

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040521\
 Data File : VL036681.D
 Acq On : 5 Apr 2021 20:03
 Operator : SY/AP
 Sample : M1834-05 10X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV5

Manual Integrations
 APPROVED

MMDadoda
 4/6/2021 5:13:59 PM

Quant Time: Apr 06 14:32:56 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1375620	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	3592073	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	3283083	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.43	95	2553626	9.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
9) Propene	3.02	41	484185	5.909	ppbv #	80
10) Heptane	8.14	43	2251035	10.784	ppbv	98
13) Ethanol	3.62	45	134662m	13.801	ppbv	
15) Acetone	3.85	43	3958952	29.240	ppbv #	64
20) Methylene Chloride	4.35	84	40522m	0.639	ppbv	
26) Hexane	5.70	57	2861297	19.155	ppbv #	46
30) Cyclohexane	7.14	84	1070369	8.835	ppbv	99
34) 2-Butanone	5.24	43	10111417	57.667	ppbv	94
36) Benzene	6.90	78	1493865	4.509	ppbv	98
44) 2,2,4-Trimethylpentane	7.89	57	24837764	42.599	ppbv #	75
52) Tetrachloroethene	11.23	164	7069m	0.058	ppbv	
53) Toluene	9.82	91	1287443	3.649	ppbv	100
58) Ethyl Benzene	12.72	91	1498492	3.137	ppbv	98
59) m/p-Xylene	12.98	91	2281698	5.477	ppbv	94
60) o-Xylene	13.71	91	555566	1.379	ppbv	98
62) Isopropylbenzene	14.68	105	125239	0.231	ppbv	95
64) n-propylbenzene	15.57	120	33042m	0.249	ppbv	
72) 4-Ethyltoluene	15.85	105	58966	0.134	ppbv #	90
73) 1,3,5-Trimethylbenzene	16.01	105	42300m	0.103	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	65915m	0.150	ppbv	

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

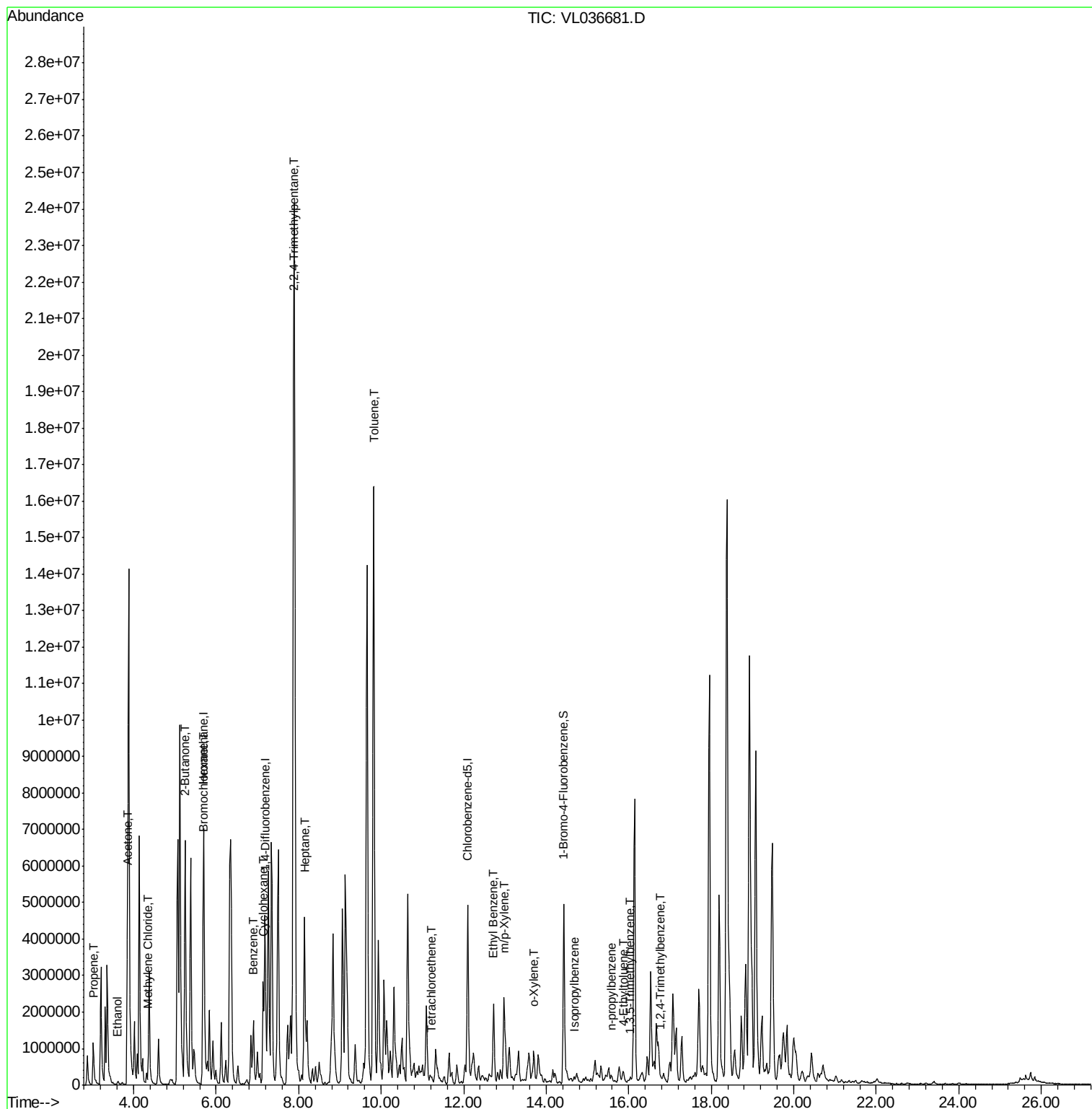
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040521\
Data File : VL036681.D
Acq On : 5 Apr 2021 20:03
Operator : SY/AP
Sample : M1834-05 10X
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

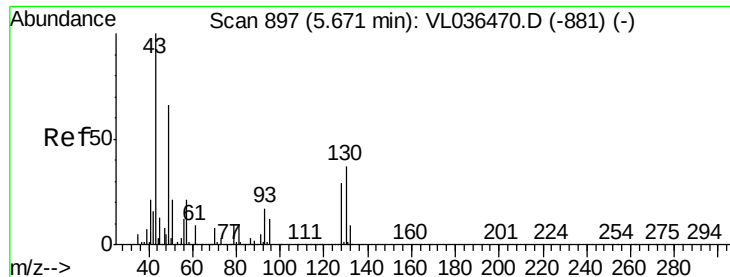
Instrument :
MSVOA_L
ClientSampleId :
SV5

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Quant Time: Apr 06 14:32:56 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. 0.00 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampled :

SV5

Tot Ion: 49 Resp: 1375620

Ion Ratio Lower Upper

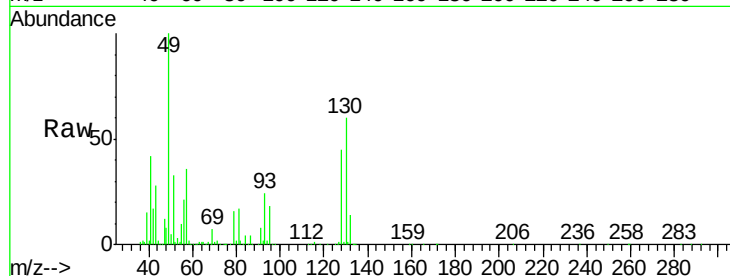
49 100

128 47.3 23.5 70.6

130 60.2 29.1 87.4

Manual Integrations
APPROVED

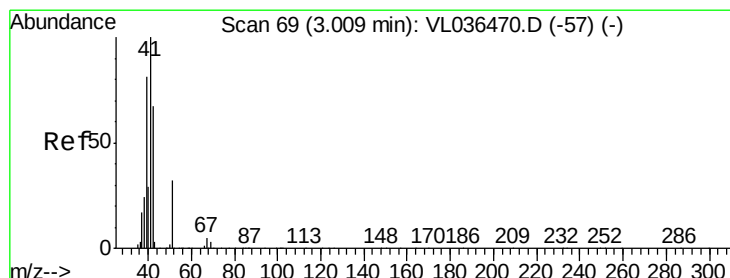
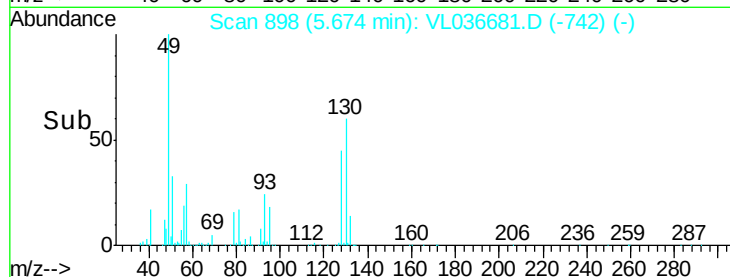
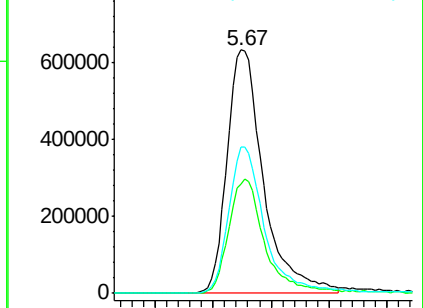
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#9

Propene

Concen: 5.909 ppbv

RT: 3.02 min Scan# 72

Delta R.T. 0.01 min

Lab File: VL036681.D

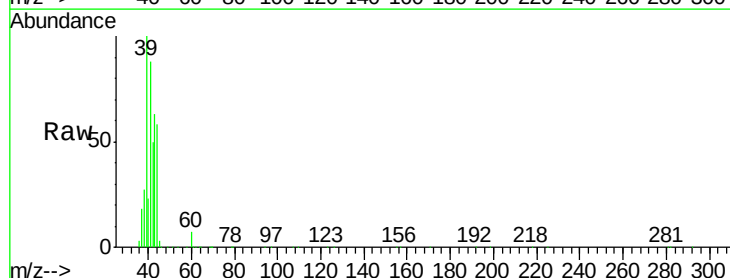
Acq: 5 Apr 2021 20:03

Tgt Ion: 41 Resp: 484185

Ion Ratio Lower Upper

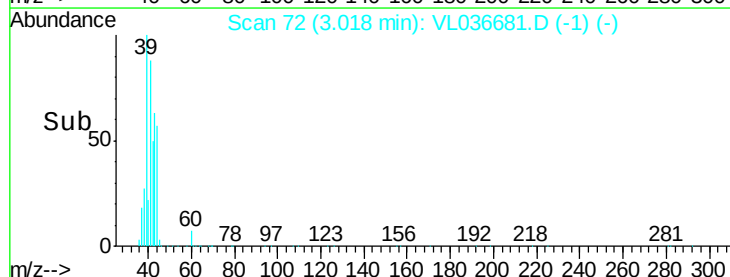
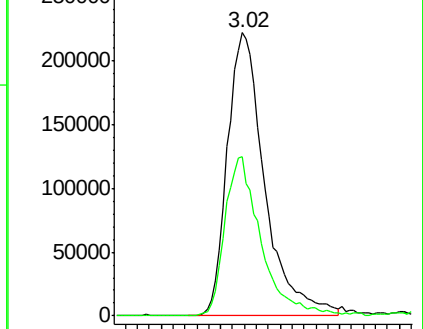
41 100

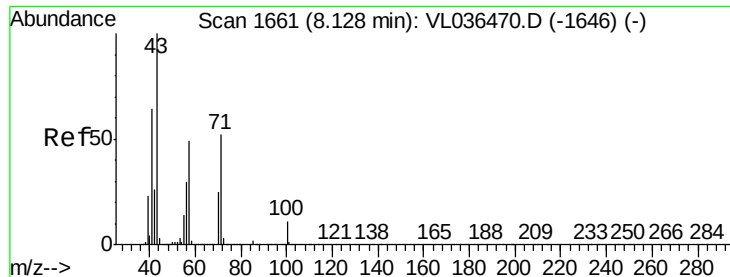
42 54.6 57.0 85.4#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0





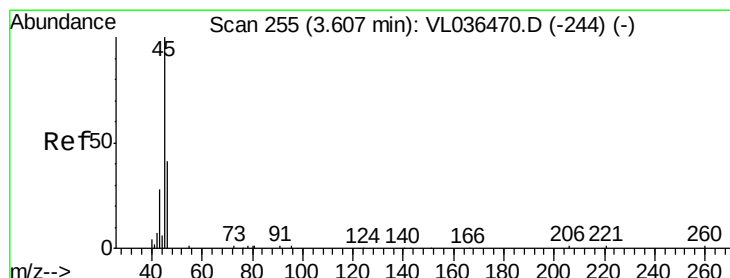
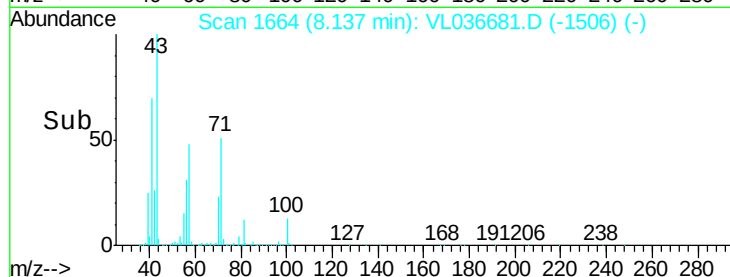
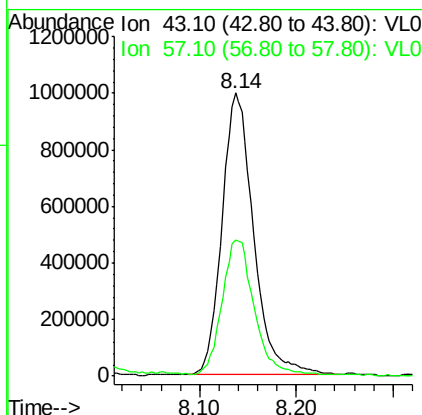
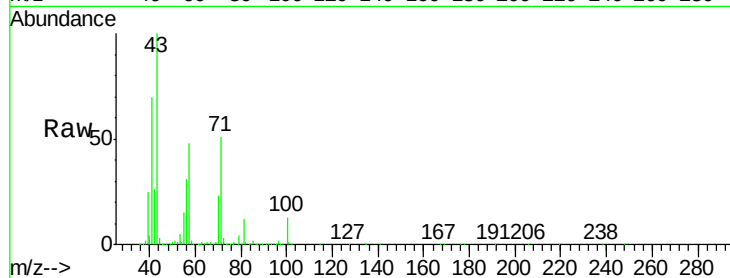
#10
Heptane
Concen: 10.784 ppbv
RT: 8.14 min Scan# 1664
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Instrument :
MSVOA_L
ClientSampled :
SV5

Tot Ion: 43 Resp: 2251035
Ion Ratio Lower Upper
43 100
57 50.5 39.0 58.6

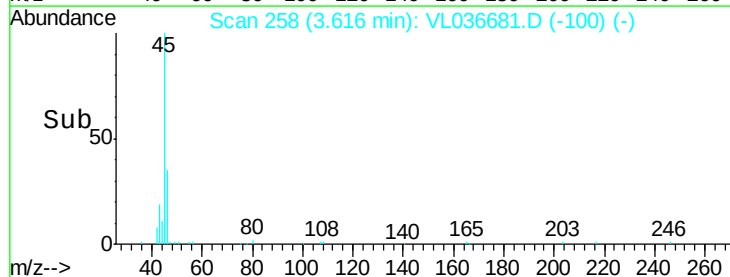
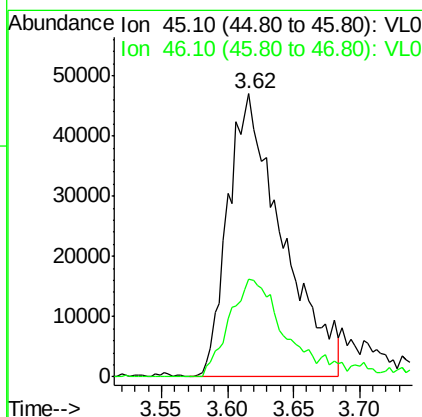
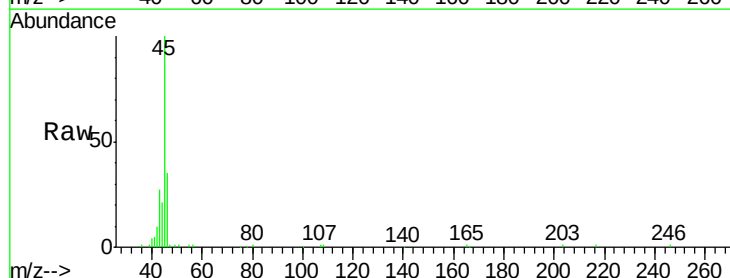
Manual Integrations
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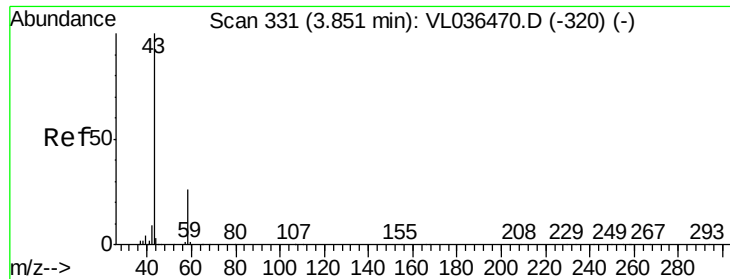
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#13
Ethanol
Concen: 13.801 ppbv m
RT: 3.62 min Scan# 258
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Tgt Ion: 45 Resp: 134662
Ion Ratio Lower Upper
45 100
46 0.0 16.6 66.2#





#15

Acetone

Concen: 29.240 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.00 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampleId :

SV5

Tot Ion: 43 Resp: 3958952

Ion Ratio Lower Upper

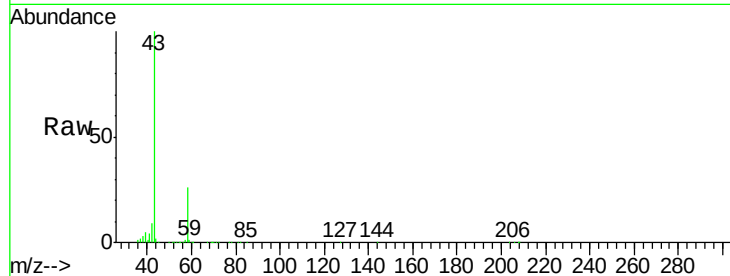
43 100

58 45.2 21.2 31.8#

Manual Integrations
APPROVED

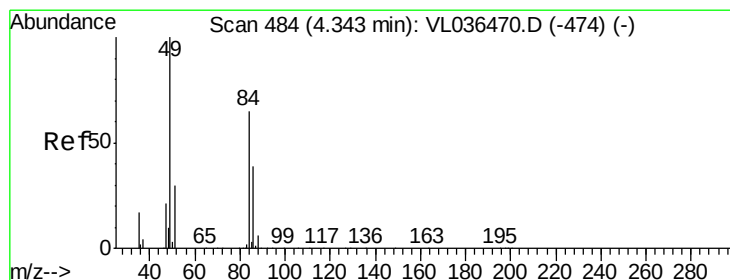
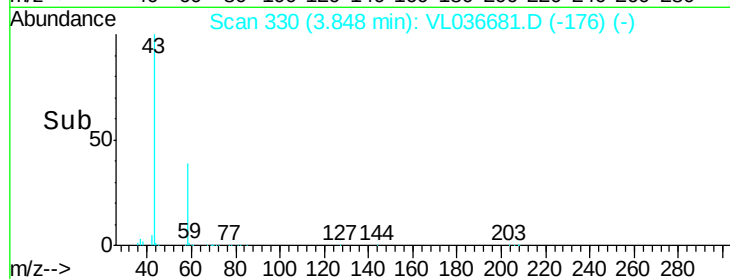
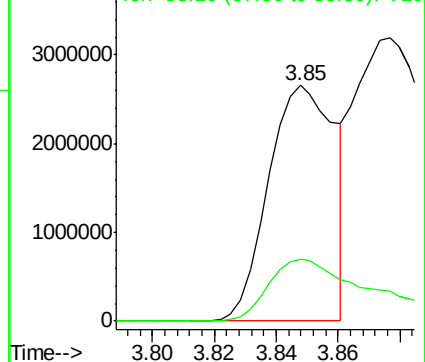
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 0.639 ppbv m

RT: 4.35 min Scan# 485

Delta R.T. 0.00 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Tgt Ion: 84 Resp: 40522

Ion Ratio Lower Upper

84 100

49 149.3 122.9 184.3

51 51.9 36.9 55.3

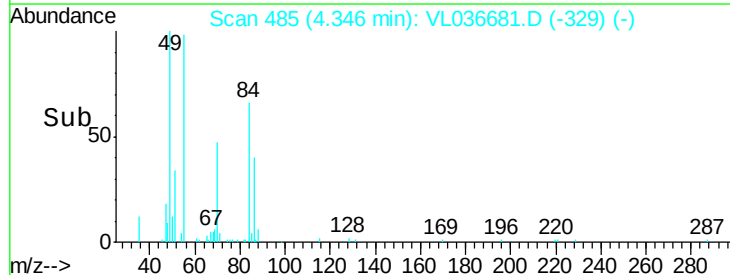
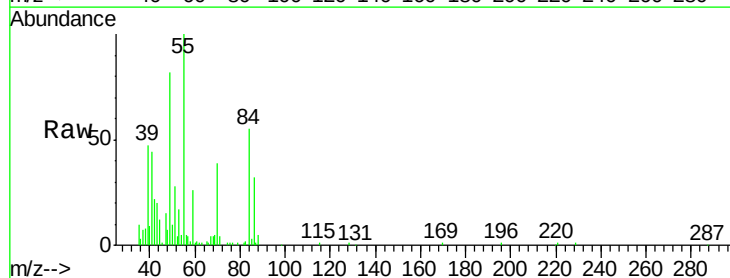
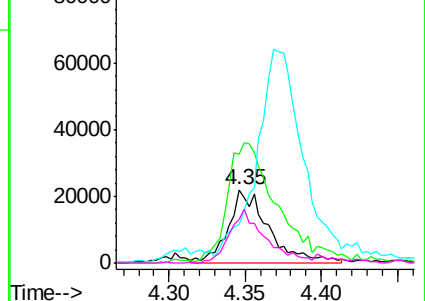
86 59.0 48.2 72.4

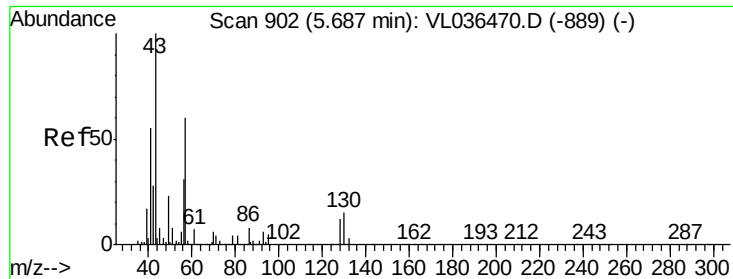
Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

Ion 86.00 (85.70 to 86.70): VL0





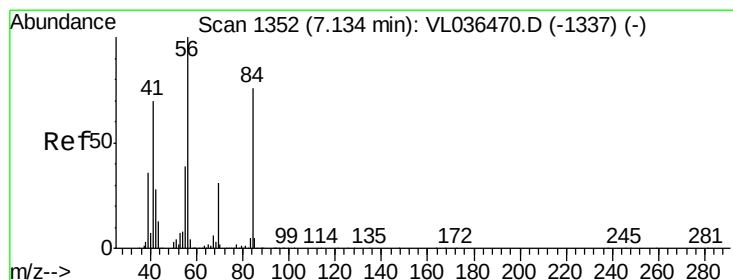
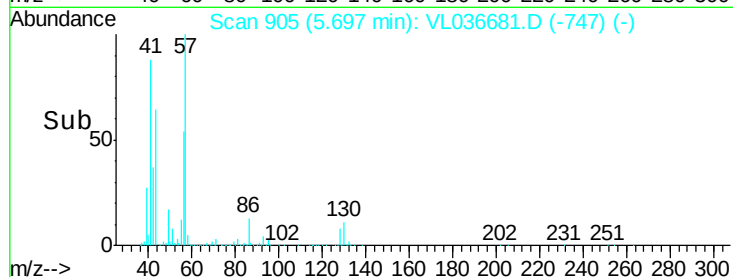
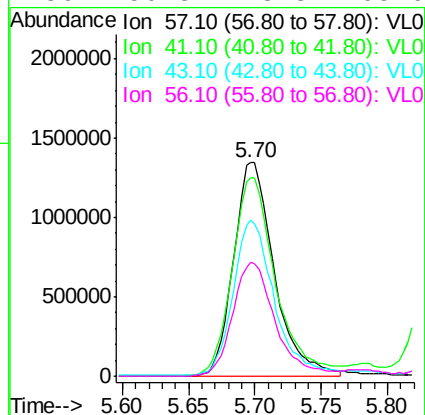
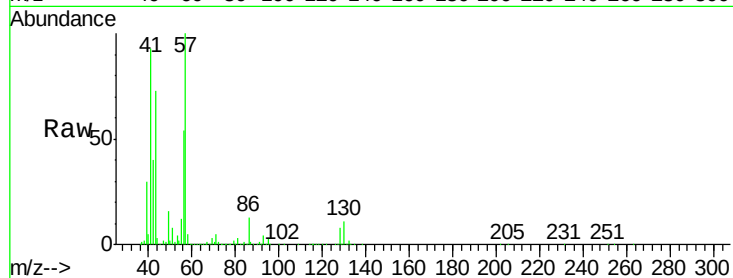
#26
Hexane
Concen: 19.155 ppbv
RT: 5.70 min Scan# 905
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Instrument :
MSVOA_L
ClientSampleId :
SV5

Tot Ion	Ratio	Lower	Upper
57	100		
41	100.3	77.2	115.8
43	74.5	173.8	260.6#
56	56.3	43.8	65.6

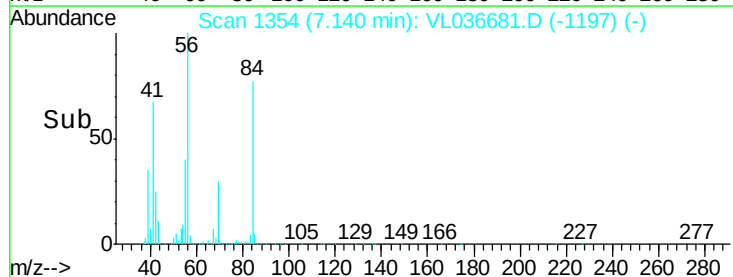
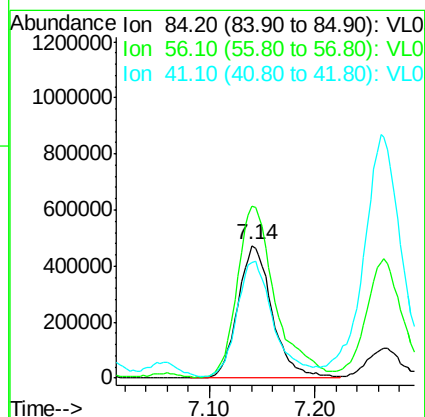
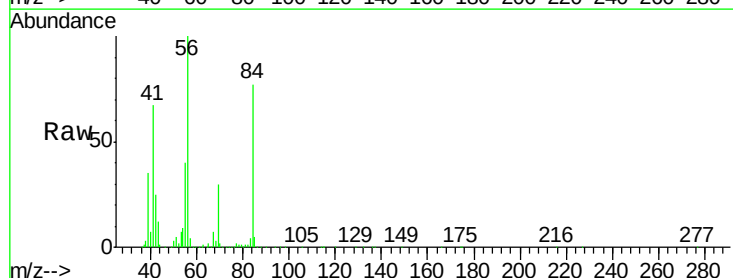
Manual Integrations
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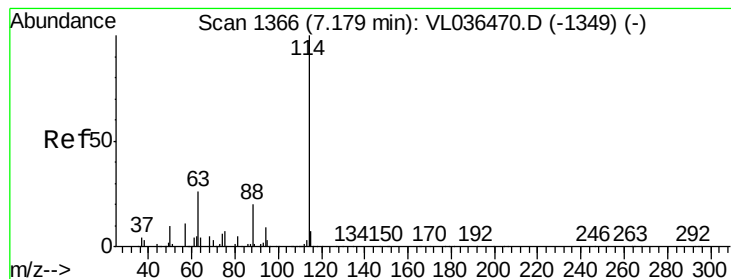
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#30
Cyclohexane
Concen: 8.835 ppbv
RT: 7.14 min Scan# 1354
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Tgt Ion	Ratio	Lower	Upper
84	100		
56	142.7	114.6	171.8
41	91.7	75.3	112.9





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.19 min Scan# 1368

Delta R.T. 0.01 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampleId :

SV5

Tot Ion:114 Resp: 3592073

Ion Ratio Lower Upper

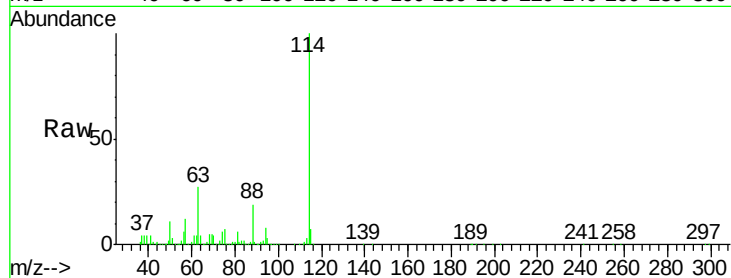
114 100

63 27.0 22.4 33.6

88 18.9 15.4 23.0

Manual Integrations
APPROVED

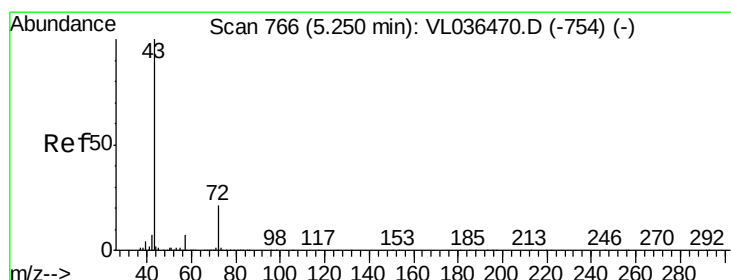
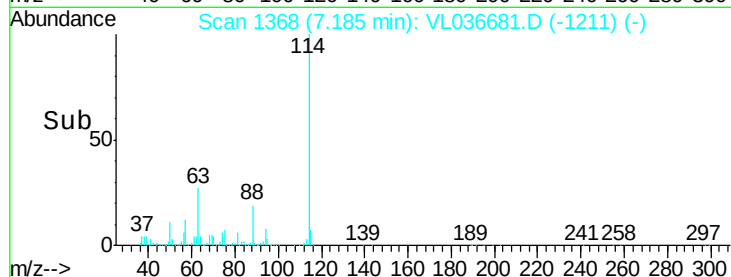
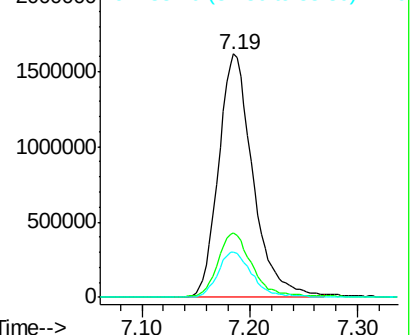
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Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0



#34

2-Butanone

Concen: 57.667 ppbv

RT: 5.24 min Scan# 764

Delta R.T. -0.01 min

Lab File: VL036681.D

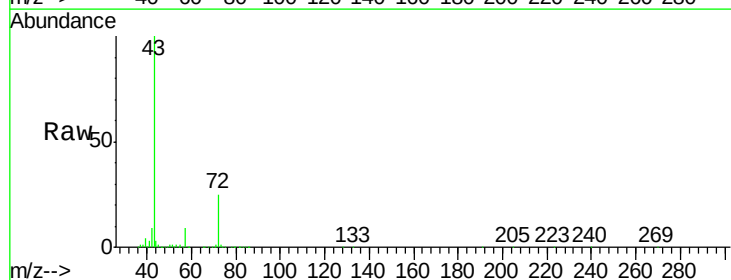
Acq: 5 Apr 2021 20:03

Tgt Ion: 43 Resp:10111417

Ion Ratio Lower Upper

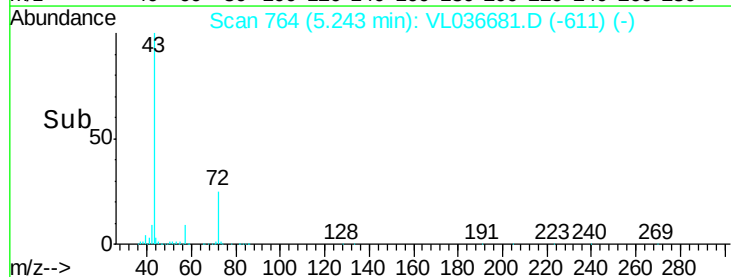
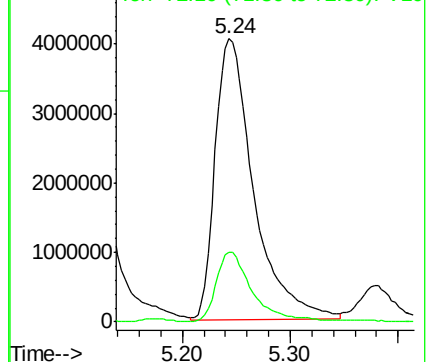
43 100

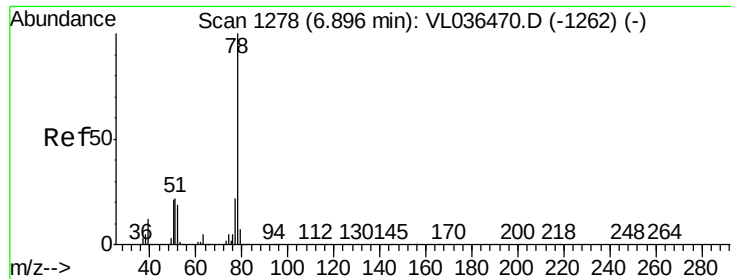
72 24.2 17.0 25.6



Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 4.509 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. 0.01 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampleId :

SV5

Tot Ion: 78 Resp: 1493865

Ion Ratio Lower Upper

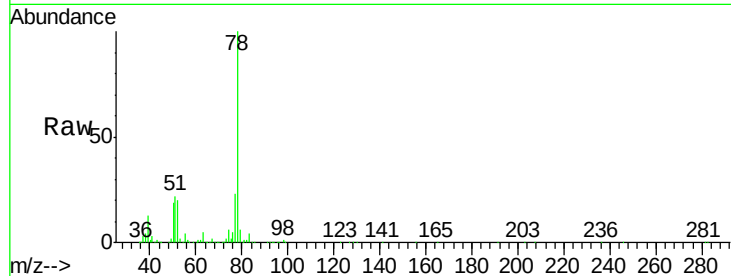
78 100

77 22.4 18.0 27.0

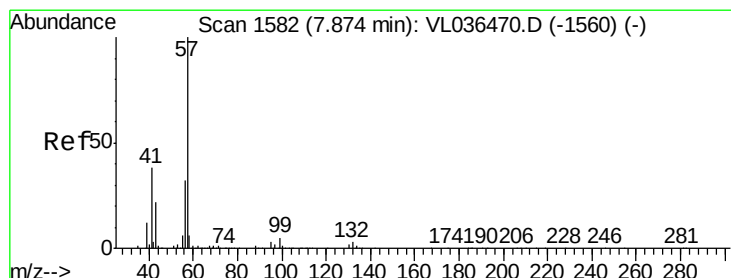
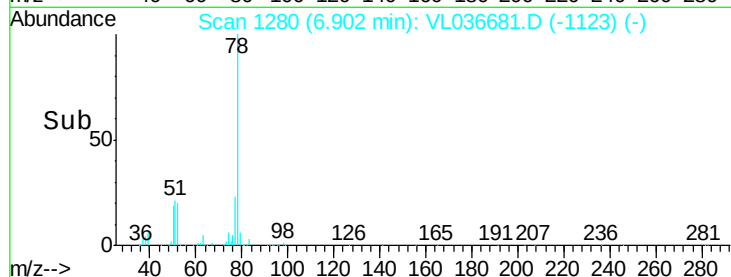
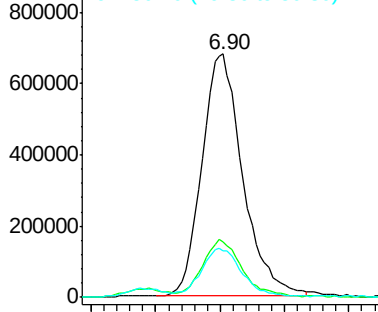
50 18.7 16.5 24.7

Manual Integrations
APPROVED

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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: 42.599 ppbv

RT: 7.89 min Scan# 1587

Delta R.T. 0.02 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

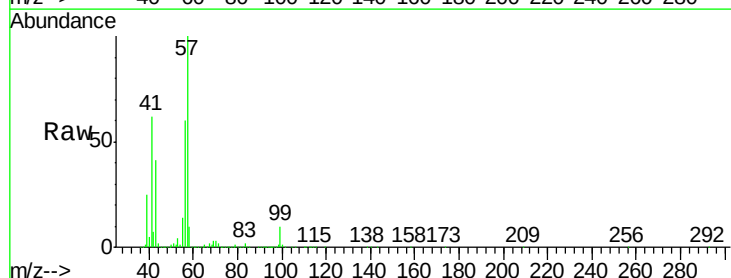
Tgt Ion: 57 Resp: 24837764

Ion Ratio Lower Upper

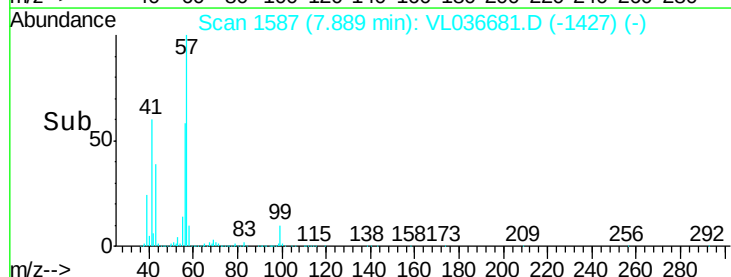
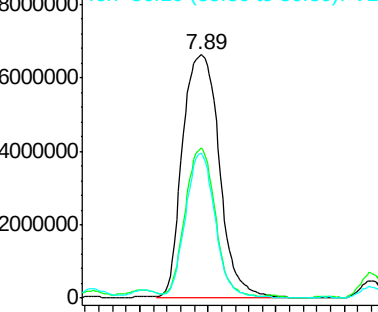
57 100

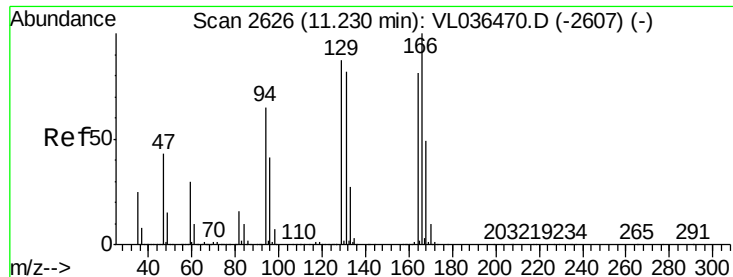
41 49.4 28.8 43.2#

56 48.3 26.1 39.1#



Abundance Ion 57.10 (56.80 to 57.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 56.10 (55.80 to 56.80): VL0





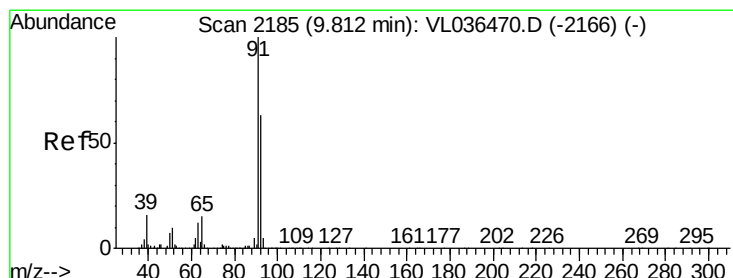
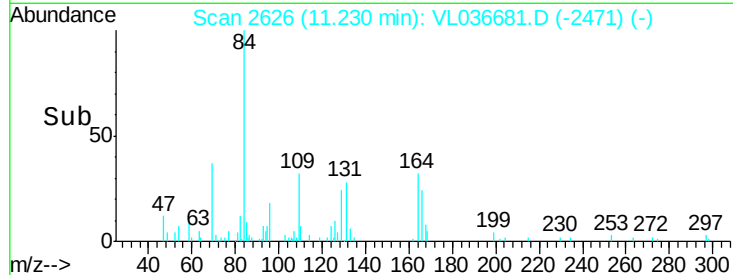
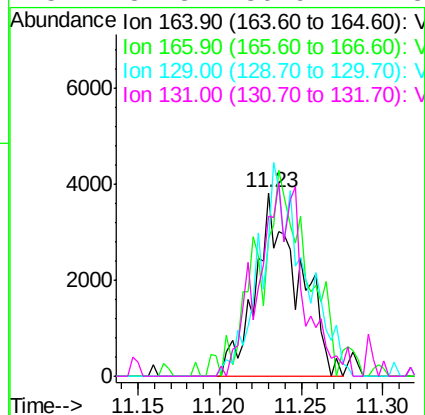
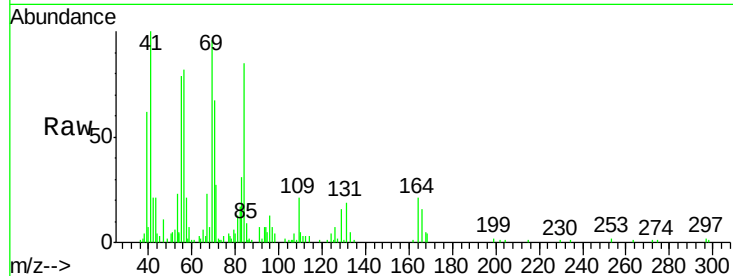
#52
Tetrachloroethene
Concen: 0.058 ppbv m
RT: 11.23 min Scan# 2626
Delta R.T. -0.00 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Instrument :
MSVOA_L
ClientSampled :
SV5

Tot Ion	Ratio	Lower	Upper
164	100		
166	75.7	98.3	147.5#
129	74.4	85.8	128.8#
131	87.3	80.9	121.3

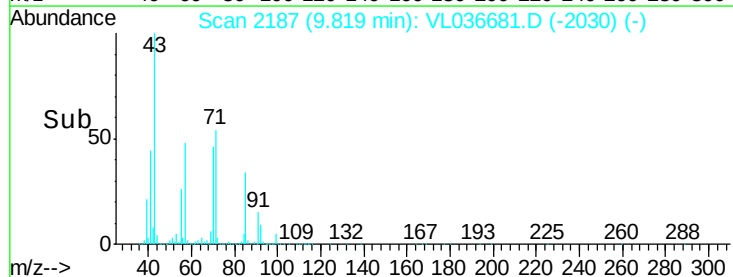
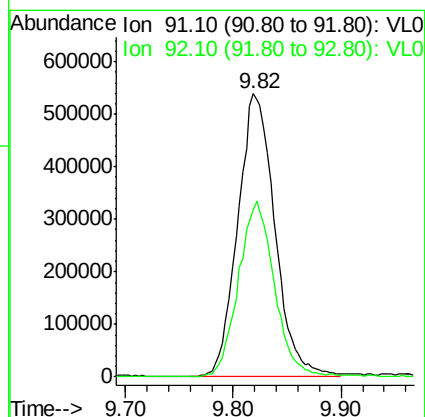
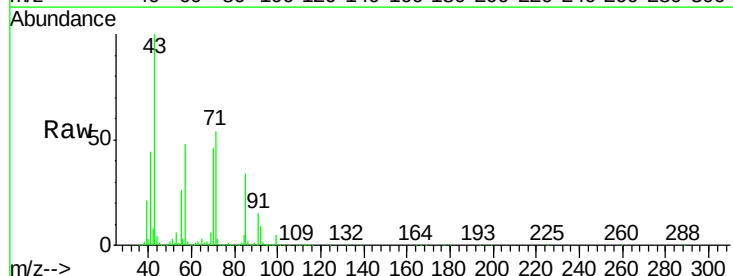
Manual Integrations
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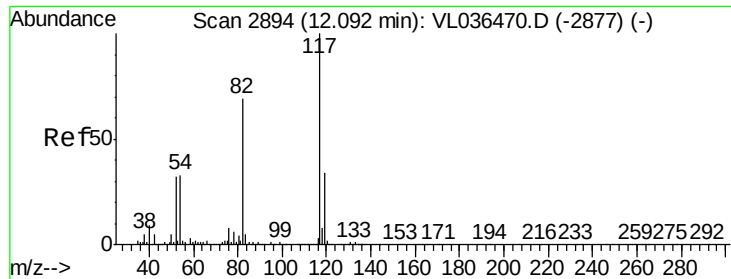
MMDadoda
4/6/2021 5:13:59 PM



#53
Toluene
Concen: 3.649 ppbv
RT: 9.82 min Scan# 2187
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.3	48.8	73.2





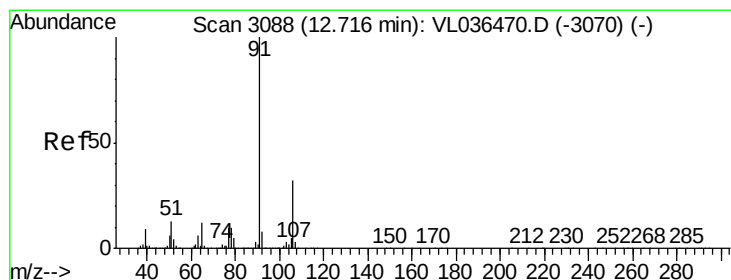
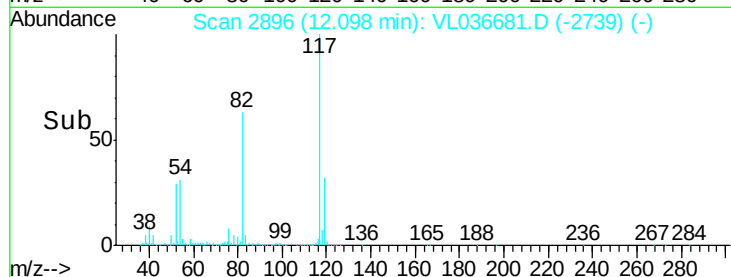
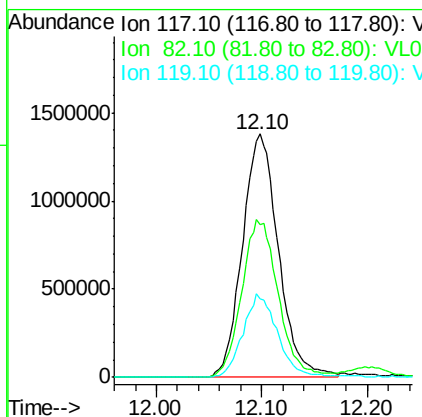
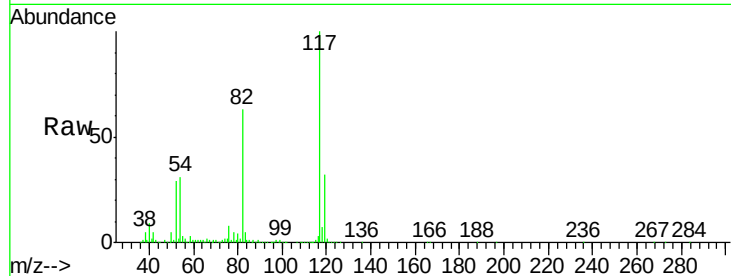
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2896
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Instrument :
MSVOA_L
ClientSampled :
SV5

Tot Ion	Ratio	Lower	Upper
117	100		
82	65.7	57.4	86.0
119	33.8	47.4	71.0#

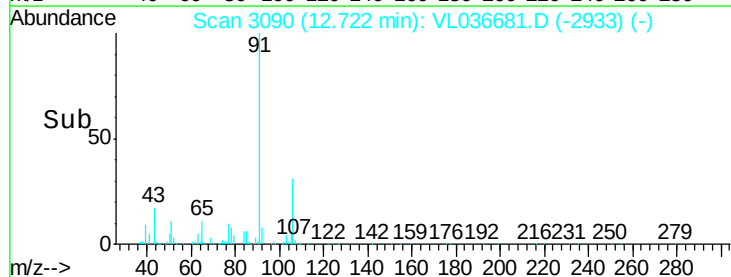
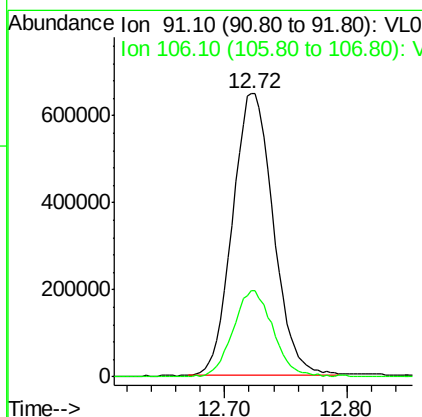
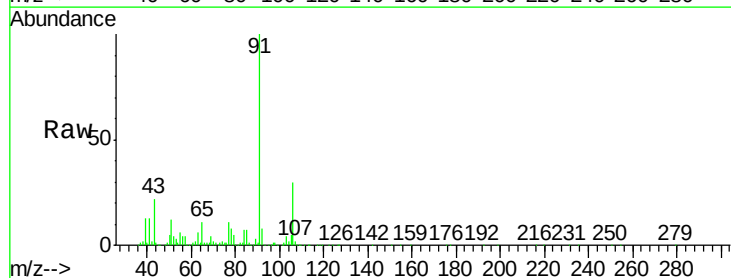
Manual Integrations
APPROVED

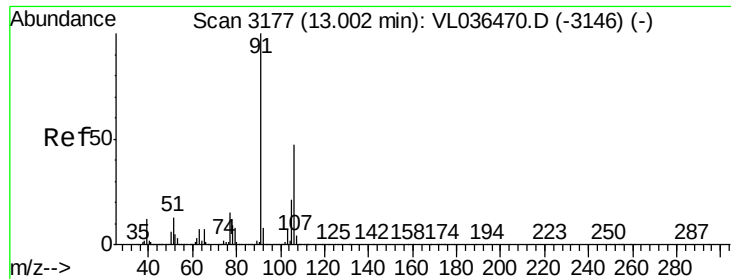
MMDadoda
4/6/2021 5:13:59 PM



#58
Ethyl Benzene
Concen: 3.137 ppbv
RT: 12.72 min Scan# 3090
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.7	25.3	37.9





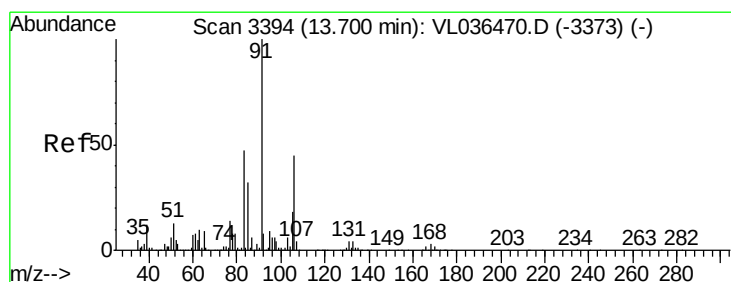
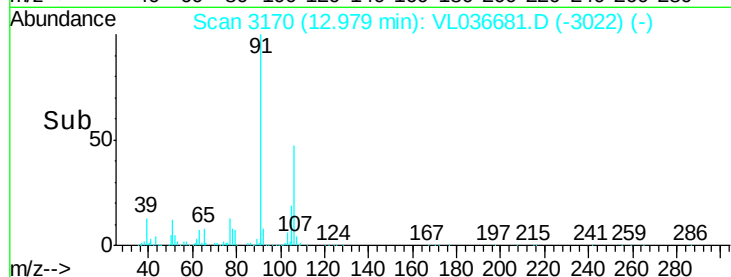
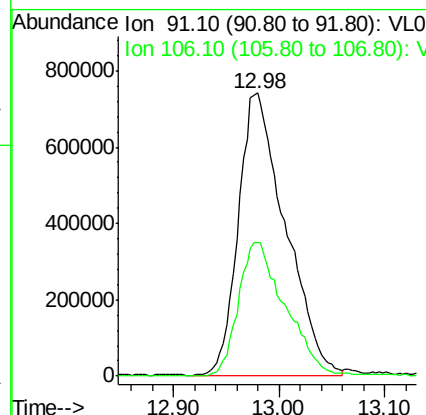
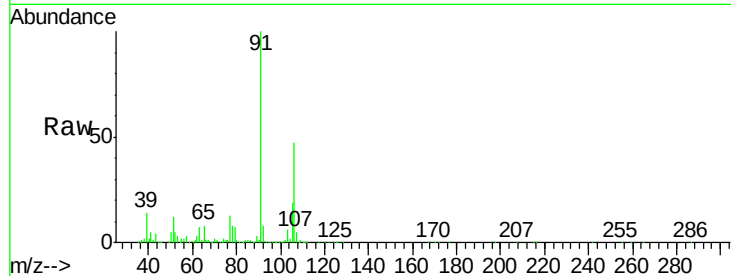
#59
m/p-Xylene
Concen: 5.477 ppbv
RT: 12.98 min Scan# 3170
Delta R.T. -0.02 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Instrument :
MSVOA_L
ClientSampled :
SV5

Tot Ion: 91 Resp: 2281698
Ion Ratio Lower Upper
91 100
106 47.8 35.3 52.9

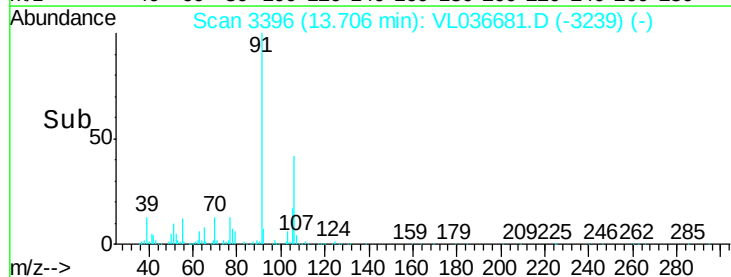
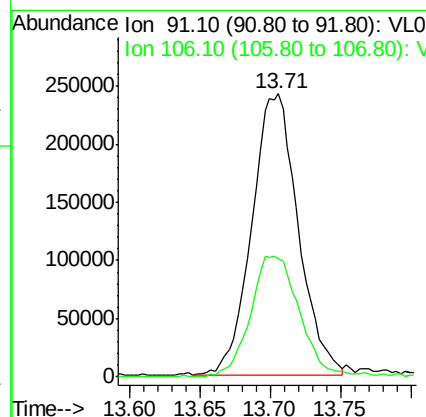
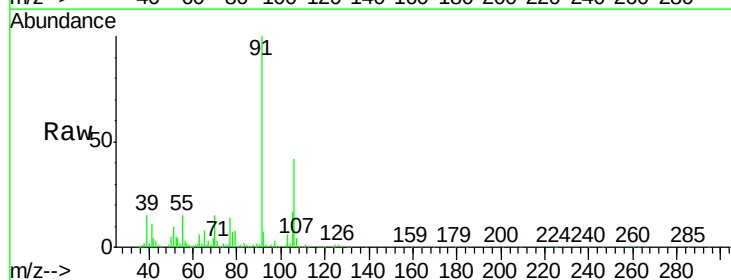
Manual Integrations
APPROVED

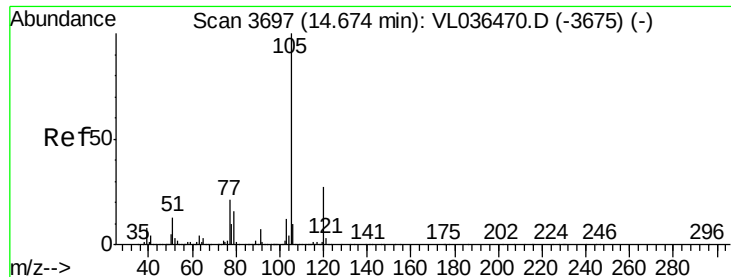
MMDadoda
4/6/2021 5:13:59 PM



#60
o-Xylene
Concen: 1.379 ppbv
RT: 13.71 min Scan# 3396
Delta R.T. 0.01 min
Lab File: VL036681.D
Acq: 5 Apr 2021 20:03

Tgt Ion: 91 Resp: 555566
Ion Ratio Lower Upper
91 100
106 46.0 22.3 66.9





#62

Isopropylbenzene

Concen: 0.231 ppbv

RT: 14.68 min Scan# 3699

Delta R.T. 0.01 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampleId :

SV5

Tot Ion:105 Resp: 125239

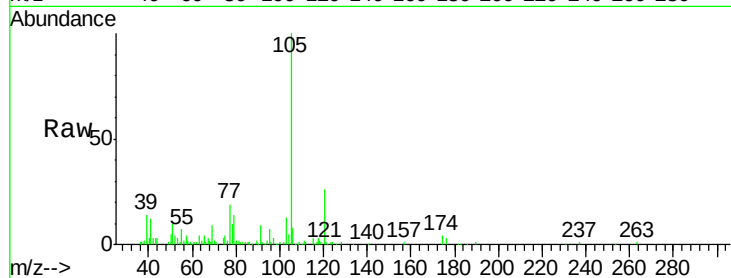
Ion Ratio Lower Upper

105 100

120 28.3 20.6 31.0

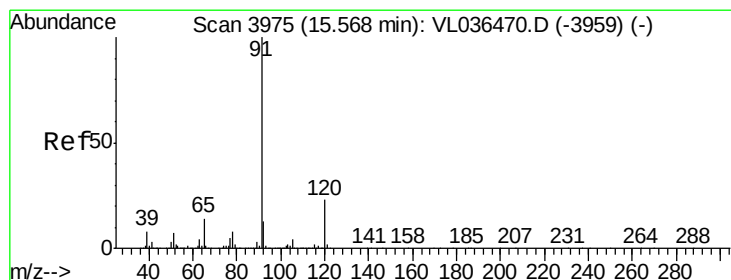
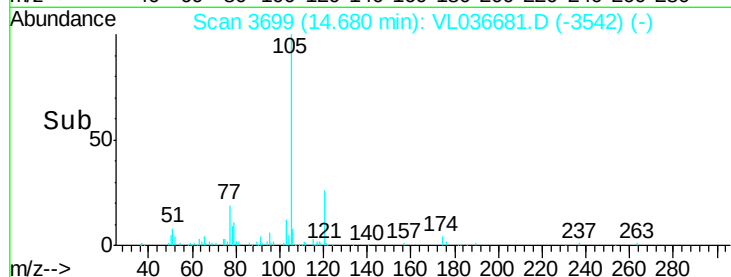
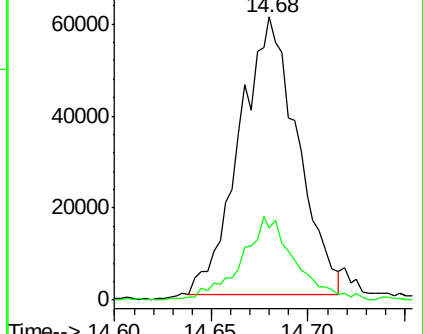
Manual Integrations
APPROVED

MMDadoda
4/6/2021 5:13:59 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V



#64

n-propylbenzene

Concen: 0.249 ppbv m

RT: 15.57 min Scan# 3977

Delta R.T. 0.01 min

Lab File: VL036681.D

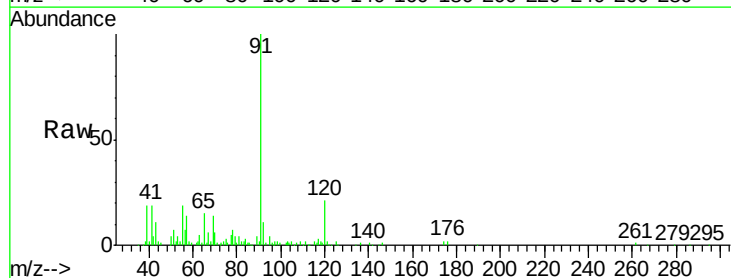
Acq: 5 Apr 2021 20:03

Tgt Ion:120 Resp: 33042

Ion Ratio Lower Upper

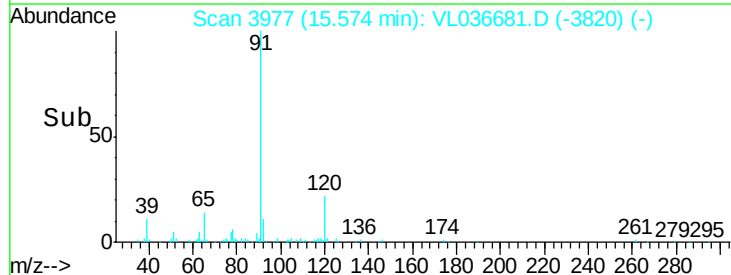
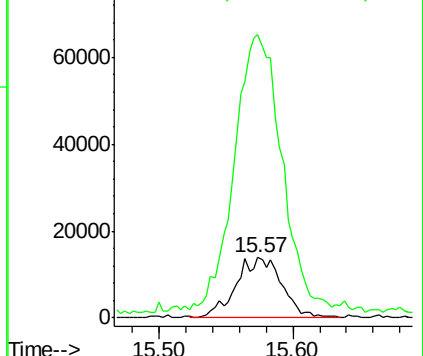
120 100

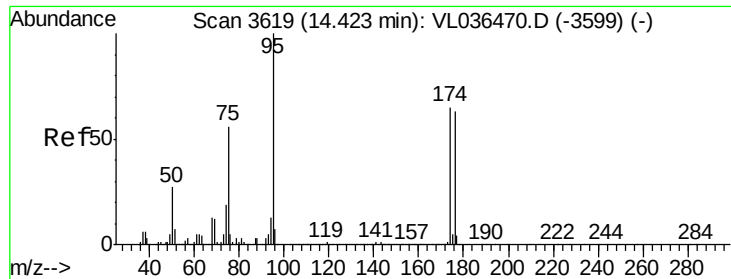
91 484.9 377.4 566.2



Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0





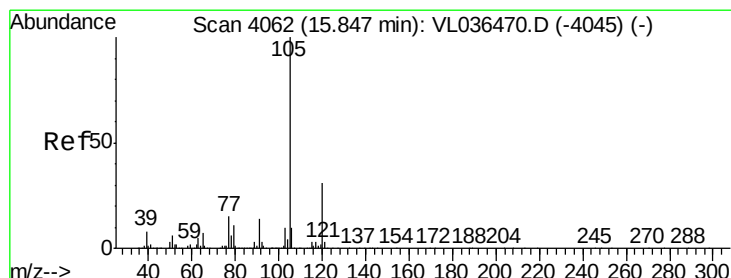
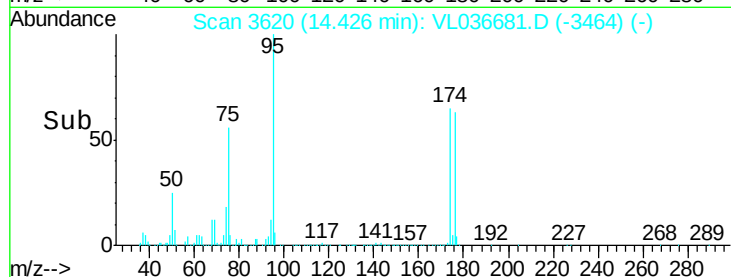
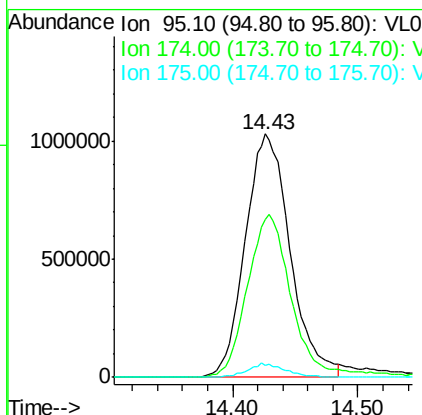
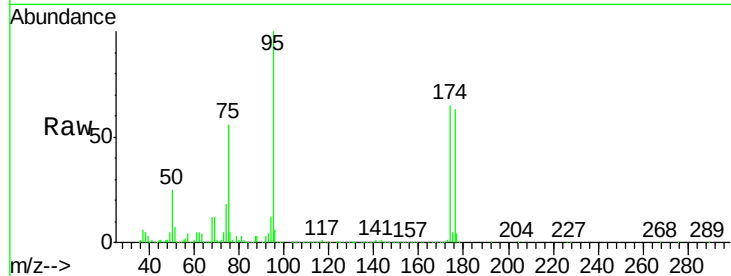
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.759 ppbv
 RT: 14.43 min Scan# 3620
 Delta R.T. 0.00 min
 Lab File: VL036681.D
 Acq: 5 Apr 2021 20:03

Instrument :
 MSVOA_L
 ClientSampled :
 SV5

Tot Ion: 95 Resp: 2553626
 Ion Ratio Lower Upper
 95 100
 174 68.4 51.0 76.6
 175 5.0 3.9 5.9

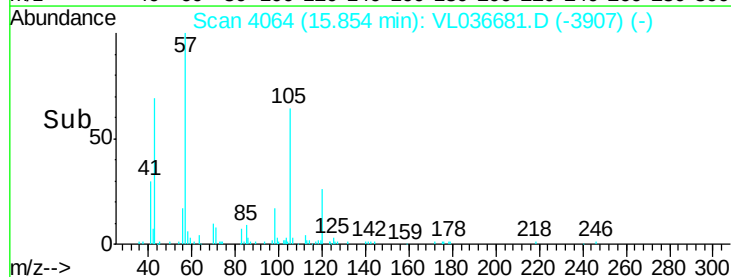
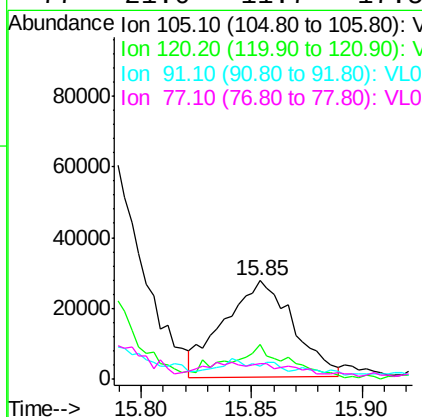
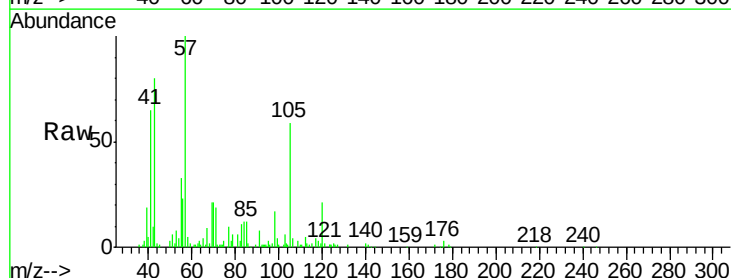
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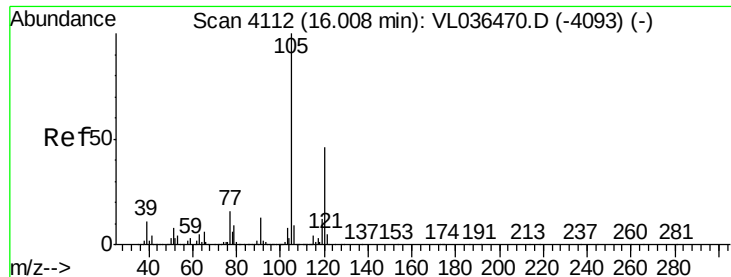
MMDadoda
 4/6/2021 5:13:59 PM



#72
 4-Ethyltoluene
 Concen: 0.134 ppbv
 RT: 15.85 min Scan# 4064
 Delta R.T. 0.01 min
 Lab File: VL036681.D
 Acq: 5 Apr 2021 20:03

Tgt Ion: 105 Resp: 58966
 Ion Ratio Lower Upper
 105 100
 120 35.5 24.0 36.0
 91 12.2 11.0 16.4
 77 21.0 11.7 17.5#





#73

1,3,5-Trimethylbenzene

Concen: 0.103 ppbv m

RT: 16.01 min Scan# 4114

Delta R.T. 0.01 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Instrument :

MSVOA_L

ClientSampled :

SV5

Tot Ion:105 Resp: 42300

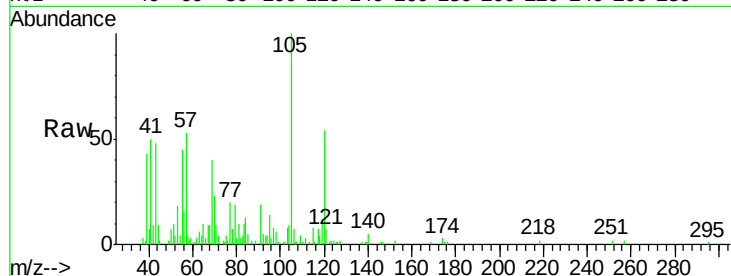
Ion Ratio Lower Upper

105 100

120 54.1 36.6 54.8

Manual Integrations
APPROVED

MMDadoda
4/6/2021 5:13:59 PM



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

16.01

20000

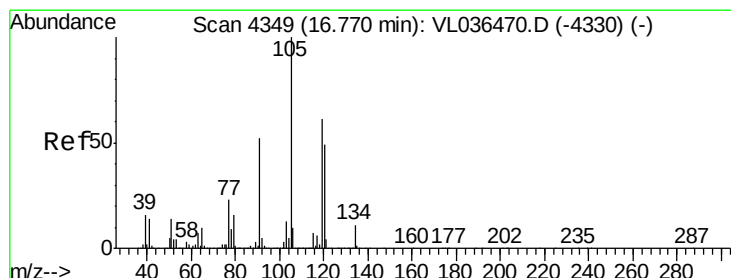
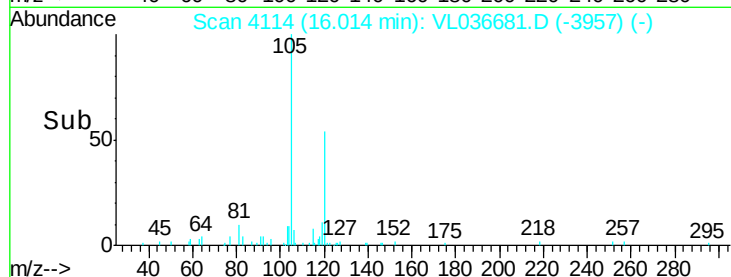
15000

10000

5000

0

Time--> 15.90 16.00 16.10



#74

1,2,4-Trimethylbenzene

Concen: 0.150 ppbv m

RT: 16.77 min Scan# 4349

Delta R.T. -0.00 min

Lab File: VL036681.D

Acq: 5 Apr 2021 20:03

Tgt Ion:105 Resp: 65915

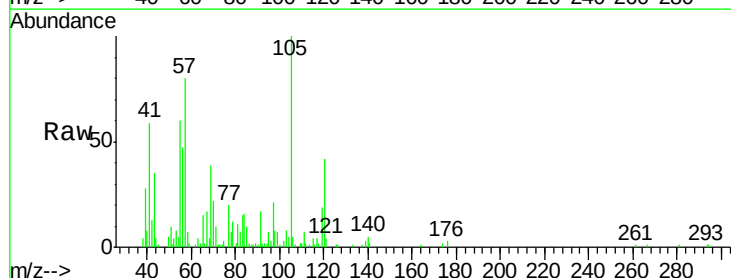
Ion Ratio Lower Upper

105 100

120 42.4 39.2 58.8

91 16.8 42.6 64.0#

77 20.1 18.6 28.0



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

40000

30000

20000

10000

0

Time--> 16.70 16.80

