

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062918\
 Data File : VL032173.D
 Acq On : 30 Jun 2018 16:29
 Operator : SY/AP
 Sample : J3601-09
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-D-INDOOR

Manual Integrations
 APPROVED

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 7/2/2018 4:26:03 PM

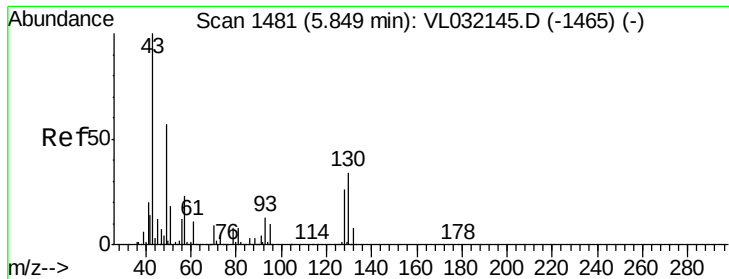
Quant Time: Jul 02 12:13:16 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 29 2018
 QLast Update : Fri Jun 29 22:27:58 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1398375	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.39	114	3109141	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.34	117	2881537	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.68	95	2292500	10.41	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.10%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	64253	0.35	ppbv	99
3) Chlorodifluoromethane	3.07	51	82906m	0.49	ppbv	
4) Chloromethane	3.23	50	67479	0.74	ppbv #	86
9) Propene	3.11	41	47113m	0.59	ppbv	
10) Heptane	8.34	43	246950	1.06	ppbv	95
11) Trichlorofluoromethane	4.07	101	55698m	0.28	ppbv	
13) Ethanol	3.72	45	2182298	90.40	ppbv	97
15) Acetone	3.96	43	1936540	11.84	ppbv	96
19) Isopropyl Alcohol	4.10	45	1167136m	8.59	ppbv	
20) Methylene Chloride	4.48	84	45394	0.76	ppbv	92
26) Hexane	5.86	57	142463	0.91	ppbv	83
29) Chloroform	5.94	83	32971m	0.15	ppbv	
34) 2-Butanone	5.41	43	165426m	0.84	ppbv	
35) Carbon Tetrachloride	7.23	117	12858	0.06	ppbv #	79
50) 4-Methyl-2-Pentanone	8.98	43	70289m	0.22	ppbv	
52) Tetrachloroethene	11.46	164	22731m	0.21	ppbv	
53) Toluene	10.05	91	1000838	2.75	ppbv	99
58) Ethyl Benzene	12.97	91	214132	0.46	ppbv	90
59) m/p-Xylene	13.22	91	357894m	0.96	ppbv	
60) o-Xylene	13.95	91	158671	0.43	ppbv	95
61) Styrene	13.78	104	69476	0.23	ppbv	95
74) 1,2,4-Trimethylbenzene	17.02	105	112075	0.25	ppbv #	76

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



#1

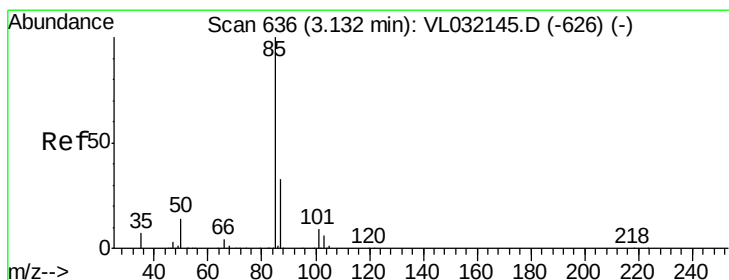
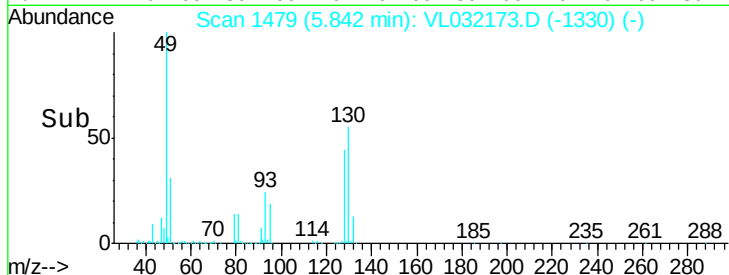
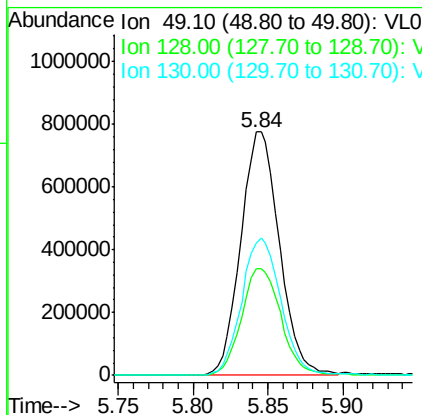
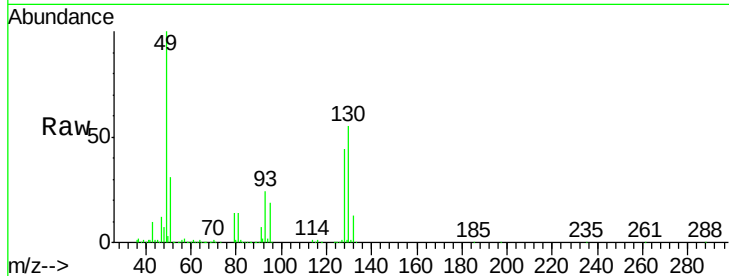
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.84 min Scan# 1479
 Delta R.T. -0.02 min
 Lab File: VL032173.D
 Acq: 30 Jun 2018 16:29

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-D-INDOOR

Tot Ion: 49 Resp: 1398375
 Ion Ratio Lower Upper
 49 100
 128 44.8 23.4 70.0
 130 58.1 30.3 90.9

Manual Integrations
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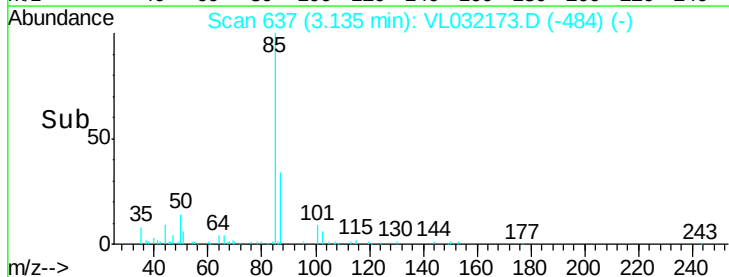
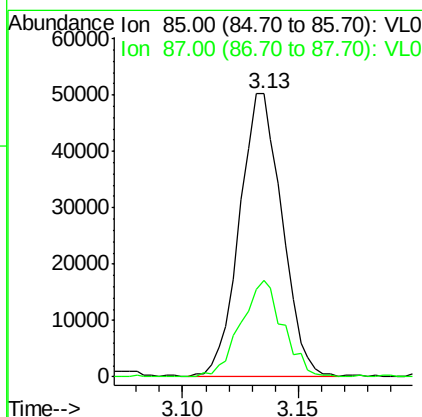
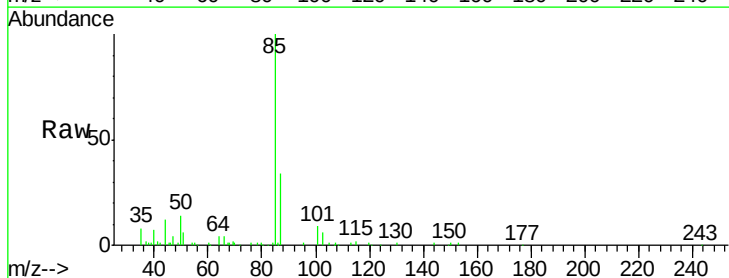
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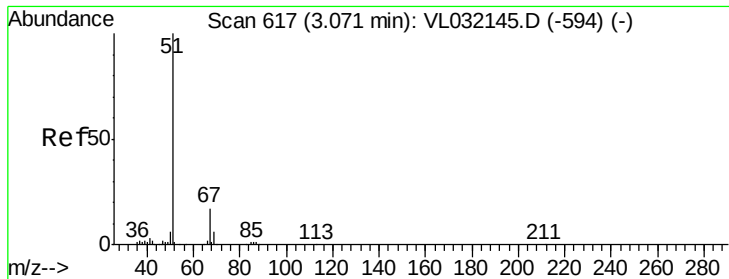


#2

Dichlorodifluoromethane
 Concen: 0.35 ppbv
 RT: 3.13 min Scan# 637
 Delta R.T. -0.01 min
 Lab File: VL032173.D
 Acq: 30 Jun 2018 16:29

Tgt Ion: 85 Resp: 64253
 Ion Ratio Lower Upper
 85 100
 87 34.2 26.7 40.1





#3

Chlorodifluoromethane

Concen: 0.49 ppbv m

RT: 3.07 min Scan# 617

Delta R.T. -0.01 min

Lab File: VL032173.D

Acq: 30 Jun 2018 16:29

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-D-INDOOR

Tot Ion: 51 Resp: 82906

Ion Ratio Lower Upper

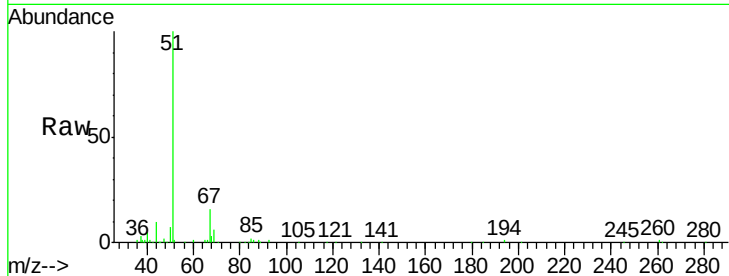
51 100

67 17.2 13.2 19.8

Manual Integrations
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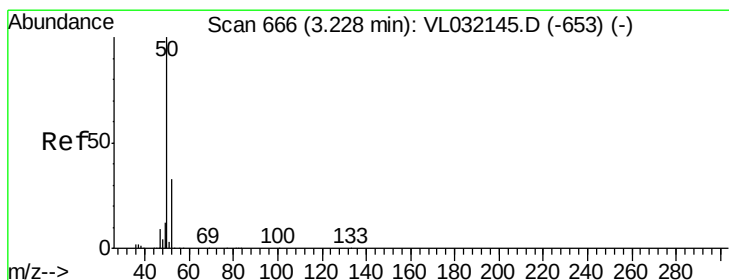
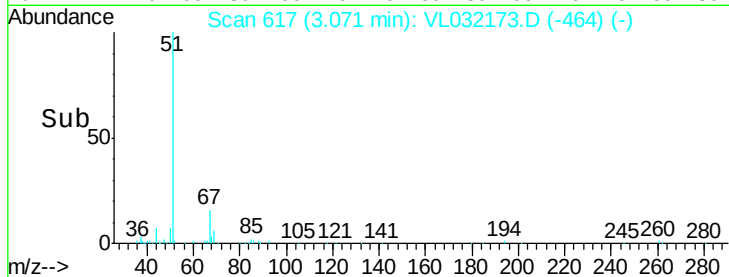
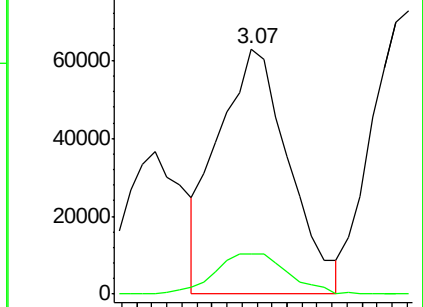
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.74 ppbv

RT: 3.23 min Scan# 668

Delta R.T. -0.00 min

Lab File: VL032173.D

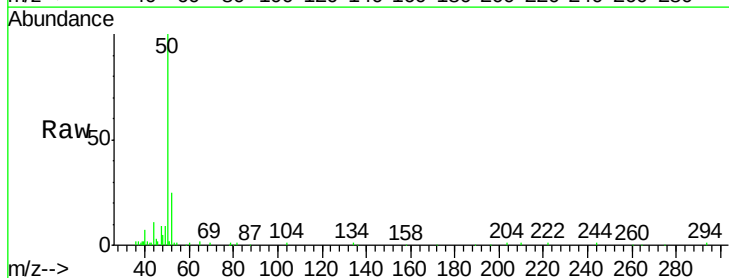
Acq: 30 Jun 2018 16:29

Tgt Ion: 50 Resp: 67479

Ion Ratio Lower Upper

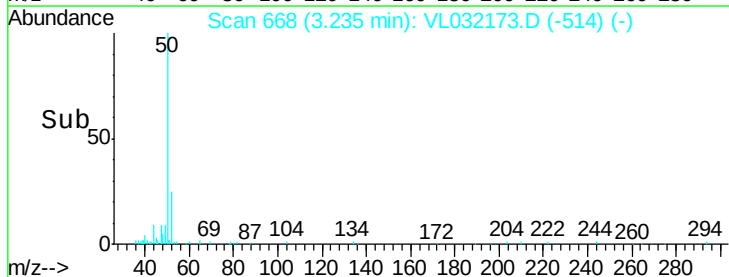
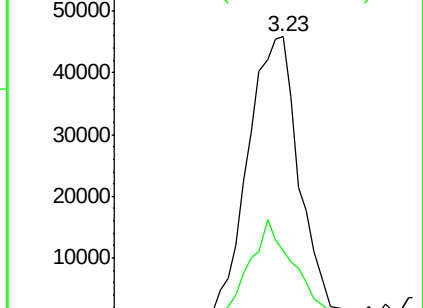
50 100

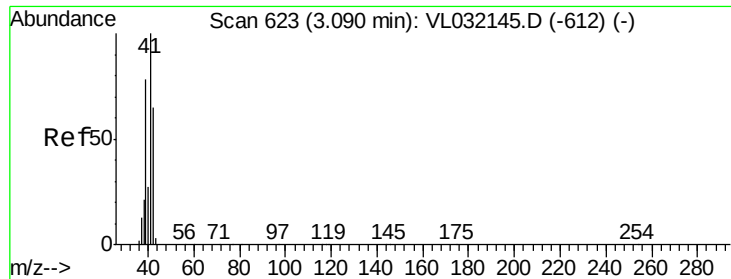
52 24.8 26.0 39.0#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

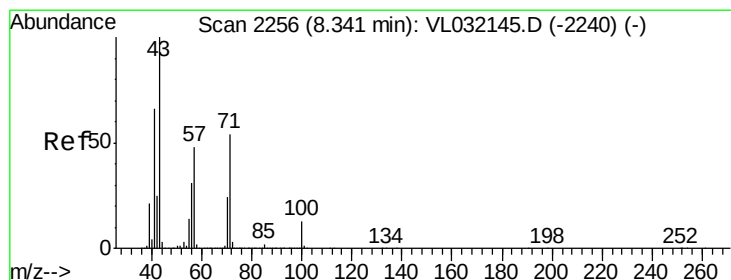
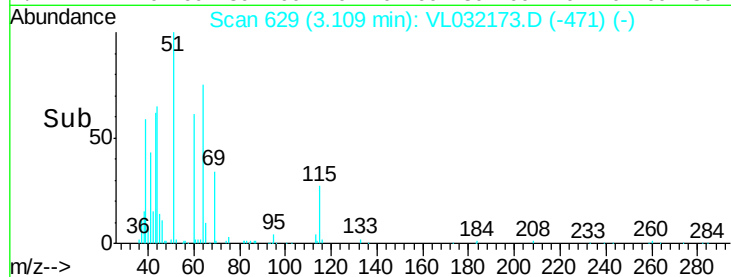
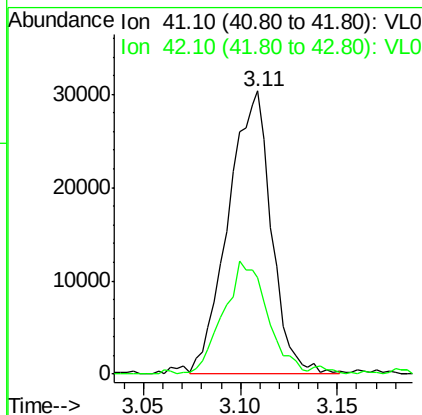
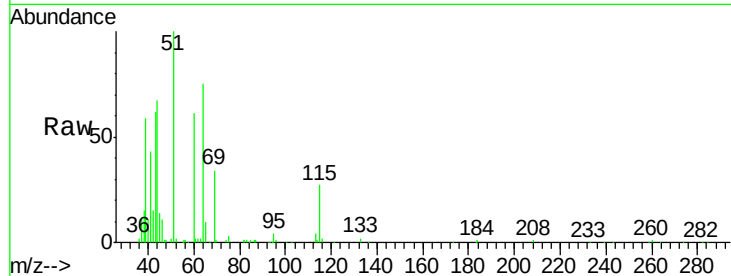
Concen: 0.59 ppbv m
RT: 3.11 min Scan# 629
Delta R.T. 0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion	41	Resp	47113
Ion Ratio	100	Lower	Upper
42	451.2	56.2	84.4#

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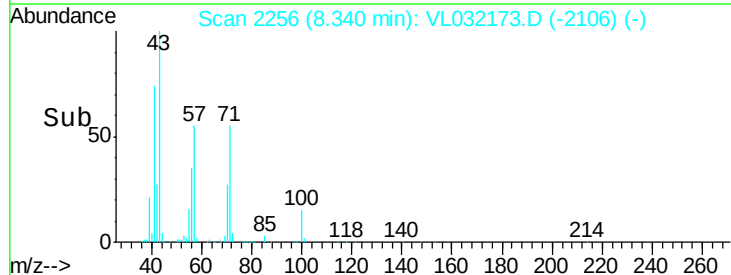
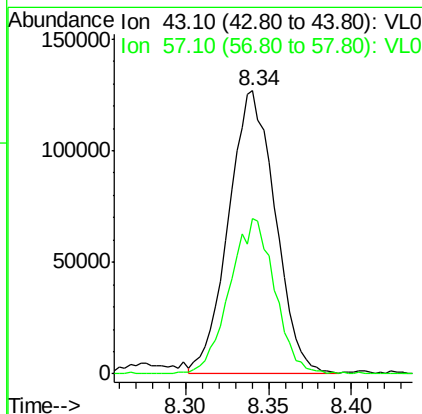
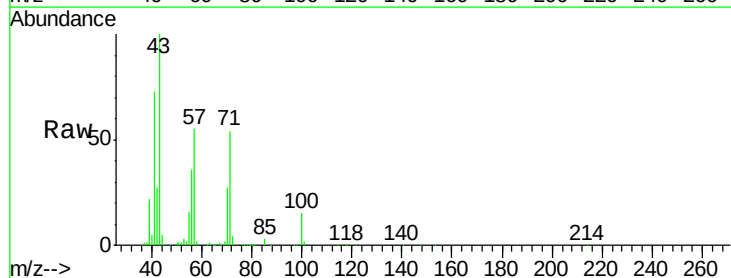


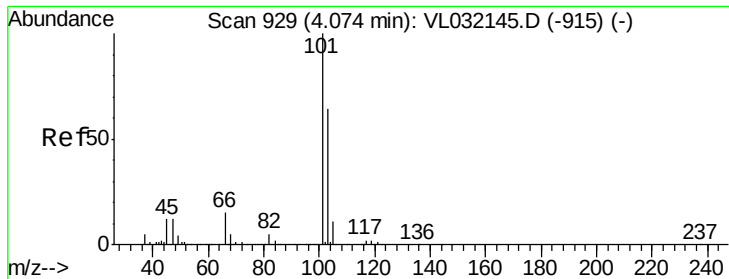
#10

Heptane

Concen: 1.06 ppbv
RT: 8.34 min Scan# 2256
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion	43	Resp	246950
Ion Ratio	100	Lower	Upper
57	53.3	39.8	59.8





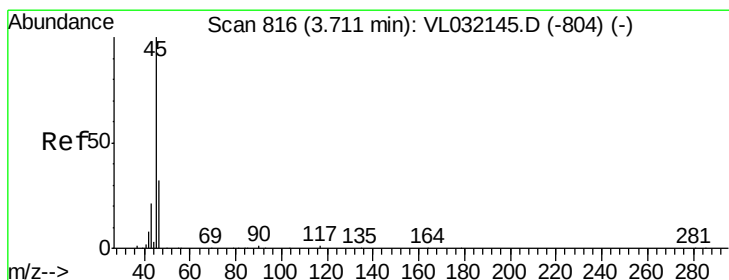
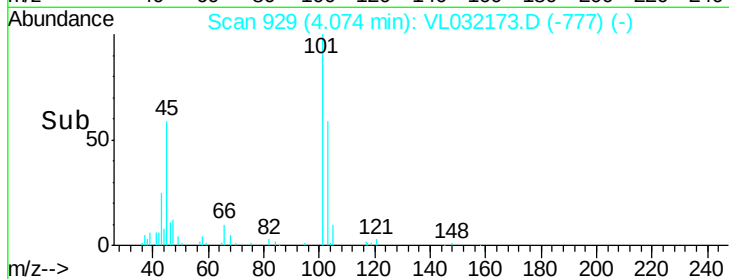
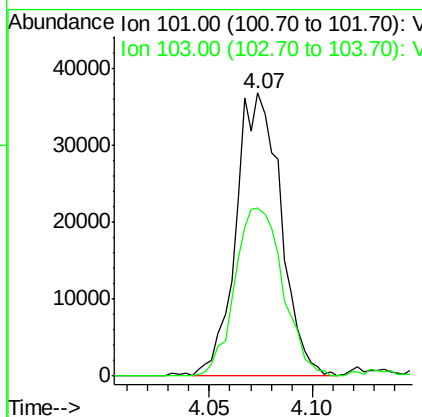
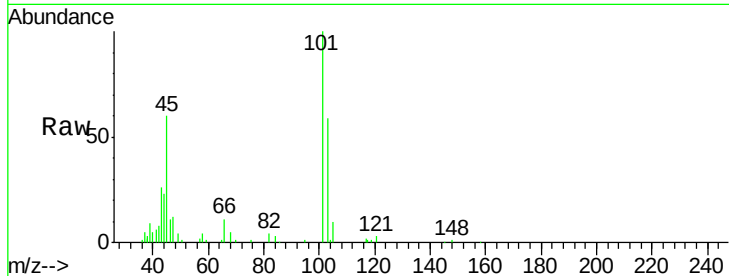
#11
 Trichlorofluoromethane
 Concen: 0.28 ppbv m
 RT: 4.07 min Scan# 929
 Delta R.T. -0.01 min
 Lab File: VL032173.D
 Acq: 30 Jun 2018 16:29

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-D-INDOOR

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		55698		
103	59.3		51.4	77.0	

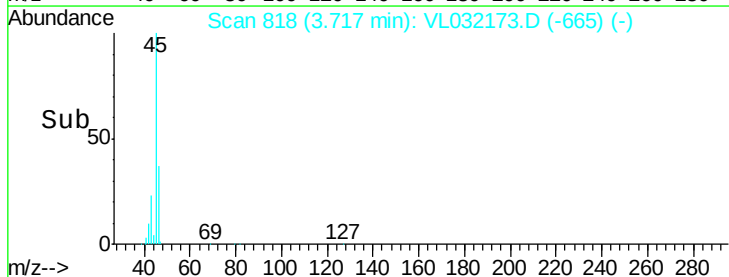
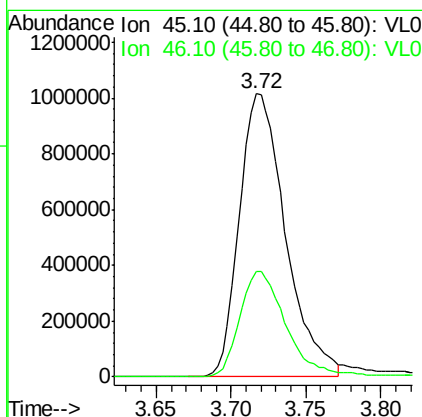
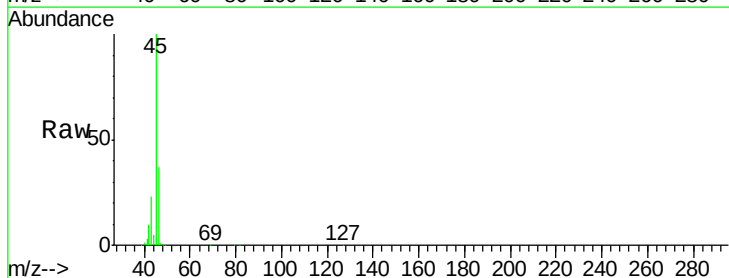
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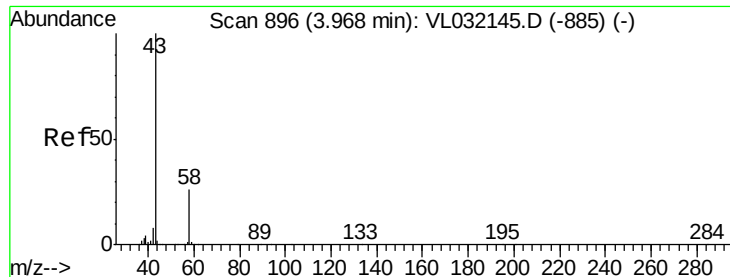
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#13
 Ethanol
 Concen: 90.40 ppbv
 RT: 3.72 min Scan# 818
 Delta R.T. -0.01 min
 Lab File: VL032173.D
 Acq: 30 Jun 2018 16:29

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		2182298		
46	38.1		14.6	58.4	





#15

Acetone

Concen: 11.84 ppbv

RT: 3.96 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL032173.D

Acq: 30 Jun 2018 16:29

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-D-INDOOR

Tot Ion: 43 Resp: 1936540

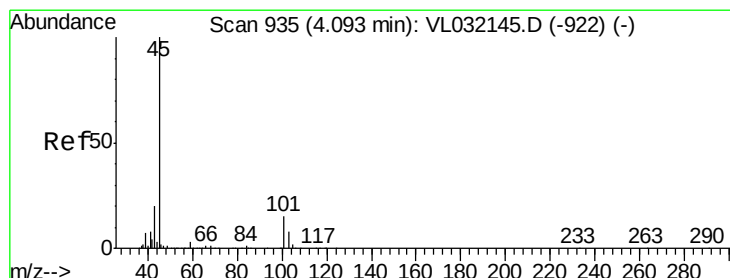
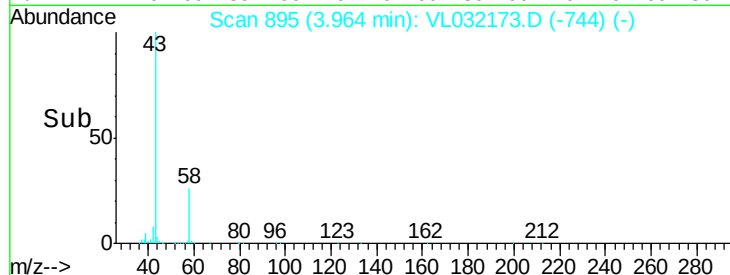
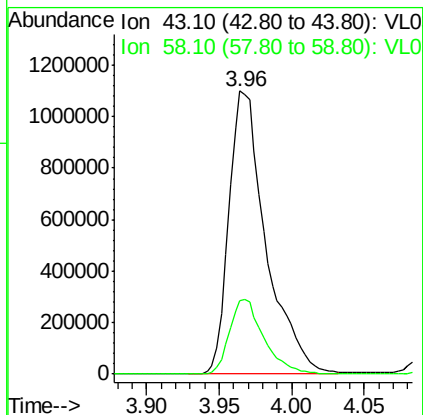
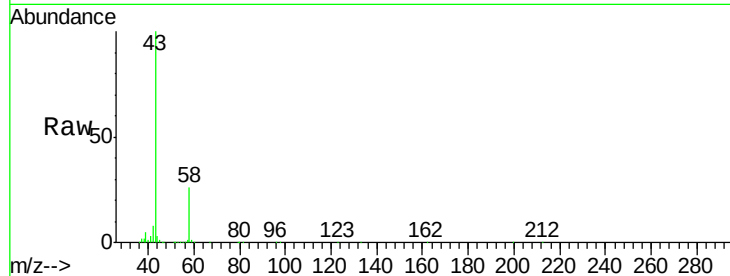
Ion Ratio Lower Upper

43 100

58 24.7 21.4 32.0

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#19

Isopropyl Alcohol

Concen: 8.59 ppbv m

RT: 4.10 min Scan# 938

Delta R.T. -0.00 min

Lab File: VL032173.D

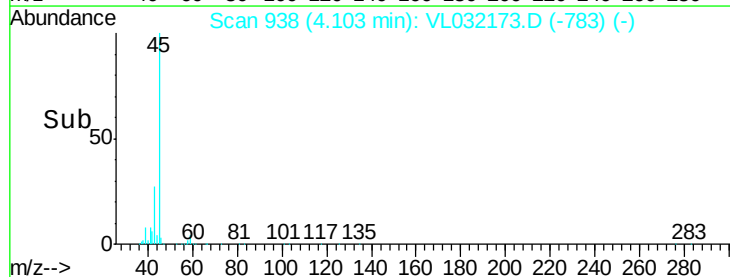
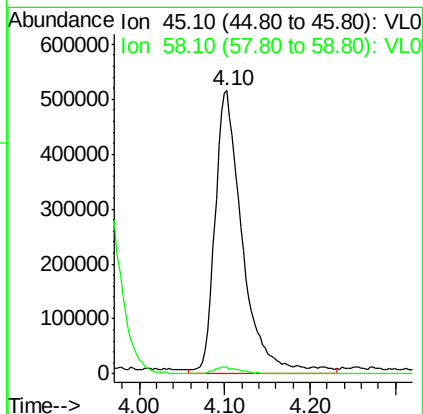
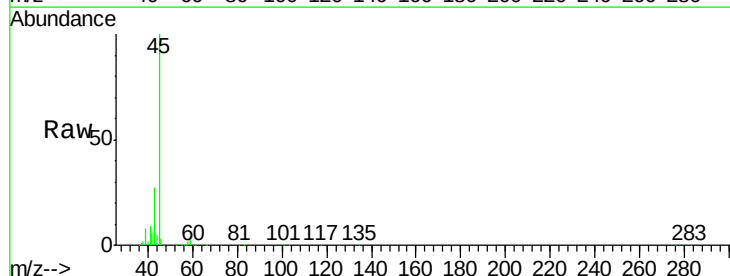
Acq: 30 Jun 2018 16:29

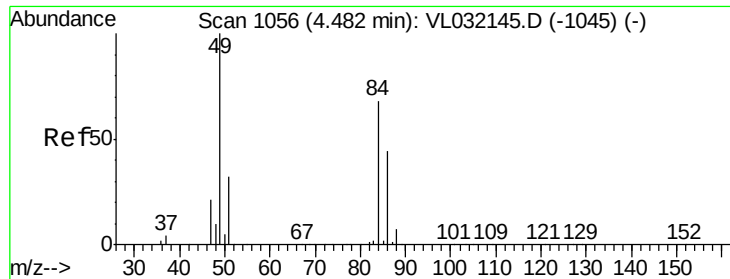
Tgt Ion: 45 Resp: 1167136

Ion Ratio Lower Upper

45 100

58 0.0 29.4 44.0#





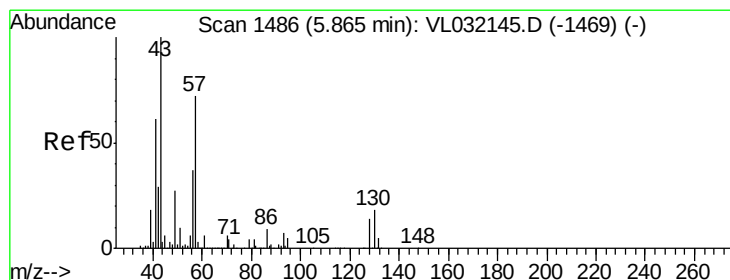
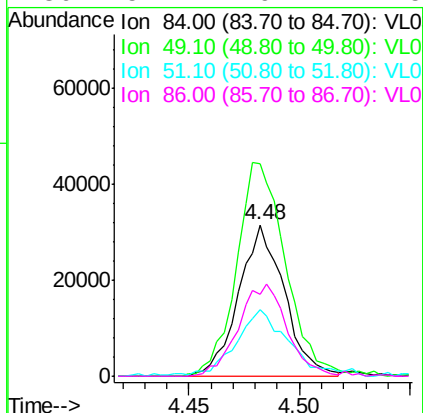
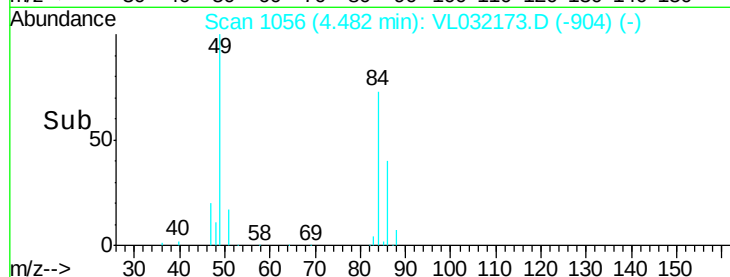
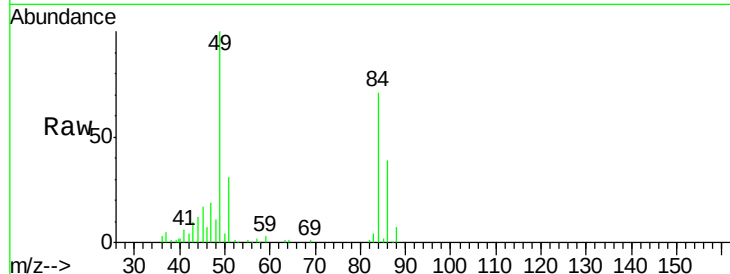
#20
Methvlene Chloride
Concen: 0.76 ppbv
RT: 4.48 min Scan# 1056
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	139.2	119.6	179.4	
51	43.0	36.3	54.5	
86	54.4	49.7	74.5	

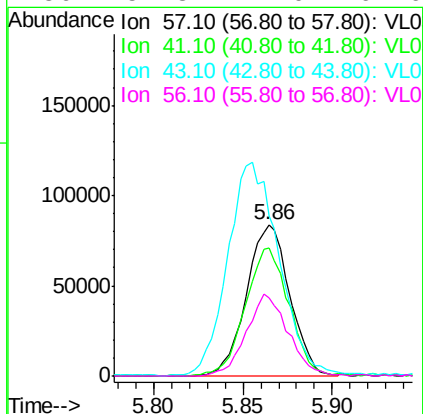
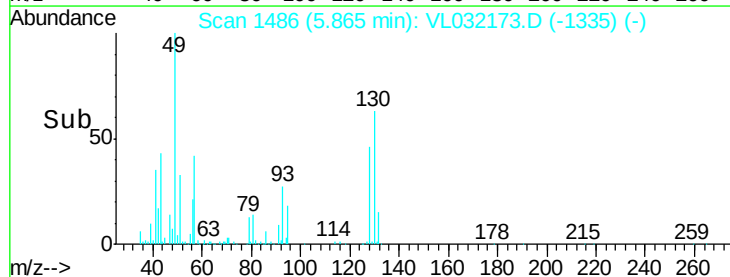
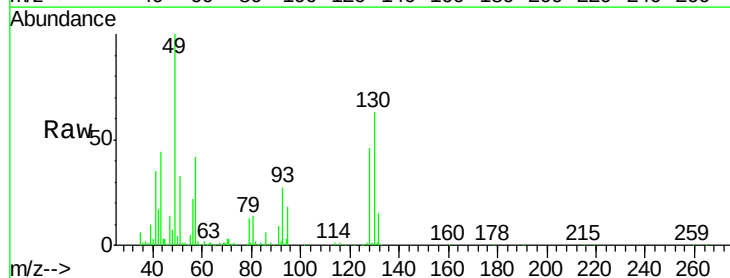
Manual Integrations
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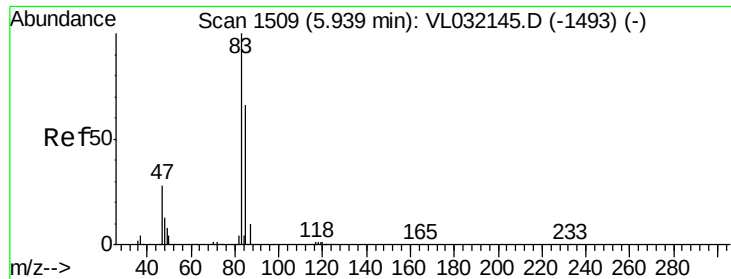
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#26
Hexane
Concen: 0.91 ppbv
RT: 5.86 min Scan# 1486
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	87.1	68.6	103.0	
43	168.9	168.6	252.8	
56	52.3	41.0	61.6	





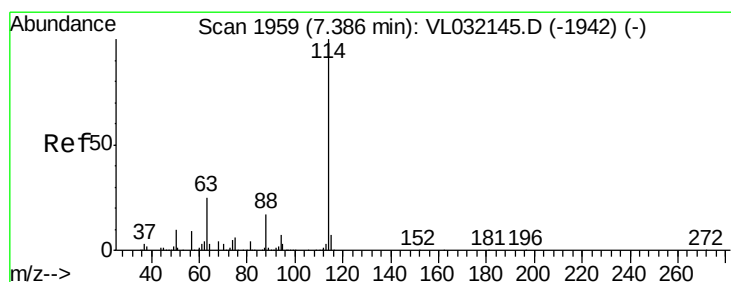
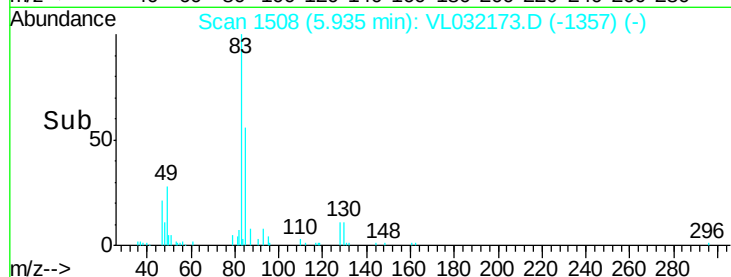
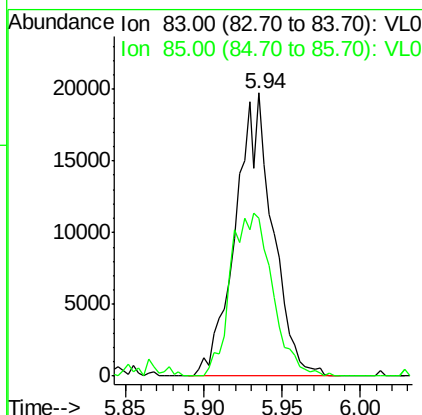
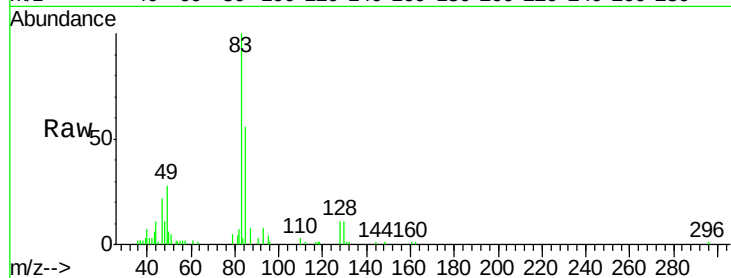
#29
Chloroform
Concen: 0.15 ppbv m
RT: 5.94 min Scan# 1508
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 83 Resp: 32971
Ion Ratio Lower Upper
83 100
85 55.8 51.6 77.4

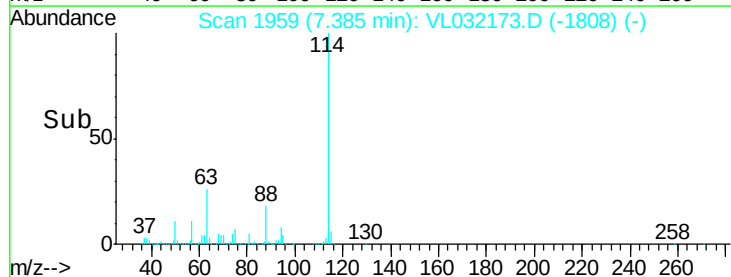
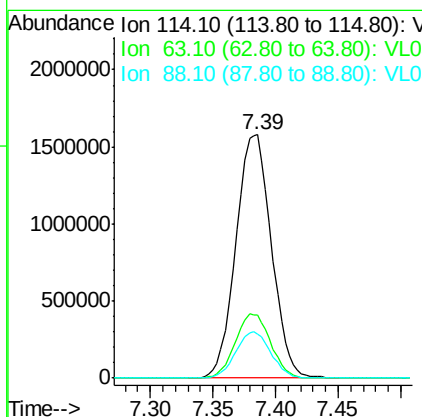
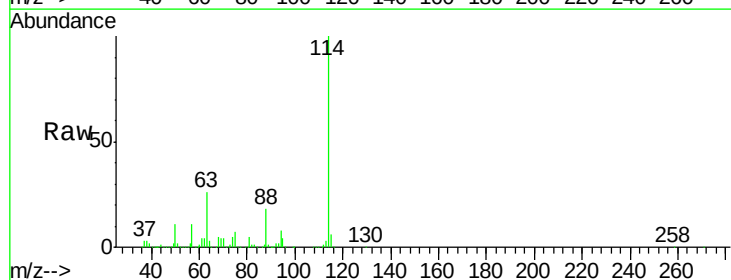
Manual Integrations
APPROVED

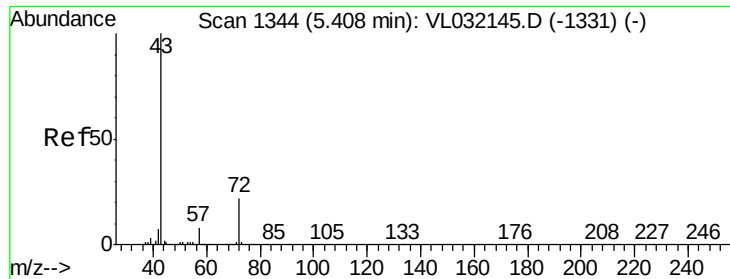
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.00 ppbv
RT: 7.39 min Scan# 1959
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 114 Resp: 3109141
Ion Ratio Lower Upper
114 100
63 26.3 19.1 28.7
88 18.7 13.9 20.9





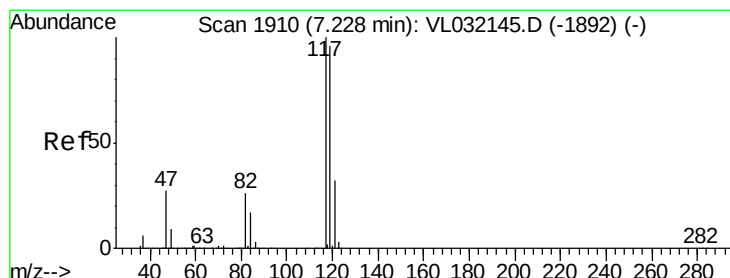
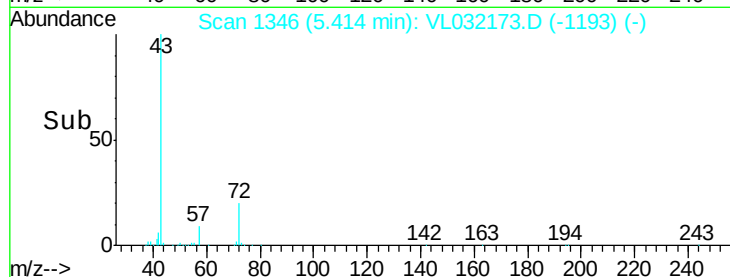
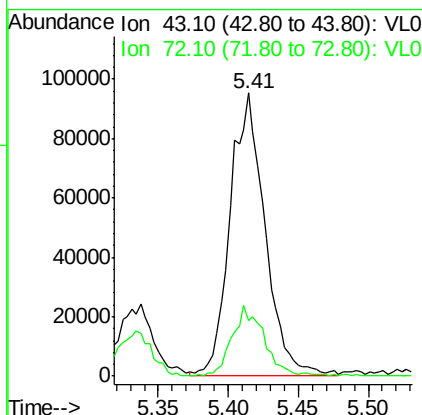
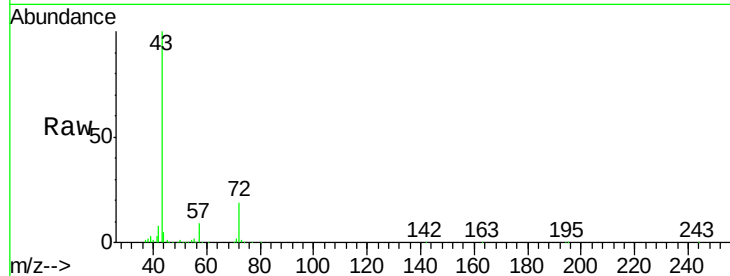
#34
2-Butanone
Concen: 0.84 ppbv m
RT: 5.41 min Scan# 1346
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 43 Resp: 165426
Ion Ratio Lower Upper
43 100
72 23.0 18.4 27.6

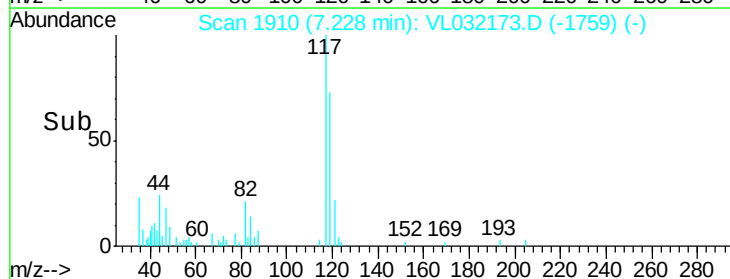
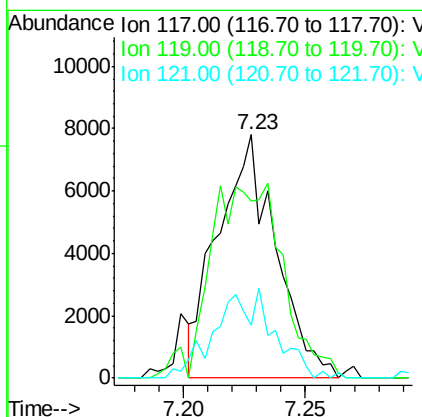
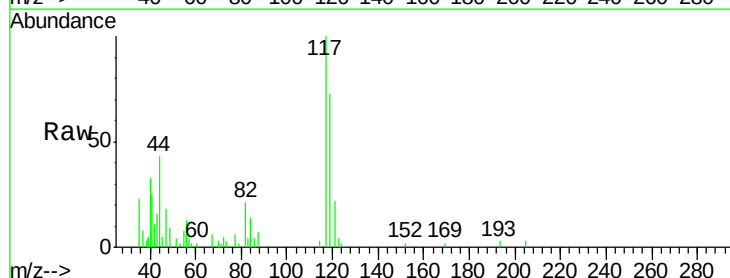
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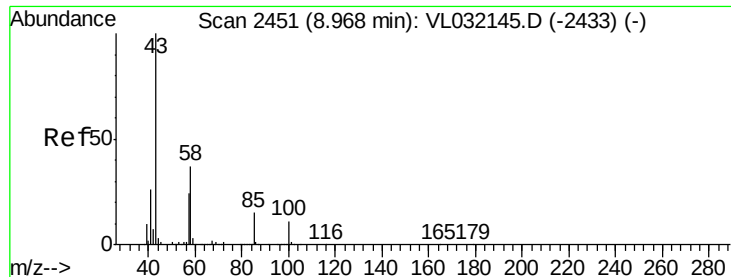
MMDadoda
7/2/2018 4:26:03 PM



#35
Carbon Tetrachloride
Concen: 0.06 ppbv
RT: 7.23 min Scan# 1910
Delta R.T. -0.01 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 117 Resp: 12858
Ion Ratio Lower Upper
117 100
119 72.7 74.8 112.2#
121 19.7 24.0 36.0#





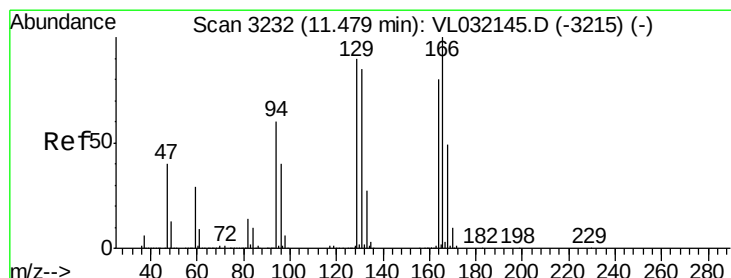
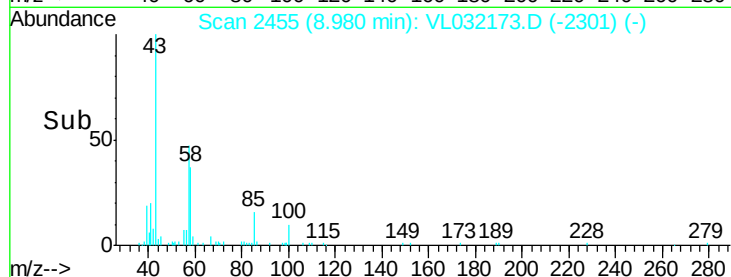
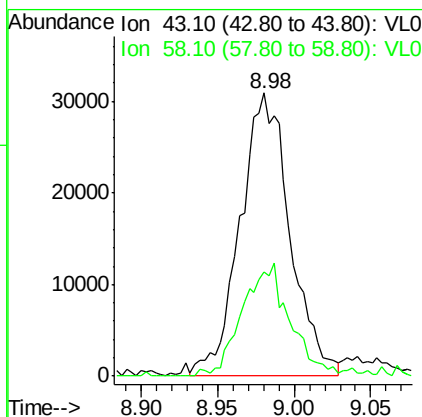
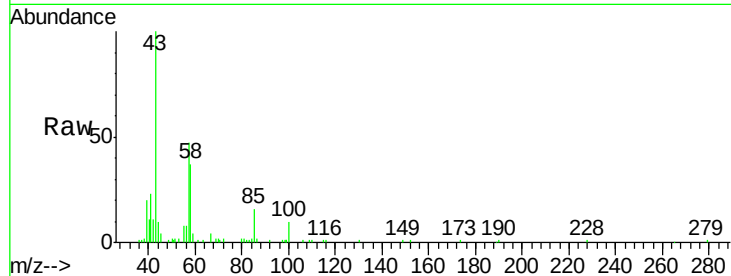
#50
4-Methyl-2-Pentanone
Concen: 0.22 ppbv m
RT: 8.98 min Scan# 2455
Delta R.T. -0.00 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 43 Resp: 70289
Ion Ratio Lower Upper
43 100
58 0.0 29.8 44.6#

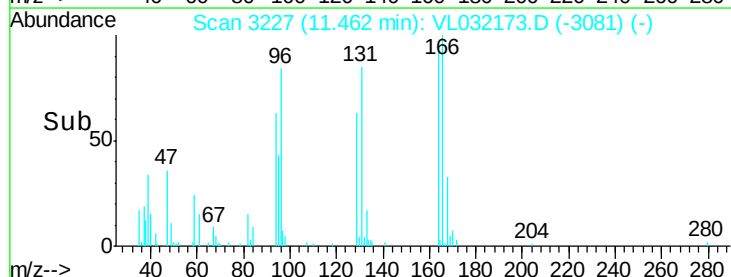
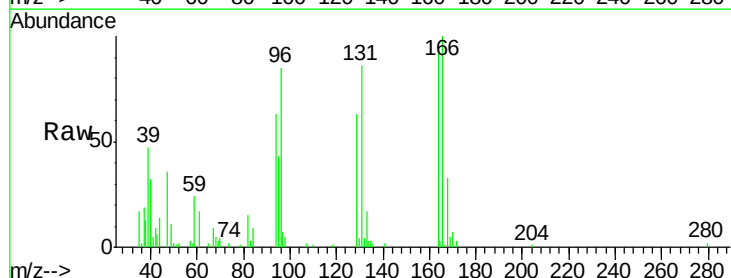
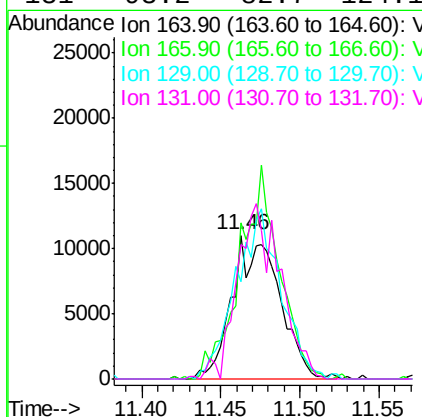
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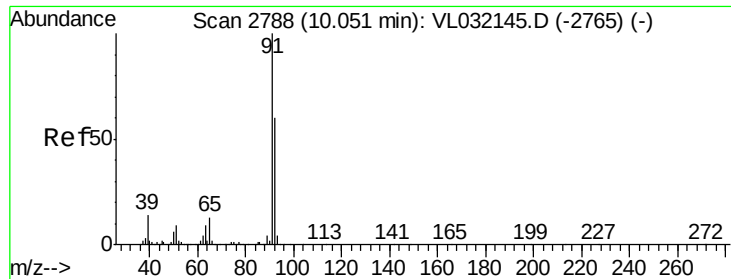
MMDadoda
7/2/2018 4:26:03 PM



#52
Tetrachloroethene
Concen: 0.21 ppbv m
RT: 11.46 min Scan# 3227
Delta R.T. -0.03 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 164 Resp: 22731
Ion Ratio Lower Upper
164 100
166 108.6 100.6 151.0
129 68.2 84.0 126.0#
131 93.2 82.7 124.1





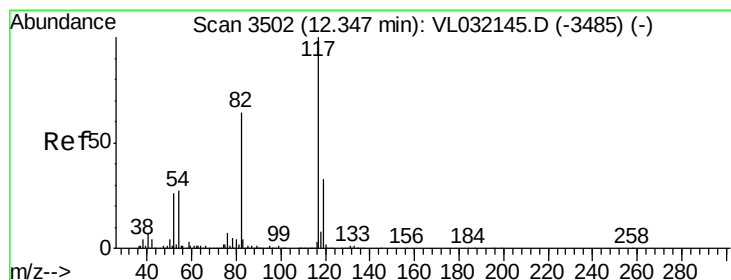
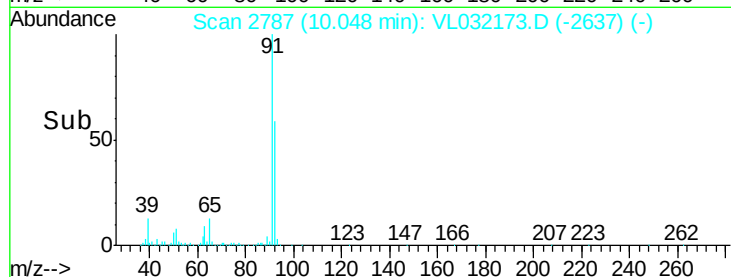
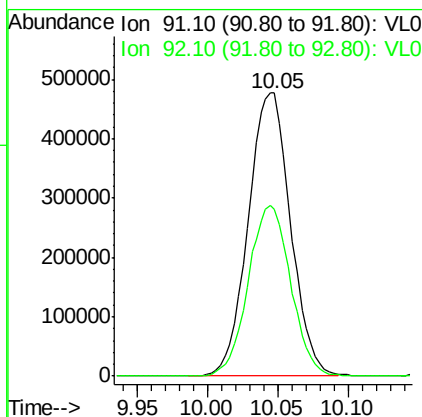
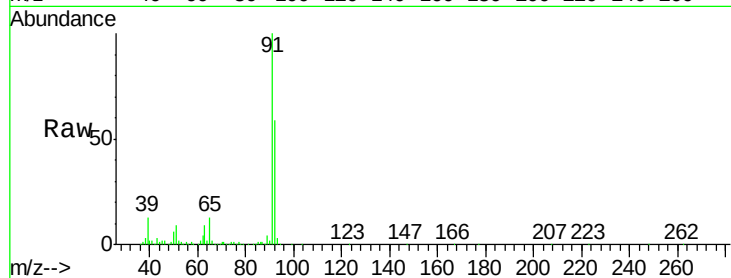
#53
Toluene
Concen: 2.75 ppbv
RT: 10.05 min Scan# 2787
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 91 Resp: 1000838
Ion Ratio Lower Upper
91 100
92 60.5 49.2 73.8

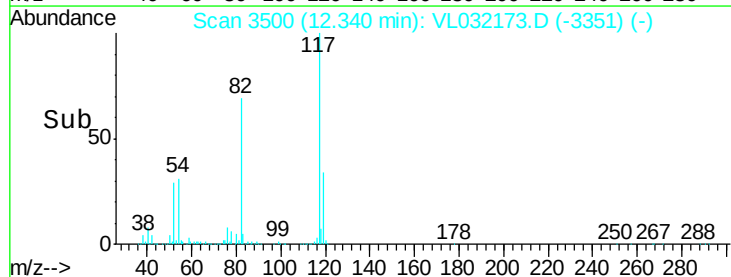
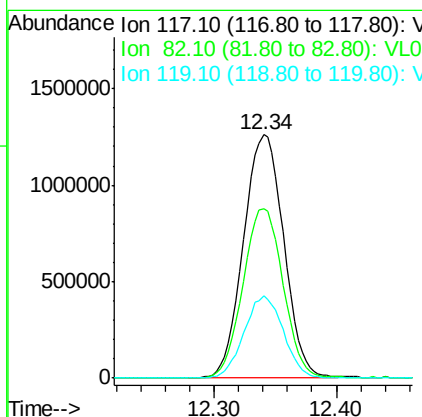
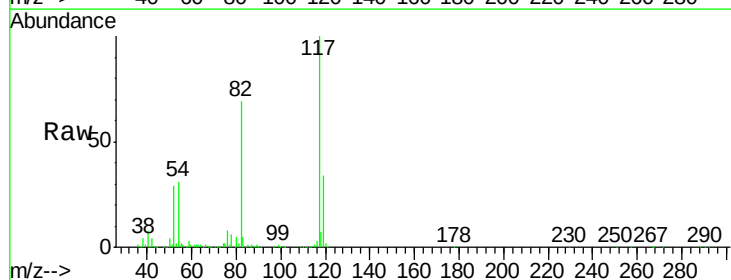
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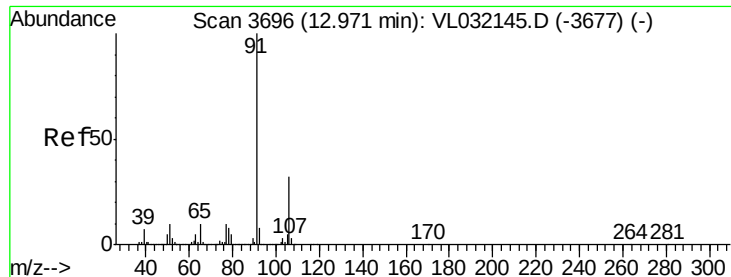
MMDadoda
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#55
Chlorobenzene-d5
Concen: 10.00 ppbv
RT: 12.34 min Scan# 3500
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 117 Resp: 2881537
Ion Ratio Lower Upper
117 100
82 69.9 47.8 71.8
119 33.0 43.3 64.9#





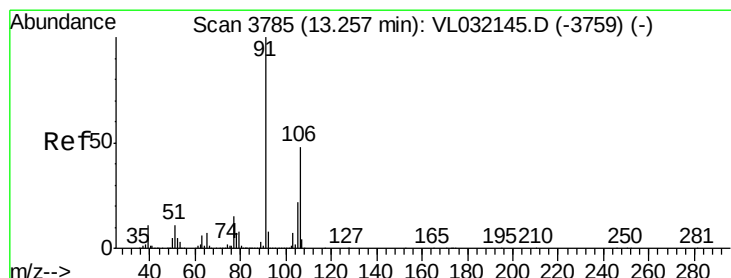
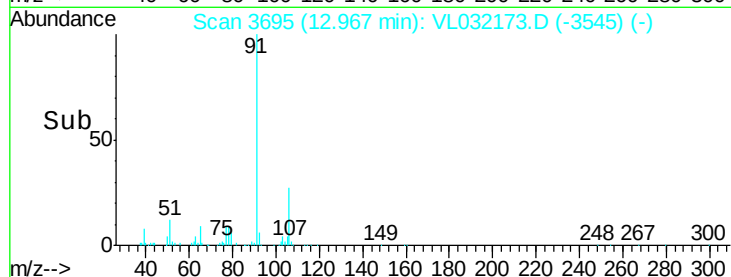
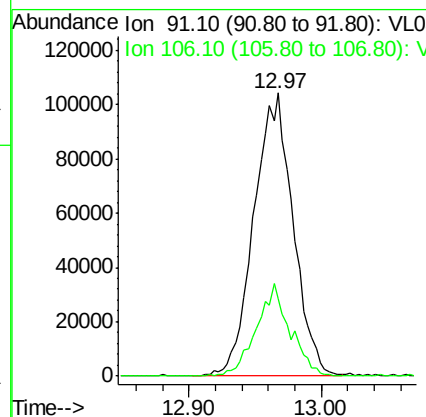
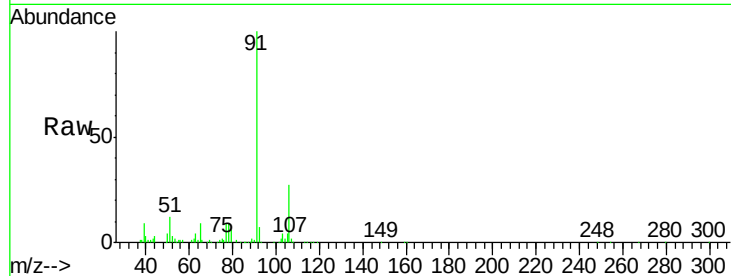
#58
Ethyl Benzene
Concen: 0.46 ppbv
RT: 12.97 min Scan# 3695
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 91 Resp: 214132
Ion Ratio Lower Upper
91 100
106 27.2 26.5 39.7

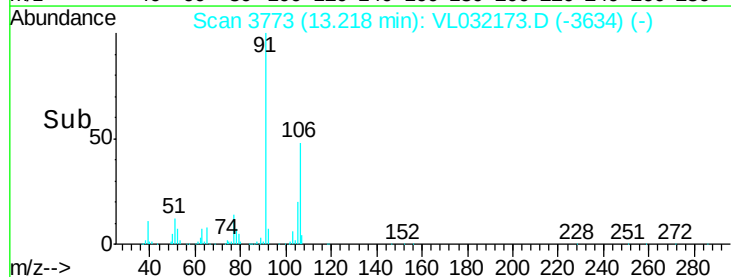
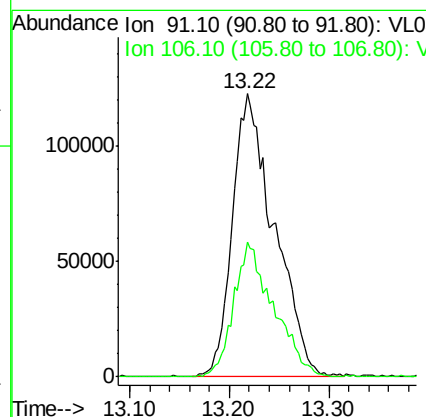
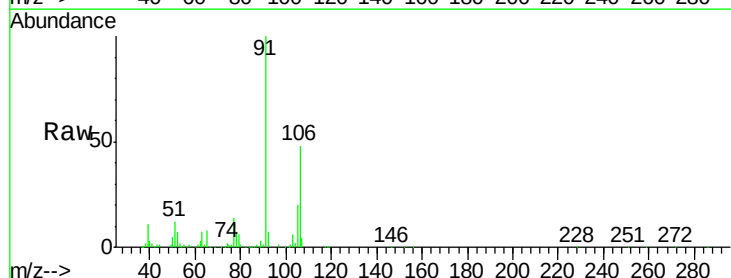
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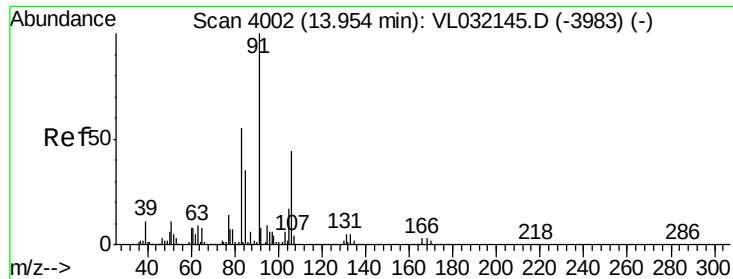
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#59
m/p-Xylene
Concen: 0.96 ppbv m
RT: 13.22 min Scan# 3773
Delta R.T. -0.05 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 91 Resp: 357894
Ion Ratio Lower Upper
91 100
106 0.0 38.6 58.0#





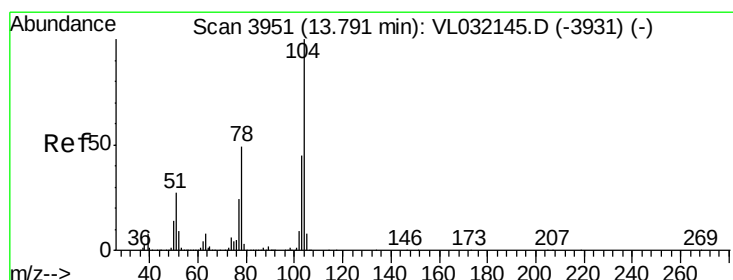
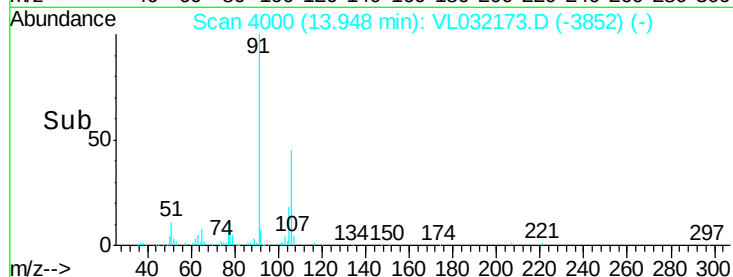
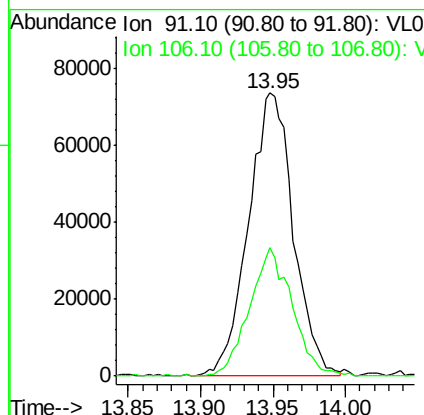
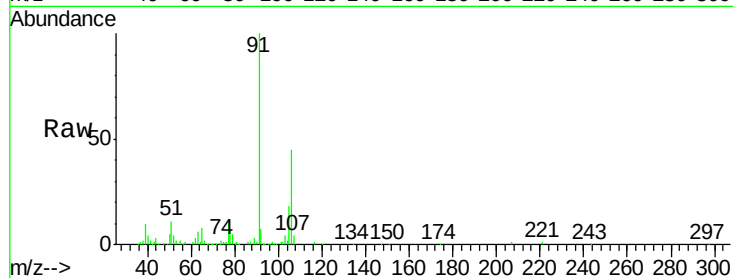
#60
o-Xylene
Concen: 0.43 ppbv
RT: 13.95 min Scan# 4000
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-D-INDOOR

Tot Ion: 91 Resp: 158671
Ion Ratio Lower Upper
91 100
106 43.3 23.3 69.8

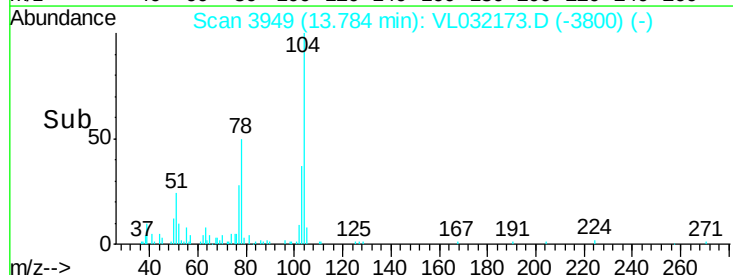
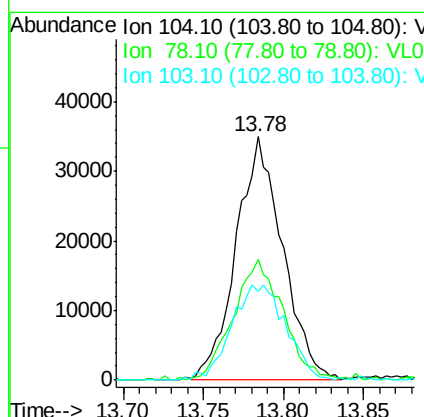
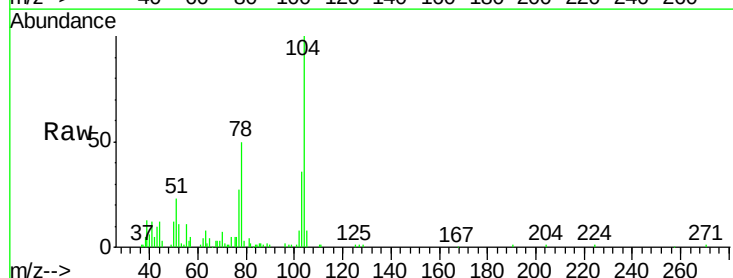
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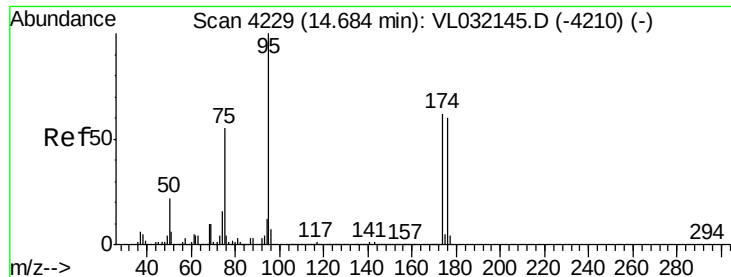
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7/2/2018 4:26:03 PM



#61
Styrene
Concen: 0.23 ppbv
RT: 13.78 min Scan# 3949
Delta R.T. -0.02 min
Lab File: VL032173.D
Acq: 30 Jun 2018 16:29

Tgt Ion: 104 Resp: 69476
Ion Ratio Lower Upper
104 100
78 53.7 37.9 56.9
103 45.7 36.6 55.0





#68

1-Bromo-4-Fluorobenzene

Concen: 10.41 ppbv

RT: 14.68 min Scan# 4227

Delta R.T. -0.02 min

Lab File: VL032173.D

Acq: 30 Jun 2018 16:29

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-D-INDOOR

Tot Ion: 95 Resp: 2292500

Ion Ratio Lower Upper

95 100

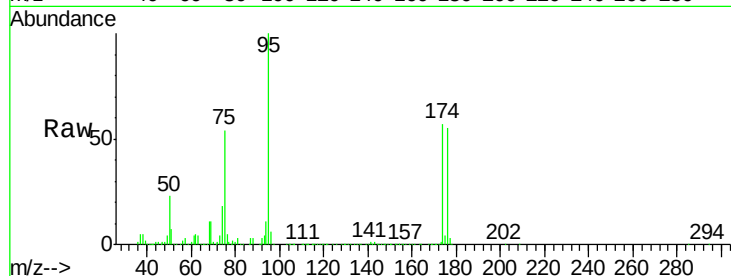
174 57.2 52.1 78.1

175 4.2 4.0 6.0

Manual Integrations
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MMDadoda

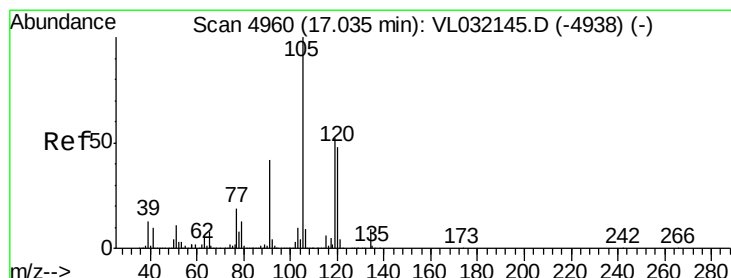
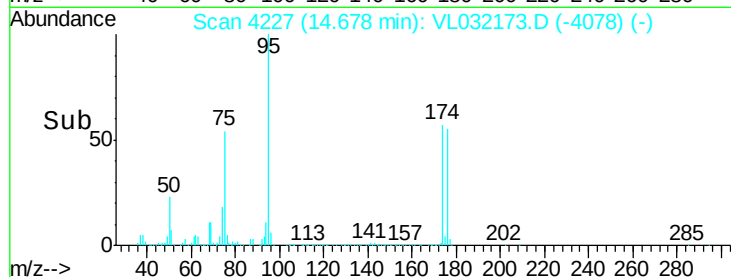
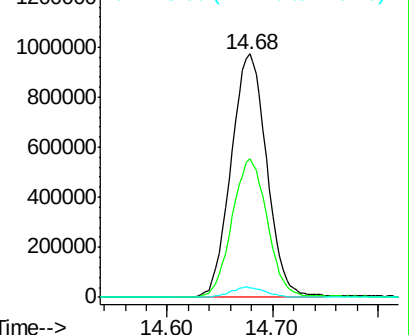
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Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V



#74

1,2,4-Trimethylbenzene

Concen: 0.25 ppbv

RT: 17.02 min Scan# 4957

Delta R.T. -0.02 min

Lab File: VL032173.D

Acq: 30 Jun 2018 16:29

Tgt Ion: 105 Resp: 112075

Ion Ratio Lower Upper

105 100

120 40.1 38.8 58.2

91 14.6 33.6 50.4#

77 15.2 16.0 24.0#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

