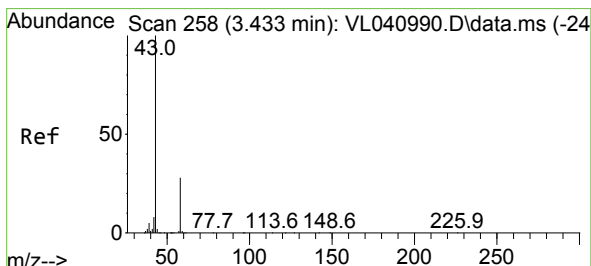
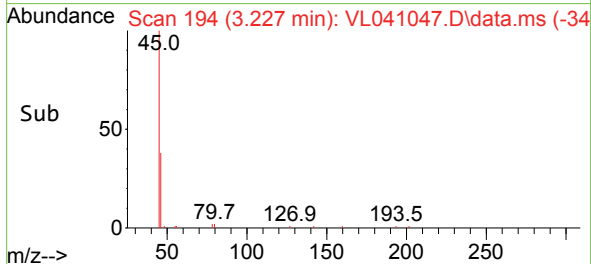
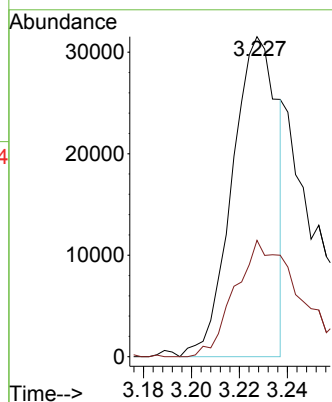
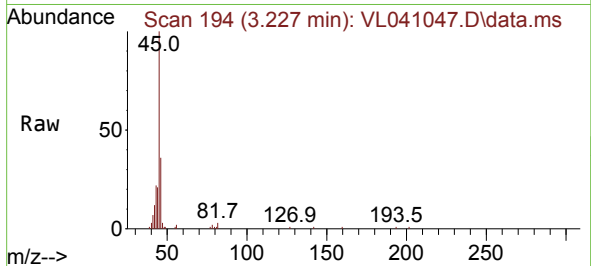




#13
Ethanol
Concen: 2.992 ppbv
RT: 3.227 min Scan# 194
Delta R.T. 0.013 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

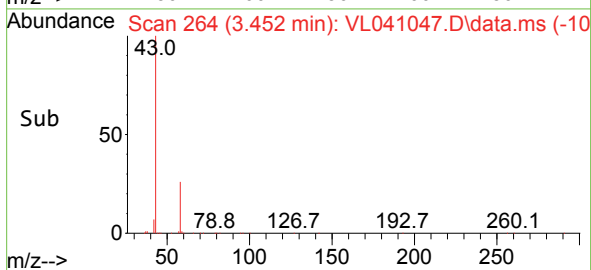
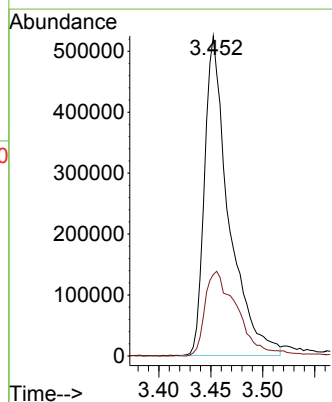
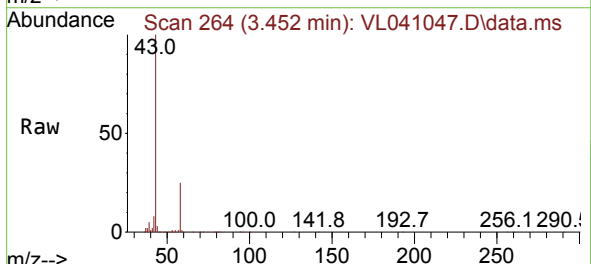
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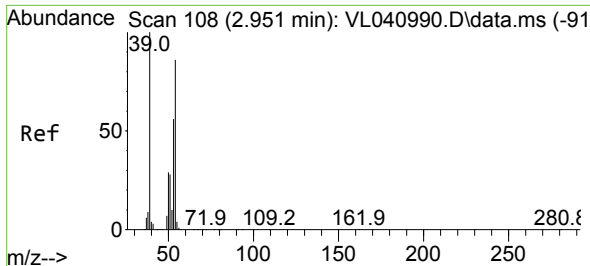
Tgt Ion: 45 Resp: 41292
Ion Ratio Lower Upper
45 100
46 58.3 16.2 64.8



#15
Acetone
Concen: 6.340 ppbv
RT: 3.452 min Scan# 264
Delta R.T. 0.013 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 43 Resp: 851036
Ion Ratio Lower Upper
43 100
58 36.3 22.2 33.2#

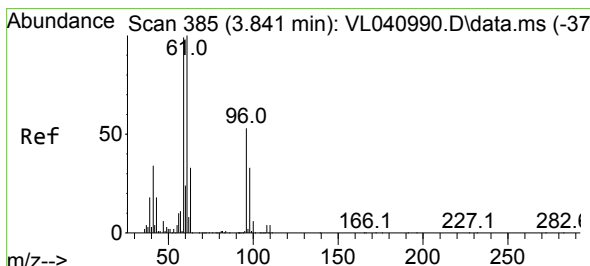
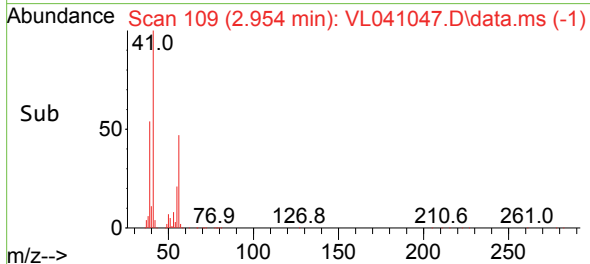
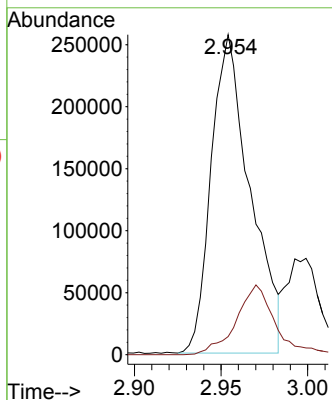
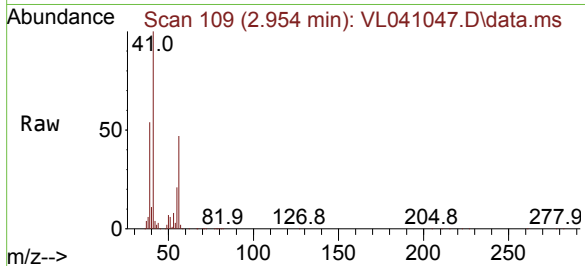




#16
1,3-Butadiene
Concen: 6.270 ppbv
RT: 2.954 min Scan# 108
Delta R.T. -0.003 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

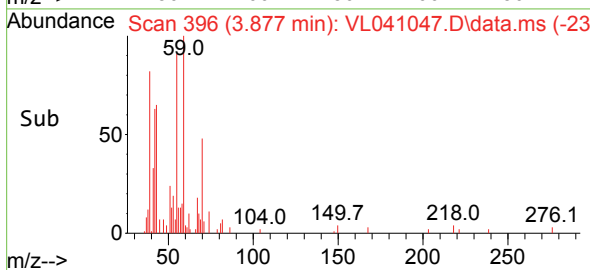
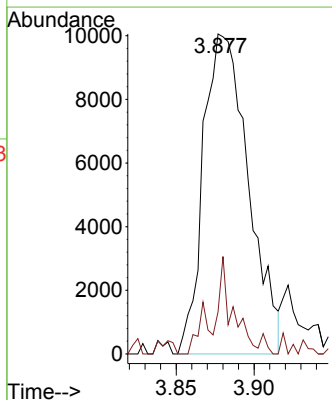
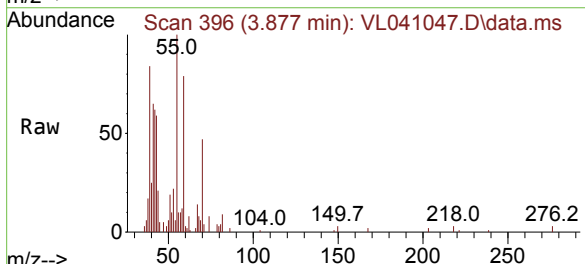
Instrument :
MSVOA_L
ClientSampleId :
SV-2

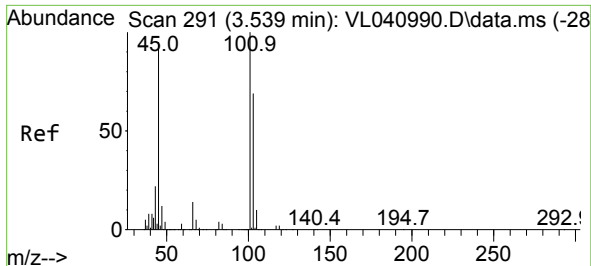
Tgt Ion: 39 Resp: 402630
Ion Ratio Lower Upper
39 100
54 22.2 62.7 94.1#



#17
tert-Butyl alcohol
Concen: 0.184 ppbv
RT: 3.877 min Scan# 396
Delta R.T. 0.026 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 59 Resp: 20242
Ion Ratio Lower Upper
59 100
57 17.2 8.7 13.1#





#19

Isopropyl Alcohol

Concen: 0.205 ppbv

RT: 3.578 min Scan# 303

Delta R.T. 0.029 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

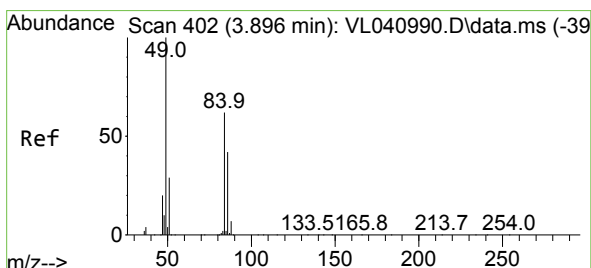
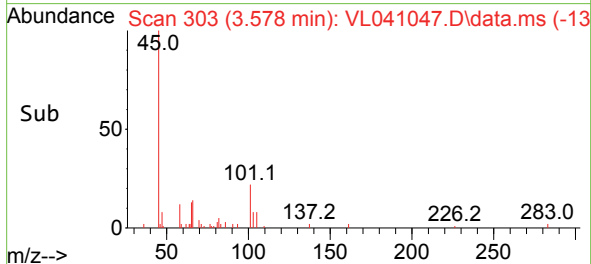
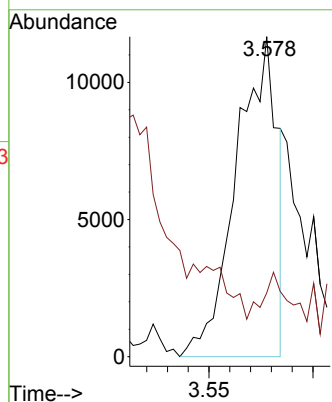
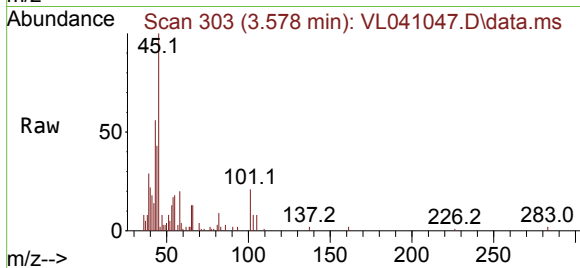
SV-2

Tgt Ion: 45 Resp: 15940

Ion Ratio Lower Upper

45 100

58 0.0 2.2 3.4#



#20

Methylene Chloride

Concen: 23.244 ppbv

RT: 3.915 min Scan# 408

Delta R.T. 0.010 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Tgt Ion: 84 Resp: 1200657

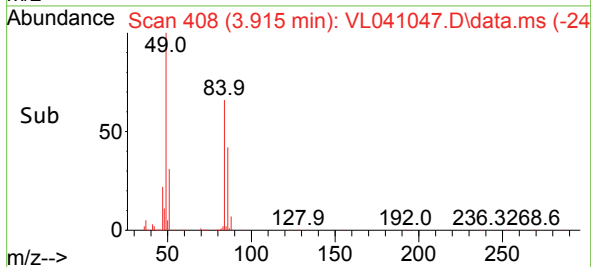
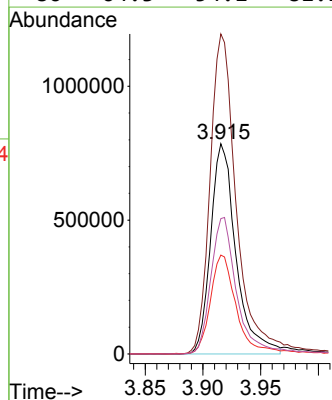
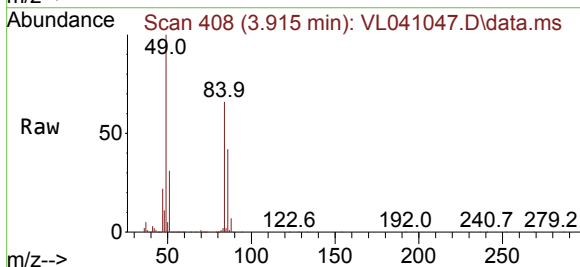
Ion Ratio Lower Upper

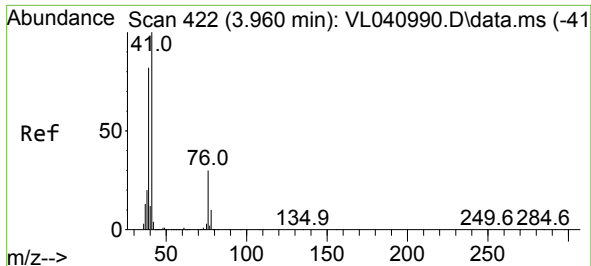
84 100

49 152.1 128.1 192.1

51 46.8 36.5 54.7

86 64.3 54.1 81.1

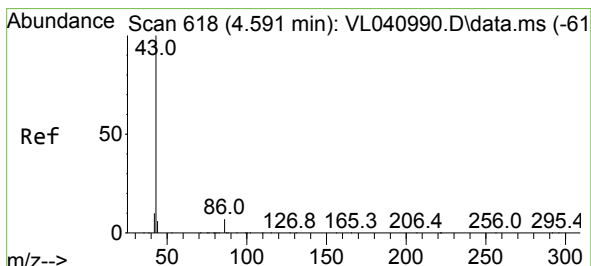
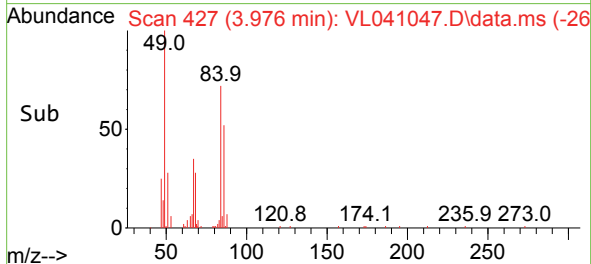
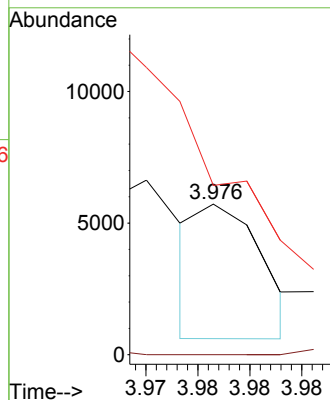
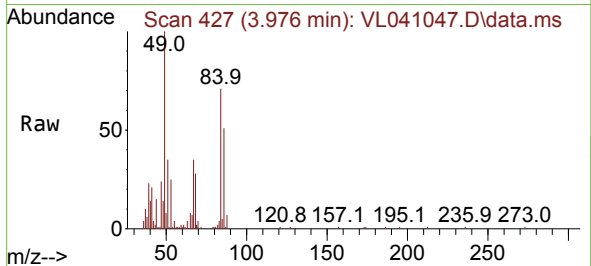




#21
 Allyl Chloride
 Concen: 0.027 ppbv
 RT: 3.976 min Scan# 41
 Delta R.T. 0.007 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

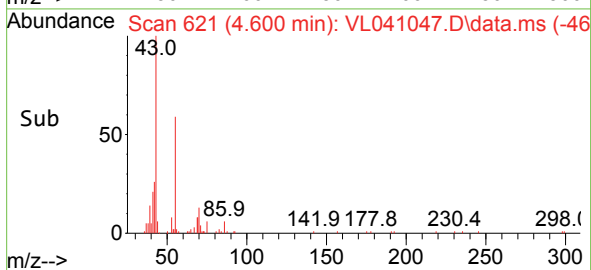
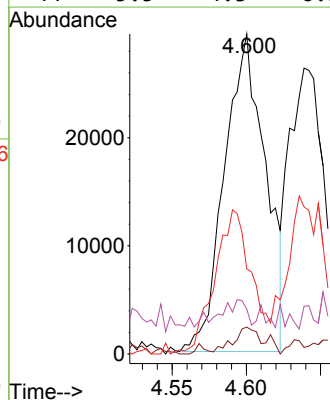
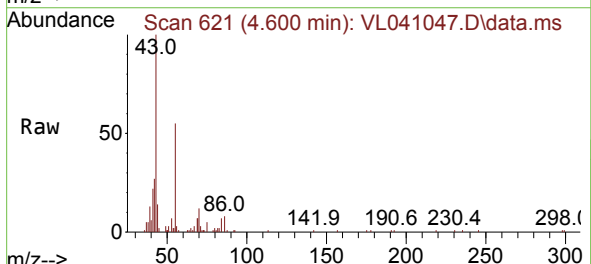
Instrument :
 MSVOA_L
 ClientSampleId :
 SV-2

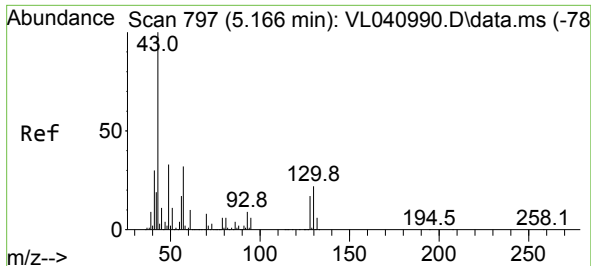
Tgt Ion: 41 Resp: 2163
 Ion Ratio Lower Upper
 41 100
 76 0.0 25.0 37.4#
 39 0.0 67.0 100.6#



#23
 Vinyl Acetate
 Concen: 0.406 ppbv
 RT: 4.600 min Scan# 621
 Delta R.T. 0.000 min
 Lab File: VL041047.D
 Acq: 7 Feb 2024 22:46

Tgt Ion: 43 Resp: 56232
 Ion Ratio Lower Upper
 43 100
 86 9.3 5.4 8.0#
 42 28.1 8.6 13.0#
 44 5.5 4.3 6.5

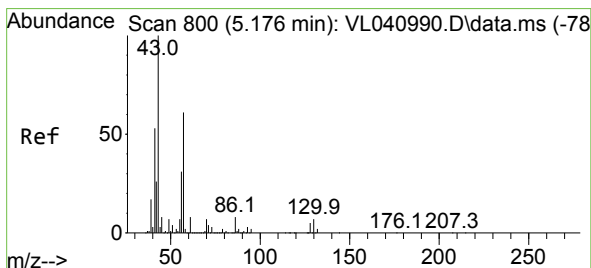
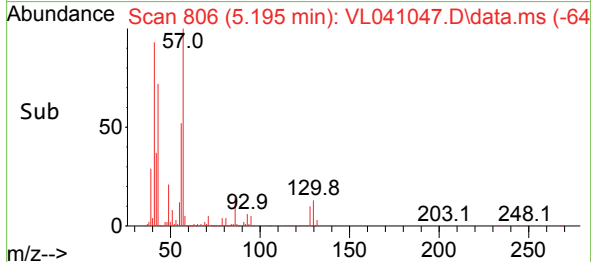
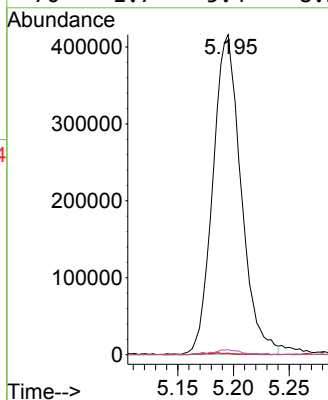
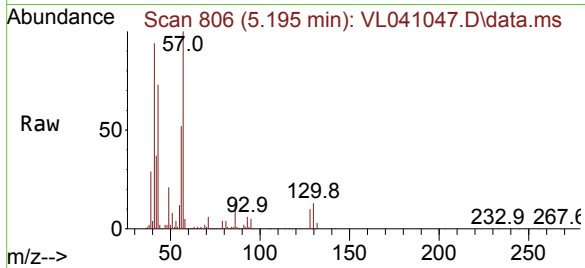




#25
Ethyl Acetate
Concen: 3.004 ppbv
RT: 5.195 min Scan# 806
Delta R.T. 0.016 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

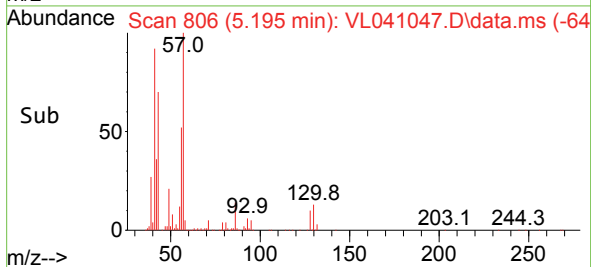
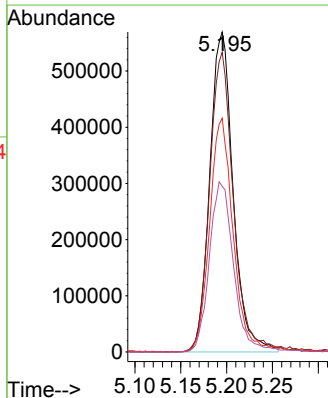
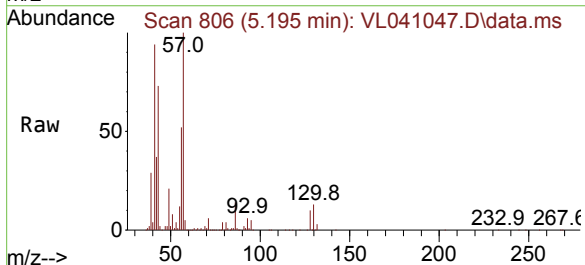
Instrument :
MSVOA_L
ClientSampleId :
SV-2

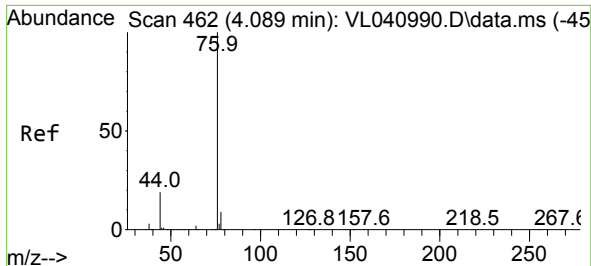
Tgt Ion: 43	Resp: 731163
Ion Ratio	Lower Upper
43 100	
45 0.7	8.2 12.4#
61 0.5	7.9 11.9#
70 1.7	5.4 8.2#



#26
Hexane
Concen: 9.732 ppbv
RT: 5.195 min Scan# 806
Delta R.T. 0.010 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 57	Resp: 1009650
Ion Ratio	Lower Upper
57 100	
41 96.8	74.4 111.6
43 74.5	190.6 285.8#
56 55.7	43.0 64.4

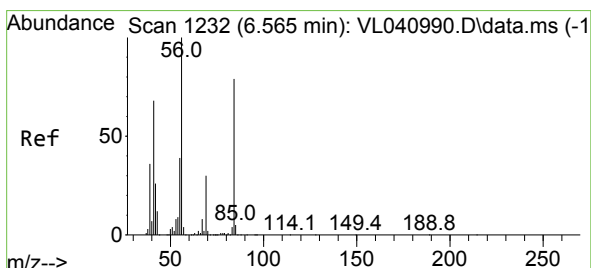
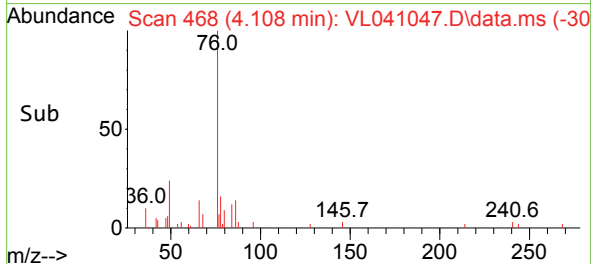
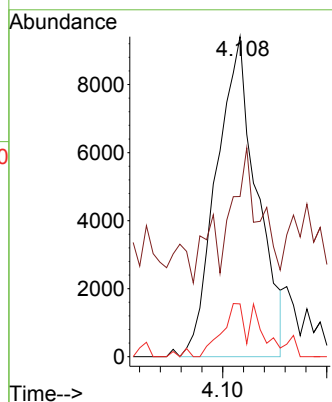
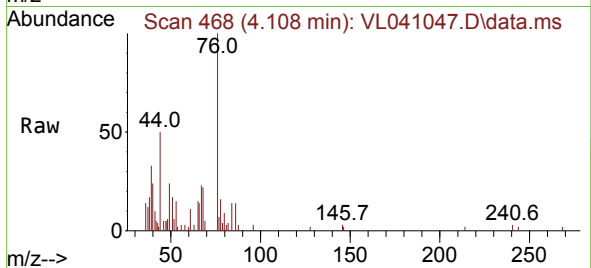




#27
Carbon Disulfide
Concen: 0.094 ppbv
RT: 4.108 min Scan# 41
Delta R.T. 0.013 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

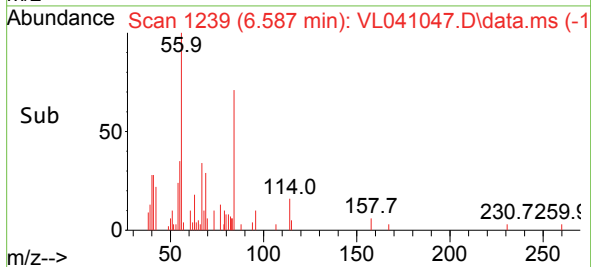
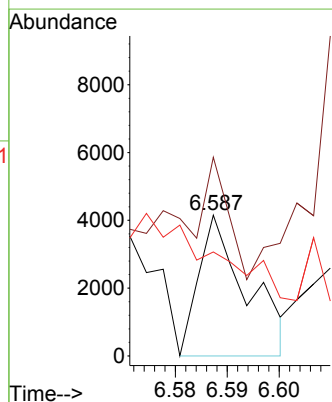
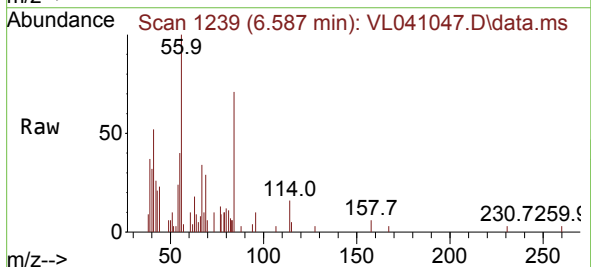
Instrument :
MSVOA_L
ClientSampleId :
SV-2

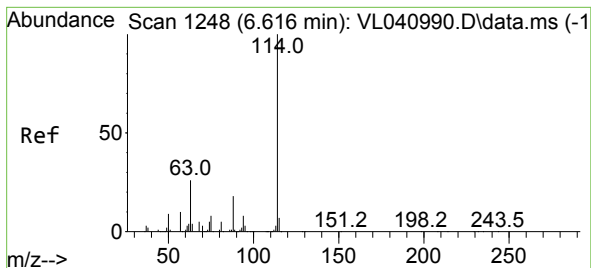
Tgt Ion: 76 Resp: 12671
Ion Ratio Lower Upper
76 100
44 83.8 16.0 24.0#
78 16.4 7.8 11.8#



#30
Cyclohexane
Concen: 0.031 ppbv
RT: 6.587 min Scan# 1239
Delta R.T. 0.013 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 84 Resp: 2663
Ion Ratio Lower Upper
84 100
56 0.0 111.7 167.5#
41 0.0 71.0 106.6#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.629 min Scan# 11

Delta R.T. 0.003 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

SV-2

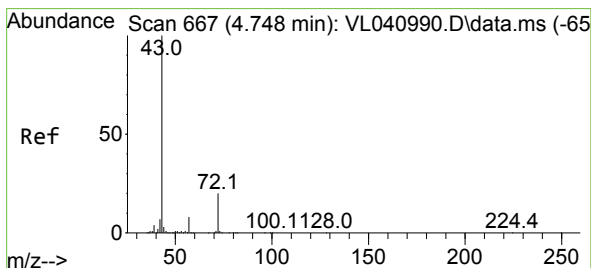
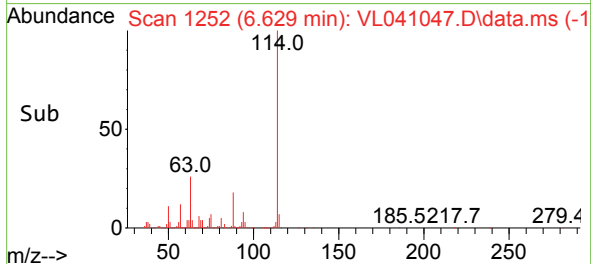
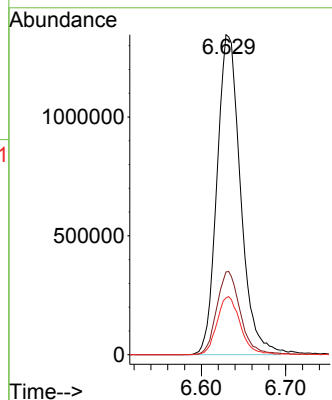
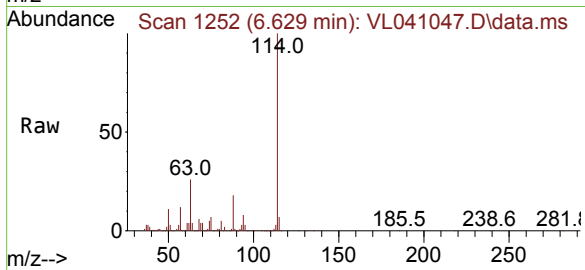
Tgt Ion:114 Resp: 2605131

Ion Ratio Lower Upper

114 100

63 26.5 20.8 31.2

88 18.2 14.3 21.5



#34

2-Butanone

Concen: 2.583 ppbv

RT: 4.771 min Scan# 674

Delta R.T. 0.013 min

Lab File: VL041047.D

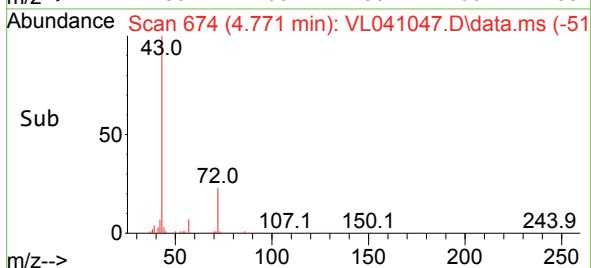
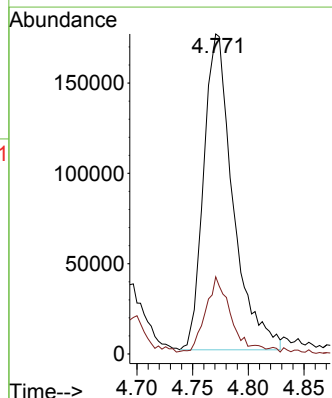
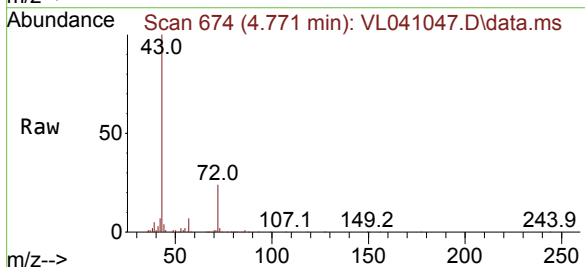
Acq: 7 Feb 2024 22:46

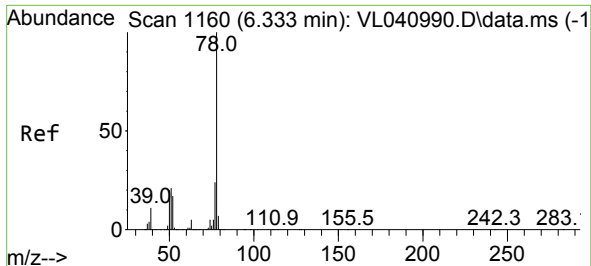
Tgt Ion: 43 Resp: 320565

Ion Ratio Lower Upper

43 100

72 23.4 17.5 26.3

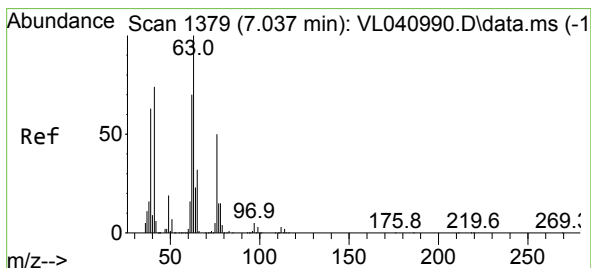
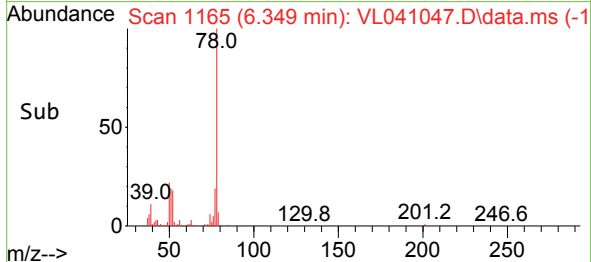
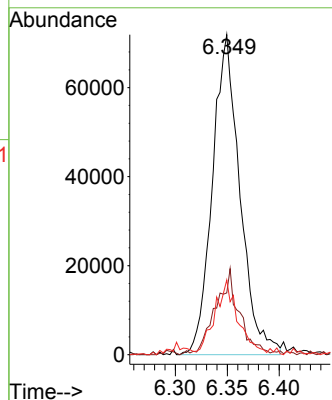
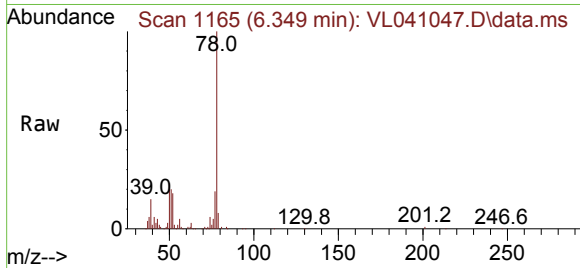




#36
Benzene
Concen: 0.616 ppbv
RT: 6.349 min Scan# 1165
Delta R.T. 0.007 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

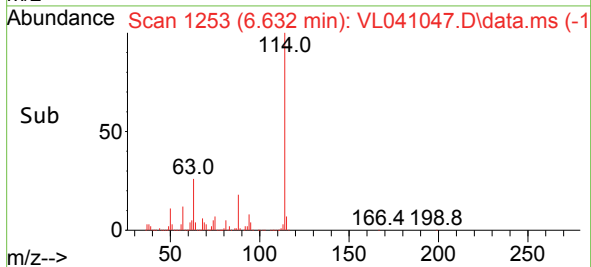
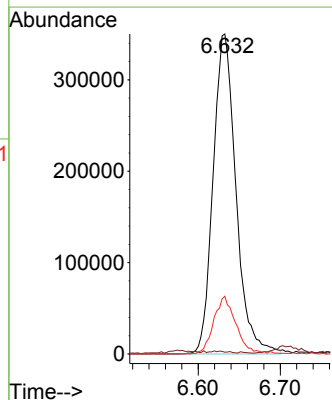
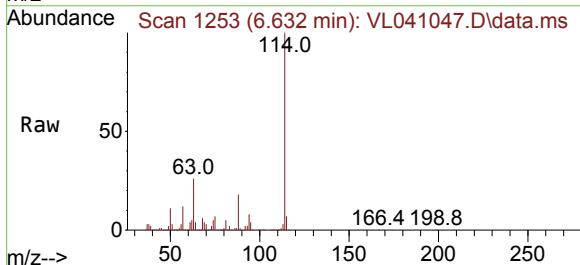
Instrument :
MSVOA_L
ClientSampleId :
SV-2

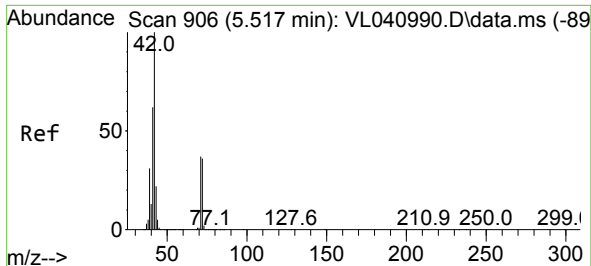
Tgt Ion: 78 Resp: 132483
Ion Ratio Lower Upper
78 100
77 19.4 19.0 28.4
50 23.2 15.8 23.6



#39
1,2-Dichloropropane
Concen: 8.011 ppbv
RT: 6.632 min Scan# 1253
Delta R.T. -0.415 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 63 Resp: 678955
Ion Ratio Lower Upper
63 100
41 0.0 59.6 89.4#
62 18.1 55.6 83.4#





#41

Tetrahydrofuran

Concen: 4.726 ppbv

RT: 5.192 min Scan# 80

Delta R.T. -0.337 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

SV-2

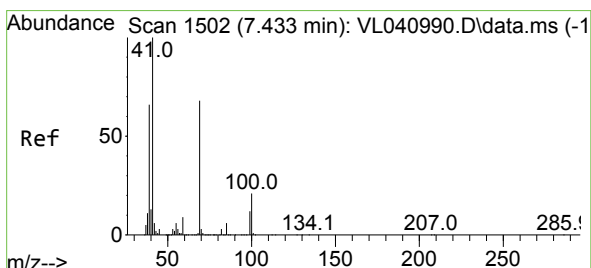
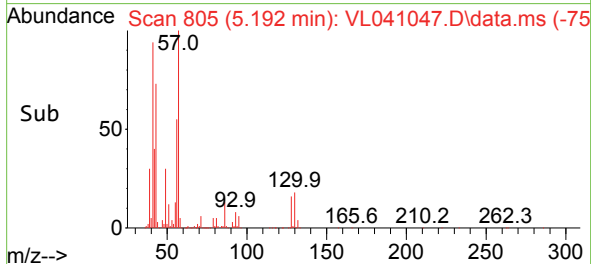
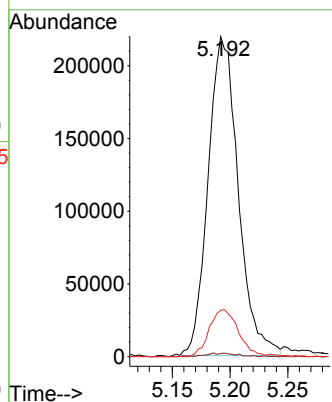
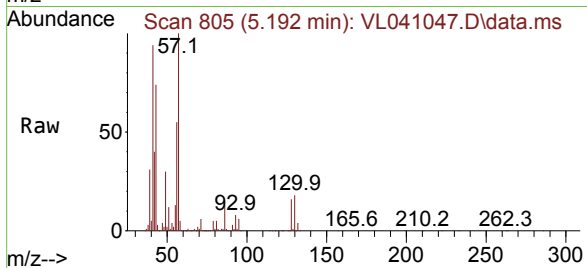
Tgt Ion: 42 Resp: 398264

Ion Ratio Lower Upper

42 100

72 1.2 30.0 45.0#

71 14.8 29.5 44.3#



#43

Methyl Methacrylate

Concen: 0.031 ppbv

RT: 7.452 min Scan# 1508

Delta R.T. 0.007 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

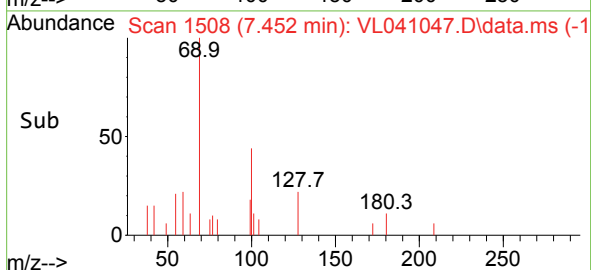
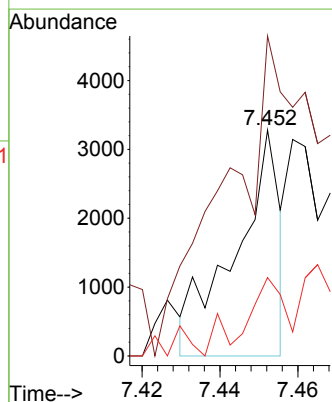
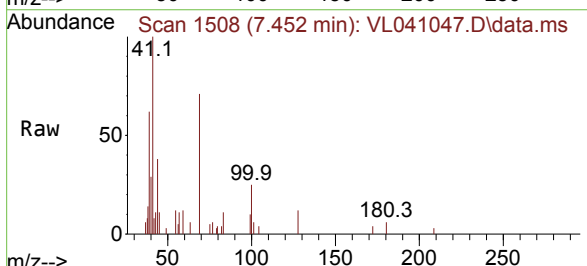
Tgt Ion: 69 Resp: 2594

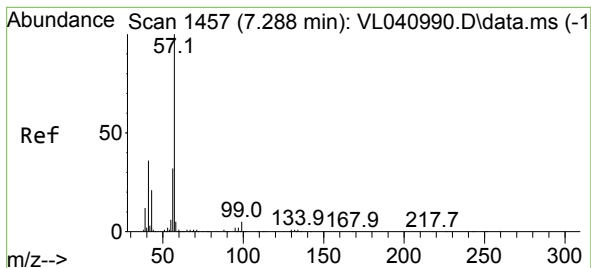
Ion Ratio Lower Upper

69 100

41 476.9 120.2 180.2#

100 0.0 24.6 36.8#





#44

2,2,4-Trimethylpentane

Concen: 0.069 ppbv

RT: 7.304 min Scan# 14

Delta R.T. 0.007 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

SV-2

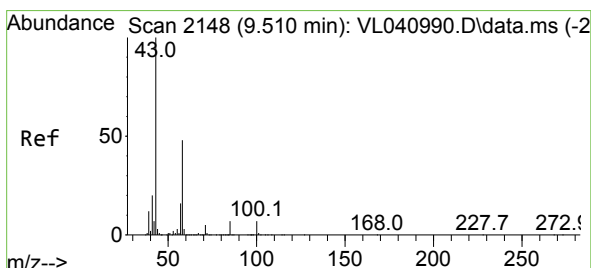
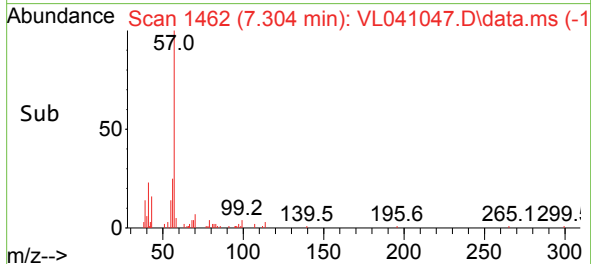
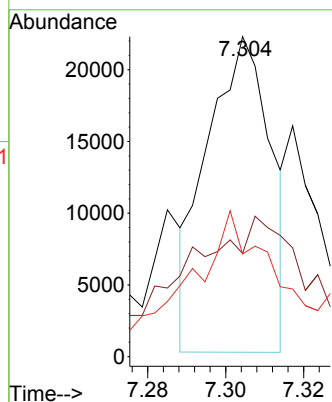
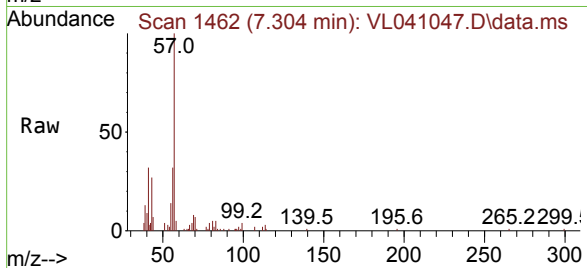
Tgt Ion: 57 Resp: 25002

Ion Ratio Lower Upper

57 100

41 87.1 28.6 43.0#

56 83.6 25.2 37.8#



#51

2-Hexanone

Concen: 0.097 ppbv

RT: 9.542 min Scan# 2158

Delta R.T. 0.019 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

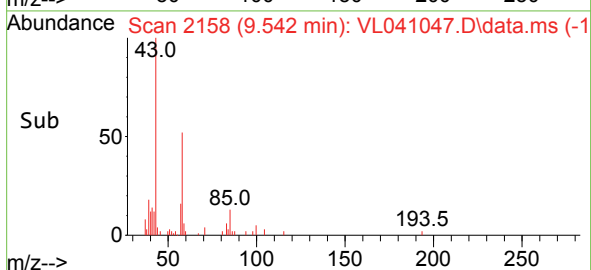
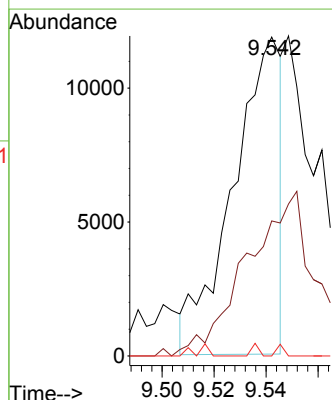
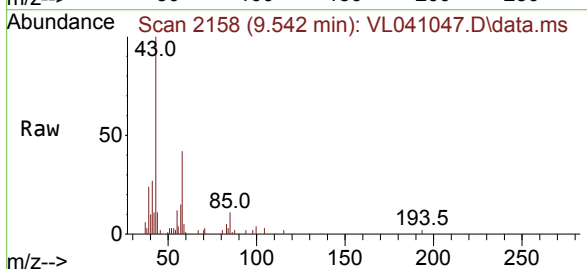
Tgt Ion: 43 Resp: 15303

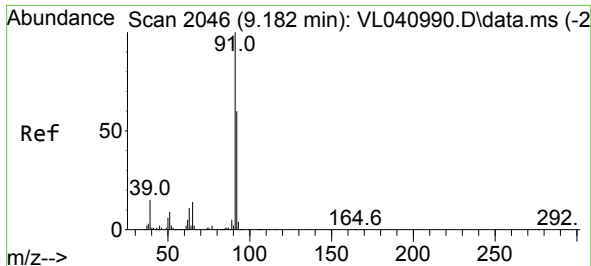
Ion Ratio Lower Upper

43 100

58 0.0 36.8 55.2#

98 0.0 0.3 0.5#





#53

Toluene

Concen: 0.472 ppbv

RT: 9.198 min Scan# 2046

Delta R.T. 0.003 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

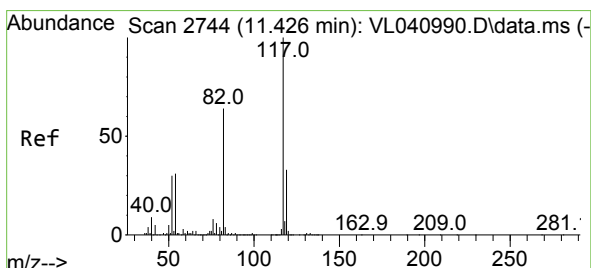
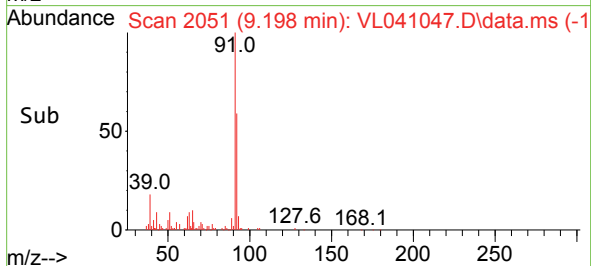
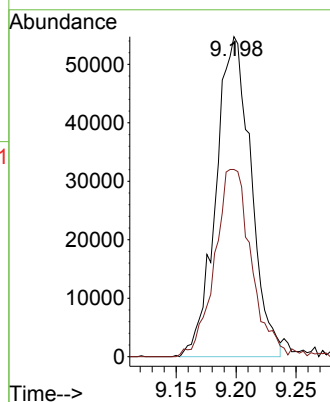
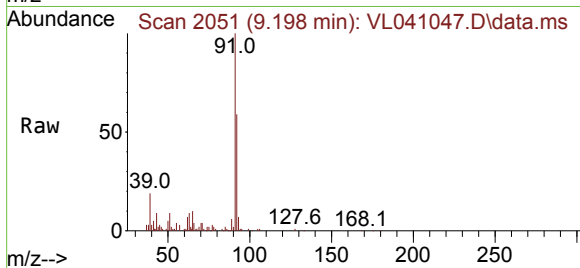
SV-2

Tgt Ion: 91 Resp: 111139

Ion Ratio Lower Upper

91 100

92 61.9 48.6 72.8



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.442 min Scan# 2749

Delta R.T. 0.003 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

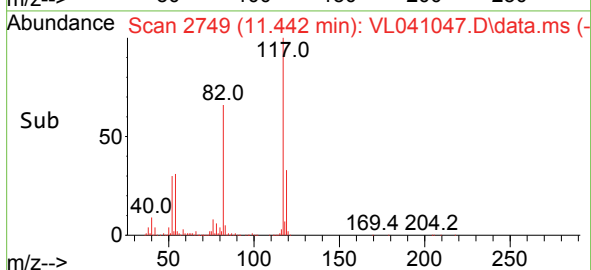
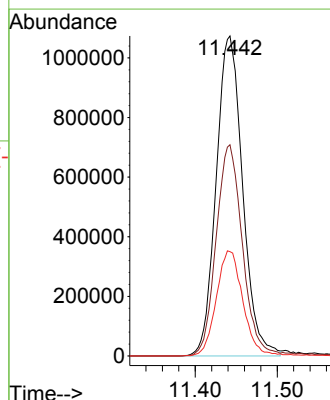
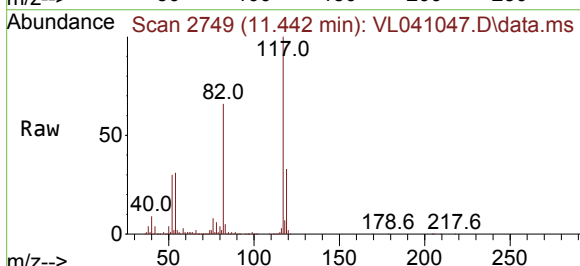
Tgt Ion: 117 Resp: 2409625

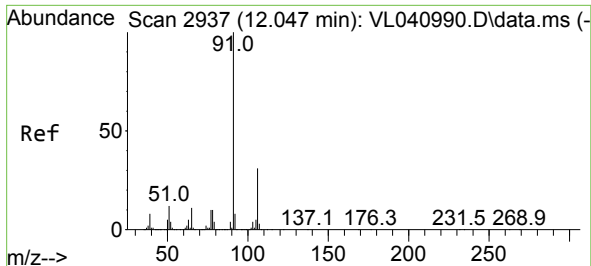
Ion Ratio Lower Upper

117 100

82 66.3 51.7 77.5

119 33.4 23.8 35.6

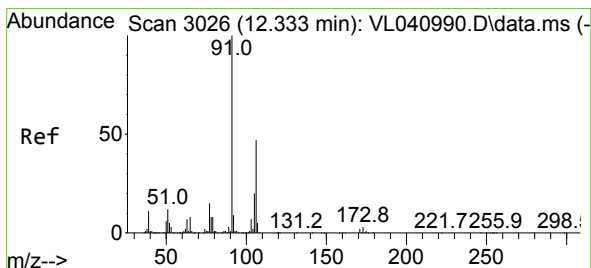
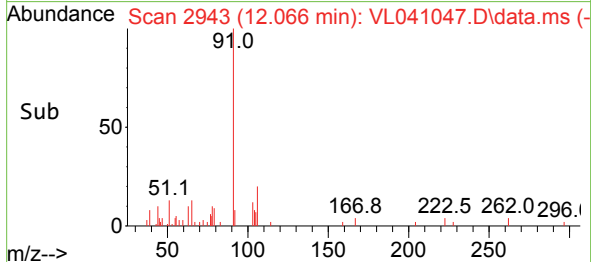
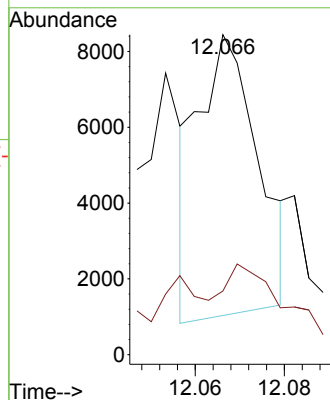
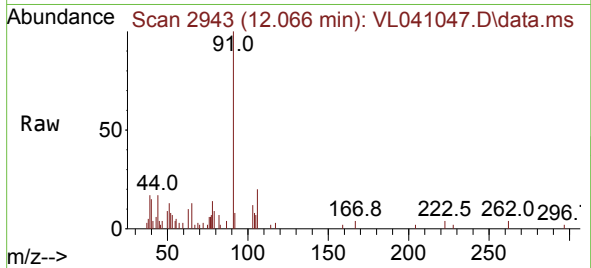




#58
Ethyl Benzene
Concen: 0.021 ppbv
RT: 12.066 min Scan# 2937
Delta R.T. 0.007 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

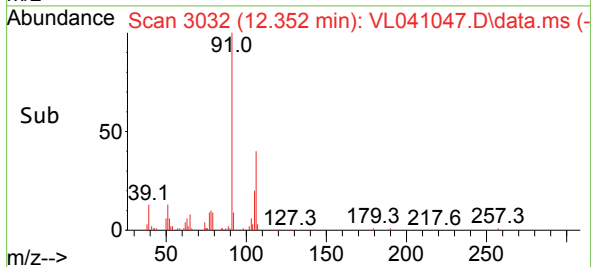
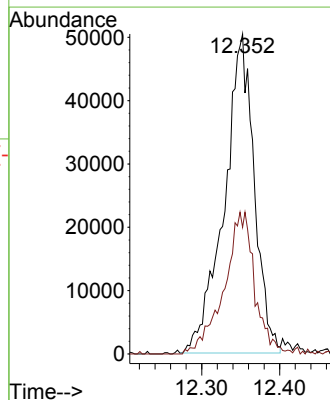
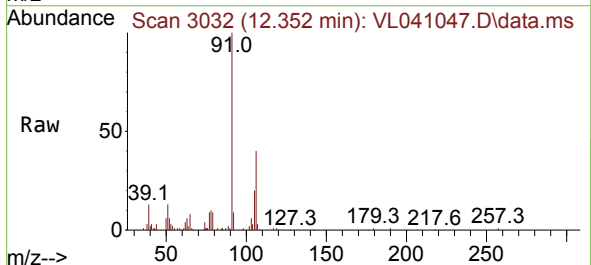
Instrument :
MSVOA_L
ClientSampleId :
SV-2

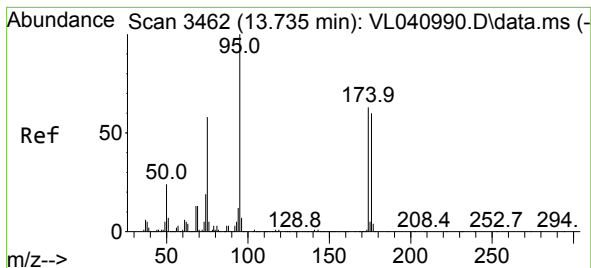
Tgt Ion: 91 Resp: 6869
Ion Ratio Lower Upper
91 100
106 10.1 24.8 37.2#



#59
m/p-Xylene
Concen: 0.477 ppbv
RT: 12.352 min Scan# 3032
Delta R.T. 0.003 min
Lab File: VL041047.D
Acq: 7 Feb 2024 22:46

Tgt Ion: 91 Resp: 134680
Ion Ratio Lower Upper
91 100
106 45.9 34.9 52.3





#68

1-Bromo-4-Fluorobenzene

Concen: 10.364 ppbv

RT: 13.751 min Scan# 3462

Delta R.T. 0.003 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Instrument :

MSVOA_L

ClientSampleId :

SV-2

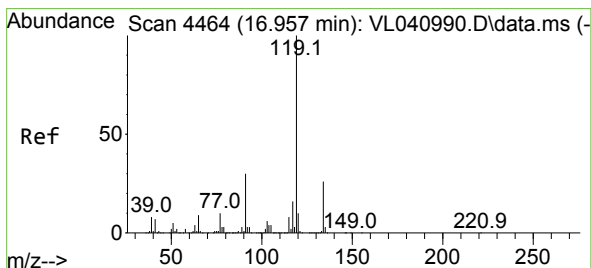
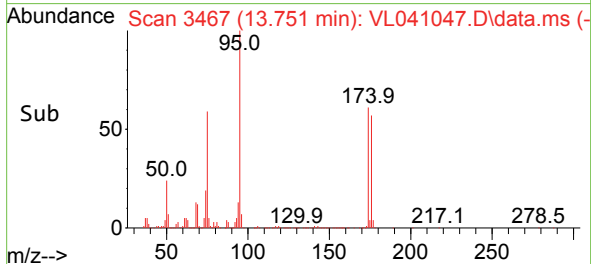
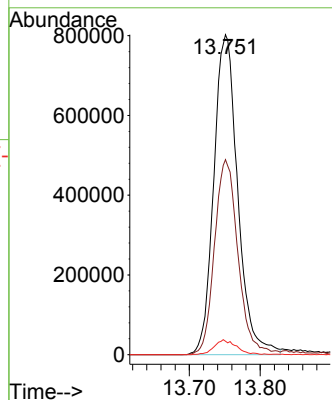
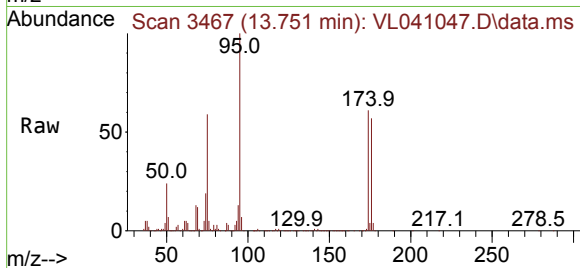
Tgt Ion: 95 Resp: 1886228

Ion Ratio Lower Upper

95 100

174 60.8 49.1 73.7

175 4.4 3.7 5.5



#69

p-Isopropyltoluene

Concen: 0.021 ppbv

RT: 16.966 min Scan# 4467

Delta R.T. 0.000 min

Lab File: VL041047.D

Acq: 7 Feb 2024 22:46

Tgt Ion: 119 Resp: 8403

Ion Ratio Lower Upper

119 100

134 0.0 20.6 30.8#

91 98.8 24.5 36.7#

