

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL050624\
 Data File : VL041214.D
 Acq On : 6 May 2024 12:20
 Operator : SY/MD
 Sample : P2342-01
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 03-SS02

Quant Time: May 07 05:22:49 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 : Tue May 07 05:19:44 2024
 Response via : Initial Calibration

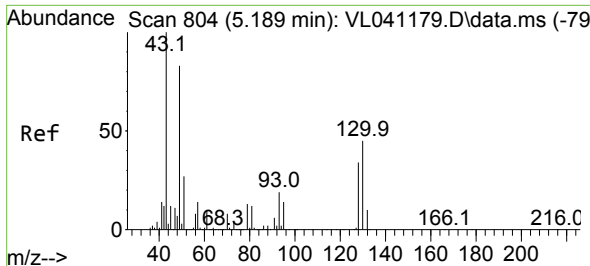
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.192	49	805428	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.652	114	2107945	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.458	117	1957660	10.000	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.767	95	1444704	9.775	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.800%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.732	85	39001	0.358	ppbv	94
3) Chlorodifluoromethane	2.655	51	124680	1.019	ppbv #	70
4) Chloromethane	2.816	50	28538	0.595	ppbv #	81
9) Propene	2.706	41	51986	1.086	ppbv #	66
11) Trichlorofluoromethane	3.565	101	28128	0.254	ppbv	91
12) 1,1,2-Trichlorotrifluo...	4.066	101	3881	0.047	ppbv #	14
13) Ethanol	3.240	45	1369687	127.633	ppbv	96
15) Acetone	3.468	43	1878403	19.761	ppbv	99
16) 1,3-Butadiene	2.967	39	3670	0.076	ppbv #	43
17) tert-Butyl alcohol	3.578	59	67748	0.661	ppbv	97
19) Isopropyl Alcohol	3.578	45	2080191	33.350	ppbv #	43
20) Methylene Chloride	3.935	84	115250	3.487	ppbv	97
21) Allyl Chloride	3.931	41	2791	0.045	ppbv #	21
23) Vinyl Acetate	4.616	43	19261	0.184	ppbv #	63
25) Ethyl Acetate	5.208	43	151861	0.800	ppbv #	94
26) Hexane	5.214	57	119156	1.407	ppbv #	62
29) Chloroform	5.272	83	7049	0.060	ppbv	90
34) 2-Butanone	4.787	43	90167	0.840	ppbv	100
35) Carbon Tetrachloride	6.491	117	4131	0.035	ppbv #	75
36) Benzene	6.369	78	24397	0.138	ppbv #	87
37) 1,2-Dichloroethane	5.806	62	10706	0.116	ppbv #	85
38) Trichloroethene	7.279	130	2896	0.044	ppbv	88
39) 1,2-Dichloropropane	6.648	63	524797	7.698	ppbv #	23
44) 2,2,4-Trimethylpentane	7.327	57	14256	0.047	ppbv #	40
52) Tetrachloroethene	10.606	164	7045	0.113	ppbv	92
53) Toluene	9.217	91	161717	0.788	ppbv	99
59) m/p-Xylene	12.362	91	11280	0.050	ppbv #	31
74) 1,2,4-Trimethylbenzene	16.101	105	8338	0.035	ppbv #	66

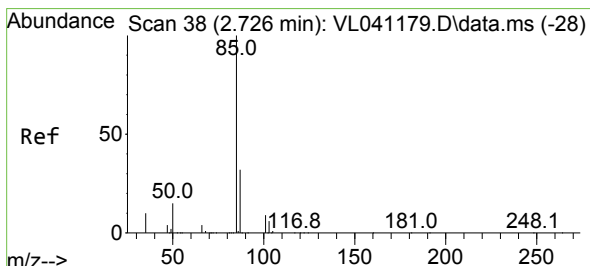
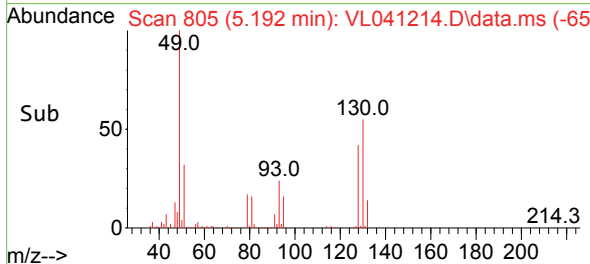
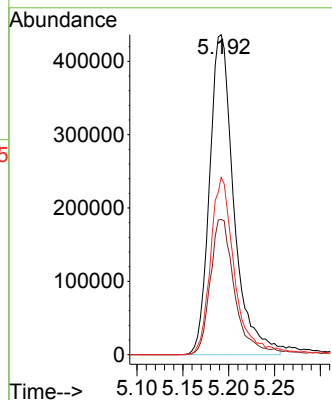
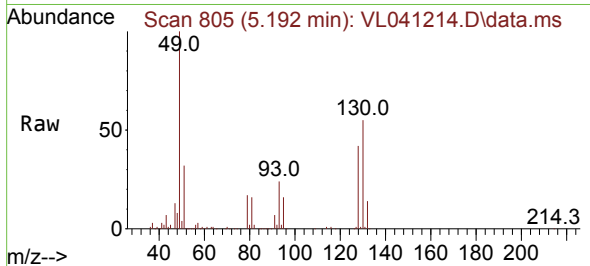
(#) = qualifier out of range (m) = manual integration (+) = signals summed



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

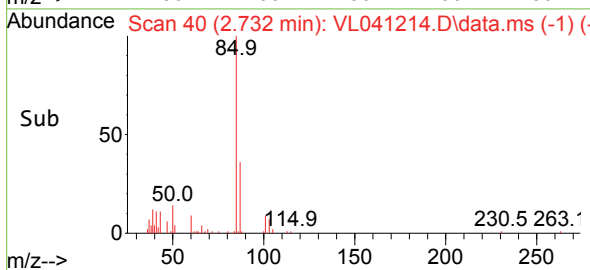
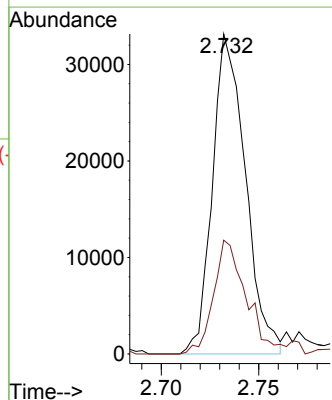
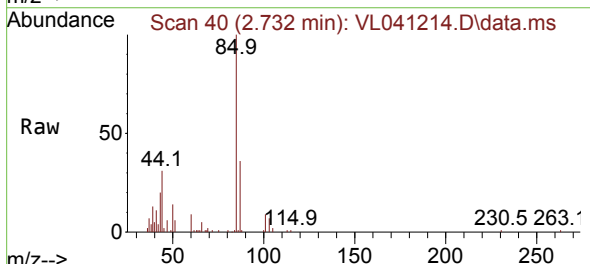
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

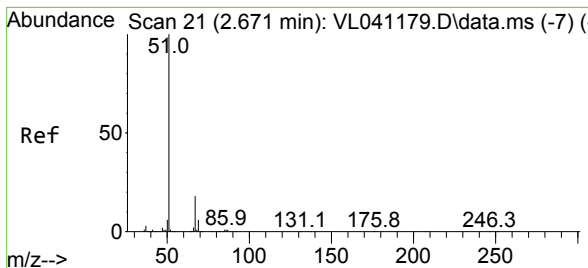
Tgt Ion: 49 Resp: 805428
Ion Ratio Lower Upper
49 100
128 43.4 21.5 64.5
130 56.4 27.2 81.6



#2
Dichlorodifluoromethane
Concen: 0.358 ppbv
RT: 2.732 min Scan# 40
Delta R.T. -0.006 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 85 Resp: 39001
Ion Ratio Lower Upper
85 100
87 35.5 25.7 38.5





#3

Chlorodifluoromethane

Concen: 1.019 ppbv

RT: 2.655 min Scan# 1

Delta R.T. -0.029 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

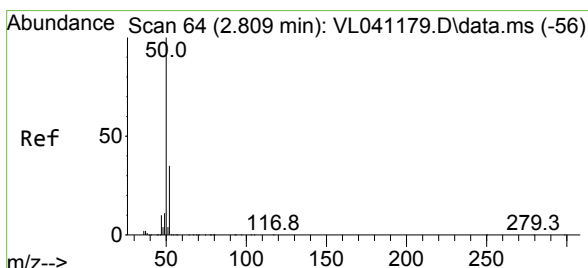
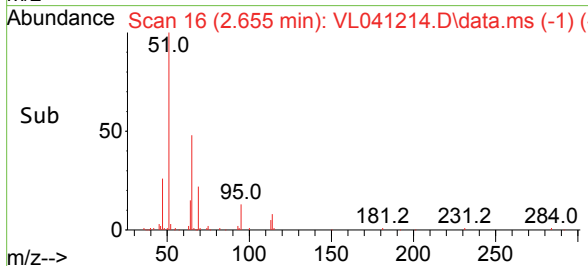
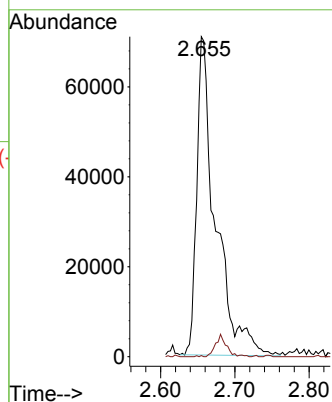
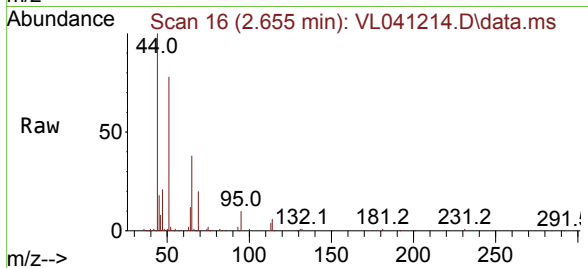
03-SS02

Tgt Ion: 51 Resp: 124680

Ion Ratio Lower Upper

51 100

67 4.2 14.0 21.0#



#4

Chloromethane

Concen: 0.595 ppbv

RT: 2.816 min Scan# 66

Delta R.T. -0.006 min

Lab File: VL041214.D

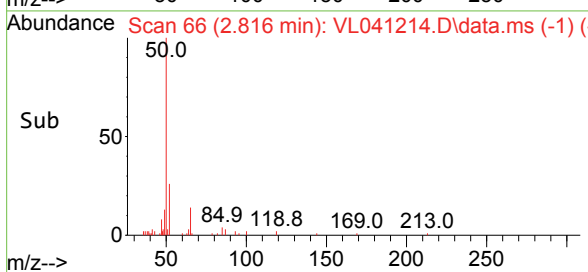
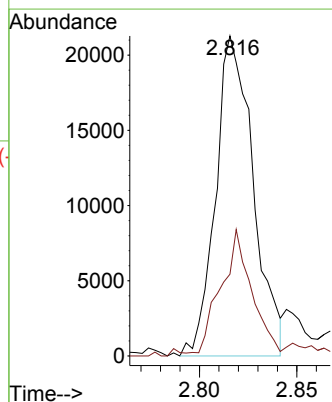
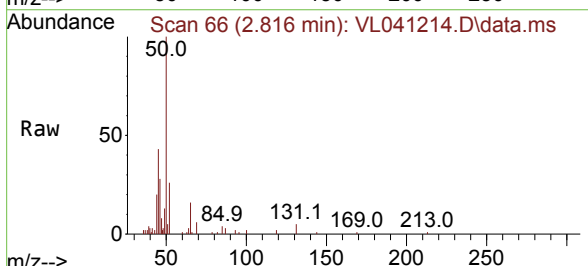
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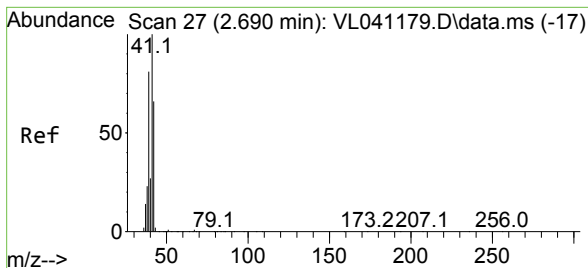
Tgt Ion: 50 Resp: 28538

Ion Ratio Lower Upper

50 100

52 24.5 28.3 42.5#





#9

Propene

Concen: 1.086 ppbv

RT: 2.706 min Scan# 31

Delta R.T. 0.003 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

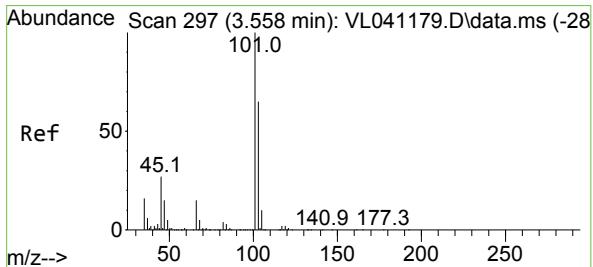
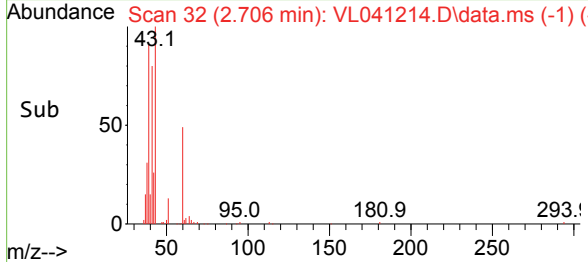
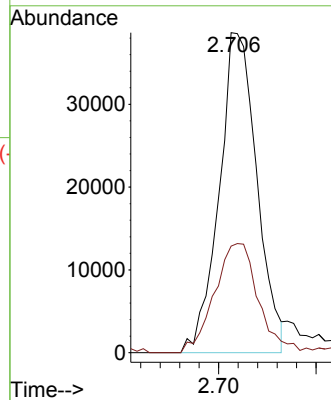
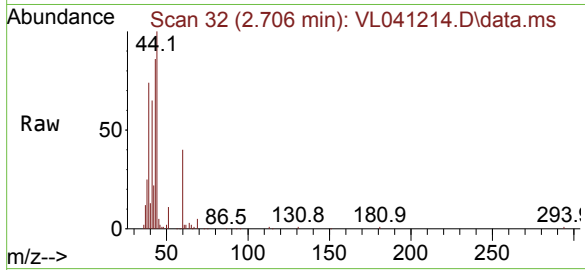
03-SS02

Tgt Ion: 41 Resp: 51986

Ion Ratio Lower Upper

41 100

42 41.3 55.3 82.9#



#11

Trichlorofluoromethane

Concen: 0.254 ppbv

RT: 3.565 min Scan# 299

Delta R.T. -0.003 min

Lab File: VL041214.D

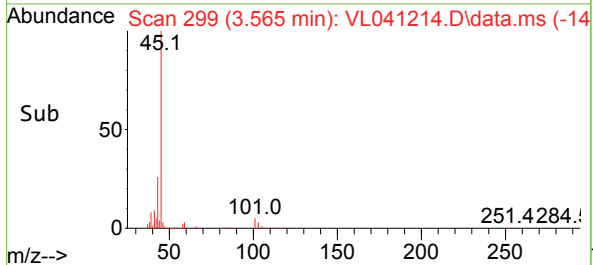
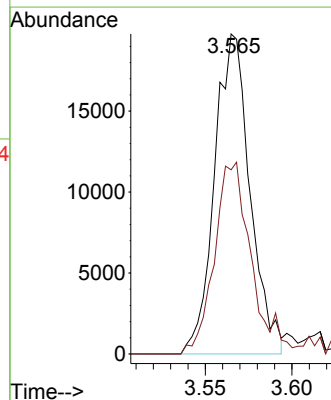
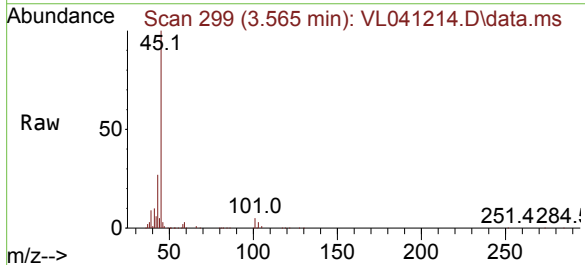
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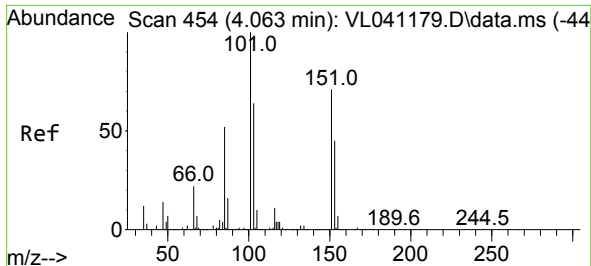
Tgt Ion:101 Resp: 28128

Ion Ratio Lower Upper

101 100

103 57.6 51.6 77.4

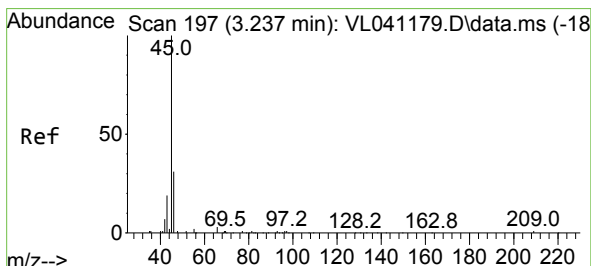
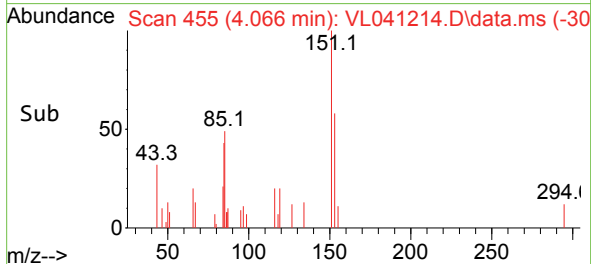
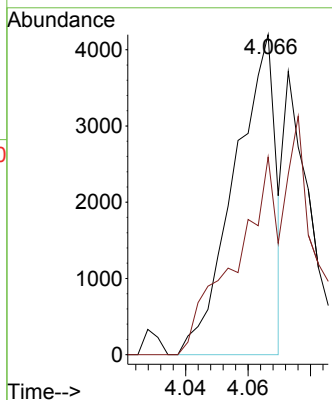
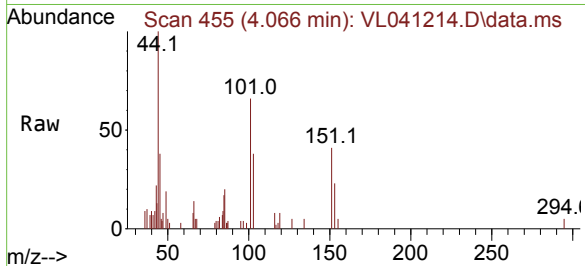




#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.047 ppbv
RT: 4.066 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

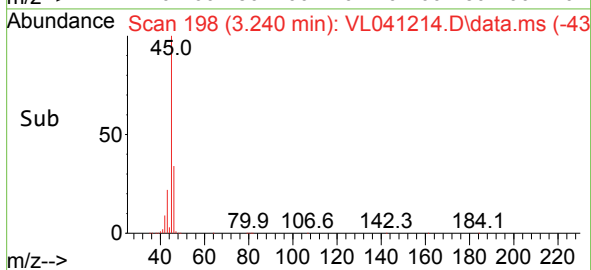
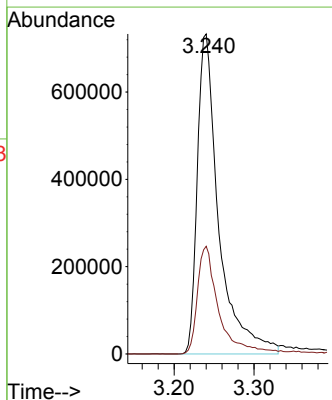
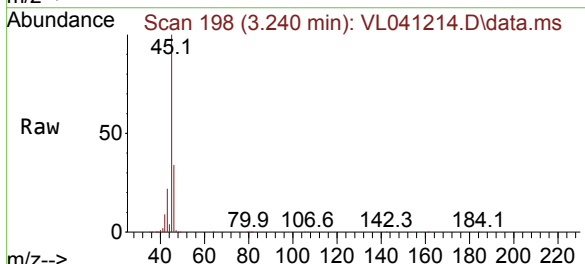
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

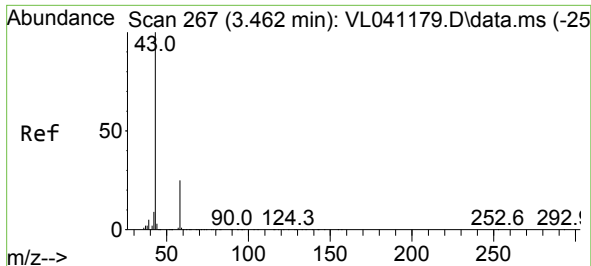
Tgt Ion:101 Resp: 3881
Ion Ratio Lower Upper
101 100
151 0.0 56.8 85.2#



#13
Ethanol
Concen: 127.633 ppbv
RT: 3.240 min Scan# 198
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 45 Resp: 1369687
Ion Ratio Lower Upper
45 100
46 34.5 14.8 59.0





#15

Acetone

Concen: 19.761 ppbv

RT: 3.468 min Scan# 2

Delta R.T. -0.006 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

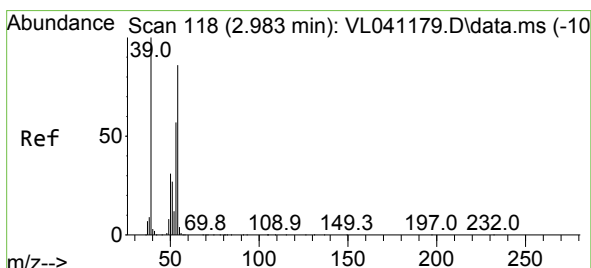
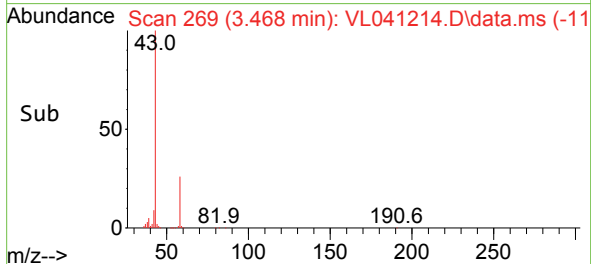
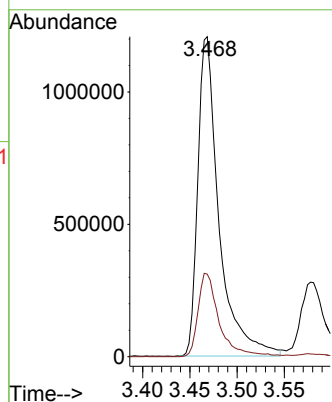
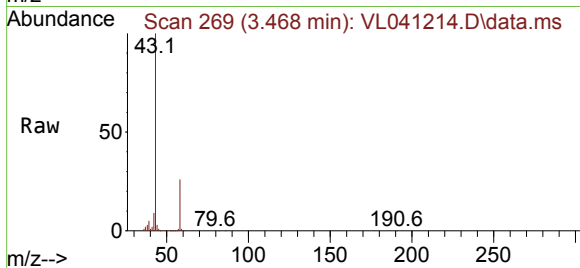
03-SS02

Tgt Ion: 43 Resp: 1878403

Ion Ratio Lower Upper

43 100

58 26.4 21.4 32.0



#16

1,3-Butadiene

Concen: 0.076 ppbv

RT: 2.967 min Scan# 113

Delta R.T. -0.026 min

Lab File: VL041214.D

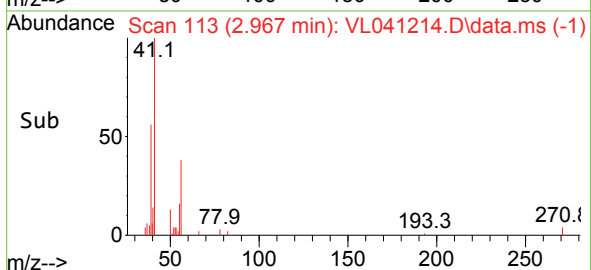
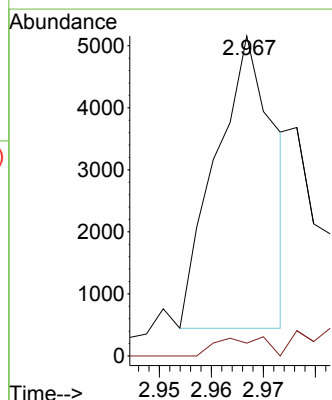
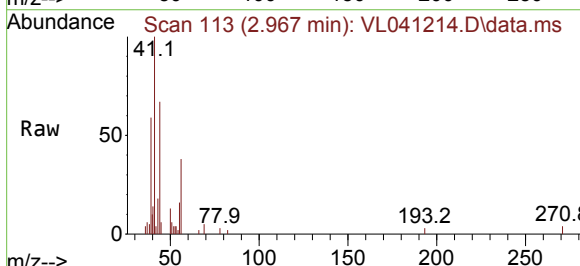
Acq: 6 May 2024 12:20

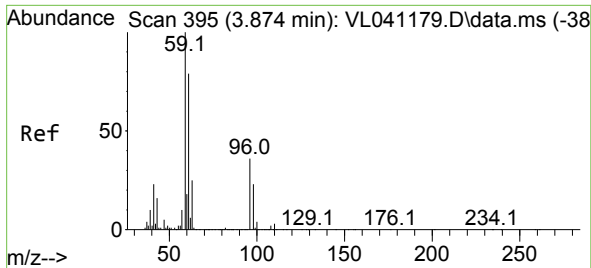
Tgt Ion: 39 Resp: 3670

Ion Ratio Lower Upper

39 100

54 28.3 62.2 93.4#

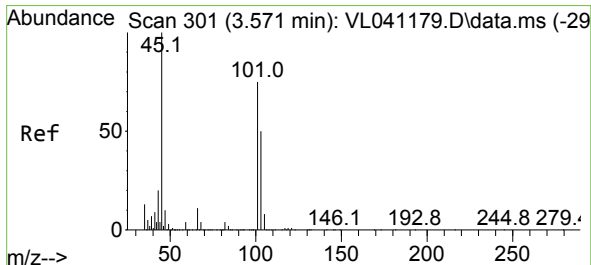
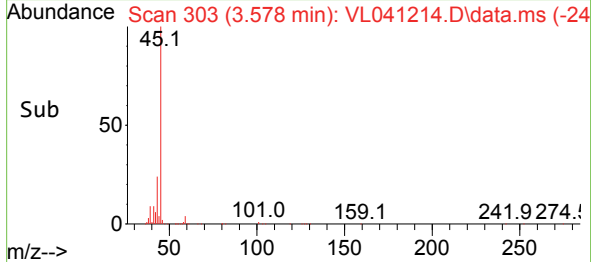
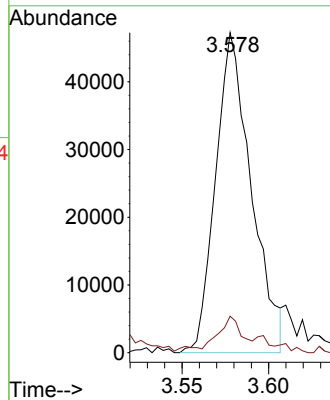
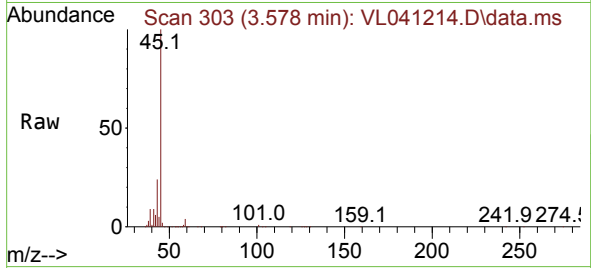




#17
tert-Butyl alcohol
Concen: 0.661 ppbv
RT: 3.578 min Scan# 303
Delta R.T. -0.305 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

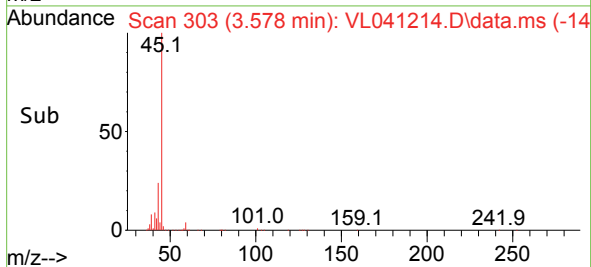
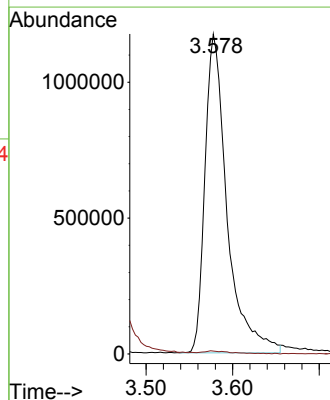
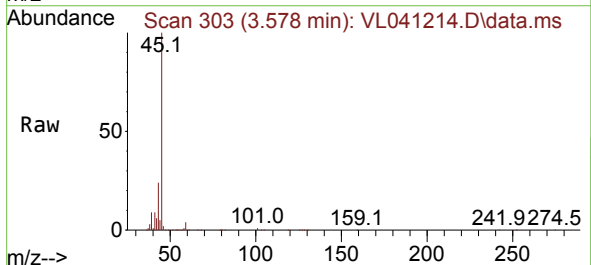
Instrument :
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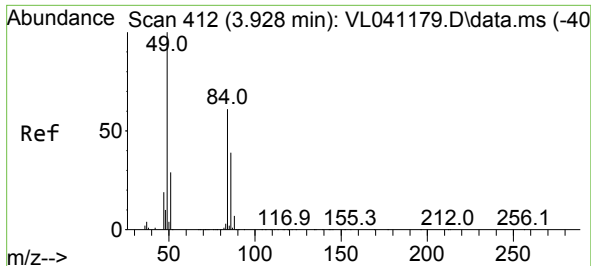
Tgt Ion: 59 Resp: 67748
Ion Ratio Lower Upper
59 100
57 11.7 8.4 12.6



#19
Isopropyl Alcohol
Concen: 33.350 ppbv
RT: 3.578 min Scan# 303
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 45 Resp: 2080191
Ion Ratio Lower Upper
45 100
58 1.0 26.8 40.2#

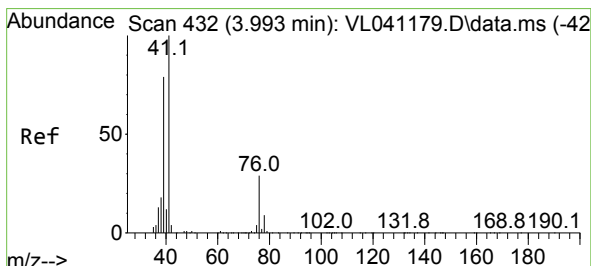
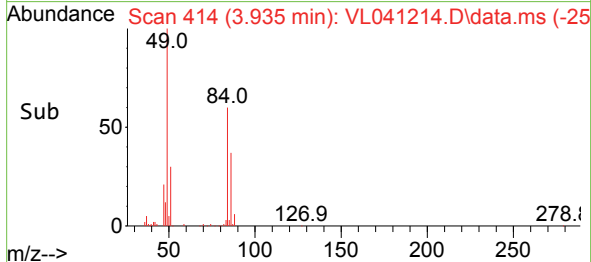
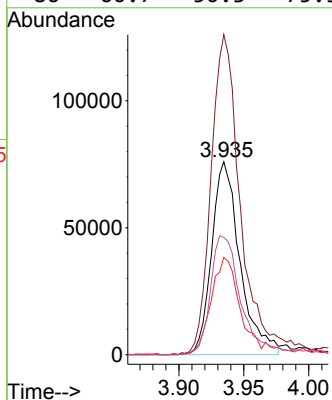
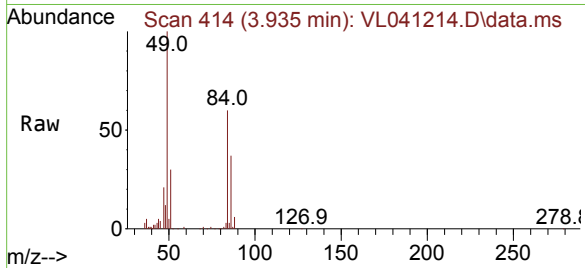




#20
Methylene Chloride
Concen: 3.487 ppbv
RT: 3.935 min Scan# 412
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

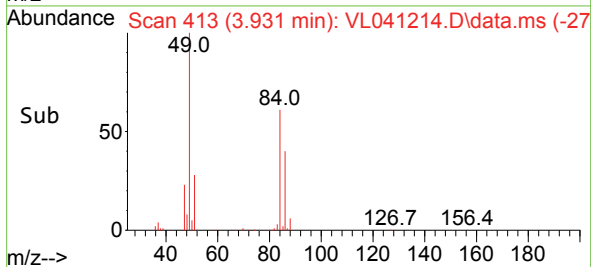
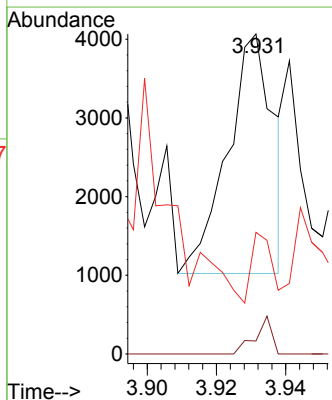
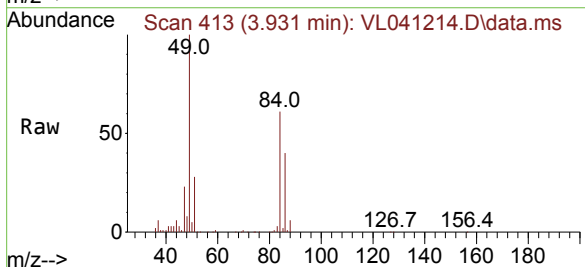
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

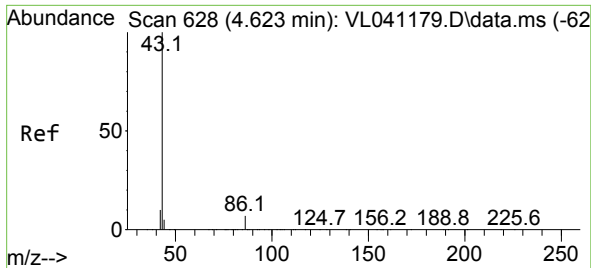
Tgt Ion: 84 Resp: 115250
Ion Ratio Lower Upper
84 100
49 165.8 130.4 195.6
51 50.1 38.0 57.0
86 60.7 50.3 75.5



#21
Allyl Chloride
Concen: 0.045 ppbv
RT: 3.931 min Scan# 413
Delta R.T. -0.071 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 41 Resp: 2791
Ion Ratio Lower Upper
41 100
76 5.6 23.7 35.5#
39 0.0 64.7 97.1#

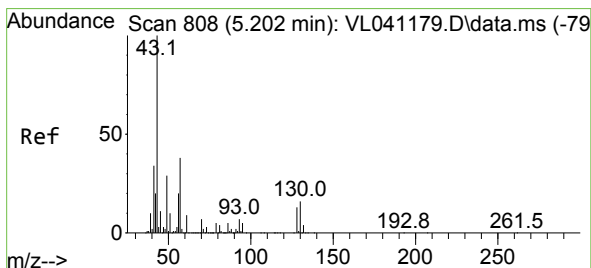
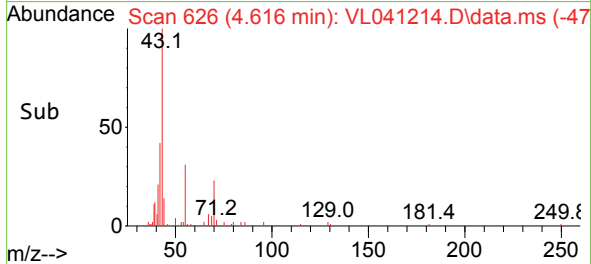
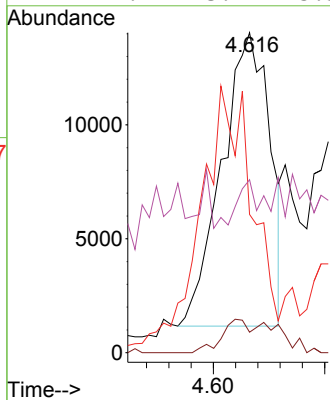
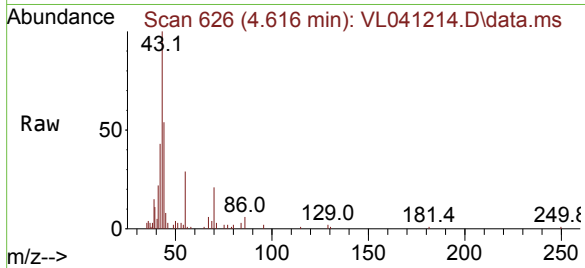




#23
Vinyl Acetate
Concen: 0.184 ppbv
RT: 4.616 min Scan# 61
Delta R.T. -0.013 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

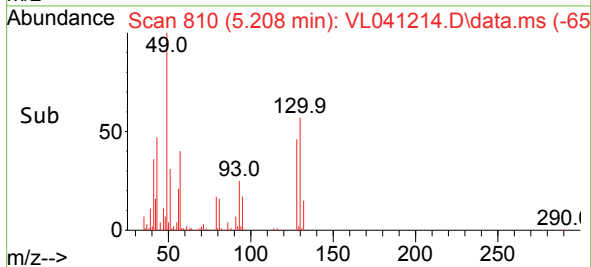
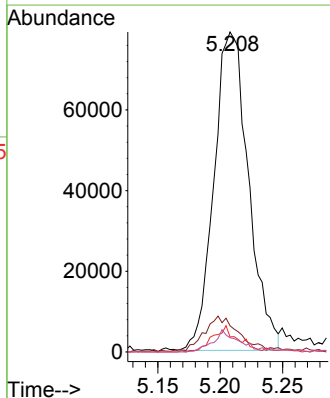
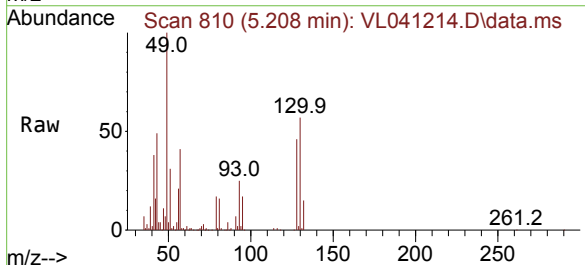
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

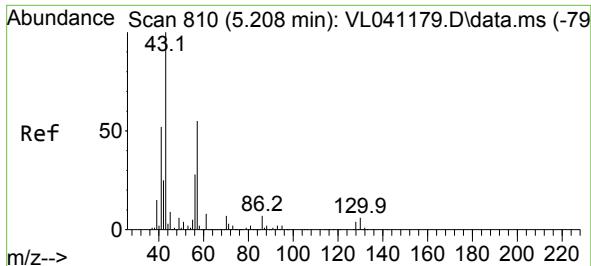
Tgt Ion: 43 Resp: 19261
Ion Ratio Lower Upper
43 100
86 7.0 4.9 7.3
42 36.3 8.0 12.0#
44 1.2 3.7 5.5#



#25
Ethyl Acetate
Concen: 0.800 ppbv
RT: 5.208 min Scan# 810
Delta R.T. 0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 43 Resp: 151861
Ion Ratio Lower Upper
43 100
45 12.8 8.2 12.2#
61 6.8 7.7 11.5#
70 6.0 5.8 8.6

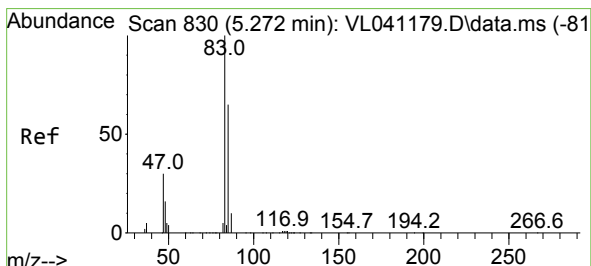
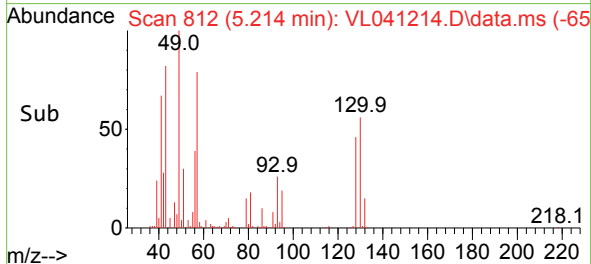
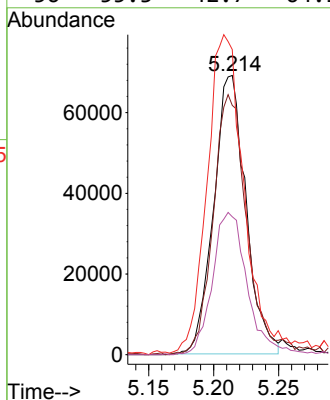
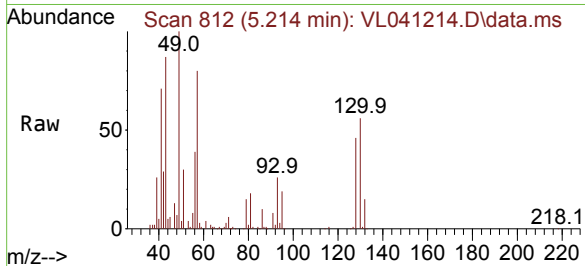




#26
Hexane
Concen: 1.407 ppbv
RT: 5.214 min Scan# 810
Delta R.T. 0.000 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

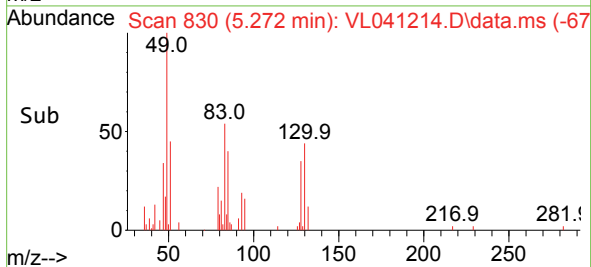
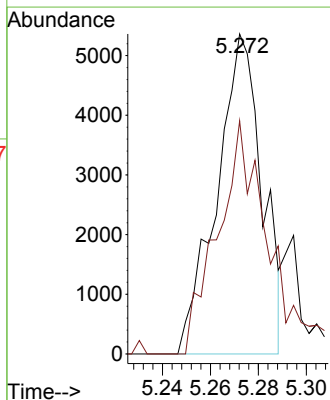
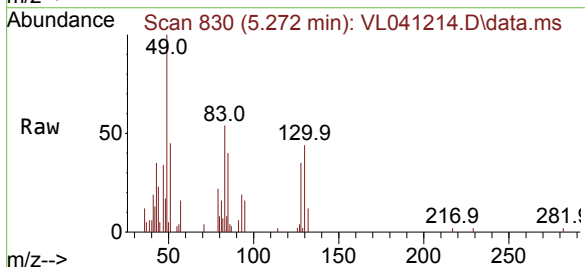
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

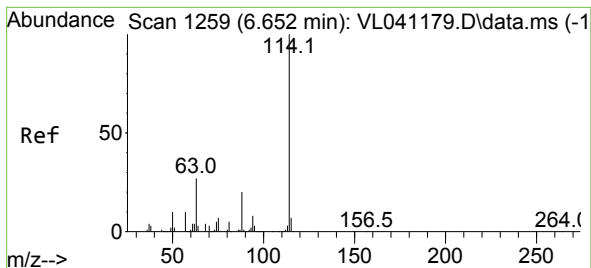
Tgt Ion: 57 Resp: 119156
Ion Ratio Lower Upper
57 100
41 100.4 75.8 113.8
43 136.0 187.0 280.4#
56 55.3 42.7 64.1



#29
Chloroform
Concen: 0.060 ppbv
RT: 5.272 min Scan# 830
Delta R.T. -0.006 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 83 Resp: 7049
Ion Ratio Lower Upper
83 100
85 72.8 51.7 77.5





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.652 min Scan# 11

Delta R.T. -0.003 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

03-SS02

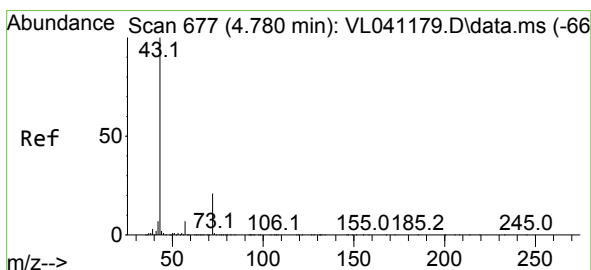
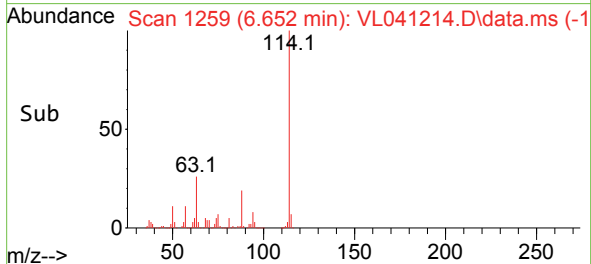
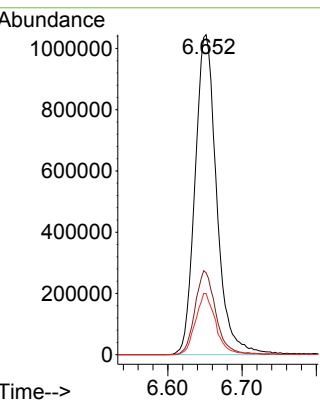
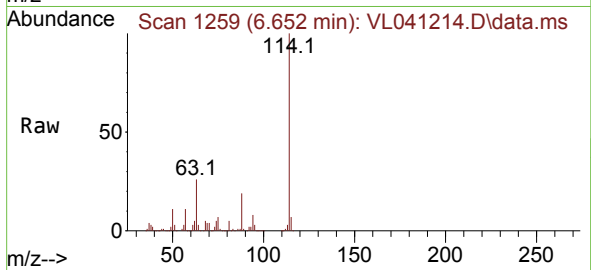
Tgt Ion:114 Resp: 2107945

Ion Ratio Lower Upper

114 100

63 25.7 21.8 32.6

88 18.2 15.2 22.8



#34

2-Butanone

Concen: 0.840 ppbv

RT: 4.787 min Scan# 679

Delta R.T. 0.000 min

Lab File: VL041214.D

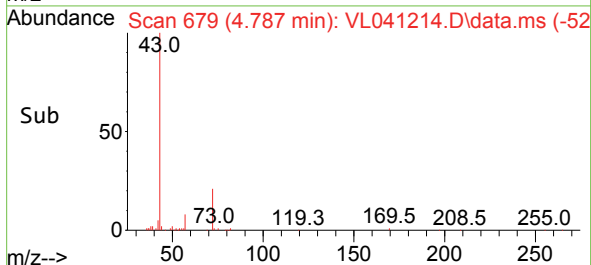
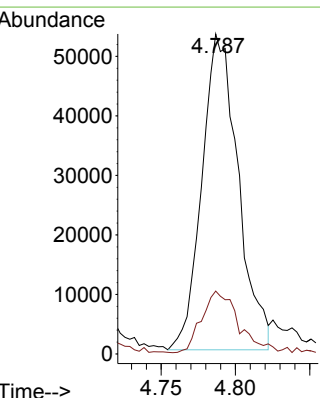
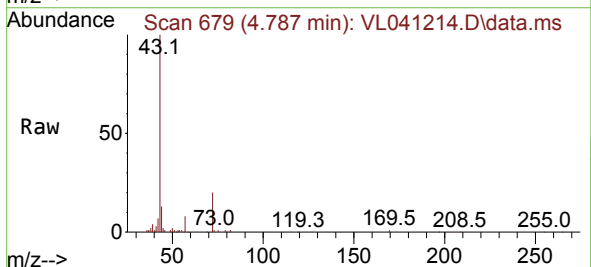
Acq: 6 May 2024 12:20

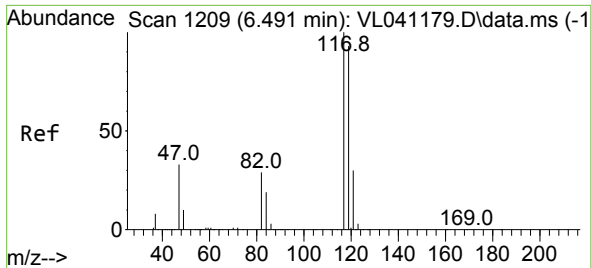
Tgt Ion: 43 Resp: 90167

Ion Ratio Lower Upper

43 100

72 21.8 17.3 25.9

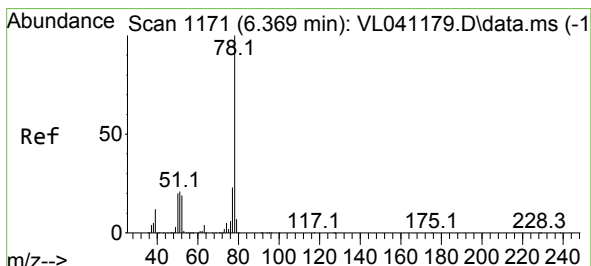
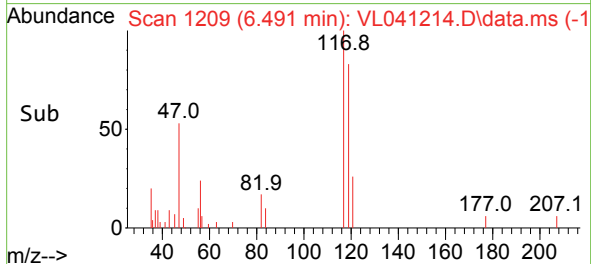
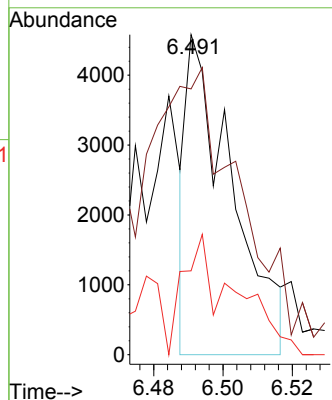
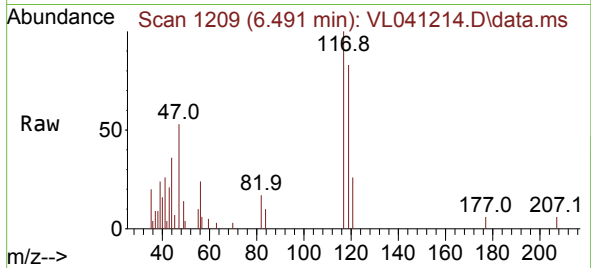




#35
Carbon Tetrachloride
Concen: 0.035 ppbv
RT: 6.491 min Scan# 117
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

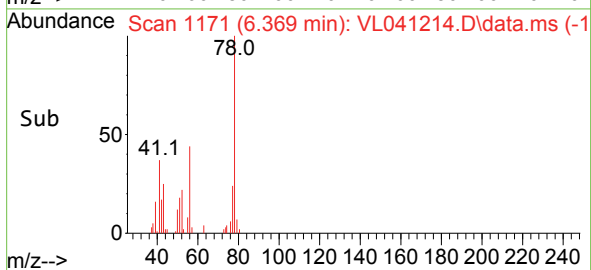
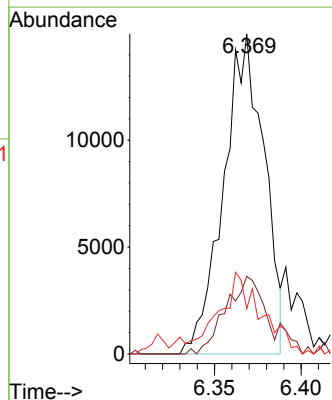
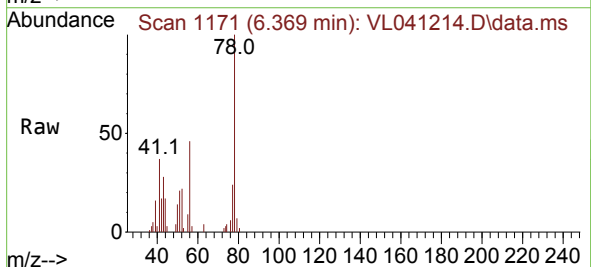
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

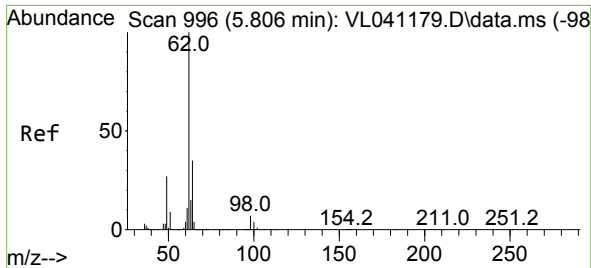
Tgt Ion:117 Resp: 4131
Ion Ratio Lower Upper
117 100
119 63.1 74.3 111.5#
121 26.2 23.8 35.8



#36
Benzene
Concen: 0.138 ppbv
RT: 6.369 min Scan# 1171
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 78 Resp: 24397
Ion Ratio Lower Upper
78 100
77 24.3 18.3 27.5
50 8.9 15.9 23.9#

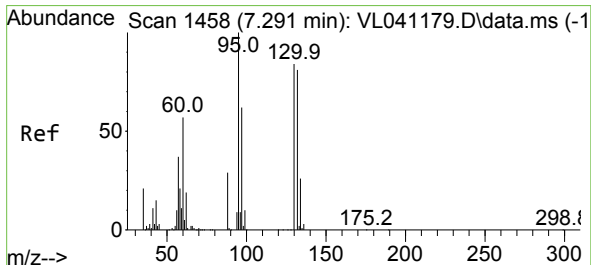
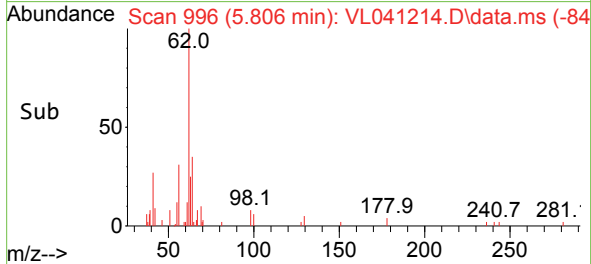
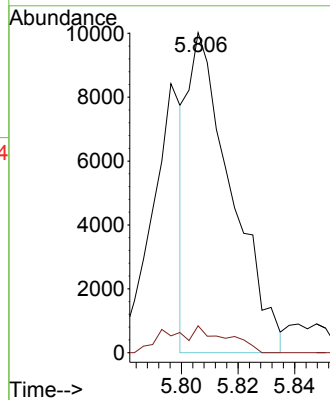
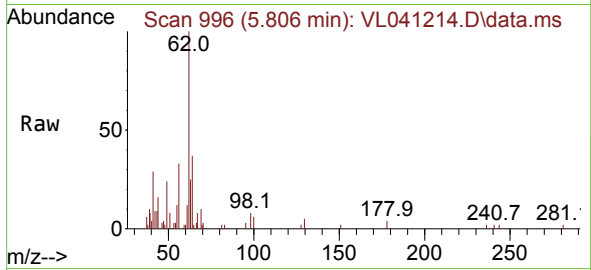




#37
1,2-Dichloroethane
Concen: 0.116 ppbv
RT: 5.806 min Scan# 996
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

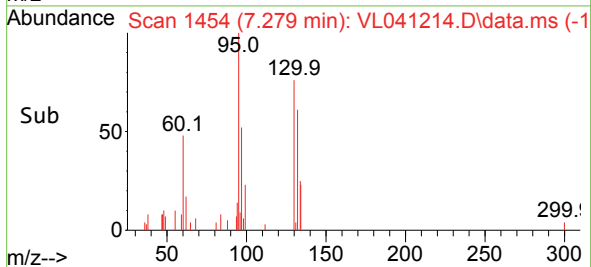
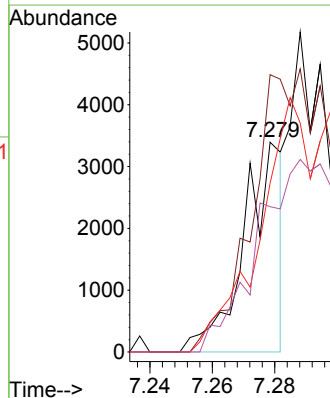
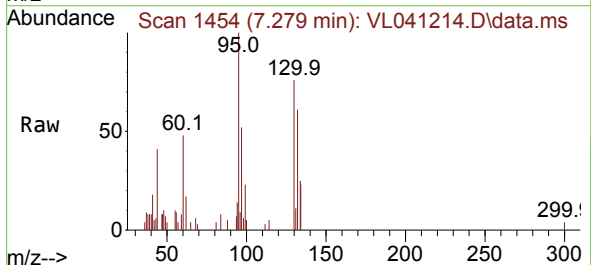
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

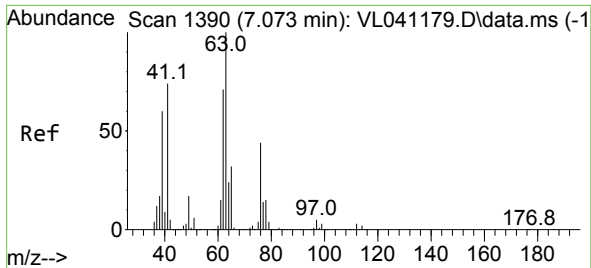
Tgt Ion: 62 Resp: 10706
Ion Ratio Lower Upper
62 100
98 11.1 5.0 7.4#



#38
Trichloroethene
Concen: 0.044 ppbv
RT: 7.279 min Scan# 1454
Delta R.T. -0.013 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 130 Resp: 2896
Ion Ratio Lower Upper
130 100
95 132.2 95.0 142.6
132 80.5 77.0 115.4
97 69.3 59.1 88.7





#39

1,2-Dichloropropane

Concen: 7.698 ppbv

RT: 6.648 min Scan# 11

Delta R.T. -0.424 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

03-SS02

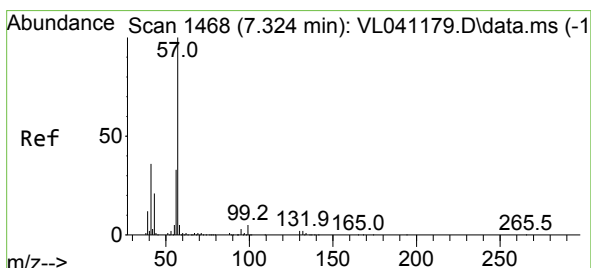
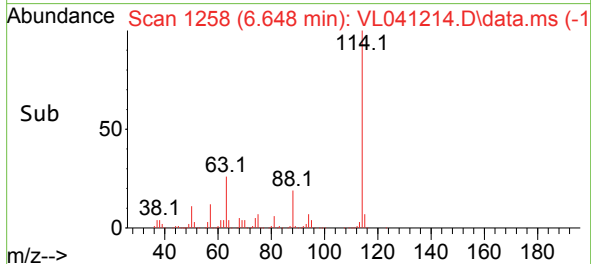
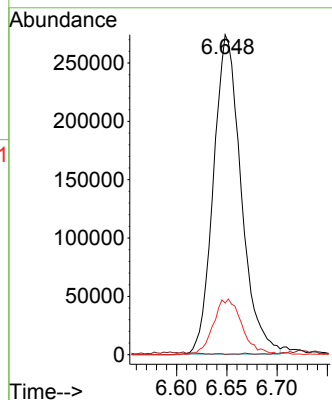
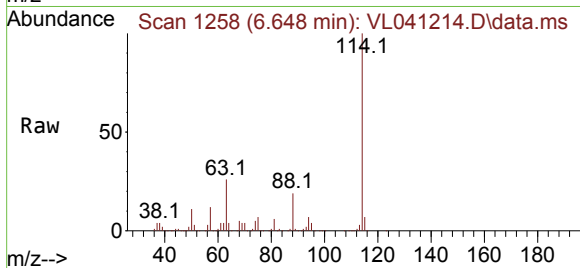
Tgt Ion: 63 Resp: 524797

Ion Ratio Lower Upper

63 100

41 0.0 59.4 89.0#

62 16.2 56.8 85.2#



#44

2,2,4-Trimethylpentane

Concen: 0.047 ppbv

RT: 7.327 min Scan# 1469

Delta R.T. 0.000 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

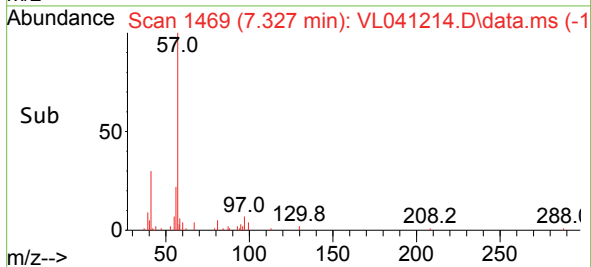
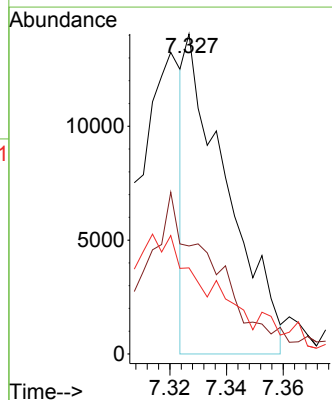
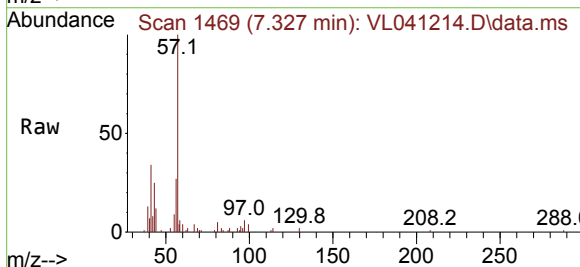
Tgt Ion: 57 Resp: 14256

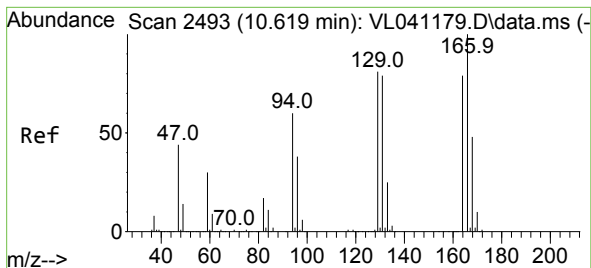
Ion Ratio Lower Upper

57 100

41 0.0 29.5 44.3#

56 0.0 25.3 37.9#





#52

Tetrachloroethene

Concen: 0.113 ppbv

RT: 10.606 min Scan# 2493

Delta R.T. -0.006 min

Lab File: VL041214.D

Acq: 6 May 2024 12:20

Instrument :

MSVOA_L

ClientSampleId :

03-SS02

Tgt Ion:164 Resp: 7045

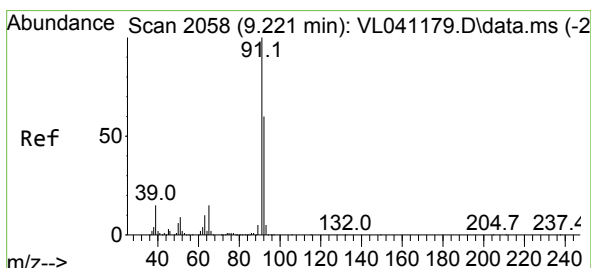
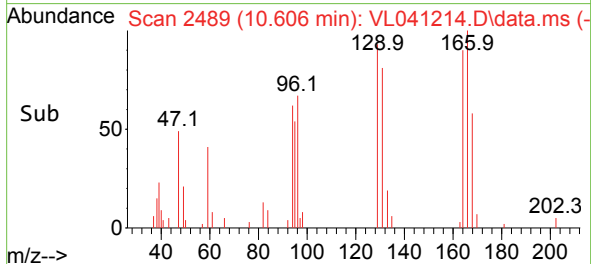
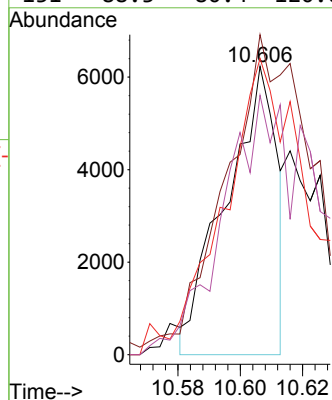
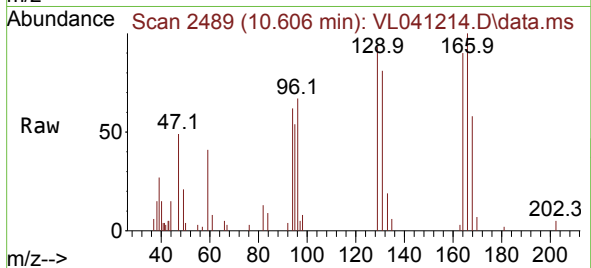
Ion Ratio Lower Upper

164 100

166 114.7 101.1 151.7

129 100.7 81.7 122.5

131 88.3 80.4 120.6



#53

Toluene

Concen: 0.788 ppbv

RT: 9.217 min Scan# 2057

Delta R.T. -0.003 min

Lab File: VL041214.D

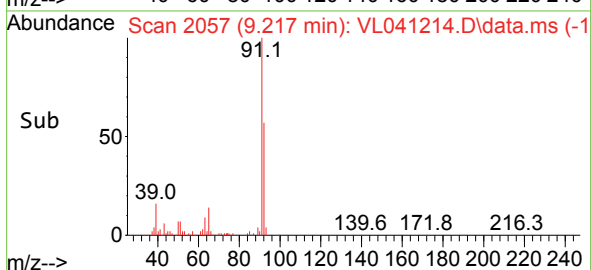
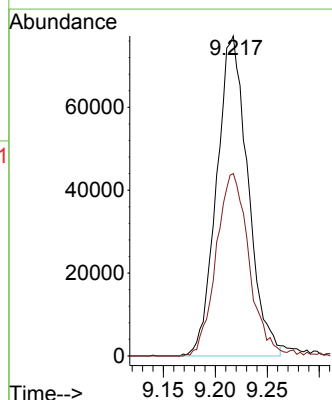
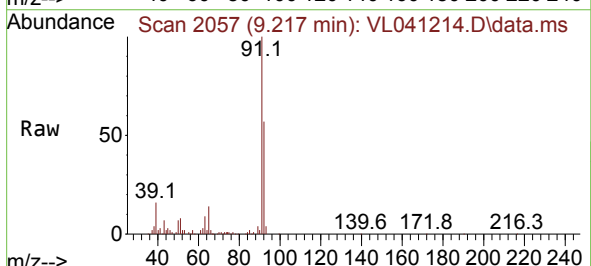
Acq: 6 May 2024 12:20

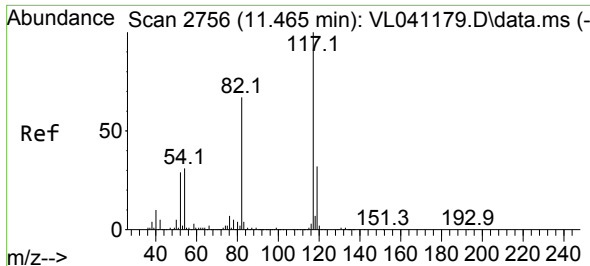
Tgt Ion: 91 Resp: 161717

Ion Ratio Lower Upper

91 100

92 61.1 48.2 72.4

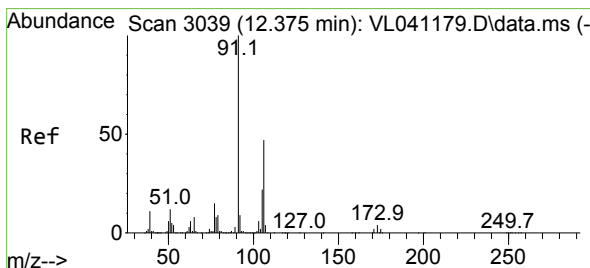
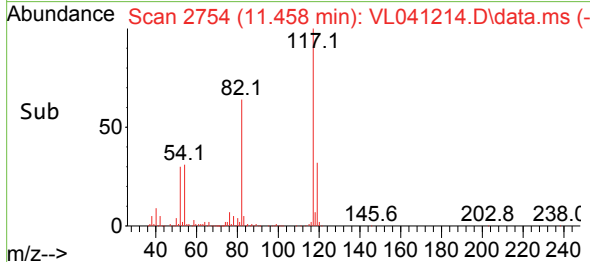
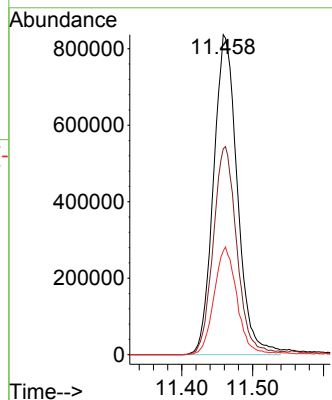
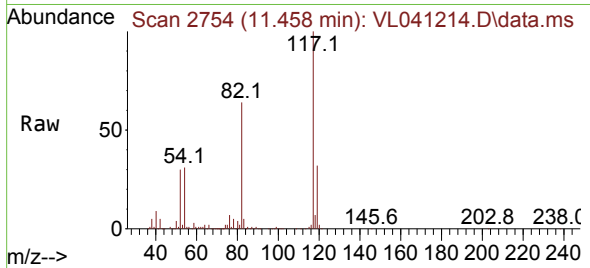




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.458 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

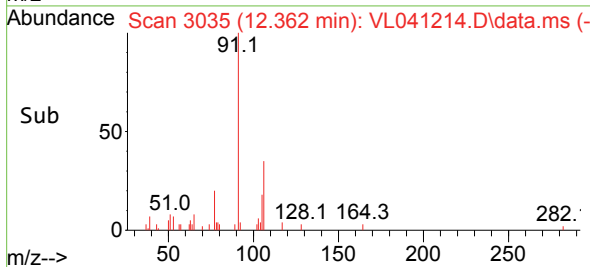
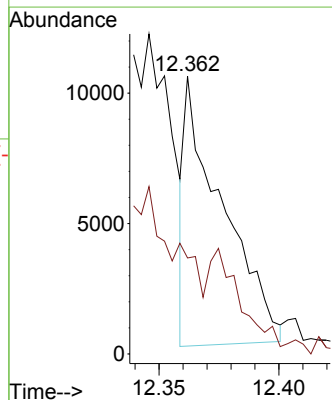
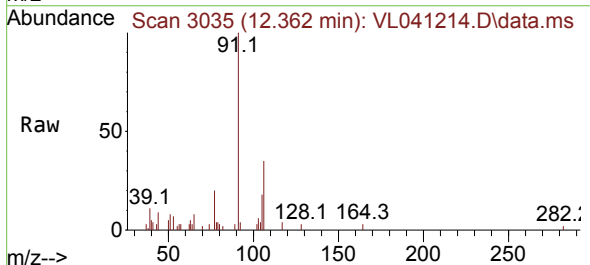
Instrument :
MSVOA_L
ClientSampleId :
03-SS02

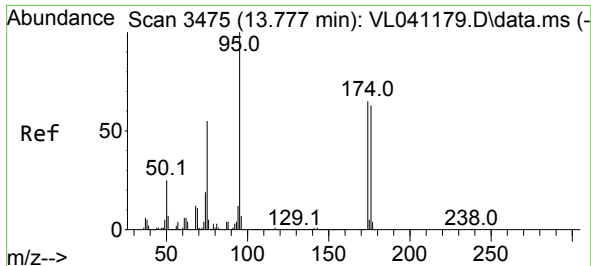
Tgt Ion:117 Resp: 1957660
Ion Ratio Lower Upper
117 100
82 66.0 53.6 80.4
119 33.4 27.2 40.8



#59
m/p-Xylene
Concen: 0.050 ppbv
RT: 12.362 min Scan# 3035
Delta R.T. -0.006 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 91 Resp: 11280
Ion Ratio Lower Upper
91 100
106 0.0 35.7 53.5#

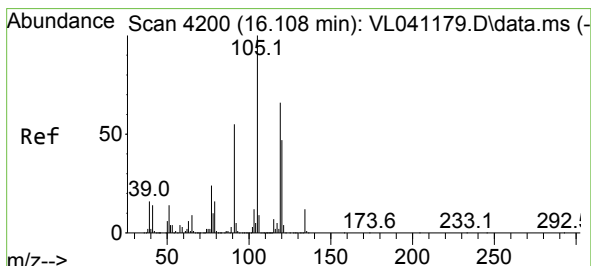
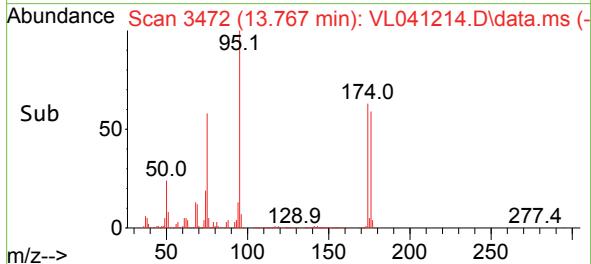
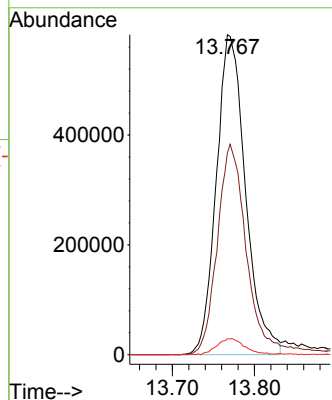
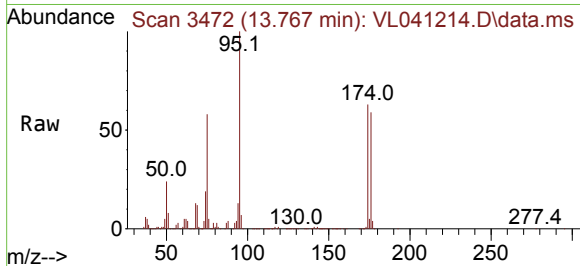




#68
1-Bromo-4-Fluorobenzene
Concen: 9.775 ppbv
RT: 13.767 min Scan# 3475
Delta R.T. -0.006 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Instrument :
MSVOA_L
ClientSampleId :
03-SS02

Tgt Ion: 95 Resp: 1444704
Ion Ratio Lower Upper
95 100
174 68.0 53.6 80.4
175 5.0 4.2 6.4



#74
1,2,4-Trimethylbenzene
Concen: 0.035 ppbv
RT: 16.101 min Scan# 4198
Delta R.T. -0.003 min
Lab File: VL041214.D
Acq: 6 May 2024 12:20

Tgt Ion: 105 Resp: 8338
Ion Ratio Lower Upper
105 100
120 53.9 37.8 56.6
91 7.9 44.3 66.5#
77 20.7 19.0 28.4

