

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL060221\
 Data File : VL037103.D
 Acq On : 2 Jun 2021 15:52
 Operator : SY/AP
 Sample : M2548-09
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-9A

Manual Integrations
 APPROVED

MMDadoda
 6/7/2021 3:00:35 PM

Quant Time: Jun 05 23:01:09 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	1409992	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.16	114	4031606	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3649214	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.40	95	2680237	9.78	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	62042	0.259	ppbv	91
3) Chlorodifluoromethane	2.96	51	191837m	0.743	ppbv	
4) Chloromethane	3.13	50	52108	0.593	ppbv	98
9) Propene	3.01	41	114755m	1.241	ppbv	
10) Heptane	8.11	43	24486m	0.106	ppbv	
11) Trichlorofluoromethane	3.94	101	53207	0.240	ppbv	84
13) Ethanol	3.61	45	19330006	1566.270	ppbv	96
15) Acetone	3.84	43	1388238m	9.612	ppbv	
17) tert-Butyl alcohol	4.31	59	88387m	0.668	ppbv	
19) Isopropyl Alcohol	3.98	45	616761	7.945	ppbv #	37
20) Methylene Chloride	4.33	84	285330	3.686	ppbv	95
26) Hexane	5.67	57	193223	1.090	ppbv #	55
29) Chloroform	5.74	83	78295	0.313	ppbv	96
34) 2-Butanone	5.24	43	84172	0.573	ppbv #	90
35) Carbon Tetrachloride	7.00	117	15612	0.058	ppbv #	78
36) Benzene	6.88	78	52849	0.152	ppbv	95
38) Trichloroethene	7.82	130	33467m	0.225	ppbv	
53) Toluene	9.79	91	201321	0.487	ppbv	98
59) m/p-Xylene	12.95	91	70487m	0.166	ppbv	
61) Styrene	13.51	104	25658m	0.112	ppbv	
69) p-Isopropyltoluene	17.64	119	65880	0.107	ppbv #	91

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

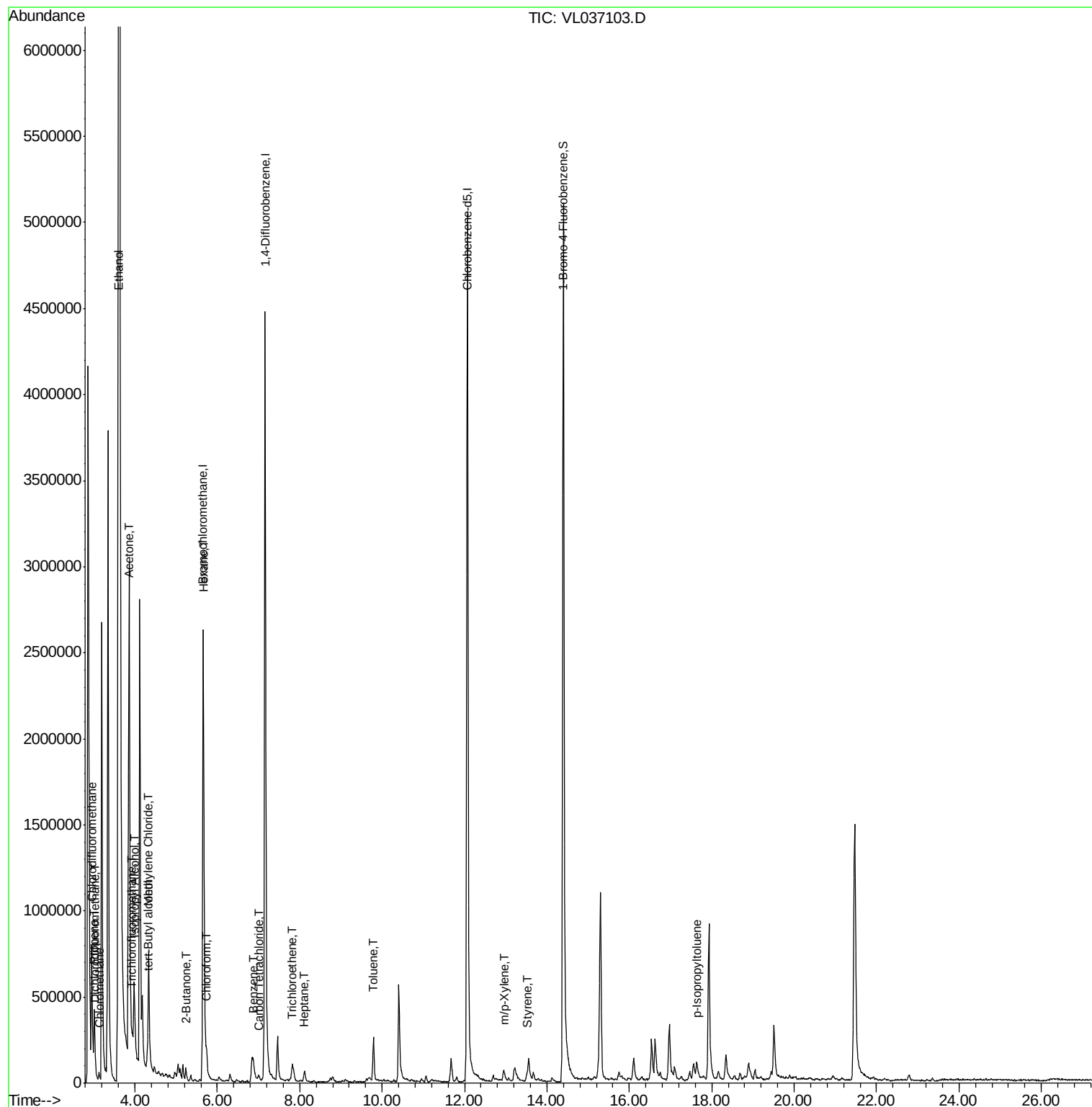
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL060221\
Data File : VL037103.D
Acq On : 2 Jun 2021 15:52
Operator : SY/AP
Sample : M2548-09
Misc : 400mL/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

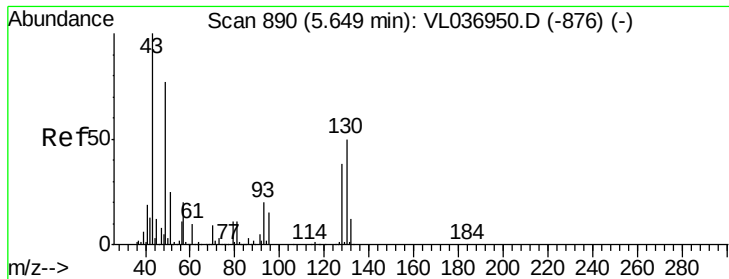
Instrument :
MSVOA_L
ClientSampleId :
IA-9A

Manual Integrations
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6/7/2021 3:00:35 PM

Quant Time: Jun 05 23:01:09 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# 891

Delta R.T. 0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

ClientSampled :

IA-9A

Tot Ion: 49 Resp: 1409992

Ion Ratio Lower Upper

49 100

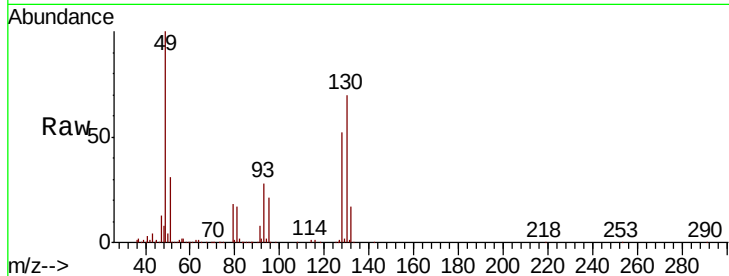
128 56.3 26.9 80.7

130 70.9 33.8 101.4

Manual Integrations
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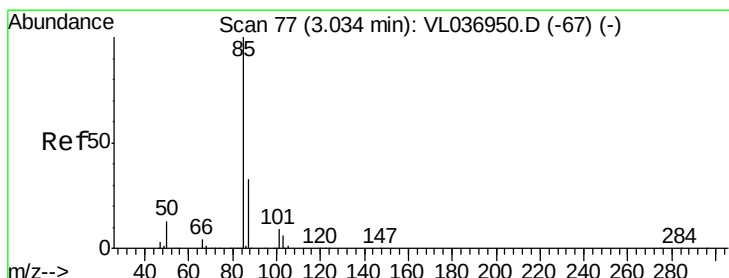
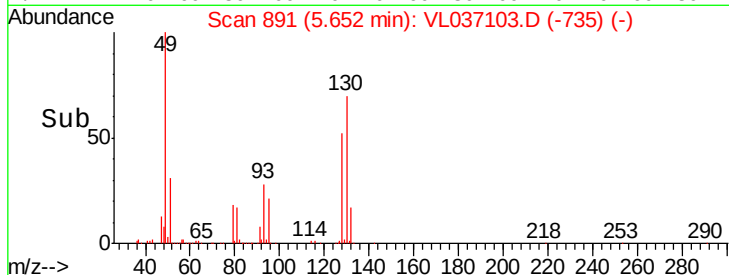
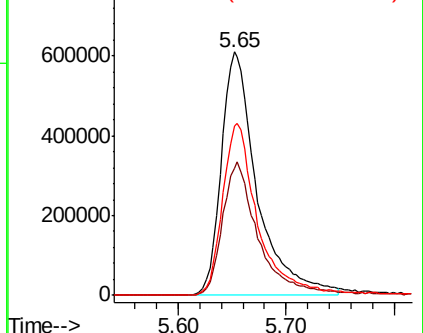
6/7/2021 3:00:35 PM



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



#2

Dichlorodifluoromethane

Concen: 0.259 ppbv

RT: 3.04 min Scan# 78

Delta R.T. 0.00 min

Lab File: VL037103.D

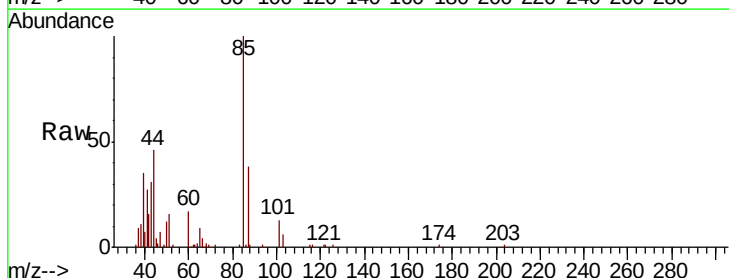
Acq: 2 Jun 2021 15:52

Tgt Ion: 85 Resp: 62042

Ion Ratio Lower Upper

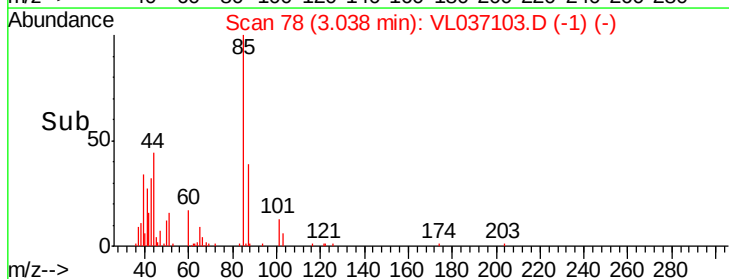
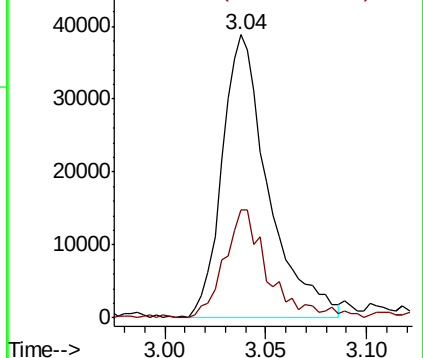
85 100

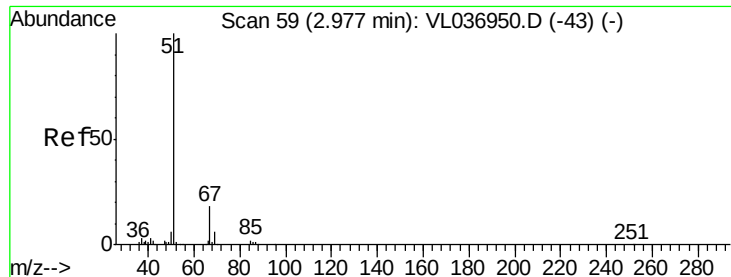
87 38.2 26.6 39.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

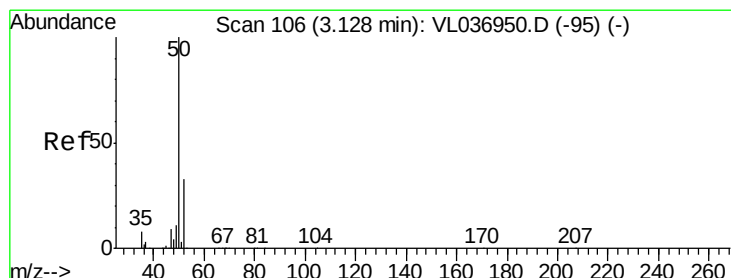
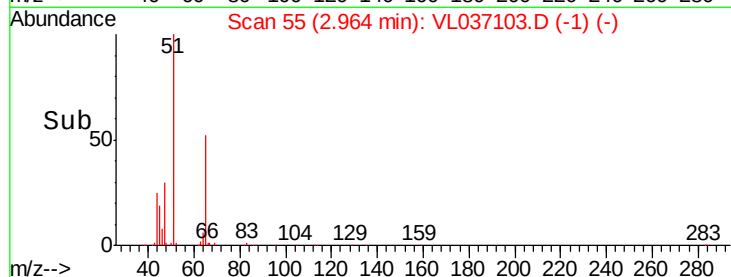
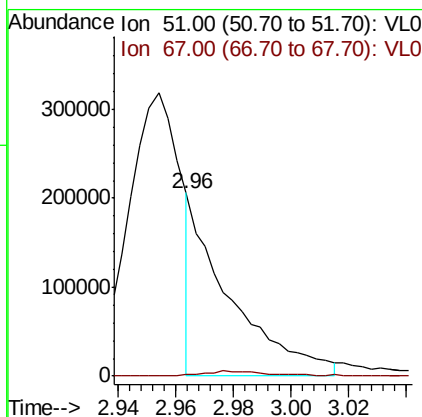
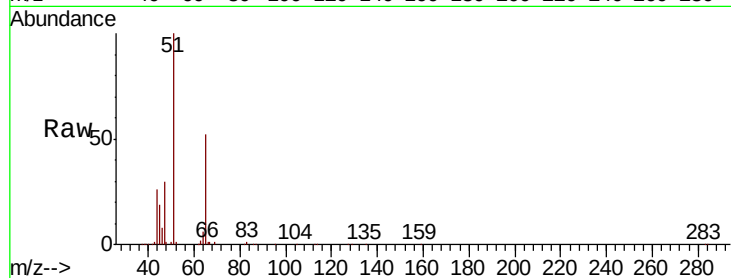
Chlorodifluoromethane
Concen: 0.743 ppbv m
RT: 2.96 min Scan# 55
Delta R.T. -0.01 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Instrument :
MSVOA_L
ClientSampled :
IA-9A

Tot Ion	Ratio	Lower	Upper
51	100		
67	5.5	14.6	21.8#

Manual Integrations
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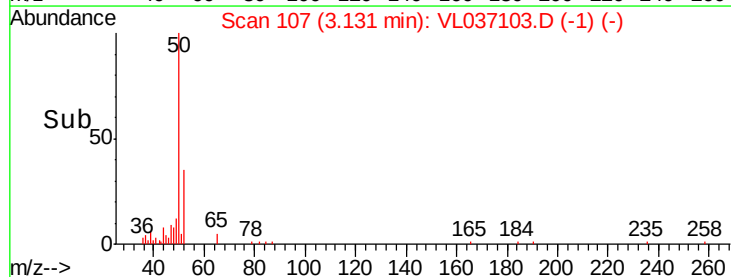
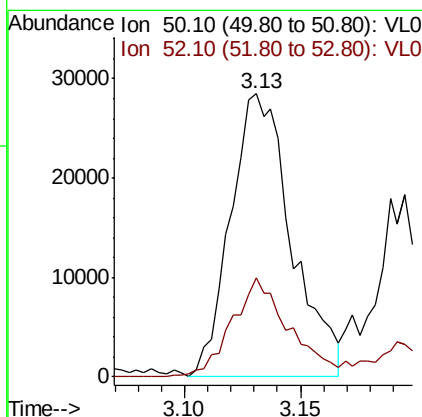
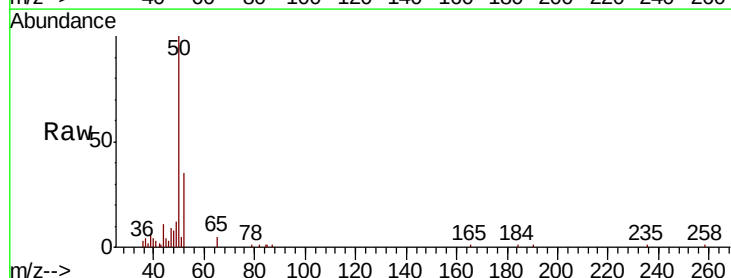
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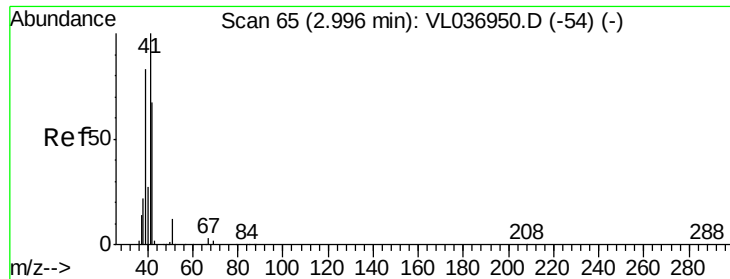


#4

Chloromethane
Concen: 0.593 ppbv
RT: 3.13 min Scan# 107
Delta R.T. 0.00 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Tgt Ion	Ratio	Lower	Upper
50	100		
52	33.6	26.1	39.1





#9

Propene

Concen: 1.241 ppbv m

RT: 3.01 min Scan# 69

Delta R.T. 0.01 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

ClientSampleId :

IA-9A

Tot Ion: 41 Resp: 114755

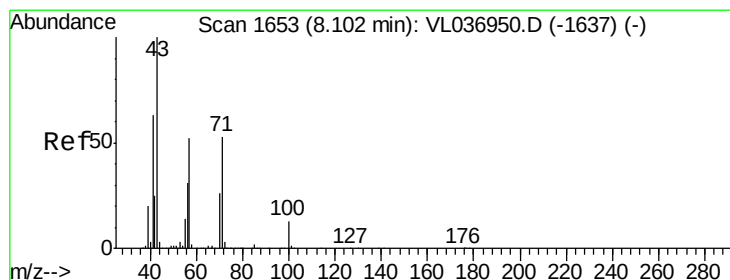
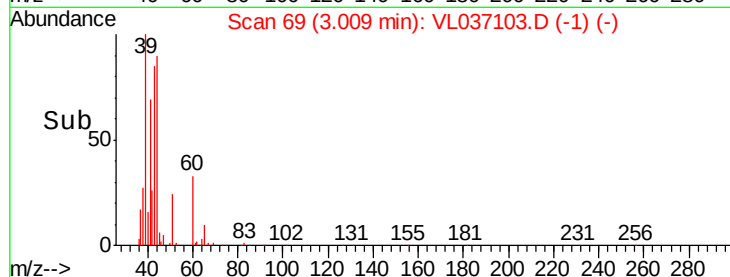
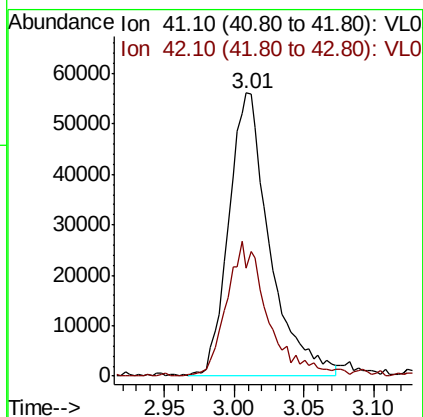
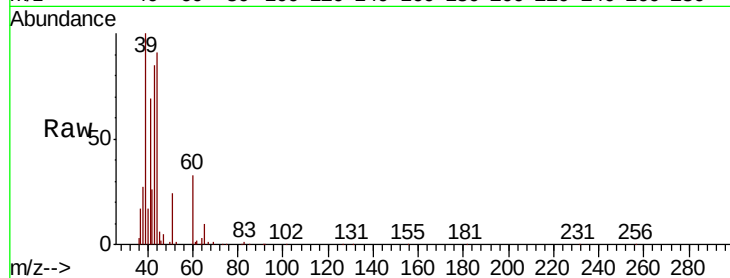
Ion Ratio Lower Upper

41 100

42 552.8 53.9 80.9#

Manual Integrations
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#10

Heptane

Concen: 0.106 ppbv m

RT: 8.11 min Scan# 1655

Delta R.T. 0.01 min

Lab File: VL037103.D

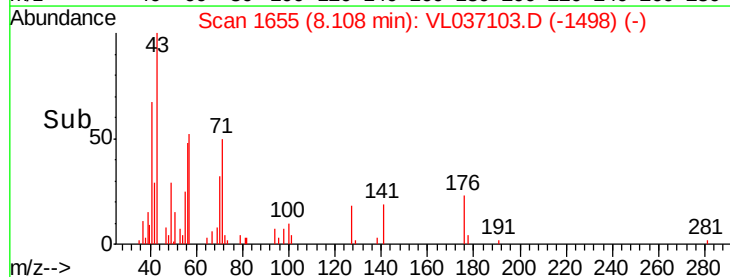
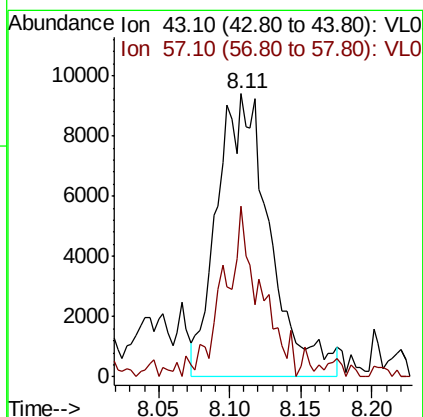
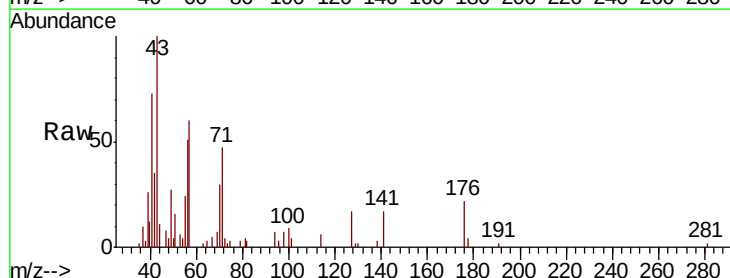
Acq: 2 Jun 2021 15:52

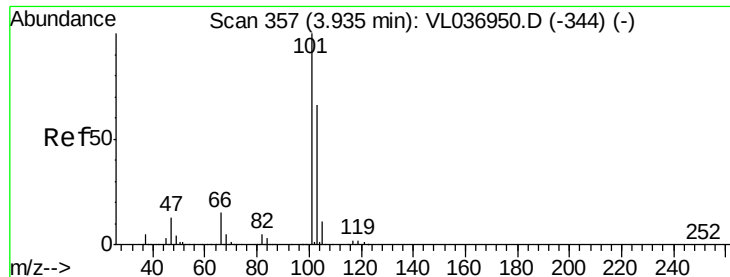
Tgt Ion: 43 Resp: 24486

Ion Ratio Lower Upper

43 100

57 44.6 41.0 61.6





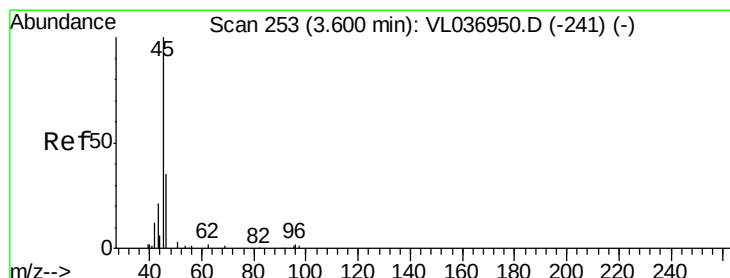
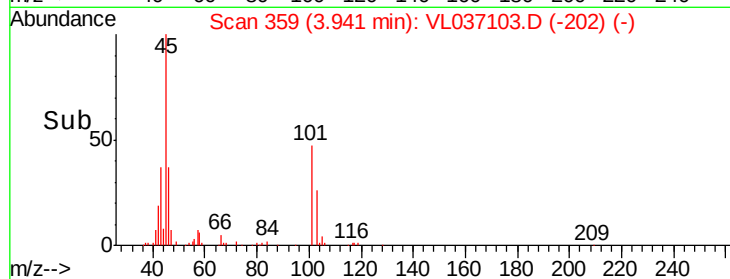
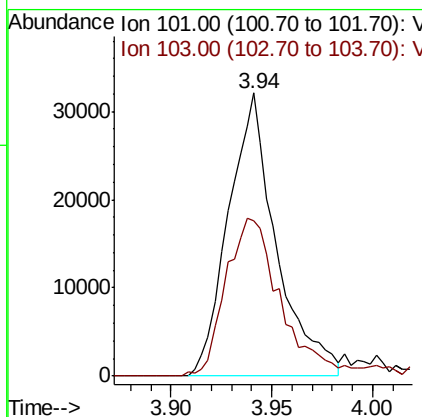
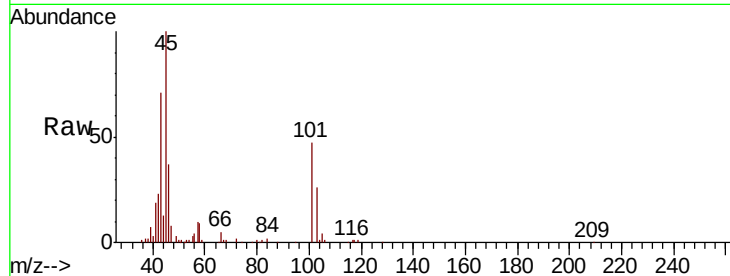
#11
Trichlorofluoromethane
Concen: 0.240 ppbv
RT: 3.94 min Scan# 359
Delta R.T. 0.01 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Instrument :
MSVOA_L
ClientSampleId :
IA-9A

Tot Ion	Ratio	Lower	Upper
101	100		
103	53.4	52.6	79.0

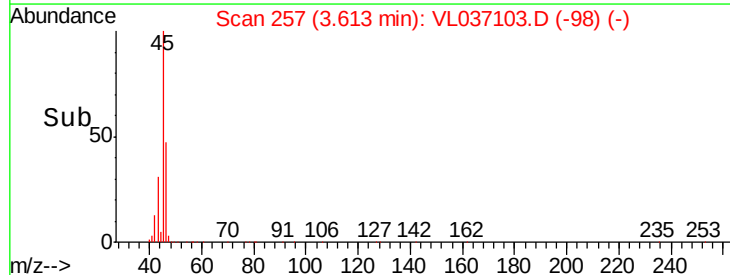
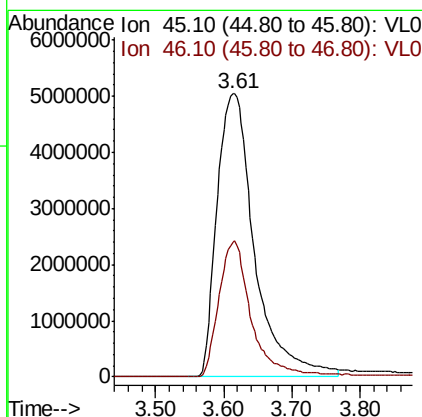
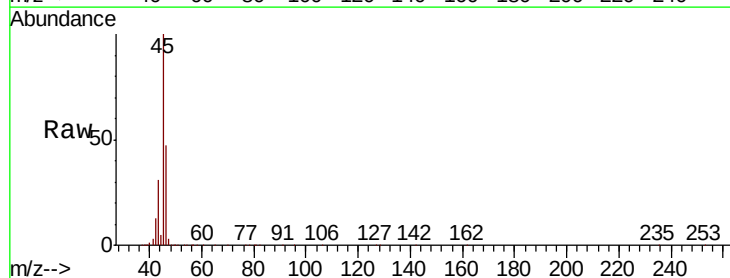
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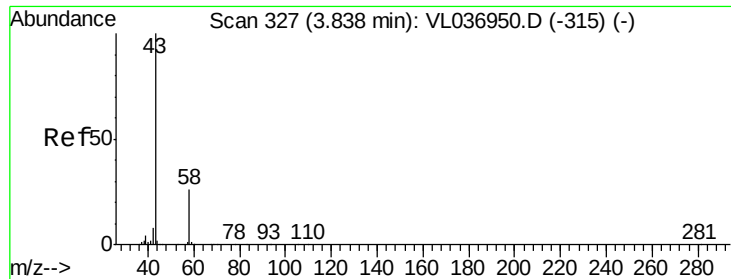
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#13
Ethanol
Concen: 1566.270 ppbv
RT: 3.61 min Scan# 257
Delta R.T. 0.01 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Tgt Ion	Ratio	Lower	Upper
45	100		
46	43.0	16.3	65.3





#15

Acetone

Concen: 9.612 ppbv m

RT: 3.84 min Scan# 329

Delta R.T. 0.01 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

ClientSampled :

IA-9A

Tot Ion: 43 Resp: 1388238

Ion Ratio Lower Upper

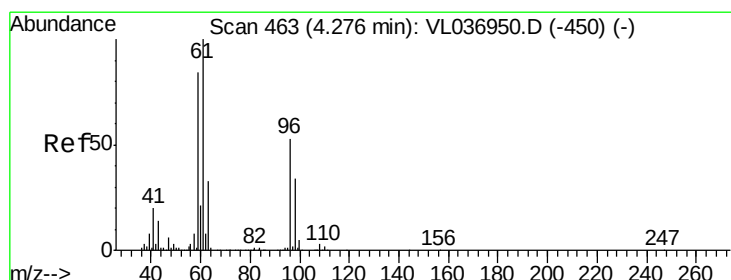
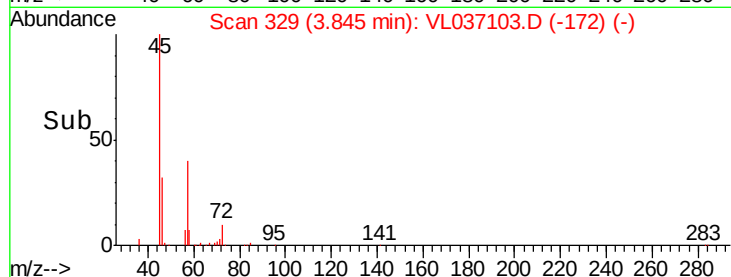
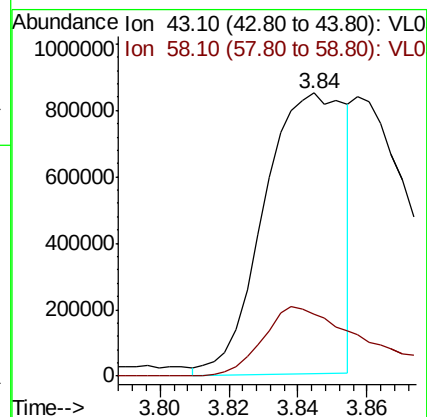
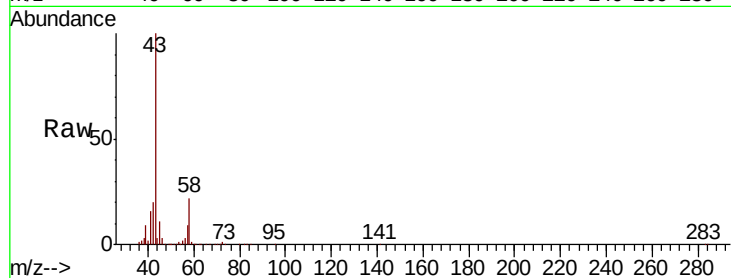
43 100

58 35.4 24.0 36.0

Manual Integrations
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#17

tert-Butyl alcohol

Concen: 0.668 ppbv m

RT: 4.31 min Scan# 473

Delta R.T. 0.03 min

Lab File: VL037103.D

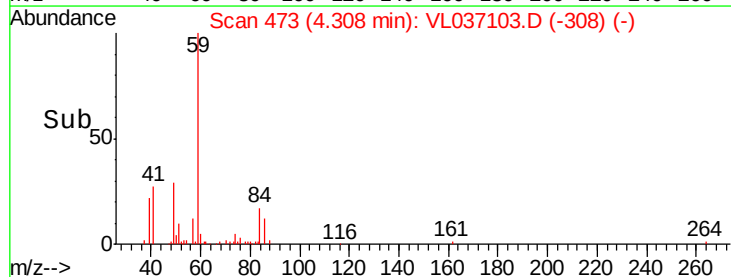
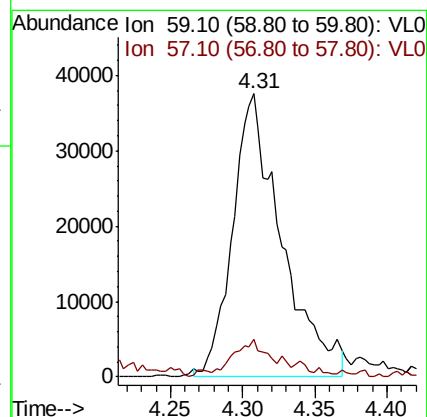
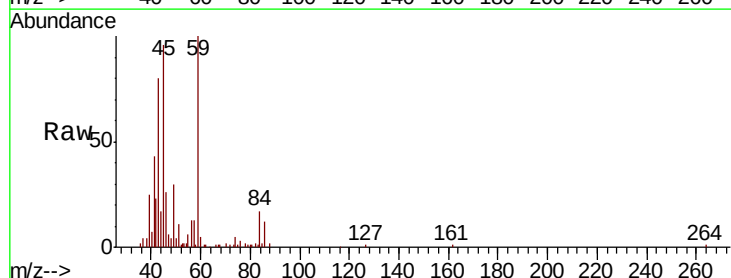
Acq: 2 Jun 2021 15:52

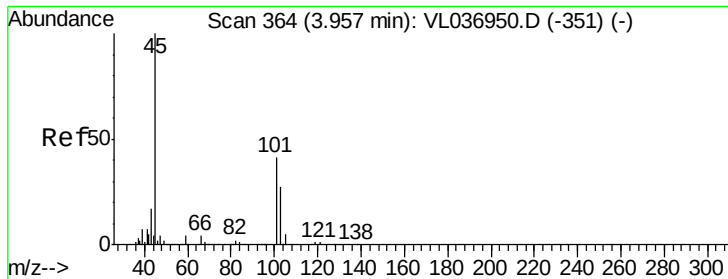
Tgt Ion: 59 Resp: 88387

Ion Ratio Lower Upper

59 100

57 0.0 8.3 12.5#





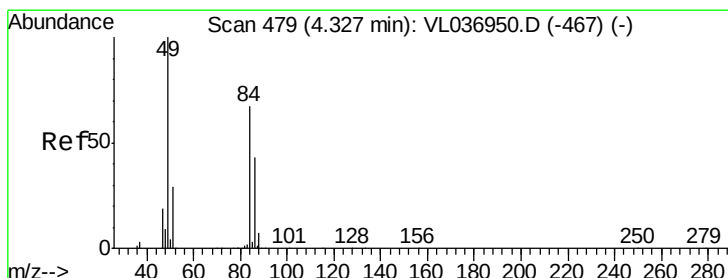
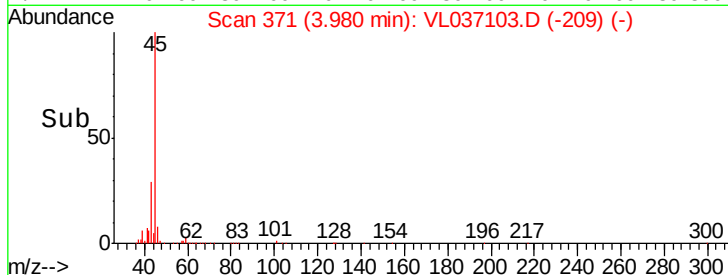
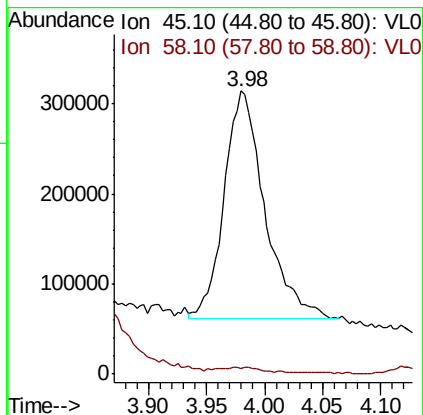
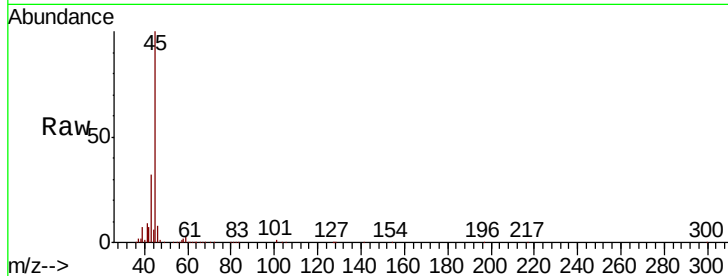
#19
Isopropyl Alcohol
Concen: 7.945 ppbv
RT: 3.98 min Scan# 371
Delta R.T. 0.02 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Instrument :
MSVOA_L
ClientSampleId :
IA-9A

Tot Ion: 45 Resp: 616761
Ion Ratio Lower Upper
45 100
58 4.3 37.2 55.8#

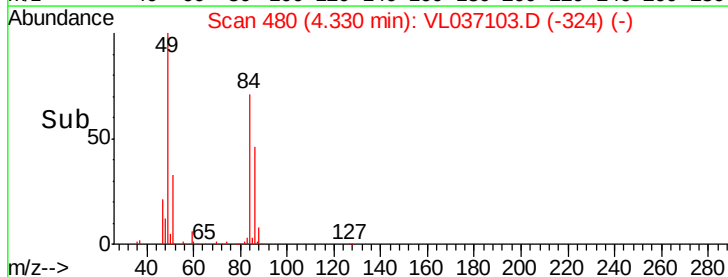
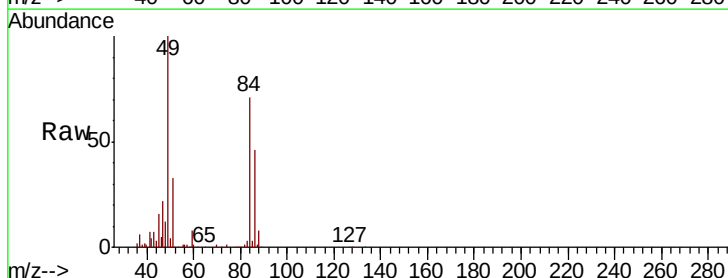
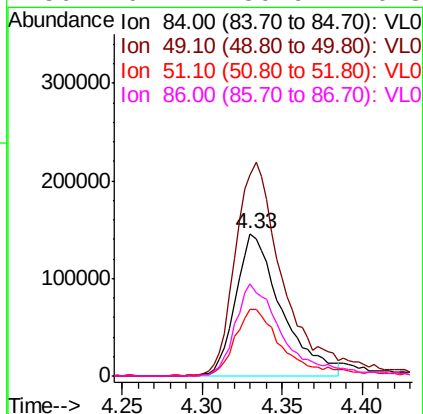
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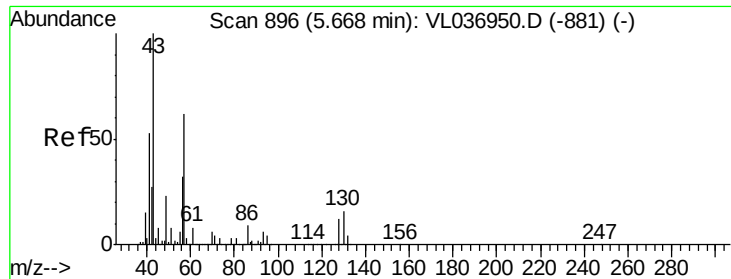
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#20
Methylene Chloride
Concen: 3.686 ppbv
RT: 4.33 min Scan# 480
Delta R.T. 0.00 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Tgt Ion: 84 Resp: 285330
Ion Ratio Lower Upper
84 100
49 140.4 119.8 179.6
51 45.8 35.1 52.7
86 64.7 50.9 76.3





#26

Hexane

Concen: 1.090 ppbv

RT: 5.67 min Scan# 896

Delta R.T. -0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

ClientSampled :

IA-9A

Tot Ion: 57 Resp: 193223

Ion Ratio Lower Upper

57 100

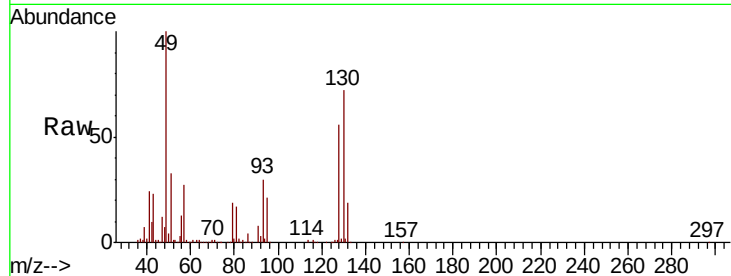
41 96.6 70.5 105.7

43 98.7 165.8 248.8#

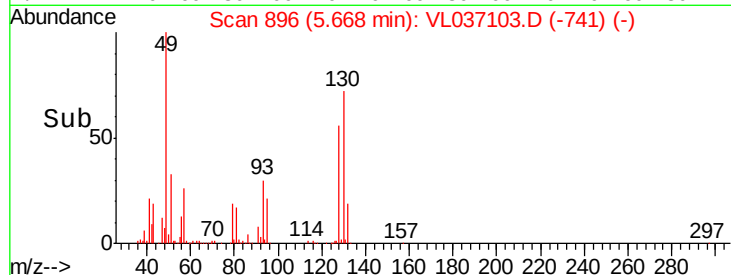
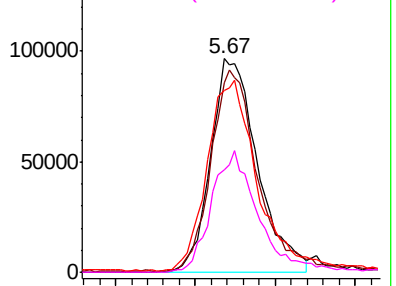
56 56.8 42.2 63.4

Manual Integrations
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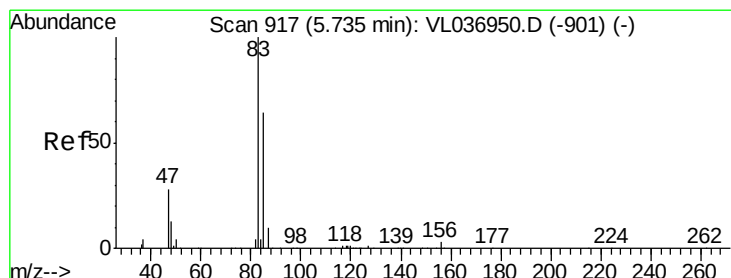
MMDadoda
6/7/2021 3:00:35 PM



Abundance Ion 57.10 (56.80 to 57.80): VL0
150000 Ion 41.10 (40.80 to 41.80): VL0
Ion 43.10 (42.80 to 43.80): VL0
Ion 56.10 (55.80 to 56.80): VL0



Time-->



#29

Chloroform

Concen: 0.313 ppbv

RT: 5.74 min Scan# 917

Delta R.T. -0.00 min

Lab File: VL037103.D

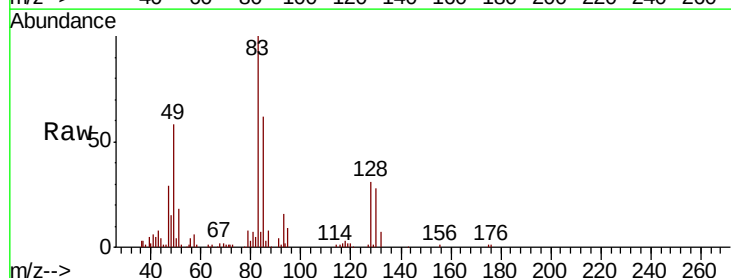
Acq: 2 Jun 2021 15:52

Tgt Ion: 83 Resp: 78295

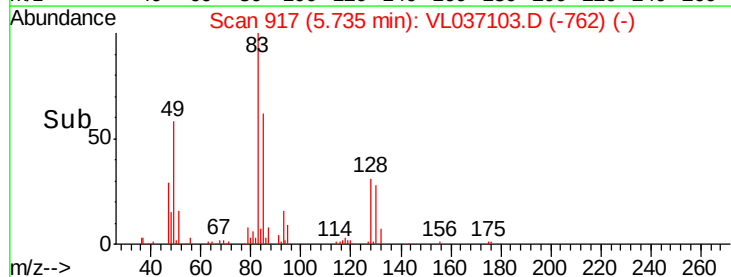
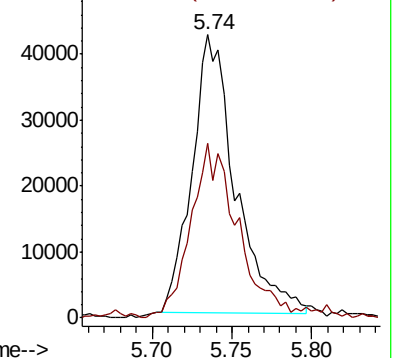
Ion Ratio Lower Upper

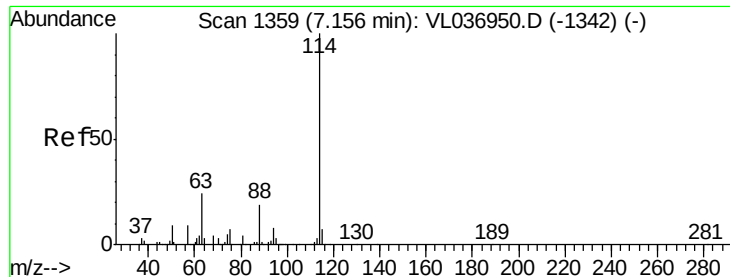
83 100

85 60.8 51.1 76.7



Abundance Ion 83.00 (82.70 to 83.70): VL0
50000 Ion 85.00 (84.70 to 85.70): VL0





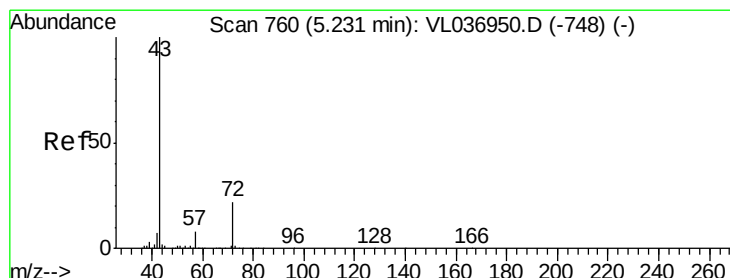
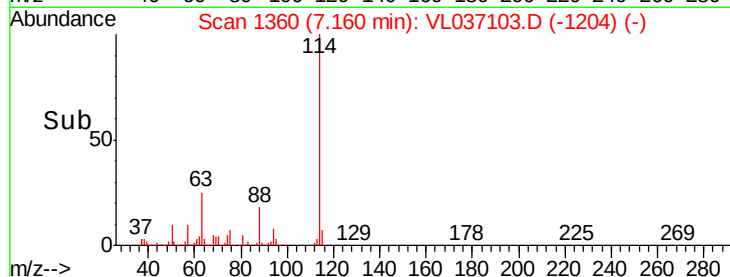
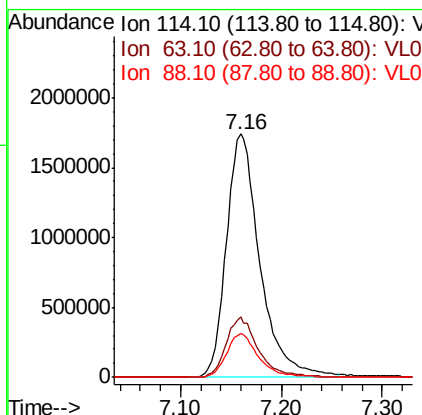
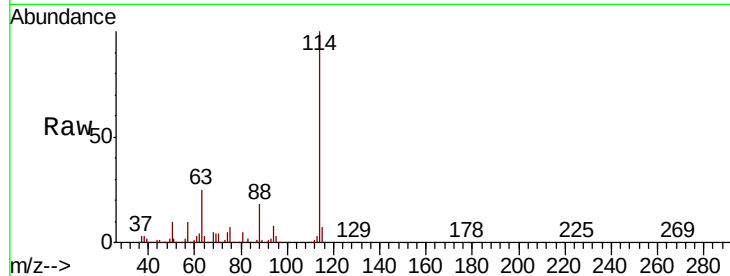
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1360
 Delta R.T. 0.00 min
 Lab File: VL037103.D
 Acq: 2 Jun 2021 15:52

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-9A

Tot Ion:114 Resp: 4031606
 Ion Ratio Lower Upper
 114 100
 63 24.0 19.6 29.4
 88 17.6 14.6 21.8

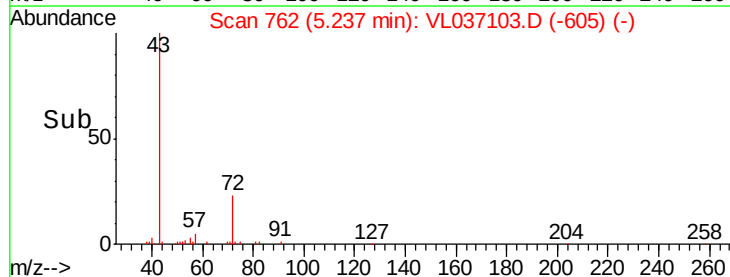
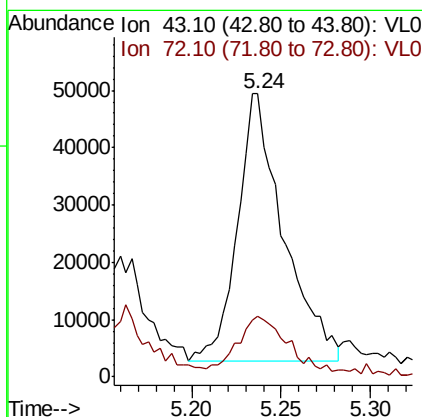
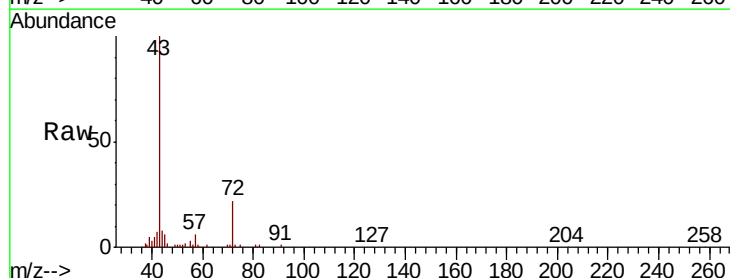
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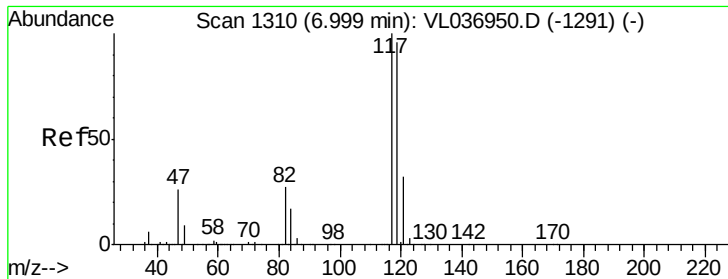
MMDadoda
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#34
 2-Butanone
 Concen: 0.573 ppbv
 RT: 5.24 min Scan# 762
 Delta R.T. 0.01 min
 Lab File: VL037103.D
 Acq: 2 Jun 2021 15:52

Tgt Ion: 43 Resp: 84172
 Ion Ratio Lower Upper
 43 100
 72 28.8 19.0 28.4#





#35

Carbon Tetrachloride

Concen: 0.058 ppbv

RT: 7.00 min Scan# 1310

Delta R.T. -0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

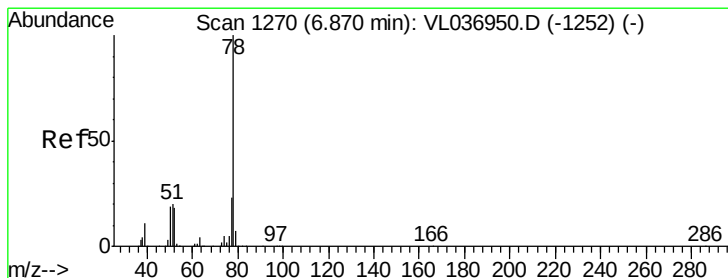
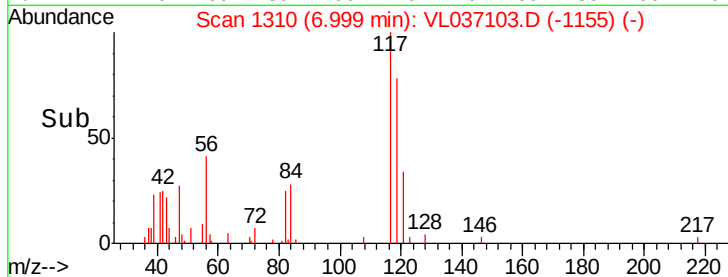
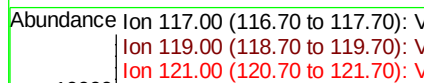
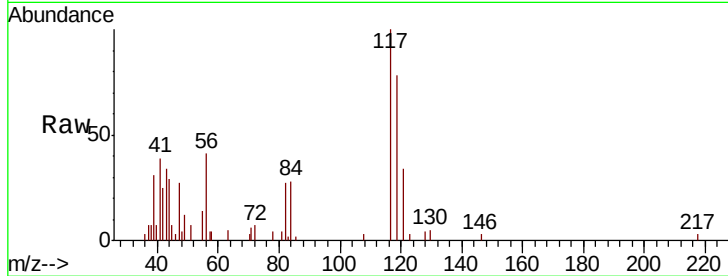
ClientSampled :

IA-9A

Tot Ion:	117	Resp:	15612
Ion Ratio	Lower	Upper	
117	100		
119	68.1	76.6	114.8#
121	31.3	25.8	38.6

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#36

Benzene

Concen: 0.152 ppbv

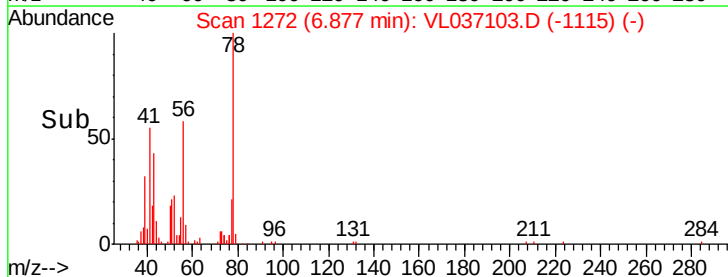
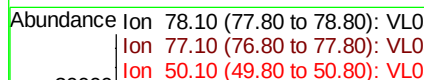
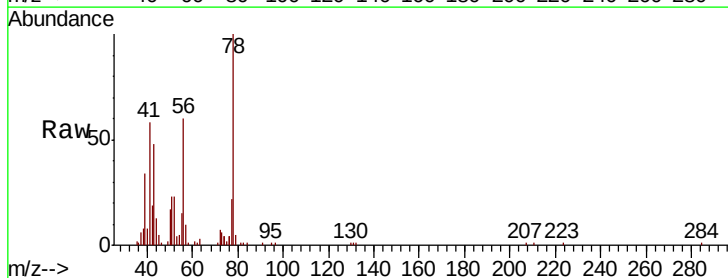
RT: 6.88 min Scan# 1272

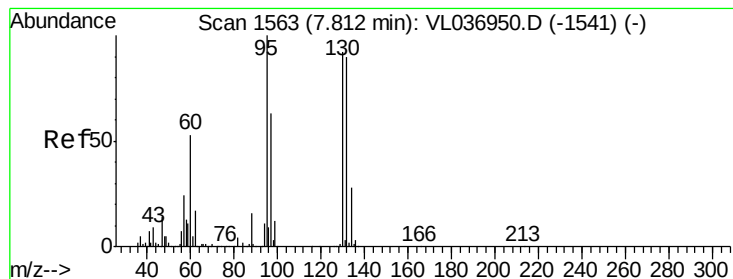
Delta R.T. 0.01 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Tgt Ion:	78	Resp:	52849
Ion Ratio	Lower	Upper	
78	100		
77	21.8	18.6	28.0
50	15.1	15.0	22.4





#38

Trichloroethene

Concen: 0.225 ppbv m

RT: 7.82 min Scan# 1564

Delta R.T. 0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

ClientSampled :

IA-9A

Tot Ion:130 Resp: 33467
Ion Ratio Lower Upper

130 100

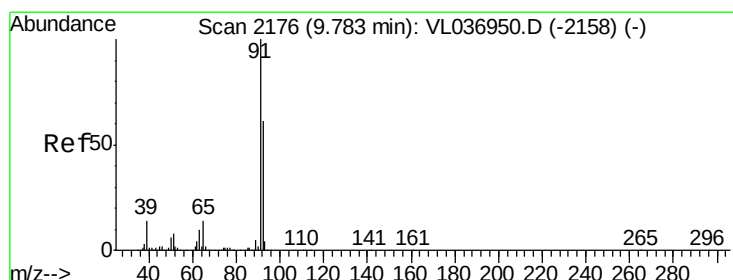
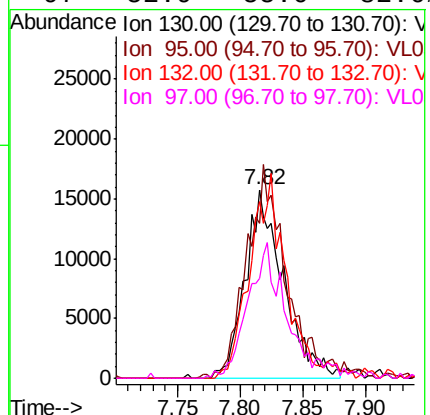
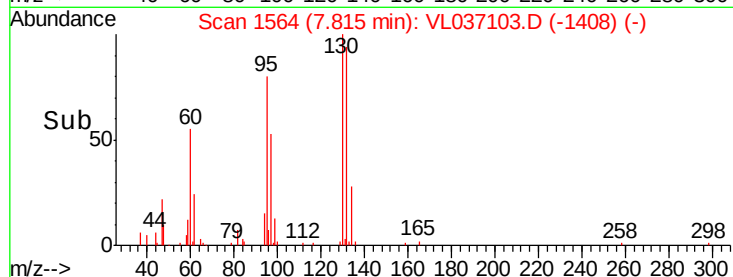
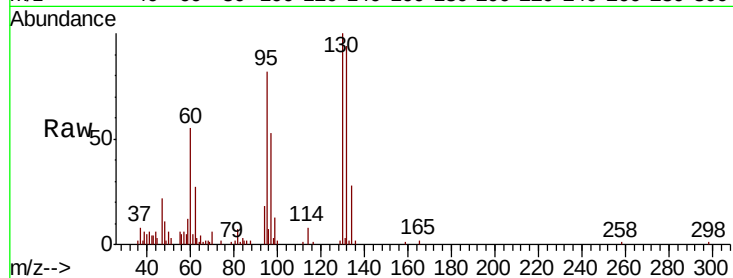
95 82.0 86.9 130.3#

132 93.6 78.4 117.6

97 52.9 55.0 82.6#

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#53

Toluene

Concen: 0.487 ppbv

RT: 9.79 min Scan# 2178

Delta R.T. 0.01 min

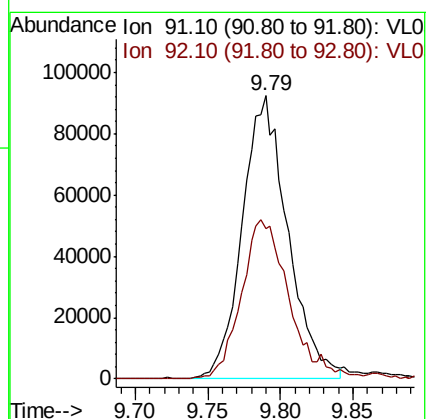
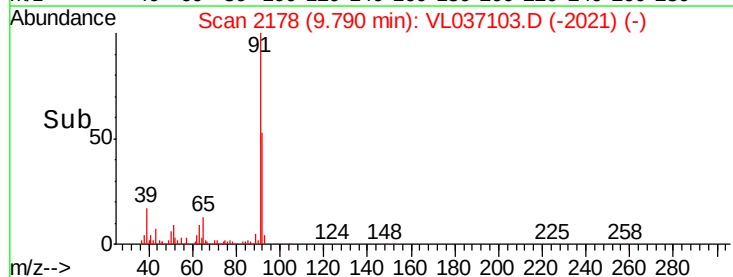
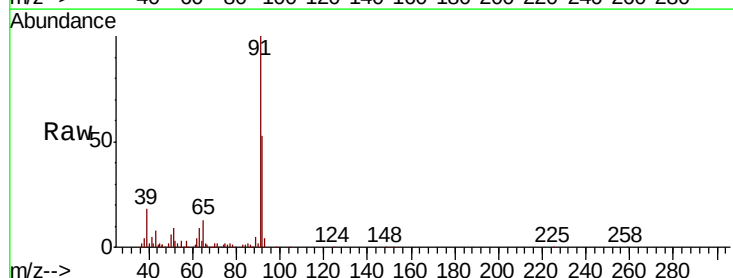
Lab File: VL037103.D

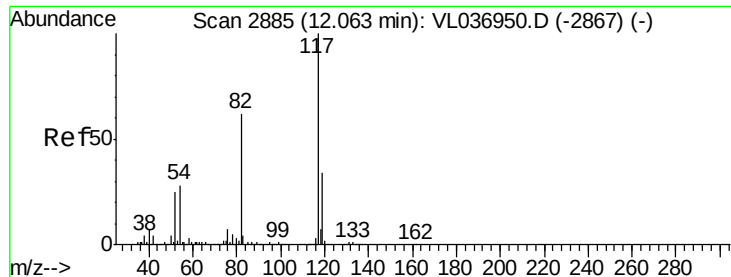
Acq: 2 Jun 2021 15:52

Tgt Ion: 91 Resp: 201321
Ion Ratio Lower Upper

91 100

92 60.0 49.5 74.3





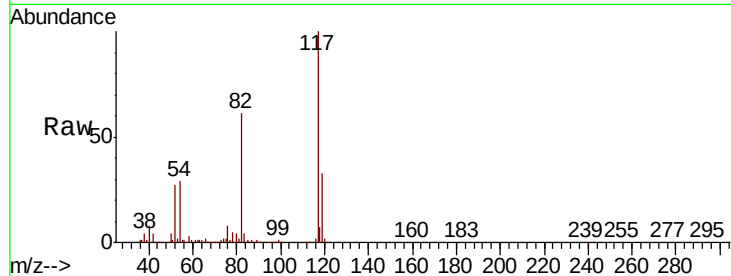
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.07 min Scan# 2886
Delta R.T. 0.00 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Instrument :
MSVOA_L
ClientSampled :
IA-9A

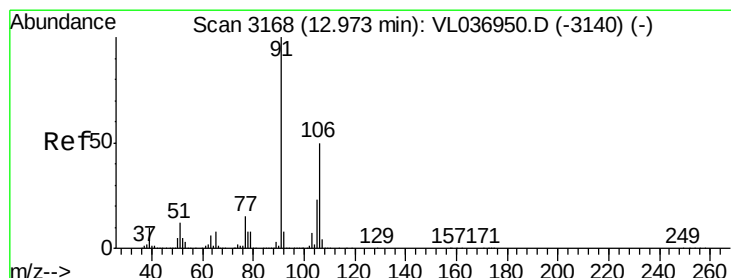
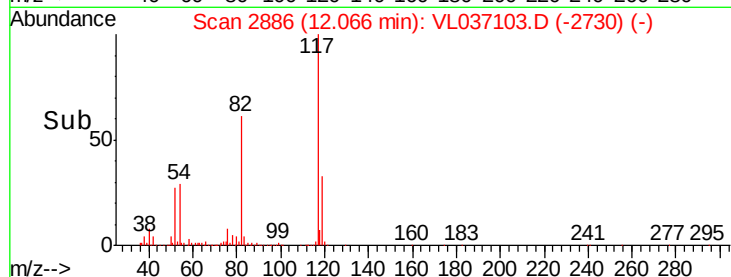
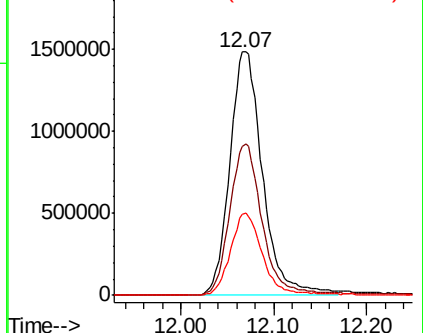
Tot Ion:117 Resp: 3649214
Ion Ratio Lower Upper
117 100
82 63.5 52.6 79.0
119 33.7 46.6 70.0#

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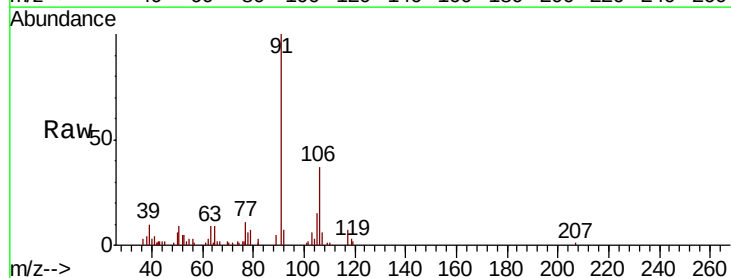


Abundance Ion 117.10 (116.80 to 117.80): V
2000000 Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

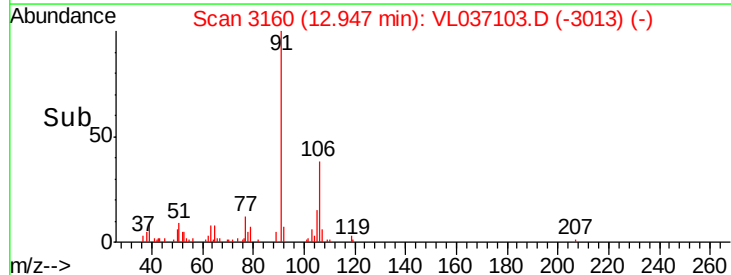
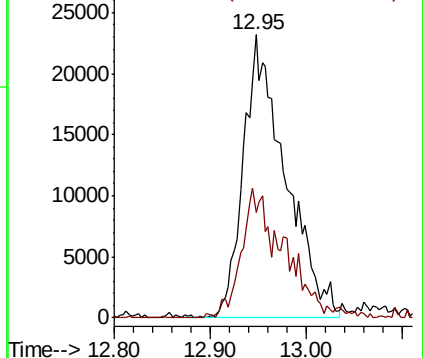


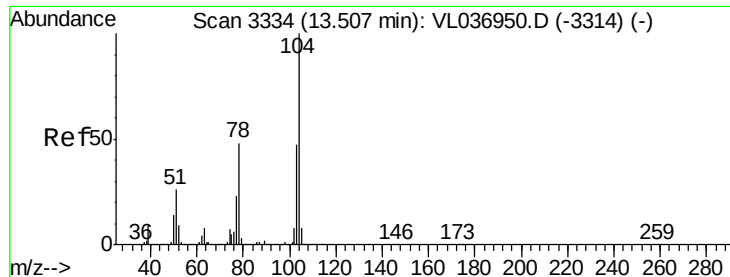
#59
m/p-Xylene
Concen: 0.166 ppbv m
RT: 12.95 min Scan# 3160
Delta R.T. -0.03 min
Lab File: VL037103.D
Acq: 2 Jun 2021 15:52

Tgt Ion: 91 Resp: 70487
Ion Ratio Lower Upper
91 100
106 0.0 37.4 56.2#



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





#61

Stvrene

Concen: 0.112 ppbv m

RT: 13.51 min Scan# 3334

Delta R.T. -0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Instrument :

MSVOA_L

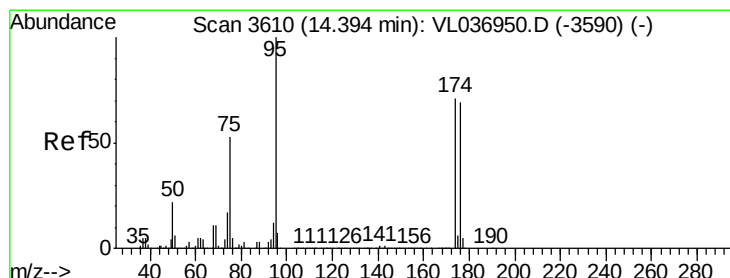
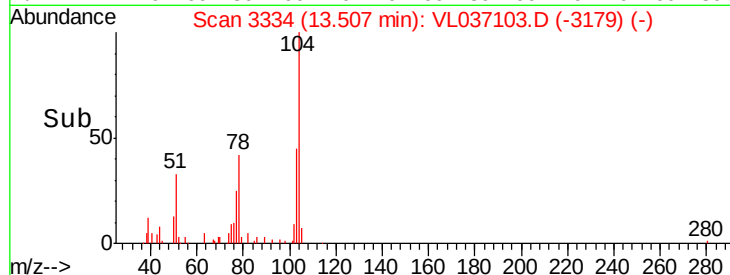
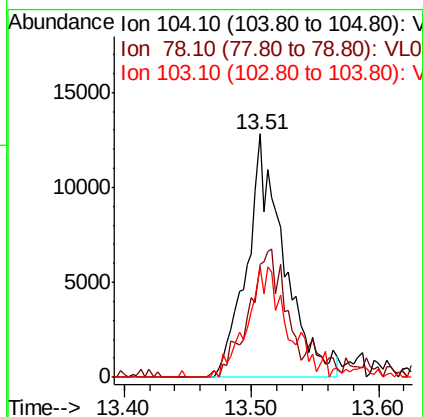
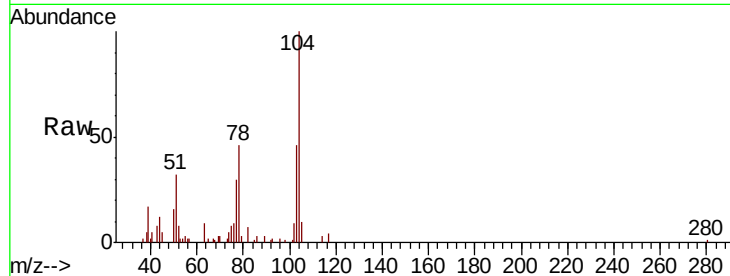
ClientSampleId :

IA-9A

Tot Ion:	104	Resp:	25658
Ion Ratio	Lower	Upper	
104	100		
78	0.0	39.0	58.6#
103	50.1	38.0	57.0

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#68

1-Bromo-4-Fluorobenzene

Concen: 9.777 ppbv

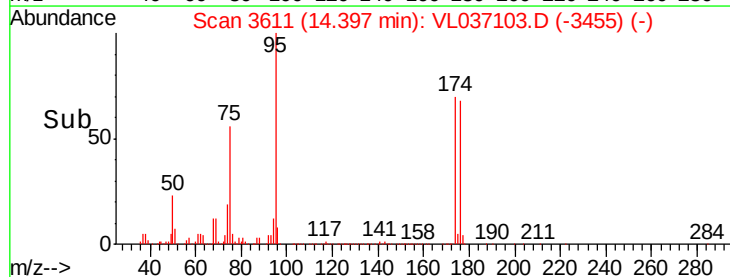
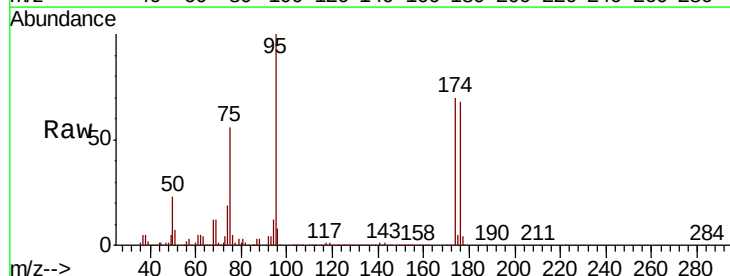
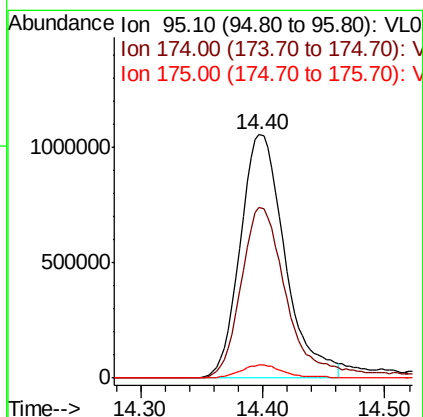
RT: 14.40 min Scan# 3611

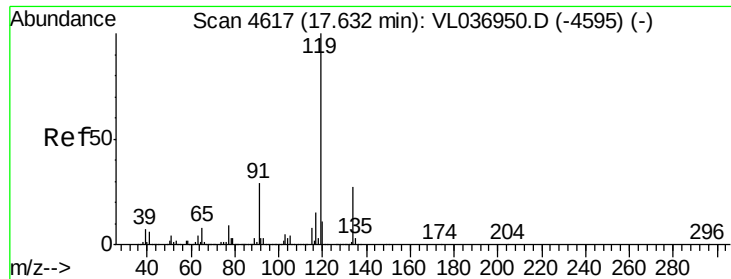
Delta R.T. 0.00 min

Lab File: VL037103.D

Acq: 2 Jun 2021 15:52

Tgt Ion:	95	Resp:	2680237
Ion Ratio	Lower	Upper	
95	100		
174	75.2	58.4	87.6
175	5.7	4.4	6.6





#69
 p-Isopropyltoluene
 Concen: 0.107 ppbv
 RT: 17.64 min Scan# 4618
 Delta R.T. 0.00 min
 Lab File: VL037103.D
 Acq: 2 Jun 2021 15:52

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-9A

Tot Ion	Ratio	Resp Lower	Upper
119	100		
134	26.2	21.2	31.8
91	36.3	22.2	33.4

Manual Integrations
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