

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051821\
 Data File : VL036971.D
 Acq On : 18 May 2021 16:24
 Operator : SY/AP
 Sample : M2430-01
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Manual Integrations
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MMDadoda
 5/20/2021 5:55:36 PM

Quant Time: May 20 15:52:41 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue May 18 2021
 QLast Update : Tue May 18 12:00:15 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1343051	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3703330	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3425699	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.39	95	2557561	9.94	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.40%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	49754m	0.218	ppbv	
3) Chlorodifluoromethane	2.97	51	874882m	3.556	ppbv	
4) Chloromethane	3.13	50	87096	1.040	ppbv	90
9) Propene	3.01	41	206673m	2.346	ppbv	
10) Heptane	8.10	43	39704m	0.181	ppbv	
11) Trichlorofluoromethane	3.93	101	43663	0.207	ppbv	99
13) Ethanol	3.63	45	24278361	2065.276	ppbv	94
15) Acetone	3.83	43	1477266m	10.739	ppbv	
19) Isopropyl Alcohol	3.99	45	8516997	115.176	ppbv #	32
20) Methylene Chloride	4.33	84	717728	9.733	ppbv	94
26) Hexane	5.66	57	617856	3.659	ppbv	83
29) Chloroform	5.73	83	134104m	0.562	ppbv	
30) Cyclohexane	7.13	84	15609m	0.109	ppbv	
31) cis-1,2-Dichloroethene	5.53	61	21836	0.144	ppbv	93
34) 2-Butanone	5.23	43	185948	1.379	ppbv	93
35) Carbon Tetrachloride	7.00	117	16050m	0.065	ppbv	
36) Benzene	6.87	78	105768	0.332	ppbv	98
37) 1,2-Dichloroethane	6.29	62	27465m	0.174	ppbv	
38) Trichloroethene	7.82	130	133816m	0.981	ppbv	
41) Tetrahydrofuran	6.02	42	69902m	0.910	ppbv	
44) 2,2,4-Trimethylpentane	7.85	57	75033m	0.137	ppbv	
52) Tetrachloroethene	11.20	164	253539	1.999	ppbv	96
53) Toluene	9.79	91	261876	0.690	ppbv	99
59) m/p-Xylene	12.95	91	86699m	0.217	ppbv	
61) Styrene	13.50	104	24921m	0.116	ppbv	
69) p-Isopropyltoluene	17.64	119	89394m	0.154	ppbv	
74) 1,2,4-Trimethylbenzene	16.74	105	44151m	0.101	ppbv	

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

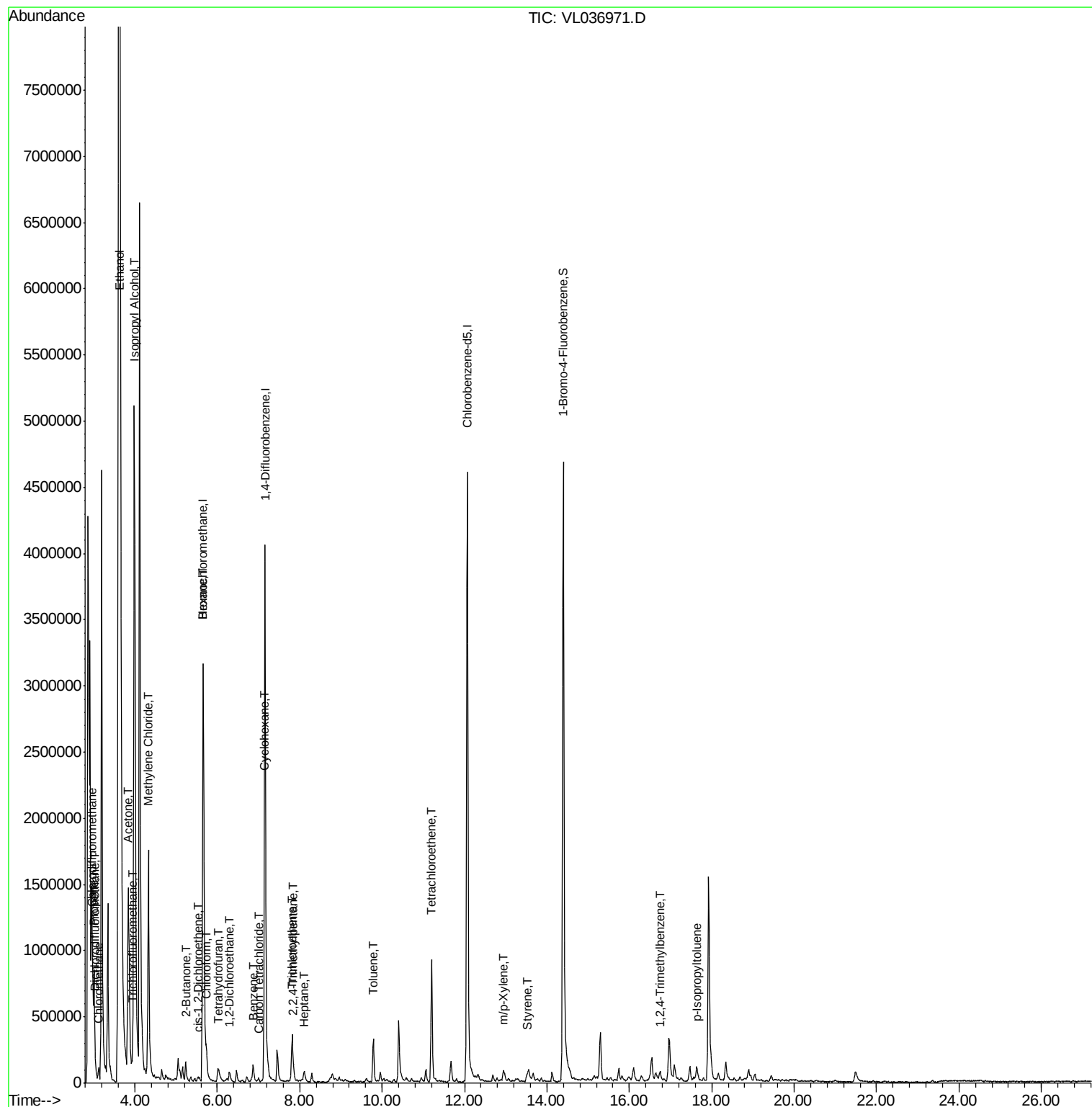
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051821\
Data File : VL036971.D
Acq On : 18 May 2021 16:24
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Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

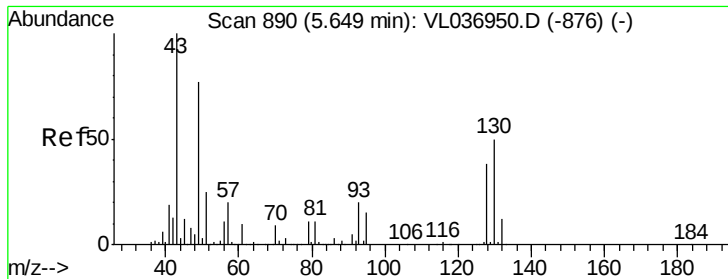
Instrument :
MSVOA_L
ClientSampleId :
IA1

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Quant Time: May 20 15:52:41 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LTue May
QLast Update : Tue May 18 12:00:15 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 49 Resp: 1343051

Ion Ratio Lower Upper

49 100

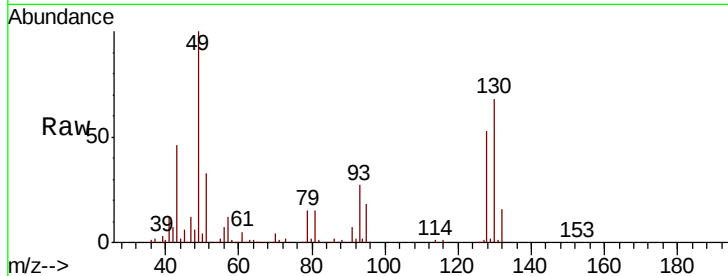
128 52.2 26.9 80.7

130 66.8 33.8 101.4

Manual Integrations
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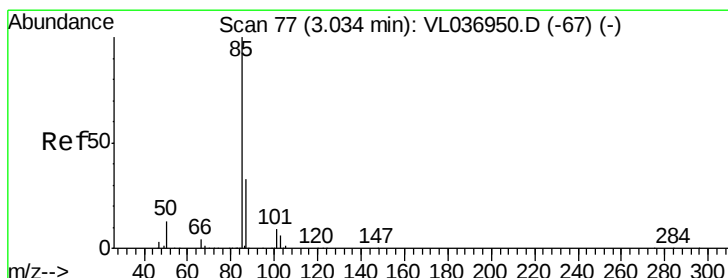
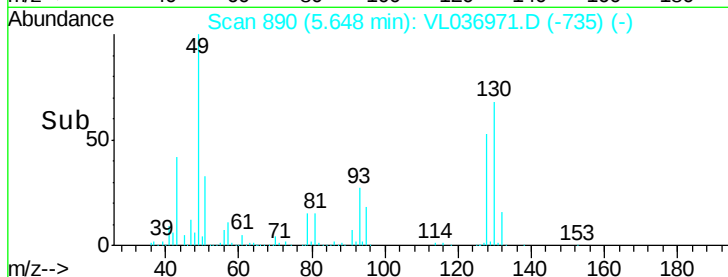
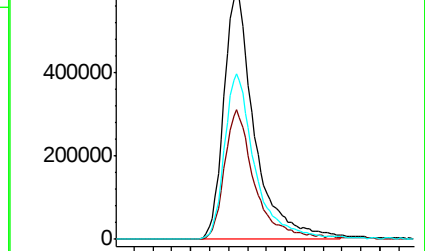
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.218 ppbv m

RT: 3.03 min Scan# 77

Delta R.T. -0.00 min

Lab File: VL036971.D

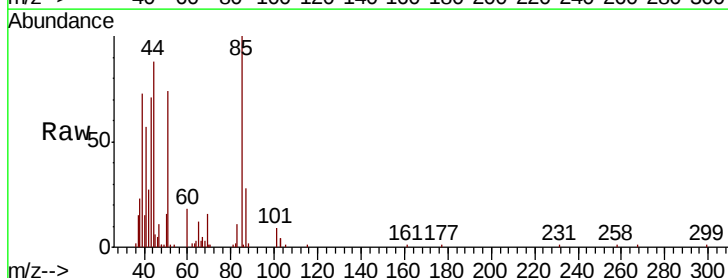
Acq: 18 May 2021 16:24

Tgt Ion: 85 Resp: 49754

Ion Ratio Lower Upper

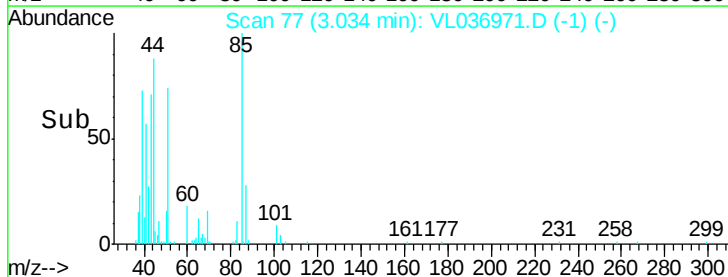
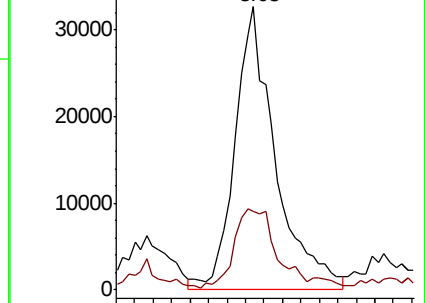
85 100

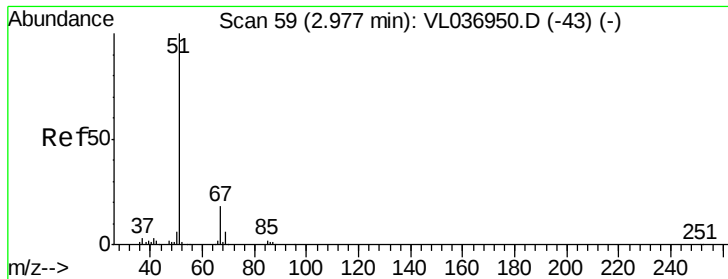
87 27.8 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 3.556 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 51 Resp: 874882

Ion Ratio Lower Upper

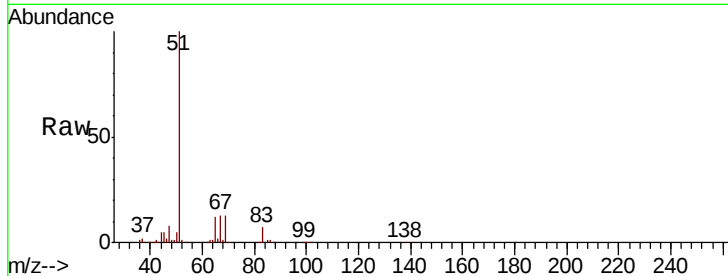
51 100

67 13.5 14.6 21.8#

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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0

600000

500000

400000

300000

200000

100000

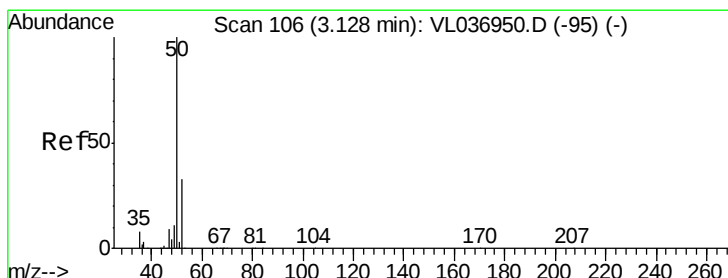
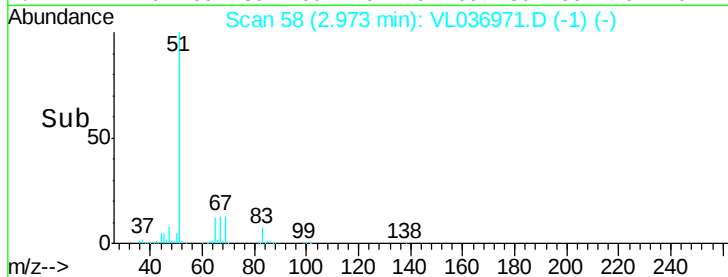
0

2.95

3.00

3.05

Time-->



#4

Chloromethane

Concen: 1.040 ppbv

RT: 3.13 min Scan# 106

Delta R.T. -0.00 min

Lab File: VL036971.D

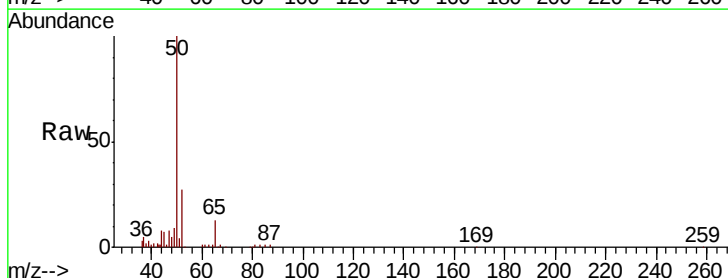
Acq: 18 May 2021 16:24

Tgt Ion: 50 Resp: 87096

Ion Ratio Lower Upper

50 100

52 27.0 26.1 39.1



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0

60000

50000

40000

30000

20000

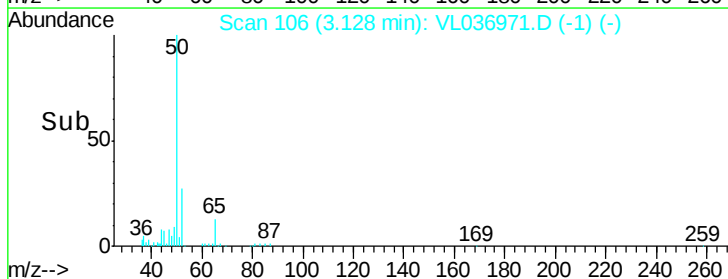
10000

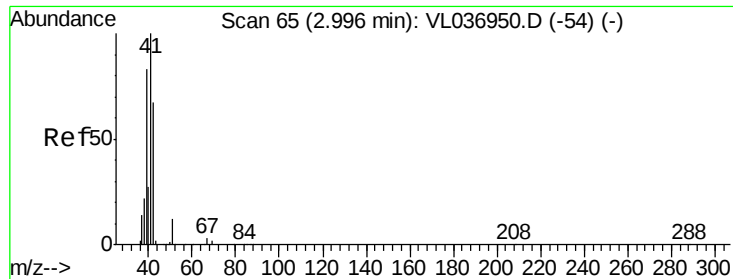
0

3.10

3.15

Time-->





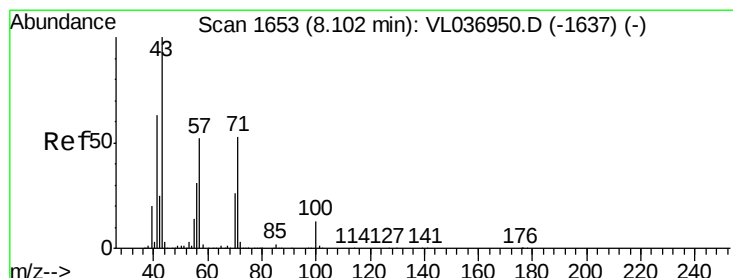
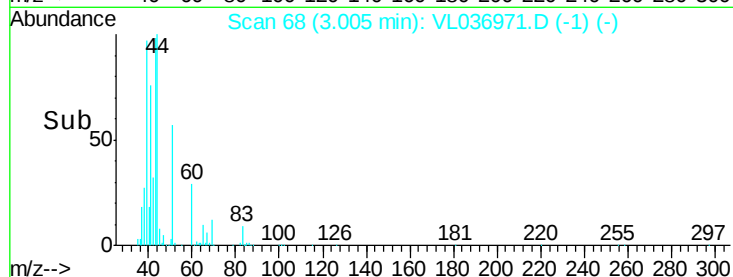
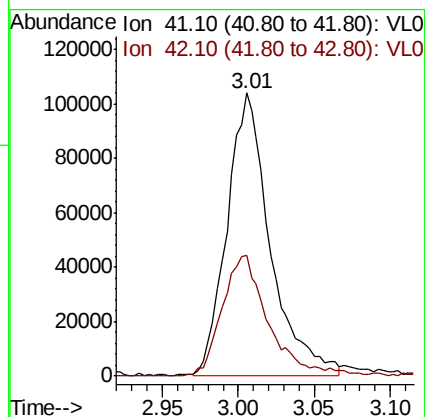
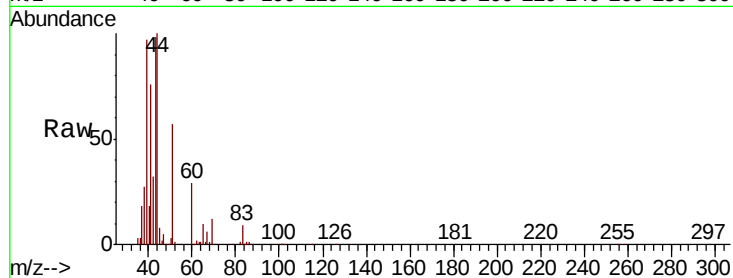
#9
 Propene
 Concen: 2.346 ppbv m
 RT: 3.01 min Scan# 68
 Delta R.T. 0.01 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 41 Resp: 206673
 Ion Ratio Lower Upper
 41 100
 42 542.0 53.9 80.9#

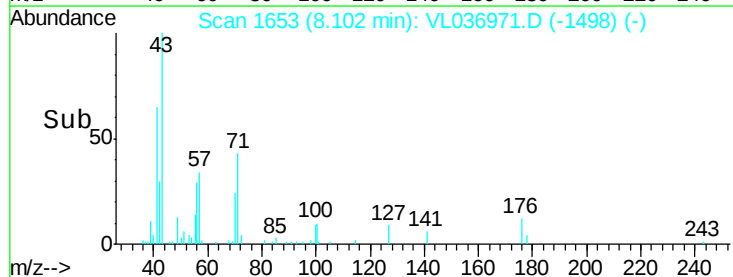
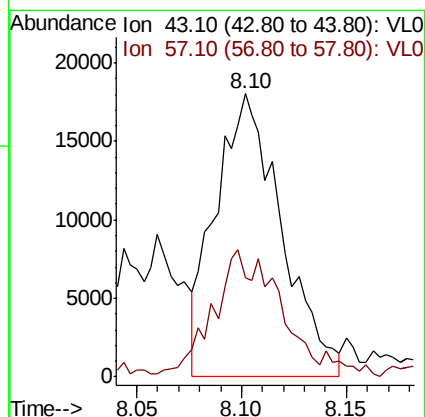
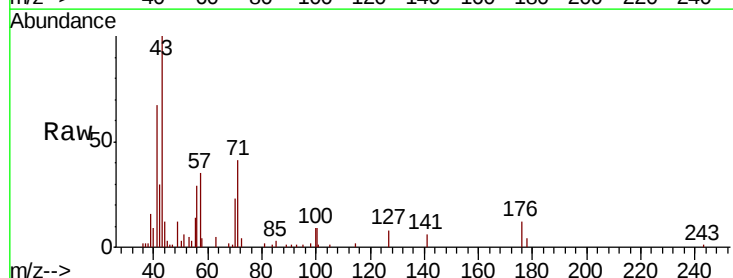
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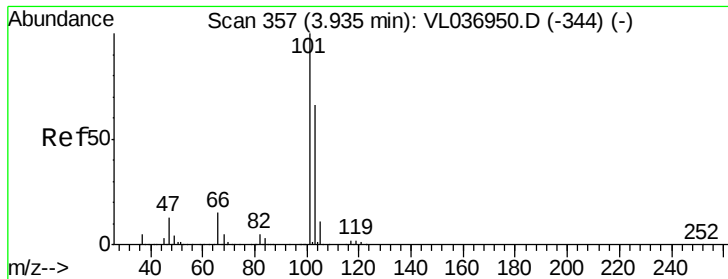
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#10
 Heptane
 Concen: 0.181 ppbv m
 RT: 8.10 min Scan# 1653
 Delta R.T. -0.00 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Tgt Ion: 43 Resp: 39704
 Ion Ratio Lower Upper
 43 100
 57 48.3 41.0 61.6





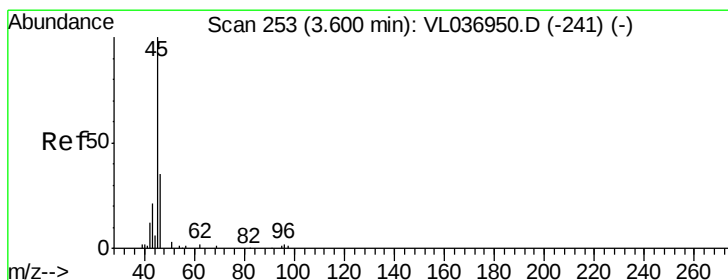
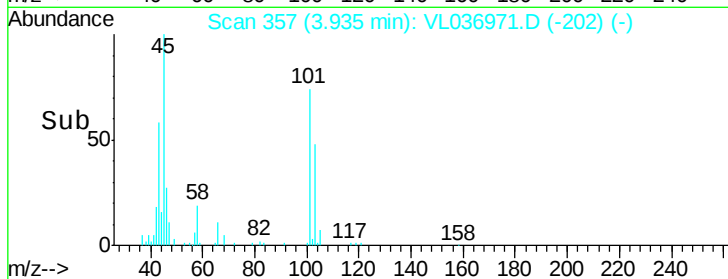
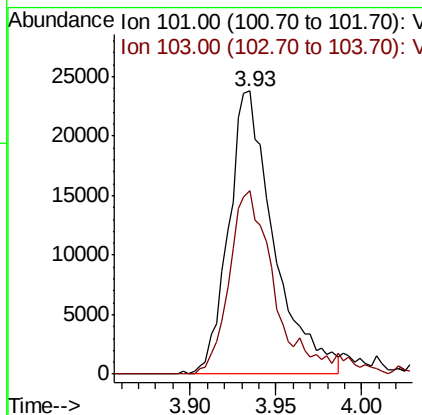
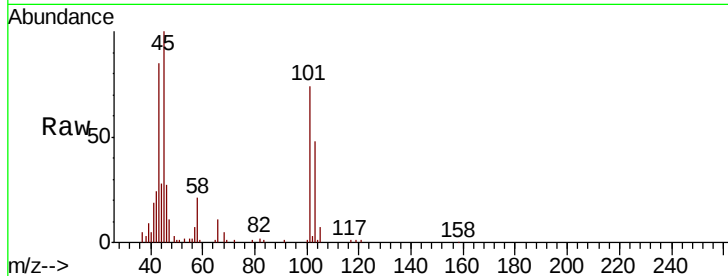
#11
 Trichlorofluoromethane
 Concen: 0.207 ppbv
 RT: 3.93 min Scan# 357
 Delta R.T. -0.00 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion	Ion	Ratio	Lower	Upper
43663	101	100		
	103	64.8	52.6	79.0

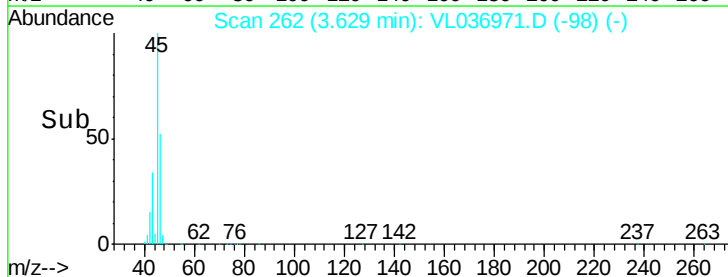
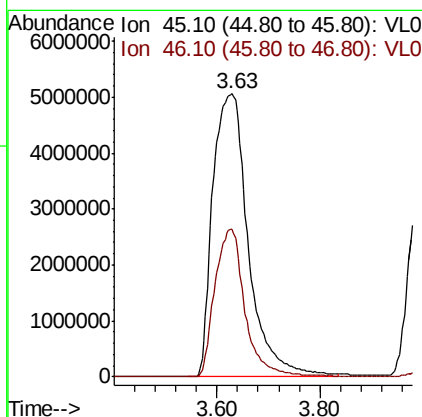
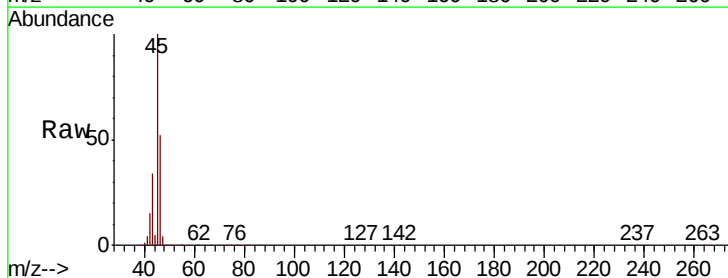
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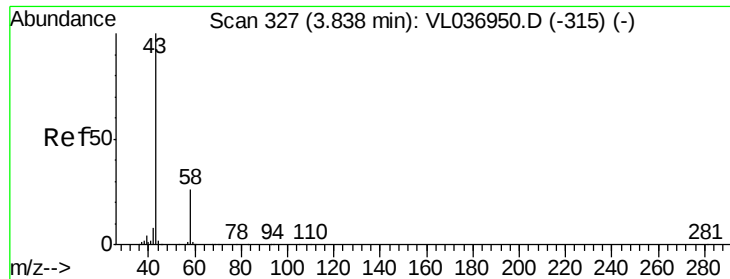
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#13
 Ethanol
 Concen: 2065.276 ppbv
 RT: 3.63 min Scan# 262
 Delta R.T. 0.03 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Tgt Ion	Ion	Ratio	Lower	Upper
24278361	45	100		
	46	44.5	16.3	65.3





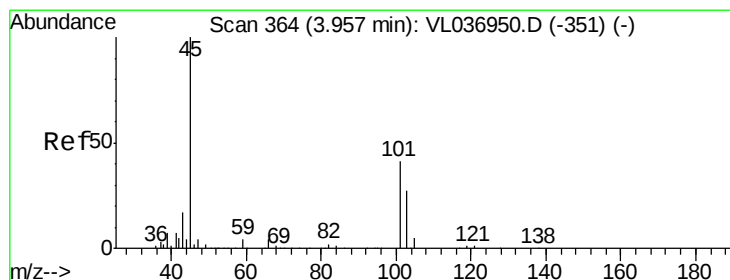
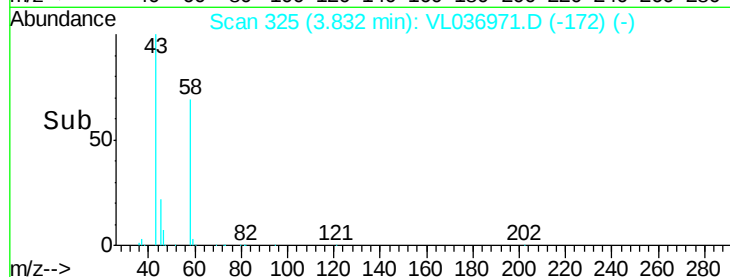
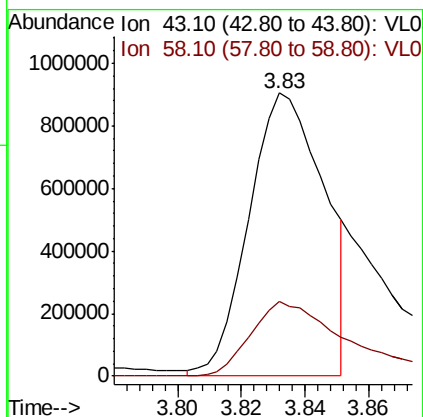
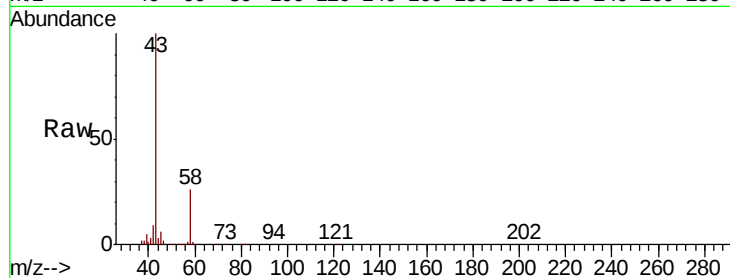
#15
Acetone
Concen: 10.739 ppbv m
RT: 3.83 min Scan# 325
Delta R.T. -0.01 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion: 43 Resp: 1477266
Ion Ratio Lower Upper
43 100
58 36.9 24.0 36.0#

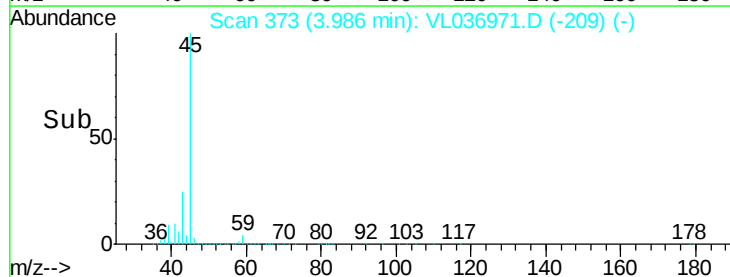
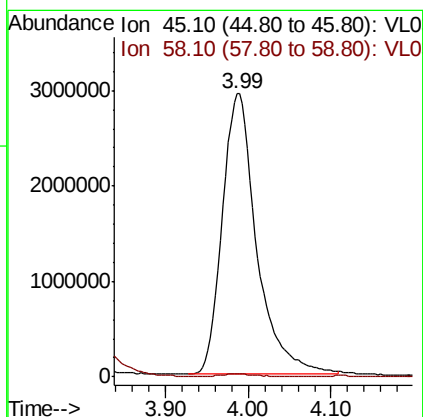
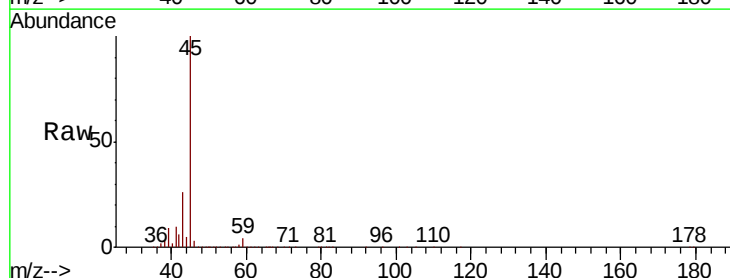
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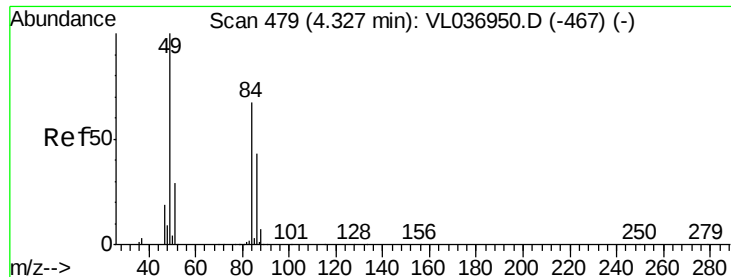
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#19
Isopropyl Alcohol
Concen: 115.176 ppbv
RT: 3.99 min Scan# 373
Delta R.T. 0.03 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion: 45 Resp: 8516997
Ion Ratio Lower Upper
45 100
58 1.3 37.2 55.8#





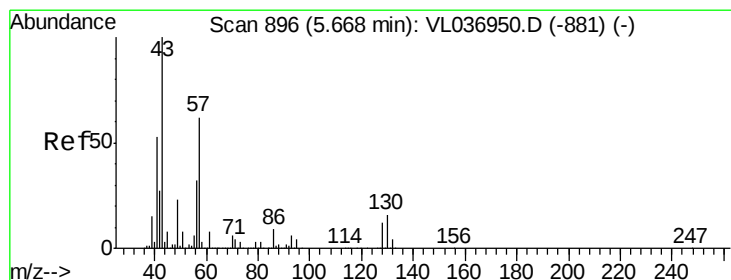
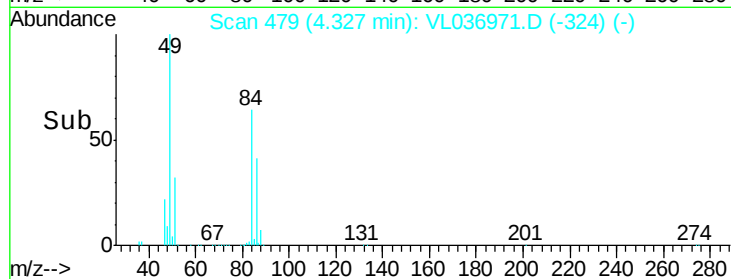
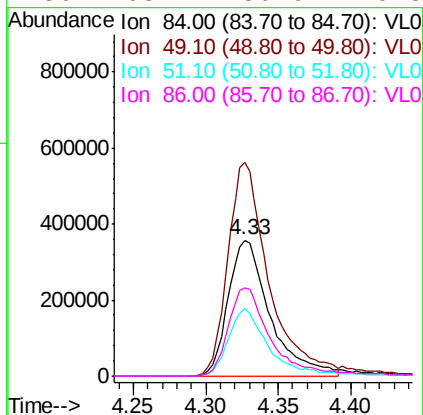
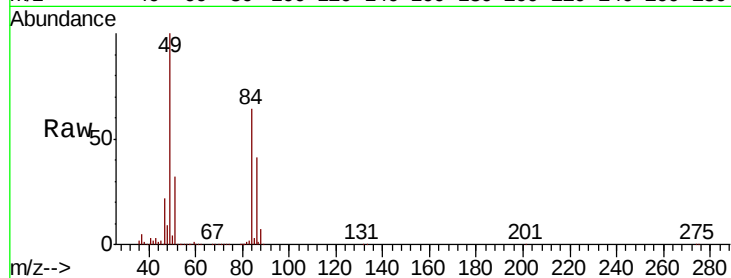
#20
Methvlene Chloride
Concen: 9.733 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	84	Resp	717728
Ion	Ratio	Lower	Upper
84	100		
49	157.1	119.8	179.6
51	50.0	35.1	52.7
86	65.2	50.9	76.3

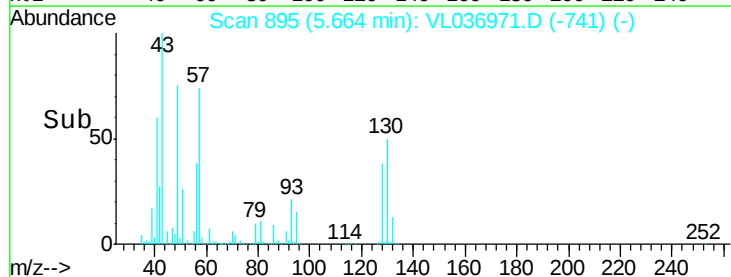
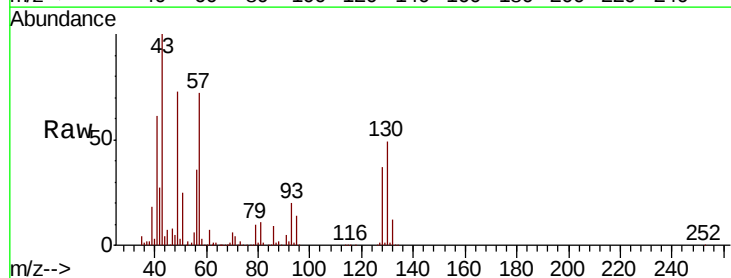
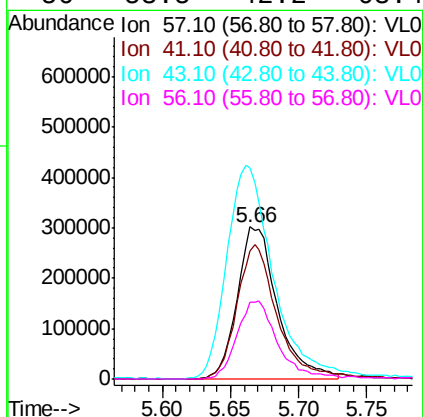
Manual Integrations
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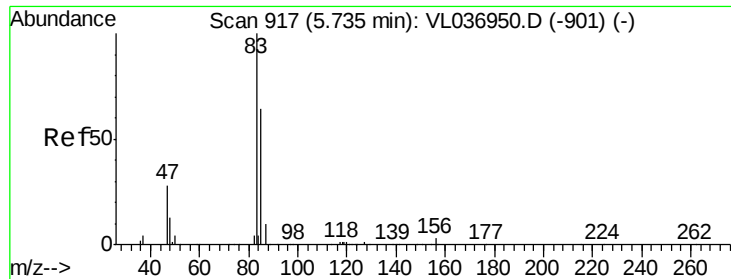
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#26
Hexane
Concen: 3.659 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion	57	Resp	617856
Ion	Ratio	Lower	Upper
57	100		
41	90.0	70.5	105.7
43	166.0	165.8	248.8
56	53.5	42.2	63.4





#29

Chloroform

Concen: 0.562 ppbv m

RT: 5.73 min Scan# 916

Delta R.T. -0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 83 Resp: 134104

Ion Ratio Lower Upper

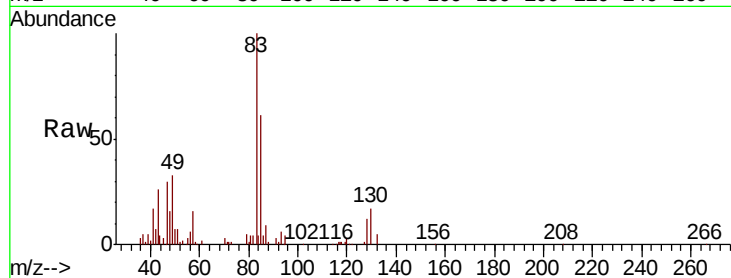
83 100

85 61.4 51.1 76.7

Manual Integrations
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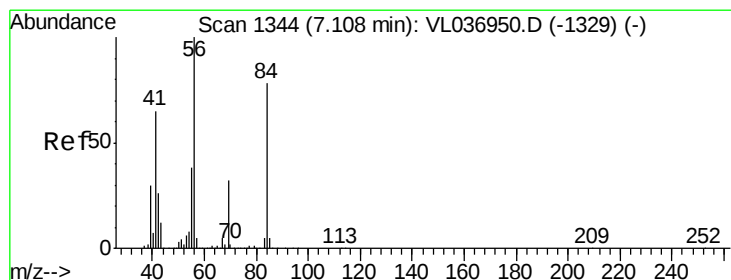
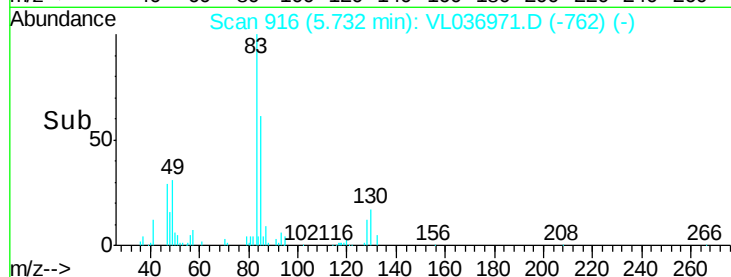
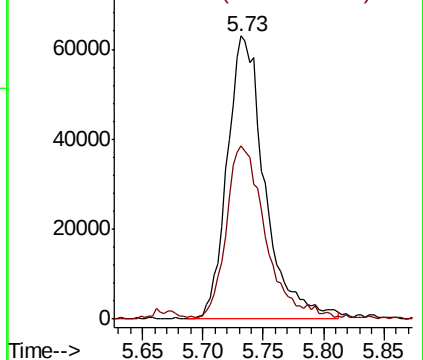
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Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0



#30

Cyclohexane

Concen: 0.109 ppbv m

RT: 7.13 min Scan# 1351

Delta R.T. 0.02 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

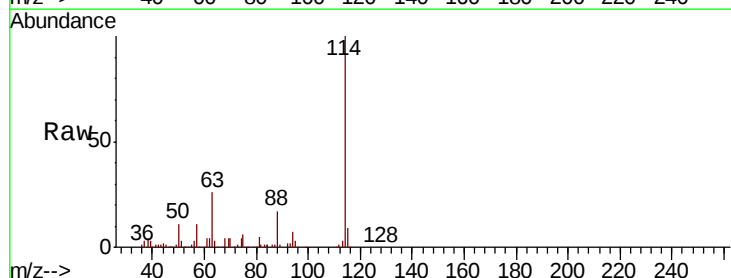
Tgt Ion: 84 Resp: 15609

Ion Ratio Lower Upper

84 100

56 0.0 107.9 161.9#

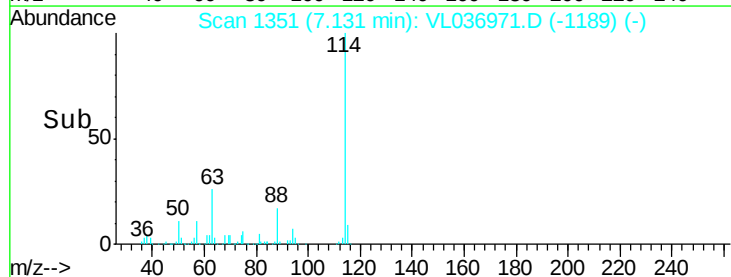
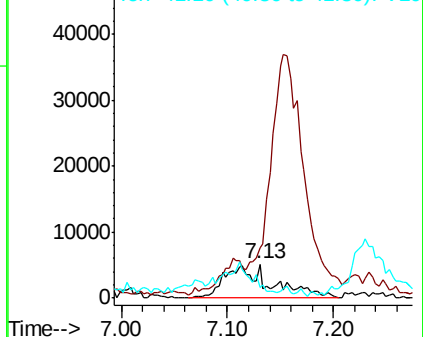
41 0.0 65.5 98.3#

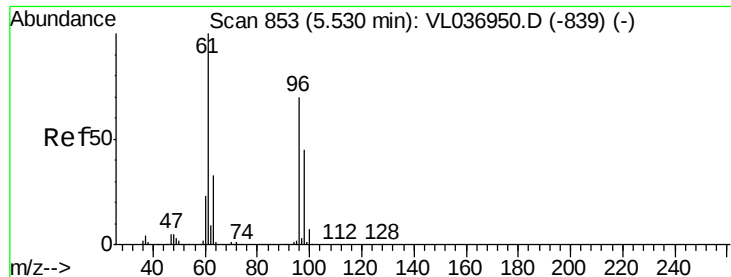


Abundance Ion 84.20 (83.90 to 84.90): VL0

Ion 56.10 (55.80 to 56.80): VL0

Ion 41.10 (40.80 to 41.80): VL0





#31

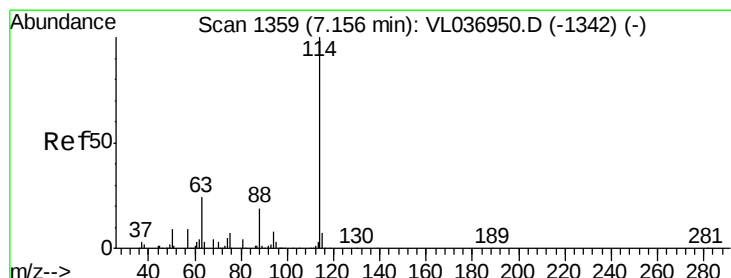
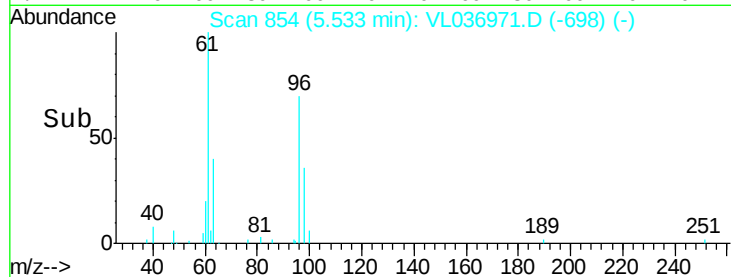
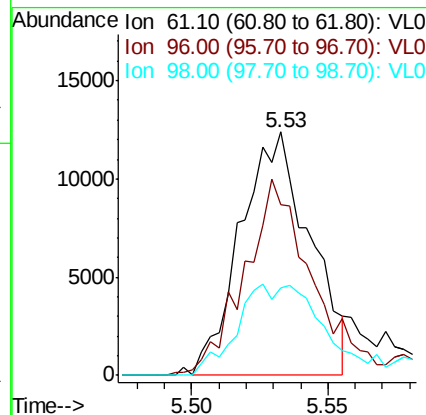
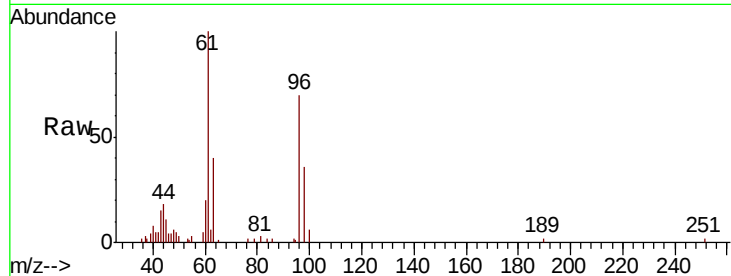
cis-1,2-Dichloroethene
Concen: 0.144 ppbv
RT: 5.53 min Scan# 854
Delta R.T. 0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	61	Resp	21836
Ion	Ratio	Lower	Upper
61	100		
96	67.5	55.9	83.9
98	35.9	35.6	53.4

Manual Integrations
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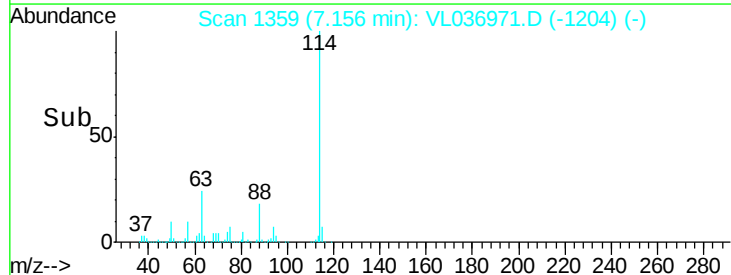
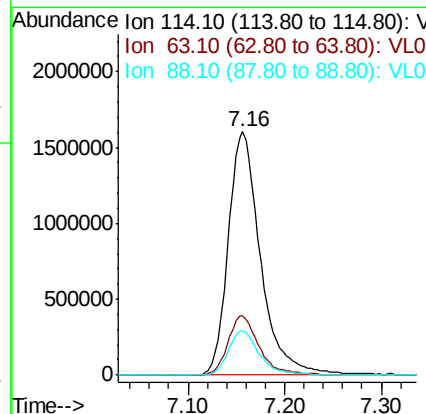
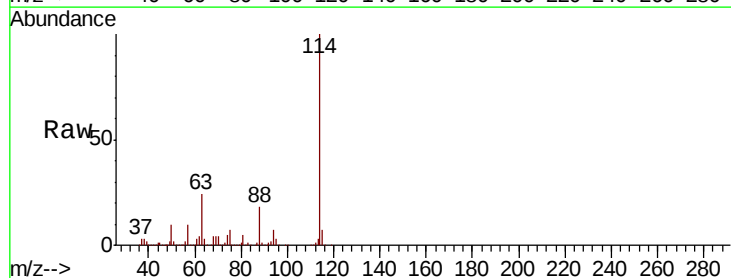
MMDadoda
5/20/2021 5:55:36 PM

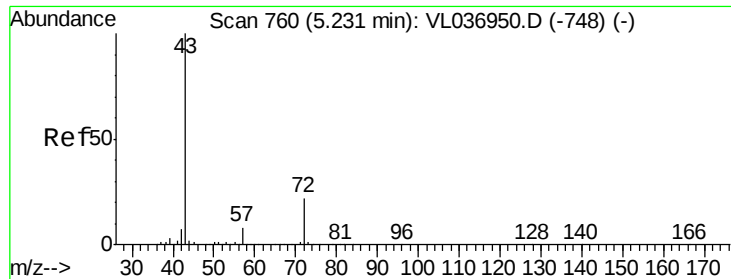


#33

1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.16 min Scan# 1359
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion	114	Resp	3703330
Ion	Ratio	Lower	Upper
114	100		
63	23.9	19.6	29.4
88	17.9	14.6	21.8





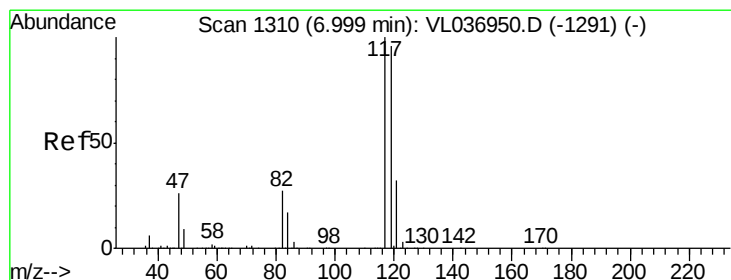
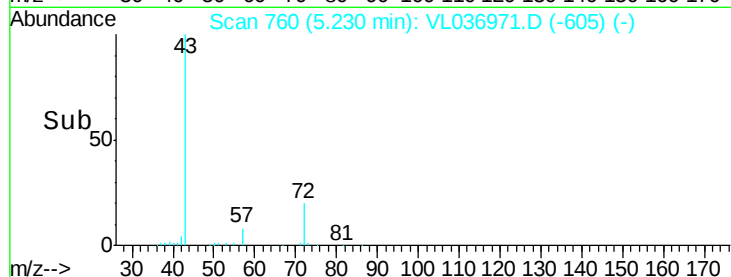
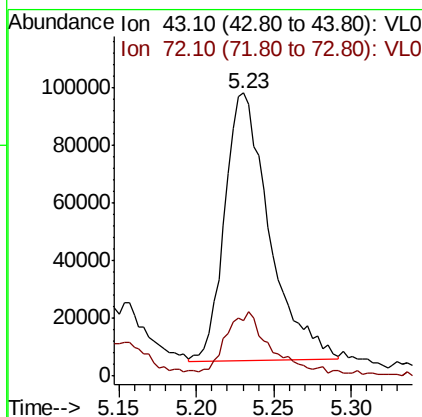
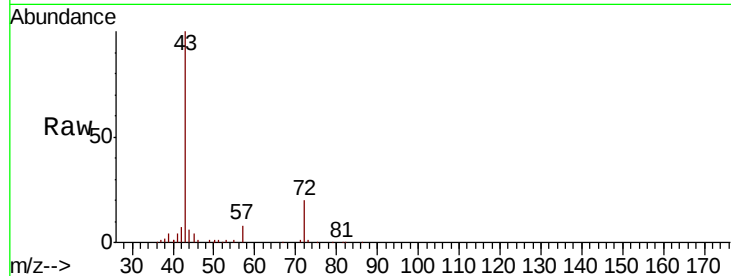
#34
2-Butanone
Concen: 1.379 ppbv
RT: 5.23 min Scan# 760
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	43	Resp	185948
Ion Ratio	100	Lower	Upper
43	100		
72	27.1	19.0	28.4

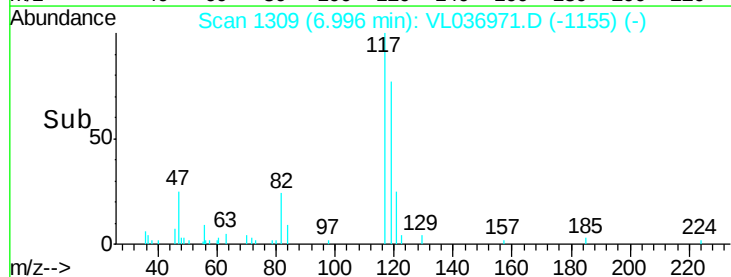
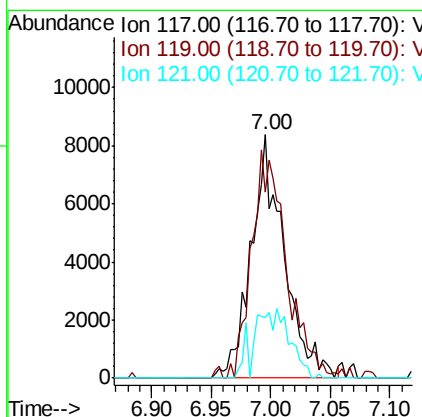
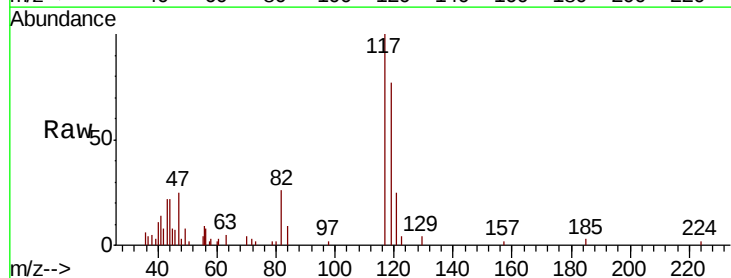
Manual Integrations
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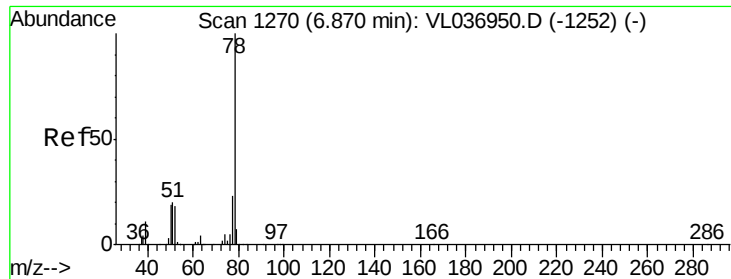
MMDadoda
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#35
Carbon Tetrachloride
Concen: 0.065 ppbv m
RT: 7.00 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion	117	Resp	16050
Ion Ratio	100	Lower	Upper
117	100		
119	76.7	76.6	114.8
121	25.0	25.8	38.6#





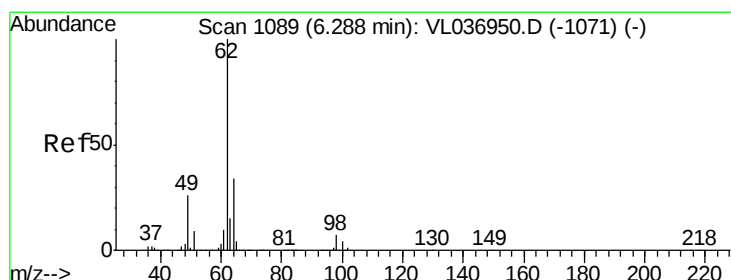
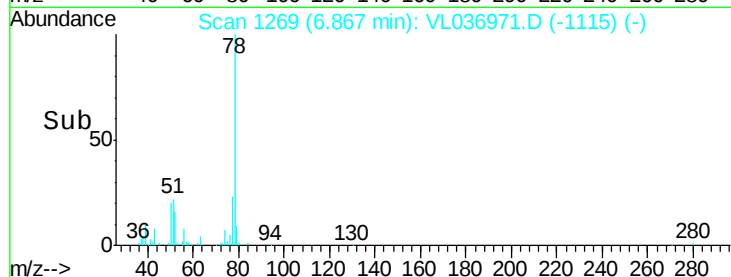
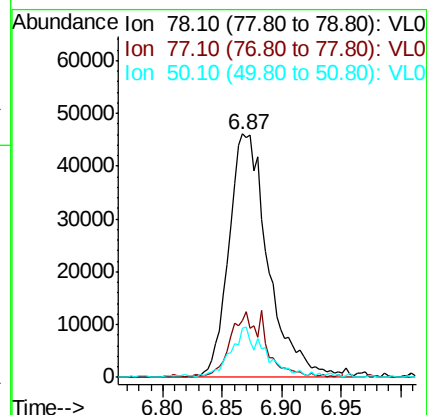
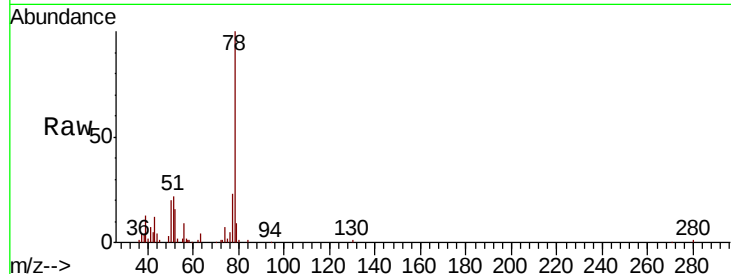
#36
Benzene
Concen: 0.332 ppbv
RT: 6.87 min Scan# 1269
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampled :
IA1

Tot Ion	Ratio	Lower	Upper
78	100		
77	22.9	18.6	28.0
50	20.2	15.0	22.4

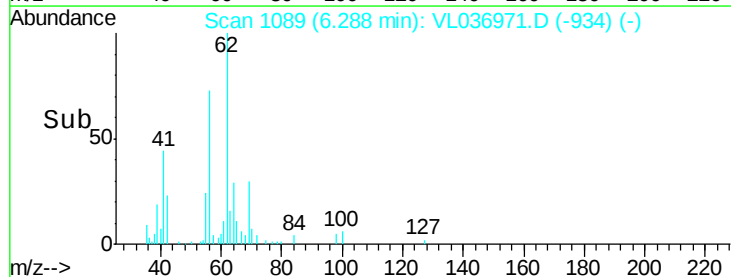
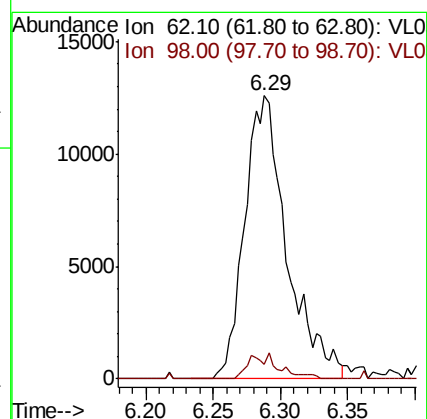
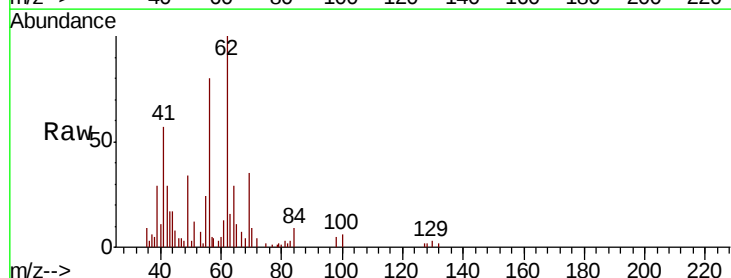
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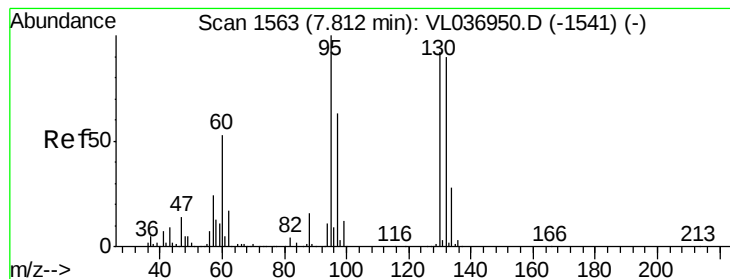
MMDadoda
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#37
1,2-Dichloroethane
Concen: 0.174 ppbv m
RT: 6.29 min Scan# 1089
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.5	8.3





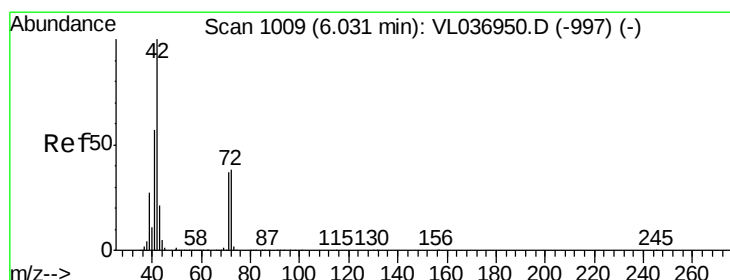
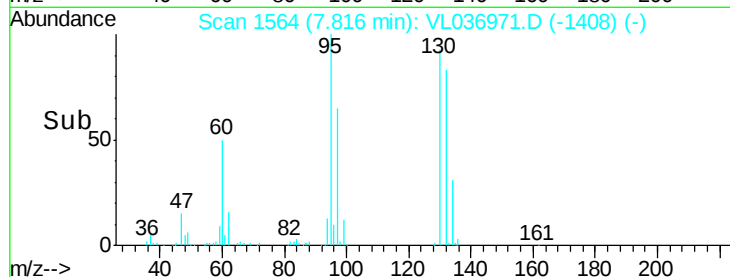
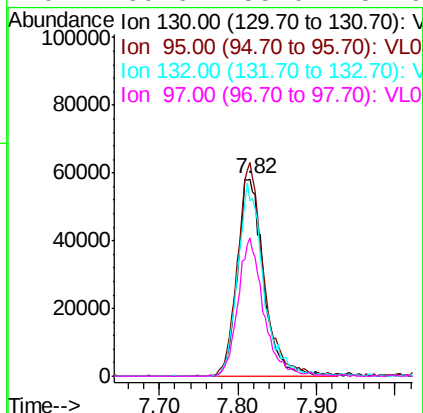
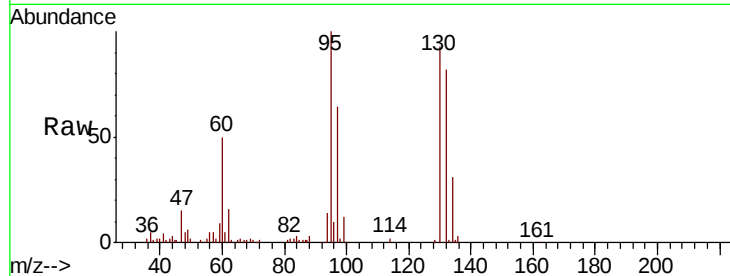
#38
 Trichloroethene
 Concen: 0.981 ppbv m
 RT: 7.82 min Scan# 1564
 Delta R.T. 0.00 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion	Ratio	Lower	Upper
130	100		
95	108.0	86.9	130.3
132	88.8	78.4	117.6
97	69.6	55.0	82.6

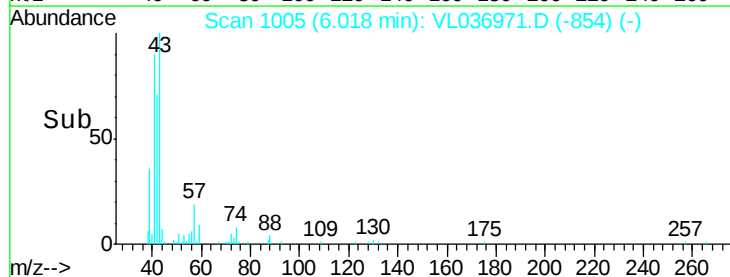
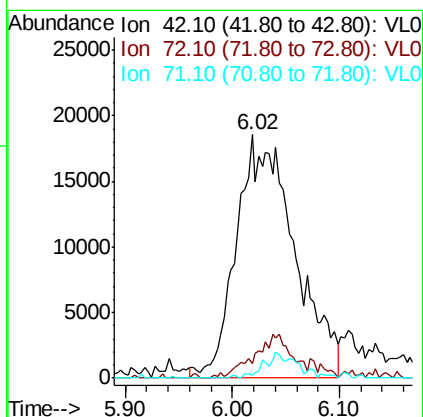
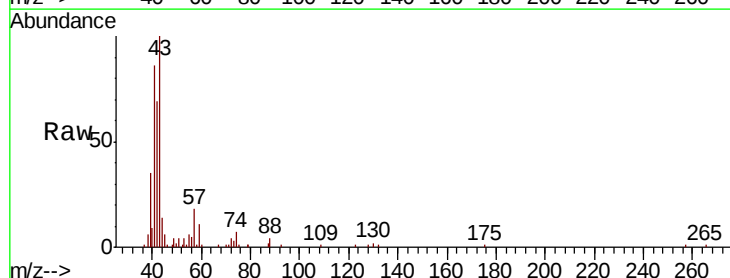
Manual Integrations
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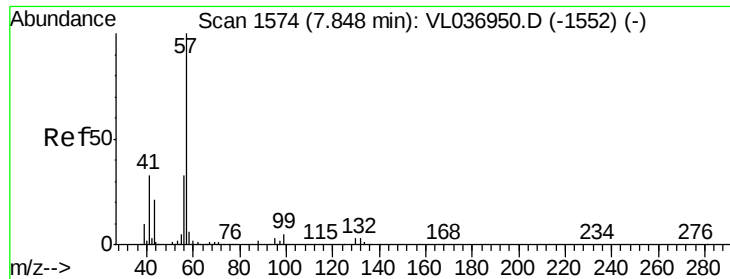
MMDadoda
 5/20/2021 5:55:36 PM



#41
 Tetrahydrofuran
 Concen: 0.910 ppbv m
 RT: 6.02 min Scan# 1005
 Delta R.T. -0.01 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Tgt Ion	Ratio	Lower	Upper
42	100		
72	13.4	31.4	47.2#
71	6.1	30.4	45.6#





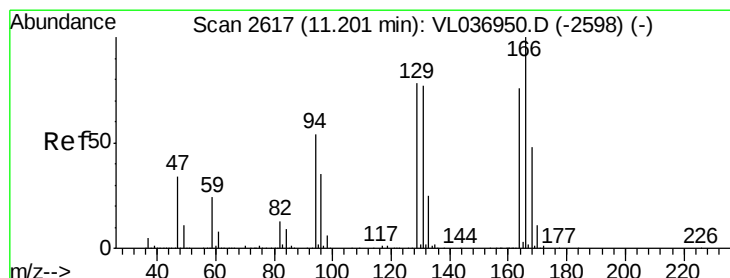
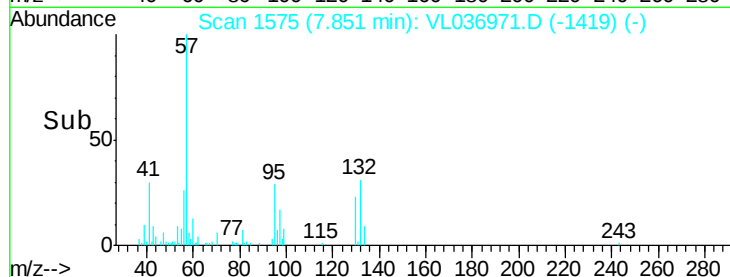
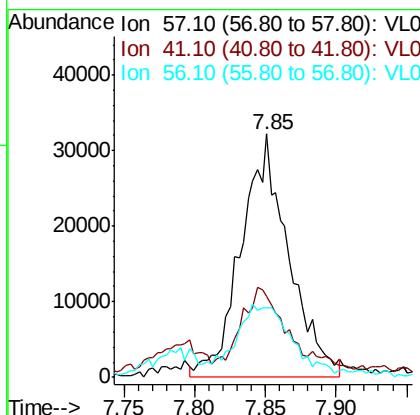
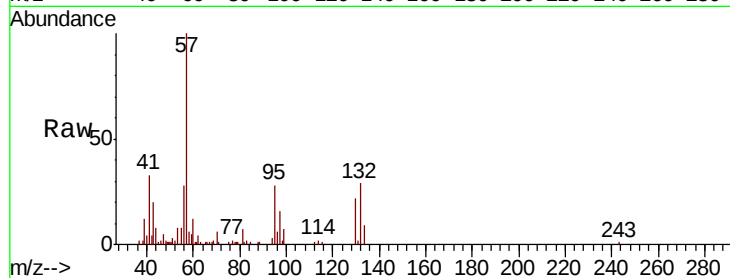
#44
2,2,4-Trimethylpentane
Concen: 0.137 ppbv m
RT: 7.85 min Scan# 1575
Delta R.T. 0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Instrument :
MSVOA_L
ClientSampleId :
IA1

Tot Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.0	40.4#
56	0.0	25.4	38.2#

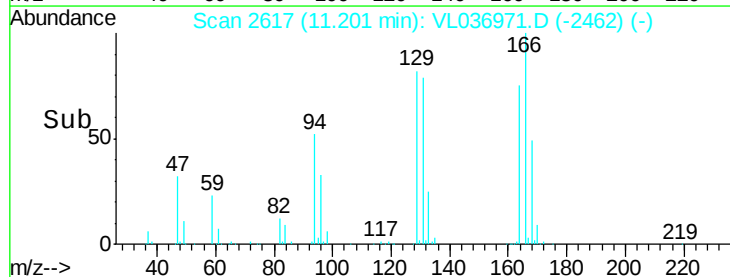
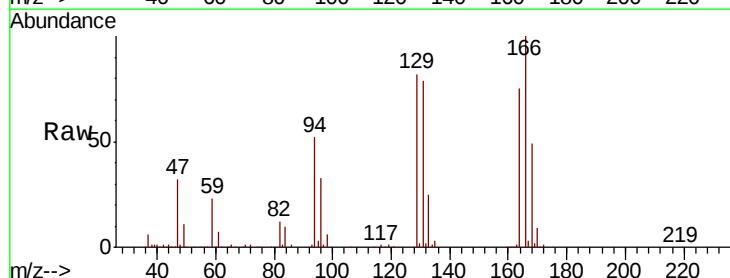
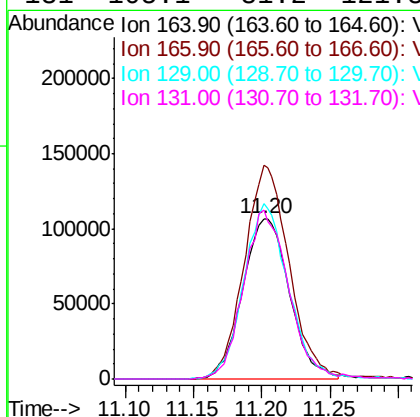
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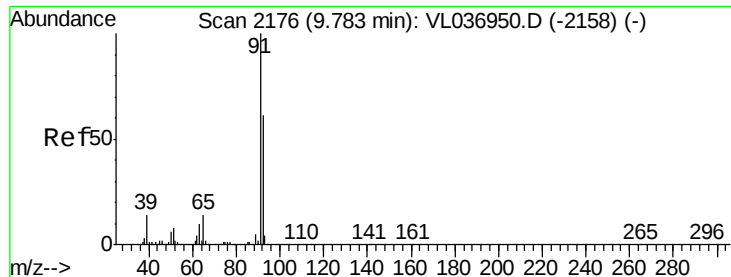
MMDadoda
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#52
Tetrachloroethene
Concen: 1.999 ppbv
RT: 11.20 min Scan# 2617
Delta R.T. -0.00 min
Lab File: VL036971.D
Acq: 18 May 2021 16:24

Tgt Ion	Ratio	Lower	Upper
164	100		
166	133.2	105.5	158.3
129	109.4	81.8	122.8
131	105.1	81.2	121.8





#53

Toluene

Concen: 0.690 ppbv

RT: 9.79 min Scan# 2177

Delta R.T. 0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

Instrument :

MSVOA_L

ClientSampleId :

IA1

Tot Ion: 91 Resp: 261876

Ion Ratio Lower Upper

91 100

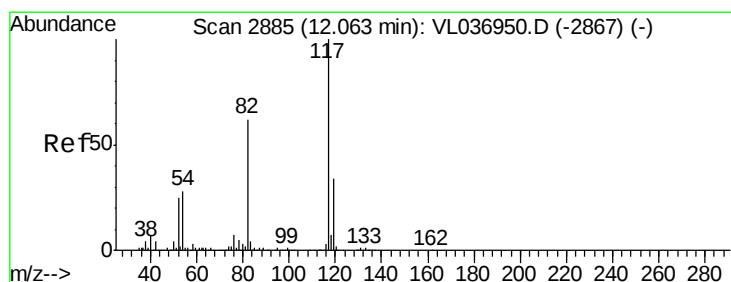
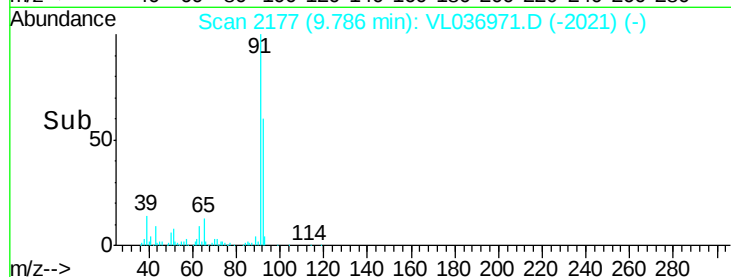
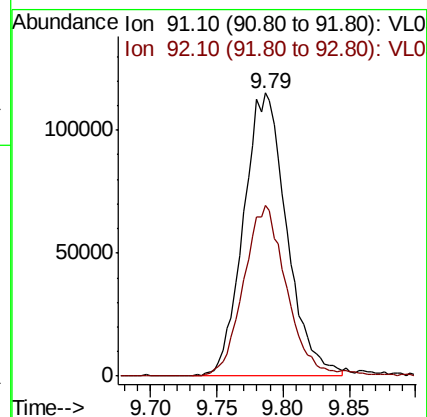
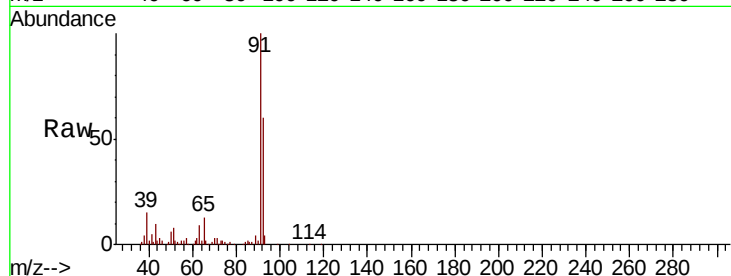
92 60.9 49.5 74.3

Manual Integrations

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2886

Delta R.T. 0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

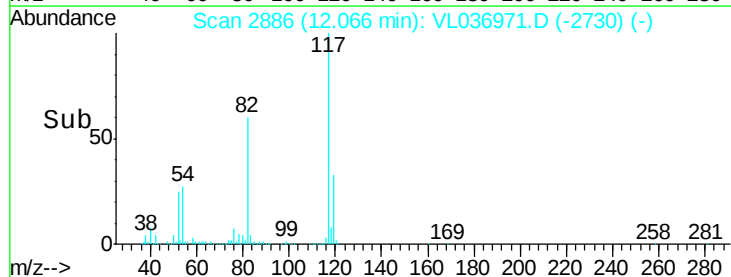
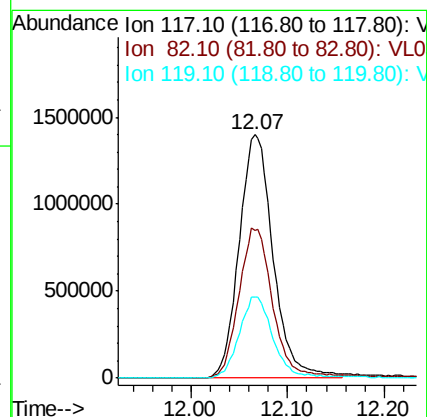
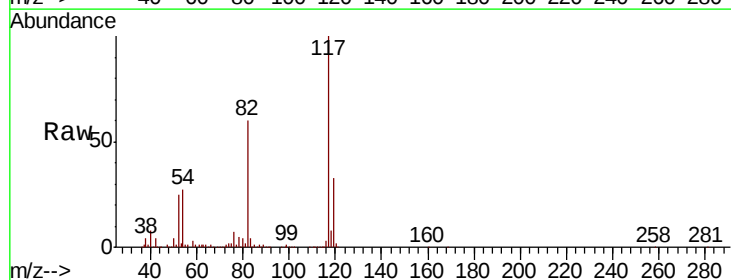
Tgt Ion: 117 Resp: 3425699

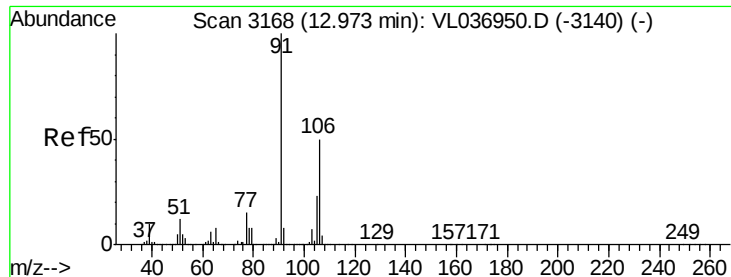
Ion Ratio Lower Upper

117 100

82 62.9 52.6 79.0

119 33.7 46.6 70.0#





#59

m/p-Xylene

Concen: 0.217 ppbv m

RT: 12.95 min Scan# 3161

Delta R.T. -0.02 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

Instrument :

MSVOA_L

ClientSampled :

IA1

Tot Ion: 91 Resp: 86699

Ion Ratio Lower Upper

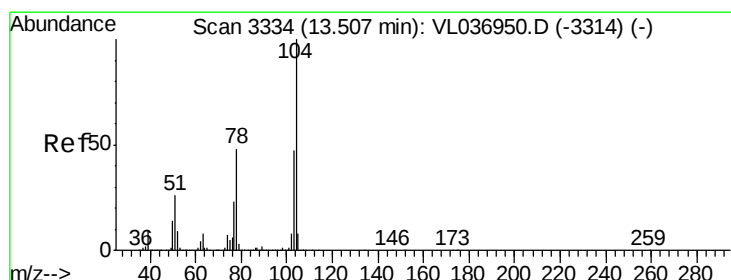
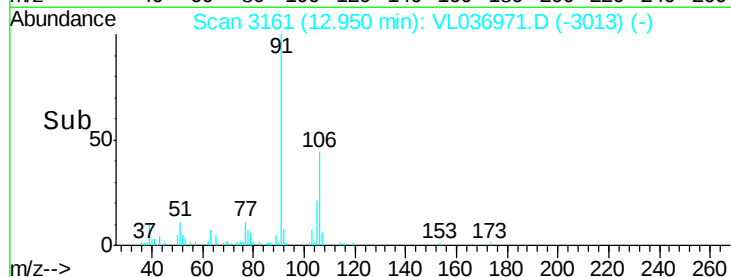
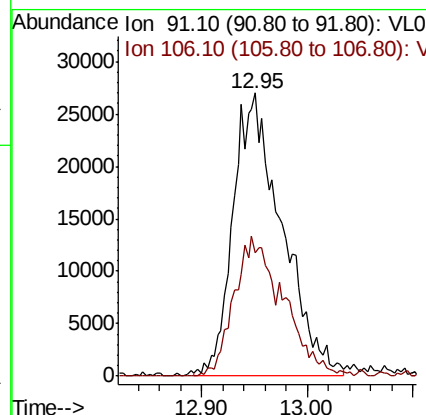
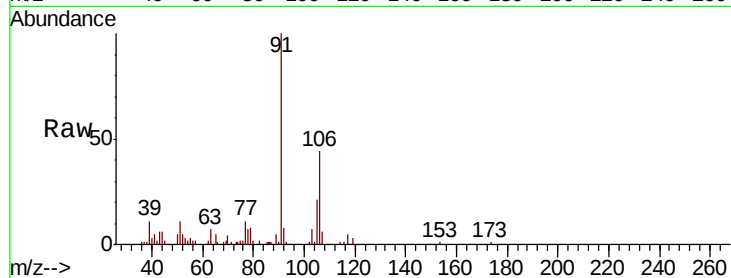
91 100

106 0.0 37.4 56.2#

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#61

Styrene

Concen: 0.116 ppbv m

RT: 13.50 min Scan# 3333

Delta R.T. -0.00 min

Lab File: VL036971.D

Acq: 18 May 2021 16:24

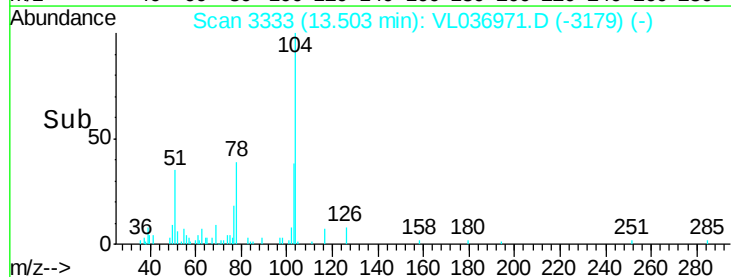
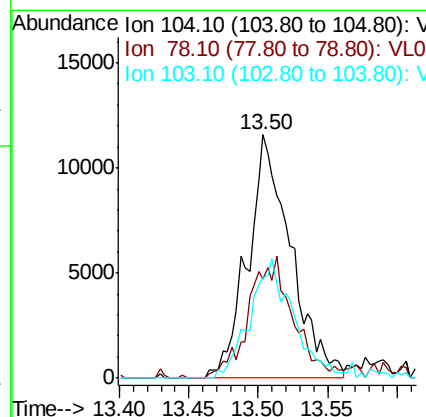
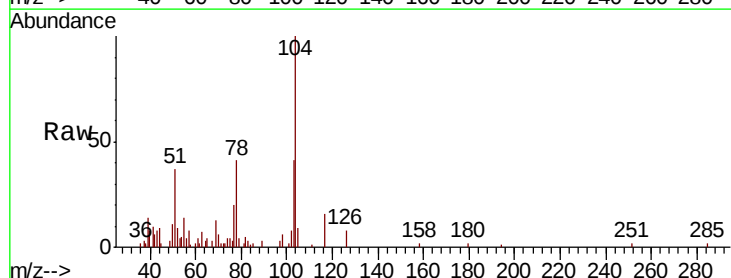
Tgt Ion: 104 Resp: 24921

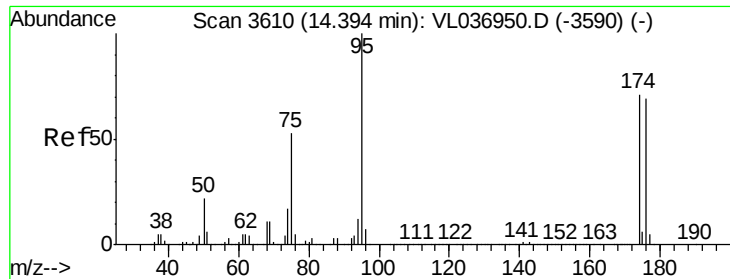
Ion Ratio Lower Upper

104 100

78 52.1 39.0 58.6

103 49.6 38.0 57.0





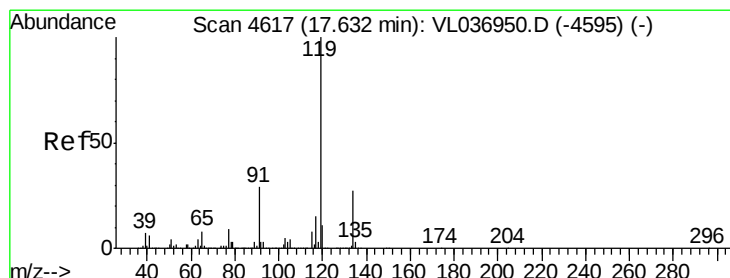
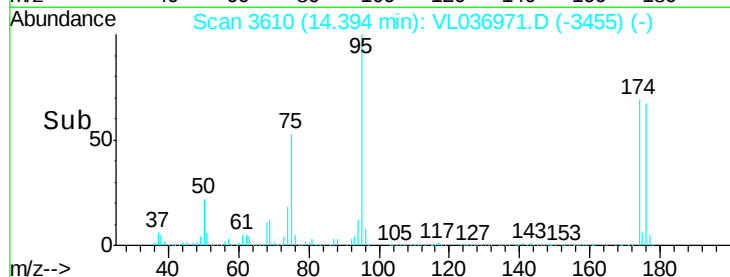
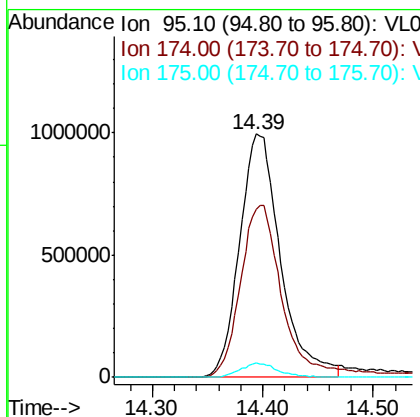
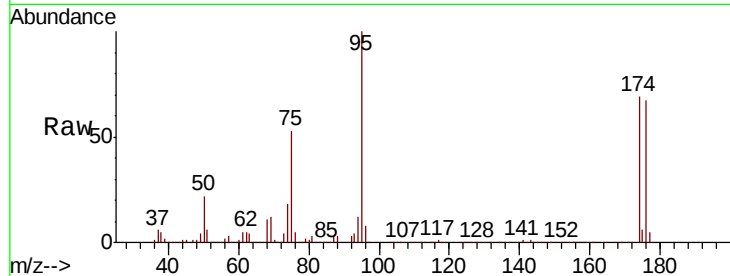
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.938 ppbv
 RT: 14.39 min Scan# 3610
 Delta R.T. -0.00 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Instrument :
 MSVOA_L
 ClientSampled :
 IA1

Tot Ion: 95 Resp: 2557561
 Ion Ratio Lower Upper
 95 100
 174 75.7 58.4 87.6
 175 5.4 4.4 6.6

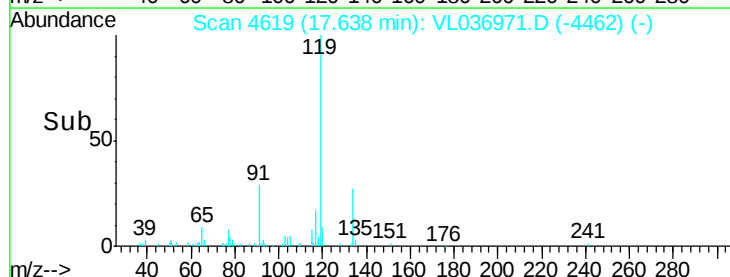
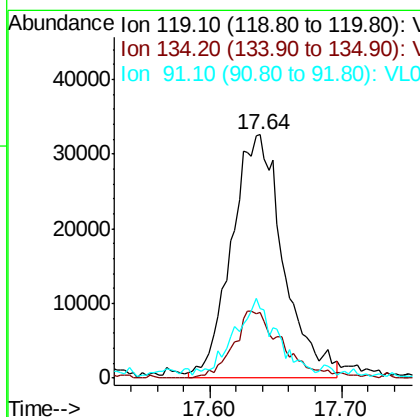
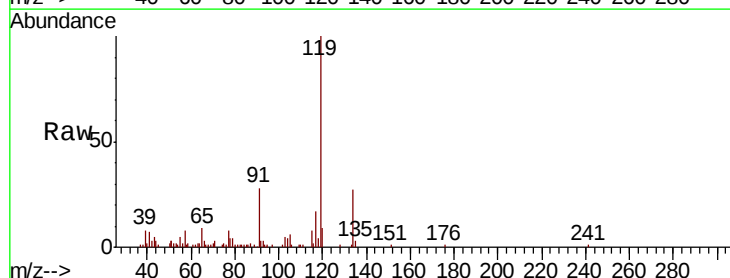
Manual Integrations
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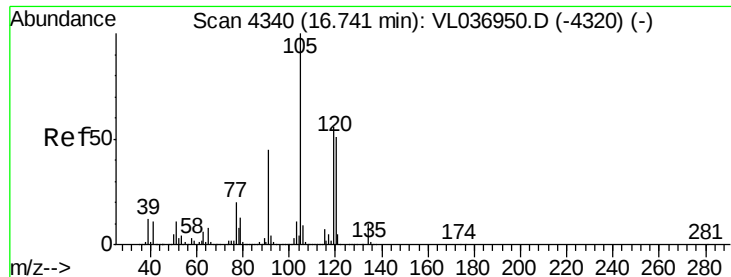
MMDadoda
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#69
 p-Isopropyltoluene
 Concen: 0.154 ppbv m
 RT: 17.64 min Scan# 4619
 Delta R.T. 0.01 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Tgt Ion: 119 Resp: 89394
 Ion Ratio Lower Upper
 119 100
 134 0.0 21.2 31.8#
 91 33.5 22.2 33.4#





#74
 1,2,4-Trimethylbenzene
 Concen: 0.101 ppbv m
 RT: 16.74 min Scan# 4340
 Delta R.T. -0.00 min
 Lab File: VL036971.D
 Acq: 18 May 2021 16:24

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1

Tot Ion:	105	Resp:	44151
Ion Ratio		Lower	Upper
105	100		
120	47.0	40.6	61.0
91	16.9	37.4	56.0#
77	12.5	16.2	24.4#

Manual Integrations
 APPROVED

MMDadoda
 5/20/2021 5:55:36 PM

