

Data Path : Z:\VOASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
 Data File : VL037818.D
 Acq On : 8 Oct 2021 5:35
 Operator : SY/AP
 Sample : M4079-03
 Misc : 400mL/MSVOA_L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 C0P13

Manual Integrations
 APPROVED

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 10/14/2021 1:19:15 PM

Quant Time: Oct 08 11:32:28 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
 Quant Title : AIR ANALYSIS BY METHOD T0-15 Instrument: MSVOA_L Mon Oct 0
 QLast Update : Mon Oct 04 17:43:54 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	1179892	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3557292	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.07	117	3118520	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.40	95	2181851	10.00	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	100.00%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Qvalue
2) Dichlorodifluoromethane	3.04	85	34567m	0.183	ppbv	
3) Chlorodifluoromethane	2.98	51	48603	0.214	ppbv	99
4) Chloromethane	3.13	50	25024	0.301	ppbv #	86
9) Propene	3.00	41	44951m	0.539	ppbv	
11) Trichlorofluoromethane	3.94	101	40096	0.238	ppbv #	72
13) Ethanol	3.60	45	98352m	14.417	ppbv	
15) Acetone	3.84	43	768548	7.256	ppbv #	88
17) tert-Butyl alcohol	4.31	59	17466m	0.160	ppbv	
19) Isopropyl Alcohol	3.98	45	25709m	0.390	ppbv	
20) Methylene Chloride	4.34	84	209894	3.922	ppbv	98
26) Hexane	5.68	57	141702	0.968	ppbv #	45
29) Chloroform	5.74	83	133491	0.638	ppbv	89
34) 2-Butanone	5.24	43	152874	1.065	ppbv #	89
35) Carbon Tetrachloride	7.02	117	8122m	0.040	ppbv	
36) Benzene	6.87	78	34252m	0.113	ppbv	
52) Tetrachloroethene	11.21	164	1367697	11.570	ppbv	98
53) Toluene	9.79	91	48015m	0.143	ppbv	
58) Ethyl Benzene	12.70	91	60312m	0.144	ppbv	
59) m/p-Xylene	12.95	91	212763m	0.592	ppbv	
60) o-Xylene	13.67	91	63857m	0.185	ppbv	
74) 1,2,4-Trimethylbenzene	16.75	105	57440m	0.154	ppbv	
79) Naphthalene	22.18	128	56202m	0.246	ppbv	

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

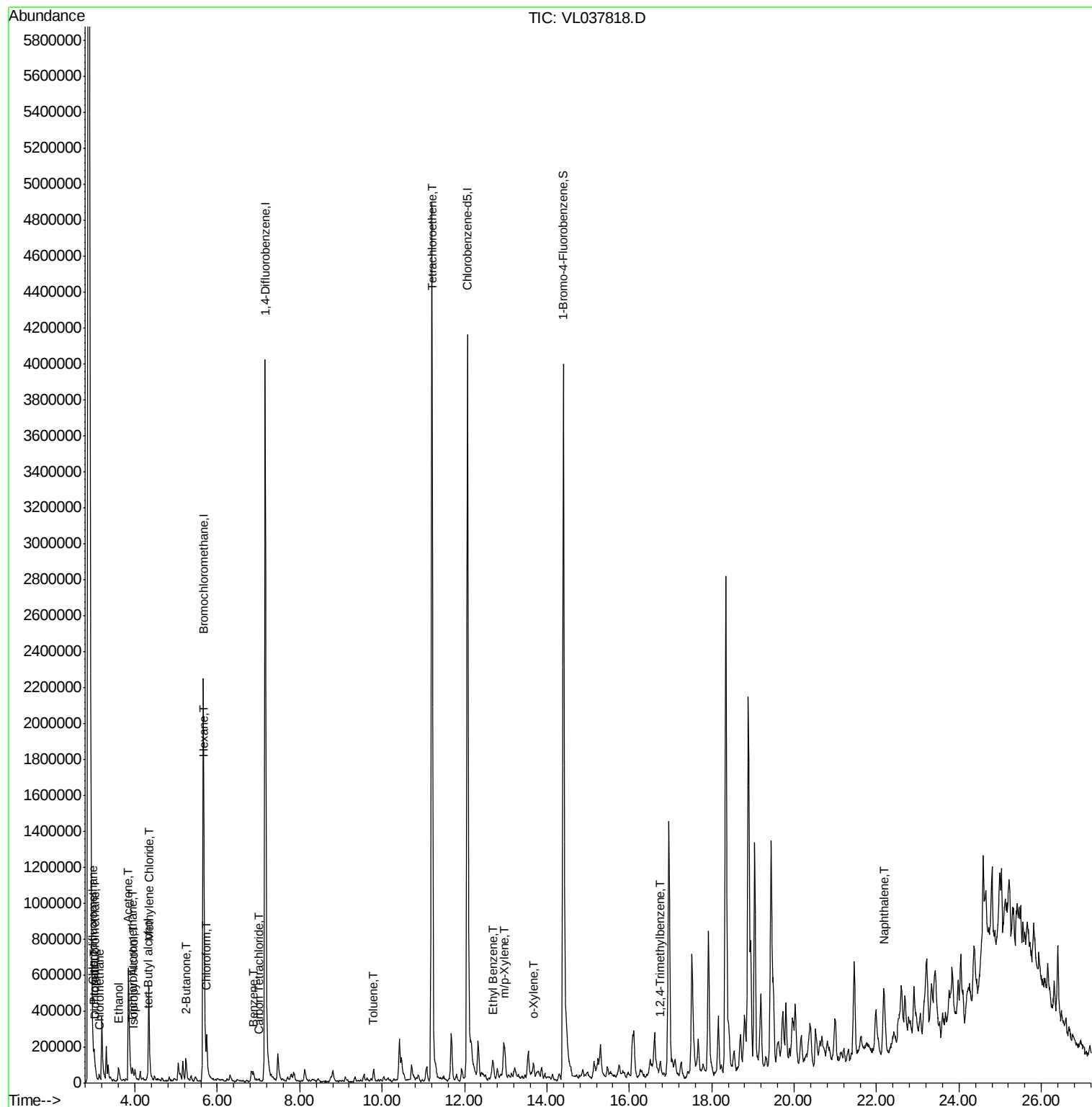
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA_L\DATA\VL100721\
Data File : VL037818.D
Acq On : 8 Oct 2021 5:35
Operator : SY/AP
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Misc : 400mL/MSVOA_L
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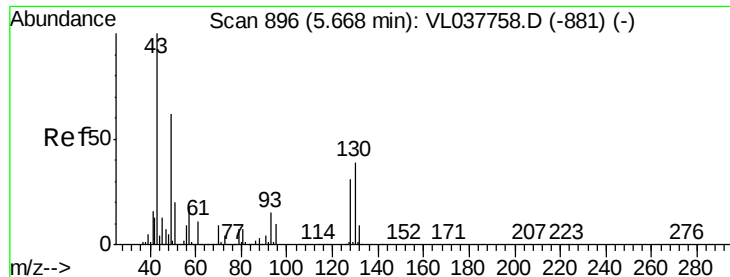
Instrument :
MSVOA_L
ClientSampleId :
C0P13

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Quant Time: Oct 08 11:32:28 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA_L\METHODS\VL100421AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Oct
QLast Update : Mon Oct 04 17:43:54 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 892

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampled :

C0P13

Tgt Ion: 49 Resp: 1179892

Ion Ratio Lower Upper

49 100

128 54.5 27.1 81.3

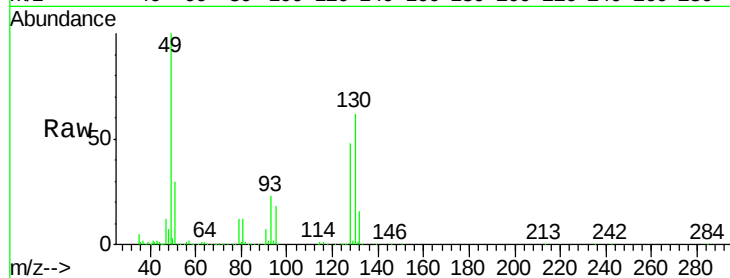
130 67.8 33.2 99.6

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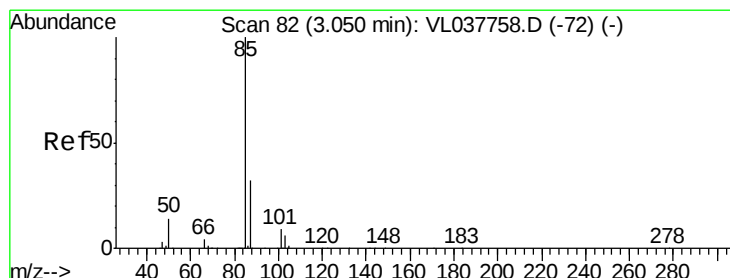
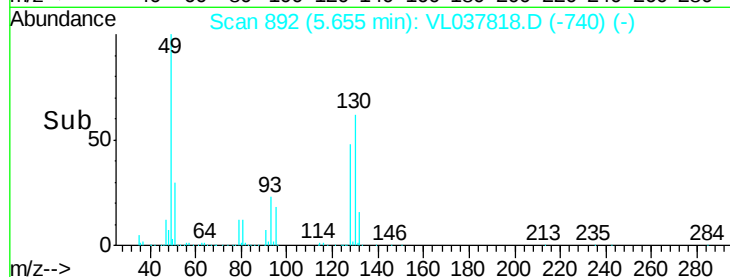
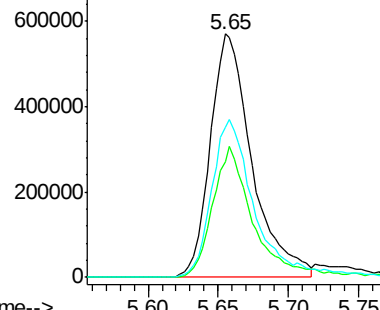
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.183 ppbv m

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL037818.D

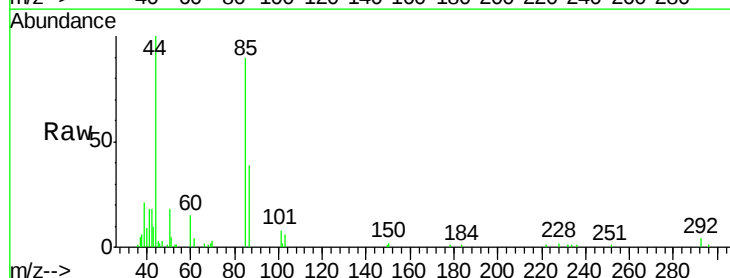
Acq: 8 Oct 2021 5:35

Tgt Ion: 85 Resp: 34567

Ion Ratio Lower Upper

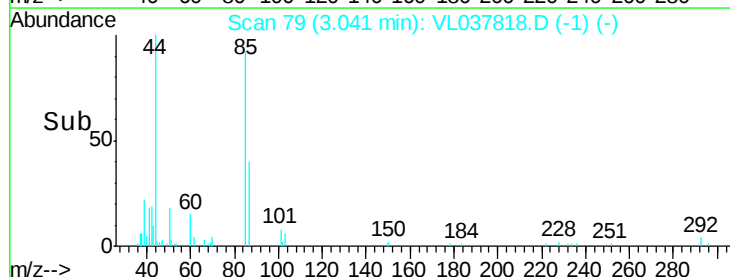
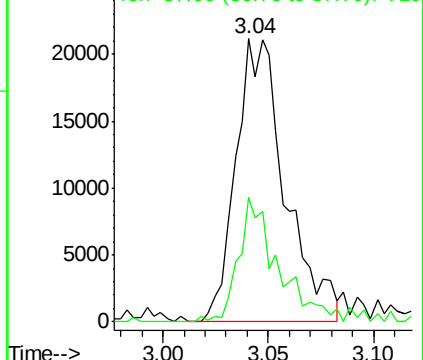
85 100

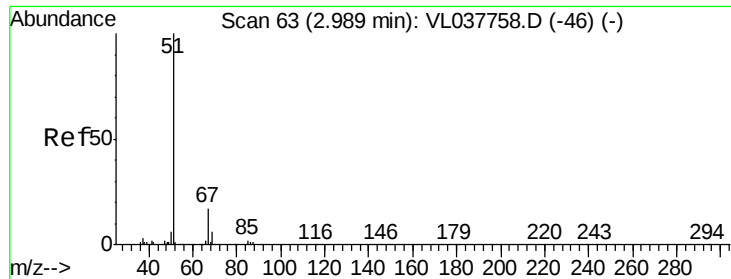
87 43.8 25.7 38.5#



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.214 ppbv

RT: 2.98 min Scan# 61

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampled :

C0P13

Tgt Ion: 51 Resp: 48603

Ion Ratio Lower Upper

51 100

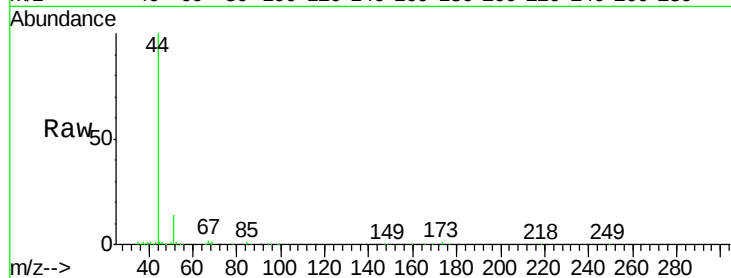
67 17.2 13.5 20.3

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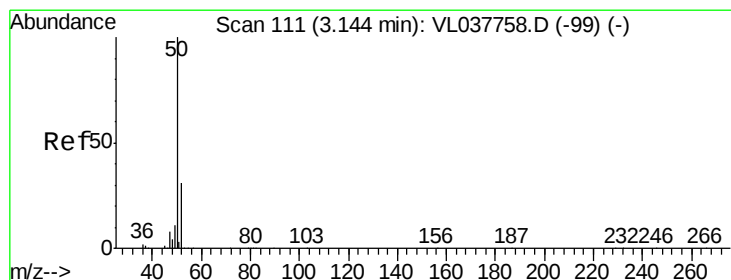
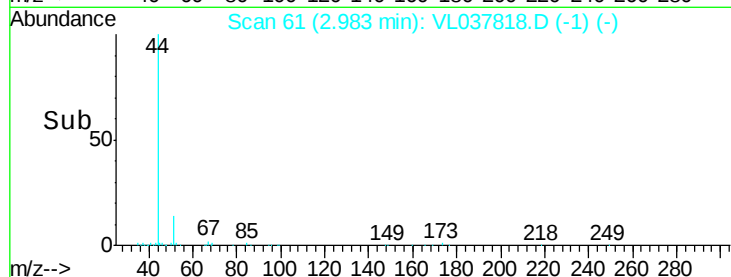
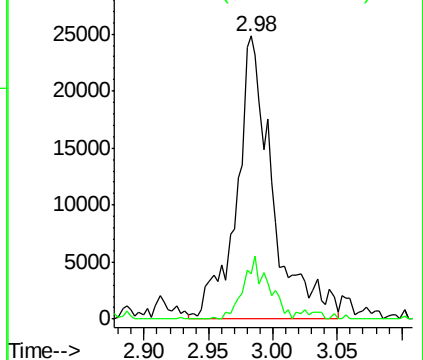
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.301 ppbv

RT: 3.13 min Scan# 108

Delta R.T. -0.01 min

Lab File: VL037818.D

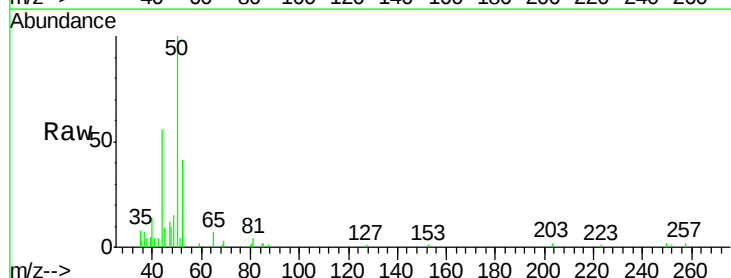
Acq: 8 Oct 2021 5:35

Tgt Ion: 50 Resp: 25024

Ion Ratio Lower Upper

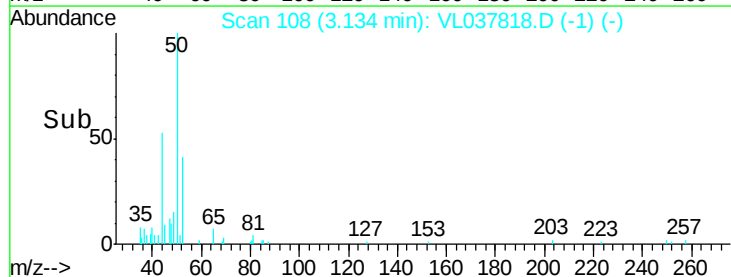
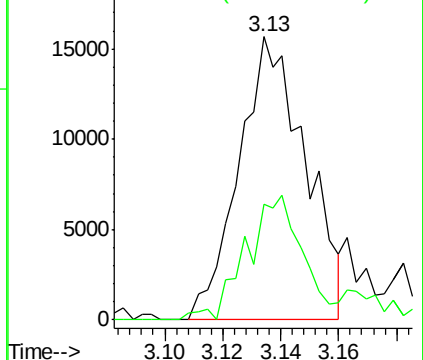
50 100

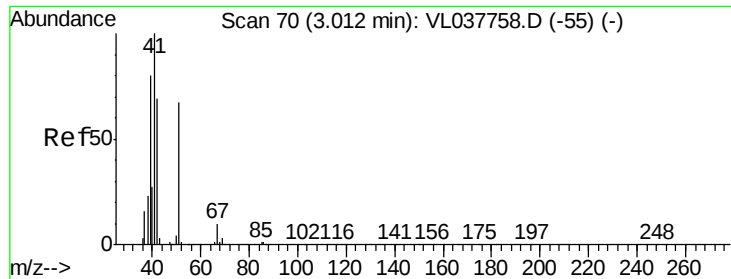
52 38.4 24.4 36.6#



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.539 ppbv m

RT: 3.00 min Scan# 67

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampleId :

C0P13

Tgt Ion: 41 Resp: 44951

Ion Ratio Lower Upper

41 100

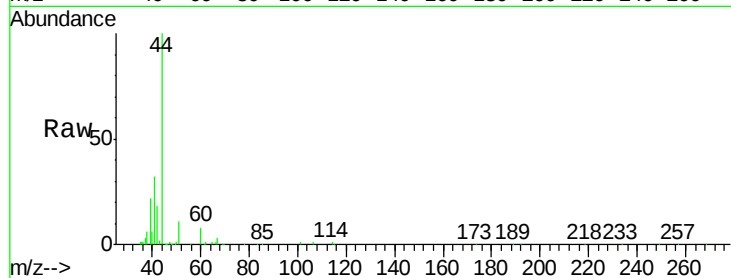
42 72.9 54.2 81.2

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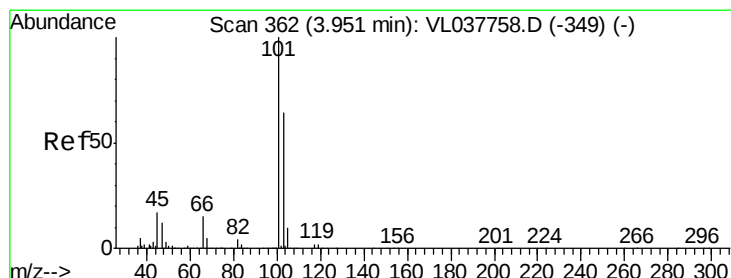
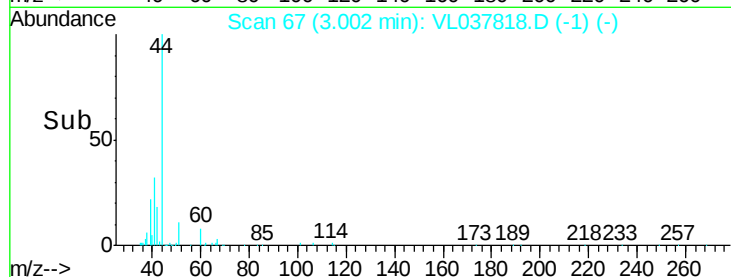
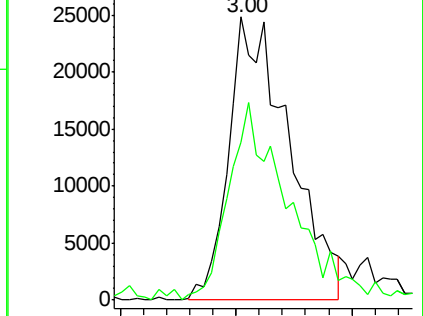
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Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0



#11

Trichlorofluoromethane

Concen: 0.238 ppbv

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL037818.D

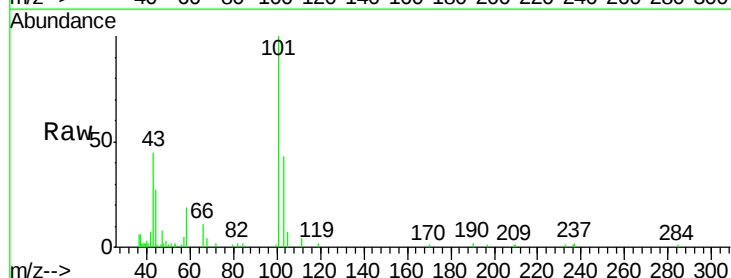
Acq: 8 Oct 2021 5:35

Tgt Ion: 101 Resp: 40096

Ion Ratio Lower Upper

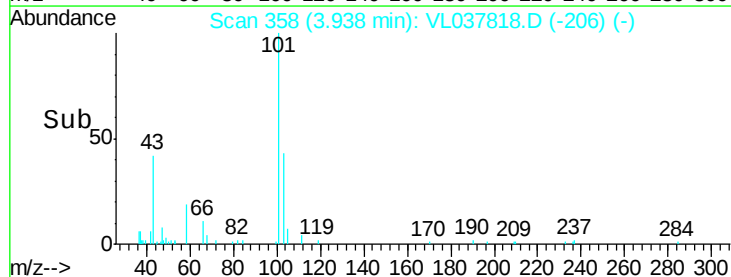
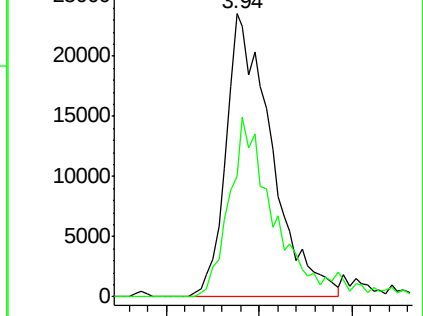
101 100

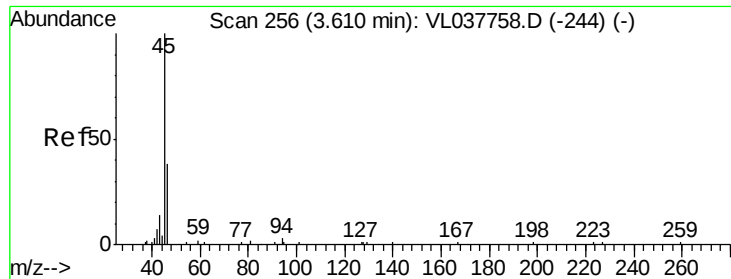
103 42.8 51.5 77.3#



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V





#13

Ethanol

Concen: 14.417 ppbv m

RT: 3.60 min Scan# 254

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampleId :

C0P13

Tgt Ion: 45 Resp: 98352

Ion Ratio Lower Upper

45 100

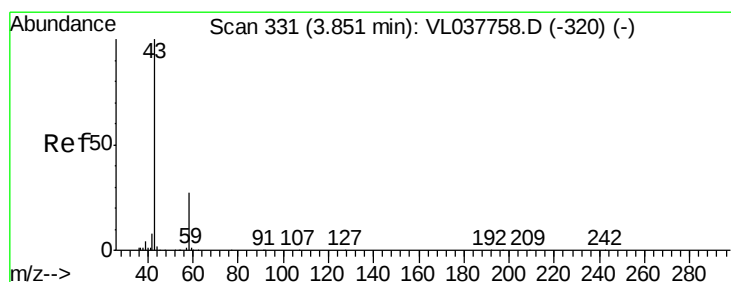
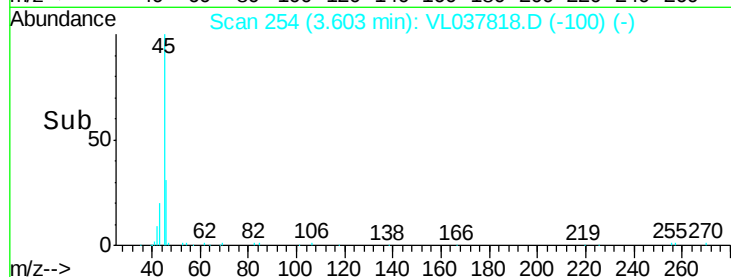
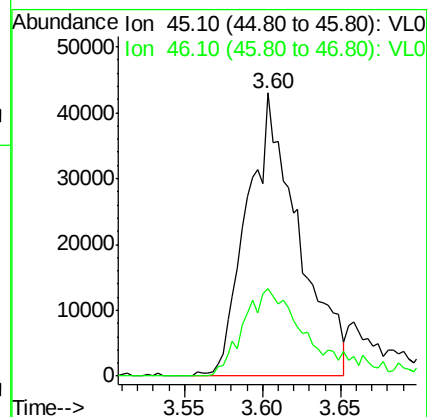
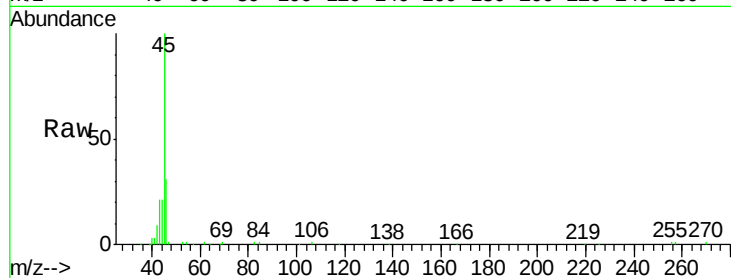
46 39.0 20.2 81.0

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#15

Acetone

Concen: 7.256 ppbv

RT: 3.84 min Scan# 328

Delta R.T. -0.01 min

Lab File: VL037818.D

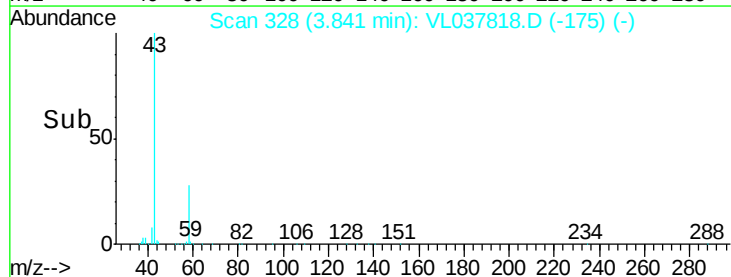
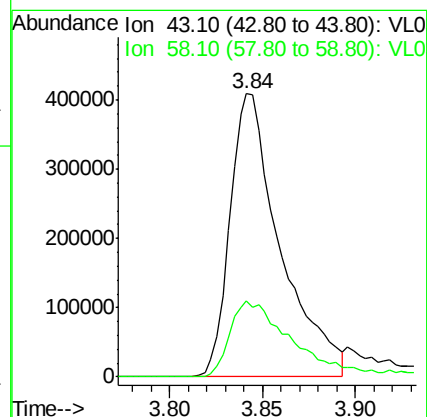
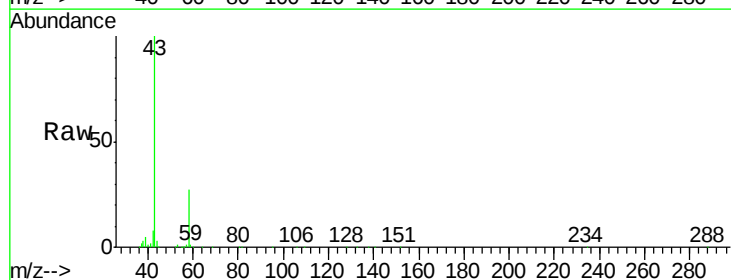
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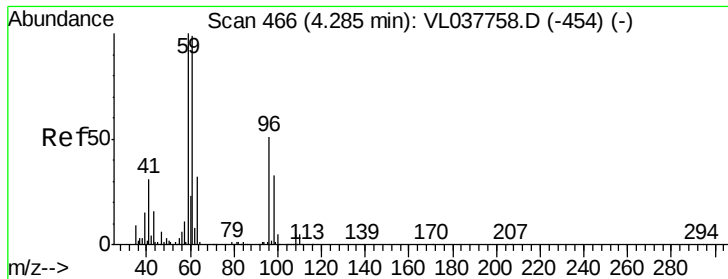
Tgt Ion: 43 Resp: 768548

Ion Ratio Lower Upper

43 100

58 34.9 23.0 34.6#





#17

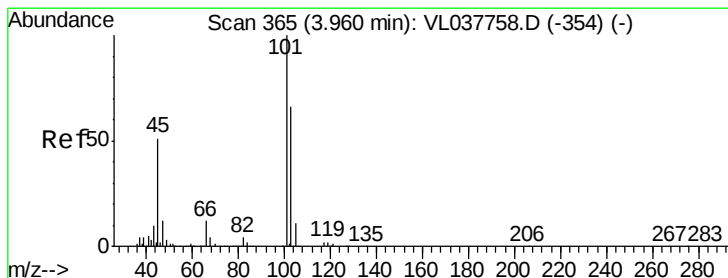
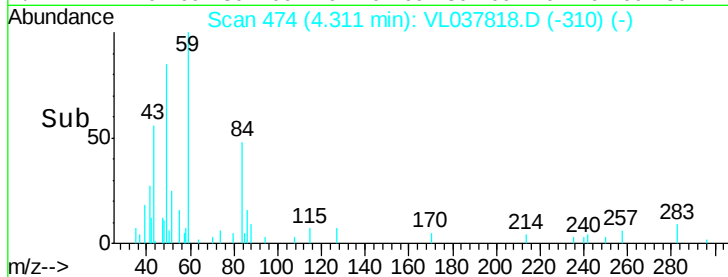
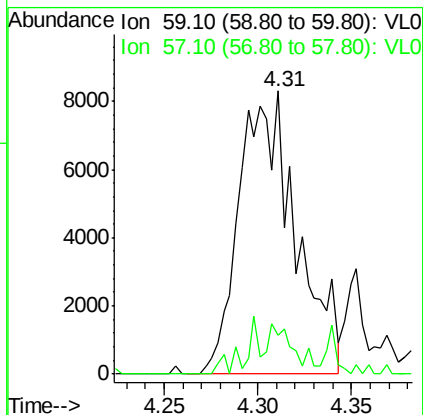
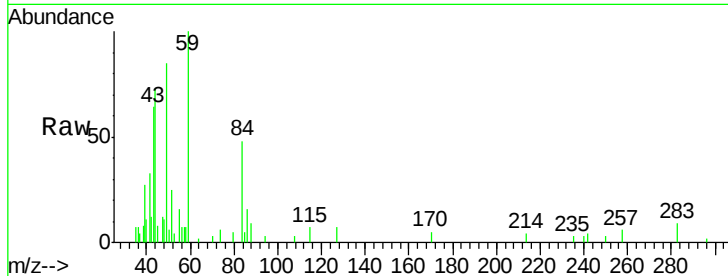
tert-Butyl alcohol
 Concen: 0.160 ppbv m
 RT: 4.31 min Scan# 474
 Delta R.T. 0.03 min
 Lab File: VL037818.D
 Acq: 8 Oct 2021 5:35

Instrument :
 MSVOA_L
 ClientSampled :
 C0P13

Tgt Ion: 59 Resp: 17466
 Ion Ratio Lower Upper
 59 100
 57 0.0 8.6 13.0#

Manual Integrations
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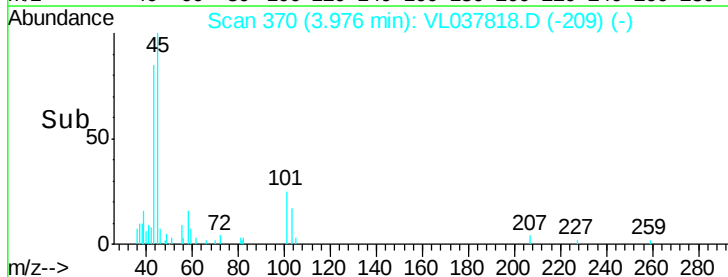
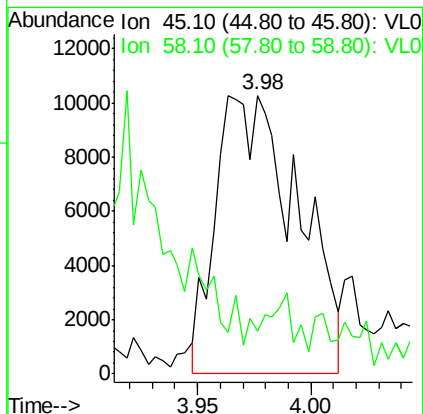
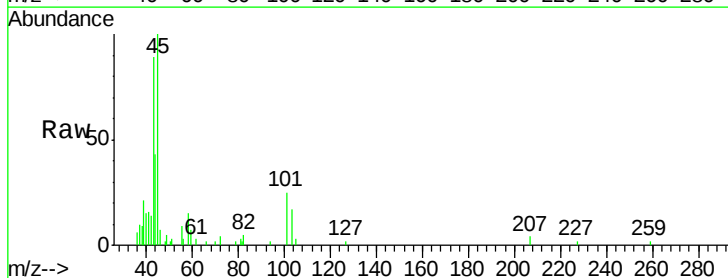
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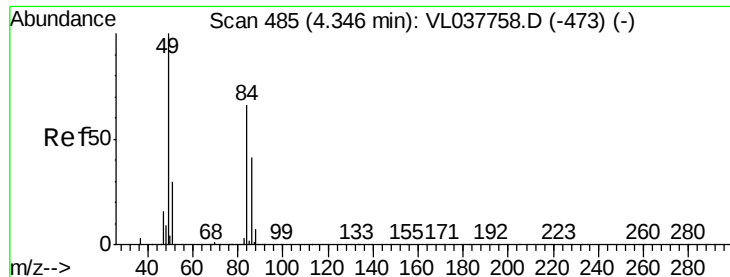


#19

Isopropyl Alcohol
 Concen: 0.390 ppbv m
 RT: 3.98 min Scan# 370
 Delta R.T. 0.02 min
 Lab File: VL037818.D
 Acq: 8 Oct 2021 5:35

Tgt Ion: 45 Resp: 25709
 Ion Ratio Lower Upper
 45 100
 58 0.0 1.1 1.7#





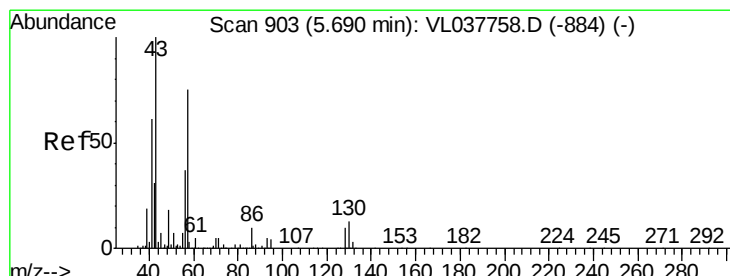
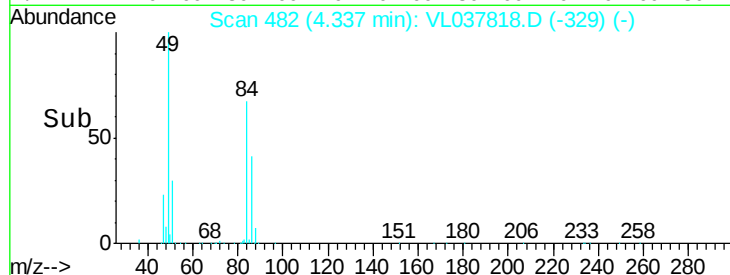
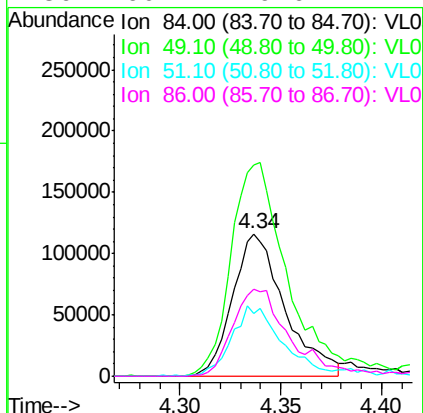
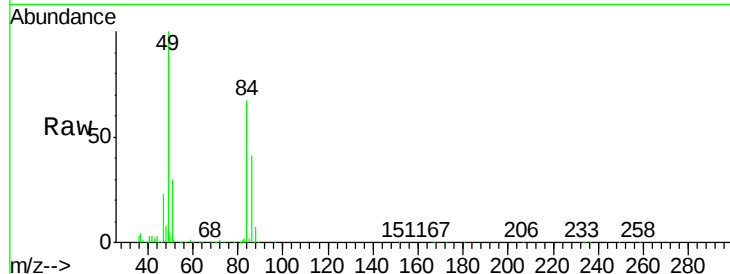
#20
Methylene Chloride
Concen: 3.922 ppbv
RT: 4.34 min Scan# 482
Delta R.T. -0.01 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Instrument :
MSVOA_L
ClientSampled :
C0P13

Tgt Ion: 84 Resp: 209894
Ion Ratio Lower Upper
84 100
49 147.8 120.7 181.1
51 44.5 36.2 54.4
86 60.7 49.6 74.4

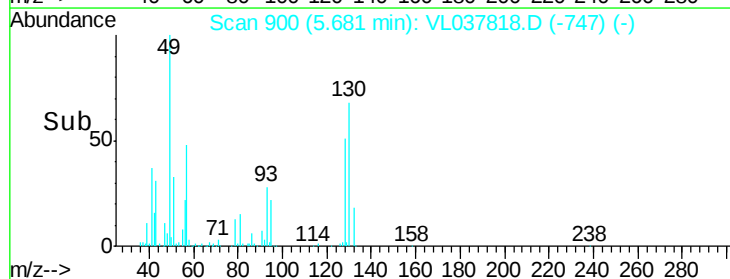
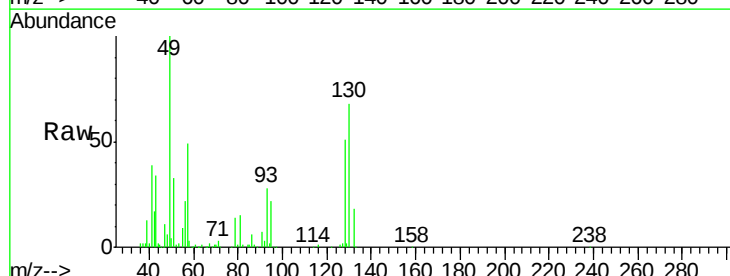
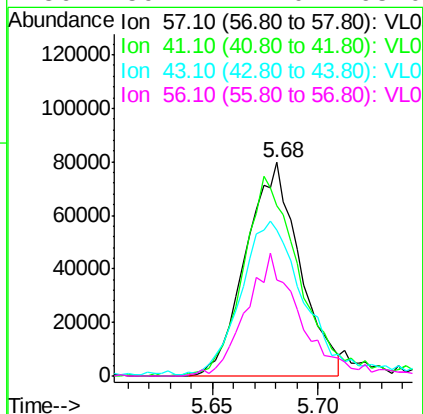
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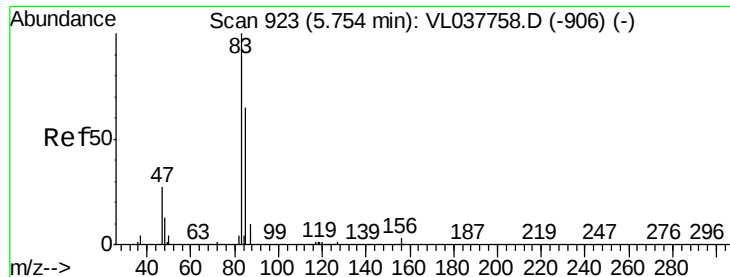
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#26
Hexane
Concen: 0.968 ppbv
RT: 5.68 min Scan# 900
Delta R.T. -0.01 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Tgt Ion: 57 Resp: 141702
Ion Ratio Lower Upper
57 100
41 102.5 69.6 104.4
43 85.8 171.4 257.0#
56 59.1 42.0 63.0





#29

Chloroform

Concen: 0.638 ppbv

RT: 5.74 min Scan# 919

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampled :

C0P13

Tgt Ion: 83 Resp: 133491

Ion Ratio Lower Upper

83 100

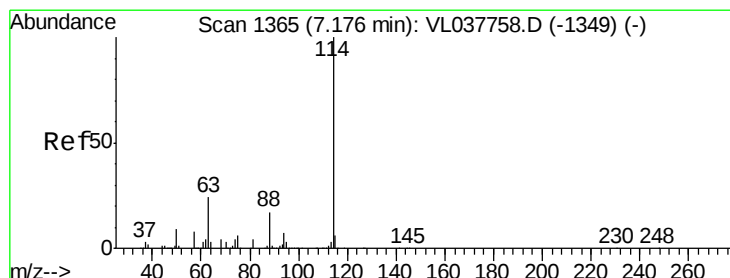
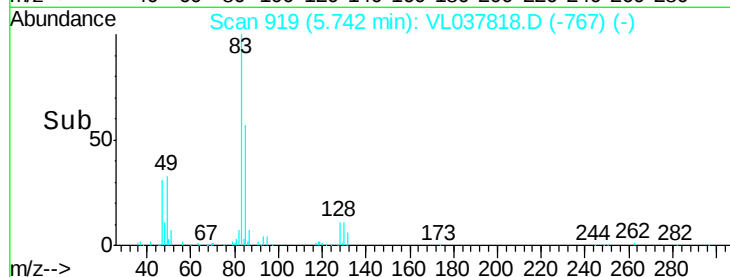
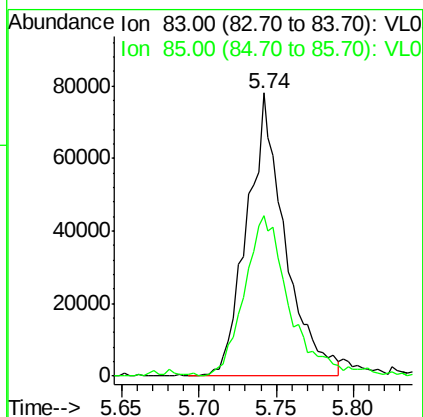
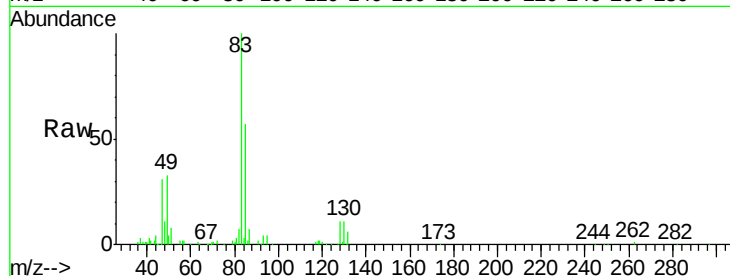
85 56.1 51.8 77.8

Manual Integrations

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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.17 min Scan# 1362

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

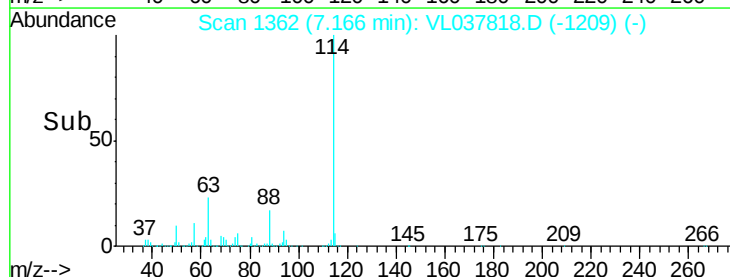
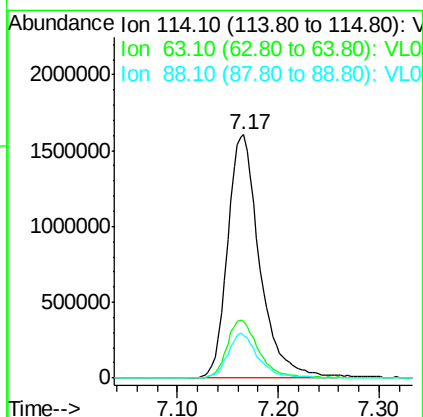
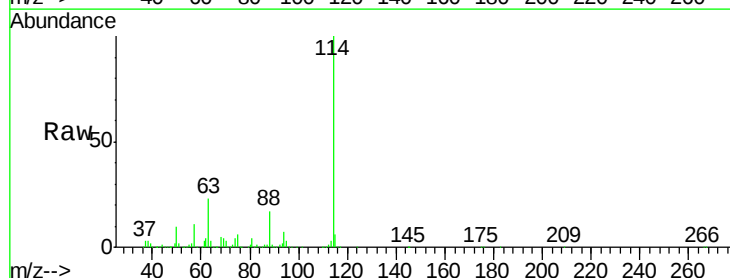
Tgt Ion: 114 Resp: 3557292

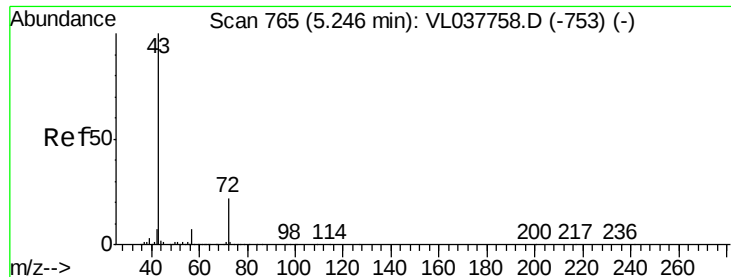
Ion Ratio Lower Upper

114 100

63 23.8 19.4 29.2

88 17.6 14.4 21.6





#34

2-Butanone

Concen: 1.065 ppbv

RT: 5.24 min Scan# 763

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampleId :

C0P13

Tgt Ion: 43 Resp: 152874

Ion Ratio Lower Upper

43 100

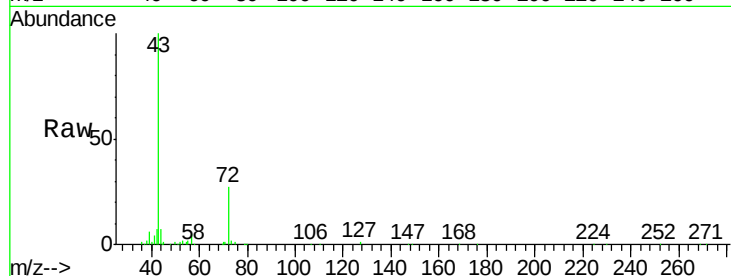
72 28.1 18.2 27.2#

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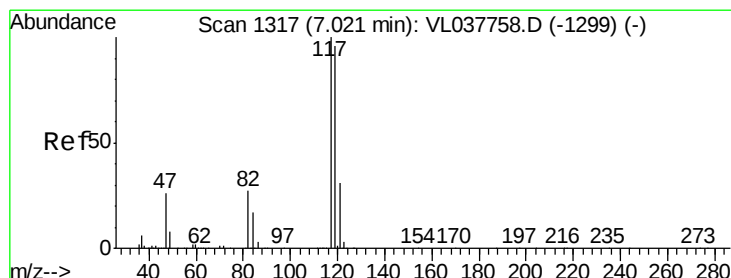
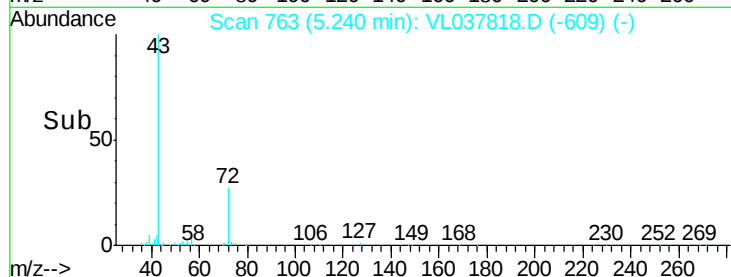
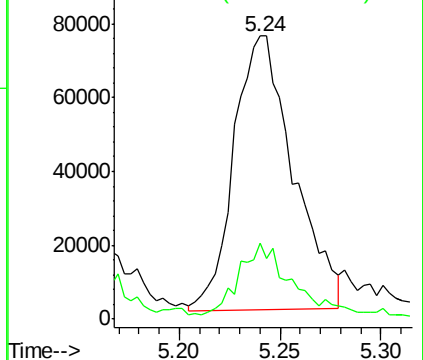
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 72.10 (71.80 to 72.80): VL0



#35

Carbon Tetrachloride

Concen: 0.040 ppbv m

RT: 7.02 min Scan# 1318

Delta R.T. 0.00 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

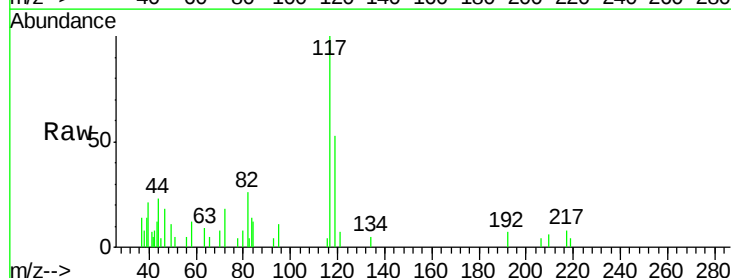
Tgt Ion: 117 Resp: 8122

Ion Ratio Lower Upper

117 100

119 52.6 76.5 114.7#

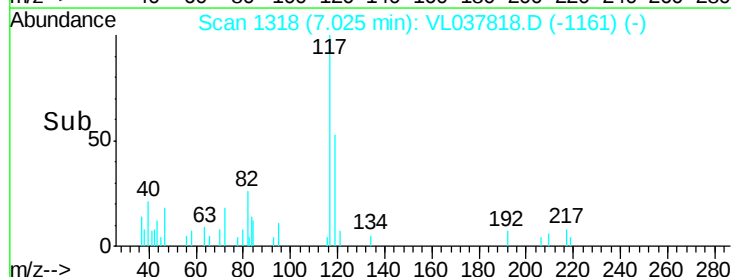
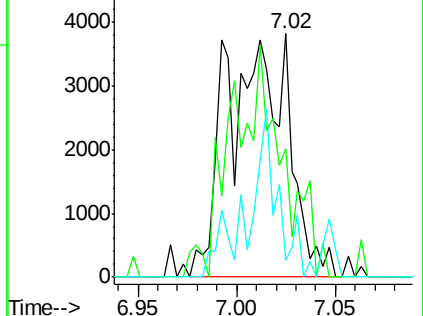
121 7.0 24.9 37.3#

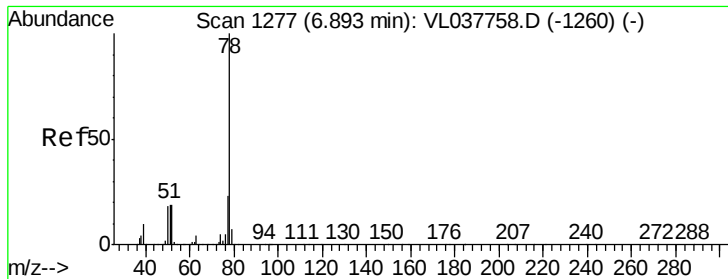


Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V





#36

Benzene

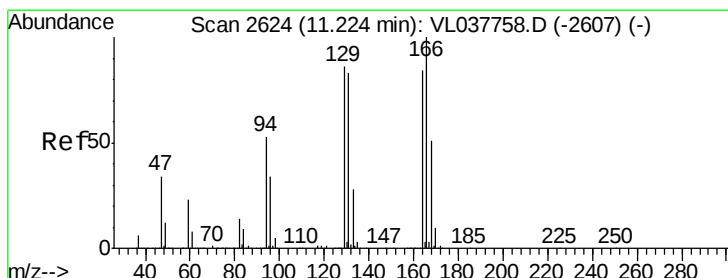
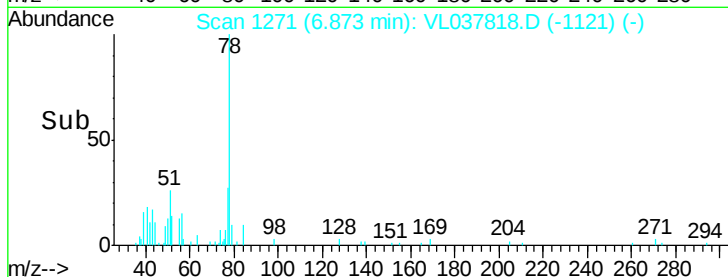
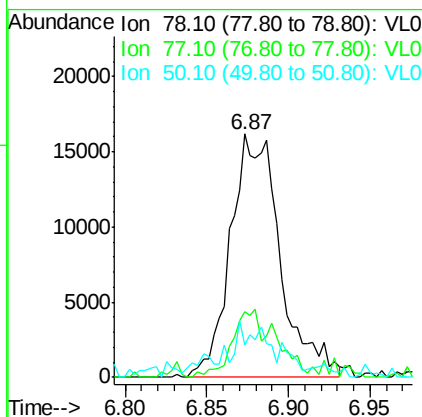
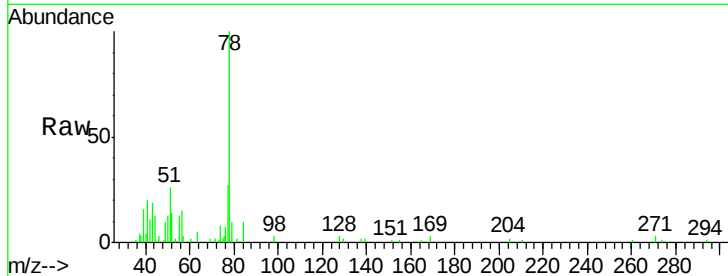
Concen: 0.113 ppbv m
RT: 6.87 min Scan# 1271
Delta R.T. -0.02 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Instrument :
MSVOA_L
ClientSampleId :
C0P13

Tgt Ion	Ratio	Lower	Upper
78	100		
77	26.8	18.8	28.2
50	13.4	14.7	22.1#

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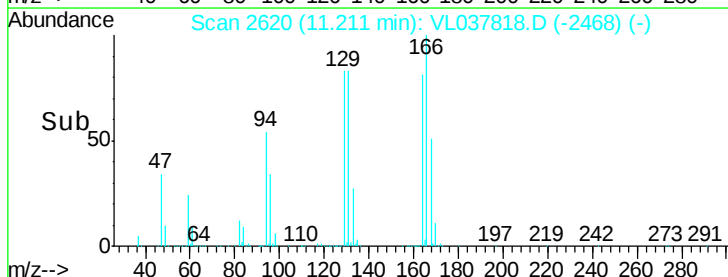
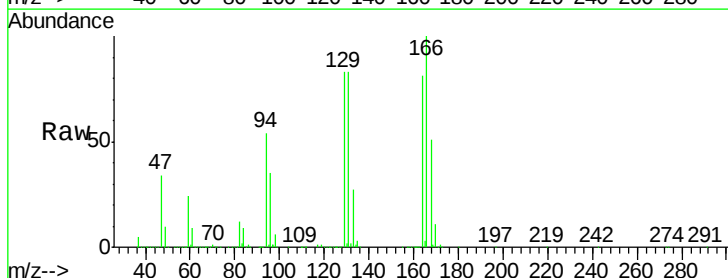
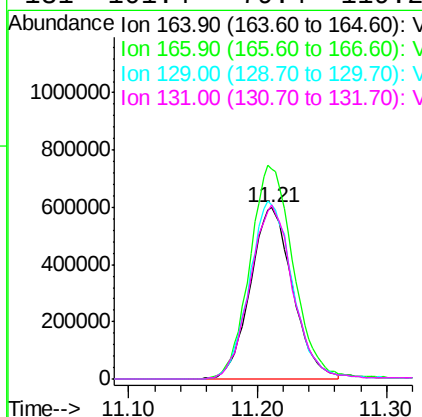


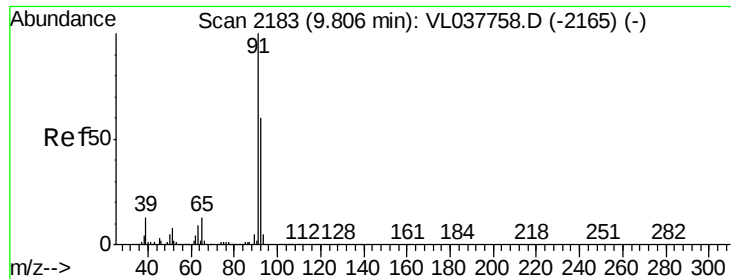
#52

Tetrachloroethene

Concen: 11.570 ppbv
RT: 11.21 min Scan# 2620
Delta R.T. -0.01 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Tgt Ion	Ratio	Lower	Upper
164	100		
166	122.8	95.4	143.2
129	101.9	82.2	123.4
131	101.4	79.4	119.2





#53

Toluene

Concen: 0.143 ppbv m

RT: 9.79 min Scan# 2179

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampleId :

C0P13

Tgt Ion: 91 Resp: 48015

Ion Ratio Lower Upper

91 100

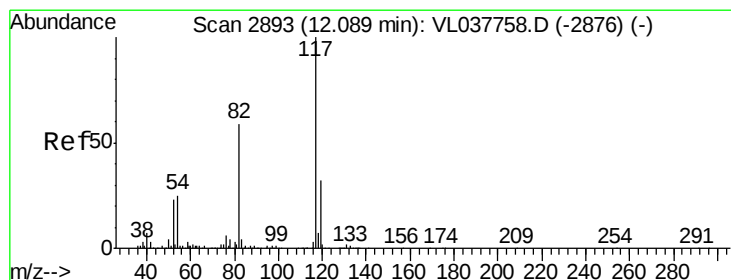
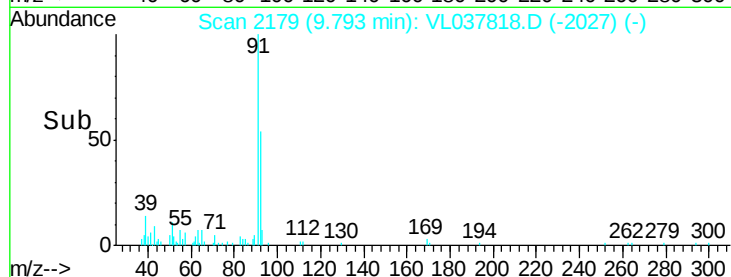
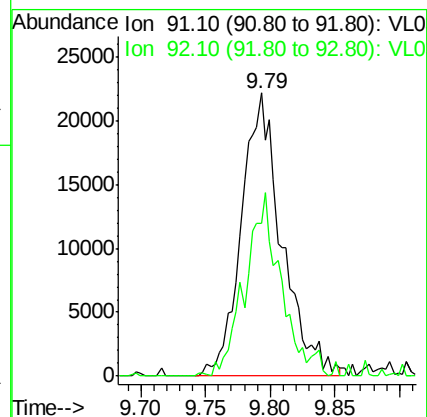
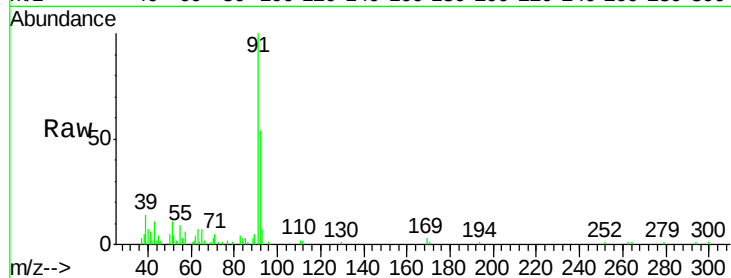
92 58.3 48.4 72.6

Manual Integrations

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2888

Delta R.T. -0.02 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

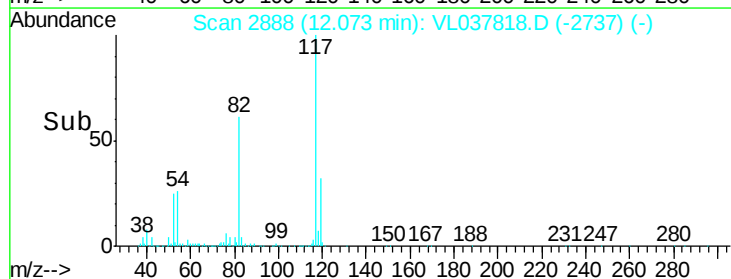
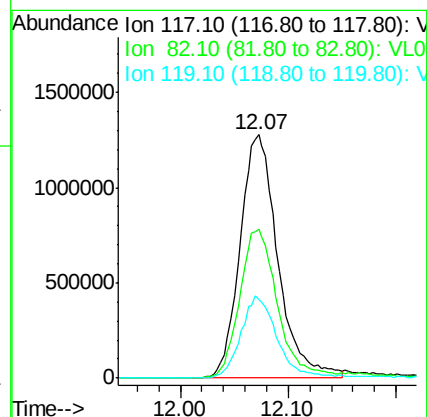
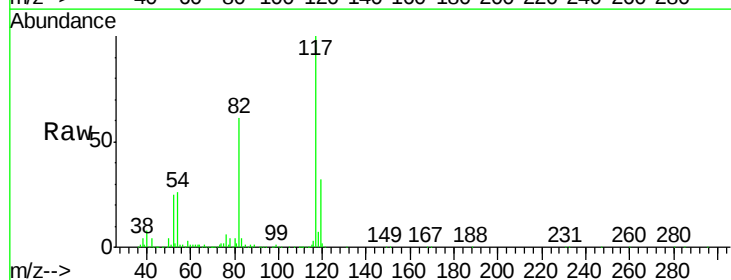
Tgt Ion: 117 Resp: 3118520

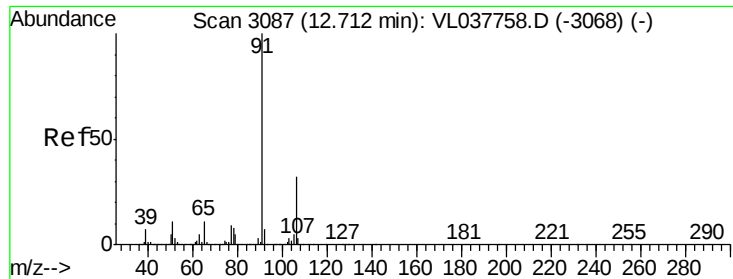
Ion Ratio Lower Upper

117 100

82 64.3 52.2 78.2

119 33.7 26.0 39.0





#58

Ethyl Benzene

Concen: 0.144 ppbv m

RT: 12.70 min Scan# 3083

Delta R.T. -0.01 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

ClientSampled :

C0P13

Tgt Ion: 91 Resp: 60312

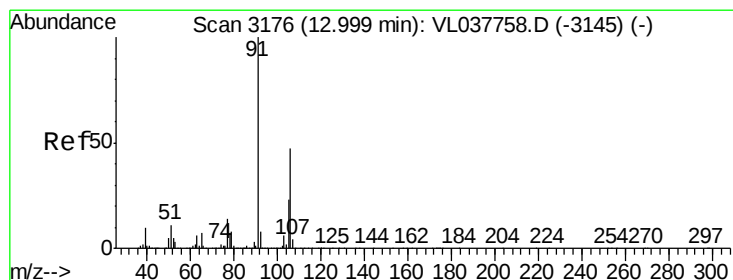
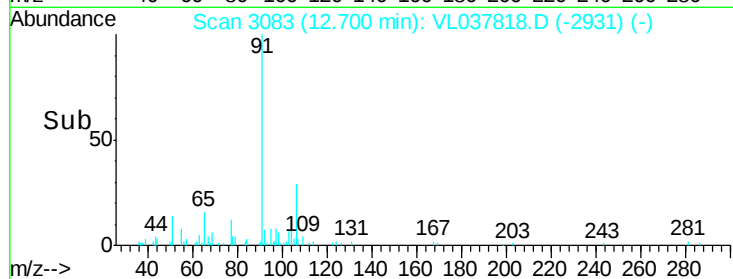
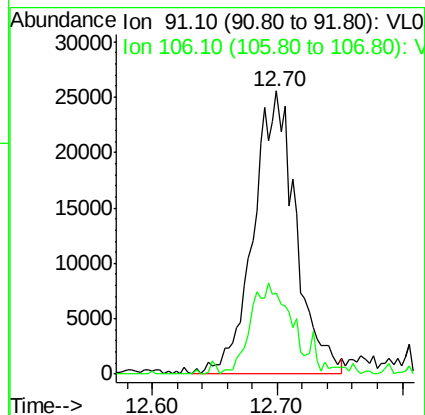
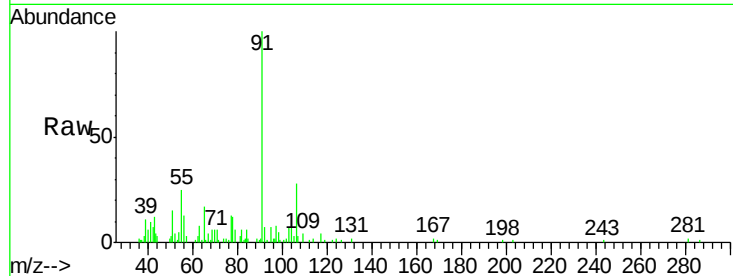
Ion Ratio Lower Upper

91 100

106 28.5 25.3 37.9

Manual Integrations
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#59

m/p-Xylene

Concen: 0.592 ppbv m

RT: 12.95 min Scan# 3161

Delta R.T. -0.05 min

Lab File: VL037818.D

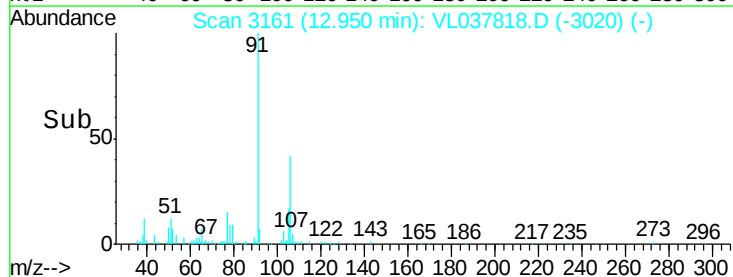
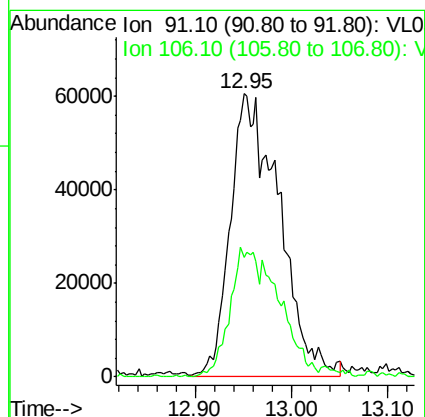
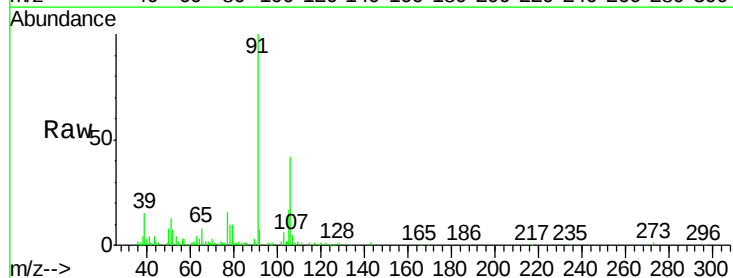
Acq: 8 Oct 2021 5:35

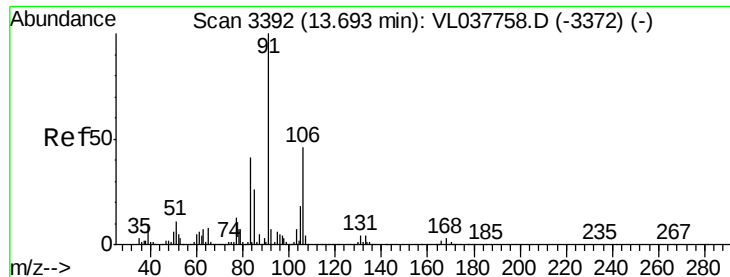
Tgt Ion: 91 Resp: 212763

Ion Ratio Lower Upper

91 100

106 0.0 36.7 55.1#





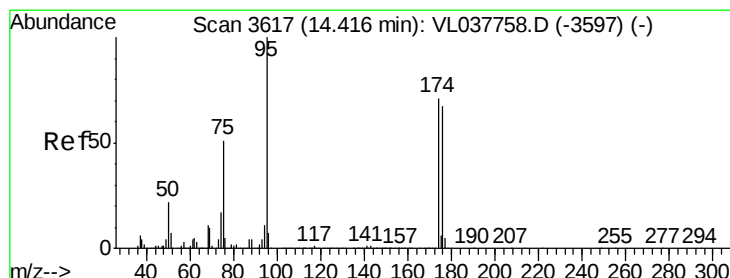
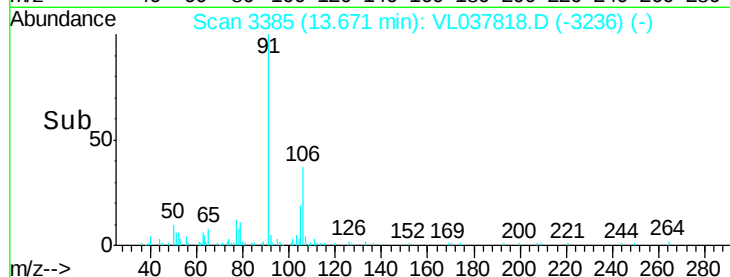
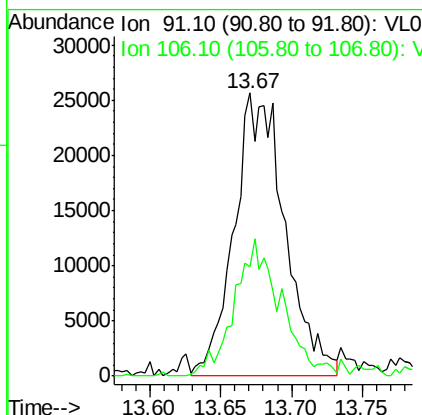
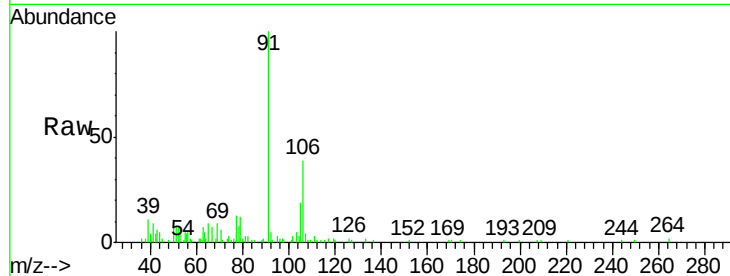
#60
o-Xylene
Concen: 0.185 ppbv m
RT: 13.67 min Scan# 3385
Delta R.T. -0.02 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Instrument :
MSVOA_L
ClientSampleId :
C0P13

Tgt Ion: 91 Resp: 63857
Ion Ratio Lower Upper
91 100
106 48.0 23.5 70.5

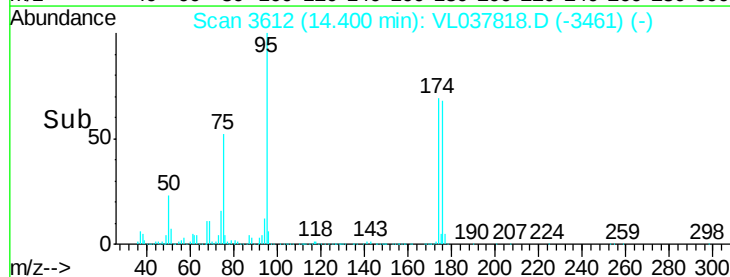
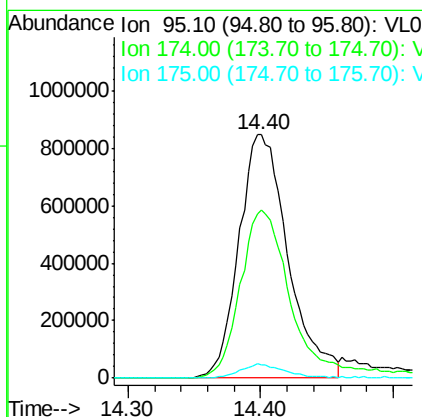
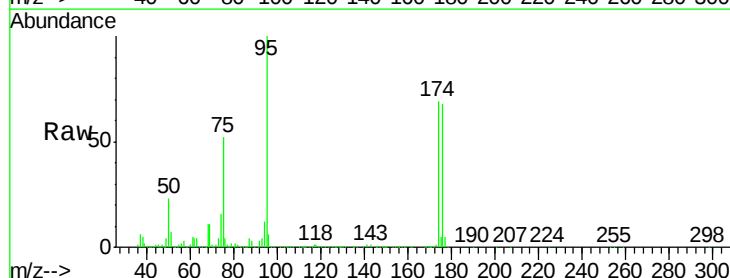
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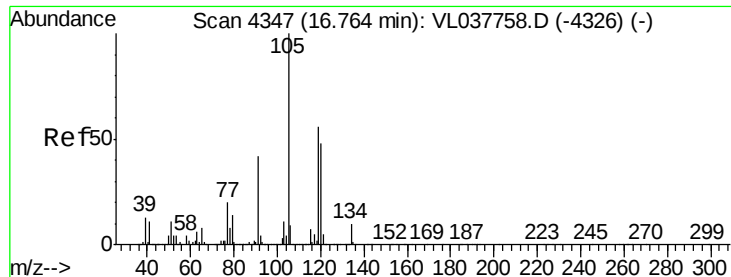
apatel
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.005 ppbv
RT: 14.40 min Scan# 3612
Delta R.T. -0.02 min
Lab File: VL037818.D
Acq: 8 Oct 2021 5:35

Tgt Ion: 95 Resp: 2181851
Ion Ratio Lower Upper
95 100
174 75.2 57.8 86.6
175 5.3 4.7 7.1





#74

1,2,4-Trimethylbenzene

Concen: 0.154 ppbv m

RT: 16.75 min Scan# 4342

Delta R.T. -0.02 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Instrument :

MSVOA_L

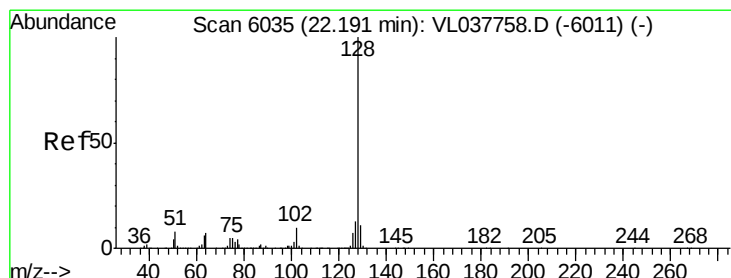
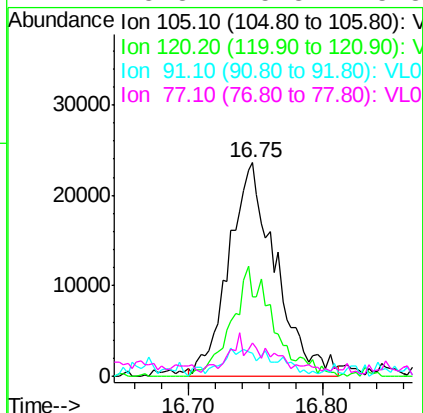
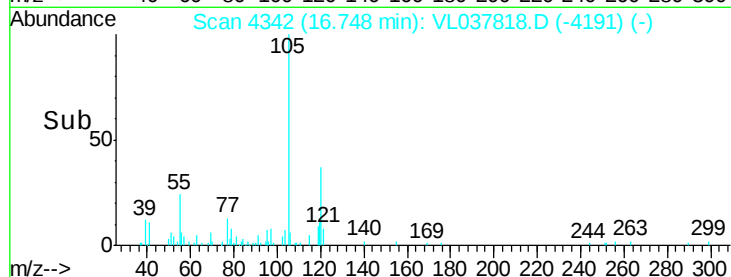
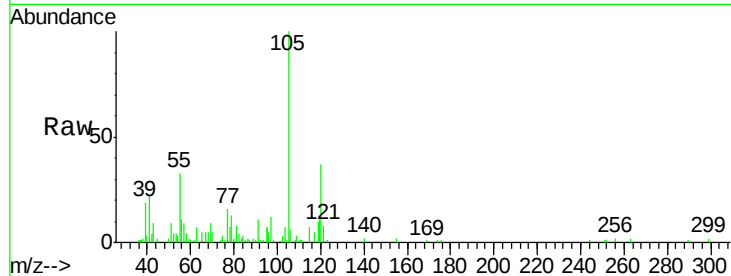
ClientSampled :

C0P13

Tgt Ion	Ratio	Resp	Lower	Upper
105	100	57440		
120	36.9	38.4	57.6#	
91	10.7	34.2	51.2#	
77	15.8	15.8	23.8#	

Manual Integrations
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#79

Naphthalene

Concen: 0.246 ppbv m

RT: 22.18 min Scan# 6030

Delta R.T. -0.02 min

Lab File: VL037818.D

Acq: 8 Oct 2021 5:35

Tgt Ion	Ratio	Resp	Lower	Upper
128	100	56202		
127	18.9	10.1	15.1#	
129	14.2	9.1	13.7#	

