

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL111418\
 Data File : VL032766.D
 Acq On : 14 Nov 2018 19:45
 Operator : SY/AP
 Sample : J5896-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA2

Manual Integrations
 APPROVED

MMDadoda
 11/16/2018 1:30:11 PM

Quant Time: Nov 15 06:54:39 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 14 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1394237	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3466080	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3063873	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.58	95	2285980	9.98	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	102675	0.512	ppbv	98
4) Chloromethane	3.17	50	32687	0.533	ppbv	98
9) Propene	3.05	41	91673m	2.072	ppbv	
10) Heptane	8.25	43	30922m	0.183	ppbv	
11) Trichlorofluoromethane	4.01	101	48539	0.257	ppbv	92
13) Ethanol	3.68	45	8296147	572.598	ppbv	98
15) Acetone	3.90	43	1154979m	9.071	ppbv	
20) Methylene Chloride	4.41	84	415019	6.296	ppbv	94
26) Hexane	5.79	57	392665	2.972	ppbv #	44
29) Chloroform	5.85	83	145597	0.618	ppbv	92
34) 2-Butanone	5.34	43	146085	0.813	ppbv	99
35) Carbon Tetrachloride	7.14	117	19375m	0.070	ppbv	
36) Benzene	7.01	78	127683	0.463	ppbv	95
41) Tetrahydrofuran	6.17	42	36003m	0.349	ppbv	
44) 2,2,4-Trimethylpentane	8.00	57	100952m	0.219	ppbv	
52) Tetrachloroethene	11.38	164	198587	2.068	ppbv	95
53) Toluene	9.95	91	346366	1.203	ppbv	98
69) p-Isopropyltoluene	17.82	119	103101m	0.225	ppbv	

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

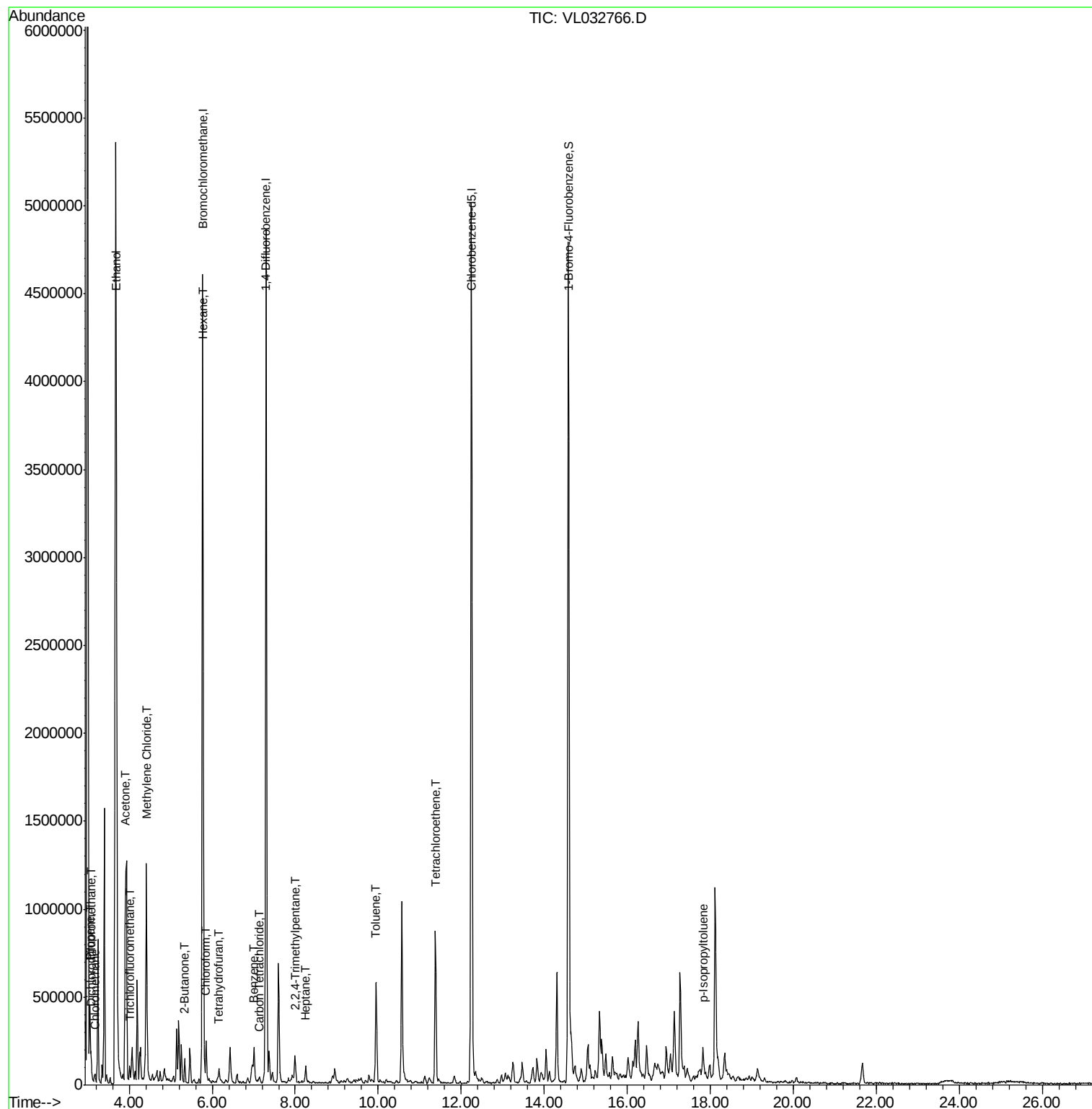
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL111418\
Data File : VL032766.D
Acq On : 14 Nov 2018 19:45
Operator : SY/AP
Sample : J5896-04
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

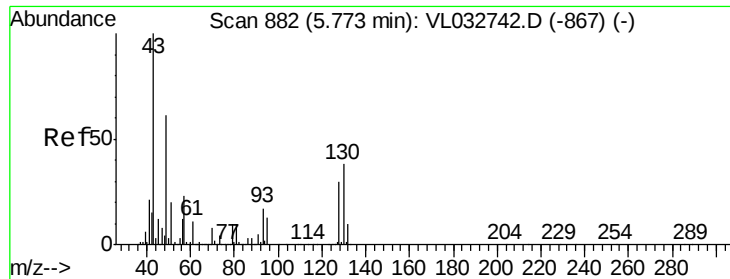
Instrument :
MSVOA_L
ClientSampleId :
IA2

Manual Integrations
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Quant Time: Nov 15 06:54:39 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.00 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

ClientSampleId :

IA2

Tot Ion: 49 Resp: 1394237

Ion Ratio Lower Upper

49 100

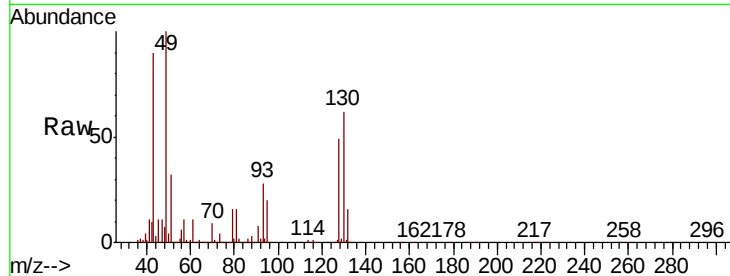
128 50.3 24.9 74.6

130 64.3 31.4 94.2

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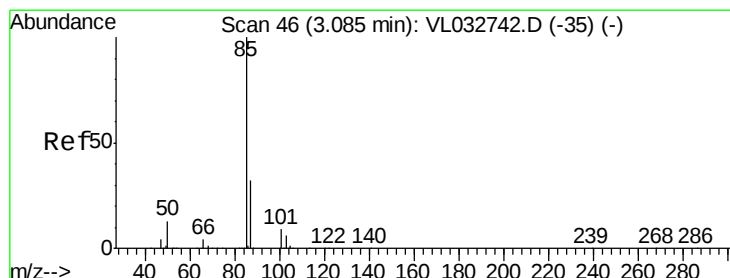
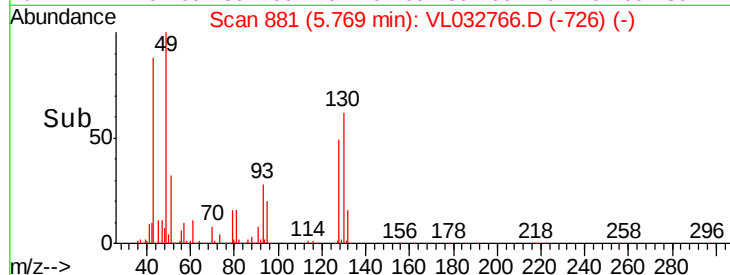
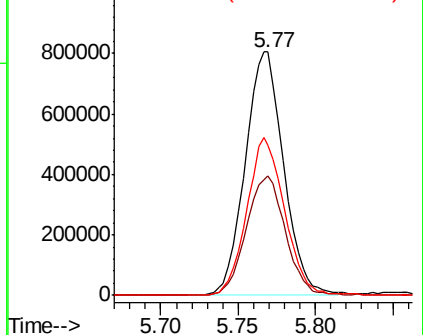
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.512 ppbv

RT: 3.08 min Scan# 45

Delta R.T. -0.00 min

Lab File: VL032766.D

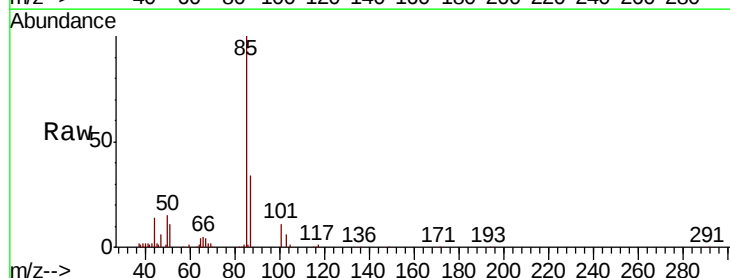
Acq: 14 Nov 2018 19:45

Tgt Ion: 85 Resp: 102675

Ion Ratio Lower Upper

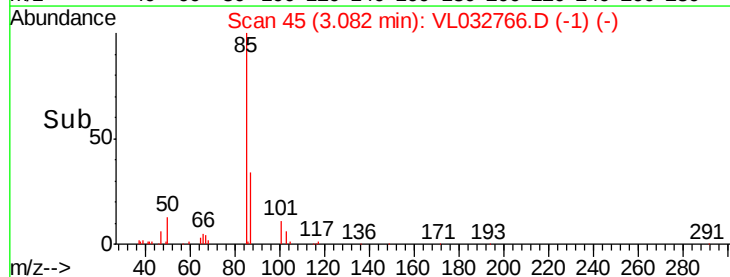
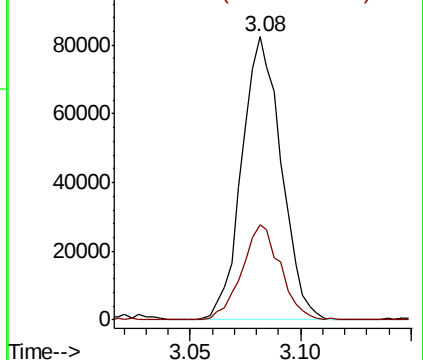
85 100

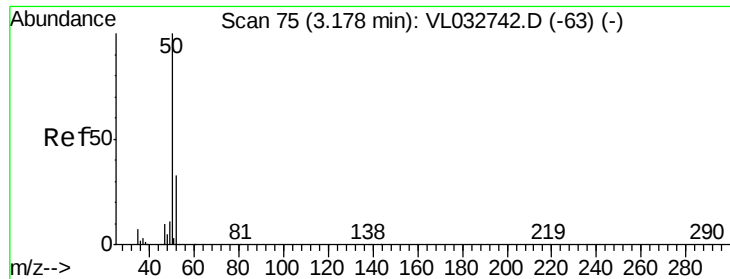
87 33.8 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.533 ppbv

RT: 3.17 min Scan# 74

Delta R.T. -0.00 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

ClientSampleId :

IA2

Tot Ion: 50 Resp: 32687

Ion Ratio Lower Upper

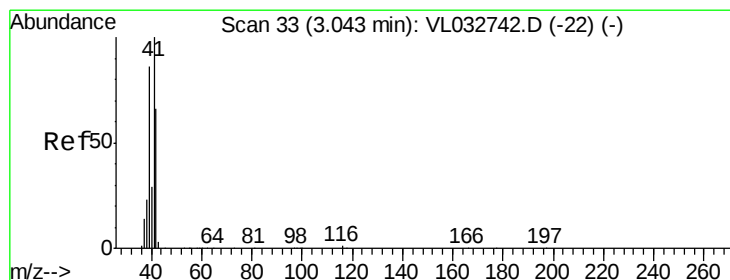
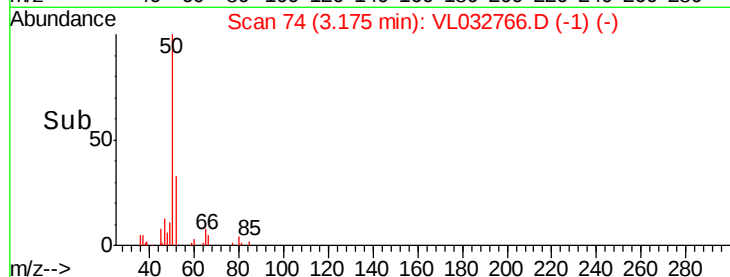
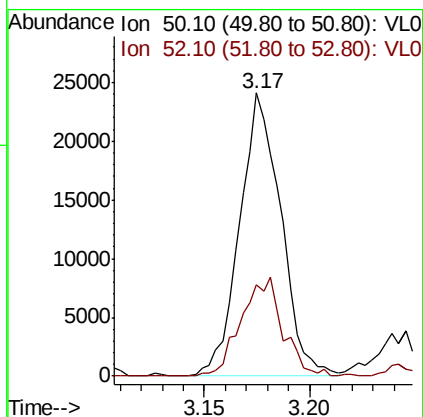
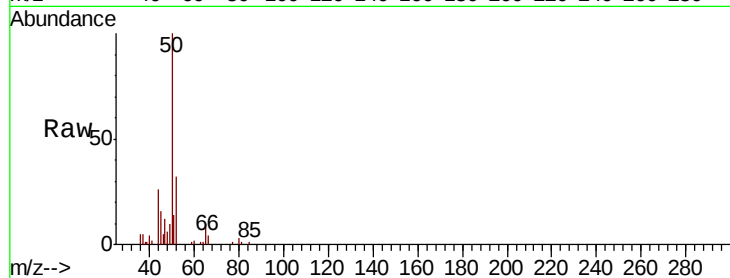
50 100

52 32.3 26.6 40.0

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#9

Propene

Concen: 2.072 ppbv m

RT: 3.05 min Scan# 36

Delta R.T. 0.01 min

Lab File: VL032766.D

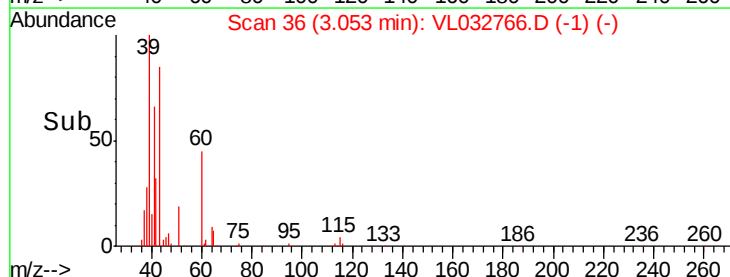
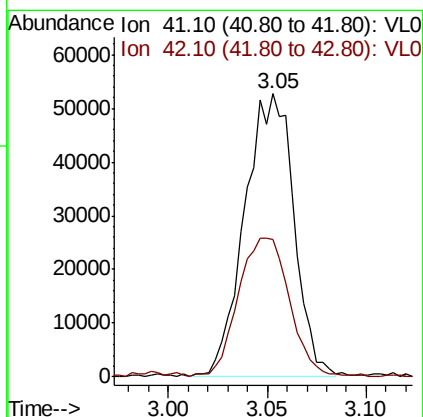
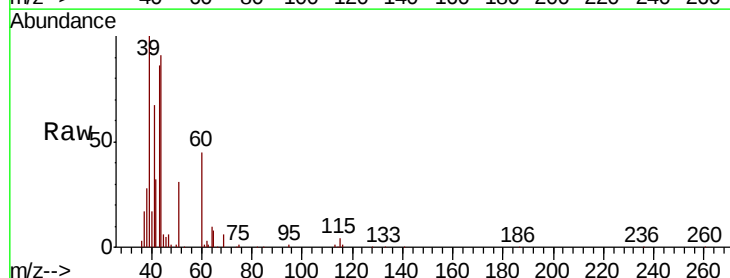
Acq: 14 Nov 2018 19:45

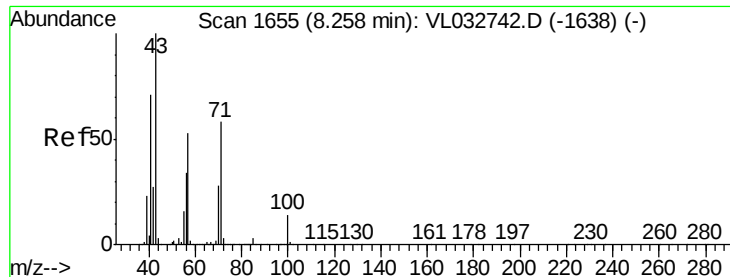
Tgt Ion: 41 Resp: 91673

Ion Ratio Lower Upper

41 100

42 146.1 55.0 82.6#





#10

Heptane

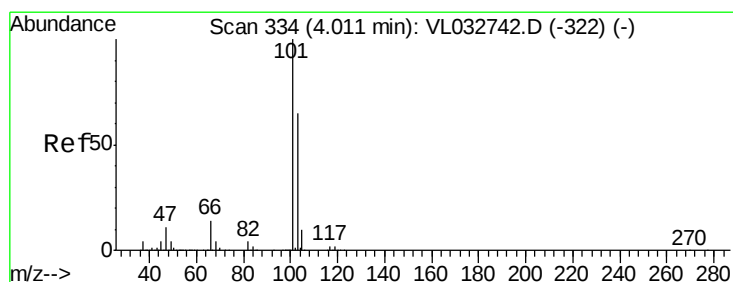
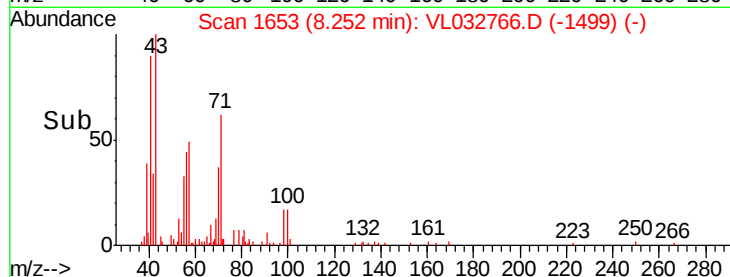
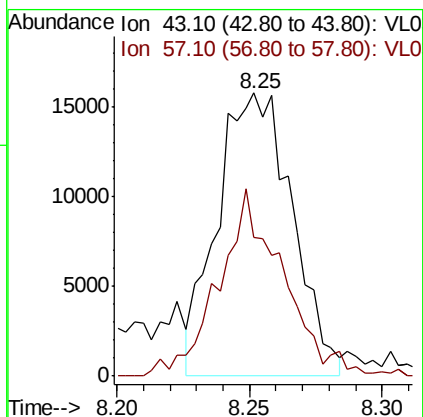
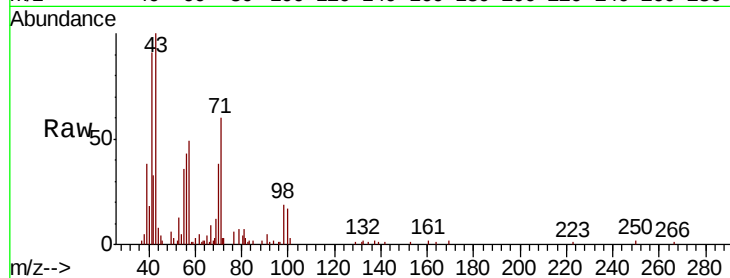
Concen: 0.183 ppbv m
 RT: 8.25 min Scan# 1653
 Delta R.T. -0.01 min
 Lab File: VL032766.D
 Acq: 14 Nov 2018 19:45

Instrument :
 MSVOA_L
 ClientSampled :
 IA2

Tot Ion: 43 Resp: 30922
 Ion Ratio Lower Upper
 43 100
 57 57.0 41.8 62.8

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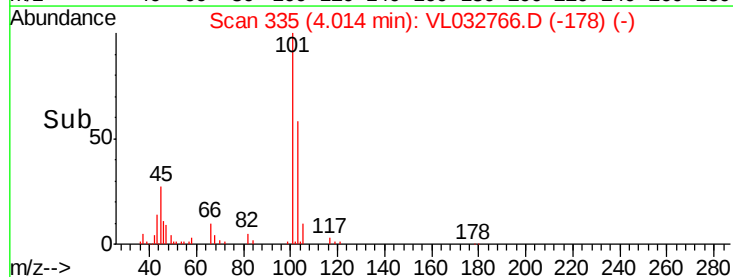
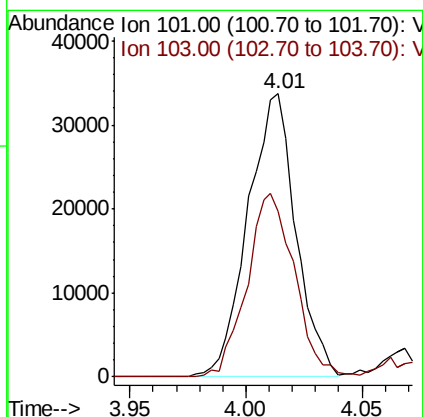
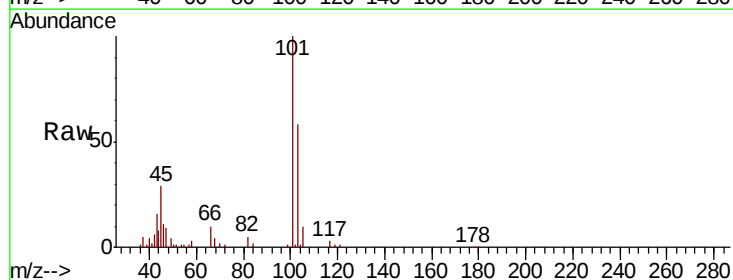


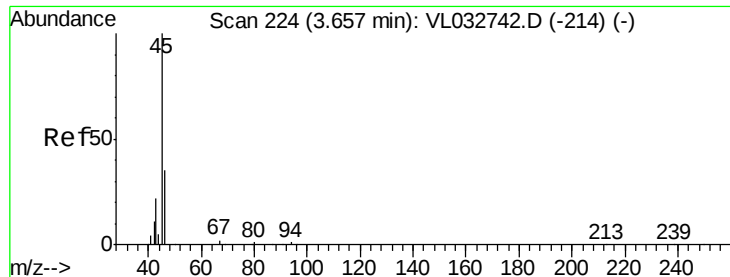
#11

Trichlorofluoromethane

Concen: 0.257 ppbv
 RT: 4.01 min Scan# 335
 Delta R.T. 0.00 min
 Lab File: VL032766.D
 Acq: 14 Nov 2018 19:45

Tgt Ion: 101 Resp: 48539
 Ion Ratio Lower Upper
 101 100
 103 58.4 51.6 77.4





#13

Ethanol

Concen: 572.598 ppbv

RT: 3.68 min Scan# 231

Delta R.T. 0.02 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Tot Ion: 45 Resp: 8296147

Ion Ratio Lower Upper

45 100

46 37.2 14.5 57.9

Instrument :

MSVOA_L

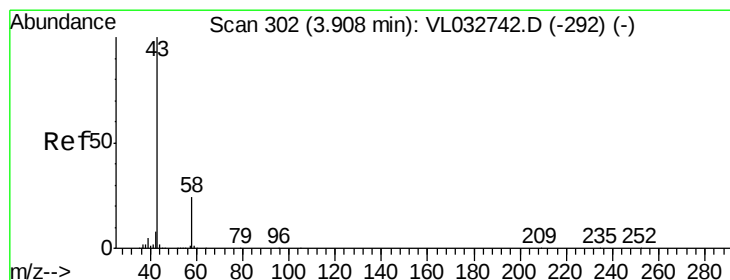
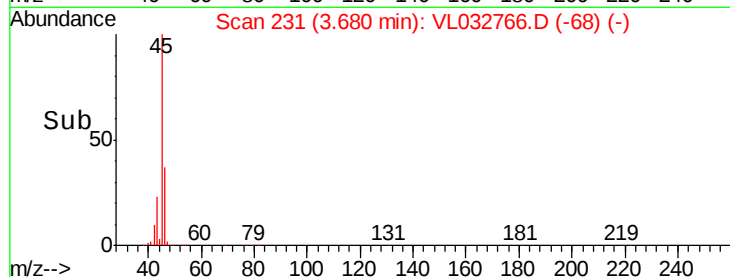
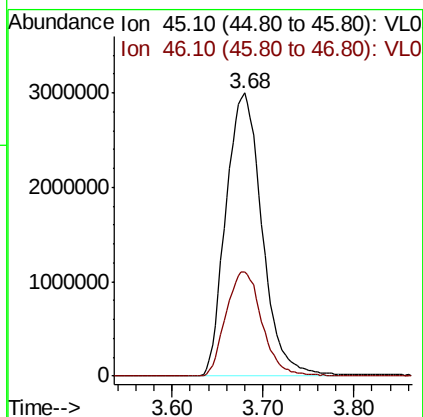
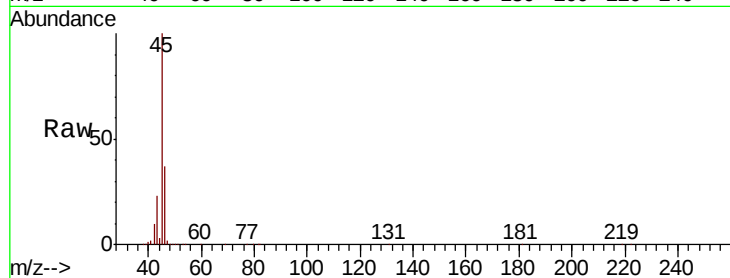
ClientSampled :

IA2

Manual Integrations
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#15

Acetone

Concen: 9.071 ppbv m

RT: 3.90 min Scan# 301

Delta R.T. -0.00 min

Lab File: VL032766.D

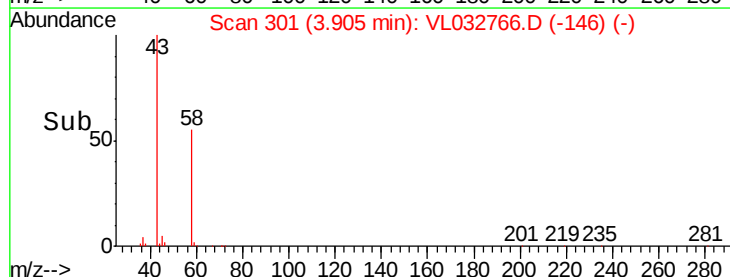
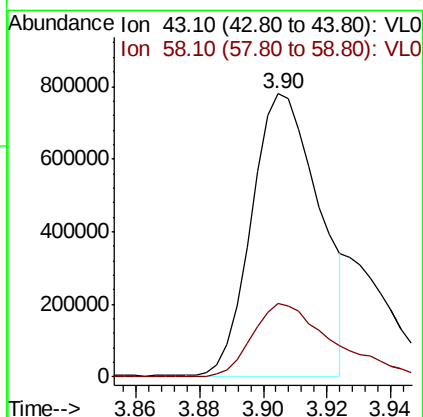
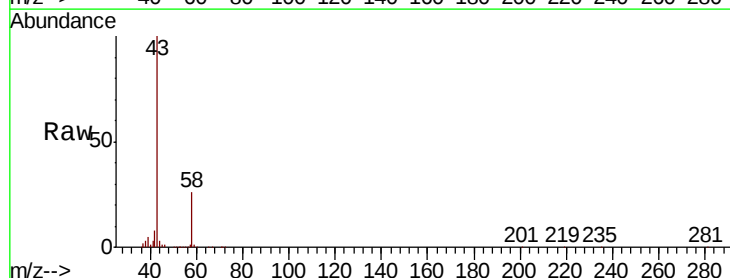
Acq: 14 Nov 2018 19:45

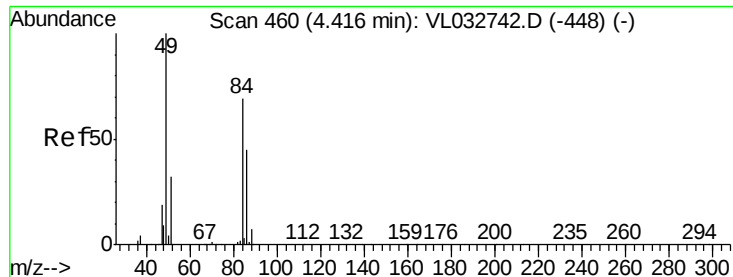
Tgt Ion: 43 Resp: 1154979

Ion Ratio Lower Upper

43 100

58 31.3 21.1 31.7





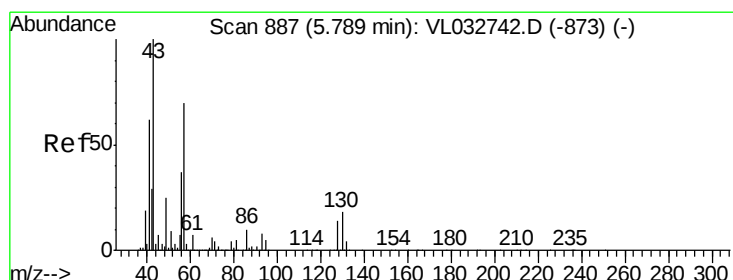
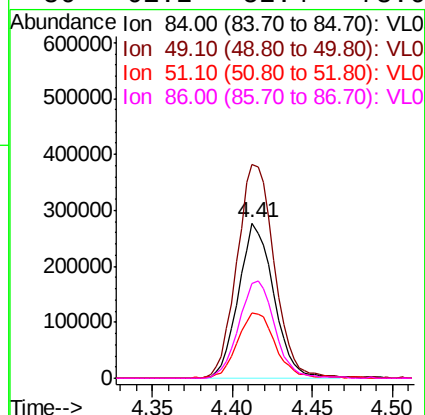
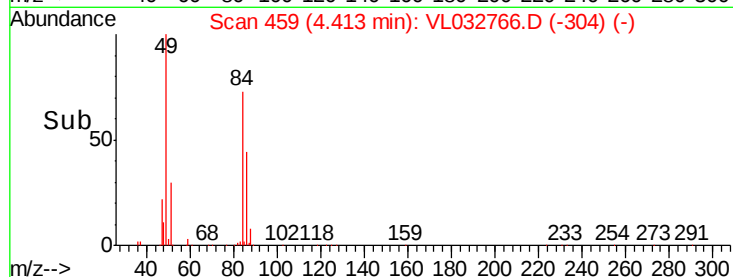
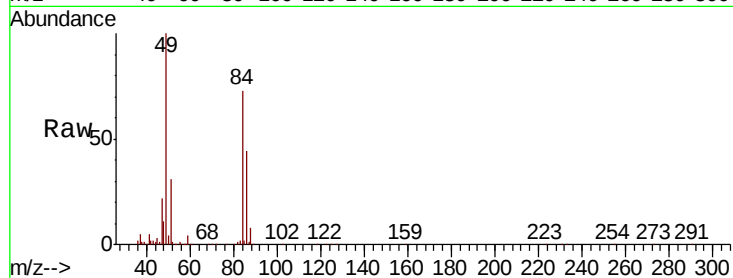
#20
Methvlene Chloride
Concen: 6.296 ppbv
RT: 4.41 min Scan# 459
Delta R.T. -0.00 min
Lab File: VL032766.D
Acq: 14 Nov 2018 19:45

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion:	84	Resp:	415019
Ion	Ratio	Lower	Upper
84	100		
49	137.4	115.8	173.6
51	41.8	36.9	55.3
86	61.2	52.4	78.6

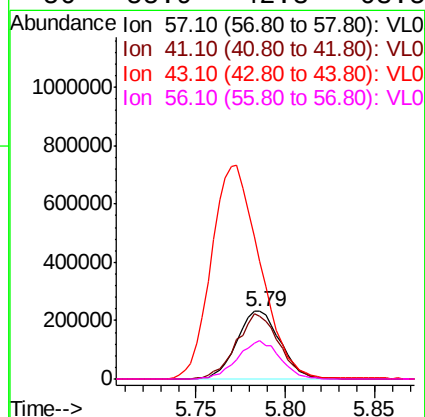
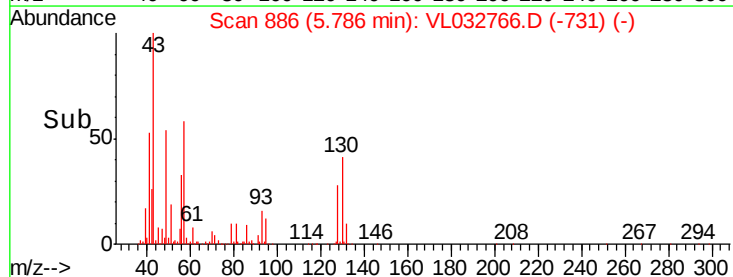
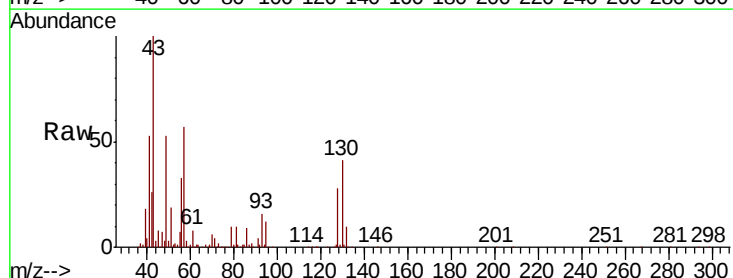
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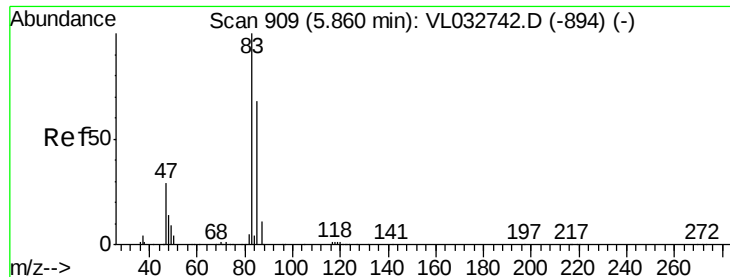
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#26
Hexane
Concen: 2.972 ppbv
RT: 5.79 min Scan# 886
Delta R.T. -0.00 min
Lab File: VL032766.D
Acq: 14 Nov 2018 19:45

Tgt Ion:	57	Resp:	392665
Ion	Ratio	Lower	Upper
57	100		
41	96.2	70.3	105.5
43	356.2	174.0	261.0#
56	55.9	42.3	63.5





#29

Chloroform

Concen: 0.618 ppbv

RT: 5.85 min Scan# 907

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

ClientSampleId :

IA2

Tot Ion: 83 Resp: 145597

Ion Ratio Lower Upper

83 100

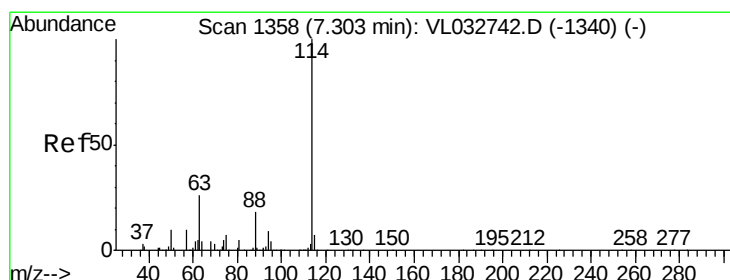
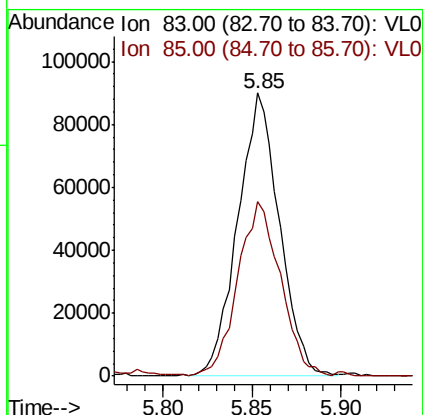
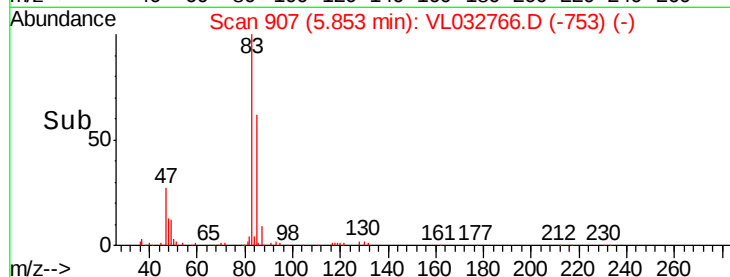
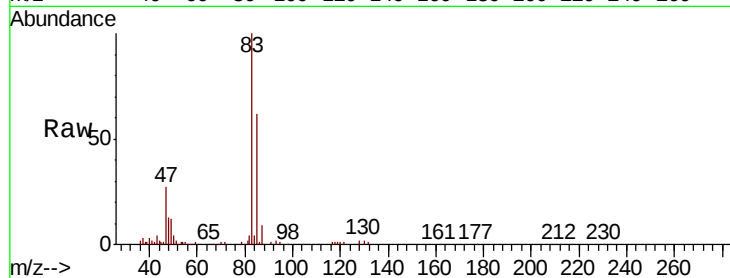
85 61.6 54.2 81.4

Manual Integrations

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1356

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

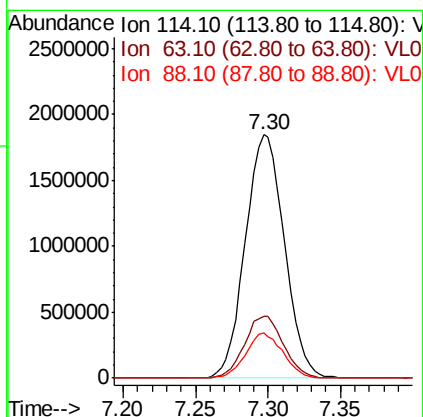
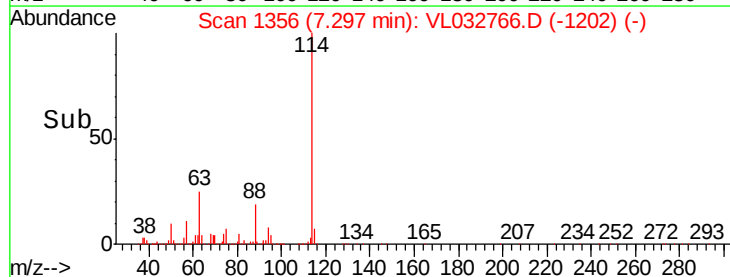
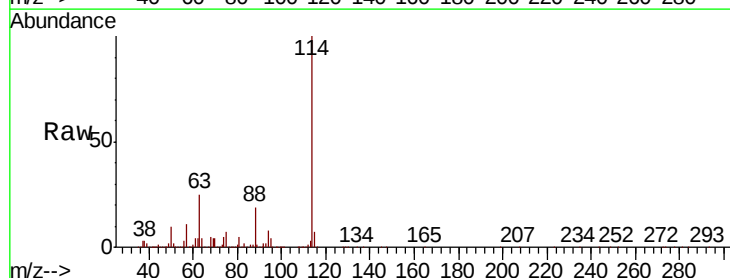
Tgt Ion: 114 Resp: 3466080

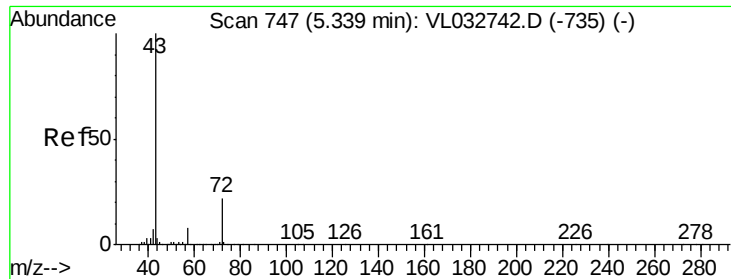
Ion Ratio Lower Upper

114 100

63 25.4 20.9 31.3

88 17.8 14.4 21.6





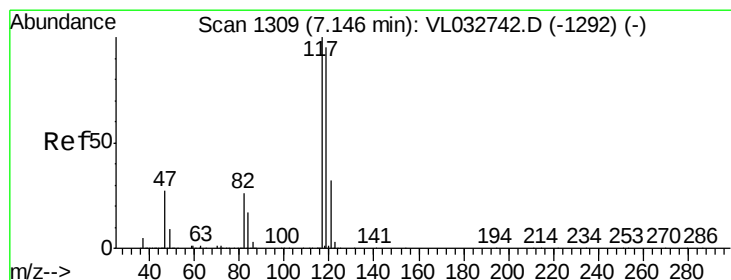
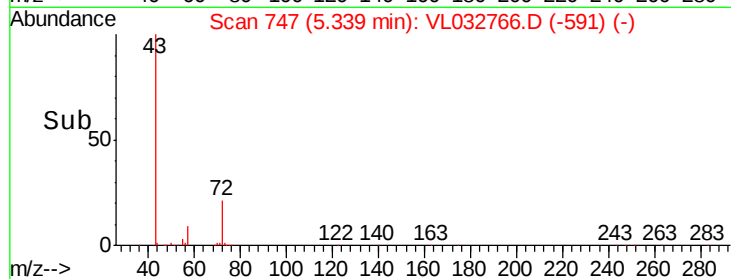
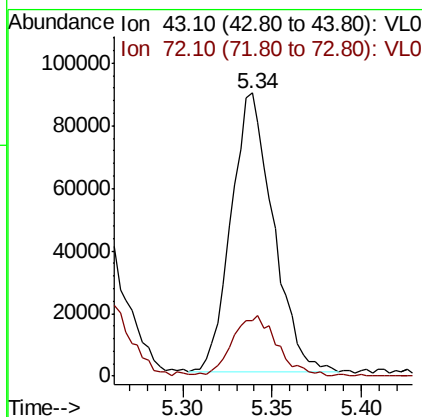
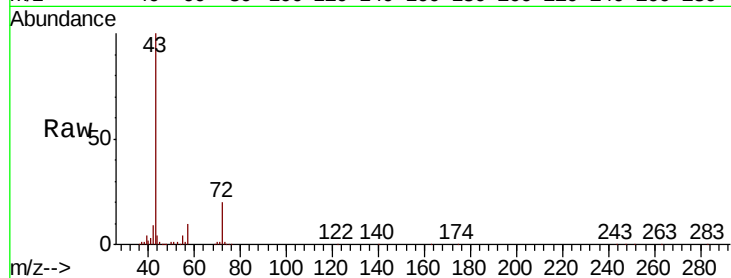
#34
2-Butanone
Concen: 0.813 ppbv
RT: 5.34 min Scan# 747
Delta R.T. 0.00 min
Lab File: VL032766.D
Acq: 14 Nov 2018 19:45

Instrument :
MSVOA_L
ClientSampled :
IA2

Tot Ion: 43 Resp: 146085
Ion Ratio Lower Upper
43 100
72 23.4 18.4 27.6

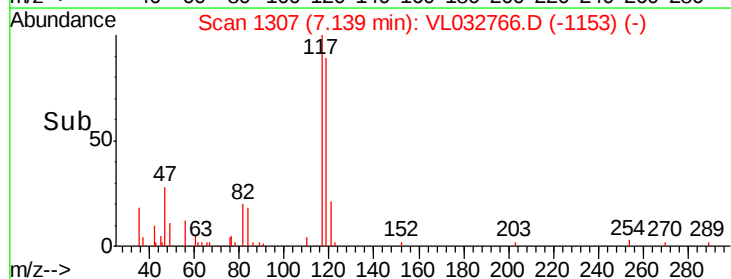
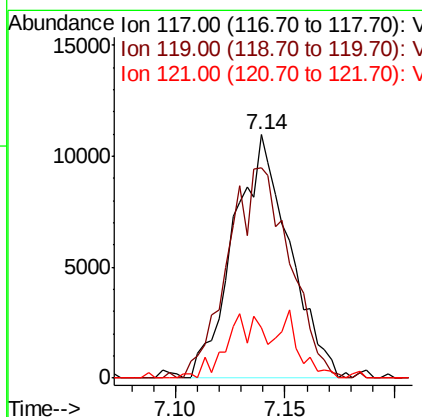
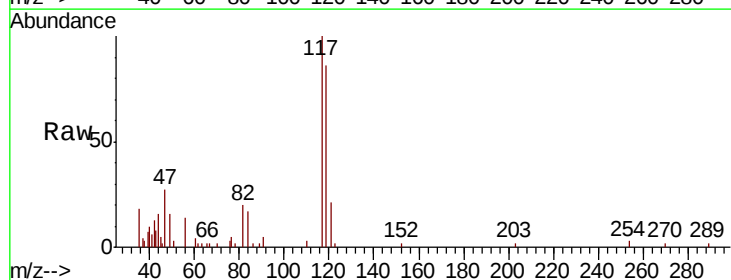
Manual Integrations
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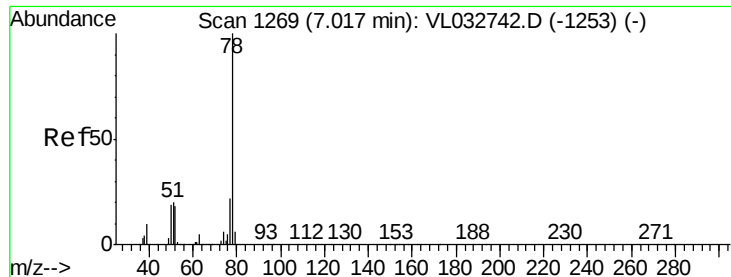
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#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. -0.01 min
Lab File: VL032766.D
Acq: 14 Nov 2018 19:45

Tgt Ion: 117 Resp: 19375
Ion Ratio Lower Upper
117 100
119 86.3 76.1 114.1
121 20.9 25.4 38.0#





#36

Benzene

Concen: 0.463 ppbv

RT: 7.01 min Scan# 1266

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

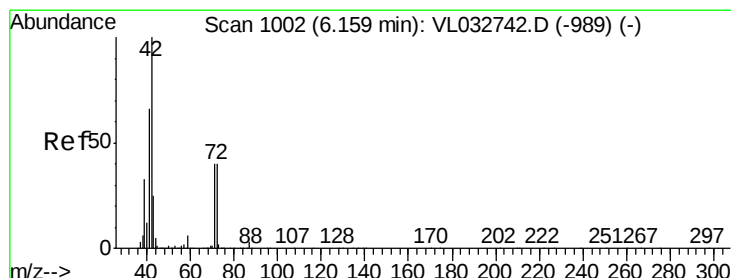
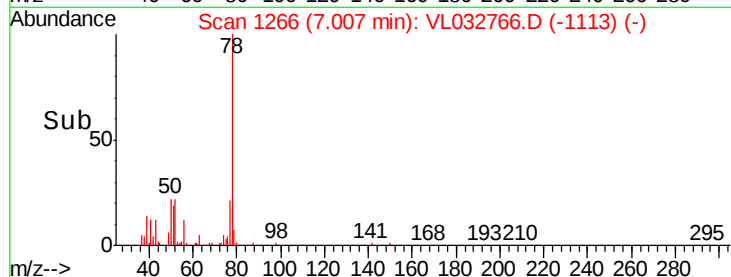
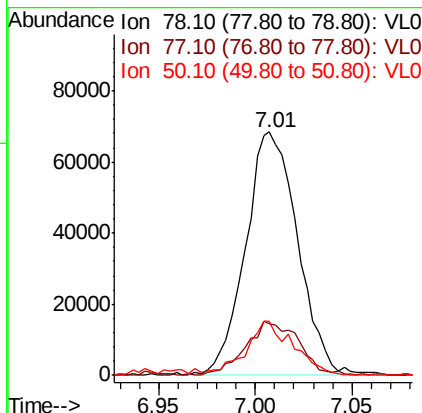
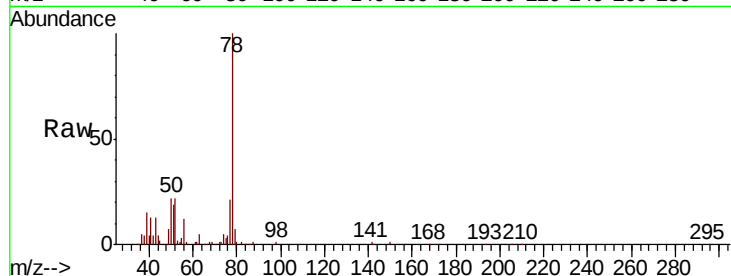
ClientSampleId :

IA2

Tot Ion:	78	Resp:	127683
Ion	Ratio	Lower	Upper
78	100		
77	20.3	17.8	26.8
50	21.6	15.4	23.0

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#41

Tetrahydrofuran

Concen: 0.349 ppbv m

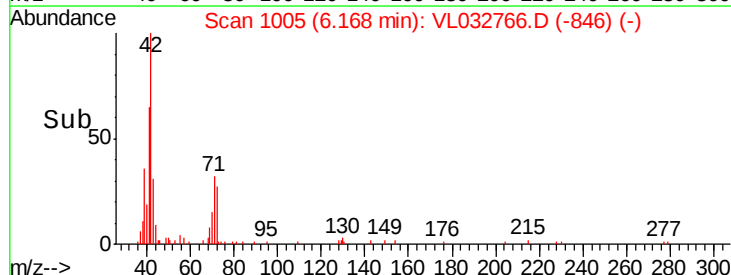
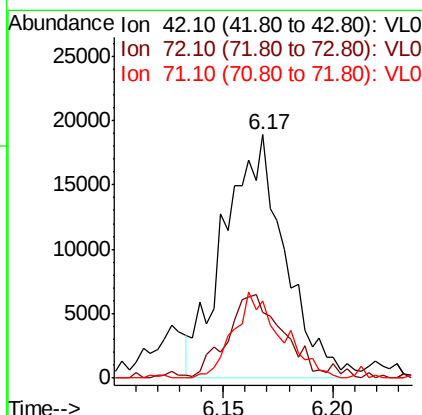
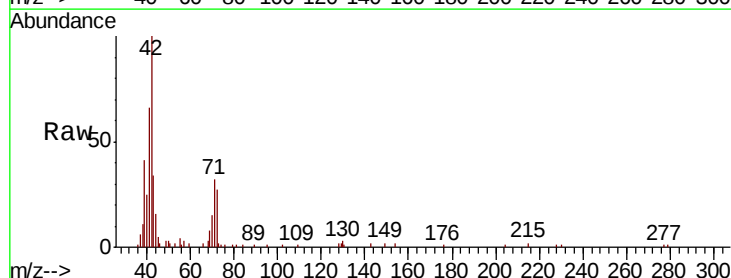
RT: 6.17 min Scan# 1005

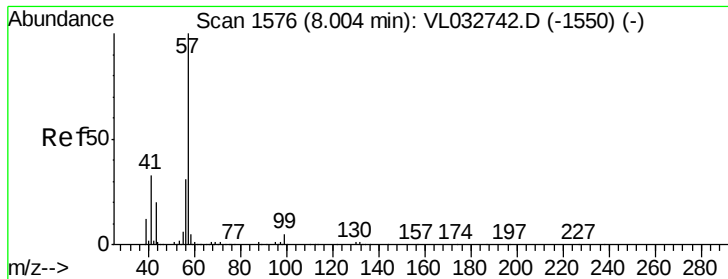
Delta R.T. 0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Tgt Ion:	42	Resp:	36003
Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.4	48.6#
71	28.6	31.6	47.4#





#44

2,2,4-Trimethylpentane

Concen: 0.219 ppbv m

RT: 8.00 min Scan# 1574

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

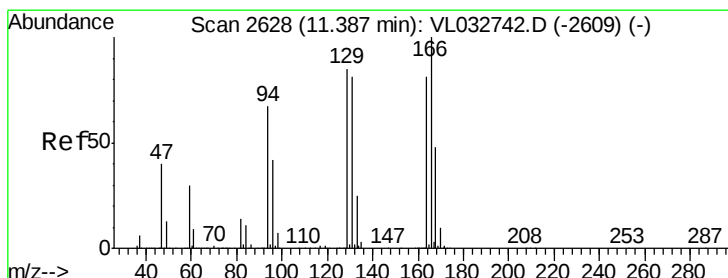
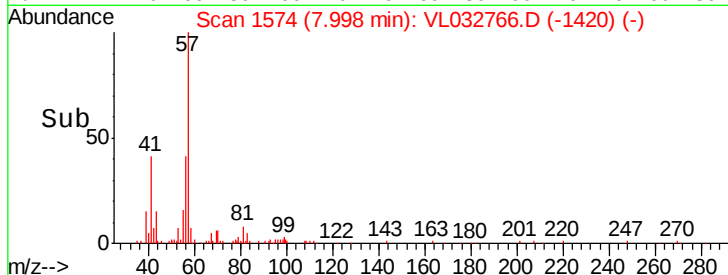
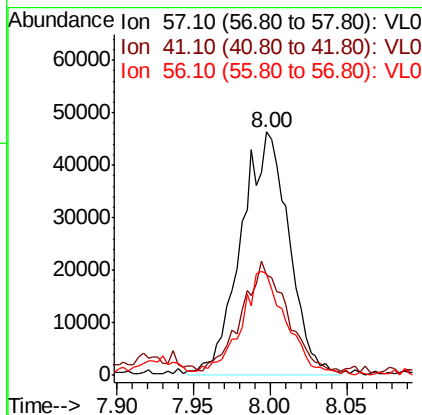
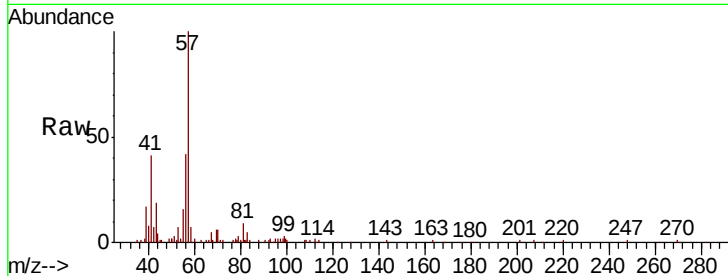
ClientSampled :

IA2

Tot Ion	57	Resp	100952
Ion Ratio	Lower	Upper	
57	100		
41	45.6	26.6	39.8#
56	41.0	24.8	37.2#

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#52

Tetrachloroethene

Concen: 2.068 ppbv

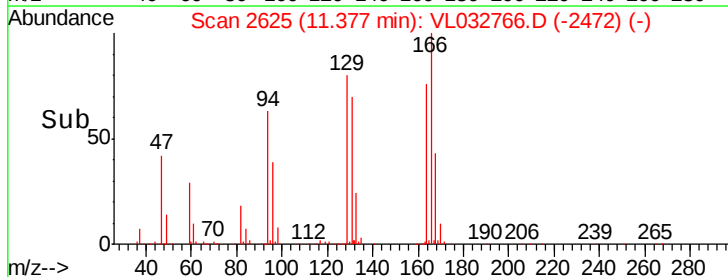
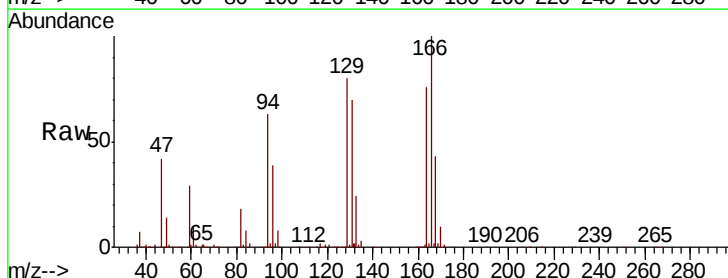
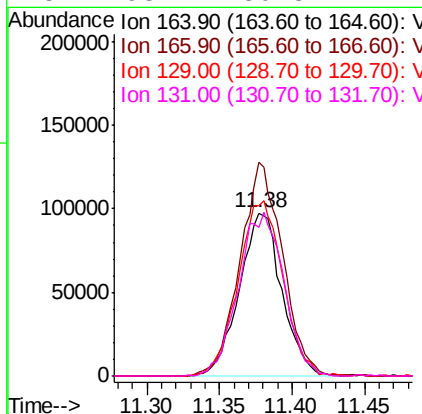
RT: 11.38 min Scan# 2625

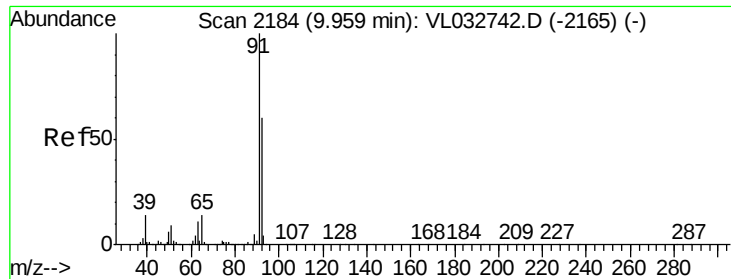
Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Tgt Ion	164	Resp	198587
Ion Ratio	Lower	Upper	
164	100		
166	131.2	99.3	148.9
129	104.5	83.9	125.9
131	93.4	80.8	121.2





#53

Toluene

Concen: 1.203 ppbv

RT: 9.95 min Scan# 2182

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

Instrument :

MSVOA_L

ClientSampleId :

IA2

Tot Ion: 91 Resp: 346366

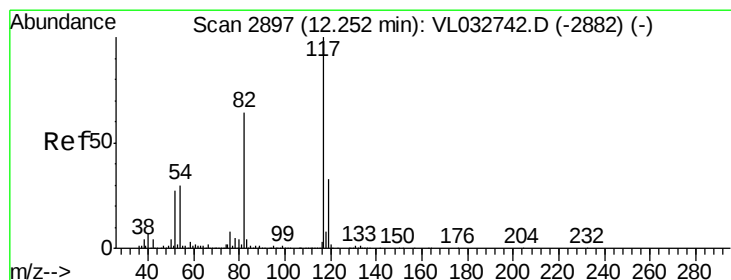
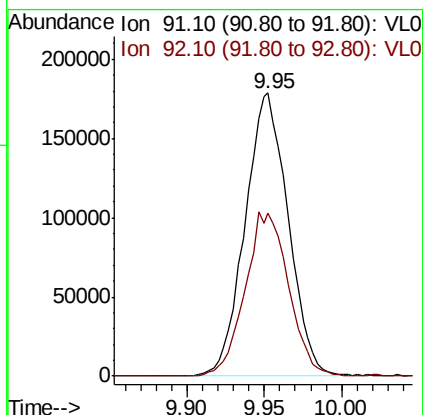
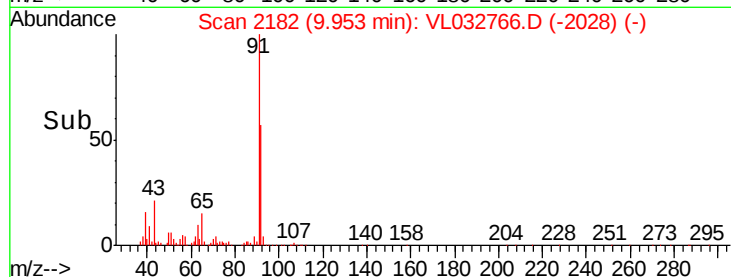
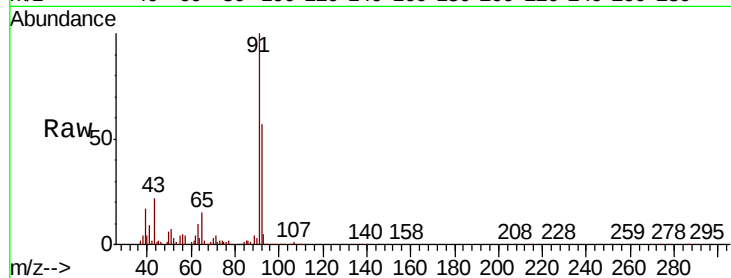
Ion Ratio Lower Upper

91 100

92 58.4 47.9 71.9

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2895

Delta R.T. -0.01 min

Lab File: VL032766.D

Acq: 14 Nov 2018 19:45

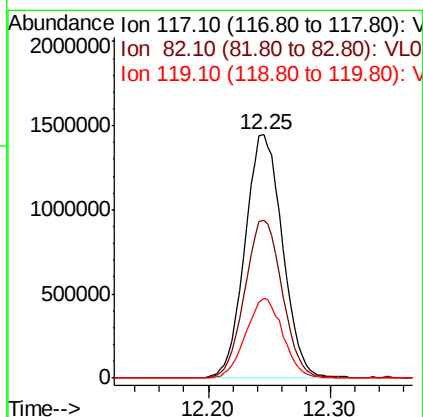
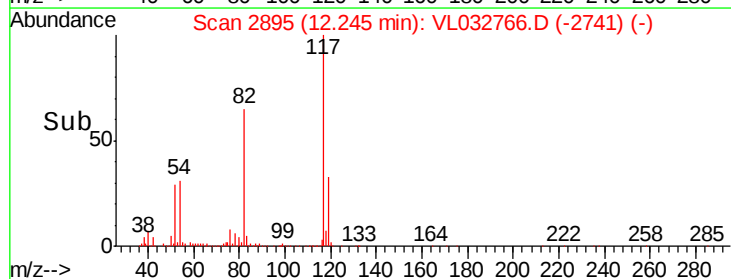
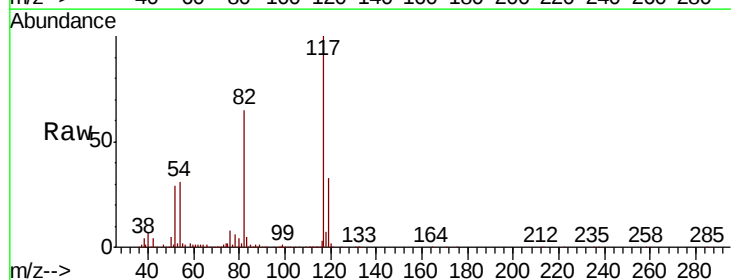
Tgt Ion: 117 Resp: 3063873

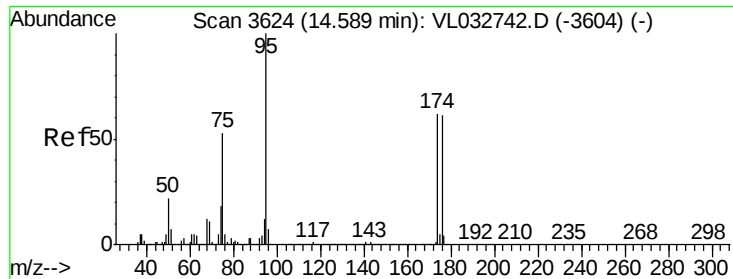
Ion Ratio Lower Upper

117 100

82 65.1 51.0 76.6

119 32.4 28.0 42.0





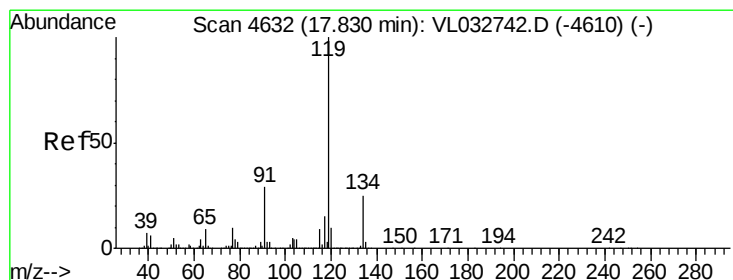
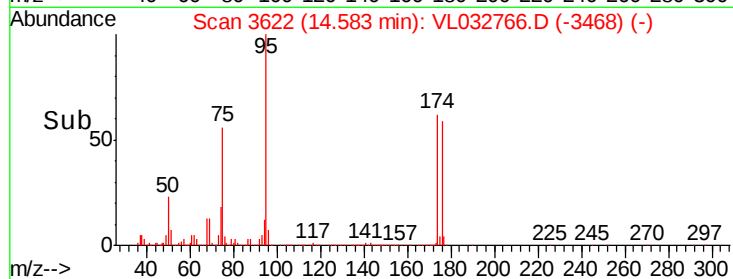
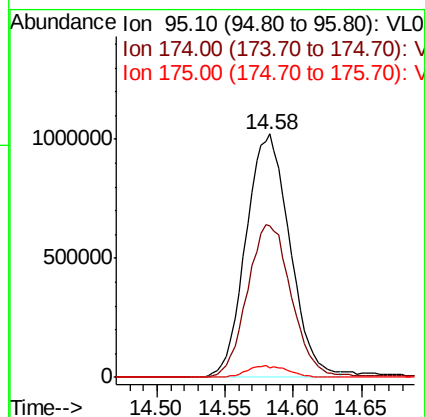
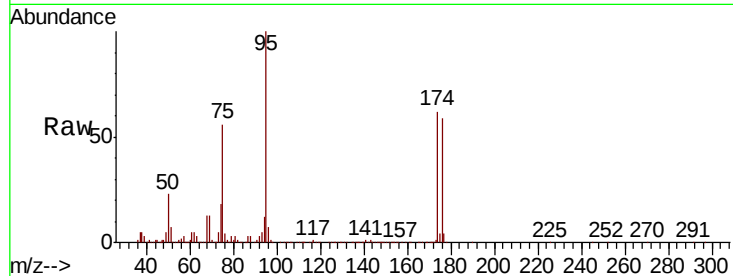
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.975 ppbv
 RT: 14.58 min Scan# 3622
 Delta R.T. -0.01 min
 Lab File: VL032766.D
 Acq: 14 Nov 2018 19:45

Instrument :
 MSVOA_L
 ClientSampled :
 IA2

Tot Ion: 95 Resp: 2285980
 Ion Ratio Lower Upper
 95 100
 174 64.4 50.7 76.1
 175 4.6 3.8 5.6

Manual Integrations
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#69
 p-Isopropyltoluene
 Concen: 0.225 ppbv m
 RT: 17.82 min Scan# 4630
 Delta R.T. -0.01 min
 Lab File: VL032766.D
 Acq: 14 Nov 2018 19:45

Tgt Ion: 119 Resp: 103101
 Ion Ratio Lower Upper
 119 100
 134 27.1 20.2 30.4
 91 37.9 23.5 35.3#

