

Data File : VL032641.D
Acq On : 17 Oct 2018 15:06
Operator : SY/AP
Sample : J5500-02DL2 400X
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SS04-MIVIDL2

Quant Time: Oct 17 16:26:40 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL101718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Oct 17 08:55:11 2018
QLast Update : Wed Oct 17 08:55:11 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.78	49	1206624	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.31	114	2684527	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.26	117	2587009	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.60	95	1993840	10.24	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.40%

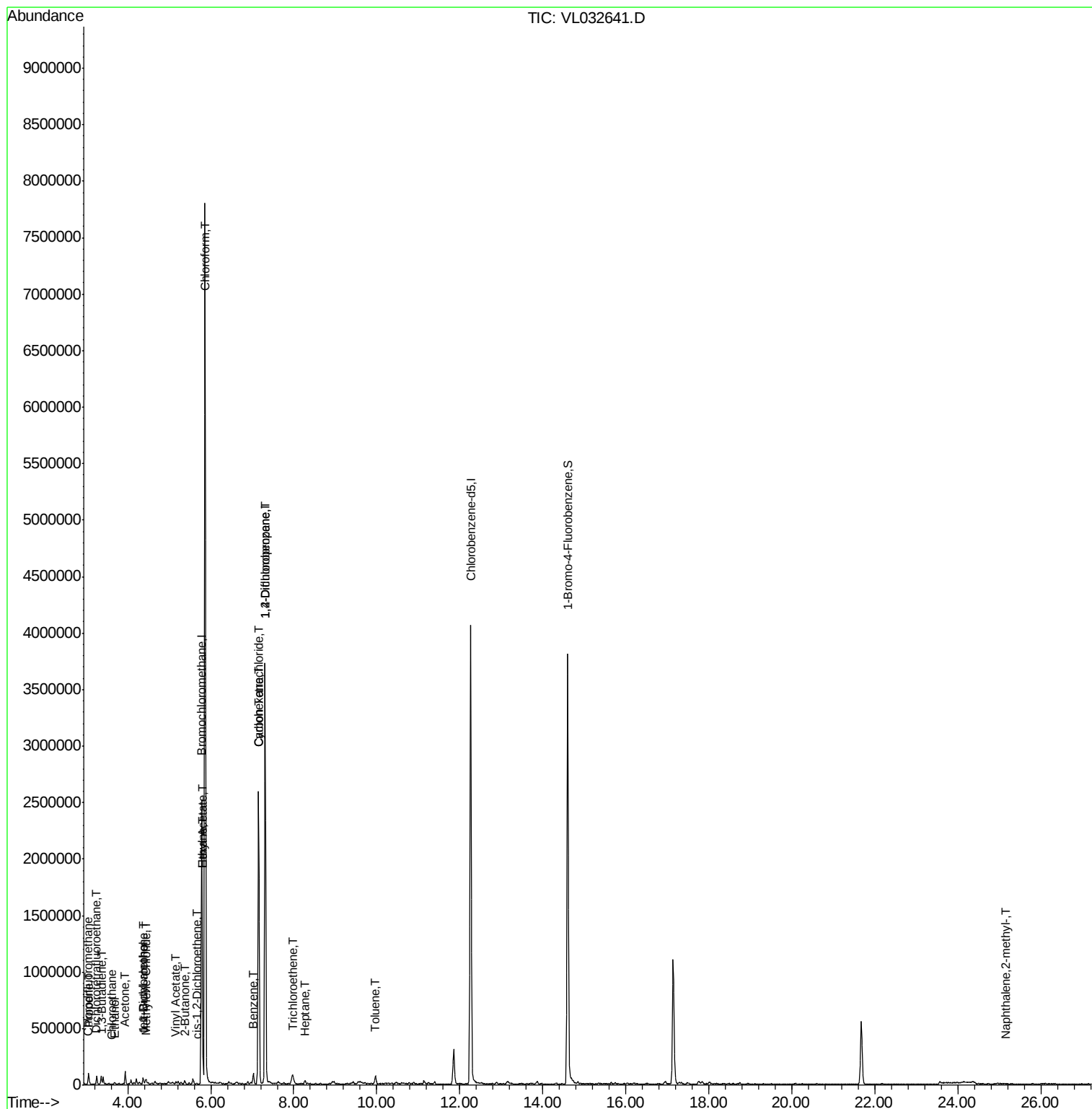
Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.24	85	4317	Below Cal		89
3) Chlorodifluoromethane	3.03	51	3746	0.037	ppbv	100
7) Chloroethane	3.62	64	853	0.039	ppbv #	82
8) Dichlorotetrafluoroethane	3.24	85	4317	0.032	ppbv	99
9) Propene	3.05	41	38003	1.027	ppbv	84
10) Heptane	8.26	43	7634	0.055	ppbv #	43
13) Ethanol	3.69	45	17681	1.544	ppbv	97
15) Acetone	3.94	43	92558	0.862	ppbv	94
16) 1,3-Butadiene	3.38	39	5352	0.135	ppbv #	66
17) tert-Butyl alcohol	4.37	59	1275	0.130	ppbv #	100
18) 1,1-Dichloroethene	4.37	96	11915	0.233	ppbv	86
20) Methylene Chloride	4.43	84	9521	0.198	ppbv	95
23) Vinyl Acetate	5.17	43	8043	0.047	ppbv #	73
25) Ethyl Acetate	5.80	43	23167	0.091	ppbv #	90
26) Hexane	5.80	57	19124	0.167	ppbv #	59
29) Chloroform	5.86	83	5750344	28.668	ppbv	99
30) Cyclohexane	7.15	84	286243	3.172	ppbv #	1
31) cis-1,2-Dichloroethene	5.66	61	4255	0.039	ppbv #	61
34) 2-Butanone	5.37	43	32139	0.216	ppbv	93
35) Carbon Tetrachloride	7.15	117	947110	4.552	ppbv	99
36) Benzene	7.02	78	75635	0.348	ppbv #	93
38) Trichloroethene	7.98	130	13270	0.162	ppbv	86
39) 1,2-Dichloropropane	7.31	63	708362	8.002	ppbv #	26
53) Toluene	9.96	91	35327	0.142	ppbv #	64
80) Naphthalene,2-methyl-	25.14	142	160	0.742	ppbv #	1

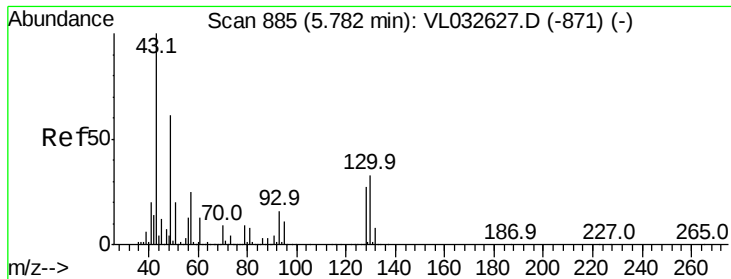
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.78 min Scan# 884

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

SS04-MIVIDL2

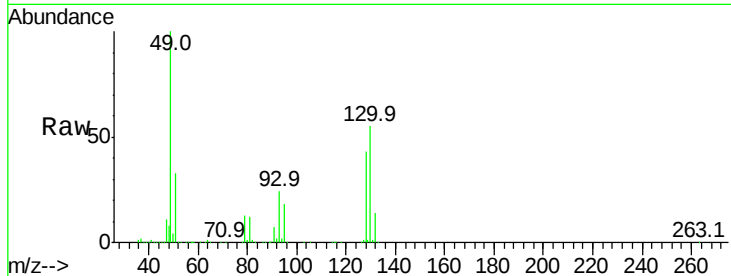
Tgt Ion: 49 Resp: 1206624

Ion Ratio Lower Upper

49 100

128 43.8 22.3 66.8

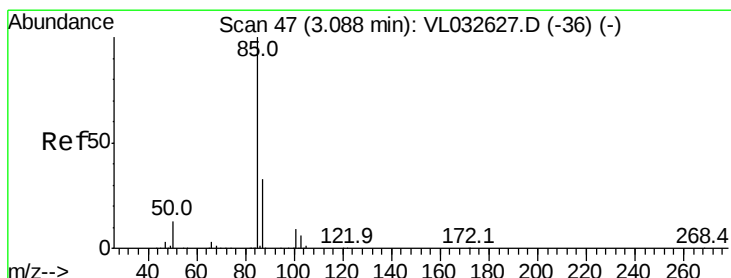
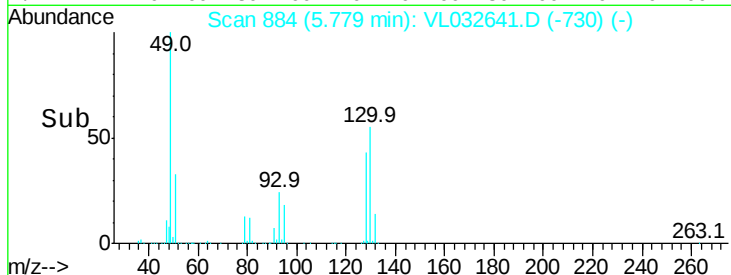
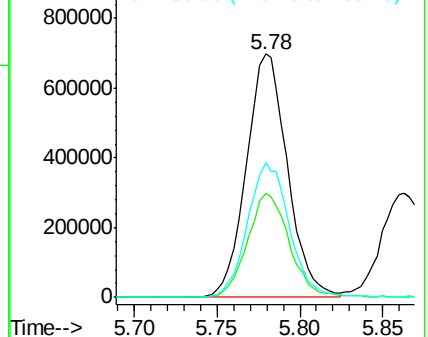
130 57.1 28.4 85.3



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: Below Cal

RT: 3.24 min Scan# 93

Delta R.T. 0.15 min

Lab File: VL032641.D

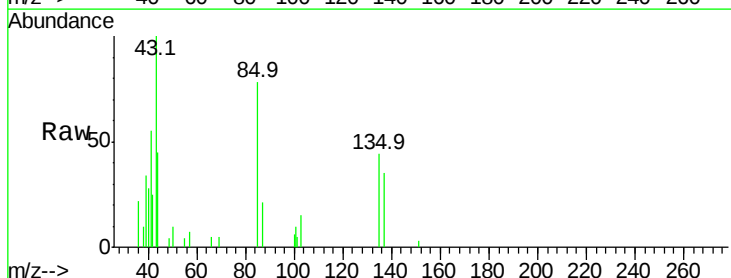
Acq: 17 Oct 2018 15:06

Tgt Ion: 85 Resp: 4317

Ion Ratio Lower Upper

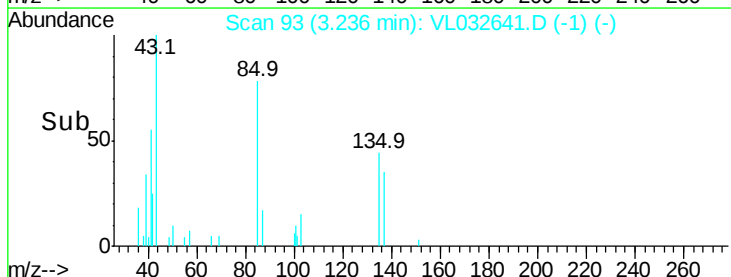
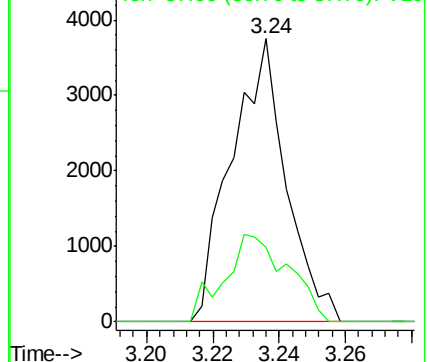
85 100

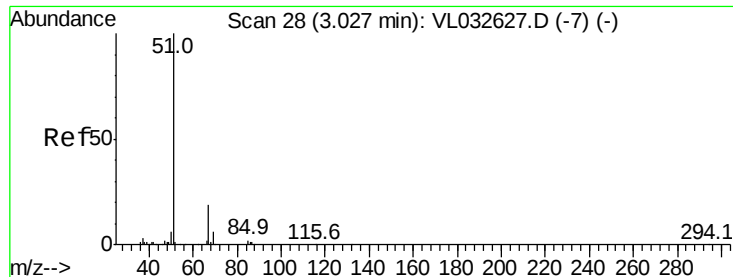
87 26.6 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

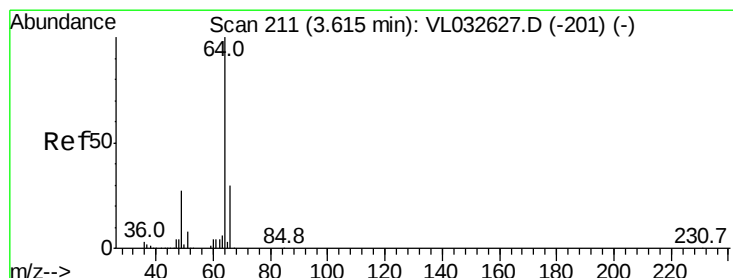
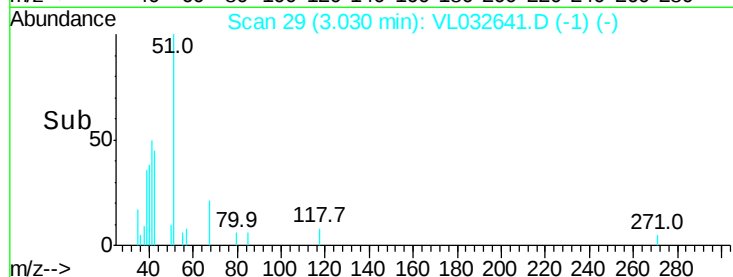
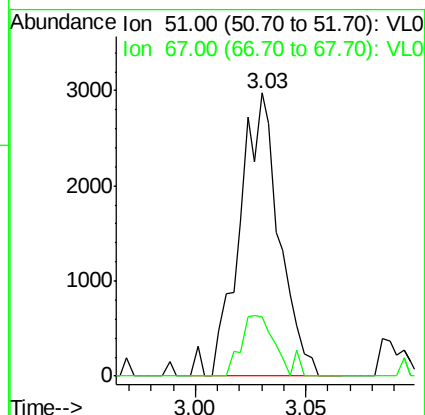
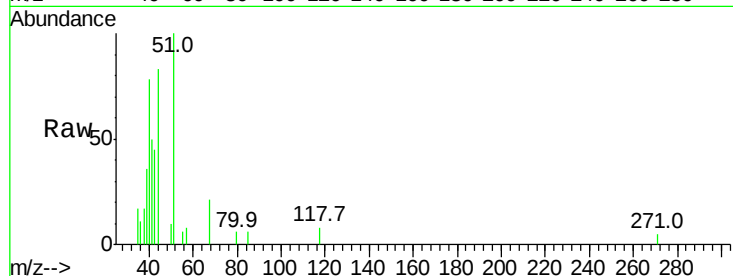




#3
 Chlorodifluoromethane
 Concen: 0.037 ppbv
 RT: 3.03 min Scan# 29
 Delta R.T. 0.00 min
 Lab File: VL032641.D
 Acq: 17 Oct 2018 15:06

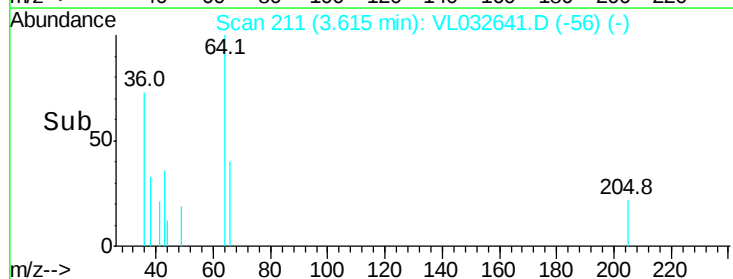
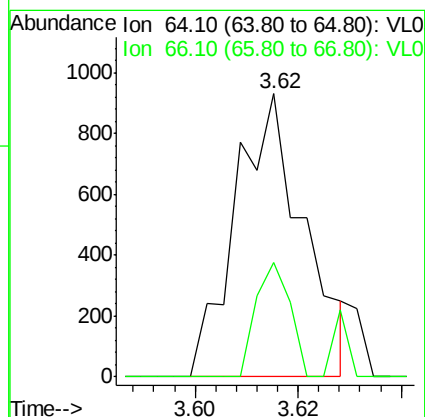
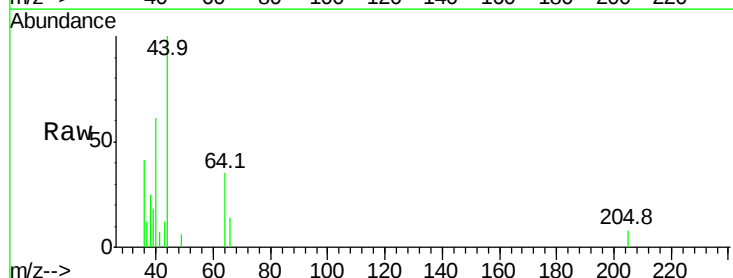
Instrument :
 MSVOA_L
 ClientSampleId :
 SS04-MIVIDL2

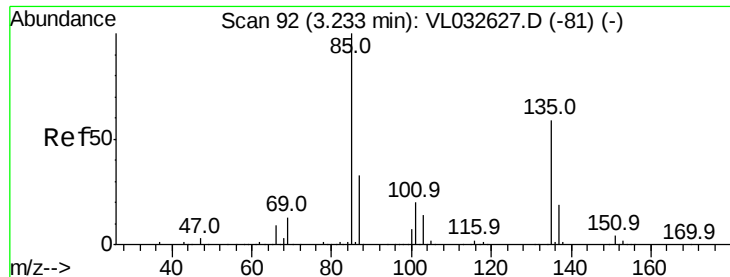
Tgt Ion: 51 Resp: 3746
 Ion Ratio Lower Upper
 51 100
 67 18.8 15.2 22.8



#7
 Chloroethane
 Concen: 0.039 ppbv
 RT: 3.62 min Scan# 211
 Delta R.T. -0.00 min
 Lab File: VL032641.D
 Acq: 17 Oct 2018 15:06

Tgt Ion: 64 Resp: 853
 Ion Ratio Lower Upper
 64 100
 66 40.5 24.4 36.6#





#8

Dichlorotetrafluoroethane

Concen: 0.032 ppbv

RT: 3.24 min Scan# 93

Delta R.T. 0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

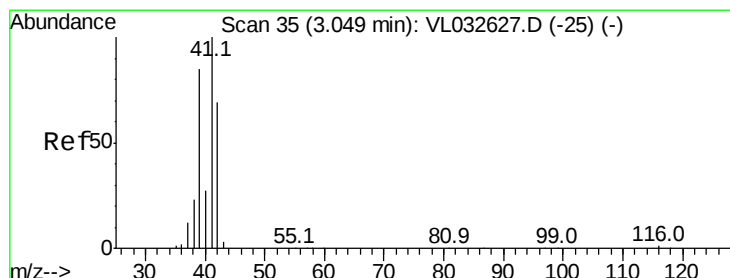
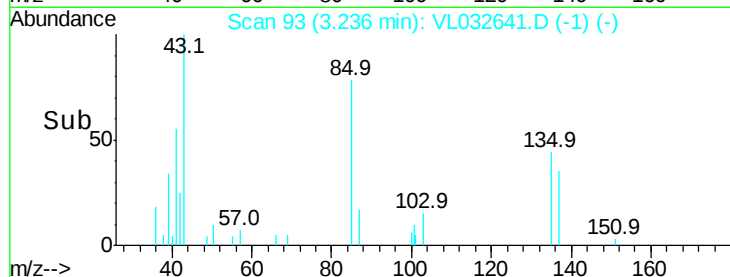
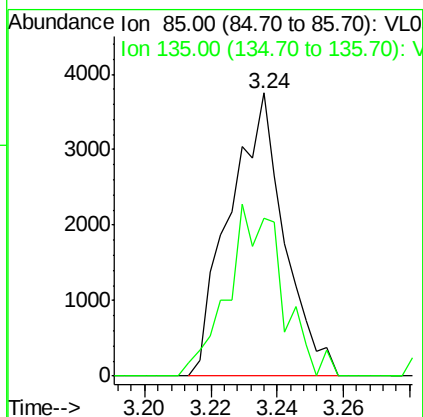
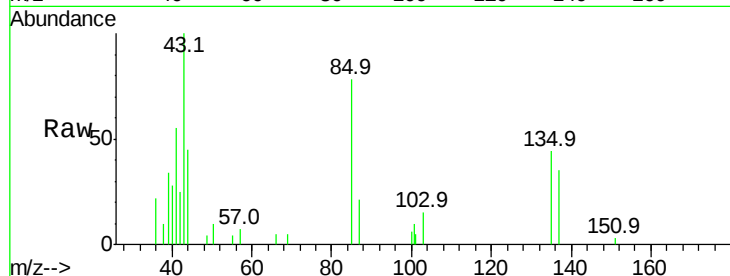
SS04-MIVIDL2

Tgt Ion: 85 Resp: 4317

Ion Ratio Lower Upper

85 100

135 60.2 49.0 73.4



#9

Propene

Concen: 1.027 ppbv

RT: 3.05 min Scan# 36

Delta R.T. 0.00 min

Lab File: VL032641.D

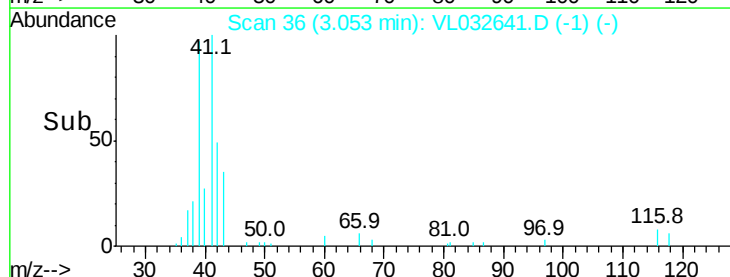
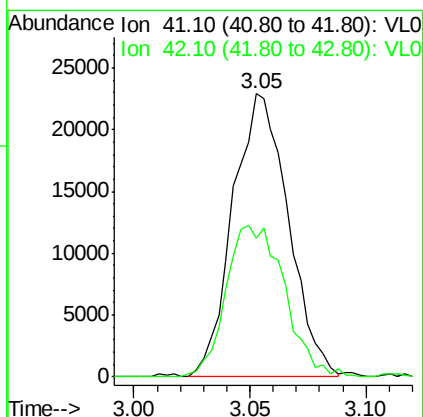
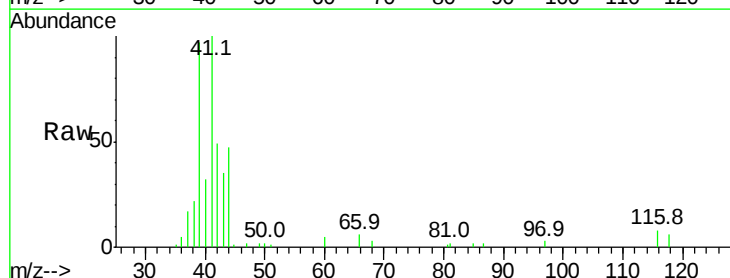
Acq: 17 Oct 2018 15:06

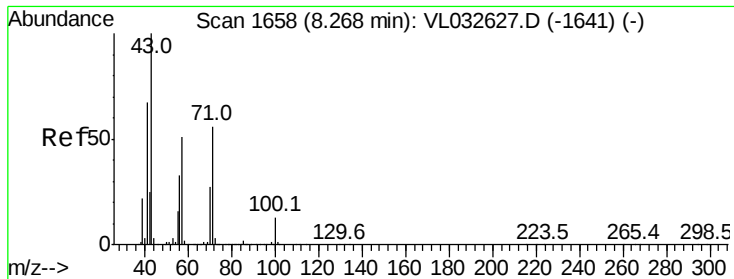
Tgt Ion: 41 Resp: 38003

Ion Ratio Lower Upper

41 100

42 56.4 55.4 83.0

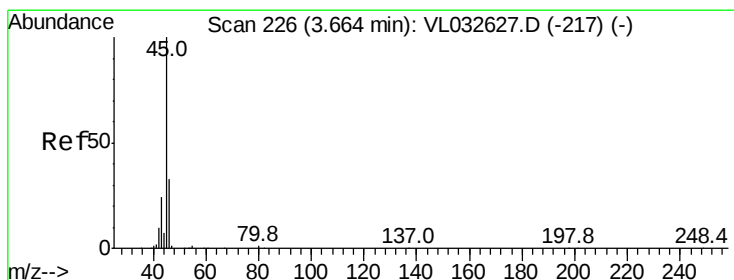
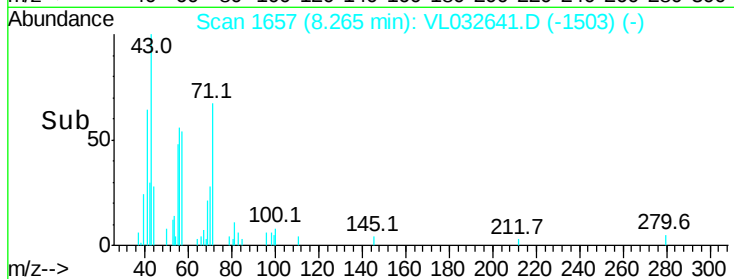
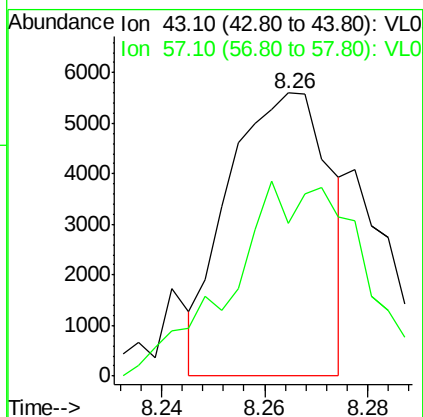
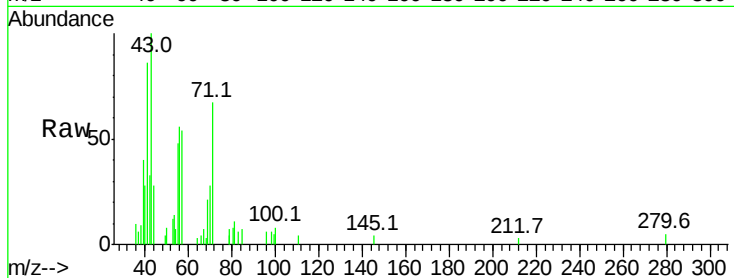




#10
Heptane
Concen: 0.055 ppbv
RT: 8.26 min Scan# 1657
Delta R.T. -0.00 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

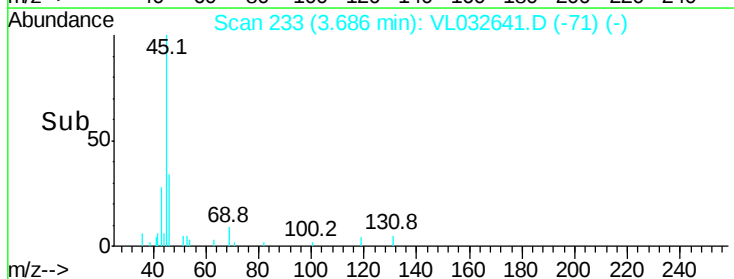
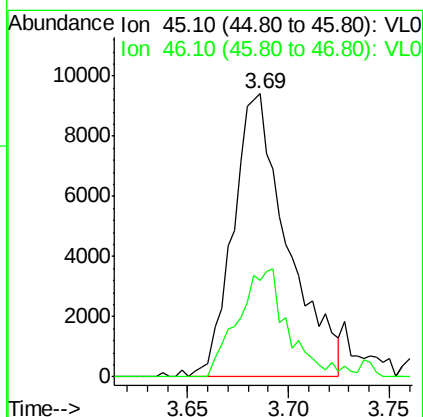
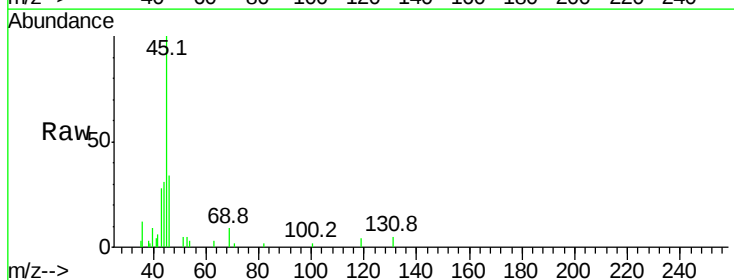
Instrument :
MSVOA_L
ClientSampleId :
SS04-MIVIDL2

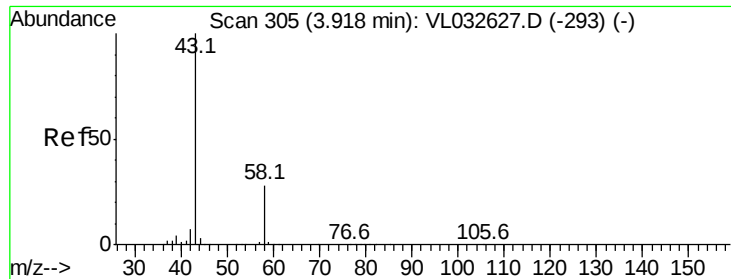
Tgt Ion: 43 Resp: 7634
Ion Ratio Lower Upper
43 100
57 92.1 41.5 62.3#



#13
Ethanol
Concen: 1.544 ppbv
RT: 3.69 min Scan# 233
Delta R.T. 0.02 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

Tgt Ion: 45 Resp: 17681
Ion Ratio Lower Upper
45 100
46 36.9 15.4 61.8





#15

Acetone

Concen: 0.862 ppbv

RT: 3.94 min Scan# 311

Delta R.T. 0.02 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

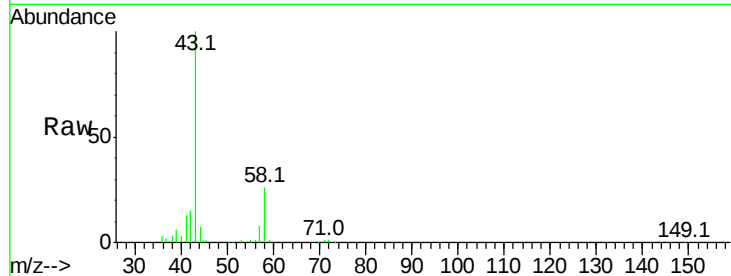
SS04-MIVIDL2

Tgt Ion: 43 Resp: 92558

Ion Ratio Lower Upper

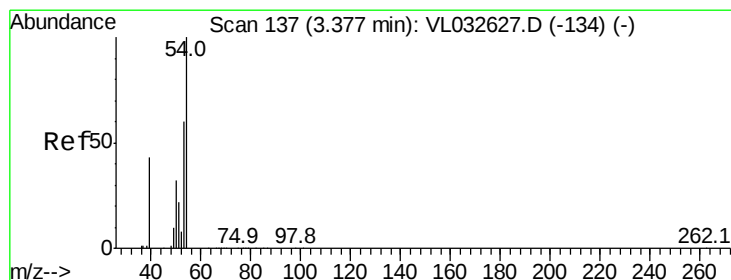
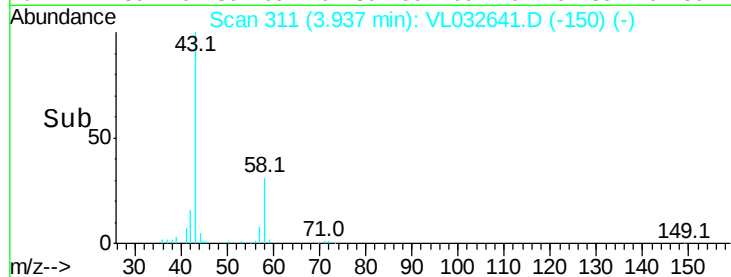
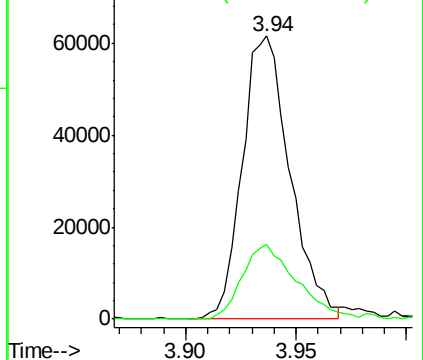
43 100

58 30.6 22.1 33.1



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#16

1,3-Butadiene

Concen: 0.135 ppbv

RT: 3.38 min Scan# 137

Delta R.T. -0.00 min

Lab File: VL032641.D

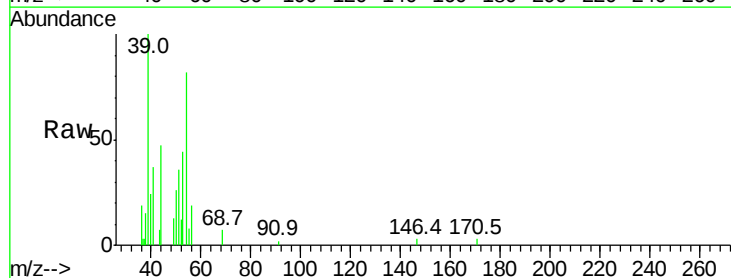
Acq: 17 Oct 2018 15:06

Tgt Ion: 39 Resp: 5352

Ion Ratio Lower Upper

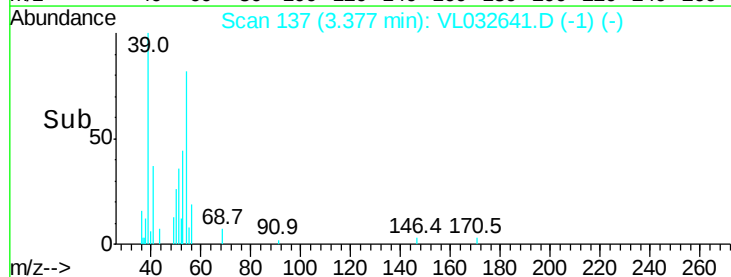
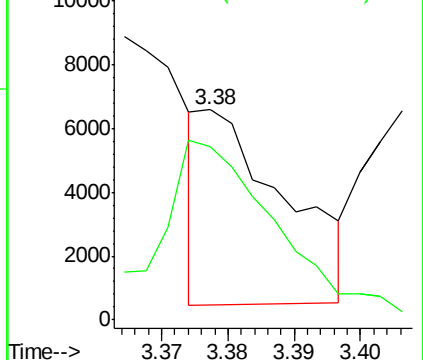
39 100

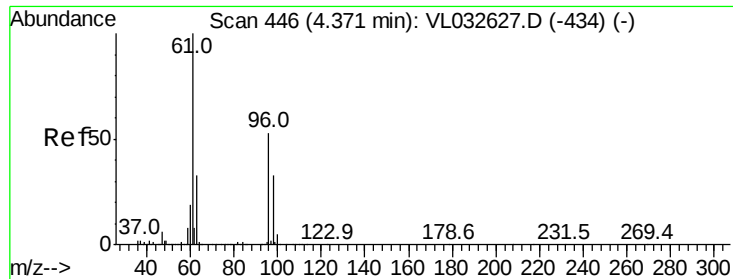
54 149.9 90.4 135.6#



Abundance Ion 39.10 (38.80 to 39.80): VL0

Ion 54.10 (53.80 to 54.80): VL0





#17

tert-Butyl alcohol

Concen: 0.130 ppbv

RT: 4.37 min Scan# 447

Delta R.T. 0.00 min

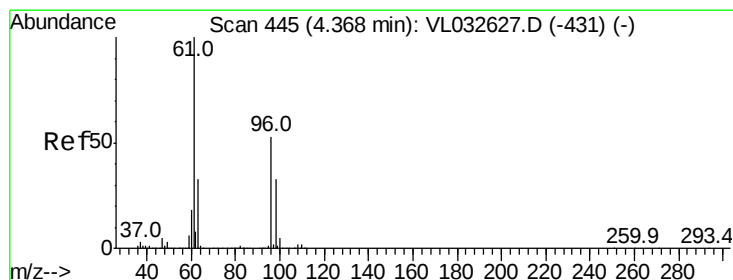
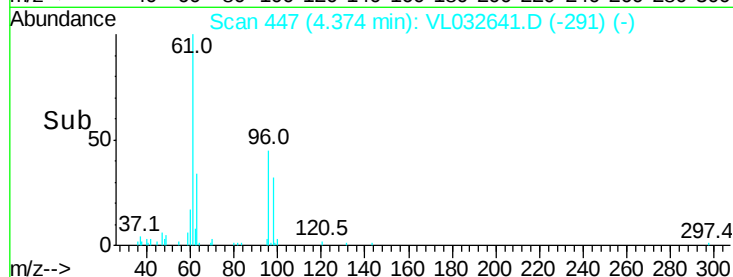
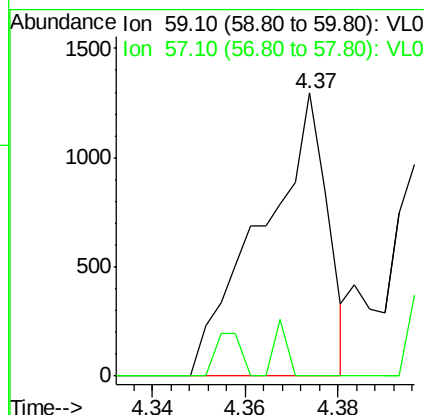
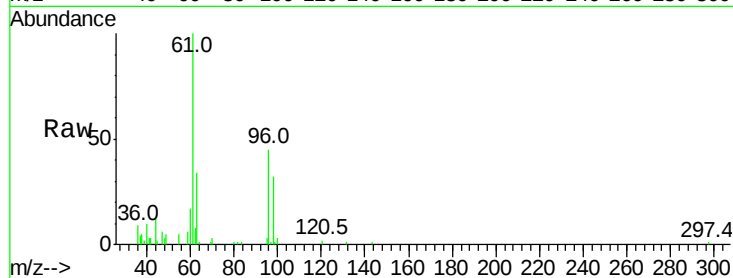
Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :
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Tgt Ion: 59 Resp: 1275

Ion	Ratio	Lower	Upper
59	100		
57	0.0	0.0	0.0



#18

1,1-Dichloroethene

Concen: 0.233 ppbv

RT: 4.37 min Scan# 445

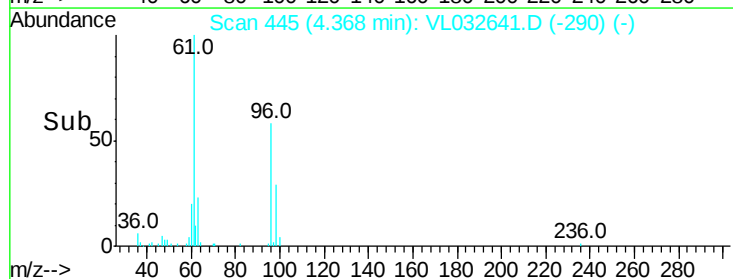
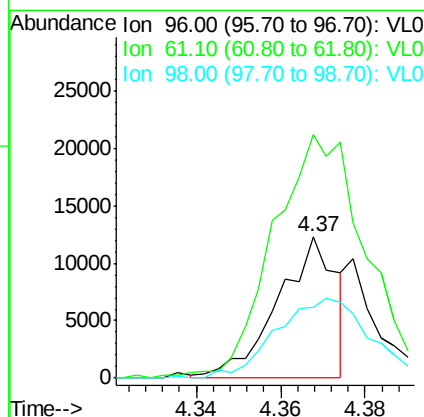
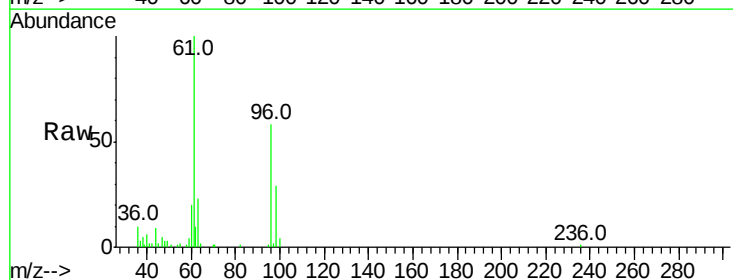
Delta R.T. -0.00 min

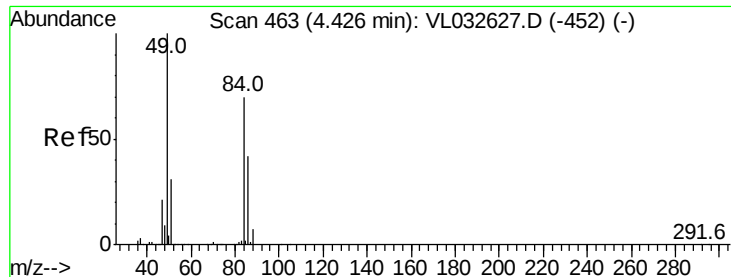
Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Tgt Ion: 96 Resp: 11915

Ion	Ratio	Lower	Upper
96	100		
61	168.8	151.6	227.4
98	51.3	50.6	75.8





#20

Methylene Chloride

Concen: 0.198 ppbv

RT: 4.43 min Scan# 463

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

SS04-MIVIDL2

Tgt Ion: 84 Resp: 9521

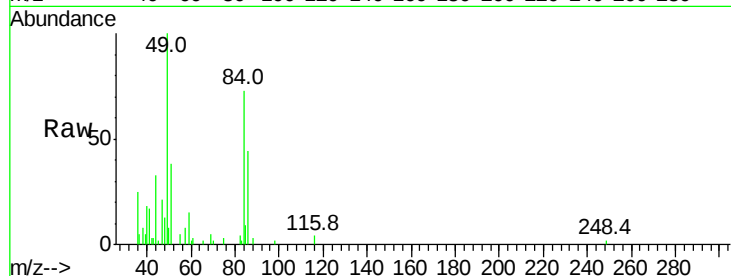
Ion Ratio Lower Upper

84 100

49 134.2 113.5 170.3

51 46.9 34.8 52.2

86 57.8 47.9 71.9

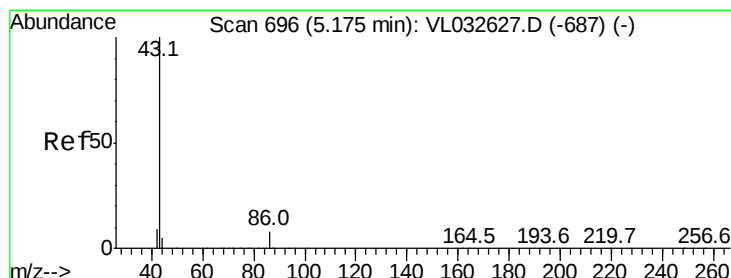
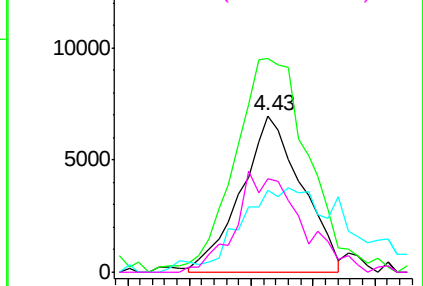
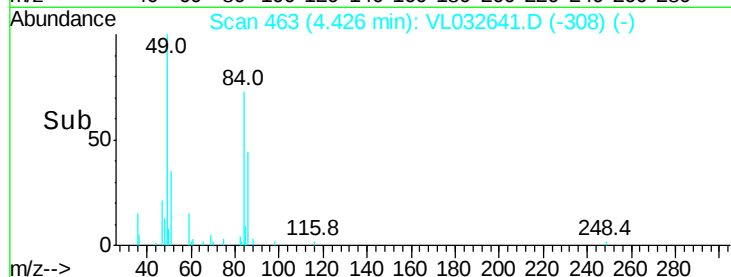


Abundance Ion 84.00 (83.70 to 84.70): VL0

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: 0.047 ppbv

RT: 5.17 min Scan# 696

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Tgt Ion: 43 Resp: 8043

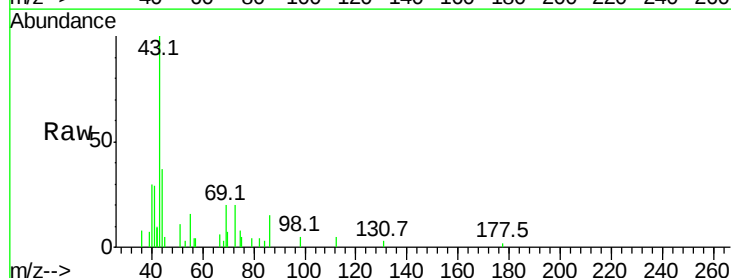
Ion Ratio Lower Upper

43 100

86 25.9 6.1 9.1#

42 4.4 7.4 11.2#

44 0.0 4.2 6.2#

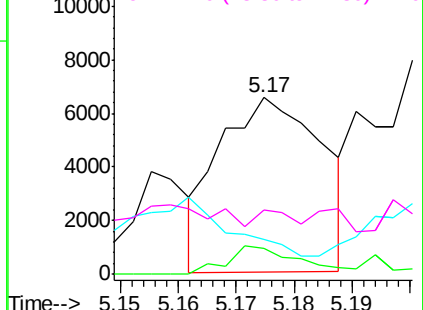
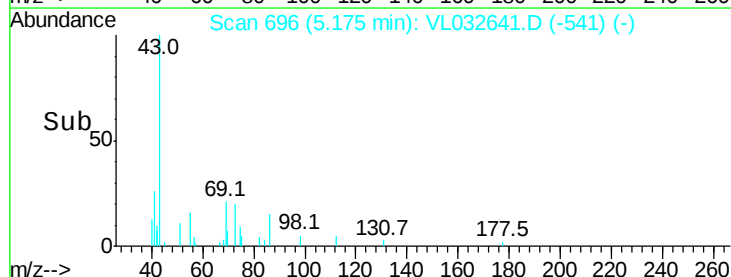


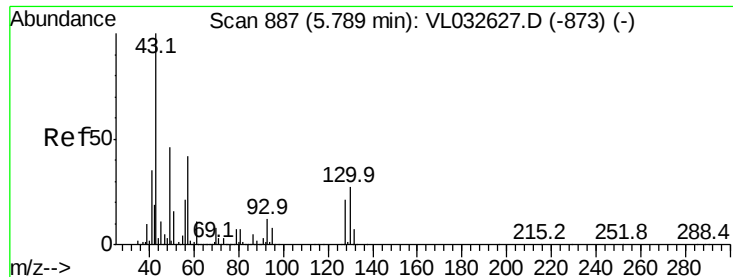
Abundance Ion 43.10 (42.80 to 43.80): VL0

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

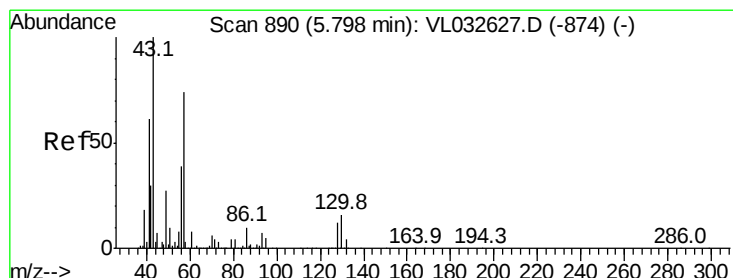
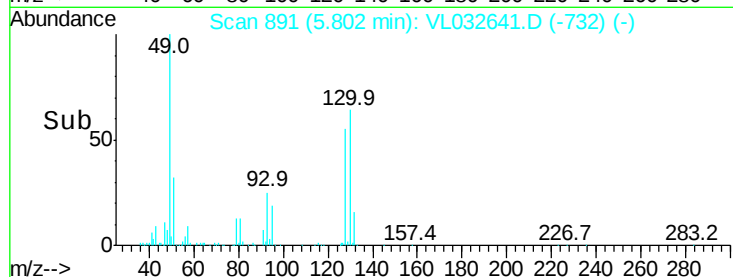
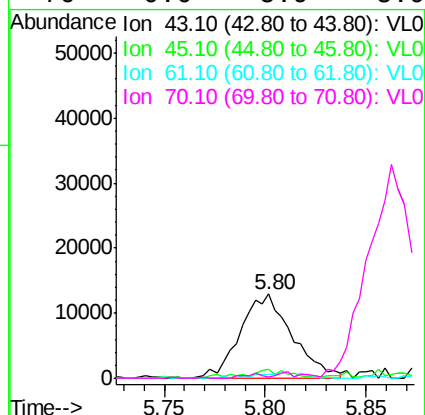
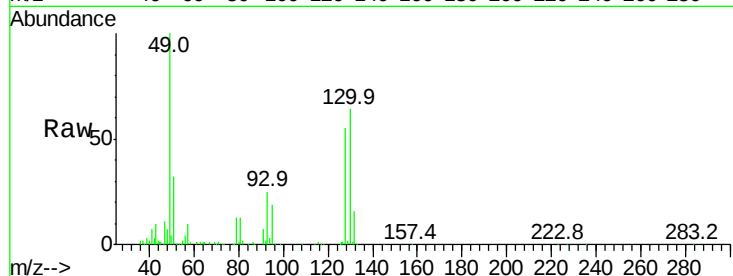




#25
Ethyl Acetate
Concen: 0.091 ppbv
RT: 5.80 min Scan# 891
Delta R.T. 0.01 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

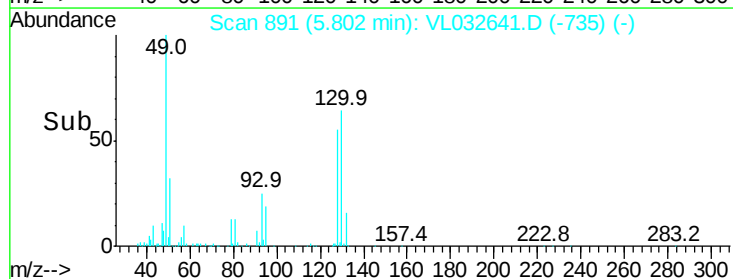
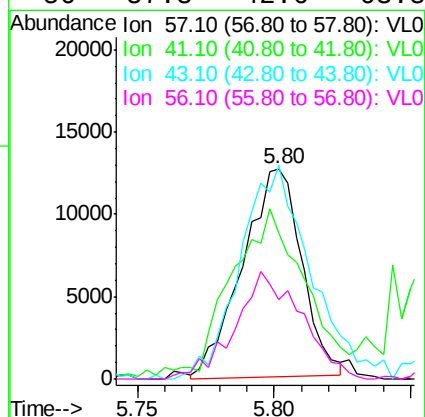
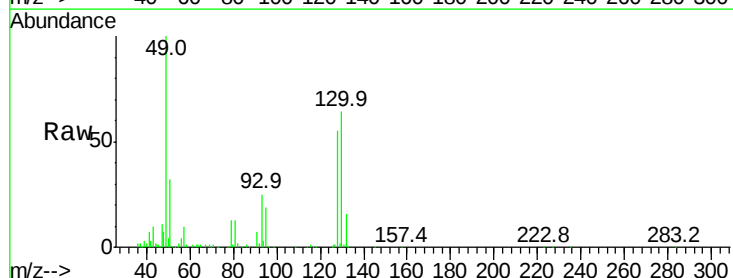
Instrument :
MSVOA_L
ClientSampleId :
SS04-MIVIDL2

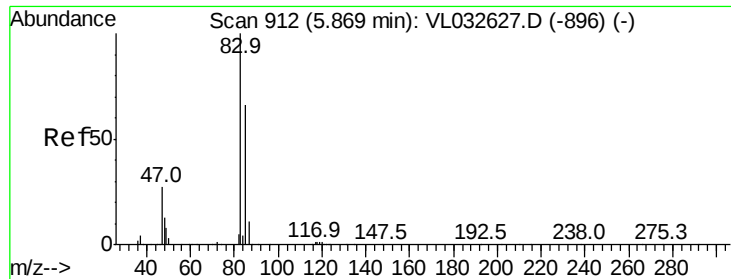
Tgt Ion:	43	Resp:	23167
Ion	Ratio	Lower	Upper
43	100		
45	9.0	8.0	12.0
61	6.1	8.0	12.0#
70	0.0	5.9	8.9#



#26
Hexane
Concen: 0.167 ppbv
RT: 5.80 min Scan# 891
Delta R.T. 0.00 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

Tgt Ion:	57	Resp:	19124
Ion	Ratio	Lower	Upper
57	100		
41	104.7	67.4	101.0#
43	125.5	171.9	257.9#
56	57.8	42.6	63.8

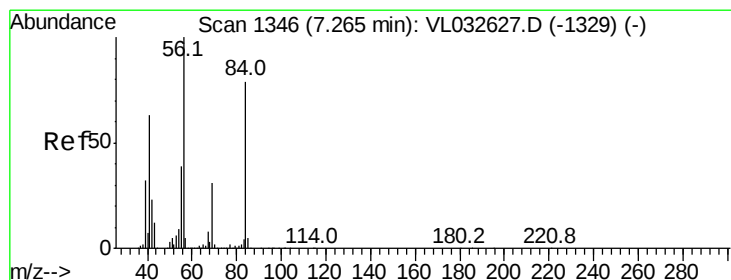
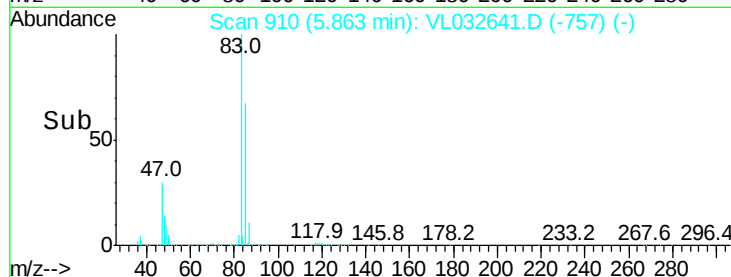
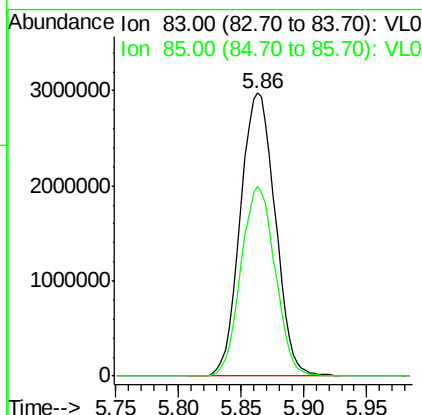
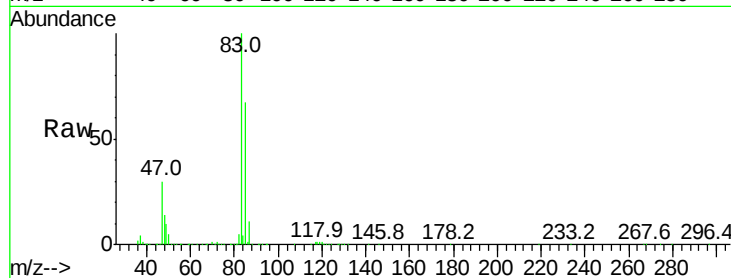




#29
Chloroform
Concen: 28.668 ppbv
RT: 5.86 min Scan# 910
Delta R.T. -0.01 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

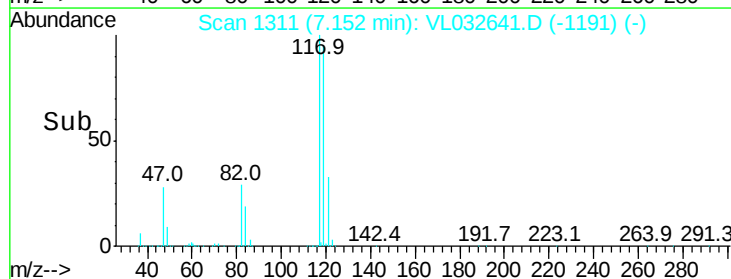
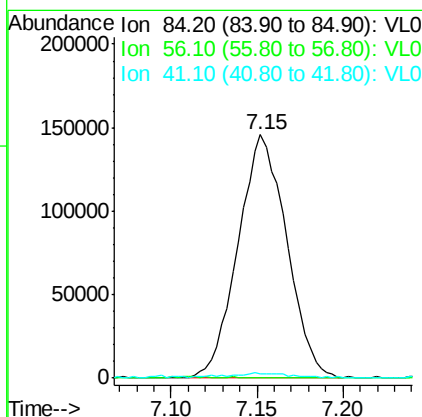
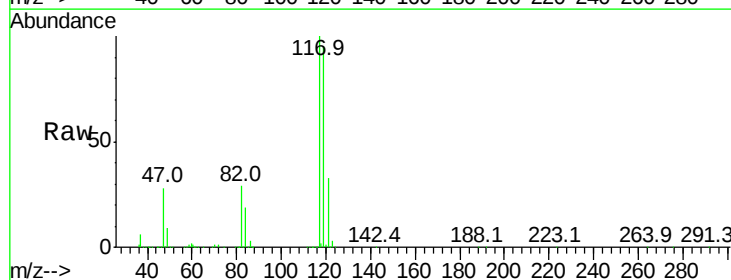
Instrument :
MSVOA_L
ClientSampleId :
SS04-MIVIDL2

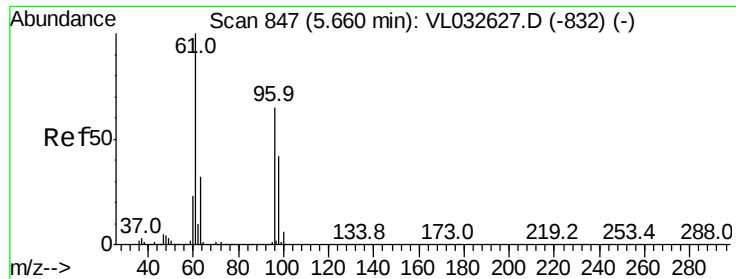
Tgt Ion: 83 Resp: 5750344
Ion Ratio Lower Upper
83 100
85 67.0 53.0 79.6



#30
Cyclohexane
Concen: 3.172 ppbv
RT: 7.15 min Scan# 1311
Delta R.T. -0.11 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

Tgt Ion: 84 Resp: 286243
Ion Ratio Lower Upper
84 100
56 0.0 108.3 162.5#
41 3.2 64.8 97.2#





#31

cis-1,2-Dichloroethene

Concen: 0.039 ppbv

RT: 5.66 min Scan# 848

Delta R.T. 0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

SS04-MIVIDL2

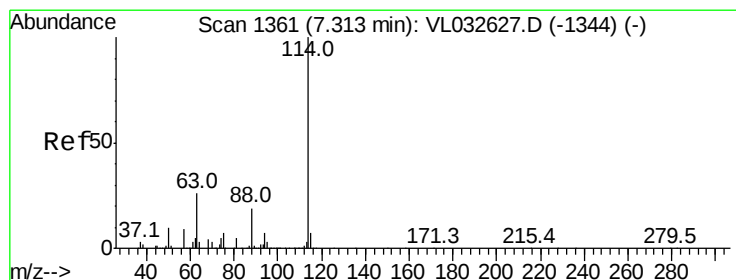
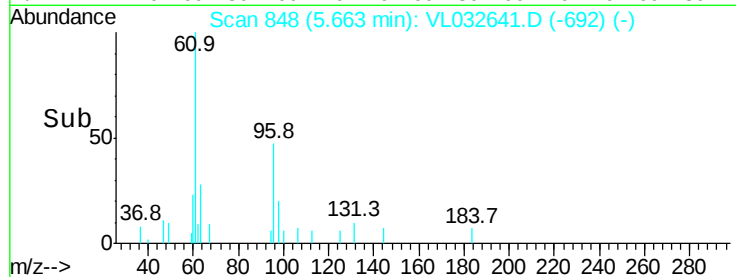
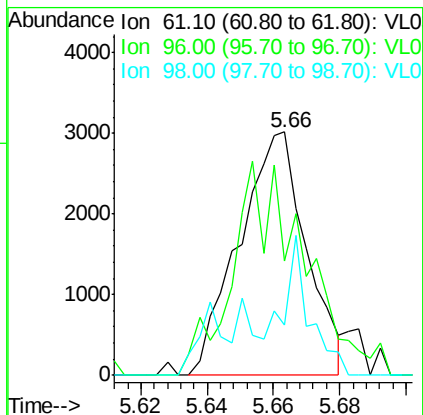
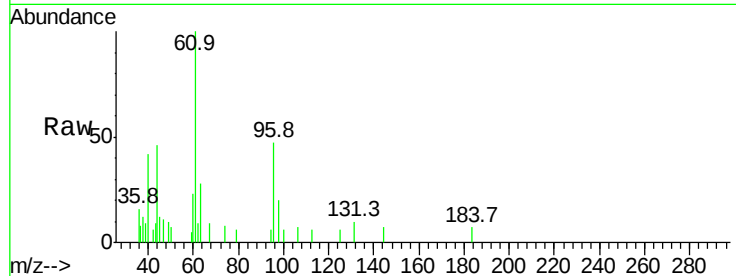
Tgt Ion: 61 Resp: 4255

Ion Ratio Lower Upper

61 100

96 38.7 51.8 77.6#

98 11.9 33.8 50.6#



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.31 min Scan# 1360

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

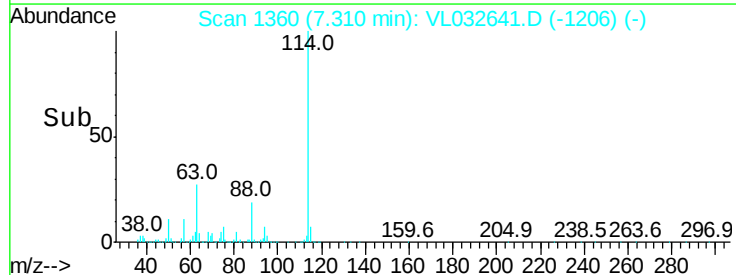
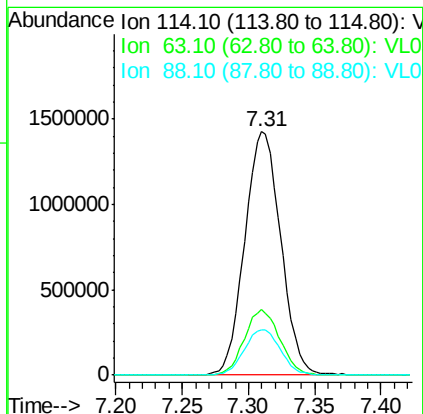
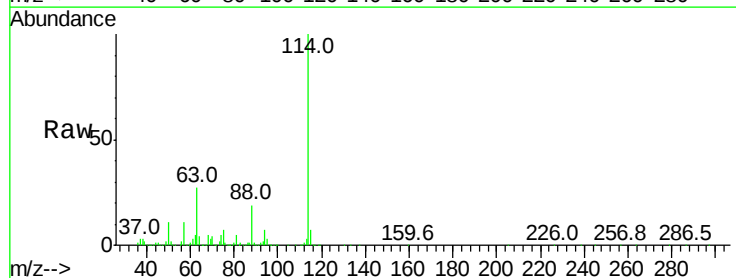
Tgt Ion: 114 Resp: 2684527

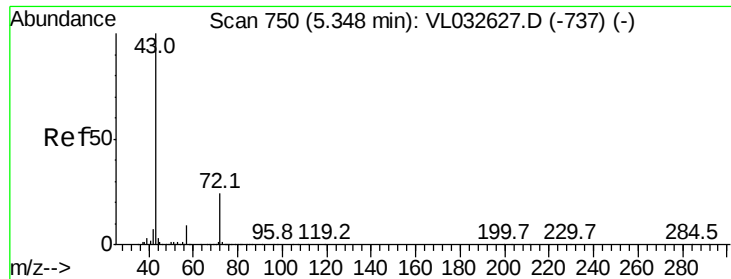
Ion Ratio Lower Upper

114 100

63 26.6 21.7 32.5

88 18.8 14.9 22.3





#34

2-Butanone

Concen: 0.216 ppbv

RT: 5.37 min Scan# 757

Delta R.T. 0.02 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

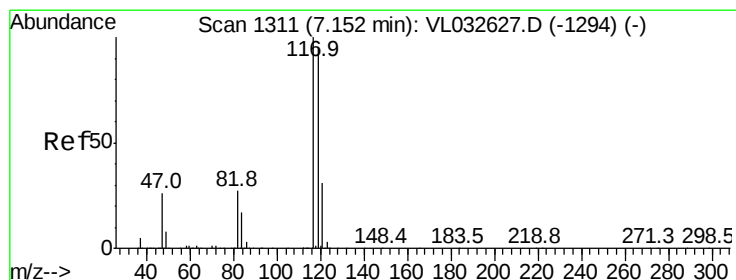
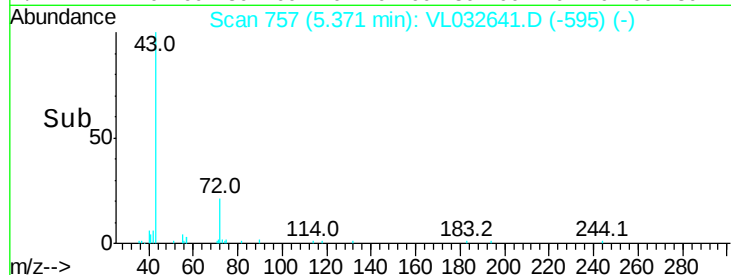
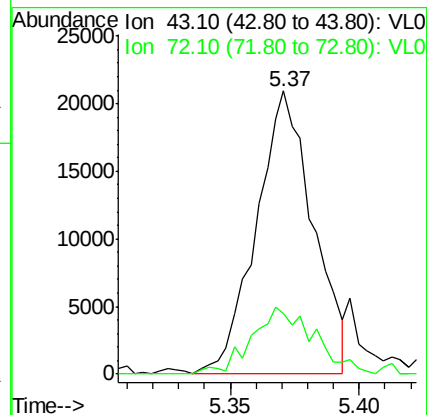
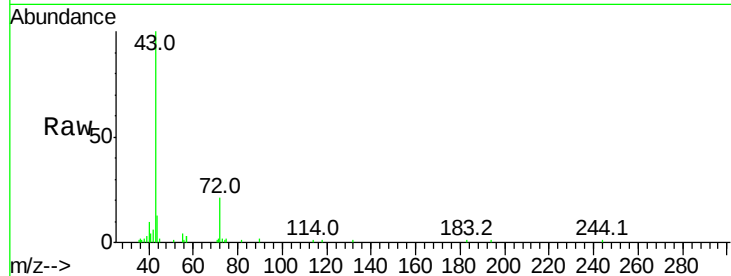
SS04-MIVIDL2

Tgt Ion: 43 Resp: 32139

Ion Ratio Lower Upper

43 100

72 26.7 18.6 27.8



#35

Carbon Tetrachloride

Concen: 4.552 ppbv

RT: 7.15 min Scan# 1311

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

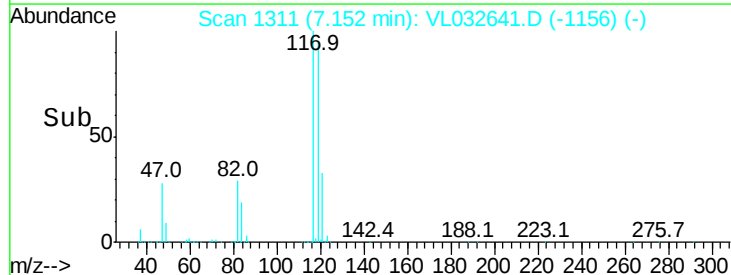
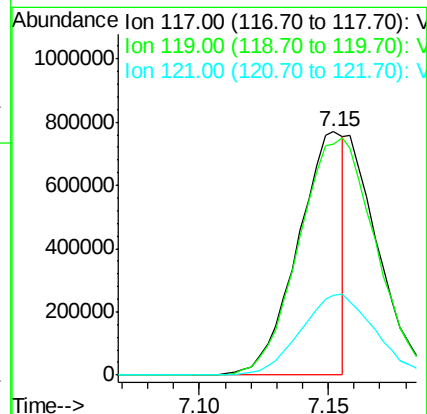
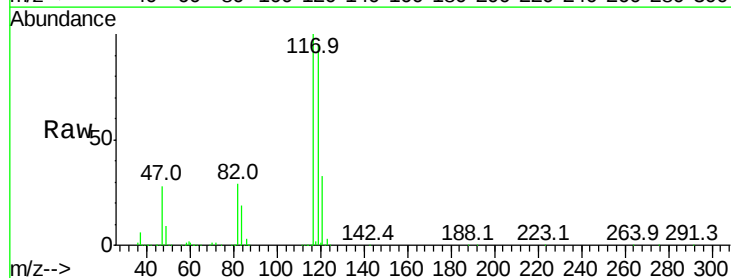
Tgt Ion: 117 Resp: 947110

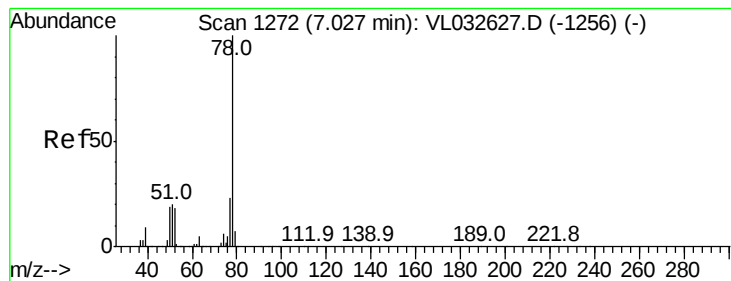
Ion Ratio Lower Upper

117 100

119 94.9 75.7 113.5

121 32.7 24.7 37.1





#36

Benzene

Concen: 0.348 ppbv

RT: 7.02 min Scan# 1271

Delta R.T. -0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

SS04-MIVIDL2

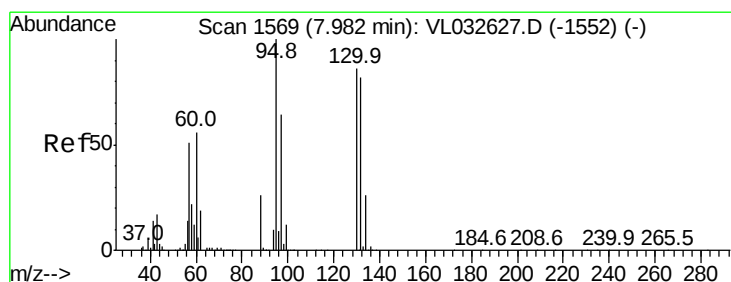
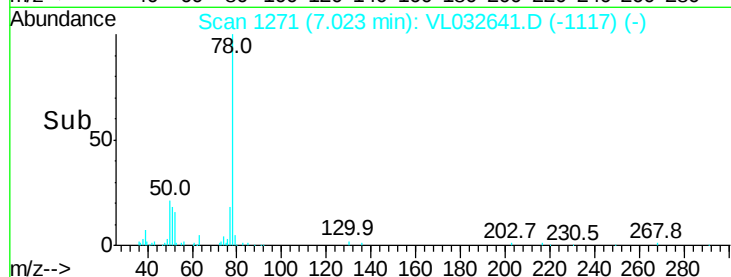
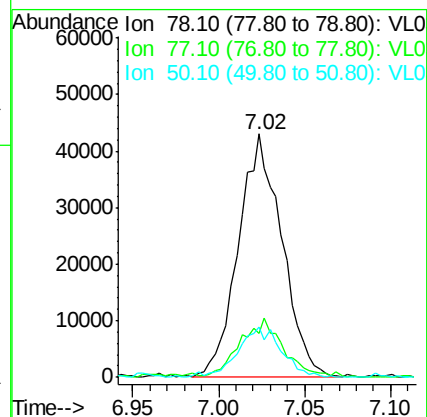
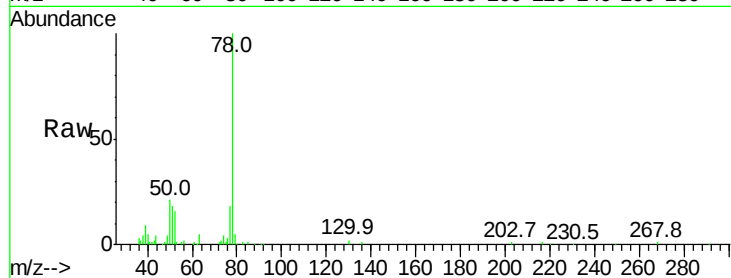
Tgt Ion: 78 Resp: 75635

Ion Ratio Lower Upper

78 100

77 17.5 18.1 27.1#

50 20.5 15.1 22.7



#38

Trichloroethene

Concen: 0.162 ppbv

RT: 7.98 min Scan# 1570

Delta R.T. 0.00 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Tgt Ion:130 Resp: 13270

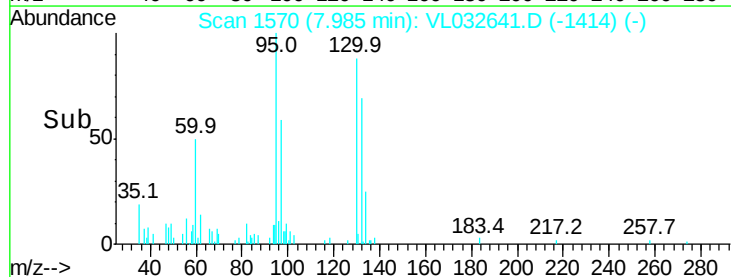
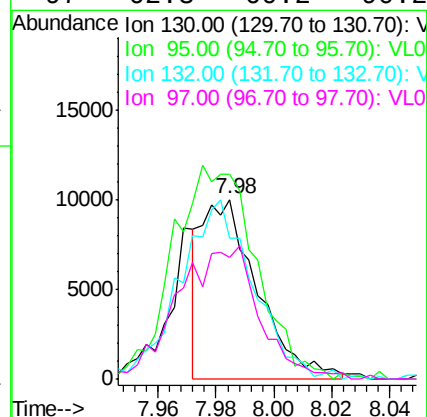
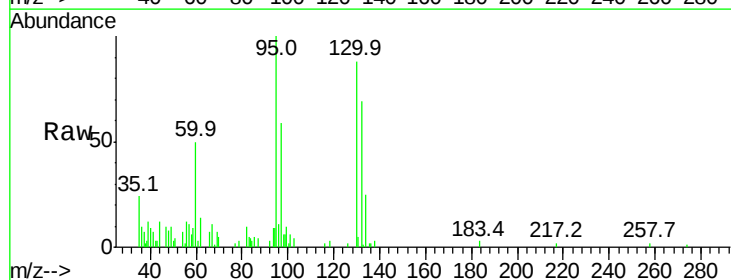
Ion Ratio Lower Upper

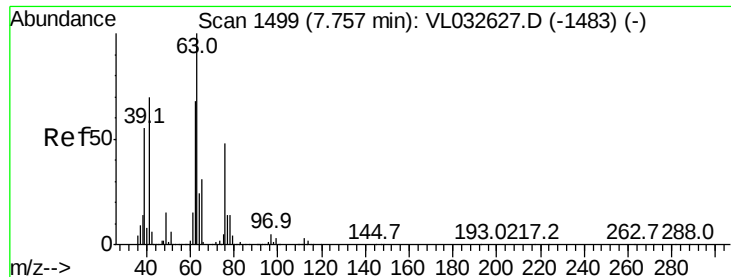
130 100

95 107.7 93.4 140.0

132 76.5 76.5 114.7

97 62.3 60.2 90.2





#39

1,2-Dichloropropane

Concen: 8.002 ppbv

RT: 7.31 min Scan# 1360

Delta R.T. -0.45 min

Lab File: VL032641.D

Acq: 17 Oct 2018 15:06

Instrument :

MSVOA_L

ClientSampleId :

SS04-MIVIDL2

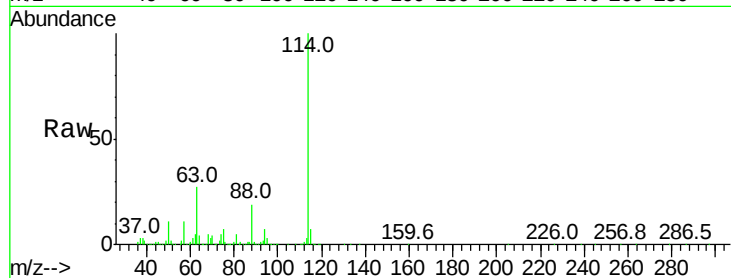
Tgt Ion: 63 Resp: 708362

Ion Ratio Lower Upper

63 100

41 0.1 56.2 84.4#

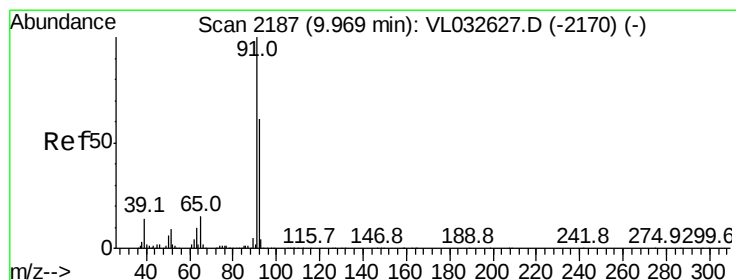
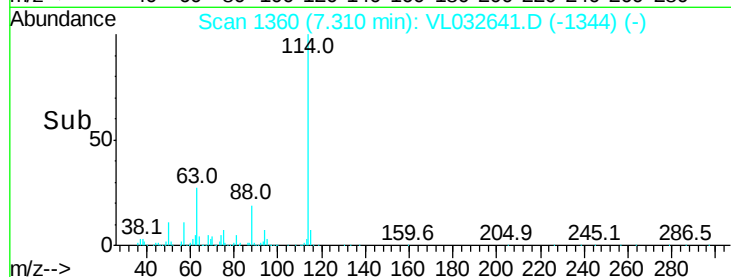
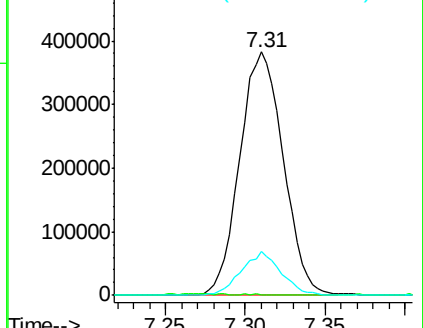
62 17.9 54.4 81.6#



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



#53

Toluene

Concen: 0.142 ppbv

RT: 9.96 min Scan# 2185

Delta R.T. -0.01 min

Lab File: VL032641.D

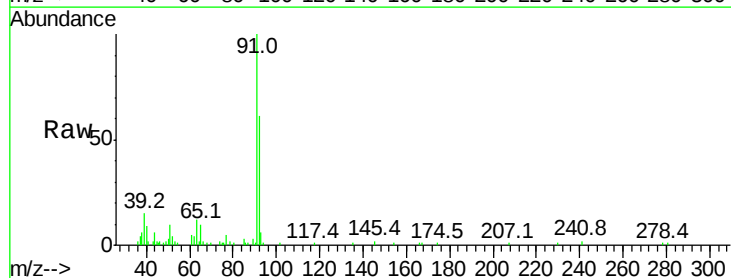
Acq: 17 Oct 2018 15:06

Tgt Ion: 91 Resp: 35327

Ion Ratio Lower Upper

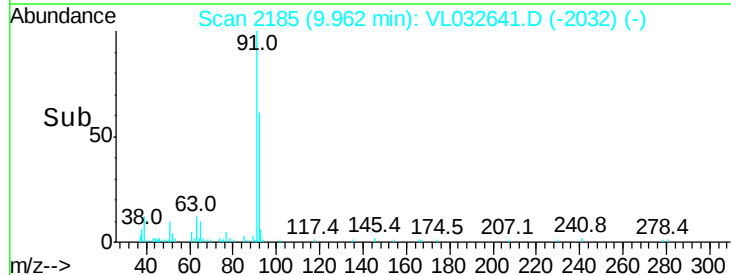
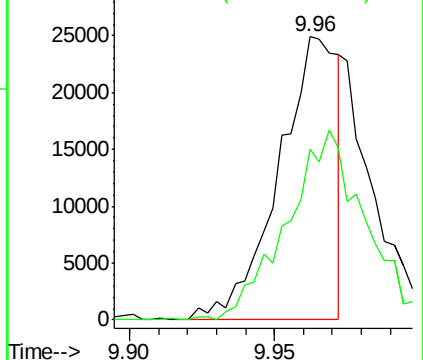
91 100

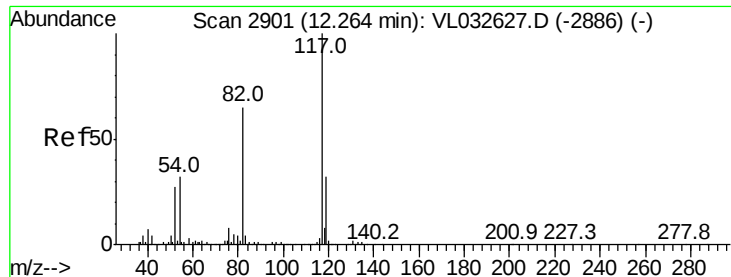
92 88.2 48.4 72.6#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

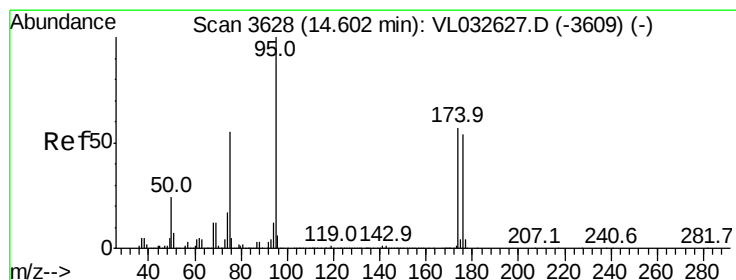
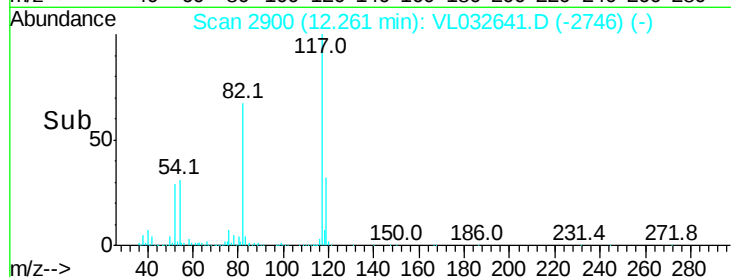
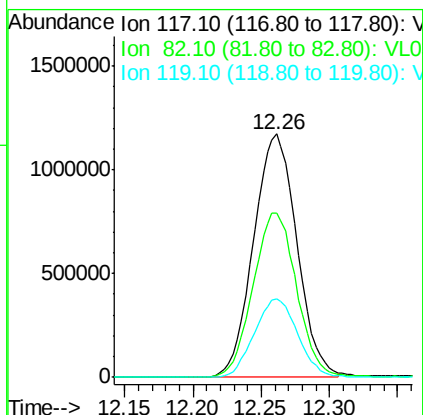
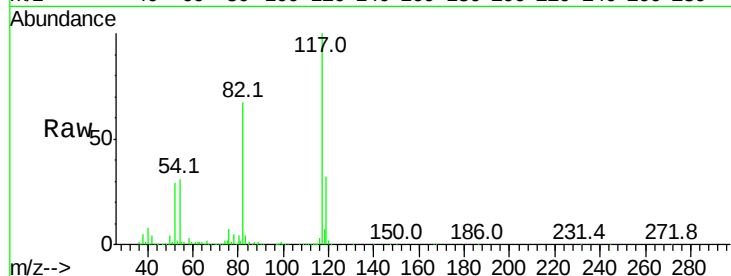




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.26 min Scan# 2900
Delta R.T. -0.00 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

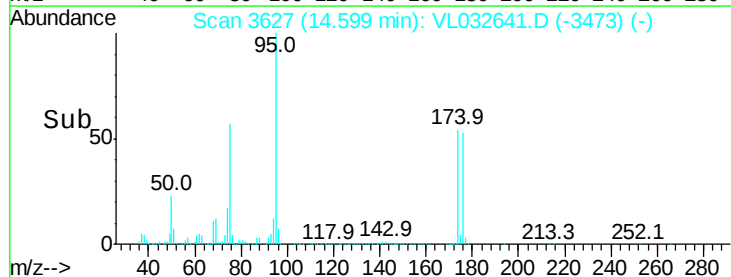
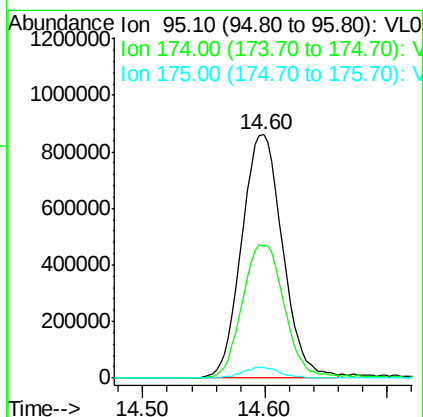
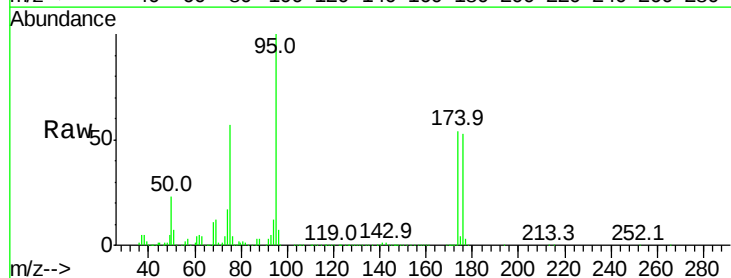
Instrument :
MSVOA_L
ClientSampleId :
SS04-MIVIDL2

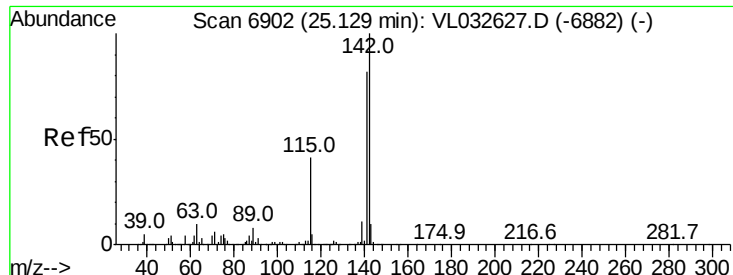
Tgt Ion: 117 Resp: 2587009
Ion Ratio Lower Upper
117 100
82 68.2 52.7 79.1
119 32.7 26.7 40.1



#68
1-Bromo-4-Fluorobenzene
Concen: 10.236 ppbv
RT: 14.60 min Scan# 3627
Delta R.T. -0.00 min
Lab File: VL032641.D
Acq: 17 Oct 2018 15:06

Tgt Ion: 95 Resp: 1993840
Ion Ratio Lower Upper
95 100
174 57.0 46.0 69.0
175 4.1 3.4 5.0





#80
 Naphthalene, 2-methyl-
 Concen: 0.742 ppbv
 RT: 25.14 min Scan# 6906
 Delta R.T. 0.01 min
 Lab File: VL032641.D
 Acq: 17 Oct 2018 15:06

Instrument :
 MSVOA_L
 ClientSampleId :
 SS04-MIVIDL2

Tgt Ion	Ratio	Lower	Upper
142	100		
141	378.8	67.5	101.3#
115	57.5	33.5	50.3#

