

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112519\
 Data File : VL034409.D
 Acq On : 25 Nov 2019 17:02
 Operator : SY/AP
 Sample : K5971-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 3

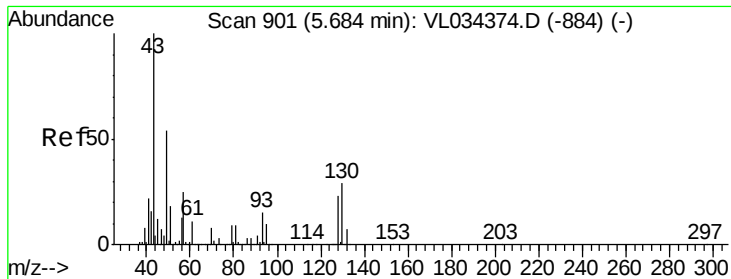
Manual Integrations
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 12/2/2019 10:03:40 AM

Quant Time: Nov 29 12:05:40 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111919AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Nov 1
 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	5.68	49	952261	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.20	114	1864236	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.14	117	1826204	10.00	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.47	95	1569178	10.21	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	102.10%
Target Compounds						Ovalue
2) Dichlorodifluoromethane	3.02	85	148649	0.863	ppbv	98
3) Chlorodifluoromethane	2.96	51	33921m	0.285	ppbv	
4) Chloromethane	3.11	50	35194	0.502	ppbv	# 86
9) Propene	2.99	41	62152m	1.178	ppbv	
10) Heptane	8.15	43	73629	0.541	ppbv	98
11) Trichlorofluoromethane	3.94	101	36968	0.216	ppbv	89
13) Ethanol	3.60	45	3768076	256.441	ppbv	95
15) Acetone	3.83	43	1662470	12.192	ppbv	100
19) Isopropyl Alcohol	3.97	45	7278240m	83.272	ppbv	
20) Methylene Chloride	4.34	84	58499	1.210	ppbv	92
25) Ethyl Acetate	5.69	43	227550m	0.935	ppbv	
26) Hexane	5.70	57	97765	0.935	ppbv	96
29) Chloroform	5.76	83	36018	0.213	ppbv	86
30) Cyclohexane	7.16	84	21599m	0.273	ppbv	
34) 2-Butanone	5.25	43	61466	0.401	ppbv	97
35) Carbon Tetrachloride	7.04	117	10106m	0.063	ppbv	
36) Benzene	6.91	78	43984m	0.236	ppbv	
44) 2,2,4-Trimethylpentane	7.90	57	35783	0.105	ppbv	# 55
52) Tetrachloroethene	11.27	164	5747m	0.071	ppbv	
53) Toluene	9.84	91	715660	3.381	ppbv	99
58) Ethyl Benzene	12.76	91	31008m	0.109	ppbv	
59) m/p-Xylene	13.02	91	84613m	0.345	ppbv	
60) o-Xylene	13.75	91	37188m	0.154	ppbv	
76) 1,4-Dichlorobenzene	17.20	146	40598	0.250	ppbv	93

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.01 min

Lab File: VL034409.D

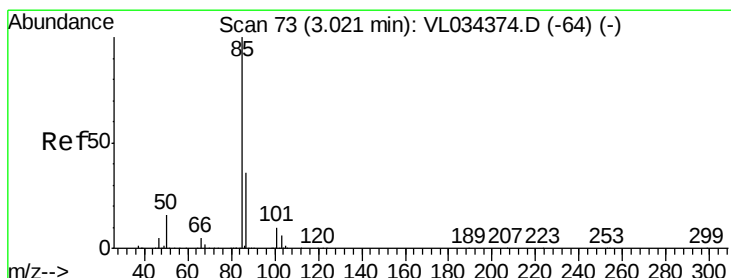
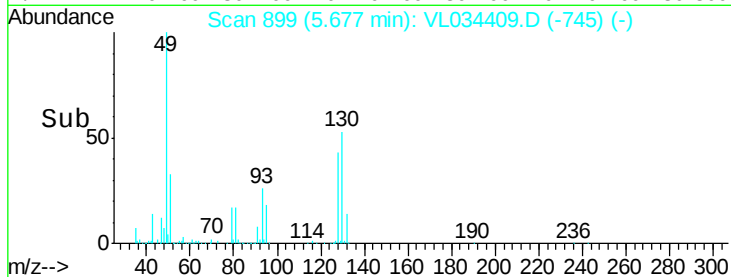
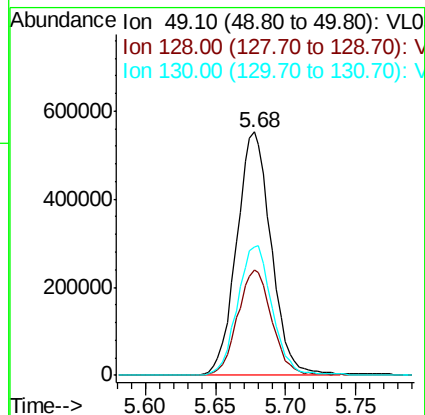
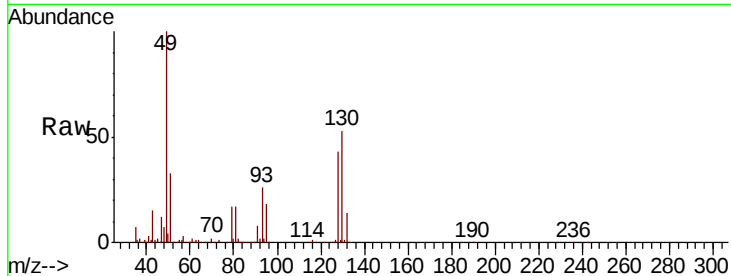
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion:	49	Resp:	952261
Ion	Ratio	Lower	Upper
49	100		
128	43.2	21.8	65.3
130	53.7	28.0	84.0

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#2

Dichlorodifluoromethane

Concen: 0.863 ppbv

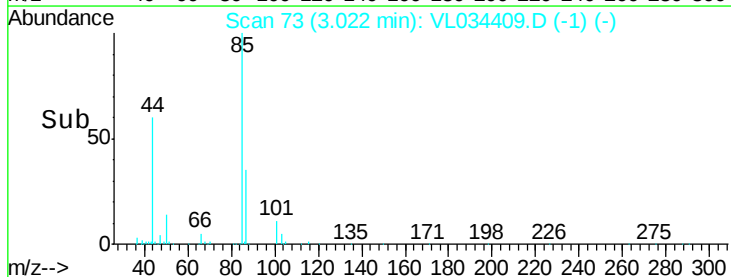
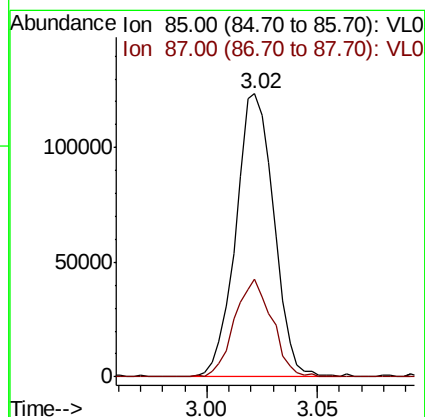
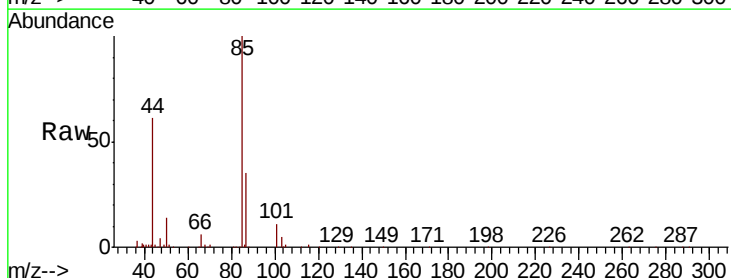
RT: 3.02 min Scan# 73

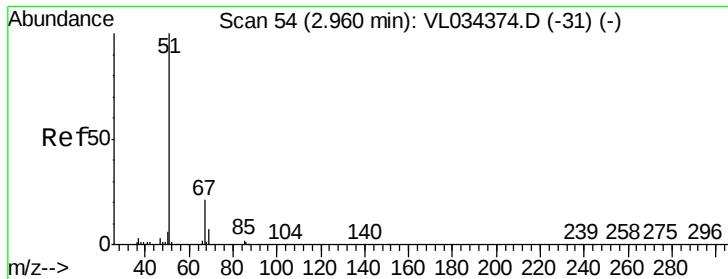
Delta R.T. 0.00 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Tgt Ion:	85	Resp:	148649
Ion	Ratio	Lower	Upper
85	100		
87	34.6	28.5	42.7





#3

Chlorodifluoromethane

Concen: 0.285 ppbv

RT: 2.96 min Scan# 55

Delta R.T. 0.00 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Instrument :

MSVOA_L

ClientSampleId :

3

Tot Ion: 51 Resp: 33921

Ion Ratio Lower Upper

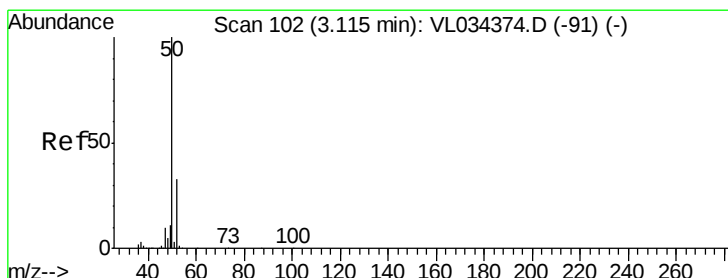
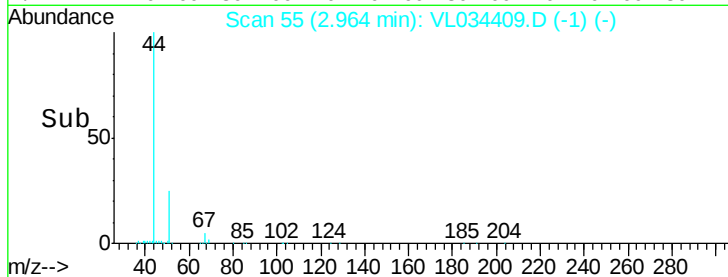
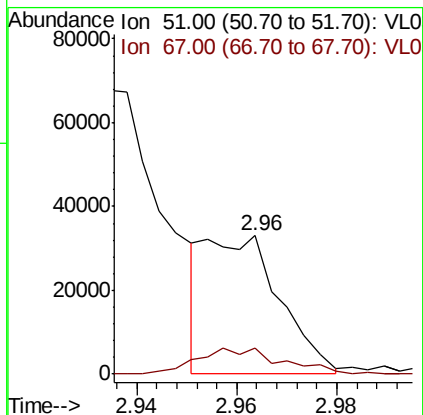
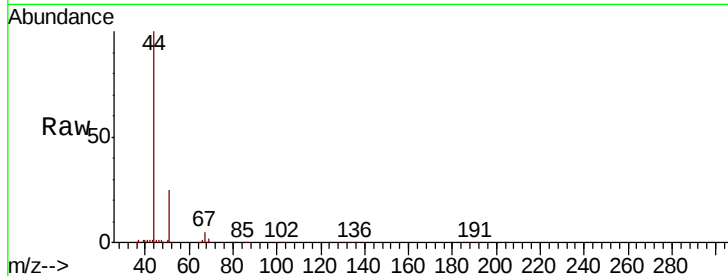
51 100

67 21.6 16.2 24.2

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#4

Chloromethane

Concen: 0.502 ppbv

RT: 3.11 min Scan# 101

Delta R.T. -0.00 min

Lab File: VL034409.D

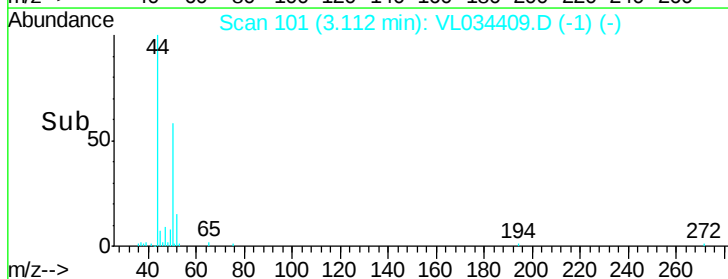
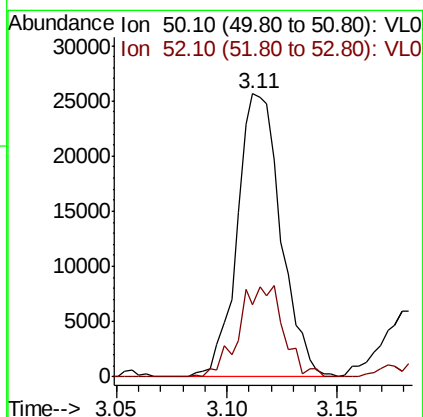
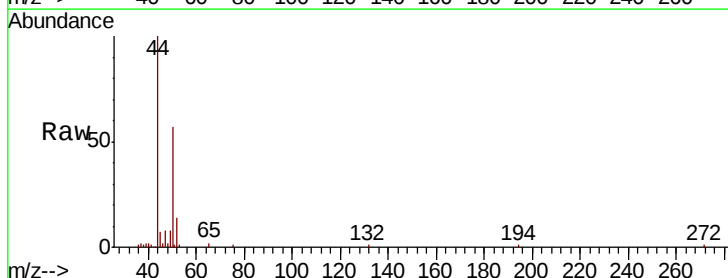
Acq: 25 Nov 2019 17:02

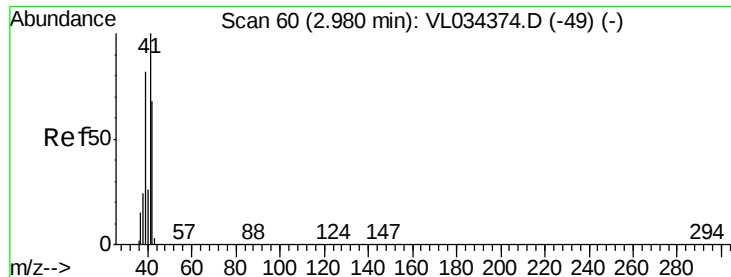
Tgt Ion: 50 Resp: 35194

Ion Ratio Lower Upper

50 100

52 25.5 26.8 40.2#





#9

Propene

Concen: 1.178 ppbv m

RT: 2.99 min Scan# 64

Delta R.T. 0.01 min

Lab File: VL034409.D

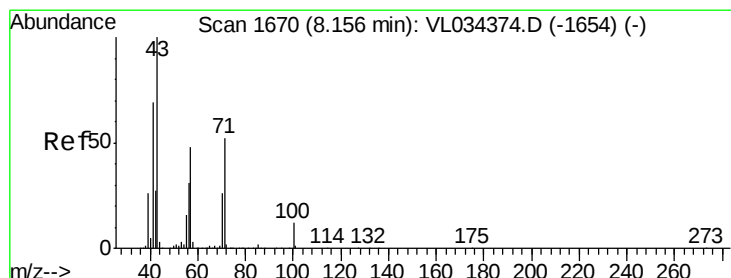
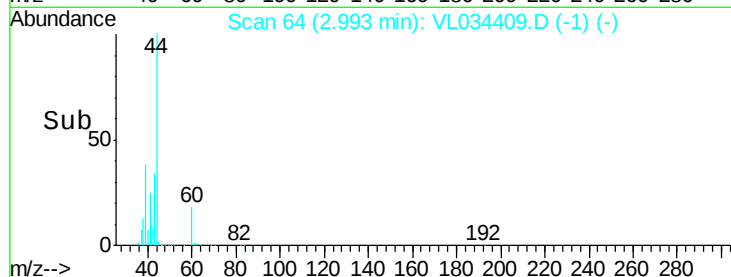
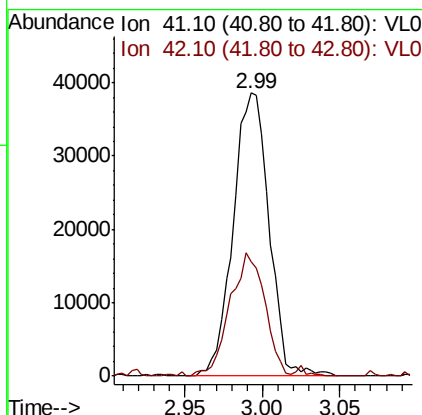
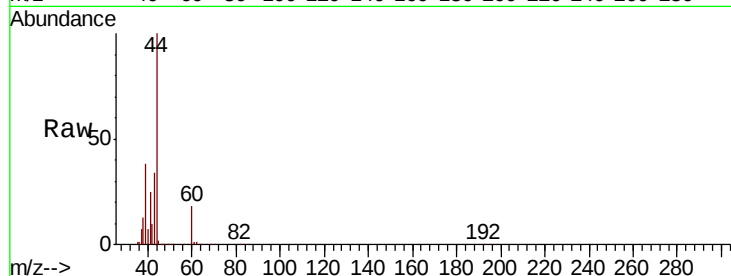
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion	41	Resp	62152
Ion	Ratio	Lower	Upper
41	100		
42	268.1	54.6	82.0#

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#10

Heptane

Concen: 0.541 ppbv

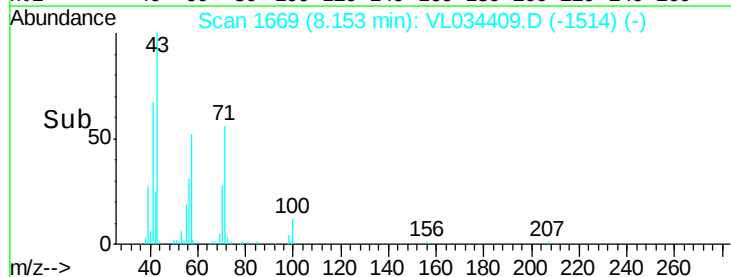
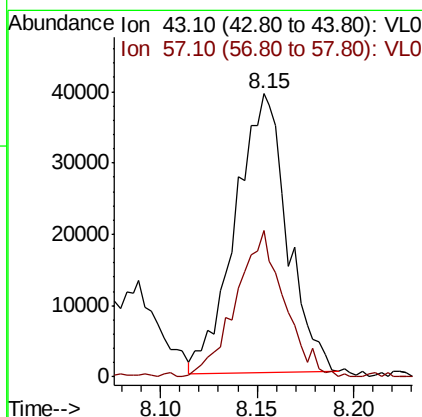
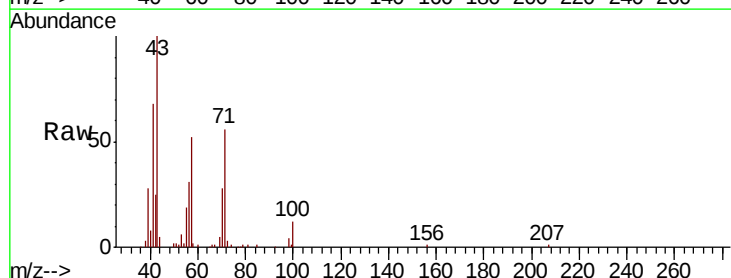
RT: 8.15 min Scan# 1669

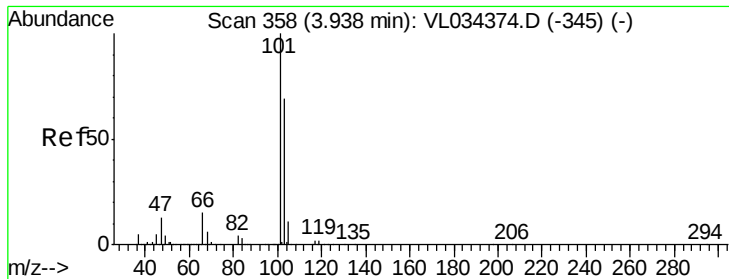
Delta R.T. -0.00 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Tgt Ion	43	Resp	73629
Ion	Ratio	Lower	Upper
43	100		
57	48.9	40.2	60.2





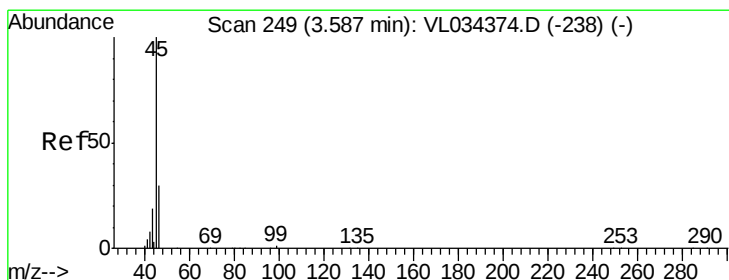
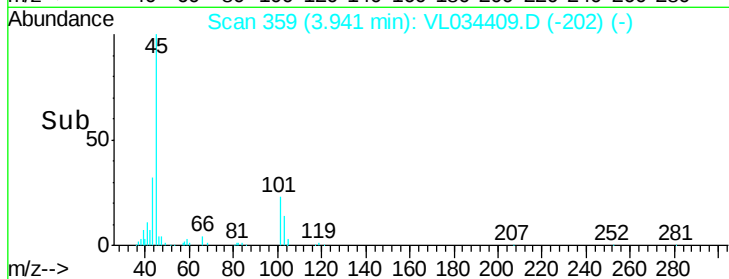
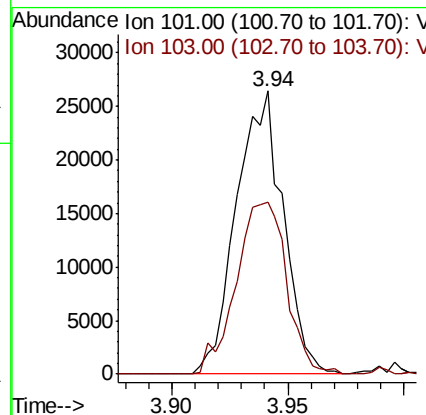
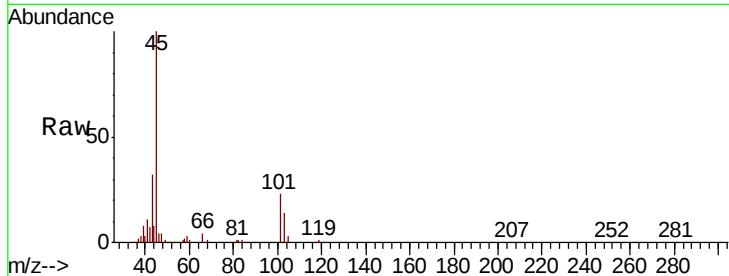
#11
Trichlorofluoromethane
Concen: 0.216 ppbv
RT: 3.94 min Scan# 359
Delta R.T. 0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampleId :
3

Tot Ion	Ion	Ratio	Lower	Upper
101	100			
103	60.6	55.4	83.0	

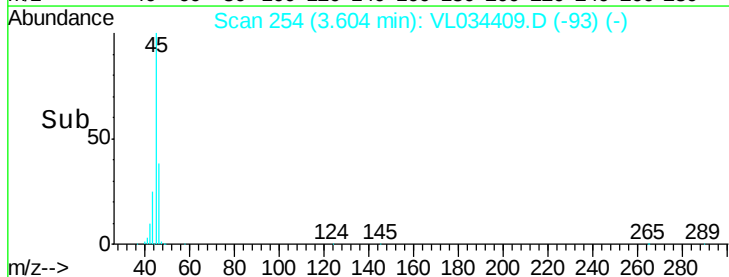
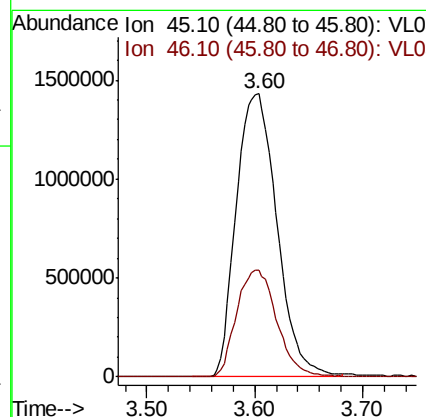
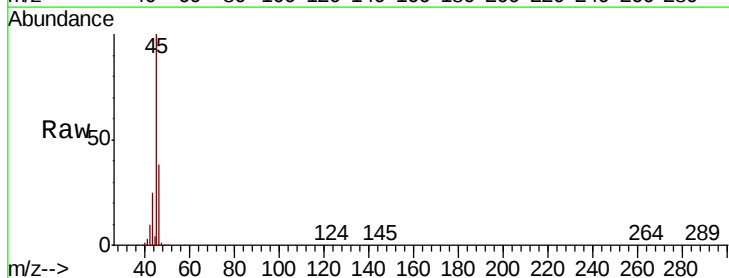
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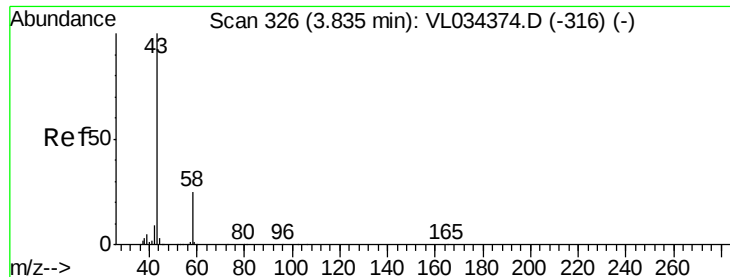
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#13
Ethanol
Concen: 256.441 ppbv
RT: 3.60 min Scan# 254
Delta R.T. 0.02 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Tgt Ion	Ion	Ratio	Lower	Upper
45	100			
46	37.4	13.8	55.4	





#15

Acetone

Concen: 12.192 ppbv

RT: 3.83 min Scan# 325

Delta R.T. -0.00 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Instrument :

MSVOA_L

ClientSampleId :

3

Tot Ion: 43 Resp: 1662470

Ion Ratio Lower Upper

43 100

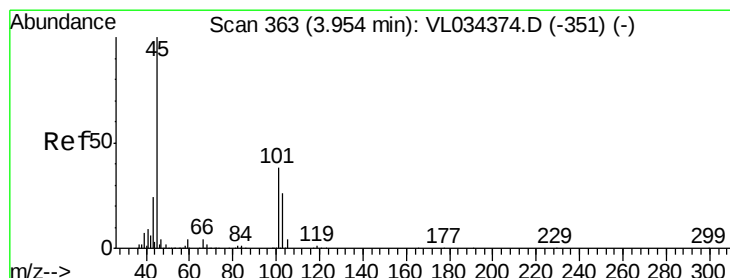
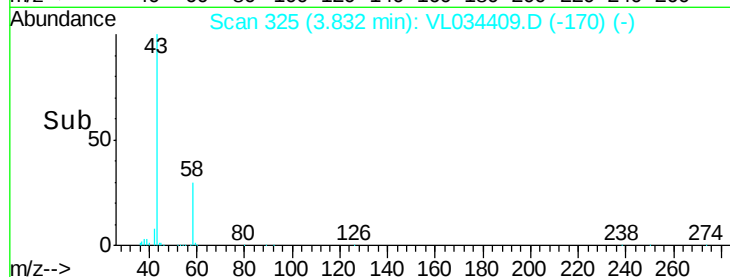
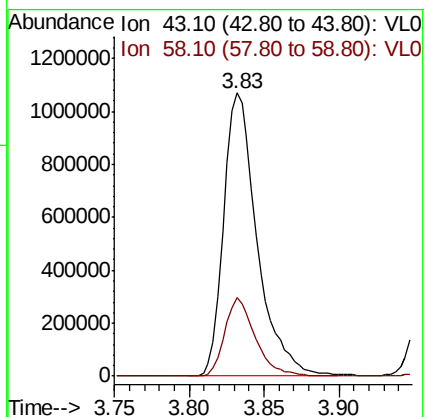
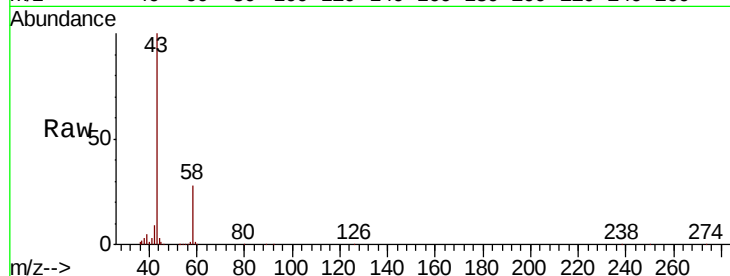
58 25.5 20.2 30.4

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12/2/2019 10:03:40 AM



#19

Isopropyl Alcohol

Concen: 83.272 ppbv m

RT: 3.97 min Scan# 369

Delta R.T. 0.02 min

Lab File: VL034409.D

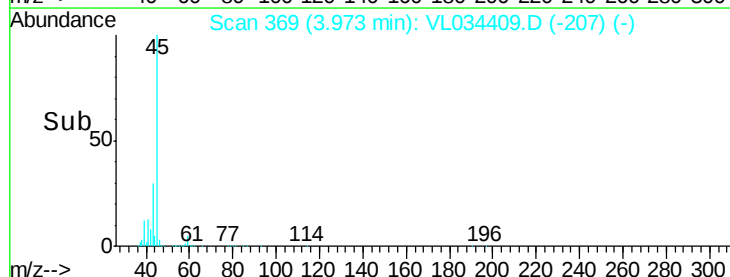
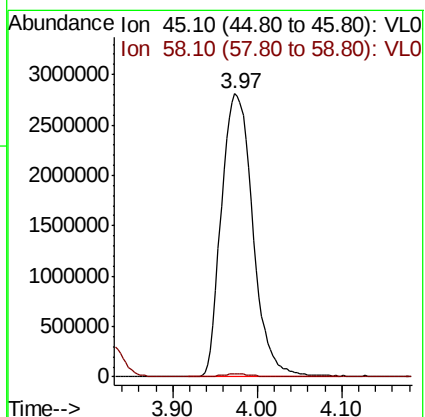
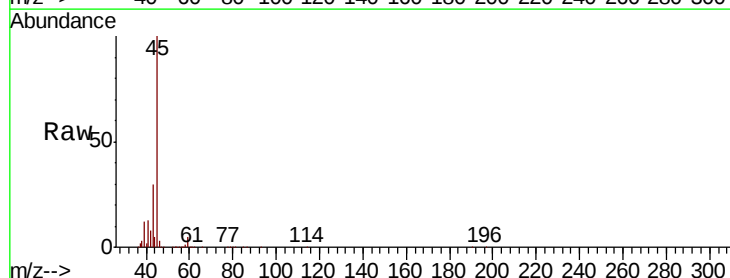
Acq: 25 Nov 2019 17:02

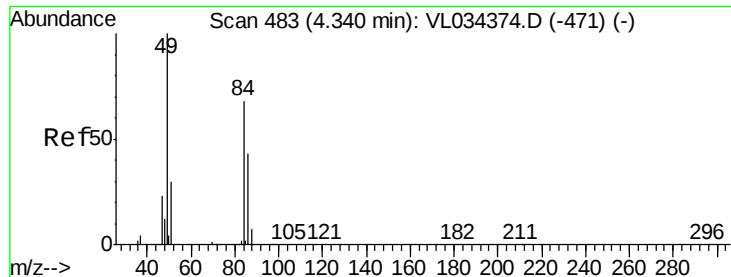
Tgt Ion: 45 Resp: 7278240

Ion Ratio Lower Upper

45 100

58 0.0 1.3 1.9#





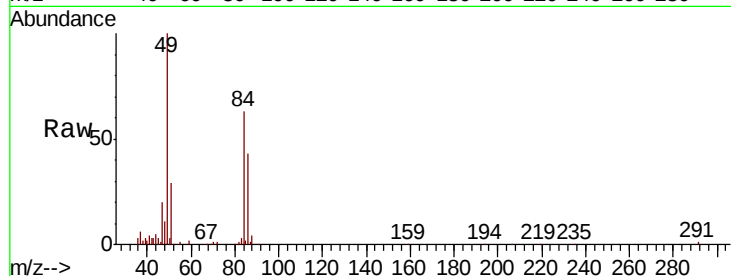
#20
Methvlene Chloride
Concen: 1.210 ppbv
RT: 4.34 min Scan# 483
Delta R.T. 0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion:	84	Resp:	58499
Ion	Ratio	Lower	Upper
84	100		
49	159.1	116.8	175.2
51	46.9	35.6	53.4
86	68.4	50.7	76.1

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12/2/2019 10:03:40 AM



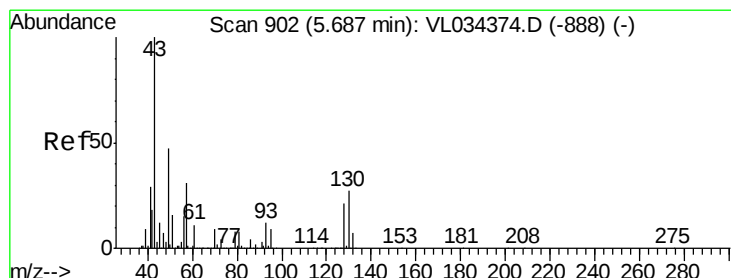
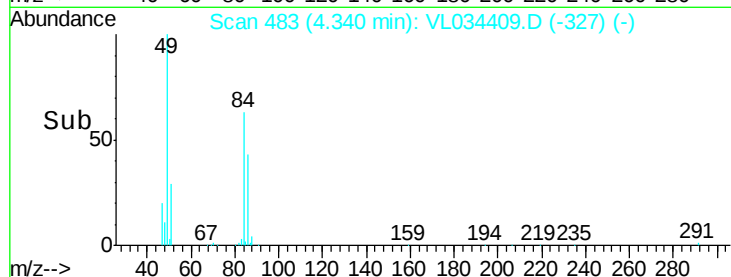
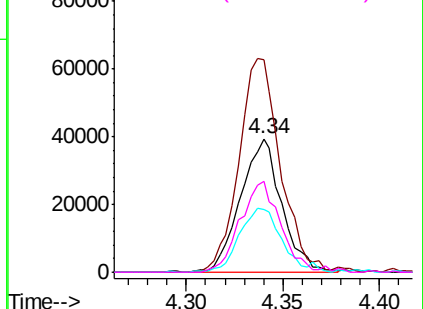
Abundance

Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0



#25
Ethyl Acetate
Concen: 0.935 ppbv m
RT: 5.69 min Scan# 902
Delta R.T. 0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Tgt Ion:	43	Resp:	227550
Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.2	12.4#
61	0.0	7.5	11.3#
70	0.0	5.7	8.5#

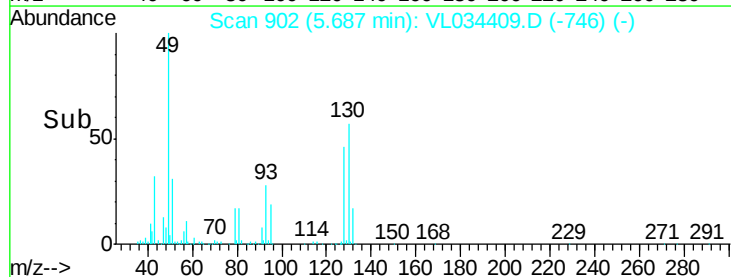
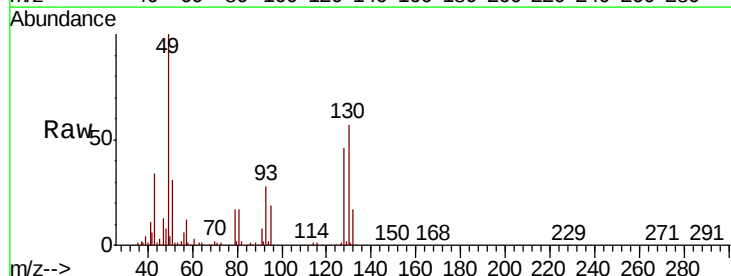
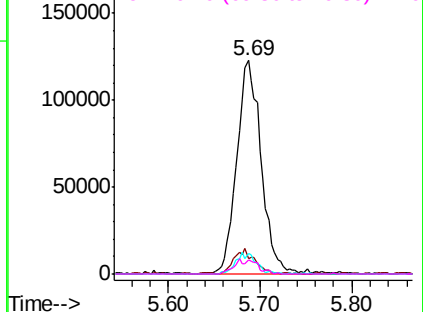
Abundance

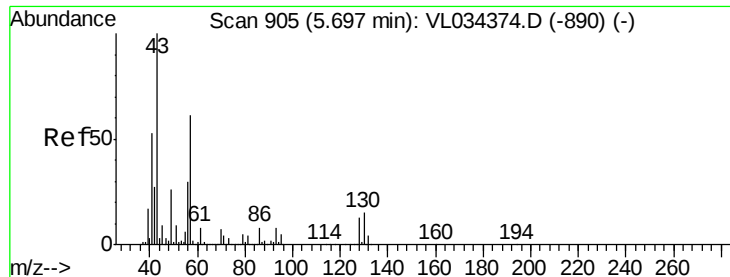
Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0





#26

Hexane

Concen: 0.935 ppbv

RT: 5.70 min Scan# 905

Delta R.T. 0.00 min

Lab File: VL034409.D

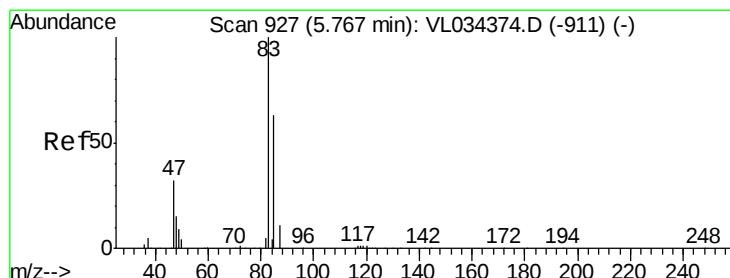
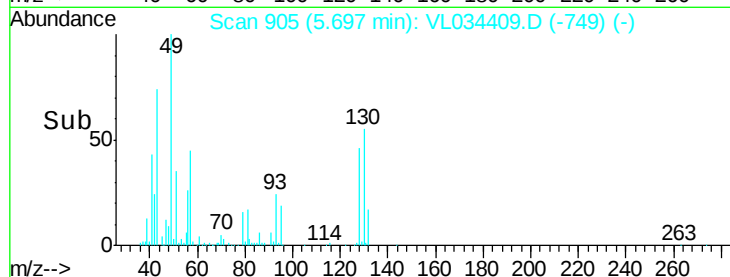
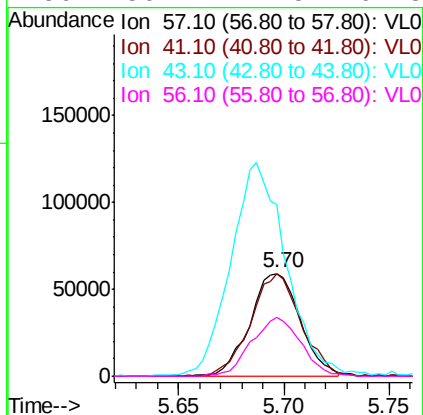
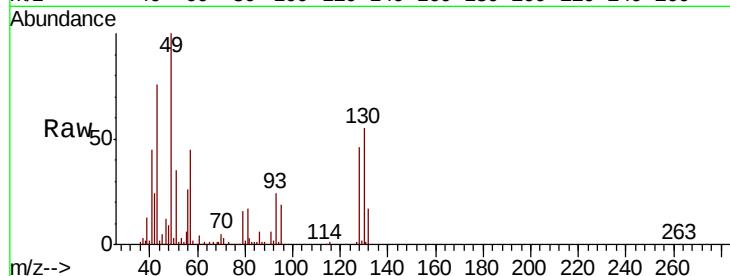
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion:	57	Resp:	97765
Ion	Ratio	Lower	Upper
57	100		
41	100.3	75.0	112.4
43	230.2	186.6	279.8
56	56.7	41.5	62.3

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#29

Chloroform

Concen: 0.213 ppbv

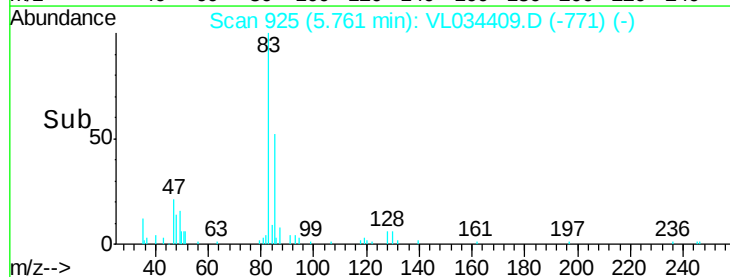
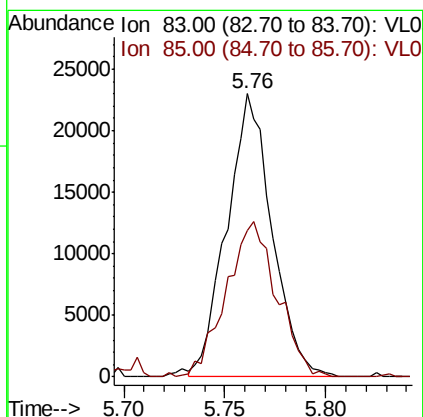
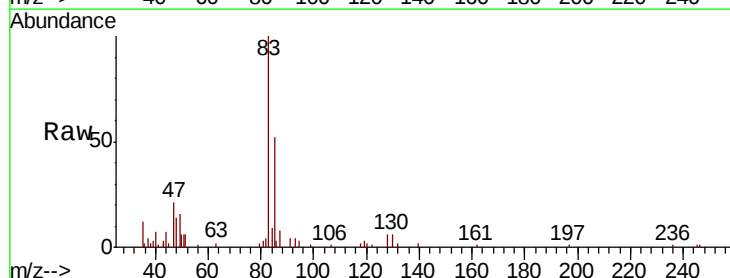
RT: 5.76 min Scan# 925

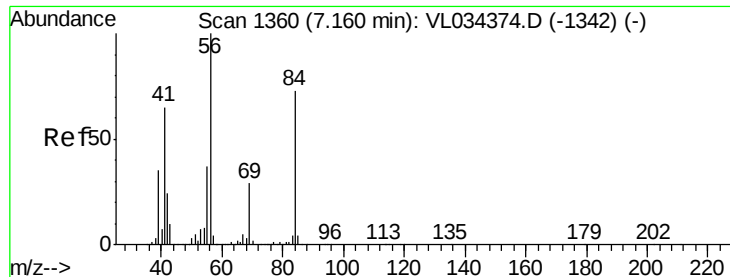
Delta R.T. -0.01 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Tgt Ion:	83	Resp:	36018
Ion	Ratio	Lower	Upper
83	100		
85	51.9	50.4	75.6





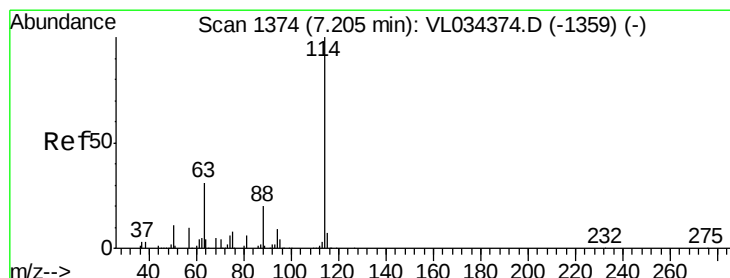
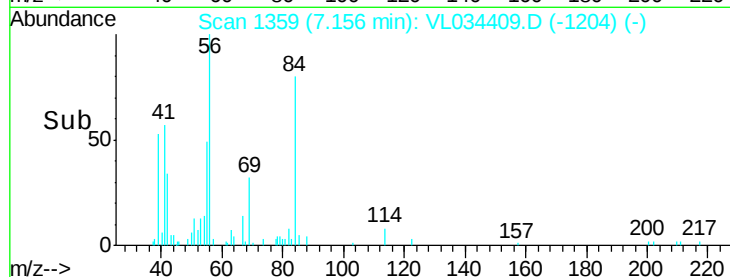
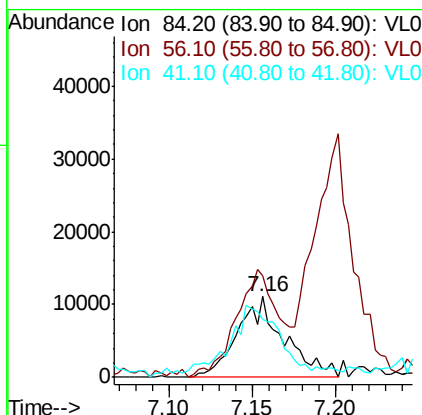
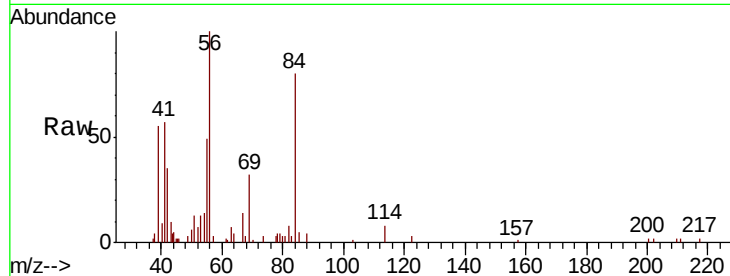
#30
Cyclohexane
Concen: 0.273 ppbv m
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	112.6	169.0#
41	91.6	73.4	110.2

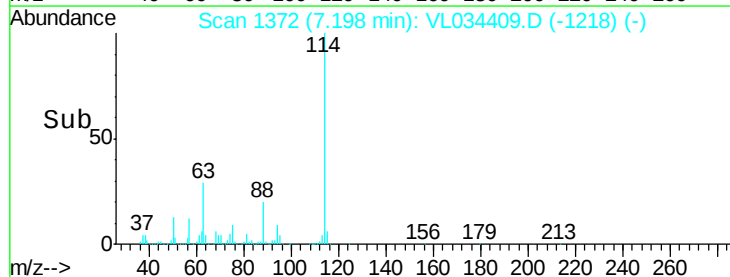
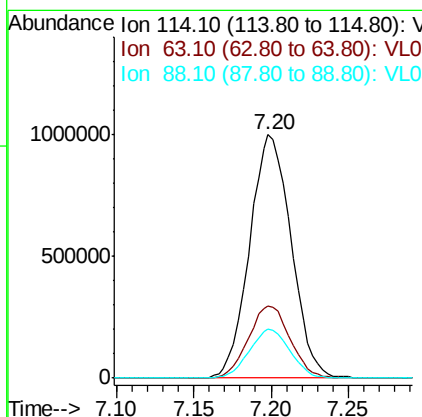
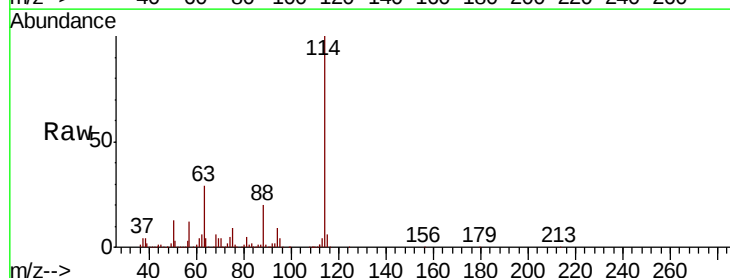
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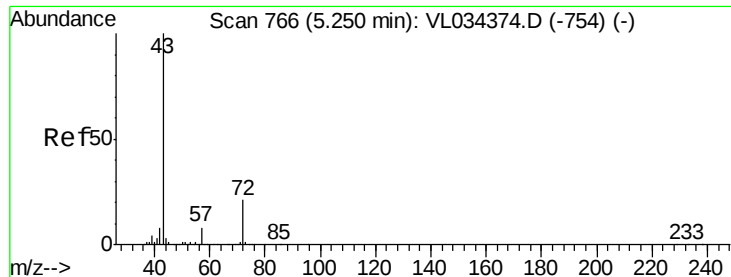
apatel
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.20 min Scan# 1372
Delta R.T. -0.01 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Tgt Ion	Ratio	Lower	Upper
114	100		
63	30.0	24.2	36.4
88	19.8	15.9	23.9





#34

2-Butanone

Concen: 0.401 ppbv

RT: 5.25 min Scan# 767

Delta R.T. 0.00 min

Lab File: VL034409.D

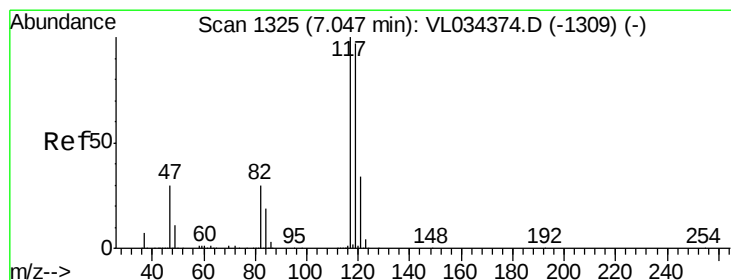
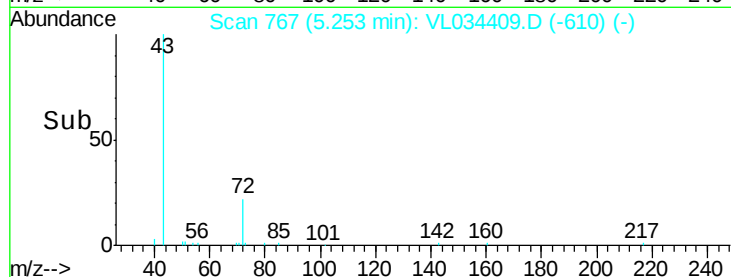
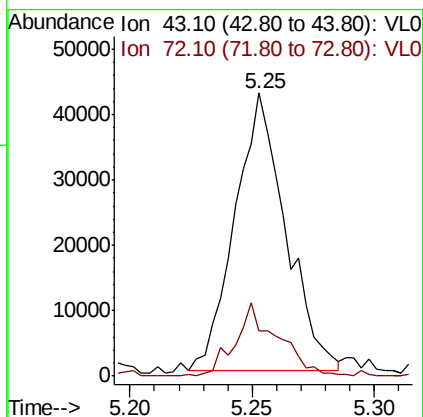
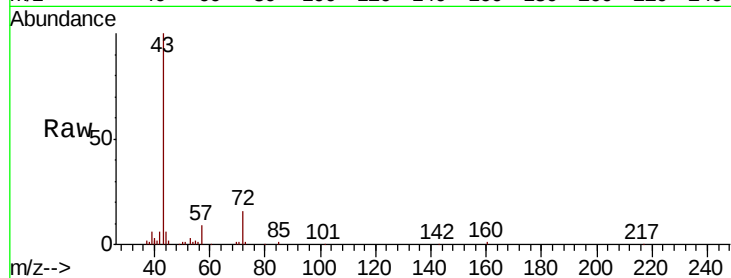
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion	43	Resp	61466
Ion Ratio	100	Lower	Upper
43	100		
72	22.6	17.0	25.6

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#35

Carbon Tetrachloride

Concen: 0.063 ppbv m

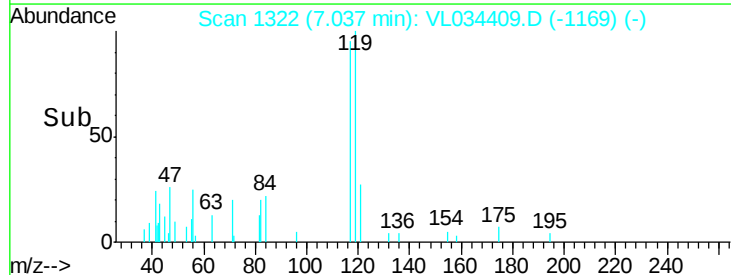
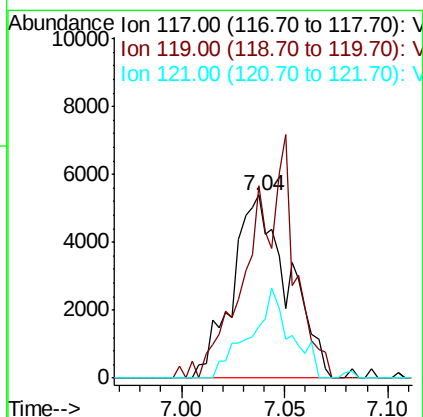
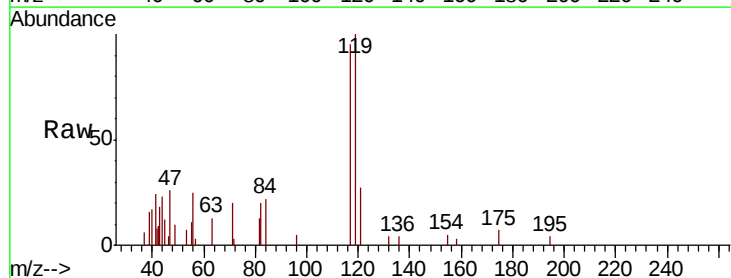
RT: 7.04 min Scan# 1322

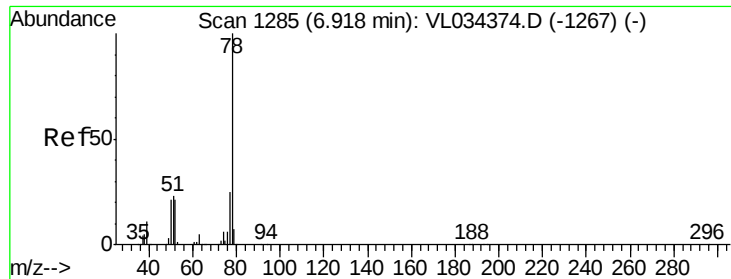
Delta R.T. -0.01 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Tgt Ion	117	Resp	10106
Ion Ratio	100	Lower	Upper
117	100		
119	104.7	77.3	115.9
121	27.9	27.4	41.2





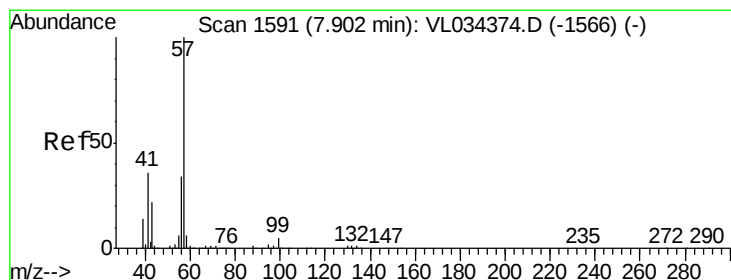
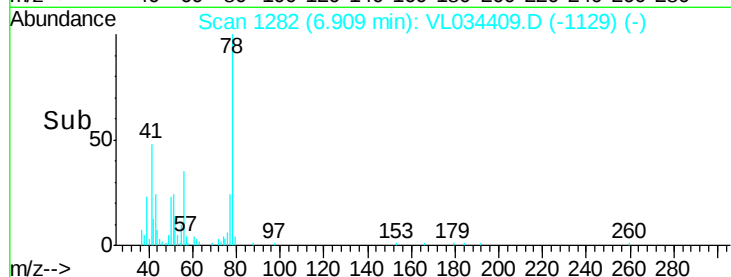
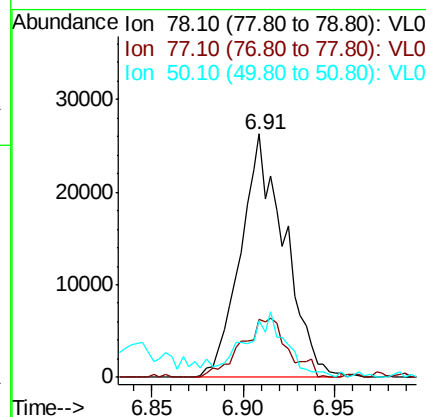
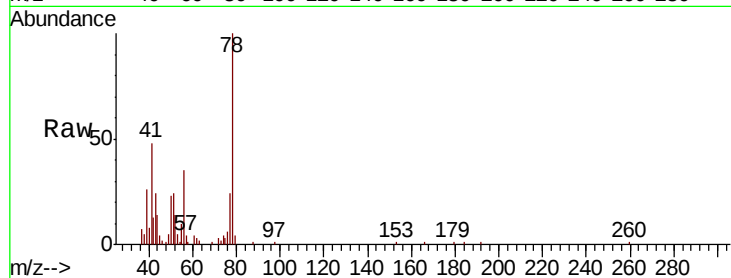
#36
Benzene
Concen: 0.236 ppbv m
RT: 6.91 min Scan# 1282
Delta R.T. -0.01 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion	Ratio	Lower	Upper
78	100		
77	23.8	20.2	30.4
50	23.4	17.1	25.7

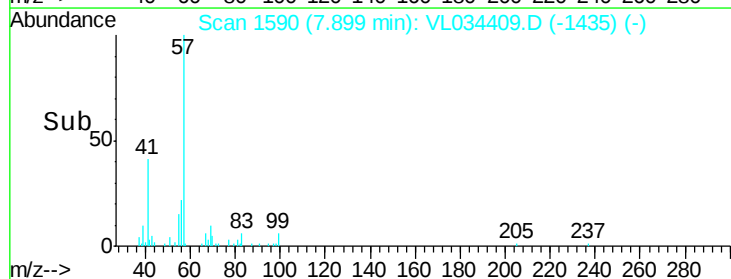
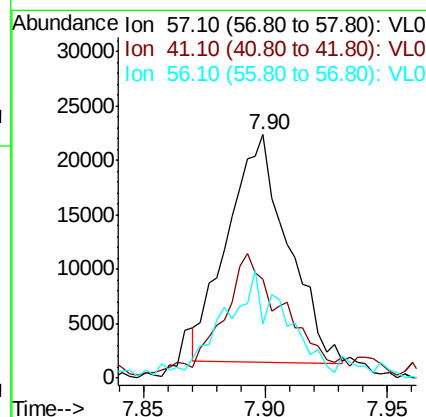
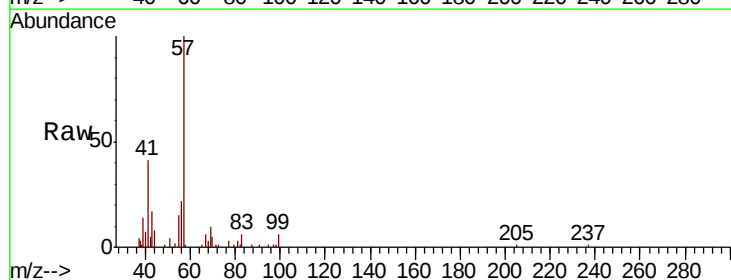
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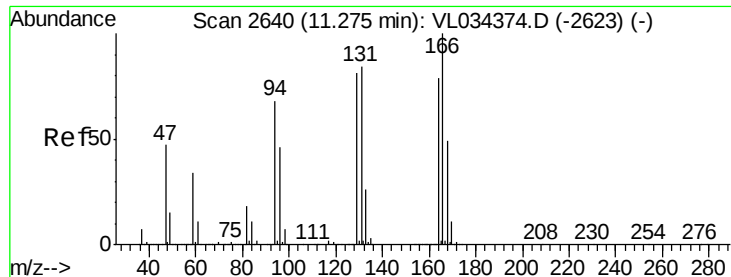
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#44
2,2,4-Trimethylpentane
Concen: 0.105 ppbv
RT: 7.90 min Scan# 1590
Delta R.T. -0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Tgt Ion	Ratio	Lower	Upper
57	100		
41	63.0	28.6	42.8#
56	55.2	25.3	37.9#





#52

Tetrachloroethene

Concen: 0.071 ppbv m

RT: 11.27 min Scan# 2639

Delta R.T. -0.00 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Instrument :

MSVOA_L

ClientSampled :

3

Tot Ion:164 Resp: 5747

Ion Ratio Lower Upper

164 100

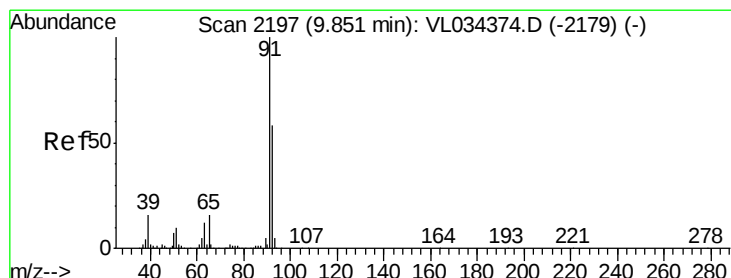
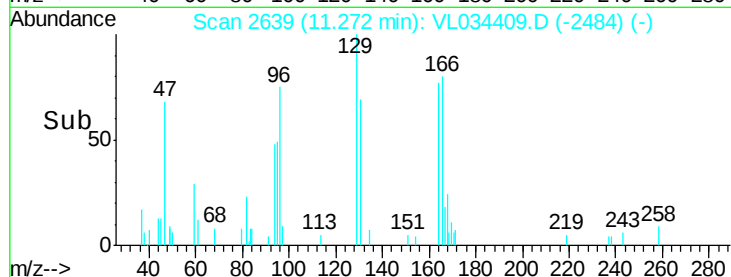
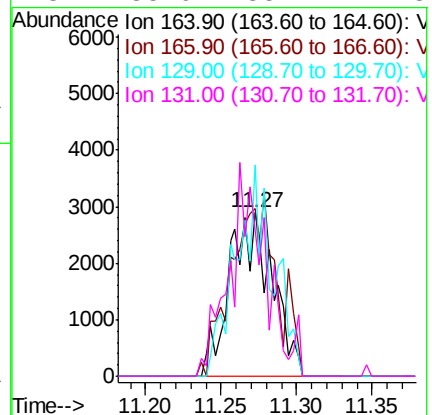
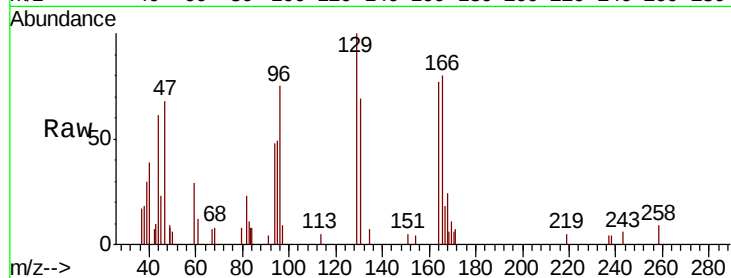
166 102.9 101.7 152.5

129 129.0 82.6 123.8#

131 88.9 85.2 127.8

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#53

Toluene

Concen: 3.381 ppbv

RT: 9.84 min Scan# 2195

Delta R.T. -0.01 min

Lab File: VL034409.D

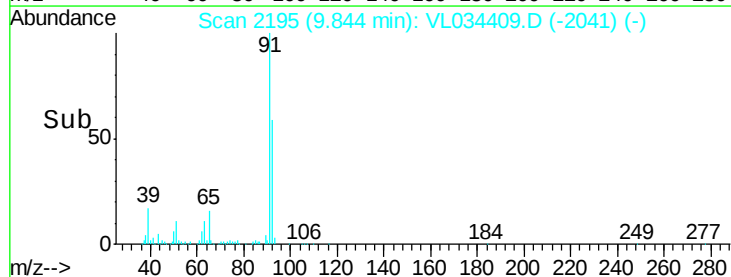
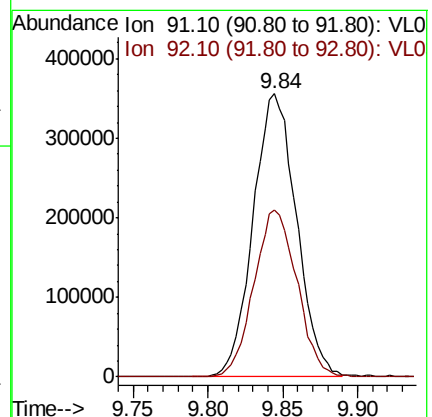
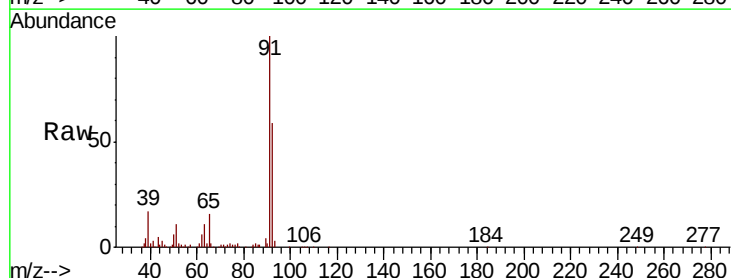
Acq: 25 Nov 2019 17:02

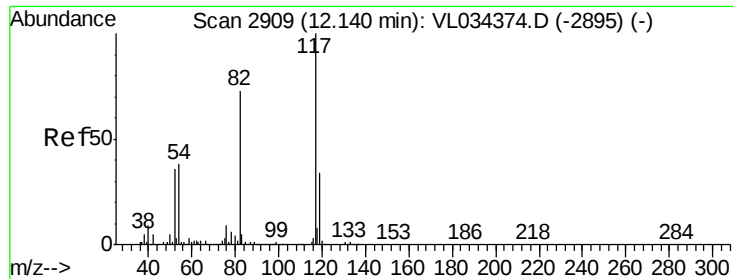
Tgt Ion: 91 Resp: 715660

Ion Ratio Lower Upper

91 100

92 58.9 47.9 71.9





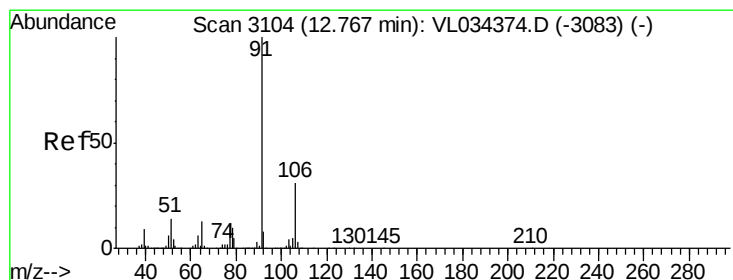
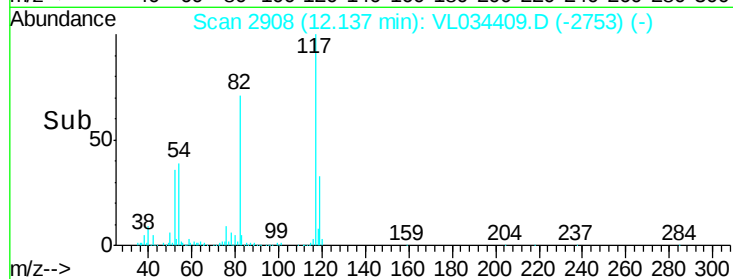
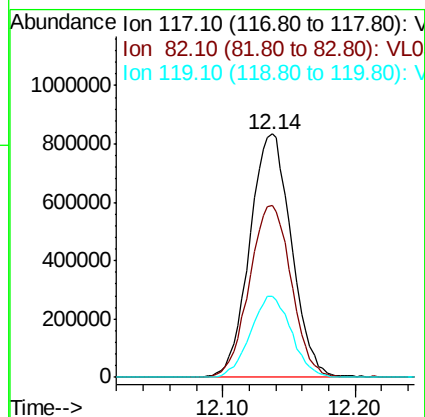
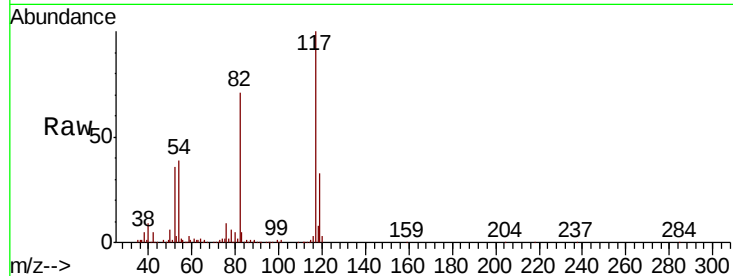
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.14 min Scan# 2908
Delta R.T. -0.00 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Instrument :
MSVOA_L
ClientSampled :
3

Tot Ion	Ratio	Lower	Upper
117	100		
82	71.3	57.5	86.3
119	32.9	25.4	38.2

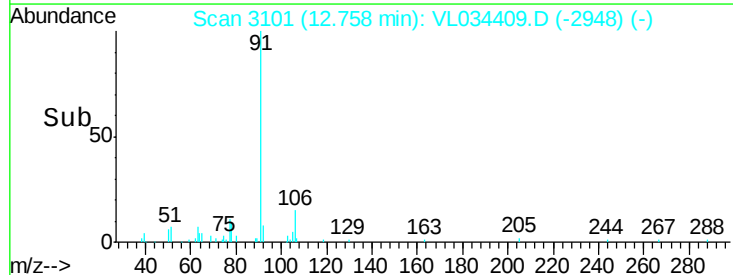
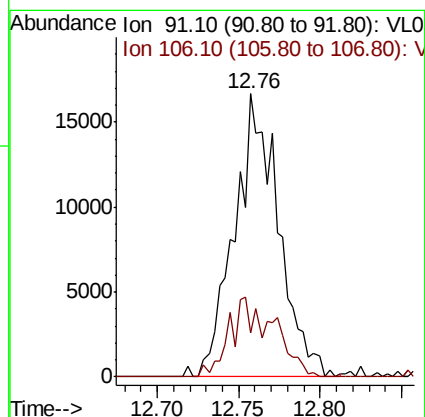
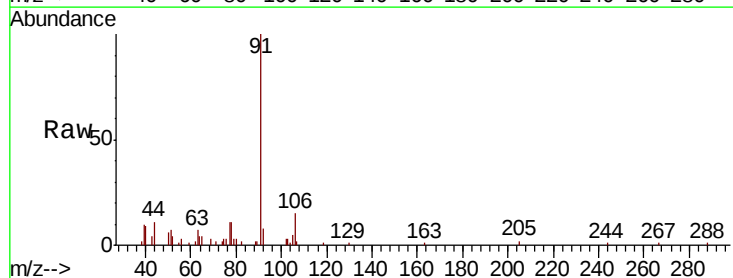
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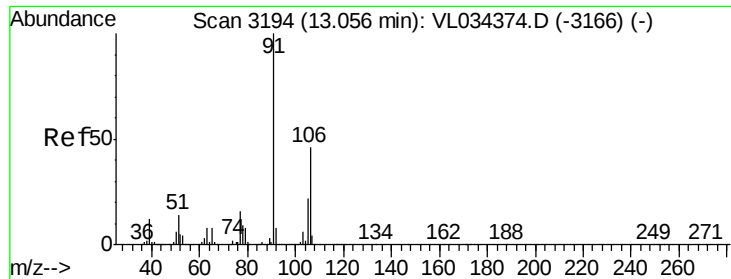
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#58
Ethyl Benzene
Concen: 0.109 ppbv m
RT: 12.76 min Scan# 3101
Delta R.T. -0.01 min
Lab File: VL034409.D
Acq: 25 Nov 2019 17:02

Tgt Ion	Ratio	Lower	Upper
91	100		
106	15.5	24.8	37.2#





#59

m/p-Xylene

Concen: 0.345 ppbv m

RT: 13.02 min Scan# 3183

Delta R.T. -0.04 min

Lab File: VL034409.D

Acq: 25 Nov 2019 17:02

Instrument :

MSVOA_L

ClientSampled :

3

Tot Ion: 91 Resp: 84613

Ion Ratio Lower Upper

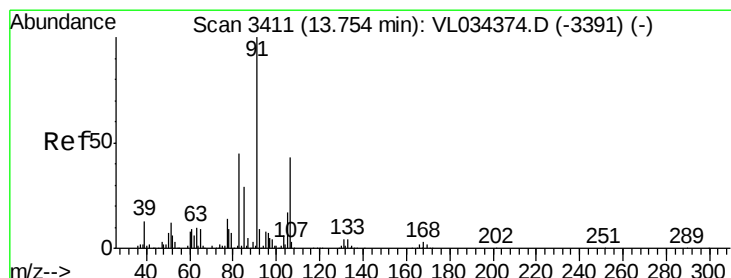
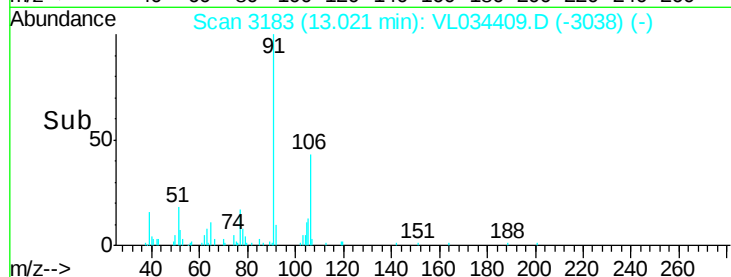
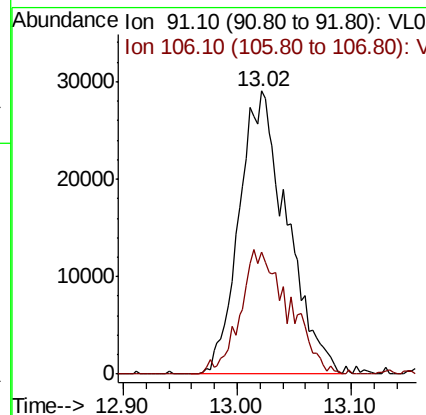
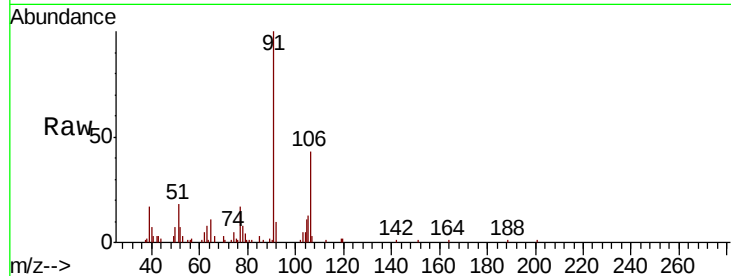
91 100

106 0.0 34.6 51.8#

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#60

o-Xylene

Concen: 0.154 ppbv m

RT: 13.75 min Scan# 3409

Delta R.T. -0.01 min

Lab File: VL034409.D

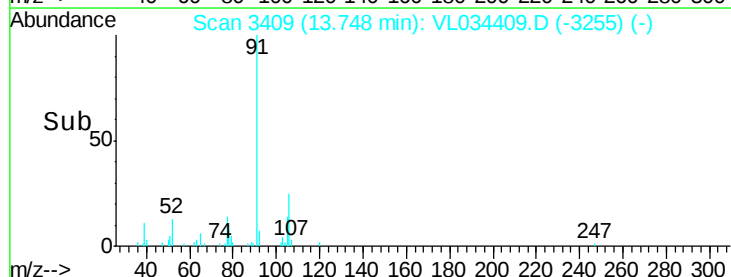
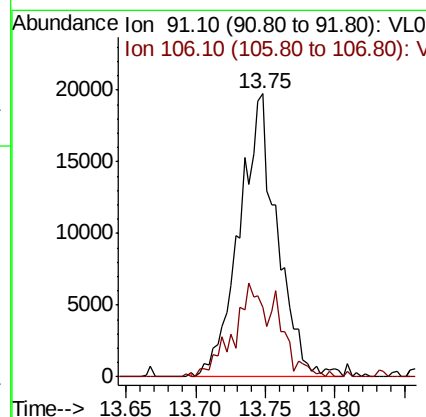
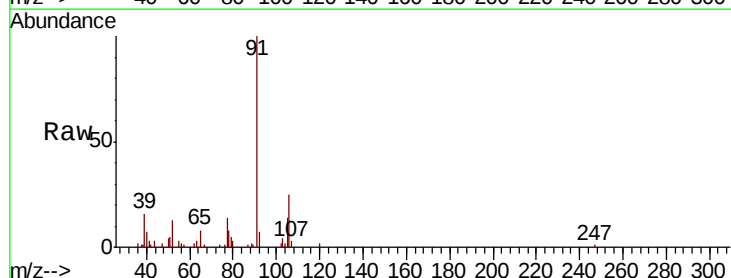
Acq: 25 Nov 2019 17:02

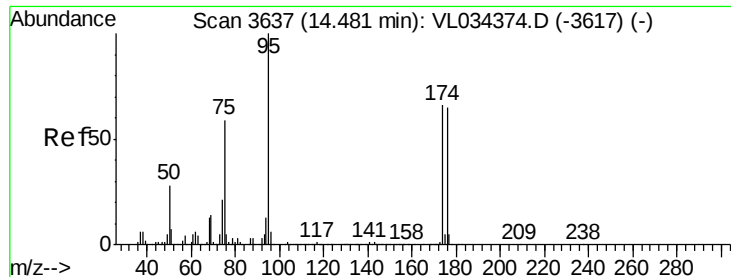
Tgt Ion: 91 Resp: 37188

Ion Ratio Lower Upper

91 100

106 0.0 21.3 64.0#





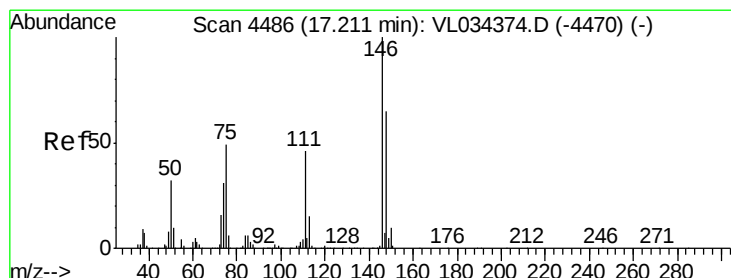
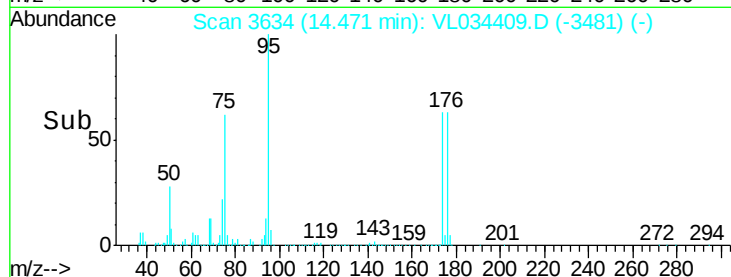
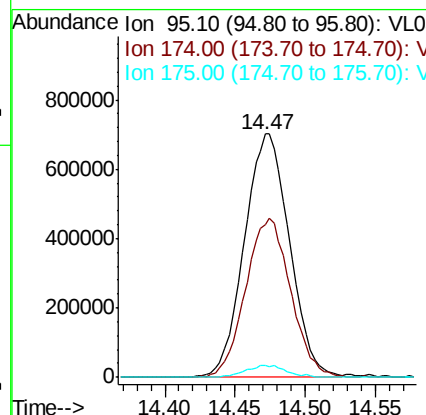
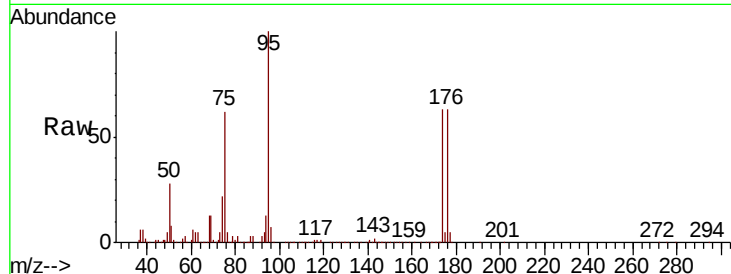
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.214 ppbv
 RT: 14.47 min Scan# 3634
 Delta R.T. -0.01 min
 Lab File: VL034409.D
 Acq: 25 Nov 2019 17:02

Instrument :
 MSVOA_L
 ClientSampled :
 3

Tot Ion: 95 Resp: 1569178
 Ion Ratio Lower Upper
 95 100
 174 65.7 52.2 78.2
 175 4.7 3.8 5.8

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#76
 1,4-Dichlorobenzene
 Concen: 0.250 ppbv
 RT: 17.20 min Scan# 4482
 Delta R.T. -0.01 min
 Lab File: VL034409.D
 Acq: 25 Nov 2019 17:02

Tgt Ion: 146 Resp: 40598
 Ion Ratio Lower Upper
 146 100
 111 54.1 24.1 72.3
 148 69.7 32.9 98.6

