

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111220\
 Data File : VL035924.D
 Acq On : 12 Nov 2020 22:00
 Operator : SY/AP
 Sample : L4721-01DUP
 Misc : 400ml/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1DUP

Manual Integrations
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 11/16/2020 2:30:58 PM

Quant Time: Nov 24 04:45:48 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL110320AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Nov 04
 QLast Update : Wed Nov 04 02:40:06 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1189542	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	4129579	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	3775210	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.41	95	2862982	10.67	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.03	85	53683	0.240	ppbv	95
3) Chlorodifluoromethane	2.98	51	76510m	0.537	ppbv	
4) Chloromethane	3.13	50	39304	0.568	ppbv	98
9) Propene	3.01	41	73169	1.403	ppbv #	82
10) Heptane	8.11	43	18518m	0.129	ppbv	
11) Trichlorofluoromethane	3.94	101	69562	0.247	ppbv	99
13) Ethanol	3.64	45	17701828	1564.976	ppbv	97
15) Acetone	3.84	43	1736409	13.654	ppbv	94
17) tert-Butyl alcohol	4.34	59	137440m	0.815	ppbv	
19) Isopropyl Alcohol	4.01	45	6825970	87.343	ppbv #	97
20) Methylene Chloride	4.34	84	1032141	11.529	ppbv	99
26) Hexane	5.68	57	806162	5.835	ppbv #	48
29) Chloroform	5.74	83	43165	0.159	ppbv	91
30) Cyclohexane	7.16	84	43442m	0.289	ppbv	
34) 2-Butanone	5.24	43	81783	0.610	ppbv	99
35) Carbon Tetrachloride	7.01	117	14265	0.065	ppbv	90
36) Benzene	6.88	78	111207	0.362	ppbv	93
38) Trichloroethene	7.83	130	6920m	0.046	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	106541	0.262	ppbv #	77
50) 4-Methyl-2-Pentanone	8.75	43	52909	0.258	ppbv	93
51) 2-Hexanone	10.14	43	32742m	0.199	ppbv	
52) Tetrachloroethene	11.21	164	6360m	0.044	ppbv	
53) Toluene	9.80	91	1848577	4.990	ppbv	98
59) m/p-Xylene	12.96	91	142256m	0.366	ppbv	
60) o-Xylene	13.69	91	63638m	0.168	ppbv	
74) 1,2,4-Trimethylbenzene	16.76	105	79931m	0.178	ppbv	

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

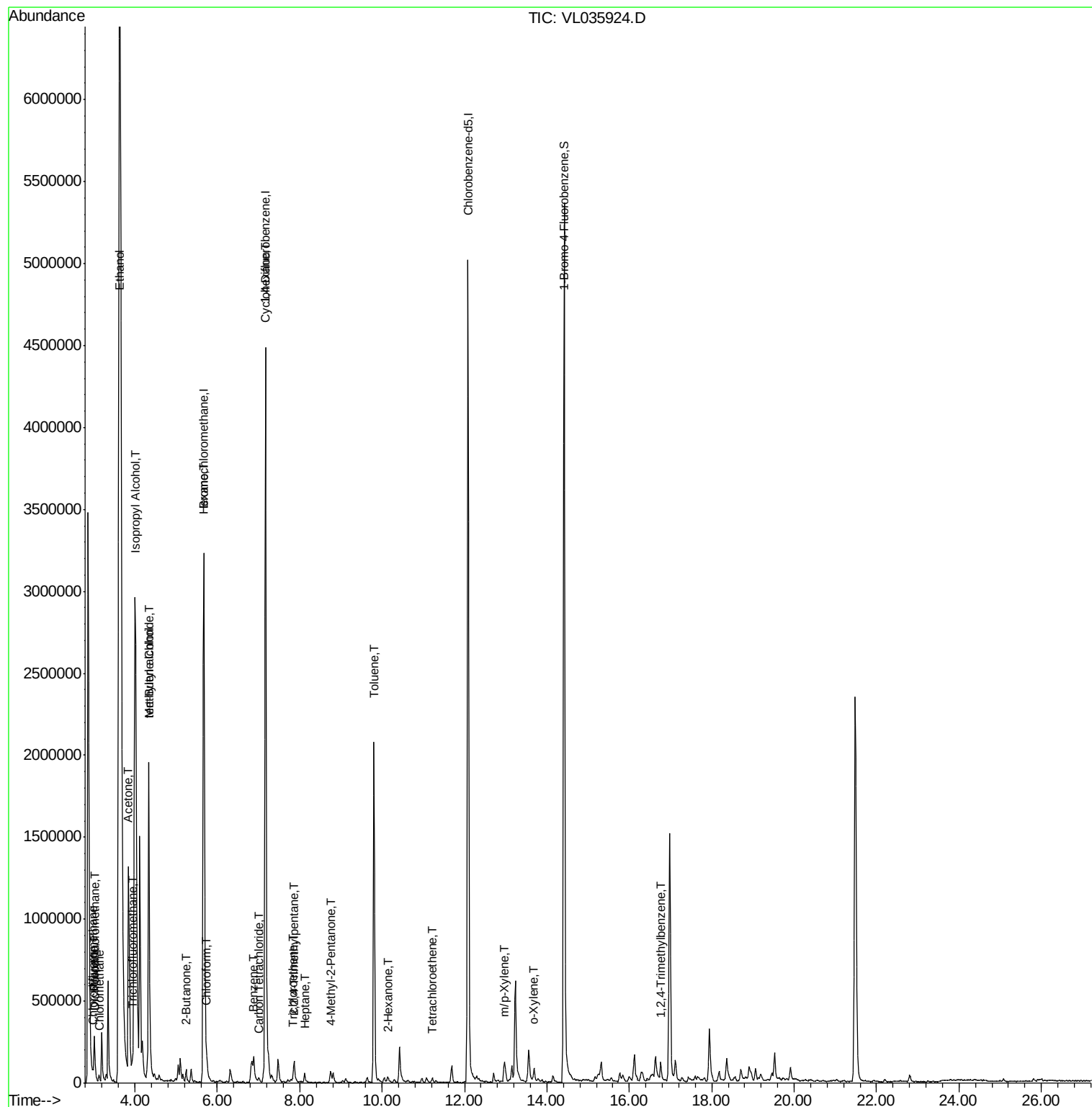
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL111220\
Data File : VL035924.D
Acq On : 12 Nov 2020 22:00
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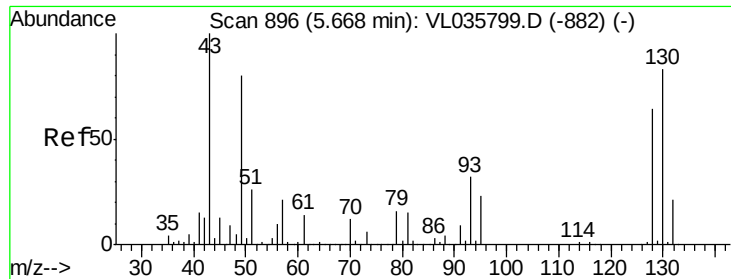
Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Manual Integrations
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Quant Time: Nov 24 04:45:48 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL110320AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Nov
QLast Update : Wed Nov 04 02:40:06 2020
Response via : Initial Calibration





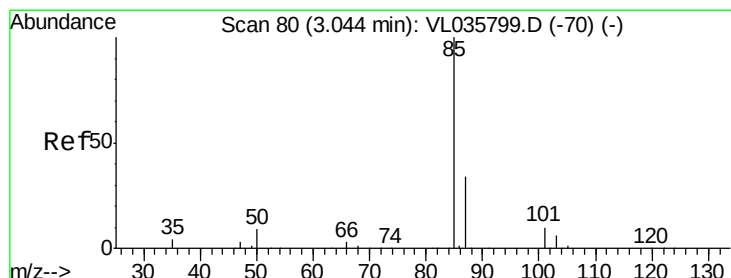
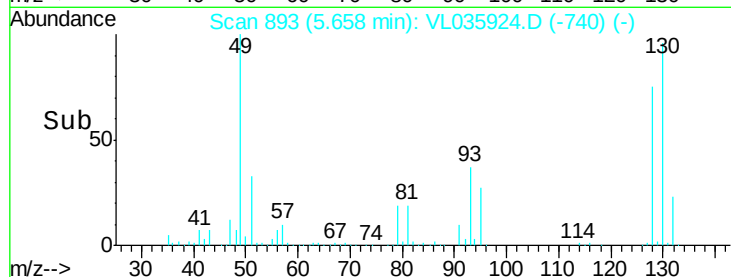
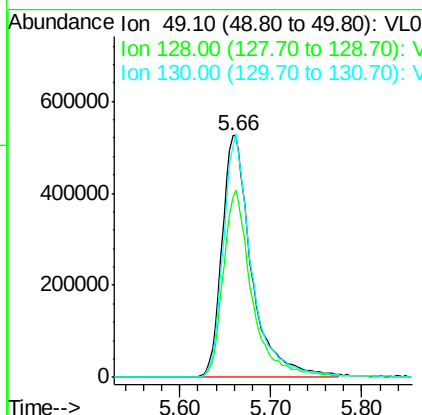
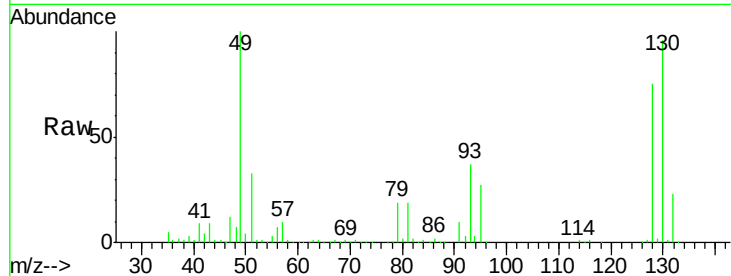
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 5.66 min Scan# 893
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Tgt Ion: 49 Resp: 1189542
Ion Ratio Lower Upper
49 100
128 75.5 41.5 124.6
130 97.1 53.7 161.1

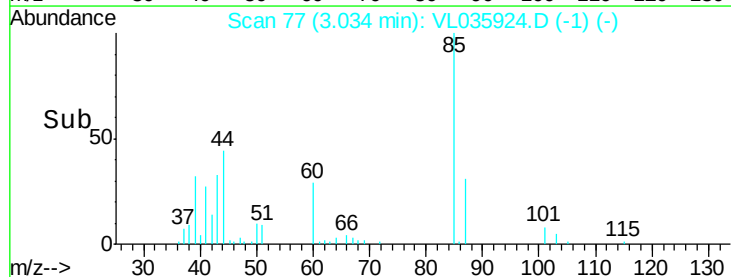
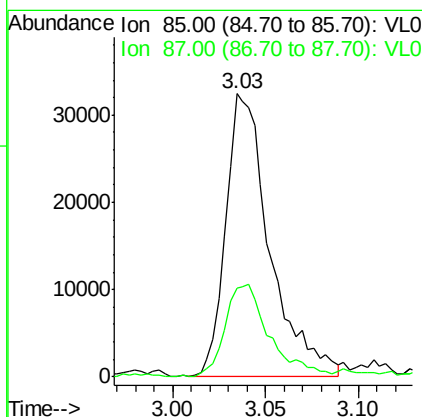
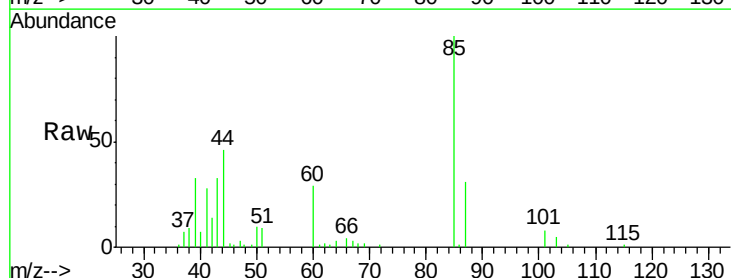
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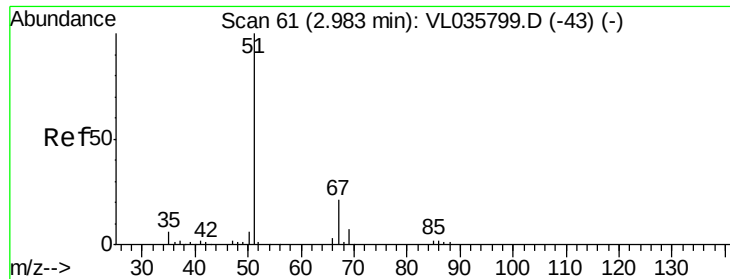
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#2
Dichlorodifluoromethane
Concen: 0.240 ppbv
RT: 3.03 min Scan# 77
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion: 85 Resp: 53683
Ion Ratio Lower Upper
85 100
87 31.2 27.1 40.7





#3

Chlorodifluoromethane

Concen: 0.537 ppbv

RT: 2.98 min Scan# 60

Delta R.T. -0.00 min

Lab File: VL035924.D

Acq: 12 Nov 2020 22:00

Instrument :

MSVOA_L

ClientSampleId :

LA-1DUP

Tgt Ion: 51 Resp: 76510

Ion Ratio Lower Upper

51 100

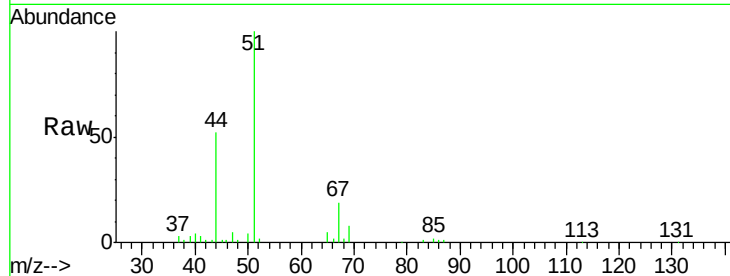
67 17.4 17.0 25.4

Manual Integrations

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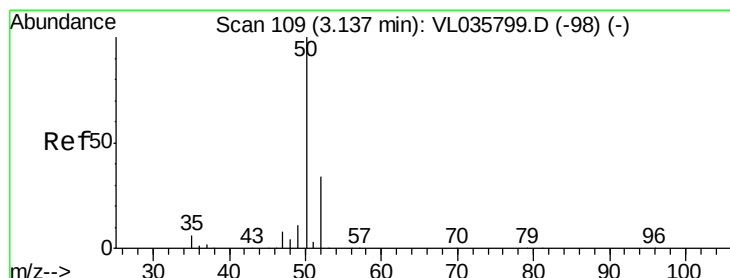
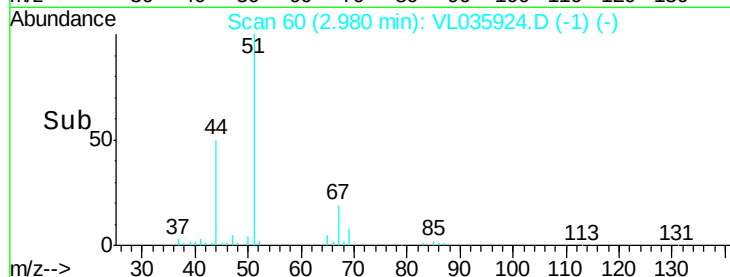
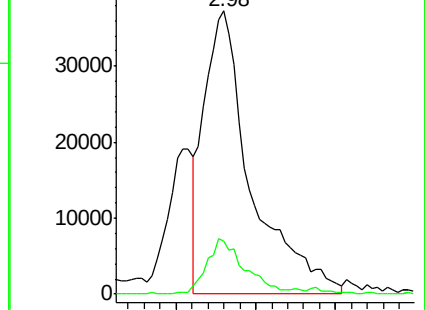
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.568 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.00 min

Lab File: VL035924.D

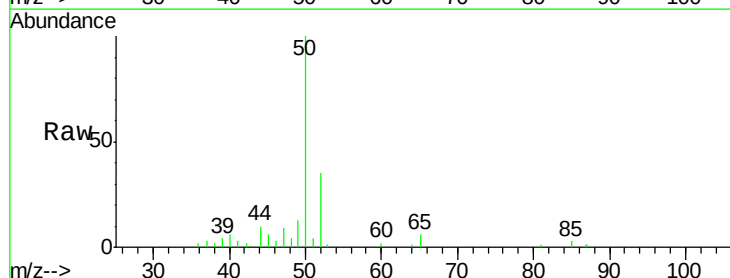
Acq: 12 Nov 2020 22:00

Tgt Ion: 50 Resp: 39304

Ion Ratio Lower Upper

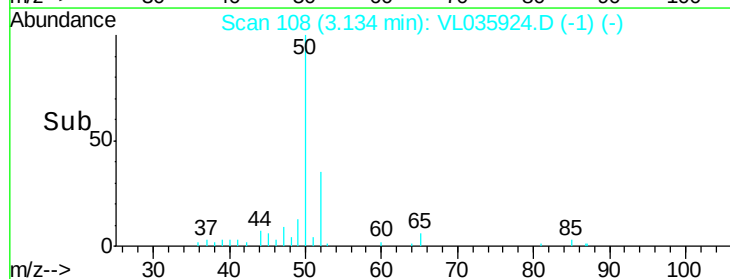
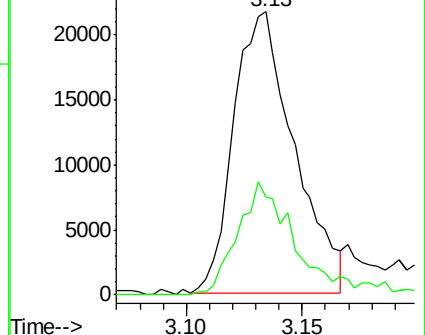
50 100

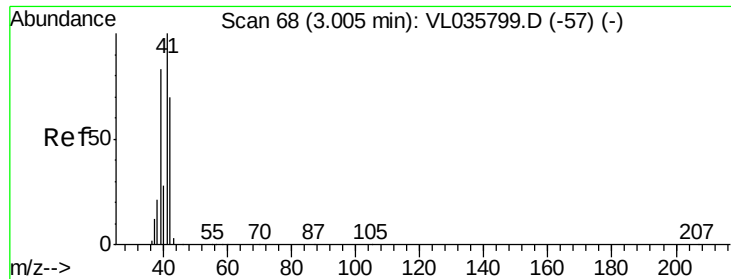
52 34.8 27.1 40.7



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





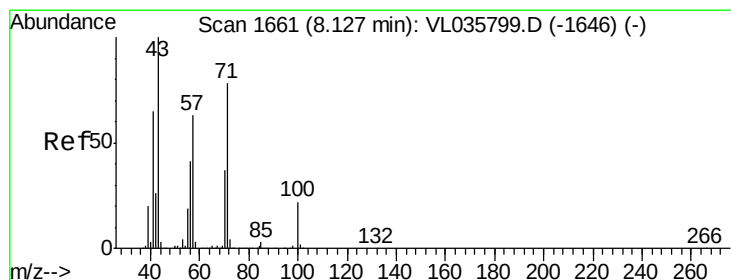
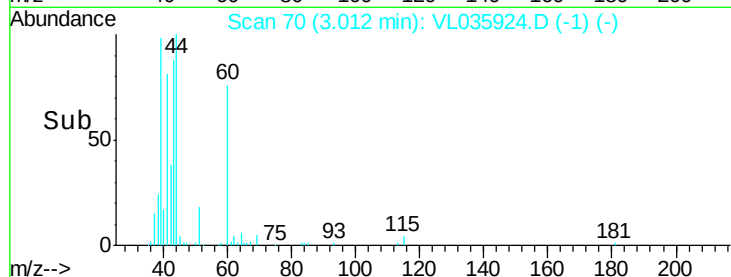
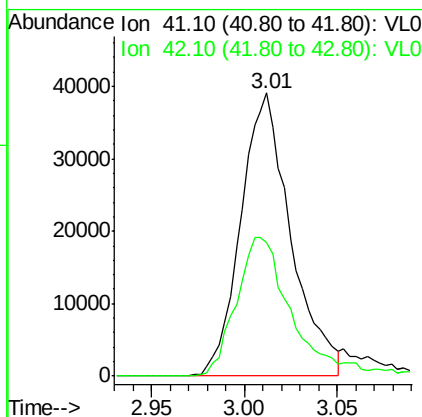
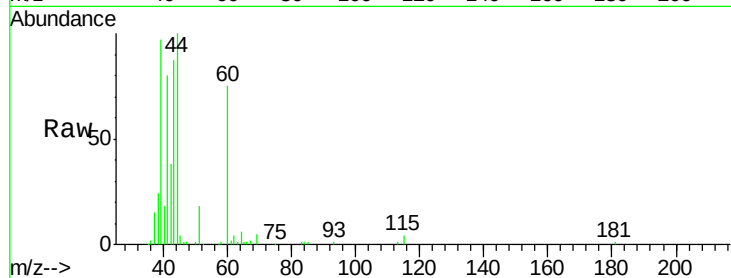
#9
 Propene
 Concen: 1.403 ppbv
 RT: 3.01 min Scan# 70
 Delta R.T. 0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1DUP

Tgt Ion: 41 Resp: 73169
 Ion Ratio Lower Upper
 41 100
 42 55.6 56.2 84.4#

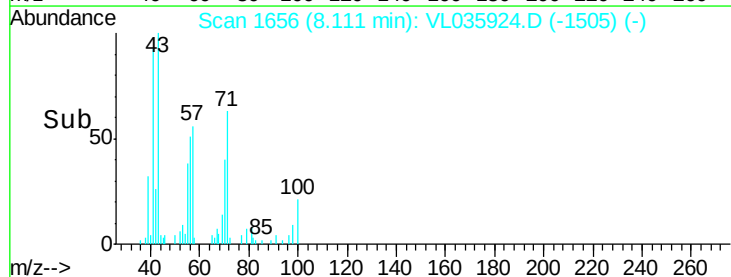
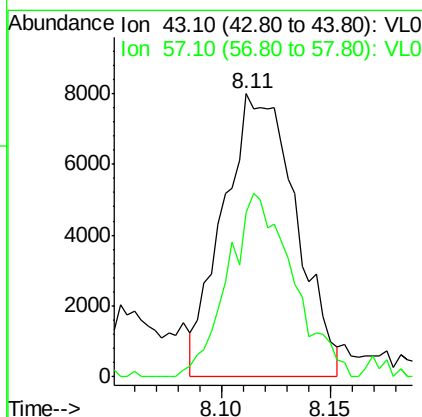
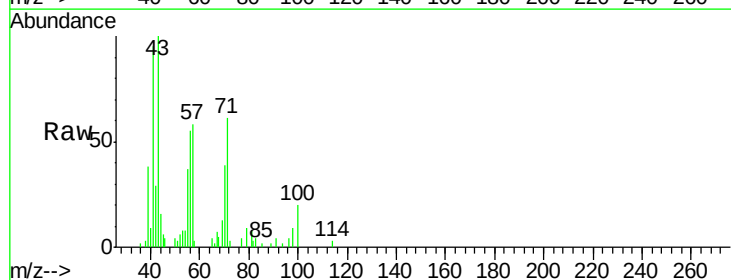
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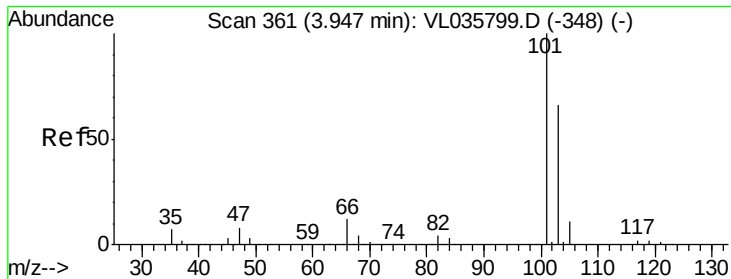
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#10
 Heptane
 Concen: 0.129 ppbv m
 RT: 8.11 min Scan# 1656
 Delta R.T. -0.02 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Tgt Ion: 43 Resp: 18518
 Ion Ratio Lower Upper
 43 100
 57 59.7 50.0 75.0





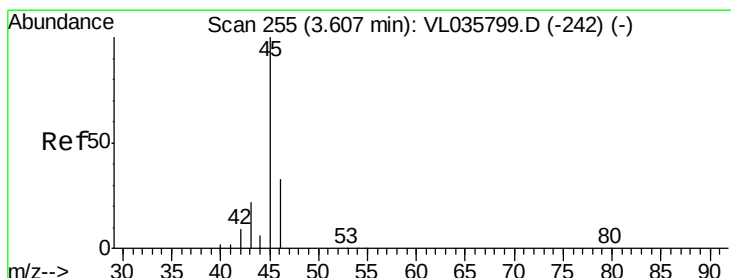
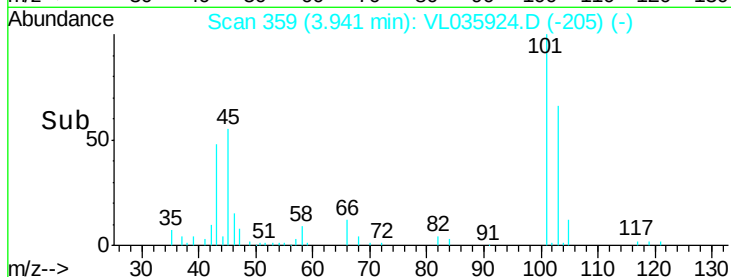
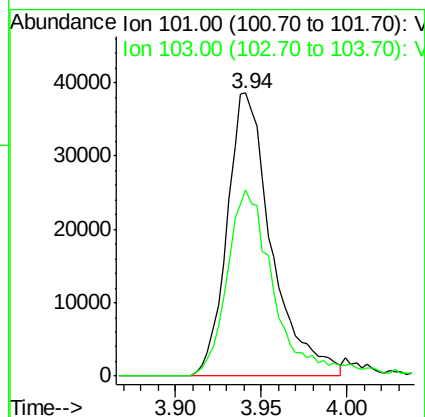
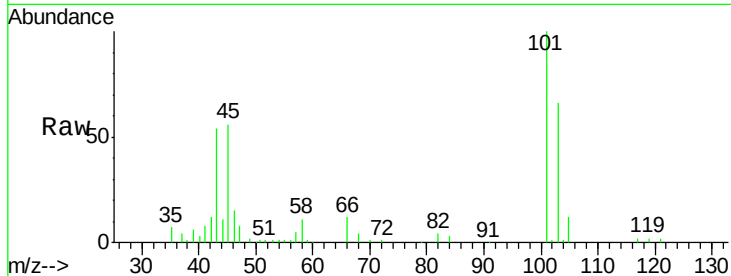
#11
 Trichlorofluoromethane
 Concen: 0.247 ppbv
 RT: 3.94 min Scan# 359
 Delta R.T. -0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1DUP

Tgt Ion:101 Resp: 69562
 Ion Ratio Lower Upper
 101 100
 103 65.6 53.0 79.4

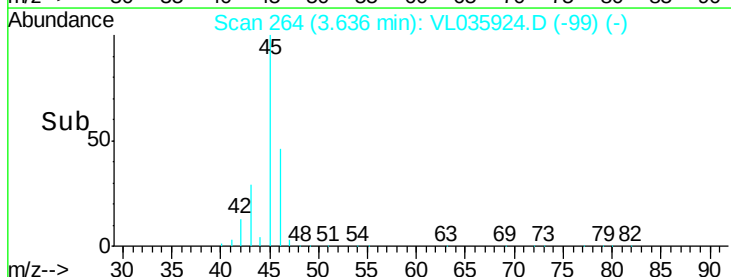
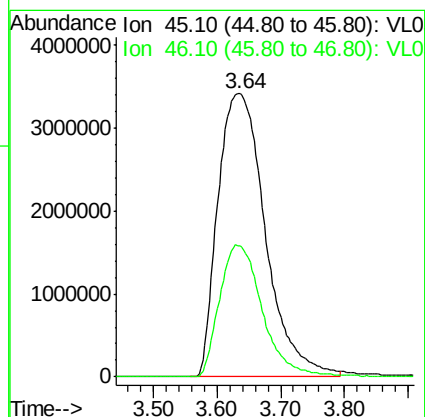
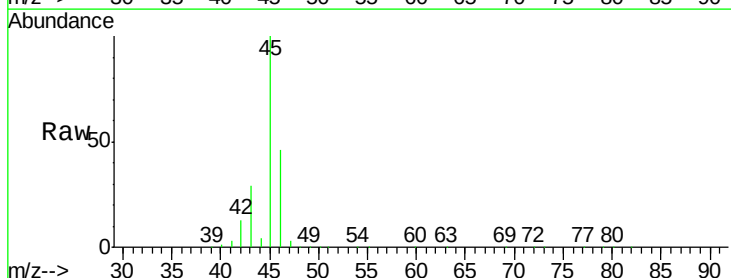
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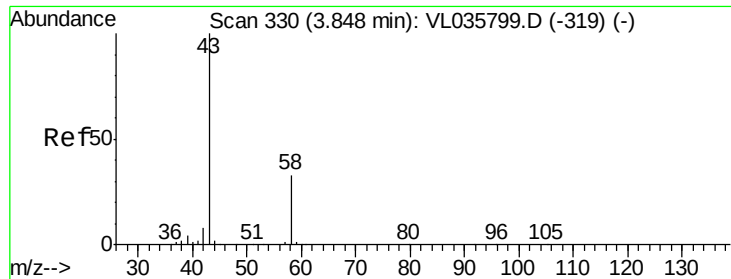
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#13
 Ethanol
 Concen: 1564.976 ppbv
 RT: 3.64 min Scan# 264
 Delta R.T. 0.03 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Tgt Ion: 45 Resp:17701828
 Ion Ratio Lower Upper
 45 100
 46 42.5 16.1 64.5





#15

Acetone

Concen: 13.654 ppbv

RT: 3.84 min Scan# 327

Delta R.T. -0.01 min

Lab File: VL035924.D

Acq: 12 Nov 2020 22:00

Instrument :

MSVOA_L

ClientSampleId :

LA-1DUP

Tgt Ion: 43 Resp: 1736409

Ion Ratio Lower Upper

43 100

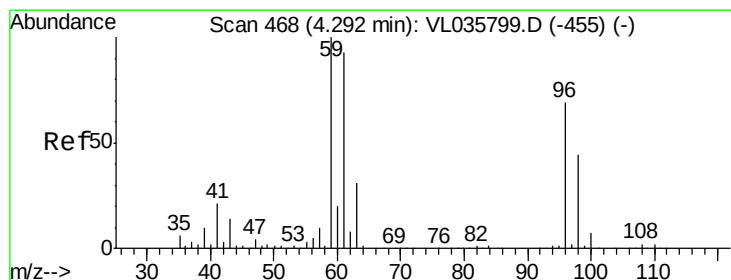
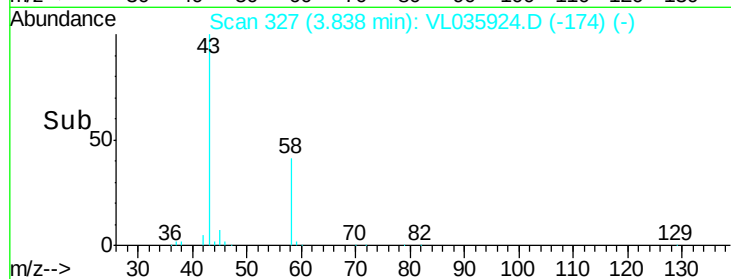
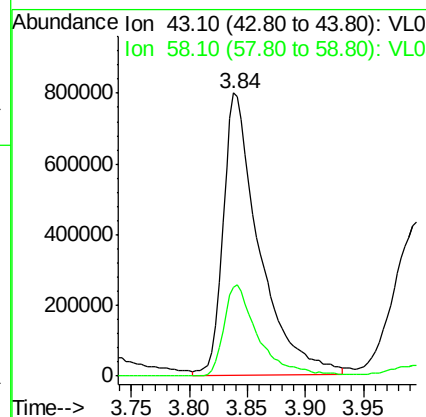
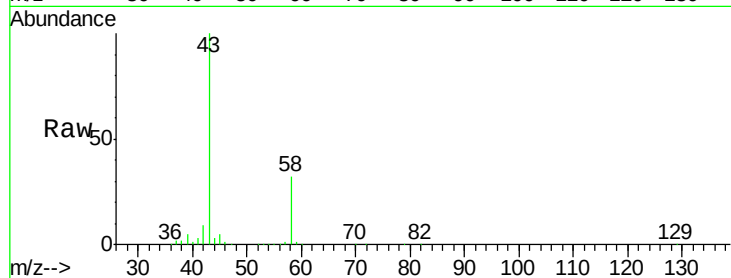
58 31.1 27.5 41.3

Manual Integrations

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#17

tert-Butyl alcohol

Concen: 0.815 ppbv m

RT: 4.34 min Scan# 482

Delta R.T. 0.05 min

Lab File: VL035924.D

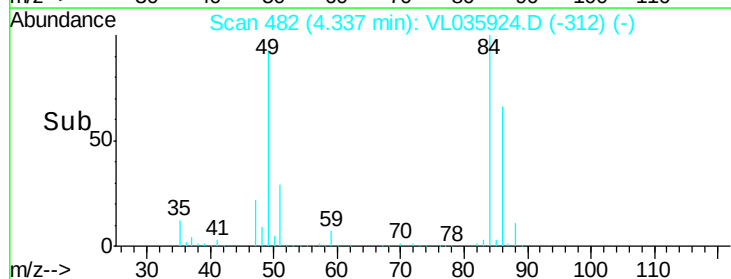
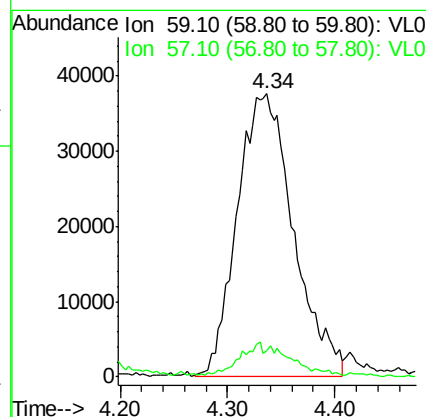
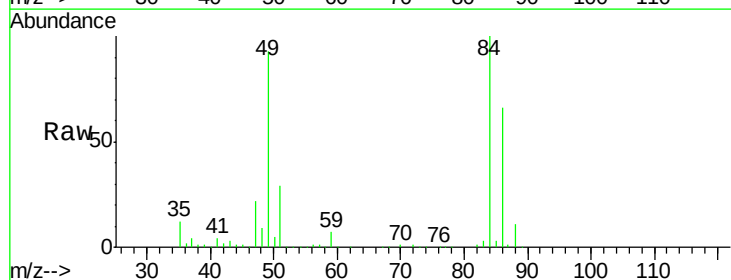
Acq: 12 Nov 2020 22:00

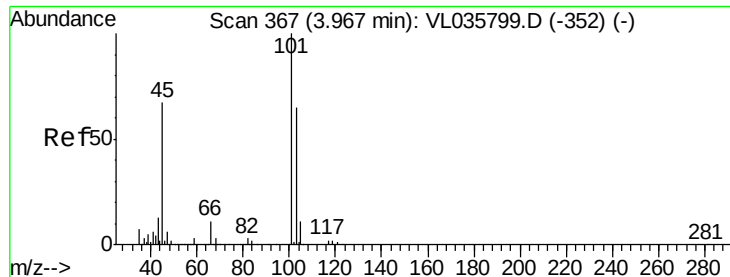
Tgt Ion: 59 Resp: 137440

Ion Ratio Lower Upper

59 100

57 0.0 8.2 12.4#





#19

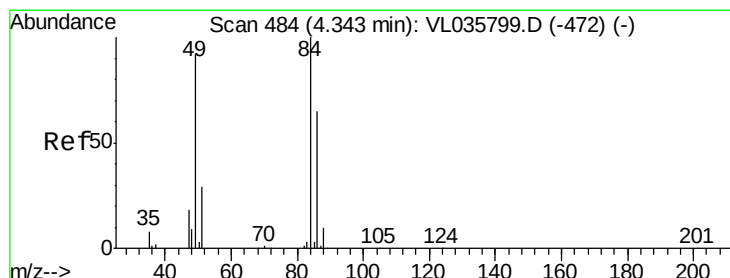
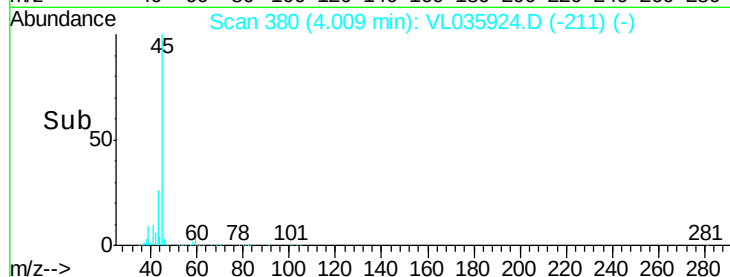
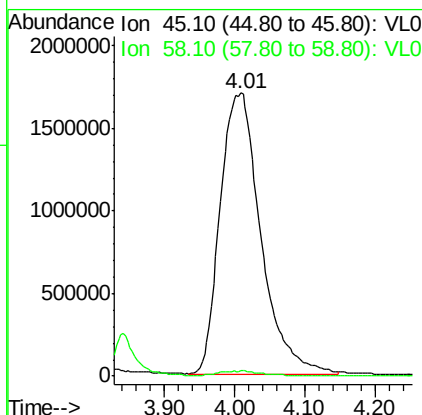
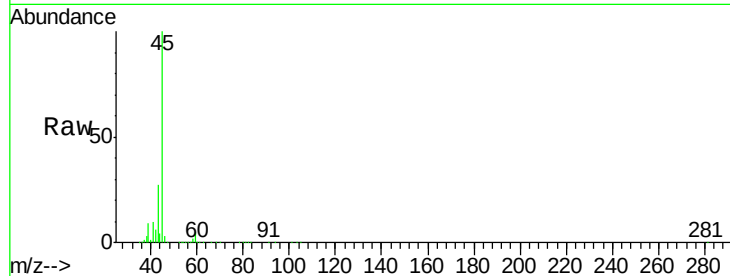
Isopropyl Alcohol
 Concen: 87.343 ppbv
 RT: 4.01 min Scan# 380
 Delta R.T. 0.04 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1DUP

Tgt Ion: 45 Resp: 6825970
 Ion Ratio Lower Upper
 45 100
 58 2.1 2.6 3.8#

Manual Integrations
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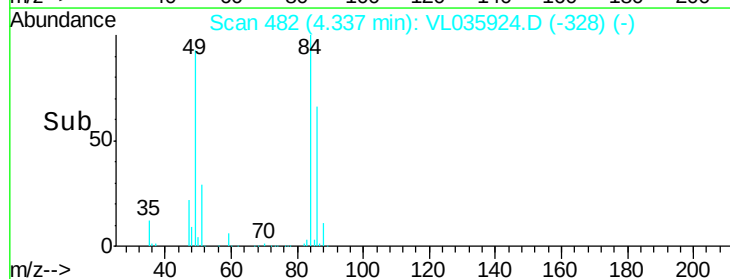
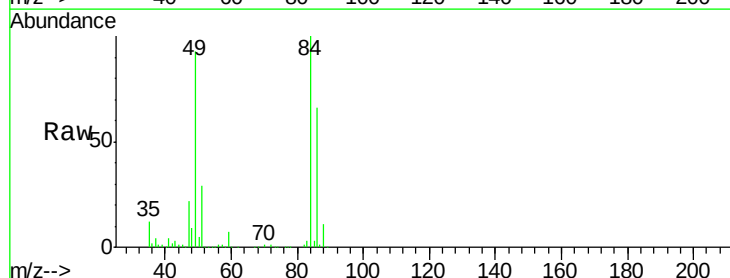
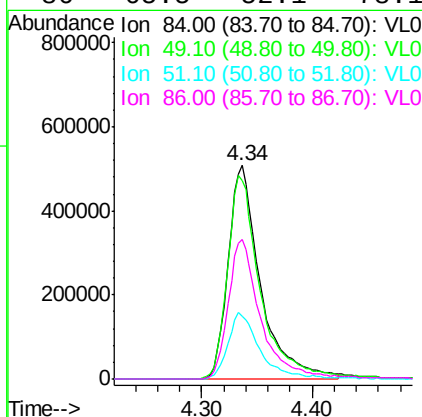
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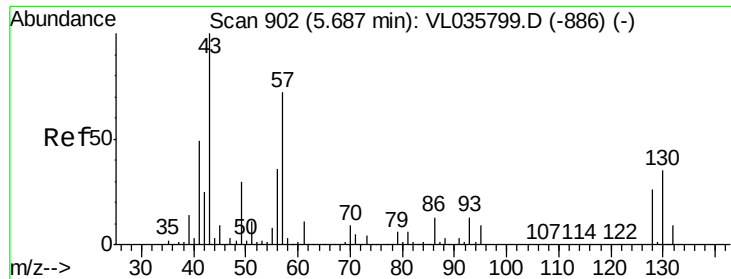


#20

Methylene Chloride
 Concen: 11.529 ppbv
 RT: 4.34 min Scan# 482
 Delta R.T. -0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Tgt Ion: 84 Resp: 1032141
 Ion Ratio Lower Upper
 84 100
 49 92.6 73.8 110.8
 51 29.3 23.0 34.4
 86 65.5 52.1 78.1





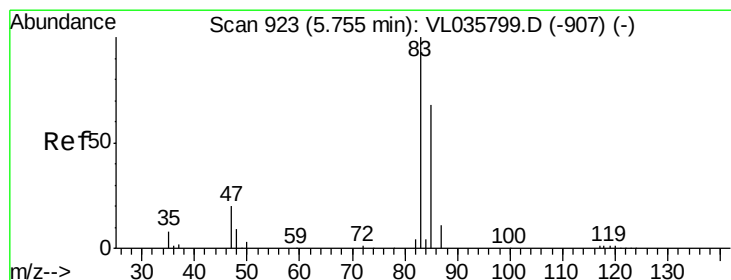
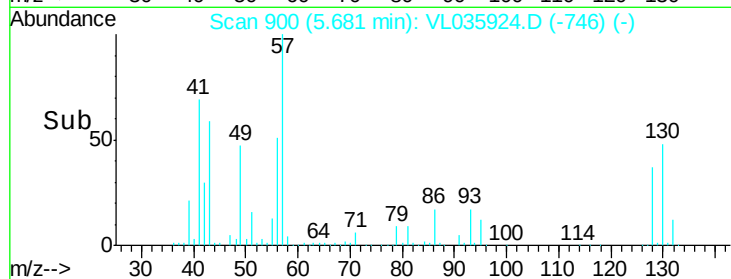
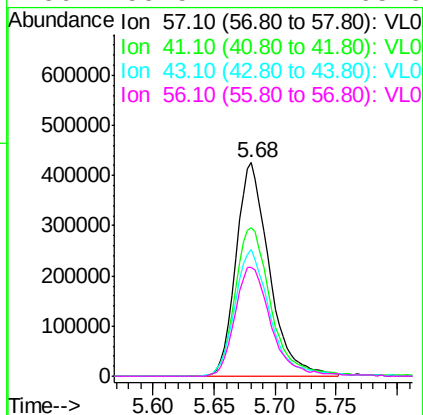
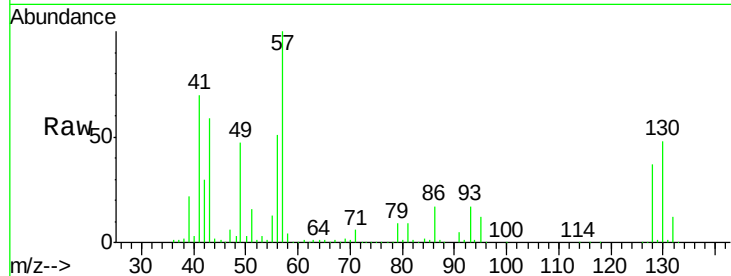
#26
Hexane
Concen: 5.835 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampled :
LA-1DUP

Tgt Ion	Ratio	Lower	Upper
57	100		
41	75.5	58.9	88.3
43	63.0	150.2	225.2#
56	55.5	42.4	63.6

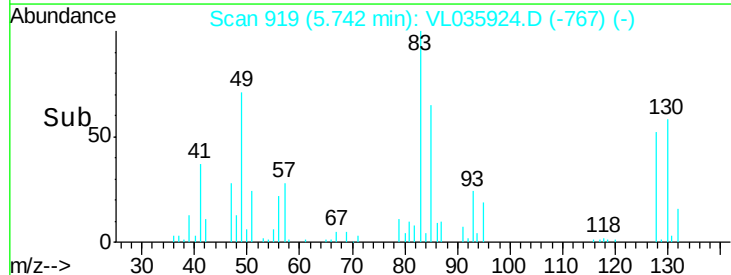
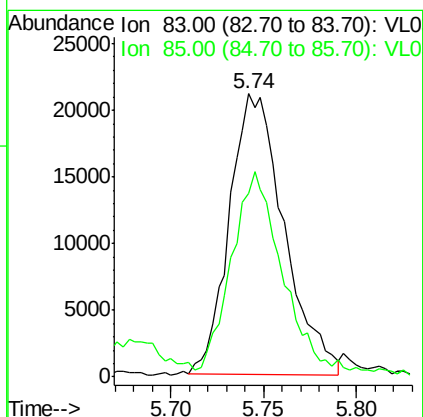
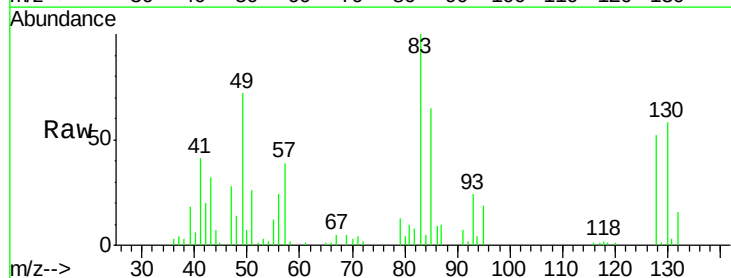
Manual Integrations
APPROVED

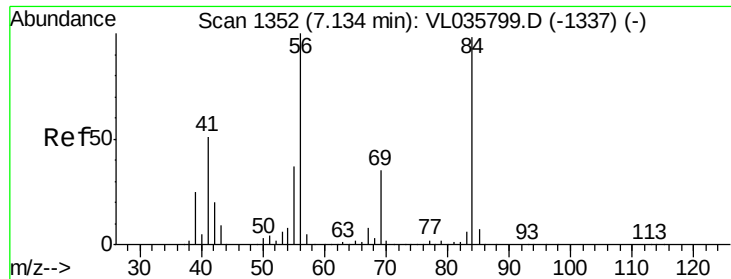
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#29
Chloroform
Concen: 0.159 ppbv
RT: 5.74 min Scan# 919
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion	Ratio	Lower	Upper
83	100		
85	60.7	54.6	81.8





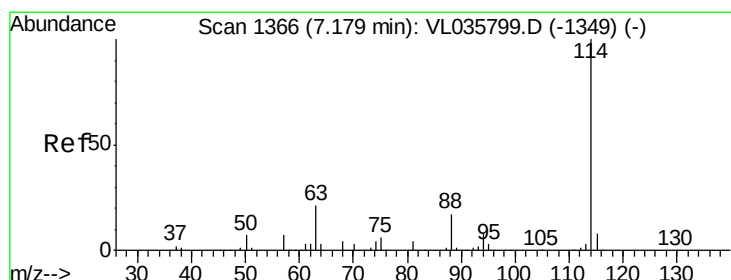
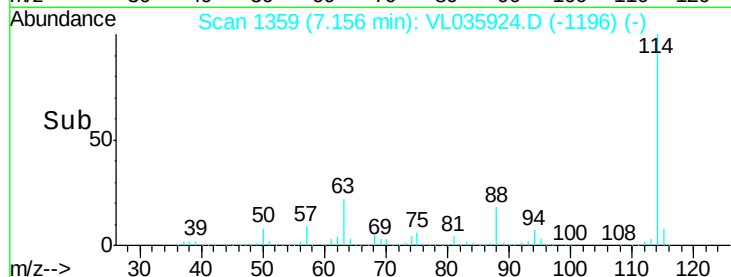
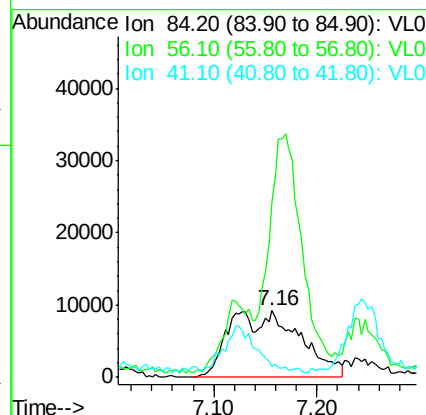
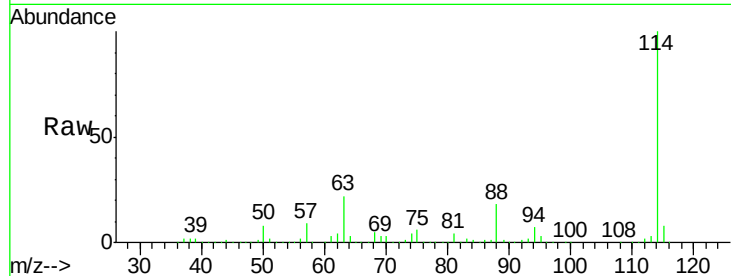
#30
Cyclohexane
Concen: 0.289 ppbv m
RT: 7.16 min Scan# 1359
Delta R.T. 0.02 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	86.4	129.6#
41	32.9	42.1	63.1#

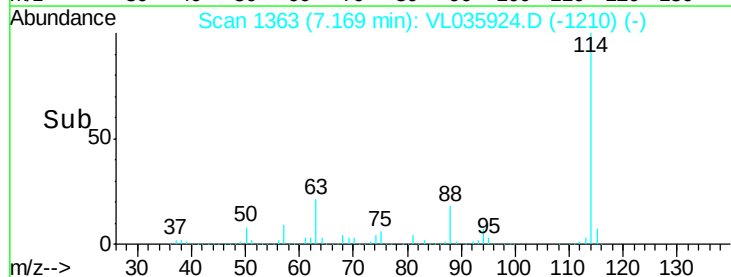
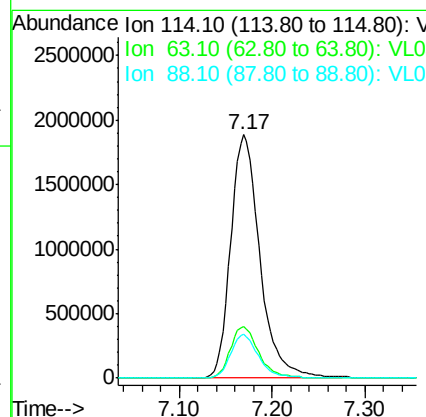
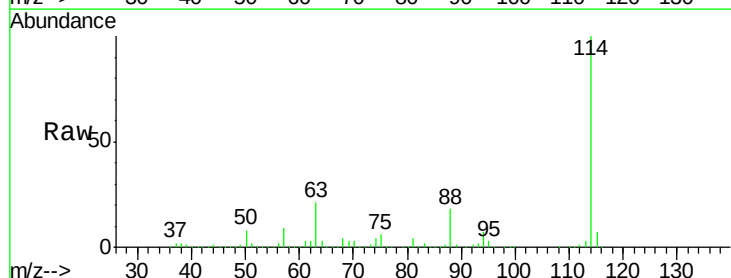
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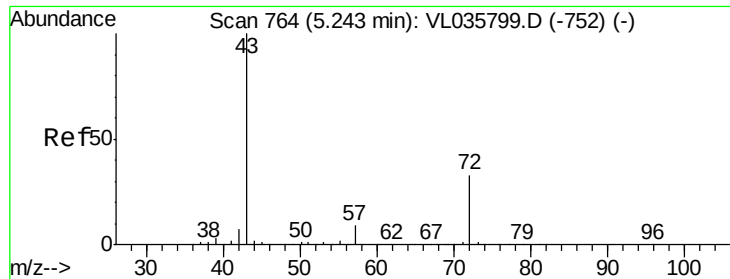
MMDadoda
11/16/2020 2:30:58 PM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1363
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion	Ratio	Lower	Upper
114	100		
63	21.0	16.1	24.1
88	17.4	13.7	20.5





#34

2-Butanone

Concen: 0.610 ppbv

RT: 5.24 min Scan# 762

Delta R.T. -0.01 min

Lab File: VL035924.D

Acq: 12 Nov 2020 22:00

Instrument :

MSVOA_L

ClientSampled :

LA-1DUP

Tgt Ion: 43 Resp: 81783

Ion Ratio Lower Upper

43 100

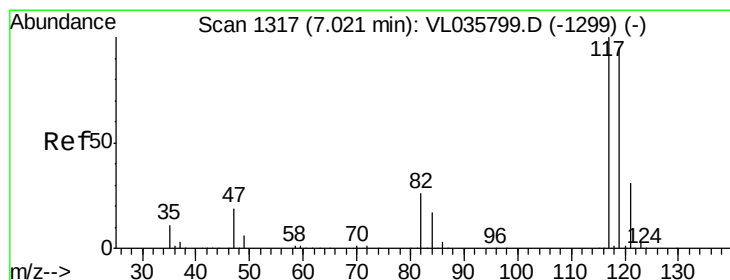
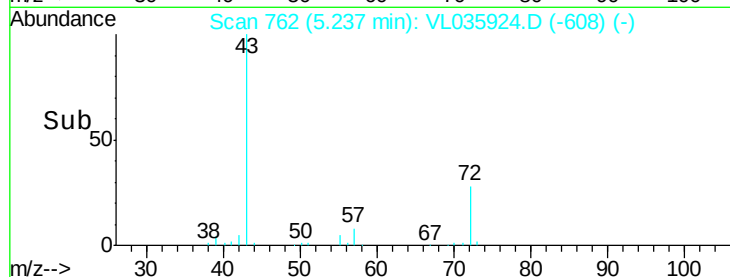
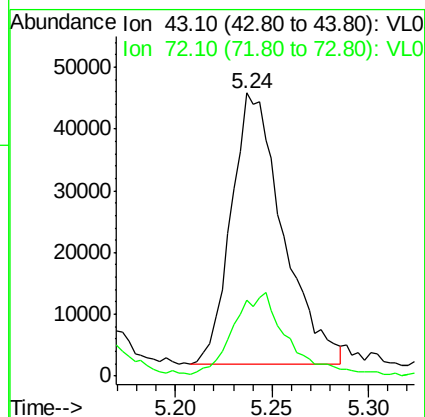
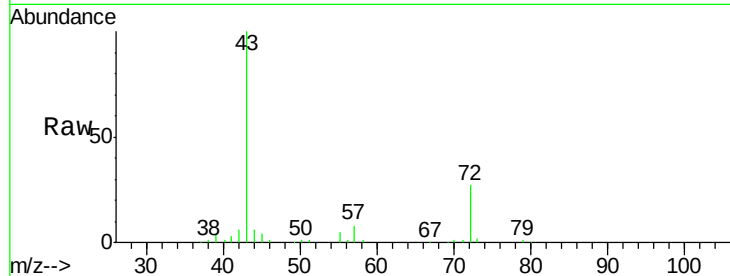
72 33.6 26.5 39.7

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#35

Carbon Tetrachloride

Concen: 0.065 ppbv

RT: 7.01 min Scan# 1313

Delta R.T. -0.01 min

Lab File: VL035924.D

Acq: 12 Nov 2020 22:00

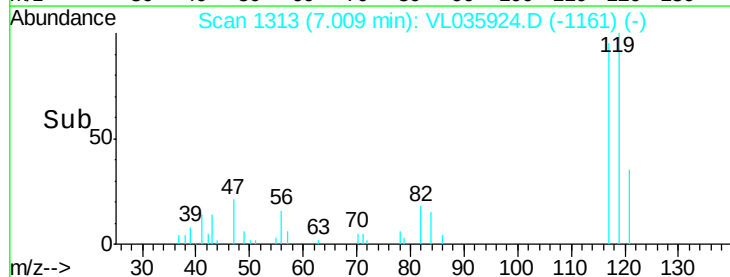
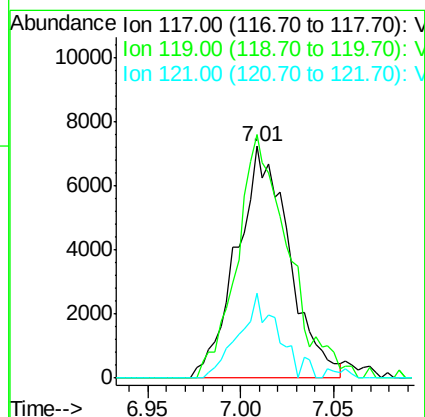
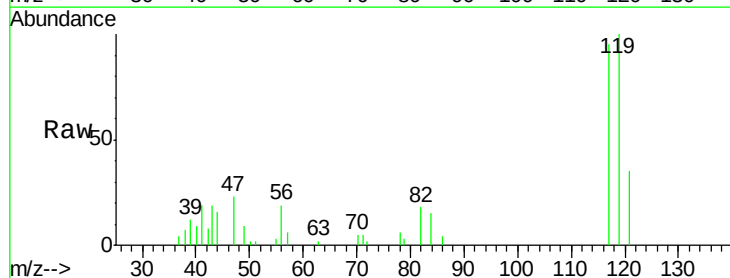
Tgt Ion: 117 Resp: 14265

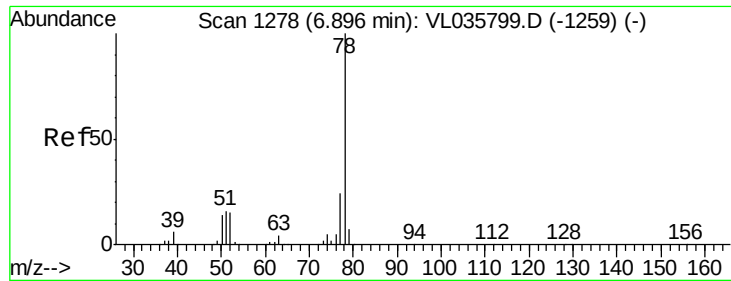
Ion Ratio Lower Upper

117 100

119 104.9 75.6 113.4

121 36.5 25.1 37.7





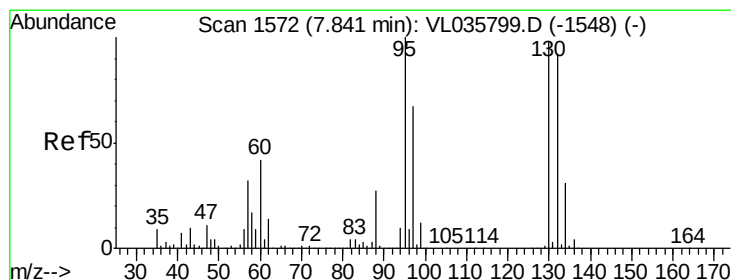
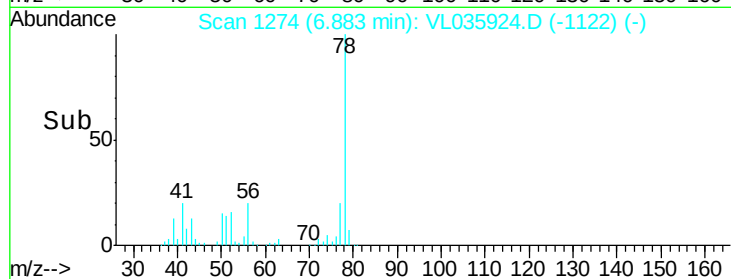
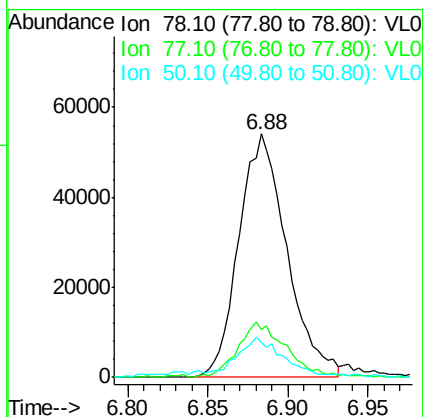
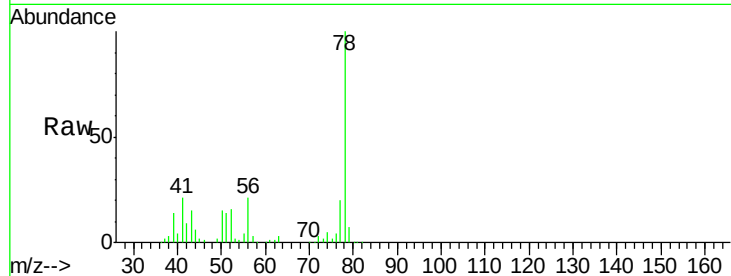
#36
Benzene
Concen: 0.362 ppbv
RT: 6.88 min Scan# 1274
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Tgt Ion:	78	Resp:	111207
Ion	Ratio	Lower	Upper
78	100		
77	19.5	19.3	28.9
50	13.3	11.4	17.2

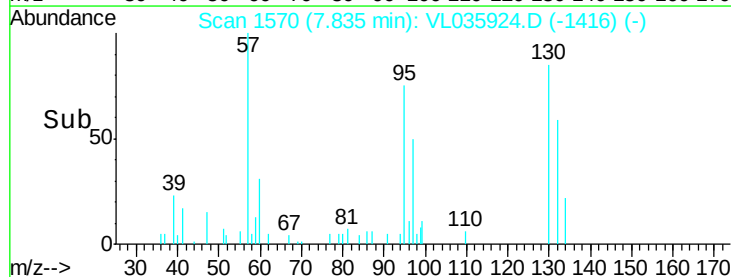
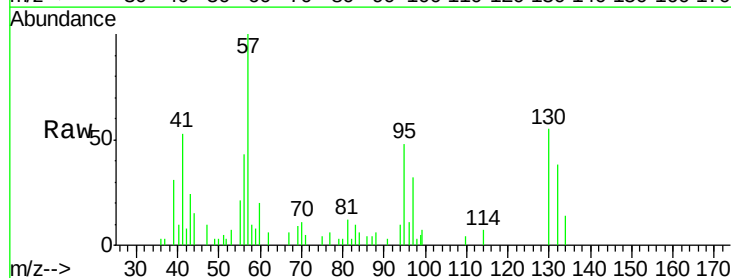
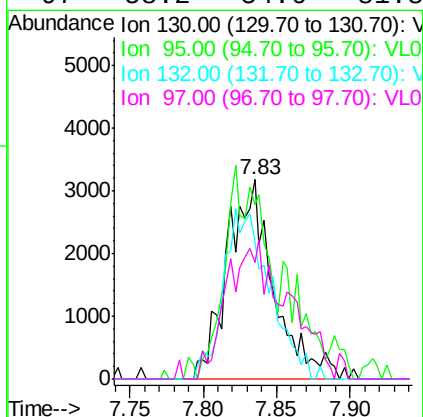
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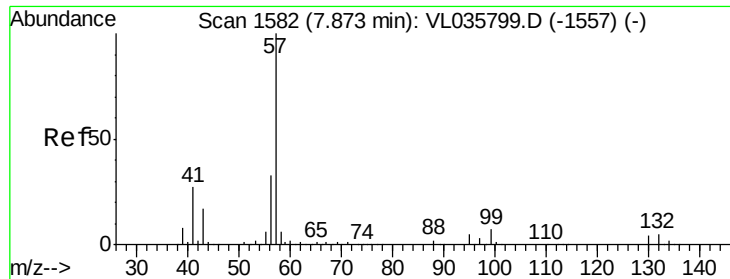
MMDadoda
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#38
Trichloroethene
Concen: 0.046 ppbv m
RT: 7.83 min Scan# 1570
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion:	130	Resp:	6920
Ion	Ratio	Lower	Upper
130	100		
95	87.6	81.6	122.4
132	68.8	75.1	112.7#
97	58.2	54.6	81.8





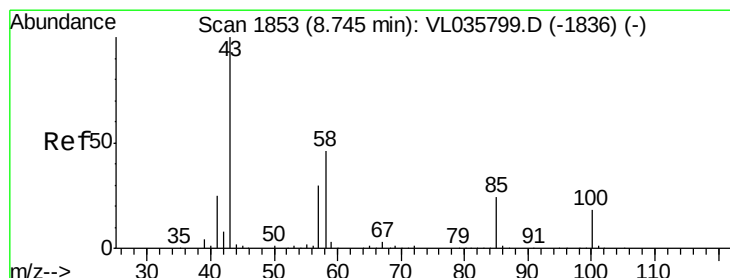
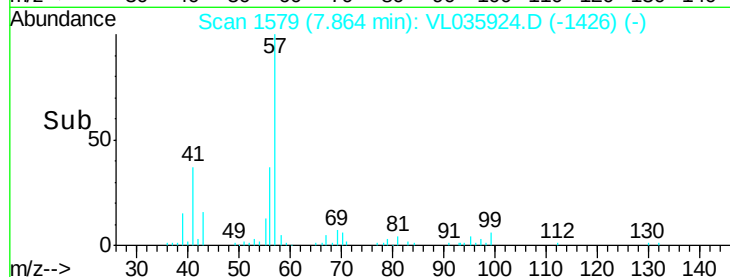
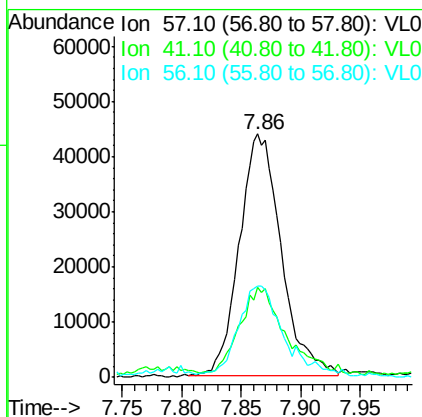
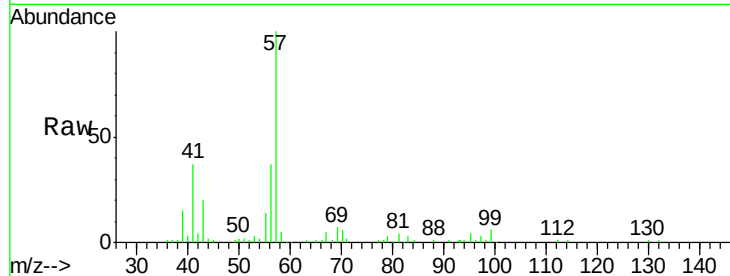
#44
 2,2,4-Trimethylpentane
 Concen: 0.262 ppbv
 RT: 7.86 min Scan# 1579
 Delta R.T. -0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Instrument :
 MSVOA_L
 ClientSampled :
 LA-1DUP

Tgt Ion	Ratio	Lower	Upper
57	100		
41	40.4	21.0	31.4#
56	42.6	25.4	38.0#

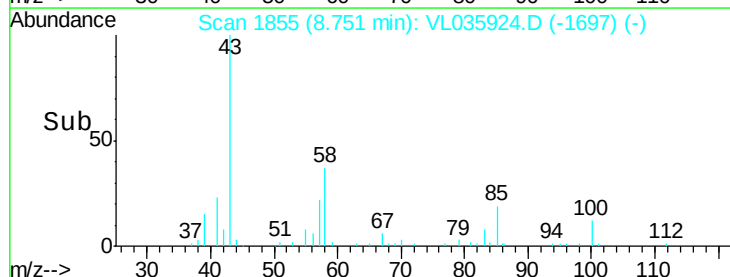
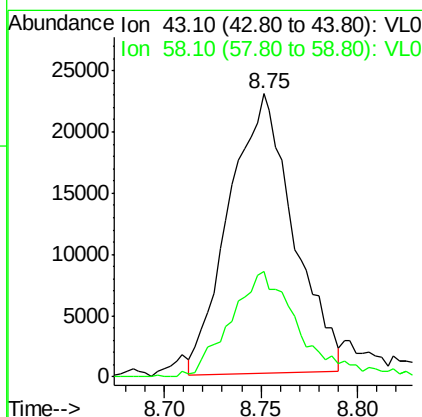
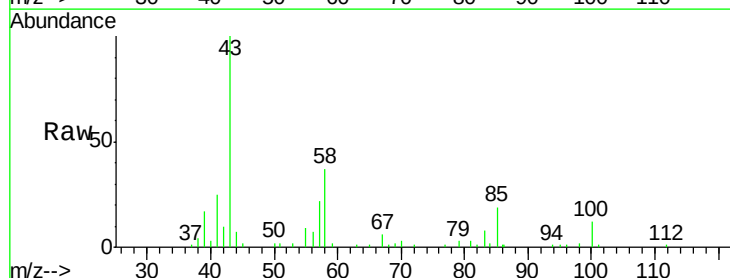
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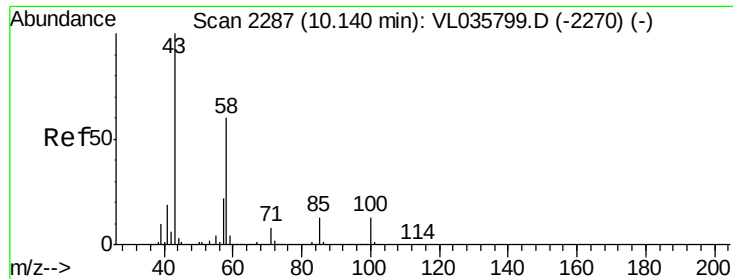
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#50
 4-Methyl-2-Pentanone
 Concen: 0.258 ppbv
 RT: 8.75 min Scan# 1855
 Delta R.T. 0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Tgt Ion	Ratio	Lower	Upper
43	100		
58	40.4	36.0	54.0





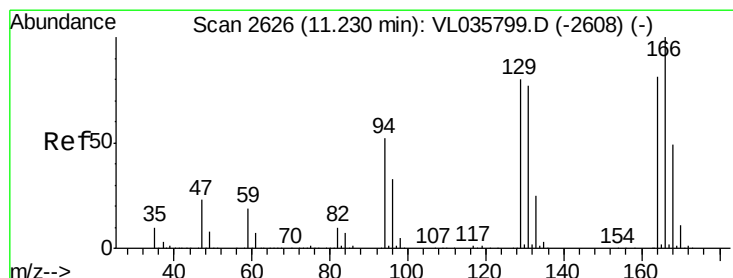
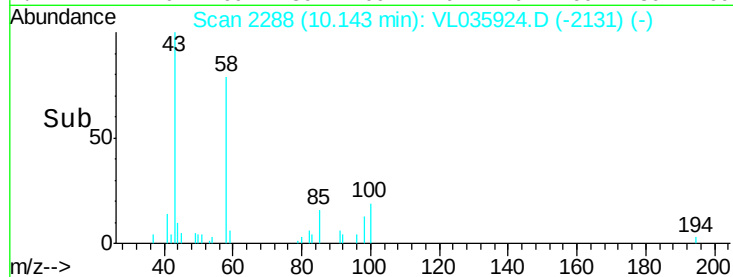
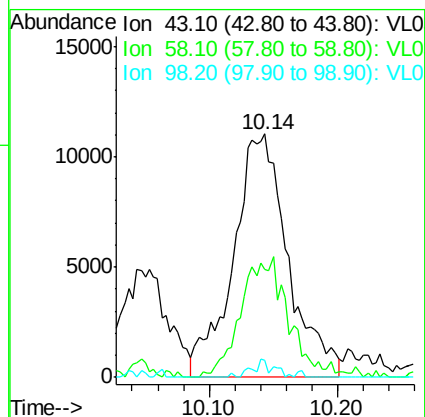
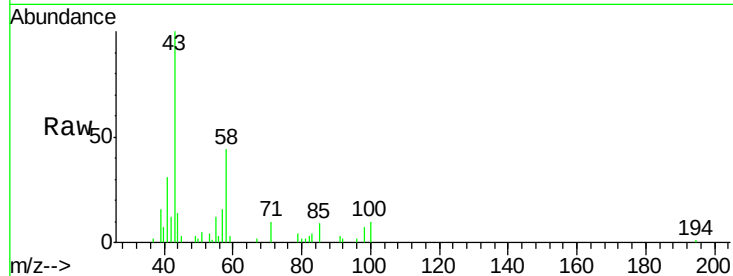
#51
2-Hexanone
Concen: 0.199 ppbv m
RT: 10.14 min Scan# 2288
Delta R.T. 0.00 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampled :
LA-1DUP

Tgt Ion: 43 Resp: 32742
Ion Ratio Lower Upper
43 100
58 0.0 48.3 72.5#
98 0.0 0.6 0.8#

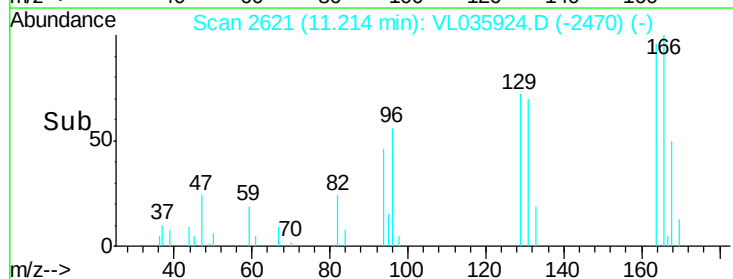
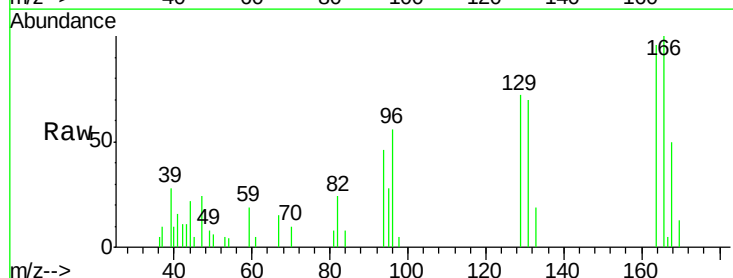
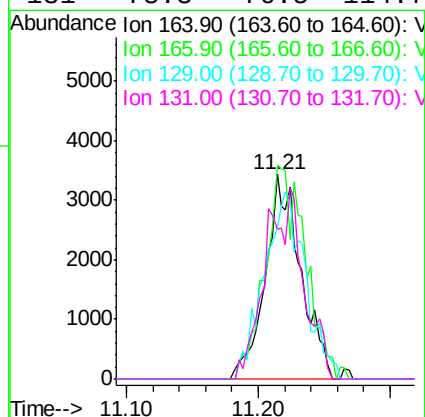
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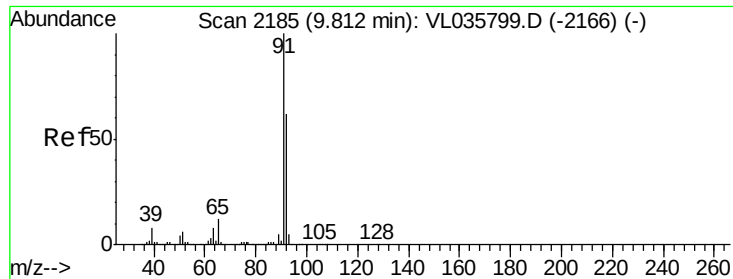
MMDadoda
11/16/2020 2:30:58 PM



#52
Tetrachloroethene
Concen: 0.044 ppbv m
RT: 11.21 min Scan# 2621
Delta R.T. -0.02 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion: 164 Resp: 6360
Ion Ratio Lower Upper
164 100
166 104.4 99.3 148.9
129 74.7 79.3 118.9#
131 73.3 76.5 114.7#





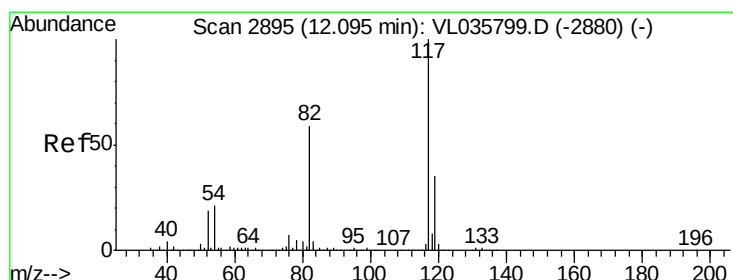
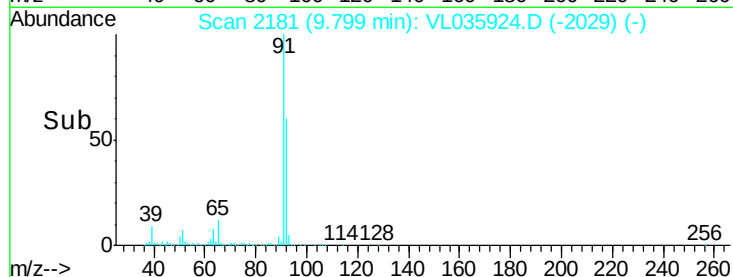
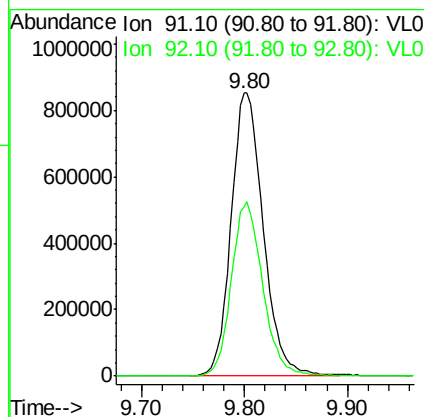
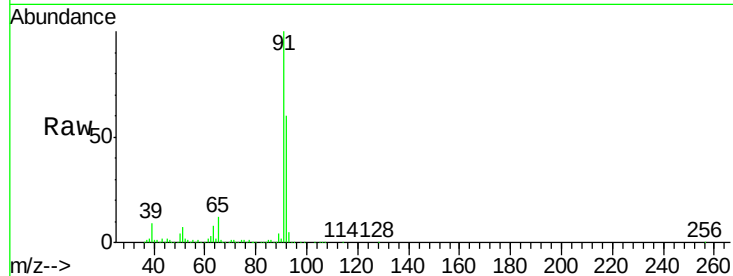
#53
Toluene
Concen: 4.990 ppbv
RT: 9.80 min Scan# 2181
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Tgt Ion: 91 Resp: 1848577
Ion Ratio Lower Upper
91 100
92 60.5 49.8 74.6

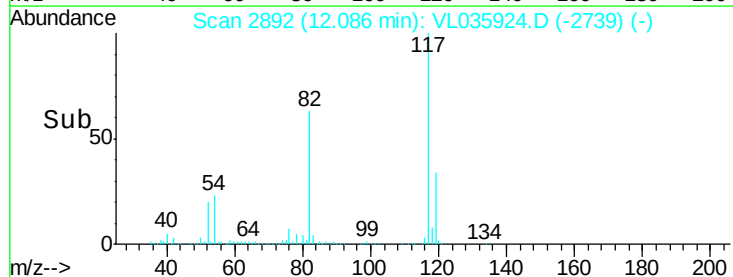
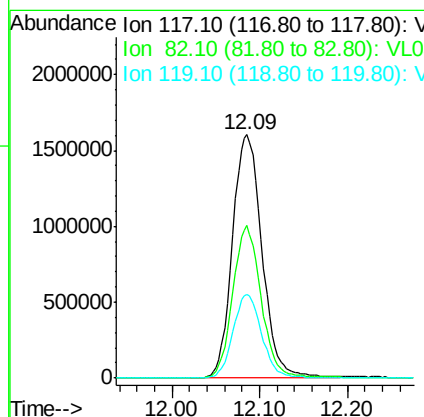
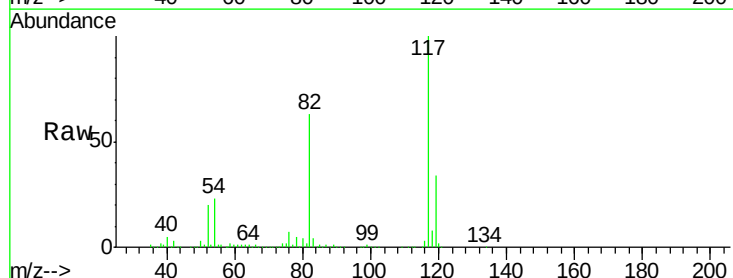
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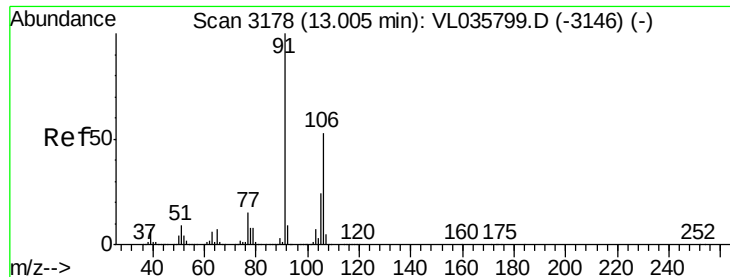
MMDadoda
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.09 min Scan# 2892
Delta R.T. -0.01 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion: 117 Resp: 3775210
Ion Ratio Lower Upper
117 100
82 61.0 50.6 76.0
119 33.5 52.6 78.8#





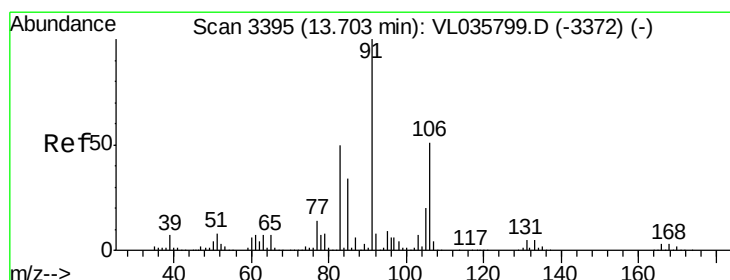
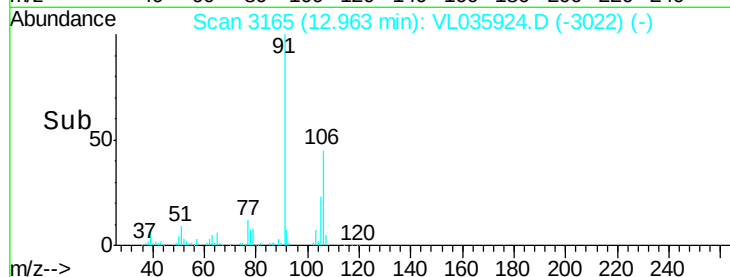
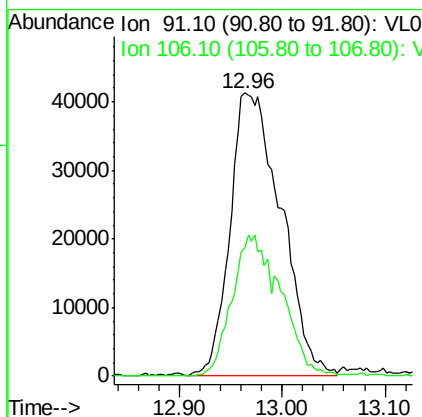
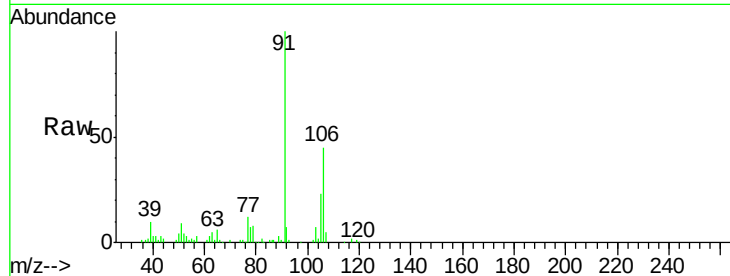
#59
m/p-Xylene
Concen: 0.366 ppbv m
RT: 12.96 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Instrument :
MSVOA_L
ClientSampleId :
LA-1DUP

Tgt Ion: 91 Resp: 142256
Ion Ratio Lower Upper
91 100
106 0.0 39.5 59.3#

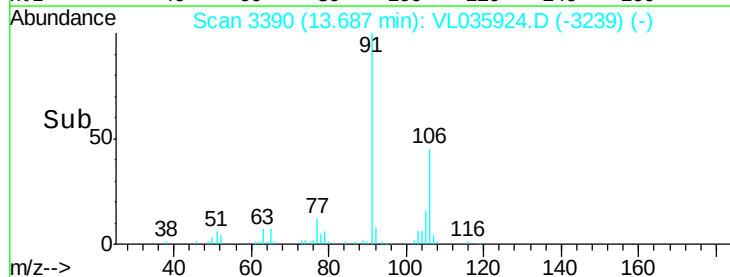
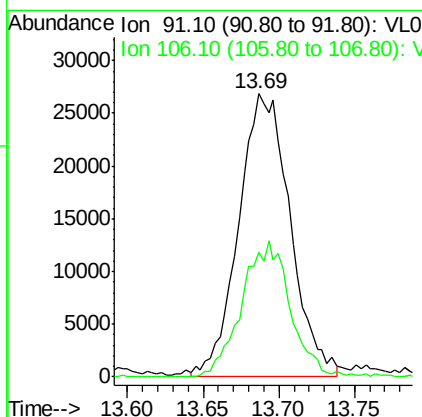
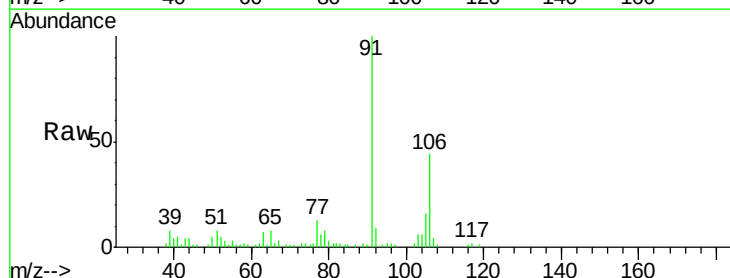
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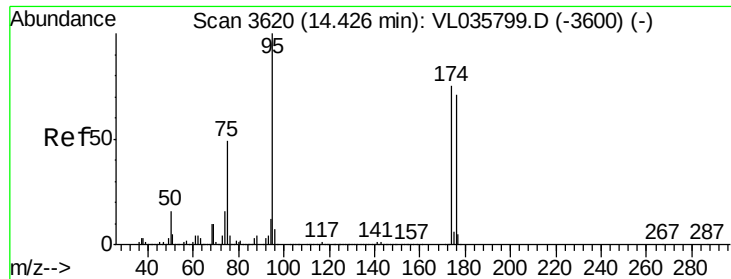
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#60
o-Xylene
Concen: 0.168 ppbv m
RT: 13.69 min Scan# 3390
Delta R.T. -0.02 min
Lab File: VL035924.D
Acq: 12 Nov 2020 22:00

Tgt Ion: 91 Resp: 63638
Ion Ratio Lower Upper
91 100
106 45.1 24.8 74.4





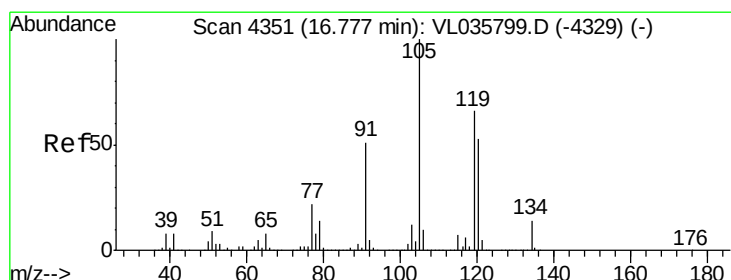
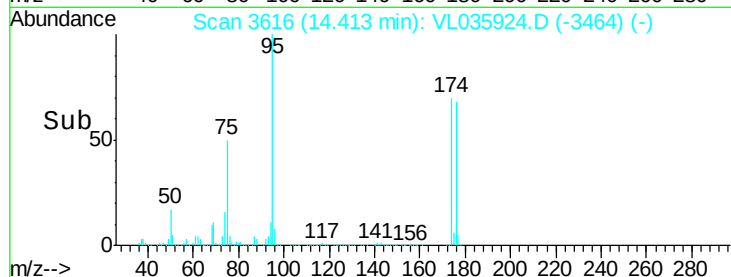
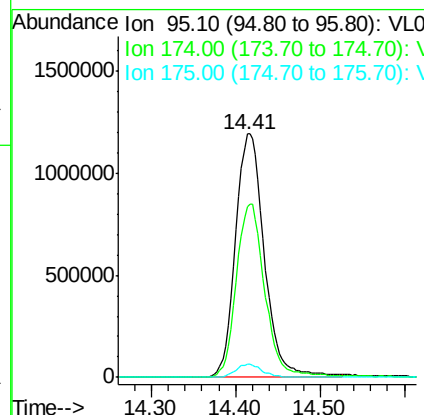
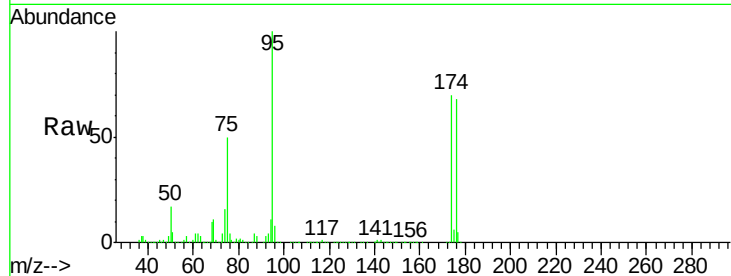
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.674 ppbv
 RT: 14.41 min Scan# 3616
 Delta R.T. -0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Instrument :
 MSVOA_L
 ClientSampleId :
 LA-1DUP

Tgt Ion: 95 Resp: 2862982
 Ion Ratio Lower Upper
 95 100
 174 71.1 59.8 89.6
 175 5.0 4.3 6.5

Manual Integrations
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.178 ppbv m
 RT: 16.76 min Scan# 4347
 Delta R.T. -0.01 min
 Lab File: VL035924.D
 Acq: 12 Nov 2020 22:00

Tgt Ion: 105 Resp: 79931
 Ion Ratio Lower Upper
 105 100
 120 39.7 42.0 63.0#
 91 12.5 41.0 61.6#
 77 13.2 17.3 25.9#

