

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
 Data File : VL035007.D
 Acq On : 13 May 2020 4:01
 Operator : SY/AP
 Sample : L2566-04 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Manual Integrations
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MMDadoda
 5/13/2020 5:13:12 PM

Quant Time: May 18 10:46:06 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	5.66	49	943995	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2268671m	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	2295120	10.00	ppbv	0.21

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.56	95	1583672m	8.52	ppbv	0.10
Spiked Amount	10.000	Range	65 - 135	Recovery	=	85.20%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
5) Vinyl Chloride	3.21	62	81411	1.351	ppbv	96
7) Chloroethane	3.51	64	6029m	0.279	ppbv	
9) Propene	2.96	41	816276	17.454	ppbv	90
13) Ethanol	3.57	45	63241	4.098	ppbv	99
17) tert-Butyl alcohol	4.28	59	37340m	0.336	ppbv	
18) 1,1-Dichloroethene	4.25	96	796332	18.660	ppbv	98
19) Isopropyl Alcohol	3.95	45	40025	0.481	ppbv #	1
20) Methylene Chloride	4.31	84	56915	1.378	ppbv	85
22) trans-1,2-Dichloroethene	4.86	96	1241411	29.367	ppbv	97
26) Hexane	5.67	57	121801	1.340	ppbv #	39
28) Methyl tert-Butyl Ether	5.04	73	53057	0.383	ppbv	98
29) Chloroform	5.74	83	9686589	65.142	ppbv #	83
30) Cyclohexane	7.13	84	29875m	0.426	ppbv	
31) cis-1,2-Dichloroethene	5.54	61	14487432	163.379	ppbv #	58
32) 1,1,1-Trichloroethane	6.51	97	154655	1.152	ppbv	88
35) Carbon Tetrachloride	7.02	117	7482m	0.052	ppbv	
36) Benzene	6.90	78	866311m	4.632	ppbv	
38) Trichloroethene	8.02	130	75627489m	1043.690	ppbv	
47) 1,1,2-Trichloroethane	9.55	97	434206m	5.488	ppbv	
52) Tetrachloroethene	11.46	164	159648523m	2400.407	ppbv	
53) Toluene	9.89	91	718218m	3.622	ppbv	
58) Ethyl Benzene	12.92	91	54842m	0.193	ppbv	
59) m/p-Xylene	13.17	91	112467m	0.450	ppbv	
60) o-Xylene	13.85	91	44271m	0.180	ppbv	
61) Styrene	13.71	104	36271m	0.233	ppbv	
62) Isopropylbenzene	14.80	105	382902	1.041	ppbv	98

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

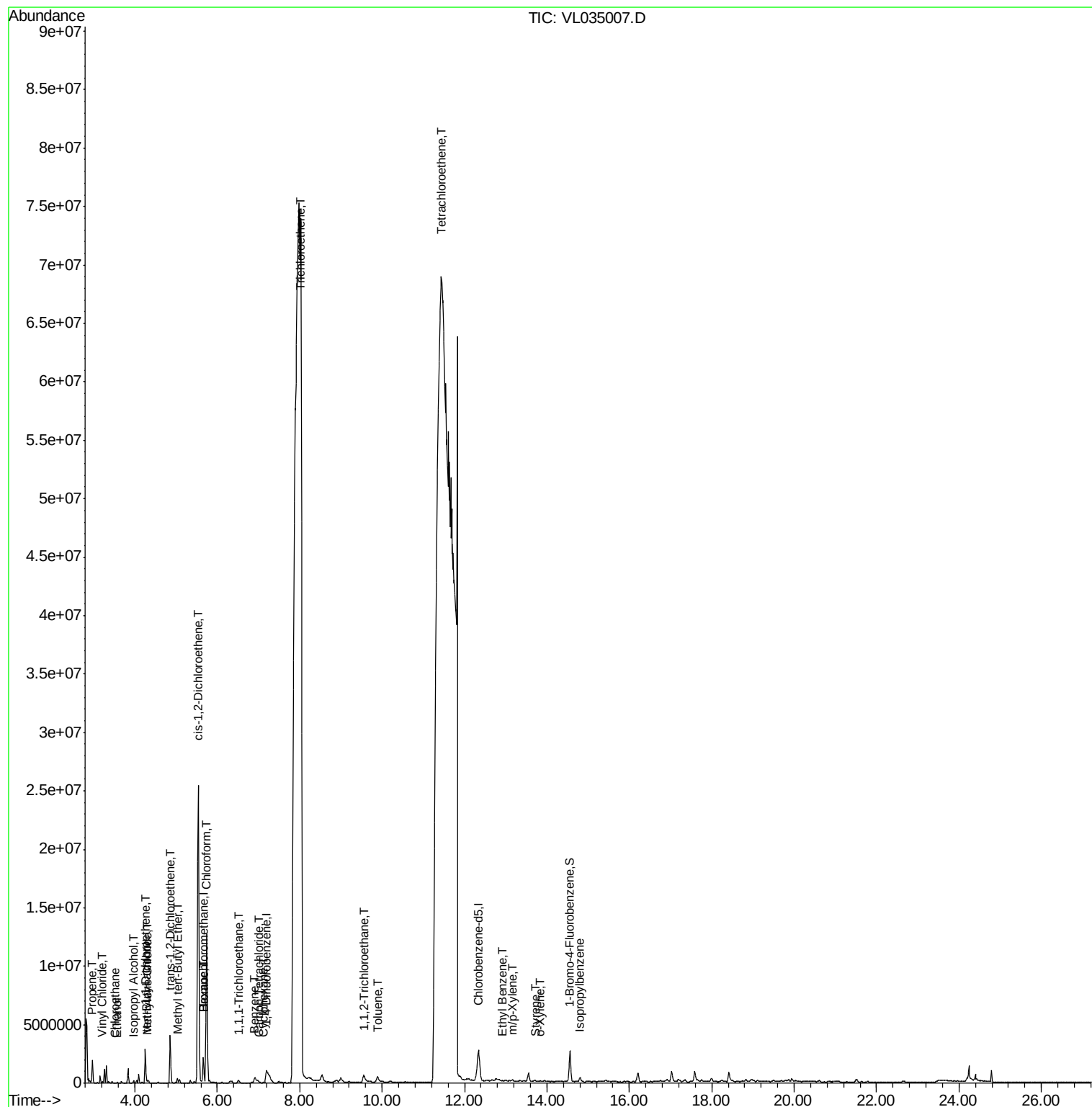
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051220\
Data File : VL035007.D
Acq On : 13 May 2020 4:01
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

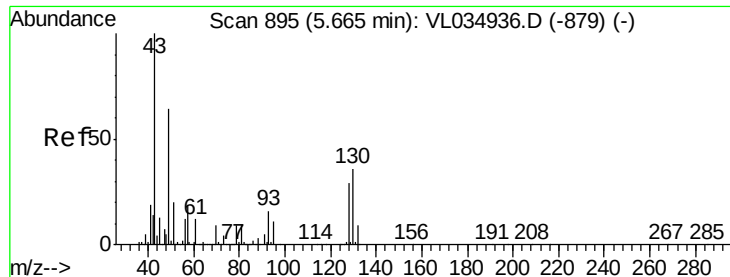
Instrument :
MSVOA_L
ClientSampleId :
SG-2

Manual Integrations
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Quant Time: May 18 10:46:06 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





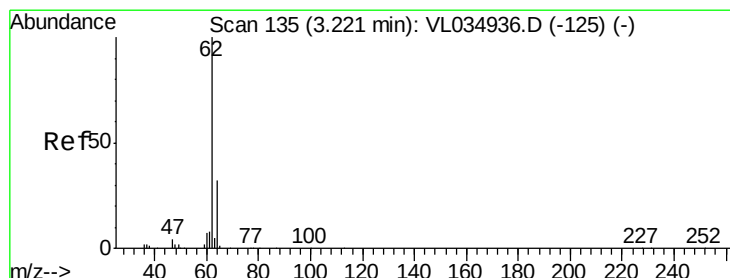
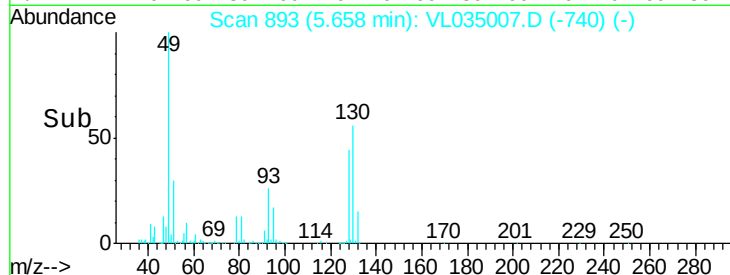
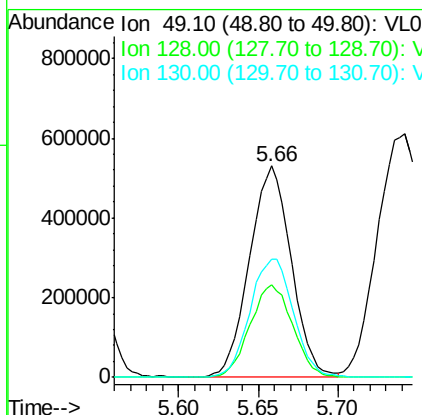
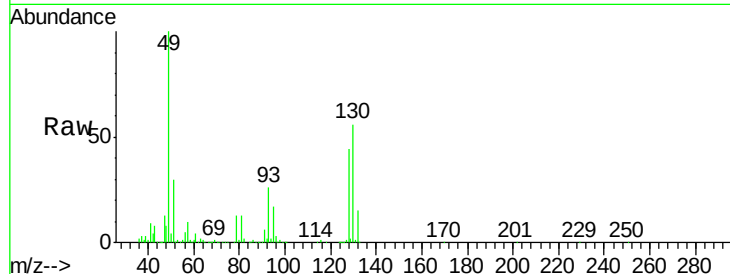
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.66 min Scan# 893
 Delta R.T. -0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.1	66.5
130	58.7	29.1	87.3

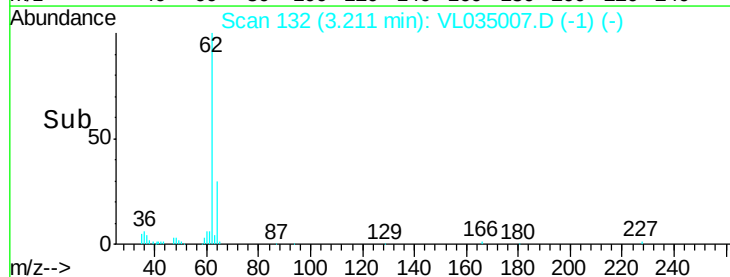
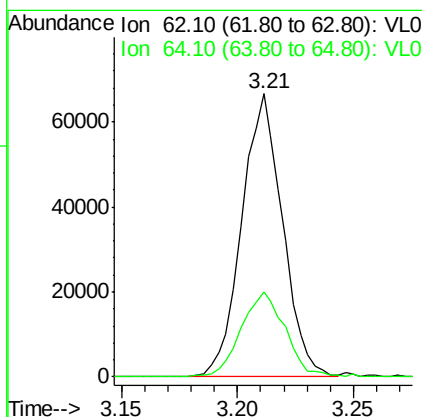
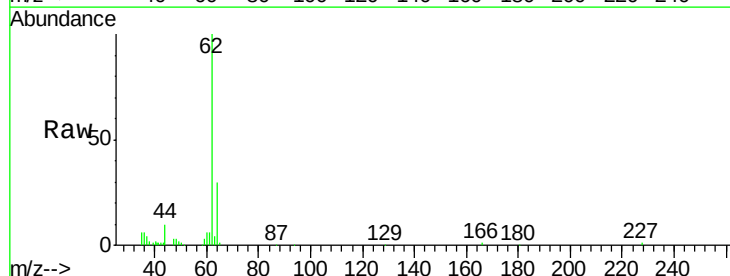
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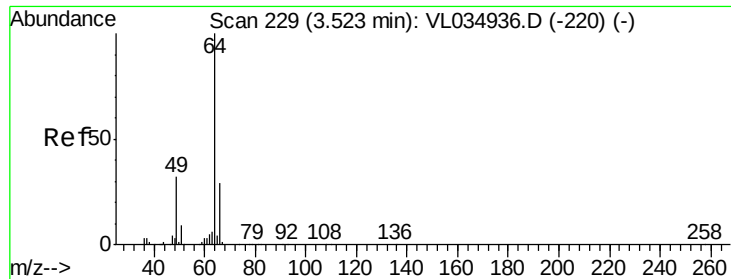
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#5
 Vinyl Chloride
 Concen: 1.351 ppbv
 RT: 3.21 min Scan# 132
 Delta R.T. -0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Tgt Ion	Ratio	Lower	Upper
62	100		
64	29.9	25.7	38.5





#7

Chloroethane

Concen: 0.279 ppbv m

RT: 3.51 min Scan# 225

Delta R.T. -0.01 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 64 Resp: 6029

Ion Ratio Lower Upper

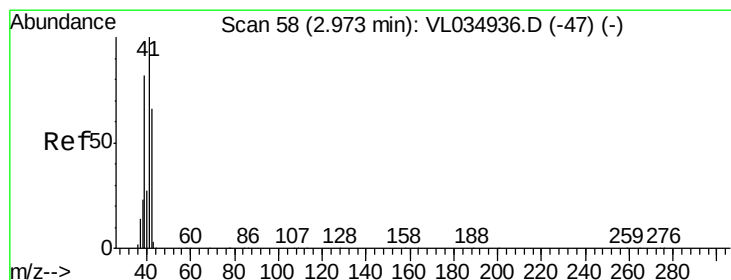
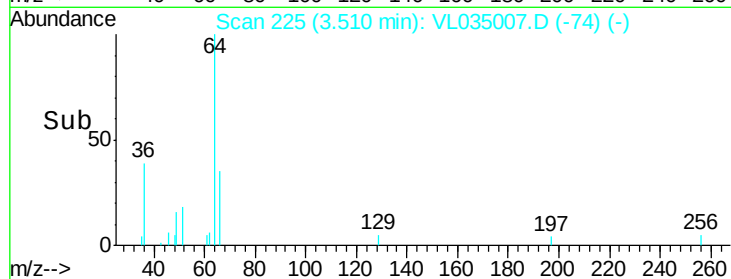
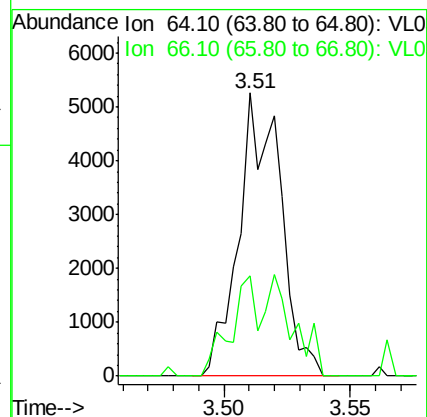
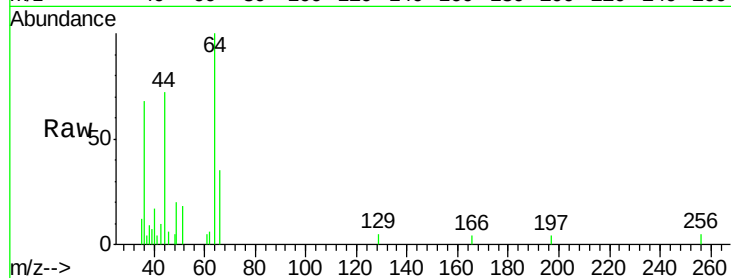
64 100

66 35.5 23.2 34.8#

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#9

Propene

Concen: 17.454 ppbv

RT: 2.96 min Scan# 54

Delta R.T. -0.01 min

Lab File: VL035007.D

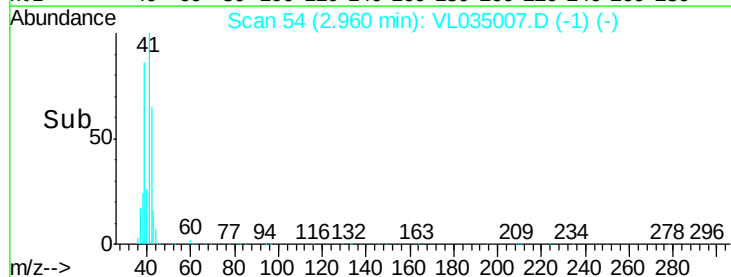
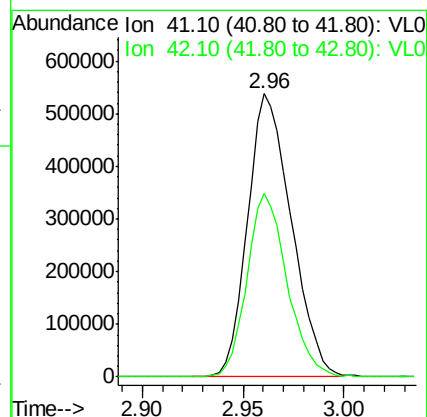
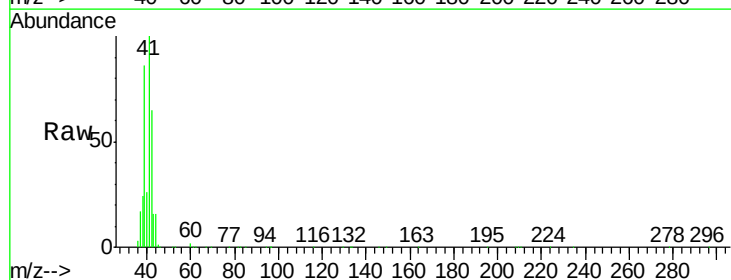
Acq: 13 May 2020 4:01

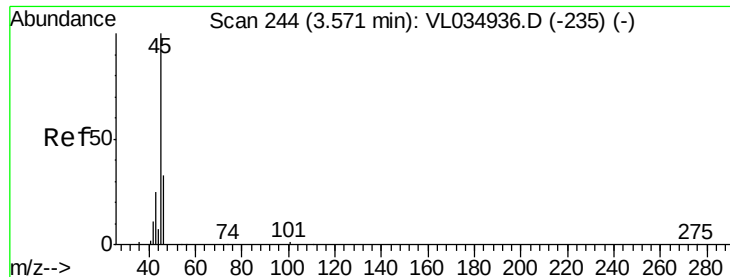
Tgt Ion: 41 Resp: 816276

Ion Ratio Lower Upper

41 100

42 59.8 54.5 81.7





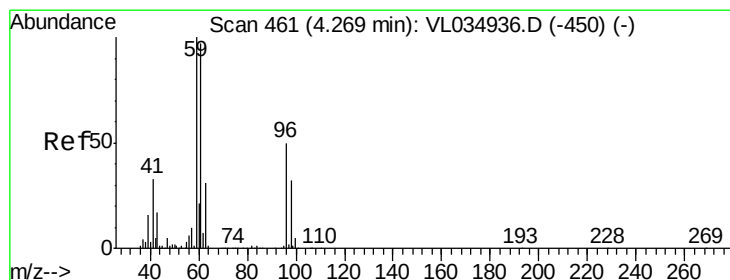
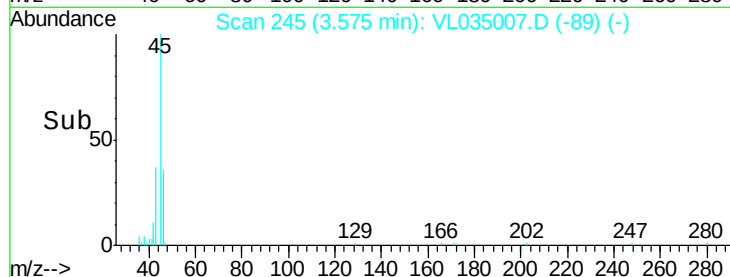
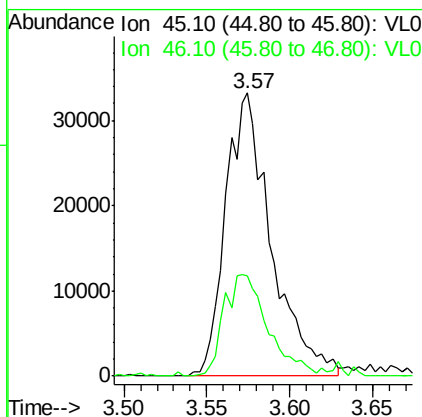
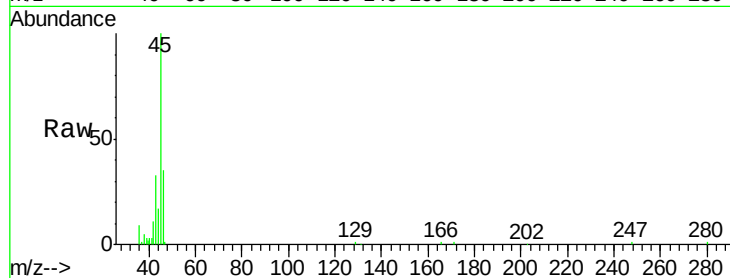
#13
Ethanol
Concen: 4.098 ppbv
RT: 3.57 min Scan# 245
Delta R.T. 0.00 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion	45	Resp	63241
Ion Ratio	100	Lower	Upper
46	36.5	14.3	57.3

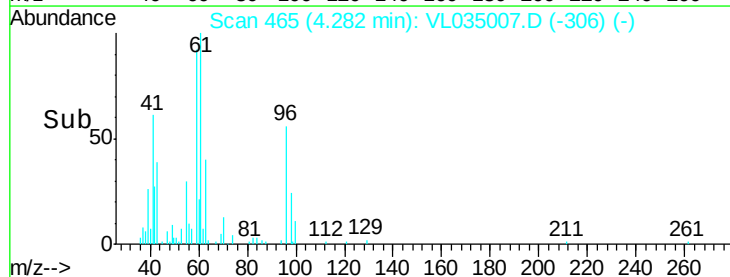
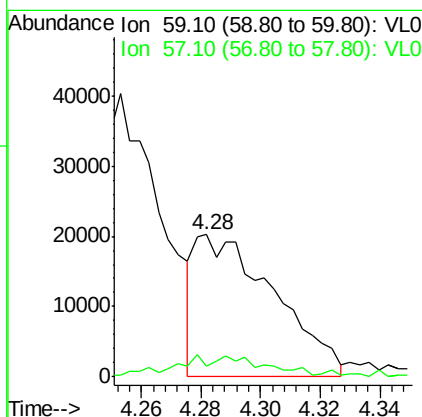
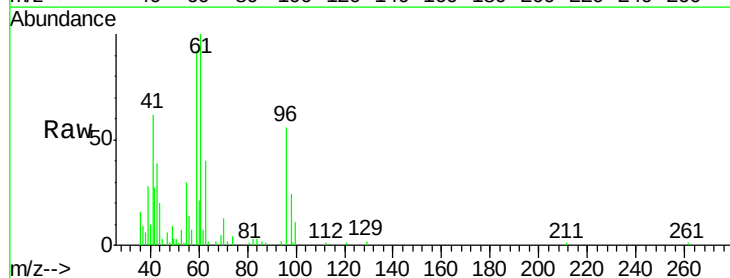
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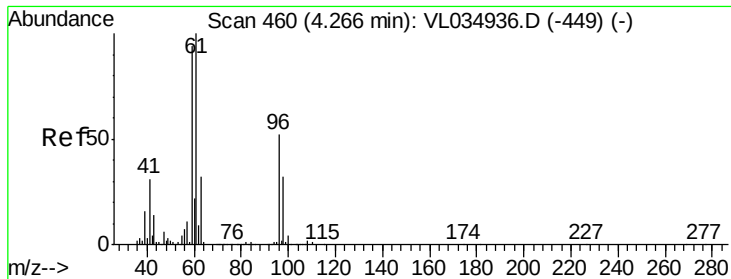
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#17
tert-Butyl alcohol
Concen: 0.336 ppbv m
RT: 4.28 min Scan# 465
Delta R.T. 0.01 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tgt Ion	59	Resp	37340
Ion Ratio	100	Lower	Upper
57	0.0	8.7	13.1#





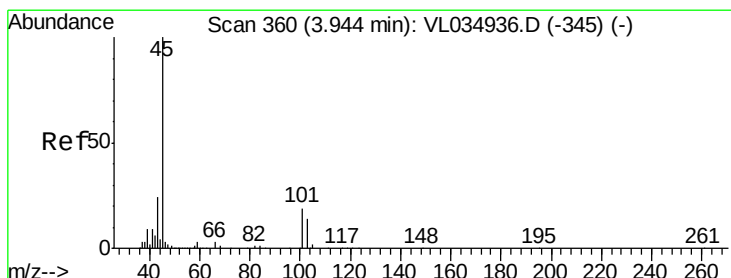
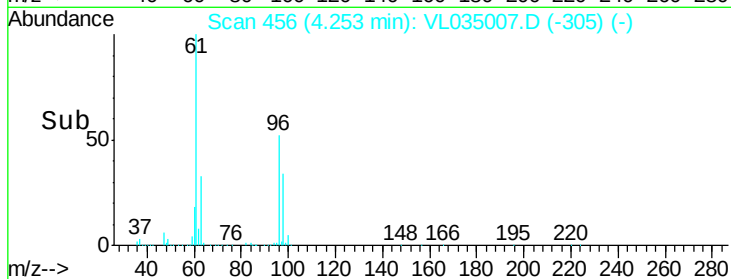
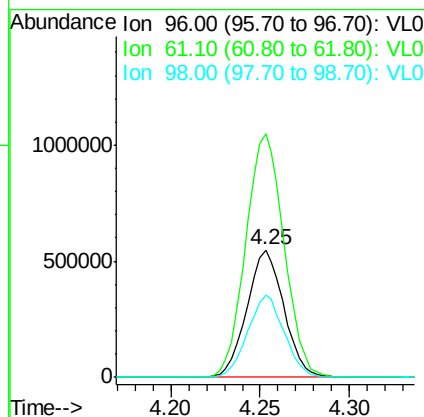
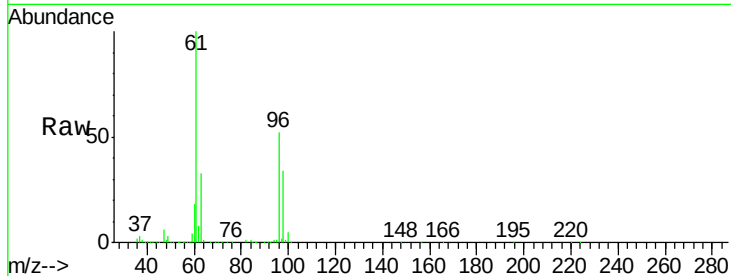
#18
 1,1-Dichloroethene
 Concen: 18.660 ppbv
 RT: 4.25 min Scan# 456
 Delta R.T. -0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Lower	Upper
96	100		
61	191.4	152.4	228.6
98	65.0	48.8	73.2

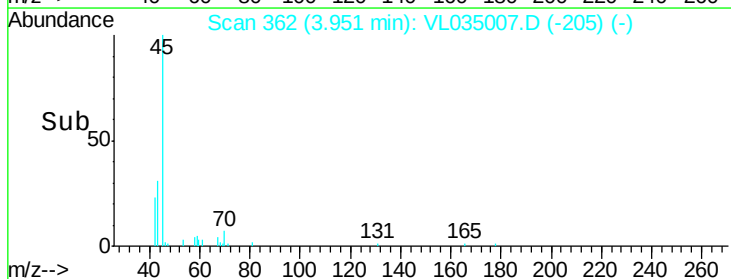
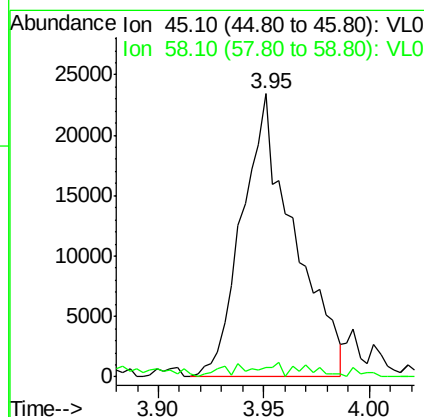
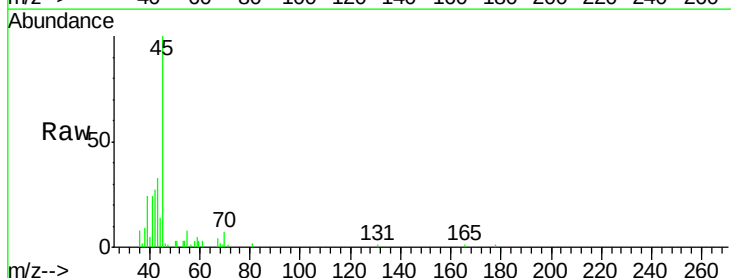
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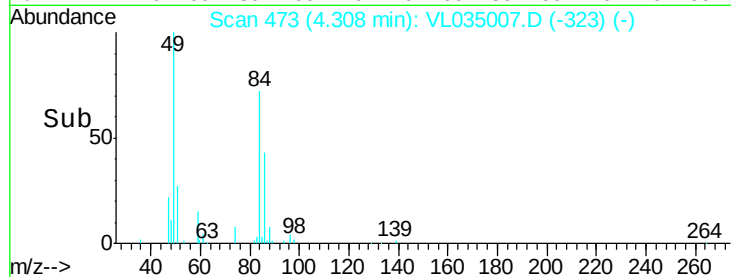
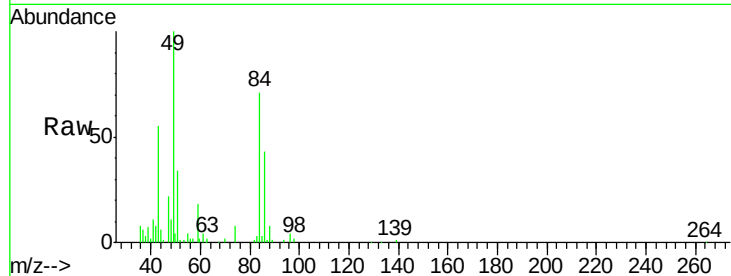
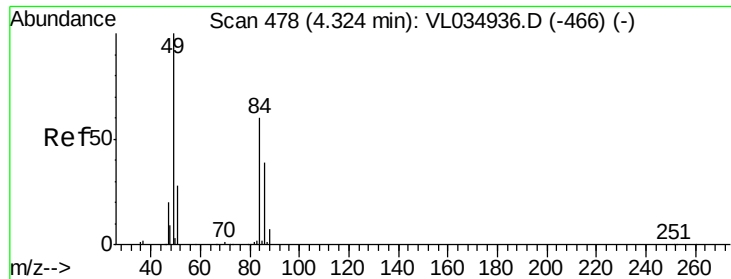
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#19
 Isopropyl Alcohol
 Concen: 0.481 ppbv
 RT: 3.95 min Scan# 362
 Delta R.T. 0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Tgt Ion	Ratio	Lower	Upper
45	100		
58	239.3	1.7	2.5#





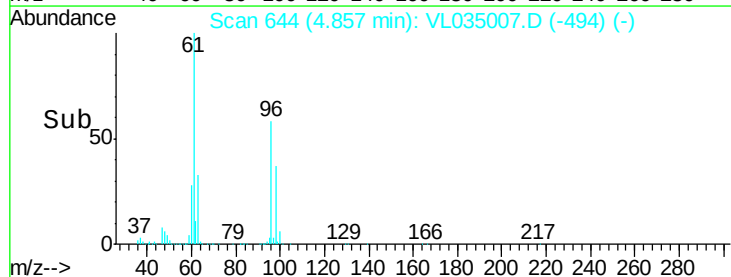
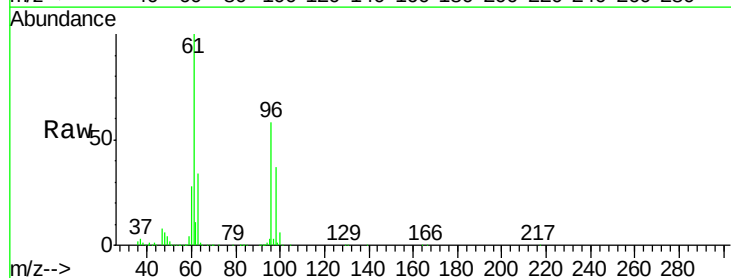
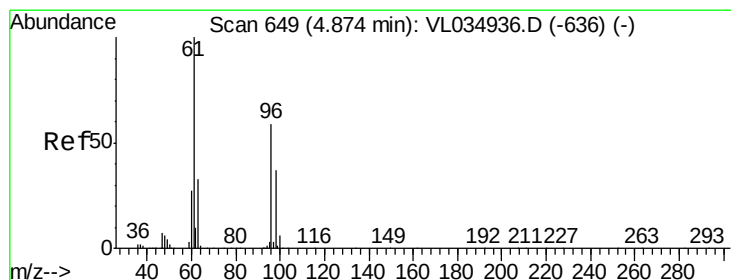
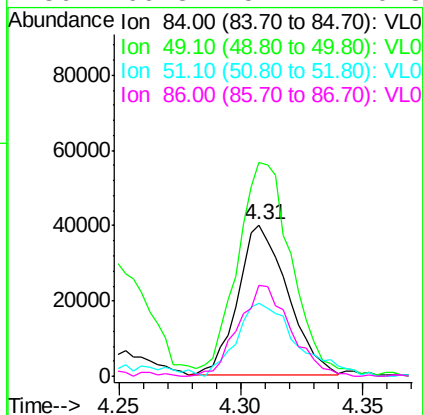
#20
Methylene Chloride
Concen: 1.378 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.02 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tot Ion:	84	Resp:	56915
Ion Ratio	Lower	Upper	
84	100		
49	136.9	132.5	198.7
51	44.0	38.4	57.6
86	60.3	51.2	76.8

Instrument :
MSVOA_L
ClientSampled :
SG-2

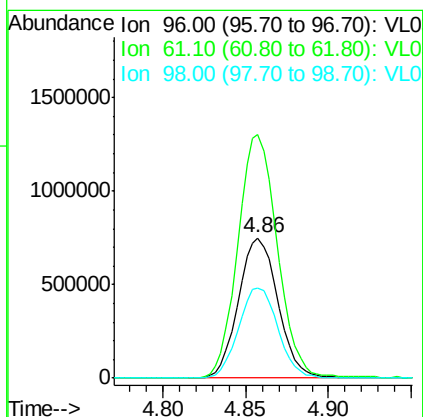
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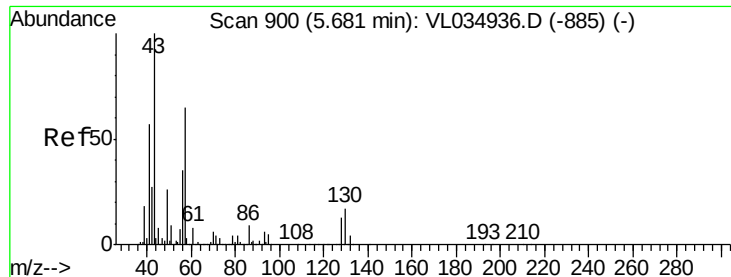
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#22
trans-1,2-Dichloroethene
Concen: 29.367 ppbv
RT: 4.86 min Scan# 644
Delta R.T. -0.02 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tgt Ion:	96	Resp:	1241411
Ion Ratio	Lower	Upper	
96	100		
61	173.7	135.3	202.9
98	63.9	50.4	75.6





#26

Hexane

Concen: 1.340 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

Instrument :

MSVOA_L

ClientSampled :

SG-2

Tot Ion: 57 Resp: 121801

Ion Ratio Lower Upper

57 100

41 102.7 72.7 109.1

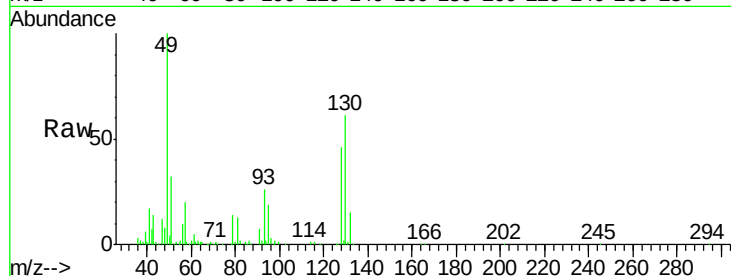
43 74.9 182.1 273.1#

56 57.1 42.2 63.2

Manual Integrations
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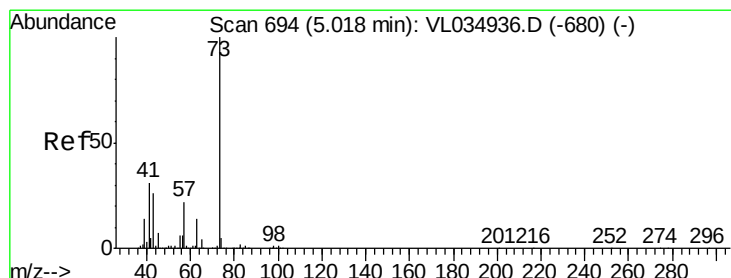
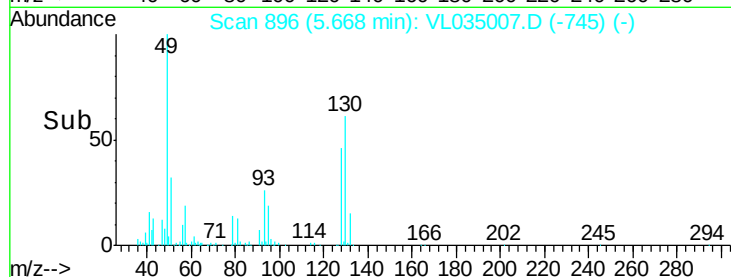
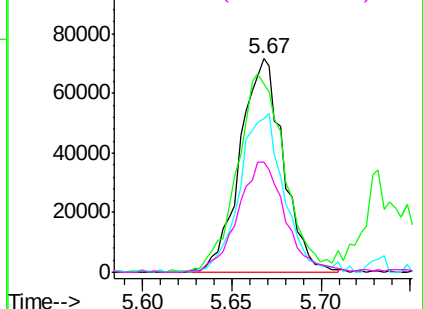


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#28

Methyl tert-Butyl Ether

Concen: 0.383 ppbv

RT: 5.04 min Scan# 700

Delta R.T. 0.02 min

Lab File: VL035007.D

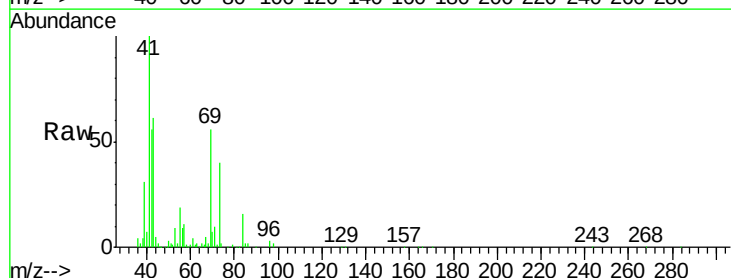
Acq: 13 May 2020 4:01

Tgt Ion: 73 Resp: 53057

Ion Ratio Lower Upper

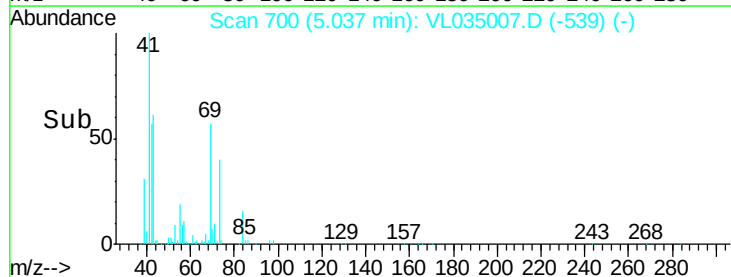
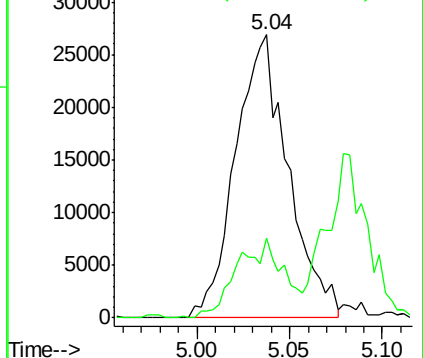
73 100

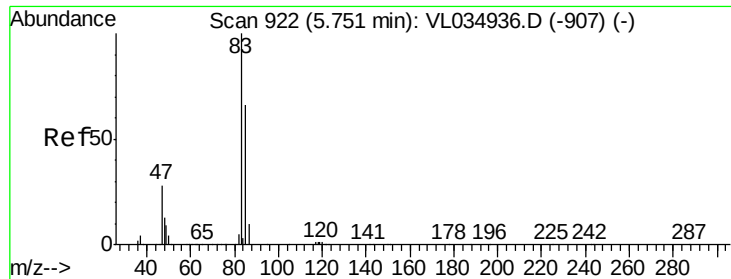
57 24.1 18.3 27.5



Abundance Ion 73.10 (72.80 to 73.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





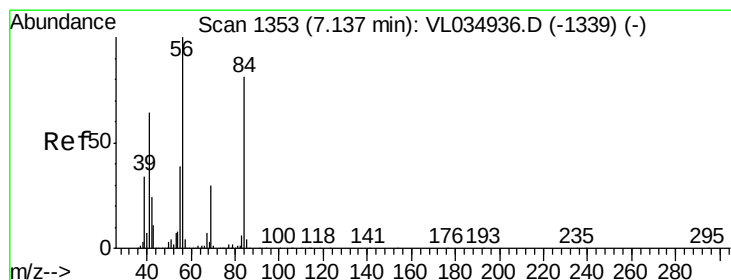
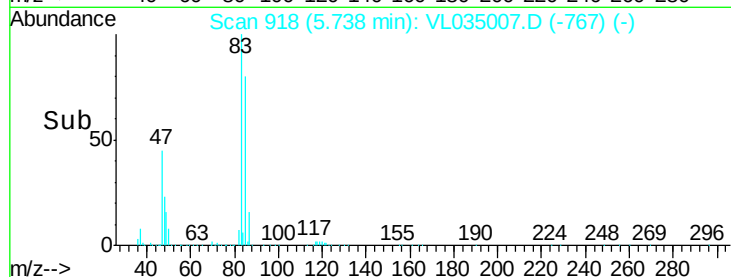
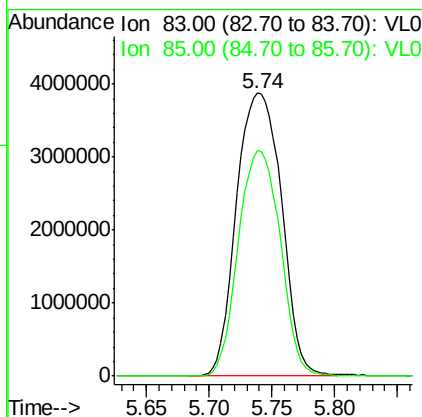
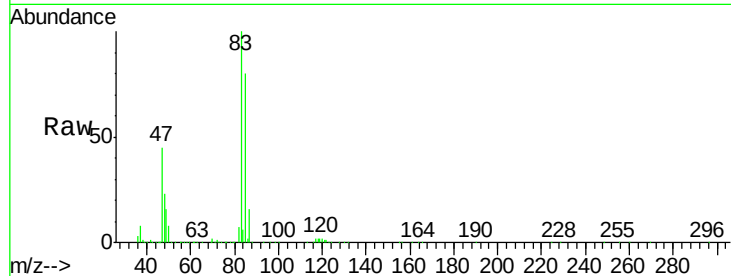
#29
Chloroform
Concen: 65.142 ppbv
RT: 5.74 min Scan# 918
Delta R.T. -0.01 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion: 83 Resp: 9686589
Ion Ratio Lower Upper
83 100
85 79.7 53.0 79.6#

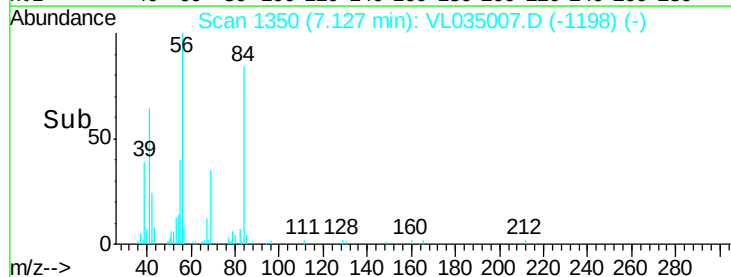
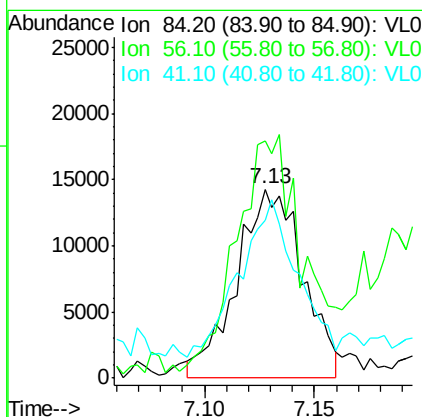
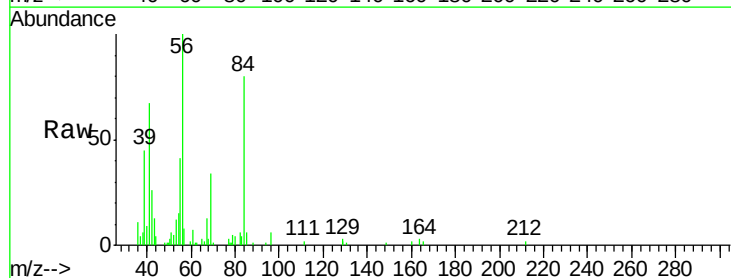
Manual Integrations
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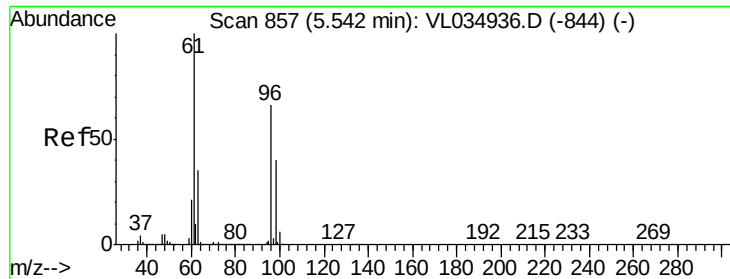
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#30
Cyclohexane
Concen: 0.426 ppbv m
RT: 7.13 min Scan# 1350
Delta R.T. -0.01 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tgt Ion: 84 Resp: 29875
Ion Ratio Lower Upper
84 100
56 130.2 111.4 167.2
41 84.7 66.7 100.1





#31

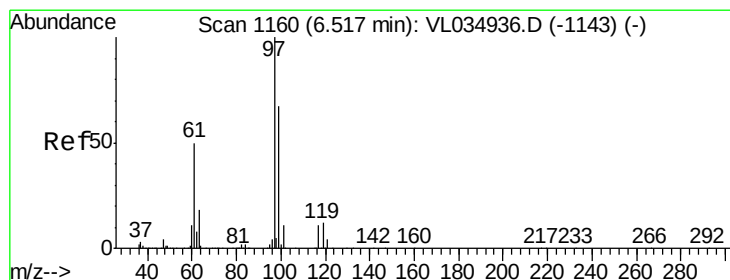
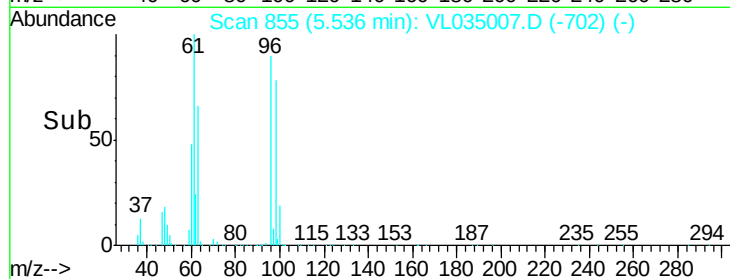
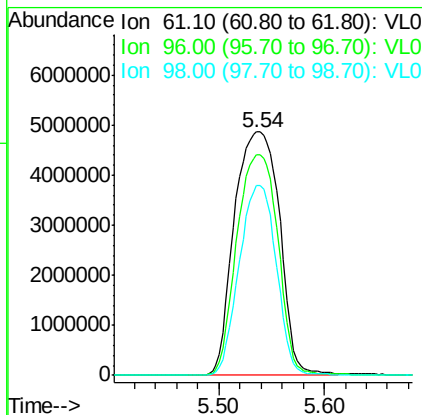
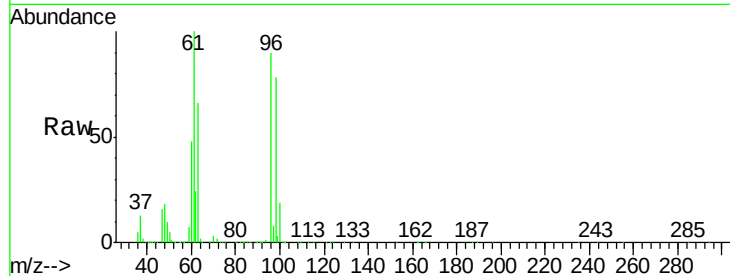
cis-1,2-Dichloroethene
 Concen: 163.379 ppbv
 RT: 5.54 min Scan# 855
 Delta R.T. -0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Lower	Upper
61	100		
96	90.5	53.0	79.6#
98	77.7	32.2	48.2#

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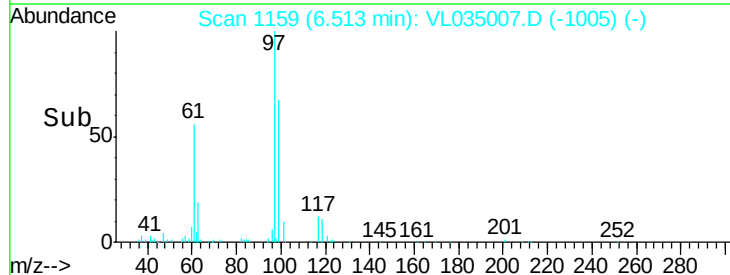
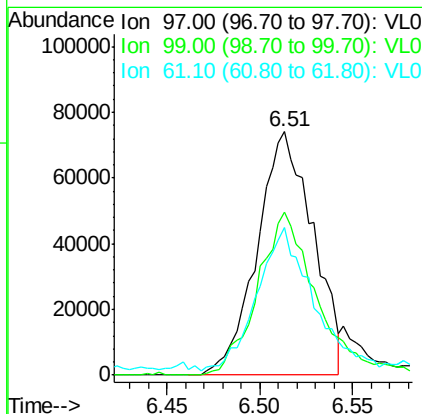
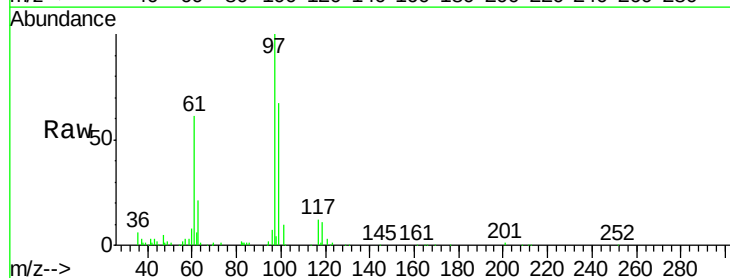
MMDadoda
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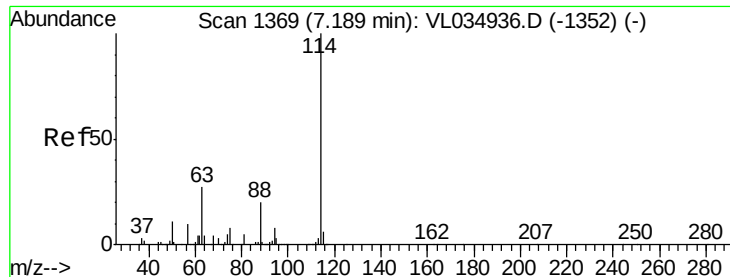


#32

1,1,1-Trichloroethane
 Concen: 1.152 ppbv
 RT: 6.51 min Scan# 1159
 Delta R.T. -0.00 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Tgt Ion	Ratio	Lower	Upper
97	100		
99	72.9	52.1	78.1
61	62.1	41.8	62.8





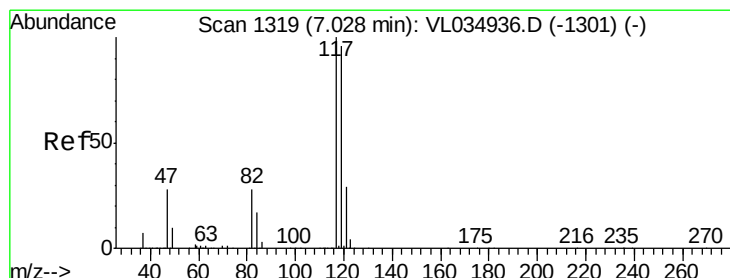
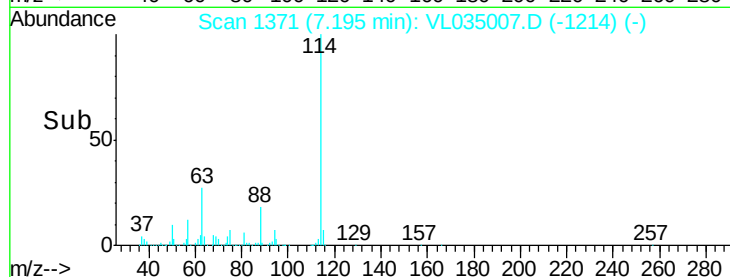
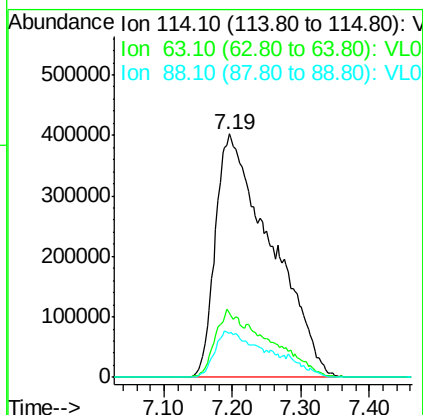
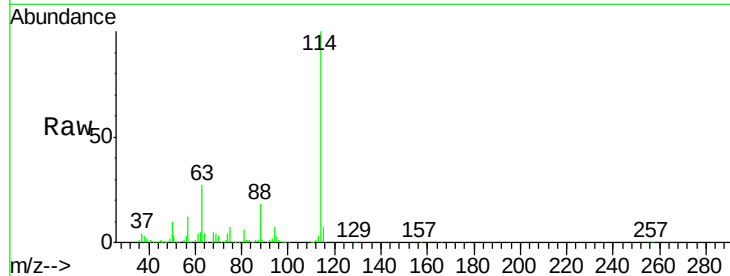
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv m
 RT: 7.19 min Scan# 1371
 Delta R.T. 0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Instrument :
 MSVOA_L
 ClientSampled :
 SG-2

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.8	22.2	33.4
88	18.9	15.5	23.3

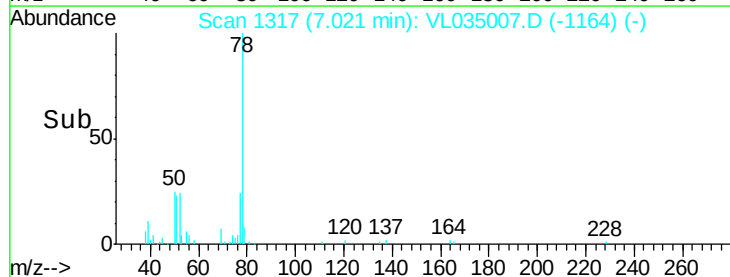
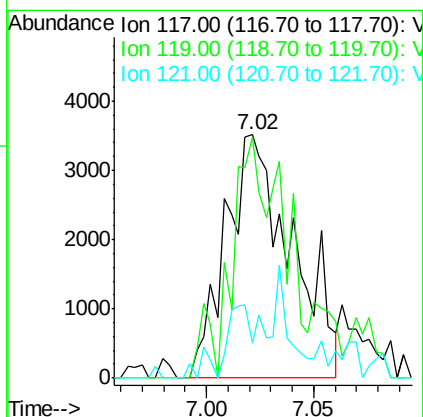
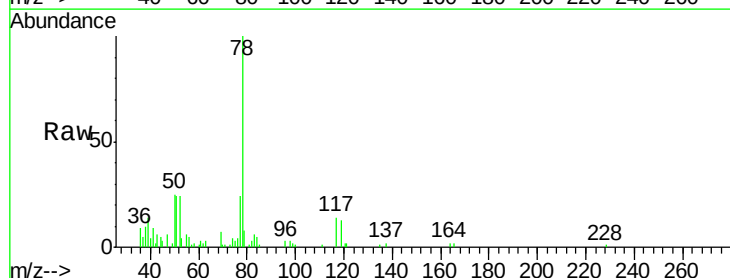
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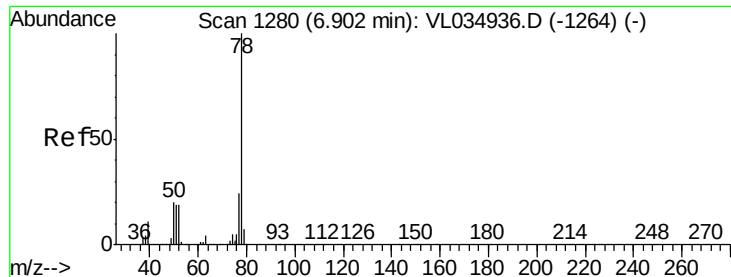
MMDadoda
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#35
 Carbon Tetrachloride
 Concen: 0.052 ppbv m
 RT: 7.02 min Scan# 1317
 Delta R.T. -0.01 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Tgt Ion	Ratio	Lower	Upper
117	100		
119	98.9	77.0	115.6
121	14.3	23.0	34.6





#36

Benzene

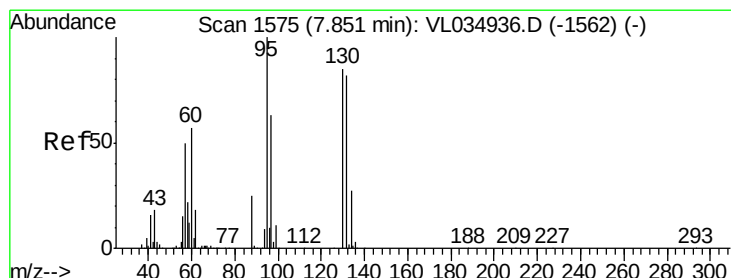
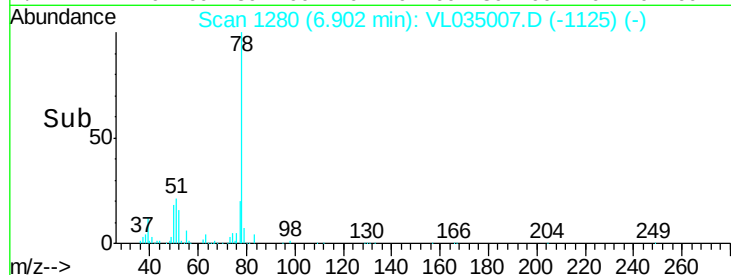
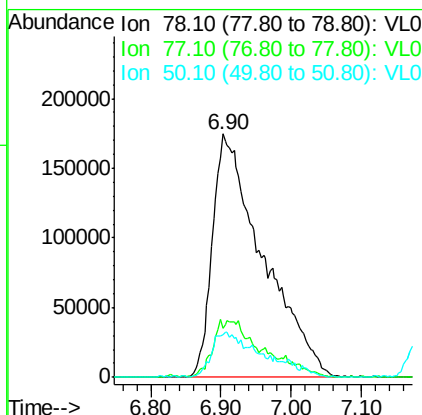
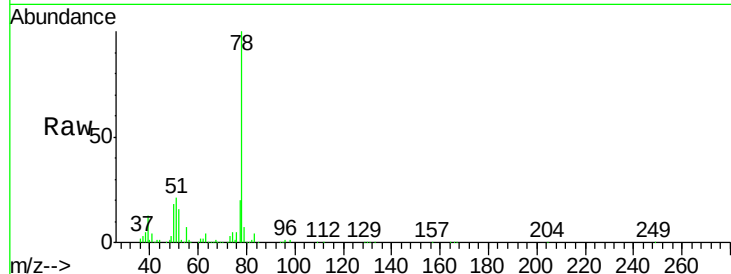
Concen: 4.632 ppbv m
RT: 6.90 min Scan# 1280
Delta R.T. -0.00 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Instrument :
MSVOA_L
ClientSampleId :
SG-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.3	19.0	28.6
50	17.7	15.8	23.8

Manual Integrations
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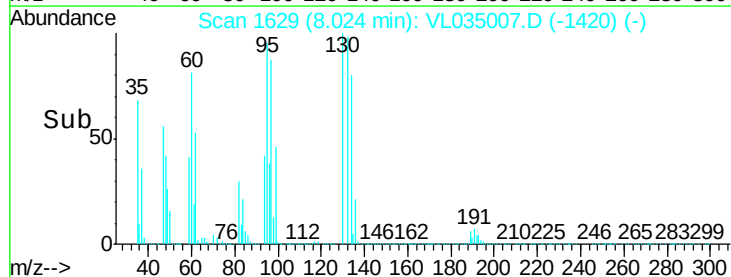
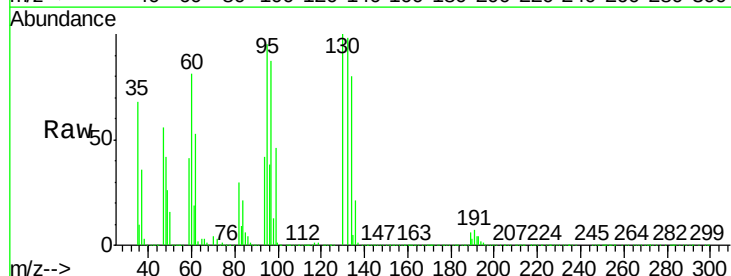
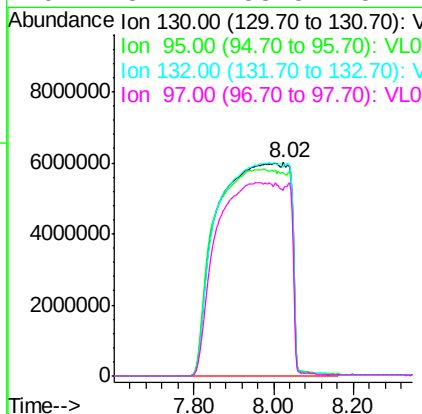


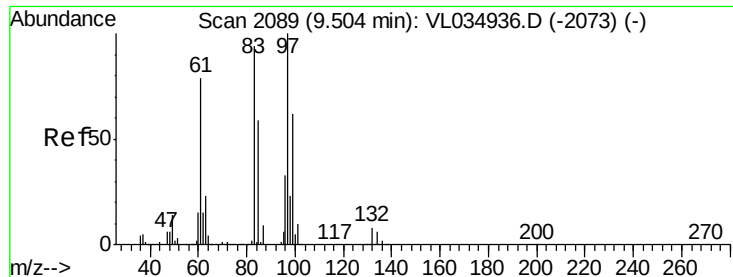
#38

Trichloroethene

Concen: 1043.690 ppbv m
RT: 8.02 min Scan# 1629
Delta R.T. 0.17 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tgt Ion	Ratio	Lower	Upper
130	100		
95	95.4	93.4	140.0
132	98.1	76.4	114.6
97	87.2	58.5	87.7





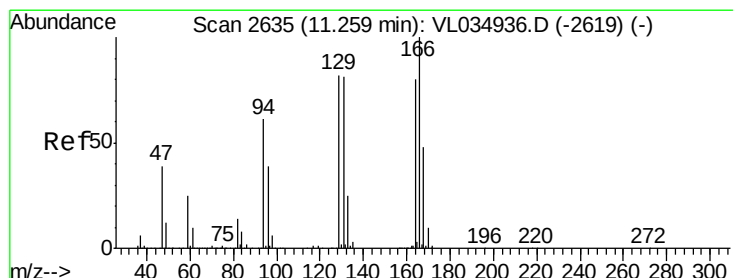
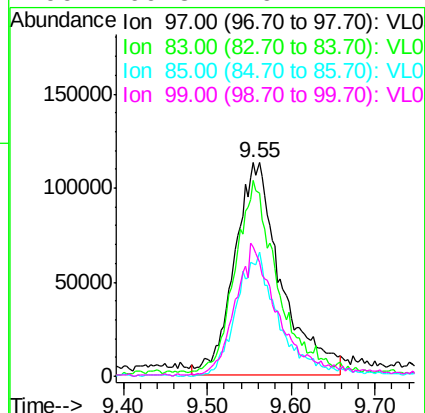
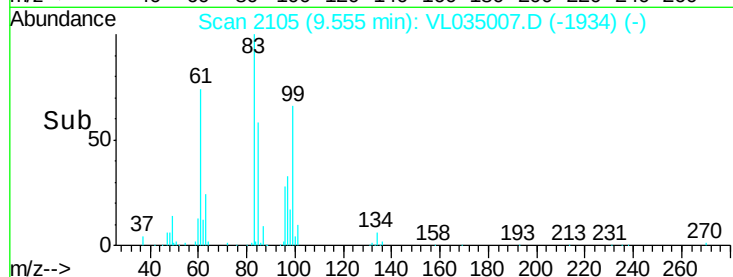
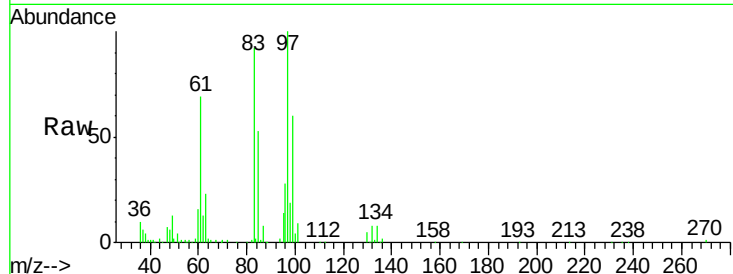
#47
 1,1,2-Trichloroethane
 Concen: 5.488 ppbv m
 RT: 9.55 min Scan# 2105
 Delta R.T. 0.05 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-2

Tot Ion	Ion	Ratio	Resp	Lower	Upper
97	100		434206		
83	91.5	75.6	113.4		
85	52.7	47.0	70.6		
99	60.3	49.4	74.2		

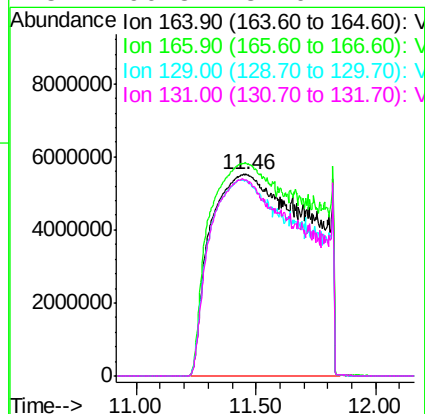
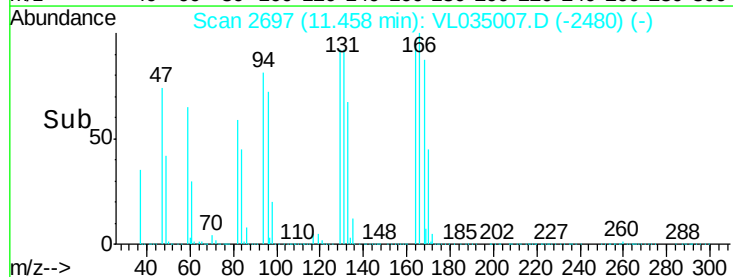
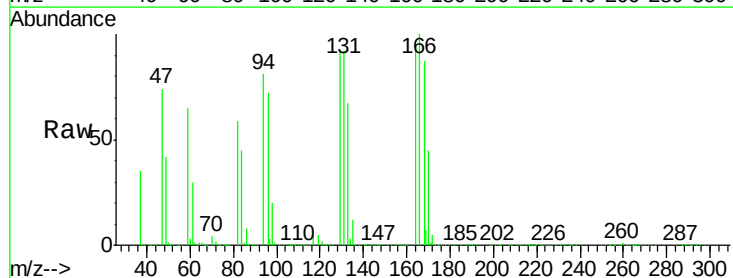
Manual Integrations
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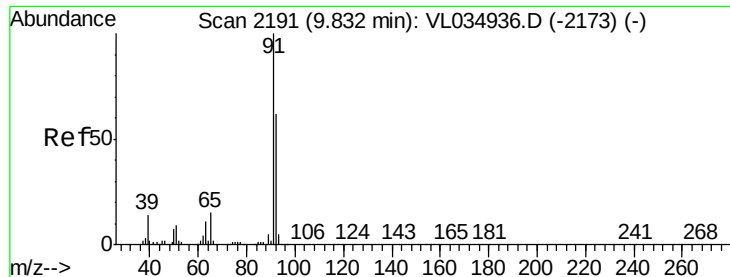
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#52
 Tetrachloroethene
 Concen: 2400.407 ppbv m
 RT: 11.46 min Scan# 2697
 Delta R.T. 0.20 min
 Lab File: VL035007.D
 Acq: 13 May 2020 4:01

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
164	100		159648523		
166	105.2	100.7	151.1		
129	96.9	83.0	124.4		
131	96.8	81.0	121.4		





#53

Toluene

Concen: 3.622 ppbv m

RT: 9.89 min Scan# 2208

Delta R.T. 0.05 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 91 Resp: 718218

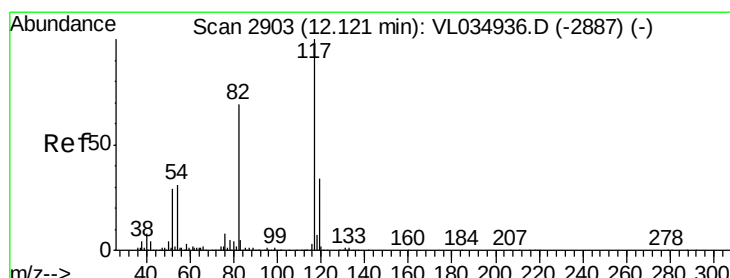
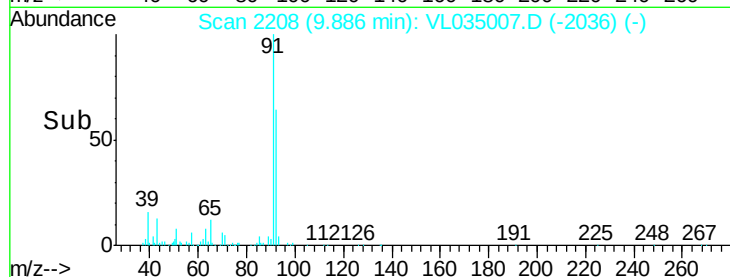
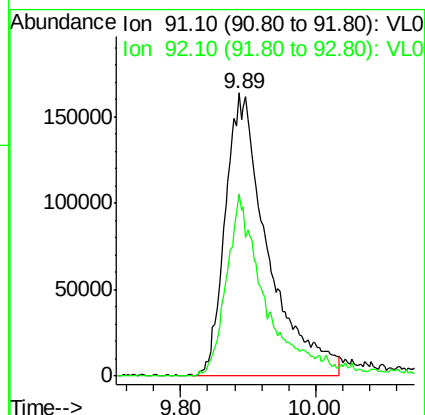
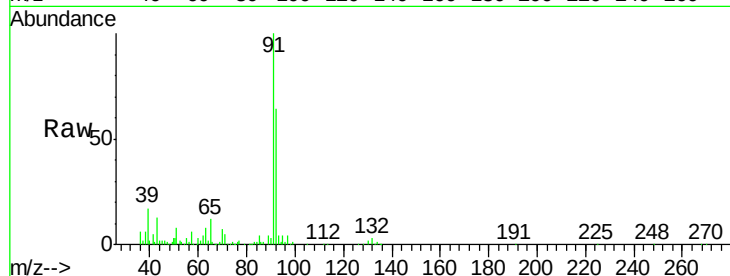
Ion Ratio Lower Upper

91 100

92 0.0 48.6 73.0#

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.33 min Scan# 2969

Delta R.T. 0.21 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

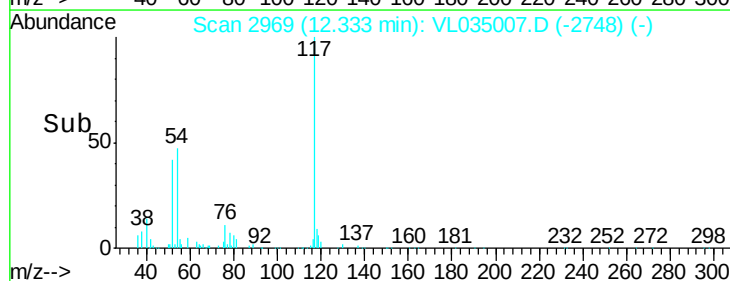
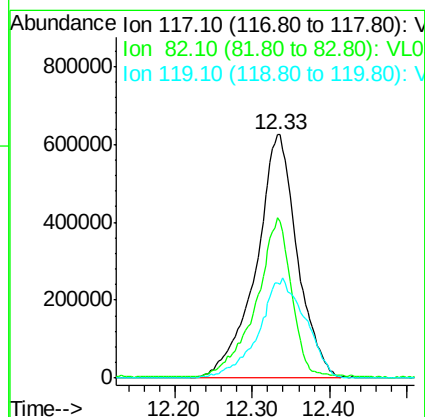
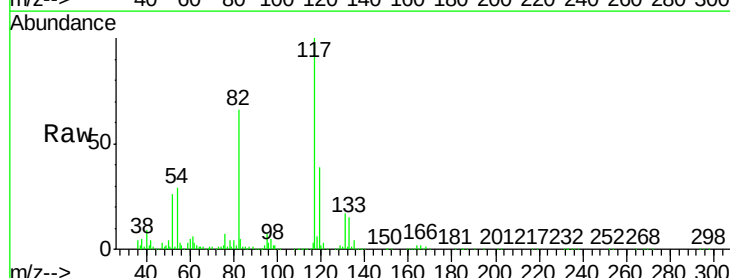
Tgt Ion: 117 Resp: 2295120

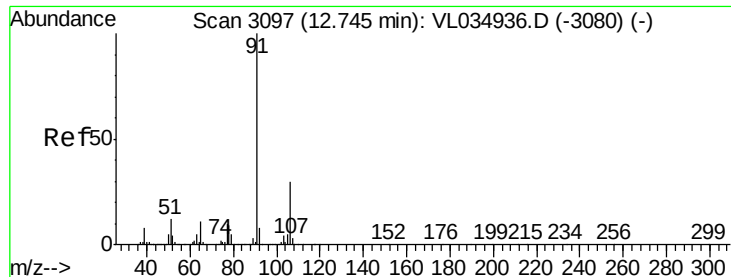
Ion Ratio Lower Upper

117 100

82 58.3 53.1 79.7

119 46.9 26.7 40.1#





#58

Ethyl Benzene

Concen: 0.193 ppbv m

RT: 12.92 min Scan# 3151

Delta R.T. 0.17 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

Instrument :

MSVOA_L

ClientSampled :

SG-2

Tot Ion: 91 Resp: 54842

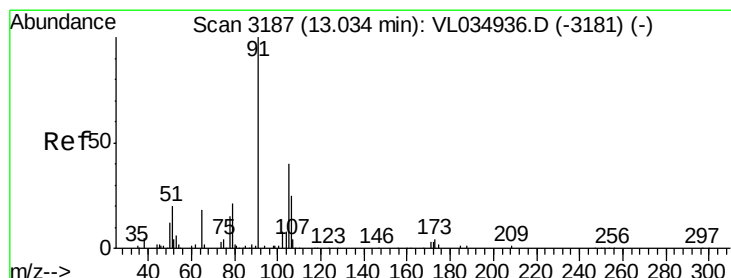
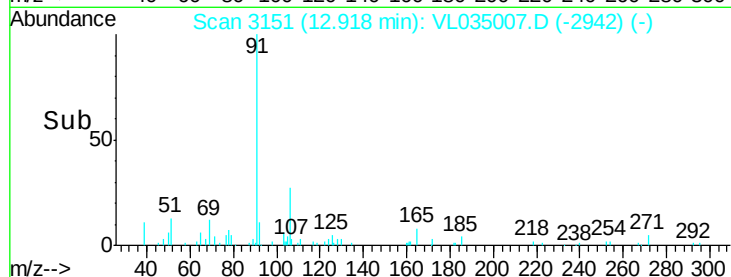
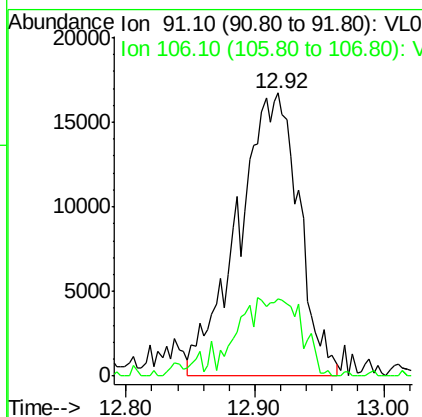
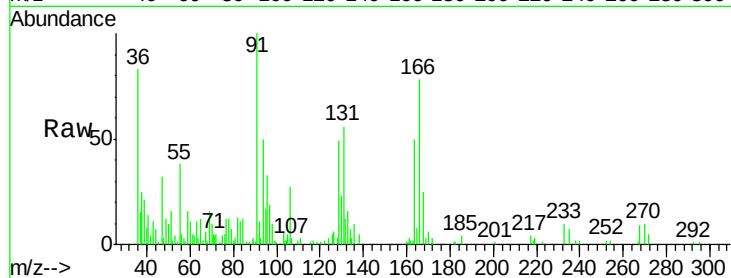
Ion Ratio Lower Upper

91 100

106 27.3 24.2 36.4

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#59

m/p-Xylene

Concen: 0.450 ppbv m

RT: 13.17 min Scan# 3229

Delta R.T. 0.13 min

Lab File: VL035007.D

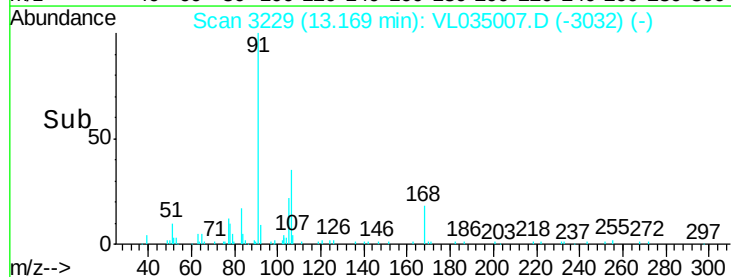
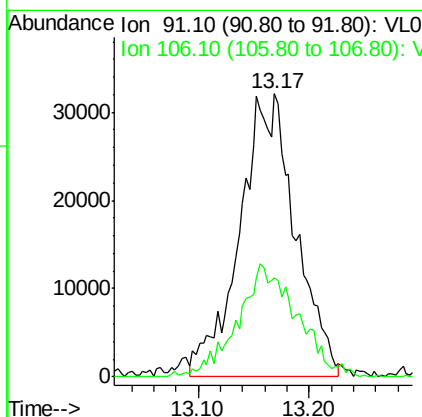
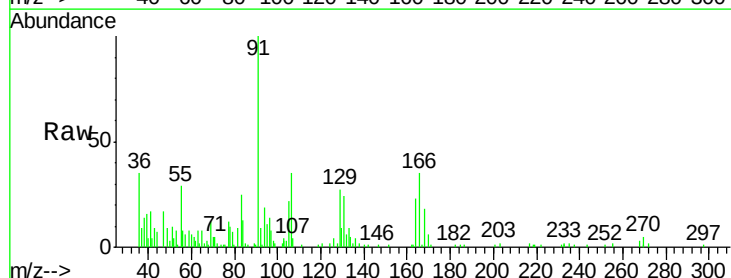
Acq: 13 May 2020 4:01

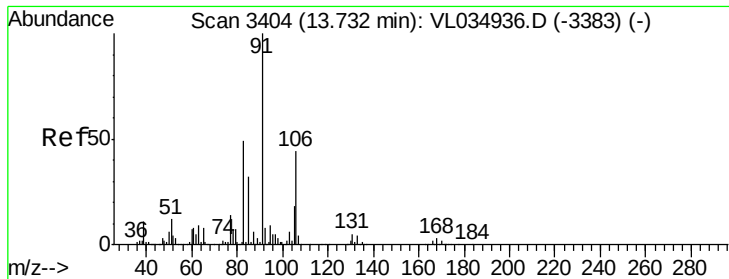
Tgt Ion: 91 Resp: 112467

Ion Ratio Lower Upper

91 100

106 0.0 66.0 99.0#





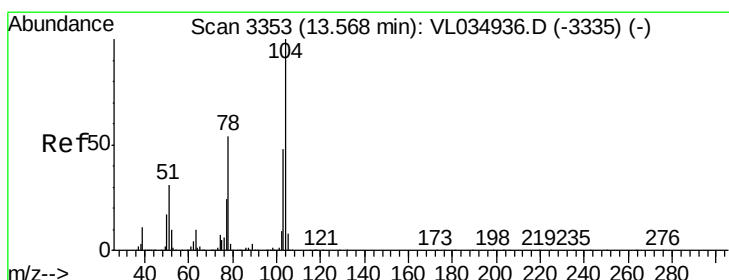
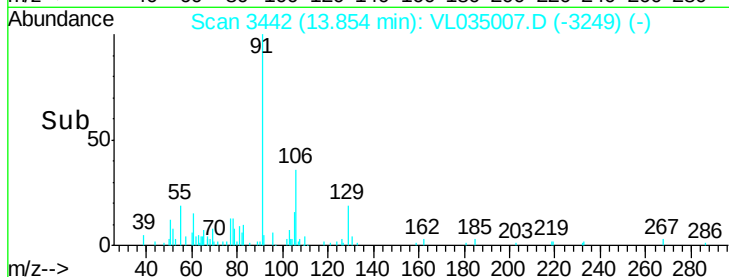
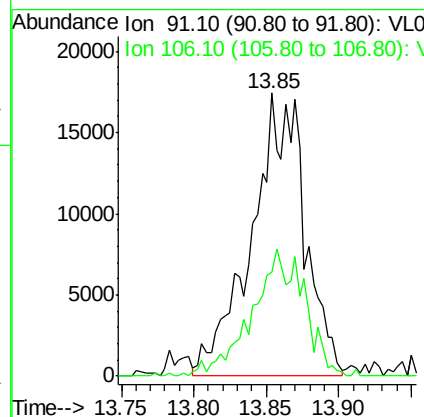
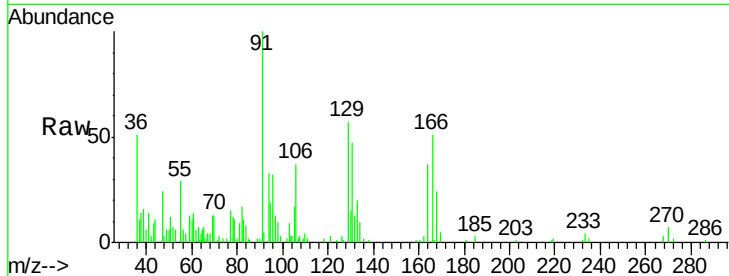
#60
o-Xylene
Concen: 0.180 ppbv m
RT: 13.85 min Scan# 3442
Delta R.T. 0.12 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Instrument :
MSVOA_L
ClientSampled :
SG-2

Tot Ion: 91 Resp: 44271
Ion Ratio Lower Upper
91 100
106 0.0 21.9 65.5#

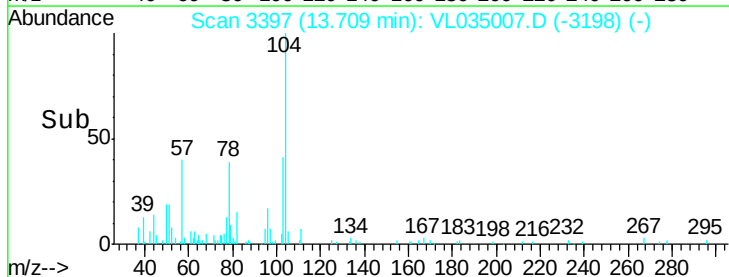
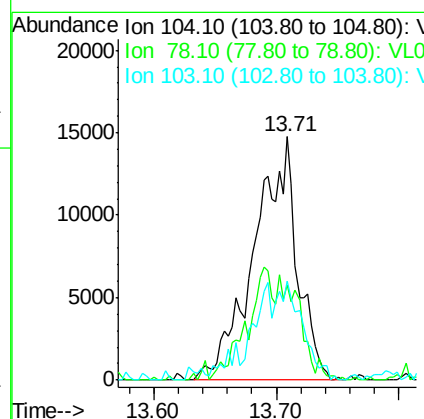
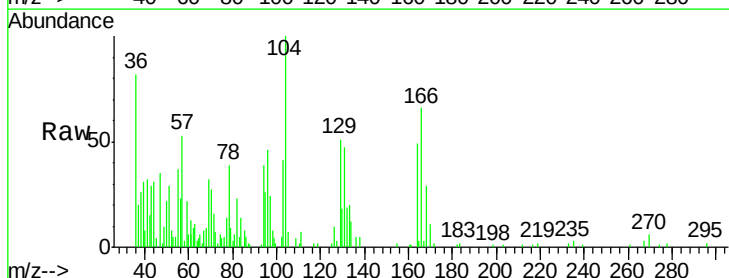
Manual Integrations
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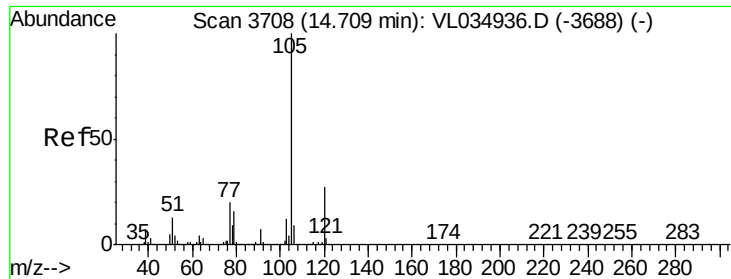
MMDadoda
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#61
Styrene
Concen: 0.233 ppbv m
RT: 13.71 min Scan# 3397
Delta R.T. 0.14 min
Lab File: VL035007.D
Acq: 13 May 2020 4:01

Tgt Ion: 104 Resp: 36271
Ion Ratio Lower Upper
104 100
78 11.3 43.7 65.5#
103 5.1 38.8 58.2#





#62

Isopropylbenzene

Concen: 1.041 ppbv

RT: 14.80 min Scan# 3736

Delta R.T. 0.09 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

Instrument :

MSVOA_L

ClientSampleId :

SG-2

Tot Ion: 105 Resp: 382902

Ion Ratio Lower Upper

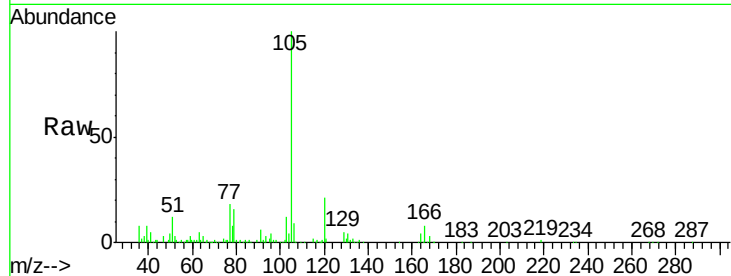
105 100

120 24.7 20.6 31.0

Manual Integrations
APPROVED

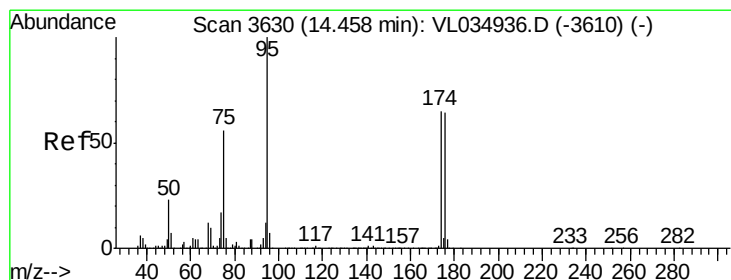
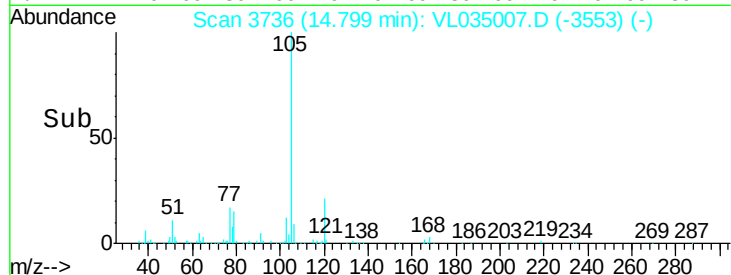
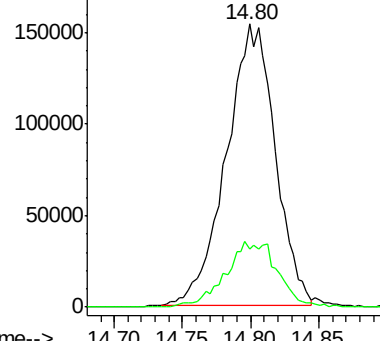
MMDadoda

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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 8.525 ppbv m

RT: 14.56 min Scan# 3661

Delta R.T. 0.10 min

Lab File: VL035007.D

Acq: 13 May 2020 4:01

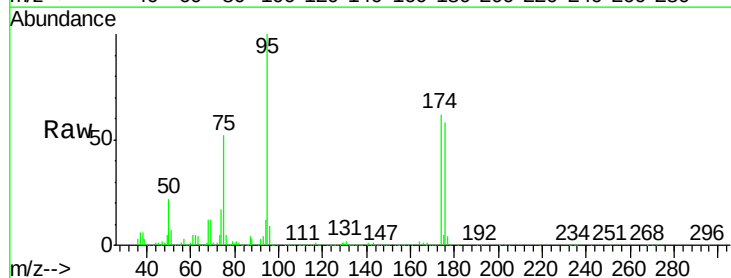
Tgt Ion: 95 Resp: 1583672

Ion Ratio Lower Upper

95 100

174 62.5 51.5 77.3

175 4.8 3.8 5.8



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

