

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL120720\
 Data File : VL036087.D
 Acq On : 8 Dec 2020 5:44
 Operator : SY/AP
 Sample : L4948-05
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2B

Manual Integrations
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 12/11/2020 5:45:26 PM

Quant Time: Dec 08 21:33:17 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec 08 2020
 QLast Update : Mon Dec 07 16:56:49 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.68	49	1141396	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2518205	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.11	117	2274872	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1943438	10.76	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.60%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	37995m	0.286	ppbv	
3) Chlorodifluoromethane	2.99	51	60550	0.465	ppbv	94
4) Chloromethane	3.15	50	49179	0.769	ppbv	98
9) Propene	3.02	41	544256m	8.343	ppbv	
10) Heptane	8.14	43	349243	2.096	ppbv	98
11) Trichlorofluoromethane	3.96	101	55111	0.352	ppbv	85
13) Ethanol	3.61	45	1945901	216.374	ppbv	86
15) Acetone	3.85	43	1320056m	9.623	ppbv	
19) Isopropyl Alcohol	3.99	45	126133m	1.504	ppbv	
20) Methylene Chloride	4.35	84	116541m	2.073	ppbv	
26) Hexane	5.70	57	955061	7.744	ppbv #	41
30) Cyclohexane	7.15	84	583965	6.445	ppbv	98
34) 2-Butanone	5.27	43	117250	0.702	ppbv	94
35) Carbon Tetrachloride	7.03	117	10159m	0.069	ppbv	
36) Benzene	6.91	78	240689m	1.128	ppbv	
38) Trichloroethene	7.85	130	3315m	0.042	ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	583955	1.511	ppbv #	82
52) Tetrachloroethene	11.25	164	11380m	0.147	ppbv	
53) Toluene	9.82	91	1582972	6.606	ppbv	100
58) Ethyl Benzene	12.73	91	629529	2.019	ppbv	95
59) m/p-Xylene	12.99	91	2280771	8.686	ppbv	97
60) o-Xylene	13.72	91	896564	3.624	ppbv	96
72) 4-Ethyltoluene	15.86	105	124113m	0.463	ppbv	
73) 1,3,5-Trimethylbenzene	16.02	105	108018m	0.422	ppbv	
74) 1,2,4-Trimethylbenzene	16.79	105	364634	1.419	ppbv #	66
79) Naphthalene	22.26	128	33777m	0.259	ppbv	

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

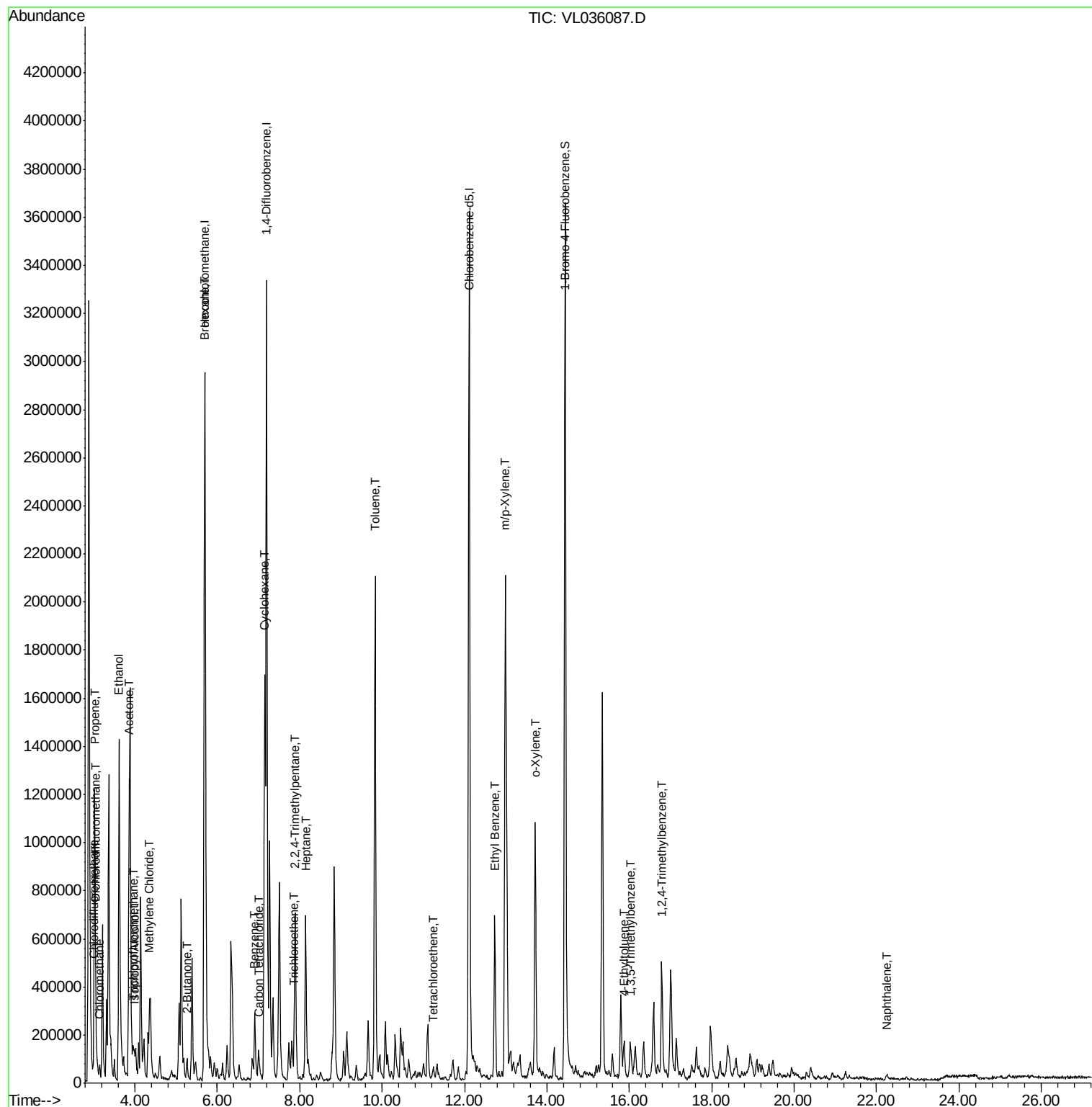
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL120720\
Data File : VL036087.D
Acq On : 8 Dec 2020 5:44
Operator : SY/AP
Sample : L4948-05
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

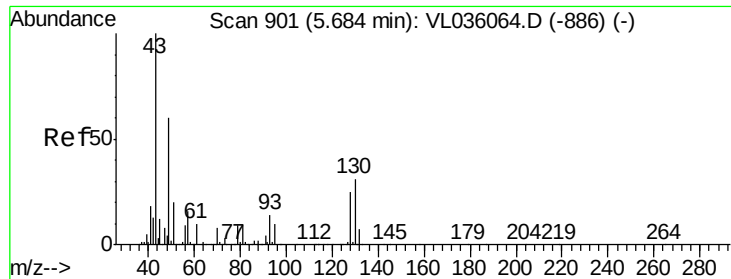
Instrument :
MSVOA_L
ClientSampleId :
IA-2B

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Quant Time: Dec 08 21:33:17 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL120720AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Dec
QLast Update : Mon Dec 07 16:56:49 2020
Response via : Initial Calibration





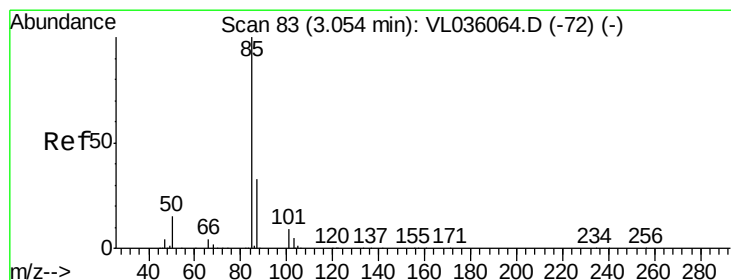
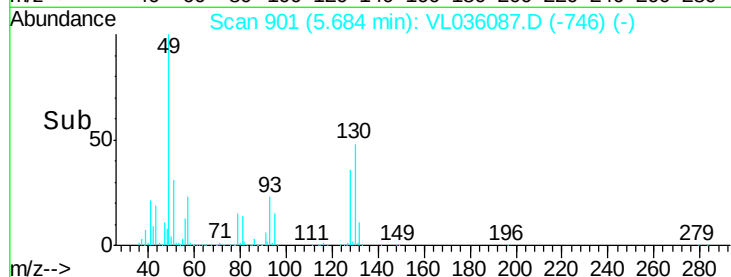
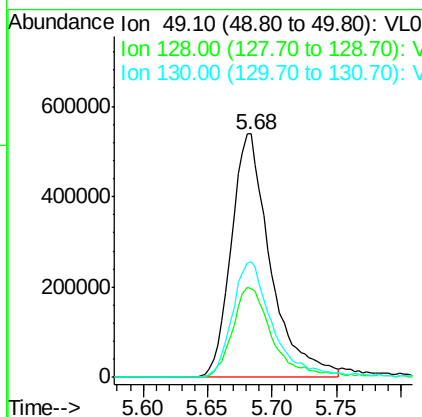
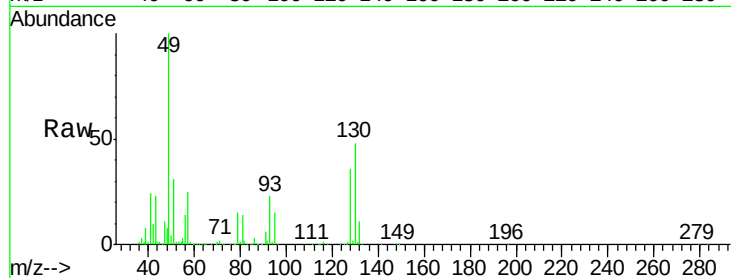
#1
 Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.68 min Scan# 901
 Delta R.T. -0.00 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2B

Tot Ion: 49 Resp: 1141396
 Ion Ratio Lower Upper
 49 100
 128 37.7 21.1 63.1
 130 49.8 27.1 81.3

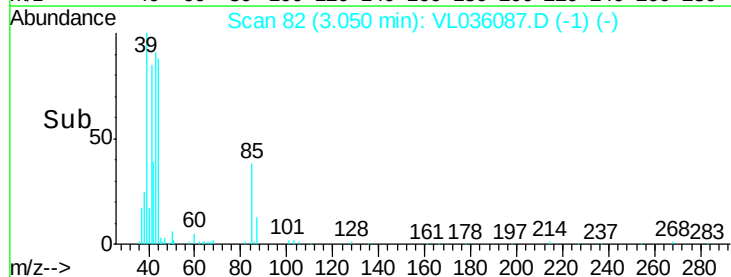
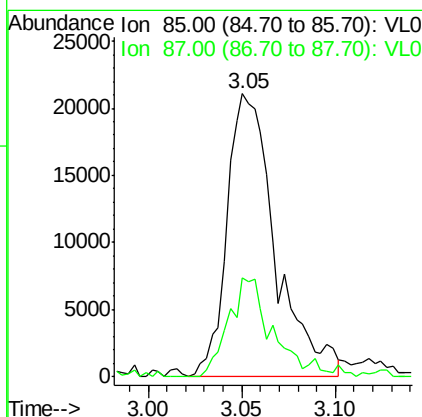
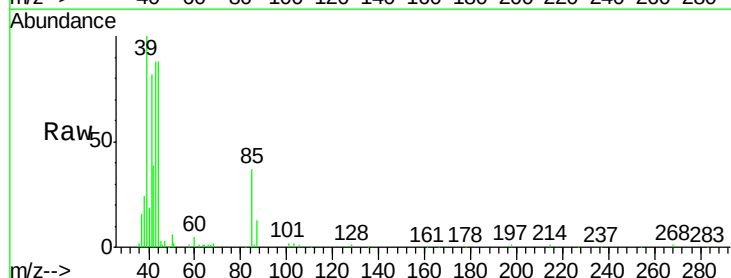
Manual Integrations
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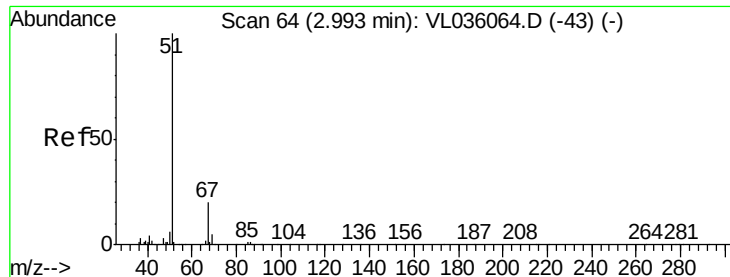
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#2
 Dichlorodifluoromethane
 Concen: 0.286 ppbv m
 RT: 3.05 min Scan# 82
 Delta R.T. -0.00 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Tgt Ion: 85 Resp: 37995
 Ion Ratio Lower Upper
 85 100
 87 34.9 26.5 39.7





#3

Chlorodifluoromethane

Concen: 0.465 ppbv

RT: 2.99 min Scan# 64

Delta R.T. -0.00 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Instrument :

MSVOA_L

ClientSampleId :

IA-2B

Tot Ion: 51 Resp: 60550

Ion Ratio Lower Upper

51 100

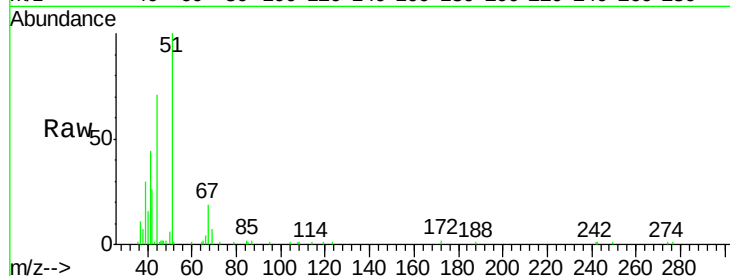
67 15.5 14.3 21.5

Manual Integrations

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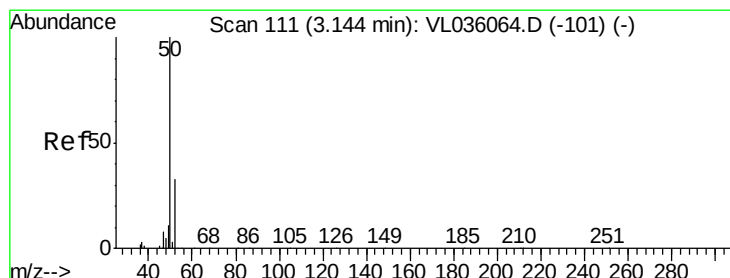
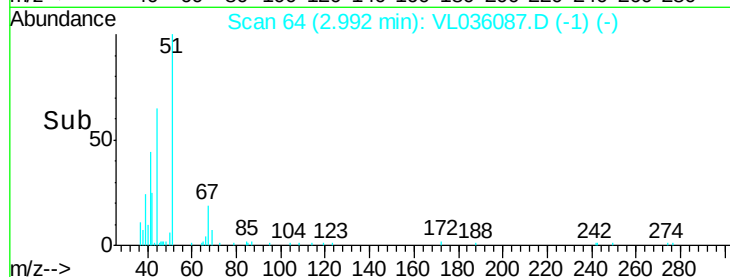
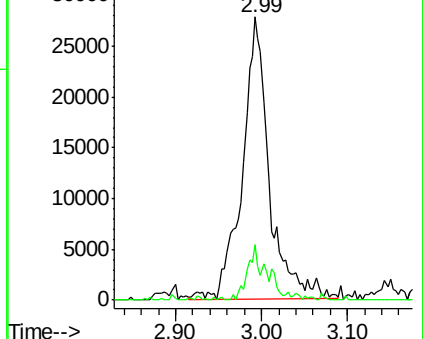
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.769 ppbv

RT: 3.15 min Scan# 112

Delta R.T. 0.00 min

Lab File: VL036087.D

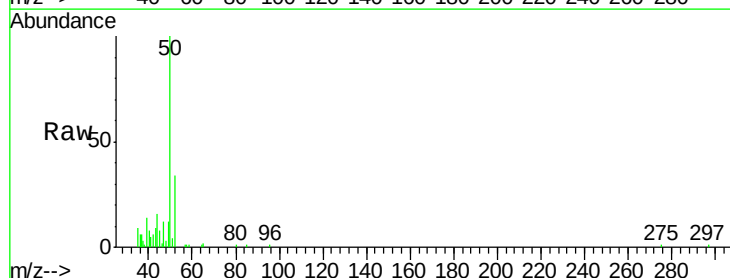
Acq: 8 Dec 2020 5:44

Tgt Ion: 50 Resp: 49179

Ion Ratio Lower Upper

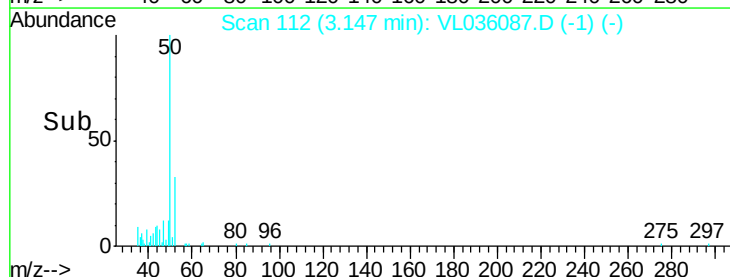
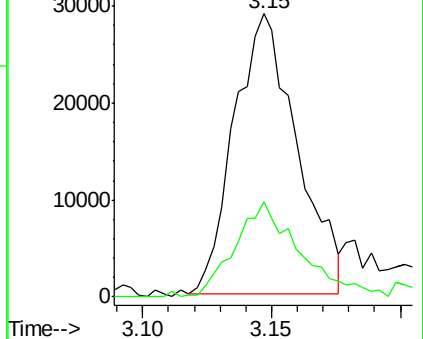
50 100

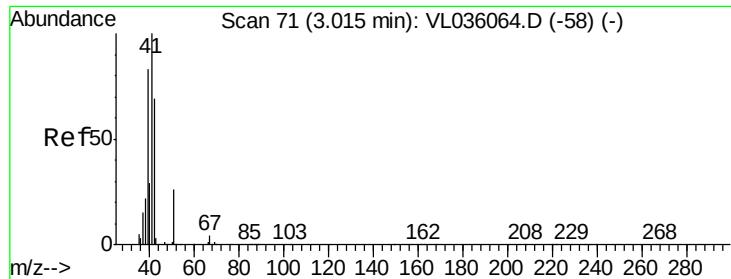
52 33.5 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





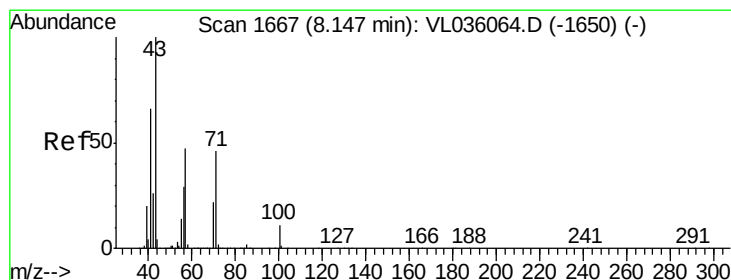
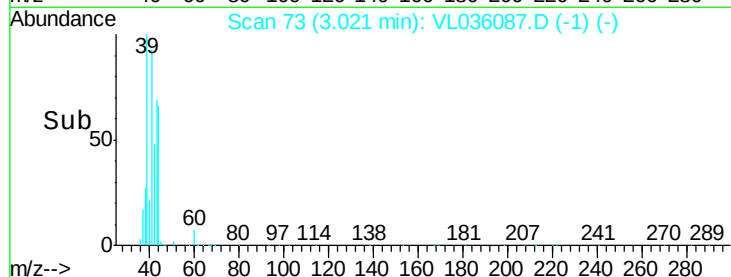
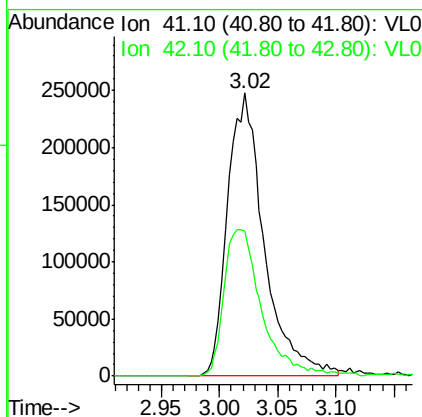
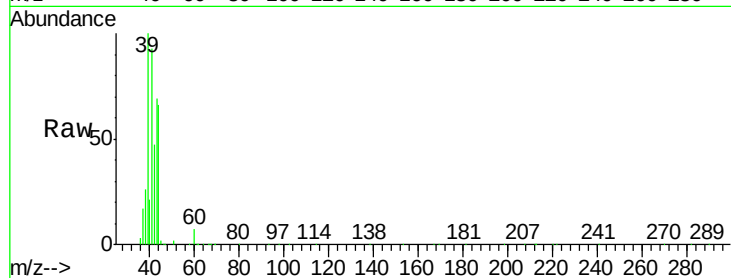
#9
 Propene
 Concen: 8.343 ppbv m
 RT: 3.02 min Scan# 73
 Delta R.T. 0.01 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2B

Tot Ion: 41 Resp: 544256
 Ion Ratio Lower Upper
 41 100
 42 25.8 57.0 85.6#

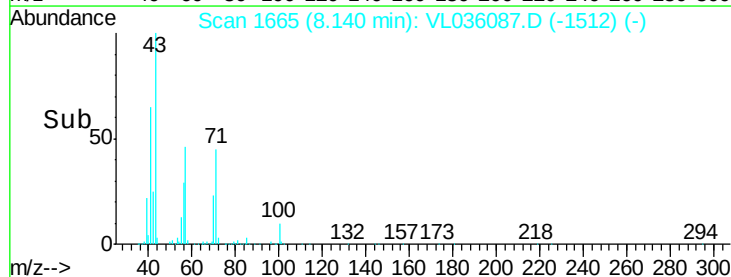
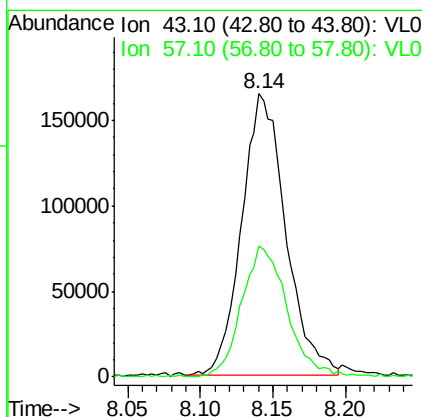
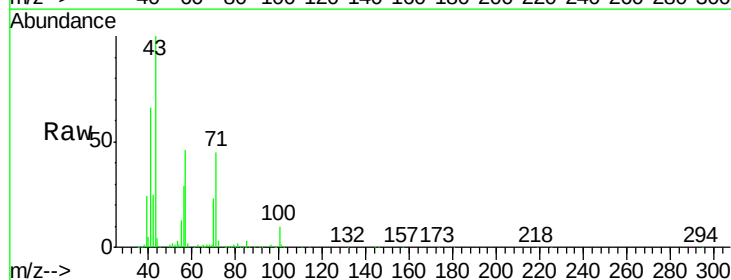
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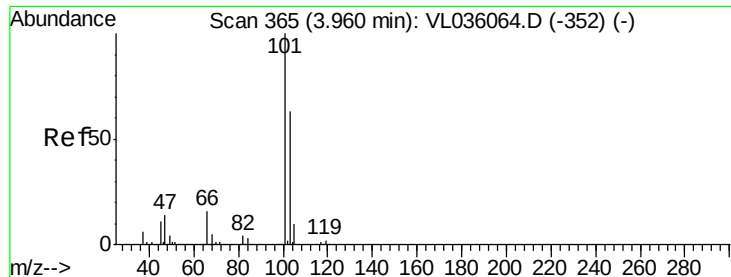
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#10
 Heptane
 Concen: 2.096 ppbv
 RT: 8.14 min Scan# 1665
 Delta R.T. -0.01 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Tgt Ion: 43 Resp: 349243
 Ion Ratio Lower Upper
 43 100
 57 48.5 37.9 56.9





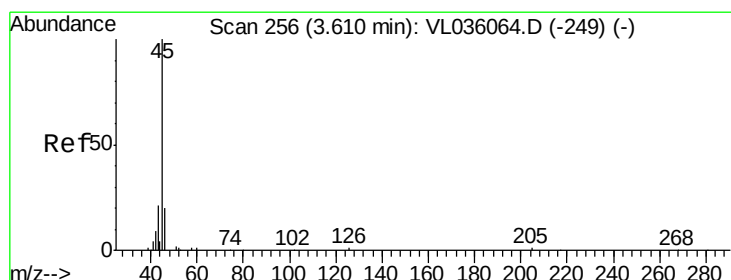
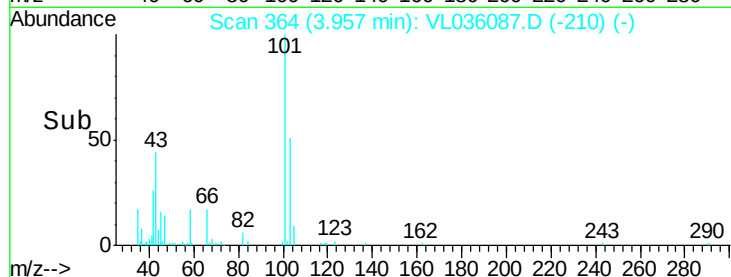
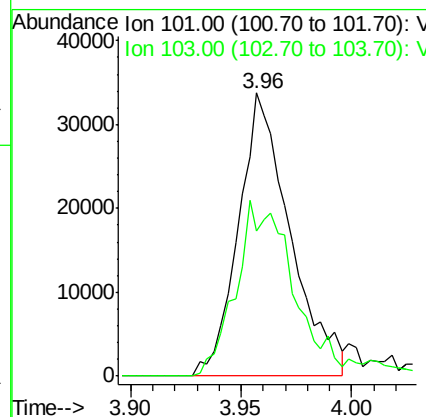
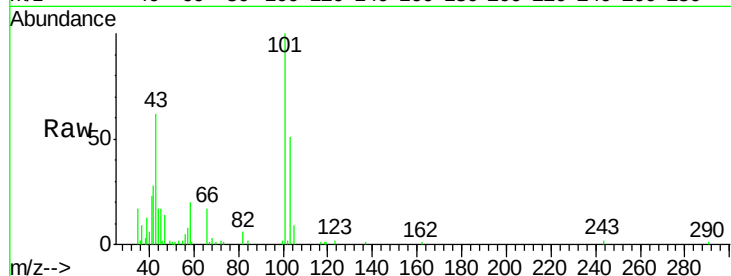
#11
 Trichlorofluoromethane
 Concen: 0.352 ppbv
 RT: 3.96 min Scan# 364
 Delta R.T. -0.00 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2B

Tot Ion	Ion	Ratio	Resp	Lower	Upper
101	100		55111		
103	51.3	50.3	75.5		

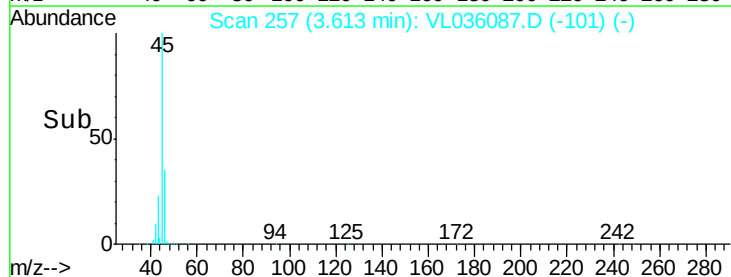
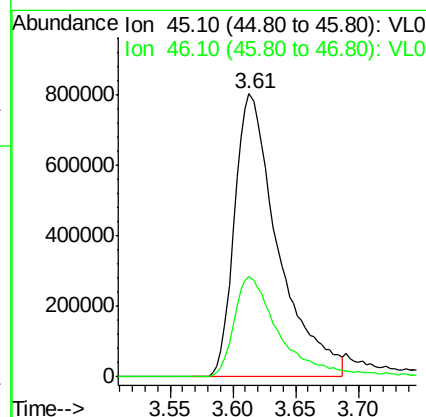
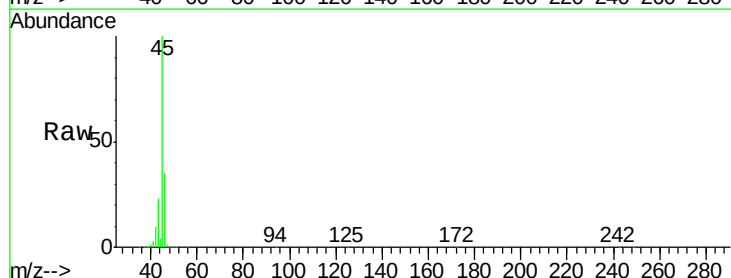
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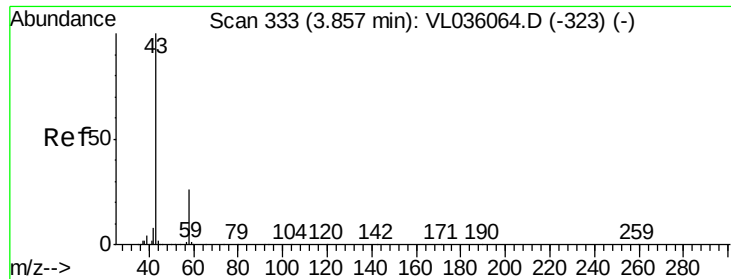
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#13
 Ethanol
 Concen: 216.374 ppbv
 RT: 3.61 min Scan# 257
 Delta R.T. 0.00 min
 Lab File: VL036087.D
 Acq: 8 Dec 2020 5:44

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
45	100		1945901		
46	38.1	19.0	75.8		





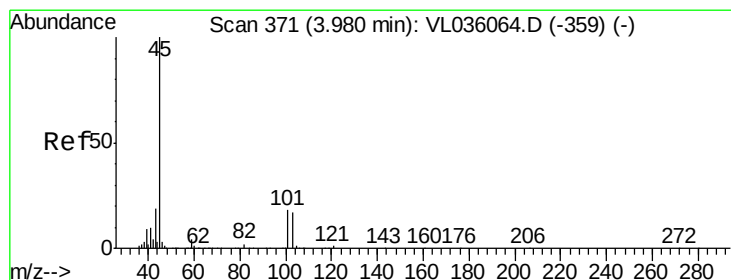
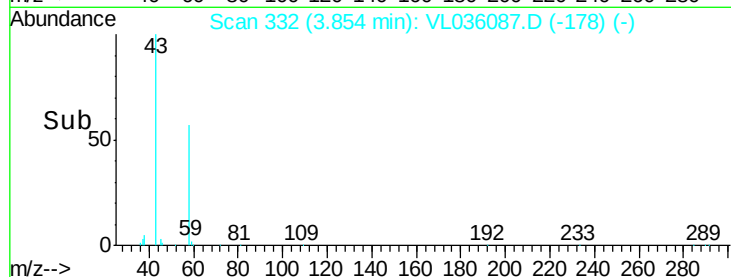
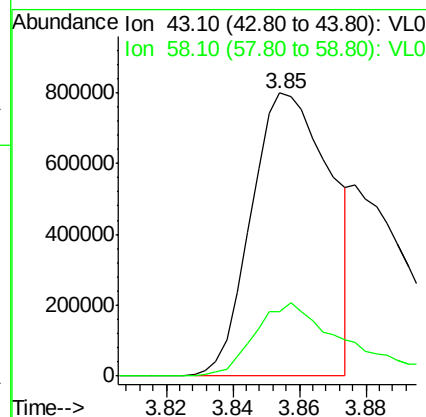
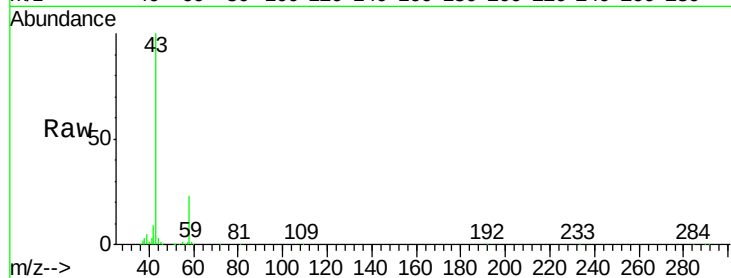
#15
Acetone
Concen: 9.623 ppbv m
RT: 3.85 min Scan# 332
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampled :
IA-2B

Tot Ion: 43 Resp: 1320056
Ion Ratio Lower Upper
43 100
58 33.1 20.9 31.3#

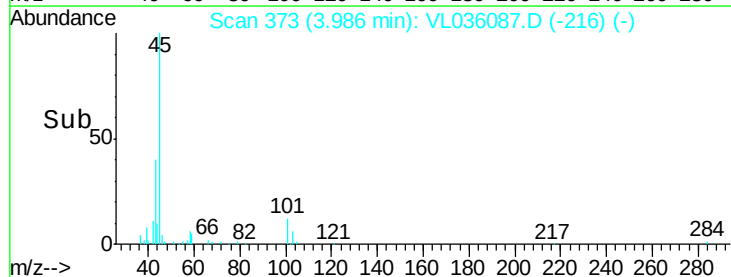
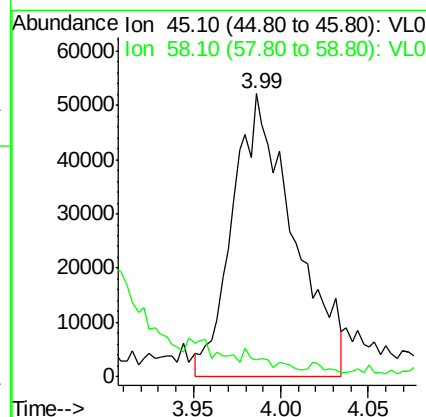
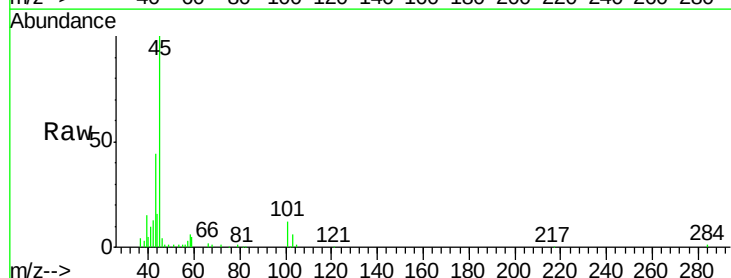
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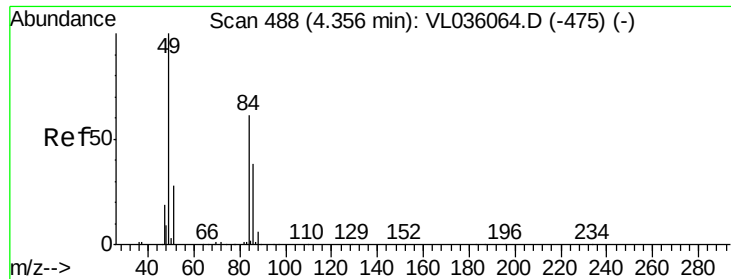
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#19
Isopropyl Alcohol
Concen: 1.504 ppbv m
RT: 3.99 min Scan# 373
Delta R.T. 0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion: 45 Resp: 126133
Ion Ratio Lower Upper
45 100
58 0.0 0.0 0.0





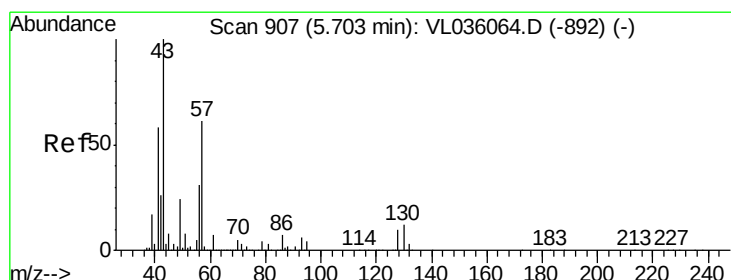
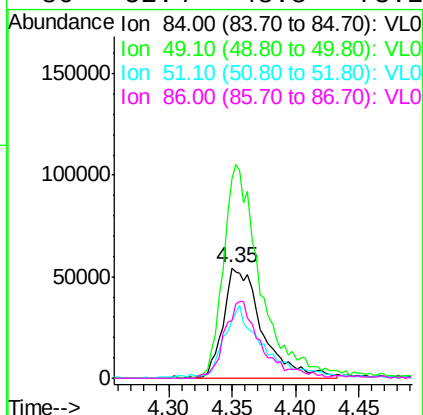
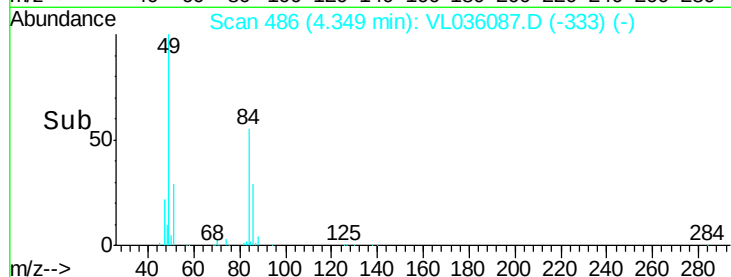
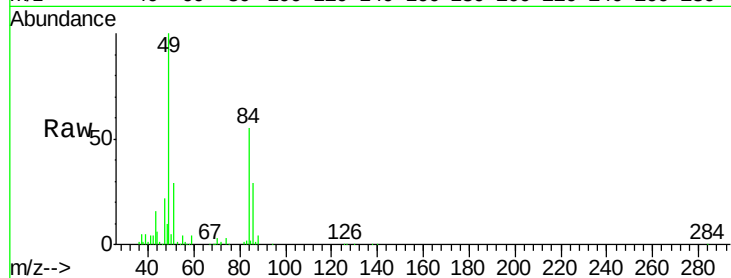
#20
Methylene Chloride
Concen: 2.073 ppbv
RT: 4.35 min Scan# 486
Delta R.T. -0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampled :
IA-2B

Tot Ion	Ion	Ratio	Resp	Lower	Upper
84	100				
49	180.9		133.0	199.4	
51	52.8		38.9	58.3	
86	52.4		48.8	73.2	

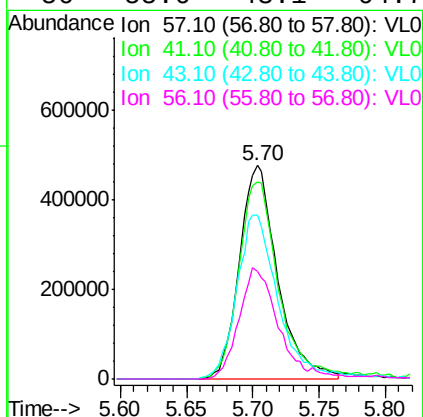
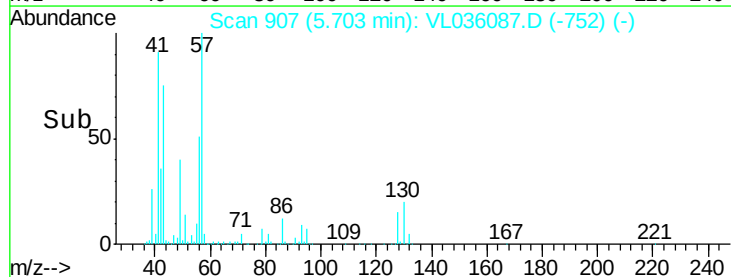
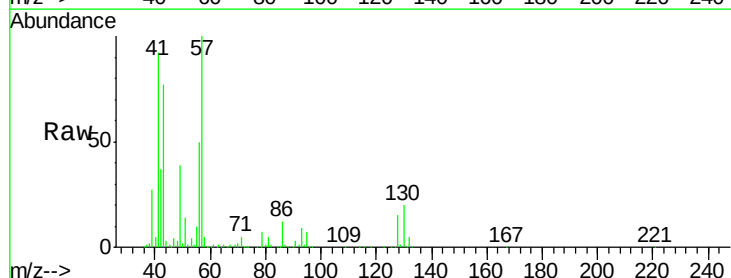
Manual Integrations
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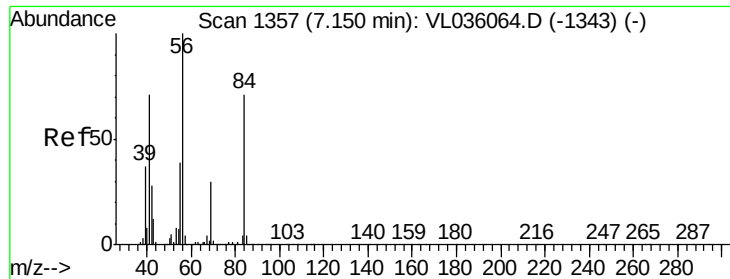
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#26
Hexane
Concen: 7.744 ppbv
RT: 5.70 min Scan# 907
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion	Ion	Ratio	Resp	Lower	Upper
57	100				
41	98.9		82.9	124.3	
43	85.3		199.9	299.9#	
56	55.6		43.1	64.7	





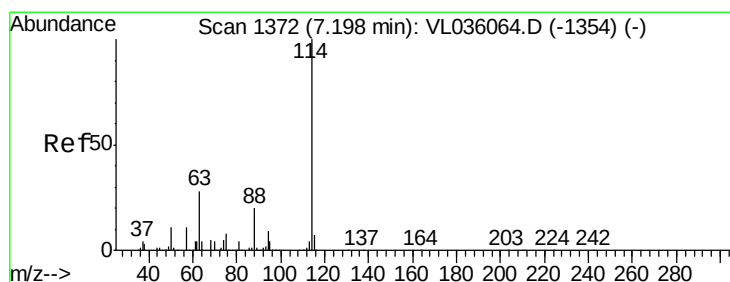
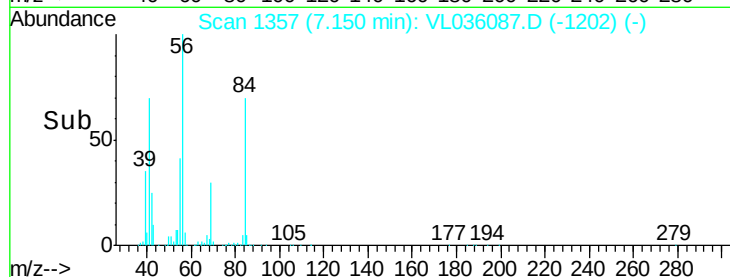
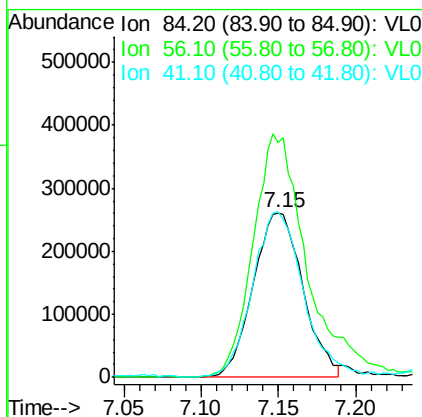
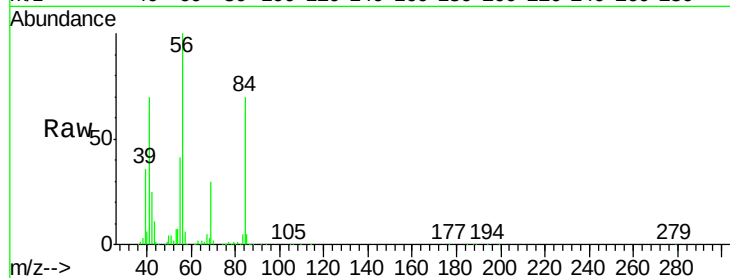
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Cyclohexane
Concen: 6.445 ppbv
RT: 7.15 min Scan# 1357
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampled :
IA-2B

Tot Ion	Ratio	Lower	Upper
84	100		
56	163.4	128.0	192.0
41	103.8	81.3	121.9

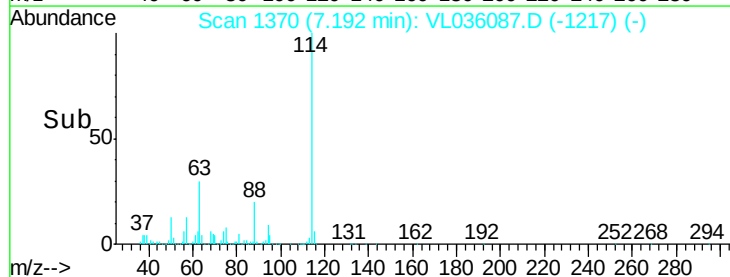
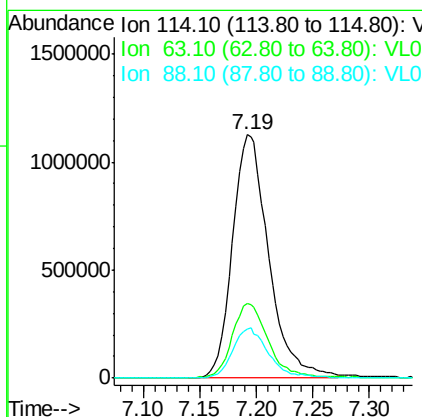
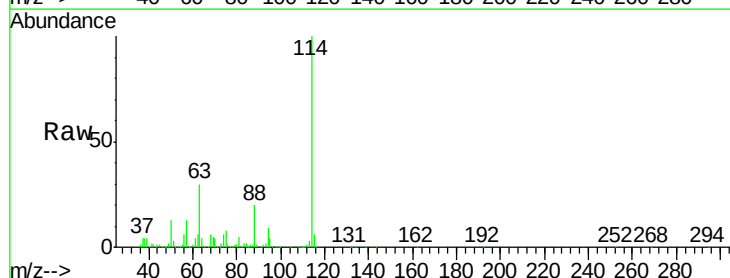
Manual Integrations
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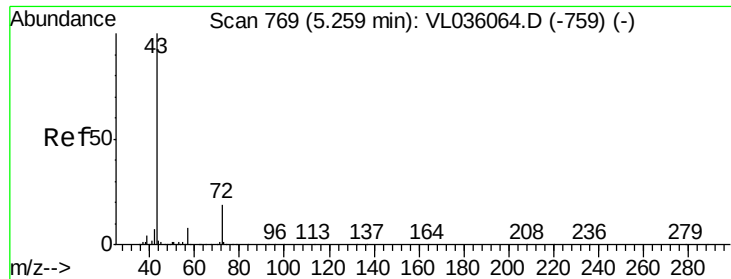
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.19 min Scan# 1370
Delta R.T. -0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion	Ratio	Lower	Upper
114	100		
63	31.2	23.6	35.4
88	20.6	15.8	23.6





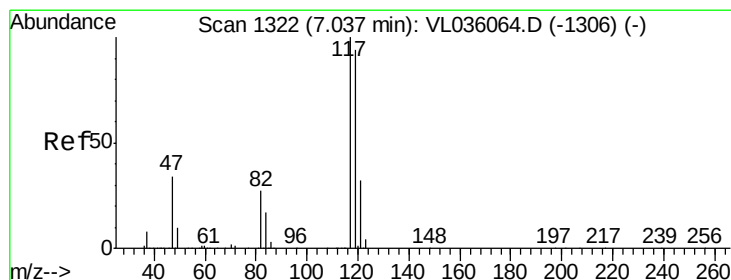
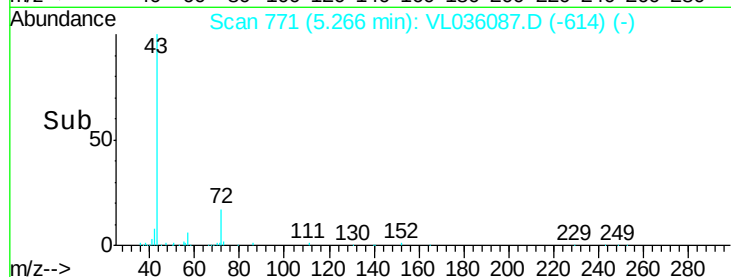
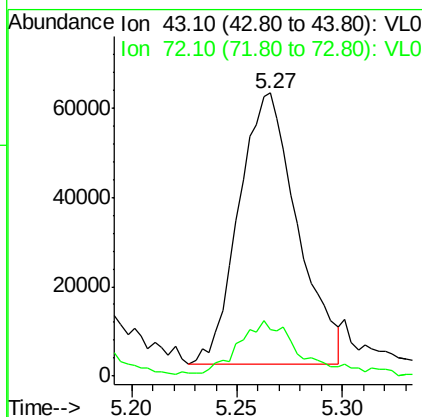
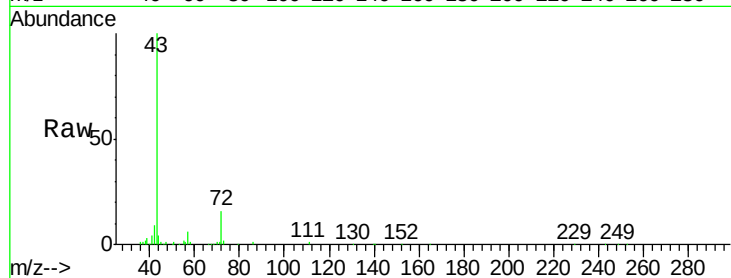
#34
2-Butanone
Concen: 0.702 ppbv
RT: 5.27 min Scan# 771
Delta R.T. 0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampled :
IA-2B

Tot Ion: 43 Resp: 117250
Ion Ratio Lower Upper
43 100
72 23.4 16.5 24.7

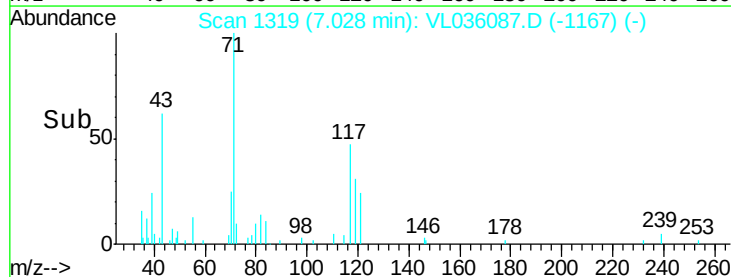
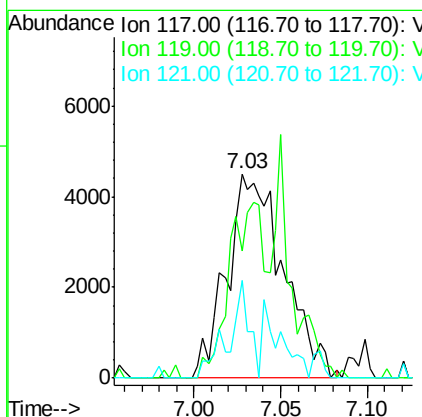
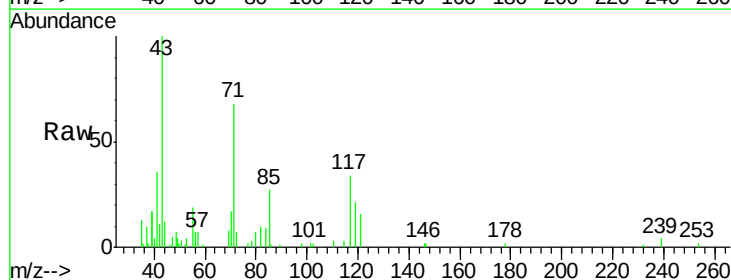
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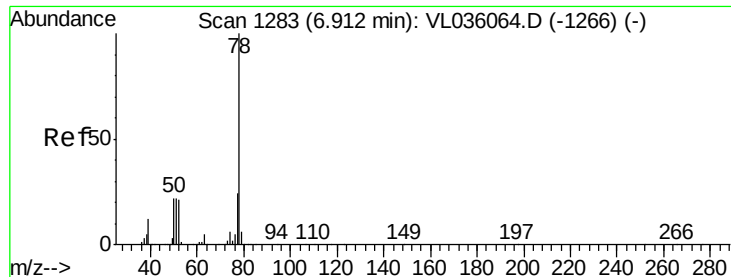
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 7.03 min Scan# 1319
Delta R.T. -0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion: 117 Resp: 10159
Ion Ratio Lower Upper
117 100
119 62.3 75.1 112.7#
121 47.9 25.6 38.4#





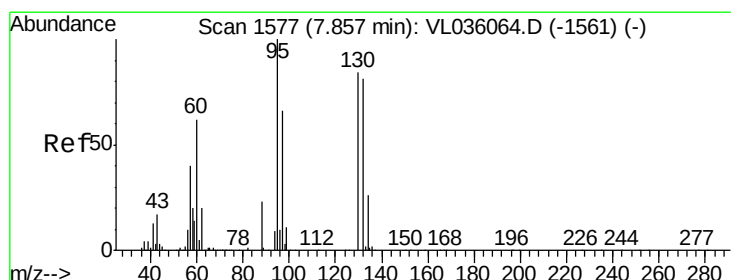
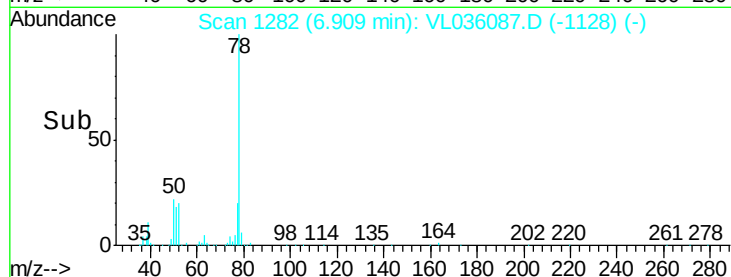
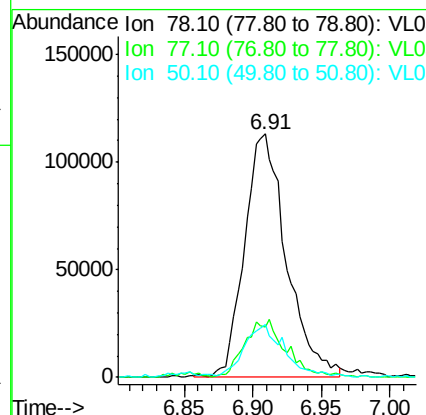
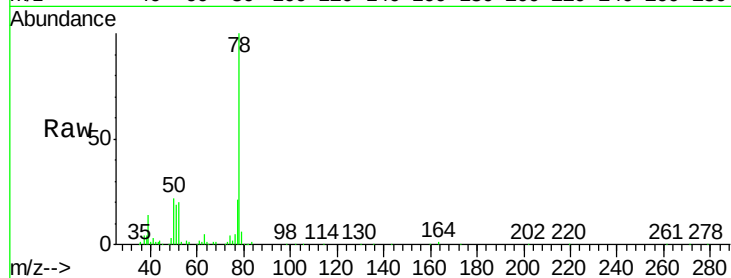
#36
Benzene
Concen: 1.128 ppbv m
RT: 6.91 min Scan# 1282
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampleId :
IA-2B

Tot Ion	Ratio	Lower	Upper
78	100		
77	20.8	19.4	29.2
50	21.9	17.8	26.8

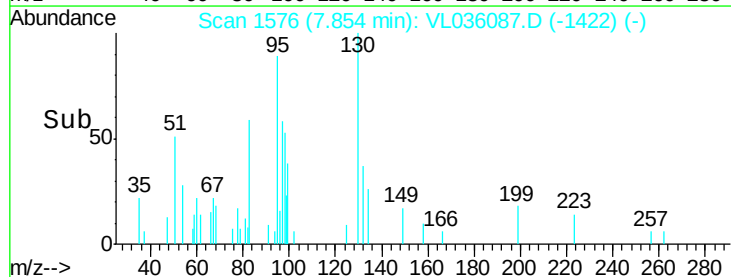
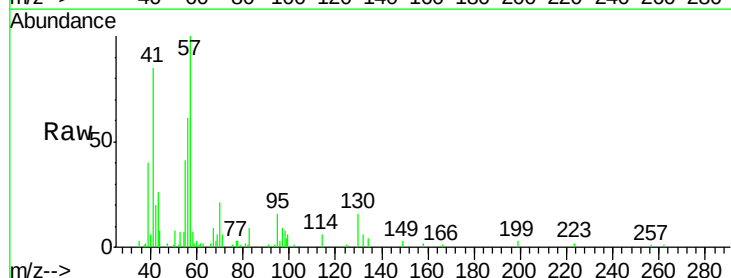
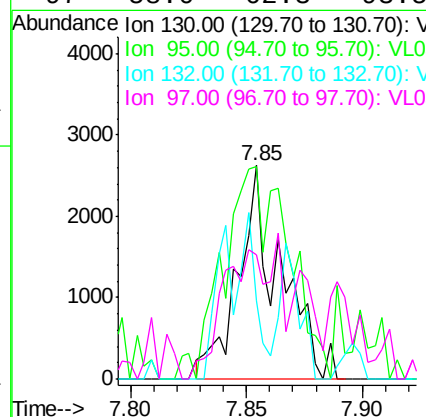
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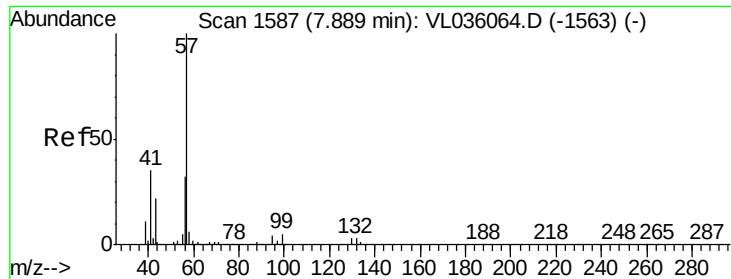
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#38
Trichloroethene
Concen: 0.042 ppbv m
RT: 7.85 min Scan# 1576
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion	Ratio	Lower	Upper
130	100		
95	99.7	95.2	142.8
132	36.7	76.9	115.3#
97	58.0	62.3	93.5#





#44

2,2,4-Trimethylpentane

Concen: 1.511 ppbv

RT: 7.89 min Scan# 1588

Delta R.T. 0.00 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Instrument :

MSVOA_L

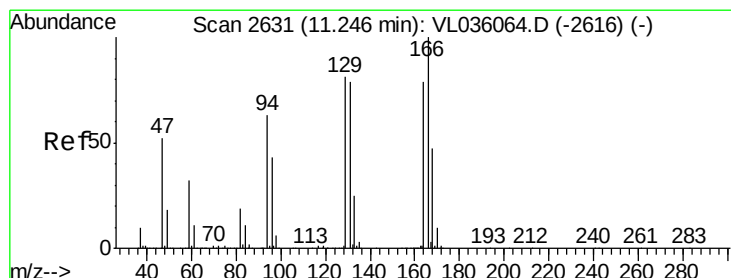
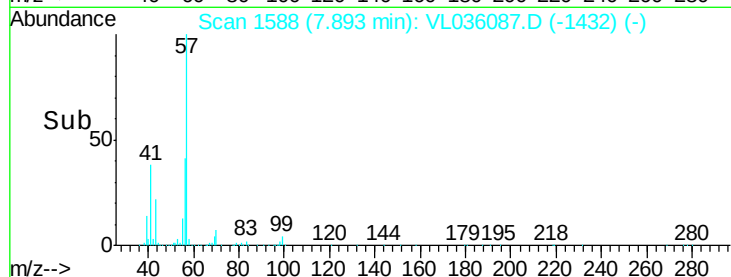
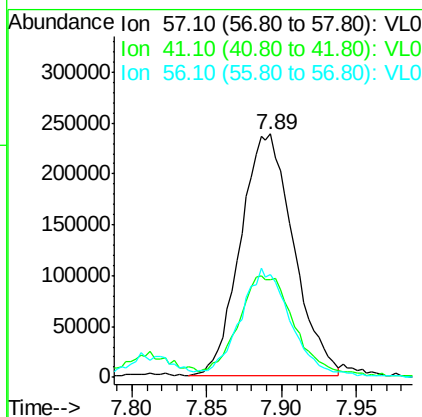
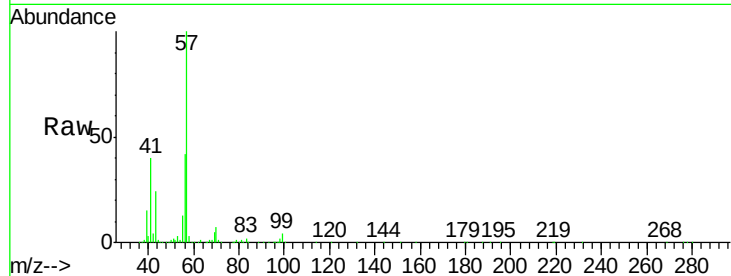
ClientSampleId :

IA-2B

Tot Ion	Ratio	Lower	Upper
57	100		
41	45.1	28.9	43.3#
56	43.9	25.3	37.9#

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#52

Tetrachloroethene

Concen: 0.147 ppbv m

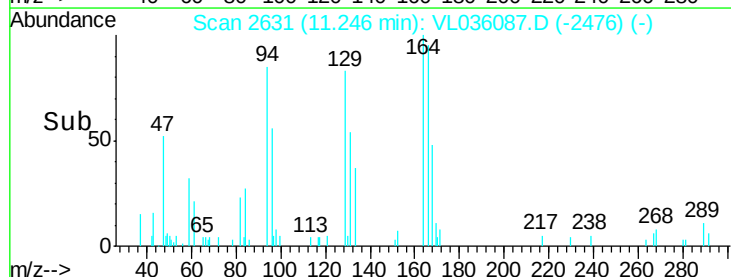
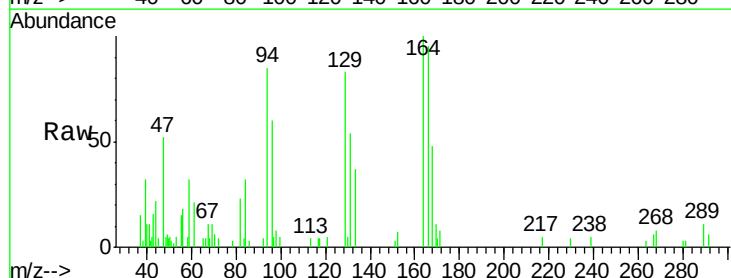
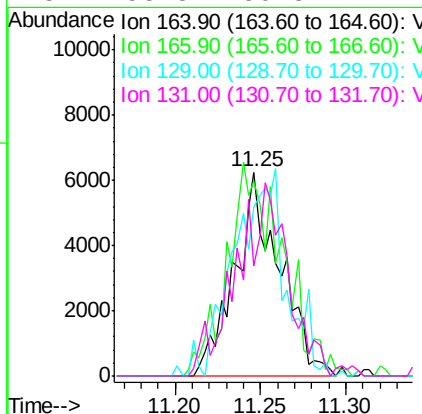
RT: 11.25 min Scan# 2631

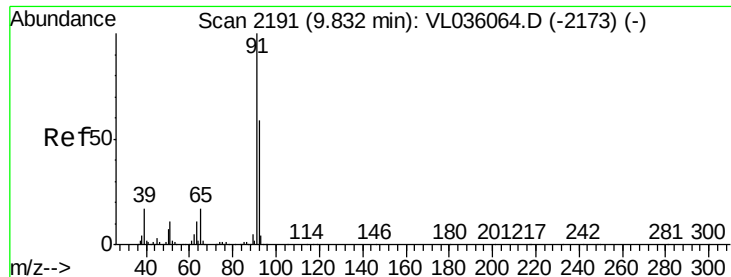
Delta R.T. -0.00 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Tgt Ion	Ratio	Lower	Upper
164	100		
166	95.2	101.9	152.9#
129	83.1	82.1	123.1
131	53.8	80.8	121.2#





#53

Toluene

Concen: 6.606 ppbv

RT: 9.82 min Scan# 2189

Delta R.T. -0.01 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Instrument :

MSVOA_L

ClientSampleId :

IA-2B

Tot Ion: 91 Resp: 1582972

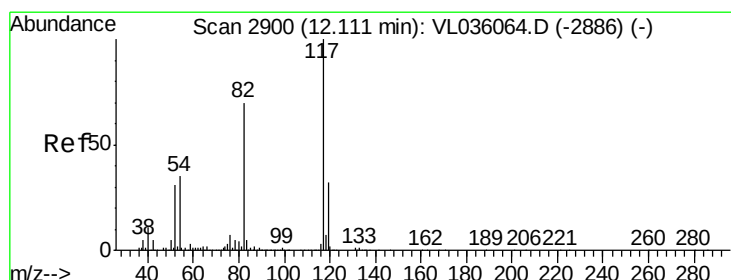
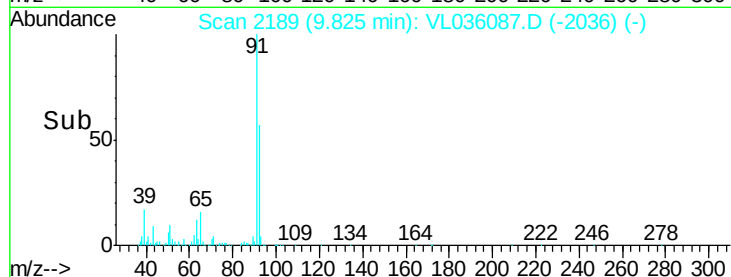
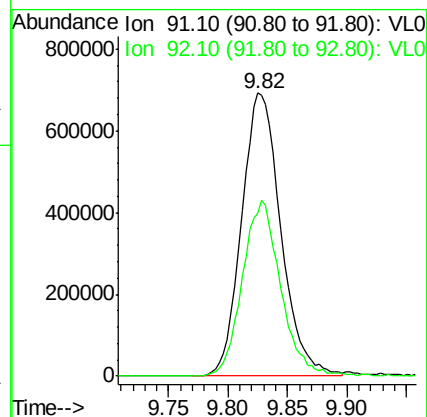
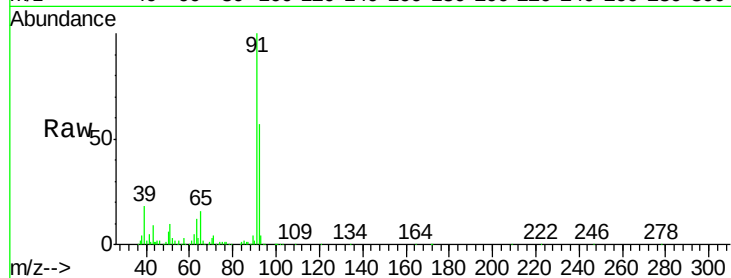
Ion Ratio Lower Upper

91 100

92 60.5 48.2 72.2

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.11 min Scan# 2899

Delta R.T. -0.00 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

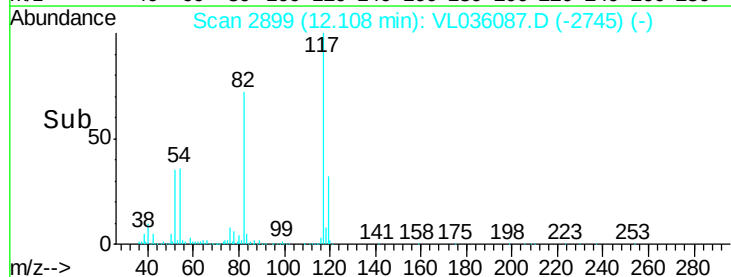
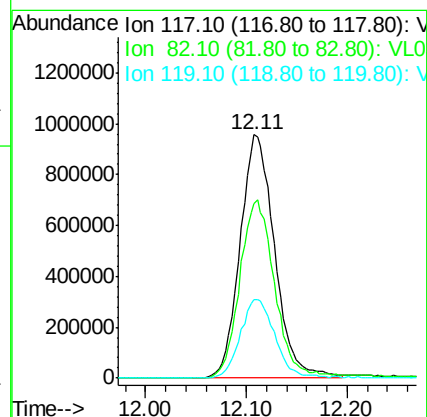
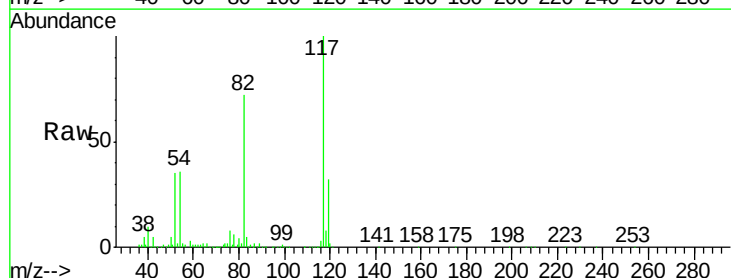
Tgt Ion: 117 Resp: 2274872

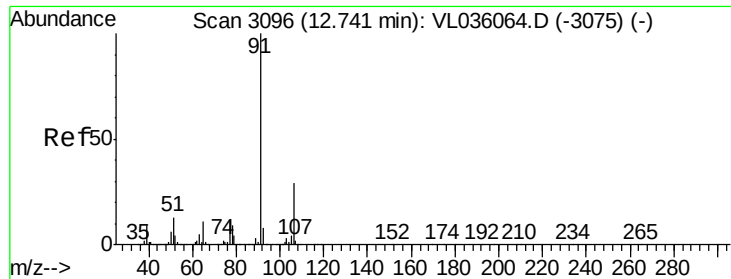
Ion Ratio Lower Upper

117 100

82 76.0 0.0 0.0#

119 32.8 0.0 0.0#





#58

Ethyl Benzene

Concen: 2.019 ppbv

RT: 12.73 min Scan# 3094

Delta R.T. -0.01 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Instrument :

MSVOA_L

ClientSampled :

IA-2B

Tot Ion: 91 Resp: 629529

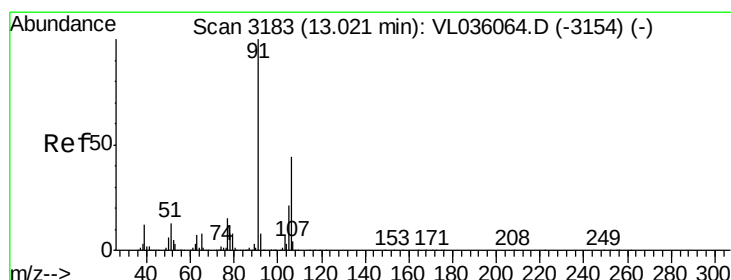
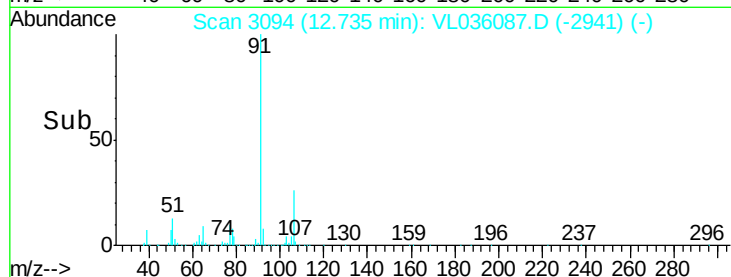
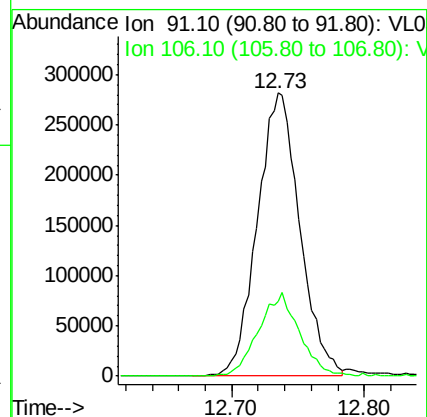
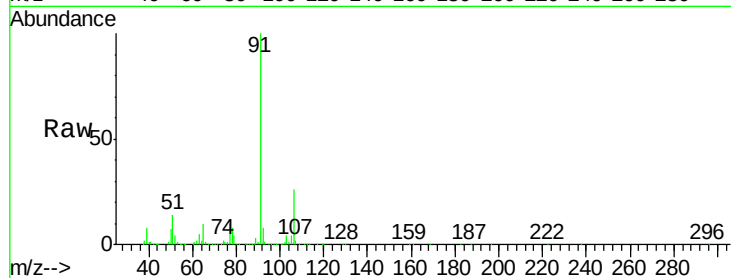
Ion Ratio Lower Upper

91 100

106 26.2 23.0 34.4

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#59

m/p-Xylene

Concen: 8.686 ppbv

RT: 12.99 min Scan# 3174

Delta R.T. -0.03 min

Lab File: VL036087.D

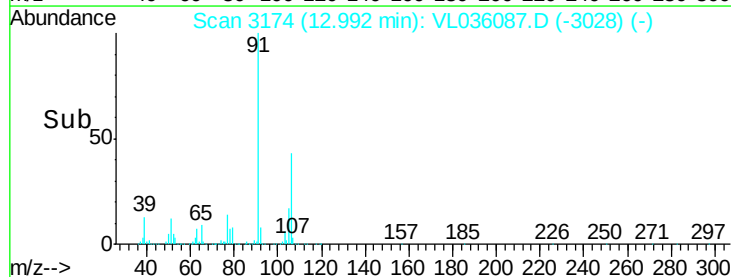
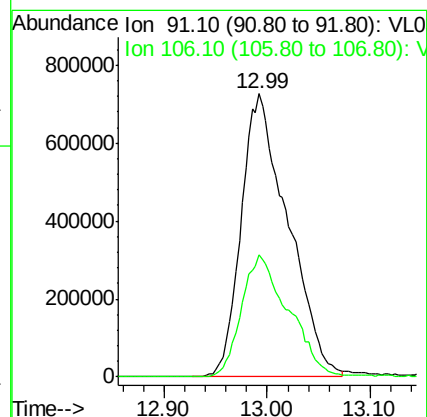
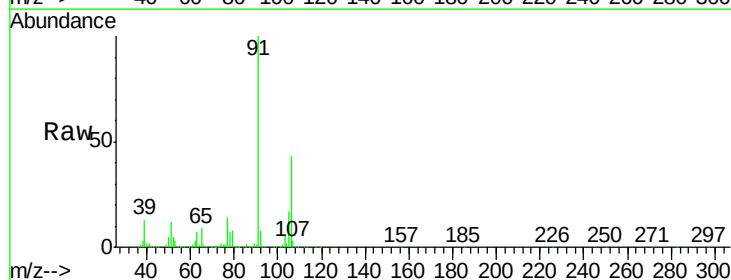
Acq: 8 Dec 2020 5:44

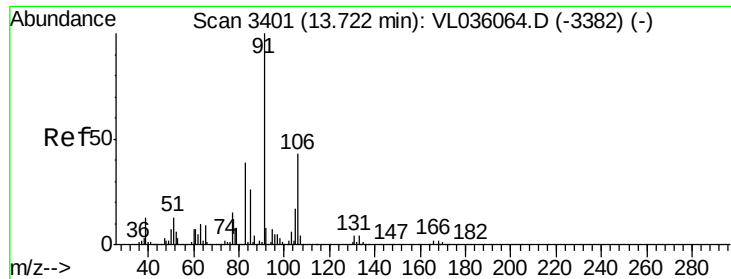
Tgt Ion: 91 Resp: 2280771

Ion Ratio Lower Upper

91 100

106 44.1 33.6 50.4





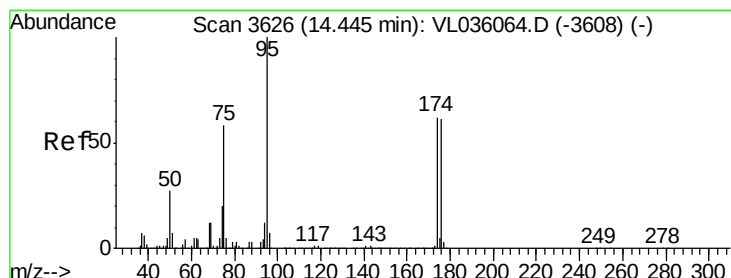
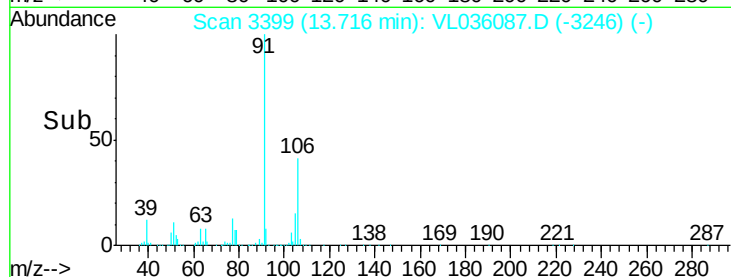
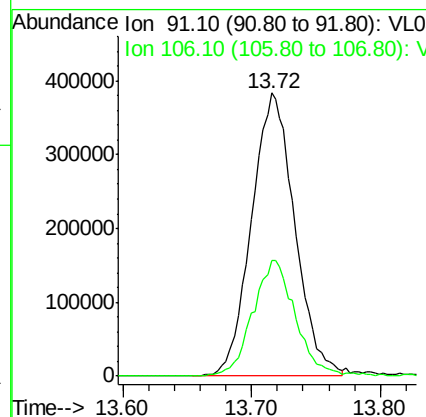
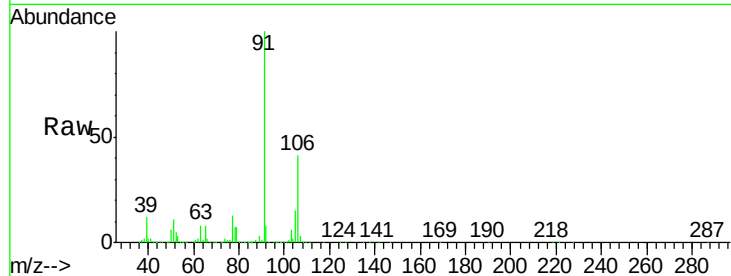
#60
o-Xylene
Concen: 3.624 ppbv
RT: 13.72 min Scan# 3399
Delta R.T. -0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampled :
IA-2B

Tot Ion: 91 Resp: 896564
Ion Ratio Lower Upper
91 100
106 40.8 21.6 64.6

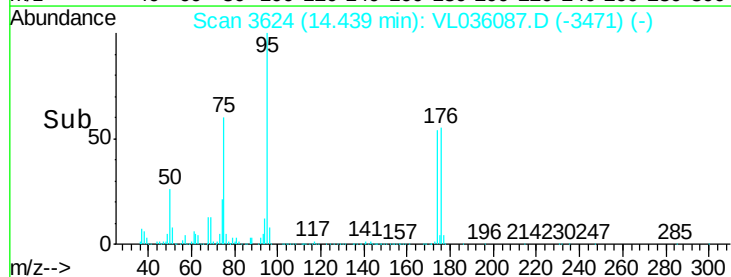
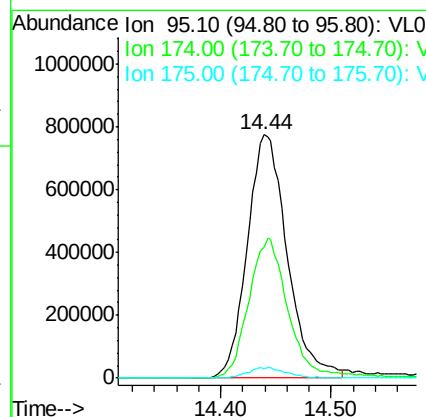
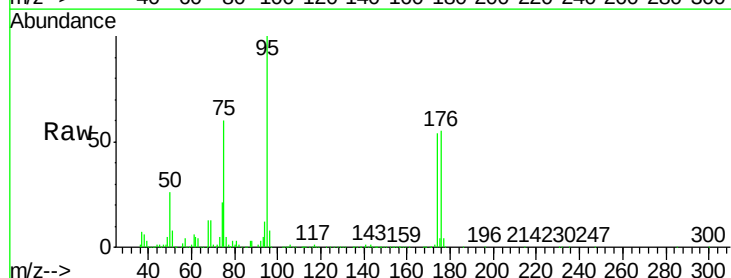
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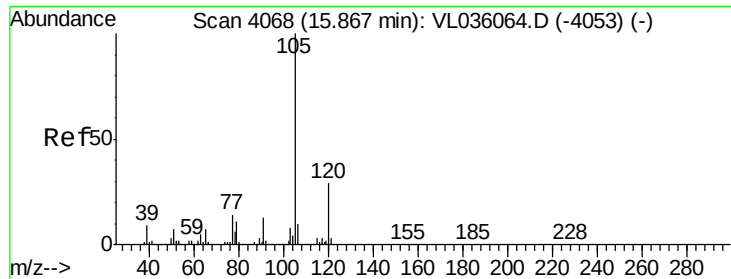
MMDadoda
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.759 ppbv
RT: 14.44 min Scan# 3624
Delta R.T. -0.01 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion: 95 Resp: 1943438
Ion Ratio Lower Upper
95 100
174 58.5 50.7 76.1
175 4.3 4.0 6.0





#72

4-Ethyltoluene

Concen: 0.463 ppbv m

RT: 15.86 min Scan# 4067

Delta R.T. -0.00 min

Lab File: VL036087.D

Acq: 8 Dec 2020 5:44

Instrument :

MSVOA_L

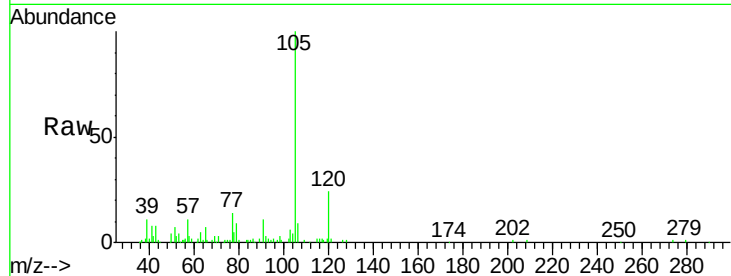
ClientSampleId :

IA-2B

Tot Ion:	105	Resp:	124113
Ion Ratio	Lower	Upper	
105	100		
120	26.1	23.6	35.4
91	16.1	11.4	17.0
77	14.4	12.1	18.1

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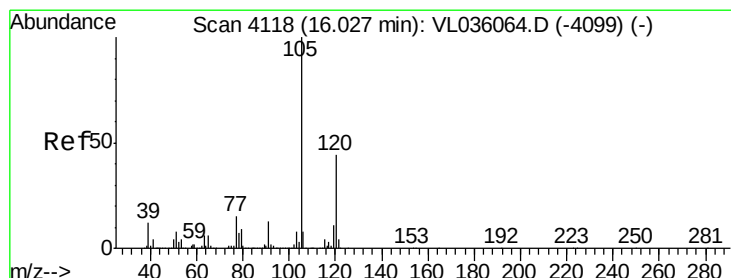
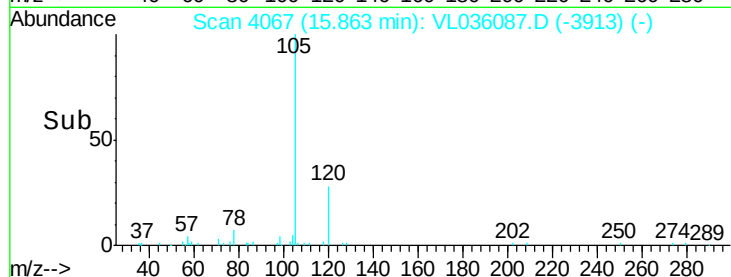
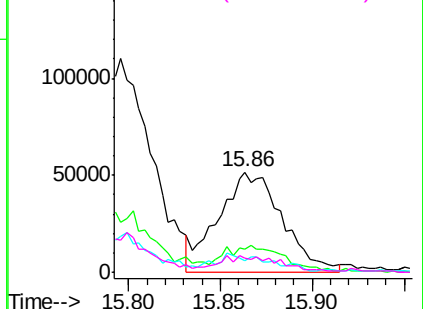


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.422 ppbv m

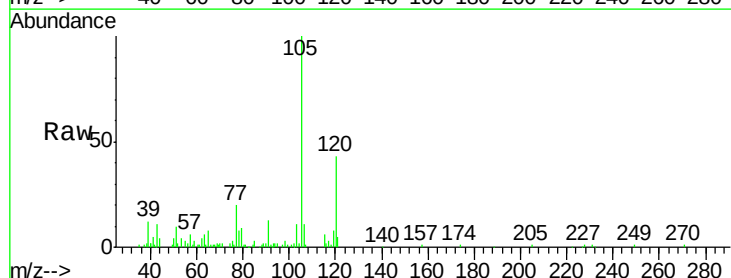
RT: 16.02 min Scan# 4117

Delta R.T. -0.00 min

Lab File: VL036087.D

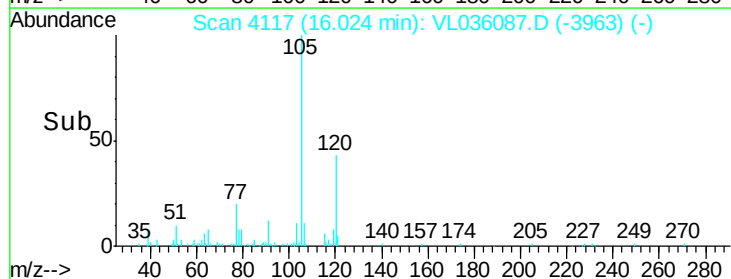
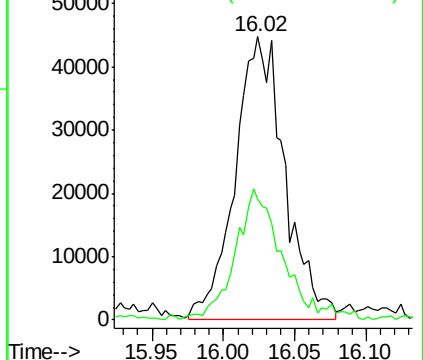
Acq: 8 Dec 2020 5:44

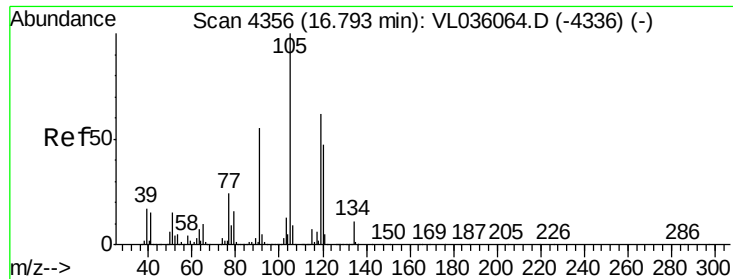
Tgt Ion:	105	Resp:	108018
Ion Ratio	Lower	Upper	
105	100		
120	42.5	35.4	53.2



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





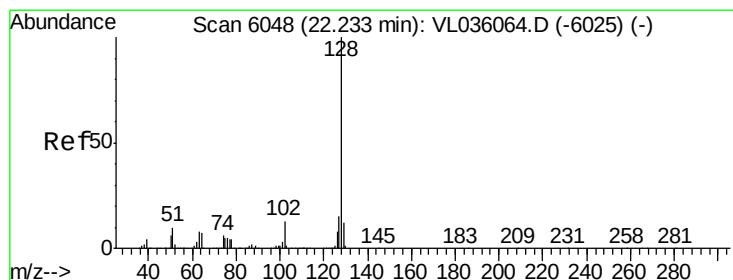
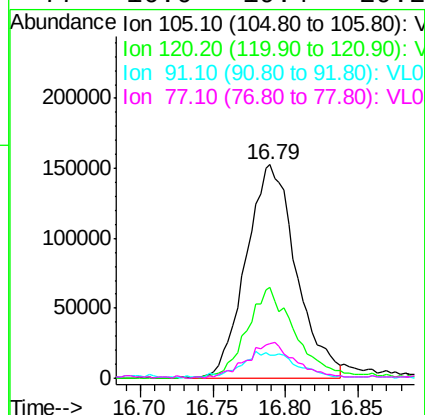
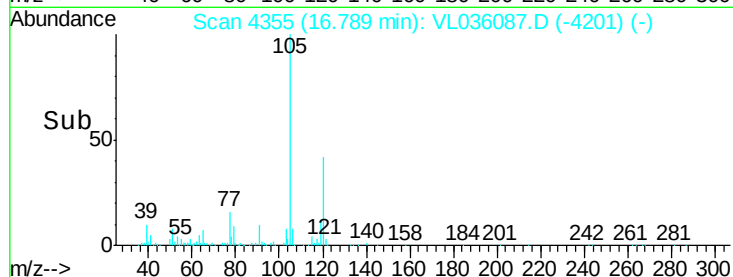
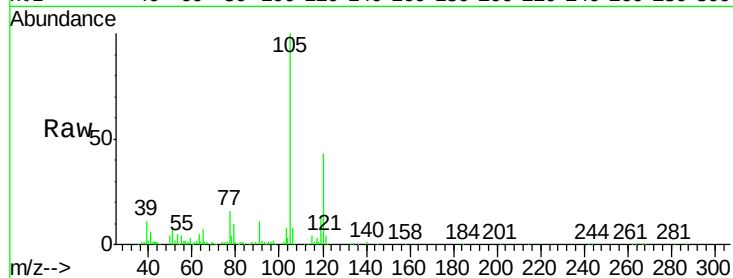
#74
1,2,4-Trimethylbenzene
Concen: 1.419 ppbv
RT: 16.79 min Scan# 4355
Delta R.T. -0.00 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Instrument :
MSVOA_L
ClientSampleId :
IA-2B

Tot Ion	Ratio	Resp	Lower	Upper
105	100			
120	42.5	37.4	56.0	
91	10.5	45.6	68.4#	
77	16.0	19.4	29.2#	

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#79
Naphthalene
Concen: 0.259 ppbv m
RT: 22.26 min Scan# 6055
Delta R.T. 0.02 min
Lab File: VL036087.D
Acq: 8 Dec 2020 5:44

Tgt Ion	Ratio	Resp	Lower	Upper
128	100			
127	16.5	11.7	17.5	
129	8.0	9.3	13.9#	

