

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
 Data File : VL034237.D
 Acq On : 8 Oct 2019 00:57
 Operator : SY/AP
 Sample : K5222-01
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 V-1

Manual Integrations
 APPROVED

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 10/11/2019 5:05:45 PM

Quant Time: Oct 09 03:54:29 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep 18 2019
 QLast Update : Wed Sep 18 12:53:31 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.69	49	1114165	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.22	114	1867438	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.15	117	1901601	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.49	95	1678771	10.16	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	106765	0.649	ppbv	93
3) Chlorodifluoromethane	2.97	51	66754m	0.511	ppbv	
4) Chloromethane	3.12	50	35824	0.467	ppbv	92
5) Vinyl Chloride	3.24	62	27364m	0.390	ppbv	
9) Propene	2.99	41	748373	11.611	ppbv	97
10) Heptane	8.17	43	716328	4.264	ppbv	99
11) Trichlorofluoromethane	3.95	101	39140	0.261	ppbv	86
13) Ethanol	3.60	45	1188768	76.168	ppbv	97
15) Acetone	3.84	43	1267791	8.490	ppbv #	78
19) Isopropyl Alcohol	3.98	45	166478	1.813	ppbv #	1
20) Methylene Chloride	4.35	84	333368	7.743	ppbv	96
26) Hexane	5.71	57	985054	8.386	ppbv #	48
30) Cyclohexane	7.17	84	304790	3.594	ppbv	94
31) cis-1,2-Dichloroethene	5.57	61	33199m	0.277	ppbv	
34) 2-Butanone	5.27	43	183318	0.961	ppbv	98
35) Carbon Tetrachloride	7.05	117	9309m	0.060	ppbv	
36) Benzene	6.93	78	1115304	5.408	ppbv	97
44) 2,2,4-Trimethylpentane	7.91	57	962520	2.424	ppbv #	82
52) Tetrachloroethene	11.29	164	19421m	0.285	ppbv	
53) Toluene	9.86	91	4011939	17.799	ppbv	98
58) Ethyl Benzene	12.78	91	584677	1.906	ppbv	90
59) m/p-Xylene	13.03	91	1454553	5.723	ppbv	98
60) o-Xylene	13.76	91	513360	2.020	ppbv	97
61) Styrene	13.60	104	47916m	0.263	ppbv	
72) 4-Ethyltoluene	15.92	105	156903m	0.546	ppbv	
73) 1,3,5-Trimethylbenzene	16.07	105	103956	0.375	ppbv	90
74) 1,2,4-Trimethylbenzene	16.84	105	251965	0.856	ppbv #	71

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

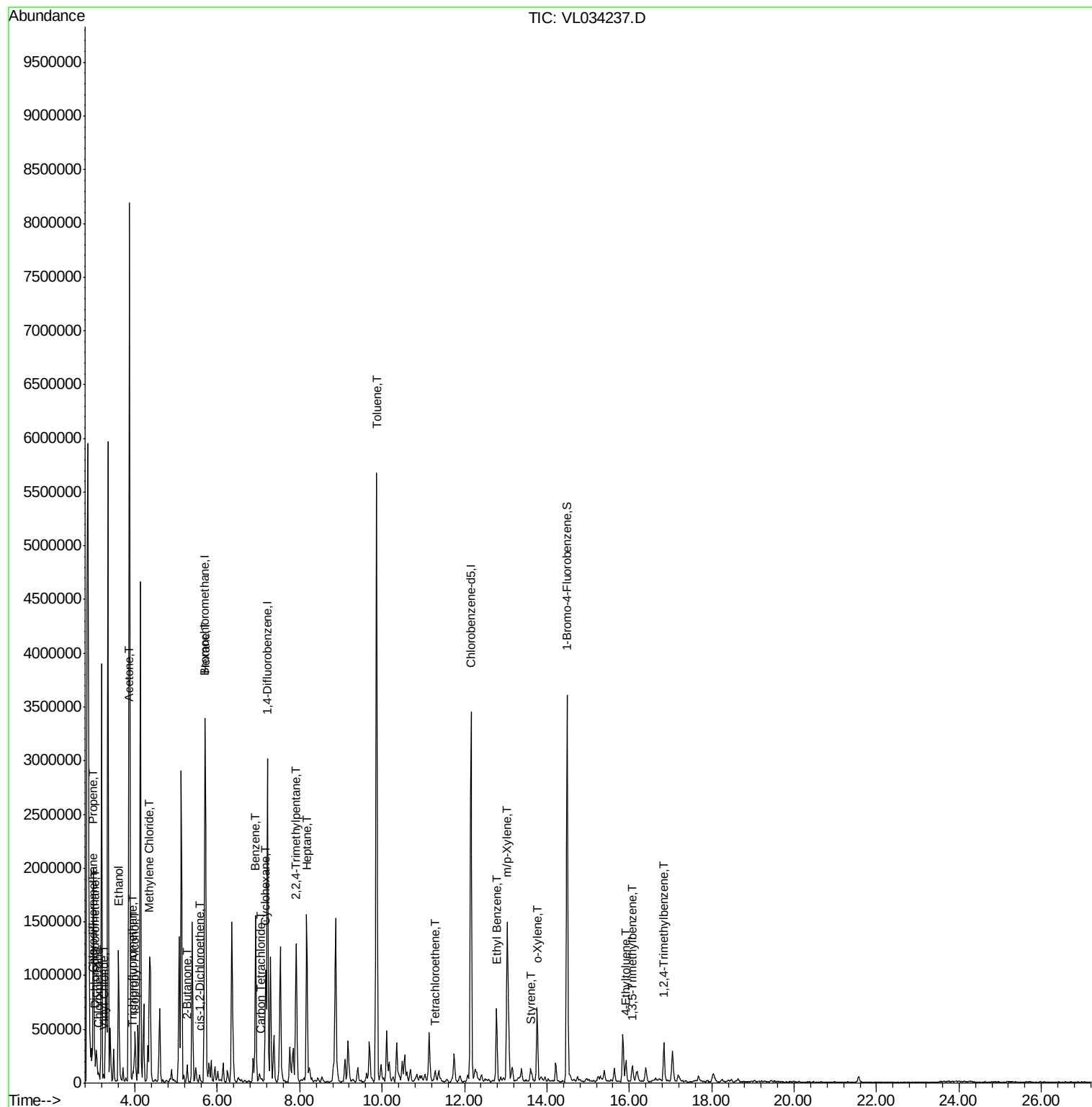
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100719\
Data File : VL034237.D
Acq On : 8 Oct 2019 00:57
Operator : SY/AP
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Misc : 400ml/MSVOA_L
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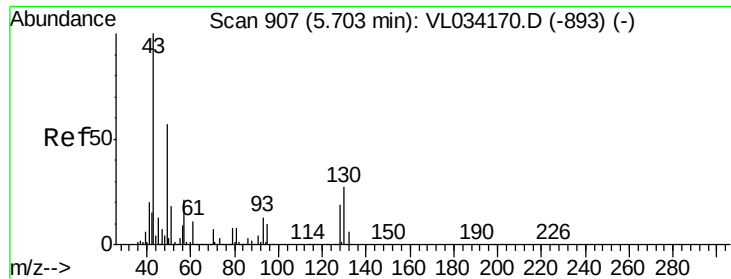
Instrument :
MSVOA_L
ClientSampleId :
V-1

Manual Integrations
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10/11/2019 5:05:45 PM

Quant Time: Oct 09 03:54:29 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL091719AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 18 12:53:31 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 903

Delta R.T. -0.01 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

ClientSampleId :

V-1

Tgt Ion: 49 Resp: 1114165

Ion Ratio Lower Upper

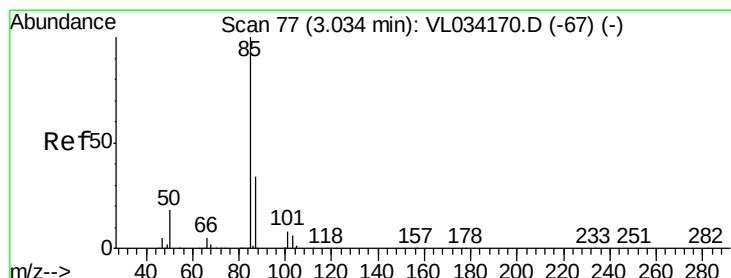
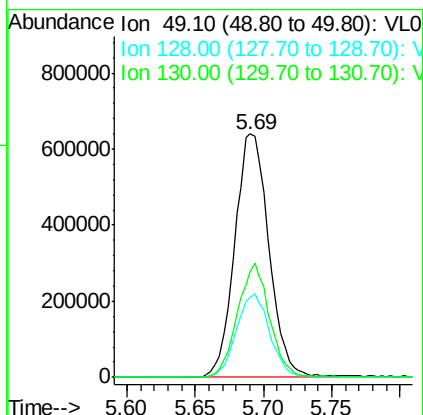
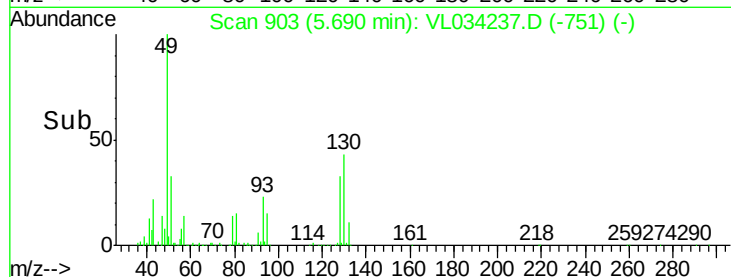
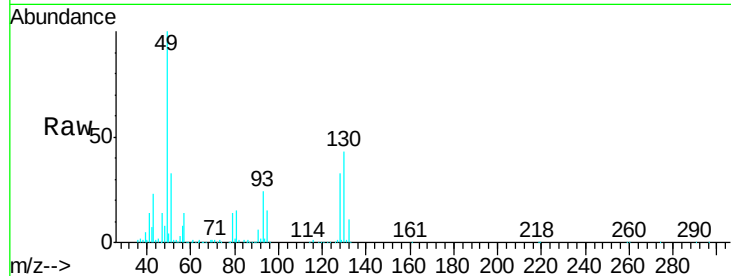
49 100

128 33.7 17.6 52.9

130 44.3 22.3 66.9

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#2

Dichlorodifluoromethane

Concen: 0.649 ppbv

RT: 3.03 min Scan# 75

Delta R.T. -0.01 min

Lab File: VL034237.D

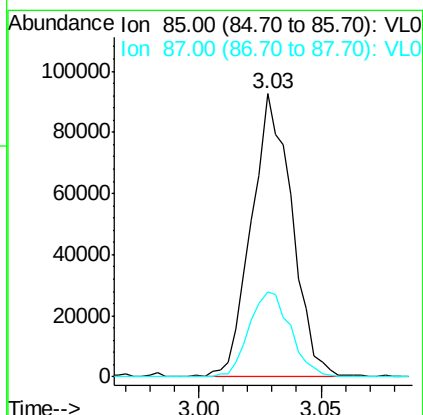
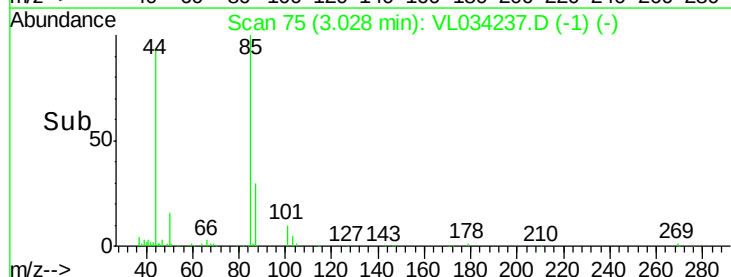
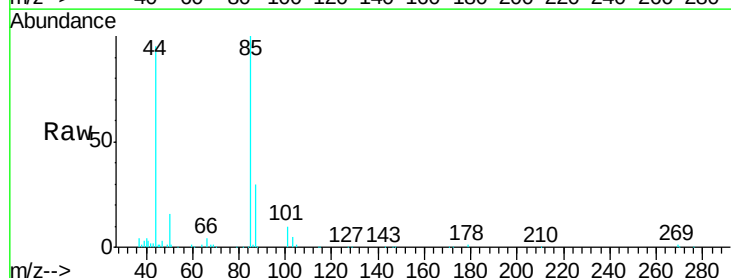
Acq: 8 Oct 2019 00:57

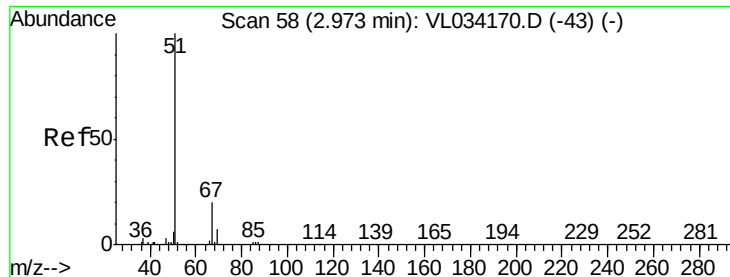
Tgt Ion: 85 Resp: 106765

Ion Ratio Lower Upper

85 100

87 29.9 27.2 40.8





#3

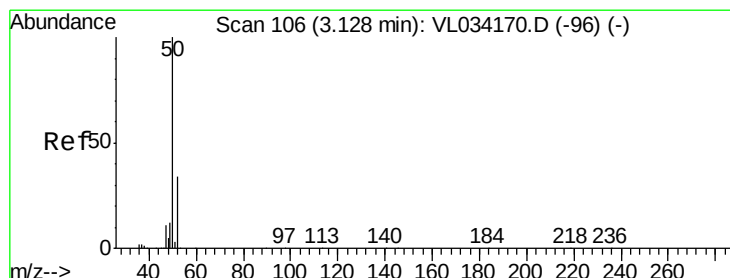
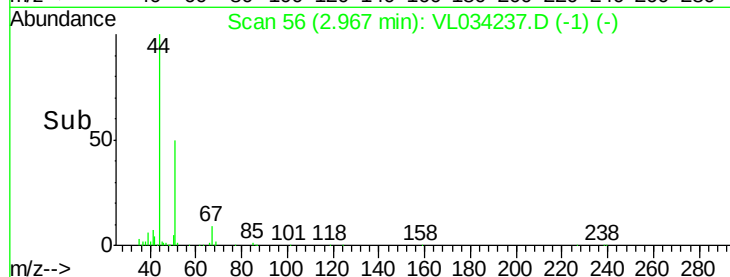
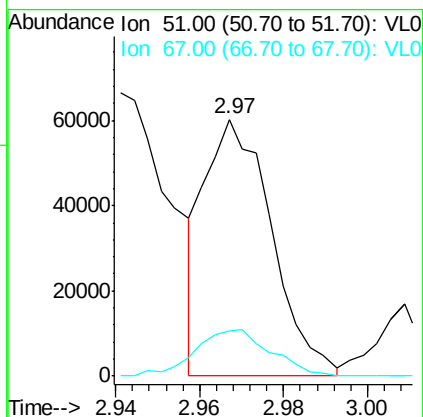
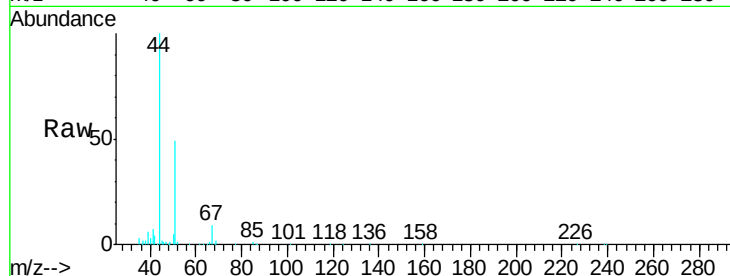
Chlorodifluoromethane
 Concen: 0.511 ppbv
 RT: 2.97 min Scan# 56
 Delta R.T. -0.01 min
 Lab File: VL034237.D
 Acq: 8 Oct 2019 00:57

Instrument :
 MSVOA_L
 ClientSampleId :
 V-1

Tgt Ion	Ratio	Lower	Upper
51	100		
67	5.2	14.8	22.2#

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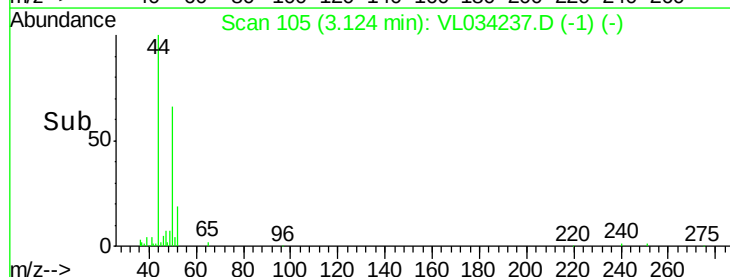
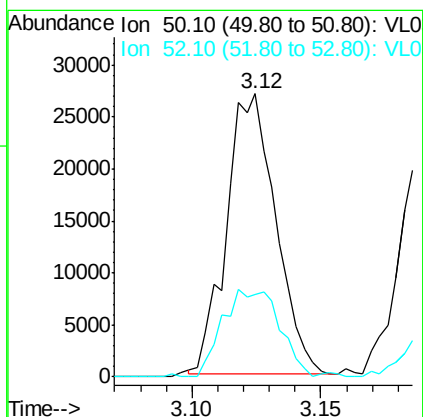
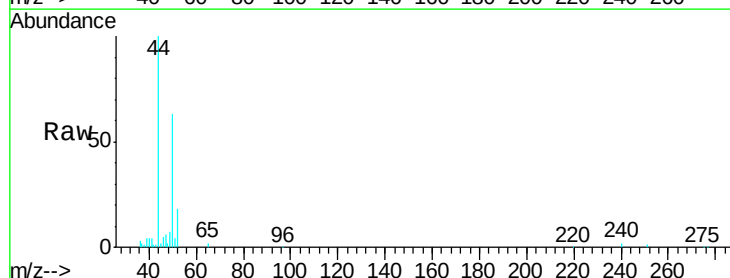
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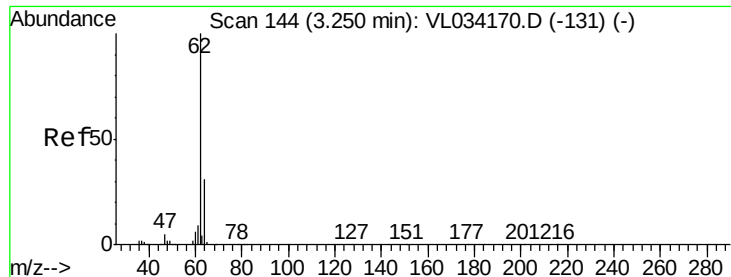


#4

Chloromethane
 Concen: 0.467 ppbv
 RT: 3.12 min Scan# 105
 Delta R.T. -0.00 min
 Lab File: VL034237.D
 Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Lower	Upper
50	100		
52	29.4	27.1	40.7





#5

Vinyl Chloride

Concen: 0.390 ppbv m

RT: 3.24 min Scan# 141

Delta R.T. -0.01 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

ClientSampled :

V-1

Tgt Ion: 62 Resp: 27364

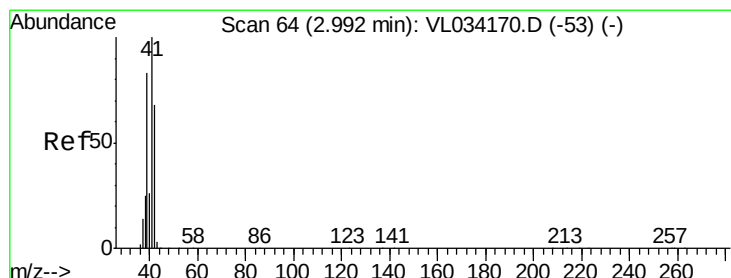
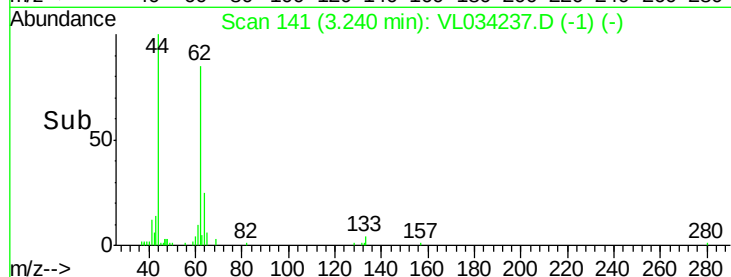
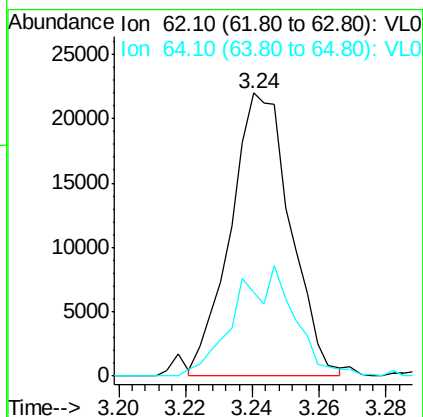
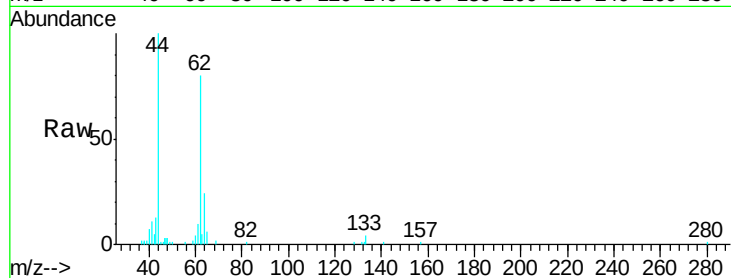
Ion Ratio Lower Upper

62 100

64 29.7 25.2 37.8

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#9

Propene

Concen: 11.611 ppbv

RT: 2.99 min Scan# 63

Delta R.T. -0.00 min

Lab File: VL034237.D

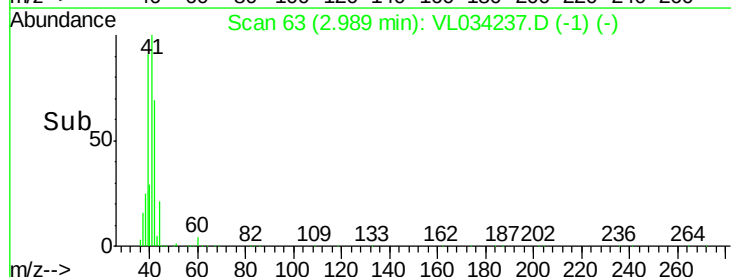
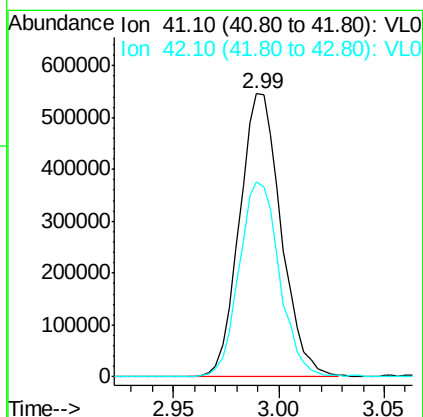
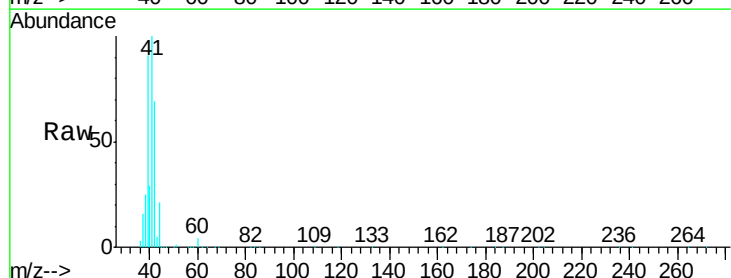
Acq: 8 Oct 2019 00:57

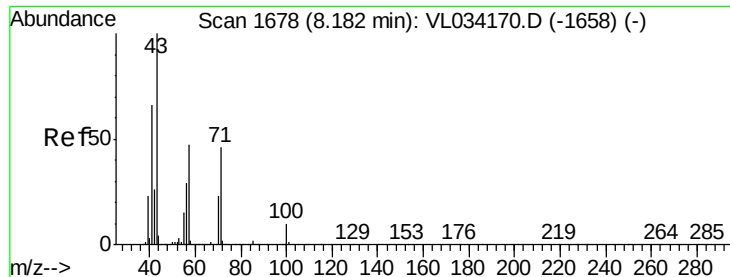
Tgt Ion: 41 Resp: 748373

Ion Ratio Lower Upper

41 100

42 66.9 55.8 83.6





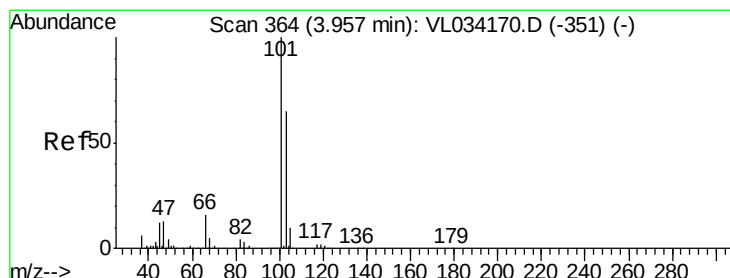
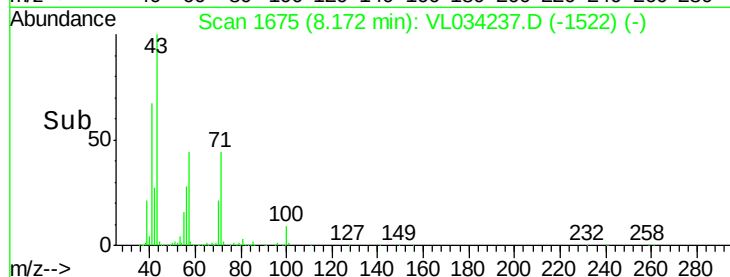
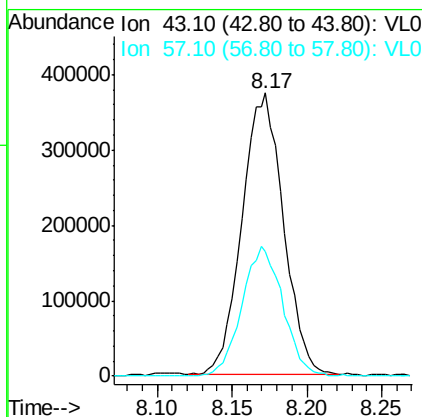
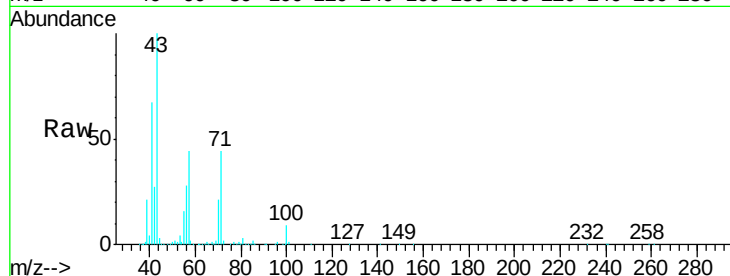
#10
 Heptane
 Concen: 4.264 ppbv
 RT: 8.17 min Scan# 1675
 Delta R.T. -0.01 min
 Lab File: VL034237.D
 Acq: 8 Oct 2019 00:57

Instrument :
 MSVOA_L
 ClientSampled :
 V-1

Tgt Ion: 43 Resp: 716328
 Ion Ratio Lower Upper
 43 100
 57 46.2 37.5 56.3

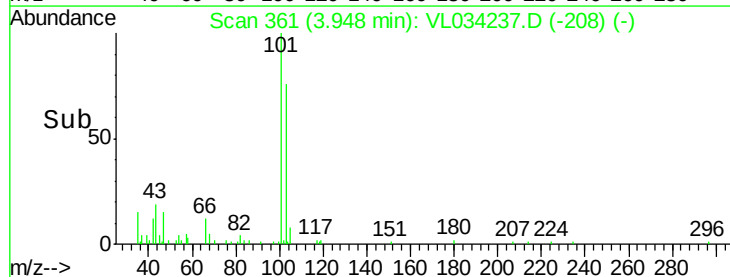
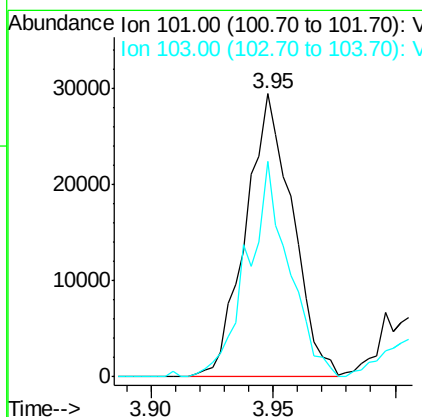
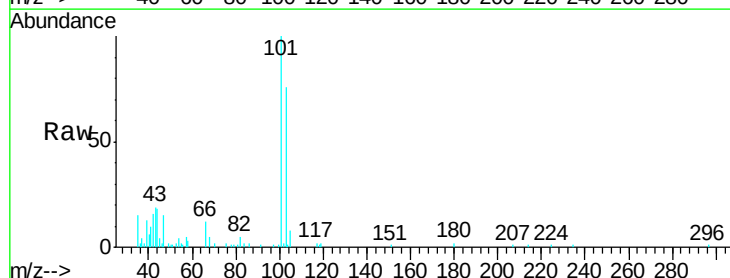
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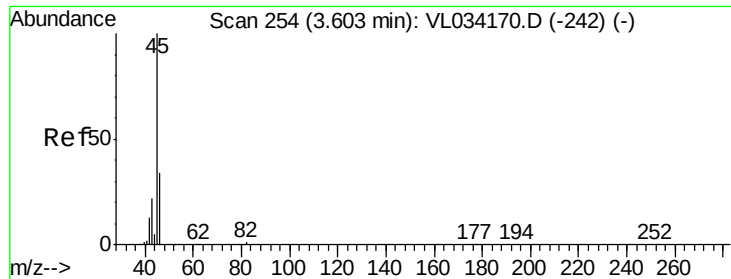
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#11
 Trichlorofluoromethane
 Concen: 0.261 ppbv
 RT: 3.95 min Scan# 361
 Delta R.T. -0.01 min
 Lab File: VL034237.D
 Acq: 8 Oct 2019 00:57

Tgt Ion: 101 Resp: 39140
 Ion Ratio Lower Upper
 101 100
 103 76.0 52.1 78.1





#13

Ethanol

Concen: 76.168 ppbv

RT: 3.60 min Scan# 253

Delta R.T. -0.00 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

ClientSampleId :

V-1

Tgt Ion: 45 Resp: 1188768

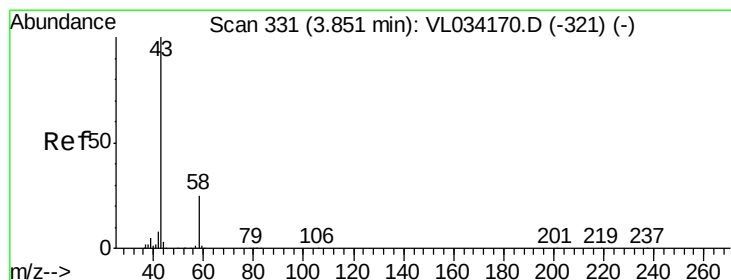
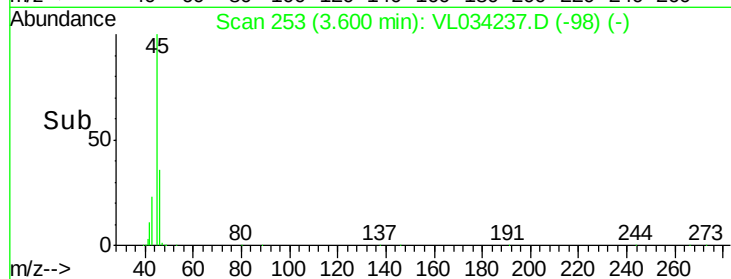
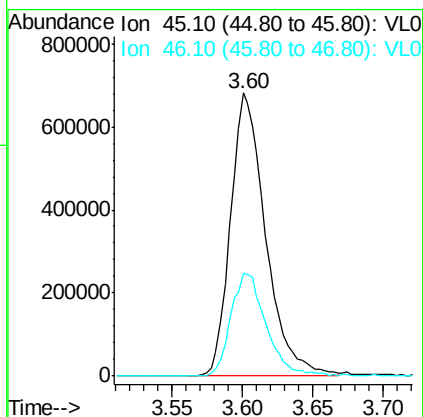
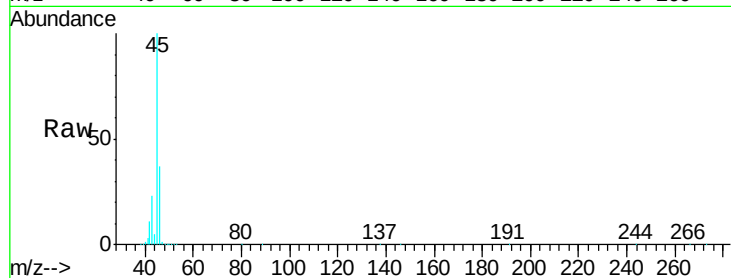
Ion Ratio Lower Upper

45 100

46 36.8 15.5 61.9

Manual Integrations
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#15

Acetone

Concen: 8.490 ppbv

RT: 3.84 min Scan# 329

Delta R.T. -0.01 min

Lab File: VL034237.D

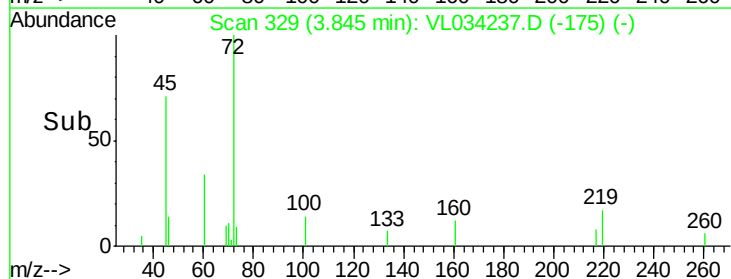
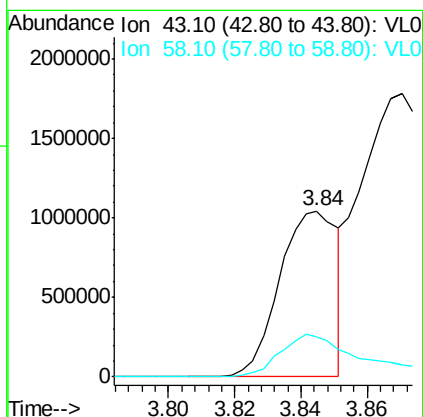
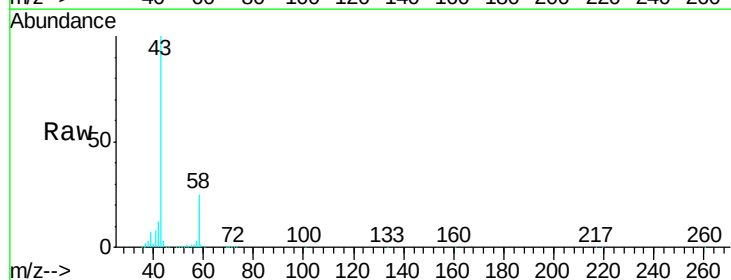
Acq: 8 Oct 2019 00:57

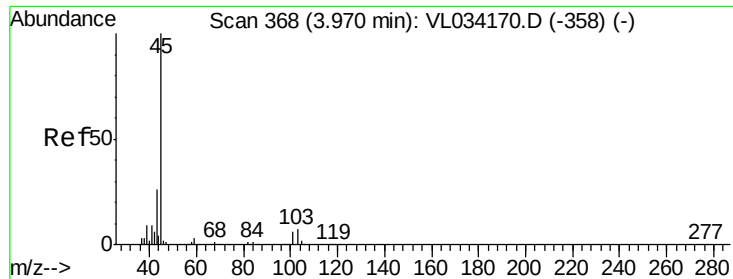
Tgt Ion: 43 Resp: 1267791

Ion Ratio Lower Upper

43 100

58 36.9 20.5 30.7#





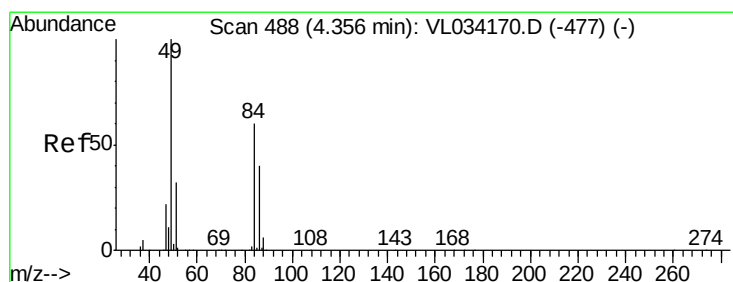
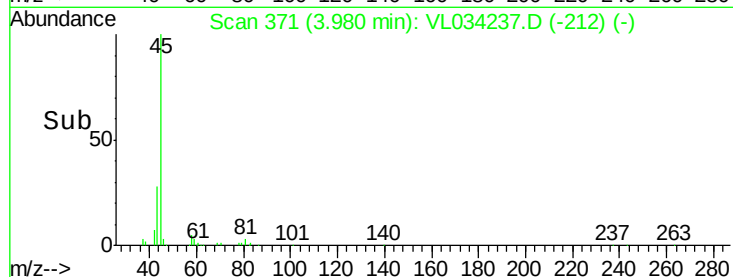
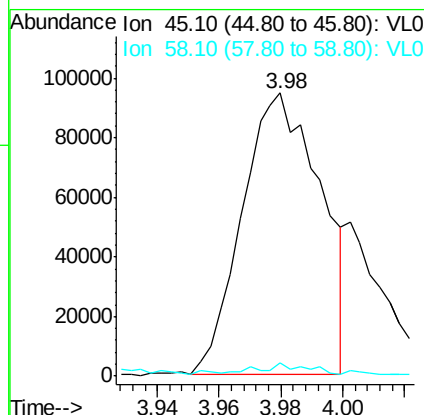
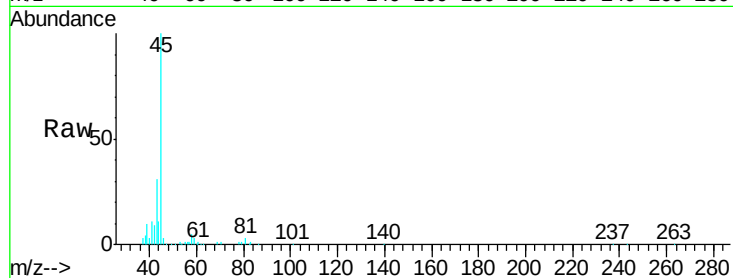
#19
Isopropyl Alcohol
Concen: 1.813 ppbv
RT: 3.98 min Scan# 371
Delta R.T. 0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampled :
V-1

Tgt Ion: 45 Resp: 166478
Ion Ratio Lower Upper
45 100
58 281.3 1.4 2.0#

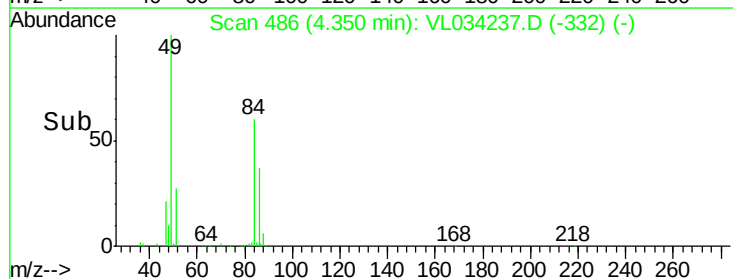
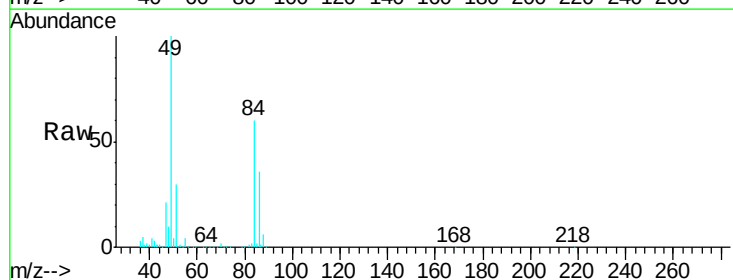
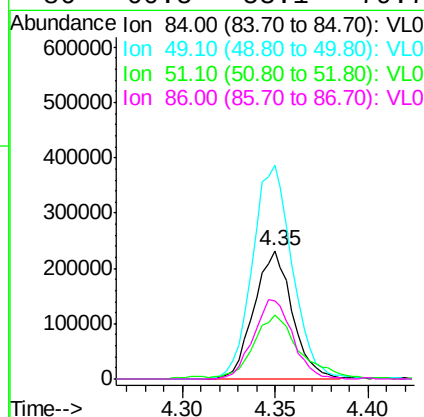
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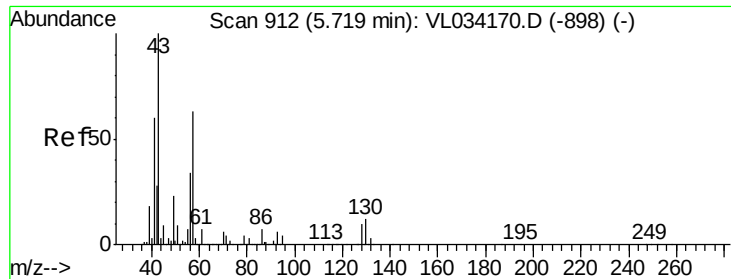
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#20
Methylene Chloride
Concen: 7.743 ppbv
RT: 4.35 min Scan# 486
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion: 84 Resp: 333368
Ion Ratio Lower Upper
84 100
49 165.9 133.8 200.8
51 47.9 43.6 65.4
86 60.5 53.1 79.7





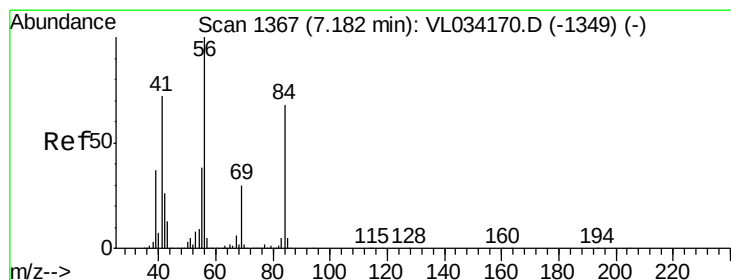
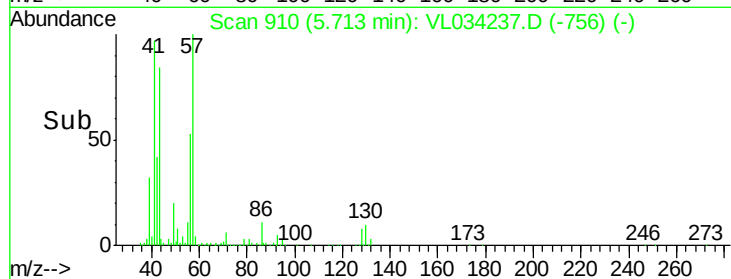
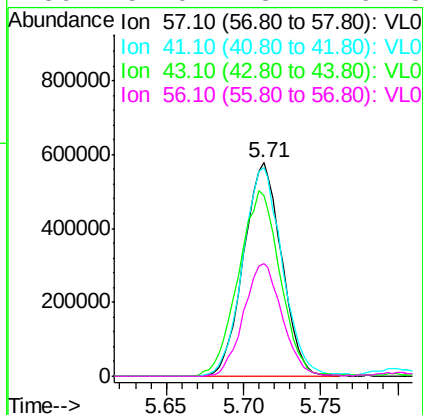
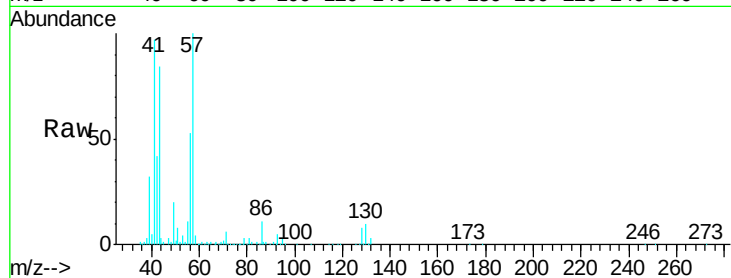
#26
Hexane
Concen: 8.386 ppbv
RT: 5.71 min Scan# 910
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampled :
V-1

Tgt Ion	Ratio	Lower	Upper
57	100		
41	102.7	78.5	117.7
43	95.0	189.5	284.3#
56	54.0	43.2	64.8

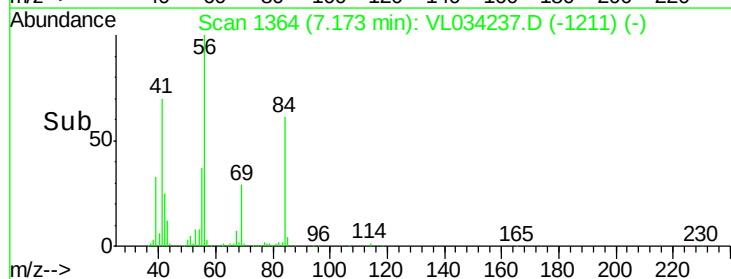
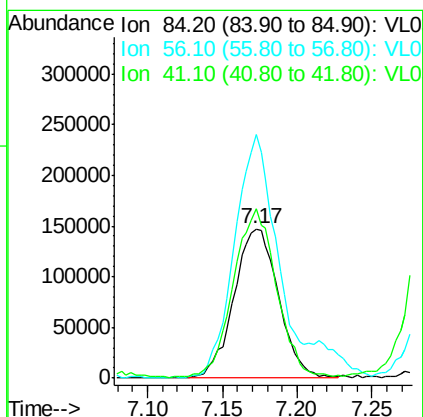
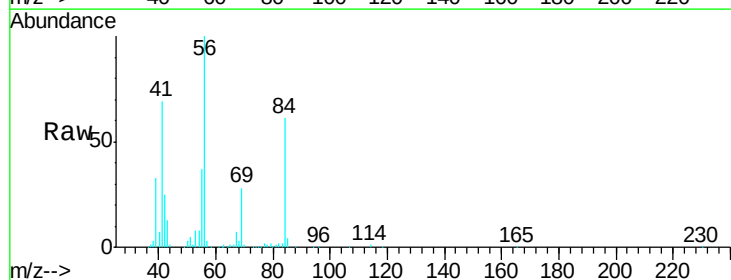
Manual Integrations
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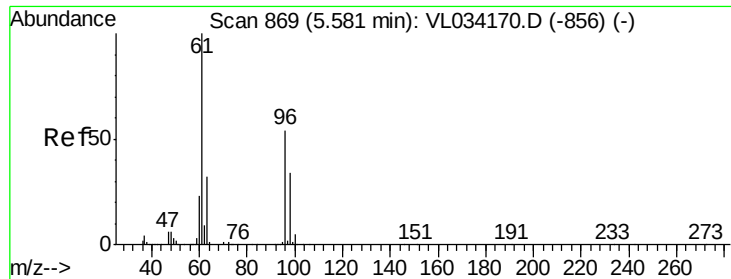
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#30
Cyclohexane
Concen: 3.594 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Lower	Upper
84	100		
56	171.0	126.2	189.2
41	107.5	85.8	128.8





#31

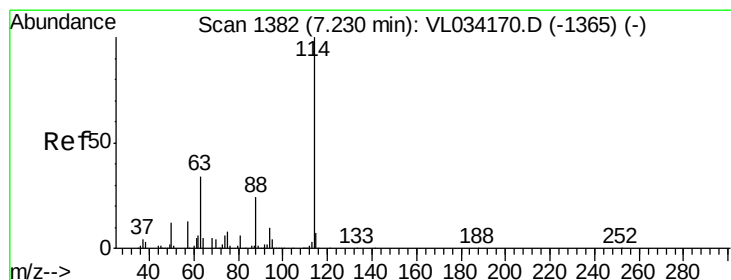
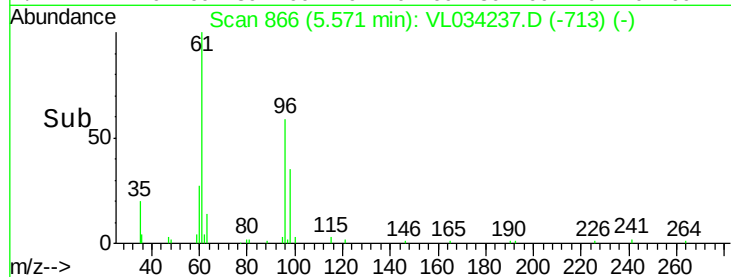
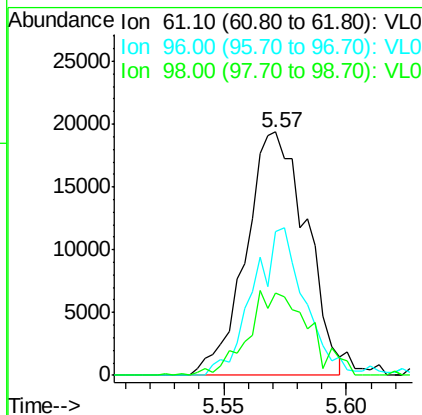
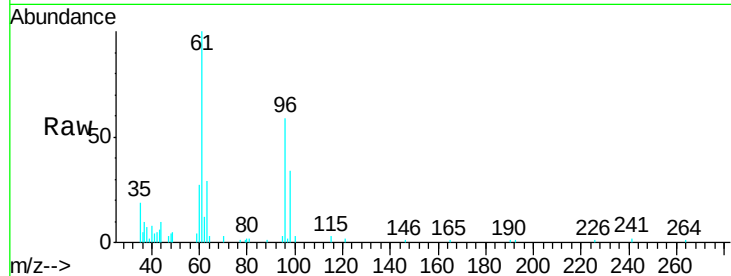
cis-1,2-Dichloroethene
Concen: 0.277 ppbv m
RT: 5.57 min Scan# 866
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampled :
V-1

Tgt Ion	Ratio	Lower	Upper
61	100		
96	59.1	43.0	64.4
98	34.0	27.2	40.8

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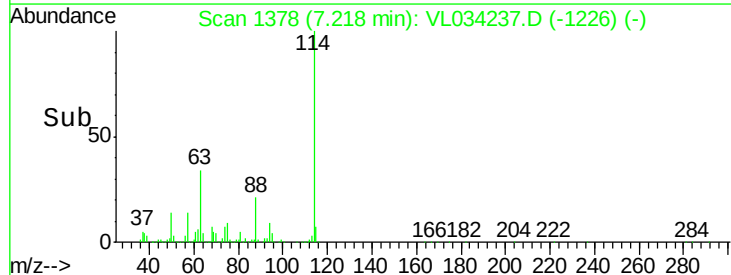
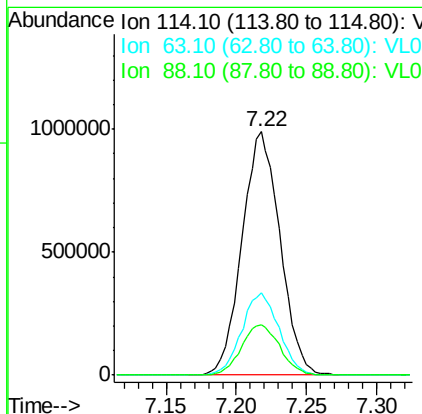
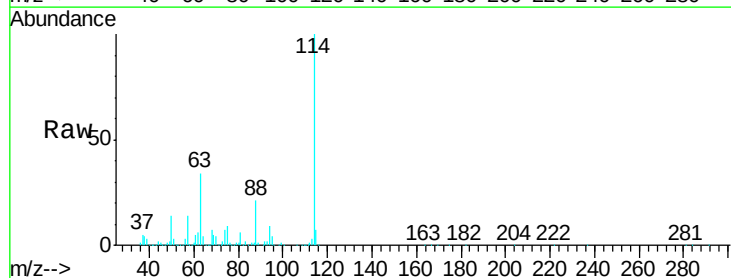
MMDadoda
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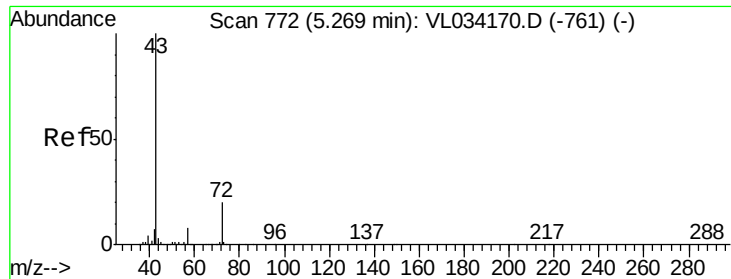


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.22 min Scan# 1378
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Lower	Upper
114	100		
63	33.5	27.8	41.6
88	21.0	17.1	25.7





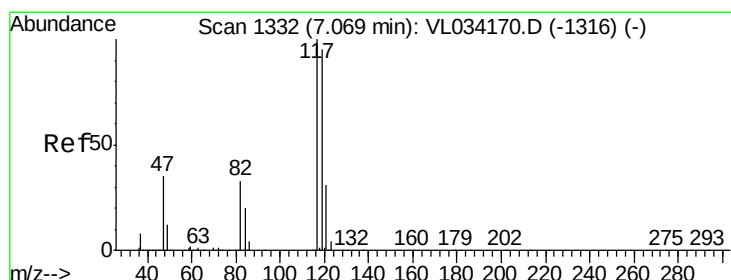
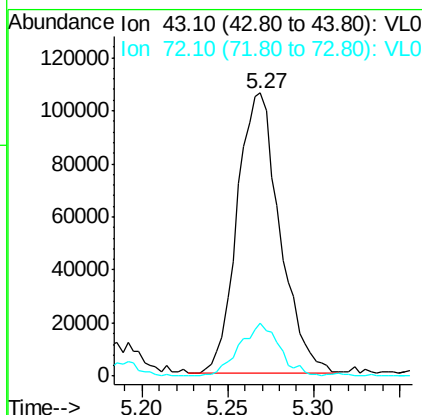
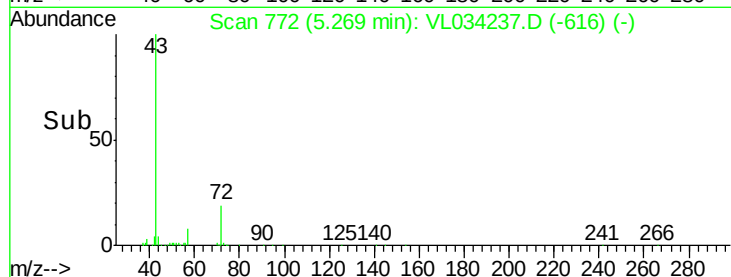
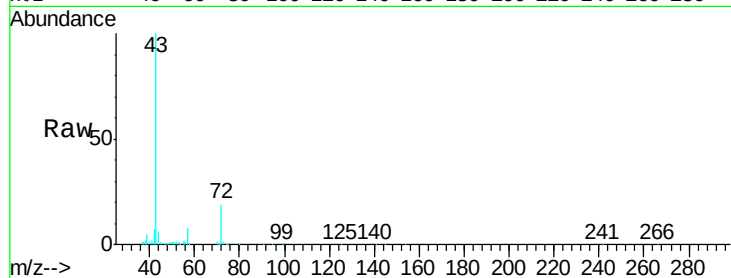
#34
2-Butanone
Concen: 0.961 ppbv
RT: 5.27 min Scan# 772
Delta R.T. 0.00 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampled :
V-1

Tgt Ion: 43 Resp: 183318
Ion Ratio Lower Upper
43 100
72 18.1 15.0 22.6

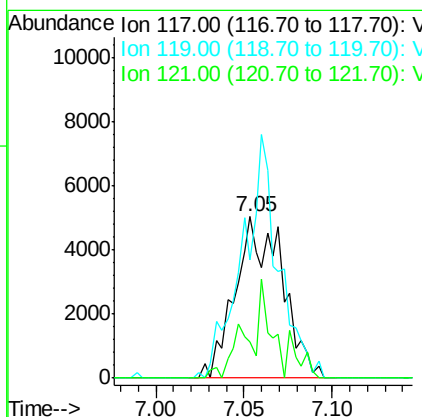
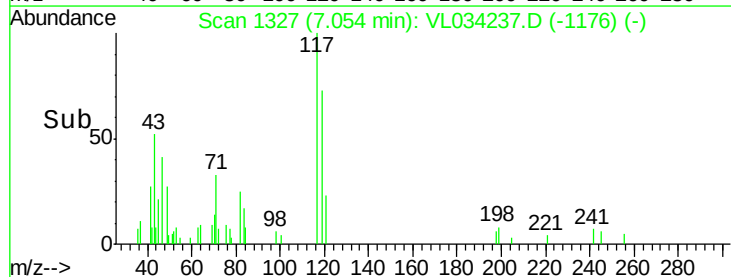
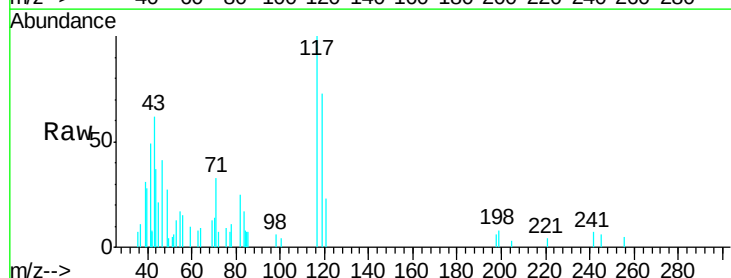
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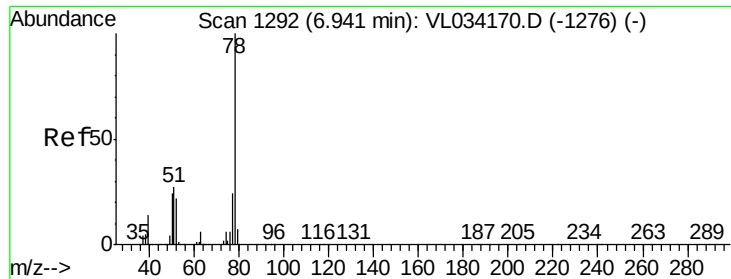
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.060 ppbv m
RT: 7.05 min Scan# 1327
Delta R.T. -0.02 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion: 117 Resp: 9309
Ion Ratio Lower Upper
117 100
119 73.2 75.8 113.6#
121 22.7 25.0 37.6#





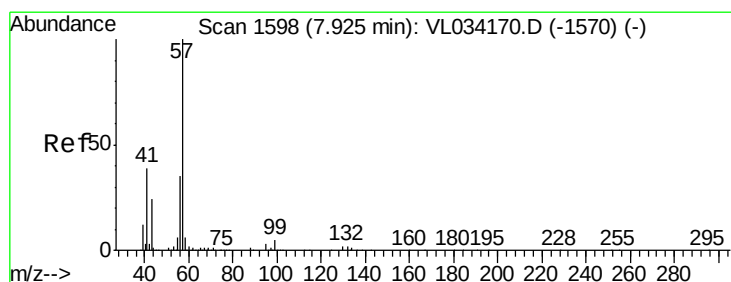
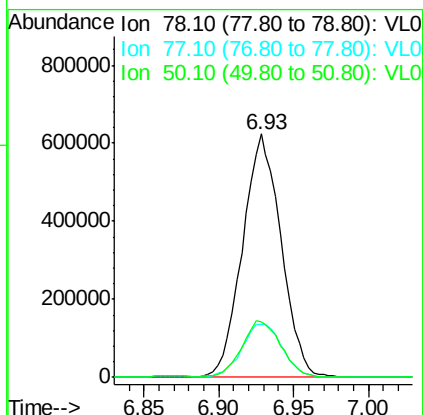
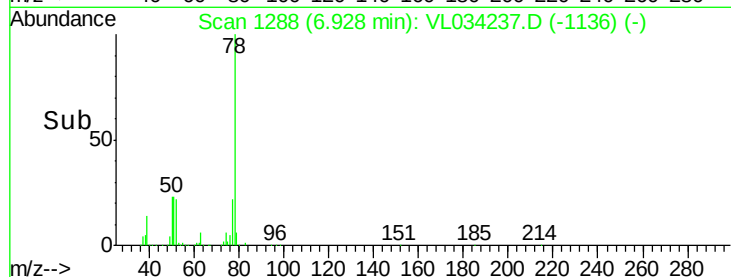
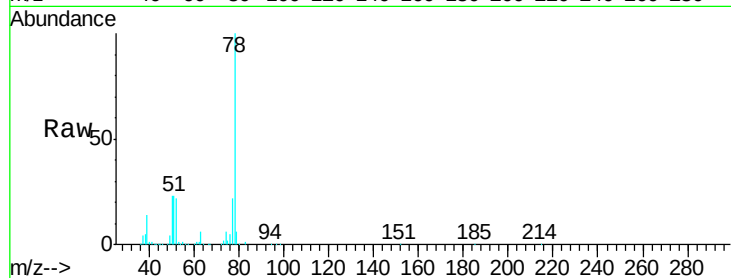
#36
Benzene
Concen: 5.408 ppbv
RT: 6.93 min Scan# 1288
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampleId :
V-1

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.5	19.0	28.4
50	22.6	18.9	28.3

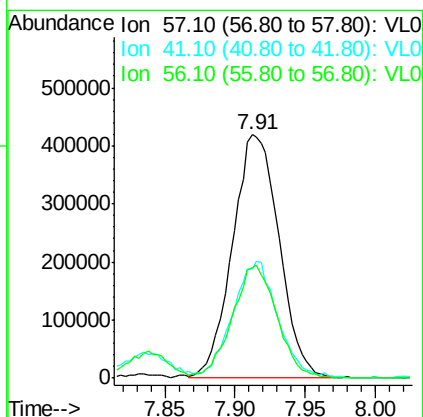
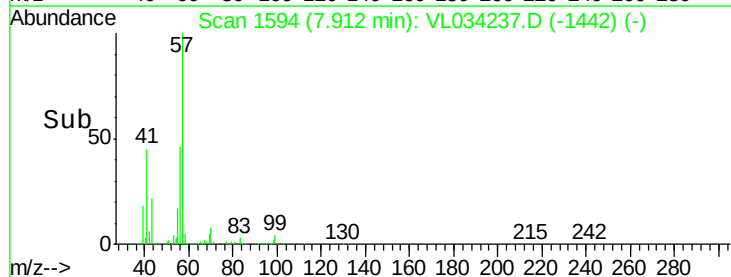
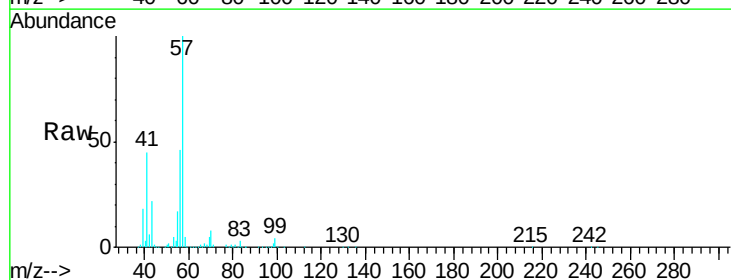
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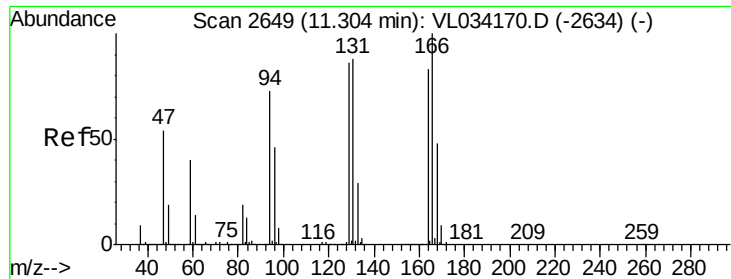
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 2.424 ppbv
RT: 7.91 min Scan# 1594
Delta R.T. -0.01 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Lower	Upper
57	100		
41	46.6	29.8	44.6#
56	44.4	25.9	38.9#





#52

Tetrachloroethene

Concen: 0.285 ppbv m

RT: 11.29 min Scan# 2645

Delta R.T. -0.01 min

Lab File: VL034237.D

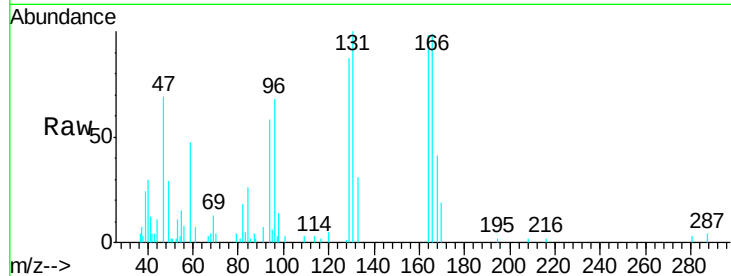
Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

ClientSampled :

V-1



Tgt Ion: 164 Resp: 19421

Ion Ratio Lower Upper

164 100

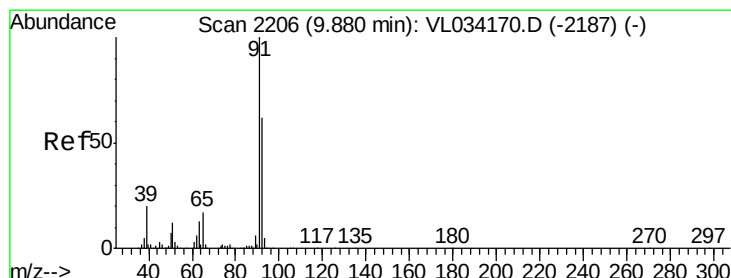
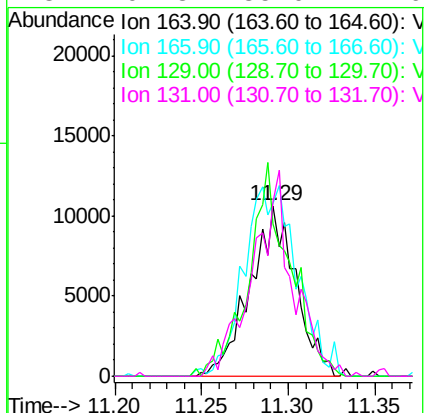
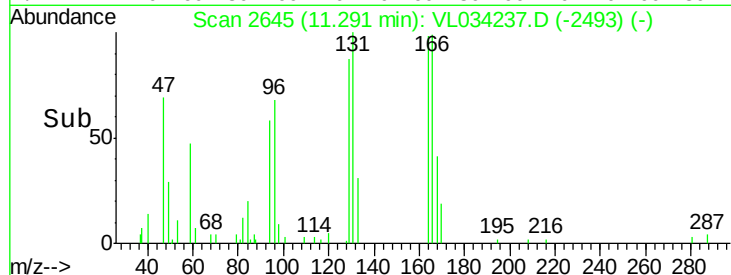
166 101.1 96.7 145.1

129 89.4 82.8 124.2

131 102.3 85.0 127.6

Manual Integrations
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#53

Toluene

Concen: 17.799 ppbv

RT: 9.86 min Scan# 2201

Delta R.T. -0.02 min

Lab File: VL034237.D

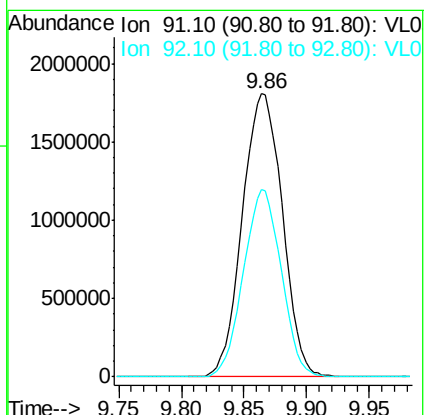
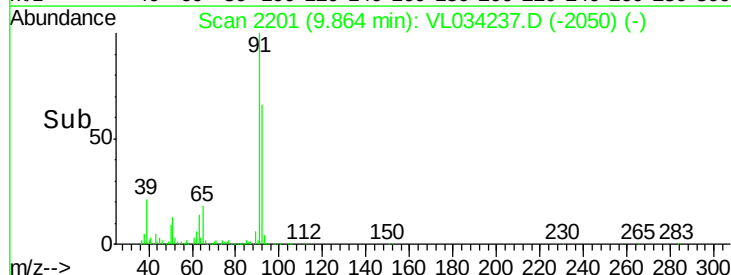
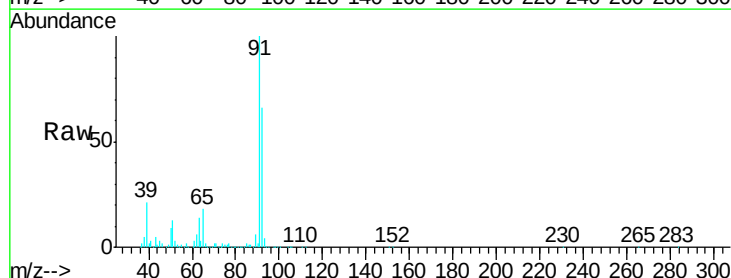
Acq: 8 Oct 2019 00:57

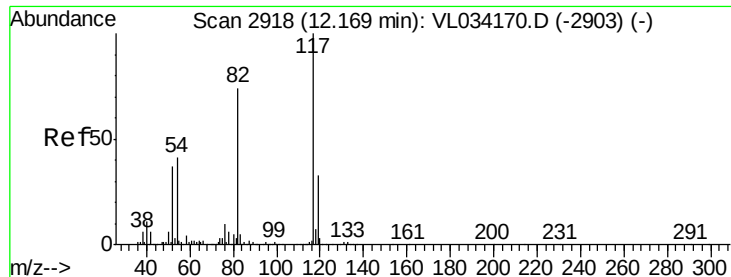
Tgt Ion: 91 Resp: 4011939

Ion Ratio Lower Upper

91 100

92 62.8 49.0 73.6





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.15 min Scan# 2913

Delta R.T. -0.02 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

ClientSampled :

V-1

Tgt Ion: 117 Resp: 1901601

Ion Ratio Lower Upper

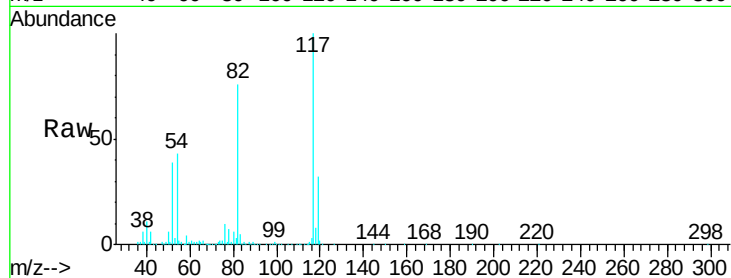
117 100

82 76.7 58.2 87.4

119 32.5 23.7 35.5

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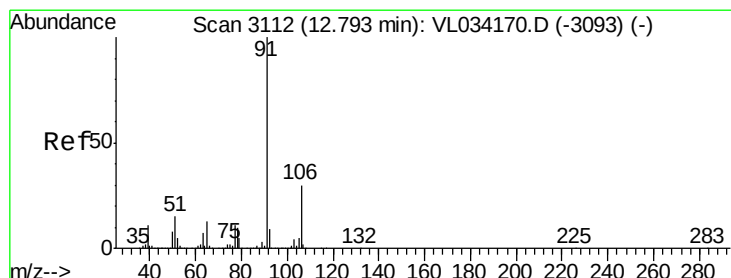
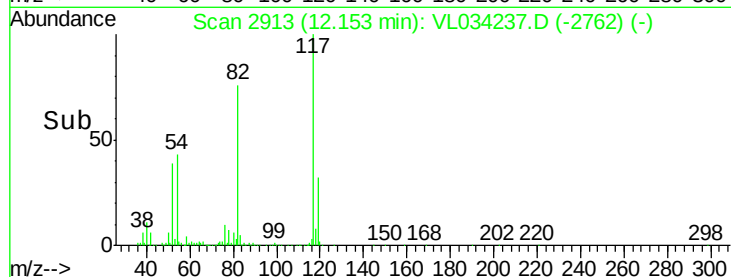
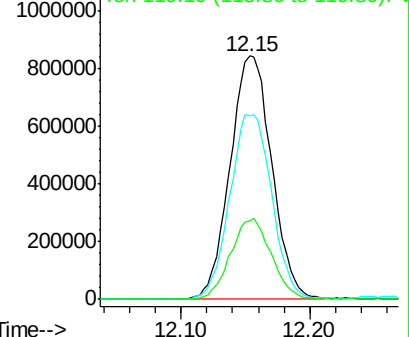
MMDadoda
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#58

Ethyl Benzene

Concen: 1.906 ppbv

RT: 12.78 min Scan# 3107

Delta R.T. -0.02 min

Lab File: VL034237.D

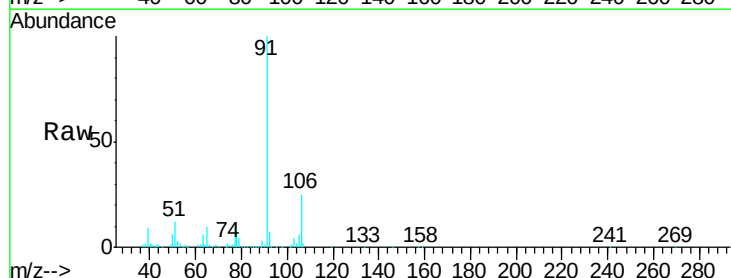
Acq: 8 Oct 2019 00:57

Tgt Ion: 91 Resp: 584677

Ion Ratio Lower Upper

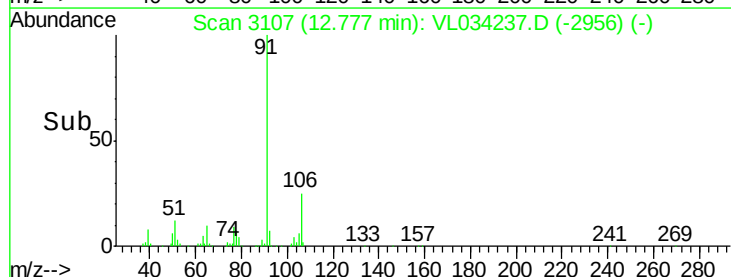
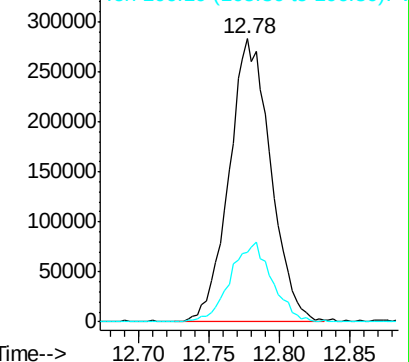
91 100

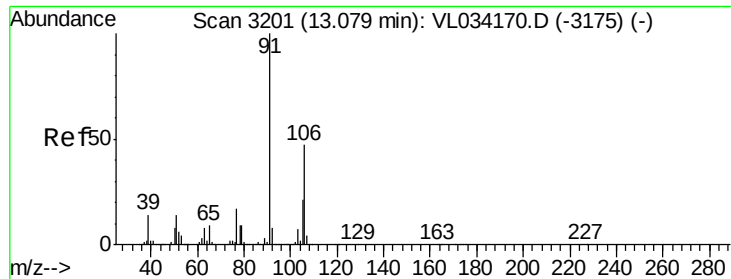
106 24.7 24.2 36.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





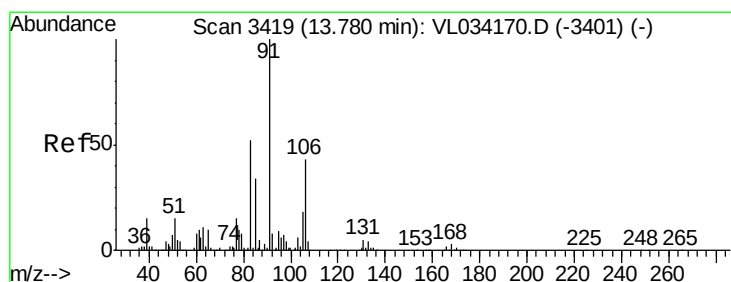
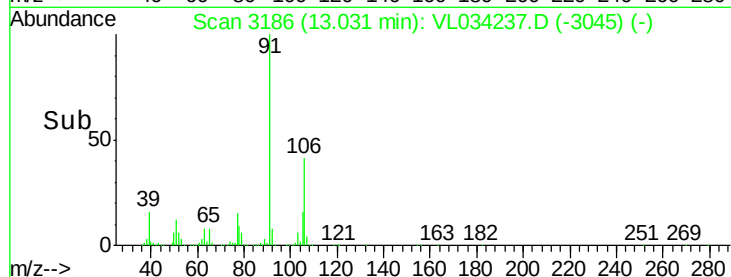
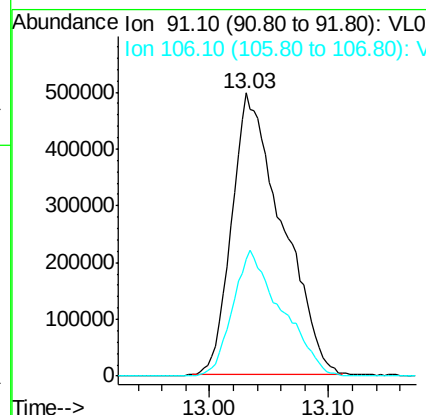
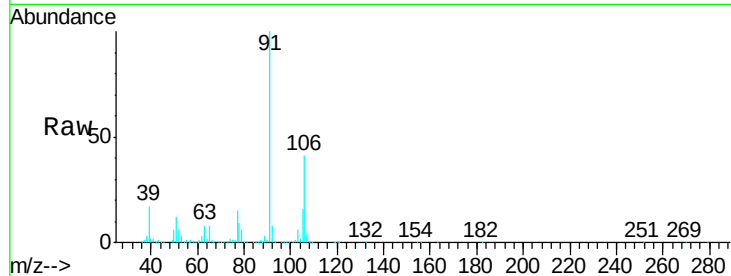
#59
m/p-Xylene
Concen: 5.723 ppbv
RT: 13.03 min Scan# 3186
Delta R.T. -0.05 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampleId :
V-1

Tgt Ion: 91 Resp: 1454553
Ion Ratio Lower Upper
91 100
106 43.4 35.5 53.3

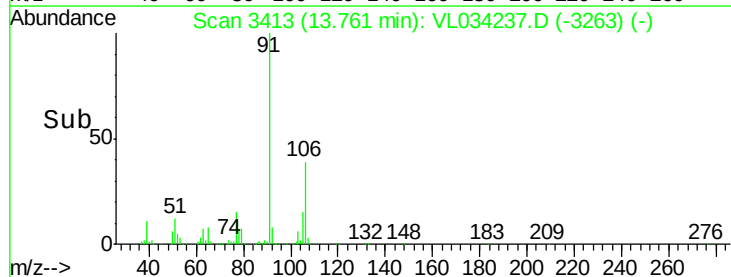
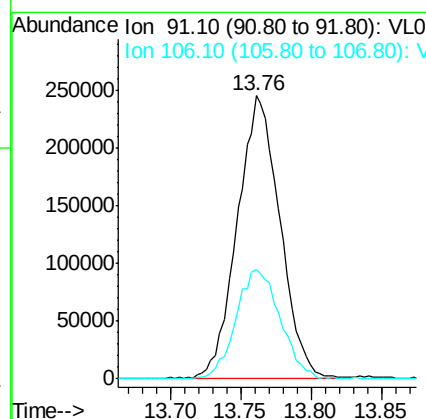
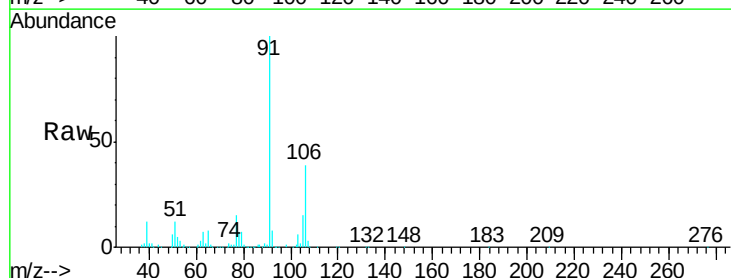
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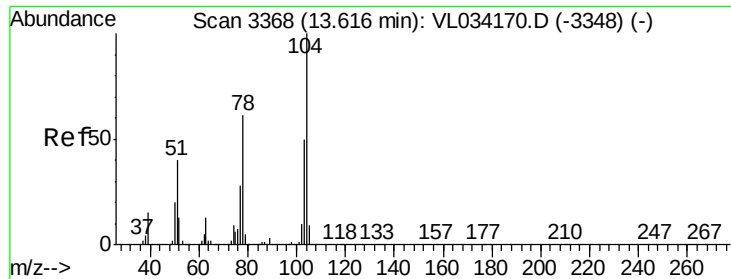
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#60
o-Xylene
Concen: 2.020 ppbv
RT: 13.76 min Scan# 3413
Delta R.T. -0.02 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion: 91 Resp: 513360
Ion Ratio Lower Upper
91 100
106 40.7 21.2 63.6





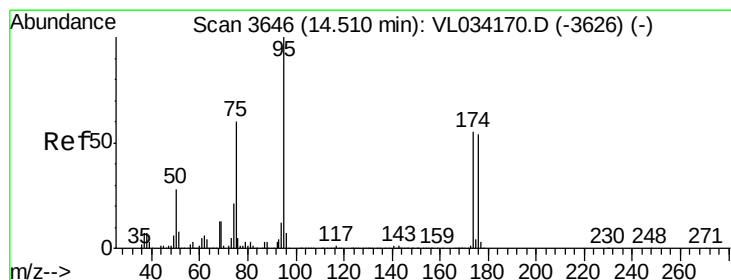
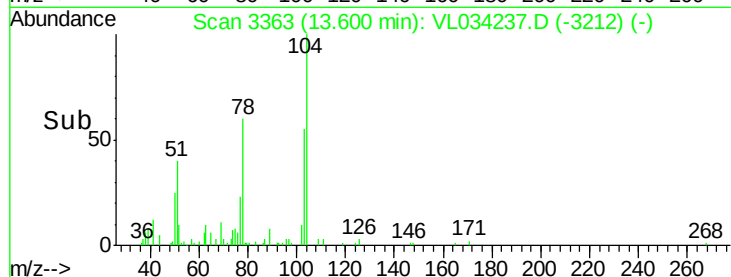
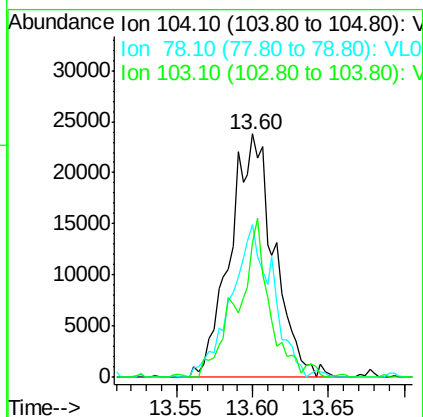
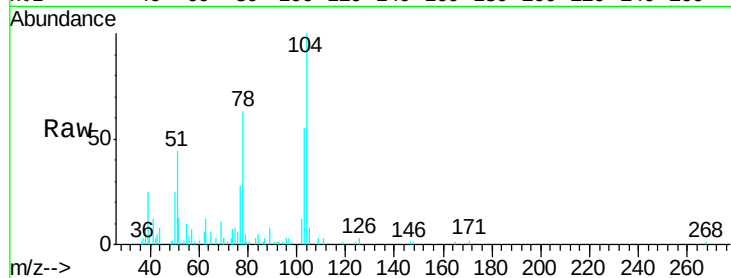
#61
Styrene
Concen: 0.263 ppbv m
RT: 13.60 min Scan# 3363
Delta R.T. -0.02 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Instrument :
MSVOA_L
ClientSampled :
V-1

Tgt Ion	Ratio	Lower	Upper
104	100		
78	60.0	49.7	74.5
103	48.7	38.4	57.6

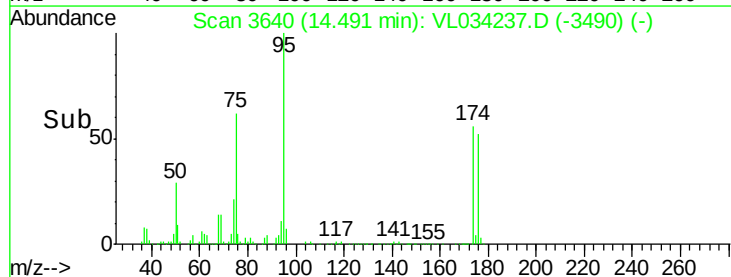
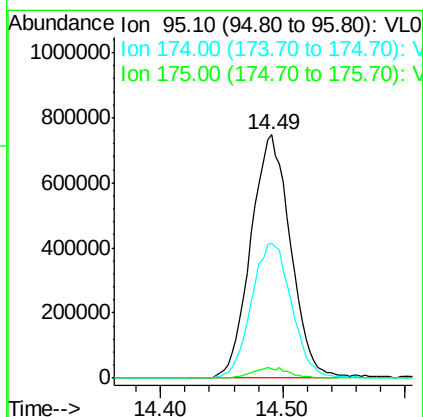
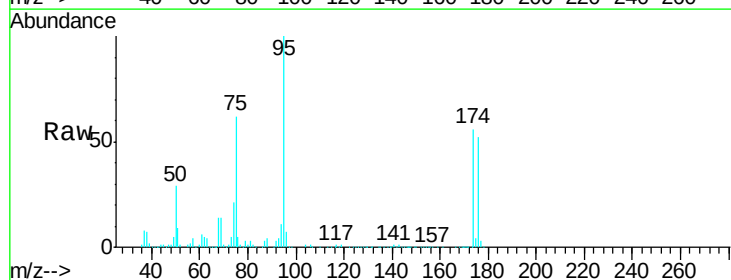
Manual Integrations
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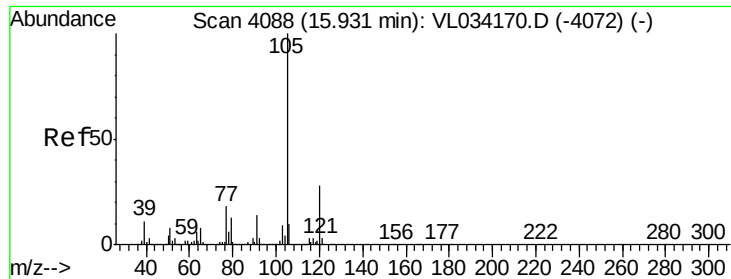
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.160 ppbv
RT: 14.49 min Scan# 3640
Delta R.T. -0.02 min
Lab File: VL034237.D
Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Lower	Upper
95	100		
174	56.8	45.1	67.7
175	4.1	3.3	4.9





#72

4-Ethyltoluene

Concen: 0.546 ppbv m

RT: 15.92 min Scan# 4084

Delta R.T. -0.01 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Instrument :

MSVOA_L

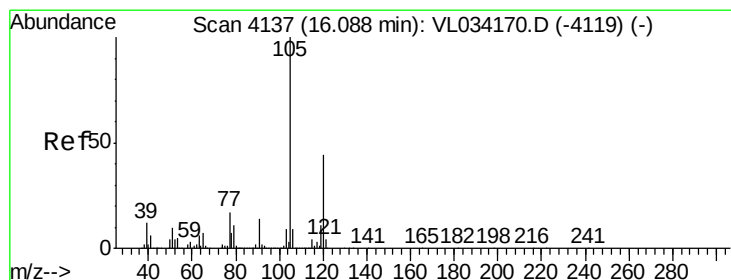
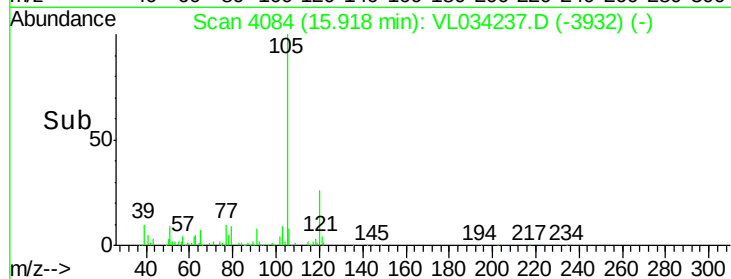
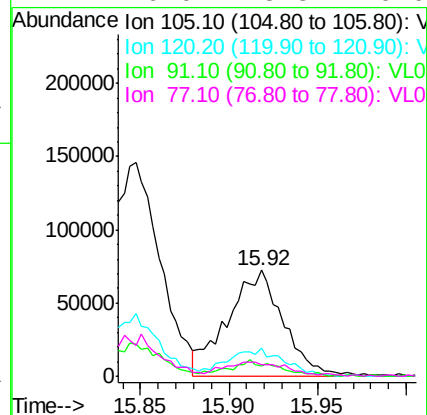
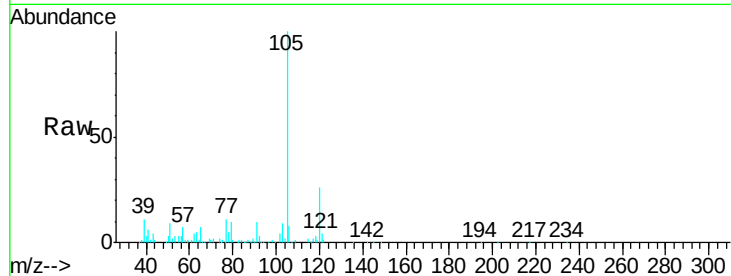
ClientSampled :

V-1

Tgt Ion	Ratio	Resp Lower	Upper
105	100		
120	0.0	23.3	34.9#
91	0.0	11.4	17.2#
77	0.0	13.3	19.9#

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#73

1,3,5-Trimethylbenzene

Concen: 0.375 ppbv

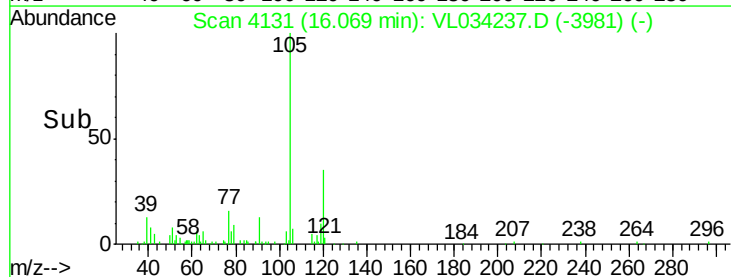
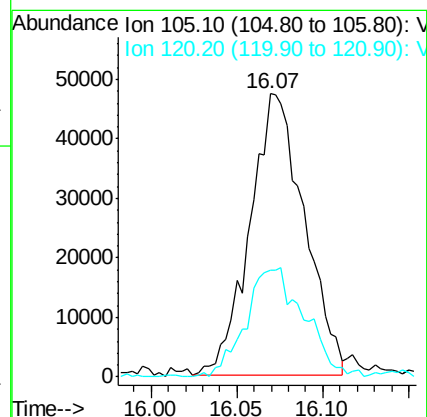
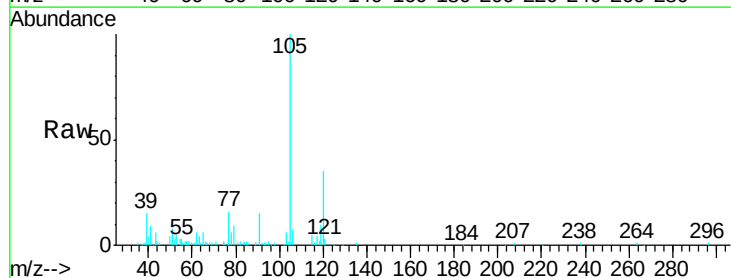
RT: 16.07 min Scan# 4131

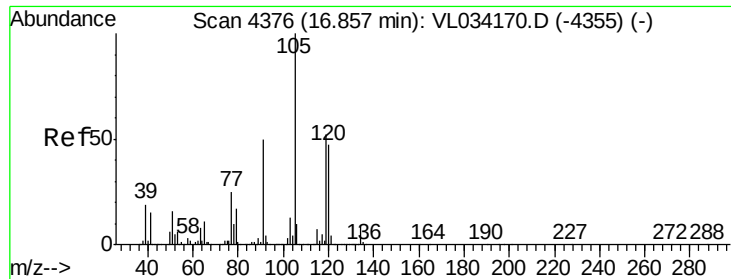
Delta R.T. -0.02 min

Lab File: VL034237.D

Acq: 8 Oct 2019 00:57

Tgt Ion	Ratio	Resp Lower	Upper
105	100		
120	38.0	35.6	53.4





#74
 1,2,4-Trimethylbenzene
 Concen: 0.856 ppbv
 RT: 16.84 min Scan# 4370
 Delta R.T. -0.02 min
 Lab File: VL034237.D
 Acq: 8 Oct 2019 00:57

Instrument :
 MSVOA_L
 ClientSampleId :
 V-1

Tgt Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	42.6	37.5	56.3
91	14.3	41.1	61.7#
77	13.2	19.9	29.9#

Manual Integrations
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 10/11/2019 5:05:45 PM

