

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
 Data File : VL034988.D
 Acq On : 12 May 2020 15:45
 Operator : SY/AP
 Sample : L2567-01DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DUP

Manual Integrations
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Quant Time: May 14 13:04:22 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 0
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1049568	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2446054	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.11	117	2250515	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	1854977	10.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	40836	0.274	ppbv	90
3) Chlorodifluoromethane	2.94	51	35340m	0.295	ppbv	
4) Chloromethane	3.10	50	34939	0.509	ppbv	89
9) Propene	2.98	41	142513m	2.741	ppbv	
10) Heptane	8.13	43	112356	0.862	ppbv	100
11) Trichlorofluoromethane	3.92	101	40300	0.262	ppbv	96
13) Ethanol	3.57	45	319738	18.634	ppbv	100
15) Acetone	3.82	43	1083688	7.810	ppbv	99
19) Isopropyl Alcohol	3.94	45	422684	4.568	ppbv #	96
20) Methylene Chloride	4.32	84	228705	4.979	ppbv	94
26) Hexane	5.67	57	392701	3.886	ppbv #	58
30) Cyclohexane	7.13	84	37947	0.487	ppbv	89
34) 2-Butanone	5.24	43	59739	0.393	ppbv	96
35) Carbon Tetrachloride	7.02	117	9399m	0.061	ppbv	
36) Benzene	6.89	78	121684	0.603	ppbv #	93
38) Trichloroethene	7.84	130	177447	2.271	ppbv	92
41) Tetrahydrofuran	6.06	42	22071m	0.276	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	192239m	0.536	ppbv	
52) Tetrachloroethene	11.25	164	1165270	16.250	ppbv	98
53) Toluene	9.82	91	2742550	12.829	ppbv	100
58) Ethyl Benzene	12.74	91	218525	0.785	ppbv	97
59) m/p-Xylene	12.99	91	698123m	2.851	ppbv	
60) o-Xylene	13.72	91	235927	0.976	ppbv	98
61) Styrene	13.56	104	49732	0.325	ppbv	93
72) 4-Ethyltoluene	15.87	105	52968m	0.196	ppbv	
73) 1,3,5-Trimethylbenzene	16.03	105	45477m	0.173	ppbv	
74) 1,2,4-Trimethylbenzene	16.80	105	181328	0.633	ppbv #	73

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

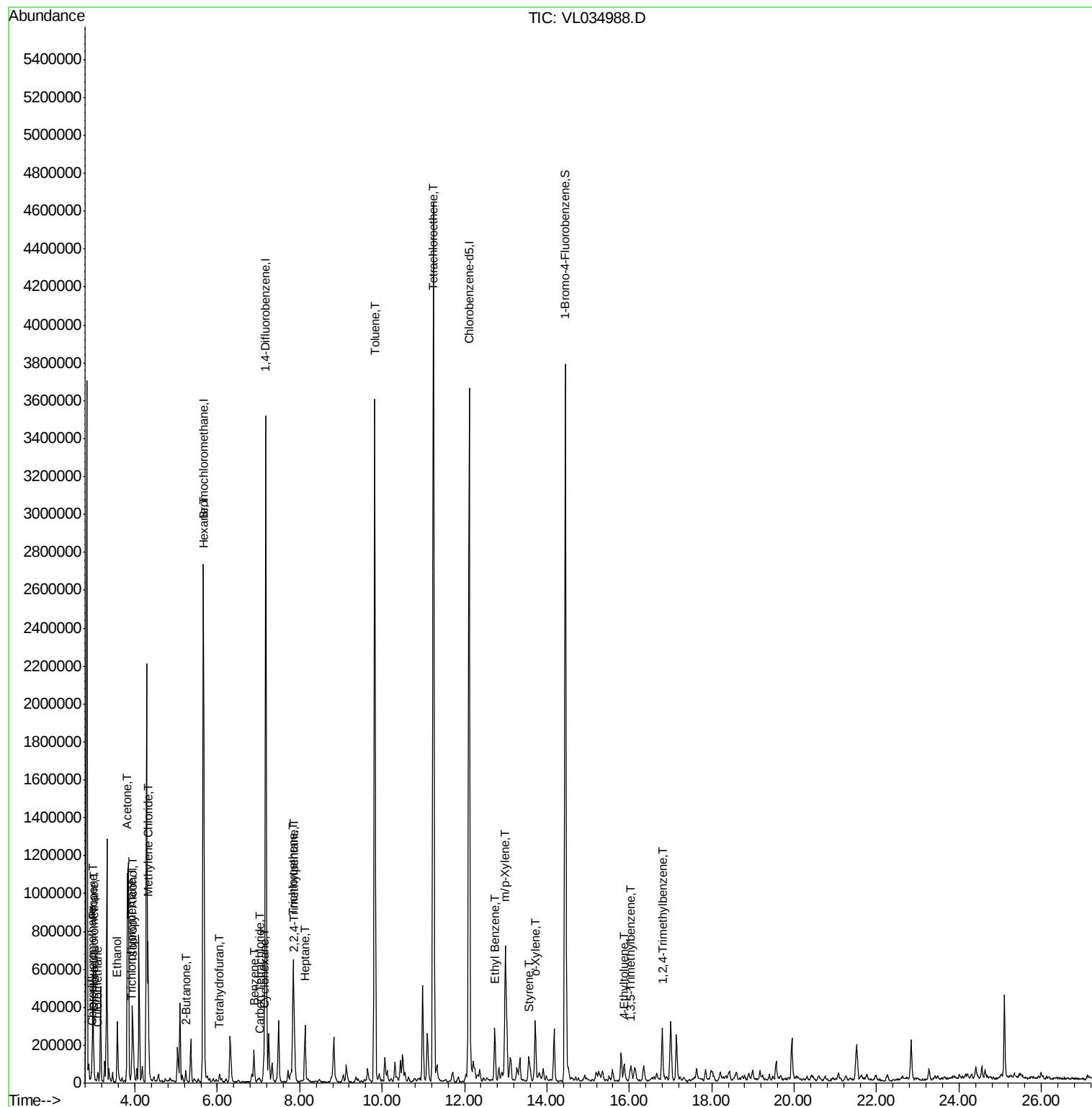
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051220\
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Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

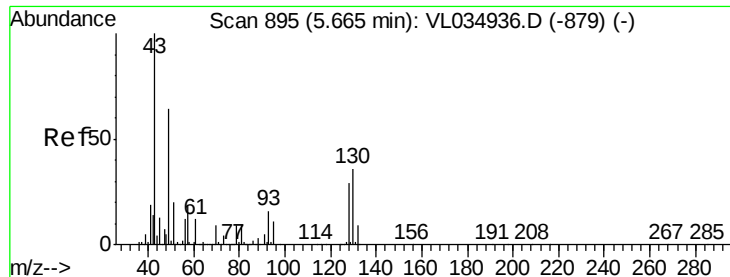
Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Manual Integrations
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Quant Time: May 14 13:04:22 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed May
QLast Update : Wed May 06 14:49:39 2020
Response via : Initial Calibration





#1

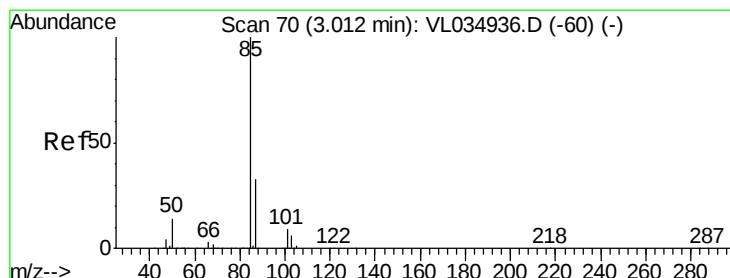
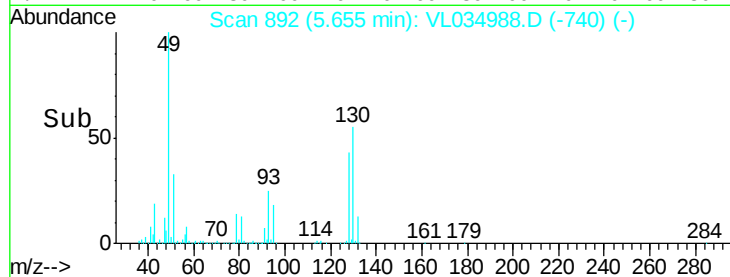
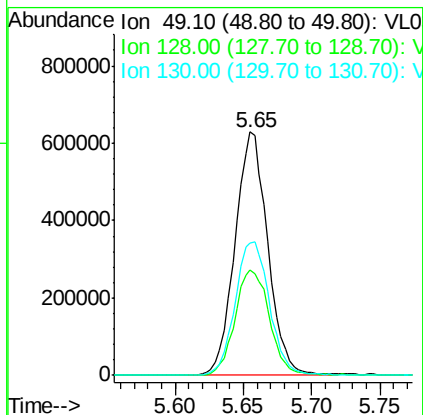
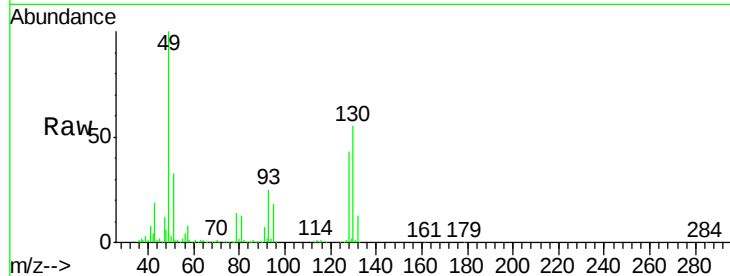
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.65 min Scan# 892
 Delta R.T. -0.01 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DUP

Tot Ion: 49 Resp: 1049568
 Ion Ratio Lower Upper
 49 100
 128 45.9 22.1 66.5
 130 57.7 29.1 87.3

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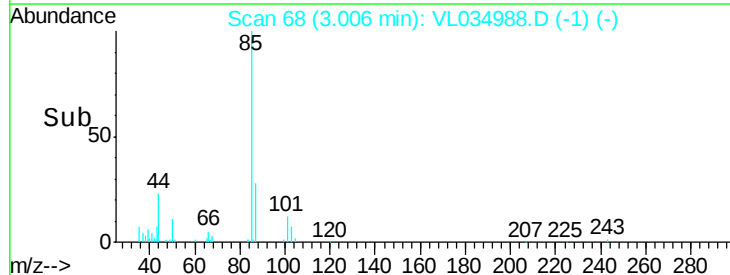
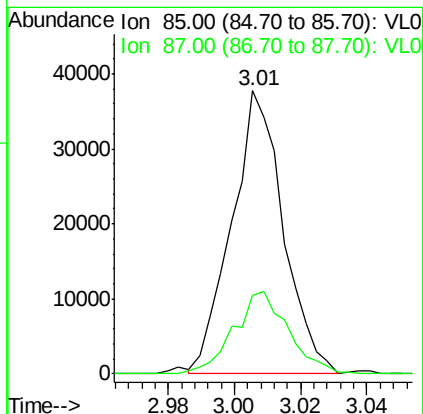
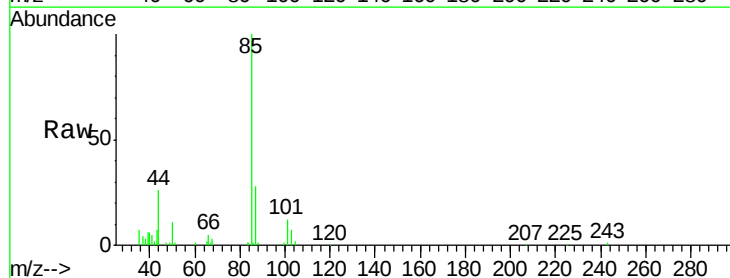
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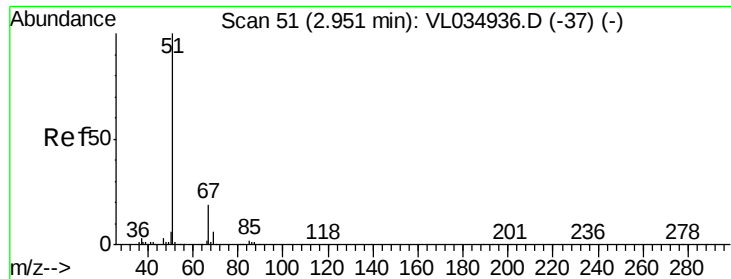


#2

Dichlorodifluoromethane
 Concen: 0.274 ppbv
 RT: 3.01 min Scan# 68
 Delta R.T. -0.01 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Tgt Ion: 85 Resp: 40836
 Ion Ratio Lower Upper
 85 100
 87 27.1 26.2 39.2





#3

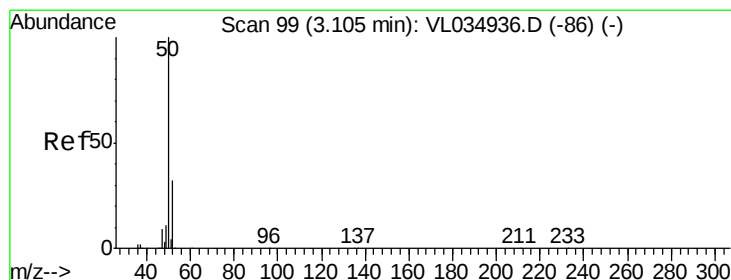
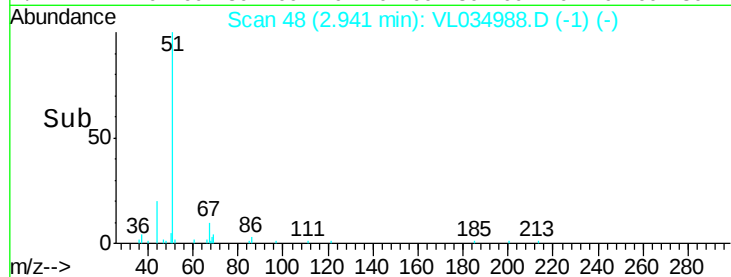
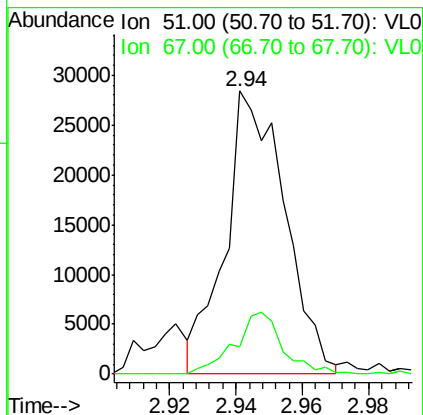
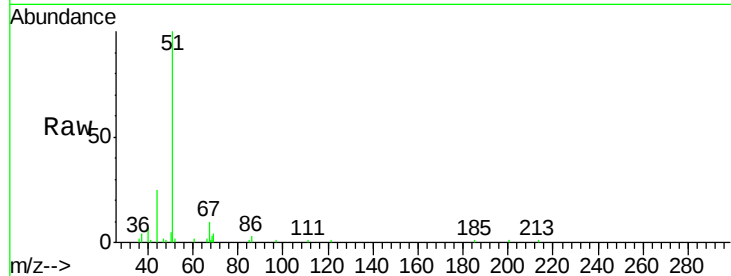
Chlorodifluoromethane
 Concen: 0.295 ppbv
 RT: 2.94 min Scan# 48
 Delta R.T. -0.01 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DUP

Tot Ion	51	Resp	35340
Ion Ratio	Lower	Upper	
51	100		
67	18.3	15.0	22.6

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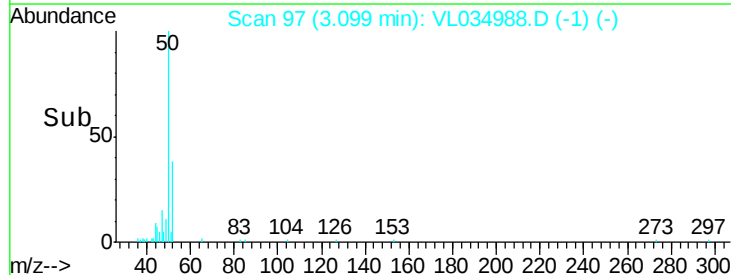
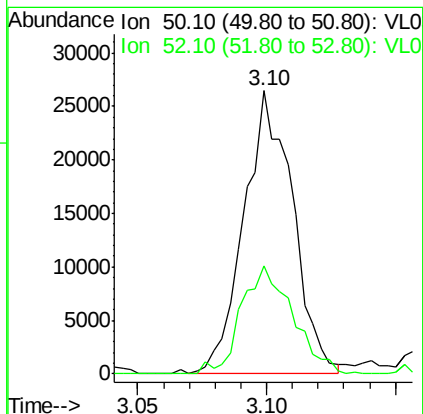
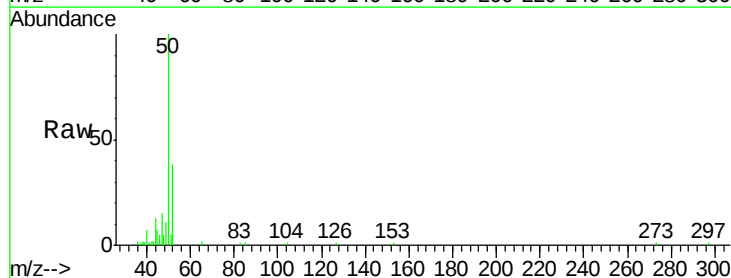
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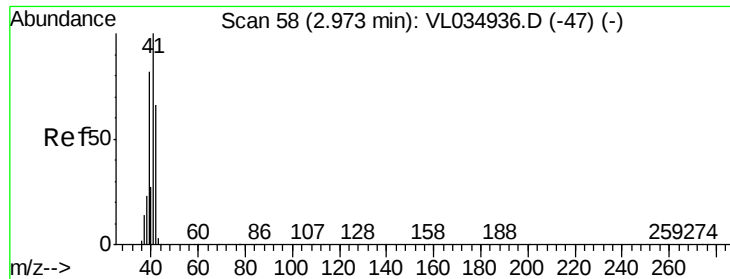


#4

Chloromethane
 Concen: 0.509 ppbv
 RT: 3.10 min Scan# 97
 Delta R.T. -0.01 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Tgt Ion	50	Resp	34939
Ion Ratio	Lower	Upper	
50	100		
52	38.1	25.4	38.2





#9

Propene

Concen: 2.741 ppbv m

RT: 2.98 min Scan# 60

Delta R.T. 0.01 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

Instrument :

MSVOA_L

ClientSampleId :

IA-4DUP

Tot Ion: 41 Resp: 142513

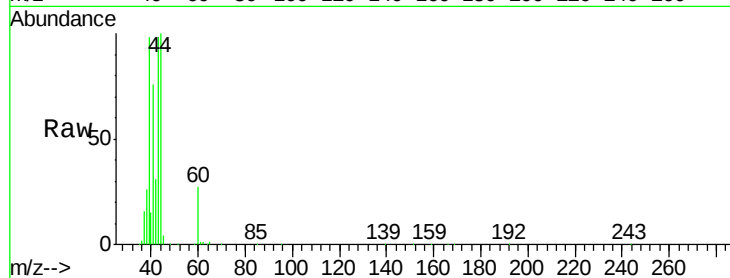
Ion Ratio Lower Upper

41 100

42 58.4 54.5 81.7

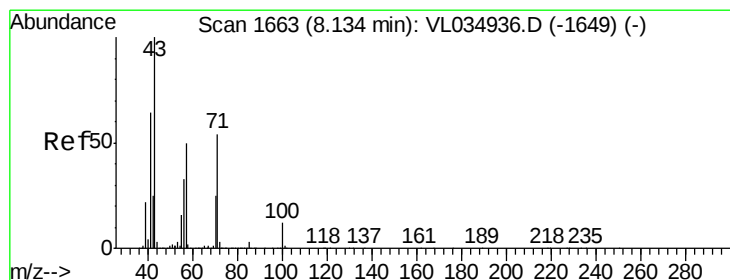
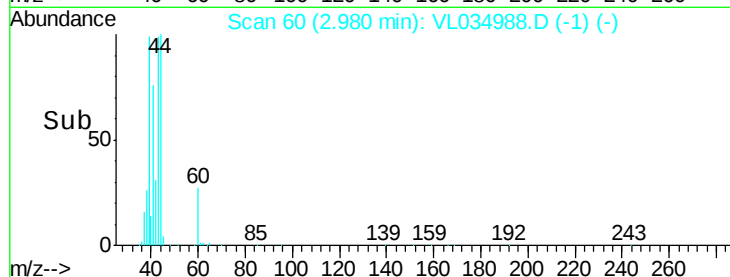
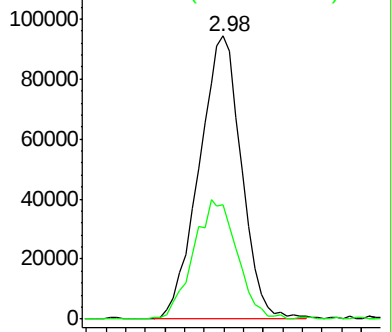
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.862 ppbv

RT: 8.13 min Scan# 1661

Delta R.T. -0.01 min

Lab File: VL034988.D

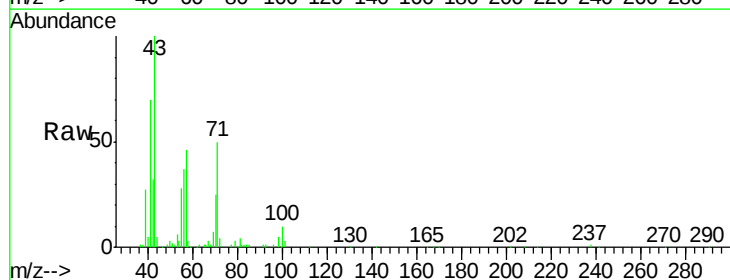
Acq: 12 May 2020 15:45

Tgt Ion: 43 Resp: 112356

Ion Ratio Lower Upper

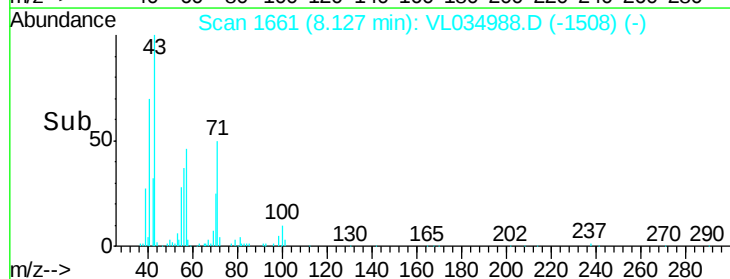
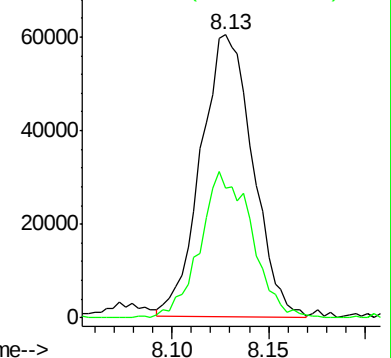
43 100

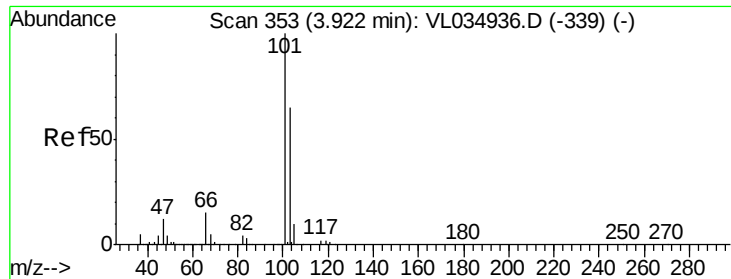
57 51.5 41.1 61.7



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#11

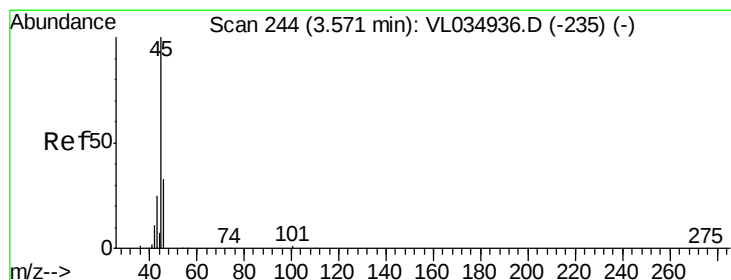
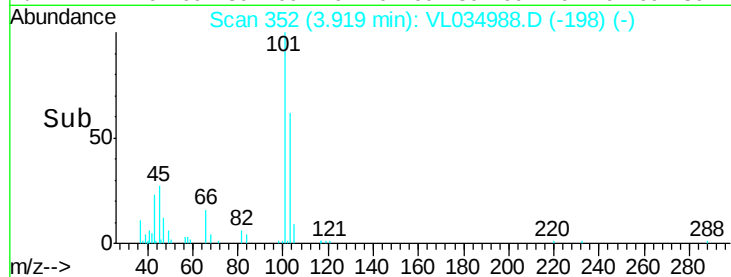
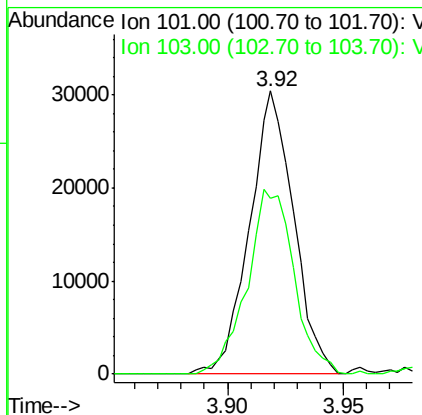
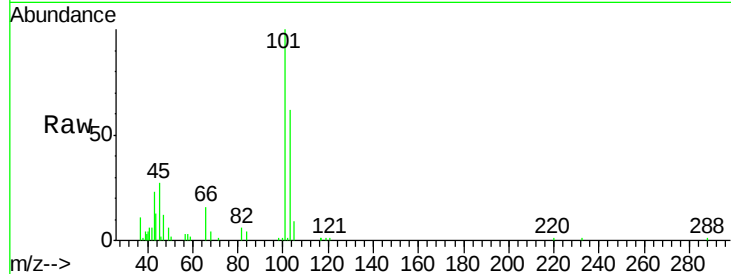
Trichlorofluoromethane
 Concen: 0.262 ppbv
 RT: 3.92 min Scan# 352
 Delta R.T. -0.00 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DUP

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.9	51.9	77.9

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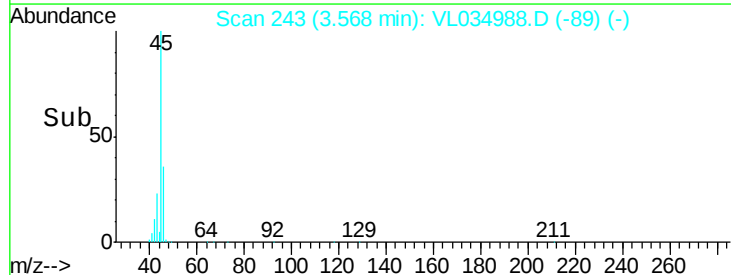
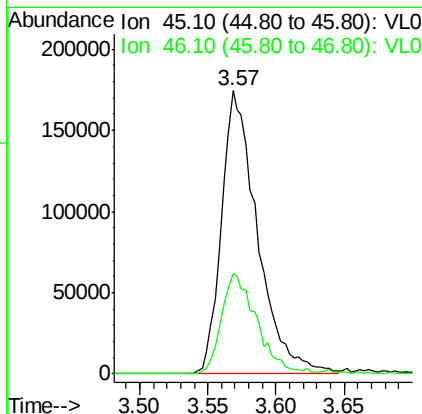
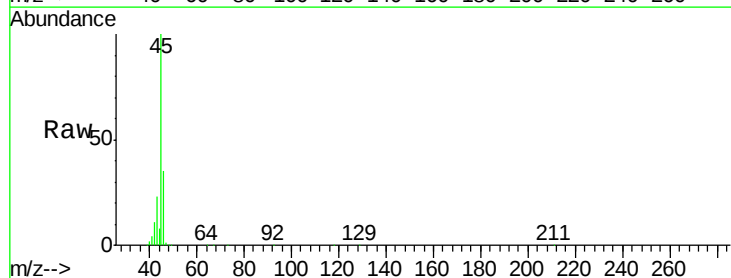
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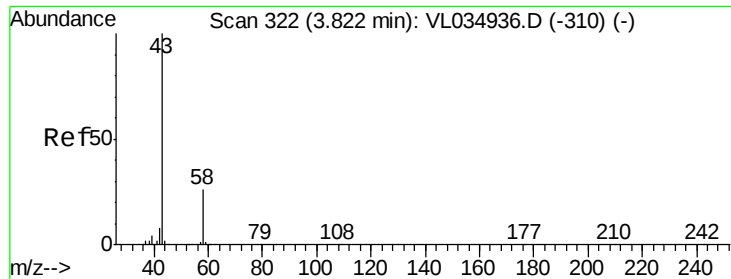


#13

Ethanol
 Concen: 18.634 ppbv
 RT: 3.57 min Scan# 243
 Delta R.T. -0.00 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
45	100		
46	35.7	14.3	57.3





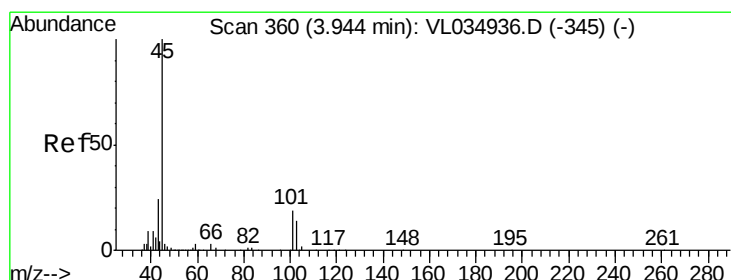
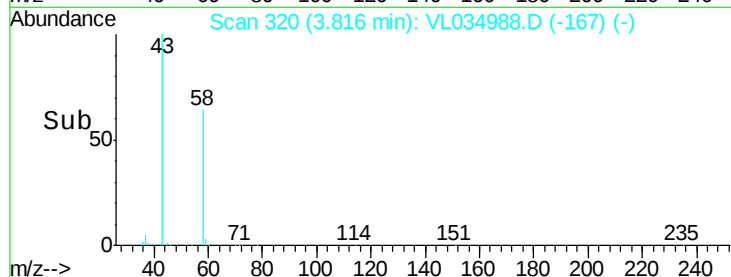
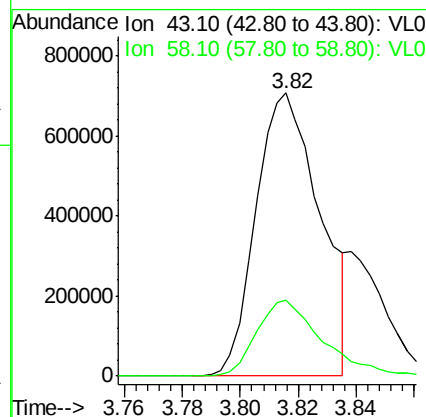
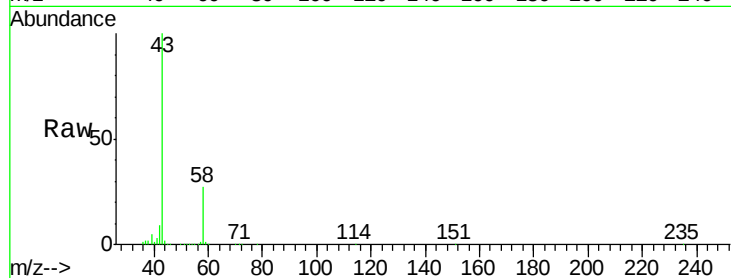
#15
Acetone
Concen: 7.810 ppbv
RT: 3.82 min Scan# 320
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion: 43 Resp: 1083688
Ion Ratio Lower Upper
43 100
58 27.9 21.7 32.5

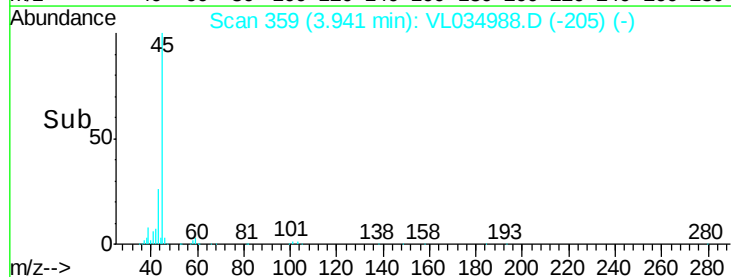
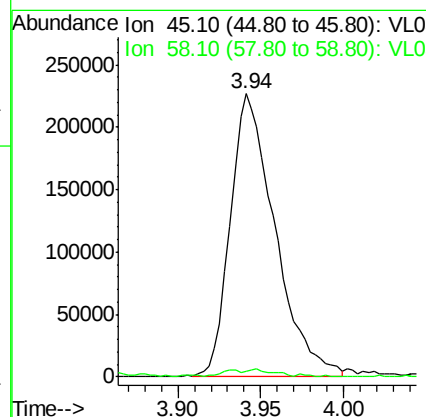
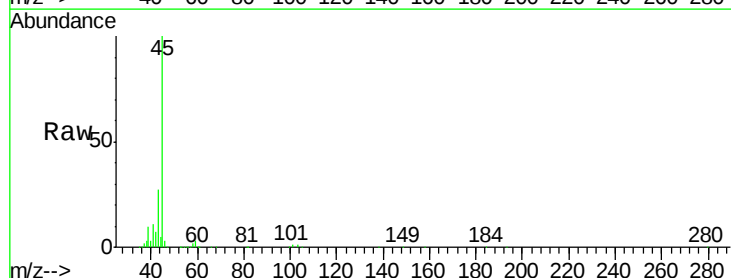
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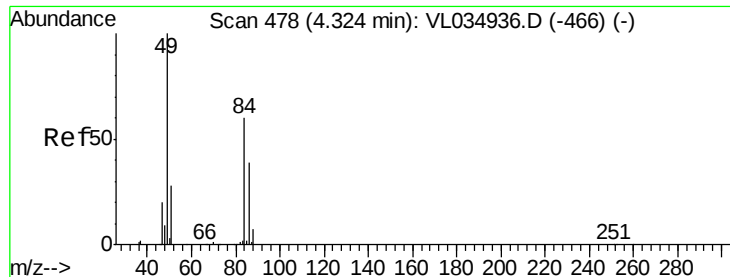
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#19
Isopropyl Alcohol
Concen: 4.568 ppbv
RT: 3.94 min Scan# 359
Delta R.T. -0.00 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion: 45 Resp: 422684
Ion Ratio Lower Upper
45 100
58 3.5 1.7 2.5#





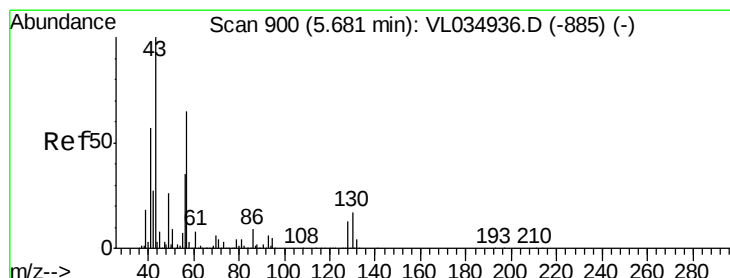
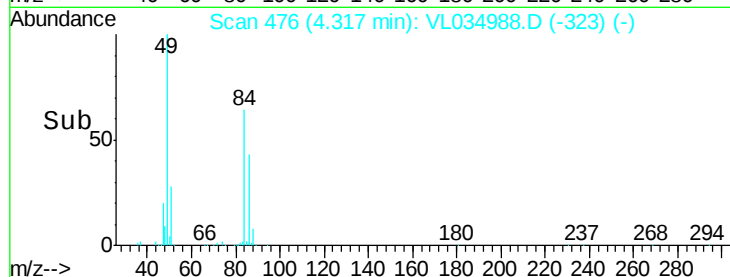
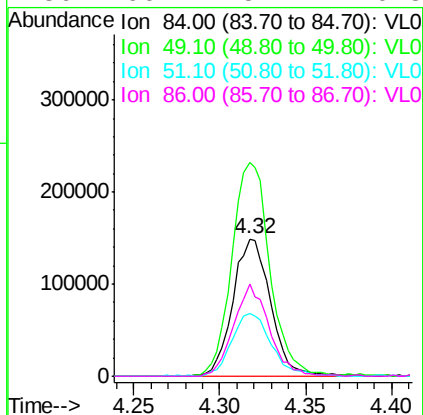
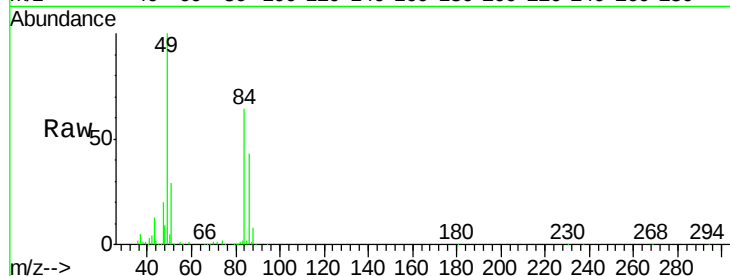
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Methvlene Chloride
Concen: 4.979 ppbv
RT: 4.32 min Scan# 476
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	155.6	132.5	198.7		
51	45.0	38.4	57.6		
86	66.7	51.2	76.8		

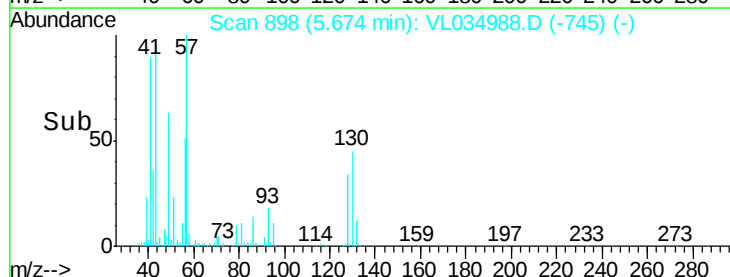
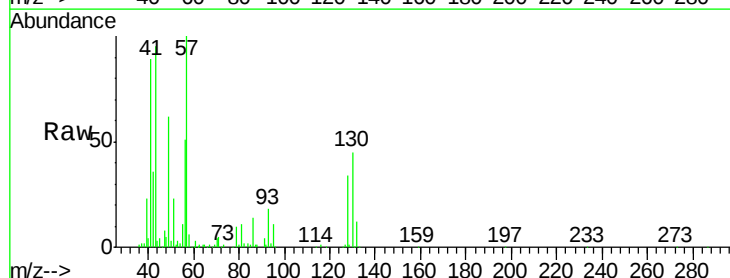
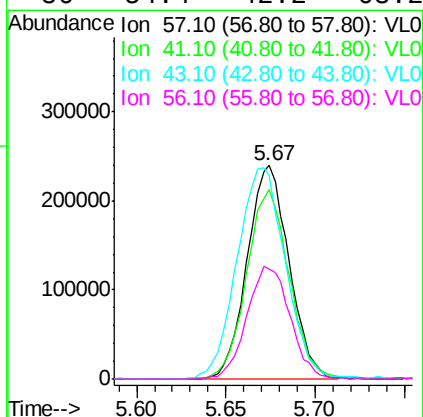
Manual Integrations
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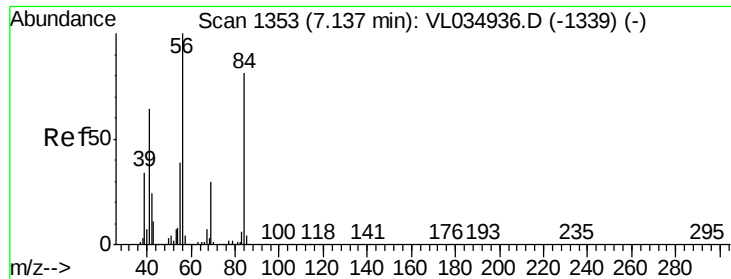
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#26
Hexane
Concen: 3.886 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	91.1	72.7	109.1		
43	115.0	182.1	273.1#		
56	54.4	42.2	63.2		





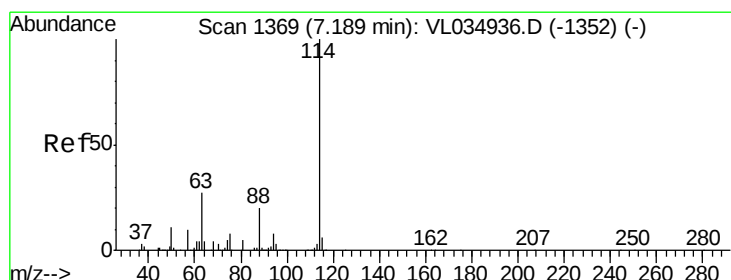
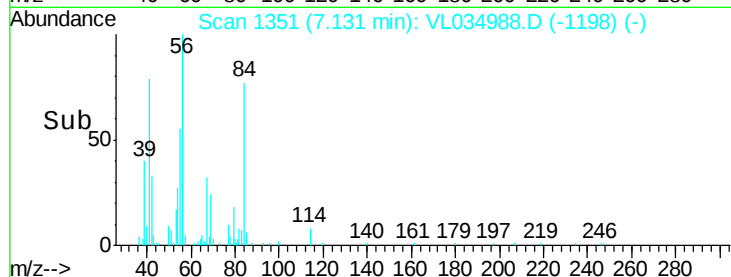
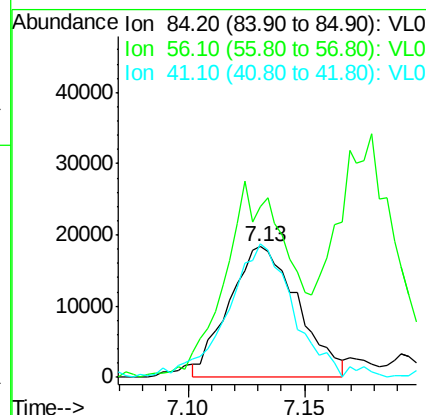
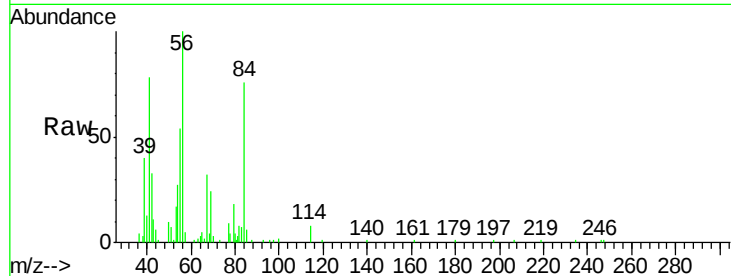
#30
Cyclohexane
Concen: 0.487 ppbv
RT: 7.13 min Scan# 1351
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ratio	Lower	Upper
84	100		
56	148.3	111.4	167.2
41	99.6	66.7	100.1

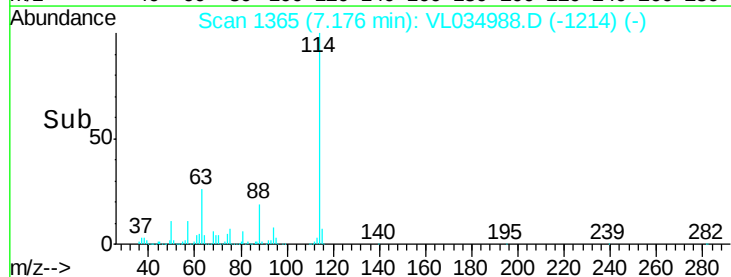
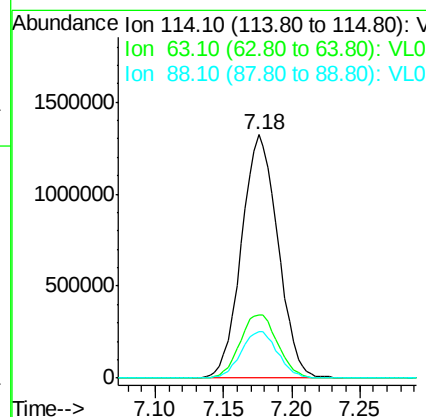
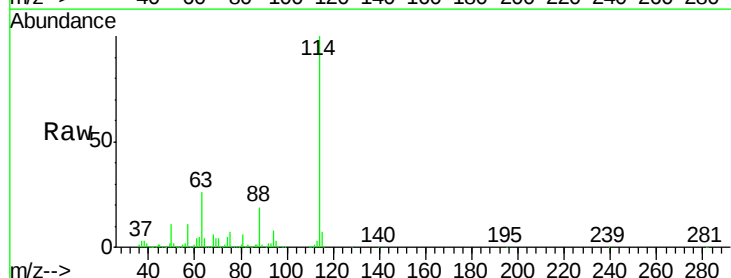
Manual Integrations
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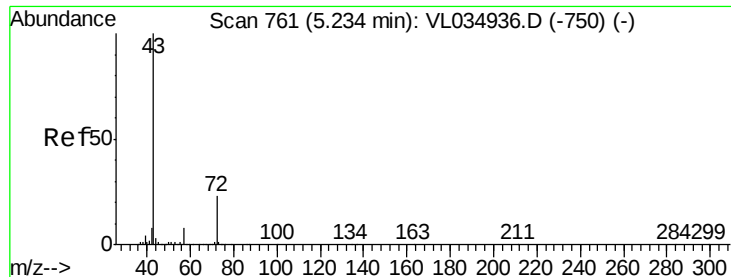
MMDadoda
5/13/2020 5:11:46 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.2	22.2	33.4
88	19.2	15.5	23.3





#34

2-Butanone

Concen: 0.393 ppbv

RT: 5.24 min Scan# 762

Delta R.T. 0.00 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

Instrument :

MSVOA_L

ClientSampleId :

IA-4DUP

Tot Ion: 43 Resp: 59739

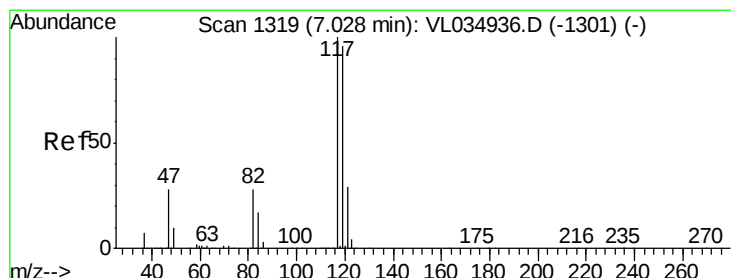
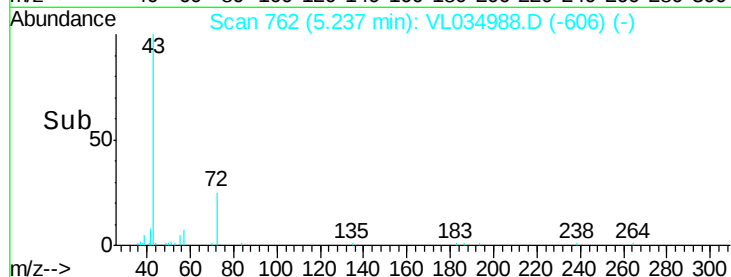
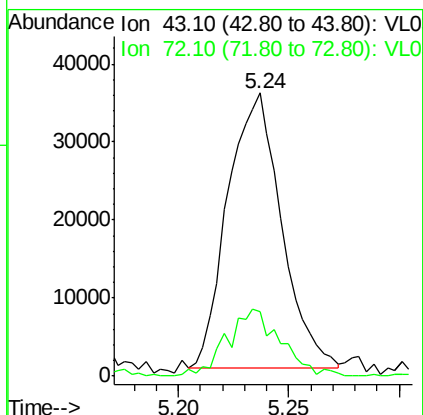
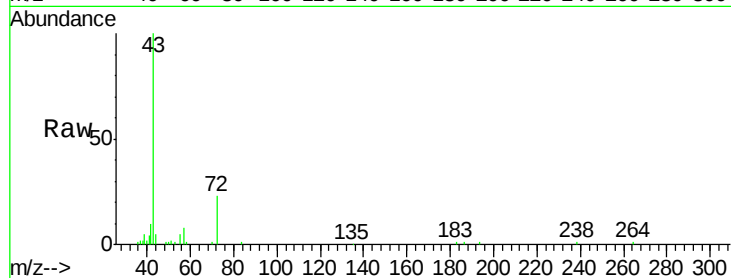
Ion Ratio Lower Upper

43 100

72 24.3 18.0 27.0

Manual Integrations
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#35

Carbon Tetrachloride

Concen: 0.061 ppbv m

RT: 7.02 min Scan# 1317

Delta R.T. -0.01 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

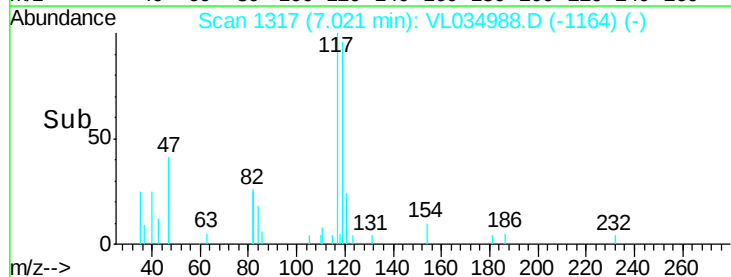
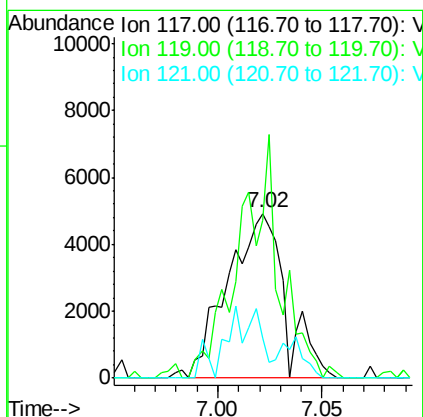
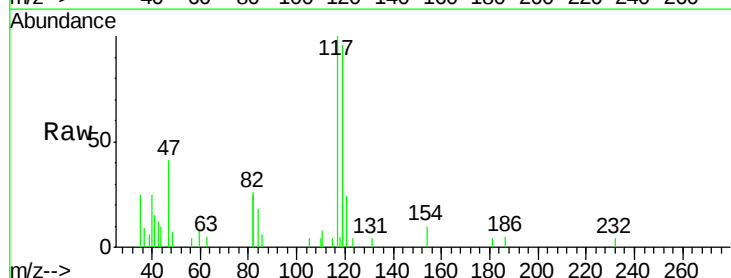
Tgt Ion: 117 Resp: 9399

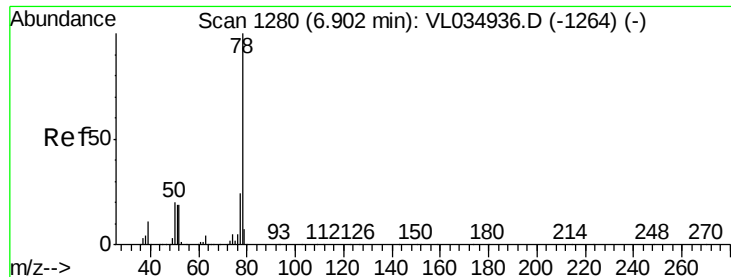
Ion Ratio Lower Upper

117 100

119 95.9 77.0 115.6

121 24.0 23.0 34.6





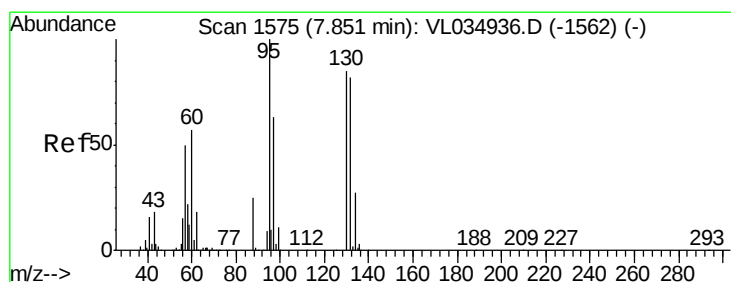
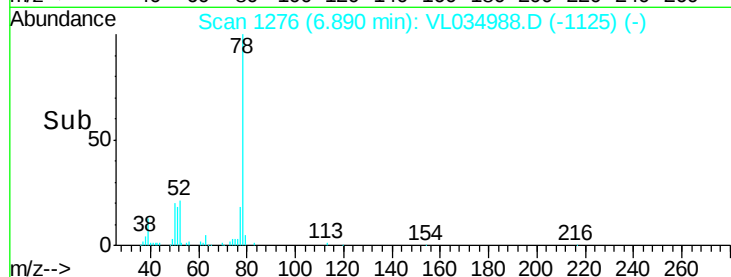
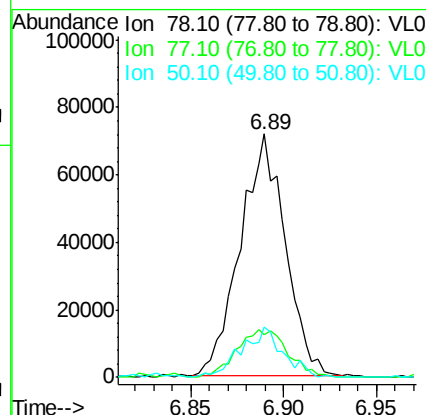
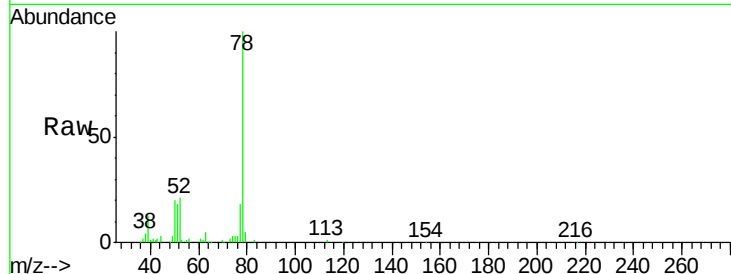
#36
Benzene
Concen: 0.603 ppbv
RT: 6.89 min Scan# 1276
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	17.9	19.0	28.6#
50	20.2	15.8	23.8

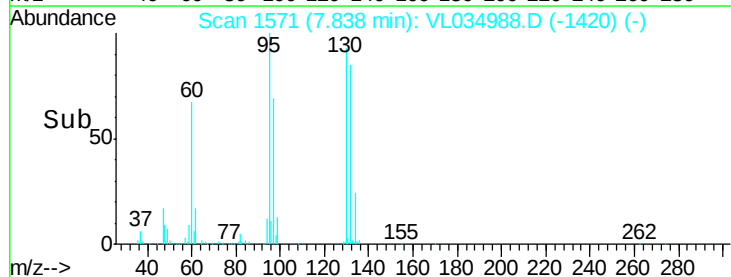
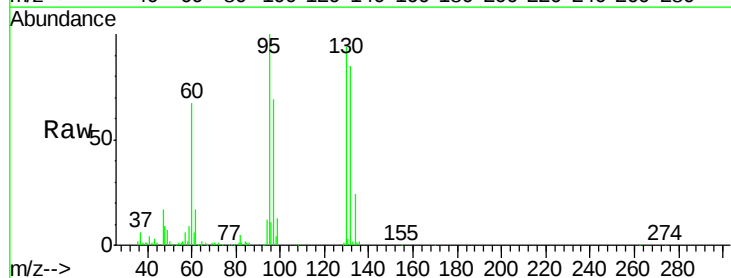
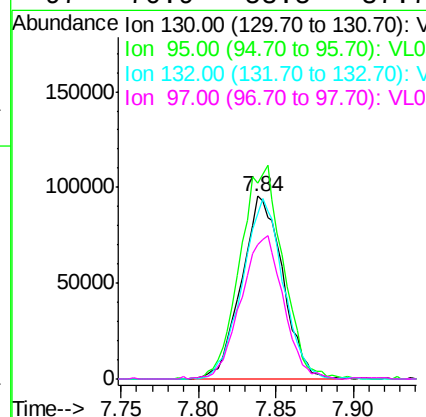
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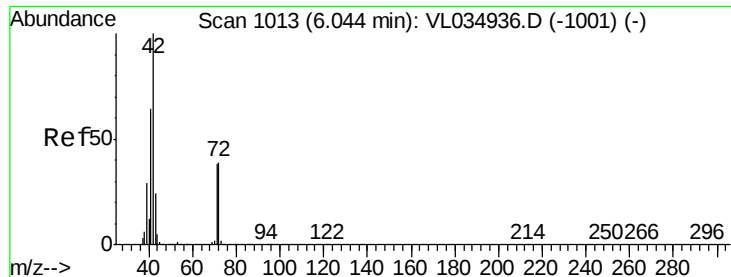
MMDadoda
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#38
Trichloroethene
Concen: 2.271 ppbv
RT: 7.84 min Scan# 1571
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
130	100		
95	103.1	93.4	140.0
132	87.5	76.4	114.6
97	70.9	58.5	87.7





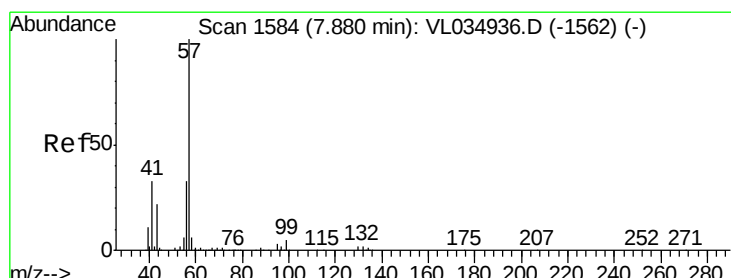
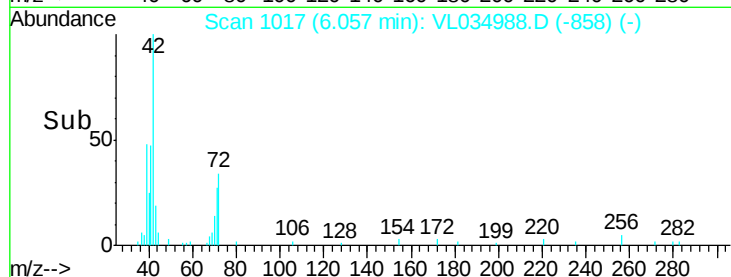
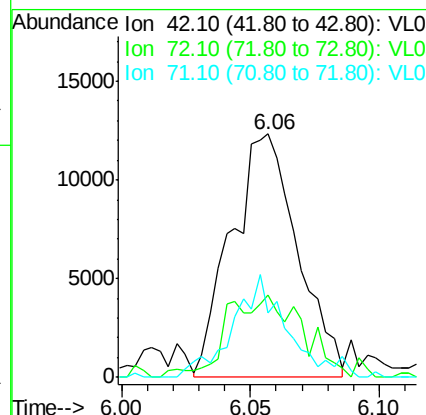
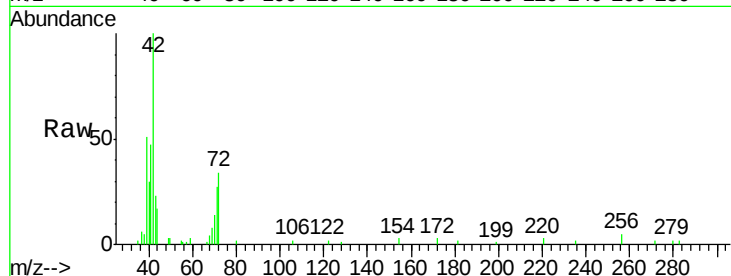
#41
Tetrahydrofuran
Concen: 0.276 ppbv m
RT: 6.06 min Scan# 1017
Delta R.T. 0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	0.0	29.8	44.8#

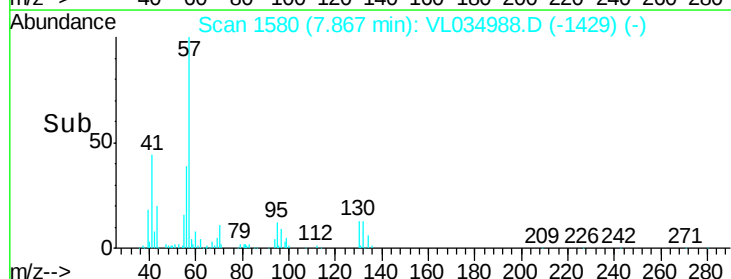
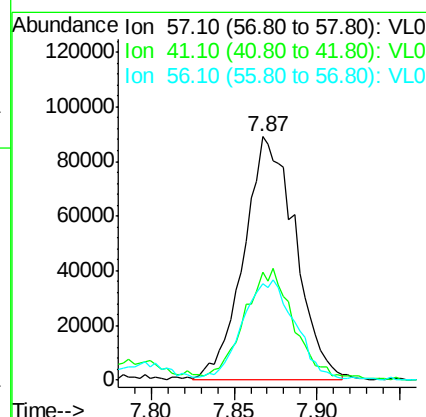
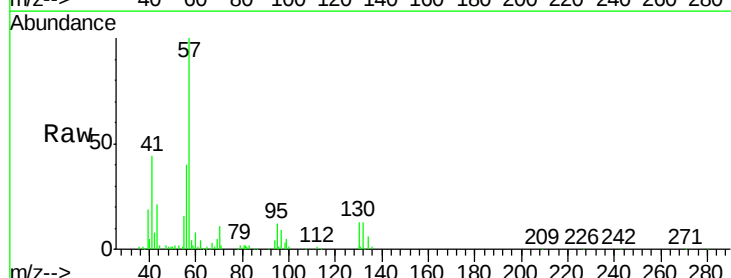
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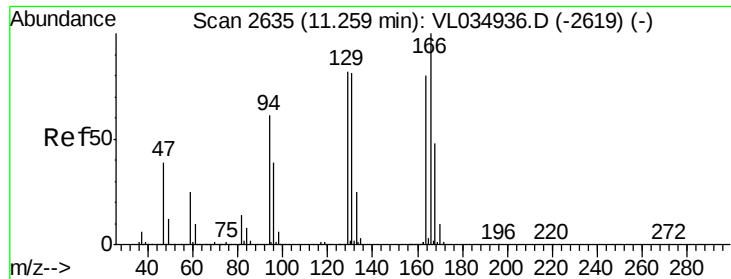
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 0.536 ppbv m
RT: 7.87 min Scan# 1580
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
57	100		
41	45.6	26.4	39.6#
56	41.1	25.5	38.3#





#52

Tetrachloroethene

Concen: 16.250 ppbv

RT: 11.25 min Scan# 2631

Delta R.T. -0.01 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

Instrument :

MSVOA_L

ClientSampleId :

IA-4DUP

Tot Ion:164 Resp: 1165270

Ion Ratio Lower Upper

164 100

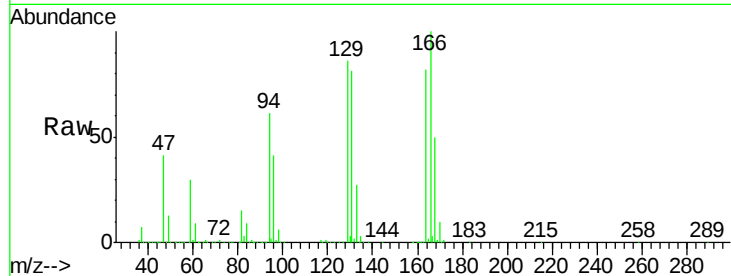
166 122.5 100.7 151.1

129 105.4 83.0 124.4

131 99.9 81.0 121.4

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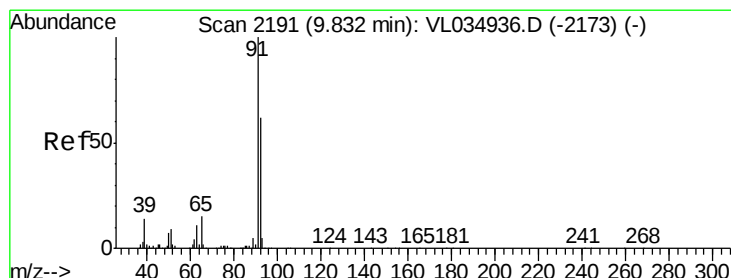
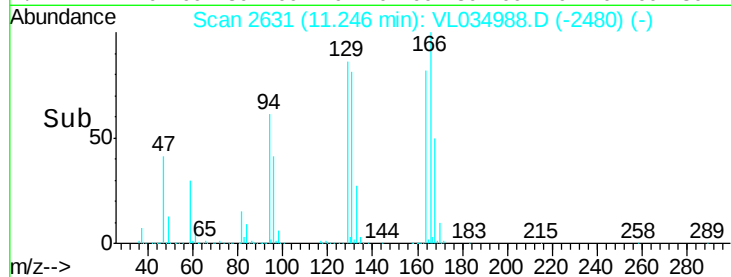
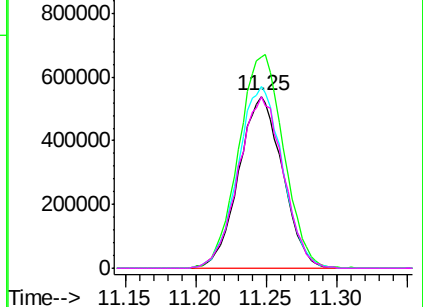


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 12.829 ppbv

RT: 9.82 min Scan# 2187

Delta R.T. -0.01 min

Lab File: VL034988.D

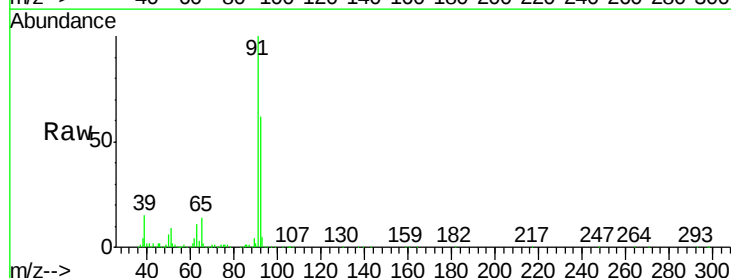
Acq: 12 May 2020 15:45

Tgt Ion: 91 Resp: 2742550

Ion Ratio Lower Upper

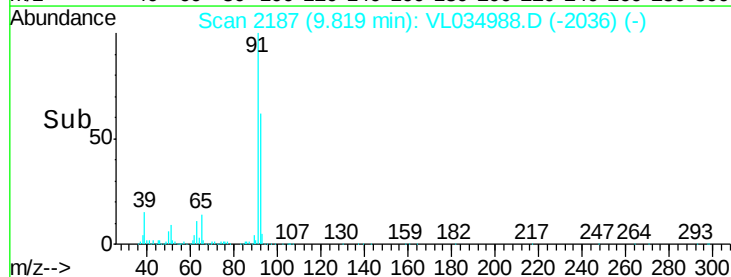
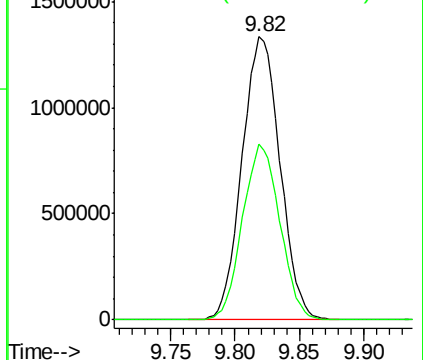
91 100

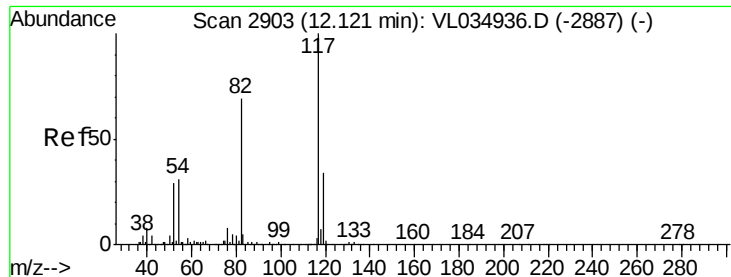
92 61.1 48.6 73.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





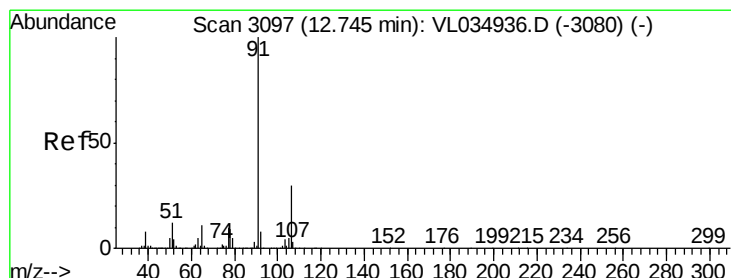
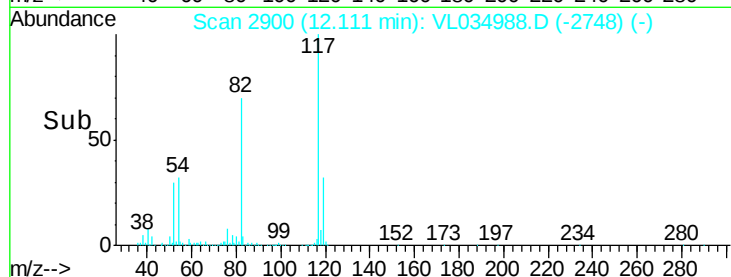
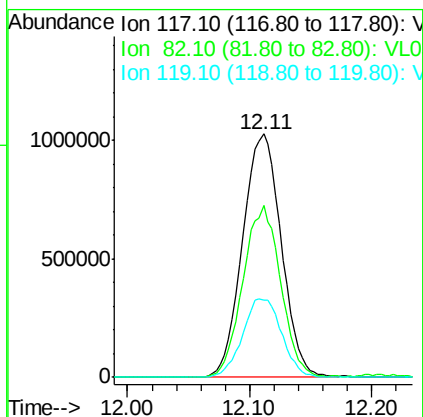
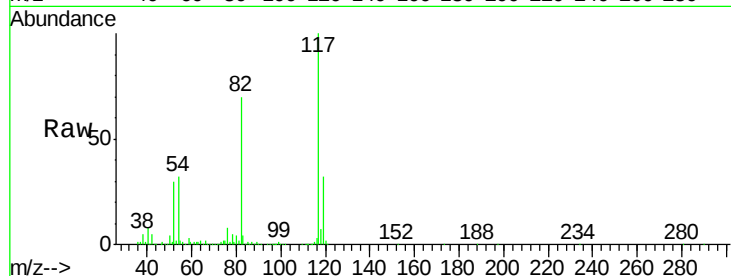
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2900
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ratio	Lower	Upper
117	100		
82	69.0	53.1	79.7
119	32.7	26.7	40.1

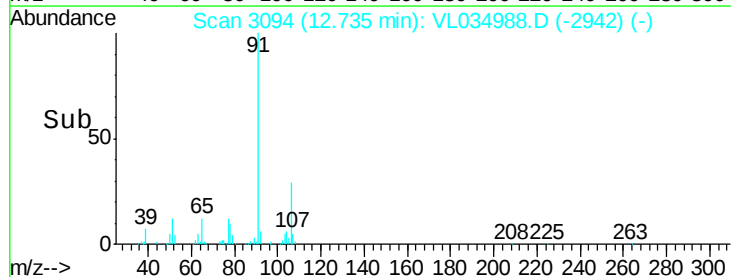
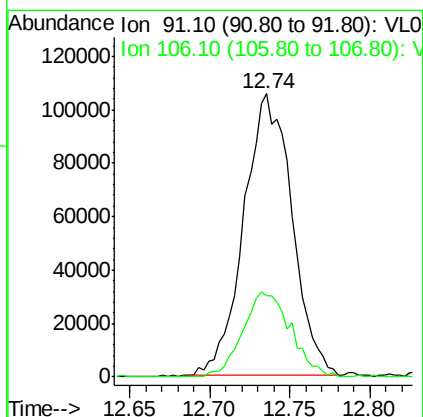
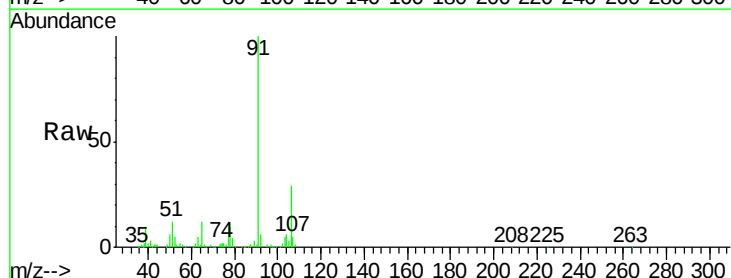
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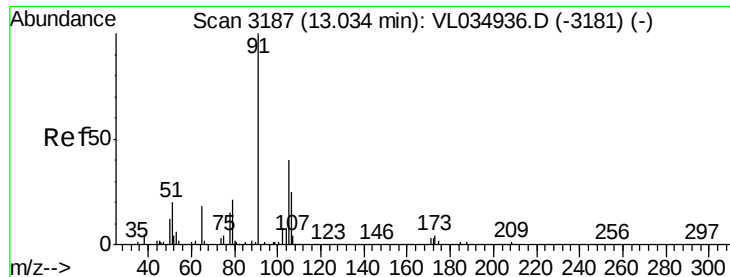
MMDadoda
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#58
Ethyl Benzene
Concen: 0.785 ppbv
RT: 12.74 min Scan# 3094
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
91	100		
106	28.8	24.2	36.4





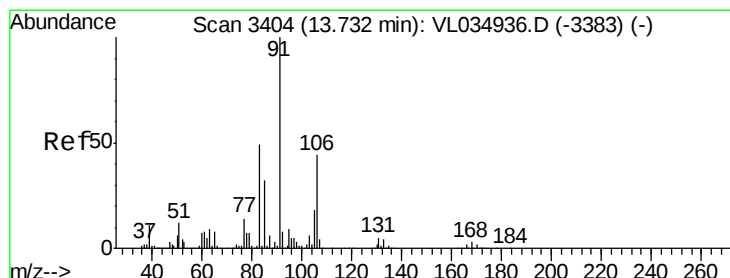
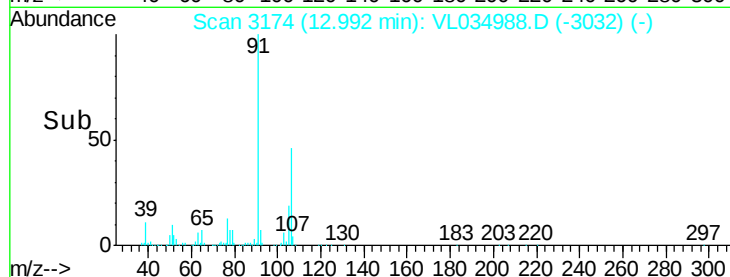
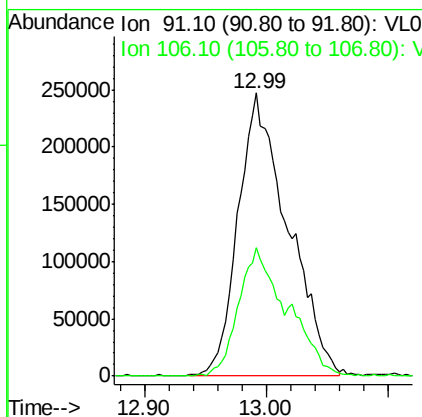
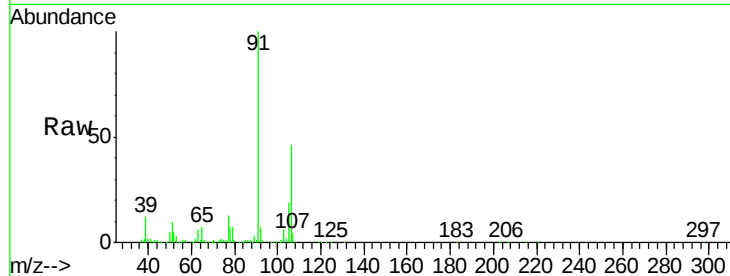
#59
m/p-Xylene
Concen: 2.851 ppbv m
RT: 12.99 min Scan# 3174
Delta R.T. -0.04 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ion	Ratio	Resp	Lower	Upper
91	100		698123		
106	0.0	66.0	99.0#		

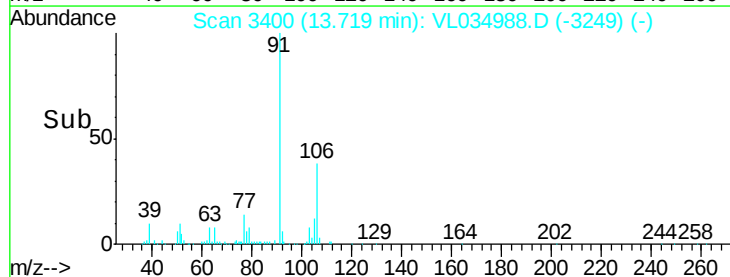
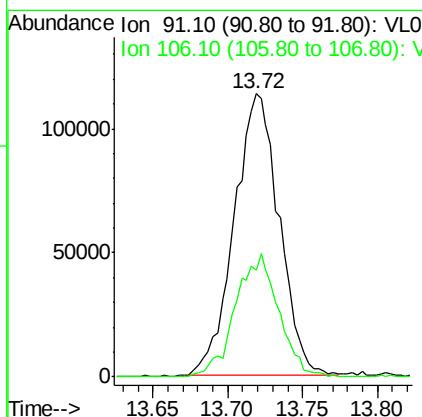
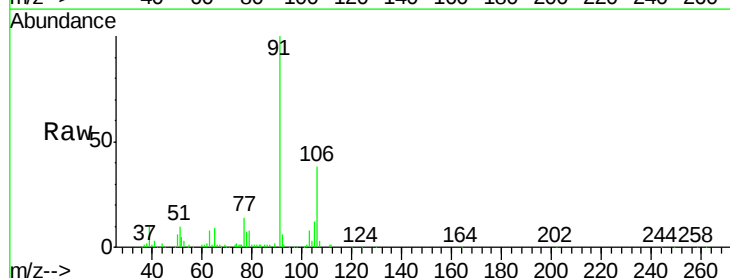
Manual Integrations
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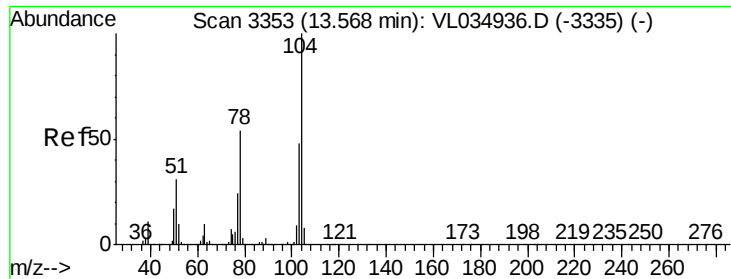
MMDadoda
5/13/2020 5:11:46 PM



#60
o-Xylene
Concen: 0.976 ppbv
RT: 13.72 min Scan# 3400
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
91	100		235927		
106	42.4	21.9	65.5		





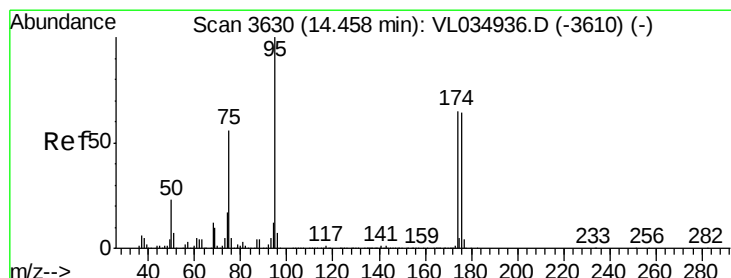
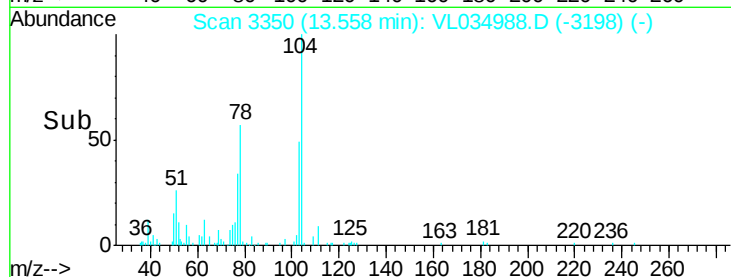
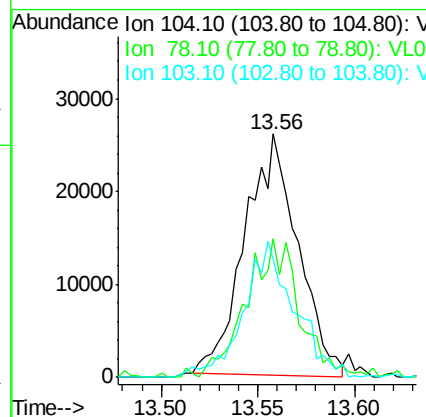
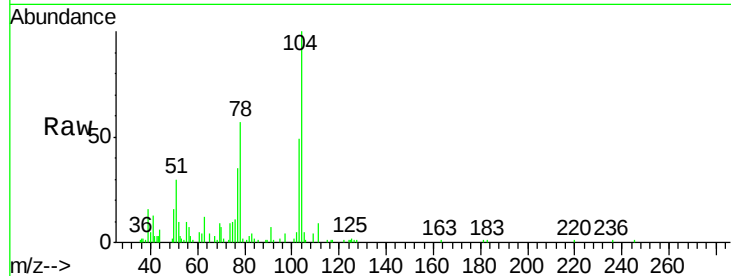
#61
Stvrene
Concen: 0.325 ppbv
RT: 13.56 min Scan# 3350
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Instrument :
MSVOA_L
ClientSampleId :
IA-4DUP

Tot Ion	Ratio	Lower	Upper
104	100		
78	58.6	43.7	65.5
103	54.1	38.8	58.2

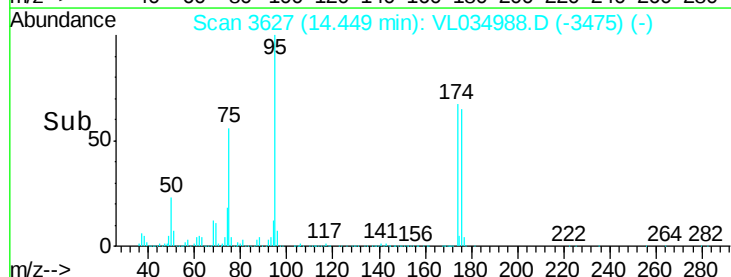
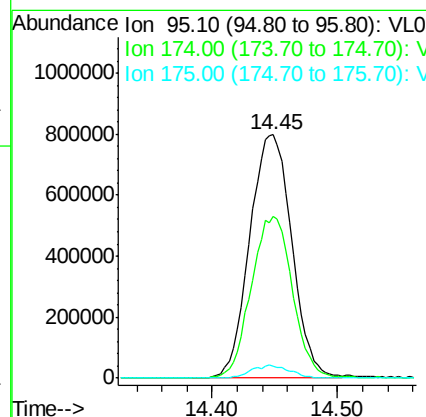
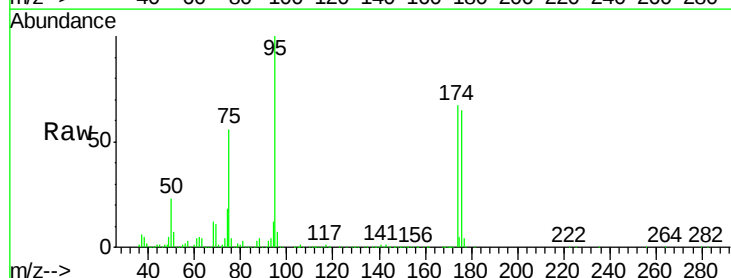
Manual Integrations
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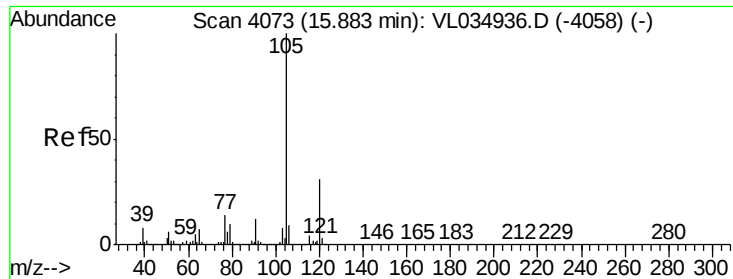
MMDadoda
5/13/2020 5:11:46 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 10.183 ppbv
RT: 14.45 min Scan# 3627
Delta R.T. -0.01 min
Lab File: VL034988.D
Acq: 12 May 2020 15:45

Tgt Ion	Ratio	Lower	Upper
95	100		
174	65.4	51.5	77.3
175	4.9	3.8	5.8





#72

4-Ethyltoluene

Concen: 0.196 ppbv m

RT: 15.87 min Scan# 4069

Delta R.T. -0.01 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

Instrument :

MSVOA_L

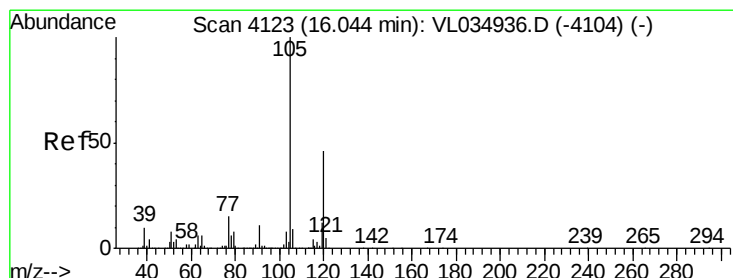
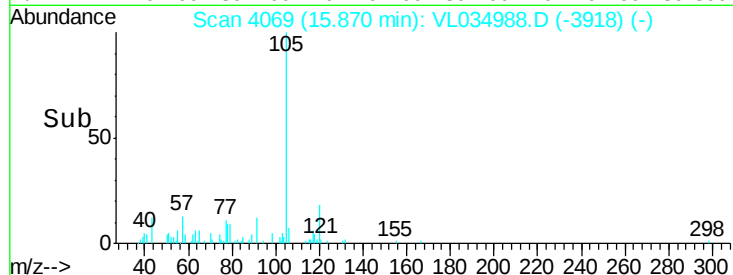
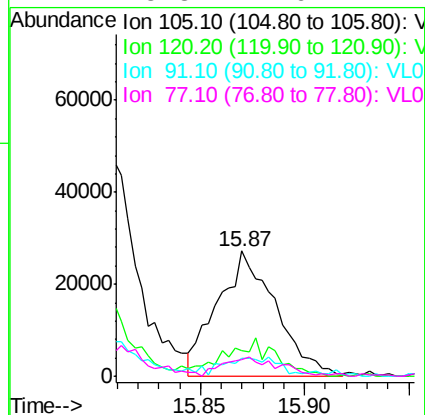
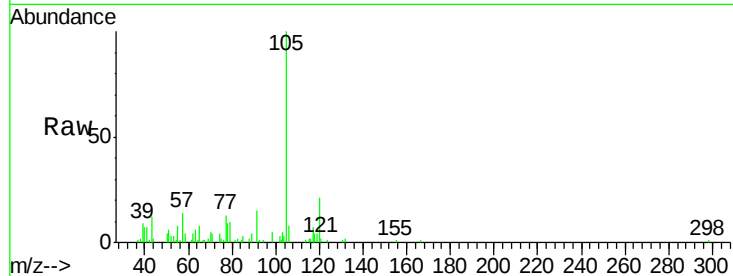
ClientSampleId :

IA-4DUP

Tot Ion:	105	Resp:	52968
Ion Ratio	Lower	Upper	
105	100		
120	28.1	23.8	35.8
91	15.8	10.6	15.8
77	15.3	11.6	17.4

Manual Integrations
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5/13/2020 5:11:46 PM



#73

1,3,5-Trimethylbenzene

Concen: 0.173 ppbv m

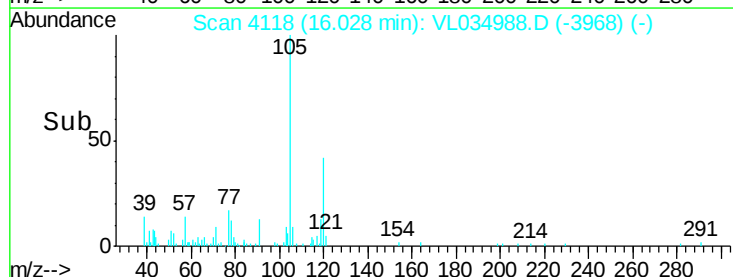
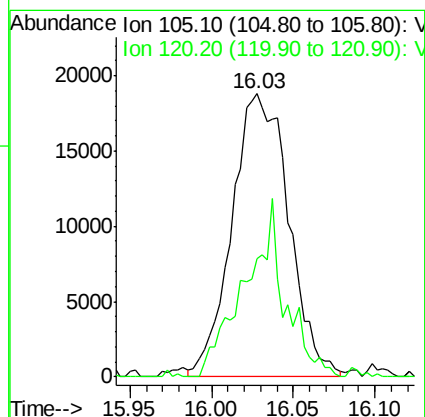
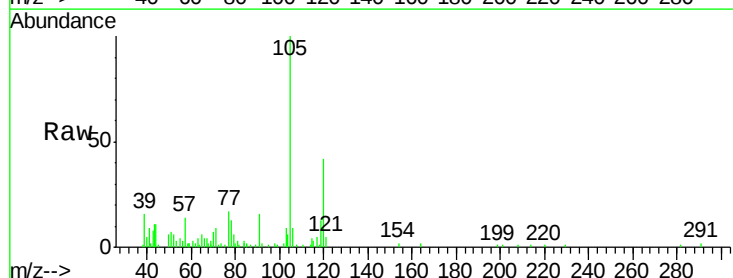
RT: 16.03 min Scan# 4118

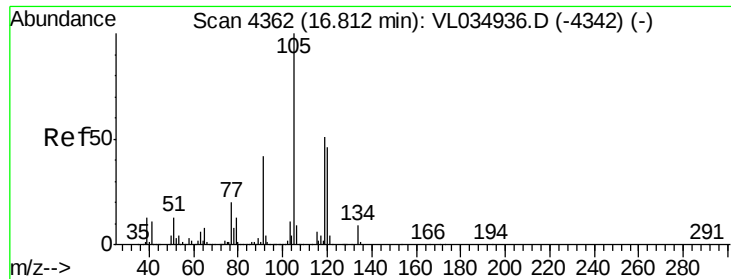
Delta R.T. -0.02 min

Lab File: VL034988.D

Acq: 12 May 2020 15:45

Tgt Ion:	105	Resp:	45477
Ion Ratio	Lower	Upper	
105	100		
120	41.6	36.4	54.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.633 ppbv
 RT: 16.80 min Scan# 4359
 Delta R.T. -0.01 min
 Lab File: VL034988.D
 Acq: 12 May 2020 15:45

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DUP

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	40.9	36.8	55.2
91	11.2	35.4	53.0#
77	12.7	16.2	24.2#

Manual Integrations
 APPROVED

MMDadoda
 5/13/2020 5:11:46 PM

