

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL040621\
 Data File : VL036717.D
 Acq On : 7 Apr 2021 3:43
 Operator : SY/AP
 Sample : M1929-05DUP
 Misc : 400mL/MSVOA L
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-OA-04DUP

Manual Integrations
 APPROVED

MMDadoda
 4/12/2021 11:11:50 AM

Quant Time: Apr 08 12:28:44 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar 25 2021
 QLast Update : Thu Mar 25 09:42:40 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.66	49	1288811	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.18	114	2985277	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.09	117	2667283	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.42	95	2027529	9.54	ppbv	0.00	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	95.40%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.05	85	42926	0.204	ppbv	90
3) Chlorodifluoromethane	2.99	51	84565	0.351	ppbv #	91
4) Chloromethane	3.13	50	44887m	0.528	ppbv	
9) Propene	3.01	41	58270m	0.759	ppbv	
11) Trichlorofluoromethane	3.95	101	39574	0.185	ppbv	84
13) Ethanol	3.62	45	295959	32.375	ppbv	91
15) Acetone	3.85	43	1097222	8.650	ppbv	98
19) Isopropyl Alcohol	3.99	45	291855m	4.183	ppbv	
20) Methylene Chloride	4.34	84	1010762	17.019	ppbv	90
26) Hexane	5.69	57	1112456	7.949	ppbv #	47
34) 2-Butanone	5.25	43	108302	0.743	ppbv	98
35) Carbon Tetrachloride	7.02	117	13537m	0.059	ppbv	
36) Benzene	6.89	78	84724m	0.308	ppbv	
44) 2,2,4-Trimethylpentane	7.88	57	57350m	0.118	ppbv	
52) Tetrachloroethene	11.22	164	7579m	0.075	ppbv	
53) Toluene	9.81	91	452414	1.543	ppbv	99
59) m/p-Xylene	12.97	91	78849m	0.233	ppbv	
60) o-Xylene	13.70	91	38755m	0.118	ppbv	
74) 1,2,4-Trimethylbenzene	16.77	105	44759m	0.125	ppbv	

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

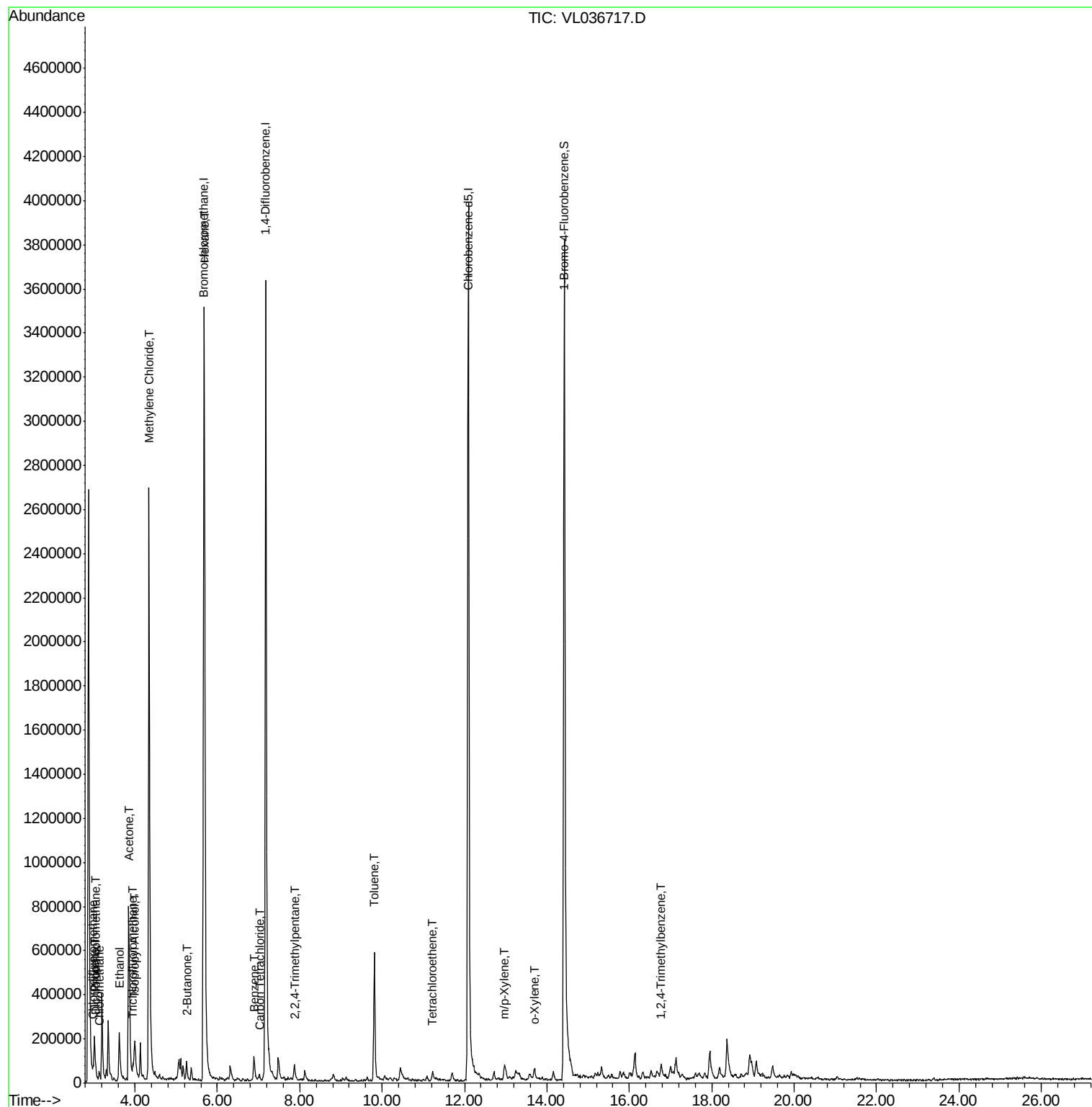
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL040621\
Data File : VL036717.D
Acq On : 7 Apr 2021 3:43
Operator : SY/AP
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Misc : 400mL/MSVOA L
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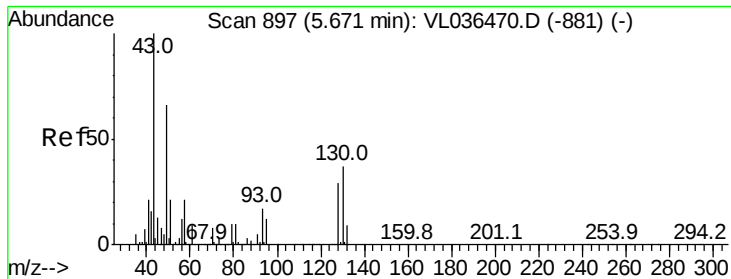
Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

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4/12/2021 11:11:50 AM

Quant Time: Apr 08 12:28:44 2021
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL032521AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Thu Mar
QLast Update : Thu Mar 25 09:42:40 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.66 min Scan# 895

Delta R.T. -0.01 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion: 49 Resp: 1288811

Ion Ratio Lower Upper

49 100

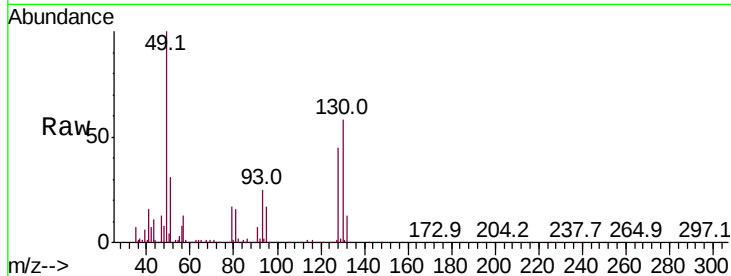
128 45.1 23.5 70.6

130 58.1 29.1 87.4

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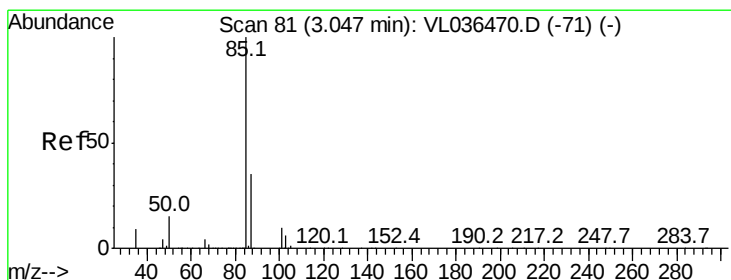
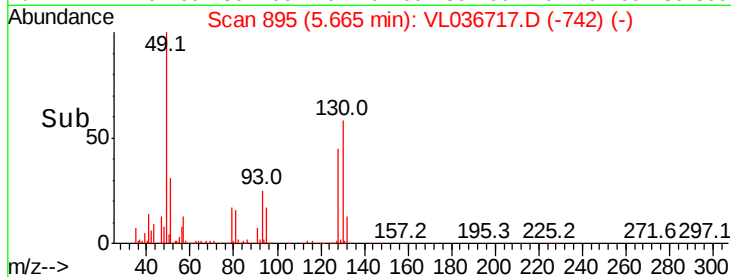
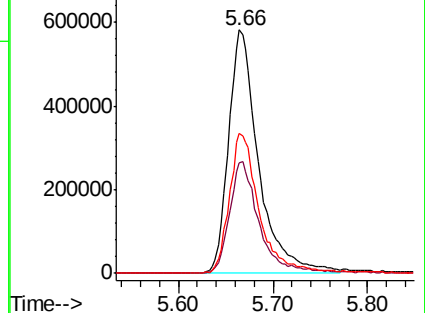
4/12/2021 11:11:50 AM



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: 0.204 ppbv

RT: 3.05 min Scan# 81

Delta R.T. -0.00 min

Lab File: VL036717.D

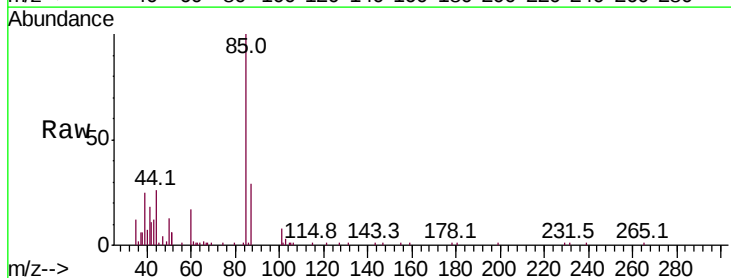
Acq: 7 Apr 2021 3:43

Tgt Ion: 85 Resp: 42926

Ion Ratio Lower Upper

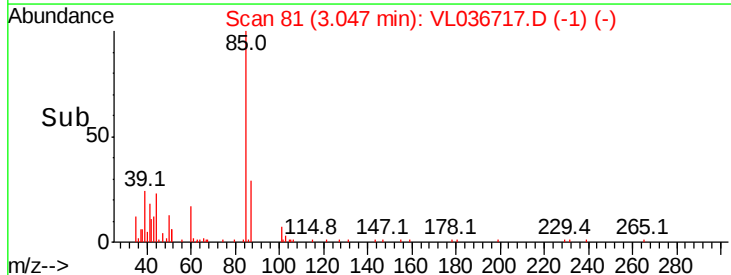
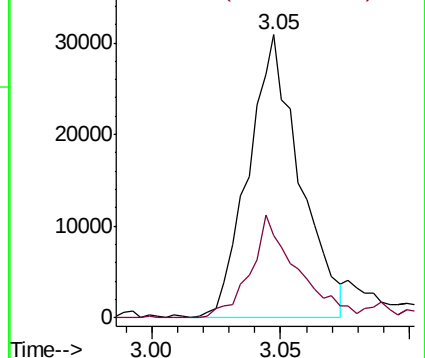
85 100

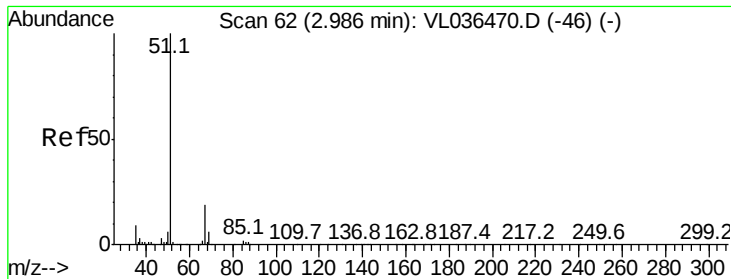
87 29.1 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





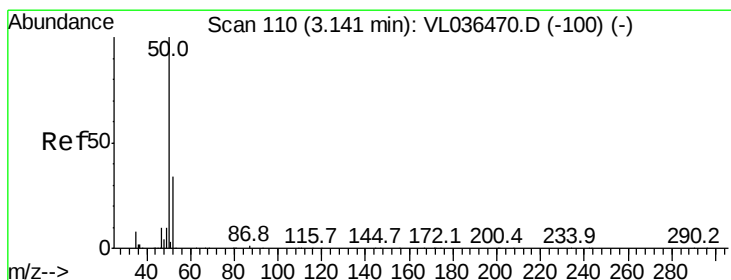
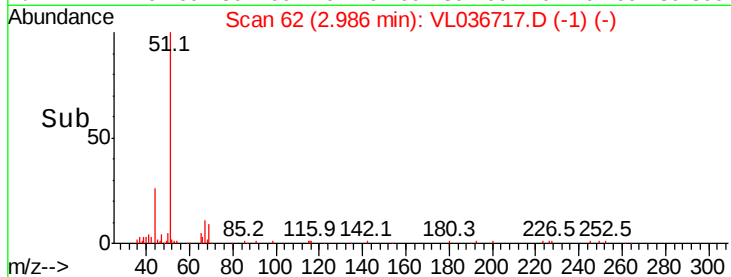
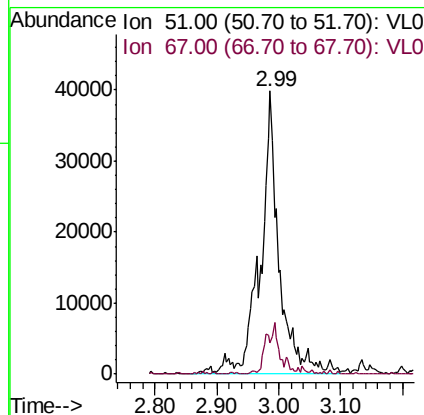
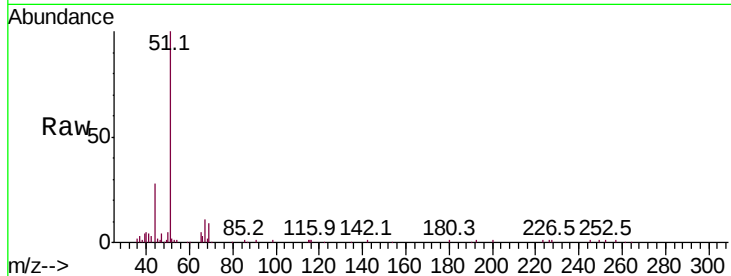
#3
Chlorodifluoromethane
Concen: 0.351 ppbv
RT: 2.99 min Scan# 62
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

Tot Ion	Ratio	Lower	Upper
51	100		
67	14.5	14.7	22.1#

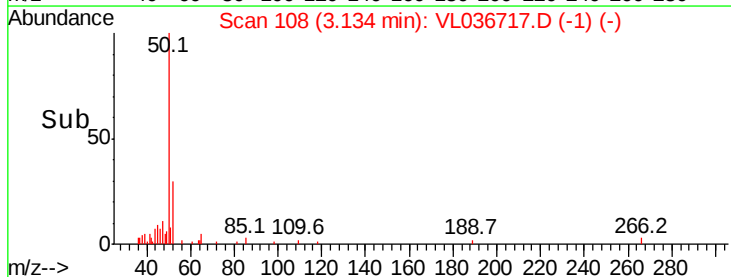
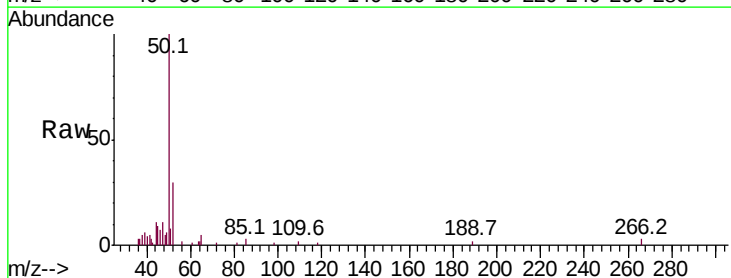
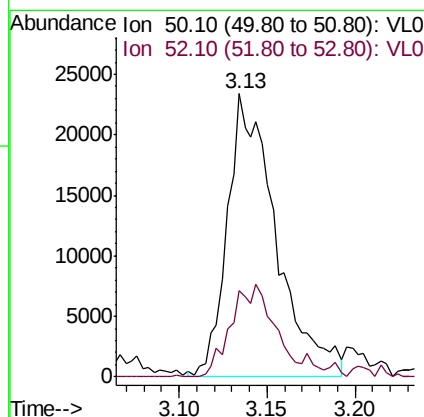
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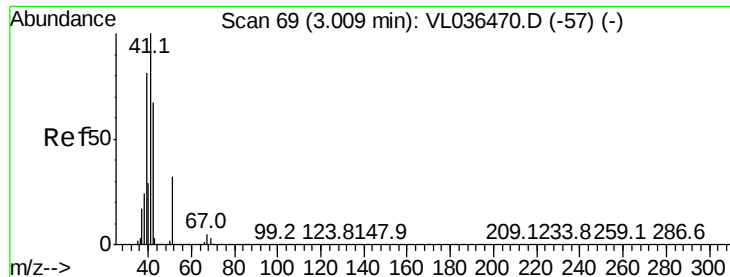
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#4
Chloromethane
Concen: 0.528 ppbv m
RT: 3.13 min Scan# 108
Delta R.T. -0.01 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Tgt Ion	Ratio	Lower	Upper
50	100		
52	30.5	27.0	40.6





#9

Propene

Concen: 0.759 ppbv m

RT: 3.01 min Scan# 70

Delta R.T. 0.00 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion: 41 Resp: 58270

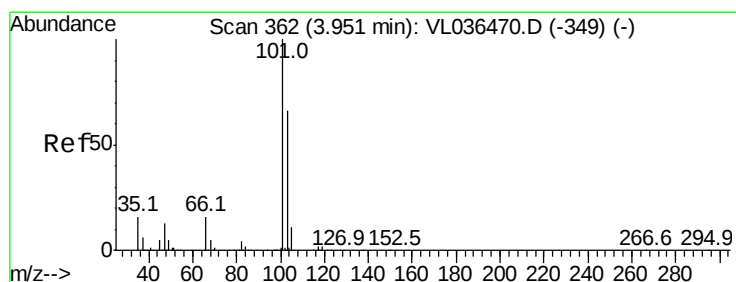
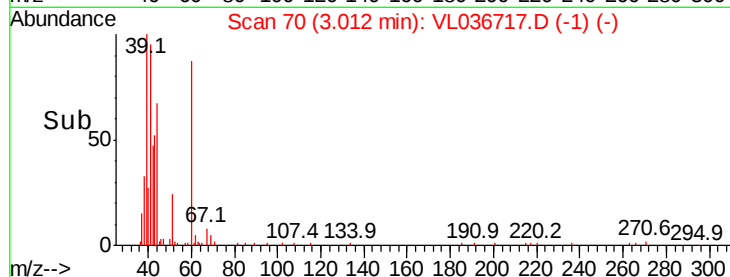
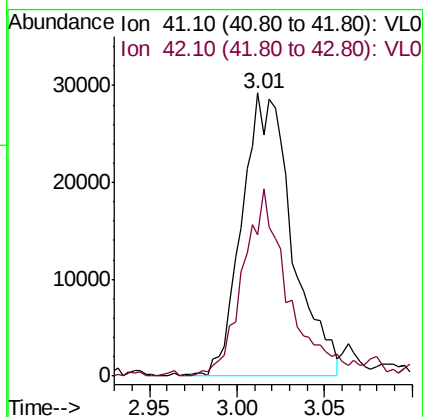
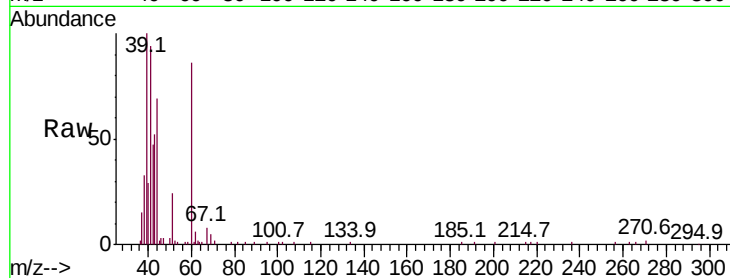
Ion Ratio Lower Upper

41 100

42 60.1 57.0 85.4

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#11

Trichlorofluoromethane

Concen: 0.185 ppbv

RT: 3.95 min Scan# 361

Delta R.T. -0.00 min

Lab File: VL036717.D

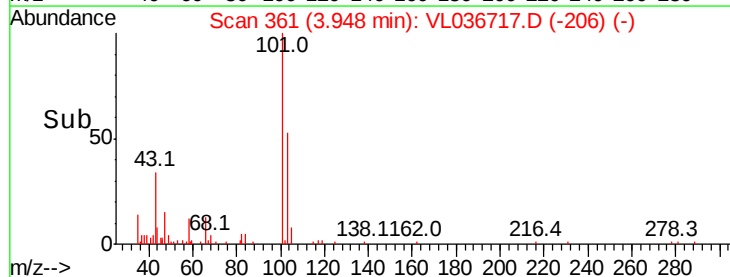
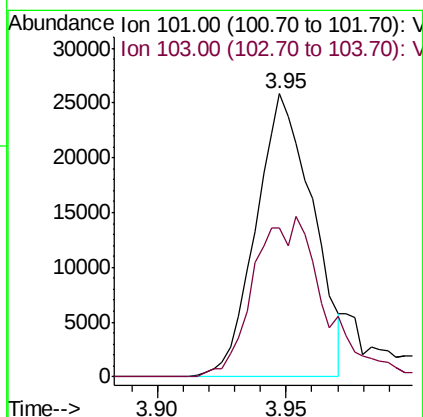
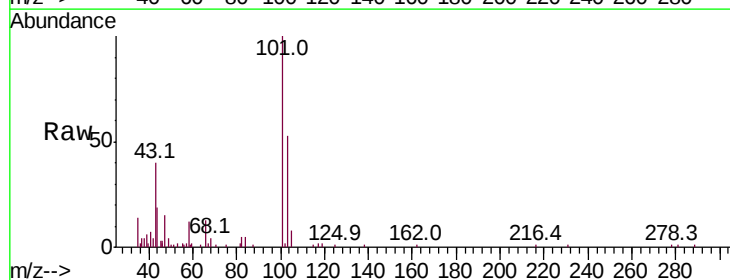
Acq: 7 Apr 2021 3:43

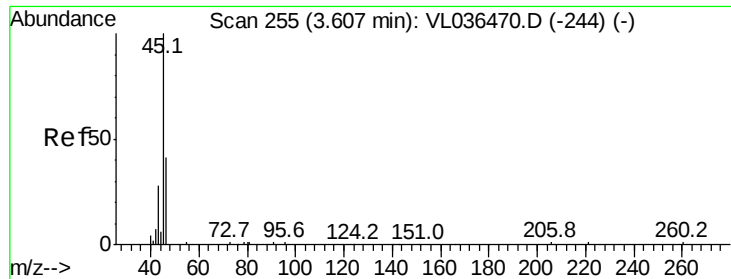
Tgt Ion: 101 Resp: 39574

Ion Ratio Lower Upper

101 100

103 52.7 52.5 78.7





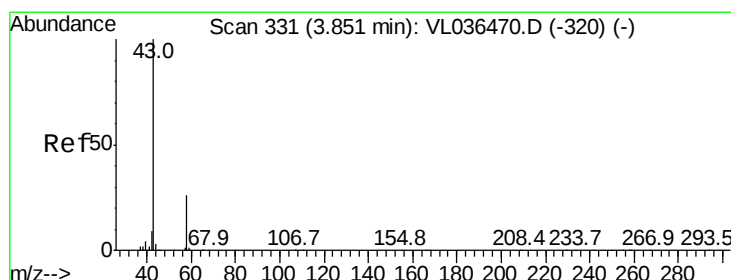
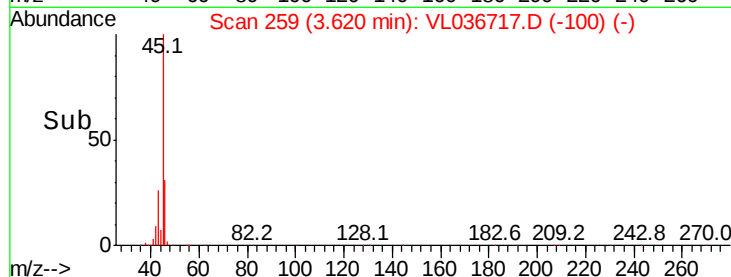
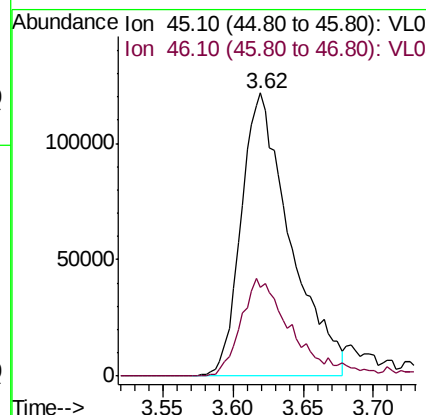
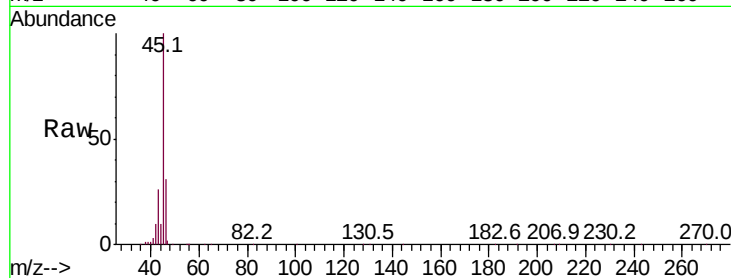
#13
Ethanol
Concen: 32.375 ppbv
RT: 3.62 min Scan# 259
Delta R.T. 0.01 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

Tot Ion	Ratio	Lower	Upper
45	100		
46	35.7	16.6	66.2

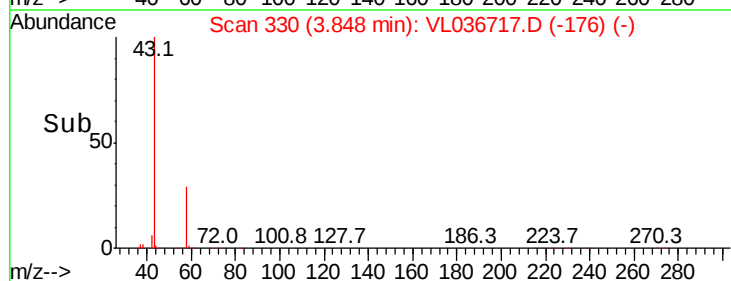
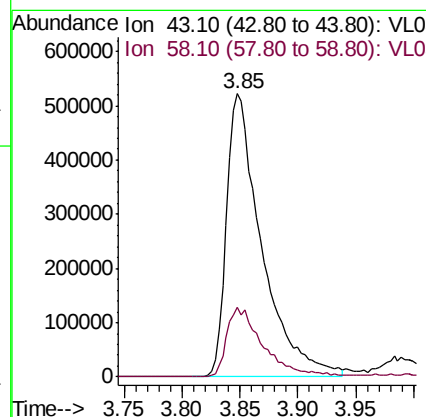
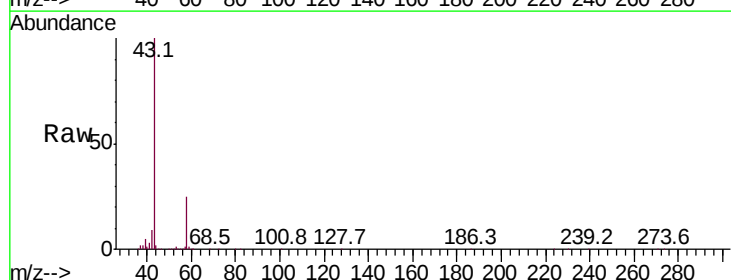
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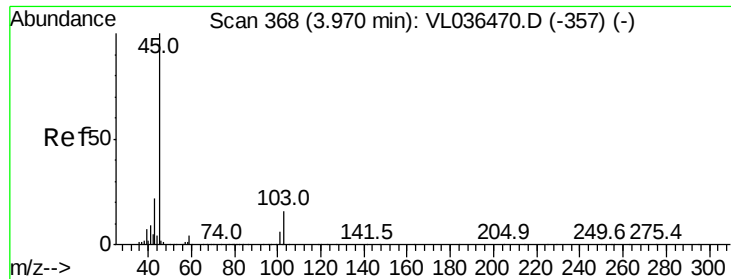
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#15
Acetone
Concen: 8.650 ppbv
RT: 3.85 min Scan# 330
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Tgt Ion	Ratio	Lower	Upper
43	100		
58	25.6	21.2	31.8





#19

Isopropyl Alcohol

Concen: 4.183 ppbv m

RT: 3.99 min Scan# 374

Delta R.T. 0.02 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion: 45 Resp: 291855

Ion Ratio Lower Upper

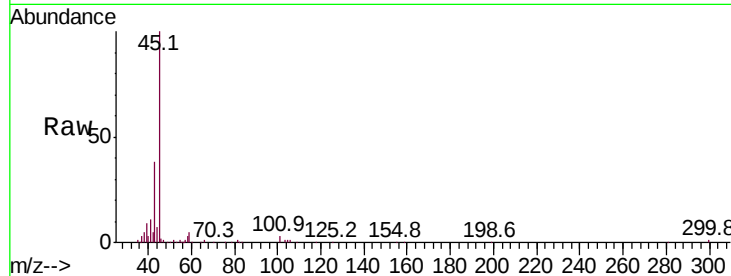
45 100

58 4.3 2.9 4.3#

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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.99

100000

80000

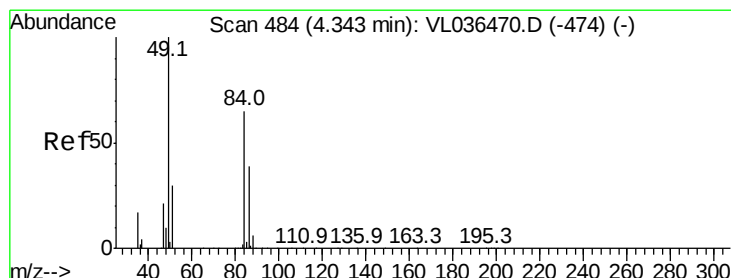
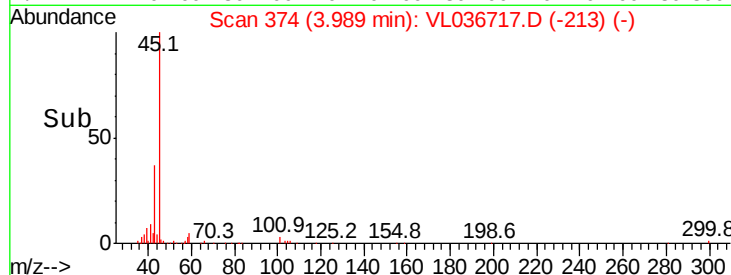
60000

40000

20000

0

Time-->



#20

Methylene Chloride

Concen: 17.019 ppbv

RT: 4.34 min Scan# 484

Delta R.T. -0.00 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Tgt Ion: 84 Resp: 1010762

Ion Ratio Lower Upper

84 100

49 170.3 122.9 184.3

51 52.4 36.9 55.3

86 63.2 48.2 72.4

Abundance Ion 84.00 (83.70 to 84.70): VL0

Ion 49.10 (48.80 to 49.80): VL0

Ion 51.10 (50.80 to 51.80): VL0

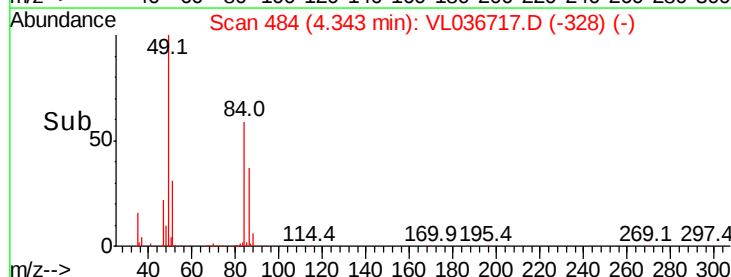
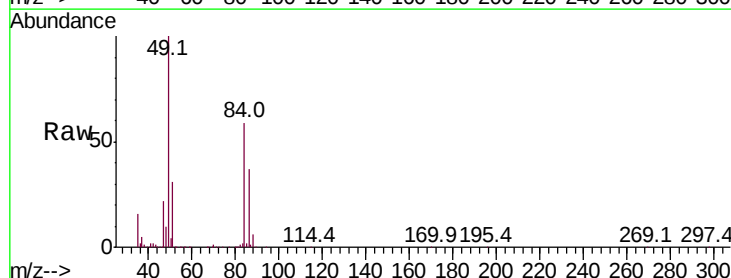
Ion 86.00 (85.70 to 86.70): VL0

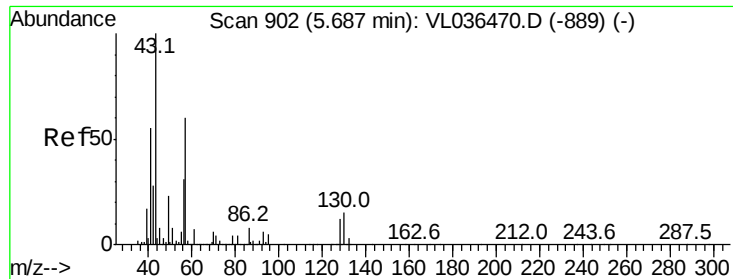
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Time-->





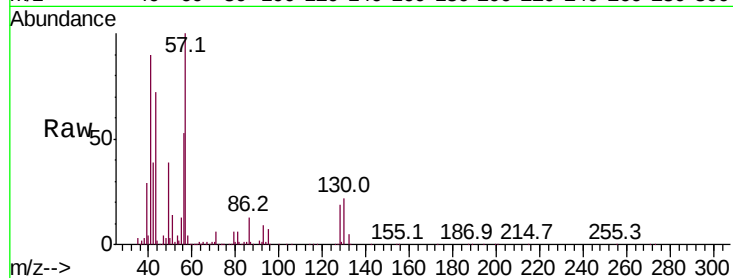
#26
Hexane
Concen: 7.949 ppbv
RT: 5.69 min Scan# 902
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	96.4	77.2	115.8
43	74.3	173.8	260.6#
56	56.0	43.8	65.6

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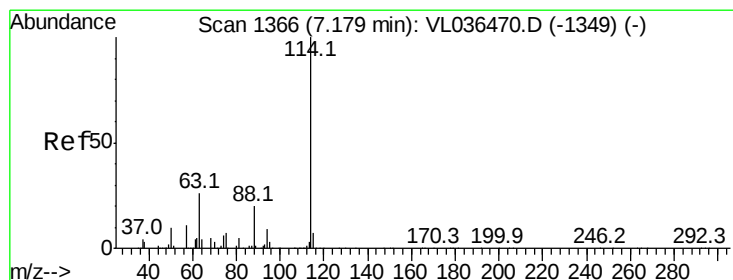
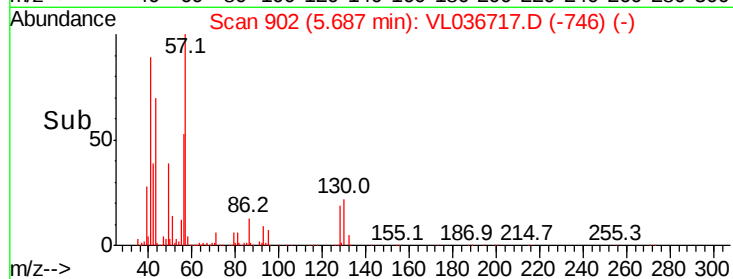
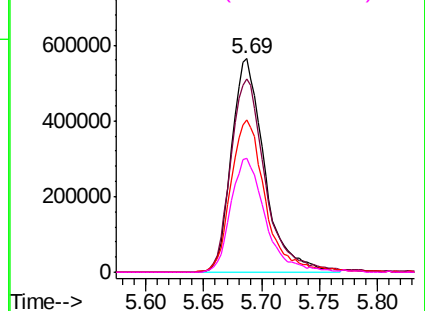
Abundance

Ion 57.10 (56.80 to 57.80): VL0

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



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.18 min Scan# 1365
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

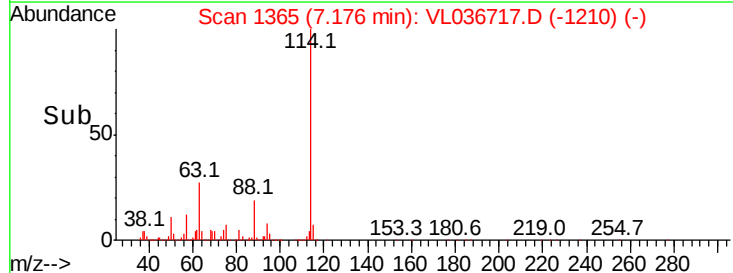
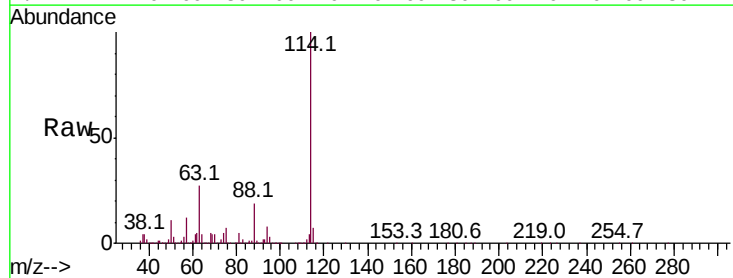
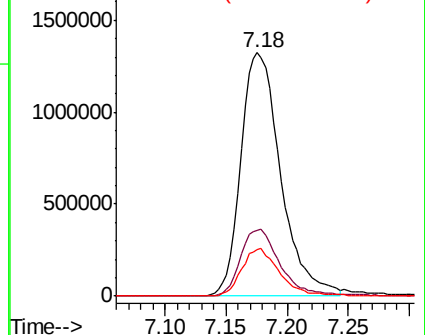
Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.5	22.4	33.6
88	18.9	15.4	23.0

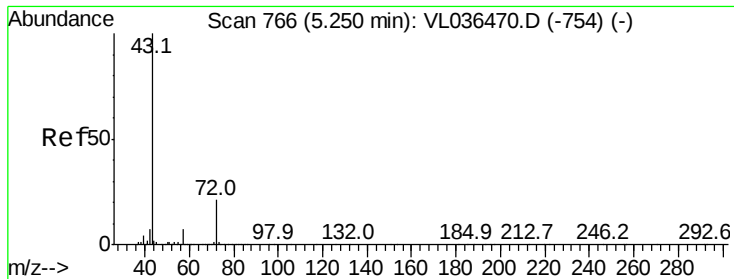
Abundance

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





#34

2-Butanone

Concen: 0.743 ppbv

RT: 5.25 min Scan# 766

Delta R.T. -0.00 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion: 43 Resp: 108302

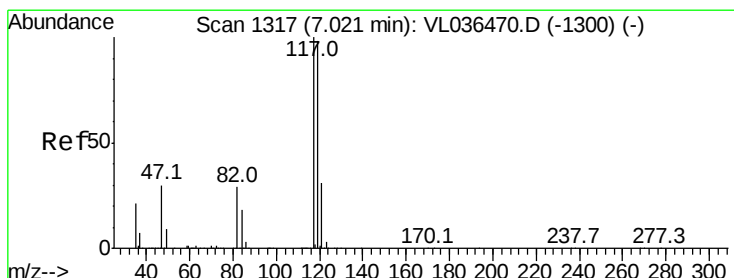
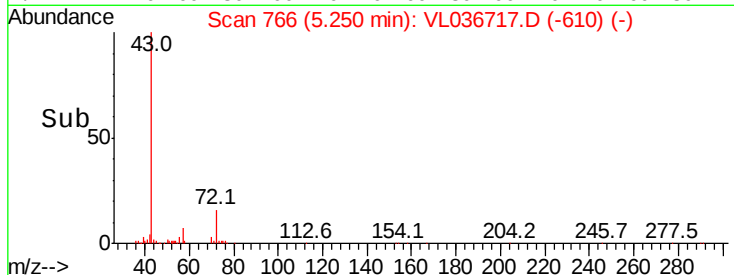
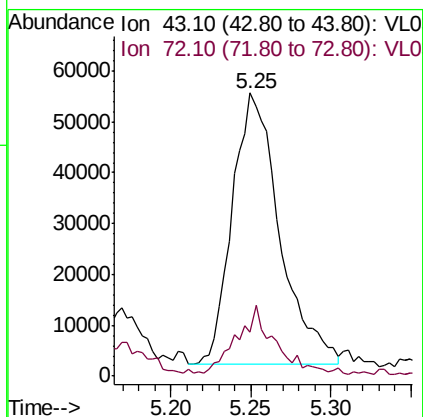
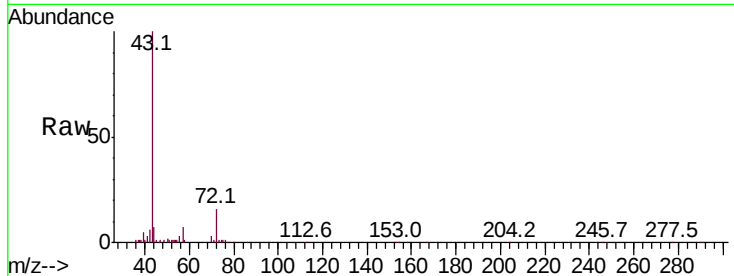
Ion Ratio Lower Upper

43 100

72 22.1 17.0 25.6

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#35

Carbon Tetrachloride

Concen: 0.059 ppbv m

RT: 7.02 min Scan# 1317

Delta R.T. -0.00 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

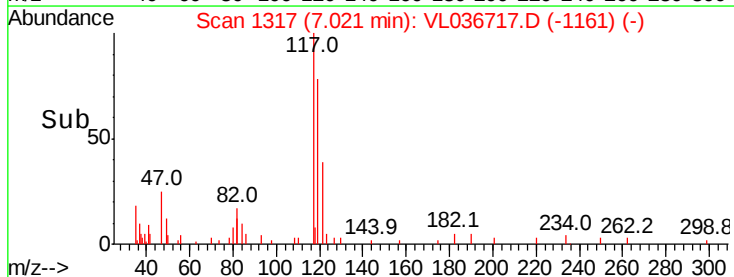
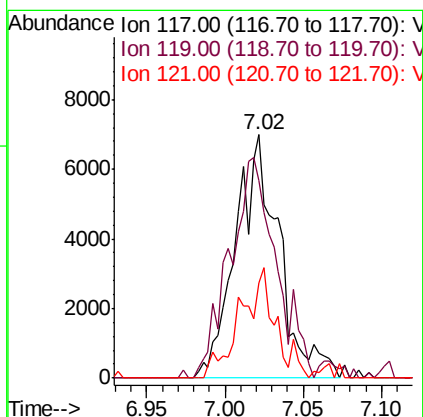
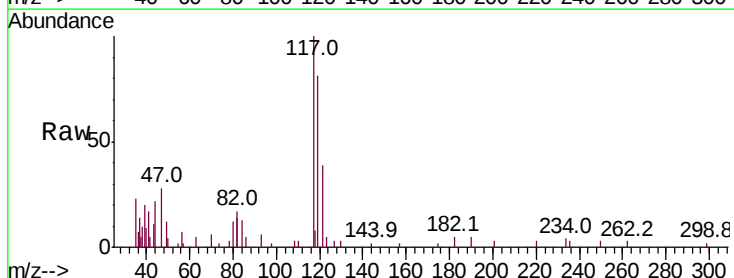
Tgt Ion: 117 Resp: 13537

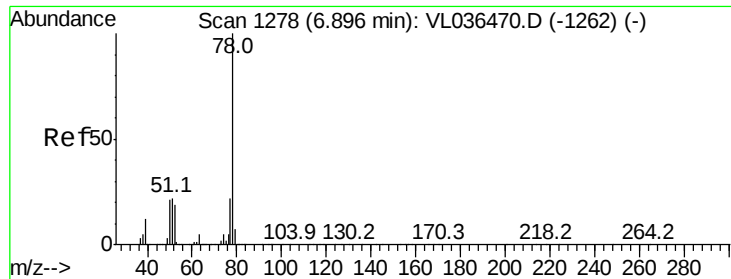
Ion Ratio Lower Upper

117 100

119 81.0 78.2 117.2

121 39.2 24.5 36.7#





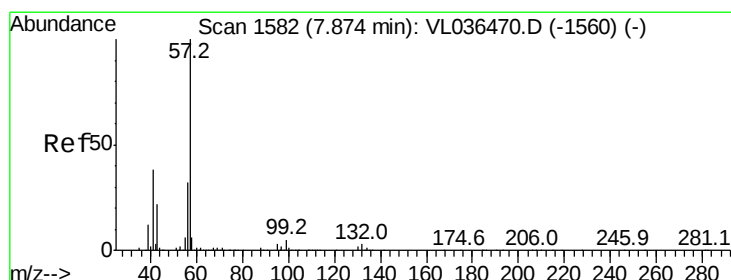
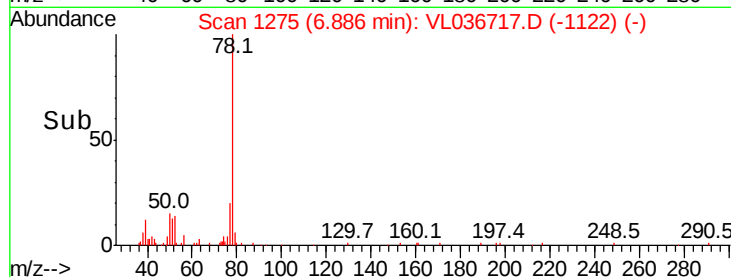
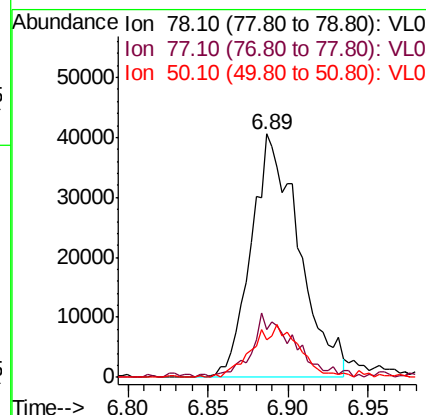
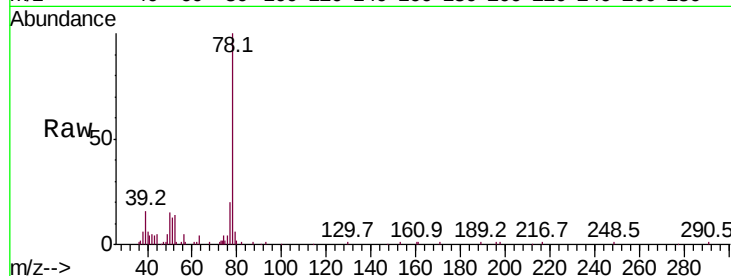
#36
Benzene
Concen: 0.308 ppbv m
RT: 6.89 min Scan# 1275
Delta R.T. -0.01 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

Tot Ion	Ratio	Lower	Upper
78	100		
77	19.5	18.0	27.0
50	15.2	16.5	24.7#

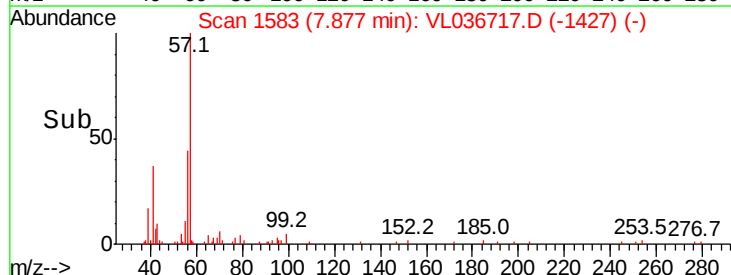
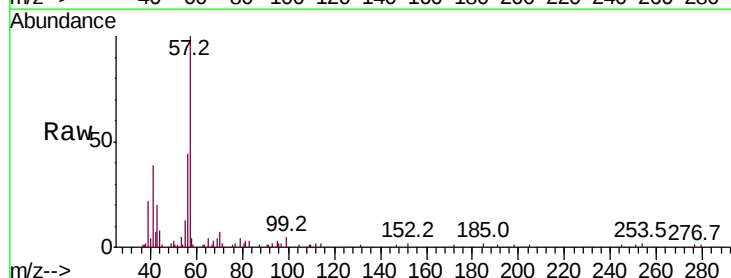
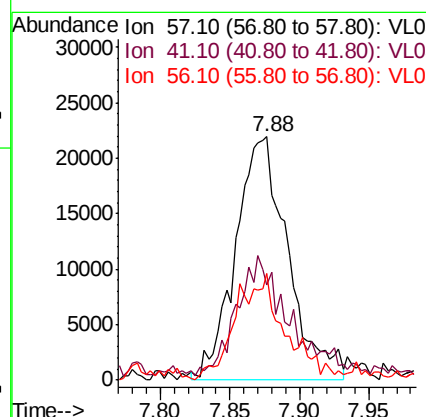
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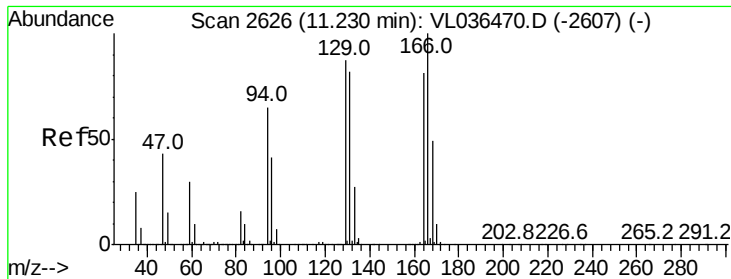
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#44
2,2,4-Trimethylpentane
Concen: 0.118 ppbv m
RT: 7.88 min Scan# 1583
Delta R.T. 0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Tgt Ion	Ratio	Lower	Upper
57	100		
41	53.9	28.8	43.2#
56	42.5	26.1	39.1#





#52

Tetrachloroethene

Concen: 0.075 ppbv m

RT: 11.22 min Scan# 2624

Delta R.T. -0.01 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion:164 Resp: 7579

Ion Ratio Lower Upper

164 100

166 88.3 98.3 147.5#

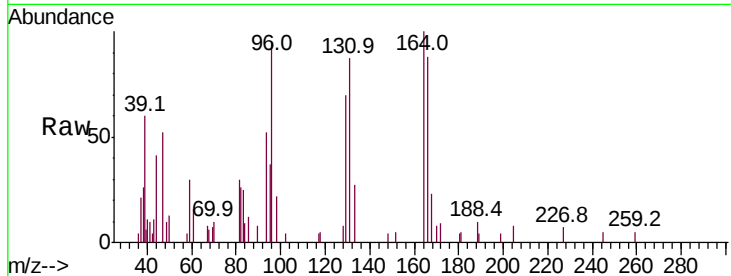
129 70.3 85.8 128.8#

131 86.9 80.9 121.3

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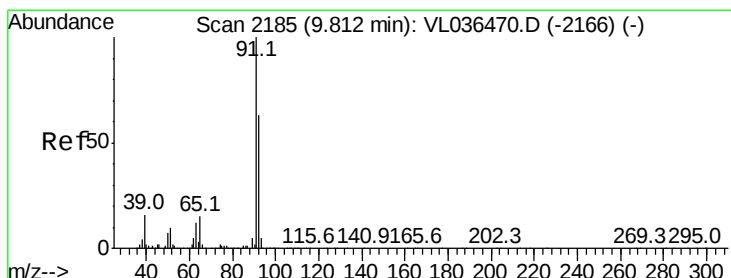
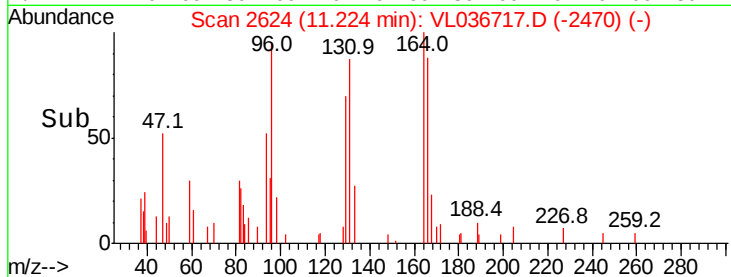
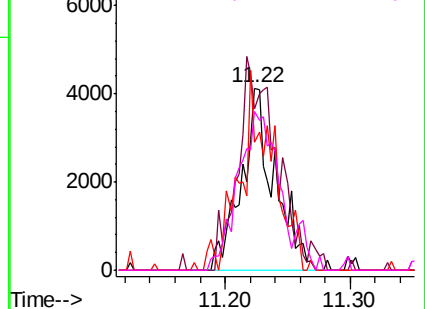


Abundance Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 1.543 ppbv

RT: 9.81 min Scan# 2184

Delta R.T. -0.00 min

Lab File: VL036717.D

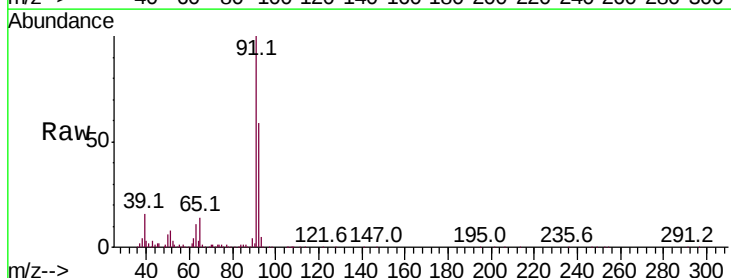
Acq: 7 Apr 2021 3:43

Tgt Ion: 91 Resp: 452414

Ion Ratio Lower Upper

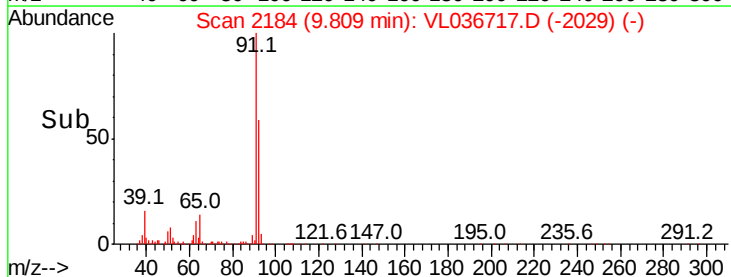
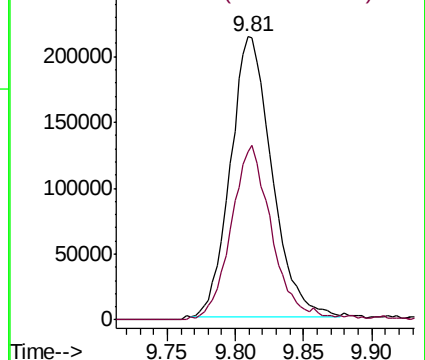
91 100

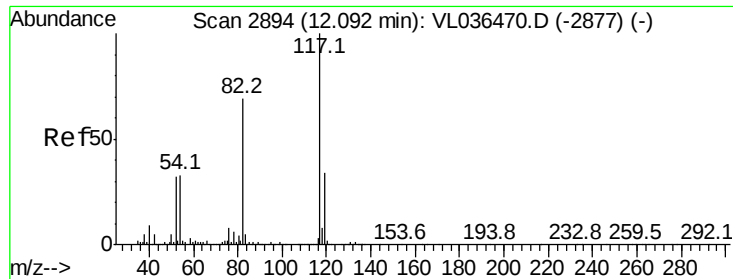
92 62.0 48.8 73.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.09 min Scan# 2893

Delta R.T. -0.00 min

Lab File: VL036717.D

Acq: 7 Apr 2021 3:43

Instrument :

MSVOA_L

ClientSampleId :

FS-OA-04DUP

Tot Ion:117 Resp: 2667283

Ion Ratio Lower Upper

117 100

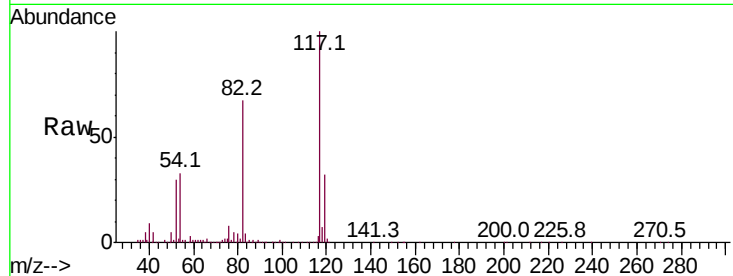
82 68.5 57.4 86.0

119 32.9 47.4 71.0#

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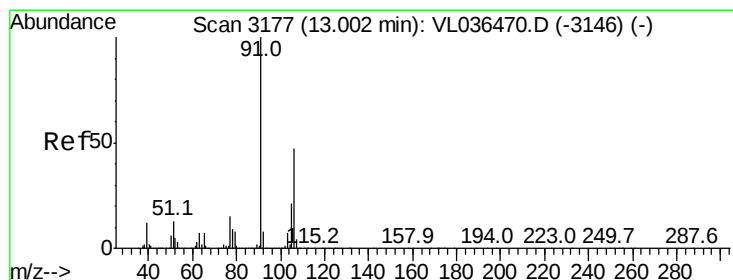
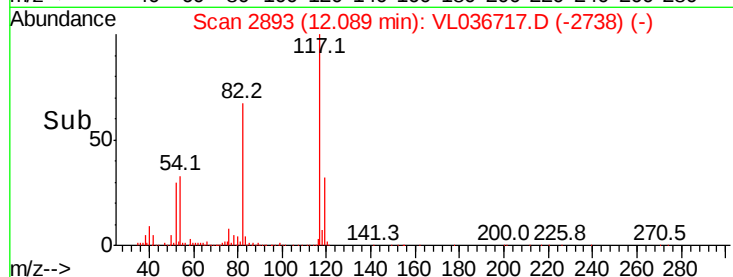
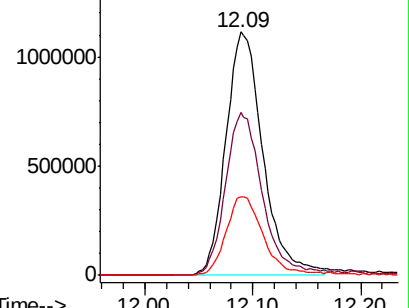
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Abundance Ion 117.10 (116.80 to 117.80): V

1500000 Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#59

m/p-Xylene

Concen: 0.233 ppbv m

RT: 12.97 min Scan# 3168

Delta R.T. -0.03 min

Lab File: VL036717.D

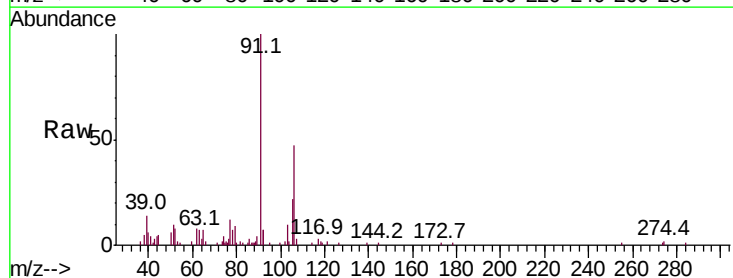
Acq: 7 Apr 2021 3:43

Tgt Ion: 91 Resp: 78849

Ion Ratio Lower Upper

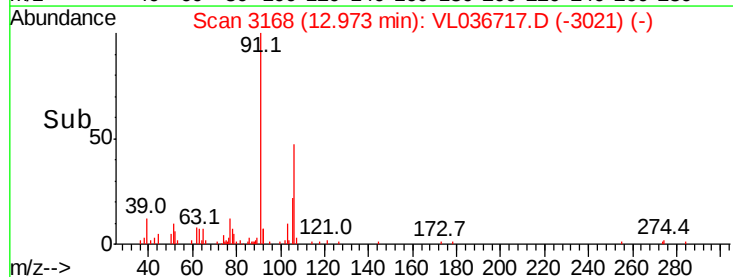
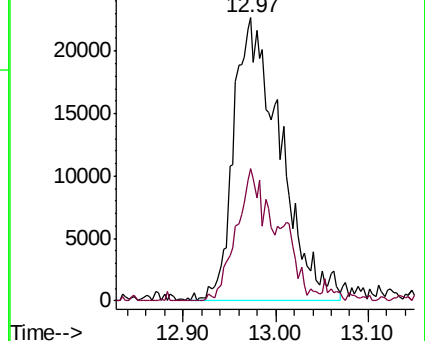
91 100

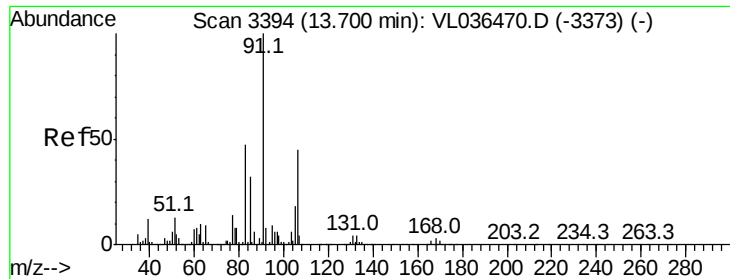
106 0.0 35.3 52.9#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





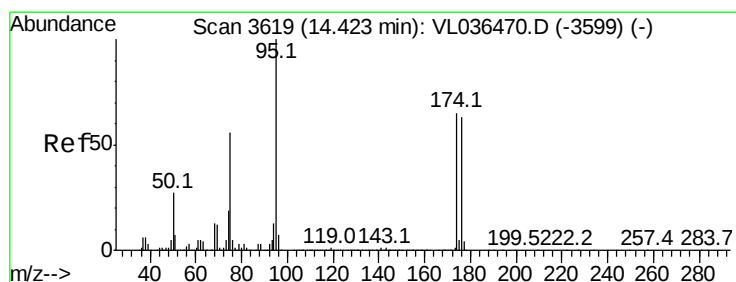
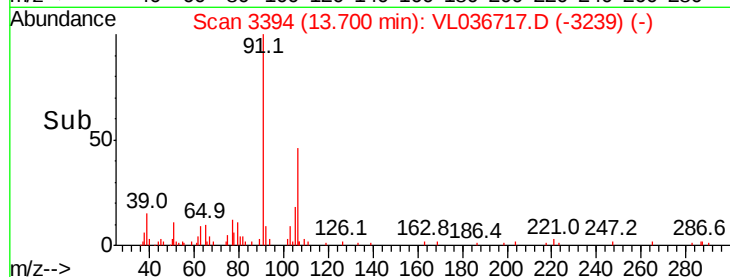
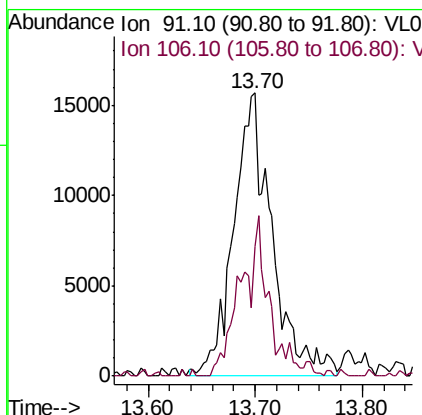
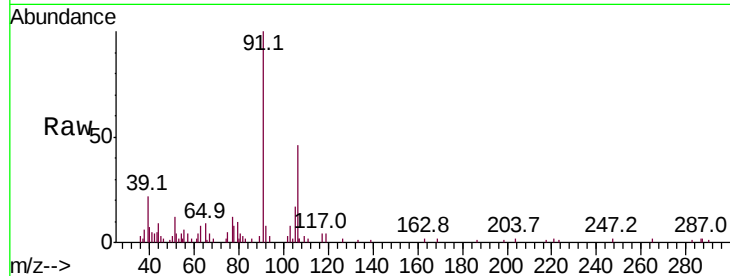
#60
o-Xylene
Concen: 0.118 ppbv m
RT: 13.70 min Scan# 3394
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Instrument :
MSVOA_L
ClientSampleId :
FS-OA-04DUP

Tot Ion: 91 Resp: 38755
Ion Ratio Lower Upper
91 100
106 42.7 22.3 66.9

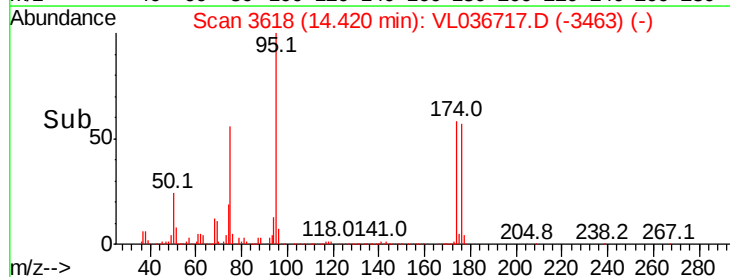
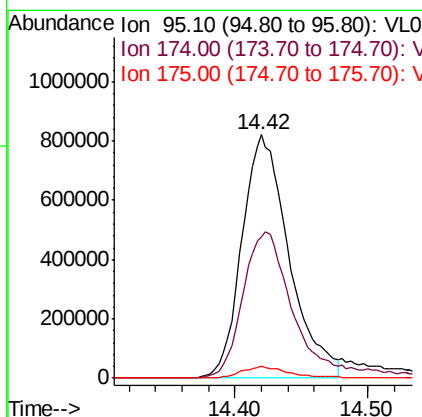
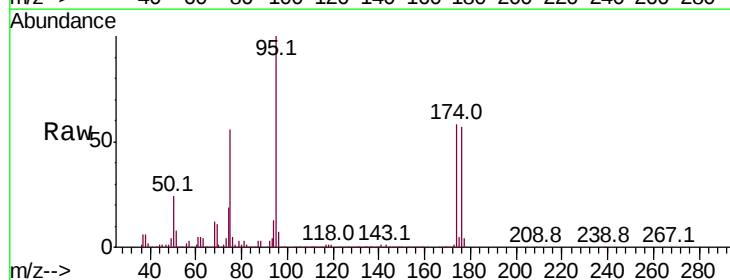
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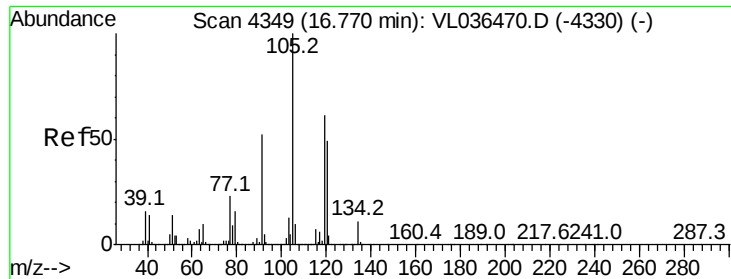
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.538 ppbv
RT: 14.42 min Scan# 3618
Delta R.T. -0.00 min
Lab File: VL036717.D
Acq: 7 Apr 2021 3:43

Tgt Ion: 95 Resp: 2027529
Ion Ratio Lower Upper
95 100
174 69.0 51.0 76.6
175 4.9 3.9 5.9





#74
 1,2,4-Trimethylbenzene
 Concen: 0.125 ppbv m
 RT: 16.77 min Scan# 4350
 Delta R.T. 0.00 min
 Lab File: VL036717.D
 Acq: 7 Apr 2021 3:43

Instrument :
 MSVOA_L
 ClientSampleId :
 FS-OA-04DUP

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	36.4	39.2	58.8#
91	21.5	42.6	64.0#
77	15.7	18.6	28.0#

Manual Integrations
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 4/12/2021 11:11:50 AM

