

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL030320\
 Data File : VL034771.D
 Acq On : 3 Mar 2020 19:48
 Operator : SY/AP
 Sample : L1704-06DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1-4DL

Quant Time: Mar 04 05:48:28 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL022620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Feb 28 01:15:02 2020
 QLast Update : Fri Feb 28 01:15:02 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1226874	10.00	ppbv	0.02
33) 1,4-Difluorobenzene	7.21	114	2519827	10.00	ppbv	0.03
55) Chlorobenzene-d5	12.15	117	2485050	10.00	ppbv	0.03

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	2133784	10.47	ppbv	0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%

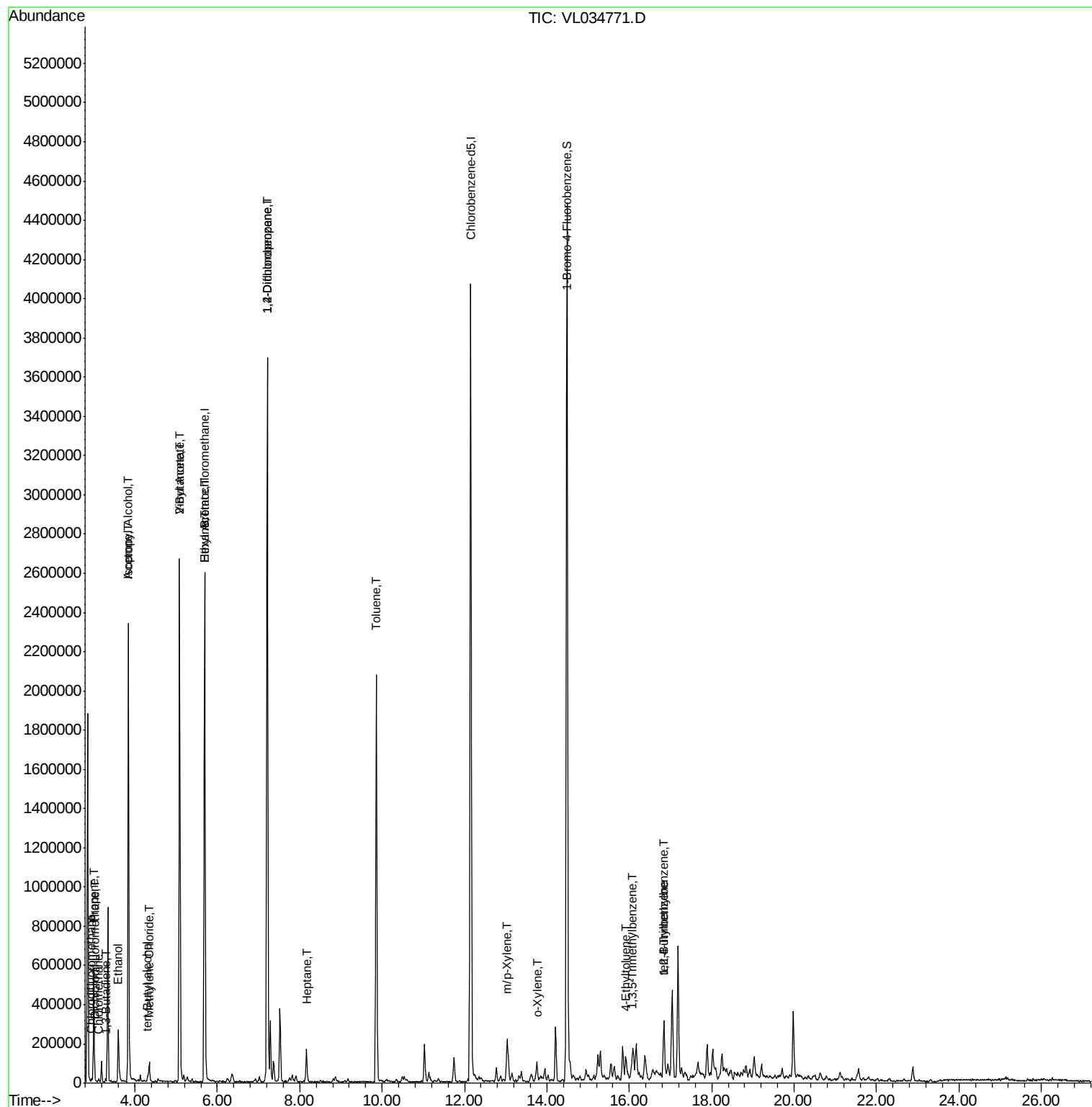
Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	9779	0.051 ppbv	92
3) Chlorodifluoromethane	2.94	51	13670	0.103 ppbv #	82
4) Chloromethane	3.12	50	8691	0.117 ppbv #	79
9) Propene	3.00	41	109617	1.981 ppbv #	63
10) Heptane	8.17	43	62681	0.440 ppbv	98
13) Ethanol	3.59	45	295243	16.886 ppbv	95
15) Acetone	3.84	43	2371364	16.962 ppbv	99
16) 1,3-Butadiene	3.29	39	2946	0.046 ppbv #	11
17) tert-Butyl alcohol	4.32	59	12972	0.121 ppbv #	78
19) Isopropyl Alcohol	3.84	45	4986	0.060 ppbv #	1
20) Methylene Chloride	4.35	84	18878	0.363 ppbv	90
23) Vinyl Acetate	5.08	43	3471047	18.263 ppbv	98
25) Ethyl Acetate	5.70	43	39330	0.159 ppbv #	95
26) Hexane	5.70	57	18455	0.162 ppbv #	57
34) 2-Butanone	5.08	43	3471047	21.885 ppbv #	53
39) 1,2-Dichloropropane	7.21	63	713318	8.238 ppbv #	22
53) Toluene	9.86	91	1512660	6.535 ppbv	99
59) m/p-Xylene	13.04	91	127559	0.486 ppbv #	54
60) o-Xylene	13.76	91	67771	0.260 ppbv	99
65) tert-Butylbenzene	16.83	119	6771	0.021 ppbv #	16
72) 4-Ethyltoluene	15.91	105	16841	0.058 ppbv #	7
73) 1,3,5-Trimethylbenzene	16.07	105	23793	0.085 ppbv #	68
74) 1,2,4-Trimethylbenzene	16.83	105	145038	0.471 ppbv #	66

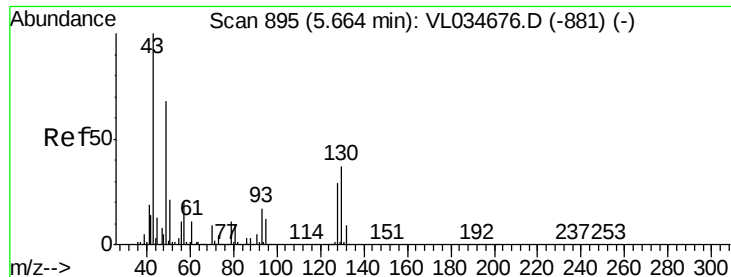
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Fri Feb 28 01:15:02 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.02 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleID :

IA-1-4DL

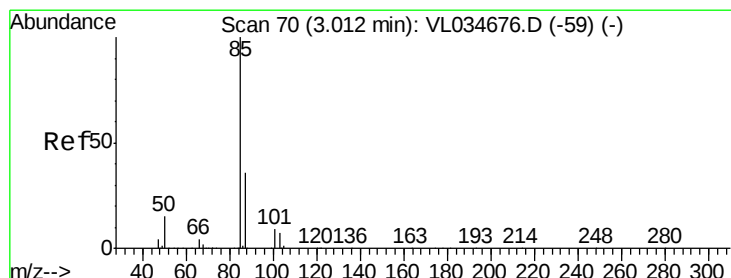
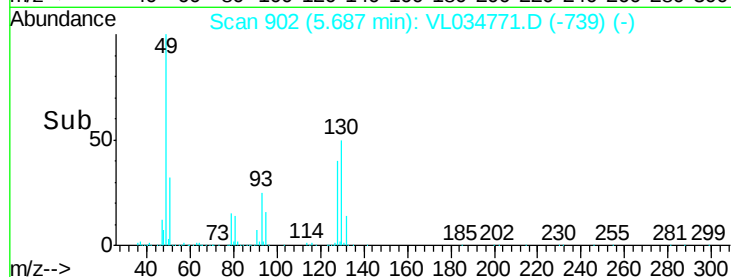
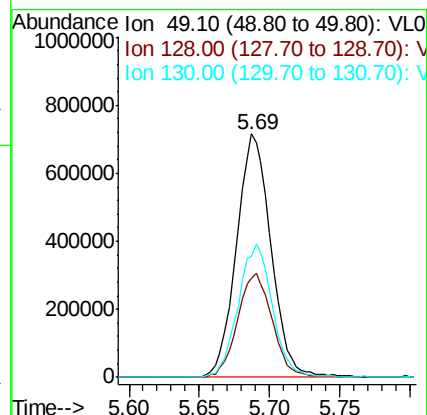
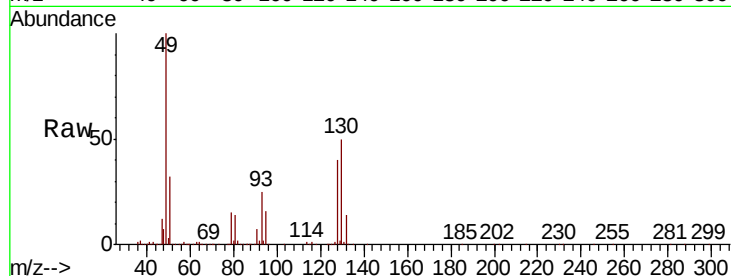
Tot Ion: 49 Resp: 1226874

Ion Ratio Lower Upper

49 100

128 43.3 21.6 65.0

130 54.9 27.7 83.1



#2

Dichlorodifluoromethane

Concen: 0.051 ppbv

RT: 3.03 min Scan# 75

Delta R.T. 0.02 min

Lab File: VL034771.D

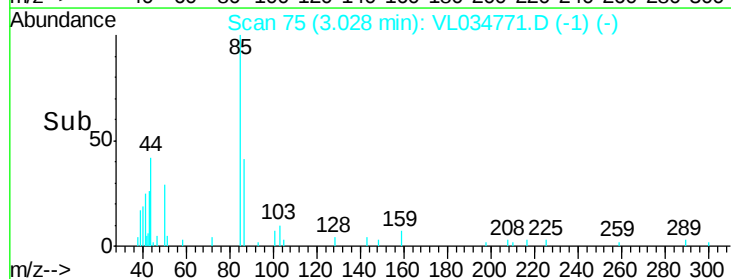
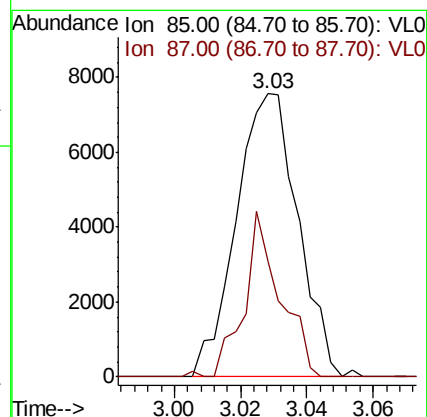
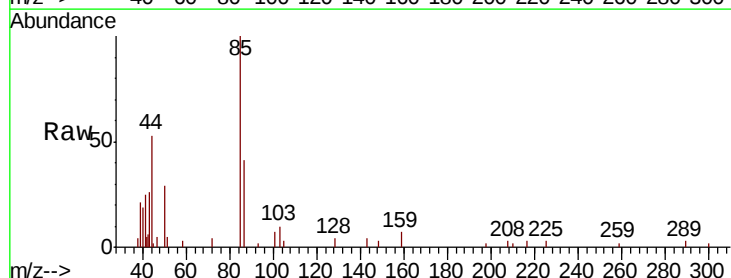
Acq: 3 Mar 2020 19:48

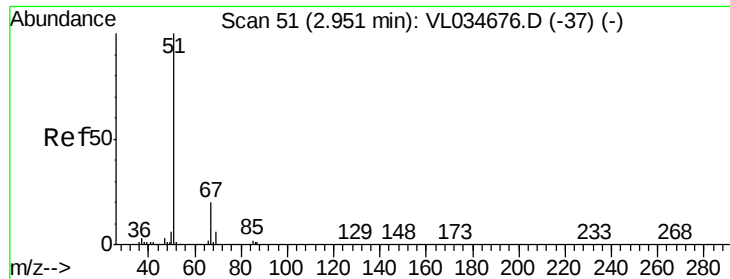
Tgt Ion: 85 Resp: 9779

Ion Ratio Lower Upper

85 100

87 40.9 29.2 43.8

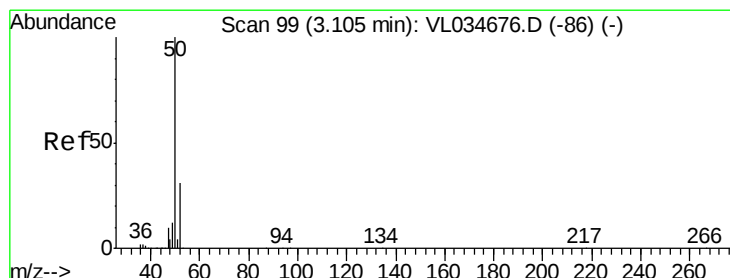
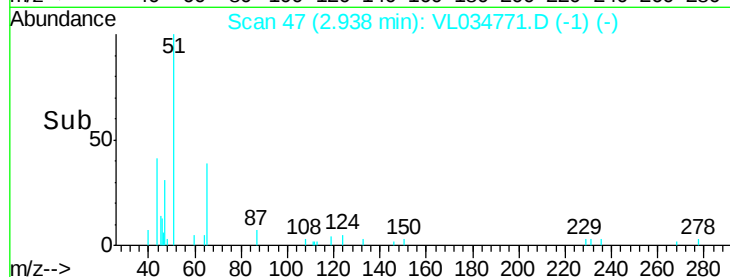
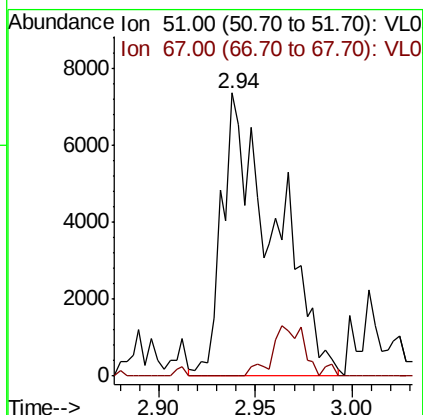
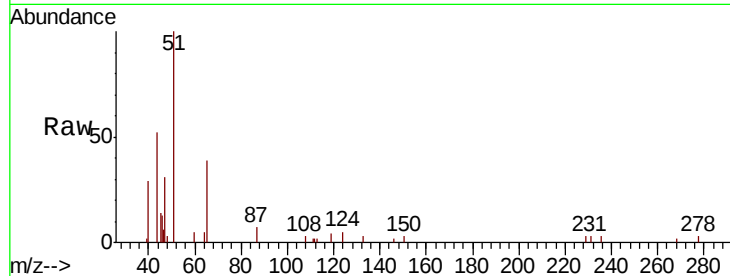




#3
Chlorodifluoromethane
Concen: 0.103 ppbv
RT: 2.94 min Scan# 47
Delta R.T. -0.01 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

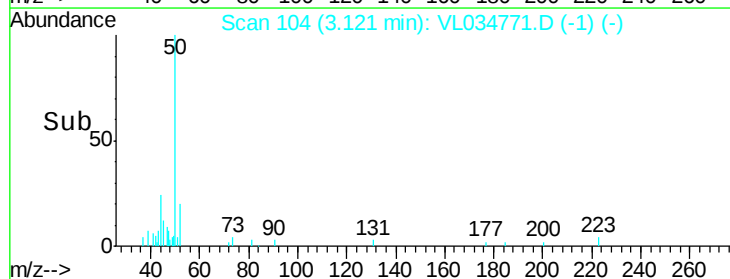
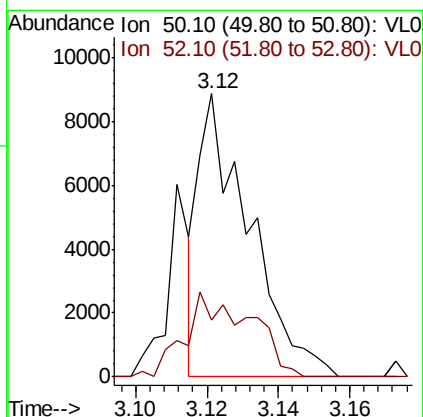
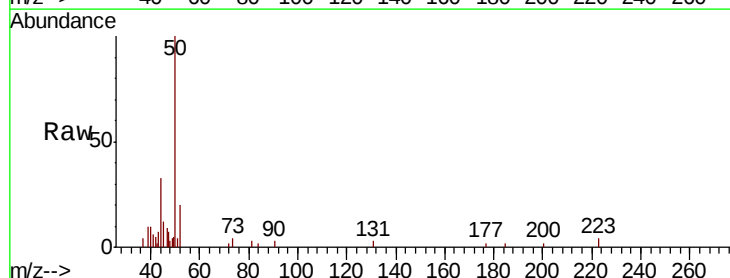
Instrument :
MSVOA_L
ClientSampleId :
IA-1-4DL

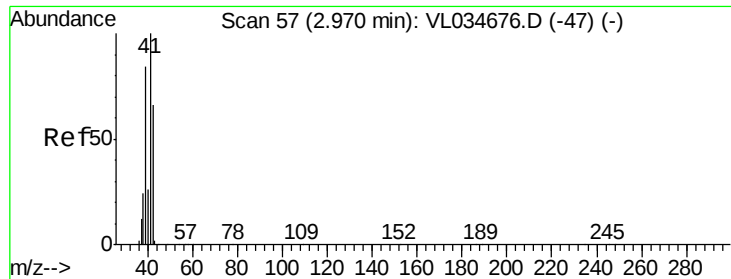
Tot Ion: 51 Resp: 13670
Ion Ratio Lower Upper
51 100
67 11.3 15.5 23.3#



#4
Chloromethane
Concen: 0.117 ppbv
RT: 3.12 min Scan# 104
Delta R.T. 0.02 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

Tgt Ion: 50 Resp: 8691
Ion Ratio Lower Upper
50 100
52 19.5 25.0 37.4#





#9

Propene

Concen: 1.981 ppbv

RT: 3.00 min Scan# 66

Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

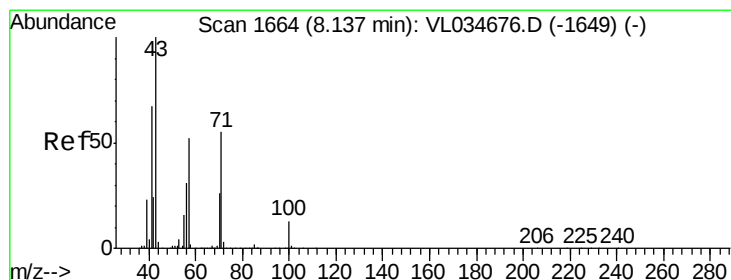
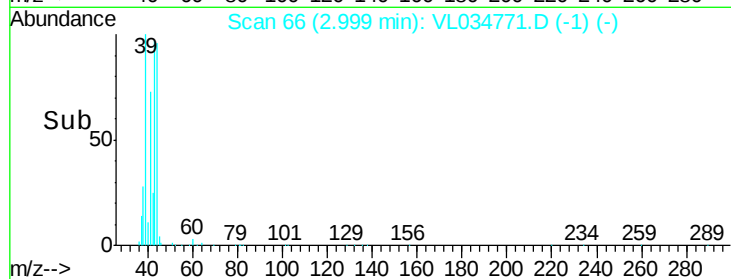
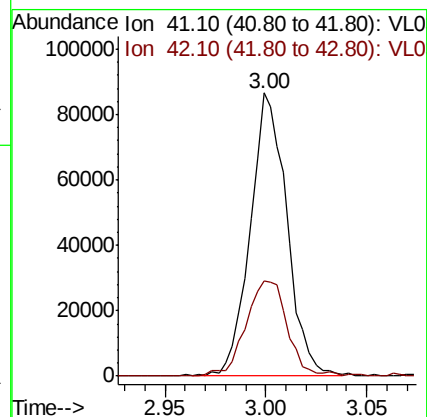
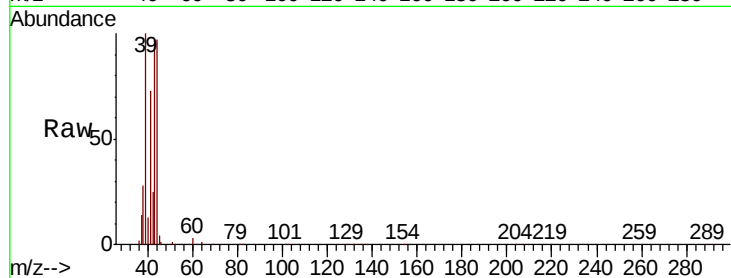
IA-1-4DL

Tot Ion: 41 Resp: 109617

Ion Ratio Lower Upper

41 100

42 38.7 54.9 82.3#



#10

Heptane

Concen: 0.440 ppbv

RT: 8.17 min Scan# 1673

Delta R.T. 0.03 min

Lab File: VL034771.D

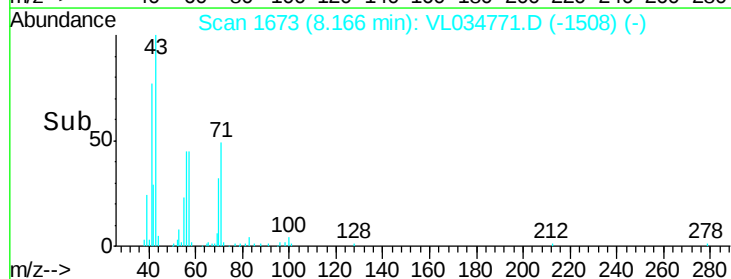
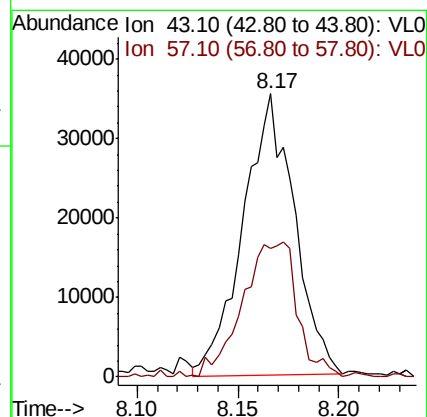
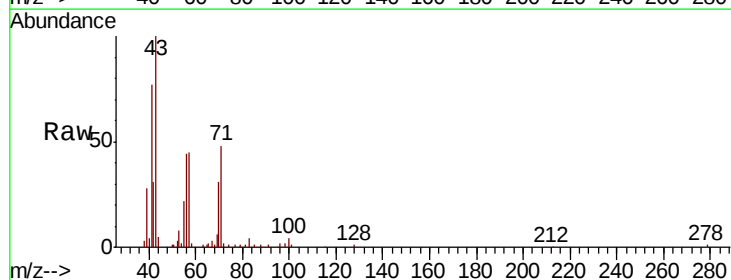
Acq: 3 Mar 2020 19:48

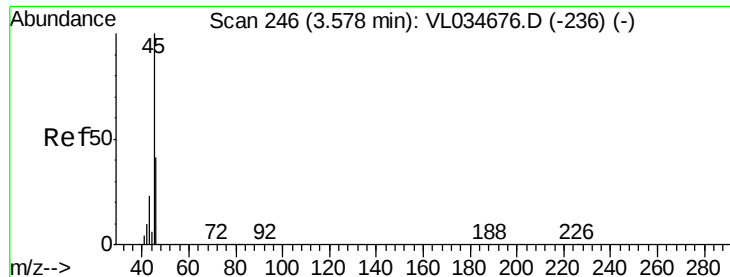
Tgt Ion: 43 Resp: 62681

Ion Ratio Lower Upper

43 100

57 53.0 41.0 61.6





#13

Ethanol

Concen: 16.886 ppbv

RT: 3.59 min Scan# 251

Delta R.T. 0.02 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

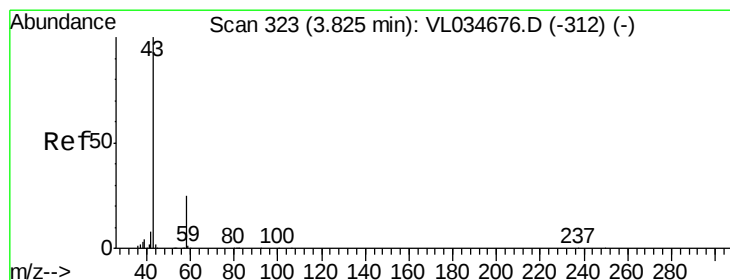
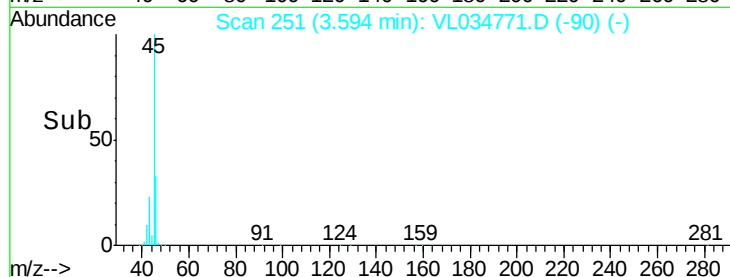
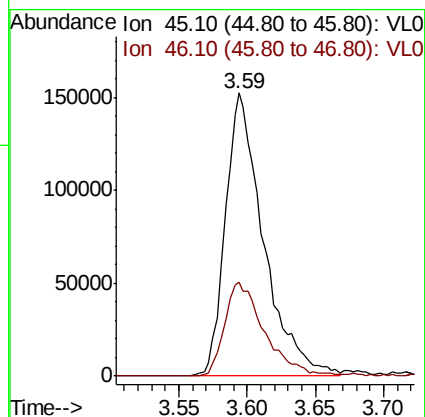
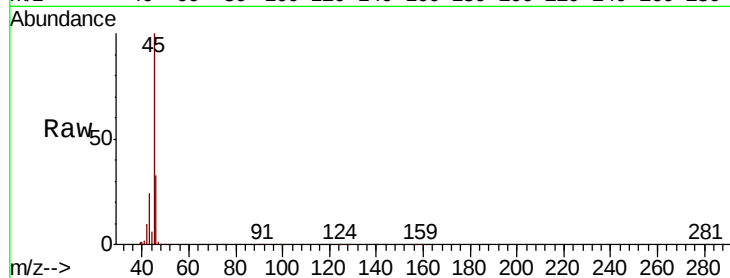
IA-1-4DL

Tot Ion: 45 Resp: 295243

Ion Ratio Lower Upper

45 100

46 35.1 15.4 61.4



#15

Acetone

Concen: 16.962 ppbv

RT: 3.84 min Scan# 327

Delta R.T. 0.01 min

Lab File: VL034771.D

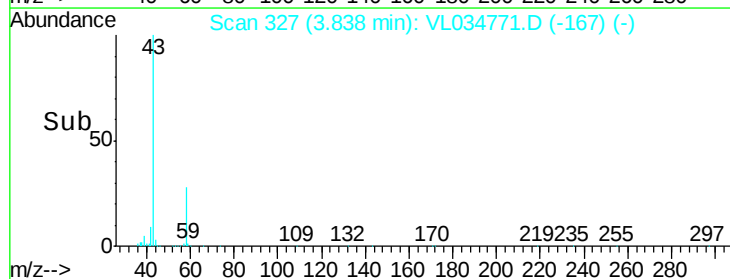
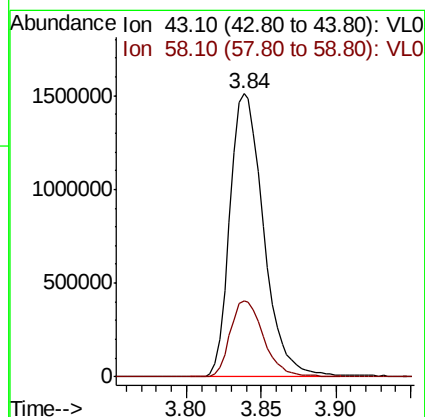
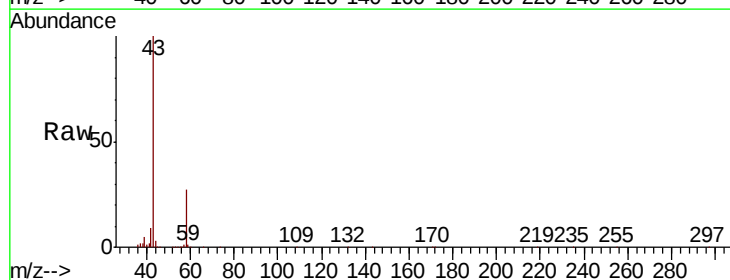
Acq: 3 Mar 2020 19:48

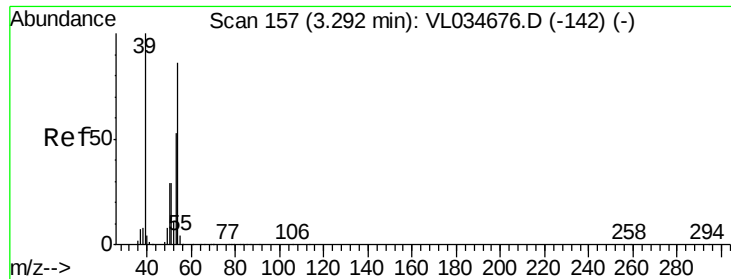
Tgt Ion: 43 Resp: 2371364

Ion Ratio Lower Upper

43 100

58 27.0 21.4 32.0

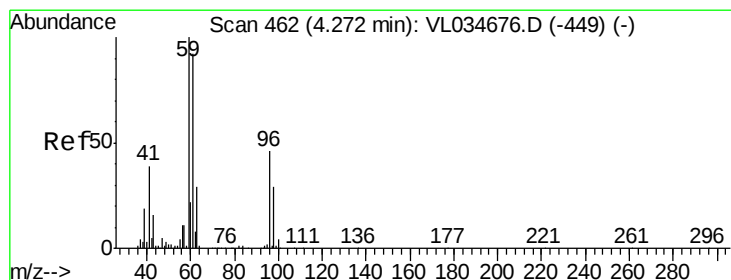
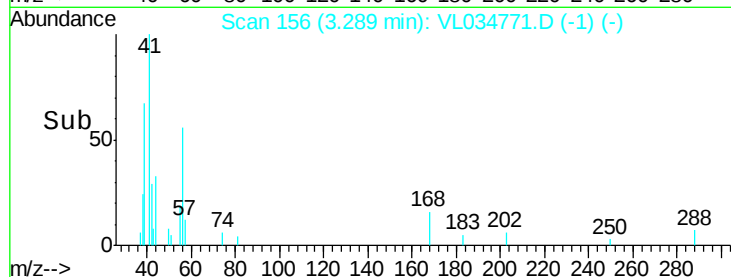
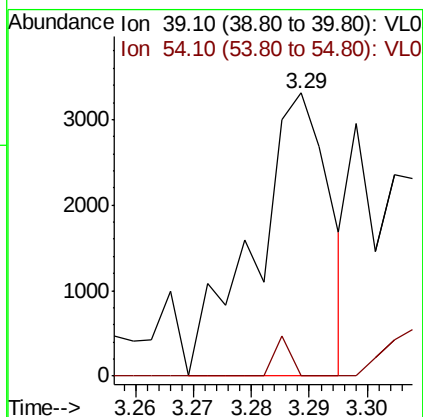
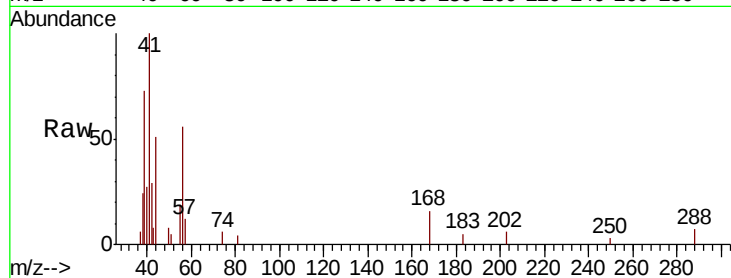




#16
 1,3-Butadiene
 Concen: 0.046 ppbv
 RT: 3.29 min Scan# 156
 Delta R.T. -0.00 min
 Lab File: VL034771.D
 Acq: 3 Mar 2020 19:48

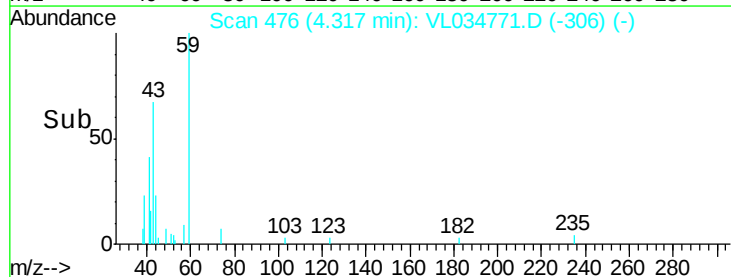
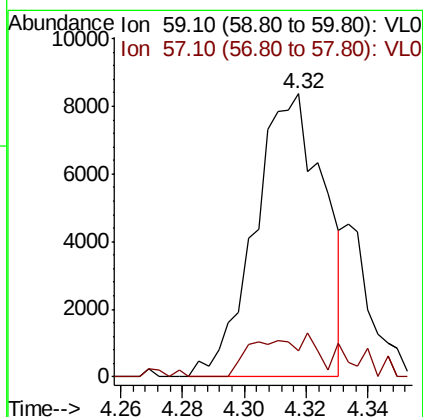
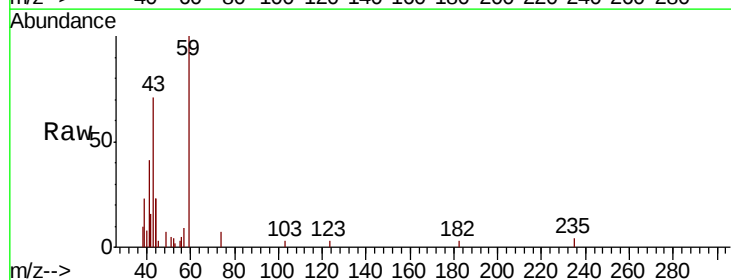
Instrument :
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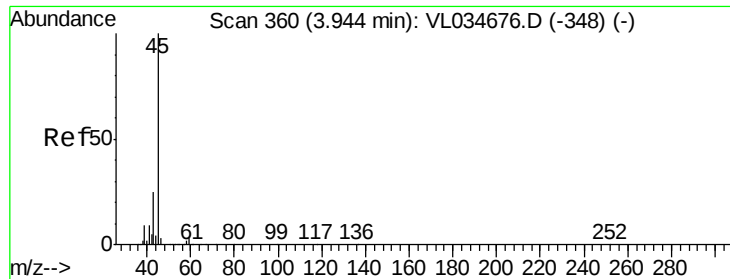
Tot Ion: 39 Resp: 2946
 Ion Ratio Lower Upper
 39 100
 54 3.1 67.0 100.6#



#17
 tert-Butyl alcohol
 Concen: 0.121 ppbv
 RT: 4.32 min Scan# 476
 Delta R.T. 0.05 min
 Lab File: VL034771.D
 Acq: 3 Mar 2020 19:48

Tgt Ion: 59 Resp: 12972
 Ion Ratio Lower Upper
 59 100
 57 19.3 8.8 13.2#





#19

Isopropyl Alcohol

Concen: 0.060 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.11 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

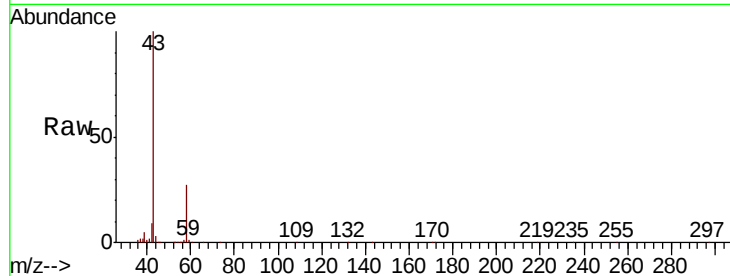
IA-1-4DL

Tot Ion: 45 Resp: 4986

Ion Ratio Lower Upper

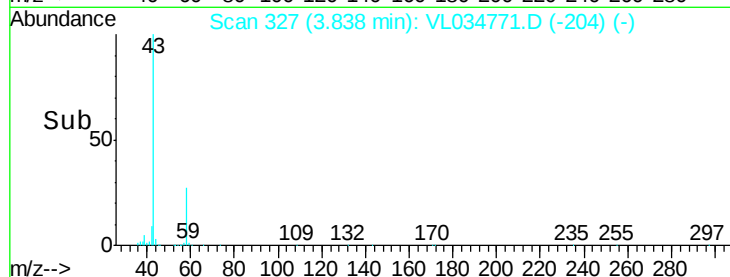
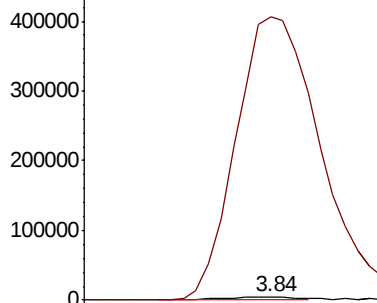
45 100

58 12815.3 1.8 2.6#

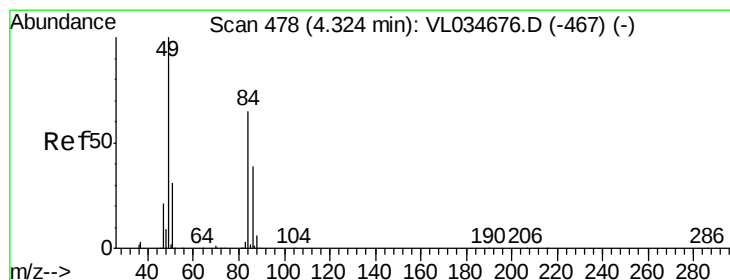


Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



Time-->



#20

Methylene Chloride

Concen: 0.363 ppbv

RT: 4.35 min Scan# 485

Delta R.T. 0.02 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Tgt Ion: 84 Resp: 18878

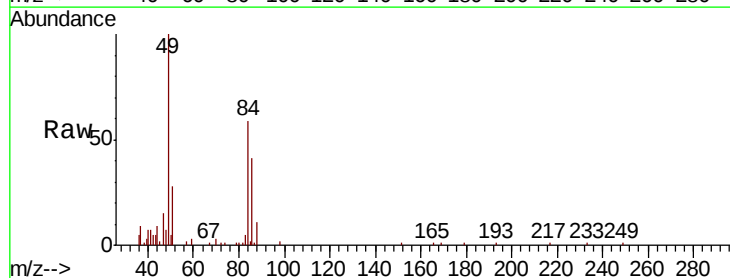
Ion Ratio Lower Upper

84 100

49 166.5 122.8 184.2

51 45.2 38.6 58.0

86 70.5 47.7 71.5

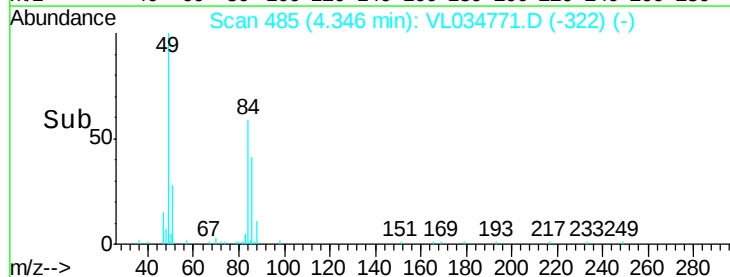
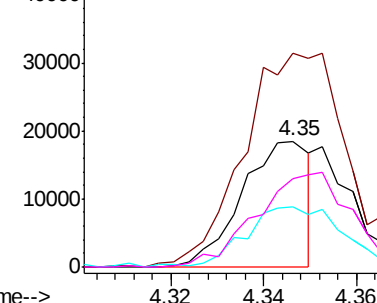


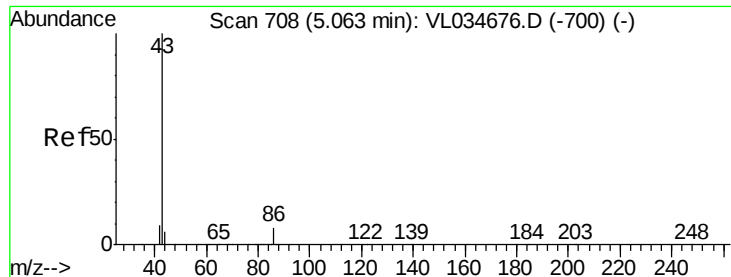
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





#23

Vinyl Acetate

Concen: 18.263 ppbv

RT: 5.08 min Scan# 714

Delta R.T. 0.02 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

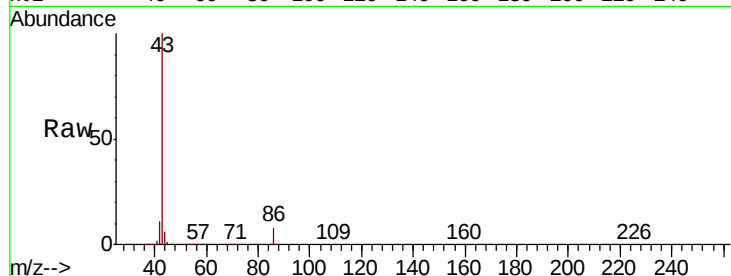
MSVOA_L

ClientSampleId :

IA-1-4DL

Tot Ion: 43 Resp: 3471047

Ion	Ratio	Lower	Upper
43	100		
86	7.9	6.0	9.0
42	11.2	8.0	12.0
44	6.0	4.5	6.7

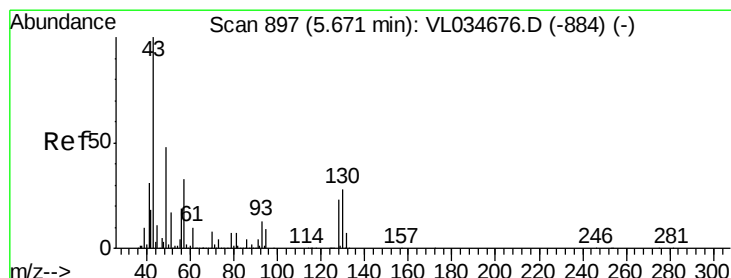
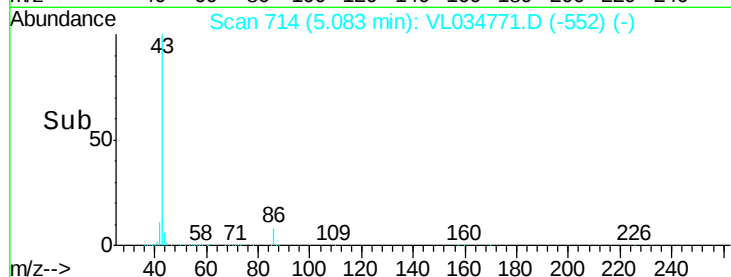


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 86.10 (85.80 to 86.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

Ion 44.10 (43.80 to 44.80): VL0



#25

Ethyl Acetate

Concen: 0.159 ppbv

RT: 5.70 min Scan# 907

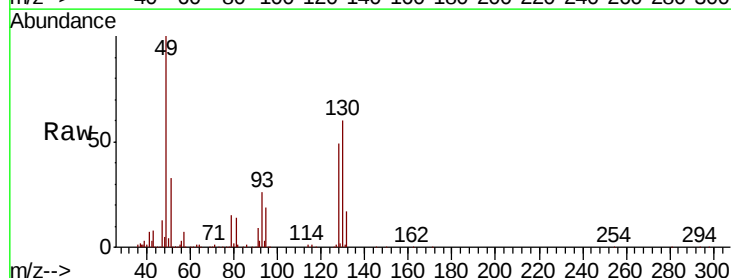
Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Tgt Ion: 43 Resp: 39330

Ion	Ratio	Lower	Upper
43	100		
45	9.1	8.2	12.4
61	6.8	7.8	11.6#
70	6.4	6.1	9.1

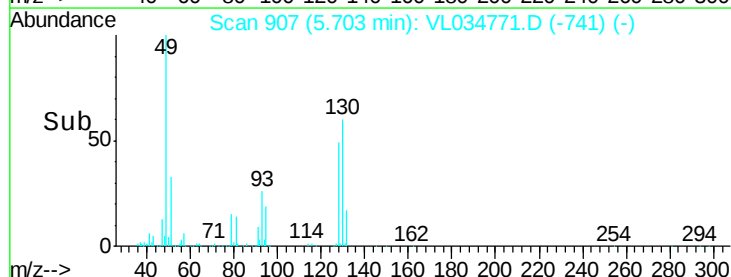


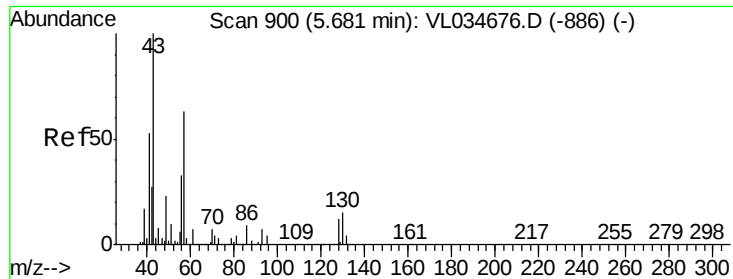
Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0

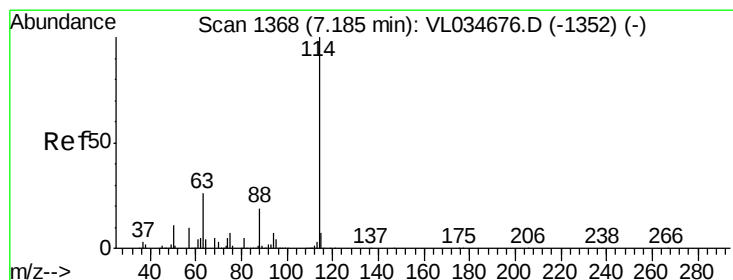
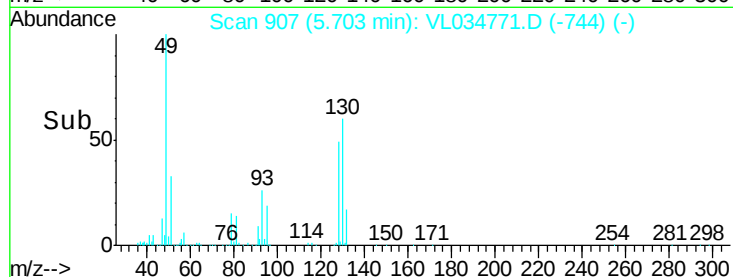
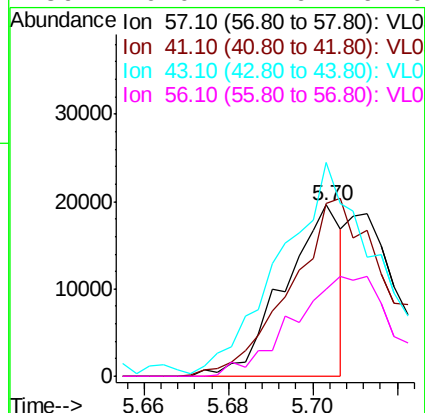
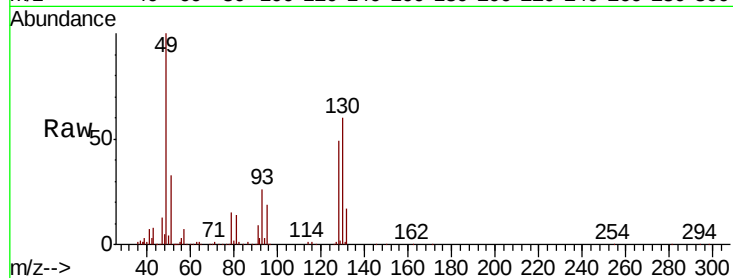




#26
Hexane
Concen: 0.162 ppbv
RT: 5.70 min Scan# 907
Delta R.T. 0.02 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

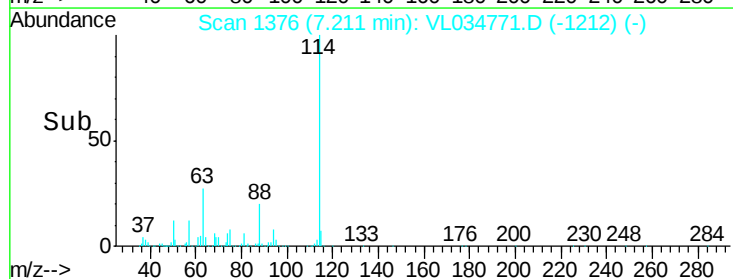
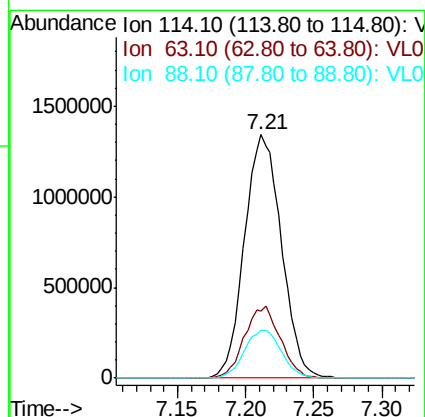
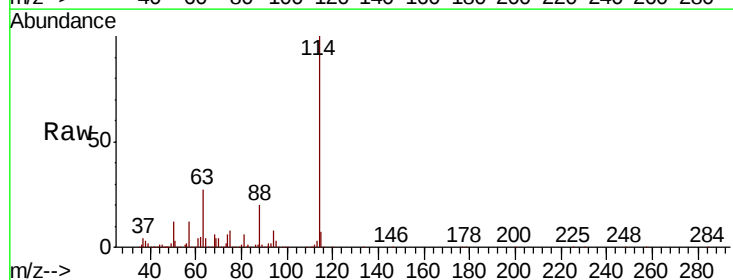
Instrument :
MSVOA_L
ClientSampleId :
IA-1-4DL

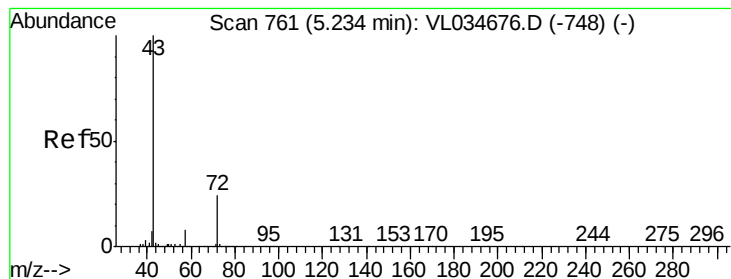
Tot Ion: 57 Resp: 18455
Ion Ratio Lower Upper
57 100
41 174.7 70.3 105.5#
43 247.1 177.0 265.4
56 0.0 42.6 64.0#



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.21 min Scan# 1376
Delta R.T. 0.03 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

Tgt Ion:114 Resp: 2519827
Ion Ratio Lower Upper
114 100
63 28.5 22.9 34.3
88 19.8 15.8 23.6





#34

2-Butanone

Concen: 21.885 ppbv

RT: 5.08 min Scan# 714

Delta R.T. -0.15 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

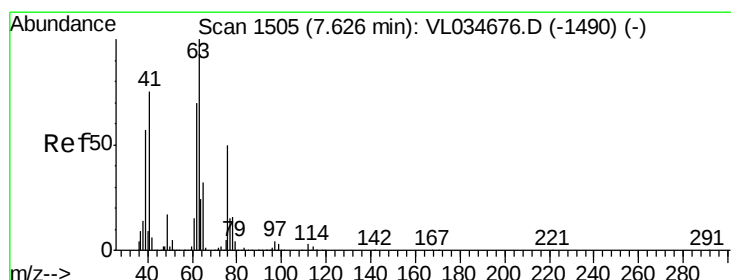
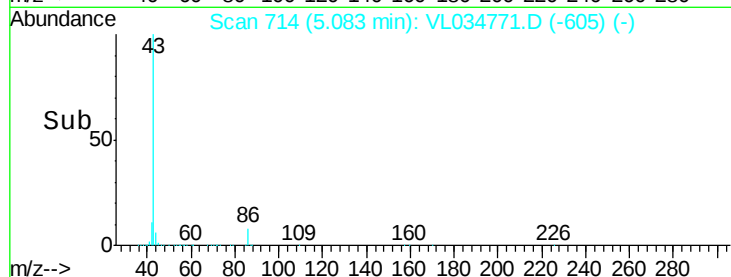
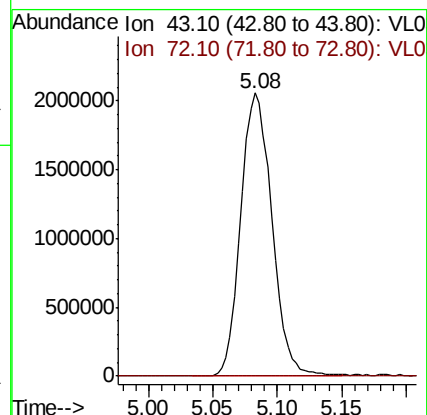
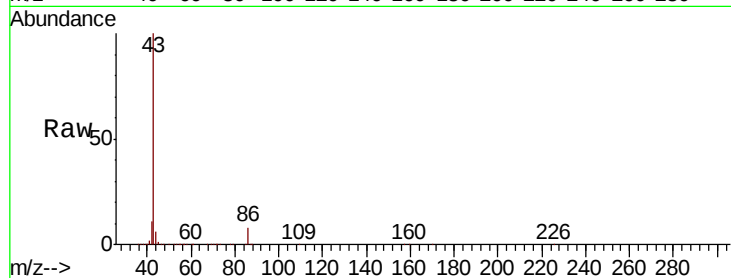
IA-1-4DL

Tot Ion: 43 Resp: 3471047

Ion Ratio Lower Upper

43 100

72 0.0 18.2 27.2#



#39

1,2-Dichloropropane

Concen: 8.238 ppbv

RT: 7.21 min Scan# 1377

Delta R.T. -0.41 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

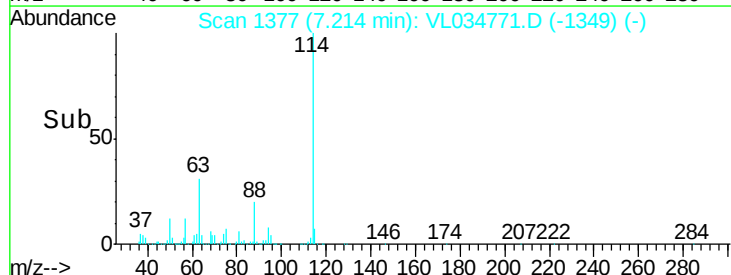
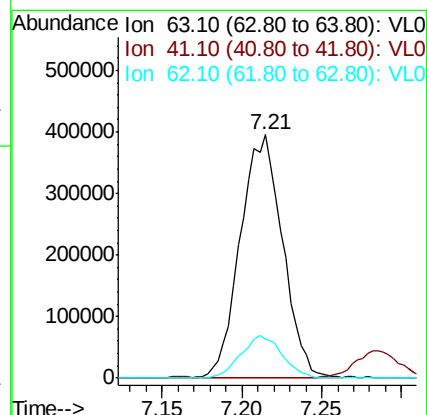
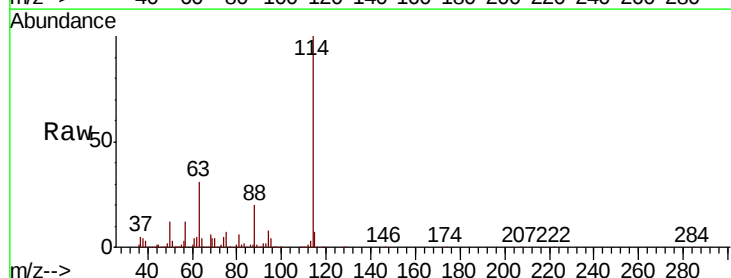
Tgt Ion: 63 Resp: 713318

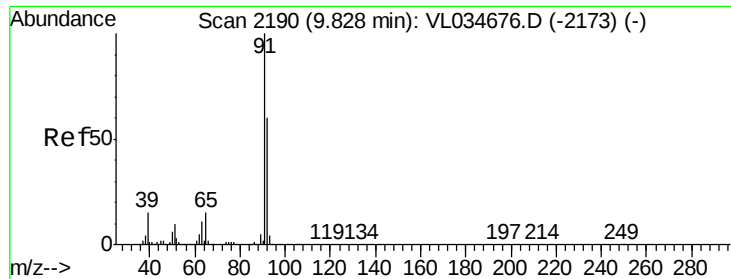
Ion Ratio Lower Upper

63 100

41 0.0 60.2 90.4#

62 15.9 56.3 84.5#





#53

Toluene

Concen: 6.535 ppbv

RT: 9.86 min Scan# 2199

Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

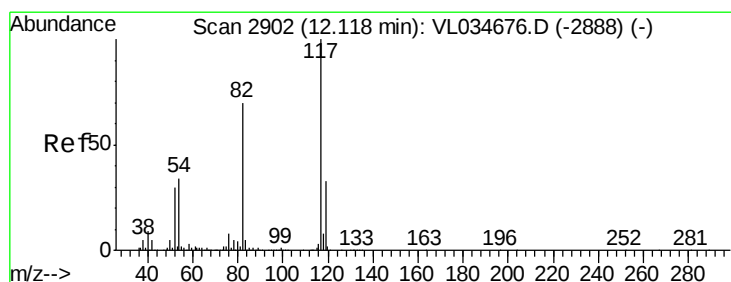
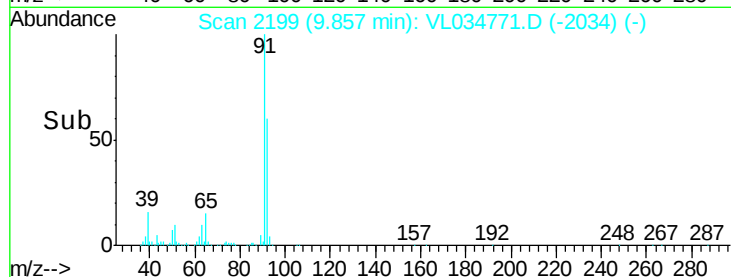
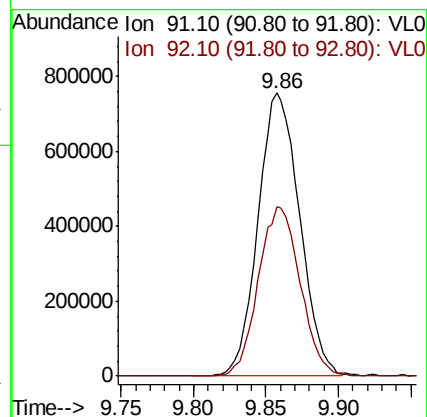
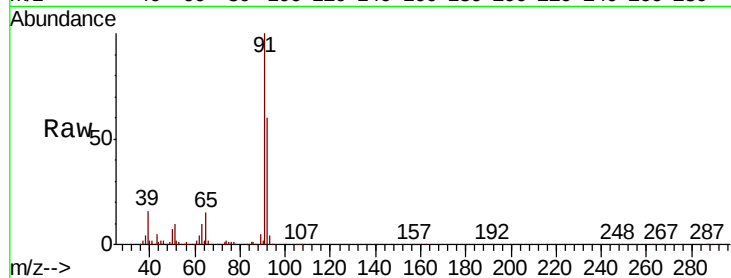
IA-1-4DL

Tot Ion: 91 Resp: 1512660

Ion Ratio Lower Upper

91 100

92 60.1 48.5 72.7



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.15 min Scan# 2912

Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

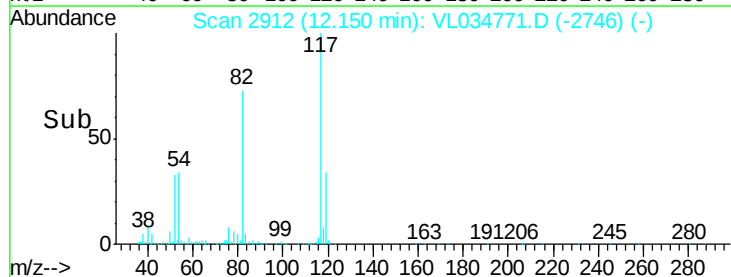
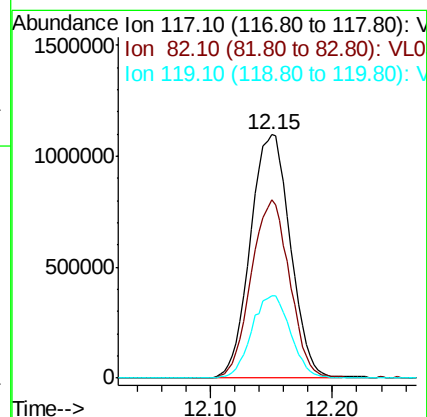
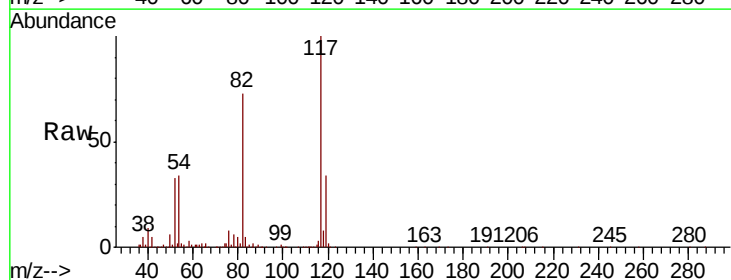
Tgt Ion: 117 Resp: 2485050

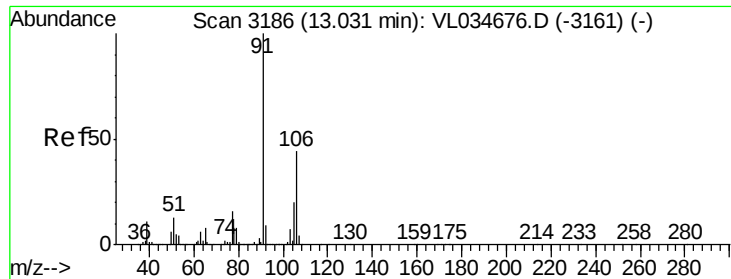
Ion Ratio Lower Upper

117 100

82 71.0 54.1 81.1

119 33.2 27.6 41.4

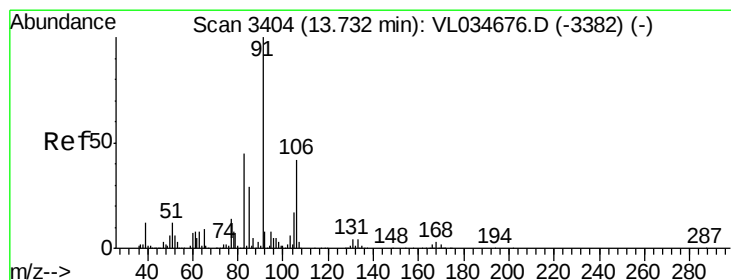
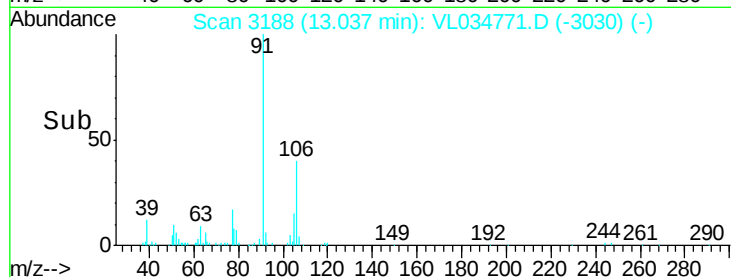
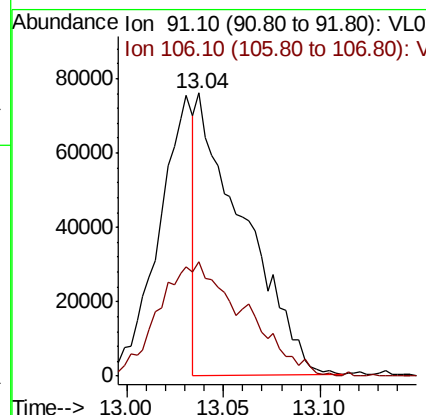
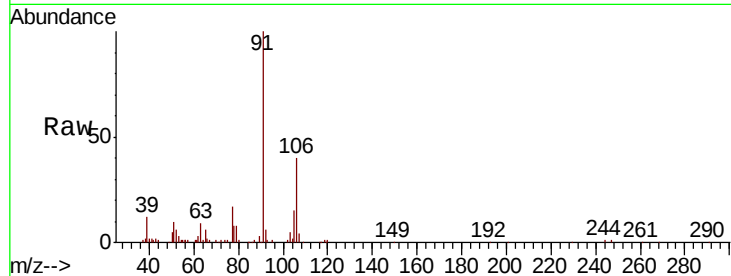




#59
m/p-Xylene
Concen: 0.486 ppbv
RT: 13.04 min Scan# 3188
Delta R.T. 0.01 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

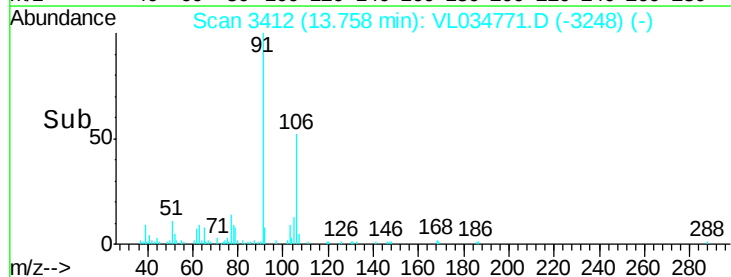
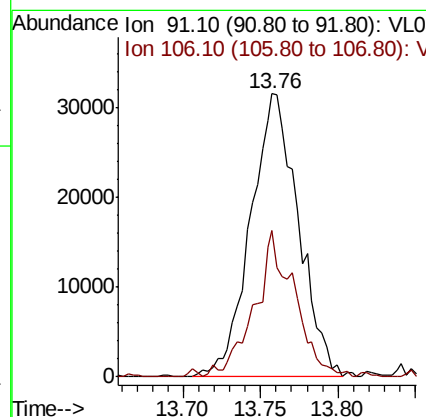
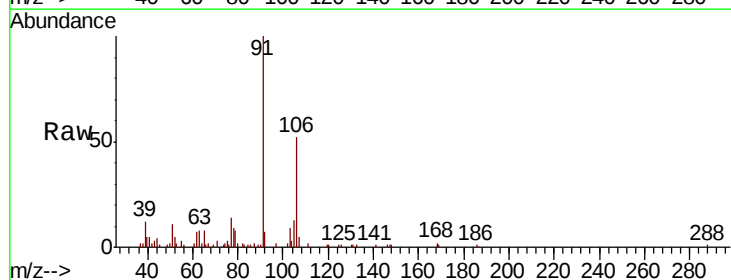
Instrument :
MSVOA_L
ClientSampleId :
IA-1-4DL

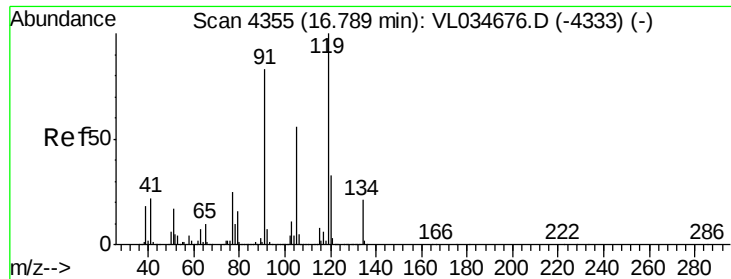
Tot Ion: 91 Resp: 127559
Ion Ratio Lower Upper
91 100
106 74.4 35.6 53.4#



#60
o-Xylene
Concen: 0.260 ppbv
RT: 13.76 min Scan# 3412
Delta R.T. 0.03 min
Lab File: VL034771.D
Acq: 3 Mar 2020 19:48

Tgt Ion: 91 Resp: 67771
Ion Ratio Lower Upper
91 100
106 44.1 21.9 65.5





#65

tert-Butylbenzene

Concen: 0.021 ppbv

RT: 16.83 min Scan# 4369

Delta R.T. 0.05 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

IA-1-4DL

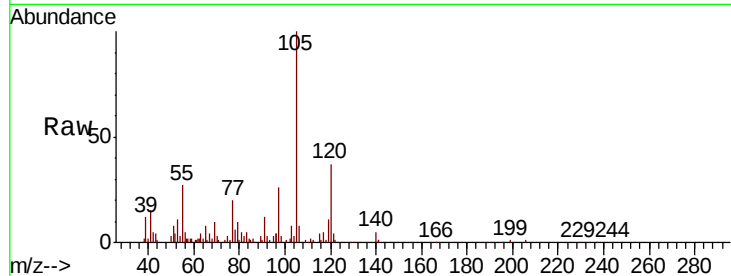
Tot Ion:119 Resp: 6771

Ion Ratio Lower Upper

119 100

91 0.0 69.1 103.7#

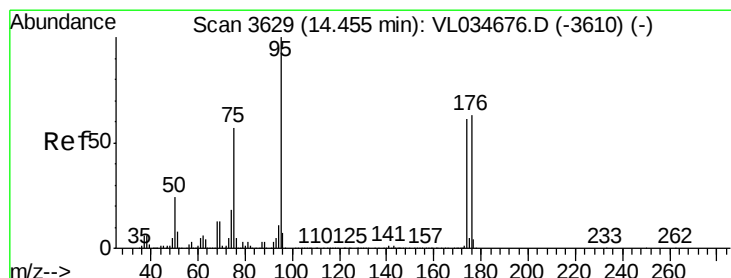
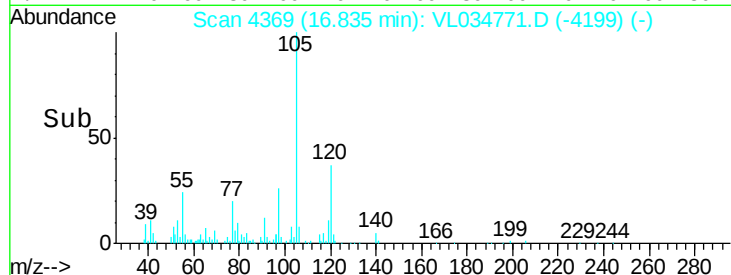
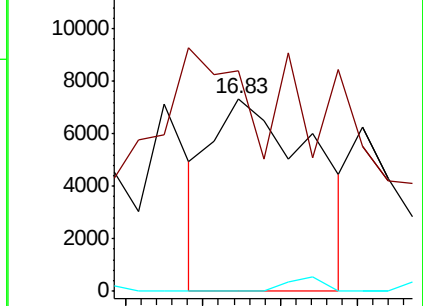
134 0.0 15.8 23.8#



Abundance Ion 119.20 (118.90 to 119.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 134.20 (133.90 to 134.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.472 ppbv

RT: 14.49 min Scan# 3639

Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

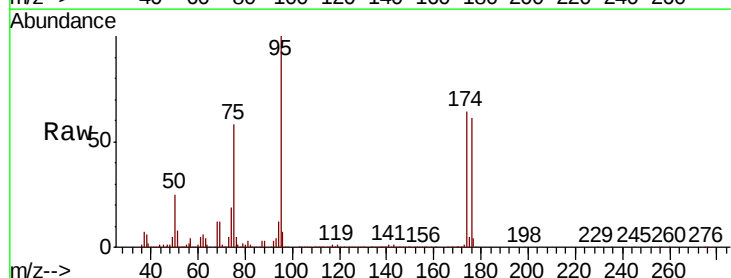
Tgt Ion: 95 Resp: 2133784

Ion Ratio Lower Upper

95 100

174 64.1 50.7 76.1

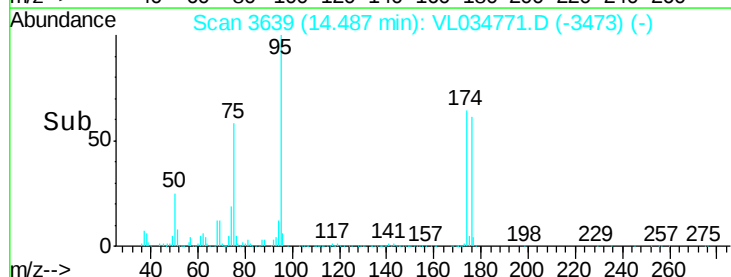
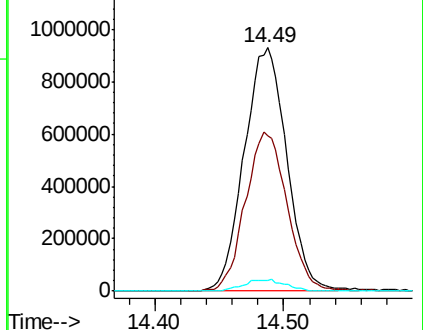
175 4.8 3.9 5.9

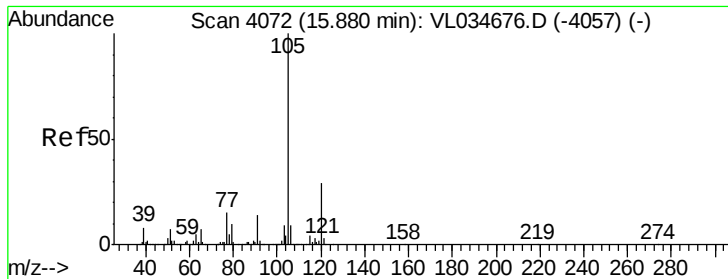


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#72

4-Ethyltoluene

Concen: 0.058 ppbv

RT: 15.91 min Scan# 4082

Delta R.T. 0.03 min

Lab File: VL034771.D

Acq: 3 Mar 2020 19:48

Instrument :

MSVOA_L

ClientSampleId :

IA-1-4DL

Tot Ion:105 Resp: 16841

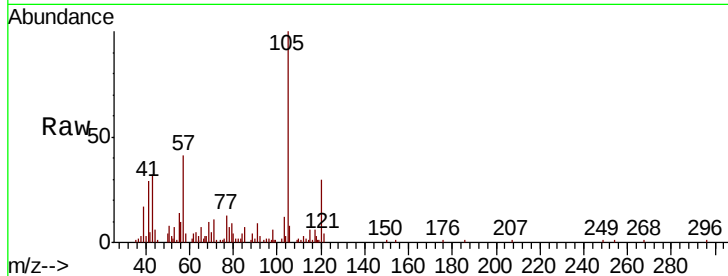
Ion Ratio Lower Upper

105 100

120 91.7 23.7 35.5#

91 56.2 10.9 16.3#

77 0.0 12.2 18.2#



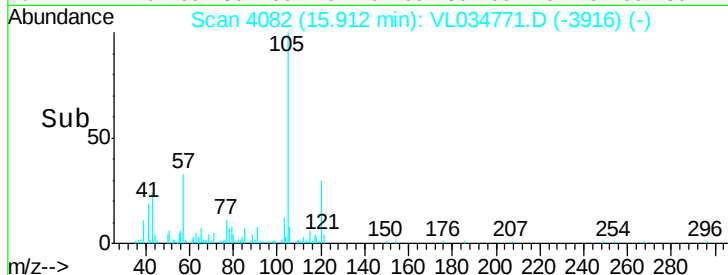
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

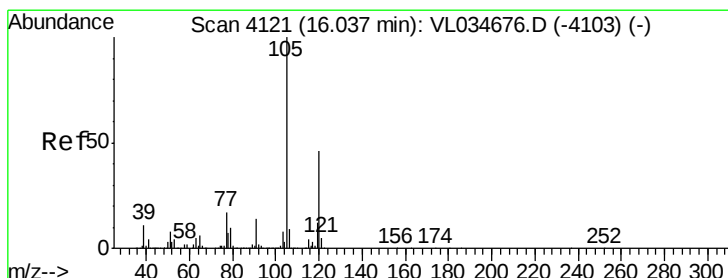
Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Time-->



Time-->



#73

1,3,5-Trimethylbenzene

Concen: 0.085 ppbv

RT: 16.07 min Scan# 4131

Delta R.T. 0.03 min

Lab File: VL034771.D

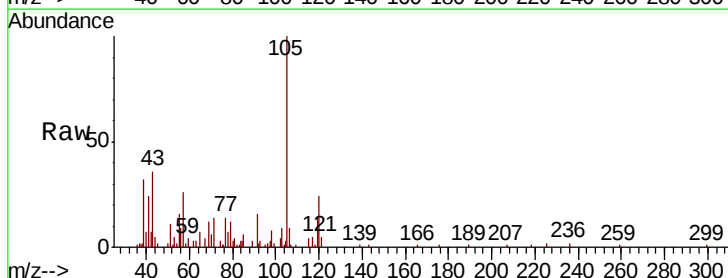
Acq: 3 Mar 2020 19:48

Tgt Ion:105 Resp: 23793

Ion Ratio Lower Upper

105 100

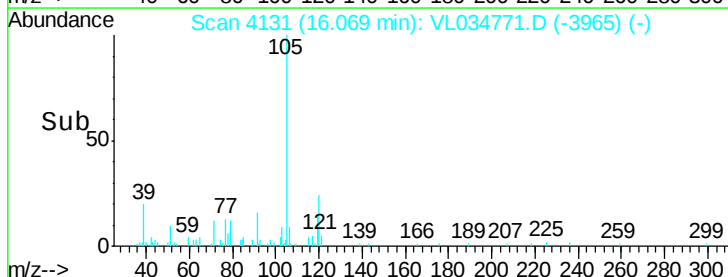
120 25.5 37.1 55.7#



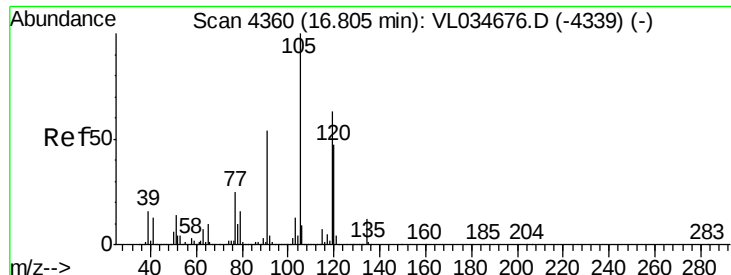
Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Time-->



Time-->



#74
 1,2,4-Trimethylbenzene
 Concen: 0.471 ppbv
 RT: 16.83 min Scan# 4369
 Delta R.T. 0.03 min
 Lab File: VL034771.D
 Acq: 3 Mar 2020 19:48

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-1-4DL

Tot Ion	Ratio	Lower	Upper
105	100		
120	36.3	37.9	56.9#
91	12.4	43.9	65.9#
77	19.4	20.3	30.5#

