

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032274.D
 Acq On : 18 Jul 2018 23:49
 Operator : SY/AP
 Sample : J3454-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:53:18 PM

Quant Time: Jul 19 03:07:46 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Jul 18
 QLast Update : Wed Jul 18 14:38:53 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.84	49	1622245	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3564385	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	4074401	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.67	95	3213957	9.73	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	163612	0.59	ppbv	98
3) Chlorodifluoromethane	3.06	51	266718m	1.47	ppbv	
4) Chloromethane	3.23	50	67138	0.63	ppbv	99
9) Propene	3.10	41	55473	0.70	ppbv #	79
10) Heptane	8.33	43	104715	0.41	ppbv	99
11) Trichlorofluoromethane	4.07	101	62838	0.29	ppbv #	79
13) Ethanol	3.71	45	1536815	67.60	ppbv	98
15) Acetone	3.96	43	2232451	13.15	ppbv	98
19) Isopropyl Alcohol	4.10	45	332643	2.90	ppbv #	1
20) Methylene Chloride	4.48	84	446370	6.83	ppbv	96
26) Hexane	5.86	57	2820952	16.61	ppbv #	44
34) 2-Butanone	5.41	43	275698	1.13	ppbv	98
35) Carbon Tetrachloride	7.21	117	18746	0.08	ppbv #	75
36) Benzene	7.09	78	67294	0.19	ppbv	95
44) 2,2,4-Trimethylpentane	8.08	57	120686	0.20	ppbv #	76
51) 2-Hexanone	10.37	43	80675m	0.26	ppbv	
53) Toluene	10.04	91	426429	1.00	ppbv	99
58) Ethyl Benzene	12.95	91	153323m	0.27	ppbv	
59) m/p-Xylene	13.21	91	725649m	1.48	ppbv	
60) o-Xylene	13.94	91	311685	0.64	ppbv	99
61) Styrene	13.77	104	75713m	0.21	ppbv	
69) p-Isopropyltoluene	17.90	119	96613m	0.14	ppbv	
72) 4-Ethyltoluene	16.09	105	68725m	0.12	ppbv	
74) 1,2,4-Trimethylbenzene	17.02	105	160569	0.28	ppbv #	74

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

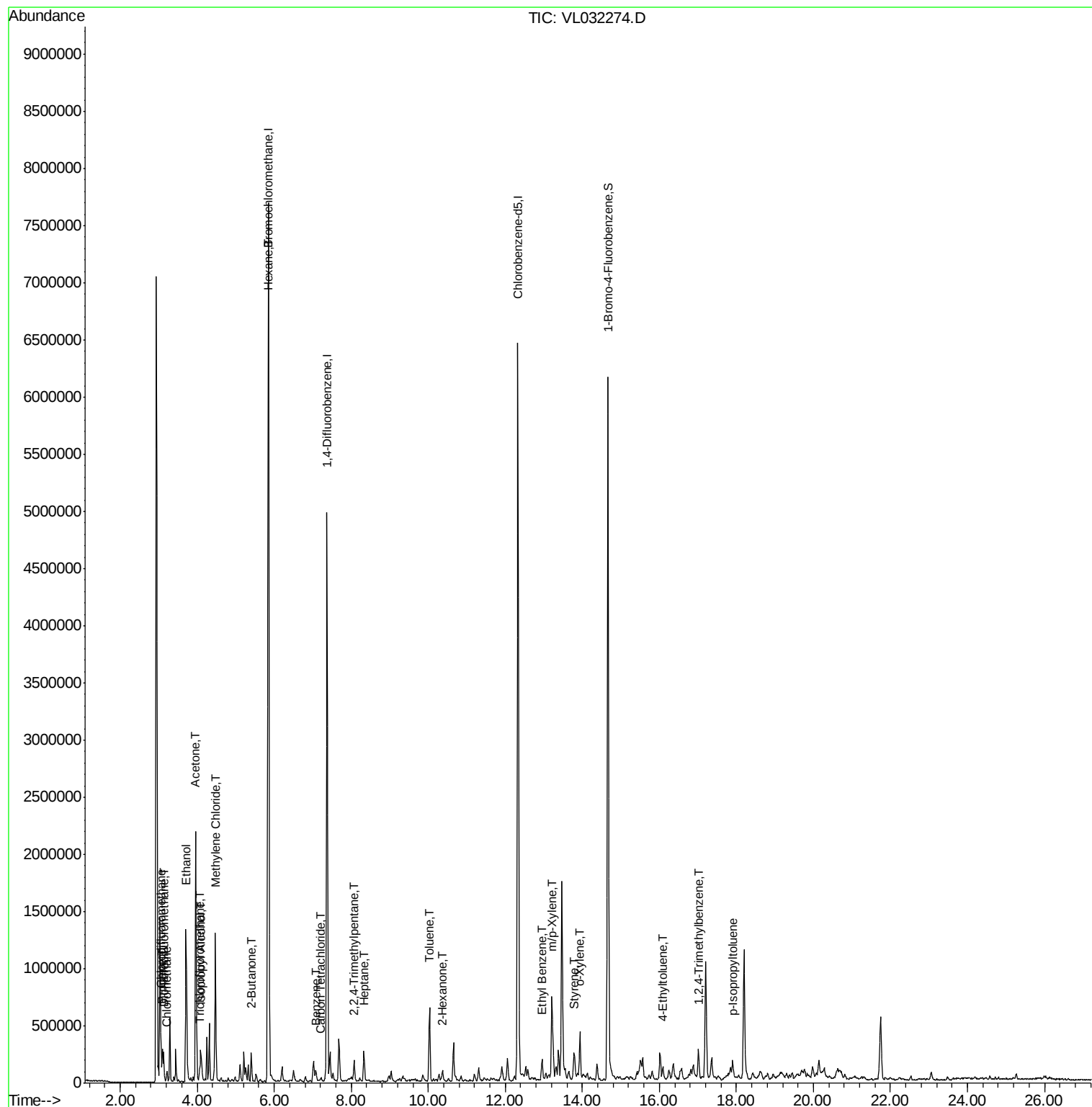
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
Data File : VL032274.D
Acq On : 18 Jul 2018 23:49
Operator : SY/AP
Sample : J3454-03
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

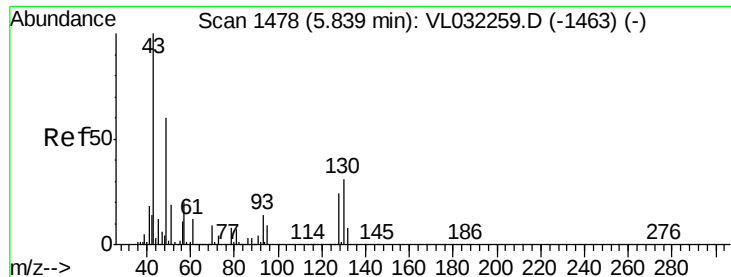
Instrument :
MSVOA_L
ClientSampleId :
B-7

Manual Integrations
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7/20/2018 2:53:18 PM

Quant Time: Jul 19 03:07:46 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL071818AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Jul
QLast Update : Wed Jul 18 14:38:53 2018
Response via : Initial Calibration





#1

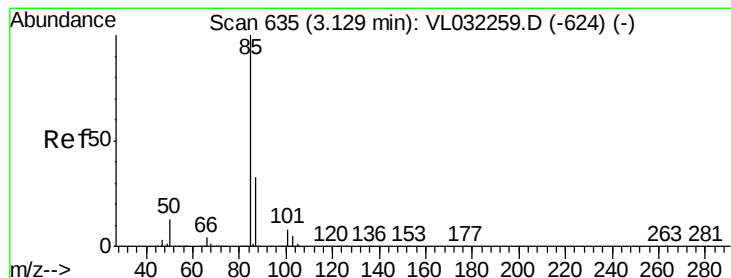
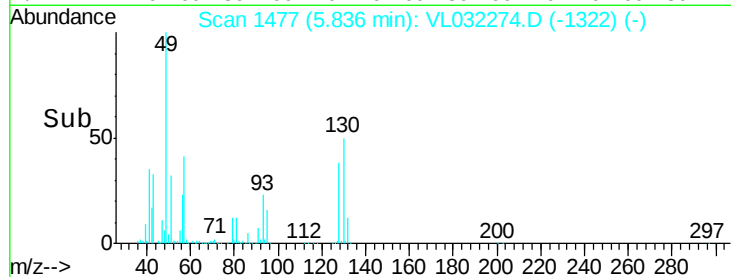
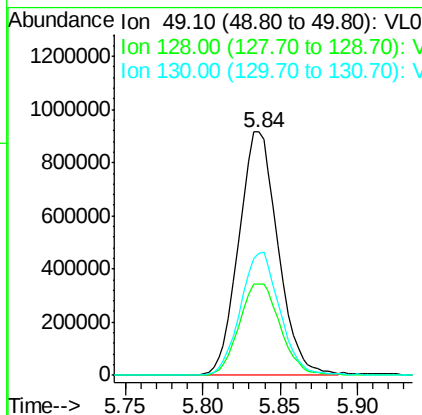
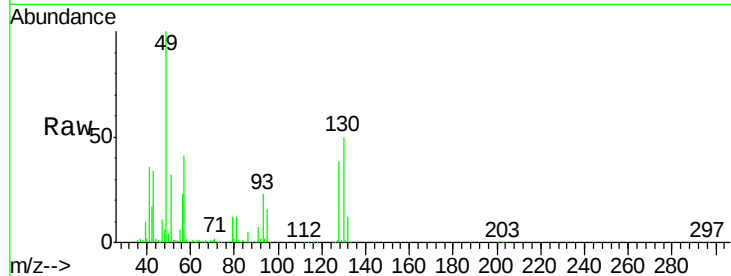
Bromochloromethane
 Concen: 10.00 ppbv
 RT: 5.84 min Scan# 1477
 Delta R.T. -0.00 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7

Tot Ion	Ratio	Lower	Upper
49	100		
128	39.6	20.1	60.2
130	51.3	25.9	77.6

Manual Integrations
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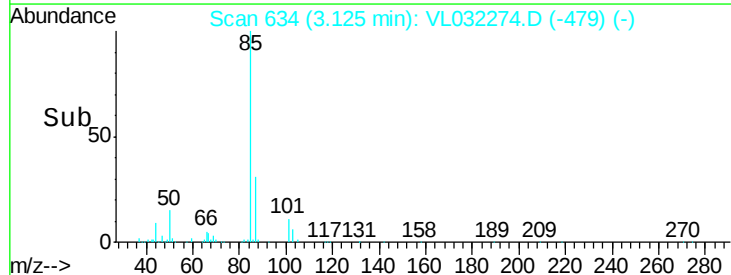
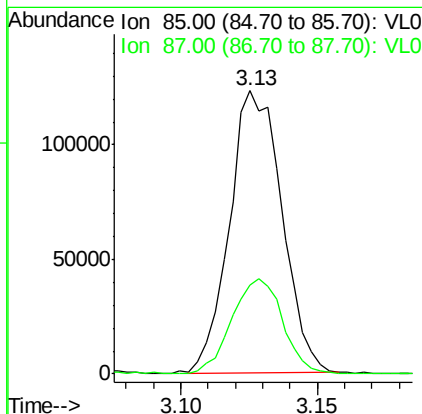
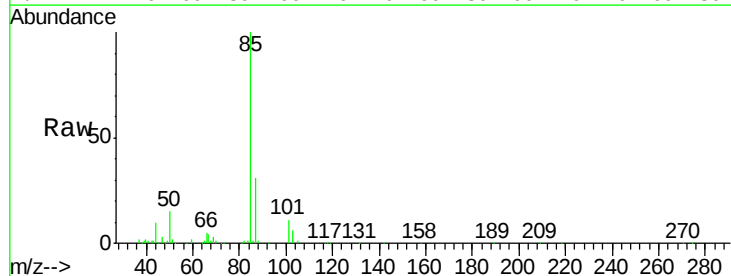
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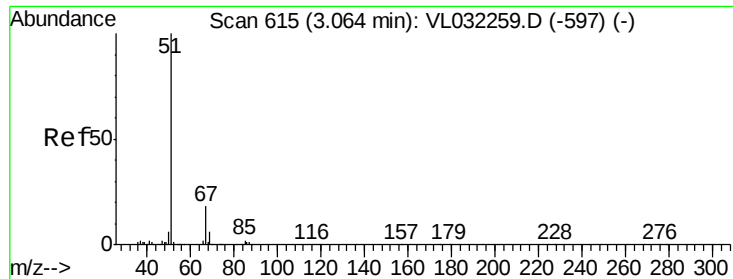


#2

Dichlorodifluoromethane
 Concen: 0.59 ppbv
 RT: 3.13 min Scan# 634
 Delta R.T. -0.00 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.2	39.2





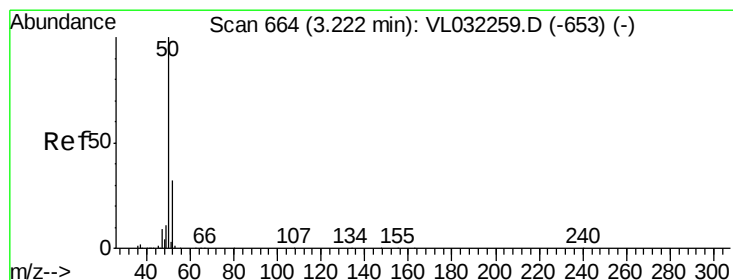
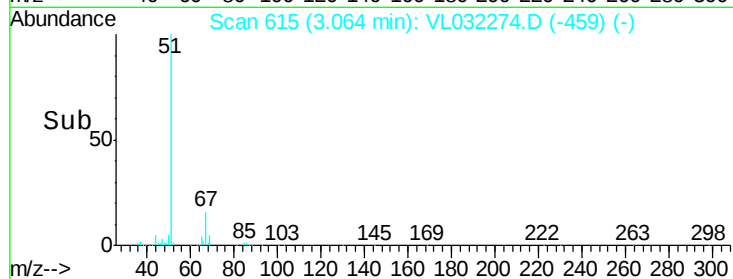
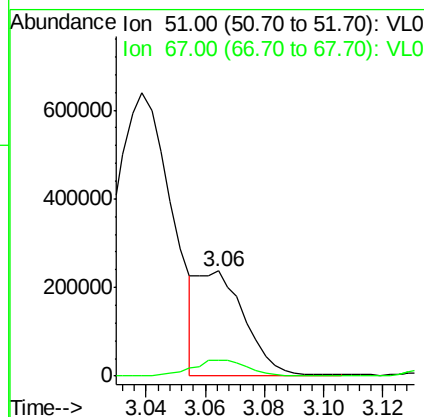
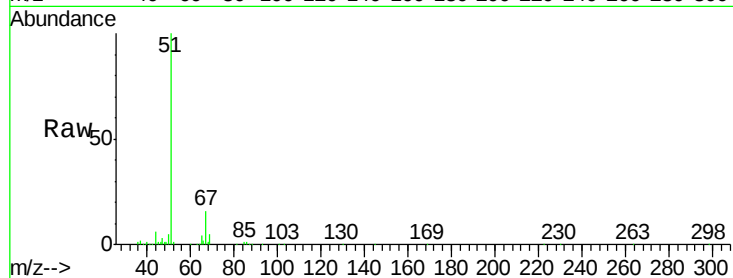
#3
Chlorodifluoromethane
Concen: 1.47 ppbv m
RT: 3.06 min Scan# 615
Delta R.T. 0.00 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Instrument :
MSVOA_L
ClientSampled :
B-7

Tot Ion	Ratio	Lower	Upper
51	100		
67	18.2	14.2	21.4

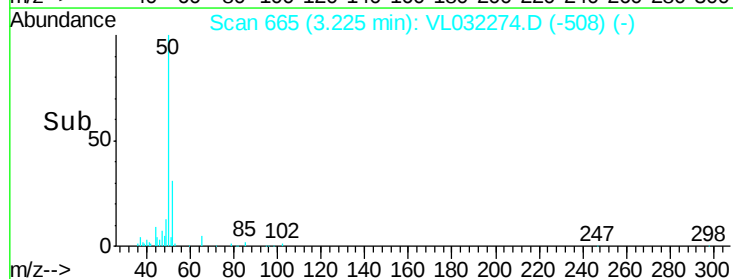
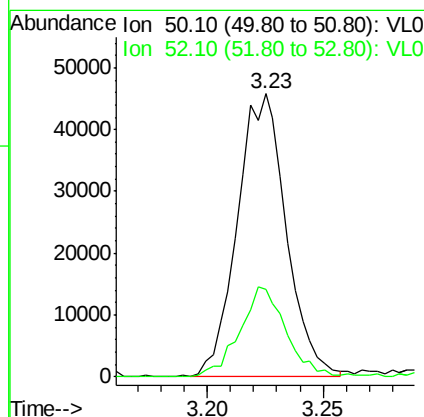
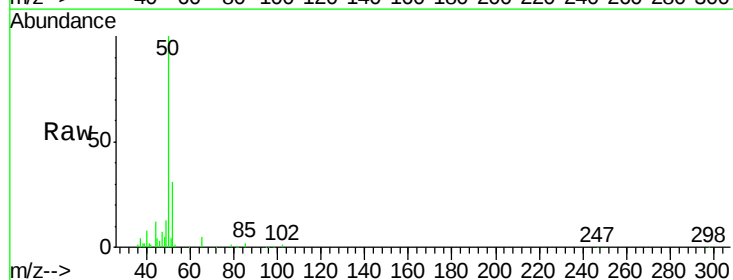
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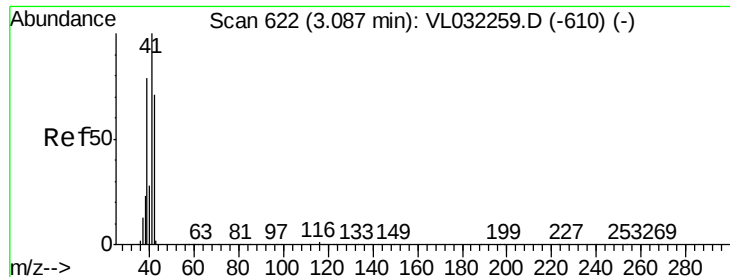
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#4
Chloromethane
Concen: 0.63 ppbv
RT: 3.23 min Scan# 665
Delta R.T. 0.00 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
50	100		
52	31.3	25.3	37.9





#9

Propene

Concen: 0.70 ppbv

RT: 3.10 min Scan# 626

Delta R.T. 0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampleId :

B-7

Tot Ion: 41 Resp: 55473

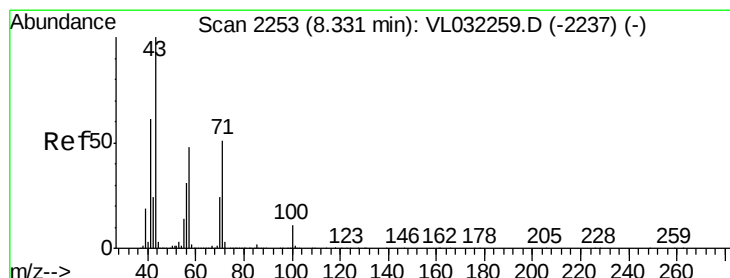
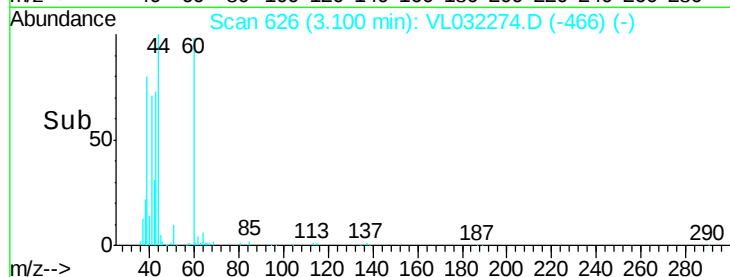
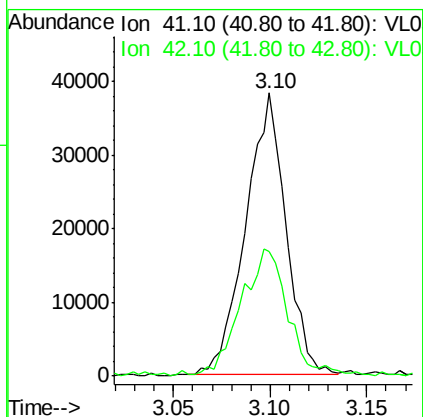
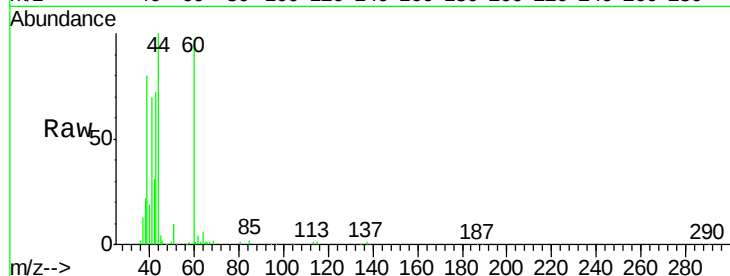
Ion Ratio Lower Upper

41 100

42 53.4 56.2 84.4#

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7/20/2018 2:53:18 PM



#10

Heptane

Concen: 0.41 ppbv

RT: 8.33 min Scan# 2253

Delta R.T. 0.00 min

Lab File: VL032274.D

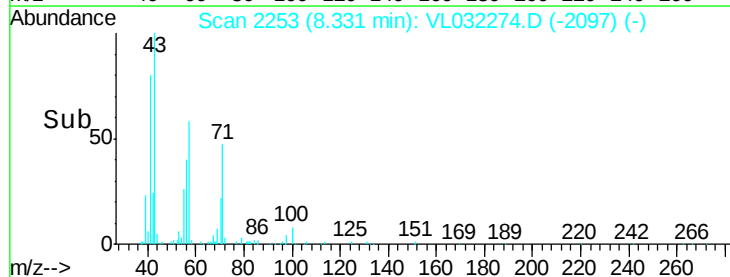
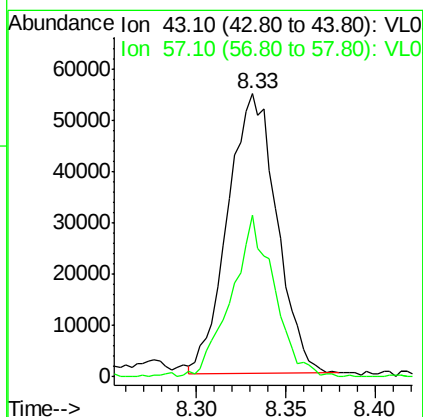
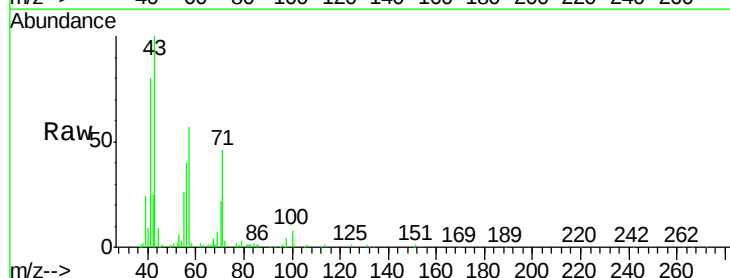
Acq: 18 Jul 2018 23:49

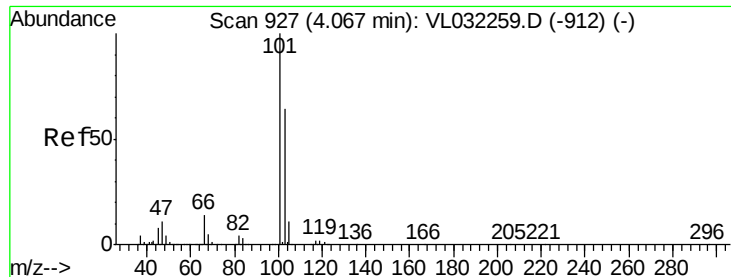
Tgt Ion: 43 Resp: 104715

Ion Ratio Lower Upper

43 100

57 50.7 39.9 59.9





#11

Trichlorofluoromethane

Concen: 0.29 ppbv

RT: 4.07 min Scan# 927

Delta R.T. 0.00 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampleId :

B-7

Tot Ion:101 Resp: 62838

Ion Ratio Lower Upper

101 100

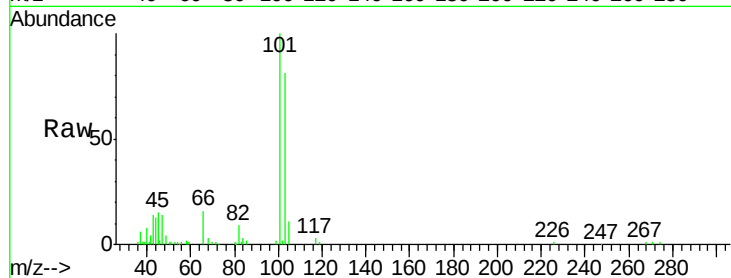
103 80.9 51.5 77.3#

Manual Integrations

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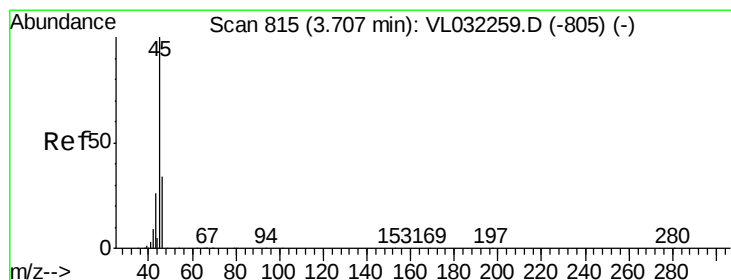
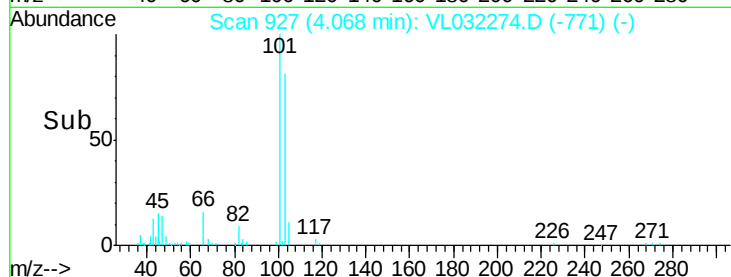
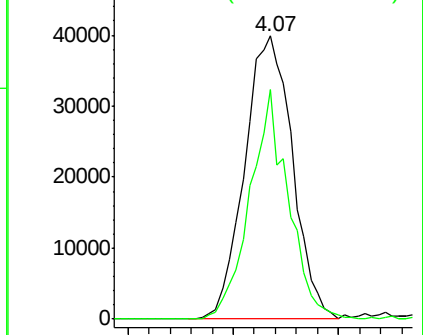
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#13

Ethanol

Concen: 67.60 ppbv

RT: 3.71 min Scan# 816

Delta R.T. 0.00 min

Lab File: VL032274.D

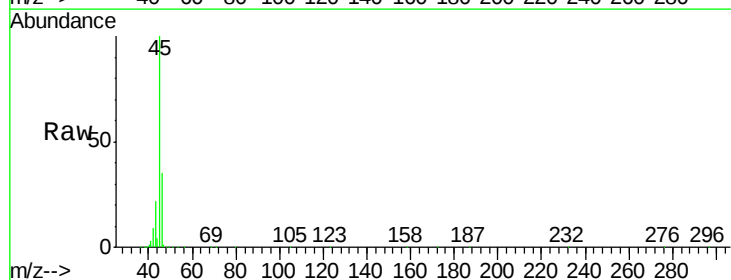
Acq: 18 Jul 2018 23:49

Tgt Ion: 45 Resp: 1536815

Ion Ratio Lower Upper

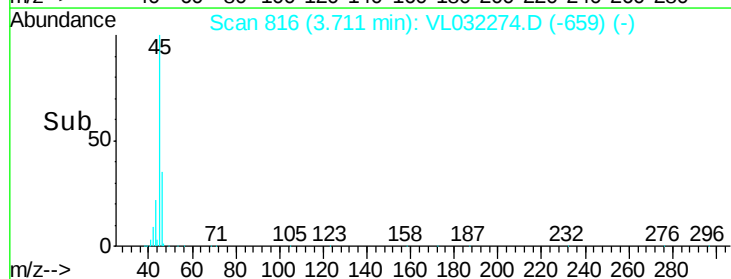
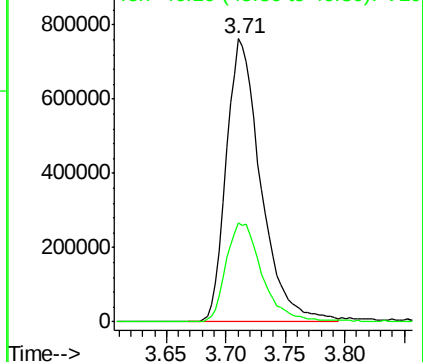
45 100

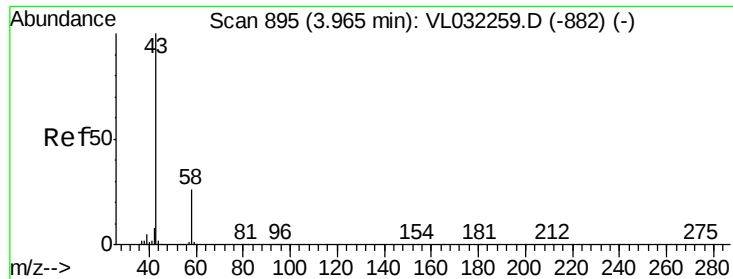
46 36.6 15.2 60.8



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0





#15

Acetone

Concen: 13.15 ppbv

RT: 3.96 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampleId :

B-7

Tot Ion: 43 Resp: 2232451

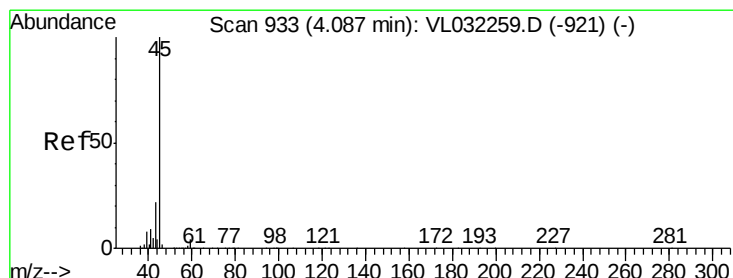
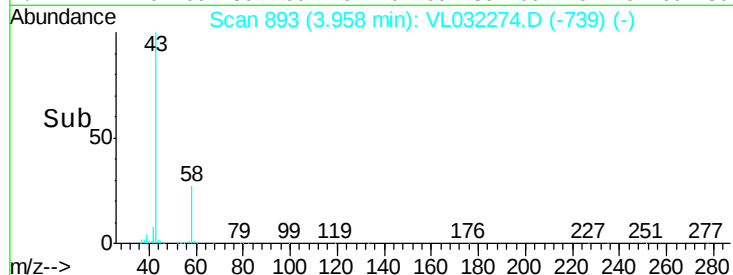
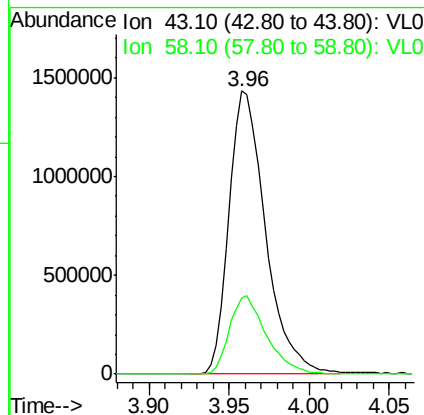
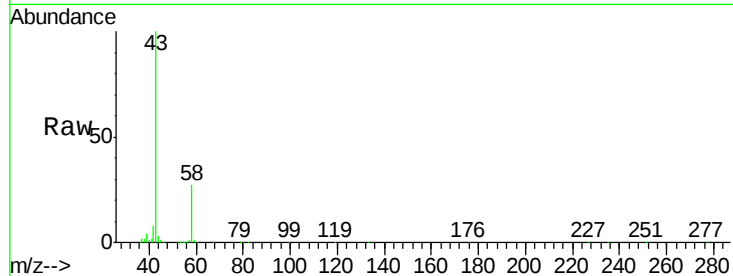
Ion Ratio Lower Upper

43 100

58 28.1 21.8 32.6

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 2.90 ppbv

RT: 4.10 min Scan# 936

Delta R.T. 0.01 min

Lab File: VL032274.D

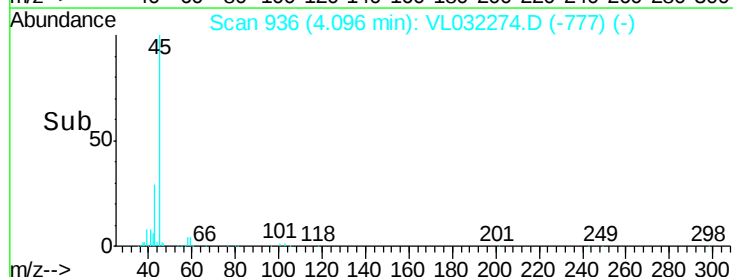
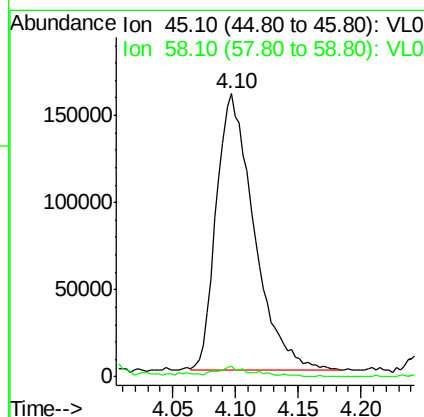
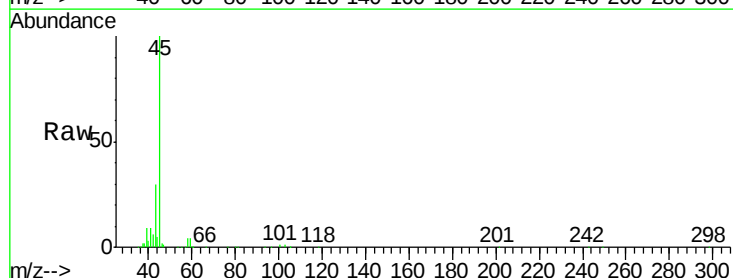
Acq: 18 Jul 2018 23:49

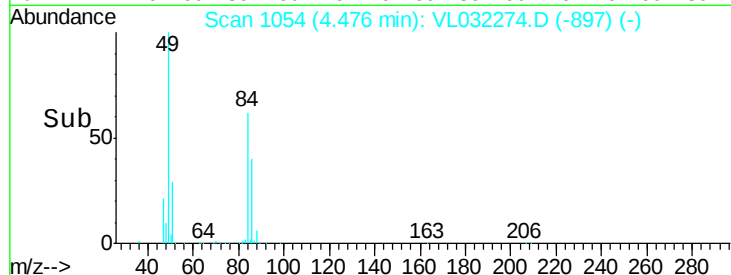
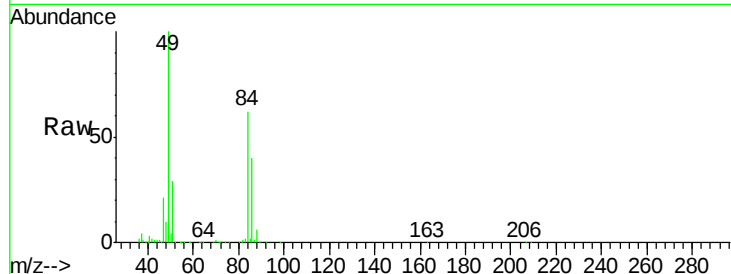
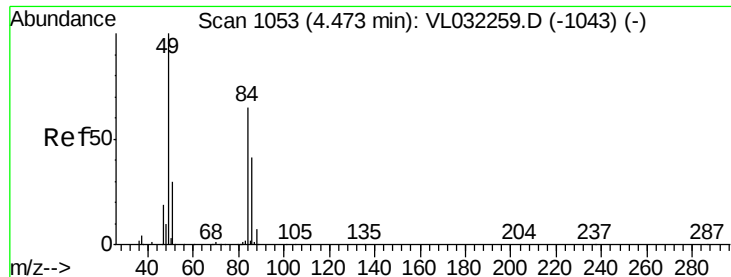
Tgt Ion: 45 Resp: 332643

Ion Ratio Lower Upper

45 100

58 189.1 1.5 2.3#





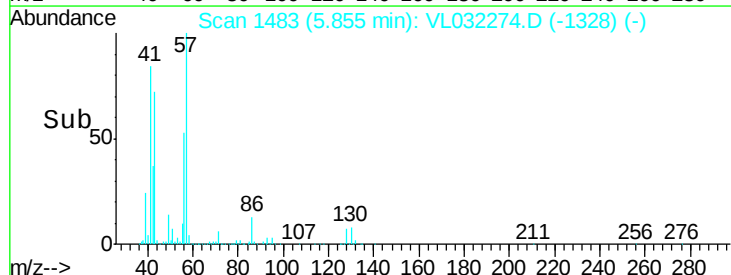
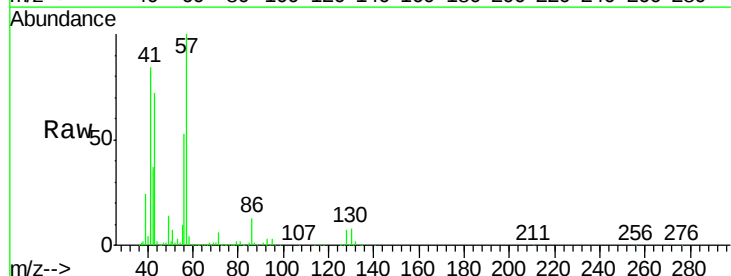
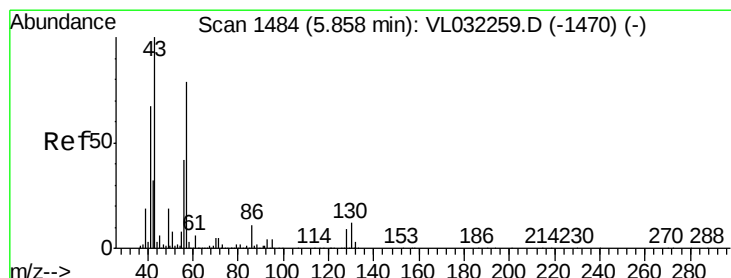
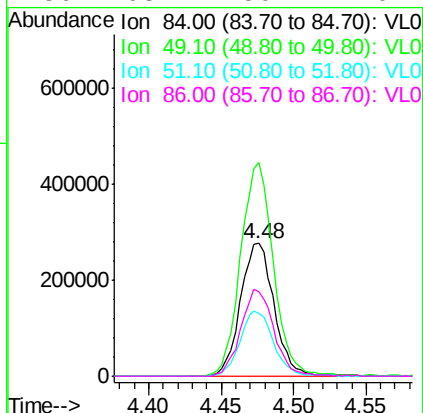
#20
Methvlene Chloride
Concen: 6.83 ppbv
RT: 4.48 min Scan# 1054
Delta R.T. 0.00 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Tot Ion	Ratio	Lower	Upper
84	100		
49	160.8	122.4	183.6
51	47.2	36.8	55.2
86	63.7	50.7	76.1

Instrument :
MSVOA_L
ClientSampleId :
B-7

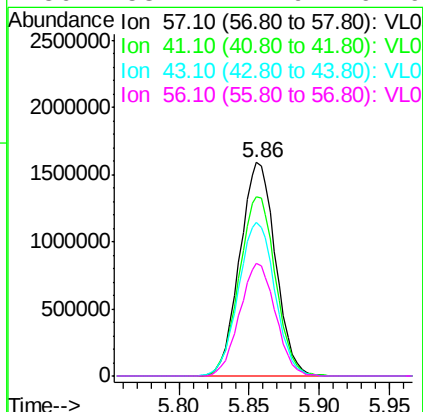
Manual Integrations
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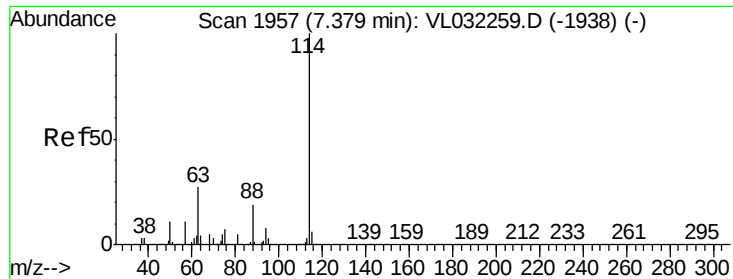
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7/20/2018 2:53:18 PM



#26
Hexane
Concen: 16.61 ppbv
RT: 5.86 min Scan# 1483
Delta R.T. -0.00 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
57	100		
41	85.5	67.9	101.9
43	73.8	175.9	263.9#
56	53.1	41.9	62.9





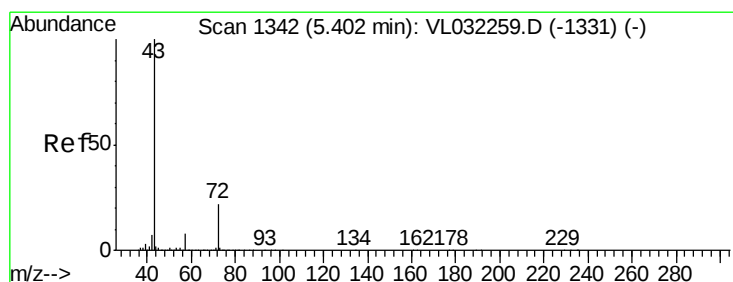
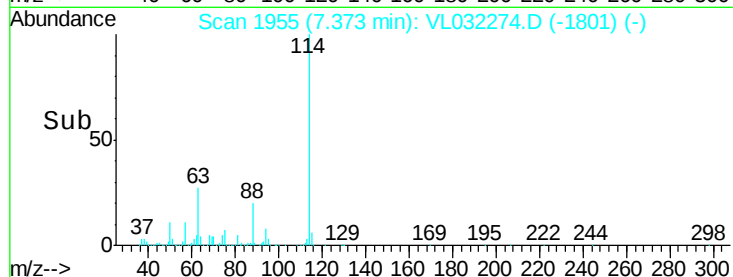
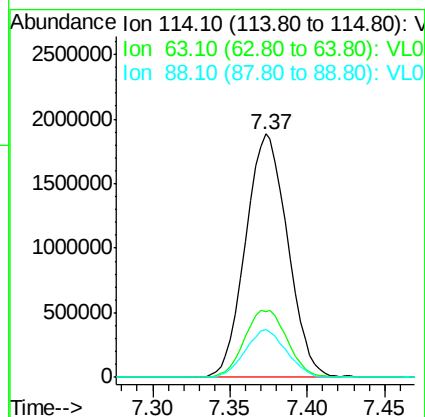
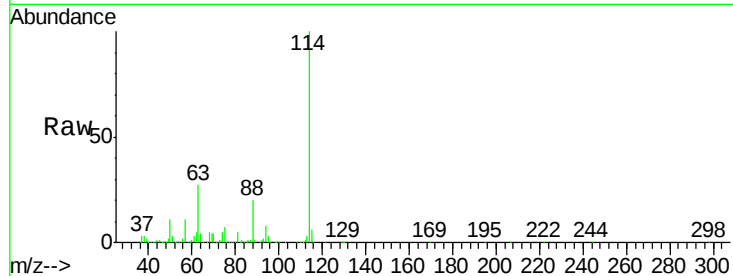
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.37 min Scan# 1955
 Delta R.T. -0.01 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7

Tot Ion:114 Resp: 3564385
 Ion Ratio Lower Upper
 114 100
 63 28.2 22.6 33.8
 88 19.2 15.2 22.8

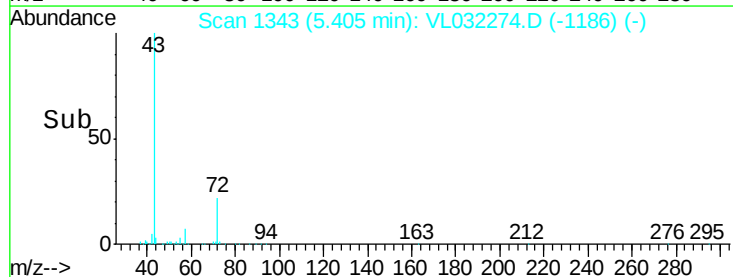
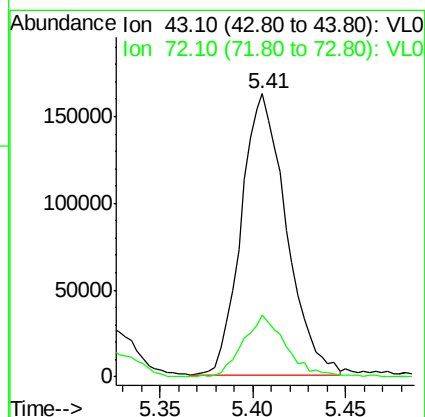
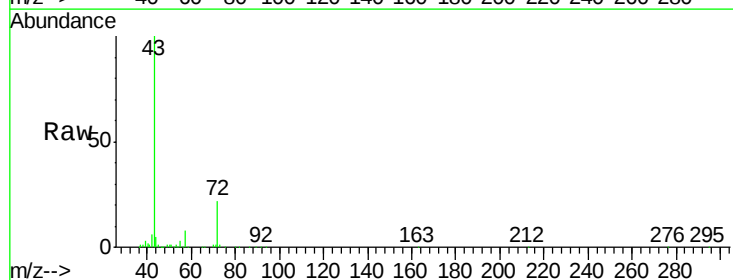
Manual Integrations
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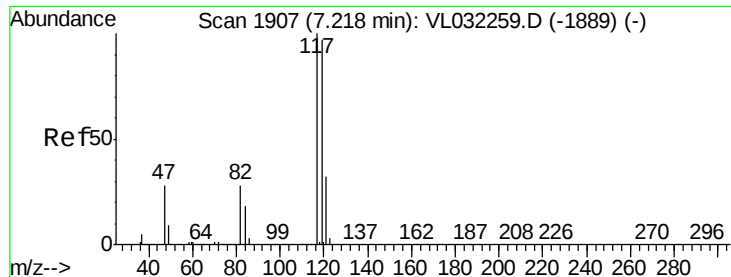
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 7/20/2018 2:53:18 PM



#34
 2-Butanone
 Concen: 1.13 ppbv
 RT: 5.41 min Scan# 1343
 Delta R.T. 0.00 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Tgt Ion: 43 Resp: 275698
 Ion Ratio Lower Upper
 43 100
 72 21.3 17.7 26.5





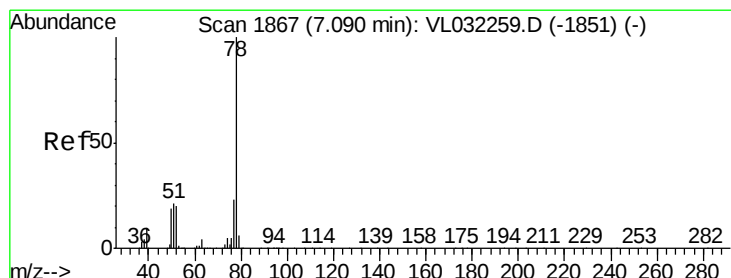
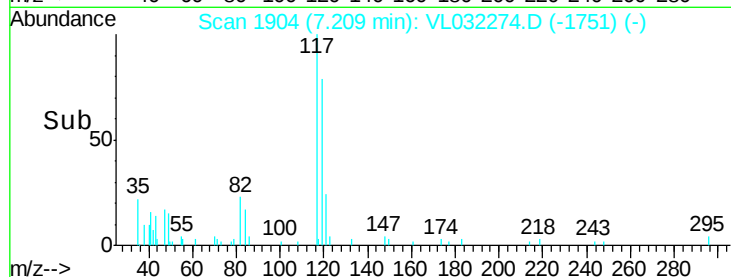
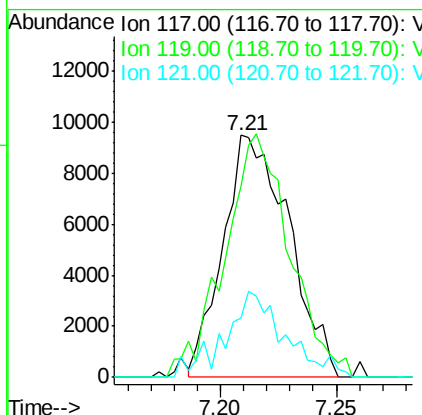
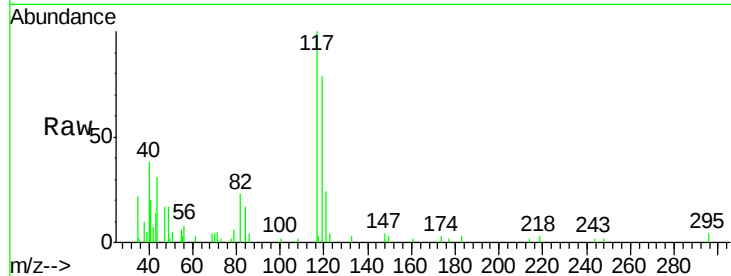
#35
Carbon Tetrachloride
Concen: 0.08 ppbv
RT: 7.21 min Scan# 1904
Delta R.T. -0.01 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Instrument :
MSVOA_L
ClientSampled :
B-7

Tot Ion	Ratio	Lower	Upper
117	100		
119	71.2	77.4	116.0#
121	20.6	25.4	38.2#

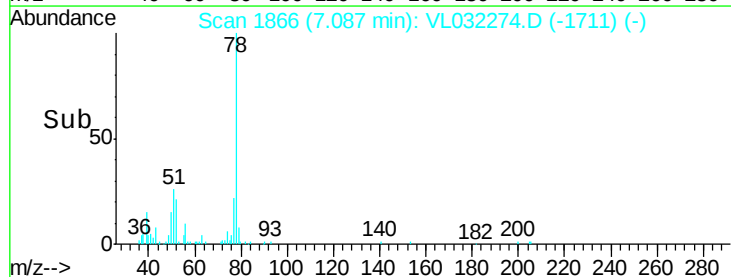
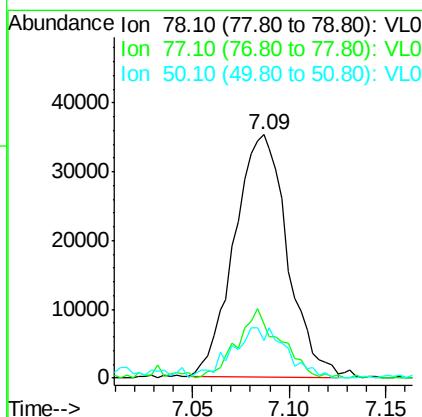
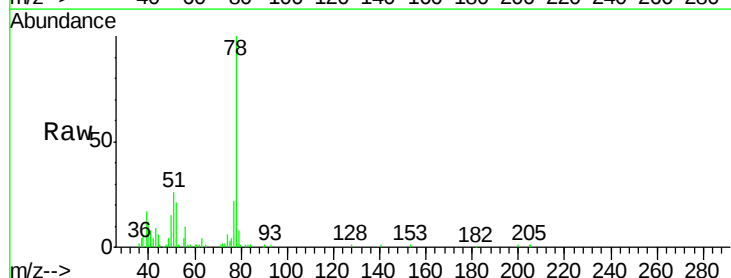
Manual Integrations
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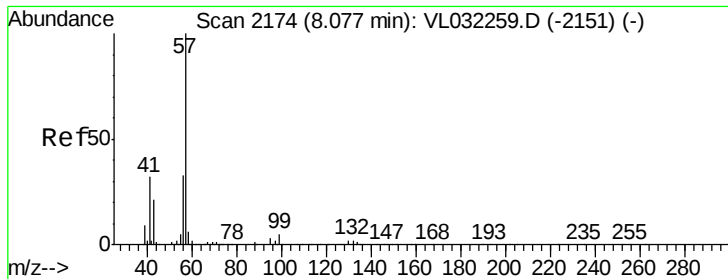
MMDadoda
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#36
Benzene
Concen: 0.19 ppbv
RT: 7.09 min Scan# 1866
Delta R.T. -0.00 min
Lab File: VL032274.D
Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.5	18.6	27.8
50	15.5	15.0	22.6





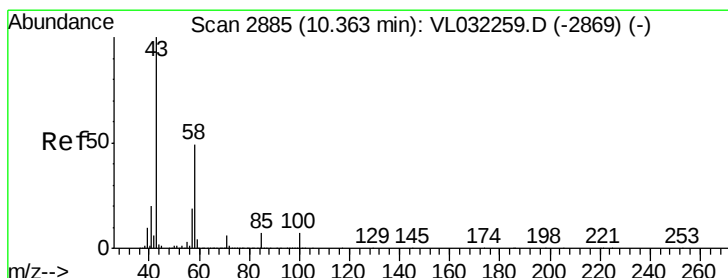
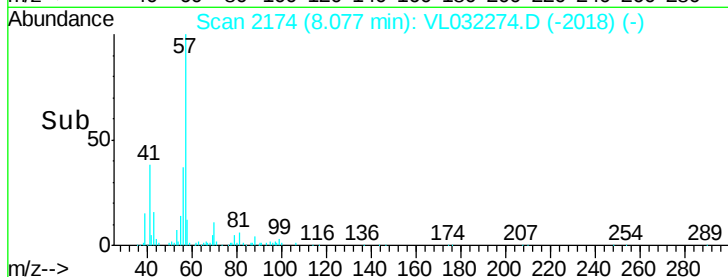
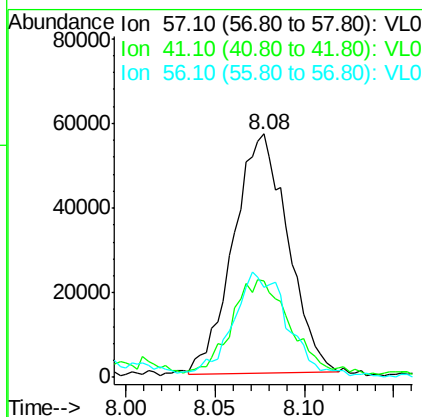
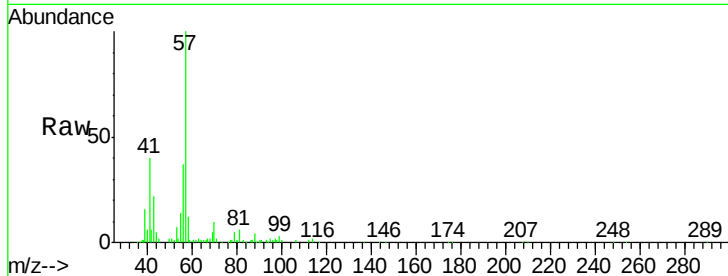
#44
 2,2,4-Trimethylpentane
 Concen: 0.20 ppbv
 RT: 8.08 min Scan# 2174
 Delta R.T. 0.00 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7

Tot Ion	Ratio	Lower	Upper
57	100		
41	46.1	24.4	36.6#
56	43.3	25.7	38.5#

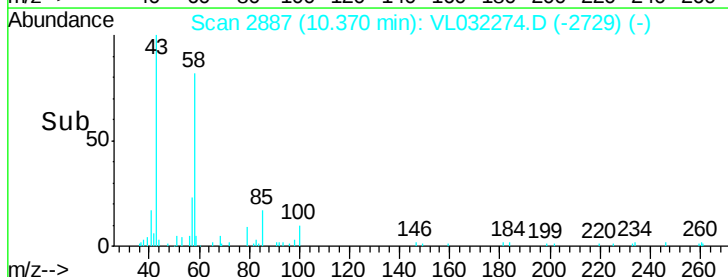
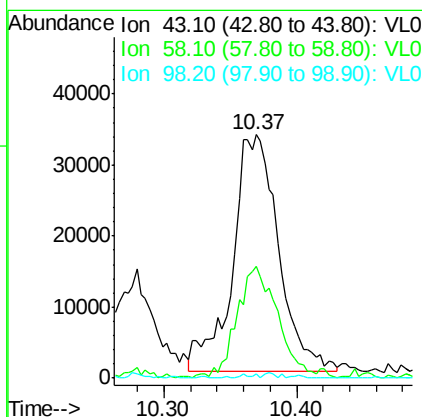
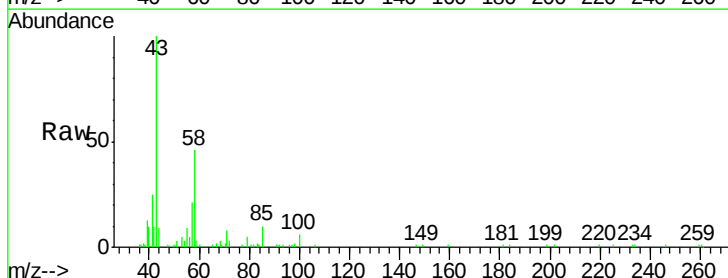
Manual Integrations
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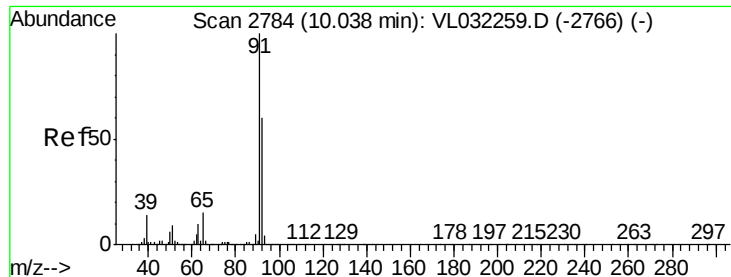
MMDadoda
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#51
 2-Hexanone
 Concen: 0.26 ppbv m
 RT: 10.37 min Scan# 2887
 Delta R.T. 0.01 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.4	59.2#
98	0.0	0.2	0.2#





#53

Toluene

Concen: 1.00 ppbv

RT: 10.04 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampled :

B-7

Tot Ion: 91 Resp: 426429

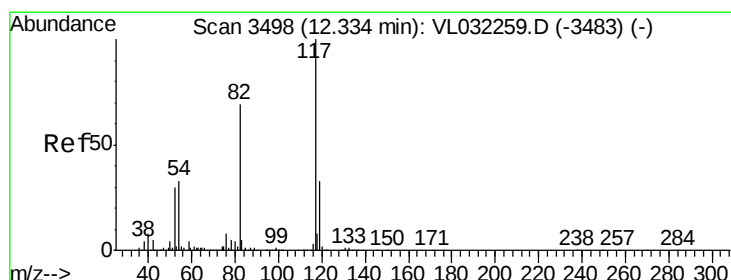
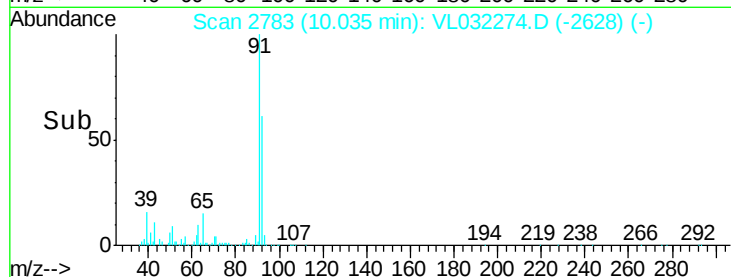
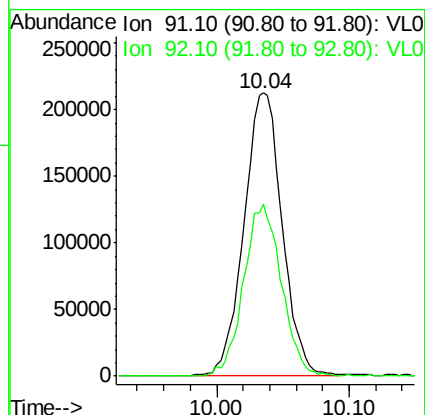
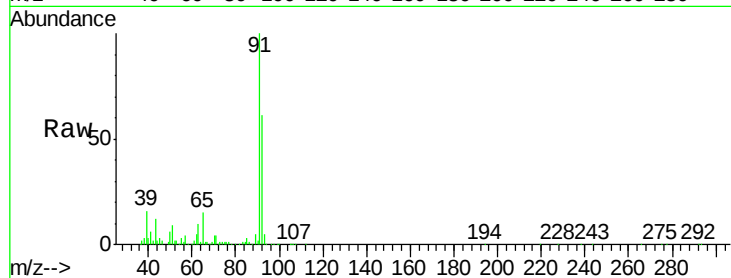
Ion Ratio Lower Upper

91 100

92 59.9 48.6 72.8

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7/20/2018 2:53:18 PM



#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.33 min Scan# 3496

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

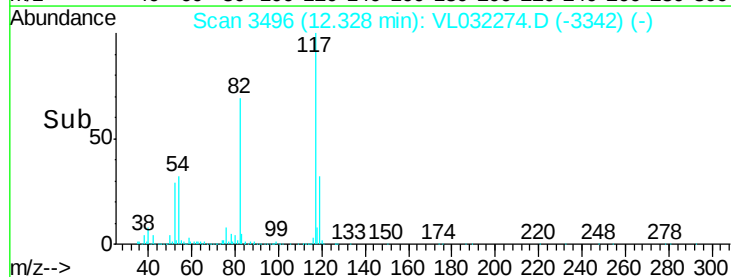
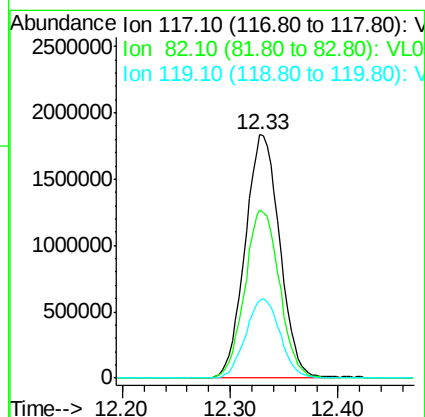
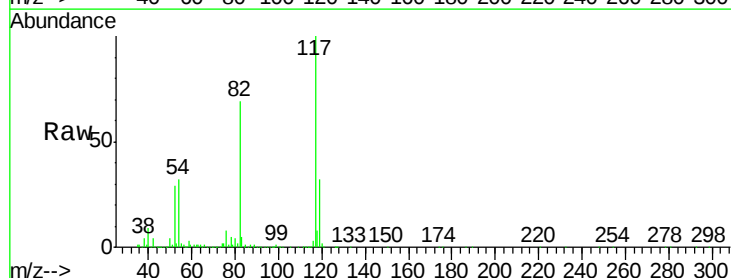
Tgt Ion: 117 Resp: 4074401

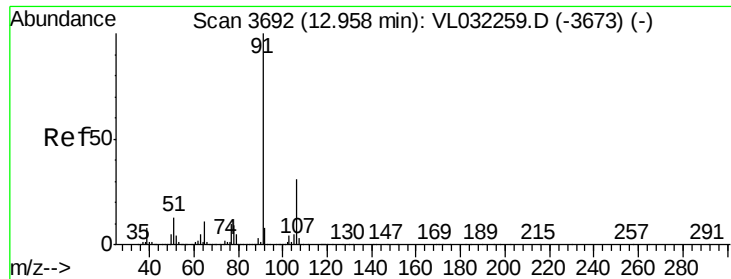
Ion Ratio Lower Upper

117 100

82 69.8 53.9 80.9

119 32.4 25.5 38.3





#58

Ethyl Benzene

Concen: 0.27 ppbv m

RT: 12.95 min Scan# 3690

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampleId :

B-7

Tot Ion: 91 Resp: 153323

Ion Ratio Lower Upper

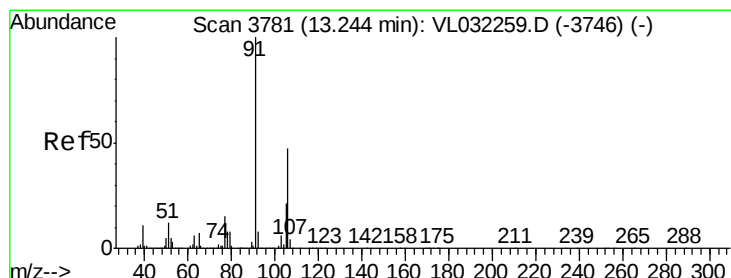
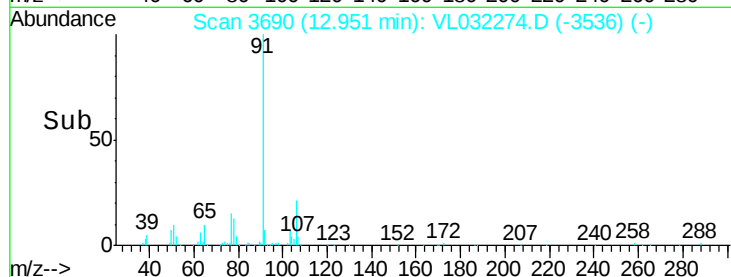
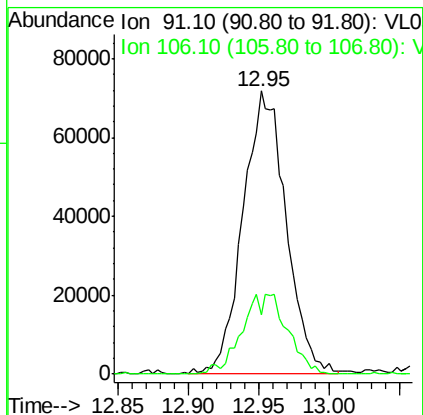
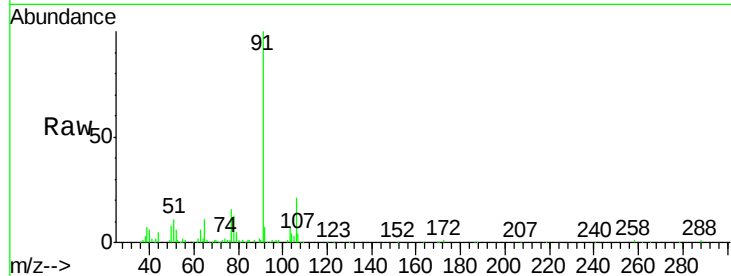
91 100

106 21.2 24.5 36.7#

Manual Integrations
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7/20/2018 2:53:18 PM



#59

m/p-Xylene

Concen: 1.48 ppbv m

RT: 13.21 min Scan# 3771

Delta R.T. -0.03 min

Lab File: VL032274.D

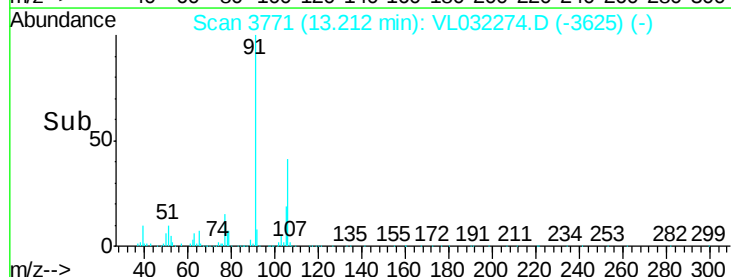
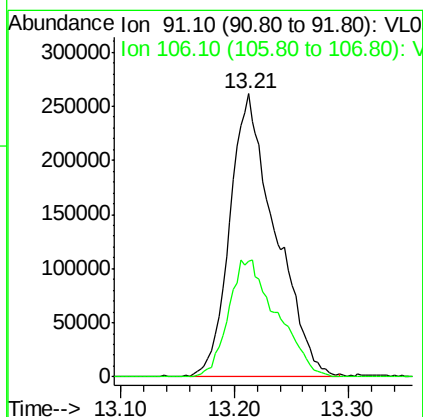
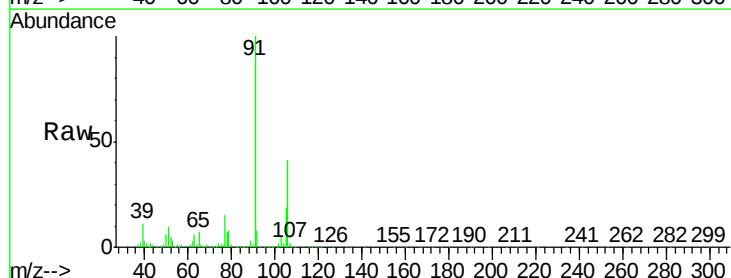
Acq: 18 Jul 2018 23:49

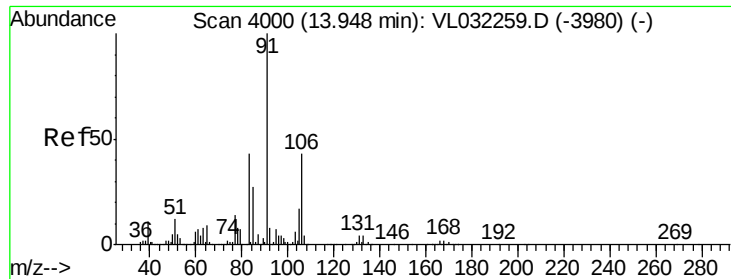
Tgt Ion: 91 Resp: 725649

Ion Ratio Lower Upper

91 100

106 0.0 36.2 54.2#





#60

o-Xylene

Concen: 0.64 ppbv

RT: 13.94 min Scan# 3997

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

ClientSampled :

B-7

Tot Ion: 91 Resp: 311685

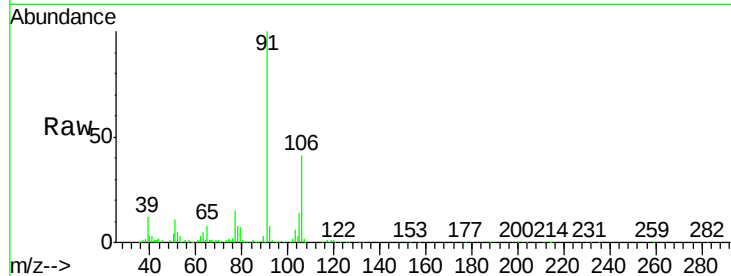
Ion Ratio Lower Upper

91 100

106 43.9 21.7 65.1

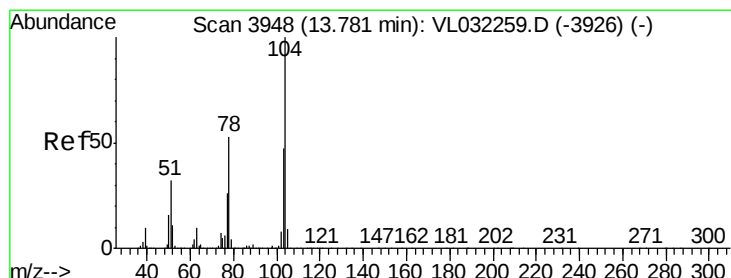
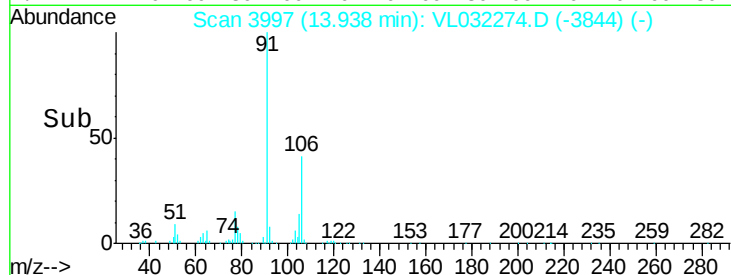
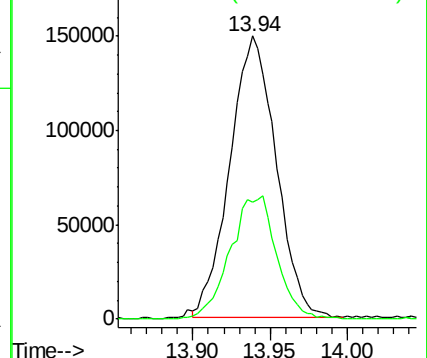
Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): VL0



#61

Styrene

Concen: 0.21 ppbv m

RT: 13.77 min Scan# 3946

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

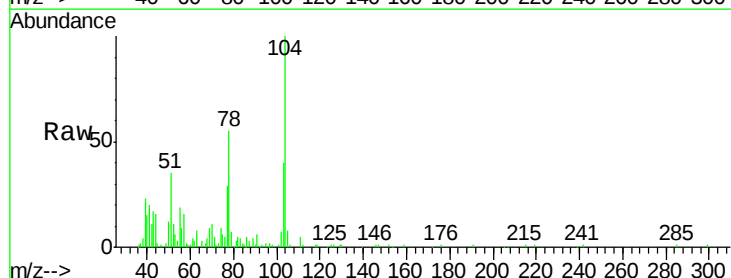
Tgt Ion: 104 Resp: 75713

Ion Ratio Lower Upper

104 100

78 62.0 43.2 64.8

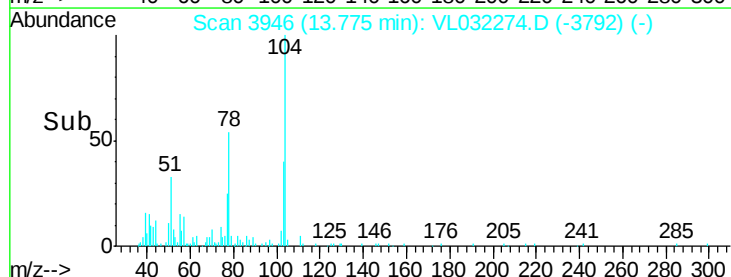
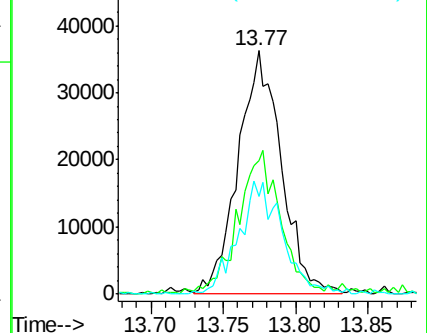
103 47.4 37.8 56.6

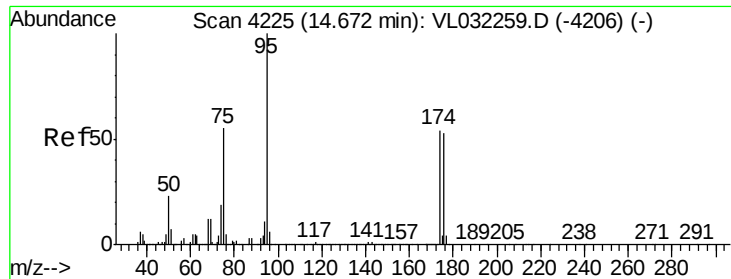


Abundance Ion 104.10 (103.80 to 104.80): VL0

Ion 78.10 (77.80 to 78.80): VL0

Ion 103.10 (102.80 to 103.80): VL0





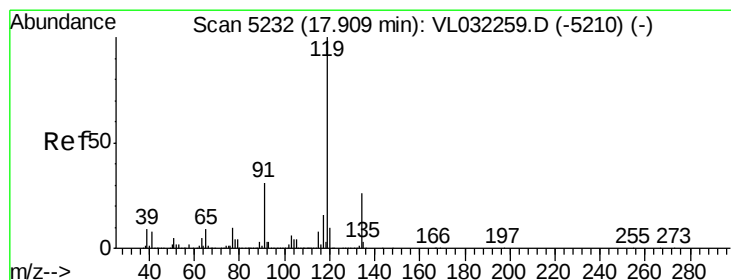
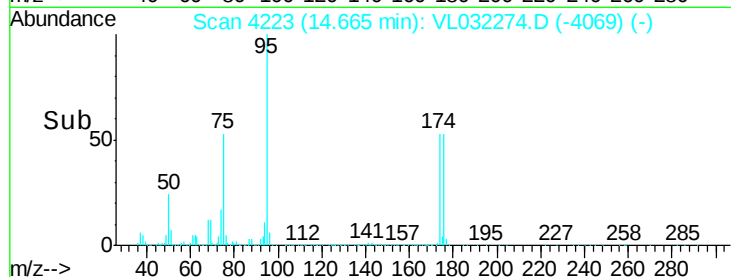
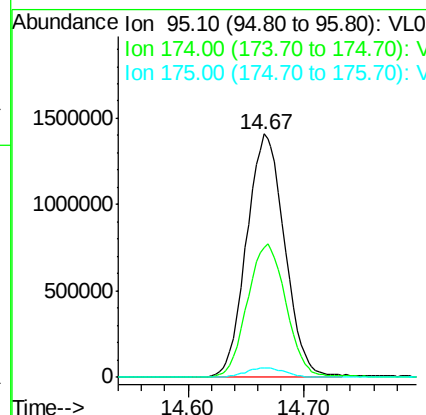
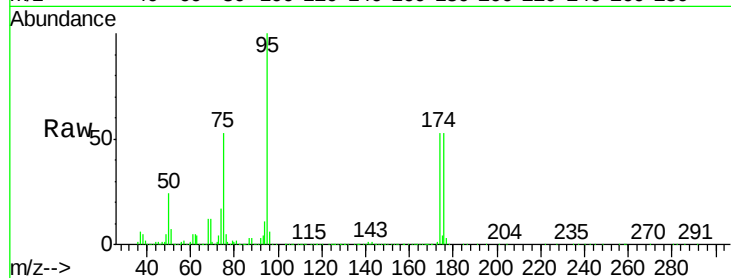
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.73 ppbv
 RT: 14.67 min Scan# 4223
 Delta R.T. -0.01 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Instrument :
 MSVOA_L
 ClientSampled :
 B-7

Tot Ion	Ratio	Lower	Upper
95	100		
174	56.4	44.3	66.5
175	4.0	3.3	4.9

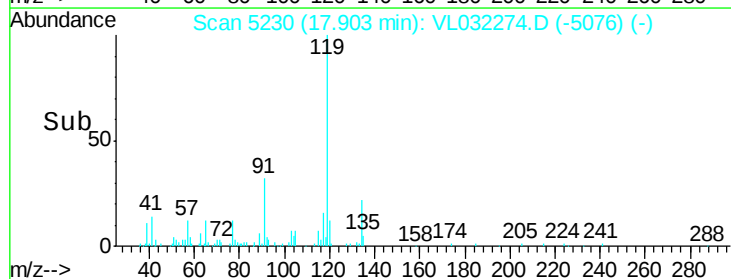
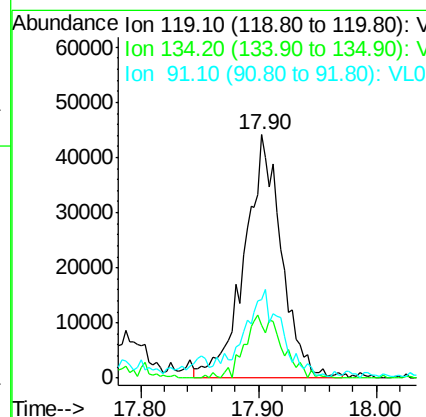
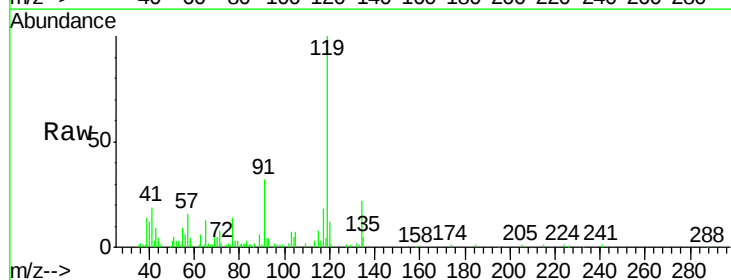
Manual Integrations
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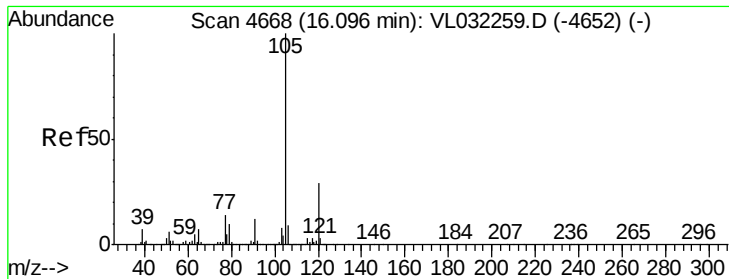
MMDadoda
 7/20/2018 2:53:18 PM



#69
 p-Isopropyltoluene
 Concen: 0.14 ppbv m
 RT: 17.90 min Scan# 5230
 Delta R.T. -0.01 min
 Lab File: VL032274.D
 Acq: 18 Jul 2018 23:49

Tgt Ion	Ratio	Lower	Upper
119	100		
134	25.9	20.3	30.5
91	42.2	24.1	36.1





#72

4-Ethyltoluene

Concen: 0.12 ppbv m

RT: 16.09 min Scan# 4667

Delta R.T. -0.00 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Instrument :

MSVOA_L

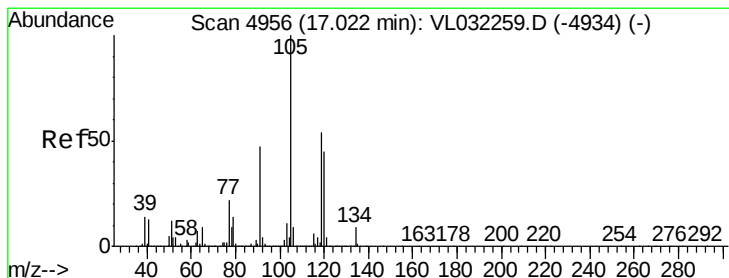
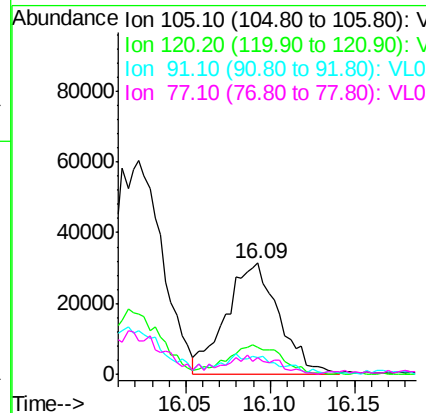
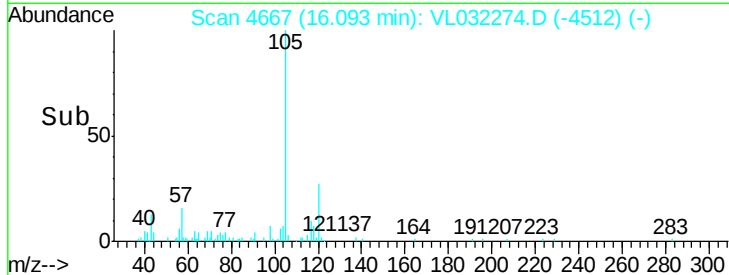
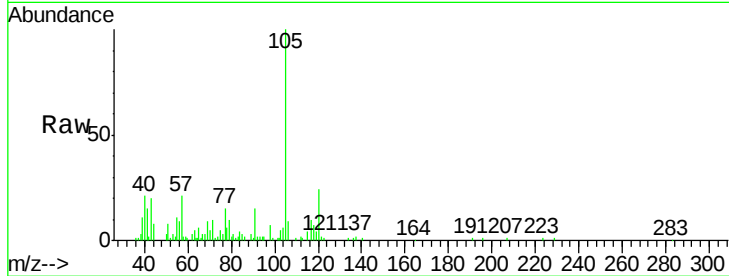
ClientSampled :

B-7

Tot Ion:	105	Resp:	68725
Ion Ratio	Lower	Upper	
105	100		
120	27.3	23.0	34.6
91	0.0	10.1	15.1#
77	15.9	11.4	17.0

Manual Integrations
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#74

1,2,4-Trimethylbenzene

Concen: 0.28 ppbv

RT: 17.02 min Scan# 4954

Delta R.T. -0.01 min

Lab File: VL032274.D

Acq: 18 Jul 2018 23:49

Tgt Ion:	105	Resp:	160569
Ion Ratio	Lower	Upper	
105	100		
120	41.5	35.8	53.6
91	12.4	38.2	57.4#
77	16.9	17.5	26.3#

