

Data File : VL034633.D
Acq On : 18 Feb 2020 21:00
Operator : SY/AP
Sample : L1532-08
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
L-SS

Quant Time: Feb 19 06:05:49 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Jan 30 17:16:44 2020
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	934483	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	1886105	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	1827252	10.00	ppbv	0.00

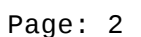
System Monitoring Compounds
68) 1-Bromo-4-Fluorobenzene 14.45 95 1575455 10.20 ppbv 0.00
Spiked Amount 10.000 Range 65 - 135 Recovery = 102.00%

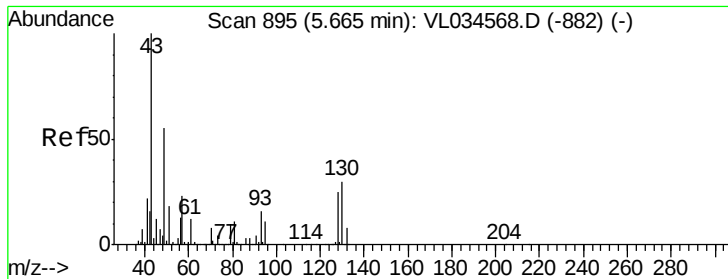
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.01	85	48190	0.234	ppbv #	87
3) Chlorodifluoromethane	2.95	51	59741	0.529	ppbv #	88
9) Propene	3.17	41	48833	1.111	ppbv	99
11) Trichlorofluoromethane	3.92	101	44613	0.239	ppbv	91
12) 1,1,2-Trichlorotrifluoroet	4.46	101	9121	0.075	ppbv	93
13) Ethanol	3.58	45	34294	2.912	ppbv	99
15) Acetone	3.83	43	281627	2.051	ppbv	98
17) tert-Butyl alcohol	4.29	59	14595	0.145	ppbv #	73
19) Isopropyl Alcohol	3.96	45	19937	0.249	ppbv #	94
20) Methylene Chloride	4.32	84	96352	1.842	ppbv	97
25) Ethyl Acetate	5.68	43	10649	0.048	ppbv #	83
26) Hexane	5.67	57	23739	0.255	ppbv #	26
27) Carbon Disulfide	4.53	76	4544	0.036	ppbv #	51
31) cis-1,2-Dichloroethene	5.54	61	684886	7.078	ppbv	98
34) 2-Butanone	5.24	43	14706	0.107	ppbv #	67
35) Carbon Tetrachloride	7.02	117	5410	0.030	ppbv #	68
36) Benzene	6.89	78	13195	0.079	ppbv #	85
38) Trichloroethene	7.84	130	44588	0.631	ppbv	92
39) 1,2-Dichloropropane	7.18	63	560655	8.063	ppbv #	20
43) Methyl Methacrylate	8.02	69	3016	0.045	ppbv #	1
52) Tetrachloroethene	11.26	164	6784056	100.683	ppbv	91
53) Toluene	9.81	91	8733	0.047	ppbv #	21
80) Naphthalene,2-methyl-	25.01	142	2856	0.037	ppbv #	91

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

ALS Vial : 1 Sample Multiplier: 1

Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL034633.D

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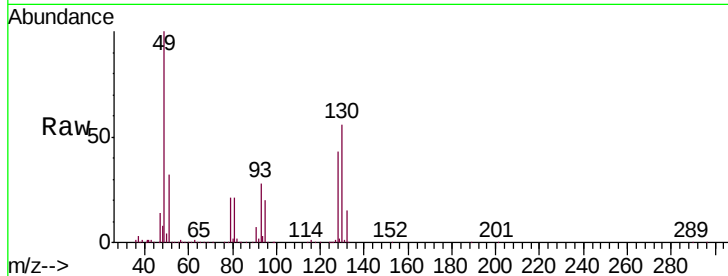
Tgt Ion: 49 Resp: 934483

Ion Ratio Lower Upper

49 100

128 45.3 22.7 68.1

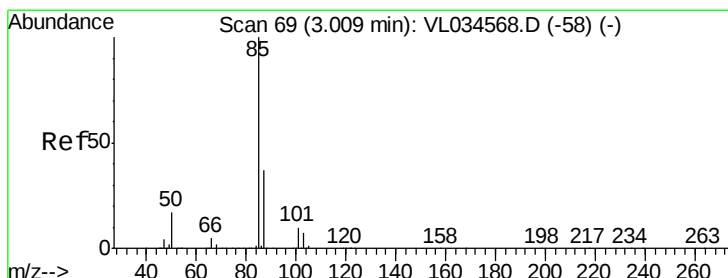
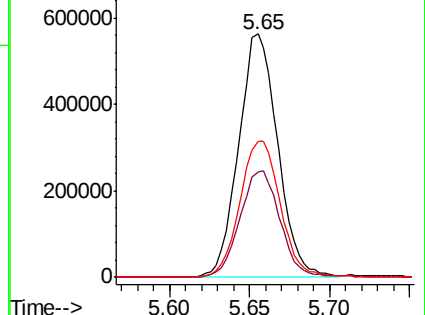
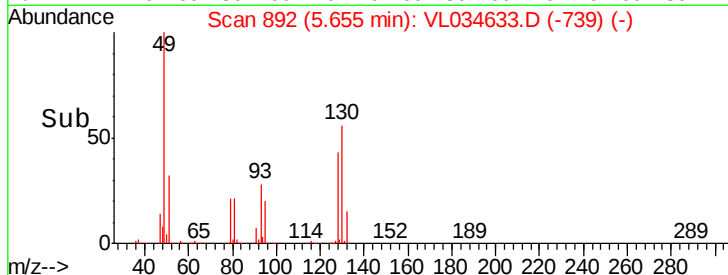
130 58.2 28.6 85.8



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.234 ppbv

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL034633.D

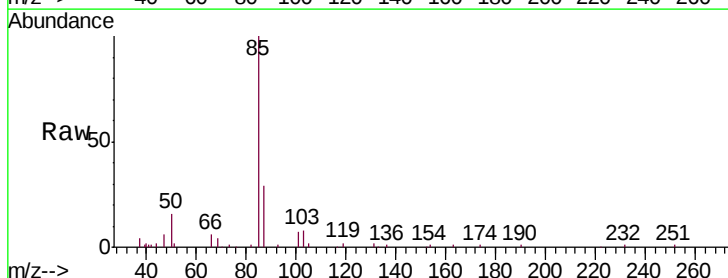
Acq: 18 Feb 2020 21:00

Tgt Ion: 85 Resp: 48190

Ion Ratio Lower Upper

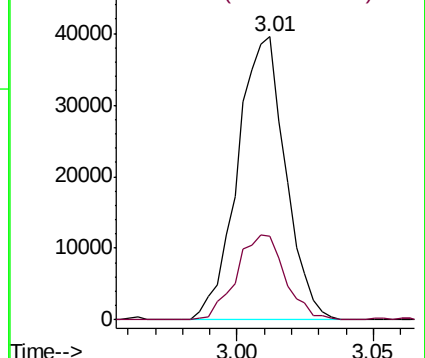
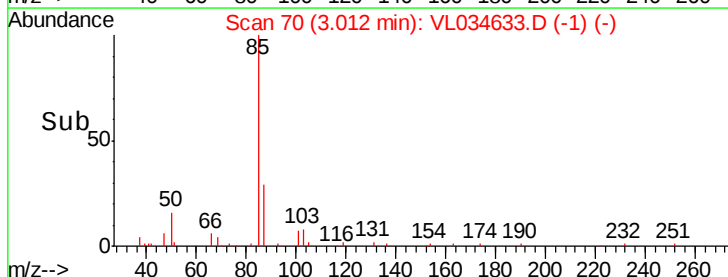
85 100

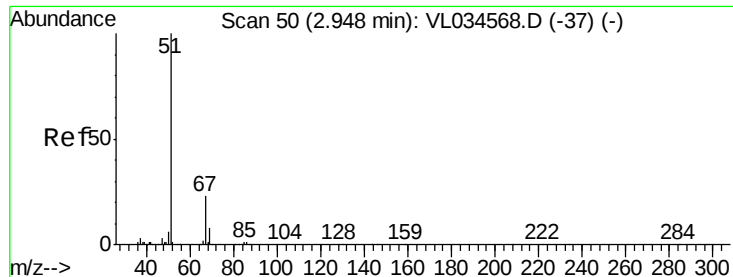
87 29.5 29.5 44.3#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

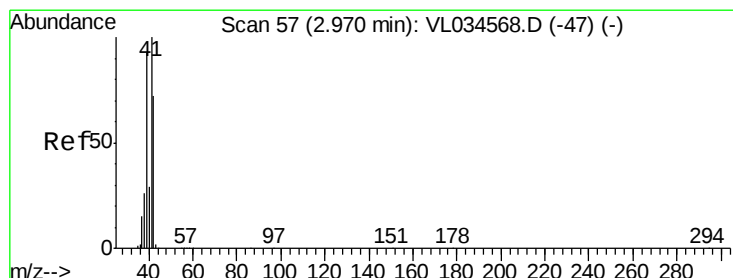
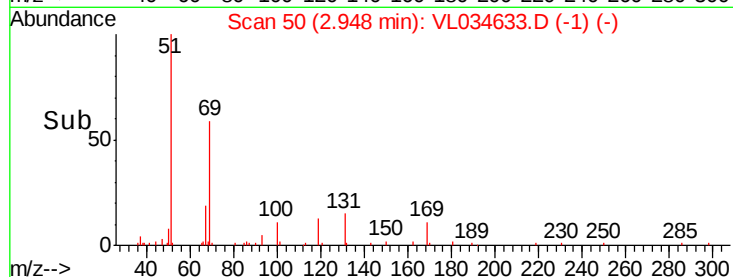
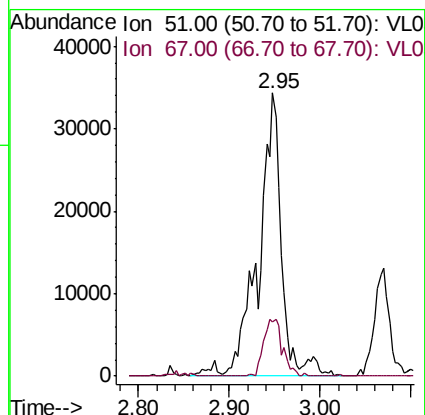
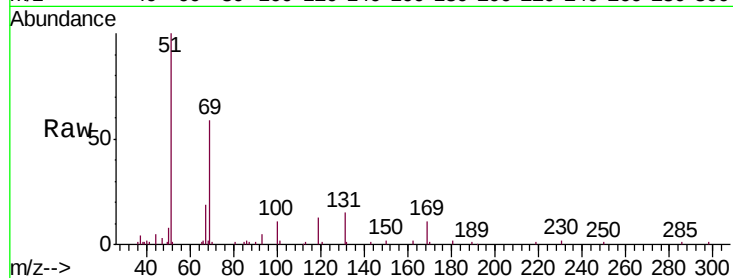




#3
Chlorodifluoromethane
Concen: 0.529 ppbv
RT: 2.95 min Scan# 50
Delta R.T. 0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

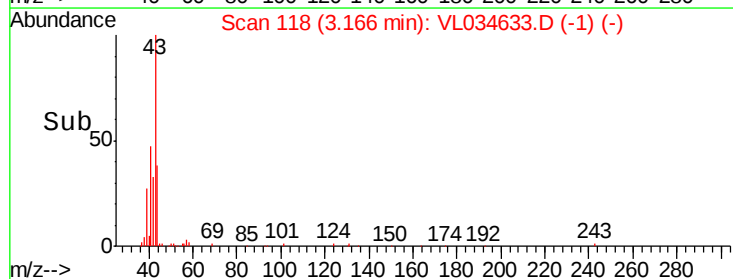
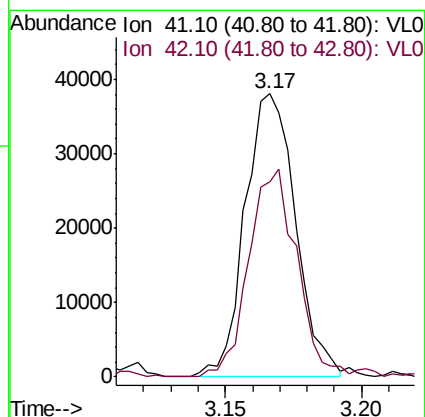
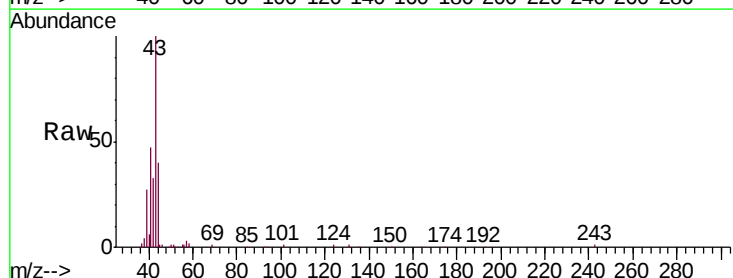
Instrument :
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ClientSampleId :
L-SS

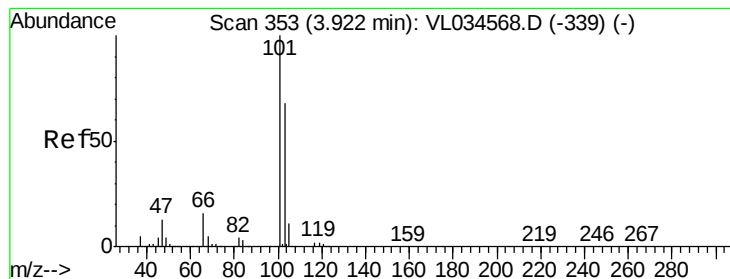
Tgt Ion: 51 Resp: 59741
Ion Ratio Lower Upper
51 100
67 16.6 17.8 26.8#



#9
Propene
Concen: 1.111 ppbv
RT: 3.17 min Scan# 118
Delta R.T. 0.20 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Tgt Ion: 41 Resp: 48833
Ion Ratio Lower Upper
41 100
42 71.8 57.0 85.4





#11

Trichlorofluoromethane

Concen: 0.239 ppbv

RT: 3.92 min Scan# 353

Delta R.T. -0.00 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

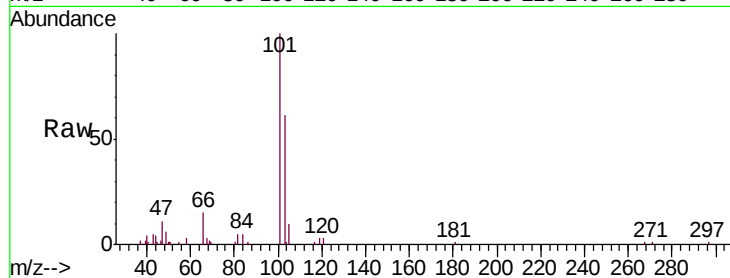
L-SS

Tgt Ion:101 Resp: 44613

Ion Ratio Lower Upper

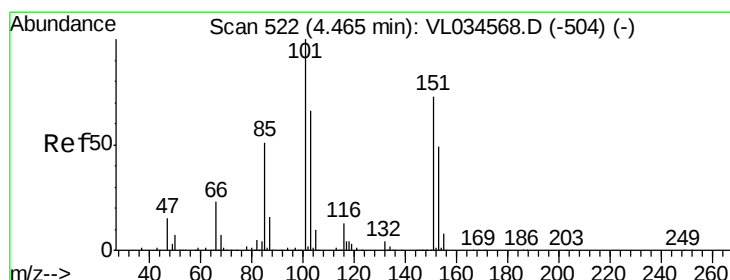
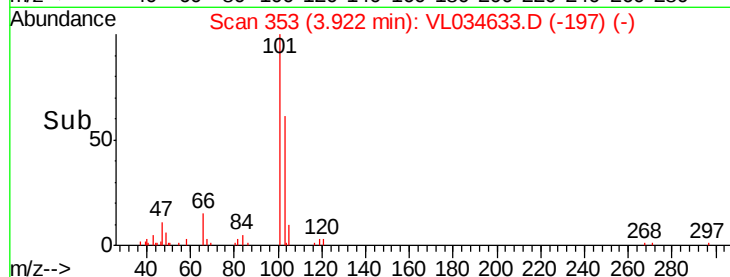
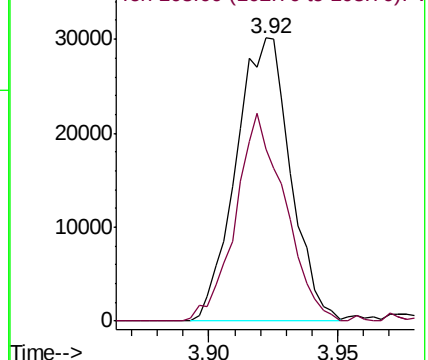
101 100

103 60.6 54.4 81.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.075 ppbv

RT: 4.46 min Scan# 520

Delta R.T. -0.01 min

Lab File: VL034633.D

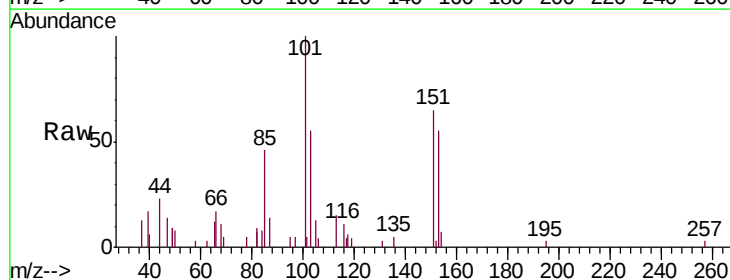
Acq: 18 Feb 2020 21:00

Tgt Ion:101 Resp: 9121

Ion Ratio Lower Upper

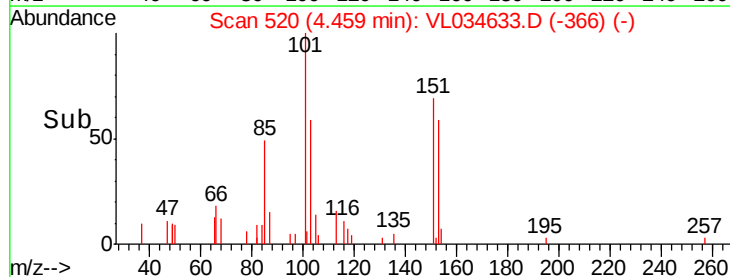
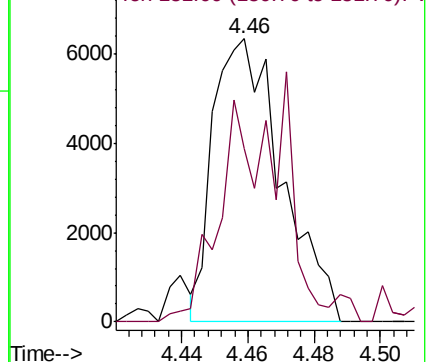
101 100

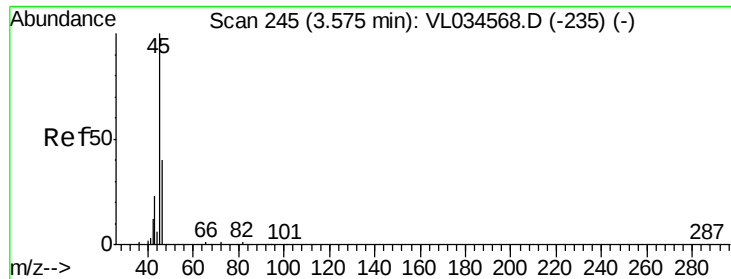
151 77.0 57.0 85.6



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





#13

Ethanol

Concen: 2.912 ppbv

RT: 3.58 min Scan# 248

Delta R.T. 0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

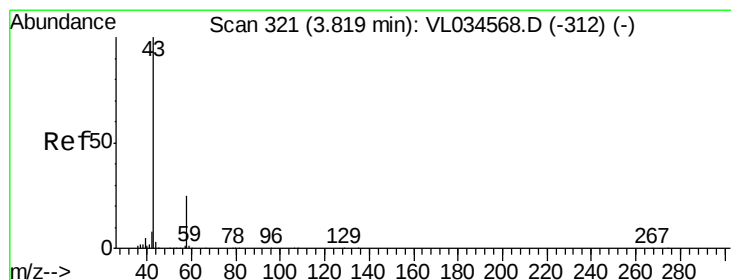
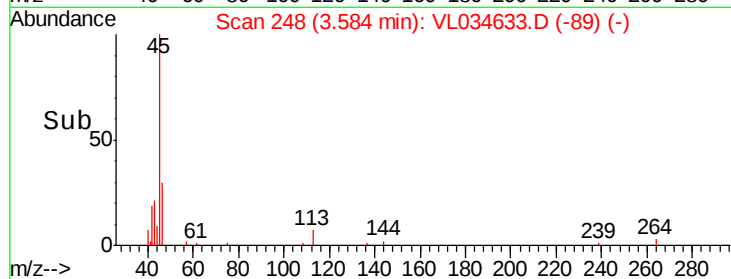
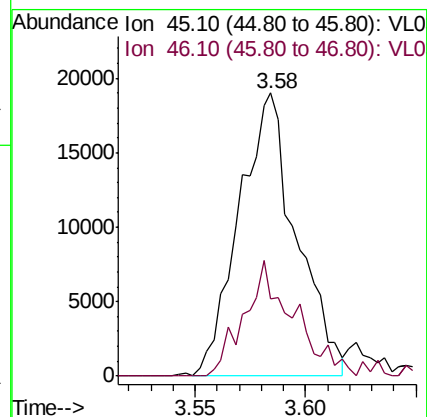
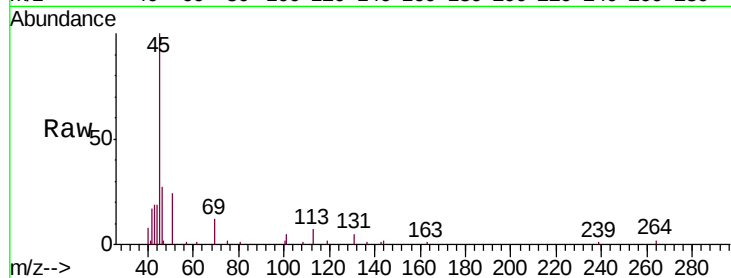
L-SS

Tgt Ion: 45 Resp: 34294

Ion Ratio Lower Upper

45 100

46 36.5 14.8 59.2



#15

Acetone

Concen: 2.051 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.01 min

Lab File: VL034633.D

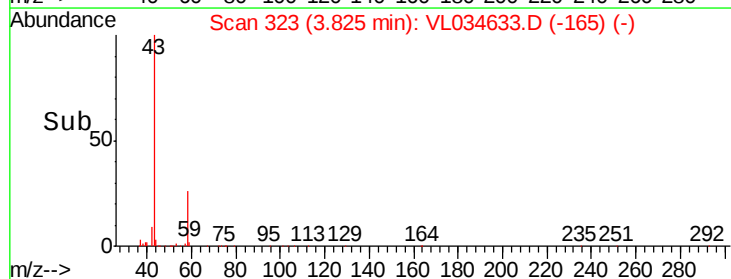
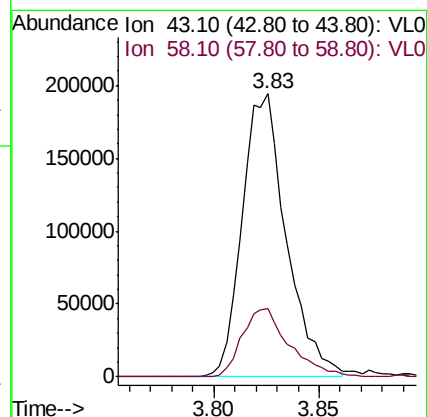
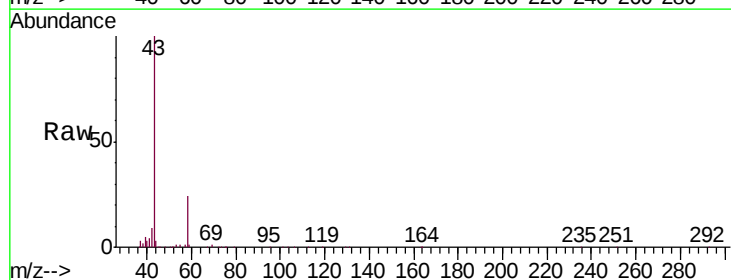
Acq: 18 Feb 2020 21:00

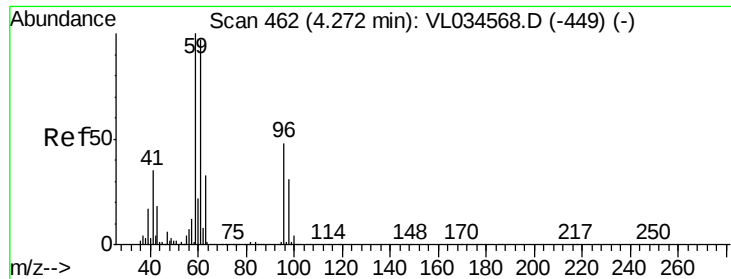
Tgt Ion: 43 Resp: 281627

Ion Ratio Lower Upper

43 100

58 26.3 20.3 30.5





#17

tert-Butyl alcohol

Concen: 0.145 ppbv

RT: 4.29 min Scan# 466

Delta R.T. 0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

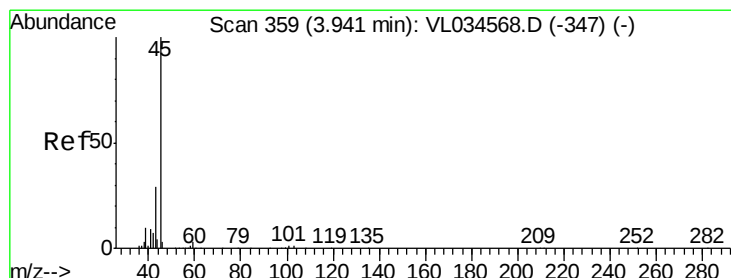
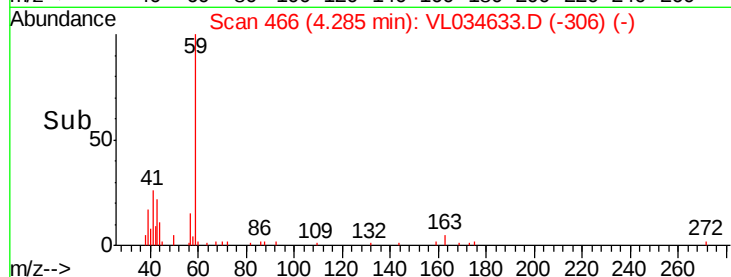
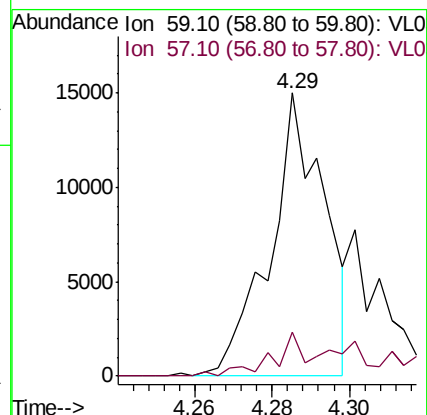
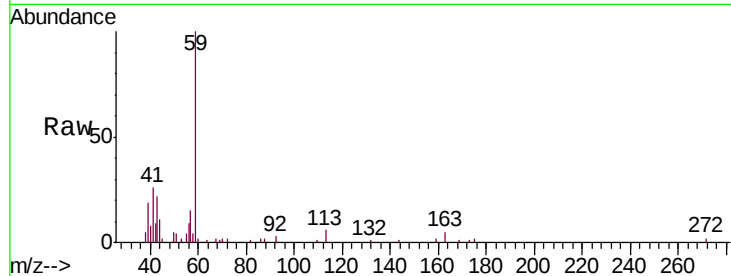
L-SS

Tgt Ion: 59 Resp: 14595

Ion Ratio Lower Upper

59 100

57 21.2 8.7 13.1#



#19

Isopropyl Alcohol

Concen: 0.249 ppbv

RT: 3.96 min Scan# 364

Delta R.T. 0.02 min

Lab File: VL034633.D

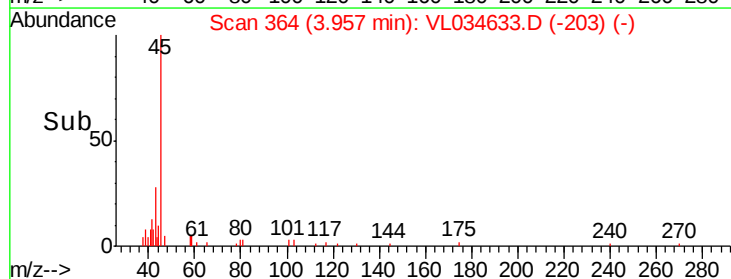
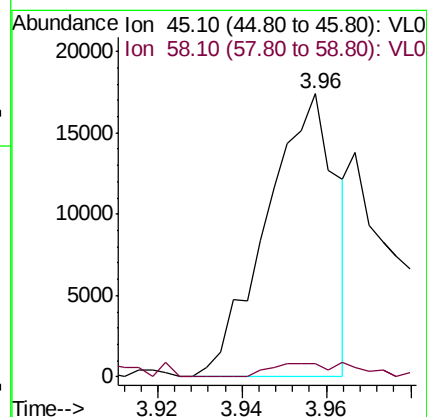
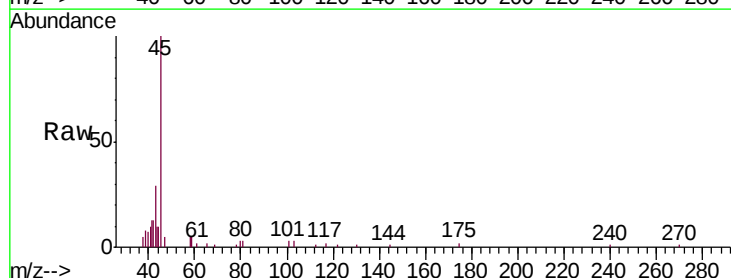
Acq: 18 Feb 2020 21:00

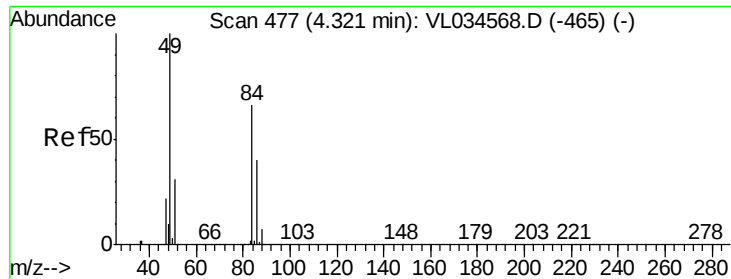
Tgt Ion: 45 Resp: 19937

Ion Ratio Lower Upper

45 100

58 0.0 1.7 2.5#

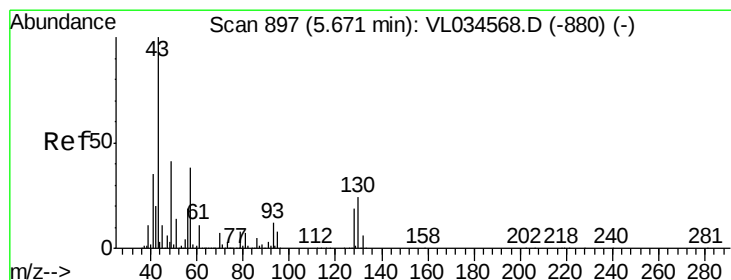
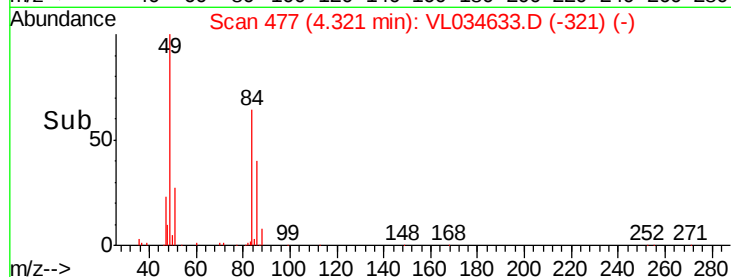
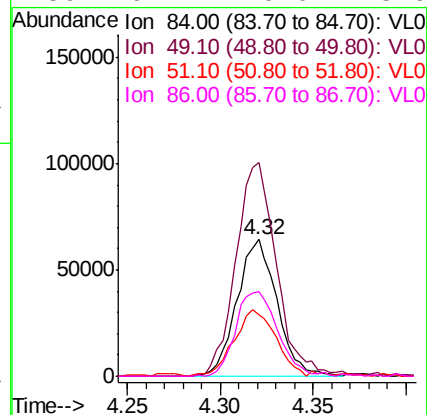
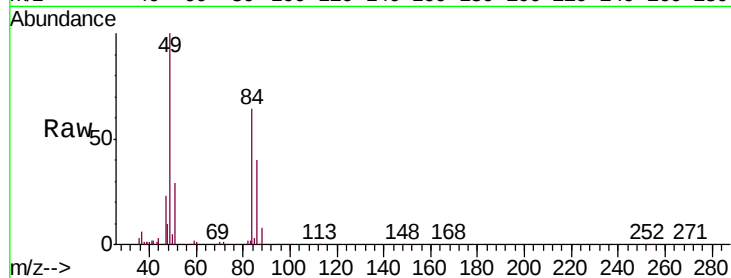




#20
Methylene Chloride
Concen: 1.842 ppbv
RT: 4.32 min Scan# 477
Delta R.T. 0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

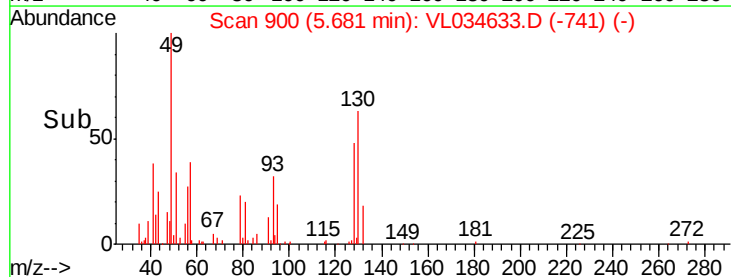
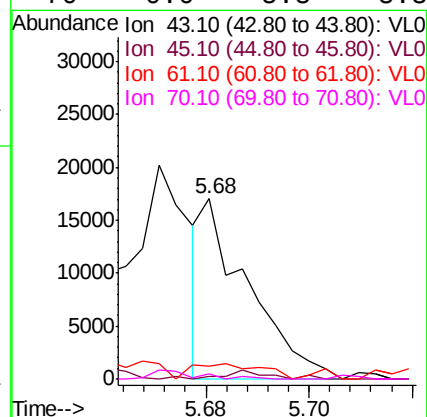
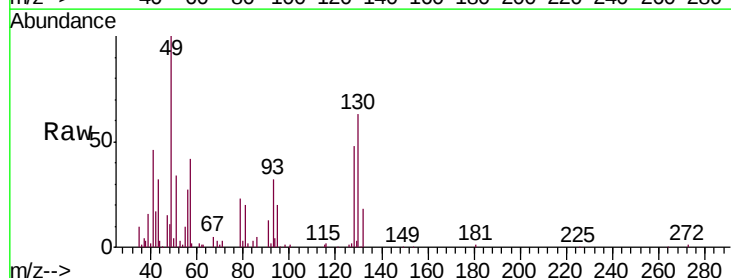
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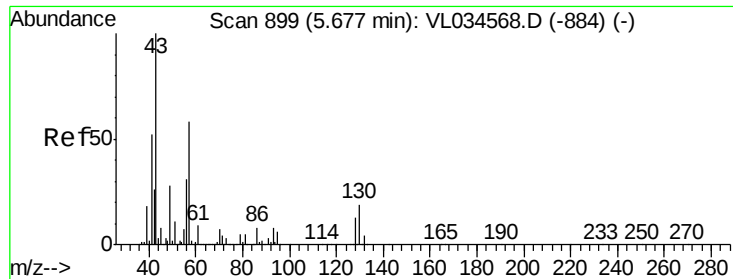
Tgt Ion:	84	Resp:	96352
Ion	Ratio	Lower	Upper
84	100		
49	156.4	122.4	183.6
51	44.2	38.6	57.8
86	61.4	49.0	73.6



#25
Ethyl Acetate
Concen: 0.048 ppbv
RT: 5.68 min Scan# 900
Delta R.T. 0.01 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Tgt Ion:	43	Resp:	10649
Ion	Ratio	Lower	Upper
43	100		
45	12.7	8.5	12.7
61	0.0	7.8	11.6#
70	0.0	5.8	8.8#

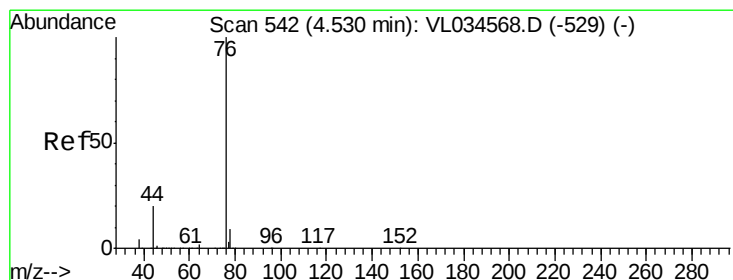
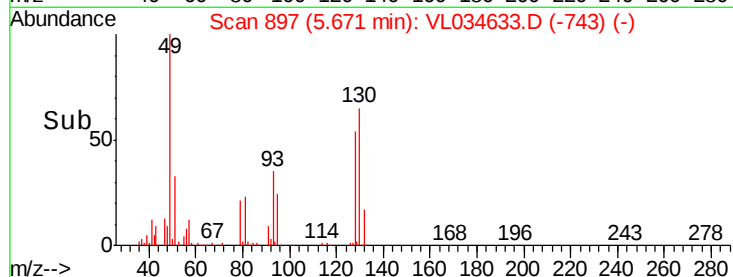
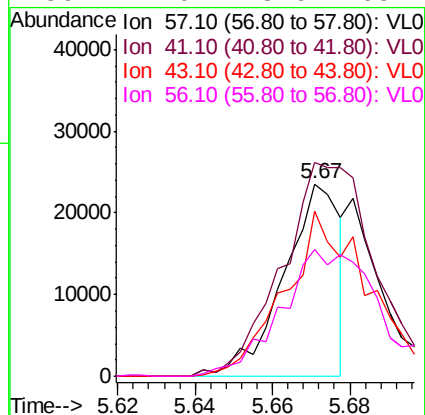
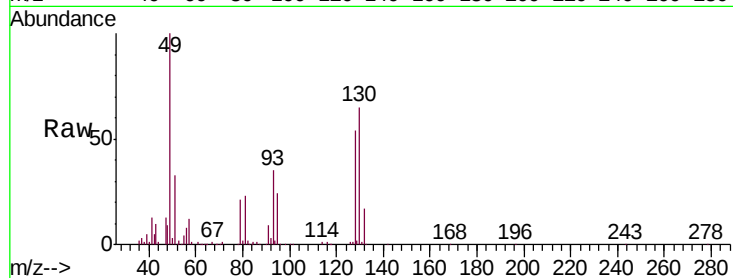




#26
Hexane
Concen: 0.255 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

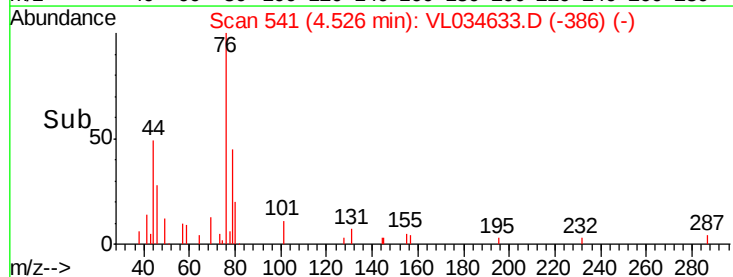
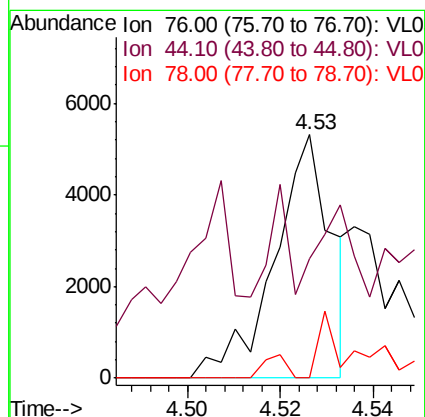
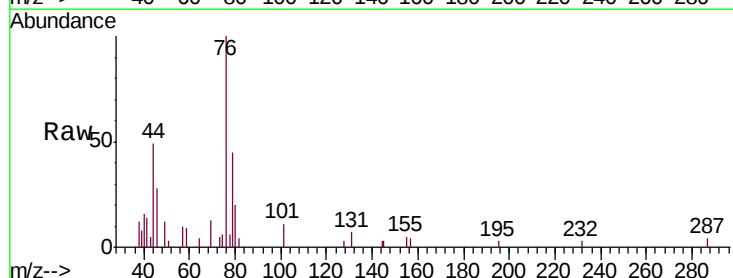
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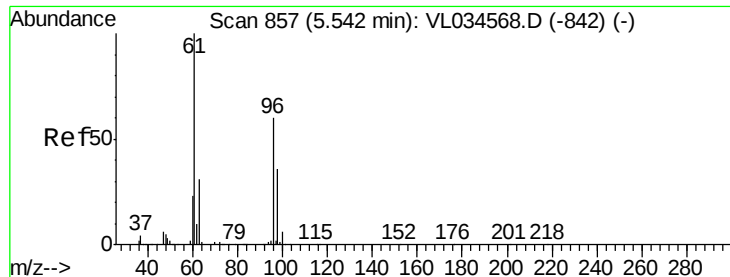
Tgt Ion: 57 Resp: 23739
Ion Ratio Lower Upper
57 100
41 183.6 76.2 114.2#
43 126.8 189.9 284.9#
56 114.0 43.6 65.4#



#27
Carbon Disulfide
Concen: 0.036 ppbv
RT: 4.53 min Scan# 541
Delta R.T. -0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Tgt Ion: 76 Resp: 4544
Ion Ratio Lower Upper
76 100
44 47.0 16.3 24.5#
78 21.0 7.4 11.2#





#31

cis-1,2-Dichloroethene

Concen: 7.078 ppbv

RT: 5.54 min Scan# 855

Delta R.T. -0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

L-SS

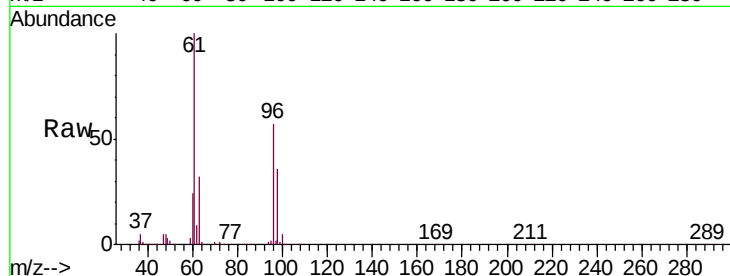
Tgt Ion: 61 Resp: 684886

Ion Ratio Lower Upper

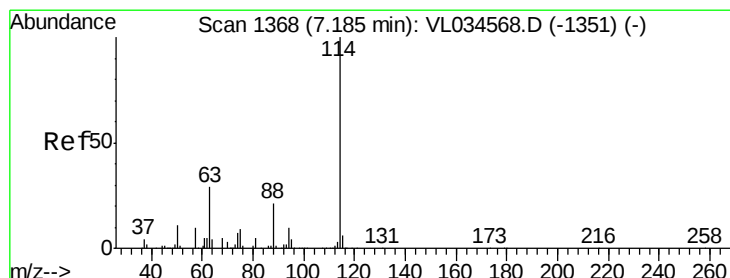
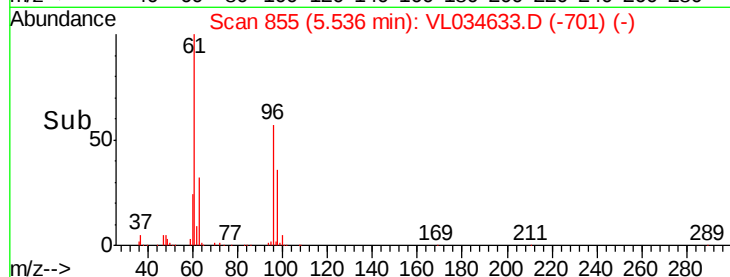
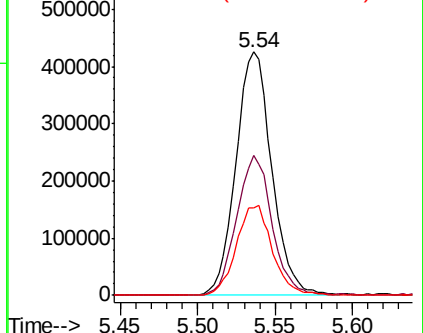
61 100

96 57.4 48.0 72.0

98 35.9 28.6 43.0



Abundance Ion 61.10 (60.80 to 61.80): VL0
Ion 96.00 (95.70 to 96.70): VL0
Ion 98.00 (97.70 to 98.70): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

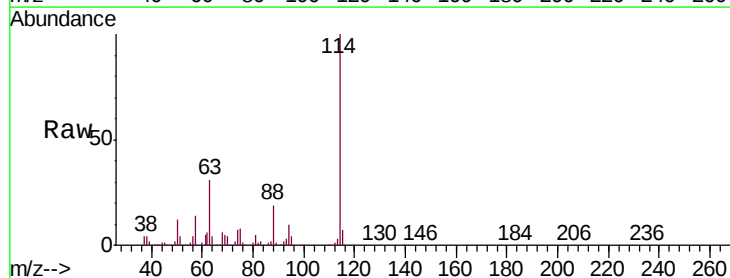
Tgt Ion: 114 Resp: 1886105

Ion Ratio Lower Upper

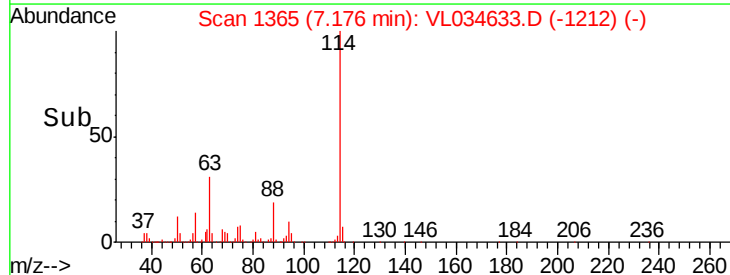
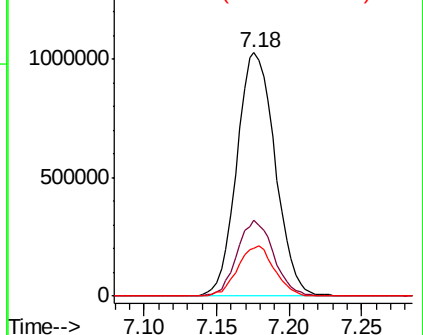
114 100

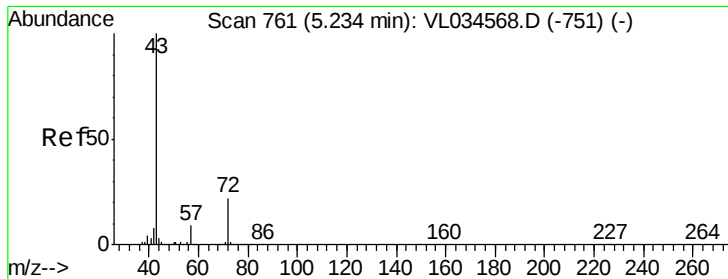
63 29.8 24.1 36.1

88 19.7 15.9 23.9



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

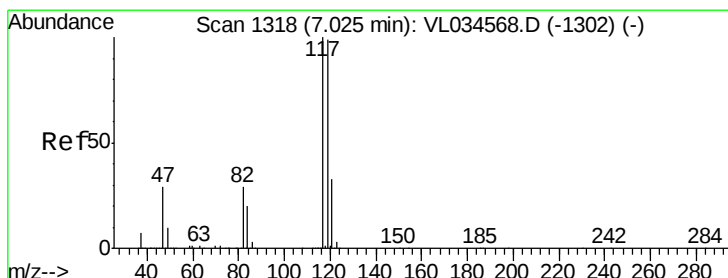
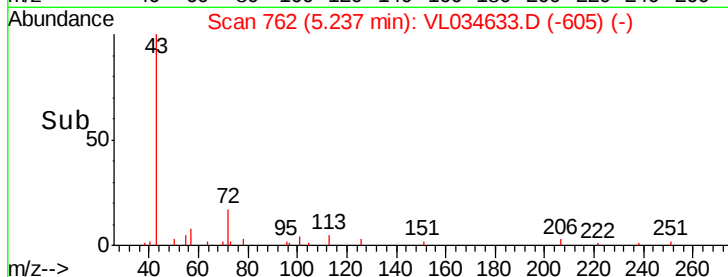
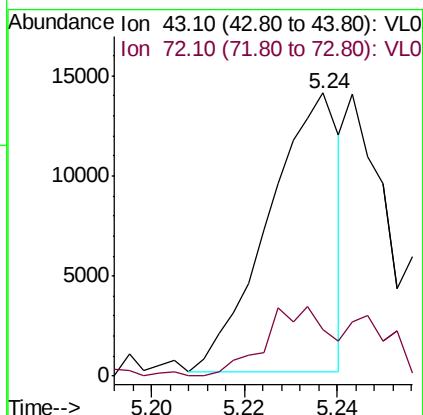
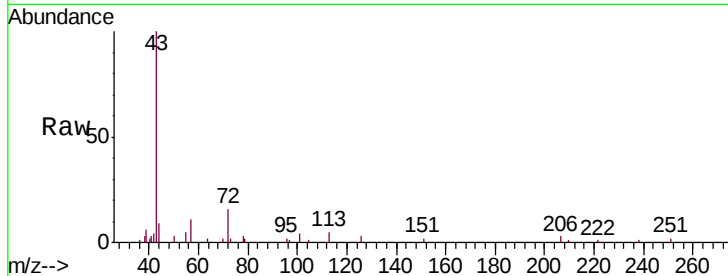




#34
2-Butanone
Concen: 0.107 ppbv
RT: 5.24 min Scan# 762
Delta R.T. 0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

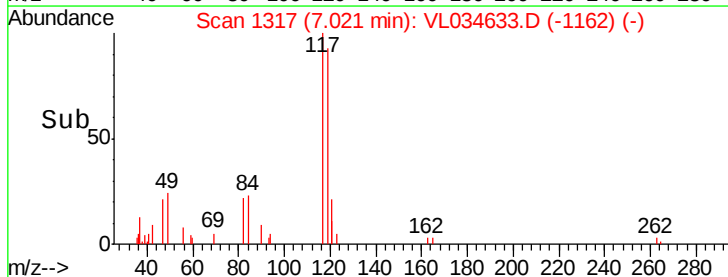
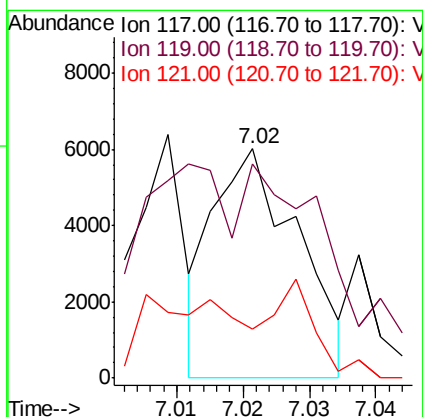
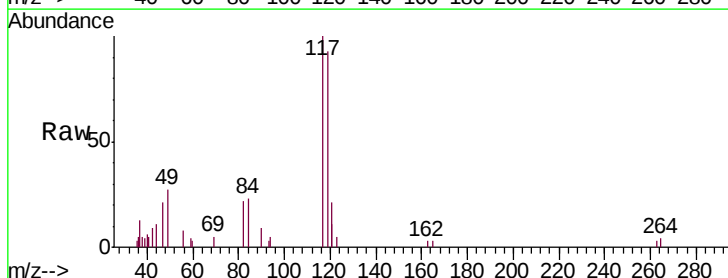
Instrument :
MSVOA_L
ClientSampleId :
L-SS

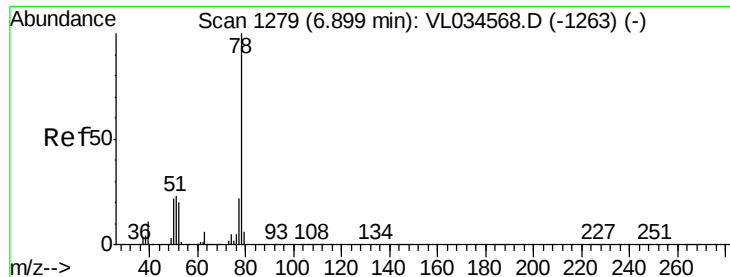
Tgt Ion: 43 Resp: 14706
Ion Ratio Lower Upper
43 100
72 37.2 17.2 25.8#



#35
Carbon Tetrachloride
Concen: 0.030 ppbv
RT: 7.02 min Scan# 1317
Delta R.T. -0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Tgt Ion: 117 Resp: 5410
Ion Ratio Lower Upper
117 100
119 61.8 79.5 119.3#
121 24.5 26.2 39.2#





#36

Benzene

Concen: 0.079 ppbv

RT: 6.89 min Scan# 1277

Delta R.T. -0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

L-SS

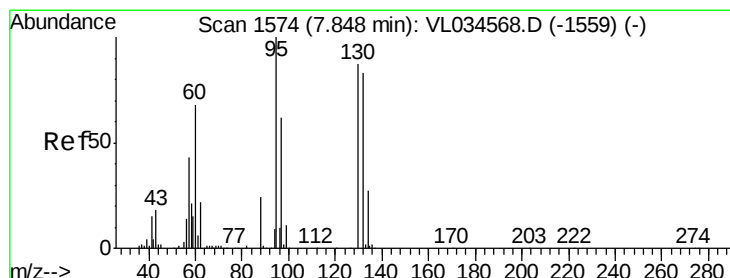
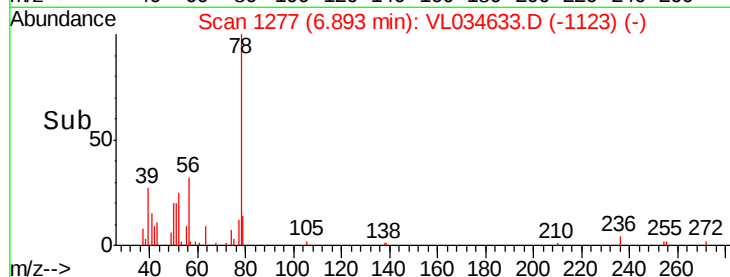
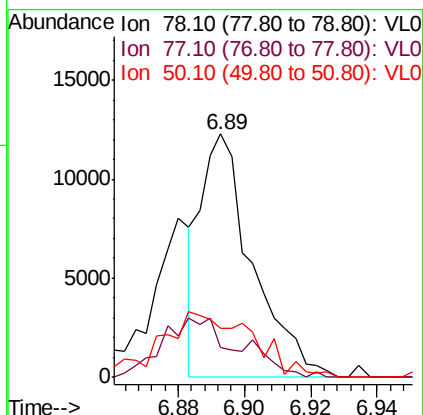
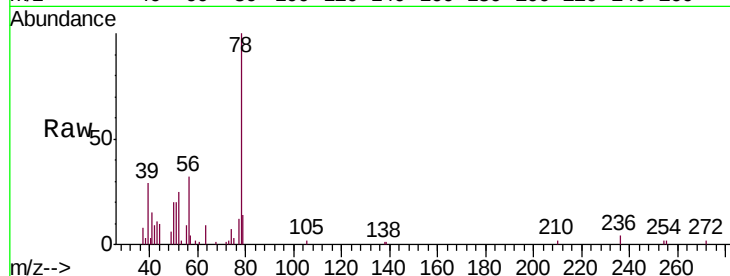
Tgt Ion: 78 Resp: 13195

Ion Ratio Lower Upper

78 100

77 10.8 17.3 25.9#

50 17.9 17.4 26.2



#38

Trichloroethene

Concen: 0.631 ppbv

RT: 7.84 min Scan# 1572

Delta R.T. -0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Tgt Ion: 130 Resp: 44588

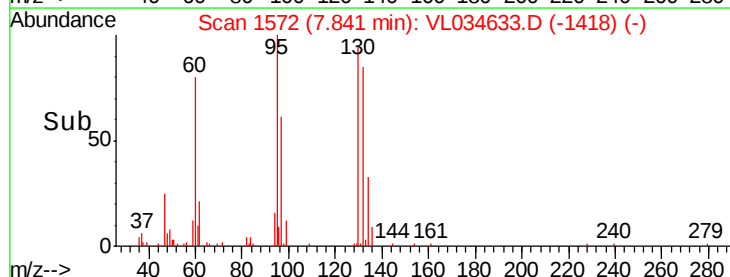
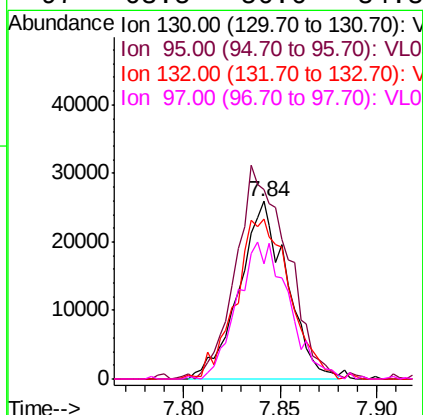
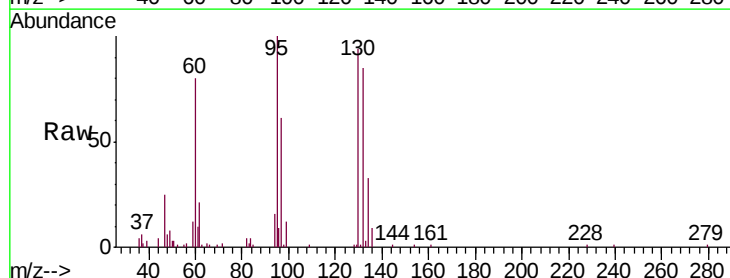
Ion Ratio Lower Upper

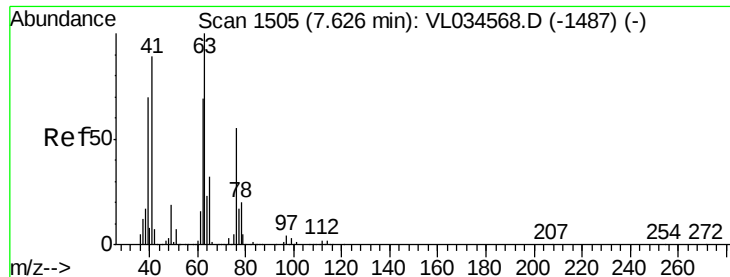
130 100

95 104.6 91.6 137.4

132 90.5 76.1 114.1

97 63.5 56.6 84.8





#39

1,2-Dichloropropane

Concen: 8.063 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.45 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampled :

L-SS

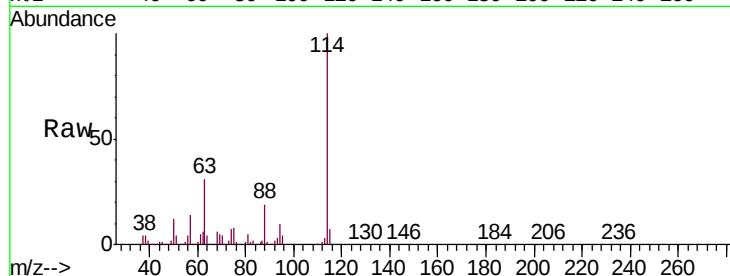
Tgt Ion: 63 Resp: 560655

Ion Ratio Lower Upper

63 100

41 0.0 71.0 106.4#

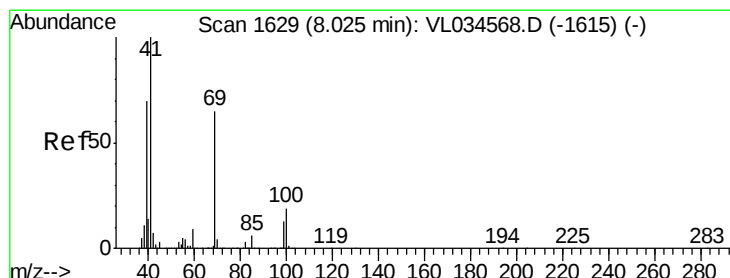
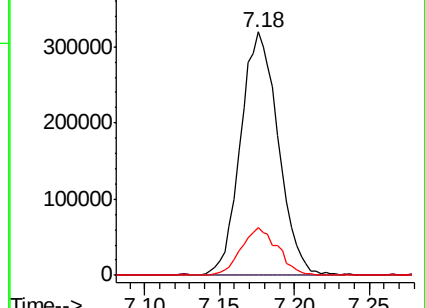
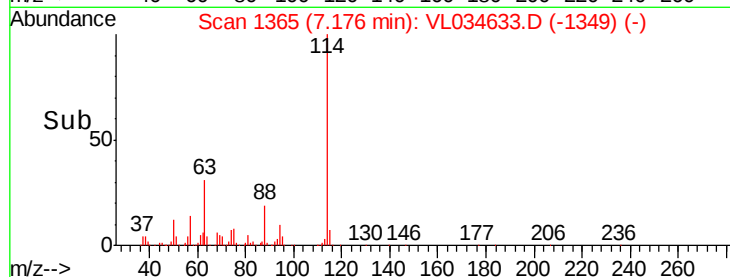
62 19.9 55.4 83.0#



Abundance Ion 63.10 (62.80 to 63.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 62.10 (61.80 to 62.80): VL0



#43

Methyl Methacrylate

Concen: 0.045 ppbv

RT: 8.02 min Scan# 1627

Delta R.T. -0.01 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

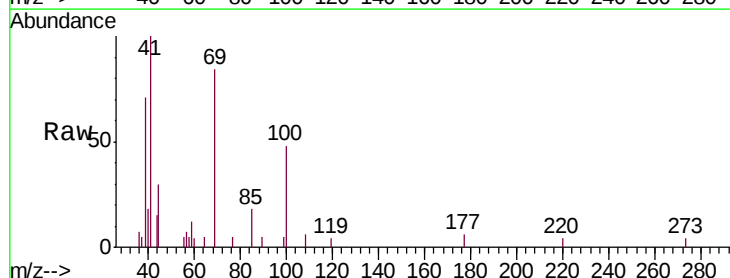
Tgt Ion: 69 Resp: 3016

Ion Ratio Lower Upper

69 100

41 0.0 123.9 185.9#

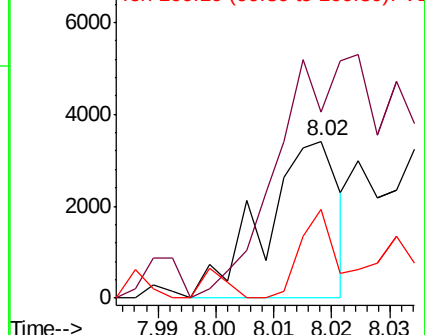
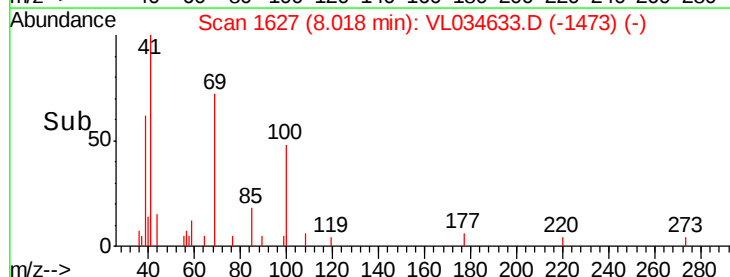
100 57.8 24.1 36.1#

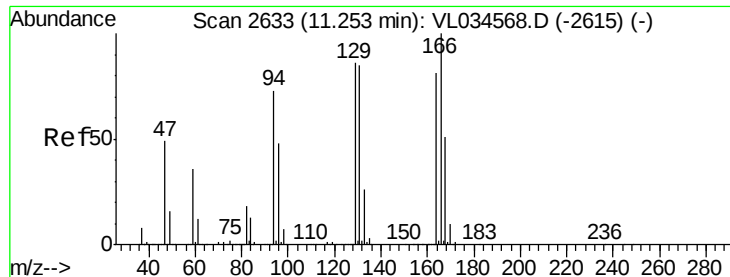


Abundance Ion 69.10 (68.80 to 69.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 100.10 (99.80 to 100.80): VL0





#52

Tetrachloroethene

Concen: 100.683 ppbv

RT: 11.26 min Scan# 2634

Delta R.T. 0.00 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

L-SS

Tgt Ion:164 Resp: 6784056

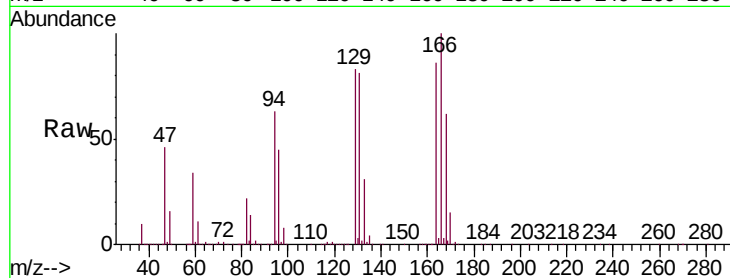
Ion Ratio Lower Upper

164 100

166 116.6 99.0 148.4

129 96.2 85.3 127.9

131 94.5 84.2 126.2

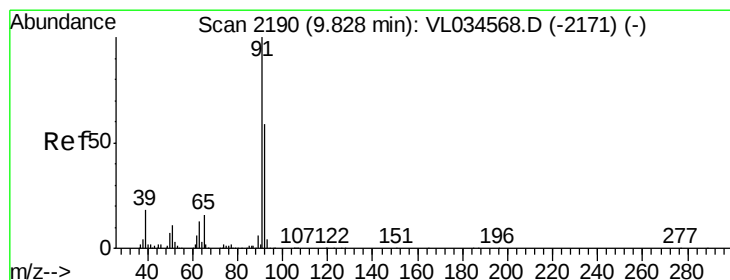
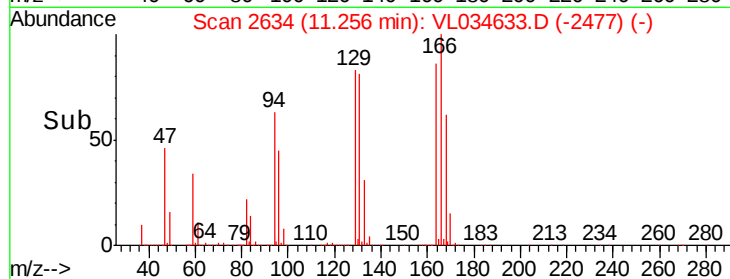
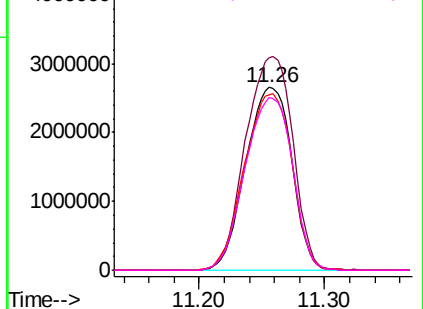


Abundance Ion 163.90 (163.60 to 164.60): V

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



#53

Toluene

Concen: 0.047 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.02 min

Lab File: VL034633.D

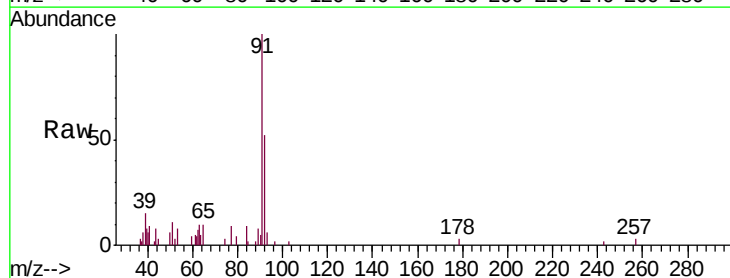
Acq: 18 Feb 2020 21:00

Tgt Ion: 91 Resp: 8733

Ion Ratio Lower Upper

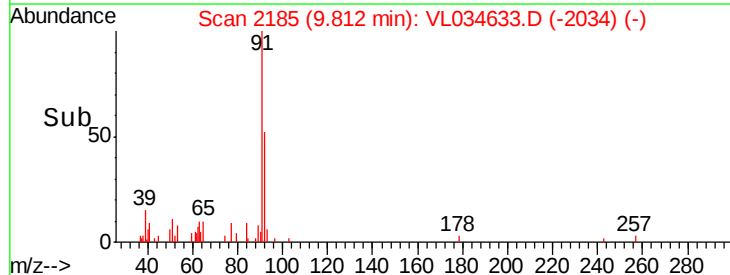
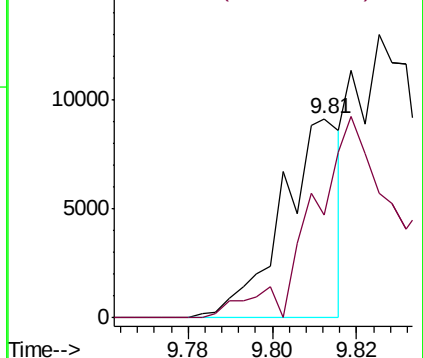
91 100

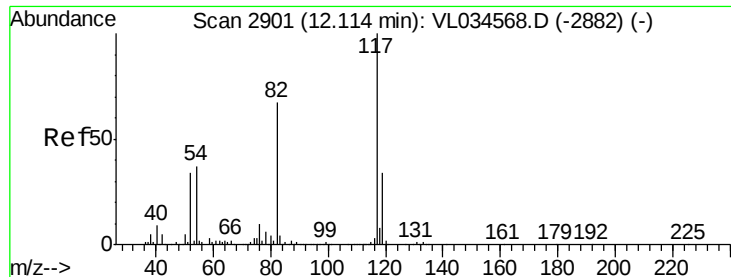
92 0.0 48.2 72.2#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

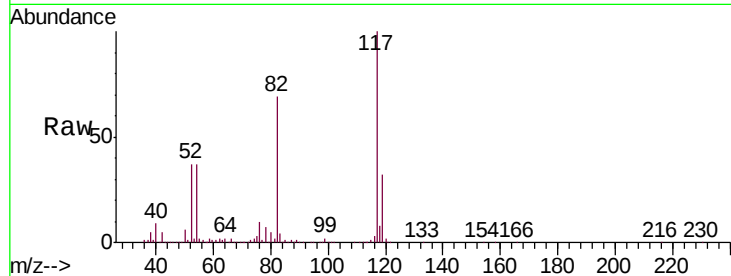




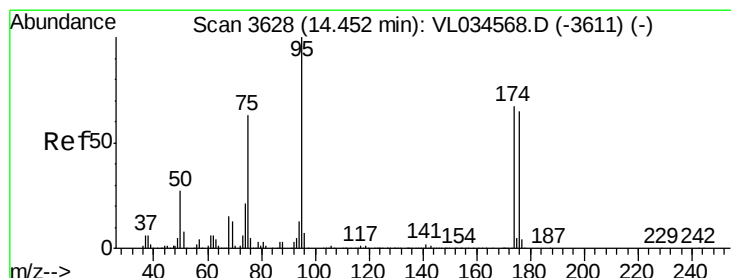
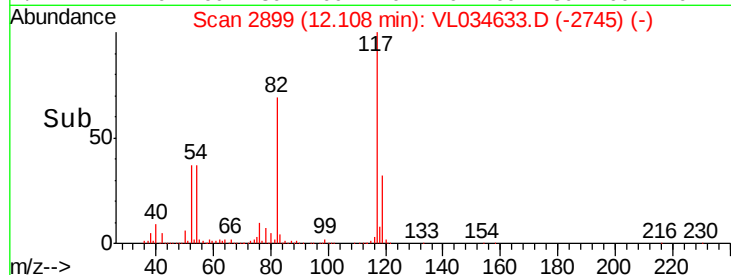
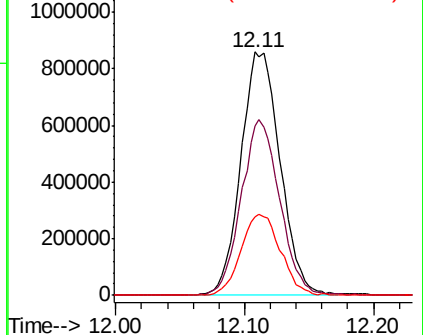
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. -0.01 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Instrument :
MSVOA_L
ClientSampled :
L-SS

Tgt Ion: 117 Resp: 1827252
Ion Ratio Lower Upper
117 100
82 70.9 54.2 81.4
119 33.5 26.1 39.1

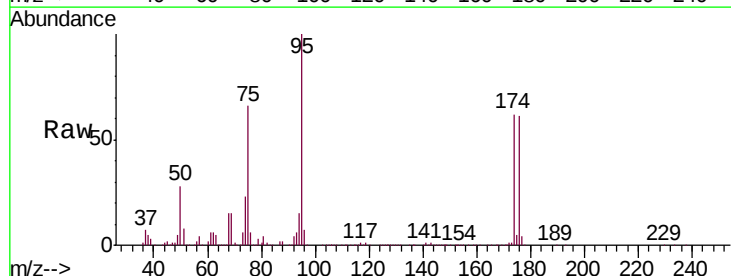


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

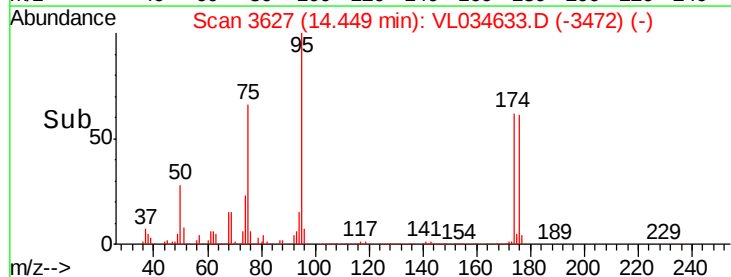
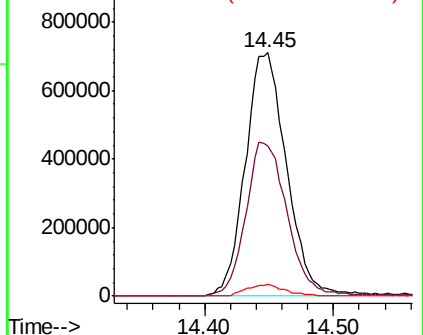


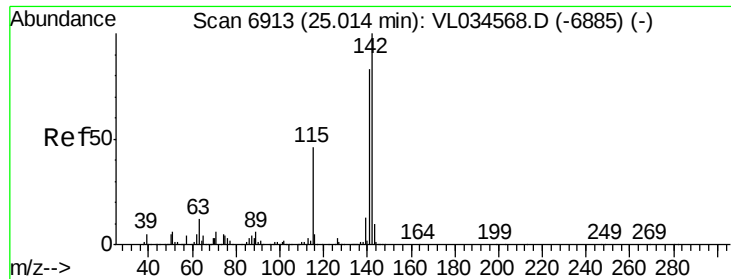
#68
1-Bromo-4-Fluorobenzene
Concen: 10.202 ppbv
RT: 14.45 min Scan# 3627
Delta R.T. -0.00 min
Lab File: VL034633.D
Acq: 18 Feb 2020 21:00

Tgt Ion: 95 Resp: 1575455
Ion Ratio Lower Upper
95 100
174 64.5 52.3 78.5
175 4.6 3.8 5.6



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





#80

Naphthalene, 2-methyl-

Concen: 0.037 ppbv

RT: 25.01 min Scan# 6912

Delta R.T. -0.00 min

Lab File: VL034633.D

Acq: 18 Feb 2020 21:00

Instrument :

MSVOA_L

ClientSampleId :

L-SS

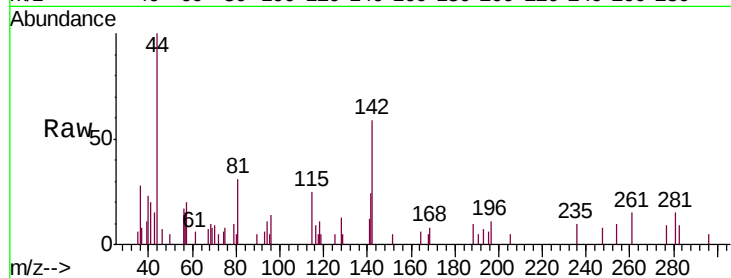
Tgt Ion:142 Resp: 2856

Ion Ratio Lower Upper

142 100

141 78.4 67.0 100.4

115 59.4 39.5 59.3#



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

