

Data File : VL034687.D
Acq On : 26 Feb 2020 10:49
Operator : SY/AP
Sample : L1314-01DL 4X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
E051-1100DL

Quant Time: Feb 27 07:27:19 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL022620AIR.M
Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_LWed Feb 26 06:58:15 2020
QLast Update : Wed Feb 26 06:58:15 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1078260	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2293107	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	2243058	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	1926272	10.47	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.70%

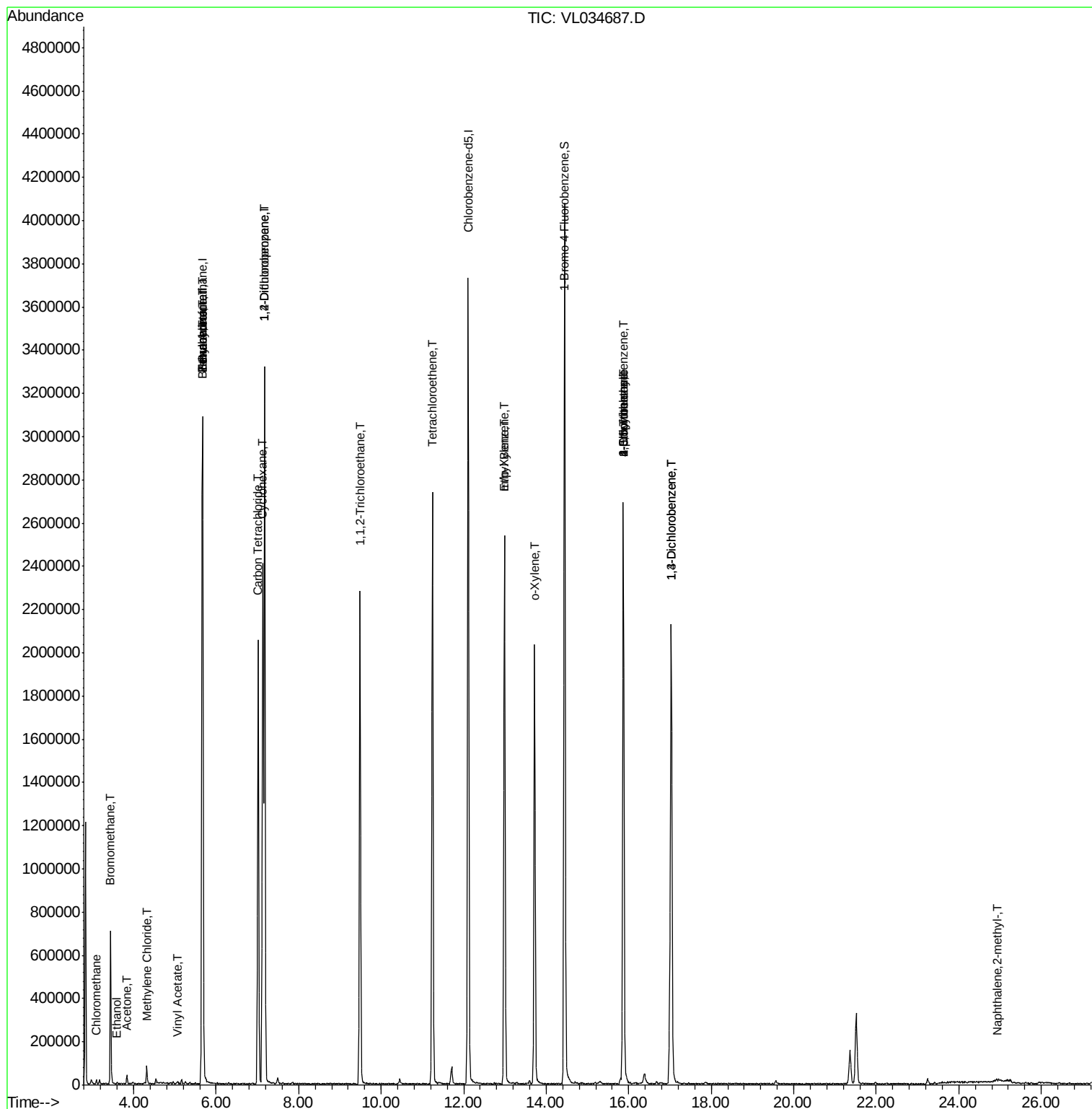
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
4) Chloromethane	3.10	50	6371	0.098	ppbv #	89
6) Bromomethane	3.44	94	357142	9.539	ppbv	97
13) Ethanol	3.58	45	1323	0.086	ppbv #	37
15) Acetone	3.83	43	35856	0.292	ppbv #	73
20) Methylene Chloride	4.32	84	24545	0.537	ppbv	92
23) Vinyl Acetate	5.06	43	3453	0.021	ppbv #	71
25) Ethyl Acetate	5.67	43	623438	2.866	ppbv #	76
26) Hexane	5.67	57	911325	9.091	ppbv #	42
30) Cyclohexane	7.13	84	819849	10.553	ppbv	99
34) 2-Butanone	5.67	43	622409	4.312	ppbv #	53
35) Carbon Tetrachloride	7.02	117	1210420	7.882	ppbv	97
39) 1,2-Dichloropropane	7.18	63	642438	8.153	ppbv #	24
41) Tetrahydrofuran	5.67	42	337318	4.428	ppbv #	49
47) 1,1,2-Trichloroethane	9.48	97	769235	9.516	ppbv	96
52) Tetrachloroethene	11.24	164	645301	8.889	ppbv	97
58) Ethyl Benzene	12.99	91	1844543	6.797	ppbv #	71
59) m/p-Xylene	12.99	91	1844543	7.793	ppbv	99
60) o-Xylene	13.72	91	1575028	6.706	ppbv	98
64) n-propylbenzene	15.87	120	637400	7.216	ppbv #	1
71) 2-Chlorotoluene	15.87	91	301944	1.138	ppbv #	45
72) 4-Ethyltoluene	15.87	105	2264235	8.661	ppbv	99
73) 1,3,5-Trimethylbenzene	15.87	105	2264235	9.003	ppbv #	71
75) 1,3-Dichlorobenzene	17.03	146	988544	6.166	ppbv	99
76) 1,4-Dichlorobenzene	17.03	146	988544	6.163	ppbv	98
80) Naphthalene,2-methyl-	24.93	142	3971	0.053	ppbv	95

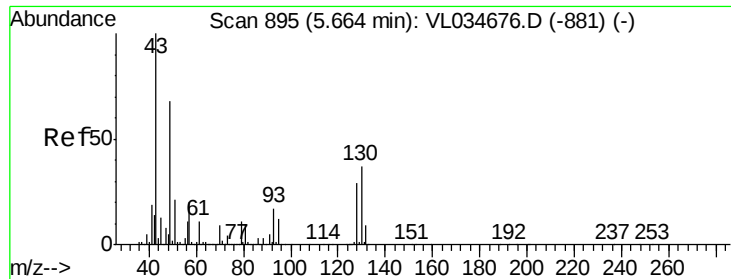
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

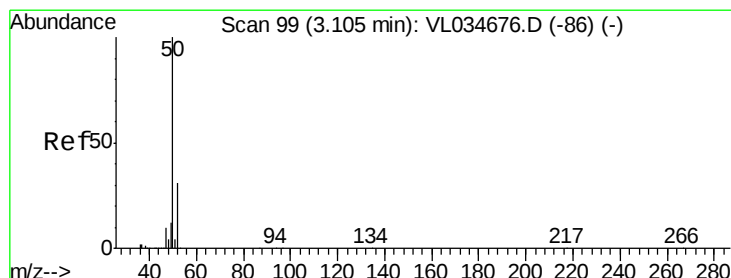
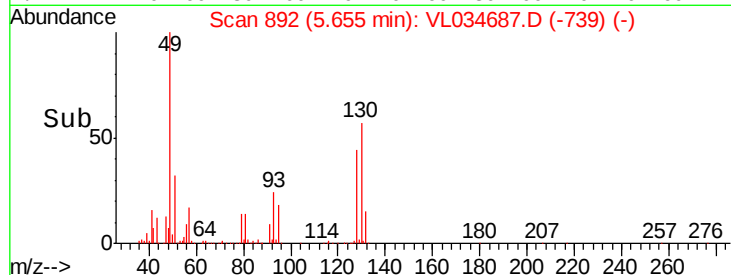
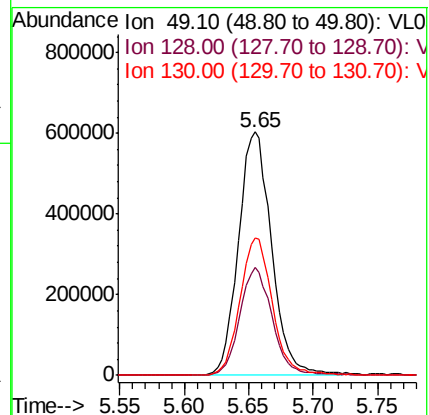
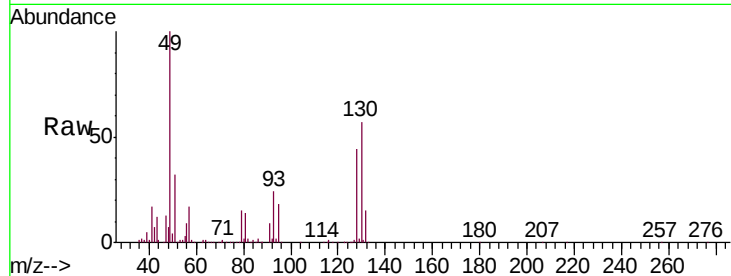
Tgt Ion: 49 Resp: 1078260

Ion Ratio Lower Upper

49 100

128 43.5 21.6 65.0

130 55.7 27.7 83.1



#4

Chloromethane

Concen: 0.098 ppbv

RT: 3.10 min Scan# 96

Delta R.T. -0.01 min

Lab File: VL034687.D

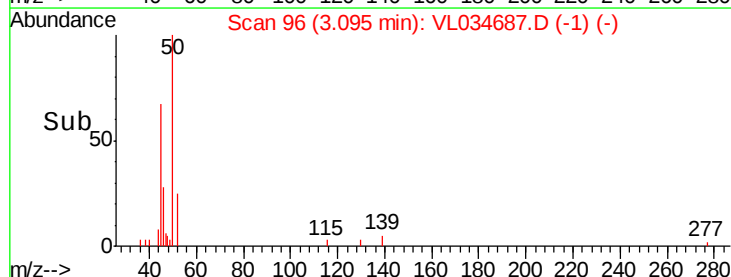
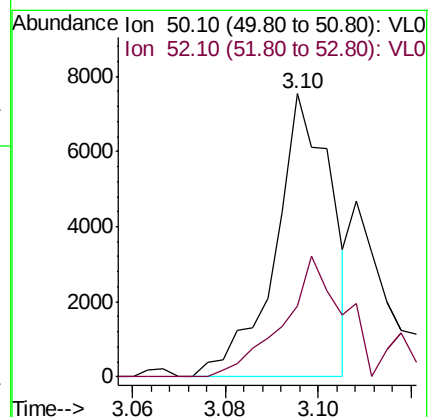
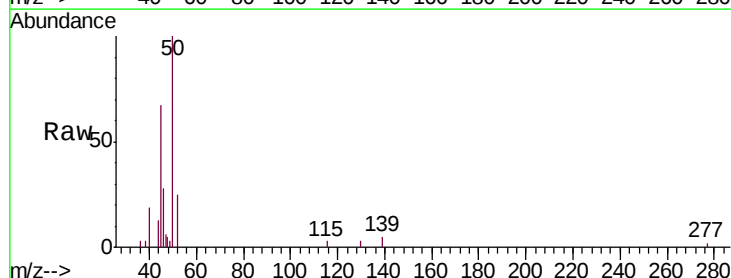
Acq: 26 Feb 2020 10:49

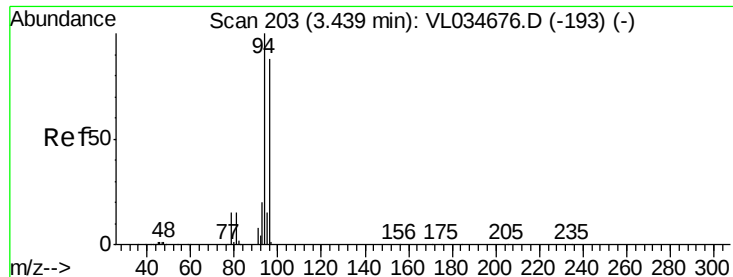
Tgt Ion: 50 Resp: 6371

Ion Ratio Lower Upper

50 100

52 24.9 25.0 37.4#





#6

Bromomethane

Concen: 9.539 ppbv

RT: 3.44 min Scan# 203

Delta R.T. 0.00 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

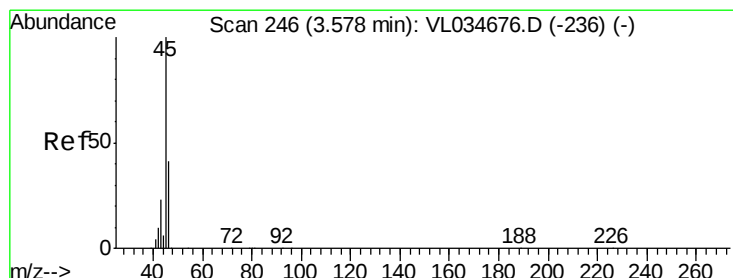
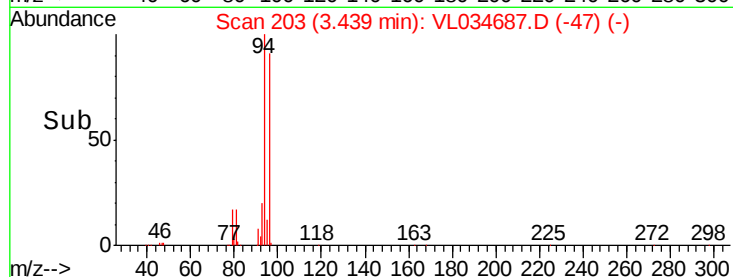
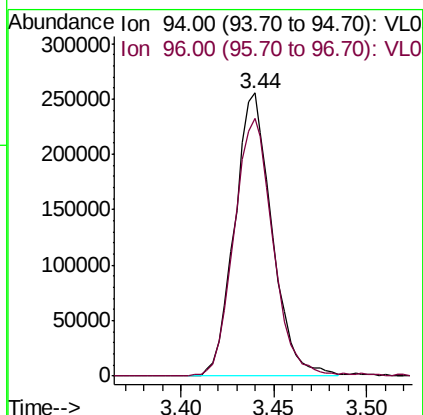
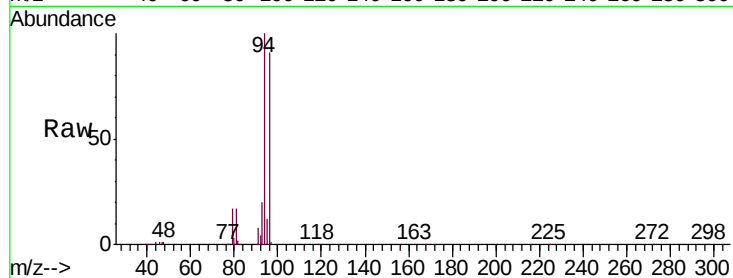
E051-1100DL

Tgt Ion: 94 Resp: 357142

Ion Ratio Lower Upper

94 100

96 91.2 70.5 105.7



#13

Ethanol

Concen: 0.086 ppbv

RT: 3.58 min Scan# 248

Delta R.T. 0.01 min

Lab File: VL034687.D

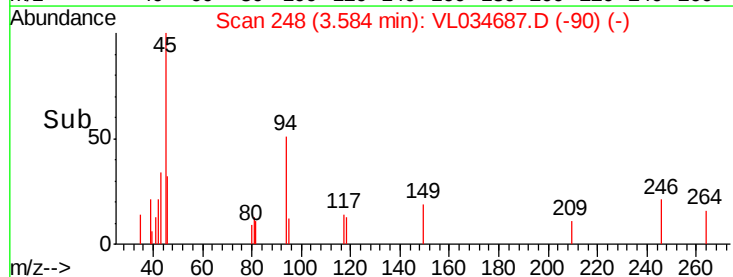
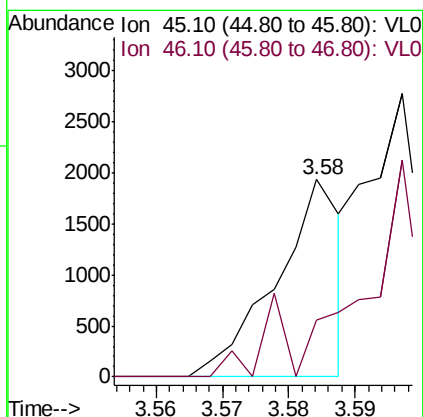
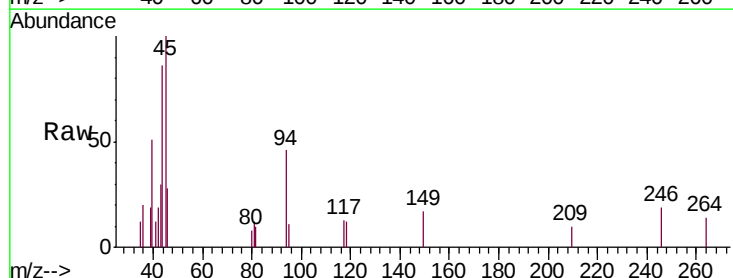
Acq: 26 Feb 2020 10:49

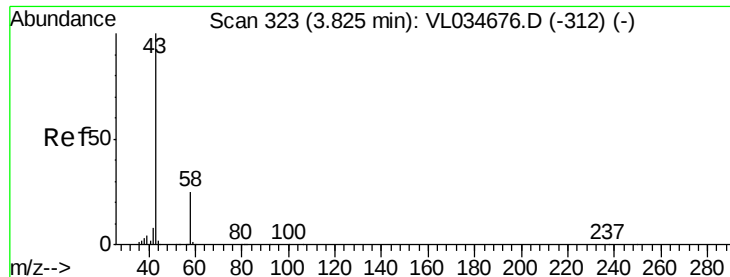
Tgt Ion: 45 Resp: 1323

Ion Ratio Lower Upper

45 100

46 0.0 15.4 61.4#





#15

Acetone

Concen: 0.292 ppbv

RT: 3.83 min Scan# 326

Delta R.T. 0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

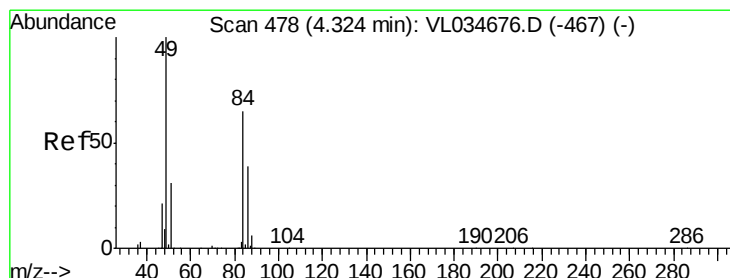
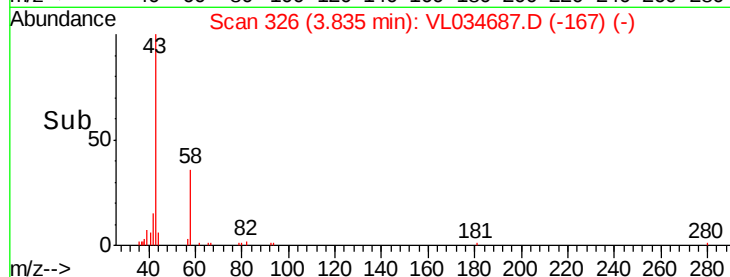
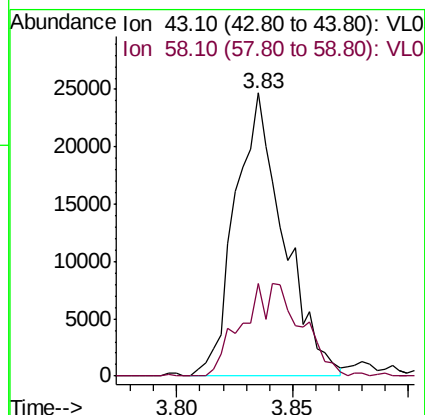
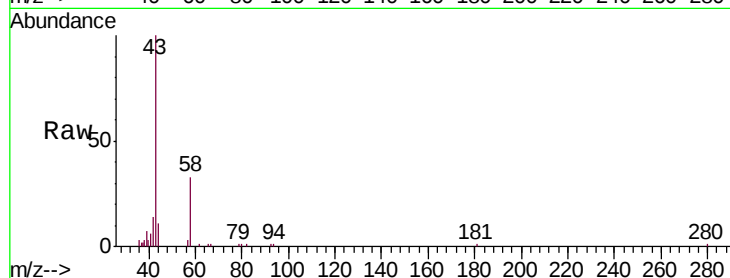
E051-1100DL

Tgt Ion: 43 Resp: 35856

Ion Ratio Lower Upper

43 100

58 40.4 21.4 32.0#



#20

Methylene Chloride

Concen: 0.537 ppbv

RT: 4.32 min Scan# 476

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Tgt Ion: 84 Resp: 24545

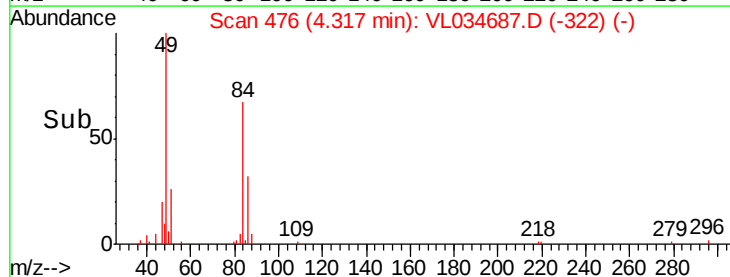
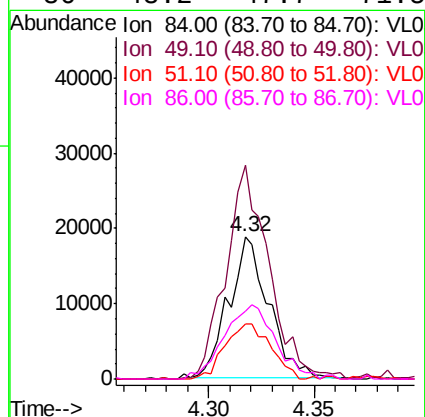
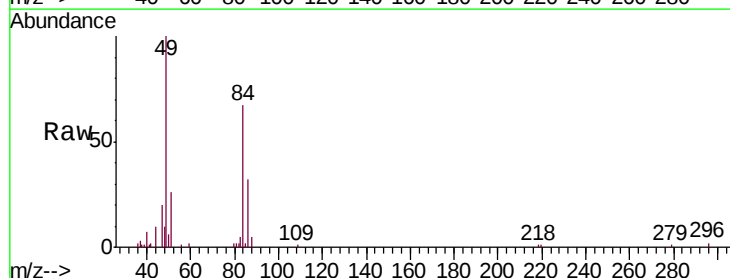
Ion Ratio Lower Upper

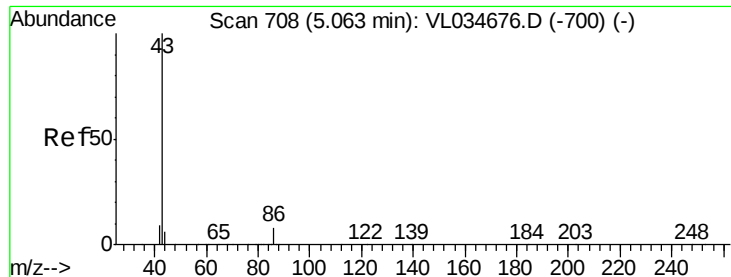
84 100

49 150.1 122.8 184.2

51 38.9 38.6 58.0

86 48.2 47.7 71.5





#23

Vinyl Acetate

Concen: 0.021 ppbv

RT: 5.06 min Scan# 707

Delta R.T. -0.00 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

Tgt Ion: 43 Resp: 3453

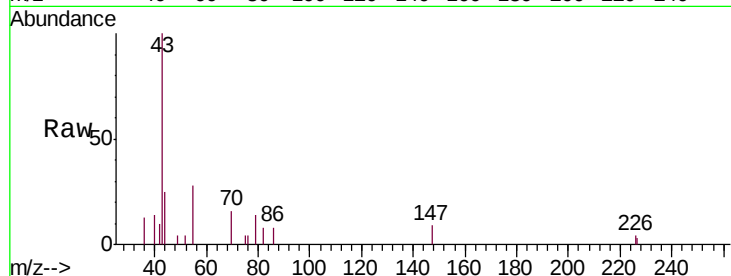
Ion Ratio Lower Upper

43 100

86 16.9 6.0 9.0#

42 0.0 8.0 12.0#

44 18.0 4.5 6.7#

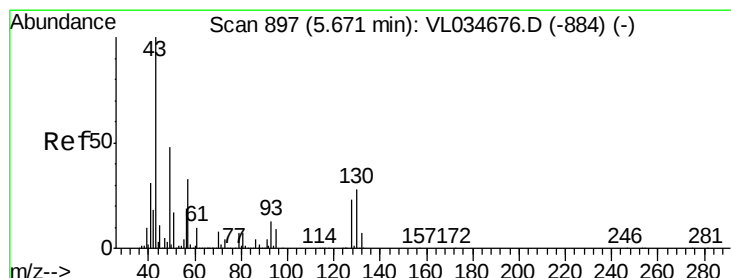
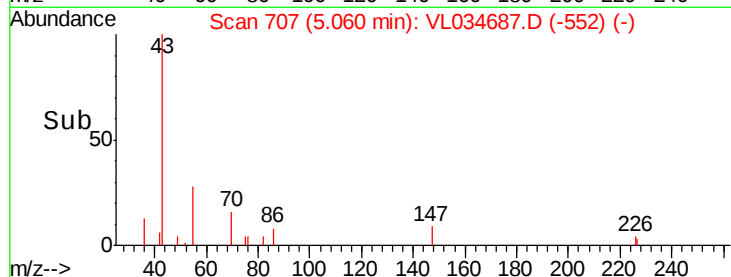
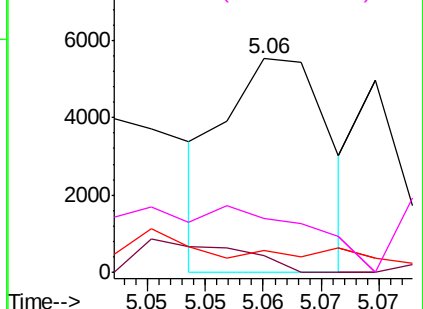


Abundance Ion 43.10 (42.80 to 43.80): VL0

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: 2.866 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.00 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Tgt Ion: 43 Resp: 623438

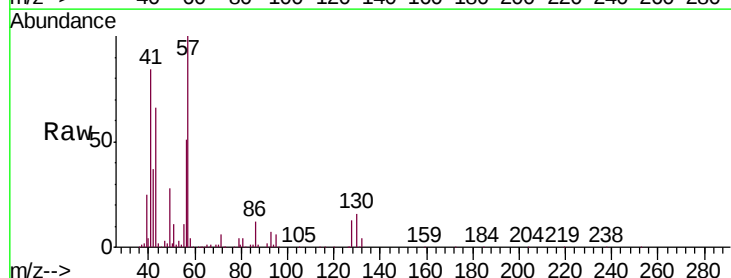
Ion Ratio Lower Upper

43 100

45 0.1 8.2 12.4#

61 0.0 7.8 11.6#

70 1.4 6.1 9.1#

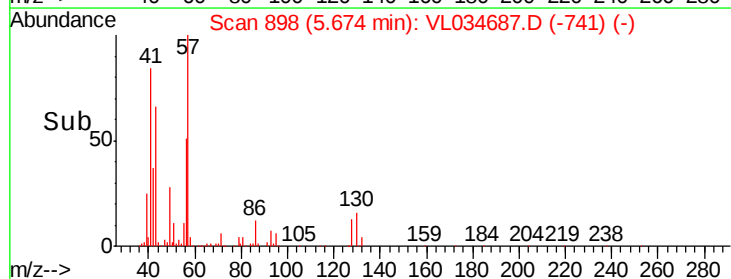
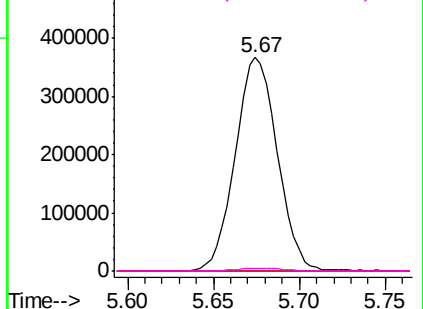


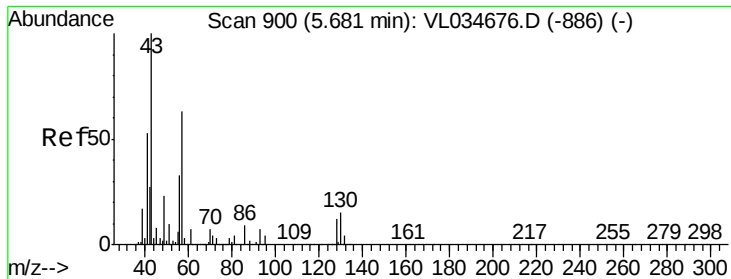
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

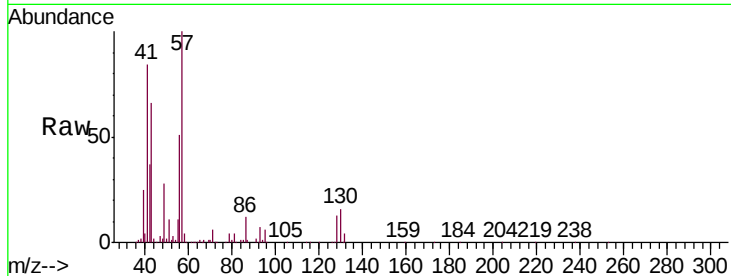




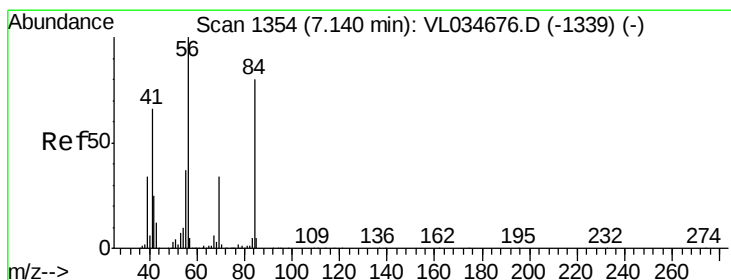
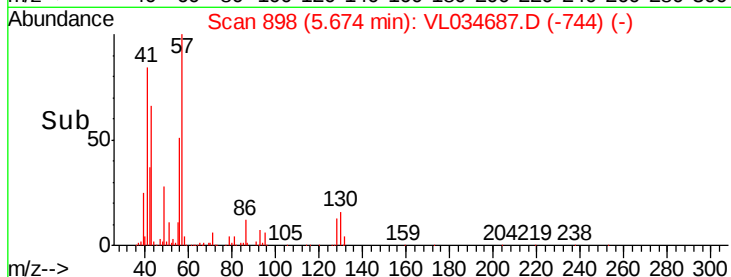
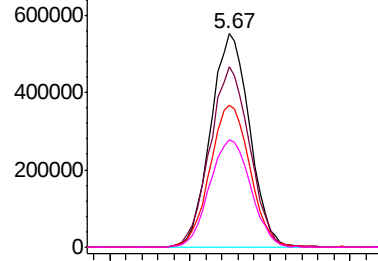
#26
Hexane
Concen: 9.091 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

Instrument :
MSVOA_L
ClientSampleId :
E051-1100DL

Tgt Ion:	57	Resp:	911325
Ion	Ratio	Lower	Upper
57	100		
41	87.1	70.3	105.5
43	68.7	177.0	265.4#
56	53.6	42.6	64.0

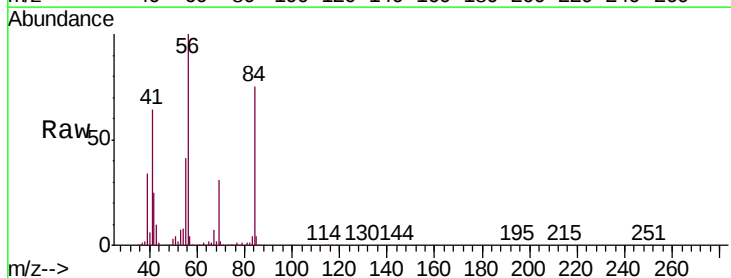


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

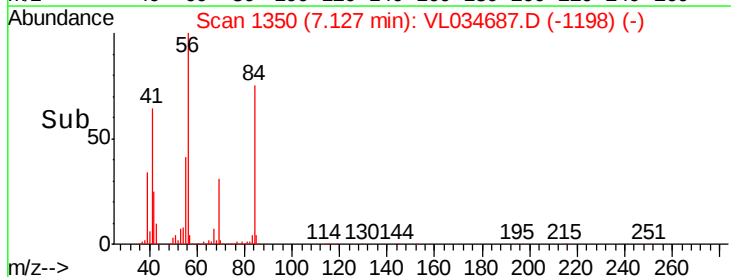
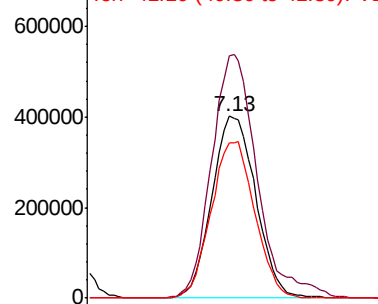


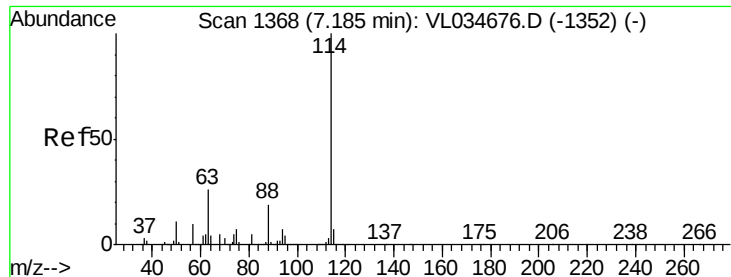
#30
Cyclohexane
Concen: 10.553 ppbv
RT: 7.13 min Scan# 1350
Delta R.T. -0.01 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

Tgt Ion:	84	Resp:	819849
Ion	Ratio	Lower	Upper
84	100		
56	139.8	113.4	170.2
41	85.8	68.2	102.4



Abundance Ion 84.20 (83.90 to 84.90): VL0
Ion 56.10 (55.80 to 56.80): VL0
Ion 41.10 (40.80 to 41.80): VL0

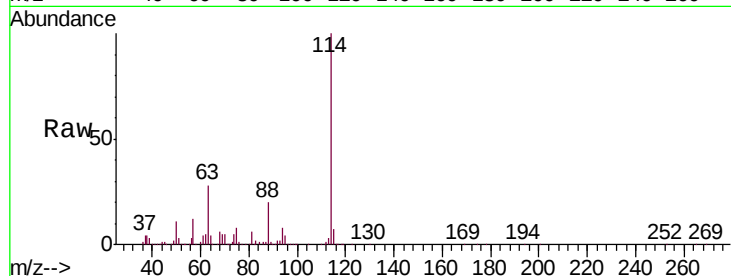




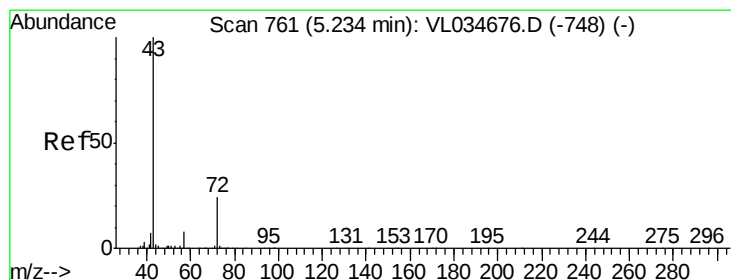
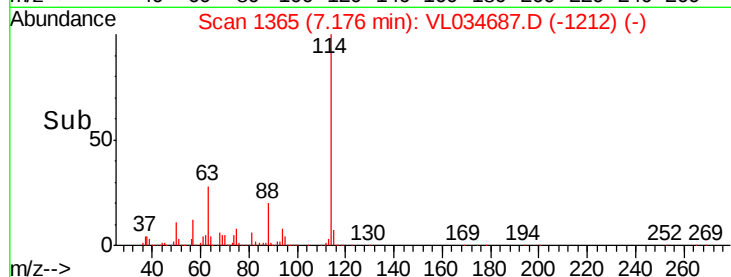
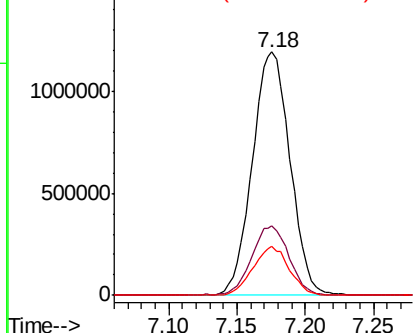
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.18 min Scan# 1365
 Delta R.T. -0.01 min
 Lab File: VL034687.D
 Acq: 26 Feb 2020 10:49

Instrument :
 MSVOA_L
 ClientSampleId :
 E051-1100DL

Tgt Ion:114 Resp: 2293107
 Ion Ratio Lower Upper
 114 100
 63 28.6 22.9 34.3
 88 19.5 15.8 23.6

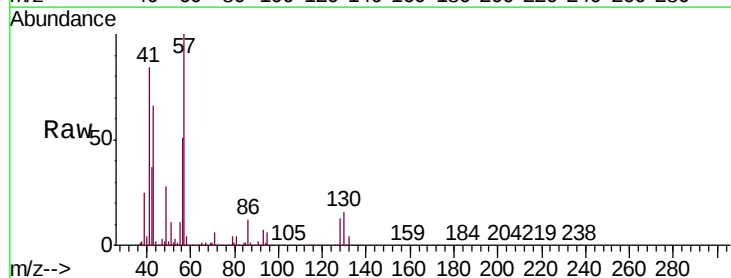


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

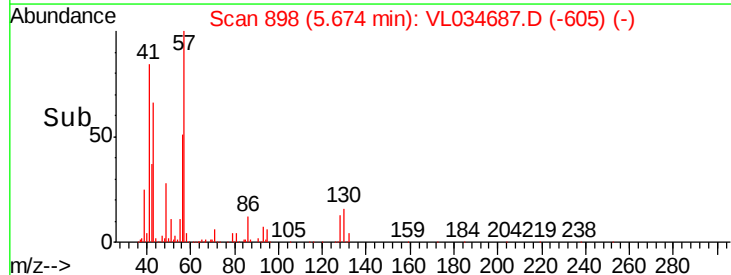
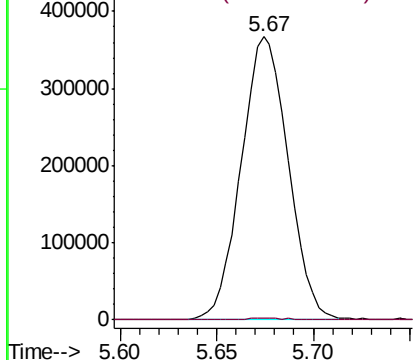


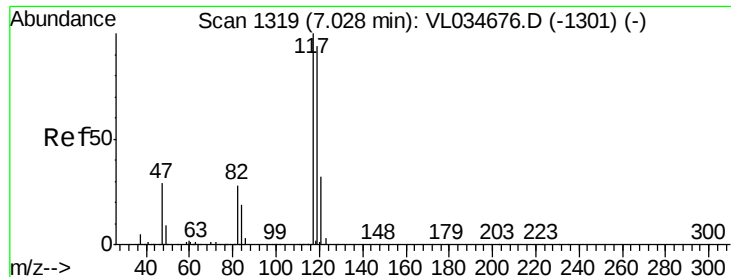
#34
 2-Butanone
 Concen: 4.312 ppbv
 RT: 5.67 min Scan# 898
 Delta R.T. 0.44 min
 Lab File: VL034687.D
 Acq: 26 Feb 2020 10:49

Tgt Ion: 43 Resp: 622409
 Ion Ratio Lower Upper
 43 100
 72 0.0 18.2 27.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0

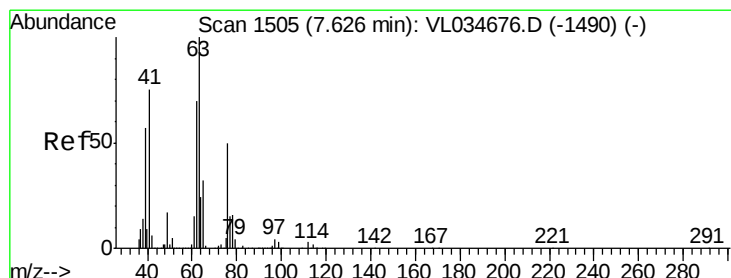
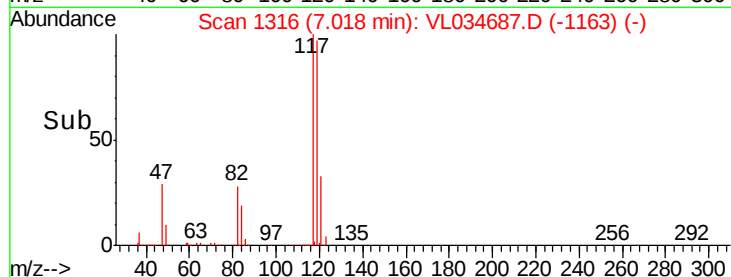
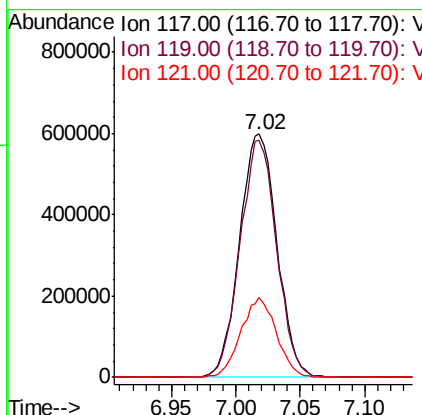
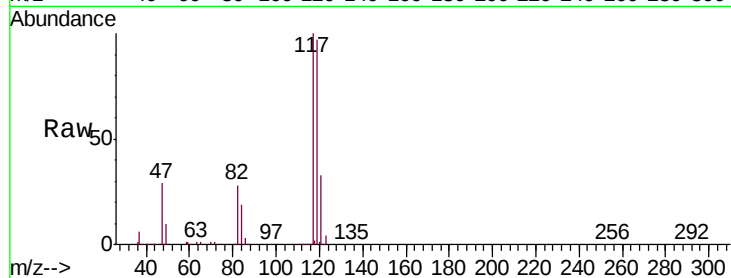




#35
Carbon Tetrachloride
Concen: 7.882 ppbv
RT: 7.02 min Scan# 1316
Delta R.T. -0.01 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

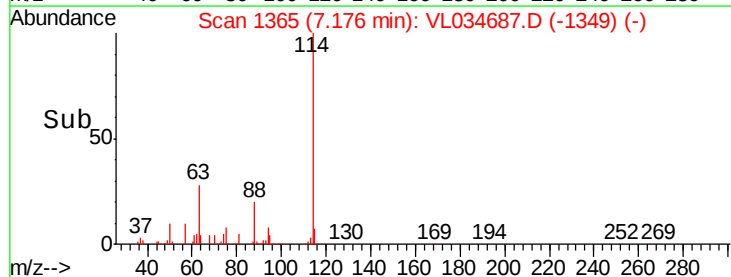
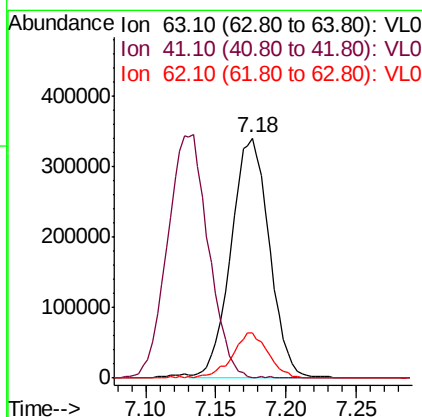
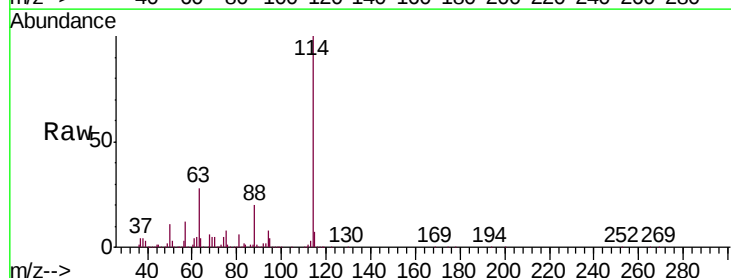
Instrument :
MSVOA_L
ClientSampleId :
E051-1100DL

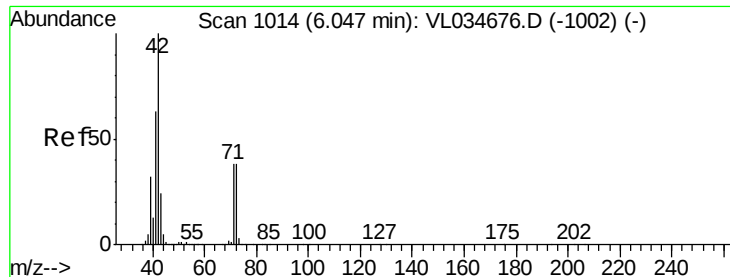
Tgt Ion: 117 Resp: 1210420
Ion Ratio Lower Upper
117 100
119 97.2 75.5 113.3
121 32.6 25.4 38.0



#39
1,2-Dichloropropane
Concen: 8.153 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.45 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

Tgt Ion: 63 Resp: 642438
Ion Ratio Lower Upper
63 100
41 0.3 60.2 90.4#
62 18.4 56.3 84.5#

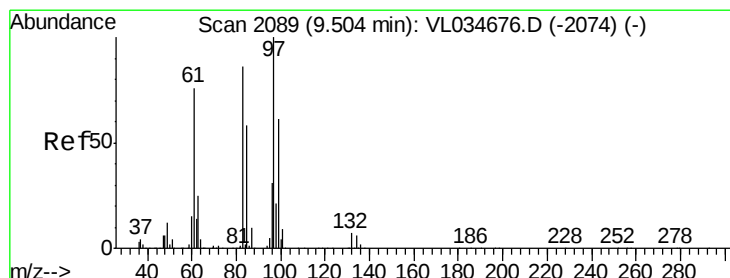
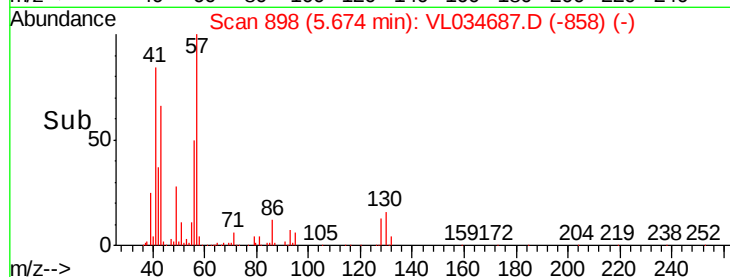
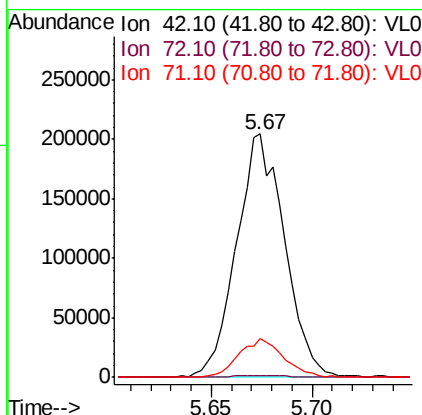
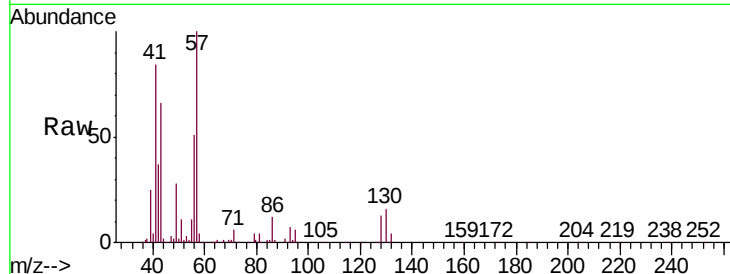




#41
Tetrahydrofuran
Concen: 4.428 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.37 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

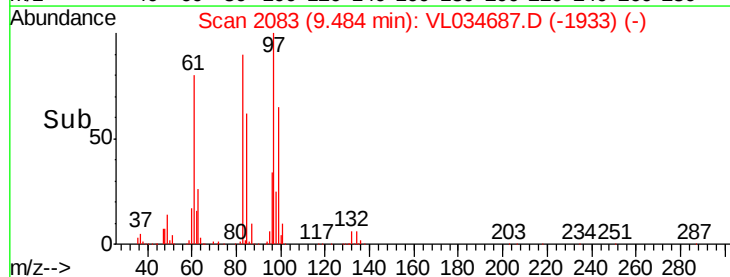
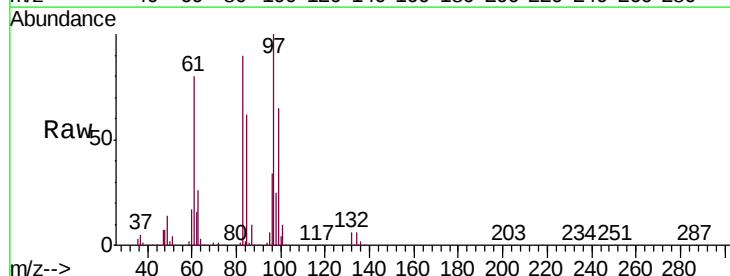
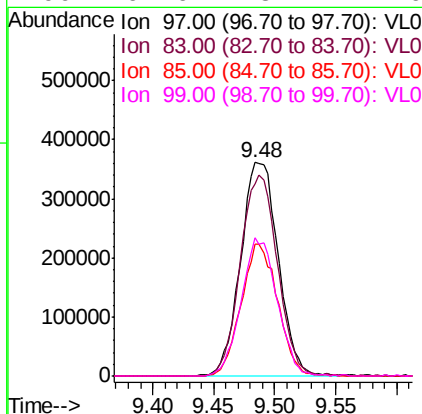
Instrument :
MSVOA_L
ClientSampleId :
E051-1100DL

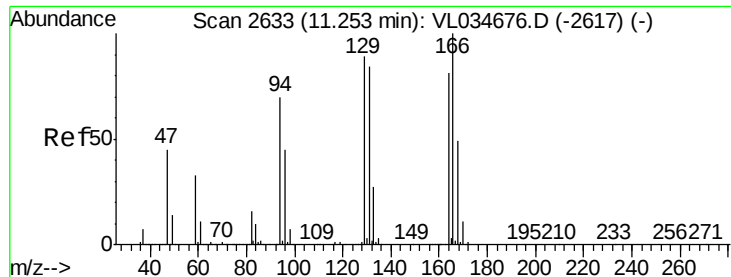
Tgt Ion: 42 Resp: 337318
Ion Ratio Lower Upper
42 100
72 0.9 31.7 47.5#
71 15.2 30.7 46.1#



#47
1,1,2-Trichloroethane
Concen: 9.516 ppbv
RT: 9.48 min Scan# 2083
Delta R.T. -0.02 min
Lab File: VL034687.D
Acq: 26 Feb 2020 10:49

Tgt Ion: 97 Resp: 769235
Ion Ratio Lower Upper
97 100
83 89.7 69.4 104.0
85 62.0 46.4 69.6
99 64.6 48.4 72.6





#52

Tetrachloroethene

Concen: 8.889 ppbv

RT: 11.24 min Scan# 2630

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

Tgt Ion:164 Resp: 645301

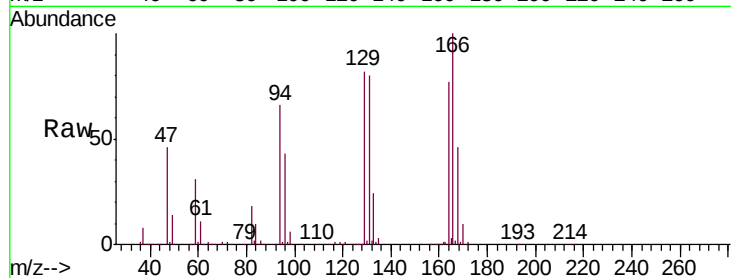
Ion Ratio Lower Upper

164 100

166 130.0 99.2 148.8

129 106.1 88.0 132.0

131 103.8 83.7 125.5

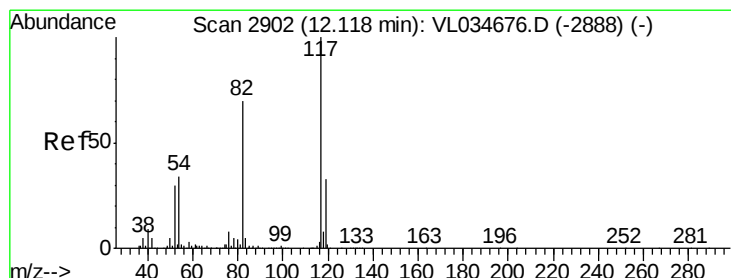
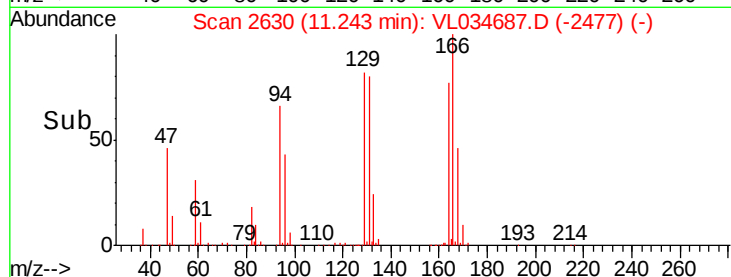
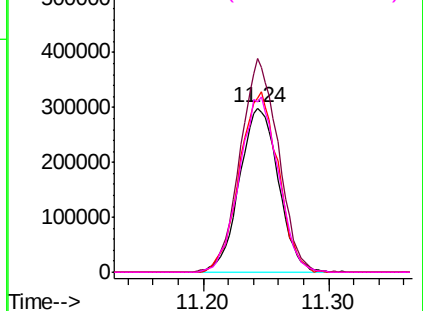


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2900

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

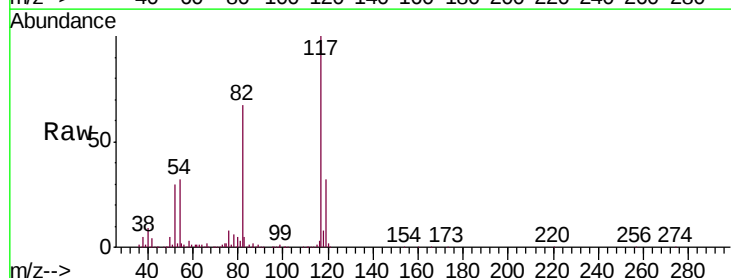
Tgt Ion:117 Resp: 2243058

Ion Ratio Lower Upper

117 100

82 70.2 54.1 81.1

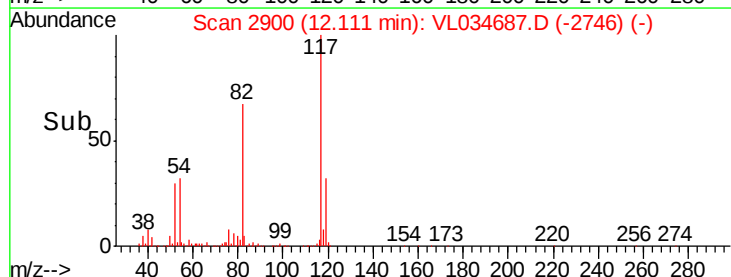
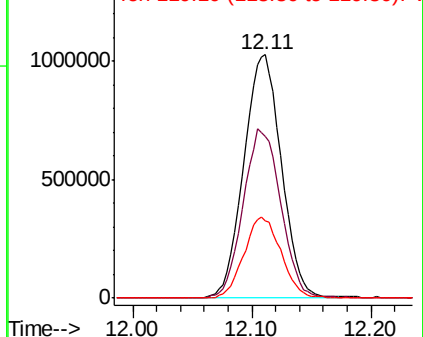
119 33.0 27.6 41.4

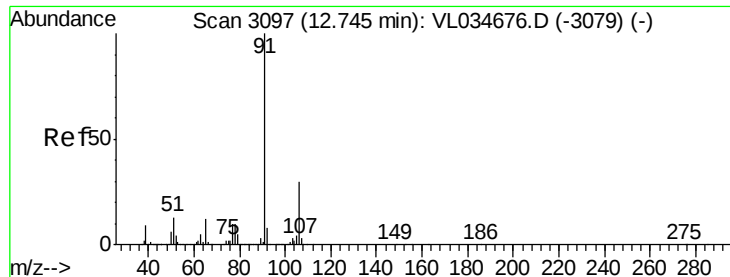


Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): V

Ion 119.10 (118.80 to 119.80): V





#58

Ethyl Benzene

Concen: 6.797 ppbv

RT: 12.99 min Scan# 3173

Delta R.T. 0.24 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

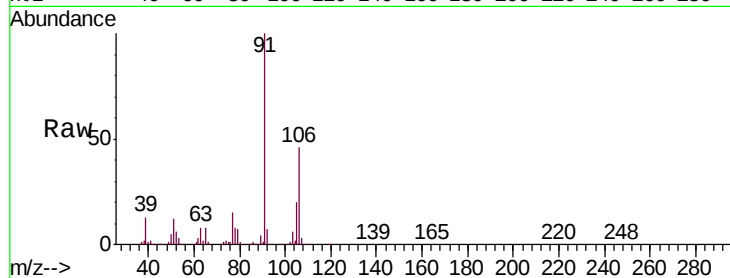
E051-1100DL

Tgt Ion: 91 Resp: 1844543

Ion Ratio Lower Upper

91 100

106 45.5 24.0 36.0#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

1000000

800000

600000

400000

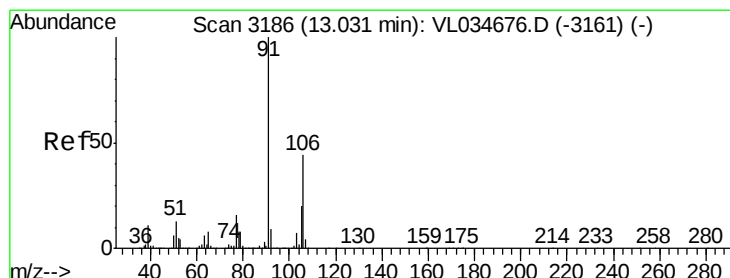
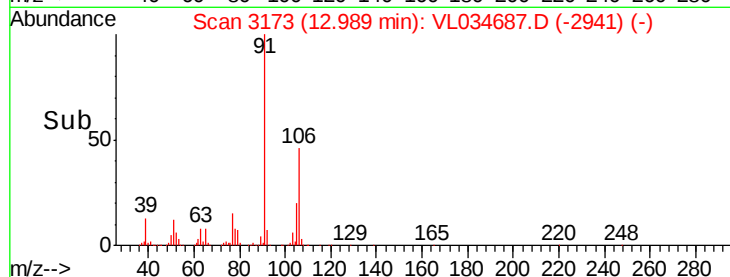
200000

0

12.90

13.00

Time-->



#59

m/p-Xylene

Concen: 7.793 ppbv

RT: 12.99 min Scan# 3173

Delta R.T. -0.04 min

Lab File: VL034687.D

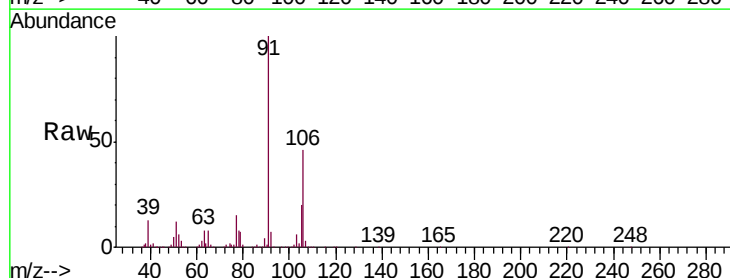
Acq: 26 Feb 2020 10:49

Tgt Ion: 91 Resp: 1844543

Ion Ratio Lower Upper

91 100

106 45.2 35.6 53.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

1000000

800000

600000

400000

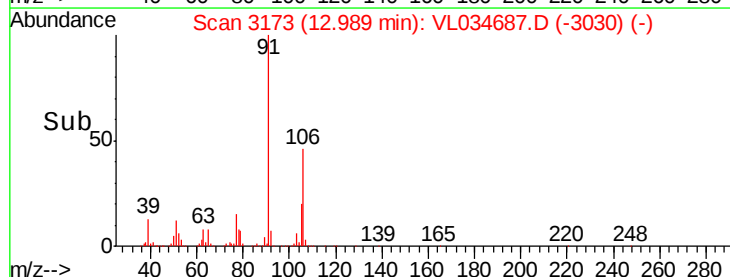
200000

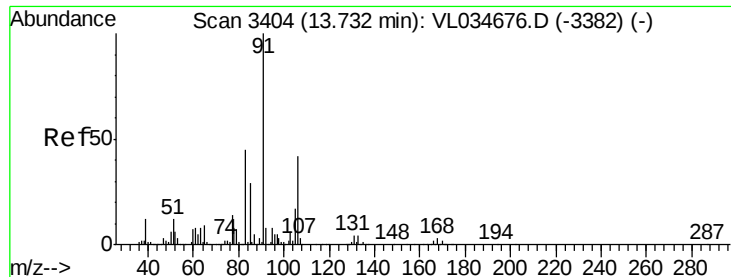
0

12.90

13.00

Time-->





#60

o-Xylene

Concen: 6.706 ppbv

RT: 13.72 min Scan# 3400

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

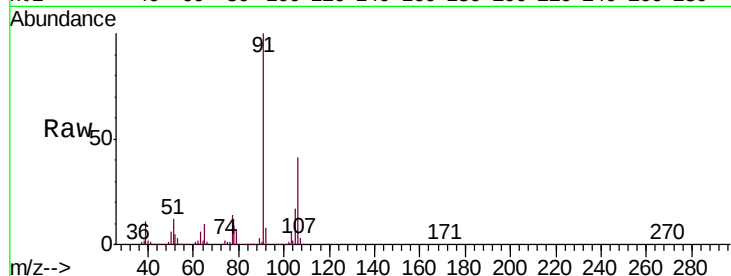
E051-1100DL

Tgt Ion: 91 Resp: 1575028

Ion Ratio Lower Upper

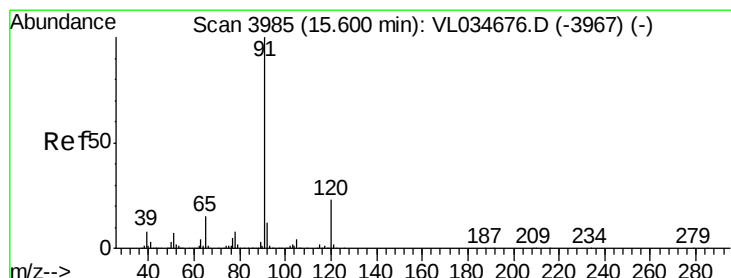
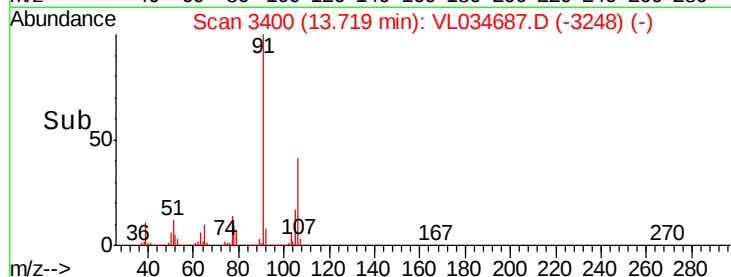
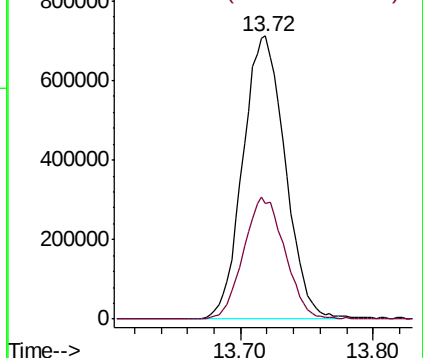
91 100

106 42.4 21.9 65.5



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#64

n-propylbenzene

Concen: 7.216 ppbv

RT: 15.87 min Scan# 4068

Delta R.T. 0.27 min

Lab File: VL034687.D

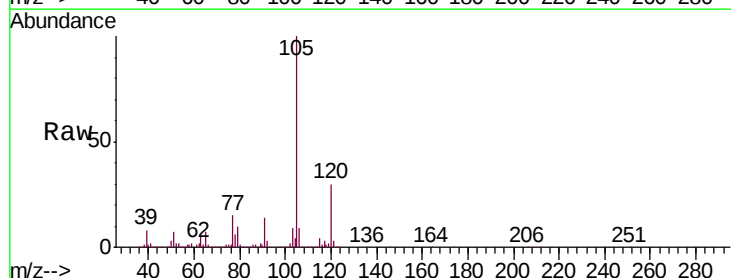
Acq: 26 Feb 2020 10:49

Tgt Ion: 120 Resp: 637400

Ion Ratio Lower Upper

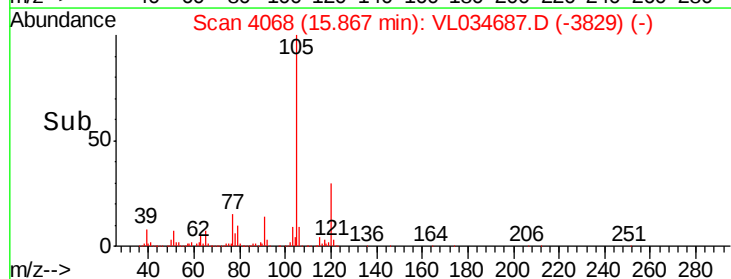
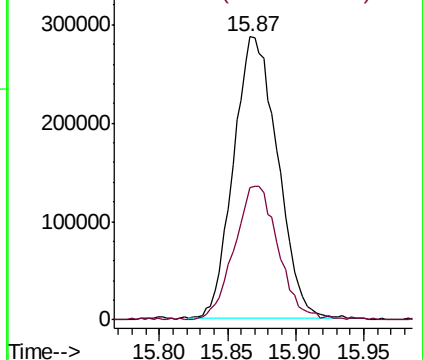
120 100

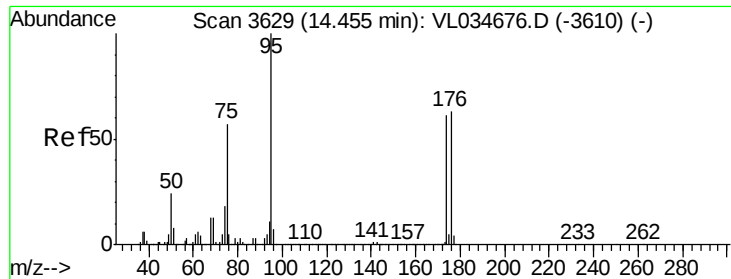
91 48.5 369.8 554.8#



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





#68

1-Bromo-4-Fluorobenzene

Concen: 10.473 ppbv

RT: 14.45 min Scan# 3626

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

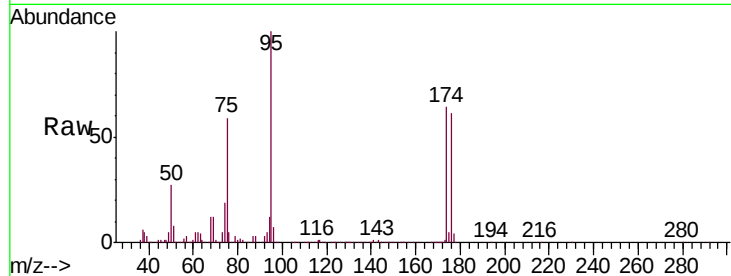
Tgt Ion: 95 Resp: 1926272

Ion Ratio Lower Upper

95 100

174 64.4 50.7 76.1

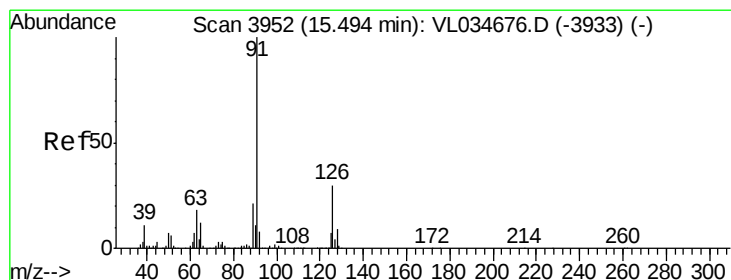
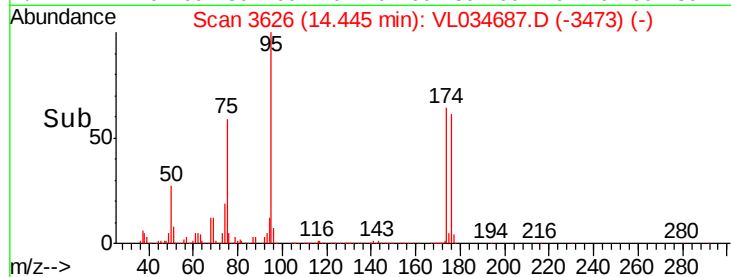
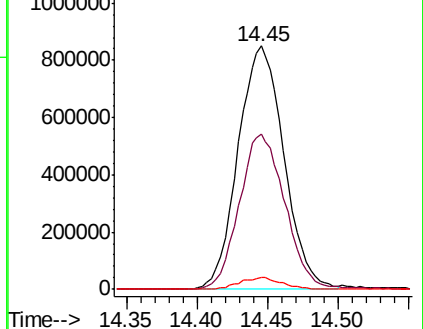
175 4.6 3.9 5.9



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



#71

2-Chlorotoluene

Concen: 1.138 ppbv

RT: 15.87 min Scan# 4070

Delta R.T. 0.38 min

Lab File: VL034687.D

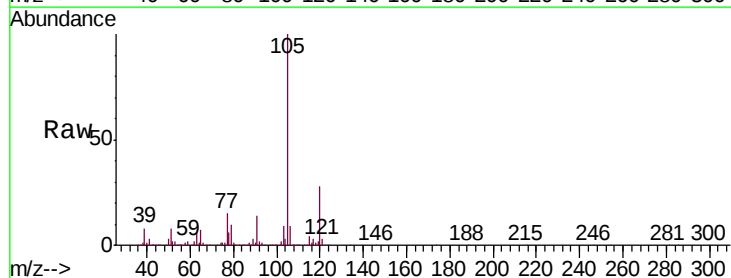
Acq: 26 Feb 2020 10:49

Tgt Ion: 91 Resp: 301944

Ion Ratio Lower Upper

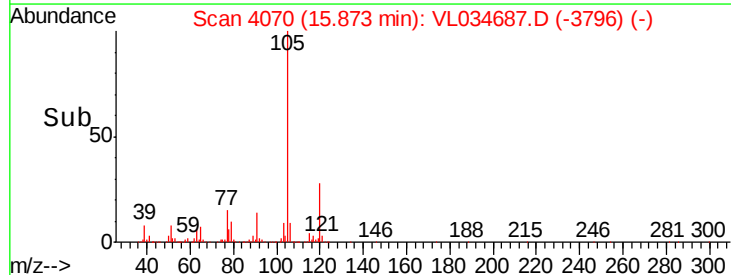
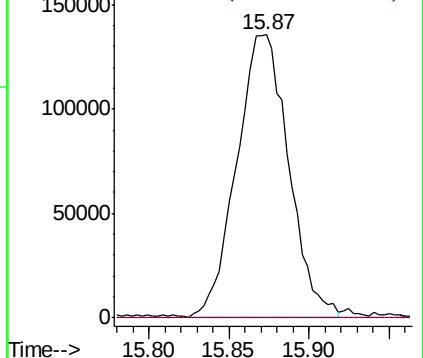
91 100

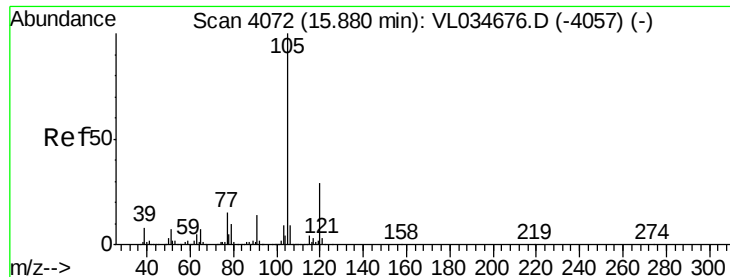
126 0.0 11.8 47.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 126.10 (125.80 to 126.80): V





#72

4-Ethyltoluene

Concen: 8.661 ppbv

RT: 15.87 min Scan# 4070

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

Tgt Ion:105 Resp: 2264235

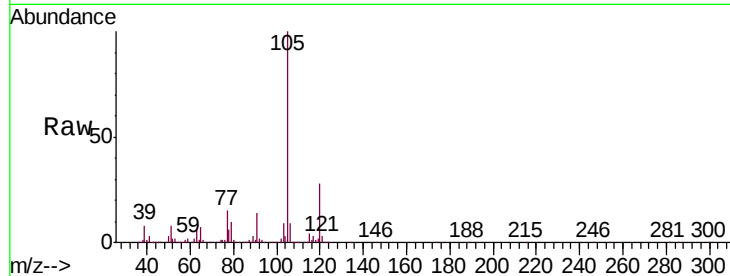
Ion Ratio Lower Upper

105 100

120 29.2 23.7 35.5

91 13.6 10.9 16.3

77 15.3 12.2 18.2

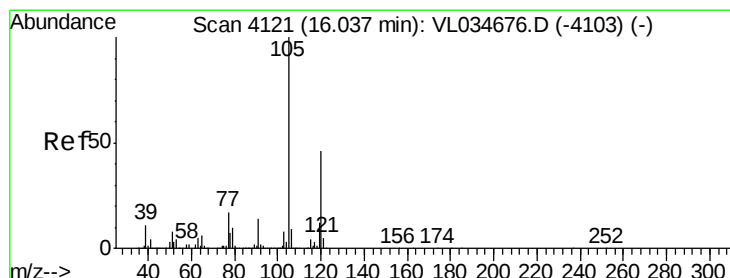
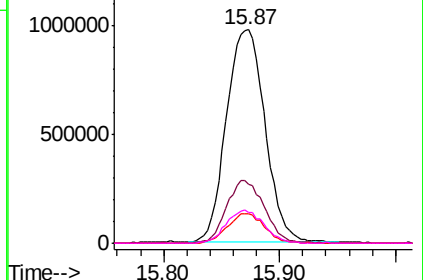
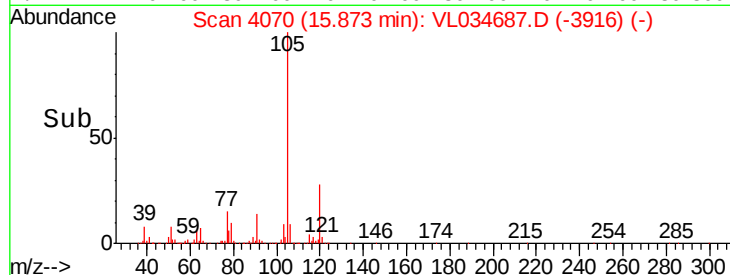


Abundance Ion 105.10 (104.80 to 105.80): V

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



#73

1,3,5-Trimethylbenzene

Concen: 9.003 ppbv

RT: 15.87 min Scan# 4070

Delta R.T. -0.16 min

Lab File: VL034687.D

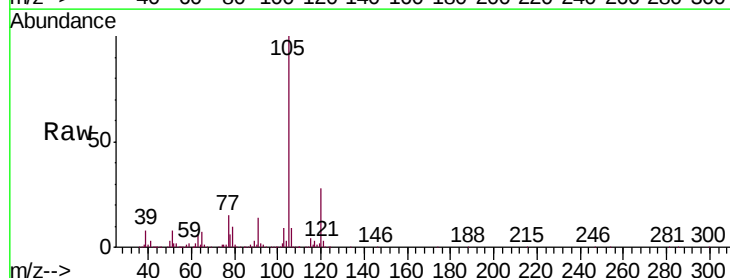
Acq: 26 Feb 2020 10:49

Tgt Ion:105 Resp: 2264235

Ion Ratio Lower Upper

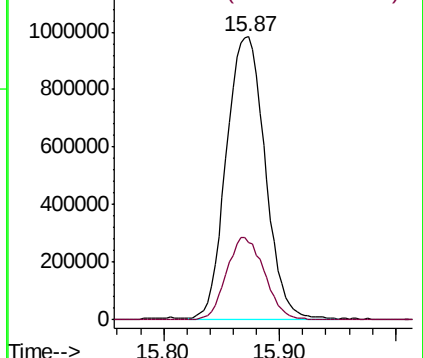
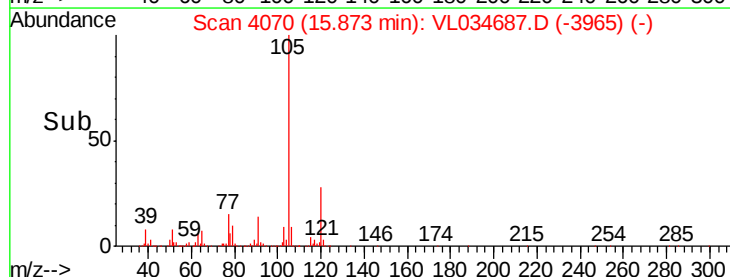
105 100

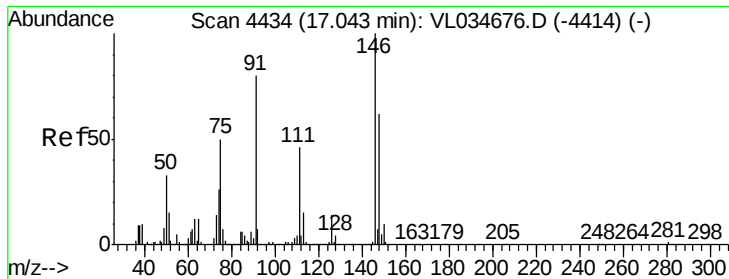
120 27.4 37.1 55.7#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#75

1,3-Dichlorobenzene

Concen: 6.166 ppbv

RT: 17.03 min Scan# 4431

Delta R.T. -0.01 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

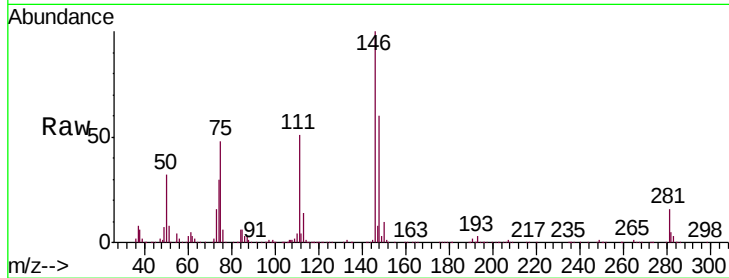
Tgt Ion:146 Resp: 988544

Ion Ratio Lower Upper

146 100

111 49.0 24.4 73.2

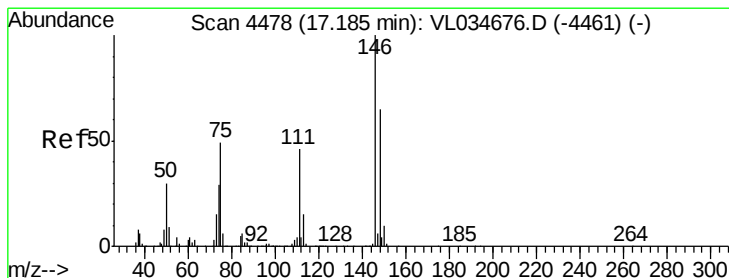
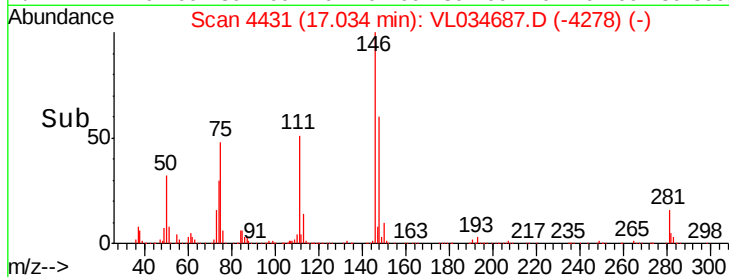
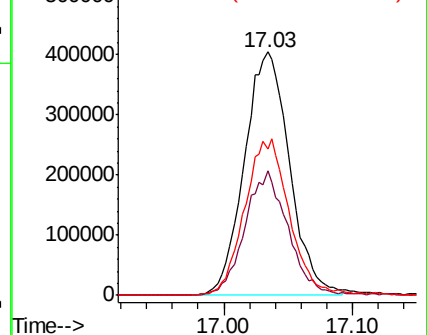
148 64.0 32.5 97.4



Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V



#76

1,4-Dichlorobenzene

Concen: 6.163 ppbv

RT: 17.03 min Scan# 4431

Delta R.T. -0.15 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

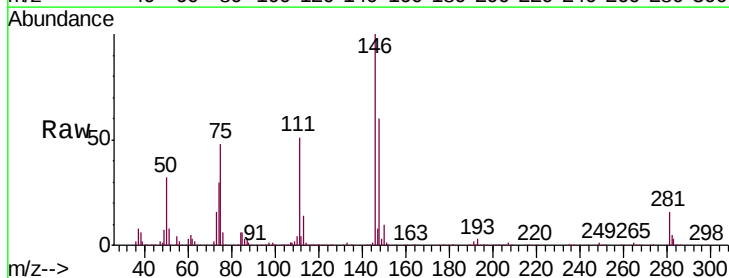
Tgt Ion:146 Resp: 988544

Ion Ratio Lower Upper

146 100

111 48.6 23.4 70.0

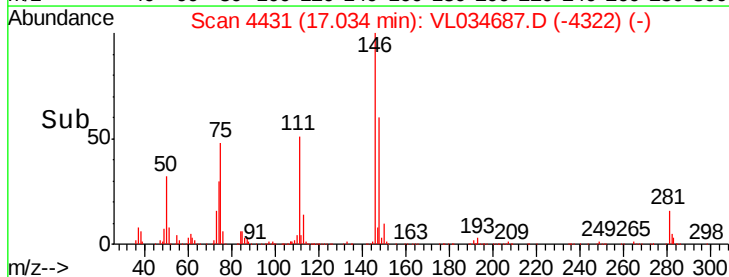
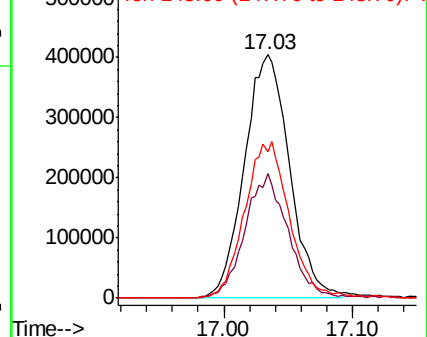
148 64.3 31.9 95.5

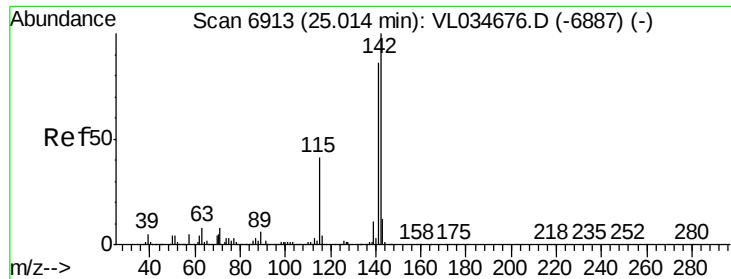


Abundance Ion 146.00 (145.70 to 146.70): V

Ion 111.10 (110.80 to 111.80): V

Ion 148.00 (147.70 to 148.70): V





#80

Naphthalene, 2-methyl-

Concen: 0.053 ppbv

RT: 24.93 min Scan# 6888

Delta R.T. -0.08 min

Lab File: VL034687.D

Acq: 26 Feb 2020 10:49

Instrument :

MSVOA_L

ClientSampleId :

E051-1100DL

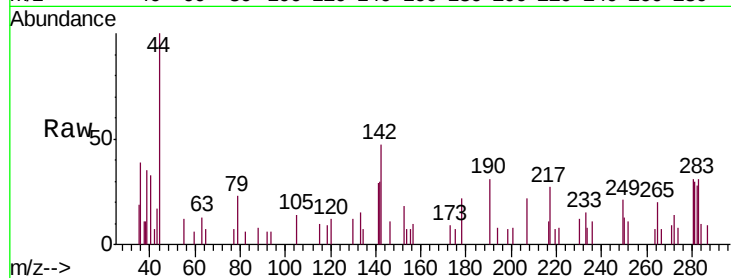
Tgt Ion:142 Resp: 3971

Ion Ratio Lower Upper

142 100

141 86.3 66.5 99.7

115 33.5 30.6 46.0



Abundance Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

