

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121718\
 Data File : VL033001.D
 Acq On : 17 Dec 2018 18:34
 Operator : SY/AP
 Sample : J6382-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 P0068-IA002-181212-01

Manual Integrations
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 12/19/2018 1:59:57 PM

Quant Time: Dec 18 01:29:51 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.77	49	1028247	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	2413148	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.25	117	2816018	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.59	95	2069164	9.95	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.08	85	89814	0.654	ppbv	100
4) Chloromethane	3.17	50	55498	1.224	ppbv	94
9) Propene	3.05	41	248658m	8.075	ppbv	
10) Heptane	8.26	43	358317	3.098	ppbv	97
11) Trichlorofluoromethane	4.01	101	50540	0.391	ppbv	86
13) Ethanol	3.67	45	3040955	286.831	ppbv	96
15) Acetone	3.90	43	1566524	17.749	ppbv #	79
19) Isopropyl Alcohol	4.05	45	353926	6.386	ppbv #	1
20) Methylene Chloride	4.42	84	367780	8.526	ppbv	97
22) trans-1,2-Dichloroethene	4.97	96	141340	2.635	ppbv	97
26) Hexane	5.79	57	1217244	12.646	ppbv #	46
30) Cyclohexane	7.26	84	170437	2.136	ppbv	85
34) 2-Butanone	5.34	43	182436	1.736	ppbv	96
35) Carbon Tetrachloride	7.14	117	14857m	0.078	ppbv	
36) Benzene	7.01	78	1131782	6.377	ppbv	99
44) 2,2,4-Trimethylpentane	8.00	57	2537781	8.423	ppbv	95
50) 4-Methyl-2-Pentanone	8.90	43	47409m	0.282	ppbv	
52) Tetrachloroethene	11.39	164	55138m	0.854	ppbv	
53) Toluene	9.96	91	9031964	47.980	ppbv	96
58) Ethyl Benzene	12.88	91	1212309	4.036	ppbv	97
59) m/p-Xylene	13.13	91	4077358	14.971	ppbv #	100
60) o-Xylene	13.86	91	1268023	4.610	ppbv	99
61) Styrene	13.70	104	32487	0.178	ppbv	93
64) n-propylbenzene	15.73	120	53888	0.541	ppbv	91
72) 4-Ethyltoluene	16.01	105	421389	1.372	ppbv	98
73) 1,3,5-Trimethylbenzene	16.17	105	243026	0.811	ppbv	99
74) 1,2,4-Trimethylbenzene	16.93	105	1172688	3.465	ppbv #	70
79) Naphthalene	22.43	128	44760m	0.205	ppbv	

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

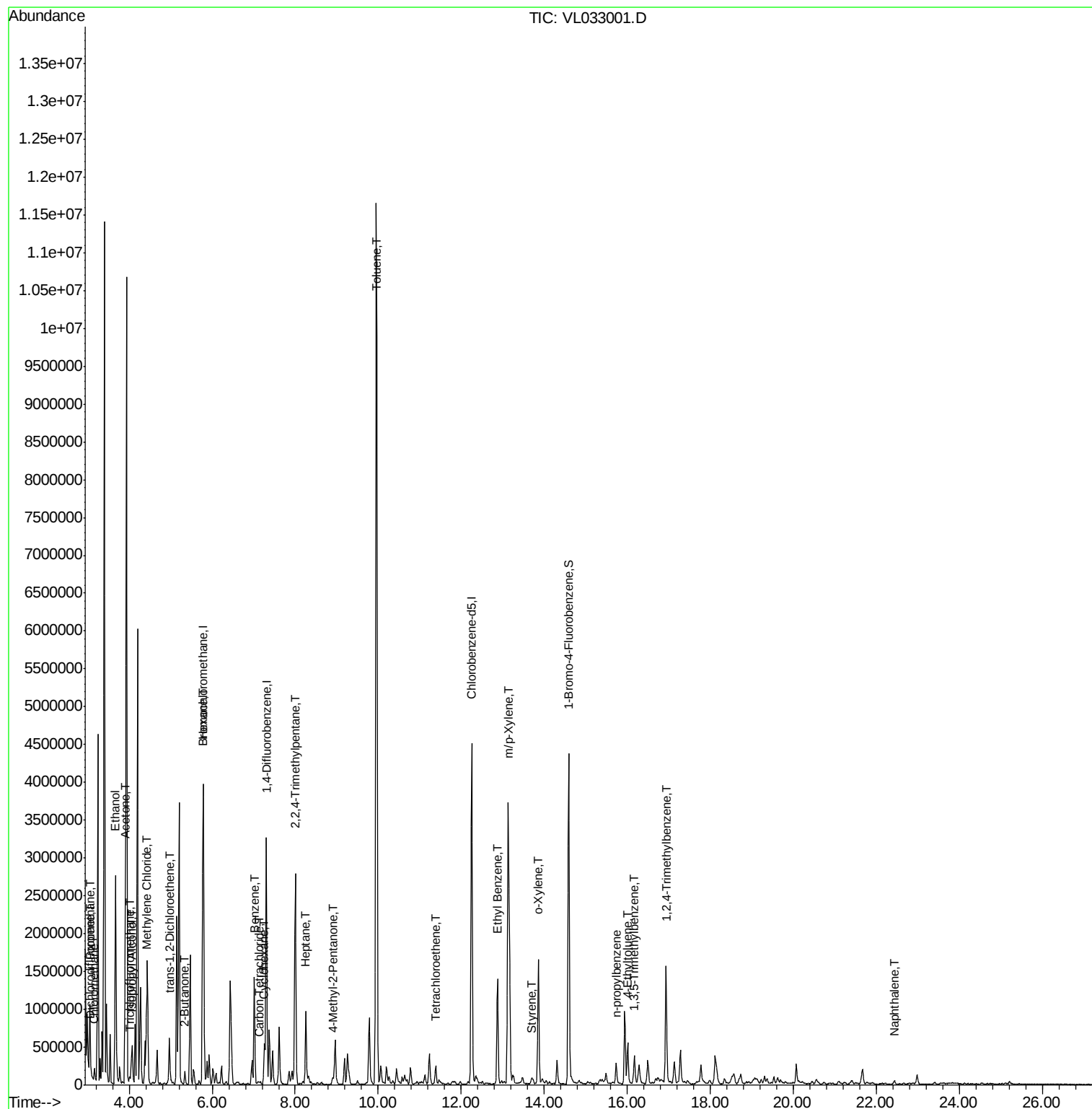
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121718\
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Quant Time: Dec 18 01:29:51 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec
QLast Update : Fri Dec 07 09:35:17 2018
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.77 min Scan# 881

Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion: 49 Resp: 1028247

Ion Ratio Lower Upper

49 100

128 52.5 26.3 78.8

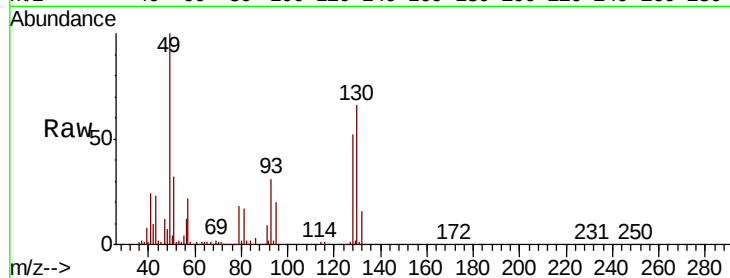
130 67.2 33.9 101.7

Manual Integrations

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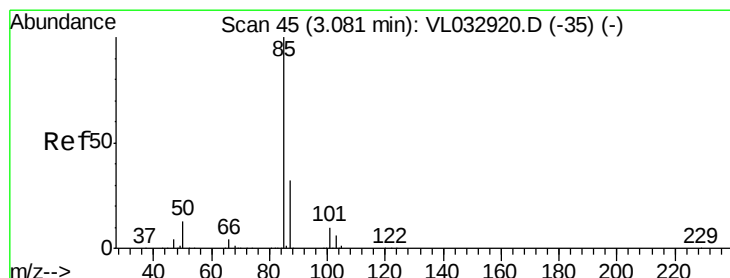
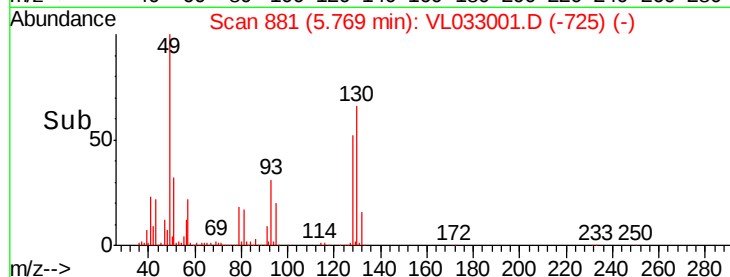
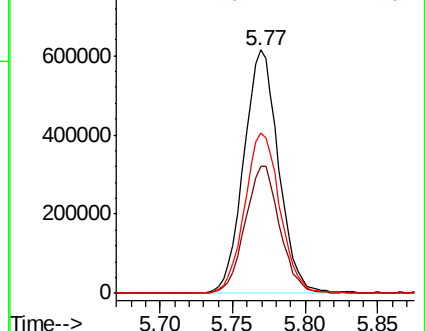
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.654 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL033001.D

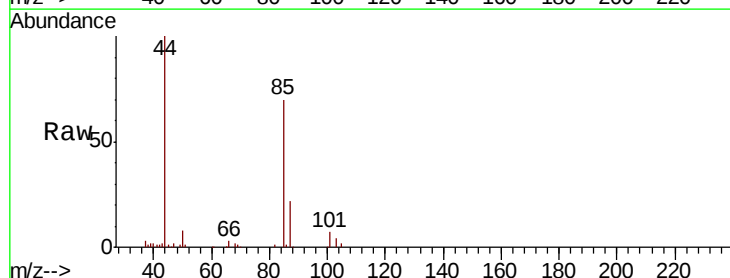
Acq: 17 Dec 2018 18:34

Tgt Ion: 85 Resp: 89814

Ion Ratio Lower Upper

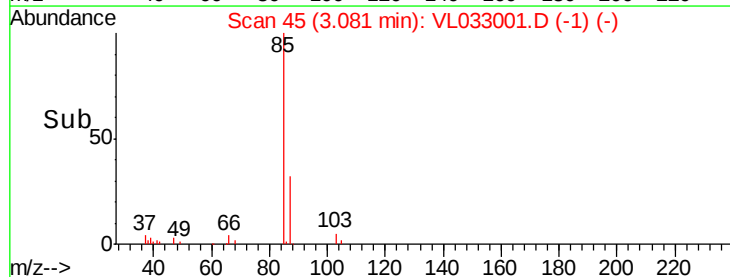
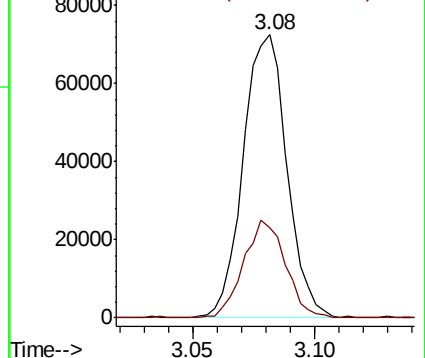
85 100

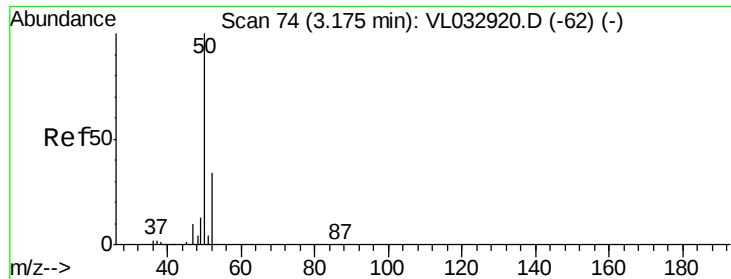
87 31.9 25.7 38.5



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 1.224 ppbv

RT: 3.17 min Scan# 73

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion: 50 Resp: 55498

Ion Ratio Lower Upper

50 100

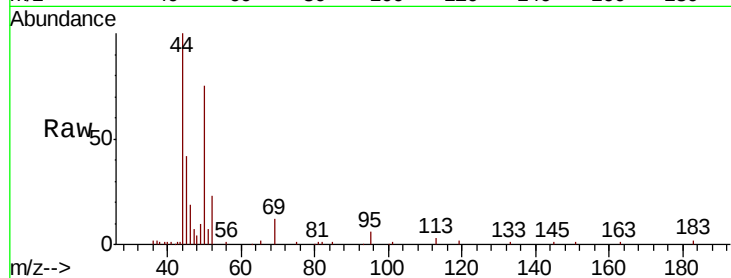
52 30.4 27.3 40.9

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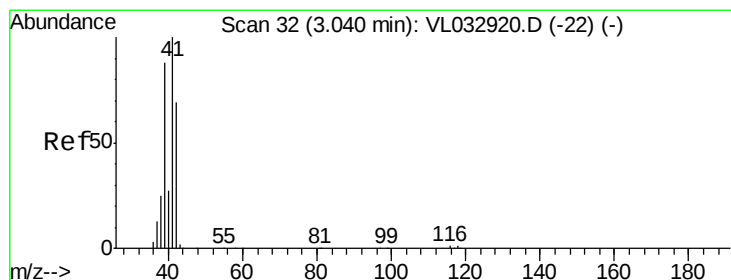
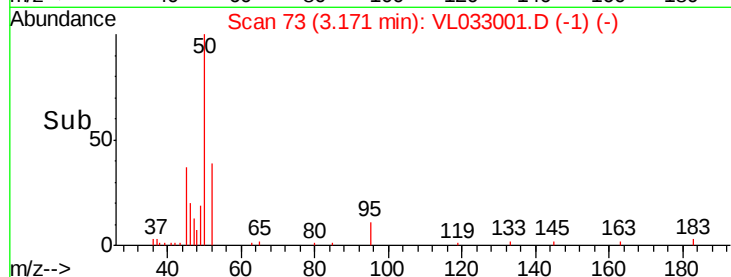
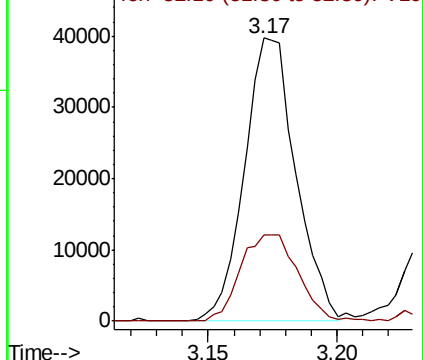
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Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



#9

Propene

Concen: 8.075 ppbv m

RT: 3.05 min Scan# 35

Delta R.T. 0.01 min

Lab File: VL033001.D

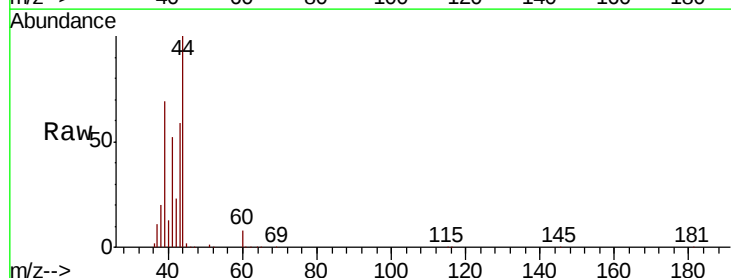
Acq: 17 Dec 2018 18:34

Tgt Ion: 41 Resp: 248658

Ion Ratio Lower Upper

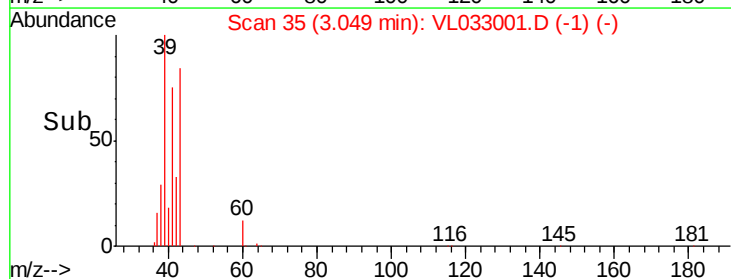
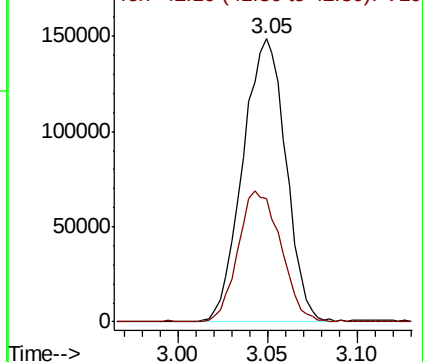
41 100

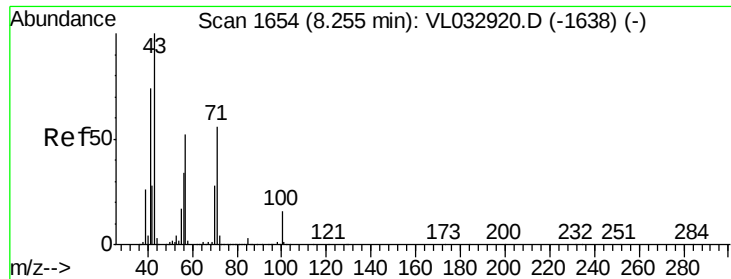
42 323.1 56.2 84.2#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





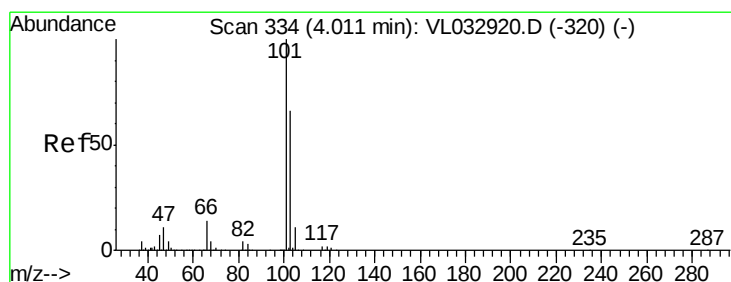
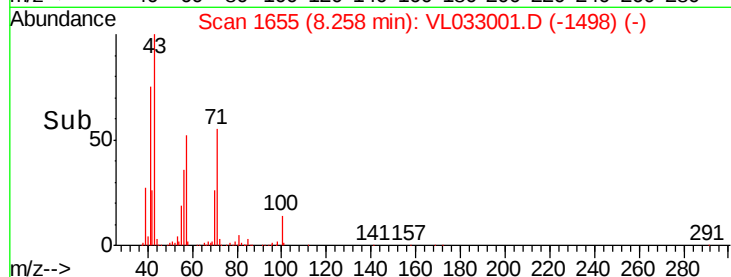
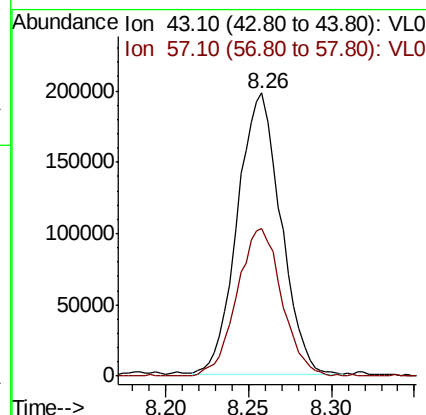
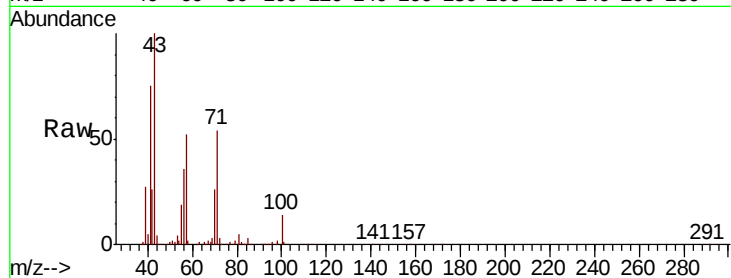
#10
Heptane
Concen: 3.098 ppbv
RT: 8.26 min Scan# 1655
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 43 Resp: 358317
Ion Ratio Lower Upper
43 100
57 54.5 41.8 62.6

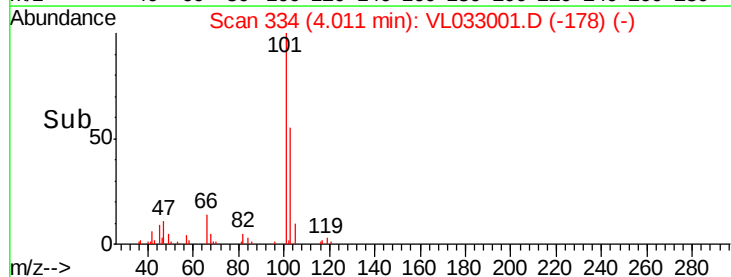
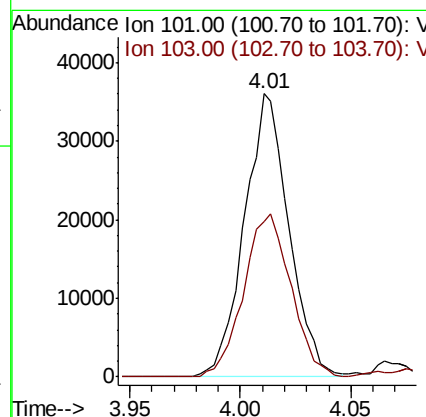
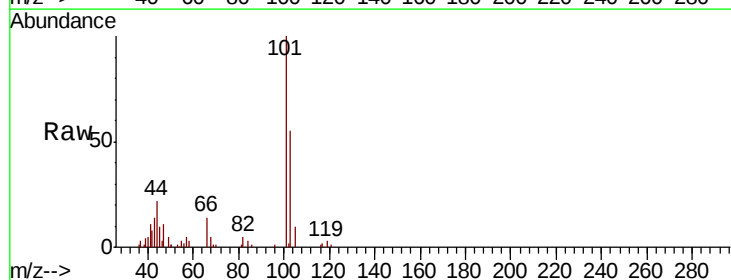
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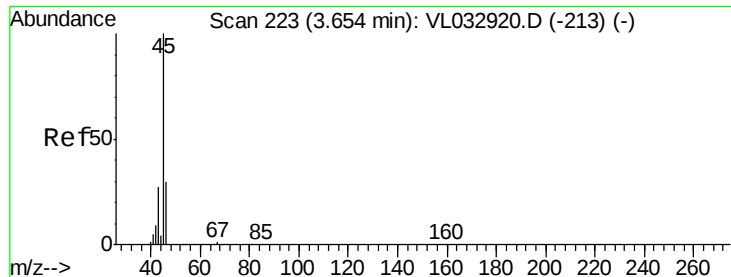
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#11
Trichlorofluoromethane
Concen: 0.391 ppbv
RT: 4.01 min Scan# 334
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion: 101 Resp: 50540
Ion Ratio Lower Upper
101 100
103 54.8 52.7 79.1





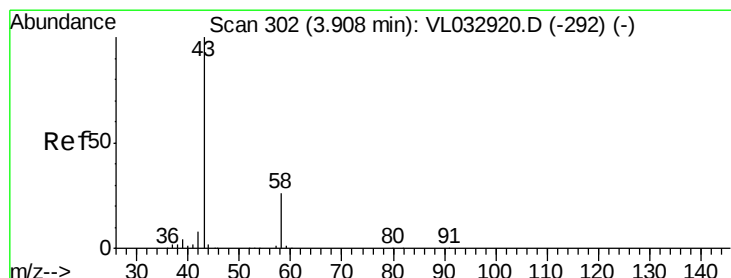
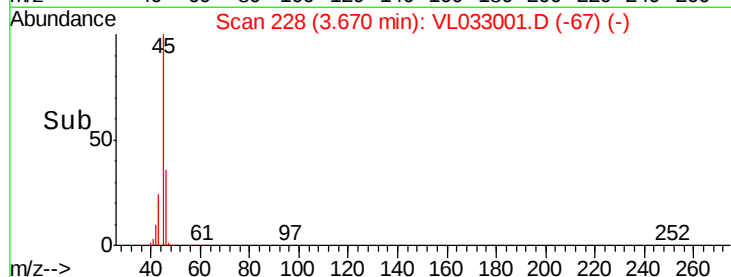
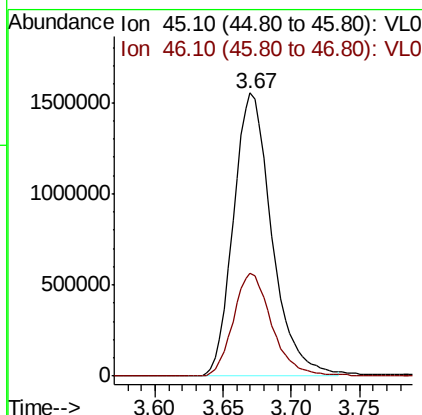
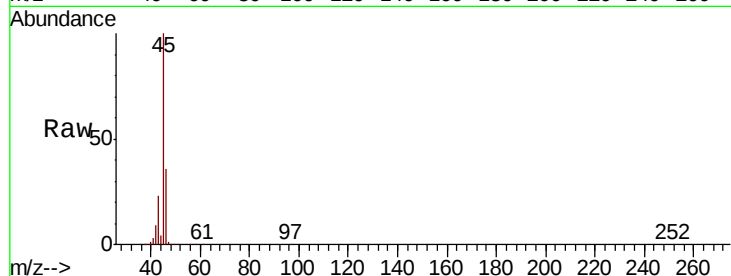
#13
Ethanol
Concen: 286.831 ppbv
RT: 3.67 min Scan# 228
Delta R.T. 0.02 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 45 Resp: 3040955
Ion Ratio Lower Upper
45 100
46 37.0 13.8 55.4

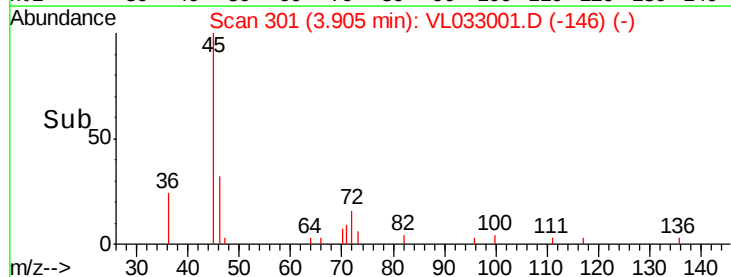
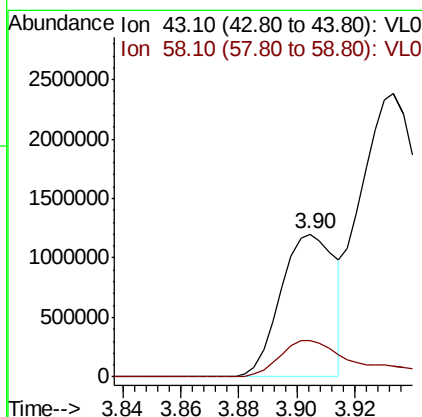
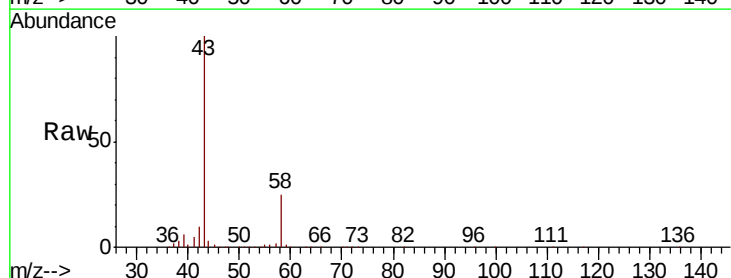
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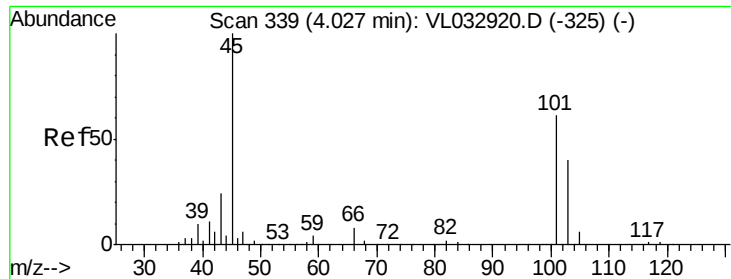
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#15
Acetone
Concen: 17.749 ppbv
RT: 3.90 min Scan# 301
Delta R.T. -0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion: 43 Resp: 1566524
Ion Ratio Lower Upper
43 100
58 36.5 20.6 30.8#





#19

Isopropyl Alcohol

Concen: 6.386 ppbv

RT: 4.05 min Scan# 345

Delta R.T. 0.02 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion: 45 Resp: 353926

Ion Ratio Lower Upper

45 100

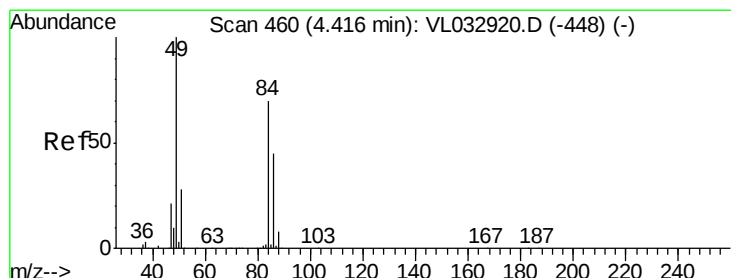
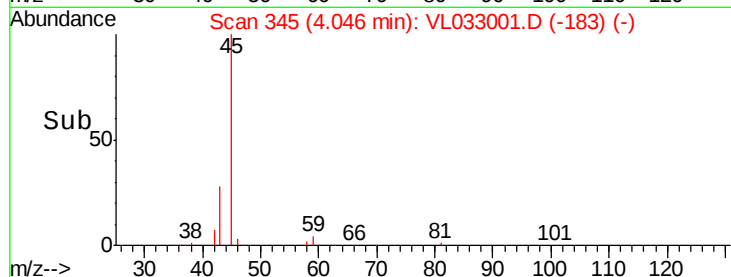
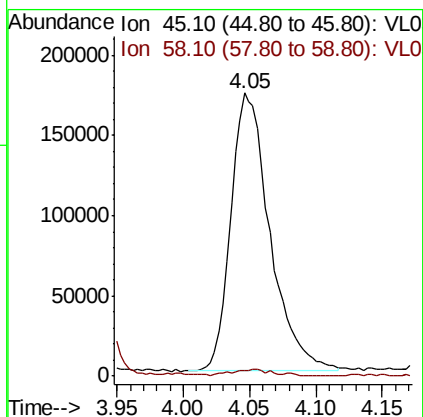
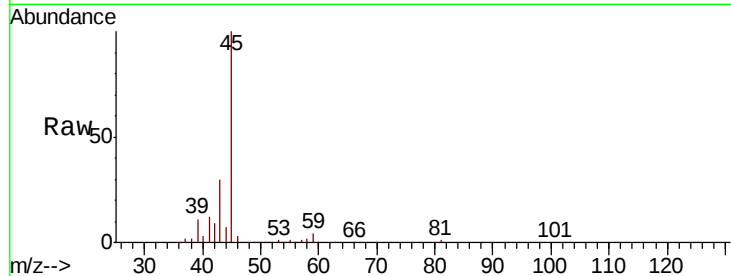
58 161.2 1.4 2.2#

Manual Integrations

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#20

Methylene Chloride

Concen: 8.526 ppbv

RT: 4.42 min Scan# 460

Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Tgt Ion: 84 Resp: 367780

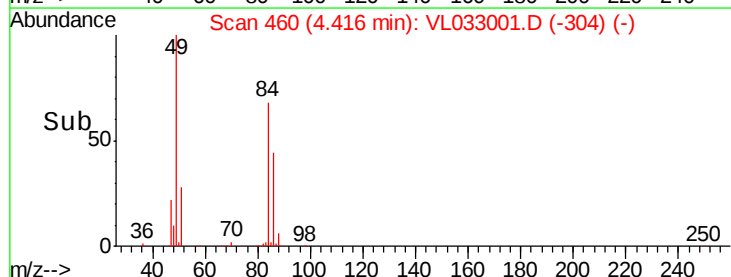
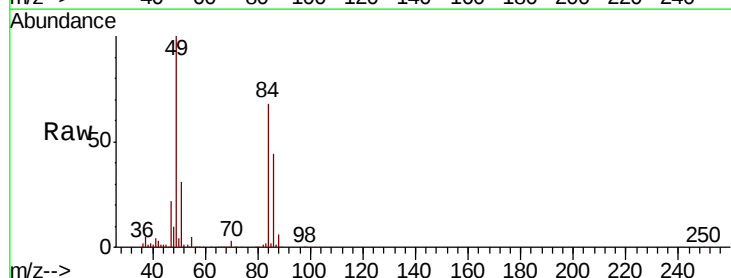
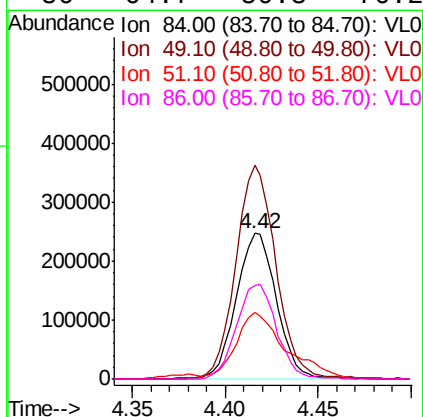
Ion Ratio Lower Upper

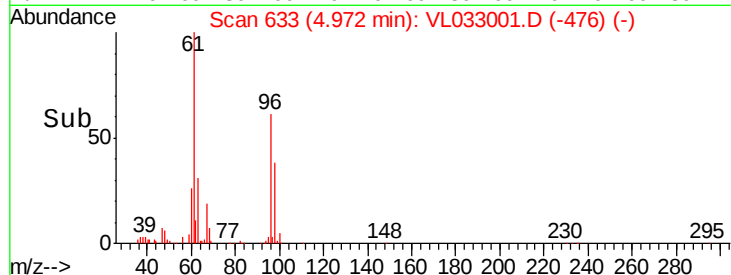
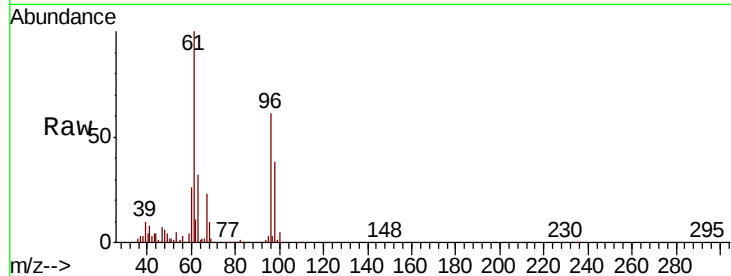
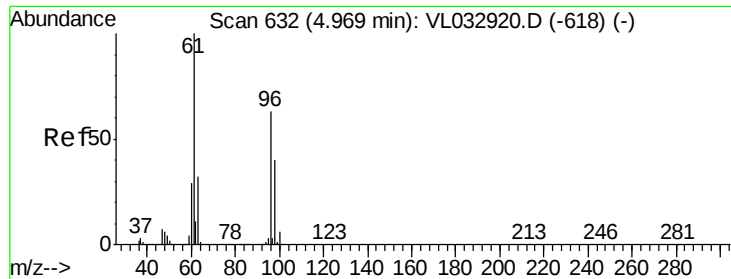
84 100

49 146.7 113.8 170.8

51 43.3 31.8 47.8

86 64.7 50.8 76.2





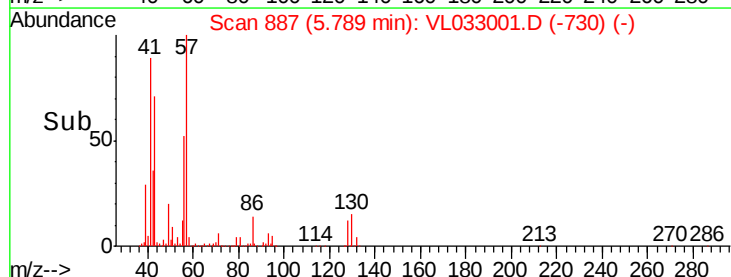
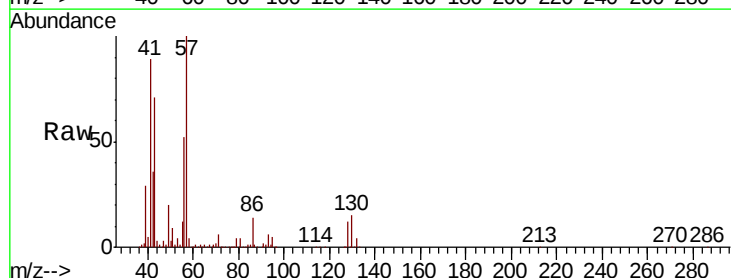
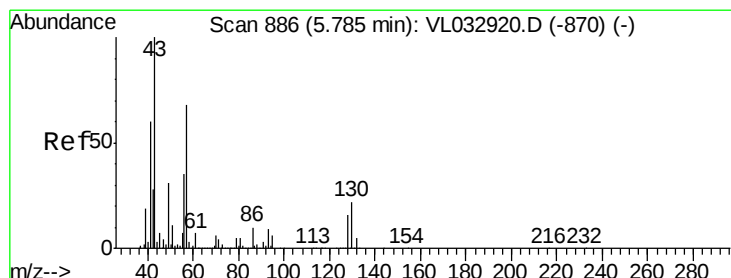
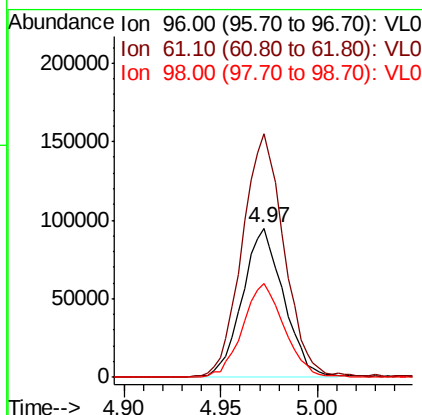
#22
trans-1,2-Dichloroethene
Concen: 2.635 ppbv
RT: 4.97 min Scan# 633
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tot Ion	Ratio	Lower	Upper
96	100		
61	162.8	127.1	190.7
98	62.7	51.3	76.9

Instrument :
MSVOA_L
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P0068-IA002-181212-01

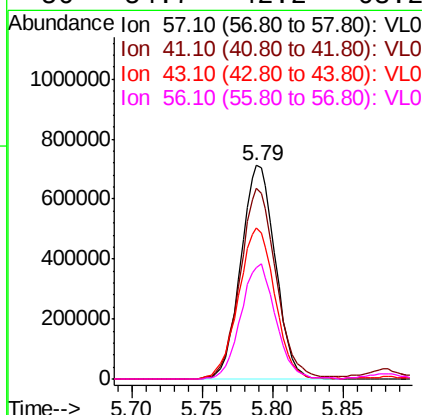
Manual Integrations
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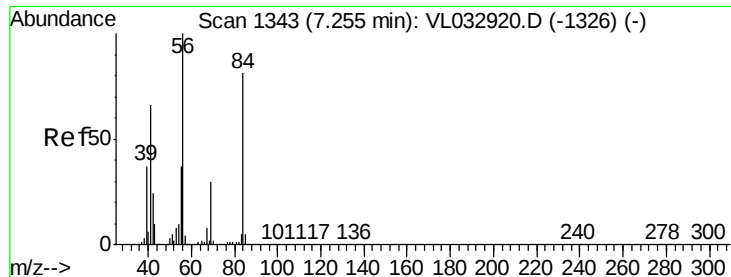
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#26
Hexane
Concen: 12.646 ppbv
RT: 5.79 min Scan# 887
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion	Ratio	Lower	Upper
57	100		
41	93.7	72.2	108.2
43	74.7	171.9	257.9#
56	54.7	42.2	63.2





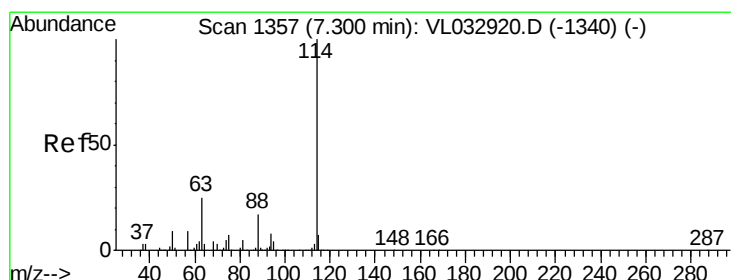
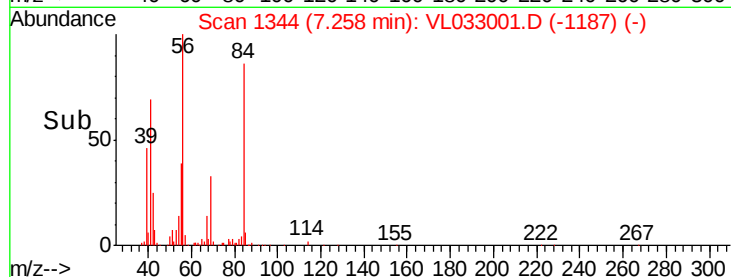
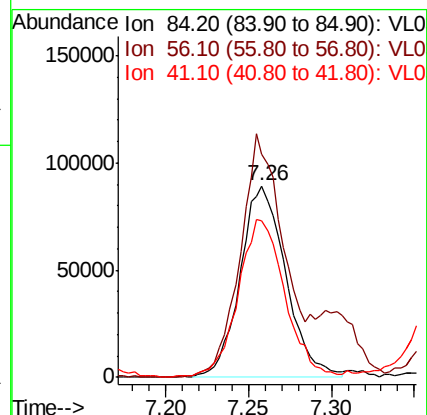
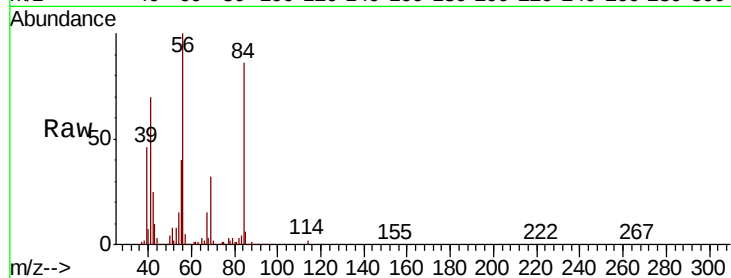
#30
Cvclohexane
Concen: 2.136 ppbv
RT: 7.26 min Scan# 1344
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion	Ratio	Lower	Upper
84	100		
56	153.6	102.5	153.7
41	83.0	64.1	96.1

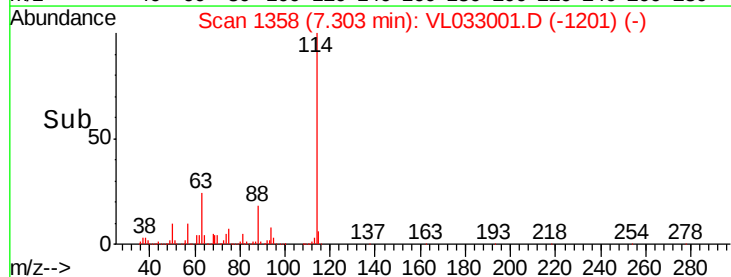
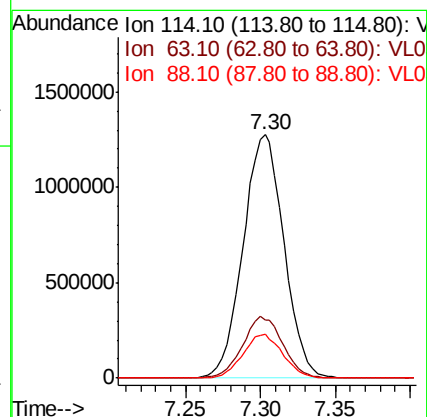
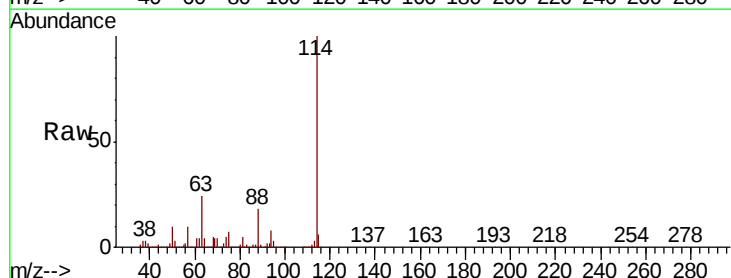
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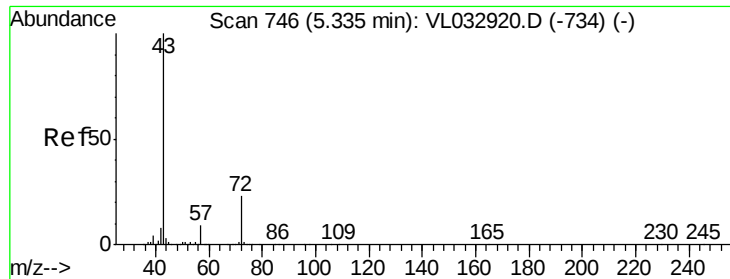
MMDadoda
12/19/2018 1:59:57 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion	Ratio	Lower	Upper
114	100		
63	25.1	20.1	30.1
88	17.6	14.2	21.4





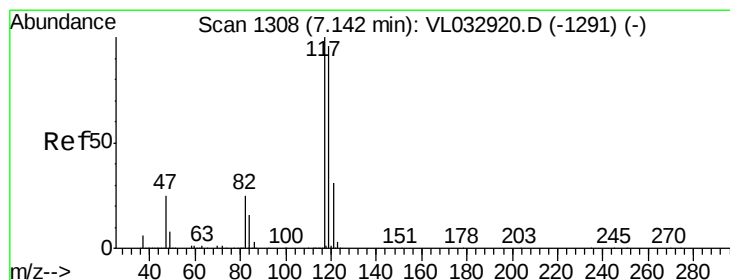
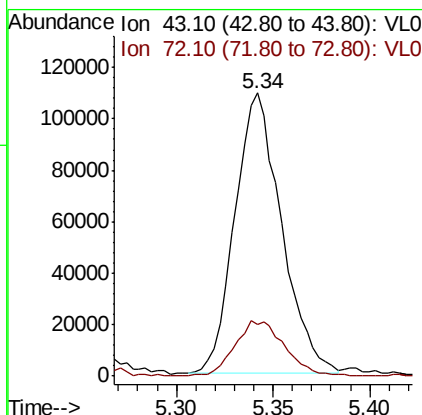
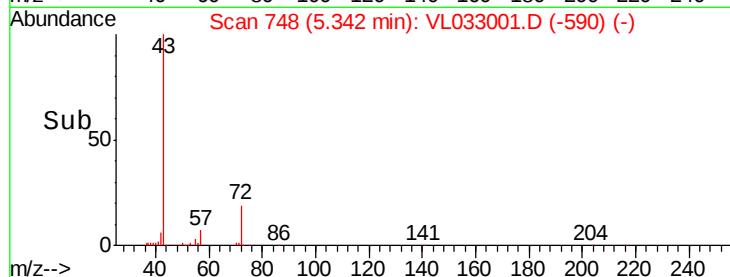
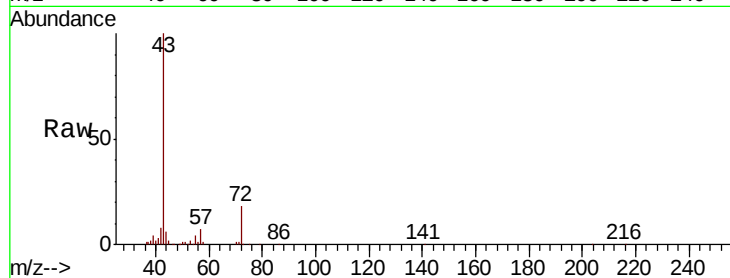
#34
2-Butanone
Concen: 1.736 ppbv
RT: 5.34 min Scan# 748
Delta R.T. 0.01 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 43 Resp: 182436
Ion Ratio Lower Upper
43 100
72 21.5 18.8 28.2

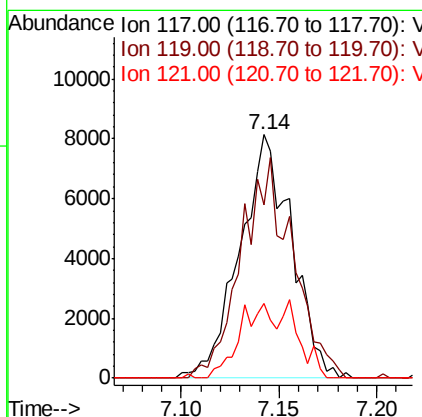
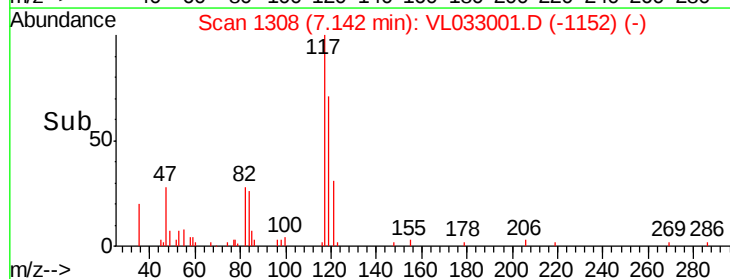
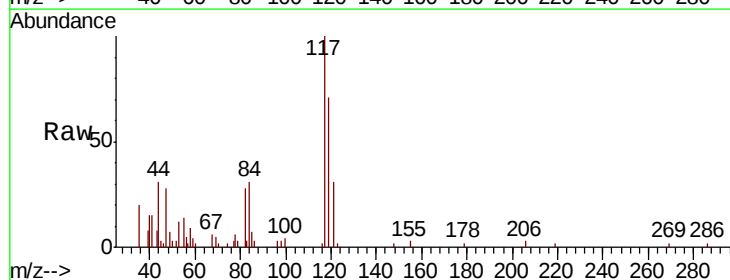
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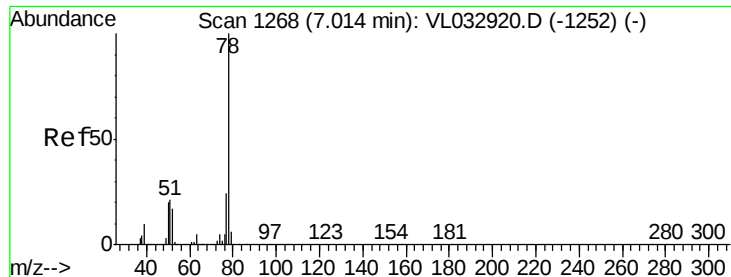
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 7.14 min Scan# 1308
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion: 117 Resp: 14857
Ion Ratio Lower Upper
117 100
119 71.1 76.5 114.7#
121 30.8 24.5 36.7





#36

Benzene

Concen: 6.377 ppbv

RT: 7.01 min Scan# 1267

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion: 78 Resp: 1131782

Ion Ratio Lower Upper

78 100

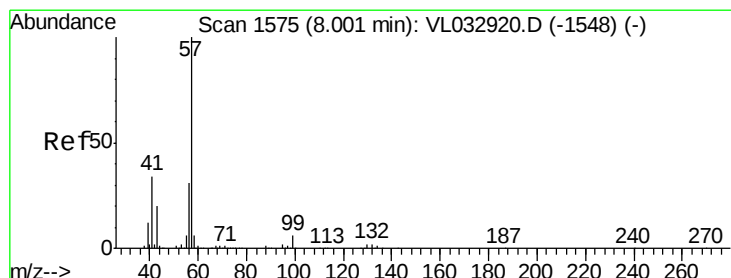
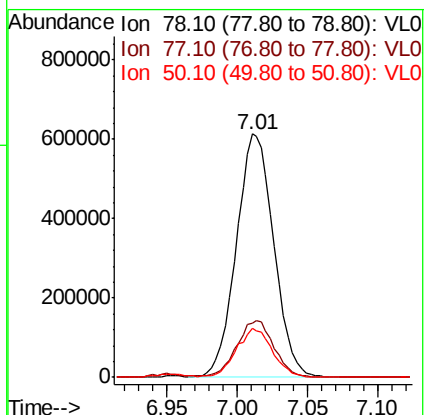
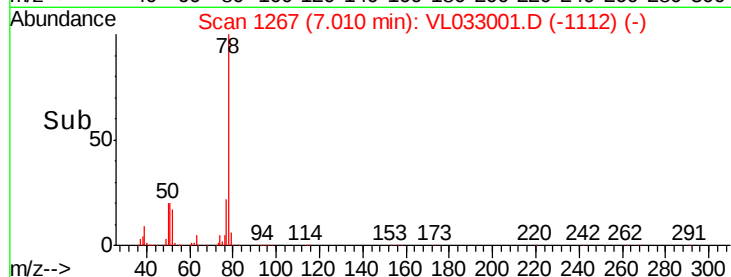
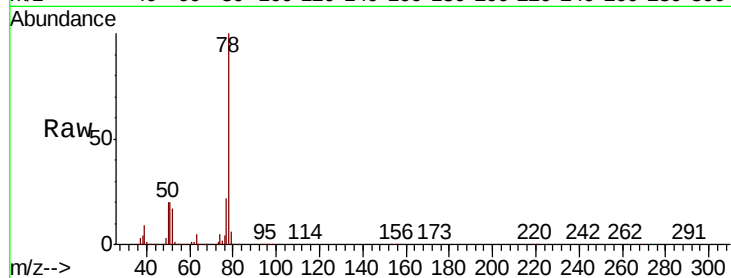
77 22.3 18.9 28.3

50 20.1 16.1 24.1

Manual Integrations
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#44

2,2,4-Trimethylpentane

Concen: 8.423 ppbv

RT: 8.00 min Scan# 1575

Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

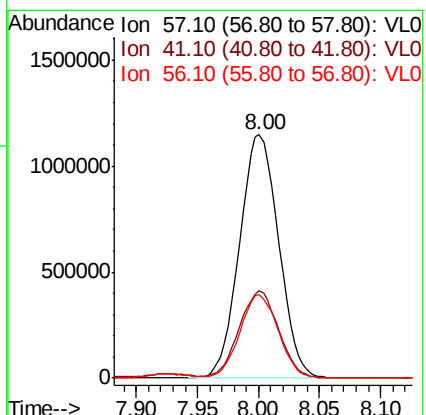
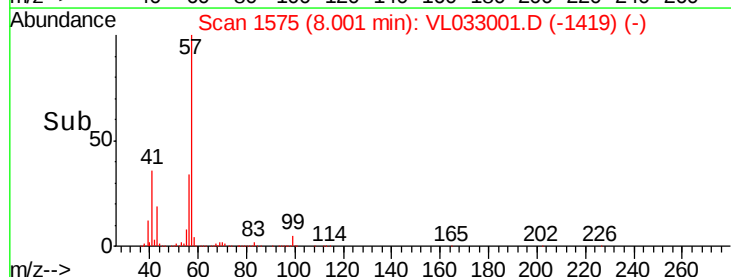
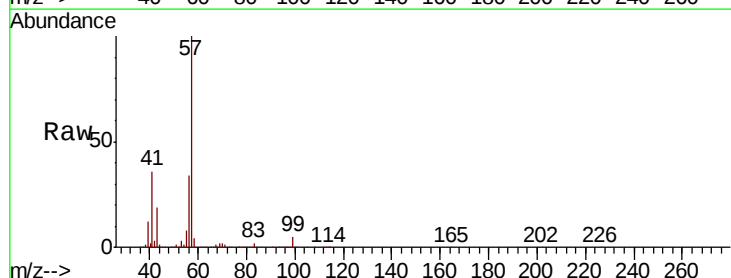
Tgt Ion: 57 Resp: 2537781

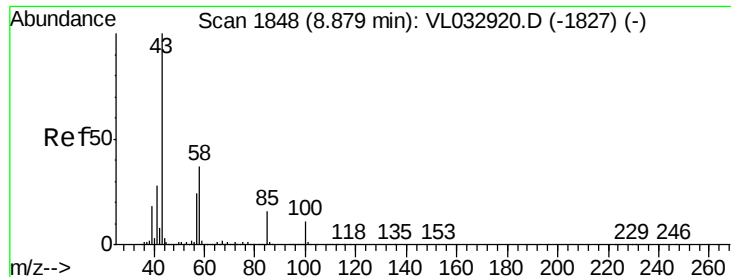
Ion Ratio Lower Upper

57 100

41 36.2 27.0 40.4

56 33.9 24.6 37.0





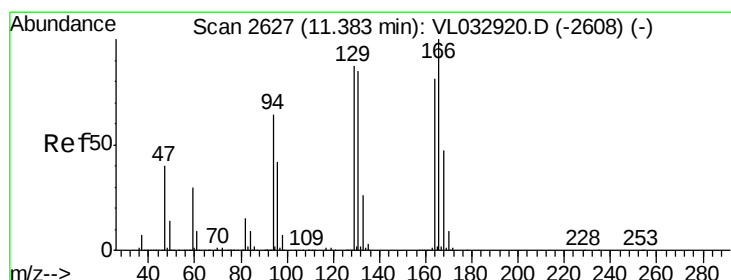
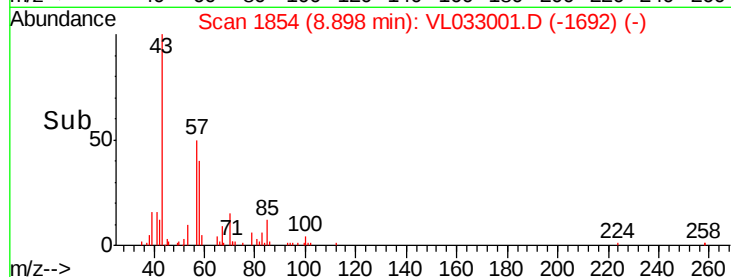
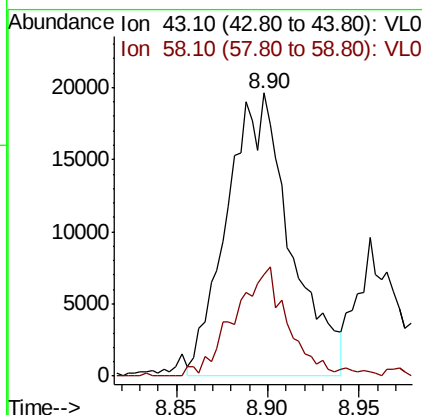
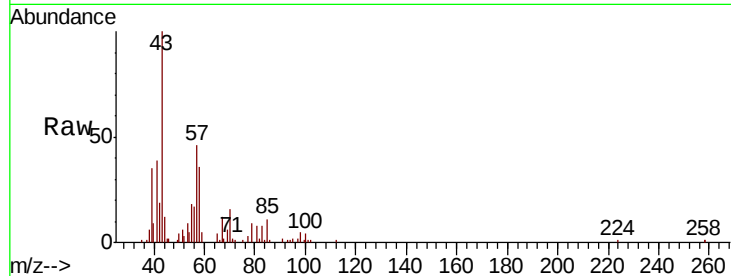
#50
4-Methyl-2-Pentanone
Concen: 0.282 ppbv m
RT: 8.90 min Scan# 1854
Delta R.T. 0.02 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 43 Resp: 47409
Ion Ratio Lower Upper
43 100
58 0.0 29.0 43.4#

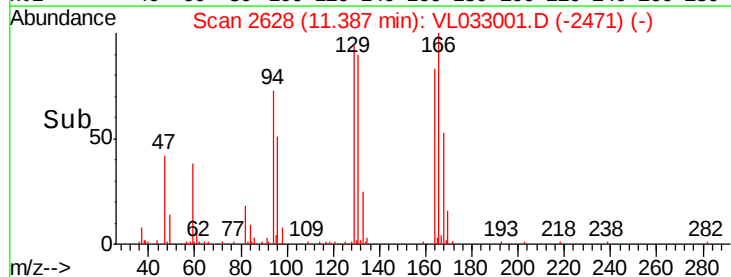
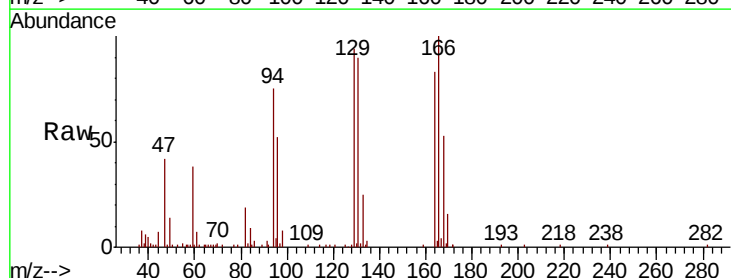
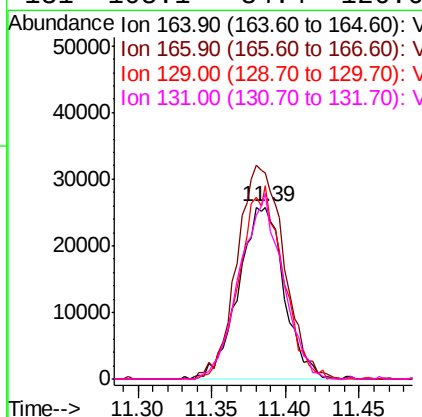
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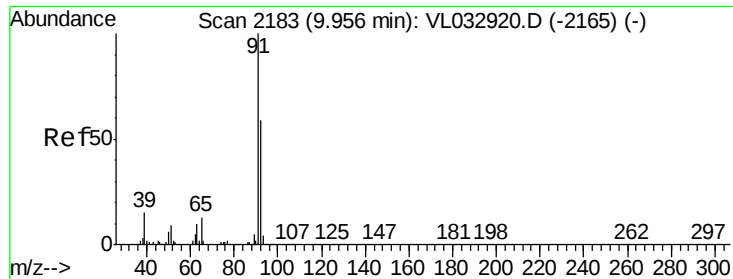
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#52
Tetrachloroethene
Concen: 0.854 ppbv m
RT: 11.39 min Scan# 2628
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion:164 Resp: 55138
Ion Ratio Lower Upper
164 100
166 119.9 98.8 148.2
129 112.6 85.5 128.3
131 108.1 84.4 126.6





#53

Toluene

Concen: 47.980 ppbv

RT: 9.96 min Scan# 2183

Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion: 91 Resp: 9031964

Ion Ratio Lower Upper

91 100

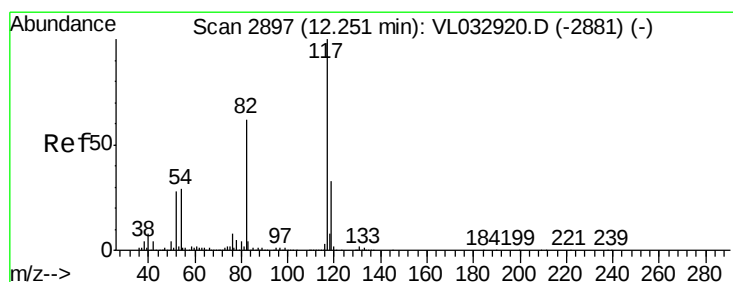
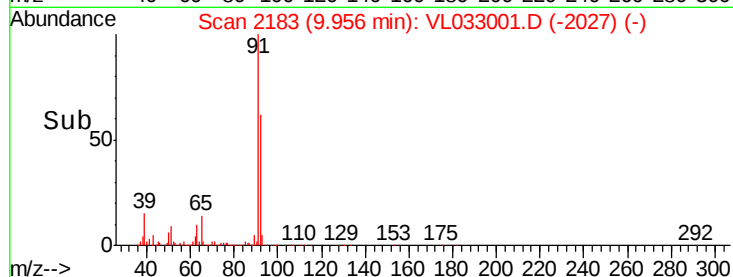
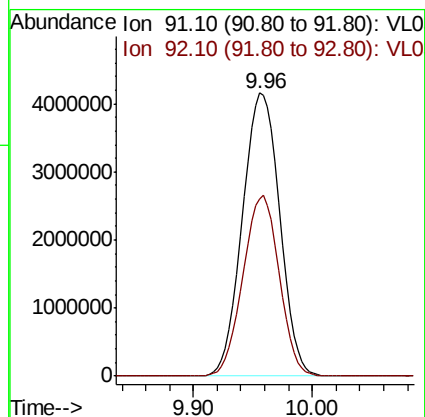
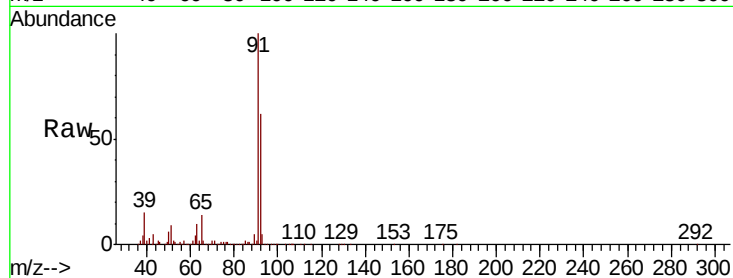
92 62.0 47.4 71.0

Manual Integrations

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.25 min Scan# 2897

Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

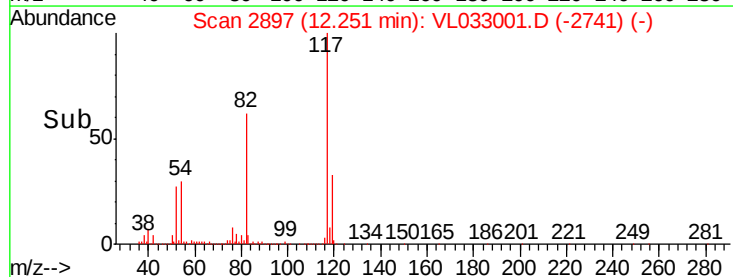
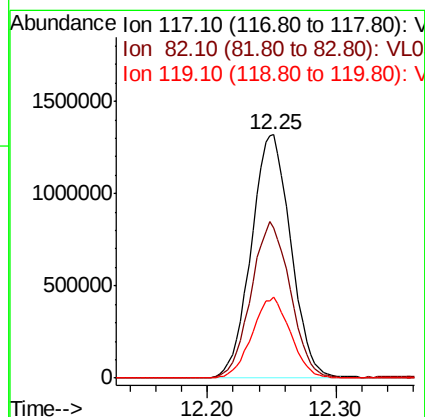
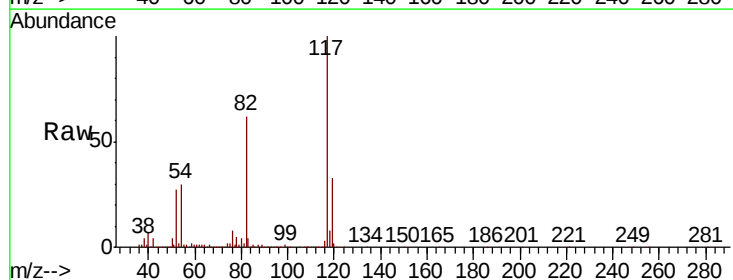
Tgt Ion: 117 Resp: 2816018

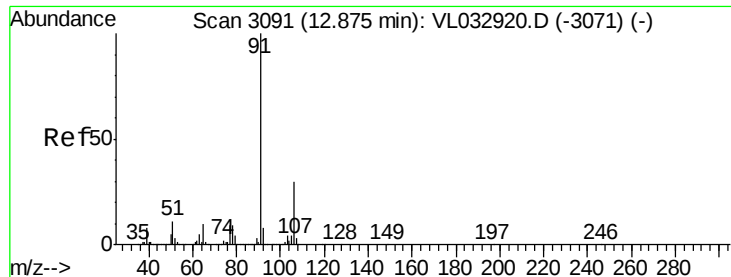
Ion Ratio Lower Upper

117 100

82 63.7 47.8 71.8

119 32.5 43.1 64.7#





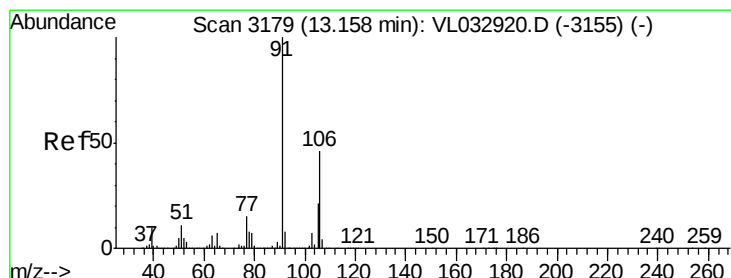
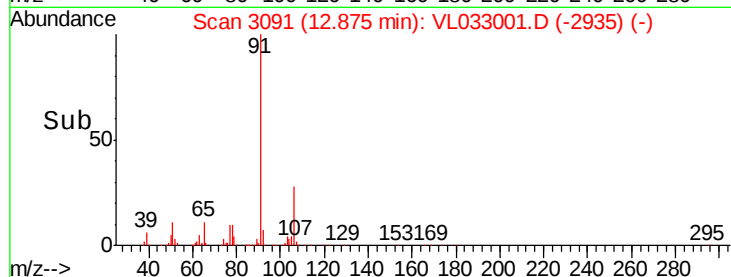
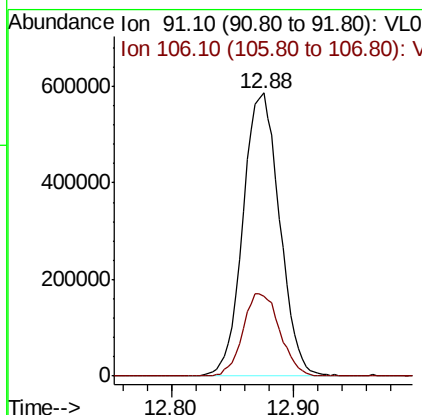
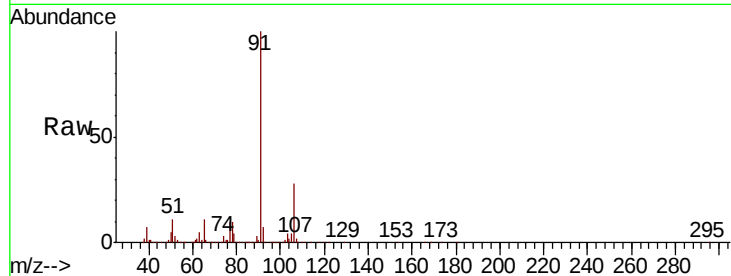
#58
Ethyl Benzene
Concen: 4.036 ppbv
RT: 12.88 min Scan# 3091
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 91 Resp: 1212309
Ion Ratio Lower Upper
91 100
106 28.3 23.9 35.9

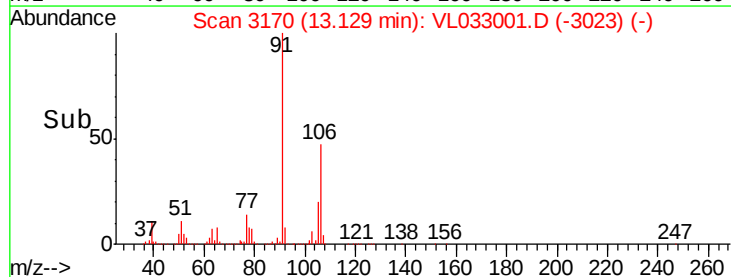
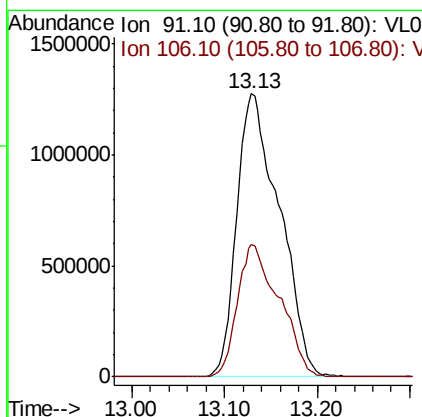
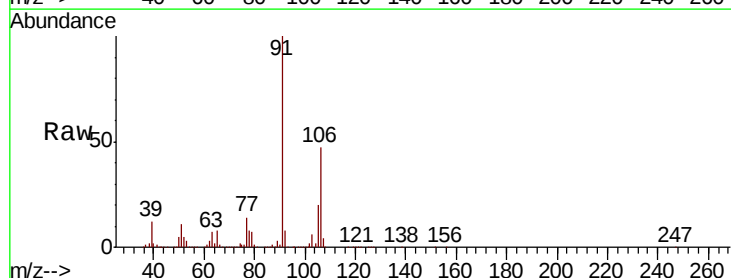
Manual Integrations
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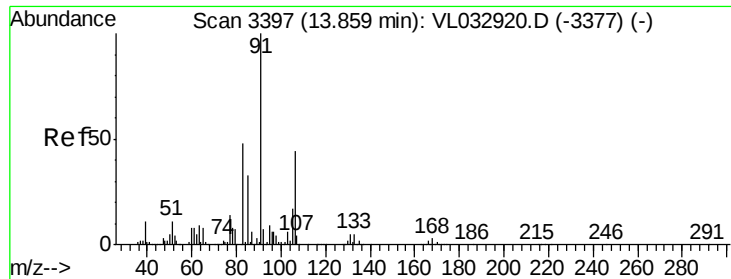
MMDadoda
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#59
m/p-Xylene
Concen: 14.971 ppbv
RT: 13.13 min Scan# 3170
Delta R.T. -0.03 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion: 91 Resp: 4077358
Ion Ratio Lower Upper
91 100
106 46.1 0.0 0.0#





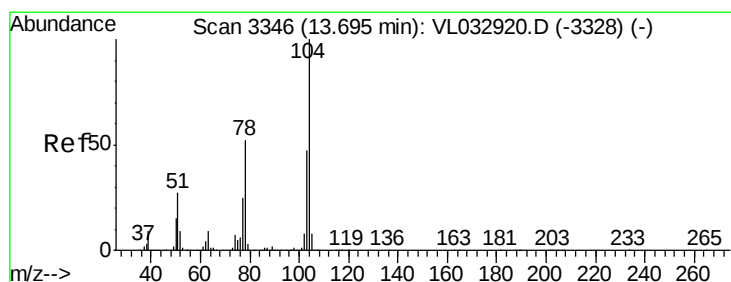
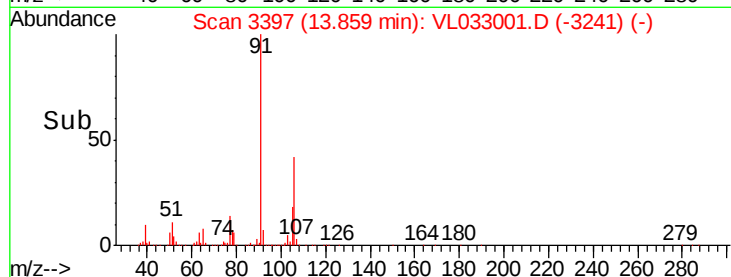
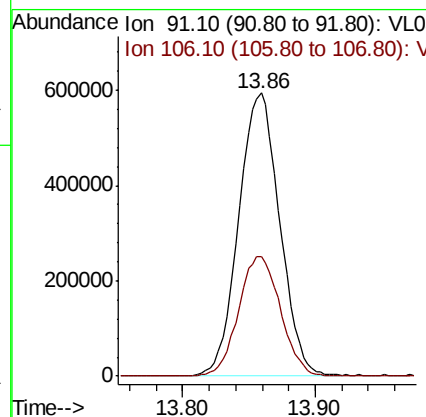
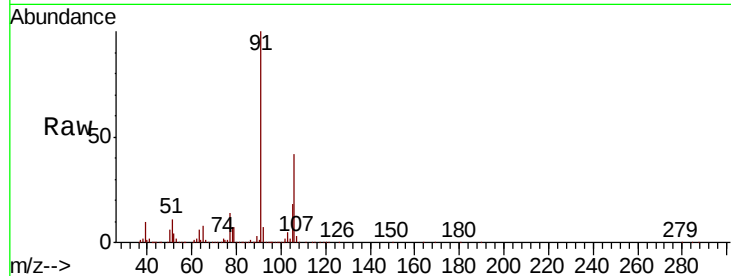
#60
o-Xylene
Concen: 4.610 ppbv
RT: 13.86 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Instrument :
MSVOA_L
ClientSampleId :
P0068-IA002-181212-01

Tot Ion: 91 Resp: 1268023
Ion Ratio Lower Upper
91 100
106 43.5 21.9 65.8

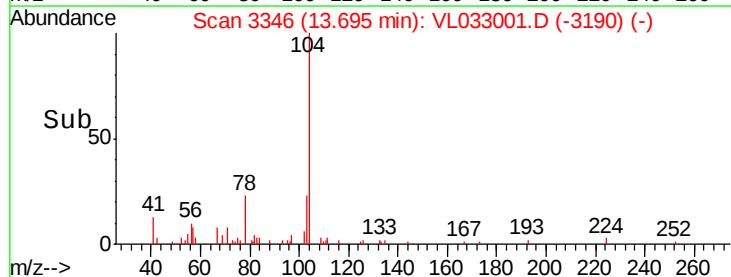
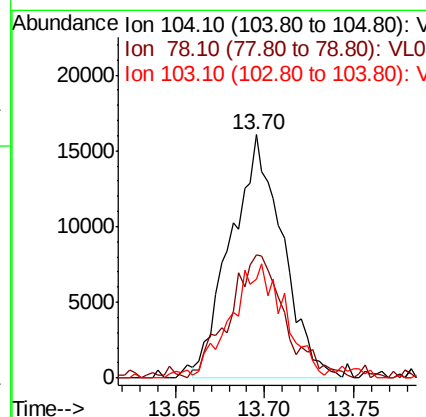
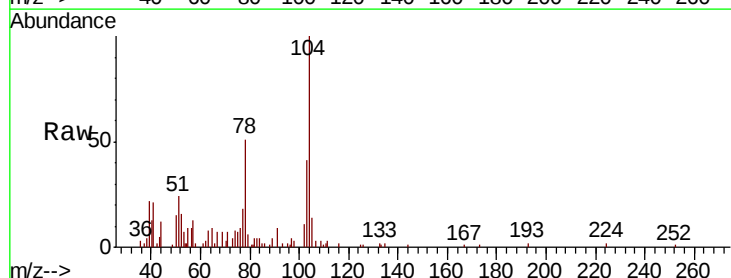
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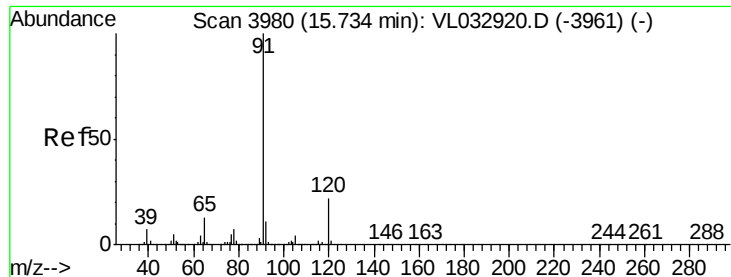
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#61
Styrene
Concen: 0.178 ppbv
RT: 13.70 min Scan# 3346
Delta R.T. 0.00 min
Lab File: VL033001.D
Acq: 17 Dec 2018 18:34

Tgt Ion: 104 Resp: 32487
Ion Ratio Lower Upper
104 100
78 57.8 42.0 63.0
103 52.2 38.3 57.5





#64

n-propylbenzene

Concen: 0.541 ppbv

RT: 15.73 min Scan# 3979

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion:120 Resp: 53888

Ion Ratio Lower Upper

120 100

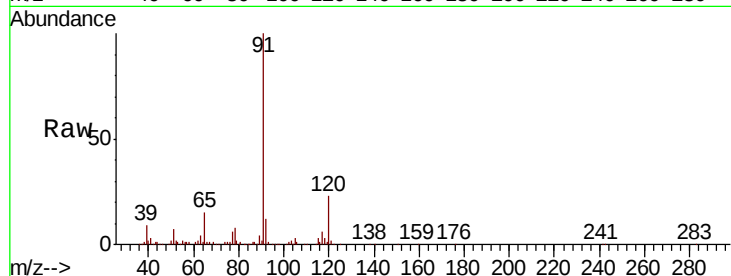
91 498.7 380.4 570.6

Manual Integrations

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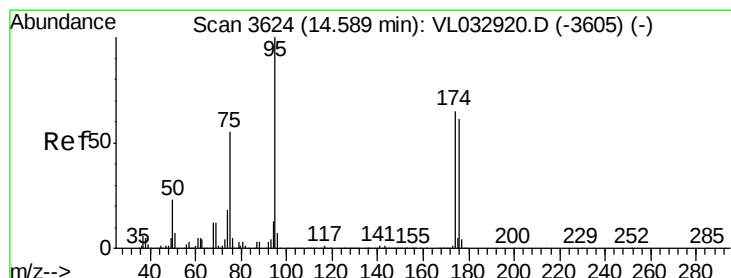
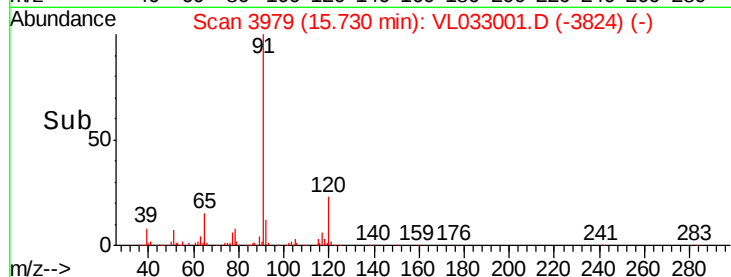
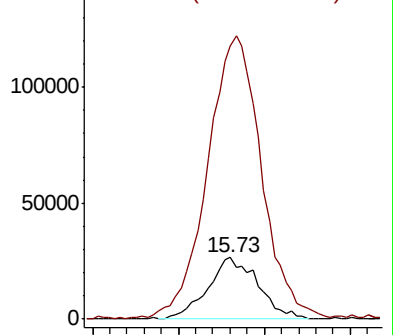
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Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0



#68

1-Bromo-4-Fluorobenzene

Concen: 9.946 ppbv

RT: 14.59 min Scan# 3623

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

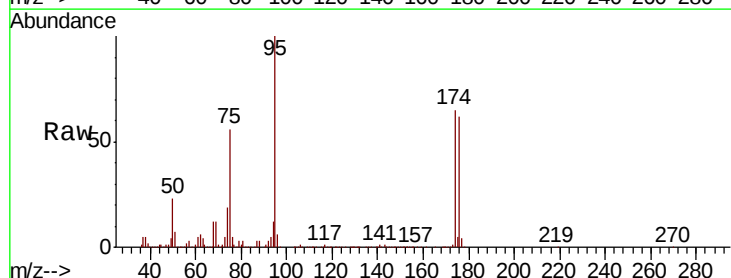
Tgt Ion: 95 Resp: 2069164

Ion Ratio Lower Upper

95 100

174 65.5 51.4 77.0

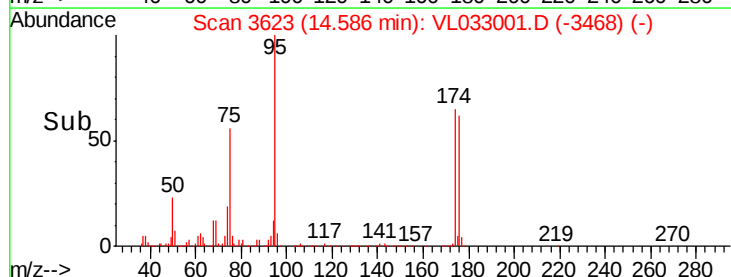
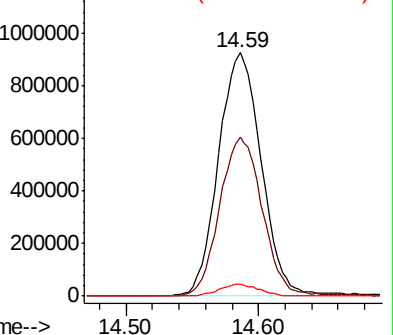
175 4.7 3.8 5.6

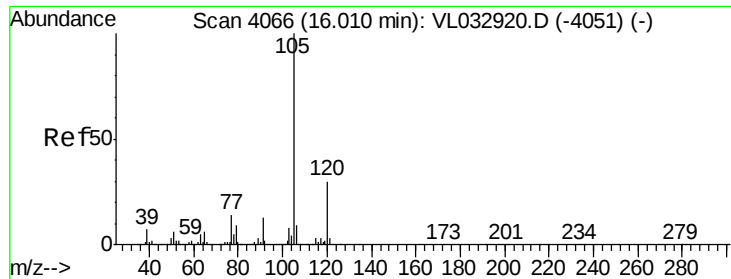


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#72

4-Ethyltoluene

Concen: 1.372 ppbv

RT: 16.01 min Scan# 4065

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

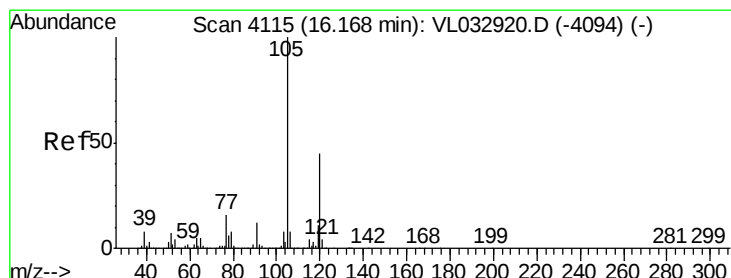
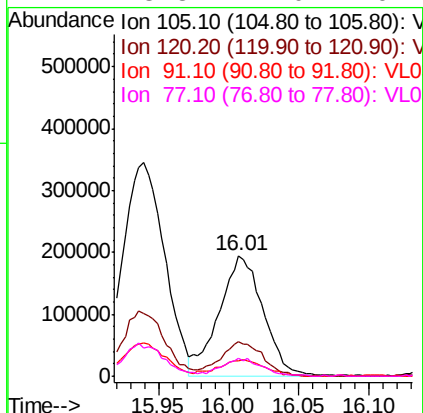
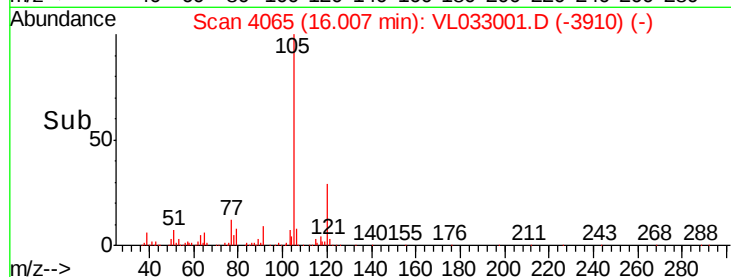
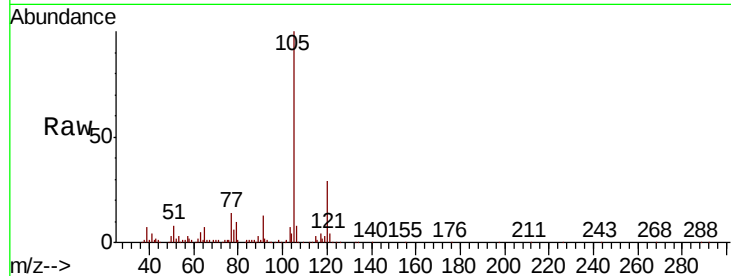
ClientSampleId :

P0068-IA002-181212-01

Tot Ion:	105	Resp:	421389
Ion Ratio	Lower	Upper	
105	100		
120	27.4	23.0	34.4
91	14.2	10.4	15.6
77	13.8	11.0	16.4

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#73

1,3,5-Trimethylbenzene

Concen: 0.811 ppbv

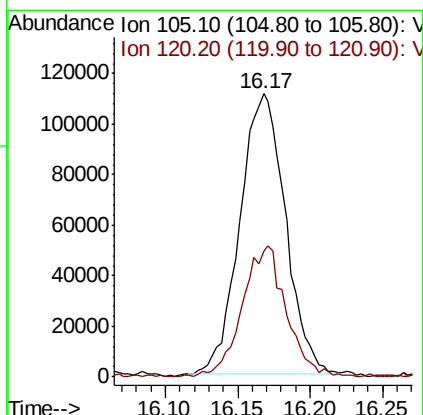
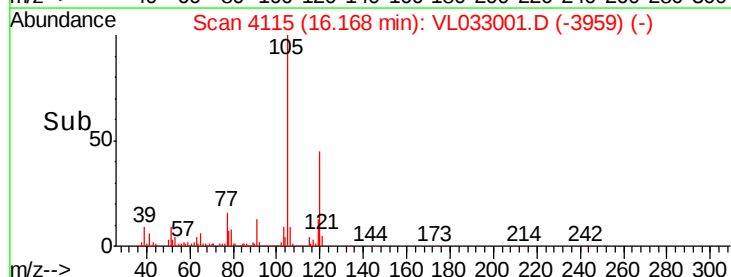
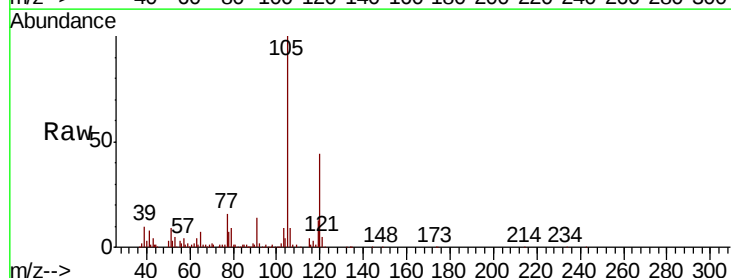
RT: 16.17 min Scan# 4115

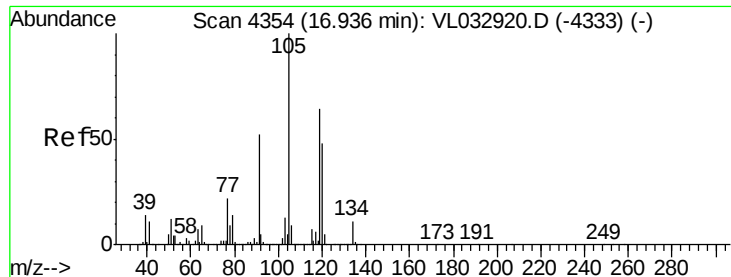
Delta R.T. 0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Tgt Ion:	105	Resp:	243026
Ion Ratio	Lower	Upper	
105	100		
120	44.3	36.0	54.0





#74

1,2,4-Trimethylbenzene

Concen: 3.465 ppbv

RT: 16.93 min Scan# 4353

Delta R.T. -0.00 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Instrument :

MSVOA_L

ClientSampleId :

P0068-IA002-181212-01

Tot Ion:105 Resp: 1172688

Ion Ratio Lower Upper

105 100

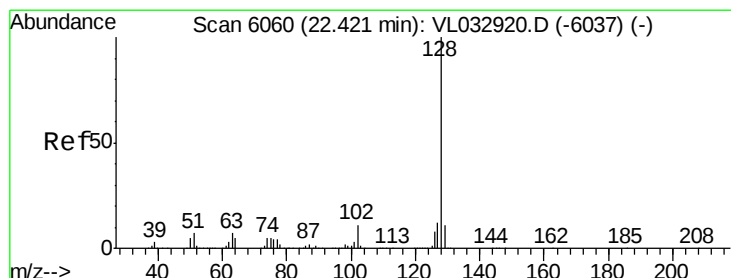
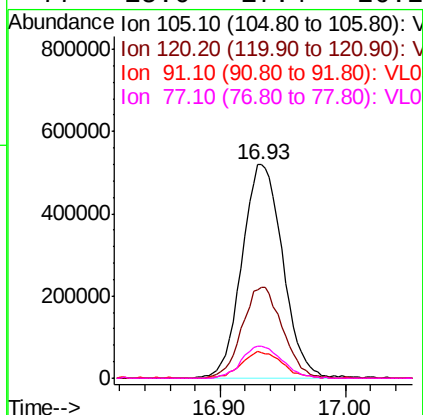
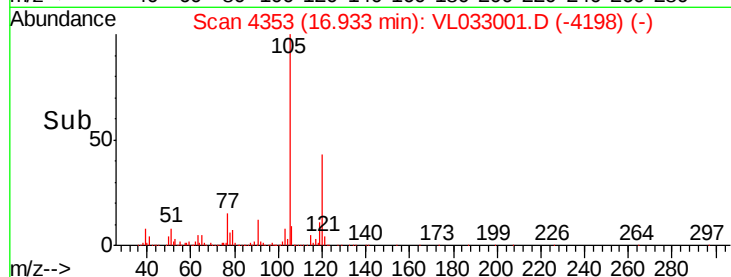
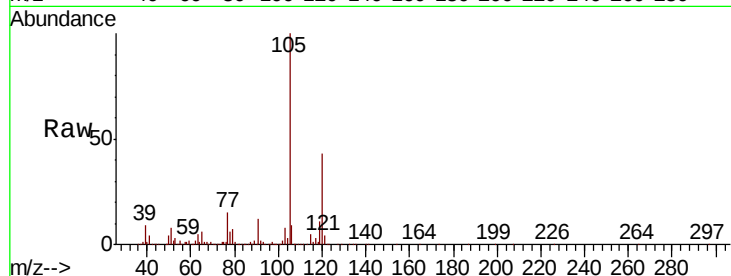
120 42.7 38.6 58.0

91 11.9 41.7 62.5#

77 15.0 17.4 26.2#

Manual Integrations
APPROVED

MMDadoda
12/19/2018 1:59:57 PM



#79

Naphthalene

Concen: 0.205 ppbv m

RT: 22.43 min Scan# 6064

Delta R.T. 0.01 min

Lab File: VL033001.D

Acq: 17 Dec 2018 18:34

Tgt Ion:128 Resp: 44760

Ion Ratio Lower Upper

128 100

127 12.8 9.9 14.9

129 10.4 8.6 13.0

