

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL102523\
 Data File : VL040798.D
 Acq On : 25 Oct 2023 13:26
 Operator : SY/MD
 Sample : 05024-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2DUP

Quant Time: Oct 26 03:51:44 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	5.192	49	876962	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	6.645	114	2329038	10.000	ppbv	-0.02
55) Chlorobenzene-d5	11.452	117	2087463	10.000	ppbv	-0.02

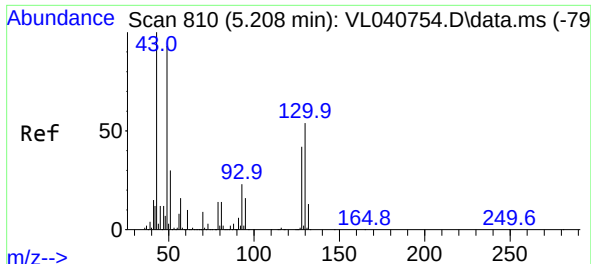
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.757	95	1597233	10.399	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.000%

Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.745	85	78481	0.508	ppbv	96
3) Chlorodifluoromethane	2.671	51	51748	0.402	ppbv #	91
4) Chloromethane	2.829	50	28067	0.552	ppbv	89
9) Propene	2.722	41	34200	0.714	ppbv #	75
10) Heptane	7.561	43	4889	0.041	ppbv #	1
11) Trichlorofluoromethane	3.568	101	34235	0.287	ppbv	87
12) 1,1,2-Trichlorotrifluo...	4.076	101	5015	0.059	ppbv #	64
13) Ethanol	3.247	45	1134523	104.990	ppbv	99
15) Acetone	3.475	43	1055370	11.641	ppbv	98
19) Isopropyl Alcohol	3.584	45	701916	12.027	ppbv #	40
20) Methylene Chloride	3.941	84	618214	16.371	ppbv	98
23) Vinyl Acetate	4.623	43	7709	0.067	ppbv #	23
25) Ethyl Acetate	5.205	43	381554	1.921	ppbv #	90
26) Hexane	5.208	57	345221	3.803	ppbv #	56
29) Chloroform	5.275	83	22470	0.171	ppbv	95
30) Cyclohexane	6.587	84	2649	0.034	ppbv #	1
34) 2-Butanone	4.790	43	69707	0.661	ppbv	96
36) Benzene	6.365	78	22099	0.123	ppbv #	93
39) 1,2-Dichloropropane	6.642	63	561870	8.028	ppbv #	26
41) Tetrahydrofuran	5.562	42	6339	0.087	ppbv #	37
44) 2,2,4-Trimethylpentane	7.317	57	13407	0.044	ppbv #	31
53) Toluene	9.211	91	67387	0.316	ppbv	98
58) Ethyl Benzene	12.073	91	15446	0.059	ppbv	93
59) m/p-Xylene	12.355	91	8733	0.040	ppbv #	30
60) o-Xylene	13.040	91	8077	0.039	ppbv #	30
61) Styrene	12.880	104	5248	0.046	ppbv #	1
74) 1,2,4-Trimethylbenzene	16.092	105	10170	0.044	ppbv #	66

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

Quant Time: Oct 26 03:51:44 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

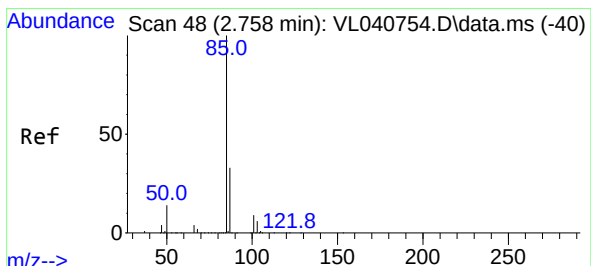
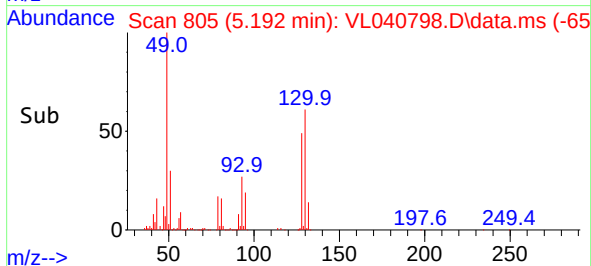
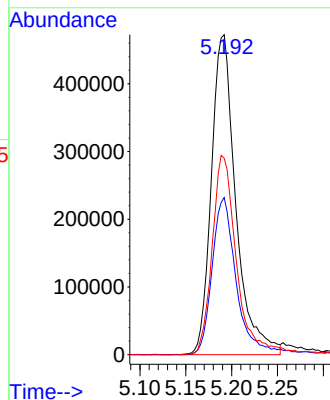
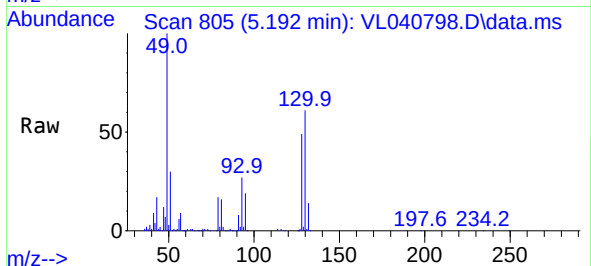




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 80
Delta R.T. -0.016 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

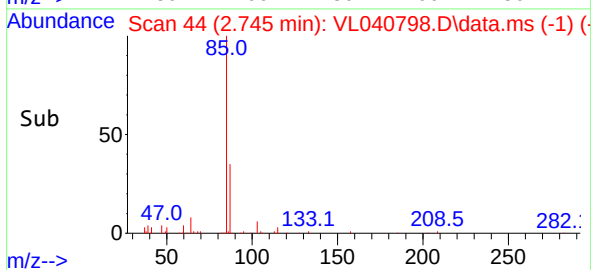
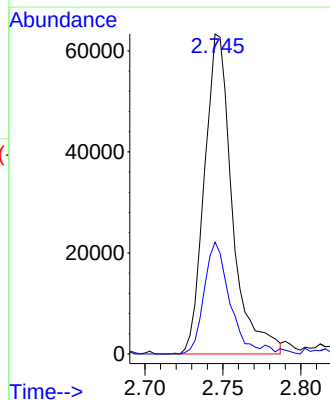
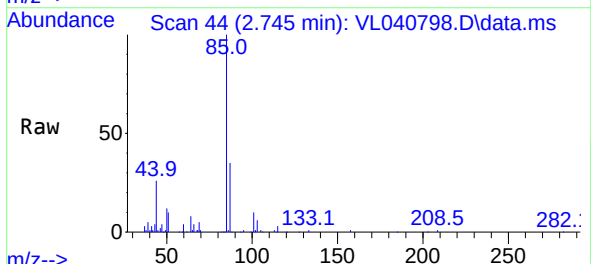
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

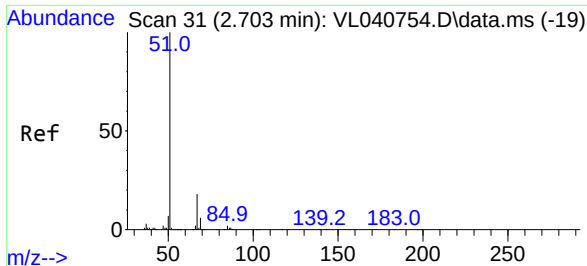
Tgt Ion: 49 Resp: 876962
Ion Ratio Lower Upper
49 100
128 49.9 23.9 71.7
130 64.2 30.7 92.1



#2
Dichlorodifluoromethane
Concen: 0.508 ppbv
RT: 2.745 min Scan# 44
Delta R.T. -0.013 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 85 Resp: 78481
Ion Ratio Lower Upper
85 100
87 34.9 26.0 39.0

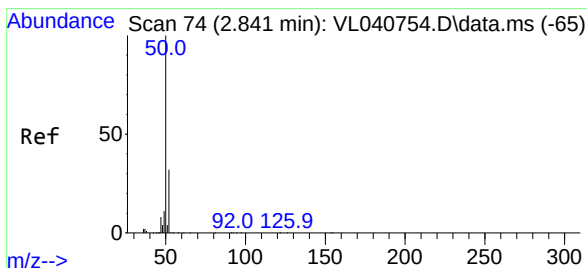
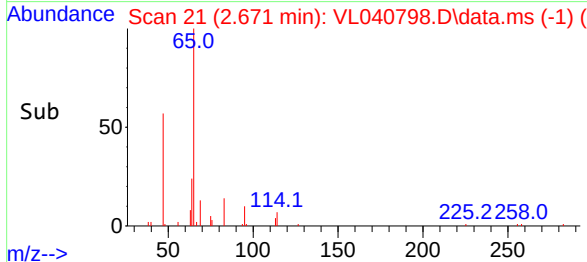
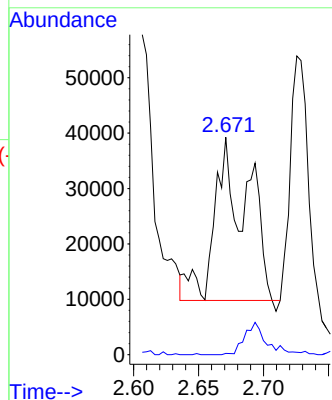
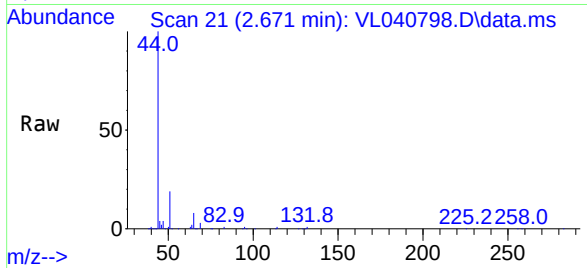




#3
Chlorodifluoromethane
Concen: 0.402 ppbv
RT: 2.671 min Scan# 21
Delta R.T. -0.032 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

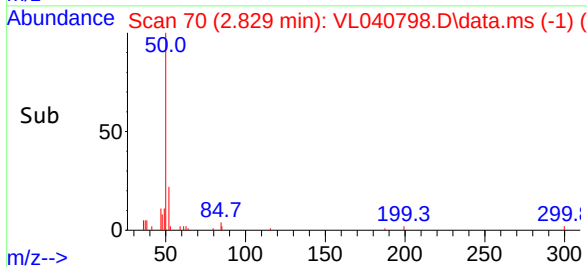
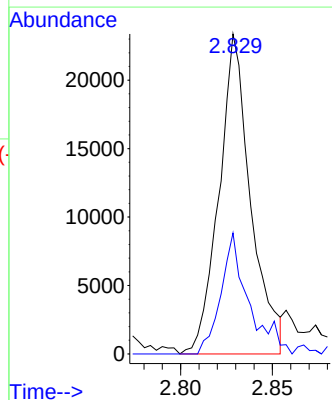
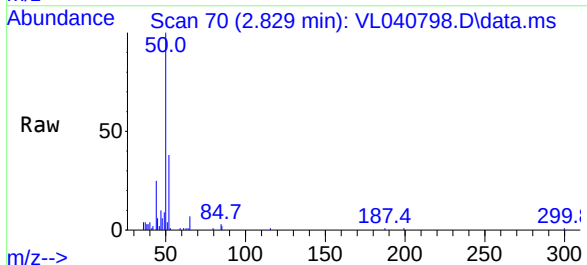
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

Tgt Ion: 51 Resp: 51748
Ion Ratio Lower Upper
51 100
67 13.5 13.8 20.6#

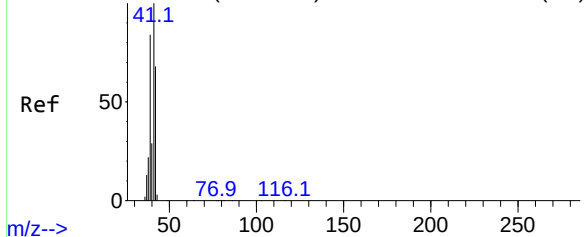


#4
Chloromethane
Concen: 0.552 ppbv
RT: 2.829 min Scan# 70
Delta R.T. -0.013 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 50 Resp: 28067
Ion Ratio Lower Upper
50 100
52 37.8 25.3 37.9



Abundance Scan 37 (2.722 min): VL040754.D\data.ms (-27)



#9

Propene

Concen: 0.714 ppbv

RT: 2.722 min Scan# 31

Delta R.T. 0.000 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

IA-2DUP

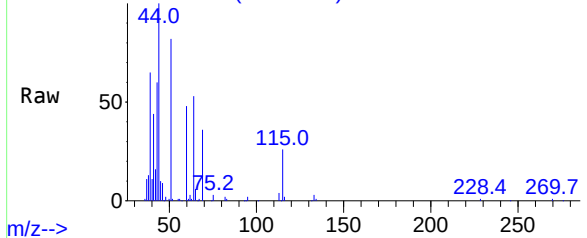
Tgt Ion: 41 Resp: 34200

Ion Ratio Lower Upper

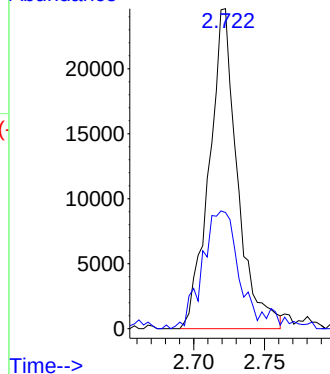
41 100

42 50.9 57.1 85.7#

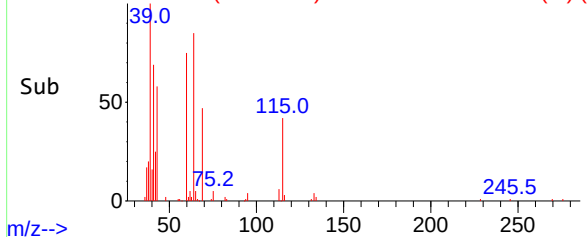
Abundance Scan 37 (2.722 min): VL040798.D\data.ms



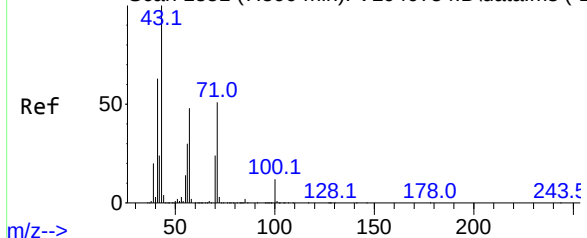
Abundance



Abundance Scan 37 (2.722 min): VL040798.D\data.ms (-1)



Abundance Scan 1551 (7.590 min): VL040754.D\data.ms (-1)



#10

Heptane

Concen: 0.041 ppbv

RT: 7.561 min Scan# 1542

Delta R.T. -0.029 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

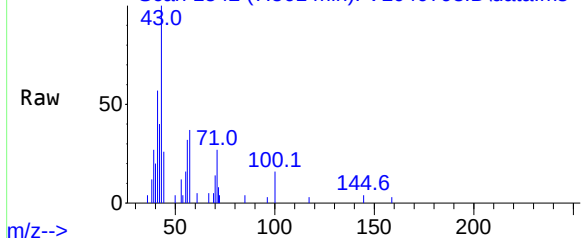
Tgt Ion: 43 Resp: 4889

Ion Ratio Lower Upper

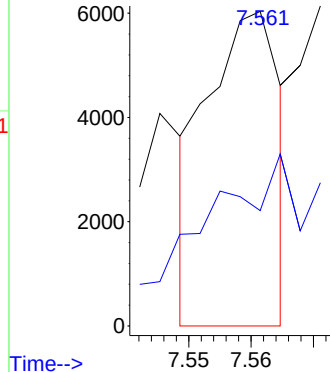
43 100

57 144.3 40.0 60.0#

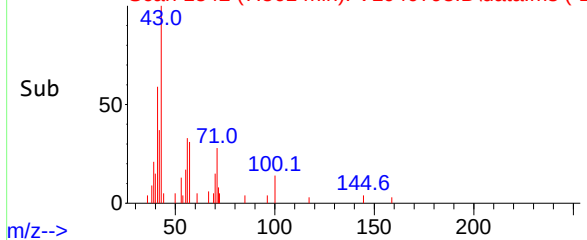
Abundance Scan 1542 (7.561 min): VL040798.D\data.ms

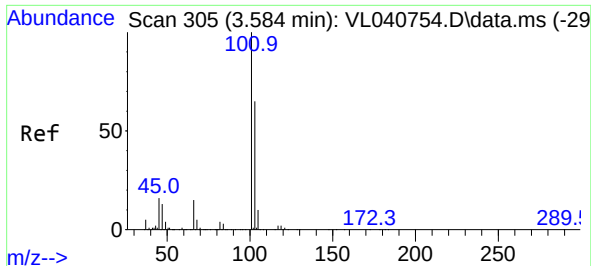


Abundance



Abundance Scan 1542 (7.561 min): VL040798.D\data.ms (-1)

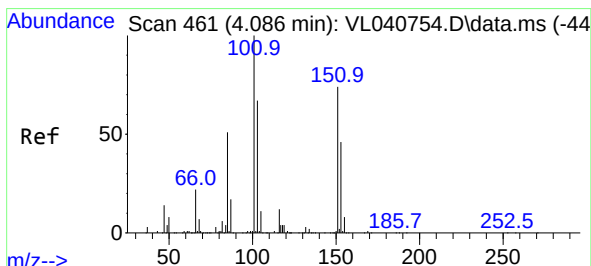
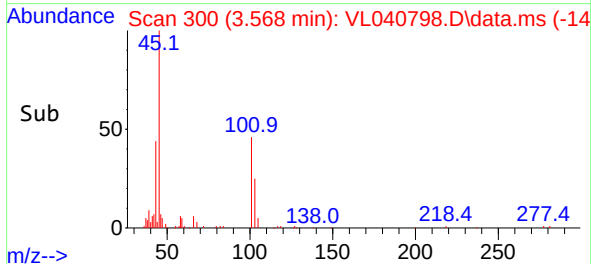
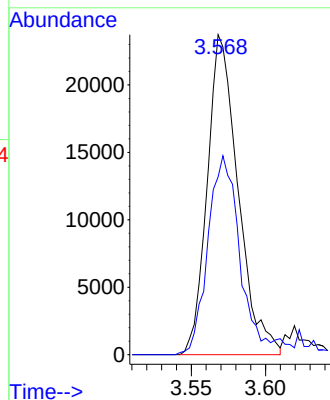
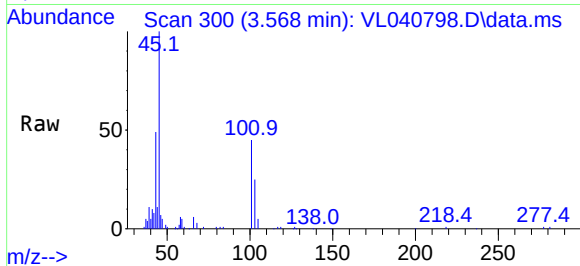




#11
 Trichlorofluoromethane
 Concen: 0.287 ppbv
 RT: 3.568 min Scan# 30
 Delta R.T. -0.016 min
 Lab File: VL040798.D
 Acq: 25 Oct 2023 13:26

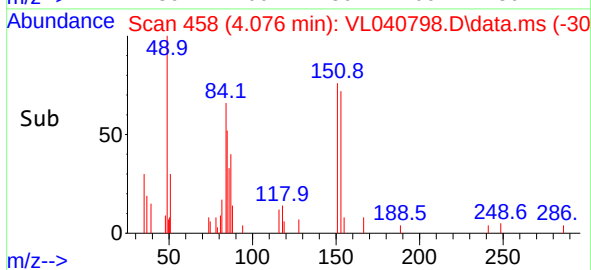
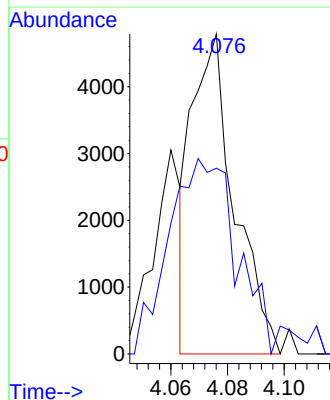
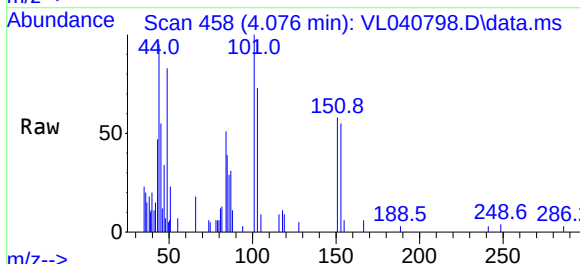
Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2DUP

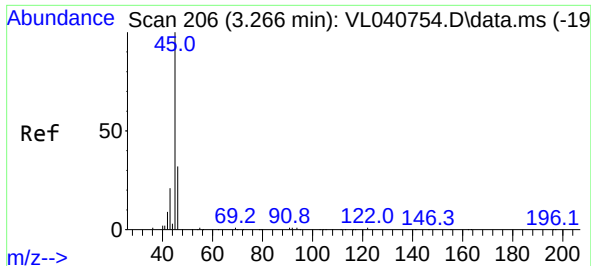
Tgt Ion:101 Resp: 34235
 Ion Ratio Lower Upper
 101 100
 103 54.9 52.2 78.2



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.059 ppbv
 RT: 4.076 min Scan# 458
 Delta R.T. -0.010 min
 Lab File: VL040798.D
 Acq: 25 Oct 2023 13:26

Tgt Ion:101 Resp: 5015
 Ion Ratio Lower Upper
 101 100
 151 103.0 58.1 87.1#

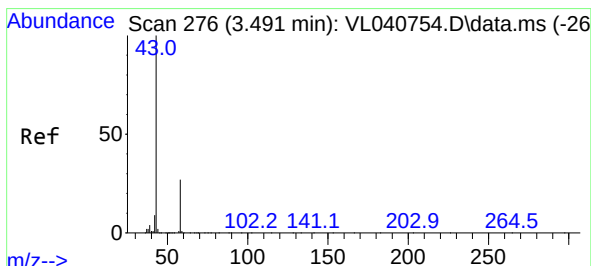
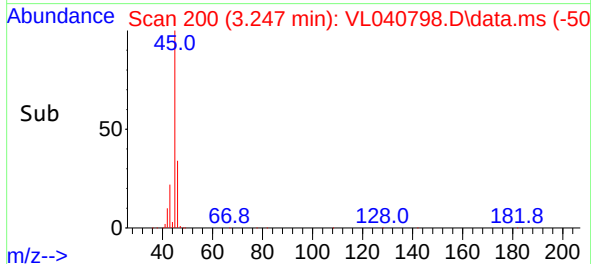
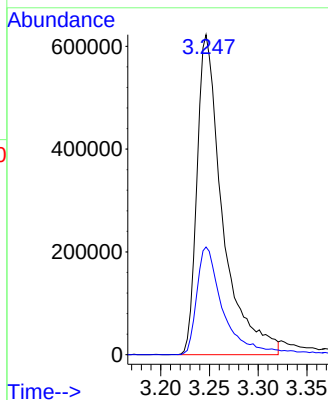
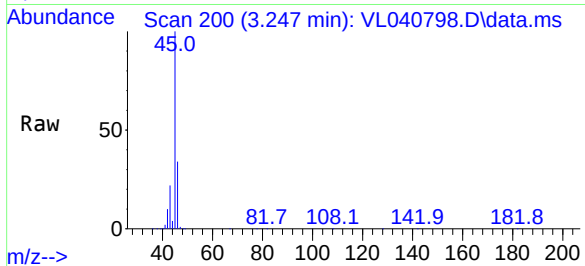




#13
Ethanol
Concen: 104.990 ppbv
RT: 3.247 min Scan# 206
Delta R.T. -0.019 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

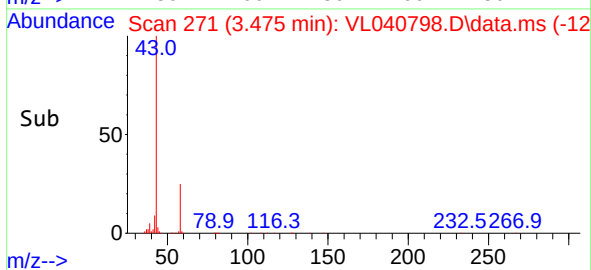
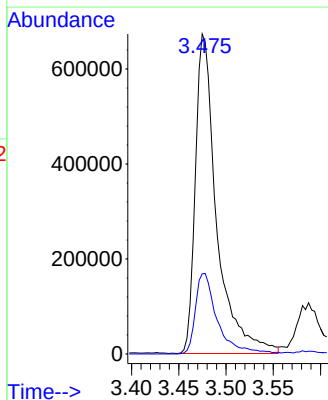
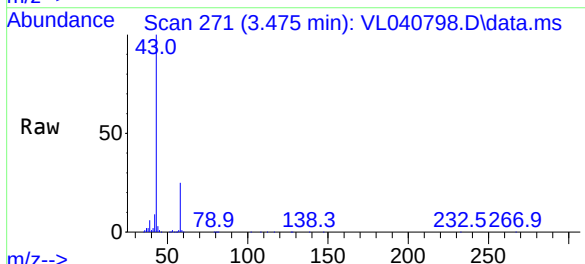
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

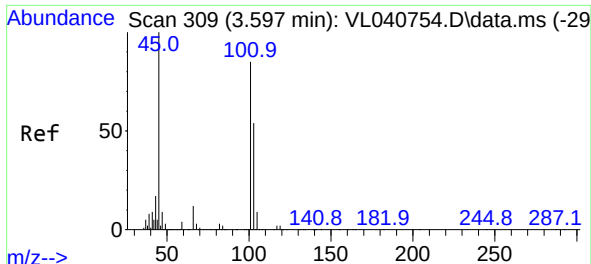
Tgt Ion: 45 Resp: 1134523
Ion Ratio Lower Upper
45 100
46 35.9 14.6 58.2



#15
Acetone
Concen: 11.641 ppbv
RT: 3.475 min Scan# 271
Delta R.T. -0.016 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 43 Resp: 1055370
Ion Ratio Lower Upper
43 100
58 26.2 21.6 32.4





#19

Isopropyl Alcohol

Concen: 12.027 ppbv

RT: 3.584 min Scan# 309

Delta R.T. -0.013 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

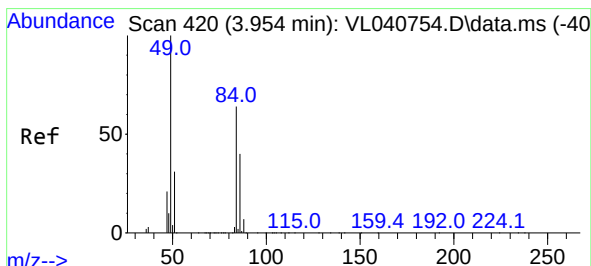
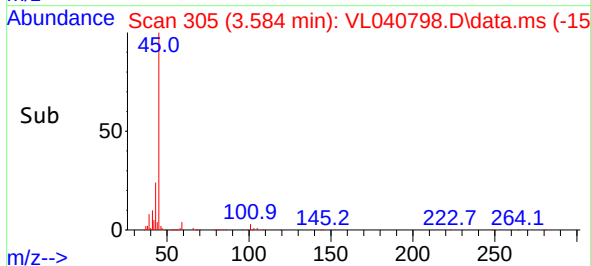
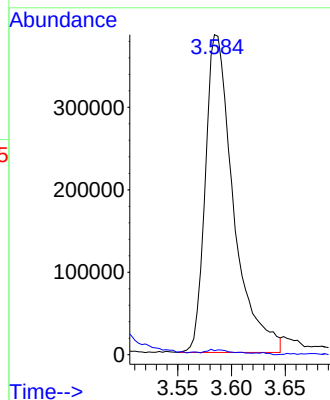
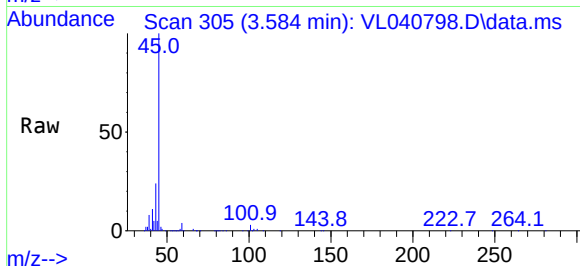
IA-2DUP

Tgt Ion: 45 Resp: 701916

Ion Ratio Lower Upper

45 100

58 1.9 30.3 45.5#



#20

Methylene Chloride

Concen: 16.371 ppbv

RT: 3.941 min Scan# 416

Delta R.T. -0.013 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Tgt Ion: 84 Resp: 618214

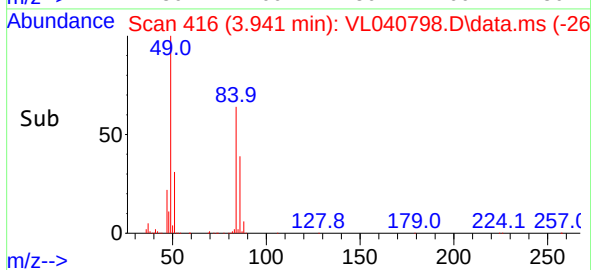
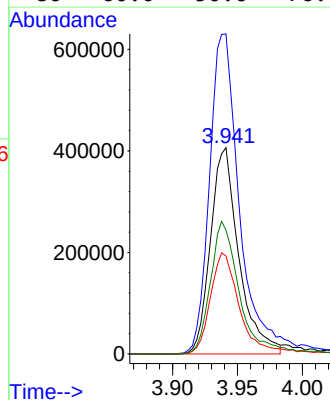
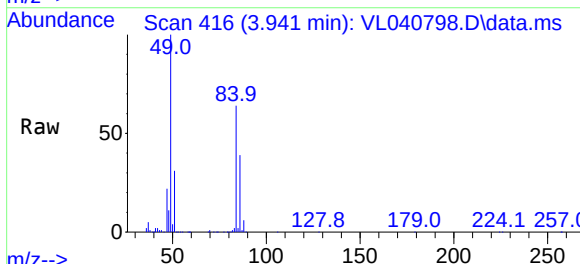
Ion Ratio Lower Upper

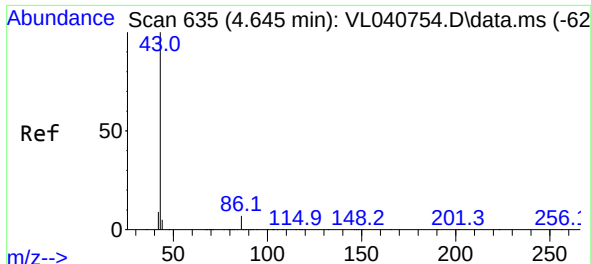
84 100

49 154.8 125.6 188.4

51 47.2 38.9 58.3

86 60.0 50.6 76.0



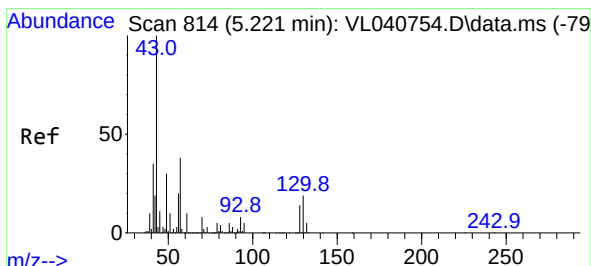
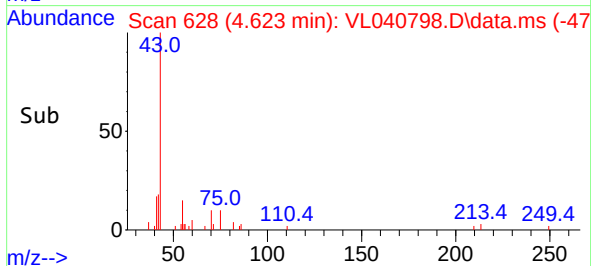
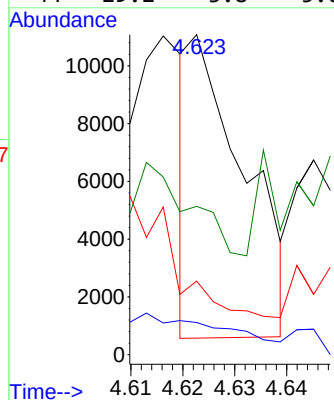
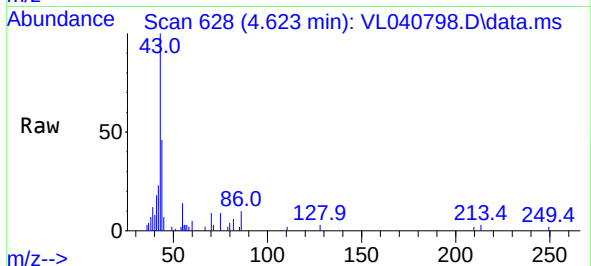


#23
Vinyl Acetate
Concen: 0.067 ppbv
RT: 4.623 min Scan# 61
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

Tgt Ion: 43 Resp: 7709

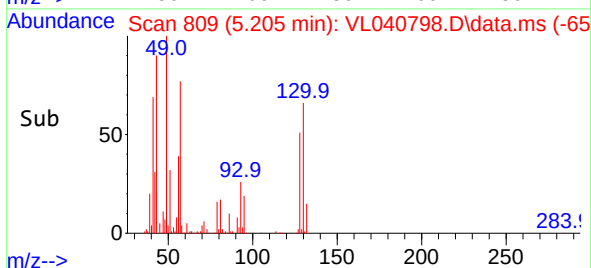
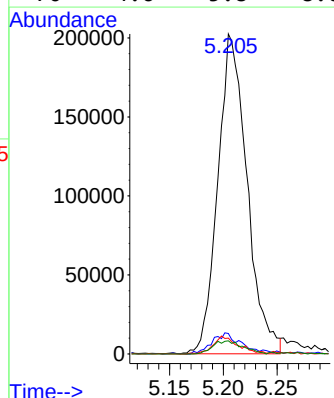
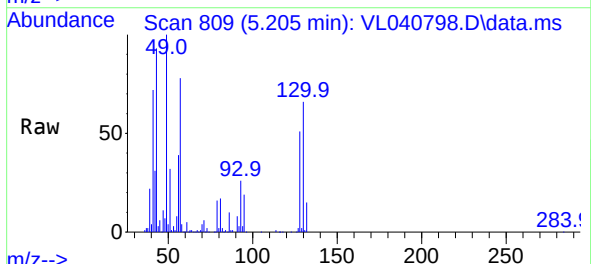
Ion	Ratio	Lower	Upper
43	100		
86	23.5	4.9	7.3#
42	44.2	7.8	11.6#
44	29.2	3.8	5.6#

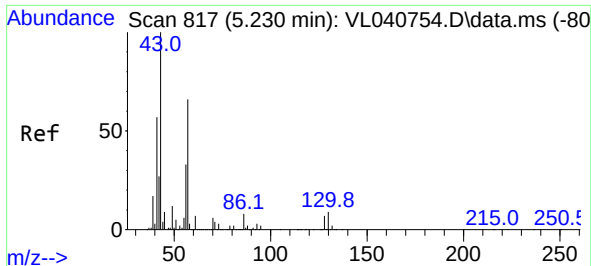


#25
Ethyl Acetate
Concen: 1.921 ppbv
RT: 5.205 min Scan# 809
Delta R.T. -0.016 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 43 Resp: 381554

Ion	Ratio	Lower	Upper
43	100		
45	7.4	8.2	12.4#
61	5.3	8.2	12.2#
70	4.6	5.8	8.6#



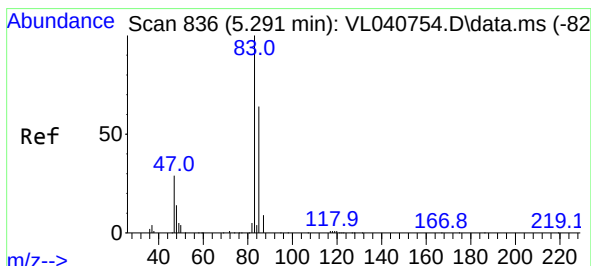
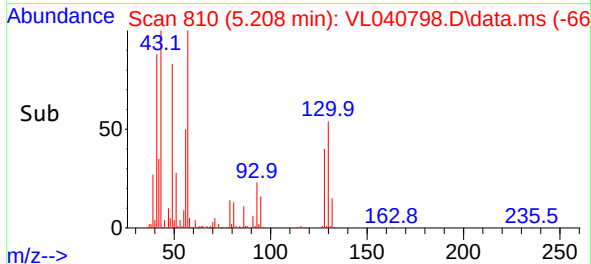
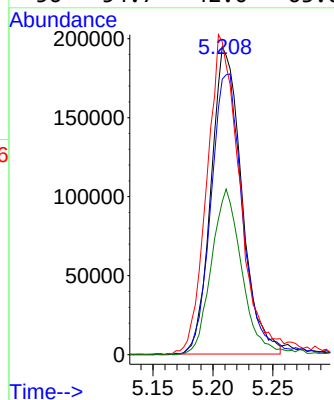
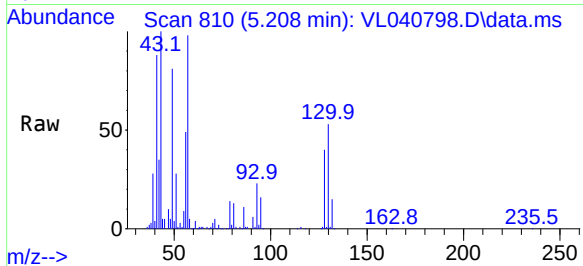


#26
Hexane
Concen: 3.803 ppbv
RT: 5.208 min Scan# 810
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

Tgt Ion: 57 Resp: 345221

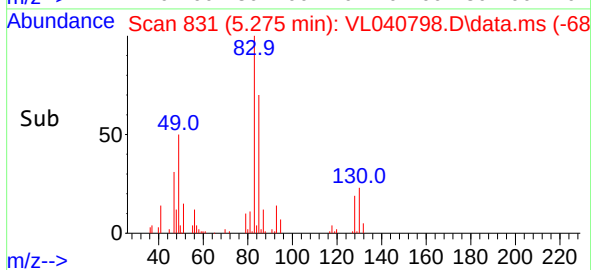
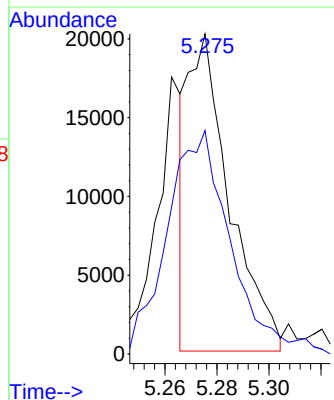
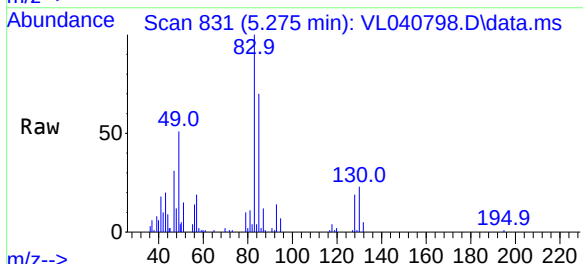
Ion	Ratio	Lower	Upper
57	100		
41	96.4	71.4	107.2
43	115.9	182.3	273.5#
56	54.7	42.0	63.0

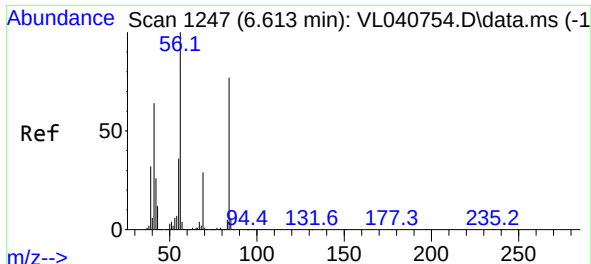


#29
Chloroform
Concen: 0.171 ppbv
RT: 5.275 min Scan# 831
Delta R.T. -0.016 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 83 Resp: 22470

Ion	Ratio	Lower	Upper
83	100		
85	67.7	51.3	76.9

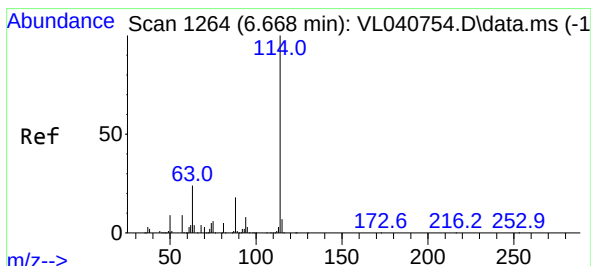
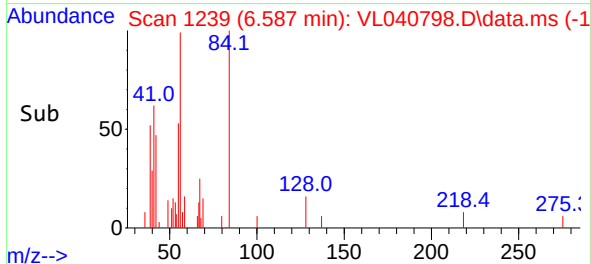
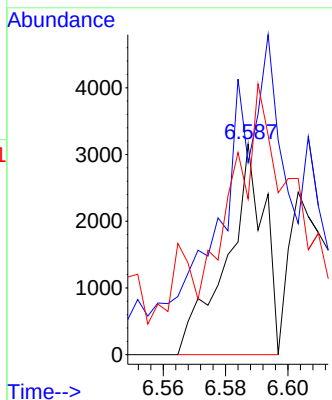
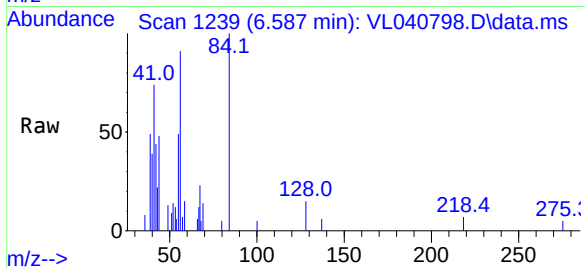




#30
Cyclohexane
Concen: 0.034 ppbv
RT: 6.587 min Scan# 11
Delta R.T. -0.026 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

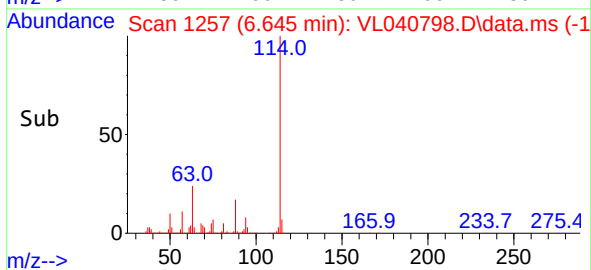
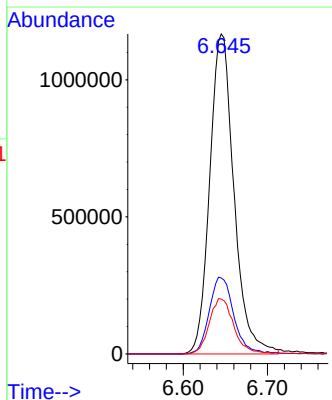
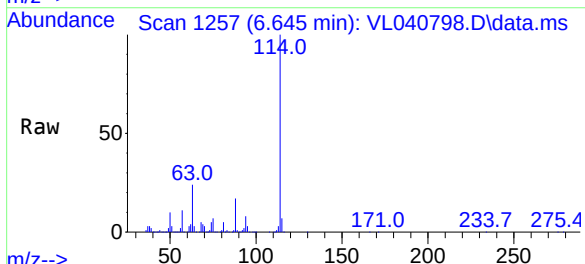
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

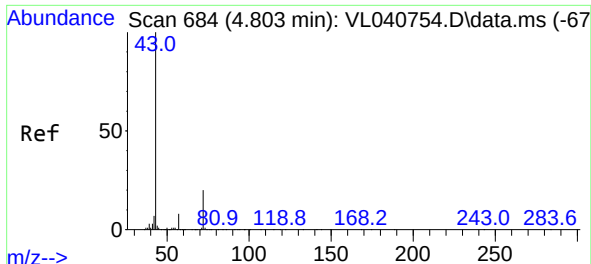
Tgt Ion: 84 Resp: 2649
Ion Ratio Lower Upper
84 100
56 0.0 110.3 165.5#
41 309.5 67.4 101.2#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 6.645 min Scan# 1257
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 114 Resp: 2329038
Ion Ratio Lower Upper
114 100
63 24.8 19.8 29.6
88 17.7 14.2 21.2





#34

2-Butanone

Concen: 0.661 ppbv

RT: 4.790 min Scan# 61

Delta R.T. -0.013 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

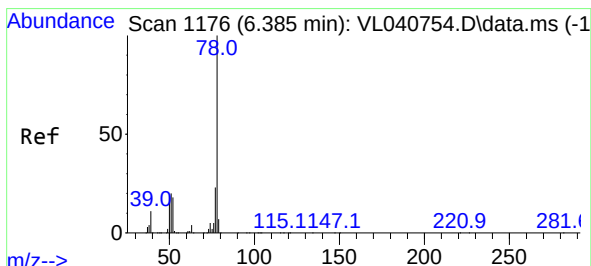
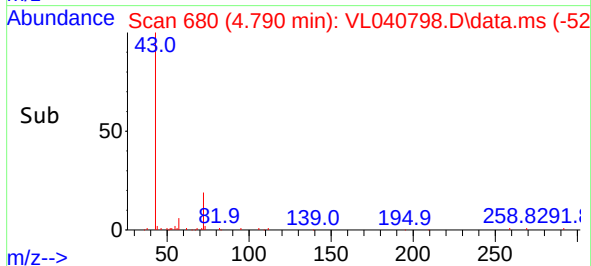
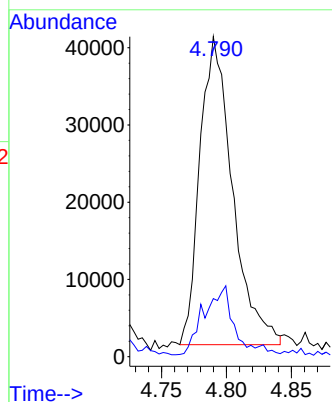
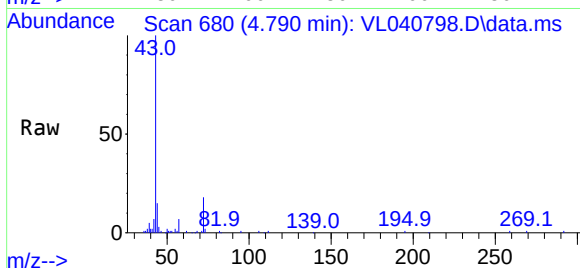
IA-2DUP

Tgt Ion: 43 Resp: 69707

Ion Ratio Lower Upper

43 100

72 22.7 16.8 25.2



#36

Benzene

Concen: 0.123 ppbv

RT: 6.365 min Scan# 1170

Delta R.T. -0.019 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

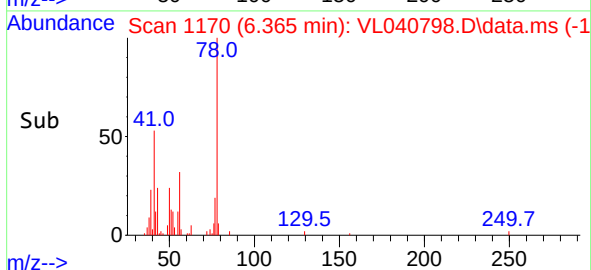
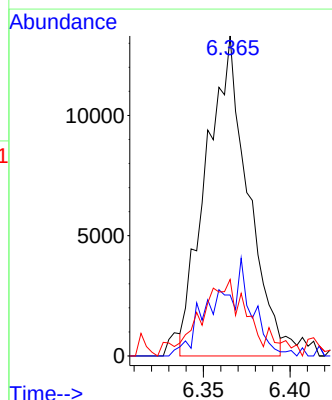
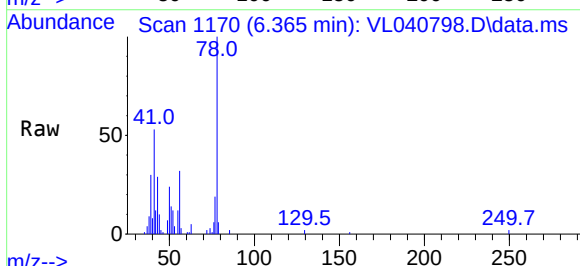
Tgt Ion: 78 Resp: 22099

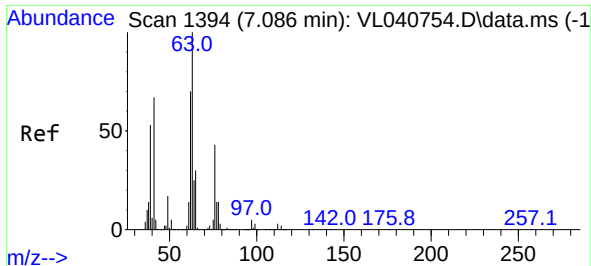
Ion Ratio Lower Upper

78 100

77 17.6 18.4 27.6#

50 19.7 15.0 22.4





#39

1,2-Dichloropropane

Concen: 8.028 ppbv

RT: 6.642 min Scan# 11

Delta R.T. -0.444 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

IA-2DUP

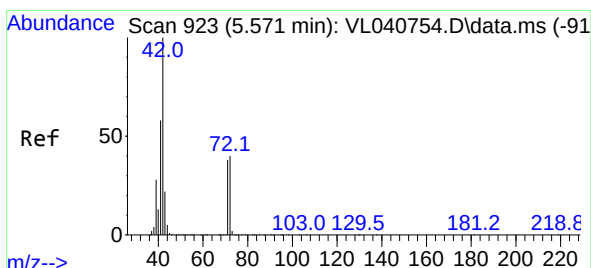
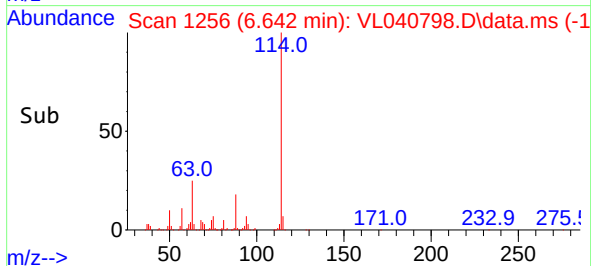
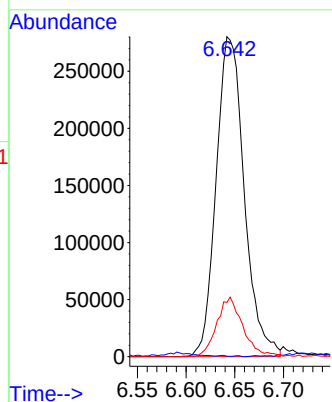
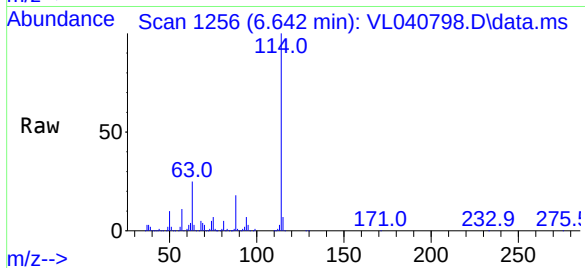
Tgt Ion: 63 Resp: 561870

Ion Ratio Lower Upper

63 100

41 0.0 53.7 80.5#

62 16.9 55.7 83.5#



#41

Tetrahydrofuran

Concen: 0.087 ppbv

RT: 5.562 min Scan# 920

Delta R.T. -0.010 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

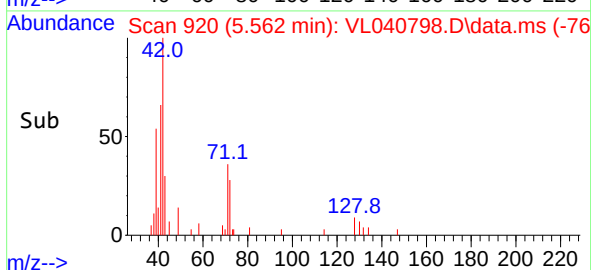
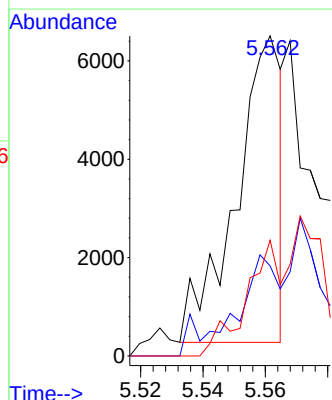
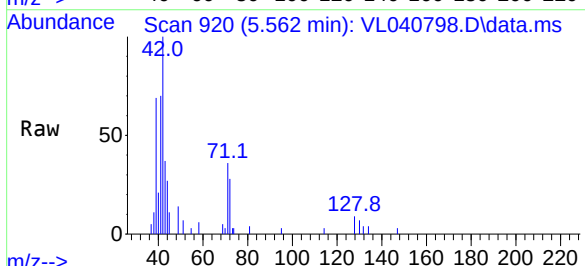
Tgt Ion: 42 Resp: 6339

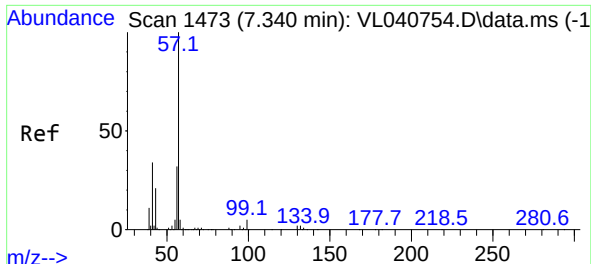
Ion Ratio Lower Upper

42 100

72 0.0 31.1 46.7#

71 0.0 29.7 44.5#





#44

2,2,4-Trimethylpentane

Concen: 0.044 ppbv

RT: 7.317 min Scan# 14

Delta R.T. -0.022 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

IA-2DUP

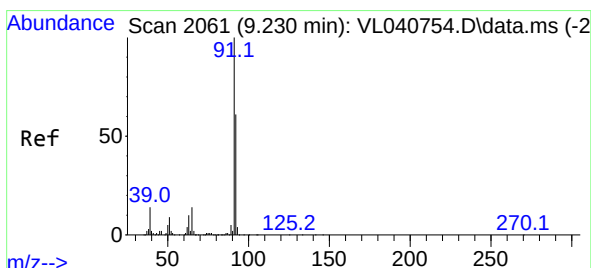
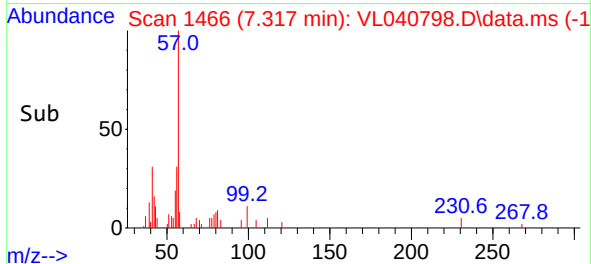
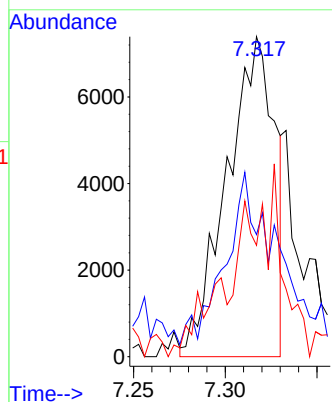
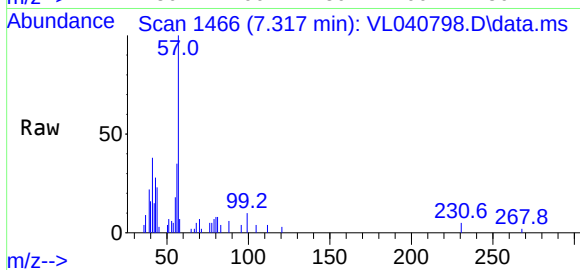
Tgt Ion: 57 Resp: 13407

Ion Ratio Lower Upper

57 100

41 80.3 27.4 41.0#

56 0.0 25.0 37.6#



#53

Toluene

Concen: 0.316 ppbv

RT: 9.211 min Scan# 2055

Delta R.T. -0.019 min

Lab File: VL040798.D

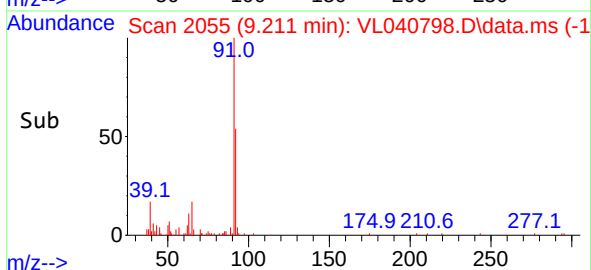
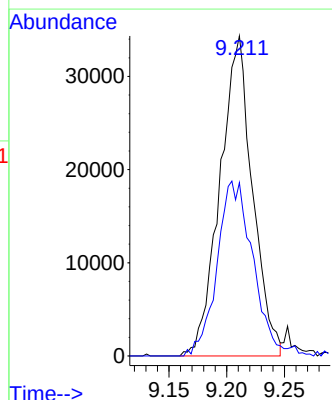
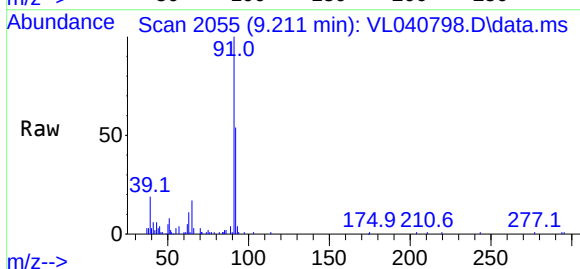
Acq: 25 Oct 2023 13:26

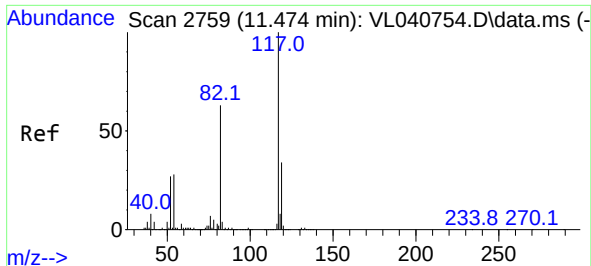
Tgt Ion: 91 Resp: 67387

Ion Ratio Lower Upper

91 100

92 61.1 50.2 75.2

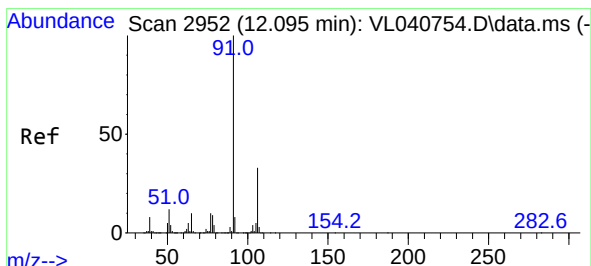
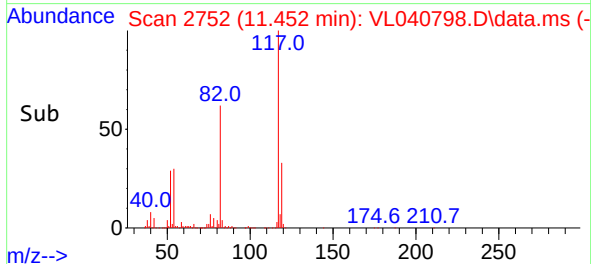
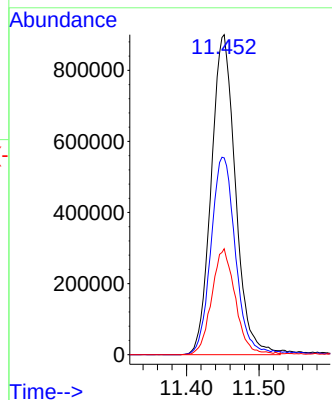
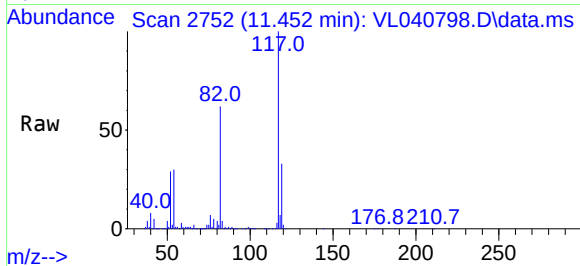




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.452 min Scan# 21
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

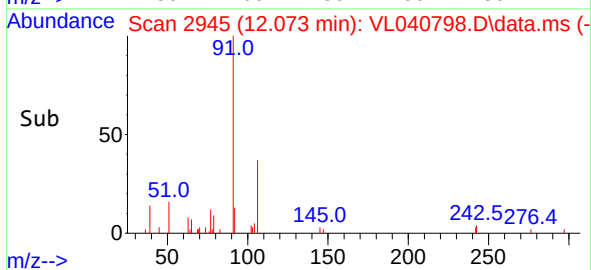
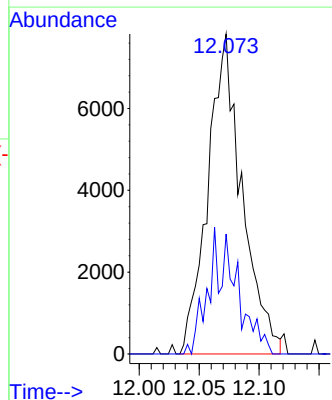
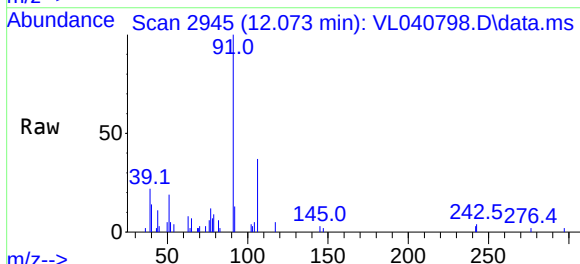
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

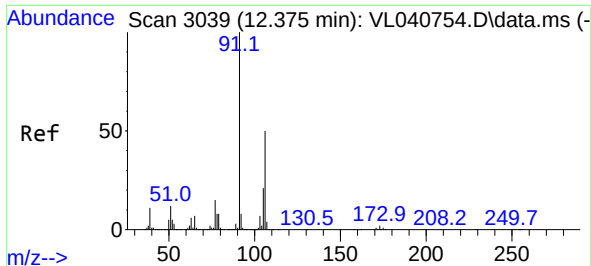
Tgt Ion:117 Resp: 2087463
Ion Ratio Lower Upper
117 100
82 64.0 46.6 70.0
119 32.8 26.0 39.0



#58
Ethyl Benzene
Concen: 0.059 ppbv
RT: 12.073 min Scan# 2945
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

Tgt Ion: 91 Resp: 15446
Ion Ratio Lower Upper
91 100
106 37.5 26.7 40.1





#59

m/p-Xylene

Concen: 0.040 ppbv

RT: 12.355 min Scan# 3033

Delta R.T. -0.019 min

Lab File: VL040798.D

Acq: 25 Oct 2023 13:26

Instrument :

MSVOA_L

ClientSampleId :

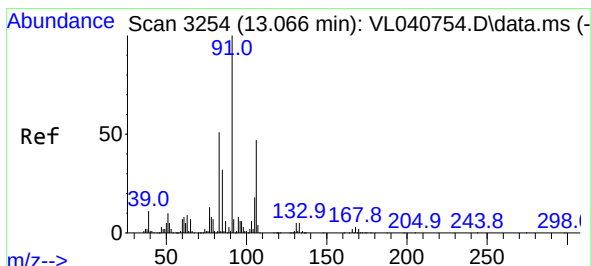
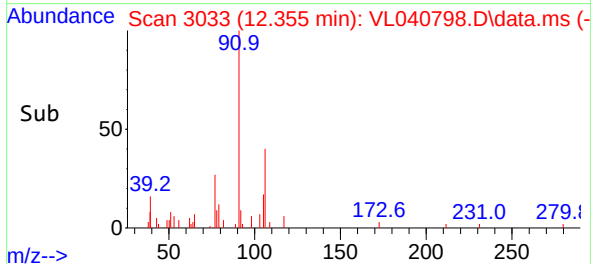
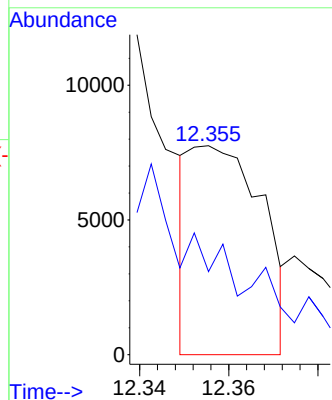
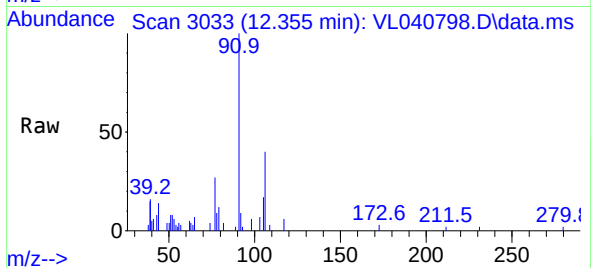
IA-2DUP

Tgt Ion: 91 Resp: 8733

Ion Ratio Lower Upper

91 100

106 0.0 37.7 56.5#



#60

o-Xylene

Concen: 0.039 ppbv

RT: 13.040 min Scan# 3246

Delta R.T. -0.026 min

Lab File: VL040798.D

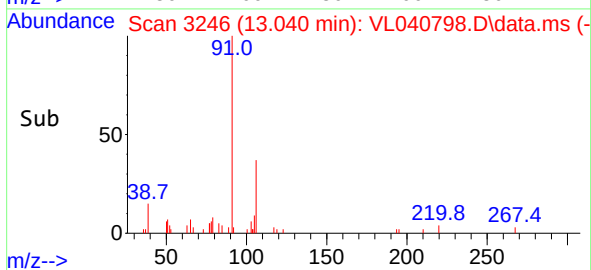
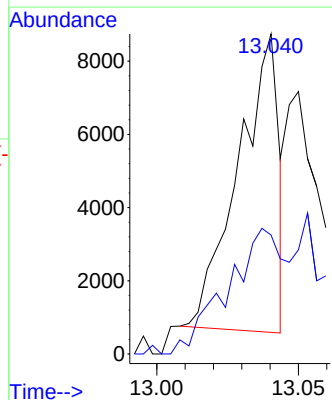
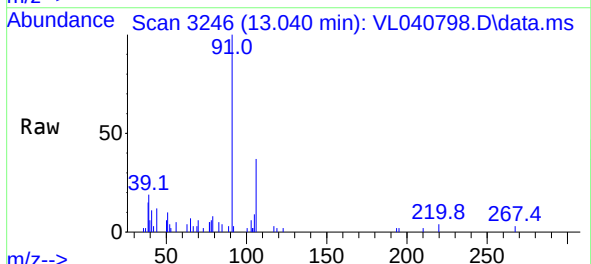
Acq: 25 Oct 2023 13:26

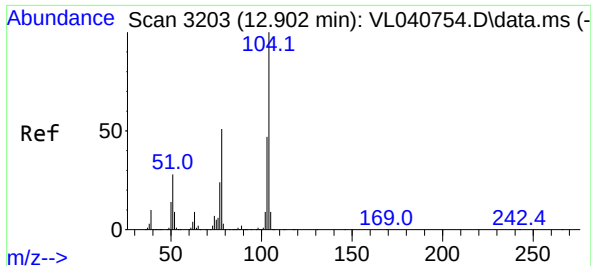
Tgt Ion: 91 Resp: 8077

Ion Ratio Lower Upper

91 100

106 0.0 23.5 70.5#

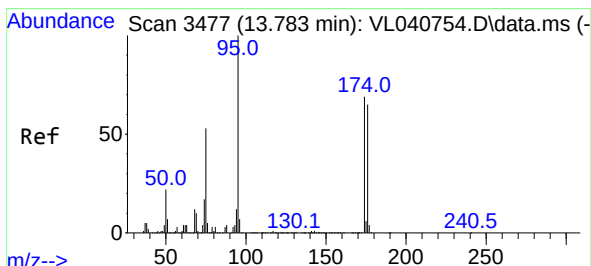
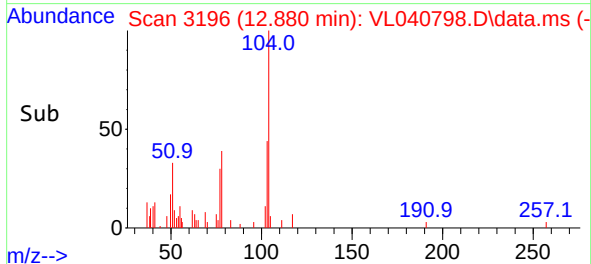
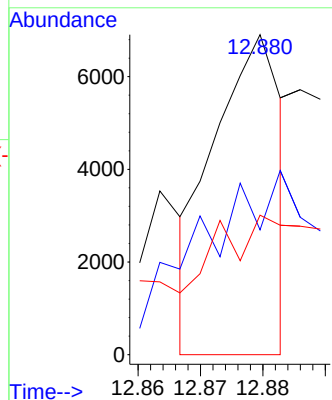
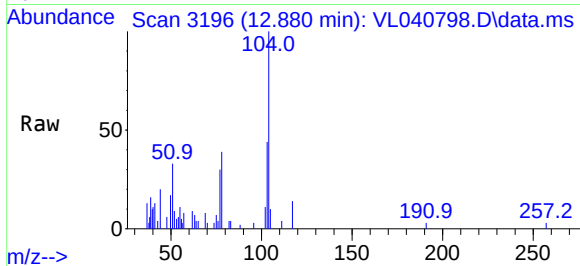




#61
Styrene
Concen: 0.046 ppbv
RT: 12.880 min Scan# 3196
Delta R.T. -0.022 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

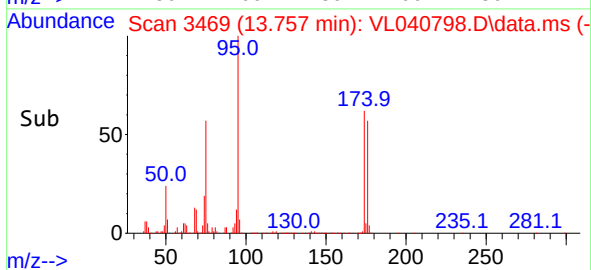
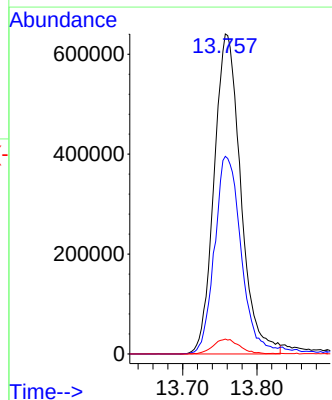
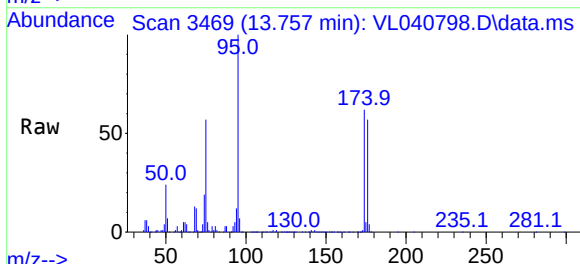
Instrument :
MSVOA_L
ClientSampleId :
IA-2DUP

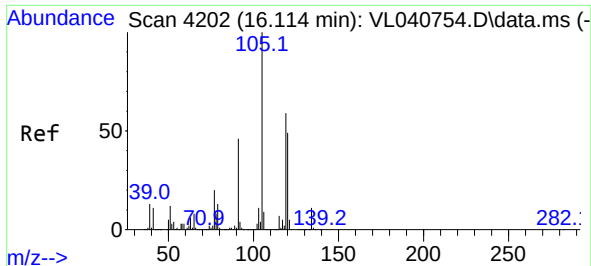
Tgt Ion:104 Resp: 5248
Ion Ratio Lower Upper
104 100
78 0.0 39.8 59.6#
103 140.7 37.5 56.3#



#68
1-Bromo-4-Fluorobenzene
Concen: 10.399 ppbv
RT: 13.757 min Scan# 3469
Delta R.T. -0.026 min
Lab File: VL040798.D
Acq: 25 Oct 2023 13:26

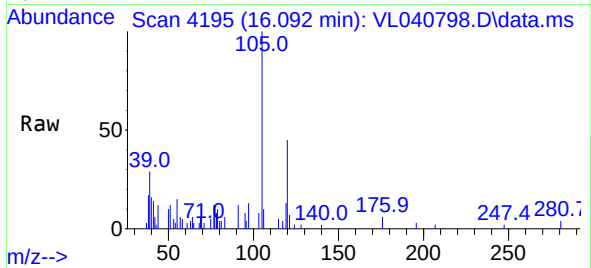
Tgt Ion: 95 Resp: 1597233
Ion Ratio Lower Upper
95 100
174 64.2 54.7 82.1
175 4.7 4.2 6.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.044 ppbv
 RT: 16.092 min Scan# 41
 Delta R.T. -0.022 min
 Lab File: VL040798.D
 Acq: 25 Oct 2023 13:26

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2DUP



Tgt Ion:	105	Resp:	10170
Ion	Ratio	Lower	Upper
105	100		
120	48.2	39.4	59.2
91	0.0	38.6	58.0#
77	8.7	16.6	25.0#

