

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL112018\
 Data File : VL032783.D
 Acq On : 20 Nov 2018 18:07
 Operator : SY/AP
 Sample : J5961-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
 APPROVED

MMDadoda
 11/26/2018 9:18:44 AM

Quant Time: Nov 21 05:44:53 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 14 07:00:23 2018
 QLast Update : Wed Nov 14 07:00:23 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1341639	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3577945	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	3388050	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2557537	10.09	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	96165	0.499	ppbv	97
3) Chlorodifluoromethane	3.02	51	112845m	1.061	ppbv	
4) Chloromethane	3.18	50	27694	0.470	ppbv	97
9) Propene	3.05	41	57953m	1.361	ppbv	
10) Heptane	8.26	43	172908	1.064	ppbv	99
11) Trichlorofluoromethane	4.01	101	41430	0.228	ppbv	99
13) Ethanol	3.67	45	1451649	104.120	ppbv	100
15) Acetone	3.91	43	923569	7.538	ppbv	99
19) Isopropyl Alcohol	4.05	45	727365	8.911	ppbv #	99
20) Methylene Chloride	4.42	84	246291	3.883	ppbv	97
26) Hexane	5.79	57	284818	2.241	ppbv #	47
29) Chloroform	5.86	83	25727m	0.114	ppbv	
30) Cyclohexane	7.25	84	107371	0.966	ppbv	95
34) 2-Butanone	5.35	43	170855	0.921	ppbv	100
35) Carbon Tetrachloride	7.14	117	18770m	0.065	ppbv	
36) Benzene	7.02	78	272040	0.955	ppbv	97
38) Trichloroethene	7.97	130	6015m	0.052	ppbv	
50) 4-Methyl-2-Pentanone	8.89	43	71303m	0.246	ppbv	
51) 2-Hexanone	10.28	43	275146	1.473	ppbv #	84
52) Tetrachloroethene	11.40	164	10471711	105.654	ppbv	95
53) Toluene	9.96	91	973401	3.275	ppbv	100
58) Ethyl Benzene	12.88	91	239384	0.587	ppbv	95
59) m/p-Xylene	13.13	91	754453	2.078	ppbv	97
60) o-Xylene	13.86	91	256663	0.703	ppbv	97
64) n-propylbenzene	15.74	120	24726	0.191	ppbv	74
72) 4-Ethyltoluene	16.01	105	144547	0.361	ppbv	97
73) 1,3,5-Trimethylbenzene	16.17	105	121660	0.311	ppbv	96
74) 1,2,4-Trimethylbenzene	16.94	105	411109	0.982	ppbv #	67

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

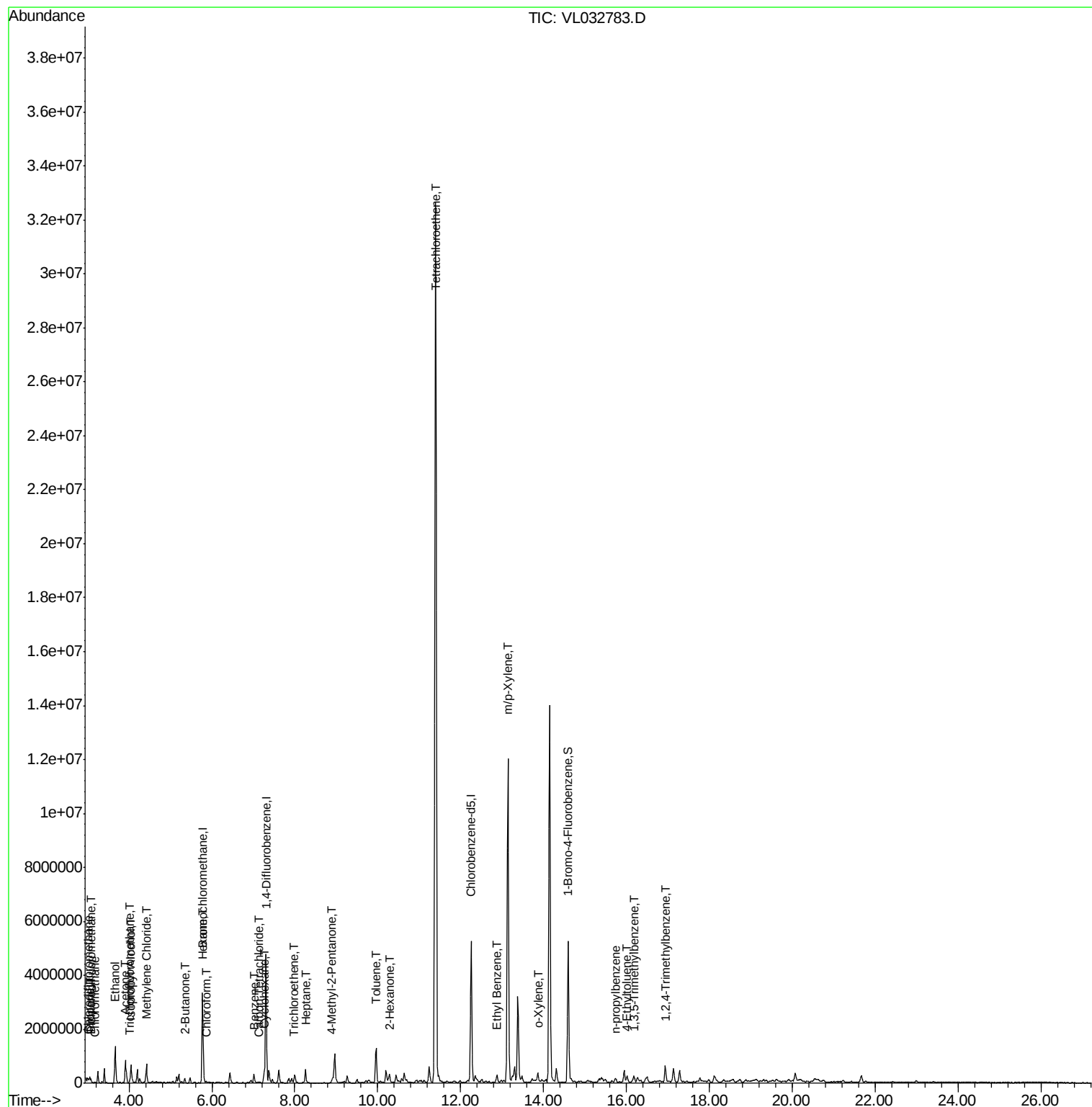
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL112018\
Data File : VL032783.D
Acq On : 20 Nov 2018 18:07
Operator : SY/AP
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Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

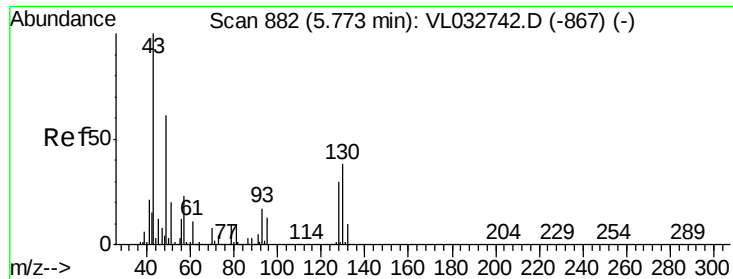
Instrument :
MSVOA_L
ClientSampleId :
IA1

Manual Integrations
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11/26/2018 9:18:44 AM

Quant Time: Nov 21 05:44:53 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL111418AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 14 07:00:23 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.00 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 49 Resp: 1341639

Ion Ratio Lower Upper

49 100

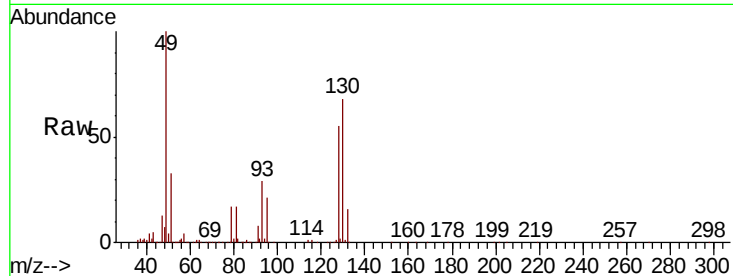
128 52.9 24.9 74.6

130 67.1 31.4 94.2

Manual Integrations
APPROVED

MMDadoda

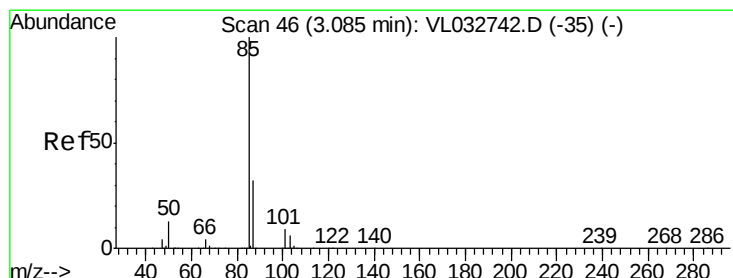
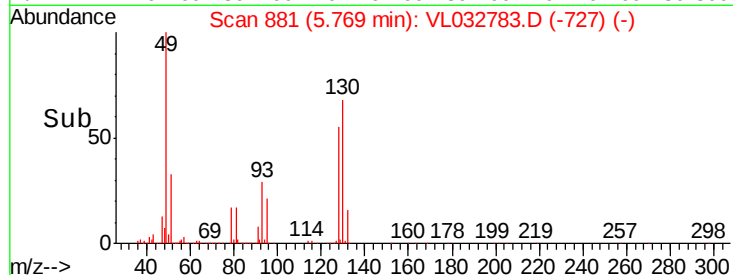
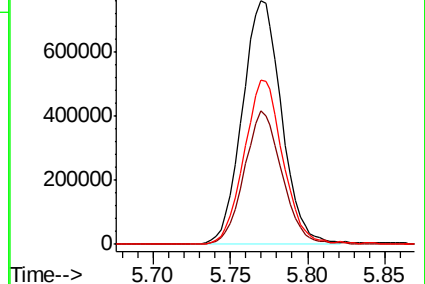
11/26/2018 9:18:44 AM



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: 0.499 ppbv

RT: 3.08 min Scan# 46

Delta R.T. -0.00 min

Lab File: VL032783.D

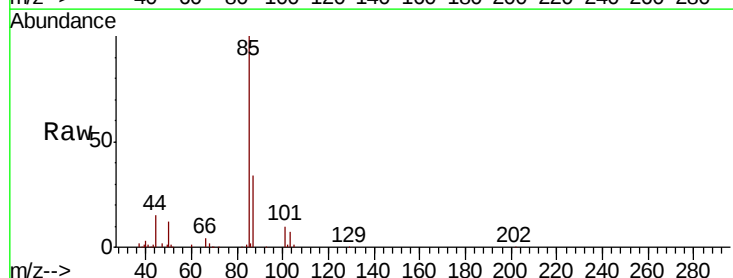
Acq: 20 Nov 2018 18:07

Tgt Ion: 85 Resp: 96165

Ion Ratio Lower Upper

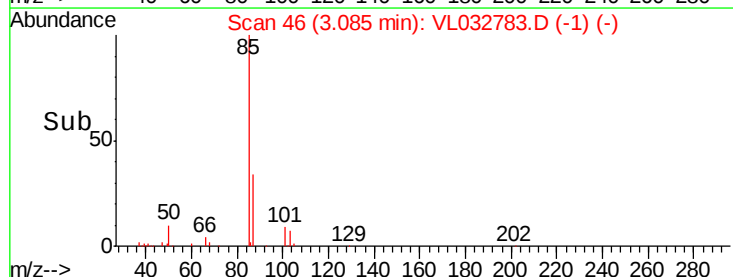
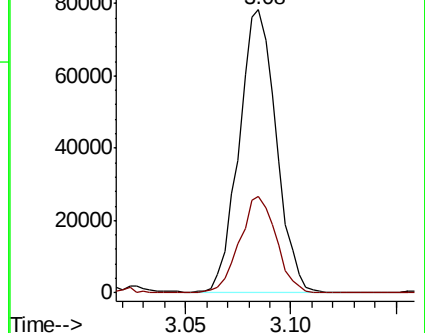
85 100

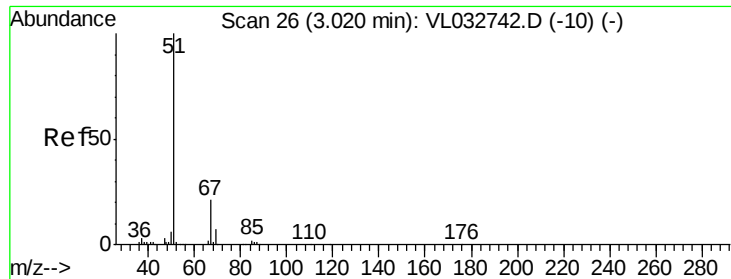
87 34.2 26.0 39.0



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





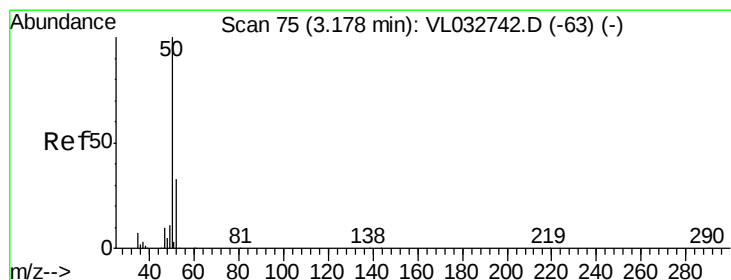
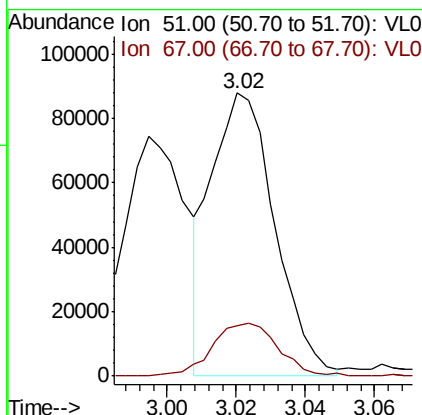
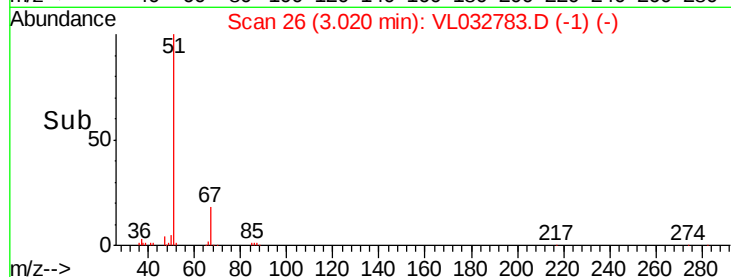
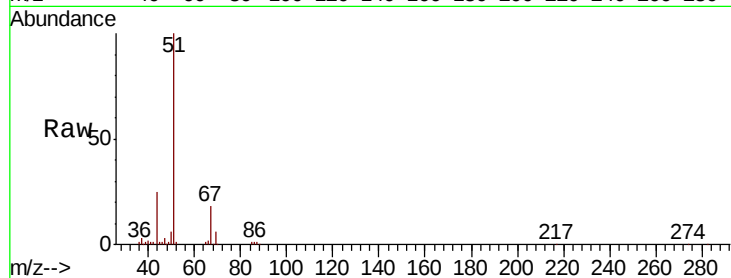
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Chlorodifluoromethane
Concen: 1.061 ppbv
RT: 3.02 min Scan# 26
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
51	100		
67	19.2	16.1	24.1

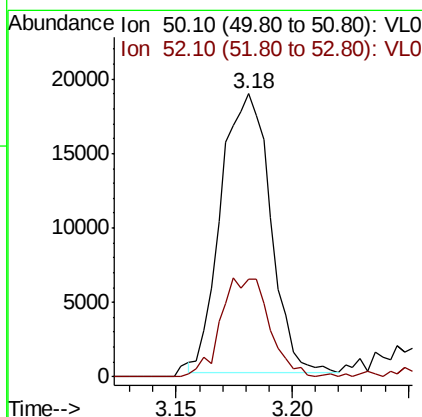
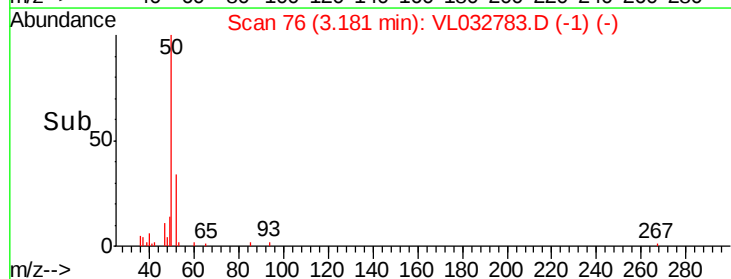
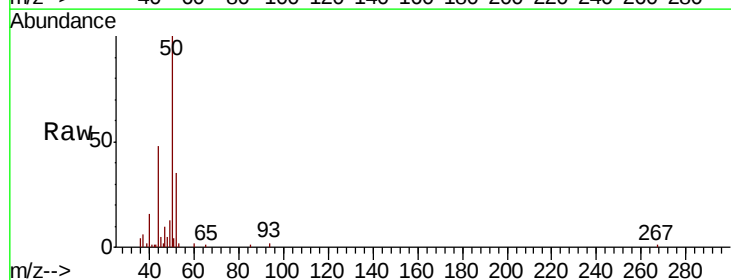
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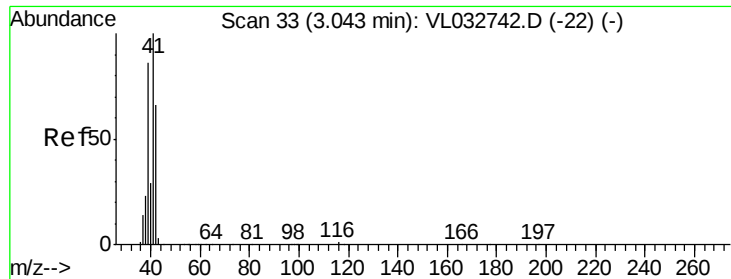
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#4
Chloromethane
Concen: 0.470 ppbv
RT: 3.18 min Scan# 76
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion	Ratio	Lower	Upper
50	100		
52	35.1	26.6	40.0





#9

Propene

Concen: 1.361 ppbv m

RT: 3.05 min Scan# 36

Delta R.T. 0.01 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 41 Resp: 57953

Ion Ratio Lower Upper

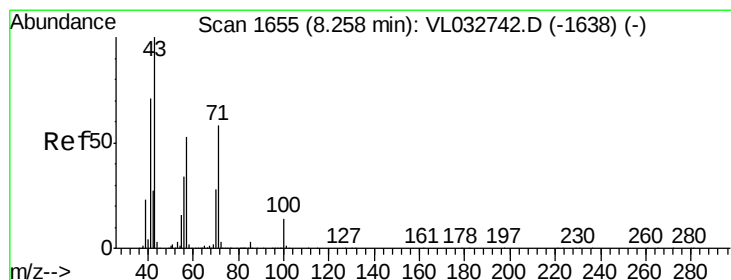
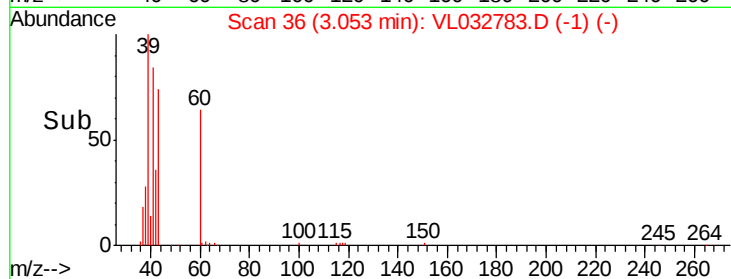
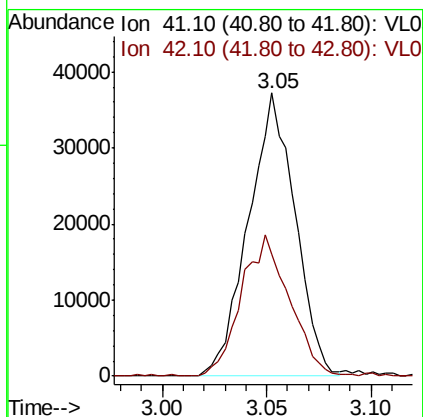
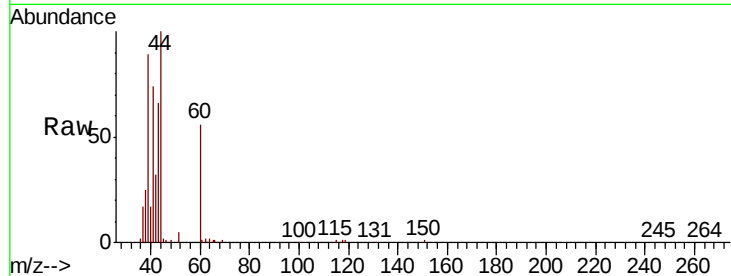
41 100

42 126.8 55.0 82.6#

Manual Integrations
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#10

Heptane

Concen: 1.064 ppbv

RT: 8.26 min Scan# 1655

Delta R.T. -0.00 min

Lab File: VL032783.D

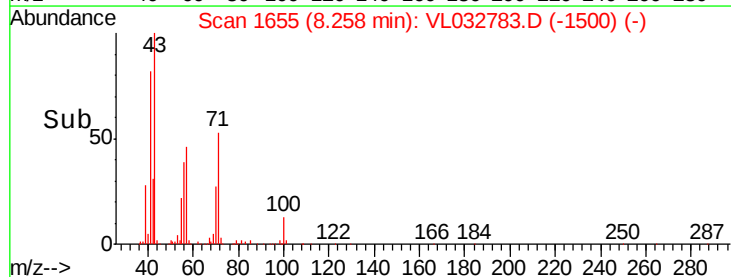
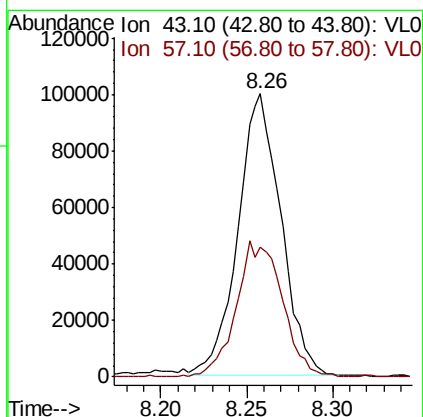
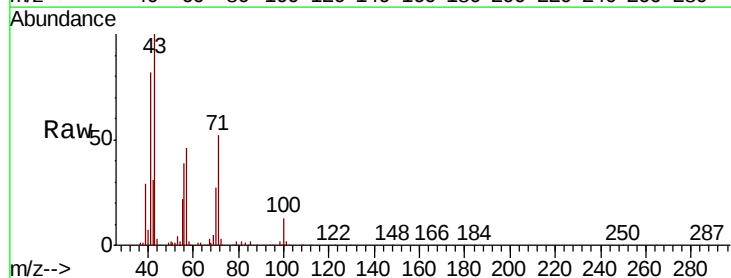
Acq: 20 Nov 2018 18:07

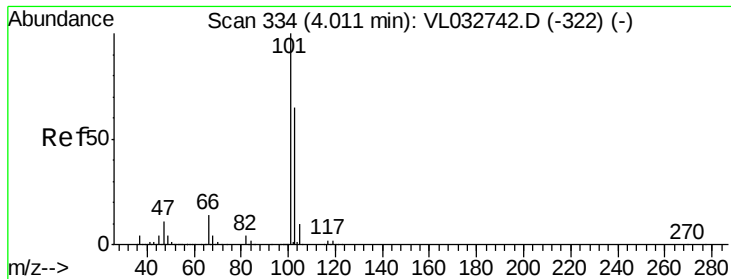
Tgt Ion: 43 Resp: 172908

Ion Ratio Lower Upper

43 100

57 51.9 41.8 62.8





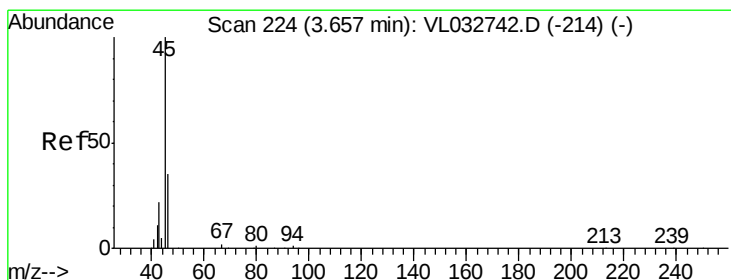
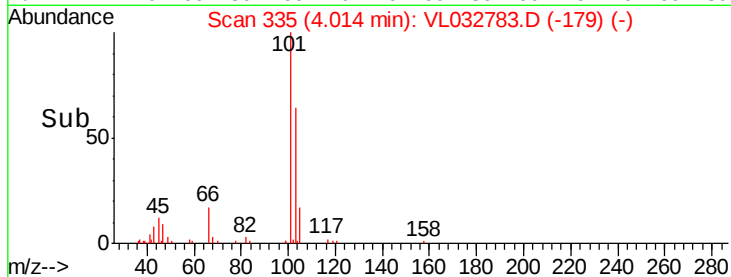
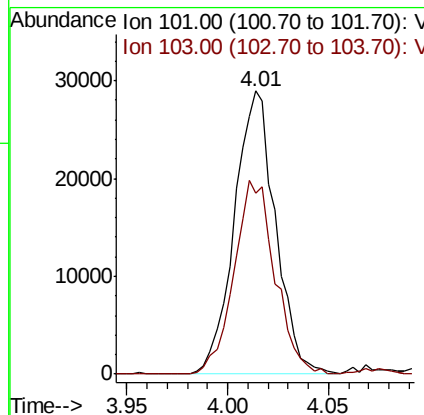
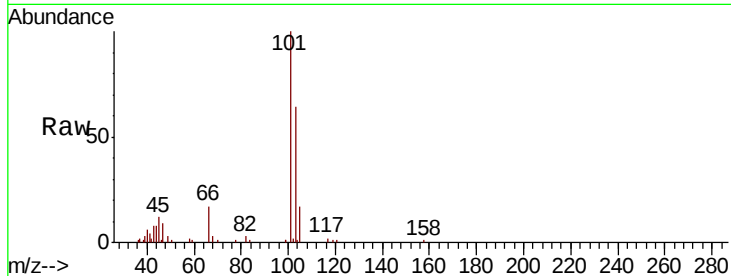
#11
 Trichlorofluoromethane
 Concen: 0.228 ppbv
 RT: 4.01 min Scan# 335
 Delta R.T. 0.00 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion:101 Resp: 41430
 Ion Ratio Lower Upper
 101 100
 103 64.1 51.6 77.4

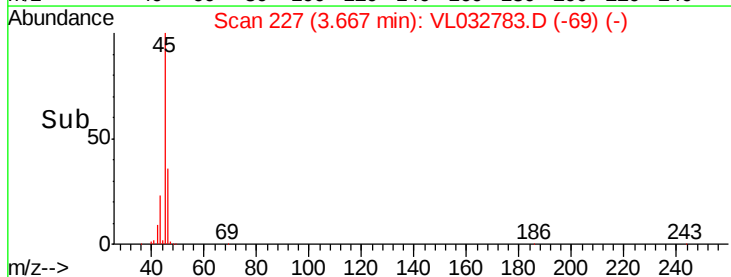
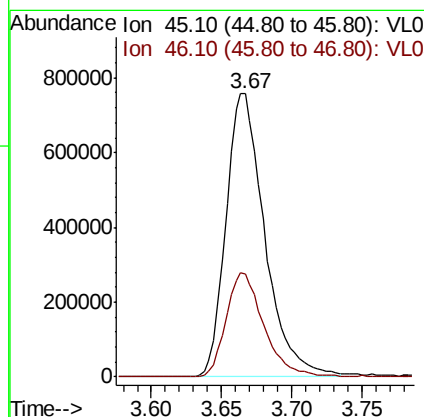
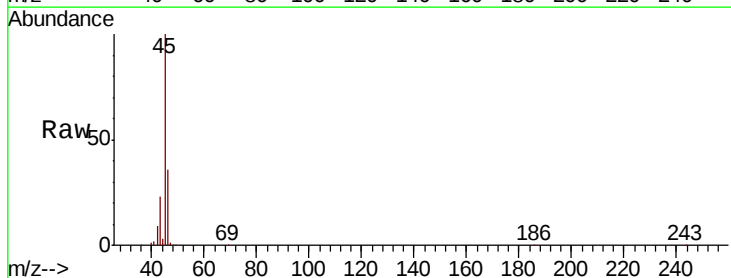
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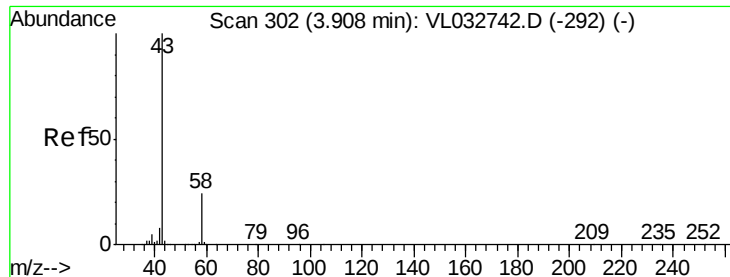
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#13
 Ethanol
 Concen: 104.120 ppbv
 RT: 3.67 min Scan# 227
 Delta R.T. 0.01 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Tgt Ion: 45 Resp: 1451649
 Ion Ratio Lower Upper
 45 100
 46 36.2 14.5 57.9





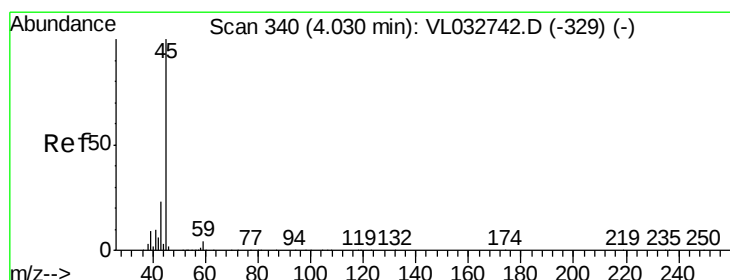
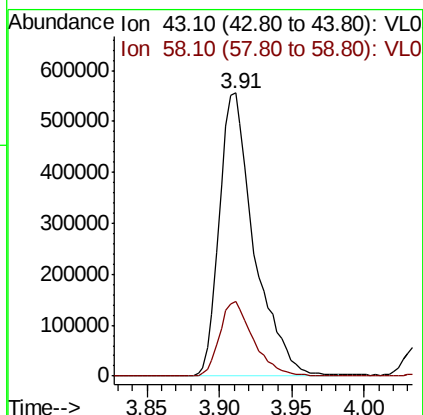
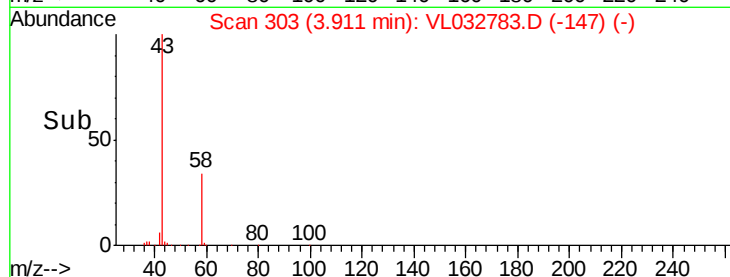
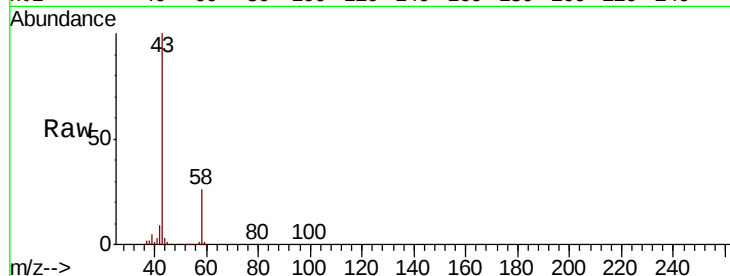
#15
Acetone
Concen: 7.538 ppbv
RT: 3.91 min Scan# 303
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 43 Resp: 923569
Ion Ratio Lower Upper
43 100
58 25.7 21.1 31.7

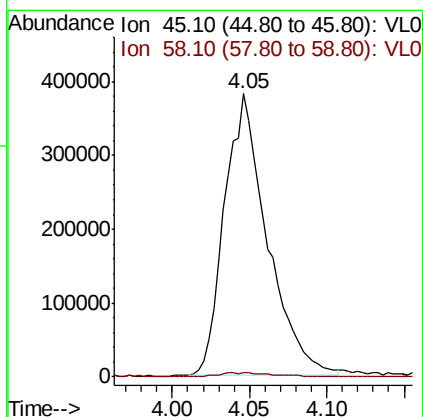
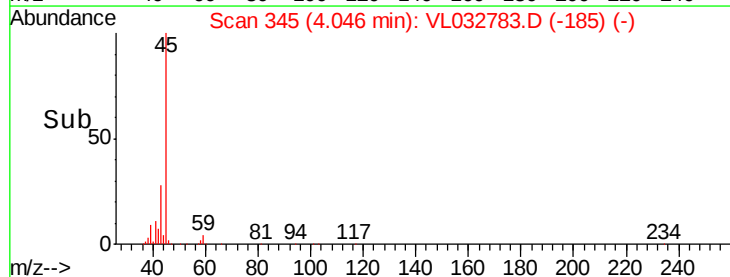
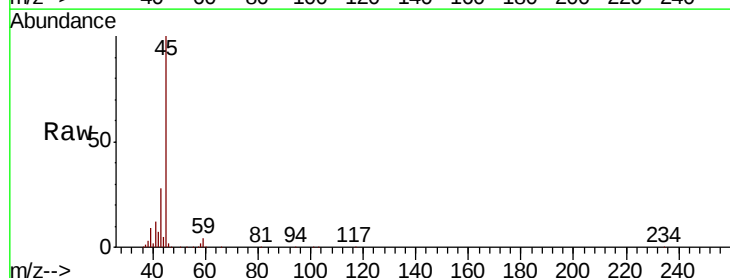
Manual Integrations
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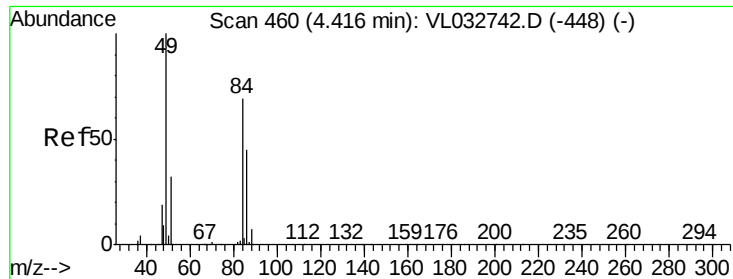
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#19
Isopropyl Alcohol
Concen: 8.911 ppbv
RT: 4.05 min Scan# 345
Delta R.T. 0.02 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion: 45 Resp: 727365
Ion Ratio Lower Upper
45 100
58 2.1 1.4 2.0#





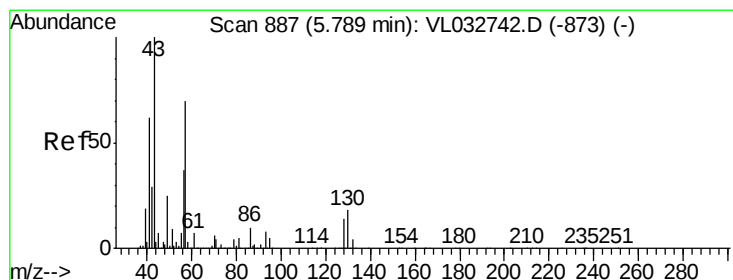
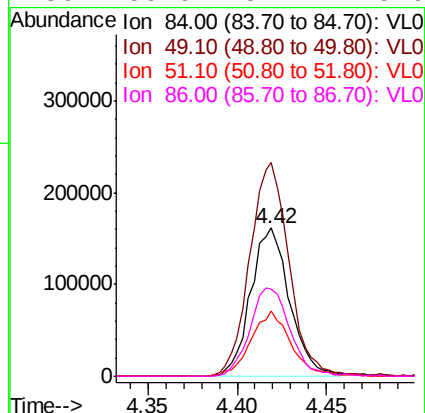
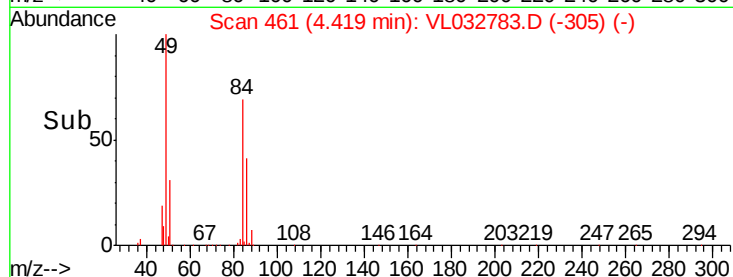
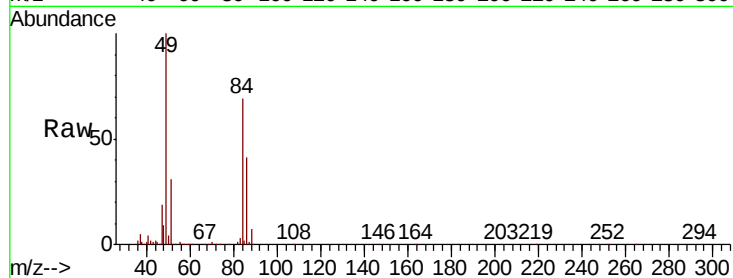
#20
Methvlene Chloride
Concen: 3.883 ppbv
RT: 4.42 min Scan# 461
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
84	100		
49	144.3	115.8	173.6
51	43.9	36.9	55.3
86	58.6	52.4	78.6

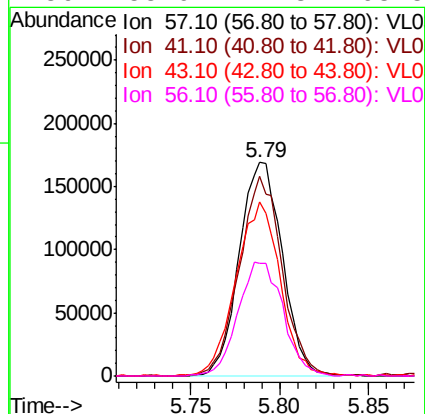
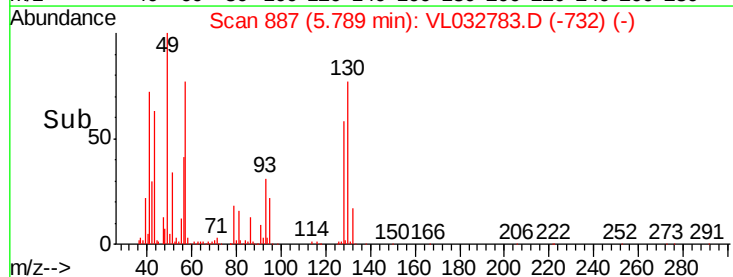
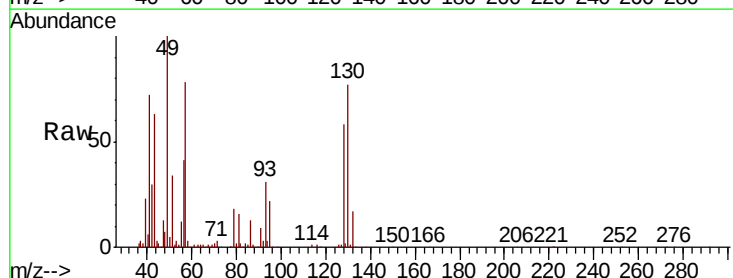
Manual Integrations
APPROVED

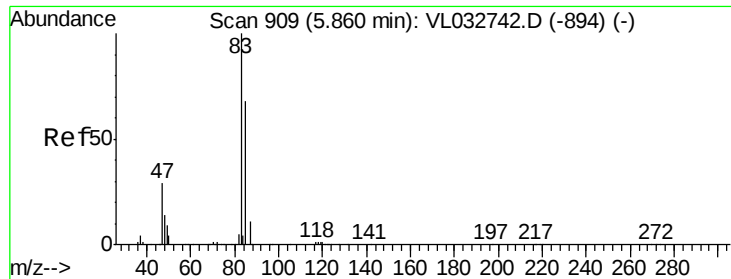
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11/26/2018 9:18:44 AM



#26
Hexane
Concen: 2.241 ppbv
RT: 5.79 min Scan# 887
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion	Ratio	Lower	Upper
57	100		
41	93.1	70.3	105.5
43	82.9	174.0	261.0
56	55.9	42.3	63.5





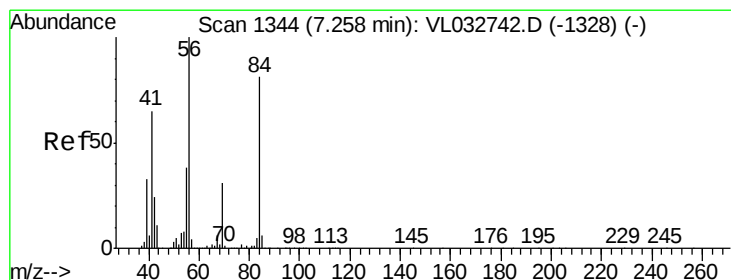
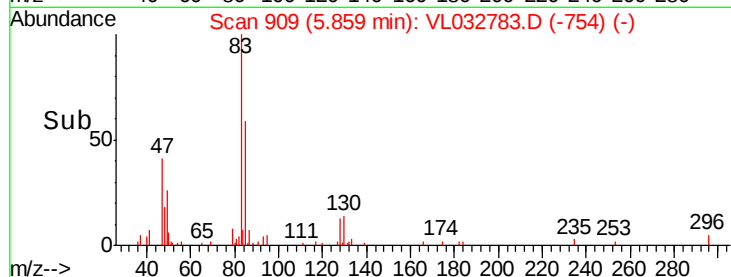
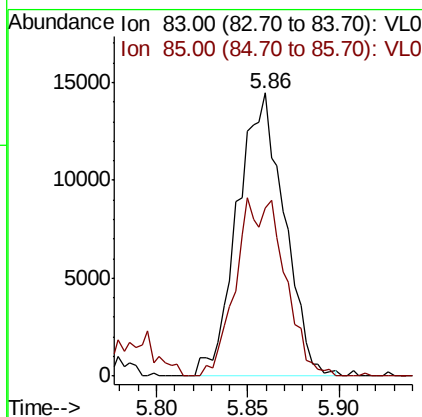
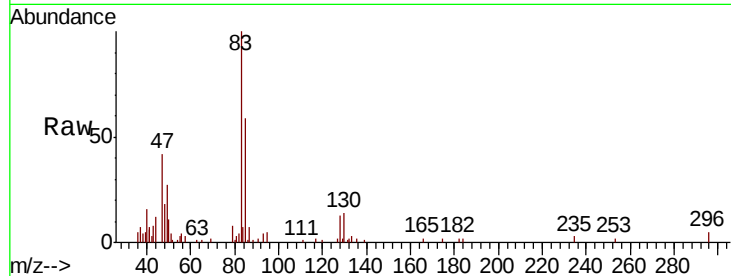
#29
Chloroform
Concen: 0.114 ppbv m
RT: 5.86 min Scan# 909
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	83	Resp	25727
Ion Ratio	100	Lower	Upper
83	100		
85	59.4	54.2	81.4

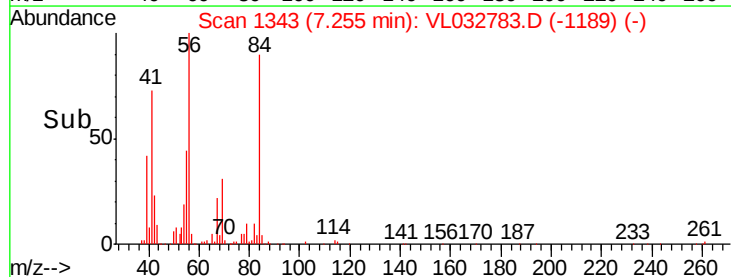
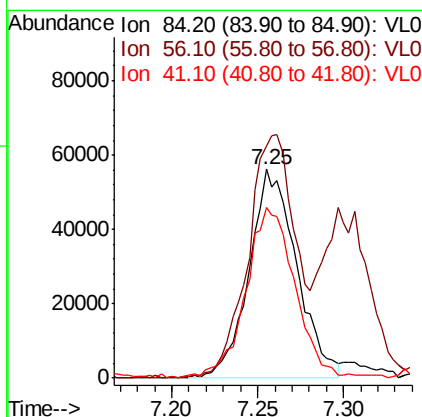
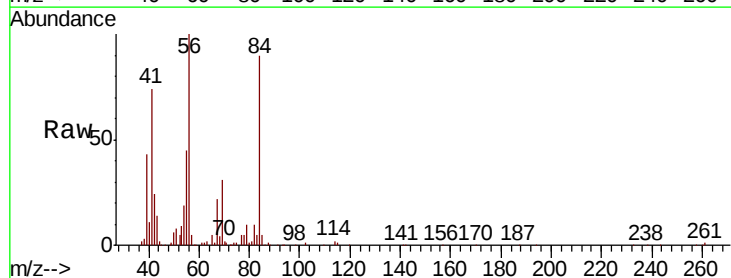
Manual Integrations
APPROVED

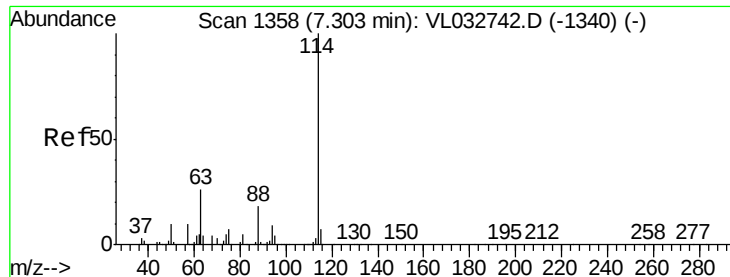
MMDadoda
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#30
Cyclohexane
Concen: 0.966 ppbv
RT: 7.25 min Scan# 1343
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion	84	Resp	107371
Ion Ratio	100	Lower	Upper
84	100		
56	123.0	105.0	157.4
41	83.8	65.3	97.9





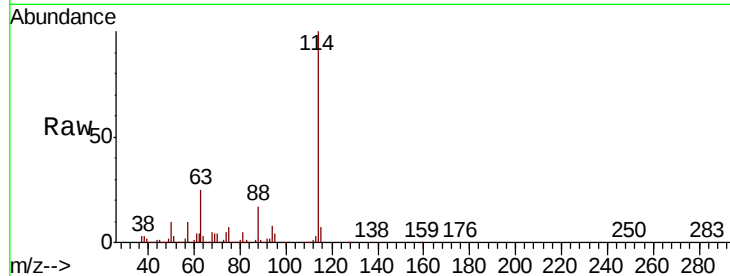
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.30 min Scan# 1358
 Delta R.T. -0.00 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

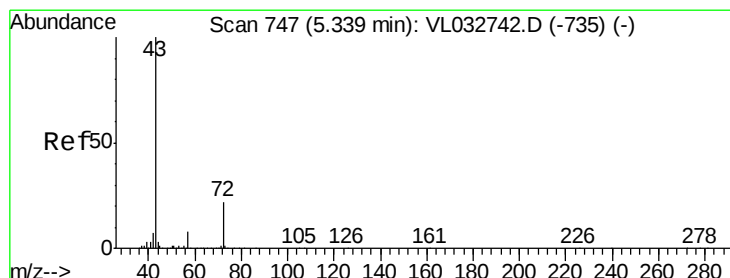
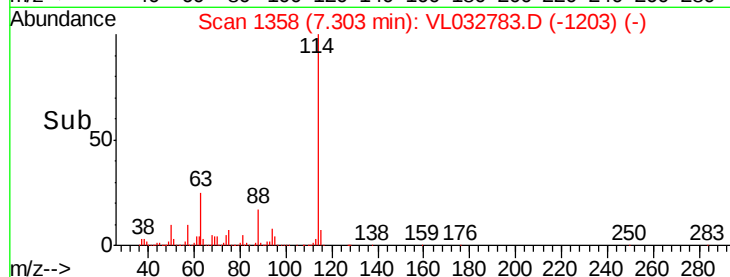
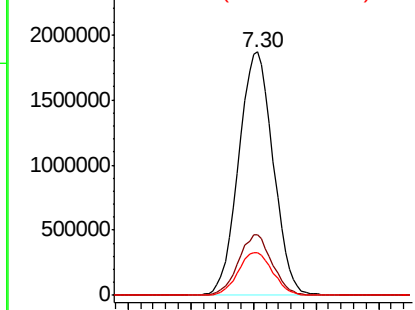
Tot Ion	Ratio	Lower	Upper
114	100		
63	24.3	20.9	31.3
88	17.7	14.4	21.6

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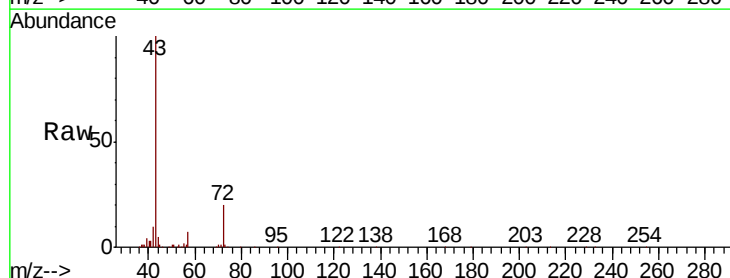


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

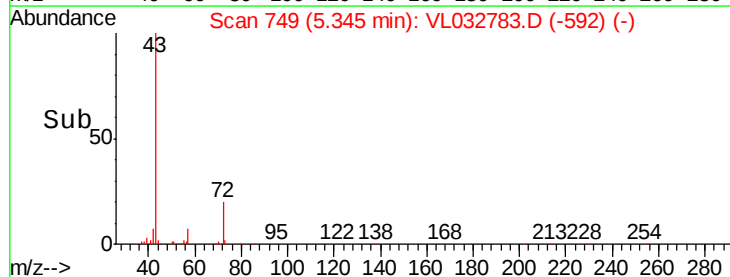
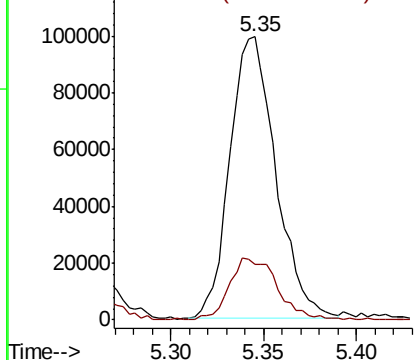


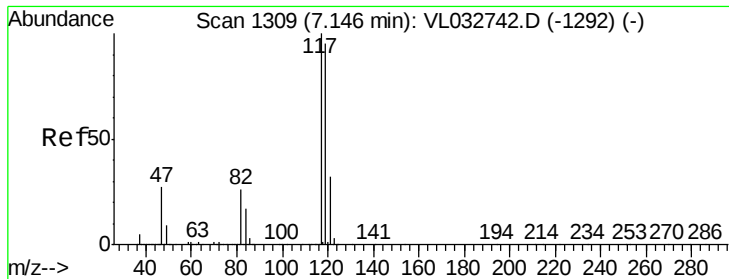
#34
 2-Butanone
 Concen: 0.921 ppbv
 RT: 5.35 min Scan# 749
 Delta R.T. 0.01 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.1	18.4	27.6



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





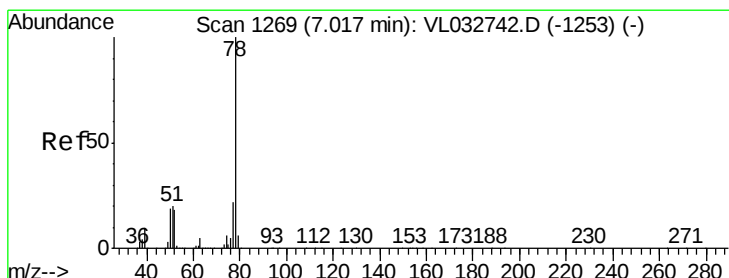
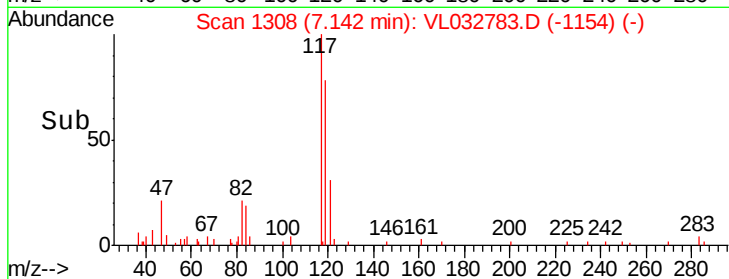
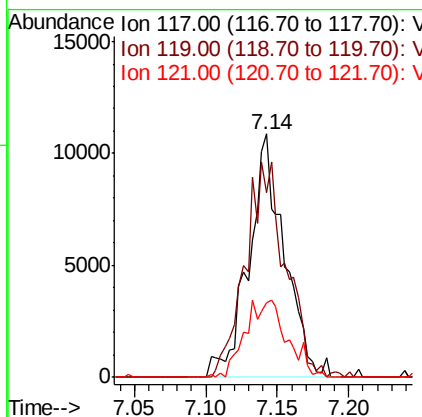
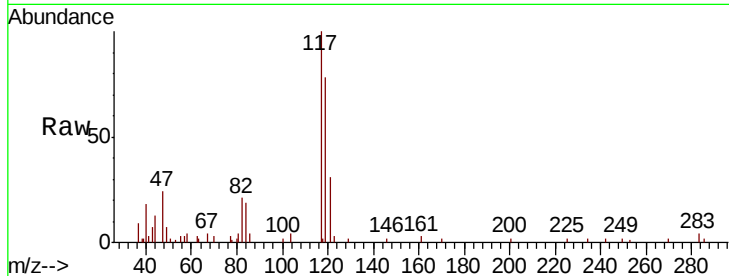
#35
Carbon Tetrachloride
Concen: 0.065 ppbv m
RT: 7.14 min Scan# 1308
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
117	100		
119	77.9	76.1	114.1
121	31.4	25.4	38.0

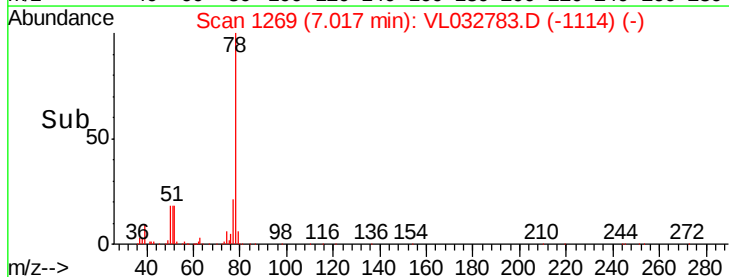
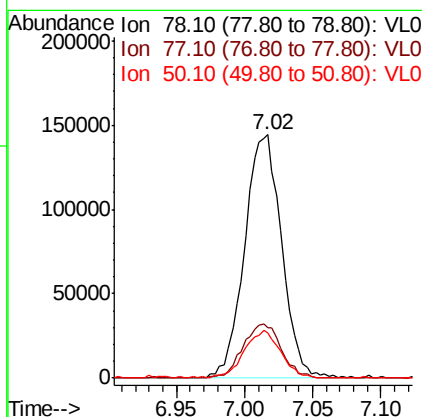
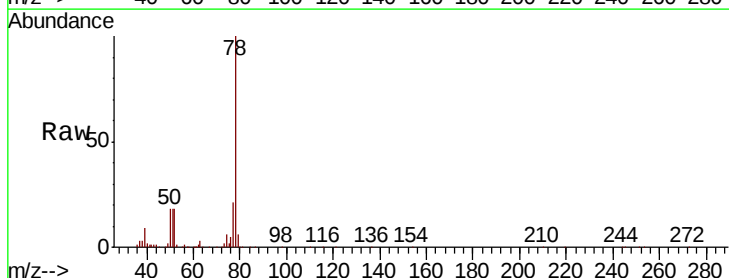
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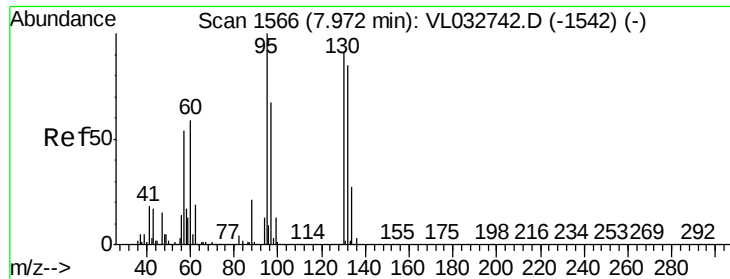
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#36
Benzene
Concen: 0.955 ppbv
RT: 7.02 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.4	17.8	26.8
50	18.2	15.4	23.0





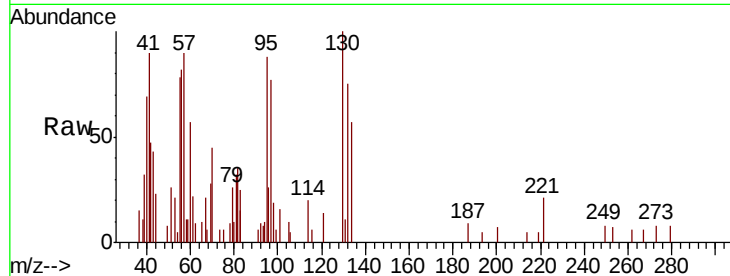
#38
 Trichloroethene
 Concen: 0.052 ppbv m
 RT: 7.97 min Scan# 1564
 Delta R.T. -0.01 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

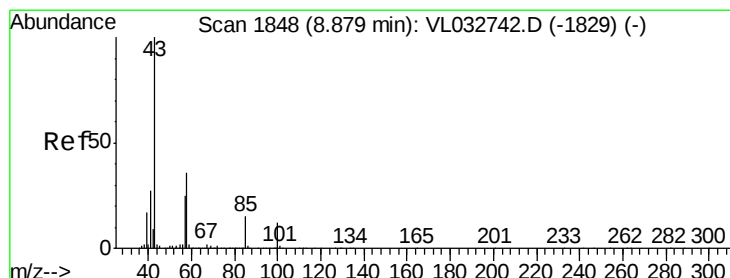
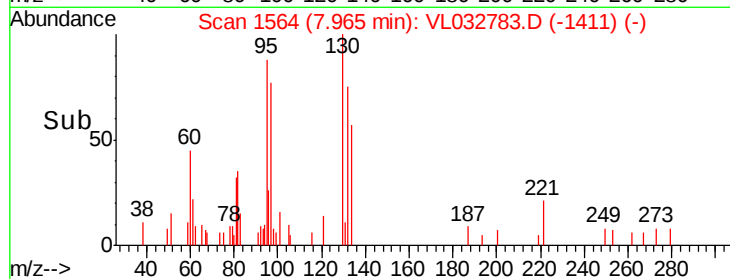
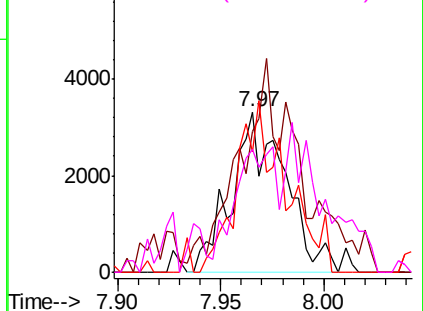
Tot Ion:	130	Resp:	6015
Ion Ratio	Lower	Upper	
130	100		
95	87.9	87.7	131.5
132	74.9	74.6	111.8
97	76.6	58.3	87.5

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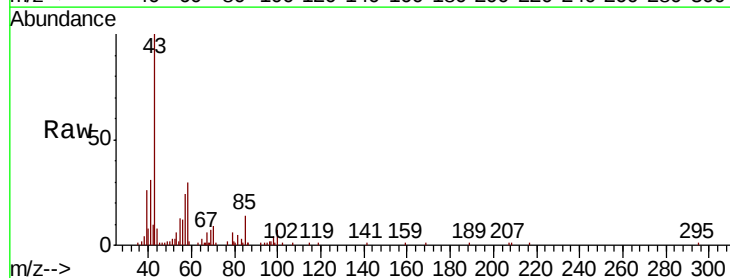


Abundance Ion 130.00 (129.70 to 130.70): V
 Ion 95.00 (94.70 to 95.70): VL0
 Ion 132.00 (131.70 to 132.70): V
 Ion 97.00 (96.70 to 97.70): VL0

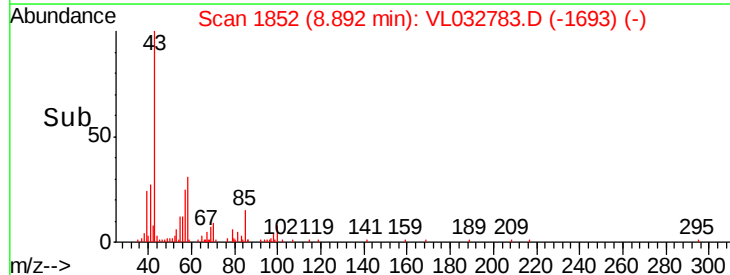
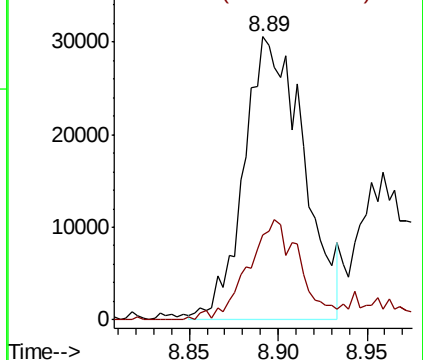


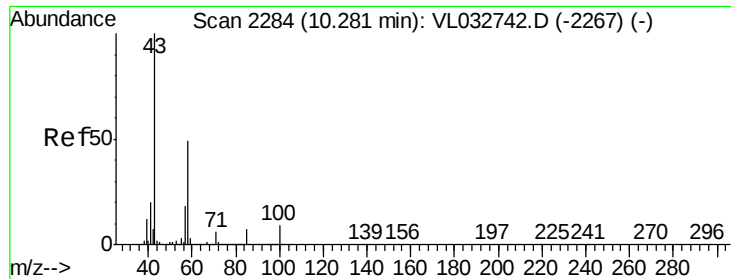
#50
 4-Methyl-2-Pentanone
 Concen: 0.246 ppbv m
 RT: 8.89 min Scan# 1852
 Delta R.T. 0.01 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Tgt Ion:	43	Resp:	71303
Ion Ratio	Lower	Upper	
43	100		
58	0.0	28.8	43.2#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 58.10 (57.80 to 58.80): VL0





#51

2-Hexanone

Concen: 1.473 ppbv

RT: 10.28 min Scan# 2285

Delta R.T. 0.00 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Instrument :

MSVOA_L

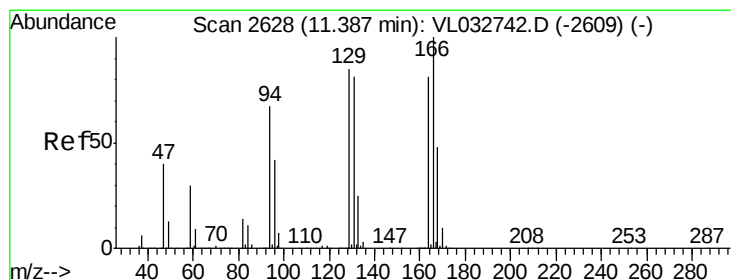
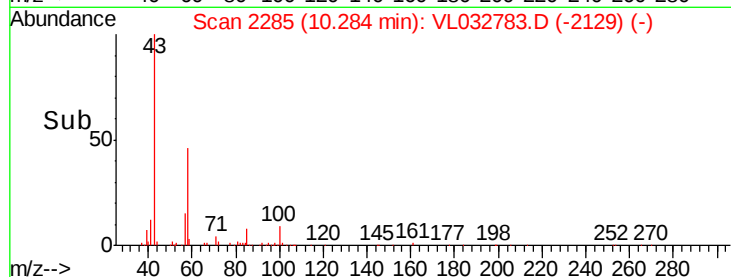
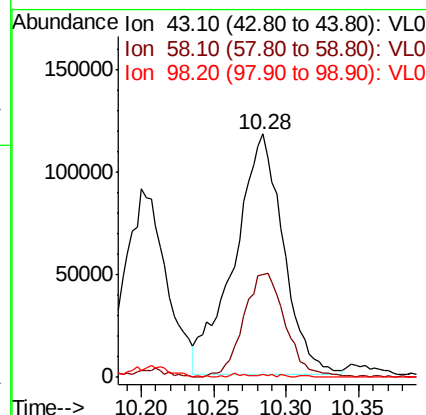
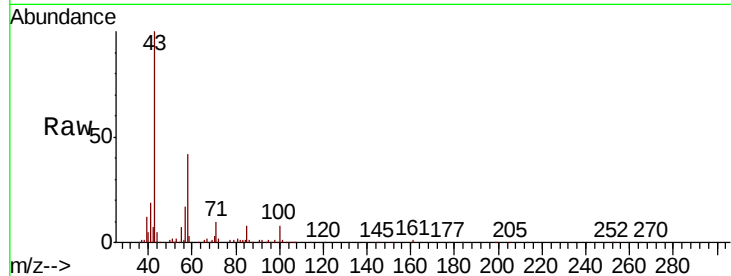
ClientSampleId :

IA1

Tot Ion:	43	Resp:	275146
Ion Ratio	Lower	Upper	
43	100		
58	37.4	38.9	58.3#
98	1.3	0.2	0.4#

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#52

Tetrachloroethene

Concen: 105.654 ppbv

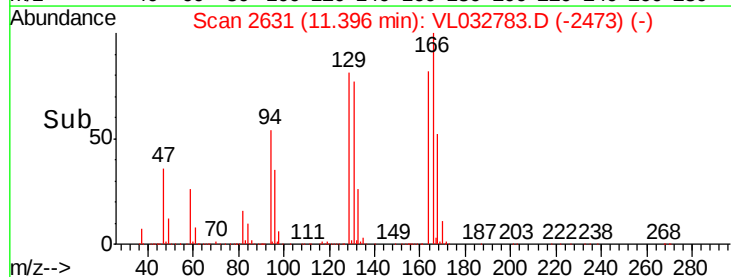
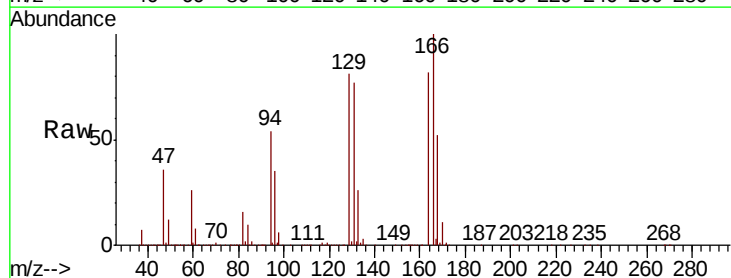
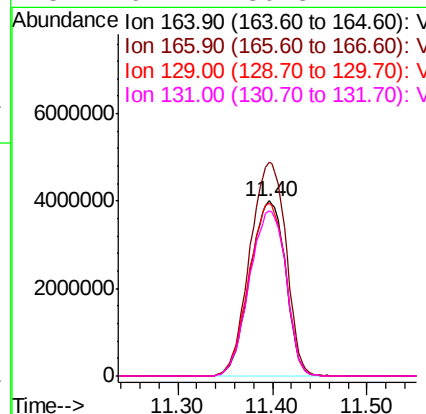
RT: 11.40 min Scan# 2631

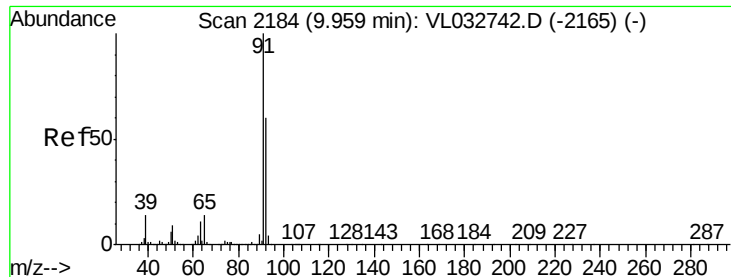
Delta R.T. 0.01 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Tgt Ion:	164	Resp:	10471711
Ion Ratio	Lower	Upper	
164	100		
166	122.0	99.3	148.9
129	98.8	83.9	125.9
131	94.1	80.8	121.2





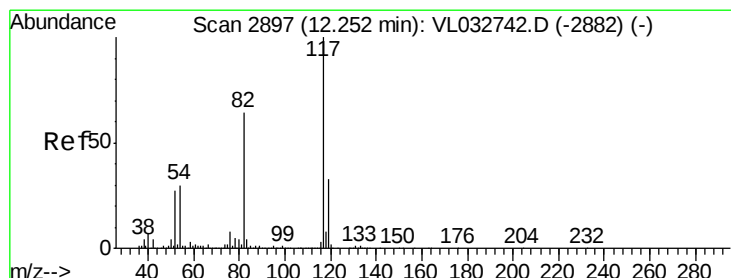
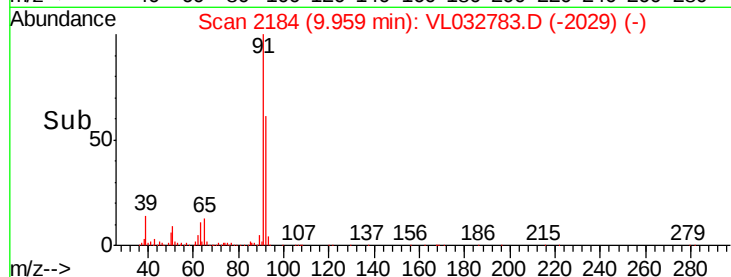
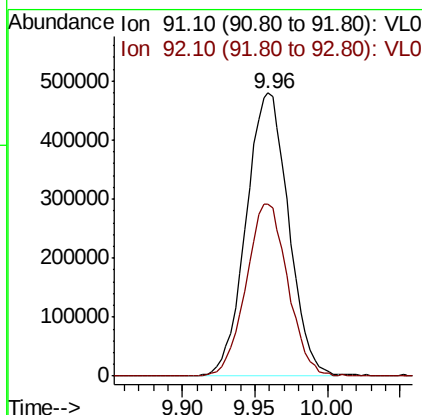
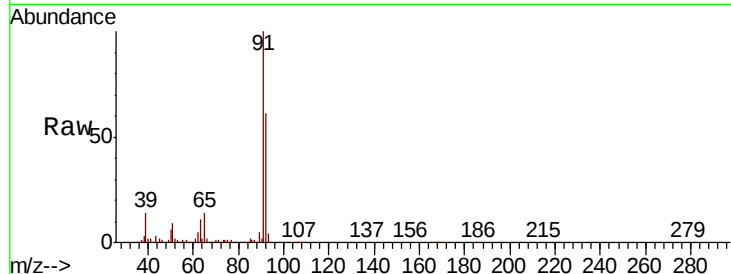
#53
Toluene
Concen: 3.275 ppbv
RT: 9.96 min Scan# 2184
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 91 Resp: 973401
Ion Ratio Lower Upper
91 100
92 60.3 47.9 71.9

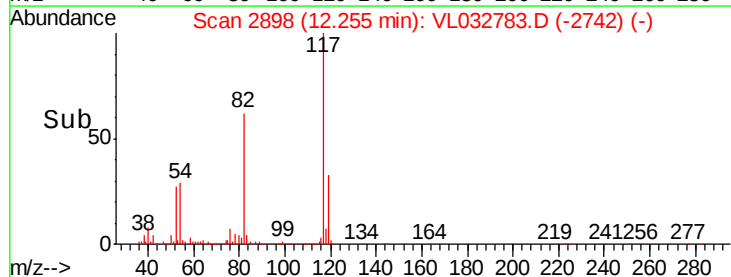
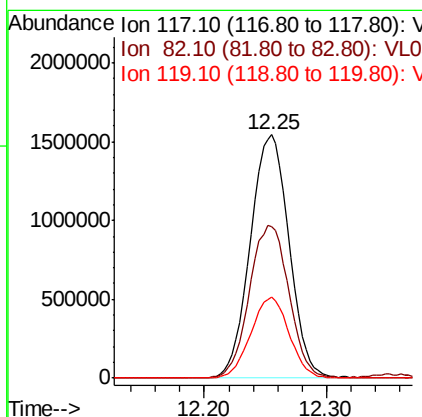
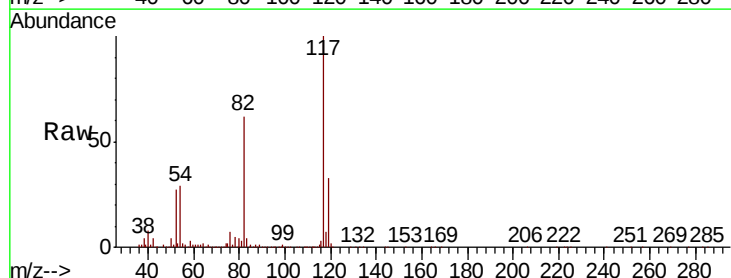
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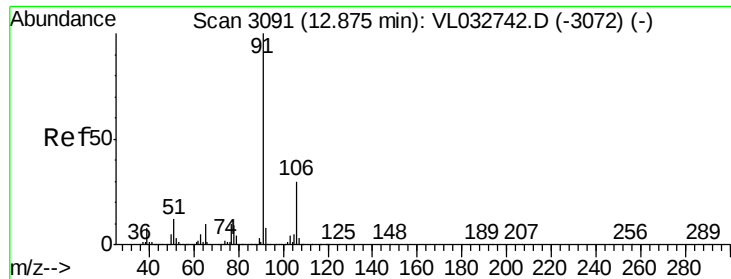
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.25 min Scan# 2898
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion: 117 Resp: 3388050
Ion Ratio Lower Upper
117 100
82 64.1 51.0 76.6
119 33.0 28.0 42.0





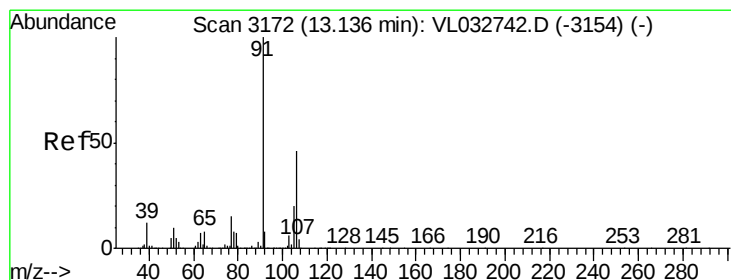
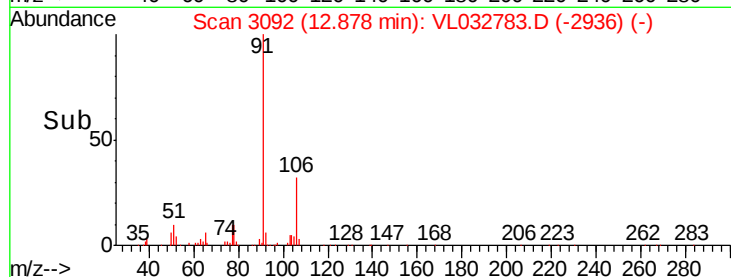
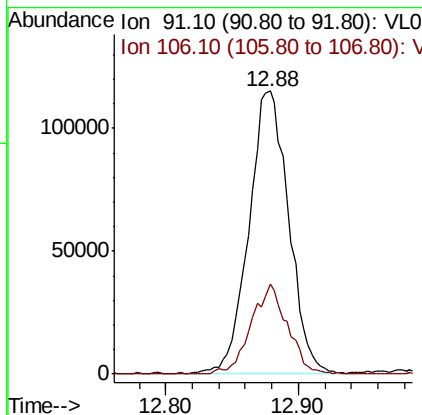
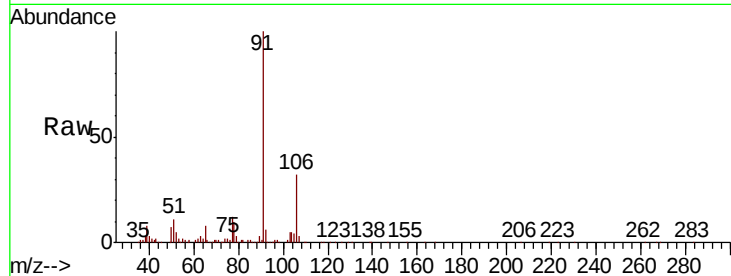
#58
Ethyl Benzene
Concen: 0.587 ppbv
RT: 12.88 min Scan# 3092
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
91	100		
106	32.0	23.6	35.4

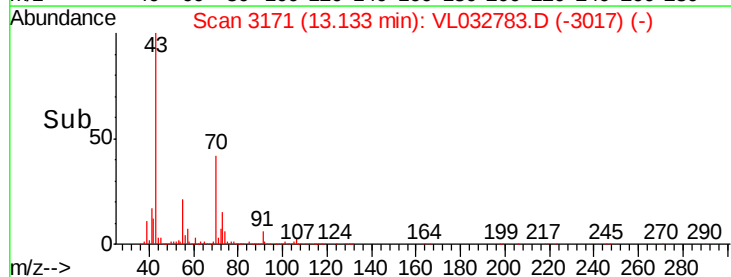
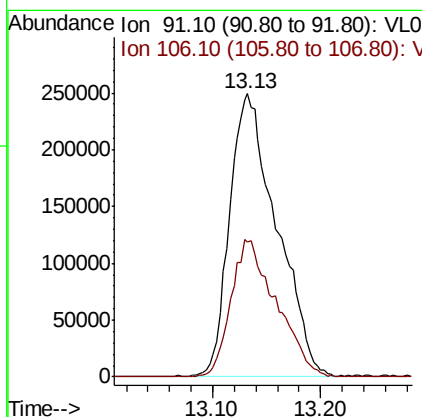
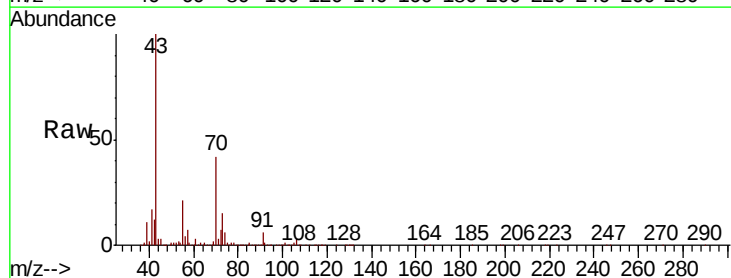
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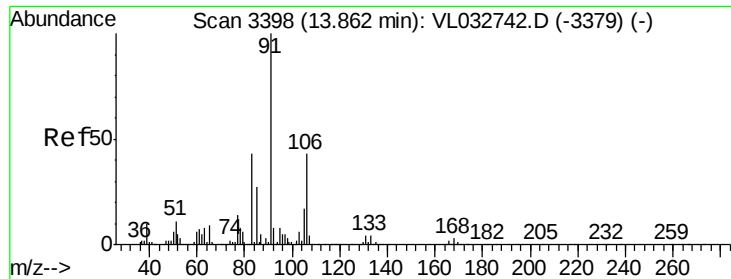
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#59
m/p-Xylene
Concen: 2.078 ppbv
RT: 13.13 min Scan# 3171
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion	Ratio	Lower	Upper
91	100		
106	47.0	36.1	54.1





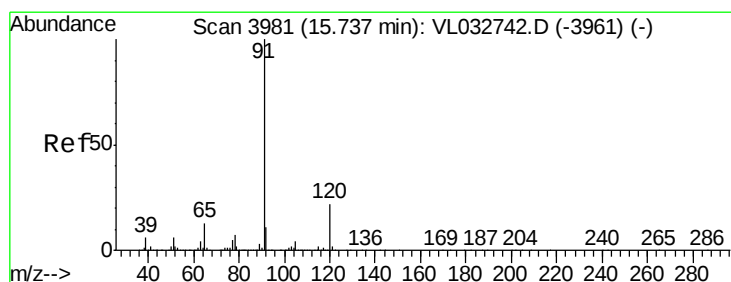
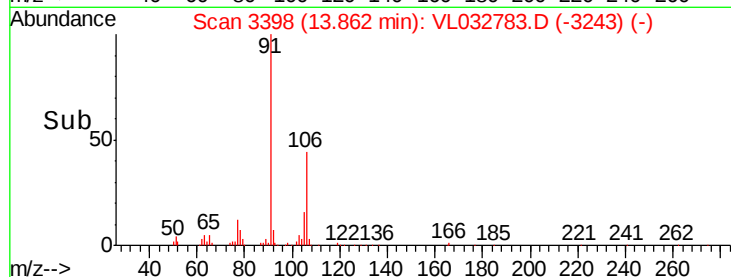
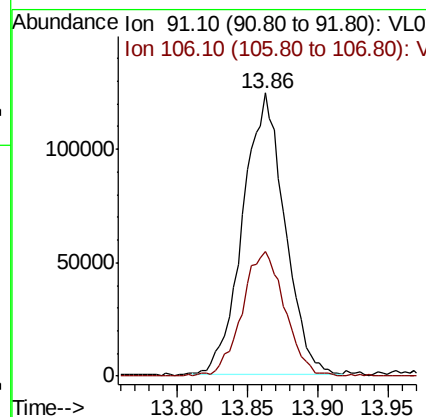
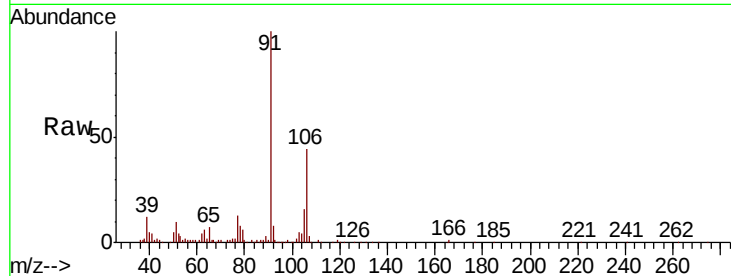
#60
o-Xylene
Concen: 0.703 ppbv
RT: 13.86 min Scan# 3398
Delta R.T. -0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion: 91 Resp: 256663
Ion Ratio Lower Upper
91 100
106 45.6 21.9 65.7

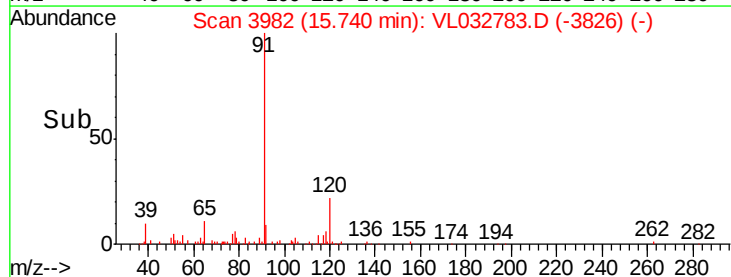
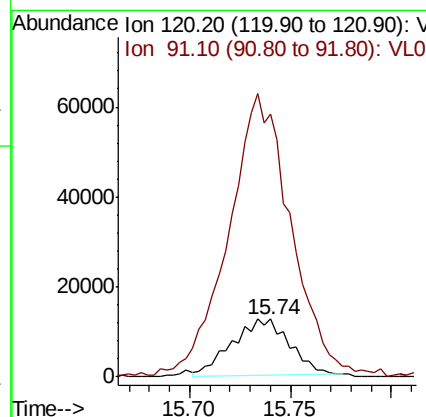
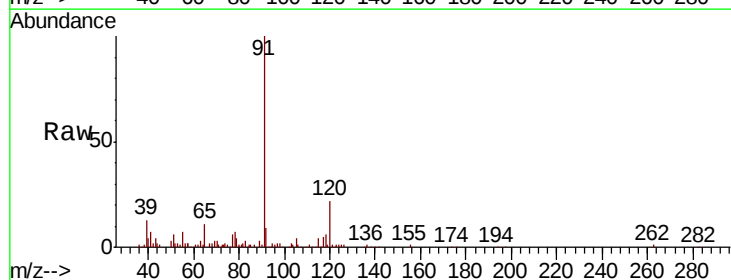
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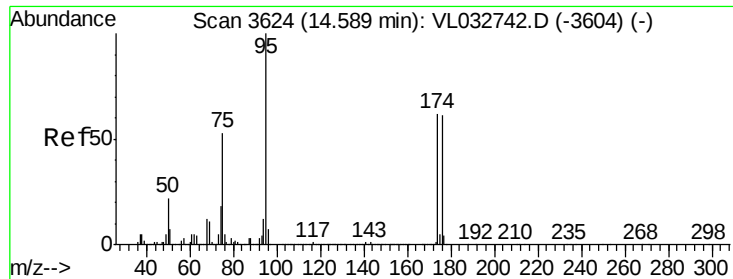
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#64
n-propylbenzene
Concen: 0.191 ppbv
RT: 15.74 min Scan# 3982
Delta R.T. 0.00 min
Lab File: VL032783.D
Acq: 20 Nov 2018 18:07

Tgt Ion: 120 Resp: 24726
Ion Ratio Lower Upper
120 100
91 545.2 381.7 572.5





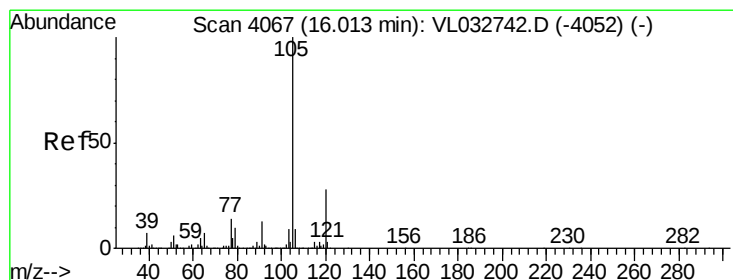
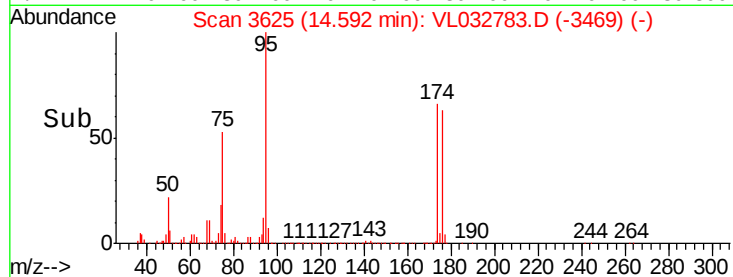
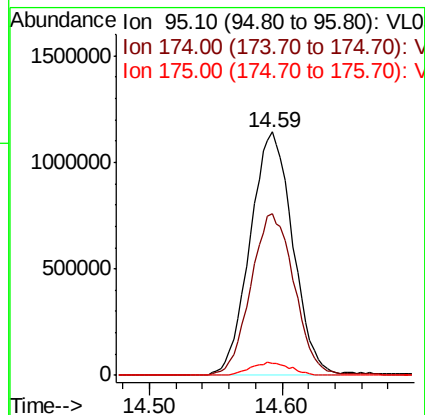
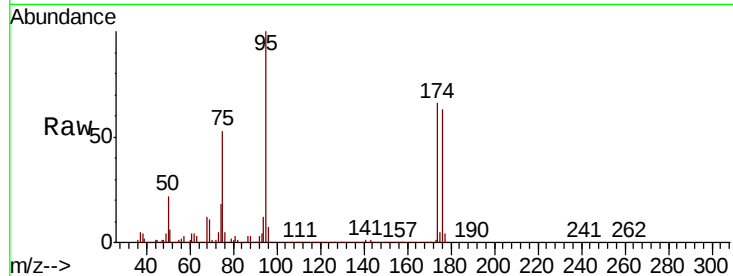
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.093 ppbv
 RT: 14.59 min Scan# 3625
 Delta R.T. 0.00 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion: 95 Resp: 2557537
 Ion Ratio Lower Upper
 95 100
 174 68.0 50.7 76.1
 175 5.0 3.8 5.6

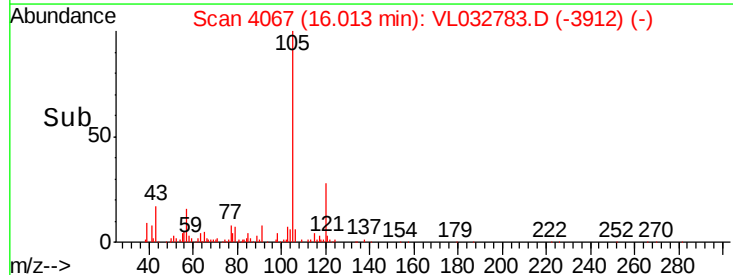
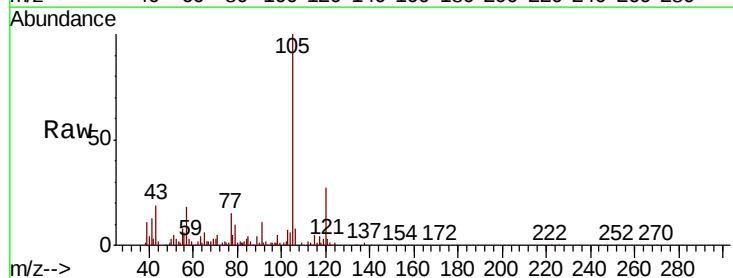
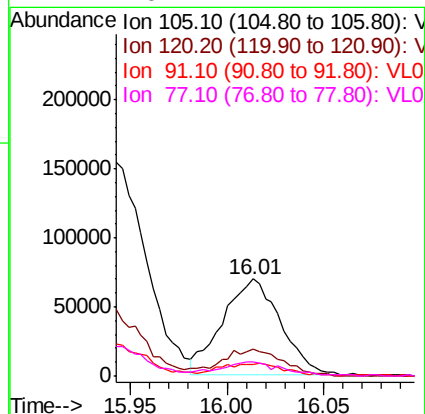
Manual Integrations
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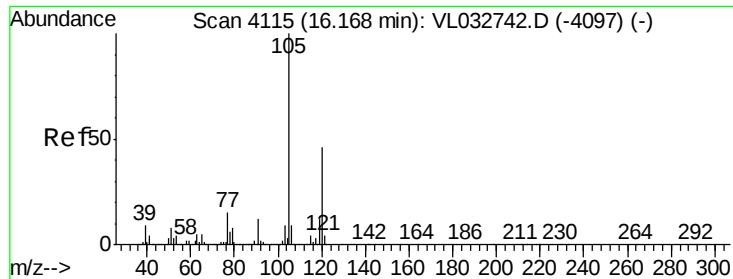
MMDadoda
 11/26/2018 9:18:44 AM



#72
 4-Ethyltoluene
 Concen: 0.361 ppbv
 RT: 16.01 min Scan# 4067
 Delta R.T. -0.00 min
 Lab File: VL032783.D
 Acq: 20 Nov 2018 18:07

Tgt Ion: 105 Resp: 144547
 Ion Ratio Lower Upper
 105 100
 120 29.8 22.9 34.3
 91 13.9 10.6 15.8
 77 16.1 11.4 17.2





#73

1,3,5-Trimethylbenzene

Concen: 0.311 ppbv

RT: 16.17 min Scan# 4115

Delta R.T. -0.00 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion:105 Resp: 121660

Ion Ratio Lower Upper

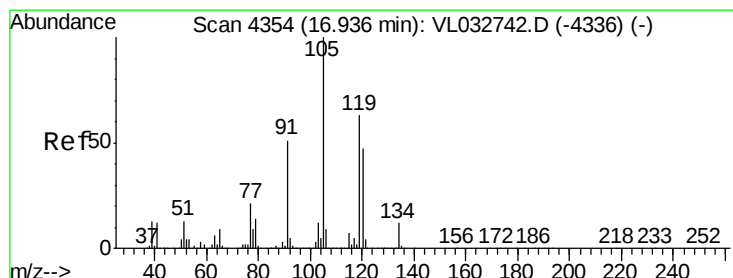
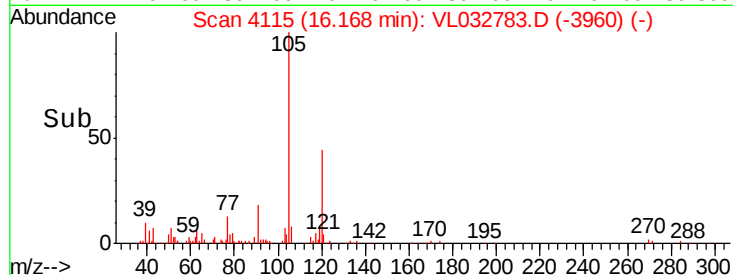
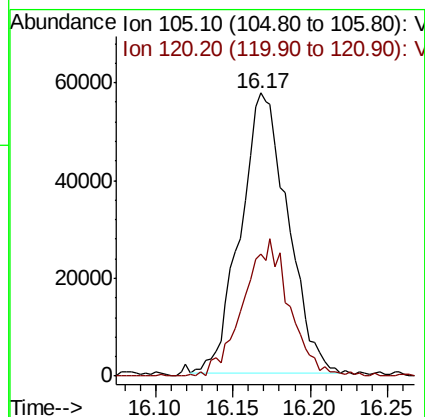
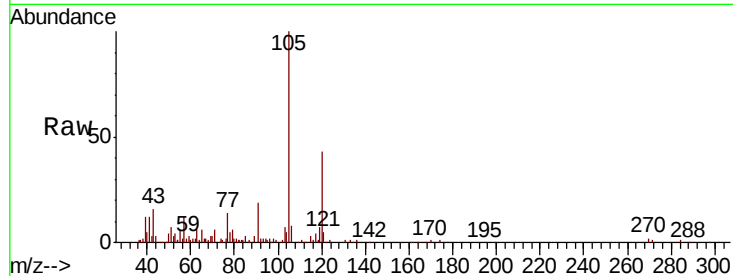
105 100

120 43.2 36.6 55.0

Manual Integrations
APPROVED

MMDadoda

11/26/2018 9:18:44 AM



#74

1,2,4-Trimethylbenzene

Concen: 0.982 ppbv

RT: 16.94 min Scan# 4354

Delta R.T. -0.00 min

Lab File: VL032783.D

Acq: 20 Nov 2018 18:07

Tgt Ion:105 Resp: 411109

Ion Ratio Lower Upper

105 100

120 38.9 37.6 56.4

91 13.0 42.5 63.7#

77 13.2 17.4 26.2#

