

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL071818\
 Data File : VL032275.D
 Acq On : 19 Jul 2018 00:29
 Operator : SY/AP
 Sample : J3454-03DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7DUP

Manual Integrations
 APPROVED

MMDadoda
 7/20/2018 2:53:19 PM

Quant Time: Jul 19 04:04:19 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	1614752	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.37	114	3498793	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.33	117	4051460	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.67	95	3173966	9.66	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	96.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.13	85	225084	0.82	ppbv	99
3) Chlorodifluoromethane	3.04	51	1170343	6.46	ppbv #	69
4) Chloromethane	3.22	50	67486	0.63	ppbv	94
9) Propene	3.10	41	58870	0.74	ppbv #	79
10) Heptane	8.33	43	115881m	0.46	ppbv	
11) Trichlorofluoromethane	4.07	101	62810	0.29	ppbv	97
13) Ethanol	3.71	45	1495456	66.09	ppbv	98
15) Acetone	3.96	43	2277153	13.47	ppbv	98
19) Isopropyl Alcohol	4.10	45	310406	2.72	ppbv #	1
20) Methylene Chloride	4.48	84	453767	6.97	ppbv	99
26) Hexane	5.86	57	2852906	16.88	ppbv #	44
34) 2-Butanone	5.40	43	273857	1.14	ppbv	100
35) Carbon Tetrachloride	7.21	117	17748m	0.07	ppbv	
36) Benzene	7.09	78	60232	0.17	ppbv #	89
44) 2,2,4-Trimethylpentane	8.08	57	135941m	0.23	ppbv	
51) 2-Hexanone	10.37	43	76530m	0.25	ppbv	
53) Toluene	10.03	91	439077	1.05	ppbv	98
58) Ethyl Benzene	12.95	91	159404	0.28	ppbv	97
59) m/p-Xylene	13.21	91	734015	1.51	ppbv	99
60) o-Xylene	13.94	91	317301	0.65	ppbv	99
61) Styrene	13.77	104	80636m	0.22	ppbv	
69) p-Isopropyltoluene	17.90	119	101785m	0.15	ppbv	
72) 4-Ethyltoluene	16.09	105	66387	0.12	ppbv #	97
74) 1,2,4-Trimethylbenzene	17.01	105	159993	0.28	ppbv #	70

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

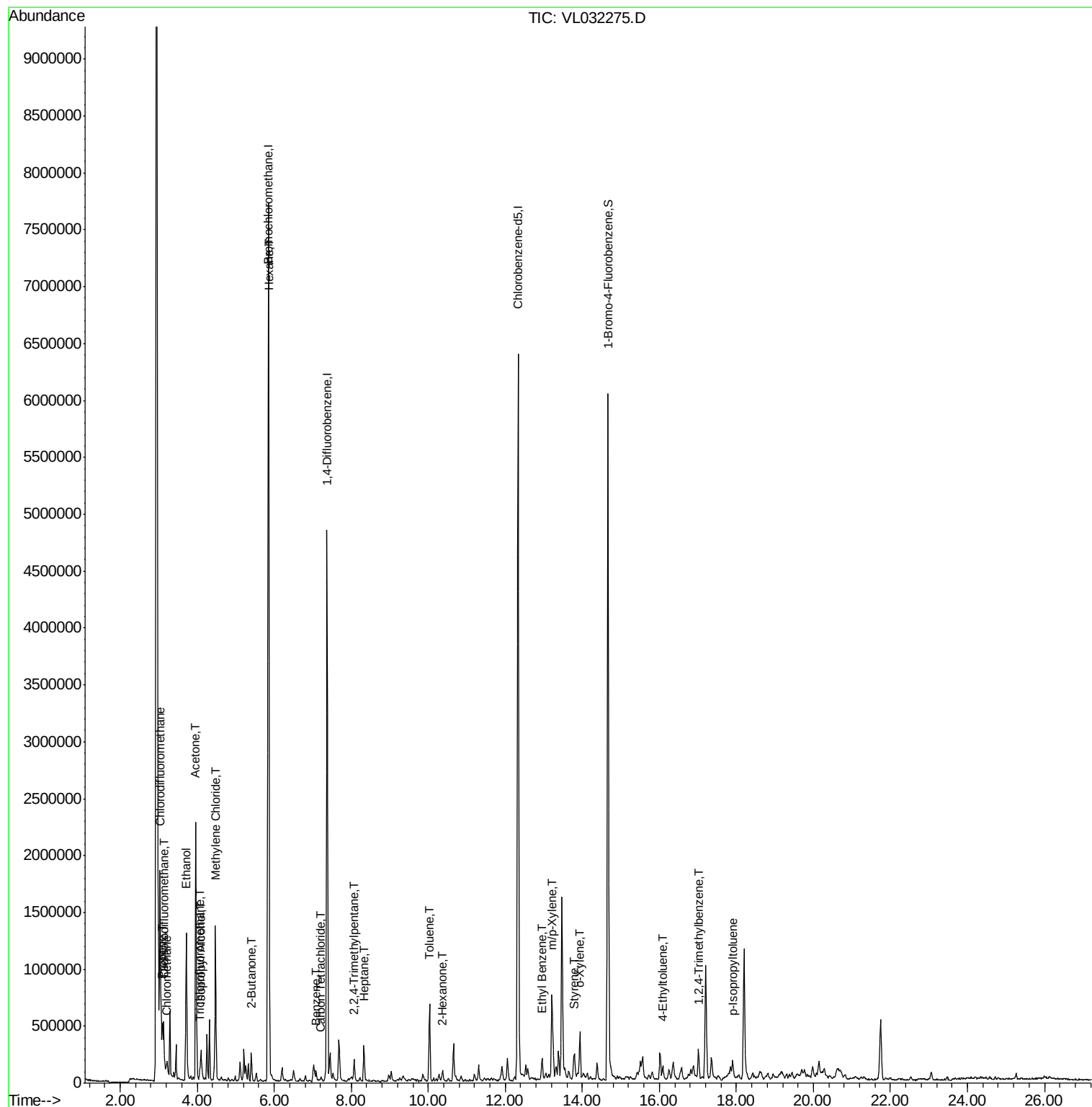
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL071818\
Data File : VL032275.D
Acq On : 19 Jul 2018 00:29
Operator : SY/AP
Sample : J3454-03DUP
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

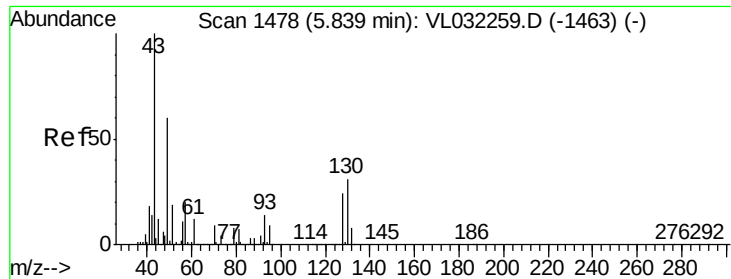
Instrument :
MSVOA_L
ClientSampleId :
B-7DUP

Manual Integrations
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7/20/2018 2:53:19 PM

Quant Time: Jul 19 04:04:19 2018
Quant Method : Z:\V0ASRV\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: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampled :

B-7DUP

Tot Ion: 49 Resp: 1614752

Ion Ratio Lower Upper

49 100

128 40.3 20.1 60.2

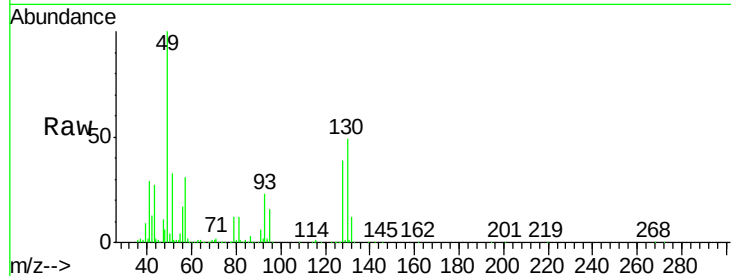
130 51.0 25.9 77.6

Manual Integrations

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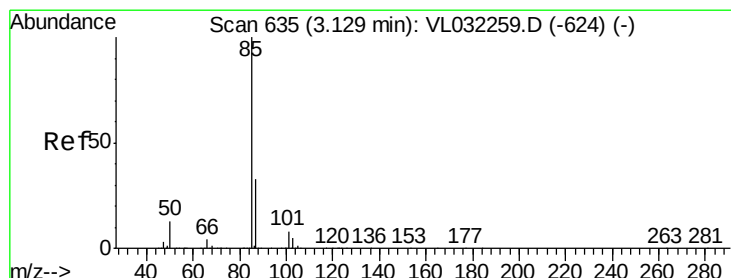
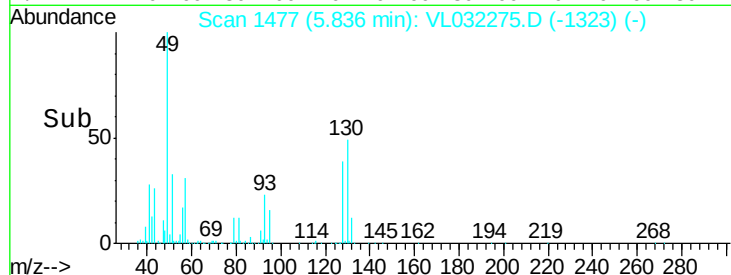
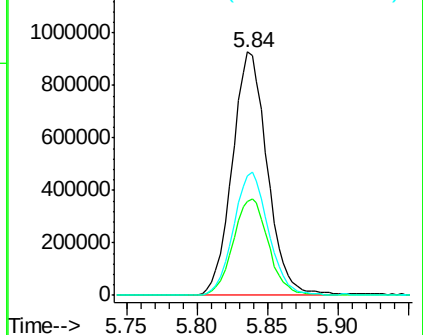
7/20/2018 2:53:19 PM



Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.82 ppbv

RT: 3.13 min Scan# 634

Delta R.T. -0.00 min

Lab File: VL032275.D

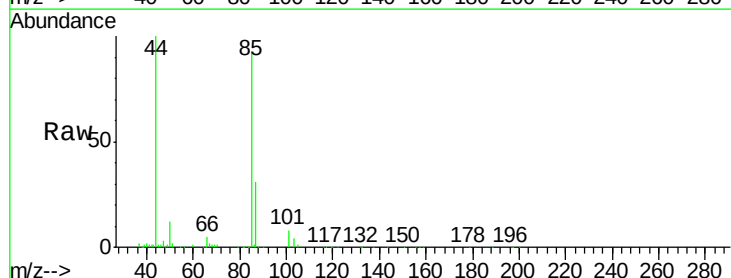
Acq: 19 Jul 2018 00:29

Tgt Ion: 85 Resp: 225084

Ion Ratio Lower Upper

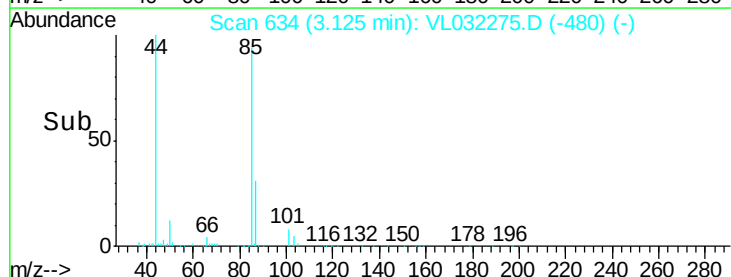
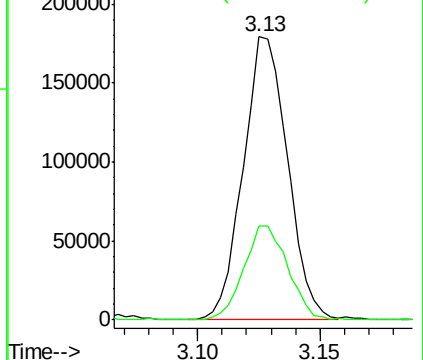
85 100

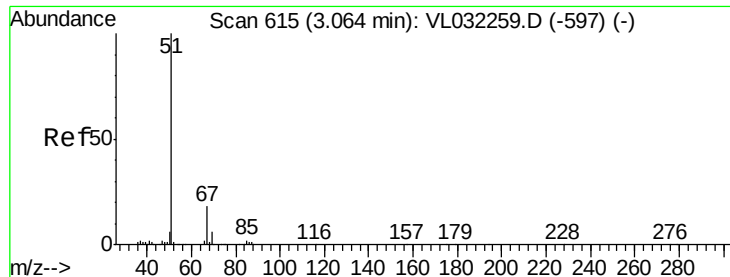
87 33.2 26.2 39.2



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 6.46 ppbv

RT: 3.04 min Scan# 607

Delta R.T. -0.03 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampleId :

B-7DUP

Tot Ion: 51 Resp: 1170343

Ion Ratio Lower Upper

51 100

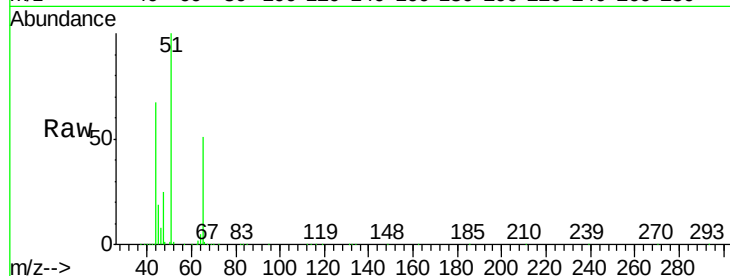
67 4.0 14.2 21.4#

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

3.04

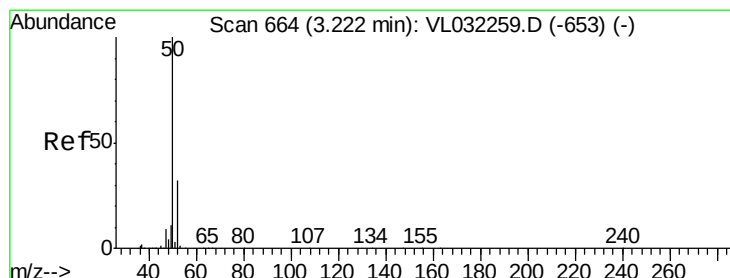
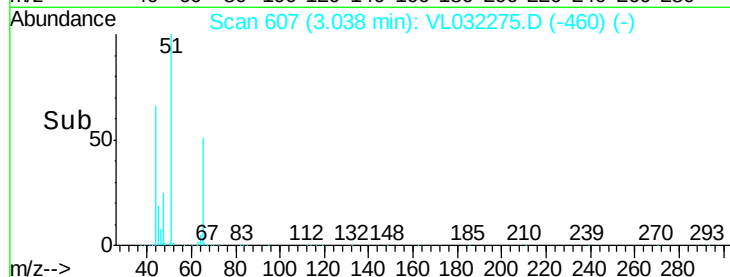
600000

400000

200000

0

Time--> 2.95 3.00 3.05 3.10 3.15



#4

Chloromethane

Concen: 0.63 ppbv

RT: 3.22 min Scan# 665

Delta R.T. 0.00 min

Lab File: VL032275.D

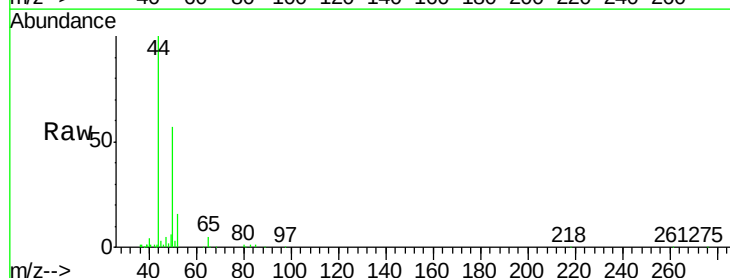
Acq: 19 Jul 2018 00:29

Tgt Ion: 50 Resp: 67486

Ion Ratio Lower Upper

50 100

52 28.5 25.3 37.9



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

3.22

50000

40000

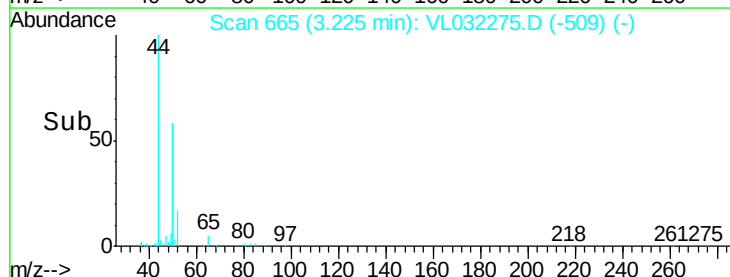
30000

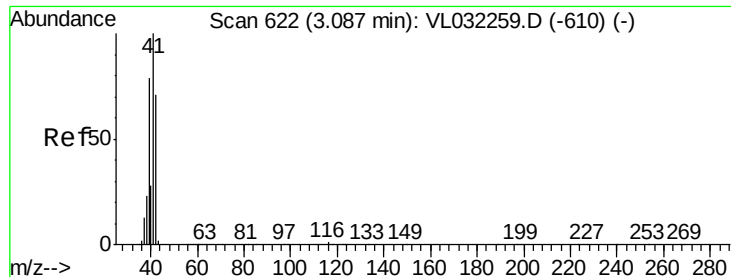
20000

10000

0

Time--> 3.15 3.20 3.25





#9

Propene

Concen: 0.74 ppbv

RT: 3.10 min Scan# 627

Delta R.T. 0.02 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampleId :

B-7DUP

Tot Ion: 41 Resp: 58870

Ion Ratio Lower Upper

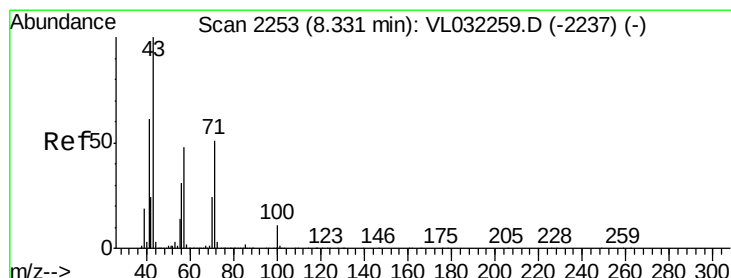
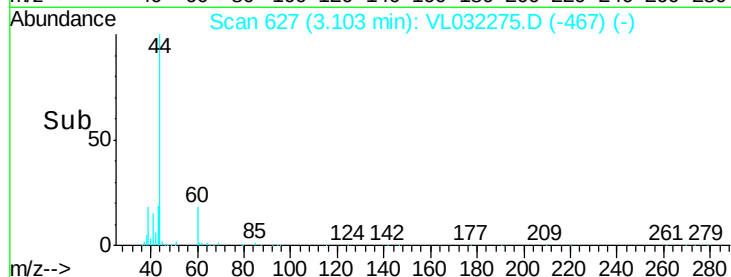
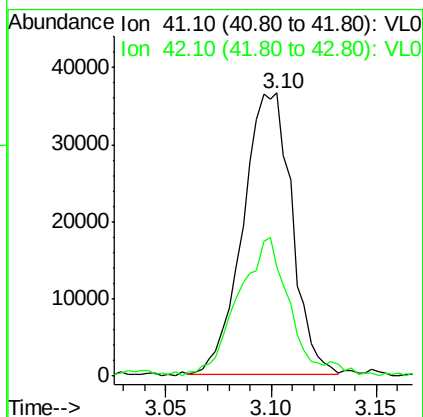
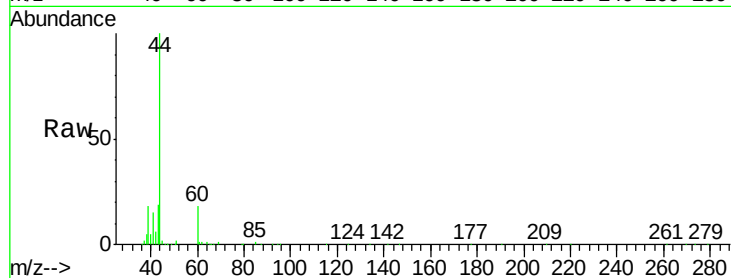
41 100

42 52.8 56.2 84.4#

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#10

Heptane

Concen: 0.46 ppbv m

RT: 8.33 min Scan# 2253

Delta R.T. -0.00 min

Lab File: VL032275.D

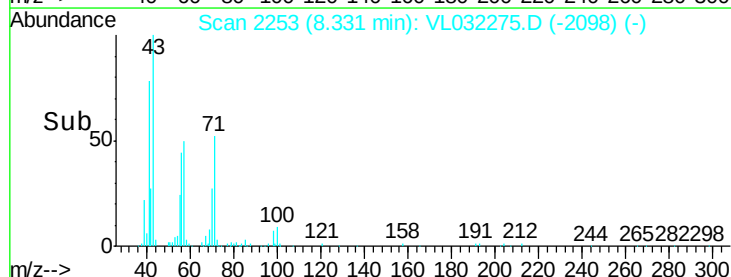
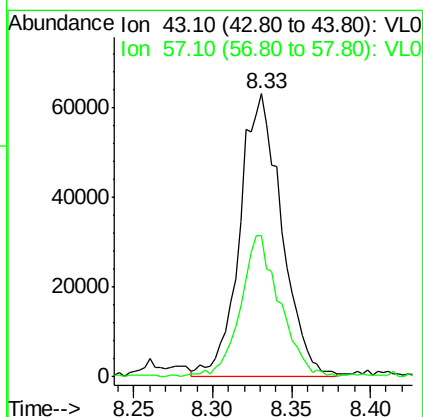
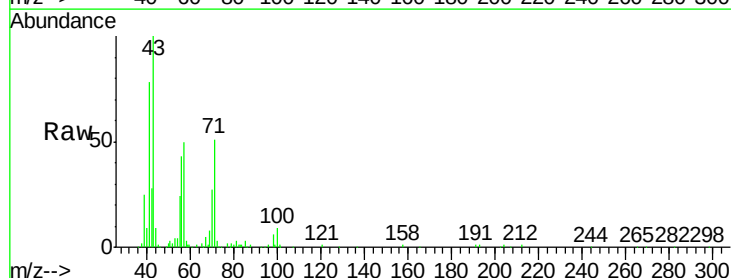
Acq: 19 Jul 2018 00:29

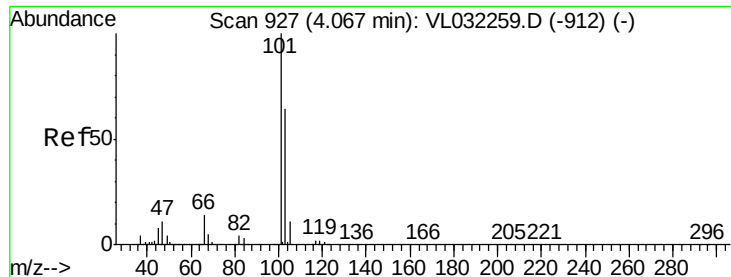
Tgt Ion: 43 Resp: 115881

Ion Ratio Lower Upper

43 100

57 47.2 39.9 59.9





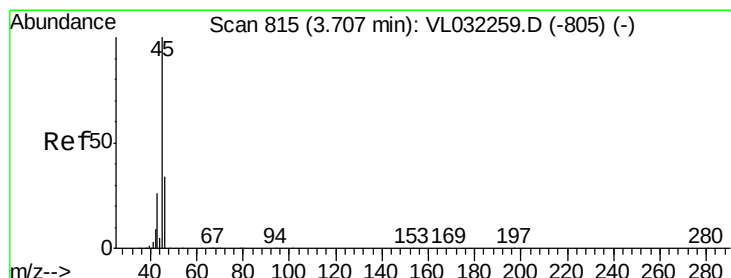
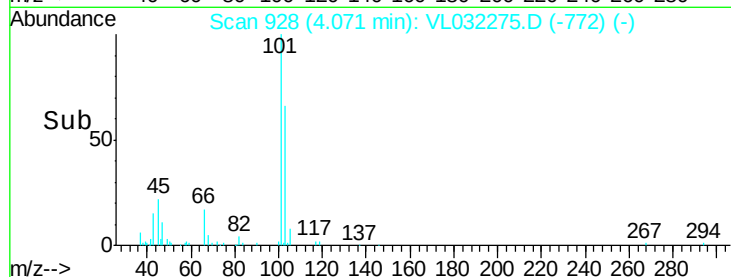
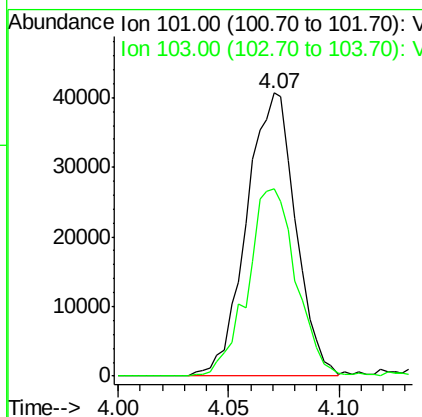
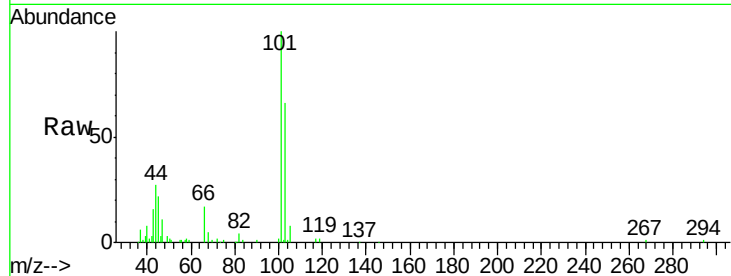
#11
 Trichlorofluoromethane
 Concen: 0.29 ppbv
 RT: 4.07 min Scan# 928
 Delta R.T. 0.00 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7DUP

Tot Ion	Ratio	Lower	Upper
101	100		
103	66.4	51.5	77.3

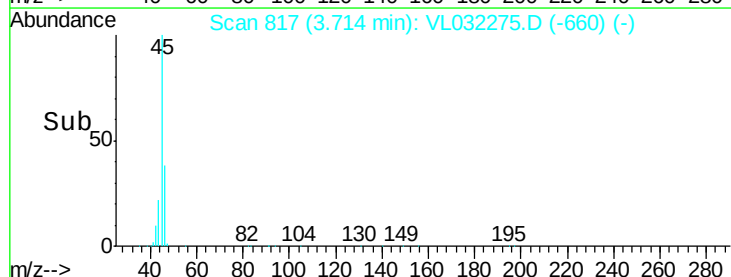
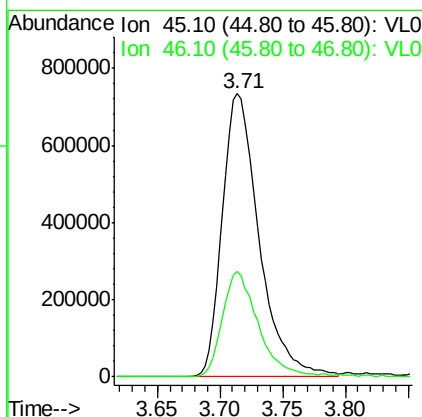
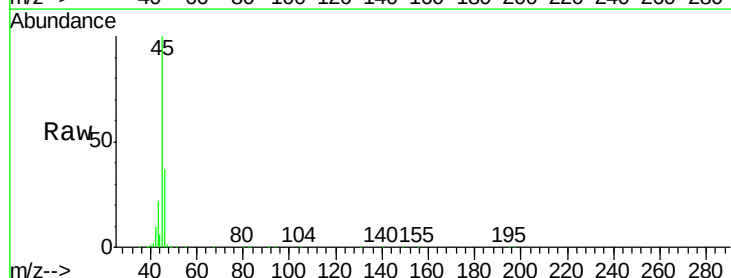
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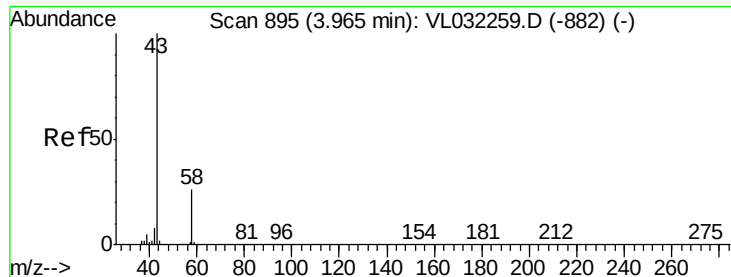
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#13
 Ethanol
 Concen: 66.09 ppbv
 RT: 3.71 min Scan# 817
 Delta R.T. 0.01 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.1	15.2	60.8





#15

Acetone

Concen: 13.47 ppbv

RT: 3.96 min Scan# 894

Delta R.T. -0.00 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampleId :

B-7DUP

Tot Ion: 43 Resp: 2277153

Ion Ratio Lower Upper

43 100

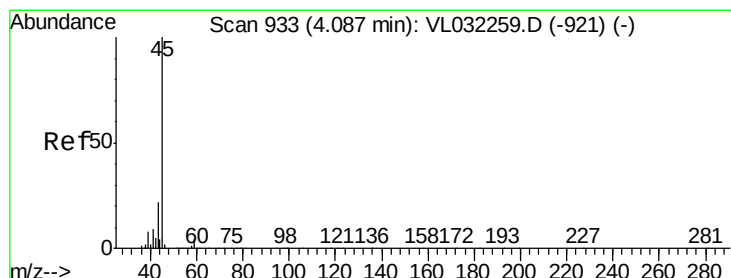
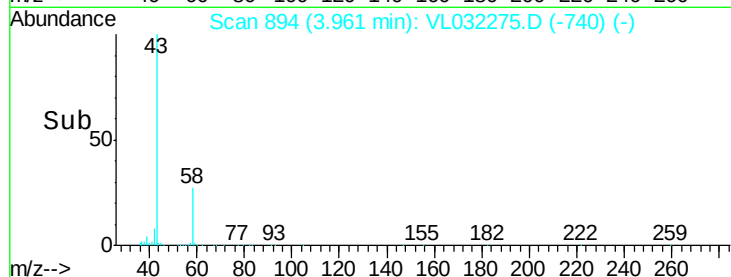
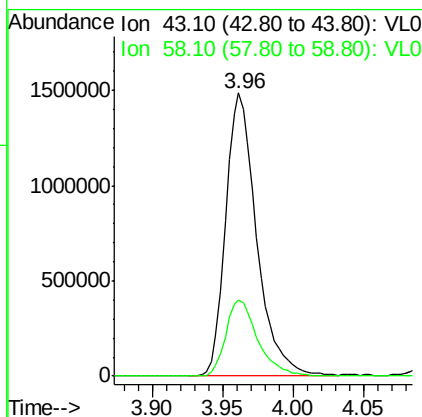
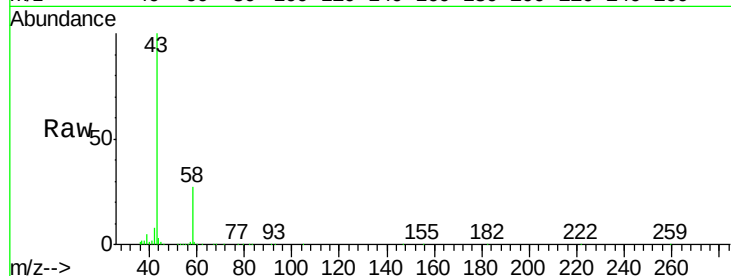
58 28.2 21.8 32.6

Manual Integrations

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#19

Isopropyl Alcohol

Concen: 2.72 ppbv

RT: 4.10 min Scan# 936

Delta R.T. 0.01 min

Lab File: VL032275.D

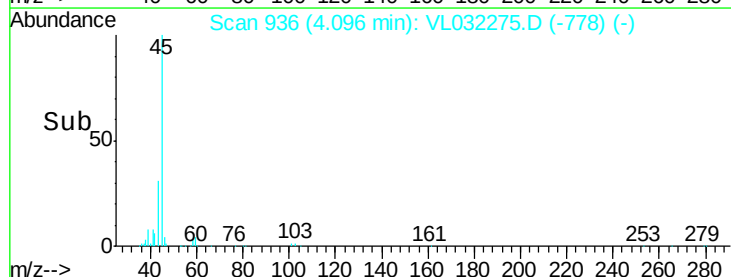
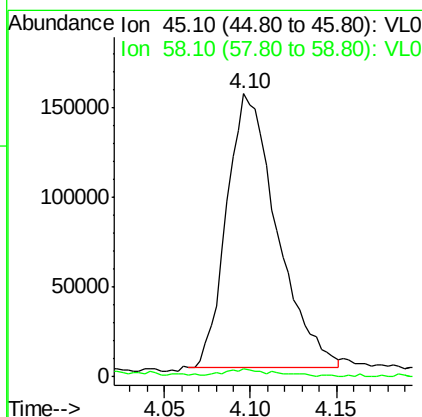
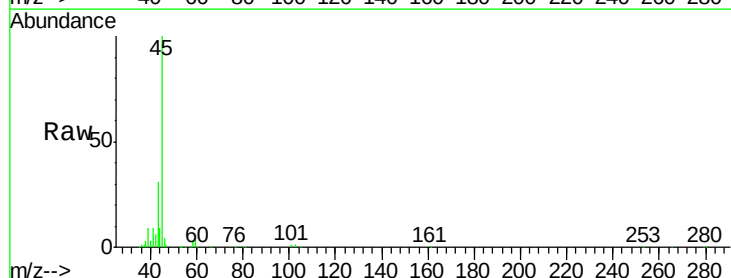
Acq: 19 Jul 2018 00:29

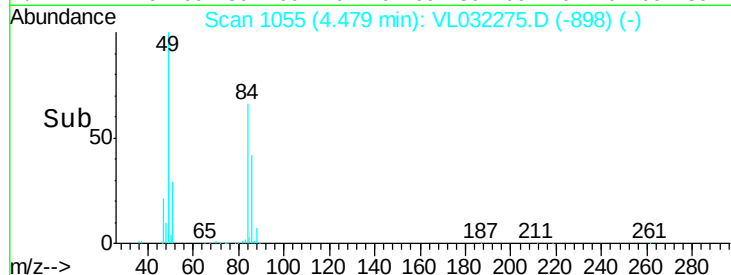
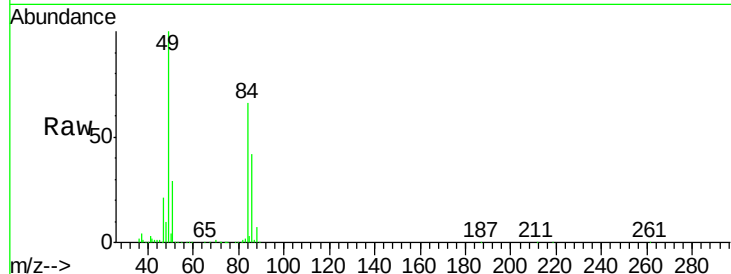
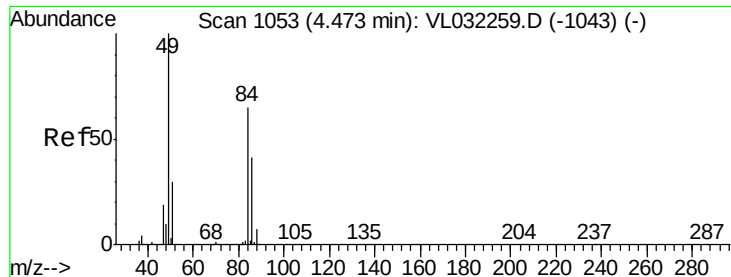
Tgt Ion: 45 Resp: 310406

Ion Ratio Lower Upper

45 100

58 206.3 1.5 2.3#





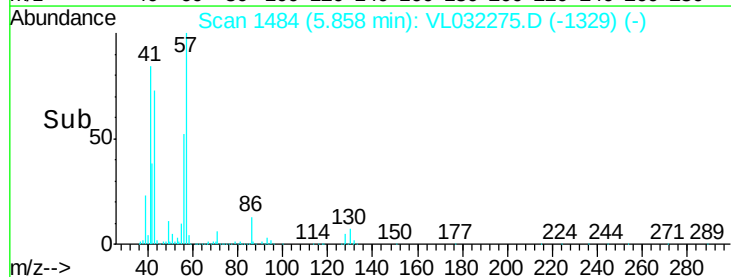
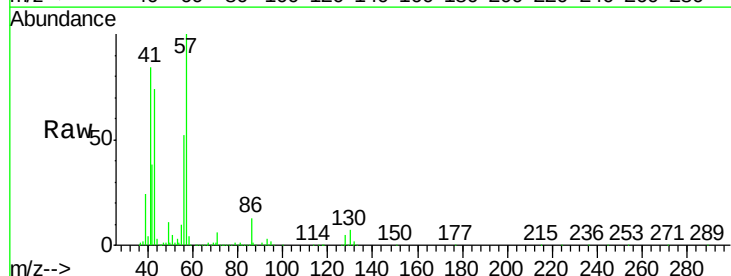
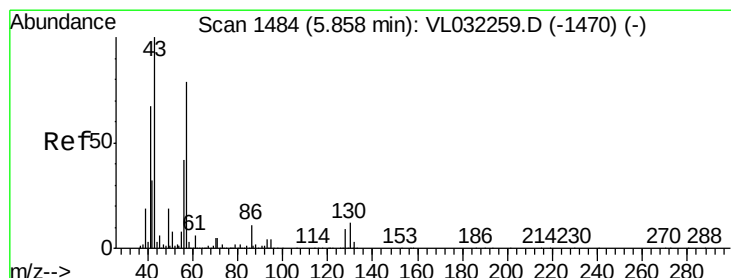
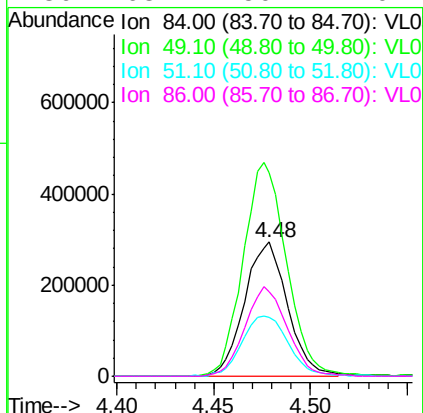
#20
Methvlene Chloride
Concen: 6.97 ppbv
RT: 4.48 min Scan# 1055
Delta R.T. 0.01 min
Lab File: VL032275.D
Acq: 19 Jul 2018 00:29

Tot Ion	Ion	Ratio	Lower	Upper
84	100			
49	152.0	122.4	183.6	
51	44.1	36.8	55.2	
86	63.2	50.7	76.1	

Instrument :
MSVOA_L
ClientSampleId :
B-7DUP

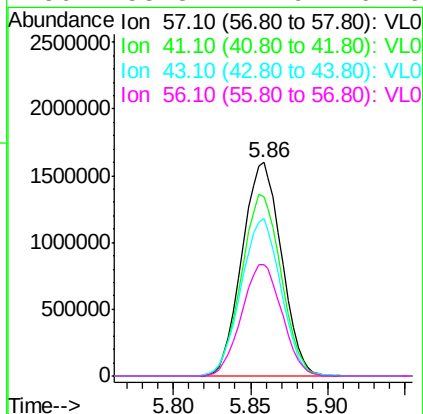
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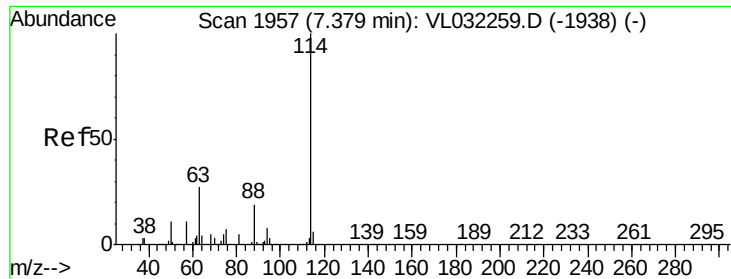
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#26
Hexane
Concen: 16.88 ppbv
RT: 5.86 min Scan# 1484
Delta R.T. -0.00 min
Lab File: VL032275.D
Acq: 19 Jul 2018 00:29

Tgt Ion	Ion	Ratio	Lower	Upper
57	100			
41	85.4	67.9	101.9	
43	74.3	175.9	263.9	
56	53.3	41.9	62.9	





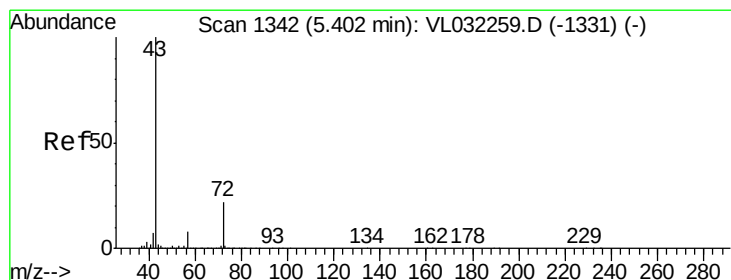
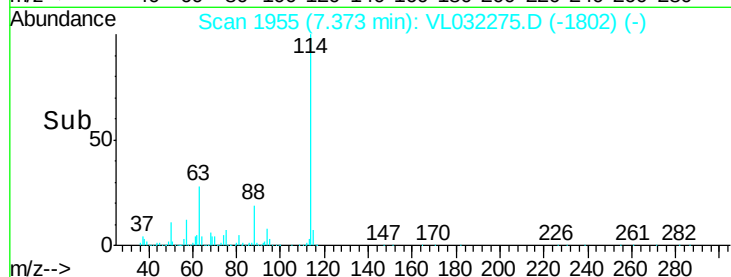
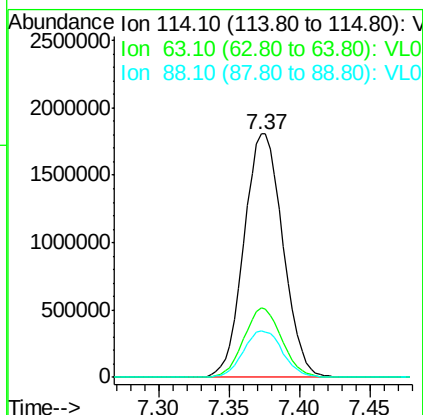
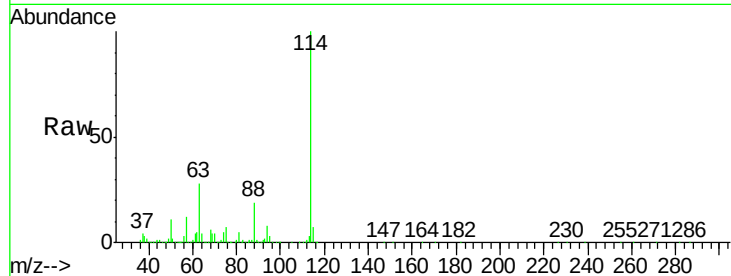
#33
 1,4-Difluorobenzene
 Concen: 10.00 ppbv
 RT: 7.37 min Scan# 1955
 Delta R.T. -0.01 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7DUP

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.0	22.6	33.8
88	19.3	15.2	22.8

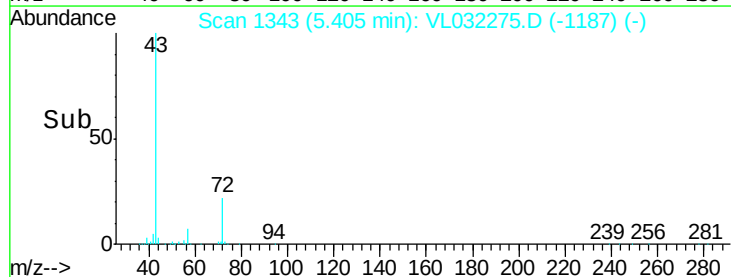
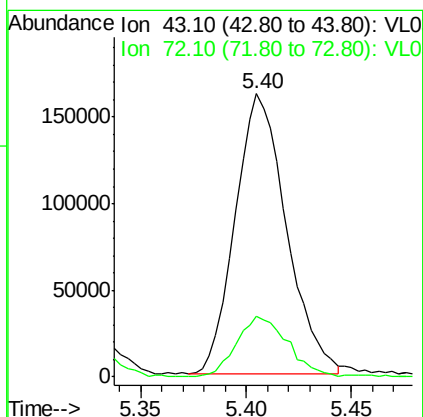
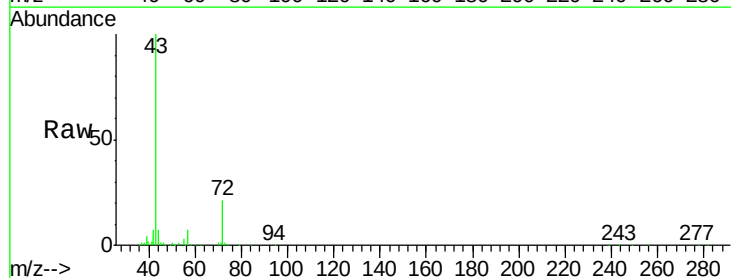
Manual Integrations
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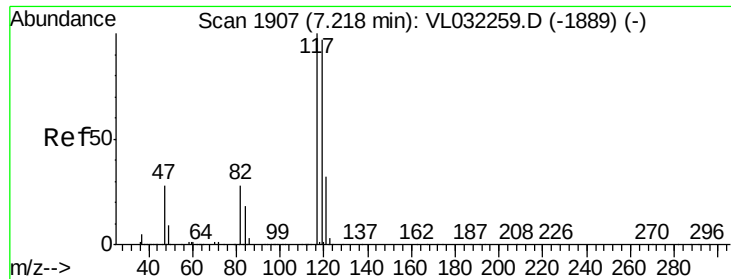
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#34
 2-Butanone
 Concen: 1.14 ppbv
 RT: 5.40 min Scan# 1343
 Delta R.T. 0.00 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Tgt Ion	Ratio	Lower	Upper
43	100		
72	22.1	17.7	26.5





#35

Carbon Tetrachloride

Concen: 0.07 ppbv m

RT: 7.21 min Scan# 1905

Delta R.T. -0.01 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

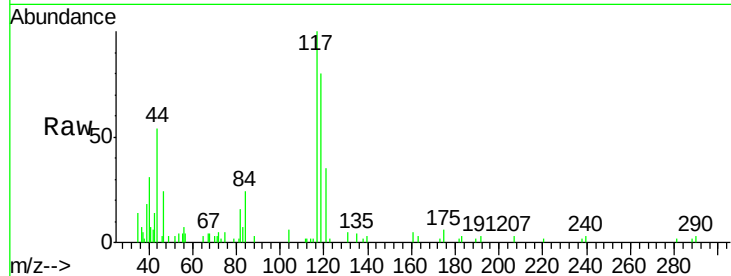
ClientSampleId :

B-7DUP

Tot Ion:	117	Resp:	17748
Ion	Ratio	Lower	Upper
117	100		
119	79.6	77.4	116.0
121	35.1	25.4	38.2

Manual Integrations
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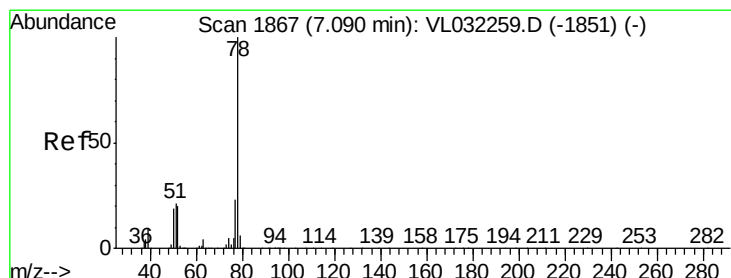
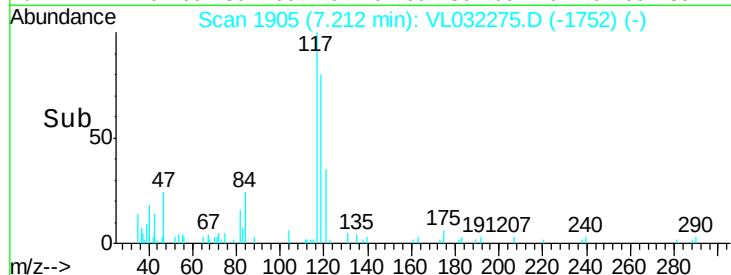
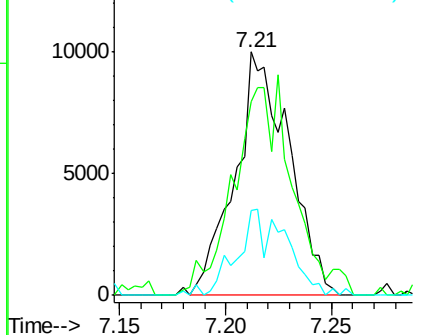
MMDadoda
7/20/2018 2:53:19 PM



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: 0.17 ppbv

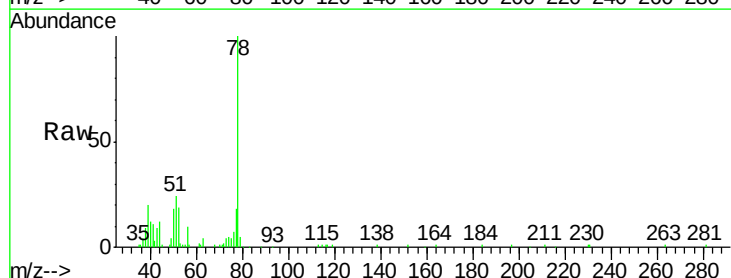
RT: 7.09 min Scan# 1866

Delta R.T. -0.00 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

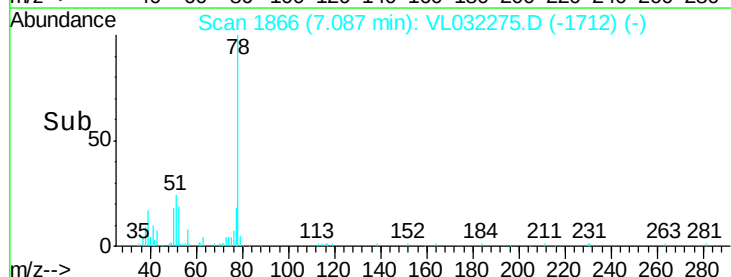
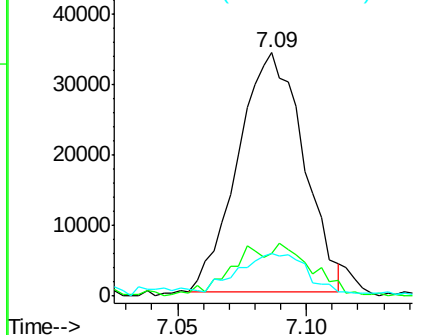
Tgt Ion:	78	Resp:	60232
Ion	Ratio	Lower	Upper
78	100		
77	16.5	18.6	27.8#
50	15.1	15.0	22.6

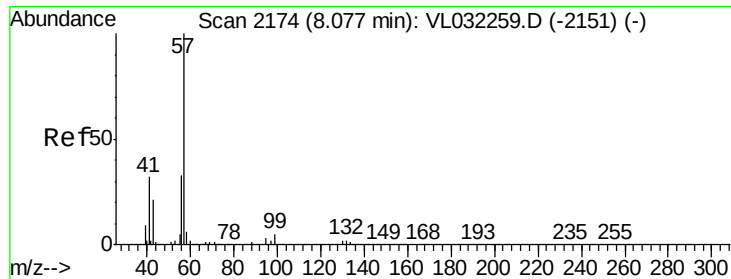


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





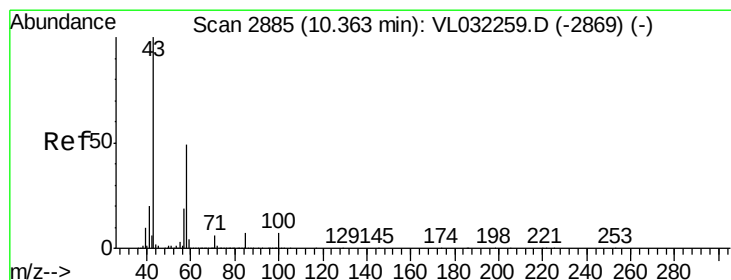
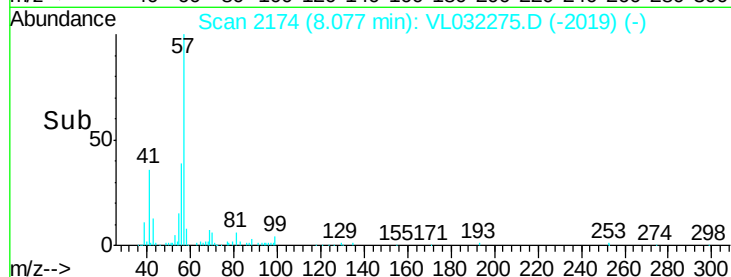
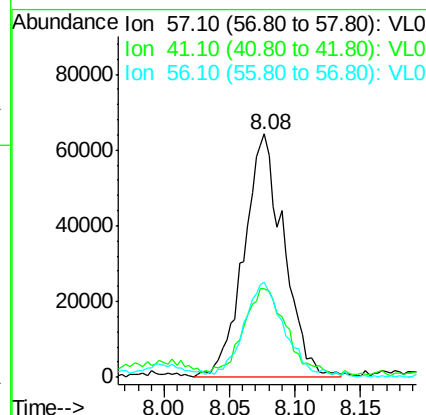
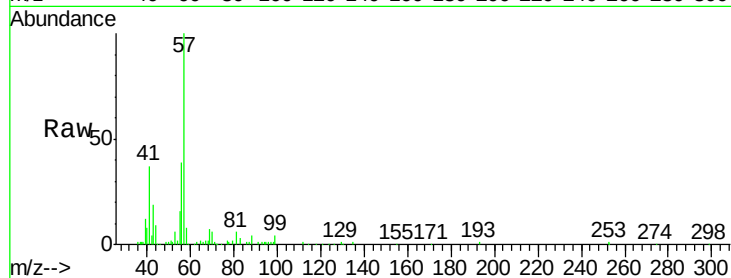
#44
 2,2,4-Trimethylpentane
 Concen: 0.23 ppbv m
 RT: 8.08 min Scan# 2174
 Delta R.T. -0.00 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Instrument :
 MSVOA_L
 ClientSampleId :
 B-7DUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	37.6	24.4	36.6#
56	40.9	25.7	38.5#

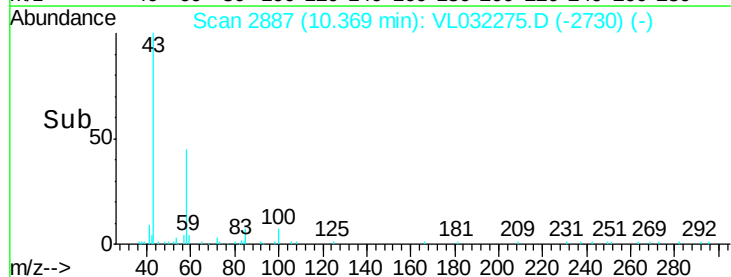
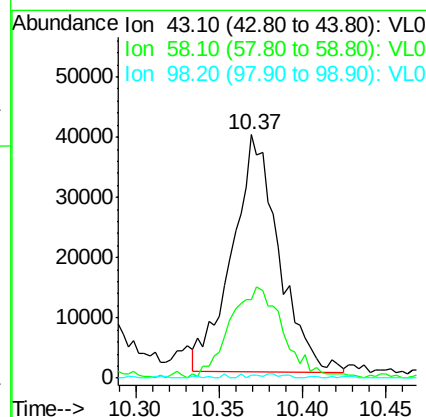
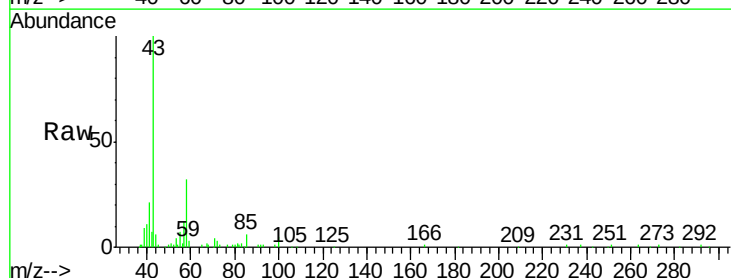
Manual Integrations
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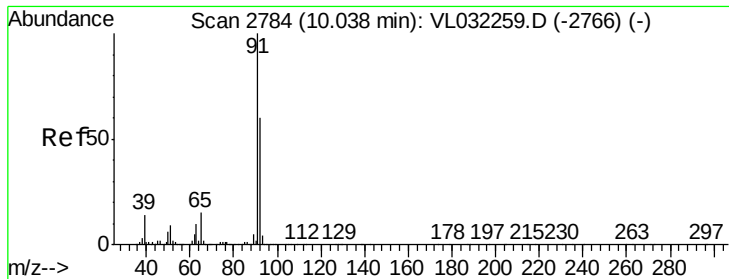
MMDadoda
 7/20/2018 2:53:19 PM



#51
 2-Hexanone
 Concen: 0.25 ppbv m
 RT: 10.37 min Scan# 2887
 Delta R.T. 0.01 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Tgt Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.4	59.2#
98	0.5	0.2	0.2#





#53

Toluene

Concen: 1.05 ppbv

RT: 10.03 min Scan# 2783

Delta R.T. -0.00 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampleId :

B-7DUP

Tot Ion: 91 Resp: 439077

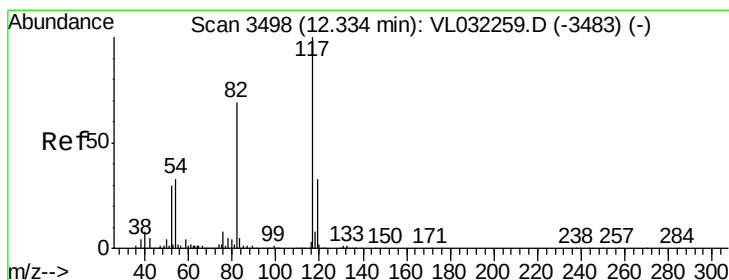
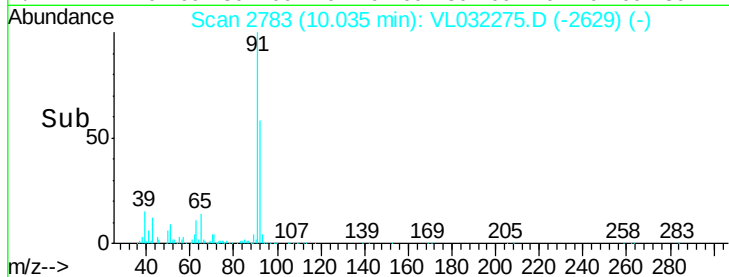
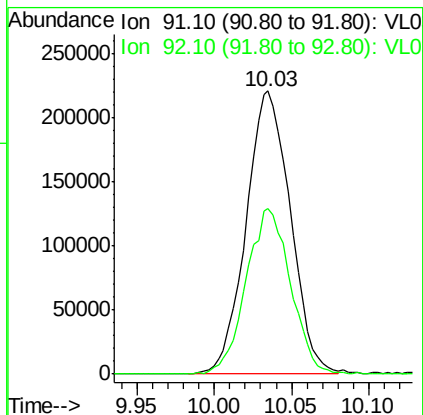
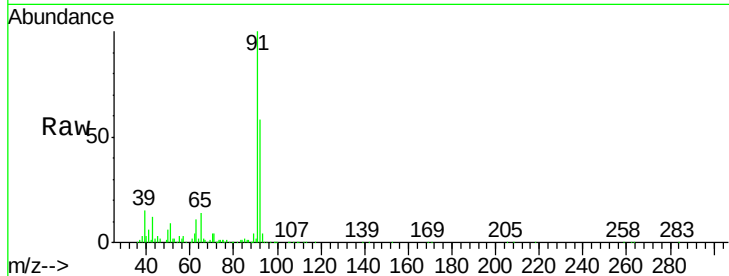
Ion Ratio Lower Upper

91 100

92 59.0 48.6 72.8

Manual Integrations
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#55

Chlorobenzene-d5

Concen: 10.00 ppbv

RT: 12.33 min Scan# 3497

Delta R.T. -0.00 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

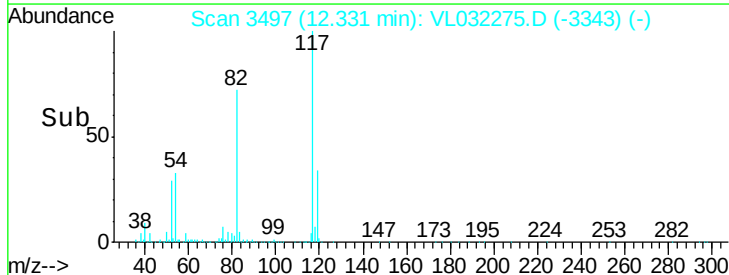
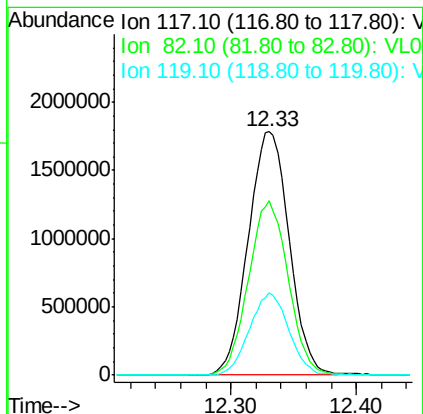
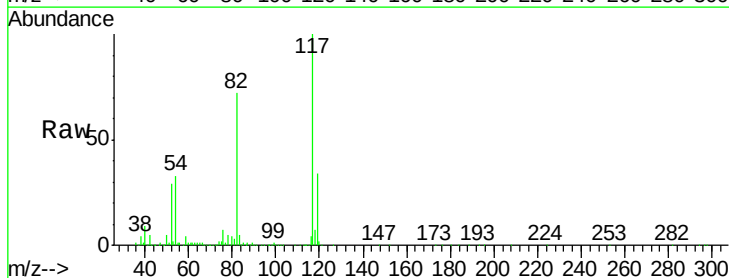
Tgt Ion: 117 Resp: 4051460

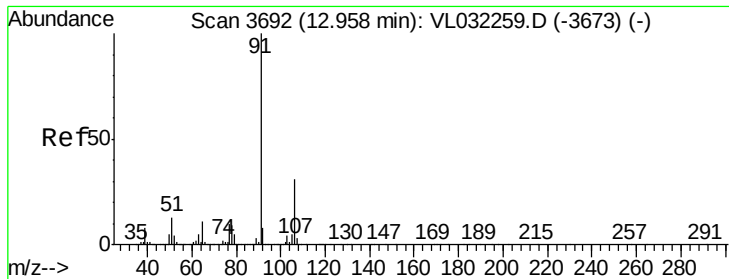
Ion Ratio Lower Upper

117 100

82 70.2 53.9 80.9

119 32.6 25.5 38.3





#58

Ethyl Benzene

Concen: 0.28 ppbv

RT: 12.95 min Scan# 3690

Delta R.T. -0.01 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

ClientSampleId :

B-7DUP

Tot Ion: 91 Resp: 159404

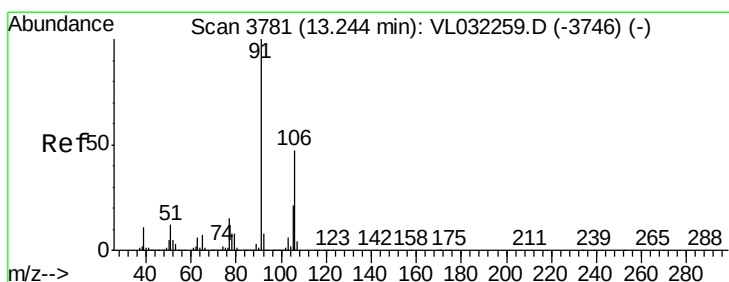
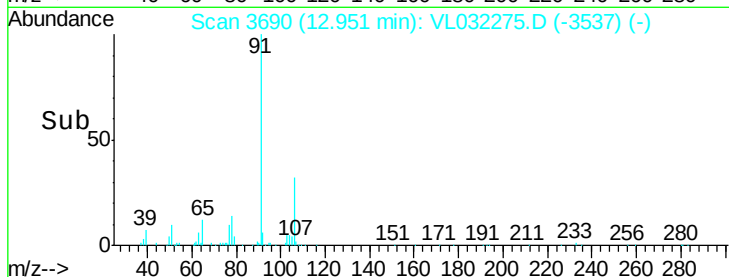
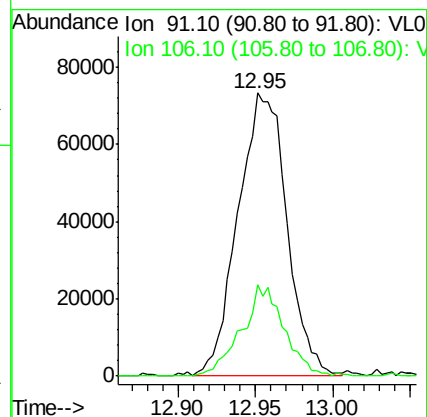
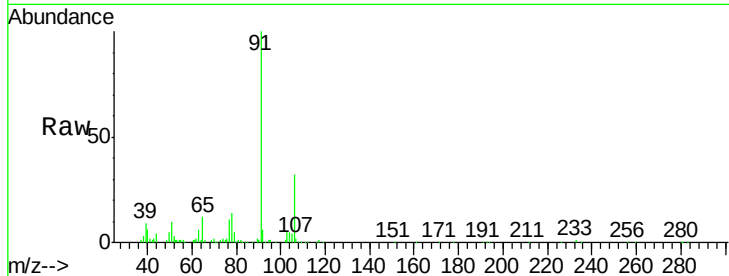
Ion Ratio Lower Upper

91 100

106 32.1 24.5 36.7

Manual Integrations
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#59

m/p-Xylene

Concen: 1.51 ppbv

RT: 13.21 min Scan# 3772

Delta R.T. -0.03 min

Lab File: VL032275.D

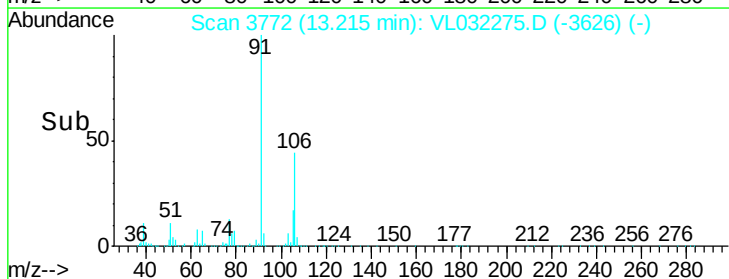
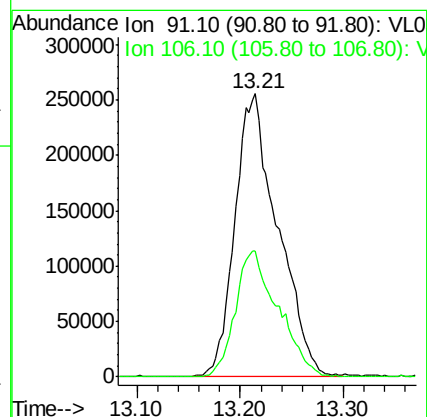
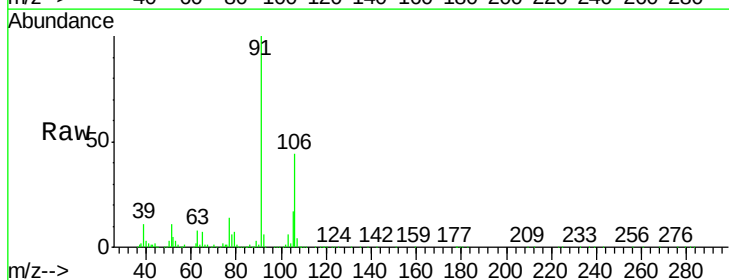
Acq: 19 Jul 2018 00:29

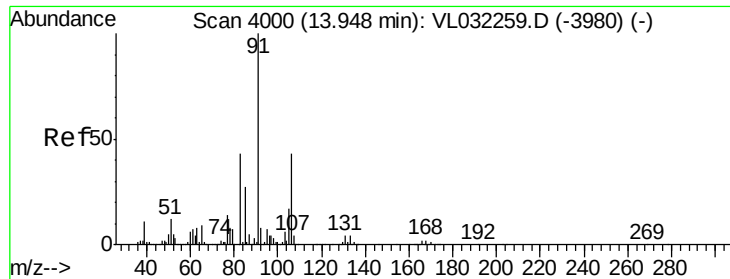
Tgt Ion: 91 Resp: 734015

Ion Ratio Lower Upper

91 100

106 44.8 36.2 54.2





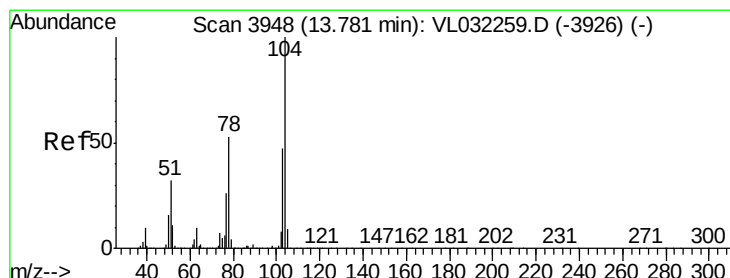
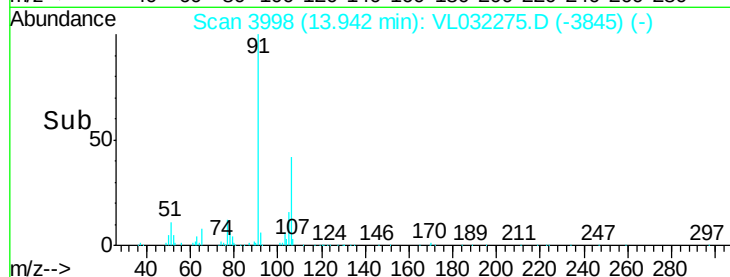
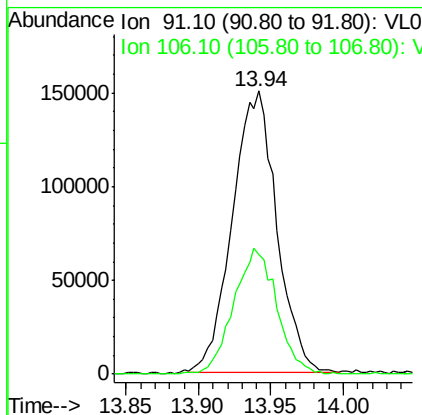
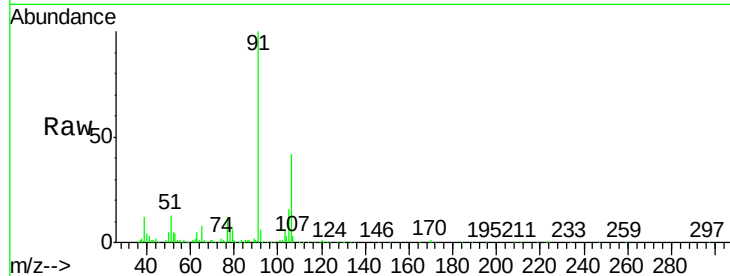
#60
o-Xylene
Concen: 0.65 ppbv
RT: 13.94 min Scan# 3998
Delta R.T. -0.01 min
Lab File: VL032275.D
Acq: 19 Jul 2018 00:29

Instrument :
MSVOA_L
ClientSampleId :
B-7DUP

Tot Ion	Ratio	Lower	Upper
91	100		
106	43.7	21.7	65.1

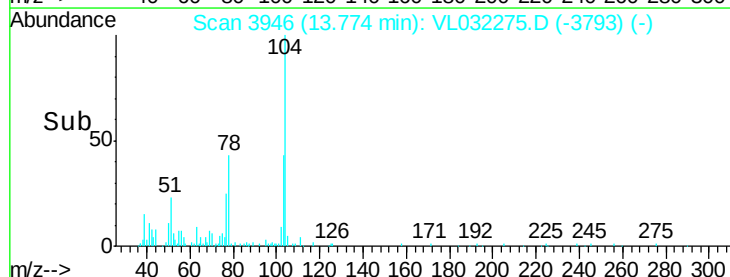
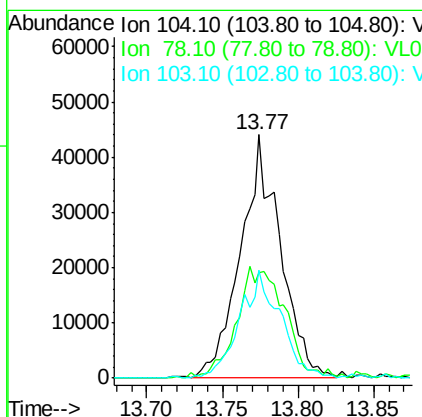
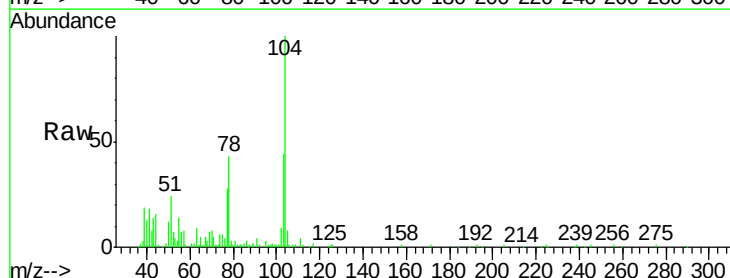
Manual Integrations
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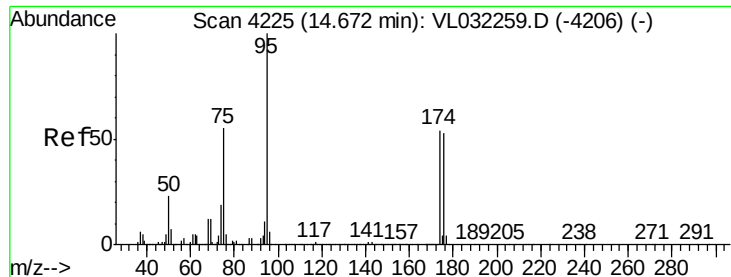
MMDadoda
7/20/2018 2:53:19 PM



#61
Styrene
Concen: 0.22 ppbv m
RT: 13.77 min Scan# 3946
Delta R.T. -0.01 min
Lab File: VL032275.D
Acq: 19 Jul 2018 00:29

Tgt Ion	Ratio	Lower	Upper
104	100		
78	55.3	43.2	64.8
103	45.2	37.8	56.6





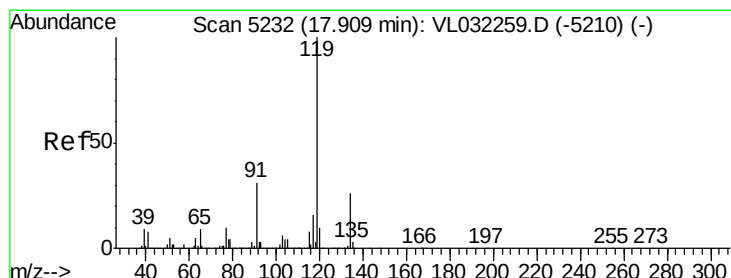
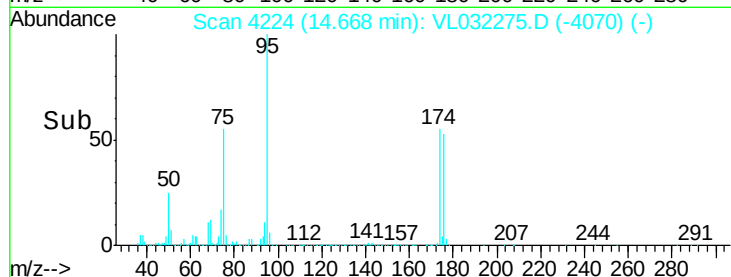
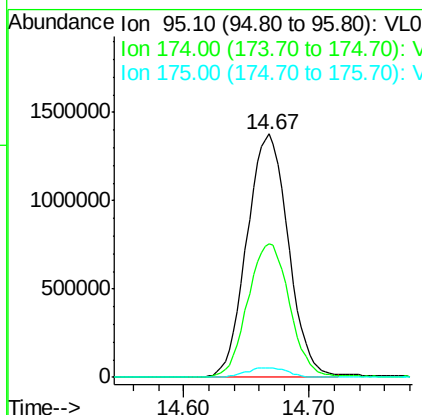
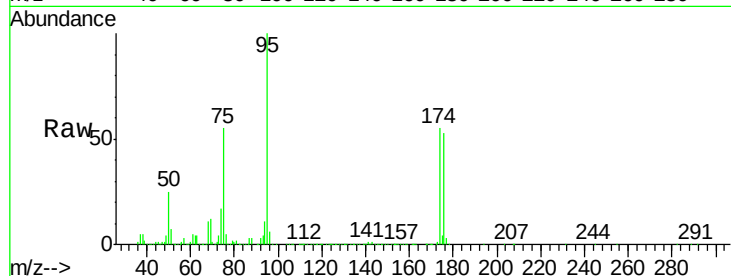
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.66 ppbv
 RT: 14.67 min Scan# 4224
 Delta R.T. -0.00 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Instrument :
 MSVOA_L
 ClientSampleID :
 B-7DUP

Tot Ion: 95 Resp: 3173966
 Ion Ratio Lower Upper
 95 100
 174 56.3 44.3 66.5
 175 4.1 3.3 4.9

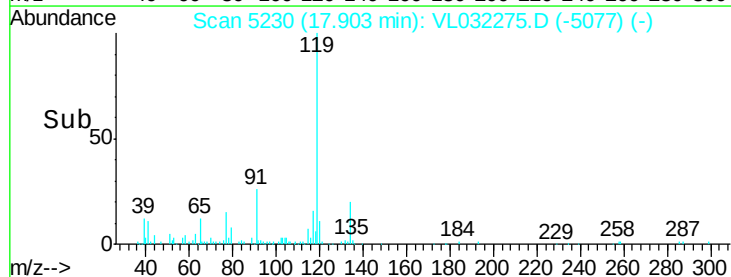
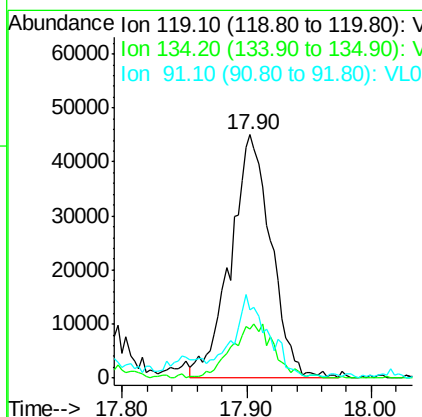
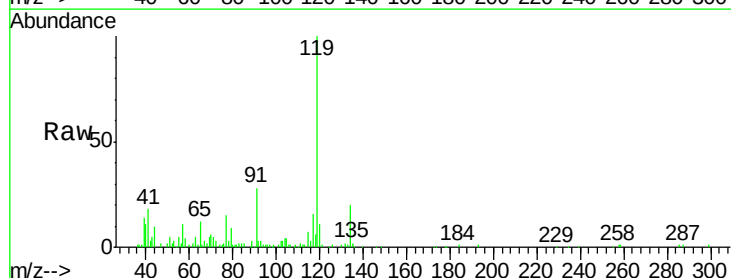
Manual Integrations
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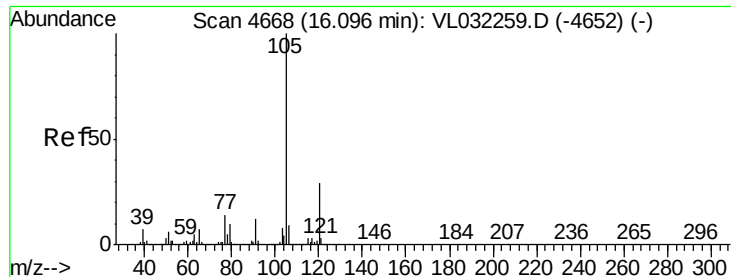
MMDadoda
 7/20/2018 2:53:19 PM



#69
 p-Isopropyltoluene
 Concen: 0.15 ppbv m
 RT: 17.90 min Scan# 5230
 Delta R.T. -0.01 min
 Lab File: VL032275.D
 Acq: 19 Jul 2018 00:29

Tgt Ion: 119 Resp: 101785
 Ion Ratio Lower Upper
 119 100
 134 23.7 20.3 30.5
 91 37.6 24.1 36.1#





#72

4-Ethyltoluene

Concen: 0.12 ppbv

RT: 16.09 min Scan# 4666

Delta R.T. -0.01 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Instrument :

MSVOA_L

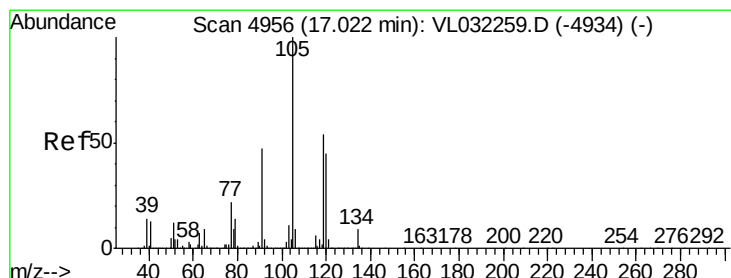
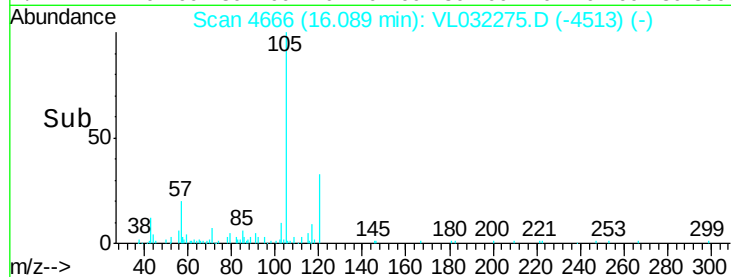
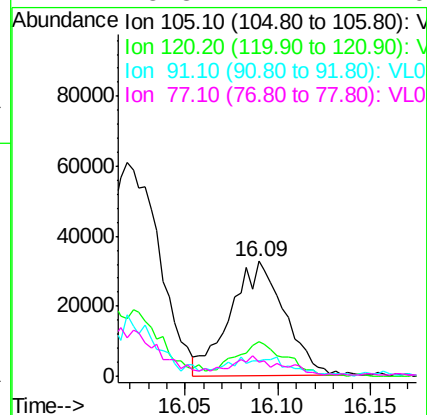
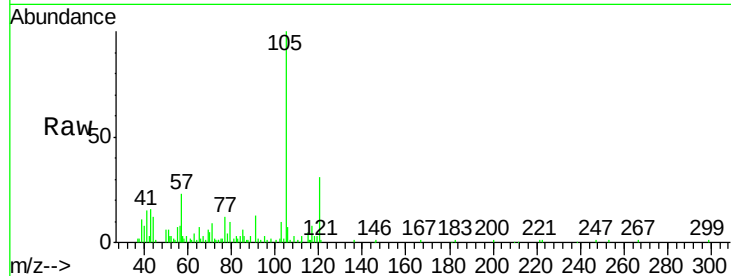
ClientSampleId :

B-7DUP

Tot Ion:	105	Resp:	66387
Ion Ratio	Lower	Upper	
105	100		
120	28.3	23.0	34.6
91	16.6	10.1	15.1#
77	15.3	11.4	17.0

Manual Integrations
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7/20/2018 2:53:19 PM



#74

1,2,4-Trimethylbenzene

Concen: 0.28 ppbv

RT: 17.01 min Scan# 4953

Delta R.T. -0.01 min

Lab File: VL032275.D

Acq: 19 Jul 2018 00:29

Tgt Ion:	105	Resp:	159993
Ion Ratio	Lower	Upper	
105	100		
120	37.7	35.8	53.6
91	12.8	38.2	57.4#
77	12.7	17.5	26.3#

