

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL073019\
 Data File : VL034065.D
 Acq On : 30 Jul 2019 14:50
 Operator : SY/AP
 Sample : K4033-03DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSG2DL

Manual Integrations
 APPROVED

MMDadoda
 8/7/2019 12:20:19 PM

Quant Time: Jul 31 19:59:52 2019

Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL073019AIR.M

Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul 31

QLast Update : Tue Jul 30 06:55:18 2019

Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.71	49	1346461	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.24	114	4812806	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.18	117	3624399	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.52	95	2839241	9.91	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.10%

Target Compounds

						Ovalue
3) Chlorodifluoromethane	2.99	51	29389	0.189	ppbv	99
9) Propene	3.02	41	41855m	0.750	ppbv	
10) Heptane	8.20	43	45798m	0.301	ppbv	
13) Ethanol	3.63	45	116986m	5.268	ppbv	
15) Acetone	3.88	43	121776m	0.595	ppbv	
26) Hexane	5.73	57	81164	0.590	ppbv #	39
30) Cyclohexane	7.20	84	49449m	0.354	ppbv	
36) Benzene	6.96	78	127173m	0.397	ppbv	
53) Toluene	9.89	91	1912096	5.720	ppbv	100
58) Ethyl Benzene	12.80	91	447490	1.043	ppbv	95
59) m/p-Xylene	13.06	91	1511085m	3.875	ppbv	
60) o-Xylene	13.79	91	560000m	1.445	ppbv	
61) Styrene	13.64	104	63764m	0.249	ppbv	
62) Isopropylbenzene	14.78	105	120341	0.232	ppbv	100
64) n-propylbenzene	15.67	120	43645m	0.325	ppbv	
72) 4-Ethyltoluene	15.94	105	301168	0.687	ppbv	95
73) 1,3,5-Trimethylbenzene	16.10	105	192465	0.432	ppbv	97
74) 1,2,4-Trimethylbenzene	16.87	105	881523m	1.799	ppbv	

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

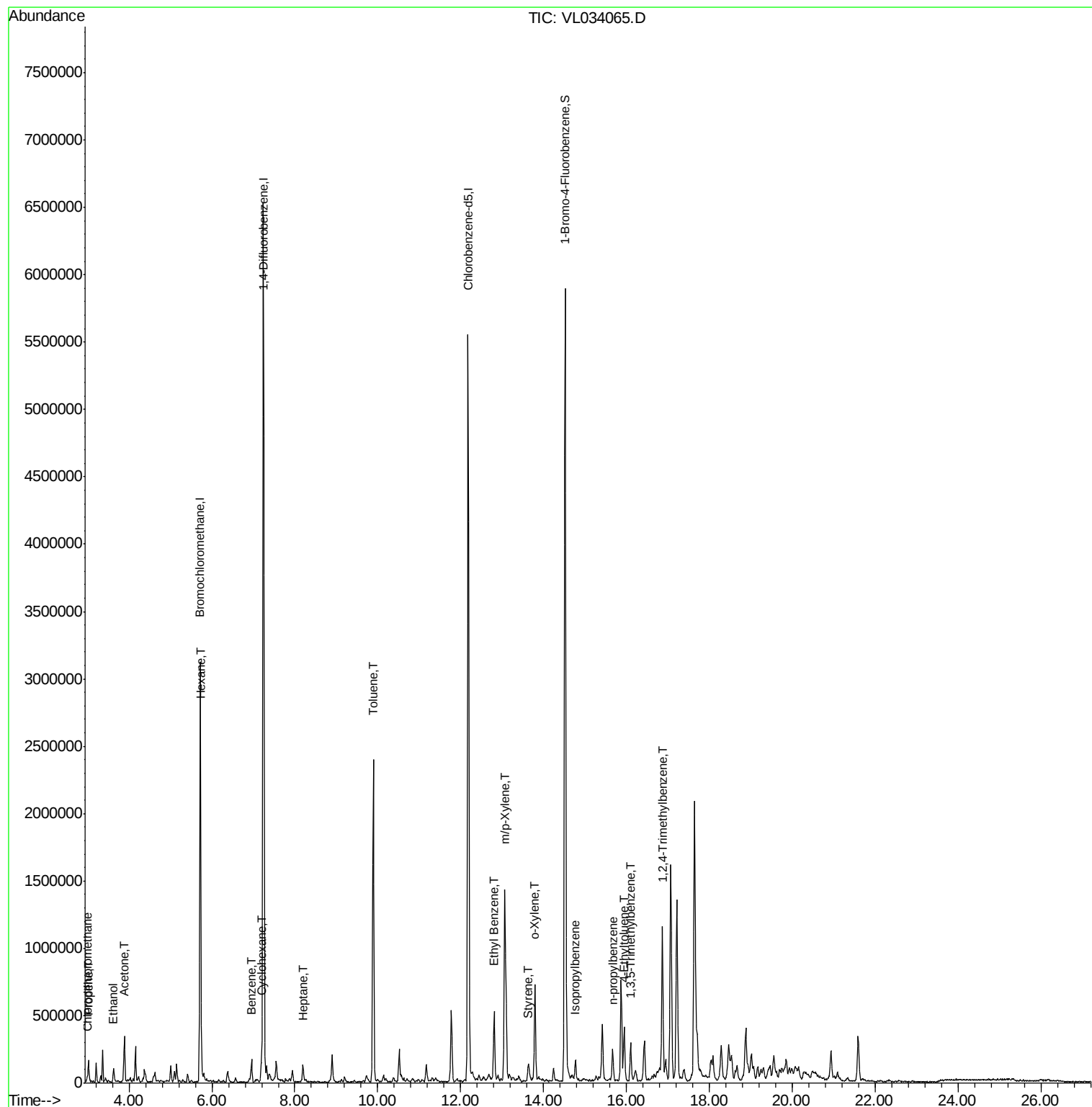
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL073019\
Data File : VL034065.D
Acq On : 30 Jul 2019 14:50
Operator : SY/AP
Sample : K4033-03DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

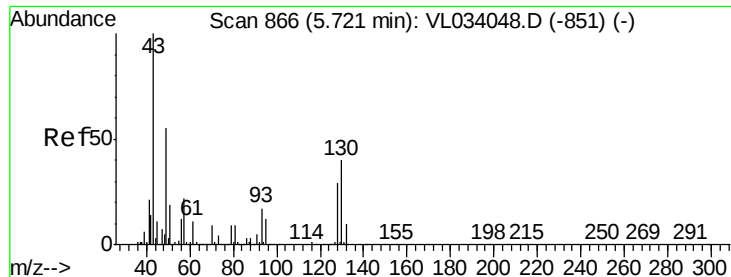
Instrument :
MSVOA_L
ClientSampleId :
SSG2DL

Manual Integrations
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8/7/2019 12:20:19 PM

Quant Time: Jul 31 19:59:52 2019
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL073019AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue Jul
QLast Update : Tue Jul 30 06:55:18 2019
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.71 min Scan# 864

Delta R.T. -0.01 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleId :

SSG2DL

Tot Ion: 49 Resp: 1346461

Ion Ratio Lower Upper

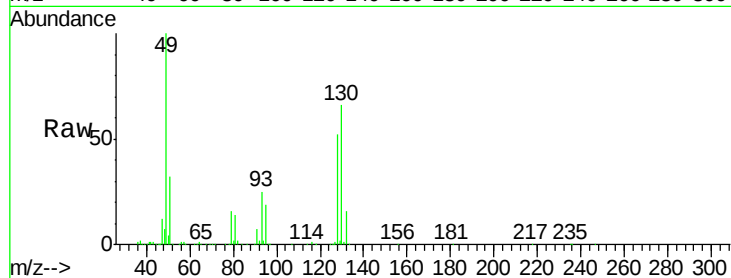
49 100

128 52.5 27.0 81.0

130 68.1 35.0 105.0

Manual Integrations
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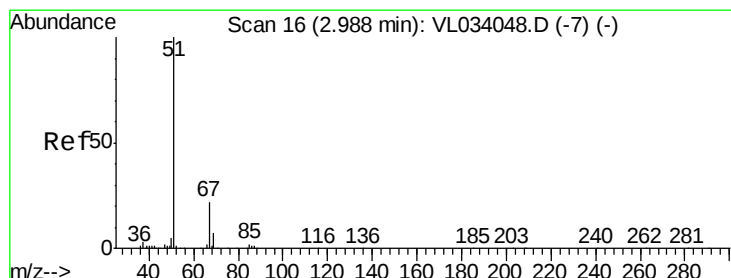
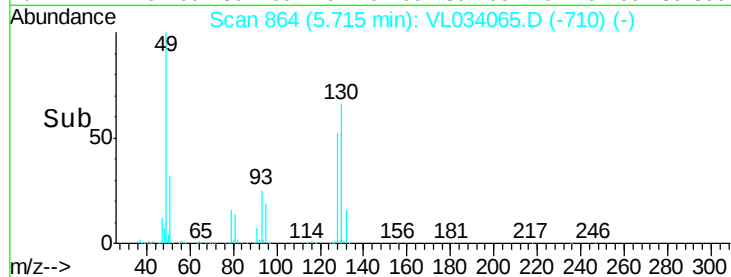
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.71

Time-->



#3

Chlorodifluoromethane

Concen: 0.189 ppbv

RT: 2.99 min Scan# 16

Delta R.T. 0.00 min

Lab File: VL034065.D

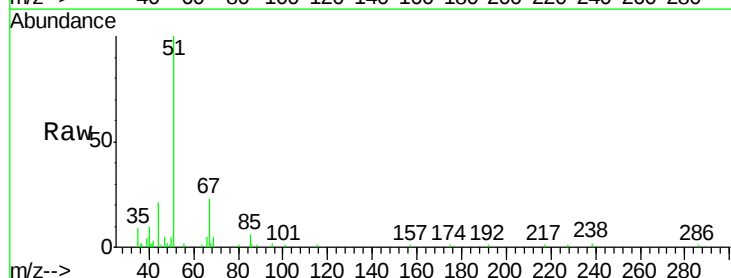
Acq: 30 Jul 2019 14:50

Tgt Ion: 51 Resp: 29389

Ion Ratio Lower Upper

51 100

67 21.0 17.4 26.0

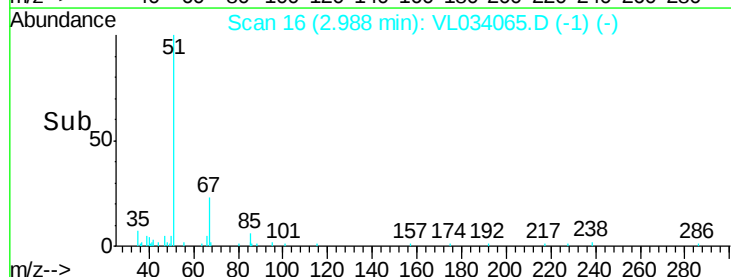


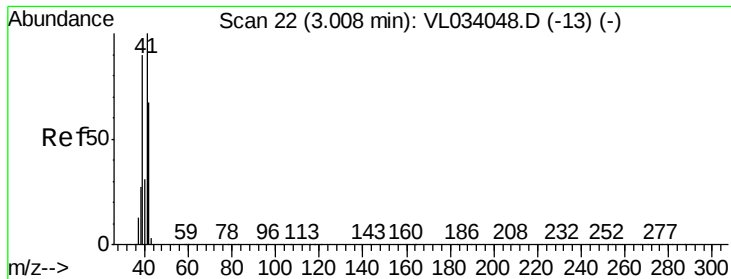
Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

2.99

Time-->





#9

Propene

Concen: 0.750 ppbv m

RT: 3.02 min Scan# 25

Delta R.T. 0.01 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleId :

SSG2DL

Tot Ion: 41 Resp: 41855

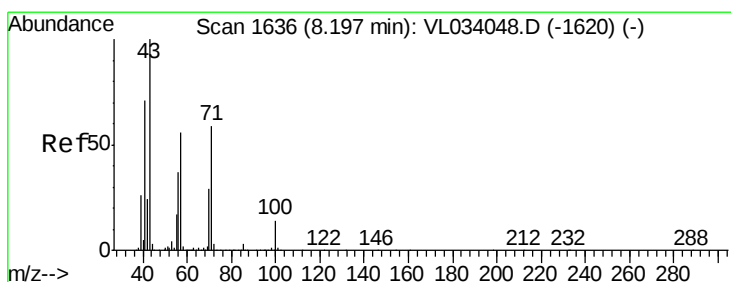
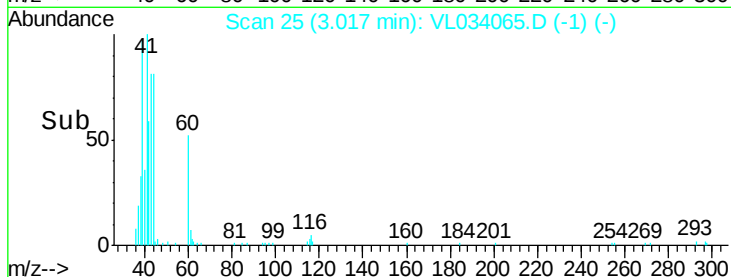
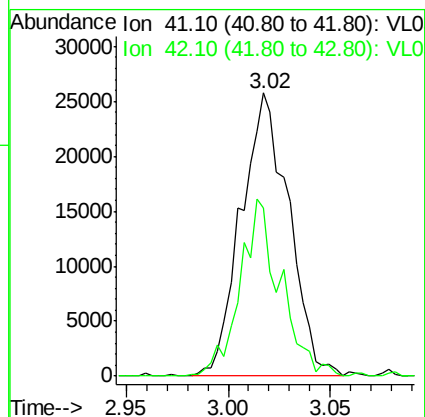
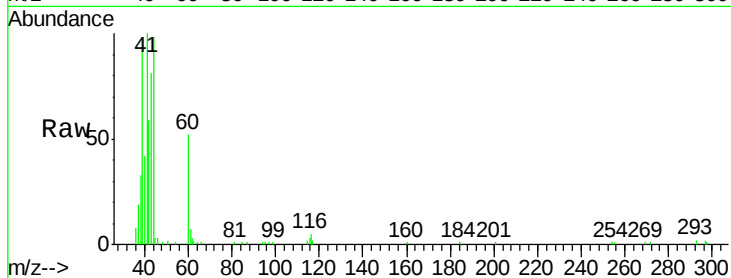
Ion Ratio Lower Upper

41 100

42 58.9 55.4 83.2

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#10

Heptane

Concen: 0.301 ppbv m

RT: 8.20 min Scan# 1636

Delta R.T. 0.00 min

Lab File: VL034065.D

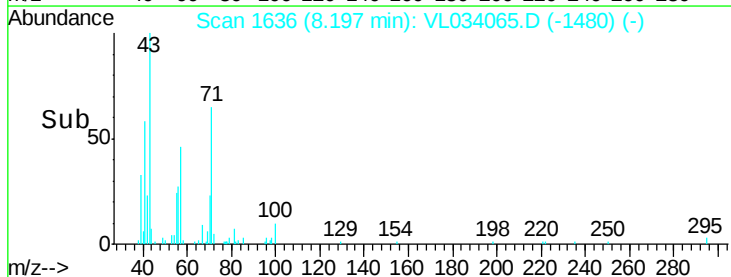
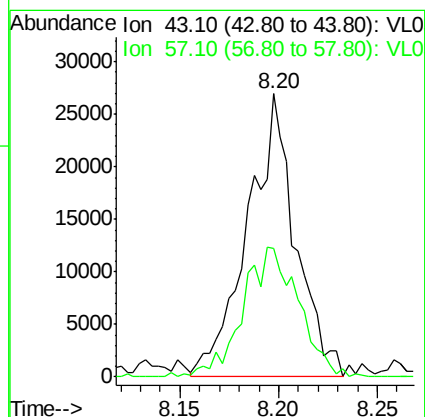
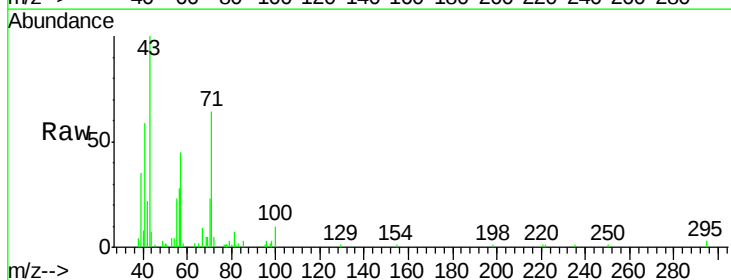
Acq: 30 Jul 2019 14:50

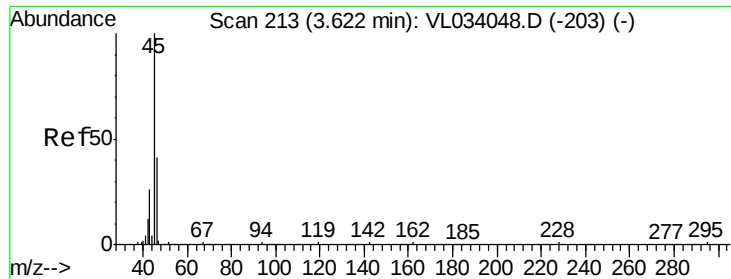
Tgt Ion: 43 Resp: 45798

Ion Ratio Lower Upper

43 100

57 0.0 44.8 67.2#





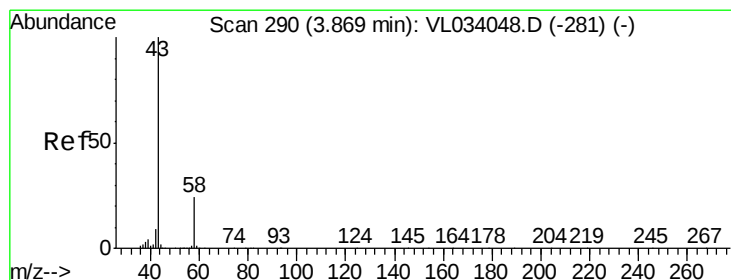
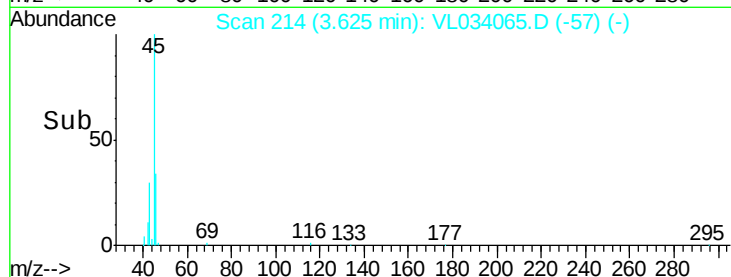
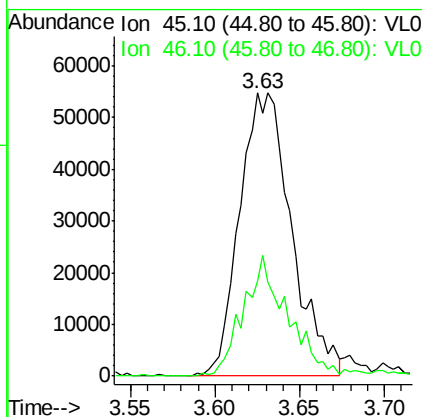
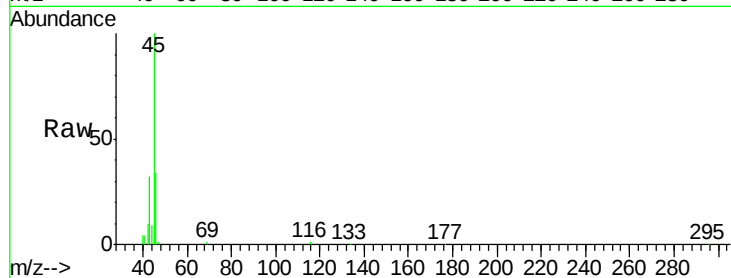
#13
Ethanol
Concen: 5.268 ppbv m
RT: 3.63 min Scan# 214
Delta R.T. 0.00 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Instrument :
MSVOA_L
ClientSampleId :
SSG2DL

Tot Ion	Ratio	Lower	Upper
45	100		
46	0.0	15.6	62.2#

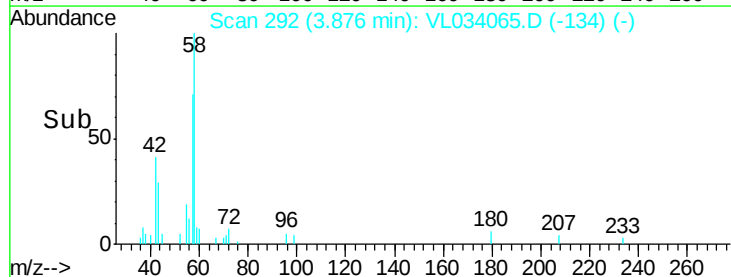
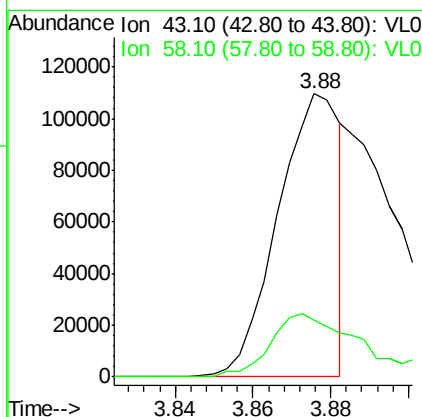
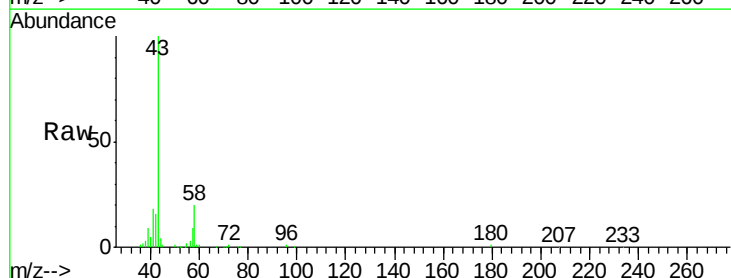
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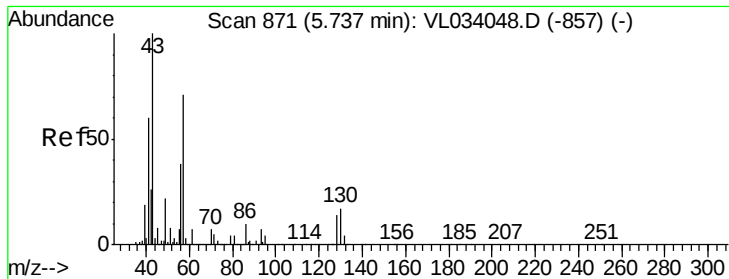
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#15
Acetone
Concen: 0.595 ppbv m
RT: 3.88 min Scan# 292
Delta R.T. 0.01 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Tgt Ion	Ratio	Lower	Upper
43	100		
58	33.2	21.6	32.4#





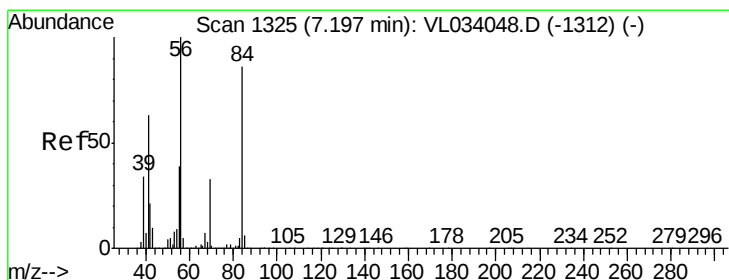
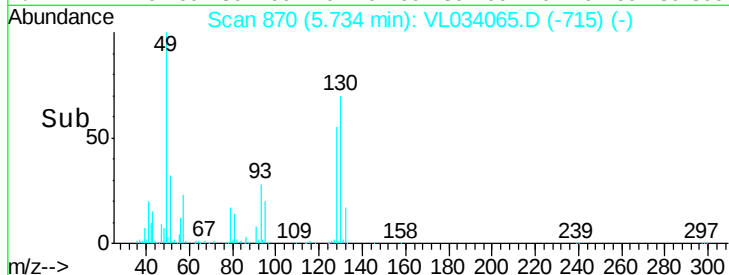
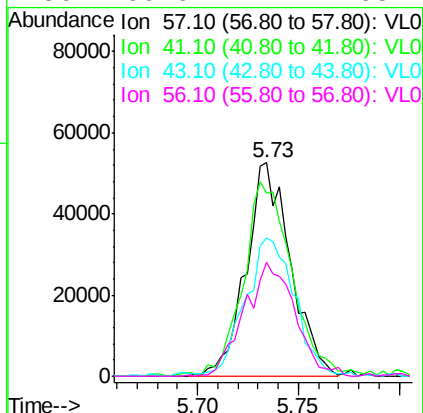
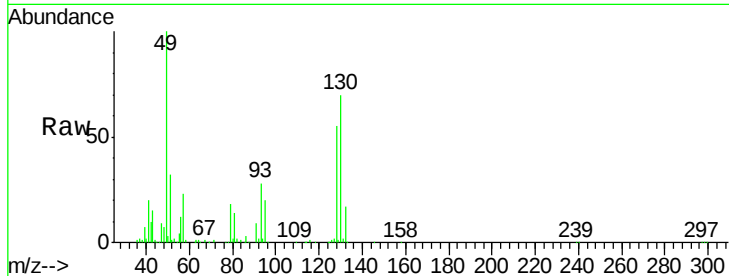
#26
Hexane
Concen: 0.590 ppbv
RT: 5.73 min Scan# 870
Delta R.T. -0.00 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Instrument :
MSVOA_L
ClientSampleId :
SSG2DL

Tot Ion	57	Resp	81164
Ion	Ratio	Lower	Upper
57	100		
41	99.8	69.0	103.6
43	73.4	176.6	264.8#
56	60.6	42.2	63.4

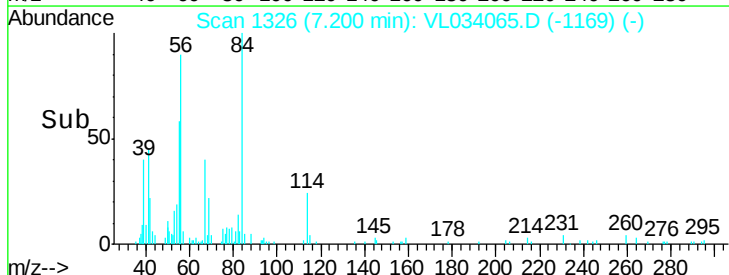
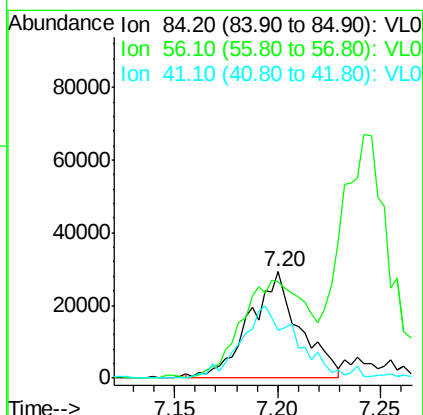
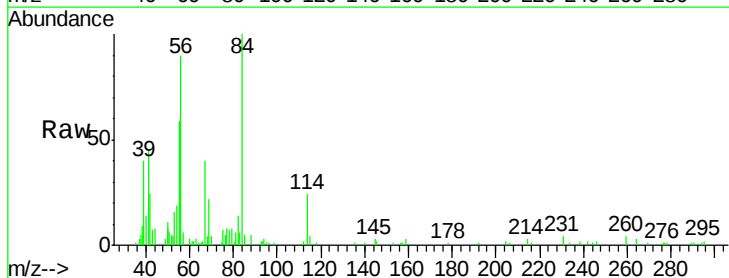
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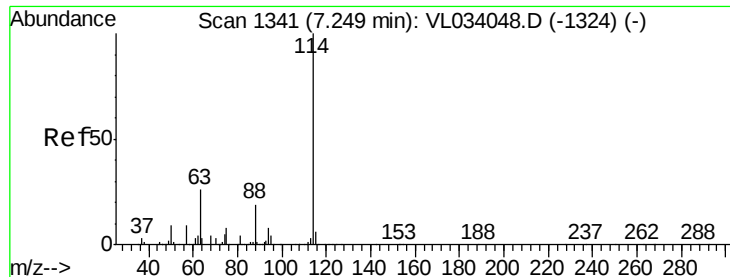
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#30
Cyclohexane
Concen: 0.354 ppbv m
RT: 7.20 min Scan# 1326
Delta R.T. 0.00 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Tgt Ion	84	Resp	49449
Ion	Ratio	Lower	Upper
84	100		
56	0.0	101.7	152.5#
41	0.0	59.4	89.0#





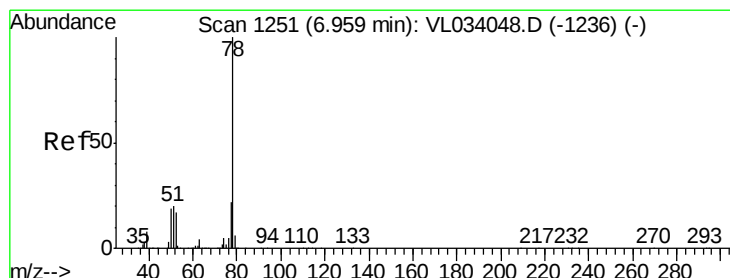
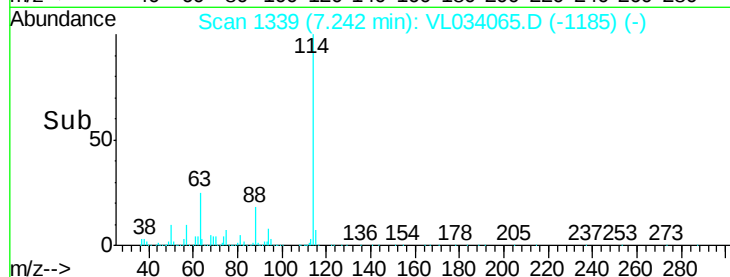
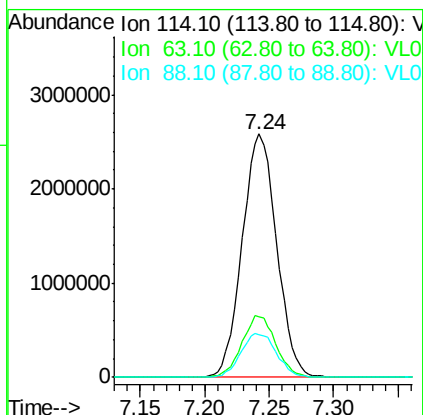
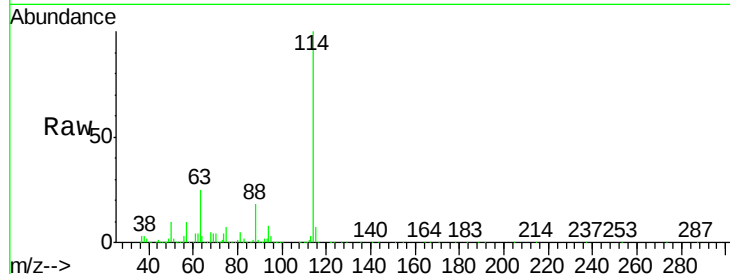
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.24 min Scan# 1339
 Delta R.T. -0.01 min
 Lab File: VL034065.D
 Acq: 30 Jul 2019 14:50

Instrument :
 MSVOA_L
 ClientSampleId :
 SSG2DL

Tot Ion	Ratio	Lower	Upper
114	100		
63	25.0	21.0	31.6
88	18.7	14.7	22.1

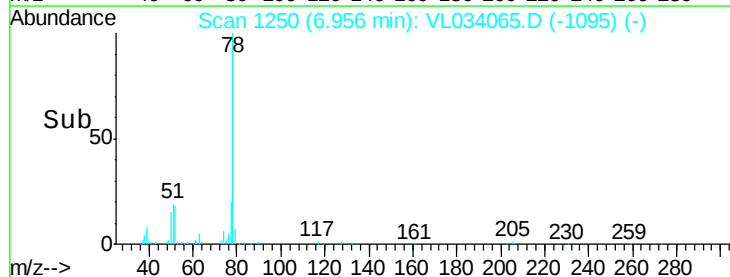
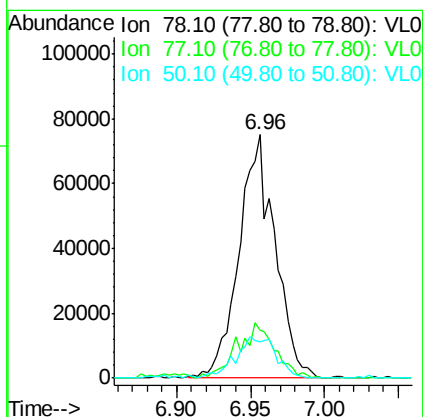
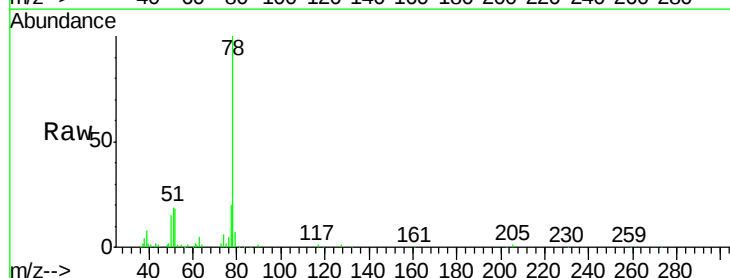
Manual Integrations
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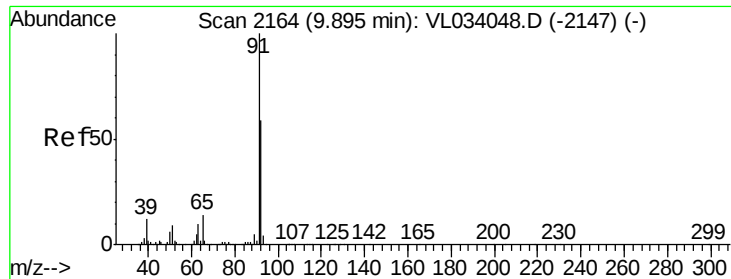
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 8/7/2019 12:20:19 PM



#36
 Benzene
 Concen: 0.397 ppbv m
 RT: 6.96 min Scan# 1250
 Delta R.T. -0.00 min
 Lab File: VL034065.D
 Acq: 30 Jul 2019 14:50

Tgt Ion	Ratio	Lower	Upper
78	100		
77	19.5	17.9	26.9
50	14.7	14.9	22.3#





#53

Toluene

Concen: 5.720 ppbv

RT: 9.89 min Scan# 2163

Delta R.T. -0.00 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleId :

SSG2DL

Tot Ion: 91 Resp: 1912096

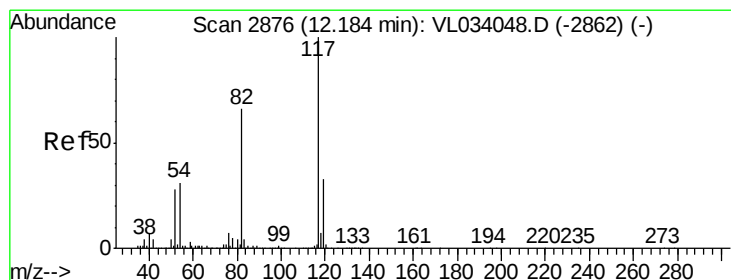
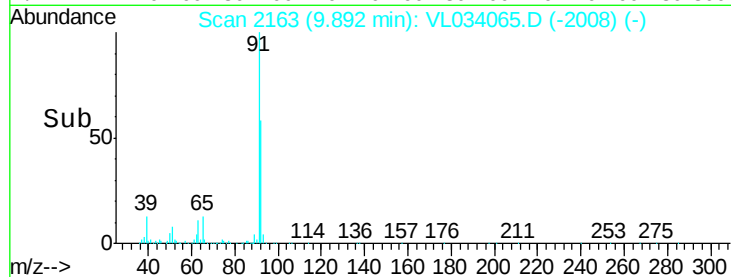
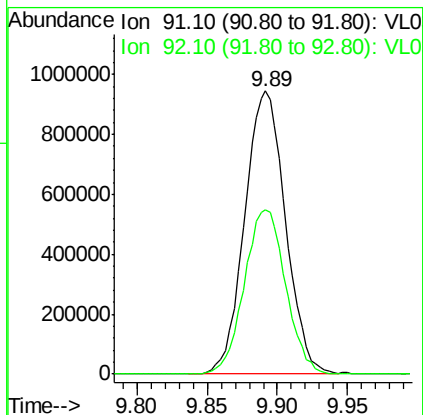
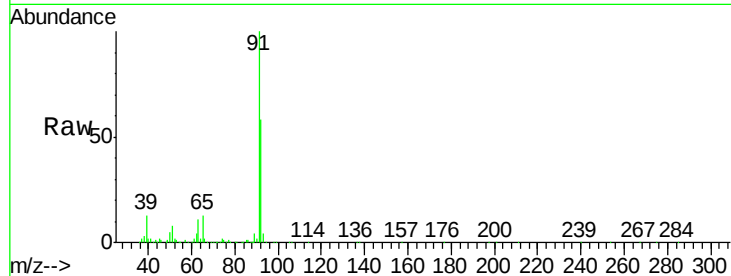
Ion Ratio Lower Upper

91 100

92 59.2 47.4 71.2

Manual Integrations
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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.18 min Scan# 2875

Delta R.T. -0.00 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

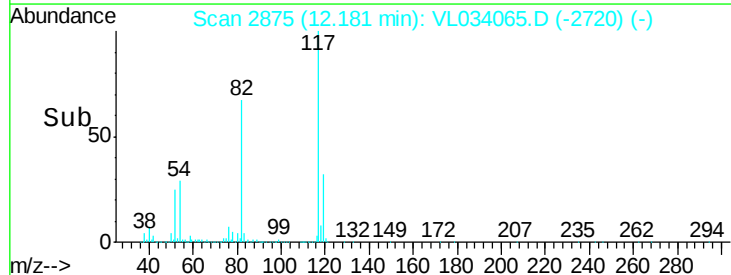
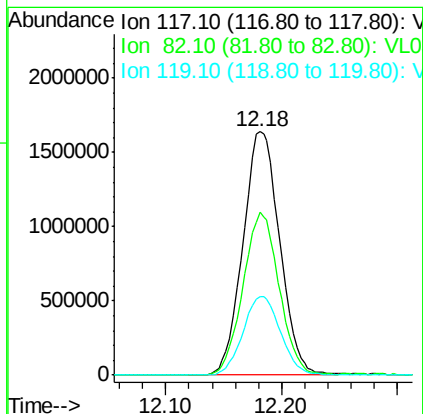
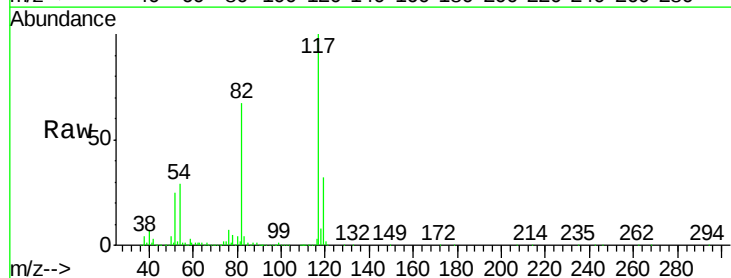
Tgt Ion: 117 Resp: 3624399

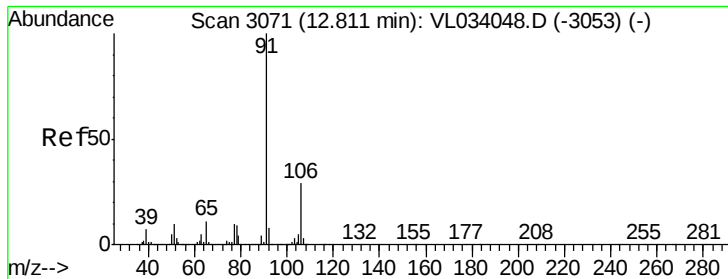
Ion Ratio Lower Upper

117 100

82 65.9 49.8 74.8

119 33.0 43.0 64.6#





#58

Ethyl Benzene

Concen: 1.043 ppbv

RT: 12.80 min Scan# 3069

Delta R.T. -0.01 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampled :

SSG2DL

Tot Ion: 91 Resp: 447490

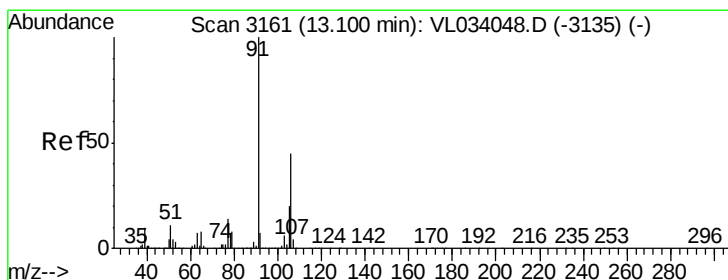
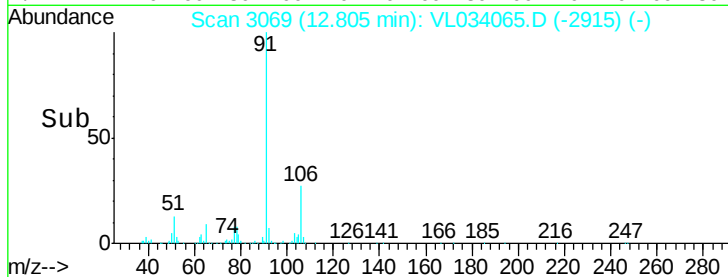
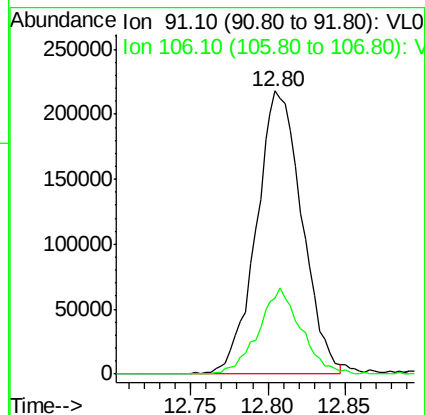
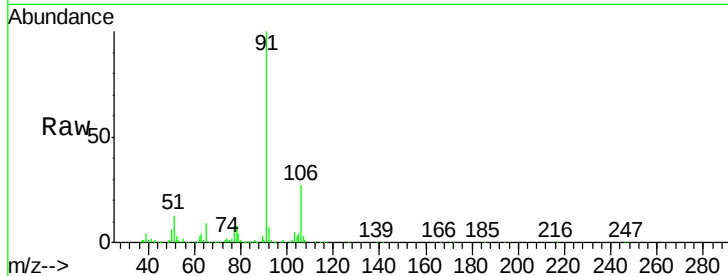
Ion Ratio Lower Upper

91 100

106 27.0 23.5 35.3

Manual Integrations
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#59

m/p-Xylene

Concen: 3.875 ppbv m

RT: 13.06 min Scan# 3149

Delta R.T. -0.04 min

Lab File: VL034065.D

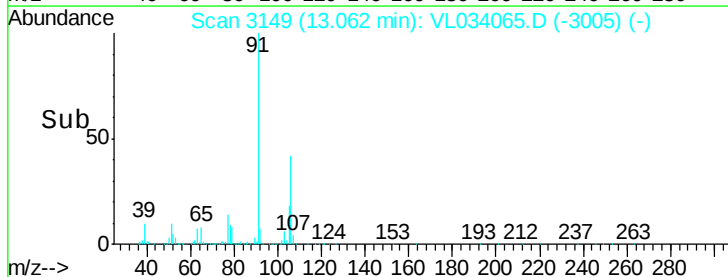
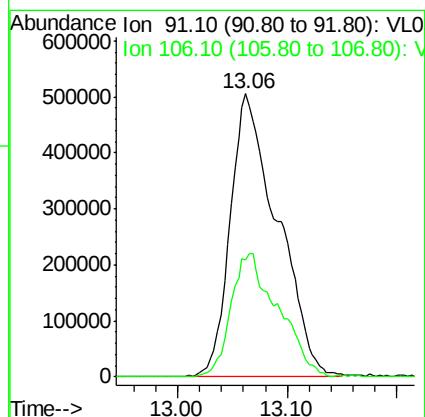
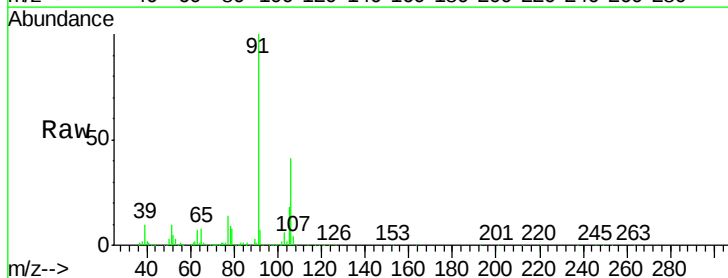
Acq: 30 Jul 2019 14:50

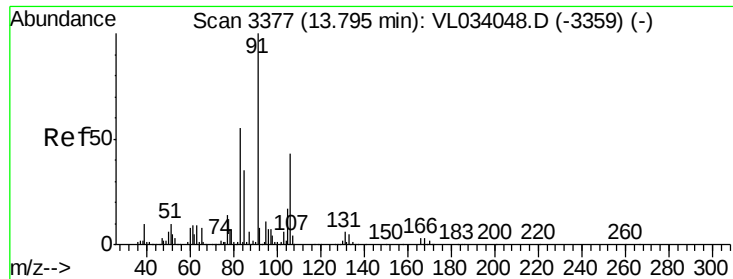
Tgt Ion: 91 Resp: 1511085

Ion Ratio Lower Upper

91 100

106 0.0 35.1 52.7#





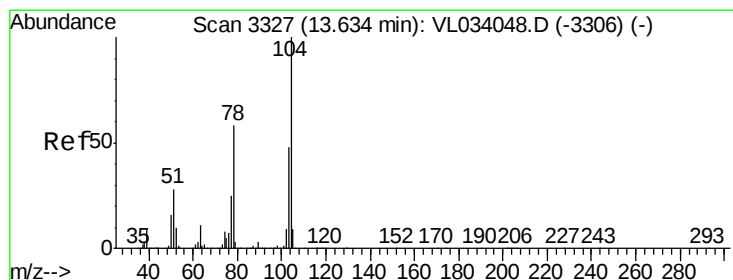
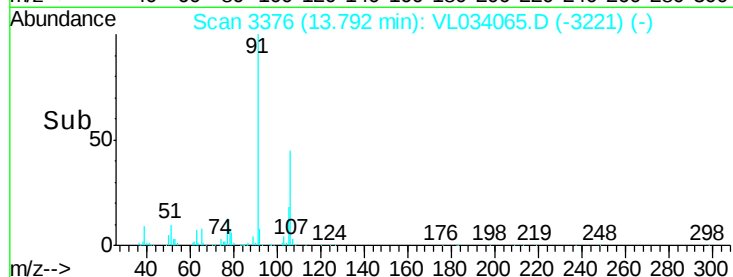
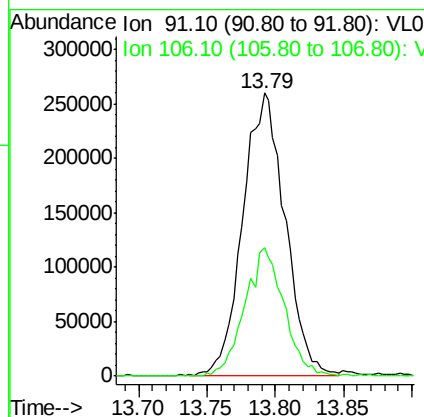
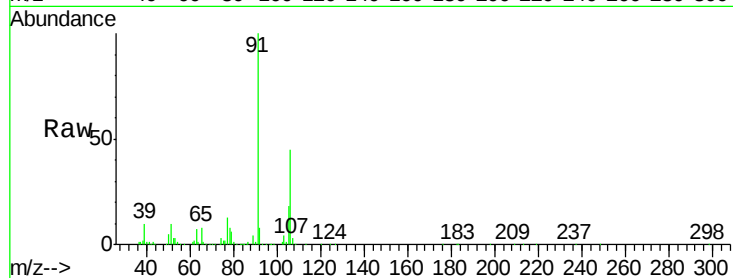
#60
o-Xylene
Concen: 1.445 ppbv m
RT: 13.79 min Scan# 3376
Delta R.T. -0.00 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Instrument :
MSVOA_L
ClientSampled :
SSG2DL

Tot Ion: 91 Resp: 560000
Ion Ratio Lower Upper
91 100
106 42.4 21.2 63.6

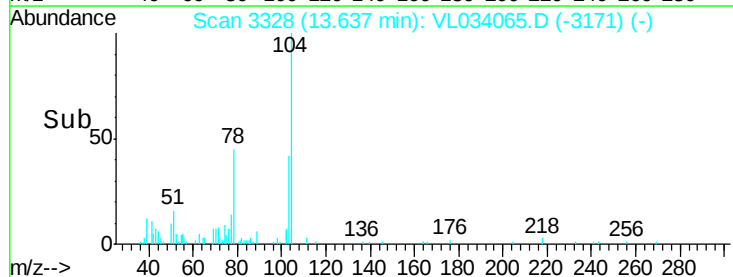
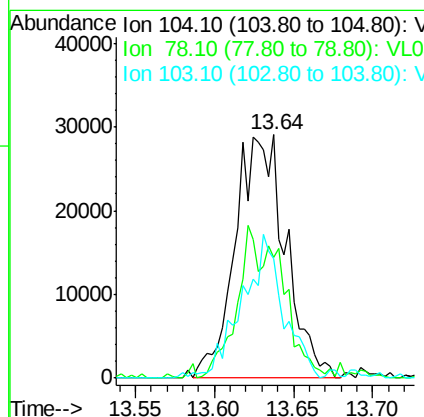
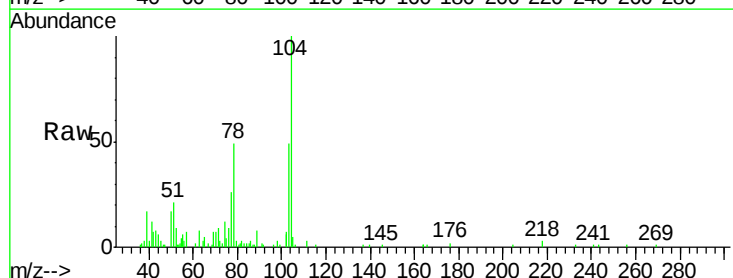
Manual Integrations
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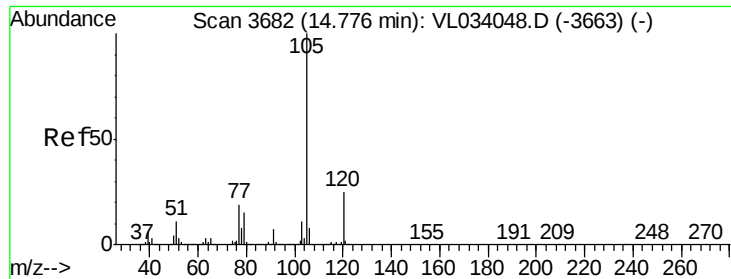
MMDadoda
8/7/2019 12:20:19 PM



#61
Styrene
Concen: 0.249 ppbv m
RT: 13.64 min Scan# 3328
Delta R.T. 0.00 min
Lab File: VL034065.D
Acq: 30 Jul 2019 14:50

Tgt Ion: 104 Resp: 63764
Ion Ratio Lower Upper
104 100
78 0.0 44.3 66.5#
103 49.5 38.8 58.2





#62

Isopropylbenzene

Concen: 0.232 ppbv

RT: 14.78 min Scan# 3682

Delta R.T. 0.00 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleId :

SSG2DL

Tot Ion:105 Resp: 120341

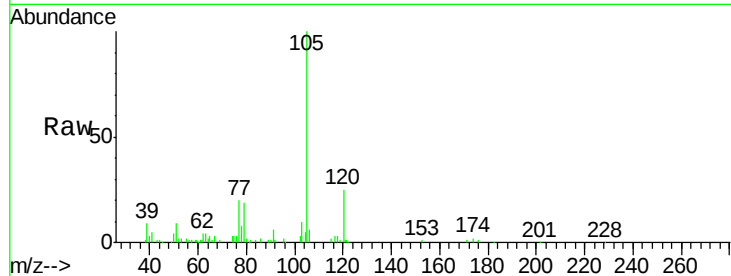
Ion Ratio Lower Upper

105 100

120 25.0 20.2 30.2

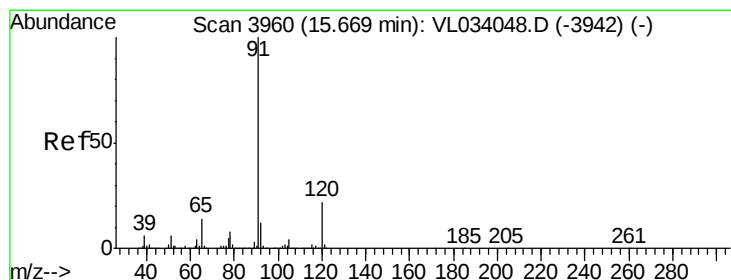
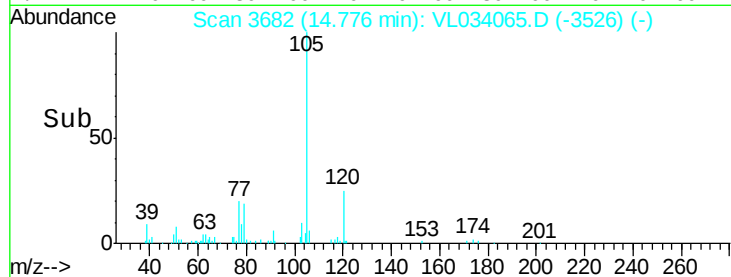
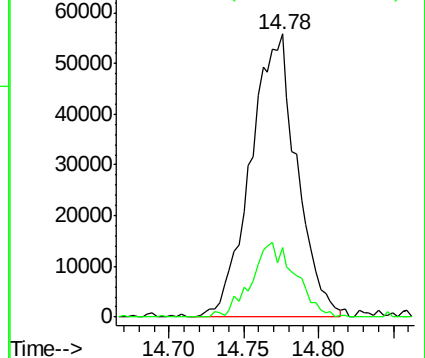
Manual Integrations
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Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.325 ppbv m

RT: 15.67 min Scan# 3961

Delta R.T. 0.00 min

Lab File: VL034065.D

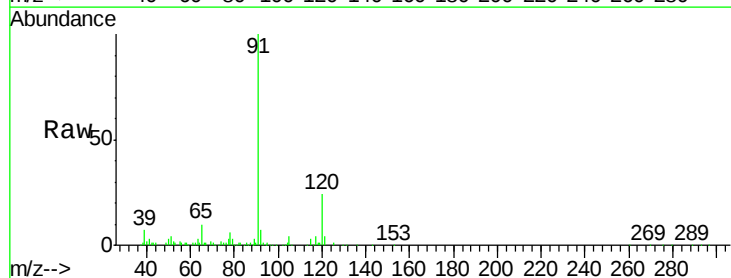
Acq: 30 Jul 2019 14:50

Tgt Ion:120 Resp: 43645

Ion Ratio Lower Upper

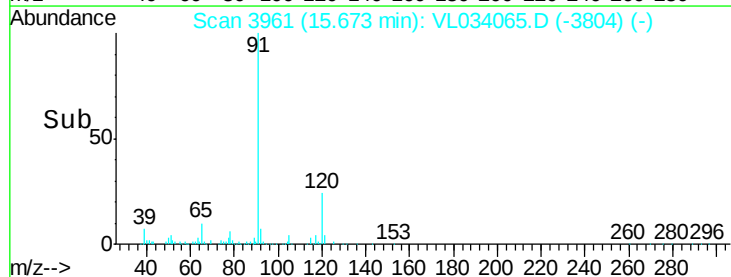
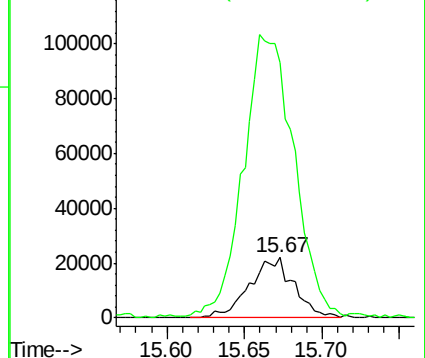
120 100

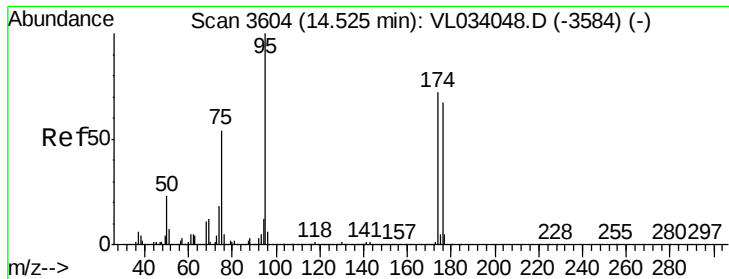
91 536.3 386.2 579.2



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: 9.911 ppbv

RT: 14.52 min Scan# 3602

Delta R.T. -0.01 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleId :

SSG2DL

Tot Ion: 95 Resp: 2839241

Ion Ratio Lower Upper

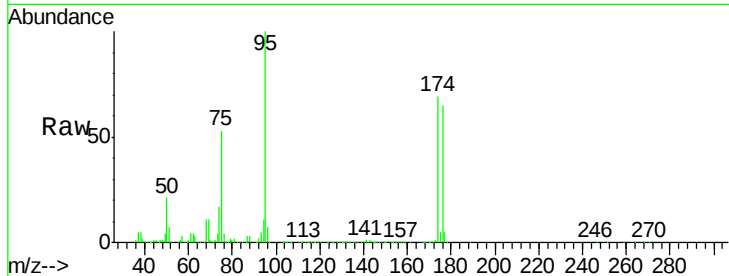
95 100

174 71.7 57.6 86.4

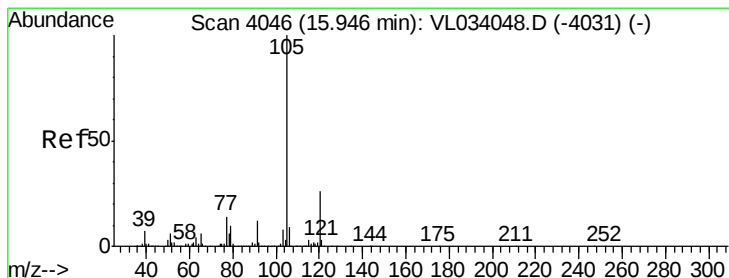
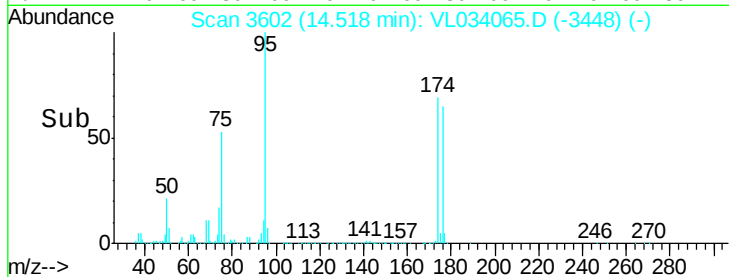
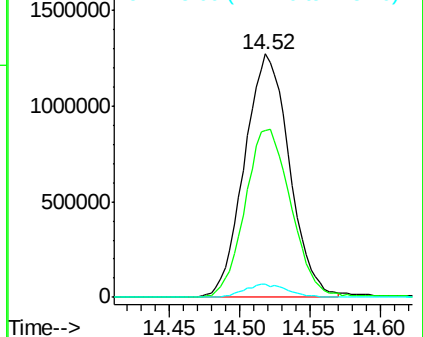
175 5.4 4.1 6.1

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Abundance Ion 95.10 (94.80 to 95.80): VL0
Ion 174.00 (173.70 to 174.70): V
Ion 175.00 (174.70 to 175.70): V



#72

4-Ethyltoluene

Concen: 0.687 ppbv

RT: 15.94 min Scan# 4045

Delta R.T. -0.00 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Tgt Ion: 105 Resp: 301168

Ion Ratio Lower Upper

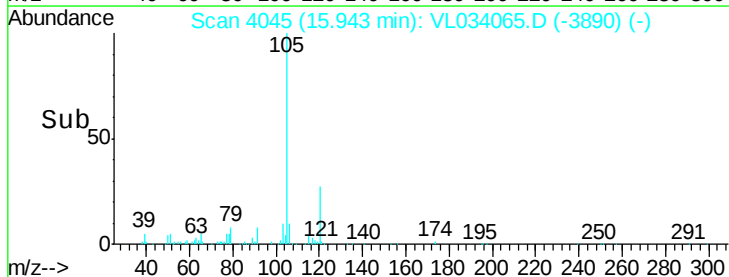
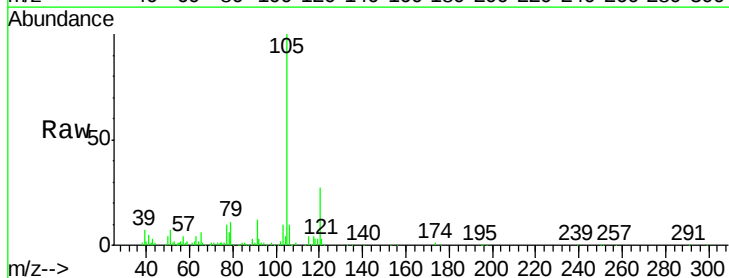
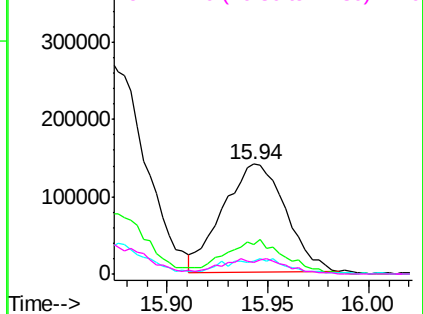
105 100

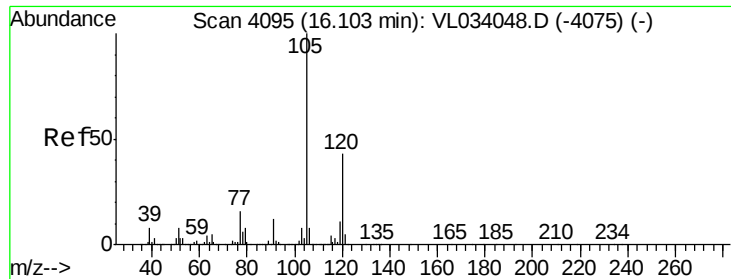
120 31.8 23.0 34.4

91 15.4 10.6 16.0

77 13.4 11.5 17.3

Abundance Ion 105.10 (104.80 to 105.80): V
Ion 120.20 (119.90 to 120.90): V
Ion 91.10 (90.80 to 91.80): VL0
Ion 77.10 (76.80 to 77.80): VL0





#73

1,3,5-Trimethylbenzene

Concen: 0.432 ppbv

RT: 16.10 min Scan# 4094

Delta R.T. -0.00 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Instrument :

MSVOA_L

ClientSampleID :

SSG2DL

Tot Ion:105 Resp: 192465

Ion Ratio Lower Upper

105 100

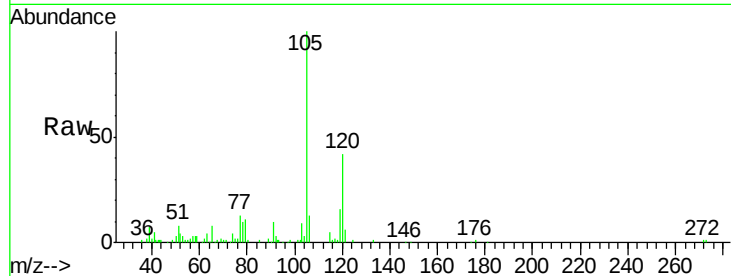
120 41.5 34.7 52.1

Manual Integrations

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MMDadoda

8/7/2019 12:20:19 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.10

80000

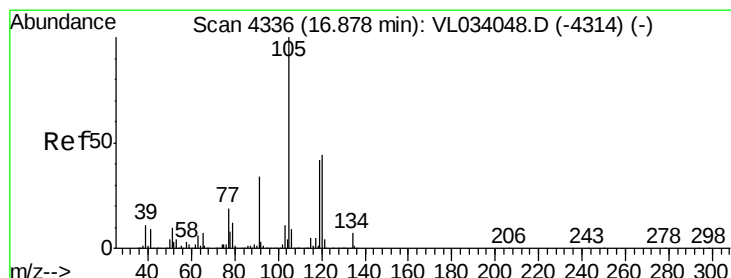
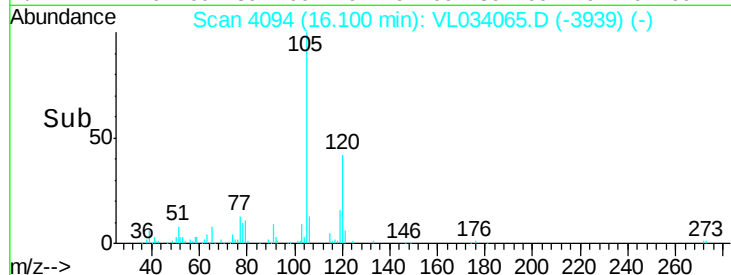
60000

40000

20000

0

Time--> 16.00 16.05 16.10 16.15



#74

1,2,4-Trimethylbenzene

Concen: 1.799 ppbv m

RT: 16.87 min Scan# 4334

Delta R.T. -0.01 min

Lab File: VL034065.D

Acq: 30 Jul 2019 14:50

Tgt Ion:105 Resp: 881523

Ion Ratio Lower Upper

105 100

120 43.0 35.6 53.4

91 11.5 28.0 42.0#

77 13.6 15.2 22.8#

Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

600000

500000

400000

300000

200000

100000

0

Time--> 16.80 16.90

