

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL101118\
 Data File : VL032618.D
 Acq On : 12 Oct 2018 00:08
 Operator : SY/AP
 Sample : J5370-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 Q3-SVI-100518

Manual Integrations
 APPROVED

MMDadoda
 10/12/2018 2:07:43 PM

Quant Time: Oct 12 12:15:06 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	1354915	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.33	114	2976916	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.27	117	3240098	10.00	ppbv	-0.03

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.61	95	2292328	9.38	ppbv	-0.03
Spiked Amount	10.000	Range	65 - 135	Recovery	=	93.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.09	85	30627	0.244	ppbv	100
3) Chlorodifluoromethane	3.03	51	125188m	1.111	ppbv	
4) Chloromethane	3.19	50	41716	0.635	ppbv	100
9) Propene	3.05	41	3699073	75.666	ppbv	98
10) Heptane	8.28	43	148645	0.829	ppbv	98
11) Trichlorofluoromethane	4.02	101	35578	0.239	ppbv	99
13) Ethanol	3.68	45	1042173	70.922	ppbv	99
15) Acetone	3.92	43	18322940	154.063	ppbv #	68
17) tert-Butyl alcohol	4.39	59	925231	61.909	ppbv #	100
19) Isopropyl Alcohol	4.06	45	784824	9.474	ppbv #	93
20) Methylene Chloride	4.44	84	1523493	26.453	ppbv	98
26) Hexane	5.80	57	412152	3.162	ppbv #	42
27) Carbon Disulfide	4.64	76	453932	3.239	ppbv	100
28) Methyl tert-Butyl Ether	5.13	73	20544m	0.127	ppbv	
34) 2-Butanone	5.36	43	15581103	87.892	ppbv #	86
35) Carbon Tetrachloride	7.17	117	14142m	0.068	ppbv	
36) Benzene	7.04	78	7011150	29.143	ppbv	98
50) 4-Methyl-2-Pentanone	8.91	43	61244m	0.220	ppbv	
51) 2-Hexanone	10.29	43	2081341	9.031	ppbv #	99
52) Tetrachloroethene	11.41	164	138104	1.649	ppbv	84
53) Toluene	9.98	91	1761387	6.008	ppbv	99
58) Ethyl Benzene	12.90	91	76876	0.196	ppbv	98
59) m/p-Xylene	13.16	91	138143m	0.395	ppbv	
60) o-Xylene	13.88	91	49228	0.145	ppbv	94

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

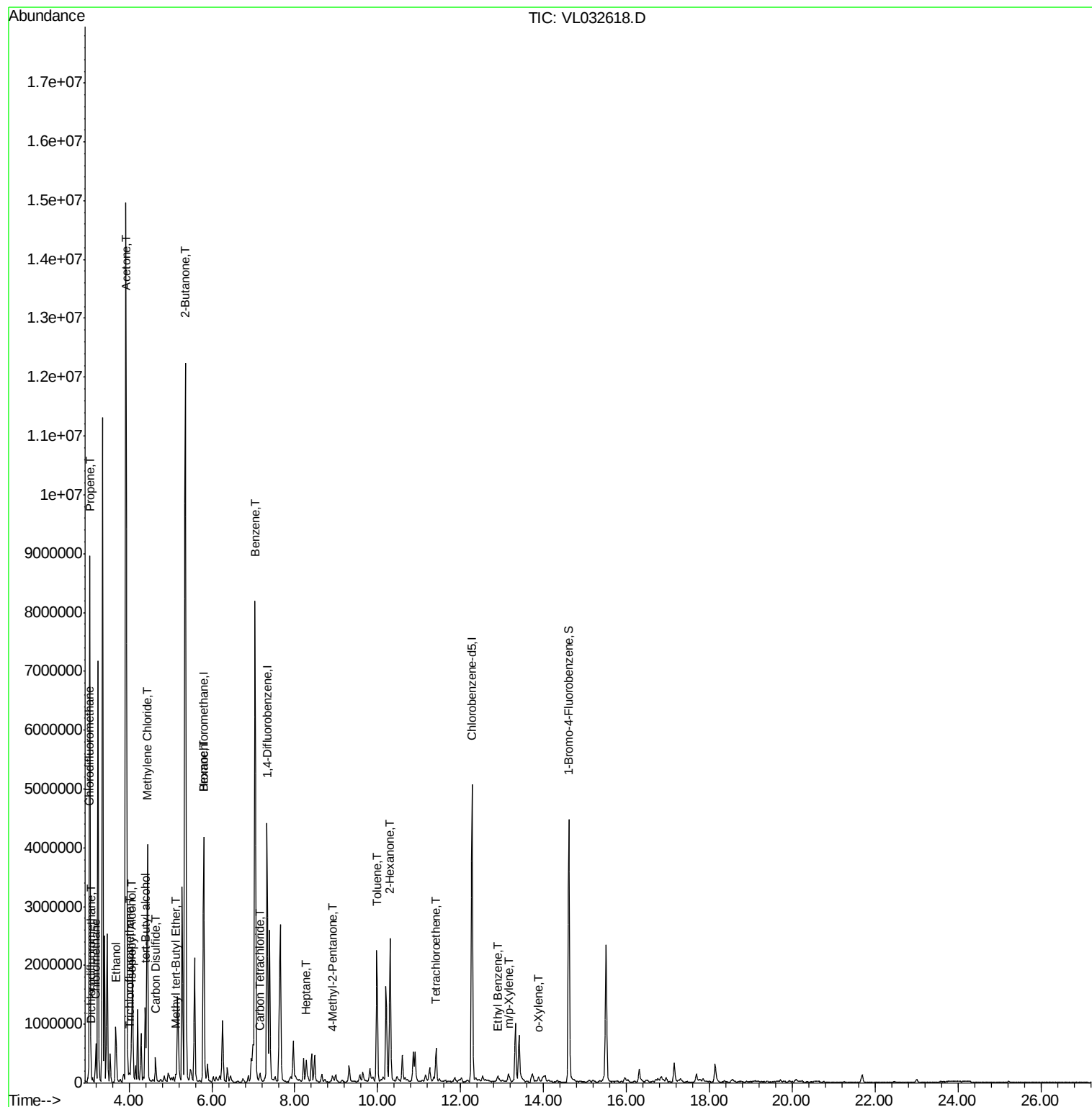
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL101118\
Data File : VL032618.D
Acq On : 12 Oct 2018 00:08
Operator : SY/AP
Sample : J5370-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

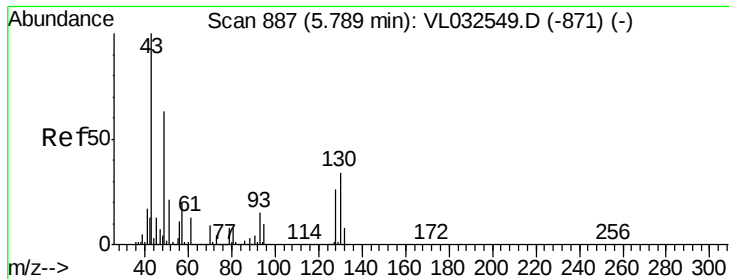
Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Manual Integrations
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Quant Time: Oct 12 12:15:06 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# 891

Delta R.T. -0.01 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 49 Resp: 1354915

Ion Ratio Lower Upper

49 100

128 43.8 20.7 62.1

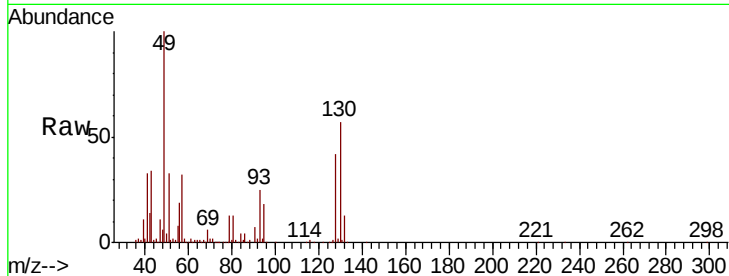
130 56.0 26.6 79.7

Manual Integrations

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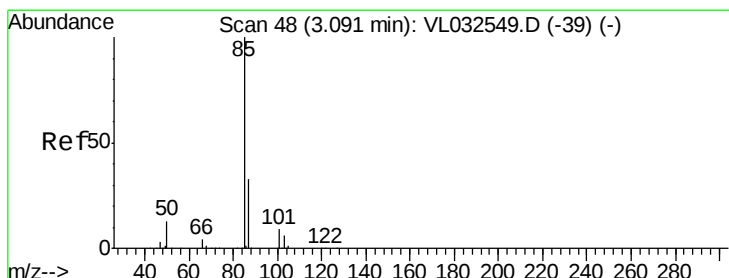
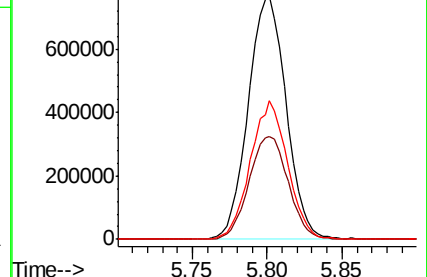
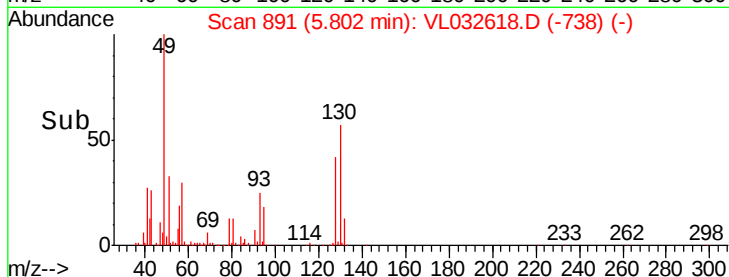
10/12/2018 2:07:43 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.244 ppbv

RT: 3.09 min Scan# 48

Delta R.T. -0.02 min

Lab File: VL032618.D

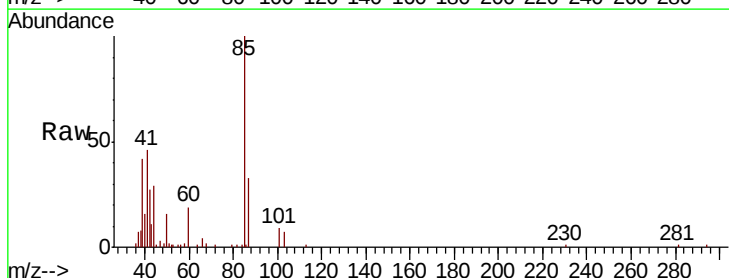
Acq: 12 Oct 2018 00:08

Tgt Ion: 85 Resp: 30627

Ion Ratio Lower Upper

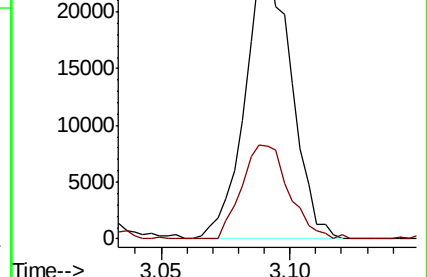
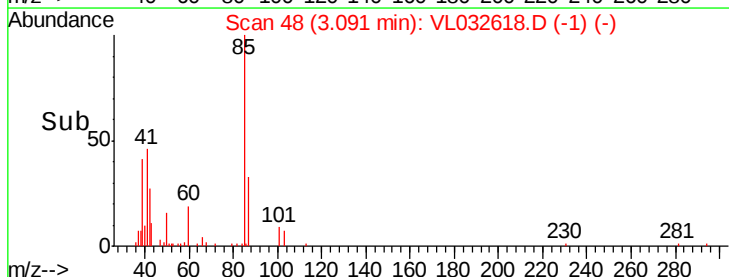
85 100

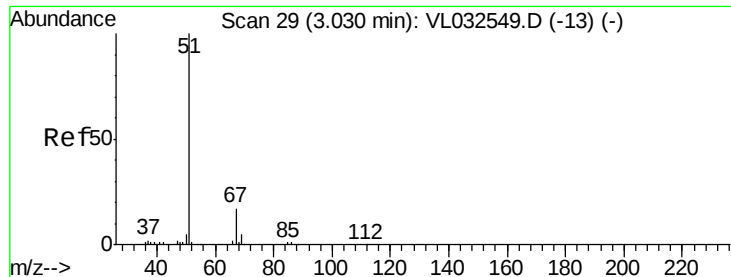
87 32.6 26.2 39.4



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





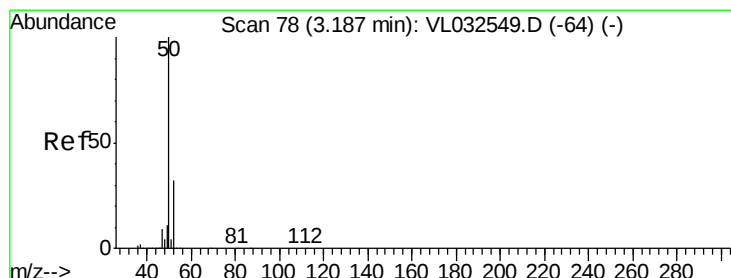
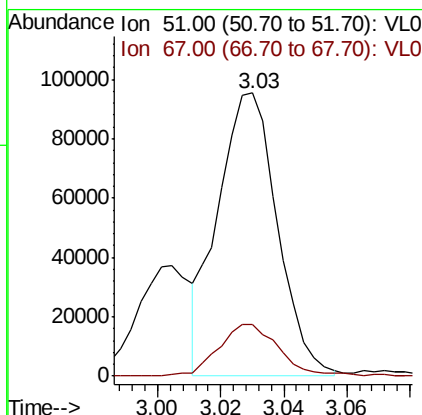
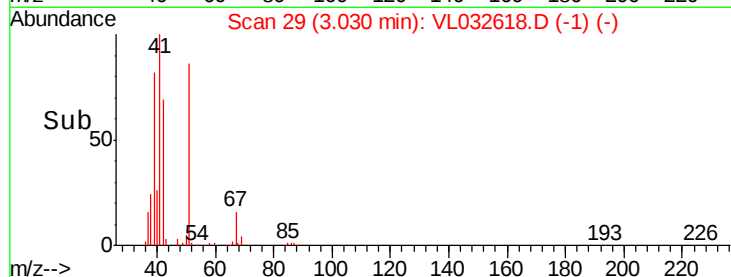
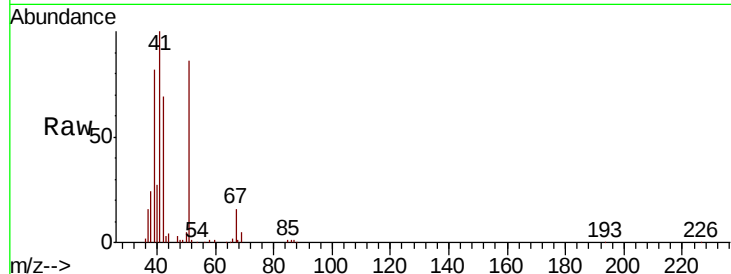
#3
Chlorodifluoromethane
Concen: 1.111 ppbv
RT: 3.03 min Scan# 29
Delta R.T. -0.01 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Tot Ion	Ratio	Lower	Upper
51	100		
67	18.9	13.8	20.8

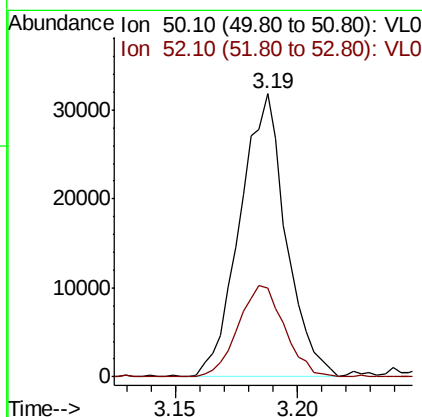
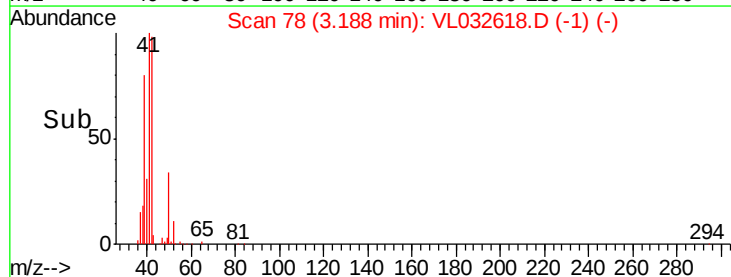
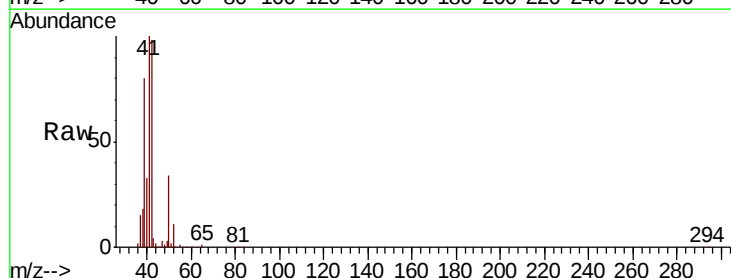
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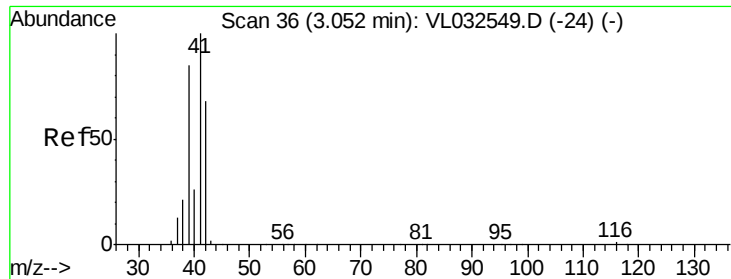
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#4
Chloromethane
Concen: 0.635 ppbv
RT: 3.19 min Scan# 78
Delta R.T. -0.01 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.9	25.6	38.4





#9

Propene

Concen: 75.666 ppbv

RT: 3.05 min Scan# 36

Delta R.T. -0.01 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 41 Resp: 3699073

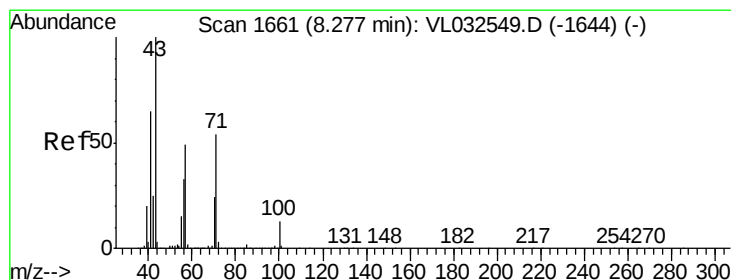
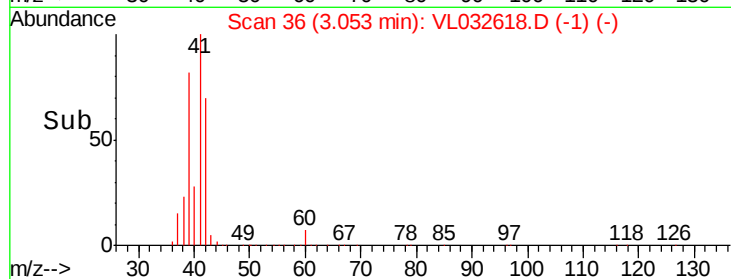
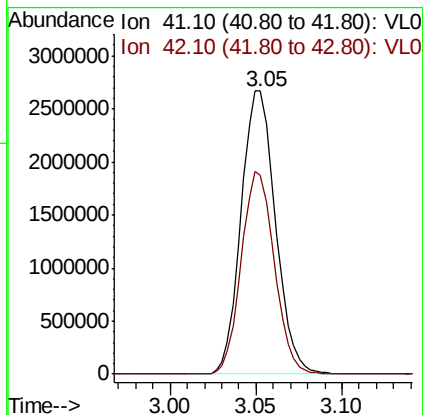
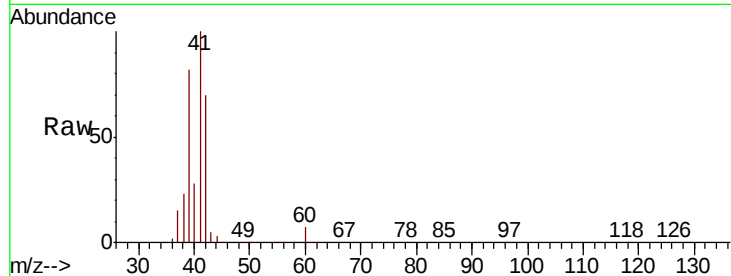
Ion Ratio Lower Upper

41 100

42 69.2 56.6 84.8

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#10

Heptane

Concen: 0.829 ppbv

RT: 8.28 min Scan# 1661

Delta R.T. -0.02 min

Lab File: VL032618.D

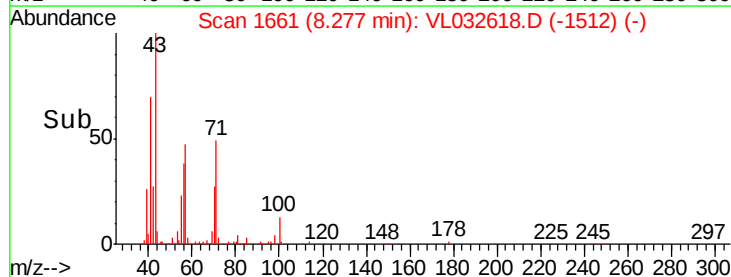
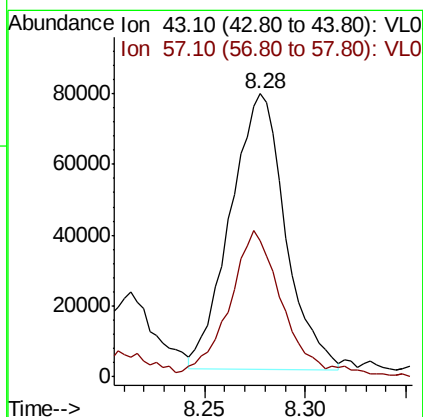
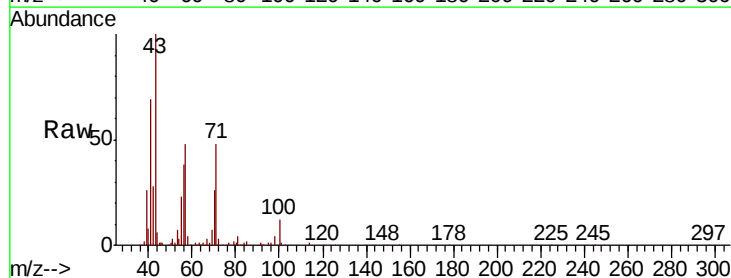
Acq: 12 Oct 2018 00:08

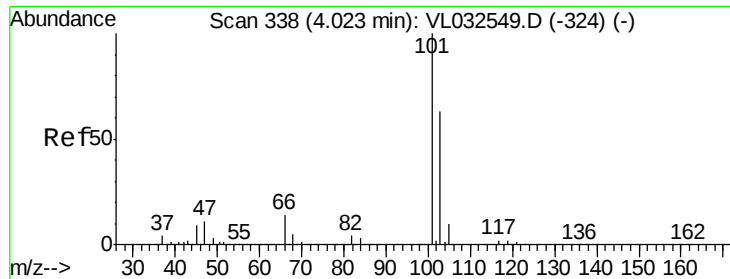
Tgt Ion: 43 Resp: 148645

Ion Ratio Lower Upper

43 100

57 51.1 39.6 59.4





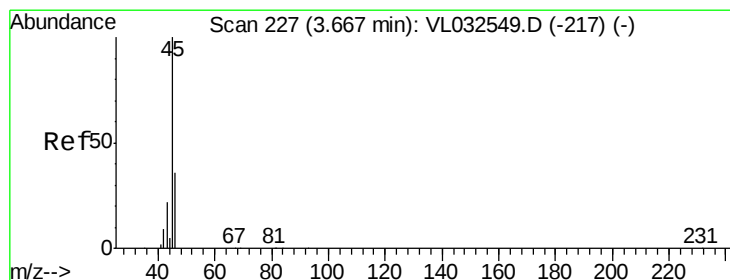
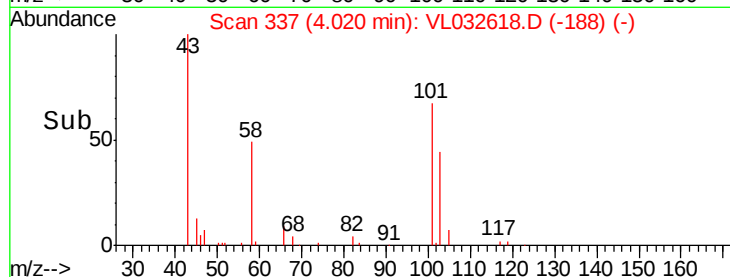
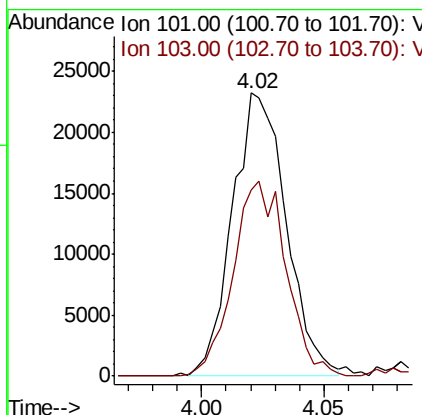
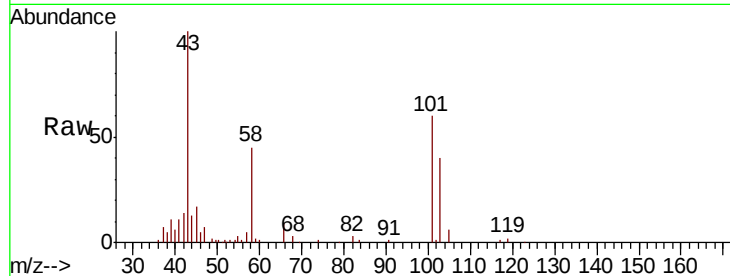
#11
 Trichlorofluoromethane
 Concen: 0.239 ppbv
 RT: 4.02 min Scan# 337
 Delta R.T. -0.02 min
 Lab File: VL032618.D
 Acq: 12 Oct 2018 00:08

Instrument :
 MSVOA_L
 ClientSampleId :
 Q3-SVI-100518

Tot Ion:101 Resp: 35578
 Ion Ratio Lower Upper
 101 100
 103 65.0 52.8 79.2

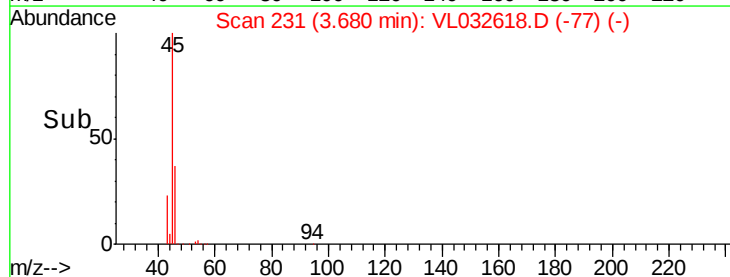
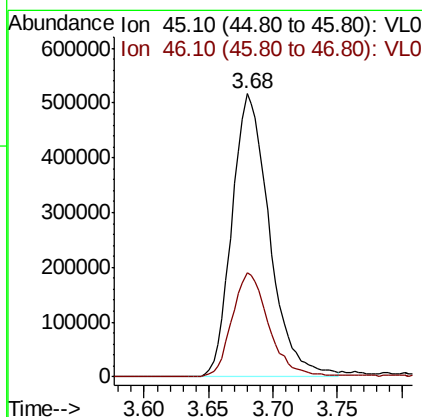
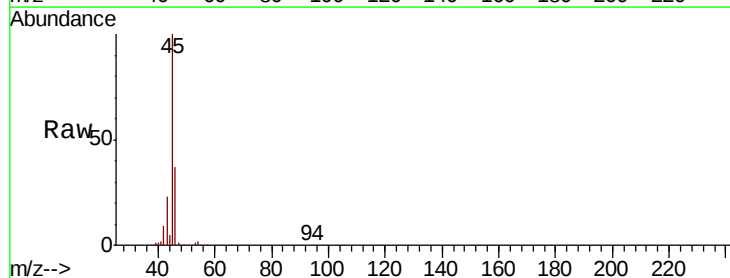
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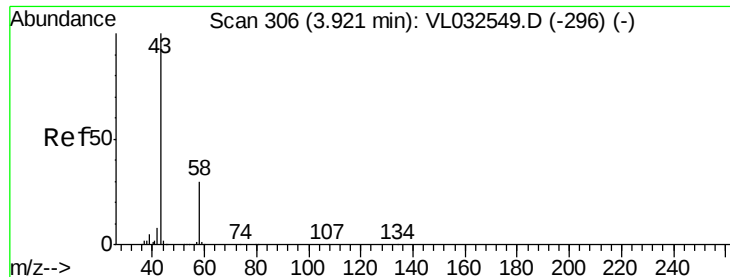
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#13
 Ethanol
 Concen: 70.922 ppbv
 RT: 3.68 min Scan# 231
 Delta R.T. -0.01 min
 Lab File: VL032618.D
 Acq: 12 Oct 2018 00:08

Tgt Ion: 45 Resp: 1042173
 Ion Ratio Lower Upper
 45 100
 46 36.4 14.2 56.8





#15

Acetone

Concen: 154.063 ppbv

RT: 3.92 min Scan# 307

Delta R.T. -0.01 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 43 Resp:18322940

Ion Ratio Lower Upper

43 100

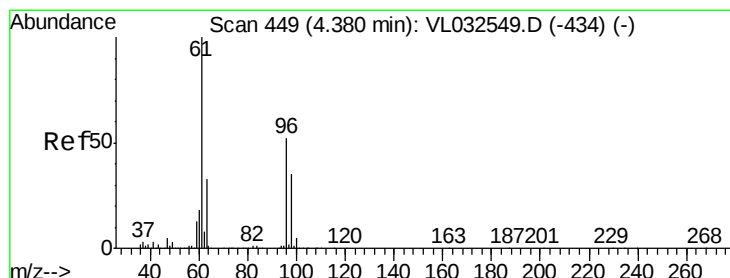
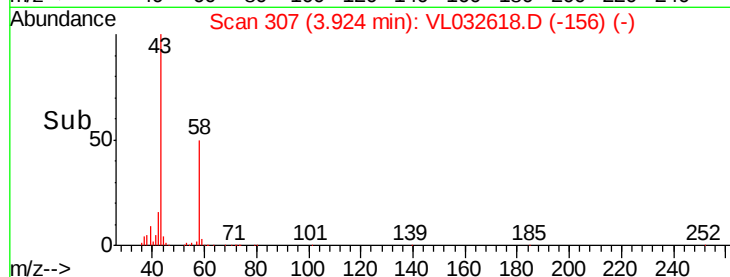
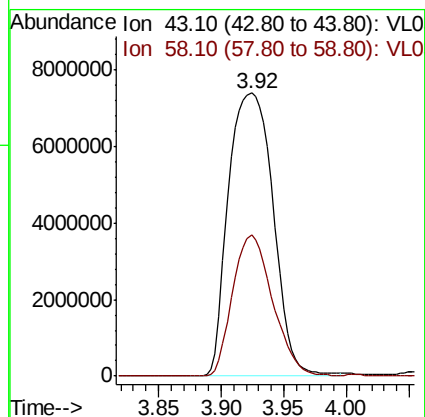
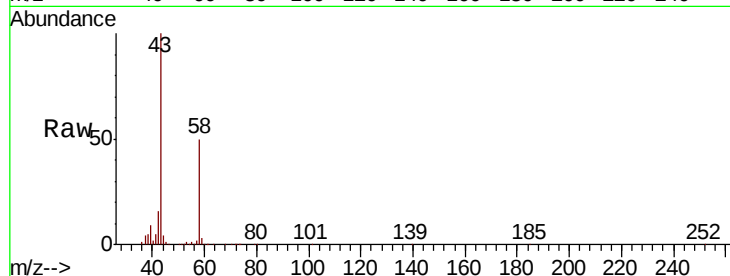
58 45.1 22.6 33.8#

Manual Integrations

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#17

tert-Butyl alcohol

Concen: 61.909 ppbv

RT: 4.39 min Scan# 452

Delta R.T. -0.01 min

Lab File: VL032618.D

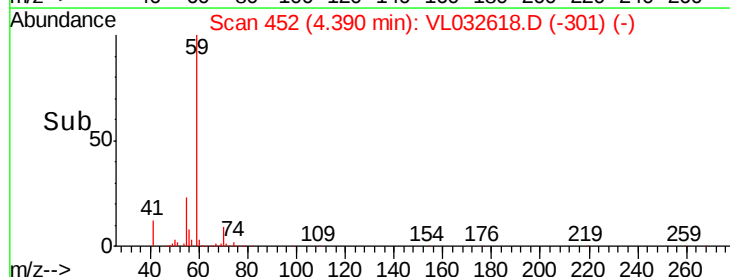
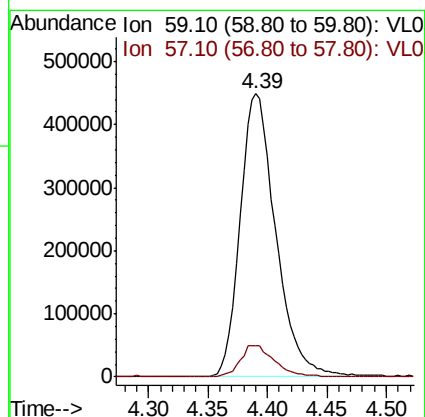
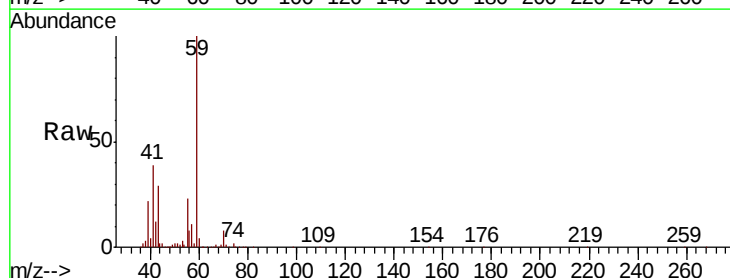
Acq: 12 Oct 2018 00:08

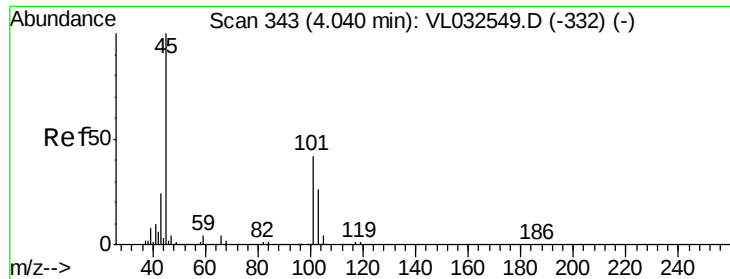
Tgt Ion: 59 Resp: 925231

Ion Ratio Lower Upper

59 100

57 10.9 0.0 0.0#





#19

Isopropyl Alcohol

Concen: 9.474 ppbv

RT: 4.06 min Scan# 348

Delta R.T. -0.01 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 45 Resp: 784824

Ion Ratio Lower Upper

45 100

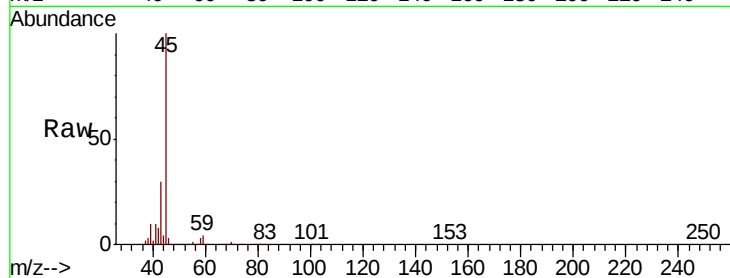
58 0.0 2.0 3.0#

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

4.06

400000

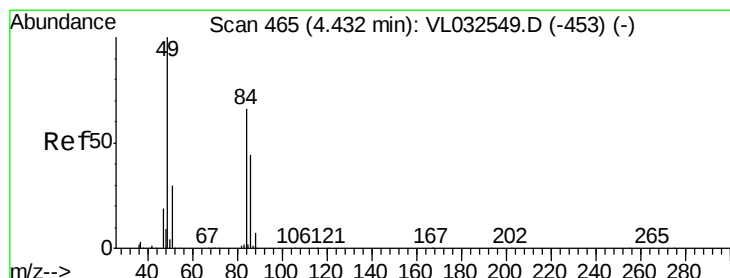
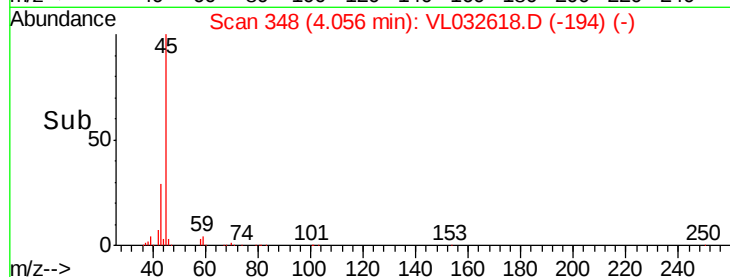
300000

200000

100000

0

Time-->



#20

Methylene Chloride

Concen: 26.453 ppbv

RT: 4.44 min Scan# 468

Delta R.T. -0.01 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Tgt Ion: 84 Resp: 1523493

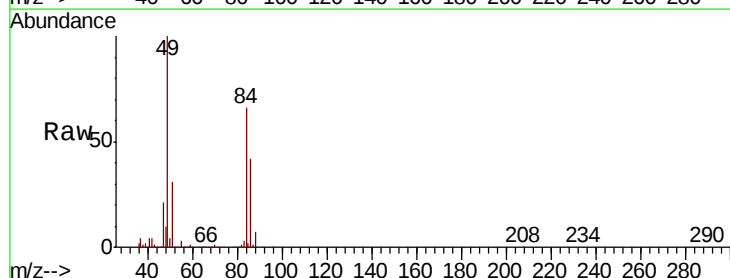
Ion Ratio Lower Upper

84 100

49 150.2 119.1 178.7

51 46.5 35.2 52.8

86 63.6 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

2000000

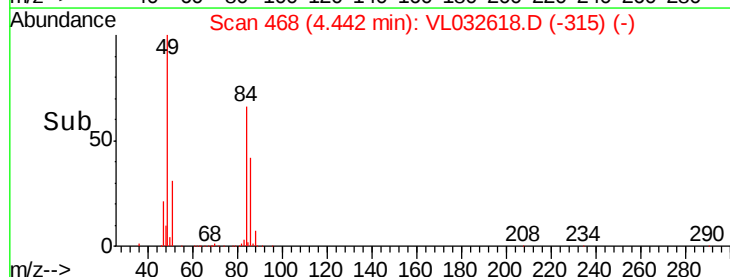
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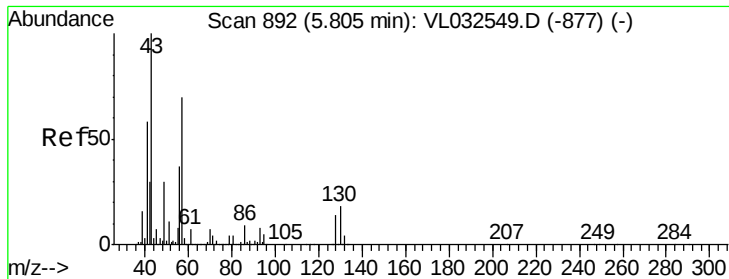
1000000

500000

0

Time-->





#26

Hexane

Concen: 3.162 ppbv

RT: 5.80 min Scan# 891

Delta R.T. -0.02 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

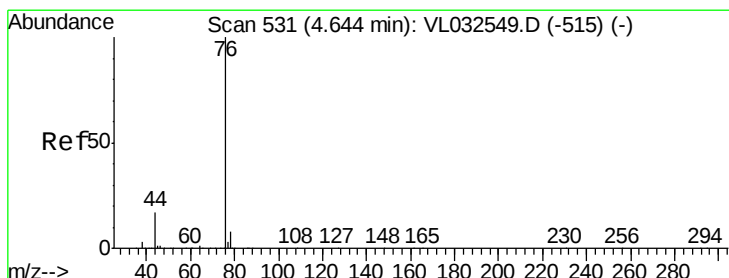
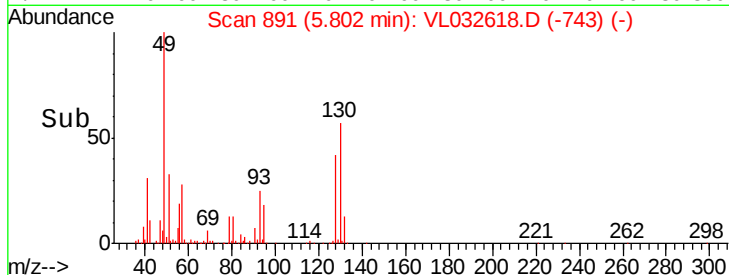
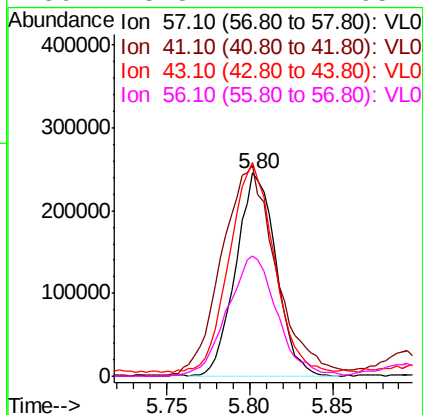
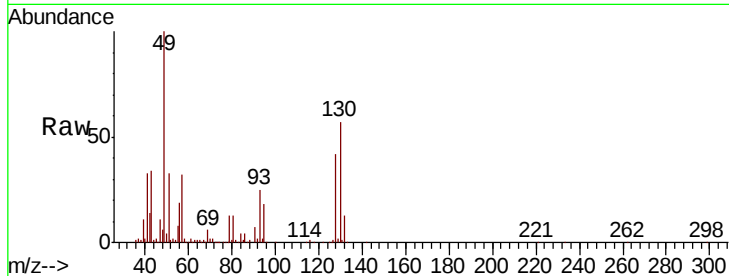
ClientSampleId :

Q3-SVI-100518

Tot Ion	Ratio	Lower	Upper
57	100		
41	140.5	69.0	103.4#
43	114.1	172.1	258.1#
56	73.8	42.2	63.2#

Manual Integrations
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#27

Carbon Disulfide

Concen: 3.239 ppbv

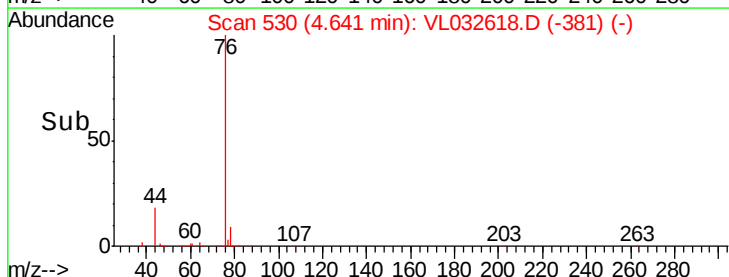
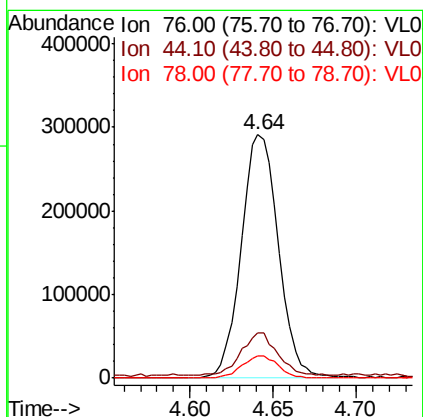
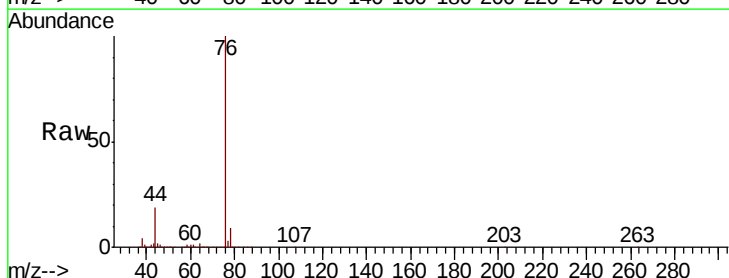
RT: 4.64 min Scan# 530

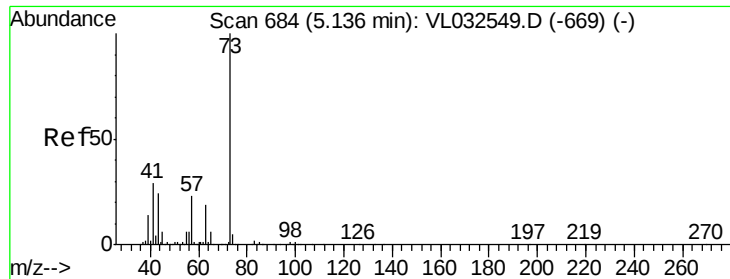
Delta R.T. -0.02 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Tgt Ion	Ratio	Lower	Upper
76	100		
44	17.7	14.0	21.0
78	9.2	7.5	11.3





#28

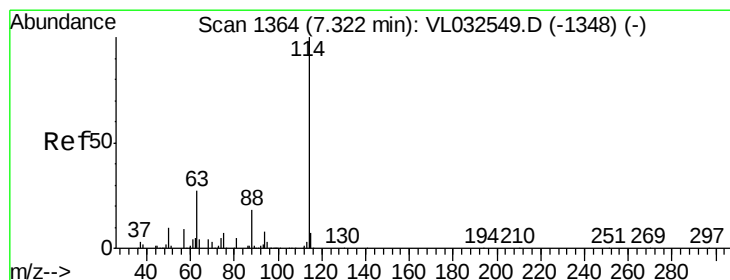
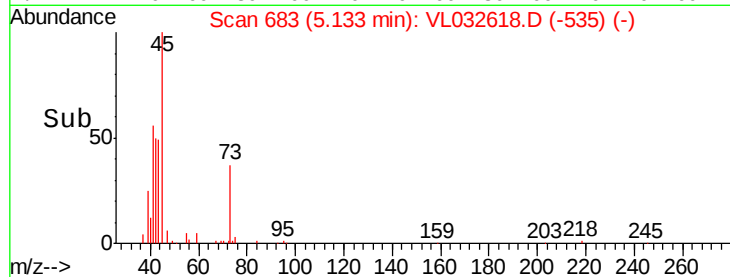
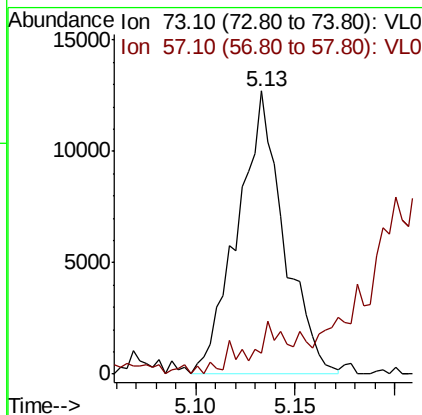
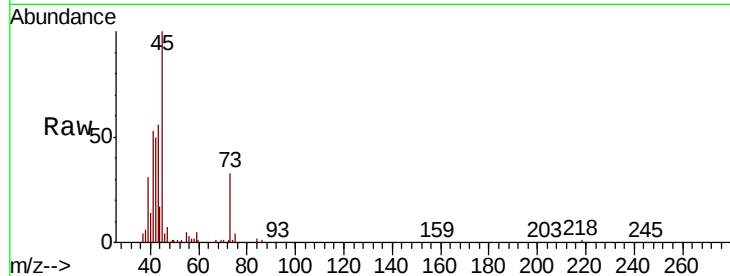
Methvl tert-Butvl Ether
 Concen: 0.127 ppbv m
 RT: 5.13 min Scan# 683
 Delta R.T. -0.02 min
 Lab File: VL032618.D
 Acq: 12 Oct 2018 00:08

Instrument :
 MSVOA_L
 ClientSampleId :
 Q3-SVI-100518

Tot Ion	Ratio	Lower	Upper
73	100		
57	0.0	19.3	28.9#

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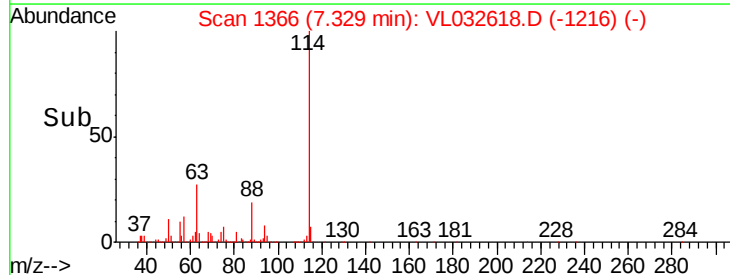
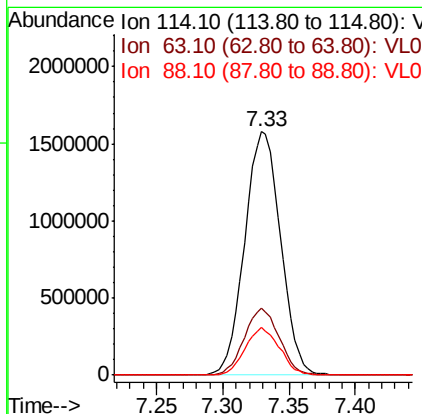
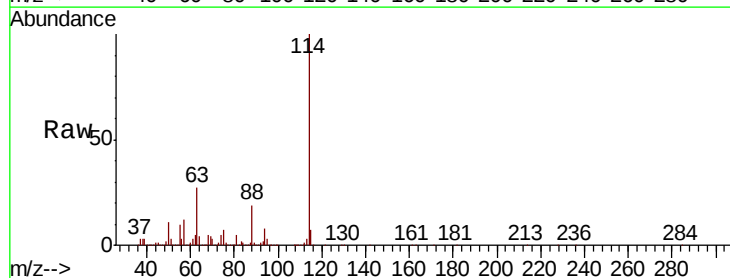
MMDadoda
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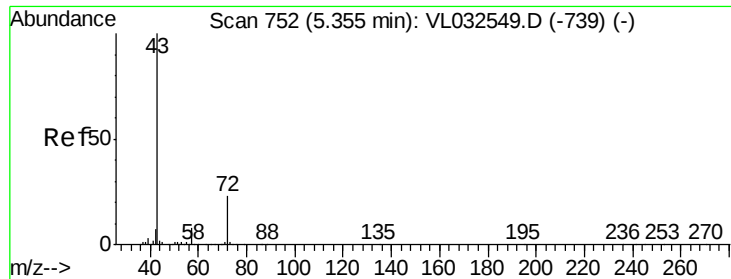


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.33 min Scan# 1366
 Delta R.T. -0.02 min
 Lab File: VL032618.D
 Acq: 12 Oct 2018 00:08

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.0	22.2	33.4
88	18.7	15.0	22.4





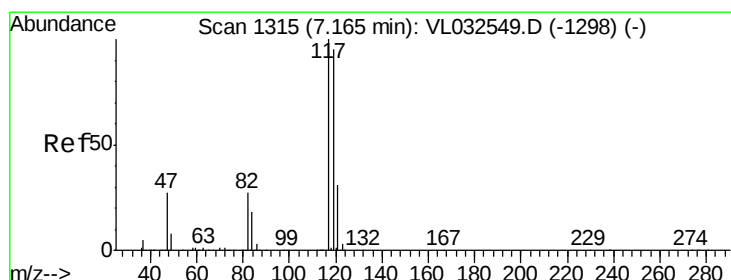
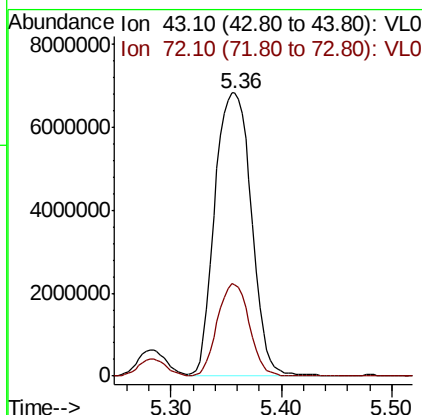
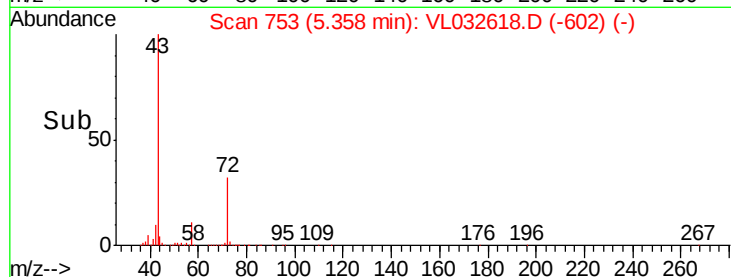
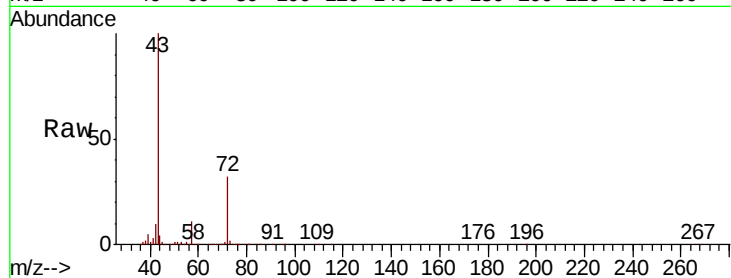
#34
2-Butanone
Concen: 87.892 ppbv
RT: 5.36 min Scan# 753
Delta R.T. -0.01 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Tot Ion: 43 Resp:15581103
Ion Ratio Lower Upper
43 100
72 28.8 17.8 26.6#

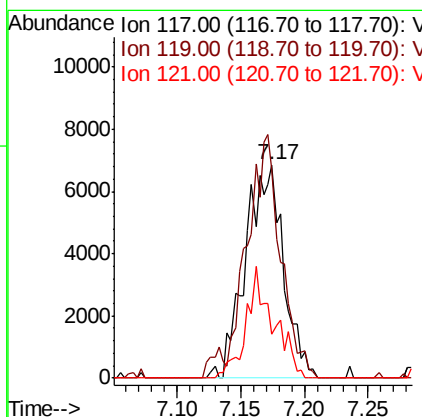
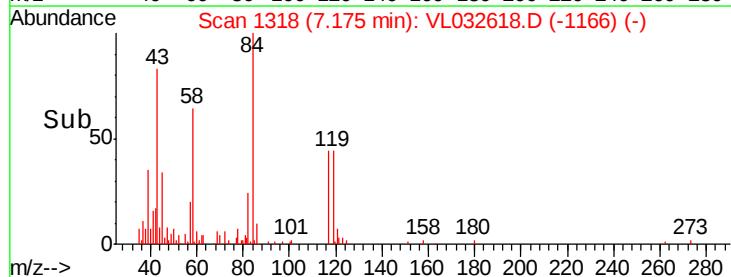
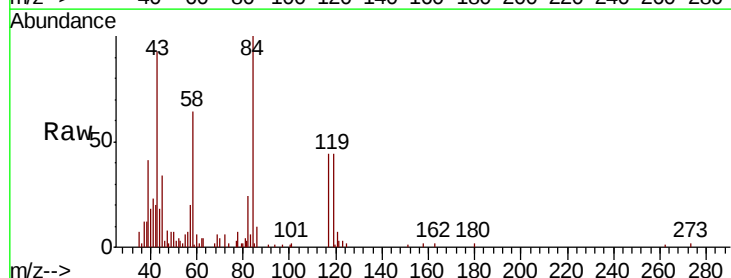
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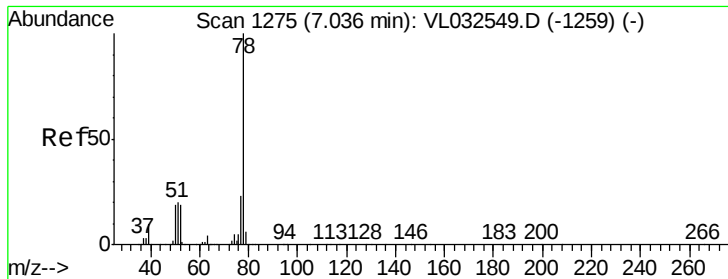
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#35
Carbon Tetrachloride
Concen: 0.068 ppbv m
RT: 7.17 min Scan# 1318
Delta R.T. -0.01 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Tgt Ion:117 Resp: 14142
Ion Ratio Lower Upper
117 100
119 98.2 76.6 115.0
121 14.8 24.6 36.8#





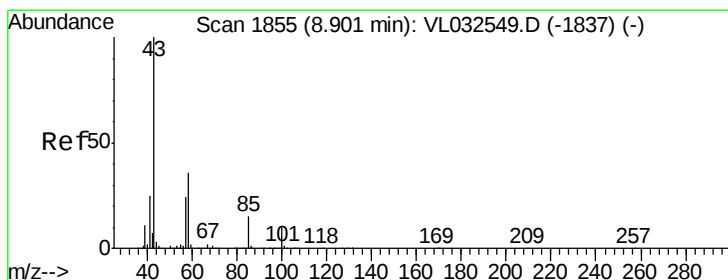
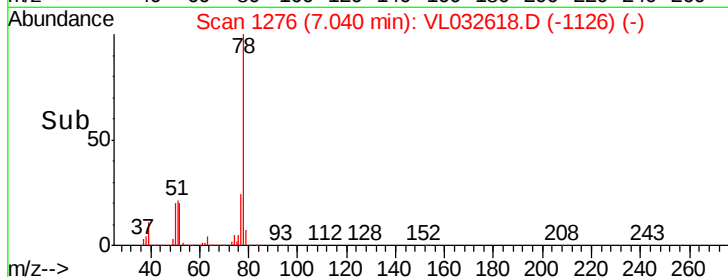
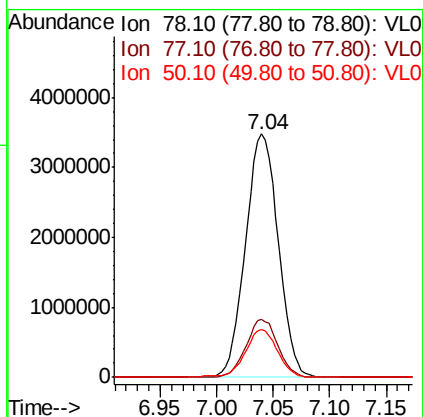
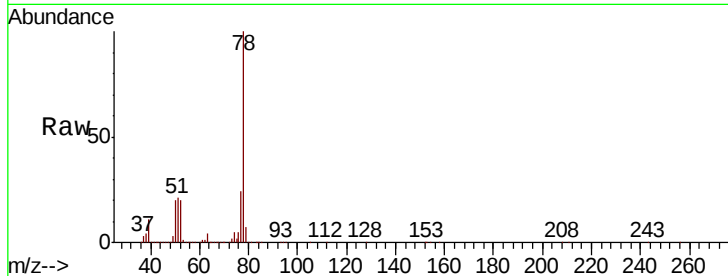
#36
Benzene
Concen: 29.143 ppbv
RT: 7.04 min Scan# 1276
Delta R.T. -0.02 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Tot Ion	Ratio	Lower	Upper
78	100		
77	23.8	18.4	27.6
50	19.4	14.4	21.6

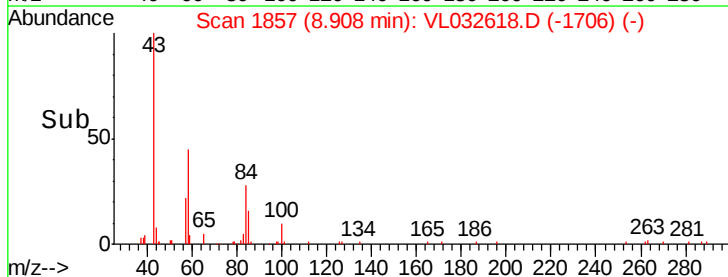
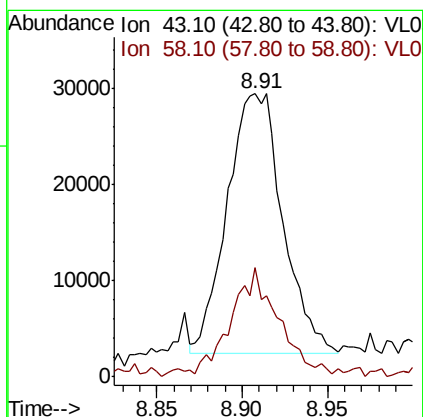
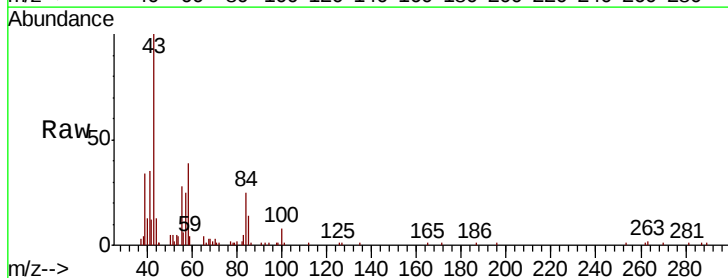
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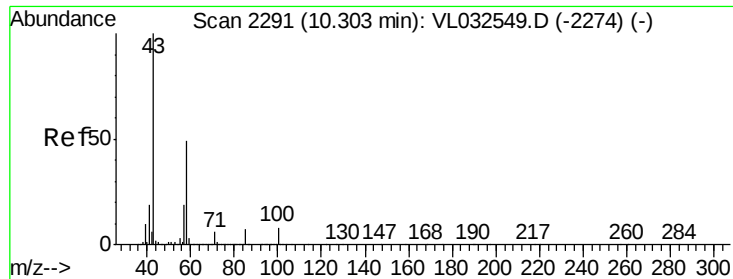
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#50
4-Methyl-2-Pentanone
Concen: 0.220 ppbv m
RT: 8.91 min Scan# 1857
Delta R.T. -0.01 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Tgt Ion	Ratio	Lower	Upper
43	100		
58	38.2	29.0	43.4





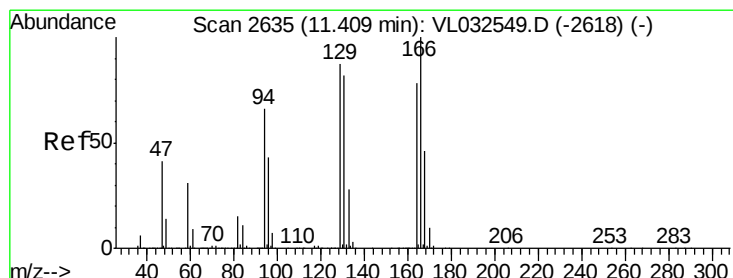
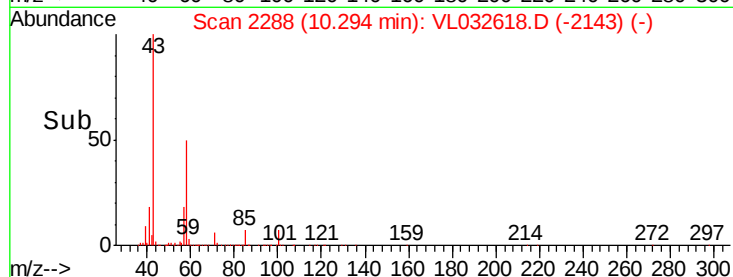
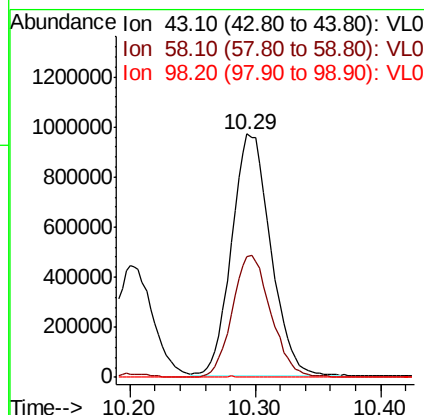
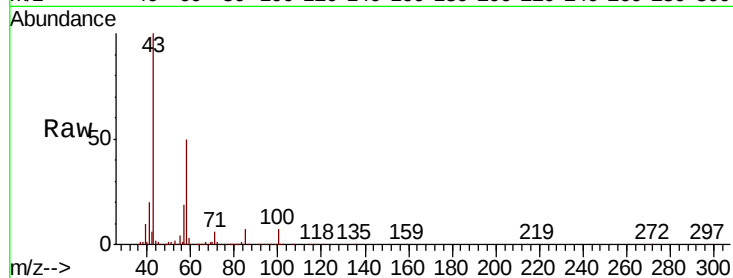
#51
2-Hexanone
Concen: 9.031 ppbv
RT: 10.29 min Scan# 2288
Delta R.T. -0.03 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Tot Ion	Ratio	Lower	Upper
43	100		
58	49.9	39.2	58.8
98	1.1	0.4	0.6

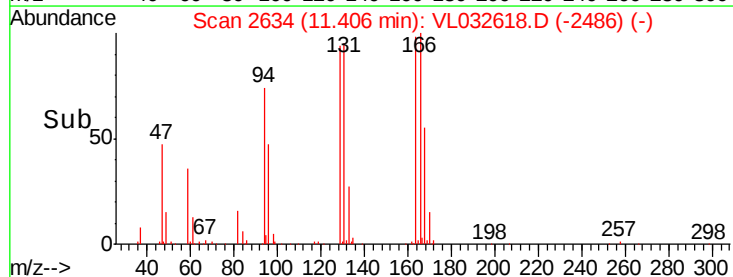
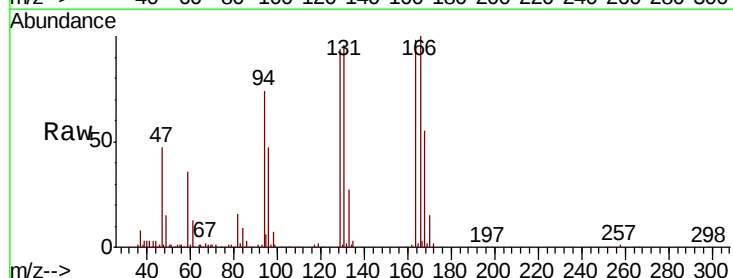
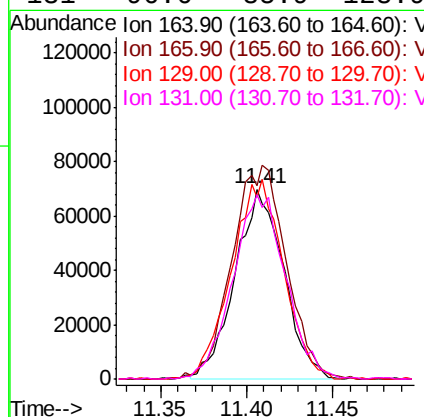
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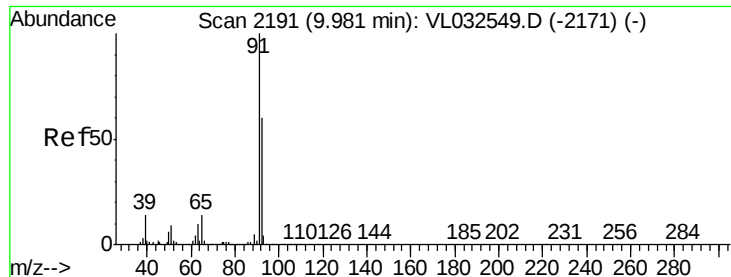
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#52
Tetrachloroethene
Concen: 1.649 ppbv
RT: 11.41 min Scan# 2634
Delta R.T. -0.02 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Tgt Ion	Ratio	Lower	Upper
164	100		
166	100.9	100.6	150.8
129	95.8	89.9	134.9
131	96.6	85.9	128.9





#53

Toluene

Concen: 6.008 ppbv

RT: 9.98 min Scan# 2190

Delta R.T. -0.03 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 91 Resp: 1761387

Ion Ratio Lower Upper

91 100

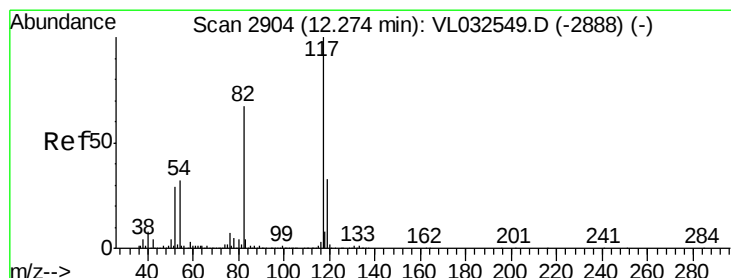
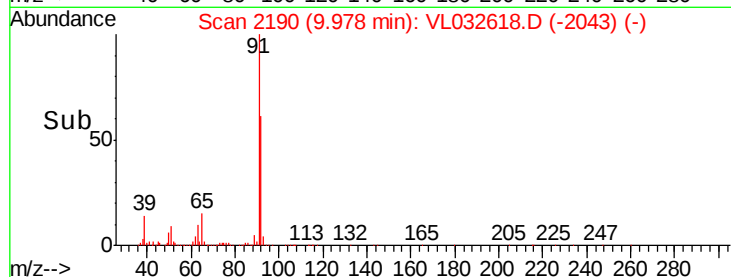
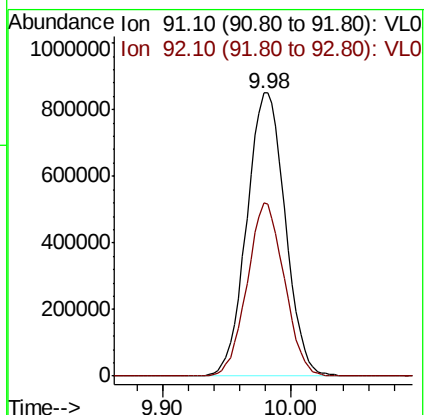
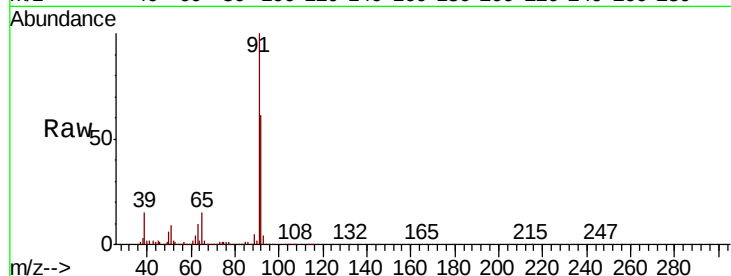
92 59.3 48.1 72.1

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.27 min Scan# 2903

Delta R.T. -0.03 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

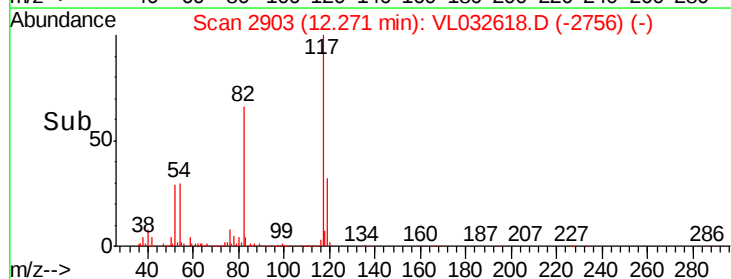
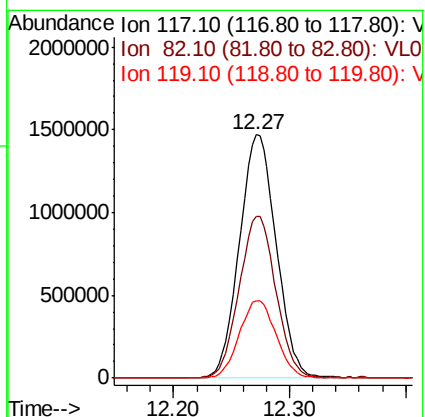
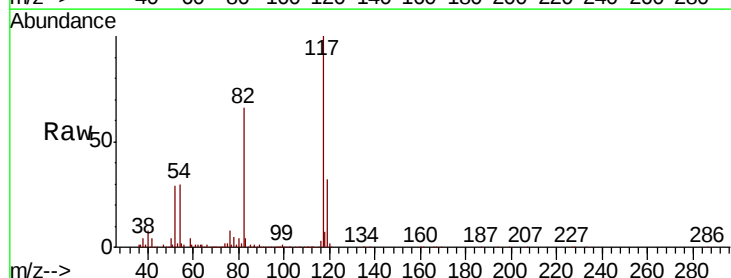
Tgt Ion: 117 Resp: 3240098

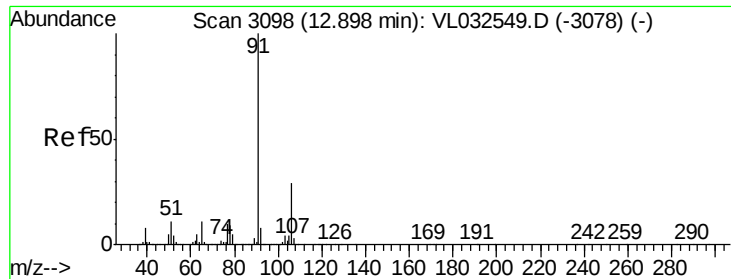
Ion Ratio Lower Upper

117 100

82 66.4 53.0 79.6

119 32.2 45.9 68.9#





#58

Ethyl Benzene

Concen: 0.196 ppbv

RT: 12.90 min Scan# 3098

Delta R.T. -0.02 min

Lab File: VL032618.D

Acq: 12 Oct 2018 00:08

Instrument :

MSVOA_L

ClientSampleId :

Q3-SVI-100518

Tot Ion: 91 Resp: 76876

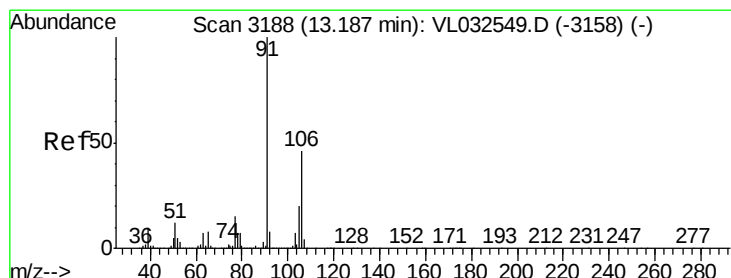
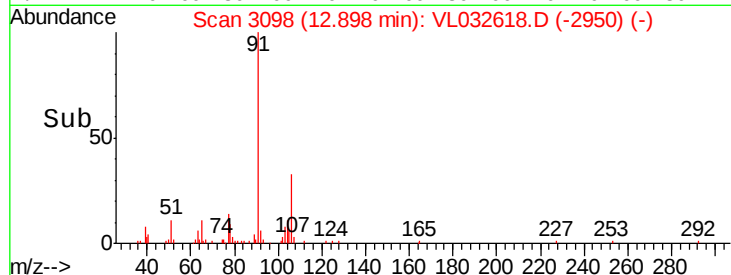
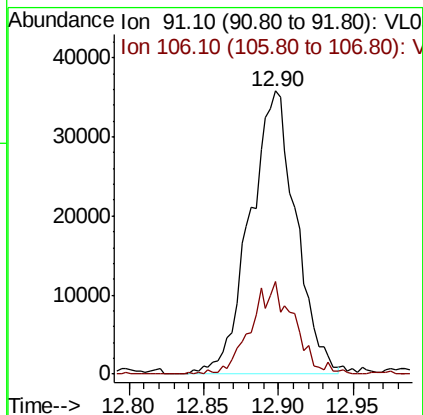
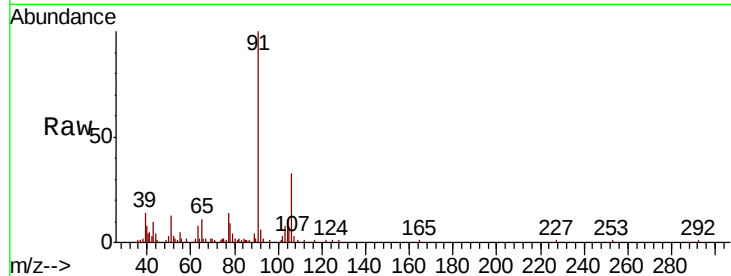
Ion Ratio Lower Upper

91 100

106 32.1 24.8 37.2

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#59

m/p-Xylene

Concen: 0.395 ppbv m

RT: 13.16 min Scan# 3179

Delta R.T. -0.05 min

Lab File: VL032618.D

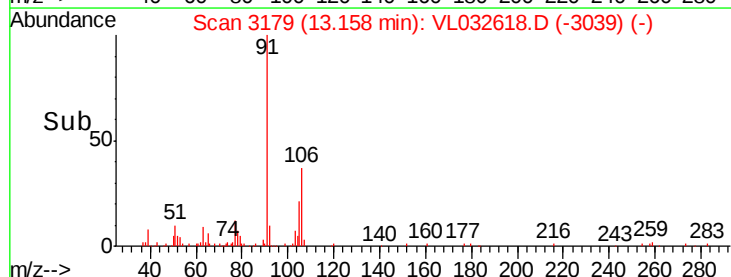
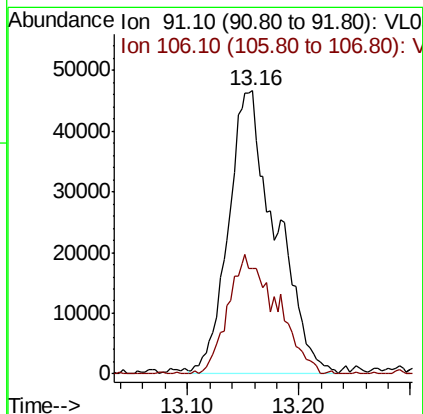
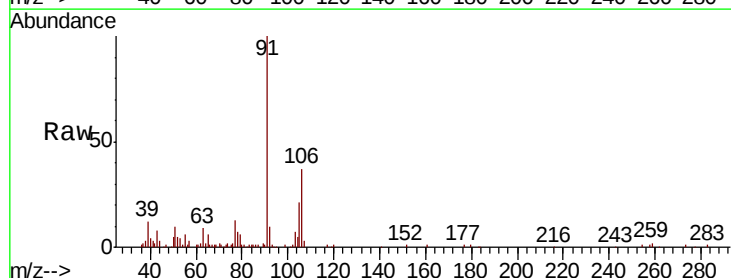
Acq: 12 Oct 2018 00:08

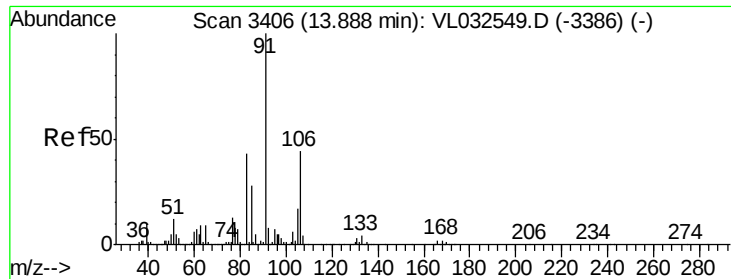
Tgt Ion: 91 Resp: 138143

Ion Ratio Lower Upper

91 100

106 0.0 36.6 55.0#





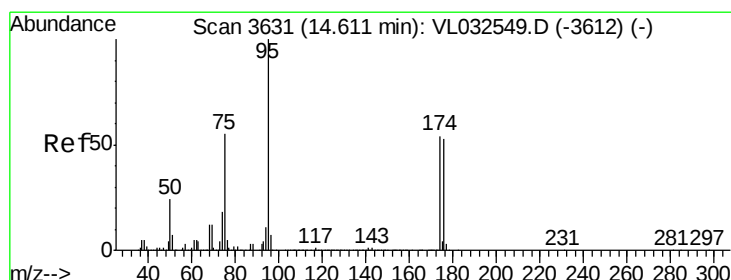
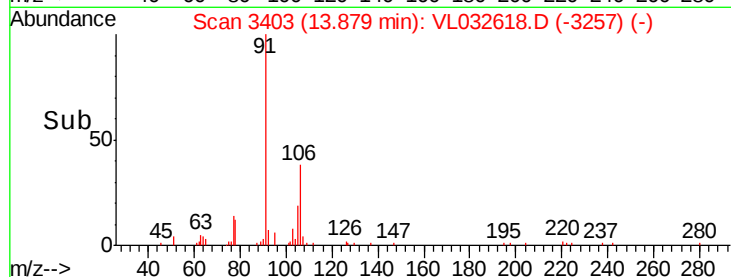
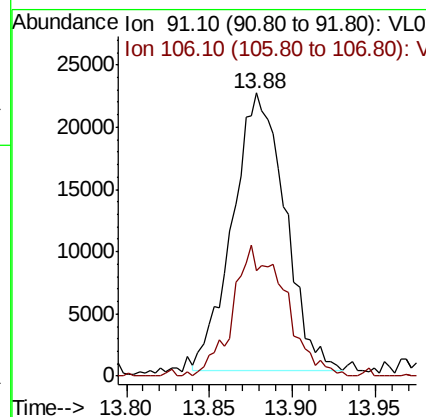
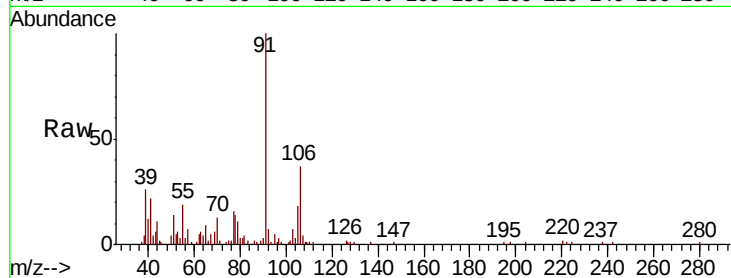
#60
o-Xylene
Concen: 0.145 ppbv
RT: 13.88 min Scan# 3403
Delta R.T. -0.03 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Instrument :
MSVOA_L
ClientSampleId :
Q3-SVI-100518

Tot Ion: 91 Resp: 49228
Ion Ratio Lower Upper
91 100
106 47.4 21.9 65.7

Manual Integrations
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.382 ppbv
RT: 14.61 min Scan# 3629
Delta R.T. -0.03 min
Lab File: VL032618.D
Acq: 12 Oct 2018 00:08

Tgt Ion: 95 Resp: 2292328
Ion Ratio Lower Upper
95 100
174 58.6 46.3 69.5
175 4.1 3.4 5.0

