

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060121\
 Data File : VL037073.D
 Acq On : 1 Jun 2021 17:02
 Operator : SY/AP
 Sample : M2559-03 4X
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 HSG3

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 2:58:32 PM

Quant Time: Jun 04 11:38:12 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1589786	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4669425	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	4428976	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.40	95	3494475	10.50	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.00%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
4) Chloromethane	3.13	50	15854m	0.160	ppbv	
9) Propene	3.01	41	252225	2.418	ppbv #	79
10) Heptane	8.11	43	9163110	35.255	ppbv	96
11) Trichlorofluoromethane	3.94	101	80719	0.323	ppbv	97
13) Ethanol	3.59	45	808762	58.121	ppbv	97
15) Acetone	3.84	43	1434779m	8.811	ppbv	
17) tert-Butyl alcohol	4.30	59	214372	1.437	ppbv	97
19) Isopropyl Alcohol	3.96	45	111103	1.269	ppbv #	1
20) Methylene Chloride	4.33	84	343346m	3.934	ppbv	
26) Hexane	5.67	57	1397078	6.989	ppbv #	48
27) Carbon Disulfide	4.54	76	52307	0.260	ppbv #	61
30) Cyclohexane	7.12	84	464467	2.734	ppbv	93
34) 2-Butanone	5.23	43	314838	1.852	ppbv	95
36) Benzene	6.88	78	1176177	2.924	ppbv	96
52) Tetrachloroethene	11.21	164	129779	0.811	ppbv	92
53) Toluene	9.79	91	11538468	24.110	ppbv	96
58) Ethyl Benzene	12.70	91	1955088	3.128	ppbv	98
59) m/p-Xylene	12.95	91	5141125	9.950	ppbv	97
60) o-Xylene	13.67	91	1329349	2.698	ppbv	98
61) Styrene	13.51	104	230135	0.829	ppbv	99
62) Isopropylbenzene	14.65	105	4156697	5.869	ppbv	99
64) n-propylbenzene	15.54	120	115951	0.635	ppbv	87
70) n-Butylbenzene	18.53	91	86899	0.122	ppbv #	59
72) 4-Ethyltoluene	15.82	105	634045	1.084	ppbv	98
73) 1,3,5-Trimethylbenzene	15.98	105	281839	0.513	ppbv	93
74) 1,2,4-Trimethylbenzene	16.74	105	1051852	1.852	ppbv #	71

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

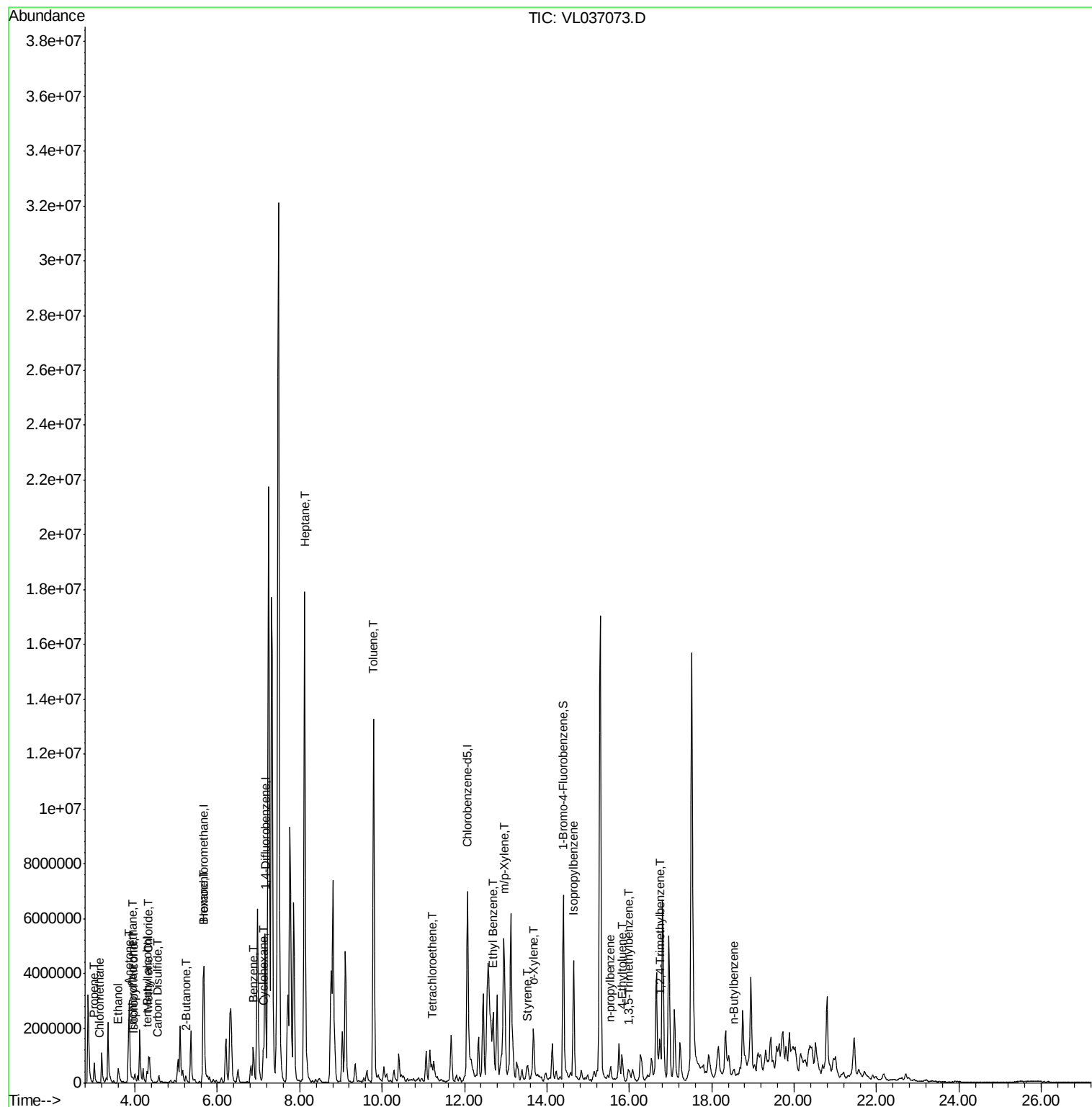
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060121\
Data File : VL037073.D
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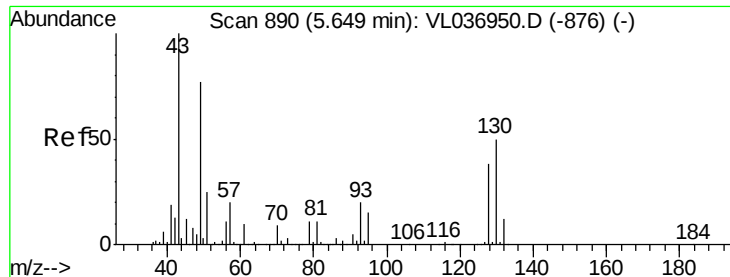
Instrument :
MSVOA_L
ClientSampleId :
HSG3

Manual Integrations
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Quant Time: Jun 04 11:38:12 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 891

Delta R.T. 0.00 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampled :

HSG3

Tot Ion: 49 Resp: 1589786

Ion Ratio Lower Upper

49 100

128 55.7 26.9 80.7

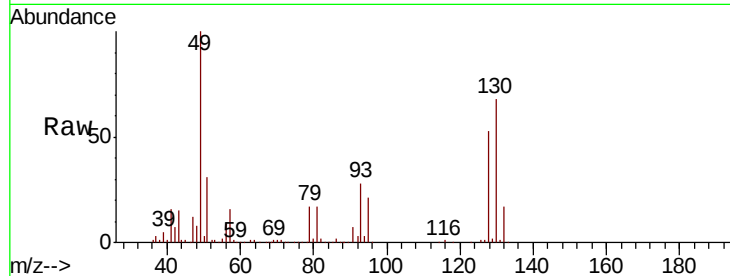
130 71.2 33.8 101.4

Manual Integrations

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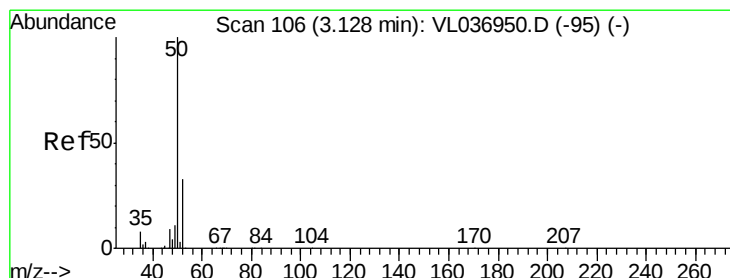
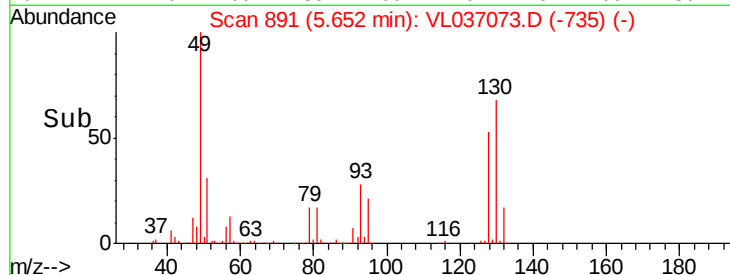
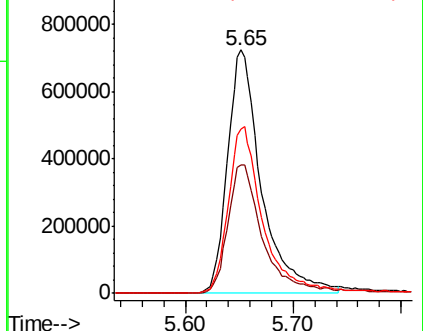
6/7/2021 2:58:32 PM



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



#4

Chloromethane

Concen: 0.160 ppbv m

RT: 3.13 min Scan# 106

Delta R.T. -0.00 min

Lab File: VL037073.D

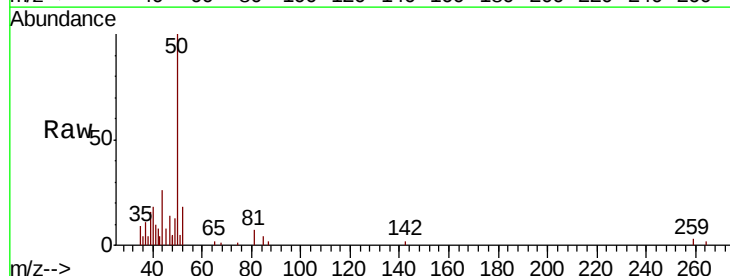
Acq: 1 Jun 2021 17:02

Tgt Ion: 50 Resp: 15854

Ion Ratio Lower Upper

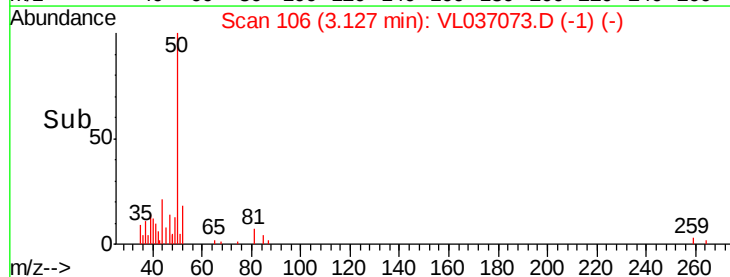
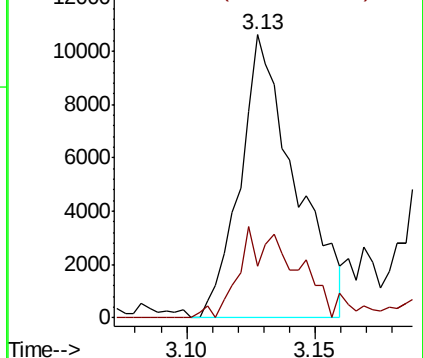
50 100

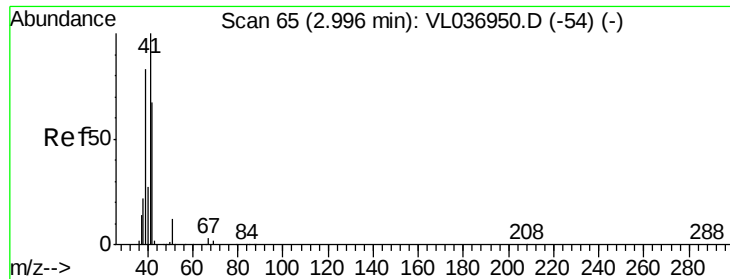
52 18.2 26.1 39.1#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 2.418 ppbv

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampled :

HSG3

Tot Ion: 41 Resp: 252225

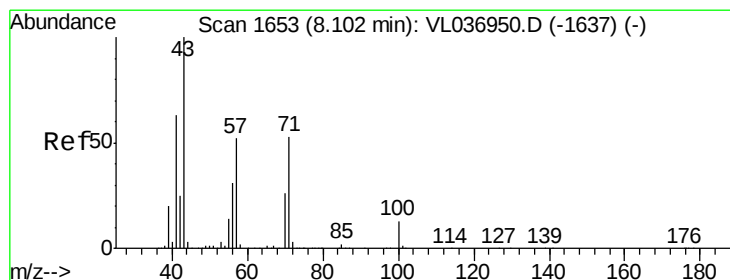
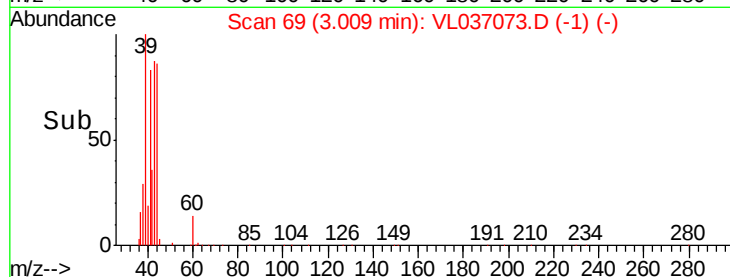
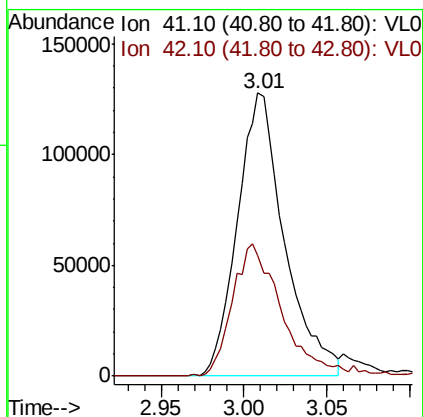
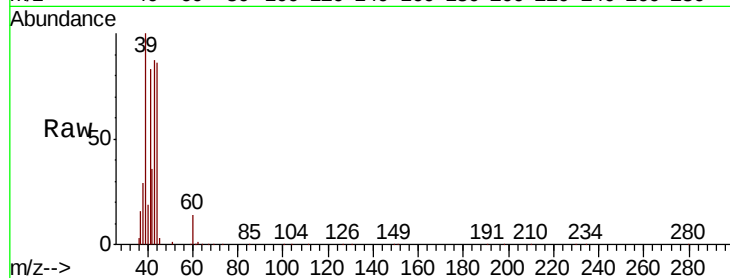
Ion Ratio Lower Upper

41 100

42 50.4 53.9 80.9#

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#10

Heptane

Concen: 35.255 ppbv

RT: 8.11 min Scan# 1657

Delta R.T. 0.01 min

Lab File: VL037073.D

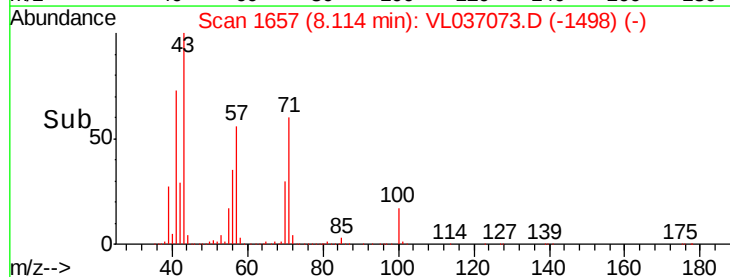
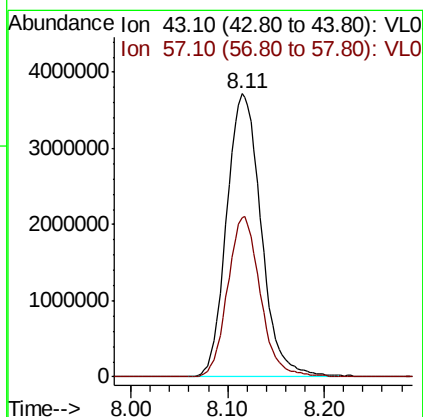
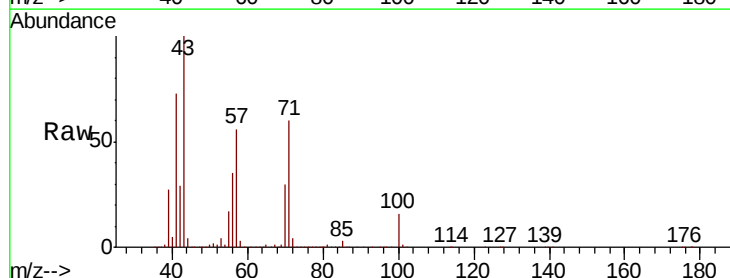
Acq: 1 Jun 2021 17:02

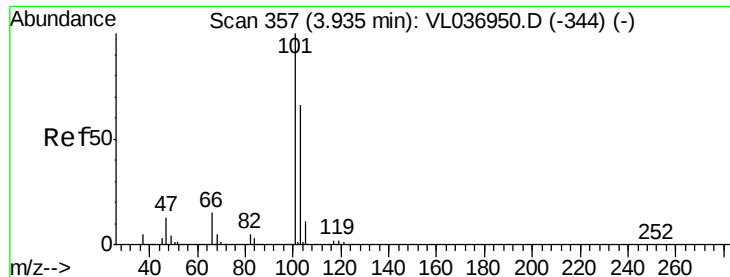
Tgt Ion: 43 Resp: 9163110

Ion Ratio Lower Upper

43 100

57 54.1 41.0 61.6





#11

Trichlorofluoromethane

Concen: 0.323 ppbv

RT: 3.94 min Scan# 359

Delta R.T. 0.01 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampled :

HSG3

Tot Ion:101 Resp: 80719

Ion Ratio Lower Upper

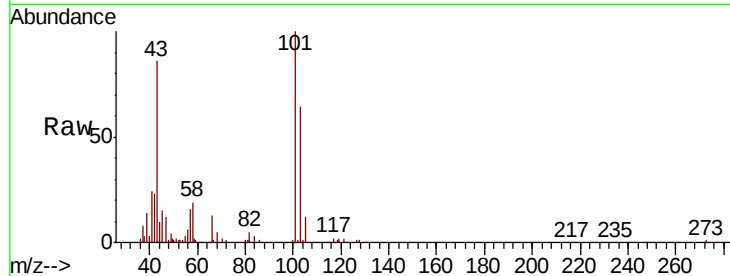
101 100

103 63.8 52.6 79.0

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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V

3.94

50000

40000

30000

20000

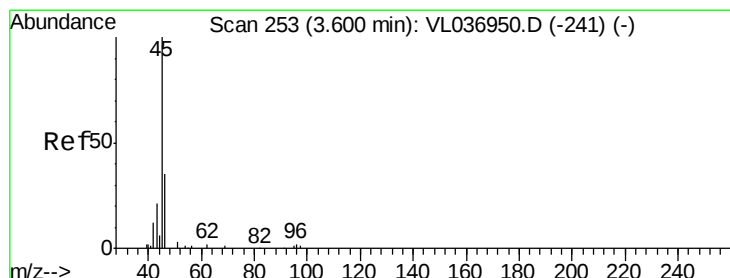
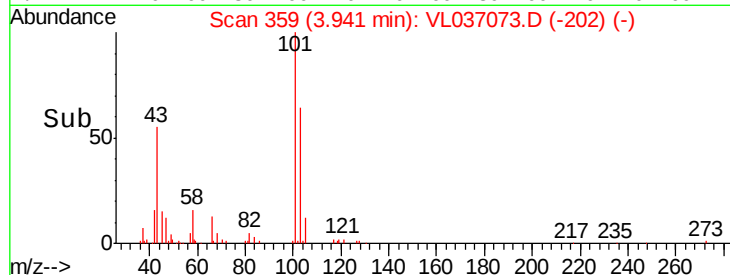
10000

0

Time-->

3.90 3.95

3.90 3.95



#13

Ethanol

Concen: 58.121 ppbv

RT: 3.59 min Scan# 251

Delta R.T. -0.01 min

Lab File: VL037073.D

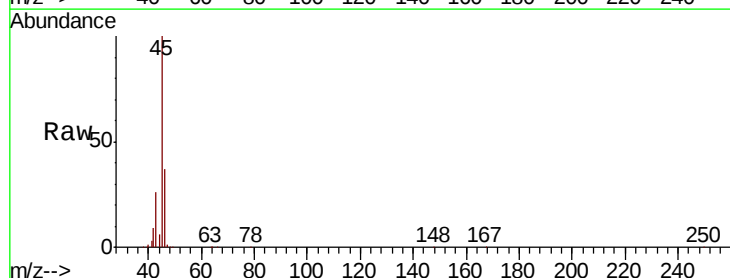
Acq: 1 Jun 2021 17:02

Tgt Ion: 45 Resp: 808762

Ion Ratio Lower Upper

45 100

46 38.7 16.3 65.3



Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 46.10 (45.80 to 46.80): VL0

3.59

300000

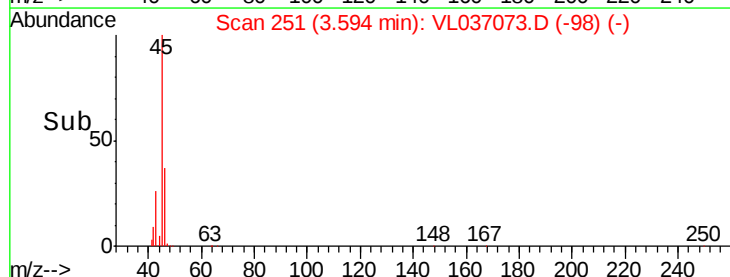
200000

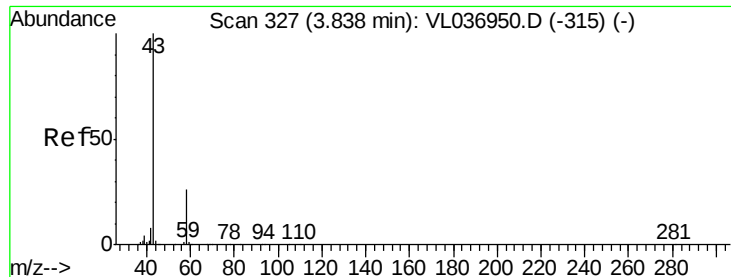
100000

0

Time-->

3.50 3.55 3.60 3.65 3.70





#15

Acetone

Concen: 8.811 ppbv m

RT: 3.84 min Scan# 327

Delta R.T. -0.00 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampleId :

HSG3

Tot Ion: 43 Resp: 1434779

Ion Ratio Lower Upper

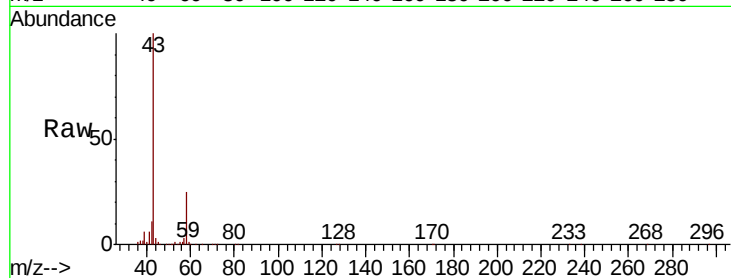
43 100

58 47.2 24.0 36.0#

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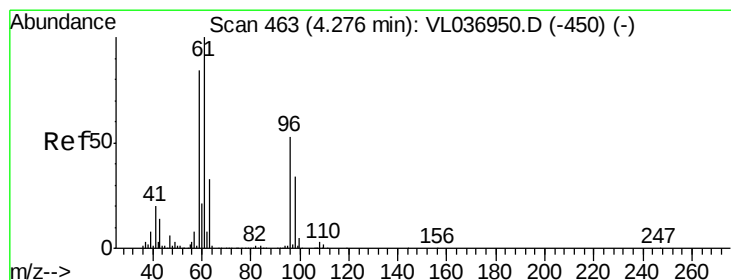
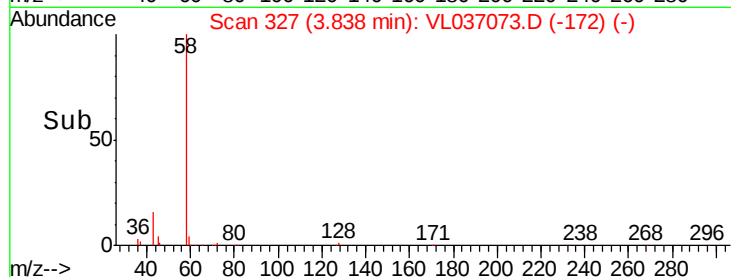
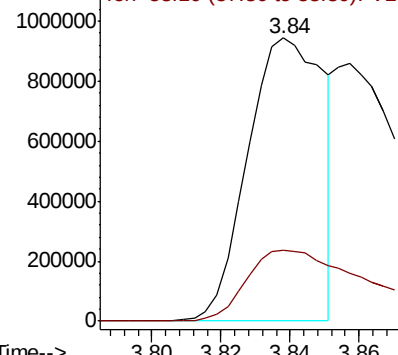
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 1.437 ppbv

RT: 4.30 min Scan# 471

Delta R.T. 0.03 min

Lab File: VL037073.D

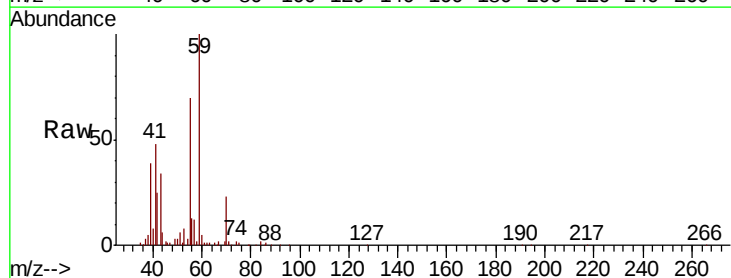
Acq: 1 Jun 2021 17:02

Tgt Ion: 59 Resp: 214372

Ion Ratio Lower Upper

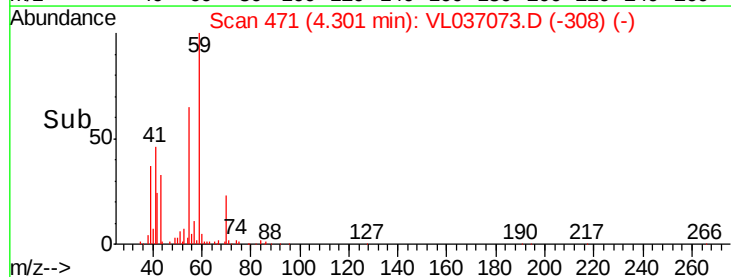
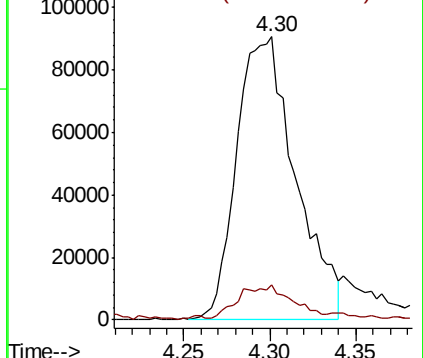
59 100

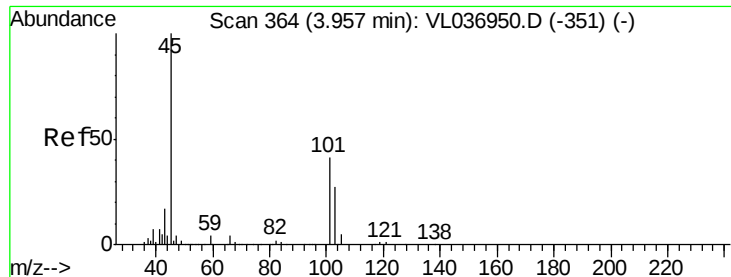
57 11.4 8.3 12.5



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





#19

Isopropyl Alcohol

Concen: 1.269 ppbv

RT: 3.96 min Scan# 366

Delta R.T. 0.01 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampled :

HSG3

Tot Ion: 45 Resp: 111103

Ion Ratio Lower Upper

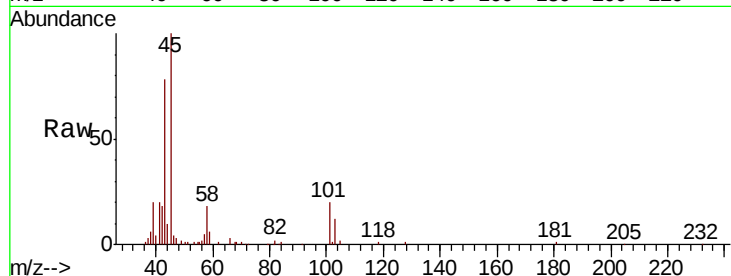
45 100

58 605.0 37.2 55.8#

Manual Integrations
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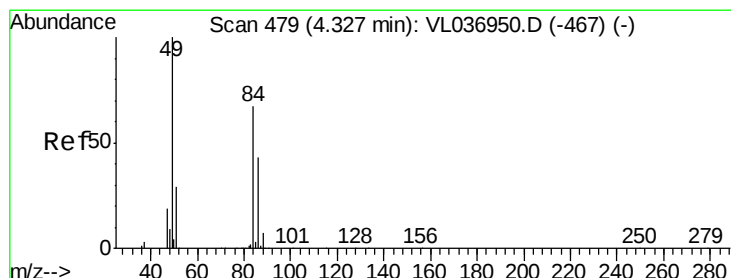
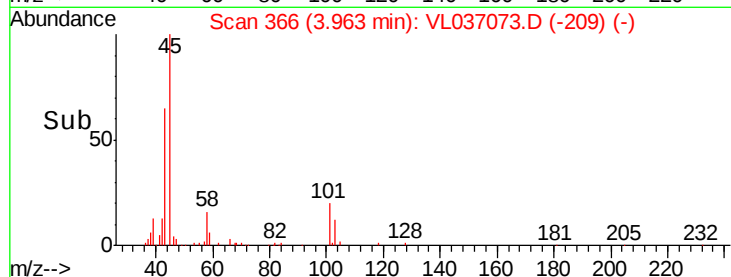
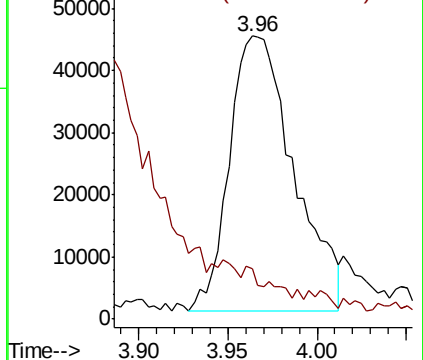
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#20

Methylene Chloride

Concen: 3.934 ppbv m

RT: 4.33 min Scan# 481

Delta R.T. 0.01 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Tgt Ion: 84 Resp: 343346

Ion Ratio Lower Upper

84 100

49 154.4 119.8 179.6

51 47.2 35.1 52.7

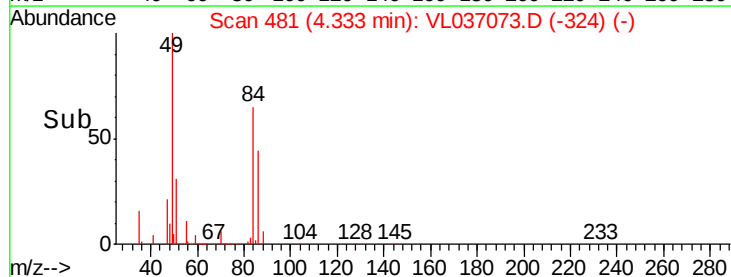
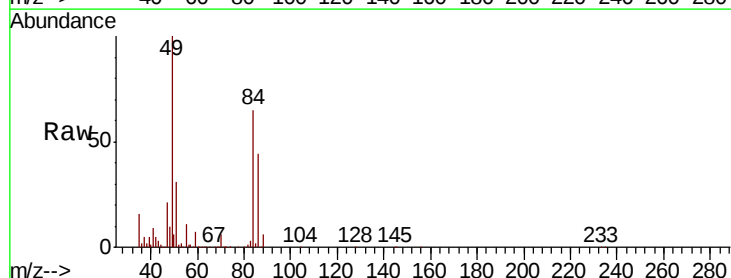
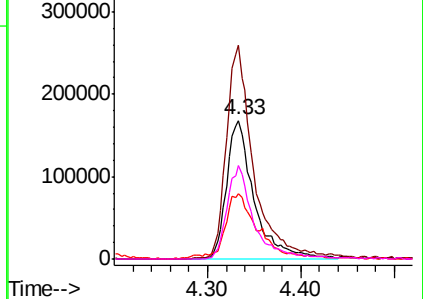
86 67.5 50.9 76.3

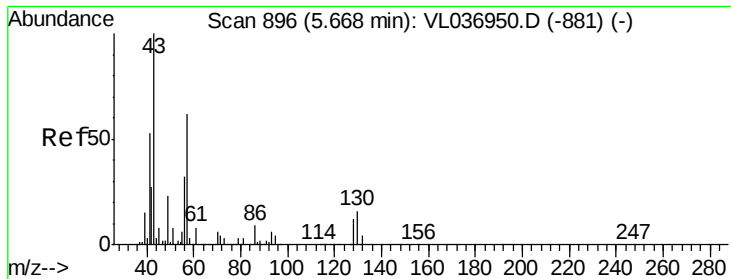
Abundance Ion 84.00 (83.70 to 84.70): VL0

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





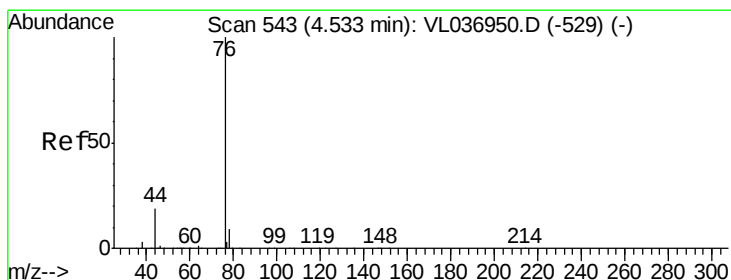
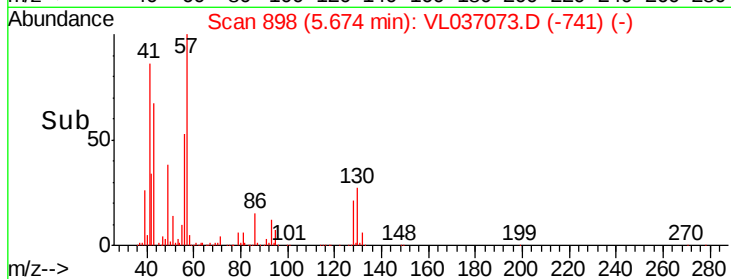
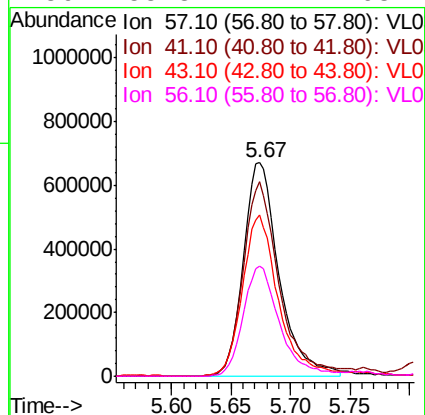
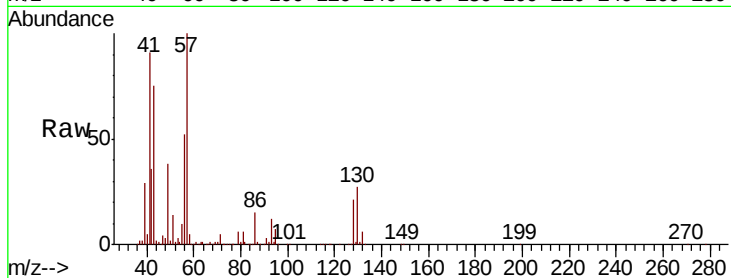
#26
Hexane
Concen: 6.989 ppbv
RT: 5.67 min Scan# 898
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion	57	Resp	1397078
Ion	Ratio	Lower	Upper
57	100		
41	94.8	70.5	105.7
43	77.6	165.8	248.8#
56	55.8	42.2	63.4

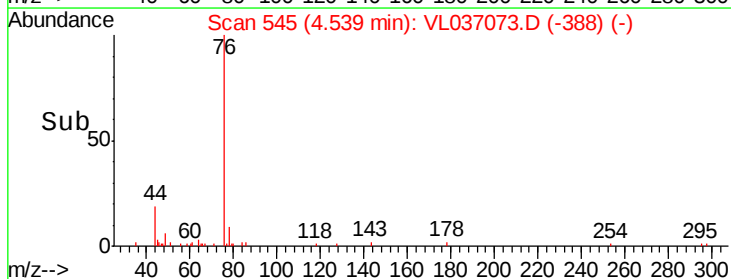
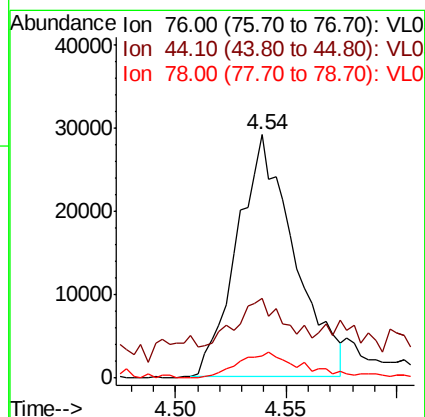
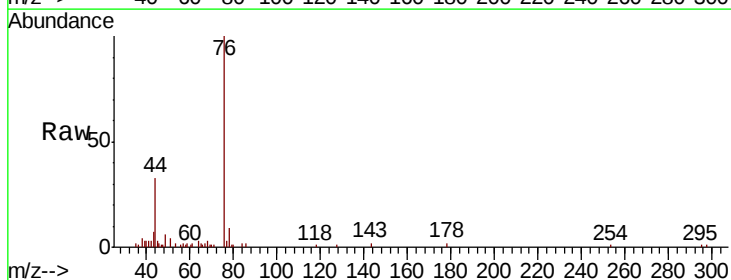
Manual Integrations
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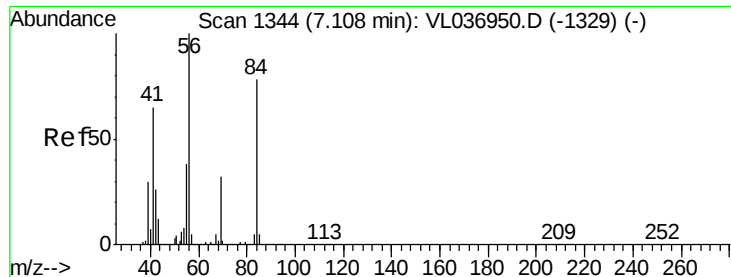
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#27
Carbon Disulfide
Concen: 0.260 ppbv
RT: 4.54 min Scan# 545
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	76	Resp	52307
Ion	Ratio	Lower	Upper
76	100		
44	44.1	15.5	23.3#
78	12.7	7.8	11.6#





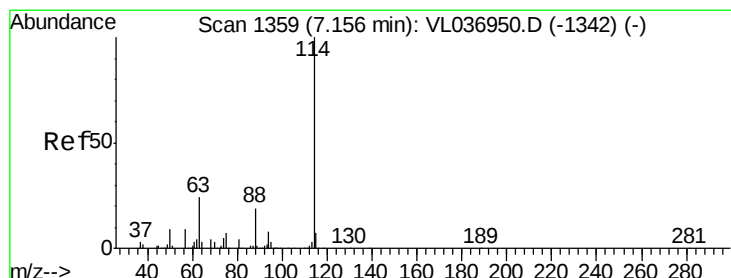
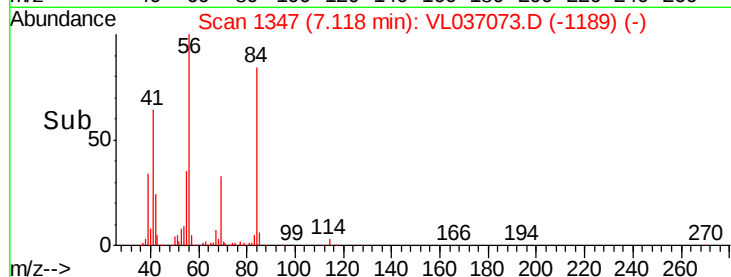
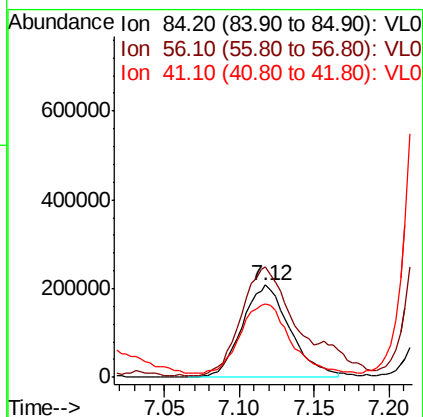
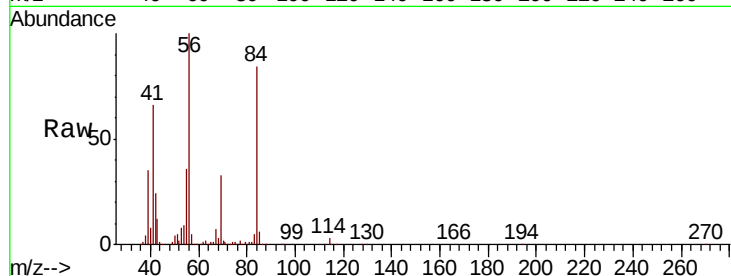
#30
Cvclohexane
Concen: 2.734 ppbv
RT: 7.12 min Scan# 1347
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampleId :
HSG3

Tot Ion	Ratio	Lower	Upper
84	100		
56	144.4	107.9	161.9
41	77.6	65.5	98.3

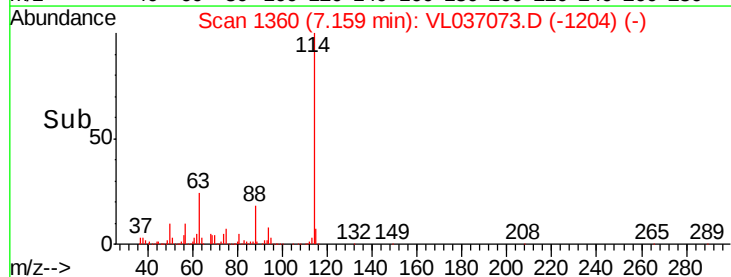
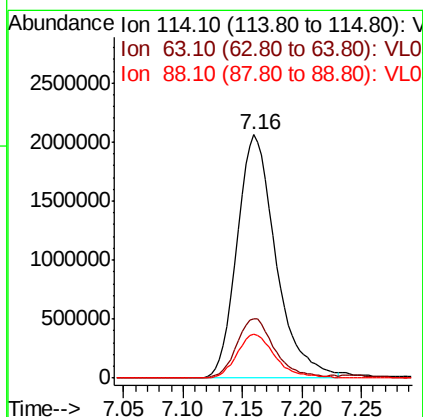
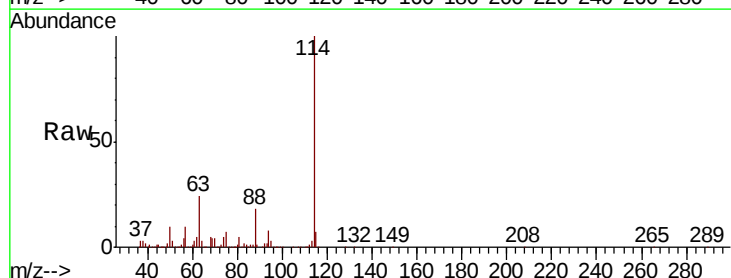
Manual Integrations
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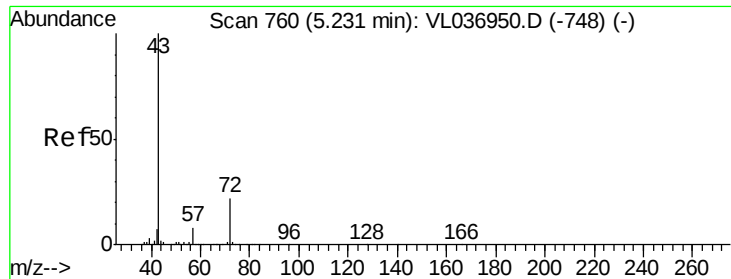
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1360
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.3	19.6	29.4
88	18.0	14.6	21.8





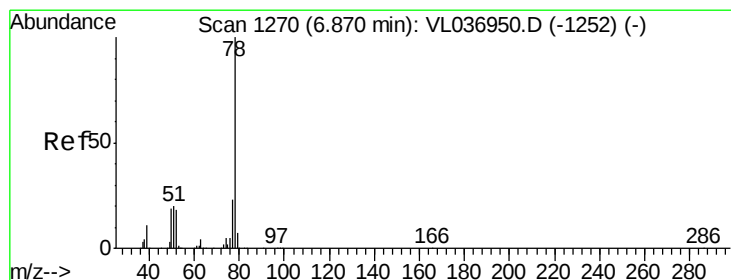
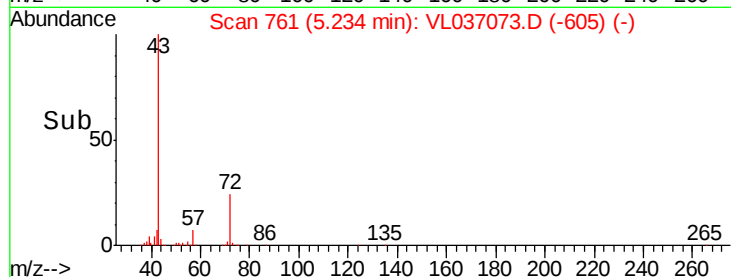
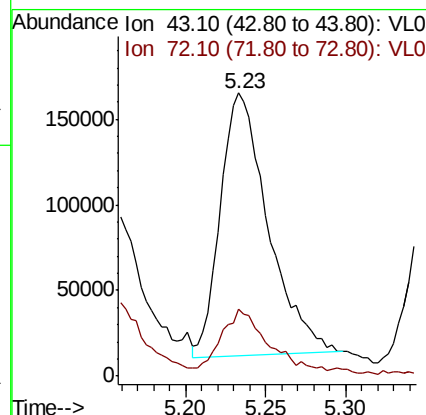
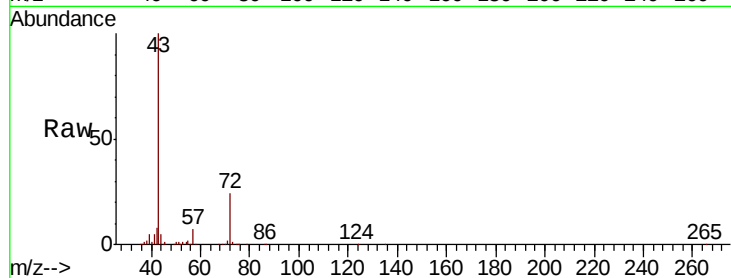
#34
2-Butanone
Concen: 1.852 ppbv
RT: 5.23 min Scan# 761
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion	43	Resp	314838
Ion Ratio	43	100	Lower Upper
	72	26.3	19.0 28.4

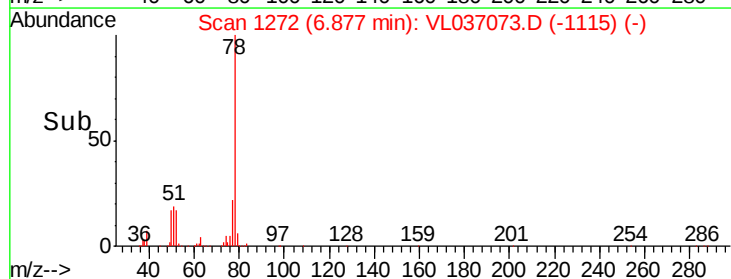
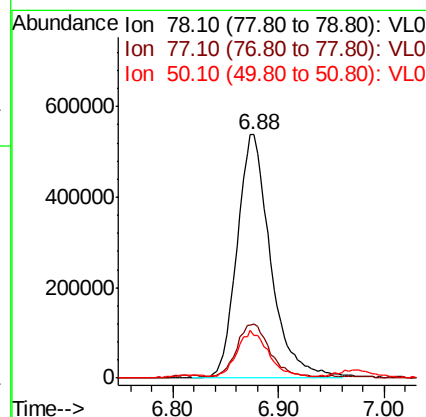
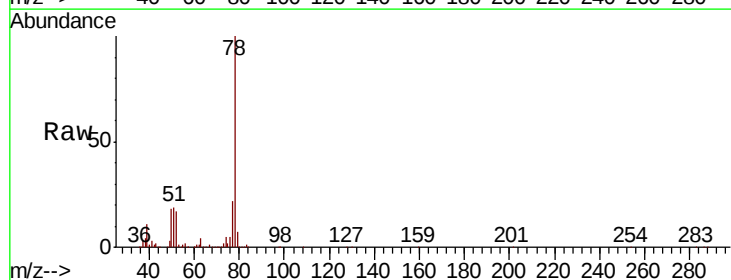
Manual Integrations
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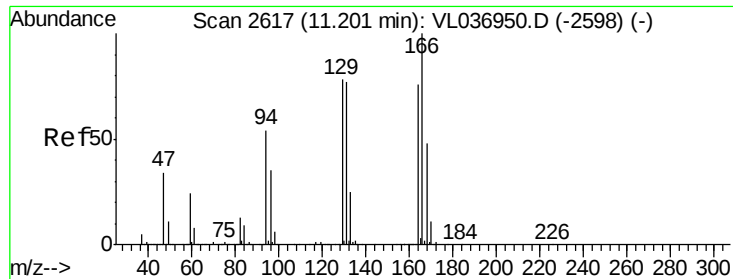
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#36
Benzene
Concen: 2.924 ppbv
RT: 6.88 min Scan# 1272
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	78	Resp	1176177
Ion Ratio	78	100	Lower Upper
	77	21.8	18.6 28.0
	50	16.3	15.0 22.4





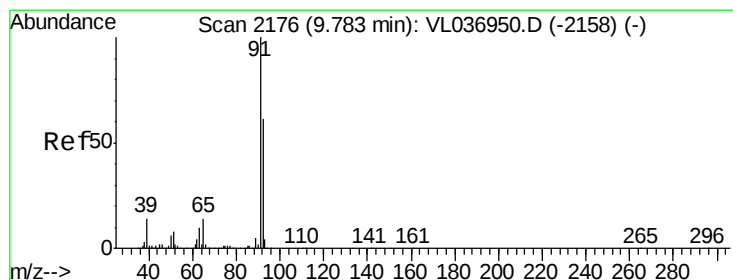
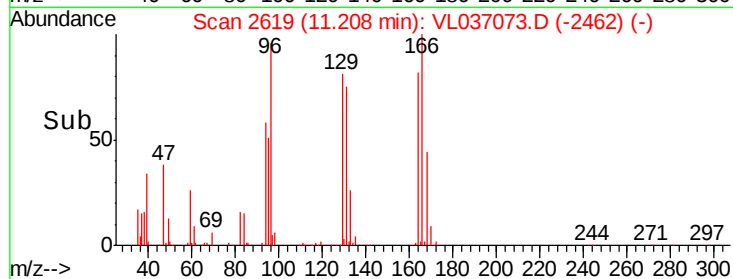
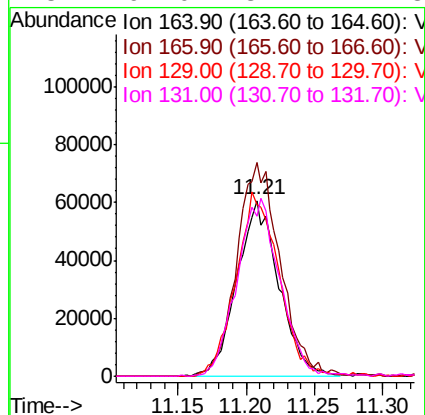
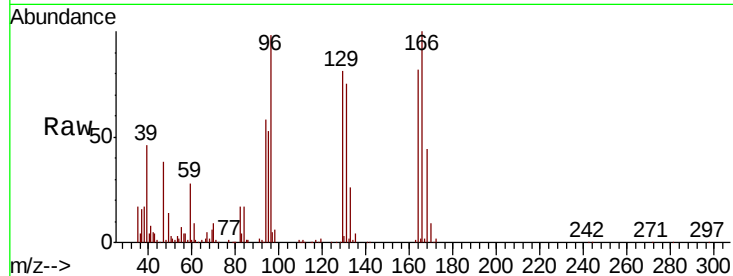
#52
Tetrachloroethene
Concen: 0.811 ppbv
RT: 11.21 min Scan# 2619
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion	Ratio	Lower	Upper
164	100		
166	121.2	105.5	158.3
129	97.8	81.8	122.8
131	91.0	81.2	121.8

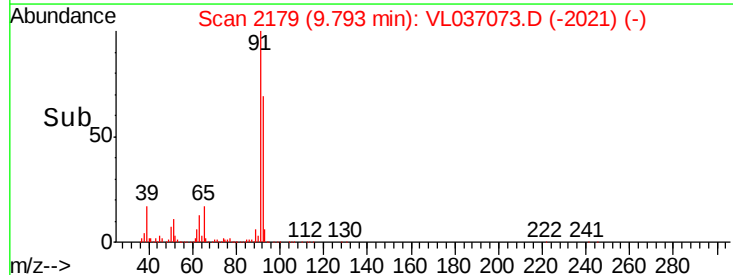
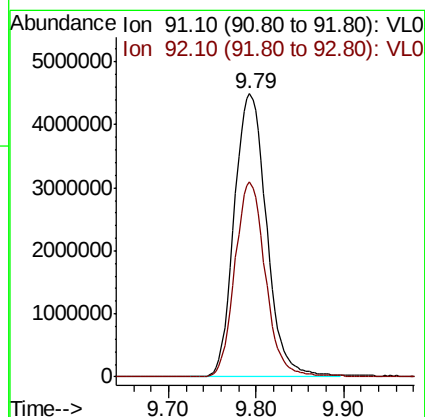
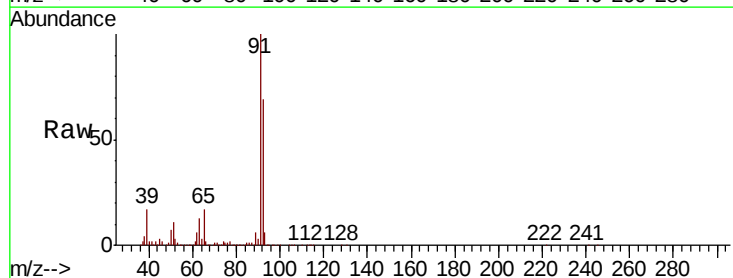
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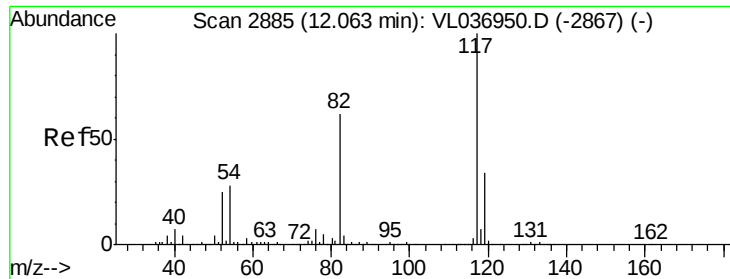
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#53
Toluene
Concen: 24.110 ppbv
RT: 9.79 min Scan# 2179
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	Ratio	Lower	Upper
91	100		
92	65.2	49.5	74.3





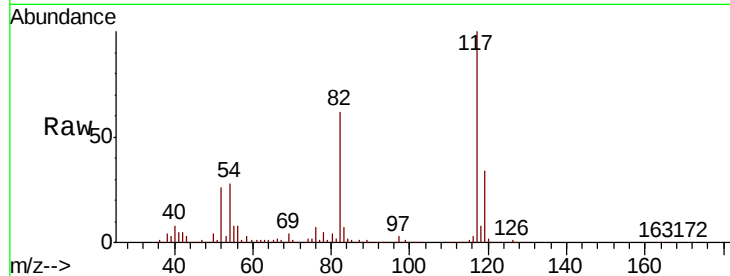
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2887
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

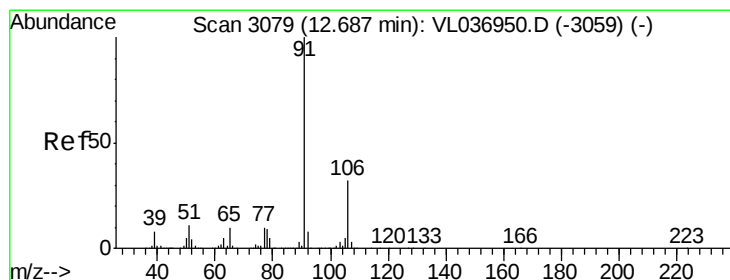
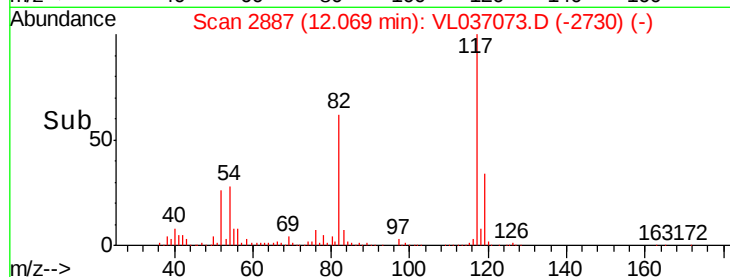
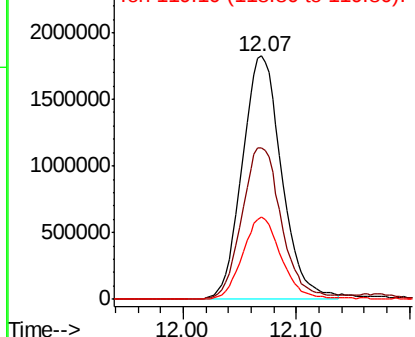
Tot Ion:117 Resp: 4428976
Ion Ratio Lower Upper
117 100
82 62.8 52.6 79.0
119 33.8 46.6 70.0#

Manual Integrations
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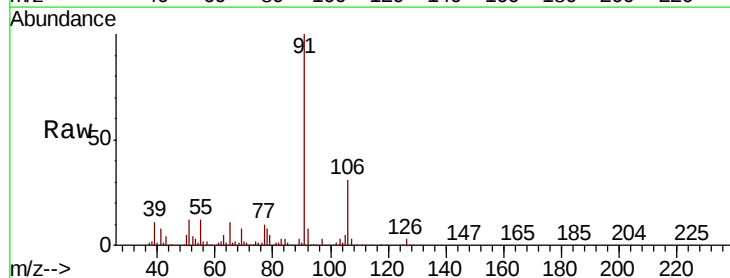


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

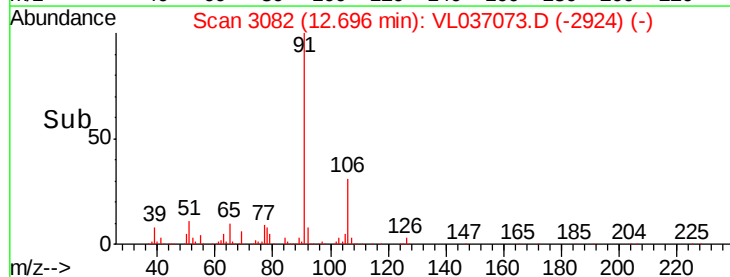
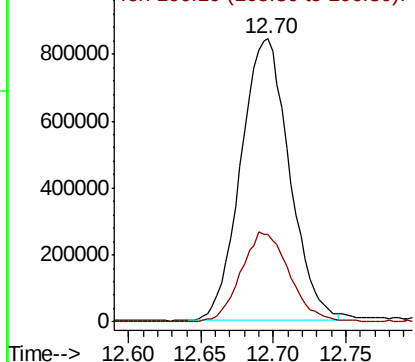


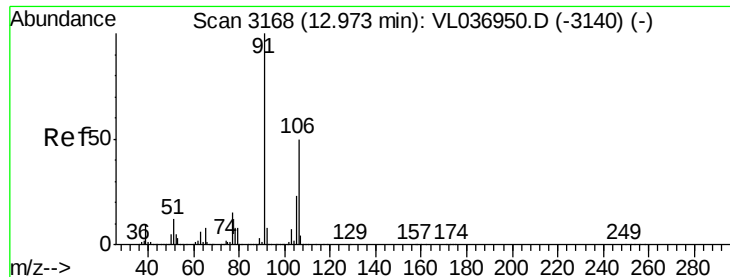
#58
Ethyl Benzene
Concen: 3.128 ppbv
RT: 12.70 min Scan# 3082
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion: 91 Resp: 1955088
Ion Ratio Lower Upper
91 100
106 31.1 25.6 38.4



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





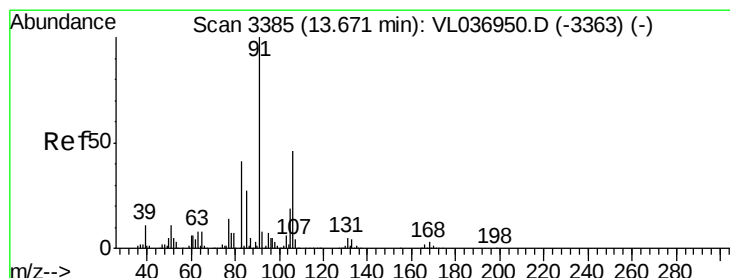
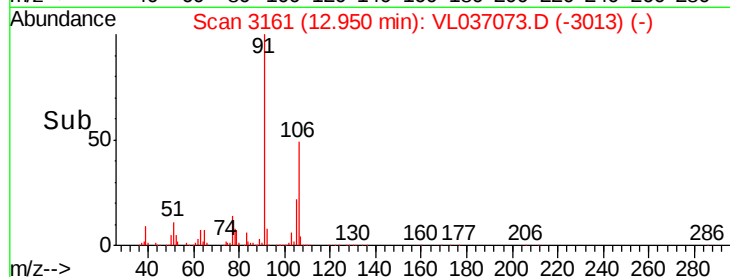
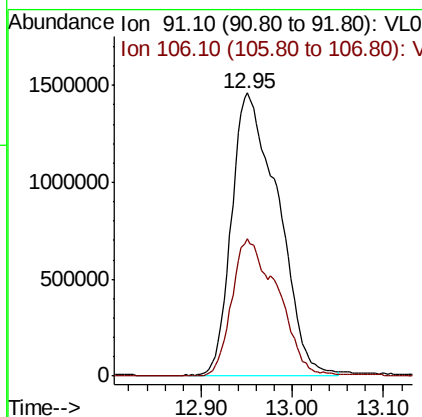
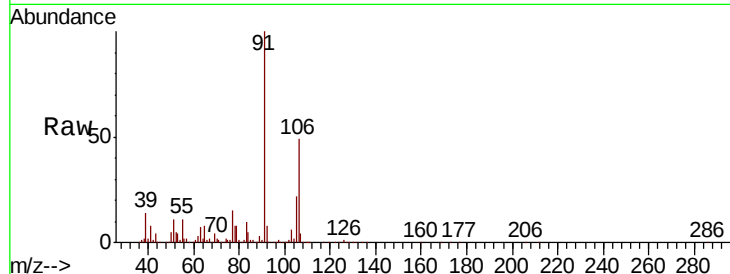
#59
m/p-Xylene
Concen: 9.950 ppbv
RT: 12.95 min Scan# 3161
Delta R.T. -0.02 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampleId :
HSG3

Tot Ion: 91 Resp: 5141125
Ion Ratio Lower Upper
91 100
106 49.0 37.4 56.2

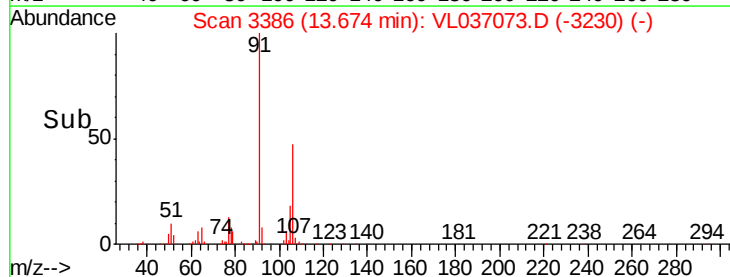
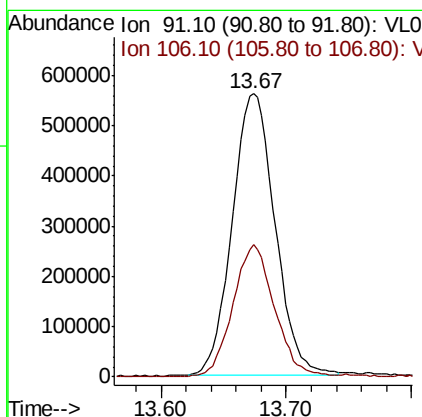
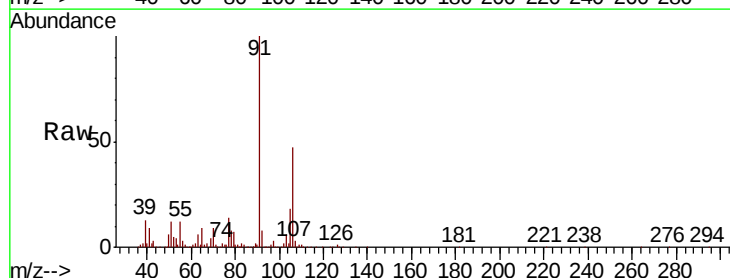
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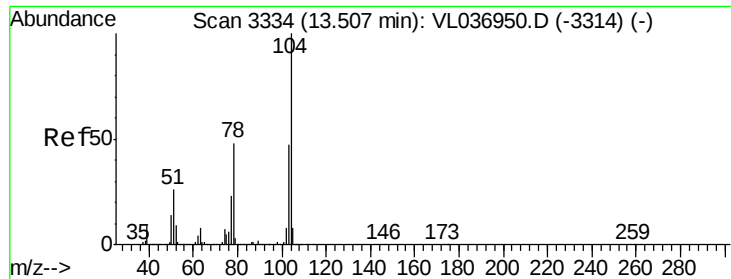
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#60
o-Xylene
Concen: 2.698 ppbv
RT: 13.67 min Scan# 3386
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion: 91 Resp: 1329349
Ion Ratio Lower Upper
91 100
106 45.8 23.4 70.3





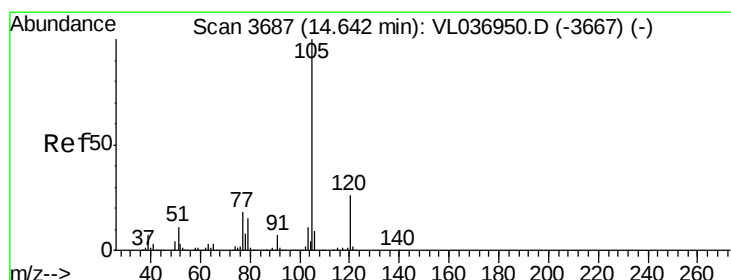
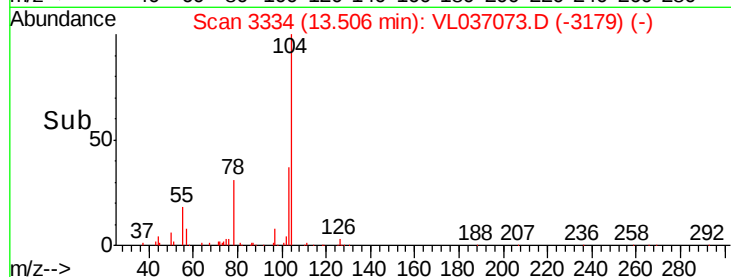
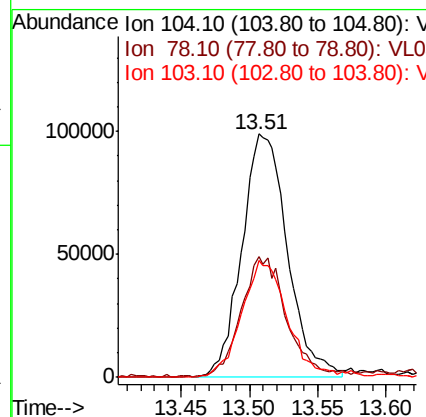
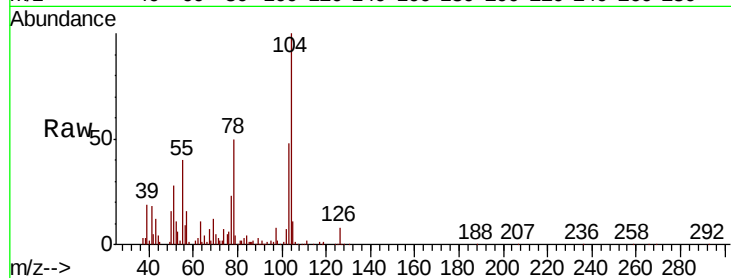
#61
Stvrene
Concen: 0.829 ppbv
RT: 13.51 min Scan# 3334
Delta R.T. -0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion	Ratio	Lower	Upper
104	100		
78	48.8	39.0	58.6
103	49.2	38.0	57.0

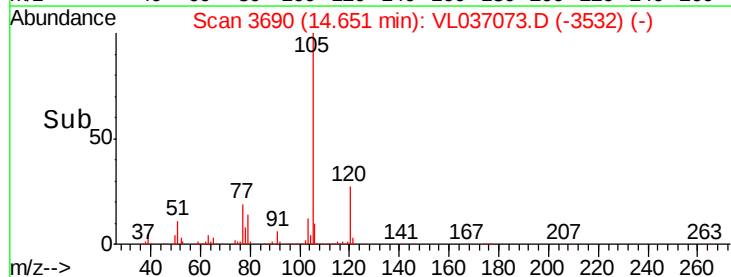
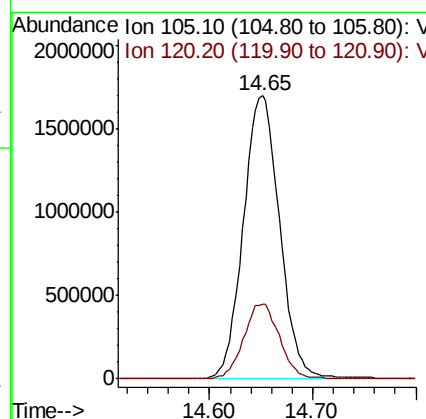
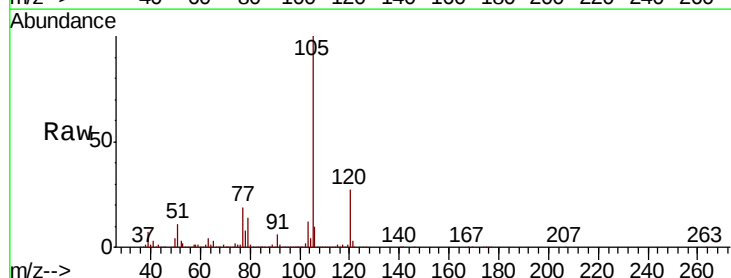
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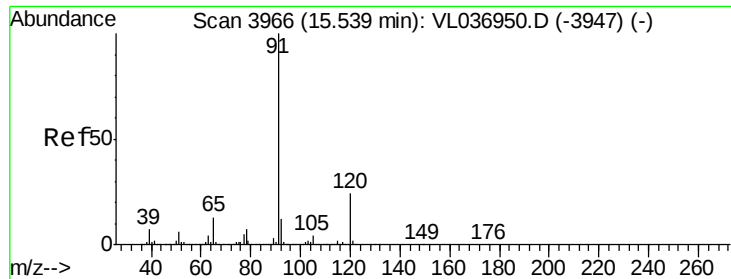
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#62
Isopropylbenzene
Concen: 5.869 ppbv
RT: 14.65 min Scan# 3690
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	26.4	21.7	32.5





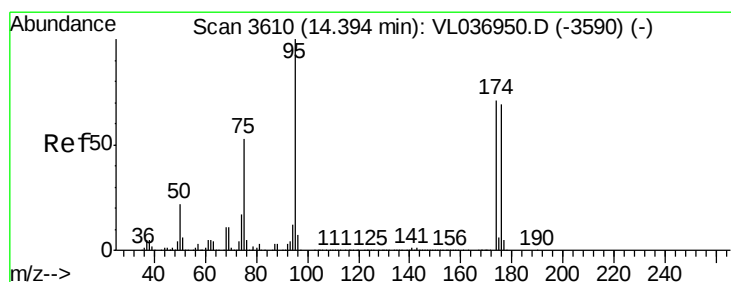
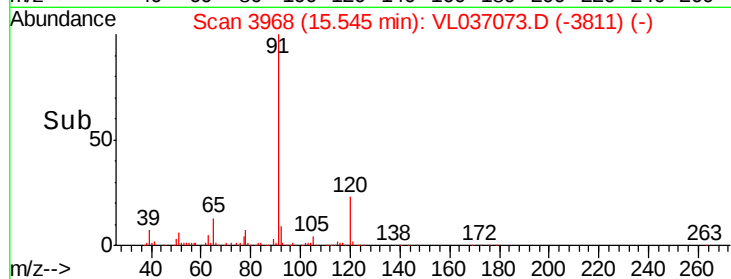
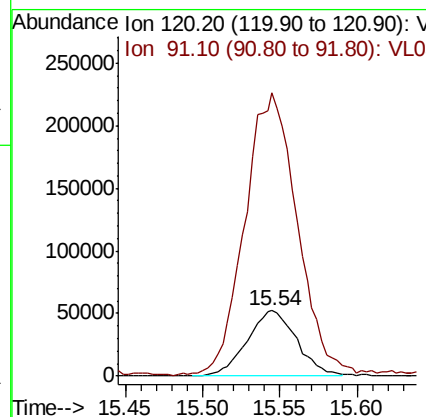
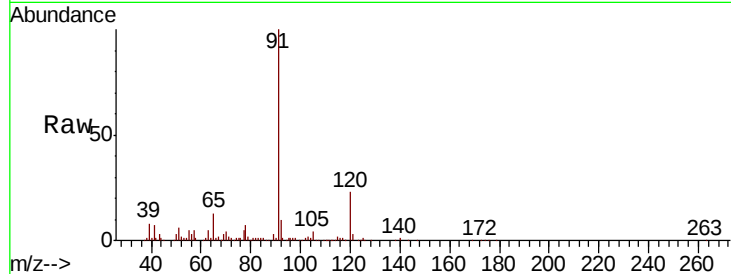
#64
n-propylbenzene
Concen: 0.635 ppbv
RT: 15.54 min Scan# 3968
Delta R.T. 0.01 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion:120 Resp: 115951
Ion Ratio Lower Upper
120 100
91 461.7 343.8 515.6

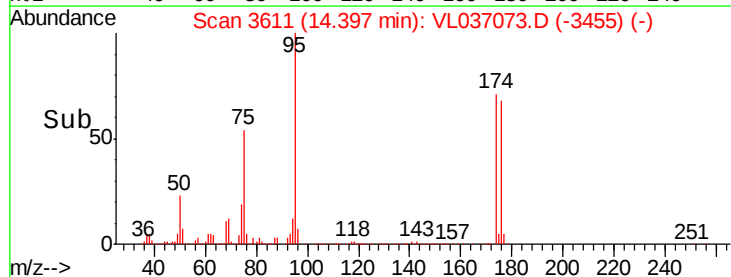
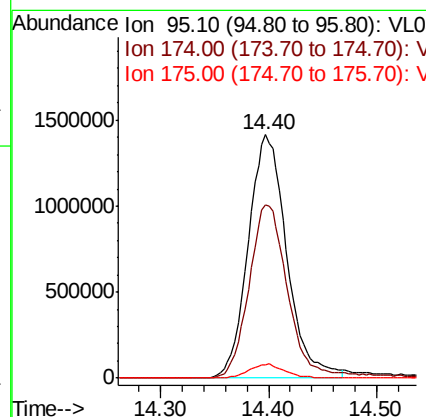
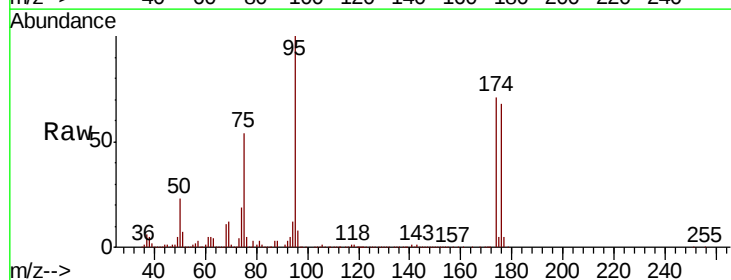
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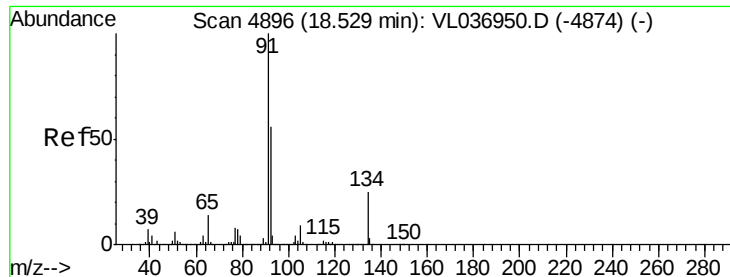
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.503 ppbv
RT: 14.40 min Scan# 3611
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion: 95 Resp: 3494475
Ion Ratio Lower Upper
95 100
174 73.9 58.4 87.6
175 5.6 4.4 6.6





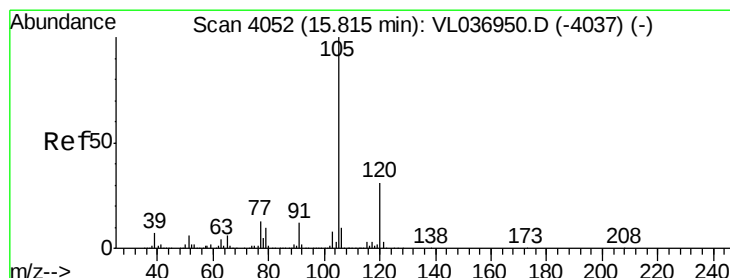
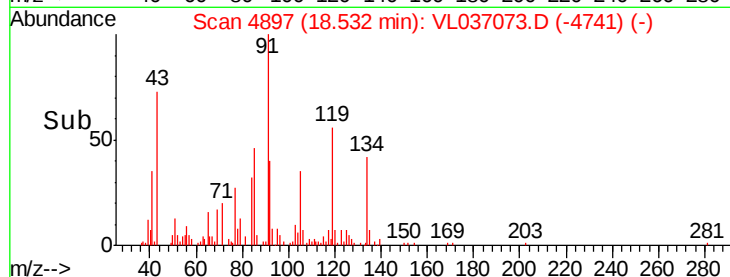
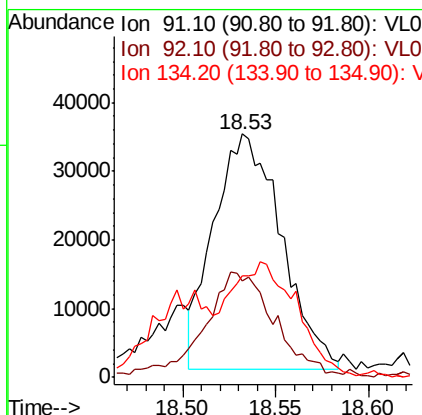
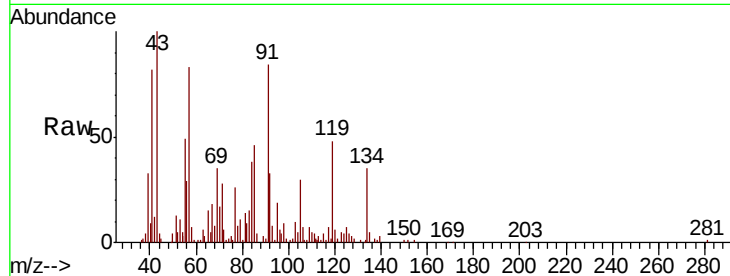
#70
n-Butylbenzene
Concen: 0.122 ppbv
RT: 18.53 min Scan# 4897
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Instrument :
MSVOA_L
ClientSampled :
HSG3

Tot Ion	Ratio	Lower	Upper
91	100		
92	48.2	44.6	66.8
134	79.8	20.2	30.2

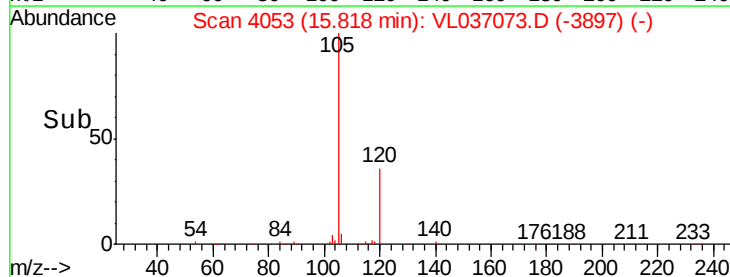
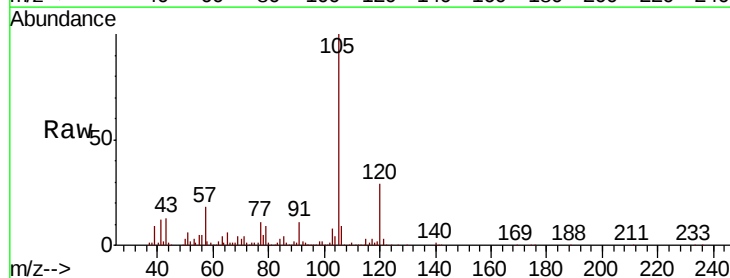
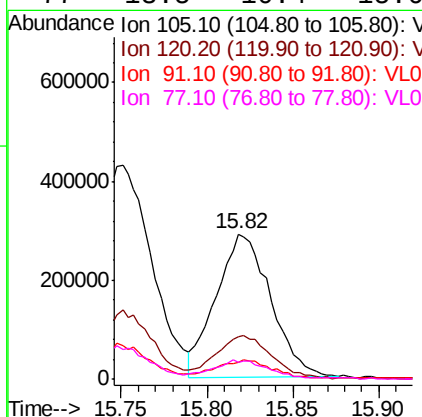
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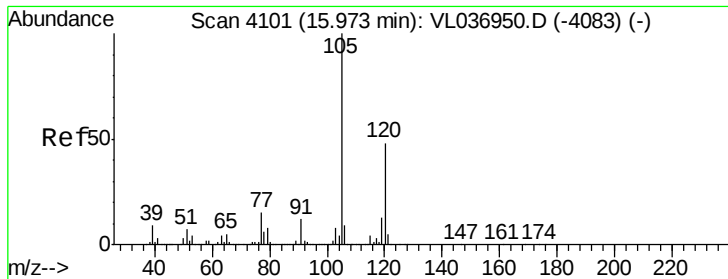
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#72
4-Ethyltoluene
Concen: 1.084 ppbv
RT: 15.82 min Scan# 4053
Delta R.T. 0.00 min
Lab File: VL037073.D
Acq: 1 Jun 2021 17:02

Tgt Ion	Ratio	Lower	Upper
105	100		
120	31.9	24.6	37.0
91	13.5	9.8	14.6
77	13.5	10.4	15.6





#73

1,3,5-Trimethylbenzene

Concen: 0.513 ppbv

RT: 15.98 min Scan# 4103

Delta R.T. 0.01 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Instrument :

MSVOA_L

ClientSampled :

HSG3

Tot Ion:105 Resp: 281839

Ion Ratio Lower Upper

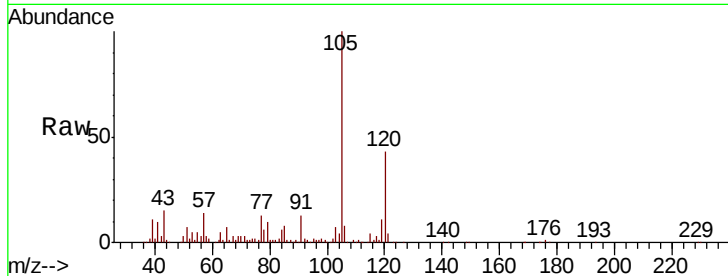
105 100

120 43.5 38.6 58.0

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

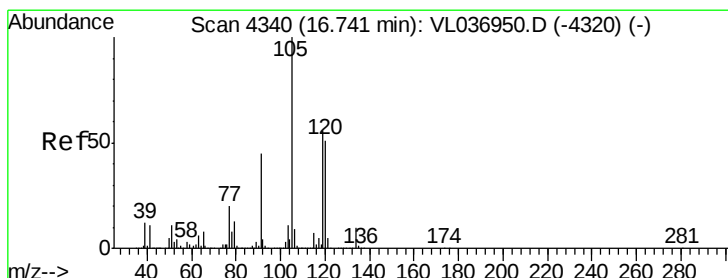
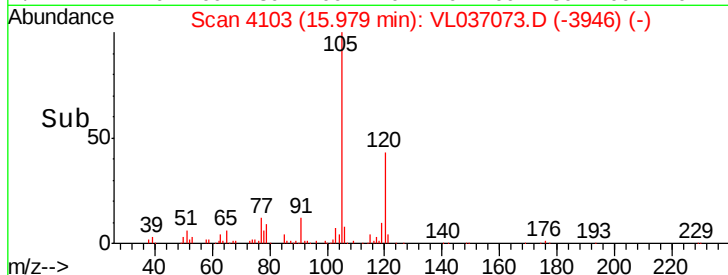
15.98

100000

50000

0

Time-->



#74

1,2,4-Trimethylbenzene

Concen: 1.852 ppbv

RT: 16.74 min Scan# 4341

Delta R.T. 0.00 min

Lab File: VL037073.D

Acq: 1 Jun 2021 17:02

Tgt Ion:105 Resp: 1051852

Ion Ratio Lower Upper

105 100

120 43.6 40.6 61.0

91 10.7 37.4 56.0#

77 11.5 16.2 24.4#

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

400000

200000

0

Time-->

