

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120219\
 Data File : VL034444.D
 Acq On : 3 Dec 2019 2:36
 Operator : SY/AP
 Sample : K6097-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2A

Manual Integrations
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Quant Time: Dec 03 06:18:20 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	5.69	49	754109	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.21	114	1490978	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.15	117	1410513	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.48	95	1256258	10.59	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.90%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	242764	1.779	ppbv	94
3) Chlorodifluoromethane	2.97	51	38978m	0.414	ppbv	
4) Chloromethane	3.12	50	28265	0.509	ppbv	94
9) Propene	3.00	41	63600m	1.523	ppbv	
11) Trichlorofluoromethane	3.95	101	45898	0.338	ppbv	87
13) Ethanol	3.60	45	731846	62.894	ppbv	96
15) Acetone	3.84	43	560261	5.188	ppbv	99
19) Isopropyl Alcohol	3.97	45	2823637	40.795	ppbv #	99
20) Methylene Chloride	4.34	84	86297	2.254	ppbv	90
26) Hexane	5.71	57	102134	1.233	ppbv #	50
29) Chloroform	5.77	83	22598	0.169	ppbv	98
30) Cyclohexane	7.17	84	23924m	0.382	ppbv	
34) 2-Butanone	5.27	43	30444m	0.248	ppbv	
35) Carbon Tetrachloride	7.05	117	10309m	0.080	ppbv	
36) Benzene	6.92	78	51909m	0.348	ppbv	
38) Trichloroethene	7.88	130	32245	0.527	ppbv	95
52) Tetrachloroethene	11.28	164	4412m	0.068	ppbv	
53) Toluene	9.86	91	140005m	0.827	ppbv	
59) m/p-Xylene	13.03	91	40995m	0.217	ppbv	
60) o-Xylene	13.76	91	19298m	0.103	ppbv	
74) 1,2,4-Trimethylbenzene	16.83	105	32146m	0.143	ppbv	

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

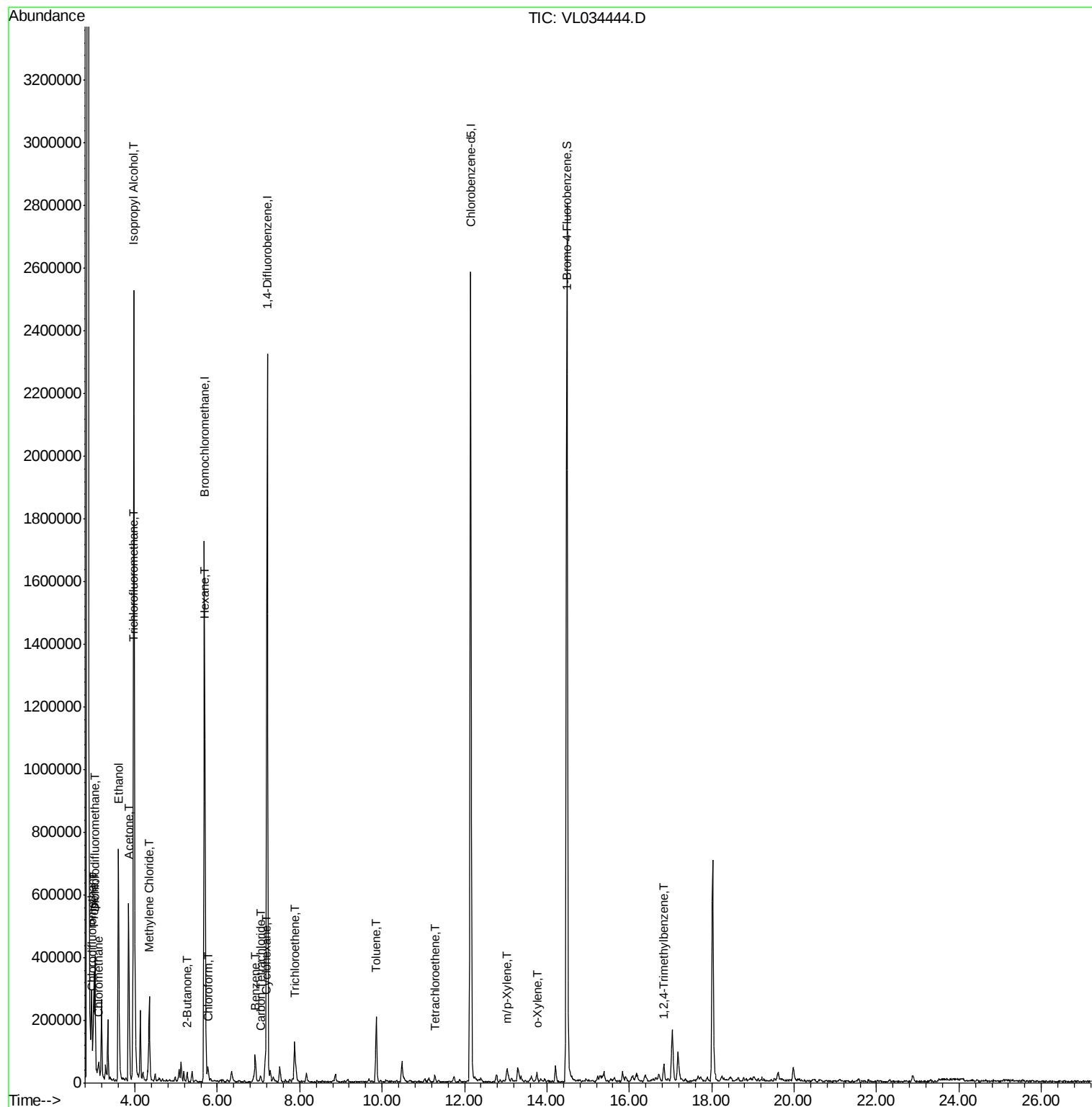
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120219\
Data File : VL034444.D
Acq On : 3 Dec 2019 2:36
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

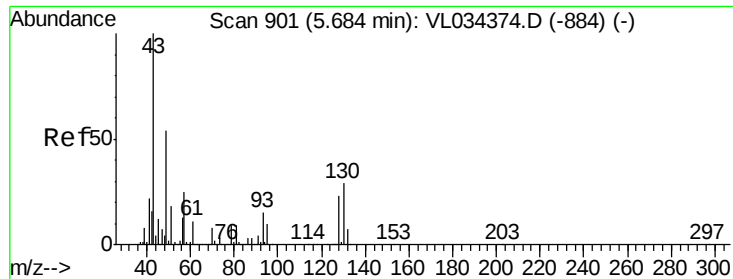
Instrument :
MSVOA_L
ClientSampleId :
IA-2A

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Quant Time: Dec 03 06:18:20 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue Nov
QLast Update : Tue Nov 19 14:15:35 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.00 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

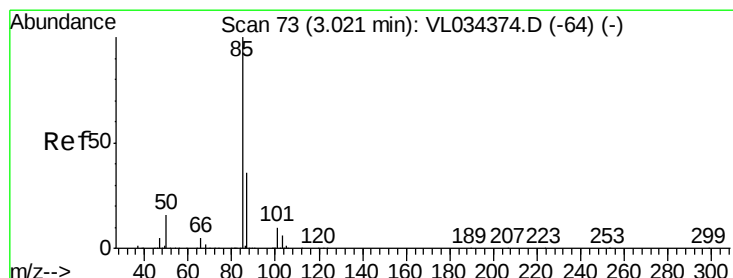
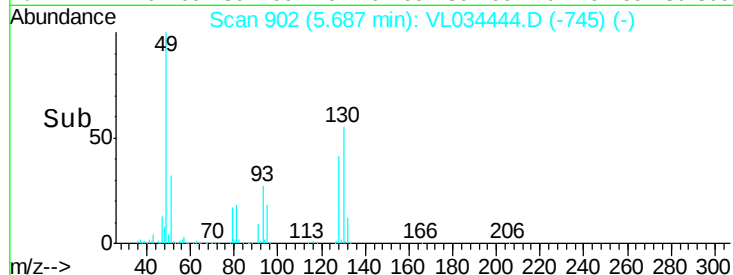
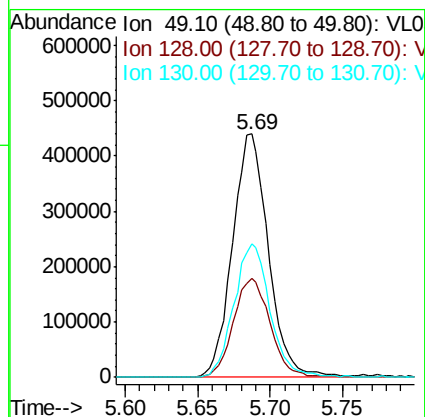
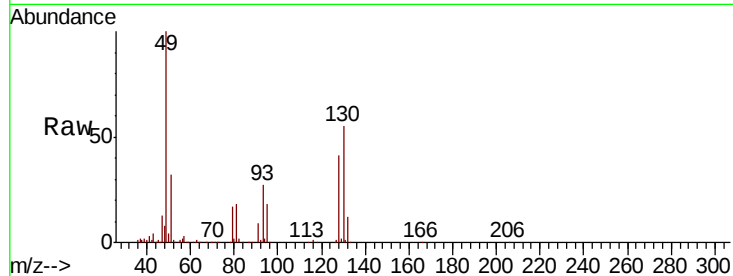
ClientSampled :

IA-2A

Tot Ion:	49	Resp:	754109
Ion Ratio	Lower	Upper	
49	100		
128	42.1	21.8	65.3
130	55.6	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 1.779 ppbv

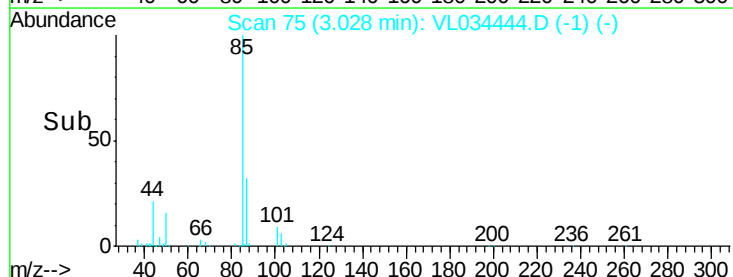
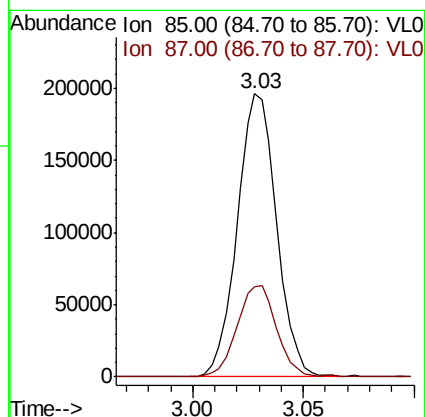
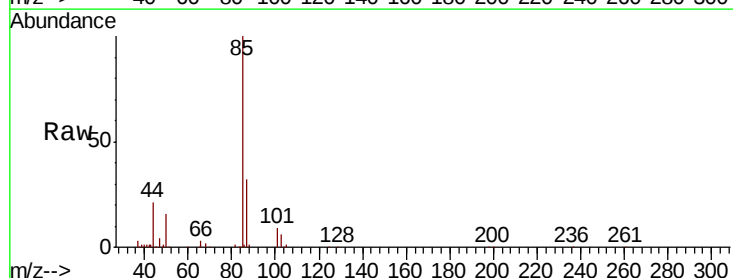
RT: 3.03 min Scan# 75

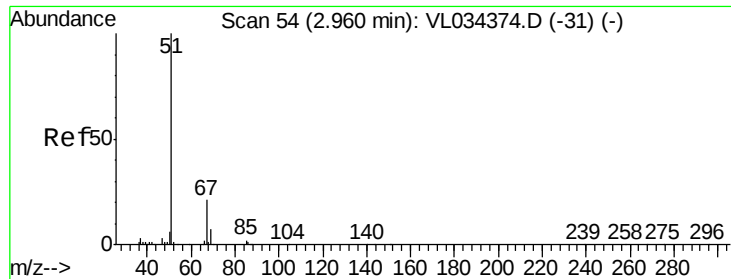
Delta R.T. 0.01 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Tgt Ion:	85	Resp:	242764
Ion Ratio	Lower	Upper	
85	100		
87	31.9	28.5	42.7





#3

Chlorodifluoromethane

Concen: 0.414 ppbv

RT: 2.97 min Scan# 56

Delta R.T. 0.01 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampled :

IA-2A

Tot Ion: 51 Resp: 38978

Ion Ratio Lower Upper

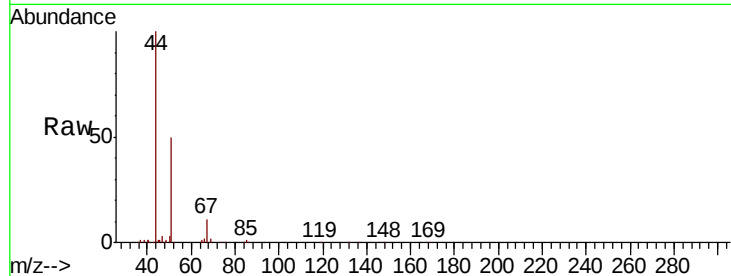
51 100

67 23.7 16.2 24.2

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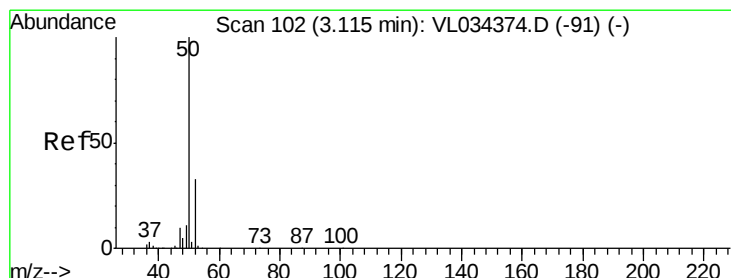
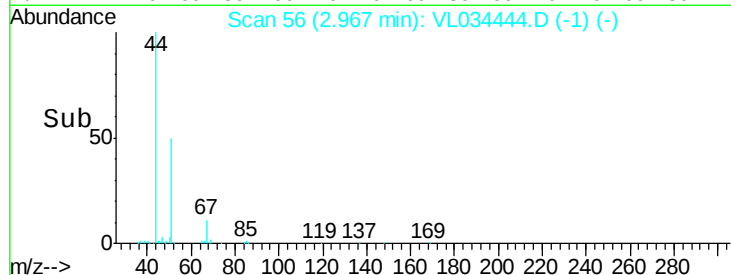
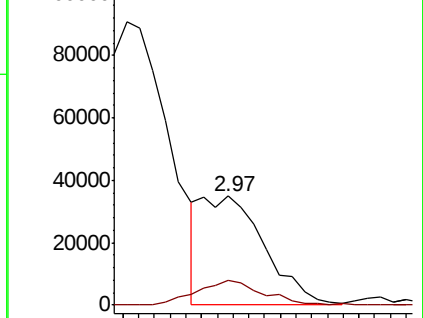
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.509 ppbv

RT: 3.12 min Scan# 104

Delta R.T. 0.01 min

Lab File: VL034444.D

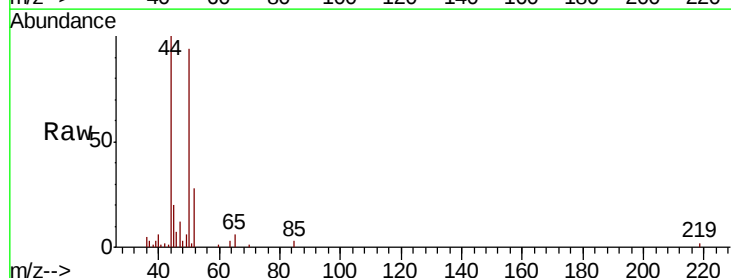
Acq: 3 Dec 2019 2:36

Tgt Ion: 50 Resp: 28265

Ion Ratio Lower Upper

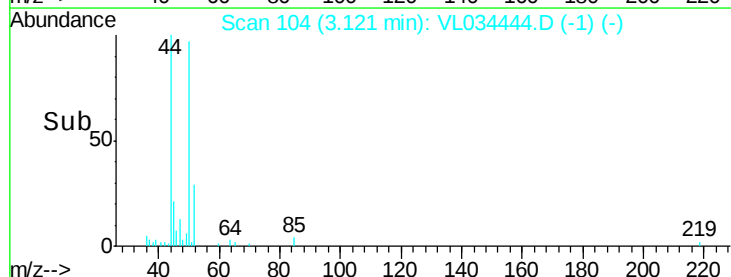
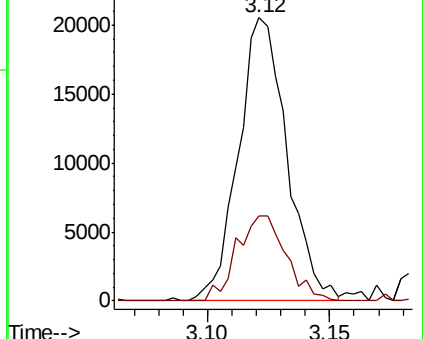
50 100

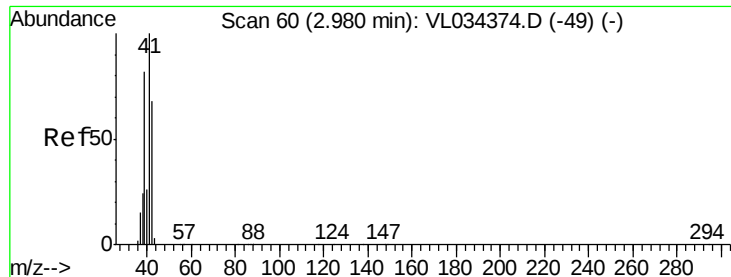
52 29.9 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.523 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. 0.02 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 41 Resp: 63600

Ion Ratio Lower Upper

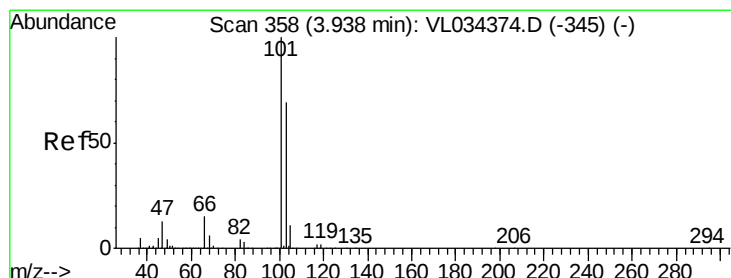
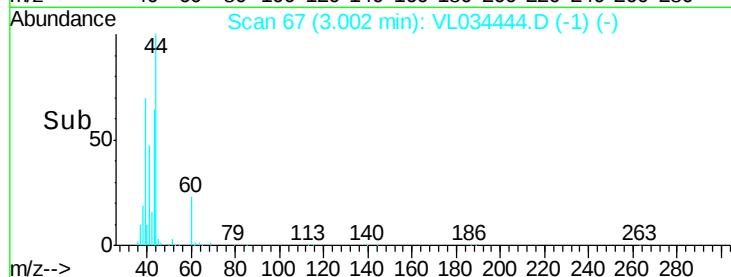
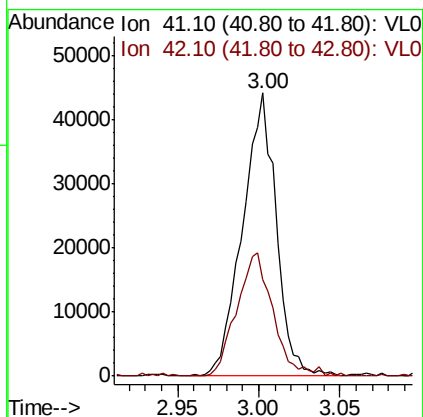
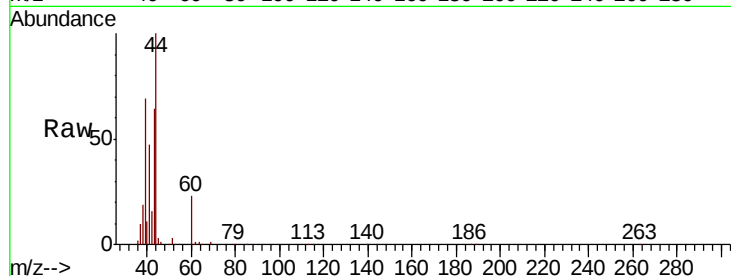
41 100

42 62.6 54.6 82.0

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#11

Trichlorofluoromethane

Concen: 0.338 ppbv

RT: 3.95 min Scan# 361

Delta R.T. 0.01 min

Lab File: VL034444.D

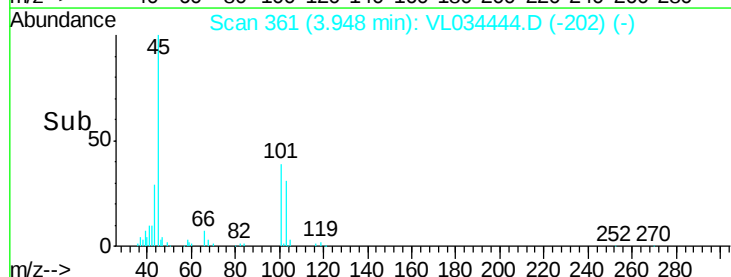
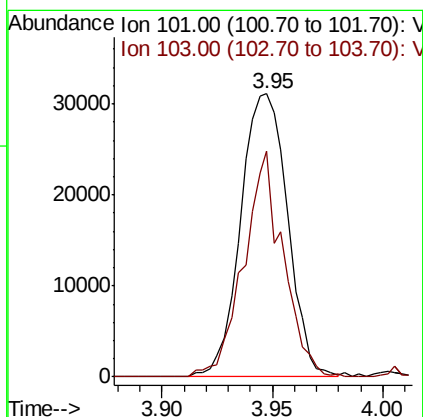
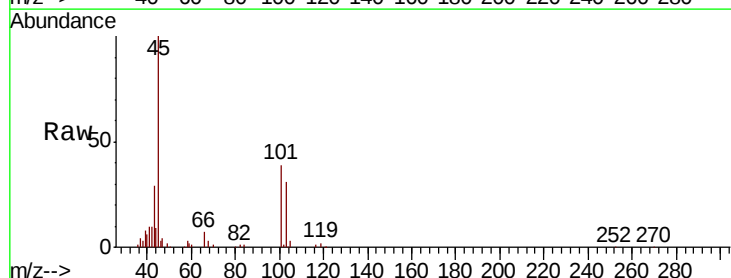
Acq: 3 Dec 2019 2:36

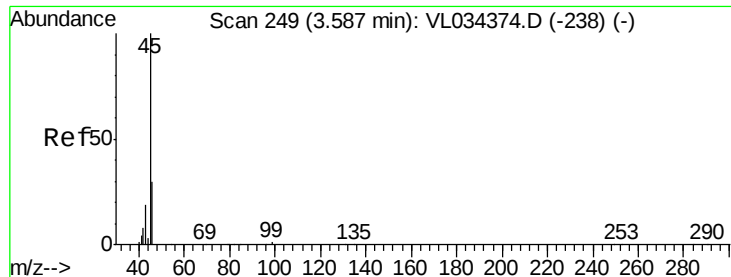
Tgt Ion: 101 Resp: 45898

Ion Ratio Lower Upper

101 100

103 79.9 55.4 83.0





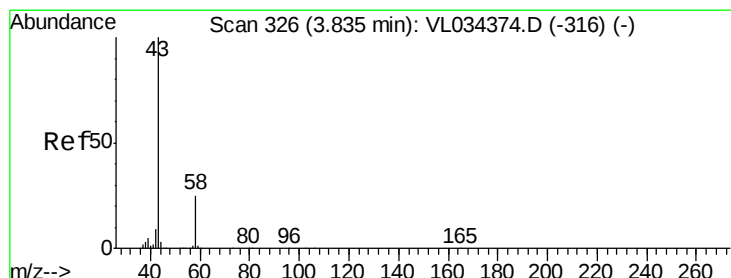
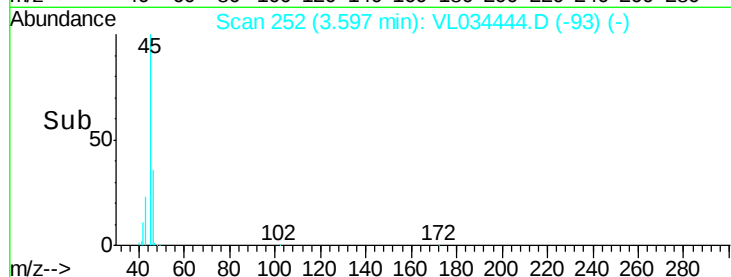
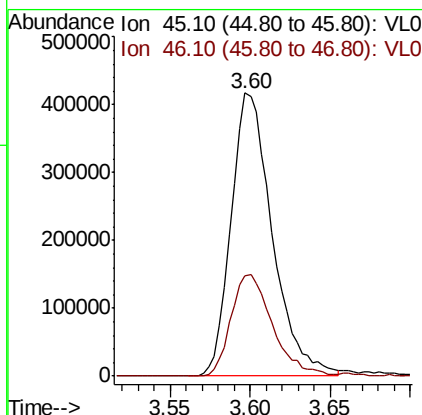
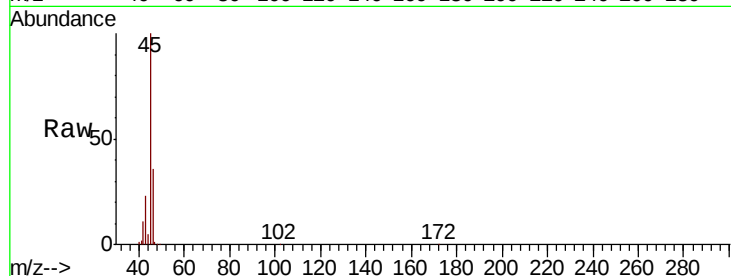
#13
Ethanol
Concen: 62.894 ppbv
RT: 3.60 min Scan# 252
Delta R.T. 0.01 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Instrument :
MSVOA_L
ClientSampleId :
IA-2A

Tot Ion	Ratio	Lower	Upper
45	100		
46	36.9	13.8	55.4

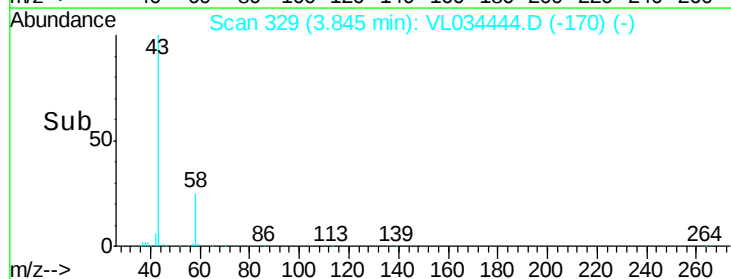
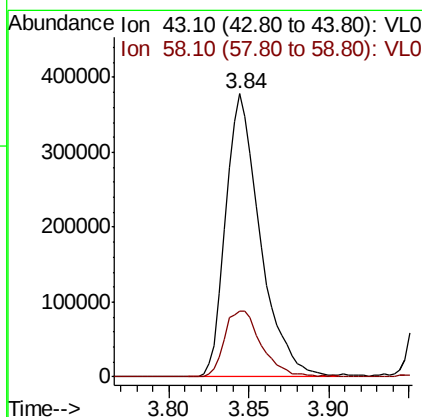
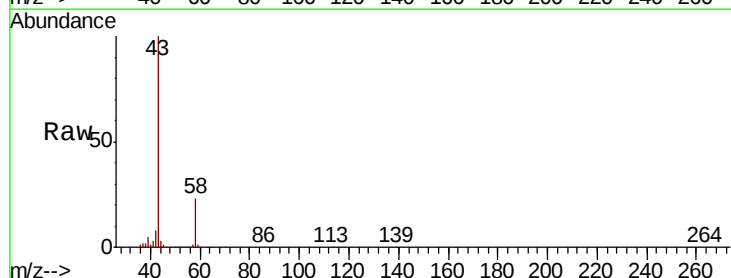
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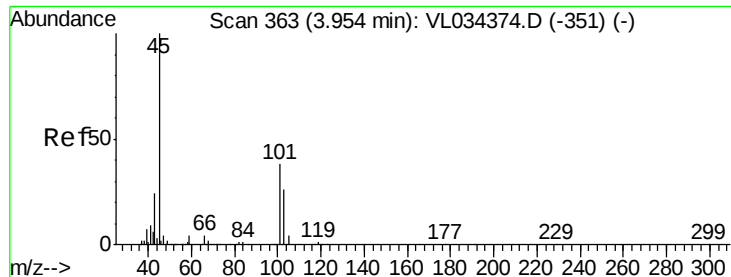
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#15
Acetone
Concen: 5.188 ppbv
RT: 3.84 min Scan# 329
Delta R.T. 0.01 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Tgt Ion	Ratio	Lower	Upper
43	100		
58	25.0	20.2	30.4





#19

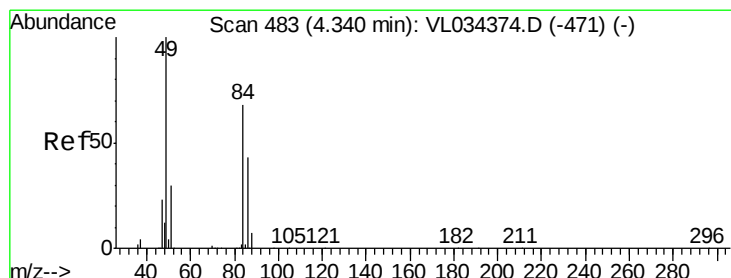
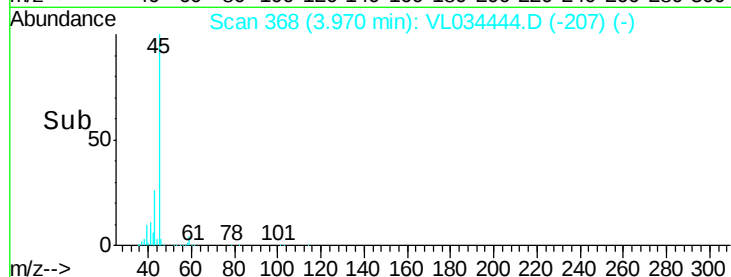
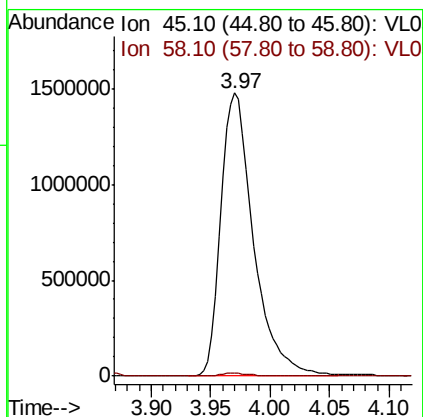
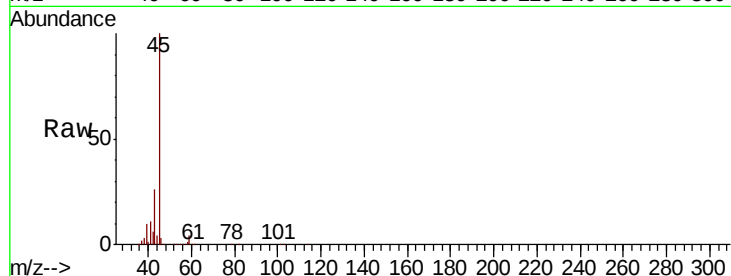
Isopropyl Alcohol
 Concen: 40.795 ppbv
 RT: 3.97 min Scan# 368
 Delta R.T. 0.02 min
 Lab File: VL034444.D
 Acq: 3 Dec 2019 2:36

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2A

Tot Ion: 45 Resp: 2823637
 Ion Ratio Lower Upper
 45 100
 58 1.1 1.3 1.9#

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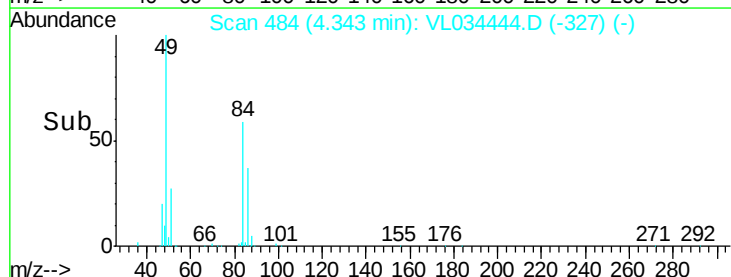
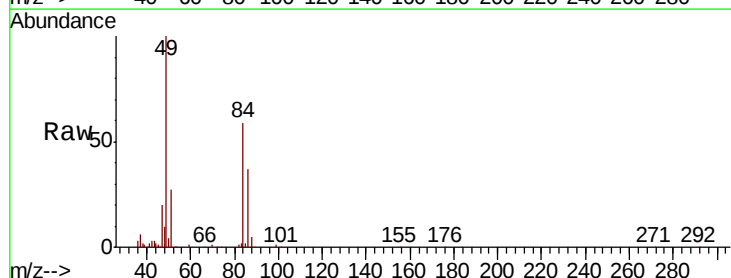
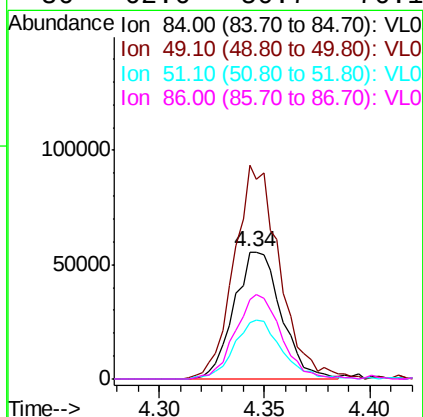
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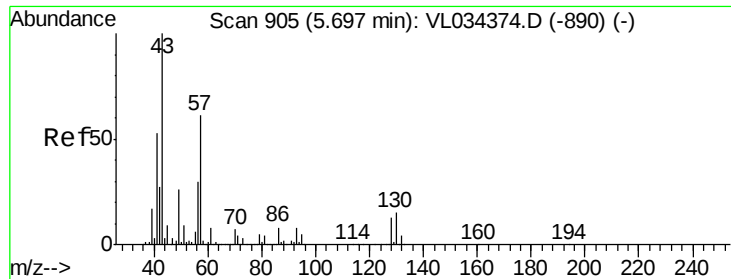


#20

Methylene Chloride
 Concen: 2.254 ppbv
 RT: 4.34 min Scan# 484
 Delta R.T. 0.00 min
 Lab File: VL034444.D
 Acq: 3 Dec 2019 2:36

Tgt Ion: 84 Resp: 86297
 Ion Ratio Lower Upper
 84 100
 49 167.3 116.8 175.2
 51 44.4 35.6 53.4
 86 62.6 50.7 76.1





#26

Hexane

Concen: 1.233 ppbv

RT: 5.71 min Scan# 908

Delta R.T. 0.01 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 57 Resp: 102134

Ion Ratio Lower Upper

57 100

41 102.1 75.0 112.4

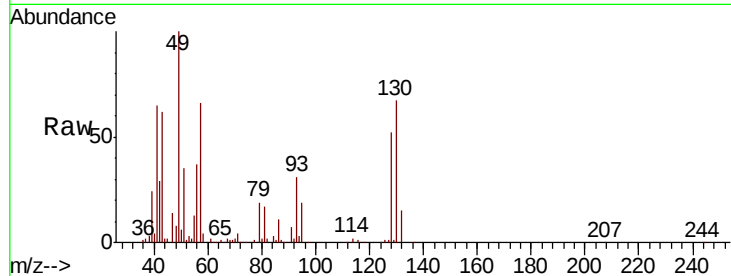
43 104.0 186.6 279.8#

56 54.9 41.5 62.3

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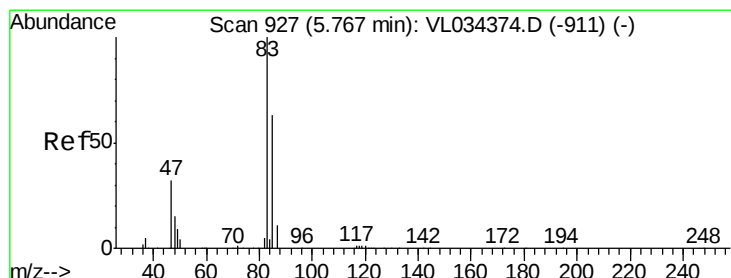
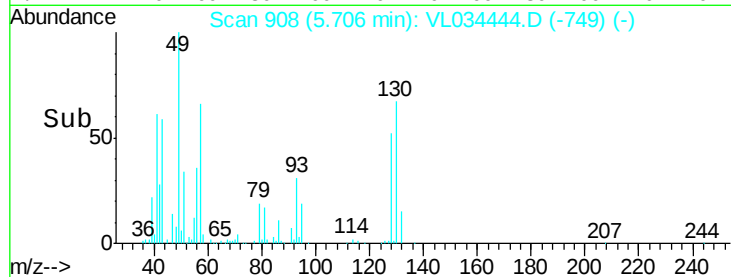
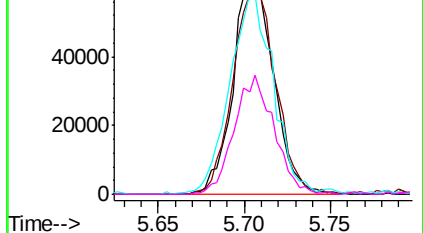


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 0.169 ppbv

RT: 5.77 min Scan# 928

Delta R.T. 0.00 min

Lab File: VL034444.D

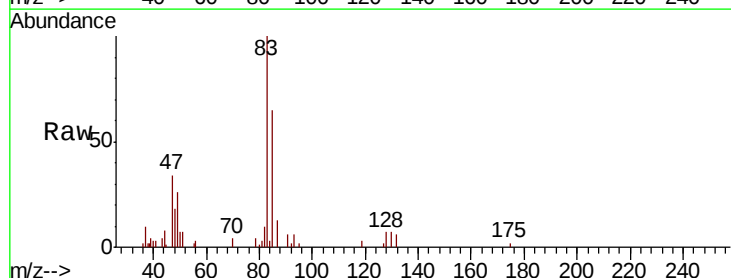
Acq: 3 Dec 2019 2:36

Tgt Ion: 83 Resp: 22598

Ion Ratio Lower Upper

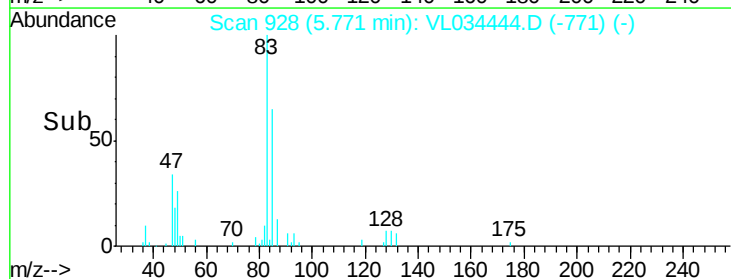
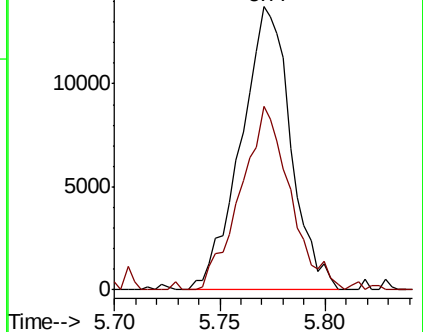
83 100

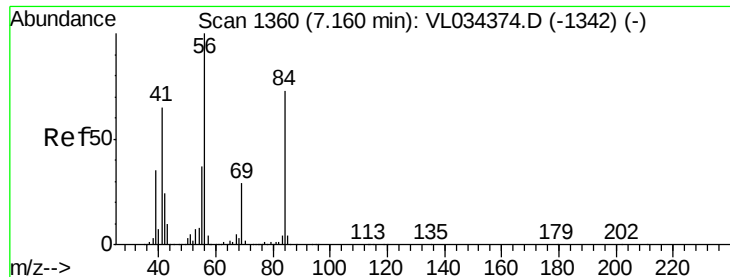
85 64.8 50.4 75.6



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





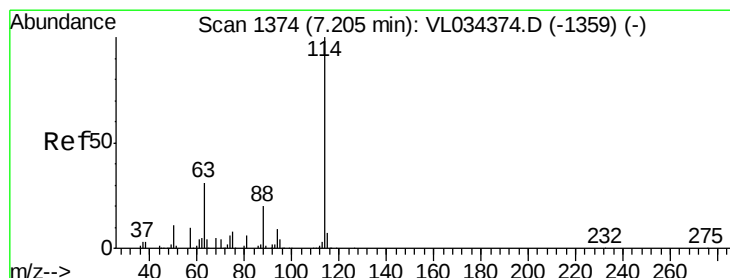
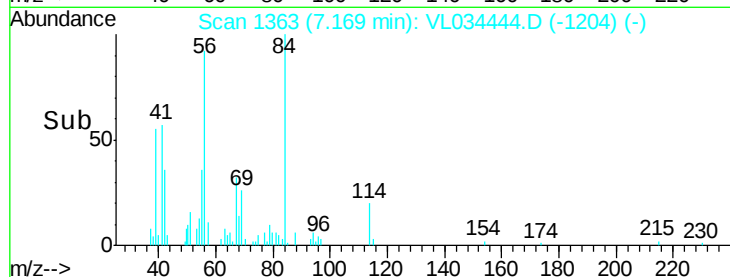
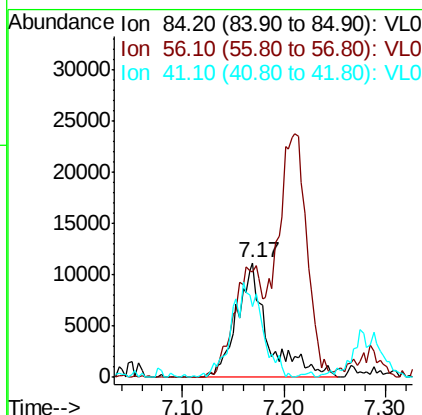
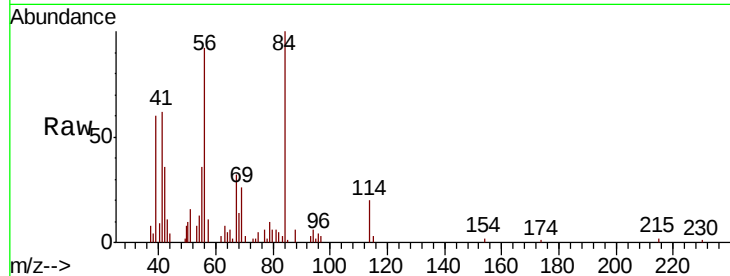
#30
Cvclohexane
Concen: 0.382 ppbv m
RT: 7.17 min Scan# 1363
Delta R.T. 0.01 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	112.6	169.0#
41	81.2	73.4	110.2

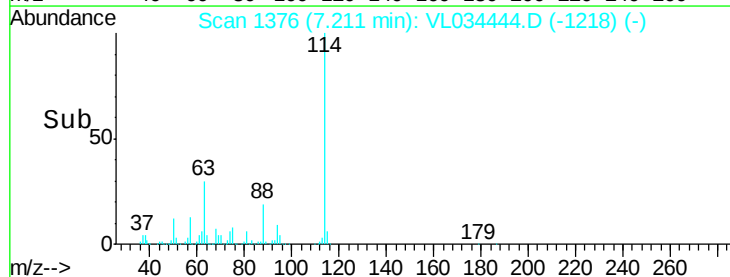
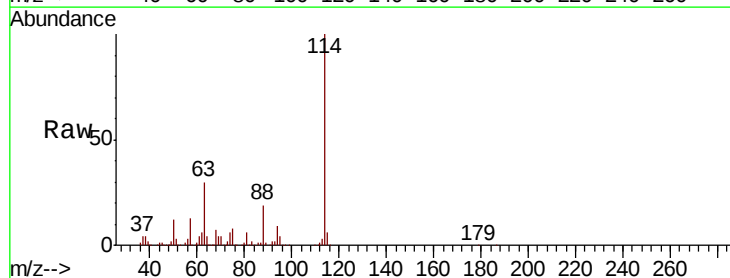
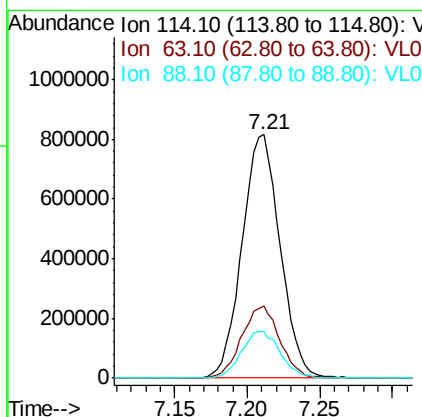
Manual Integrations
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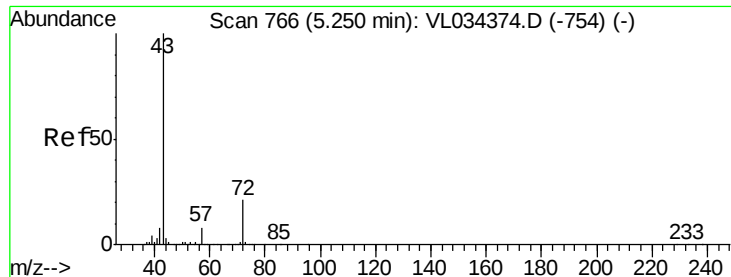
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.21 min Scan# 1376
Delta R.T. 0.01 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.7	24.2	36.4
88	19.6	15.9	23.9





#34

2-Butanone

Concen: 0.248 ppbv m

RT: 5.27 min Scan# 771

Delta R.T. 0.02 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion: 43 Resp: 30444

Ion Ratio Lower Upper

43 100

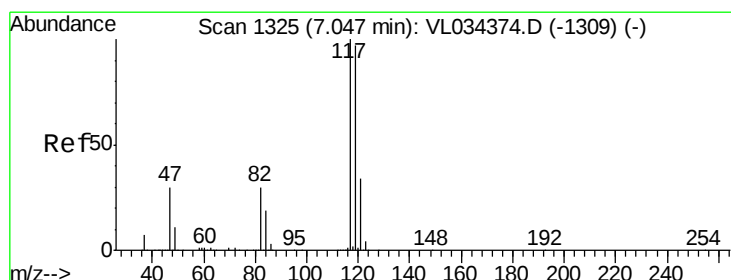
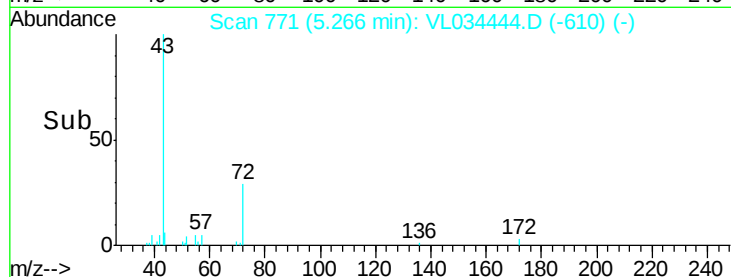
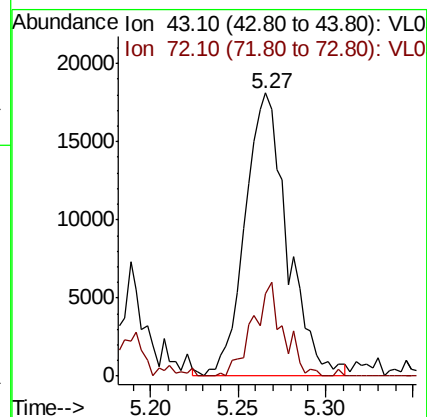
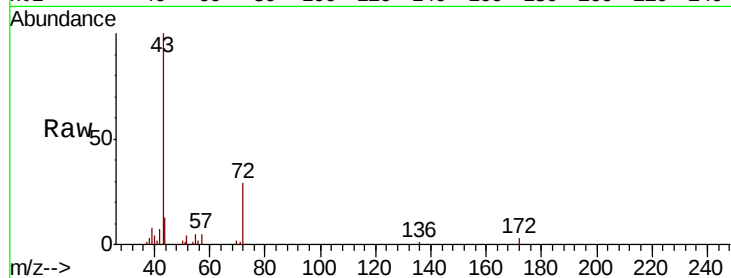
72 24.0 17.0 25.6

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#35

Carbon Tetrachloride

Concen: 0.080 ppbv m

RT: 7.05 min Scan# 1327

Delta R.T. 0.01 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

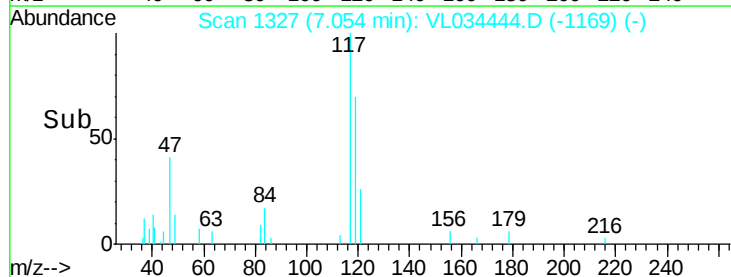
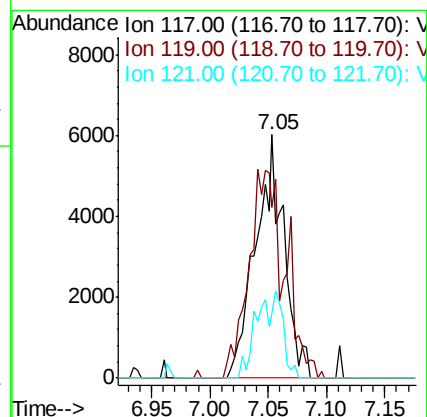
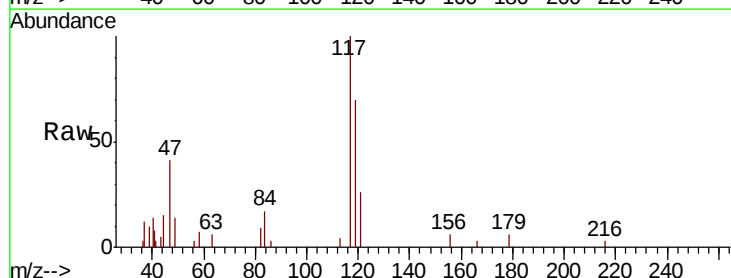
Tgt Ion: 117 Resp: 10309

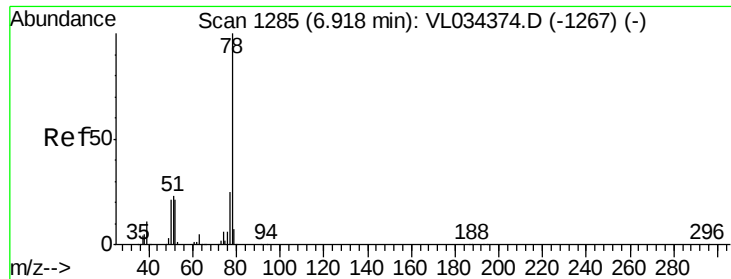
Ion Ratio Lower Upper

117 100

119 70.1 77.3 115.9#

121 26.3 27.4 41.2#





#36

Benzene

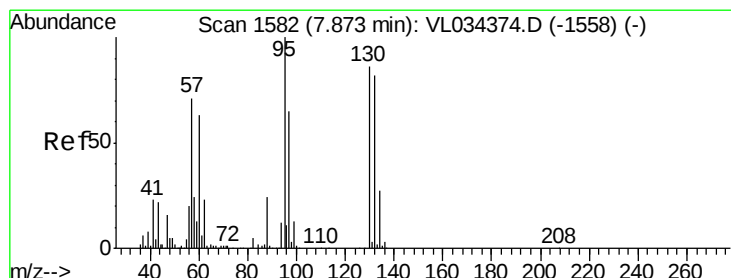
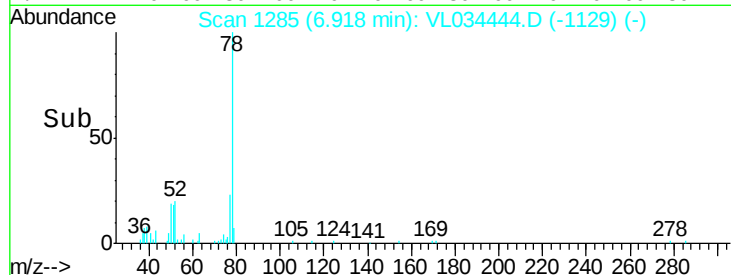
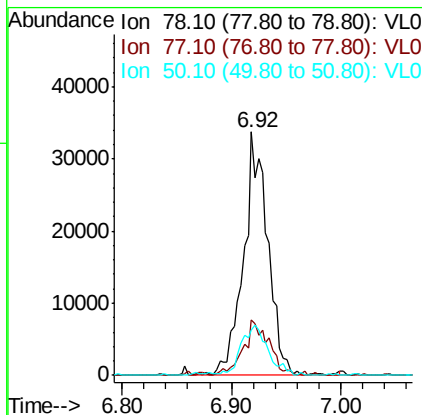
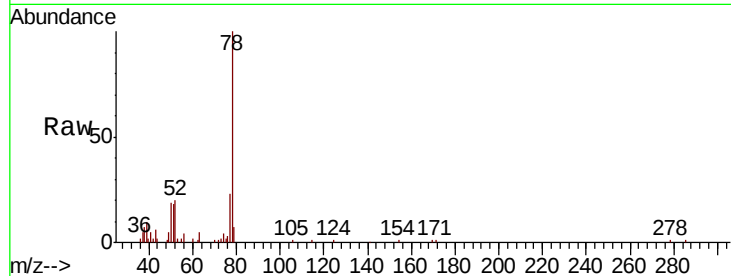
Concen: 0.348 ppbv m
RT: 6.92 min Scan# 1285
Delta R.T. 0.00 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Instrument :
MSVOA_L
ClientSampleId :
IA-2A

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.5	20.2	30.4
50	18.5	17.1	25.7

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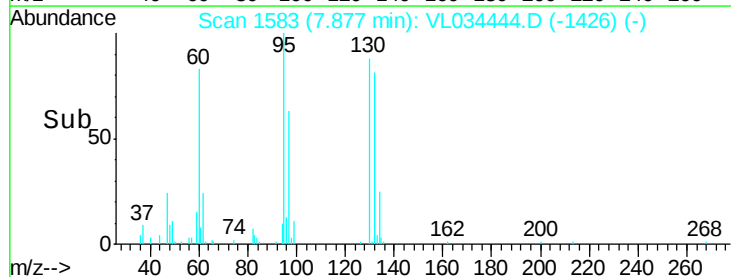
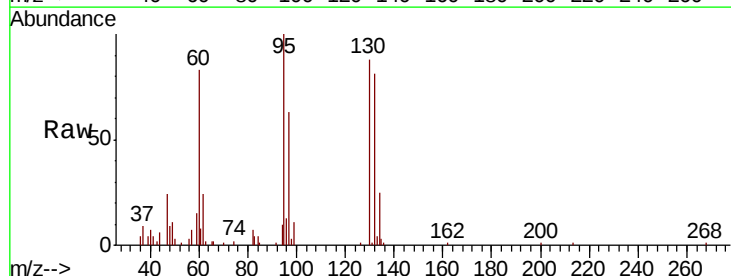
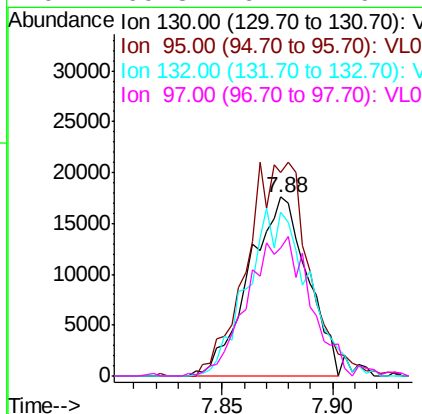


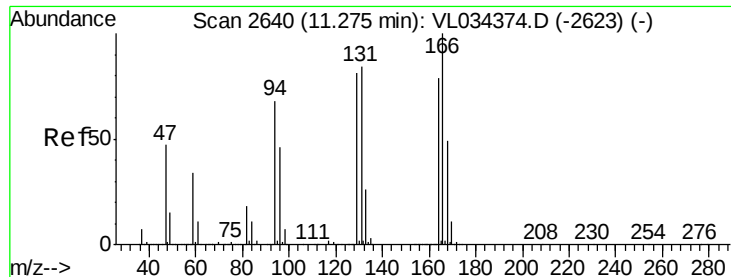
#38

Trichloroethene

Concen: 0.527 ppbv
RT: 7.88 min Scan# 1583
Delta R.T. 0.00 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Tgt Ion	Ratio	Lower	Upper
130	100		
95	112.8	93.4	140.0
132	91.0	76.4	114.6
97	69.3	61.1	91.7





#52

Tetrachloroethene

Concen: 0.068 ppbv m

RT: 11.28 min Scan# 2640

Delta R.T. 0.00 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampled :

IA-2A

Tot Ion:164 Resp: 4412

Ion Ratio Lower Upper

164 100

166 127.1 101.7 152.5

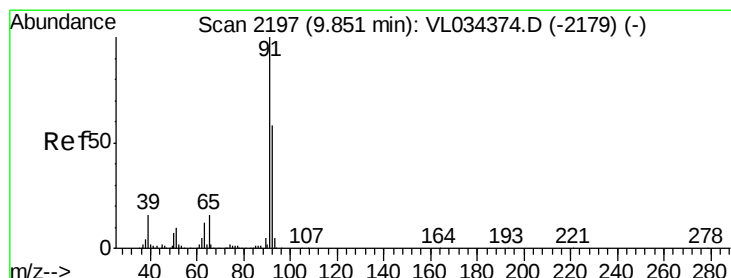
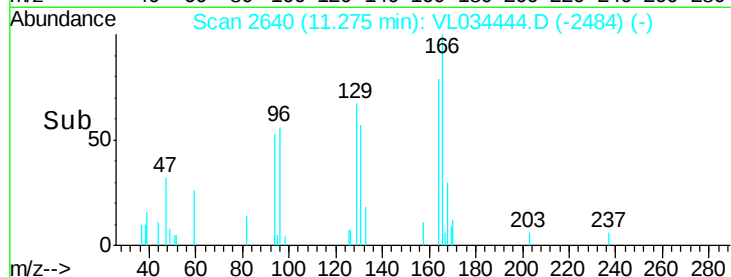
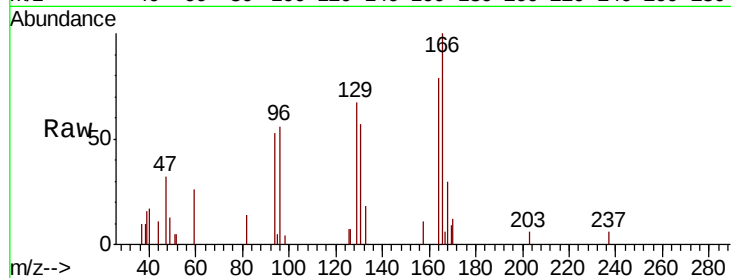
129 84.9 82.6 123.8

131 71.8 85.2 127.8#

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#53

Toluene

Concen: 0.827 ppbv m

RT: 9.86 min Scan# 2199

Delta R.T. 0.01 min

Lab File: VL034444.D

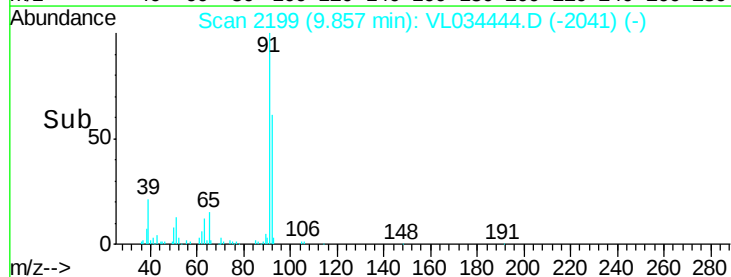
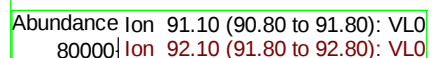
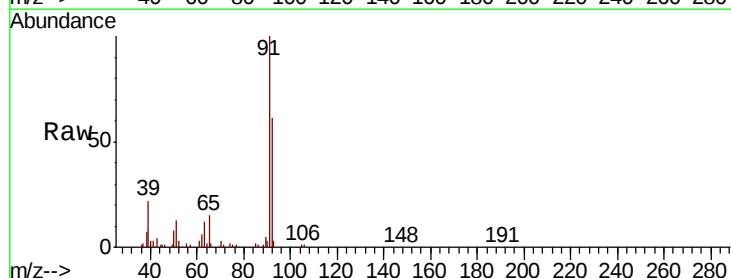
Acq: 3 Dec 2019 2:36

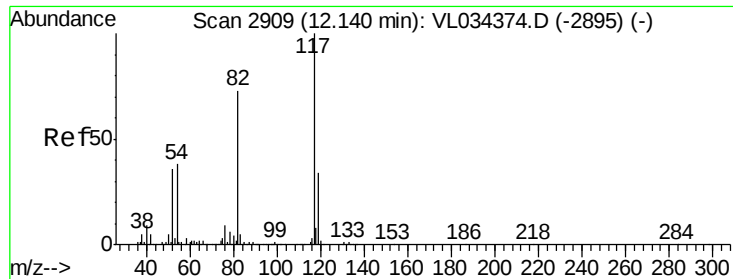
Tgt Ion: 91 Resp: 140005

Ion Ratio Lower Upper

91 100

92 58.2 47.9 71.9





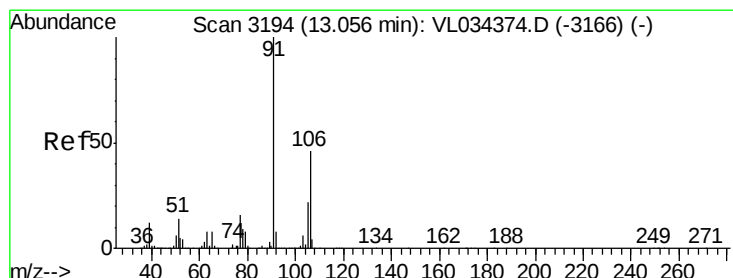
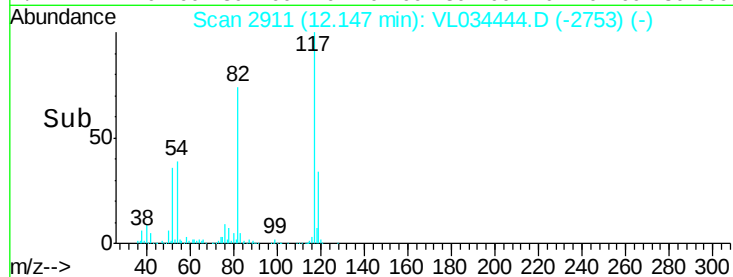
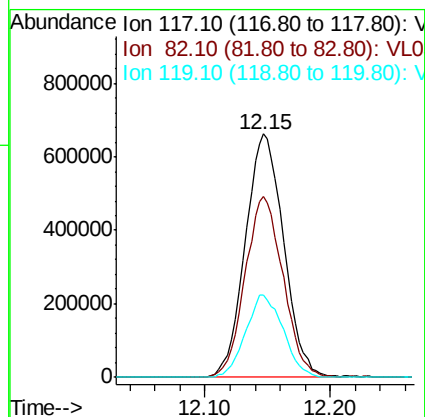
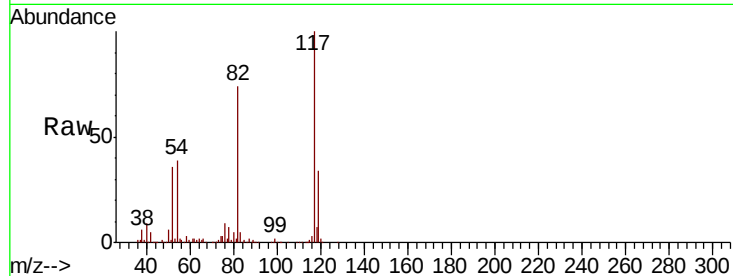
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2911
Delta R.T. 0.01 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion	Ratio	Lower	Upper
117	100		
82	74.0	57.5	86.3
119	33.3	25.4	38.2

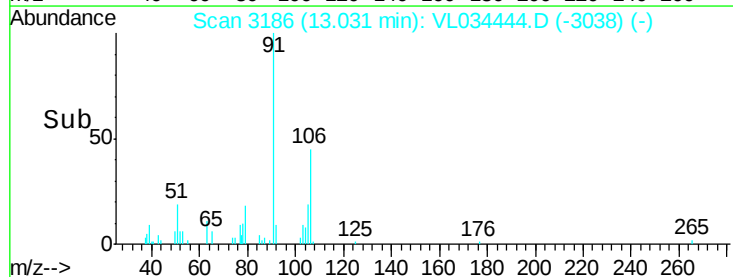
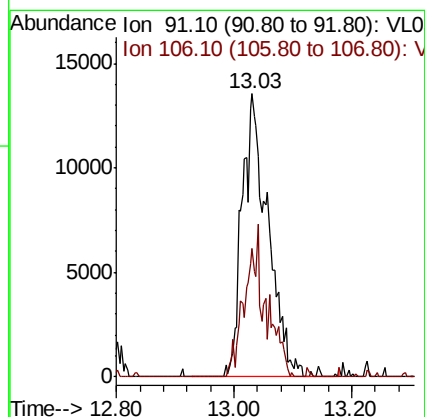
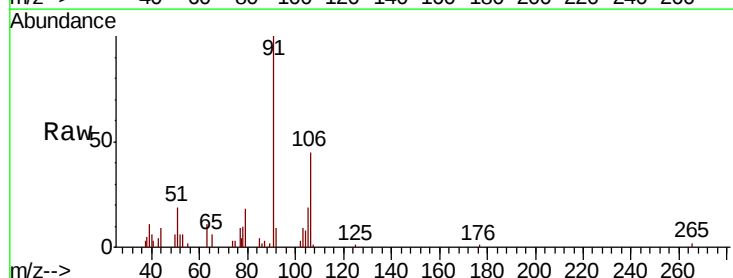
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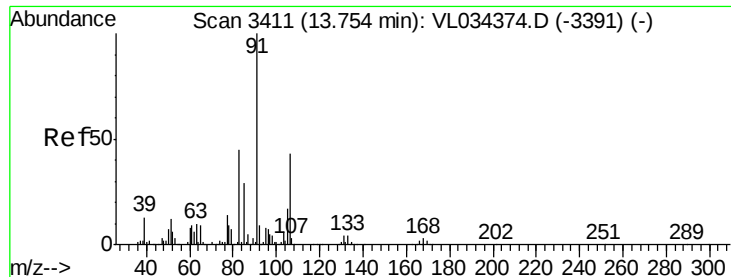
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#59
m/p-Xylene
Concen: 0.217 ppbv m
RT: 13.03 min Scan# 3186
Delta R.T. -0.03 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Tgt Ion	Ratio	Lower	Upper
91	100		
106	10.1	34.6	51.8#





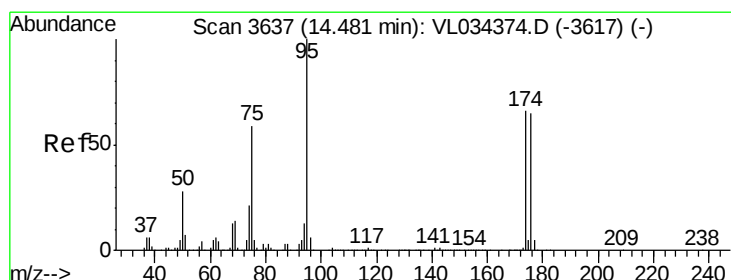
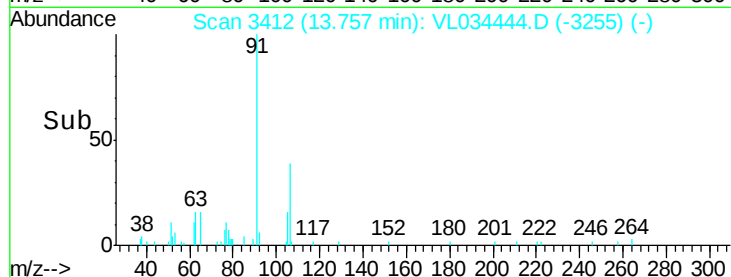
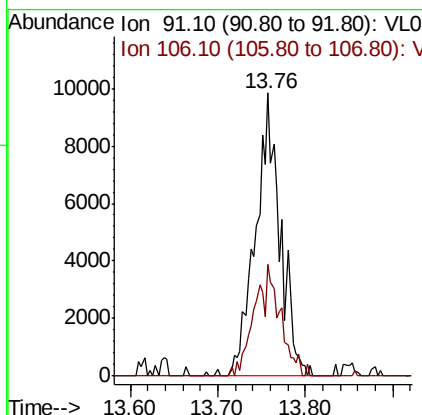
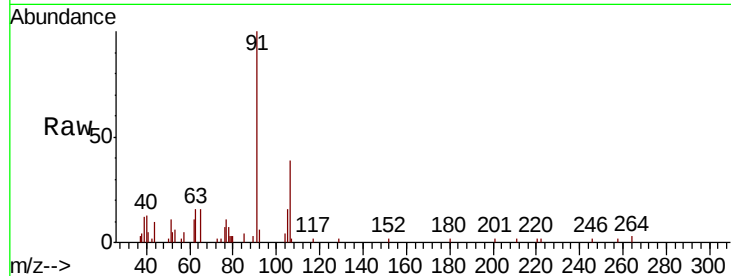
#60
o-Xylene
Concen: 0.103 ppbv m
RT: 13.76 min Scan# 3412
Delta R.T. 0.00 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Instrument :
MSVOA_L
ClientSampled :
IA-2A

Tot Ion: 91 Resp: 19298
Ion Ratio Lower Upper
91 100
106 41.0 21.3 64.0

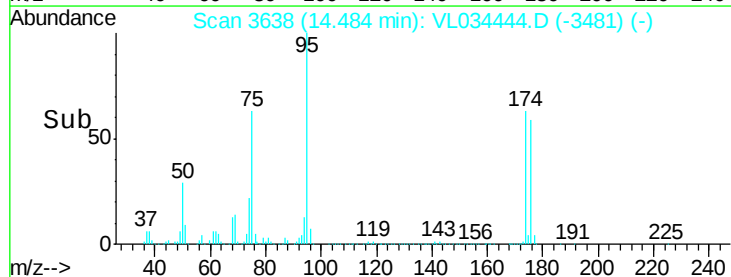
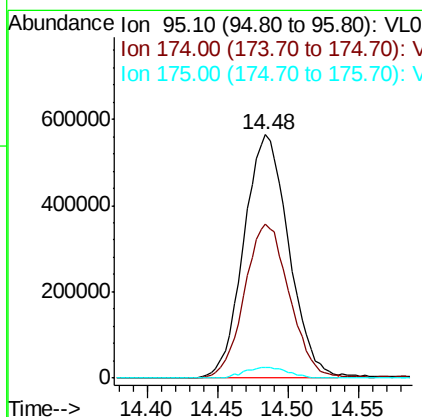
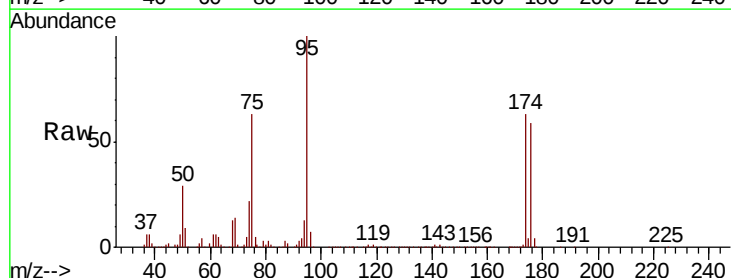
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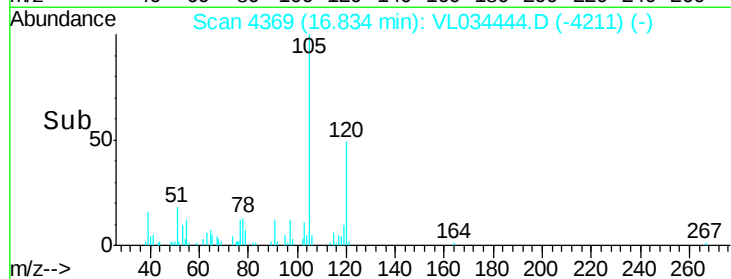
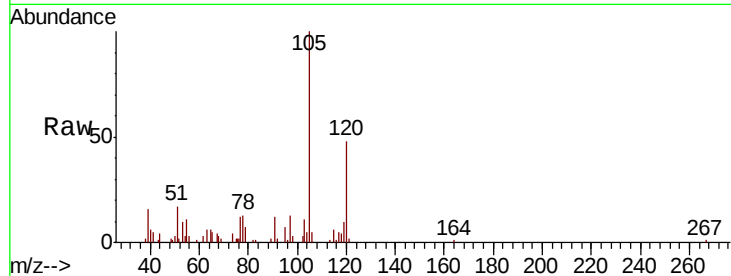
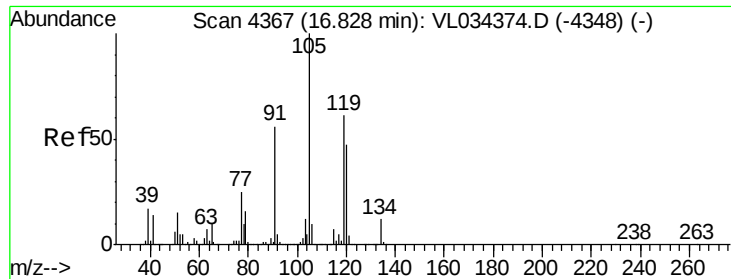
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.587 ppbv
RT: 14.48 min Scan# 3638
Delta R.T. 0.00 min
Lab File: VL034444.D
Acq: 3 Dec 2019 2:36

Tgt Ion: 95 Resp: 1256258
Ion Ratio Lower Upper
95 100
174 63.7 52.2 78.2
175 4.5 3.8 5.8





#74

1,2,4-Trimethylbenzene

Concen: 0.143 ppbv m

RT: 16.83 min Scan# 4369

Delta R.T. 0.01 min

Lab File: VL034444.D

Acq: 3 Dec 2019 2:36

Instrument :

MSVOA_L

ClientSampleId :

IA-2A

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	48.1	37.4	56.0
91	11.6	46.3	69.5#
77	11.9	20.6	30.8#

Manual Integrations
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