

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL081820\
 Data File : VL035466.D
 Acq On : 19 Aug 2020 12:27
 Operator : SY/AP
 Sample : L3730-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3

Manual Integrations
 APPROVED

MMDadoda
 8/20/2020 11:07:56 AM

Quant Time: Aug 20 03:54:24 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug 1
 QLast Update : Mon Aug 17 19:28:30 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1059985	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4817198	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	4797826	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	3462567	10.31	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	63085	0.321	ppbv	96
3) Chlorodifluoromethane	2.99	51	271873m	2.046	ppbv	
4) Chloromethane	3.14	50	37933	0.548	ppbv	99
9) Propene	3.02	41	40860	0.765	ppbv #	73
10) Heptane	8.14	43	16656m	0.119	ppbv	
11) Trichlorofluoromethane	3.95	101	149891	0.486	ppbv	94
13) Ethanol	3.61	45	805400	41.151	ppbv	99
15) Acetone	3.85	43	1351397	11.077	ppbv #	83
17) tert-Butyl alcohol	4.31	59	22117m	0.140	ppbv	
19) Isopropyl Alcohol	3.97	45	1138693	13.541	ppbv #	97
20) Methylene Chloride	4.35	84	175130	1.779	ppbv #	64
26) Hexane	5.69	57	162332	1.212	ppbv #	36
29) Chloroform	5.76	83	35983	0.134	ppbv	96
30) Cyclohexane	7.14	84	46074	0.310	ppbv #	55
34) 2-Butanone	5.26	43	74940	0.466	ppbv #	70
35) Carbon Tetrachloride	7.03	117	16285	0.064	ppbv #	82
36) Benzene	6.90	78	54723	0.155	ppbv #	91
37) 1,2-Dichloroethane	6.31	62	32323	0.200	ppbv #	88
44) 2,2,4-Trimethylpentane	7.88	57	122821	0.266	ppbv	92
50) 4-Methyl-2-Pentanone	8.77	43	177834	0.770	ppbv #	86
52) Tetrachloroethene	11.25	164	13816m	0.064	ppbv	
53) Toluene	9.82	91	396858	0.871	ppbv	98
59) m/p-Xylene	12.99	91	117609	0.240	ppbv	87
60) o-Xylene	13.71	91	46808	0.098	ppbv	92
61) Styrene	13.55	104	52114m	0.136	ppbv	
62) Isopropylbenzene	14.70	105	94550	0.121	ppbv	92
74) 1,2,4-Trimethylbenzene	16.79	105	71885	0.114	ppbv #	72

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

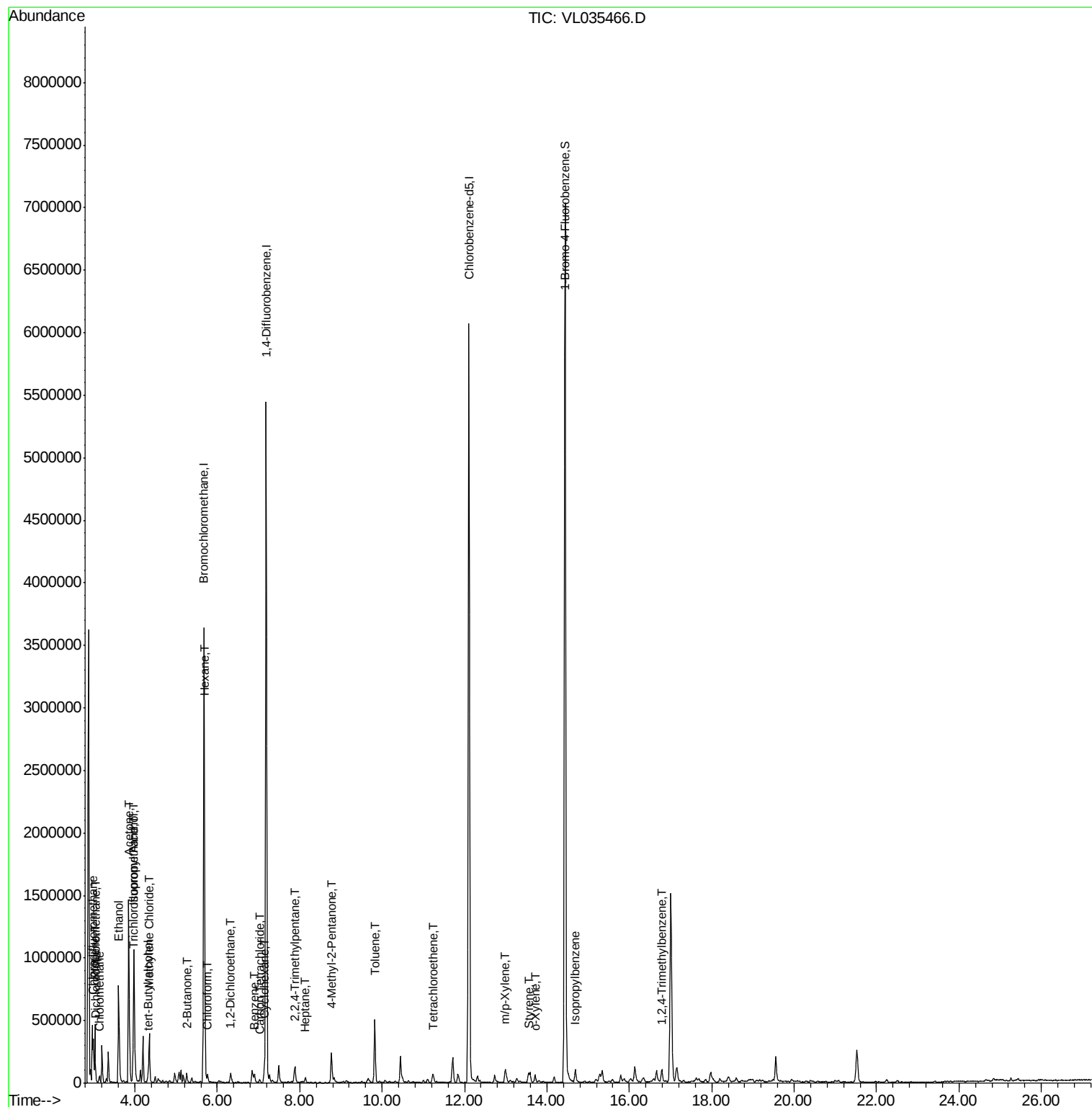
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL081820\
Data File : VL035466.D
Acq On : 19 Aug 2020 12:27
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Quant Time: Aug 20 03:54:24 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL081720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Aug
QLast Update : Mon Aug 17 19:28:30 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 49 Resp: 1059985

Ion Ratio Lower Upper

49 100

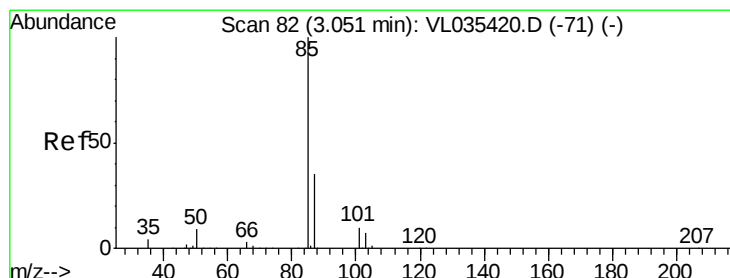
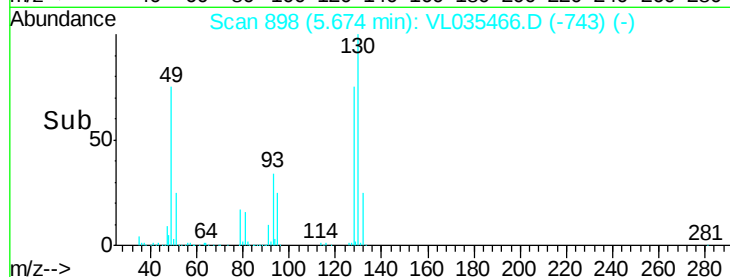
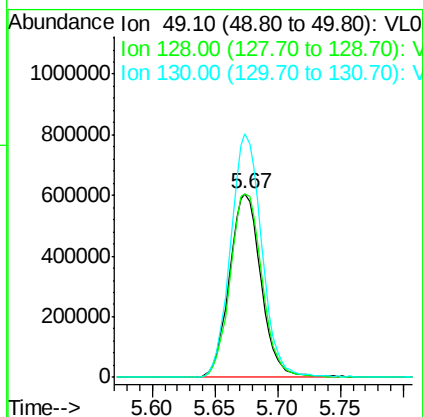
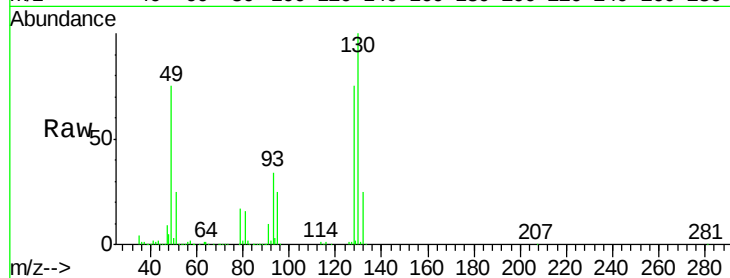
128 101.9 20.9 62.7#

130 131.9 26.7 80.1#

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#2

Dichlorodifluoromethane

Concen: 0.321 ppbv

RT: 3.05 min Scan# 81

Delta R.T. 0.00 min

Lab File: VL035466.D

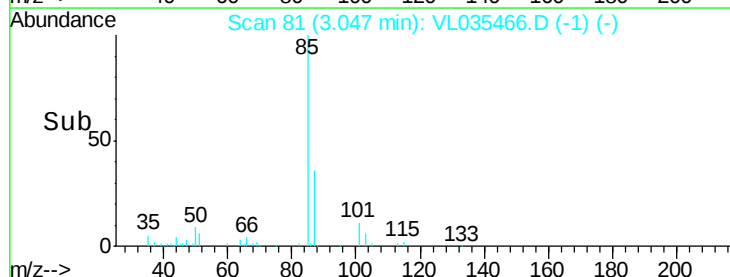
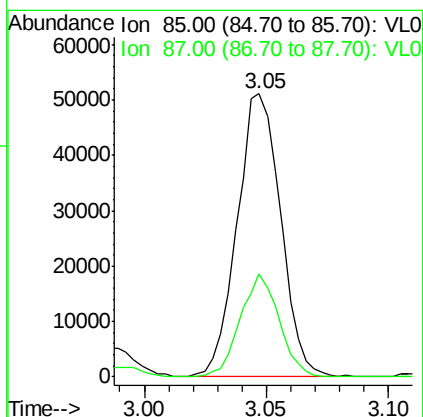
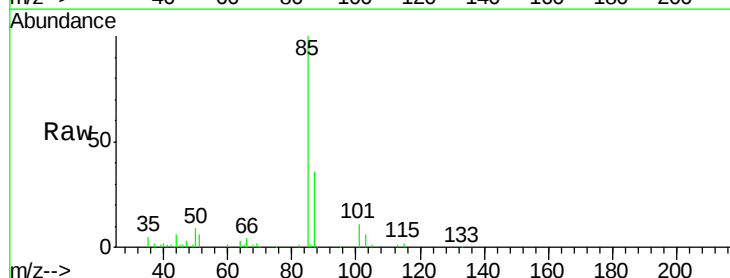
Acq: 19 Aug 2020 12:27

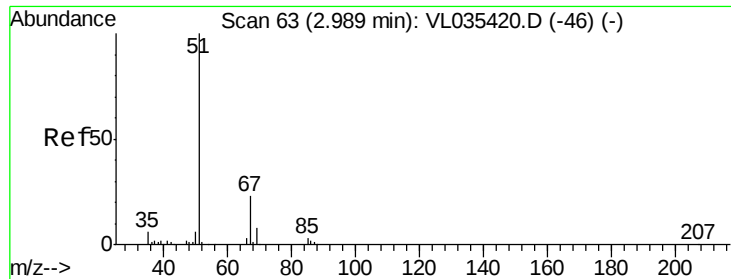
Tgt Ion: 85 Resp: 63085

Ion Ratio Lower Upper

85 100

87 36.2 27.1 40.7





#3

Chlorodifluoromethane

Concen: 2.046 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 51 Resp: 271873

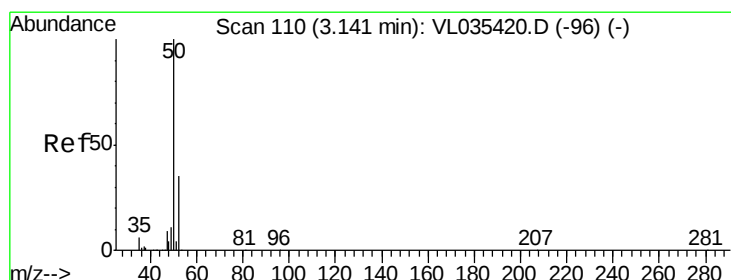
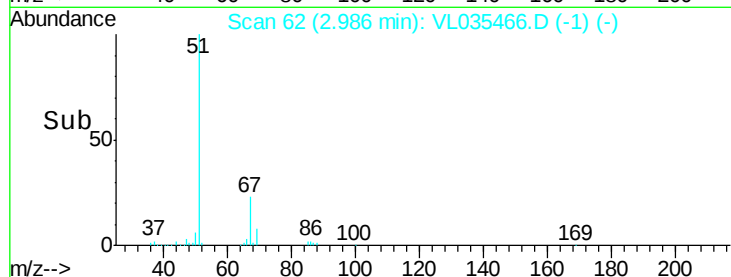
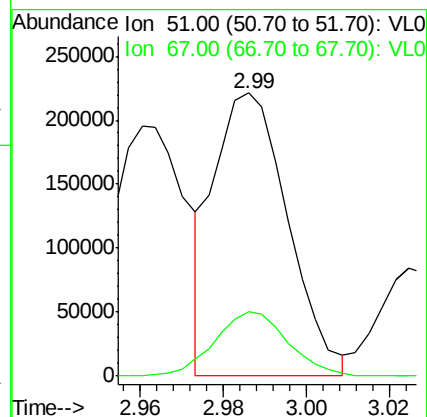
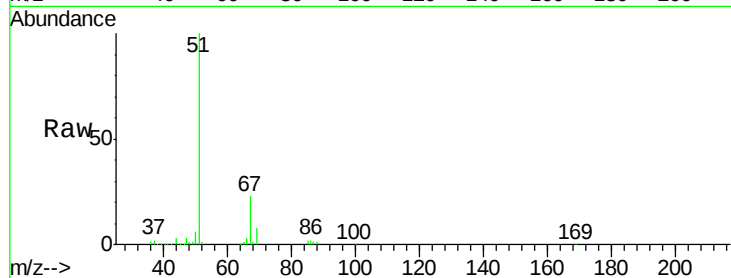
Ion Ratio Lower Upper

51 100

67 22.7 15.0 22.6#

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#4

Chloromethane

Concen: 0.548 ppbv

RT: 3.14 min Scan# 109

Delta R.T. 0.00 min

Lab File: VL035466.D

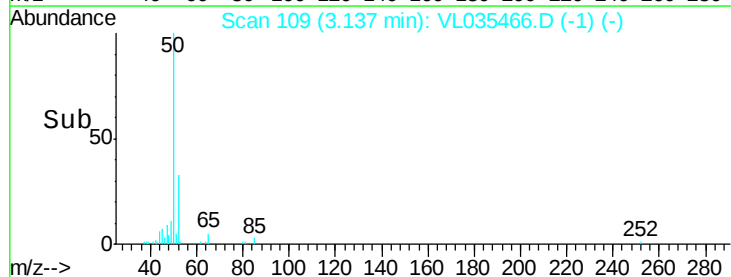
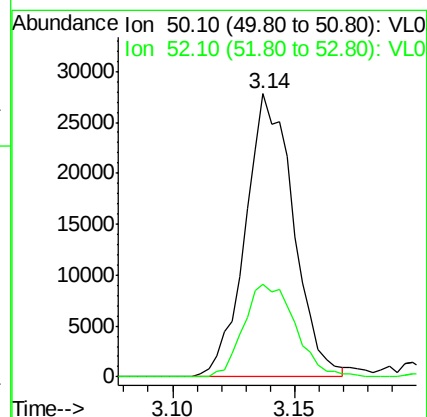
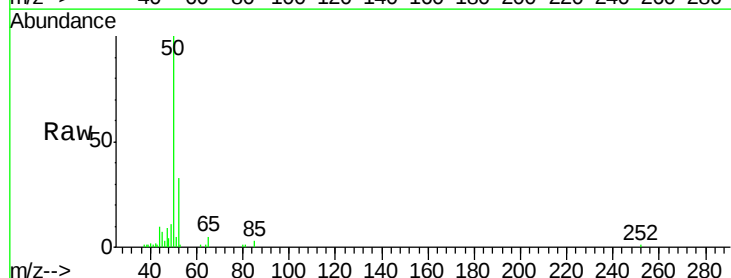
Acq: 19 Aug 2020 12:27

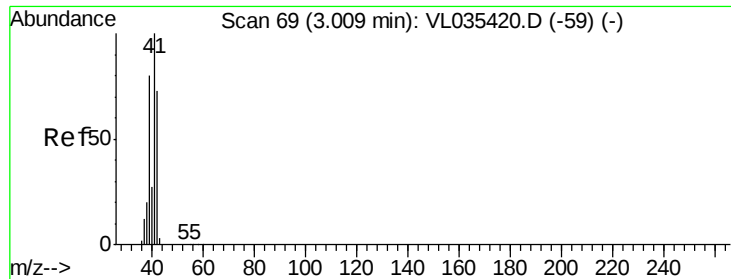
Tgt Ion: 50 Resp: 37933

Ion Ratio Lower Upper

50 100

52 33.0 25.9 38.9





#9

Propene

Concen: 0.765 ppbv

RT: 3.02 min Scan# 73

Delta R.T. 0.02 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 41 Resp: 40860

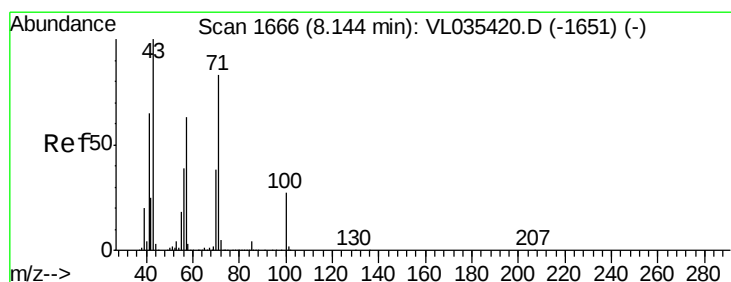
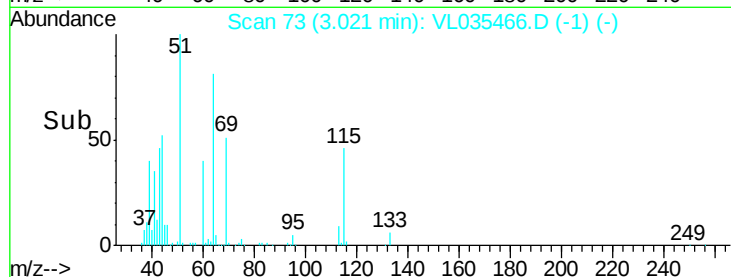
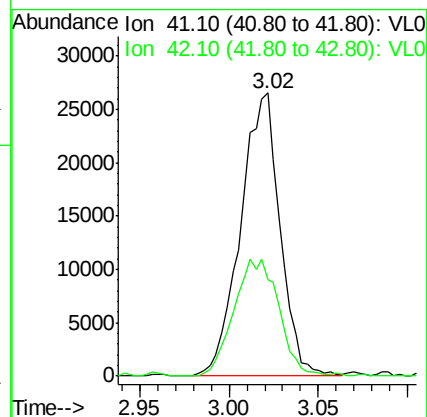
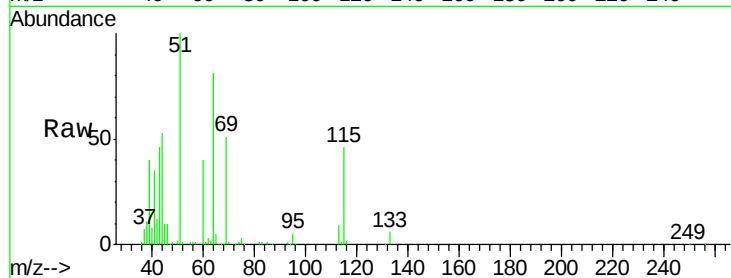
Ion Ratio Lower Upper

41 100

42 47.1 55.5 83.3#

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#10

Heptane

Concen: 0.119 ppbv m

RT: 8.14 min Scan# 1665

Delta R.T. 0.00 min

Lab File: VL035466.D

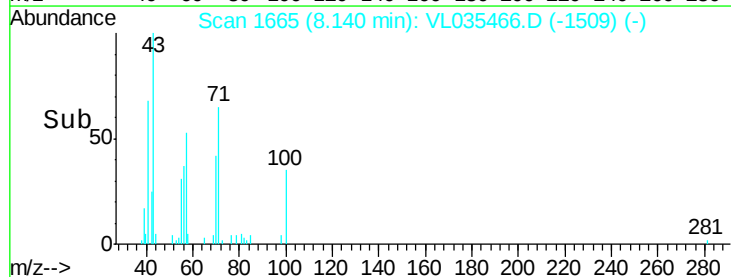
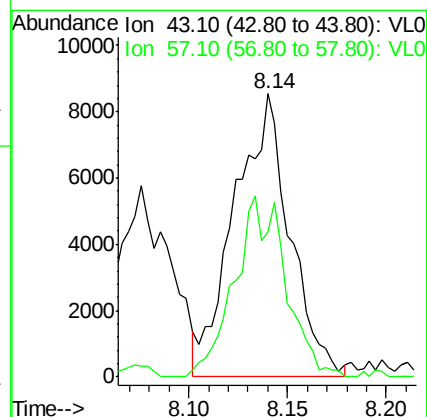
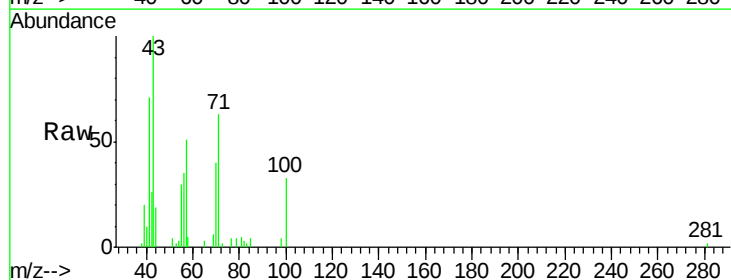
Acq: 19 Aug 2020 12:27

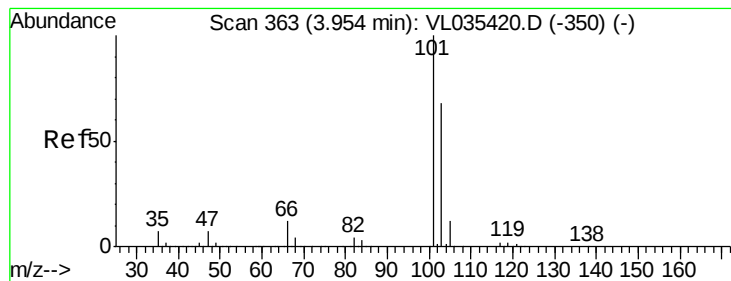
Tgt Ion: 43 Resp: 16656

Ion Ratio Lower Upper

43 100

57 0.0 39.8 59.6#





#11

Trichlorofluoromethane

Concen: 0.486 ppbv

RT: 3.95 min Scan# 363

Delta R.T. 0.01 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion:101 Resp: 149891

Ion Ratio Lower Upper

101 100

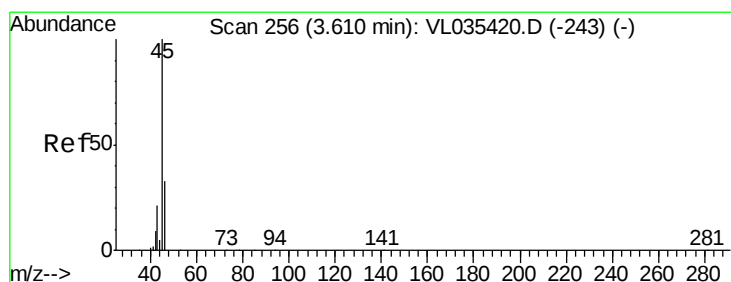
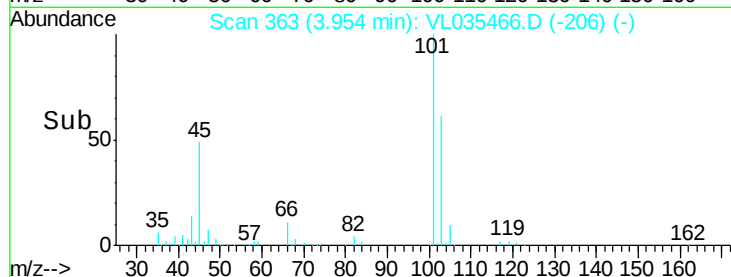
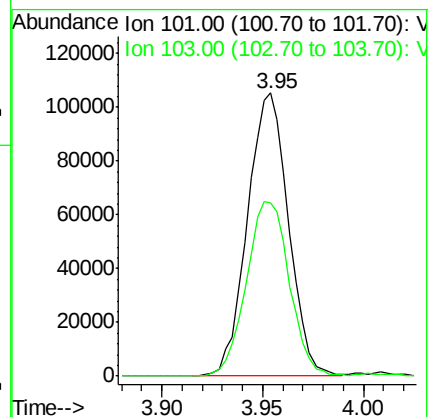
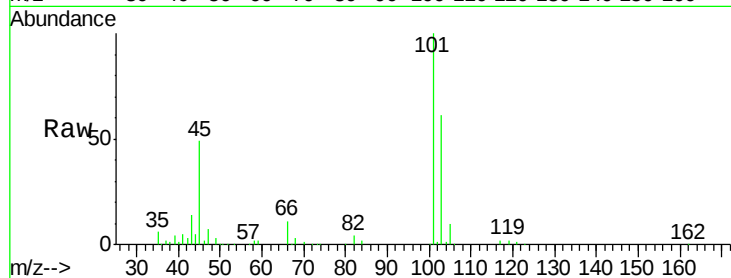
103 61.1 52.6 78.8

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#13

Ethanol

Concen: 41.151 ppbv

RT: 3.61 min Scan# 255

Delta R.T. 0.01 min

Lab File: VL035466.D

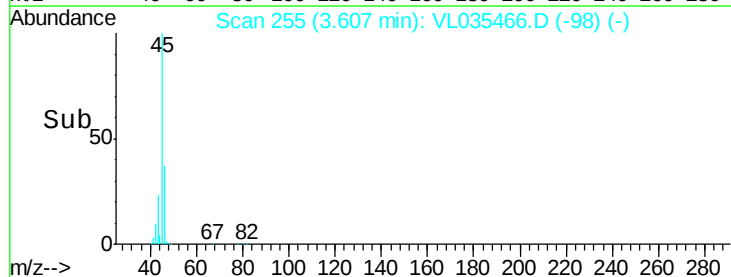
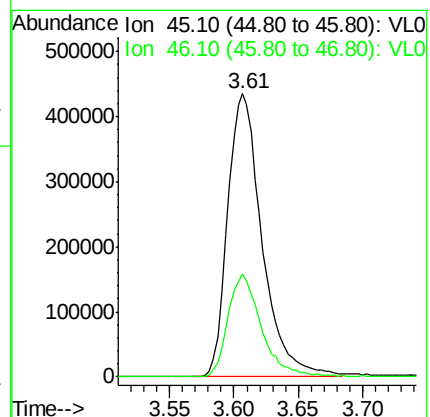
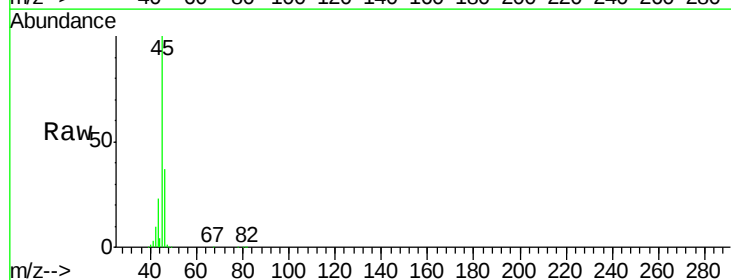
Acq: 19 Aug 2020 12:27

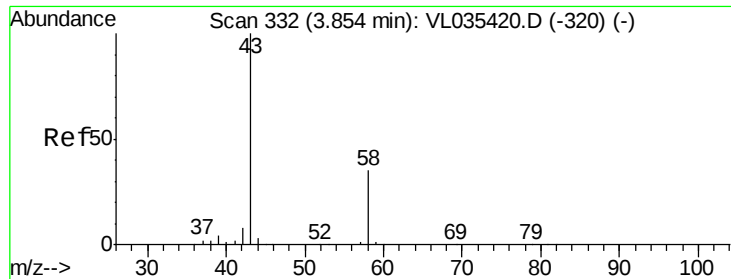
Tgt Ion: 45 Resp: 805400

Ion Ratio Lower Upper

45 100

46 35.7 14.2 56.6





#15

Acetone

Concen: 11.077 ppbv

RT: 3.85 min Scan# 331

Delta R.T. 0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion: 43 Resp: 1351397

Ion Ratio Lower Upper

43 100

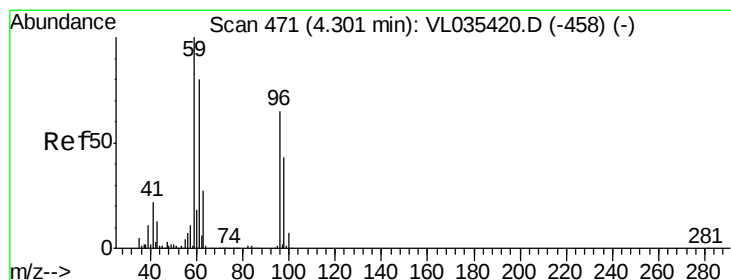
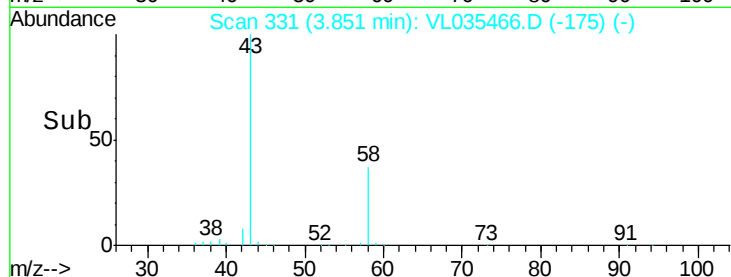
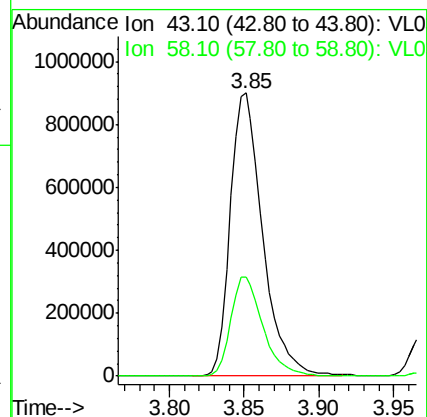
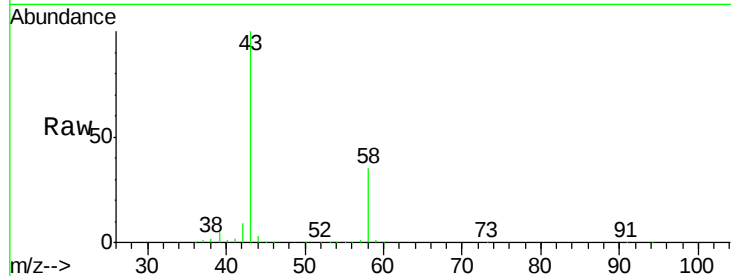
58 35.2 21.0 31.6#

Manual Integrations

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#17

tert-Butyl alcohol

Concen: 0.140 ppbv m

RT: 4.31 min Scan# 475

Delta R.T. 0.02 min

Lab File: VL035466.D

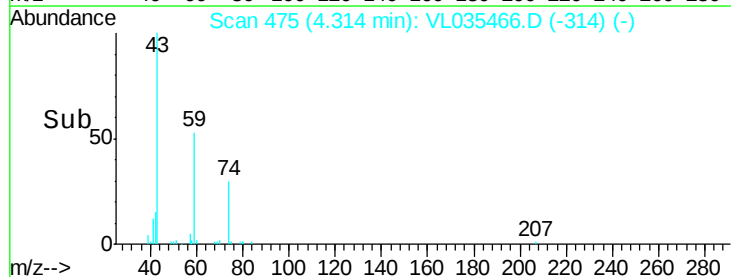
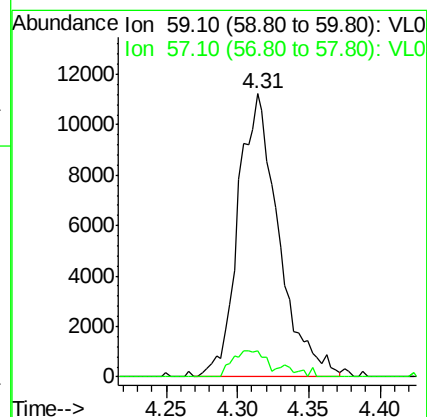
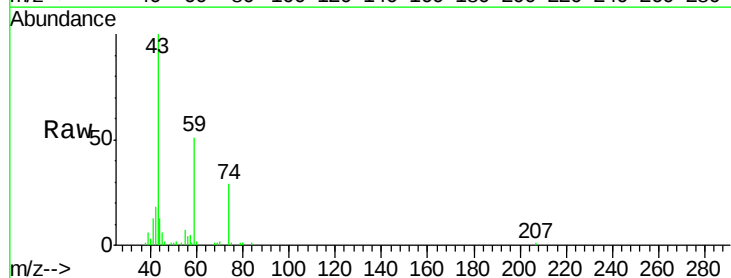
Acq: 19 Aug 2020 12:27

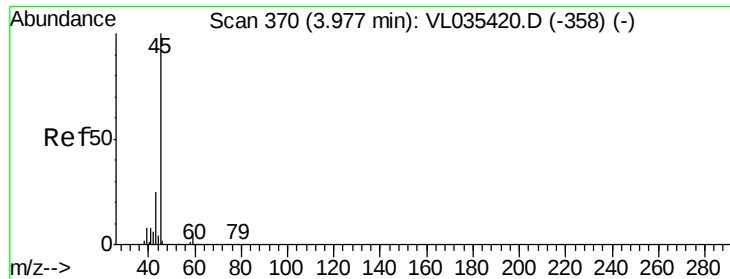
Tgt Ion: 59 Resp: 22117

Ion Ratio Lower Upper

59 100

57 9.6 8.9 13.3





#19

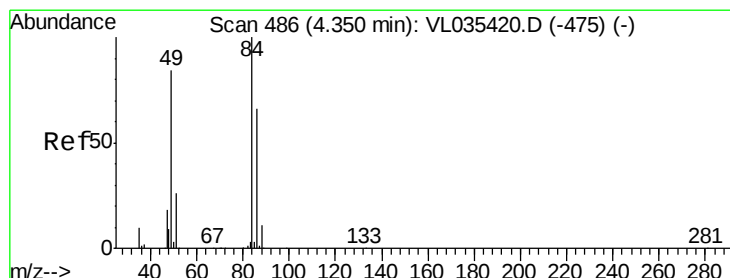
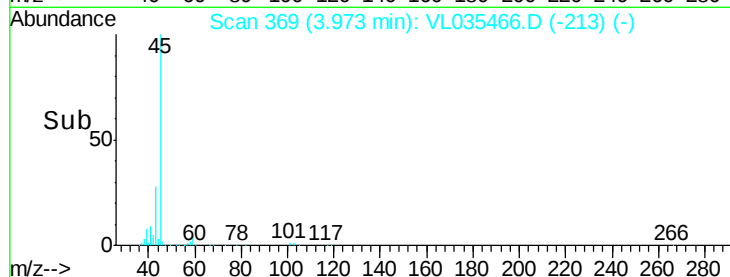
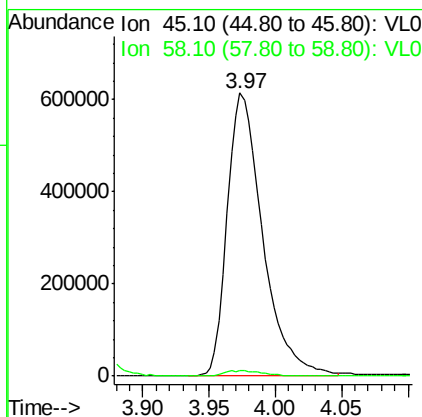
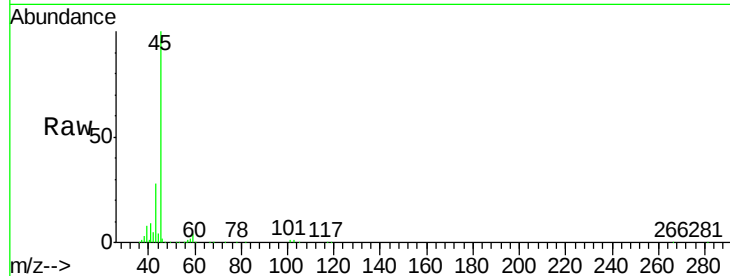
Isopropyl Alcohol
 Concen: 13.541 ppbv
 RT: 3.97 min Scan# 369
 Delta R.T. 0.00 min
 Lab File: VL035466.D
 Acq: 19 Aug 2020 12:27

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3

Tot Ion: 45 Resp: 1138693
 Ion Ratio Lower Upper
 45 100
 58 2.6 1.0 1.6#

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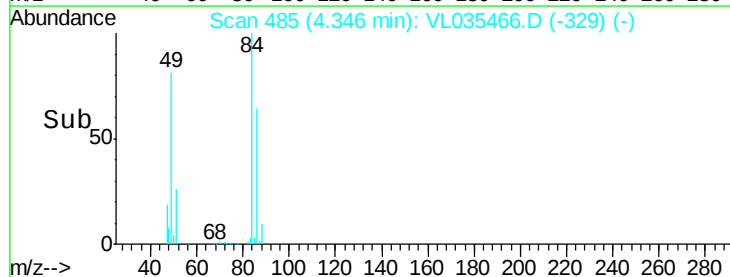
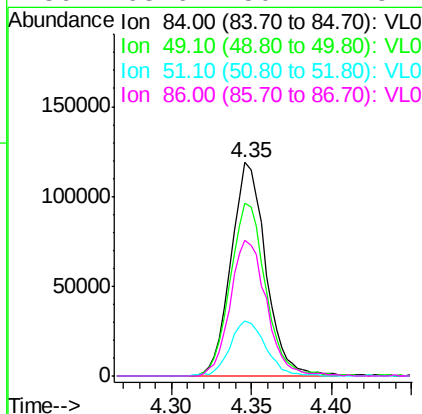
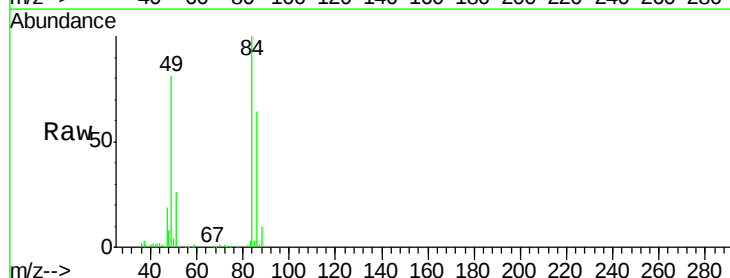
MMDadoda
 8/20/2020 11:07:56 AM

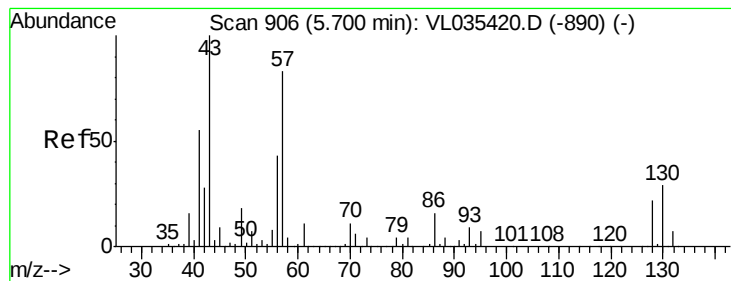


#20

Methylene Chloride
 Concen: 1.779 ppbv
 RT: 4.35 min Scan# 485
 Delta R.T. 0.00 min
 Lab File: VL035466.D
 Acq: 19 Aug 2020 12:27

Tgt Ion: 84 Resp: 175130
 Ion Ratio Lower Upper
 84 100
 49 81.0 118.6 177.8#
 51 25.7 36.4 54.6#
 86 63.6 50.2 75.4





#26

Hexane

Concen: 1.212 ppbv

RT: 5.69 min Scan# 904

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampleId :

IA-3

Tot Ion: 57 Resp: 162332

Ion Ratio Lower Upper

57 100

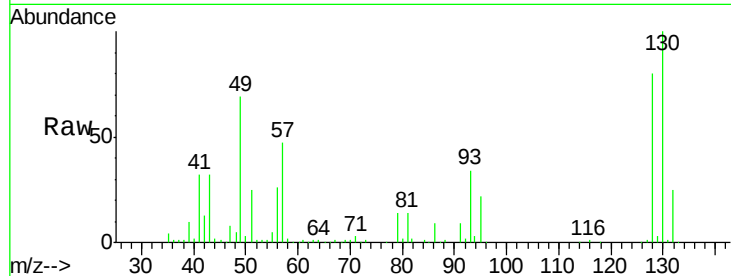
41 69.5 75.5 113.3#

43 71.2 181.7 272.5#

56 52.6 42.4 63.6

Manual Integrations
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8/20/2020 11:07:56 AM

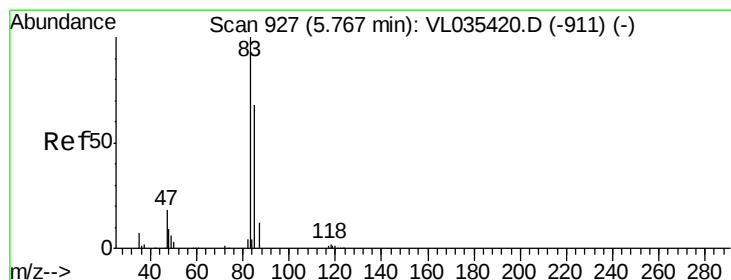
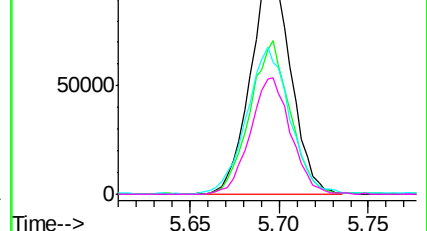
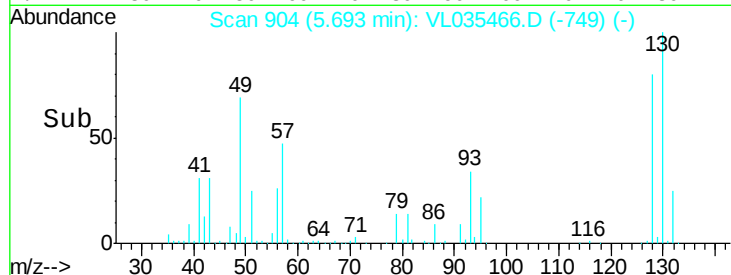


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#29

Chloroform

Concen: 0.134 ppbv

RT: 5.76 min Scan# 924

Delta R.T. -0.00 min

Lab File: VL035466.D

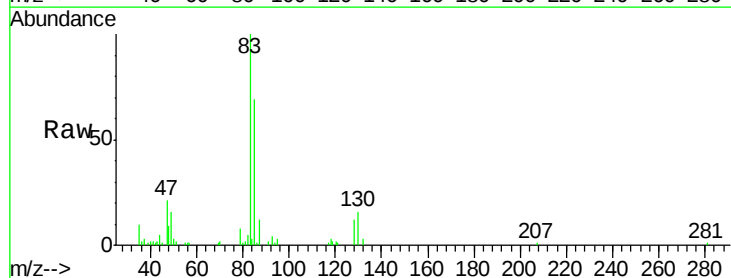
Acq: 19 Aug 2020 12:27

Tgt Ion: 83 Resp: 35983

Ion Ratio Lower Upper

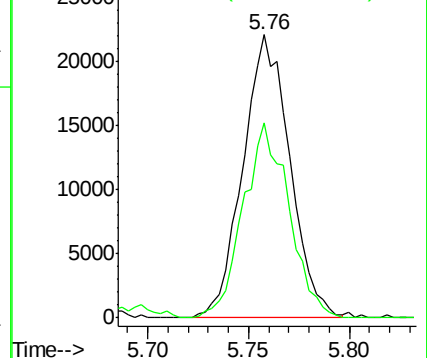
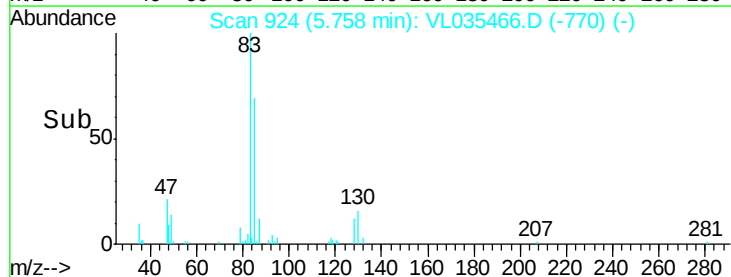
83 100

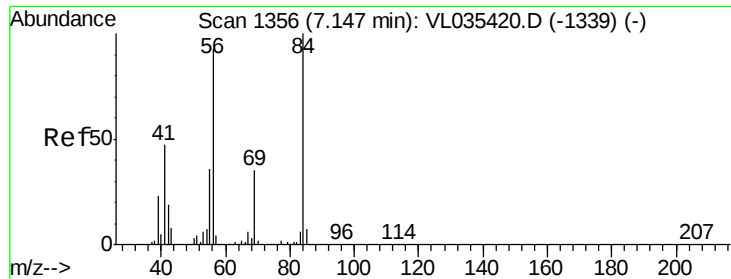
85 69.0 52.7 79.1



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





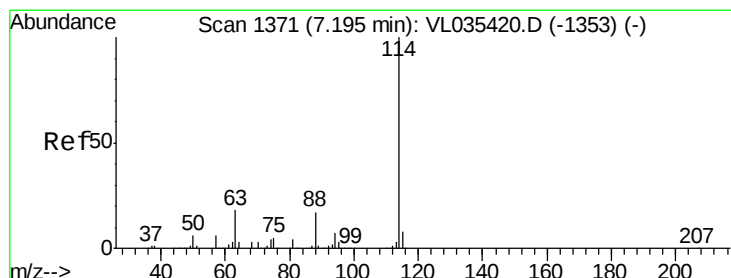
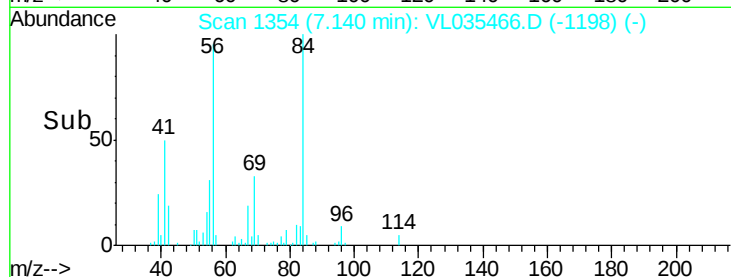
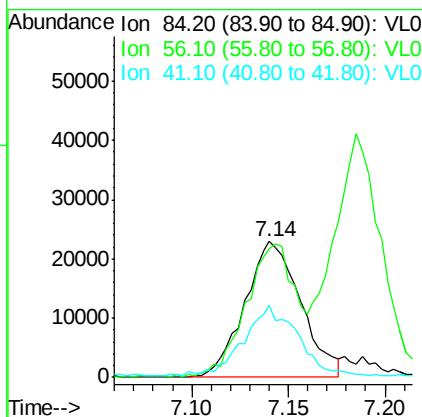
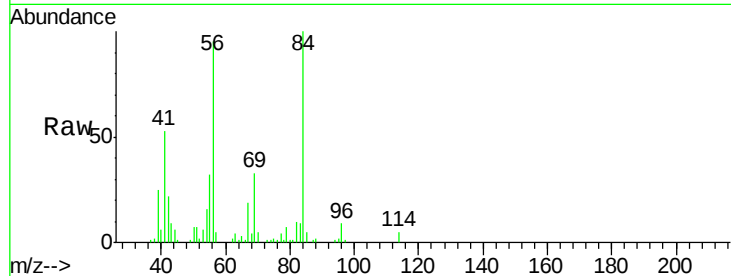
#30
Cvclohexane
Concen: 0.310 ppbv
RT: 7.14 min Scan# 1354
Delta R.T. 0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion	Ratio	Lower	Upper
84	100		
56	85.3	114.9	172.3#
41	50.6	72.3	108.5#

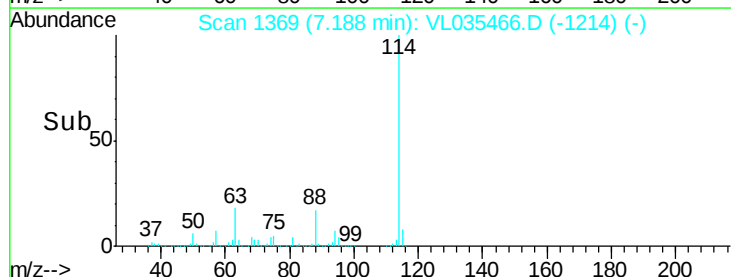
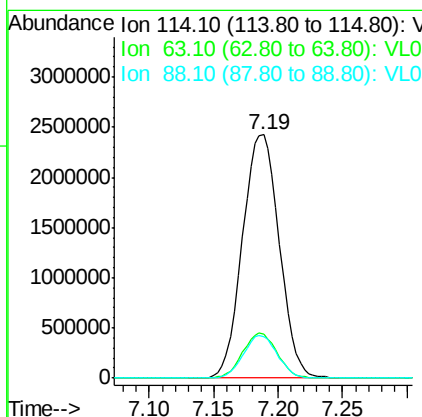
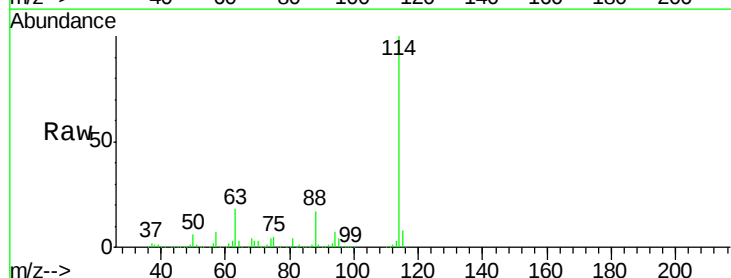
Manual Integrations
APPROVED

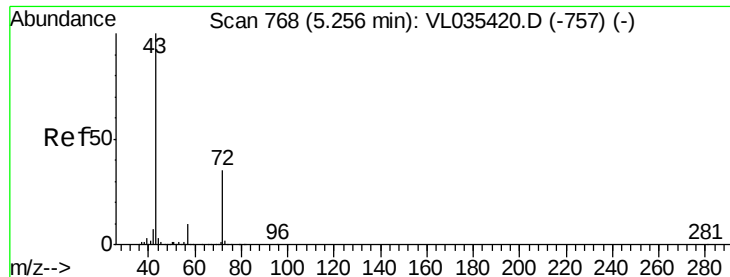
MMDadoda
8/20/2020 11:07:56 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1369
Delta R.T. -0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Tgt Ion	Ratio	Lower	Upper
114	100		
63	17.5	23.1	34.7#
88	16.4	15.9	23.9





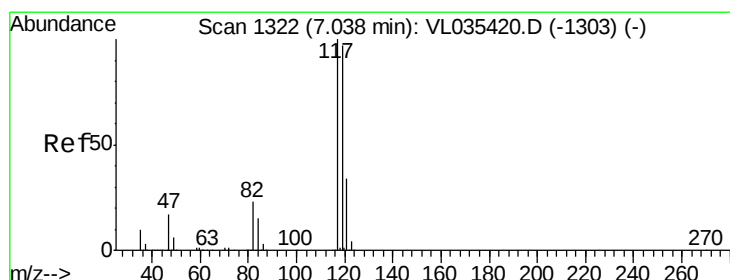
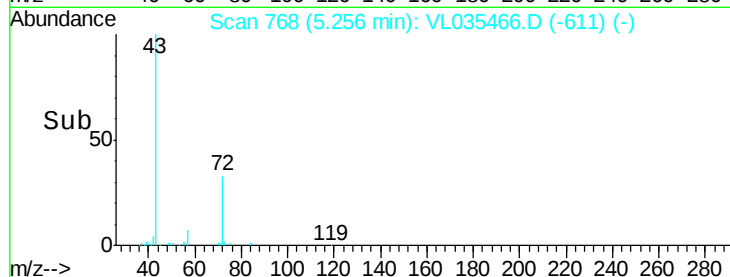
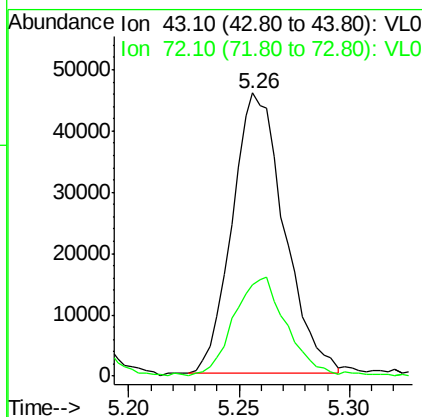
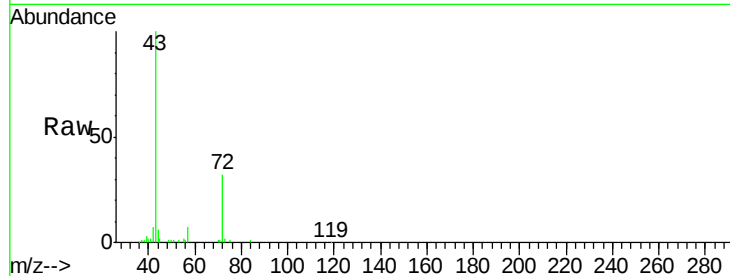
#34
2-Butanone
Concen: 0.466 ppbv
RT: 5.26 min Scan# 768
Delta R.T. 0.01 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion	43	Resp	74940
Ion Ratio	100	Lower	Upper
72	36.4	17.6	26.4#

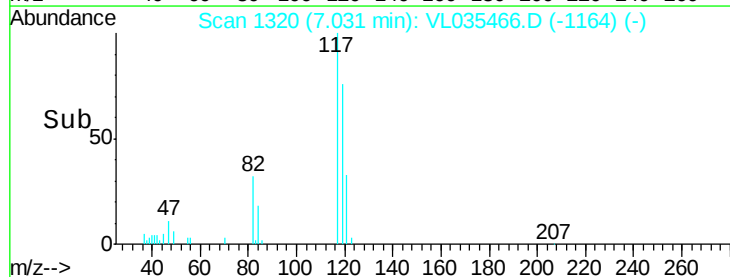
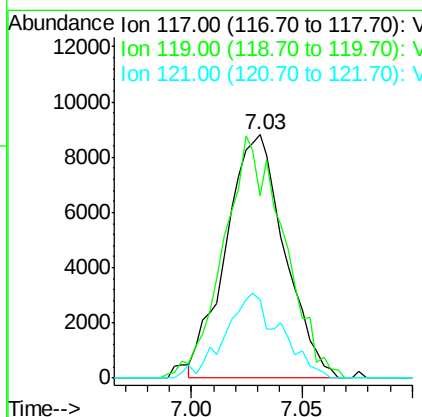
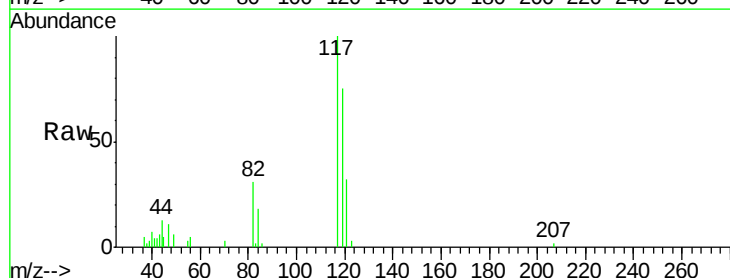
Manual Integrations
APPROVED

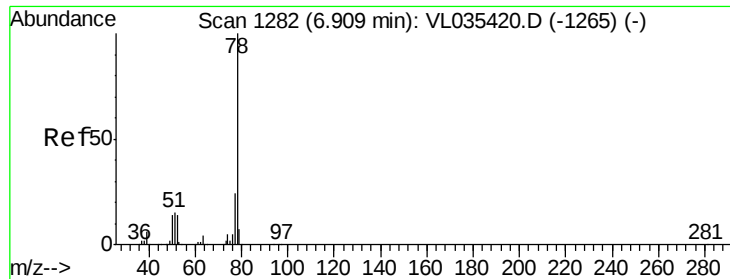
MMDadoda
8/20/2020 11:07:56 AM



#35
Carbon Tetrachloride
Concen: 0.064 ppbv
RT: 7.03 min Scan# 1320
Delta R.T. 0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Tgt Ion	117	Resp	16285
Ion Ratio	100	Lower	Upper
119	71.6	76.1	114.1#
121	32.2	25.5	38.3





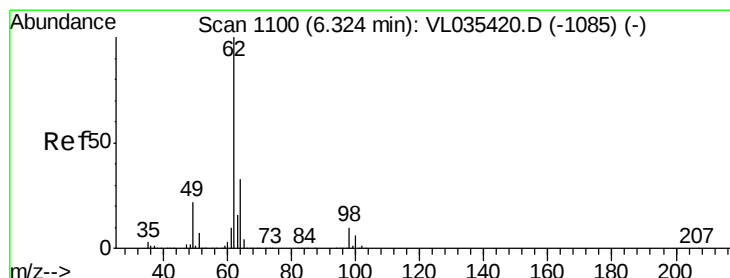
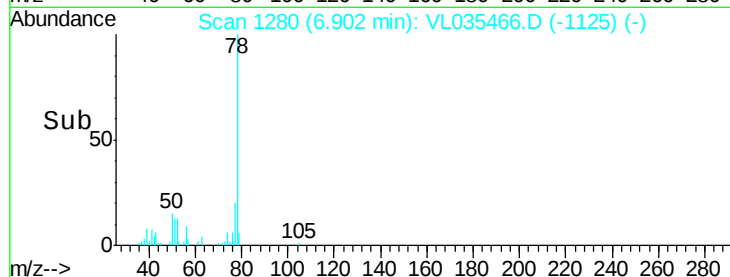
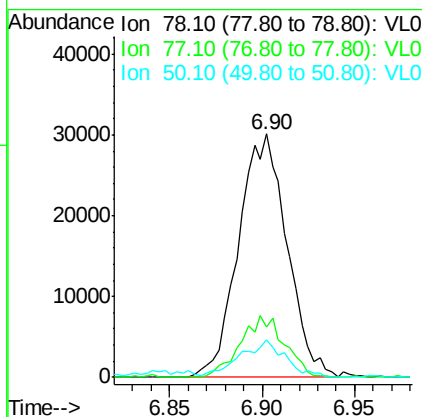
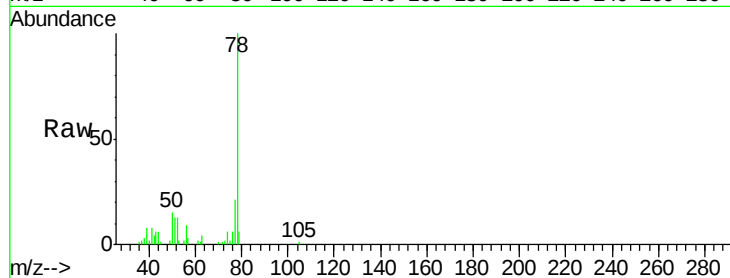
#36
Benzene
Concen: 0.155 ppbv
RT: 6.90 min Scan# 1280
Delta R.T. -0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Instrument :
MSVOA_L
ClientSampleId :
IA-3

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.6	19.6	29.4
50	15.2	16.3	24.5#

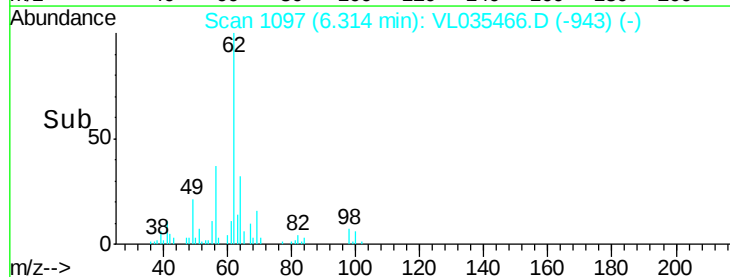
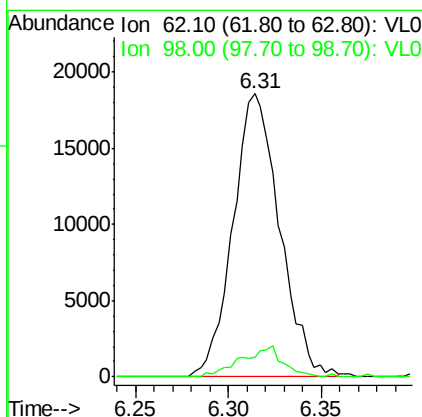
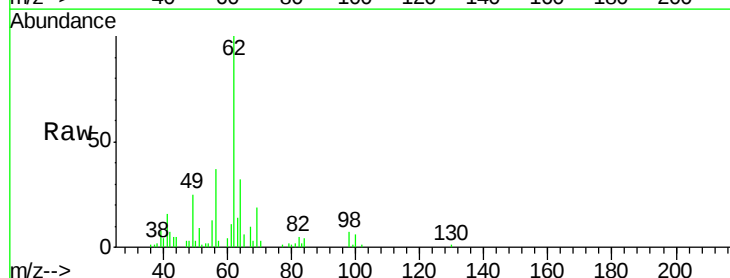
Manual Integrations
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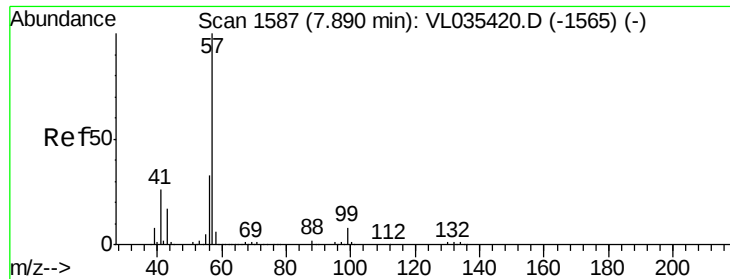
MMDadoda
8/20/2020 11:07:56 AM



#37
1,2-Dichloroethane
Concen: 0.200 ppbv
RT: 6.31 min Scan# 1097
Delta R.T. -0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.9	4.6	7.0#





#44

2,2,4-Trimethylpentane

Concen: 0.266 ppbv

RT: 7.88 min Scan# 1585

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

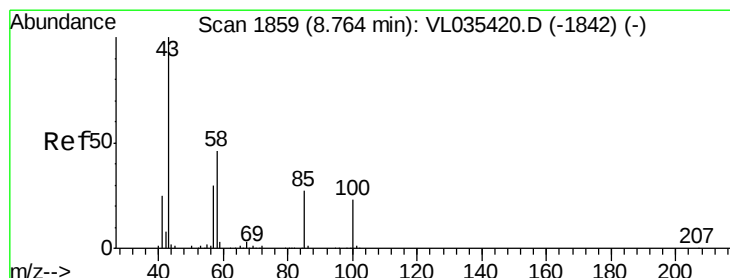
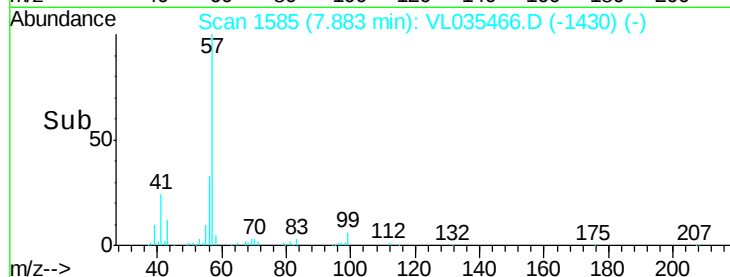
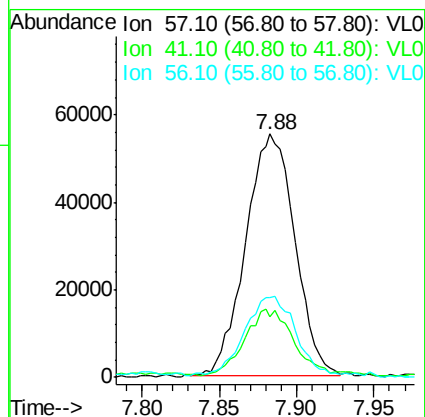
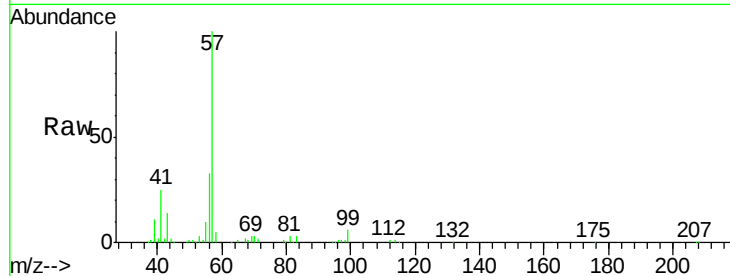
ClientSampleId :

IA-3

Tot Ion:	57	Resp:	122821
Ion	Ratio	Lower	Upper
57	100		
41	30.5	27.2	40.8
56	36.8	25.4	38.0

Manual Integrations
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#50

4-Methyl-2-Pentanone

Concen: 0.770 ppbv

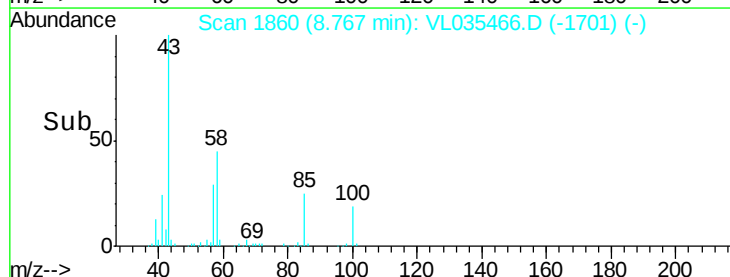
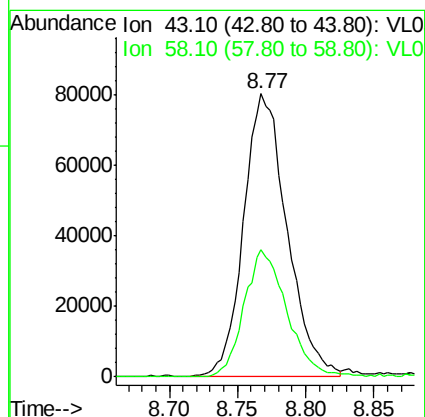
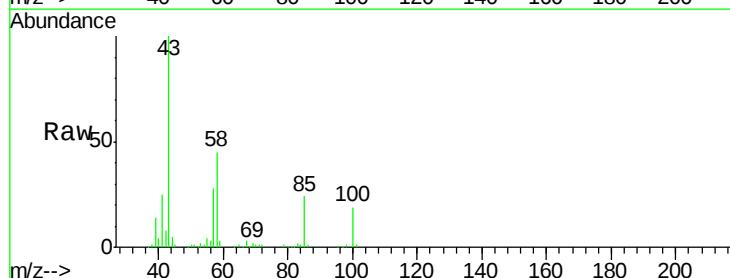
RT: 8.77 min Scan# 1860

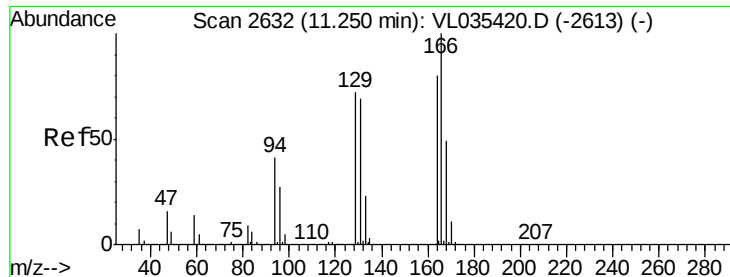
Delta R.T. 0.01 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Tgt Ion:	43	Resp:	177834
Ion	Ratio	Lower	Upper
43	100		
58	44.0	28.7	43.1#





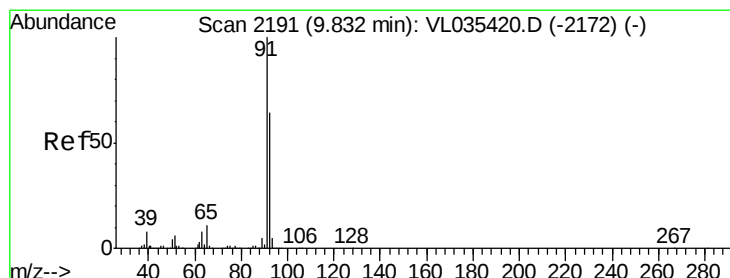
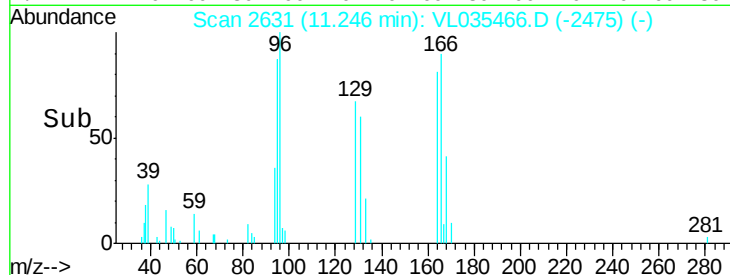
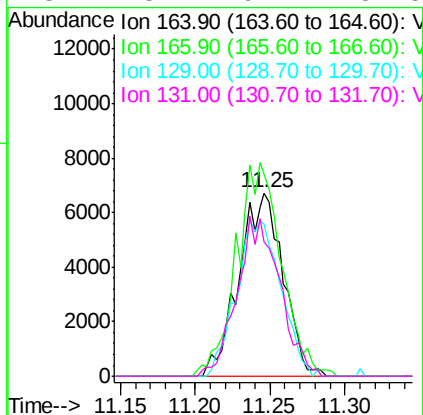
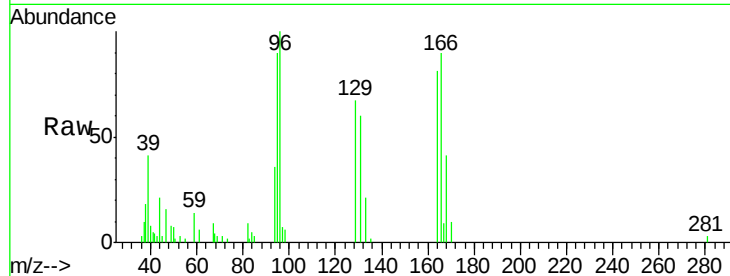
#52
Tetrachloroethene
Concen: 0.064 ppbv m
RT: 11.25 min Scan# 2631
Delta R.T. 0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Instrument :
MSVOA_L
ClientSampleId :
IA-3

Tot Ion	Ratio	Lower	Upper
164	100		
166	110.4	103.4	155.0
129	83.1	90.2	135.4#
131	73.4	91.7	137.5#

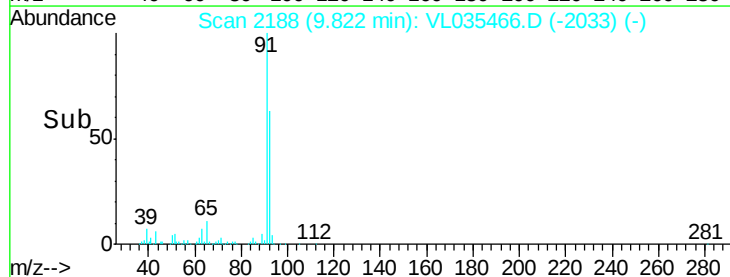
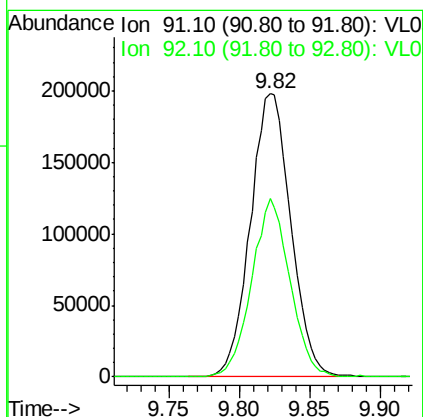
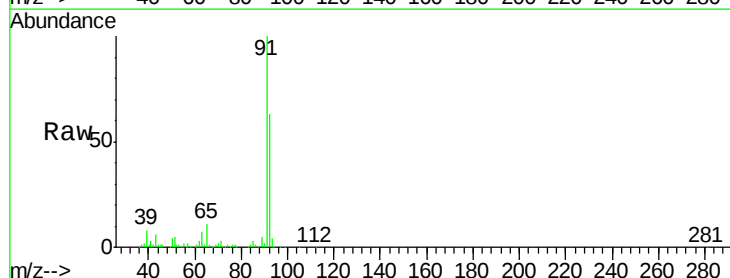
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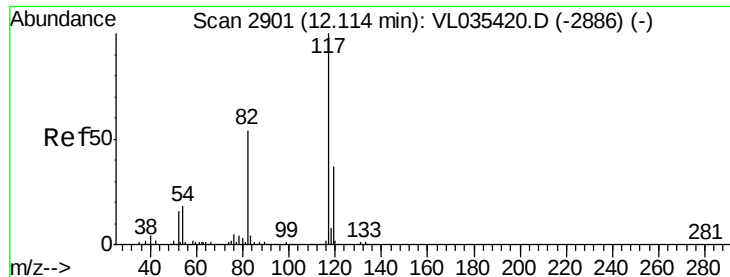
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#53
Toluene
Concen: 0.871 ppbv
RT: 9.82 min Scan# 2188
Delta R.T. -0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.6	49.1	73.7





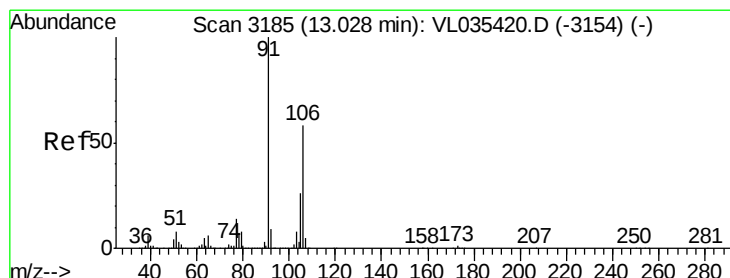
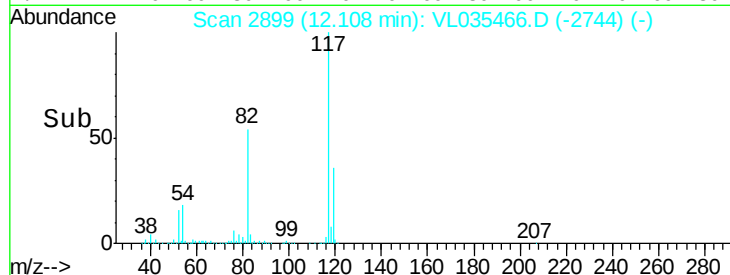
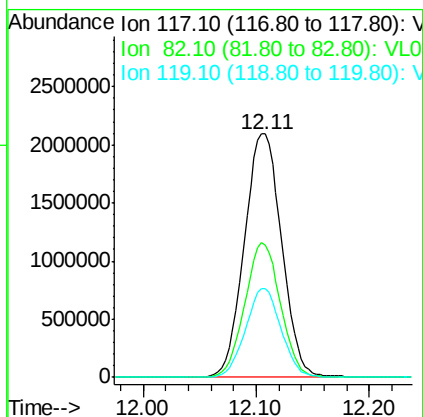
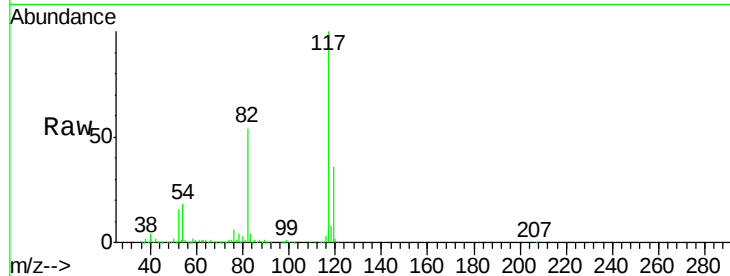
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. -0.00 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Instrument :
MSVOA_L
ClientSampled :
IA-3

Tot Ion:117 Resp: 4797826
Ion Ratio Lower Upper
117 100
82 53.3 57.4 86.0#
119 34.9 28.4 42.6

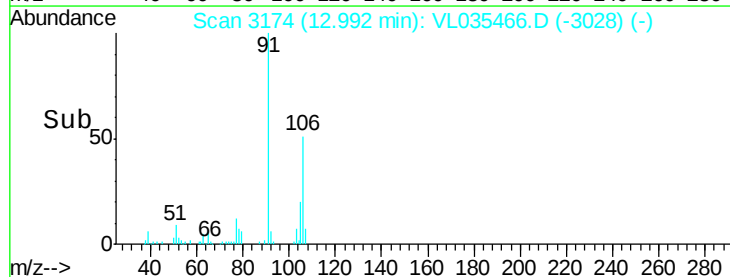
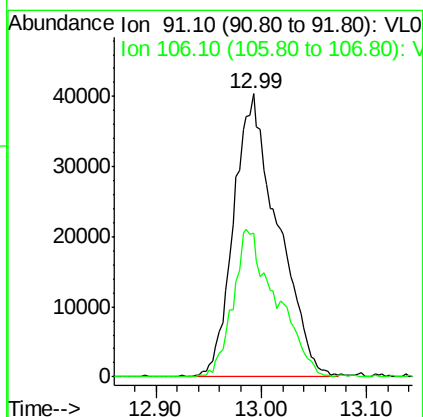
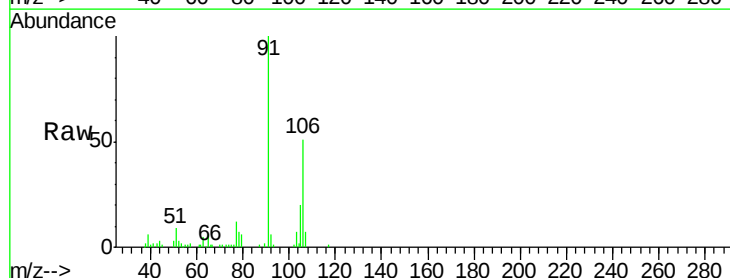
Manual Integrations
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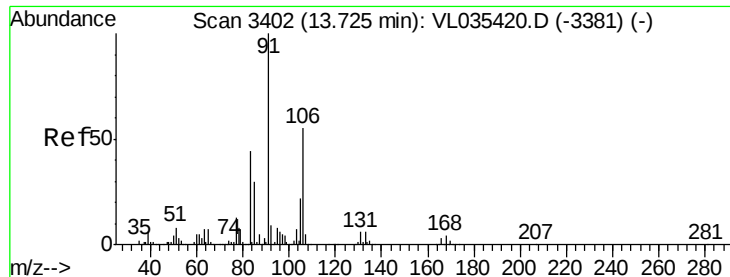
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#59
m/p-Xylene
Concen: 0.240 ppbv
RT: 12.99 min Scan# 3174
Delta R.T. -0.03 min
Lab File: VL035466.D
Acq: 19 Aug 2020 12:27

Tgt Ion: 91 Resp: 117609
Ion Ratio Lower Upper
91 100
106 50.9 34.0 51.0





#60

o-Xylene

Concen: 0.098 ppbv

RT: 13.71 min Scan# 3398

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion: 91 Resp: 46808

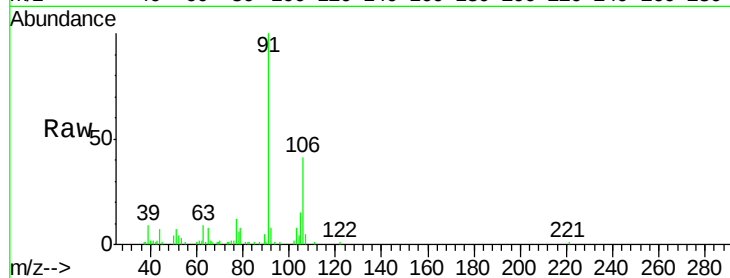
Ion Ratio Lower Upper

91 100

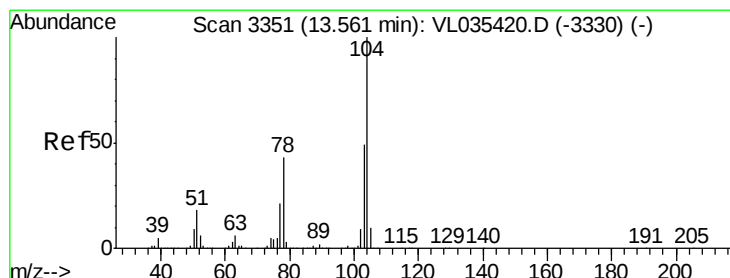
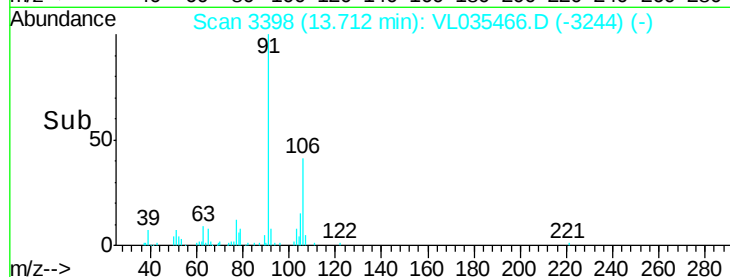
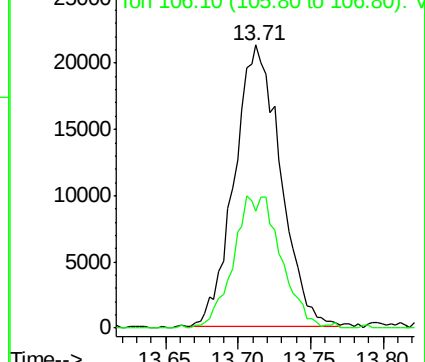
106 48.6 21.8 65.3

Manual Integrations
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Abundance Ion 91.10 (90.80 to 91.80): VL035420.D (-3381) (-)



#61

Styrene

Concen: 0.136 ppbv m

RT: 13.55 min Scan# 3347

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

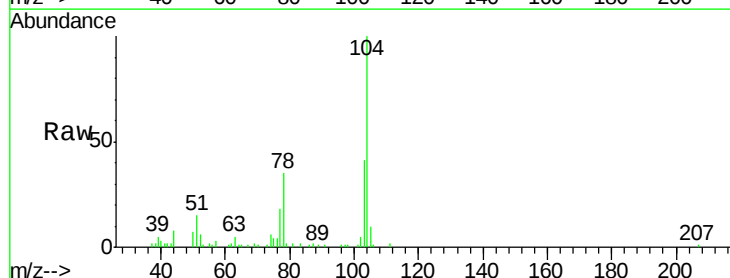
Tgt Ion: 104 Resp: 52114

Ion Ratio Lower Upper

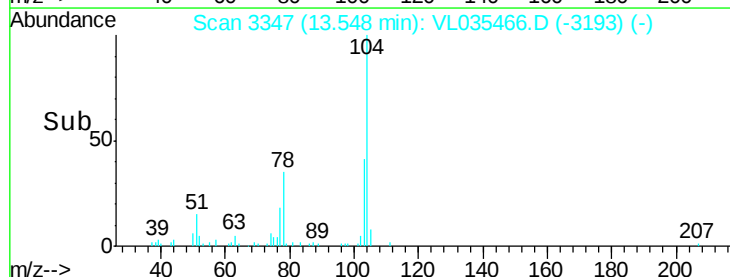
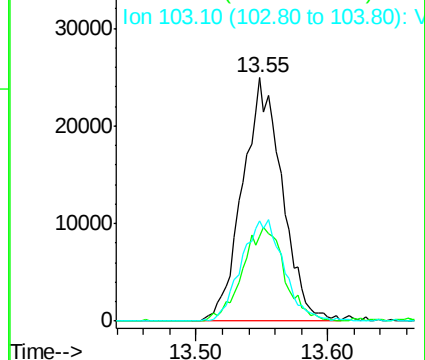
104 100

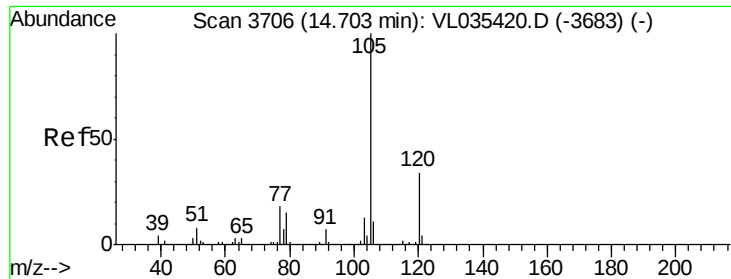
78 40.7 45.4 68.2#

103 44.8 37.8 56.8



Abundance Ion 104.10 (103.80 to 104.80): VL035420.D (-3330) (-)





#62

Isopropylbenzene

Concen: 0.121 ppbv

RT: 14.70 min Scan# 3704

Delta R.T. 0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

Instrument :

MSVOA_L

ClientSampled :

IA-3

Tot Ion:105 Resp: 94550

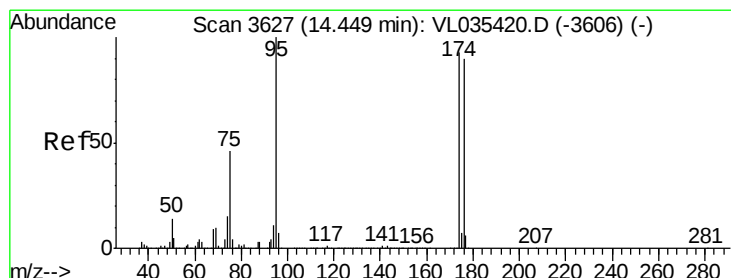
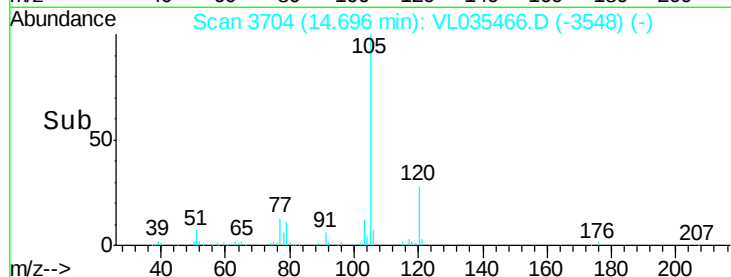
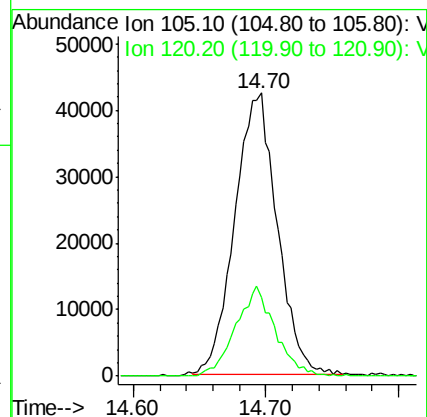
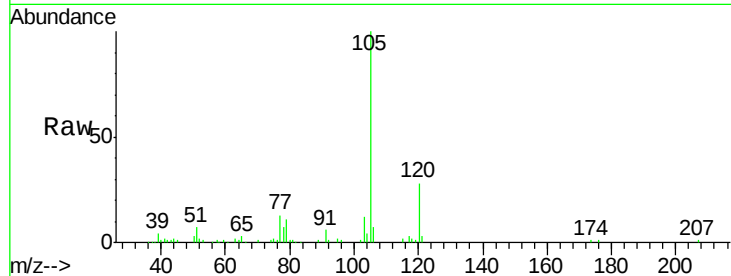
Ion Ratio Lower Upper

105 100

120 29.5 20.3 30.5

Manual Integrations
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#68

1-Bromo-4-Fluorobenzene

Concen: 10.309 ppbv

RT: 14.44 min Scan# 3624

Delta R.T. -0.00 min

Lab File: VL035466.D

Acq: 19 Aug 2020 12:27

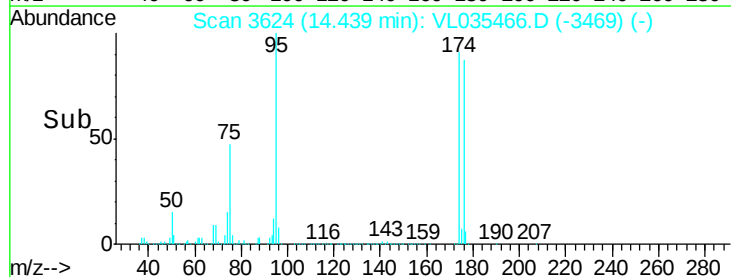
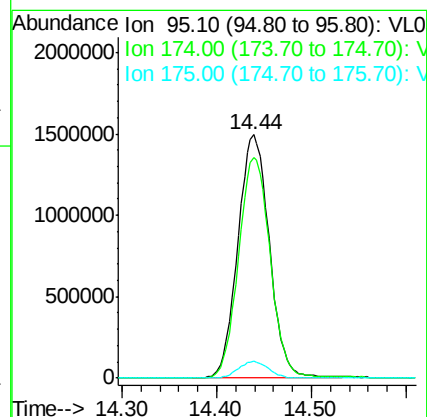
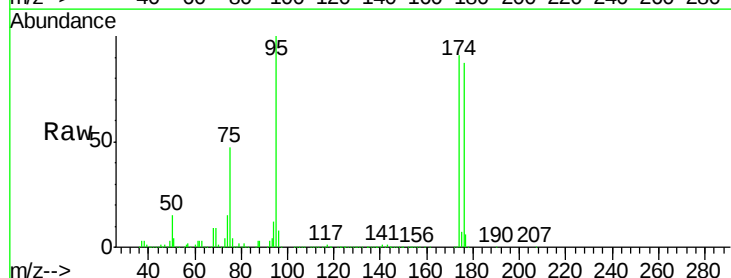
Tgt Ion: 95 Resp: 3462567

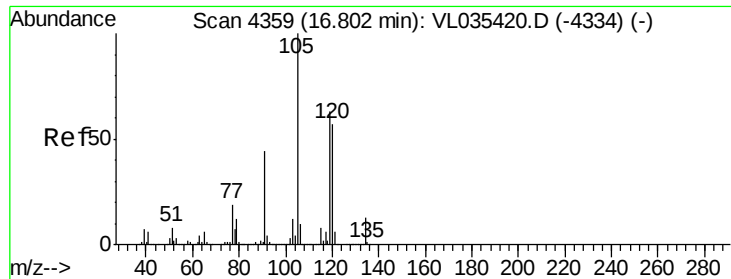
Ion Ratio Lower Upper

95 100

174 91.9 44.0 66.0#

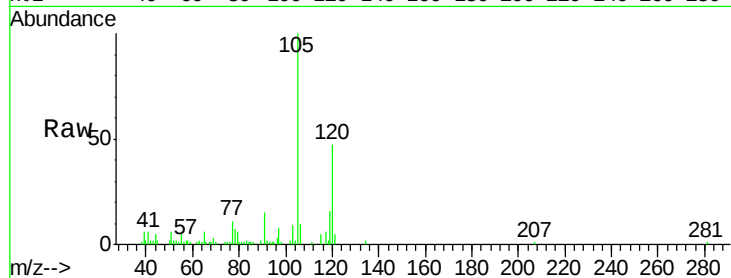
175 6.7 3.2 4.8#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.114 ppbv
 RT: 16.79 min Scan# 4354
 Delta R.T. -0.01 min
 Lab File: VL035466.D
 Acq: 19 Aug 2020 12:27

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-3



Tot Ion:	105	Resp:	71885
Ion Ratio		Lower	Upper
105	100		
120	46.4	37.8	56.8
91	13.3	40.0	60.0#
77	10.6	18.8	28.2#

Manual Integrations
 APPROVED

MMDadoda
 8/20/2020 11:07:56 AM

