

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050224\
 Data File : VL041201.D
 Acq On : 2 May 2024 18:39
 Operator : SY/MD
 Sample : P2334-06
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 BA-20-IA01-20240425

Quant Time: May 03 03:43:03 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)

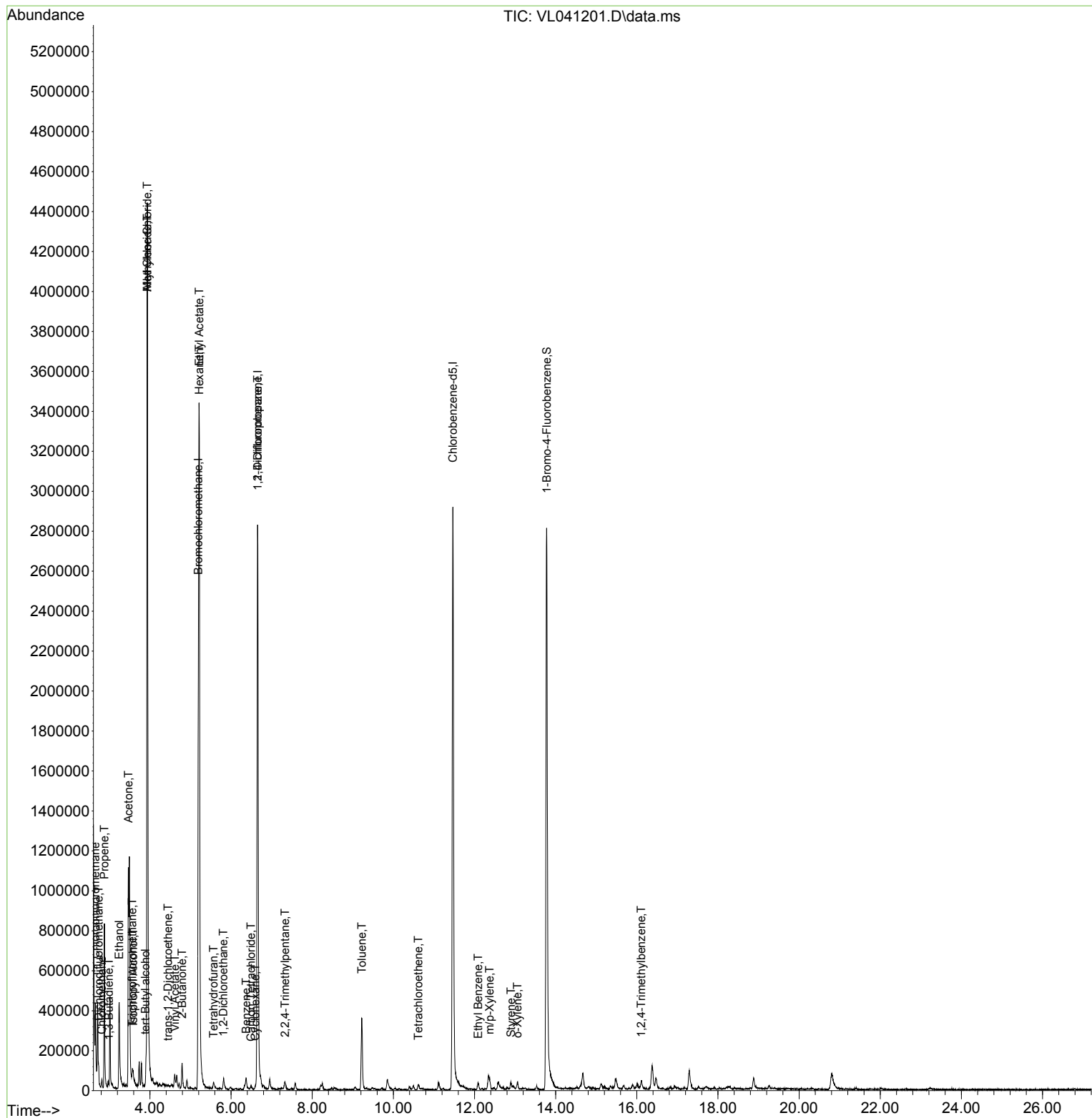
Internal Standards						
1) Bromochloromethane	5.195	49	853318	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.655	114	2154209	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.468	117	1973796	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1439426	9.660	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.600%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.735	85	56752	0.492	ppbv	100
3) Chlorodifluoromethane	2.655	51	238508	1.840	ppbv #	68
4) Chloromethane	2.816	50	30190	0.594	ppbv	95
9) Propene	2.877	41	202051	3.984	ppbv	98
11) Trichlorofluoromethane	3.565	101	30008	0.256	ppbv	92
13) Ethanol	3.240	45	454385	39.965	ppbv	100
15) Acetone	3.468	43	1350019	13.405	ppbv	92
16) 1,3-Butadiene	2.989	39	1951	0.038	ppbv #	1
17) tert-Butyl alcohol	3.890	59	6659	0.061	ppbv #	72
19) Isopropyl Alcohol	3.587	45	58881	0.891	ppbv #	1
20) Methylene Chloride	3.935	84	1455026	41.548	ppbv	99
21) Allyl Chloride	3.935	41	57300	0.873	ppbv #	25
22) trans-1,2-Dichloroethene	4.446	96	1470	0.037	ppbv #	66
23) Vinyl Acetate	4.616	43	17333	0.156	ppbv #	1
25) Ethyl Acetate	5.214	43	927847	4.616	ppbv #	78
26) Hexane	5.218	57	1266876	14.123	ppbv #	41
30) Cyclohexane	6.600	84	2788	0.039	ppbv #	1
34) 2-Butanone	4.793	43	151097	1.378	ppbv	99
35) Carbon Tetrachloride	6.491	117	4239	0.035	ppbv	96
36) Benzene	6.372	78	36278	0.201	ppbv #	90
37) 1,2-Dichloroethane	5.809	62	3816	0.040	ppbv #	91
39) 1,2-Dichloropropane	6.652	63	552044	7.924	ppbv #	23
41) Tetrahydrofuran	5.568	42	11524	0.145	ppbv #	50
44) 2,2,4-Trimethylpentane	7.330	57	22333	0.072	ppbv #	49
52) Tetrachloroethene	10.619	164	2015	0.032	ppbv #	62
53) Toluene	9.224	91	285597	1.362	ppbv	99
58) Ethyl Benzene	12.089	91	18454	0.068	ppbv #	80
59) m/p-Xylene	12.368	91	25263	0.111	ppbv #	31
60) o-Xylene	13.056	91	23757	0.111	ppbv	94
61) Styrene	12.899	104	4194	0.037	ppbv #	1
74) 1,2,4-Trimethylbenzene	16.111	105	11033	0.046	ppbv #	48

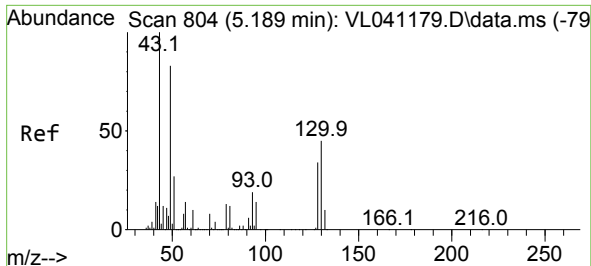
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Instrument :
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ClientSampleId :
BA-20-IA01-20240425

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
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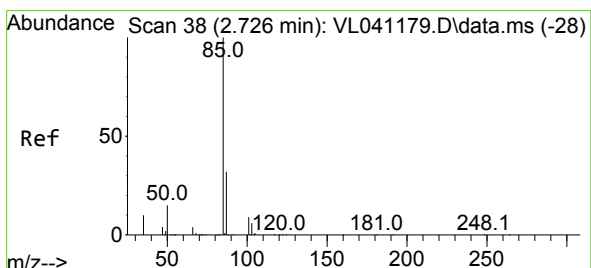
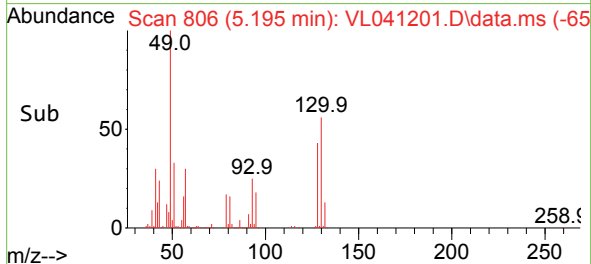
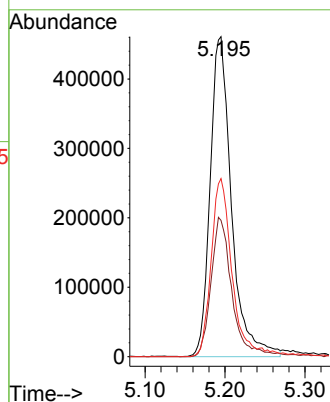
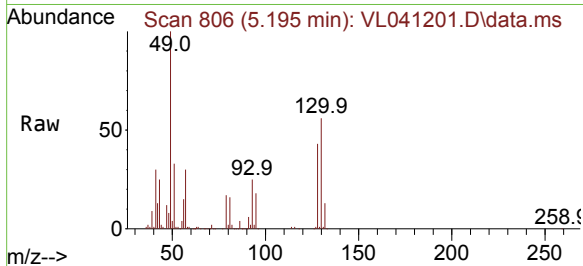




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.195 min Scan# 80
 Delta R.T. 0.003 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

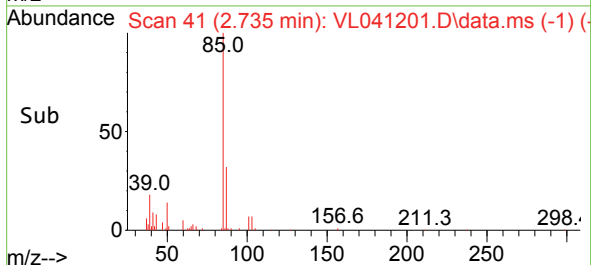
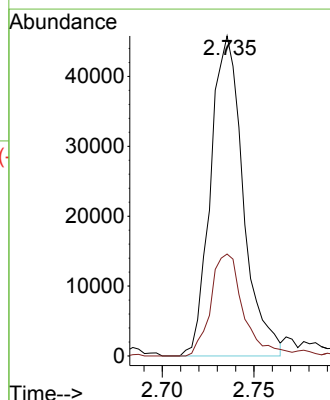
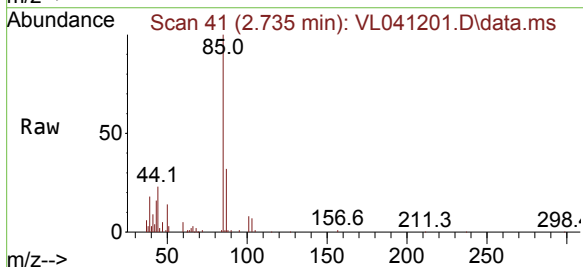
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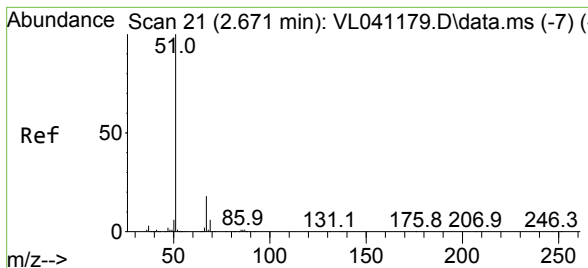
Tgt Ion: 49 Resp: 853318
 Ion Ratio Lower Upper
 49 100
 128 43.4 21.5 64.5
 130 56.4 27.2 81.6



#2
 Dichlorodifluoromethane
 Concen: 0.492 ppbv
 RT: 2.735 min Scan# 41
 Delta R.T. 0.007 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

Tgt Ion: 85 Resp: 56752
 Ion Ratio Lower Upper
 85 100
 87 31.8 25.7 38.5

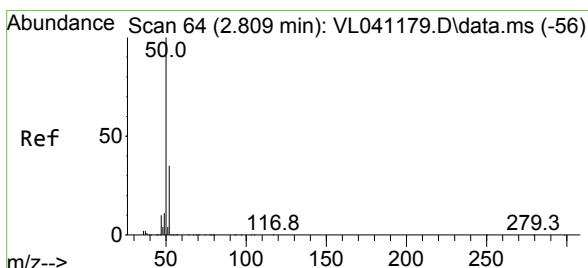
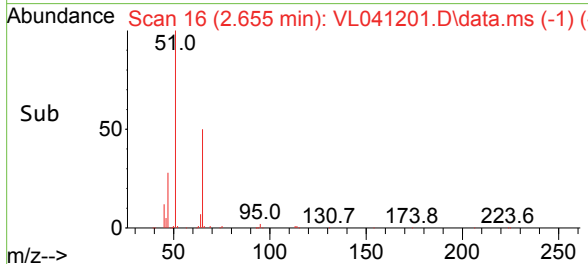
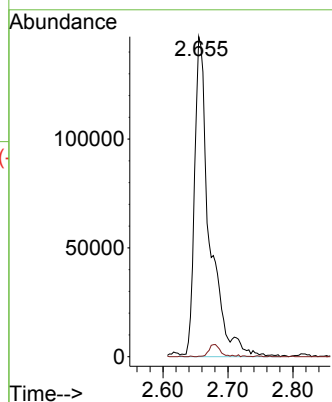
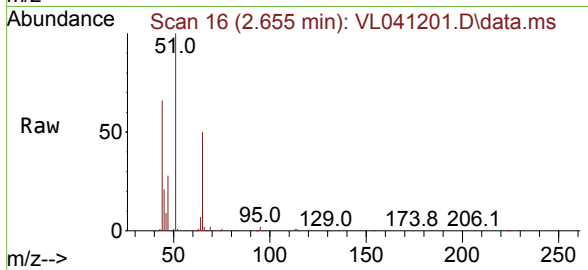




#3
Chlorodifluoromethane
Concen: 1.840 ppbv
RT: 2.655 min Scan# 16
Delta R.T. -0.019 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

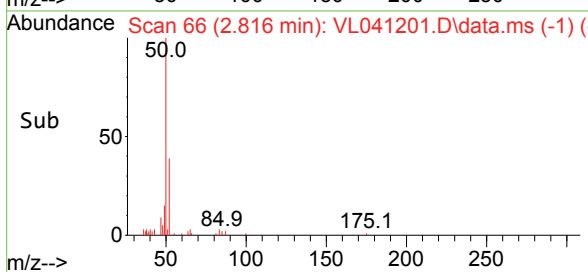
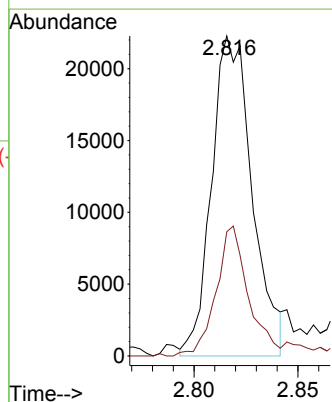
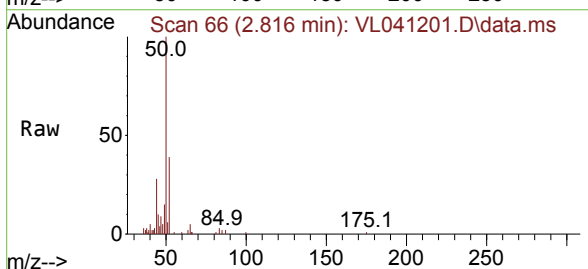
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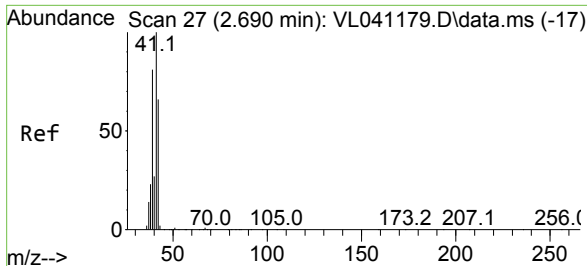
Tgt Ion: 51 Resp: 238508
Ion Ratio Lower Upper
51 100
67 3.3 14.0 21.0#



#4
Chloromethane
Concen: 0.594 ppbv
RT: 2.816 min Scan# 66
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 50 Resp: 30190
Ion Ratio Lower Upper
50 100
52 38.5 28.3 42.5

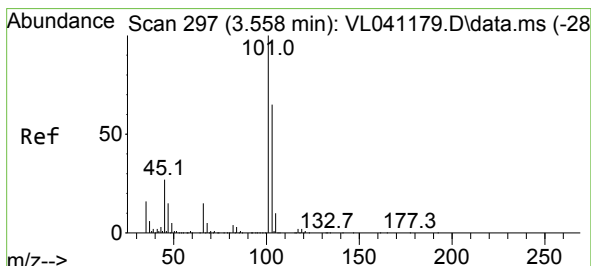
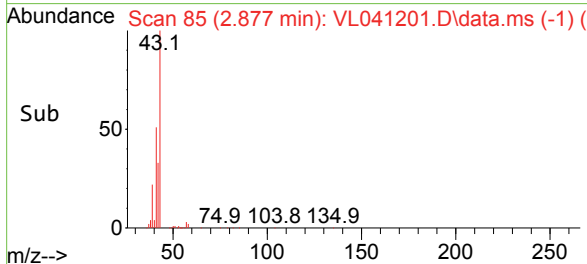
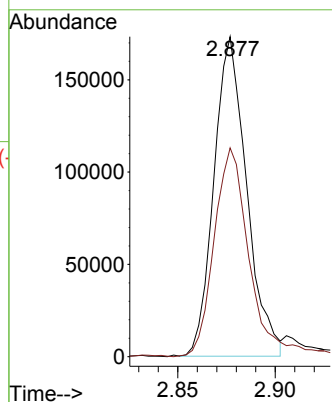
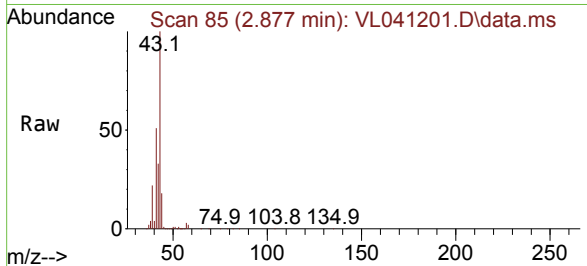




#9
Propene
Concen: 3.984 ppbv
RT: 2.877 min Scan# 81
Delta R.T. 0.183 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

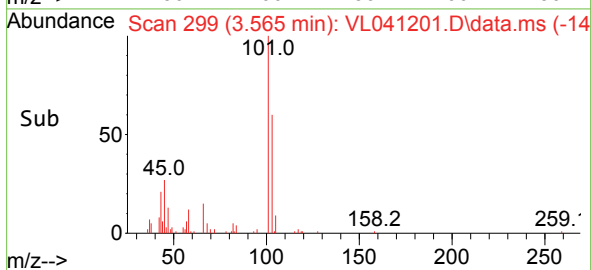
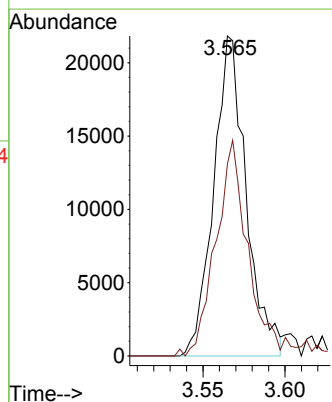
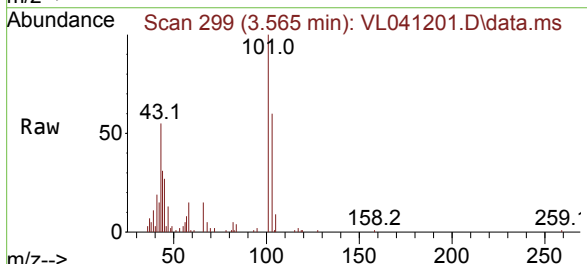
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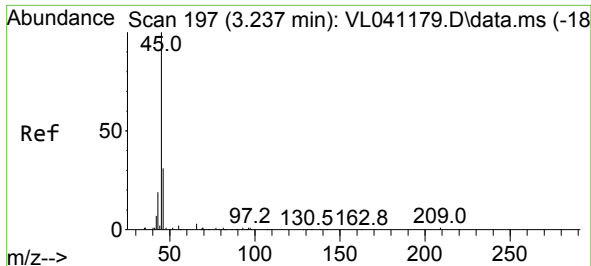
Tgt Ion: 41 Resp: 202051
Ion Ratio Lower Upper
41 100
42 70.7 55.3 82.9



#11
Trichlorofluoromethane
Concen: 0.256 ppbv
RT: 3.565 min Scan# 299
Delta R.T. 0.007 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 101 Resp: 30008
Ion Ratio Lower Upper
101 100
103 58.1 51.6 77.4

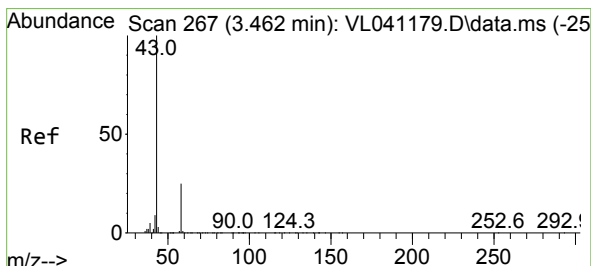
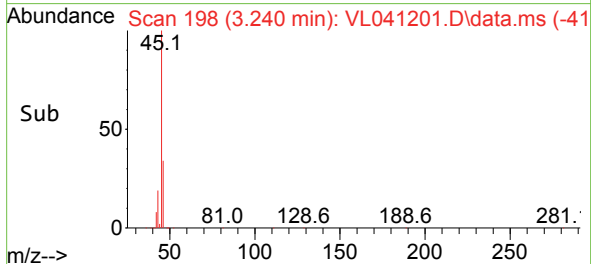
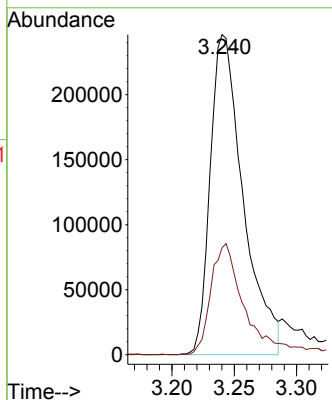
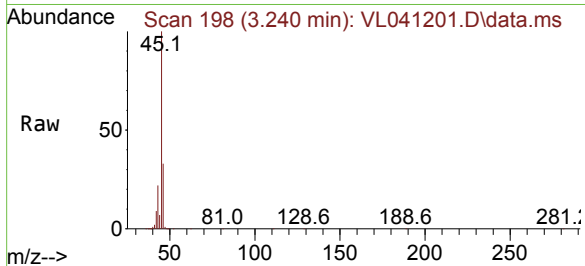




#13
Ethanol
Concen: 39.965 ppbv
RT: 3.240 min Scan# 197
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

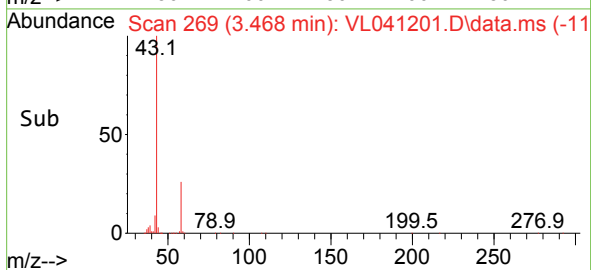
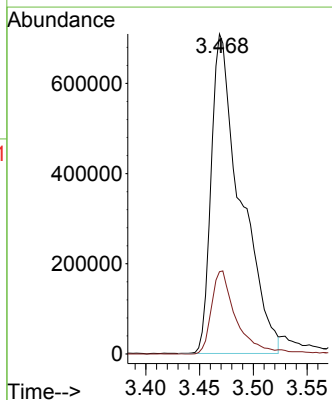
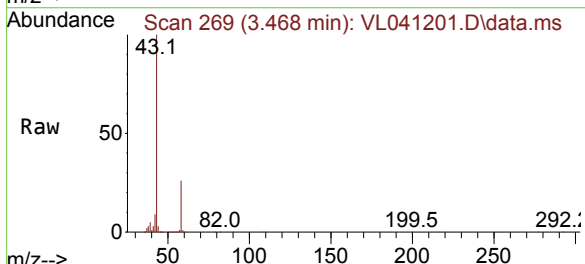
Instrument :
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ClientSampleId :
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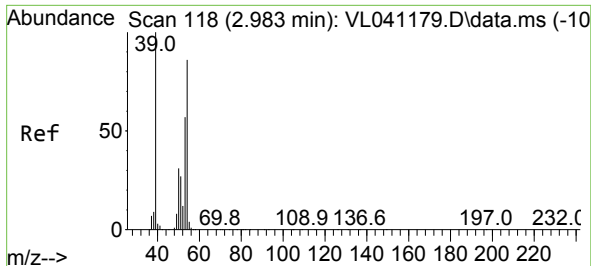
Tgt Ion: 45 Resp: 454385
Ion Ratio Lower Upper
45 100
46 36.9 14.8 59.0



#15
Acetone
Concen: 13.405 ppbv
RT: 3.468 min Scan# 269
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 43 Resp: 1350019
Ion Ratio Lower Upper
43 100
58 22.4 21.4 32.0





#16

1,3-Butadiene

Concen: 0.038 ppbv

RT: 2.989 min Scan# 11

Delta R.T. 0.007 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

ClientSampleId :

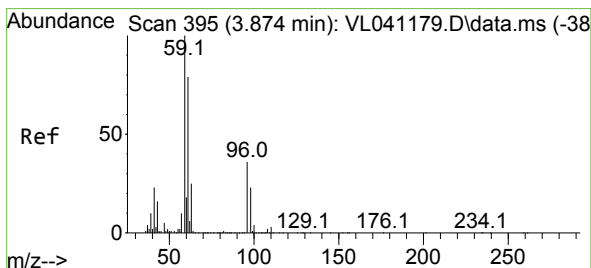
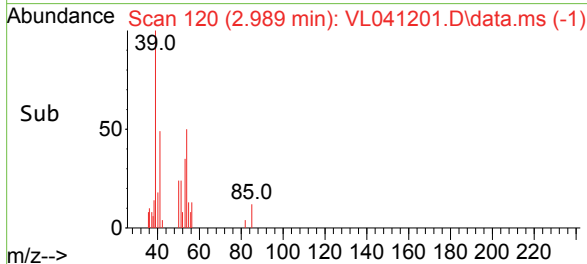
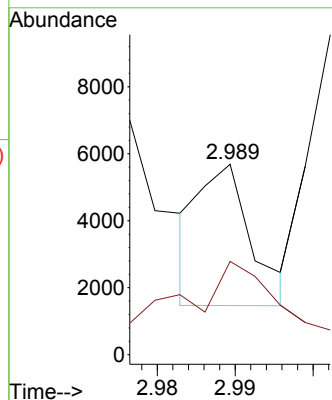
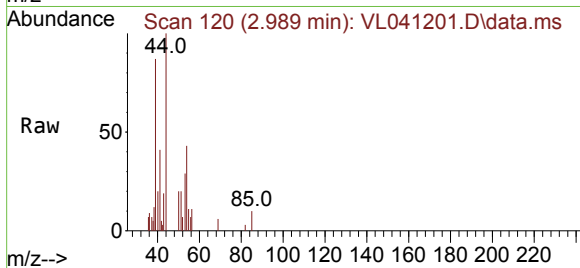
BA-20-IA01-20240425

Tgt Ion: 39 Resp: 1951

Ion Ratio Lower Upper

39 100

54 237.6 62.2 93.4#



#17

tert-Butyl alcohol

Concen: 0.061 ppbv

RT: 3.890 min Scan# 400

Delta R.T. 0.016 min

Lab File: VL041201.D

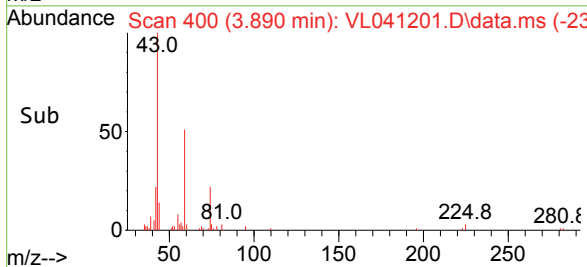
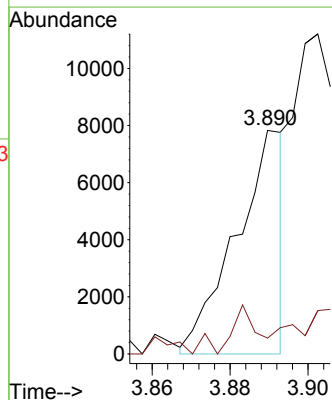
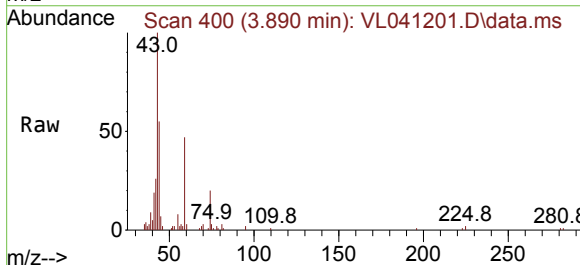
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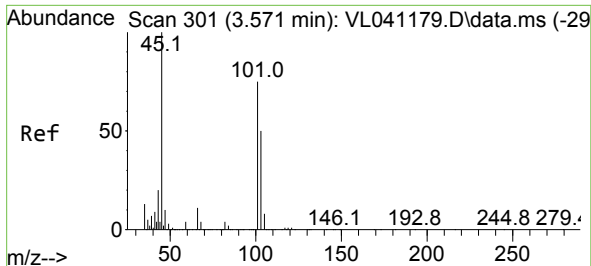
Tgt Ion: 59 Resp: 6659

Ion Ratio Lower Upper

59 100

57 0.0 8.4 12.6#

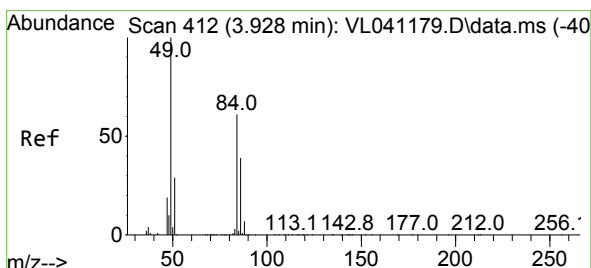
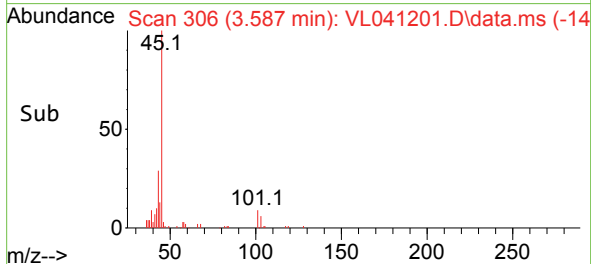
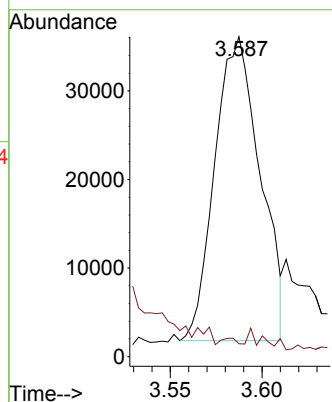
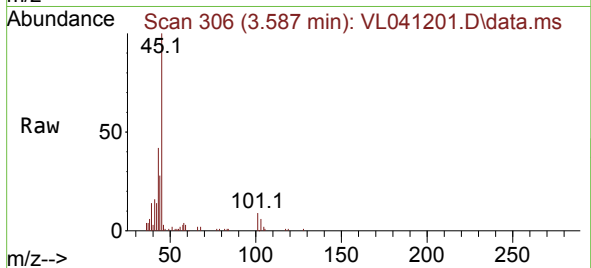




#19
Isopropyl Alcohol
Concen: 0.891 ppbv
RT: 3.587 min Scan# 306
Delta R.T. 0.016 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

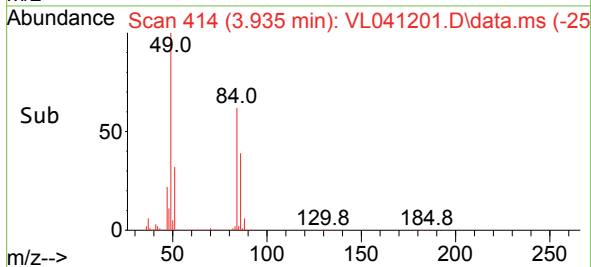
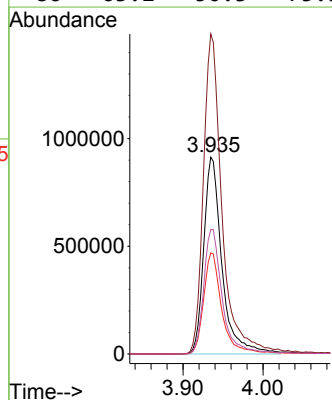
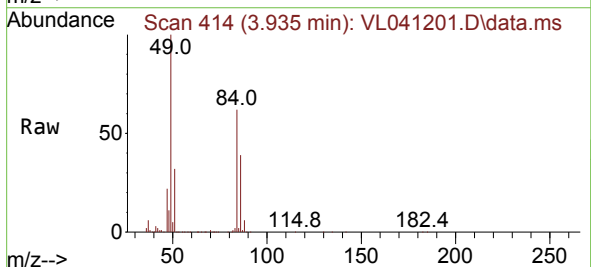
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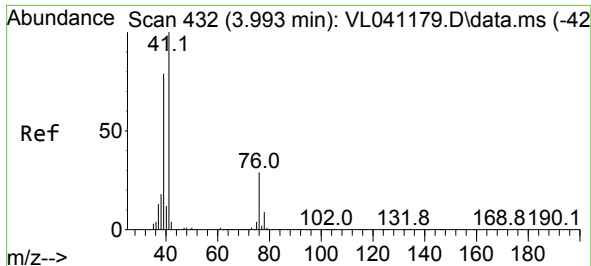
Tgt Ion: 45 Resp: 58881
Ion Ratio Lower Upper
45 100
58 513.3 26.8 40.2#



#20
Methylene Chloride
Concen: 41.548 ppbv
RT: 3.935 min Scan# 414
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 84 Resp: 1455026
Ion Ratio Lower Upper
84 100
49 162.5 130.4 195.6
51 51.4 38.0 57.0
86 63.2 50.3 75.5

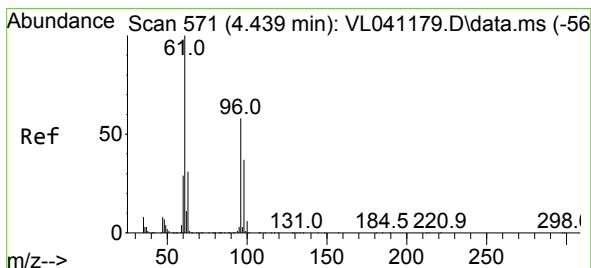
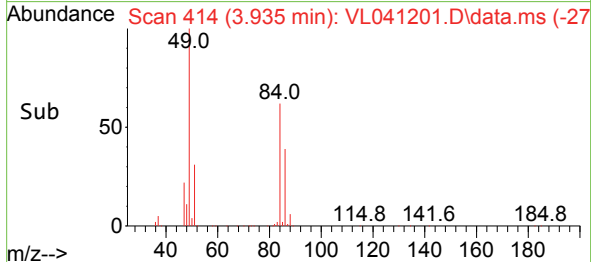
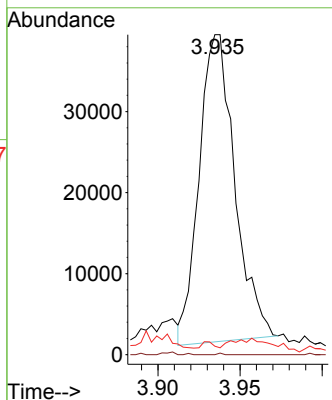
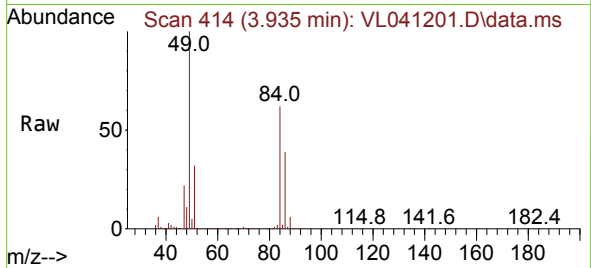




#21
 Allyl Chloride
 Concen: 0.873 ppbv
 RT: 3.935 min Scan# 41
 Delta R.T. -0.061 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

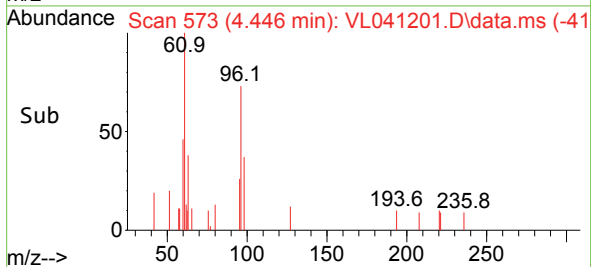
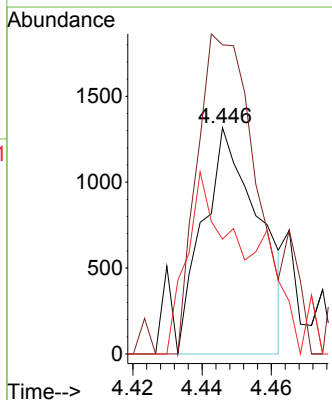
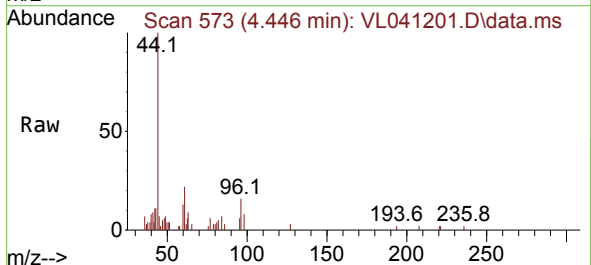
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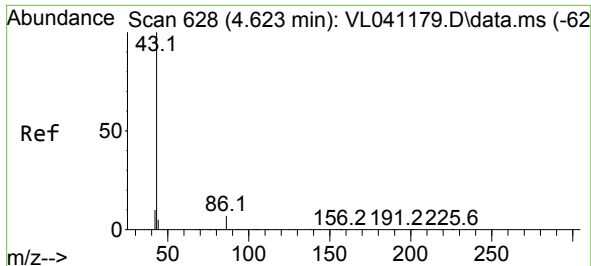
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 Ion Ratio Lower Upper
 41 100
 76 0.0 23.7 35.5#
 39 8.3 64.7 97.1#



#22
 trans-1,2-Dichloroethene
 Concen: 0.037 ppbv
 RT: 4.446 min Scan# 573
 Delta R.T. 0.003 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

Tgt Ion: 96 Resp: 1470
 Ion Ratio Lower Upper
 96 100
 61 136.7 137.6 206.4#
 98 18.3 50.6 76.0#

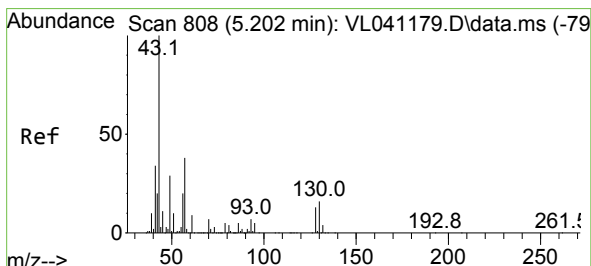
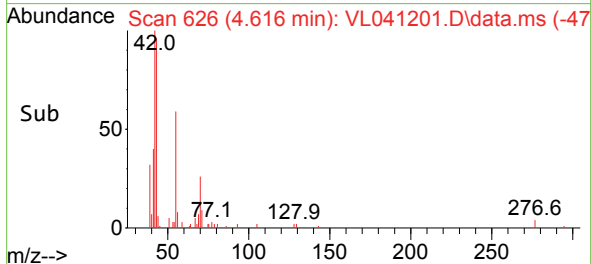
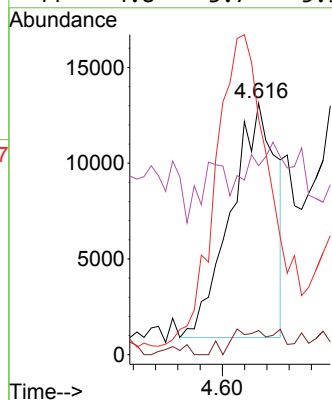
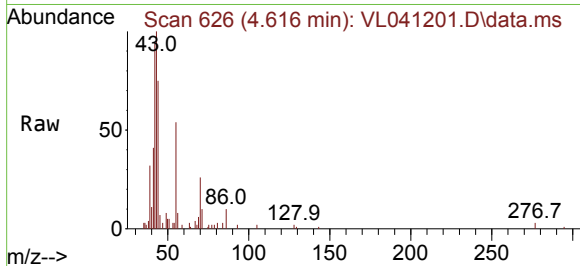




#23
 Vinyl Acetate
 Concen: 0.156 ppbv
 RT: 4.616 min Scan# 61
 Delta R.T. -0.010 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

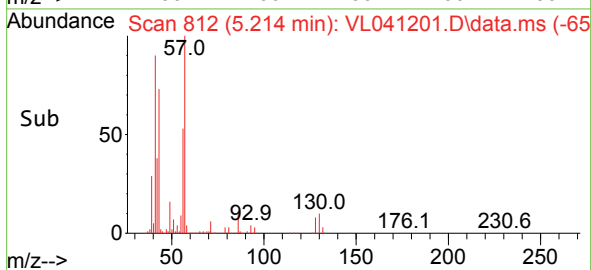
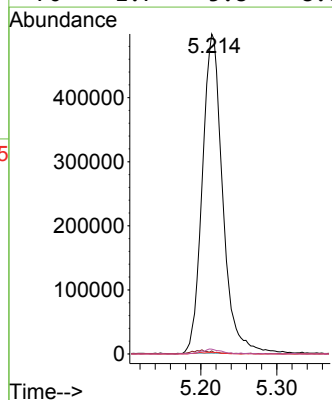
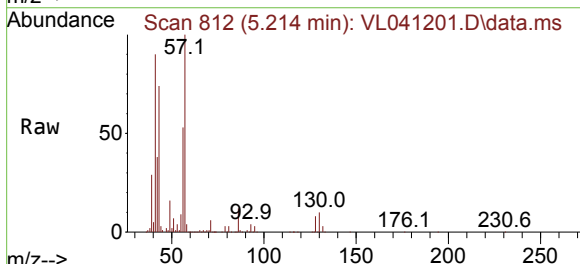
Instrument :
 MSVOA_L
 ClientSampleId :
 BA-20-IA01-20240425

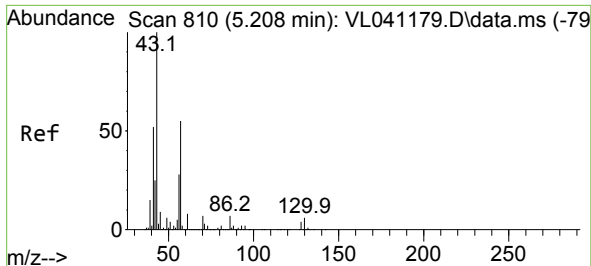
Tgt Ion: 43 Resp: 17333
 Ion Ratio Lower Upper
 43 100
 86 8.5 4.9 7.3#
 42 89.8 8.0 12.0#
 44 4.8 3.7 5.5



#25
 Ethyl Acetate
 Concen: 4.616 ppbv
 RT: 5.214 min Scan# 812
 Delta R.T. 0.013 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

Tgt Ion: 43 Resp: 927847
 Ion Ratio Lower Upper
 43 100
 45 1.4 8.2 12.2#
 61 0.6 7.7 11.5#
 70 1.7 5.8 8.6#

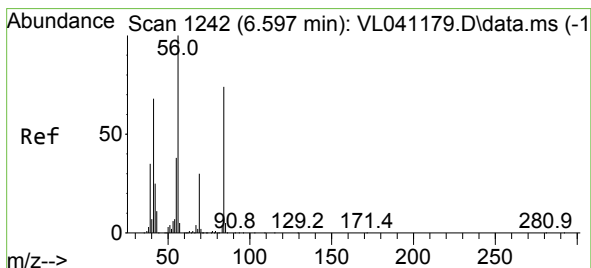
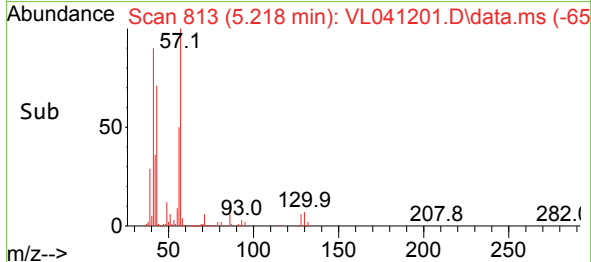
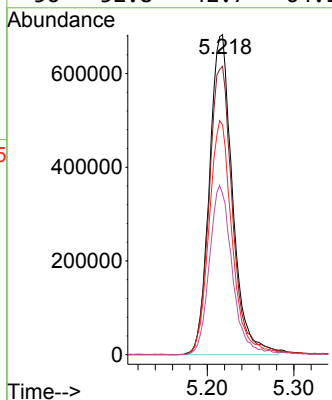
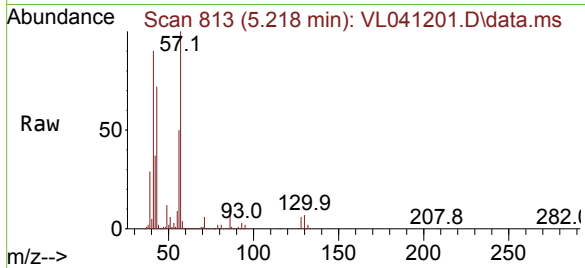




#26
Hexane
Concen: 14.123 ppbv
RT: 5.218 min Scan# 810
Delta R.T. 0.007 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

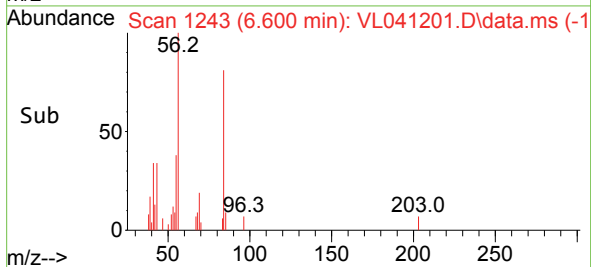
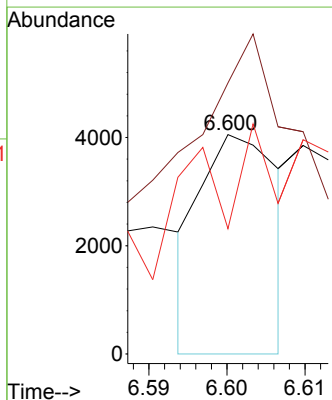
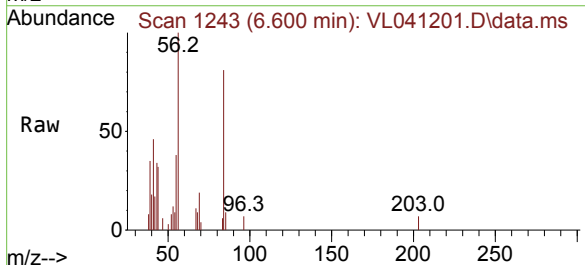
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425

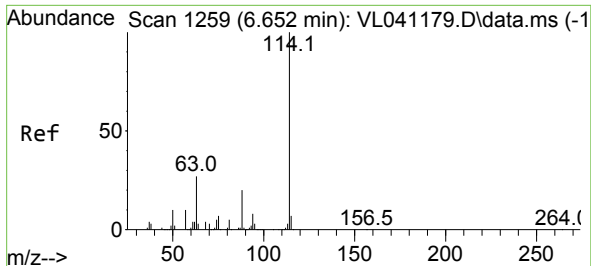
Tgt Ion: 57 Resp: 1266876
Ion Ratio Lower Upper
57 100
41 92.4 75.8 113.8
43 73.9 187.0 280.4#
56 52.8 42.7 64.1



#30
Cyclohexane
Concen: 0.039 ppbv
RT: 6.600 min Scan# 1243
Delta R.T. 0.000 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 84 Resp: 2788
Ion Ratio Lower Upper
84 100
56 0.0 116.8 175.2#
41 350.4 73.8 110.8#

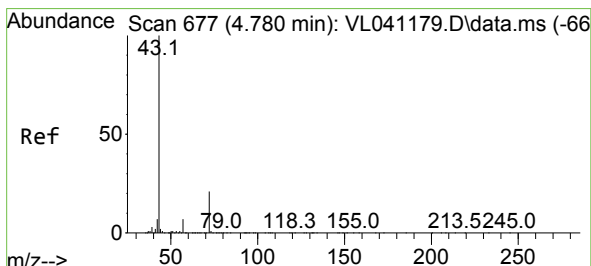
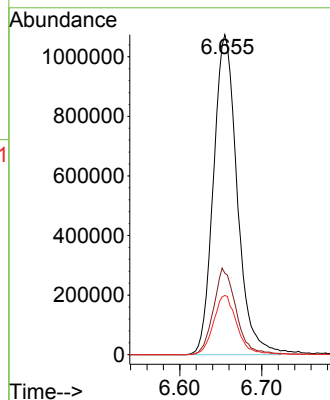
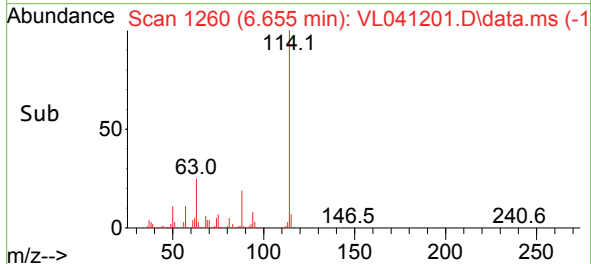
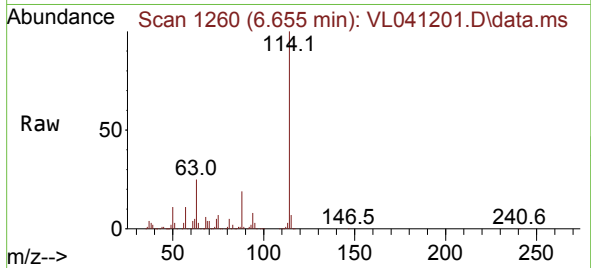




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.655 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

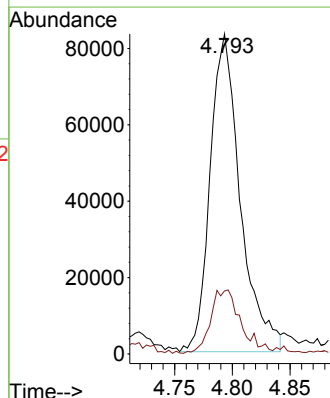
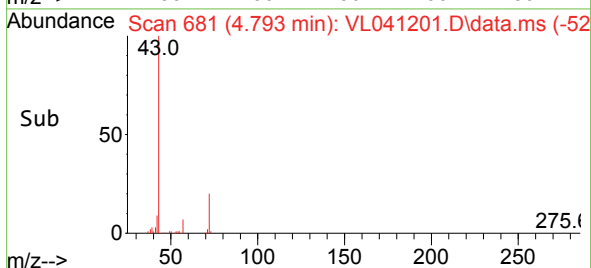
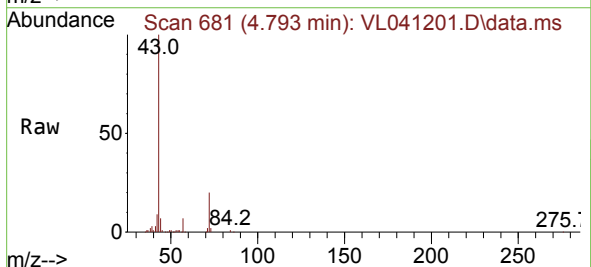
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425

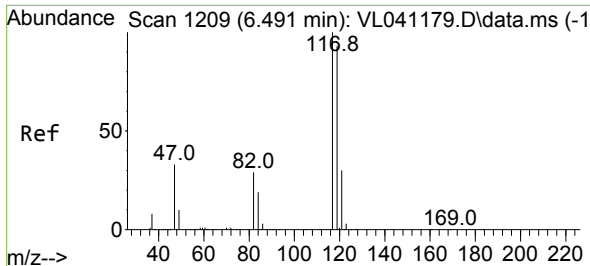
Tgt Ion:114 Resp: 2154209
Ion Ratio Lower Upper
114 100
63 26.3 21.8 32.6
88 18.5 15.2 22.8



#34
2-Butanone
Concen: 1.378 ppbv
RT: 4.793 min Scan# 681
Delta R.T. 0.010 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 43 Resp: 151097
Ion Ratio Lower Upper
43 100
72 21.1 17.3 25.9

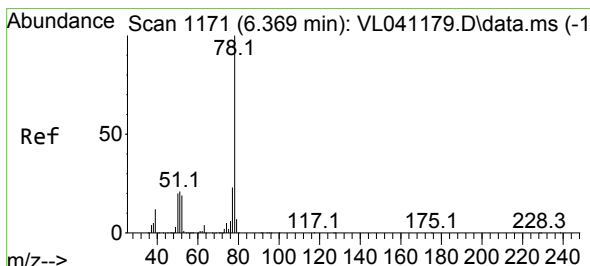
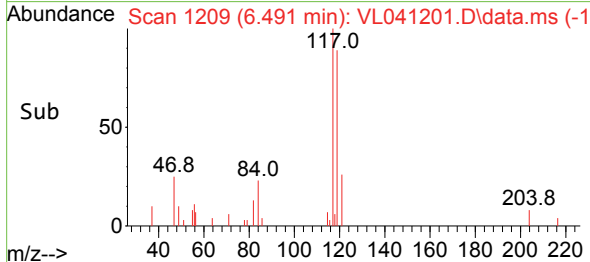
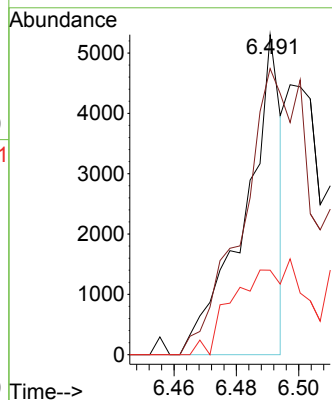
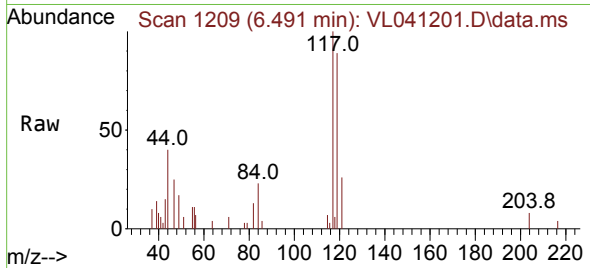




#35
Carbon Tetrachloride
Concen: 0.035 ppbv
RT: 6.491 min Scan# 1172
Delta R.T. 0.000 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

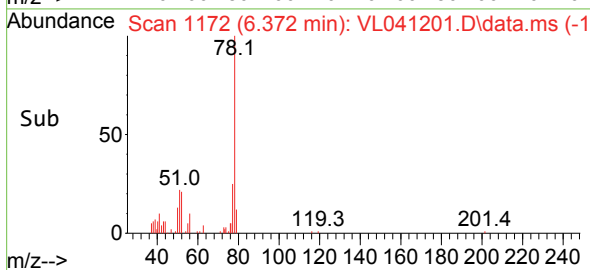
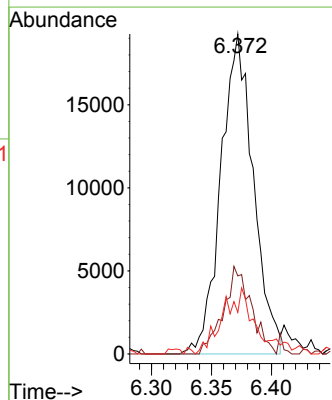
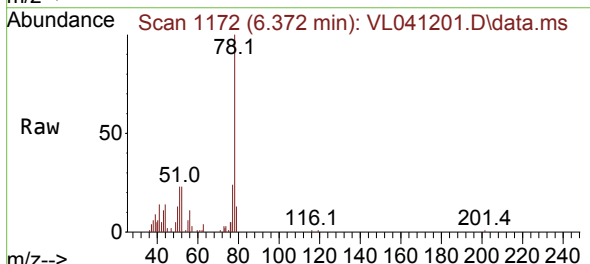
Instrument : MSVOA_L
ClientSampleId : BA-20-IA01-20240425

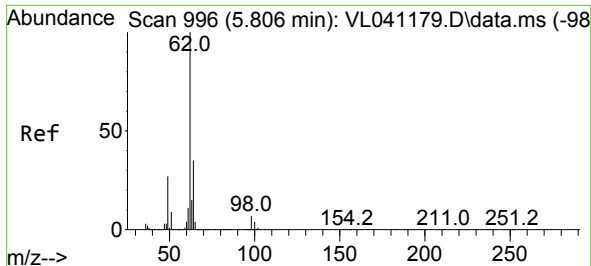
Tgt Ion:117 Resp: 4239
Ion Ratio Lower Upper
117 100
119 89.4 74.3 111.5
121 26.4 23.8 35.8



#36
Benzene
Concen: 0.201 ppbv
RT: 6.372 min Scan# 1172
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 78 Resp: 36278
Ion Ratio Lower Upper
78 100
77 24.4 18.3 27.5
50 11.7 15.9 23.9#





#37

1,2-Dichloroethane

Concen: 0.040 ppbv

RT: 5.809 min Scan# 996

Delta R.T. 0.003 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

ClientSampleId :

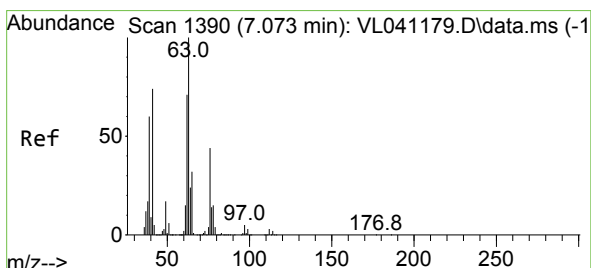
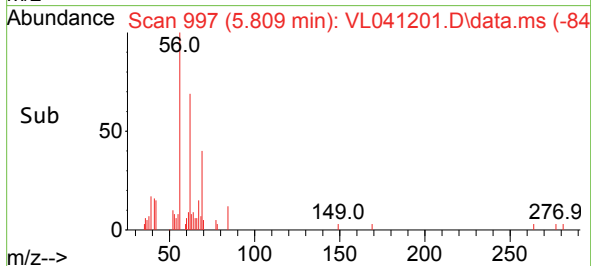
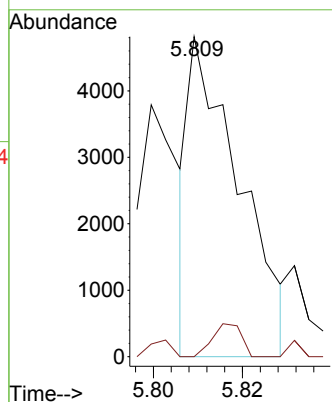
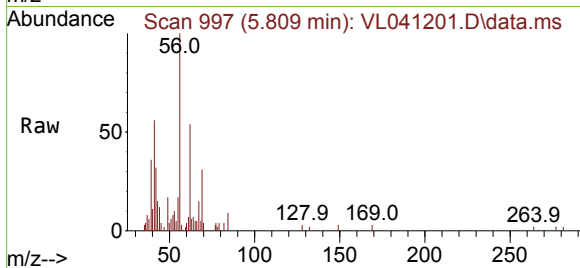
BA-20-IA01-20240425

Tgt Ion: 62 Resp: 3816

Ion Ratio Lower Upper

62 100

98 9.3 5.0 7.4#



#39

1,2-Dichloropropane

Concen: 7.924 ppbv

RT: 6.652 min Scan# 1259

Delta R.T. -0.421 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

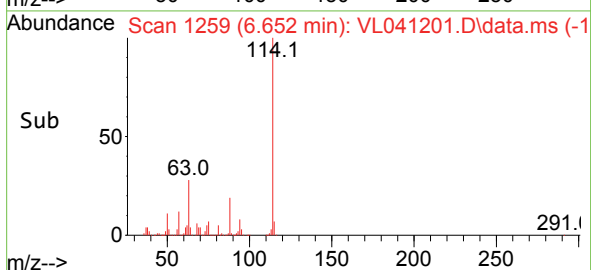
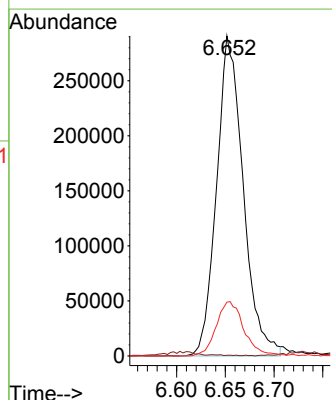
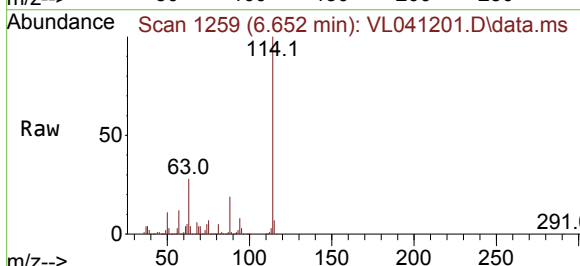
Tgt Ion: 63 Resp: 552044

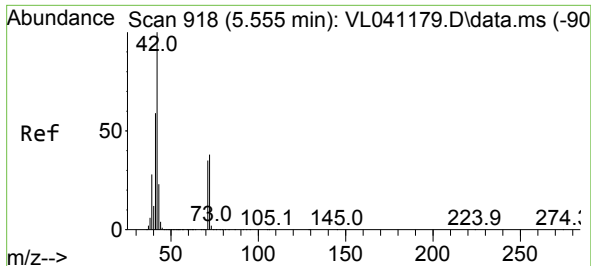
Ion Ratio Lower Upper

63 100

41 0.0 59.4 89.0#

62 16.8 56.8 85.2#





#41

Tetrahydrofuran

Concen: 0.145 ppbv

RT: 5.568 min Scan# 91

Delta R.T. 0.016 min

Lab File: VL041201.D

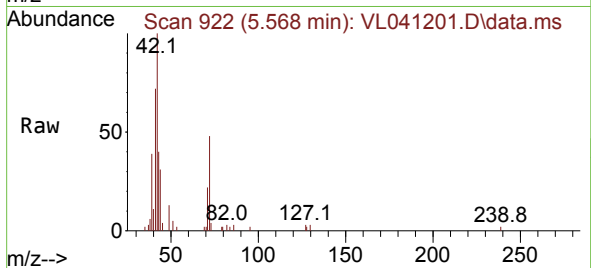
Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

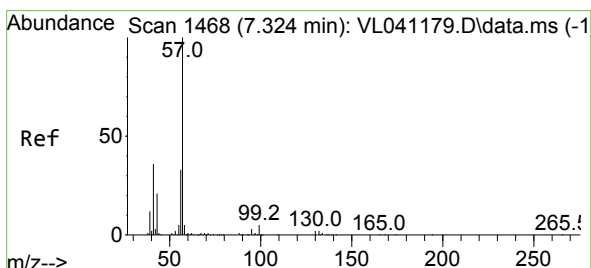
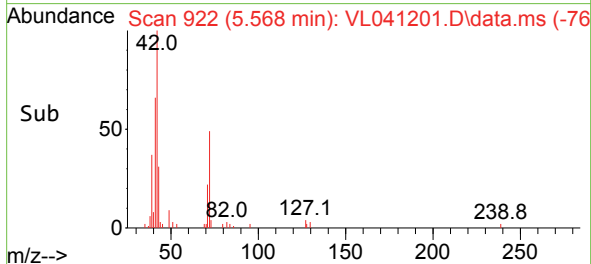
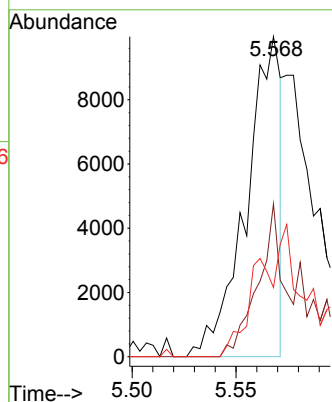
ClientSampleId :

BA-20-IA01-20240425



Tgt Ion: 42 Resp: 11524

Ion	Ratio	Lower	Upper
42	100		
72	59.7	29.4	44.0#
71	0.0	29.1	43.7#



#44

2,2,4-Trimethylpentane

Concen: 0.072 ppbv

RT: 7.330 min Scan# 1470

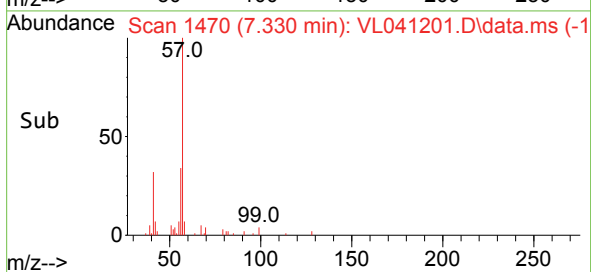
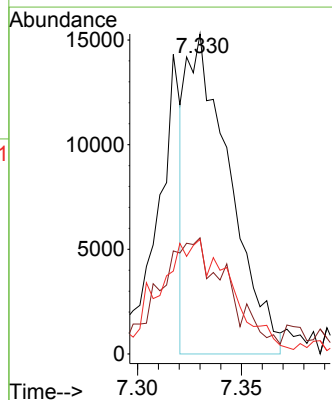
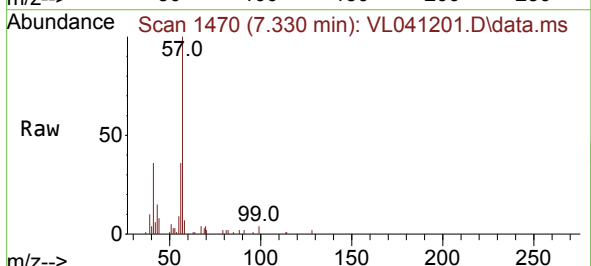
Delta R.T. 0.003 min

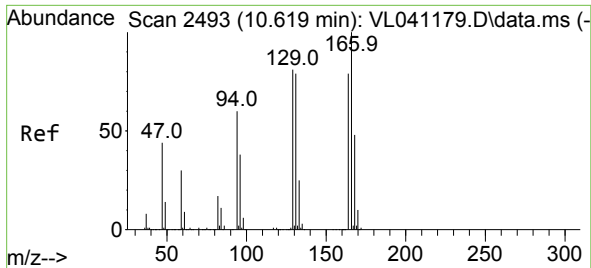
Lab File: VL041201.D

Acq: 2 May 2024 18:39

Tgt Ion: 57 Resp: 22333

Ion	Ratio	Lower	Upper
57	100		
41	63.0	29.5	44.3#
56	64.2	25.3	37.9#

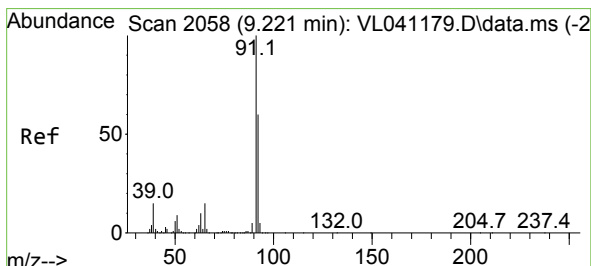
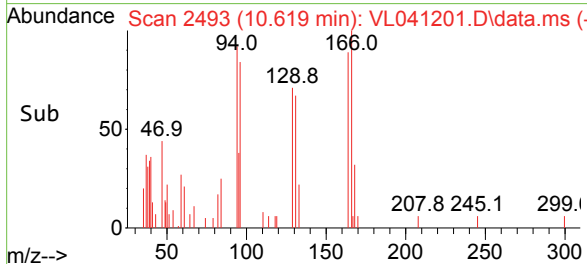
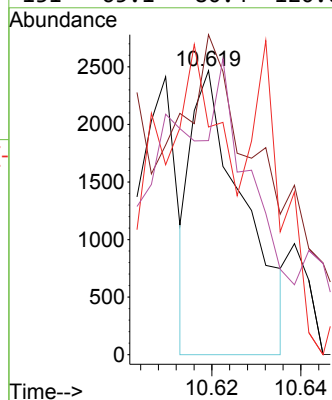
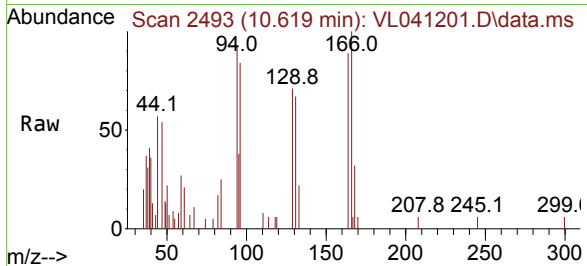




#52
Tetrachloroethene
Concen: 0.032 ppbv
RT: 10.619 min Scan# 2493
Delta R.T. 0.007 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

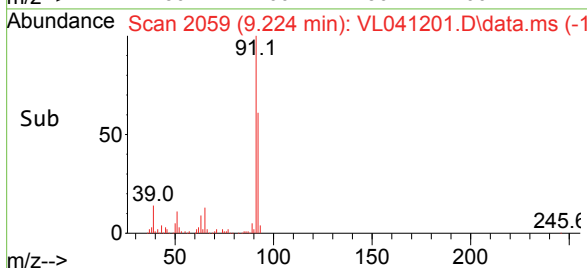
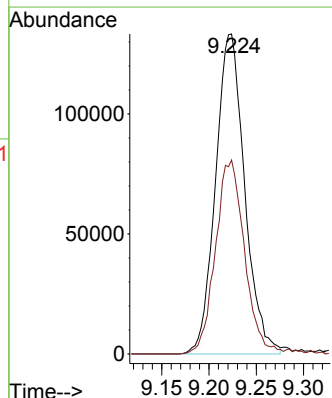
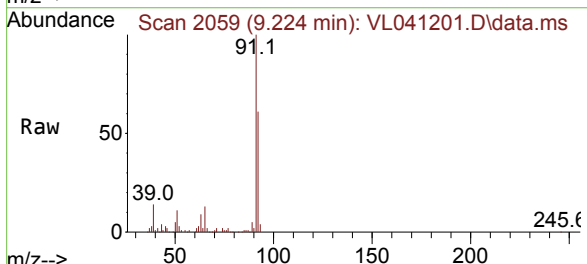
Instrument :
MSVOA_L
ClientSampleId :
BA-20-IA01-20240425

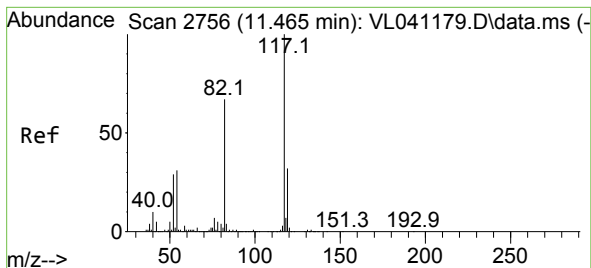
Tgt Ion:164 Resp: 2015
Ion Ratio Lower Upper
164 100
166 90.7 101.1 151.7#
129 53.0 81.7 122.5#
131 65.1 80.4 120.6#



#53
Toluene
Concen: 1.362 ppbv
RT: 9.224 min Scan# 2059
Delta R.T. 0.003 min
Lab File: VL041201.D
Acq: 2 May 2024 18:39

Tgt Ion: 91 Resp: 285597
Ion Ratio Lower Upper
91 100
92 61.2 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: VL041201.D

Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

ClientSampleId :

BA-20-IA01-20240425

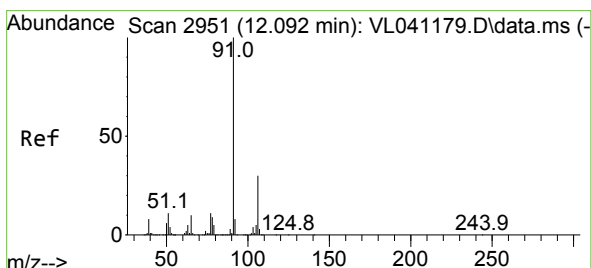
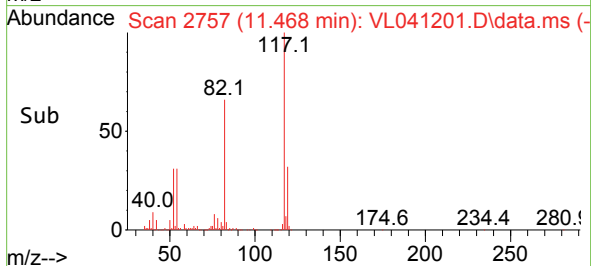
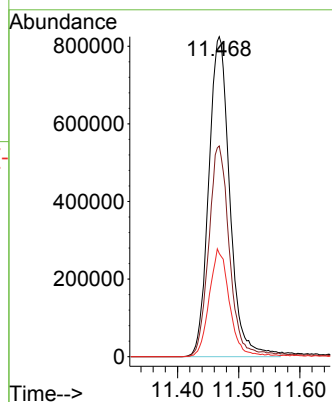
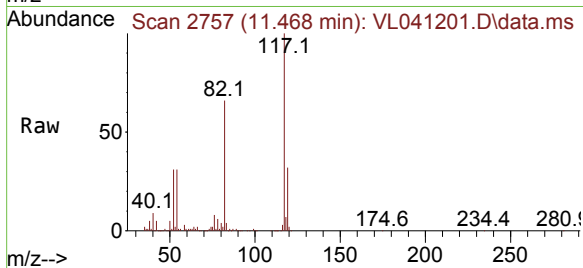
Tgt Ion:117 Resp: 1973796

Ion Ratio Lower Upper

117 100

82 65.8 53.6 80.4

119 32.5 27.2 40.8



#58

Ethyl Benzene

Concen: 0.068 ppbv

RT: 12.089 min Scan# 2950

Delta R.T. 0.003 min

Lab File: VL041201.D

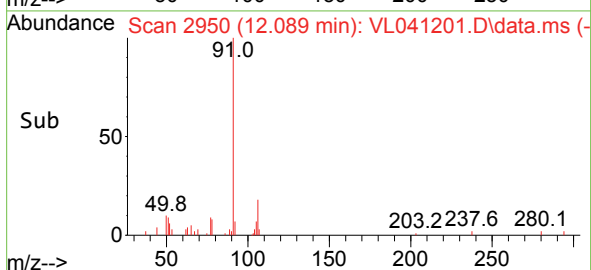
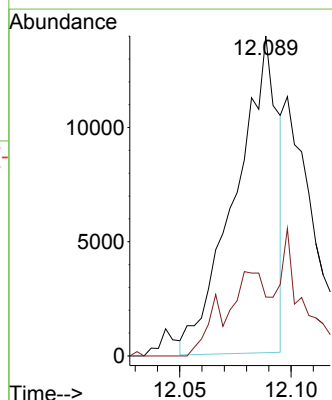
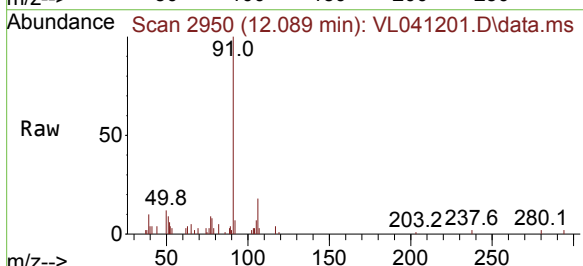
Acq: 2 May 2024 18:39

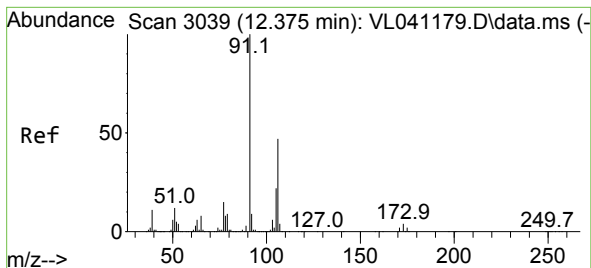
Tgt Ion: 91 Resp: 18454

Ion Ratio Lower Upper

91 100

106 19.3 24.3 36.5#





#59

m/p-Xylene

Concen: 0.111 ppbv

RT: 12.368 min Scan# 3037

Delta R.T. -0.003 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

ClientSampleId :

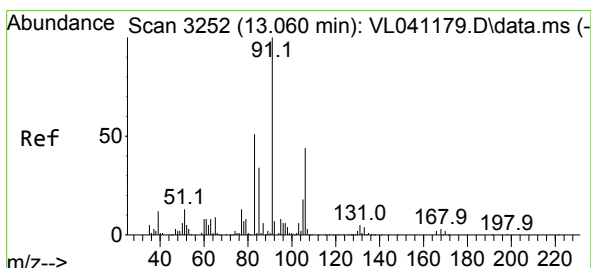
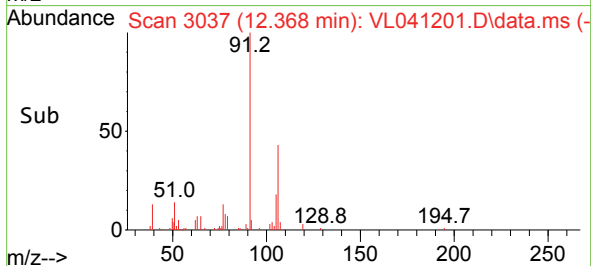
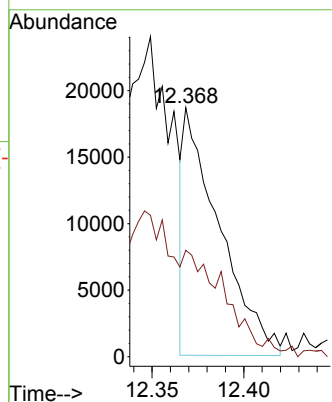
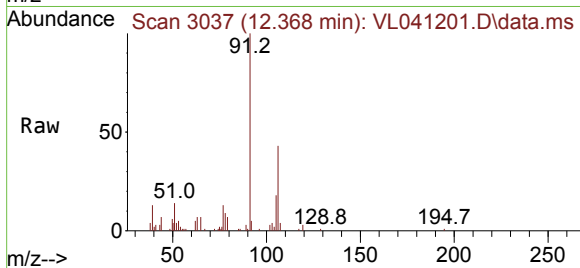
BA-20-IA01-20240425

Tgt Ion: 91 Resp: 25263

Ion Ratio Lower Upper

91 100

106 0.0 35.7 53.5#



#60

o-Xylene

Concen: 0.111 ppbv

RT: 13.056 min Scan# 3251

Delta R.T. 0.000 min

Lab File: VL041201.D

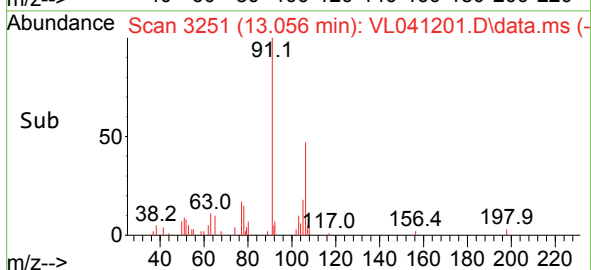
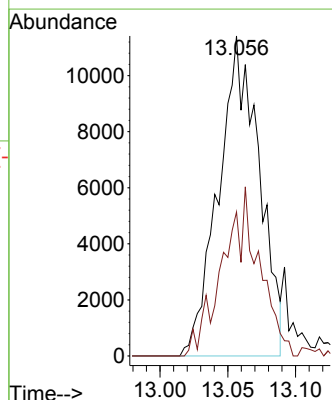
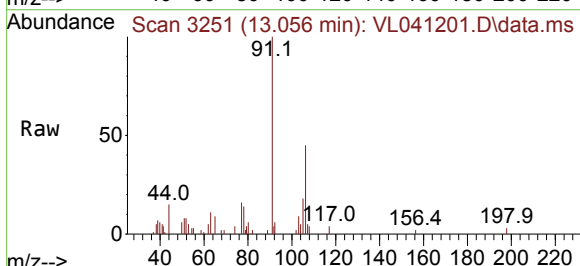
Acq: 2 May 2024 18:39

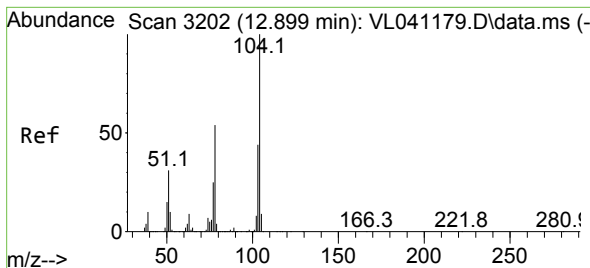
Tgt Ion: 91 Resp: 23757

Ion Ratio Lower Upper

91 100

106 48.5 22.4 67.3





#61

Styrene

Concen: 0.037 ppbv

RT: 12.899 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

Instrument :

MSVOA_L

ClientSampleId :

BA-20-IA01-20240425

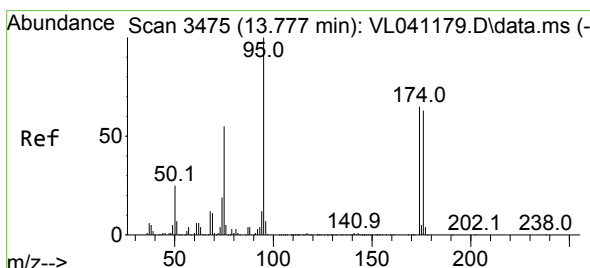
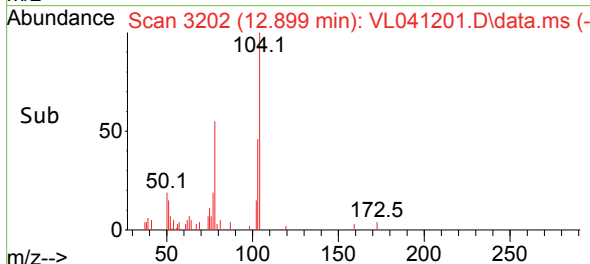
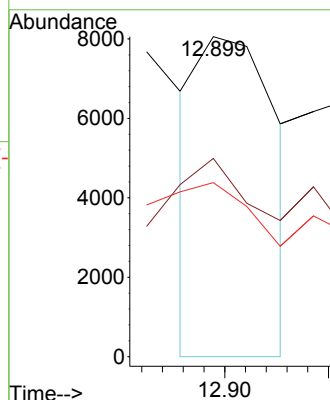
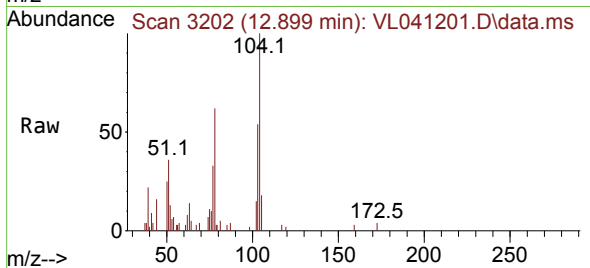
Tgt Ion:104 Resp: 4194

Ion Ratio Lower Upper

104 100

78 269.8 42.6 63.8#

103 243.6 38.4 57.6#



#68

1-Bromo-4-Fluorobenzene

Concen: 9.660 ppbv

RT: 13.780 min Scan# 3476

Delta R.T. 0.007 min

Lab File: VL041201.D

Acq: 2 May 2024 18:39

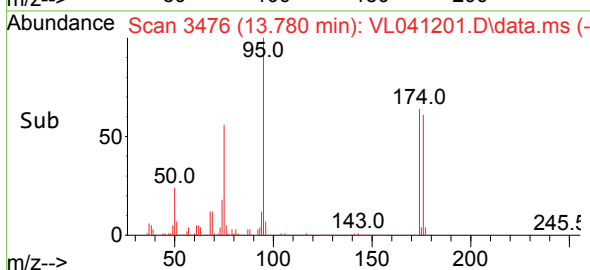
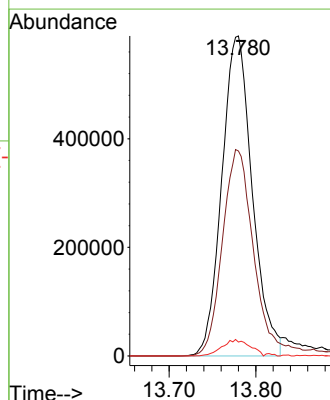
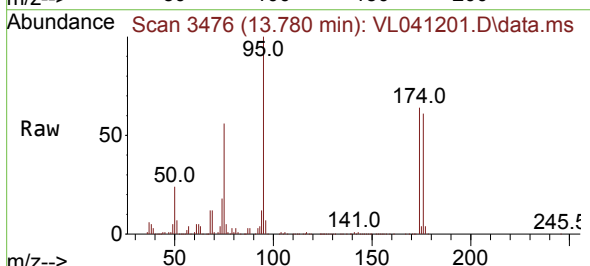
Tgt Ion: 95 Resp: 1439426

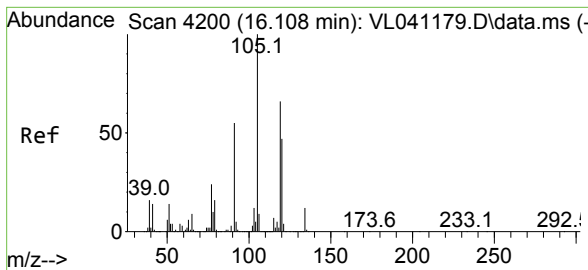
Ion Ratio Lower Upper

95 100

174 69.8 53.6 80.4

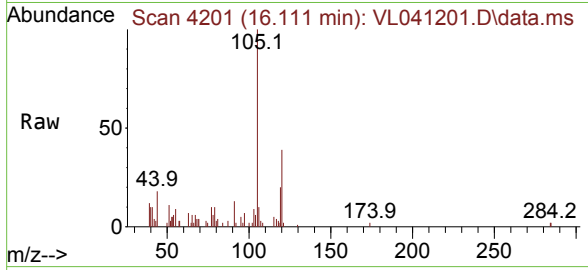
175 4.9 4.2 6.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.046 ppbv
 RT: 16.111 min Scan# 41
 Delta R.T. 0.007 min
 Lab File: VL041201.D
 Acq: 2 May 2024 18:39

Instrument :
 MSVOA_L
 ClientSampleId :
 BA-20-IA01-20240425



Tgt Ion:	105	Resp:	11033
Ion	Ratio	Lower	Upper
105	100		
120	21.5	37.8	56.6#
91	8.7	44.3	66.5#
77	0.0	19.0	28.4#

