

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL041019\
 Data File : VL033573.D
 Acq On : 10 Apr 2019 20:58
 Operator : SY/AP
 Sample : K2301-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 4/11/2019 1:01:31 PM

Quant Time: Apr 11 04:36:38 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Mar 2
 QLast Update : Tue Mar 26 16:00:50 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	889271	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.29	114	2089158	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2065892	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.57	95	1671192	10.32	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.20%

Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.08	85	32663	0.252	ppbv	94
3) Chlorodifluoromethane	3.01	51	89886m	0.878	ppbv	
4) Chloromethane	3.17	50	23568	0.435	ppbv	93
9) Propene	3.04	41	75099	1.747	ppbv	85
10) Heptane	8.25	43	12338m	0.107	ppbv	
11) Trichlorofluoromethane	4.01	101	31478m	0.197	ppbv	
13) Ethanol	3.65	45	337612	30.345	ppbv	66
15) Acetone	3.90	43	409619	3.831	ppbv	95
19) Isopropyl Alcohol	4.03	45	80431	1.189	ppbv #	92
20) Methylene Chloride	4.41	84	116362	2.564	ppbv	87
26) Hexane	5.78	57	88385	1.002	ppbv #	44
29) Chloroform	5.85	83	20717m	0.137	ppbv	
34) 2-Butanone	5.34	43	37405	0.298	ppbv	99
36) Benzene	7.00	78	112080	0.639	ppbv #	93
44) 2,2,4-Trimethylpentane	7.99	57	122201	0.399	ppbv #	85
52) Tetrachloroethene	11.37	164	124470	1.882	ppbv	97
53) Toluene	9.94	91	342725	1.682	ppbv	98
58) Ethyl Benzene	12.87	91	34763m	0.126	ppbv	
59) m/p-Xylene	13.12	91	135716m	0.551	ppbv	
60) o-Xylene	13.84	91	46585m	0.195	ppbv	
73) 1,3,5-Trimethylbenzene	16.16	105	29606m	0.116	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	84413	0.307	ppbv #	69

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

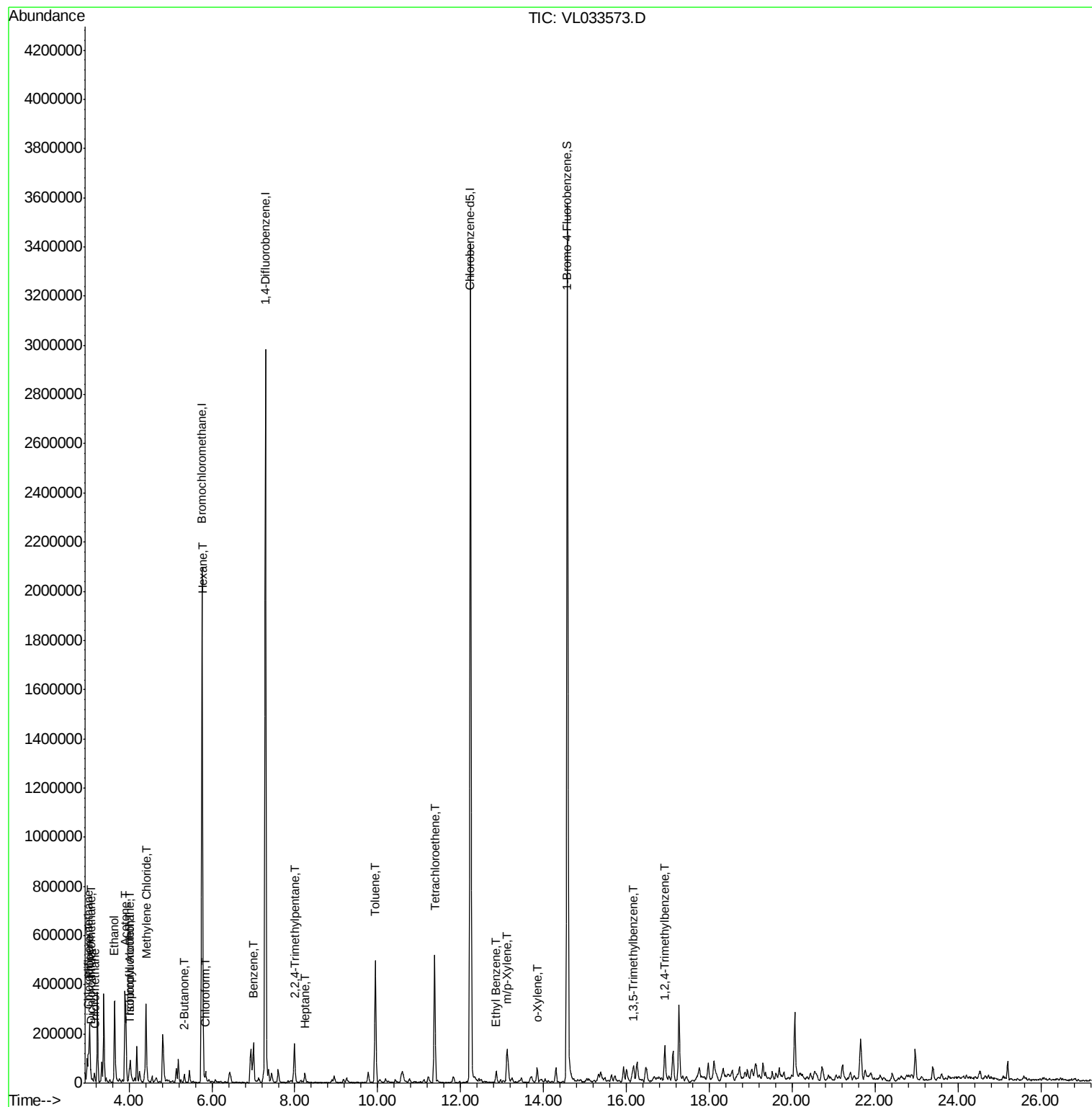
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL041019\
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Quant Time: Apr 11 04:36:38 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032519AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Mar
QLast Update : Tue Mar 26 16:00:50 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 878

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

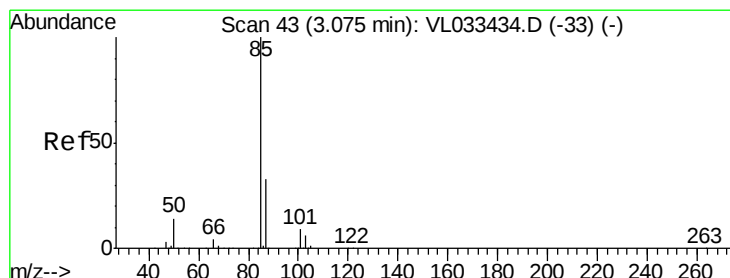
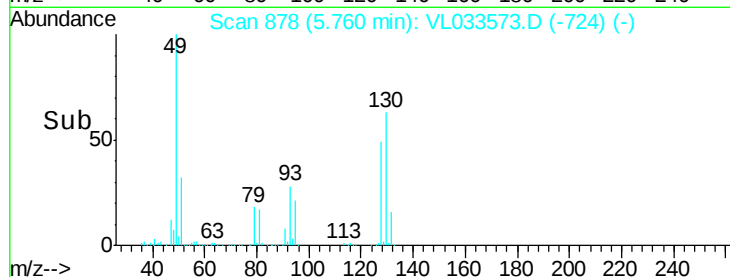
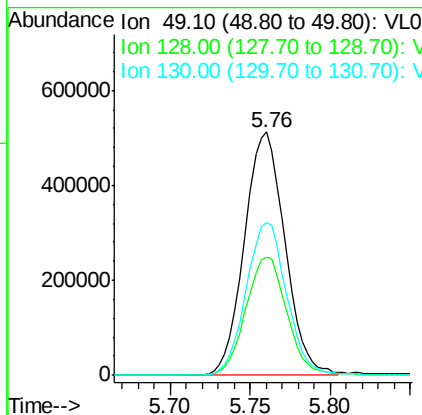
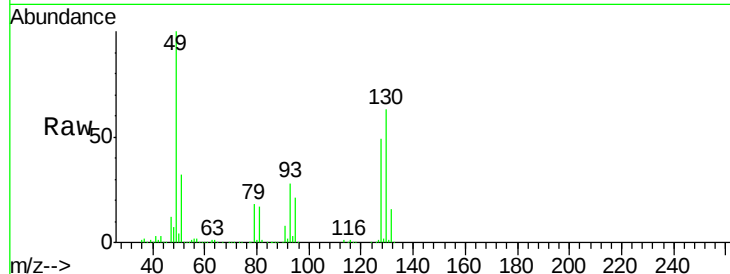
ClientSampled :

IA1

Tot Ion:	49	Resp:	889271
Ion	Ratio	Lower	Upper
49	100		
128	49.5	24.0	72.0
130	63.2	31.2	93.6

Manual Integrations
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#2

Dichlorodifluoromethane

Concen: 0.252 ppbv

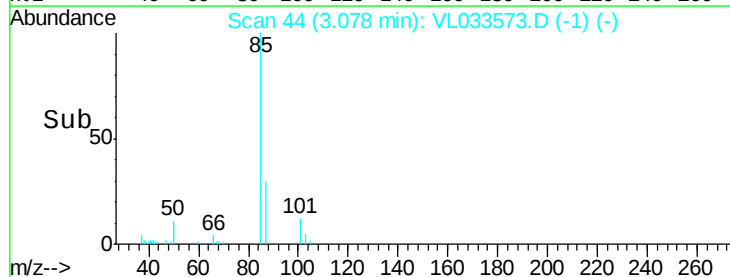
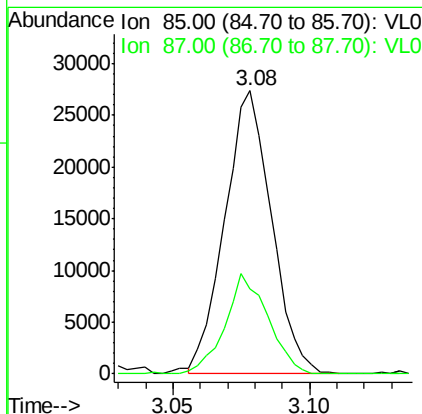
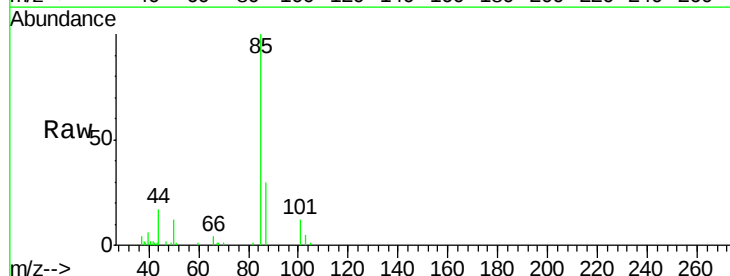
RT: 3.08 min Scan# 44

Delta R.T. 0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Tgt Ion:	85	Resp:	32663
Ion	Ratio	Lower	Upper
85	100		
87	30.0	26.7	40.1





#3

Chlorodifluoromethane

Concen: 0.878 ppbv

RT: 3.01 min Scan# 24

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 51 Resp: 89886

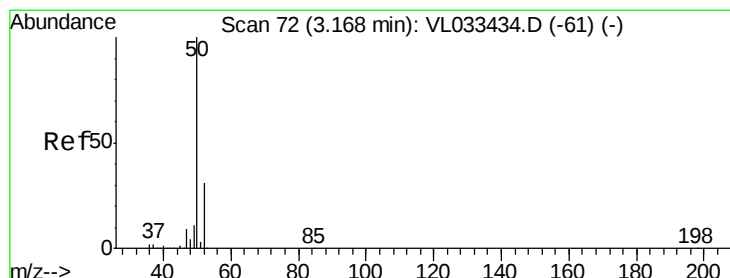
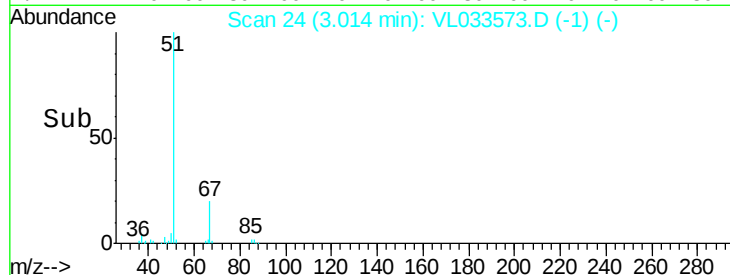
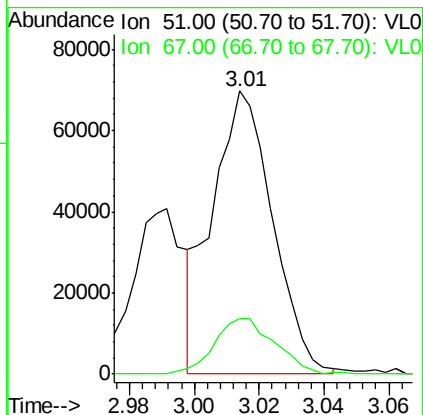
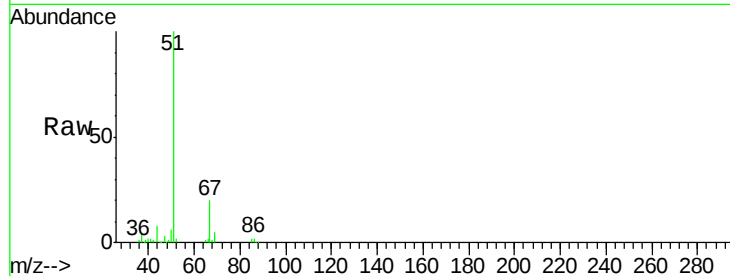
Ion Ratio Lower Upper

51 100

67 19.9 15.7 23.5

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#4

Chloromethane

Concen: 0.435 ppbv

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033573.D

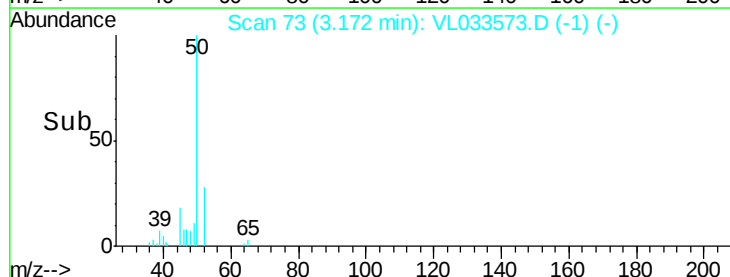
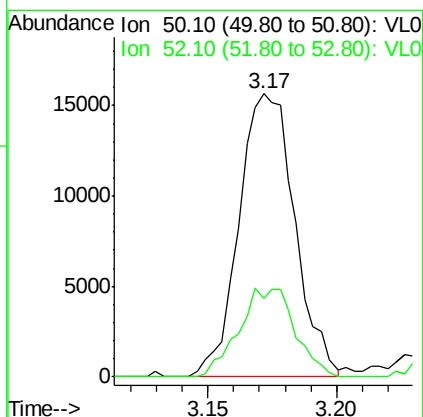
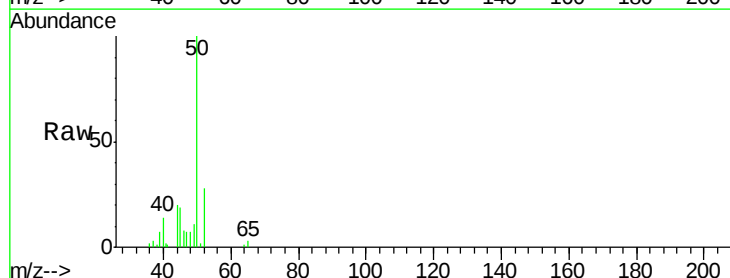
Acq: 10 Apr 2019 20:58

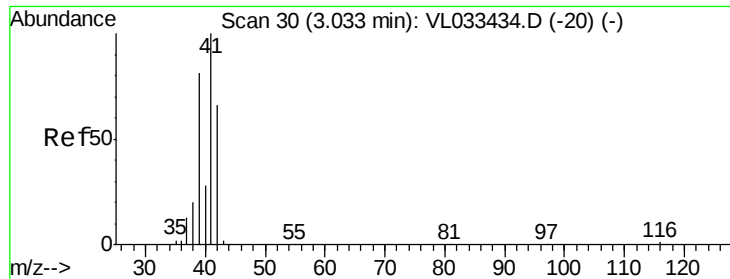
Tgt Ion: 50 Resp: 23568

Ion Ratio Lower Upper

50 100

52 27.6 25.0 37.6





#9

Propene

Concen: 1.747 ppbv

RT: 3.04 min Scan# 33

Delta R.T. 0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 41 Resp: 75099

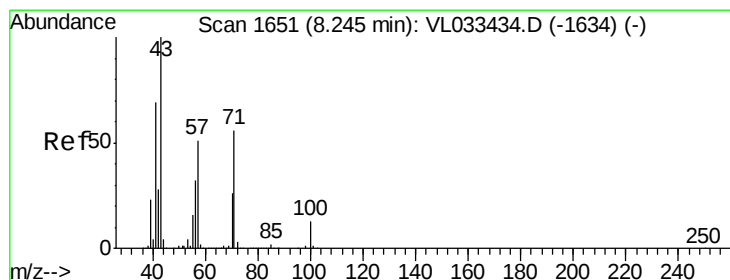
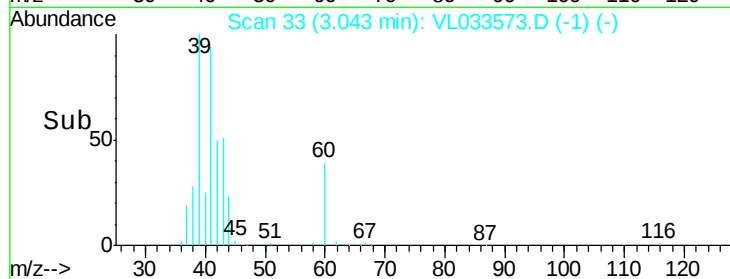
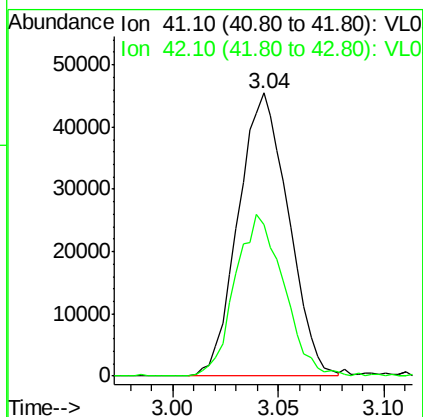
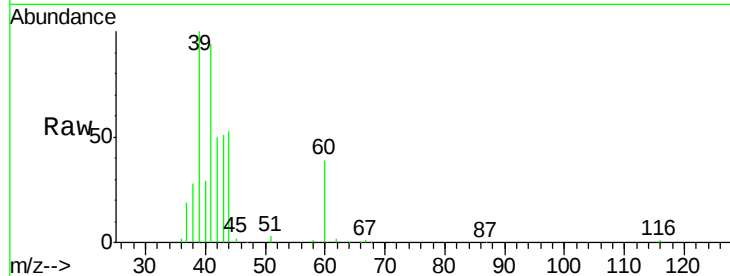
Ion Ratio Lower Upper

41 100

42 55.5 53.9 80.9

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#10

Heptane

Concen: 0.107 ppbv m

RT: 8.25 min Scan# 1653

Delta R.T. 0.01 min

Lab File: VL033573.D

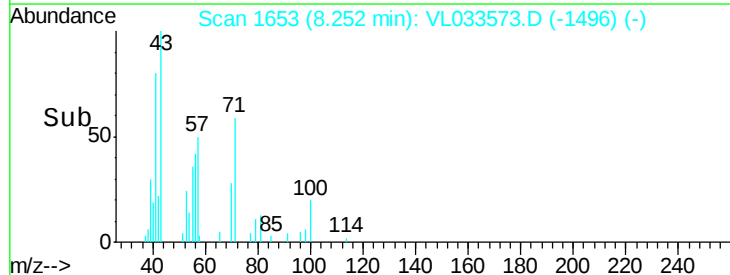
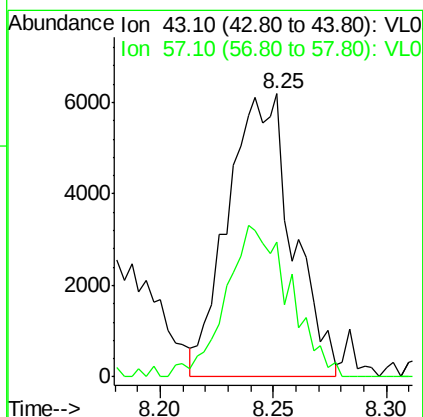
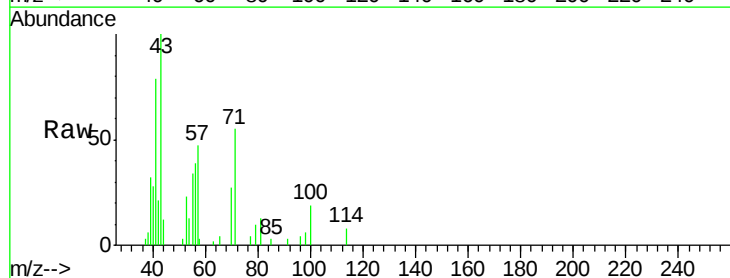
Acq: 10 Apr 2019 20:58

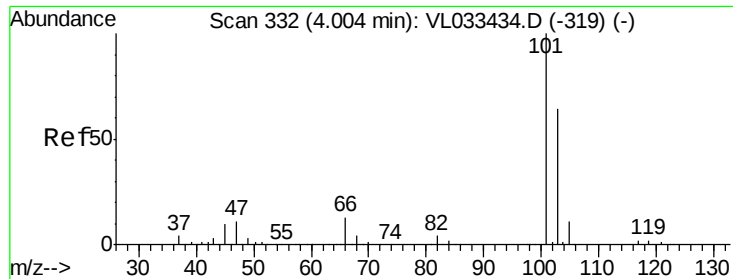
Tgt Ion: 43 Resp: 12338

Ion Ratio Lower Upper

43 100

57 53.0 40.6 60.8





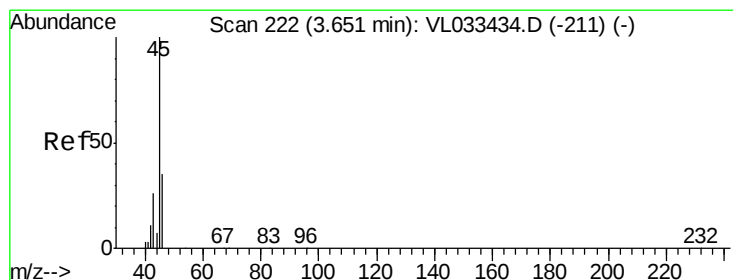
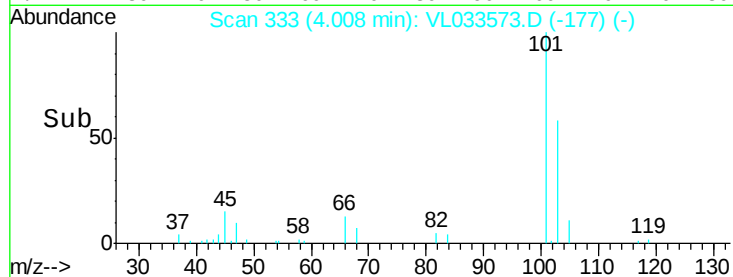
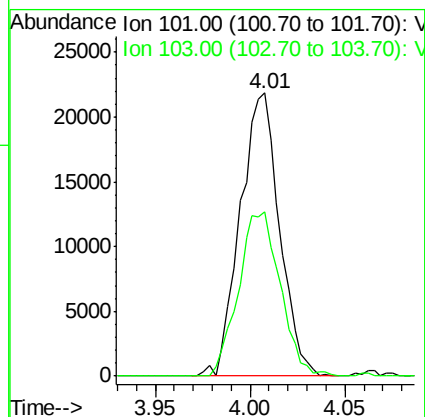
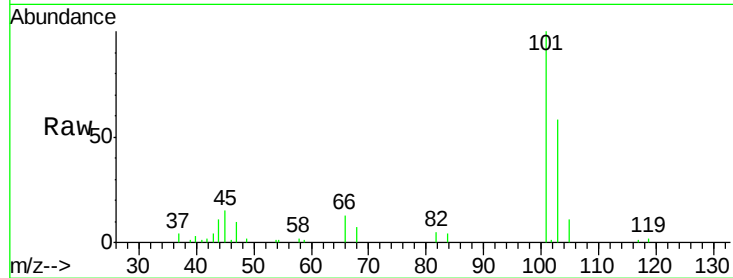
#11
 Trichlorofluoromethane
 Concen: 0.197 ppbv
 RT: 4.01 min Scan# 333
 Delta R.T. 0.00 min
 Lab File: VL033573.D
 Acq: 10 Apr 2019 20:58

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 101 Resp: 31478
 Ion Ratio Lower Upper
 101 100
 103 58.0 51.3 76.9

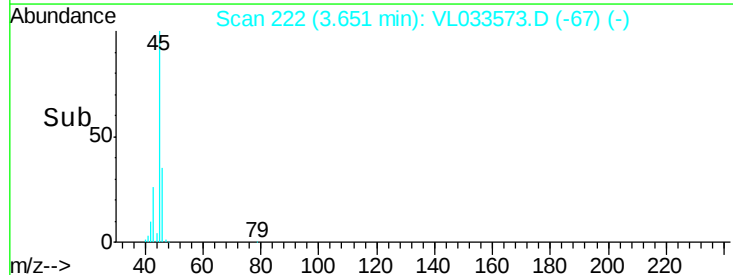
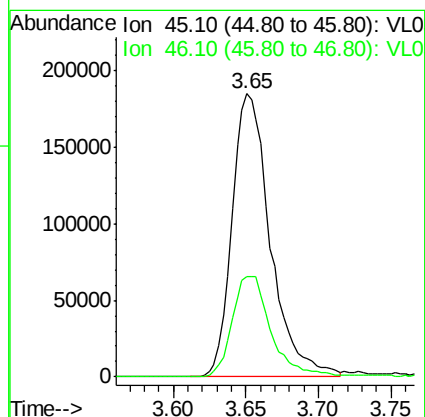
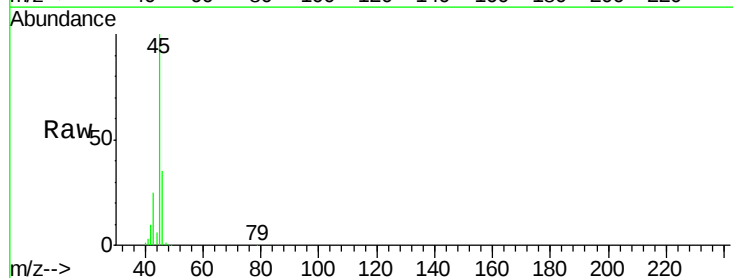
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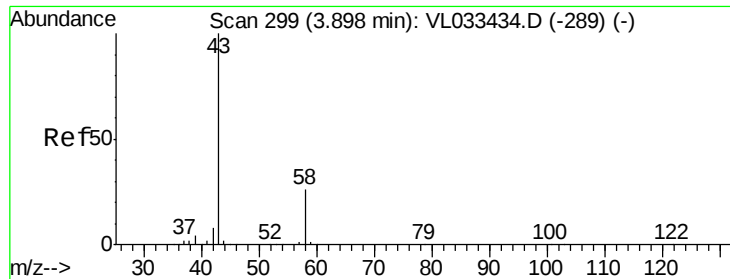
MMDadoda
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#13
 Ethanol
 Concen: 30.345 ppbv
 RT: 3.65 min Scan# 222
 Delta R.T. -0.00 min
 Lab File: VL033573.D
 Acq: 10 Apr 2019 20:58

Tgt Ion: 45 Resp: 337612
 Ion Ratio Lower Upper
 45 100
 46 36.7 25.4 101.8





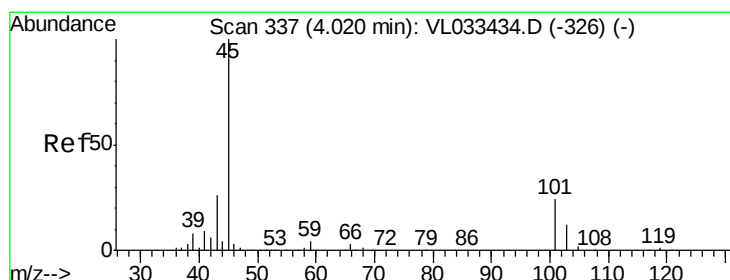
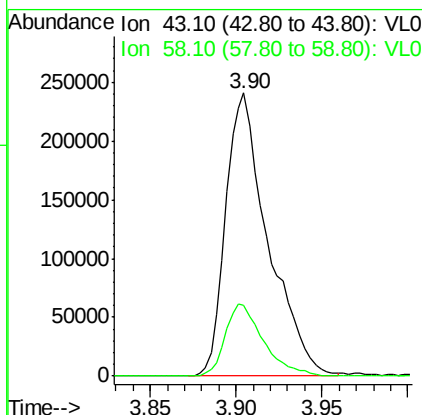
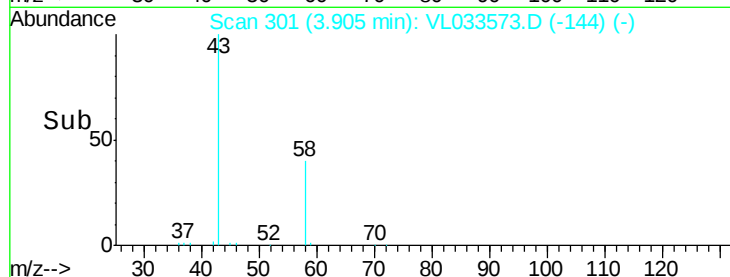
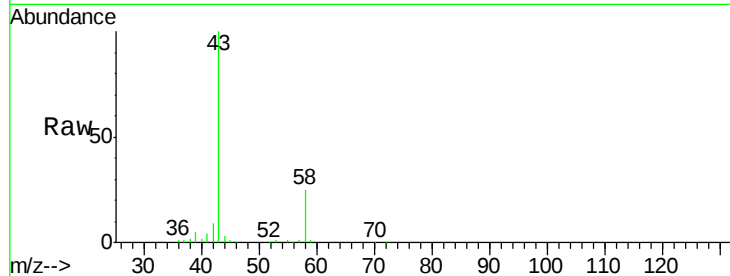
#15
Acetone
Concen: 3.831 ppbv
RT: 3.90 min Scan# 301
Delta R.T. 0.01 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 43 Resp: 409619
Ion Ratio Lower Upper
43 100
58 23.3 20.5 30.7

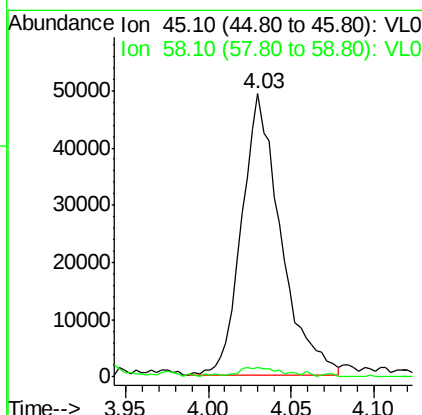
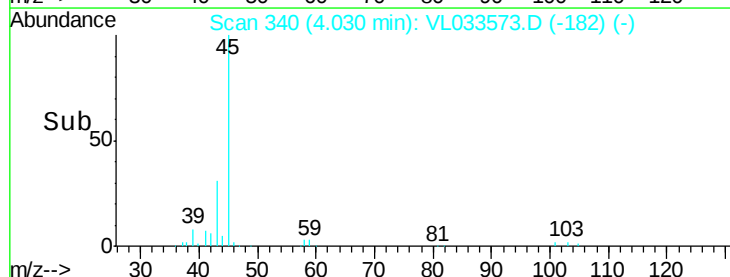
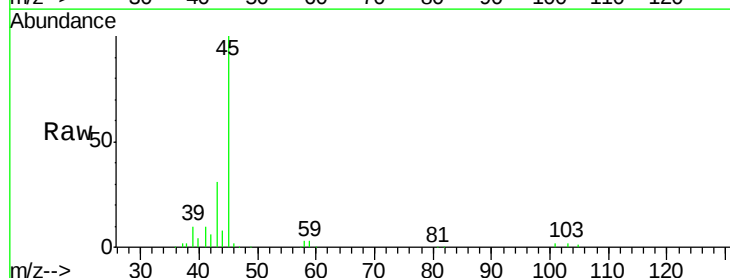
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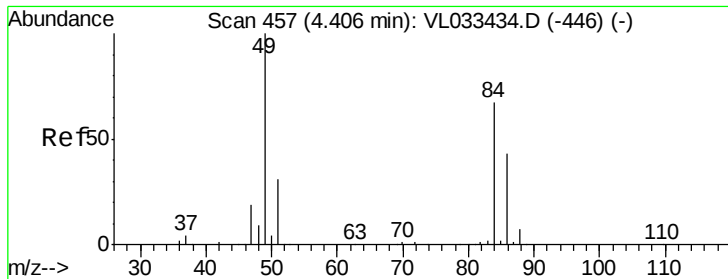
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#19
Isopropyl Alcohol
Concen: 1.189 ppbv
RT: 4.03 min Scan# 340
Delta R.T. 0.01 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Tgt Ion: 45 Resp: 80431
Ion Ratio Lower Upper
45 100
58 4.5 1.4 2.2#





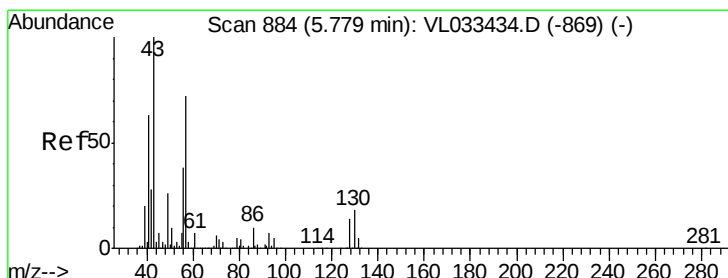
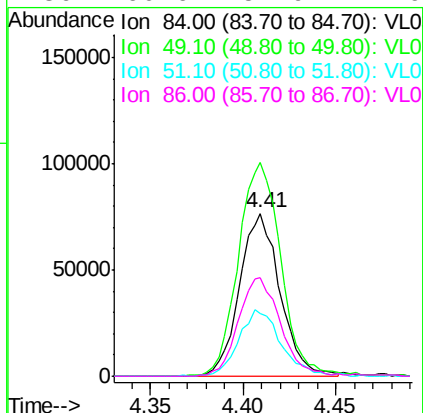
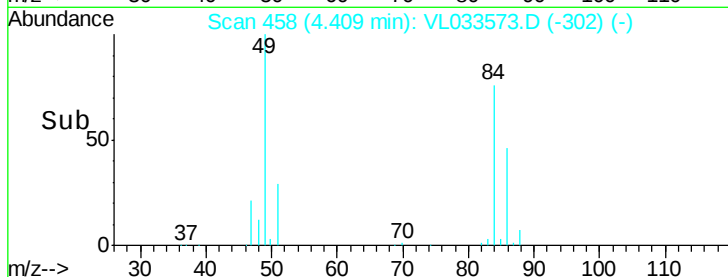
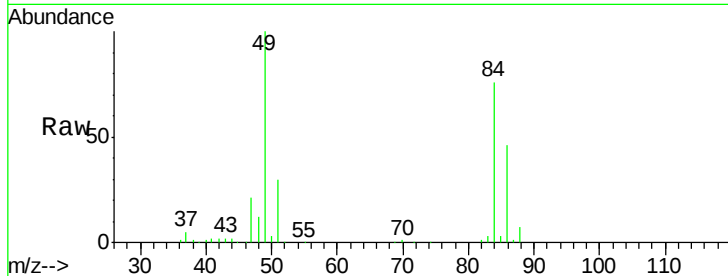
#20
Methvlene Chloride
Concen: 2.564 ppbv
RT: 4.41 min Scan# 458
Delta R.T. 0.00 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion:	84	Resp:	116362
Ion	Ratio	Lower	Upper
84	100		
49	129.7	120.0	180.0
51	38.6	36.7	55.1
86	60.6	51.9	77.9

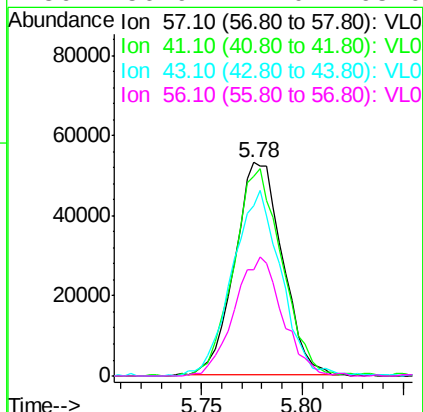
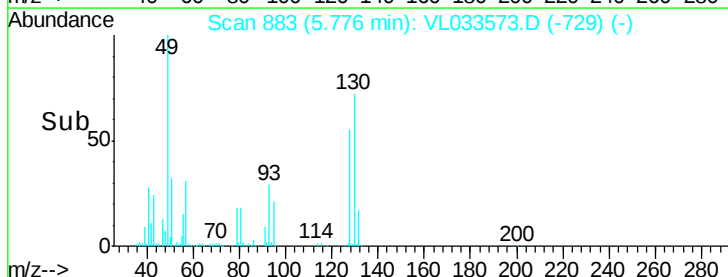
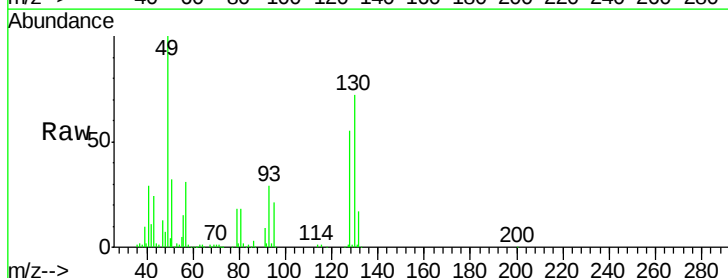
Manual Integrations
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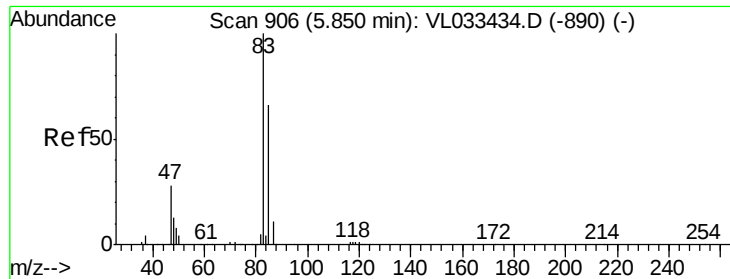
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#26
Hexane
Concen: 1.002 ppbv
RT: 5.78 min Scan# 883
Delta R.T. -0.00 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Tgt Ion:	57	Resp:	88385
Ion	Ratio	Lower	Upper
57	100		
41	99.3	70.7	106.1
43	89.4	182.6	274.0#
56	56.9	42.0	63.0





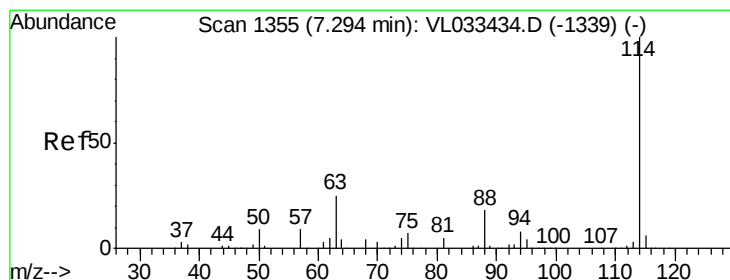
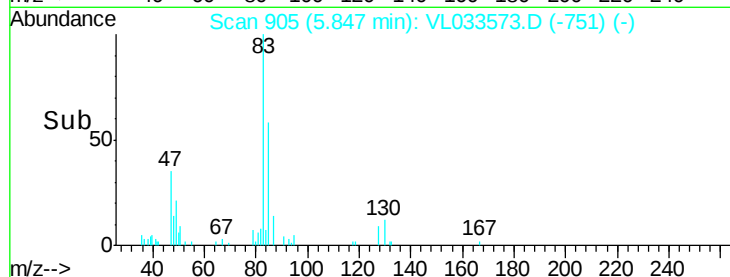
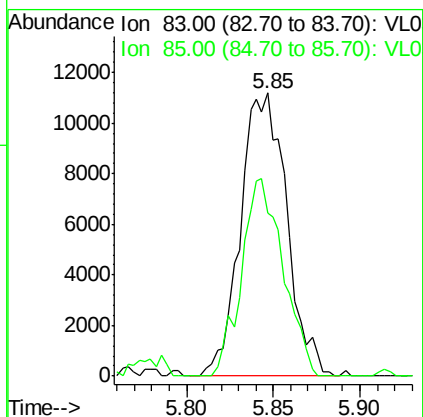
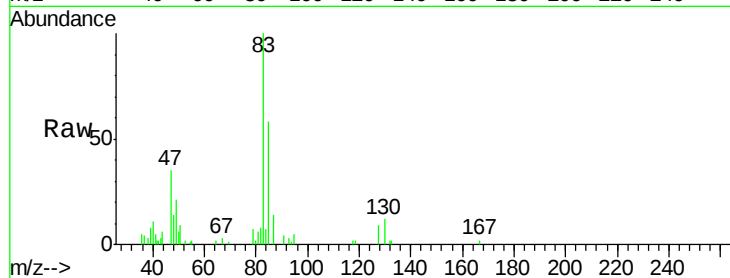
#29
Chloroform
Concen: 0.137 ppbv m
RT: 5.85 min Scan# 905
Delta R.T. -0.00 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion: 83 Resp: 20717
Ion Ratio Lower Upper
83 100
85 57.7 52.6 79.0

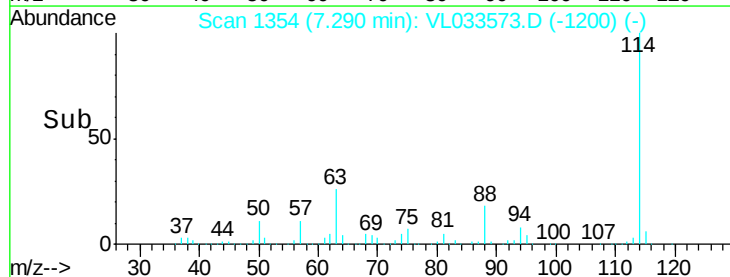
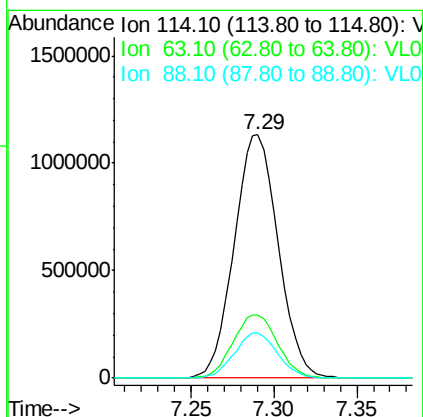
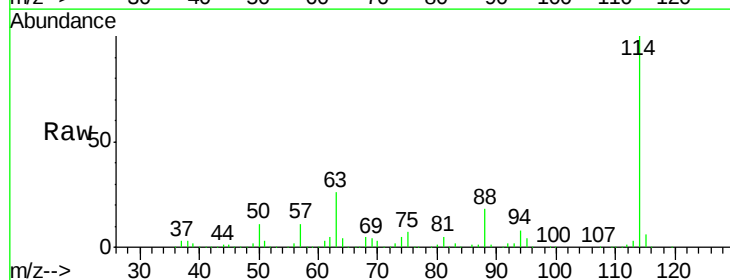
Manual Integrations
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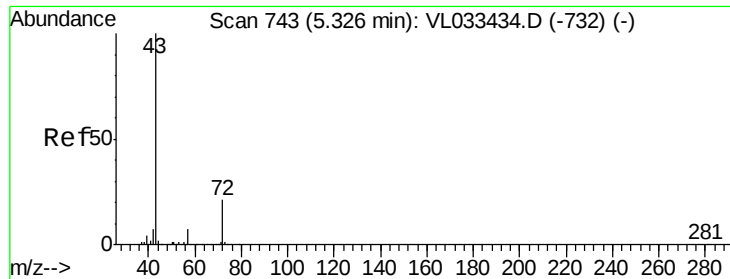
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.29 min Scan# 1354
Delta R.T. -0.00 min
Lab File: VL033573.D
Acq: 10 Apr 2019 20:58

Tgt Ion: 114 Resp: 2089158
Ion Ratio Lower Upper
114 100
63 26.6 21.5 32.3
88 18.2 14.5 21.7





#34

2-Butanone

Concen: 0.298 ppbv

RT: 5.34 min Scan# 746

Delta R.T. 0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 43 Resp: 37405

Ion Ratio Lower Upper

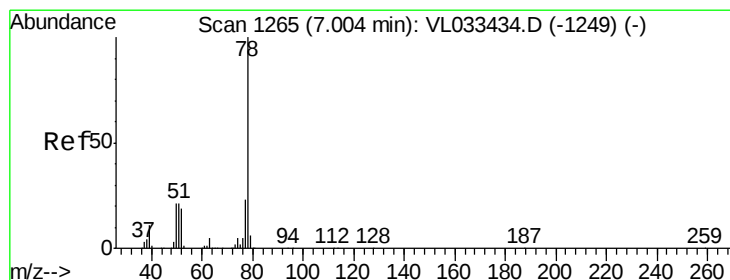
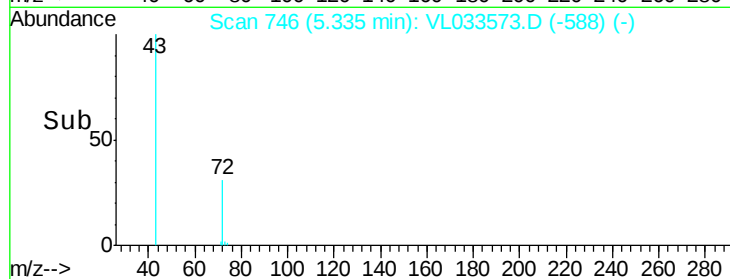
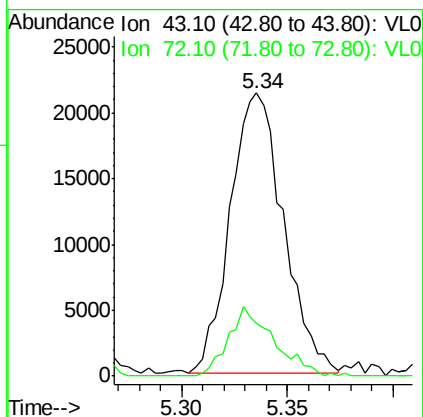
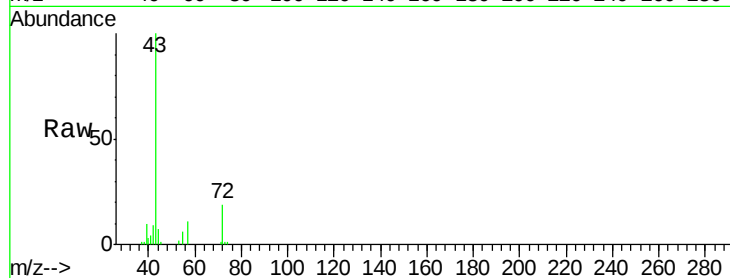
43 100

72 21.2 17.4 26.2

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#36

Benzene

Concen: 0.639 ppbv

RT: 7.00 min Scan# 1263

Delta R.T. -0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

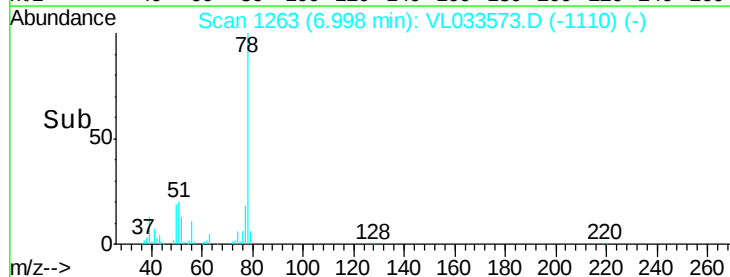
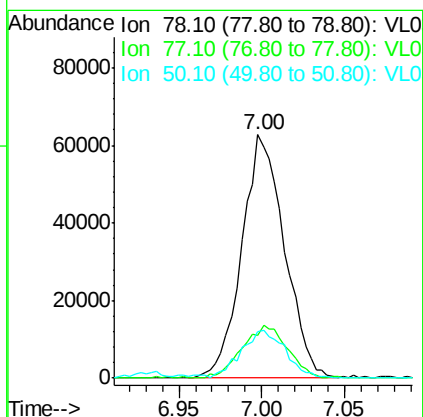
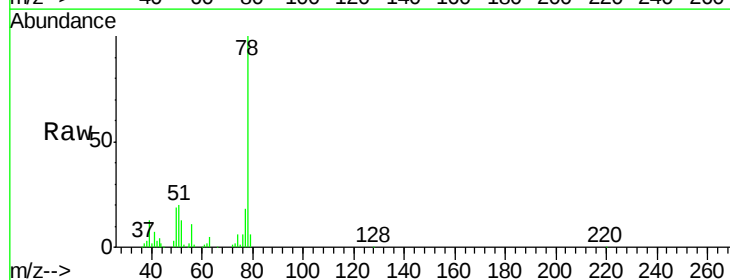
Tgt Ion: 78 Resp: 112080

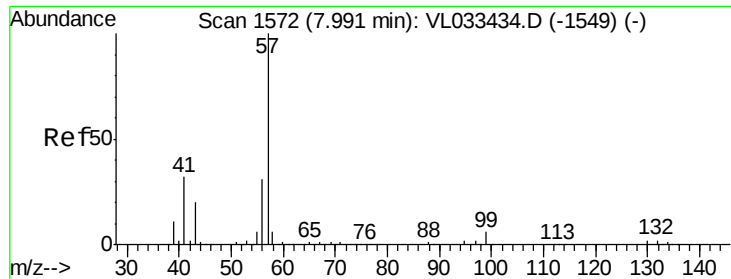
Ion Ratio Lower Upper

78 100

77 17.7 18.1 27.1#

50 19.1 16.7 25.1





#44

2,2,4-Trimethylpentane

Concen: 0.399 ppbv

RT: 7.99 min Scan# 1572

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampleId :

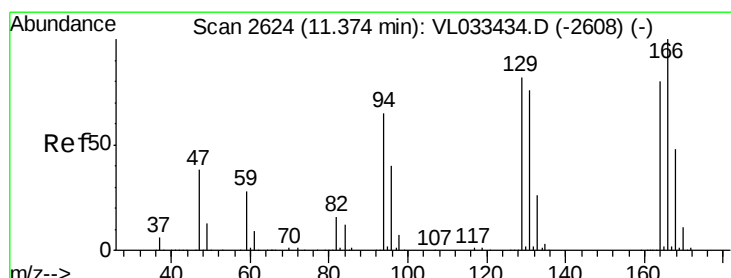
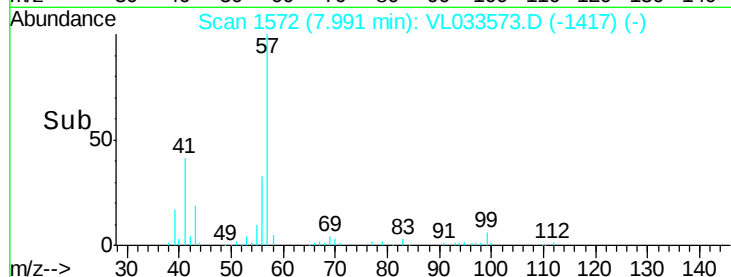
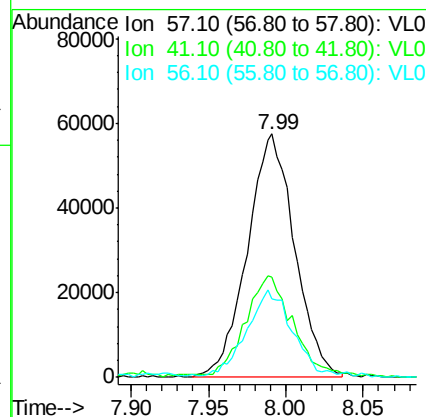
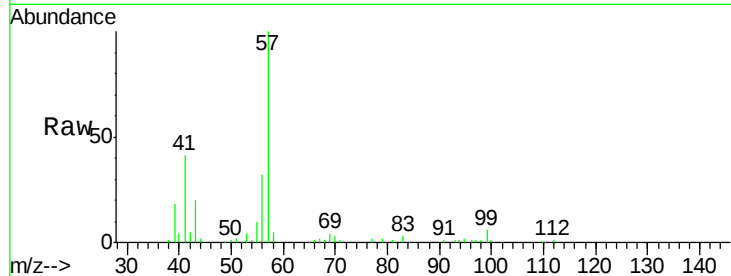
IA1

Tot Ion: 57 Resp: 122201

Ion	Ratio	Lower	Upper
57	100		
41	43.8	26.0	39.0#
56	36.1	24.6	37.0

Manual Integrations
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#52

Tetrachloroethene

Concen: 1.882 ppbv

RT: 11.37 min Scan# 2623

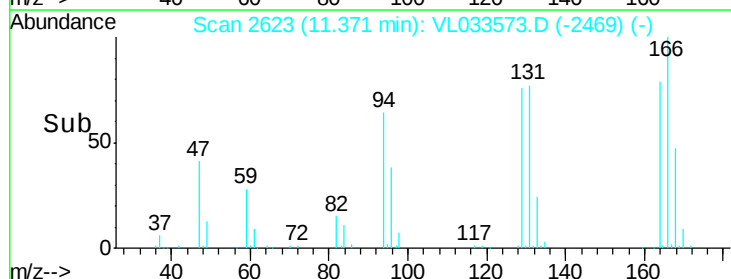
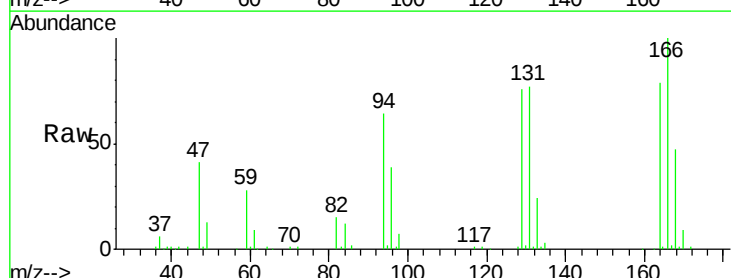
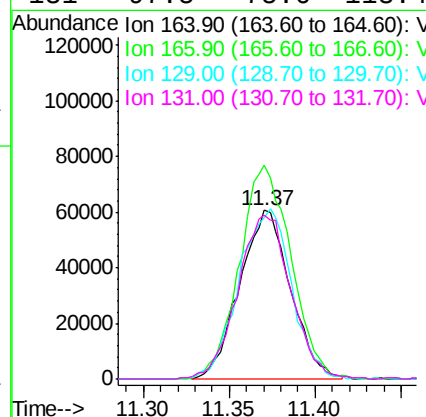
Delta R.T. -0.00 min

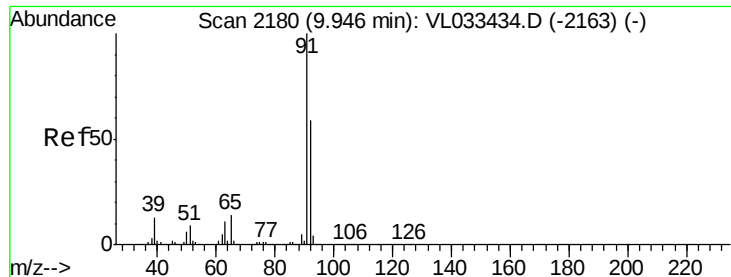
Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Tgt Ion: 164 Resp: 124470

Ion	Ratio	Lower	Upper
164	100		
166	125.4	99.5	149.3
129	96.6	81.4	122.2
131	97.5	75.6	113.4





#53

Toluene

Concen: 1.682 ppbv

RT: 9.94 min Scan# 2179

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 91 Resp: 342725

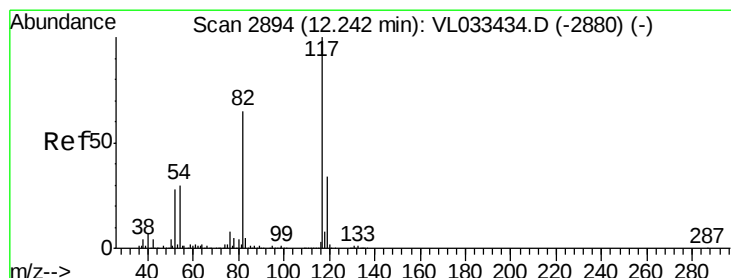
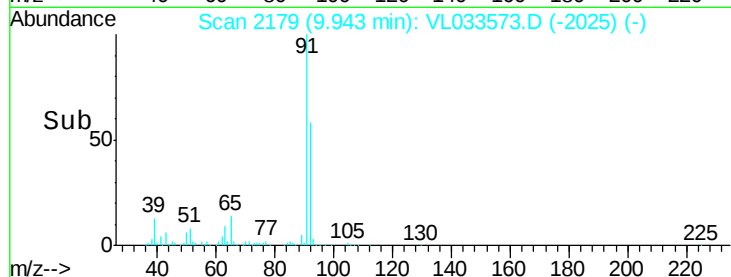
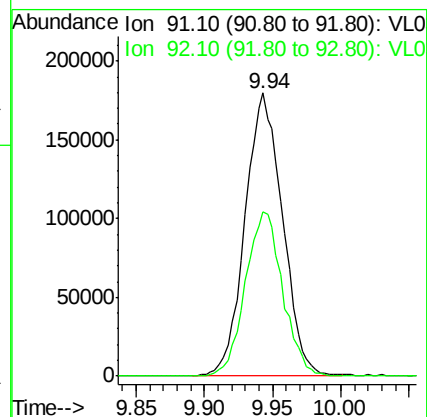
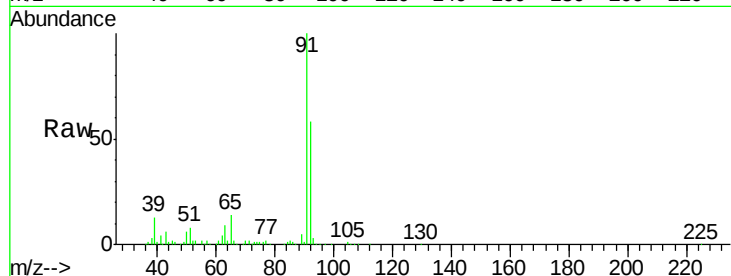
Ion Ratio Lower Upper

91 100

92 57.9 47.4 71.0

Manual Integrations
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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2892

Delta R.T. -0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

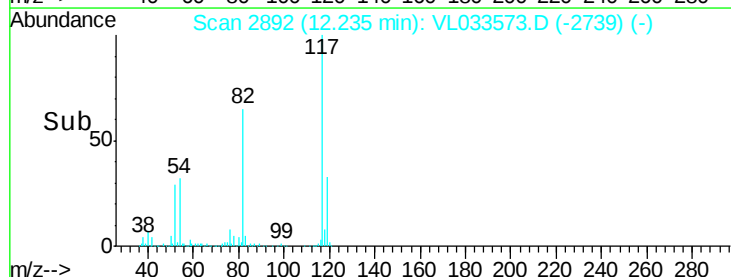
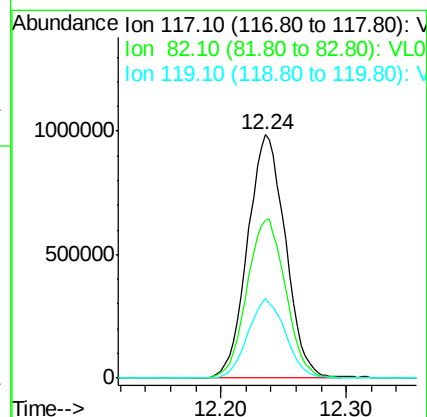
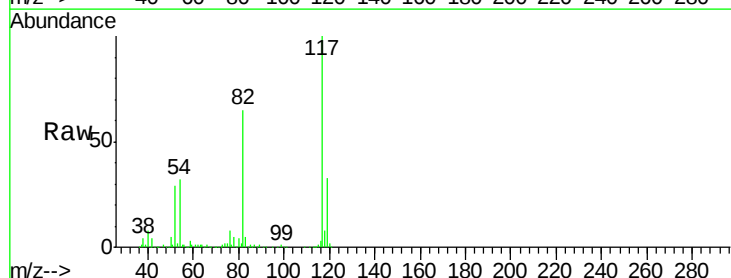
Tgt Ion: 117 Resp: 2065892

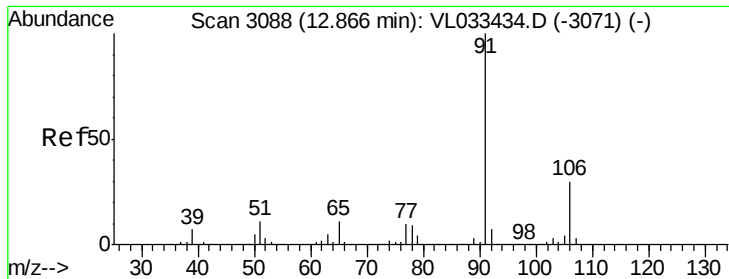
Ion Ratio Lower Upper

117 100

82 66.6 51.5 77.3

119 32.4 25.5 38.3





#58

Ethyl Benzene

Concen: 0.126 ppbv m

RT: 12.87 min Scan# 3088

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 91 Resp: 34763

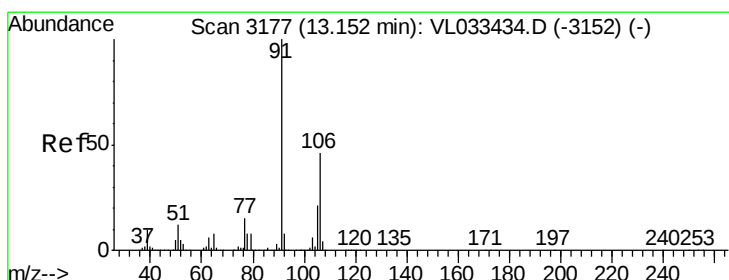
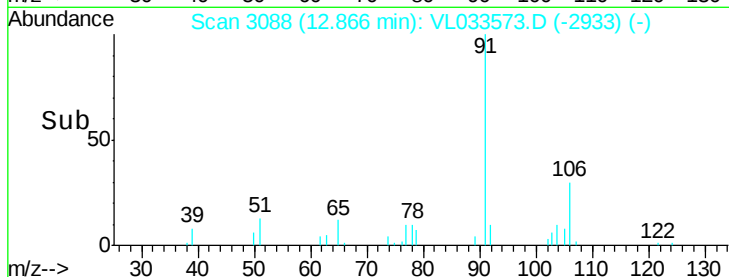
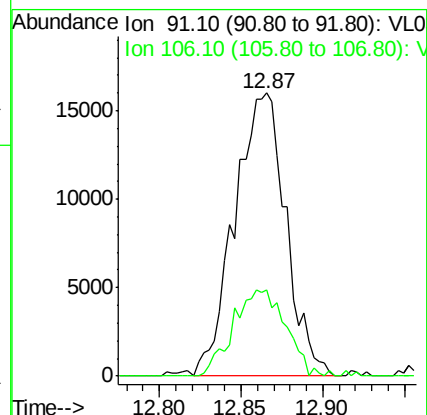
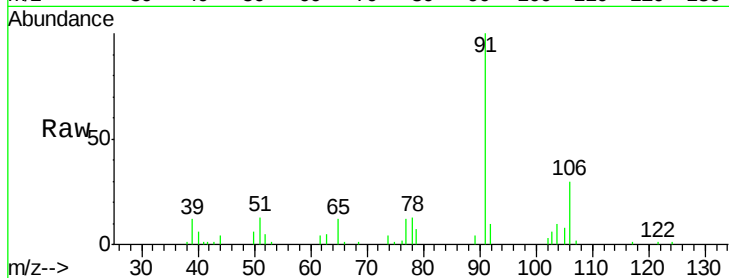
Ion Ratio Lower Upper

91 100

106 30.5 23.8 35.6

Manual Integrations
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#59

m/p-Xylene

Concen: 0.551 ppbv m

RT: 13.12 min Scan# 3167

Delta R.T. -0.03 min

Lab File: VL033573.D

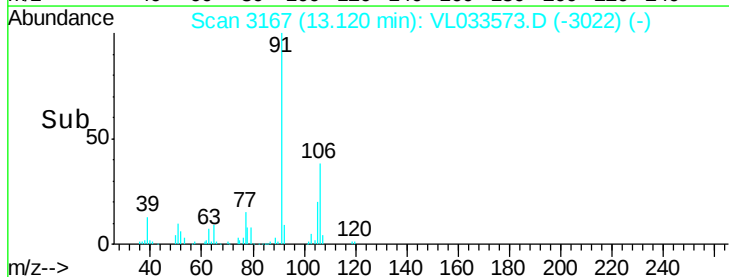
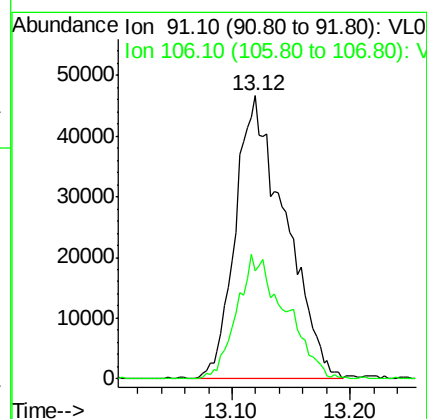
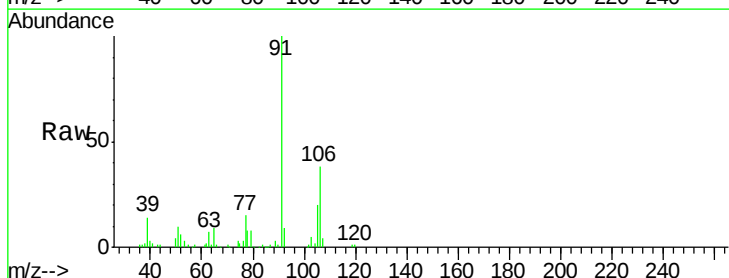
Acq: 10 Apr 2019 20:58

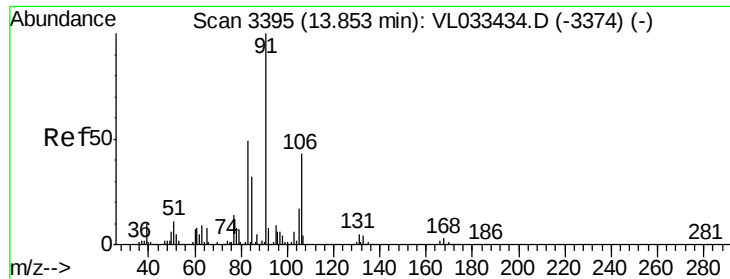
Tgt Ion: 91 Resp: 135716

Ion Ratio Lower Upper

91 100

106 0.0 0.0 0.0





#60

o-Xylene

Concen: 0.195 ppbv m

RT: 13.84 min Scan# 3392

Delta R.T. -0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 91 Resp: 46585

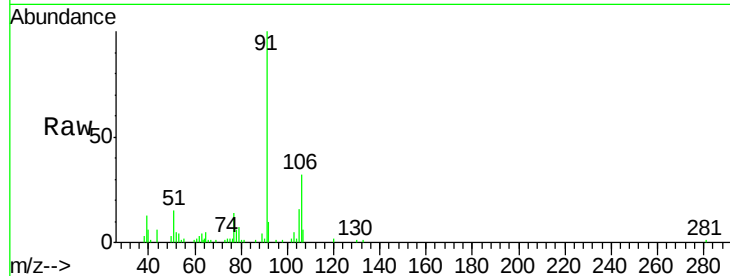
Ion Ratio Lower Upper

91 100

106 0.0 21.4 64.3#

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

13.84

20000

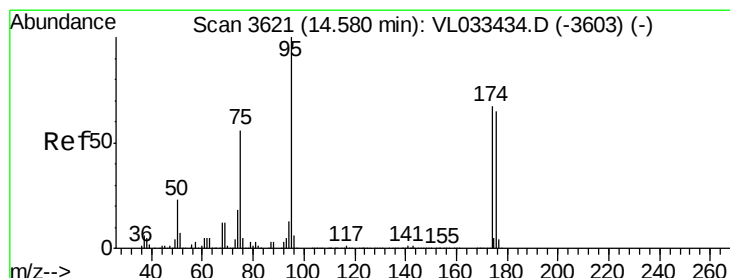
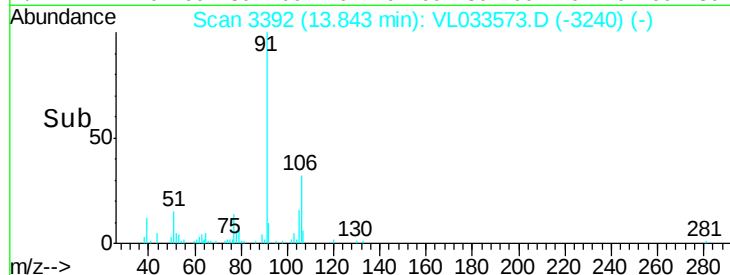
15000

10000

5000

0

Time--> 13.75 13.80 13.85 13.90



#68

1-Bromo-4-Fluorobenzene

Concen: 10.319 ppbv

RT: 14.57 min Scan# 3619

Delta R.T. -0.01 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

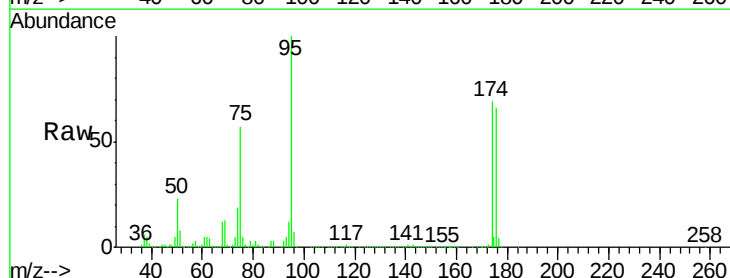
Tgt Ion: 95 Resp: 1671192

Ion Ratio Lower Upper

95 100

174 67.2 52.9 79.3

175 4.8 3.8 5.6



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

1000000

800000

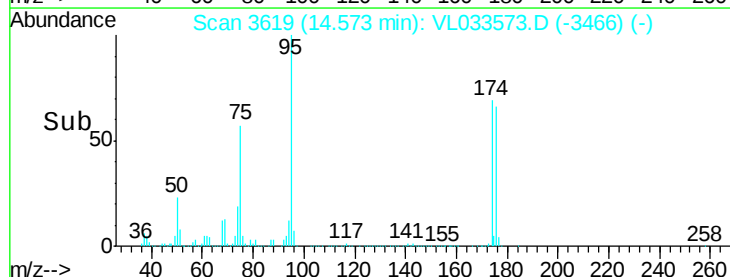
600000

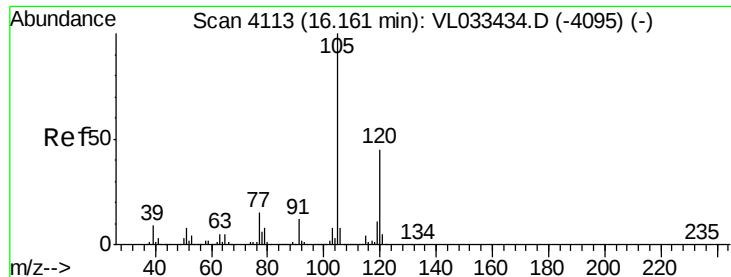
400000

200000

0

Time--> 14.50 14.60





#73

1,3,5-Trimethylbenzene

Concen: 0.116 ppbv m

RT: 16.16 min Scan# 4112

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion:105 Resp: 29606

Ion Ratio Lower Upper

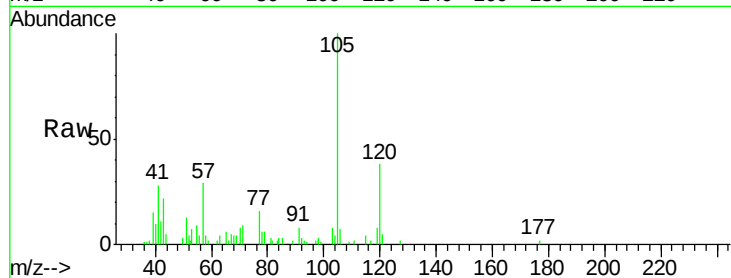
105 100

120 37.7 35.7 53.5

Manual Integrations
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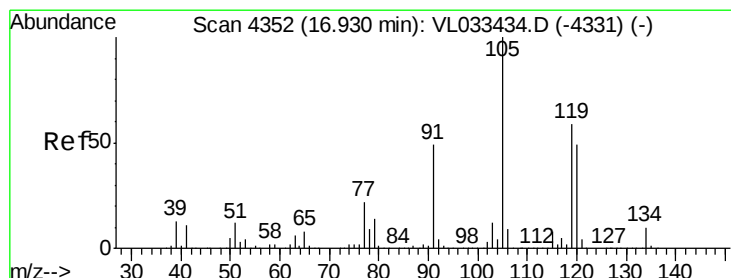
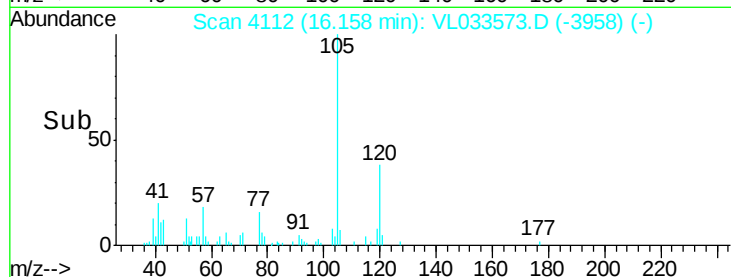
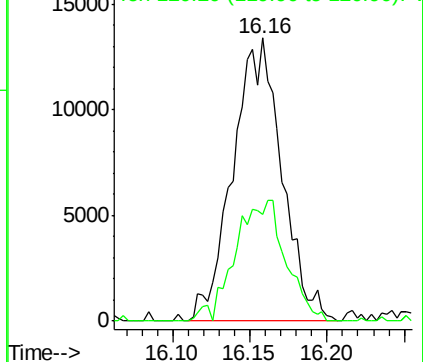
MMDadoda

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.307 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. -0.00 min

Lab File: VL033573.D

Acq: 10 Apr 2019 20:58

Tgt Ion:105 Resp: 84413

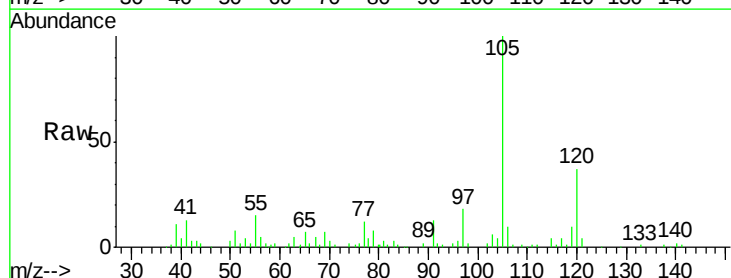
Ion Ratio Lower Upper

105 100

120 40.8 39.0 58.6

91 12.1 40.0 60.0#

77 11.8 17.5 26.3#



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

