

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL051223\
 Data File : VL040422.D
 Acq On : 12 May 2023 17:29
 Operator : SY/MD
 Sample : 02785-02
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

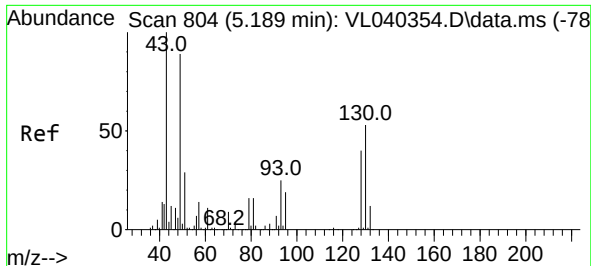
Quant Time: May 15 00:43:01 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Thu Apr 13 14:37:02 2023
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	5.179	49	1065623	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.645	114	2655405	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.465	117	2271000	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.780	95	1796731	9.567	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.700%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.710	85	47993	0.250	ppbv	99
3) Chlorodifluoromethane	2.655	51	108345	0.778	ppbv #	77
4) Chloromethane	2.797	50	38742	0.440	ppbv	95
9) Propene	2.851	41	182257	3.313	ppbv	96
10) Heptane	7.578	43	21139	0.169	ppbv	90
11) Trichlorofluoromethane	3.546	101	38988	0.200	ppbv	94
12) 1,1,2-Trichlorotrifluo...	4.047	101	8469	0.062	ppbv	98
13) Ethanol	3.218	45	435388	94.806	ppbv	98
15) Acetone	3.449	43	1301611	8.624	ppbv	93
17) tert-Butyl alcohol	3.874	59	13546	0.098	ppbv #	72
19) Isopropyl Alcohol	3.559	45	1041315	15.120	ppbv #	96
20) Methylene Chloride	3.915	84	1974090	32.761	ppbv	99
21) Allyl Chloride	3.919	41	68155	0.795	ppbv #	26
23) Vinyl Acetate	4.604	43	70466	1.834	ppbv #	47
25) Ethyl Acetate	5.202	43	1164636	4.586	ppbv #	76
26) Hexane	5.202	57	1715482	16.023	ppbv #	36
30) Cyclohexane	6.584	84	8031	0.097	ppbv #	1
34) 2-Butanone	4.777	43	83078	0.580	ppbv	96
35) Carbon Tetrachloride	6.484	117	9806	0.052	ppbv	96
36) Benzene	6.362	78	71333	0.329	ppbv	94
39) 1,2-Dichloropropane	6.645	63	670406	7.864	ppbv #	25
41) Tetrahydrofuran	5.202	42	618702	7.890	ppbv #	48
44) 2,2,4-Trimethylpentane	7.324	57	42953	0.119	ppbv #	5
53) Toluene	9.221	91	150988	0.657	ppbv	98
60) o-Xylene	13.057	91	11757	0.048	ppbv #	36
74) 1,2,4-Trimethylbenzene	16.108	105	17455	0.061	ppbv #	66

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

Quant Time: May 15 00:43:01 2023
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041323AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Thu Apr 13 14:37:02 2023
Response via : Initial Calibration

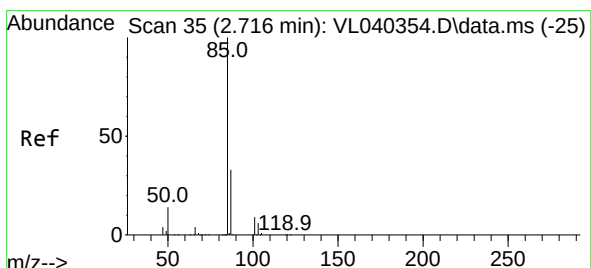
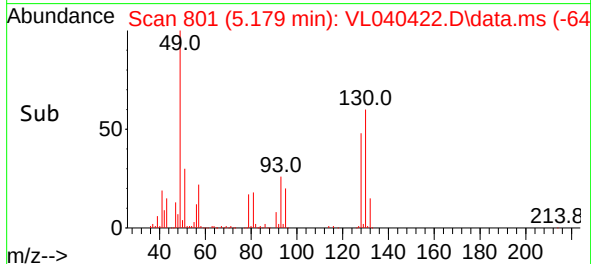
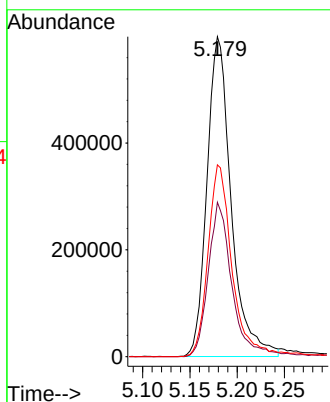
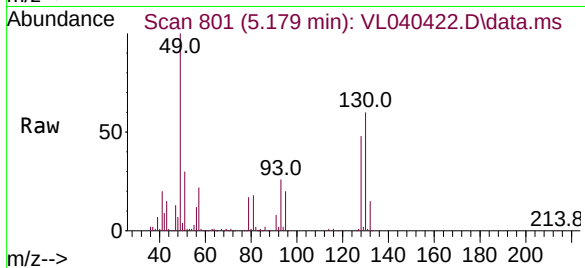




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.179 min Scan# 80
Delta R.T. -0.010 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

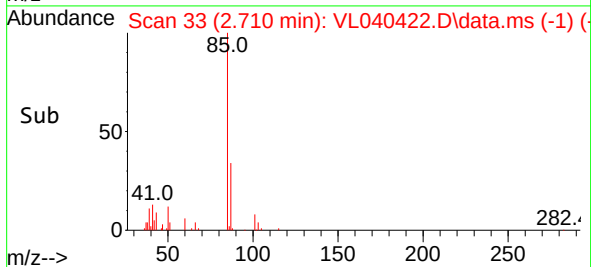
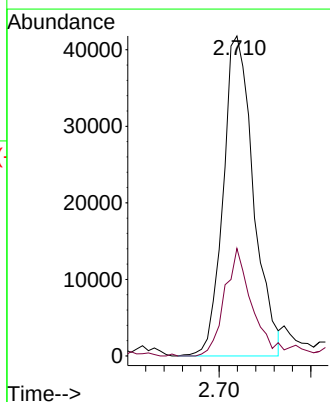
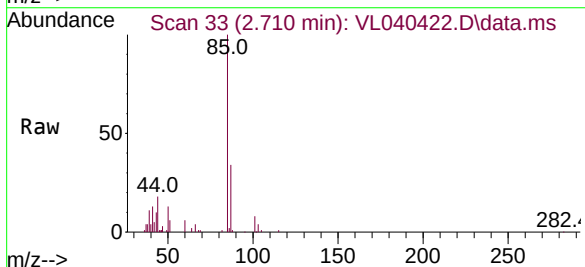
Instrument :
MSVOA_L
ClientSampleId :
IA1

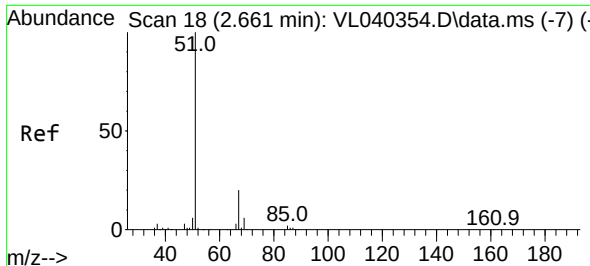
Tgt Ion: 49 Resp: 1065623
Ion Ratio Lower Upper
49 100
128 48.6 23.7 71.1
130 61.5 29.9 89.8



#2
Dichlorodifluoromethane
Concen: 0.250 ppbv
RT: 2.710 min Scan# 33
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 85 Resp: 47993
Ion Ratio Lower Upper
85 100
87 33.6 26.6 40.0

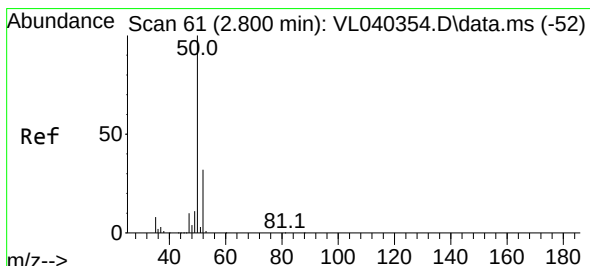
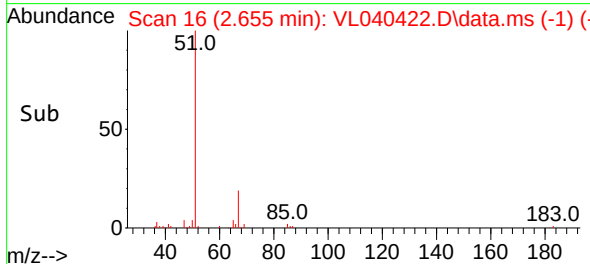
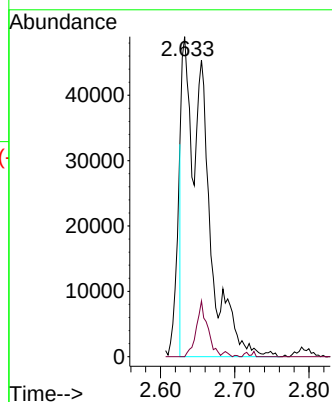
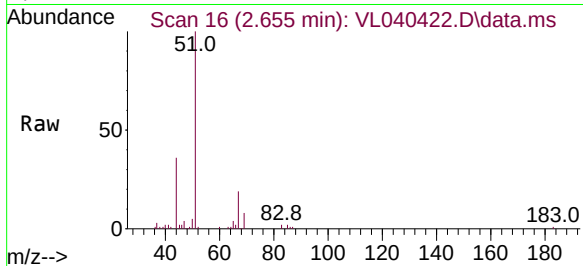




#3
Chlorodifluoromethane
Concen: 0.778 ppbv
RT: 2.655 min Scan# 10
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

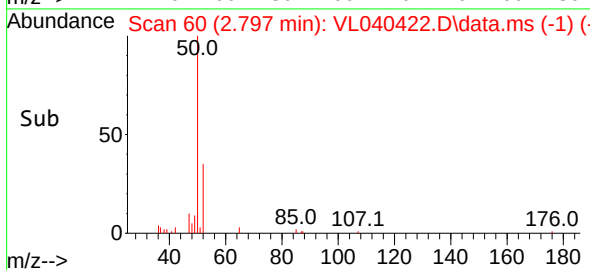
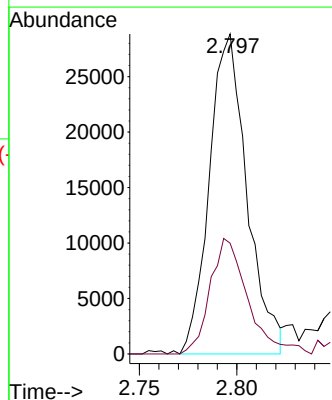
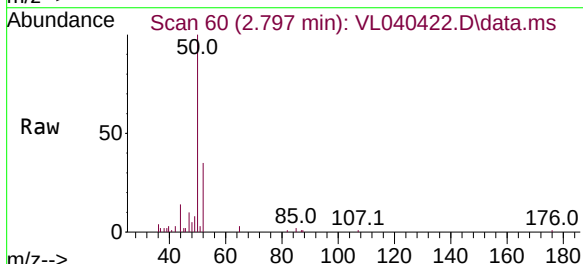
Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 51 Resp: 108345
Ion Ratio Lower Upper
51 100
67 8.8 15.5 23.3#

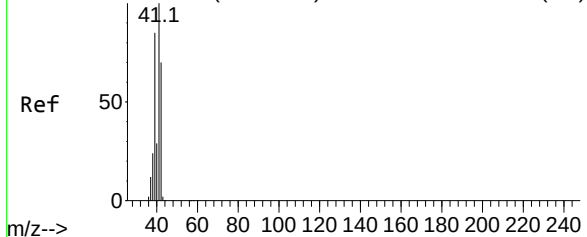


#4
Chloromethane
Concen: 0.440 ppbv
RT: 2.797 min Scan# 60
Delta R.T. -0.003 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 50 Resp: 38742
Ion Ratio Lower Upper
50 100
52 34.6 25.3 37.9



Abundance Scan 24 (2.681 min): VL040354.D\data.ms (-15)



#9

Propene

Concen: 3.313 ppbv

RT: 2.851 min Scan# 71

Delta R.T. 0.170 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

Instrument :

MSVOA_L

ClientSampleId :

IA1

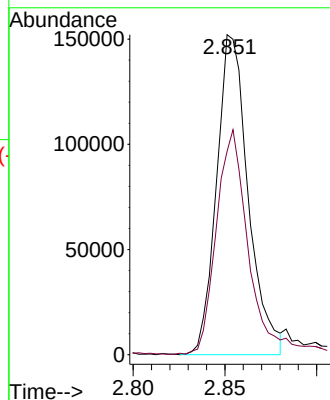
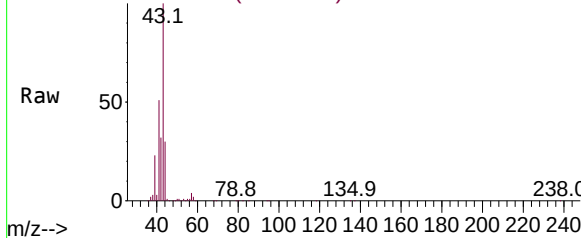
Tgt Ion: 41 Resp: 182257

Ion Ratio Lower Upper

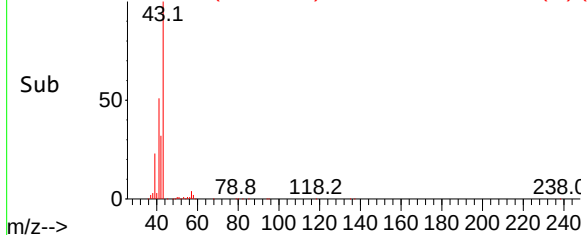
41 100

42 74.2 56.5 84.7

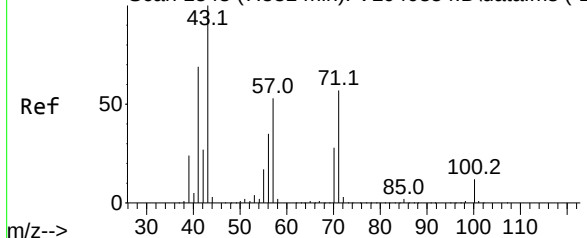
Abundance Scan 77 (2.851 min): VL040422.D\data.ms



Abundance Scan 77 (2.851 min): VL040422.D\data.ms (-1)



Abundance Scan 1548 (7.581 min): VL040354.D\data.ms (-1)



#10

Heptane

Concen: 0.169 ppbv

RT: 7.578 min Scan# 1547

Delta R.T. -0.003 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

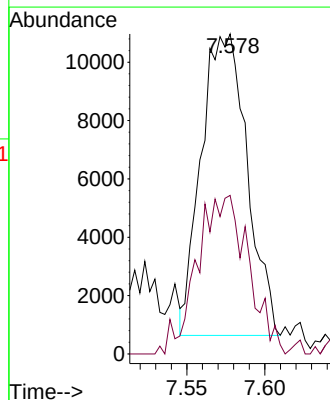
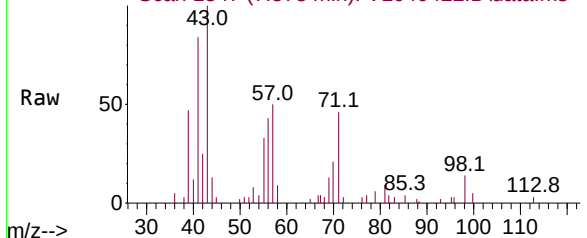
Tgt Ion: 43 Resp: 21139

Ion Ratio Lower Upper

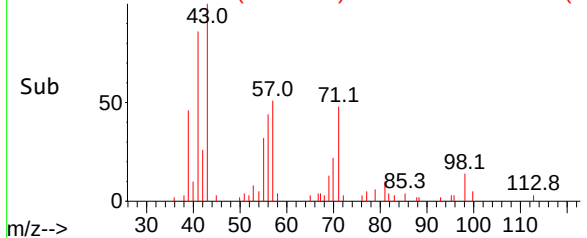
43 100

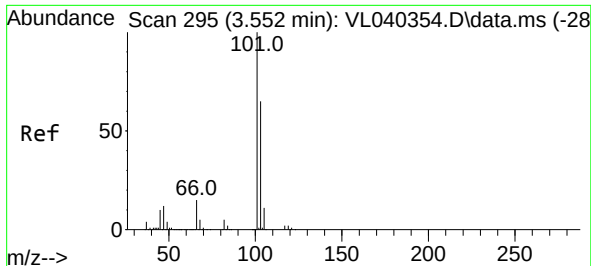
57 60.0 42.2 63.4

Abundance Scan 1547 (7.578 min): VL040422.D\data.ms



Abundance Scan 1547 (7.578 min): VL040422.D\data.ms (-1)

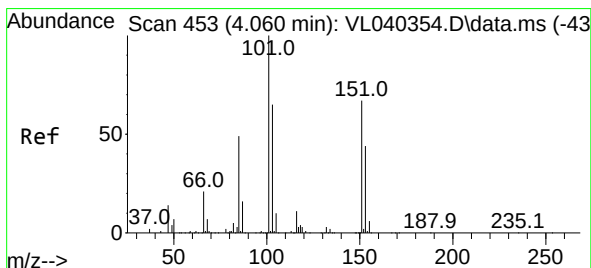
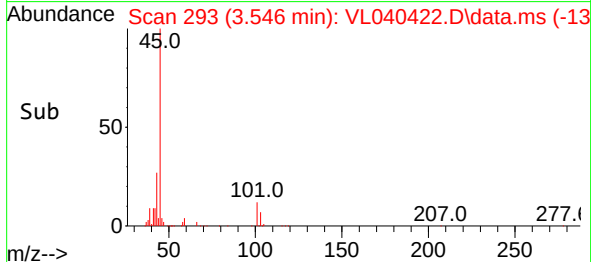
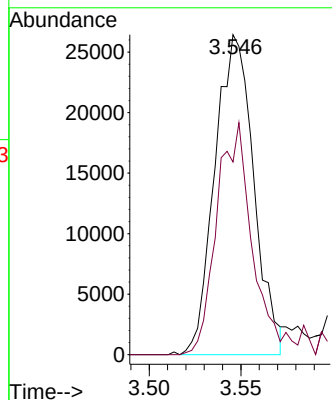
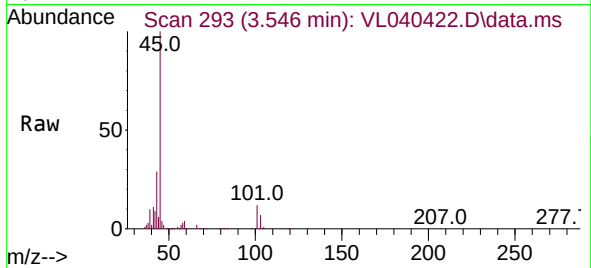




#11
 Trichlorofluoromethane
 Concen: 0.200 ppbv
 RT: 3.546 min Scan# 295
 Delta R.T. -0.006 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

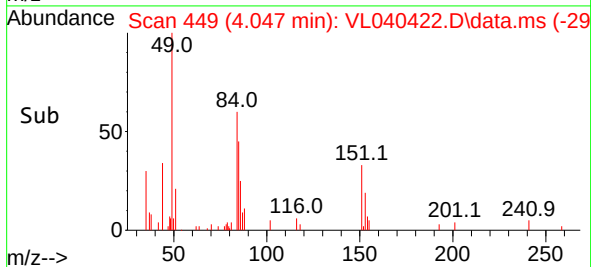
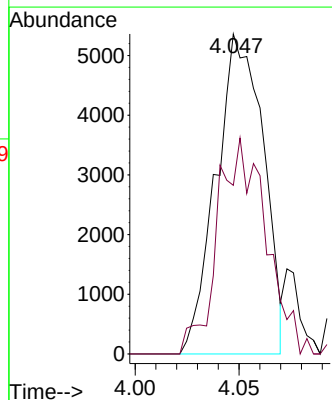
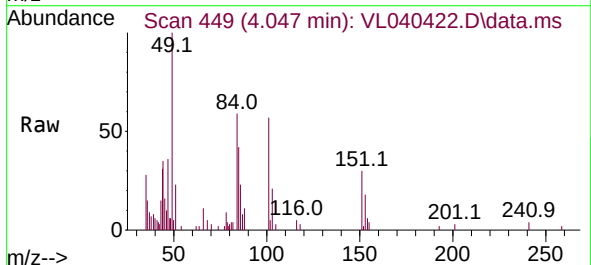
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

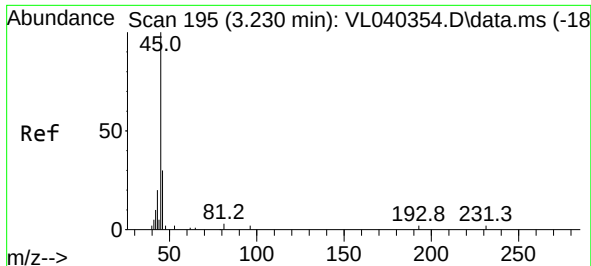
Tgt Ion:101 Resp: 38988
 Ion Ratio Lower Upper
 101 100
 103 60.2 52.2 78.4



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.062 ppbv
 RT: 4.047 min Scan# 449
 Delta R.T. -0.013 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

Tgt Ion:101 Resp: 8469
 Ion Ratio Lower Upper
 101 100
 151 70.2 54.7 82.1

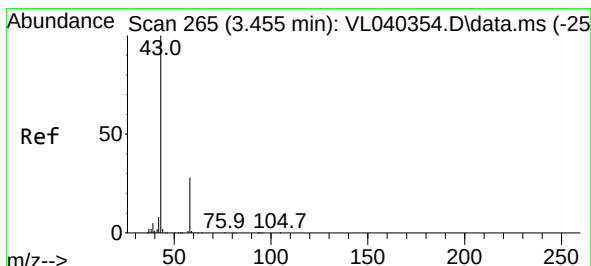
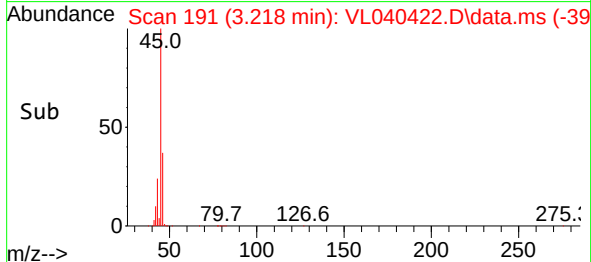
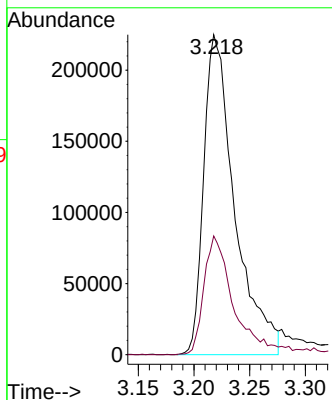
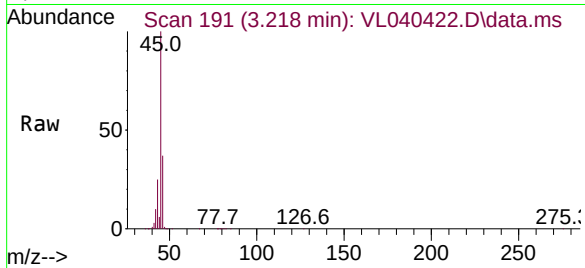




#13
Ethanol
Concen: 94.806 ppbv
RT: 3.218 min Scan# 191
Delta R.T. -0.012 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

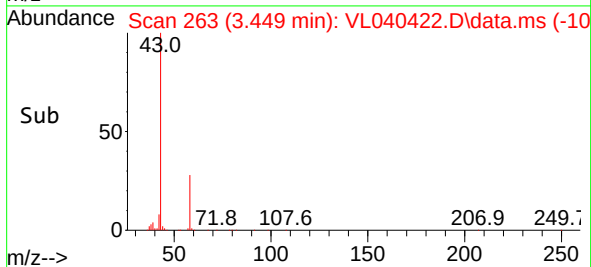
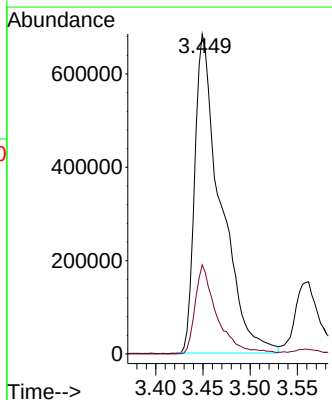
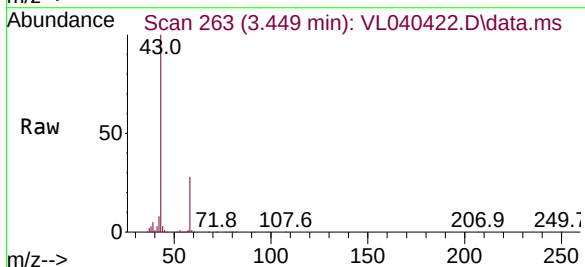
Instrument :
MSVOA_L
ClientSampleId :
IA1

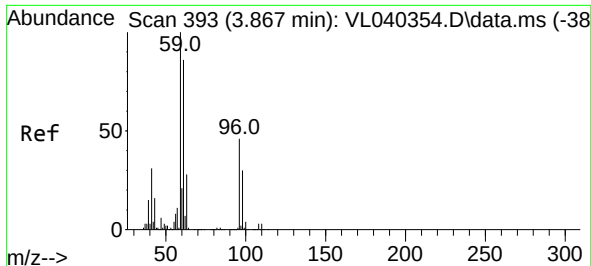
Tgt Ion: 45 Resp: 435388
Ion Ratio Lower Upper
45 100
46 39.7 15.3 61.3



#15
Acetone
Concen: 8.624 ppbv
RT: 3.449 min Scan# 263
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 43 Resp: 1301611
Ion Ratio Lower Upper
43 100
58 23.8 22.2 33.2





#17

tert-Butyl alcohol

Concen: 0.098 ppbv

RT: 3.874 min Scan# 393

Delta R.T. 0.007 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

Instrument :

MSVOA_L

ClientSampleId :

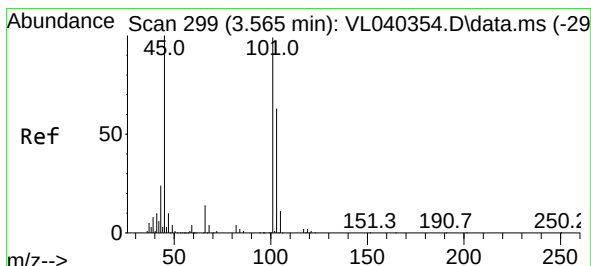
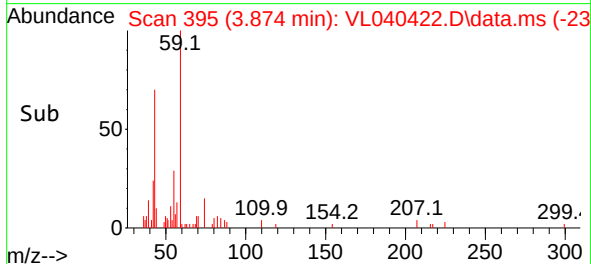
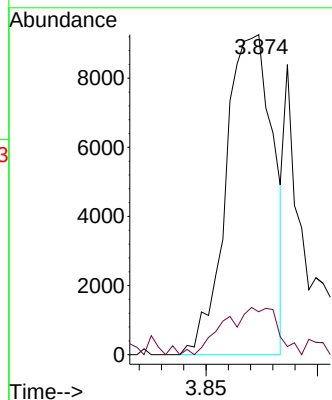
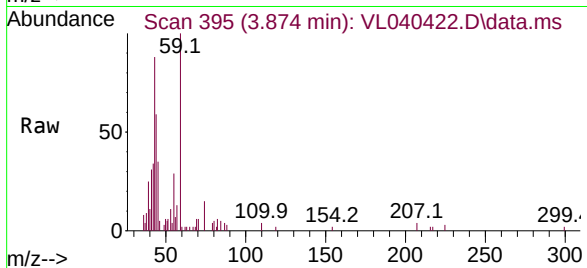
IA1

Tgt Ion: 59 Resp: 13546

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#



#19

Isopropyl Alcohol

Concen: 15.120 ppbv

RT: 3.559 min Scan# 297

Delta R.T. -0.006 min

Lab File: VL040422.D

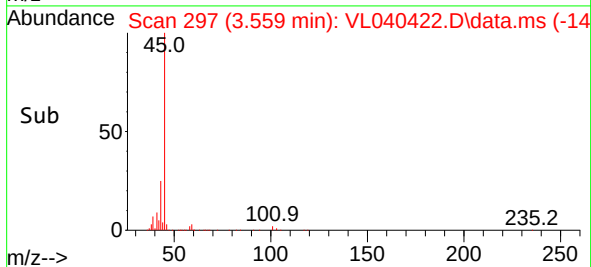
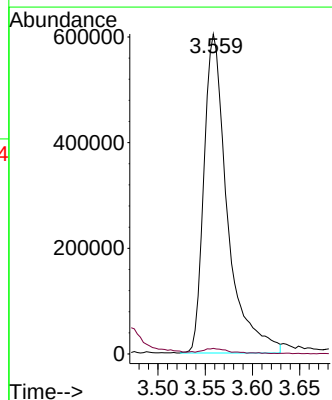
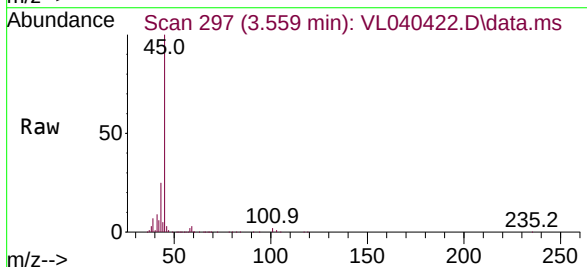
Acq: 12 May 2023 17:29

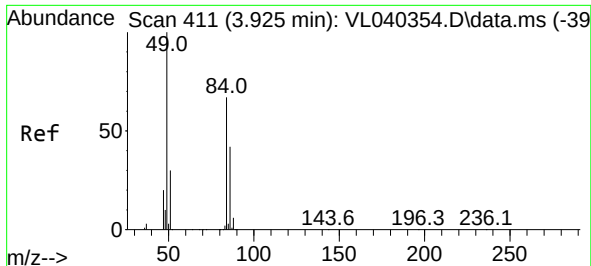
Tgt Ion: 45 Resp: 1041315

Ion Ratio Lower Upper

45 100

58 1.9 2.6 4.0#



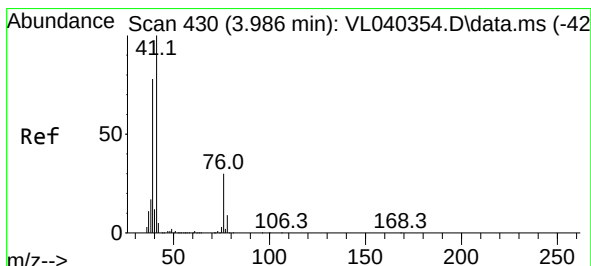
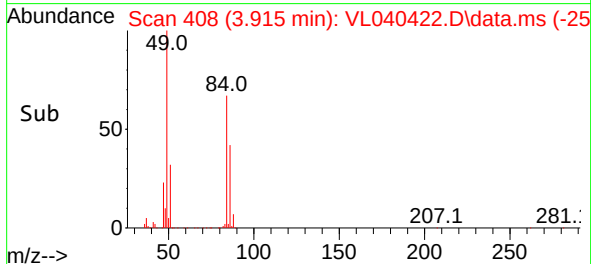
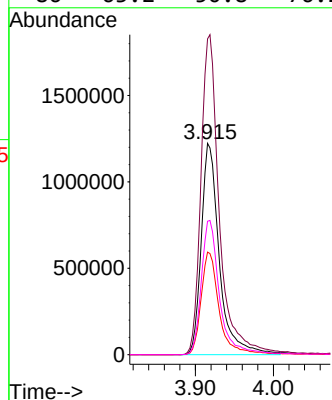
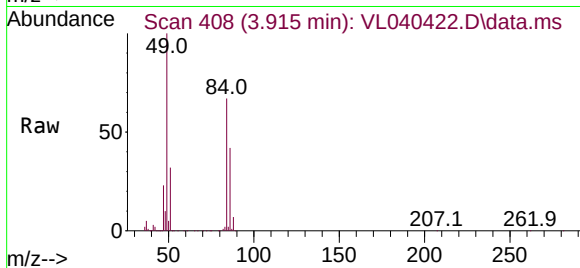


#20
Methylene Chloride
Concen: 32.761 ppbv
RT: 3.915 min Scan# 408
Delta R.T. -0.010 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 84 Resp: 1974090

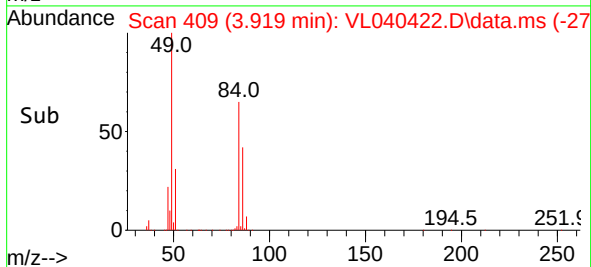
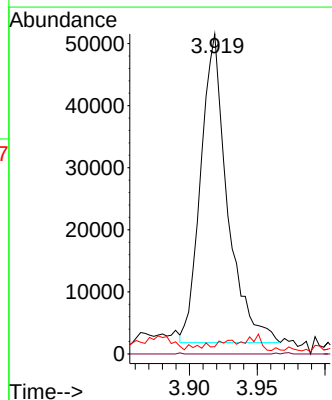
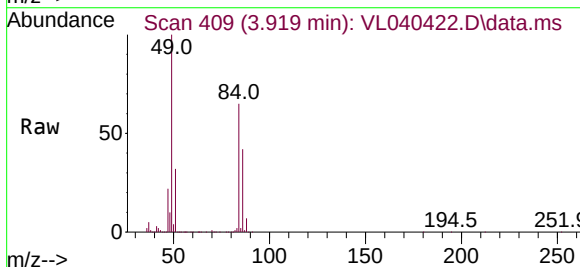
Ion	Ratio	Lower	Upper
84	100		
49	149.4	120.1	180.1
51	48.5	36.3	54.5
86	63.2	50.8	76.2

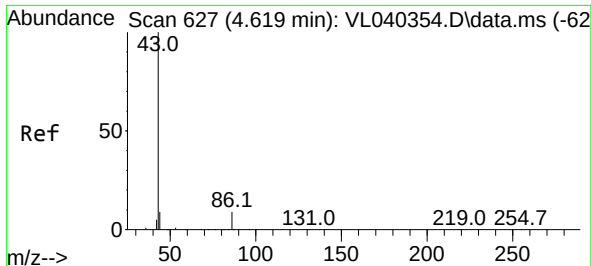


#21
Allyl Chloride
Concen: 0.795 ppbv
RT: 3.919 min Scan# 409
Delta R.T. -0.067 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 41 Resp: 68155

Ion	Ratio	Lower	Upper
41	100		
76	0.1	25.5	38.3#
39	8.9	64.0	96.0#

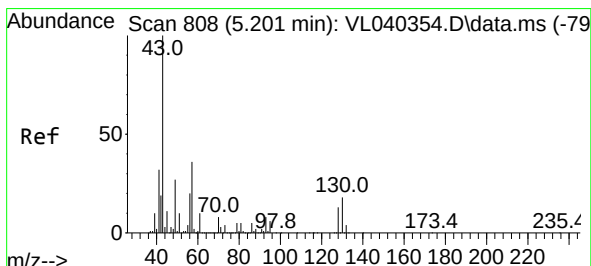
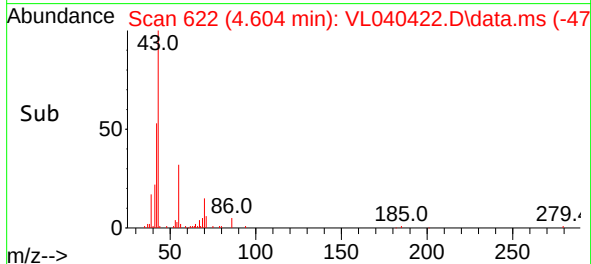
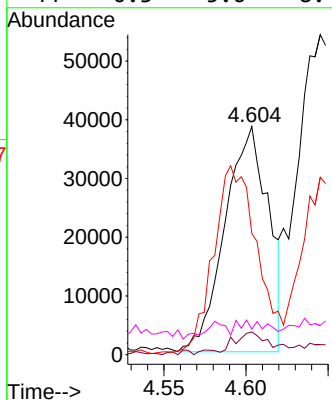
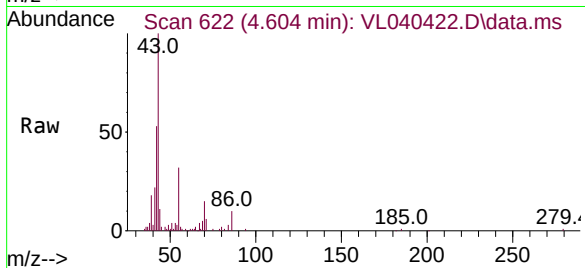




#23
 Vinyl Acetate
 Concen: 1.834 ppbv
 RT: 4.604 min Scan# 61
 Delta R.T. -0.015 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

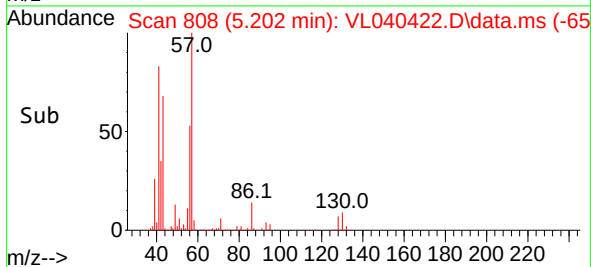
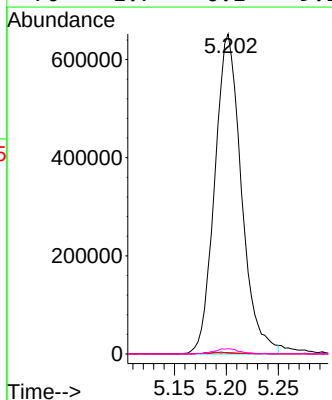
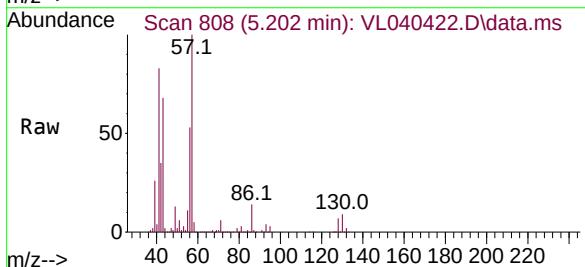
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

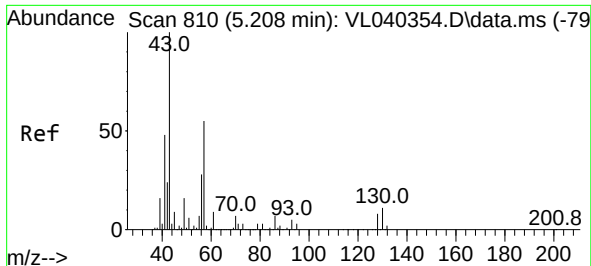
Tgt Ion: 43	Resp: 70466
Ion Ratio	Lower Upper
43 100	
86 10.1	6.0 9.0#
42 52.0	6.4 9.6#
44 0.3	5.6 8.4#



#25
 Ethyl Acetate
 Concen: 4.586 ppbv
 RT: 5.202 min Scan# 808
 Delta R.T. 0.001 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

Tgt Ion: 43	Resp: 1164636
Ion Ratio	Lower Upper
43 100	
45 0.8	8.5 12.7#
61 0.5	8.5 12.7#
70 1.7	6.1 9.1#



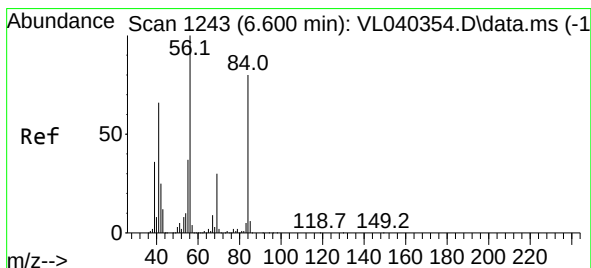
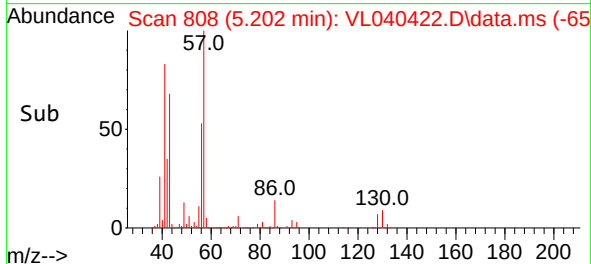
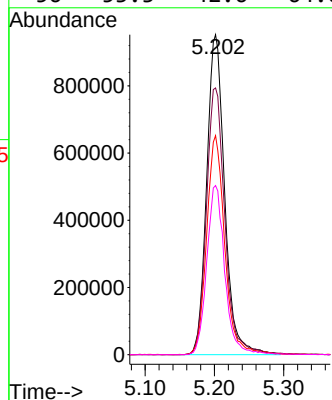
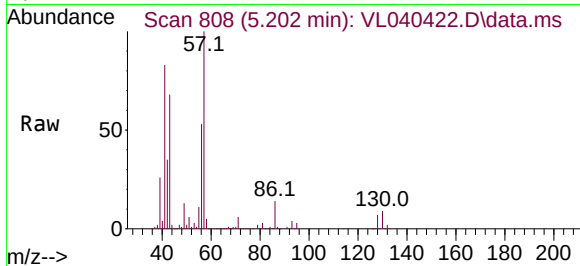


#26
Hexane
Concen: 16.023 ppbv
RT: 5.202 min Scan# 80
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tgt Ion: 57 Resp: 1715482

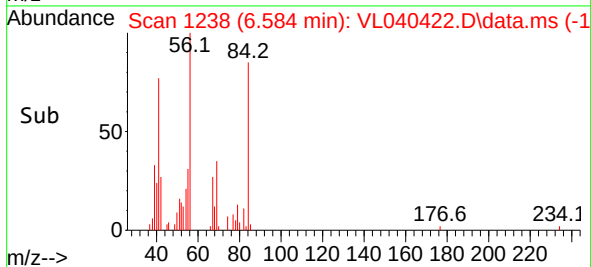
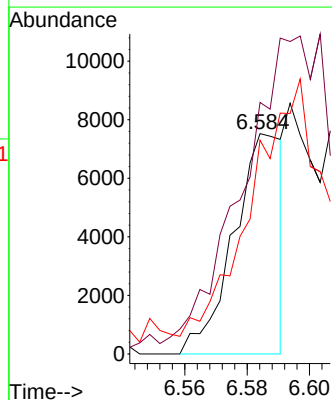
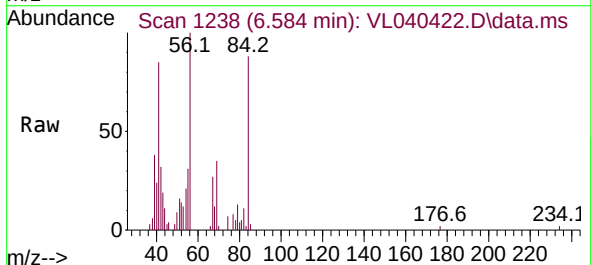
Ion	Ratio	Lower	Upper
57	100		
41	86.4	74.8	112.2
43	69.3	192.7	289.1#
56	53.3	42.6	64.0

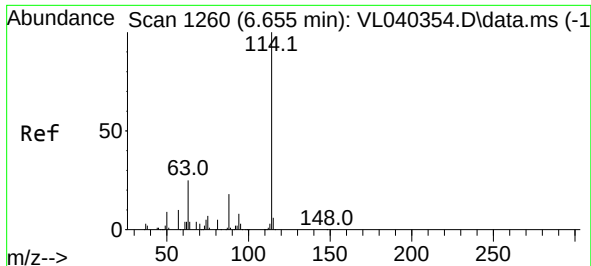


#30
Cyclohexane
Concen: 0.097 ppbv
RT: 6.584 min Scan# 1238
Delta R.T. -0.016 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 84 Resp: 8031

Ion	Ratio	Lower	Upper
84	100		
56	0.0	107.0	160.6#
41	0.0	66.7	100.1#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.645 min Scan# 11

Delta R.T. -0.010 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

Instrument :

MSVOA_L

ClientSampleId :

IA1

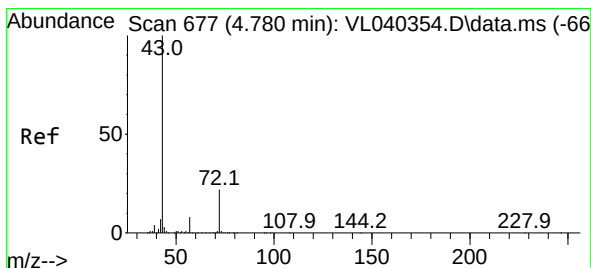
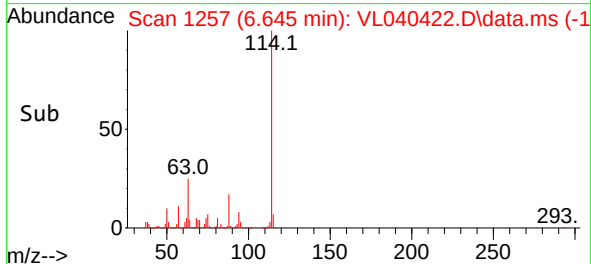
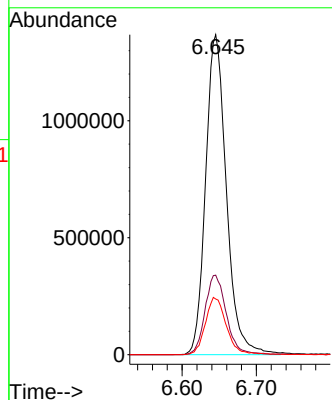
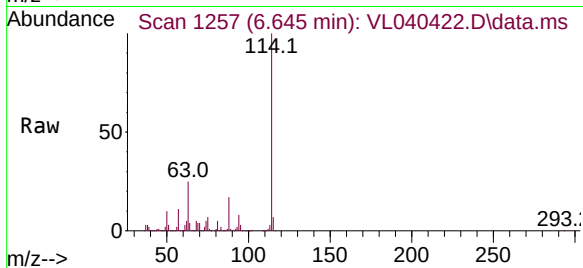
Tgt Ion:114 Resp: 2655405

Ion Ratio Lower Upper

114 100

63 25.7 21.4 32.0

88 18.2 14.6 22.0



#34

2-Butanone

Concen: 0.580 ppbv

RT: 4.777 min Scan# 676

Delta R.T. -0.003 min

Lab File: VL040422.D

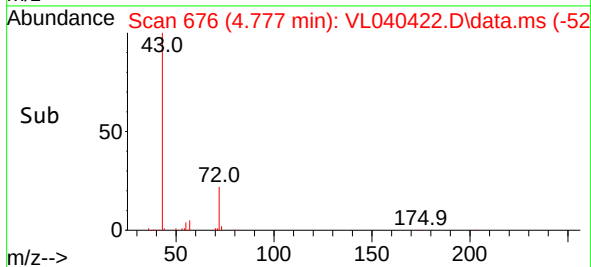
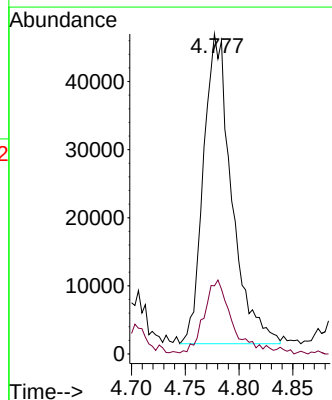
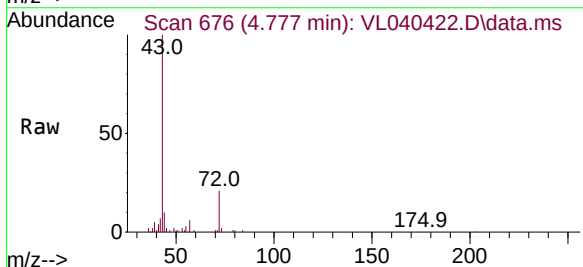
Acq: 12 May 2023 17:29

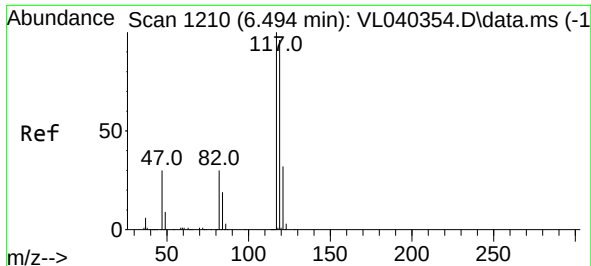
Tgt Ion: 43 Resp: 83078

Ion Ratio Lower Upper

43 100

72 25.0 18.4 27.6

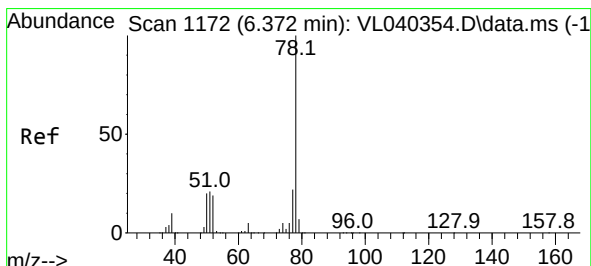
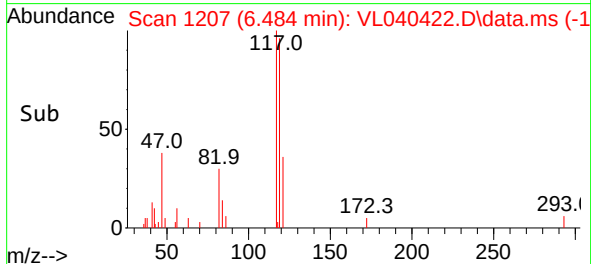
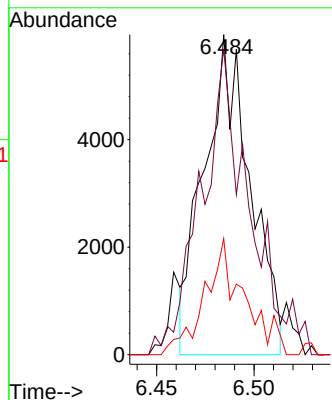
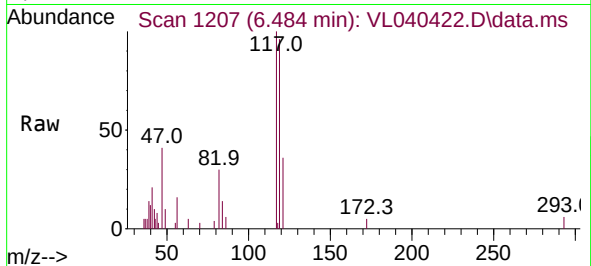




#35
Carbon Tetrachloride
Concen: 0.052 ppbv
RT: 6.484 min Scan# 1169
Delta R.T. -0.010 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

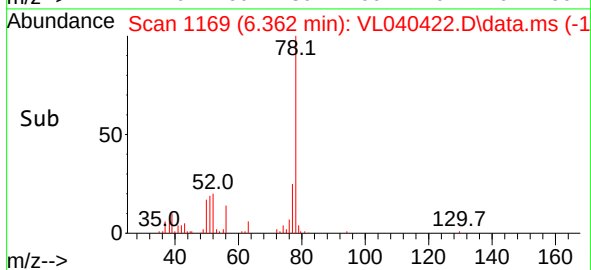
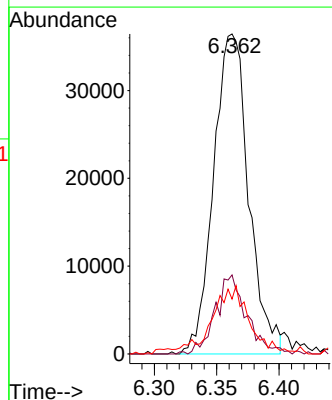
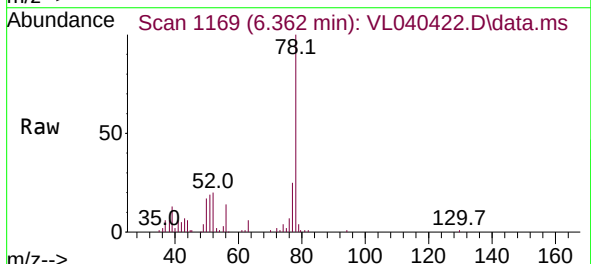
Instrument :
MSVOA_L
ClientSampleId :
IA1

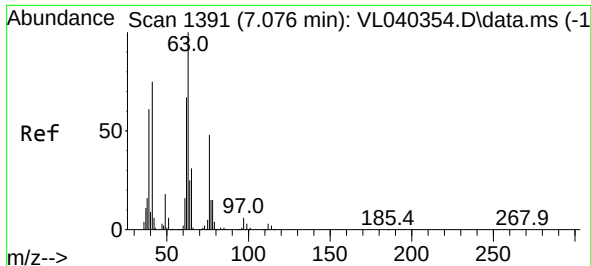
Tgt Ion:	117	Resp:	9806
Ion	Ratio	Lower	Upper
117	100		
119	92.1	76.6	114.8
121	34.2	25.3	37.9



#36
Benzene
Concen: 0.329 ppbv
RT: 6.362 min Scan# 1169
Delta R.T. -0.010 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion:	78	Resp:	71333
Ion	Ratio	Lower	Upper
78	100		
77	24.1	17.8	26.8
50	16.1	15.6	23.4





#39

1,2-Dichloropropane

Concen: 7.864 ppbv

RT: 6.645 min Scan# 11

Delta R.T. -0.431 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

Instrument :

MSVOA_L

ClientSampleId :

IA1

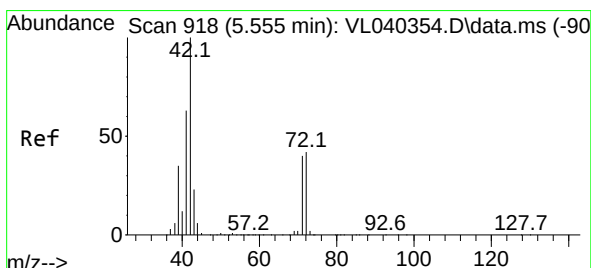
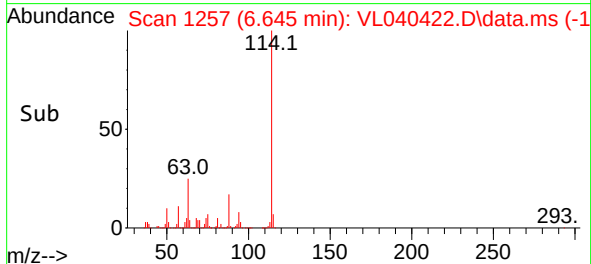
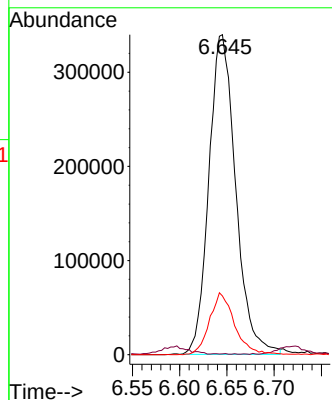
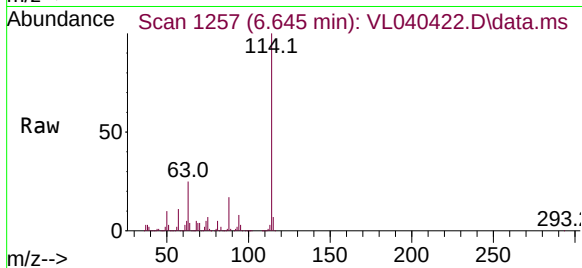
Tgt Ion: 63 Resp: 670406

Ion Ratio Lower Upper

63 100

41 0.0 59.6 89.4#

62 18.3 53.9 80.9#



#41

Tetrahydrofuran

Concen: 7.890 ppbv

RT: 5.202 min Scan# 808

Delta R.T. -0.353 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

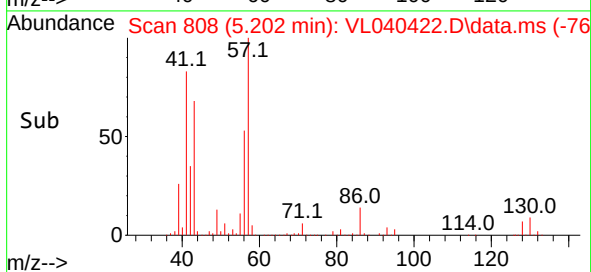
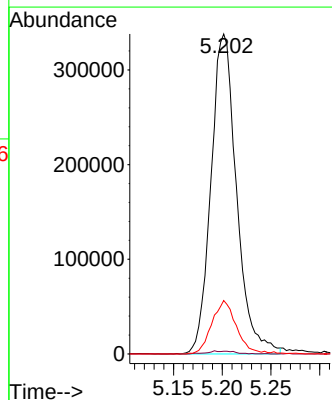
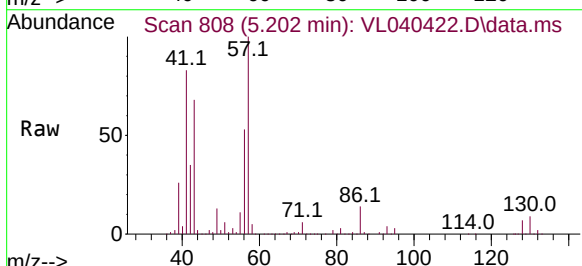
Tgt Ion: 42 Resp: 618702

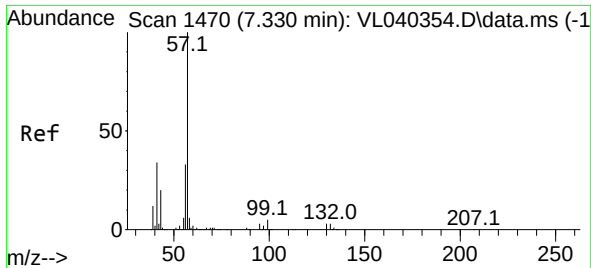
Ion Ratio Lower Upper

42 100

72 1.0 33.7 50.5#

71 16.3 32.2 48.2#

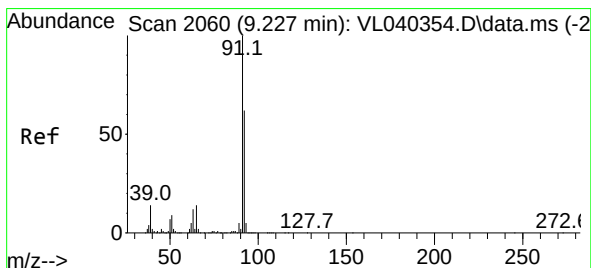
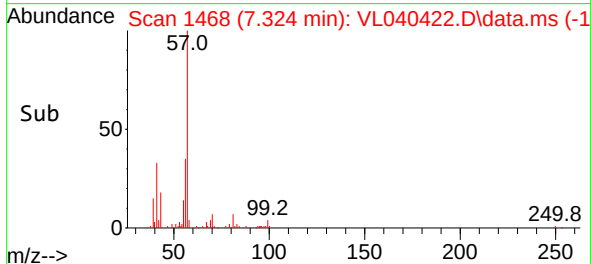
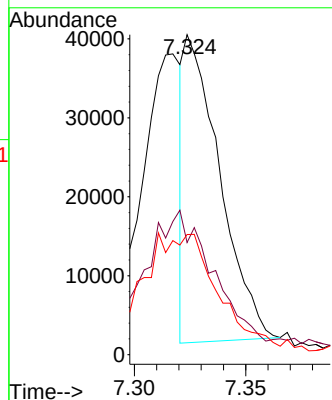
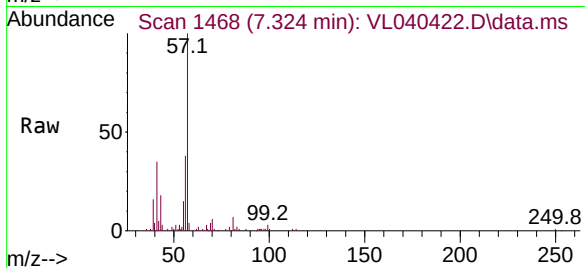




#44
2,2,4-Trimethylpentane
Concen: 0.119 ppbv
RT: 7.324 min Scan# 14
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

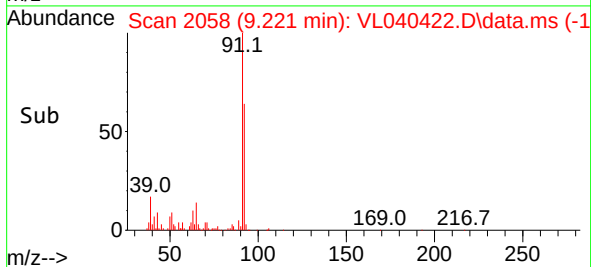
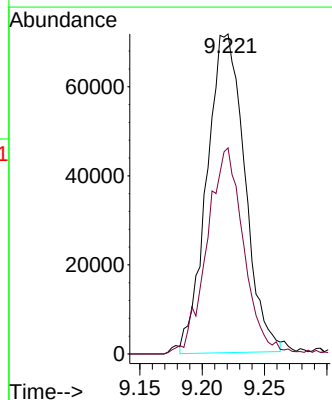
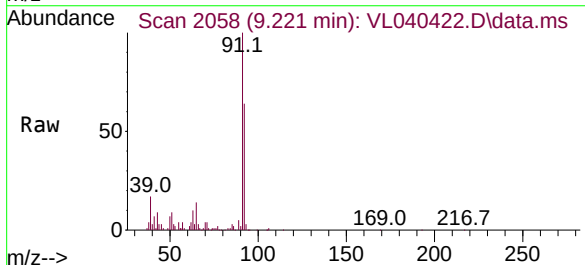
Instrument :
MSVOA_L
ClientSampleId :
IA1

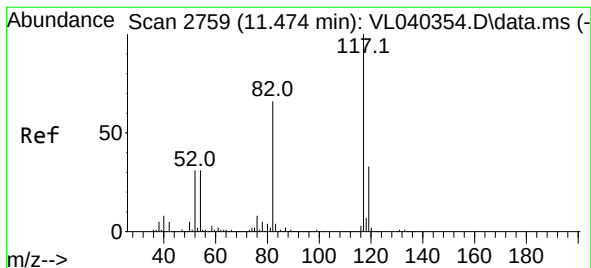
Tgt Ion: 57 Resp: 42953
Ion Ratio Lower Upper
57 100
41 108.4 26.9 40.3#
56 0.0 25.1 37.7#



#53
Toluene
Concen: 0.657 ppbv
RT: 9.221 min Scan# 2058
Delta R.T. -0.006 min
Lab File: VL040422.D
Acq: 12 May 2023 17:29

Tgt Ion: 91 Resp: 150988
Ion Ratio Lower Upper
91 100
92 62.7 48.9 73.3





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 11.465 min Scan# 21

Delta R.T. -0.009 min

Lab File: VL040422.D

Acq: 12 May 2023 17:29

Instrument :

MSVOA_L

ClientSampleId :

IA1

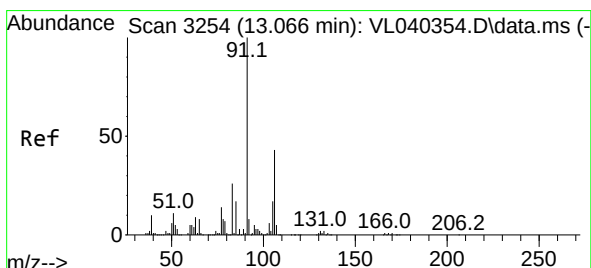
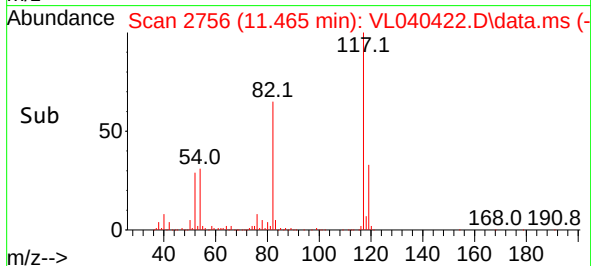
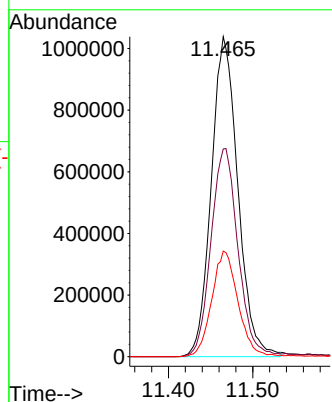
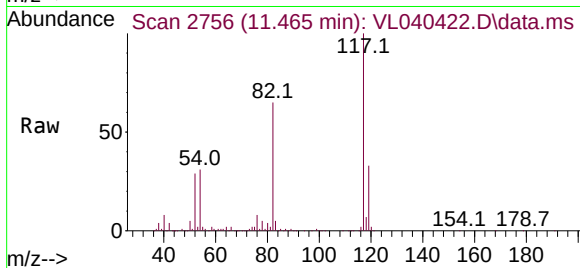
Tgt Ion:117 Resp: 2271000

Ion Ratio Lower Upper

117 100

82 67.3 52.5 78.7

119 33.0 24.3 36.5



#60

o-Xylene

Concen: 0.048 ppbv

RT: 13.057 min Scan# 3251

Delta R.T. -0.009 min

Lab File: VL040422.D

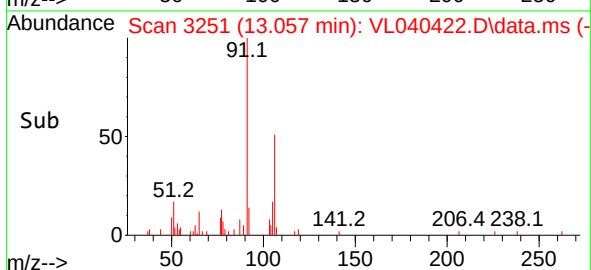
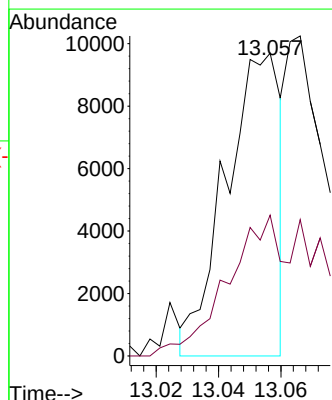
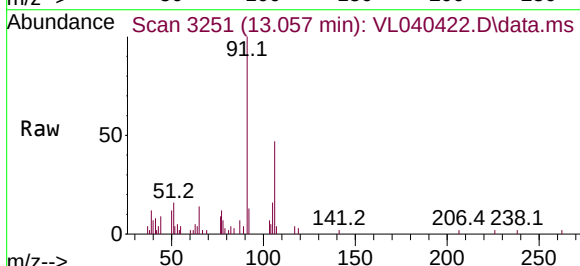
Acq: 12 May 2023 17:29

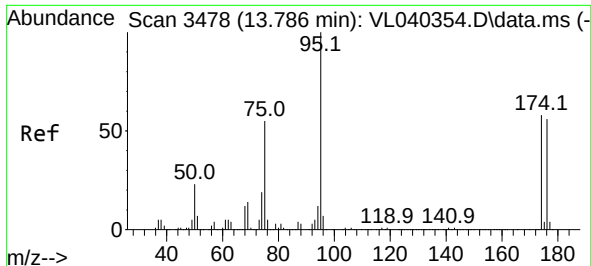
Tgt Ion: 91 Resp: 11757

Ion Ratio Lower Upper

91 100

106 85.0 21.9 65.8#

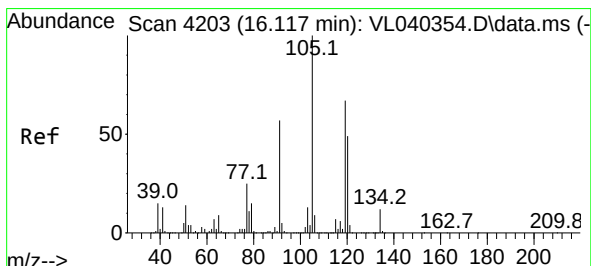
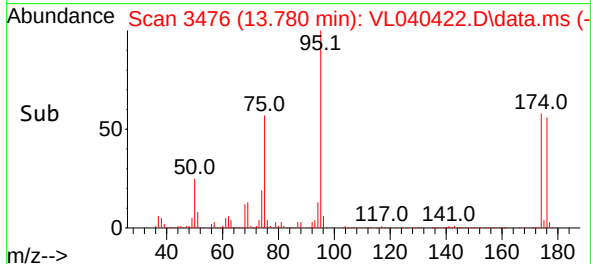
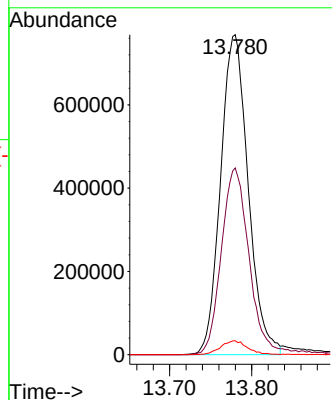
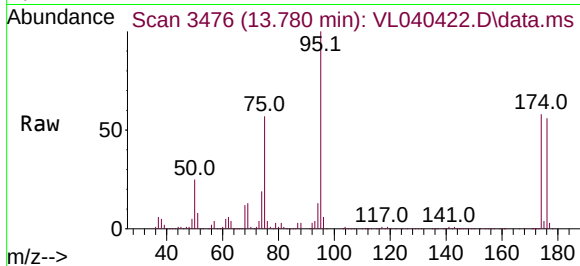




#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.567 ppbv
 RT: 13.780 min Scan# 3478
 Delta R.T. -0.006 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

Instrument :
 MSVOA_1
 ClientSampleId :
 IA1

Tgt Ion: 95 Resp: 1796731
 Ion Ratio Lower Upper
 95 100
 174 60.0 47.2 70.8
 175 4.2 3.5 5.3



#74
 1,2,4-Trimethylbenzene
 Concen: 0.061 ppbv
 RT: 16.108 min Scan# 4200
 Delta R.T. -0.009 min
 Lab File: VL040422.D
 Acq: 12 May 2023 17:29

Tgt Ion: 105 Resp: 17455
 Ion Ratio Lower Upper
 105 100
 120 41.9 38.9 58.3
 91 15.3 46.0 69.0#
 77 10.1 20.0 30.0#

