

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL110320\
 Data File : VL035812.D
 Acq On : 3 Nov 2020 20:42
 Operator : SY/AP
 Sample : L4604-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :

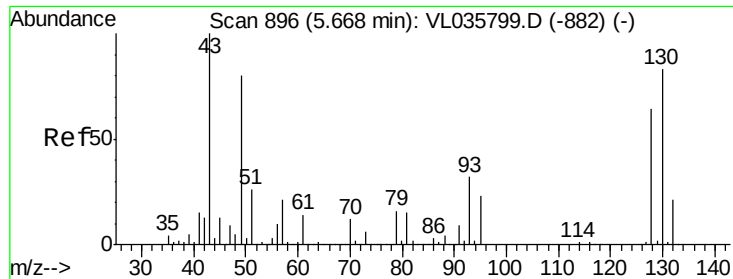
Quant Time: Nov 04 05:16:20 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04 02:40:06 2020
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1097484	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.15	114	5022492	10.00	ppbv	-0.03
55) Chlorobenzene-d5	12.07	117	4602756	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	3230646	9.88	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	98.80%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.03	85	61748	0.299	ppbv 97
3) Chlorodifluoromethane	2.97	51	47979	0.365	ppbv # 91
4) Chloromethane	3.12	50	26823	0.420	ppbv 97
9) Propene	3.00	41	40133	0.834	ppbv # 75
11) Trichlorofluoromethane	3.93	101	30786	0.119	ppbv 98
12) 1,1,2-Trichlorotrifluoroet	4.47	101	13520	0.070	ppbv 96
13) Ethanol	3.59	45	10697	1.025	ppbv # 35
15) Acetone	3.84	43	266321	2.270	ppbv # 88
16) 1,3-Butadiene	3.30	39	2318	0.046	ppbv # 69
19) Isopropyl Alcohol	3.97	45	14294	0.198	ppbv # 90
20) Methylene Chloride	4.33	84	108734	1.316	ppbv 94
21) Allyl Chloride	4.35	41	7489	0.118	ppbv # 49
23) Vinyl Acetate	5.04	43	23331	0.142	ppbv # 7
25) Ethyl Acetate	5.66	43	48040	0.208	ppbv # 77
26) Hexane	5.67	57	79686	0.625	ppbv # 47
34) 2-Butanone	5.24	43	26655	0.164	ppbv # 87
36) Benzene	6.87	78	70565	0.189	ppbv 96
39) 1,2-Dichloropropane	7.15	63	889034	7.072	ppbv # 30
44) 2,2,4-Trimethylpentane	7.84	57	69438	0.141	ppbv # 91
53) Toluene	9.78	91	277347	0.616	ppbv 99
60) o-Xylene	13.67	91	24910	0.054	ppbv 95

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 889

Delta R.T. -0.02 min

Lab File: VL035812.D

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MSVOA_L

ClientSampleId :

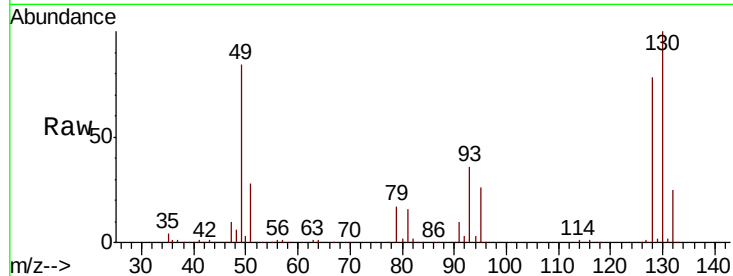
Tot Ion: 49 Resp: 1097484

Ion Ratio Lower Upper

49 100

128 93.5 41.5 124.6

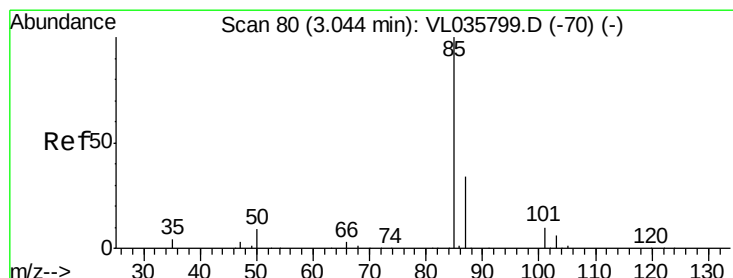
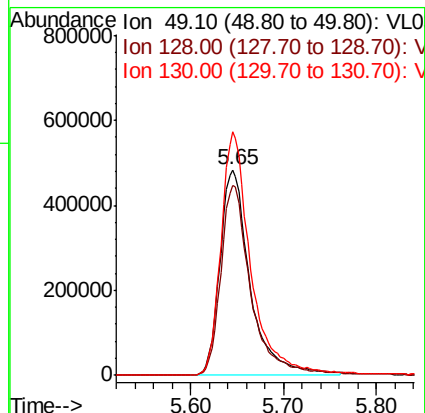
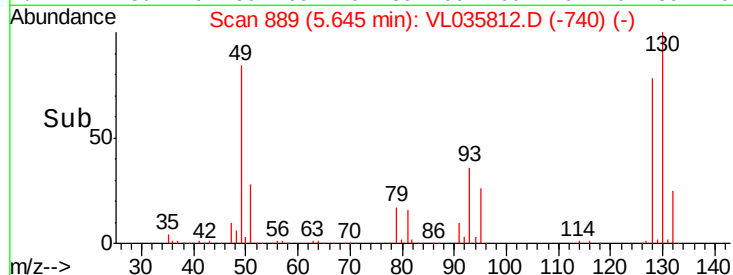
130 119.0 53.7 161.1



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: 0.299 ppbv

RT: 3.03 min Scan# 76

Delta R.T. -0.01 min

Lab File: VL035812.D

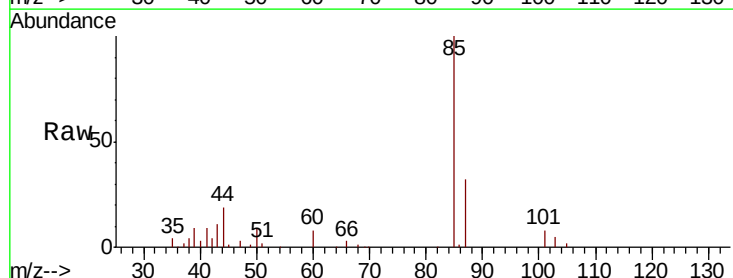
Acq: 3 Nov 2020 20:42

Tgt Ion: 85 Resp: 61748

Ion Ratio Lower Upper

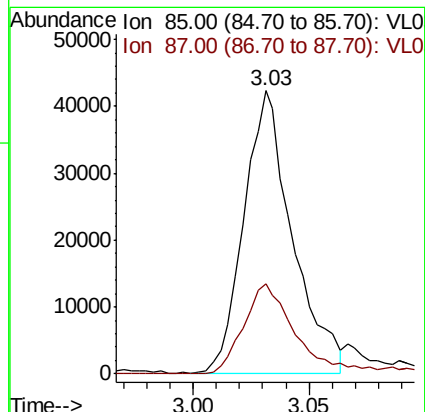
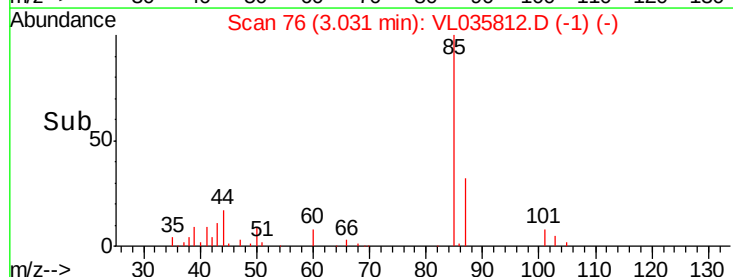
85 100

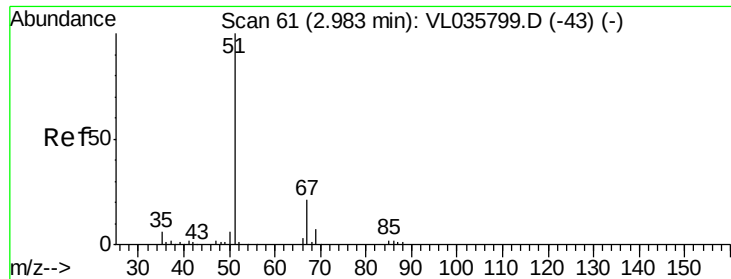
87 32.0 27.1 40.7



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.365 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.01 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

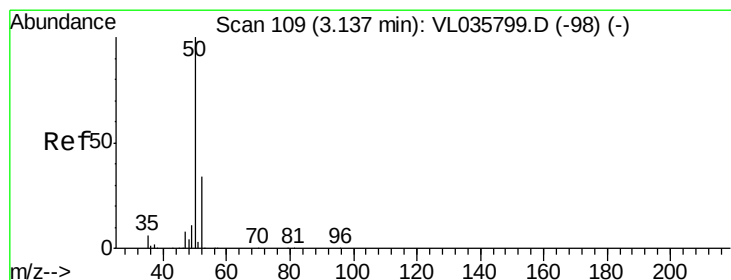
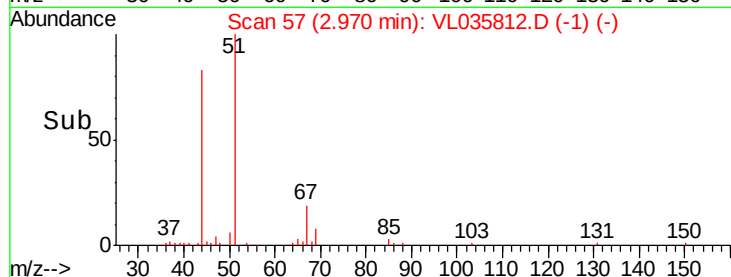
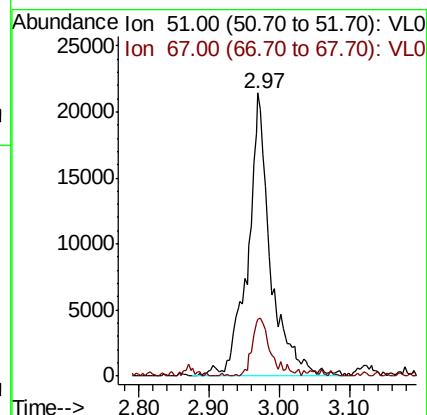
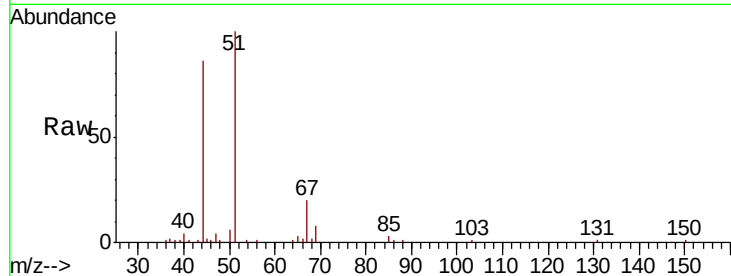
ClientSampleId :

Tot Ion: 51 Resp: 47979

Ion Ratio Lower Upper

51 100

67 16.9 17.0 25.4#



#4

Chloromethane

Concen: 0.420 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.02 min

Lab File: VL035812.D

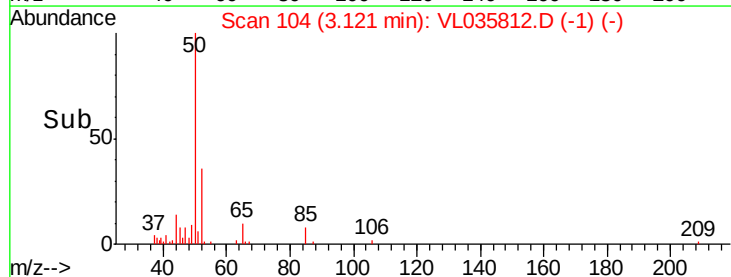
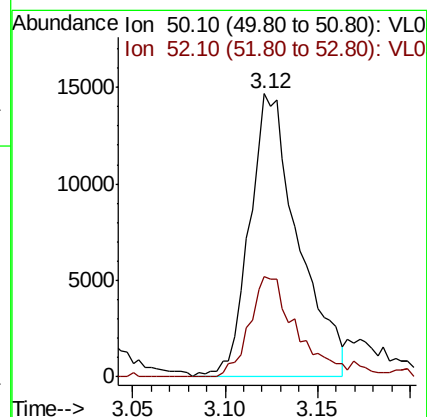
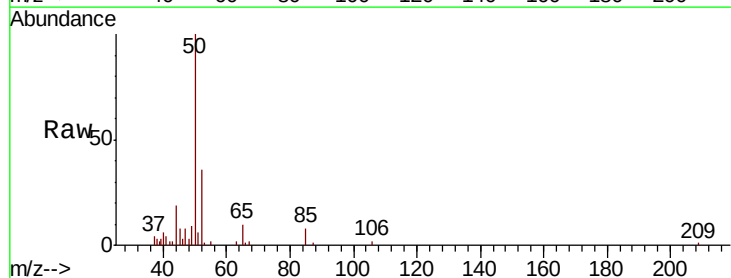
Acq: 3 Nov 2020 20:42

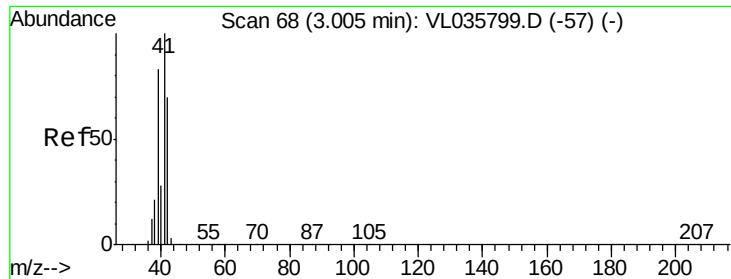
Tgt Ion: 50 Resp: 26823

Ion Ratio Lower Upper

50 100

52 35.7 27.1 40.7





#9

Propene

Concen: 0.834 ppbv

RT: 3.00 min Scan# 66

Delta R.T. -0.01 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

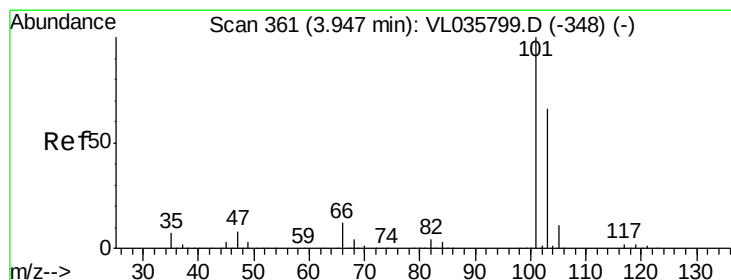
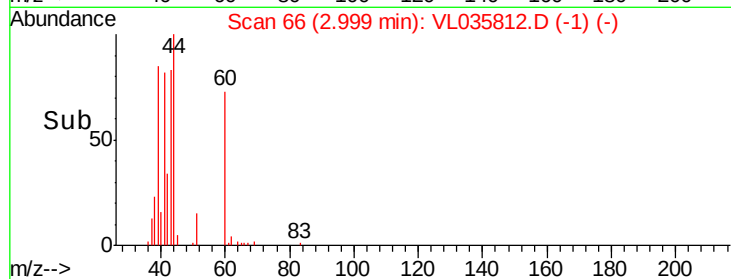
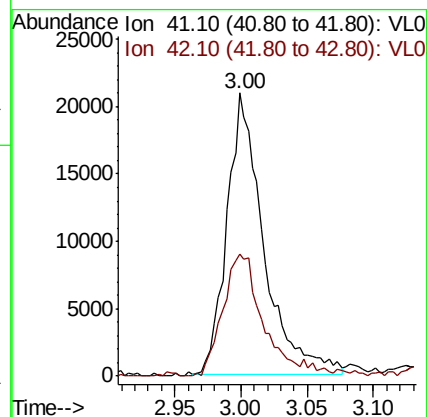
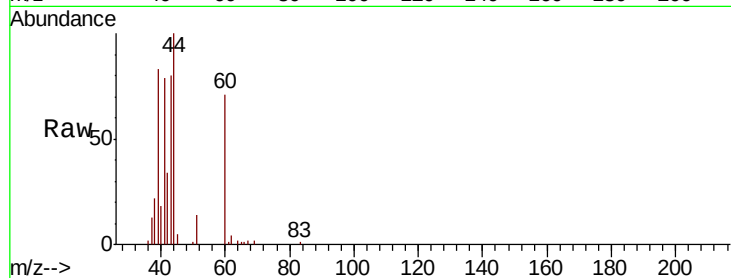
ClientSampleId :

Tot Ion: 41 Resp: 40133

Ion Ratio Lower Upper

41 100

42 50.1 56.2 84.4#



#11

Trichlorofluoromethane

Concen: 0.119 ppbv

RT: 3.93 min Scan# 357

Delta R.T. -0.01 min

Lab File: VL035812.D

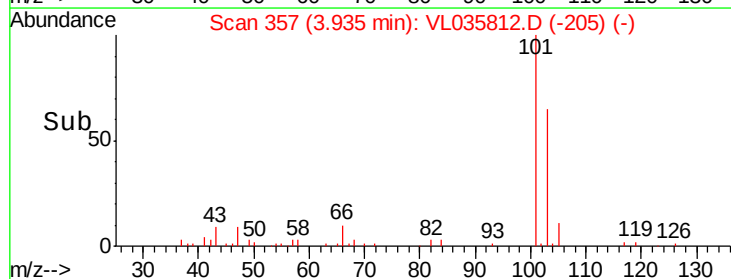
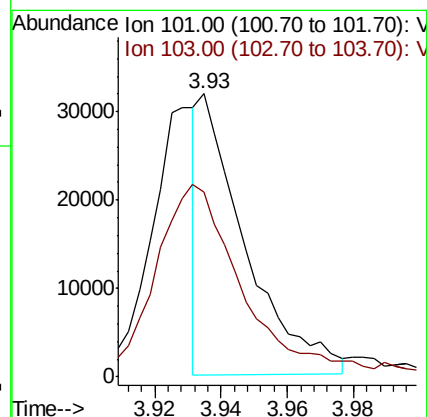
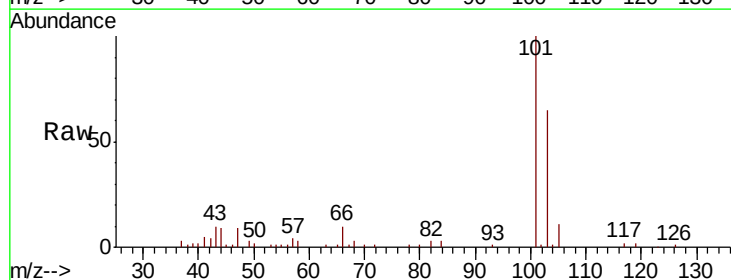
Acq: 3 Nov 2020 20:42

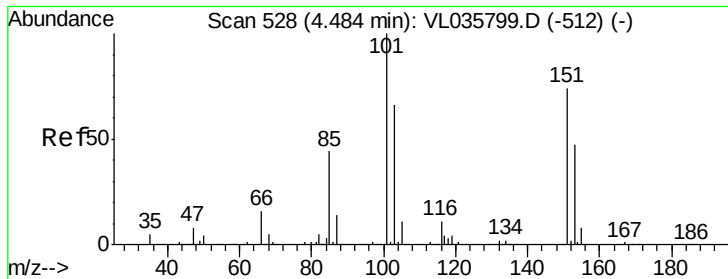
Tgt Ion: 101 Resp: 30786

Ion Ratio Lower Upper

101 100

103 64.2 53.0 79.4





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.070 ppbv

RT: 4.47 min Scan# 522

Delta R.T. -0.02 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

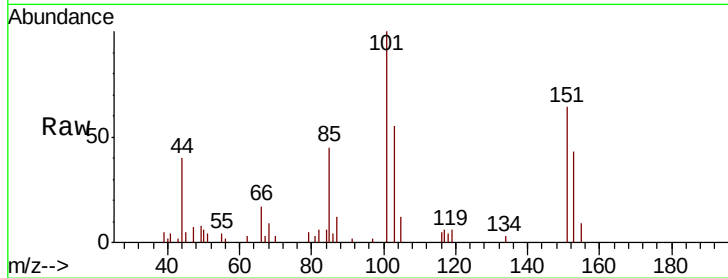
ClientSampled :

Tot Ion:101 Resp: 13520

Ion Ratio Lower Upper

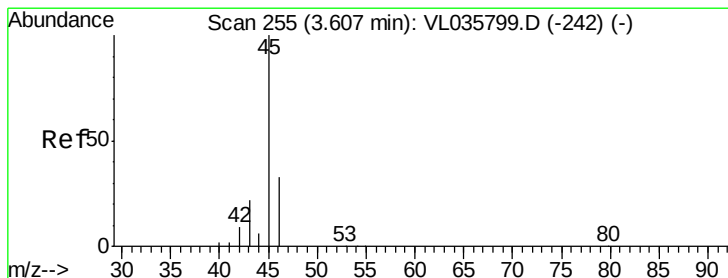
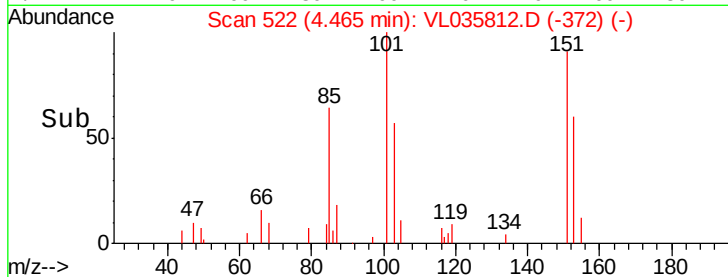
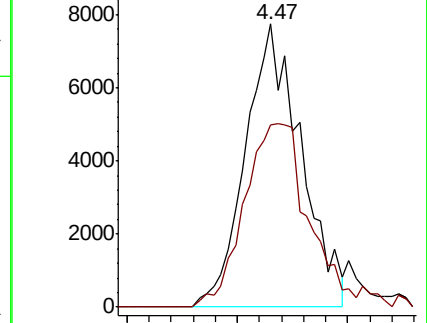
101 100

151 76.9 58.9 88.3



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V



#13

Ethanol

Concen: 1.025 ppbv

RT: 3.59 min Scan# 250

Delta R.T. -0.02 min

Lab File: VL035812.D

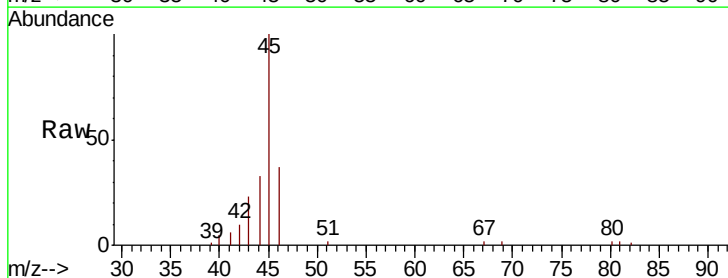
Acq: 3 Nov 2020 20:42

Tgt Ion: 45 Resp: 10697

Ion Ratio Lower Upper

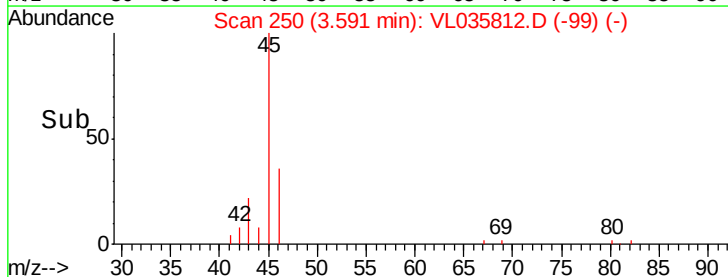
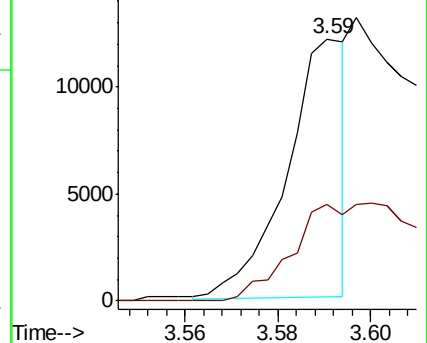
45 100

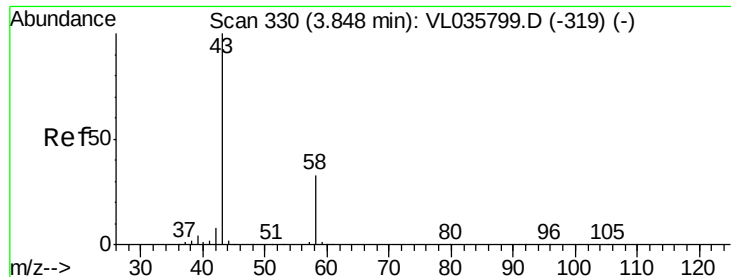
46 0.0 16.1 64.5#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 2.270 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.00 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

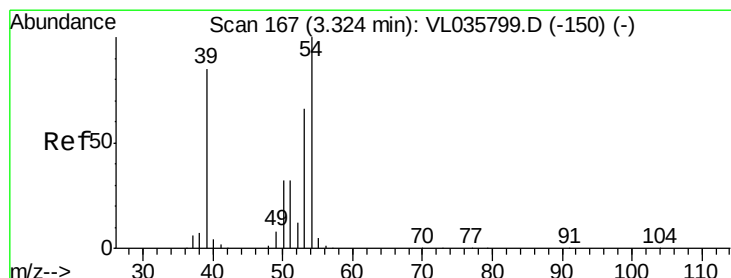
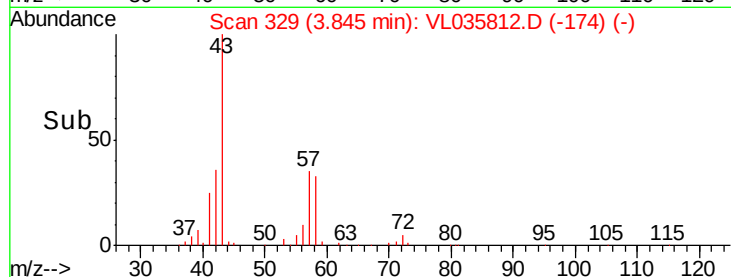
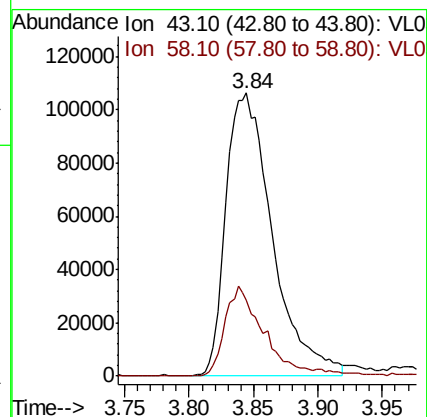
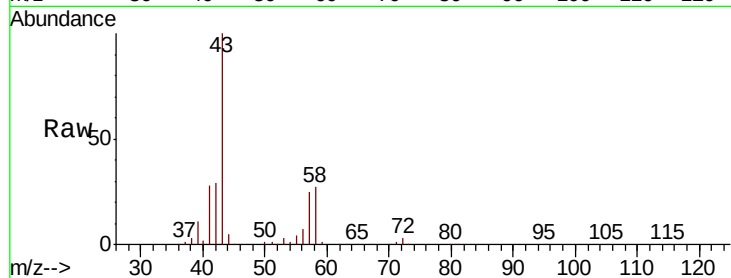
ClientSampled :

Tot Ion: 43 Resp: 266321

Ion Ratio Lower Upper

43 100

58 27.4 27.5 41.3#



#16

1,3-Butadiene

Concen: 0.046 ppbv

RT: 3.30 min Scan# 159

Delta R.T. -0.03 min

Lab File: VL035812.D

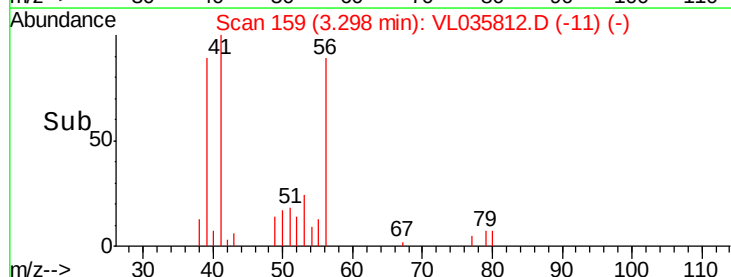
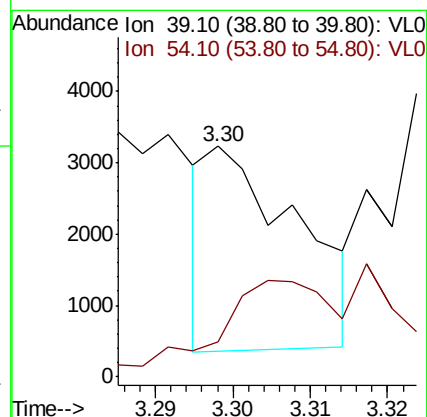
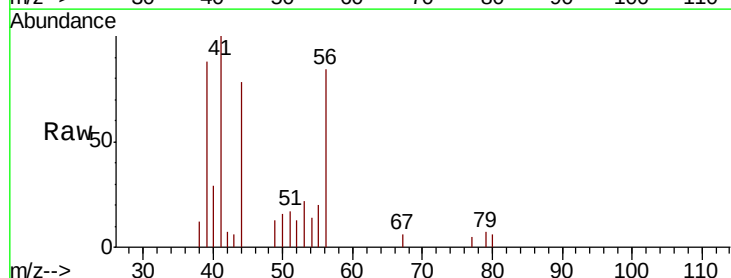
Acq: 3 Nov 2020 20:42

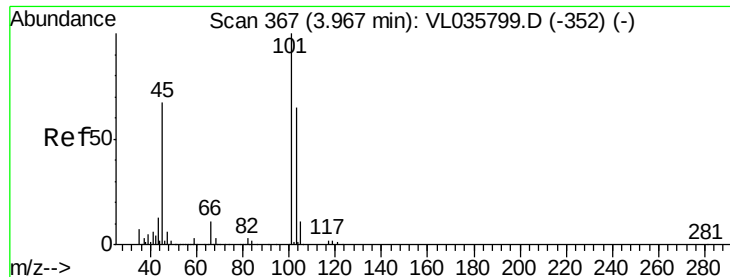
Tgt Ion: 39 Resp: 2318

Ion Ratio Lower Upper

39 100

54 141.1 87.1 130.7#





#19

Isopropyl Alcohol

Concen: 0.198 ppbv

RT: 3.97 min Scan# 368

Delta R.T. 0.00 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

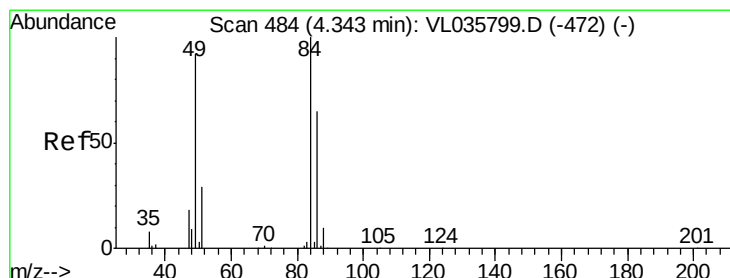
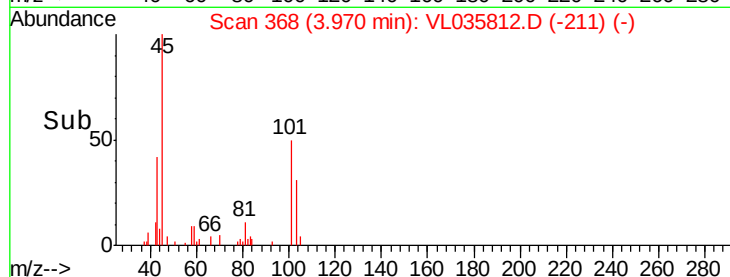
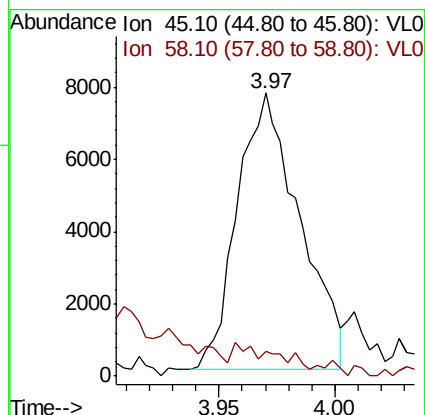
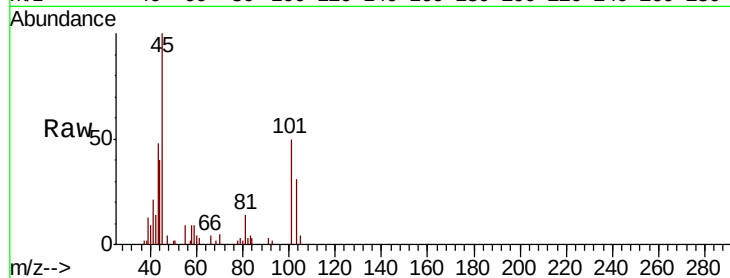
ClientSampleId :

Tot Ion: 45 Resp: 14294

Ion Ratio Lower Upper

45 100

58 0.0 2.6 3.8#



#20

Methylene Chloride

Concen: 1.316 ppbv

RT: 4.33 min Scan# 479

Delta R.T. -0.02 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Tgt Ion: 84 Resp: 108734

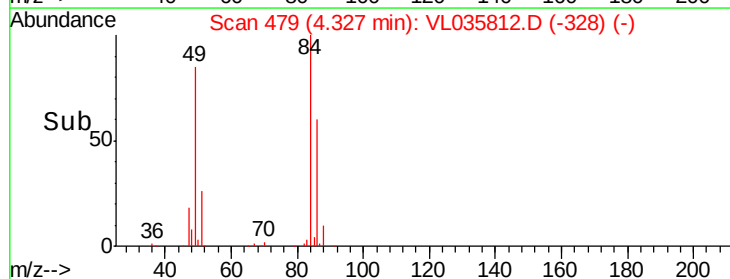
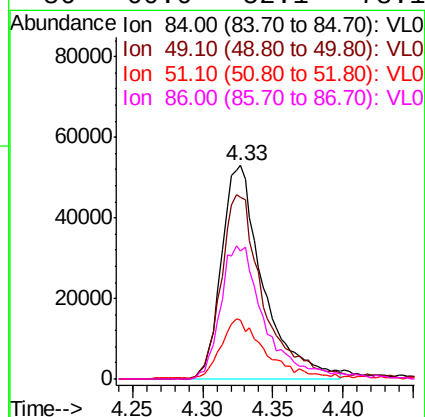
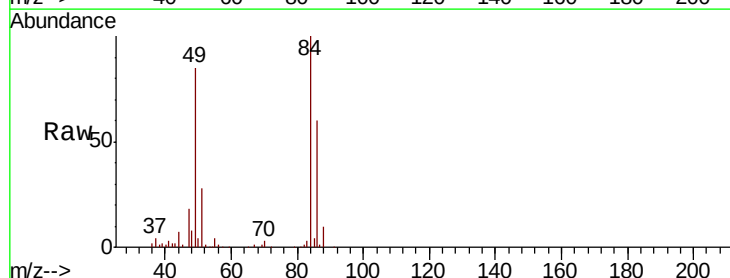
Ion Ratio Lower Upper

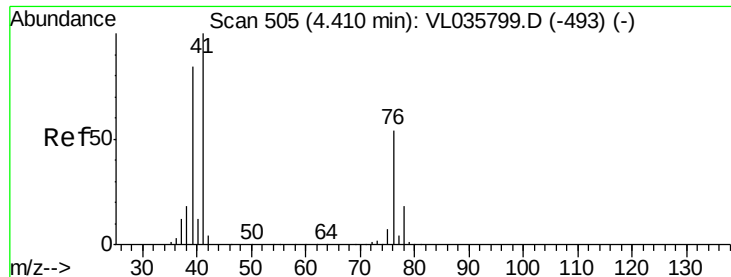
84 100

49 84.9 73.8 110.8

51 27.5 23.0 34.4

86 60.0 52.1 78.1





#21

Allvl Chloride

Concen: 0.118 ppbv

RT: 4.35 min Scan# 486

Delta R.T. -0.06 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :
MSVOA_L
ClientSampleId :

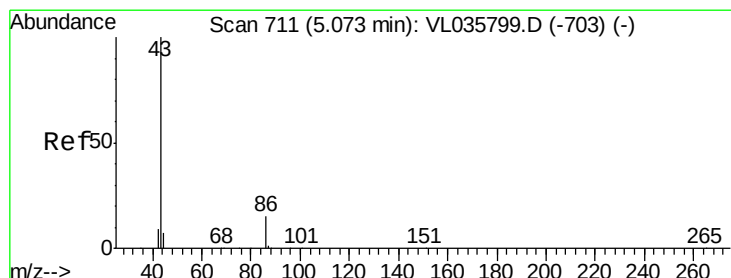
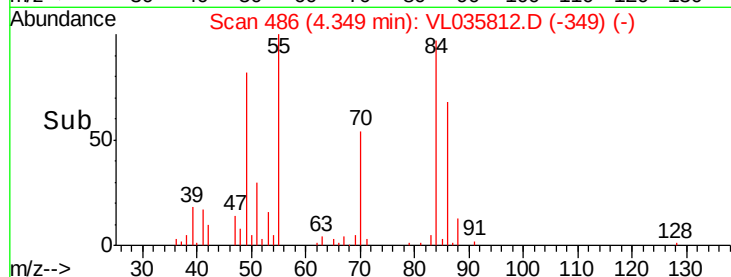
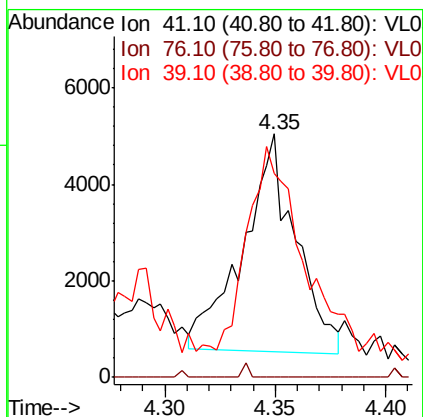
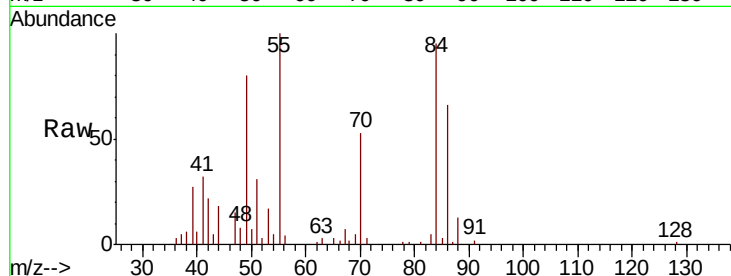
Tot Ion: 41 Resp: 7489

Ion Ratio Lower Upper

41 100

76 0.0 42.6 63.8#

39 116.9 67.0 100.4#



#23

Vinyl Acetate

Concen: 0.142 ppbv

RT: 5.04 min Scan# 700

Delta R.T. -0.04 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Tgt Ion: 43 Resp: 23331

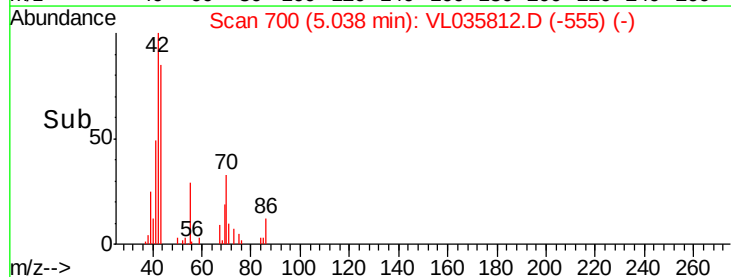
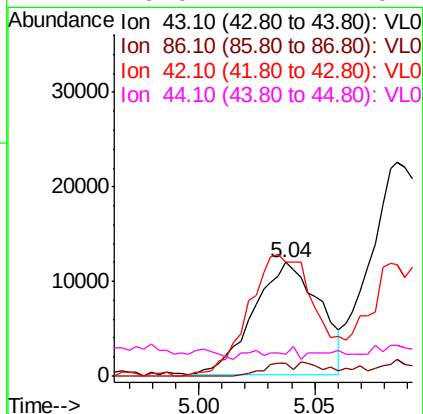
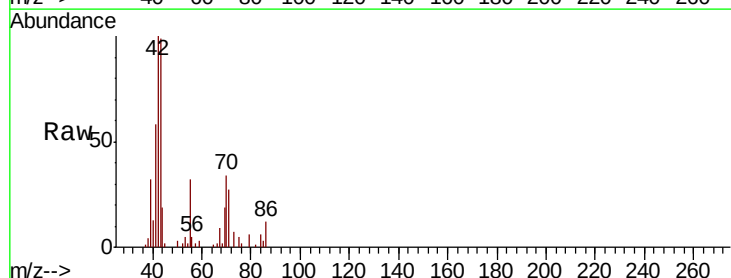
Ion Ratio Lower Upper

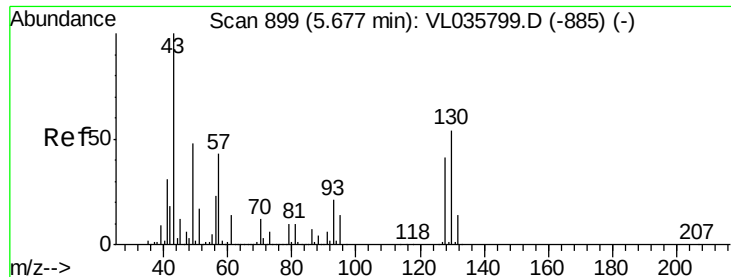
43 100

86 11.8 9.8 14.6

42 100.5 8.1 12.1#

44 0.0 4.2 6.4#

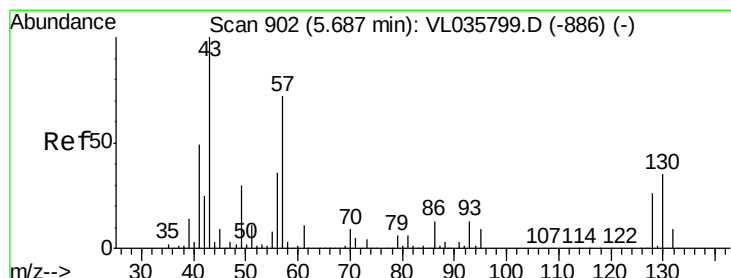
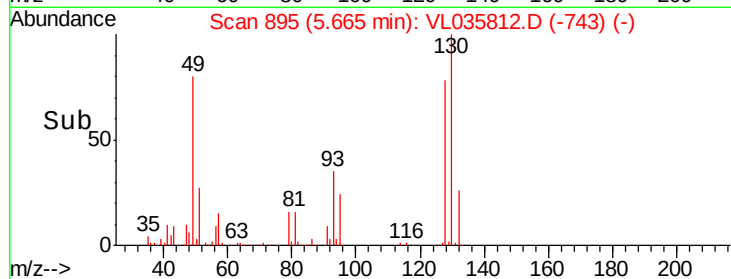
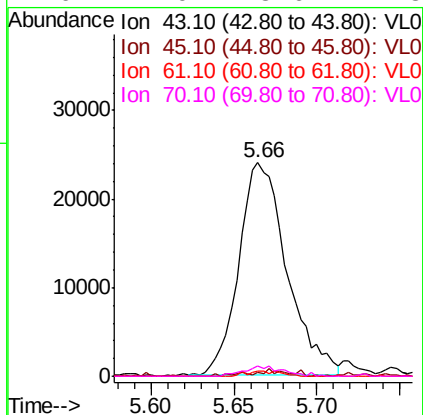
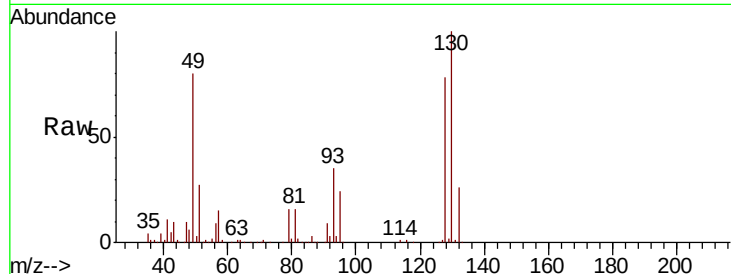




#25
Ethyl Acetate
Concen: 0.208 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.01 min
Lab File: VL035812.D
Acq: 3 Nov 2020 20:42

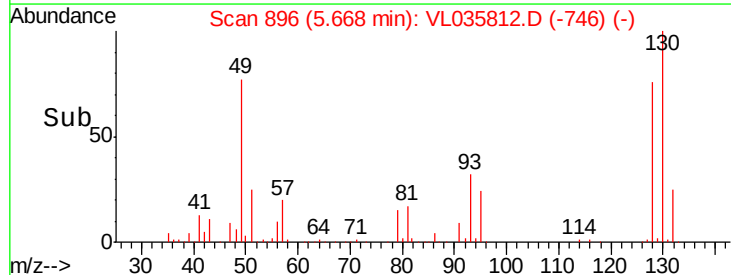
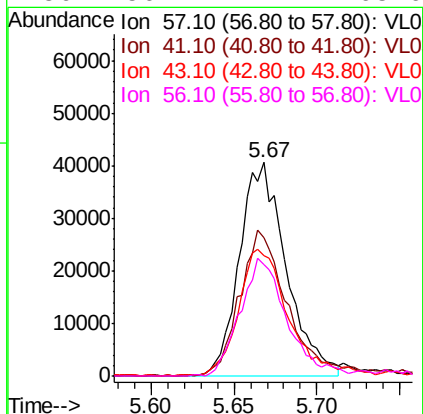
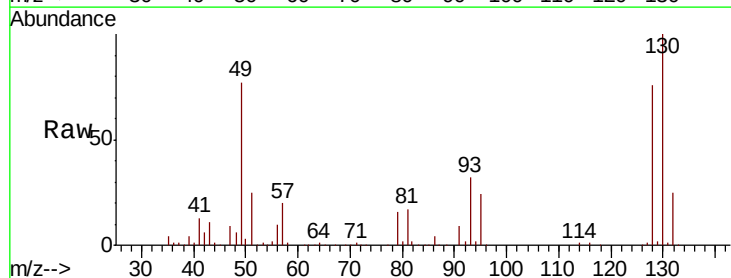
Instrument :
MSVOA_L
ClientSampleId :

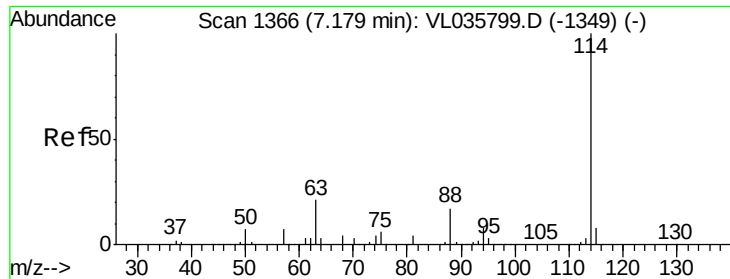
Tot Ion: 43 Resp: 48040
Ion Ratio Lower Upper
43 100
45 2.5 8.5 12.7#
61 1.9 10.7 16.1#
70 4.0 8.6 12.8#



#26
Hexane
Concen: 0.625 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.02 min
Lab File: VL035812.D
Acq: 3 Nov 2020 20:42

Tgt Ion: 57 Resp: 79686
Ion Ratio Lower Upper
57 100
41 72.5 58.9 88.3
43 62.3 150.2 225.2#
56 56.4 42.4 63.6

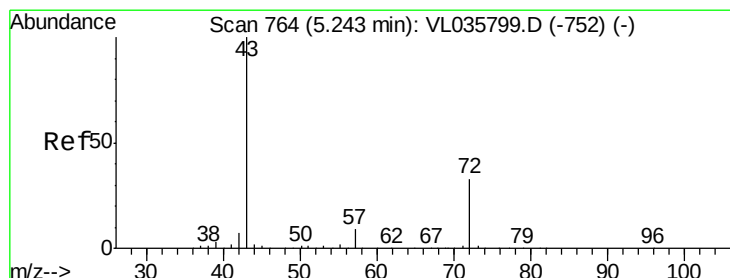
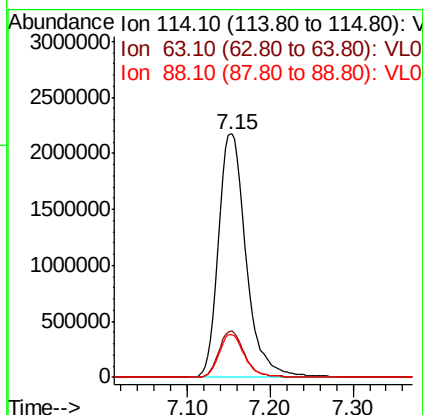
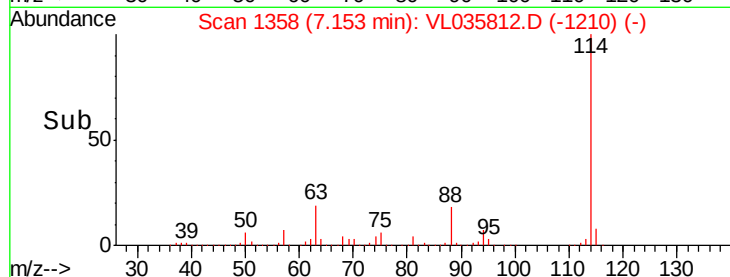
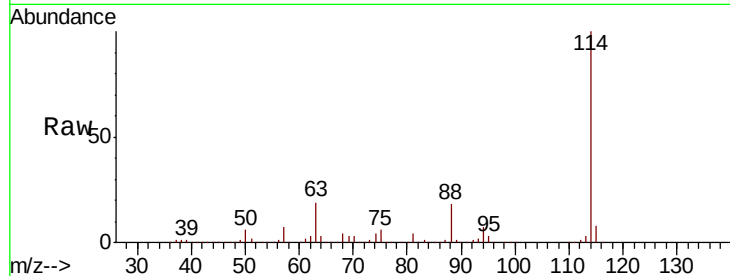




#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.15 min Scan# 1358
 Delta R.T. -0.03 min
 Lab File: VL035812.D
 Acq: 3 Nov 2020 20:42

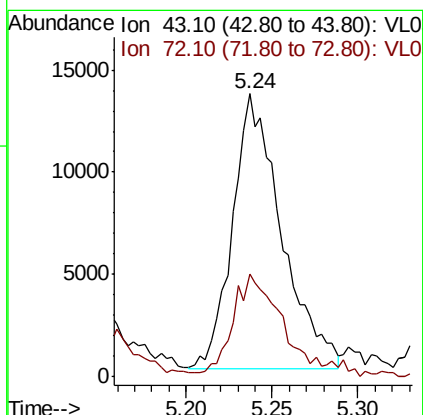
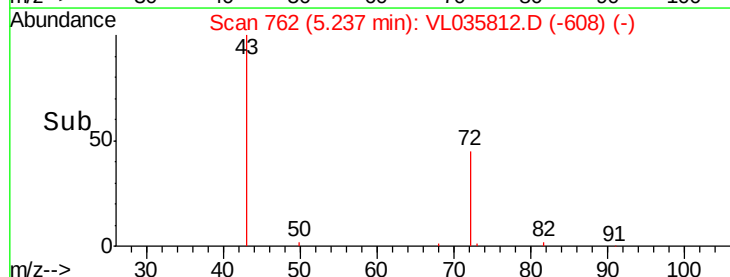
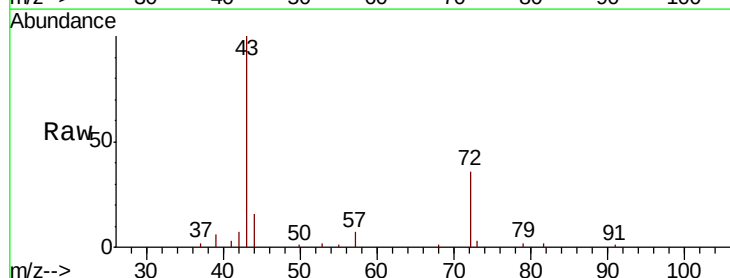
Instrument :
 MSVOA_L
 ClientSampled :

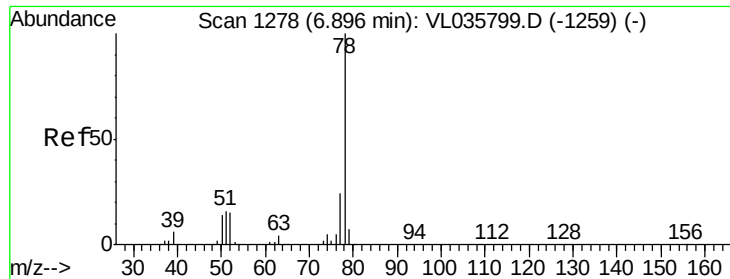
Tot Ion:114 Resp: 5022492
 Ion Ratio Lower Upper
 114 100
 63 18.0 16.1 24.1
 88 16.7 13.7 20.5



#34
 2-Butanone
 Concen: 0.164 ppbv
 RT: 5.24 min Scan# 762
 Delta R.T. -0.01 min
 Lab File: VL035812.D
 Acq: 3 Nov 2020 20:42

Tgt Ion: 43 Resp: 26655
 Ion Ratio Lower Upper
 43 100
 72 40.3 26.5 39.7#





#36

Benzene

Concen: 0.189 ppbv

RT: 6.87 min Scan# 1269

Delta R.T. -0.03 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

ClientSampleId :

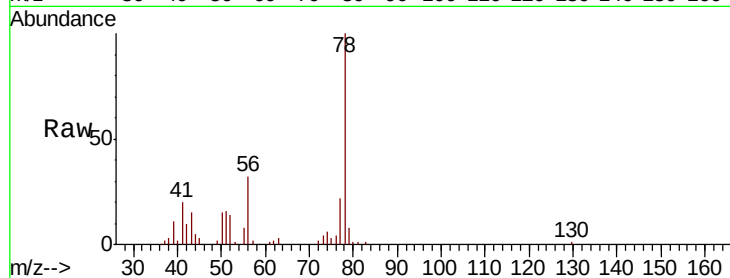
Tot Ion: 78 Resp: 70565

Ion Ratio Lower Upper

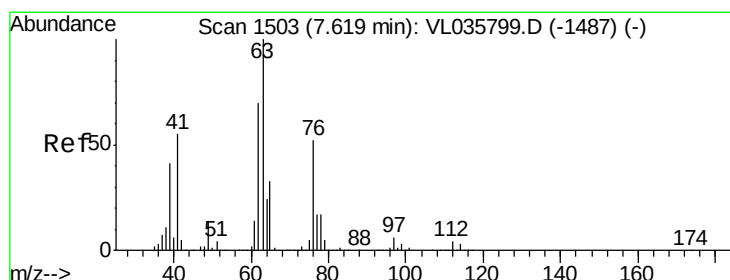
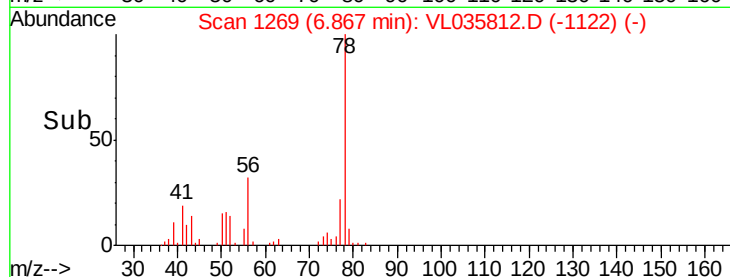
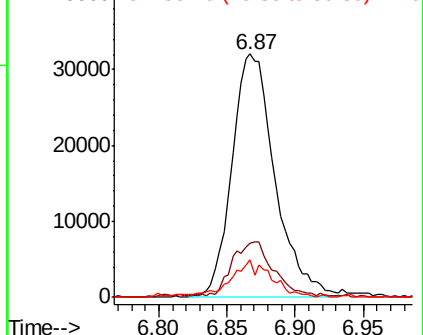
78 100

77 21.7 19.3 28.9

50 15.4 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: 7.072 ppbv

RT: 7.15 min Scan# 1358

Delta R.T. -0.47 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

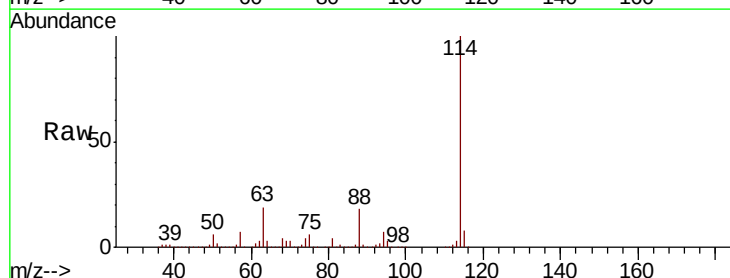
Tgt Ion: 63 Resp: 889034

Ion Ratio Lower Upper

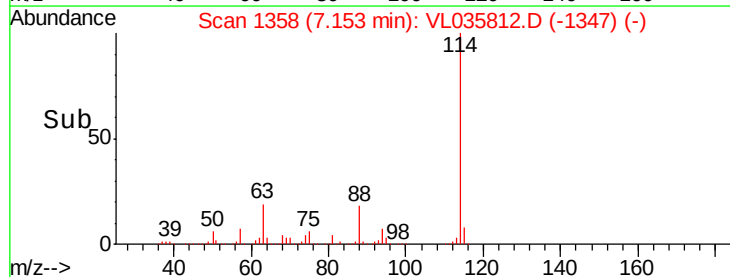
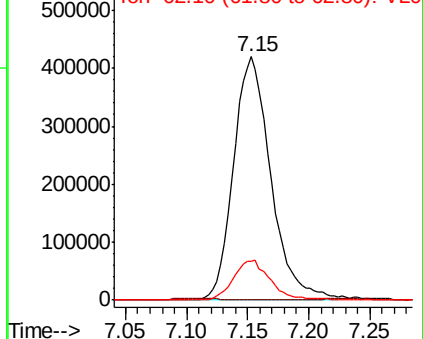
63 100

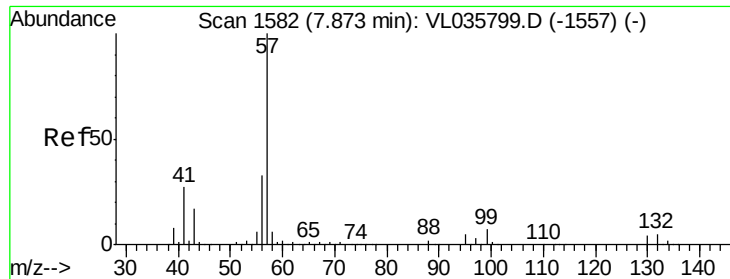
41 0.0 43.8 65.6#

62 15.9 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

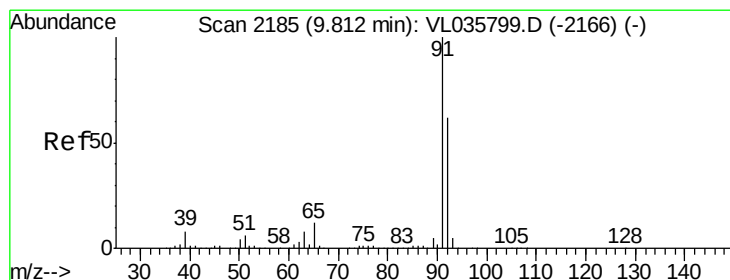
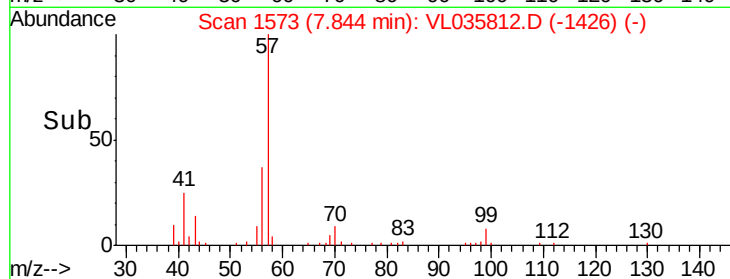
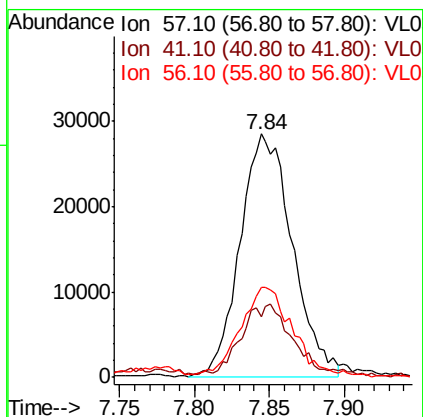
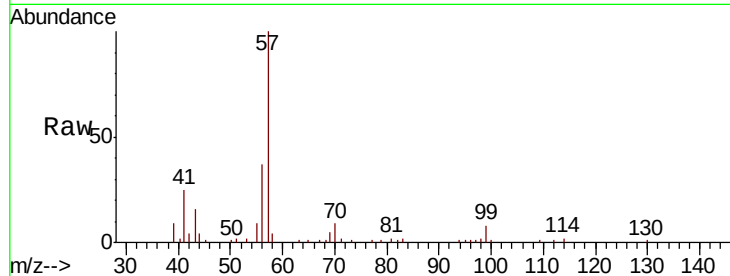




#44
 2,2,4-Trimethylpentane
 Concen: 0.141 ppbv
 RT: 7.84 min Scan# 1573
 Delta R.T. -0.03 min
 Lab File: VL035812.D
 Acq: 3 Nov 2020 20:42

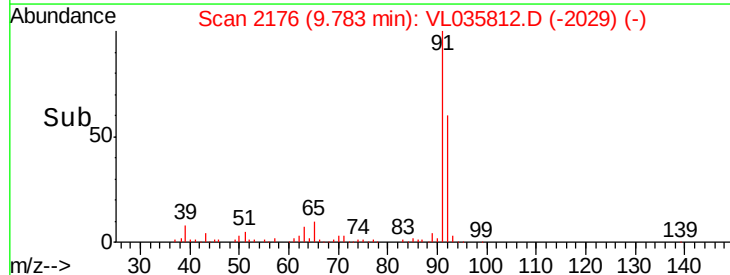
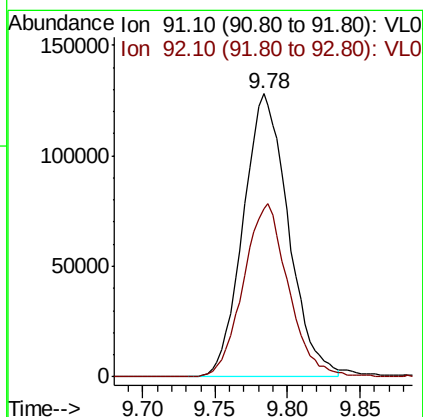
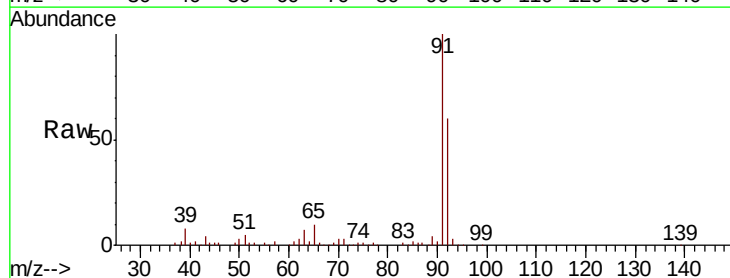
Instrument :
 MSVOA_L
 ClientSampleId :

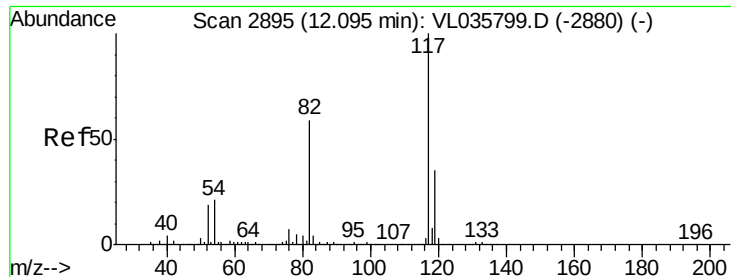
Tot Ion	57.10 (56.80 to 57.80): VL0	Resp	69438
Ion Ratio	Lower	Upper	
57	100		
41	28.9	21.0	31.4
56	38.2	25.4	38.0#



#53
 Toluene
 Concen: 0.616 ppbv
 RT: 9.78 min Scan# 2176
 Delta R.T. -0.03 min
 Lab File: VL035812.D
 Acq: 3 Nov 2020 20:42

Tgt Ion	91.10 (90.80 to 91.80): VL0	Resp	277347
Ion Ratio	Lower	Upper	
91	100		
92	61.3	49.8	74.6

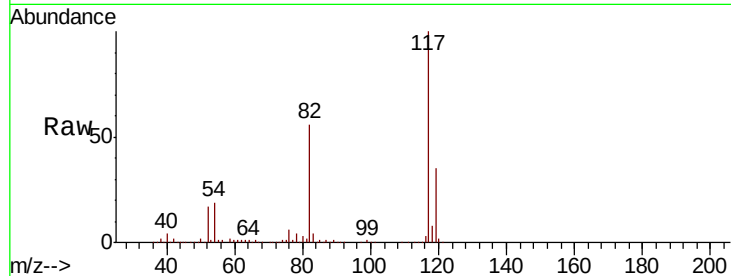




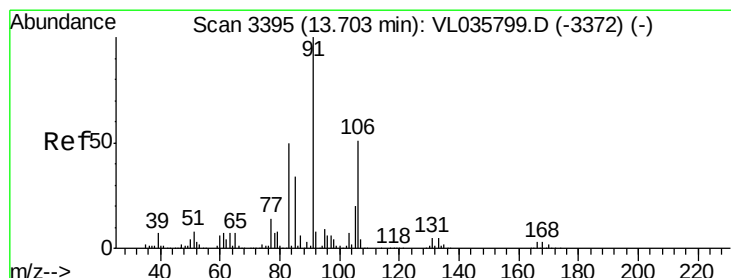
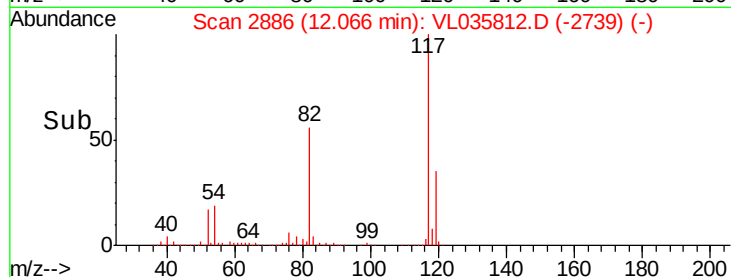
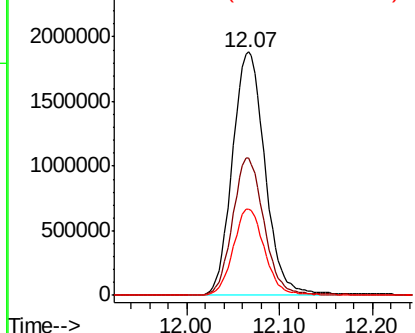
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. -0.03 min
Lab File: VL035812.D
Acq: 3 Nov 2020 20:42

Instrument :
MSVOA_L
ClientSampleId :

Tot Ion:117 Resp: 4602756
Ion Ratio Lower Upper
117 100
82 55.3 50.6 76.0
119 34.6 52.6 78.8#

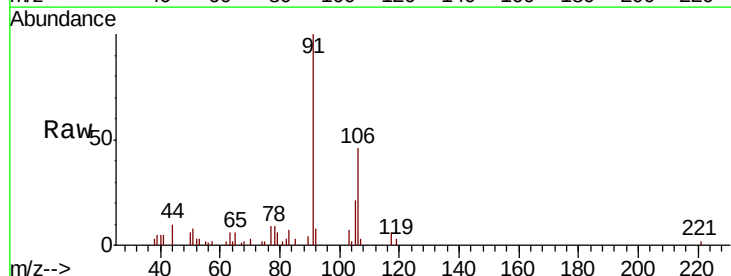


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

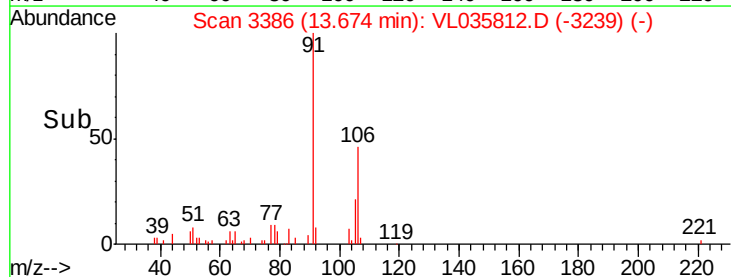
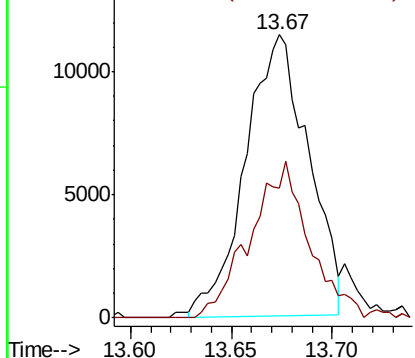


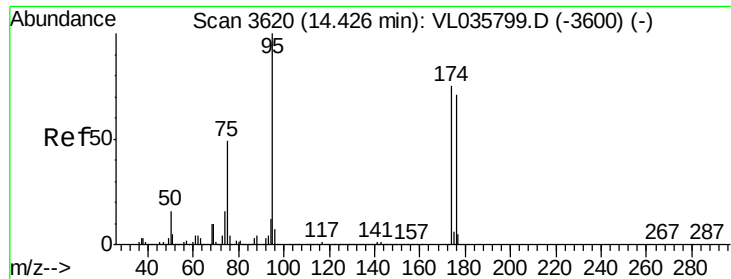
#60
o-Xylene
Concen: 0.054 ppbv
RT: 13.67 min Scan# 3386
Delta R.T. -0.03 min
Lab File: VL035812.D
Acq: 3 Nov 2020 20:42

Tgt Ion: 91 Resp: 24910
Ion Ratio Lower Upper
91 100
106 52.9 24.8 74.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





#68

1-Bromo-4-Fluorobenzene

Concen: 9.879 ppbv

RT: 14.40 min Scan# 3611

Delta R.T. -0.03 min

Lab File: VL035812.D

Acq: 3 Nov 2020 20:42

Instrument :

MSVOA_L

ClientSampleId :

Tot Ion: 95 Resp: 3230646

Ion Ratio Lower Upper

95 100

174 77.3 59.8 89.6

175 5.5 4.3 6.5

