

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091420\
 Data File : VL035621.D
 Acq On : 15 Sep 2020 5:14
 Operator : SY/AP
 Sample : L3983-03 4X
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-9

Manual Integrations
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 9/17/2020 5:41:11 PM

Quant Time: Sep 15 08:16:08 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep 14 2020
 QLast Update : Mon Sep 14 15:19:50 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	937171	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3957598	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.08	117	4054756	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	3102526	10.77	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	21113m	0.130	ppbv	
3) Chlorodifluoromethane	2.97	51	49247m	0.475	ppbv	
4) Chloromethane	3.12	50	11023	0.199	ppbv	94
9) Propene	2.99	41	72949	1.826	ppbv	93
10) Heptane	8.11	43	65873	0.614	ppbv	99
13) Ethanol	3.59	45	81580	8.234	ppbv	96
15) Acetone	3.83	43	8181458	79.154	ppbv #	71
17) tert-Butyl alcohol	4.28	59	234298	1.862	ppbv	99
19) Isopropyl Alcohol	3.95	45	66511	1.079	ppbv #	93
20) Methylene Chloride	4.33	84	209365	2.720	ppbv	97
26) Hexane	5.67	57	127237	1.230	ppbv #	42
30) Cyclohexane	7.11	84	11591m	0.105	ppbv	
34) 2-Butanone	5.23	43	1152721	9.815	ppbv	99
36) Benzene	6.88	78	107483	0.420	ppbv	97
38) Trichloroethene	7.82	130	54464m	0.366	ppbv	
44) 2,2,4-Trimethylpentane	7.85	57	50798m	0.151	ppbv	
50) 4-Methyl-2-Pentanone	8.73	43	1813037	10.661	ppbv	100
51) 2-Hexanone	10.12	43	426929	3.060	ppbv #	97
52) Tetrachloroethene	11.21	164	1638310	10.947	ppbv	98
53) Toluene	9.80	91	4887596	15.171	ppbv	98
58) Ethyl Benzene	12.70	91	380979	0.911	ppbv	92
59) m/p-Xylene	12.96	91	1271162	3.638	ppbv	96
60) o-Xylene	13.68	91	471464	1.340	ppbv	96
64) n-propylbenzene	15.56	120	48386	0.280	ppbv #	53
72) 4-Ethyltoluene	15.84	105	261749	0.585	ppbv	96
73) 1,3,5-Trimethylbenzene	16.00	105	174438	0.422	ppbv	93
74) 1,2,4-Trimethylbenzene	16.76	105	721392	1.588	ppbv #	70
79) Naphthalene	22.21	128	99102	0.197	ppbv #	93
80) Naphthalene,2-methyl-	24.99	142	16766	0.097	ppbv	96

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

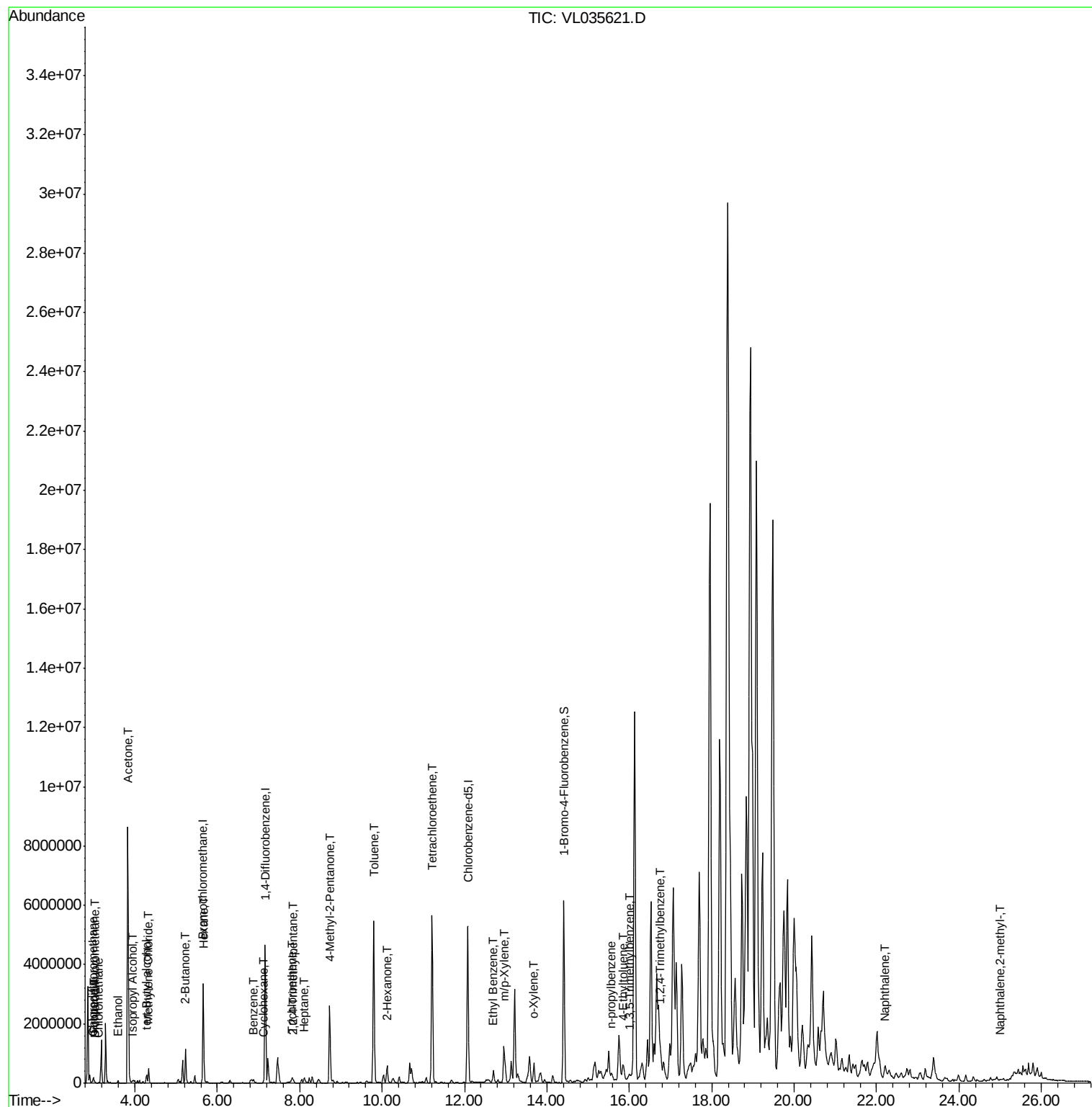
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL091420\
Data File : VL035621.D
Acq On : 15 Sep 2020 5:14
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Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL082720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Sep
QLast Update : Mon Sep 14 15:19:50 2020
Response via : Initial Calibration





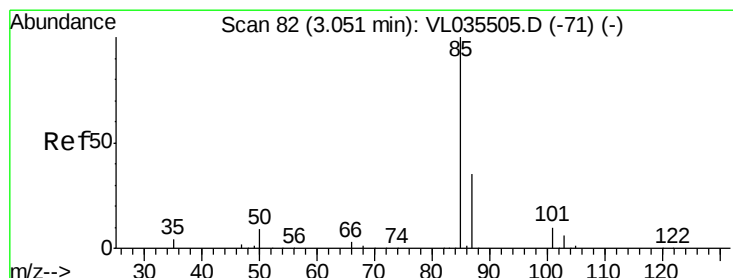
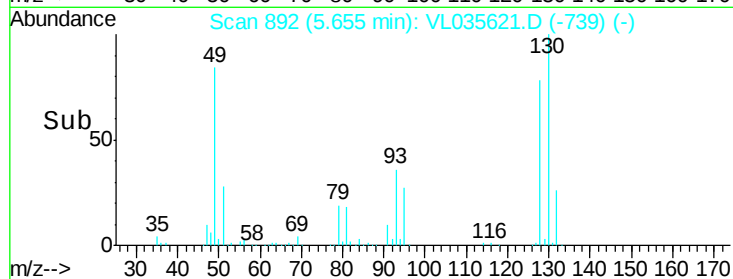
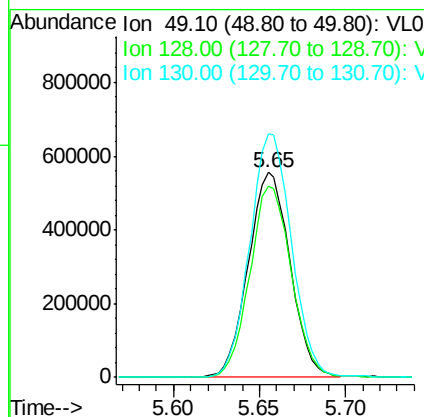
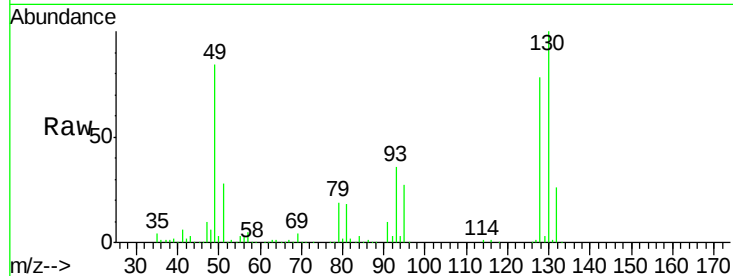
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.65 min Scan# 892
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

Tot Ion	Ratio	Lower	Upper
49	100		
128	93.2	50.0	150.1
130	119.4	64.4	193.2

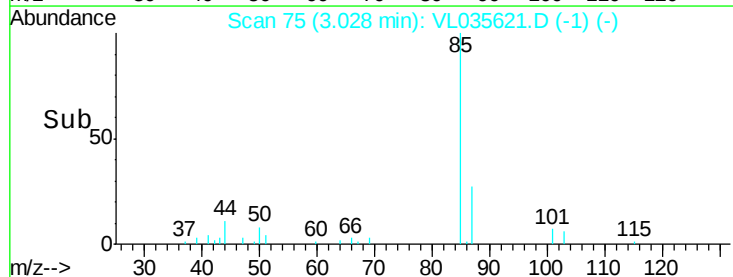
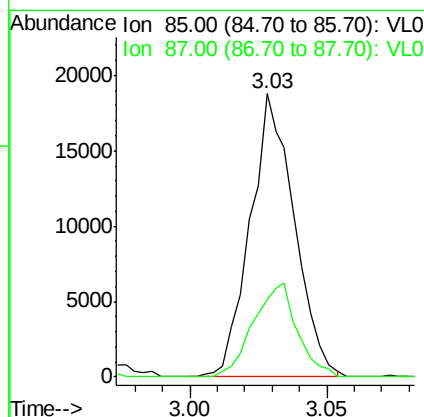
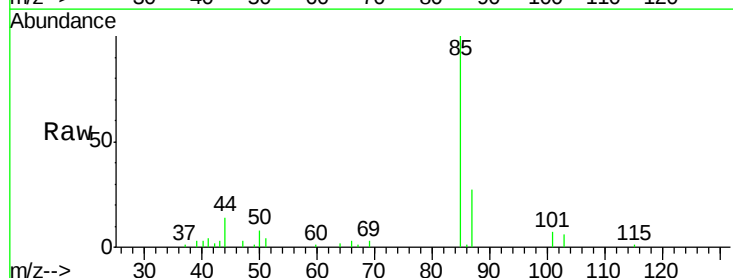
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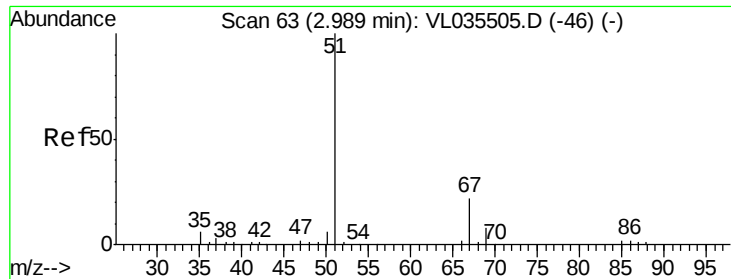
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#2
Dichlorodifluoromethane
Concen: 0.130 ppbv m
RT: 3.03 min Scan# 75
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Lower	Upper
85	100		
87	27.5	28.0	42.0#





#3

Chlorodifluoromethane

Concen: 0.475 ppbv

RT: 2.97 min Scan# 57

Delta R.T. -0.00 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Instrument :

MSVOA_L

ClientSampled :

SV-9

Tot Ion: 51 Resp: 49247

Ion Ratio Lower Upper

51 100

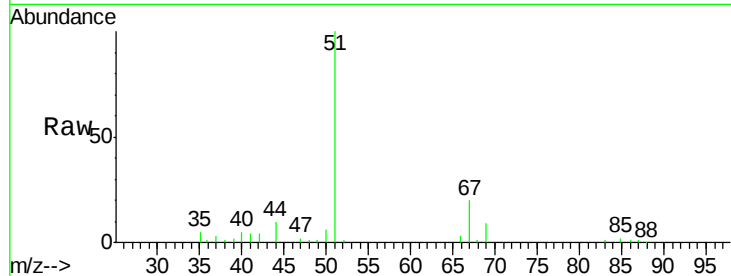
67 21.5 17.8 26.8

Manual Integrations

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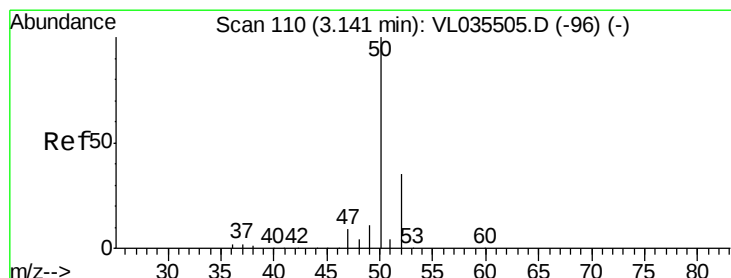
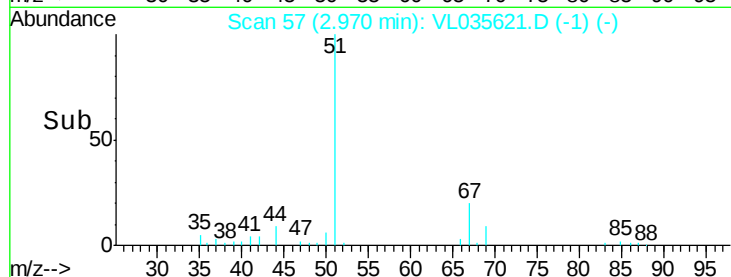
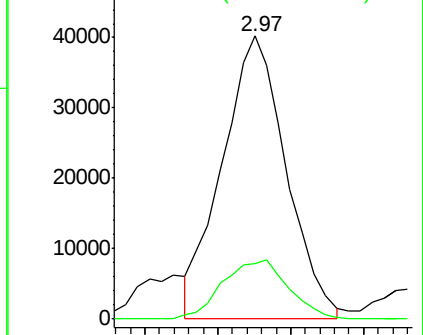
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.199 ppbv

RT: 3.12 min Scan# 104

Delta R.T. -0.01 min

Lab File: VL035621.D

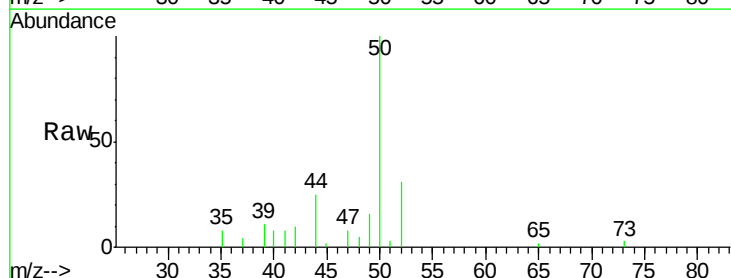
Acq: 15 Sep 2020 5:14

Tgt Ion: 50 Resp: 11023

Ion Ratio Lower Upper

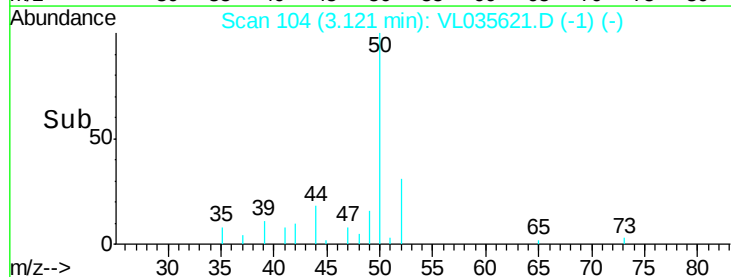
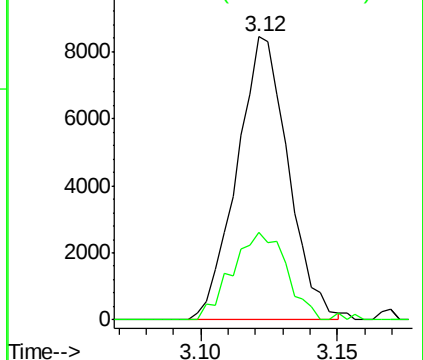
50 100

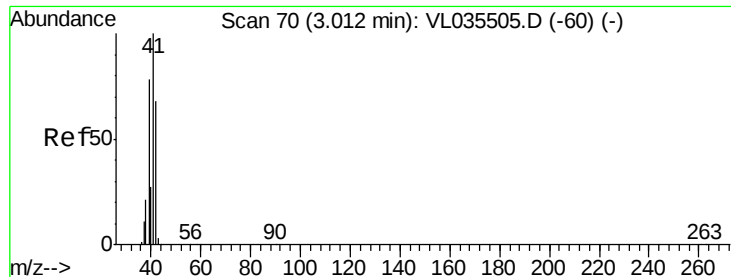
52 31.1 27.7 41.5



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 1.826 ppbv

RT: 2.99 min Scan# 64

Delta R.T. -0.00 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Instrument :

MSVOA_L

ClientSampleId :

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Tot Ion: 41 Resp: 72949

Ion Ratio Lower Upper

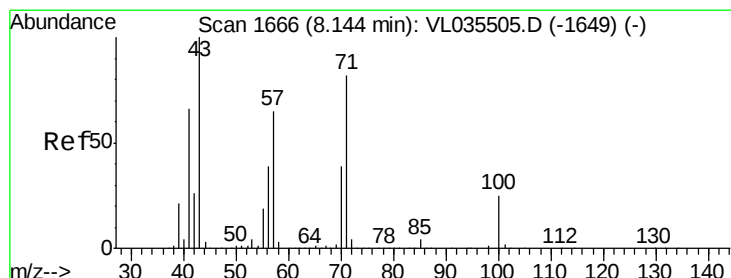
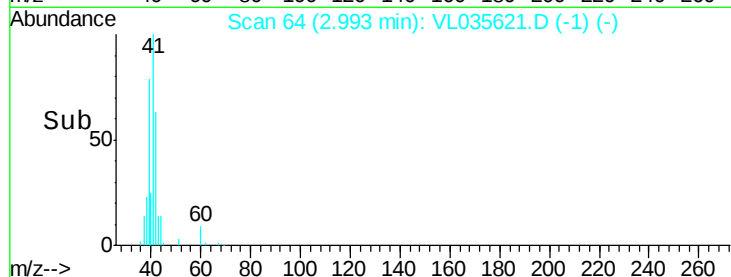
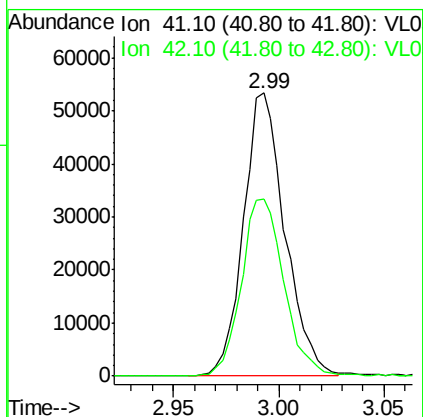
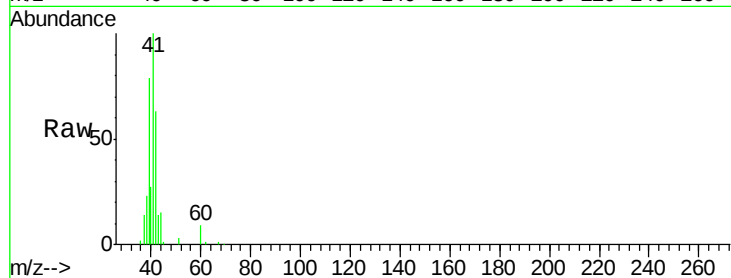
41 100

42 64.3 56.3 84.5

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#10

Heptane

Concen: 0.614 ppbv

RT: 8.11 min Scan# 1656

Delta R.T. -0.02 min

Lab File: VL035621.D

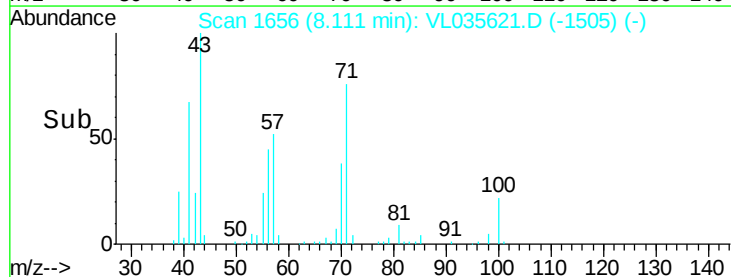
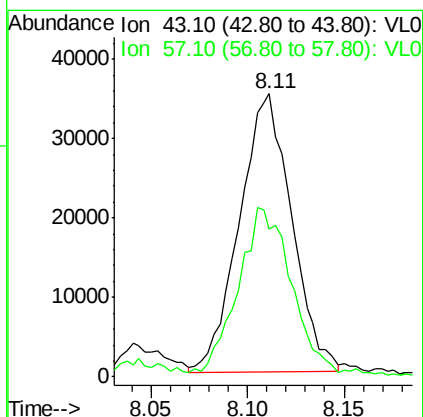
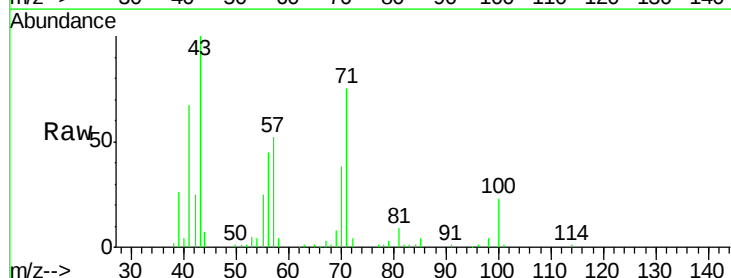
Acq: 15 Sep 2020 5:14

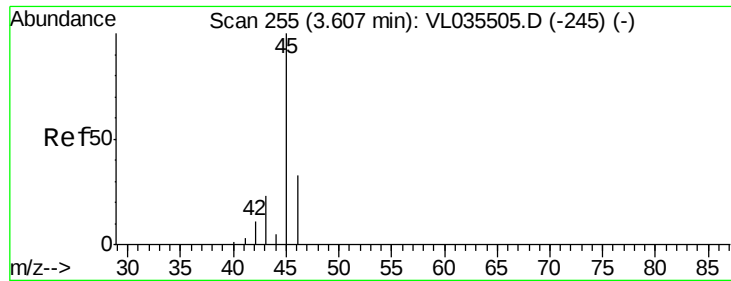
Tgt Ion: 43 Resp: 65873

Ion Ratio Lower Upper

43 100

57 64.7 51.4 77.0





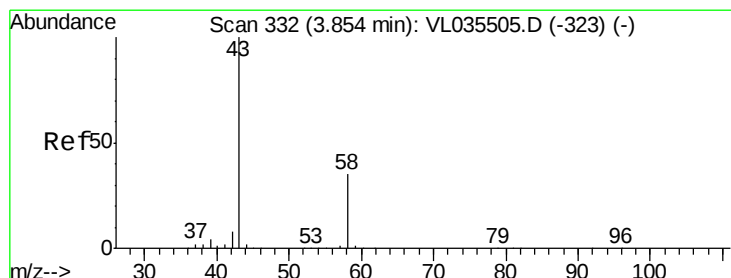
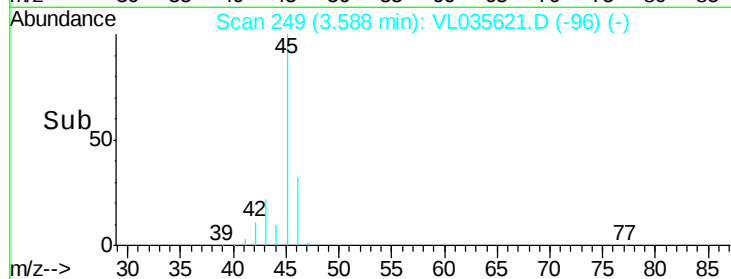
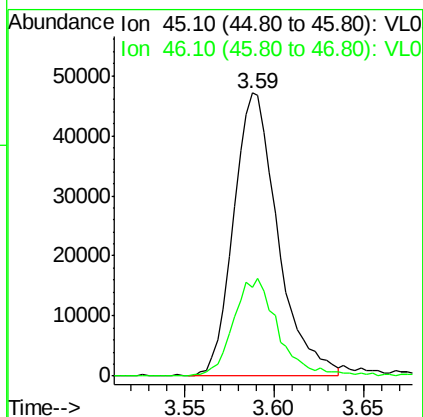
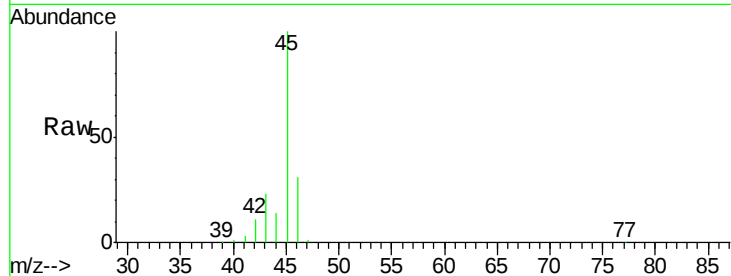
#13
Ethanol
Concen: 8.234 ppbv
RT: 3.59 min Scan# 249
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

Tot Ion: 45 Resp: 81580
Ion Ratio Lower Upper
45 100
46 35.2 15.2 60.6

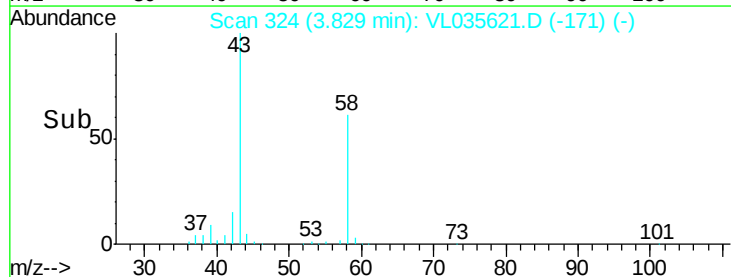
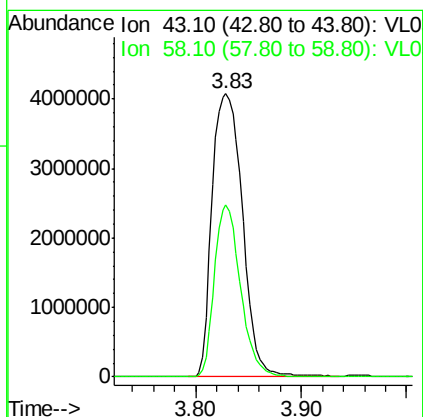
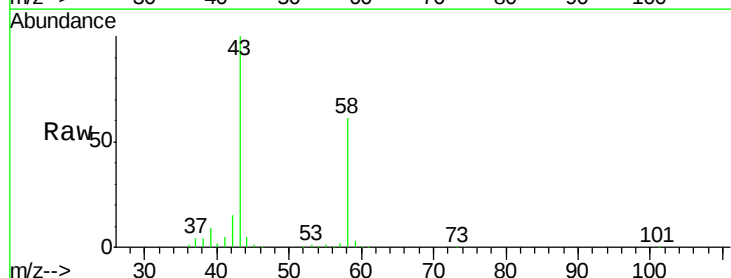
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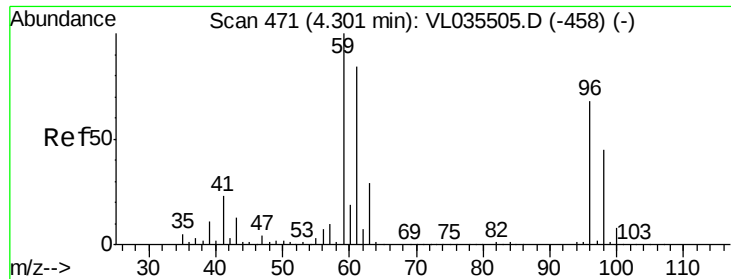
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#15
Acetone
Concen: 79.154 ppbv
RT: 3.83 min Scan# 324
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion: 43 Resp: 8181458
Ion Ratio Lower Upper
43 100
58 52.2 28.4 42.6#





#17

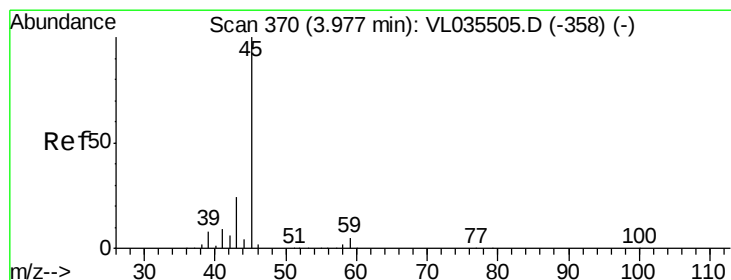
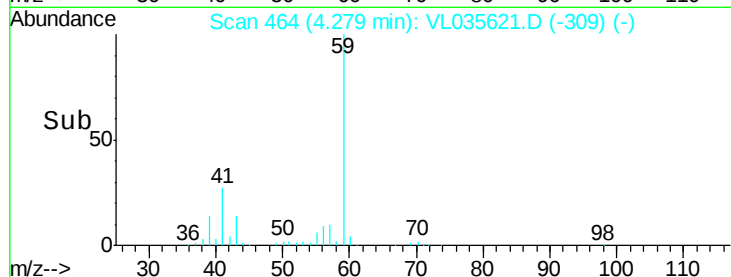
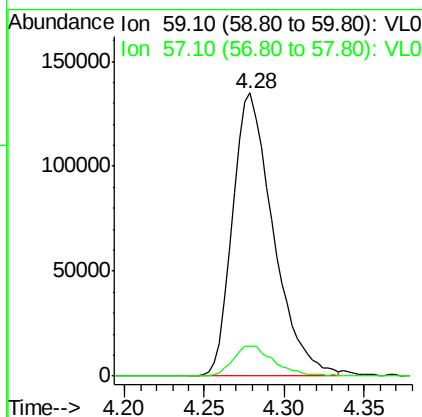
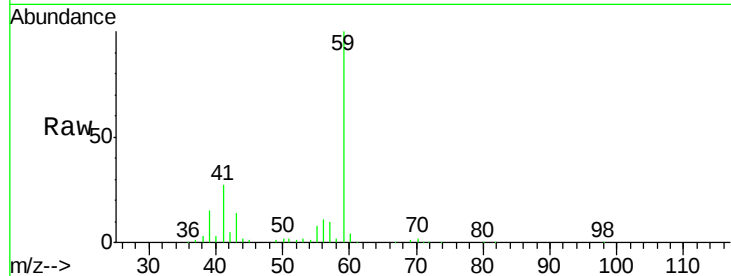
tert-Butyl alcohol
Concen: 1.862 ppbv
RT: 4.28 min Scan# 464
Delta R.T. -0.00 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

Tot Ion	59	Resp	234298
Ion Ratio	100	Lower	Upper
57	10.9	8.4	12.6

Manual Integrations
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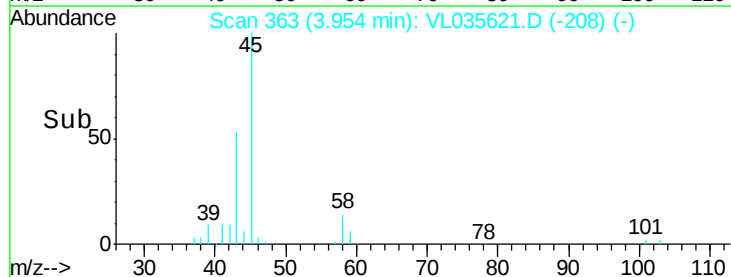
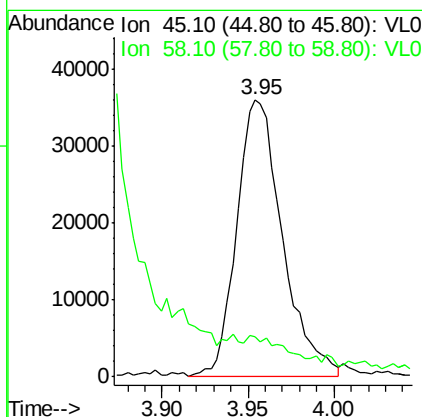
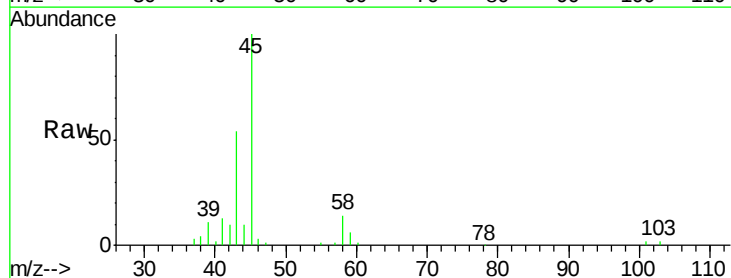
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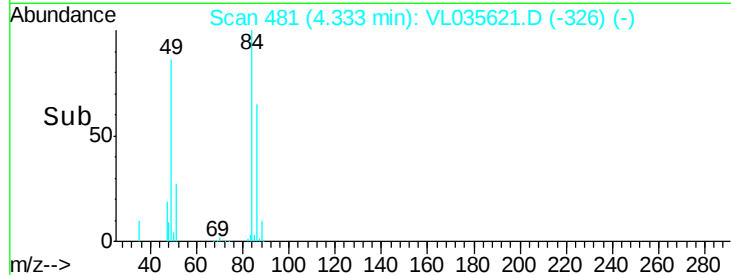
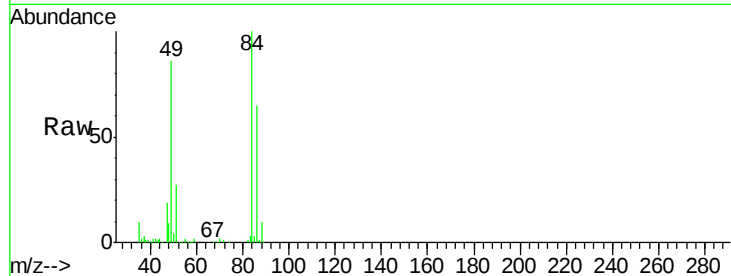
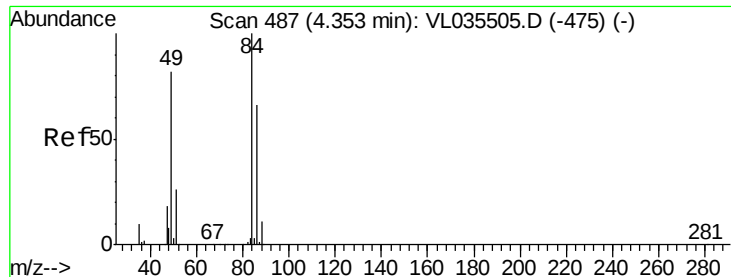


#19

Isopropyl Alcohol
Concen: 1.079 ppbv
RT: 3.95 min Scan# 363
Delta R.T. -0.00 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	45	Resp	66511
Ion Ratio	100	Lower	Upper
58	0.0	2.0	3.0#





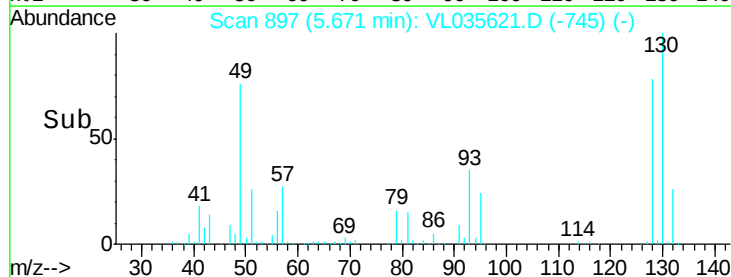
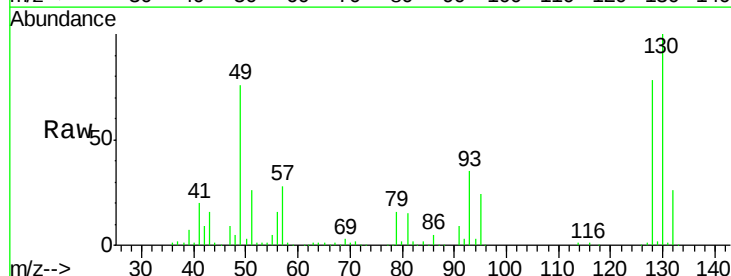
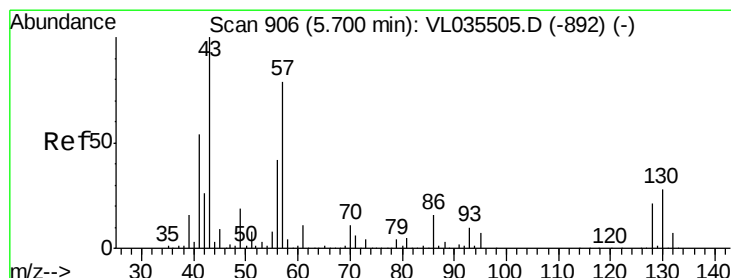
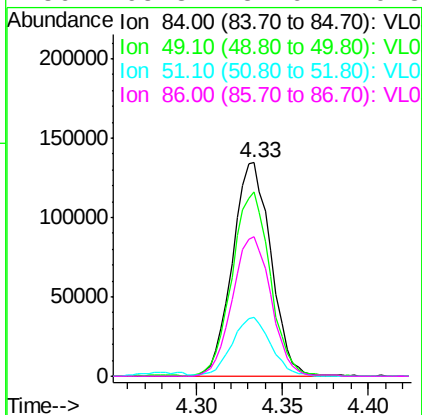
#20
Methvlene Chloride
Concen: 2.720 ppbv
RT: 4.33 min Scan# 481
Delta R.T. -0.00 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tot Ion	84	Resp	209365
Ion Ratio	Lower	Upper	
84	100		
49	86.0	65.4	98.0
51	27.2	21.5	32.3
86	65.3	52.9	79.3

Instrument :
MSVOA_L
ClientSampleId :
SV-9

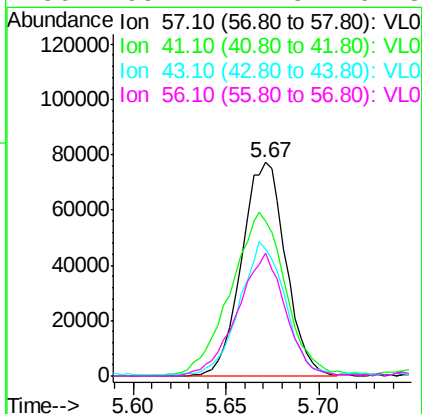
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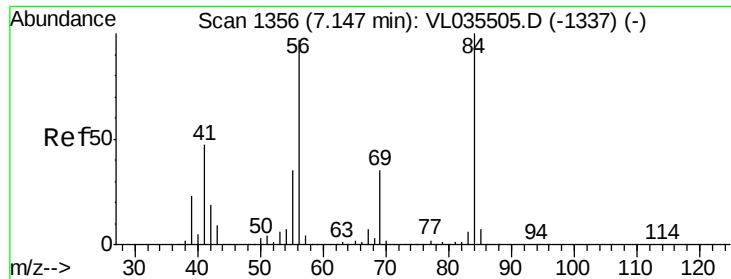
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#26
Hexane
Concen: 1.230 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	57	Resp	127237
Ion Ratio	Lower	Upper	
57	100		
41	95.6	55.9	83.9#
43	64.2	141.8	212.8#
56	63.1	41.8	62.8#





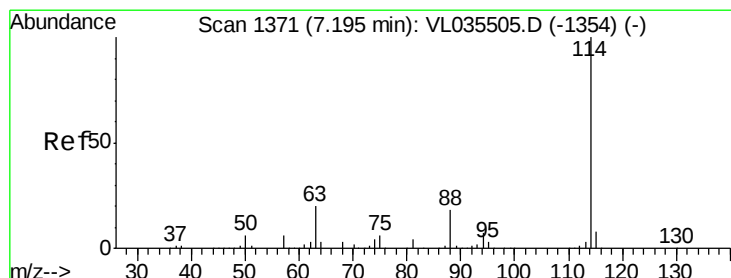
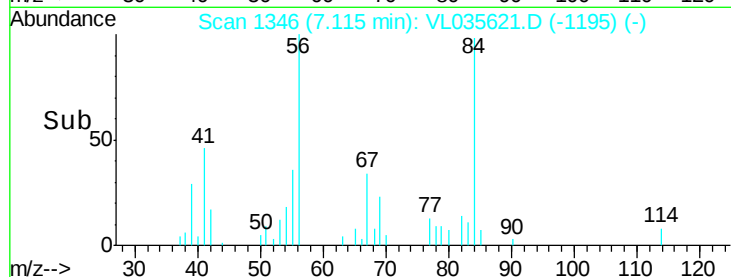
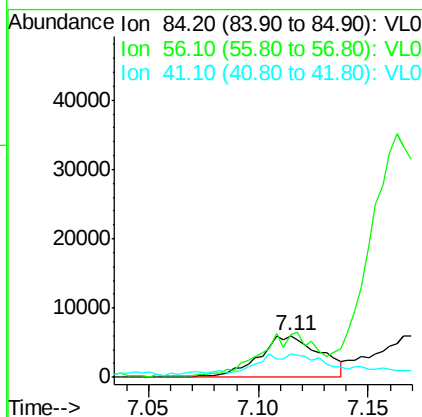
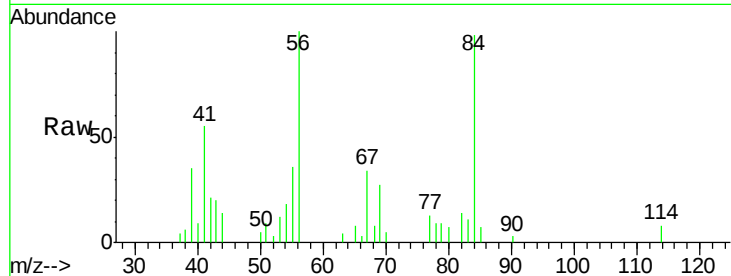
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Cvclohexane
Concen: 0.105 ppbv m
RT: 7.11 min Scan# 1346
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampleId :
SV-9

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	80.1	120.1#
41	63.9	38.1	57.1#

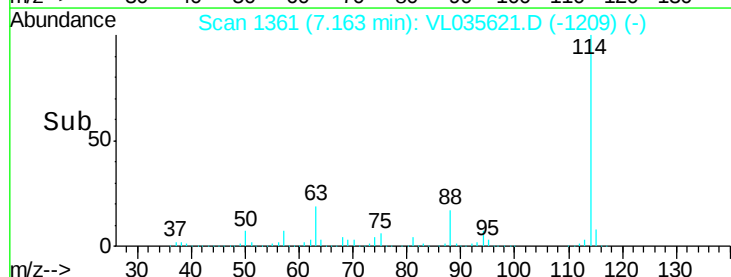
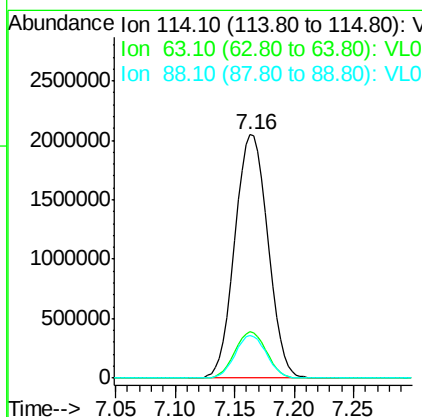
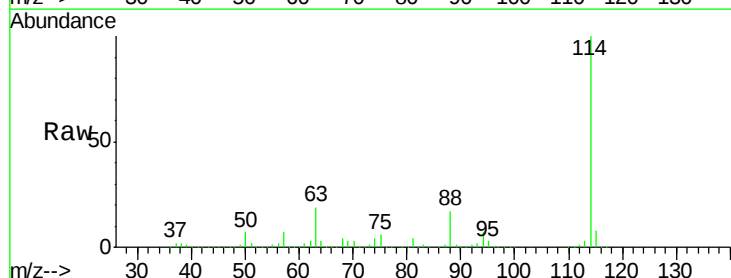
Manual Integrations
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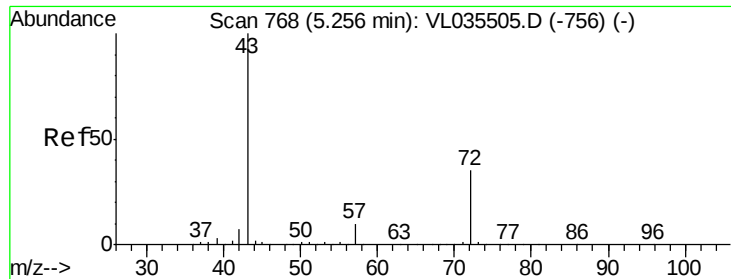
MMDadoda
9/17/2020 5:41:11 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1361
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Lower	Upper
114	100		
63	18.4	14.7	22.1
88	16.8	13.4	20.2





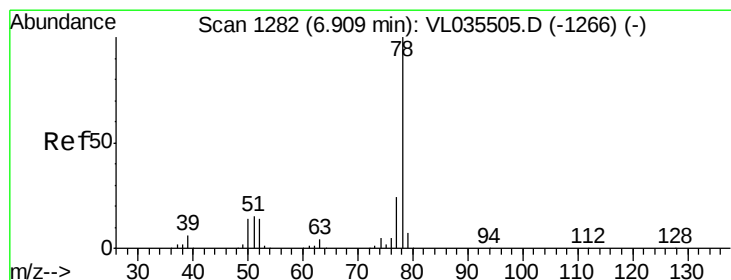
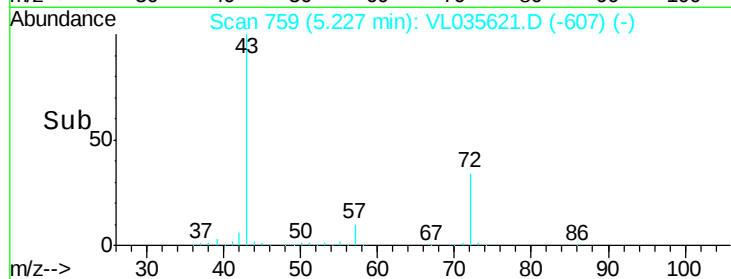
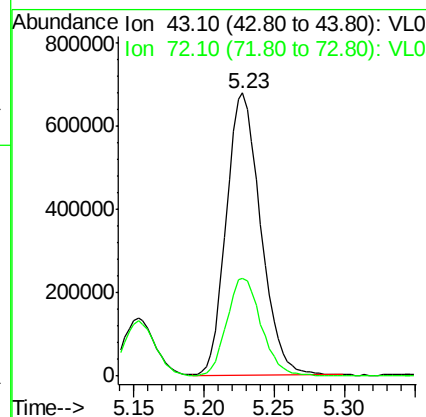
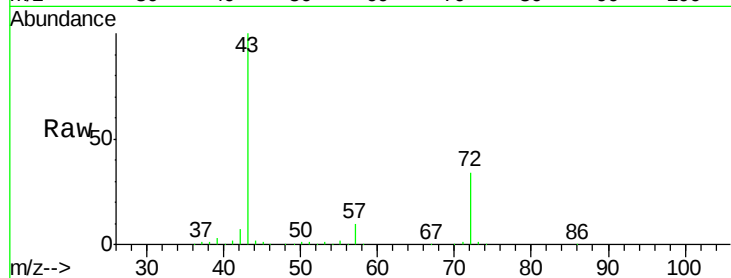
#34
2-Butanone
Concen: 9.815 ppbv
RT: 5.23 min Scan# 759
Delta R.T. -0.01 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampleId :
SV-9

Tot Ion: 43 Resp: 1152721
Ion Ratio Lower Upper
43 100
72 35.2 27.7 41.5

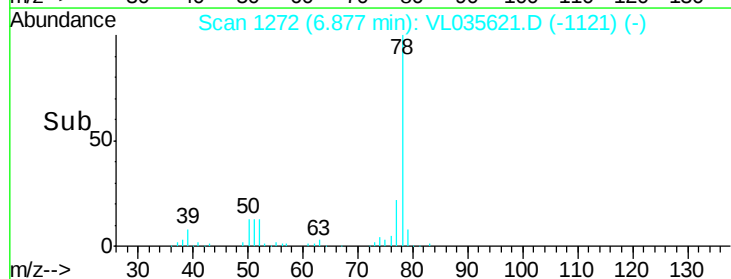
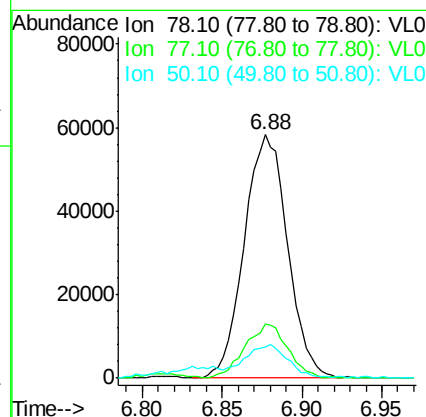
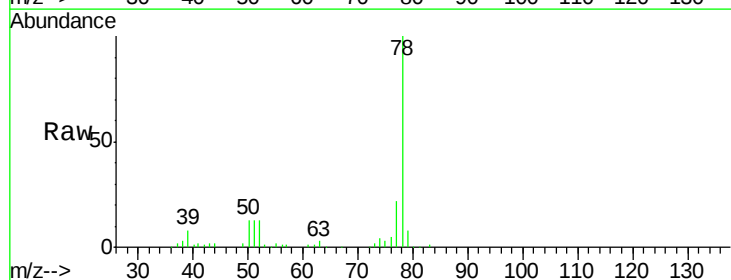
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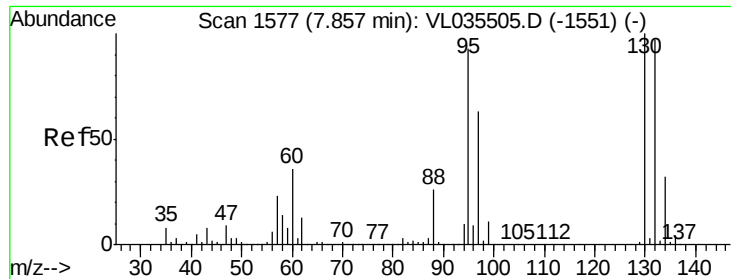
MMDadoda
9/17/2020 5:41:11 PM



#36
Benzene
Concen: 0.420 ppbv
RT: 6.88 min Scan# 1272
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion: 78 Resp: 107483
Ion Ratio Lower Upper
78 100
77 22.5 19.3 28.9
50 12.2 11.0 16.6





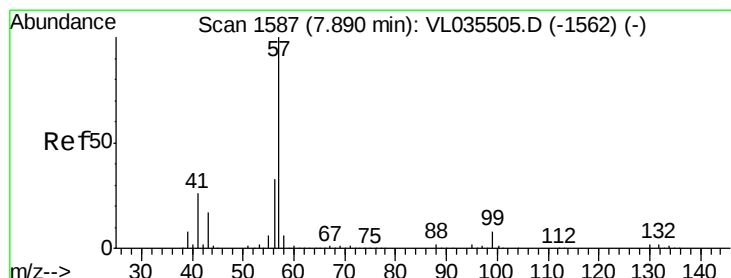
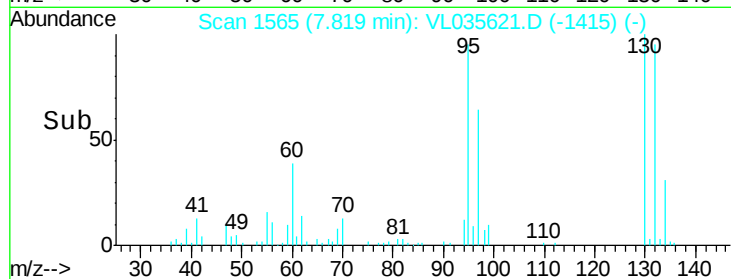
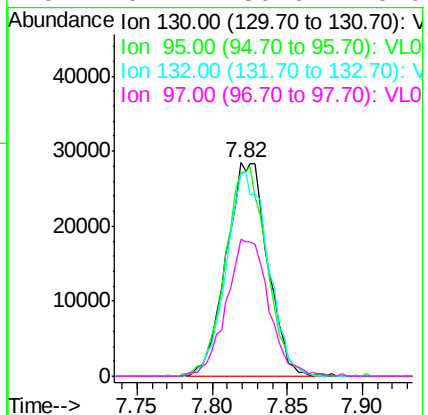
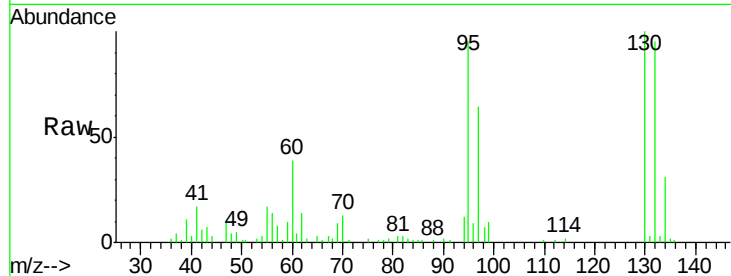
#38
 Trichloroethene
 Concen: 0.366 ppbv m
 RT: 7.82 min Scan# 1565
 Delta R.T. -0.02 min
 Lab File: VL035621.D
 Acq: 15 Sep 2020 5:14

Instrument :
 MSVOA_L
 ClientSampled :
 SV-9

Tot Ion	Ion	Ratio	Resp	Lower	Upper
130	100		54464		
95	95.3		74.6	112.0	
132	94.7		77.6	116.4	
97	64.1		50.6	76.0	

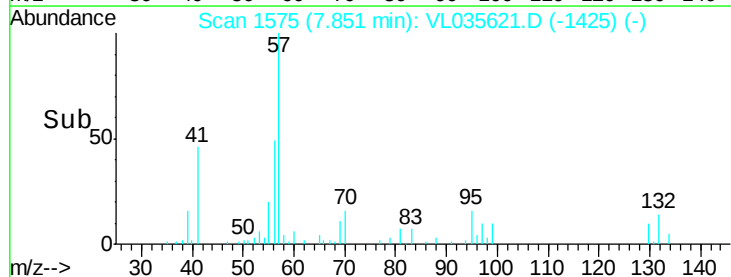
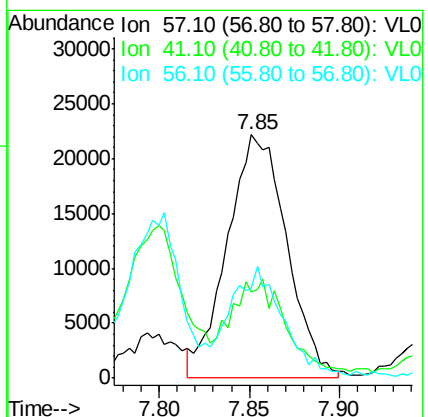
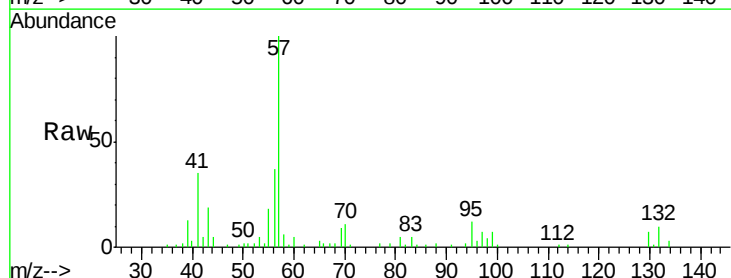
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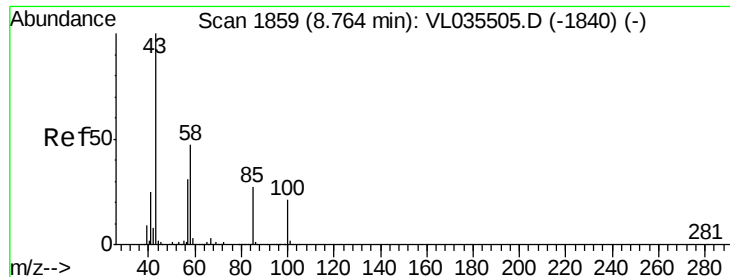
MMDadoda
 9/17/2020 5:41:11 PM



#44
 2,2,4-Trimethylpentane
 Concen: 0.151 ppbv m
 RT: 7.85 min Scan# 1575
 Delta R.T. -0.02 min
 Lab File: VL035621.D
 Acq: 15 Sep 2020 5:14

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100		50798		
41	34.9		20.5	30.7#	
56	0.0		25.3	37.9#	





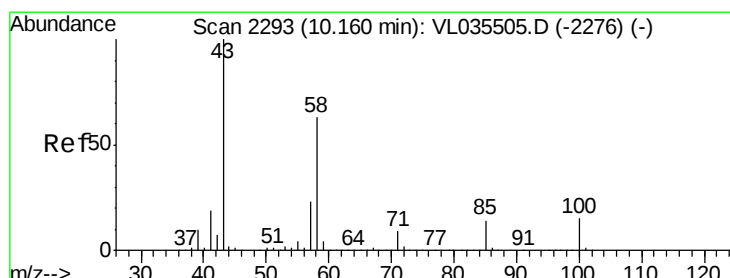
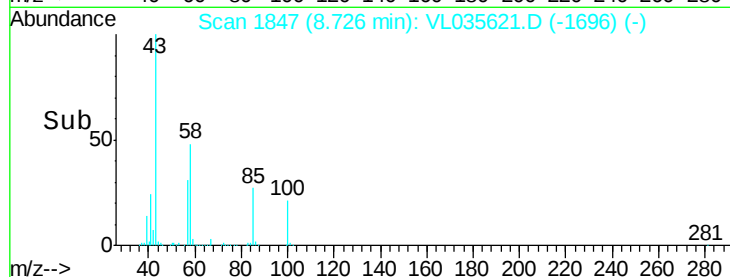
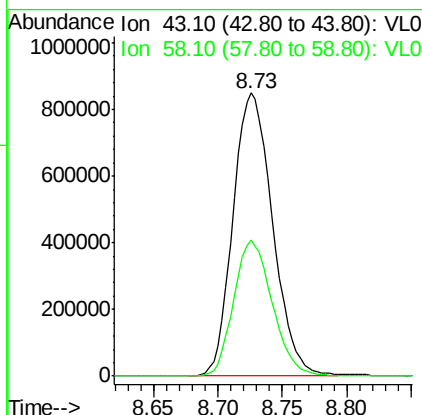
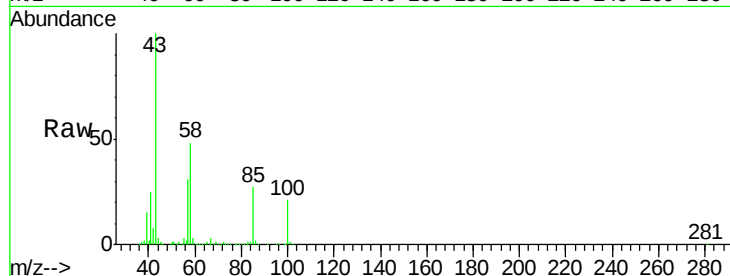
#50
4-Methyl-2-Pentanone
Concen: 10.661 ppbv
RT: 8.73 min Scan# 1847
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

Tot Ion: 43 Resp: 1813037
Ion Ratio Lower Upper
43 100
58 46.7 37.4 56.0

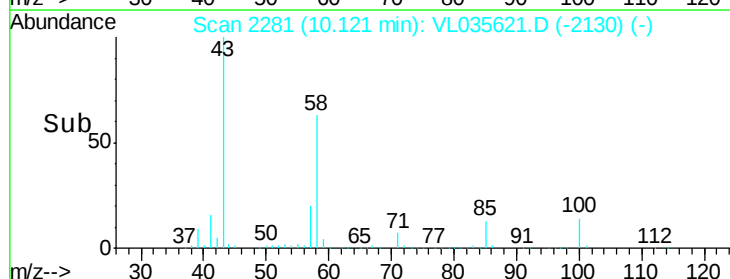
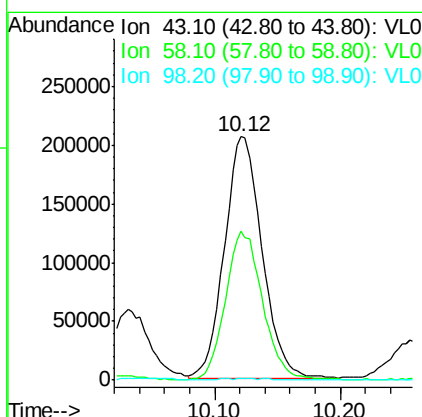
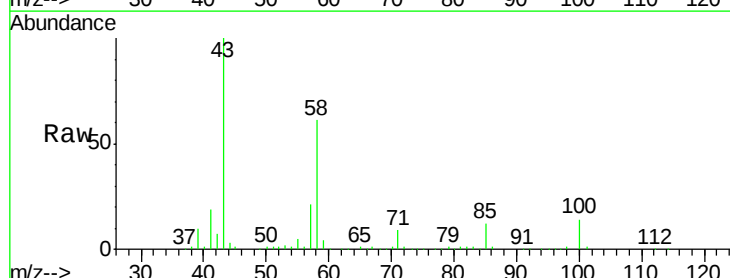
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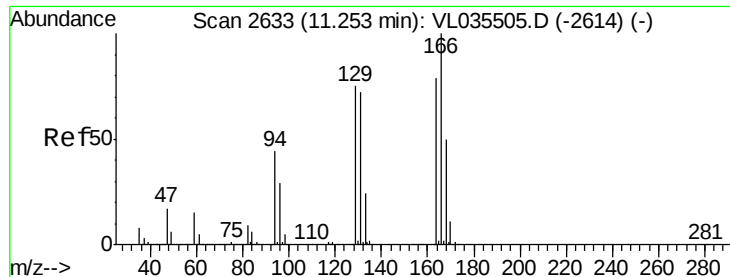
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#51
2-Hexanone
Concen: 3.060 ppbv
RT: 10.12 min Scan# 2281
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion: 43 Resp: 426929
Ion Ratio Lower Upper
43 100
58 60.8 50.2 75.4
98 1.0 0.4 0.6#





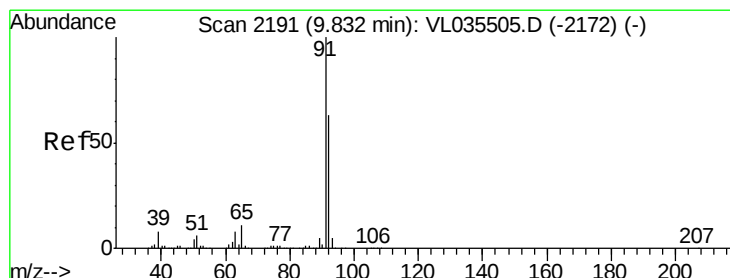
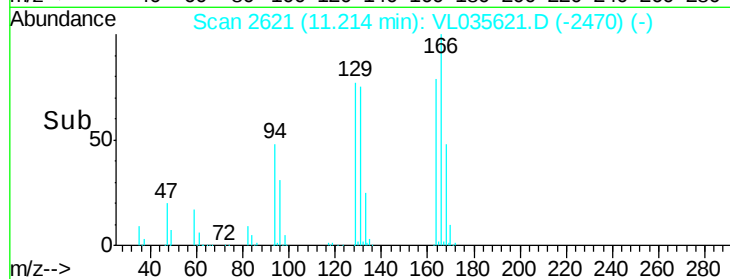
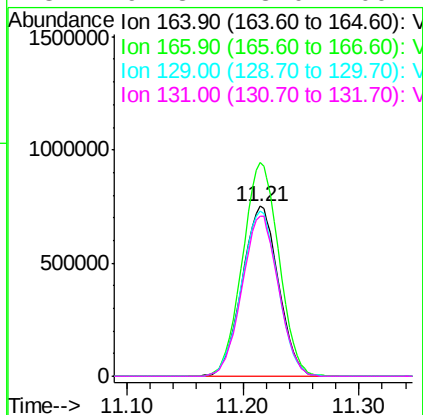
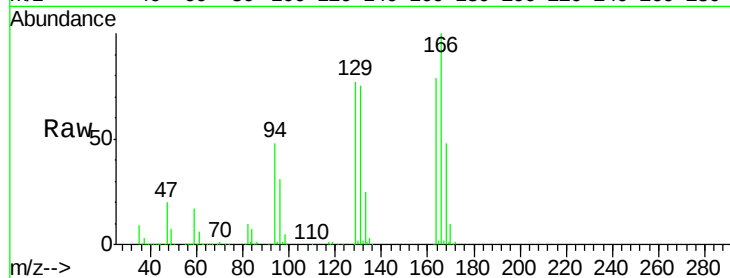
#52
Tetrachloroethene
Concen: 10.947 ppbv
RT: 11.21 min Scan# 2621
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampleId :
SV-9

Tot Ion	Ratio	Lower	Upper
164	100		
166	125.9	100.9	151.3
129	97.2	75.3	112.9
131	94.3	73.0	109.4

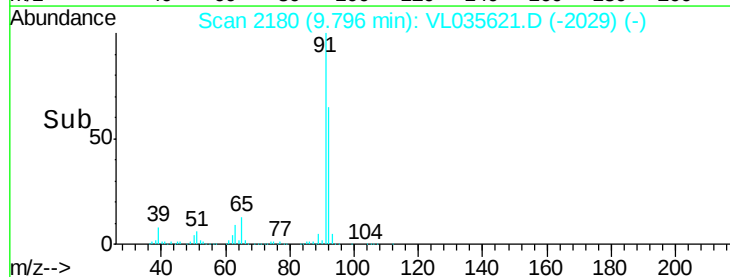
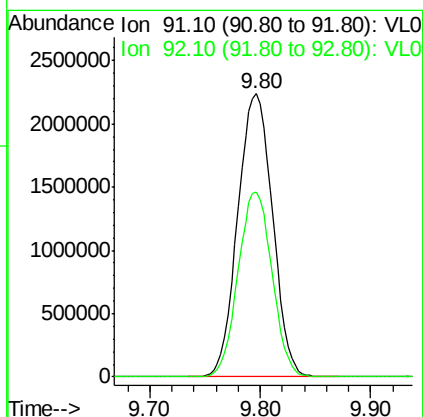
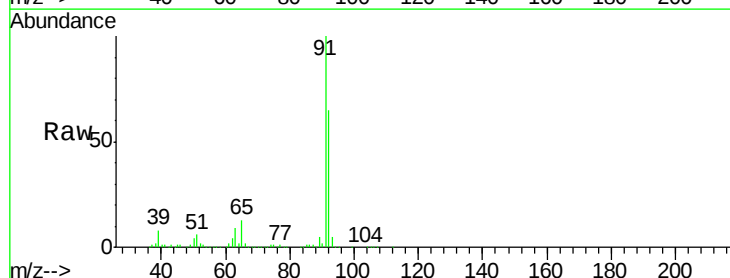
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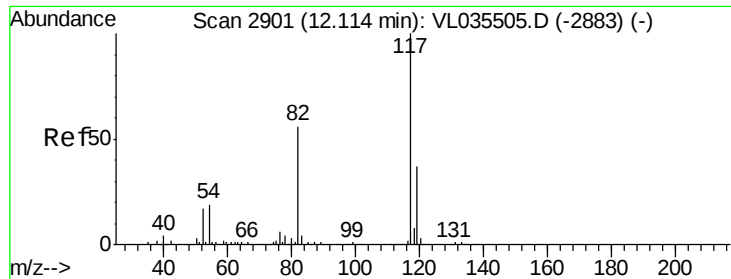
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#53
Toluene
Concen: 15.171 ppbv
RT: 9.80 min Scan# 2180
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Lower	Upper
91	100		
92	63.8	49.8	74.8





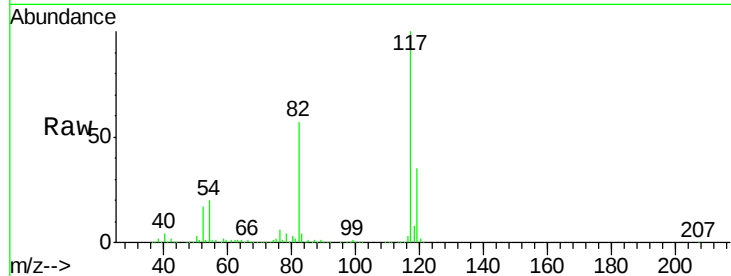
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.08 min Scan# 2890
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

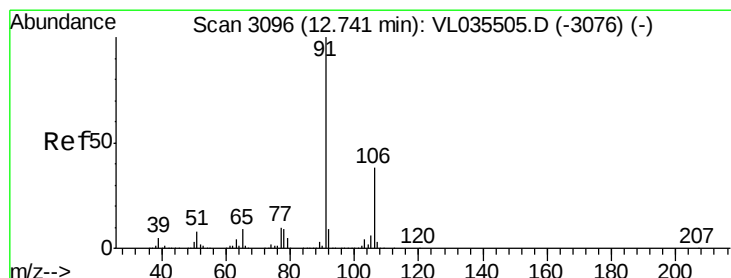
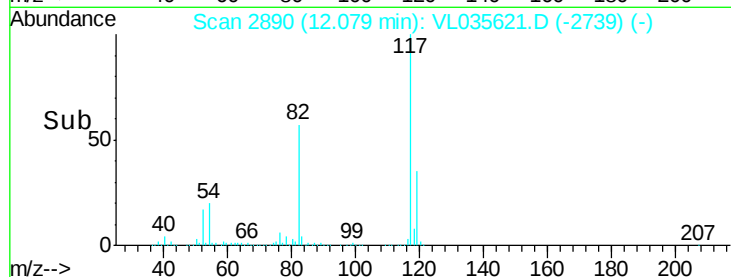
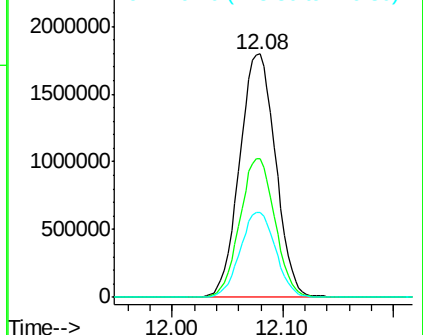
Tot Ion	Ratio	Lower	Upper
117	100		
82	55.7	41.6	62.4
119	34.3	29.3	43.9

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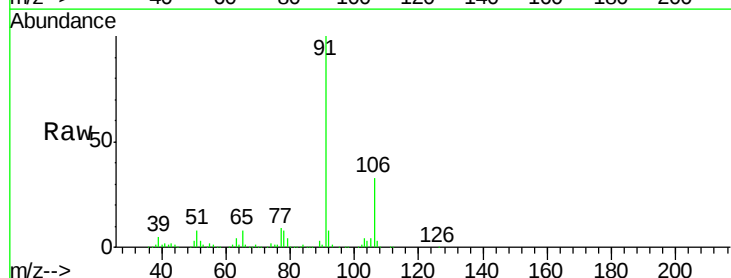


Abundance Ion 117.10 (116.80 to 117.80): VL0
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): VL0

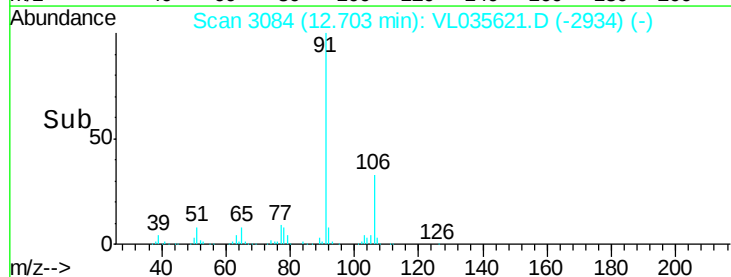
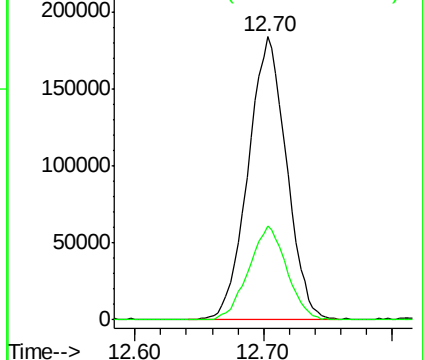


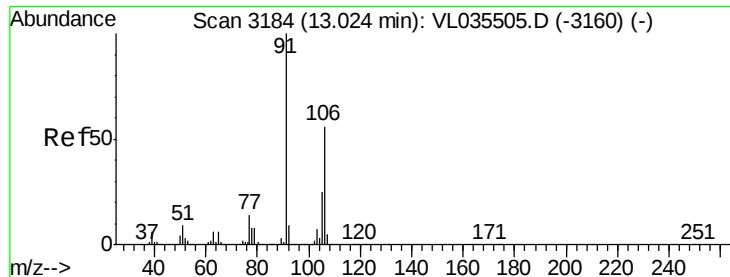
#58
Ethyl Benzene
Concen: 0.911 ppbv
RT: 12.70 min Scan# 3084
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Lower	Upper
91	100		
106	33.0	30.3	45.5



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





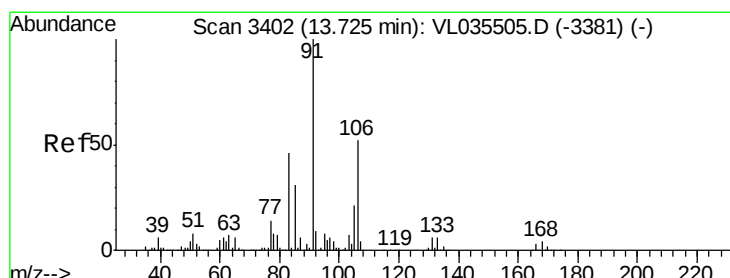
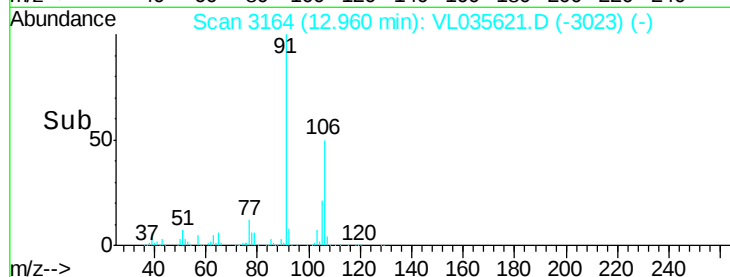
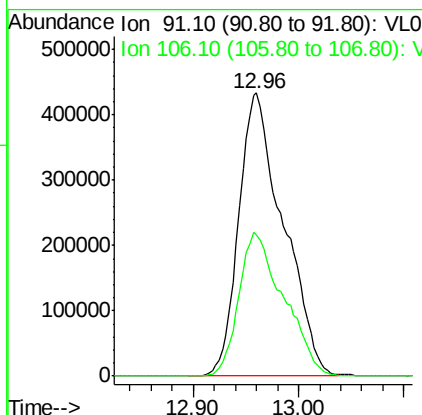
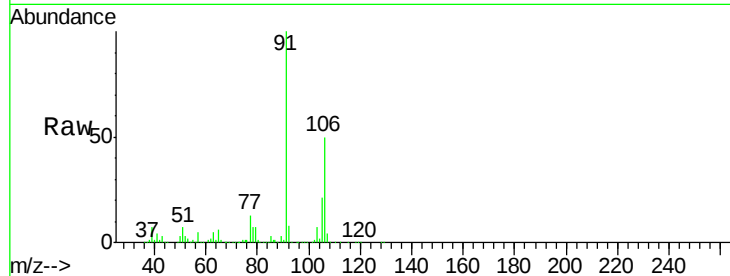
#59
m/p-Xylene
Concen: 3.638 ppbv
RT: 12.96 min Scan# 3164
Delta R.T. -0.05 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Instrument :
MSVOA_L
ClientSampled :
SV-9

Tot Ion: 91 Resp: 1271162
Ion Ratio Lower Upper
91 100
106 51.3 43.4 65.2

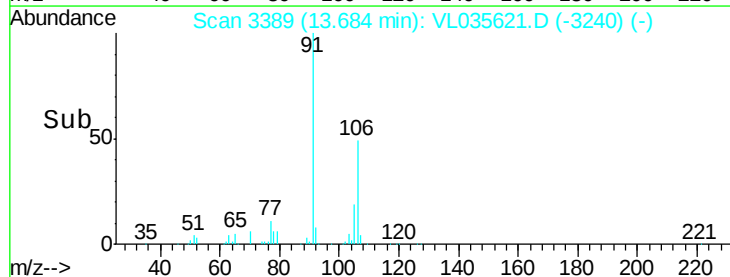
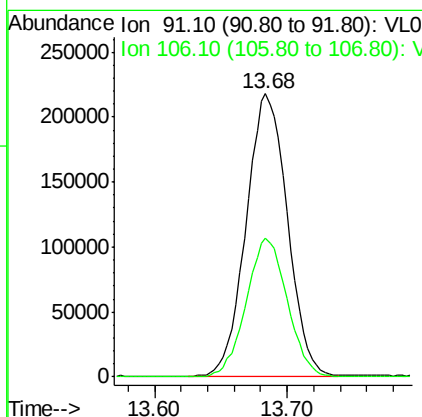
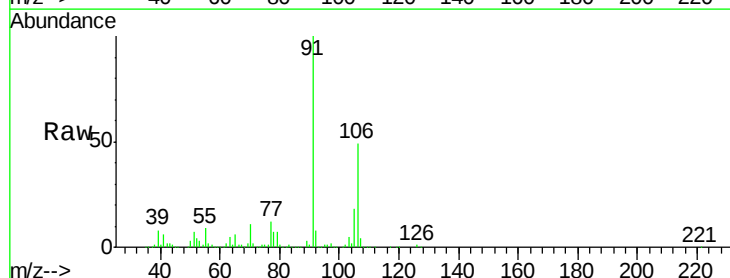
Manual Integrations
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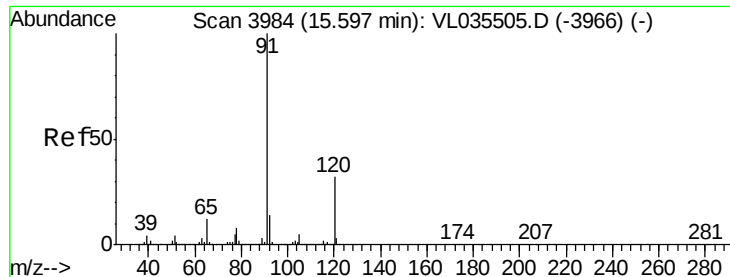
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#60
o-Xylene
Concen: 1.340 ppbv
RT: 13.68 min Scan# 3389
Delta R.T. -0.02 min
Lab File: VL035621.D
Acq: 15 Sep 2020 5:14

Tgt Ion: 91 Resp: 471464
Ion Ratio Lower Upper
91 100
106 48.9 25.8 77.4





#64

n-propylbenzene

Concen: 0.280 ppbv

RT: 15.56 min Scan# 3972

Delta R.T. -0.02 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Instrument :

MSVOA_L

ClientSampled :

SV-9

Tot Ion:120 Resp: 48386

Ion Ratio Lower Upper

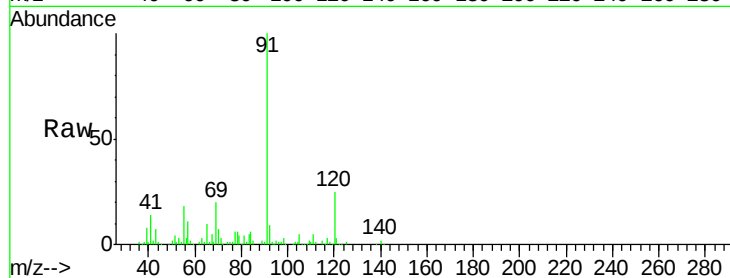
120 100

91 450.0 279.4 419.0#

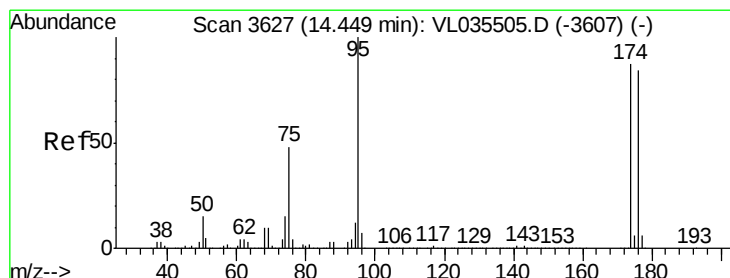
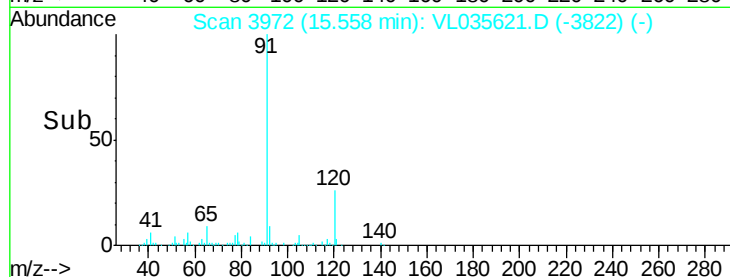
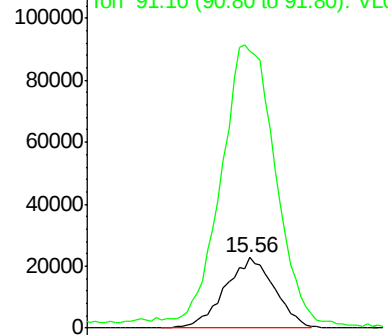
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Abundance Ion 120.20 (119.90 to 120.90): V



#68

1-Bromo-4-Fluorobenzene

Concen: 10.775 ppbv

RT: 14.41 min Scan# 3615

Delta R.T. -0.02 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

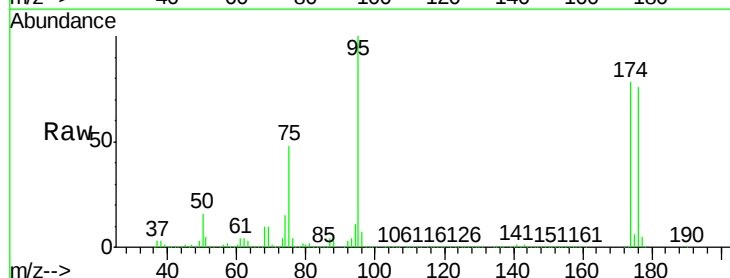
Tgt Ion: 95 Resp: 3102526

Ion Ratio Lower Upper

95 100

174 78.2 69.6 104.4

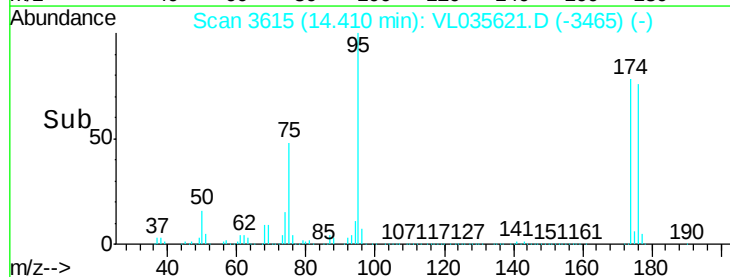
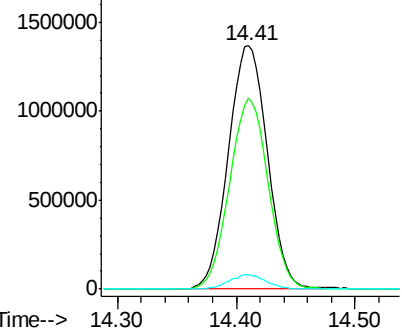
175 5.7 5.1 7.7

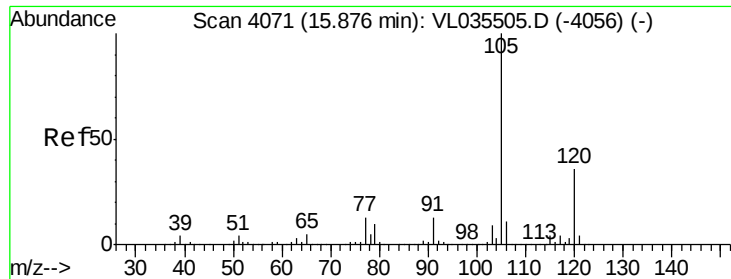


Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V





#72

4-Ethyltoluene

Concen: 0.585 ppbv

RT: 15.84 min Scan# 4059

Delta R.T. -0.02 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Instrument :

MSVOA_L

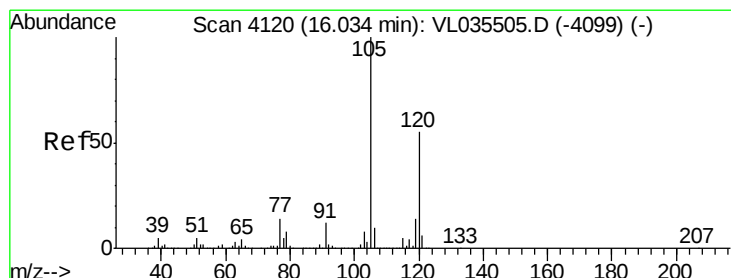
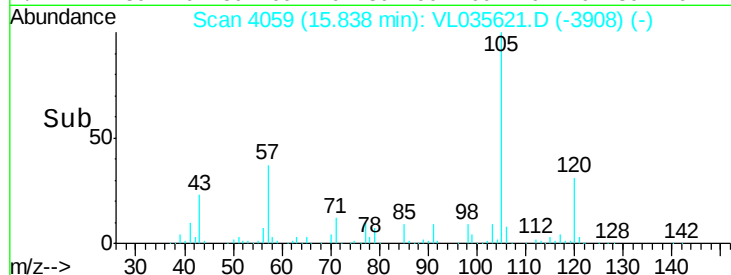
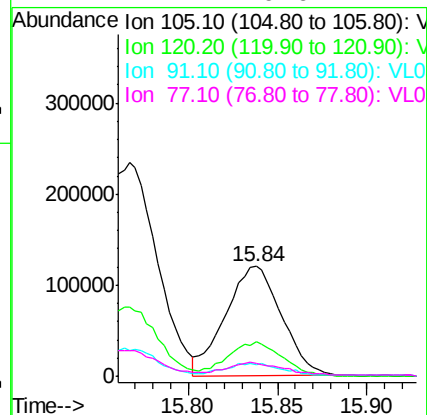
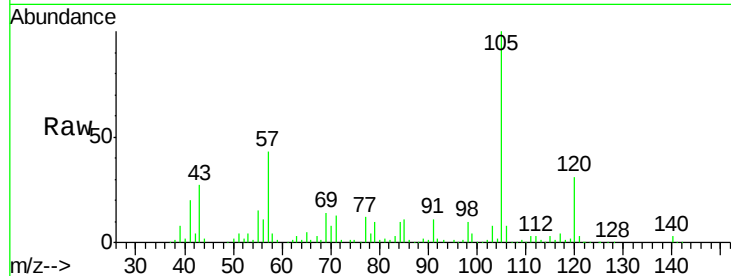
ClientSampled :

SV-9

Tot Ion	Ratio	Lower	Upper
105	100		
120	31.0	27.4	41.2
91	11.6	9.7	14.5
77	12.2	9.6	14.4

Manual Integrations
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MMDadoda
9/17/2020 5:41:11 PM



#73

1,3,5-Trimethylbenzene

Concen: 0.422 ppbv

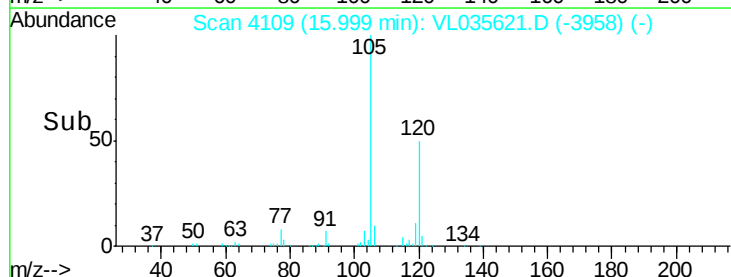
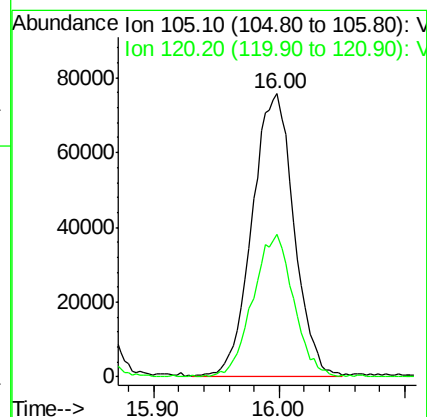
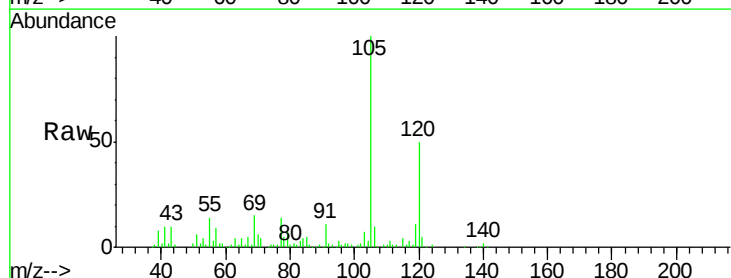
RT: 16.00 min Scan# 4109

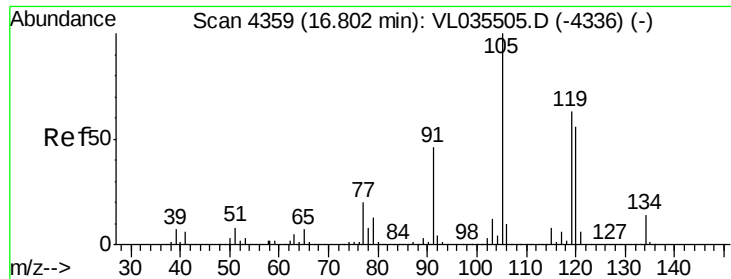
Delta R.T. -0.02 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Lower	Upper
105	100		
120	50.0	44.2	66.2





#74

1,2,4-Trimethylbenzene

Concen: 1.588 ppbv

RT: 16.76 min Scan# 4347

Delta R.T. -0.02 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Instrument :

MSVOA_L

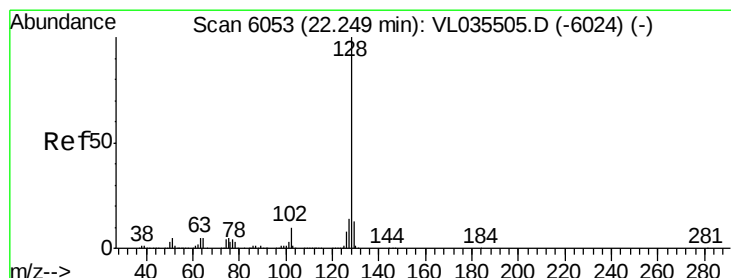
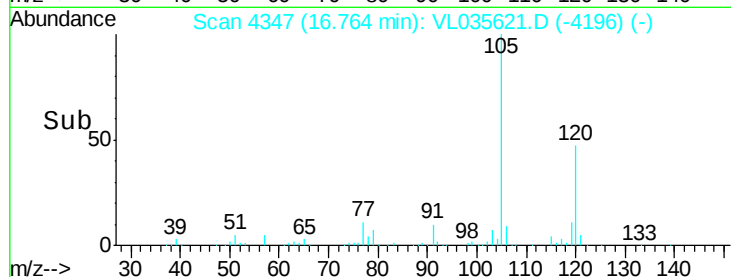
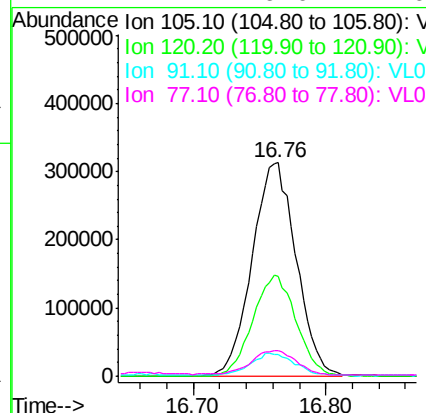
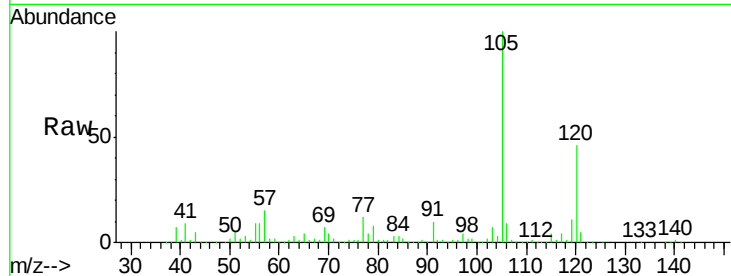
ClientSampleId :

SV-9

Tot Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	46.4	44.4	66.6
91	9.7	37.1	55.7#
77	11.2	16.0	24.0#

Manual Integrations
APPROVED

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9/17/2020 5:41:11 PM



#79

Naphthalene

Concen: 0.197 ppbv

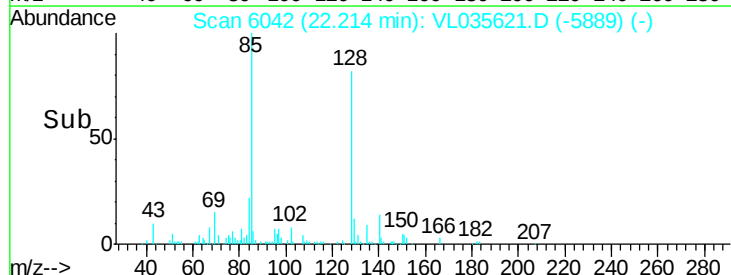
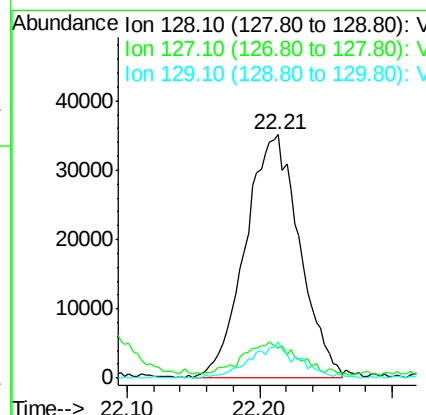
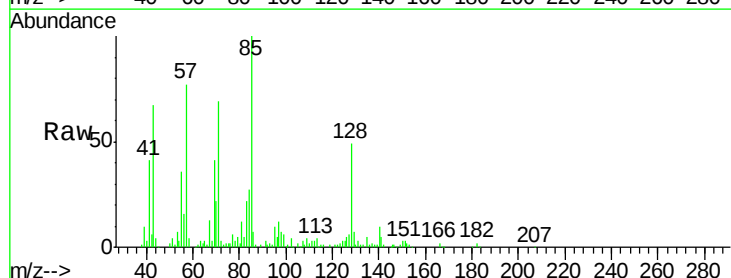
RT: 22.21 min Scan# 6042

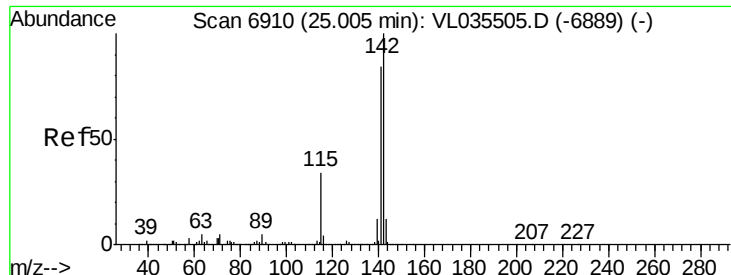
Delta R.T. -0.01 min

Lab File: VL035621.D

Acq: 15 Sep 2020 5:14

Tgt Ion	Ratio	Resp Lower	Resp Upper
128	100		
127	10.7	11.4	17.2#
129	14.9	10.5	15.7





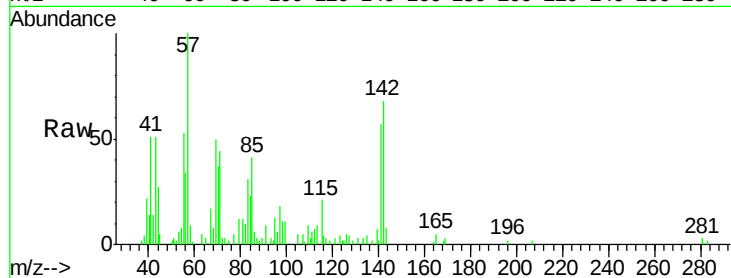
#80
 Naphthalene, 2-methyl-
 Concen: 0.097 ppbv
 RT: 24.99 min Scan# 6904
 Delta R.T. -0.01 min
 Lab File: VL035621.D
 Acq: 15 Sep 2020 5:14

Instrument :
 MSVOA_L
 ClientSampleId :
 SV-9

Tot Ion	Ratio	Lower	Upper
142	100		
141	85.9	67.6	101.4
115	37.6	25.8	38.8

Manual Integrations
 APPROVED

MMDadoda
 9/17/2020 5:41:11 PM



Abundance

Ion 142.00 (141.70 to 142.70): V

Ion 141.00 (140.70 to 141.70): V

Ion 115.00 (114.70 to 115.70): V

