

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL092320\
 Data File : VL035714.D
 Acq On : 23 Sep 2020 11:44
 Operator : SY/AP
 Sample : L4079-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 B-1

Manual Integrations
 APPROVED

MMDadoda
 9/24/2020 1:35:32 PM

Quant Time: Sep 24 11:28:08 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Sep 23 2020
 QLast Update : Wed Sep 23 07:38:05 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	1097357	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	4176812	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	4257421	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	3248582	10.18	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	50550	0.281	ppbv	99
3) Chlorodifluoromethane	2.99	51	48657m	0.412	ppbv	
4) Chloromethane	3.14	50	37819	0.596	ppbv	99
10) Heptane	8.14	43	36078	0.302	ppbv #	19
11) Trichlorofluoromethane	3.95	101	63725	0.248	ppbv	91
13) Ethanol	3.61	45	145184	13.735	ppbv	99
15) Acetone	3.85	43	1088601	9.219	ppbv #	60
19) Isopropyl Alcohol	3.97	45	161853	2.520	ppbv #	89
20) Methylene Chloride	4.35	84	313389	3.613	ppbv	95
26) Hexane	5.70	57	349843	3.005	ppbv #	51
27) Carbon Disulfide	4.56	76	20172	0.116	ppbv #	76
30) Cyclohexane	7.15	84	63417m	0.552	ppbv	
34) 2-Butanone	5.25	43	80838m	0.585	ppbv	
35) Carbon Tetrachloride	7.03	117	16829	0.077	ppbv #	91
36) Benzene	6.91	78	78074	0.287	ppbv #	92
44) 2,2,4-Trimethylpentane	7.88	57	3709939	9.499	ppbv	97
52) Tetrachloroethene	11.25	164	21593	0.165	ppbv #	85
53) Toluene	9.83	91	399605	1.245	ppbv	96
58) Ethyl Benzene	12.73	91	53304m	0.125	ppbv	
59) m/p-Xylene	12.99	91	171587m	0.460	ppbv	
60) o-Xylene	13.71	91	61734	0.164	ppbv	95
74) 1,2,4-Trimethylbenzene	16.80	105	179684	0.377	ppbv #	69
79) Naphthalene	22.24	128	800971	1.763	ppbv	98
80) Naphthalene,2-methyl-	25.00	142	19598	0.183	ppbv #	86

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

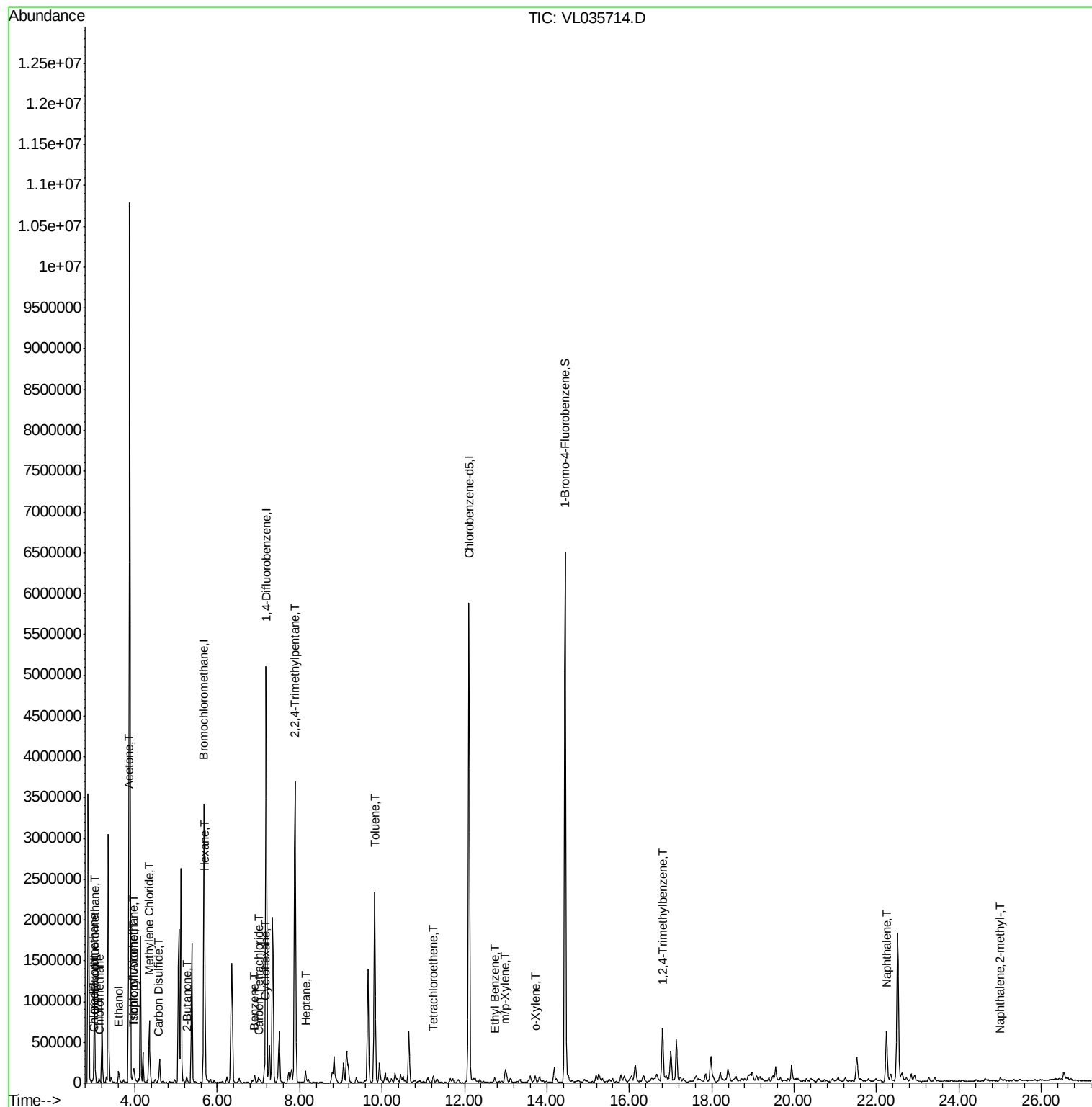
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL092320\
Data File : VL035714.D
Acq On : 23 Sep 2020 11:44
Operator : SY/AP
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Quant Time: Sep 24 11:28:08 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL092320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Sep
QLast Update : Wed Sep 23 07:38:05 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 898

Delta R.T. -0.01 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

ClientSampled :

B-1

Tot Ion: 49 Resp: 1097357

Ion Ratio Lower Upper

49 100

128 82.9 43.1 129.4

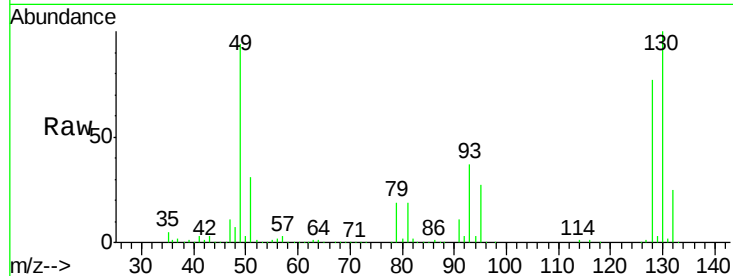
130 106.0 54.9 164.7

Manual Integrations

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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0

5.67

800000

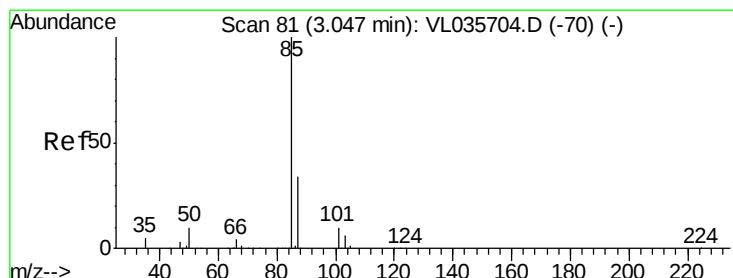
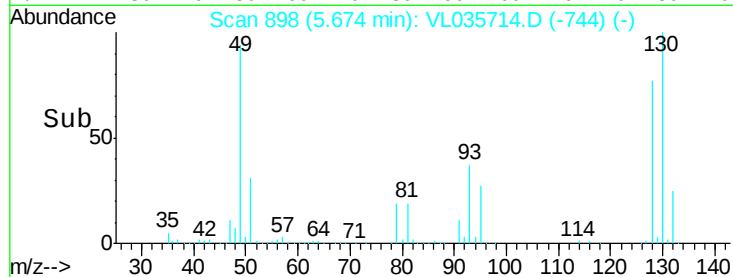
600000

400000

200000

0

Time-->



#2

Dichlorodifluoromethane

Concen: 0.281 ppbv

RT: 3.04 min Scan# 80

Delta R.T. -0.00 min

Lab File: VL035714.D

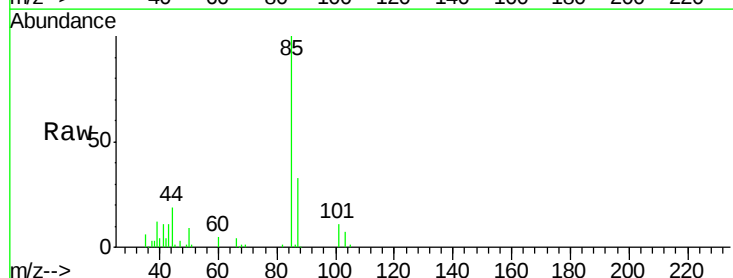
Acq: 23 Sep 2020 11:44

Tgt Ion: 85 Resp: 50550

Ion Ratio Lower Upper

85 100

87 33.5 27.3 40.9



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0

50000

40000

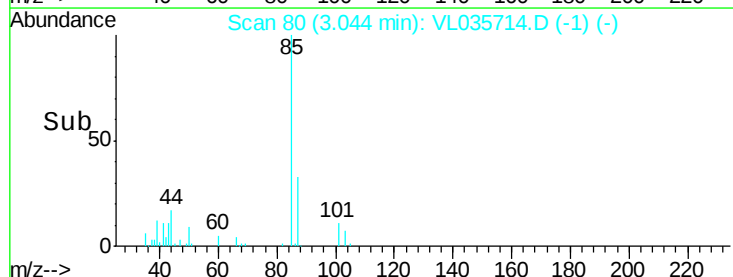
30000

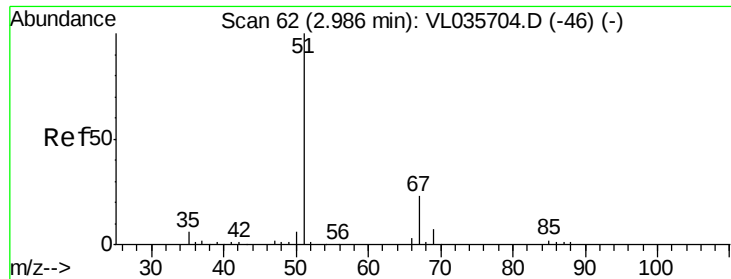
20000

10000

0

Time-->





#3

Chlorodifluoromethane

Concen: 0.412 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

ClientSampled :

B-1

Tot Ion: 51 Resp: 48657

Ion Ratio Lower Upper

51 100

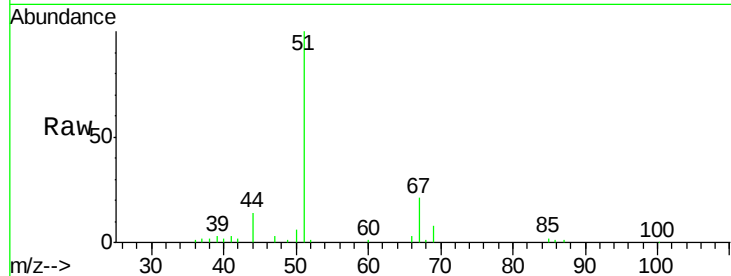
67 20.9 17.8 26.8

Manual Integrations

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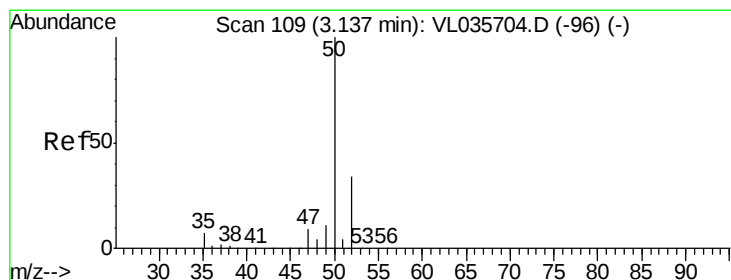
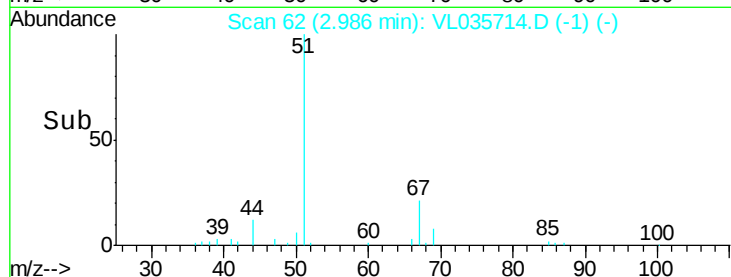
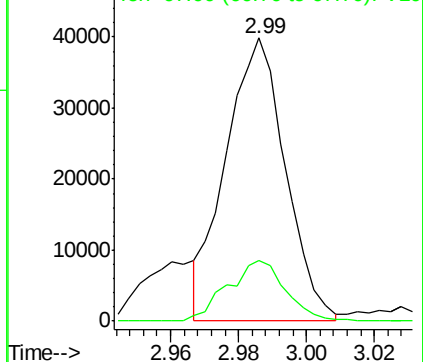
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.596 ppbv

RT: 3.14 min Scan# 109

Delta R.T. 0.00 min

Lab File: VL035714.D

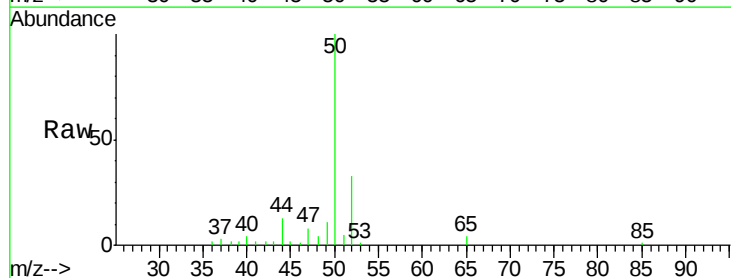
Acq: 23 Sep 2020 11:44

Tgt Ion: 50 Resp: 37819

Ion Ratio Lower Upper

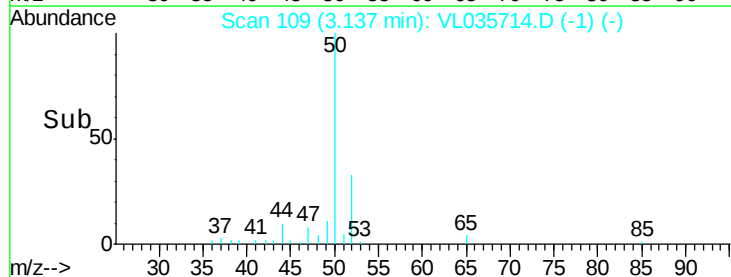
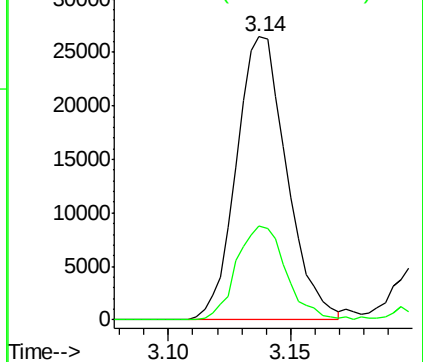
50 100

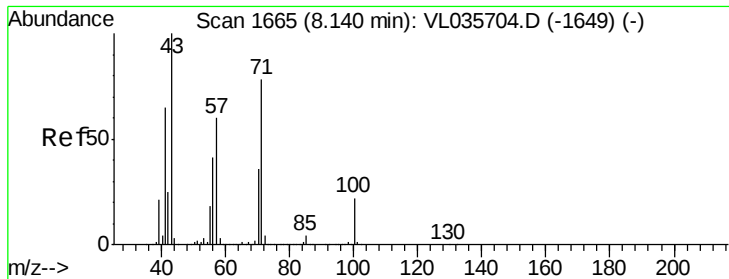
52 33.2 26.8 40.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





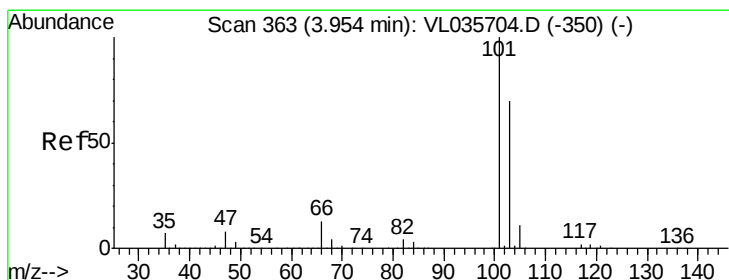
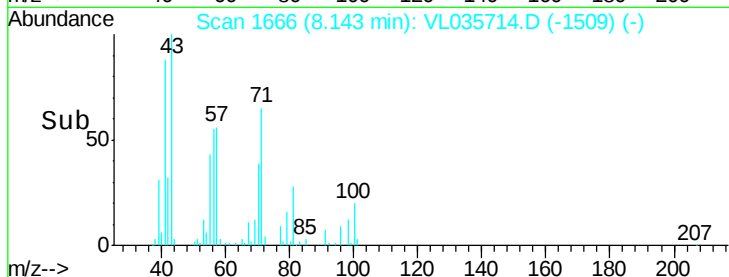
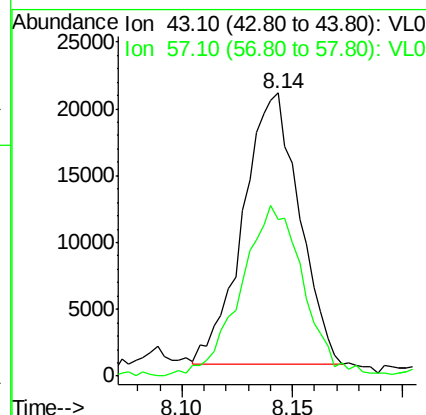
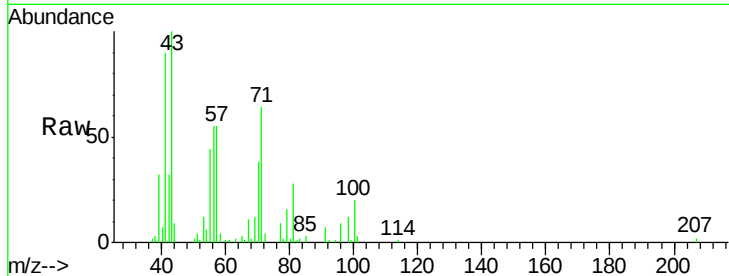
#10
Heptane
Concen: 0.302 ppbv
RT: 8.14 min Scan# 1666
Delta R.T. 0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion: 43 Resp: 36078
Ion Ratio Lower Upper
43 100
57 0.0 50.4 75.6#

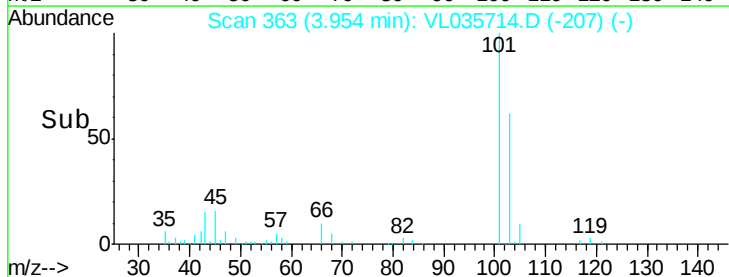
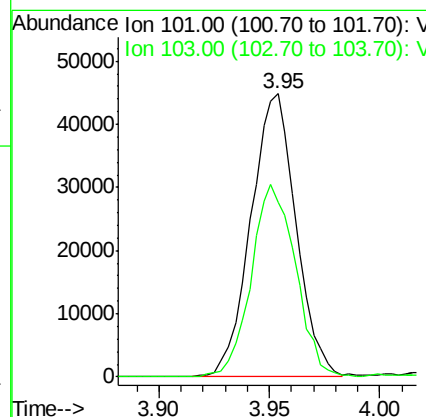
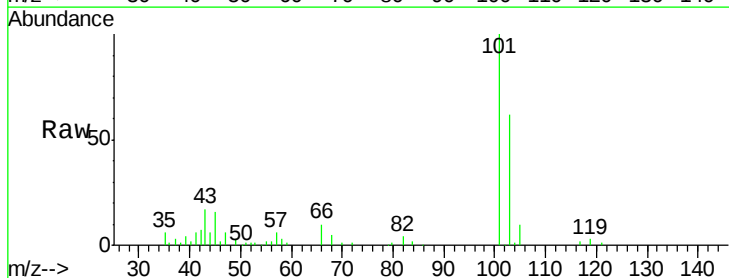
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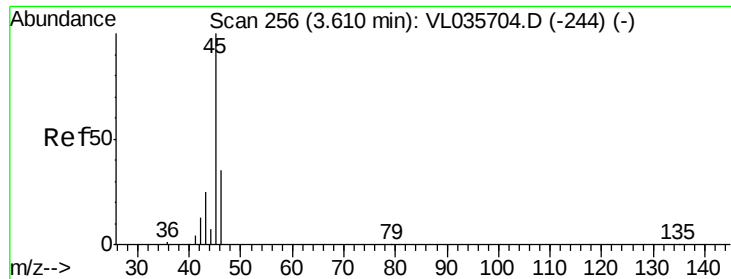
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#11
Trichlorofluoromethane
Concen: 0.248 ppbv
RT: 3.95 min Scan# 363
Delta R.T. 0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion: 101 Resp: 63725
Ion Ratio Lower Upper
101 100
103 61.9 55.6 83.4





#13

Ethanol

Concen: 13.735 ppbv

RT: 3.61 min Scan# 255

Delta R.T. -0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

ClientSampleId :

B-1

Tot Ion: 45 Resp: 145184

Ion Ratio Lower Upper

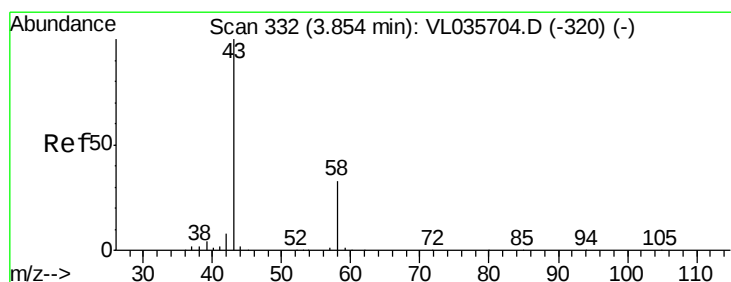
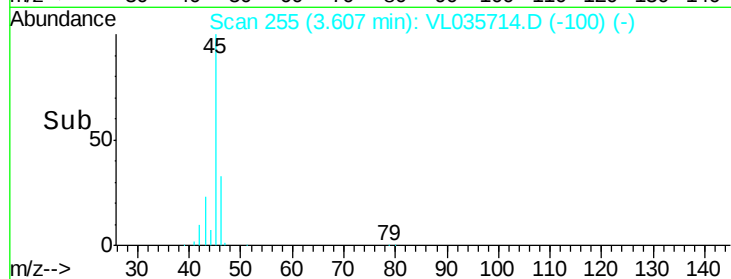
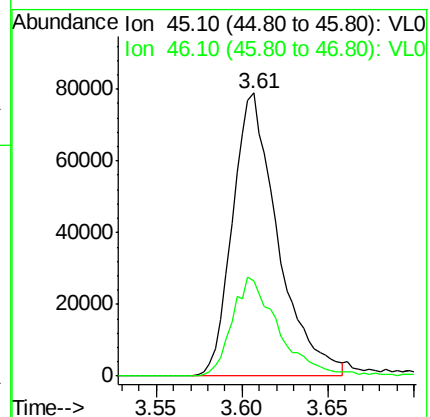
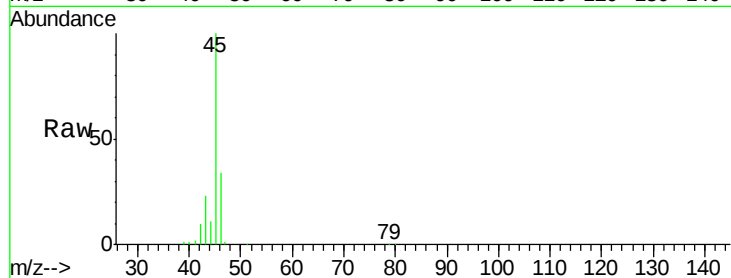
45 100

46 36.4 14.7 58.7

Manual Integrations
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#15

Acetone

Concen: 9.219 ppbv

RT: 3.85 min Scan# 330

Delta R.T. -0.01 min

Lab File: VL035714.D

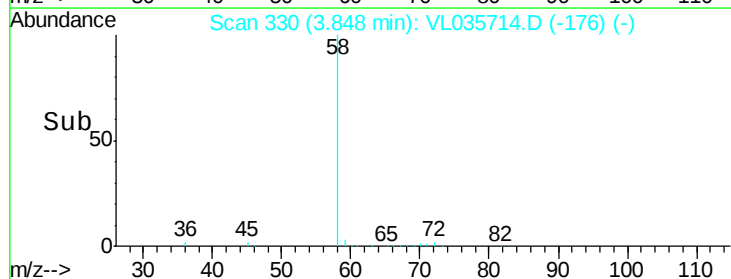
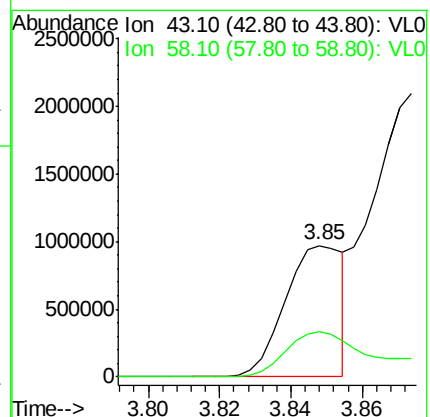
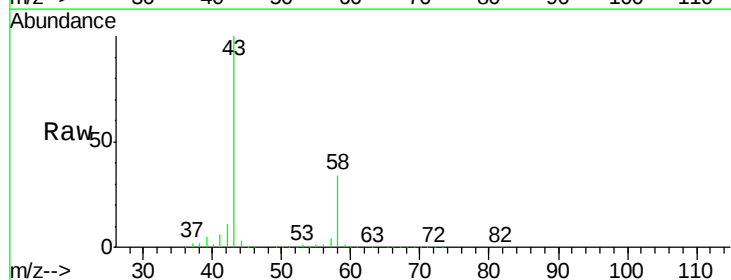
Acq: 23 Sep 2020 11:44

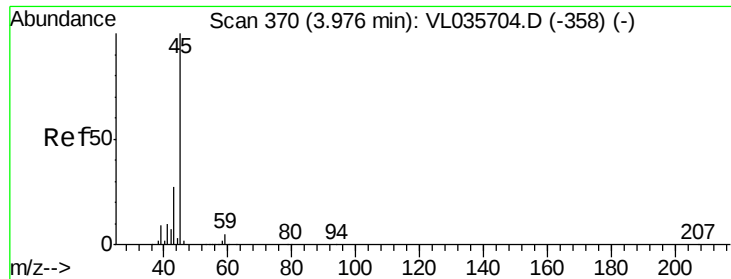
Tgt Ion: 43 Resp: 1088601

Ion Ratio Lower Upper

43 100

58 57.3 27.3 40.9#





#19

Isopropyl Alcohol

Concen: 2.520 ppbv

RT: 3.97 min Scan# 369

Delta R.T. -0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

ClientSampleId :

B-1

Tot Ion: 45 Resp: 161853

Ion Ratio Lower Upper

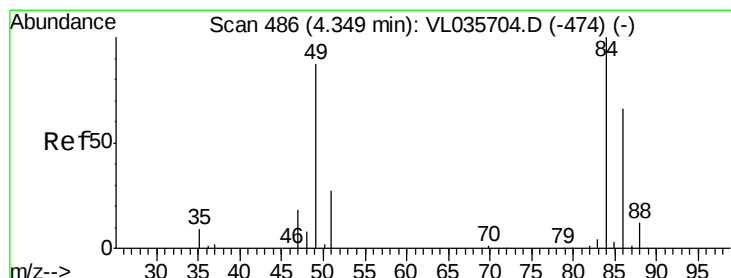
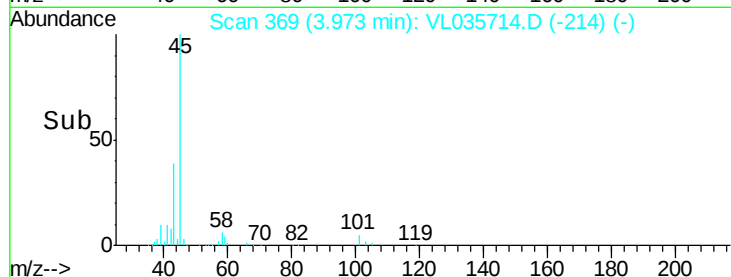
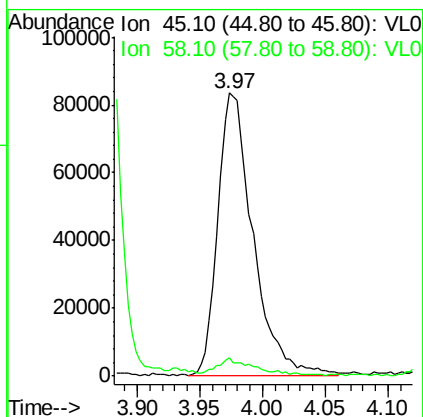
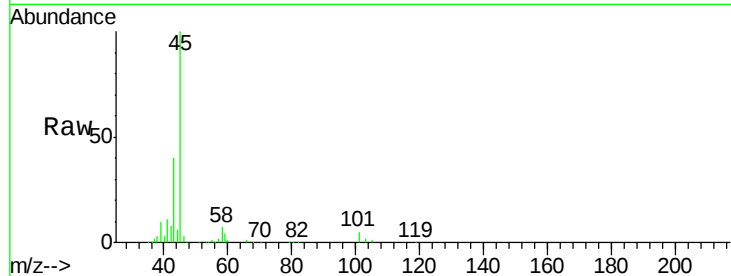
45 100

58 0.0 2.8 4.2#

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#20

Methylene Chloride

Concen: 3.613 ppbv

RT: 4.35 min Scan# 485

Delta R.T. -0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Tgt Ion: 84 Resp: 313389

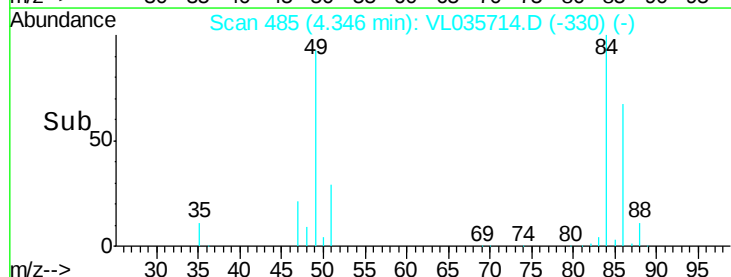
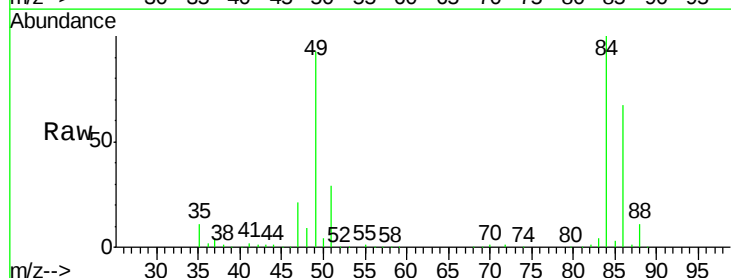
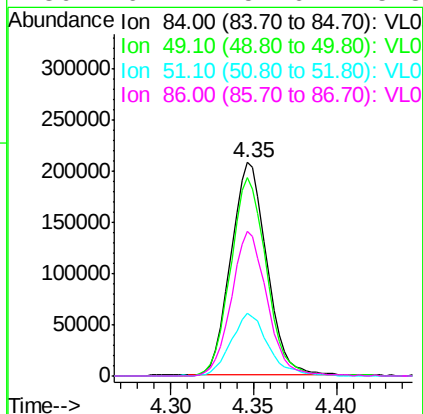
Ion Ratio Lower Upper

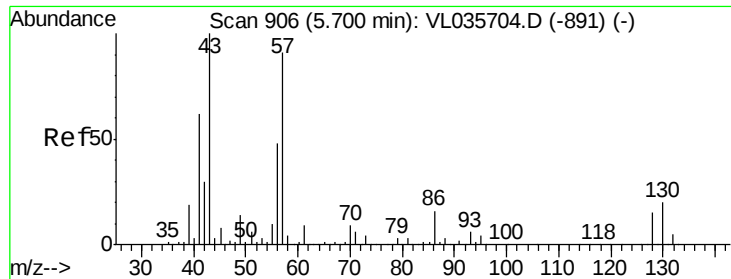
84 100

49 93.0 69.8 104.6

51 29.3 21.8 32.8

86 67.7 52.6 78.8





#26

Hexane

Concen: 3.005 ppbv

RT: 5.70 min Scan# 906

Delta R.T. 0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

ClientSampled :

B-1

Tot Ion: 57 Resp: 349843

Ion Ratio Lower Upper

57 100

41 74.0 57.9 86.9

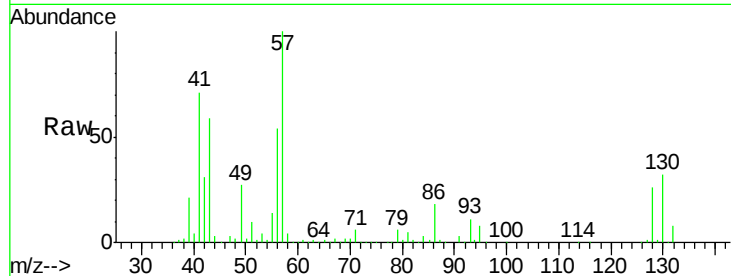
43 64.5 143.8 215.6#

56 55.1 43.0 64.6

Manual Integrations
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9/24/2020 1:35:32 PM

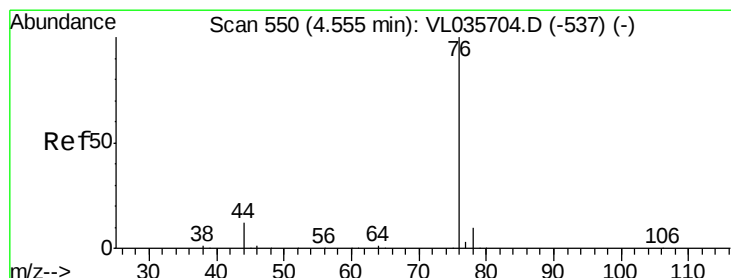
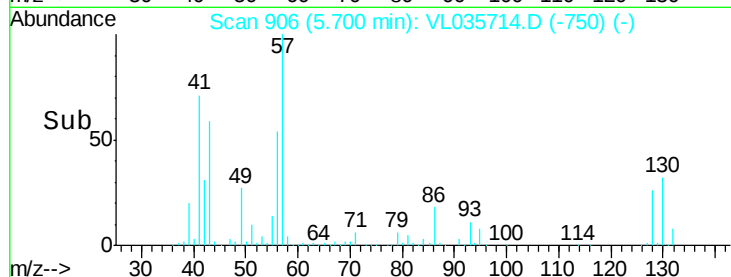
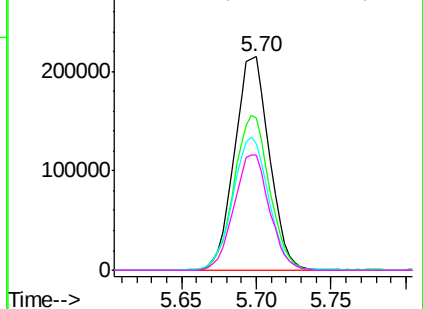


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#27

Carbon Disulfide

Concen: 0.116 ppbv

RT: 4.56 min Scan# 550

Delta R.T. 0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

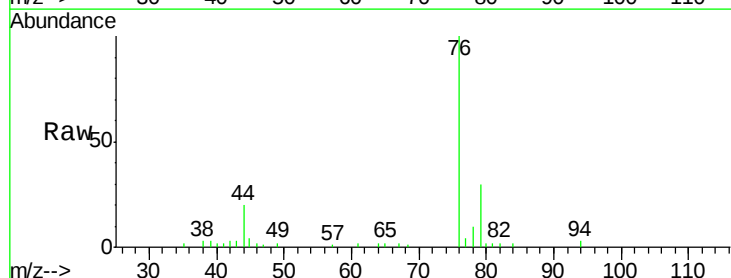
Tgt Ion: 76 Resp: 20172

Ion Ratio Lower Upper

76 100

44 26.4 9.7 14.5#

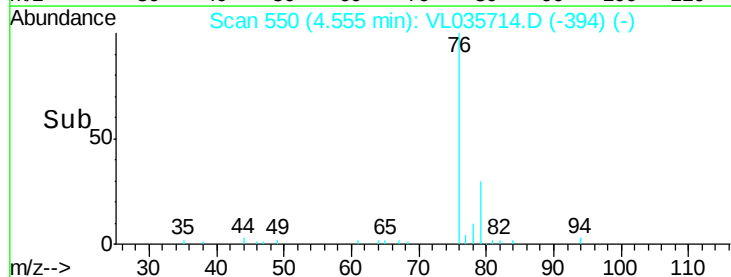
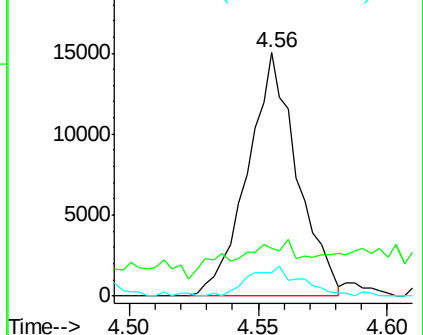
78 13.2 7.8 11.8#

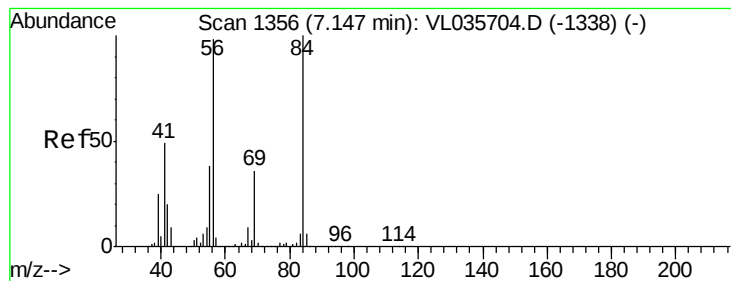


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0





#30

Cvclohexane

Concen: 0.552 ppbv m

RT: 7.15 min Scan# 1357

Delta R.T. 0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

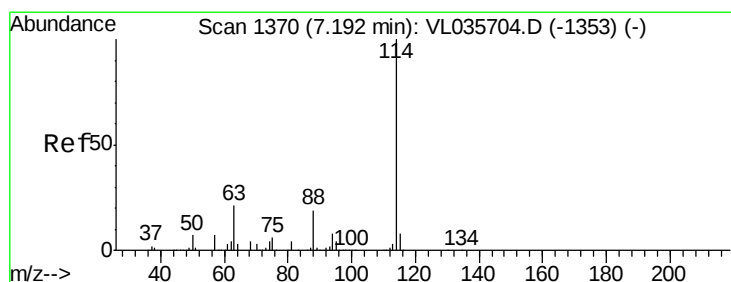
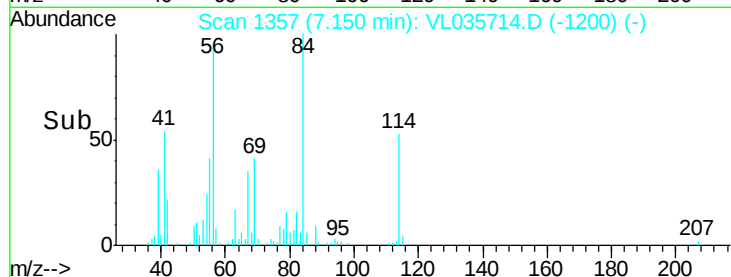
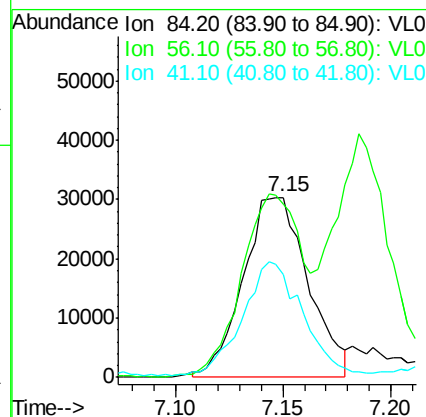
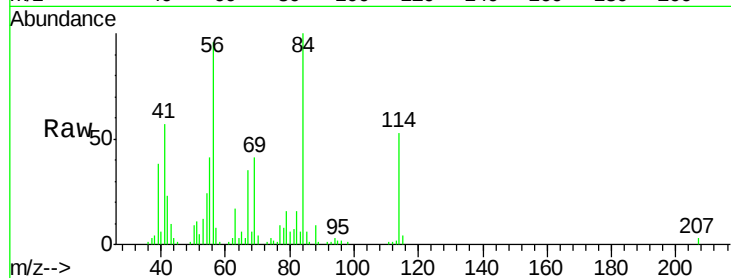
ClientSampled :

B-1

Tot Ion:	84	Resp:	63417
Ion	Ratio	Lower	Upper
84	100		
56	88.7	84.6	127.0
41	58.0	41.1	61.7

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

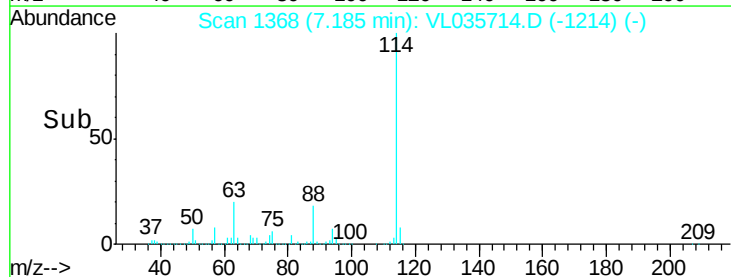
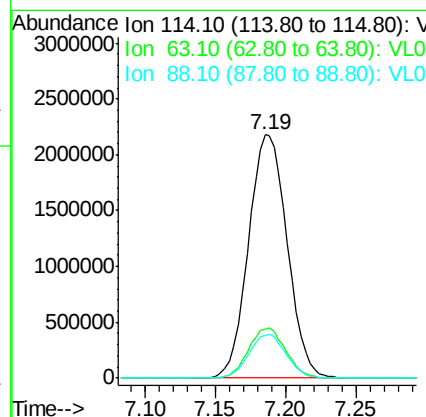
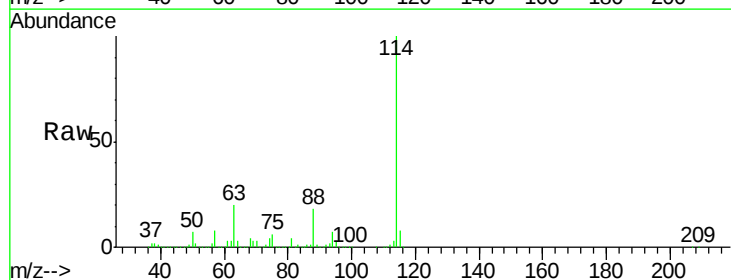
RT: 7.19 min Scan# 1368

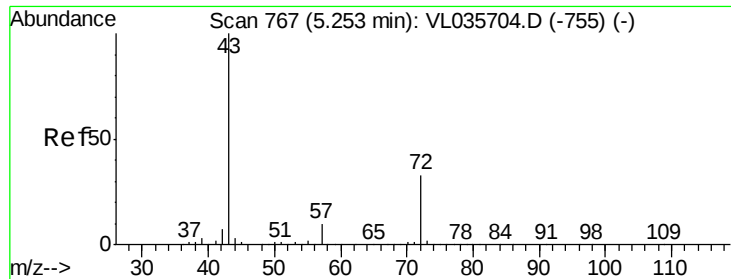
Delta R.T. -0.01 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Tgt Ion:	114	Resp:	4176812
Ion	Ratio	Lower	Upper
114	100		
63	20.0	16.1	24.1
88	17.4	14.1	21.1





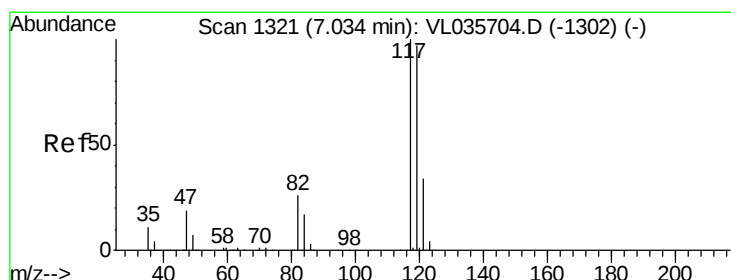
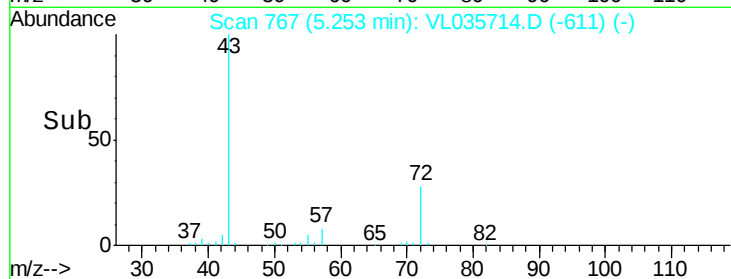
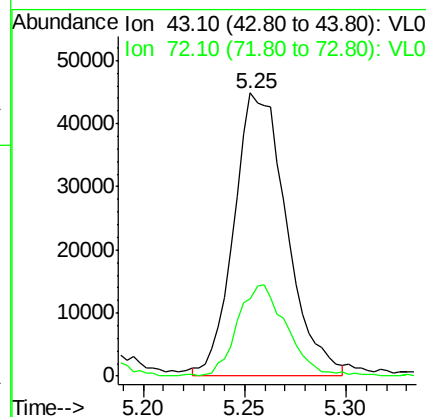
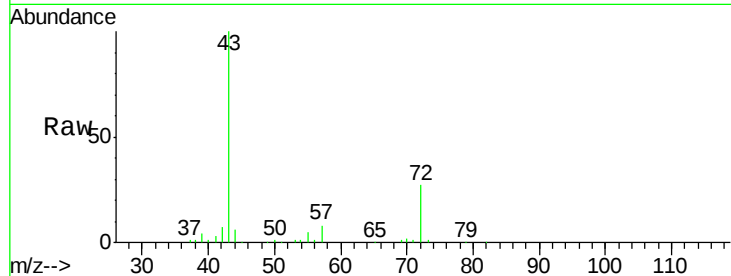
#34
2-Butanone
Concen: 0.585 ppbv m
RT: 5.25 min Scan# 767
Delta R.T. 0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion	Ratio	Lower	Upper
43	100		
72	30.4	26.1	39.1

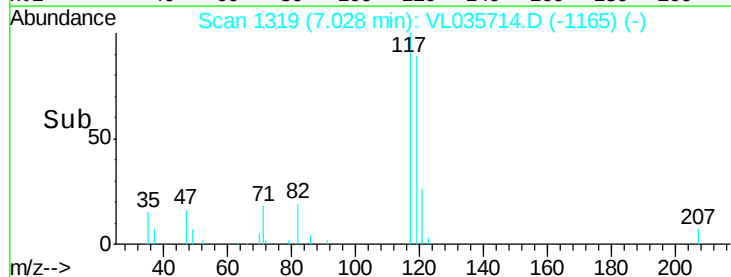
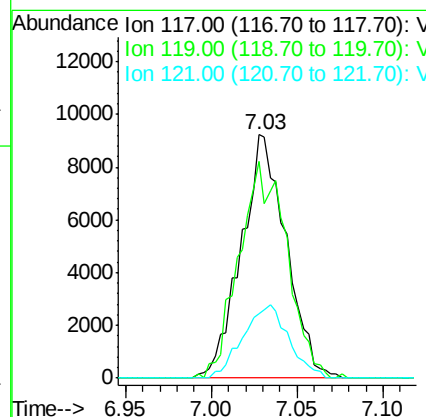
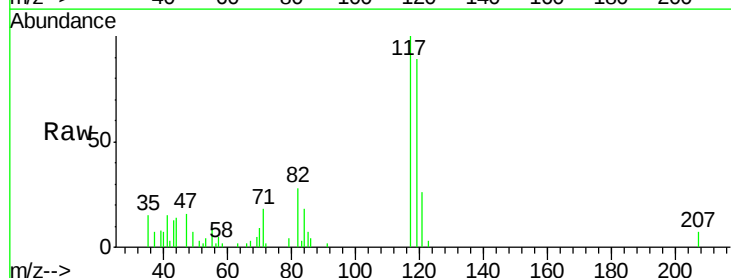
Manual Integrations
APPROVED

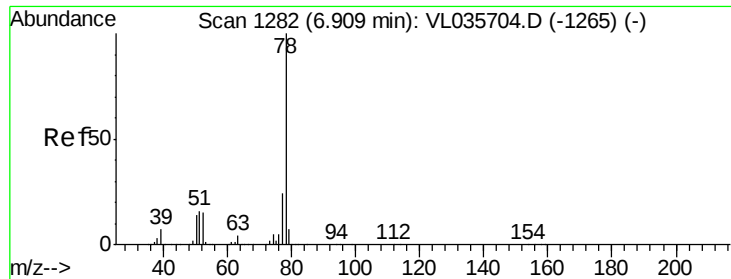
MMDadoda
9/24/2020 1:35:32 PM



#35
Carbon Tetrachloride
Concen: 0.077 ppbv
RT: 7.03 min Scan# 1319
Delta R.T. -0.01 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion	Ratio	Lower	Upper
117	100		
119	88.9	77.7	116.5
121	26.3	26.9	40.3





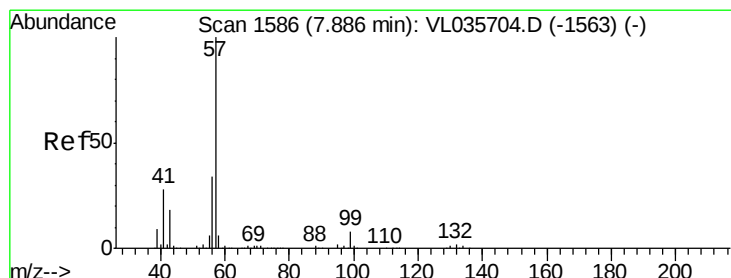
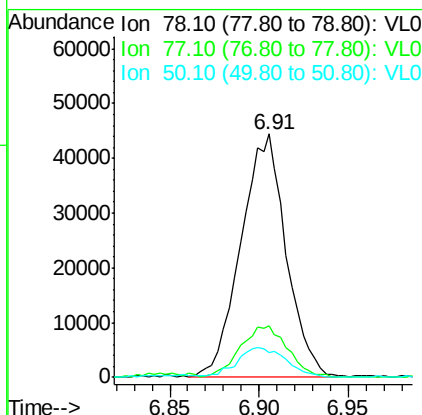
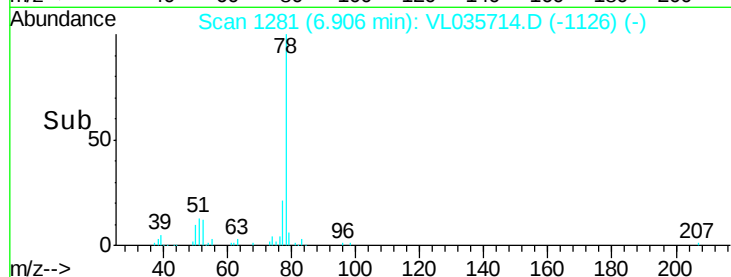
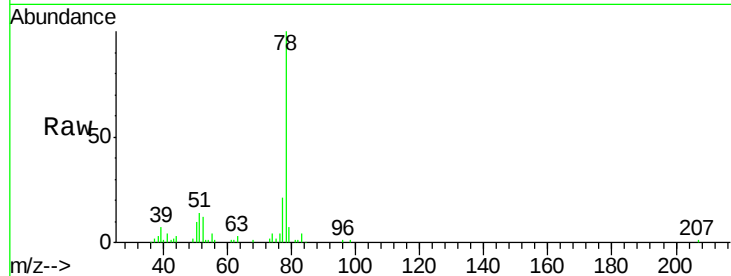
#36
Benzene
Concen: 0.287 ppbv
RT: 6.91 min Scan# 1281
Delta R.T. -0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.7	19.3	28.9
50	10.4	11.6	17.4#

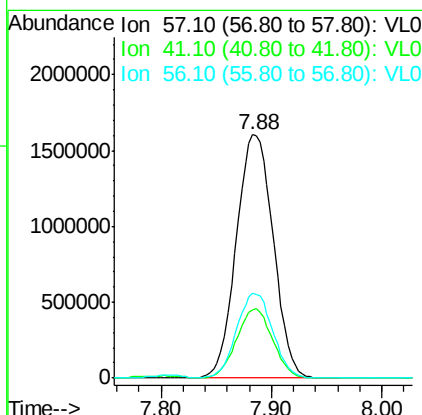
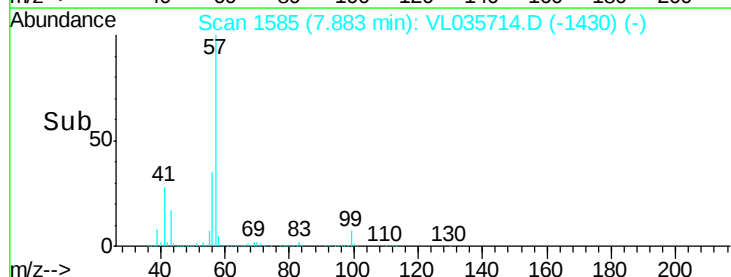
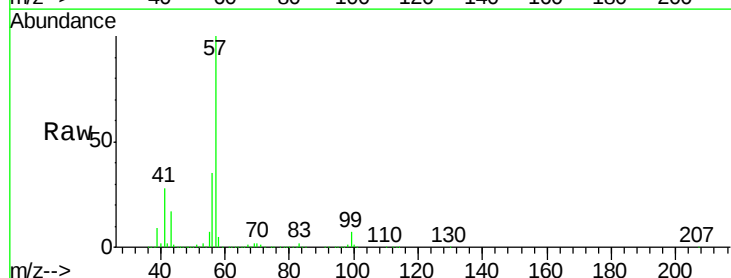
Manual Integrations
APPROVED

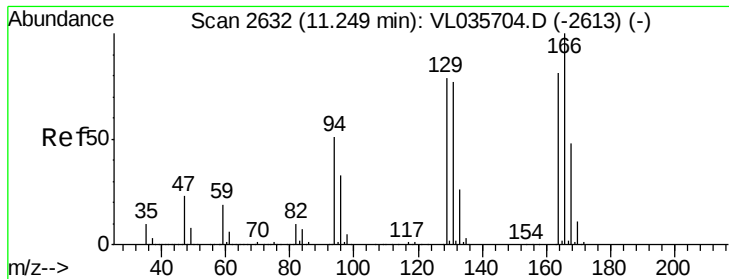
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 9.499 ppbv
RT: 7.88 min Scan# 1585
Delta R.T. -0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion	Ratio	Lower	Upper
57	100		
41	27.8	21.2	31.8
56	34.2	25.8	38.8





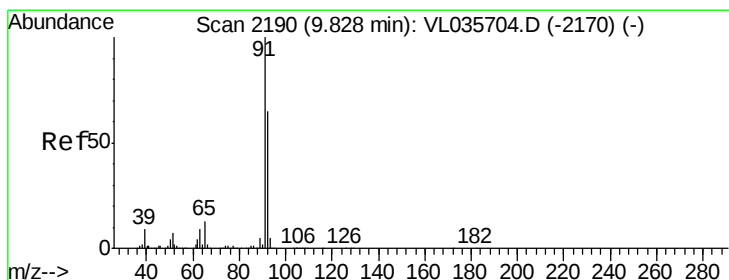
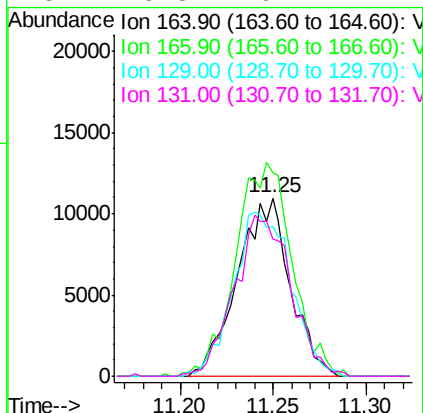
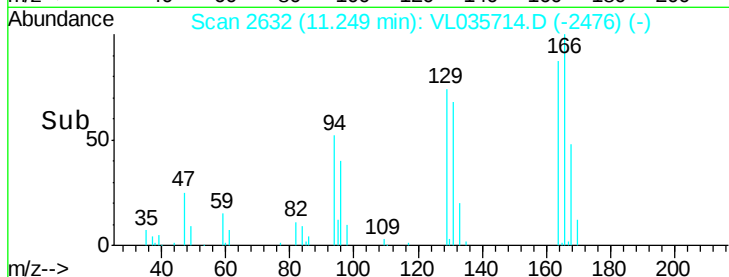
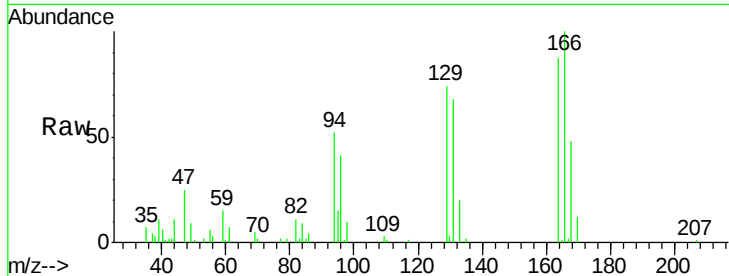
#52
Tetrachloroethene
Concen: 0.165 ppbv
RT: 11.25 min Scan# 2632
Delta R.T. 0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion	Ratio	Lower	Upper
164	100		
166	112.7	98.7	148.1
129	81.7	78.4	117.6
131	75.8	76.2	114.2#

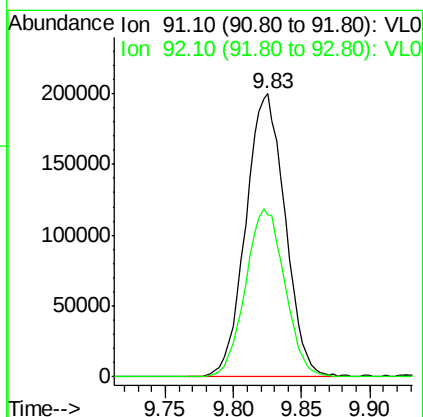
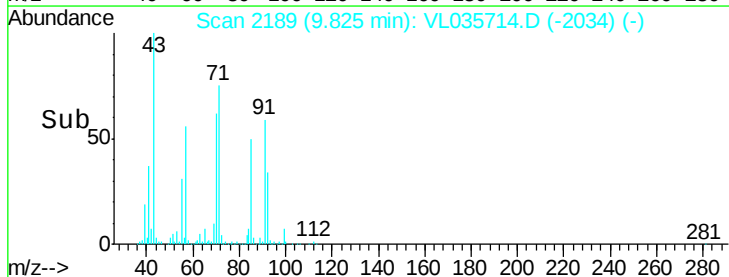
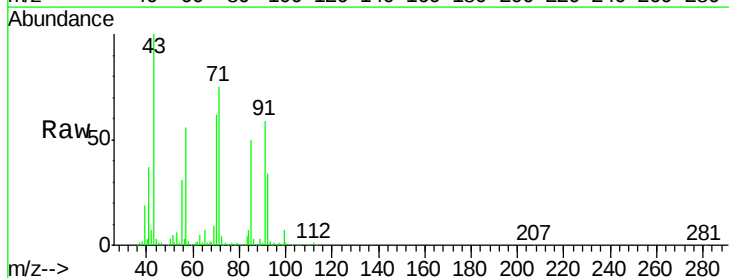
Manual Integrations
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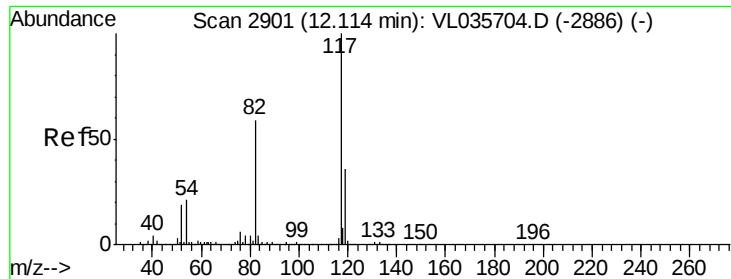
MMDadoda
9/24/2020 1:35:32 PM



#53
Toluene
Concen: 1.245 ppbv
RT: 9.83 min Scan# 2189
Delta R.T. -0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.3	50.0	75.0





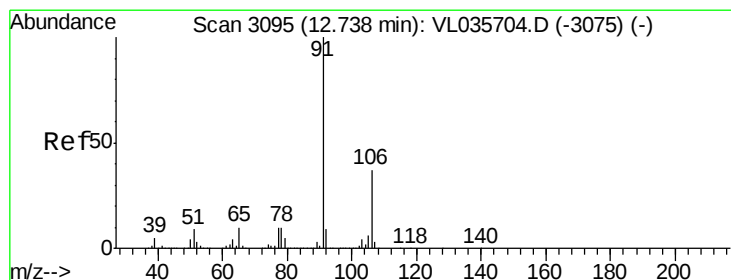
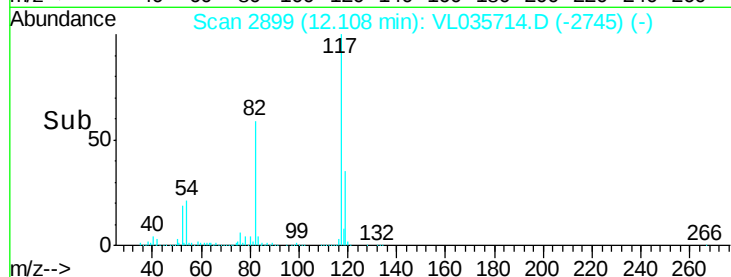
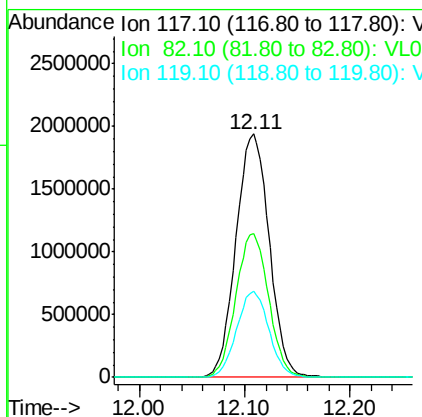
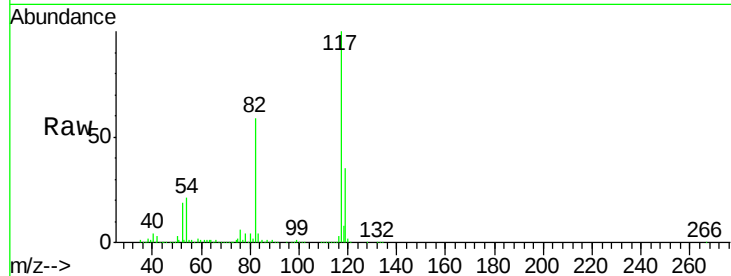
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2899
Delta R.T. -0.01 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion:117 Resp: 4257421
Ion Ratio Lower Upper
117 100
82 58.3 46.1 69.1
119 34.3 28.0 42.0

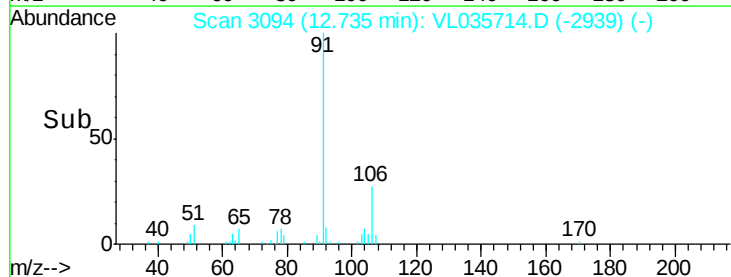
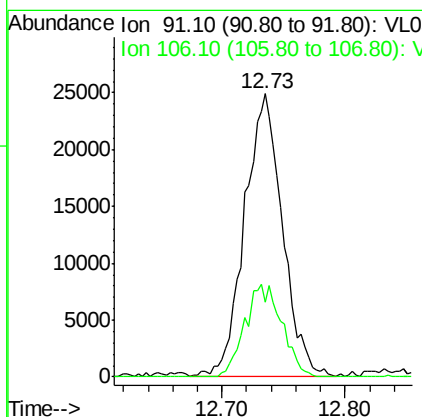
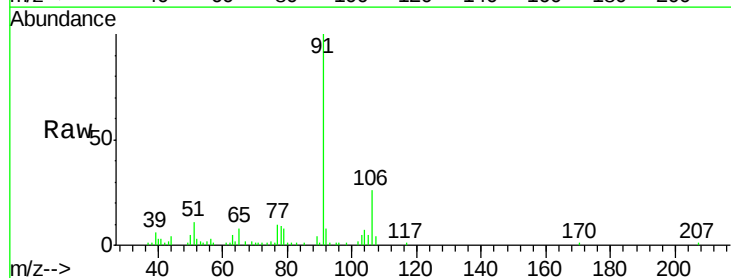
Manual Integrations
APPROVED

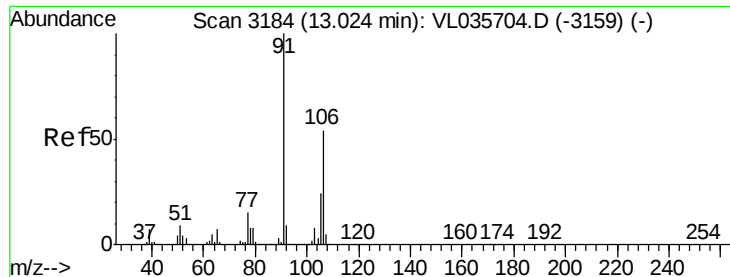
MMDadoda
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#58
Ethyl Benzene
Concen: 0.125 ppbv m
RT: 12.73 min Scan# 3094
Delta R.T. -0.00 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion: 91 Resp: 53304
Ion Ratio Lower Upper
91 100
106 26.5 29.7 44.5#





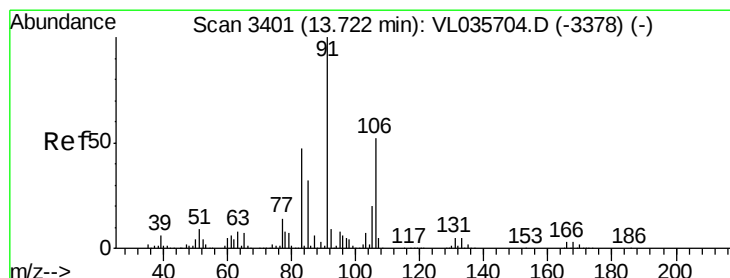
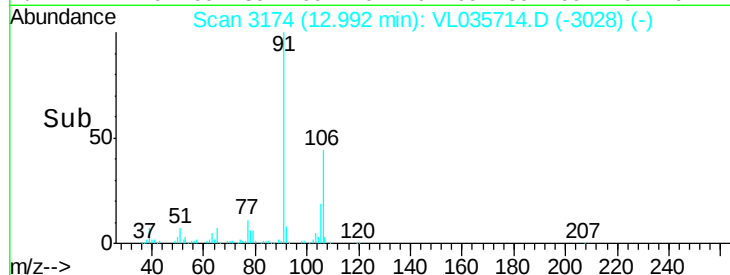
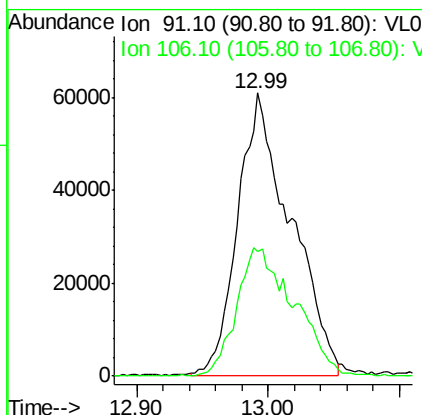
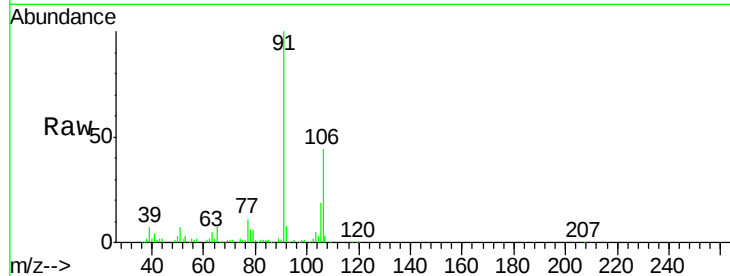
#59
m/p-Xylene
Concen: 0.460 ppbv m
RT: 12.99 min Scan# 3174
Delta R.T. -0.03 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Instrument :
MSVOA_L
ClientSampled :
B-1

Tot Ion: 91 Resp: 171587
Ion Ratio Lower Upper
91 100
106 0.0 41.4 62.0#

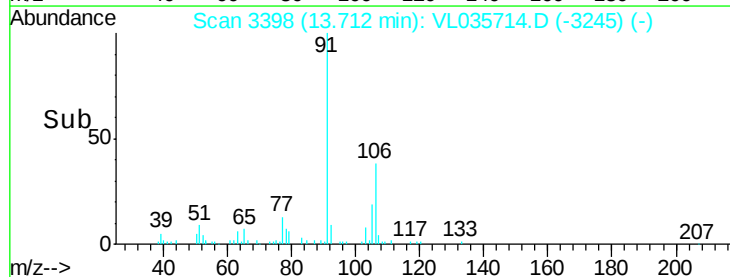
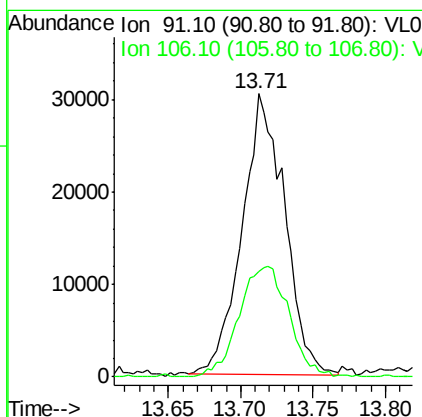
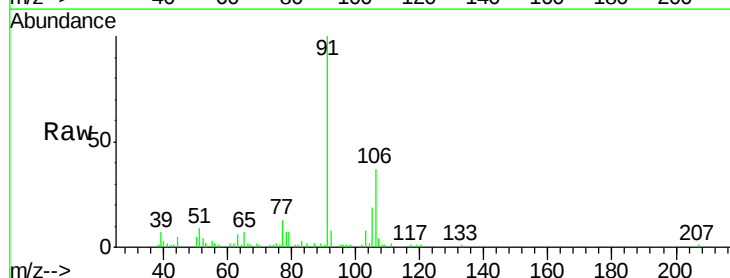
Manual Integrations
APPROVED

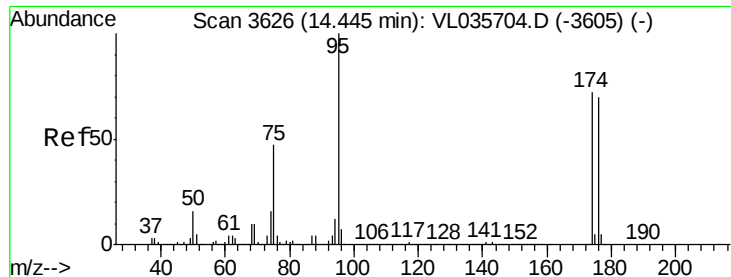
MMDadoda
9/24/2020 1:35:32 PM



#60
o-Xylene
Concen: 0.164 ppbv
RT: 13.71 min Scan# 3398
Delta R.T. -0.01 min
Lab File: VL035714.D
Acq: 23 Sep 2020 11:44

Tgt Ion: 91 Resp: 61734
Ion Ratio Lower Upper
91 100
106 46.6 25.0 75.0





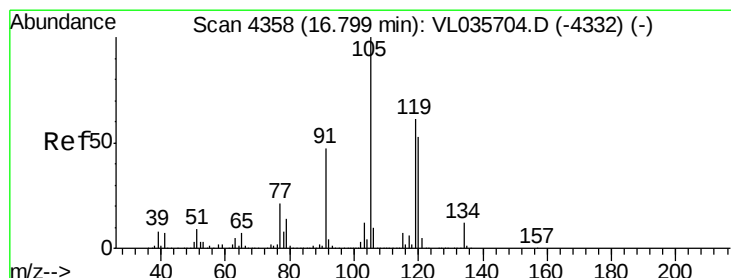
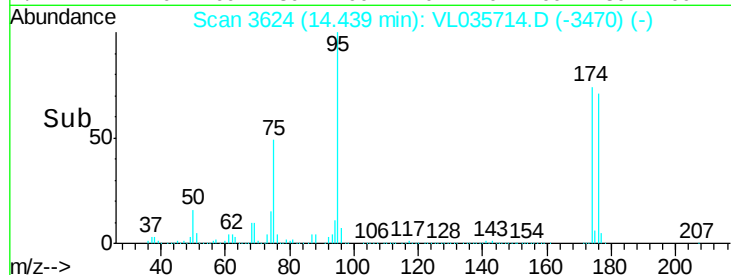
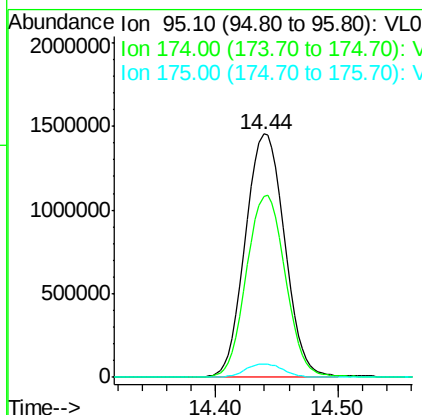
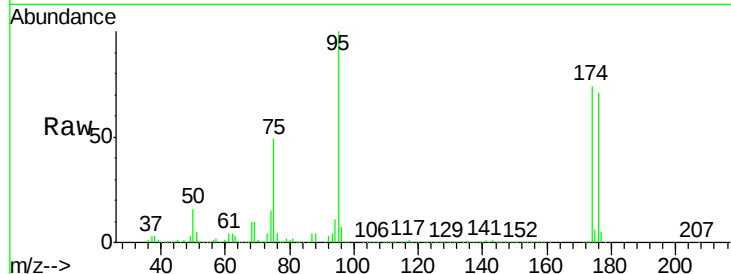
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.183 ppbv
 RT: 14.44 min Scan# 3624
 Delta R.T. -0.01 min
 Lab File: VL035714.D
 Acq: 23 Sep 2020 11:44

Instrument :
 MSVOA_L
 ClientSampled :
 B-1

Tot Ion: 95 Resp: 3248582
 Ion Ratio Lower Upper
 95 100
 174 74.9 59.6 89.4
 175 5.5 4.2 6.4

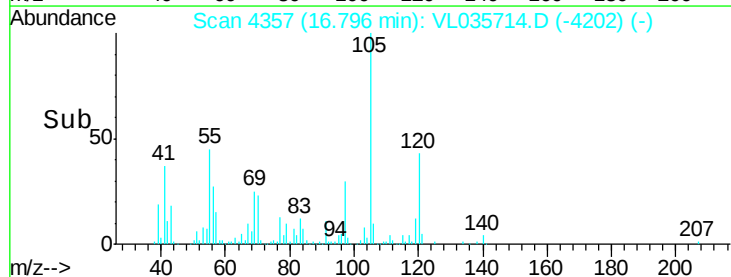
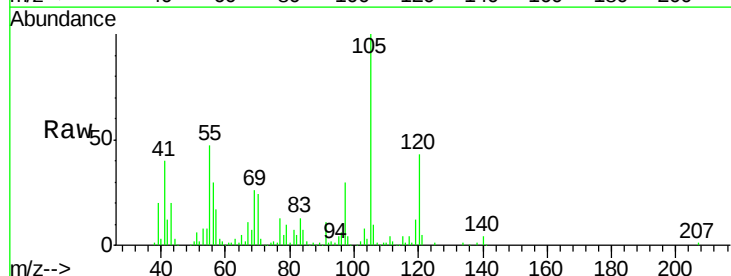
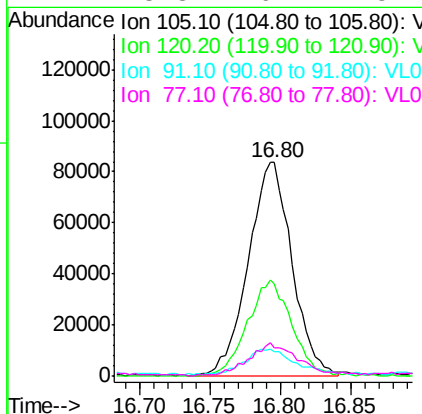
Manual Integrations
 APPROVED

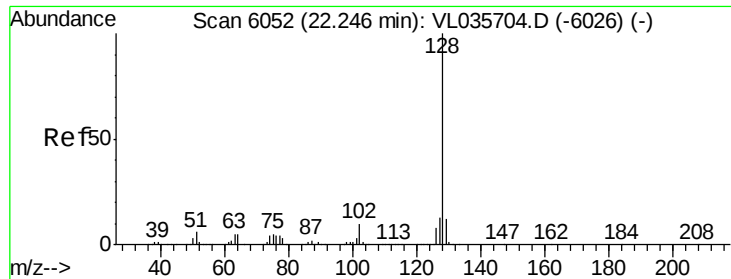
MMDadoda
 9/24/2020 1:35:32 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 0.377 ppbv
 RT: 16.80 min Scan# 4357
 Delta R.T. -0.00 min
 Lab File: VL035714.D
 Acq: 23 Sep 2020 11:44

Tgt Ion: 105 Resp: 179684
 Ion Ratio Lower Upper
 105 100
 120 43.0 42.5 63.7
 91 10.2 37.7 56.5#
 77 13.3 16.7 25.1#





#79

Naphthalene

Concen: 1.763 ppbv

RT: 22.24 min Scan# 6050

Delta R.T. -0.01 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Instrument :

MSVOA_L

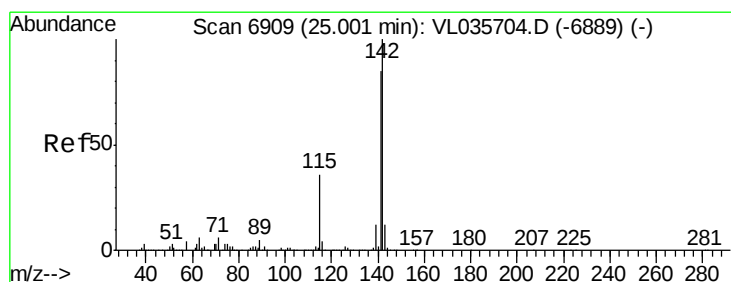
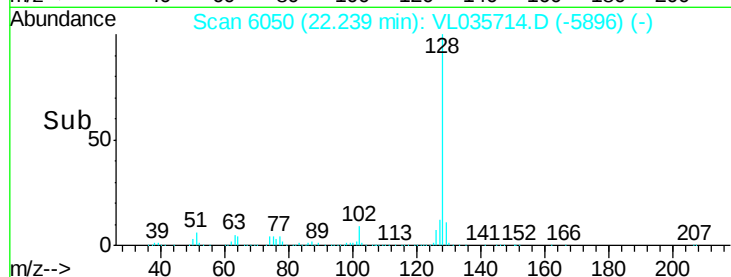
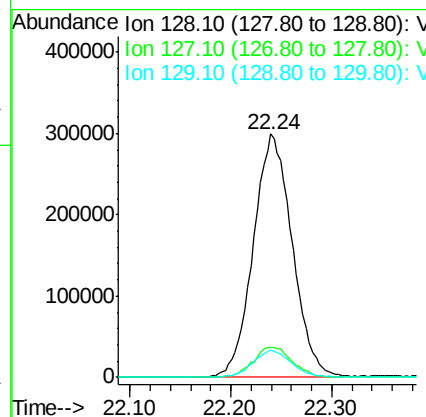
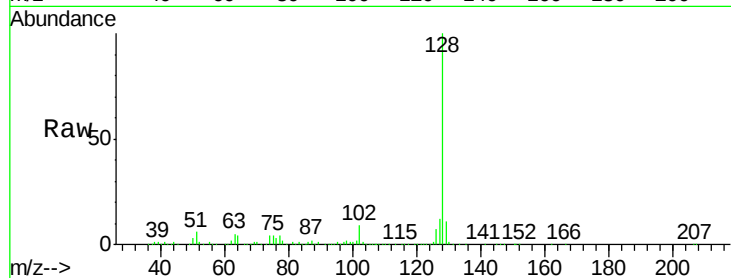
ClientSampleId :

B-1

Tot Ion	Ratio	Resp	Lower	Upper
128	100	800971		
127	12.3		10.6	15.8
129	11.0		9.4	14.0

Manual Integrations
APPROVED

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9/24/2020 1:35:32 PM



#80

Naphthalene, 2-methyl-

Concen: 0.183 ppbv

RT: 25.00 min Scan# 6910

Delta R.T. 0.00 min

Lab File: VL035714.D

Acq: 23 Sep 2020 11:44

Tgt Ion	Ratio	Resp	Lower	Upper
142	100	19598		
141	93.1		68.2	102.4
115	51.4		27.8	41.6#

