

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120820\
 Data File : VL036107.D
 Acq On : 8 Dec 2020 23:05
 Operator : SY/AP
 Sample : L4949-05DL 10X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DL

Manual Integrations
 APPROVED

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 12/11/2020 12:23:22 PM

Quant Time: Dec 09 22:39:12 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 0
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1171731	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2609179	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.10	117	2317308	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	1965927	10.68	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
9) Propene	3.02	41	355861m	5.314	ppbv	
10) Heptane	8.12	43	69522m	0.406	ppbv	
13) Ethanol	3.61	45	70798m	7.669	ppbv	
15) Acetone	3.85	43	4518595	32.087	ppbv	99
19) Isopropyl Alcohol	3.98	45	200383	2.328	ppbv #	100
25) Ethyl Acetate	5.68	43	598832	2.129	ppbv #	67
34) 2-Butanone	5.25	43	1085808	6.274	ppbv	100
36) Benzene	6.90	78	22082m	0.100	ppbv	
41) Tetrahydrofuran	6.06	42	153272	1.491	ppbv	97
44) 2,2,4-Trimethylpentane	7.87	57	230248	0.575	ppbv #	71
50) 4-Methyl-2-Pentanone	8.76	43	300986	1.166	ppbv	98
52) Tetrachloroethene	11.24	164	9024m	0.113	ppbv	
53) Toluene	9.82	91	4750881	19.134	ppbv	98
58) Ethyl Benzene	12.73	91	300663	0.947	ppbv	99
59) m/p-Xylene	12.98	91	962654	3.599	ppbv	98
60) o-Xylene	13.70	91	322196	1.279	ppbv	97
72) 4-Ethyltoluene	15.86	105	98539m	0.361	ppbv	
73) 1,3,5-Trimethylbenzene	16.01	105	83716m	0.321	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	195792m	0.748	ppbv	

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

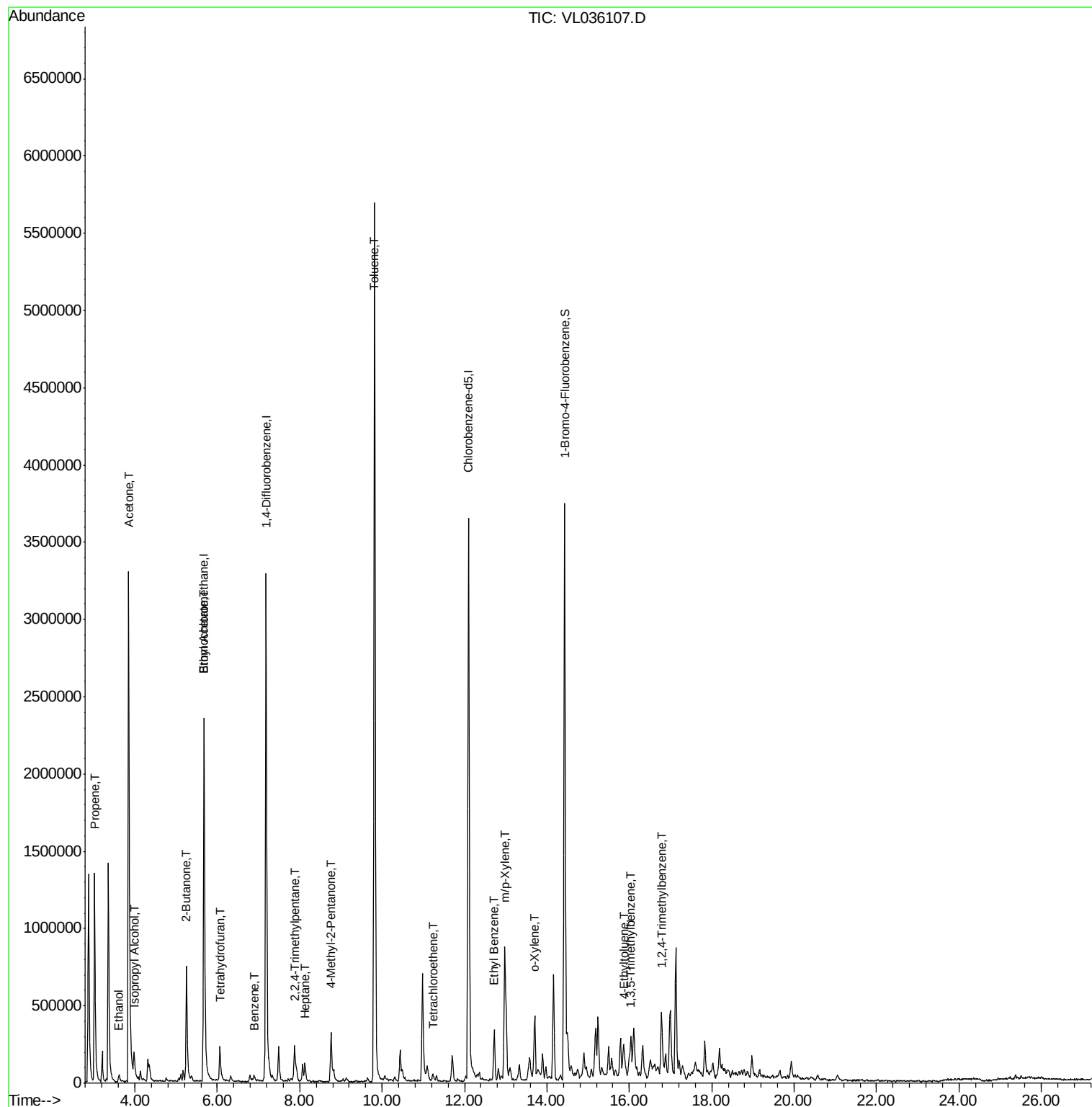
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120820\
Data File : VL036107.D
Acq On : 8 Dec 2020 23:05
Operator : SY/AP
Sample : L4949-05DL 10X
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

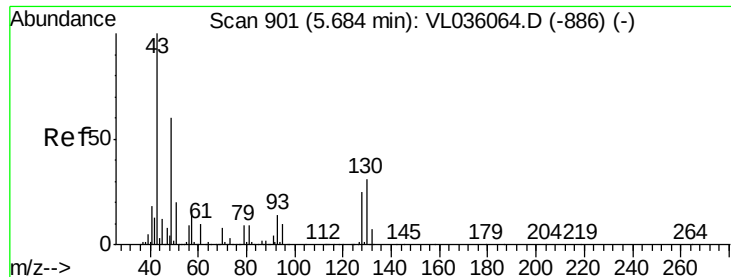
Instrument :
MSVOA_L
ClientSampleId :
IA-4DL

Manual Integrations
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12/11/2020 12:23:22 PM

Quant Time: Dec 09 22:39:12 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





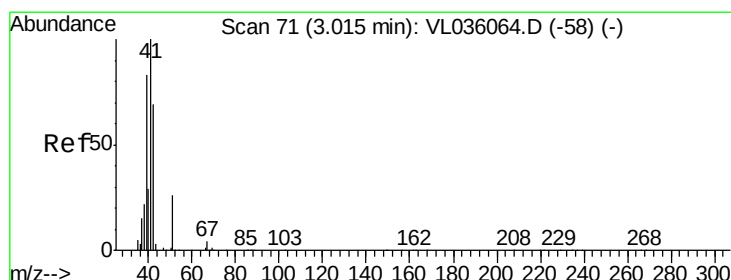
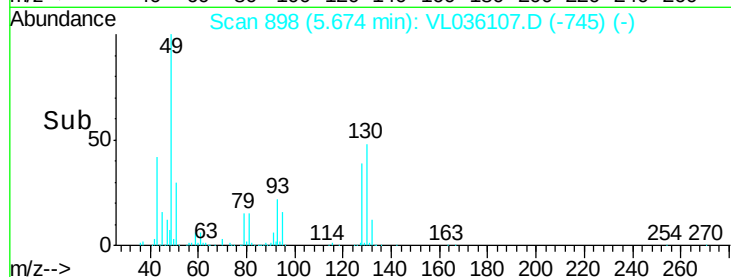
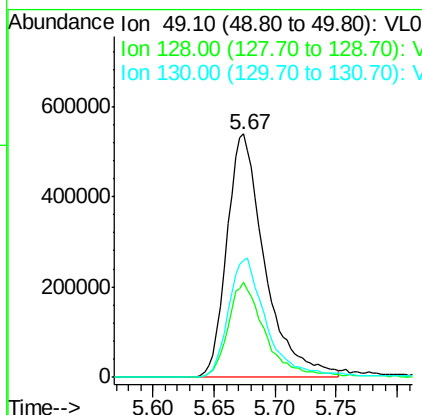
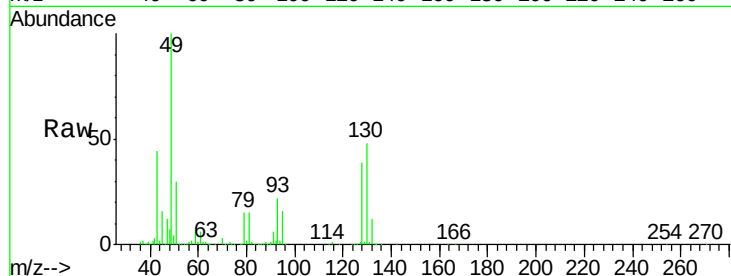
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Instrument :
MSVOA_L
ClientSampled :
IA-4DL

Tot Ion: 49 Resp: 1171731
Ion Ratio Lower Upper
49 100
128 38.9 21.1 63.1
130 49.9 27.1 81.3

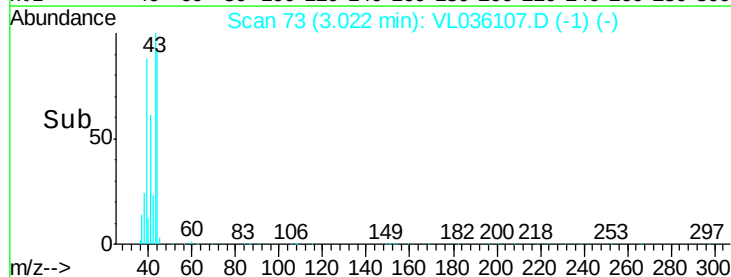
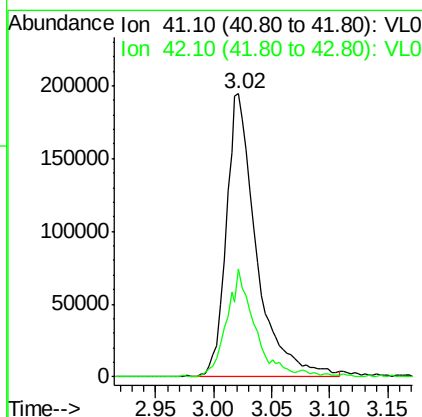
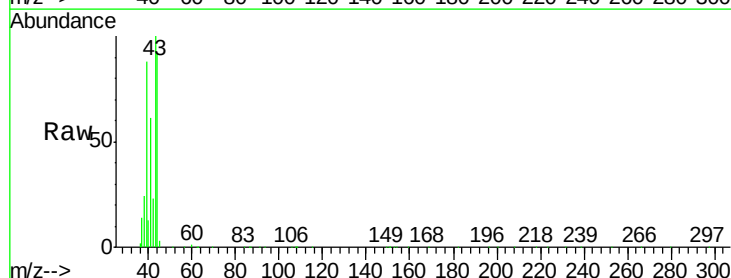
Manual Integrations
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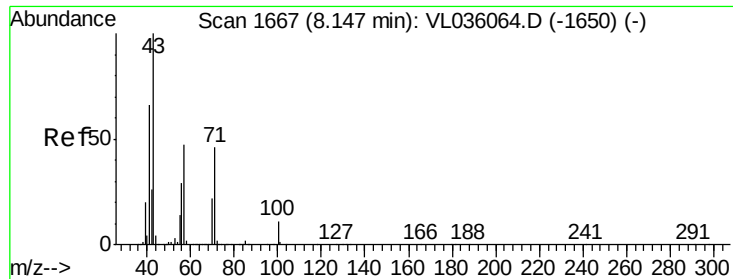
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#9
Propene
Concen: 5.314 ppbv m
RT: 3.02 min Scan# 73
Delta R.T. 0.01 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Tgt Ion: 41 Resp: 355861
Ion Ratio Lower Upper
41 100
42 12.8 57.0 85.6#





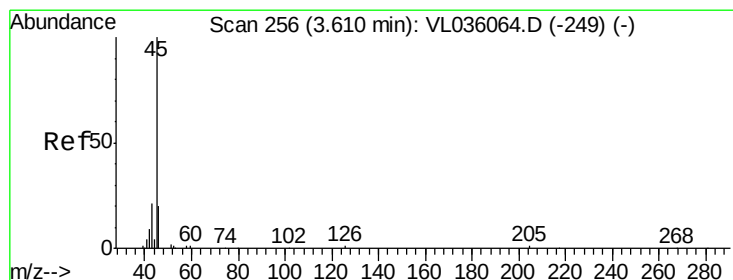
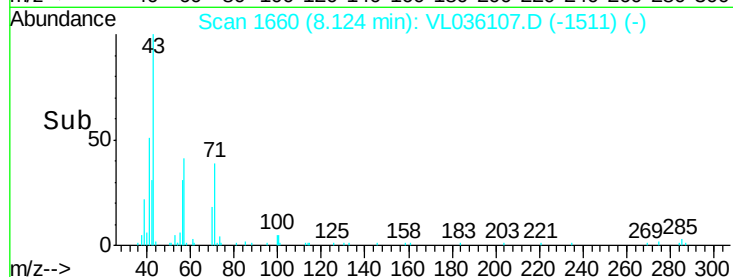
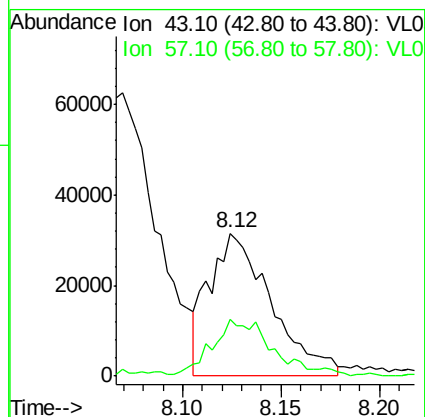
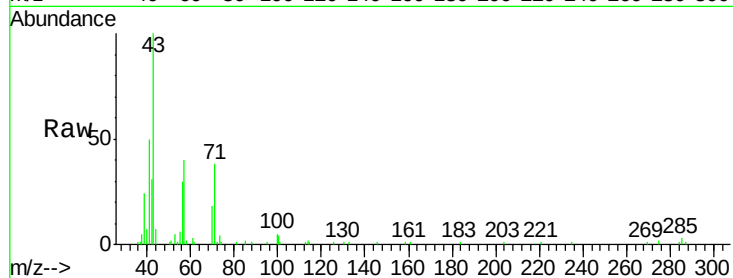
#10
Heptane
Concen: 0.406 ppbv m
RT: 8.12 min Scan# 1660
Delta R.T. -0.02 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Instrument :
MSVOA_L
ClientSampled :
IA-4DL

Tot Ion: 43 Resp: 69522
Ion Ratio Lower Upper
43 100
57 43.3 37.9 56.9

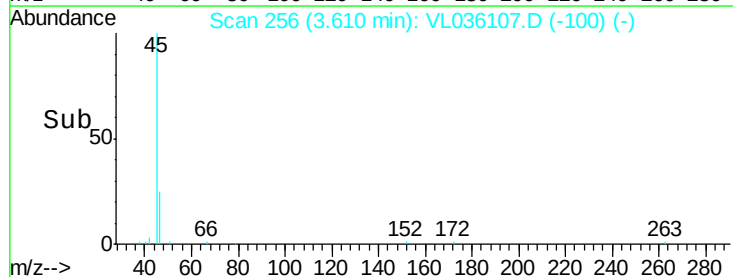
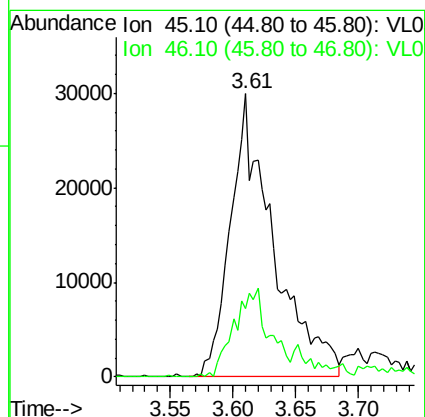
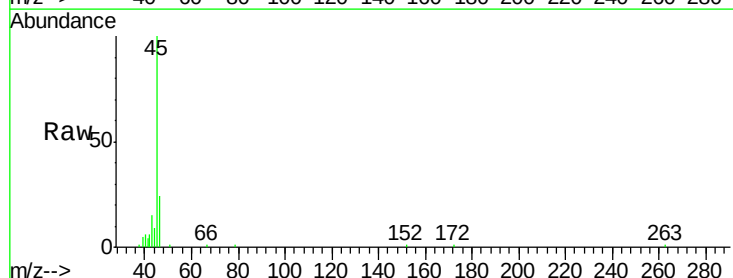
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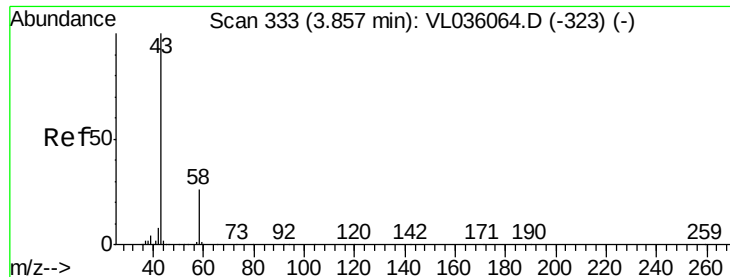
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#13
Ethanol
Concen: 7.669 ppbv m
RT: 3.61 min Scan# 256
Delta R.T. 0.00 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Tgt Ion: 45 Resp: 70798
Ion Ratio Lower Upper
45 100
46 0.0 19.0 75.8#





#15

Acetone

Concen: 32.087 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.01 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

ClientSampled :

IA-4DL

Tot Ion: 43 Resp: 4518595

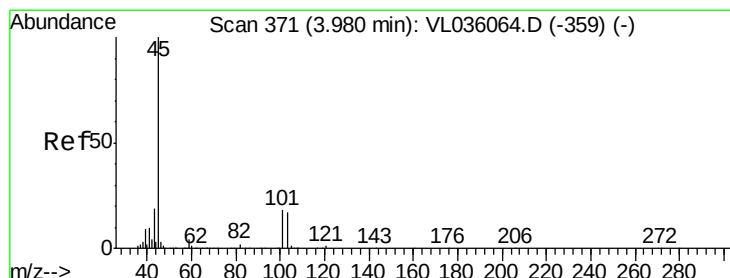
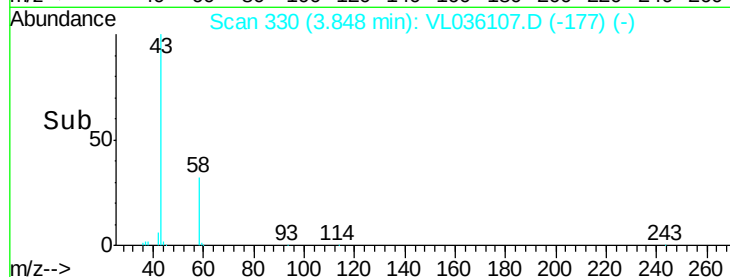
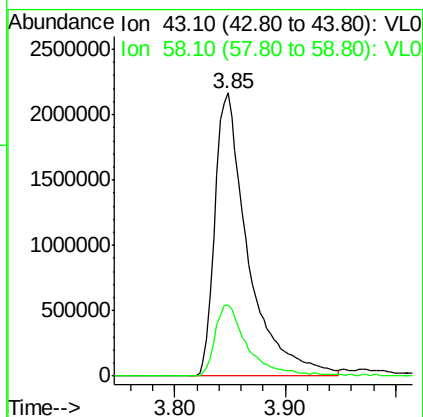
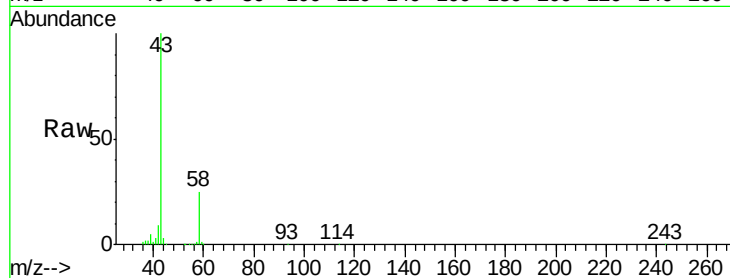
Ion Ratio Lower Upper

43 100

58 25.7 20.9 31.3

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#19

Isopropyl Alcohol

Concen: 2.328 ppbv

RT: 3.98 min Scan# 371

Delta R.T. 0.00 min

Lab File: VL036107.D

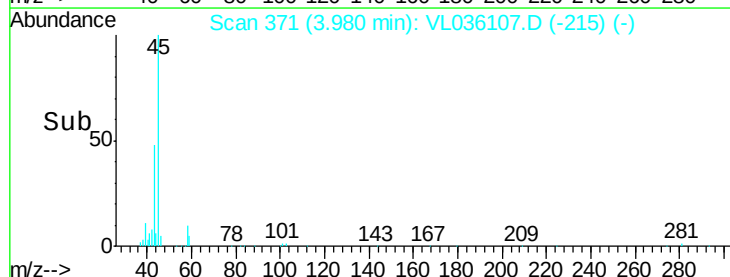
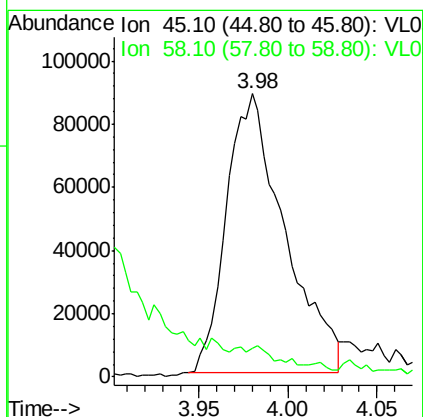
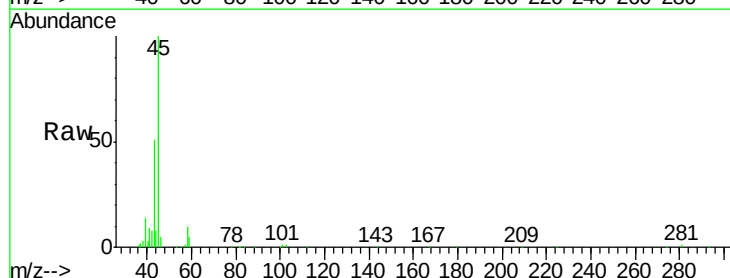
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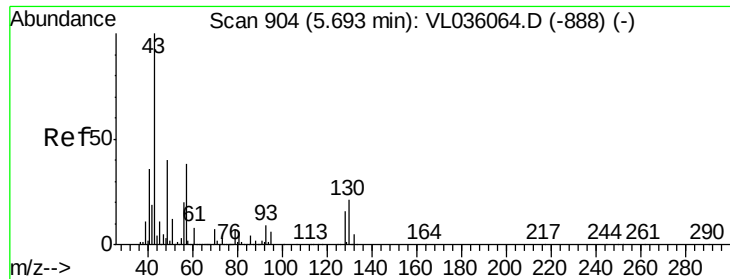
Tgt Ion: 45 Resp: 200383

Ion Ratio Lower Upper

45 100

58 0.0 0.0 0.0





#25

Ethyl Acetate

Concen: 2.129 ppbv

RT: 5.68 min Scan# 899

Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

ClientSampled :

IA-4DL

Tot Ion: 43 Resp: 598832

Ion Ratio Lower Upper

43 100

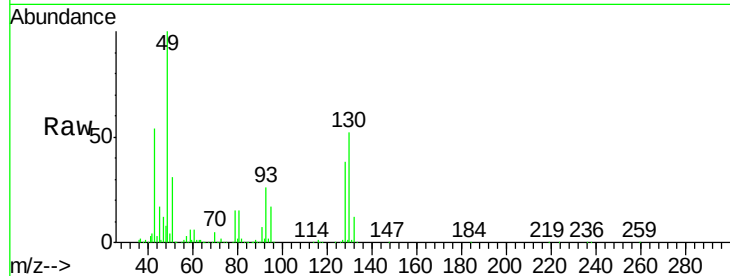
45 37.5 8.2 12.4#

61 12.2 7.4 11.2#

70 9.1 5.4 8.0#

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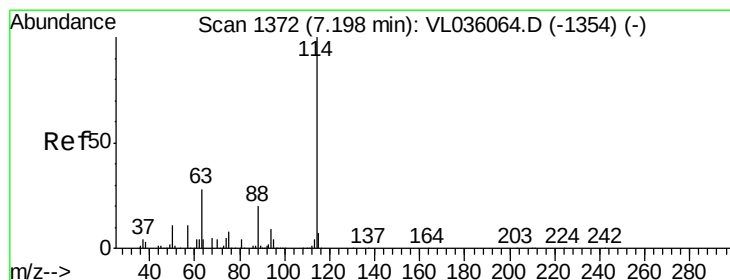
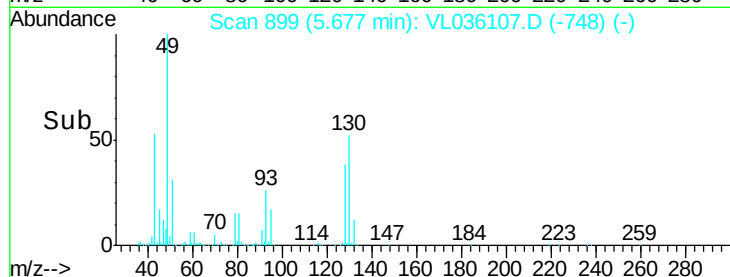
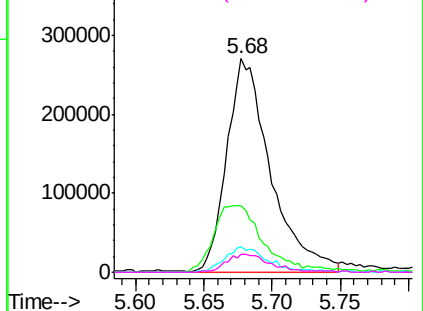


Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 45.10 (44.80 to 45.80): VL0

Ion 61.10 (60.80 to 61.80): VL0

Ion 70.10 (69.80 to 70.80): VL0



#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. -0.01 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

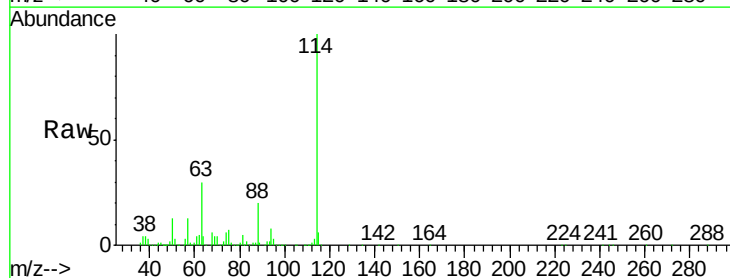
Tgt Ion: 114 Resp: 2609179

Ion Ratio Lower Upper

114 100

63 29.8 23.6 35.4

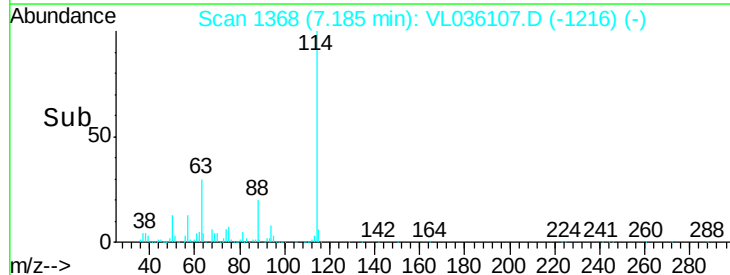
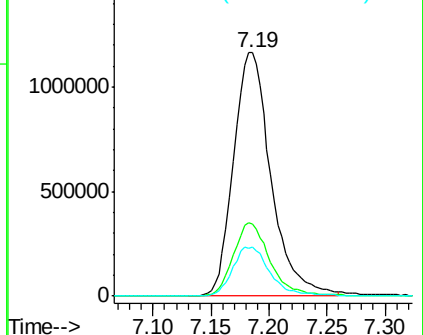
88 20.4 15.8 23.6

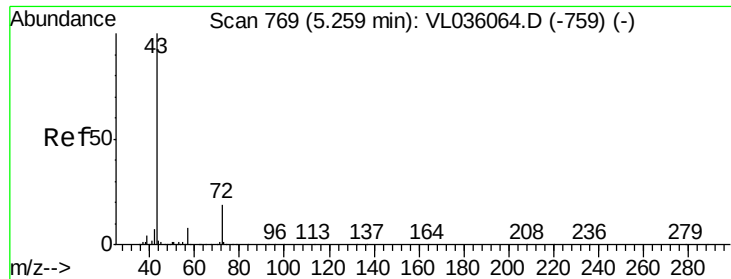


Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0





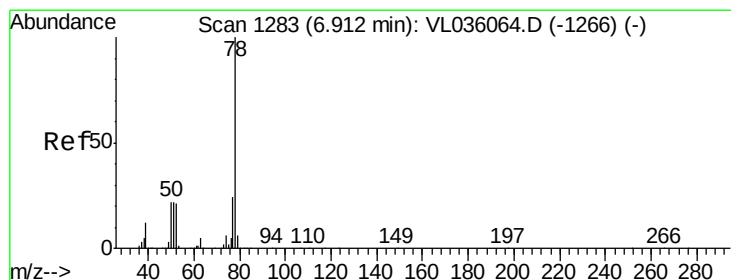
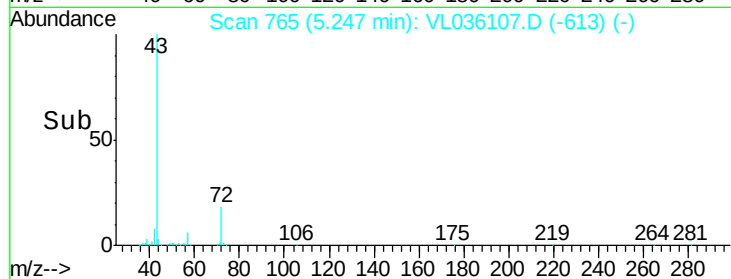
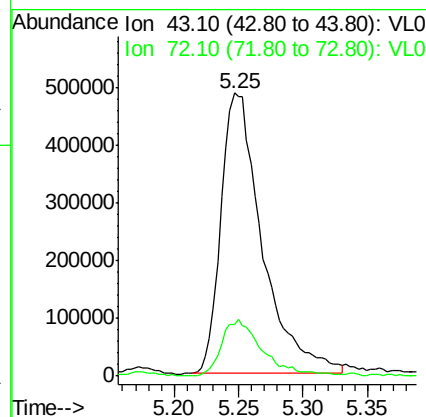
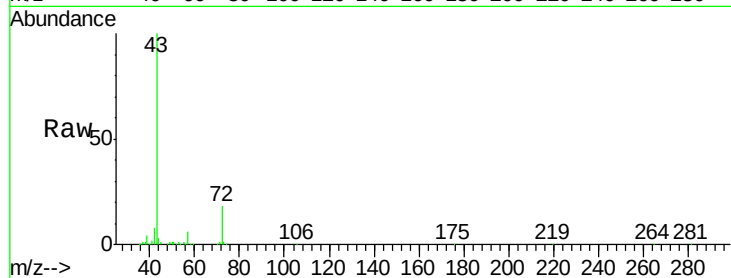
#34
2-Butanone
Concen: 6.274 ppbv
RT: 5.25 min Scan# 765
Delta R.T. -0.01 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Instrument :
MSVOA_L
ClientSampled :
IA-4DL

Tot Ion: 43 Resp: 1085808
Ion Ratio Lower Upper
43 100
72 20.5 16.5 24.7

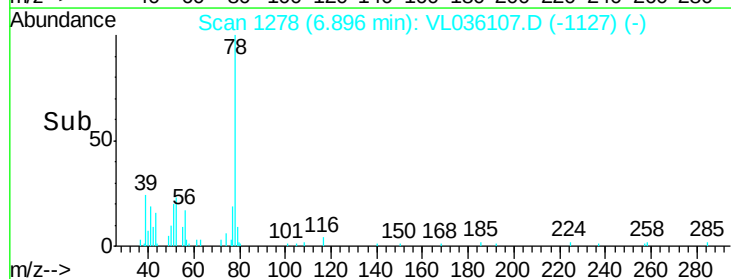
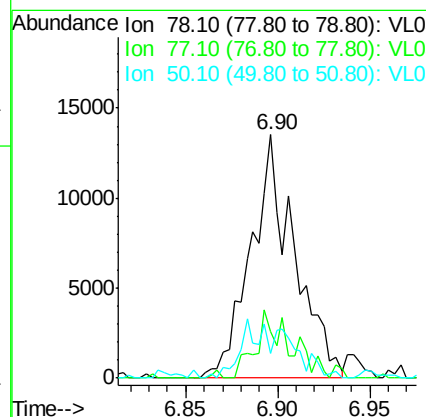
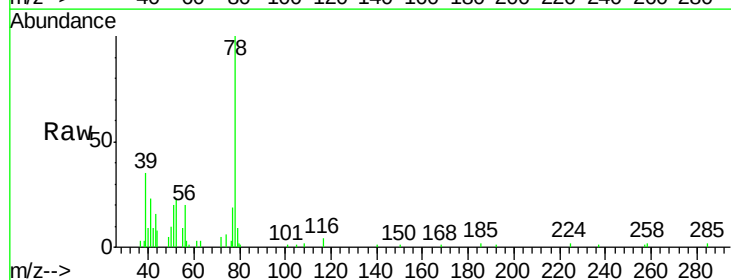
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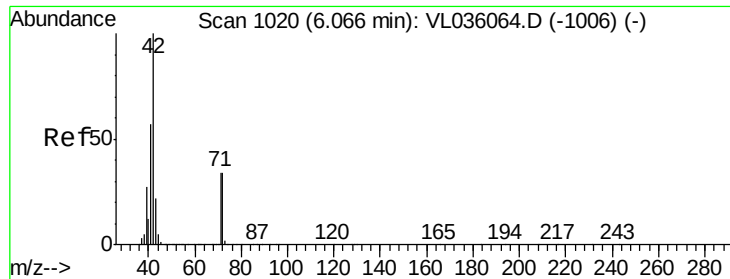
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#36
Benzene
Concen: 0.100 ppbv m
RT: 6.90 min Scan# 1278
Delta R.T. -0.02 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Tgt Ion: 78 Resp: 22082
Ion Ratio Lower Upper
78 100
77 19.1 19.4 29.2#
50 10.2 17.8 26.8#





#41

Tetrahydrofuran

Concen: 1.491 ppbv

RT: 6.06 min Scan# 1019

Delta R.T. -0.00 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

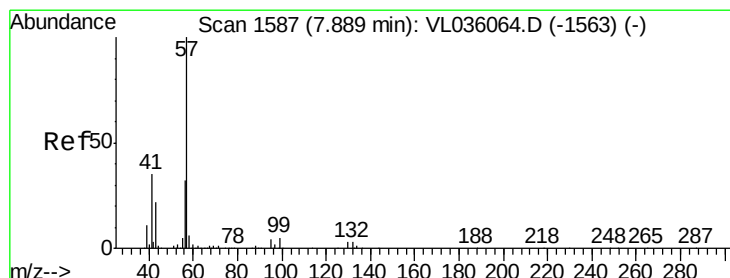
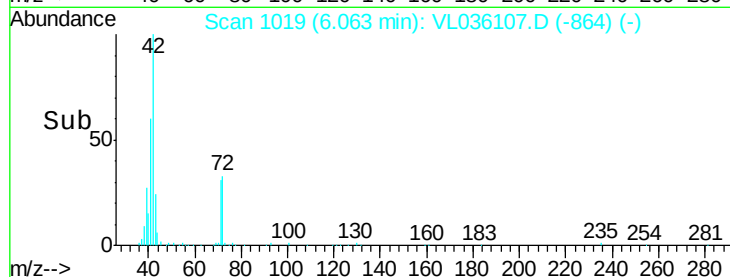
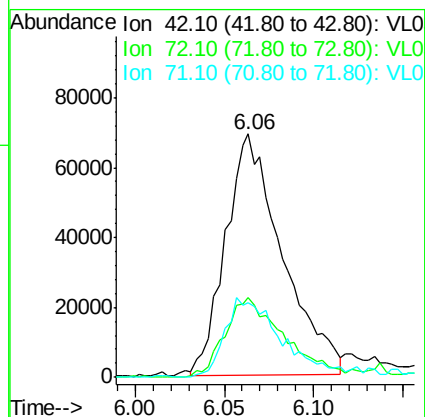
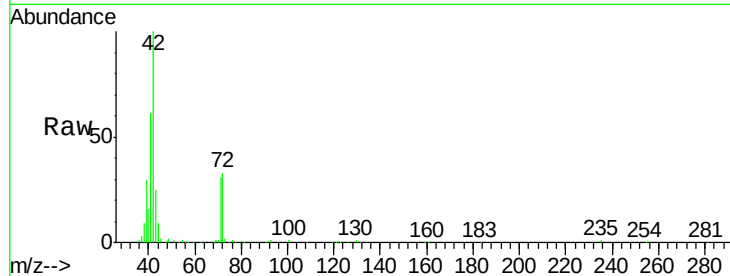
ClientSampled :

IA-4DL

Tot Ion	42	Resp	153272
Ion	Ratio	Lower	Upper
42	100		
72	36.6	28.3	42.5
71	36.6	27.3	40.9

Manual Integrations
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#44

2,2,4-Trimethylpentane

Concen: 0.575 ppbv

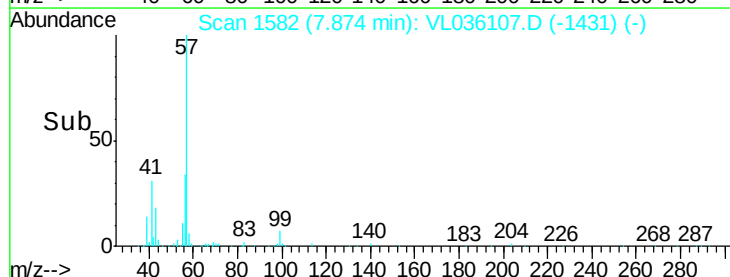
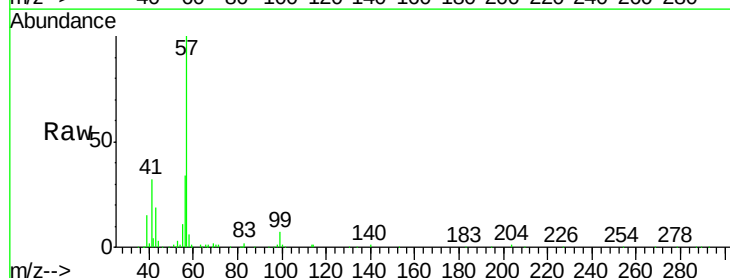
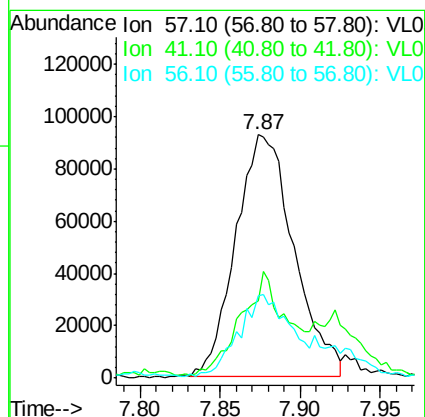
RT: 7.87 min Scan# 1582

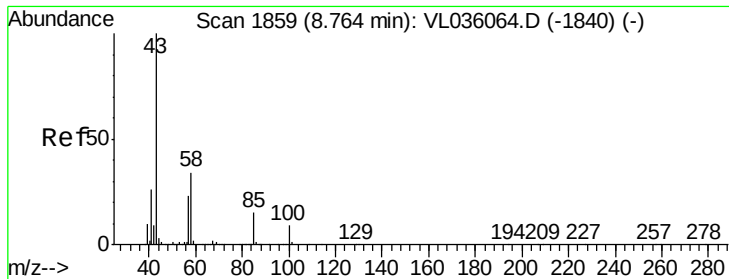
Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Tgt Ion	57	Resp	230248
Ion	Ratio	Lower	Upper
57	100		
41	56.7	28.9	43.3#
56	43.6	25.3	37.9#





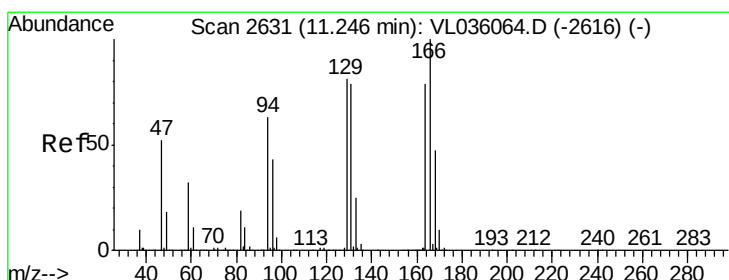
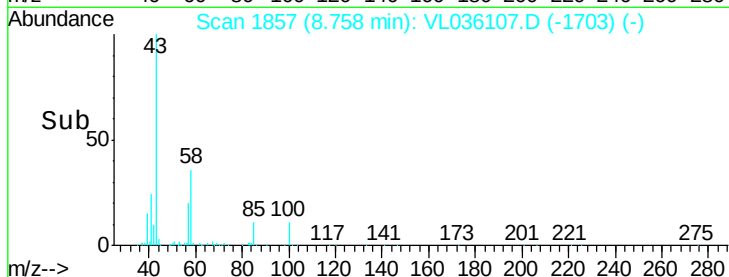
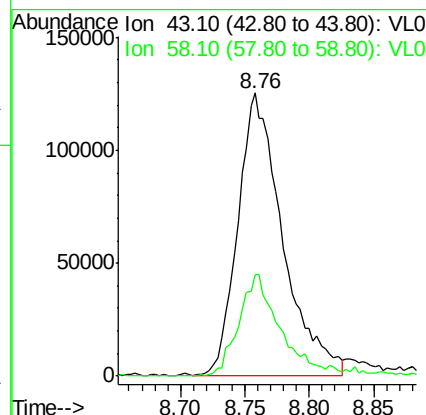
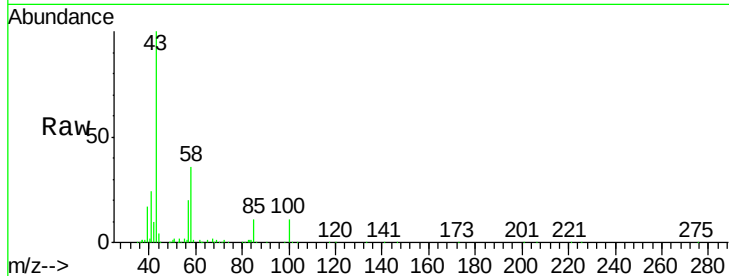
#50
4-Methyl-2-Pentanone
Concen: 1.166 ppbv
RT: 8.76 min Scan# 1857
Delta R.T. -0.01 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Instrument :
MSVOA_L
ClientSampled :
IA-4DL

Tot Ion	Ratio	Lower	Upper
43	100		
58	35.4	27.4	41.2

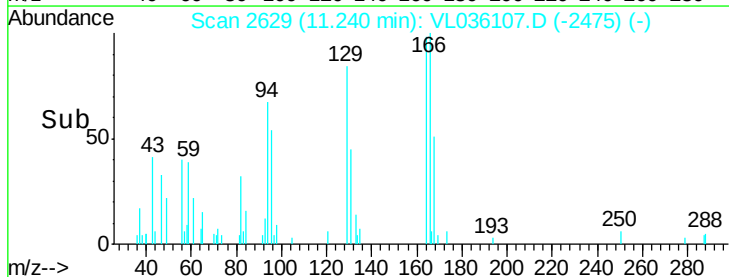
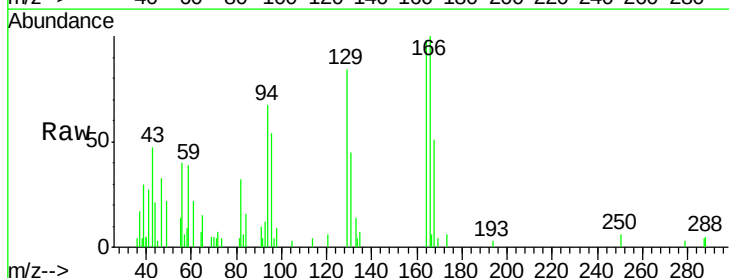
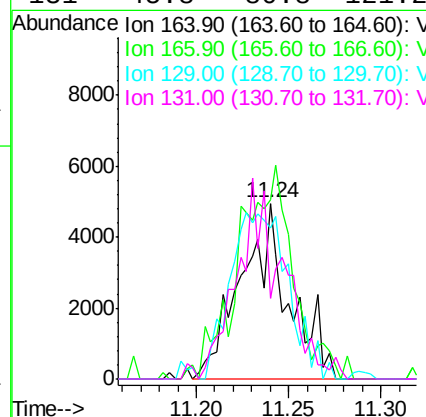
Manual Integrations
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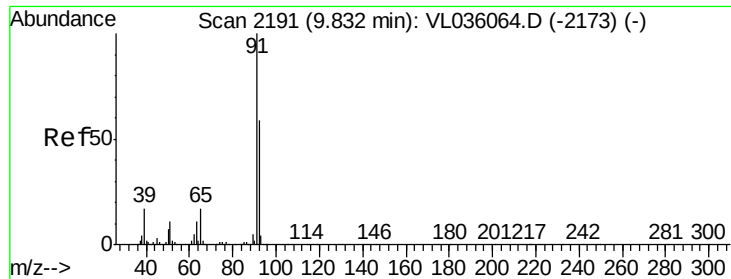
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#52
Tetrachloroethene
Concen: 0.113 ppbv m
RT: 11.24 min Scan# 2629
Delta R.T. -0.01 min
Lab File: VL036107.D
Acq: 8 Dec 2020 23:05

Tgt Ion	Ratio	Lower	Upper
164	100		
166	101.7	101.9	152.9#
129	85.7	82.1	123.1
131	45.8	80.8	121.2#





#53

Toluene

Concen: 19.134 ppbv

RT: 9.82 min Scan# 2186

Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

ClientSampleId :

IA-4DL

Tot Ion: 91 Resp: 4750881

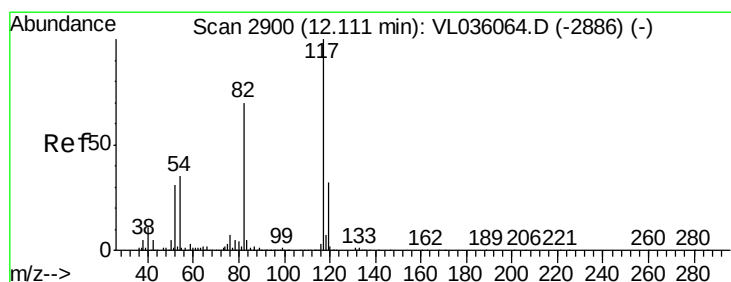
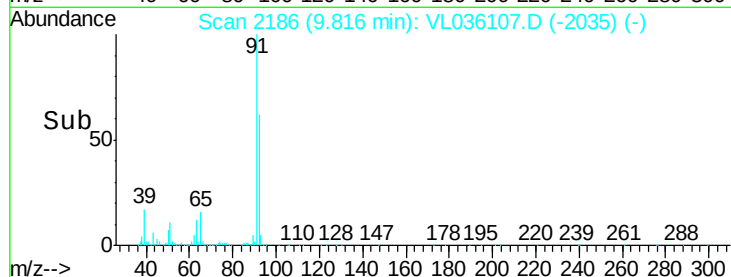
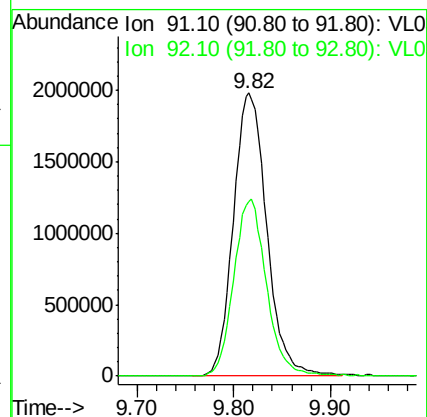
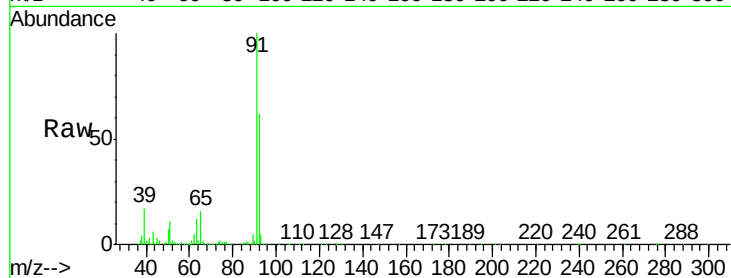
Ion Ratio Lower Upper

91 100

92 61.7 48.2 72.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2896

Delta R.T. -0.01 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

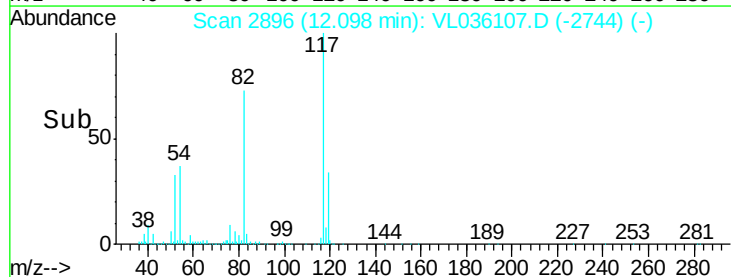
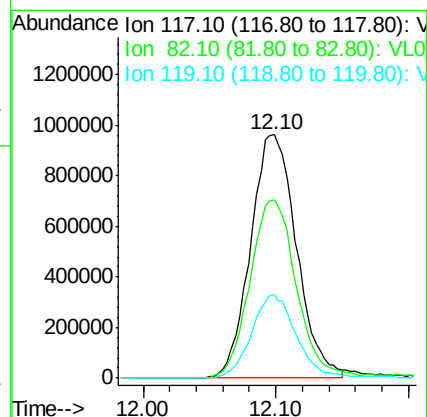
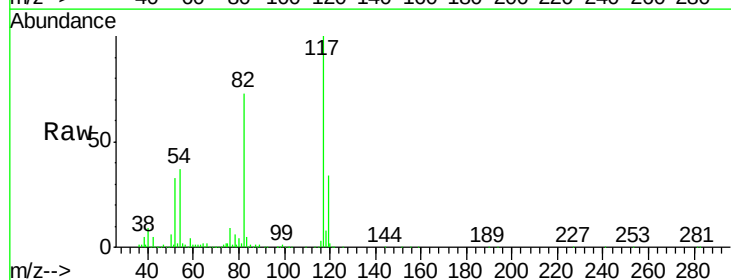
Tgt Ion: 117 Resp: 2317308

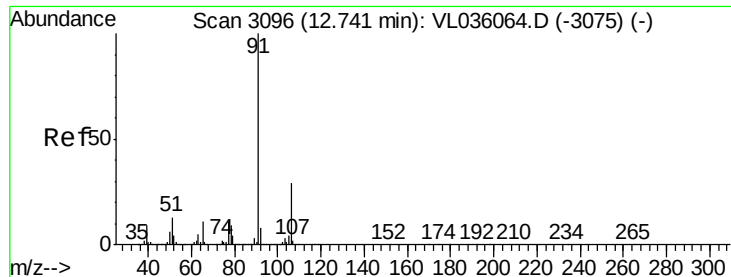
Ion Ratio Lower Upper

117 100

82 75.9 0.0 0.0#

119 33.8 0.0 0.0#





#58

Ethyl Benzene

Concen: 0.947 ppbv

RT: 12.73 min Scan# 3091

Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

ClientSampled :

IA-4DL

Tot Ion: 91 Resp: 300663

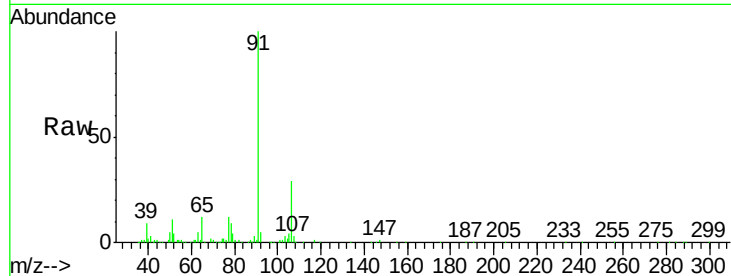
Ion Ratio Lower Upper

91 100

106 29.2 23.0 34.4

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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.73

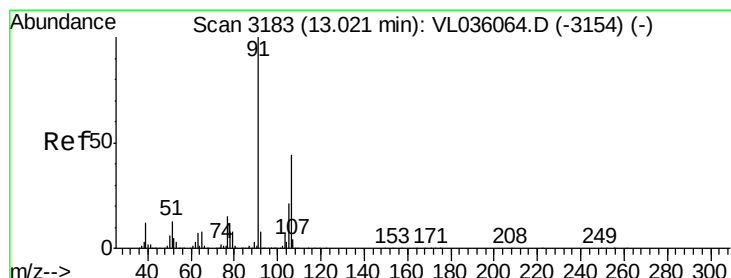
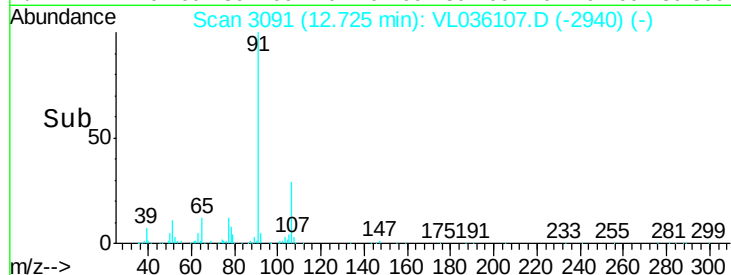
150000

100000

50000

0

Time-->



#59

m/p-Xylene

Concen: 3.599 ppbv

RT: 12.98 min Scan# 3169

Delta R.T. -0.04 min

Lab File: VL036107.D

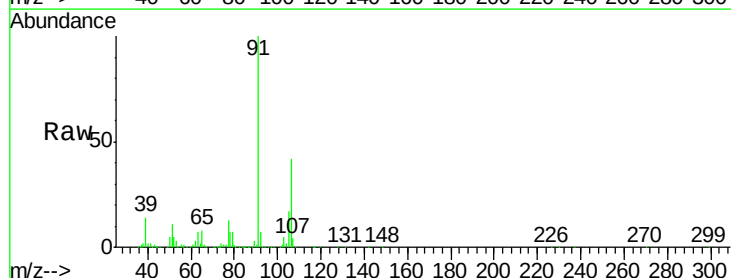
Acq: 8 Dec 2020 23:05

Tgt Ion: 91 Resp: 962654

Ion Ratio Lower Upper

91 100

106 43.0 33.6 50.4



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

12.98

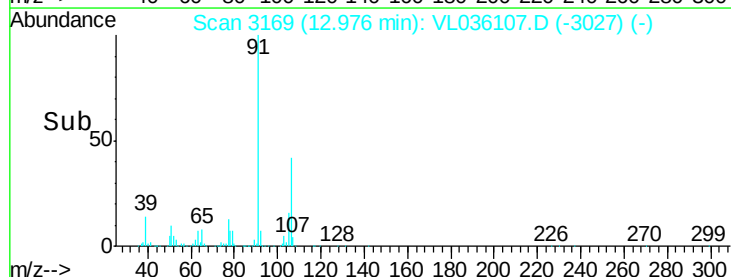
300000

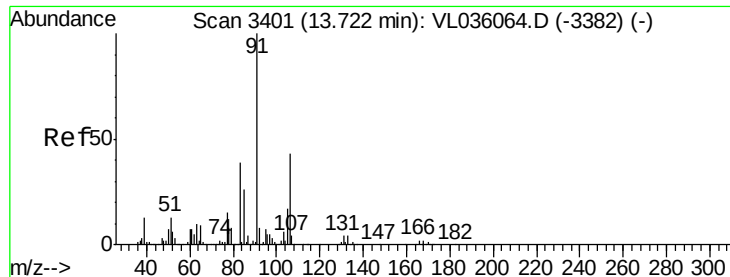
200000

100000

0

Time-->





#60

o-Xylene

Concen: 1.279 ppbv

RT: 13.70 min Scan# 3395

Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

ClientSampled :

IA-4DL

Tot Ion: 91 Resp: 322196

Ion Ratio Lower Upper

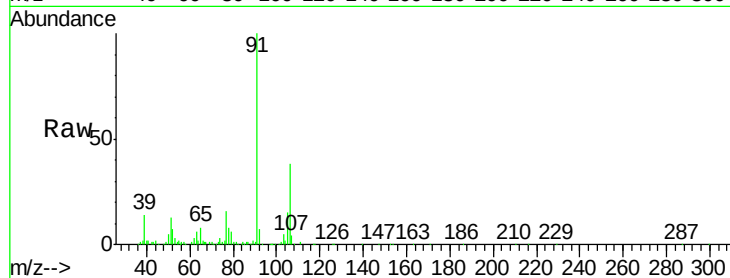
91 100

106 41.0 21.6 64.6

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

Ion 106.10 (105.80 to 106.80): V

13.70

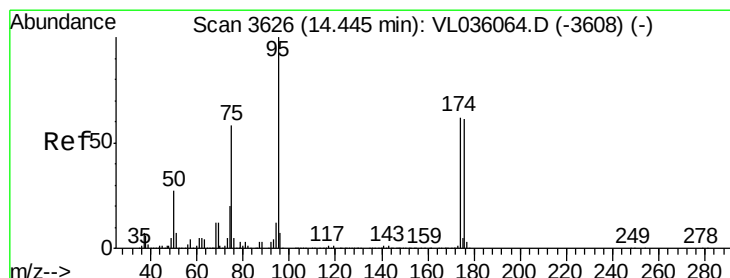
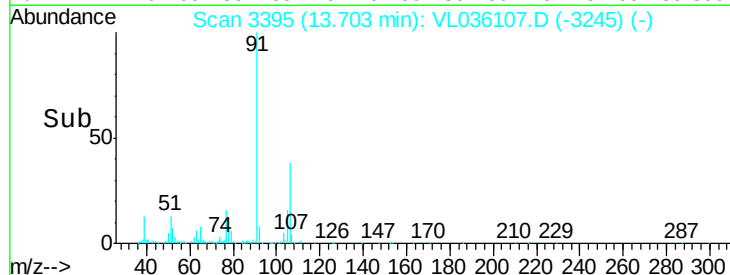
150000

100000

50000

0

Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.684 ppbv

RT: 14.43 min Scan# 3621

Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

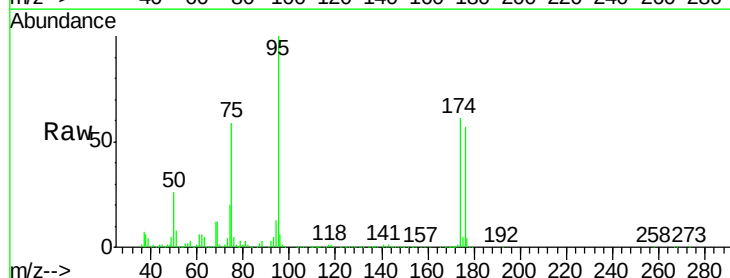
Tgt Ion: 95 Resp: 1965927

Ion Ratio Lower Upper

95 100

174 58.7 50.7 76.1

175 4.4 4.0 6.0



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

1000000

800000

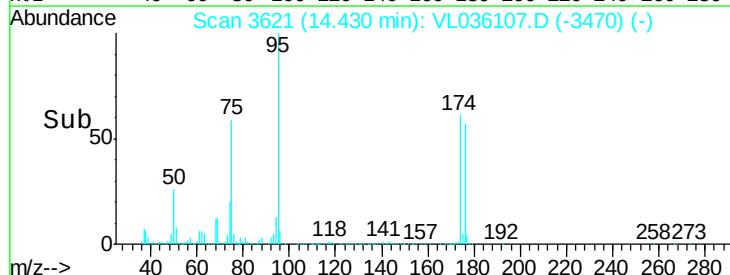
600000

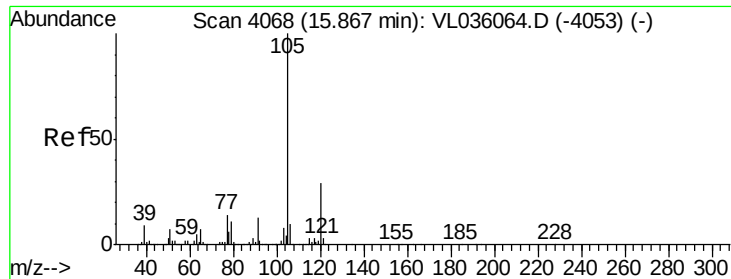
400000

200000

0

Time-->





#72

4-Ethyltoluene

Concen: 0.361 ppbv m

RT: 15.86 min Scan# 4065

Delta R.T. -0.01 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Instrument :

MSVOA_L

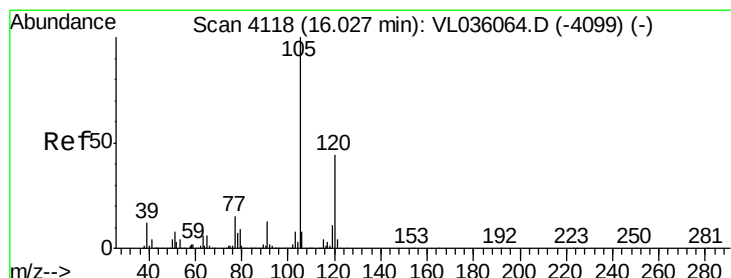
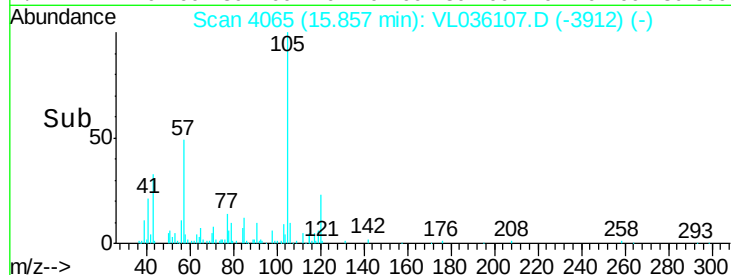
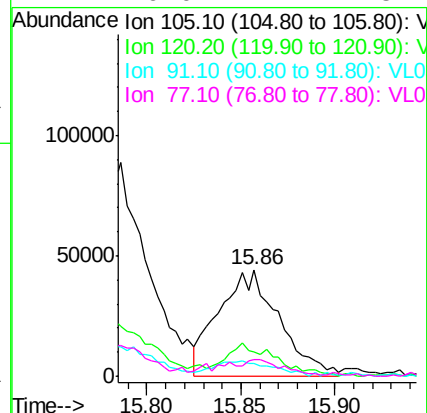
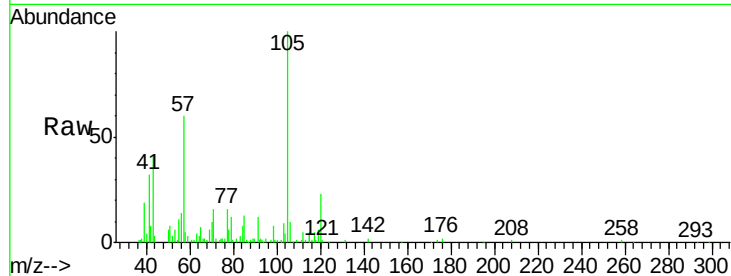
ClientSampleId :

IA-4DL

Tot Ion:	105	Resp:	98539
Ion Ratio	Lower	Upper	
105	100		
120	27.1	23.6	35.4
91	13.9	11.4	17.0
77	0.0	12.1	18.1#

Manual Integrations
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#73

1,3,5-Trimethylbenzene

Concen: 0.321 ppbv m

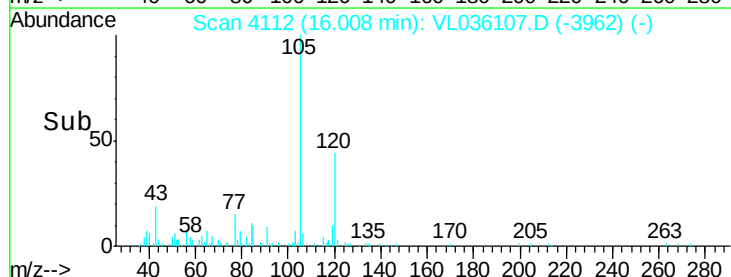
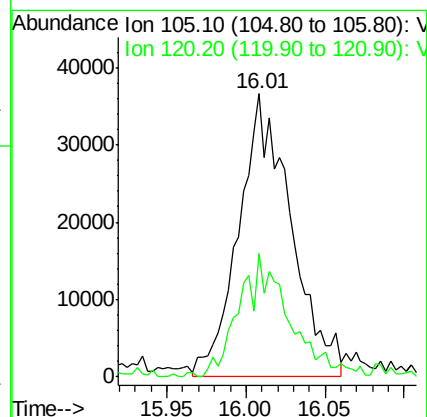
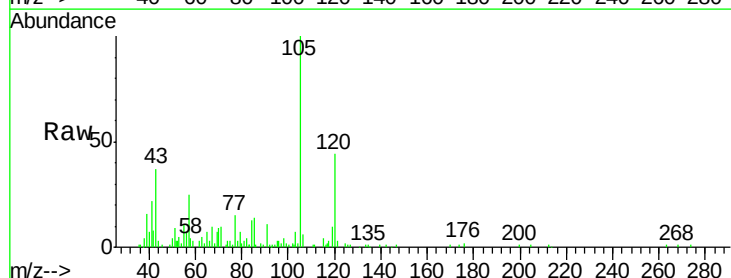
RT: 16.01 min Scan# 4112

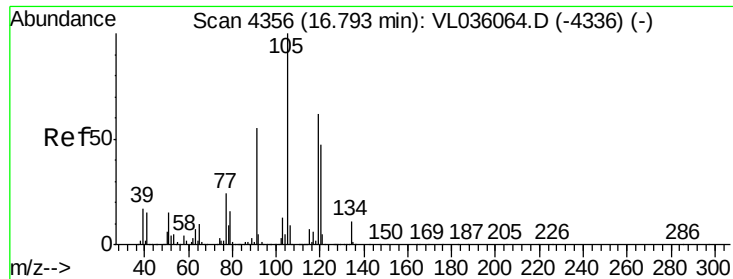
Delta R.T. -0.02 min

Lab File: VL036107.D

Acq: 8 Dec 2020 23:05

Tgt Ion:	105	Resp:	83716
Ion Ratio	Lower	Upper	
105	100		
120	43.7	35.4	53.2





#74
 1,2,4-Trimethylbenzene
 Concen: 0.748 ppbv m
 RT: 16.77 min Scan# 4350
 Delta R.T. -0.02 min
 Lab File: VL036107.D
 Acq: 8 Dec 2020 23:05

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4DL

Tot Ion:	105	Resp:	195792
Ion Ratio		Lower	Upper
105	100		
120	36.7	37.4	56.0#
91	16.8	45.6	68.4#
77	13.9	19.4	29.2#

Manual Integrations
 APPROVED

MMDadoda
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