

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111220\
 Data File : VL035911.D
 Acq On : 12 Nov 2020 13:08
 Operator : SY/AP
 Sample : L4618-05DL 4X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-2DL

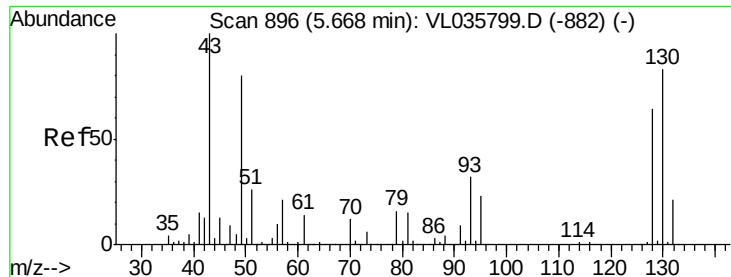
Quant Time: Nov 13 00:57:20 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04 02:40:06 2020
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	845580	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	3254662	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3547461	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.42	95	2629513	10.43	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	22319	0.140	ppbv	93
3) Chlorodifluoromethane	2.98	51	13884	0.137	ppbv #	90
9) Propene	3.20	41	77598	2.094	ppbv	100
11) Trichlorofluoromethane	3.95	101	12546	0.063	ppbv	97
13) Ethanol	3.62	45	6624202	823.850	ppbv	96
15) Acetone	3.85	43	804919	8.904	ppbv	99
16) 1,3-Butadiene	3.35	39	735741	18.904	ppbv #	1
17) tert-Butyl alcohol	4.31	59	13803	0.115	ppbv #	72
19) Isopropyl Alcohol	3.62	45	6624202	119.239	ppbv #	90
20) Methylene Chloride	4.34	84	319138	5.015	ppbv	96
25) Ethyl Acetate	5.68	43	200006	1.123	ppbv #	73
26) Hexane	5.68	57	382651	3.896	ppbv #	44
29) Chloroform	5.75	83	11469	0.059	ppbv	91
34) 2-Butanone	5.24	43	10443	0.099	ppbv	92
36) Benzene	6.89	78	9934	0.041	ppbv #	86
39) 1,2-Dichloropropane	7.18	63	639181	7.846	ppbv #	30
41) Tetrahydrofuran	5.73	42	2317	0.039	ppbv #	27
50) 4-Methyl-2-Pentanone	8.76	43	7901	0.049	ppbv #	74
53) Toluene	9.81	91	116524	0.399	ppbv	94
60) o-Xylene	13.70	91	16292	0.046	ppbv	99

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.00 min

Lab File: VL035911.D

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Instrument :

MSVOA_L

ClientSampleId :

SSSG-2DL

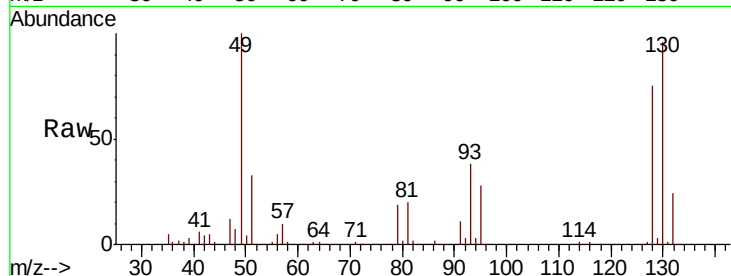
Tot Ion: 49 Resp: 845580

Ion Ratio Lower Upper

49 100

128 78.7 41.5 124.6

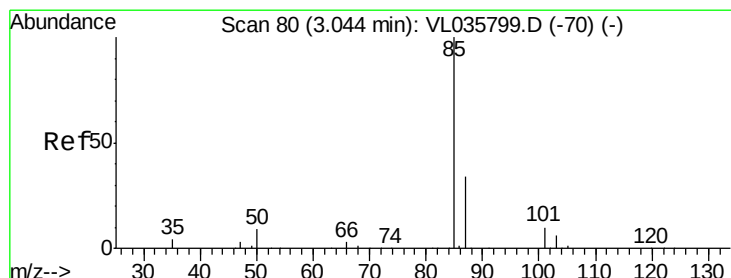
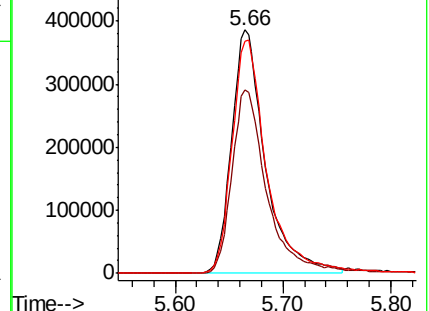
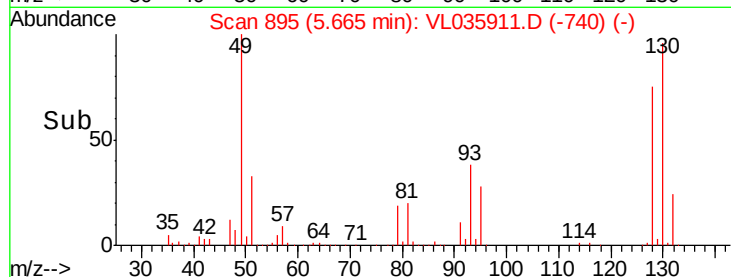
130 99.9 53.7 161.1



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.140 ppbv

RT: 3.04 min Scan# 80

Delta R.T. 0.00 min

Lab File: VL035911.D

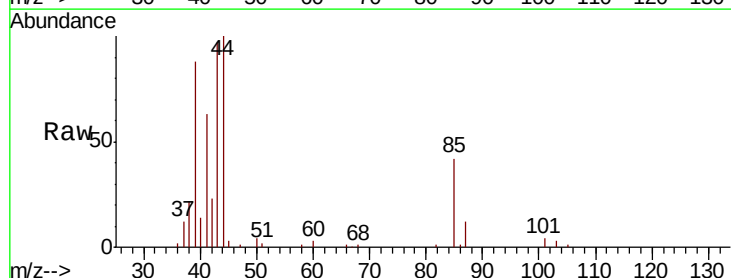
Acq: 12 Nov 2020 13:08

Tgt Ion: 85 Resp: 22319

Ion Ratio Lower Upper

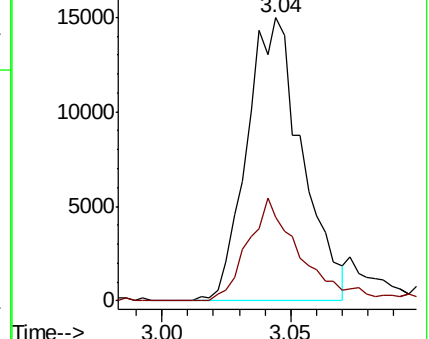
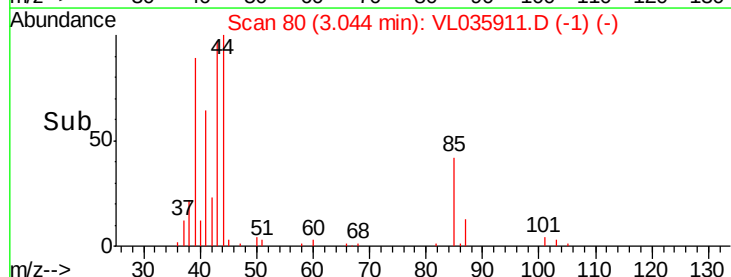
85 100

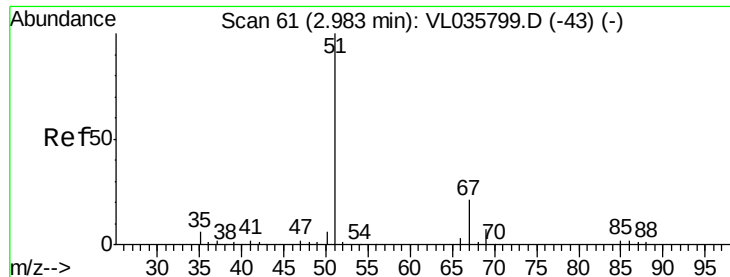
87 29.8 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.137 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.00 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampleId :

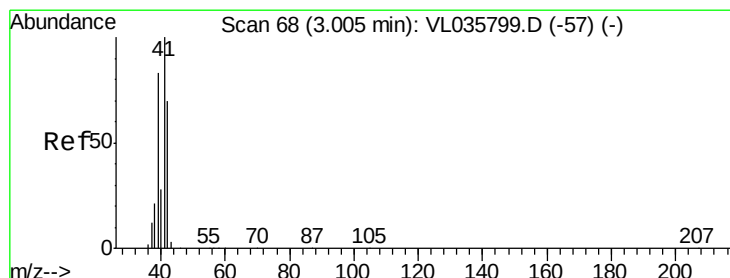
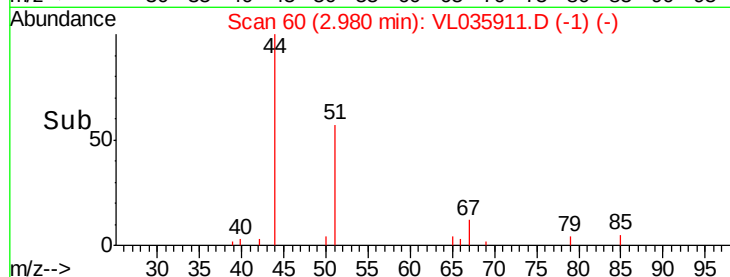
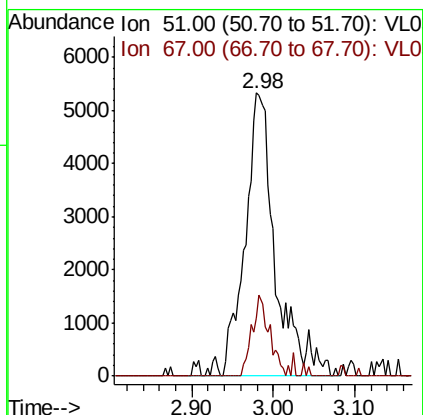
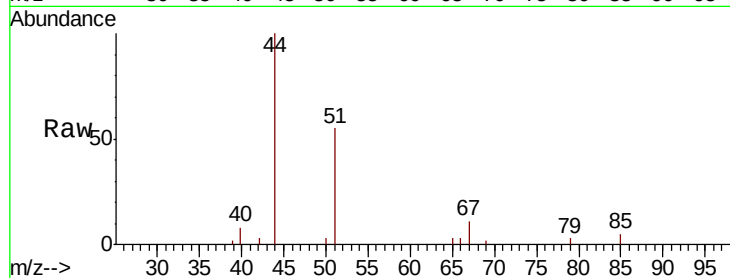
SSSG-2DL

Tot Ion: 51 Resp: 13884

Ion Ratio Lower Upper

51 100

67 16.5 17.0 25.4#



#9

Propene

Concen: 2.094 ppbv

RT: 3.20 min Scan# 128

Delta R.T. 0.19 min

Lab File: VL035911.D

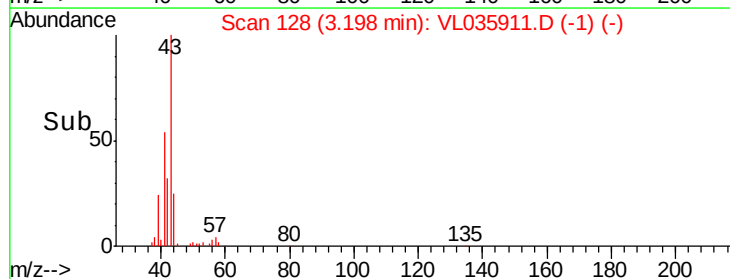
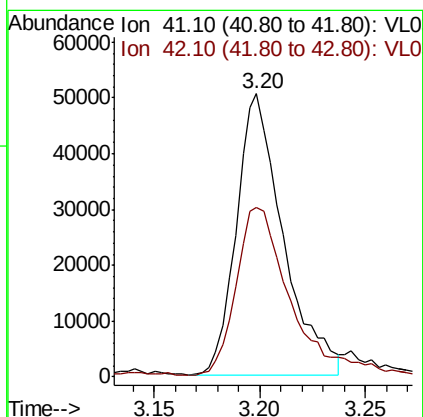
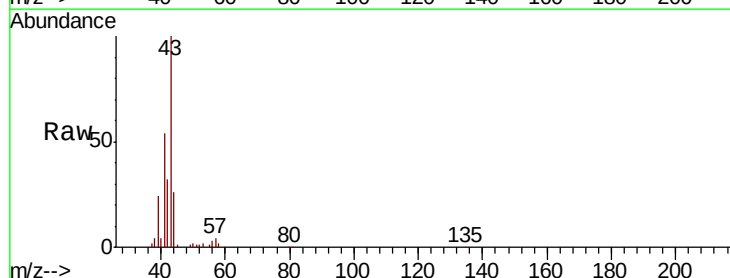
Acq: 12 Nov 2020 13:08

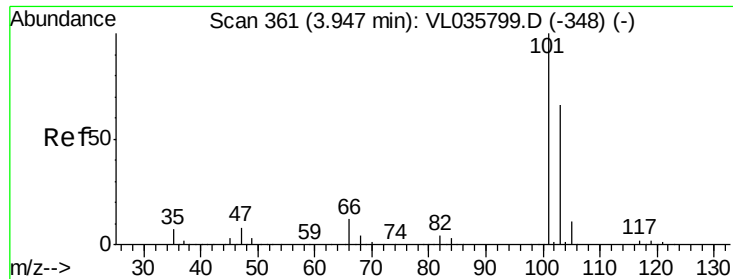
Tgt Ion: 41 Resp: 77598

Ion Ratio Lower Upper

41 100

42 70.2 56.2 84.4

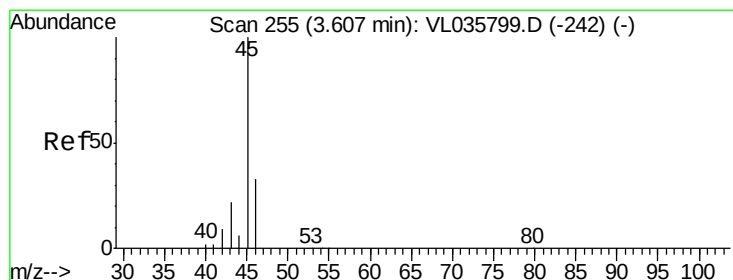
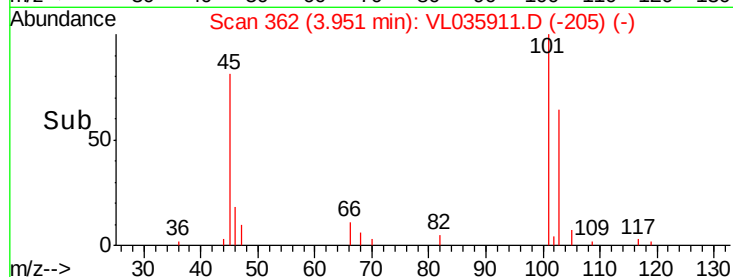
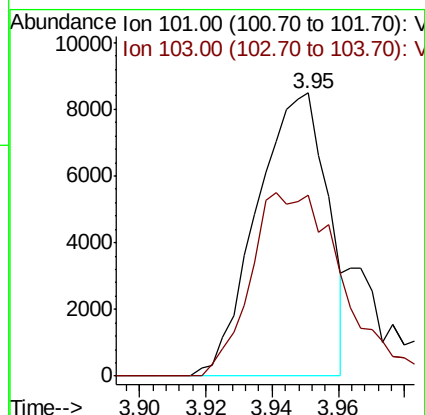
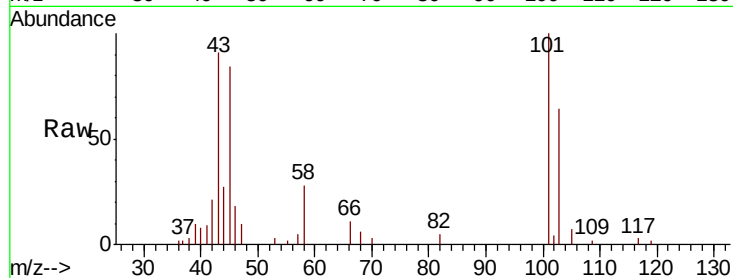




#11
 Trichlorofluoromethane
 Concen: 0.063 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. 0.00 min
 Lab File: VL035911.D
 Acq: 12 Nov 2020 13:08

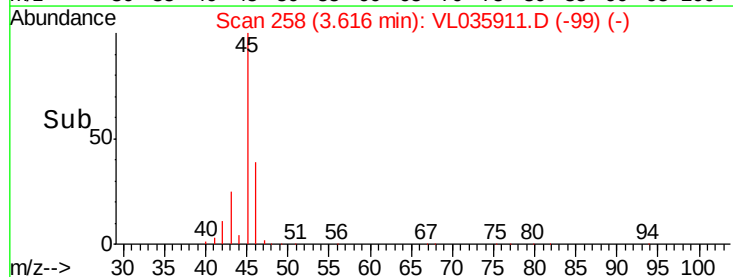
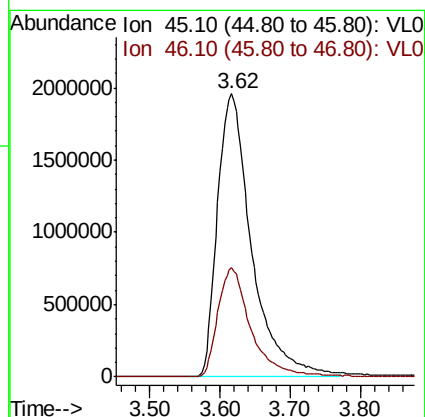
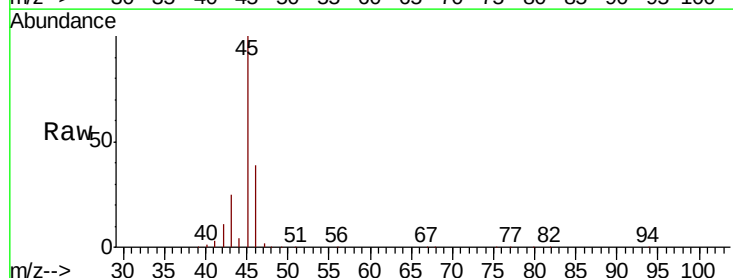
Instrument :
 MSVOA_L
 ClientSampleId :
 SSSG-2DL

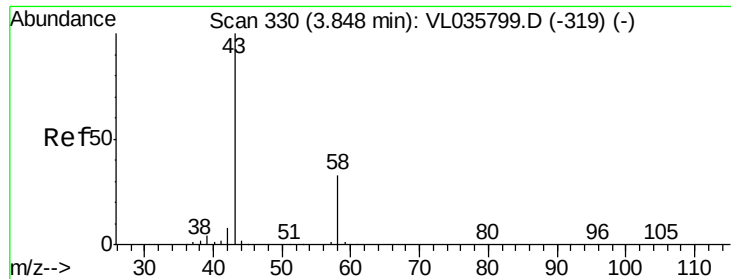
Tot Ion:101 Resp: 12546
 Ion Ratio Lower Upper
 101 100
 103 63.9 53.0 79.4



#13
 Ethanol
 Concen: 823.850 ppbv
 RT: 3.62 min Scan# 258
 Delta R.T. 0.01 min
 Lab File: VL035911.D
 Acq: 12 Nov 2020 13:08

Tgt Ion: 45 Resp: 6624202
 Ion Ratio Lower Upper
 45 100
 46 37.6 16.1 64.5





#15

Acetone

Concen: 8.904 ppbv

RT: 3.85 min Scan# 330

Delta R.T. 0.00 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampleId :

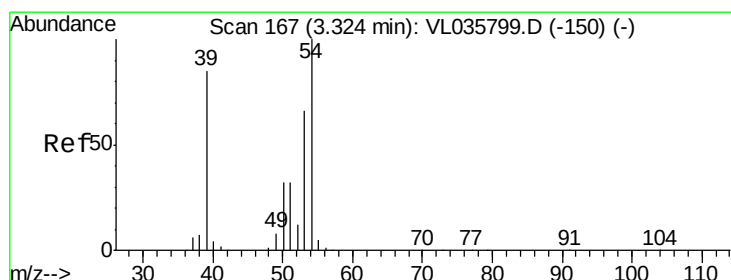
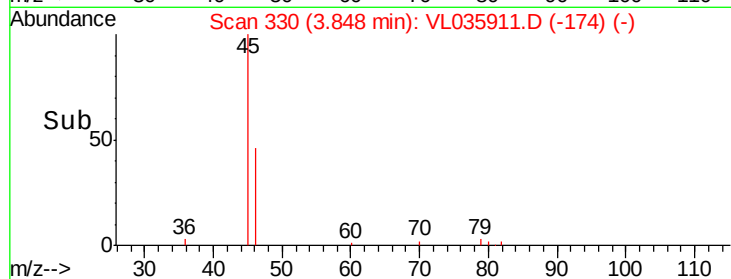
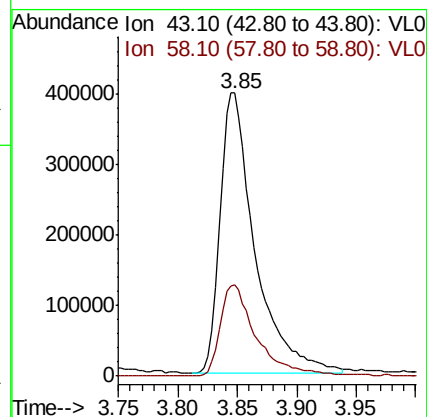
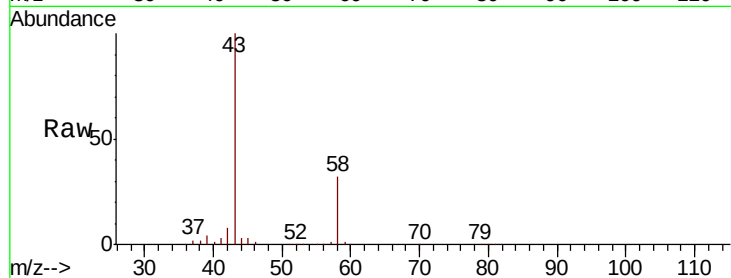
SSSG-2DL

Tot Ion: 43 Resp: 804919

Ion Ratio Lower Upper

43 100

58 35.0 27.5 41.3



#16

1,3-Butadiene

Concen: 18.904 ppbv

RT: 3.35 min Scan# 175

Delta R.T. 0.03 min

Lab File: VL035911.D

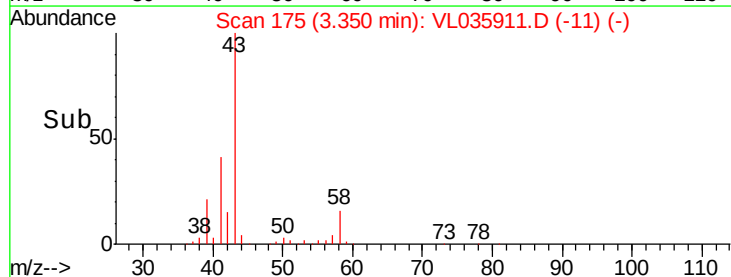
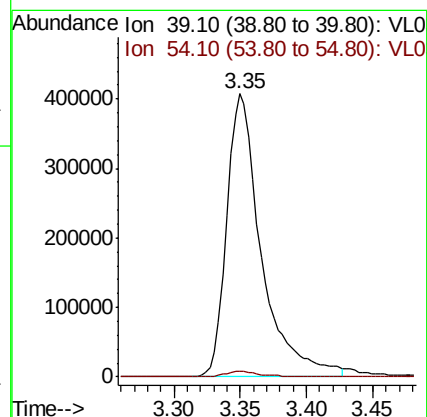
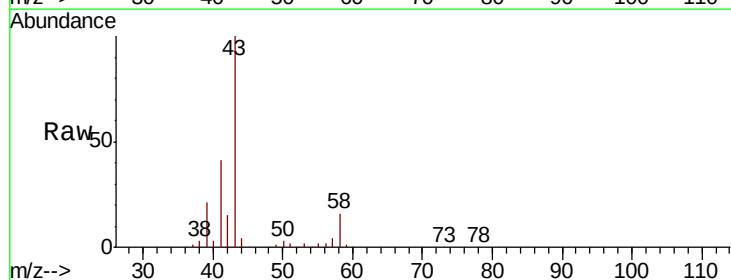
Acq: 12 Nov 2020 13:08

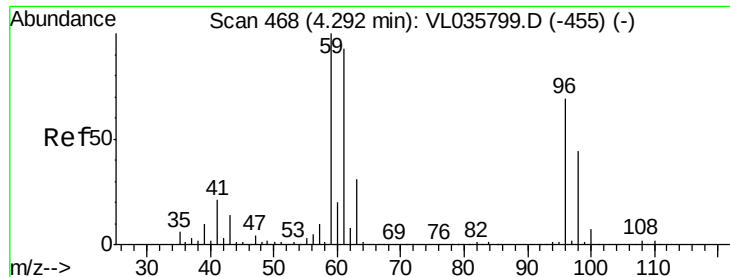
Tgt Ion: 39 Resp: 735741

Ion Ratio Lower Upper

39 100

54 2.1 87.1 130.7#





#17

tert-Butyl alcohol

Concen: 0.115 ppbv

RT: 4.31 min Scan# 474

Delta R.T. 0.02 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampleId :

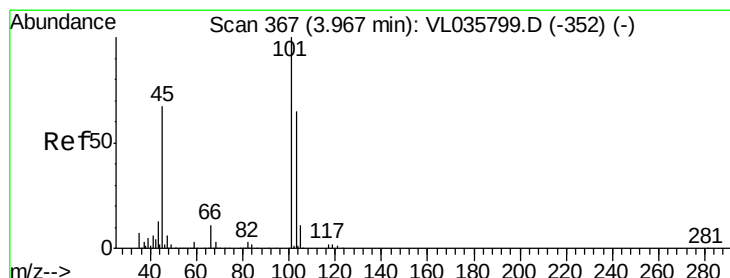
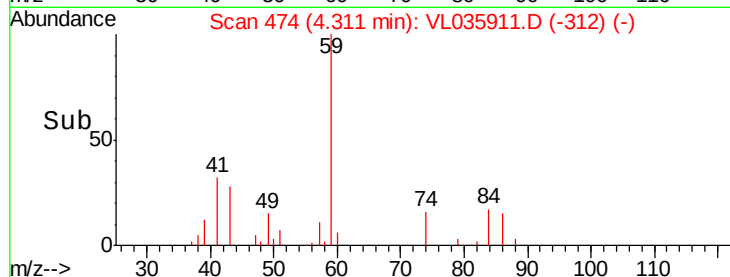
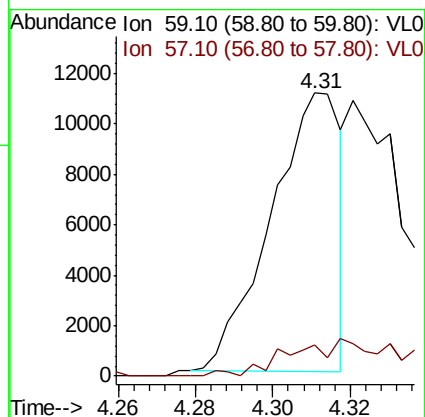
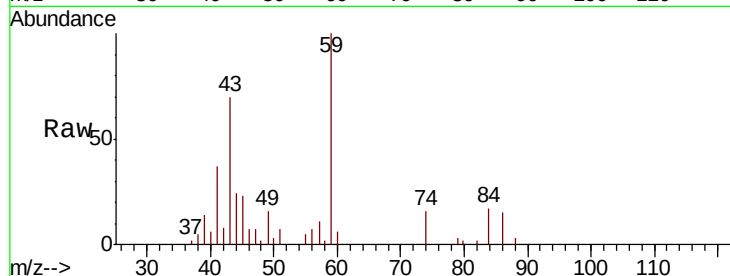
SSSG-2DL

Tot Ion: 59 Resp: 13803

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#



#19

Isopropyl Alcohol

Concen: 119.239 ppbv

RT: 3.62 min Scan# 258

Delta R.T. -0.35 min

Lab File: VL035911.D

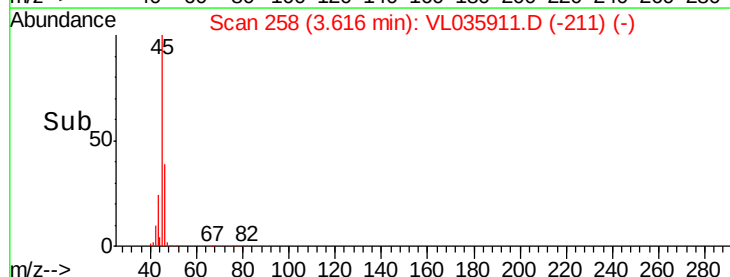
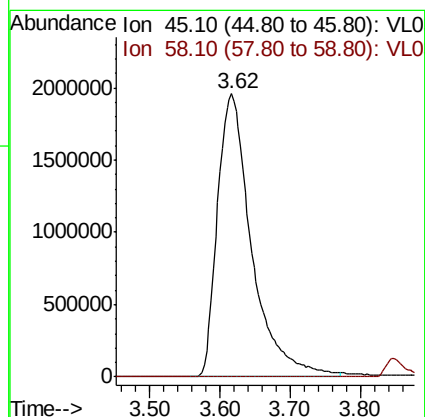
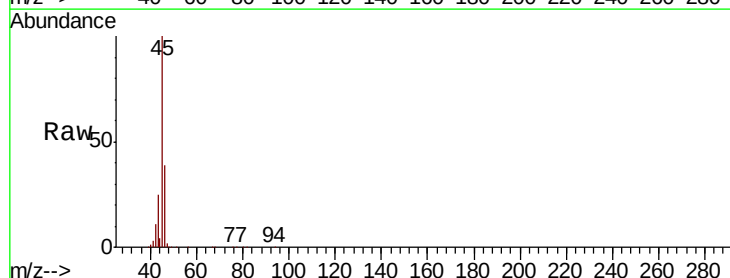
Acq: 12 Nov 2020 13:08

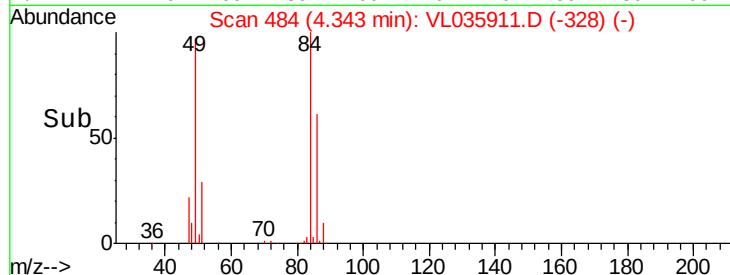
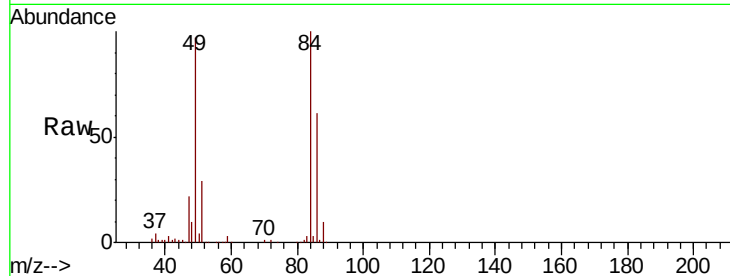
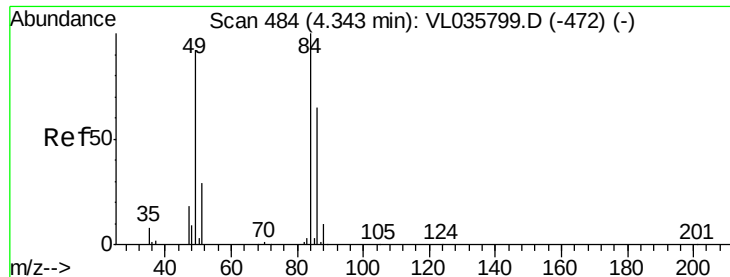
Tgt Ion: 45 Resp: 6624202

Ion Ratio Lower Upper

45 100

58 0.0 2.6 3.8#

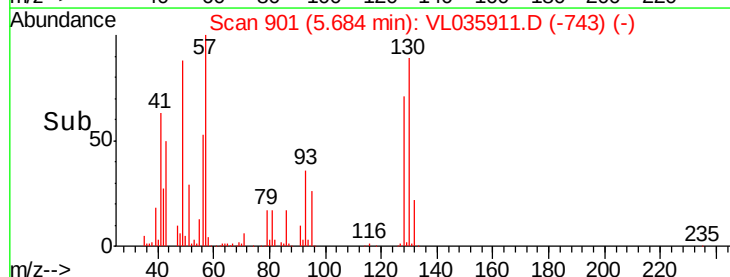
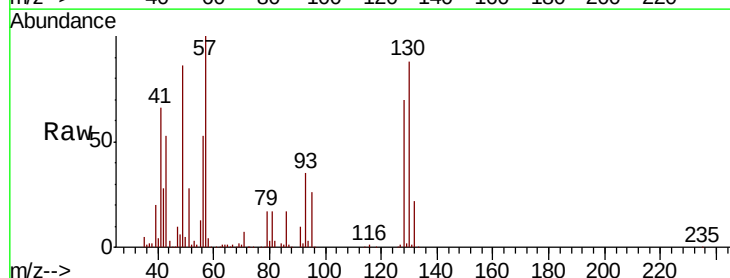
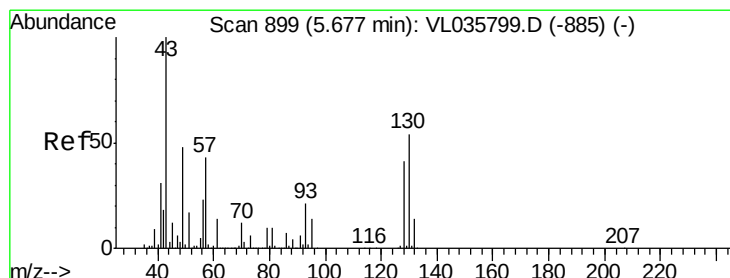
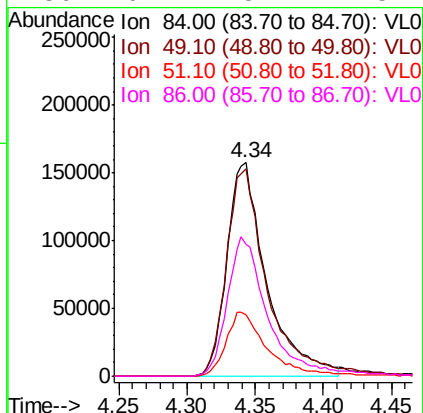




#20
Methylene Chloride
Concen: 5.015 ppbv
RT: 4.34 min Scan# 484
Delta R.T. 0.00 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

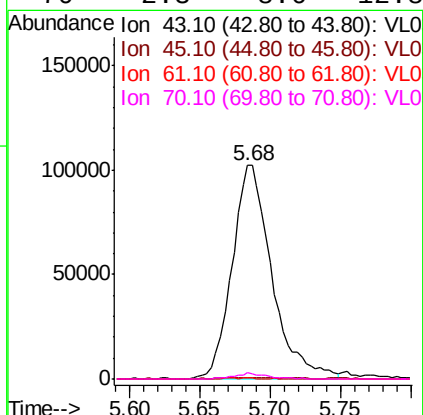
Instrument :
MSVOA_L
ClientSampleId :
SSSG-2DL

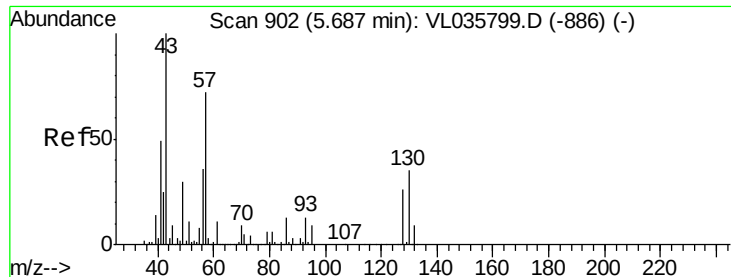
Tot Ion:	84	Resp:	319138
Ion	Ratio	Lower	Upper
84	100		
49	96.9	73.8	110.8
51	28.8	23.0	34.4
86	61.4	52.1	78.1



#25
Ethyl Acetate
Concen: 1.123 ppbv
RT: 5.68 min Scan# 901
Delta R.T. 0.01 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

Tgt Ion:	43	Resp:	200006
Ion	Ratio	Lower	Upper
43	100		
45	1.1	8.5	12.7#
61	0.6	10.7	16.1#
70	2.3	8.6	12.8#

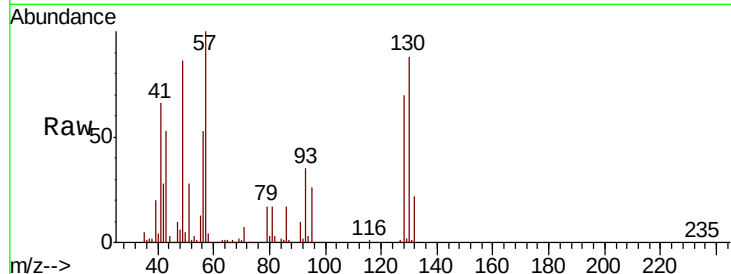




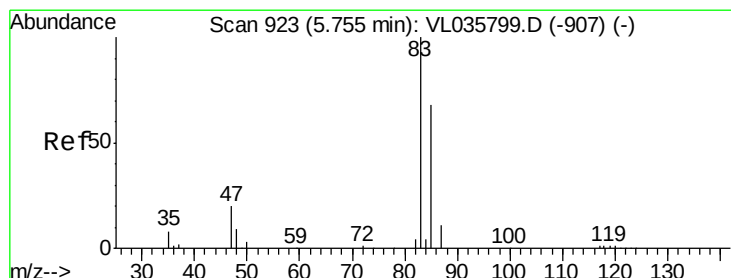
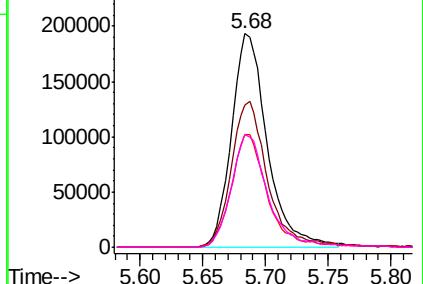
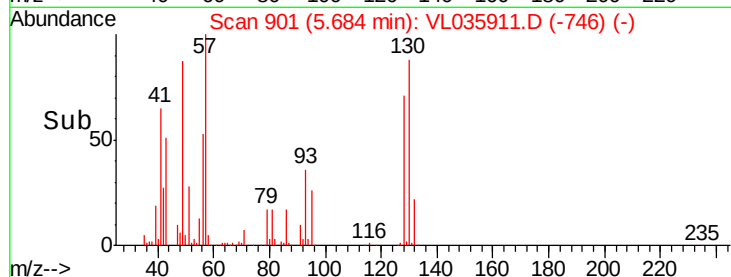
#26
Hexane
Concen: 3.896 ppbv
RT: 5.68 min Scan# 901
Delta R.T. -0.00 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

Instrument :
MSVOA_L
ClientSampled :
SSSG-2DL

Tot Ion: 57 Resp: 382651
Ion Ratio Lower Upper
57 100
41 70.0 58.9 88.3
43 54.3 150.2 225.2#
56 54.5 42.4 63.6

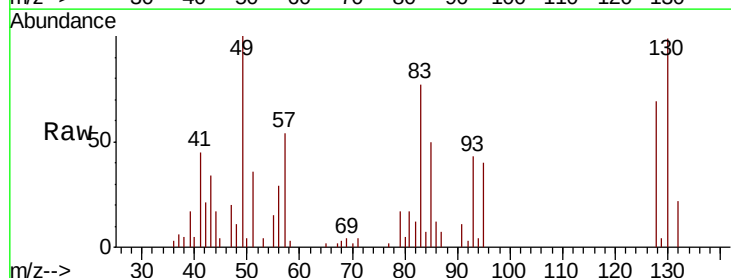


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

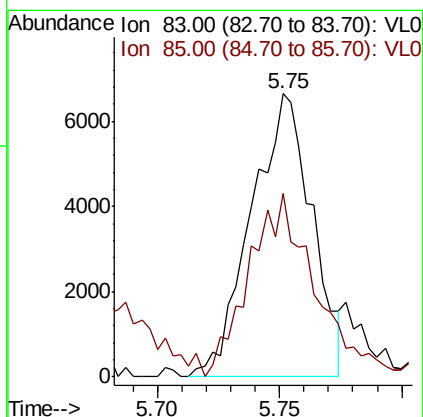
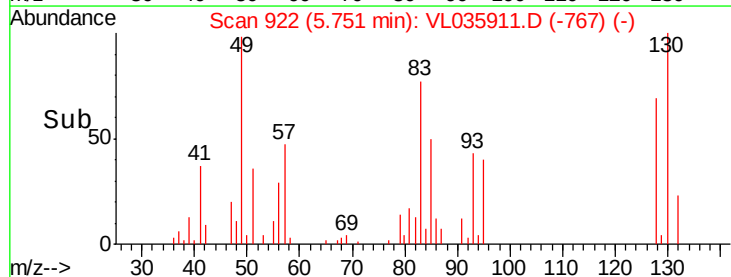


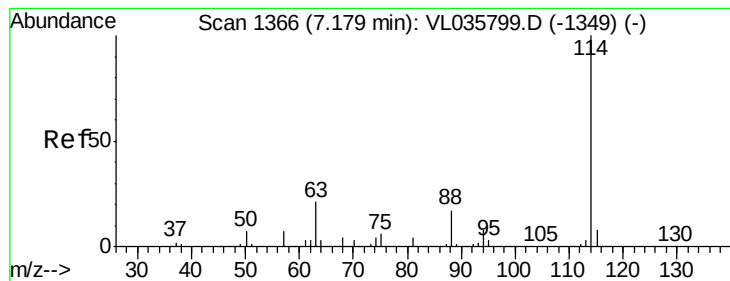
#29
Chloroform
Concen: 0.059 ppbv
RT: 5.75 min Scan# 922
Delta R.T. -0.00 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

Tgt Ion: 83 Resp: 11469
Ion Ratio Lower Upper
83 100
85 60.8 54.6 81.8



Abundance Ion 83.00 (82.70 to 83.70): VL0
Ion 85.00 (84.70 to 85.70): VL0





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.18 min Scan# 1365

Delta R.T. -0.00 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampleId :

SSSG-2DL

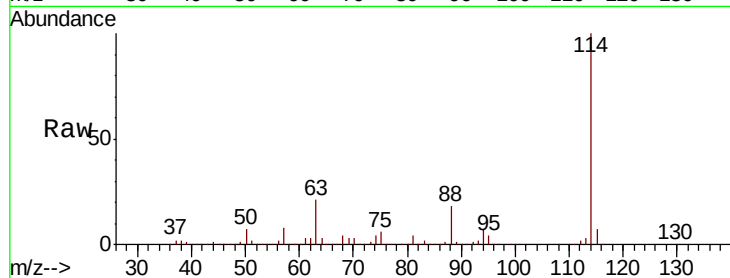
Tot Ion:114 Resp: 3254662

Ion Ratio Lower Upper

114 100

63 20.0 16.1 24.1

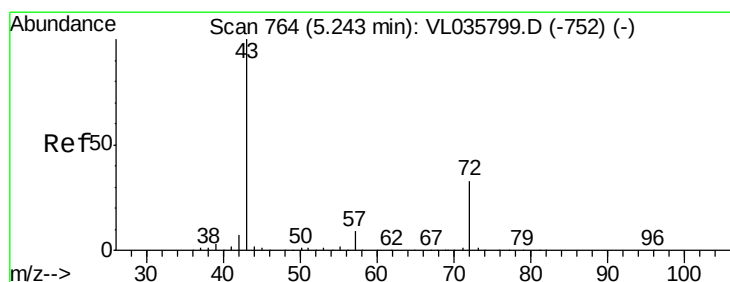
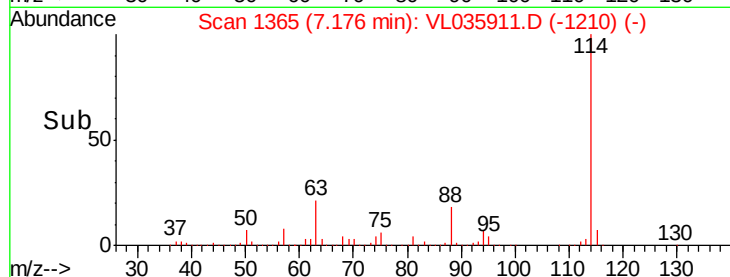
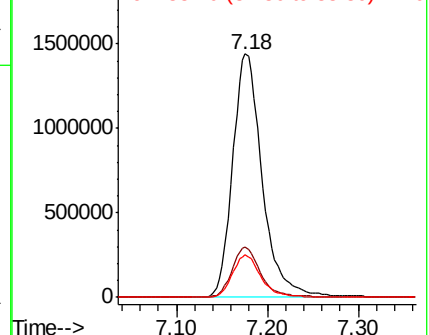
88 16.9 13.7 20.5



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: 0.099 ppbv

RT: 5.24 min Scan# 764

Delta R.T. 0.00 min

Lab File: VL035911.D

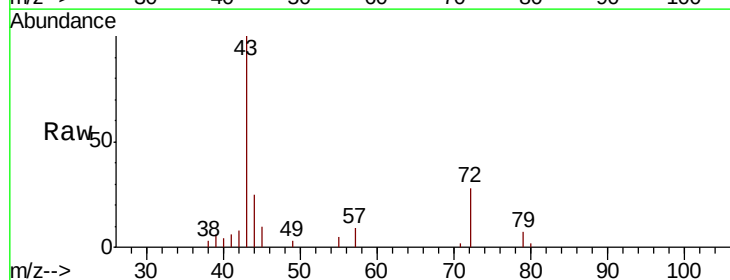
Acq: 12 Nov 2020 13:08

Tgt Ion: 43 Resp: 10443

Ion Ratio Lower Upper

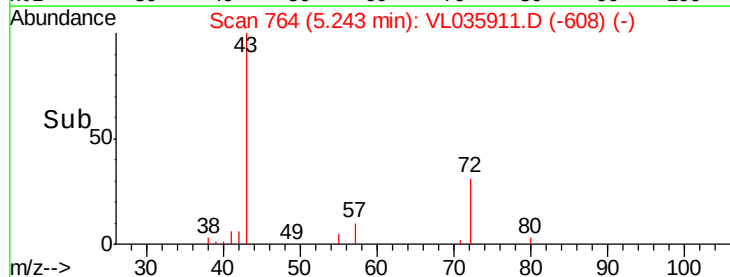
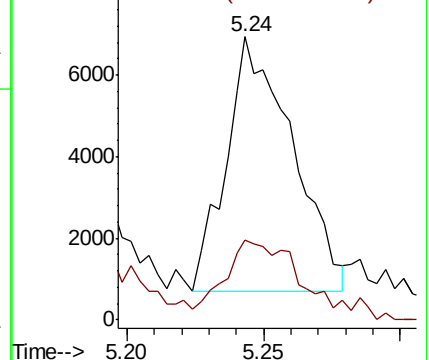
43 100

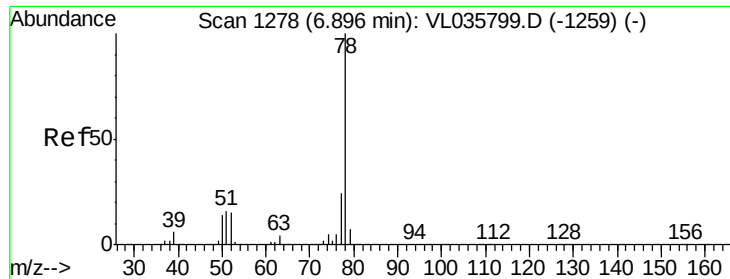
72 37.5 26.5 39.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.041 ppbv

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

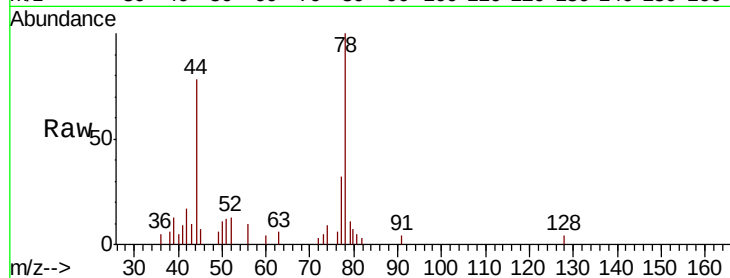
MSVOA_L

ClientSampleId :

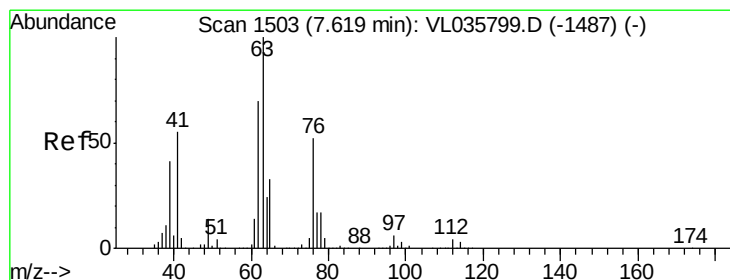
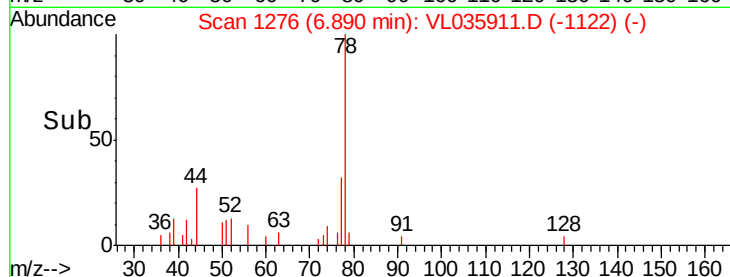
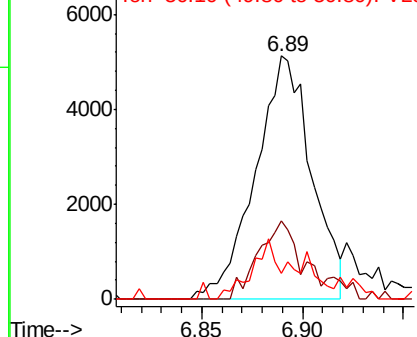
SSSG-2DL

Tot Ion: 78 Resp: 9934

Ion	Ratio	Lower	Upper
78	100		
77	32.3	19.3	28.9#
50	10.7	11.4	17.2#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 7.846 ppbv

RT: 7.18 min Scan# 1365

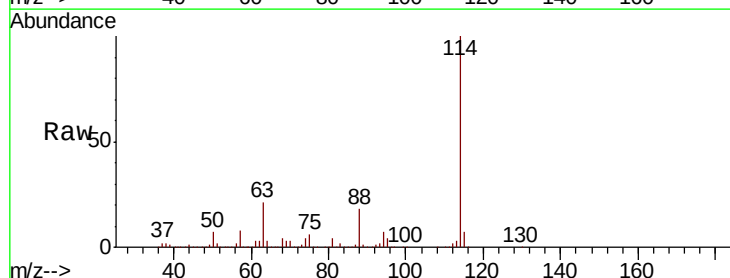
Delta R.T. -0.44 min

Lab File: VL035911.D

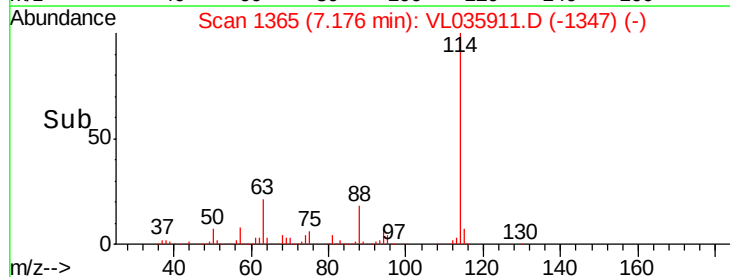
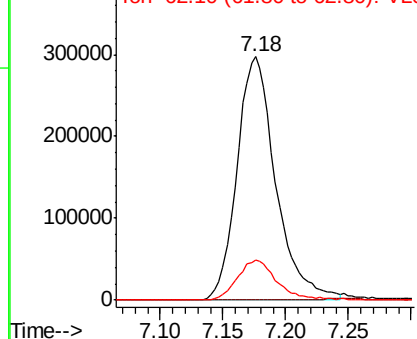
Acq: 12 Nov 2020 13:08

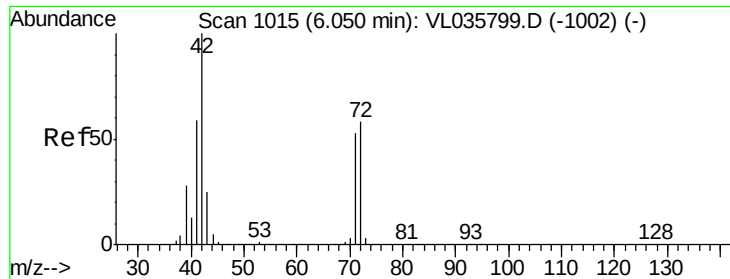
Tgt Ion: 63 Resp: 639181

Ion	Ratio	Lower	Upper
63	100		
41	0.0	43.8	65.6#
62	16.2	56.2	84.2#



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





#41

Tetrahydrofuran

Concen: 0.039 ppbv

RT: 5.73 min Scan# 914

Delta R.T. -0.32 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampled :

SSSG-2DL

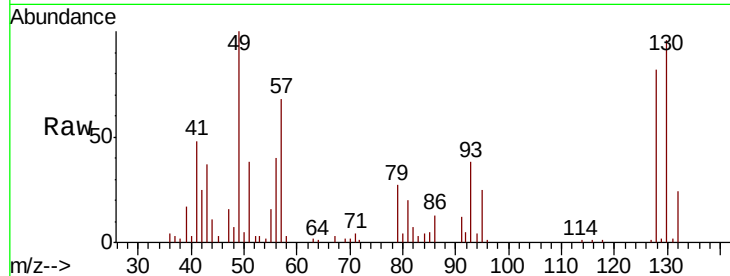
Tot Ion: 42 Resp: 2317

Ion Ratio Lower Upper

42 100

72 4.7 45.4 68.0#

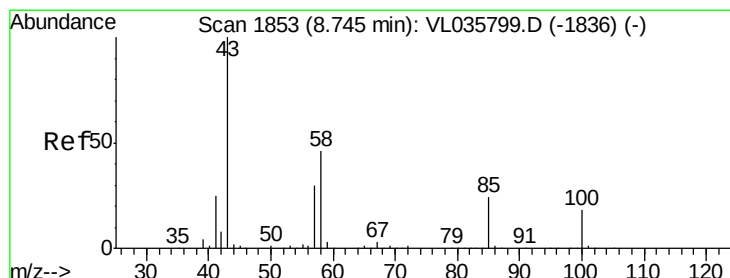
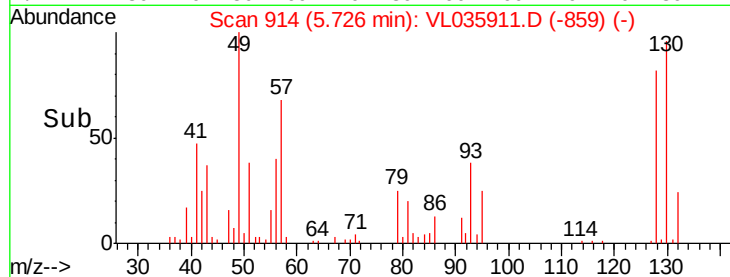
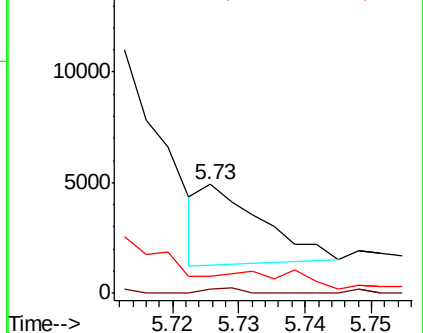
71 0.0 43.4 65.2#



Abundance Ion 42.10 (41.80 to 42.80): VL0

Ion 72.10 (71.80 to 72.80): VL0

Ion 71.10 (70.80 to 71.80): VL0



#50

4-Methyl-2-Pentanone

Concen: 0.049 ppbv

RT: 8.76 min Scan# 1857

Delta R.T. 0.01 min

Lab File: VL035911.D

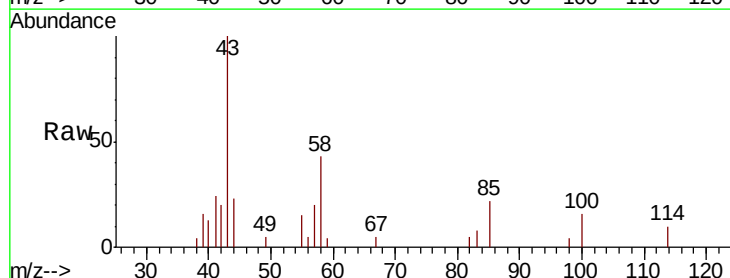
Acq: 12 Nov 2020 13:08

Tgt Ion: 43 Resp: 7901

Ion Ratio Lower Upper

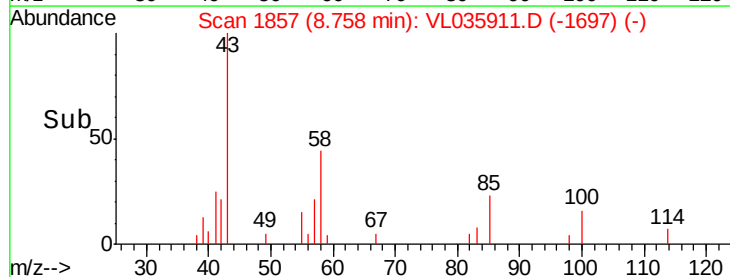
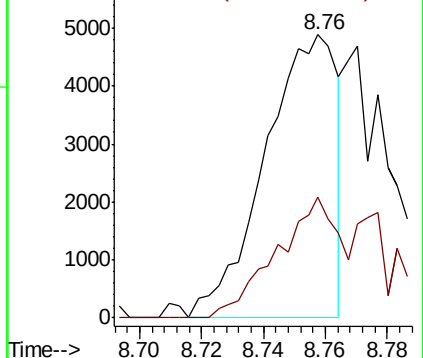
43 100

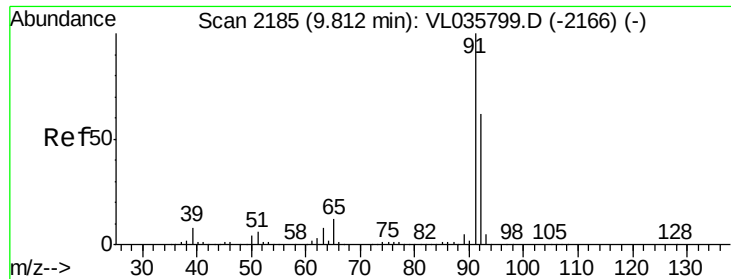
58 62.2 36.0 54.0#



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





#53

Toluene

Concen: 0.399 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

Instrument :

MSVOA_L

ClientSampleId :

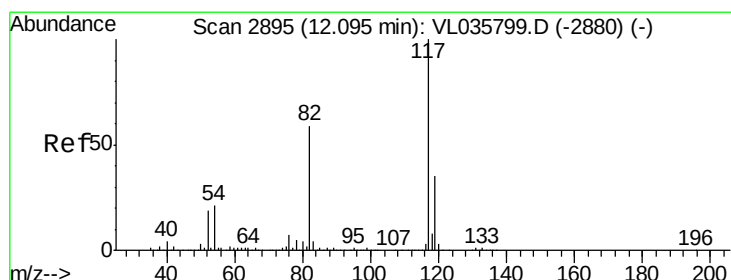
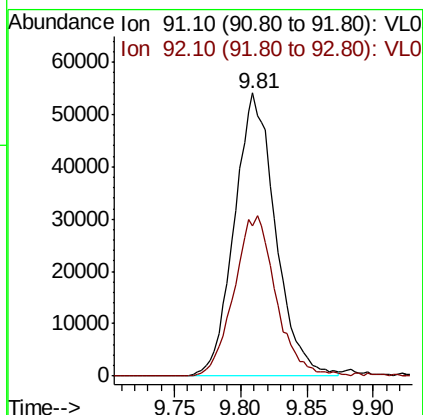
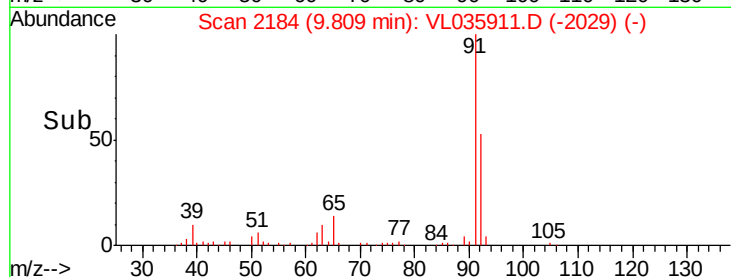
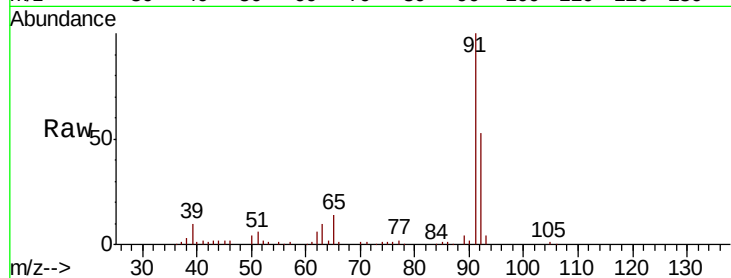
SSSG-2DL

Tot Ion: 91 Resp: 116524

Ion Ratio Lower Upper

91 100

92 57.5 49.8 74.6



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2894

Delta R.T. -0.00 min

Lab File: VL035911.D

Acq: 12 Nov 2020 13:08

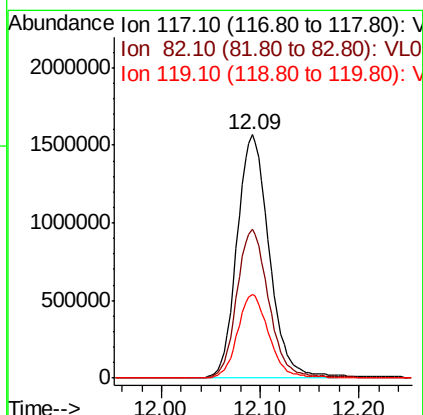
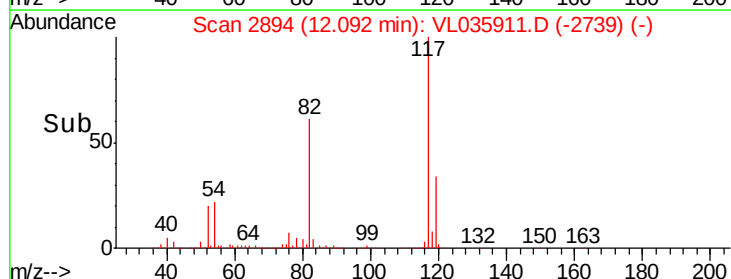
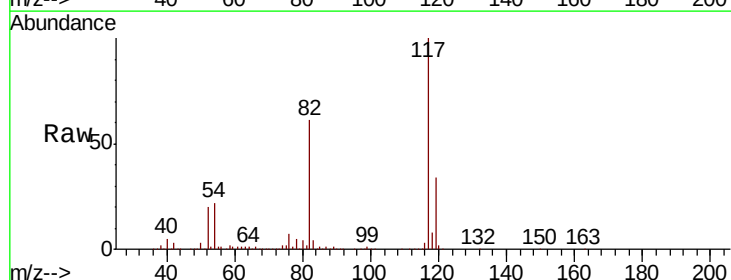
Tgt Ion: 117 Resp: 3547461

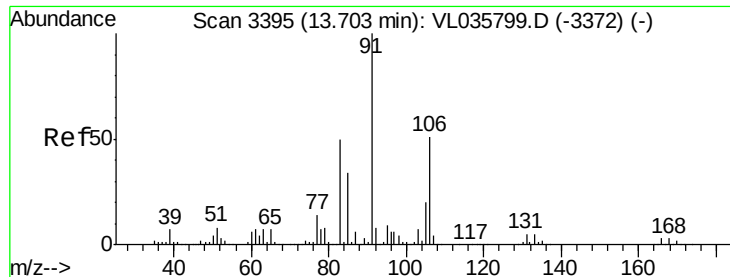
Ion Ratio Lower Upper

117 100

82 61.6 50.6 76.0

119 33.9 52.6 78.8#

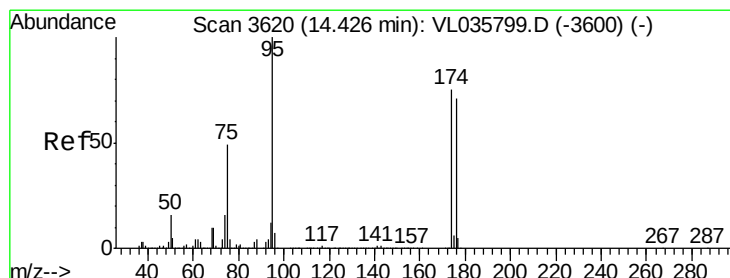
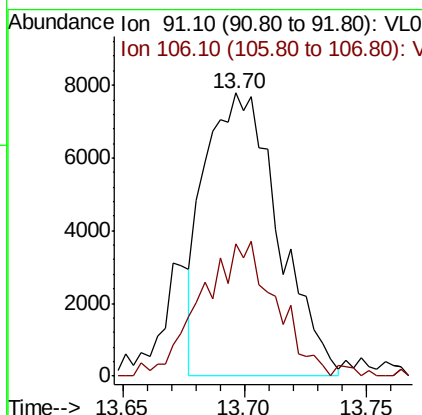
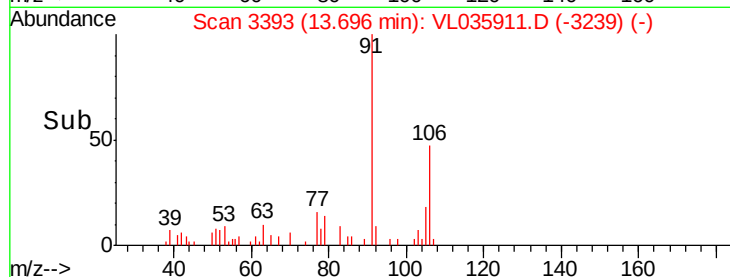
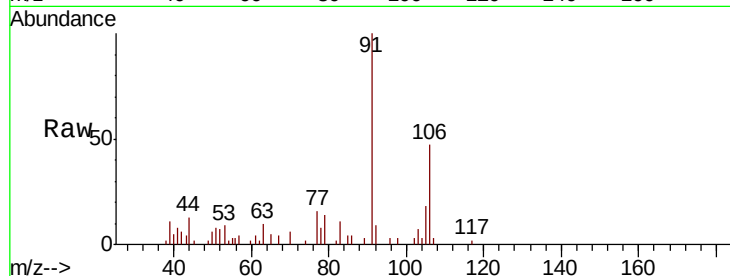




#60
o-Xylene
Concen: 0.046 ppbv
RT: 13.70 min Scan# 3393
Delta R.T. -0.01 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

Instrument :
MSVOA_L
ClientSampleId :
SSSG-2DL

Tot Ion: 91 Resp: 16292
Ion Ratio Lower Upper
91 100
106 48.9 24.8 74.4



#68
1-Bromo-4-Fluorobenzene
Concen: 10.433 ppbv
RT: 14.42 min Scan# 3619
Delta R.T. -0.00 min
Lab File: VL035911.D
Acq: 12 Nov 2020 13:08

Tgt Ion: 95 Resp: 2629513
Ion Ratio Lower Upper
95 100
174 71.5 59.8 89.6
175 5.1 4.3 6.5

