

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL102323\
 Data File : VL040779.D
 Acq On : 23 Oct 2023 15:16
 Operator : SY/MD
 Sample : 05004-01 4X
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

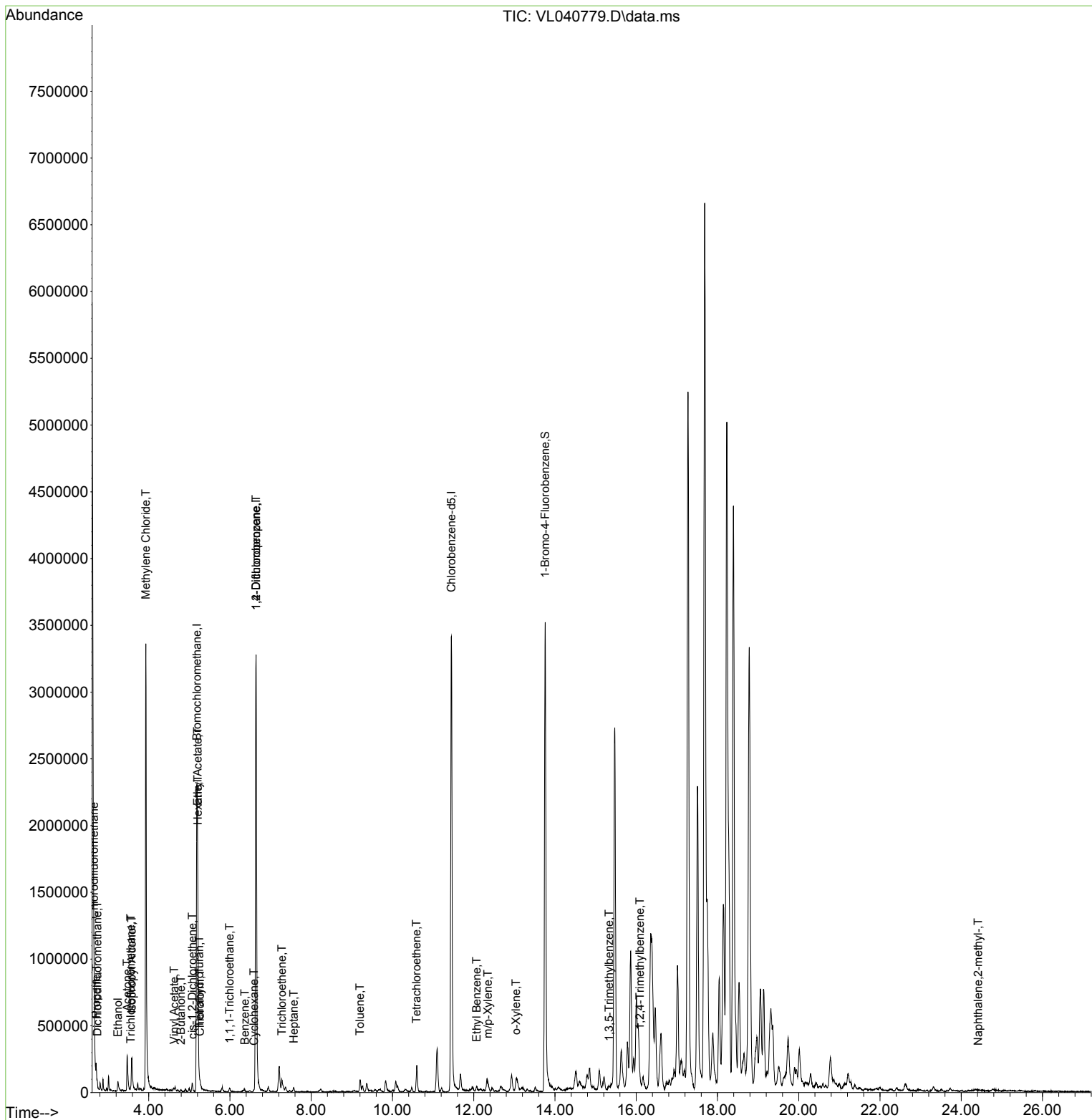
Quant Time: Oct 24 05:35:30 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Oct 12 00:21:08 2023
 Response via : Initial Calibration

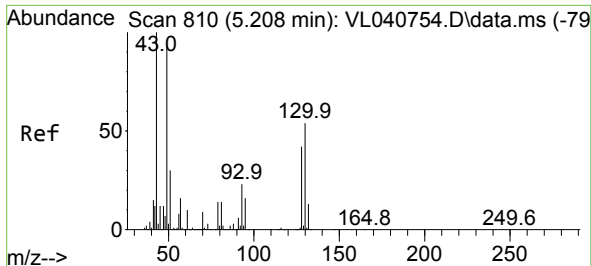
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) Bromochloromethane	5.185	49	959540	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	6.642	114	2674360	10.000	ppbv	-0.03
55) Chlorobenzene-d5	11.449	117	2426825	10.000	ppbv	-0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.761	95	1853218	10.378	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.735	85	23380	0.138	ppbv	96
3) Chlorodifluoromethane	2.655	51	88428	0.627	ppbv #	66
9) Propene	2.706	41	26330	0.503	ppbv #	76
10) Heptane	7.571	43	13000	0.099	ppbv	88
11) Trichlorofluoromethane	3.555	101	4277	0.033	ppbv	94
13) Ethanol	3.240	45	77259	6.534	ppbv	88
15) Acetone	3.468	43	283446	2.857	ppbv	100
19) Isopropyl Alcohol	3.584	45	289254	4.530	ppbv #	40
20) Methylene Chloride	3.931	84	1122300	27.161	ppbv	98
23) Vinyl Acetate	4.629	43	6053	0.048	ppbv #	56
25) Ethyl Acetate	5.205	43	394724	1.816	ppbv #	77
26) Hexane	5.208	57	552531	5.562	ppbv #	41
29) Chloroform	5.266	83	7320	0.051	ppbv	91
30) Cyclohexane	6.587	84	2748	0.033	ppbv #	1
31) cis-1,2-Dichloroethene	5.073	61	33973	0.371	ppbv	92
32) 1,1,1-Trichloroethane	5.989	97	10798	0.071	ppbv #	58
34) 2-Butanone	4.793	43	7139	0.059	ppbv #	1
36) Benzene	6.365	78	6725	0.033	ppbv #	80
38) Trichloroethene	7.275	130	5595	0.061	ppbv #	49
39) 1,2-Dichloropropane	6.642	63	613962	7.640	ppbv #	26
41) Tetrahydrofuran	5.243	42	3785	0.045	ppbv #	37
52) Tetrachloroethene	10.594	164	20196	0.242	ppbv	93
53) Toluene	9.201	91	68243	0.279	ppbv	97
58) Ethyl Benzene	12.069	91	20613	0.067	ppbv	88
59) m/p-Xylene	12.349	91	11699	0.047	ppbv #	30
60) o-Xylene	13.044	91	23914	0.100	ppbv #	30
73) 1,3,5-Trimethylbenzene	15.336	105	13443	0.054	ppbv	95
74) 1,2,4-Trimethylbenzene	16.092	105	25491	0.094	ppbv #	72
80) Naphthalene,2-methyl-	24.416	142	9435	0.153	ppbv	97

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

Quant Time: Oct 24 05:35:30 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL101123AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Oct 12 00:21:08 2023
Response via : Initial Calibration

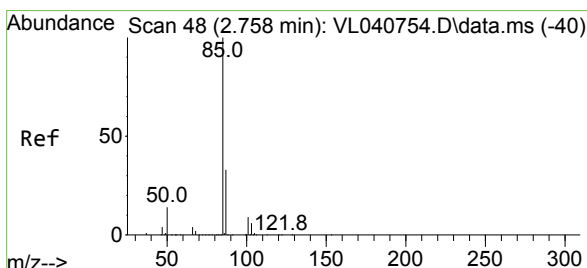
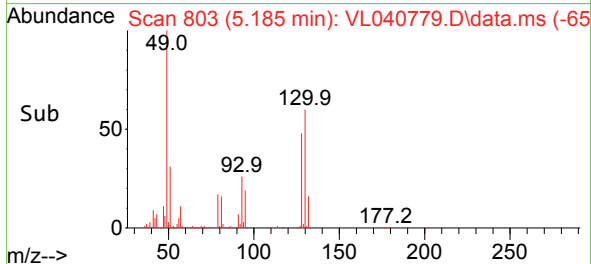
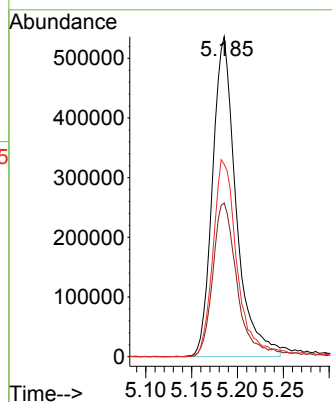
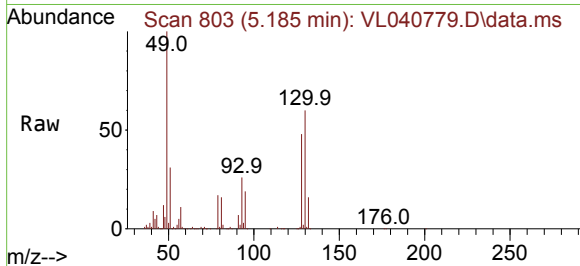




#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.185 min Scan# 80
 Delta R.T. -0.023 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

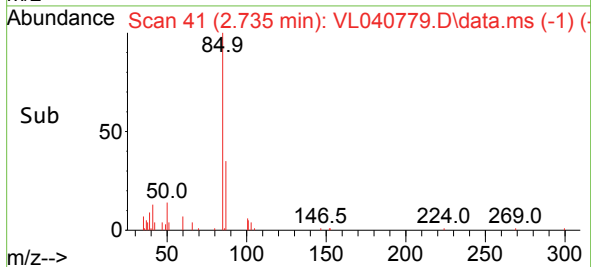
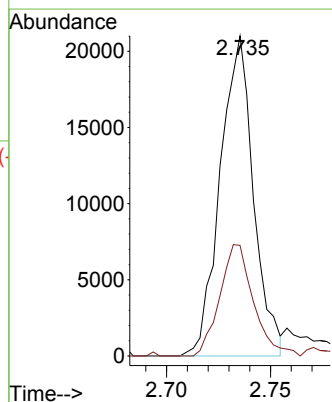
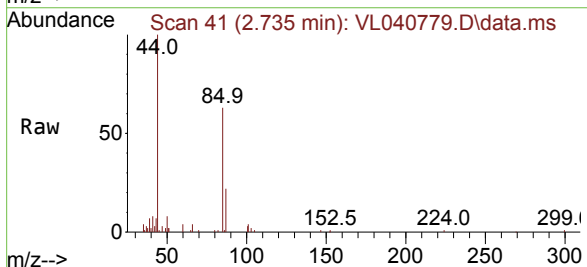
Instrument :
 MSVOA_L
 ClientSampleId :

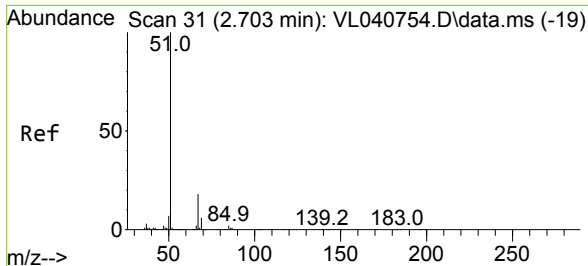
Tgt Ion: 49 Resp: 959540
 Ion Ratio Lower Upper
 49 100
 128 51.6 23.9 71.7
 130 65.0 30.7 92.1



#2
 Dichlorodifluoromethane
 Concen: 0.138 ppbv
 RT: 2.735 min Scan# 41
 Delta R.T. -0.022 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

Tgt Ion: 85 Resp: 23380
 Ion Ratio Lower Upper
 85 100
 87 34.5 26.0 39.0

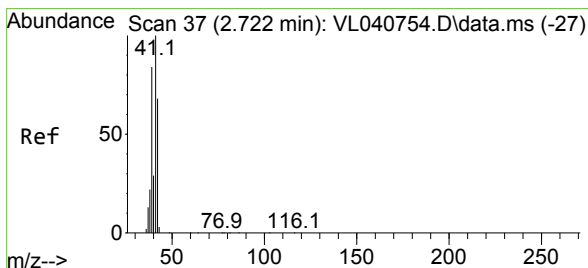
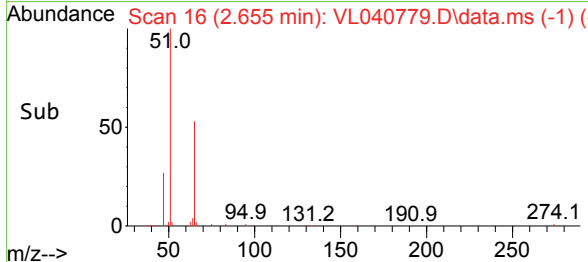
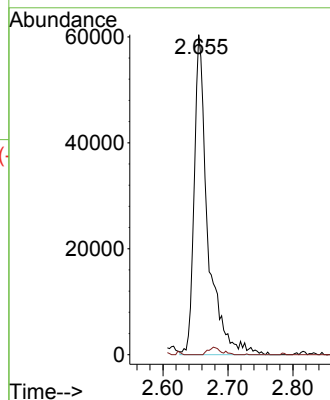
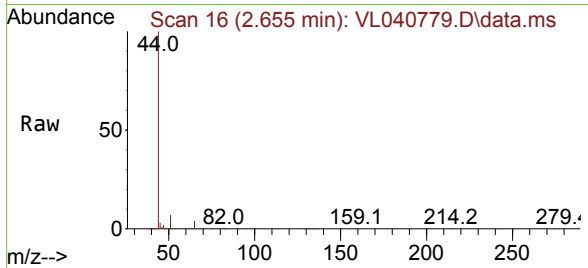




#3
Chlorodifluoromethane
Concen: 0.627 ppbv
RT: 2.655 min Scan# 1
Delta R.T. -0.048 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

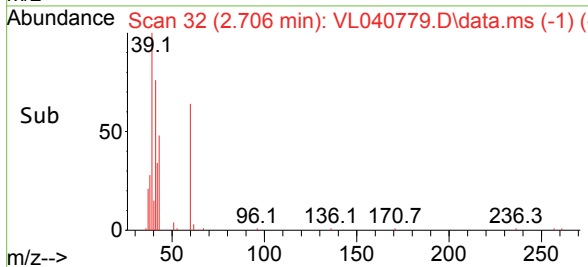
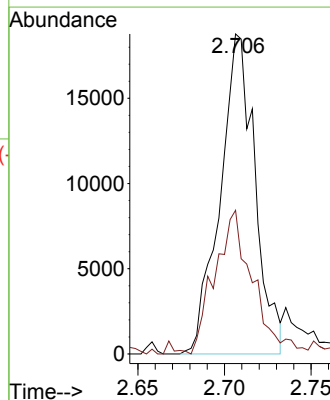
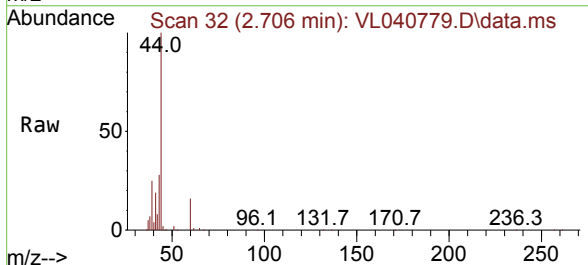
Instrument :
MSVOA_L
ClientSampleId :

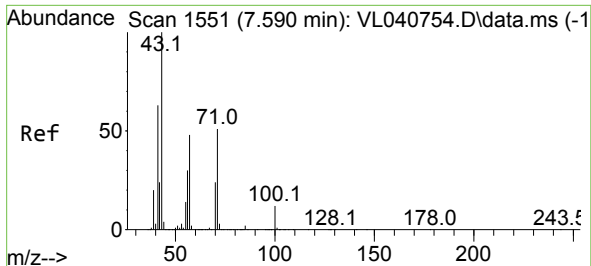
Tgt Ion: 51 Resp: 88428
Ion Ratio Lower Upper
51 100
67 2.2 13.8 20.6#



#9
Propene
Concen: 0.503 ppbv
RT: 2.706 min Scan# 32
Delta R.T. -0.016 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 41 Resp: 26330
Ion Ratio Lower Upper
41 100
42 51.2 57.1 85.7#

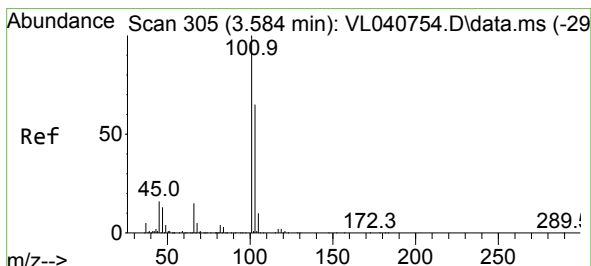
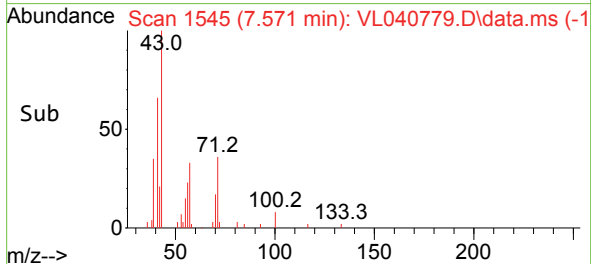
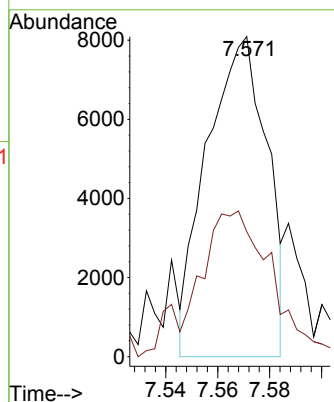
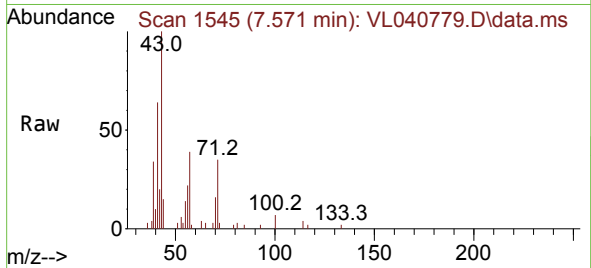




#10
Heptane
Concen: 0.099 ppbv
RT: 7.571 min Scan# 11
Delta R.T. -0.019 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

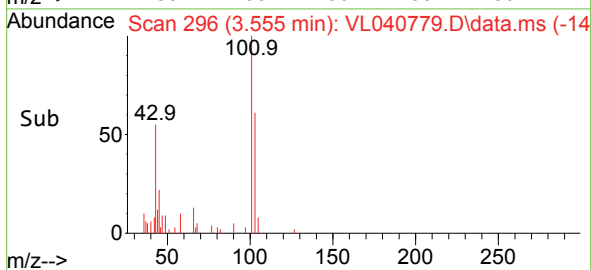
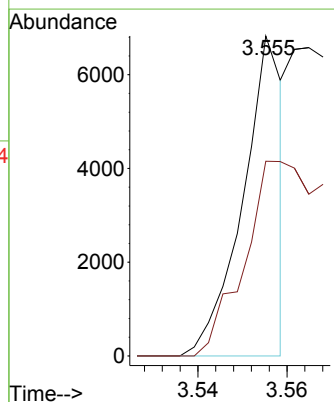
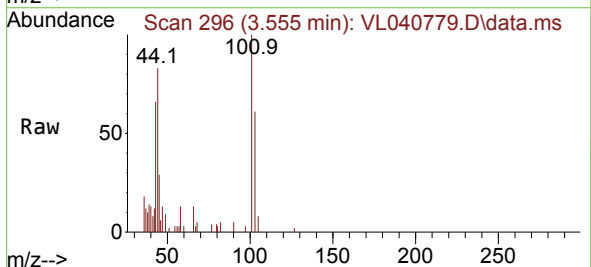
Instrument :
MSVOA_L
ClientSampleId :

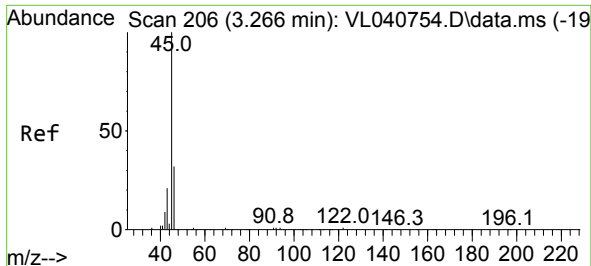
Tgt Ion: 43 Resp: 13000
Ion Ratio Lower Upper
43 100
57 58.0 40.0 60.0



#11
Trichlorofluoromethane
Concen: 0.033 ppbv
RT: 3.555 min Scan# 296
Delta R.T. -0.029 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion:101 Resp: 4277
Ion Ratio Lower Upper
101 100
103 60.8 52.2 78.2

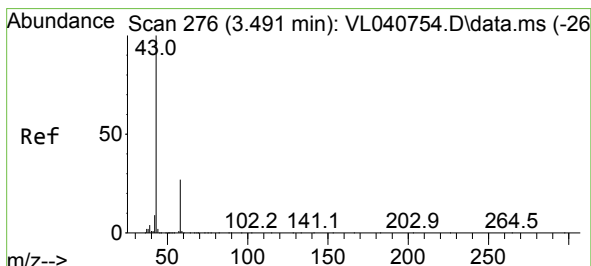
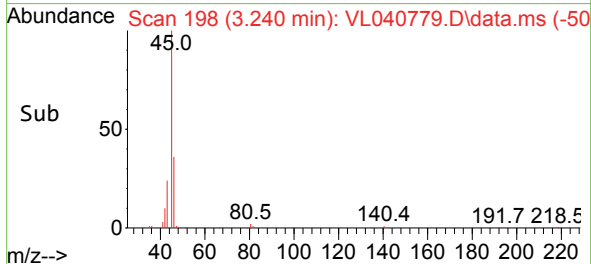
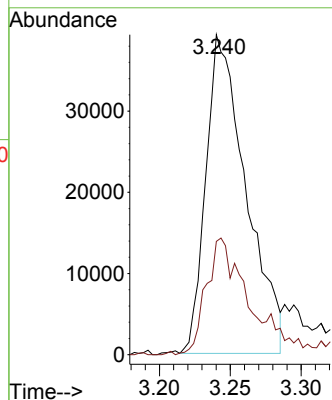
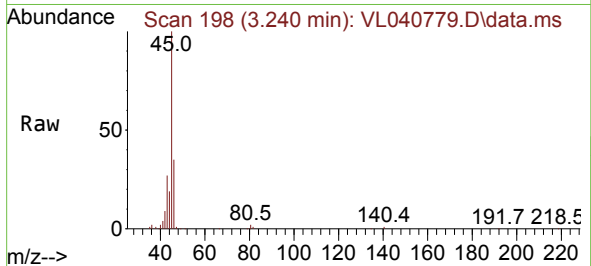




#13
Ethanol
Concen: 6.534 ppbv
RT: 3.240 min Scan# 198
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

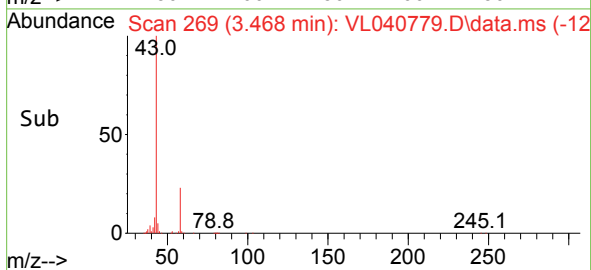
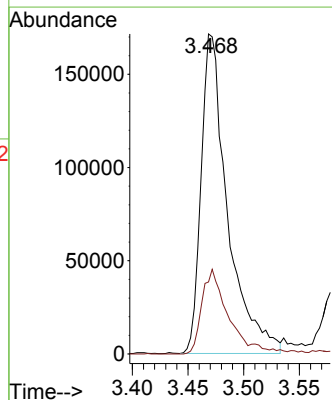
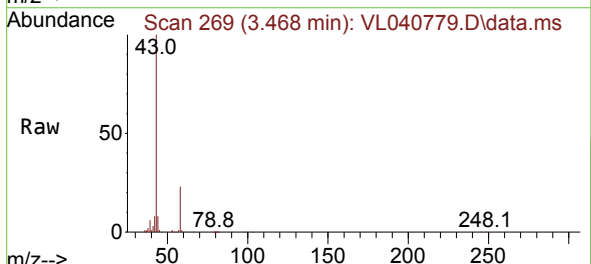
Instrument :
MSVOA_L
ClientSampleId :

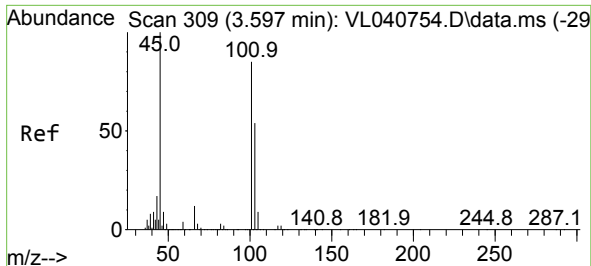
Tgt Ion: 45 Resp: 77259
Ion Ratio Lower Upper
45 100
46 43.2 14.6 58.2



#15
Acetone
Concen: 2.857 ppbv
RT: 3.468 min Scan# 269
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 43 Resp: 283446
Ion Ratio Lower Upper
43 100
58 27.2 21.6 32.4

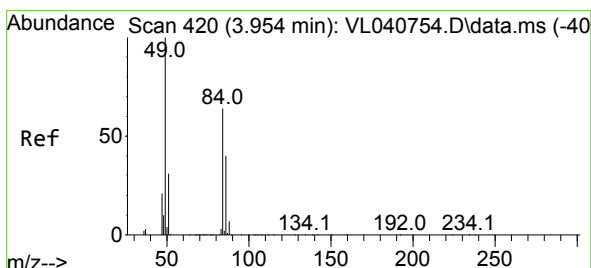
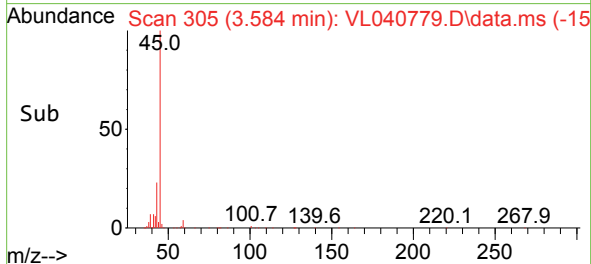
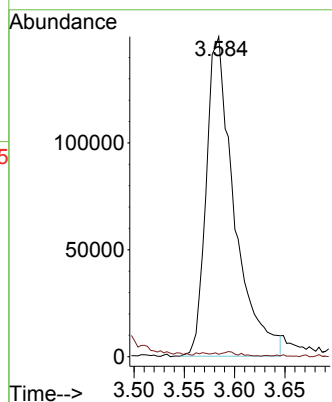
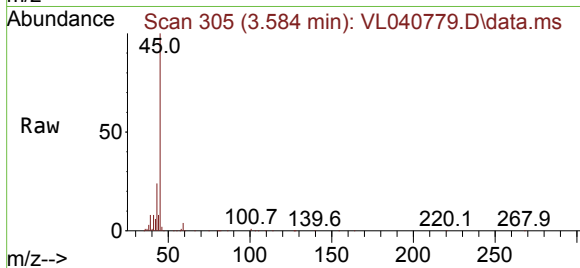




#19
Isopropyl Alcohol
Concen: 4.530 ppbv
RT: 3.584 min Scan# 309
Delta R.T. -0.013 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

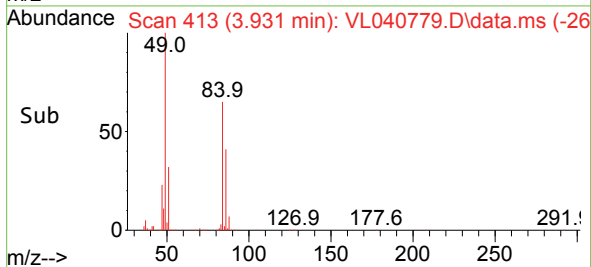
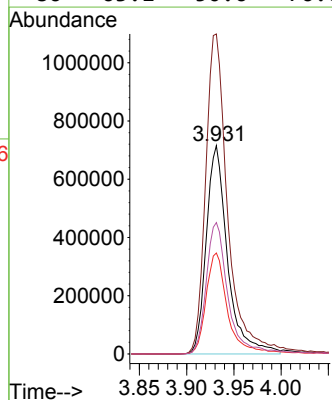
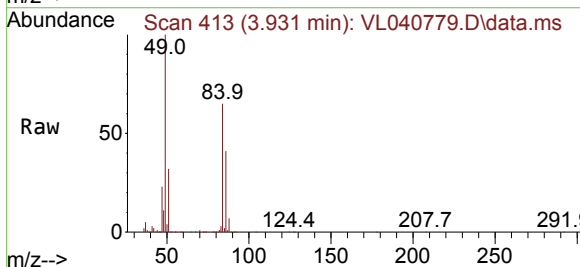
Instrument :
MSVOA_L
ClientSampleId :

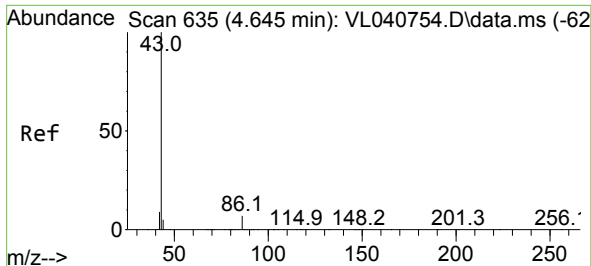
Tgt Ion: 45 Resp: 289254
Ion Ratio Lower Upper
45 100
58 1.7 30.3 45.5#



#20
Methylene Chloride
Concen: 27.161 ppbv
RT: 3.931 min Scan# 413
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

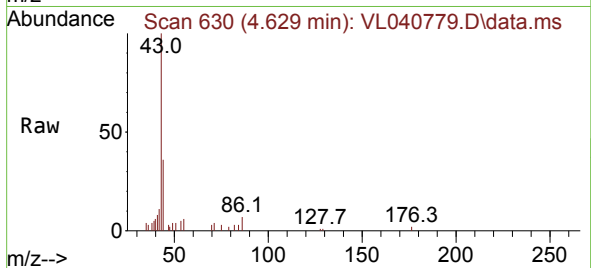
Tgt Ion: 84 Resp: 1122300
Ion Ratio Lower Upper
84 100
49 153.6 125.6 188.4
51 48.5 38.9 58.3
86 63.1 50.6 76.0



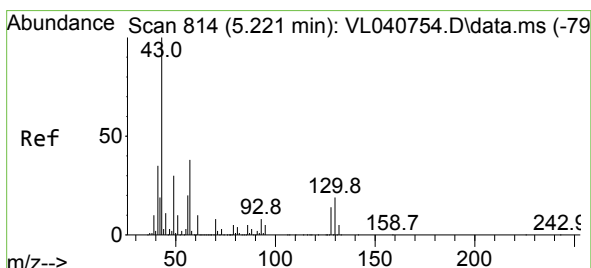
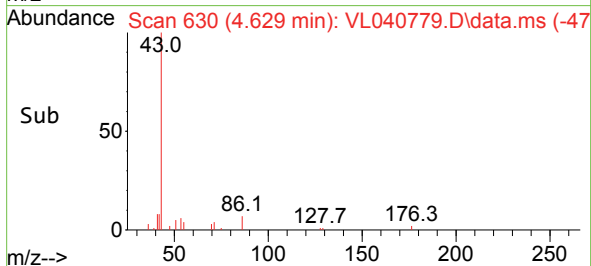
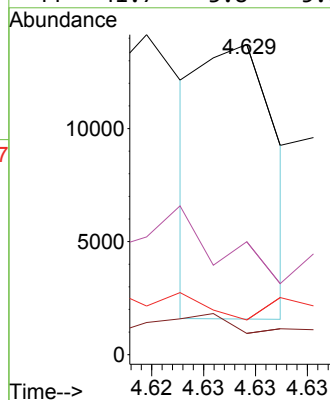


#23
 Vinyl Acetate
 Concen: 0.048 ppbv
 RT: 4.629 min Scan# 61
 Delta R.T. -0.016 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

Instrument :
 MSVOA_L
 ClientSampleId :

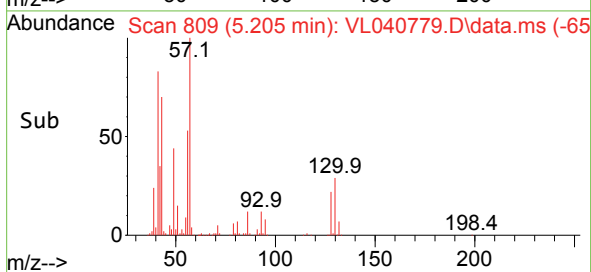
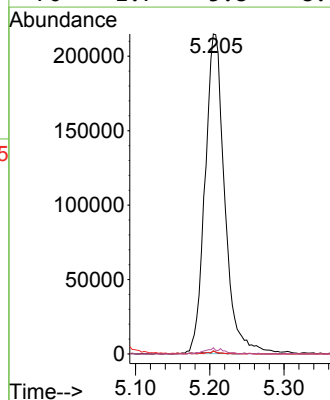
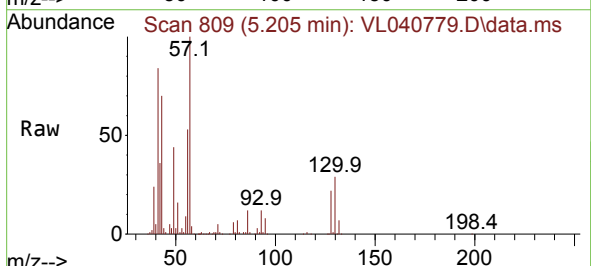


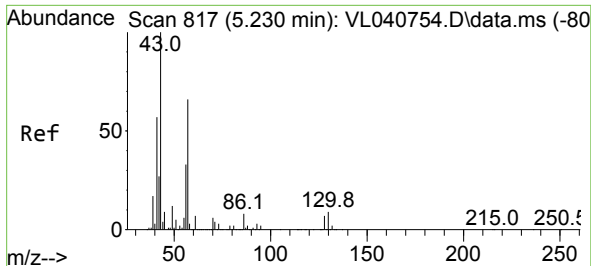
Tgt Ion: 43 Resp: 6053
 Ion Ratio Lower Upper
 43 100
 86 0.0 4.9 7.3#
 42 0.0 7.8 11.6#
 44 41.7 3.8 5.6#



#25
 Ethyl Acetate
 Concen: 1.816 ppbv
 RT: 5.205 min Scan# 809
 Delta R.T. -0.016 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

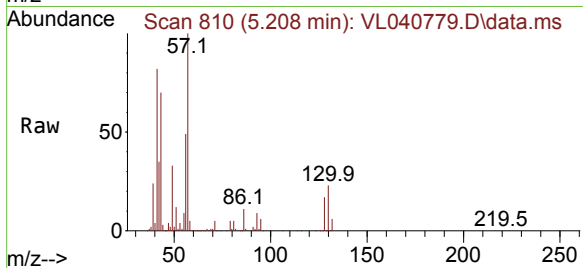
Tgt Ion: 43 Resp: 394724
 Ion Ratio Lower Upper
 43 100
 45 0.7 8.2 12.4#
 61 0.7 8.2 12.2#
 70 1.7 5.8 8.6#



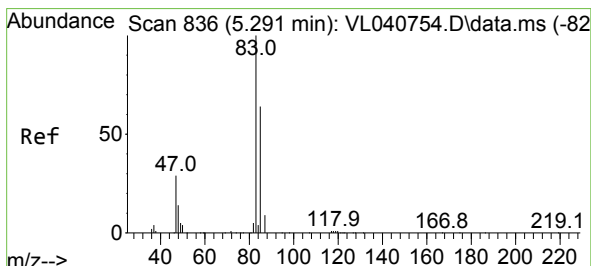
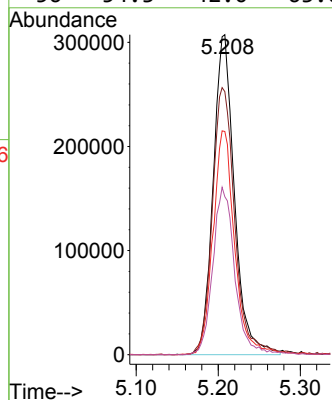
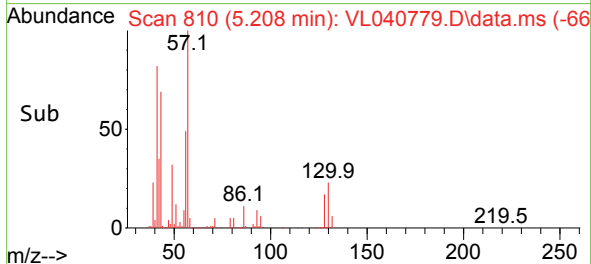


#26
Hexane
Concen: 5.562 ppbv
RT: 5.208 min Scan# 81
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Instrument :
MSVOA_L
ClientSampleId :

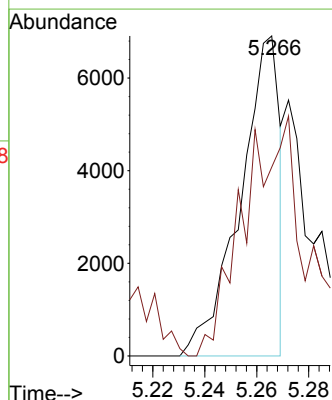
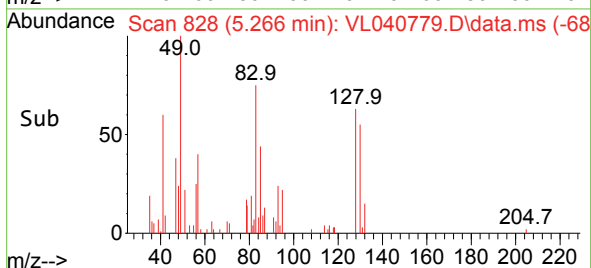
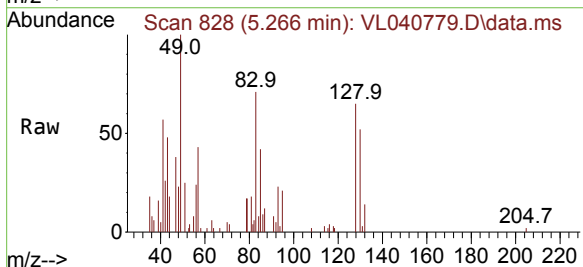


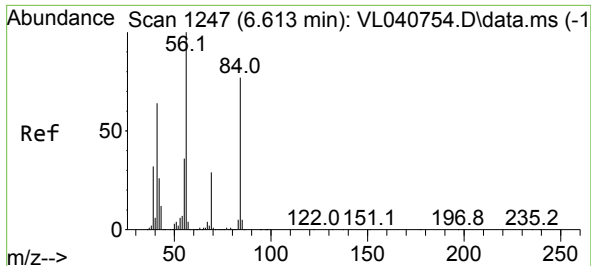
Tgt Ion: 57 Resp: 552531
Ion Ratio Lower Upper
57 100
41 89.2 71.4 107.2
43 72.4 182.3 273.5#
56 54.3 42.0 63.0



#29
Chloroform
Concen: 0.051 ppbv
RT: 5.266 min Scan# 828
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 83 Resp: 7320
Ion Ratio Lower Upper
83 100
85 56.7 51.3 76.9

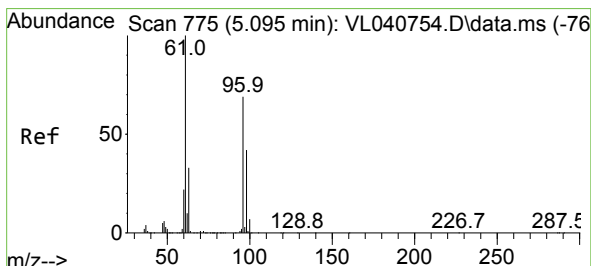
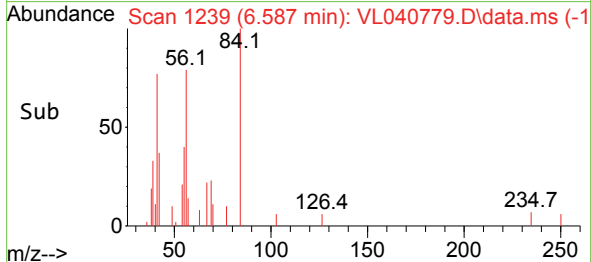
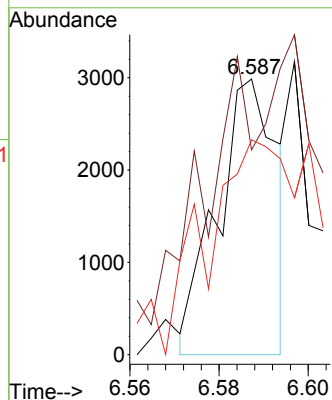
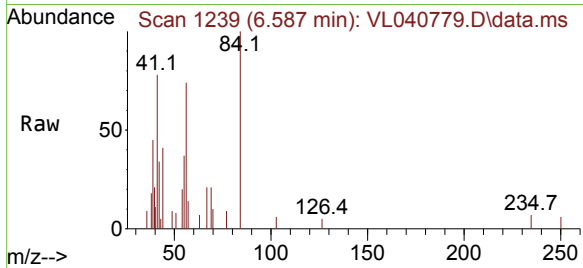




#30
Cyclohexane
Concen: 0.033 ppbv
RT: 6.587 min Scan# 11
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

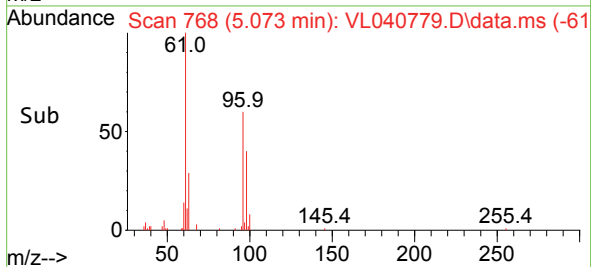
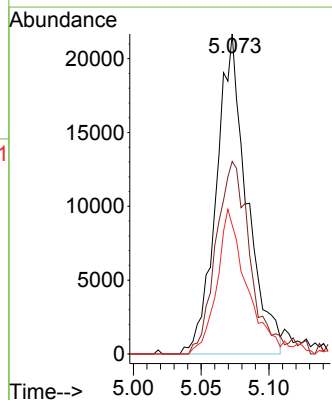
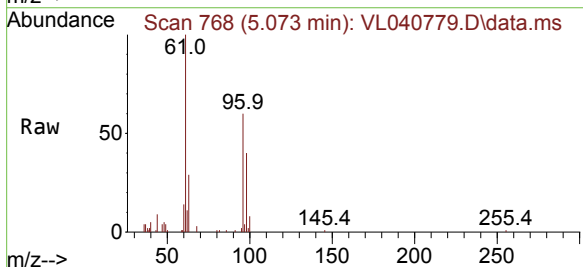
Instrument :
MSVOA_L
ClientSampleId :

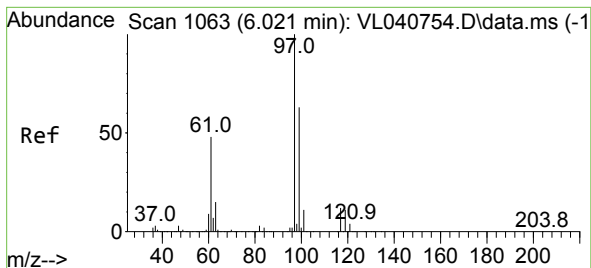
Tgt Ion: 84 Resp: 2748
Ion Ratio Lower Upper
84 100
56 0.0 110.3 165.5#
41 194.0 67.4 101.2#



#31
cis-1,2-Dichloroethene
Concen: 0.371 ppbv
RT: 5.073 min Scan# 768
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 61 Resp: 33973
Ion Ratio Lower Upper
61 100
96 60.1 55.1 82.7
98 40.3 33.5 50.3





#32

1,1,1-Trichloroethane

Concen: 0.071 ppbv

RT: 5.989 min Scan# 1053

Delta R.T. -0.032 min

Lab File: VL040779.D

Acq: 23 Oct 2023 15:16

Instrument :

MSVOA_L

ClientSampleId :

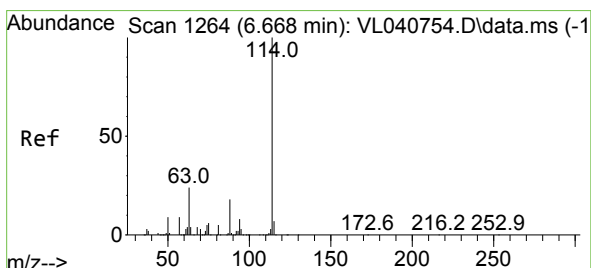
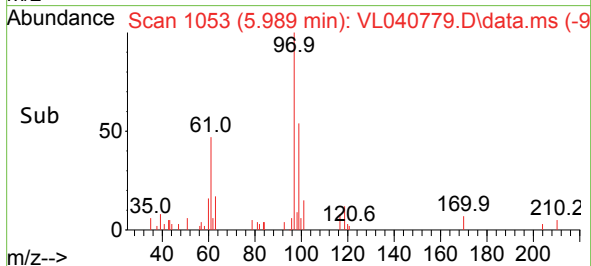
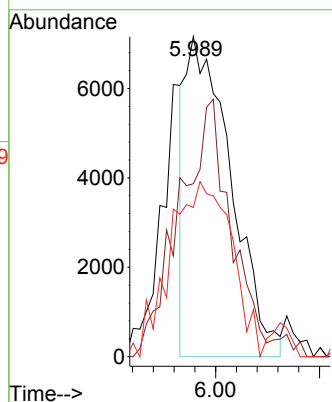
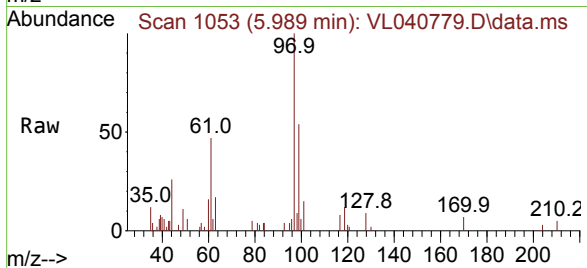
Tgt Ion: 97 Resp: 10798

Ion Ratio Lower Upper

97 100

99 94.2 51.8 77.6#

61 80.5 38.6 58.0#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.642 min Scan# 1256

Delta R.T. -0.026 min

Lab File: VL040779.D

Acq: 23 Oct 2023 15:16

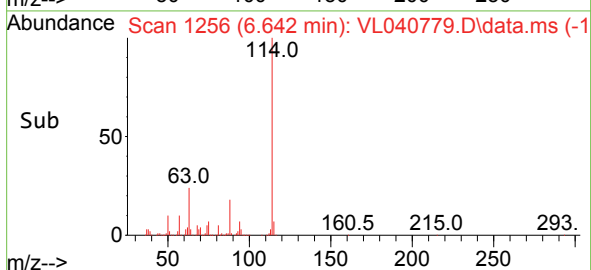
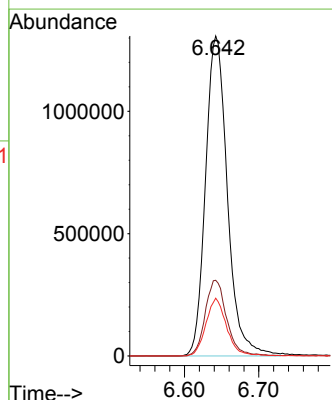
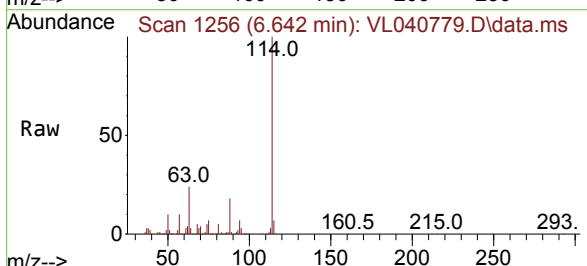
Tgt Ion: 114 Resp: 2674360

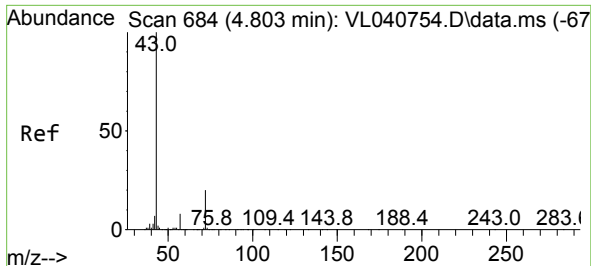
Ion Ratio Lower Upper

114 100

63 23.4 19.8 29.6

88 17.3 14.2 21.2

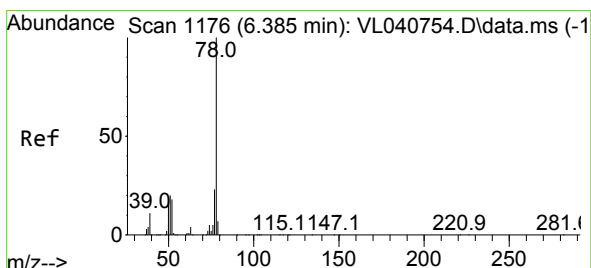
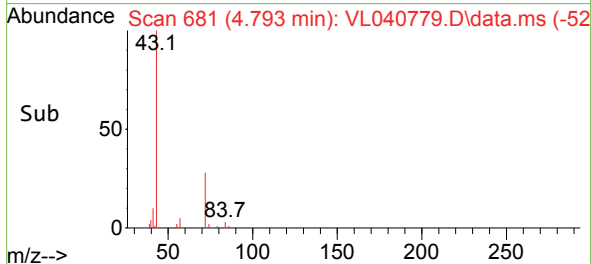
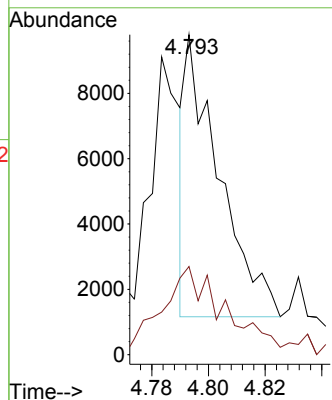
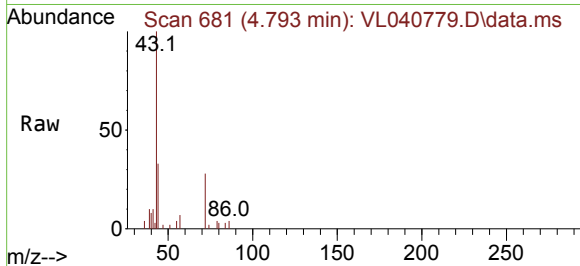




#34
2-Butanone
Concen: 0.059 ppbv
RT: 4.793 min Scan# 61
Delta R.T. -0.010 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

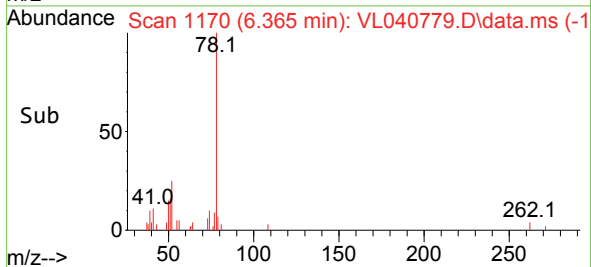
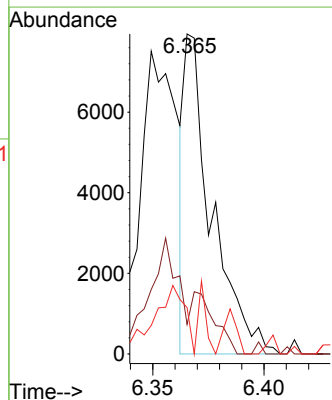
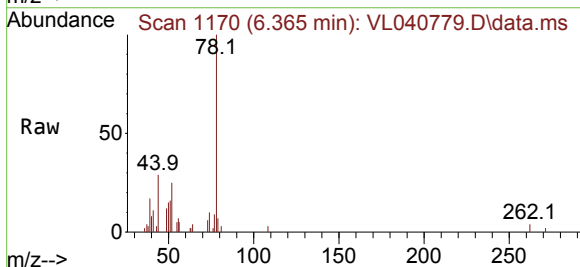
Instrument :
MSVOA_L
ClientSampleId :

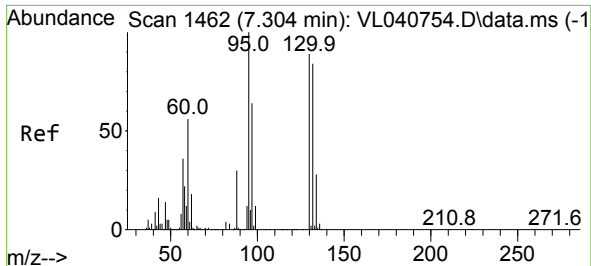
Tgt Ion: 43 Resp: 7139
Ion Ratio Lower Upper
43 100
72 67.2 16.8 25.2#



#36
Benzene
Concen: 0.033 ppbv
RT: 6.365 min Scan# 1170
Delta R.T. -0.019 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

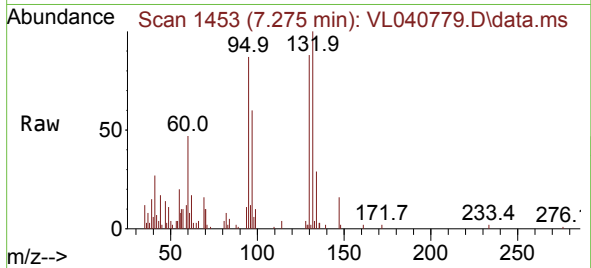
Tgt Ion: 78 Resp: 6725
Ion Ratio Lower Upper
78 100
77 9.3 18.4 27.6#
50 14.5 15.0 22.4#



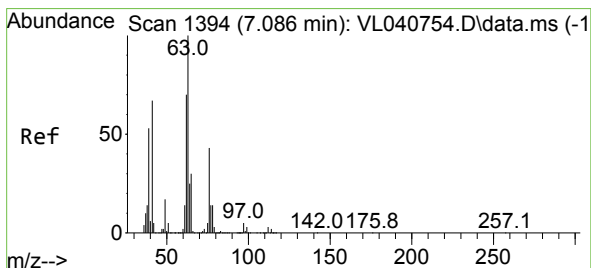
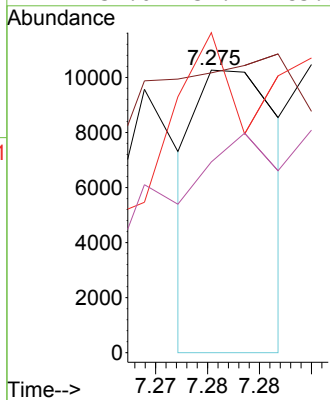
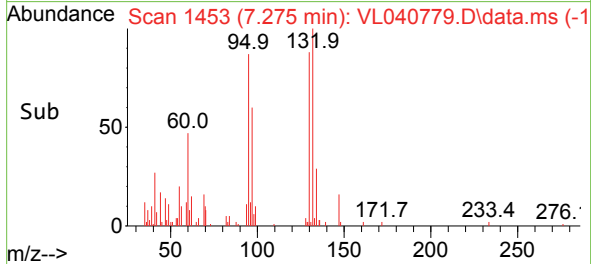


#38
 Trichloroethene
 Concen: 0.061 ppbv
 RT: 7.275 min Scan# 1462
 Delta R.T. -0.029 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

Instrument :
 MSVOA_L
 ClientSampleId :

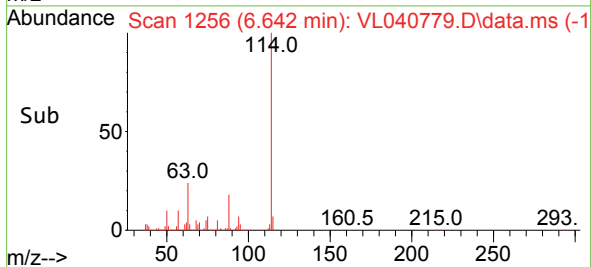
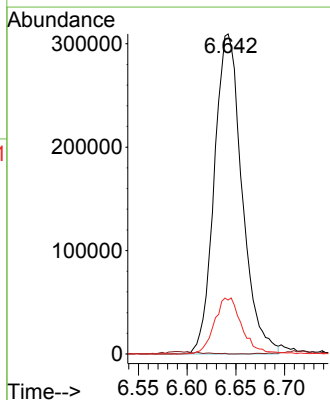
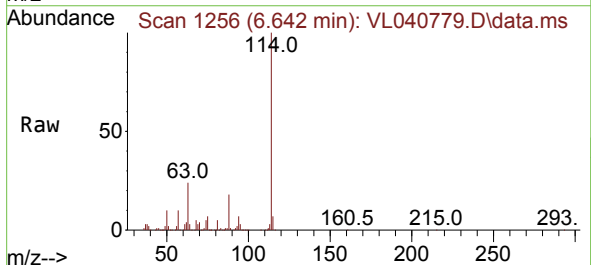


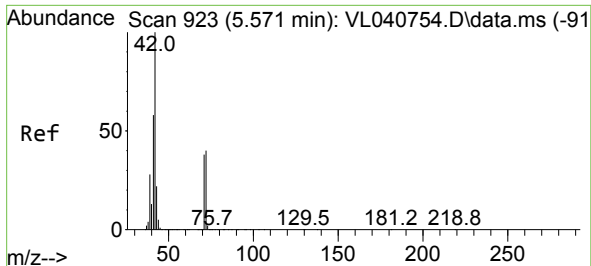
Tgt Ion:130 Resp: 5595
 Ion Ratio Lower Upper
 130 100
 95 7.5 89.4 134.2#
 132 78.9 74.8 112.2
 97 52.0 57.2 85.8#



#39
 1,2-Dichloropropane
 Concen: 7.640 ppbv
 RT: 6.642 min Scan# 1256
 Delta R.T. -0.444 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

Tgt Ion: 63 Resp: 613962
 Ion Ratio Lower Upper
 63 100
 41 0.0 53.7 80.5#
 62 16.9 55.7 83.5#

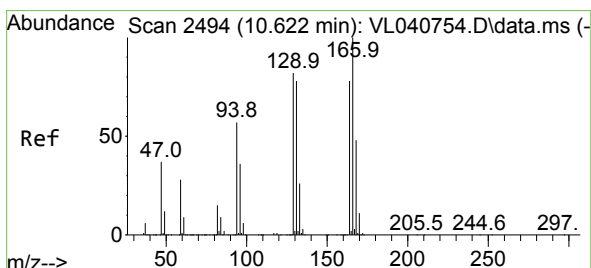
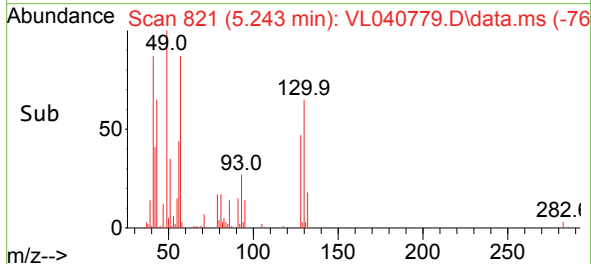
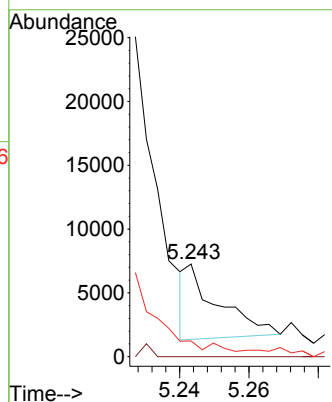
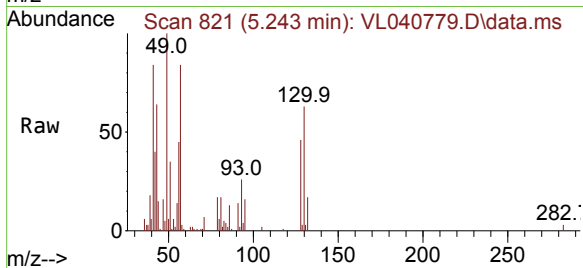




#41
Tetrahydrofuran
Concen: 0.045 ppbv
RT: 5.243 min Scan# 81
Delta R.T. -0.328 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

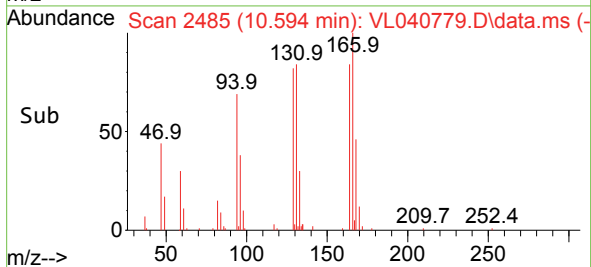
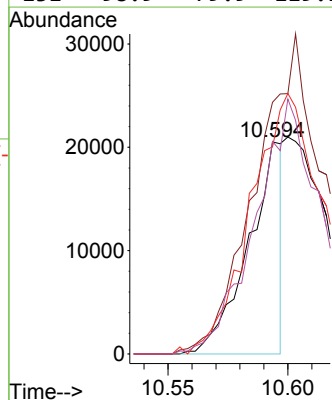
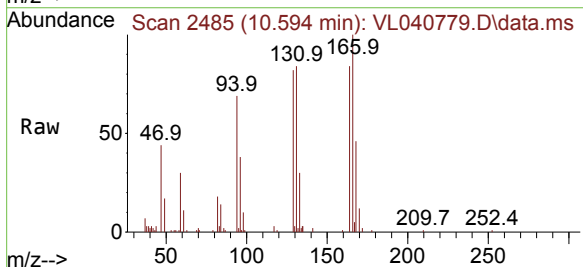
Instrument :
MSVOA_L
ClientSampleId :

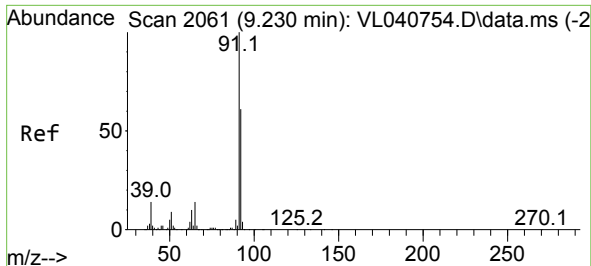
Tgt Ion: 42 Resp: 3785
Ion Ratio Lower Upper
42 100
72 0.0 31.1 46.7#
71 0.0 29.7 44.5#



#52
Tetrachloroethene
Concen: 0.242 ppbv
RT: 10.594 min Scan# 2485
Delta R.T. -0.029 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 164 Resp: 20196
Ion Ratio Lower Upper
164 100
166 116.8 102.4 153.6
129 94.3 84.2 126.4
131 98.9 79.9 119.9

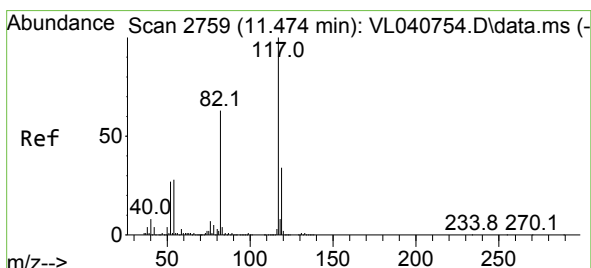
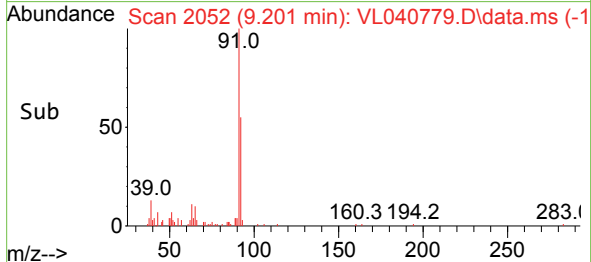
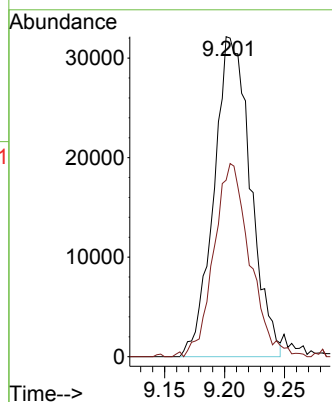
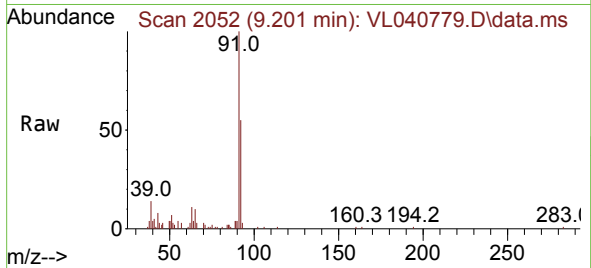




#53
Toluene
Concen: 0.279 ppbv
RT: 9.201 min Scan# 2061
Delta R.T. -0.029 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

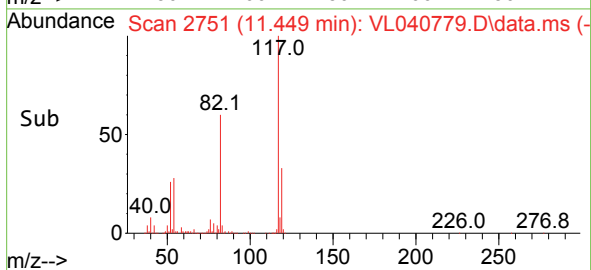
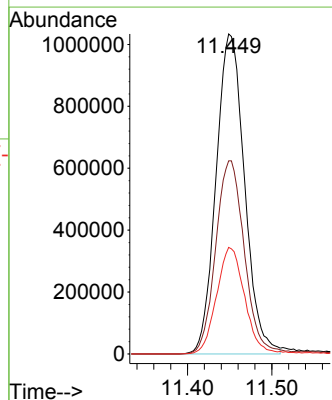
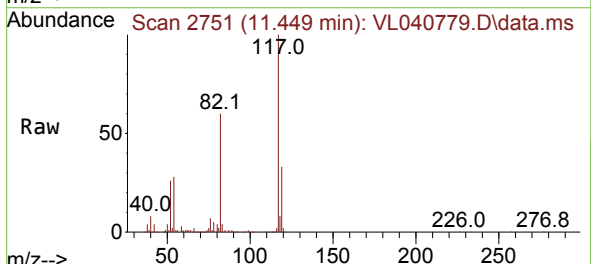
Instrument :
MSVOA_L
ClientSampleId :

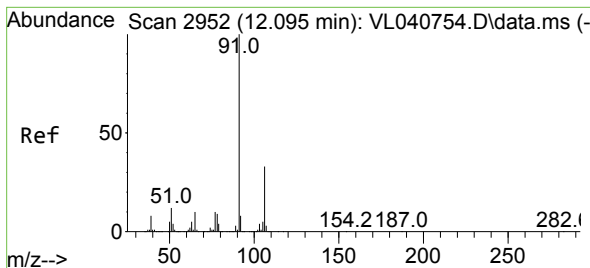
Tgt Ion: 91 Resp: 68243
Ion Ratio Lower Upper
91 100
92 60.0 50.2 75.2



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.449 min Scan# 2751
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 117 Resp: 2426825
Ion Ratio Lower Upper
117 100
82 61.5 46.6 70.0
119 33.2 26.0 39.0

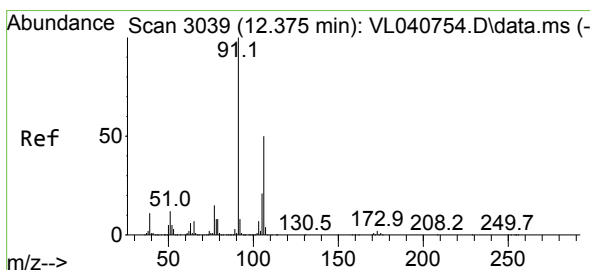
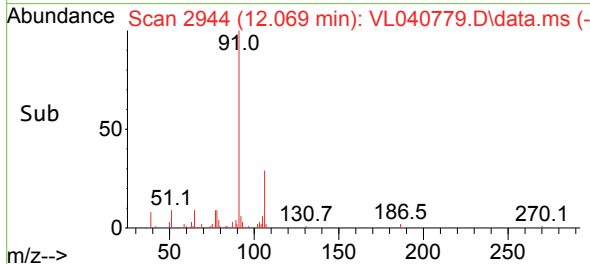
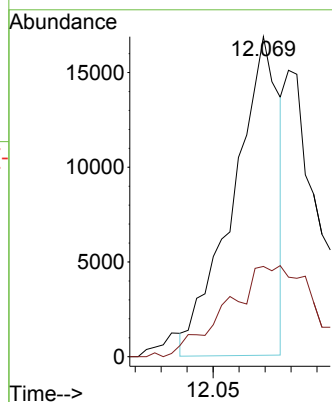
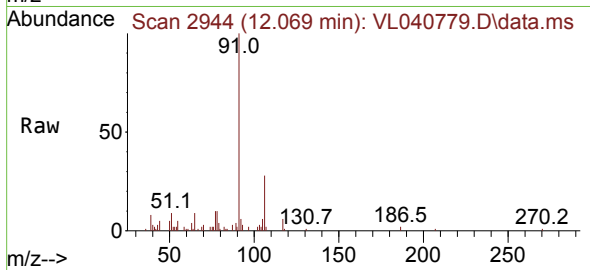




#58
Ethyl Benzene
Concen: 0.067 ppbv
RT: 12.069 min Scan# 2952
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

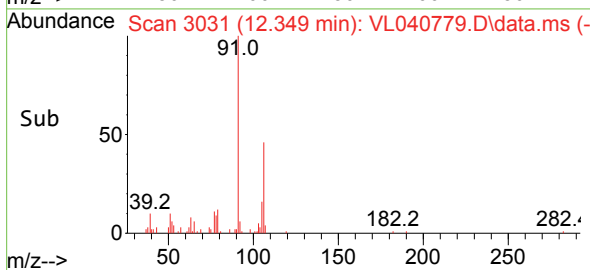
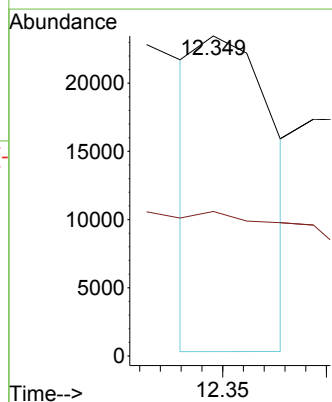
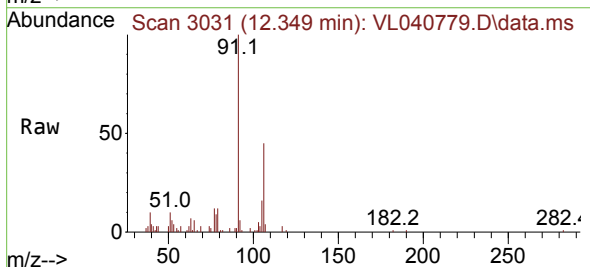
Instrument :
MSVOA_L
ClientSampleId :

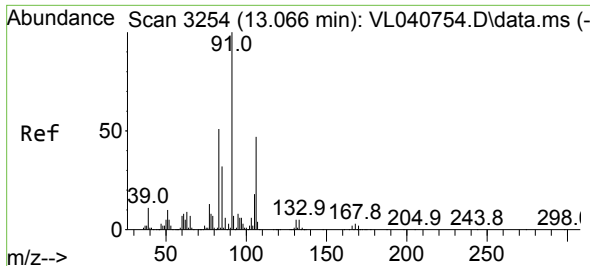
Tgt Ion: 91 Resp: 20613
Ion Ratio Lower Upper
91 100
106 26.7 26.7 40.1



#59
m/p-Xylene
Concen: 0.047 ppbv
RT: 12.349 min Scan# 3031
Delta R.T. -0.026 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 91 Resp: 11699
Ion Ratio Lower Upper
91 100
106 0.0 37.7 56.5#

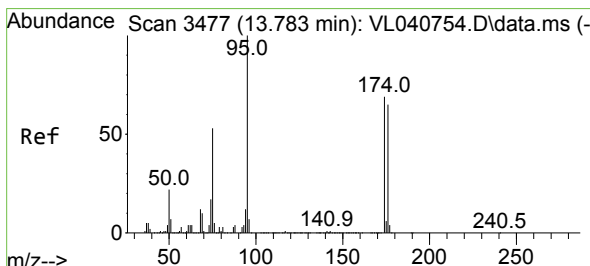
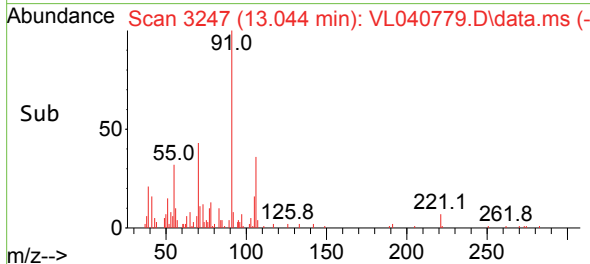
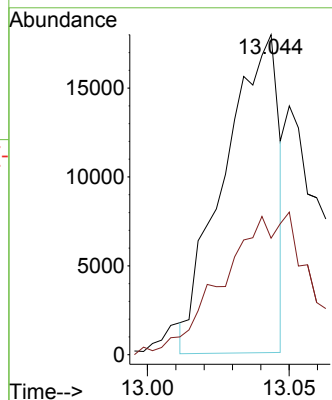
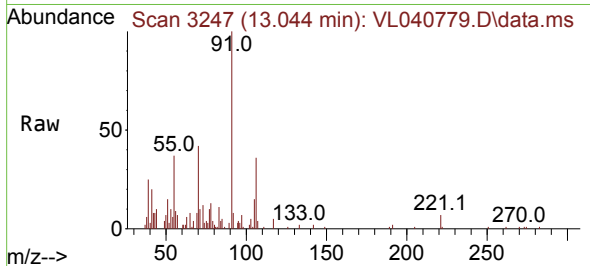




#60
o-Xylene
Concen: 0.100 ppbv
RT: 13.044 min Scan# 31
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

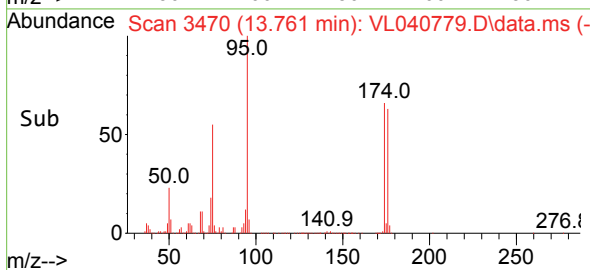
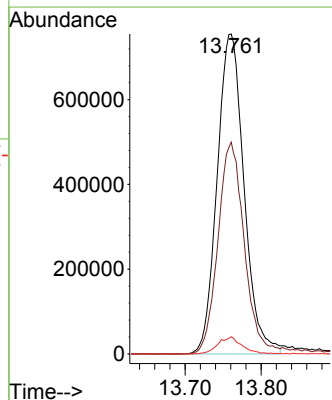
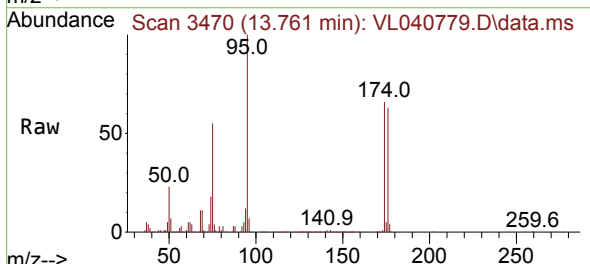
Instrument :
MSVOA_L
ClientSampleId :

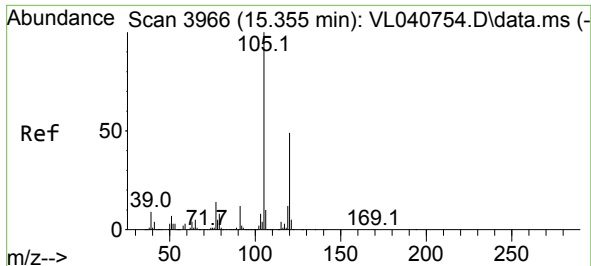
Tgt Ion: 91 Resp: 23914
Ion Ratio Lower Upper
91 100
106 0.0 23.5 70.5#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.378 ppbv
RT: 13.761 min Scan# 3470
Delta R.T. -0.022 min
Lab File: VL040779.D
Acq: 23 Oct 2023 15:16

Tgt Ion: 95 Resp: 1853218
Ion Ratio Lower Upper
95 100
174 67.1 54.7 82.1
175 4.8 4.2 6.4

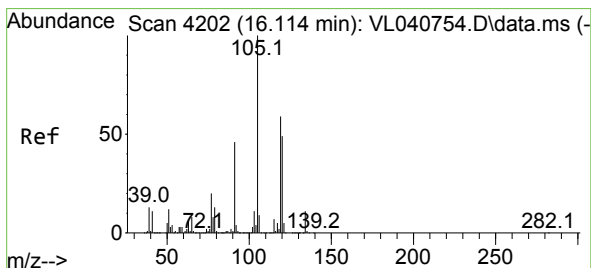
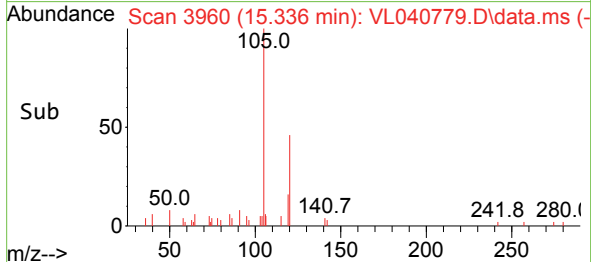
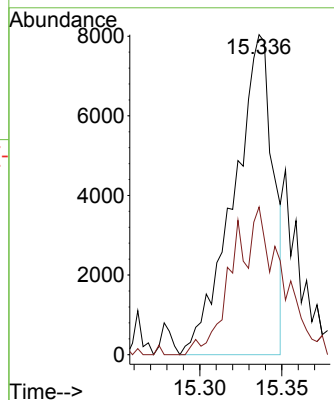
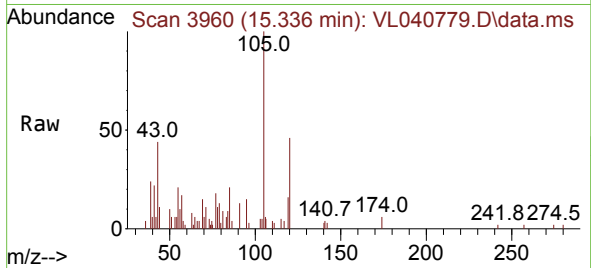




#73
 1,3,5-Trimethylbenzene
 Concen: 0.054 ppbv
 RT: 15.336 min Scan# 3960
 Delta R.T. -0.019 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

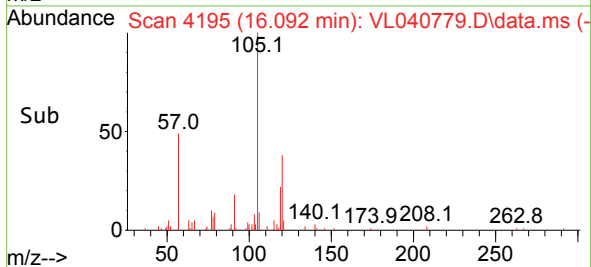
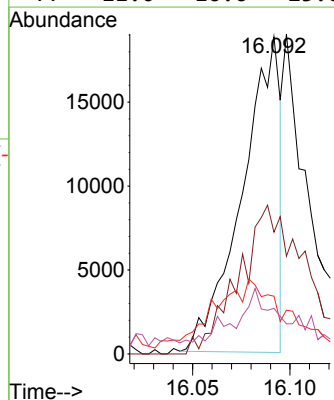
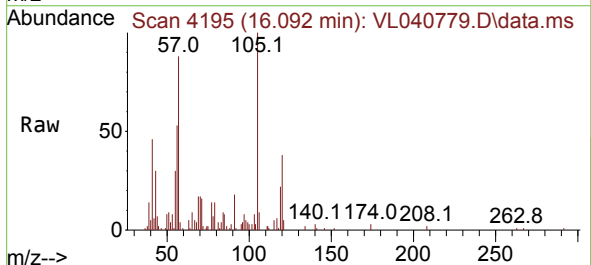
Instrument :
 MSVOA_L
 ClientSampleId :

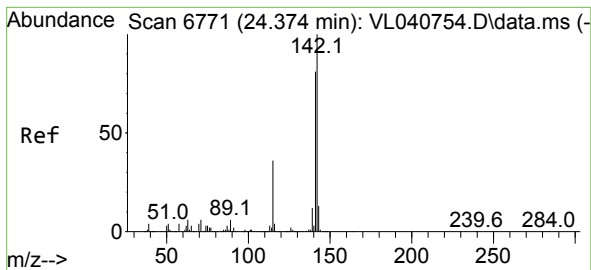
Tgt Ion:105 Resp: 13443
 Ion Ratio Lower Upper
 105 100
 120 46.1 39.4 59.2



#74
 1,2,4-Trimethylbenzene
 Concen: 0.094 ppbv
 RT: 16.092 min Scan# 4195
 Delta R.T. -0.022 min
 Lab File: VL040779.D
 Acq: 23 Oct 2023 15:16

Tgt Ion:105 Resp: 25491
 Ion Ratio Lower Upper
 105 100
 120 43.7 39.4 59.2
 91 14.0 38.6 58.0#
 77 11.0 16.6 25.0#





#80

Naphthalene, 2-methyl-

Concen: 0.153 ppbv

RT: 24.416 min Scan# 61

Delta R.T. 0.042 min

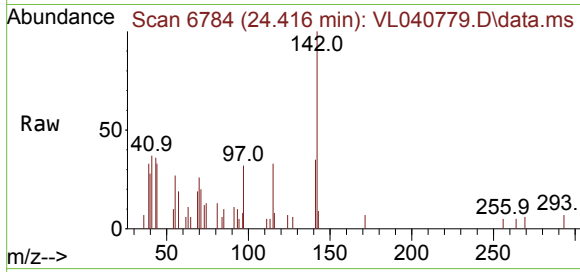
Lab File: VL040779.D

Acq: 23 Oct 2023 15:16

Instrument :

MSVOA_L

ClientSampleId :



Tgt Ion: 142 Resp: 9435

Ion Ratio Lower Upper

142 100

141 80.3 66.3 99.5

115 35.8 30.0 45.0

