

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101118\
 Data File : VL032621.D
 Acq On : 12 Oct 2018 2:09
 Operator : SY/AP
 Sample : J5370-04
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 Q4-SVI-100518

Manual Integrations
 APPROVED

MMDadoda
 10/12/2018 2:07:46 PM

Quant Time: Oct 12 12:16:51 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct 08 2018
 QLast Update : Mon Oct 01 06:49:26 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.80	49	1343141	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.33	114	2867310	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.27	117	3183171	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.61	95	2304896	9.60	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.09	85	25628	0.206	ppbv	89
3) Chlorodifluoromethane	3.03	51	71089m	0.636	ppbv	
4) Chloromethane	3.18	50	40166	0.617	ppbv	99
9) Propene	3.05	41	2877157	59.369	ppbv	98
10) Heptane	8.27	43	176771	0.994	ppbv	92
11) Trichlorofluoromethane	4.02	101	36011	0.244	ppbv	94
13) Ethanol	3.69	45	2093973	143.748	ppbv	98
15) Acetone	3.92	43	16212987	137.517	ppbv #	70
17) tert-Butyl alcohol	4.39	59	965569	65.174	ppbv #	100
19) Isopropyl Alcohol	4.07	45	1331274m	16.211	ppbv	
20) Methylene Chloride	4.44	84	1050593	18.402	ppbv	96
26) Hexane	5.80	57	415710	3.217	ppbv #	44
27) Carbon Disulfide	4.64	76	131317	0.945	ppbv #	92
34) 2-Butanone	5.35	43	14902147	87.276	ppbv #	86
35) Carbon Tetrachloride	7.16	117	15392m	0.077	ppbv	
36) Benzene	7.04	78	139321	0.601	ppbv	96
50) 4-Methyl-2-Pentanone	8.90	43	117131m	0.436	ppbv	
51) 2-Hexanone	10.29	43	4106299	18.499	ppbv #	97
52) Tetrachloroethene	11.41	164	68191m	0.845	ppbv	
53) Toluene	9.98	91	1247908	4.419	ppbv	100
58) Ethyl Benzene	12.89	91	52620	0.136	ppbv #	88
59) m/p-Xylene	13.15	91	115997m	0.338	ppbv	
60) o-Xylene	13.87	91	47007m	0.141	ppbv	

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

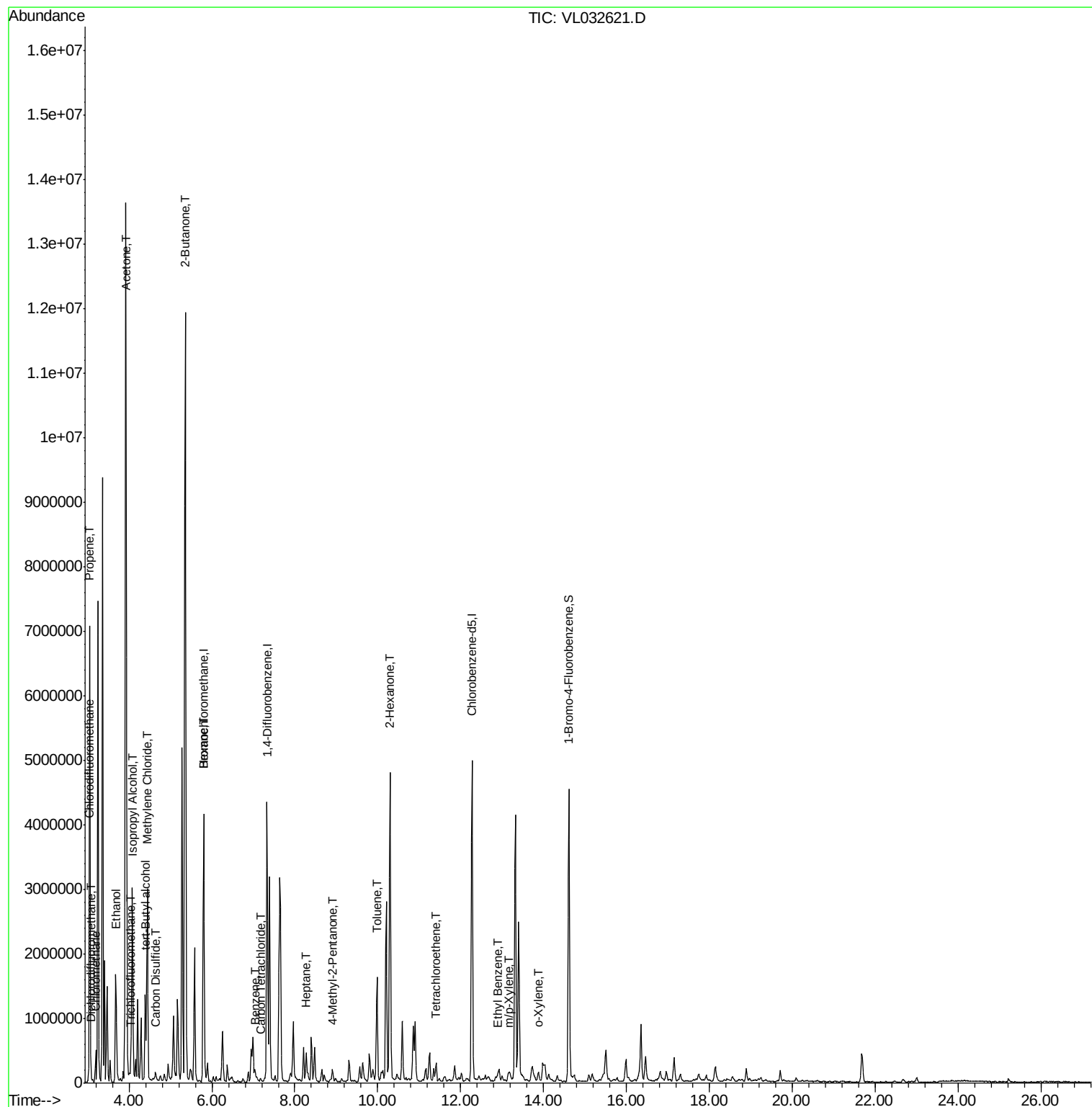
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL101118\
Data File : VL032621.D
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Misc : 400ml/MSVOA L
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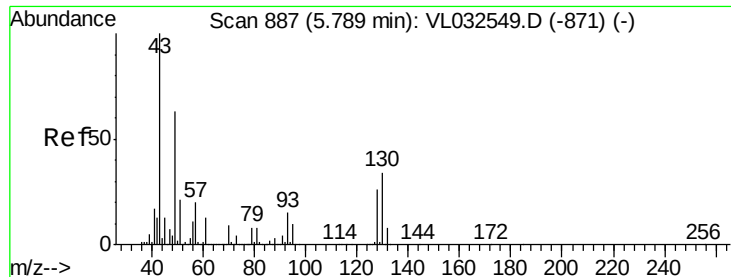
Instrument :
MSVOA_L
ClientSampleId :
Q4-SVI-100518

Manual Integrations
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Quant Time: Oct 12 12:16:51 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL092418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 01 06:49:26 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.80 min Scan# 890

Delta R.T. -0.01 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 49 Resp: 1343141

Ion Ratio Lower Upper

49 100

128 45.0 20.7 62.1

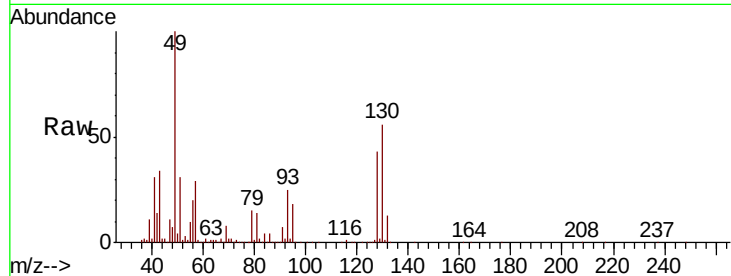
130 57.1 26.6 79.7

Manual Integrations

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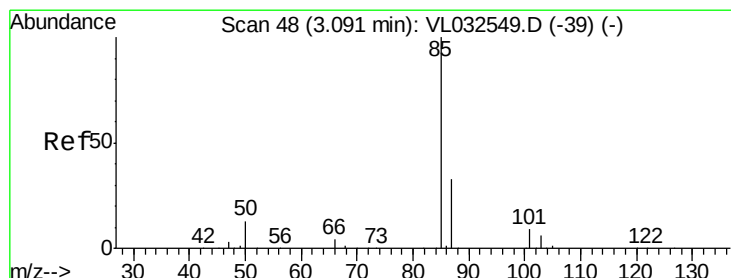
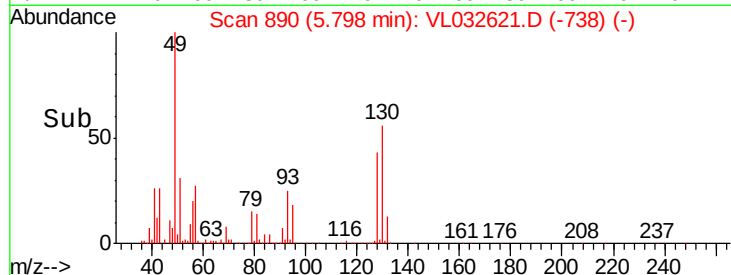
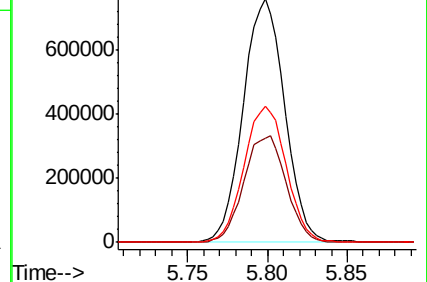
10/12/2018 2:07:46 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.206 ppbv

RT: 3.09 min Scan# 47

Delta R.T. -0.02 min

Lab File: VL032621.D

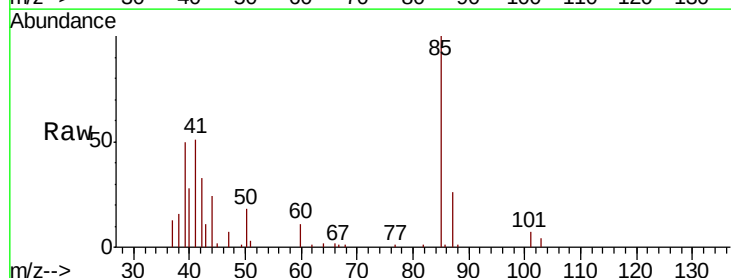
Acq: 12 Oct 2018 2:09

Tgt Ion: 85 Resp: 25628

Ion Ratio Lower Upper

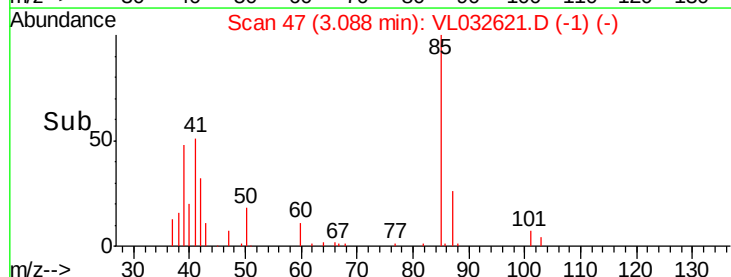
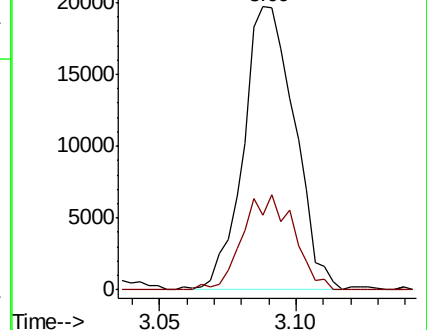
85 100

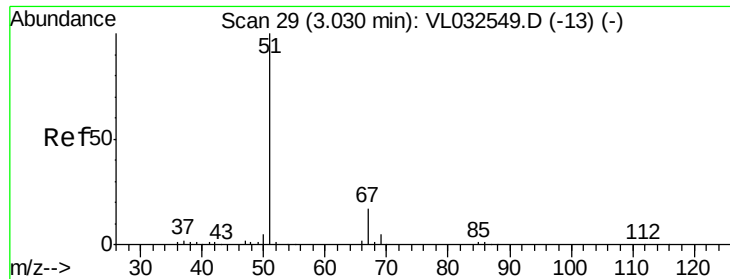
87 26.4 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.636 ppbv

RT: 3.03 min Scan# 29

Delta R.T. -0.01 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 51 Resp: 71089

Ion Ratio Lower Upper

51 100

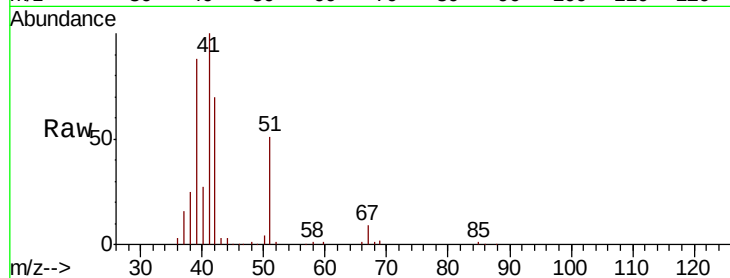
67 20.2 13.8 20.8

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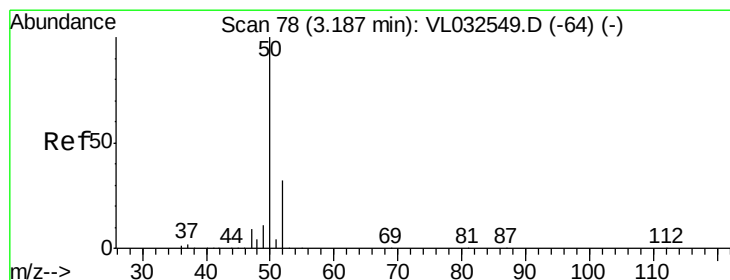
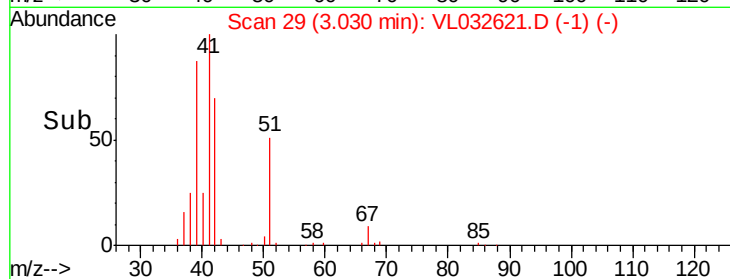
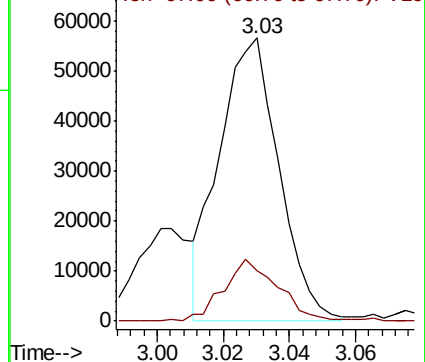
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.617 ppbv

RT: 3.18 min Scan# 76

Delta R.T. -0.02 min

Lab File: VL032621.D

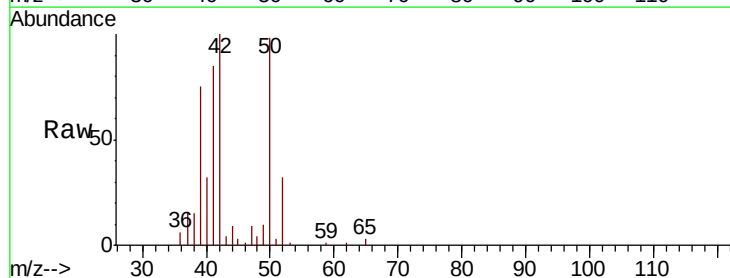
Acq: 12 Oct 2018 2:09

Tgt Ion: 50 Resp: 40166

Ion Ratio Lower Upper

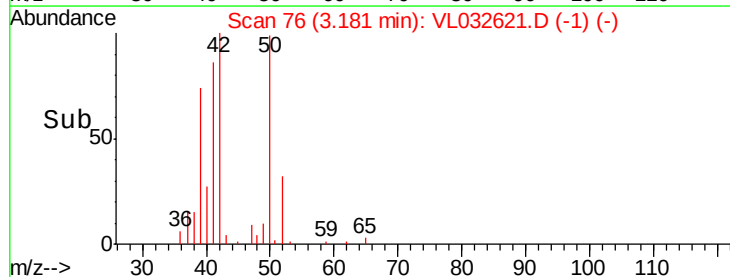
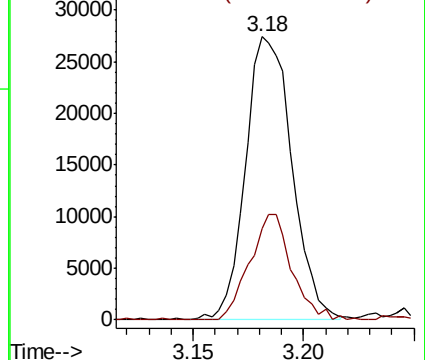
50 100

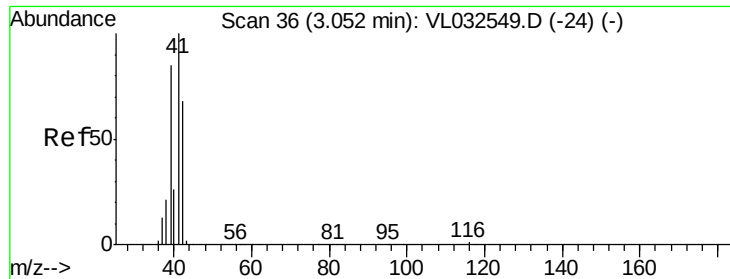
52 32.5 25.6 38.4



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 59.369 ppbv

RT: 3.05 min Scan# 35

Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 41 Resp: 2877157

Ion Ratio Lower Upper

41 100

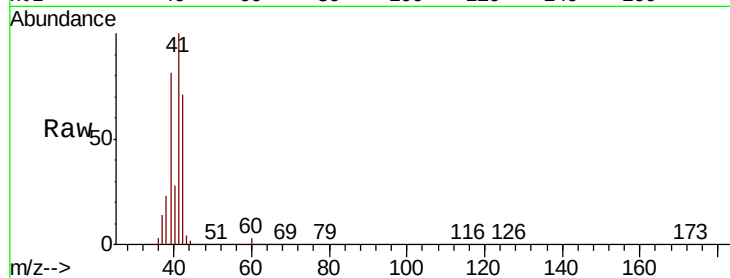
42 69.2 56.6 84.8

Manual Integrations

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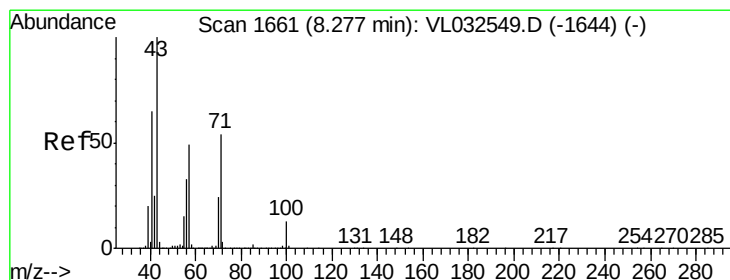
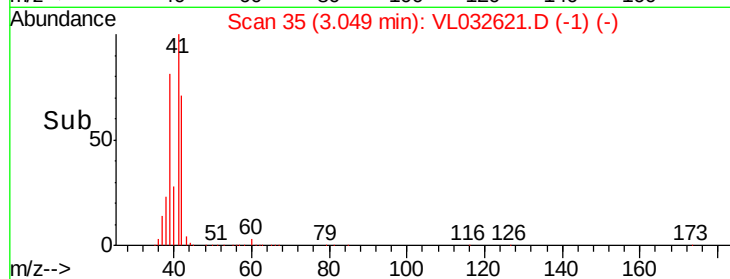
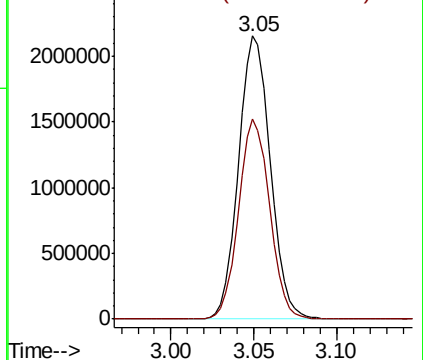
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#10

Heptane

Concen: 0.994 ppbv

RT: 8.27 min Scan# 1660

Delta R.T. -0.02 min

Lab File: VL032621.D

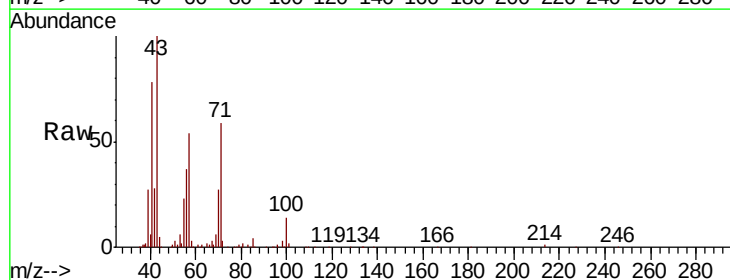
Acq: 12 Oct 2018 2:09

Tgt Ion: 43 Resp: 176771

Ion Ratio Lower Upper

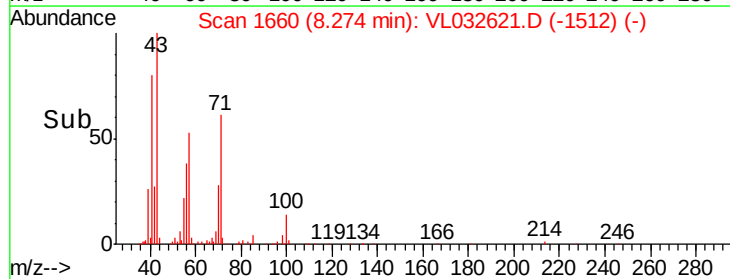
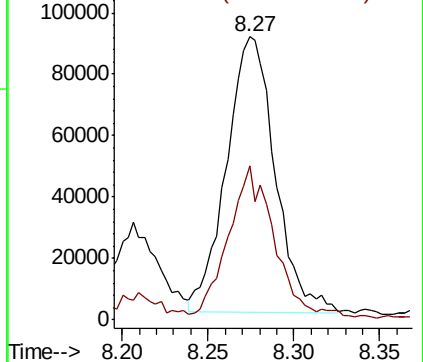
43 100

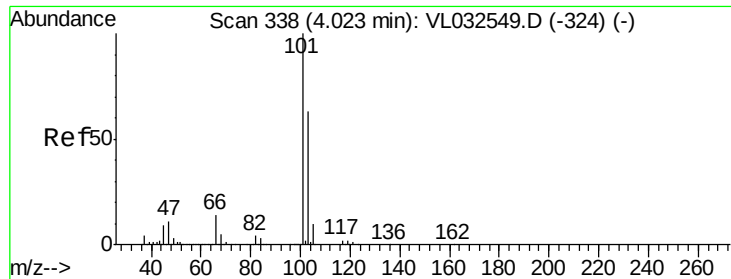
57 54.7 39.6 59.4



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





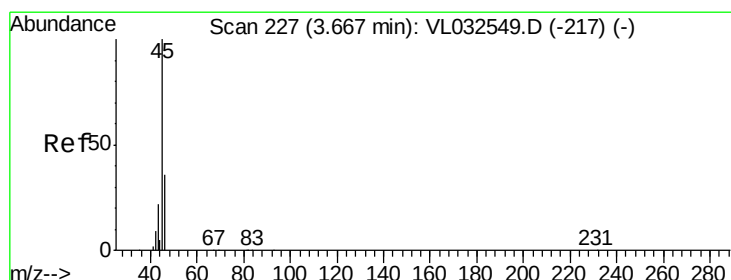
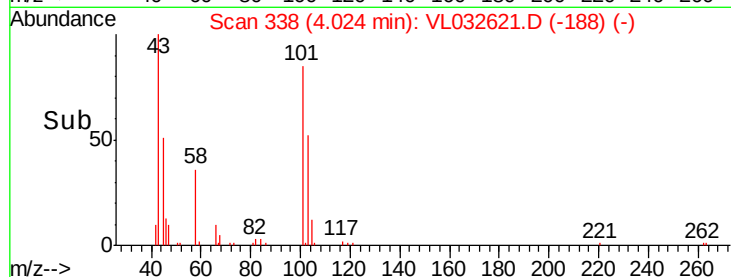
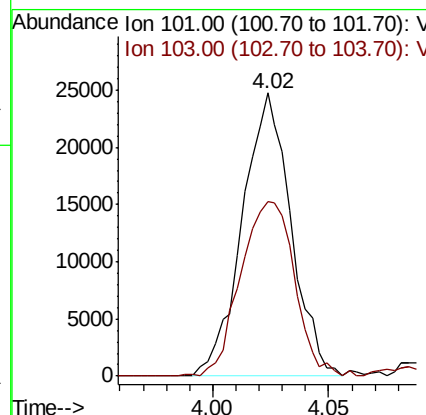
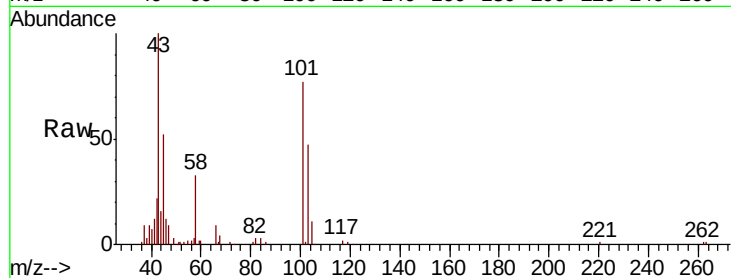
#11
 Trichlorofluoromethane
 Concen: 0.244 ppbv
 RT: 4.02 min Scan# 338
 Delta R.T. -0.02 min
 Lab File: VL032621.D
 Acq: 12 Oct 2018 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 Q4-SVI-100518

Tot Ion	Ratio	Lower	Upper
101	100		
103	61.6	52.8	79.2

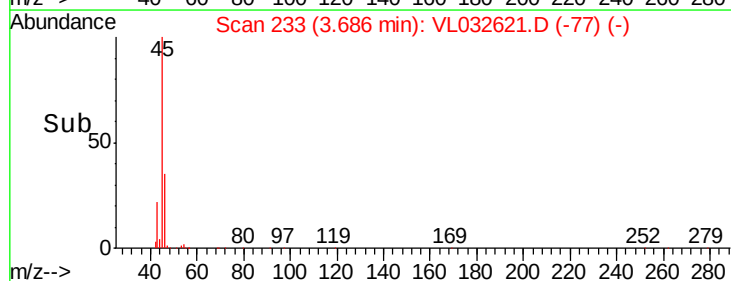
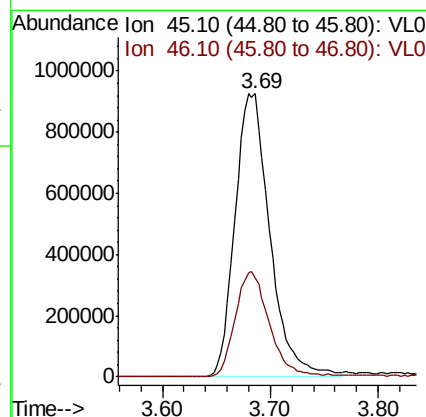
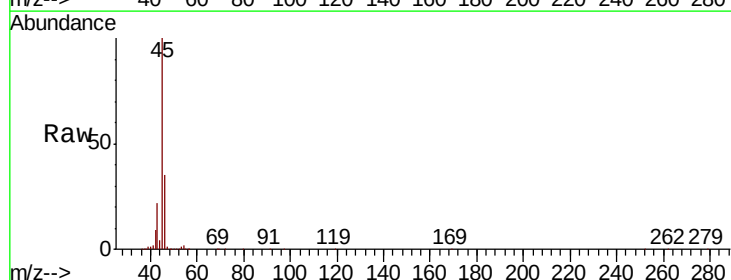
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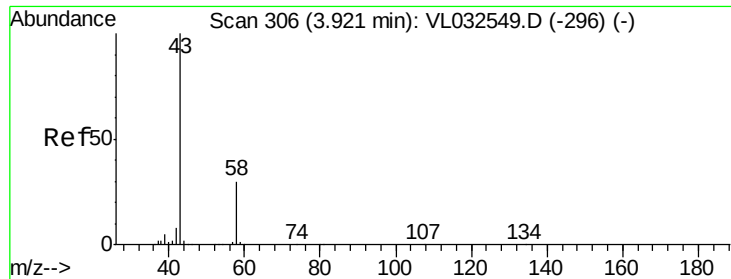
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#13
 Ethanol
 Concen: 143.748 ppbv
 RT: 3.69 min Scan# 233
 Delta R.T. 0.00 min
 Lab File: VL032621.D
 Acq: 12 Oct 2018 2:09

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.7	14.2	56.8





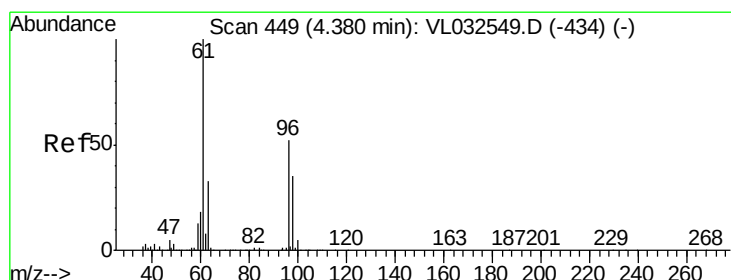
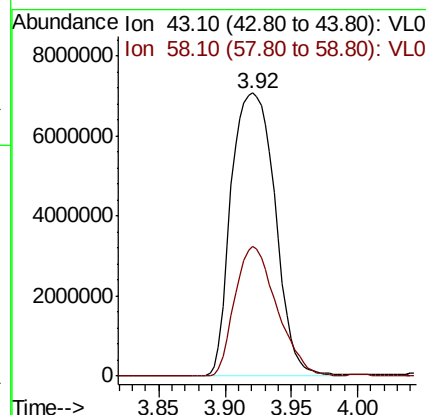
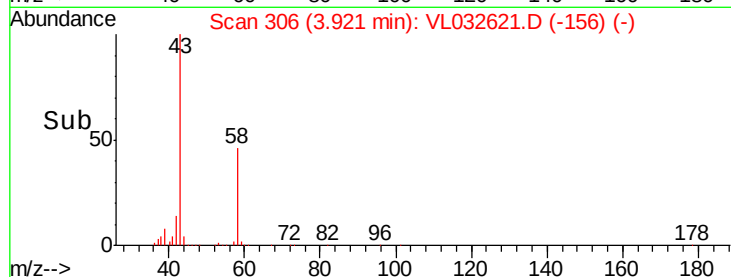
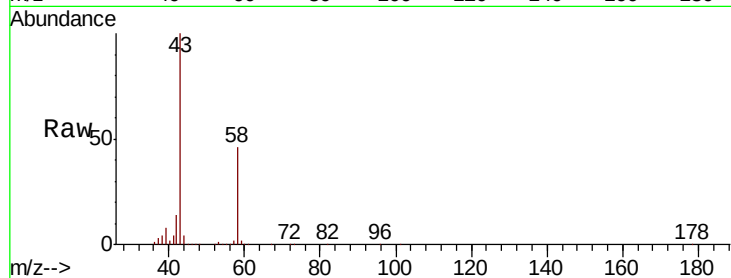
#15
Acetone
Concen: 137.517 ppbv
RT: 3.92 min Scan# 306
Delta R.T. -0.02 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Instrument :
MSVOA_L
ClientSampleId :
Q4-SVI-100518

Tot Ion: 43 Resp:16212987
Ion Ratio Lower Upper
43 100
58 44.2 22.6 33.8#

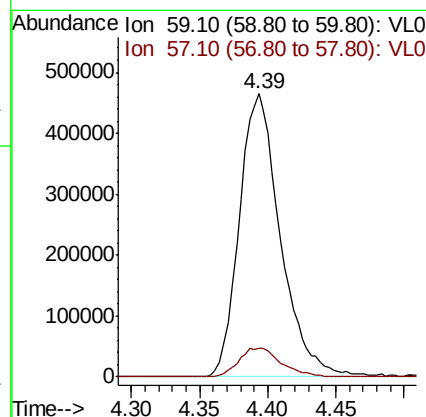
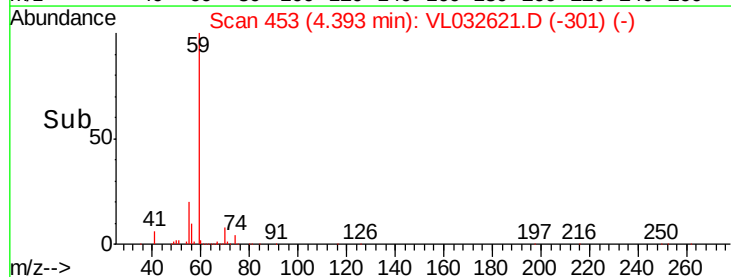
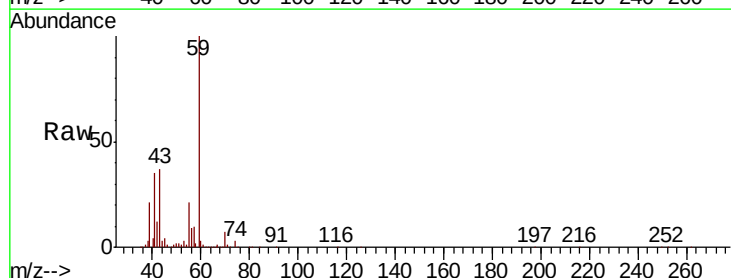
Manual Integrations
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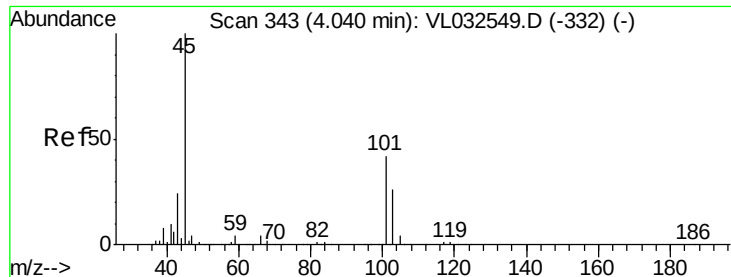
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#17
tert-Butyl alcohol
Concen: 65.174 ppbv
RT: 4.39 min Scan# 453
Delta R.T. -0.01 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Tgt Ion: 59 Resp: 965569
Ion Ratio Lower Upper
59 100
57 10.9 0.0 0.0#





#19

Isopropyl Alcohol

Concen: 16.211 ppbv m

RT: 4.07 min Scan# 352

Delta R.T. 0.01 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 45 Resp: 1331274

Ion Ratio Lower Upper

45 100

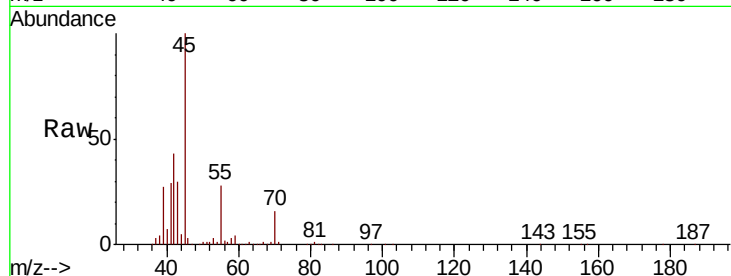
58 0.0 2.0 3.0#

Manual Integrations

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

4.07

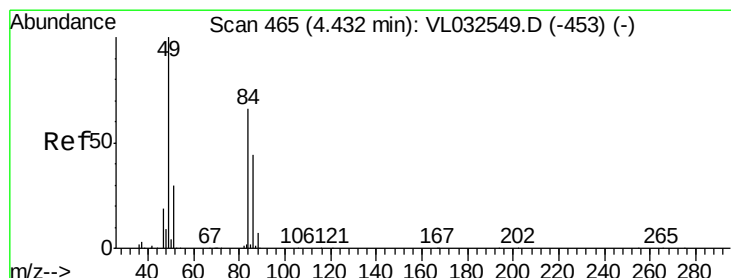
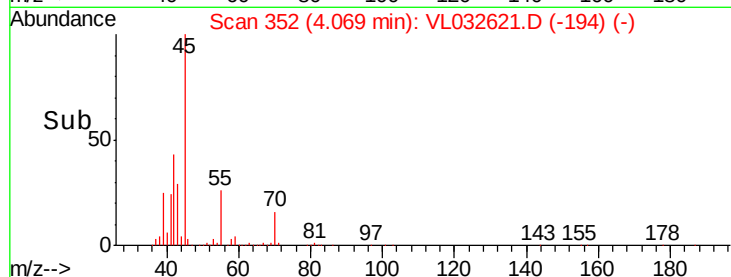
600000

400000

200000

0

Time-->



#20

Methylene Chloride

Concen: 18.402 ppbv

RT: 4.44 min Scan# 468

Delta R.T. -0.01 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Tgt Ion: 84 Resp: 1050593

Ion Ratio Lower Upper

84 100

49 146.7 119.1 178.7

51 48.7 35.2 52.8

86 65.7 49.4 74.2

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

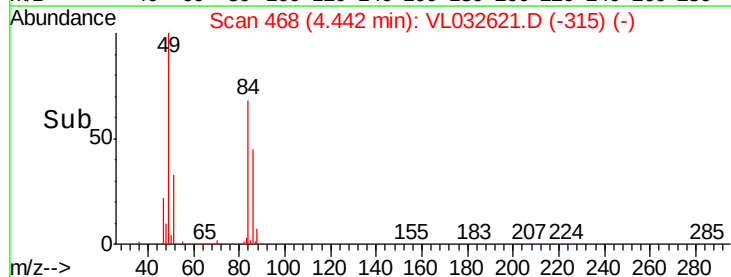
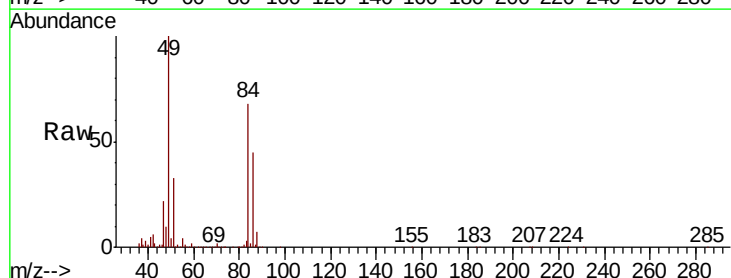
Ion 86.00 (85.70 to 86.70): VL0

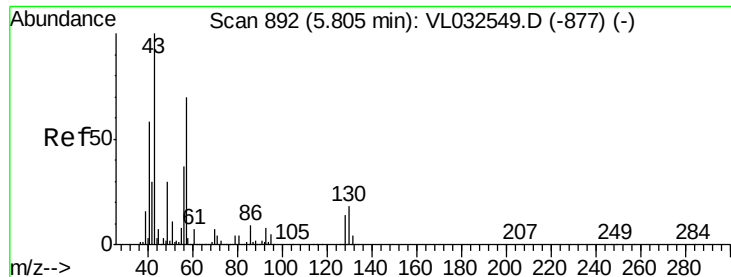
1000000

500000

0

Time-->





#26

Hexane

Concen: 3.217 ppbv

RT: 5.80 min Scan# 892

Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 57 Resp: 415710
Ion Ratio Lower Upper

57 100

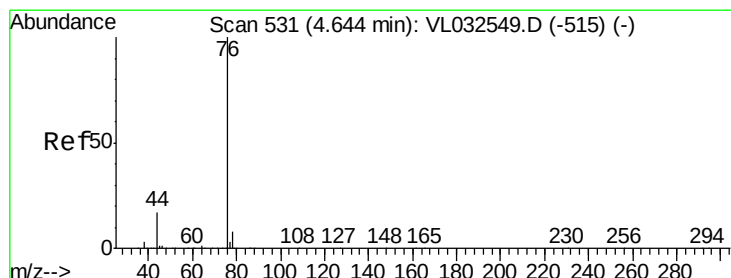
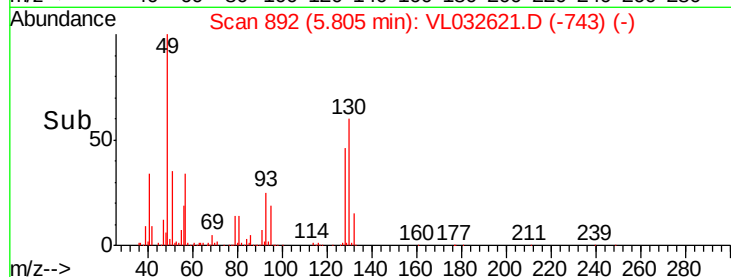
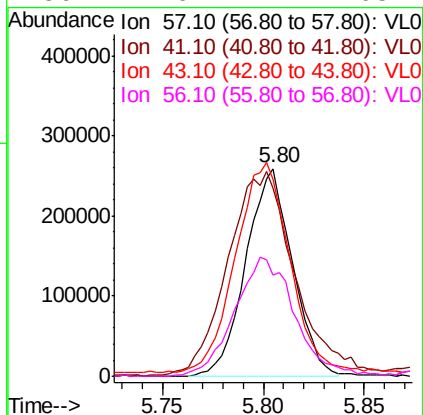
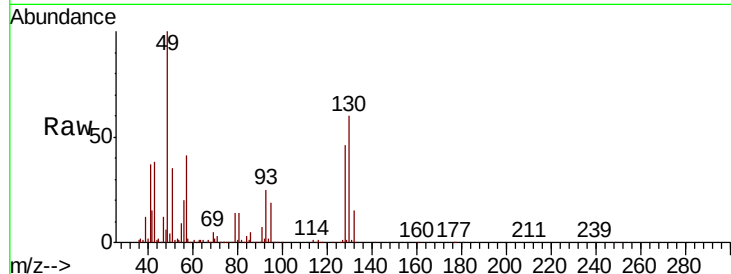
41 142.1 69.0 103.4#

43 119.2 172.1 258.1#

56 74.6 42.2 63.2#

Manual Integrations
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#27

Carbon Disulfide

Concen: 0.945 ppbv

RT: 4.64 min Scan# 531

Delta R.T. -0.02 min

Lab File: VL032621.D

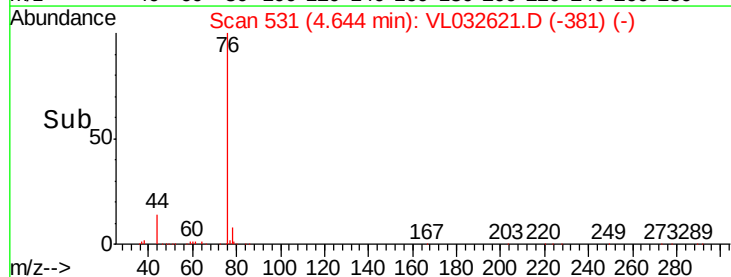
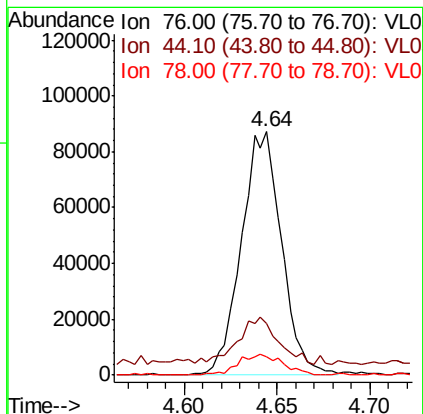
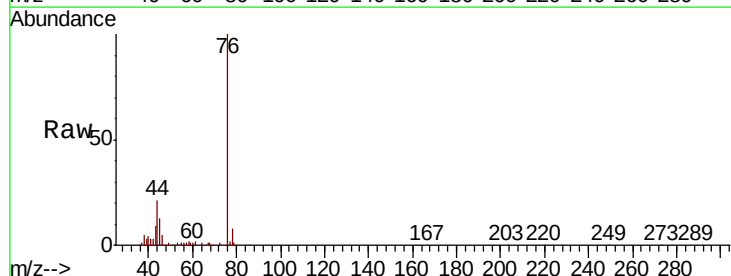
Acq: 12 Oct 2018 2:09

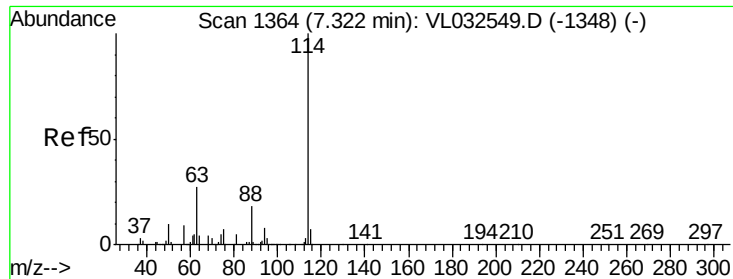
Tgt Ion: 76 Resp: 131317
Ion Ratio Lower Upper

76 100

44 22.4 14.0 21.0#

78 9.9 7.5 11.3





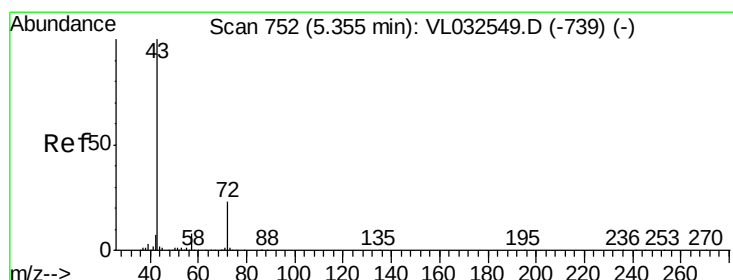
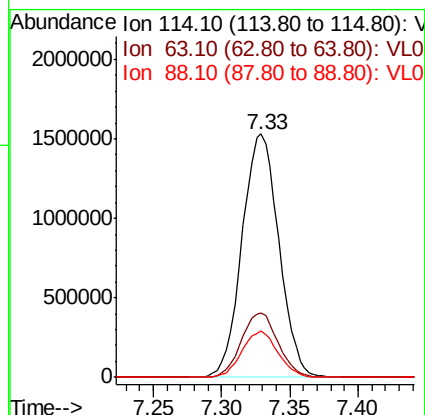
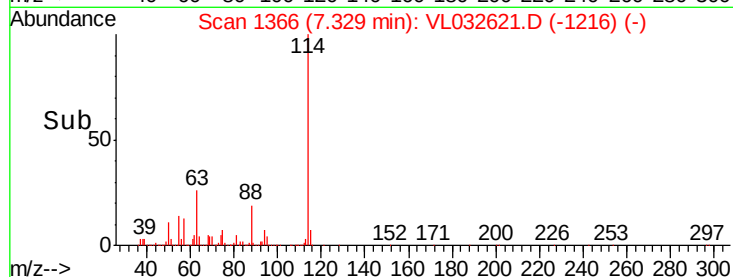
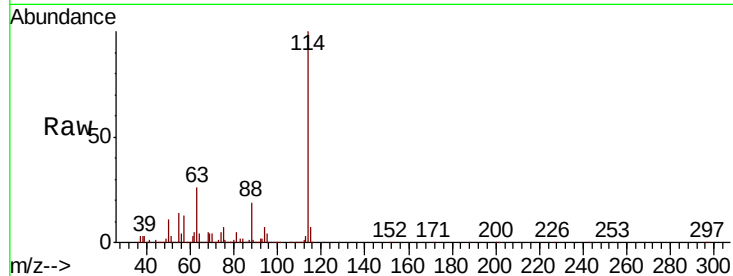
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.33 min Scan# 1366
 Delta R.T. -0.02 min
 Lab File: VL032621.D
 Acq: 12 Oct 2018 2:09

Instrument :
 MSVOA_L
 ClientSampleId :
 Q4-SVI-100518

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.7	22.2	33.4
88	18.8	15.0	22.4

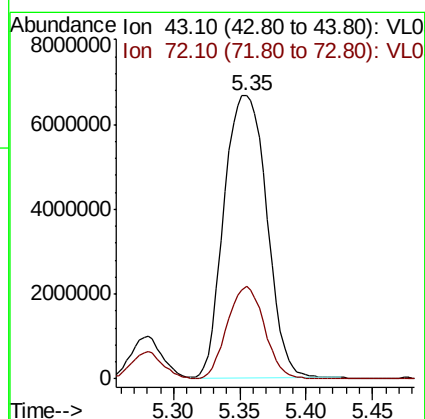
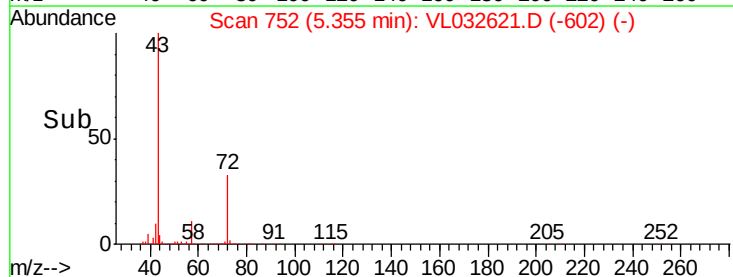
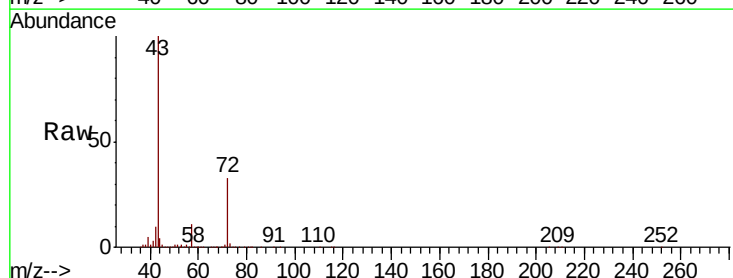
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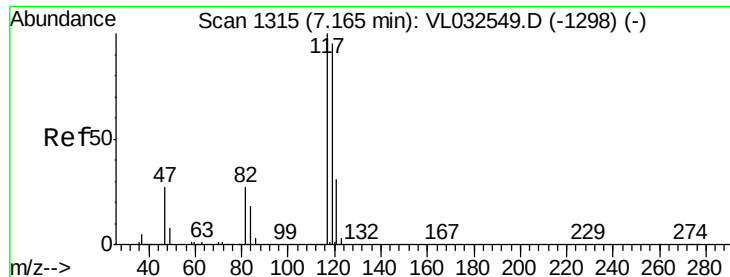
MMDadoda
 10/12/2018 2:07:46 PM



#34
 2-Butanone
 Concen: 87.276 ppbv
 RT: 5.35 min Scan# 752
 Delta R.T. -0.02 min
 Lab File: VL032621.D
 Acq: 12 Oct 2018 2:09

Tgt Ion	Ratio	Lower	Upper
43	100		
72	28.7	17.8	26.6





#35

Carbon Tetrachloride

Concen: 0.077 ppbv m

RT: 7.16 min Scan# 1314

Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

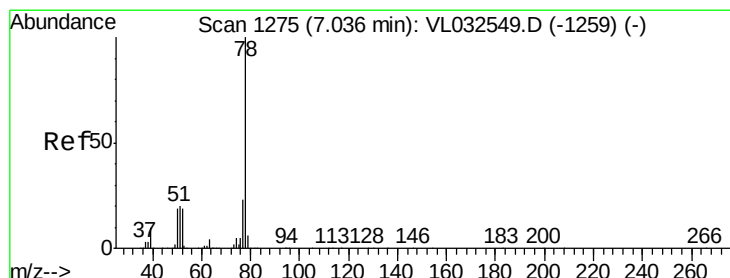
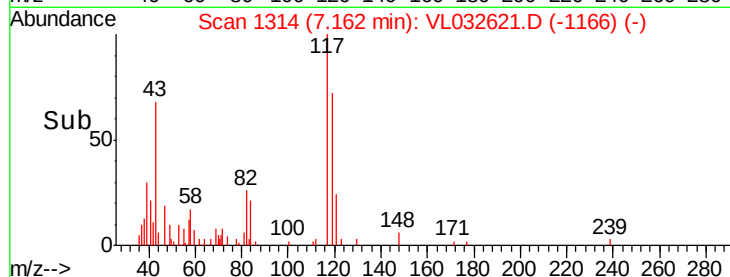
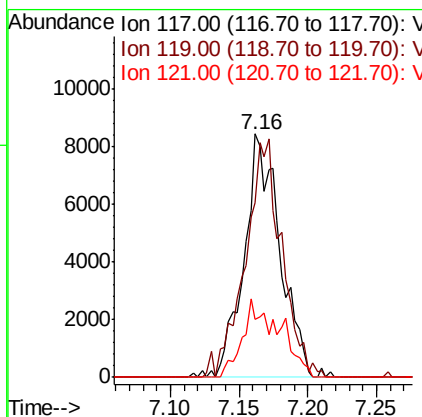
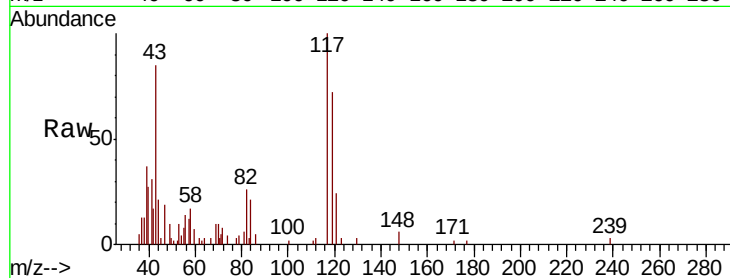
ClientSampleId :

Q4-SVI-100518

Tot Ion	Ratio	Lower	Upper
117	100		
119	71.9	76.6	115.0#
121	23.8	24.6	36.8#

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#36

Benzene

Concen: 0.601 ppbv

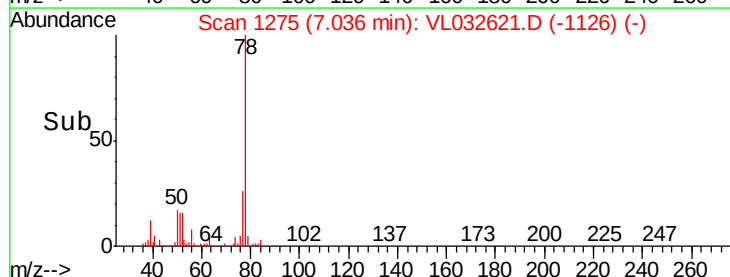
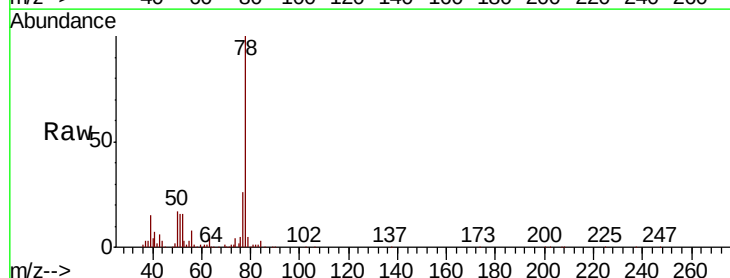
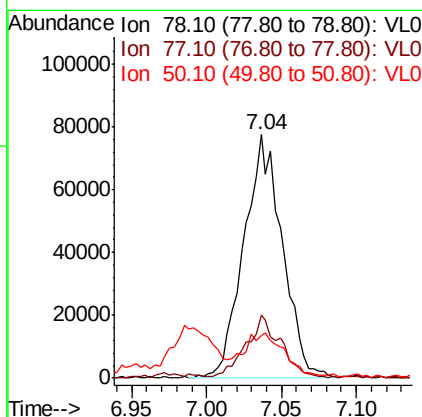
RT: 7.04 min Scan# 1275

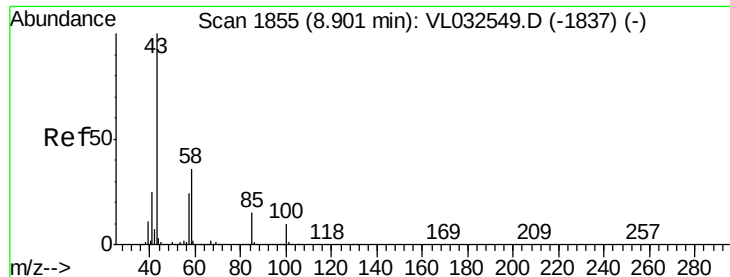
Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Tgt Ion	Ratio	Lower	Upper
78	100		
77	25.5	18.4	27.6
50	16.4	14.4	21.6





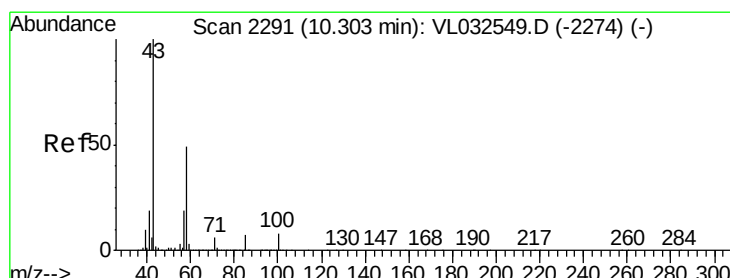
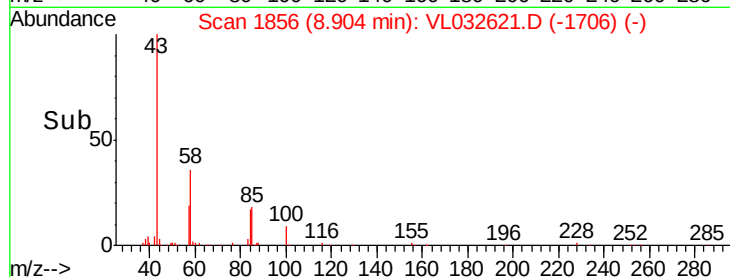
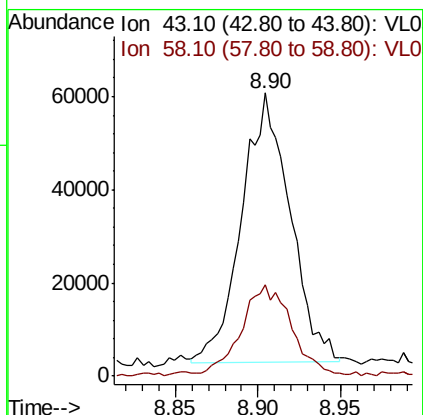
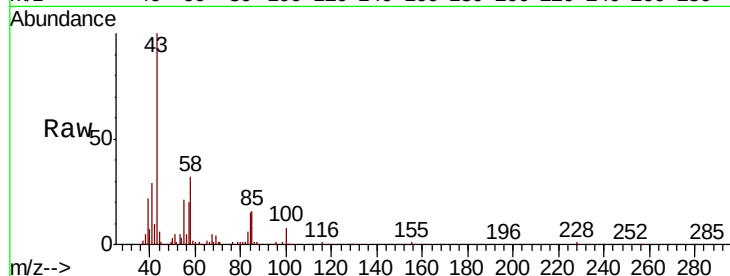
#50
4-Methyl-2-Pentanone
Concen: 0.436 ppbv m
RT: 8.90 min Scan# 1856
Delta R.T. -0.02 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Instrument :
MSVOA_L
ClientSampleId :
Q4-SVI-100518

Tot Ion	43	Resp	117131
Ion Ratio	Lower	Upper	
43	100		
58	36.6	29.0	43.4

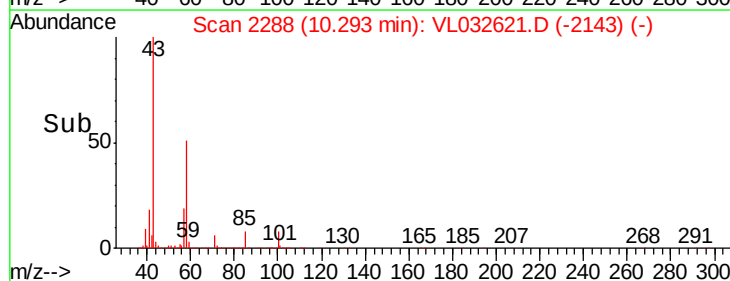
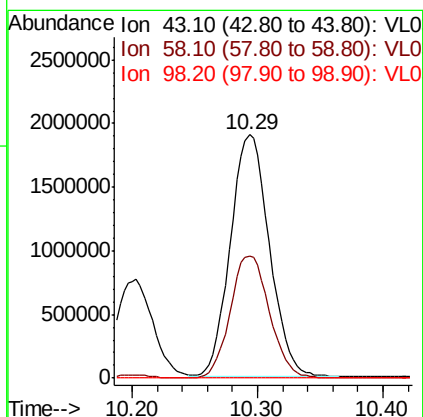
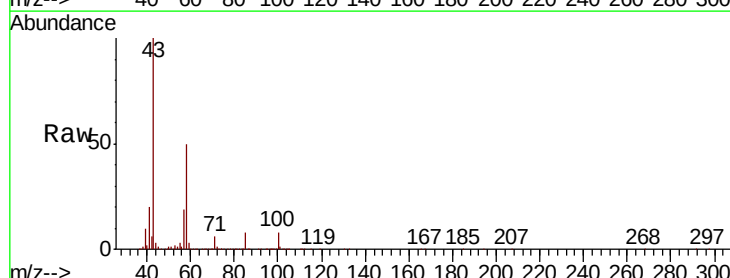
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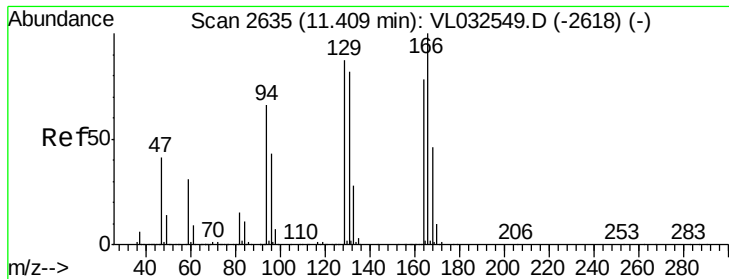
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#51
2-Hexanone
Concen: 18.499 ppbv
RT: 10.29 min Scan# 2288
Delta R.T. -0.03 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Tgt Ion	43	Resp	4106299
Ion Ratio	Lower	Upper	
43	100		
58	50.8	39.2	58.8
98	0.3	0.4	0.6#





#52

Tetrachloroethene

Concen: 0.845 ppbv m

RT: 11.41 min Scan# 2634

Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

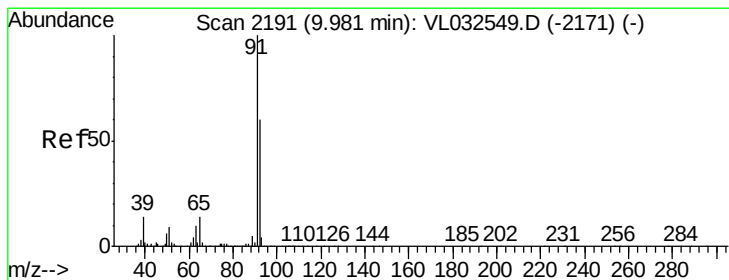
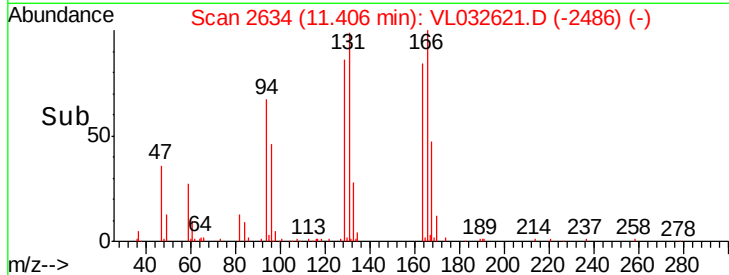
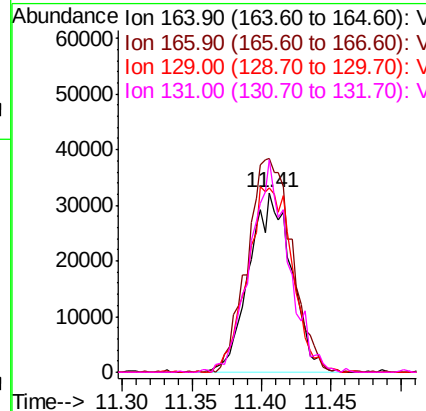
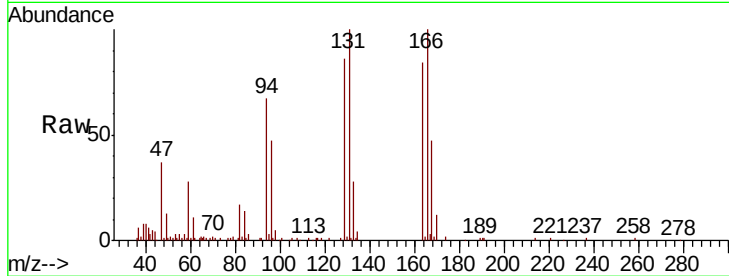
ClientSampleId :

Q4-SVI-100518

Tot Ion:	164	Resp:	68191
Ion	Ratio	Lower	Upper
164	100		
166	118.9	100.6	150.8
129	102.6	89.9	134.9
131	118.3	85.9	128.9

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#53

Toluene

Concen: 4.419 ppbv

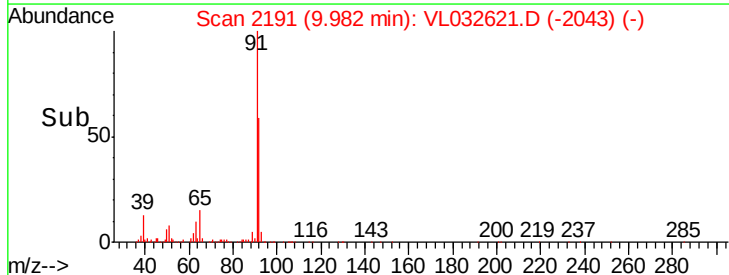
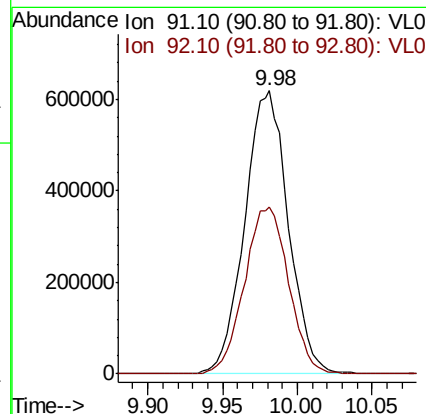
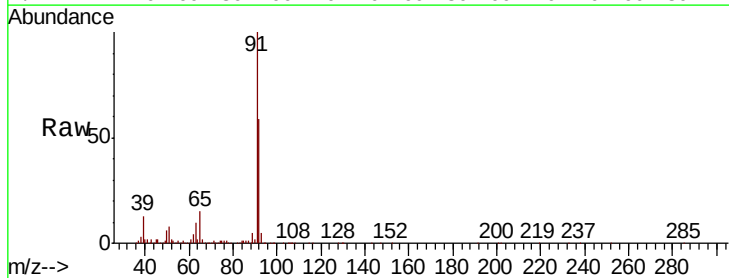
RT: 9.98 min Scan# 2191

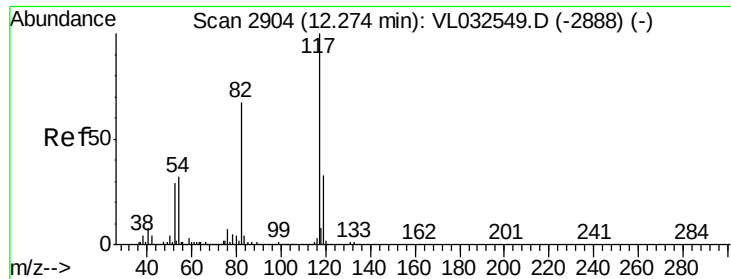
Delta R.T. -0.02 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Tgt Ion:	91	Resp:	1247908
Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.1	72.1





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.27 min Scan# 2903

Delta R.T. -0.03 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

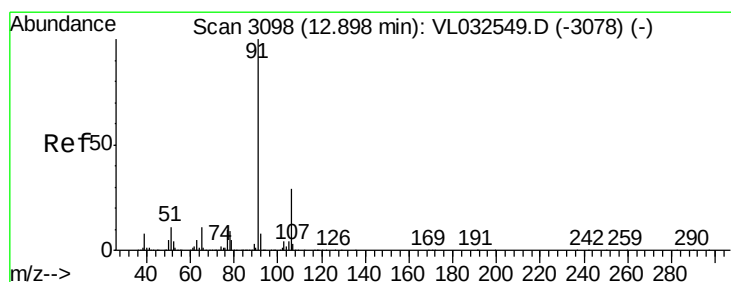
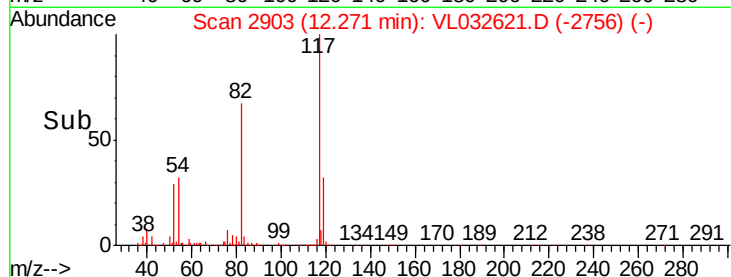
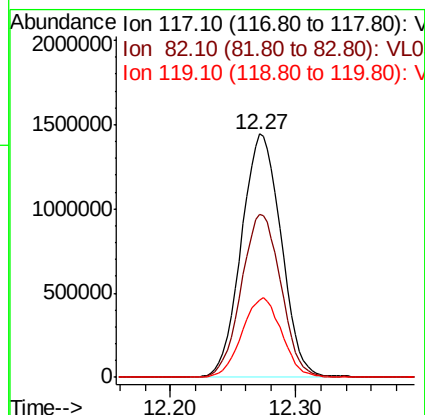
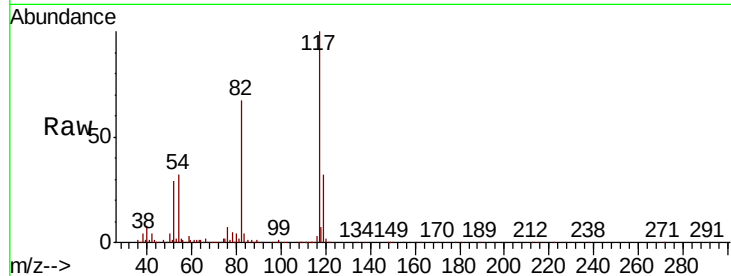
ClientSampleId :

Q4-SVI-100518

Tot Ion	Ratio	Lower	Upper
117	100		
82	67.4	53.0	79.6
119	32.6	45.9	68.9

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#58

Ethyl Benzene

Concen: 0.136 ppbv

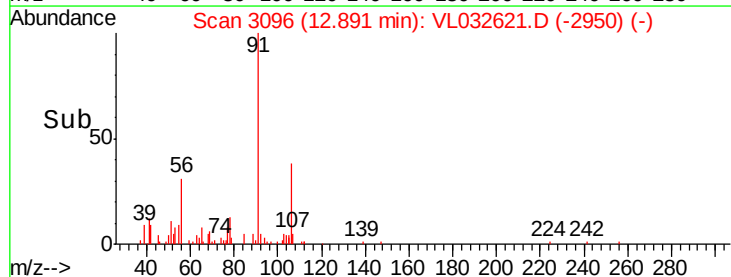
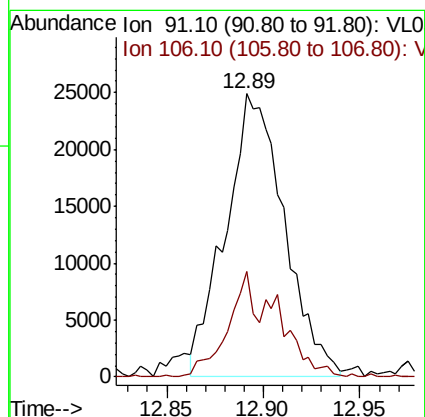
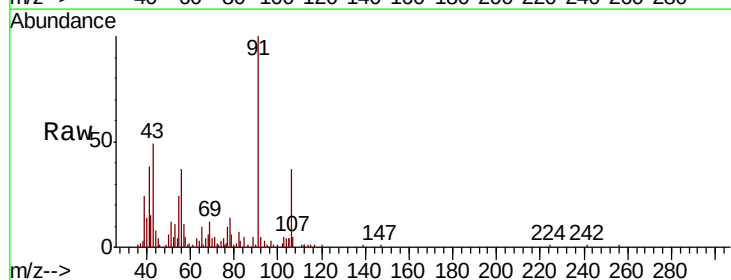
RT: 12.89 min Scan# 3096

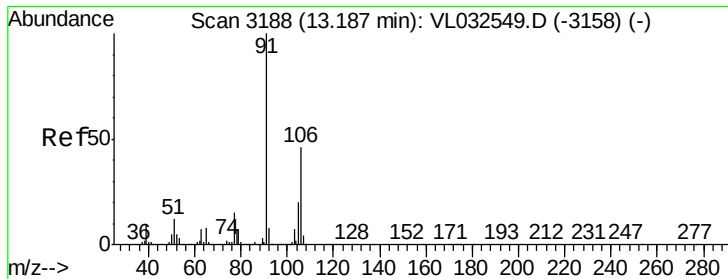
Delta R.T. -0.03 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Tgt Ion	Ratio	Lower	Upper
91	100		
106	37.3	24.8	37.2





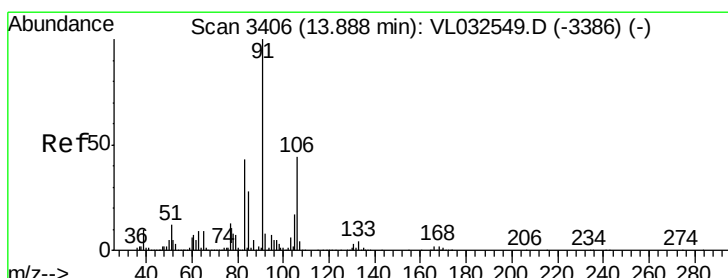
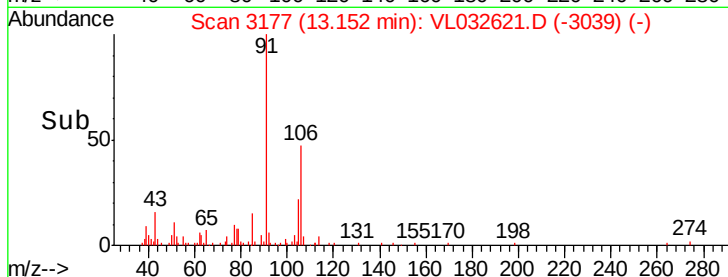
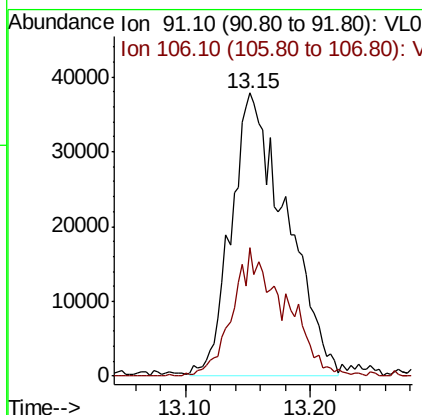
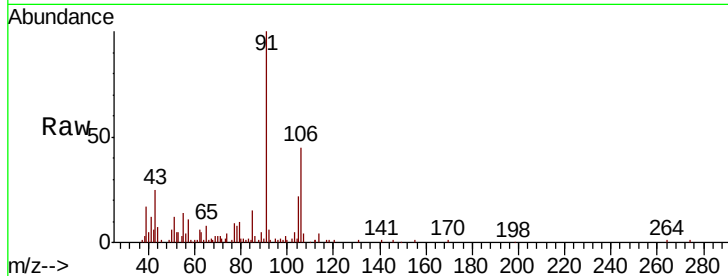
#59
m/p-Xylene
Concen: 0.338 ppbv m
RT: 13.15 min Scan# 3177
Delta R.T. -0.06 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Instrument :
MSVOA_L
ClientSampleId :
Q4-SVI-100518

Tot Ion: 91 Resp: 115997
Ion Ratio Lower Upper
91 100
106 0.0 36.6 55.0#

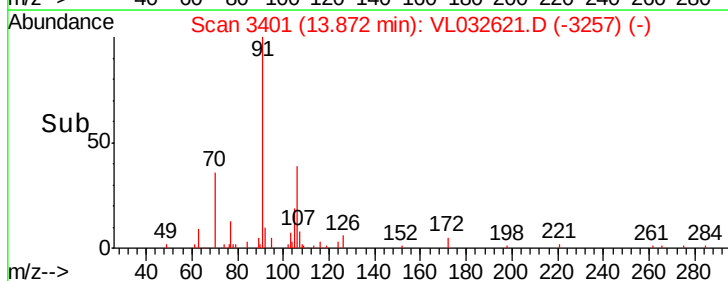
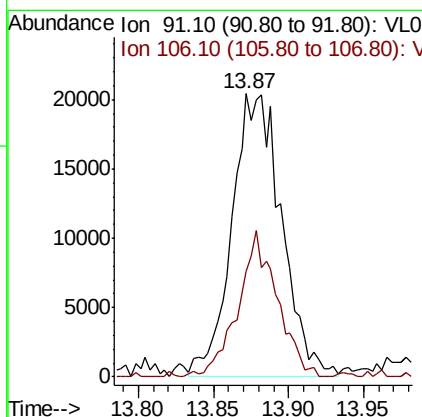
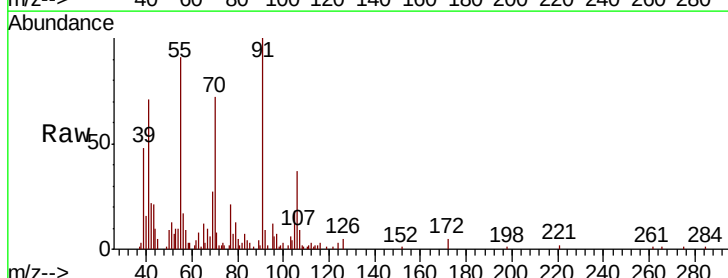
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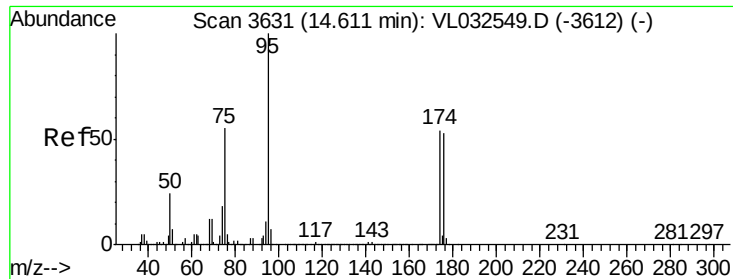
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#60
o-Xylene
Concen: 0.141 ppbv m
RT: 13.87 min Scan# 3401
Delta R.T. -0.04 min
Lab File: VL032621.D
Acq: 12 Oct 2018 2:09

Tgt Ion: 91 Resp: 47007
Ion Ratio Lower Upper
91 100
106 40.7 21.9 65.7





#68

1-Bromo-4-Fluorobenzene

Concen: 9.602 ppbv

RT: 14.61 min Scan# 3630

Delta R.T. -0.03 min

Lab File: VL032621.D

Acq: 12 Oct 2018 2:09

Instrument :

MSVOA_L

ClientSampleId :

Q4-SVI-100518

Tot Ion: 95 Resp: 2304896

Ion Ratio Lower Upper

95 100

174 59.0 46.3 69.5

175 4.3 3.4 5.0

Manual Integrations

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