

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120919\
 Data File : VL034466.D
 Acq On : 9 Dec 2019 16:07
 Operator : SY/AP
 Sample : K6195-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 NS-2

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Quant Time: Dec 11 11:22:13 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 19 14:15:35 2019
 QLast Update : Tue Nov 19 14:15:35 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	752904	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.19	114	1535946	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1656713	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.47	95	1397377	10.03	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.30%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	18312m	0.134	ppbv	
3) Chlorodifluoromethane	2.96	51	24864m	0.265	ppbv	
4) Chloromethane	3.11	50	20807	0.376	ppbv	93
9) Propene	2.99	41	21950	0.526	ppbv	90
10) Heptane	8.15	43	16997m	0.158	ppbv	
11) Trichlorofluoromethane	3.93	101	37722	0.278	ppbv	91
13) Ethanol	3.59	45	1169418	100.659	ppbv	96
15) Acetone	3.83	43	532129	4.936	ppbv	99
17) tert-Butyl alcohol	4.29	59	22684m	0.250	ppbv	
19) Isopropyl Alcohol	3.96	45	656105	9.494	ppbv #	99
20) Methylene Chloride	4.34	84	72280	1.891	ppbv	90
26) Hexane	5.69	57	141542	1.712	ppbv #	40
27) Carbon Disulfide	4.55	76	16462	0.183	ppbv #	72
30) Cyclohexane	7.14	84	10630m	0.170	ppbv	
34) 2-Butanone	5.25	43	53725	0.425	ppbv	91
35) Carbon Tetrachloride	7.03	117	7610	0.058	ppbv	91
36) Benzene	6.90	78	43637m	0.284	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	84496m	0.301	ppbv	
50) 4-Methyl-2-Pentanone	8.78	43	44556m	0.244	ppbv	
52) Tetrachloroethene	11.27	164	7385m	0.111	ppbv	
53) Toluene	9.84	91	131870m	0.756	ppbv	
58) Ethyl Benzene	12.76	91	64414	0.251	ppbv #	78
59) m/p-Xylene	13.01	91	256327m	1.153	ppbv	
60) o-Xylene	13.74	91	34242	0.156	ppbv	96
70) n-Butylbenzene	18.62	91	35769m	0.110	ppbv	
72) 4-Ethyltoluene	15.90	105	65845m	0.259	ppbv	
73) 1,3,5-Trimethylbenzene	16.05	105	67826	0.273	ppbv	96
74) 1,2,4-Trimethylbenzene	16.82	105	203965	0.773	ppbv #	70

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

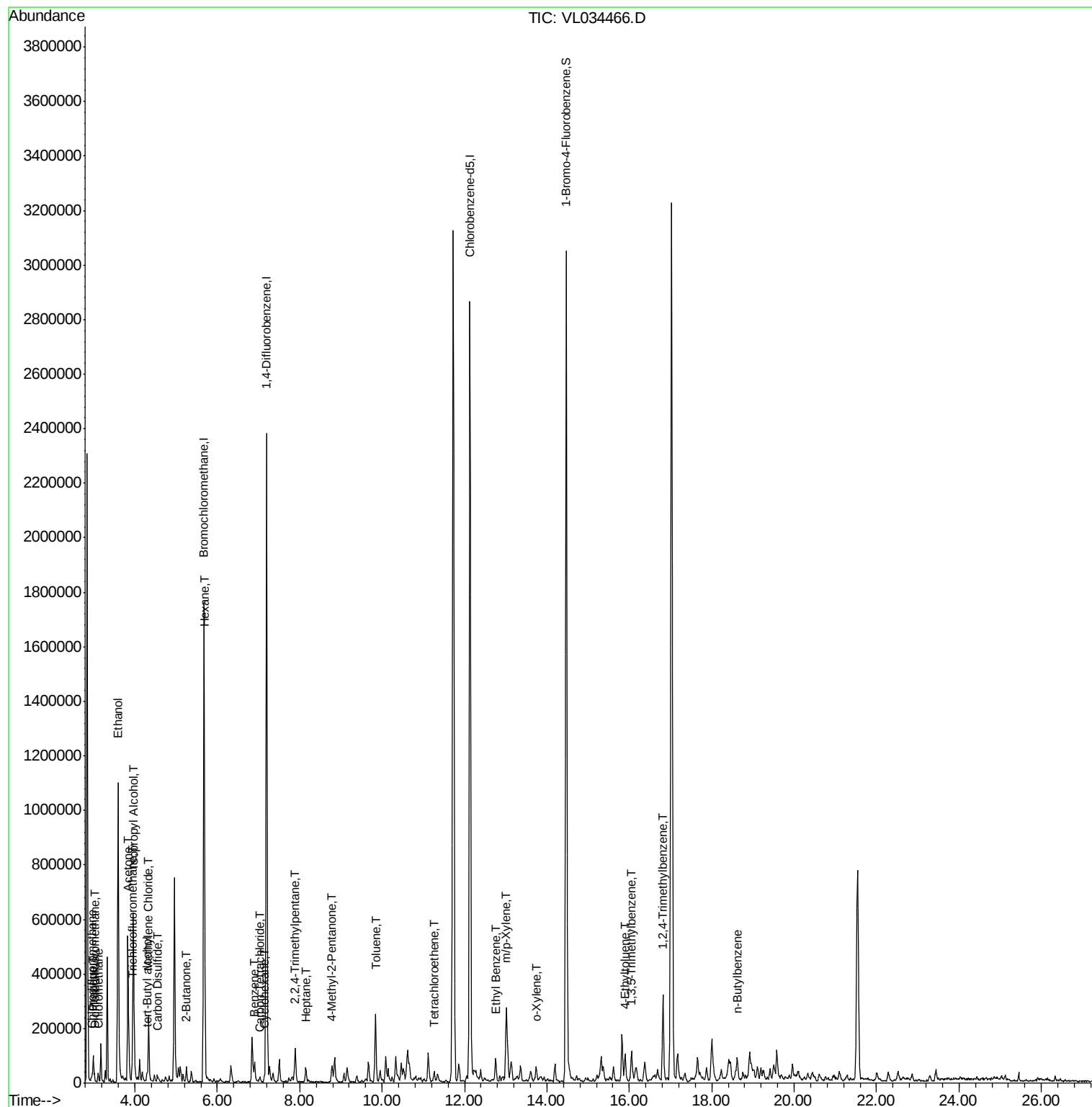
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120919\
Data File : VL034466.D
Acq On : 9 Dec 2019 16:07
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

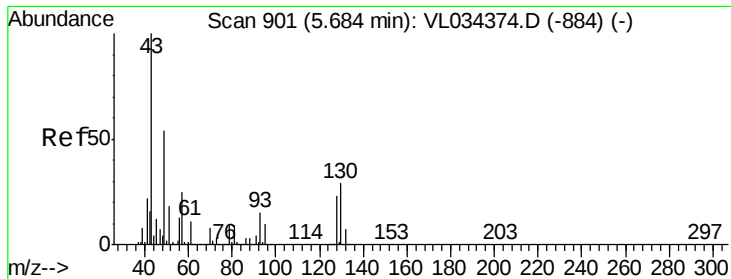
Instrument :
MSVOA_L
ClientSampleId :
NS-2

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Quant Time: Dec 11 11:22:13 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 897

Delta R.T. -0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Instrument :

MSVOA_L

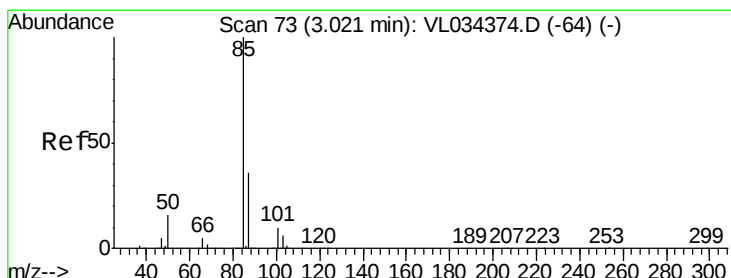
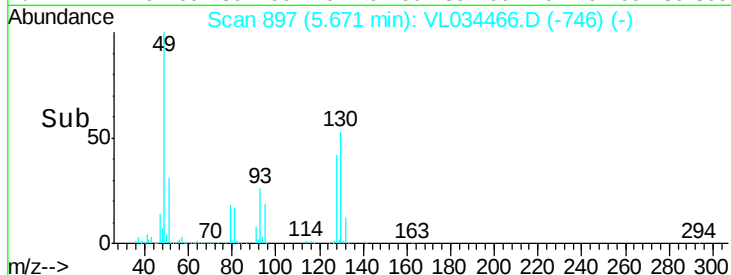
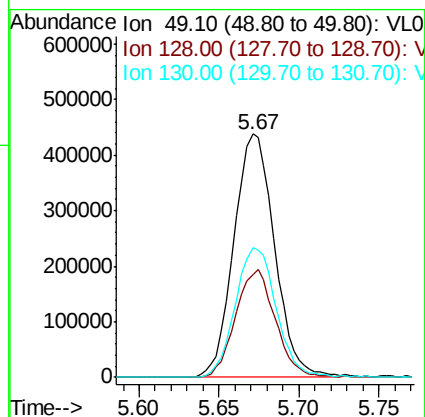
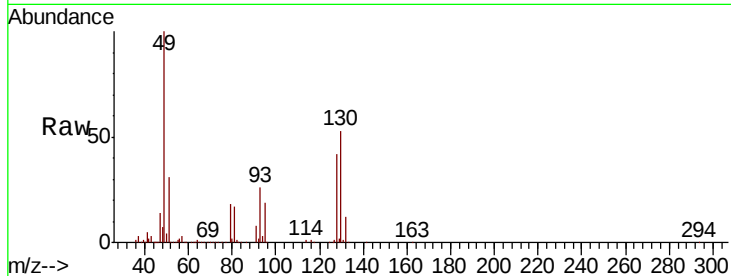
ClientSampled :

NS-2

Tot Ion:	49	Resp:	752904
Ion	Ratio	Lower	Upper
49	100		
128	44.3	21.8	65.3
130	54.6	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 0.134 ppbv m

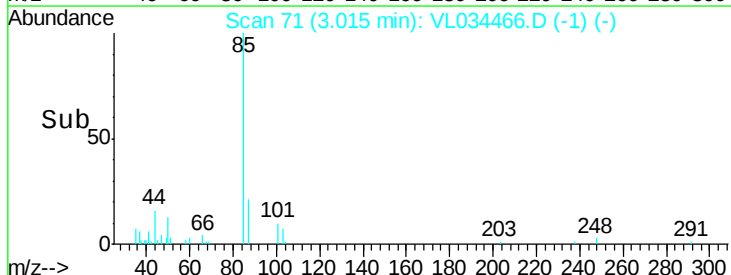
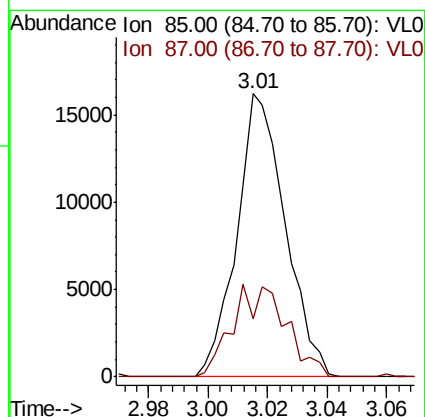
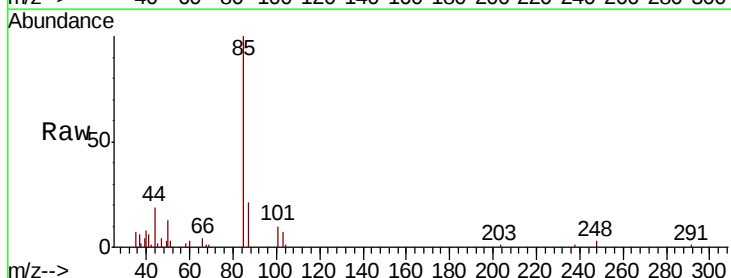
RT: 3.01 min Scan# 71

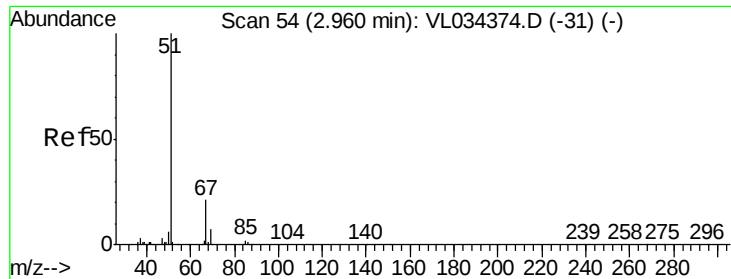
Delta R.T. -0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Tgt Ion:	85	Resp:	18312
Ion	Ratio	Lower	Upper
85	100		
87	20.6	28.5	42.7#





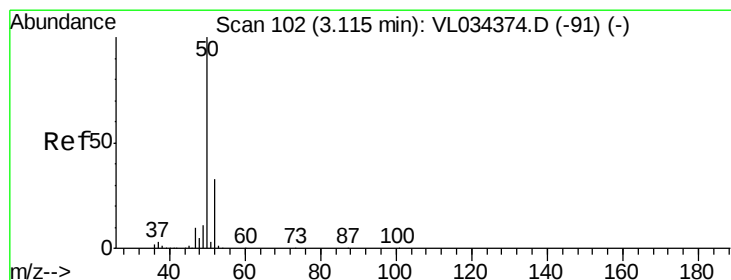
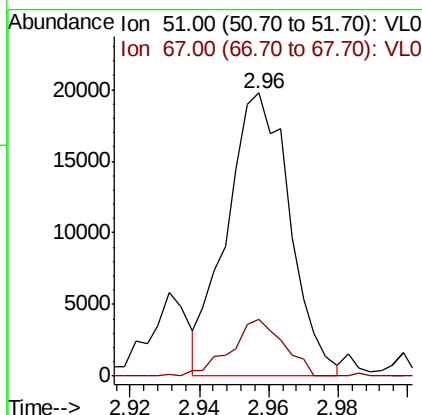
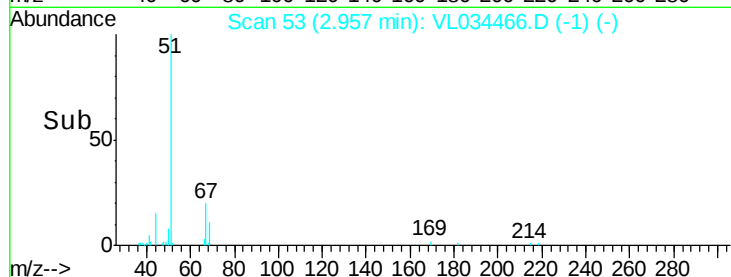
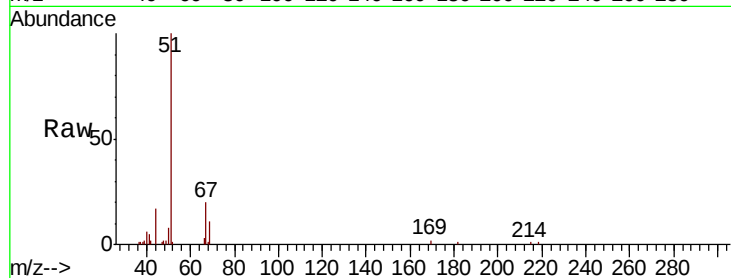
#3
Chlorodifluoromethane
Concen: 0.265 ppbv
RT: 2.96 min Scan# 53
Delta R.T. -0.00 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampleId :
NS-2

Tot Ion: 51 Resp: 24864
Ion Ratio Lower Upper
51 100
67 16.8 16.2 24.2

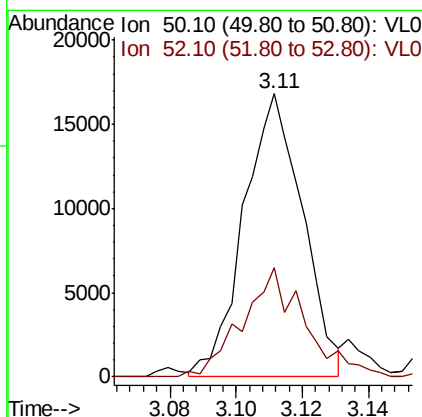
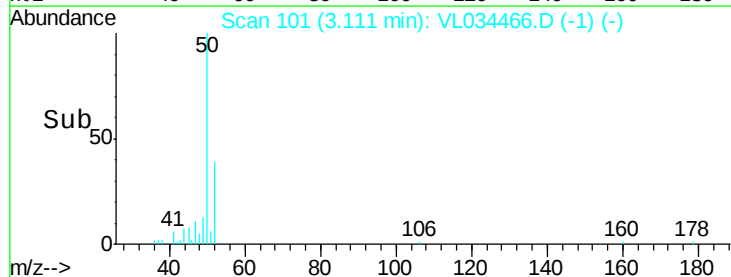
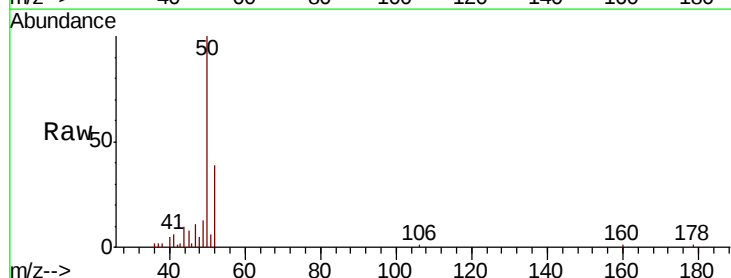
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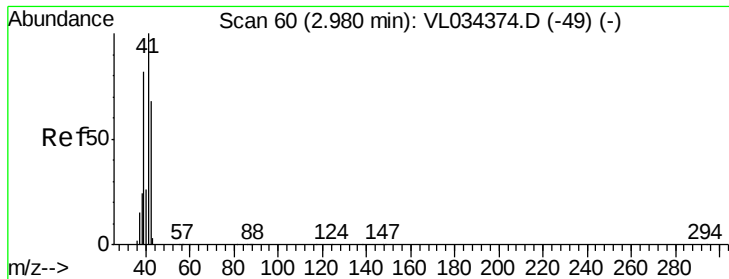
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#4
Chloromethane
Concen: 0.376 ppbv
RT: 3.11 min Scan# 101
Delta R.T. -0.00 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion: 50 Resp: 20807
Ion Ratio Lower Upper
50 100
52 37.5 26.8 40.2





#9

Propene

Concen: 0.526 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Instrument :

MSVOA_L

ClientSampled :

NS-2

Tot Ion: 41 Resp: 21950

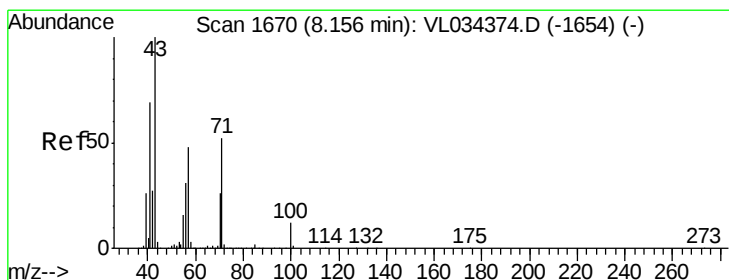
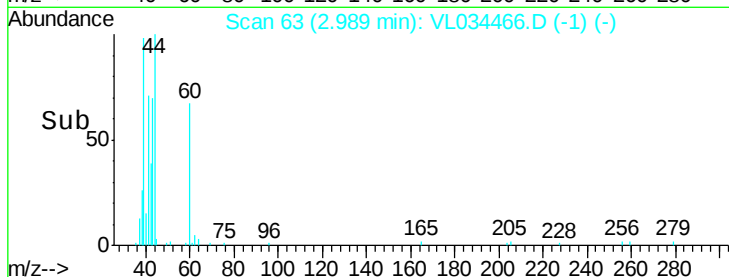
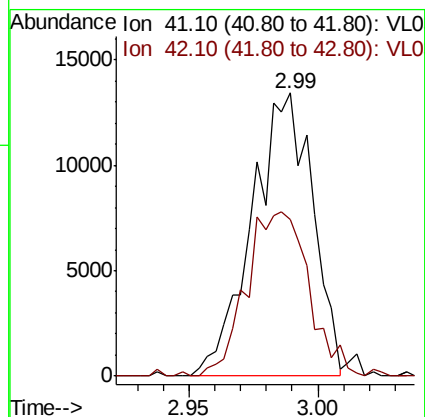
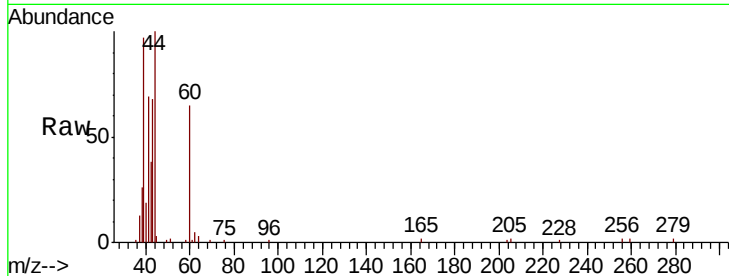
Ion Ratio Lower Upper

41 100

42 60.6 54.6 82.0

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#10

Heptane

Concen: 0.158 ppbv m

RT: 8.15 min Scan# 1668

Delta R.T. -0.01 min

Lab File: VL034466.D

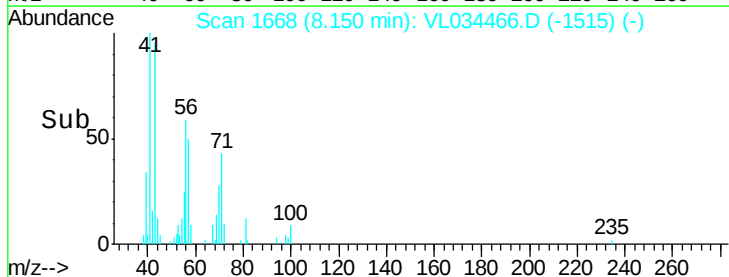
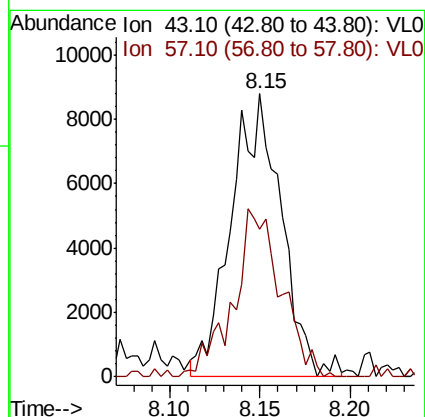
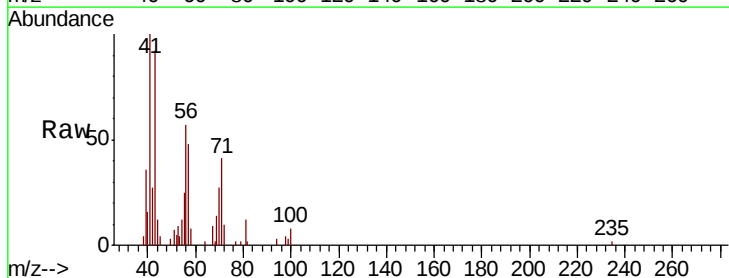
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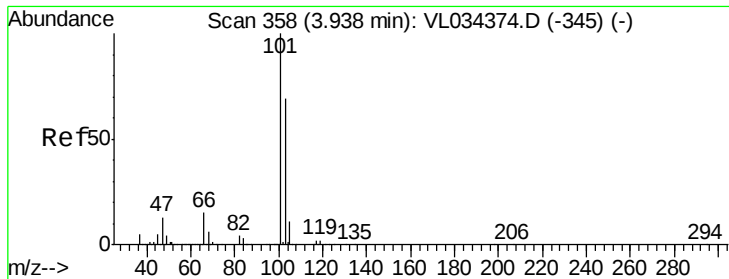
Tgt Ion: 43 Resp: 16997

Ion Ratio Lower Upper

43 100

57 57.0 40.2 60.2





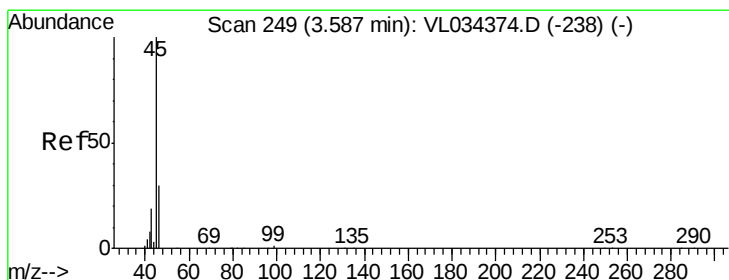
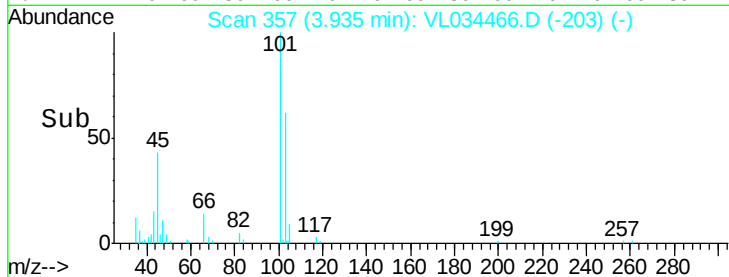
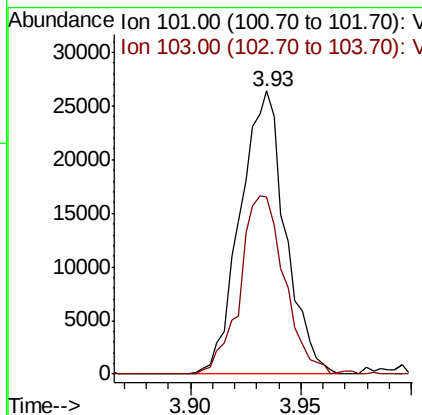
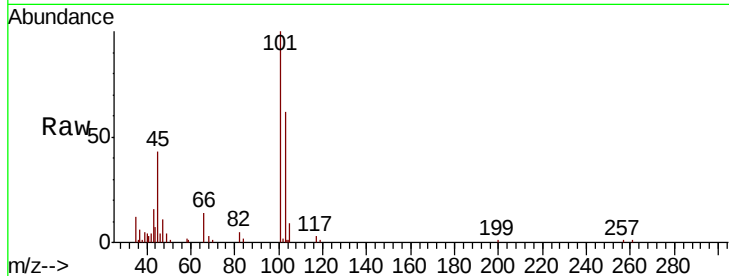
#11
 Trichlorofluoromethane
 Concen: 0.278 ppbv
 RT: 3.93 min Scan# 357
 Delta R.T. -0.00 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Instrument :
 MSVOA_L
 ClientSampleId :
 NS-2

Tot Ion:101 Resp: 37722
 Ion Ratio Lower Upper
 101 100
 103 61.7 55.4 83.0

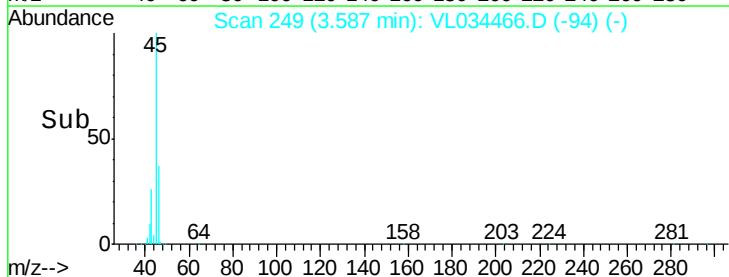
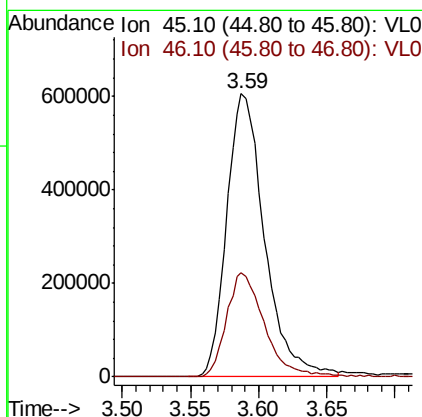
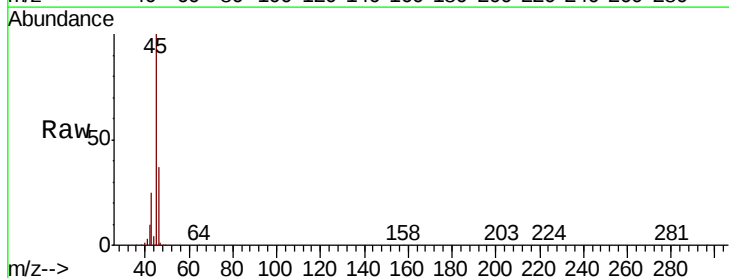
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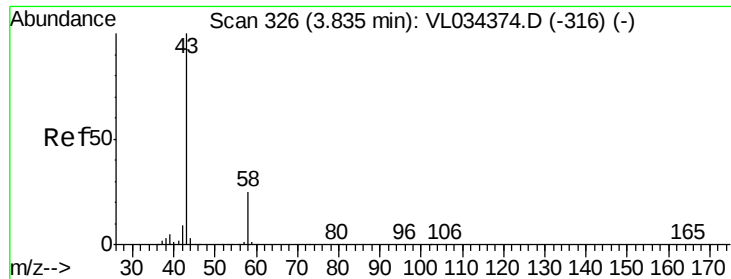
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#13
 Ethanol
 Concen: 100.659 ppbv
 RT: 3.59 min Scan# 249
 Delta R.T. -0.00 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Tgt Ion: 45 Resp: 1169418
 Ion Ratio Lower Upper
 45 100
 46 37.0 13.8 55.4





#15

Acetone

Concen: 4.936 ppbv

RT: 3.83 min Scan# 324

Delta R.T. -0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Instrument :

MSVOA_L

ClientSampled :

NS-2

Tot Ion: 43 Resp: 532129

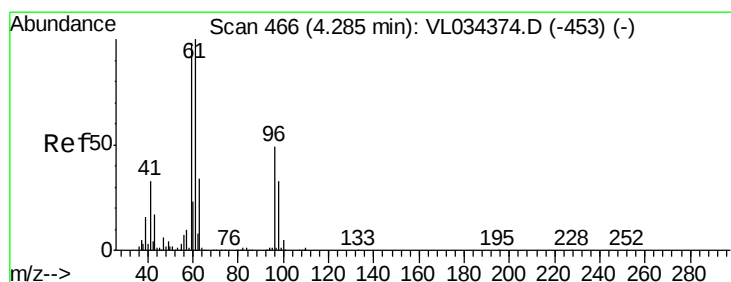
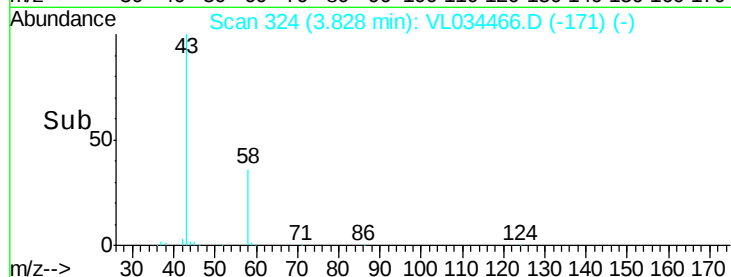
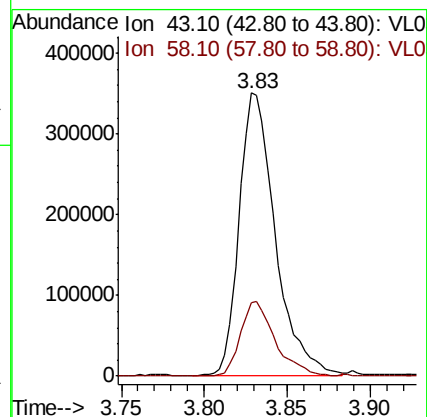
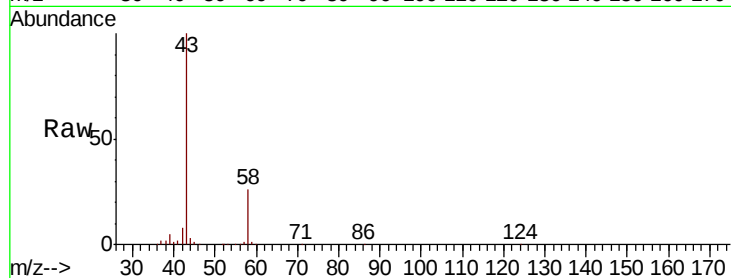
Ion Ratio Lower Upper

43 100

58 25.7 20.2 30.4

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 0.250 ppbv m

RT: 4.29 min Scan# 468

Delta R.T. 0.01 min

Lab File: VL034466.D

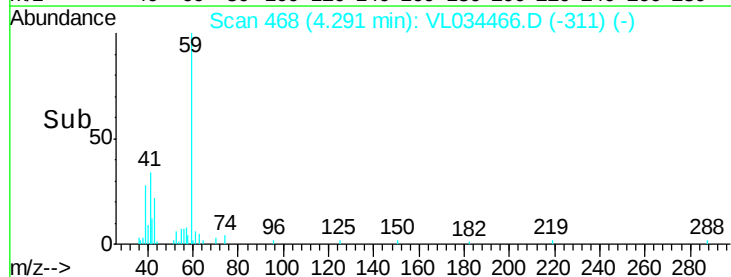
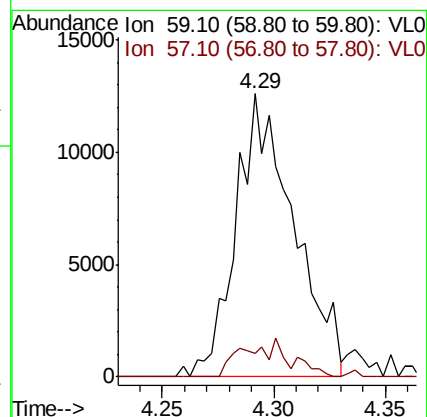
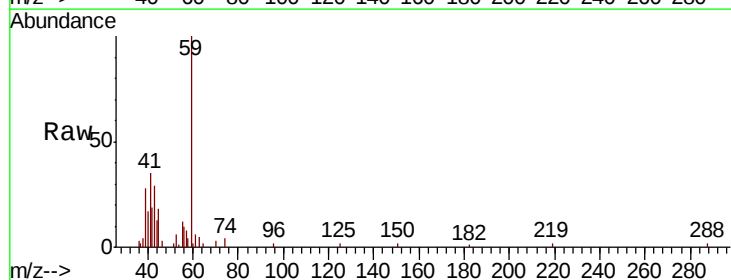
Acq: 9 Dec 2019 16:07

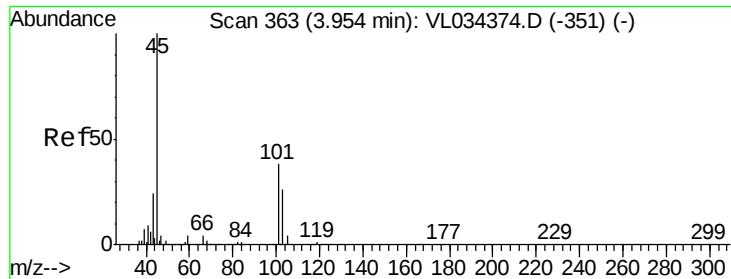
Tgt Ion: 59 Resp: 22684

Ion Ratio Lower Upper

59 100

57 11.3 8.8 13.2





#19

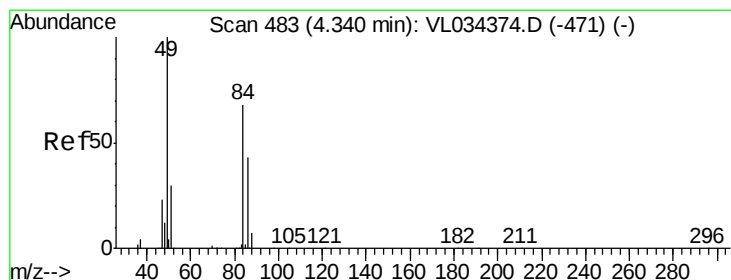
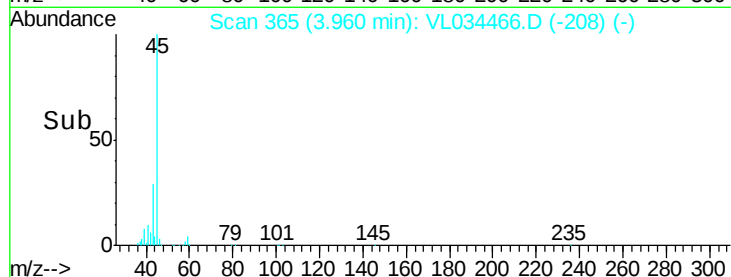
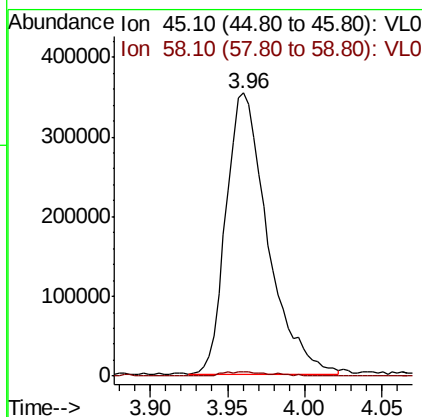
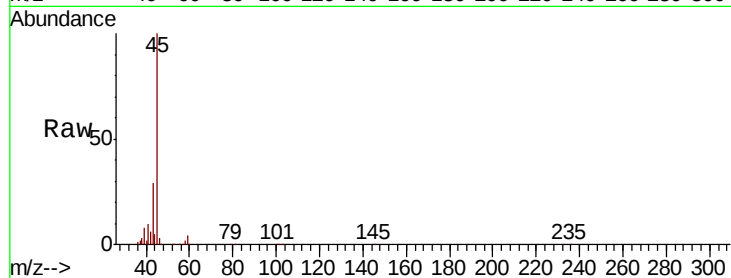
Isopropyl Alcohol
 Concen: 9.494 ppbv
 RT: 3.96 min Scan# 365
 Delta R.T. 0.01 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Instrument :
 MSVOA_L
 ClientSampleId :
 NS-2

Tot Ion	Ratio	Lower	Upper
45	100		
58	2.0	1.3	1.9#

Manual Integrations
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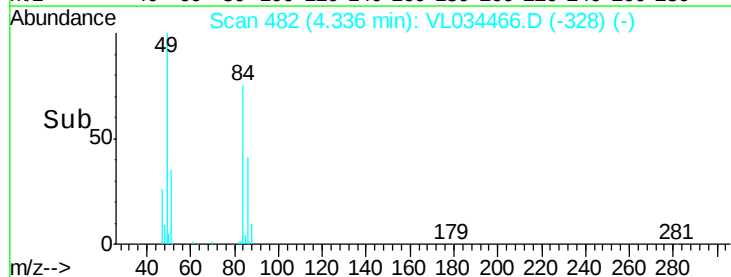
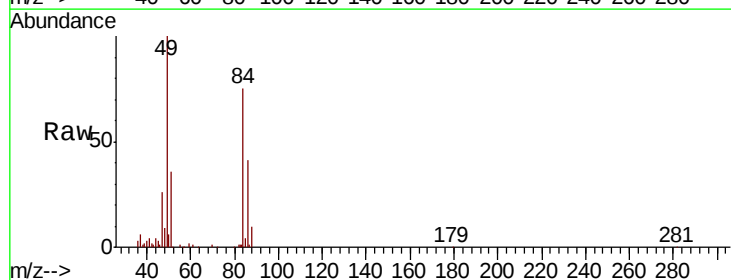
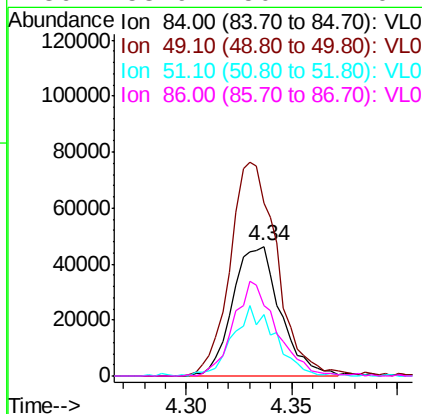
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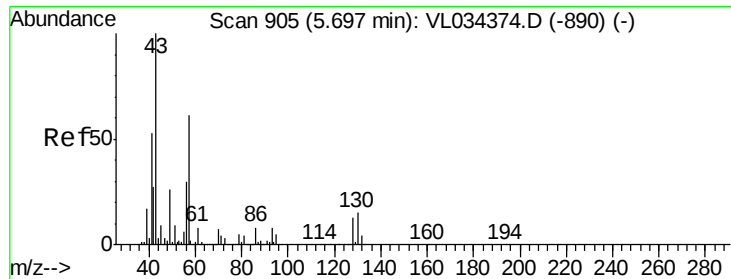


#20

Methylene Chloride
 Concen: 1.891 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. -0.00 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Tgt Ion	Ratio	Lower	Upper
84	100		
49	132.2	116.8	175.2
51	47.2	35.6	53.4
86	53.9	50.7	76.1





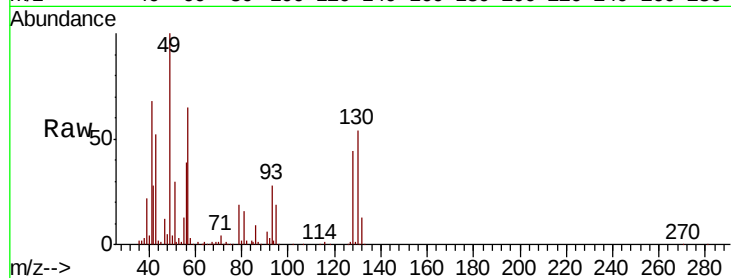
#26
Hexane
Concen: 1.712 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampled :
NS-2

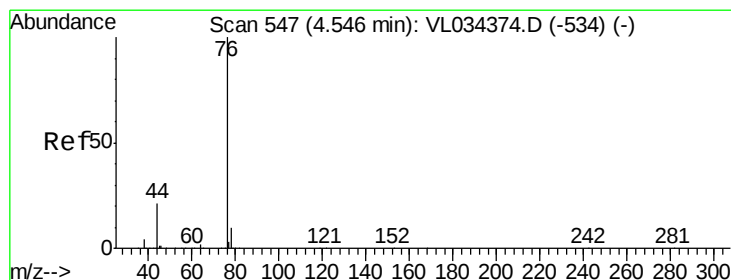
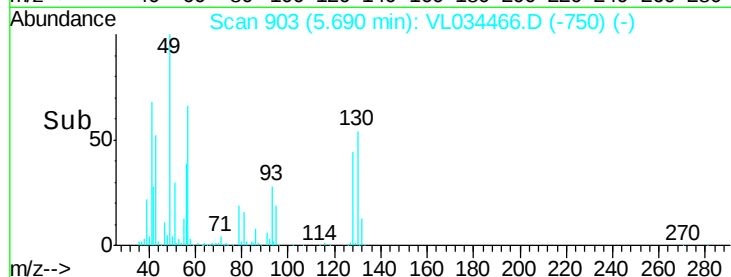
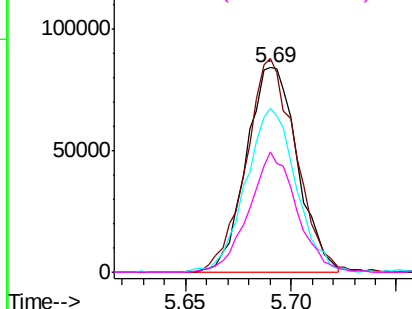
Tot Ion	Ratio	Lower	Upper
57	100		
41	102.6	75.0	112.4
43	79.6	186.6	279.8#
56	55.1	41.5	62.3

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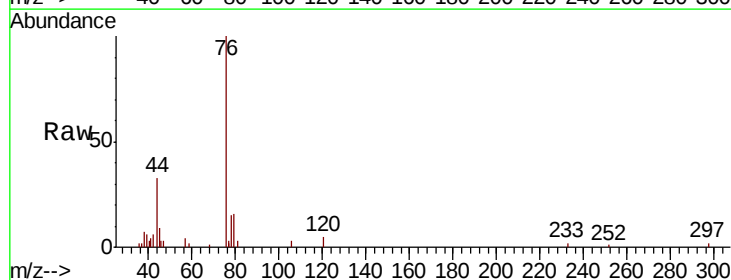


Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0

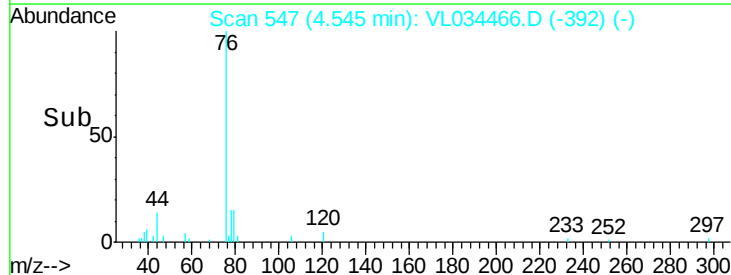
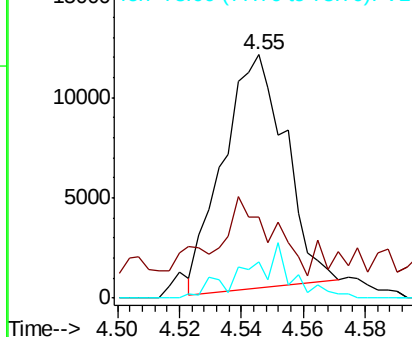


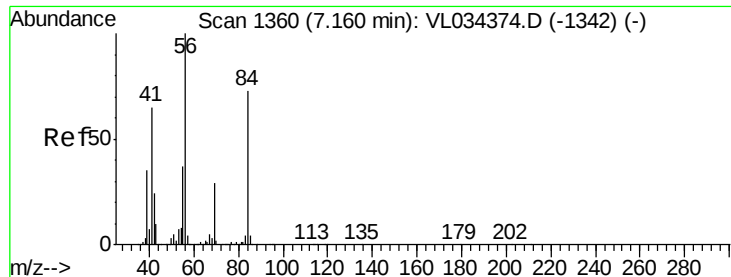
#27
Carbon Disulfide
Concen: 0.183 ppbv
RT: 4.55 min Scan# 547
Delta R.T. -0.00 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion	Ratio	Lower	Upper
76	100		
44	35.9	17.0	25.4#
78	17.1	7.6	11.4#



Abundance Ion 76.00 (75.70 to 76.70): VL0
Ion 44.10 (43.80 to 44.80): VL0
Ion 78.00 (77.70 to 78.70): VL0





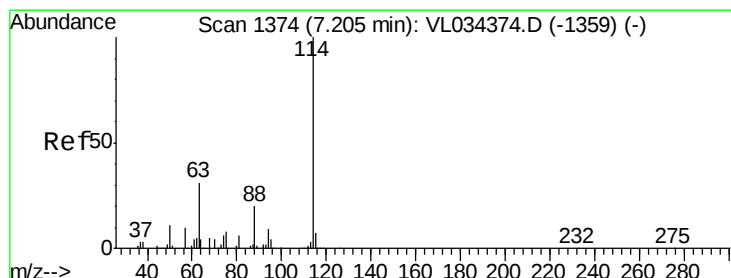
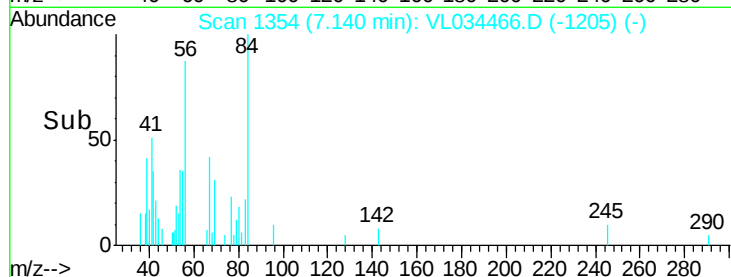
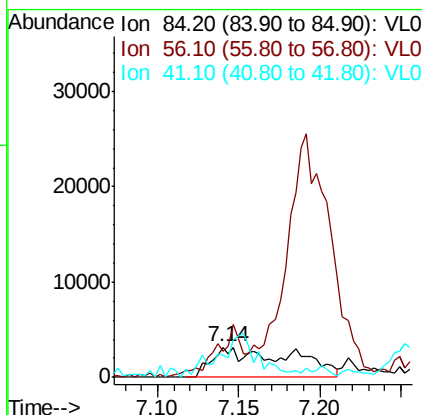
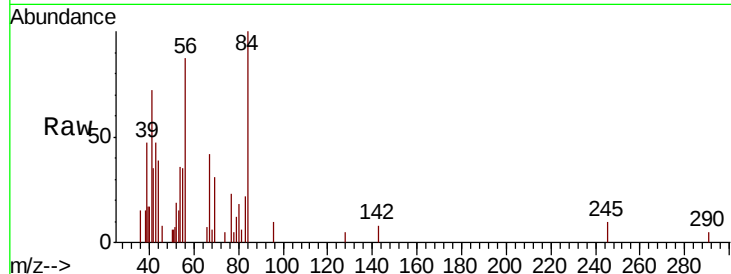
#30
Cvclohexane
Concen: 0.170 ppbv m
RT: 7.14 min Scan# 1354
Delta R.T. -0.02 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampled :
NS-2

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	112.6	169.0#
41	0.0	73.4	110.2#

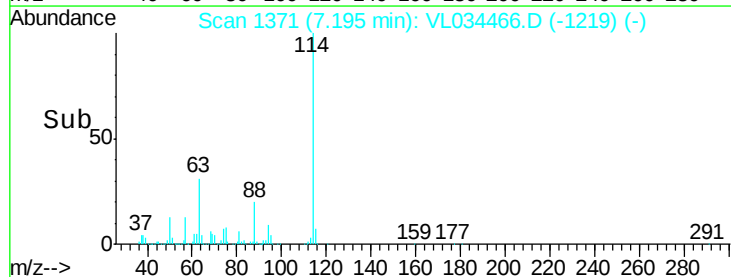
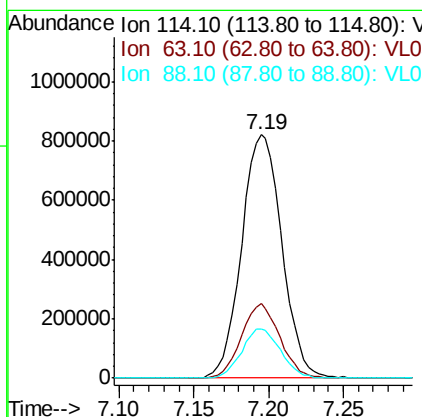
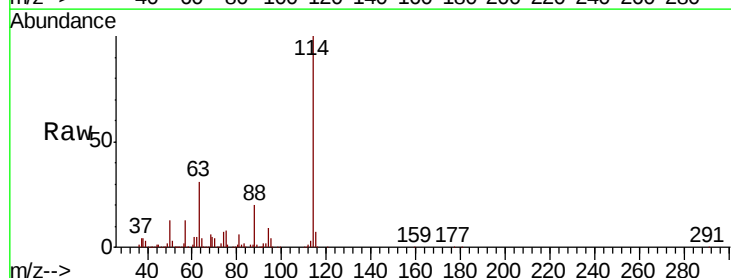
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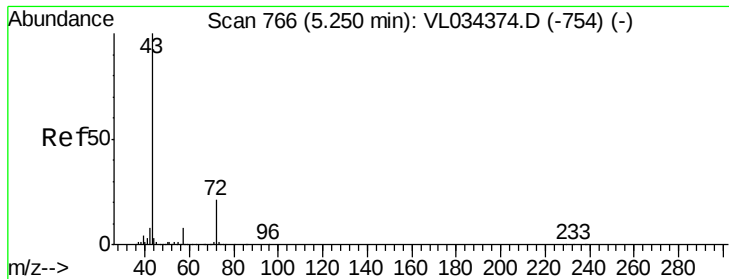
apatel
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1371
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.2	24.2	36.4
88	19.6	15.9	23.9





#34

2-Butanone

Concen: 0.425 ppbv

RT: 5.25 min Scan# 765

Delta R.T. -0.00 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Instrument :

MSVOA_L

ClientSampled :

NS-2

Tot Ion: 43 Resp: 53725

Ion Ratio Lower Upper

43 100

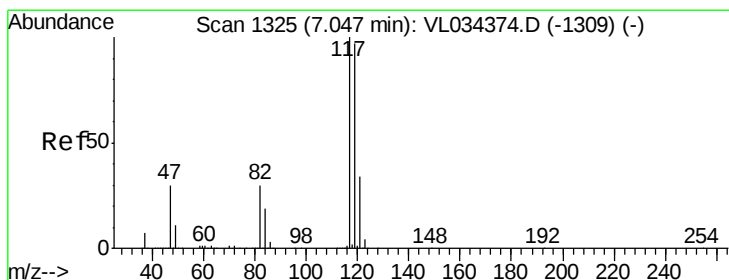
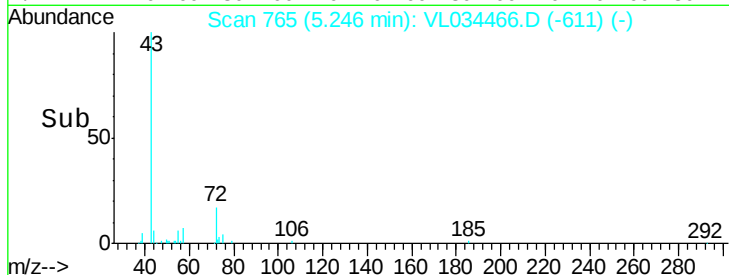
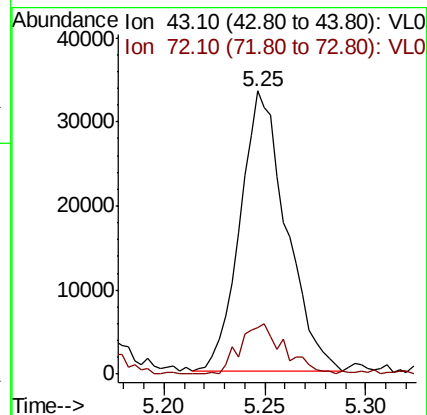
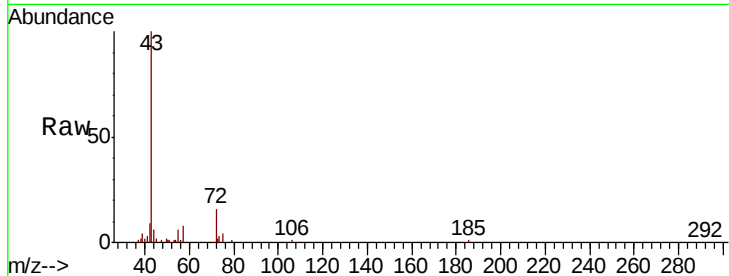
72 17.2 17.0 25.6

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#35

Carbon Tetrachloride

Concen: 0.058 ppbv

RT: 7.03 min Scan# 1320

Delta R.T. -0.02 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

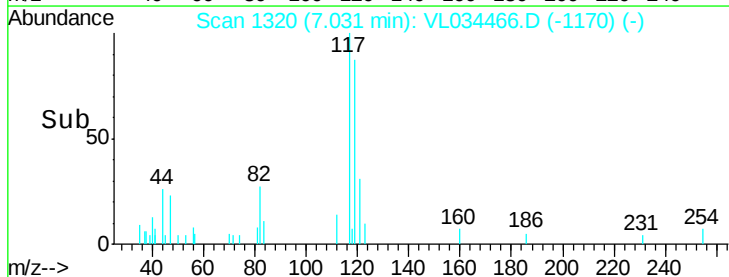
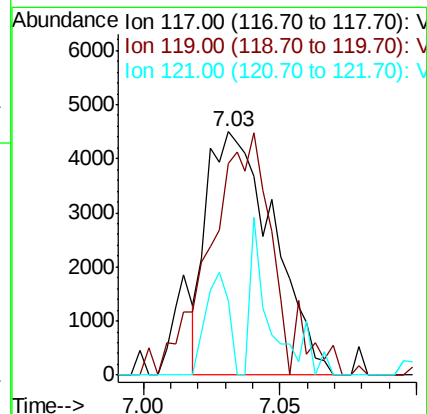
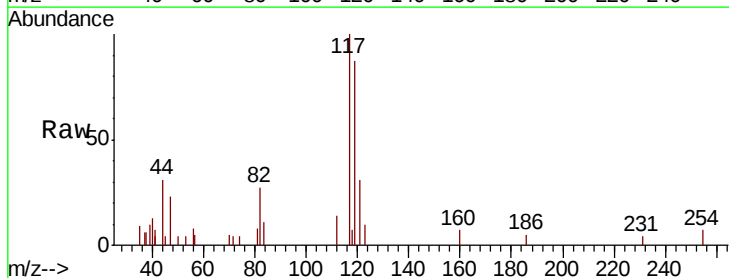
Tgt Ion: 117 Resp: 7610

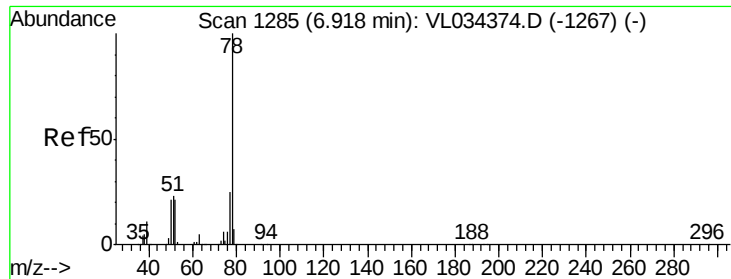
Ion Ratio Lower Upper

117 100

119 87.0 77.3 115.9

121 30.6 27.4 41.2





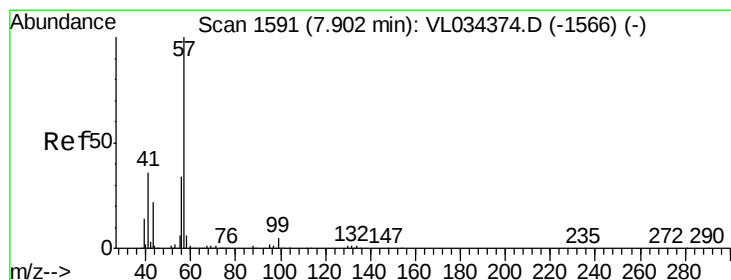
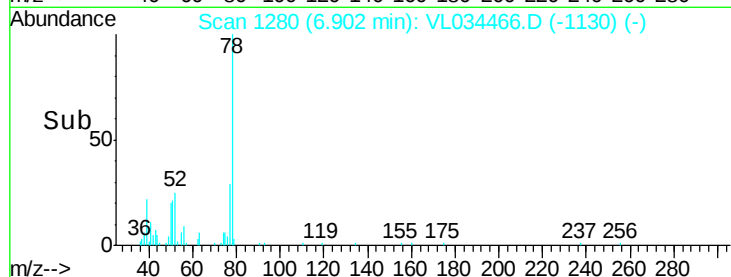
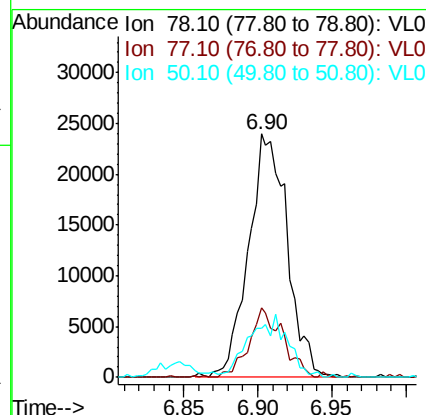
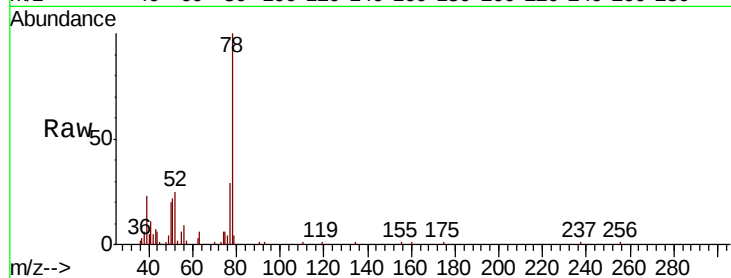
#36
Benzene
Concen: 0.284 ppbv m
RT: 6.90 min Scan# 1280
Delta R.T. -0.02 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampleId :
NS-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	28.6	20.2	30.4
50	20.2	17.1	25.7

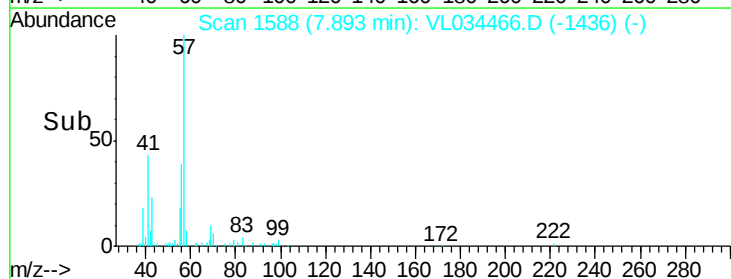
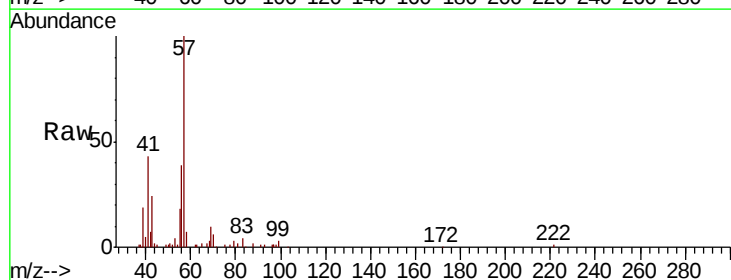
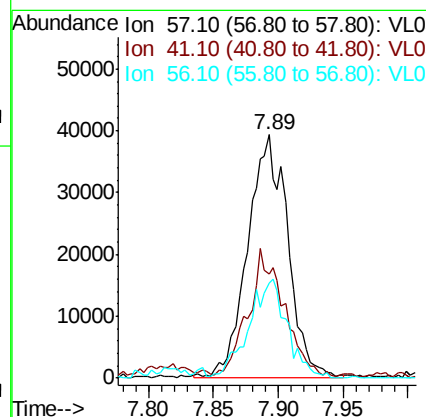
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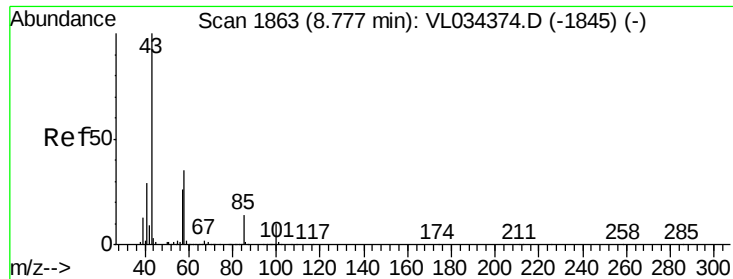
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#44
2,2,4-Trimethylpentane
Concen: 0.301 ppbv m
RT: 7.89 min Scan# 1588
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion	Ratio	Lower	Upper
57	100		
41	48.8	28.6	42.8#
56	39.3	25.3	37.9#





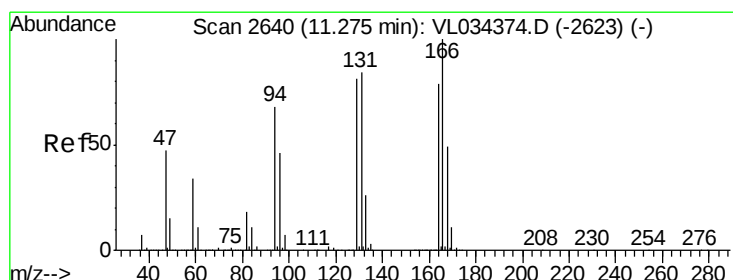
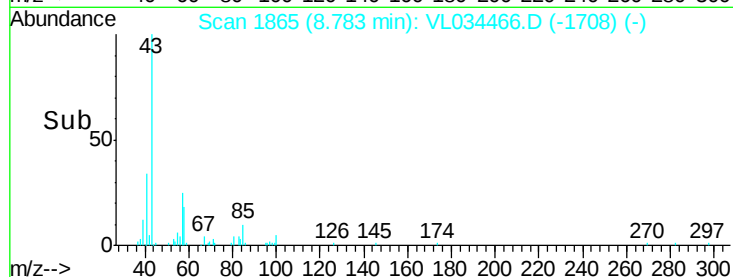
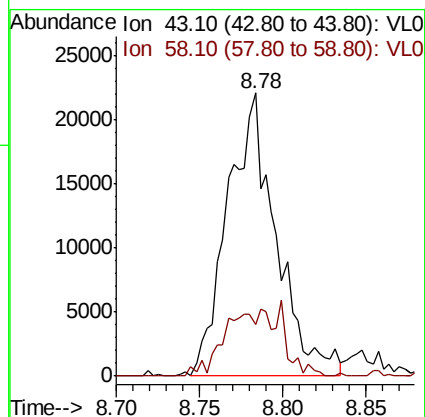
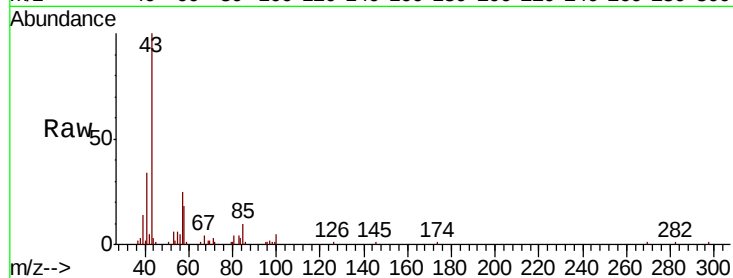
#50
4-Methyl-2-Pentanone
Concen: 0.244 ppbv m
RT: 8.78 min Scan# 1865
Delta R.T. 0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampled :
NS-2

Tot Ion: 43 Resp: 44556
Ion Ratio Lower Upper
43 100
58 0.0 27.9 41.9#

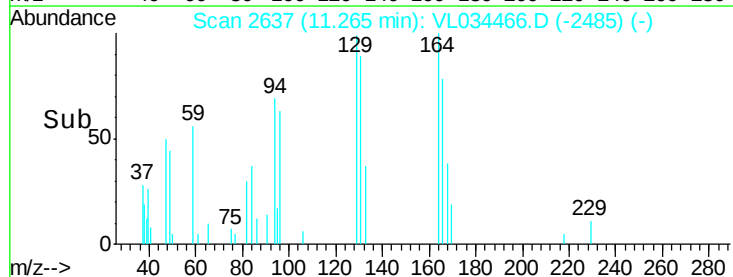
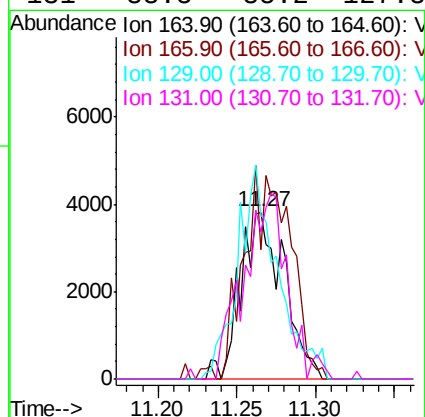
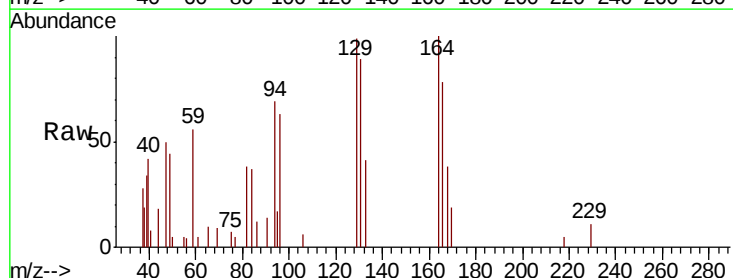
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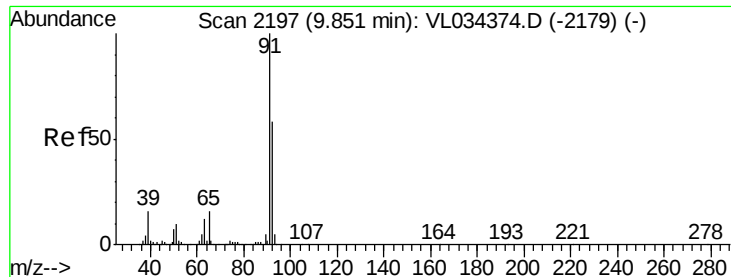
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#52
Tetrachloroethene
Concen: 0.111 ppbv m
RT: 11.27 min Scan# 2637
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion: 164 Resp: 7385
Ion Ratio Lower Upper
164 100
166 77.5 101.7 152.5#
129 98.6 82.6 123.8
131 88.5 85.2 127.8





#53

Toluene

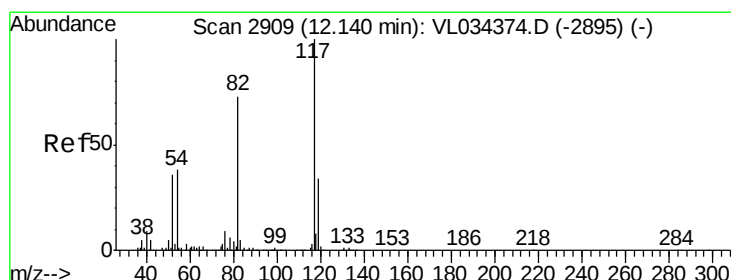
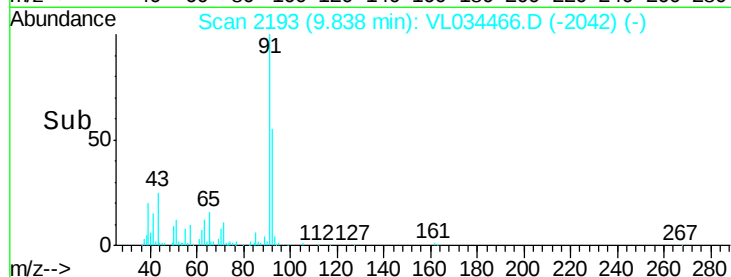
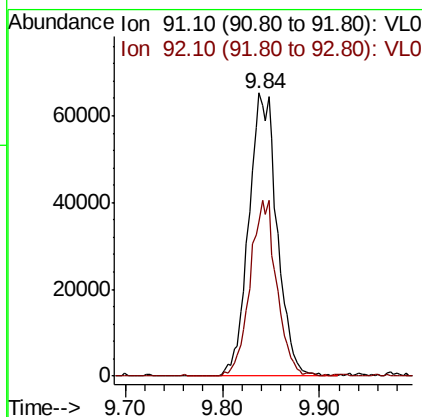
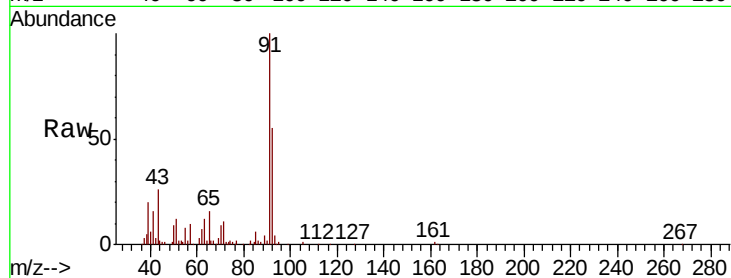
Concen: 0.756 ppbv m
 RT: 9.84 min Scan# 2193
 Delta R.T. -0.01 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Instrument :
 MSVOA_L
 ClientSampleId :
 NS-2

Tot Ion: 91 Resp: 131870
 Ion Ratio Lower Upper
 91 100
 92 0.0 47.9 71.9#

Manual Integrations
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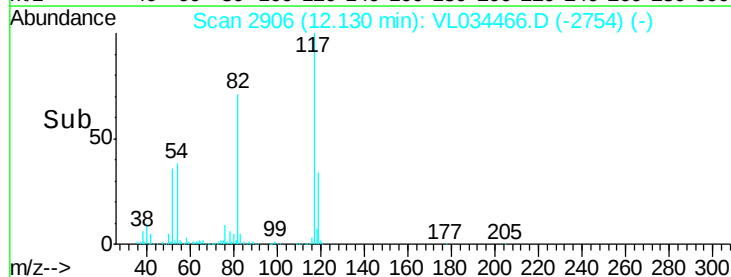
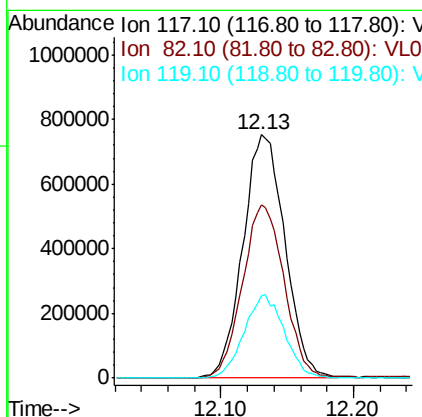
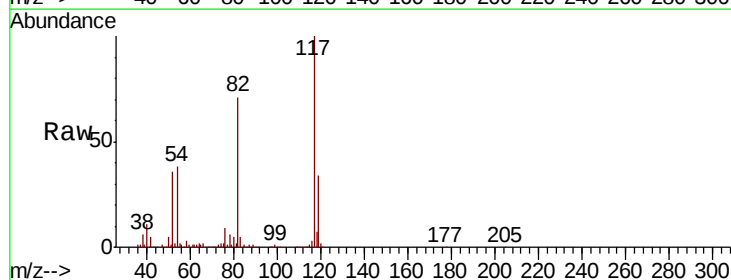


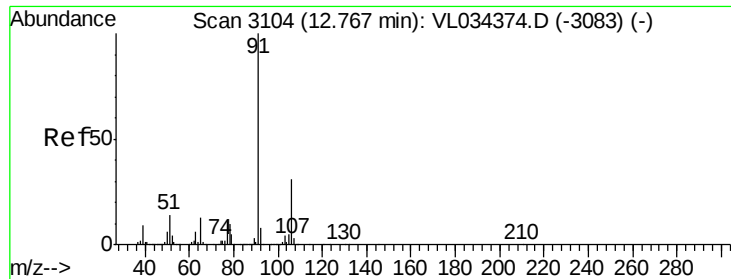
#55

Chlorobenzene-d5

Concen: 10.000 ppbv
 RT: 12.13 min Scan# 2906
 Delta R.T. -0.01 min
 Lab File: VL034466.D
 Acq: 9 Dec 2019 16:07

Tgt Ion: 117 Resp: 1656713
 Ion Ratio Lower Upper
 117 100
 82 70.6 57.5 86.3
 119 33.0 25.4 38.2





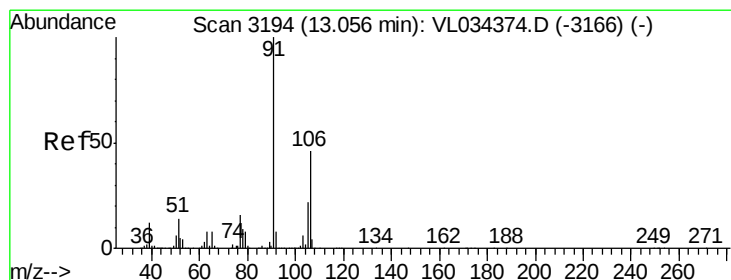
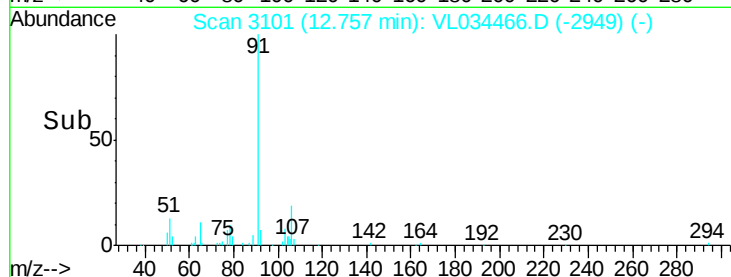
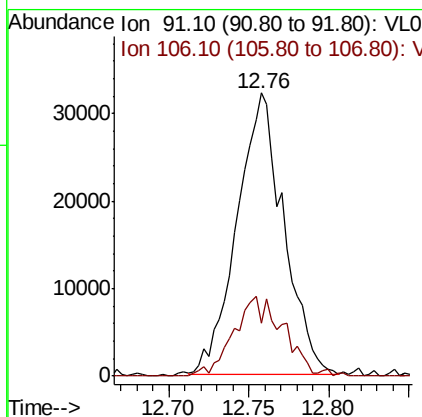
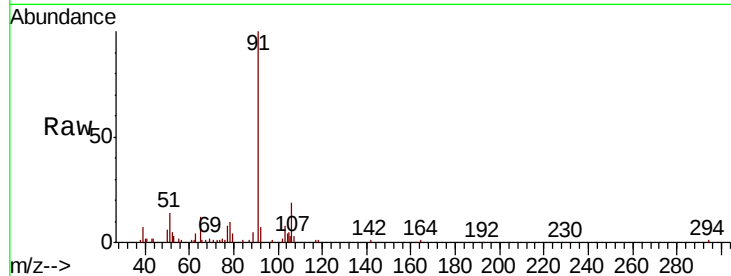
#58
Ethyl Benzene
Concen: 0.251 ppbv
RT: 12.76 min Scan# 3101
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
Client Sampled :
NS-2

Tot Ion: 91 Resp: 64414
Ion Ratio Lower Upper
91 100
106 18.7 24.8 37.2#

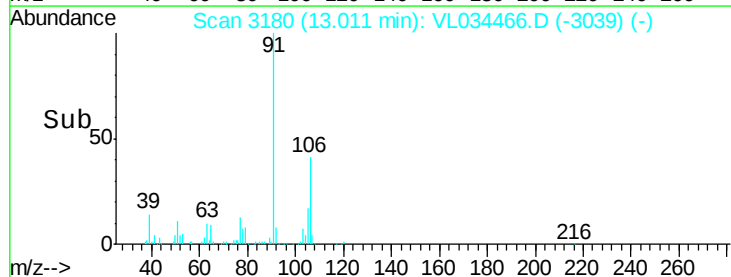
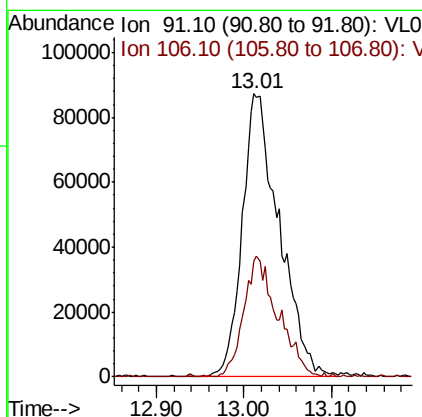
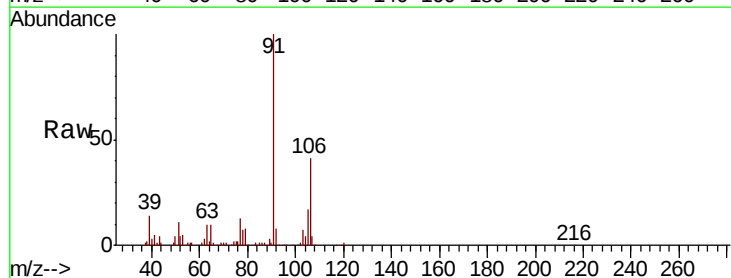
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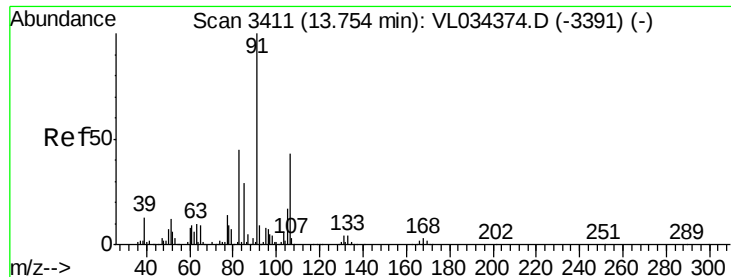
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#59
m/p-Xylene
Concen: 1.153 ppbv m
RT: 13.01 min Scan# 3180
Delta R.T. -0.05 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion: 91 Resp: 256327
Ion Ratio Lower Upper
91 100
106 0.0 34.6 51.8#





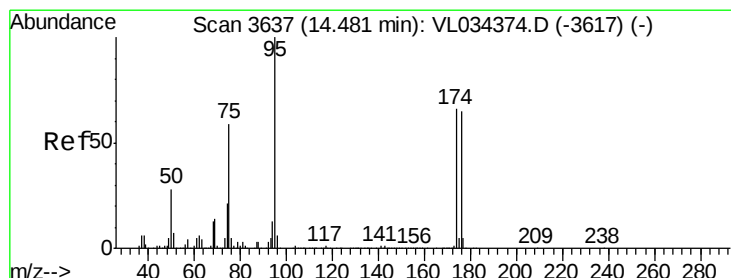
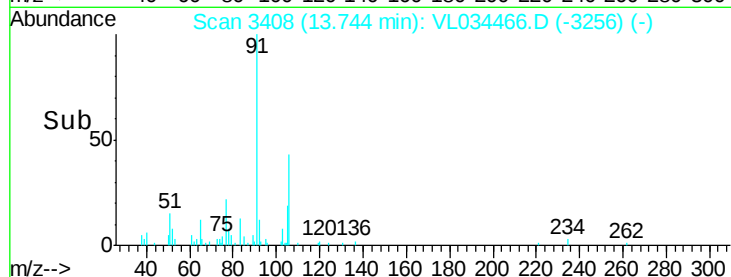
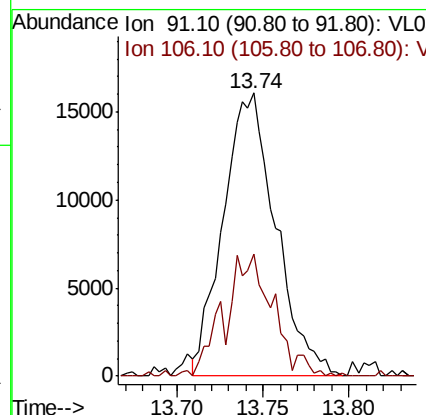
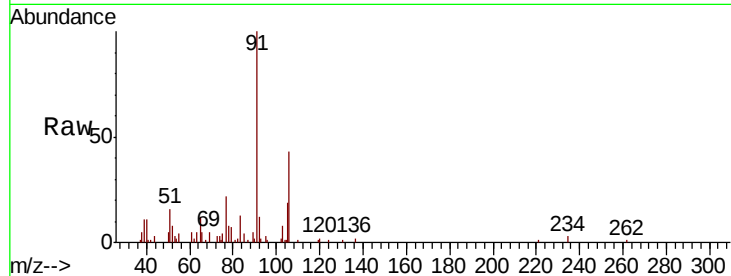
#60
o-Xylene
Concen: 0.156 ppbv
RT: 13.74 min Scan# 3408
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampled :
NS-2

Tot Ion: 91 Resp: 34242
Ion Ratio Lower Upper
91 100
106 40.3 21.3 64.0

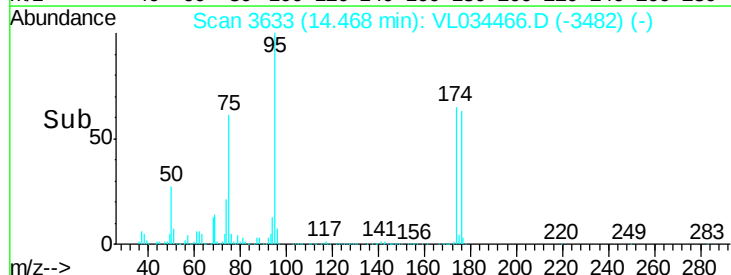
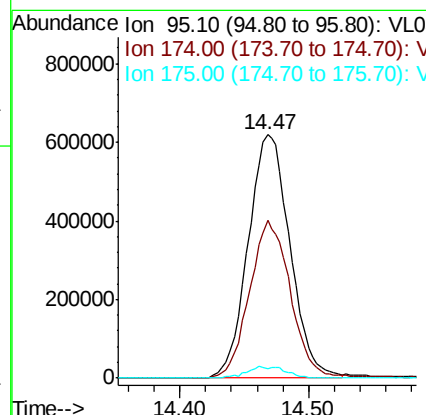
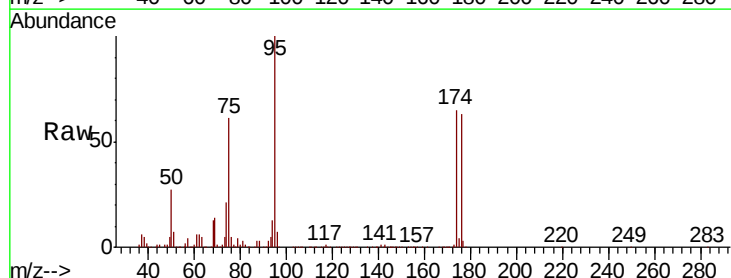
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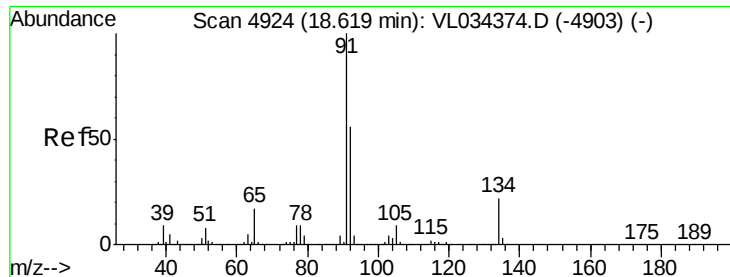
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.026 ppbv
RT: 14.47 min Scan# 3633
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion: 95 Resp: 1397377
Ion Ratio Lower Upper
95 100
174 64.2 52.2 78.2
175 4.6 3.8 5.8





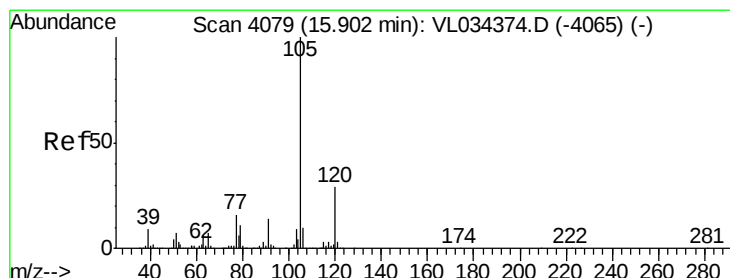
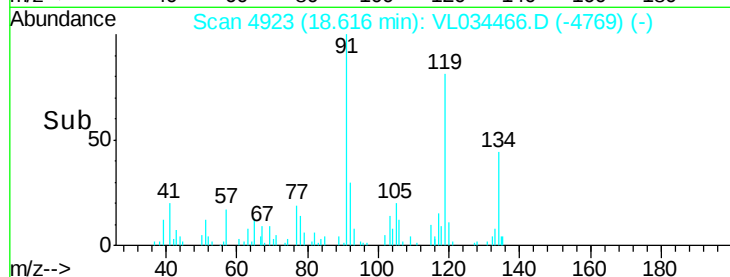
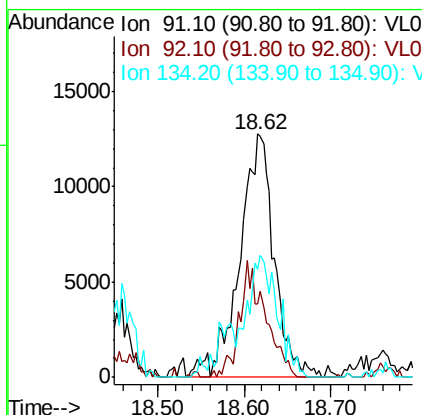
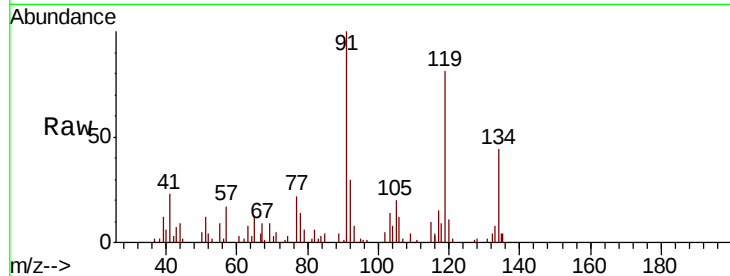
#70
n-Butylbenzene
Concen: 0.110 ppbv m
RT: 18.62 min Scan# 4923
Delta R.T. -0.00 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Instrument :
MSVOA_L
ClientSampled :
NS-2

Tot Ion	Ratio	Lower	Upper
91	100		
92	35.4	43.8	65.6#
134	0.0	17.9	26.9#

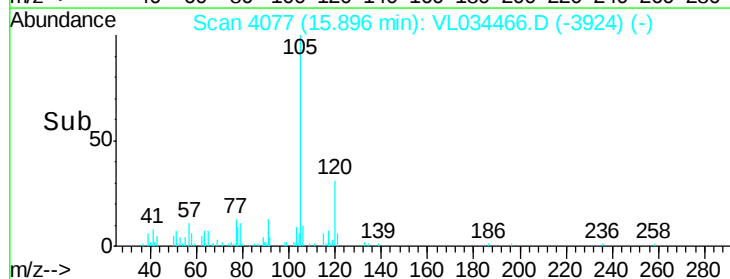
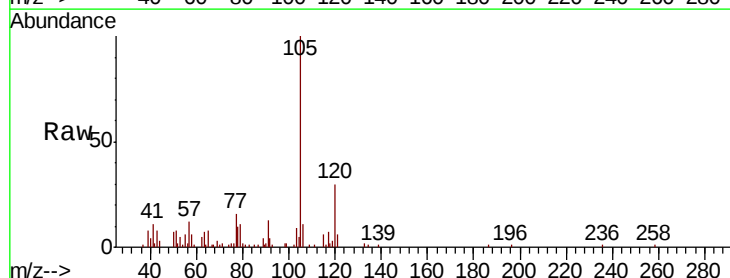
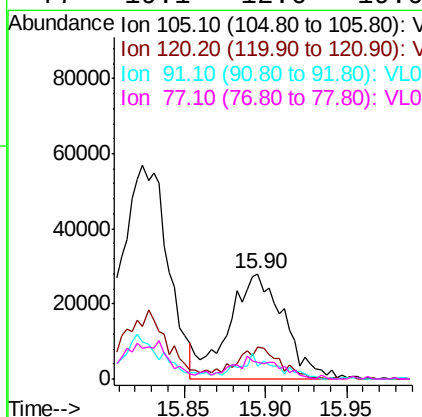
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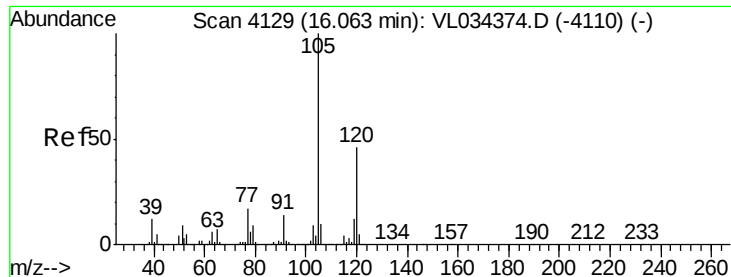
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#72
4-Ethyltoluene
Concen: 0.259 ppbv m
RT: 15.90 min Scan# 4077
Delta R.T. -0.01 min
Lab File: VL034466.D
Acq: 9 Dec 2019 16:07

Tgt Ion	Ratio	Lower	Upper
105	100		
120	23.3	23.5	35.3#
91	15.9	11.4	17.0
77	19.1	12.6	19.0#





#73

1,3,5-Trimethylbenzene

Concen: 0.273 ppbv

RT: 16.05 min Scan# 4126

Delta R.T. -0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Instrument :

MSVOA_L

ClientSampled :

NS-2

Tot Ion:105 Resp: 67826

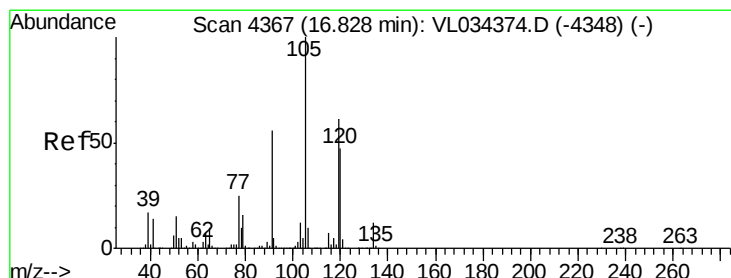
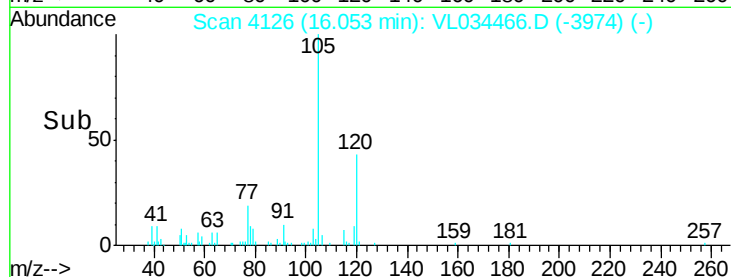
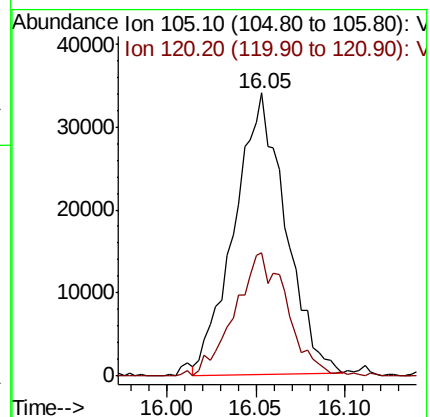
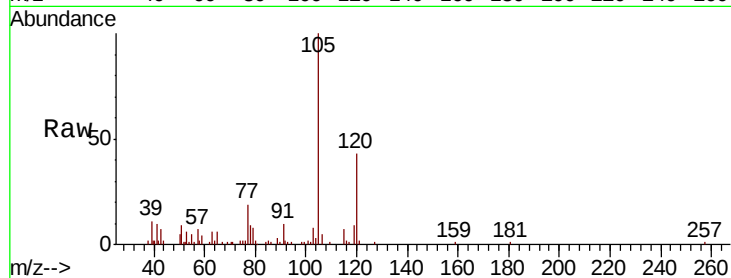
Ion Ratio Lower Upper

105 100

120 43.8 37.1 55.7

Manual Integrations
APPROVED

apatel
12/11/2019 2:12:08 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.773 ppbv

RT: 16.82 min Scan# 4363

Delta R.T. -0.01 min

Lab File: VL034466.D

Acq: 9 Dec 2019 16:07

Tgt Ion:105 Resp: 203965

Ion Ratio Lower Upper

105 100

120 47.6 37.4 56.0

91 15.0 46.3 69.5#

77 15.8 20.6 30.8#

