

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
 Data File : VL033161.D
 Acq On : 4 Feb 2019 19:15
 Operator : SY/AP
 Sample : K1267-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSA2

Manual Integrations
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 2/5/2019 10:28:04 AM

Quant Time: Feb 05 01:49:37 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb 0
 QLast Update : Mon Feb 04 14:41:39 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	967391	10.00	ppbv	0.01
33) 1,4-Difluorobenzene	7.30	114	2227164	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	2447851	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.58	95	1929511	10.58	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	89196	0.626	ppbv	96
3) Chlorodifluoromethane	3.02	51	33700m	0.313	ppbv	
9) Propene	3.04	41	68819	1.271	ppbv	96
10) Heptane	8.26	43	350336m	2.077	ppbv	
11) Trichlorofluoromethane	4.00	101	33109	0.241	ppbv	92
13) Ethanol	3.66	45	104499	4.896	ppbv	97
15) Acetone	3.90	43	8885300	77.144	ppbv	95
20) Methylene Chloride	4.42	84	12551	0.316	ppbv	91
26) Hexane	5.79	57	112432m	1.010	ppbv	
30) Cyclohexane	7.25	84	56232	0.526	ppbv	99
34) 2-Butanone	5.34	43	47625m	0.340	ppbv	
35) Carbon Tetrachloride	7.14	117	8812m	0.062	ppbv	
36) Benzene	7.01	78	246310	1.094	ppbv	99
44) 2,2,4-Trimethylpentane	7.99	57	198459	0.525	ppbv #	30
52) Tetrachloroethene	11.38	164	23155m	0.296	ppbv	
53) Toluene	9.95	91	8181249	30.595	ppbv	99
58) Ethyl Benzene	12.87	91	443440	1.151	ppbv	93
59) m/p-Xylene	13.12	91	1249951m	3.963	ppbv	
60) o-Xylene	13.85	91	427746	1.470	ppbv	97
61) Styrene	13.69	104	128766	0.553	ppbv	97
62) Isopropylbenzene	14.83	105	4107089	9.887	ppbv	98
64) n-propylbenzene	15.72	120	35287	0.326	ppbv	71
69) p-Isopropyltoluene	17.82	119	103874	0.236	ppbv #	90
72) 4-Ethyltoluene	16.00	105	213033	0.612	ppbv	98
73) 1,3,5-Trimethylbenzene	16.16	105	179074m	0.534	ppbv	
74) 1,2,4-Trimethylbenzene	16.93	105	560662	1.639	ppbv #	75

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

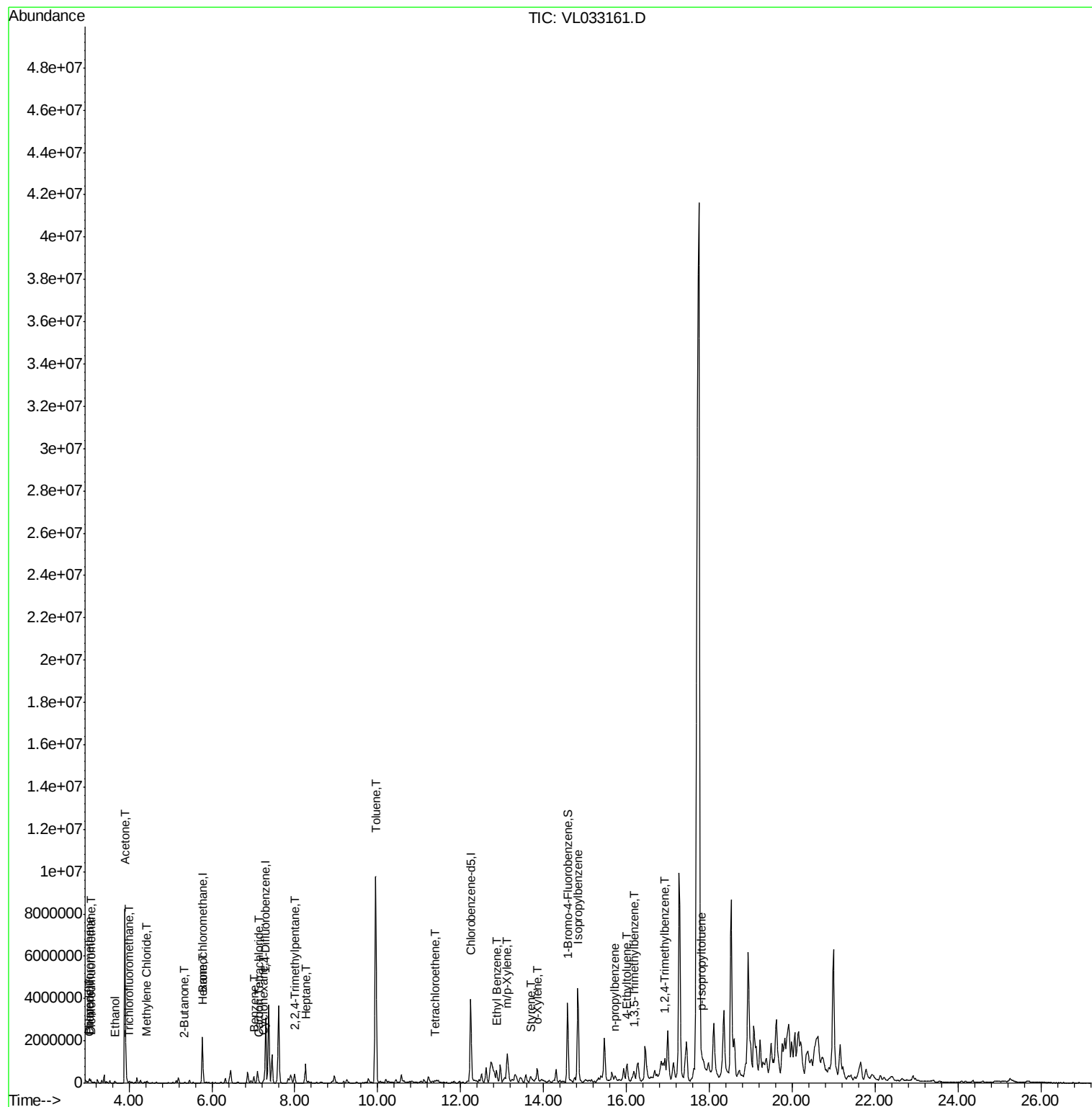
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL020419\
Data File : VL033161.D
Acq On : 4 Feb 2019 19:15
Operator : SY/AP
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ALS Vial : 1 Sample Multiplier: 1

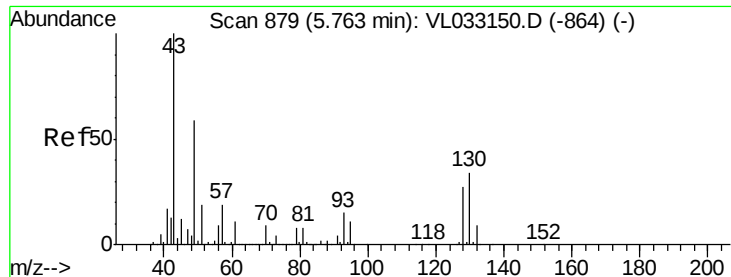
Instrument :
MSVOA_L
ClientSampleId :
SSA2

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Quant Time: Feb 05 01:49:37 2019
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL020419AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Feb
QLast Update : Mon Feb 04 14:41:39 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.01 min

Lab File: VL033161.D

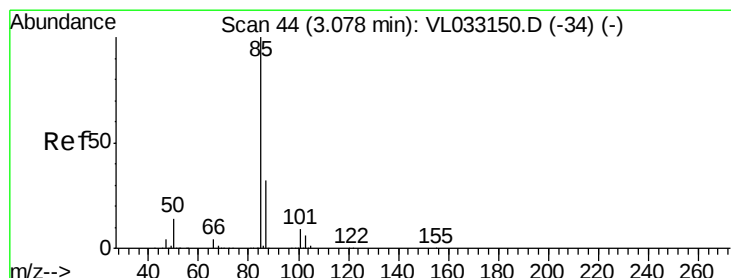
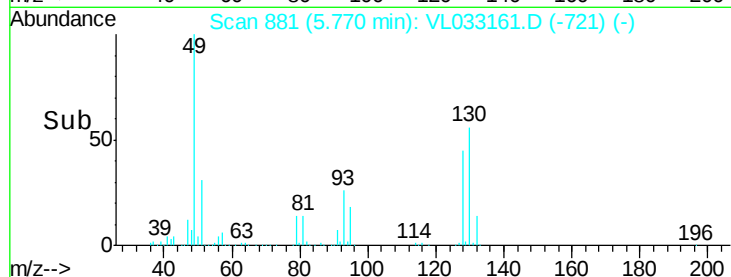
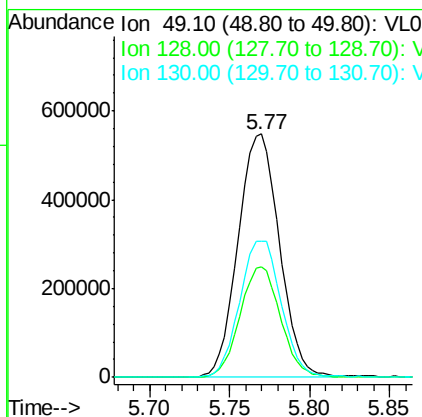
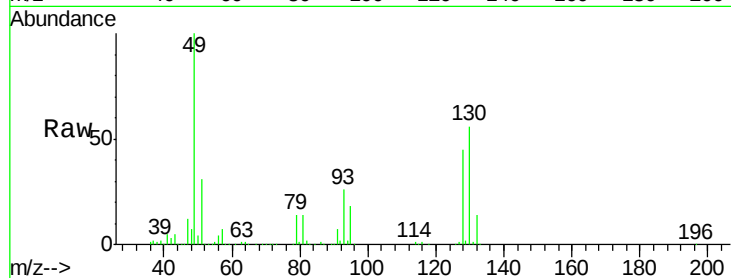
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampled :
SSA2

Tot Ion	49	Resp	967391
Ion	Ratio	Lower	Upper
49	100		
128	44.8	23.2	69.5
130	56.5	29.5	88.6

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#2

Dichlorodifluoromethane

Concen: 0.626 ppbv

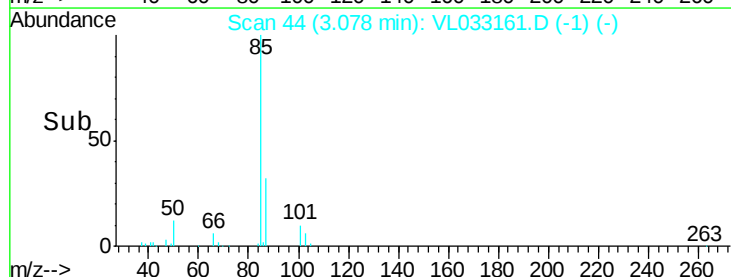
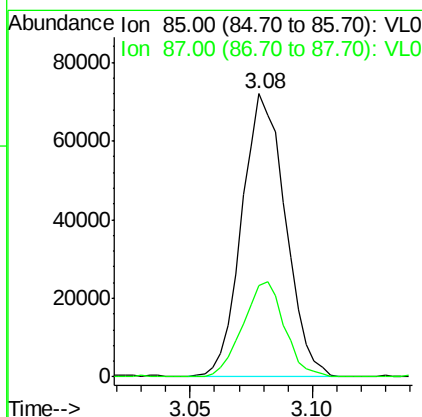
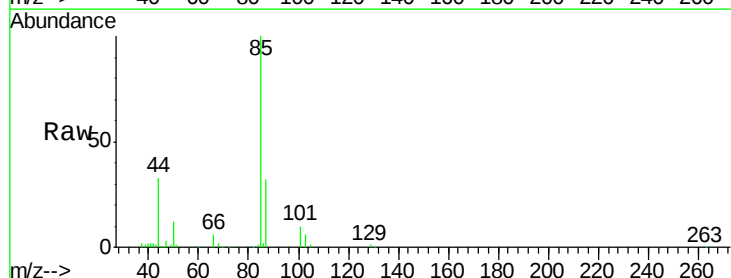
RT: 3.08 min Scan# 44

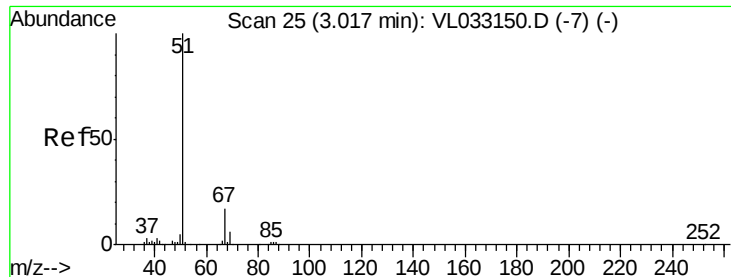
Delta R.T. 0.00 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

Tgt Ion	85	Resp	89196
Ion	Ratio	Lower	Upper
85	100		
87	32.1	27.4	41.0





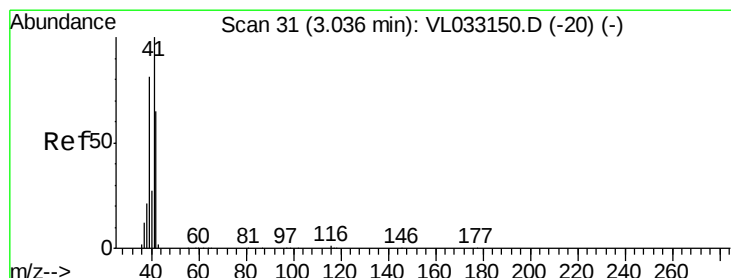
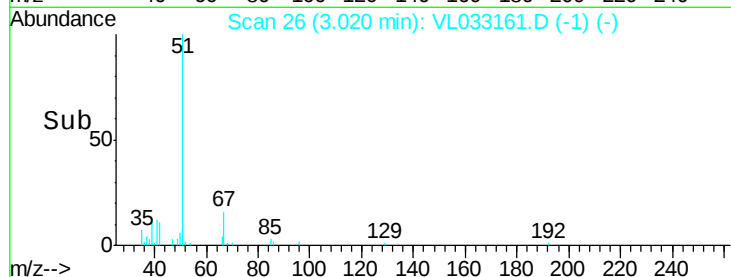
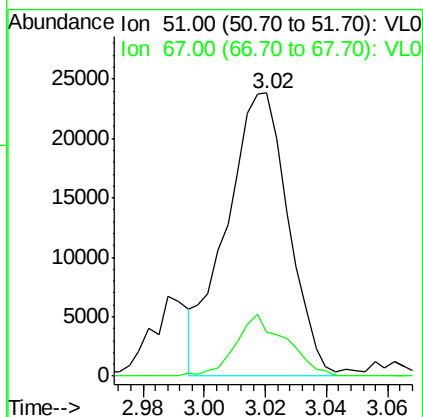
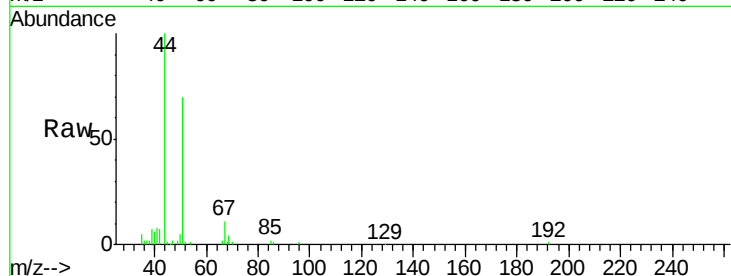
#3
Chlorodifluoromethane
Concen: 0.313 ppbv
RT: 3.02 min Scan# 26
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion: 51 Resp: 33700
Ion Ratio Lower Upper
51 100
67 17.7 13.4 20.2

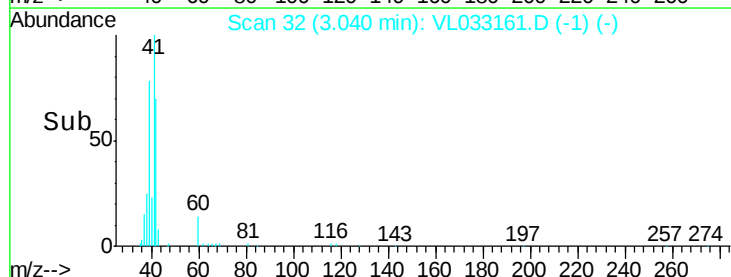
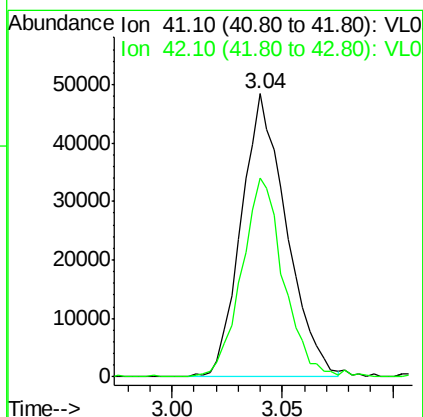
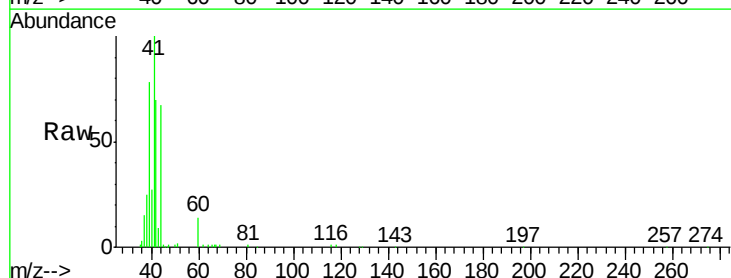
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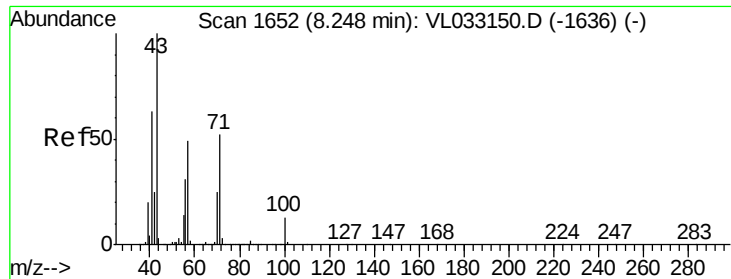
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#9
Propene
Concen: 1.271 ppbv
RT: 3.04 min Scan# 32
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion: 41 Resp: 68819
Ion Ratio Lower Upper
41 100
42 65.9 55.1 82.7





#10

Heptane

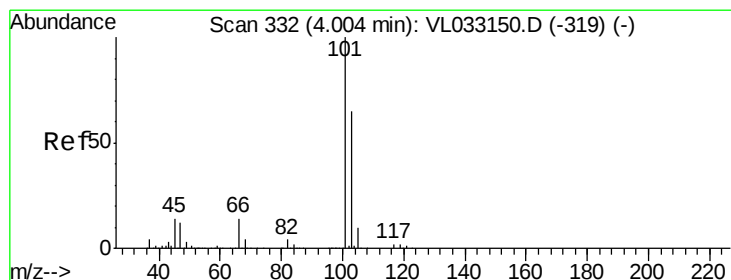
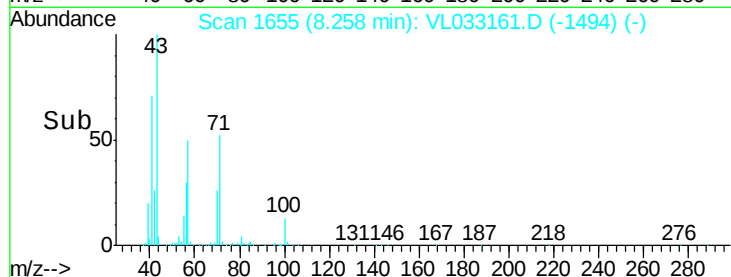
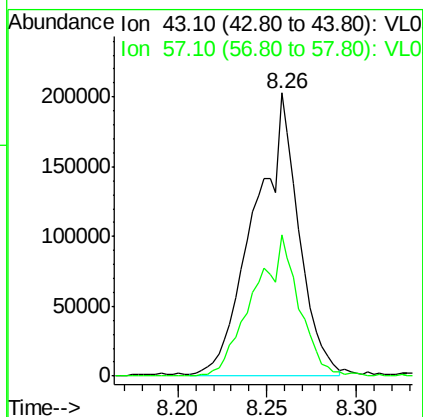
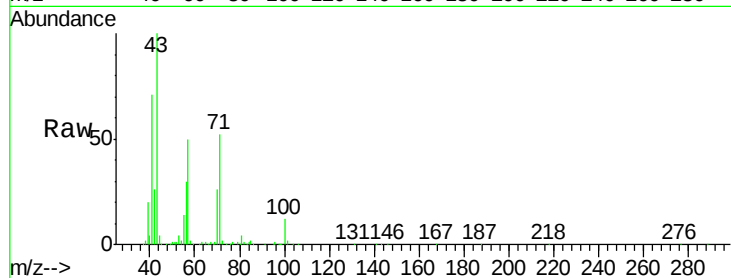
Concen: 2.077 ppbv m
RT: 8.26 min Scan# 1655
Delta R.T. 0.02 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion: 43 Resp: 350336
Ion Ratio Lower Upper
43 100
57 50.9 39.3 58.9

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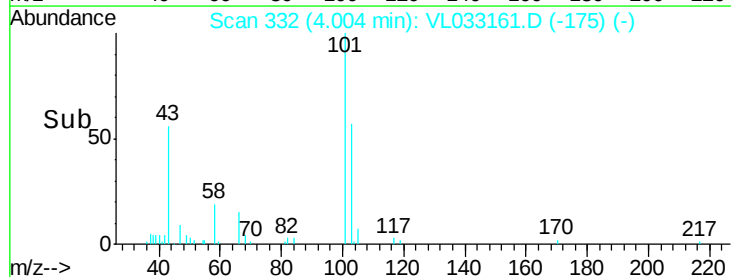
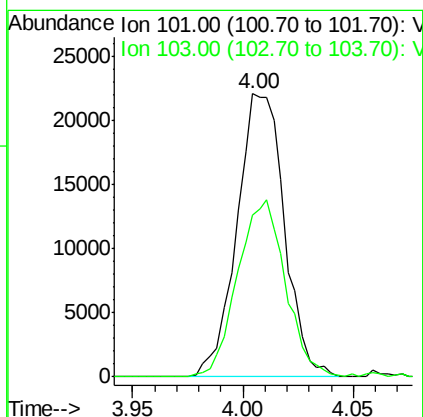
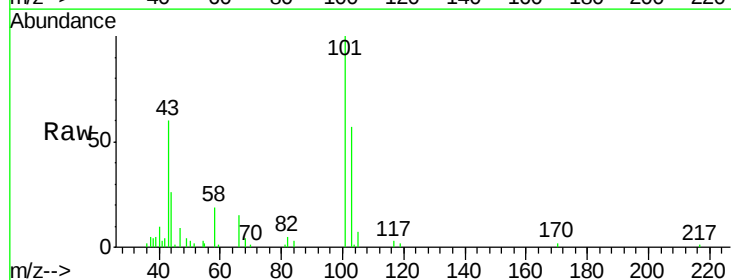


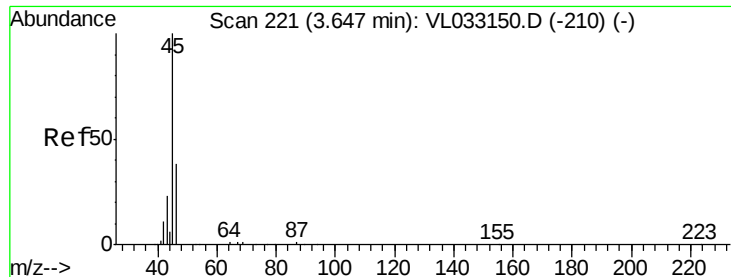
#11

Trichlorofluoromethane

Concen: 0.241 ppbv
RT: 4.00 min Scan# 332
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion: 101 Resp: 33109
Ion Ratio Lower Upper
101 100
103 58.1 51.3 76.9





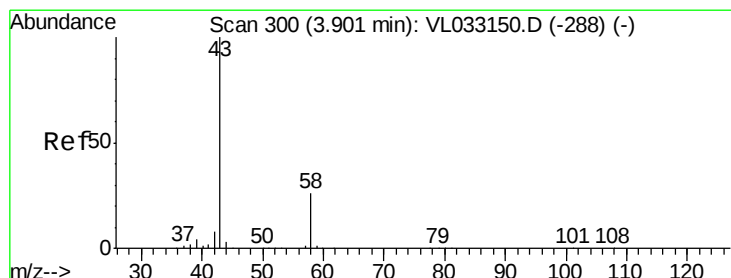
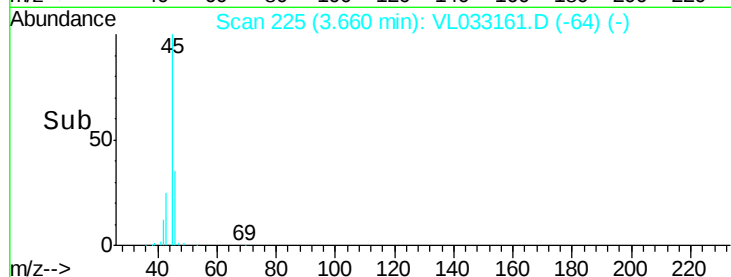
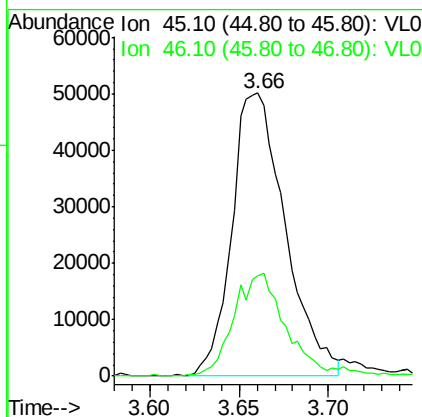
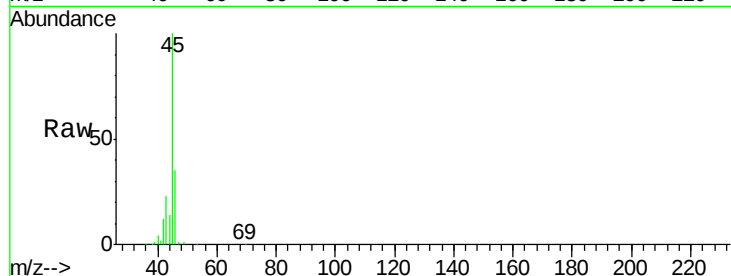
#13
Ethanol
Concen: 4.896 ppbv
RT: 3.66 min Scan# 225
Delta R.T. 0.02 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampled :
SSA2

Tot Ion: 45 Resp: 104499
Ion Ratio Lower Upper
45 100
46 36.8 14.0 56.2

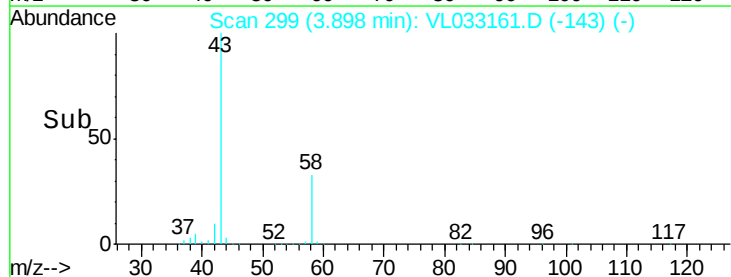
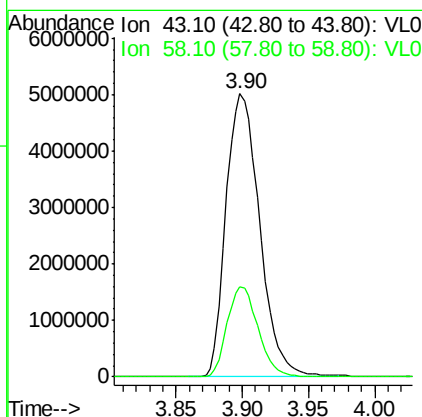
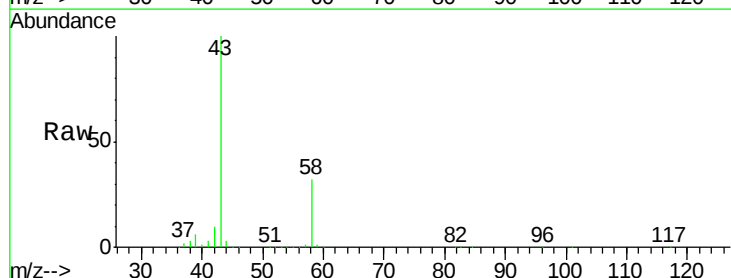
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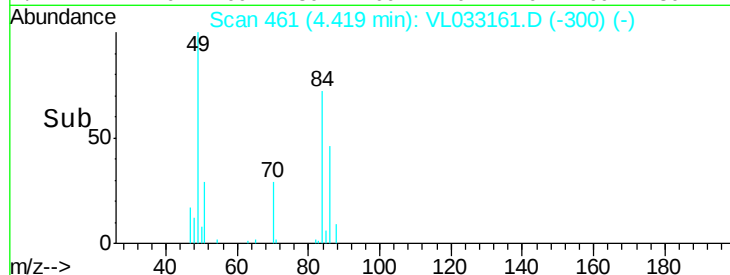
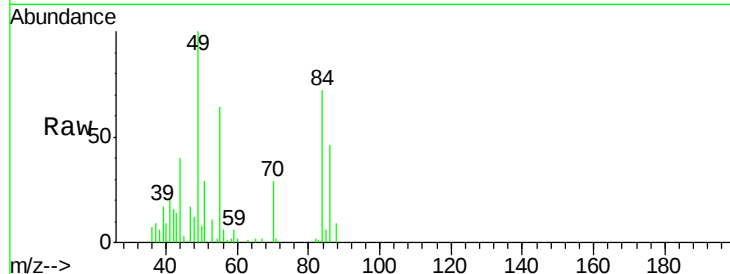
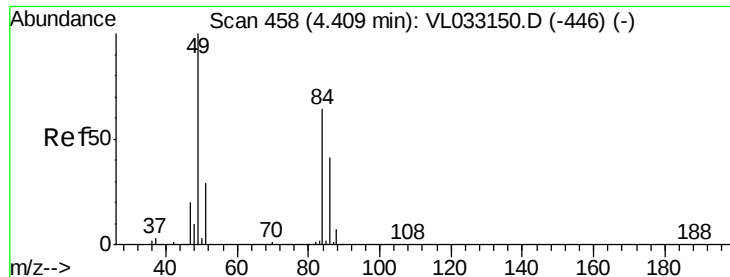
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#15
Acetone
Concen: 77.144 ppbv
RT: 3.90 min Scan# 299
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion: 43 Resp: 8885300
Ion Ratio Lower Upper
43 100
58 29.5 21.8 32.6





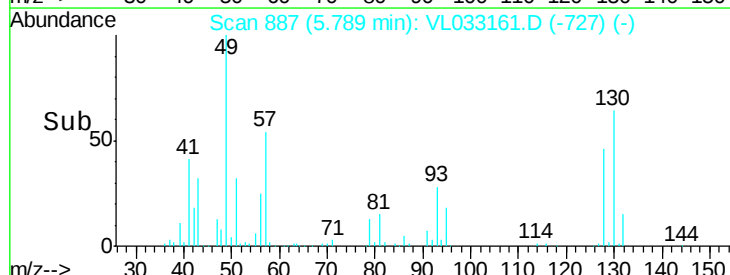
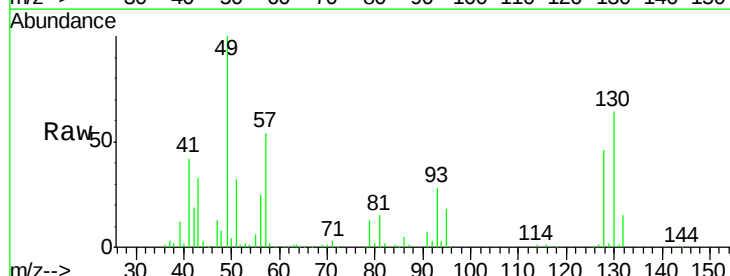
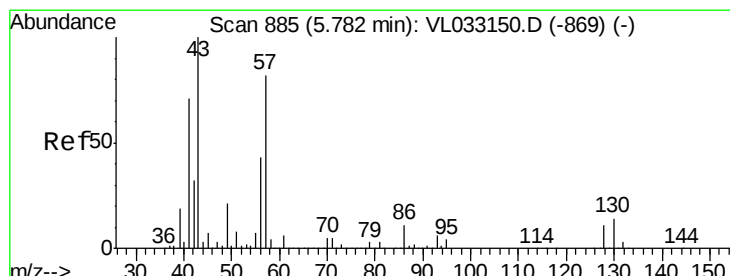
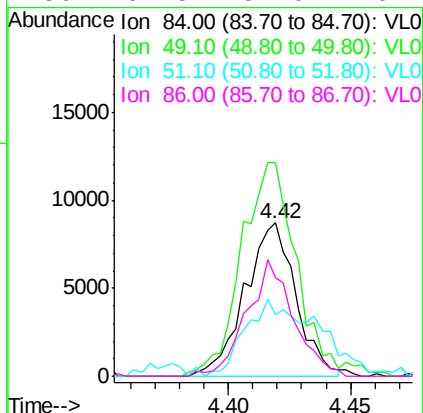
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Methvlene Chloride
Concen: 0.316 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.02 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tot Ion:	84	Resp:	12551
Ion	Ratio	Lower	Upper
84	100		
49	136.5	121.1	181.7
51	40.3	37.5	56.3
86	64.5	51.0	76.4

Instrument :
MSVOA_L
ClientSampled :
SSA2

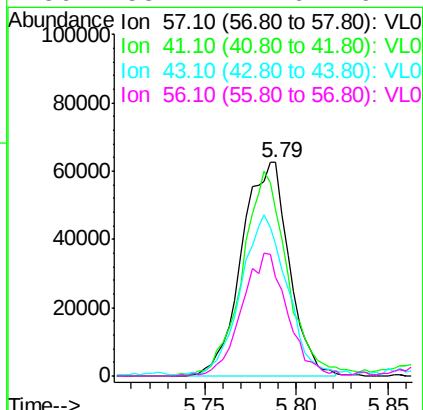
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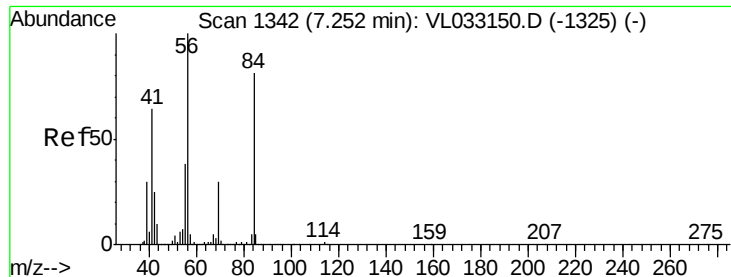
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#26
Hexane
Concen: 1.010 ppbv m
RT: 5.79 min Scan# 887
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion:	57	Resp:	112432
Ion	Ratio	Lower	Upper
57	100		
41	91.7	69.5	104.3
43	74.1	175.5	263.3#
56	55.2	41.6	62.4





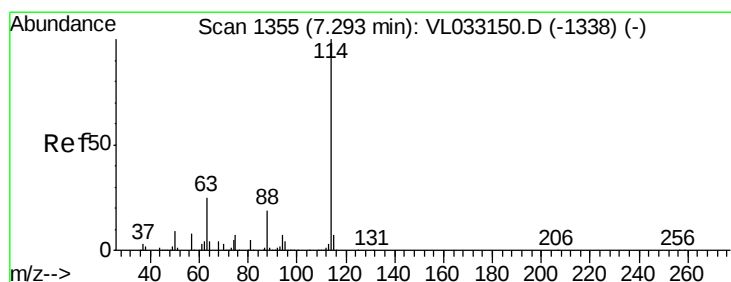
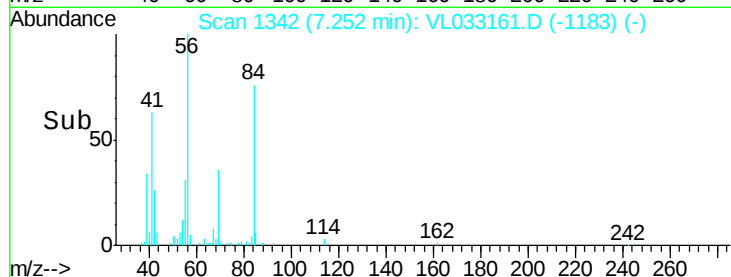
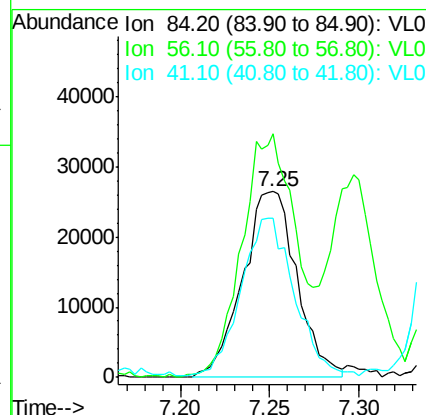
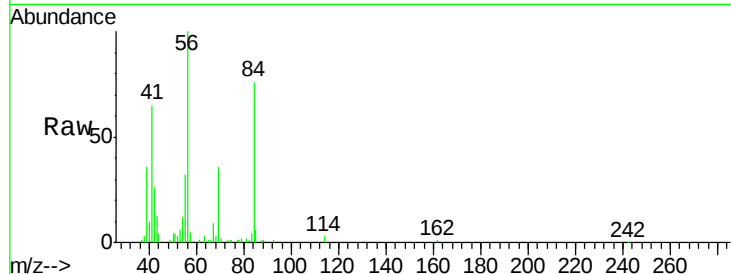
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Cvclohexane
Concen: 0.526 ppbv
RT: 7.25 min Scan# 1342
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion	Ratio	Lower	Upper
84	100		
56	134.1	109.0	163.4
41	82.3	65.3	97.9

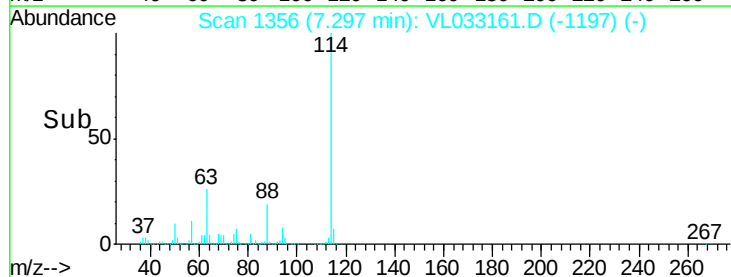
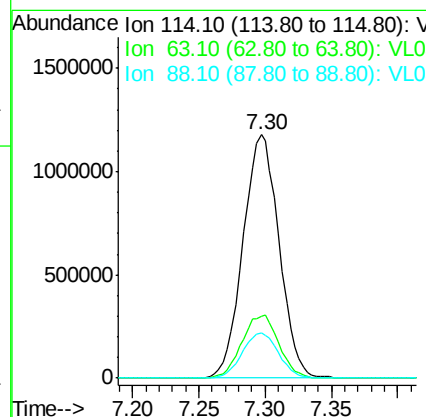
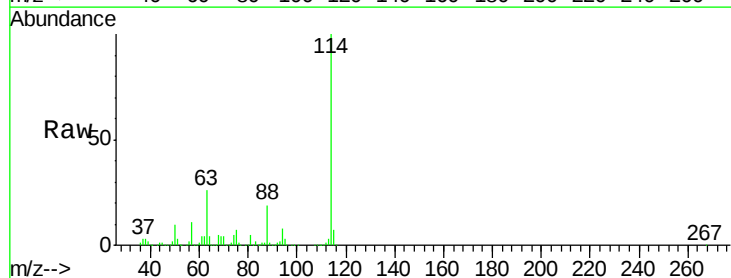
Manual Integrations
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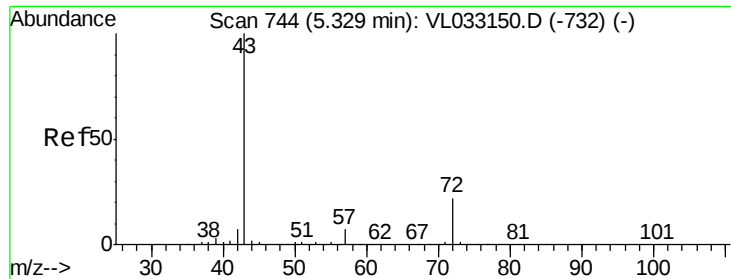
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1356
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion	Ratio	Lower	Upper
114	100		
63	26.8	20.0	30.0
88	18.7	14.4	21.6





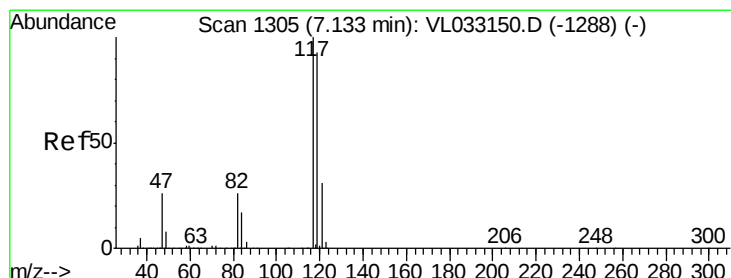
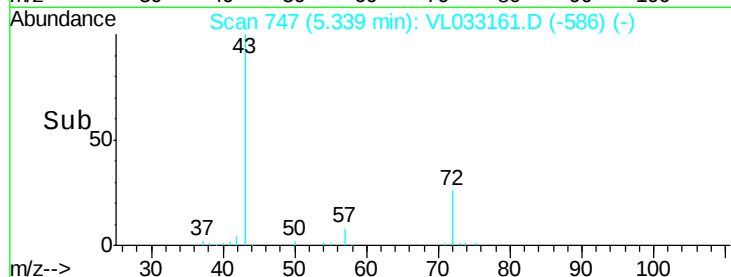
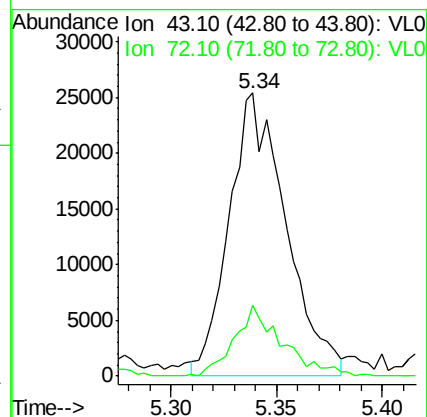
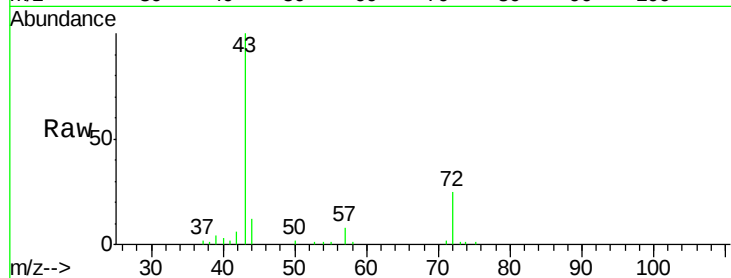
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2-Butanone
Concen: 0.340 ppbv m
RT: 5.34 min Scan# 747
Delta R.T. 0.02 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion: 43 Resp: 47625
Ion Ratio Lower Upper
43 100
72 21.2 17.9 26.9

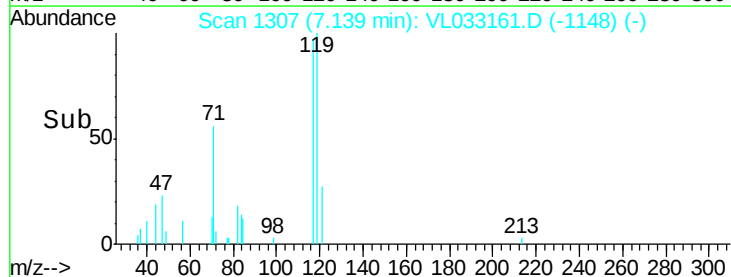
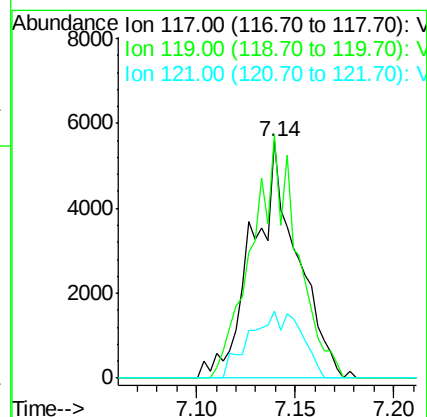
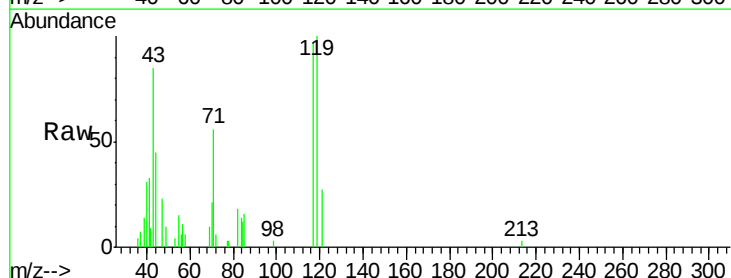
Manual Integrations
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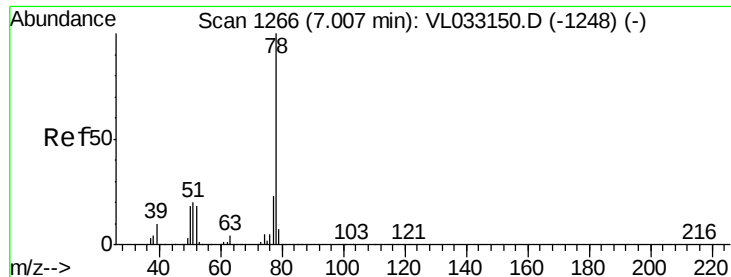
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2/5/2019 10:28:04 AM



#35
Carbon Tetrachloride
Concen: 0.062 ppbv m
RT: 7.14 min Scan# 1307
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion: 117 Resp: 8812
Ion Ratio Lower Upper
117 100
119 102.9 76.6 114.8
121 28.1 25.0 37.4





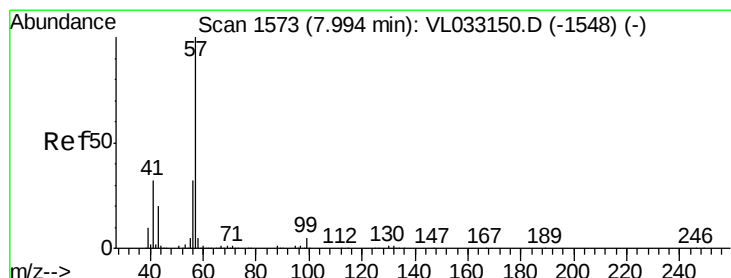
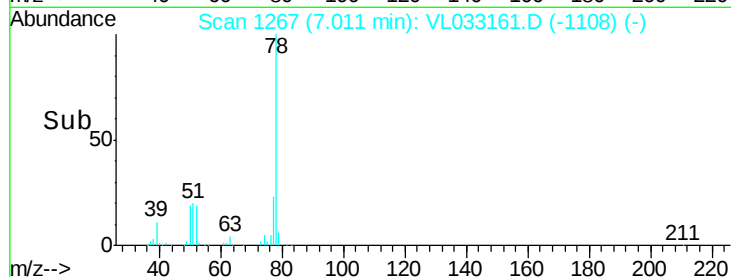
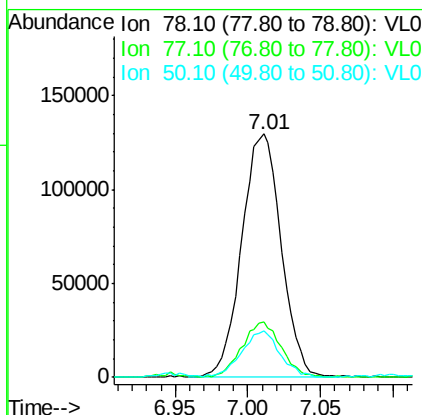
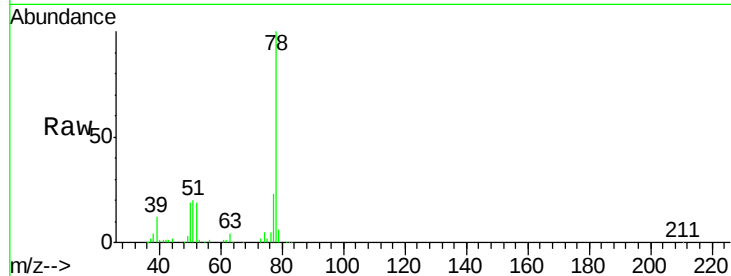
#36
Benzene
Concen: 1.094 ppbv
RT: 7.01 min Scan# 1267
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.0	17.8	26.6
50	18.9	14.7	22.1

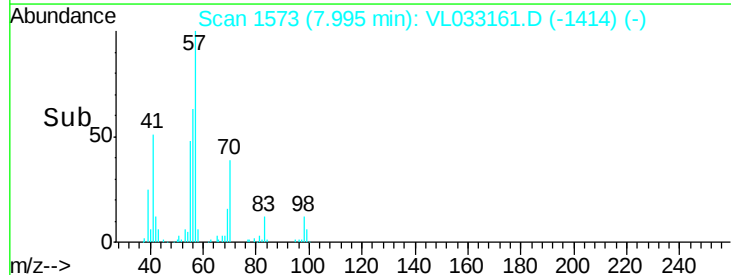
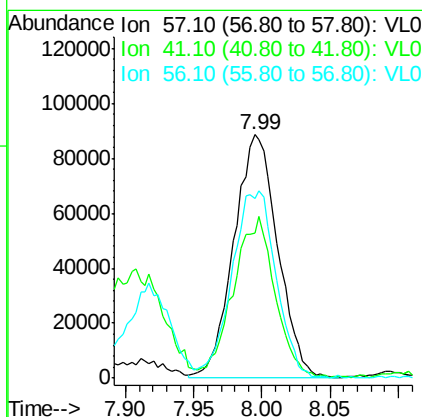
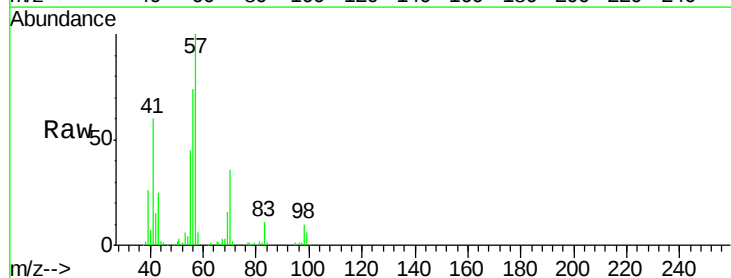
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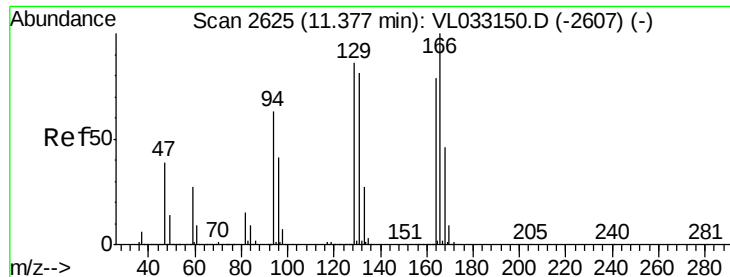
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 0.525 ppbv
RT: 7.99 min Scan# 1573
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion	Ratio	Lower	Upper
57	100		
41	62.5	24.6	36.8#
56	76.1	24.9	37.3#





#52

Tetrachloroethene

Concen: 0.296 ppbv m

RT: 11.38 min Scan# 2627

Delta R.T. 0.02 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

Instrument :

MSVOA_L

ClientSampleId :

SSA2

Tot Ion:164 Resp: 23155

Ion Ratio Lower Upper

164 100

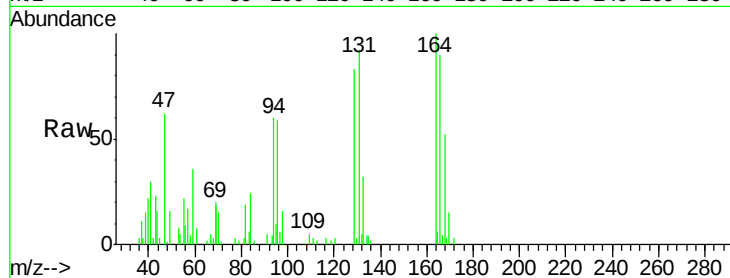
166 89.7 98.6 148.0#

129 83.4 86.3 129.5#

131 91.8 83.7 125.5

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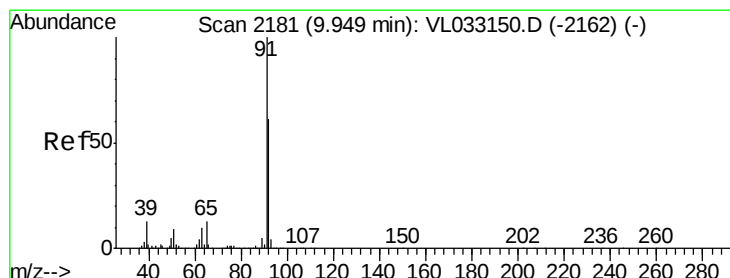
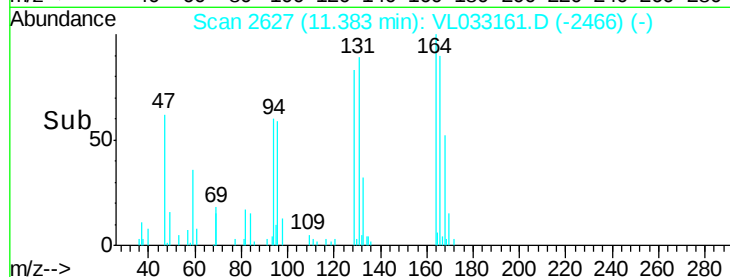
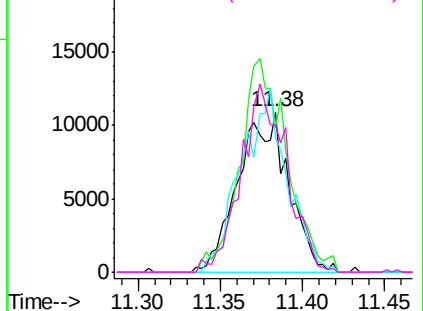


Abundance Ion 163.90 (163.60 to 164.60): V

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: 30.595 ppbv

RT: 9.95 min Scan# 2181

Delta R.T. 0.01 min

Lab File: VL033161.D

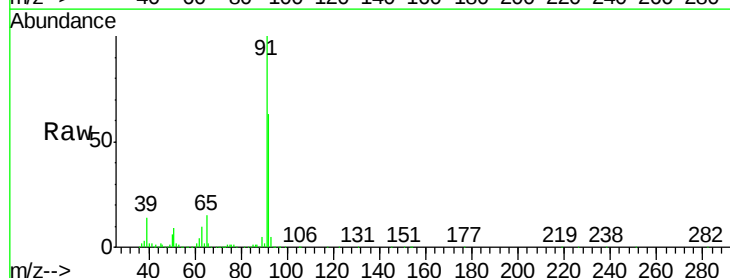
Acq: 4 Feb 2019 19:15

Tgt Ion: 91 Resp: 8181249

Ion Ratio Lower Upper

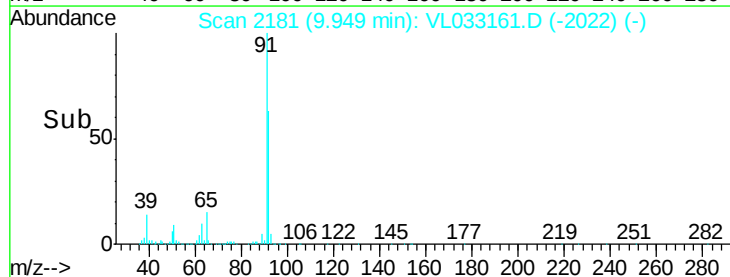
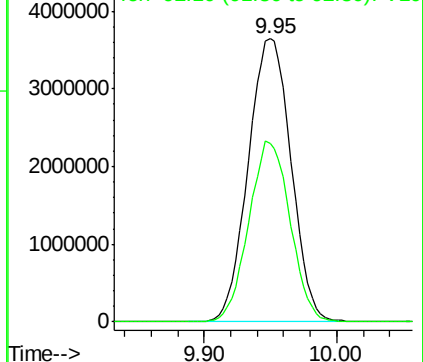
91 100

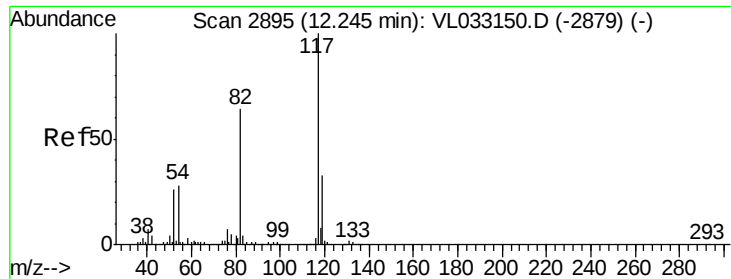
92 61.7 48.9 73.3



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





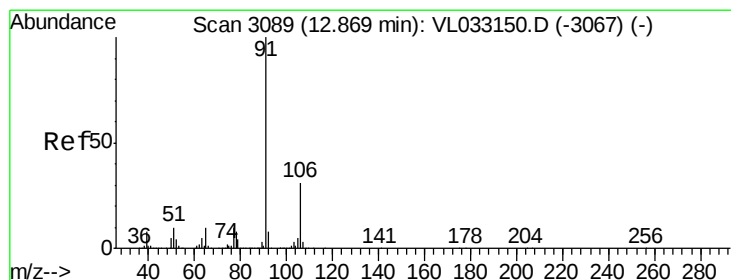
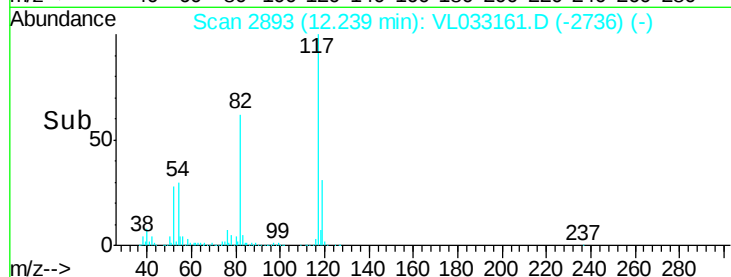
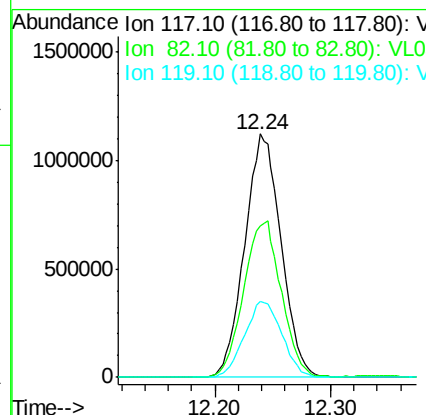
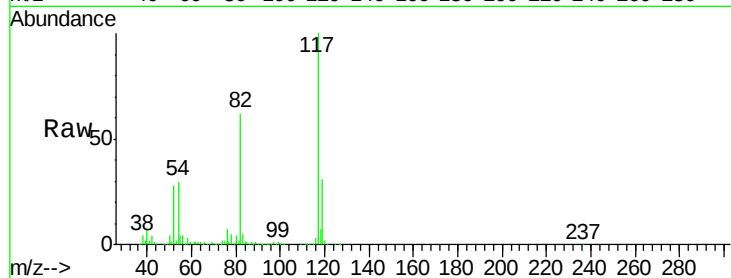
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.24 min Scan# 2893
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampled :
SSA2

Tot Ion	Ratio	Lower	Upper
117	100		
82	66.6	49.3	73.9
119	32.1	27.1	40.7

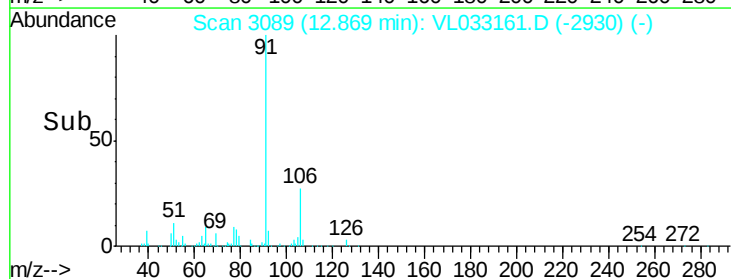
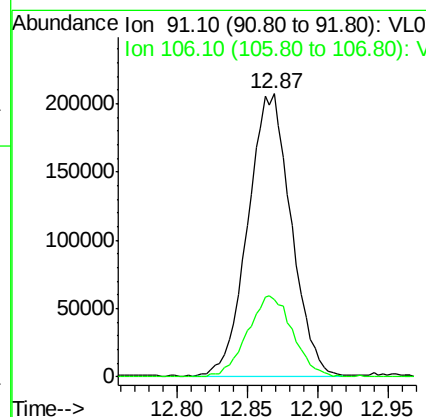
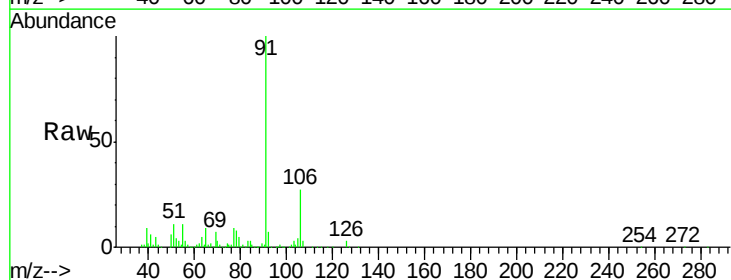
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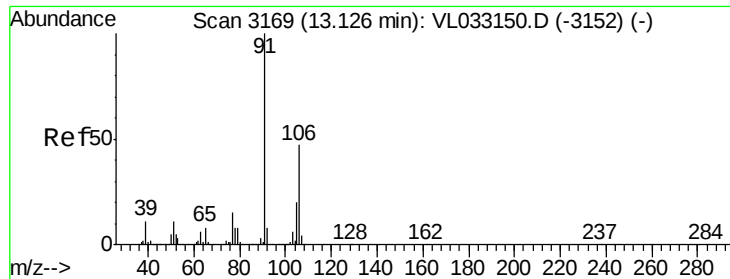
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#58
Ethyl Benzene
Concen: 1.151 ppbv
RT: 12.87 min Scan# 3089
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion	Ratio	Lower	Upper
91	100		
106	27.3	24.7	37.1





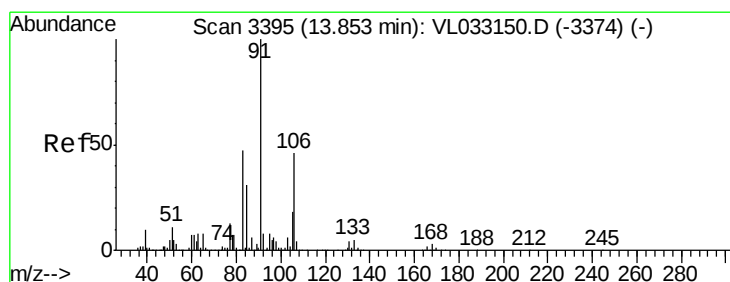
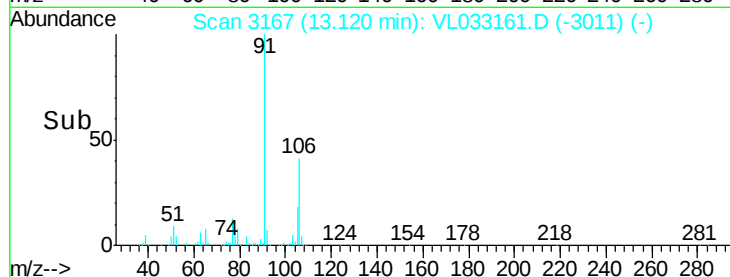
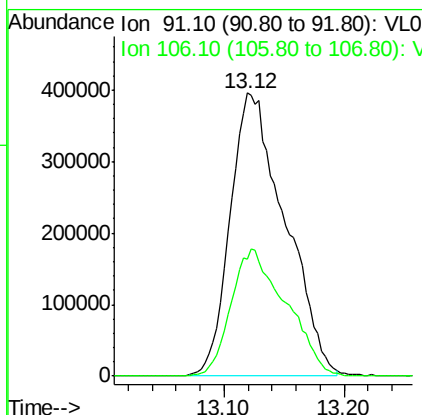
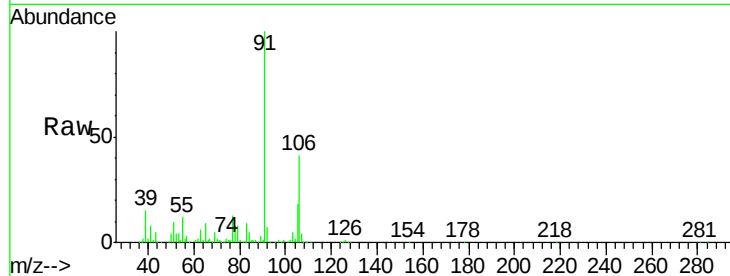
#59
m/p-Xylene
Concen: 3.963 ppbv m
RT: 13.12 min Scan# 3167
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampled :
SSA2

Tot Ion: 91 Resp: 1249951
Ion Ratio Lower Upper
91 100
106 45.0 37.6 56.4

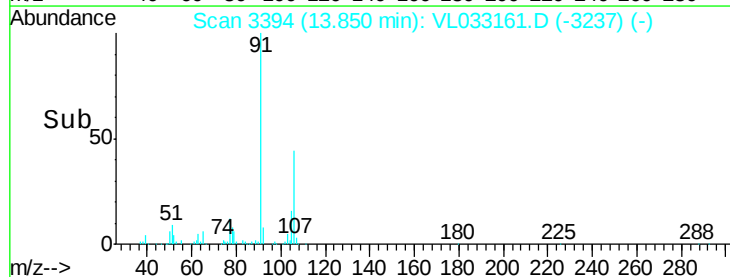
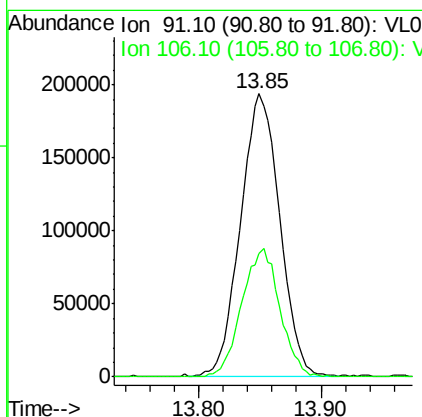
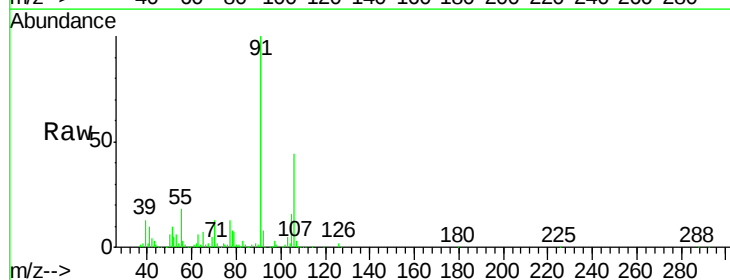
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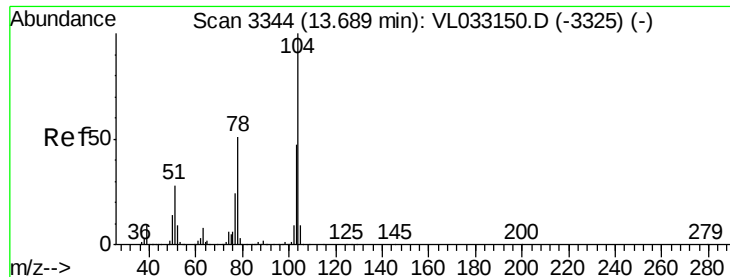
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#60
o-Xylene
Concen: 1.470 ppbv
RT: 13.85 min Scan# 3394
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion: 91 Resp: 427746
Ion Ratio Lower Upper
91 100
106 44.3 23.2 69.5





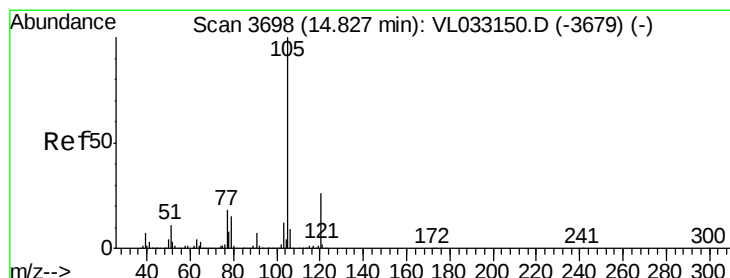
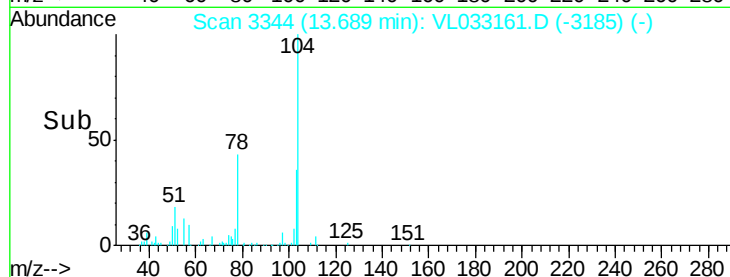
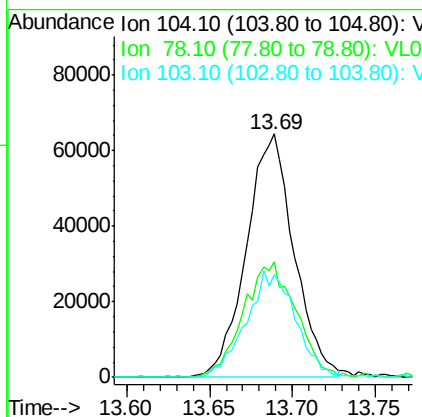
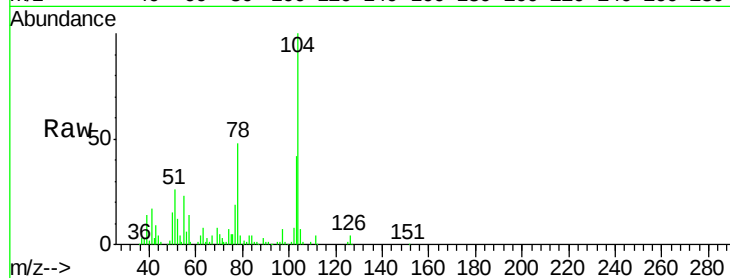
#61
Stvrene
Concen: 0.553 ppbv
RT: 13.69 min Scan# 3344
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion	Ratio	Lower	Upper
104	100		
78	52.9	39.7	59.5
103	45.7	37.7	56.5

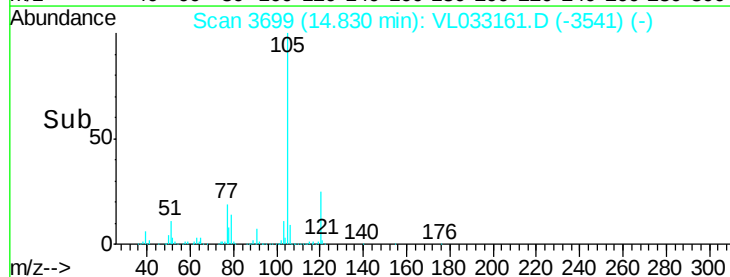
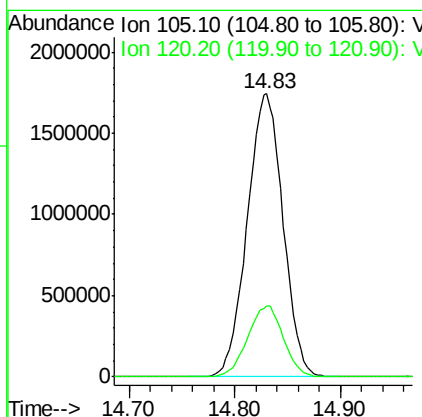
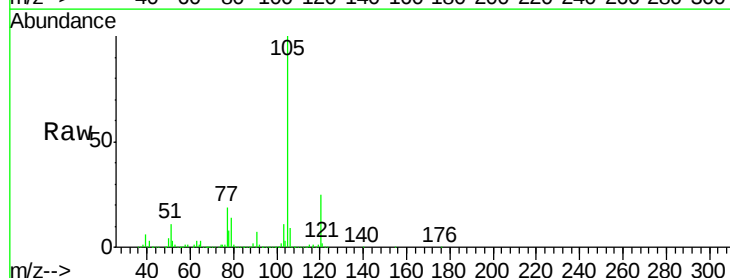
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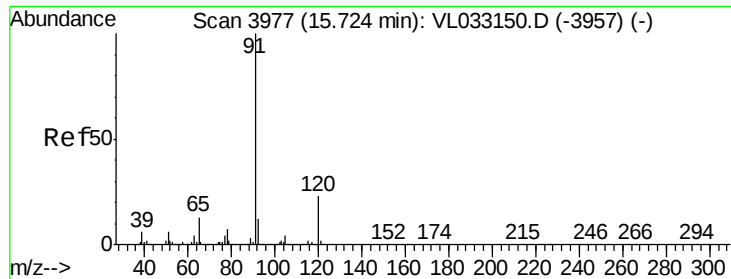
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#62
Isopropylbenzene
Concen: 9.887 ppbv
RT: 14.83 min Scan# 3699
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion	Ratio	Lower	Upper
105	100		
120	25.1	20.8	31.2





#64

n-propylbenzene

Concen: 0.326 ppbv

RT: 15.72 min Scan# 3976

Delta R.T. 0.00 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

Instrument :

MSVOA_L

ClientSampleId :

SSA2

Tot Ion:120 Resp: 35287

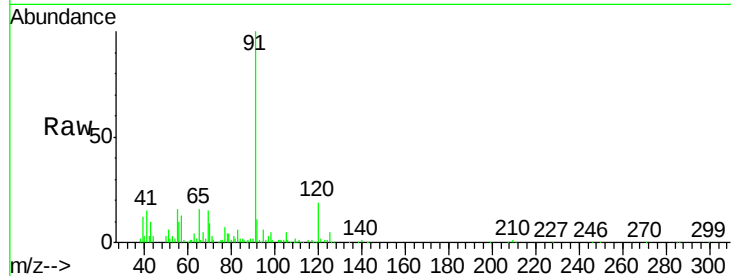
Ion Ratio Lower Upper

120 100

91 538.3 370.2 555.2

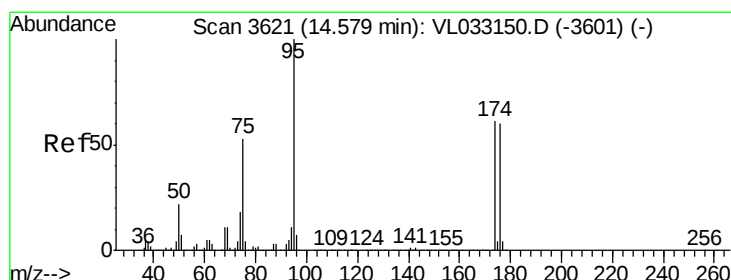
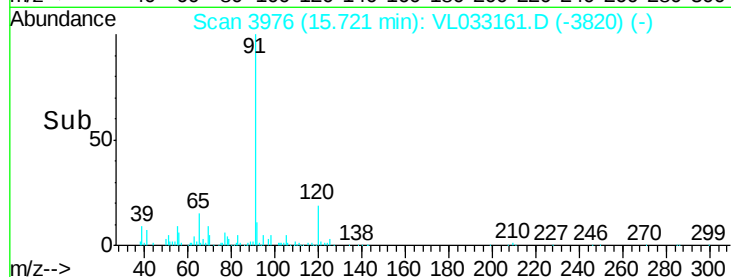
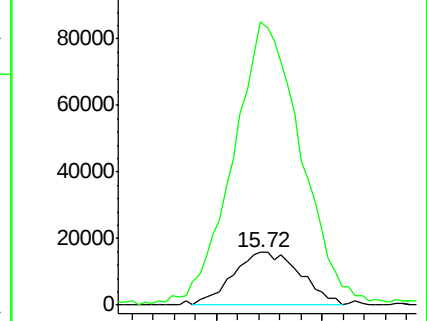
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Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 10.577 ppbv

RT: 14.58 min Scan# 3621

Delta R.T. 0.01 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

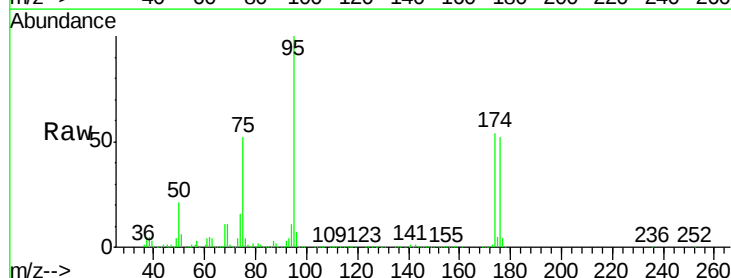
Tgt Ion: 95 Resp: 1929511

Ion Ratio Lower Upper

95 100

174 59.3 49.2 73.8

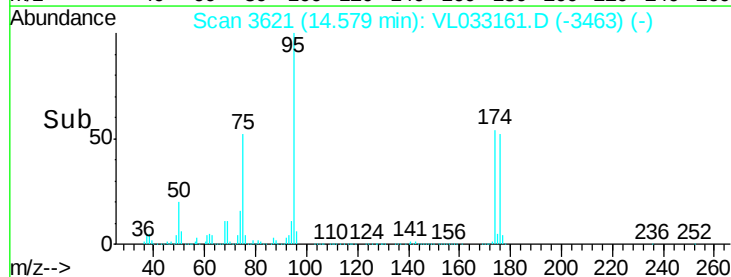
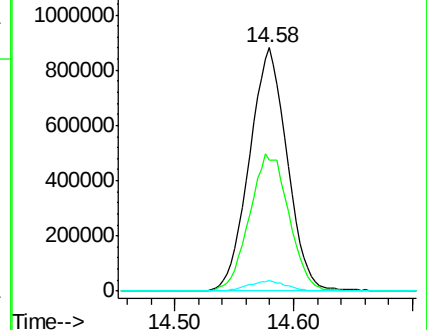
175 4.3 3.7 5.5

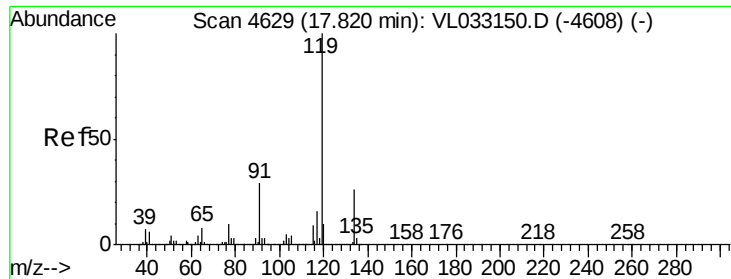


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





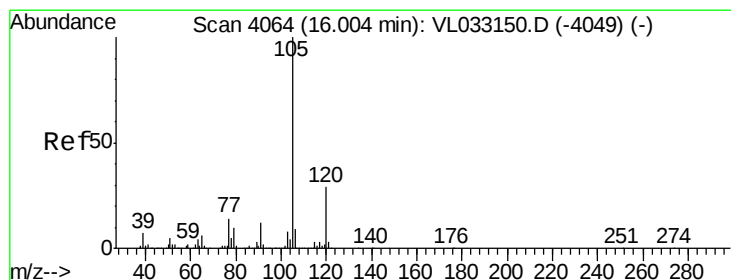
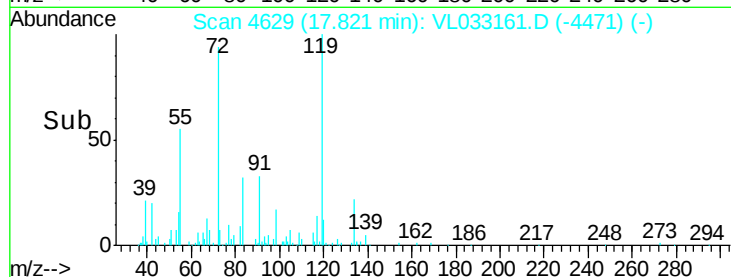
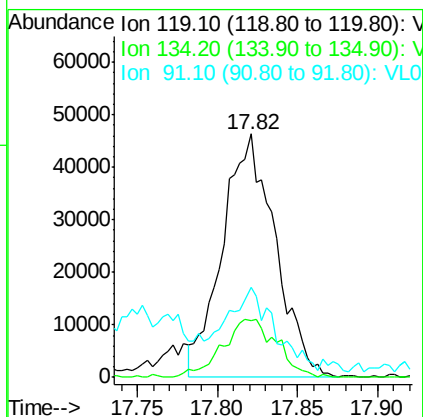
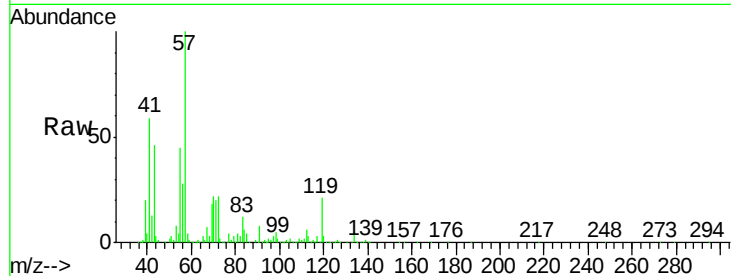
#69
p-Isopropyltoluene
Concen: 0.236 ppbv
RT: 17.82 min Scan# 4629
Delta R.T. 0.01 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Instrument :
MSVOA_L
ClientSampleId :
SSA2

Tot Ion	Ratio	Resp	Lower	Upper
119	100	103874		
134	24.9	20.3	30.5	
91	37.9	22.6	33.8	

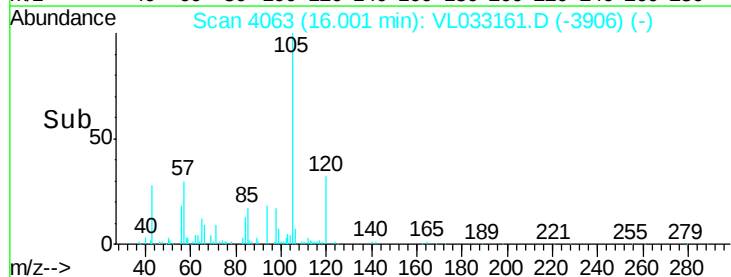
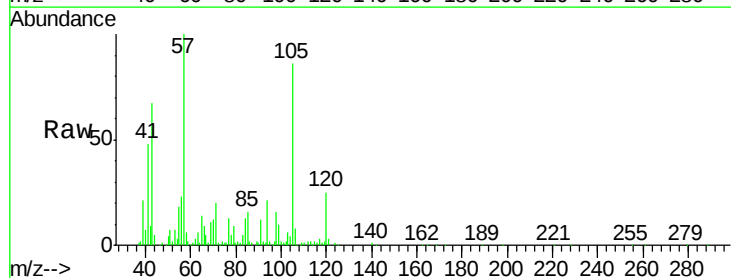
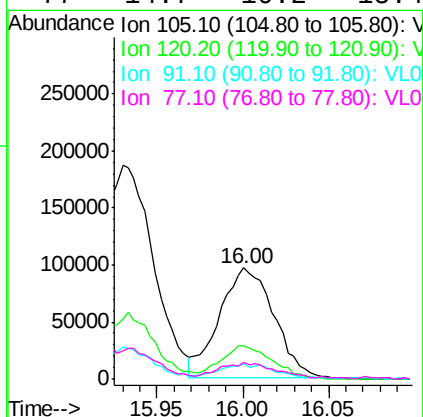
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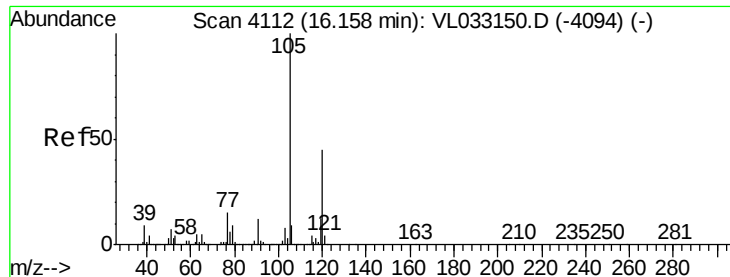
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#72
4-Ethyltoluene
Concen: 0.612 ppbv
RT: 16.00 min Scan# 4063
Delta R.T. 0.00 min
Lab File: VL033161.D
Acq: 4 Feb 2019 19:15

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	213033		
120	28.5	23.2	34.8	
91	12.8	9.5	14.3	
77	14.7	10.2	15.4	





#73

1,3,5-Trimethylbenzene

Concen: 0.534 ppbv m

RT: 16.16 min Scan# 4114

Delta R.T. 0.01 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

Instrument :

MSVOA_L

ClientSampleId :

SSA2

Tot Ion:105 Resp: 179074

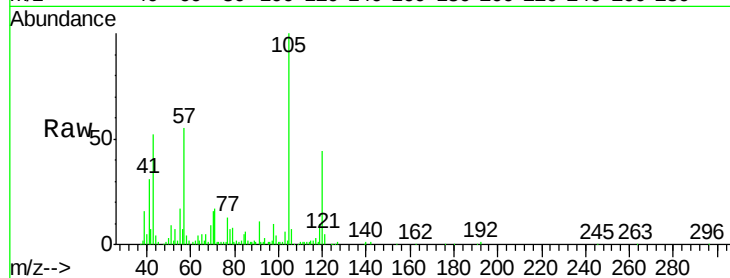
Ion Ratio Lower Upper

105 100

120 44.2 38.0 57.0

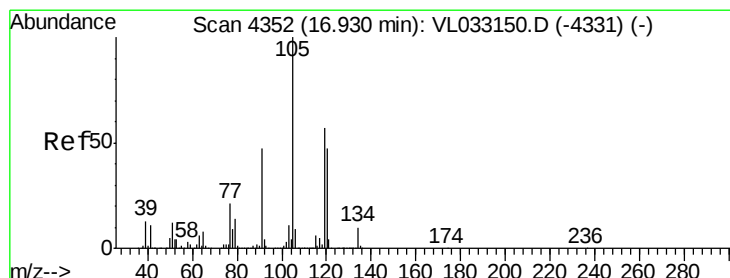
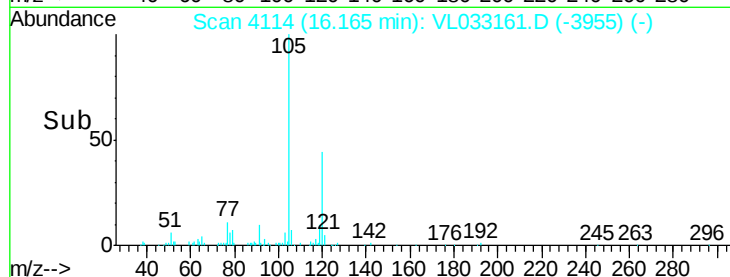
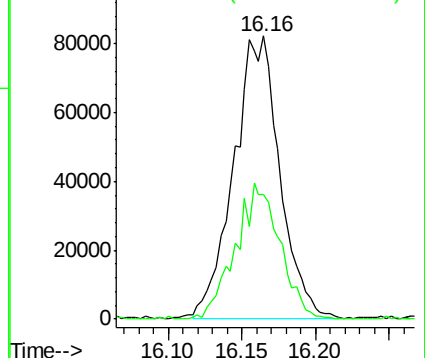
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 1.639 ppbv

RT: 16.93 min Scan# 4351

Delta R.T. 0.00 min

Lab File: VL033161.D

Acq: 4 Feb 2019 19:15

Tgt Ion:105 Resp: 560662

Ion Ratio Lower Upper

105 100

120 43.6 38.2 57.4

91 10.3 35.0 52.4#

77 14.9 15.8 23.6#

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

