

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051821\
 Data File : VL036972.D
 Acq On : 18 May 2021 17:05
 Operator : SY/AP
 Sample : M2430-01DUP
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Manual Integrations
 APPROVED

MMDadoda
 5/20/2021 5:55:42 PM

Quant Time: May 20 15:57:31 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	1285296	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	3654678	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3330727	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2494674	9.97	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.70%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.03	85	38395	0.176	ppbv	96
3) Chlorodifluoromethane	2.97	51	796274m	3.382	ppbv	
4) Chloromethane	3.12	50	88415	1.103	ppbv	97
9) Propene	3.01	41	196775m	2.334	ppbv	
10) Heptane	8.10	43	38285	0.182	ppbv	95
11) Trichlorofluoromethane	3.94	101	43194	0.214	ppbv	89
13) Ethanol	3.63	45	23471146	2086.327	ppbv	94
15) Acetone	3.84	43	1530726m	11.627	ppbv	
19) Isopropyl Alcohol	3.99	45	8277682	116.970	ppbv #	32
20) Methylene Chloride	4.33	84	749893	10.626	ppbv	98
26) Hexane	5.67	57	658234	4.073	ppbv #	82
29) Chloroform	5.73	83	131250	0.575	ppbv	93
30) Cyclohexane	7.11	84	13454m	0.098	ppbv	
31) cis-1,2-Dichloroethene	5.54	61	24587	0.170	ppbv #	81
34) 2-Butanone	5.23	43	185560	1.394	ppbv	96
35) Carbon Tetrachloride	7.00	117	15774	0.065	ppbv	85
36) Benzene	6.88	78	101766	0.323	ppbv	96
37) 1,2-Dichloroethane	6.29	62	26570m	0.170	ppbv	
38) Trichloroethene	7.82	130	128390	0.953	ppbv	97
41) Tetrahydrofuran	6.03	42	68165m	0.899	ppbv	
44) 2,2,4-Trimethylpentane	7.85	57	63673	0.118	ppbv #	78
52) Tetrachloroethene	11.20	164	261765	2.091	ppbv	93
53) Toluene	9.79	91	259566	0.693	ppbv	99
59) m/p-Xylene	12.95	91	88600m	0.228	ppbv	
61) Styrene	13.52	104	26029m	0.125	ppbv	
69) p-Isopropyltoluene	17.64	119	85750	0.152	ppbv	94
74) 1,2,4-Trimethylbenzene	16.74	105	44130m	0.103	ppbv	

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

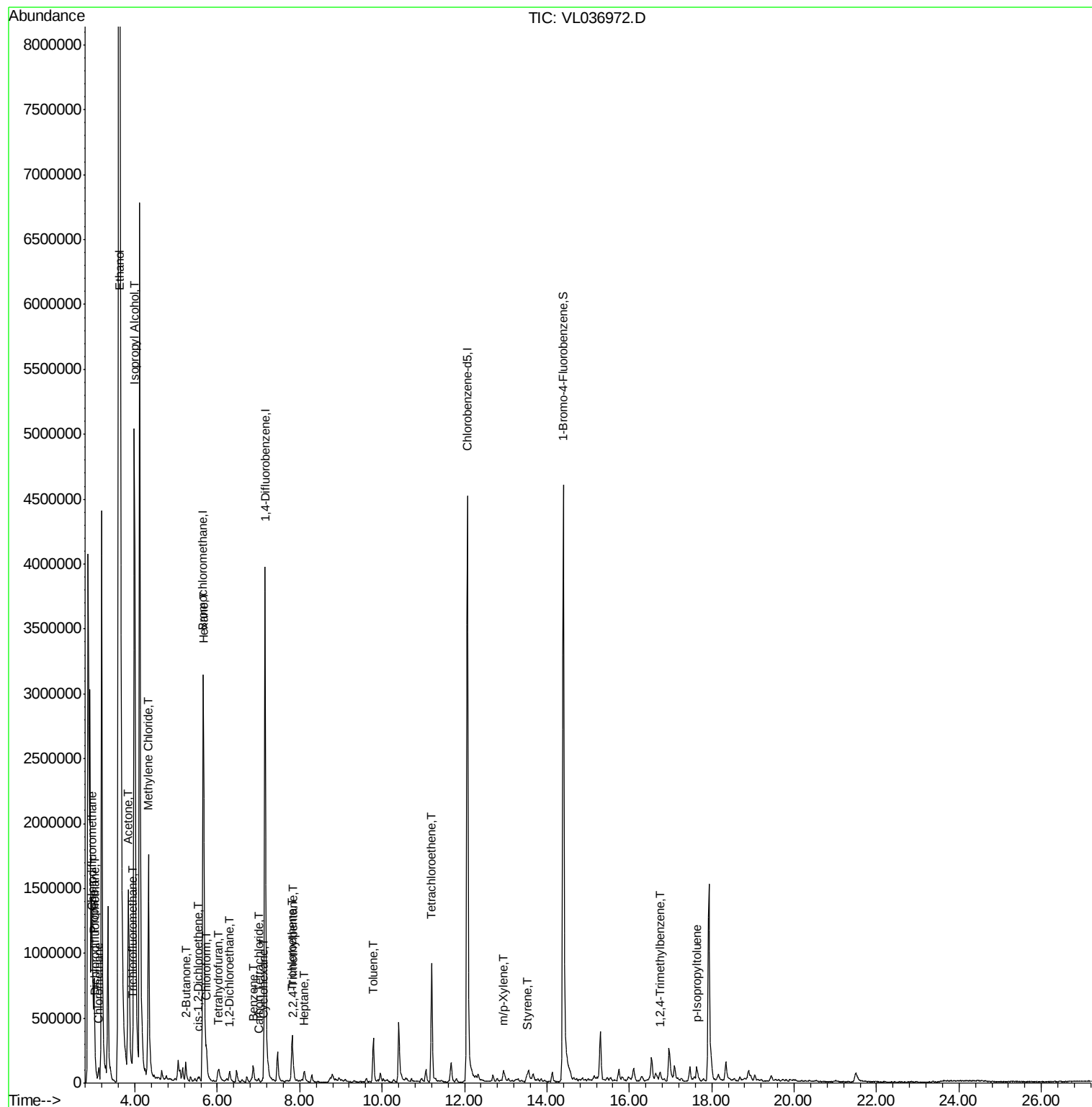
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL051821\
Data File : VL036972.D
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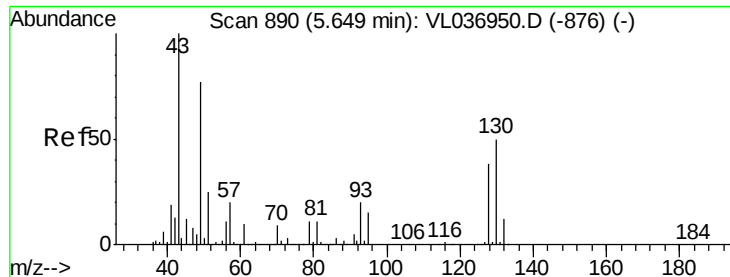
Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Manual Integrations
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MMDadoda
5/20/2021 5:55:42 PM

Quant Time: May 20 15:57:31 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL051821AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Tue 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: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampled :

IA1DUP

Tot Ion: 49 Resp: 1285296

Ion Ratio Lower Upper

49 100

128 53.7 26.9 80.7

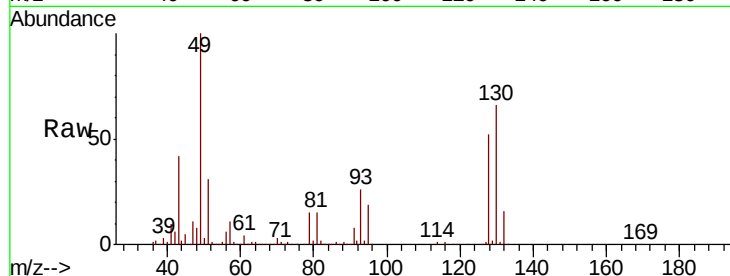
130 69.0 33.8 101.4

Manual Integrations

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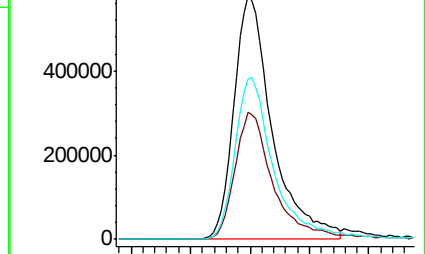
5/20/2021 5:55:42 PM



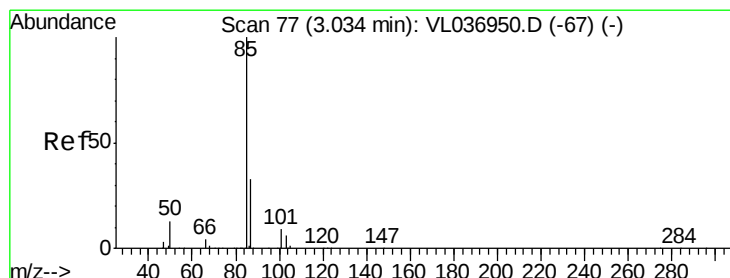
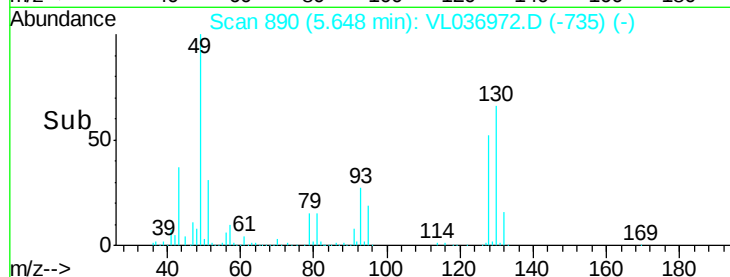
Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



Time-->



#2

Dichlorodifluoromethane

Concen: 0.176 ppbv

RT: 3.03 min Scan# 77

Delta R.T. -0.00 min

Lab File: VL036972.D

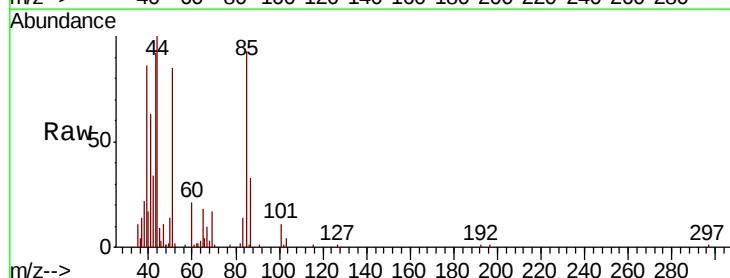
Acq: 18 May 2021 17:05

Tgt Ion: 85 Resp: 38395

Ion Ratio Lower Upper

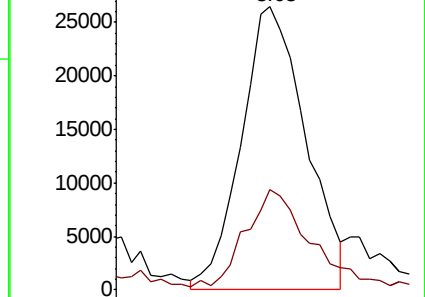
85 100

87 35.5 26.6 39.8

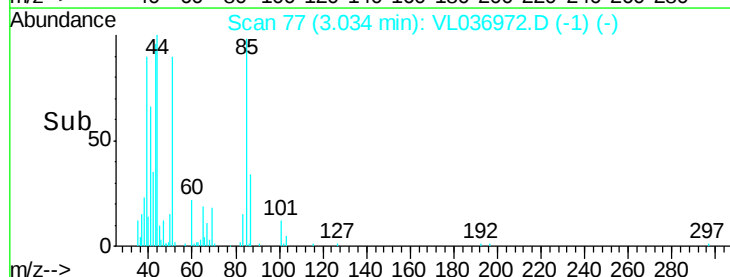


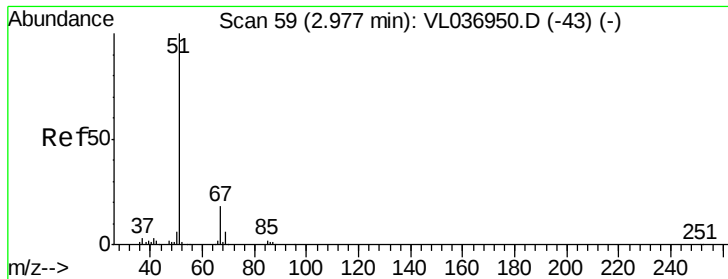
Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0



Time-->





#3

Chlorodifluoromethane

Concen: 3.382 ppbv

RT: 2.97 min Scan# 58

Delta R.T. -0.00 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tot Ion: 51 Resp: 796274

Ion Ratio Lower Upper

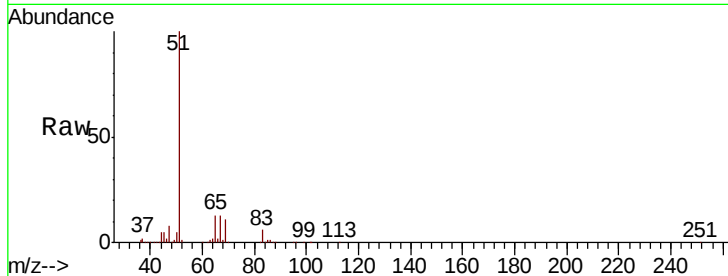
51 100

67 15.2 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

2.97

600000

500000

400000

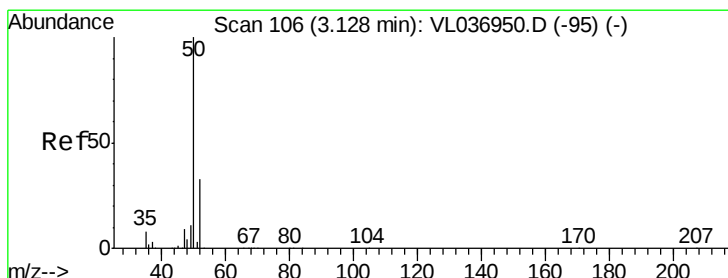
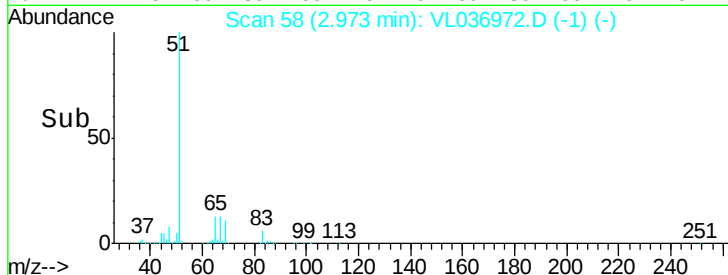
300000

200000

100000

0

Time-->



#4

Chloromethane

Concen: 1.103 ppbv

RT: 3.12 min Scan# 105

Delta R.T. -0.00 min

Lab File: VL036972.D

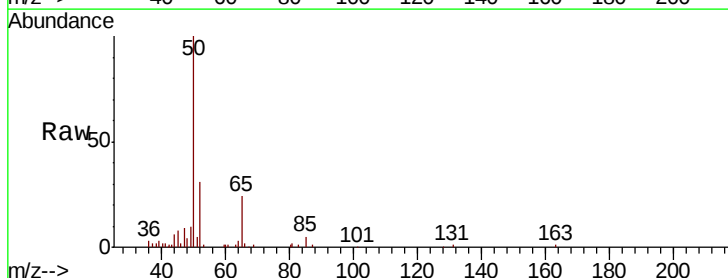
Acq: 18 May 2021 17:05

Tgt Ion: 50 Resp: 88415

Ion Ratio Lower Upper

50 100

52 30.9 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

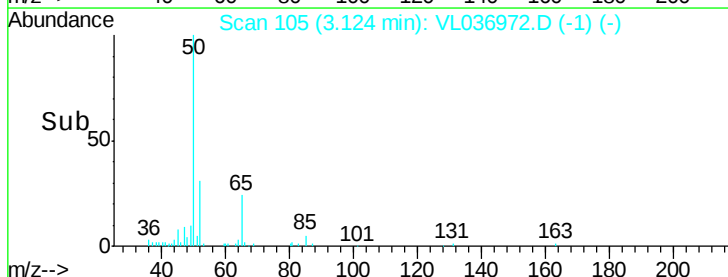
30000

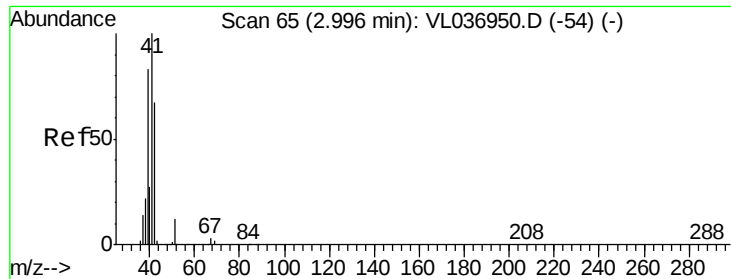
20000

10000

0

Time-->





#9

Propene

Concen: 2.334 ppbv m

RT: 3.01 min Scan# 68

Delta R.T. 0.01 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tot Ion: 41 Resp: 196775

Ion Ratio Lower Upper

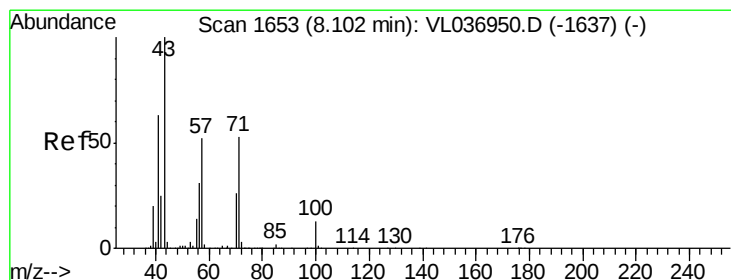
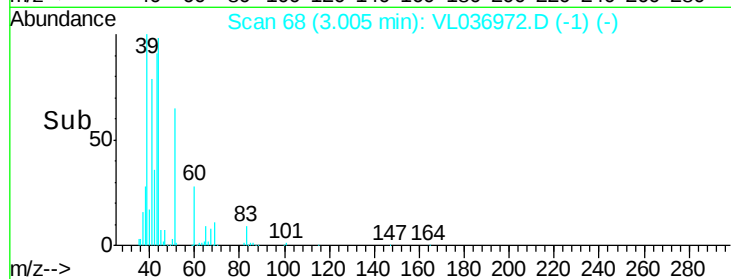
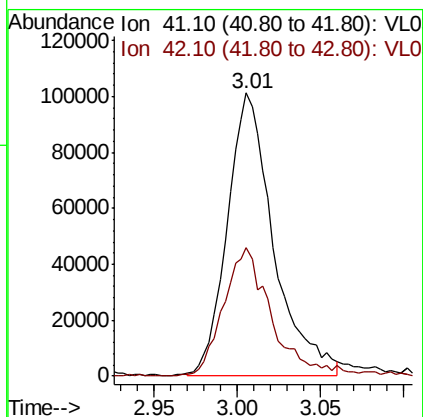
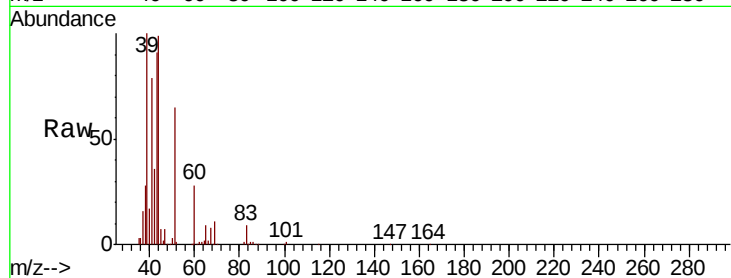
41 100

42 545.2 53.9 80.9#

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#10

Heptane

Concen: 0.182 ppbv

RT: 8.10 min Scan# 1653

Delta R.T. -0.00 min

Lab File: VL036972.D

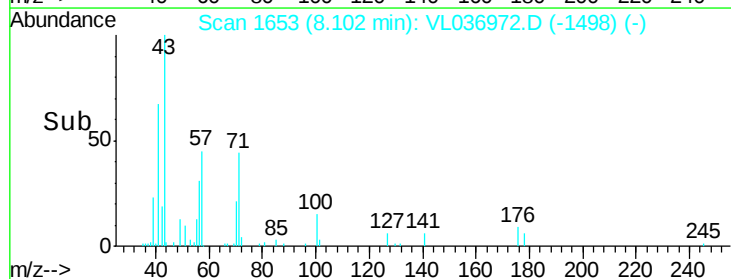
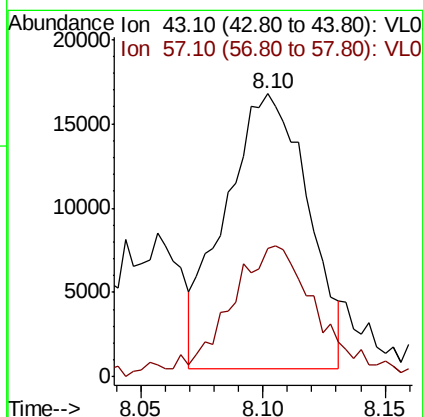
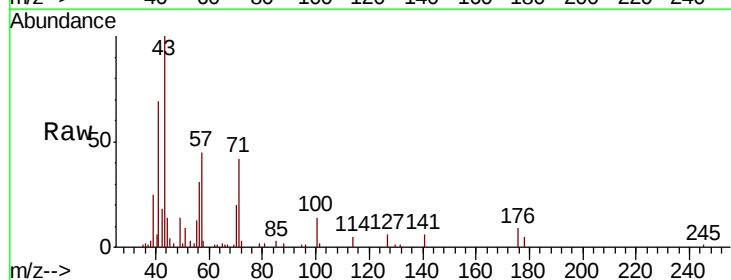
Acq: 18 May 2021 17:05

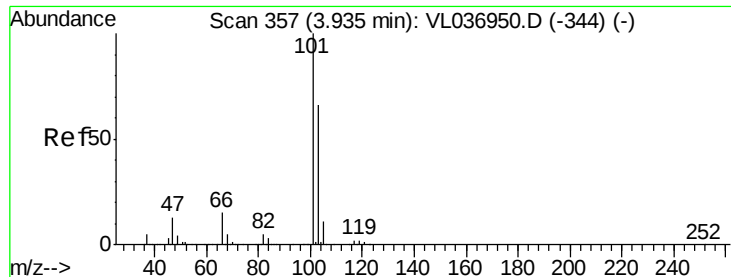
Tgt Ion: 43 Resp: 38285

Ion Ratio Lower Upper

43 100

57 54.6 41.0 61.6





#11

Trichlorofluoromethane

Concen: 0.214 ppbv

RT: 3.94 min Scan# 358

Delta R.T. 0.00 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tot Ion:101 Resp: 43194

Ion Ratio Lower Upper

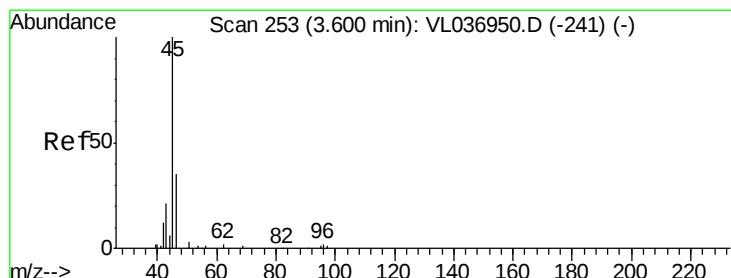
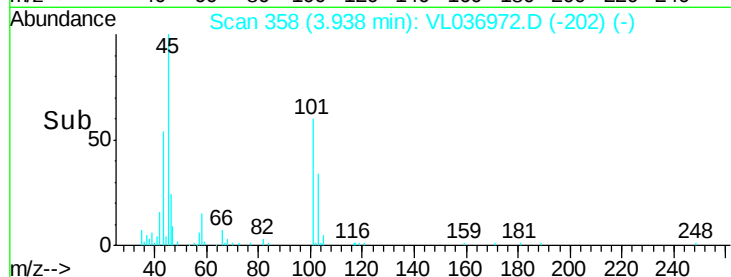
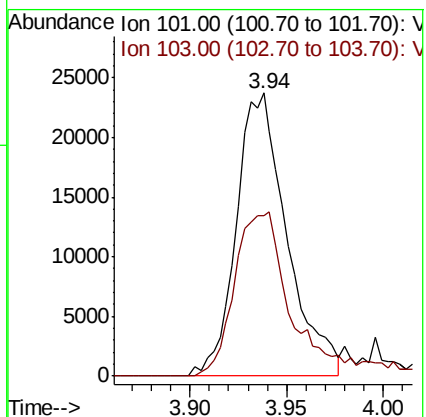
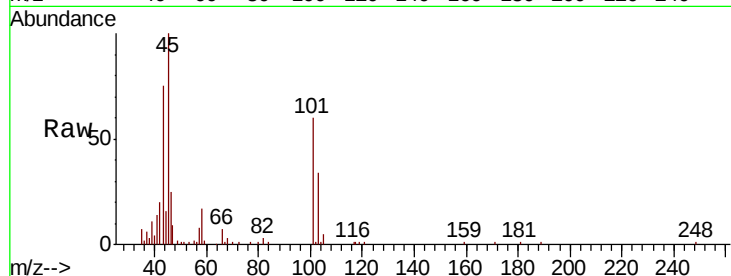
101 100

103 56.7 52.6 79.0

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#13

Ethanol

Concen: 2086.327 ppbv

RT: 3.63 min Scan# 262

Delta R.T. 0.03 min

Lab File: VL036972.D

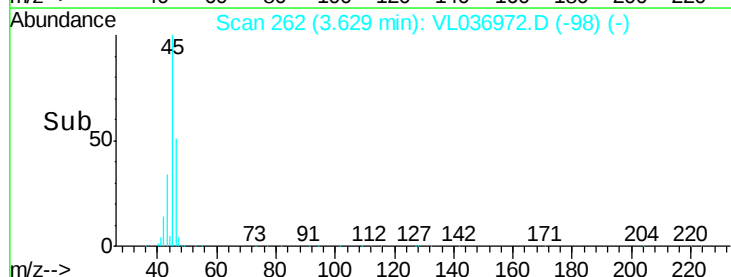
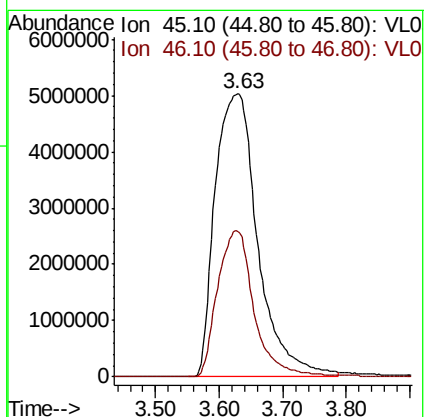
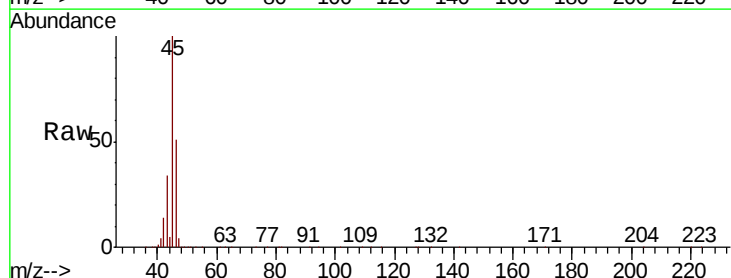
Acq: 18 May 2021 17:05

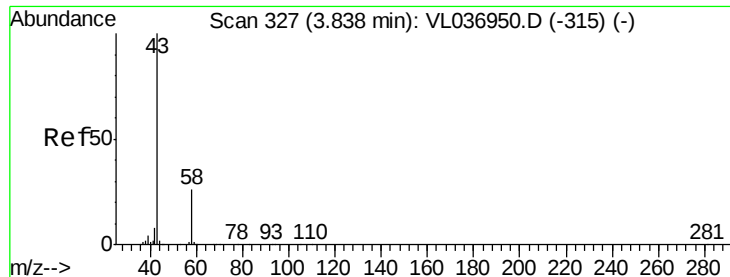
Tgt Ion: 45 Resp:23471146

Ion Ratio Lower Upper

45 100

46 44.6 16.3 65.3





#15

Acetone

Concen: 11.627 ppbv m

RT: 3.84 min Scan# 326

Delta R.T. -0.00 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tot Ion: 43 Resp: 1530726

Ion Ratio Lower Upper

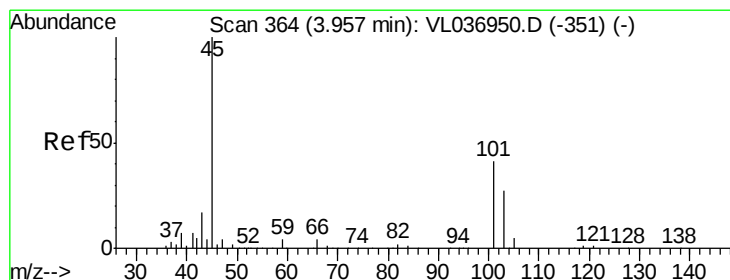
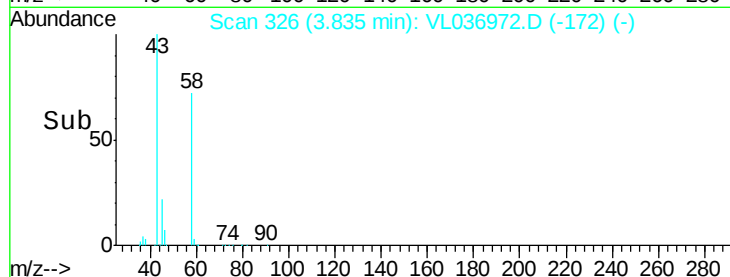
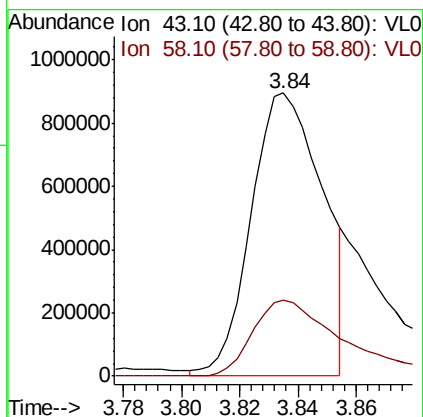
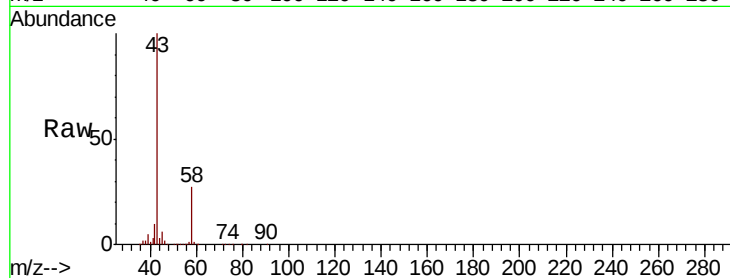
43 100

58 36.5 24.0 36.0#

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 116.970 ppbv

RT: 3.99 min Scan# 374

Delta R.T. 0.03 min

Lab File: VL036972.D

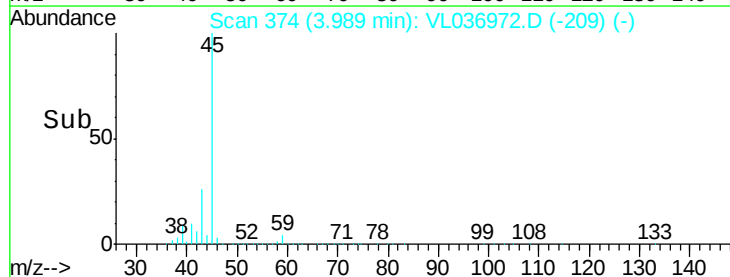
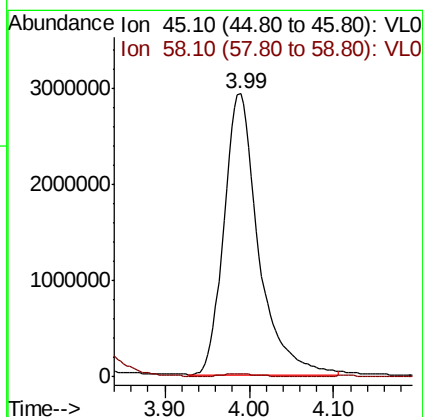
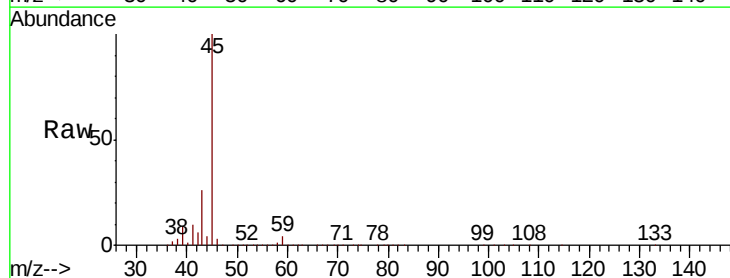
Acq: 18 May 2021 17:05

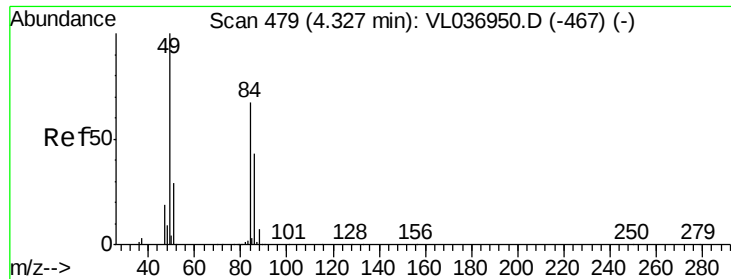
Tgt Ion: 45 Resp: 8277682

Ion Ratio Lower Upper

45 100

58 1.3 37.2 55.8#





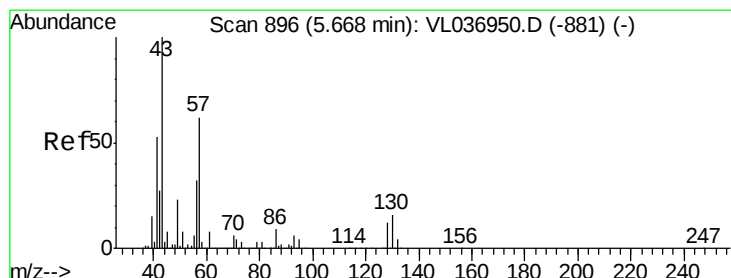
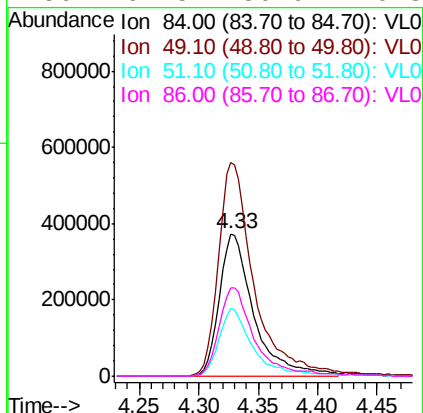
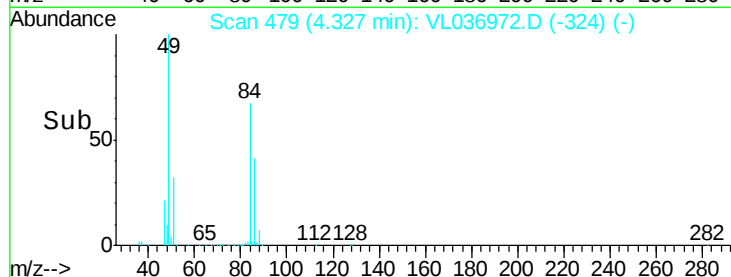
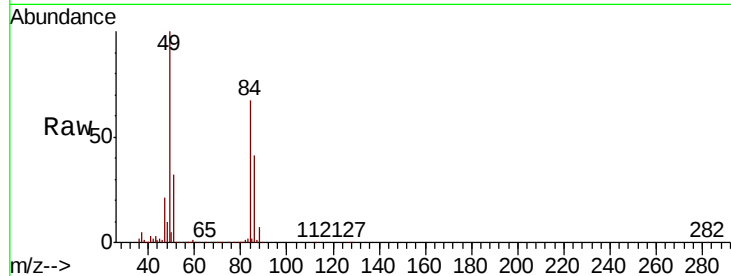
#20
Methvlene Chloride
Concen: 10.626 ppbv
RT: 4.33 min Scan# 479
Delta R.T. -0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tot Ion	84	Resp	749893
Ion	Ratio	Lower	Upper
84	100		
49	149.8	119.8	179.6
51	47.3	35.1	52.7
86	61.5	50.9	76.3

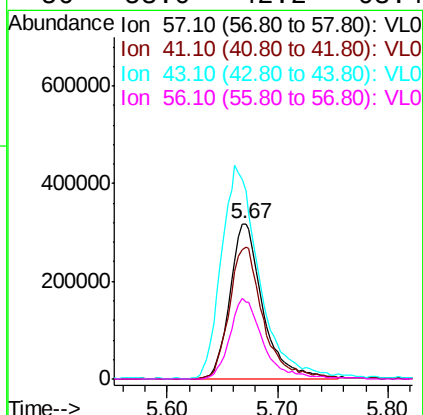
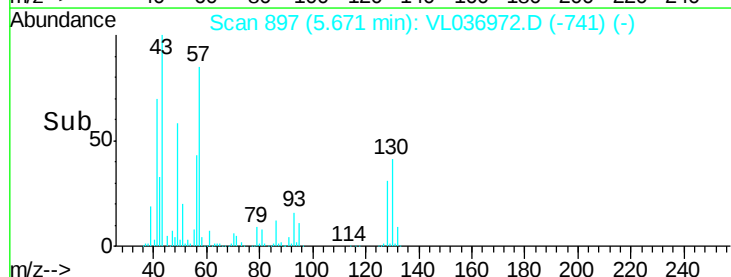
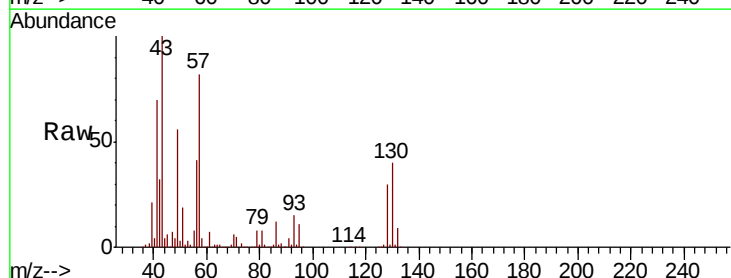
Manual Integrations
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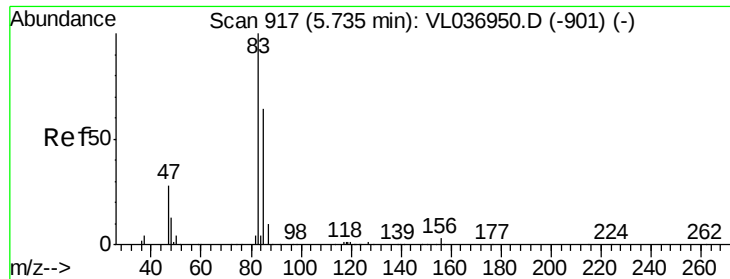
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#26
Hexane
Concen: 4.073 ppbv
RT: 5.67 min Scan# 897
Delta R.T. 0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion	57	Resp	658234
Ion	Ratio	Lower	Upper
57	100		
41	88.0	70.5	105.7
43	159.5	165.8	248.8#
56	53.0	42.2	63.4





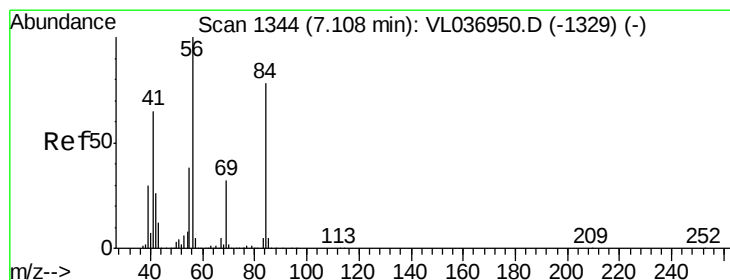
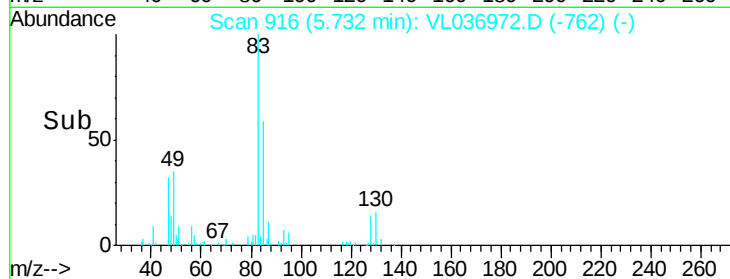
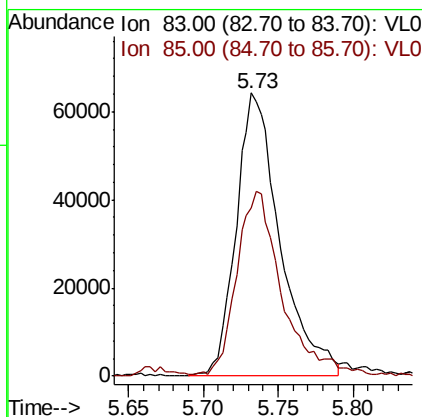
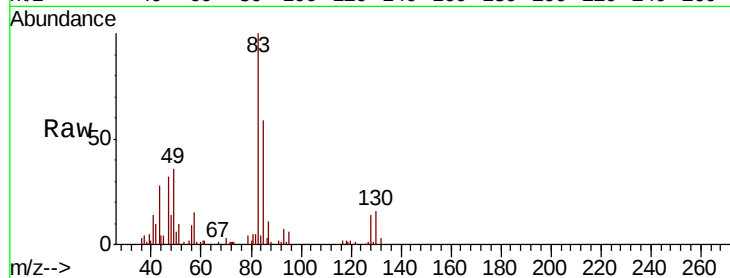
#29
Chloroform
Concen: 0.575 ppbv
RT: 5.73 min Scan# 916
Delta R.T. -0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tot Ion	83	Resp	131250
Ion Ratio	100	Lower	Upper
83	100		
85	58.6	51.1	76.7

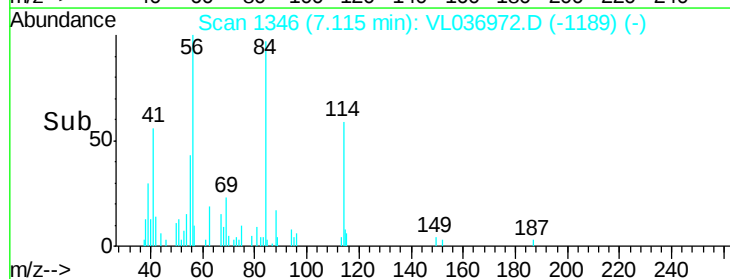
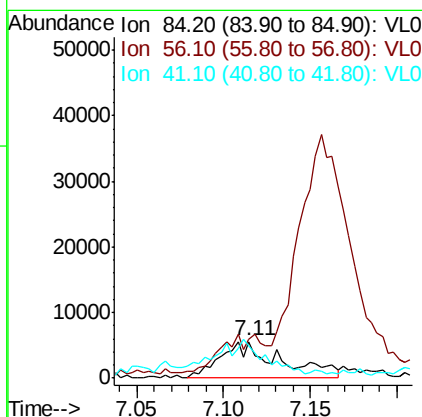
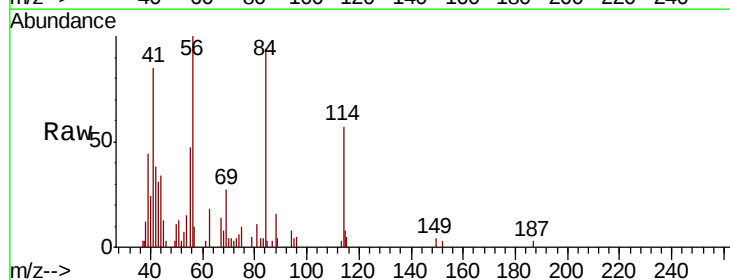
Manual Integrations
APPROVED

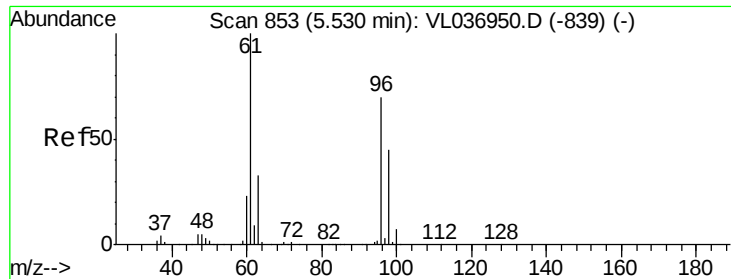
MMDadoda
5/20/2021 5:55:42 PM



#30
Cyclohexane
Concen: 0.098 ppbv m
RT: 7.11 min Scan# 1346
Delta R.T. 0.01 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion	84	Resp	13454
Ion Ratio	100	Lower	Upper
84	100		
56	0.0	107.9	161.9#
41	0.0	65.5	98.3#





#31

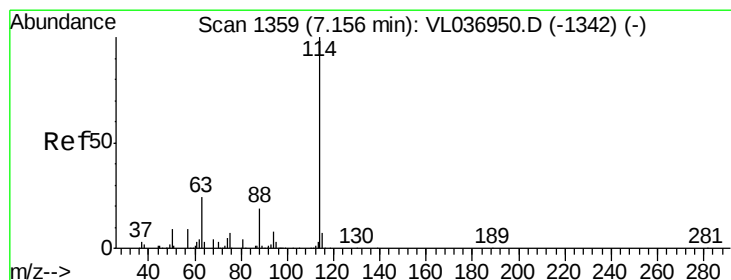
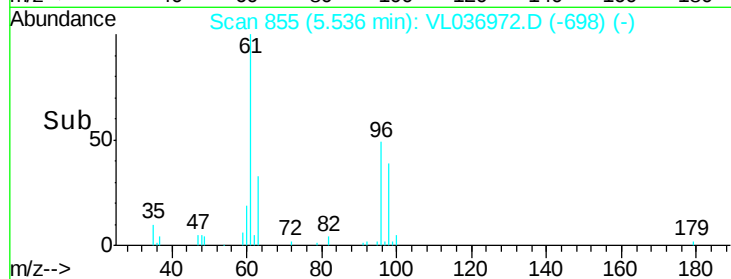
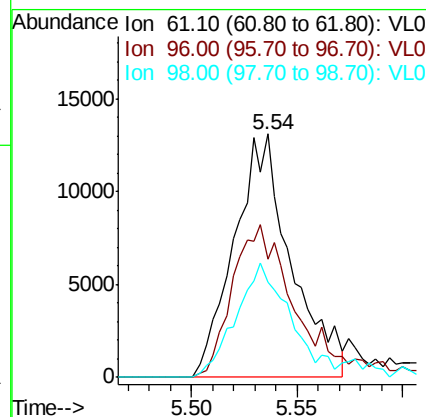
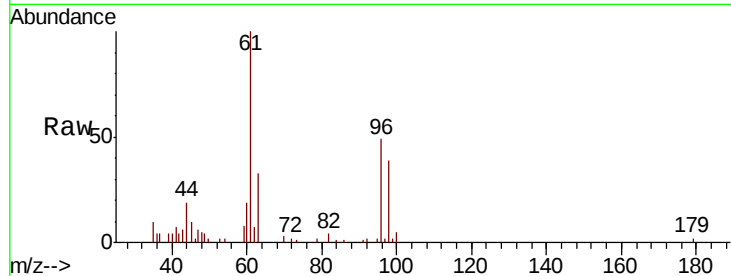
cis-1,2-Dichloroethene
 Concen: 0.170 ppbv
 RT: 5.54 min Scan# 855
 Delta R.T. 0.01 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Instrument :
 MSVOA_L
 ClientSampled :
 IA1DUP

Tot Ion	Ratio	Lower	Upper
61	100		
96	48.7	55.9	83.9#
98	39.3	35.6	53.4

Manual Integrations
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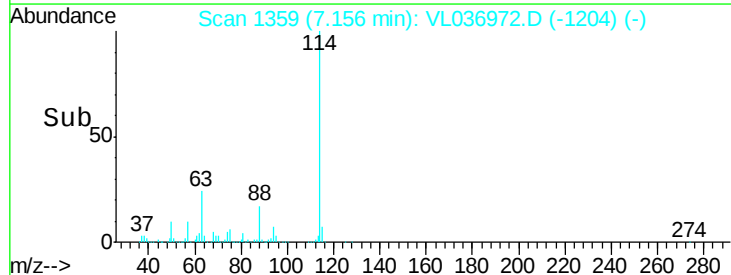
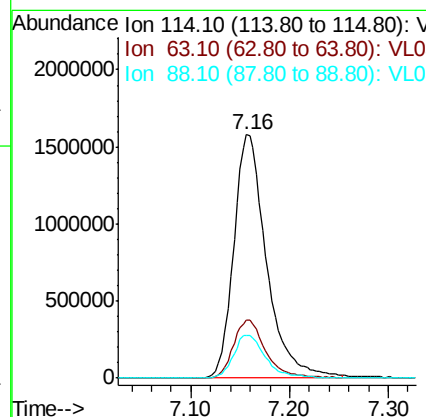
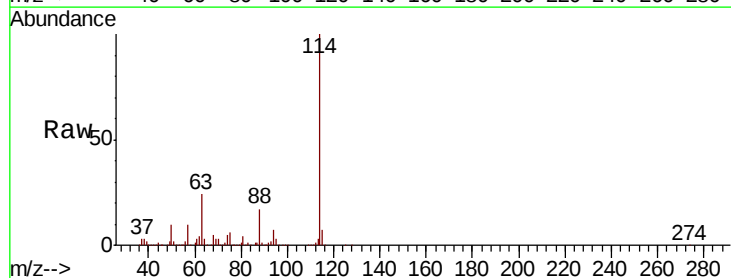
MMDadoda
 5/20/2021 5:55:42 PM

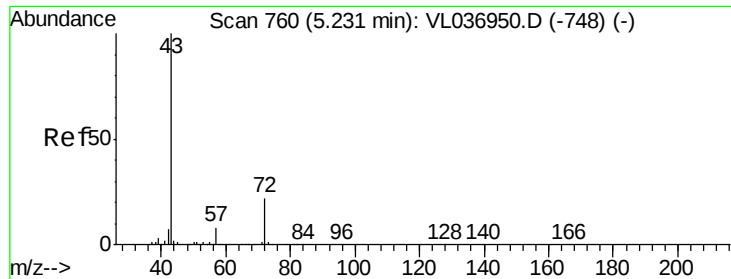


#33

1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1359
 Delta R.T. -0.00 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Tgt Ion	Ratio	Lower	Upper
114	100		
63	23.9	19.6	29.4
88	17.6	14.6	21.8





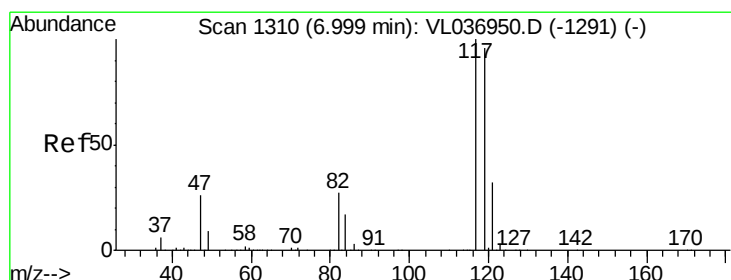
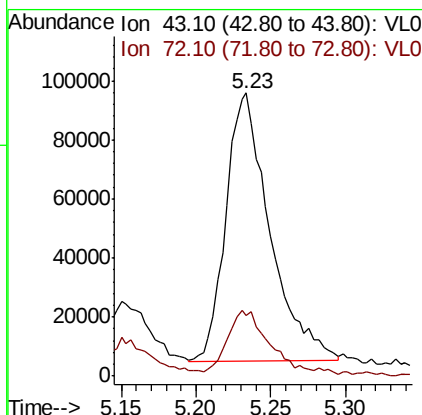
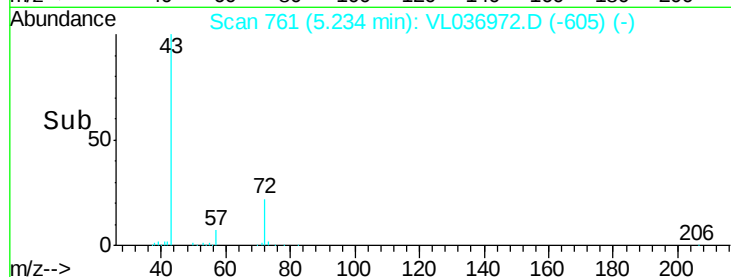
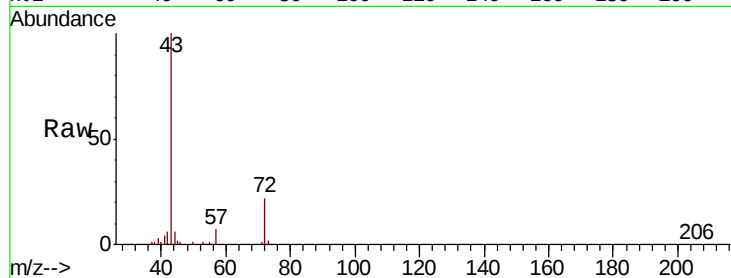
#34
2-Butanone
Concen: 1.394 ppbv
RT: 5.23 min Scan# 761
Delta R.T. 0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampled :
IA1DUP

Tot Ion: 43 Resp: 185560
Ion Ratio Lower Upper
43 100
72 25.8 19.0 28.4

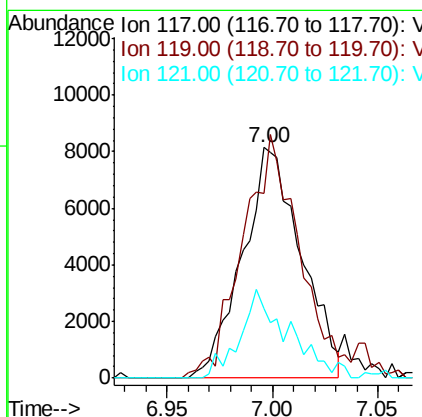
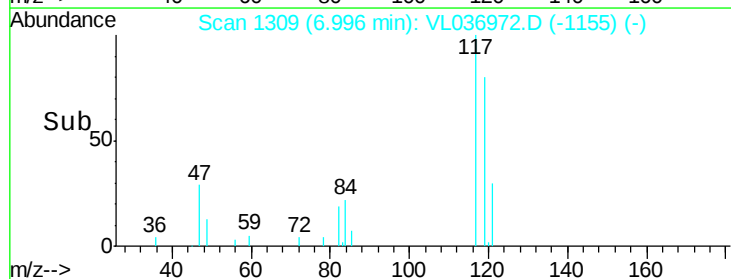
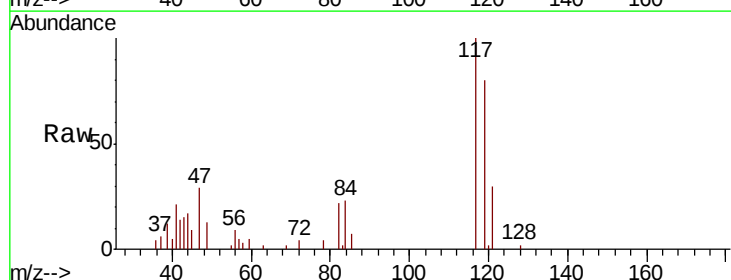
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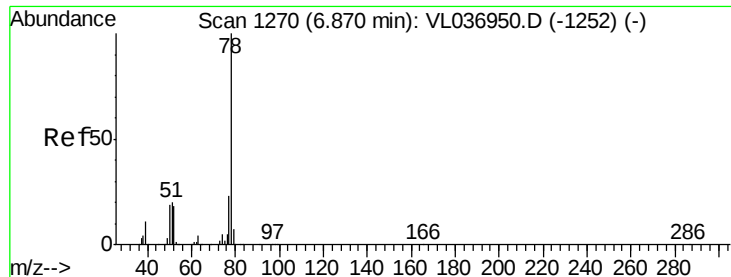
MMDadoda
5/20/2021 5:55:42 PM



#35
Carbon Tetrachloride
Concen: 0.065 ppbv
RT: 7.00 min Scan# 1309
Delta R.T. -0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion: 117 Resp: 15774
Ion Ratio Lower Upper
117 100
119 77.5 76.6 114.8
121 30.3 25.8 38.6





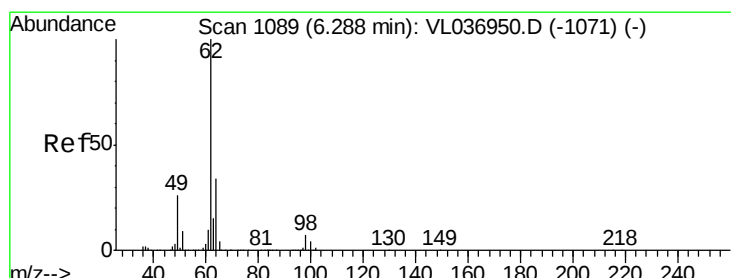
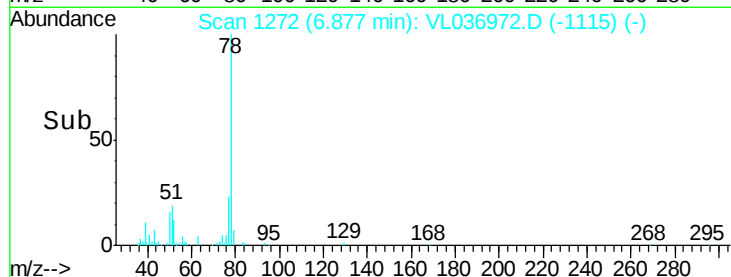
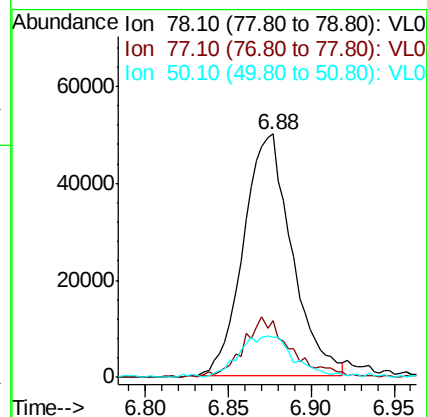
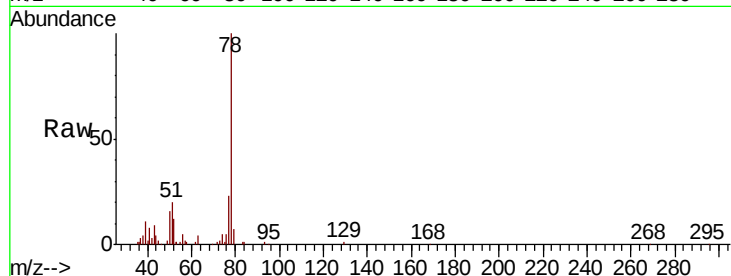
#36
Benzene
Concen: 0.323 ppbv
RT: 6.88 min Scan# 1272
Delta R.T. 0.01 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	23.1	18.6	28.0
50	15.4	15.0	22.4

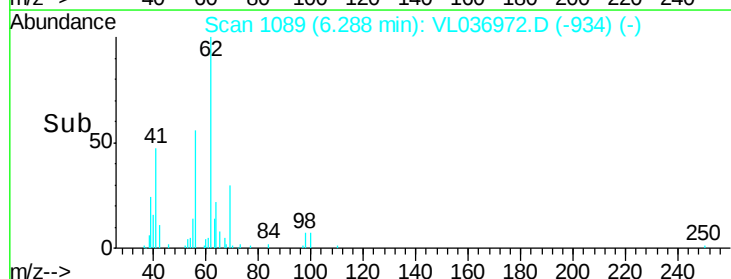
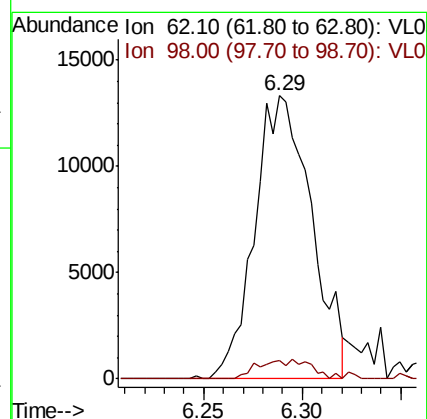
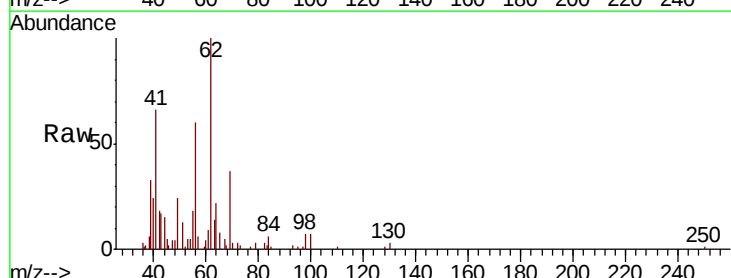
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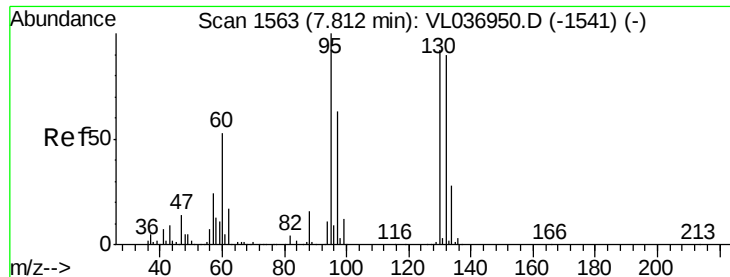
MMDadoda
5/20/2021 5:55:42 PM



#37
1,2-Dichloroethane
Concen: 0.170 ppbv m
RT: 6.29 min Scan# 1089
Delta R.T. -0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.5	8.3





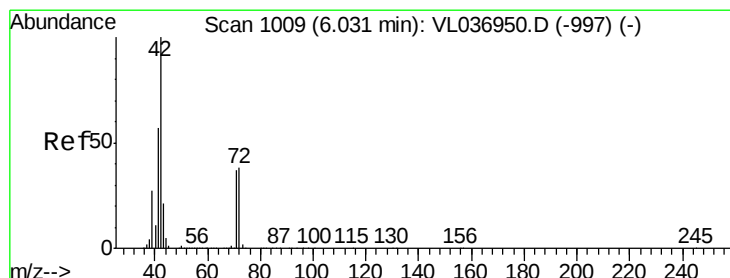
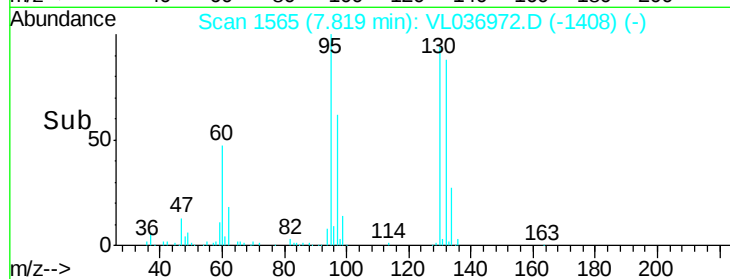
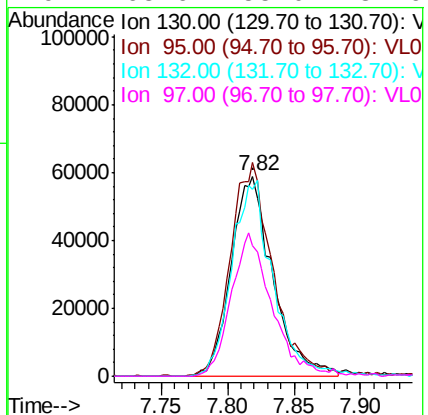
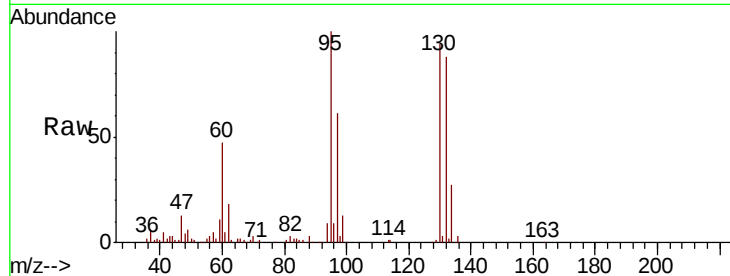
#38
 Trichloroethene
 Concen: 0.953 ppbv
 RT: 7.82 min Scan# 1565
 Delta R.T. 0.01 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Instrument :
 MSVOA_L
 ClientSampleID :
 IA1DUP

Tot Ion	Ratio	Resp	Lower	Upper
130	100	128390		
95	106.2	86.9	130.3	
132	93.7	78.4	117.6	
97	65.6	55.0	82.6	

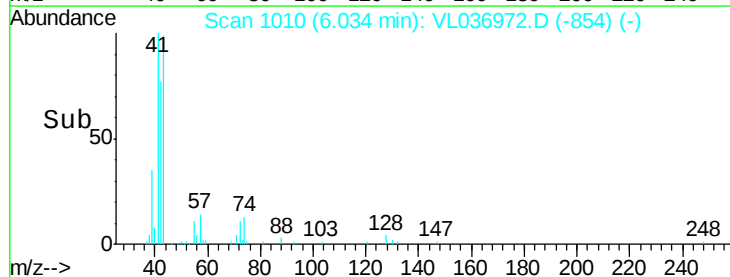
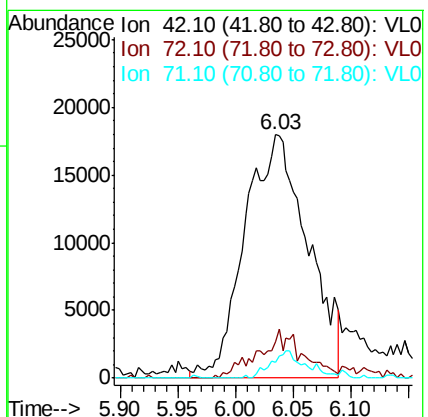
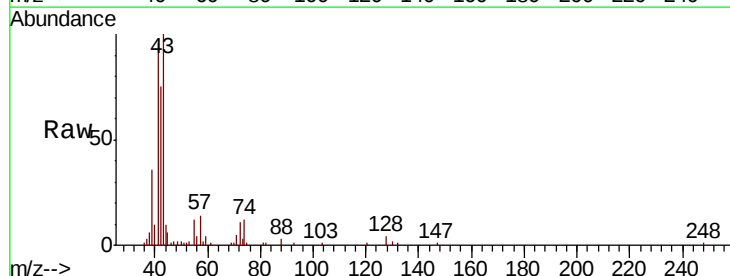
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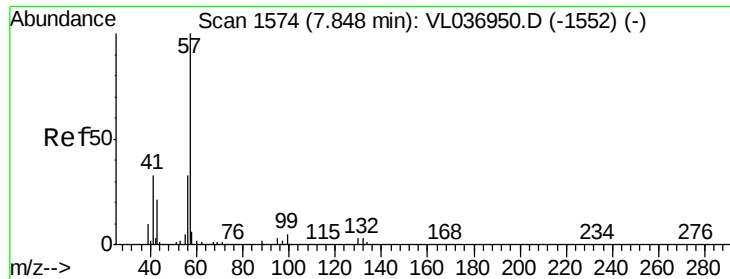
MMDadoda
 5/20/2021 5:55:42 PM



#41
 Tetrahydrofuran
 Concen: 0.899 ppbv m
 RT: 6.03 min Scan# 1010
 Delta R.T. 0.00 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Tgt Ion	Ratio	Resp	Lower	Upper
42	100	68165		
72	16.1	31.4	47.2#	
71	6.5	30.4	45.6#	





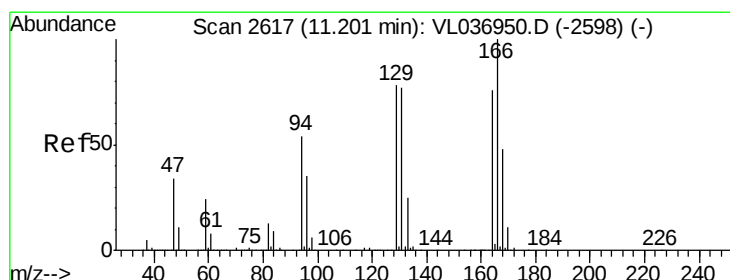
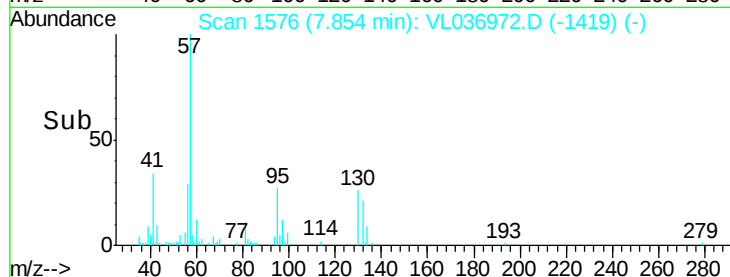
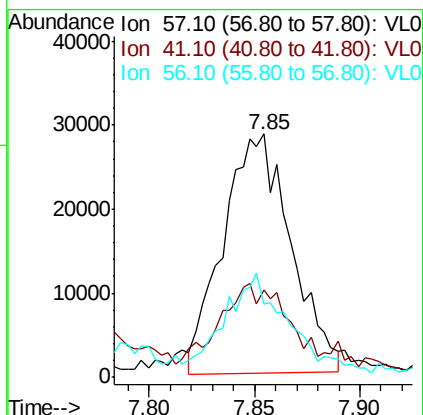
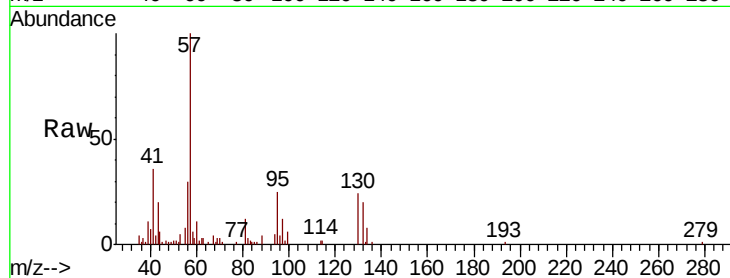
#44
2,2,4-Trimethylpentane
Concen: 0.118 ppbv
RT: 7.85 min Scan# 1576
Delta R.T. 0.01 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	45.2	27.0	40.4#
56	44.7	25.4	38.2#

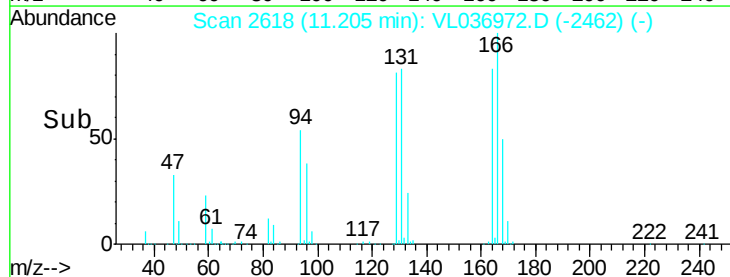
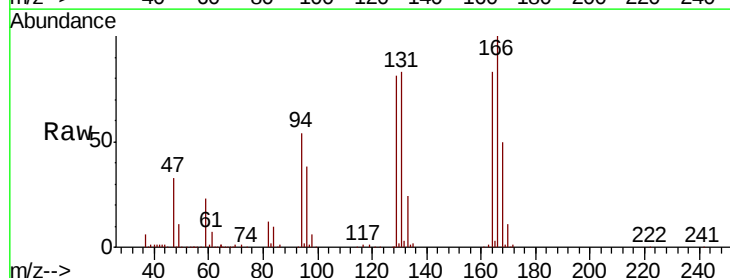
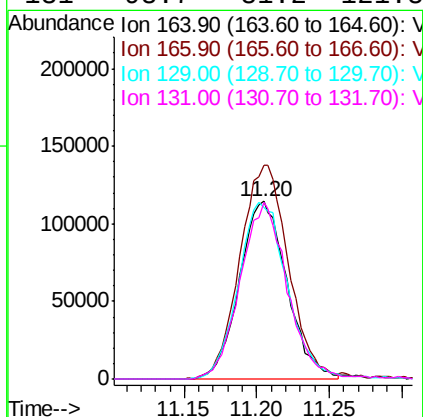
Manual Integrations
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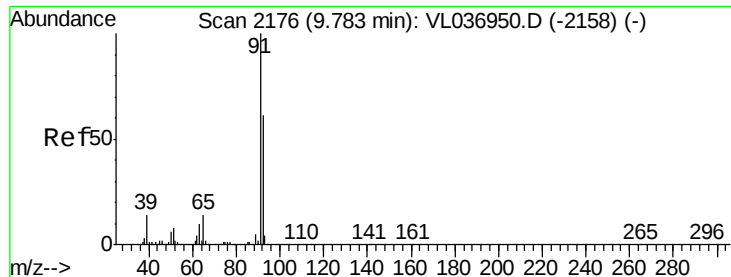
MMDadoda
5/20/2021 5:55:42 PM



#52
Tetrachloroethene
Concen: 2.091 ppbv
RT: 11.20 min Scan# 2618
Delta R.T. 0.00 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion	Ratio	Lower	Upper
164	100		
166	119.6	105.5	158.3
129	96.8	81.8	122.8
131	98.7	81.2	121.8





#53

Toluene

Concen: 0.693 ppbv

RT: 9.79 min Scan# 2177

Delta R.T. 0.00 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP

Tot Ion: 91 Resp: 259566

Ion Ratio Lower Upper

91 100

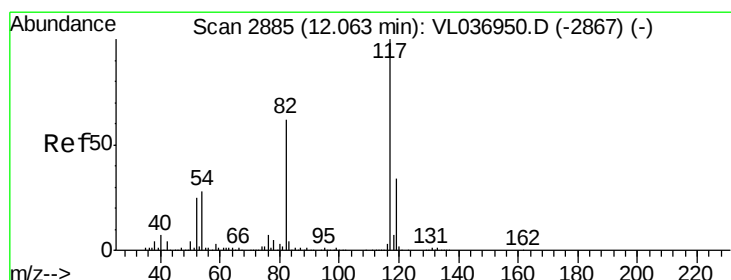
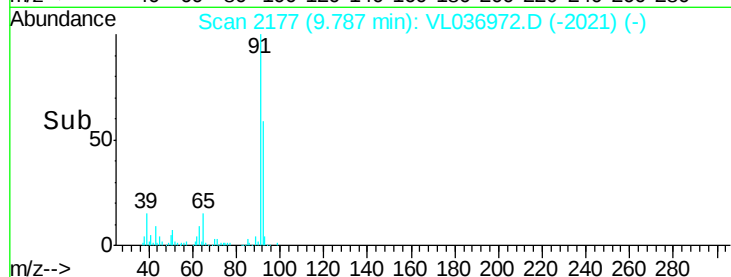
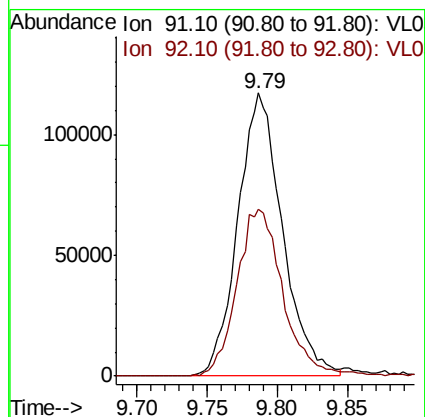
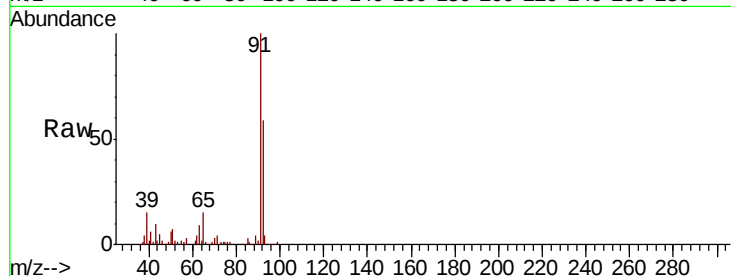
92 61.3 49.5 74.3

Manual Integrations

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2887

Delta R.T. 0.01 min

Lab File: VL036972.D

Acq: 18 May 2021 17:05

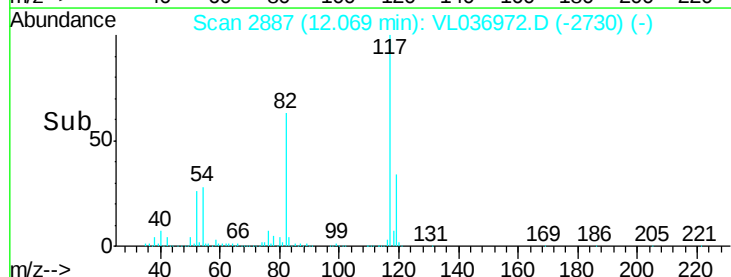
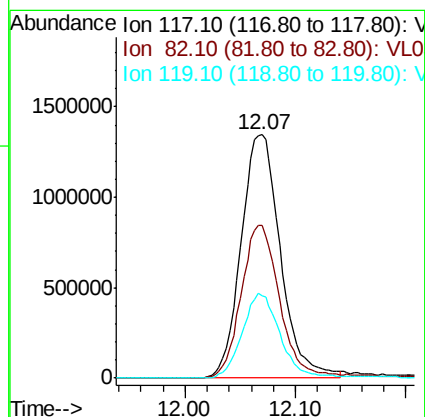
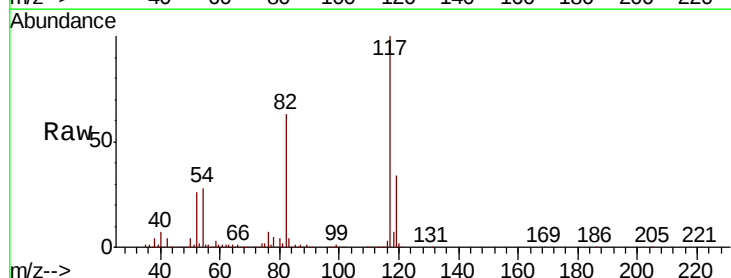
Tgt Ion: 117 Resp: 3330727

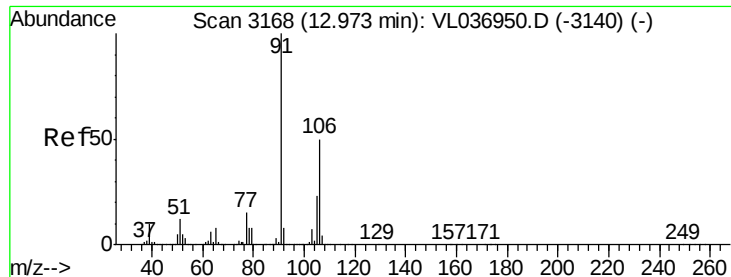
Ion Ratio Lower Upper

117 100

82 64.2 52.6 79.0

119 34.2 46.6 70.0#





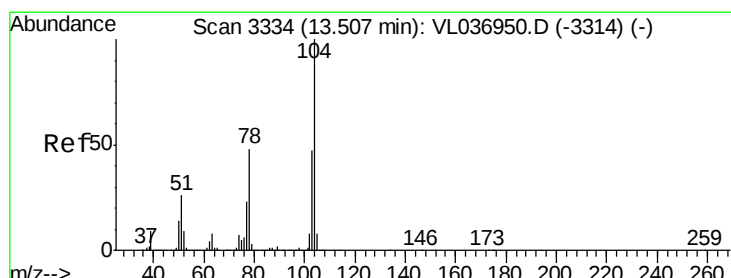
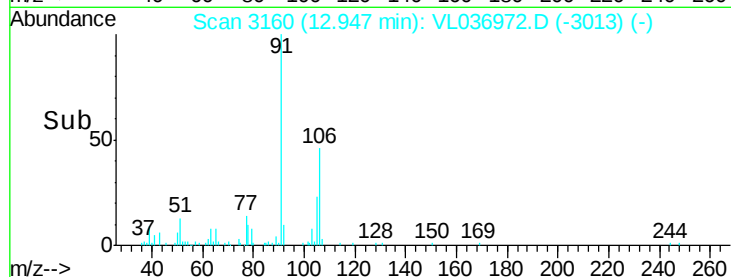
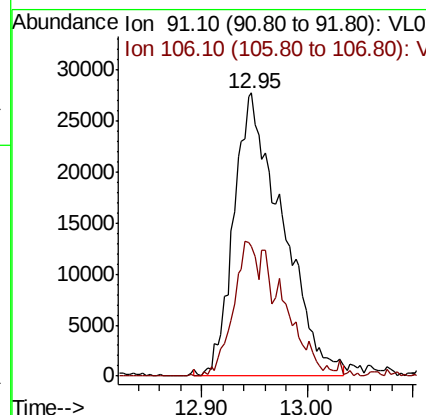
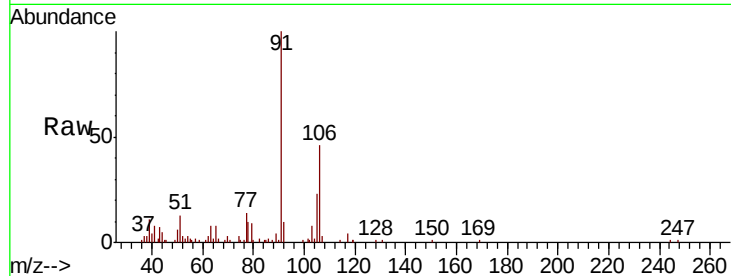
#59
m/p-Xylene
Concen: 0.228 ppbv m
RT: 12.95 min Scan# 3160
Delta R.T. -0.03 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Instrument :
MSVOA_L
ClientSampleId :
IA1DUP

Tot Ion	Ratio	Lower	Upper
91	100		
106	0.0	37.4	56.2#

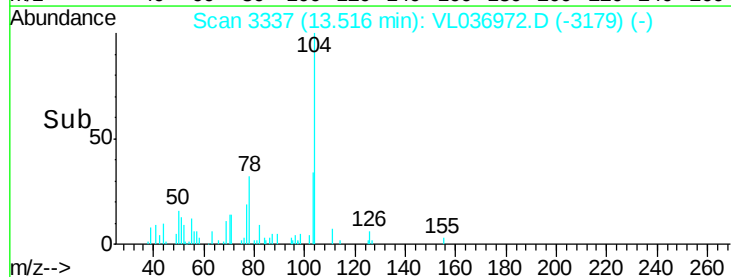
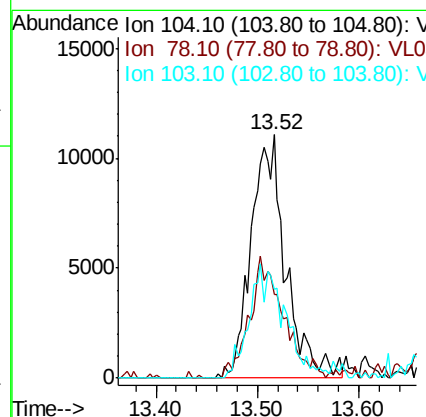
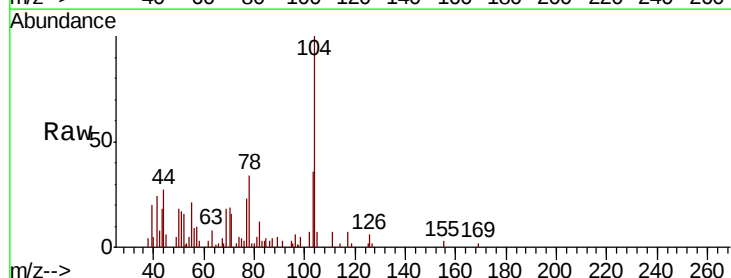
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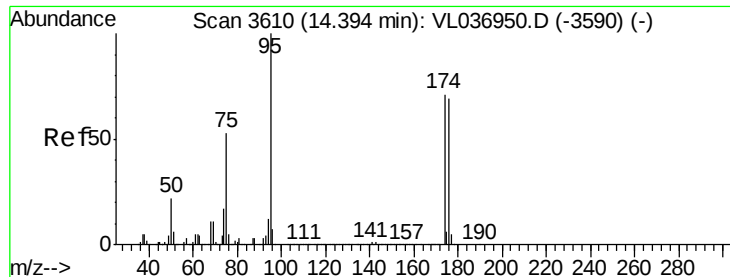
MMDadoda
5/20/2021 5:55:42 PM



#61
Styrene
Concen: 0.125 ppbv m
RT: 13.52 min Scan# 3337
Delta R.T. 0.01 min
Lab File: VL036972.D
Acq: 18 May 2021 17:05

Tgt Ion	Ratio	Lower	Upper
104	100		
78	0.0	39.0	58.6#
103	0.0	38.0	57.0#





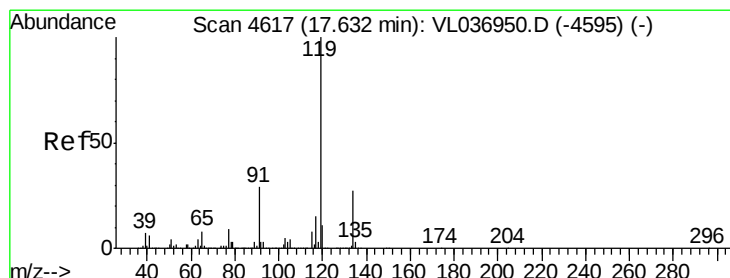
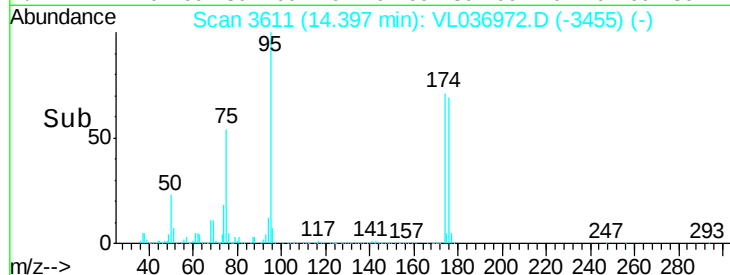
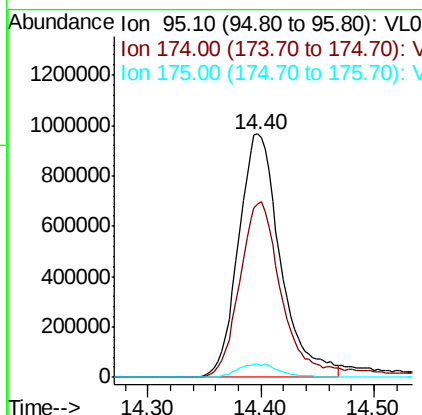
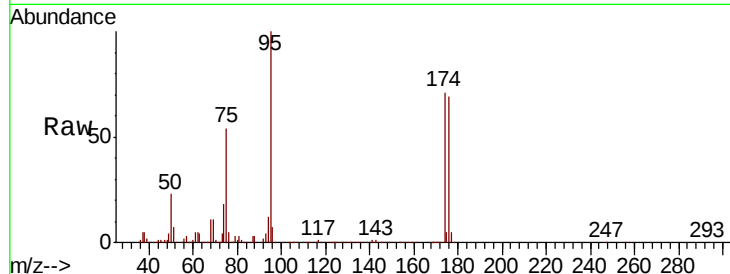
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.970 ppbv
 RT: 14.40 min Scan# 3611
 Delta R.T. 0.00 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Instrument :
 MSVOA_L
 ClientSampleId :
 IA1DUP

Tot Ion: 95 Resp: 2494674
 Ion Ratio Lower Upper
 95 100
 174 76.7 58.4 87.6
 175 5.6 4.4 6.6

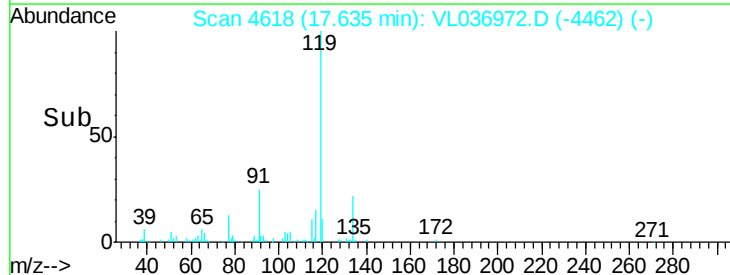
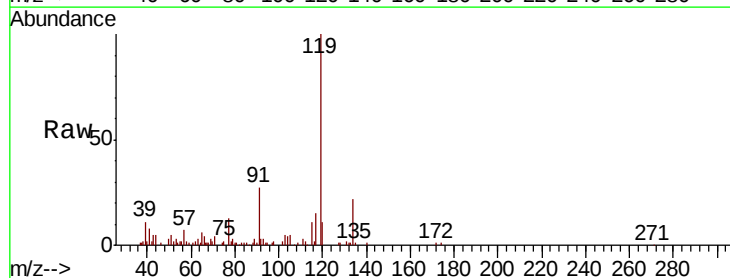
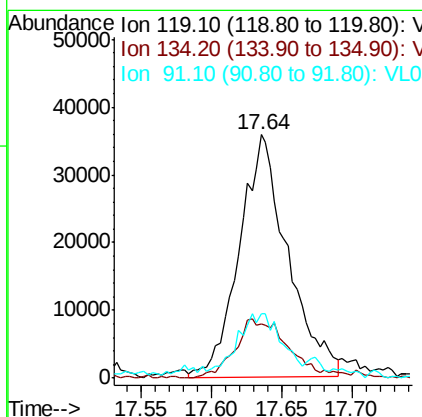
Manual Integrations
 APPROVED

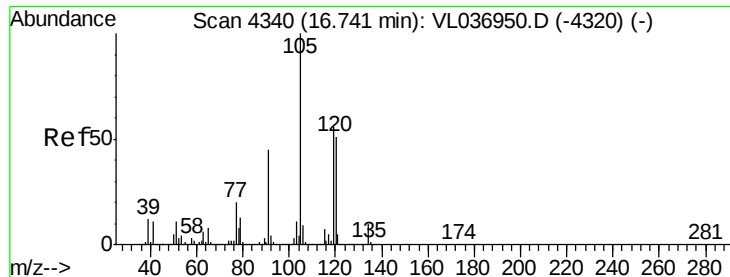
MMDadoda
 5/20/2021 5:55:42 PM



#69
 p-Isopropyltoluene
 Concen: 0.152 ppbv
 RT: 17.64 min Scan# 4618
 Delta R.T. 0.00 min
 Lab File: VL036972.D
 Acq: 18 May 2021 17:05

Tgt Ion: 119 Resp: 85750
 Ion Ratio Lower Upper
 119 100
 134 28.2 21.2 31.8
 91 32.3 22.2 33.4





#74

1,2,4-Trimethylbenzene

Concen: 0.103 ppbv m

RT: 16.74 min Scan# 4341

Delta R.T. 0.00 min

Lab File: VL036972.D

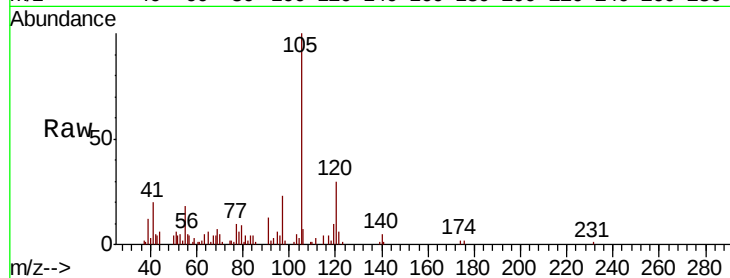
Acq: 18 May 2021 17:05

Instrument :

MSVOA_L

ClientSampleId :

IA1DUP



Tot Ion:105 Resp: 44130

Ion Ratio Lower Upper

105 100

120 30.0 40.6 61.0#

91 12.6 37.4 56.0#

77 10.1 16.2 24.4#

Manual Integrations
APPROVED

MMDadoda
5/20/2021 5:55:42 PM

