

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL062918\
 Data File : VL032171.D
 Acq On : 30 Jun 2018 15:10
 Operator : SY/AP
 Sample : J3601-08
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-C-CRAWL-SPACE

Manual Integrations
 APPROVED

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 7/2/2018 4:26:15 PM

Quant Time: Jul 02 12:12:13 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun 2
 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	5.85	49	1313563	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.38	114	3028492	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.34	117	3238682	10.00	ppbv	-0.02

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.68	95	2123953	8.58	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	85.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	54752	0.32	ppbv	97
3) Chlorodifluoromethane	3.07	51	56415m	0.35	ppbv	
4) Chloromethane	3.23	50	99467	1.16	ppbv	93
9) Propene	3.10	41	38799m	0.52	ppbv	
10) Heptane	8.34	43	75979	0.35	ppbv	93
11) Trichlorofluoromethane	4.07	101	46859m	0.25	ppbv	
13) Ethanol	3.72	45	90017	3.97	ppbv	98
15) Acetone	3.97	43	1191913	7.76	ppbv	93
19) Isopropyl Alcohol	4.10	45	86007m	0.67	ppbv	
20) Methylene Chloride	4.48	84	28492	0.51	ppbv	94
26) Hexane	5.86	57	100777	0.69	ppbv #	54
34) 2-Butanone	5.41	43	190814	0.99	ppbv	100
35) Carbon Tetrachloride	7.22	117	13730m	0.07	ppbv	
36) Benzene	7.10	78	37774	0.13	ppbv #	83
50) 4-Methyl-2-Pentanone	8.98	43	66754m	0.21	ppbv	
52) Tetrachloroethene	11.47	164	12506m	0.12	ppbv	
53) Toluene	10.04	91	1000799	2.82	ppbv	100
58) Ethyl Benzene	12.97	91	322307	0.62	ppbv	89
59) m/p-Xylene	13.22	91	522664	1.25	ppbv	96
60) o-Xylene	13.95	91	233221m	0.56	ppbv	
73) 1,3,5-Trimethylbenzene	16.26	105	57518m	0.11	ppbv	
74) 1,2,4-Trimethylbenzene	17.03	105	167116	0.33	ppbv #	72

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

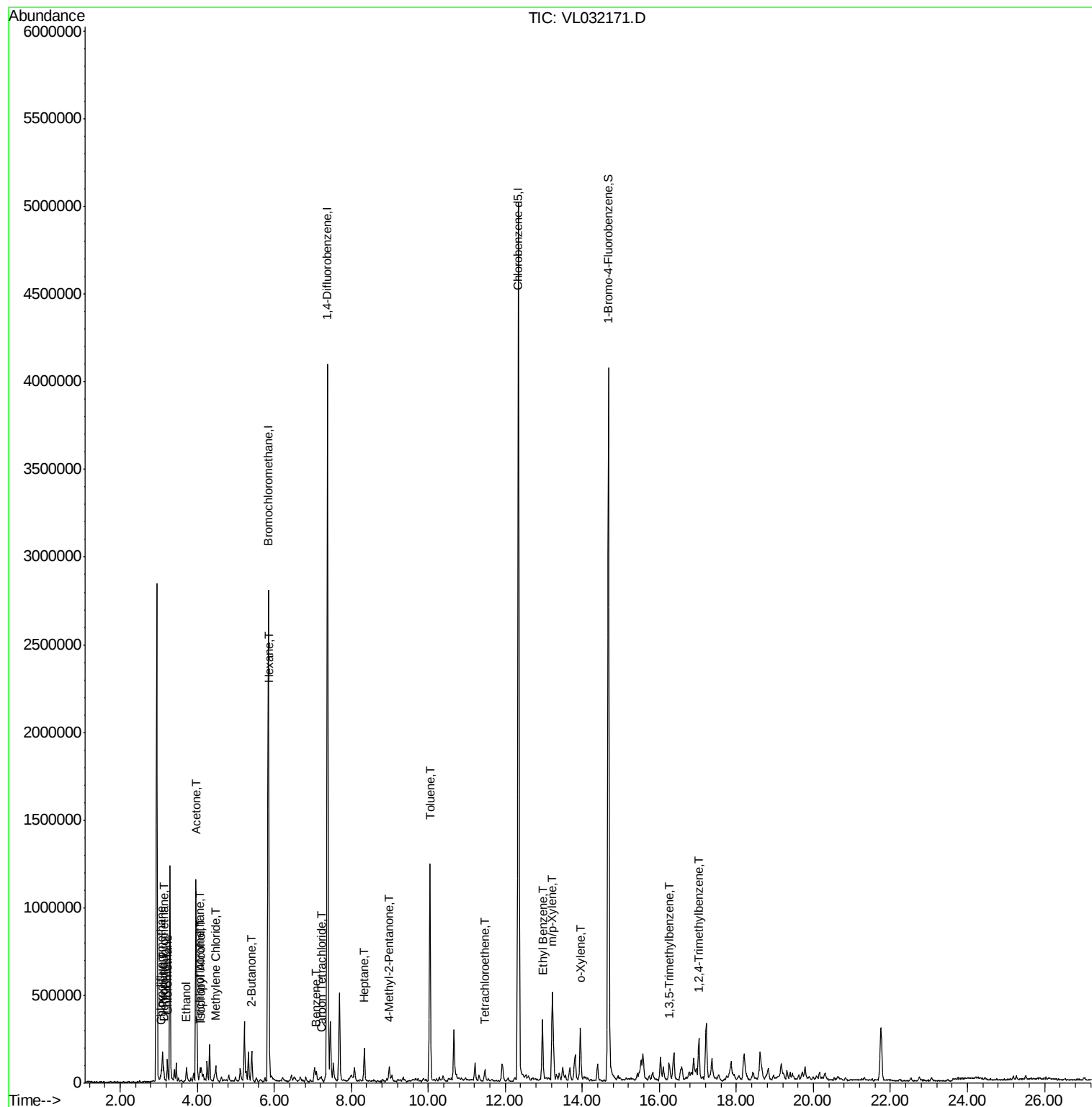
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL062918\
Data File : VL032171.D
Acq On : 30 Jun 2018 15:10
Operator : SY/AP
Sample : J3601-08
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

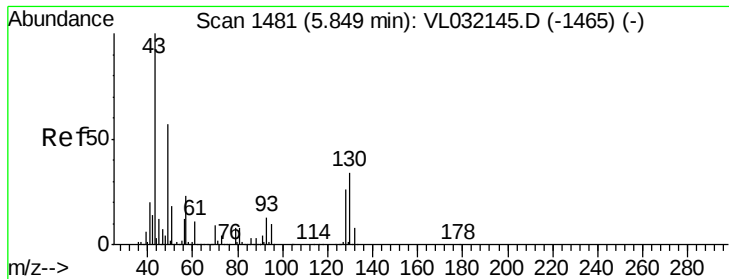
Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-C-CRAWL-SPACE

Manual Integrations
APPROVED

MMDadoda
7/2/2018 4:26:15 PM

Quant Time: Jul 02 12:12:13 2018
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL062918AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Jun
QLast Update : Fri Jun 29 22:27:58 2018
Response via : Initial Calibration





#1

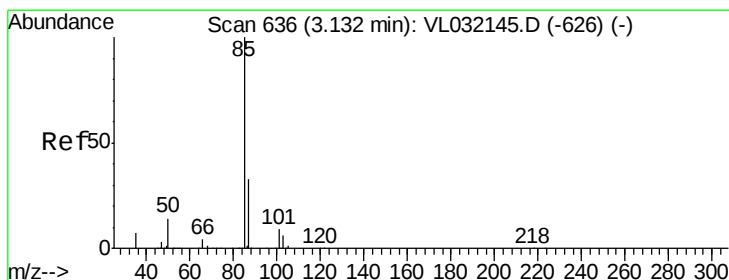
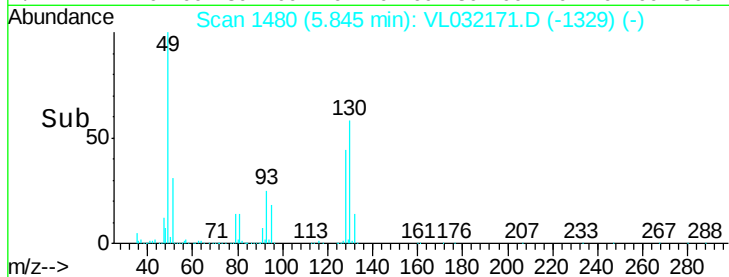
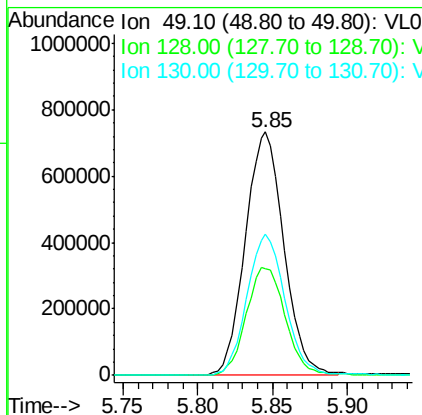
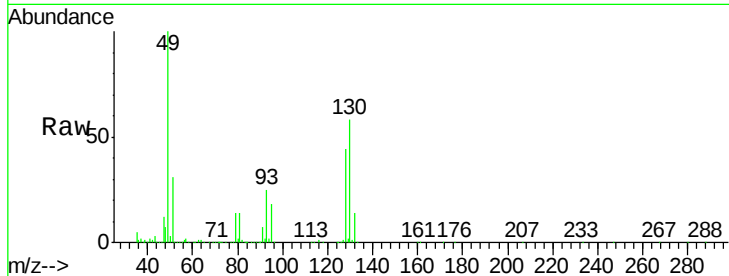
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.85 min Scan# 1480
 Delta R.T. -0.02 min
 Lab File: VL032171.D
 Acq: 30 Jun 2018 15:10

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-C-CRAWL-SPACE

Tot Ion: 49 Resp: 1313563
 Ion Ratio Lower Upper
 49 100
 128 45.6 23.4 70.0
 130 58.1 30.3 90.9

Manual Integrations
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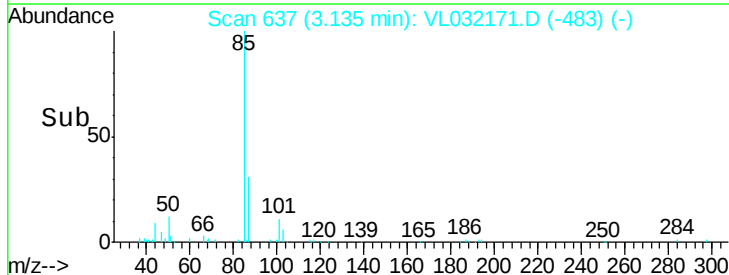
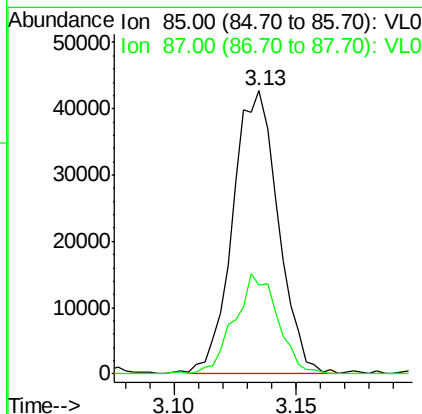
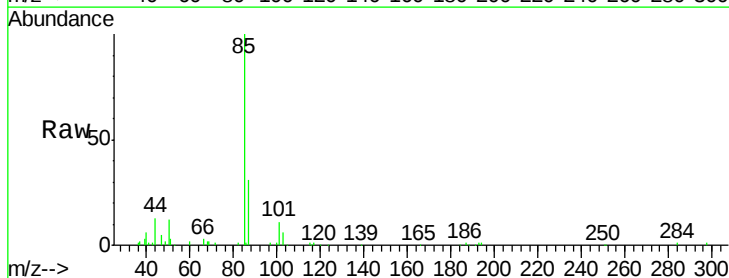
MMDadoda
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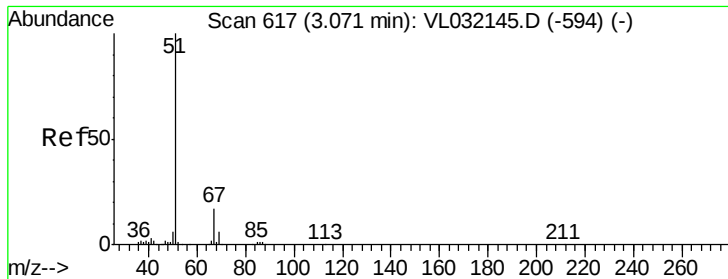


#2

Dichlorodifluoromethane
 Concen: 0.32 ppbv
 RT: 3.13 min Scan# 637
 Delta R.T. -0.01 min
 Lab File: VL032171.D
 Acq: 30 Jun 2018 15:10

Tgt Ion: 85 Resp: 54752
 Ion Ratio Lower Upper
 85 100
 87 31.5 26.7 40.1





#3

Chlorodifluoromethane

Concen: 0.35 ppbv m

RT: 3.07 min Scan# 616

Delta R.T. -0.01 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion: 51 Resp: 56415

Ion Ratio Lower Upper

51 100

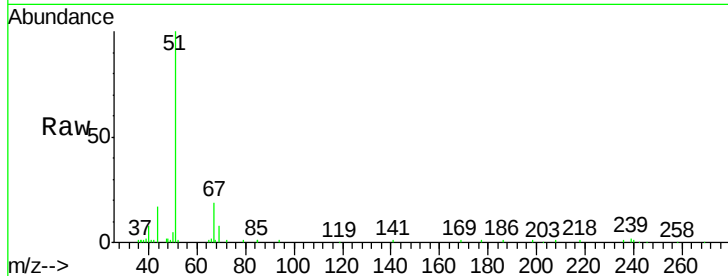
67 18.5 13.2 19.8

Manual Integrations

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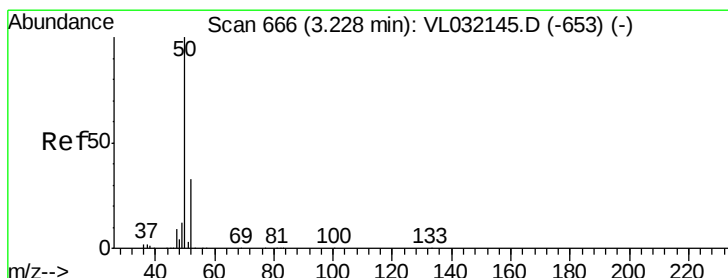
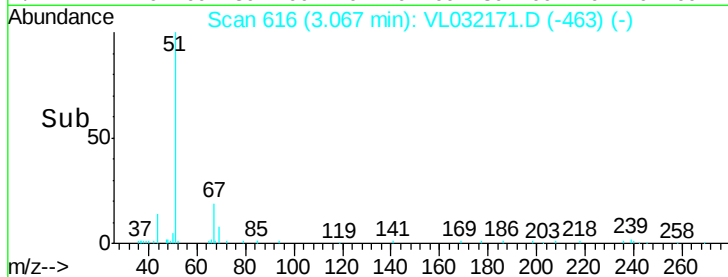
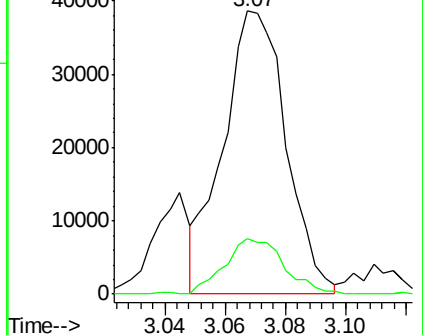
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 1.16 ppbv

RT: 3.23 min Scan# 666

Delta R.T. -0.01 min

Lab File: VL032171.D

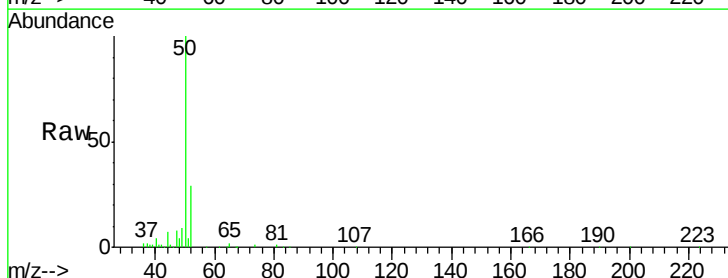
Acq: 30 Jun 2018 15:10

Tgt Ion: 50 Resp: 99467

Ion Ratio Lower Upper

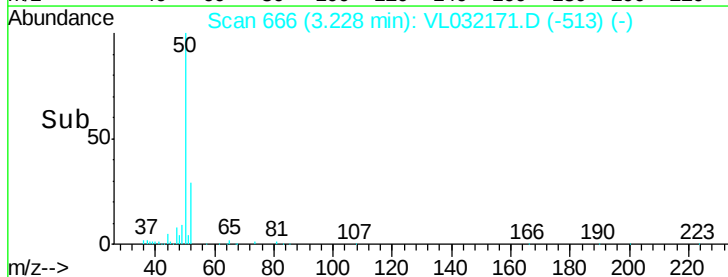
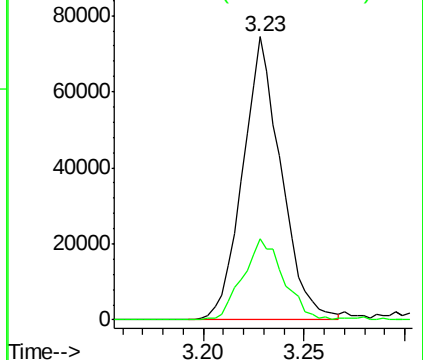
50 100

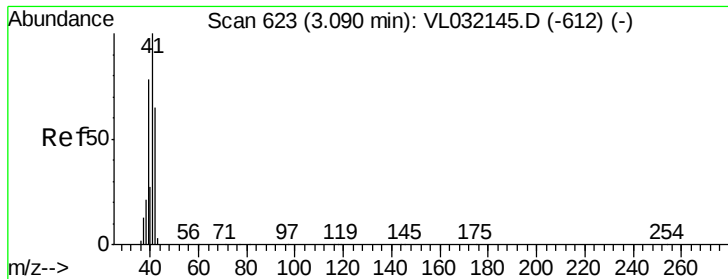
52 28.6 26.0 39.0



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

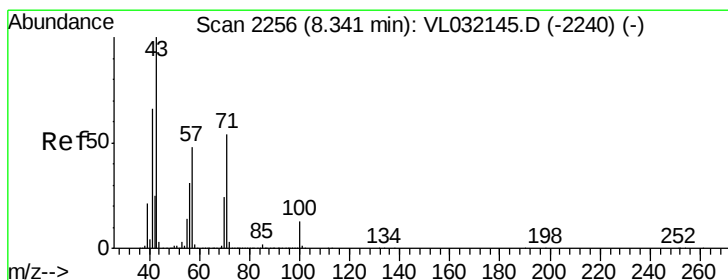
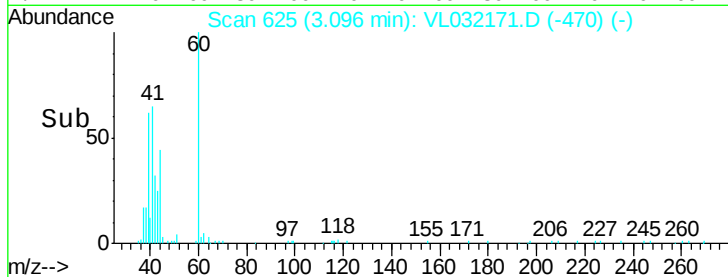
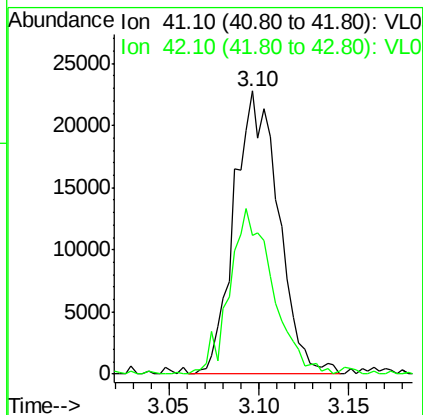
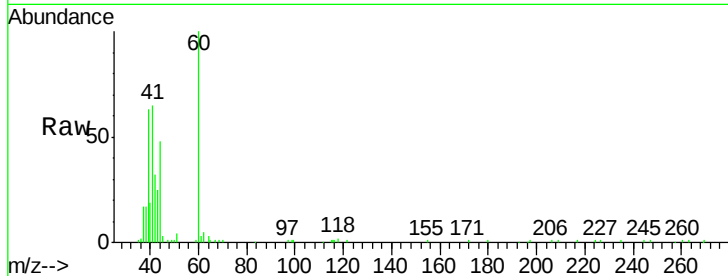
Concen: 0.52 ppbv m
 RT: 3.10 min Scan# 625
 Delta R.T. -0.00 min
 Lab File: VL032171.D
 Acq: 30 Jun 2018 15:10

Instrument :
 MSVOA_L
 ClientSampleId :
 RESIDENT-C-CRAWL-SPACE

Tot Ion: 41 Resp: 38799
 Ion Ratio Lower Upper
 41 100
 42 57.7 56.2 84.4

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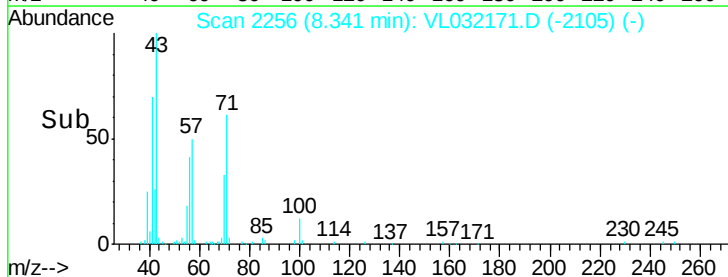
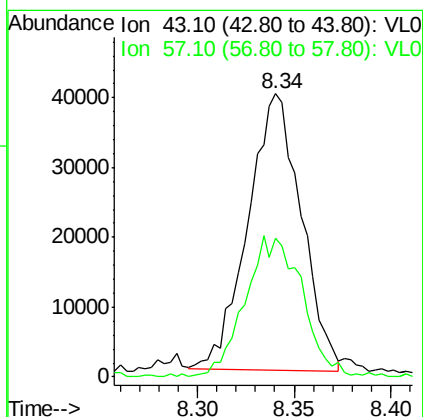
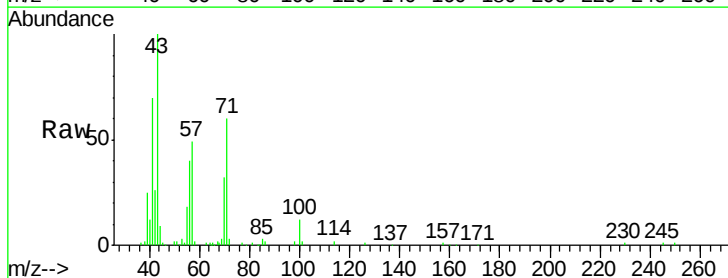


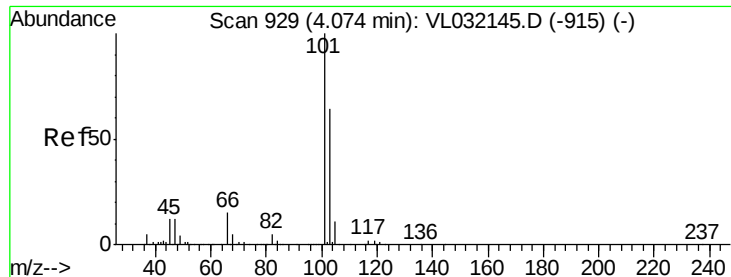
#10

Heptane

Concen: 0.35 ppbv
 RT: 8.34 min Scan# 2256
 Delta R.T. -0.02 min
 Lab File: VL032171.D
 Acq: 30 Jun 2018 15:10

Tgt Ion: 43 Resp: 75979
 Ion Ratio Lower Upper
 43 100
 57 54.7 39.8 59.8





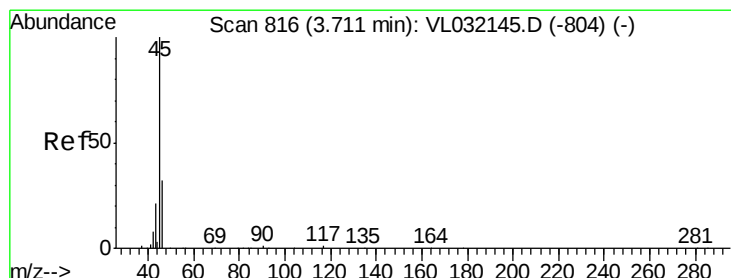
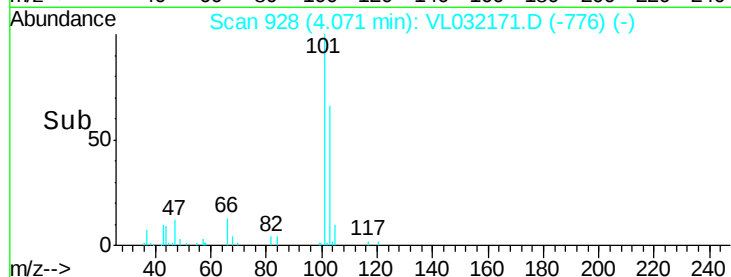
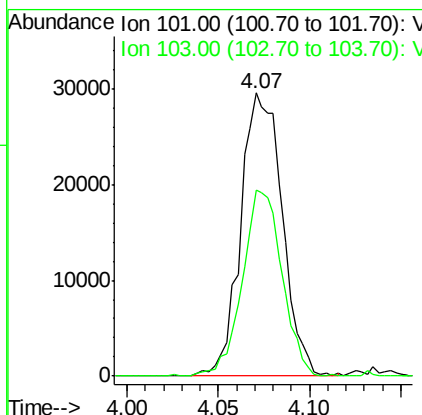
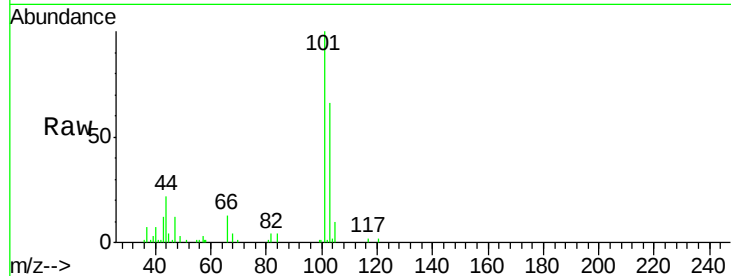
#11
Trichlorofluoromethane
Concen: 0.25 ppbv m
RT: 4.07 min Scan# 928
Delta R.T. -0.01 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-C-CRAWL-SPACE

Tot Ion	Ratio	Resp	Lower	Upper
101	100	46859		
103	65.7		51.4	77.0

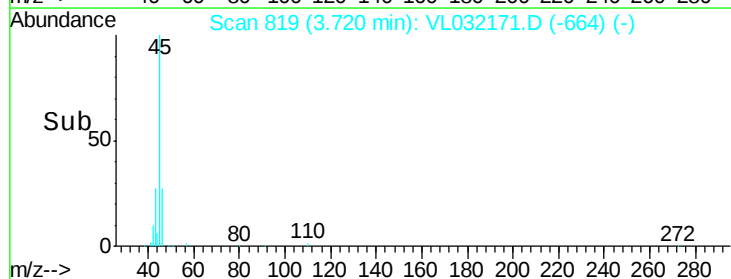
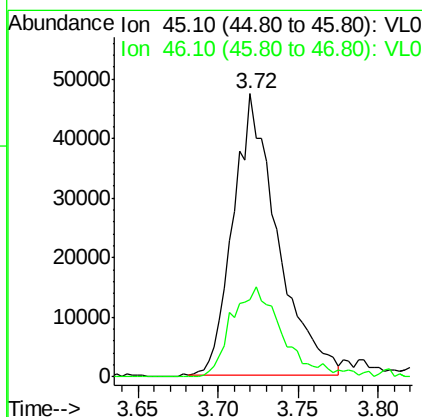
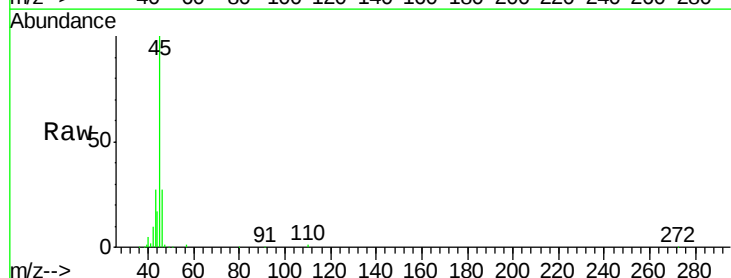
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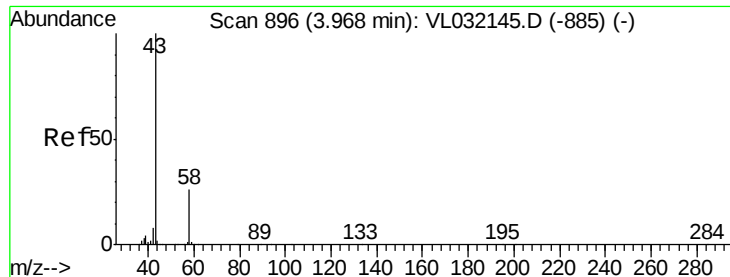
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#13
Ethanol
Concen: 3.97 ppbv
RT: 3.72 min Scan# 819
Delta R.T. -0.00 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Tgt Ion	Ratio	Resp	Lower	Upper
45	100	90017		
46	37.8		14.6	58.4





#15

Acetone

Concen: 7.76 ppbv

RT: 3.97 min Scan# 896

Delta R.T. -0.01 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion: 43 Resp: 1191913

Ion Ratio Lower Upper

43 100

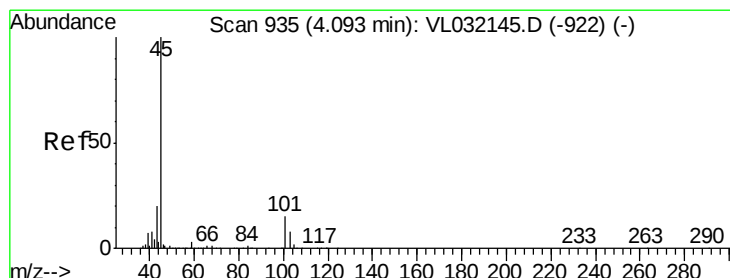
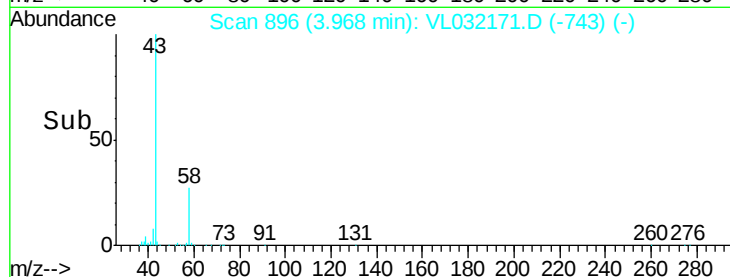
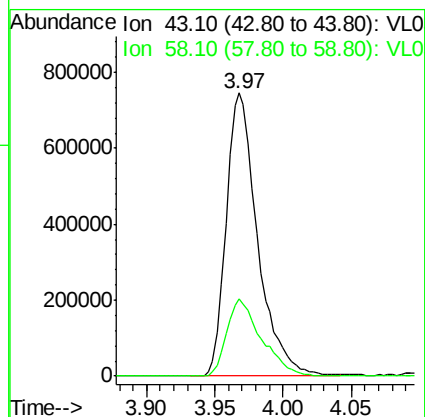
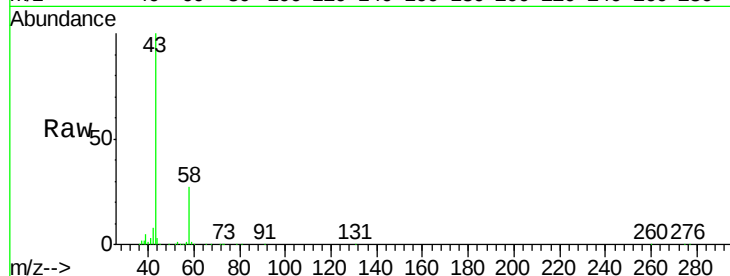
58 30.2 21.4 32.0

Manual Integrations

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#19

Isopropyl Alcohol

Concen: 0.67 ppbv m

RT: 4.10 min Scan# 938

Delta R.T. 0.00 min

Lab File: VL032171.D

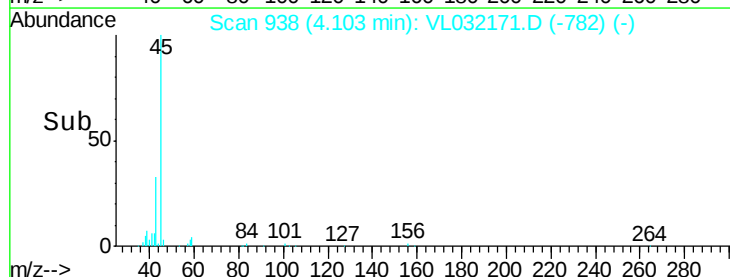
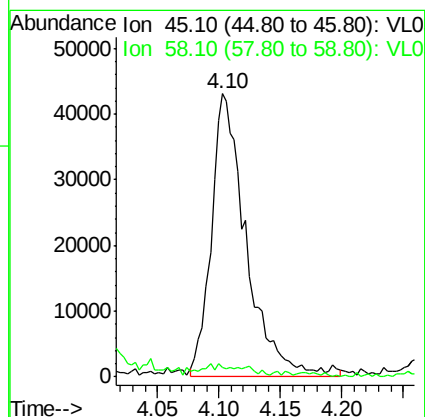
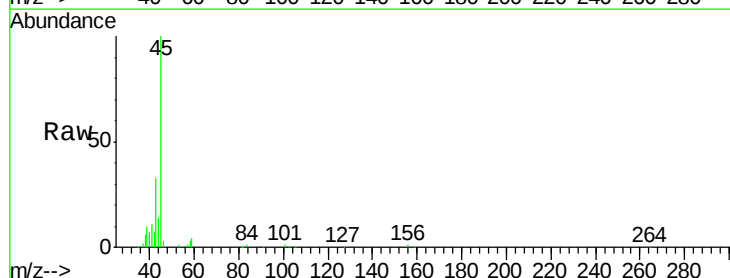
Acq: 30 Jun 2018 15:10

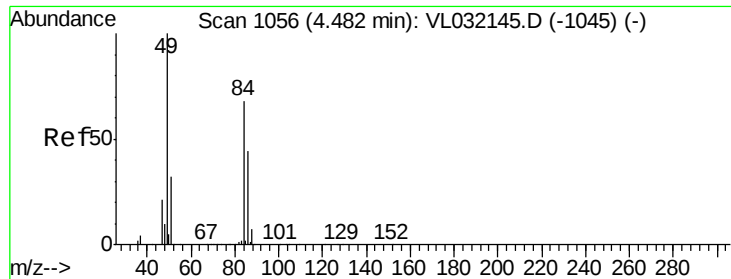
Tgt Ion: 45 Resp: 86007

Ion Ratio Lower Upper

45 100

58 0.0 29.4 44.0#





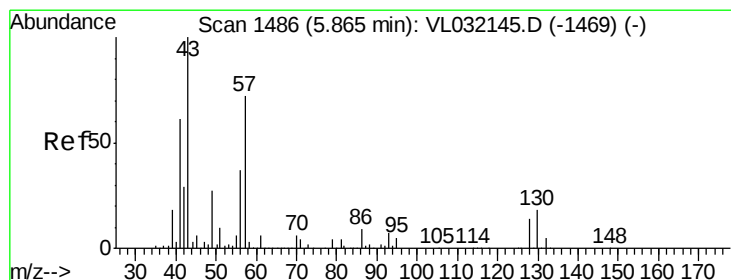
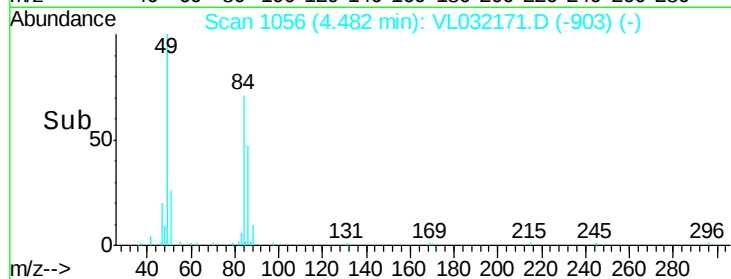
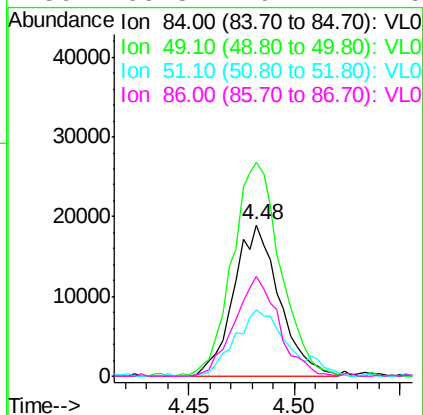
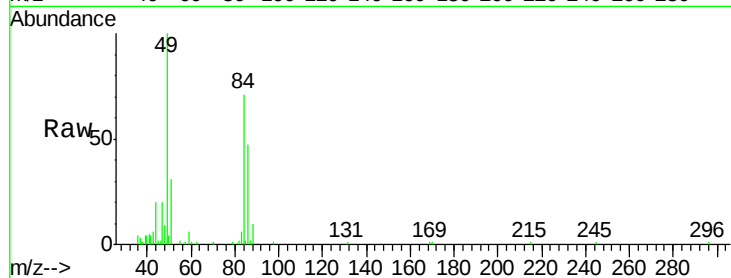
#20
Methvlene Chloride
Concen: 0.51 ppbv
RT: 4.48 min Scan# 1056
Delta R.T. -0.01 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-C-CRAWL-SPACE

Tot Ion	Ratio	Lower	Upper
84	100		
49	140.2	119.6	179.4
51	44.1	36.3	54.5
86	65.8	49.7	74.5

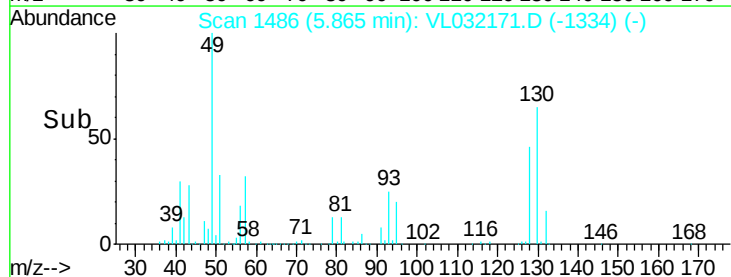
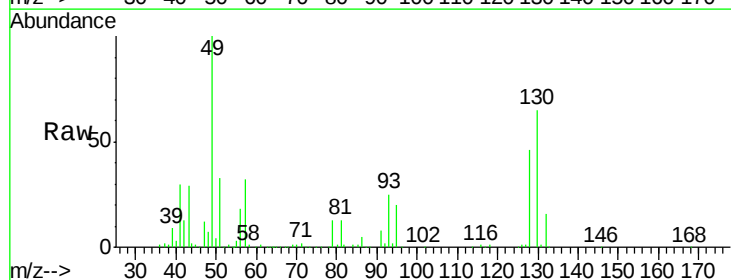
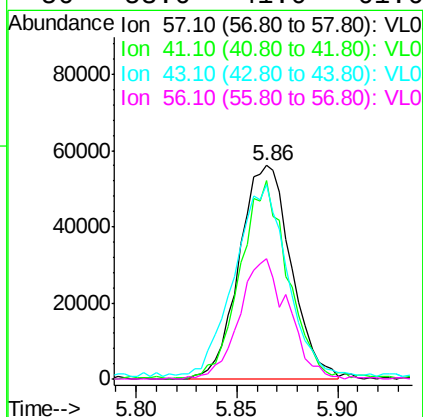
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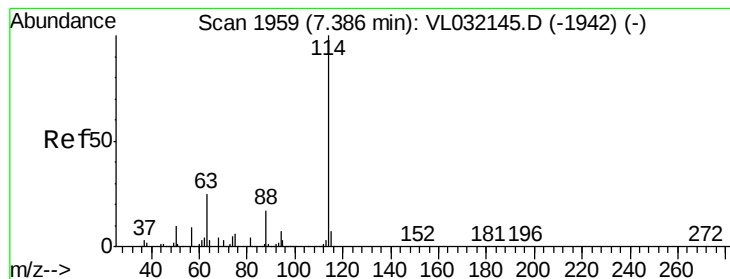
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#26
Hexane
Concen: 0.69 ppbv
RT: 5.86 min Scan# 1486
Delta R.T. -0.01 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Tgt Ion	Ratio	Lower	Upper
57	100		
41	87.4	68.6	103.0
43	93.5	168.6	252.8#
56	53.6	41.0	61.6





#33

1,4-Difluorobenzene

Concen: 10.00 ppbv

RT: 7.38 min Scan# 1958

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion:114 Resp: 3028492

Ion Ratio Lower Upper

114 100

63 26.6 19.1 28.7

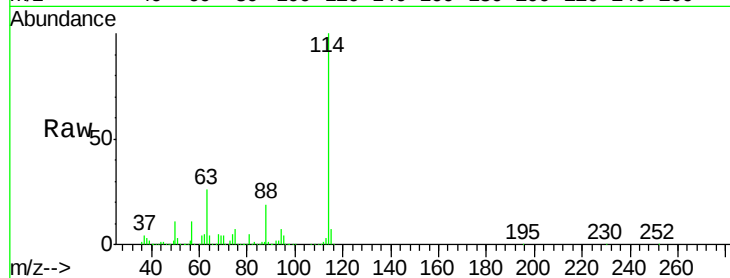
88 19.2 13.9 20.9

Manual Integrations

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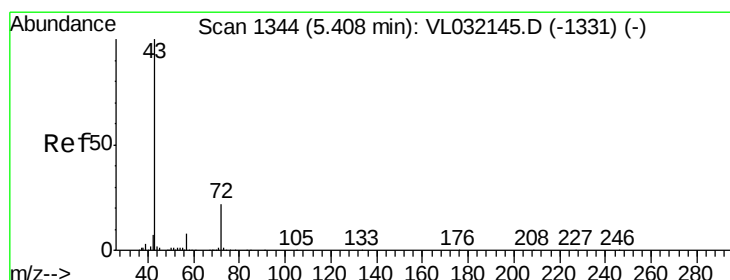
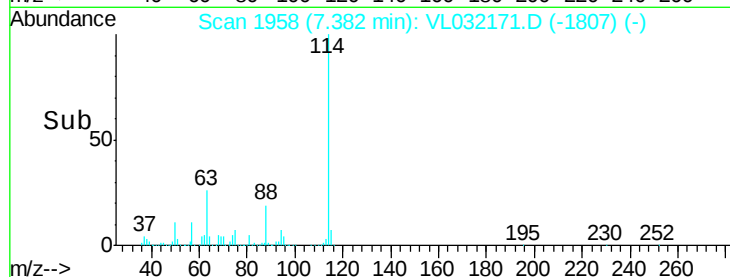
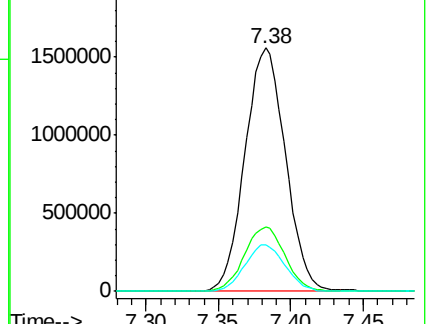
7/2/2018 4:26:15 PM



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: 0.99 ppbv

RT: 5.41 min Scan# 1346

Delta R.T. -0.01 min

Lab File: VL032171.D

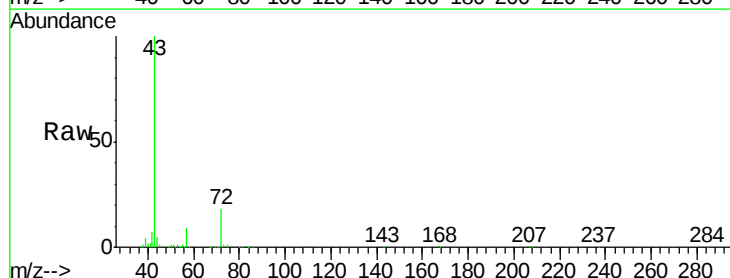
Acq: 30 Jun 2018 15:10

Tgt Ion: 43 Resp: 190814

Ion Ratio Lower Upper

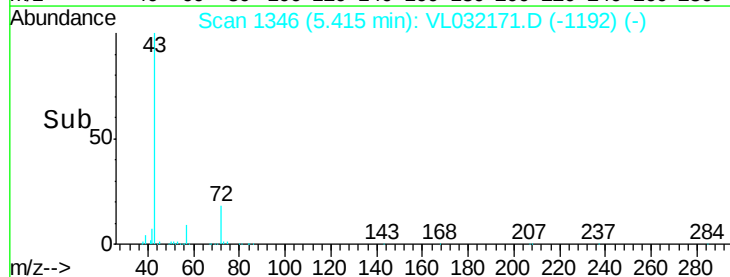
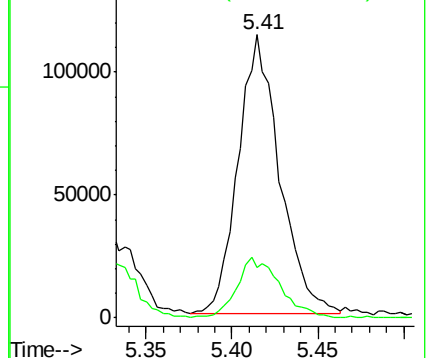
43 100

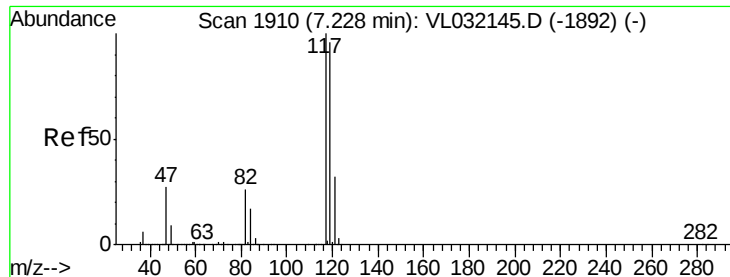
72 22.9 18.4 27.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.07 ppbv m

RT: 7.22 min Scan# 1907

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

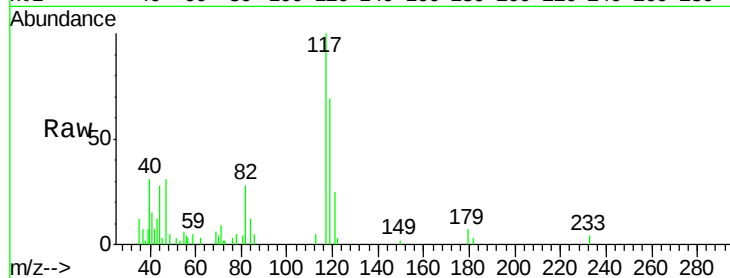
ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion	Ratio	Lower	Upper
117	100		
119	69.3	74.8	112.2#
121	25.5	24.0	36.0

Manual Integrations
APPROVED

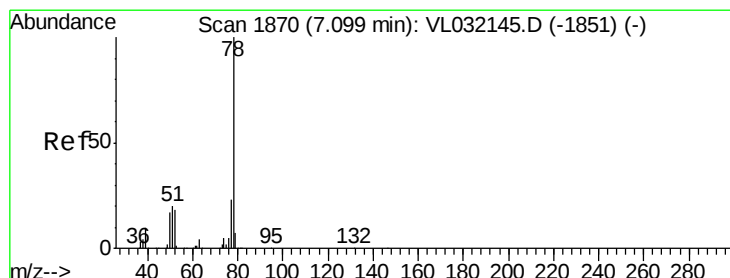
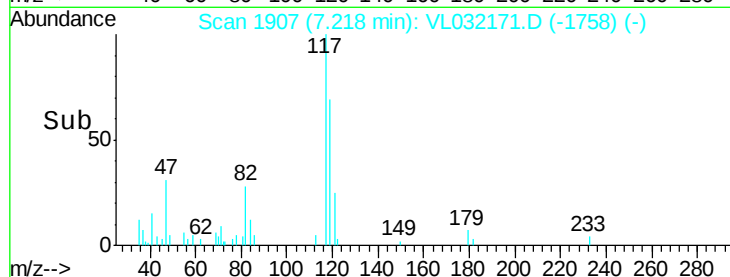
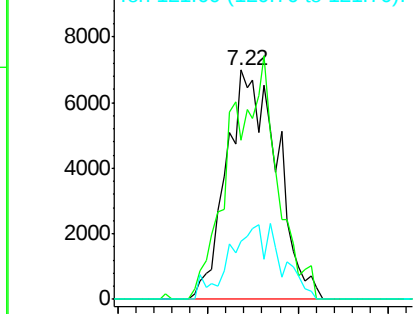
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Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.13 ppbv

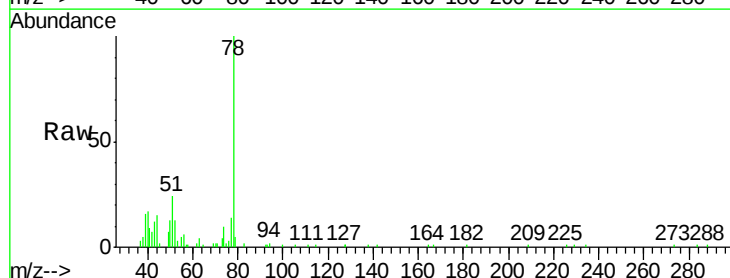
RT: 7.10 min Scan# 1870

Delta R.T. -0.01 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

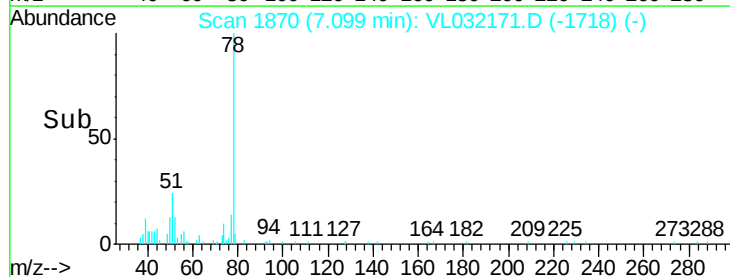
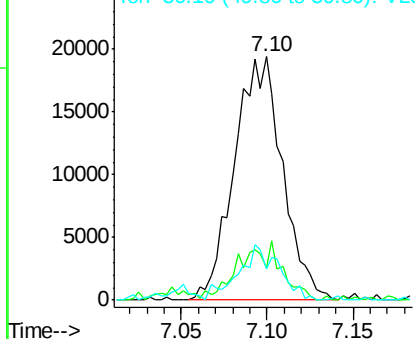
Tgt Ion	Ratio	Lower	Upper
78	100		
77	13.5	17.7	26.5#
50	10.7	14.0	21.0#

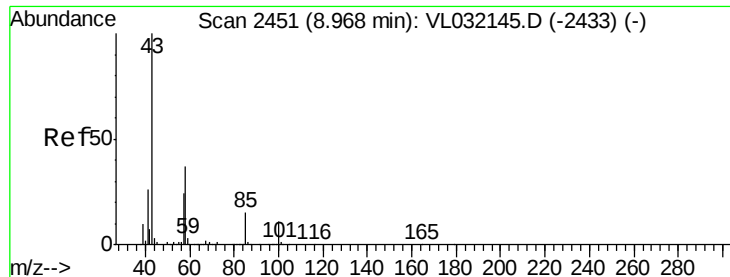


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





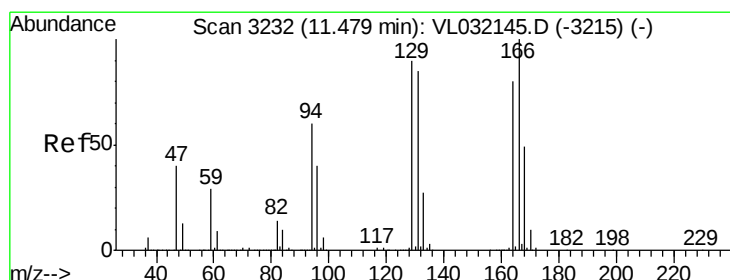
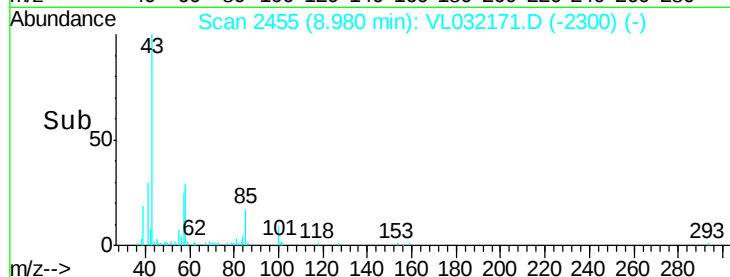
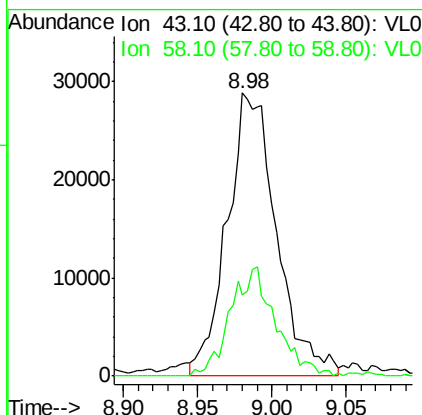
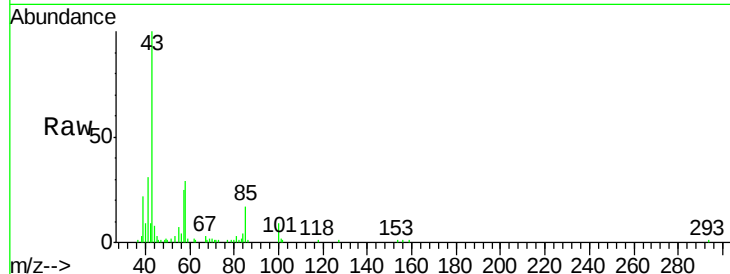
#50
4-Methyl-2-Pentanone
Concen: 0.21 ppbv m
RT: 8.98 min Scan# 2455
Delta R.T. -0.00 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-C-CRAWL-SPACE

Tot Ion: 43 Resp: 66754
Ion Ratio Lower Upper
43 100
58 0.0 29.8 44.6#

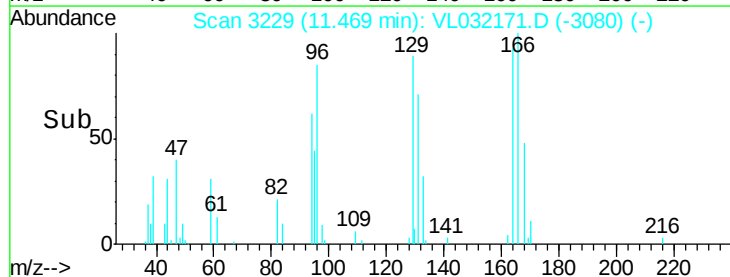
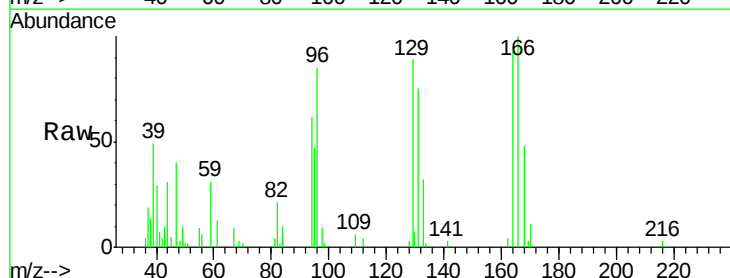
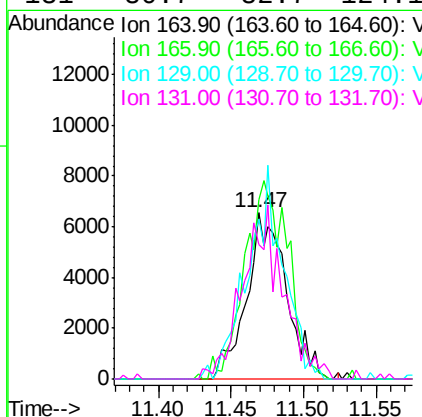
Manual Integrations
APPROVED

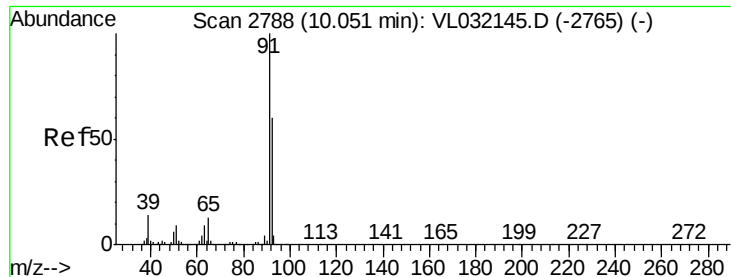
MMDadoda
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#52
Tetrachloroethene
Concen: 0.12 ppbv m
RT: 11.47 min Scan# 3229
Delta R.T. -0.02 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Tgt Ion:164 Resp: 12506
Ion Ratio Lower Upper
164 100
166 108.1 100.6 151.0
129 96.1 84.0 126.0
131 80.7 82.7 124.1#





#53

Toluene

Concen: 2.82 ppbv

RT: 10.04 min Scan# 2786

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion: 91 Resp: 1000799

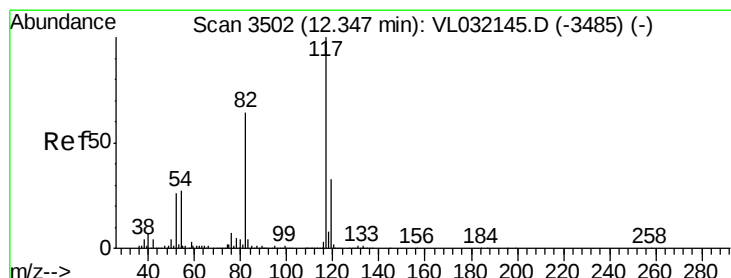
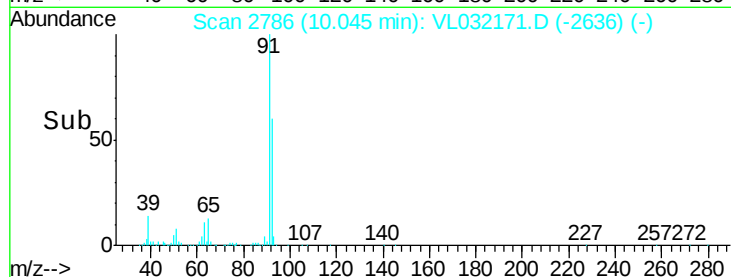
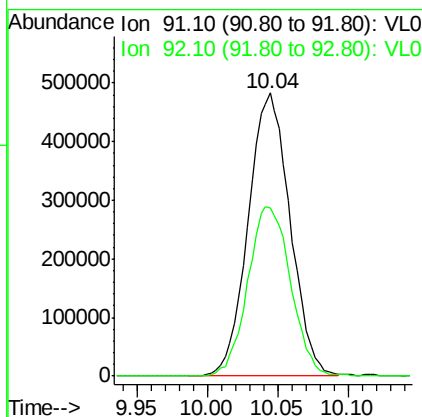
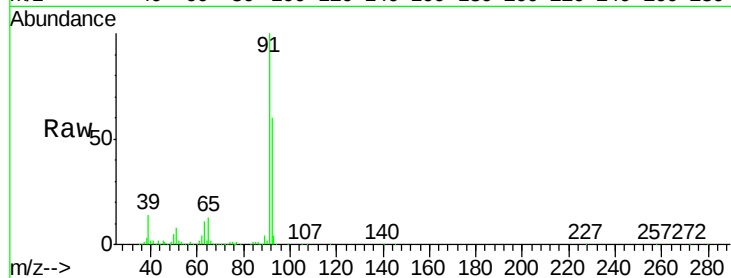
Ion Ratio Lower Upper

91 100

92 61.3 49.2 73.8

Manual Integrations
APPROVED

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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: VL032171.D

Acq: 30 Jun 2018 15:10

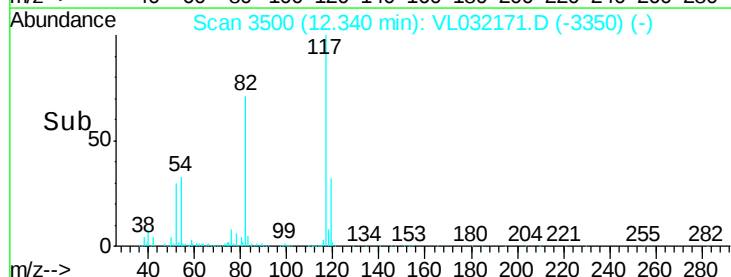
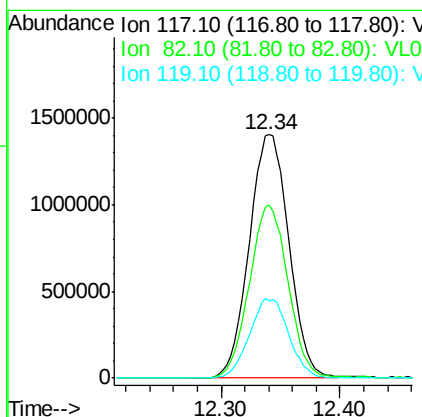
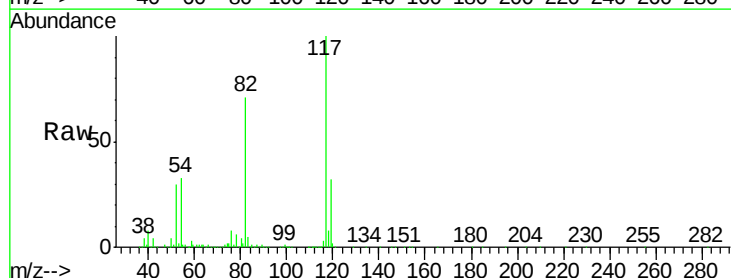
Tgt Ion: 117 Resp: 3238682

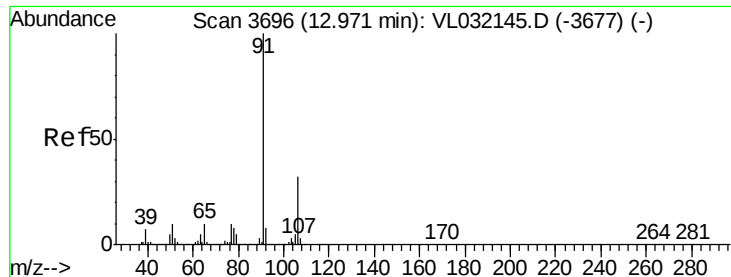
Ion Ratio Lower Upper

117 100

82 69.7 47.8 71.8

119 32.4 43.3 64.9#





#58

Ethyl Benzene

Concen: 0.62 ppbv

RT: 12.97 min Scan# 3695

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion: 91 Resp: 322307

Ion Ratio Lower Upper

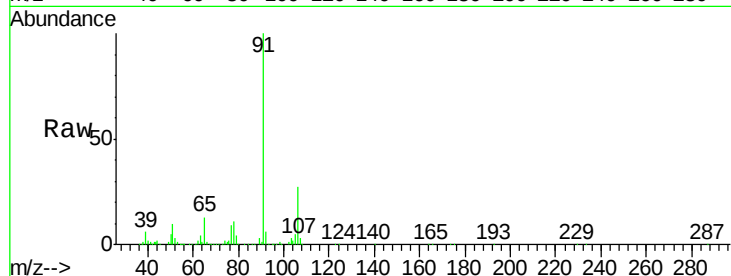
91 100

106 26.8 26.5 39.7

Manual Integrations
APPROVED

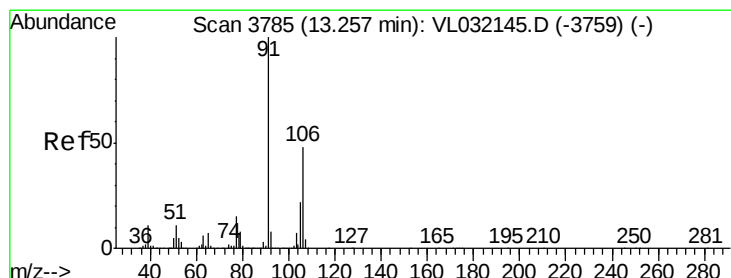
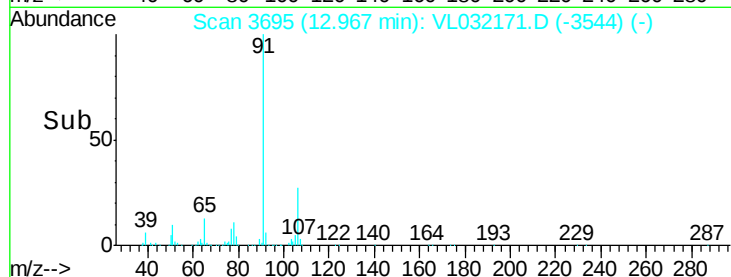
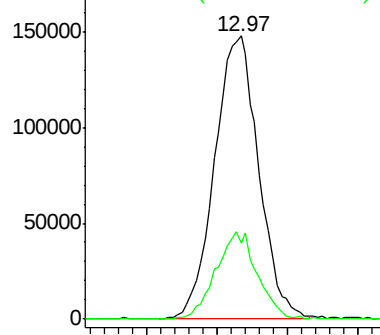
MMDadoda

7/2/2018 4:26:15 PM



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 1.25 ppbv

RT: 13.22 min Scan# 3773

Delta R.T. -0.05 min

Lab File: VL032171.D

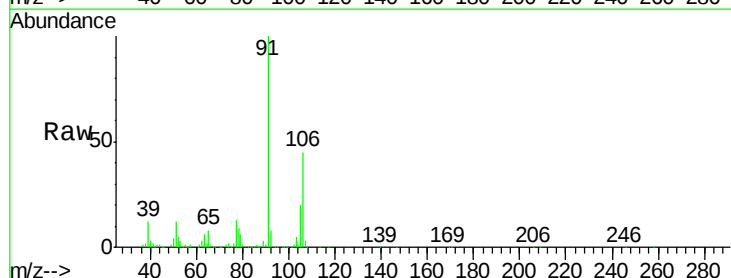
Acq: 30 Jun 2018 15:10

Tgt Ion: 91 Resp: 522664

Ion Ratio Lower Upper

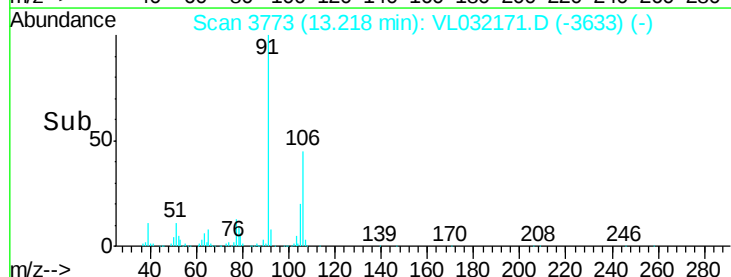
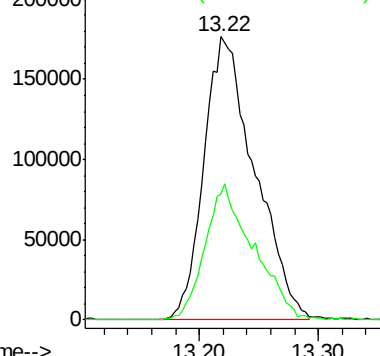
91 100

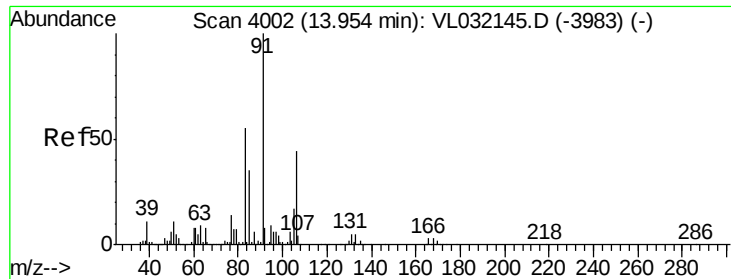
106 45.7 38.6 58.0



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





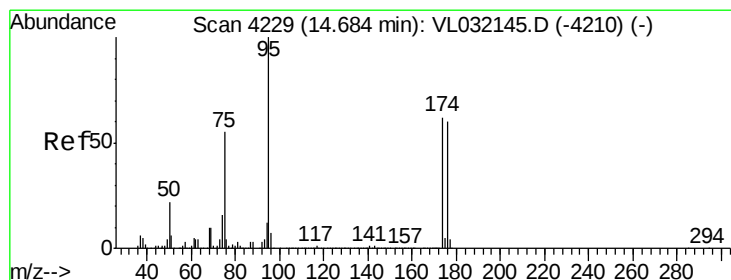
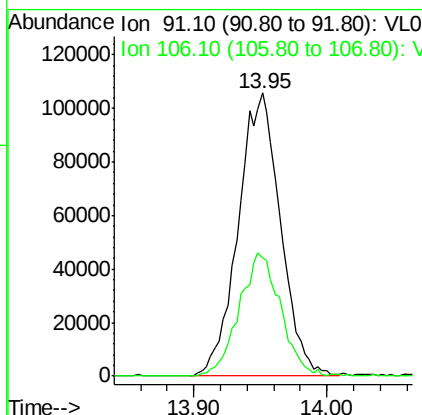
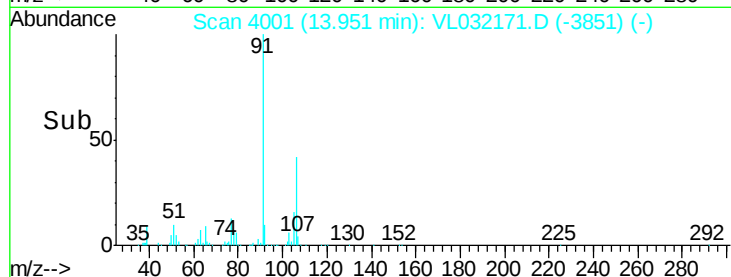
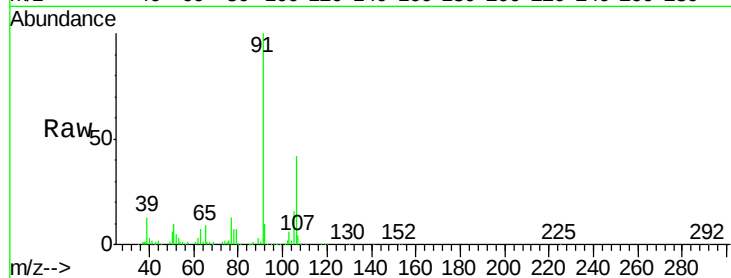
#60
o-Xylene
Concen: 0.56 ppbv m
RT: 13.95 min Scan# 4001
Delta R.T. -0.02 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Instrument :
MSVOA_L
ClientSampleId :
RESIDENT-C-CRAWL-SPACE

Tot Ion	Ion	Ratio	Lower	Upper
91	100			
106	42.8	23.3	69.8	

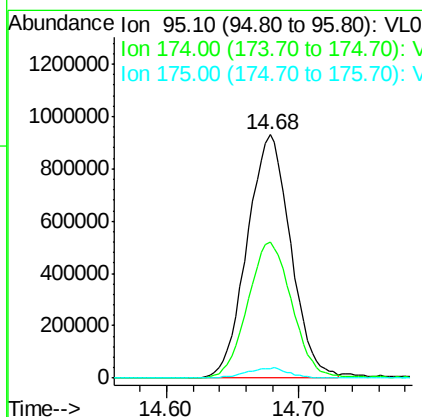
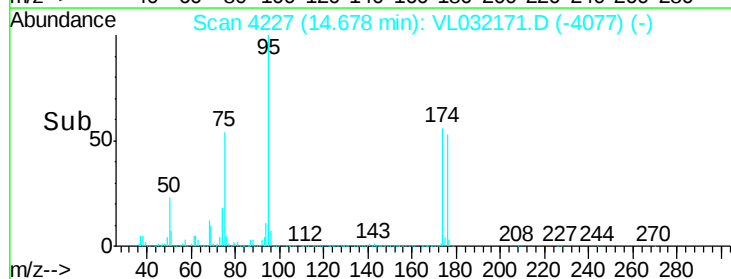
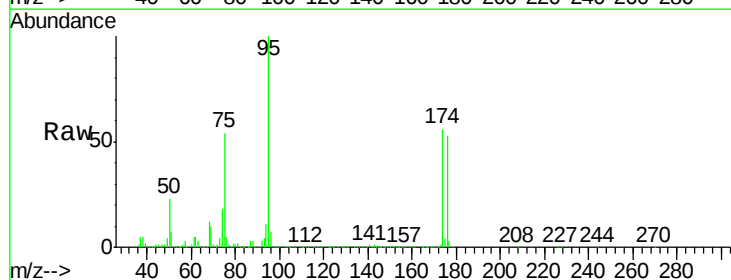
Manual Integrations
APPROVED

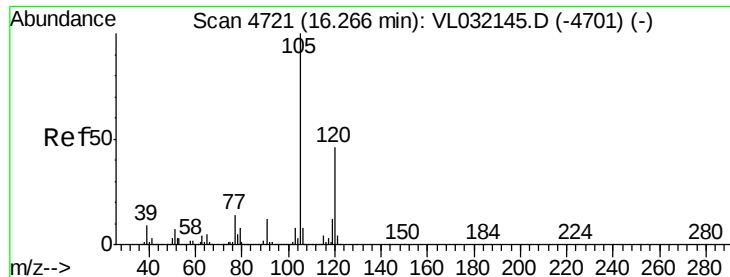
MMDadoda
7/2/2018 4:26:15 PM



#68
1-Bromo-4-Fluorobenzene
Concen: 8.58 ppbv
RT: 14.68 min Scan# 4227
Delta R.T. -0.02 min
Lab File: VL032171.D
Acq: 30 Jun 2018 15:10

Tgt Ion	Ion	Ratio	Lower	Upper
95	100			
174	57.8	52.1	78.1	
175	4.1	4.0	6.0	





#73

1,3,5-Trimethylbenzene

Concen: 0.11 ppbv m

RT: 16.26 min Scan# 4718

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Instrument :

MSVOA_L

ClientSampleId :

RESIDENT-C-CRAWL-SPACE

Tot Ion:105 Resp: 57518

Ion Ratio Lower Upper

105 100

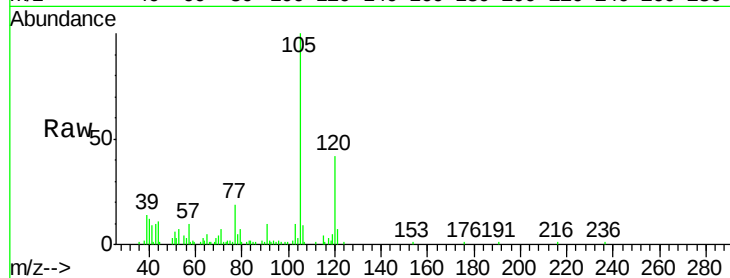
120 42.0 38.6 57.8

Manual Integrations

APPROVED

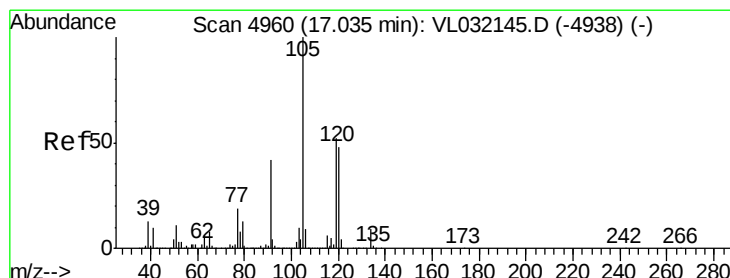
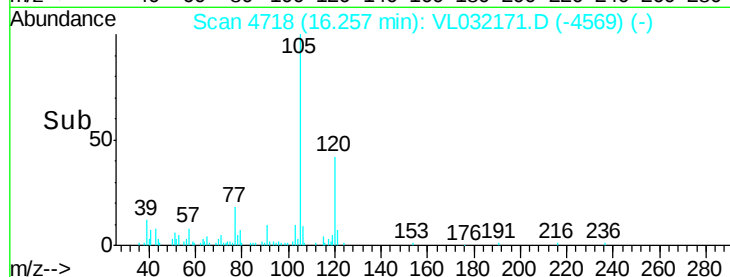
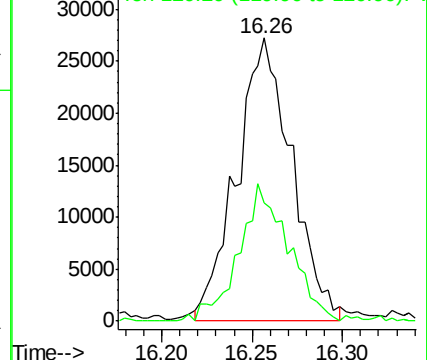
MMDadoda

7/2/2018 4:26:15 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#74

1,2,4-Trimethylbenzene

Concen: 0.33 ppbv

RT: 17.03 min Scan# 4957

Delta R.T. -0.02 min

Lab File: VL032171.D

Acq: 30 Jun 2018 15:10

Tgt Ion:105 Resp: 167116

Ion Ratio Lower Upper

105 100

120 38.7 38.8 58.2#

91 9.7 33.6 50.4#

77 13.8 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

