

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041223\
 Data File : VL040342.D
 Acq On : 12 Apr 2023 17:09
 Operator : SY/MD
 Sample : 02311-02DUP
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Quant Time: Apr 13 05:39:30 2023
 Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL031523AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
 QLast Update : Tue Apr 11 04:15:53 2023
 Response via : Initial Calibration

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

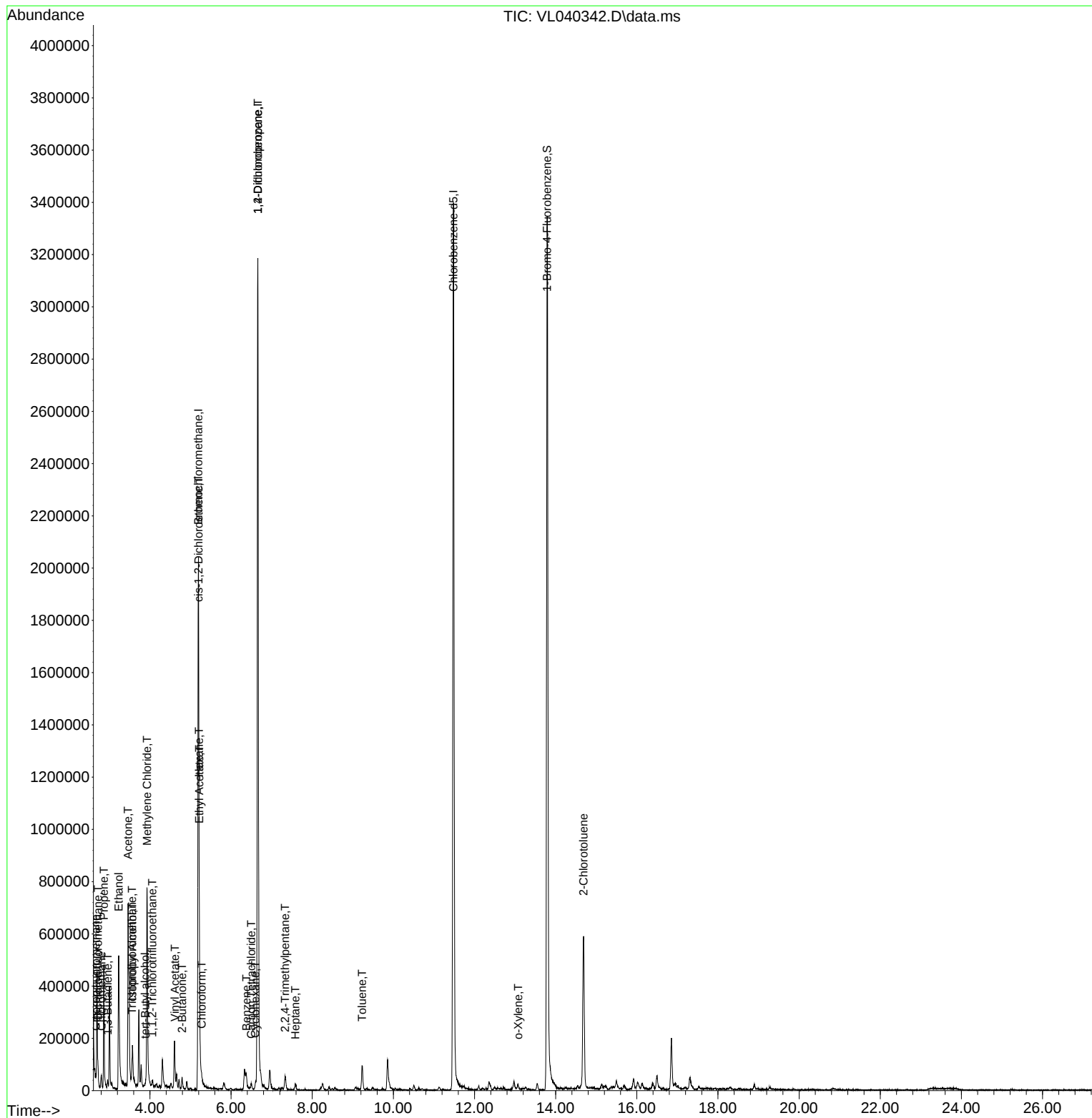
Internal Standards						
1) Bromochloromethane	5.192	49	922522	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	6.658	114	2320343	10.000	ppbv	0.00
55) Chlorobenzene-d5	11.481	117	2096396	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	13.789	95	1663983	9.478	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	94.800%
Target Compounds						
					Qvalue	
2) Dichlorodifluoromethane	2.719	85	36069	0.199	ppbv	100
3) Chlorodifluoromethane	2.668	51	66565	0.574	ppbv #	82
4) Chloromethane	2.806	50	35927	0.502	ppbv	93
9) Propene	2.864	41	113812	2.561	ppbv	98
10) Heptane	7.584	43	5710	0.053	ppbv #	77
11) Trichlorofluoromethane	3.558	101	34502	0.210	ppbv	84
12) 1,1,2-Trichlorotrifluo...	4.060	101	5235	0.043	ppbv #	57
13) Ethanol	3.230	45	568844	174.524	ppbv	97
15) Acetone	3.462	43	766488	6.825	ppbv	99
16) 1,3-Butadiene	2.957	39	5801	0.114	ppbv #	31
17) tert-Butyl alcohol	3.883	59	5965	0.056	ppbv #	72
19) Isopropyl Alcohol	3.568	45	125096	2.325	ppbv #	1
20) Methylene Chloride	3.931	84	267635	5.664	ppbv	96
23) Vinyl Acetate	4.619	43	10898	0.349	ppbv #	1
25) Ethyl Acetate	5.214	43	123434	0.587	ppbv #	89
26) Hexane	5.211	57	123761	1.434	ppbv #	46
29) Chloroform	5.275	83	11531	0.076	ppbv	92
30) Cyclohexane	6.600	84	2876	0.042	ppbv #	1
31) cis-1,2-Dichloroethene	5.201	61	5472	0.065	ppbv #	40
34) 2-Butanone	4.793	43	47395	0.414	ppbv	94
35) Carbon Tetrachloride	6.497	117	5868	0.040	ppbv	98
36) Benzene	6.378	78	16941	0.096	ppbv	99
39) 1,2-Dichloropropane	6.658	63	589132	8.492	ppbv #	24
44) 2,2,4-Trimethylpentane	7.333	57	21807	0.074	ppbv #	22
53) Toluene	9.230	91	36848	0.199	ppbv #	21
60) o-Xylene	13.076	91	12777	0.061	ppbv	91
71) 2-Chlorotoluene	14.683	91	157338	0.694	ppbv #	45

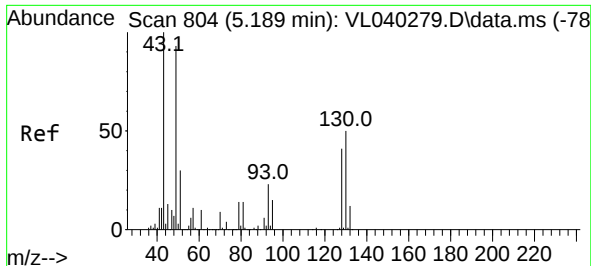
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Aug 26 06:05:16 2022
QLast Update : Tue Apr 11 04:15:53 2023
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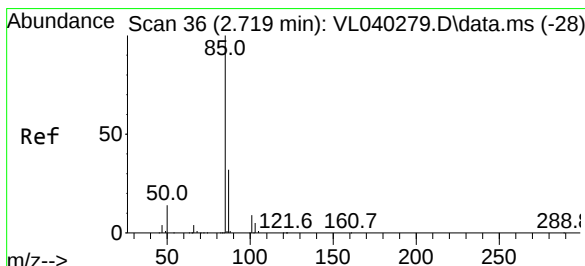
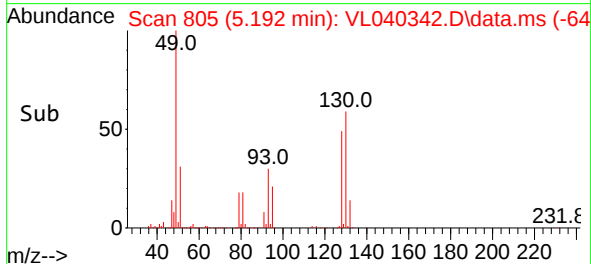
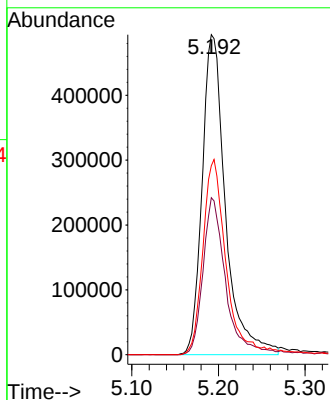
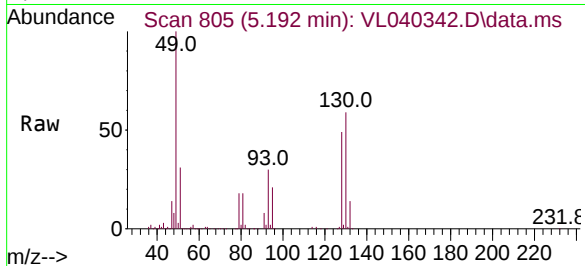




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.192 min Scan# 804
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

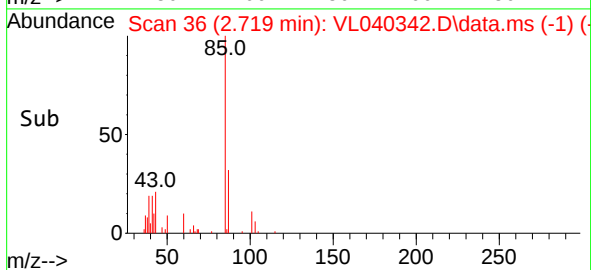
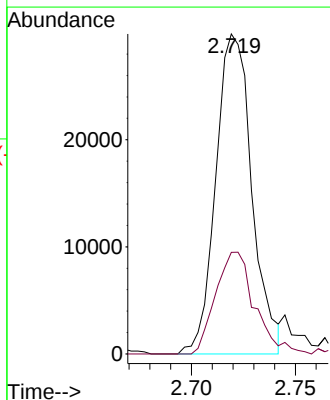
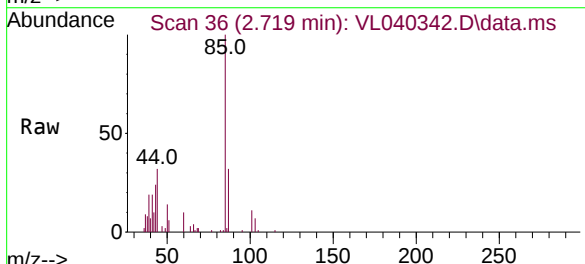
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

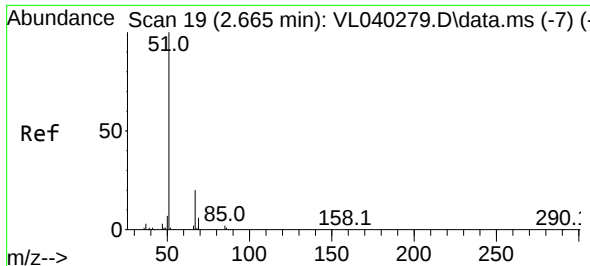
Tgt Ion: 49 Resp: 922522
Ion Ratio Lower Upper
49 100
128 48.6 22.4 67.3
130 62.6 28.7 86.1



#2
Dichlorodifluoromethane
Concen: 0.199 ppbv
RT: 2.719 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 85 Resp: 36069
Ion Ratio Lower Upper
85 100
87 31.8 25.5 38.3

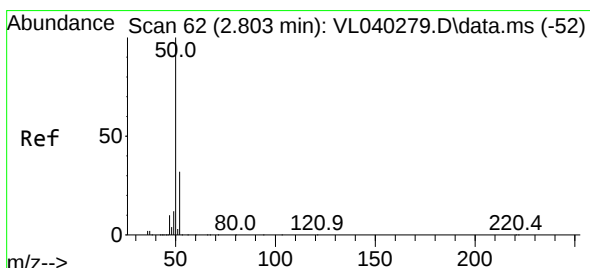
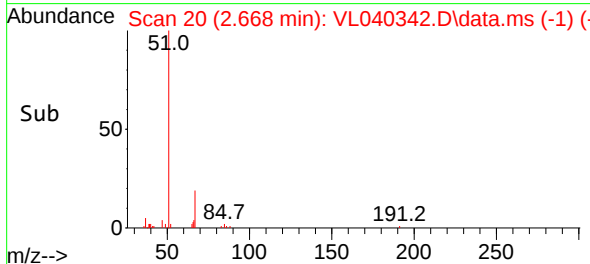
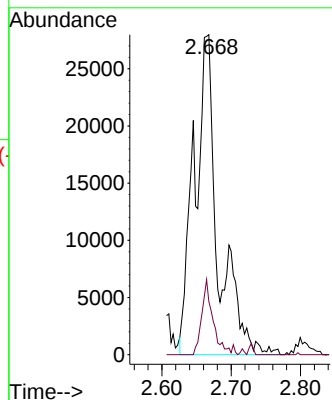
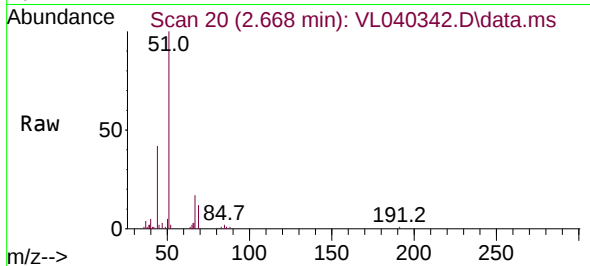




#3
Chlorodifluoromethane
Concen: 0.574 ppbv
RT: 2.668 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

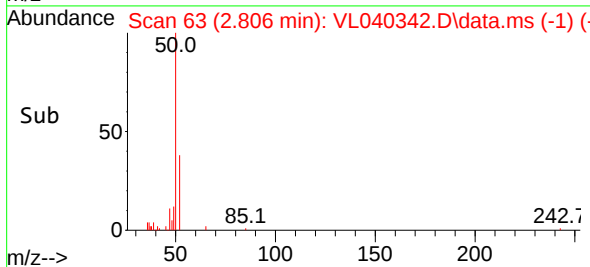
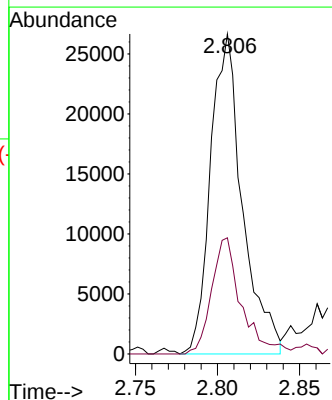
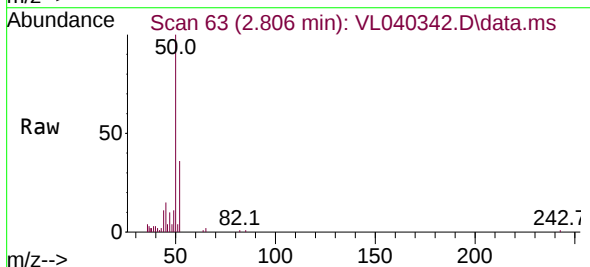
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tgt Ion: 51 Resp: 66565
Ion Ratio Lower Upper
51 100
67 11.6 16.0 24.0#

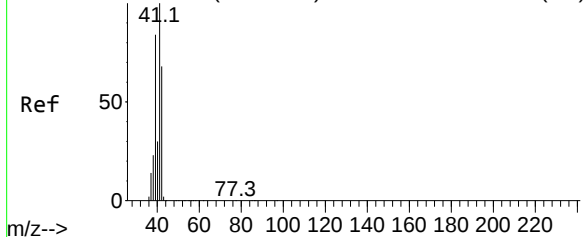


#4
Chloromethane
Concen: 0.502 ppbv
RT: 2.806 min Scan# 63
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 50 Resp: 35927
Ion Ratio Lower Upper
50 100
52 36.3 25.9 38.9



Abundance Scan 25 (2.684 min): VL040279.D\data.ms (-15)



#9

Propene

Concen: 2.561 ppbv

RT: 2.864 min Scan# 81

Delta R.T. 0.180 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

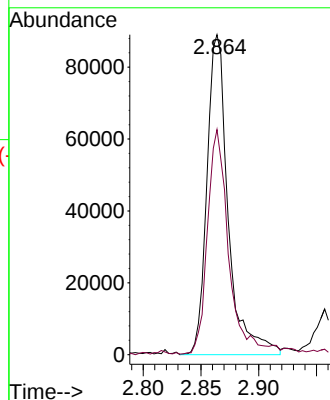
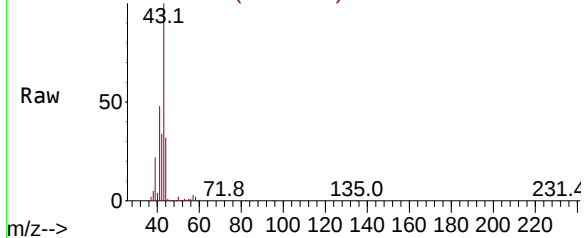
Tgt Ion: 41 Resp: 113812

Ion Ratio Lower Upper

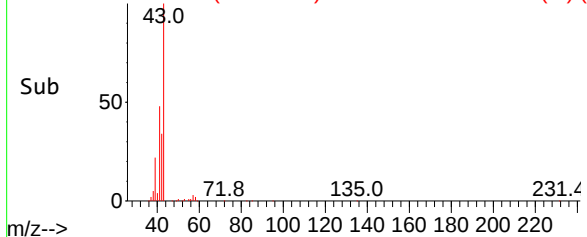
41 100

42 75.0 59.0 88.4

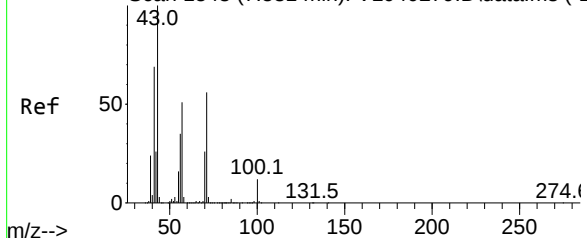
Abundance Scan 81 (2.864 min): VL040342.D\data.ms



Abundance Scan 81 (2.864 min): VL040342.D\data.ms (-1)



Abundance Scan 1548 (7.581 min): VL040279.D\data.ms (-1)



#10

Heptane

Concen: 0.053 ppbv

RT: 7.584 min Scan# 1549

Delta R.T. 0.003 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

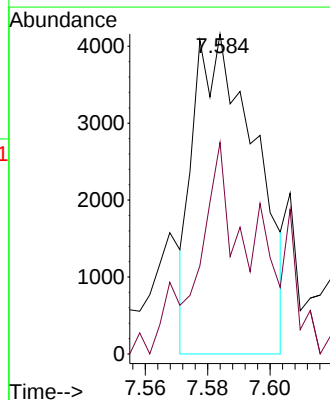
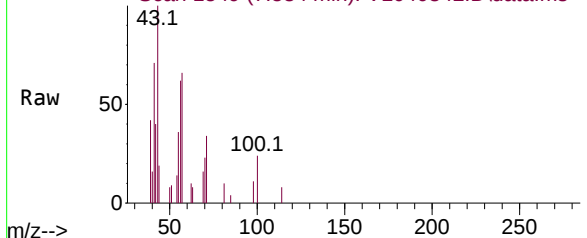
Tgt Ion: 43 Resp: 5710

Ion Ratio Lower Upper

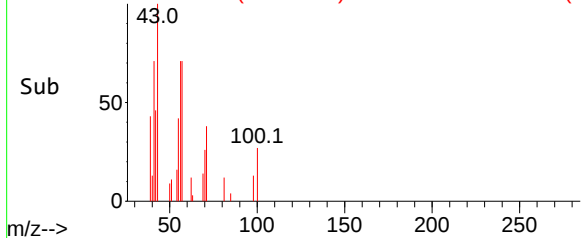
43 100

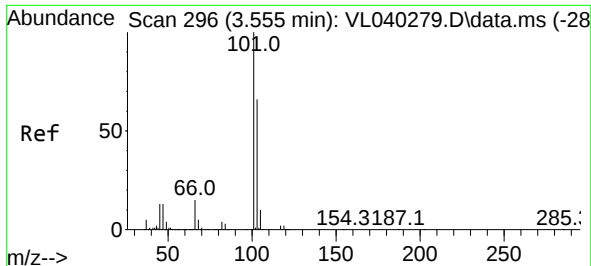
57 68.1 41.7 62.5

Abundance Scan 1549 (7.584 min): VL040342.D\data.ms



Abundance Scan 1549 (7.584 min): VL040342.D\data.ms (-1)

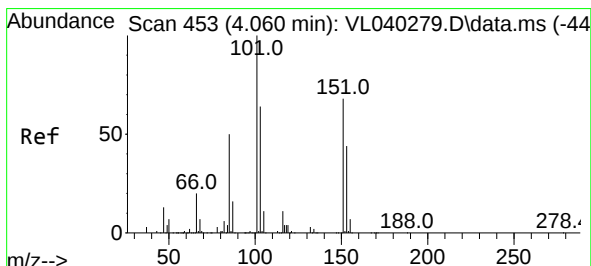
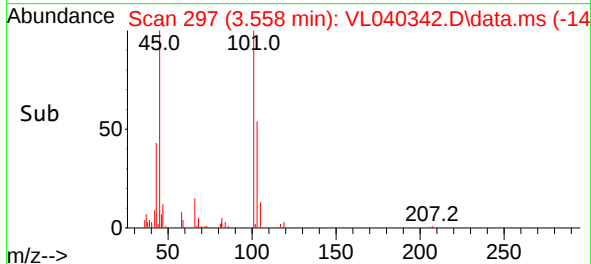
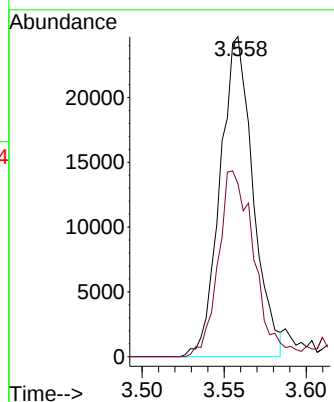
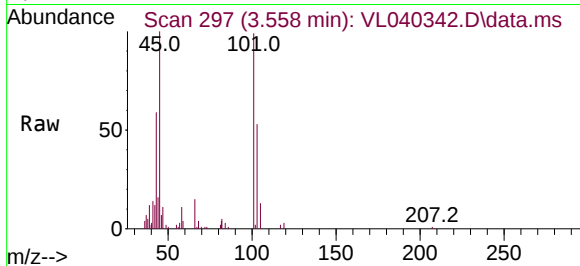




#11
 Trichlorofluoromethane
 Concen: 0.210 ppbv
 RT: 3.558 min Scan# 296
 Delta R.T. 0.003 min
 Lab File: VL040342.D
 Acq: 12 Apr 2023 17:09

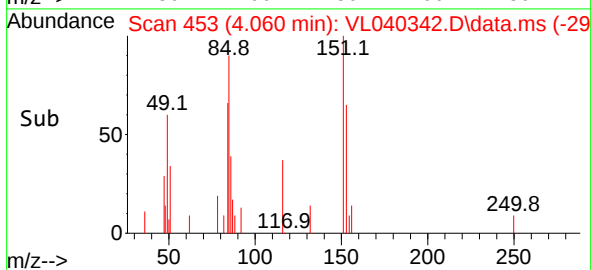
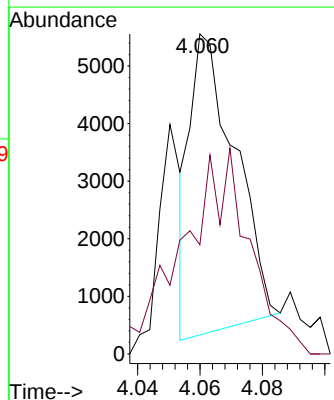
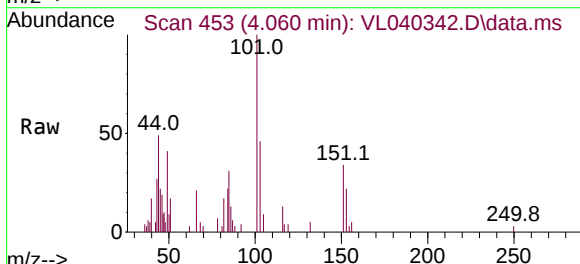
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

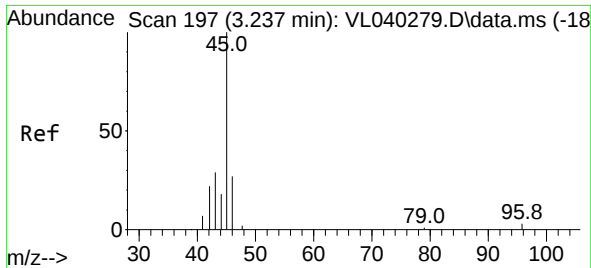
Tgt Ion:101 Resp: 34502
 Ion Ratio Lower Upper
 101 100
 103 54.0 53.1 79.7



#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.043 ppbv
 RT: 4.060 min Scan# 453
 Delta R.T. -0.000 min
 Lab File: VL040342.D
 Acq: 12 Apr 2023 17:09

Tgt Ion:101 Resp: 5235
 Ion Ratio Lower Upper
 101 100
 151 100.8 53.2 79.8#

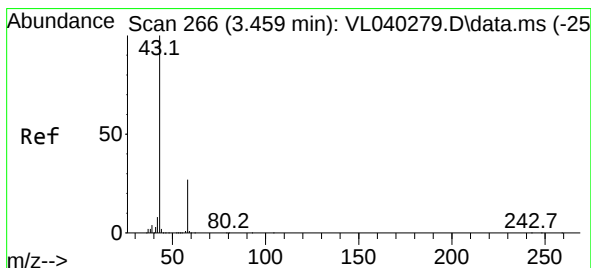
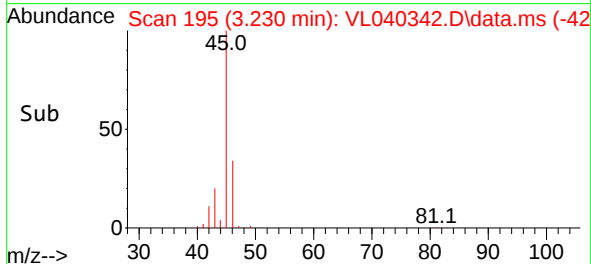
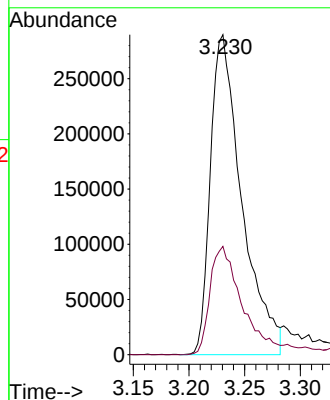
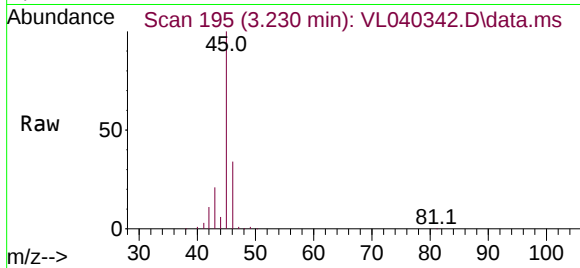




#13
Ethanol
Concen: 174.524 ppbv
RT: 3.230 min Scan# 195
Delta R.T. -0.007 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

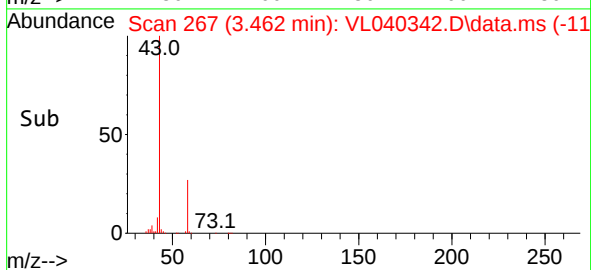
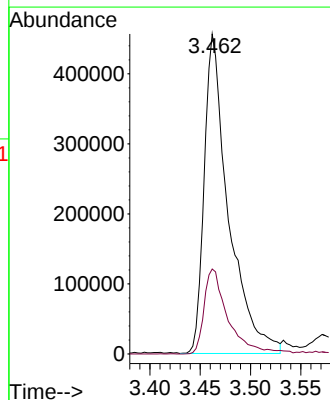
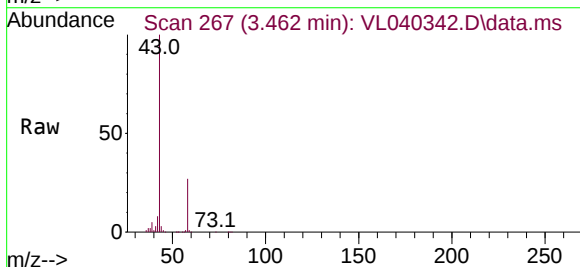
Instrument :
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ClientSampleId :
IA1DUP

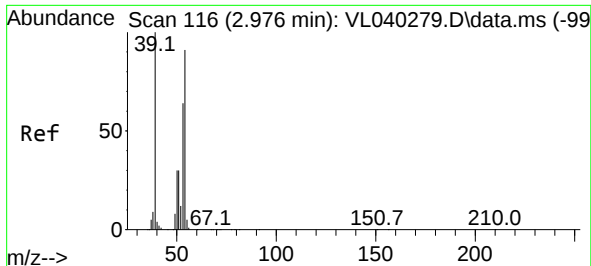
Tgt Ion: 45 Resp: 568844
Ion Ratio Lower Upper
45 100
46 39.2 15.0 60.2



#15
Acetone
Concen: 6.825 ppbv
RT: 3.462 min Scan# 267
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 43 Resp: 766488
Ion Ratio Lower Upper
43 100
58 27.6 21.8 32.8





#16

1,3-Butadiene

Concen: 0.114 ppbv

RT: 2.957 min Scan# 116

Delta R.T. -0.019 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Instrument :

MSVOA_L

ClientSampleId :

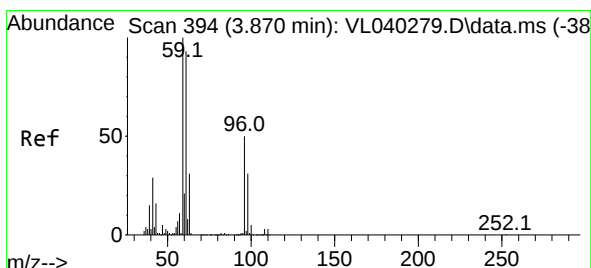
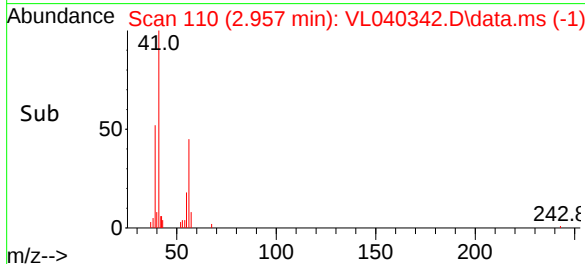
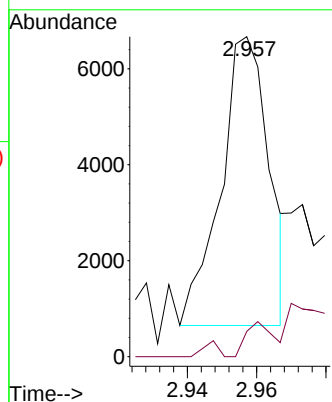
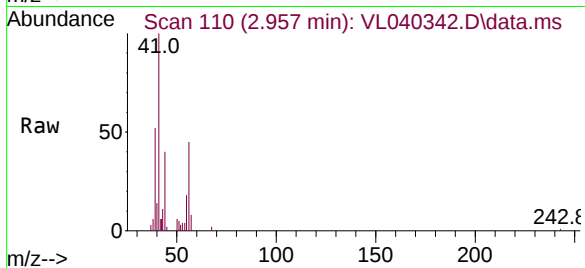
IA1DUP

Tgt Ion: 39 Resp: 5801

Ion Ratio Lower Upper

39 100

54 22.5 68.4 102.6#



#17

tert-Butyl alcohol

Concen: 0.056 ppbv

RT: 3.883 min Scan# 398

Delta R.T. 0.013 min

Lab File: VL040342.D

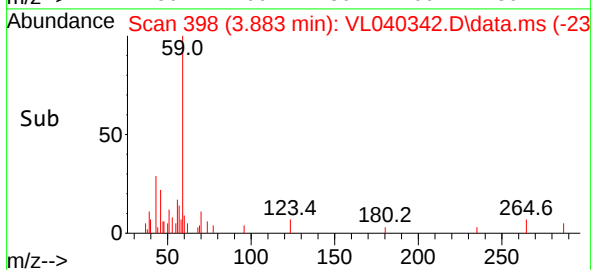
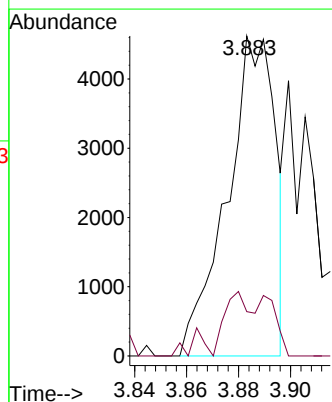
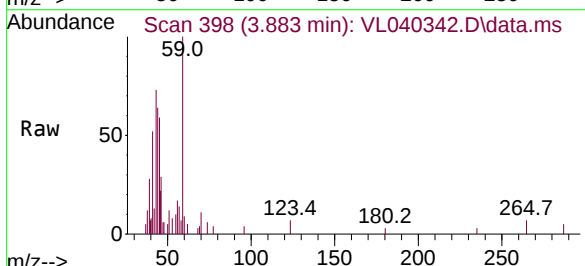
Acq: 12 Apr 2023 17:09

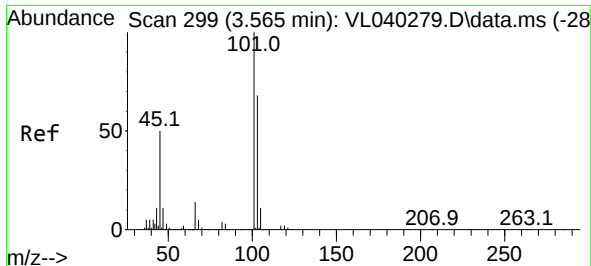
Tgt Ion: 59 Resp: 5965

Ion Ratio Lower Upper

59 100

57 0.0 8.5 12.7#





#19

Isopropyl Alcohol

Concen: 2.325 ppbv

RT: 3.568 min Scan# 300

Delta R.T. 0.003 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Instrument :

MSVOA_L

ClientSampleId :

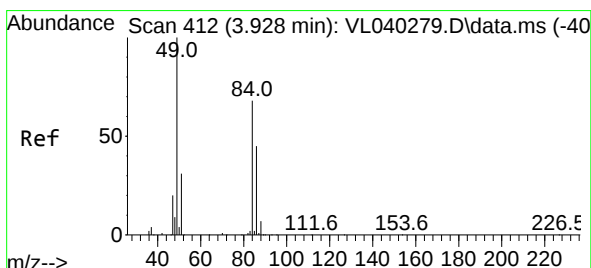
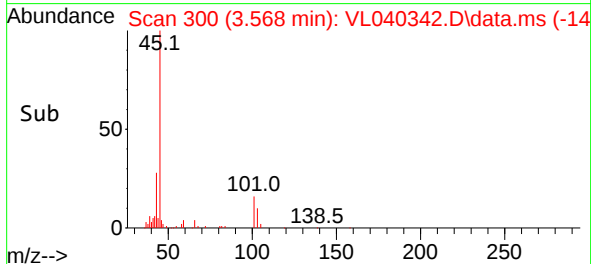
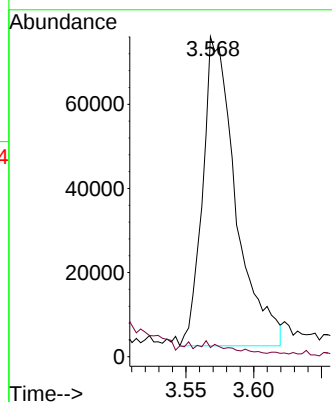
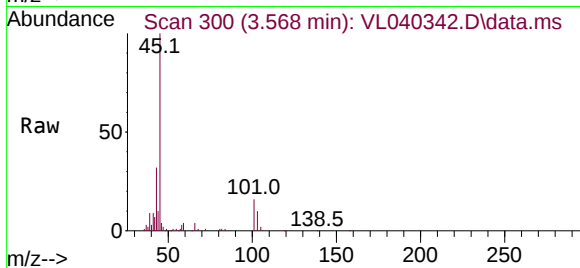
IA1DUP

Tgt Ion: 45 Resp: 125096

Ion Ratio Lower Upper

45 100

58 169.0 2.7 4.1#



#20

Methylene Chloride

Concen: 5.664 ppbv

RT: 3.931 min Scan# 413

Delta R.T. 0.003 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Tgt Ion: 84 Resp: 267635

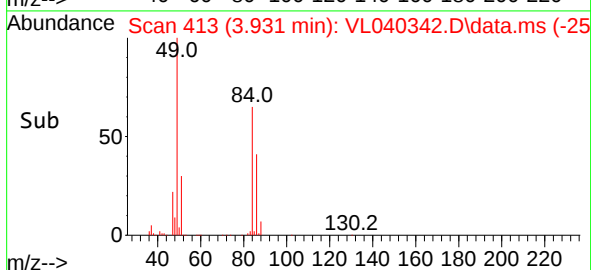
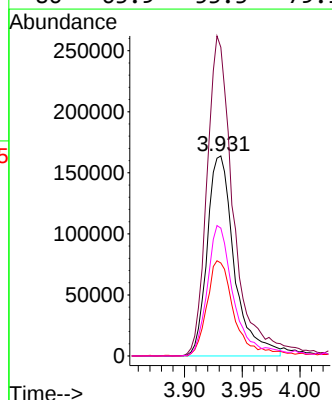
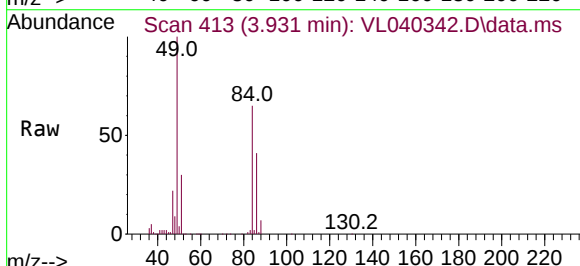
Ion Ratio Lower Upper

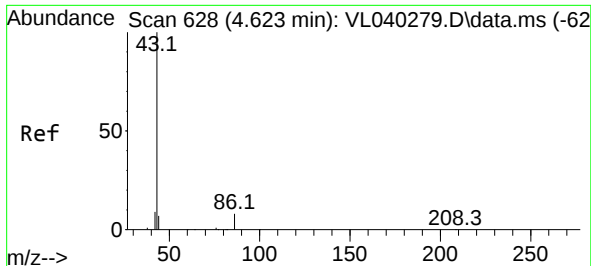
84 100

49 154.1 117.5 176.3

51 46.5 36.9 55.3

86 63.9 53.3 79.9

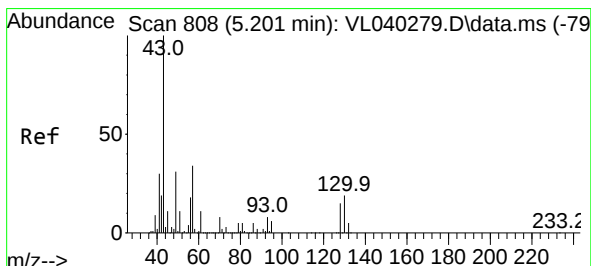
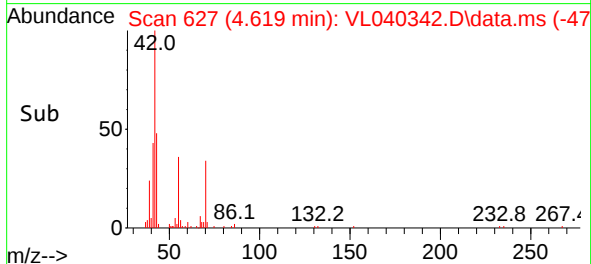
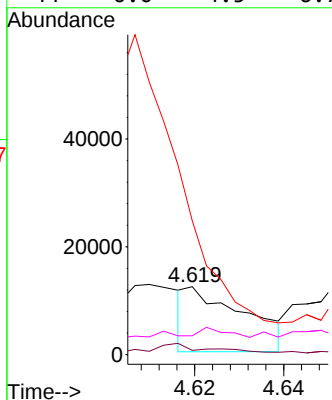
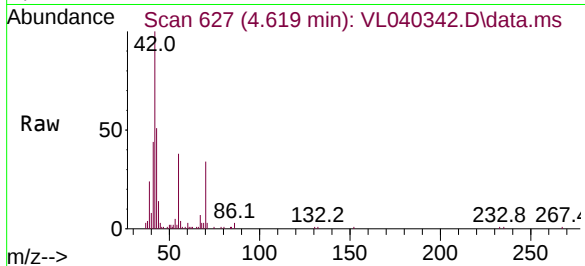




#23
 Vinyl Acetate
 Concen: 0.349 ppbv
 RT: 4.619 min Scan# 61
 Delta R.T. -0.004 min
 Lab File: VL040342.D
 Acq: 12 Apr 2023 17:09

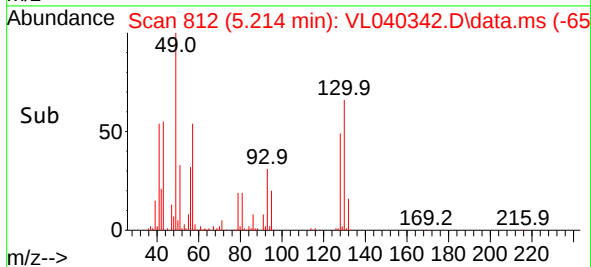
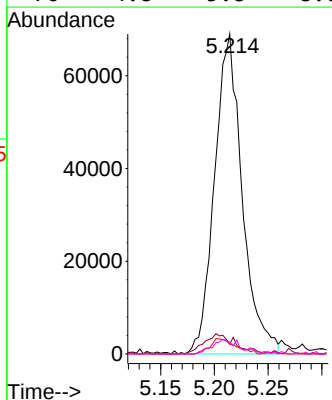
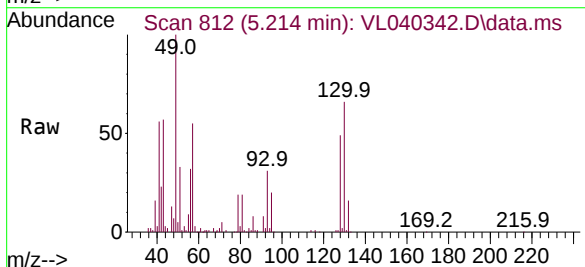
Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

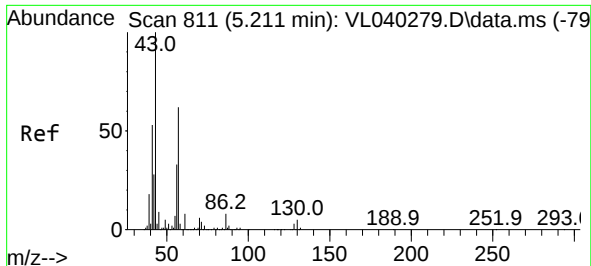
Tgt Ion:	43	Resp:	10898
Ion	Ratio	Lower	Upper
43	100		
86	5.5	5.0	7.4
42	296.8	9.1	13.7#
44	0.0	4.5	6.7#



#25
 Ethyl Acetate
 Concen: 0.587 ppbv
 RT: 5.214 min Scan# 812
 Delta R.T. 0.013 min
 Lab File: VL040342.D
 Acq: 12 Apr 2023 17:09

Tgt Ion:	43	Resp:	123434
Ion	Ratio	Lower	Upper
43	100		
45	7.4	8.6	12.8#
61	4.5	8.4	12.6#
70	4.8	5.8	8.6#

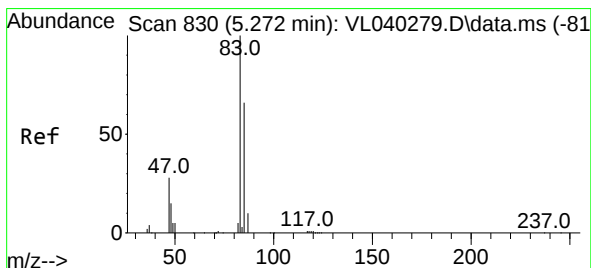
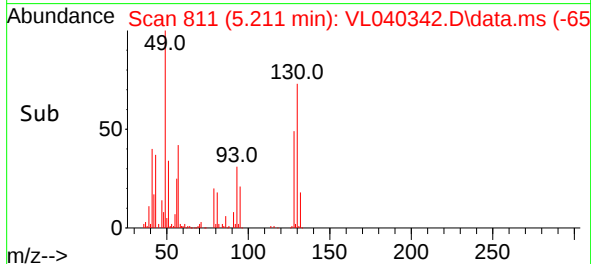
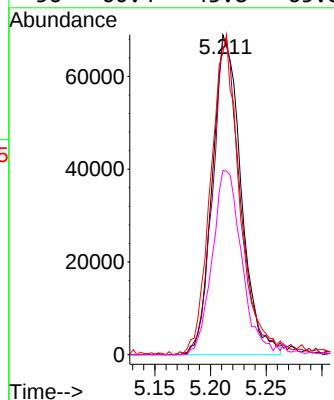
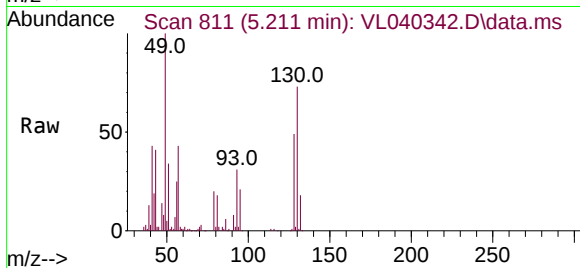




#26
Hexane
Concen: 1.434 ppbv
RT: 5.211 min Scan# 811
Delta R.T. 0.000 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

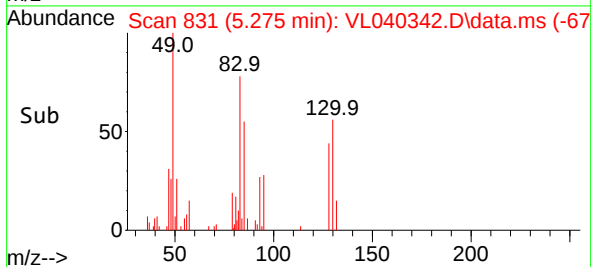
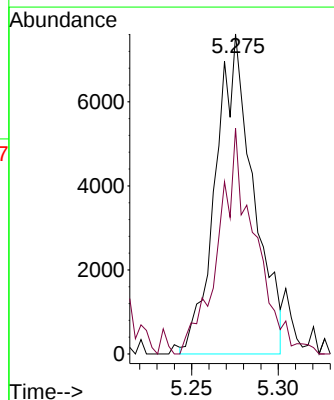
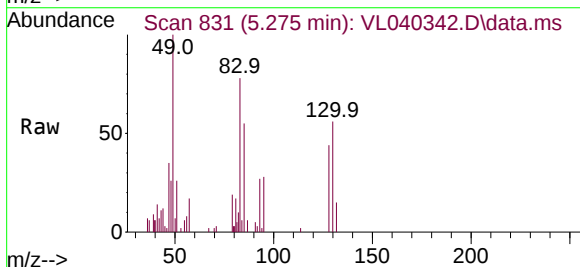
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

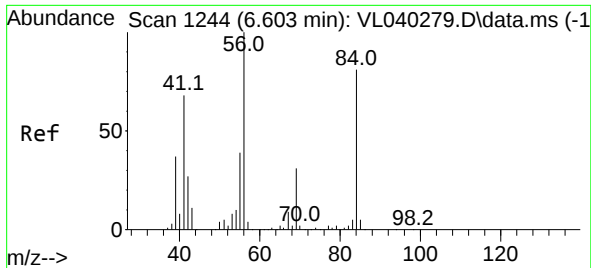
Tgt Ion:	57	Resp:	123761
Ion	Ratio	Lower	Upper
57	100		
41	98.2	73.5	110.3
43	104.0	196.3	294.5#
56	60.4	43.8	65.8



#29
Chloroform
Concen: 0.076 ppbv
RT: 5.275 min Scan# 831
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion:	83	Resp:	11531
Ion	Ratio	Lower	Upper
83	100		
85	72.0	52.8	79.2

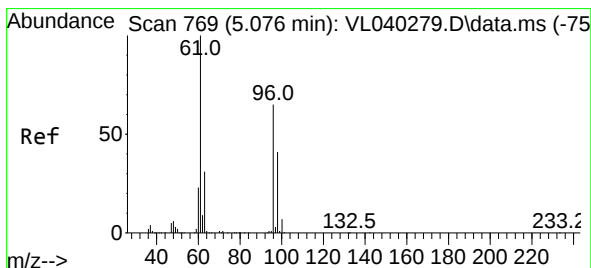
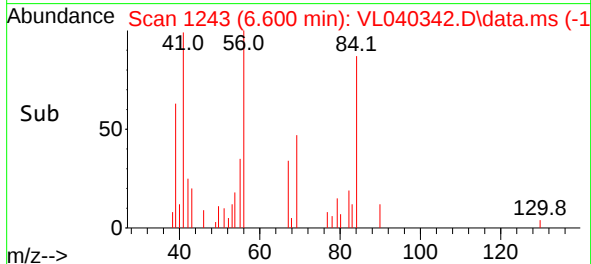
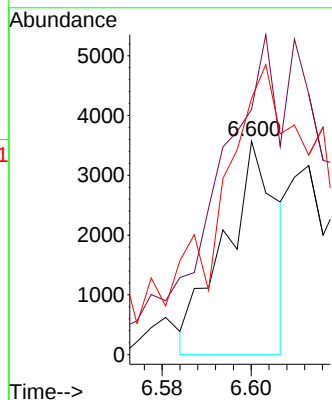
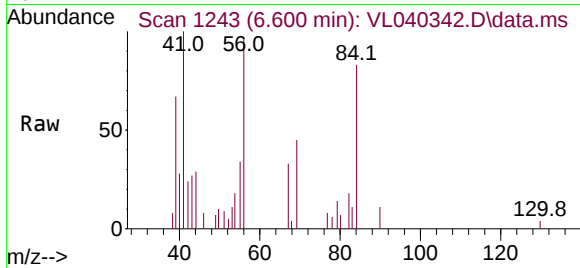




#30
Cyclohexane
Concen: 0.042 ppbv
RT: 6.600 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

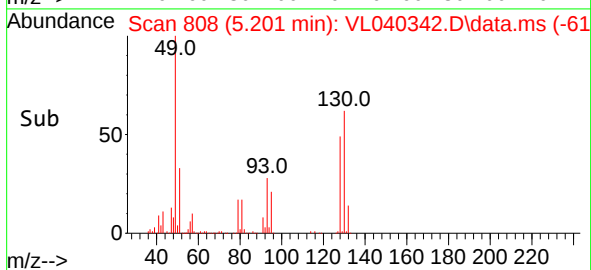
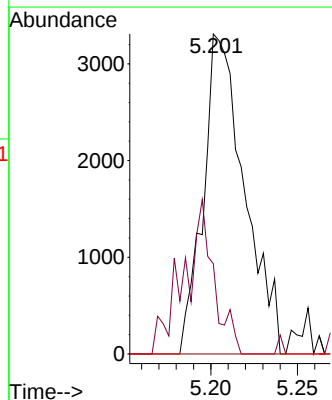
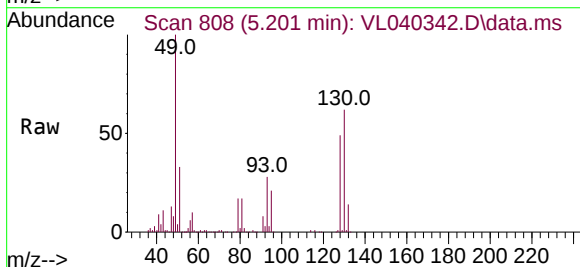
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

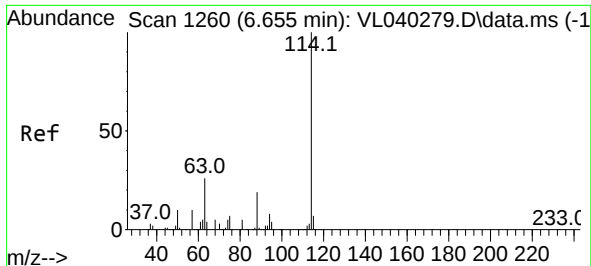
Tgt Ion: 84 Resp: 2876
Ion Ratio Lower Upper
84 100
56 0.0 109.0 163.4#
41 368.3 67.9 101.9#



#31
cis-1,2-Dichloroethene
Concen: 0.065 ppbv
RT: 5.201 min Scan# 808
Delta R.T. 0.125 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 61 Resp: 5472
Ion Ratio Lower Upper
61 100
96 20.2 51.8 77.8#
98 0.0 32.5 48.7#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 6.658 min Scan# 114

Delta R.T. 0.003 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

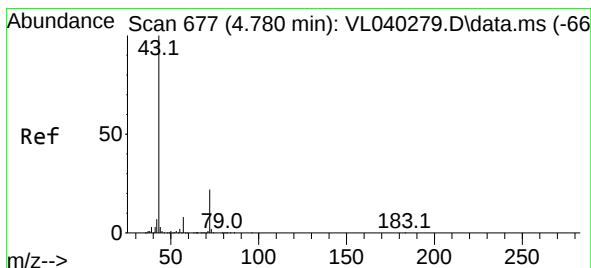
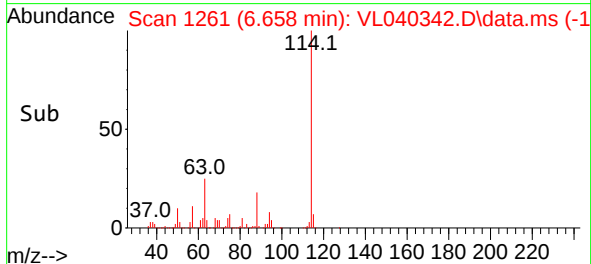
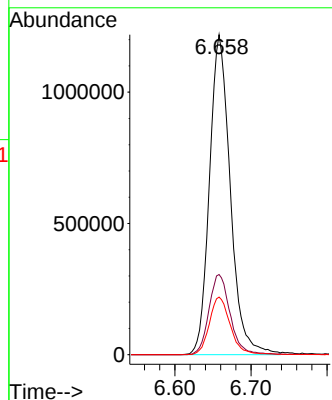
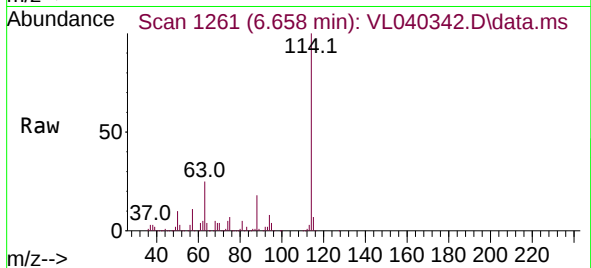
Tgt Ion:114 Resp: 2320343

Ion Ratio Lower Upper

114 100

63 25.7 21.2 31.8

88 18.3 14.5 21.7



#34

2-Butanone

Concen: 0.414 ppbv

RT: 4.793 min Scan# 681

Delta R.T. 0.013 min

Lab File: VL040342.D

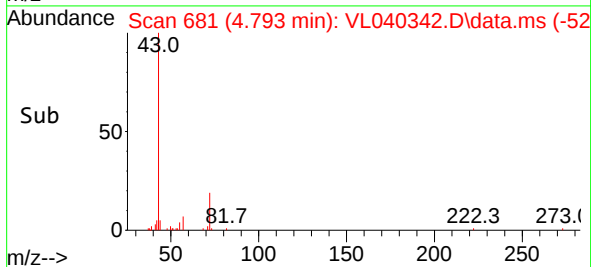
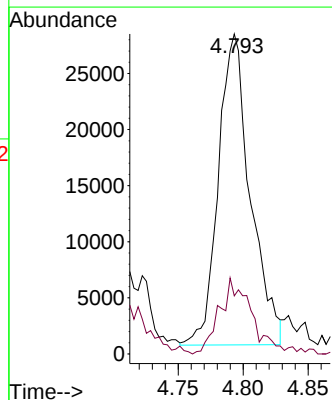
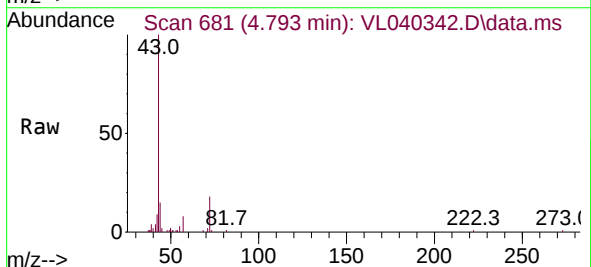
Acq: 12 Apr 2023 17:09

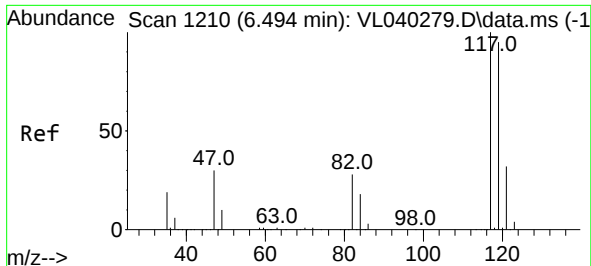
Tgt Ion: 43 Resp: 47395

Ion Ratio Lower Upper

43 100

72 25.8 18.3 27.5

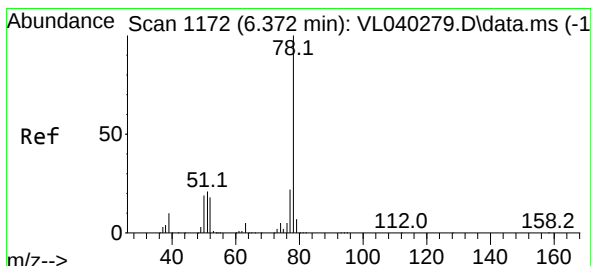
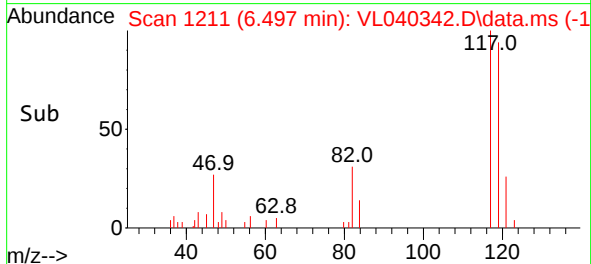
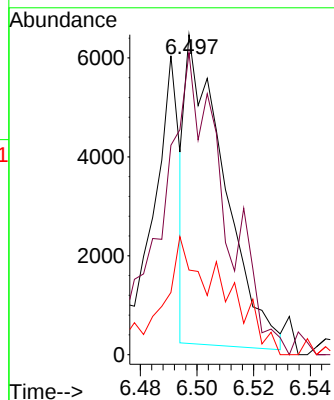
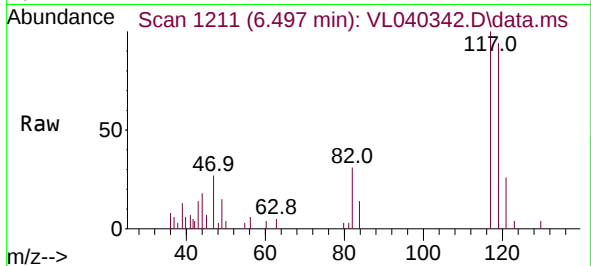




#35
Carbon Tetrachloride
Concen: 0.040 ppbv
RT: 6.497 min Scan# 1174
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

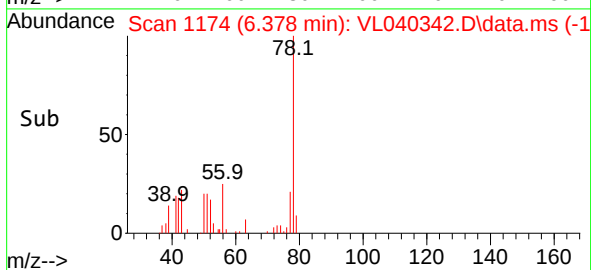
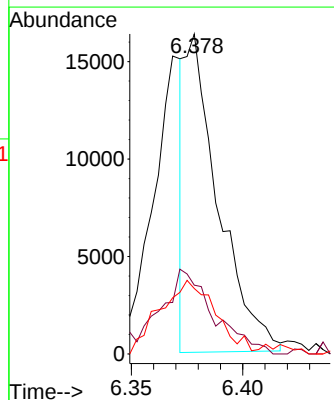
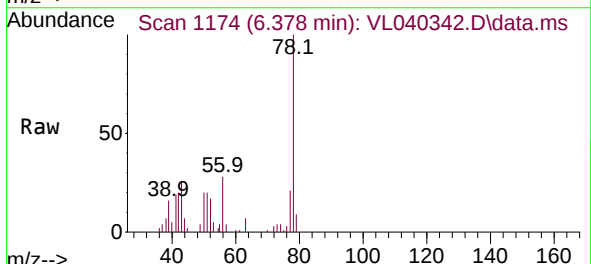
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

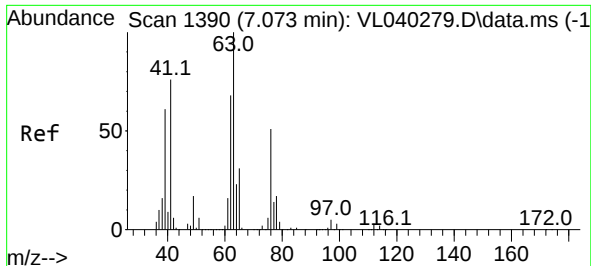
Tgt Ion:117 Resp: 5868
Ion Ratio Lower Upper
117 100
119 95.3 76.4 114.6
121 28.3 25.6 38.4



#36
Benzene
Concen: 0.096 ppbv
RT: 6.378 min Scan# 1174
Delta R.T. 0.006 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 78 Resp: 16941
Ion Ratio Lower Upper
78 100
77 22.3 17.8 26.8
50 18.1 15.4 23.2





#39

1,2-Dichloropropane

Concen: 8.492 ppbv

RT: 6.658 min Scan# 11

Delta R.T. -0.415 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

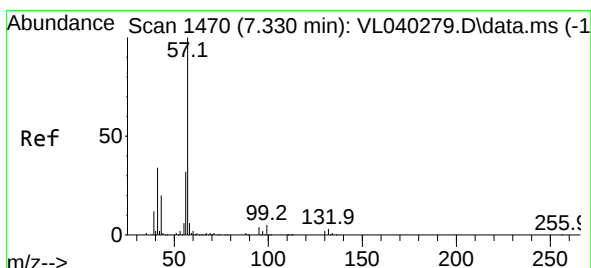
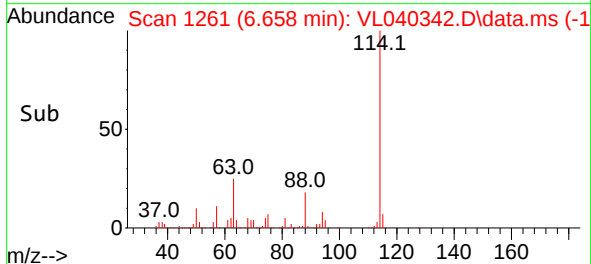
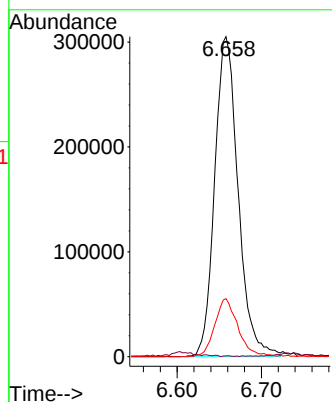
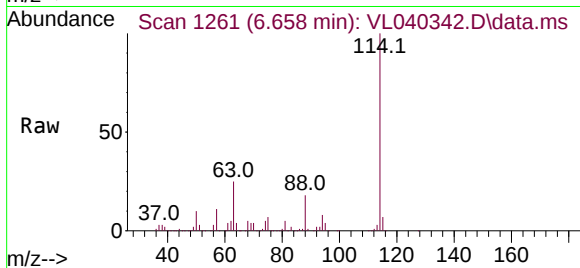
Tgt Ion: 63 Resp: 589132

Ion Ratio Lower Upper

63 100

41 0.0 60.8 91.2#

62 18.1 54.1 81.1#



#44

2,2,4-Trimethylpentane

Concen: 0.074 ppbv

RT: 7.333 min Scan# 1471

Delta R.T. 0.003 min

Lab File: VL040342.D

Acq: 12 Apr 2023 17:09

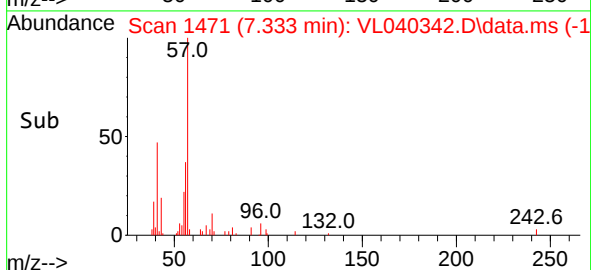
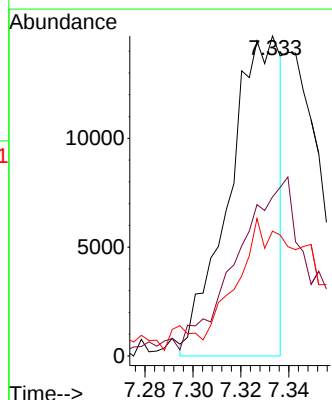
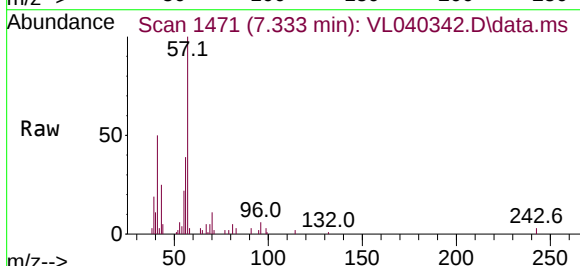
Tgt Ion: 57 Resp: 21807

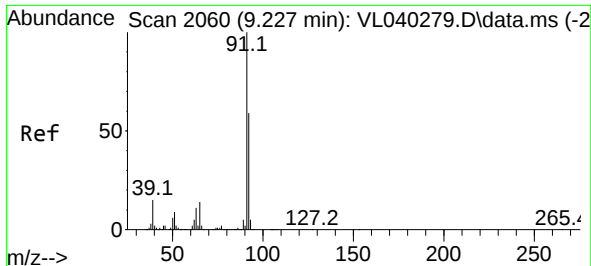
Ion Ratio Lower Upper

57 100

41 0.0 26.8 40.2#

56 85.5 25.0 37.6#

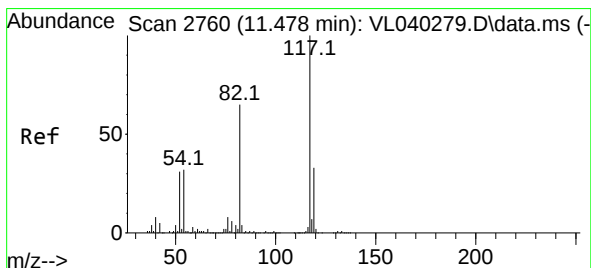
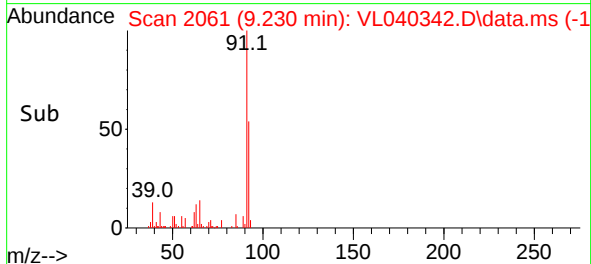
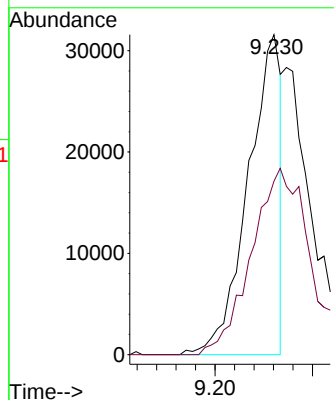
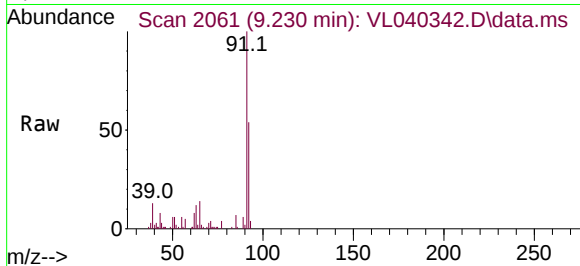




#53
Toluene
Concen: 0.199 ppbv
RT: 9.230 min Scan# 2060
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

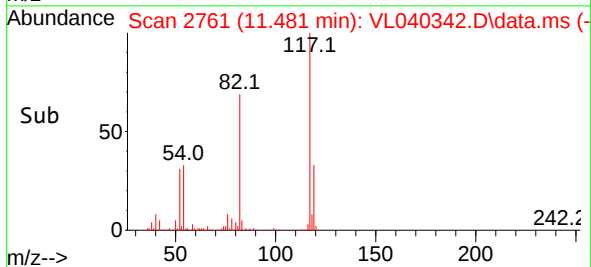
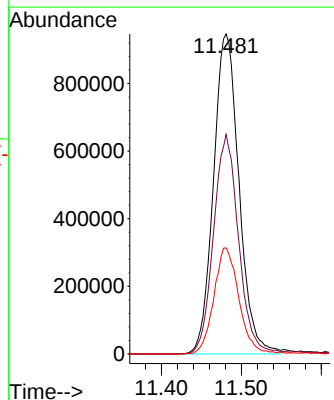
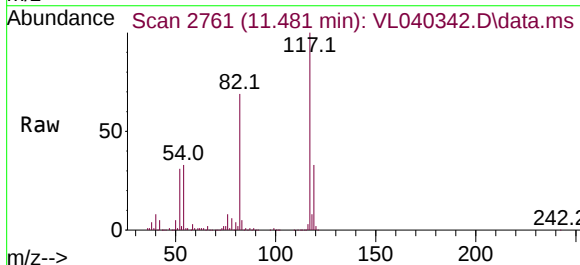
Instrument :
MSVOA_1
ClientSampleId :
IA1DUP

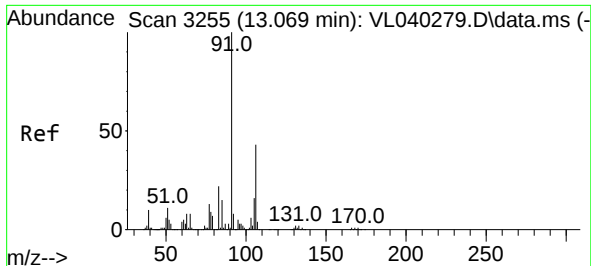
Tgt Ion: 91 Resp: 36848
Ion Ratio Lower Upper
91 100
92 0.0 48.0 72.0#



#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 11.481 min Scan# 2761
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 117 Resp: 2096396
Ion Ratio Lower Upper
117 100
82 68.2 51.4 77.2
119 32.9 24.0 36.0

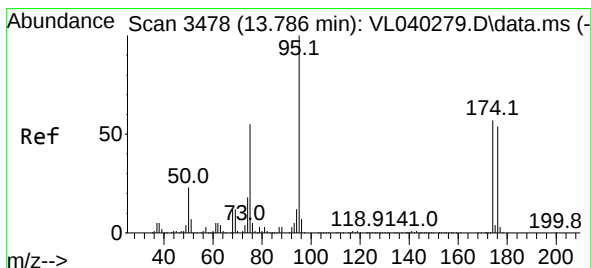
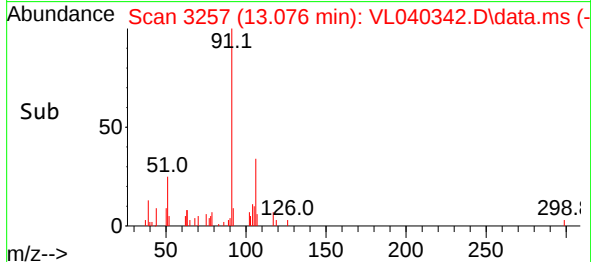
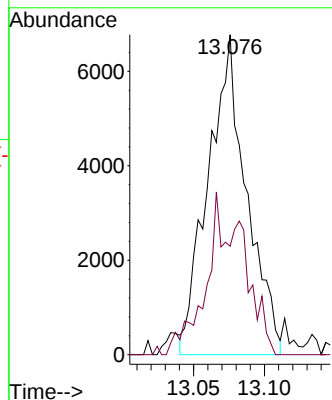
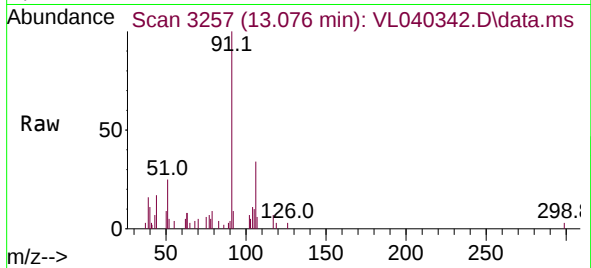




#60
o-Xylene
Concen: 0.061 ppbv
RT: 13.076 min Scan# 31
Delta R.T. 0.007 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

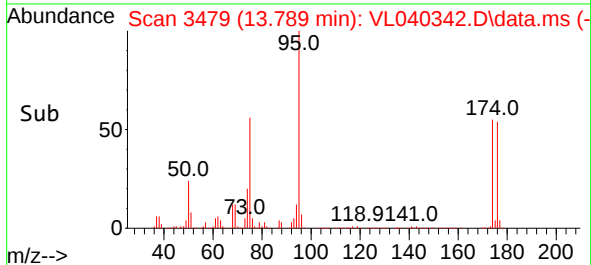
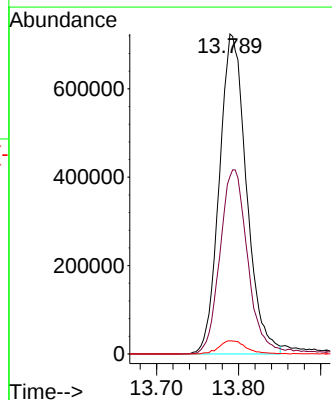
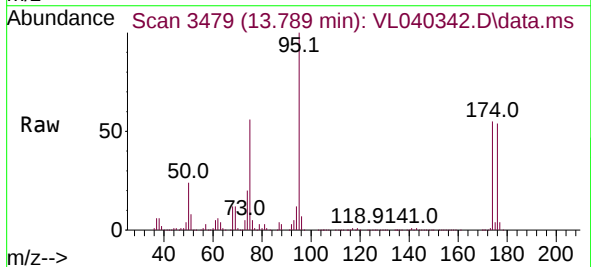
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

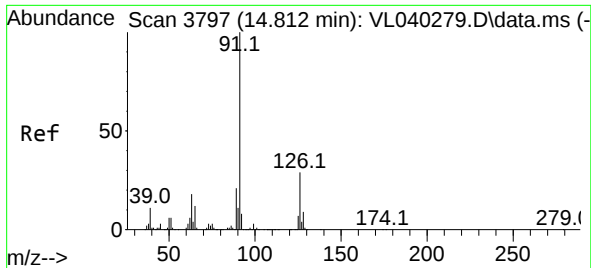
Tgt Ion: 91 Resp: 12777
Ion Ratio Lower Upper
91 100
106 49.1 21.7 65.1



#68
1-Bromo-4-Fluorobenzene
Concen: 9.478 ppbv
RT: 13.789 min Scan# 3479
Delta R.T. 0.003 min
Lab File: VL040342.D
Acq: 12 Apr 2023 17:09

Tgt Ion: 95 Resp: 1663983
Ion Ratio Lower Upper
95 100
174 59.8 47.0 70.6
175 4.2 3.4 5.2





#71
 2-Chlorotoluene
 Concen: 0.694 ppbv
 RT: 14.683 min Scan# 31
 Delta R.T. -0.129 min
 Lab File: VL040342.D
 Acq: 12 Apr 2023 17:09

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Tgt Ion: 91 Resp: 157338
 Ion Ratio Lower Upper
 91 100
 126 0.0 11.8 47.4#

