

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120919\
 Data File : VL034486.D
 Acq On : 10 Dec 2019 5:27
 Operator : SY/AP
 Sample : K6181-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 1A-4

Manual Integrations
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Quant Time: Dec 11 12:09:30 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

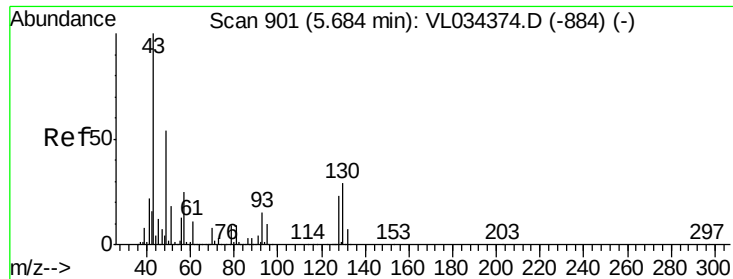
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	815988	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	1637209	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1605981	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.47	95	1398902	10.35	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	65389	0.443	ppbv	90
3) Chlorodifluoromethane	2.96	51	475496	4.670	ppbv	99
4) Chloromethane	3.11	50	29875	0.497	ppbv	98
9) Propene	2.99	41	73787	1.632	ppbv	84
10) Heptane	8.15	43	41637	0.357	ppbv	96
11) Trichlorofluoromethane	3.93	101	58041	0.395	ppbv	86
13) Ethanol	3.59	45	406960	32.322	ppbv	97
15) Acetone	3.83	43	734333m	6.285	ppbv	
19) Isopropyl Alcohol	3.96	45	100960	1.348	ppbv #	1
20) Methylene Chloride	4.33	84	146435	3.534	ppbv	93
26) Hexane	5.69	57	164929	1.841	ppbv #	44
30) Cyclohexane	7.16	84	18470m	0.273	ppbv	
34) 2-Butanone	5.25	43	82636	0.613	ppbv	100
35) Carbon Tetrachloride	7.04	117	9527m	0.068	ppbv	
36) Benzene	6.91	78	153404	0.937	ppbv #	93
38) Trichloroethene	7.86	130	10105m	0.150	ppbv	
44) 2,2,4-Trimethylpentane	7.90	57	114163	0.382	ppbv #	81
52) Tetrachloroethene	11.26	164	10362m	0.146	ppbv	
53) Toluene	9.84	91	946208	5.090	ppbv	98
58) Ethyl Benzene	12.76	91	135148	0.542	ppbv	99
59) m/p-Xylene	13.01	91	429739m	1.995	ppbv	
60) o-Xylene	13.74	91	117860m	0.553	ppbv	
74) 1,2,4-Trimethylbenzene	16.82	105	72957m	0.285	ppbv	

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.01 min

Lab File: VL034486.D

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Instrument :

MSVOA_L

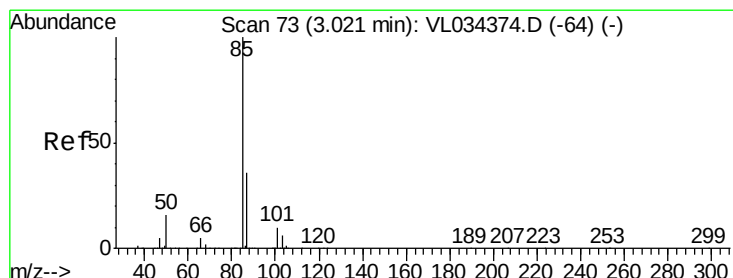
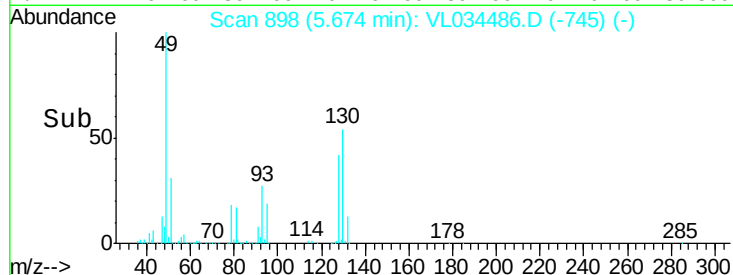
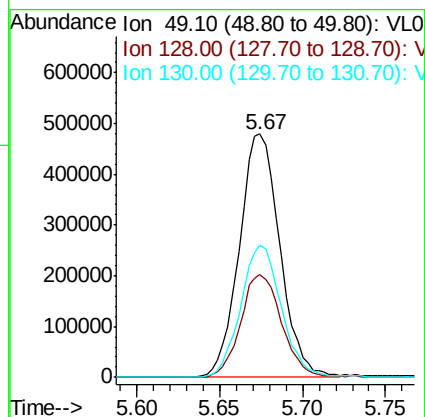
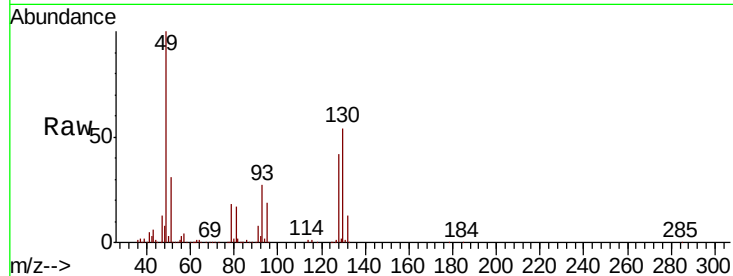
ClientSampled :

1A-4

Tot Ion:	49	Resp:	815988
Ion	Ratio	Lower	Upper
49	100		
128	43.2	21.8	65.3
130	54.9	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 0.443 ppbv

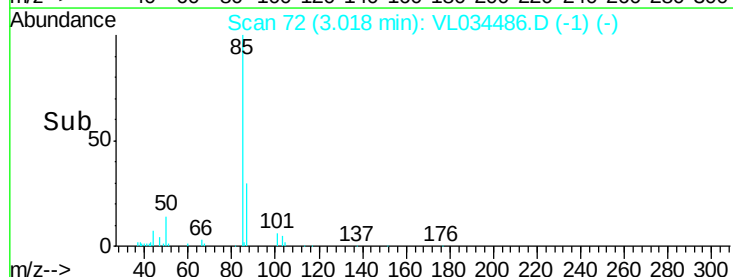
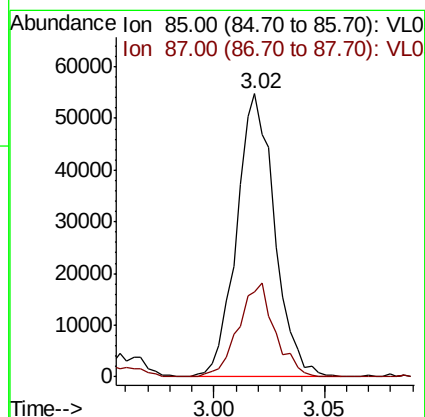
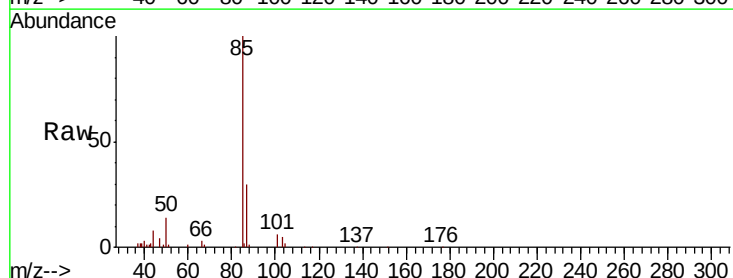
RT: 3.02 min Scan# 72

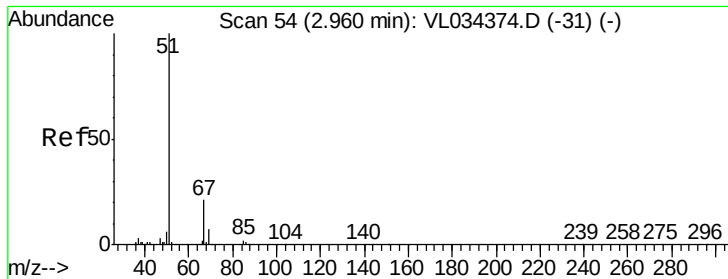
Delta R.T. -0.00 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Tgt Ion:	85	Resp:	65389
Ion	Ratio	Lower	Upper
85	100		
87	29.8	28.5	42.7





#3

Chlorodifluoromethane

Concen: 4.670 ppbv

RT: 2.96 min Scan# 53

Delta R.T. -0.00 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Instrument :

MSVOA_L

ClientSampled :

1A-4

Tot Ion: 51 Resp: 475496

Ion Ratio Lower Upper

51 100

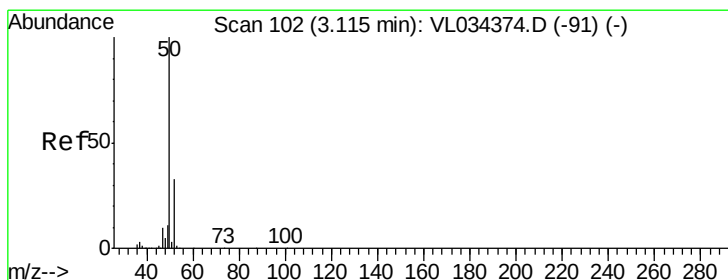
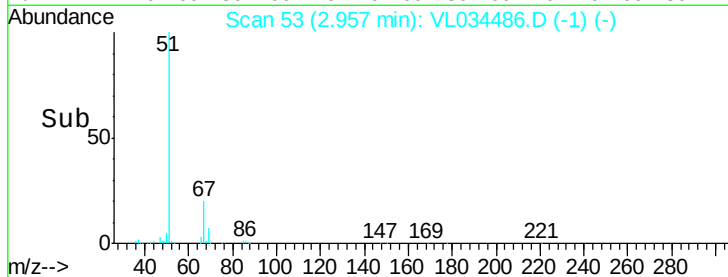
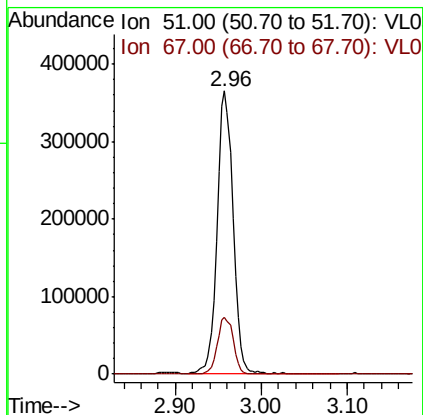
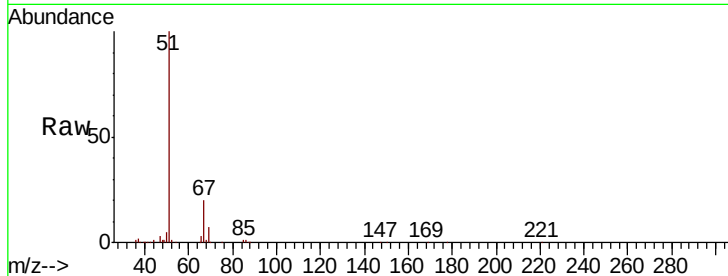
67 19.9 16.2 24.2

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#4

Chloromethane

Concen: 0.497 ppbv

RT: 3.11 min Scan# 102

Delta R.T. 0.00 min

Lab File: VL034486.D

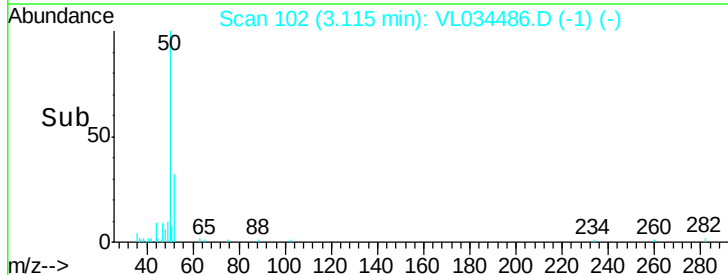
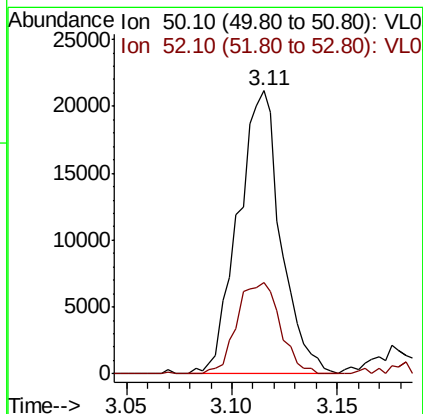
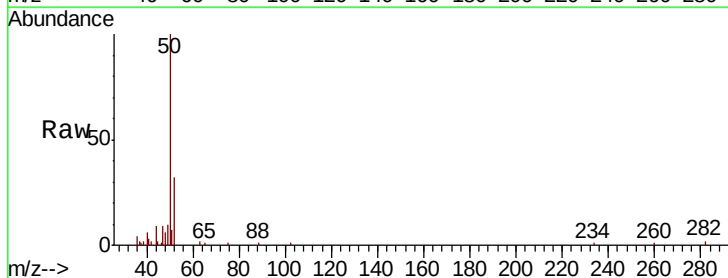
Acq: 10 Dec 2019 5:27

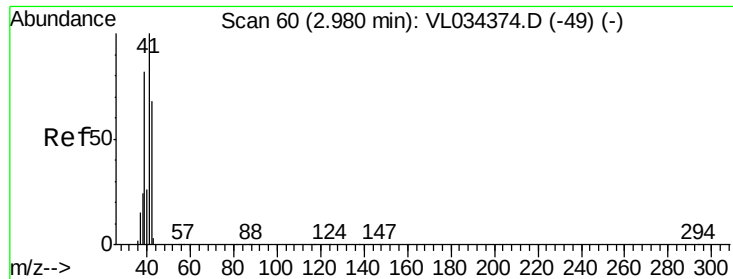
Tgt Ion: 50 Resp: 29875

Ion Ratio Lower Upper

50 100

52 32.5 26.8 40.2





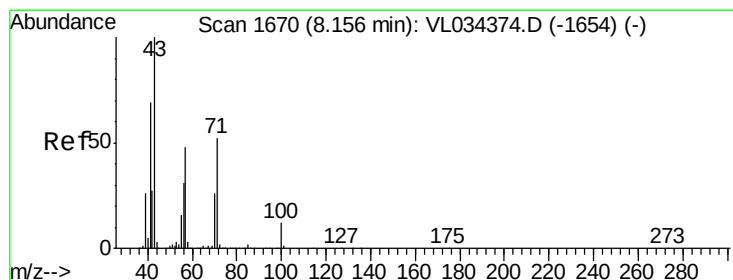
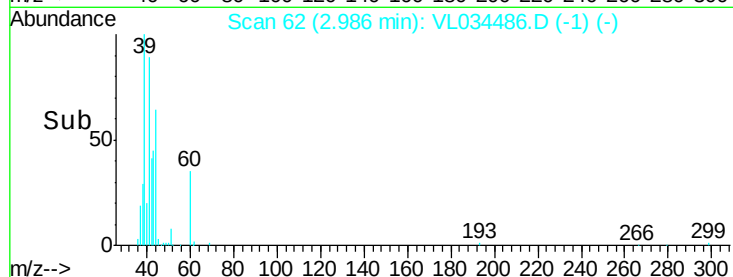
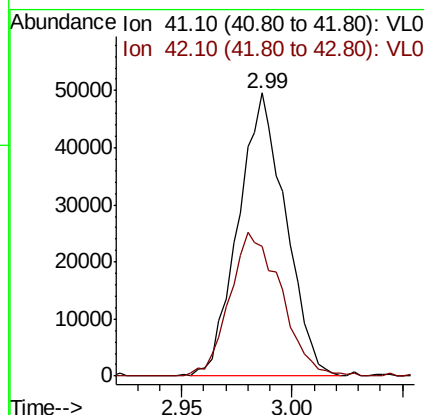
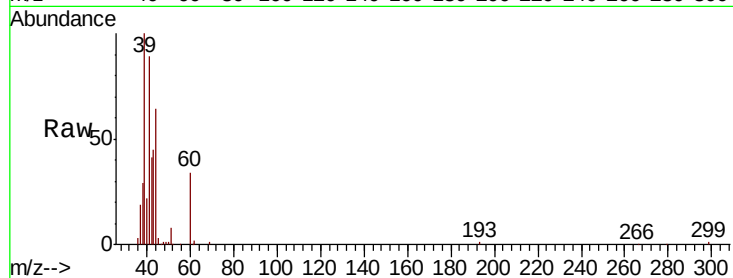
#9
 Propene
 Concen: 1.632 ppbv
 RT: 2.99 min Scan# 62
 Delta R.T. 0.01 min
 Lab File: VL034486.D
 Acq: 10 Dec 2019 5:27

Instrument :
 MSVOA_L
 ClientSampled :
 1A-4

Tot Ion	41	Resp	73787
Ion Ratio	Lower	Upper	
41	100		
42	55.6	54.6	82.0

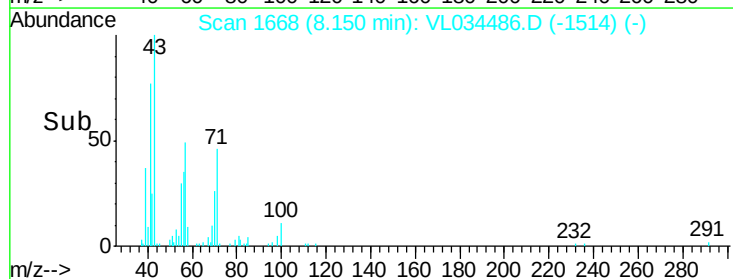
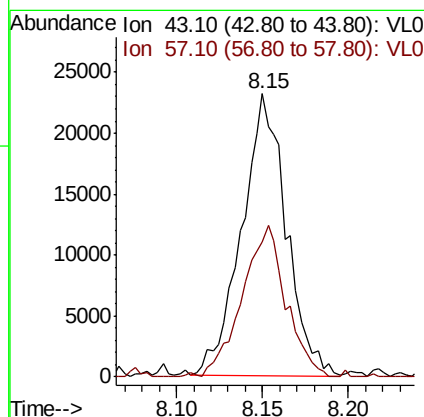
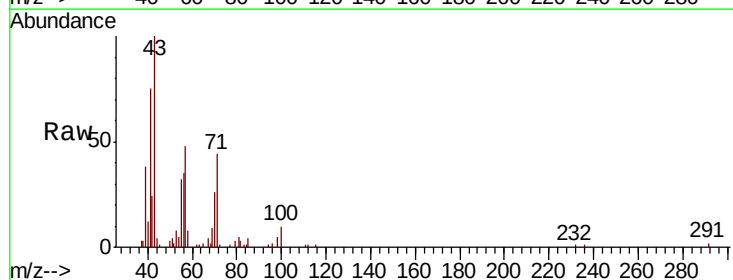
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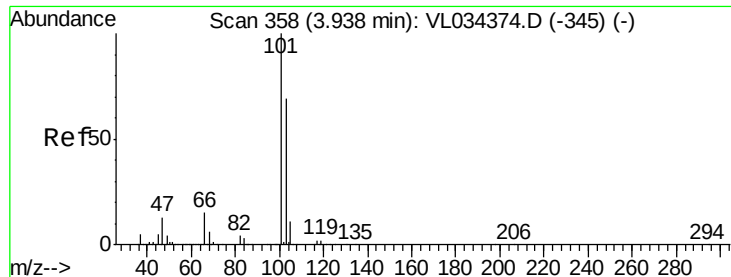
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#10
 Heptane
 Concen: 0.357 ppbv
 RT: 8.15 min Scan# 1668
 Delta R.T. -0.01 min
 Lab File: VL034486.D
 Acq: 10 Dec 2019 5:27

Tgt Ion	43	Resp	41637
Ion Ratio	Lower	Upper	
43	100		
57	53.0	40.2	60.2





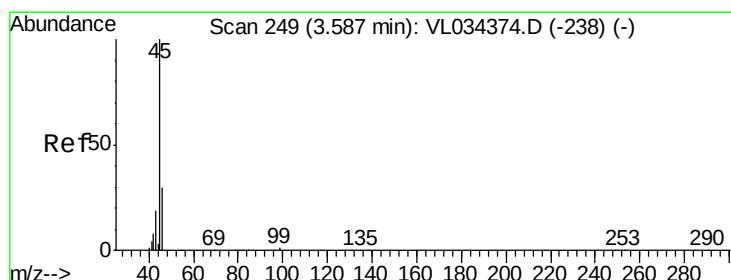
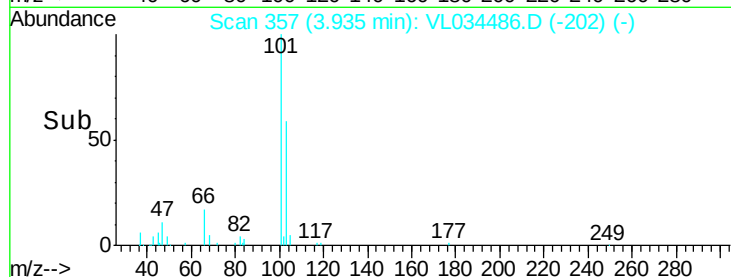
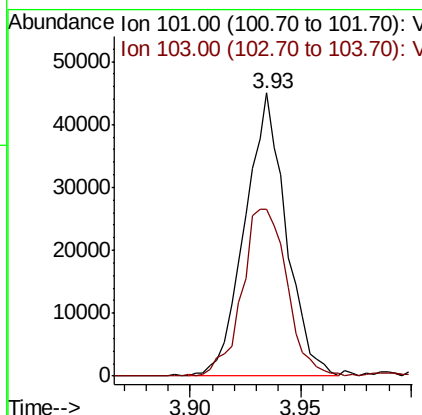
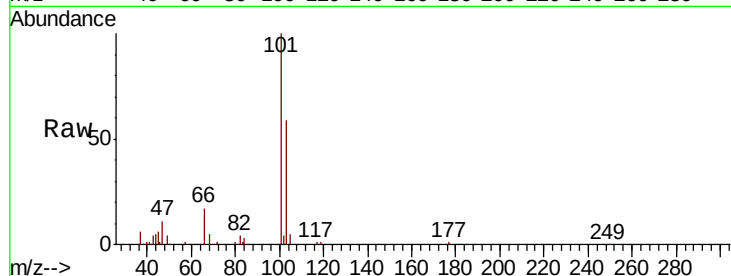
#11
Trichlorofluoromethane
Concen: 0.395 ppbv
RT: 3.93 min Scan# 357
Delta R.T. -0.00 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Instrument :
MSVOA_L
ClientSampled :
1A-4

Tot Ion	Ratio	Lower	Upper
101	100		
103	58.1	55.4	83.0

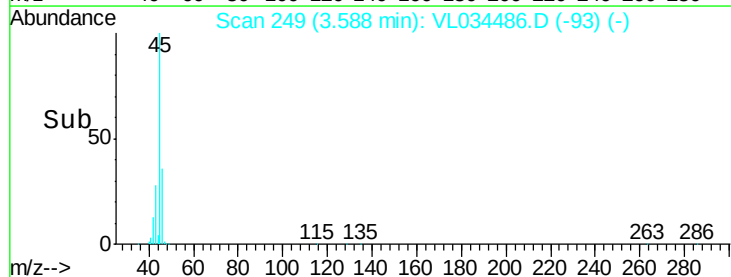
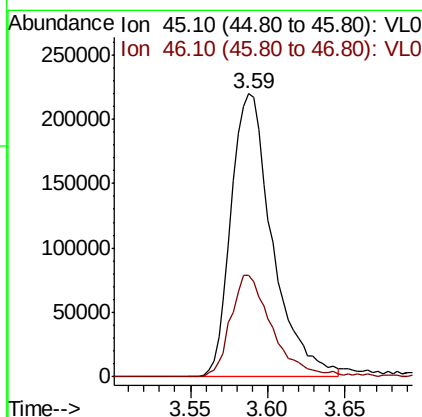
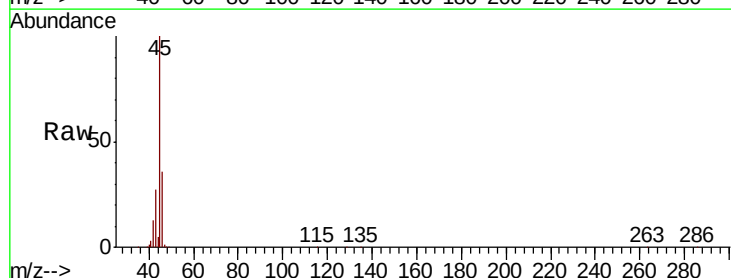
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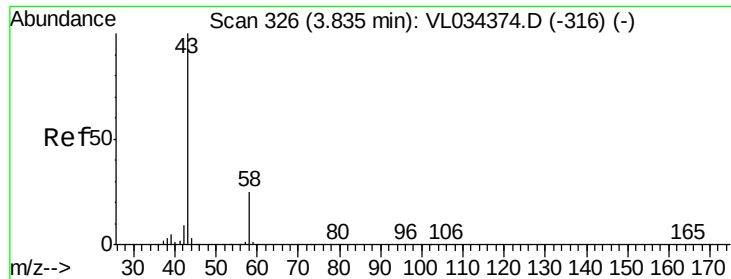
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#13
Ethanol
Concen: 32.322 ppbv
RT: 3.59 min Scan# 249
Delta R.T. 0.00 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.5	13.8	55.4





#15

Acetone

Concen: 6.285 ppbv m

RT: 3.83 min Scan# 325

Delta R.T. -0.00 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Tot Ion: 43 Resp: 734333

Ion Ratio Lower Upper

43 100

58 24.9 20.2 30.4

Instrument :

MSVOA_L

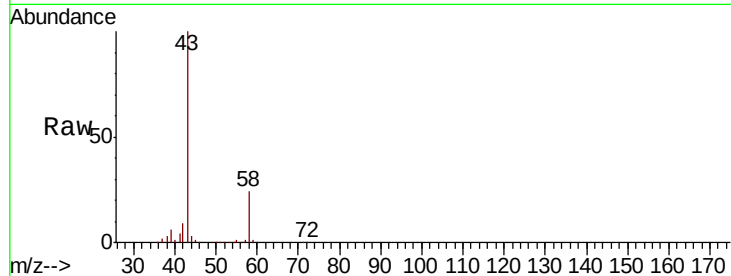
ClientSampled :

1A-4

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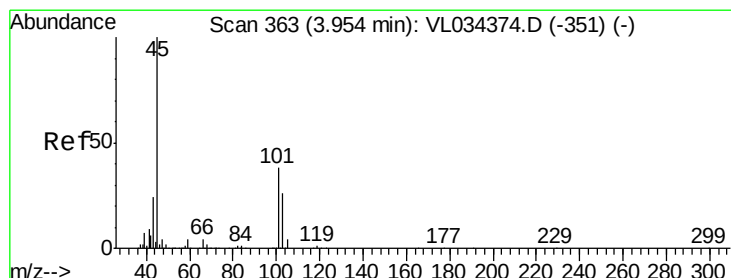
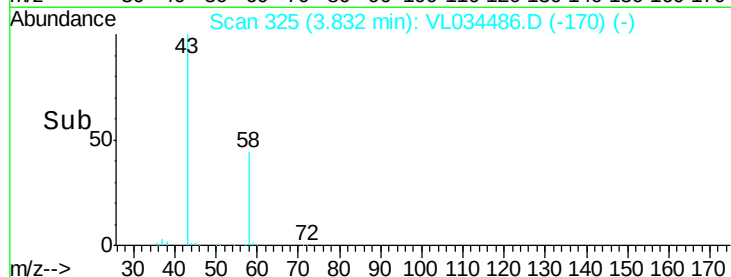
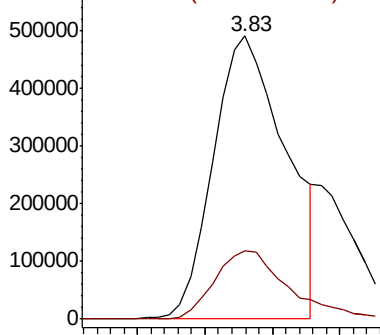
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#19

Isopropyl Alcohol

Concen: 1.348 ppbv

RT: 3.96 min Scan# 365

Delta R.T. 0.01 min

Lab File: VL034486.D

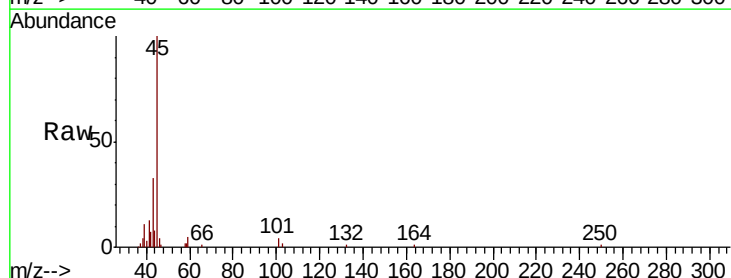
Acq: 10 Dec 2019 5:27

Tgt Ion: 45 Resp: 100960

Ion Ratio Lower Upper

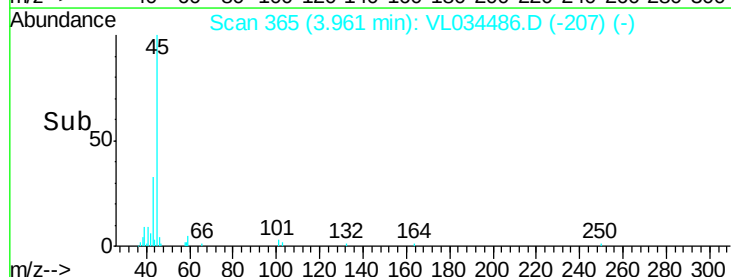
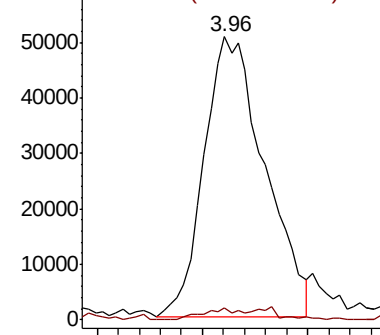
45 100

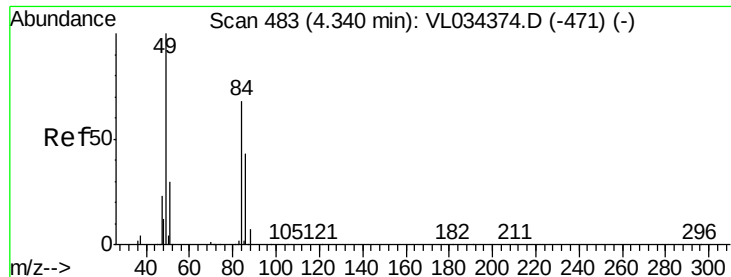
58 180.4 1.3 1.9#



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0





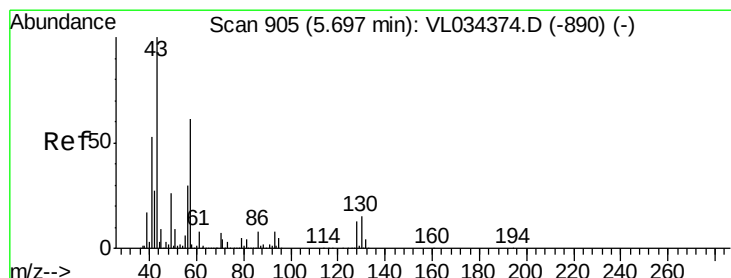
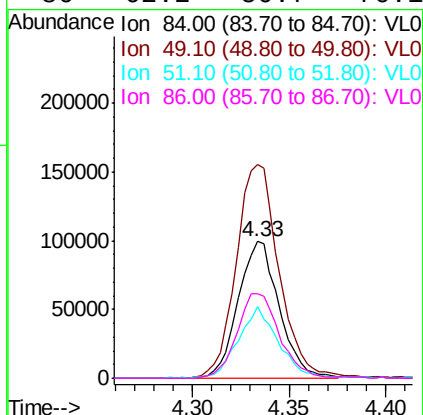
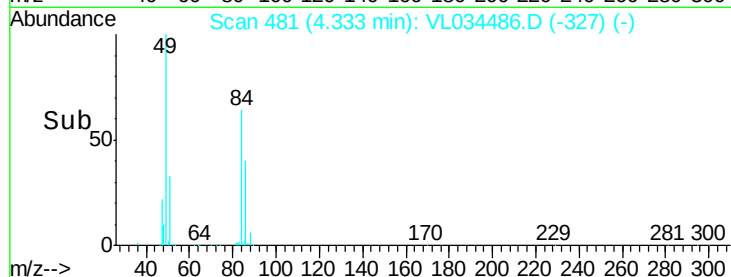
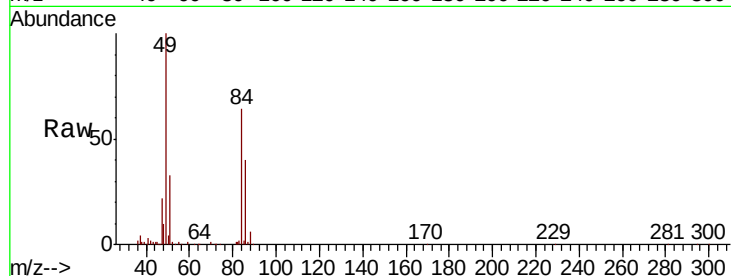
#20
Methylene Chloride
Concen: 3.534 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Instrument :
MSVOA_L
ClientSampled :
1A-4

Tot Ion	Ratio	Lower	Upper
84	100		
49	156.2	116.8	175.2
51	51.8	35.6	53.4
86	62.2	50.7	76.1

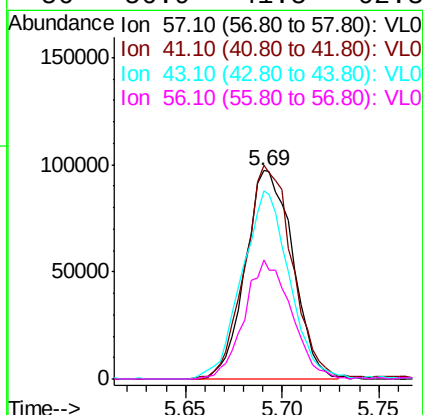
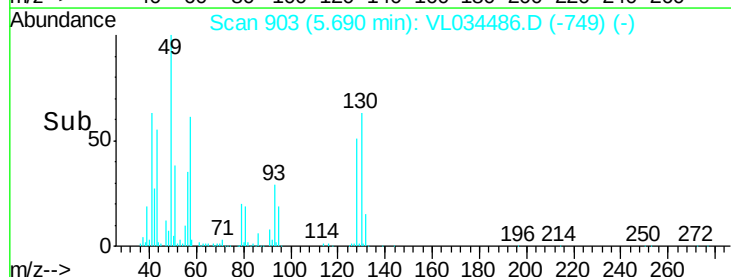
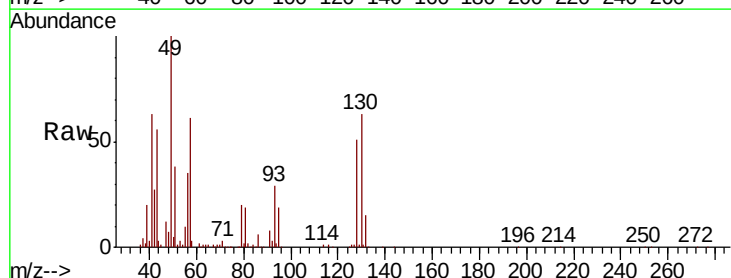
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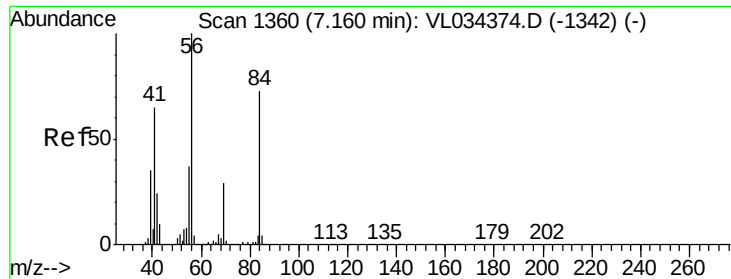
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#26
Hexane
Concen: 1.841 ppbv
RT: 5.69 min Scan# 903
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Tgt Ion	Ratio	Lower	Upper
57	100		
41	103.7	75.0	112.4
43	91.1	186.6	279.8#
56	56.9	41.5	62.3





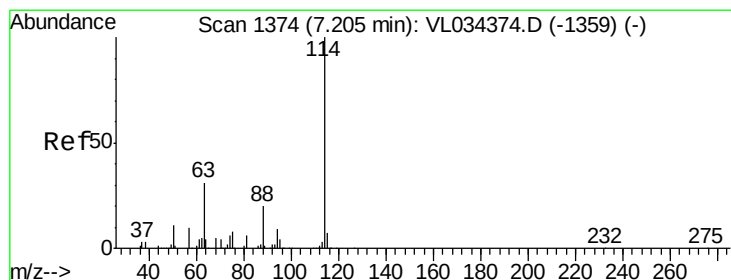
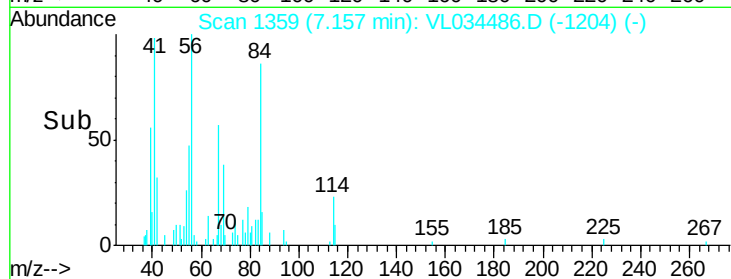
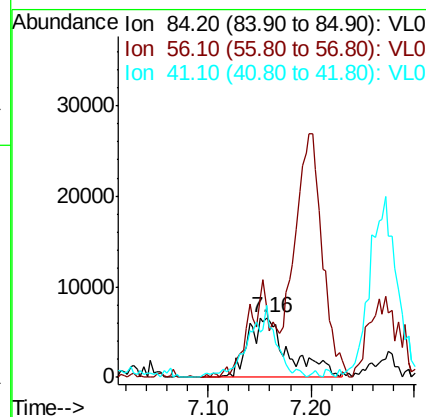
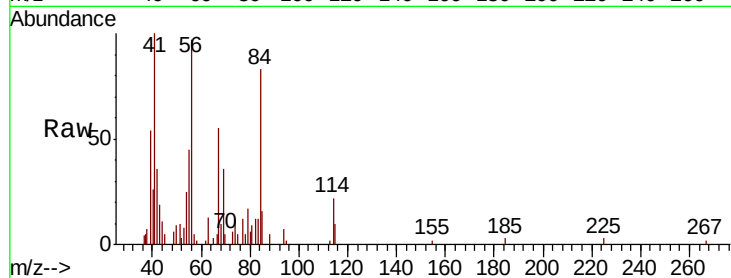
#30
Cyclohexane
Concen: 0.273 ppbv m
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Instrument :
MSVOA_L
ClientSampled :
1A-4

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

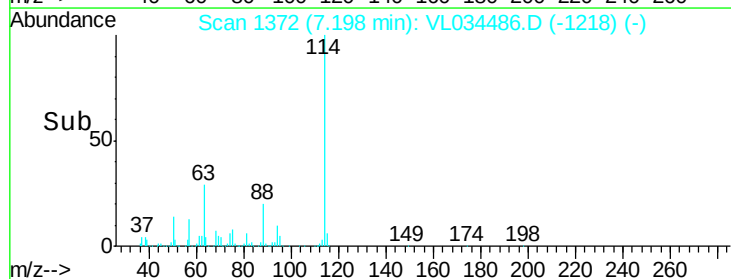
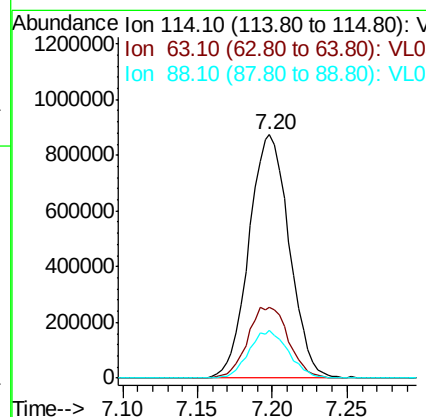
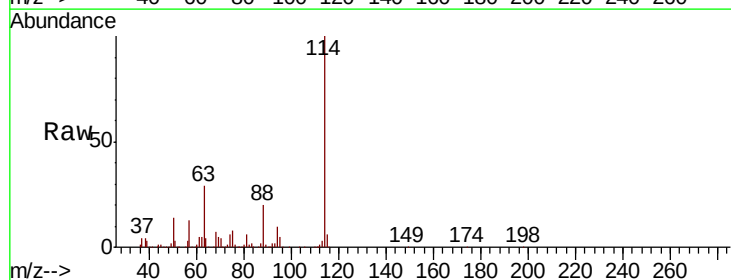
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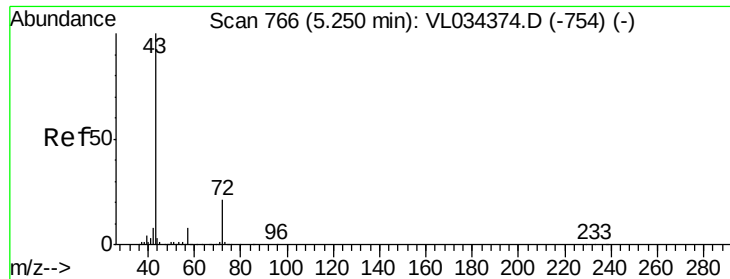
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1372
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.6	24.2	36.4
88	19.1	15.9	23.9





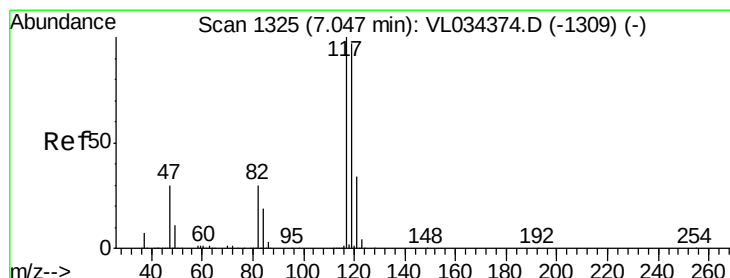
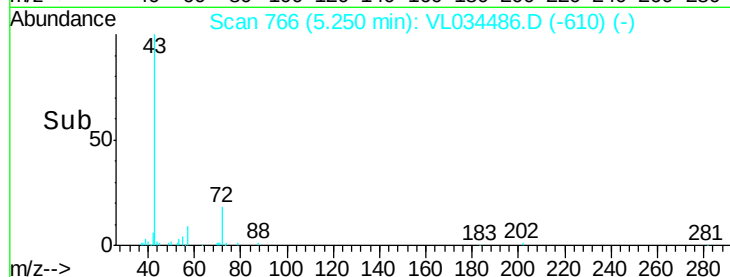
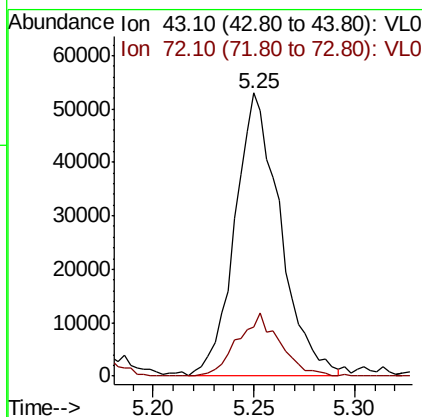
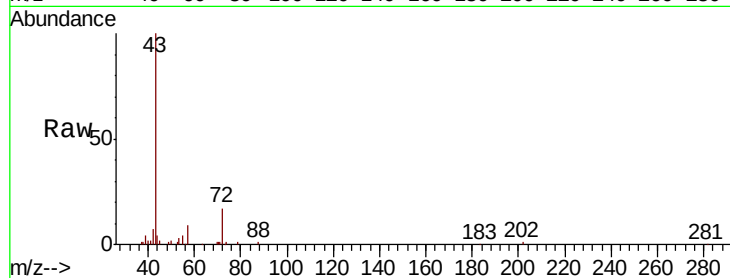
#34
2-Butanone
Concen: 0.613 ppbv
RT: 5.25 min Scan# 766
Delta R.T. 0.00 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Instrument :
MSVOA_L
ClientSampled :
1A-4

Tot Ion	43	Resp	82636
Ion Ratio	Lower	Upper	
43	100		
72	21.1	17.0	25.6

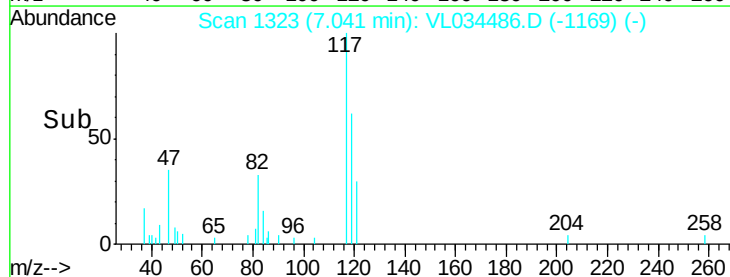
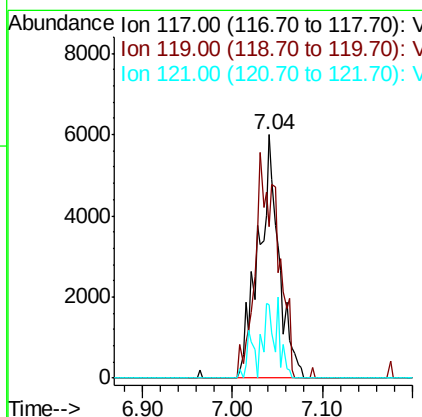
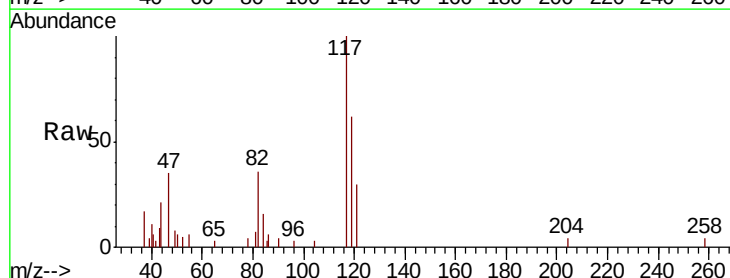
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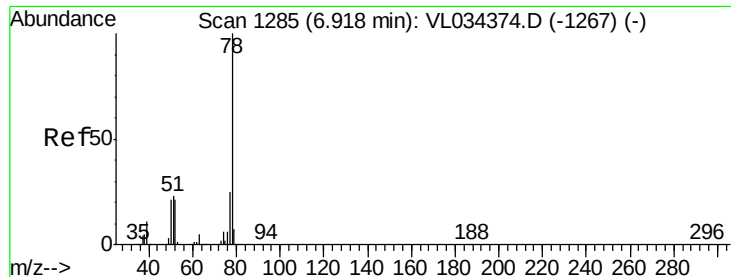
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#35
Carbon Tetrachloride
Concen: 0.068 ppbv m
RT: 7.04 min Scan# 1323
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Tgt Ion	117	Resp	9527
Ion Ratio	Lower	Upper	
117	100		
119	62.3	77.3	115.9#
121	30.3	27.4	41.2





#36

Benzene

Concen: 0.937 ppbv

RT: 6.91 min Scan# 1283

Delta R.T. -0.01 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Instrument :

MSVOA_L

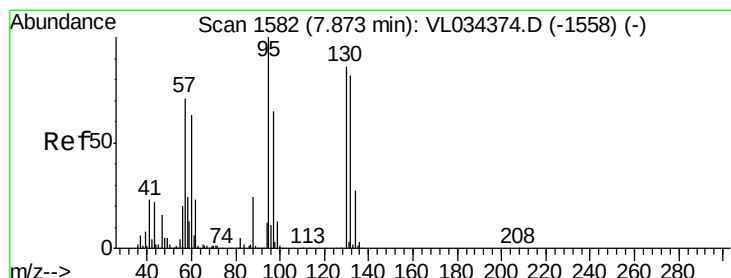
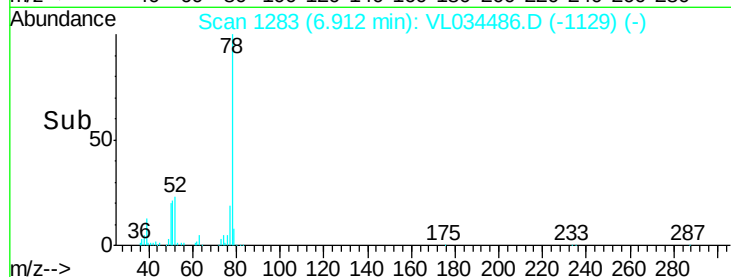
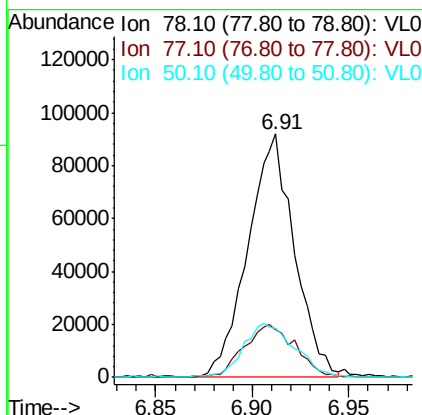
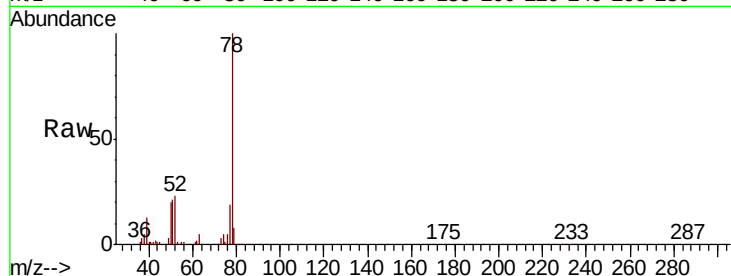
ClientSampled :

1A-4

Tot Ion:	78	Resp:	153404
Ion Ratio	Lower	Upper	
78	100		
77	19.4	20.2	30.4#
50	20.6	17.1	25.7

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#38

Trichloroethene

Concen: 0.150 ppbv m

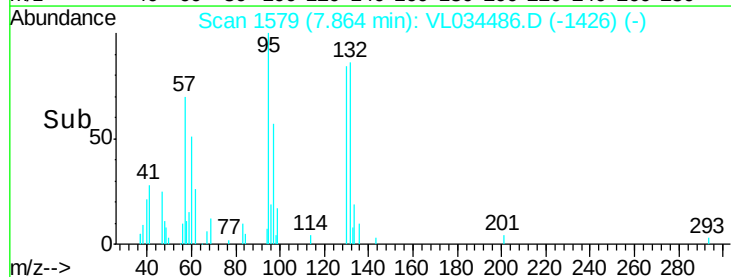
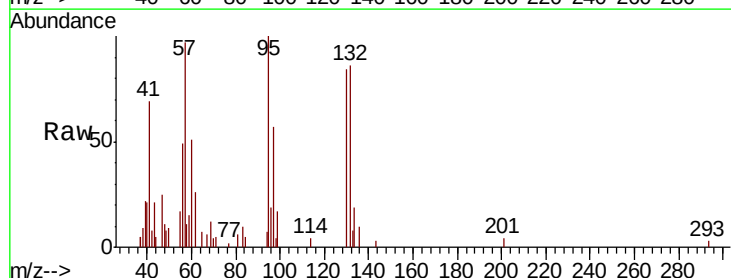
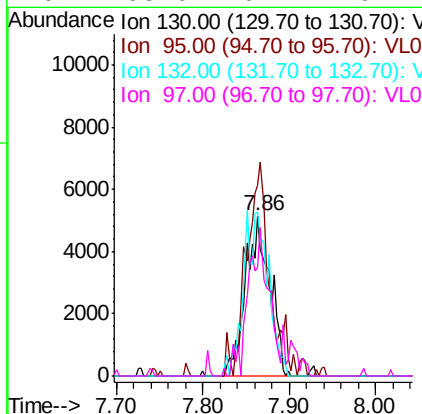
RT: 7.86 min Scan# 1579

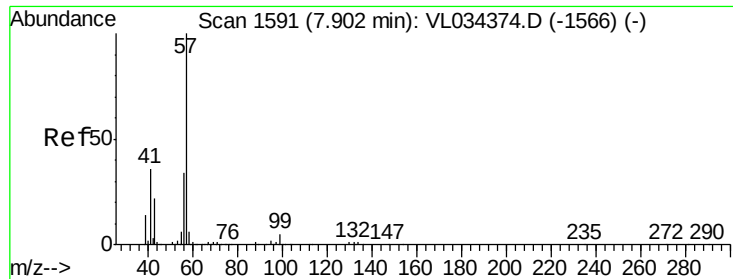
Delta R.T. -0.01 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Tgt Ion:	130	Resp:	10105
Ion Ratio	Lower	Upper	
130	100		
95	118.8	93.4	140.0
132	102.1	76.4	114.6
97	68.0	61.1	91.7





#44

2,2,4-Trimethylpentane

Concen: 0.382 ppbv

RT: 7.90 min Scan# 1590

Delta R.T. -0.00 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Instrument :

MSVOA_L

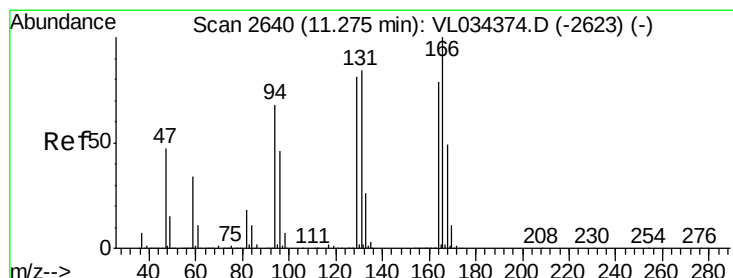
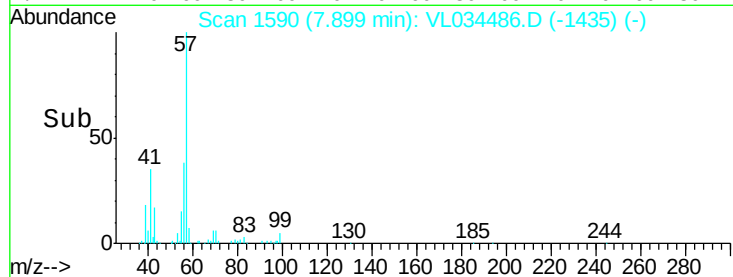
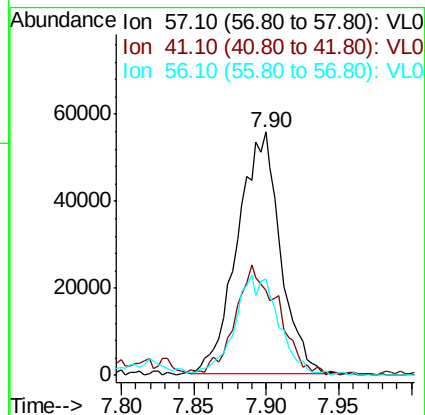
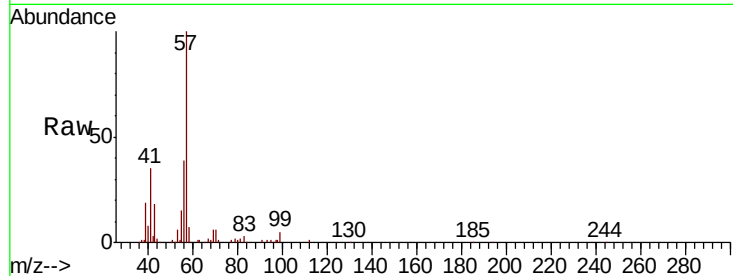
ClientSampled :

1A-4

Tot Ion:	57	Resp:	114163
Ion Ratio	Lower	Upper	
57	100		
41	47.0	28.6	42.8#
56	42.4	25.3	37.9#

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#52

Tetrachloroethene

Concen: 0.146 ppbv m

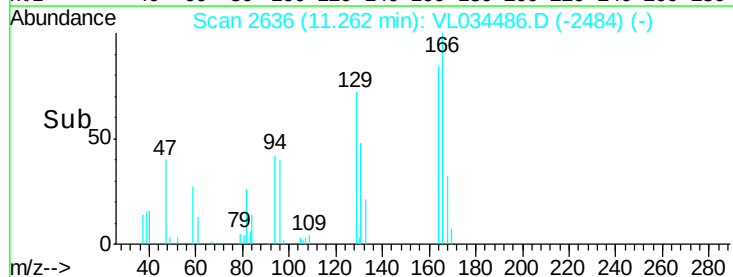
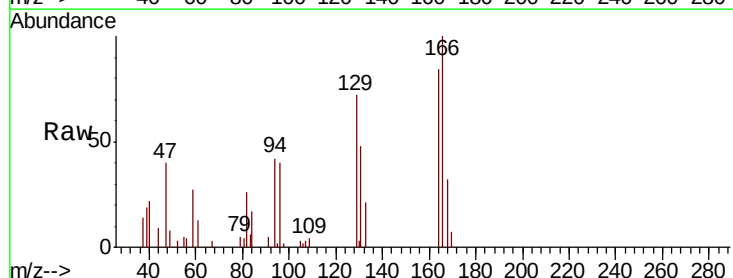
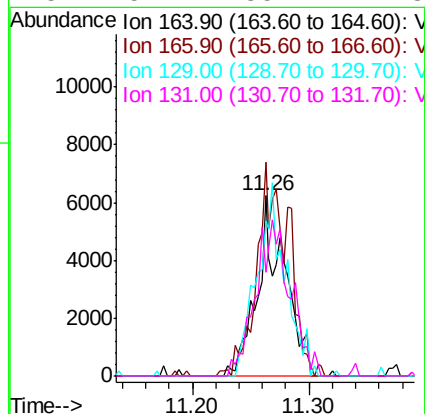
RT: 11.26 min Scan# 2636

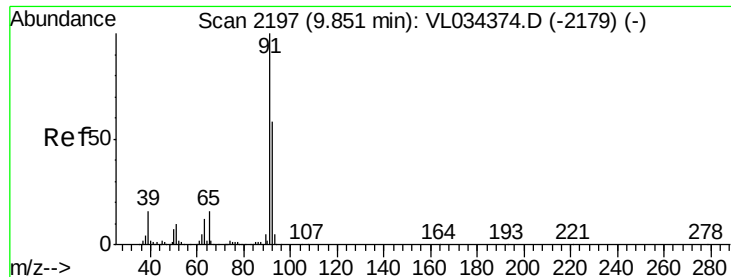
Delta R.T. -0.01 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Tgt Ion:	164	Resp:	10362
Ion Ratio	Lower	Upper	
164	100		
166	118.7	101.7	152.5
129	85.9	82.6	123.8
131	57.4	85.2	127.8#





#53

Toluene

Concen: 5.090 ppbv

RT: 9.84 min Scan# 2194

Delta R.T. -0.01 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Instrument :

MSVOA_L

ClientSampled :

1A-4

Tot Ion: 91 Resp: 946208

Ion Ratio Lower Upper

91 100

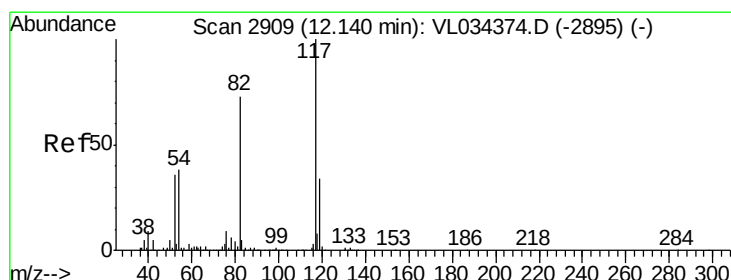
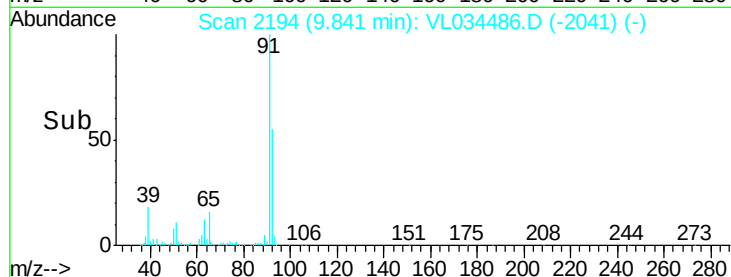
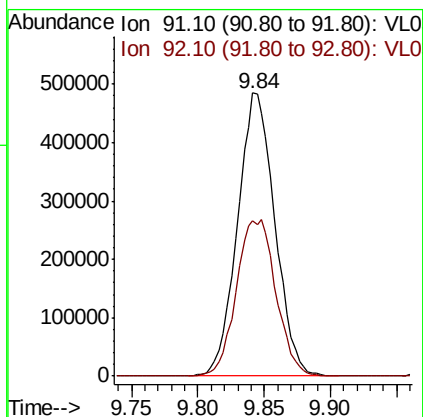
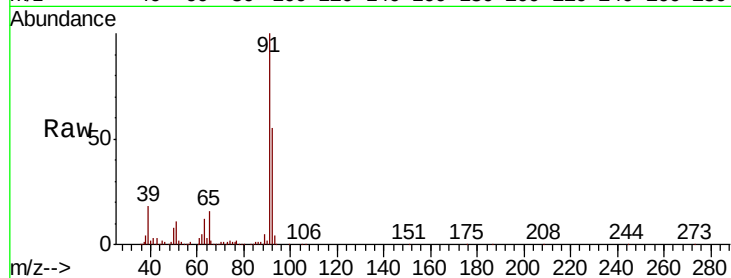
92 58.5 47.9 71.9

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2907

Delta R.T. -0.01 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

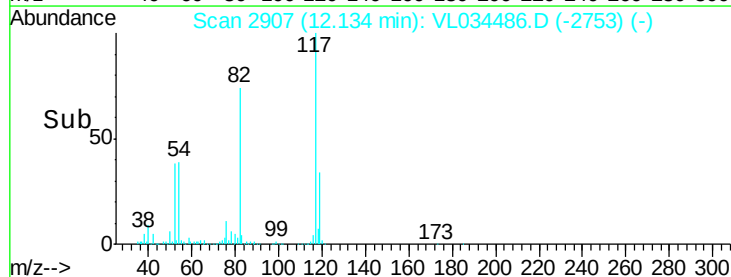
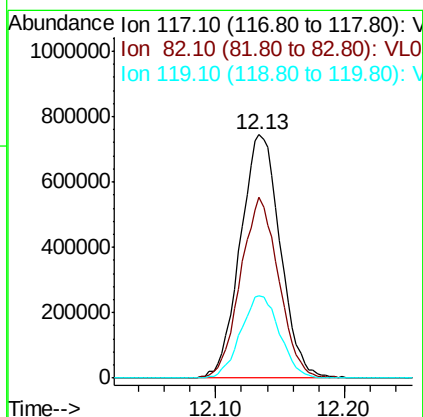
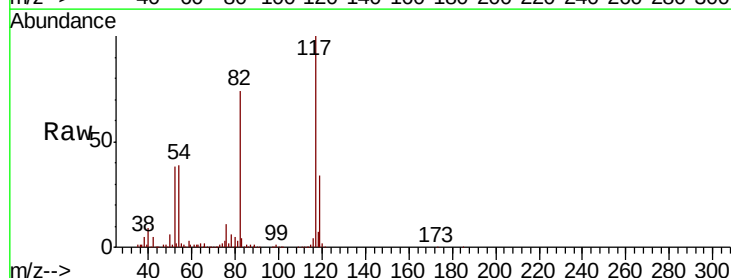
Tgt Ion: 117 Resp: 1605981

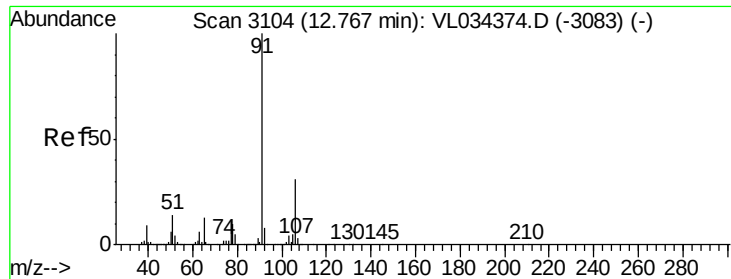
Ion Ratio Lower Upper

117 100

82 71.1 57.5 86.3

119 33.1 25.4 38.2





#58

Ethyl Benzene

Concen: 0.542 ppbv

RT: 12.76 min Scan# 3103

Delta R.T. -0.00 min

Lab File: VL034486.D

Acq: 10 Dec 2019 5:27

Instrument :

MSVOA_L

ClientSampled :

1A-4

Tot Ion: 91 Resp: 135148

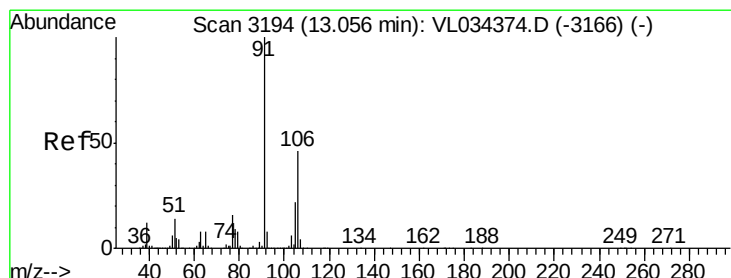
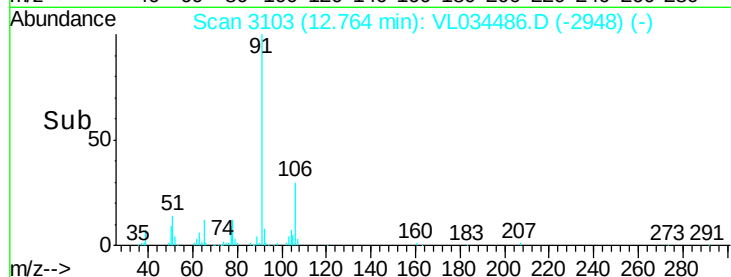
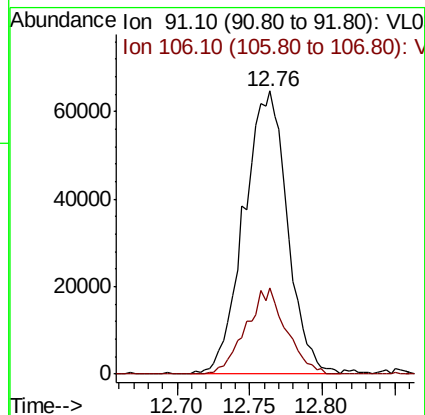
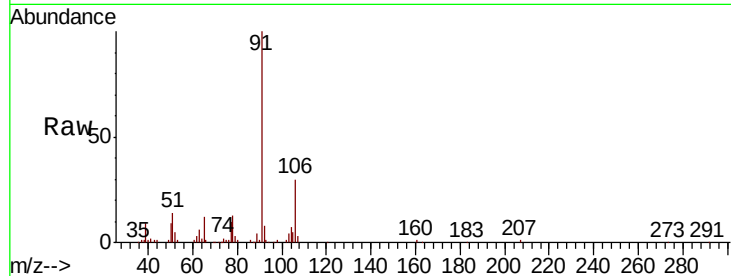
Ion Ratio Lower Upper

91 100

106 30.4 24.8 37.2

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#59

m/p-Xylene

Concen: 1.995 ppbv m

RT: 13.01 min Scan# 3181

Delta R.T. -0.04 min

Lab File: VL034486.D

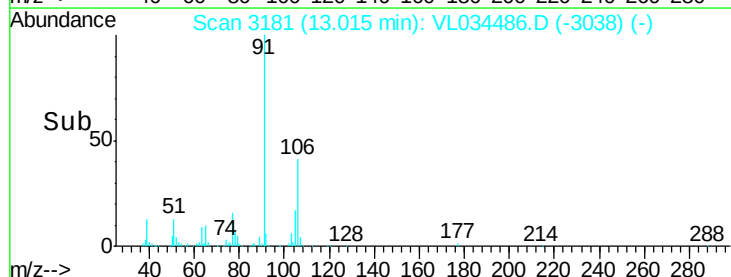
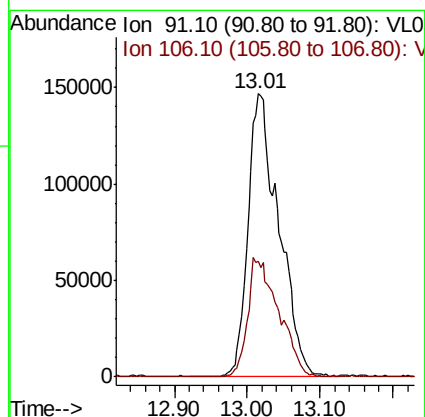
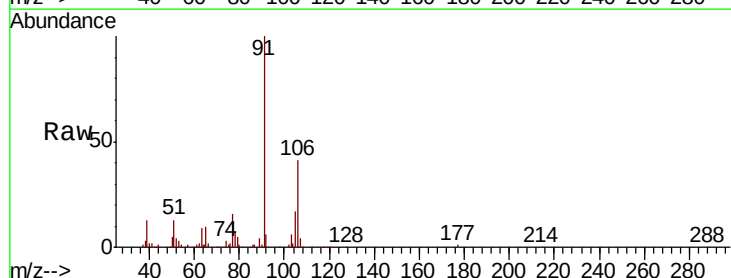
Acq: 10 Dec 2019 5:27

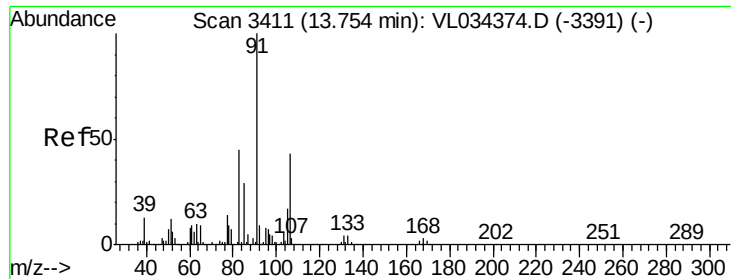
Tgt Ion: 91 Resp: 429739

Ion Ratio Lower Upper

91 100

106 0.0 34.6 51.8#





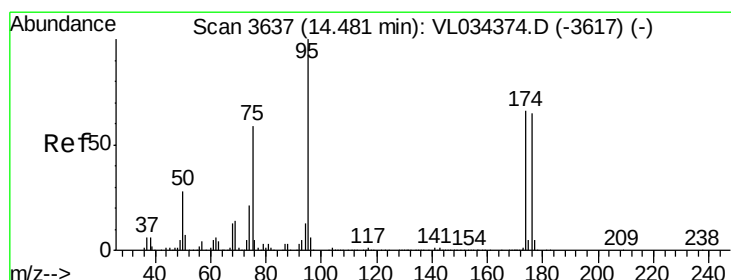
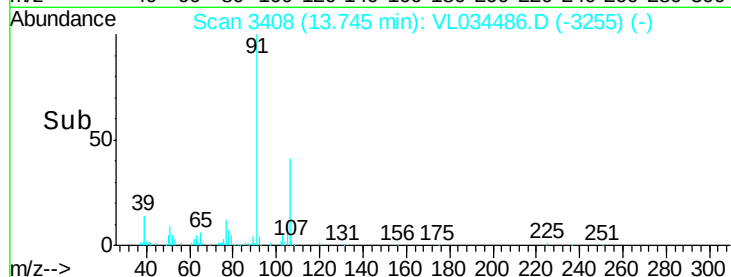
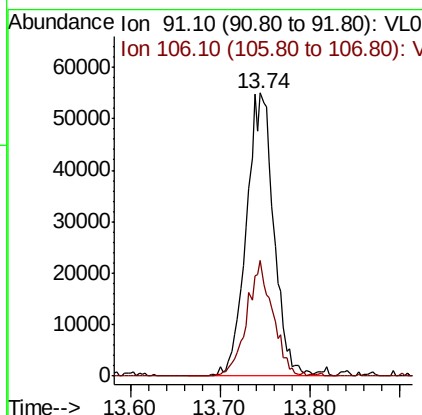
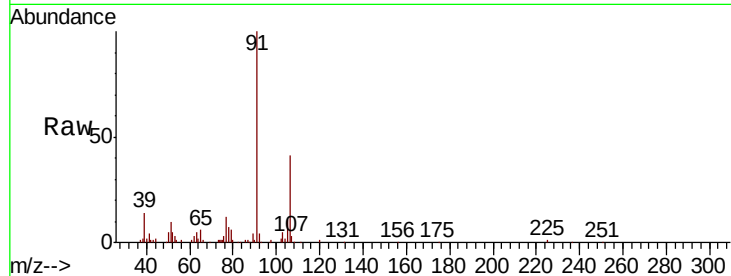
#60
o-Xylene
Concen: 0.553 ppbv m
RT: 13.74 min Scan# 3408
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Instrument :
MSVOA_L
ClientSampled :
1A-4

Tot Ion: 91 Resp: 117860
Ion Ratio Lower Upper
91 100
106 37.9 21.3 64.0

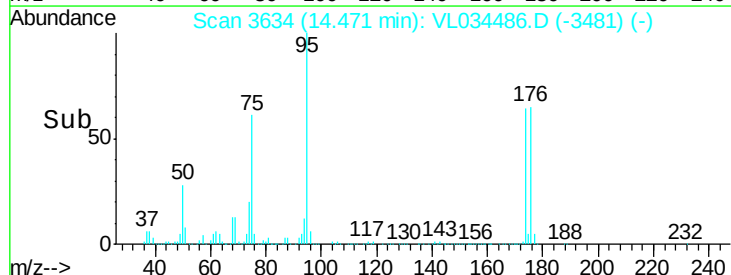
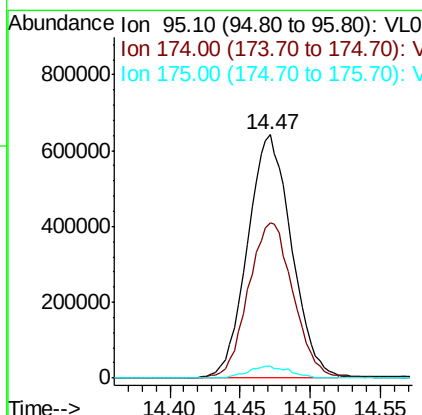
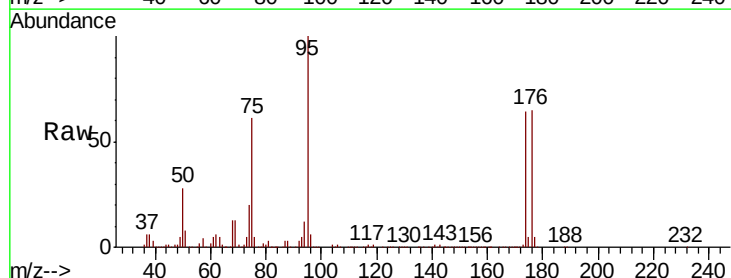
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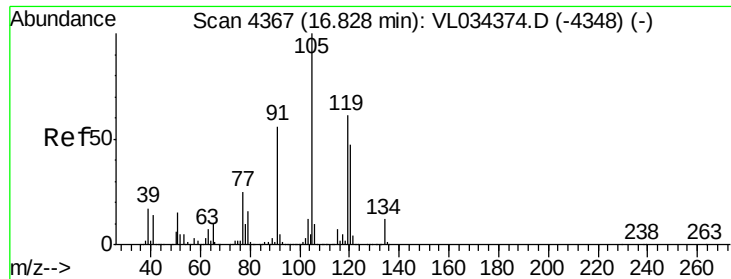
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.354 ppbv
RT: 14.47 min Scan# 3634
Delta R.T. -0.01 min
Lab File: VL034486.D
Acq: 10 Dec 2019 5:27

Tgt Ion: 95 Resp: 1398902
Ion Ratio Lower Upper
95 100
174 65.3 52.2 78.2
175 4.7 3.8 5.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.285 ppbv m
 RT: 16.82 min Scan# 4365
 Delta R.T. -0.01 min
 Lab File: VL034486.D
 Acq: 10 Dec 2019 5:27

Instrument :
 MSVOA_L
 ClientSampleId :
 1A-4

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	34.0	37.4	56.0#
91	16.3	46.3	69.5#
77	19.8	20.6	30.8#

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