

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL070620\
 Data File : VL035148.D
 Acq On : 6 Jul 2020 15:03
 Operator : SY/AP
 Sample : L3190-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 PERM-01

Manual Integrations
 APPROVED

MMDadoda
 7/9/2020 5:42:28 PM

Quant Time: Jul 09 10:57:04 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL061920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Sat Jun 20 2020
 QLast Update : Sat Jun 20 02:10:36 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.82	49	1134790m	10.00	ppbv	0.17
33) 1,4-Difluorobenzene	7.30	114	2637444	10.00	ppbv	0.13
55) Chlorobenzene-d5	12.15	117	2378227	10.00	ppbv	0.04

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.47	95	2011429	10.18	ppbv	0.03	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.80%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
9) Propene	2.95	41	2371131	47.767	ppbv #	76
11) Trichlorofluoromethane	3.93	101	41397	0.253	ppbv	99
13) Ethanol	3.57	45	1023008	54.553	ppbv	90
15) Acetone	3.83	43	7879131	57.429	ppbv #	73
17) tert-Butyl alcohol	4.28	59	1575297	12.956	ppbv #	88
19) Isopropyl Alcohol	3.94	45	880854	9.888	ppbv #	93
20) Methylene Chloride	4.34	84	148061	2.666	ppbv	86
26) Hexane	5.83	57	1474436m	13.208	ppbv	
27) Carbon Disulfide	4.76	76	180079818m	1558.767	ppbv	
35) Carbon Tetrachloride	7.15	117	15868m	0.100	ppbv	
36) Benzene	7.03	78	20367909	99.729	ppbv #	76
44) 2,2,4-Trimethylpentane	7.98	57	112234m	0.315	ppbv	
52) Tetrachloroethene	11.31	164	5707m	0.079	ppbv	
53) Toluene	9.90	91	1764061	8.098	ppbv	97
58) Ethyl Benzene	12.77	91	173363	0.649	ppbv	94
59) m/p-Xylene	13.02	91	359062	1.516	ppbv	98
60) o-Xylene	13.75	91	104562m	0.444	ppbv	
61) Styrene	13.58	104	29772m	0.201	ppbv	
62) Isopropylbenzene	14.72	105	402981	1.145	ppbv	97
69) p-Isopropyltoluene	17.70	119	56699m	0.165	ppbv	
78) Hexachloro-1,3-Butadiene	23.42	225	23401m	0.172	ppbv	
79) Naphthalene	22.26	128	119856m	0.494	ppbv	
80) Naphthalene,2-methyl-	25.01	142	14965	0.161	ppbv	93

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

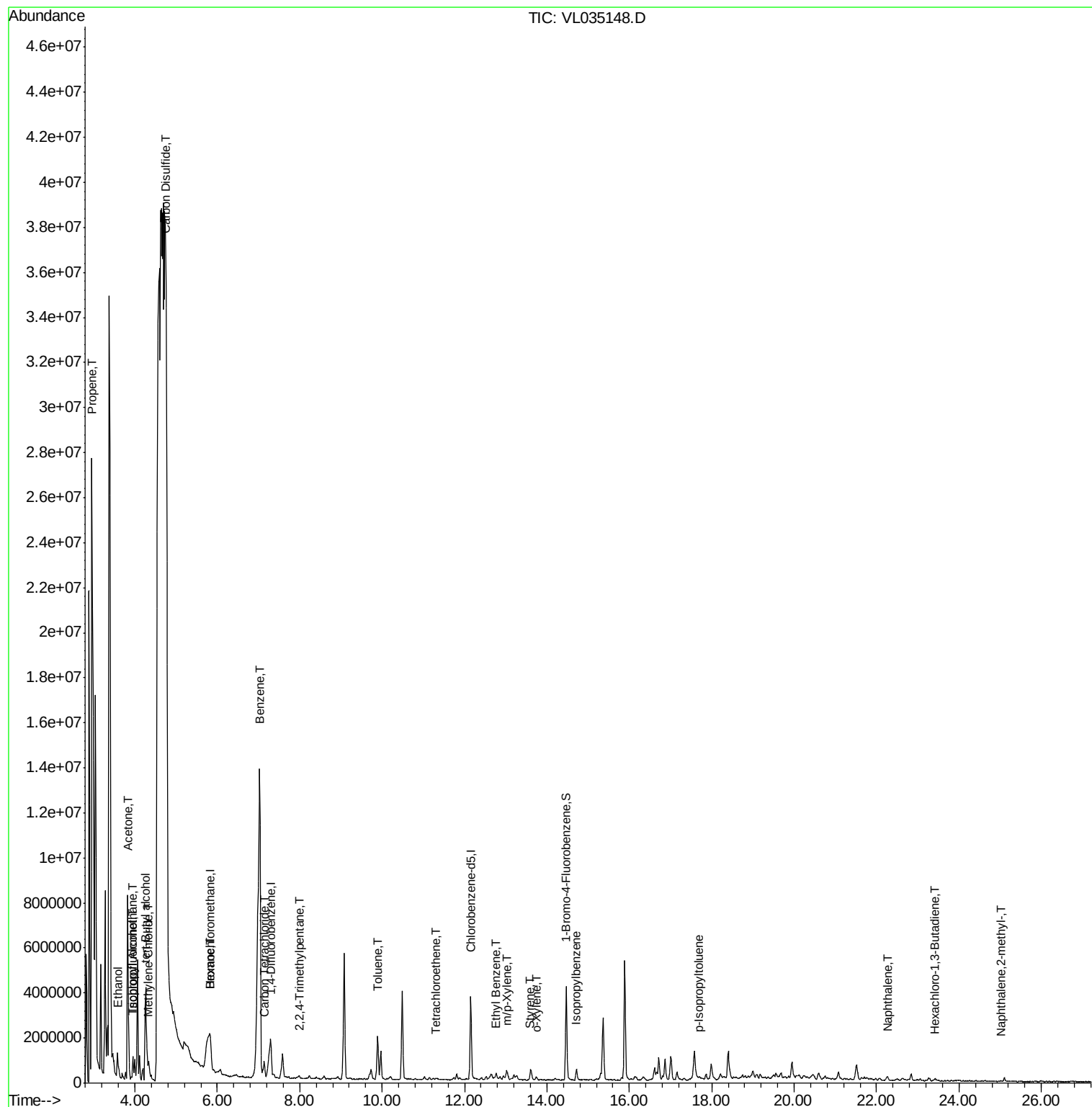
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL070620\
Data File : VL035148.D
Acq On : 6 Jul 2020 15:03
Operator : SY/AP
Sample : L3190-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

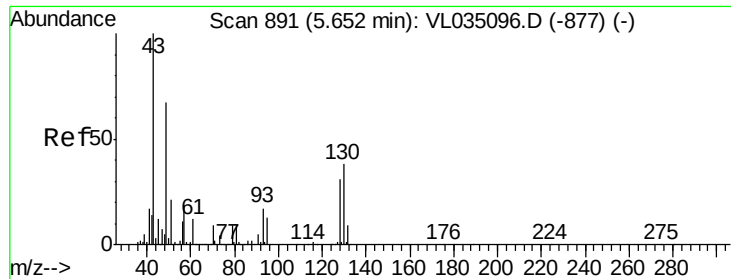
Instrument :
MSVOA_L
ClientSampleId :
PERM-01

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Quant Time: Jul 09 10:57:04 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL061920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Sat Jun
QLast Update : Sat Jun 20 02:10:36 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv m

RT: 5.82 min Scan# 944

Delta R.T. 0.17 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Instrument :

MSVOA_L

ClientSampled :

PERM-01

Tot Ion: 49 Resp: 1134790

Ion Ratio Lower Upper

49 100

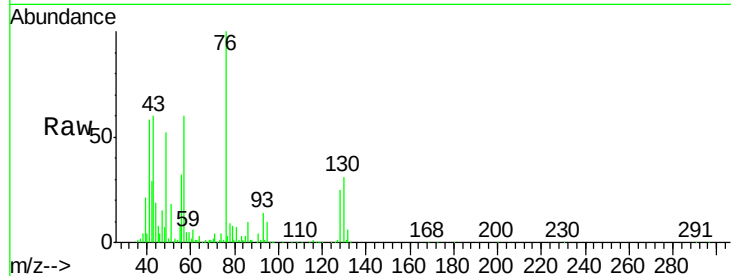
128 0.0 22.9 68.5#

130 0.0 29.0 87.0#

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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

5.82

200000

150000

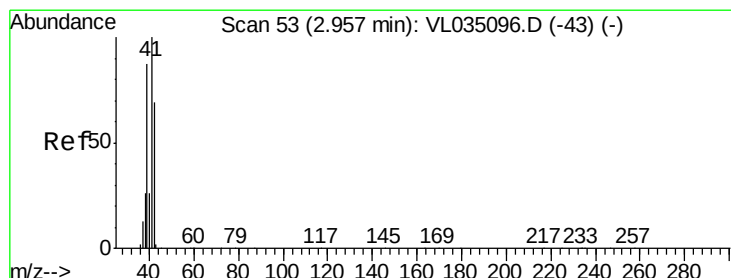
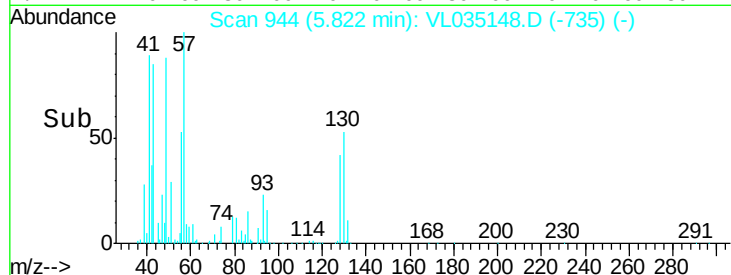
100000

50000

0

Time-->

5.60 5.70 5.80 5.90



#9

Propene

Concen: 47.767 ppbv

RT: 2.95 min Scan# 50

Delta R.T. -0.01 min

Lab File: VL035148.D

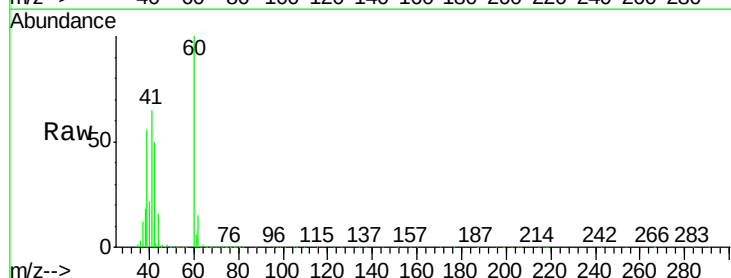
Acq: 6 Jul 2020 15:03

Tgt Ion: 41 Resp: 2371131

Ion Ratio Lower Upper

41 100

42 89.7 55.8 83.6#



Abundance Ion 41.10 (40.80 to 41.80): VL0

Ion 42.10 (41.80 to 42.80): VL0

4000000

3000000

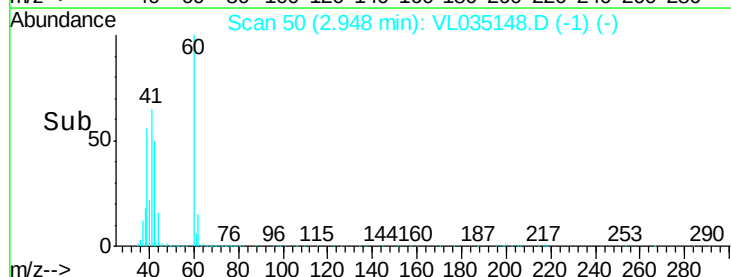
2000000

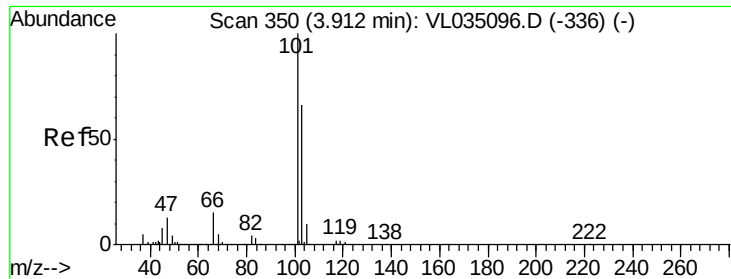
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0

Time-->

2.90 2.95 3.00





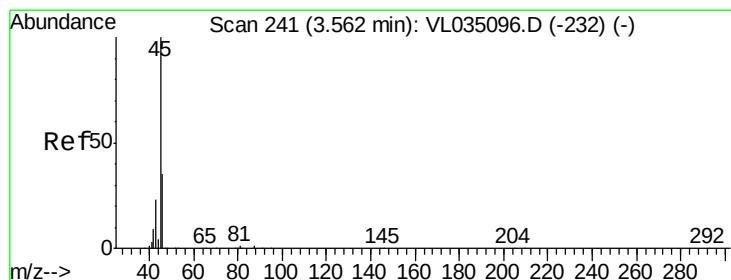
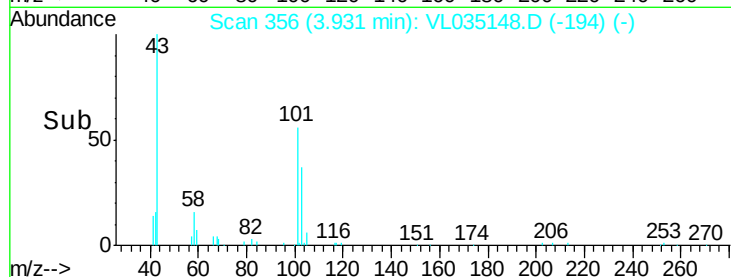
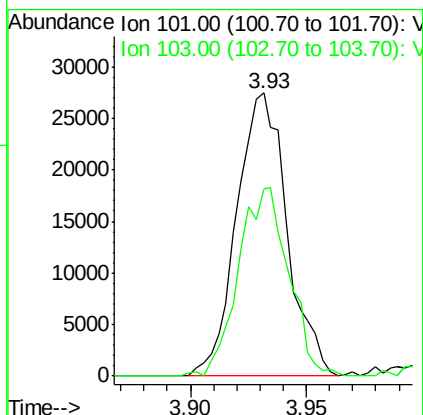
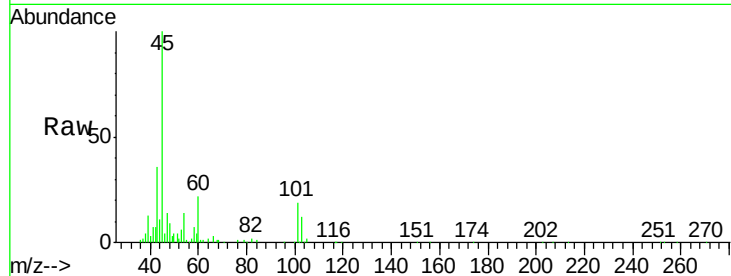
#11
 Trichlorofluoromethane
 Concen: 0.253 ppbv
 RT: 3.93 min Scan# 356
 Delta R.T. 0.02 min
 Lab File: VL035148.D
 Acq: 6 Jul 2020 15:03

Instrument :
 MSVOA_L
 ClientSampleId :
 PERM-01

Tot Ion:101 Resp: 41397
 Ion Ratio Lower Upper
 101 100
 103 65.4 52.6 79.0

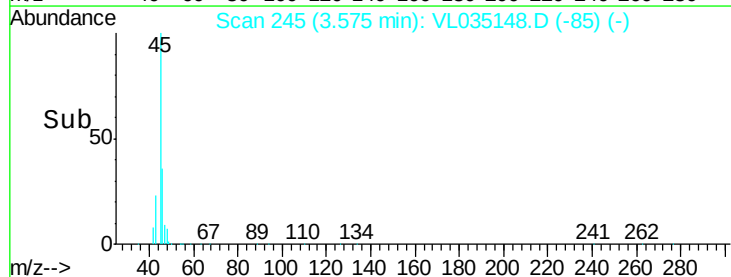
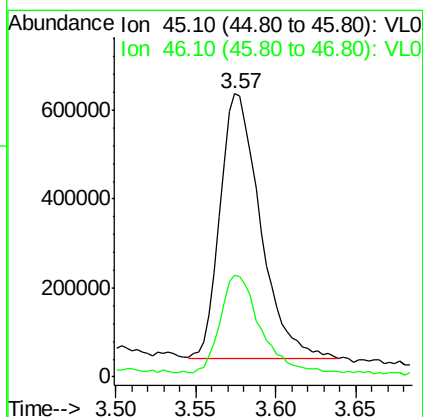
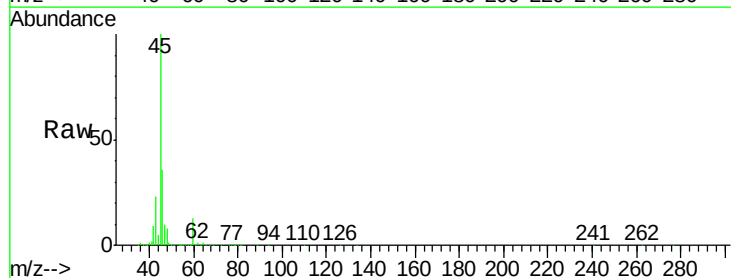
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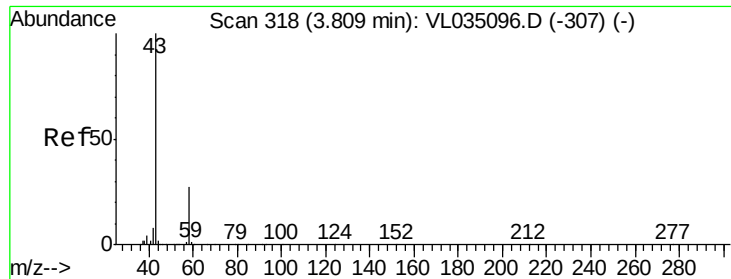
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#13
 Ethanol
 Concen: 54.553 ppbv
 RT: 3.57 min Scan# 245
 Delta R.T. 0.01 min
 Lab File: VL035148.D
 Acq: 6 Jul 2020 15:03

Tgt Ion: 45 Resp: 1023008
 Ion Ratio Lower Upper
 45 100
 46 41.2 14.2 57.0





#15

Acetone

Concen: 57.429 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.02 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Instrument :

MSVOA_L

ClientSampleId :

PERM-01

Tot Ion: 43 Resp: 7879131

Ion Ratio Lower Upper

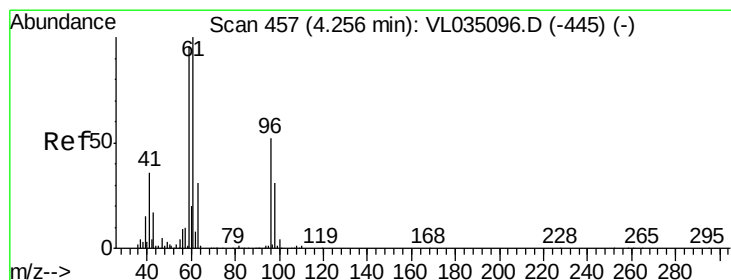
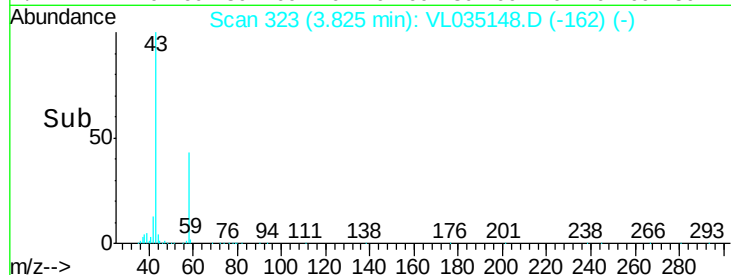
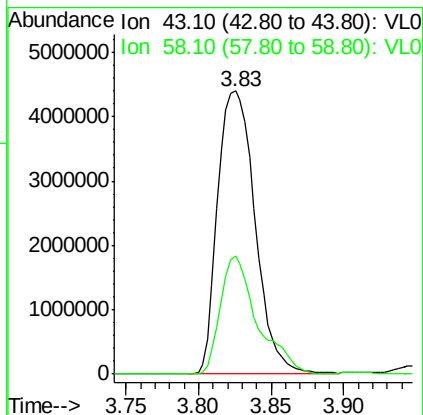
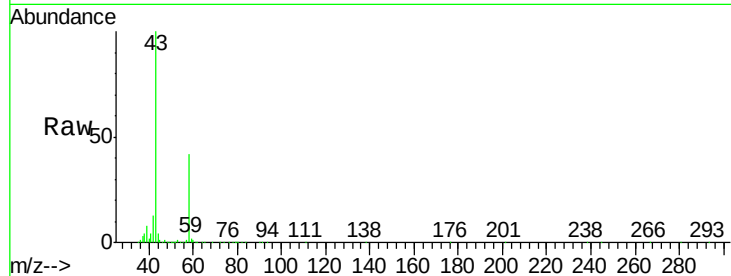
43 100

58 41.4 21.8 32.6#

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#17

tert-Butyl alcohol

Concen: 12.956 ppbv

RT: 4.28 min Scan# 463

Delta R.T. 0.02 min

Lab File: VL035148.D

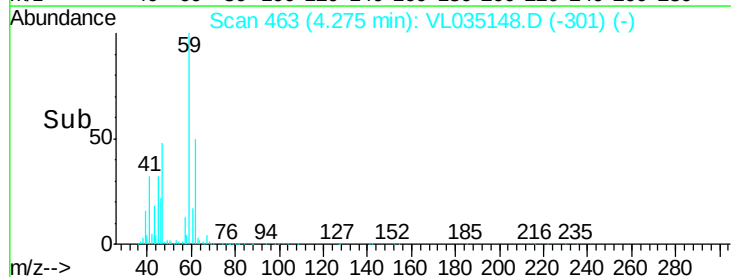
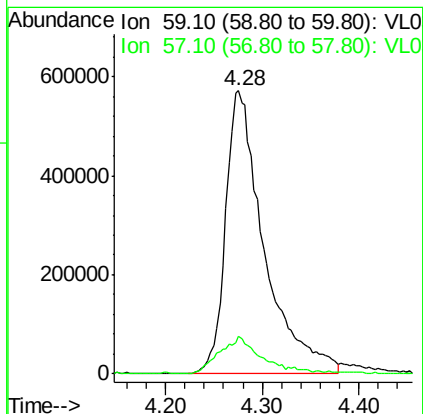
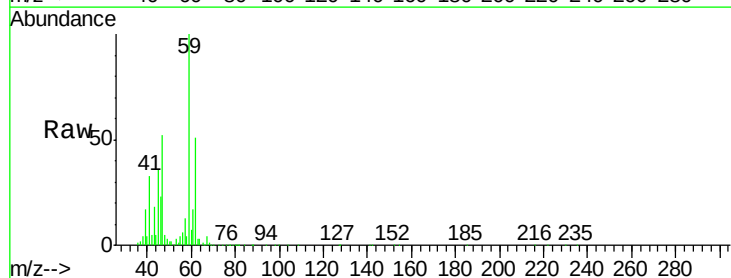
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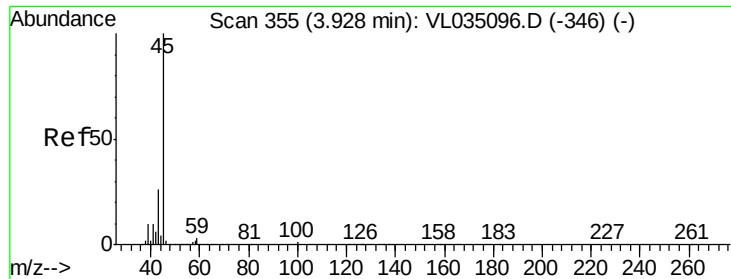
Tgt Ion: 59 Resp: 1575297

Ion Ratio Lower Upper

59 100

57 15.1 8.6 12.8#





#19

Isopropyl Alcohol

Concen: 9.888 ppbv

RT: 3.94 min Scan# 360

Delta R.T. 0.02 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Instrument :

MSVOA_L

ClientSampled :

PERM-01

Tot Ion: 45 Resp: 880854

Ion Ratio Lower Upper

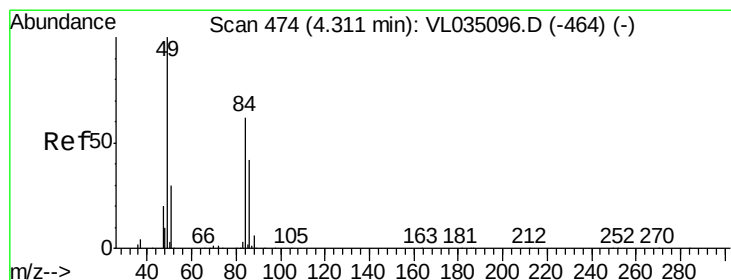
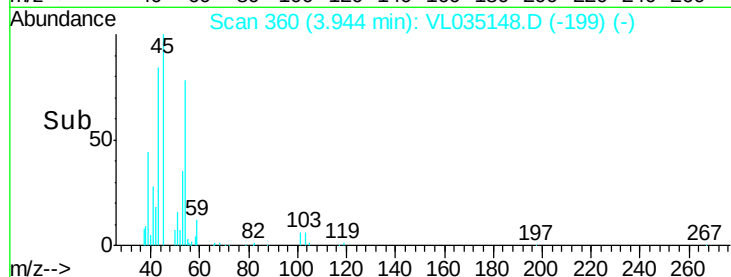
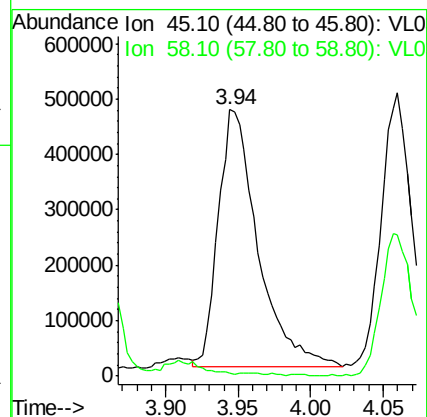
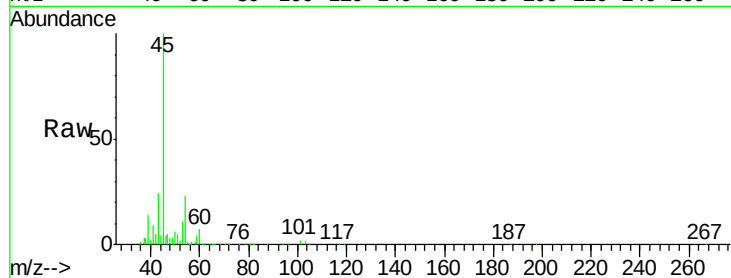
45 100

58 0.0 1.8 2.8#

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#20

Methylene Chloride

Concen: 2.666 ppbv

RT: 4.34 min Scan# 482

Delta R.T. 0.03 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Tgt Ion: 84 Resp: 148061

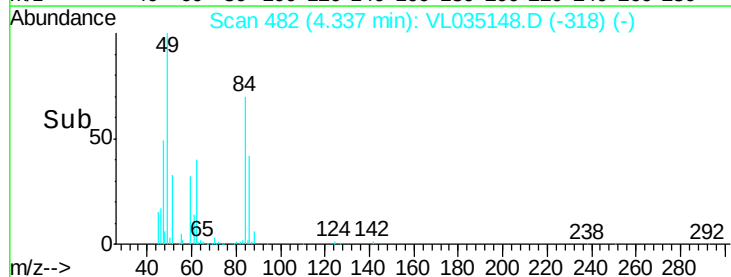
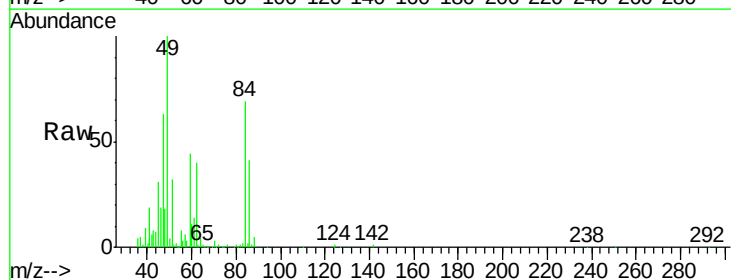
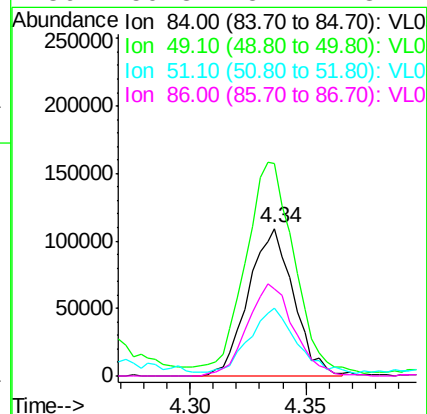
Ion Ratio Lower Upper

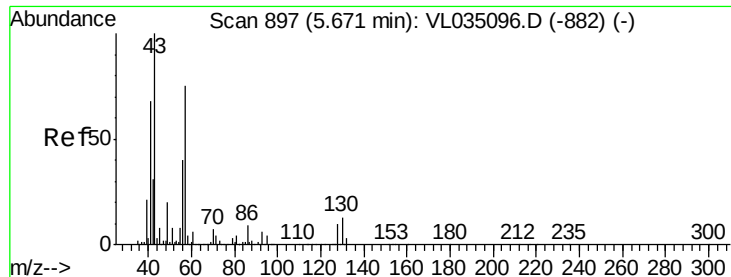
84 100

49 138.5 128.8 193.2

51 43.4 38.7 58.1

86 59.3 54.1 81.1





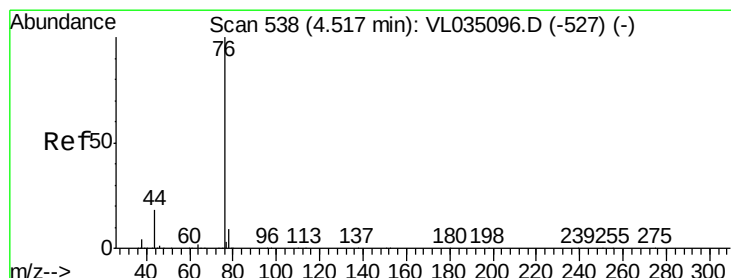
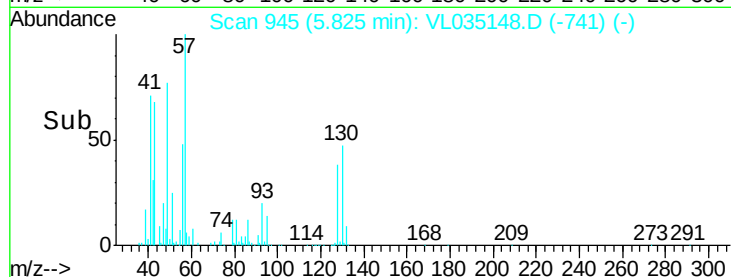
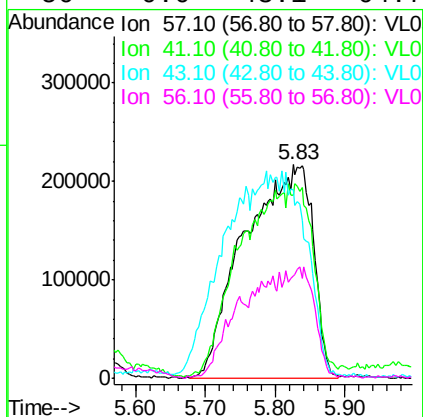
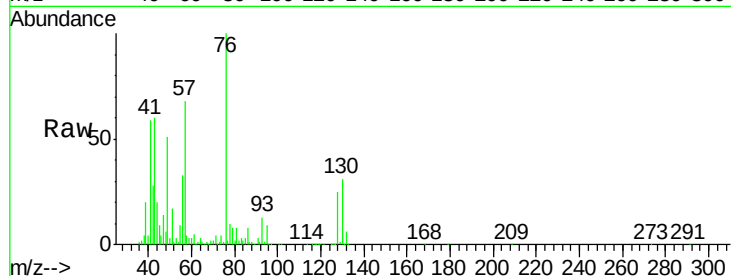
#26
Hexane
Concen: 13.208 ppbv m
RT: 5.83 min Scan# 945
Delta R.T. 0.15 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampleId :
PERM-01

Tot Ion: 57 Resp: 1474436
Ion Ratio Lower Upper
57 100
41 0.0 72.9 109.3#
43 0.0 181.3 271.9#
56 0.0 43.1 64.7#

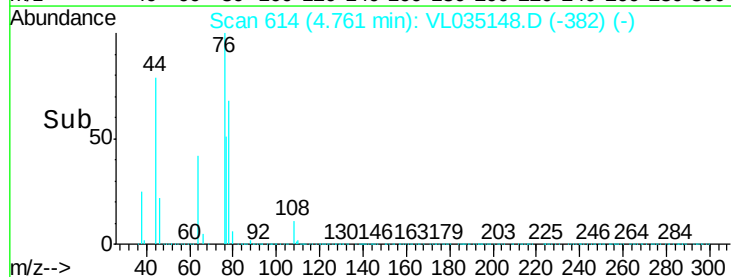
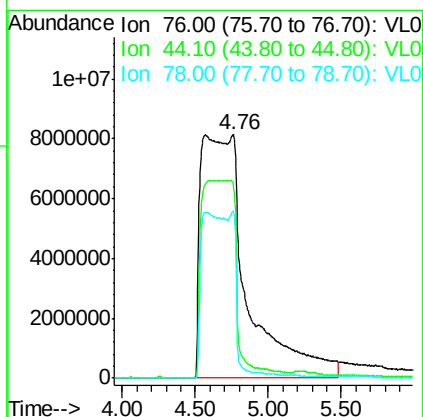
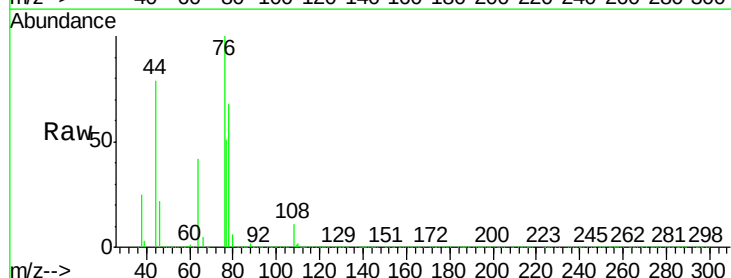
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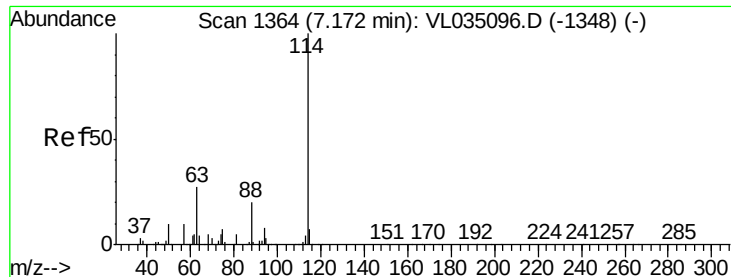
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#27
Carbon Disulfide
Concen: 1558.767 ppbv m
RT: 4.76 min Scan# 614
Delta R.T. 0.24 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion: 76 Resp: 180079818
Ion Ratio Lower Upper
76 100
44 22.5 15.8 23.8
78 33.9 7.6 11.4#





#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

RT: 7.30 min Scan# 1403

Delta R.T. 0.13 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Instrument :

MSVOA_L

ClientSampleId :

PERM-01

Tot Ion:114 Resp: 2637444

Ion Ratio Lower Upper

114 100

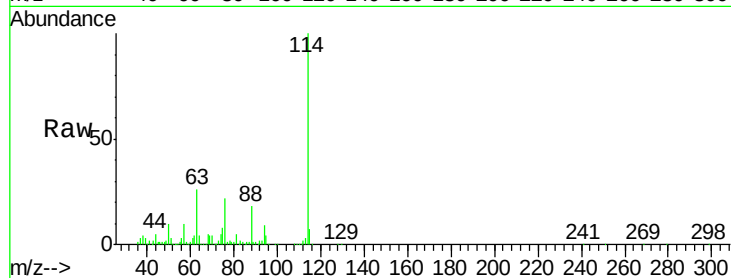
63 26.2 21.9 32.9

88 19.0 15.6 23.4

Manual Integrations
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Abundance Ion 114.10 (113.80 to 114.80): V

Ion 63.10 (62.80 to 63.80): VL0

Ion 88.10 (87.80 to 88.80): VL0

800000

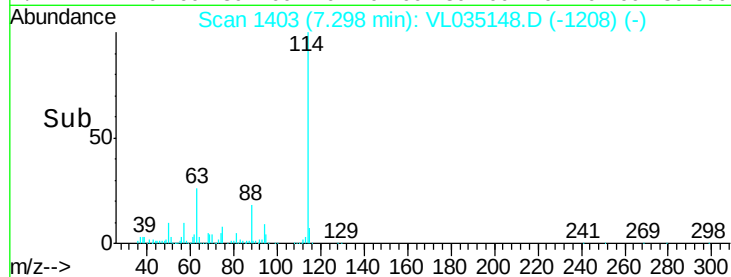
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400000

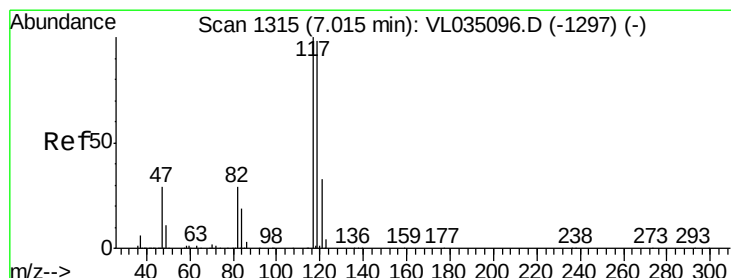
200000

0

7.10 7.20 7.30 7.40



Time-->



#35

Carbon Tetrachloride

Concen: 0.100 ppbv m

RT: 7.15 min Scan# 1357

Delta R.T. 0.14 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

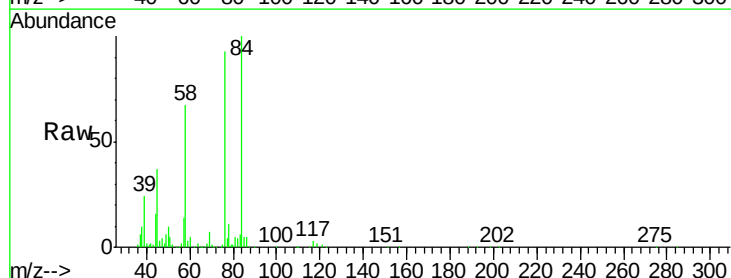
Tgt Ion:117 Resp: 15868

Ion Ratio Lower Upper

117 100

119 77.4 78.3 117.5#

121 39.7 26.0 39.0#



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

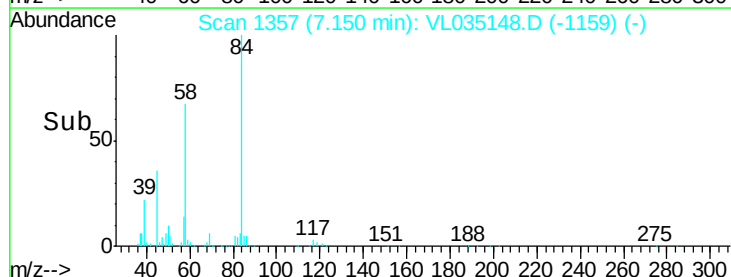
6000

4000

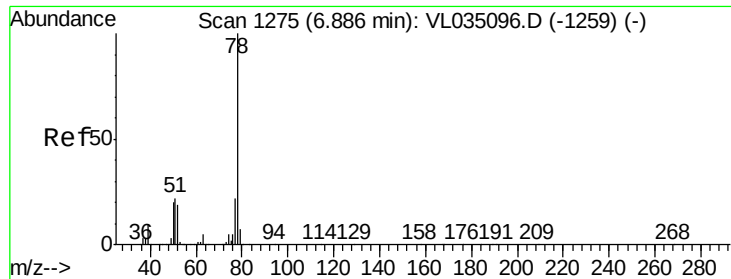
2000

0

7.00 7.10 7.20



Time-->



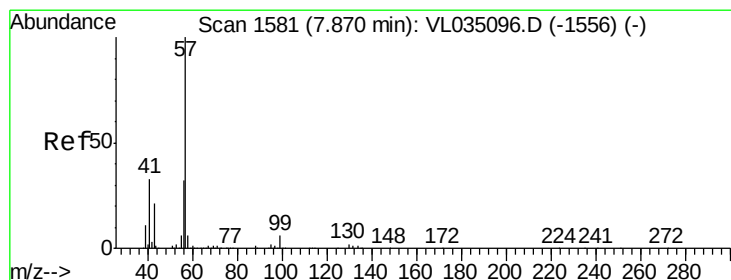
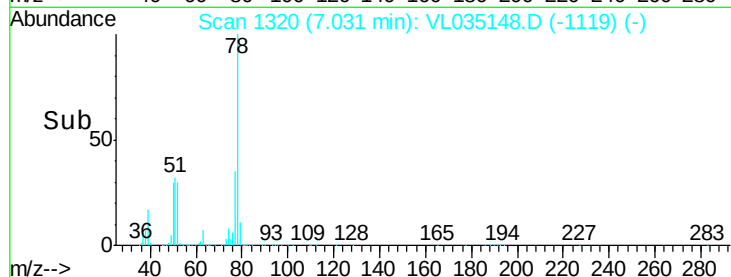
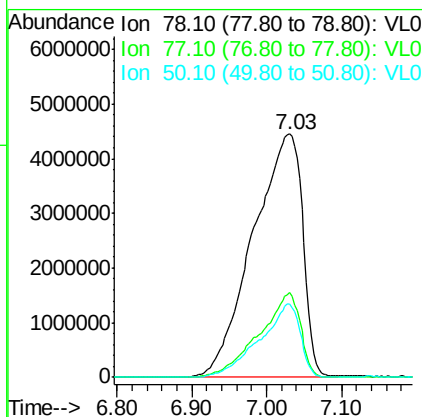
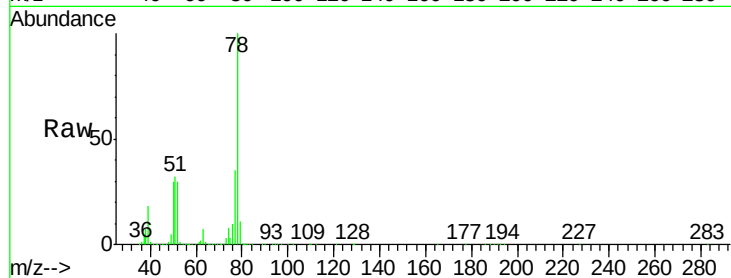
#36
Benzene
Concen: 99.729 ppbv
RT: 7.03 min Scan# 1320
Delta R.T. 0.14 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
PERM-01

Tot Ion: 78 Resp: 20367909
Ion Ratio Lower Upper
78 100
77 34.7 17.8 26.6#
50 30.3 16.2 24.2#

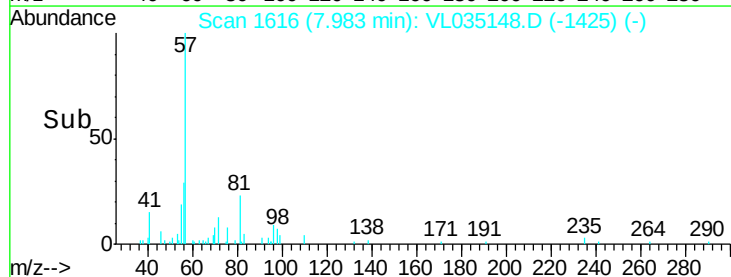
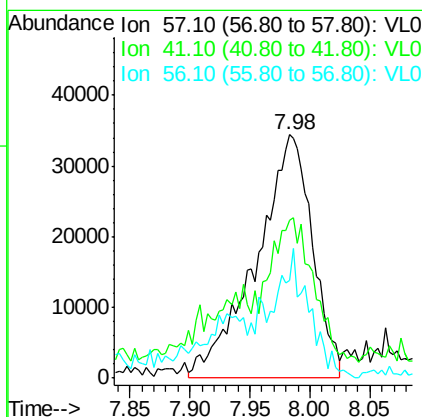
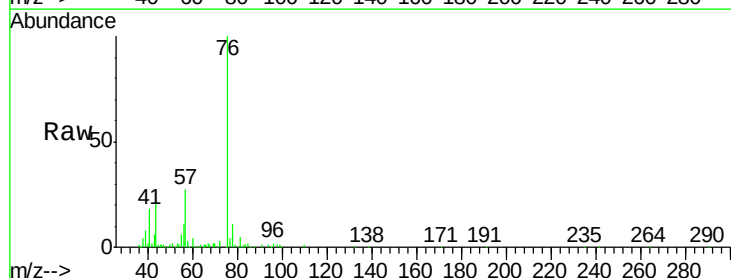
Manual Integrations
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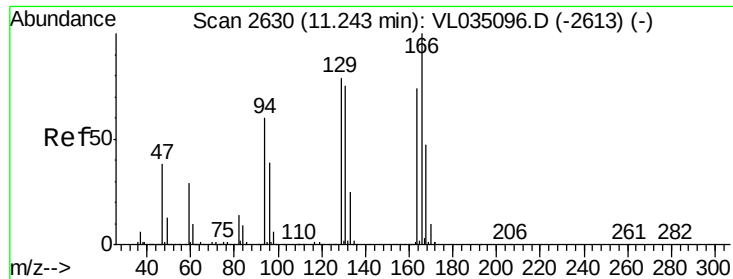
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#44
2,2,4-Trimethylpentane
Concen: 0.315 ppbv m
RT: 7.98 min Scan# 1616
Delta R.T. 0.11 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion: 57 Resp: 112234
Ion Ratio Lower Upper
57 100
41 71.5 26.2 39.2#
56 34.7 25.4 38.2





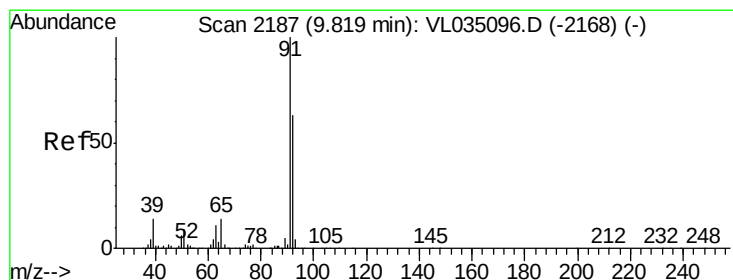
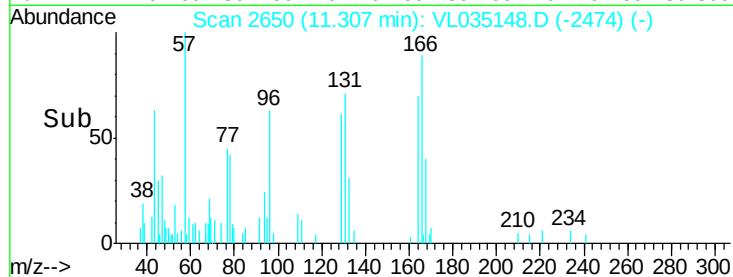
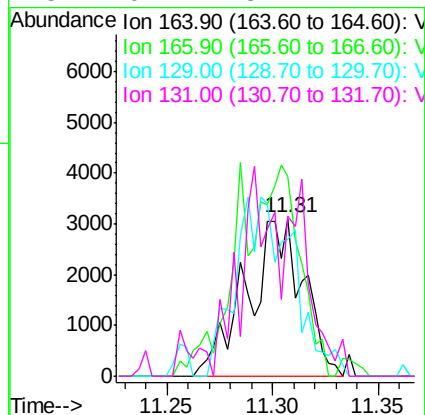
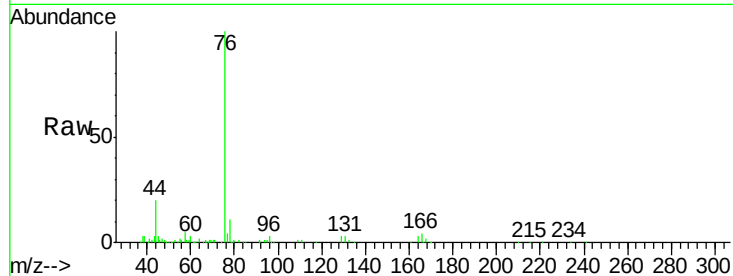
#52
Tetrachloroethene
Concen: 0.079 ppbv m
RT: 11.31 min Scan# 2650
Delta R.T. 0.06 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
PERM-01

Tot Ion	Ratio	Lower	Upper
164	100		
166	126.6	107.5	161.3
129	86.7	84.9	127.3
131	101.1	81.1	121.7

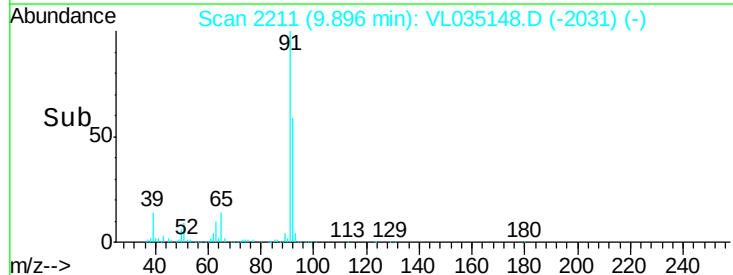
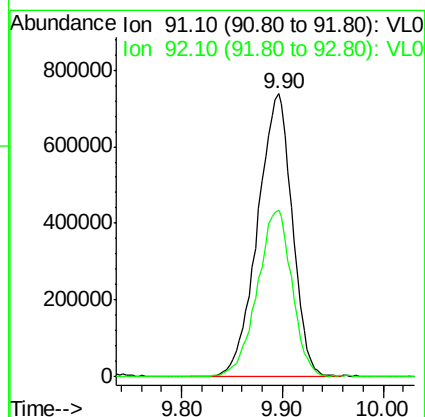
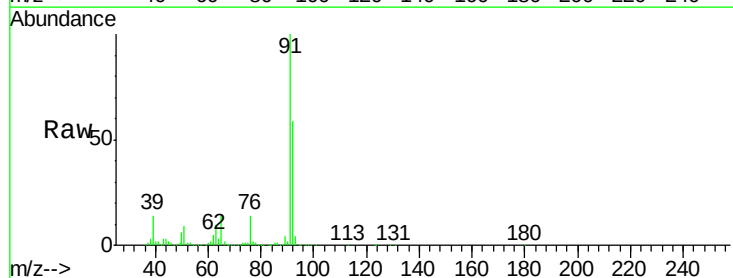
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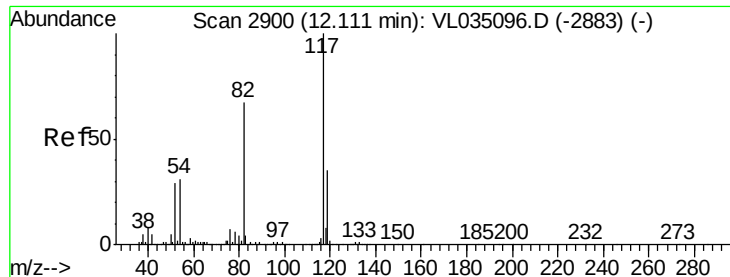
MMDadoda
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#53
Toluene
Concen: 8.098 ppbv
RT: 9.90 min Scan# 2211
Delta R.T. 0.08 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion	Ratio	Lower	Upper
91	100		
92	59.0	49.0	73.6





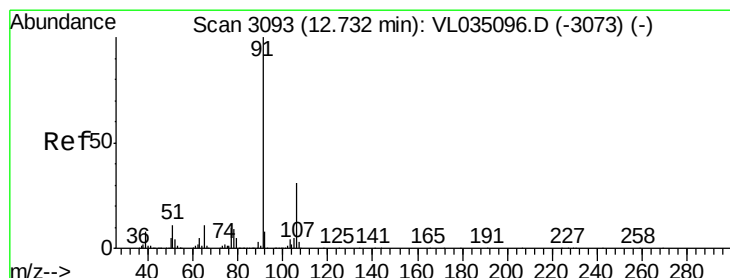
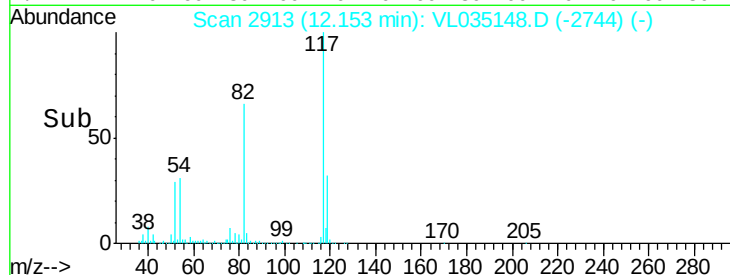
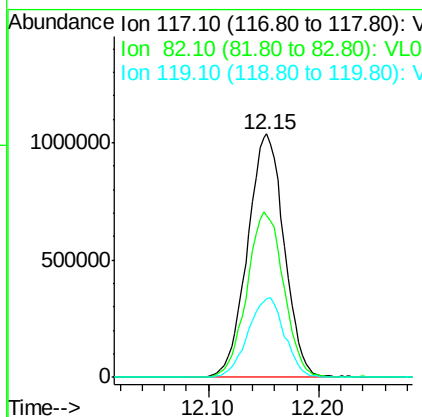
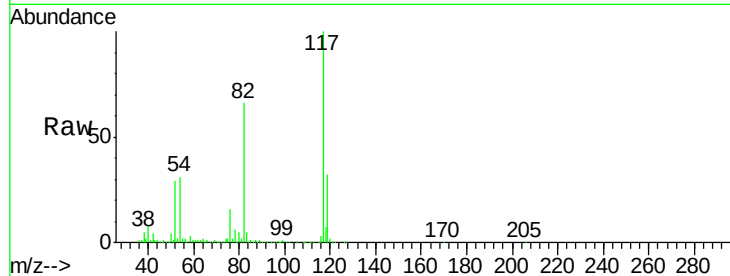
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.15 min Scan# 2913
Delta R.T. 0.04 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
PERM-01

Tot Ion:117 Resp: 2378227
Ion Ratio Lower Upper
117 100
82 68.2 50.4 75.6
119 33.1 25.4 38.0

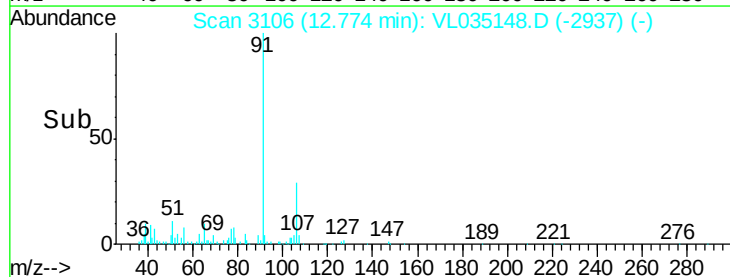
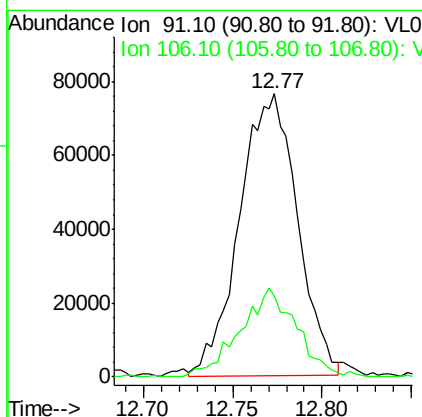
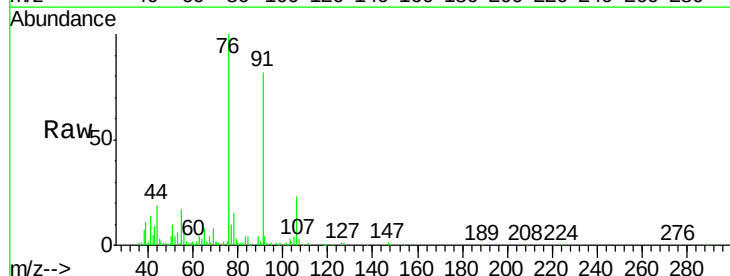
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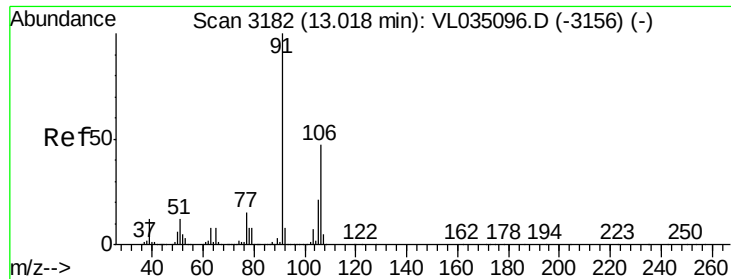
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#58
Ethyl Benzene
Concen: 0.649 ppbv
RT: 12.77 min Scan# 3106
Delta R.T. 0.04 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion: 91 Resp: 173363
Ion Ratio Lower Upper
91 100
106 28.0 25.0 37.6





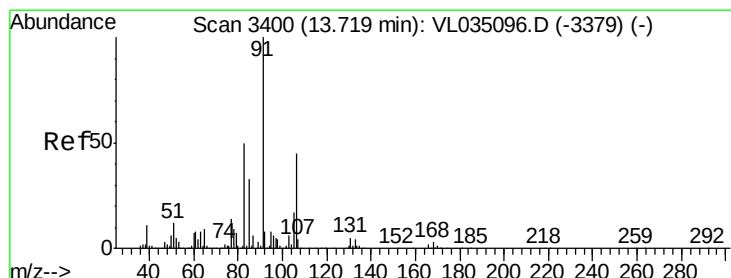
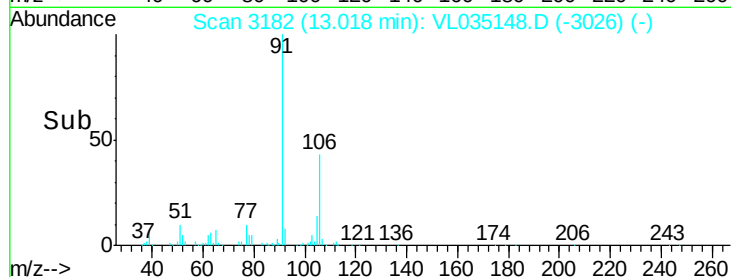
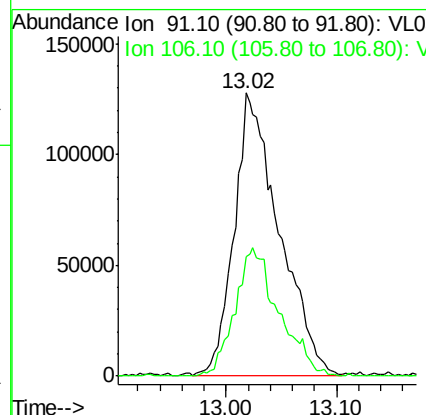
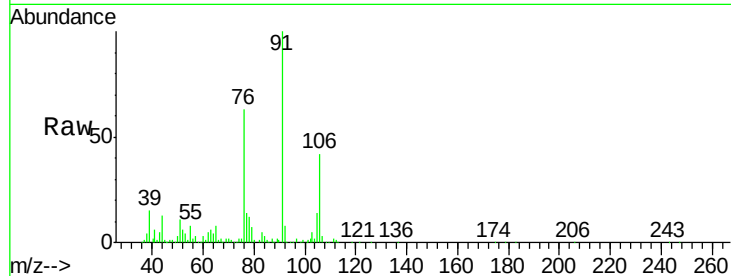
#59
m/p-Xylene
Concen: 1.516 ppbv
RT: 13.02 min Scan# 3182
Delta R.T. 0.00 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
PERM-01

Tot Ion: 91 Resp: 359062
Ion Ratio Lower Upper
91 100
106 44.4 36.5 54.7

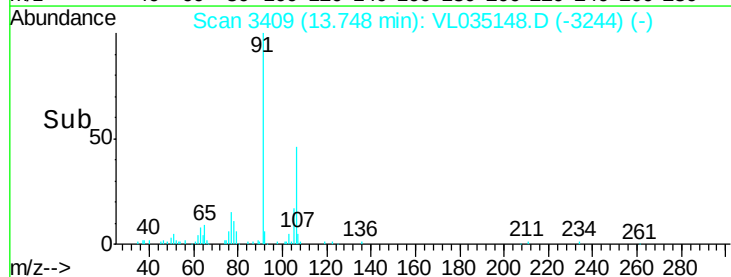
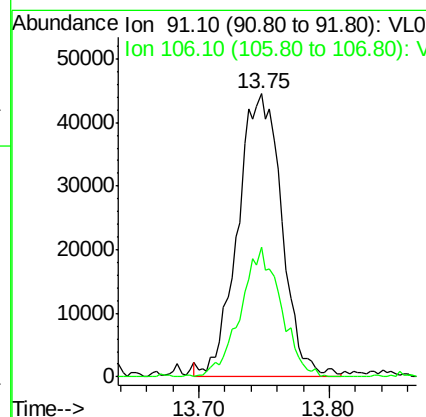
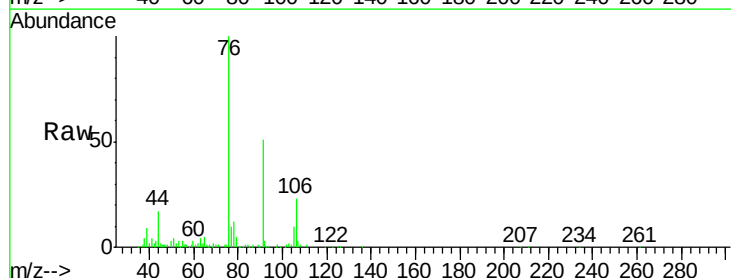
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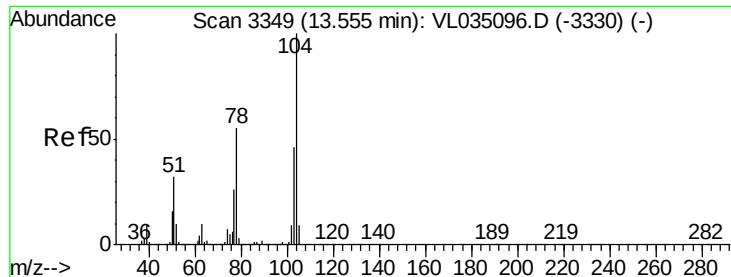
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#60
o-Xylene
Concen: 0.444 ppbv m
RT: 13.75 min Scan# 3409
Delta R.T. 0.03 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion: 91 Resp: 104562
Ion Ratio Lower Upper
91 100
106 41.9 22.1 66.5





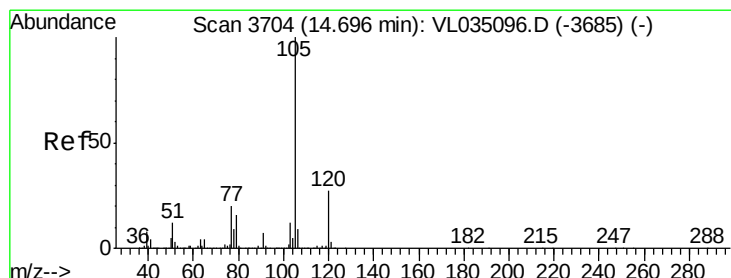
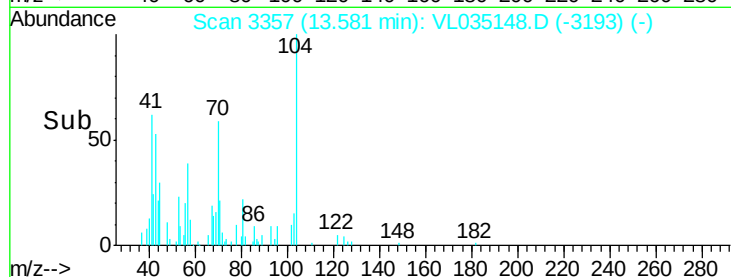
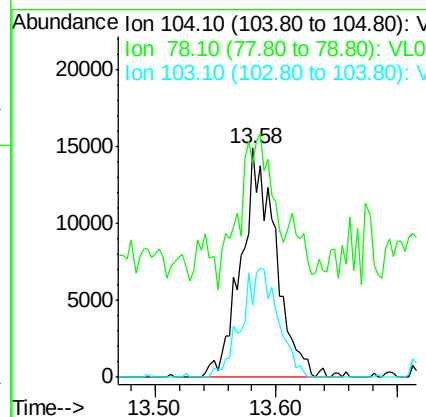
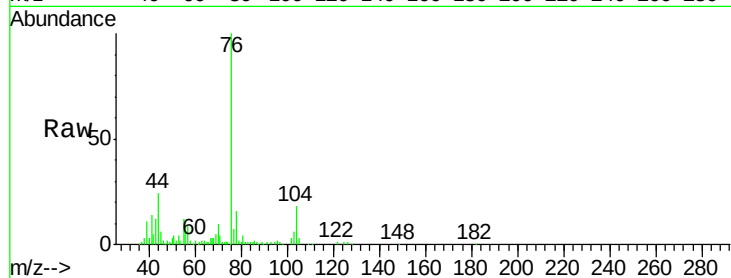
#61
Stvrene
Concen: 0.201 ppbv m
RT: 13.58 min Scan# 3357
Delta R.T. 0.03 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
PERM-01

Tot Ion	Ratio	Lower	Upper
104	100		
78	91.1	43.4	65.0#
103	49.4	38.3	57.5

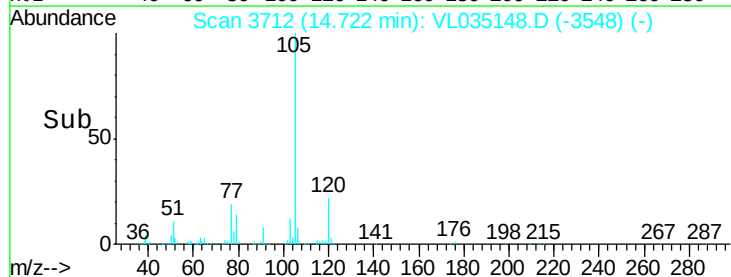
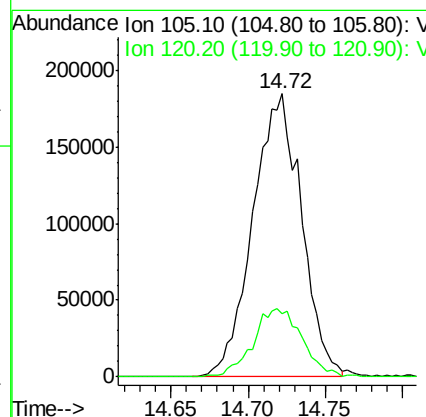
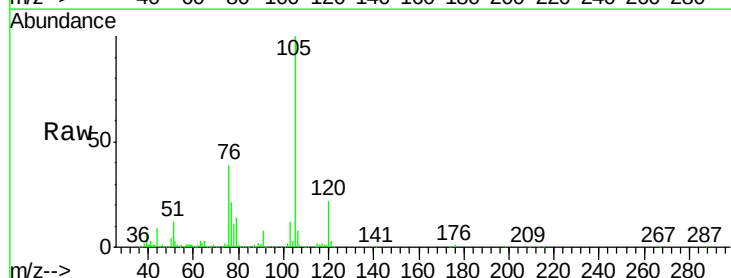
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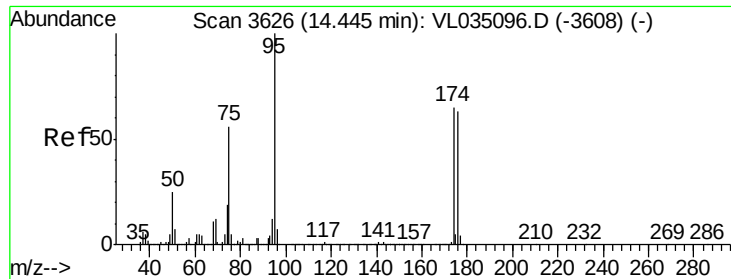
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#62
Isopropylbenzene
Concen: 1.145 ppbv
RT: 14.72 min Scan# 3712
Delta R.T. 0.03 min
Lab File: VL035148.D
Acq: 6 Jul 2020 15:03

Tgt Ion	Ratio	Lower	Upper
105	100		
120	24.4	20.8	31.2





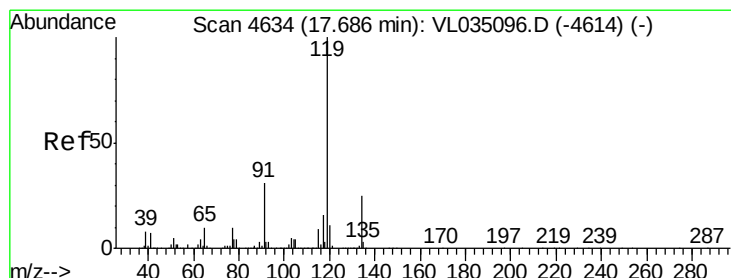
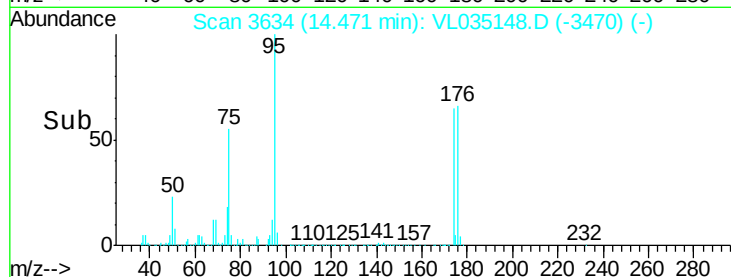
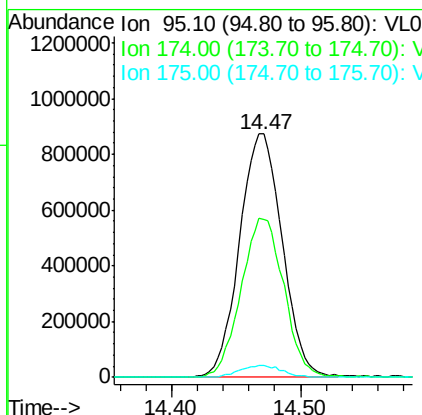
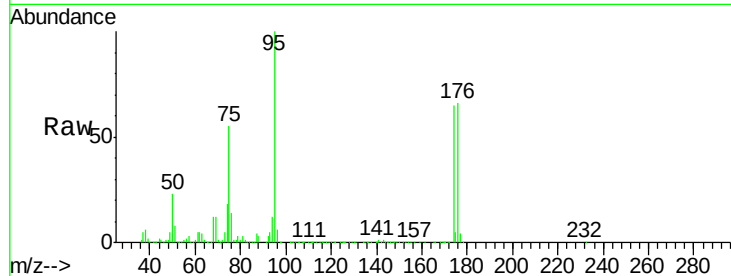
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.181 ppbv
 RT: 14.47 min Scan# 3634
 Delta R.T. 0.03 min
 Lab File: VL035148.D
 Acq: 6 Jul 2020 15:03

Instrument :
 MSVOA_L
 ClientSampled :
 PERM-01

Tot Ion: 95 Resp: 2011429
 Ion Ratio Lower Upper
 95 100
 174 65.9 52.2 78.2
 175 5.0 4.0 6.0

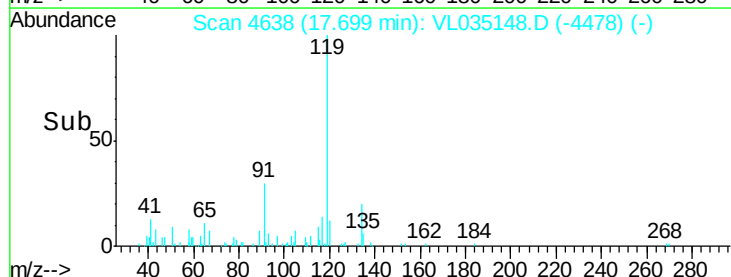
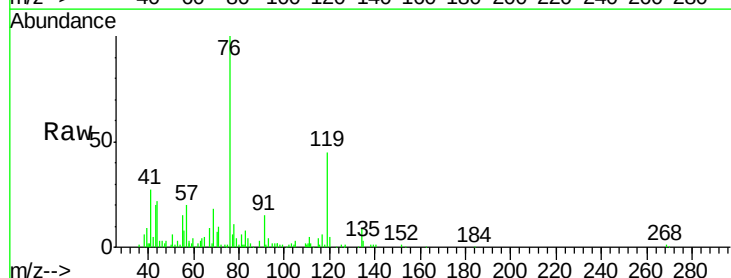
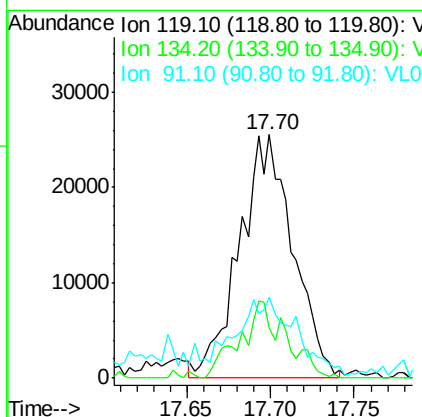
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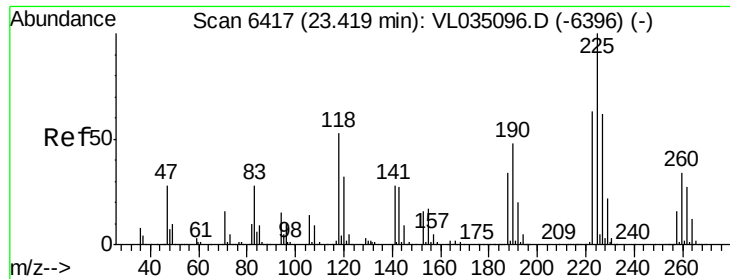
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#69
 p-Isopropyltoluene
 Concen: 0.165 ppbv m
 RT: 17.70 min Scan# 4638
 Delta R.T. 0.01 min
 Lab File: VL035148.D
 Acq: 6 Jul 2020 15:03

Tgt Ion: 119 Resp: 56699
 Ion Ratio Lower Upper
 119 100
 134 0.0 20.4 30.6#
 91 3.9 24.5 36.7#





#78

Hexachloro-1,3-Butadiene

Concen: 0.172 ppbv m

RT: 23.42 min Scan# 6418

Delta R.T. 0.00 min

Lab File: VL035148.D

Acq: 6 Jul 2020 15:03

Instrument :

MSVOA_L

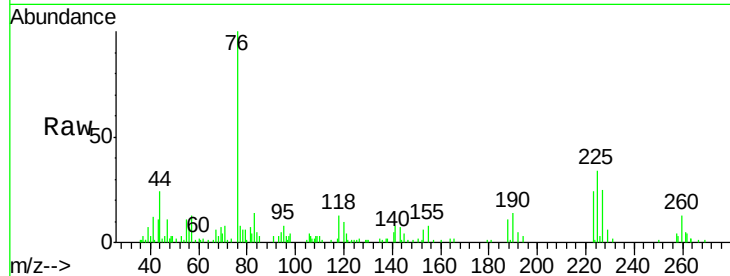
ClientSampled :

PERM-01

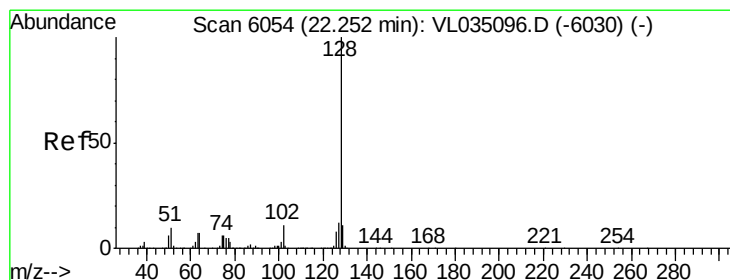
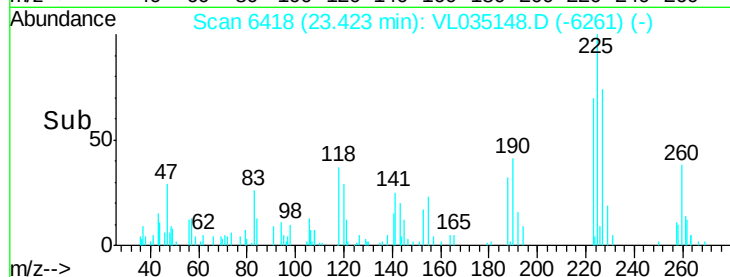
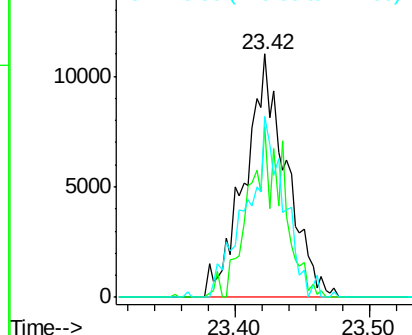
Tot Ion:	225	Resp:	23401
Ion Ratio		Lower	Upper
225	100		
223	0.0	51.4	77.0#
227	0.0	51.8	77.8#

Manual Integrations
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Abundance Ion 224.90 (224.60 to 225.60): V
Ion 222.90 (222.60 to 223.60): V
Ion 226.90 (226.60 to 227.60): V



#79

Naphthalene

Concen: 0.494 ppbv m

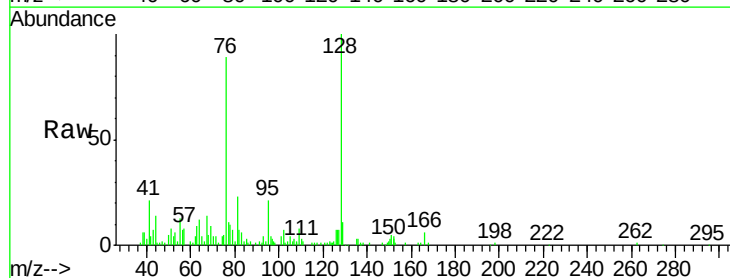
RT: 22.26 min Scan# 6055

Delta R.T. 0.00 min

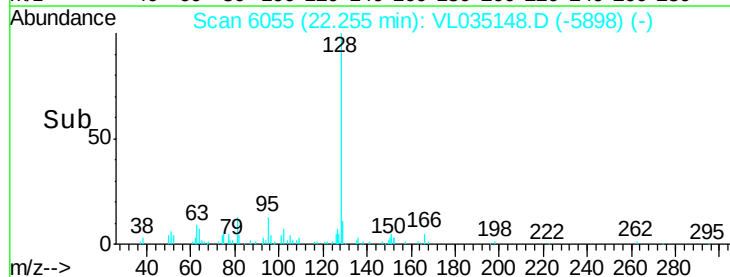
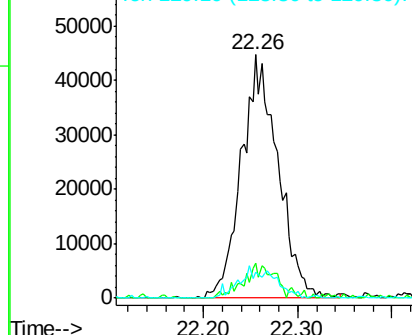
Lab File: VL035148.D

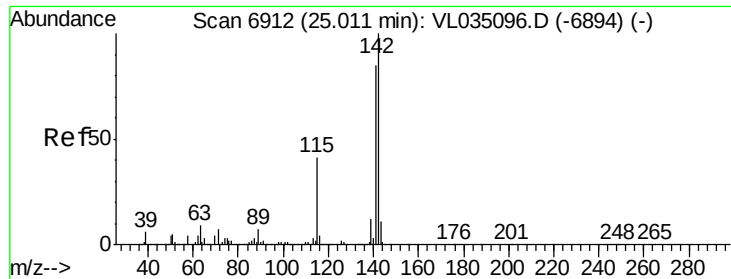
Acq: 6 Jul 2020 15:03

Tgt Ion:	128	Resp:	119856
Ion Ratio		Lower	Upper
128	100		
127	7.3	9.9	14.9#
129	10.9	9.0	13.4



Abundance Ion 128.10 (127.80 to 128.80): V
Ion 127.10 (126.80 to 127.80): V
Ion 129.10 (128.80 to 129.80): V





#80
 Naphthalene, 2-methyl-
 Concen: 0.161 ppbv
 RT: 25.01 min Scan# 6912
 Delta R.T. 0.00 min
 Lab File: VL035148.D
 Acq: 6 Jul 2020 15:03

Instrument :
 MSVOA_L
 ClientSampleId :
 PERM-01

Tot Ion	Ratio	Lower	Upper
142	100		
141	87.8	67.5	101.3
115	50.0	33.8	50.8

Manual Integrations
 APPROVED

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