

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL032921\
 Data File : VL036547.D
 Acq On : 29 Mar 2021 20:11
 Operator : SY/AP
 Sample : M1760-11
 Misc : 400mL/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1-MAIN-ELECT-RM

Manual Integrations
 APPROVED

MMDadoda
 3/30/2021 7:44:18 PM

Quant Time: Mar 30 11:32:41 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 09:42:40 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	5.65	49	1576267	10.00	ppbv	-0.02
33) 1,4-Difluorobenzene	7.16	114	3505323	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.07	117	3097310	10.00	ppbv	-0.02

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.40	95	2596365	10.52	ppbv	-0.02	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.20%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.04	85	57314	0.223	ppbv	90
3) Chlorodifluoromethane	2.98	51	83024m	0.282	ppbv	
4) Chloromethane	3.13	50	47848	0.460	ppbv #	75
9) Propene	3.01	41	102385m	1.091	ppbv	
11) Trichlorofluoromethane	3.94	101	51228m	0.196	ppbv	
13) Ethanol	3.59	45	1262574	112.928	ppbv	96
15) Acetone	3.84	43	1065130m	6.866	ppbv	
19) Isopropyl Alcohol	3.97	45	441259	5.170	ppbv #	91
20) Methylene Chloride	4.33	84	231051	3.181	ppbv	92
26) Hexane	5.67	57	847144	4.949	ppbv #	49
30) Cyclohexane	7.11	84	42438m	0.306	ppbv	
34) 2-Butanone	5.24	43	163228	0.954	ppbv	96
35) Carbon Tetrachloride	6.99	117	14902m	0.055	ppbv	
36) Benzene	6.88	78	110549	0.342	ppbv #	92
41) Tetrahydrofuran	6.05	42	35132m	0.445	ppbv	
44) 2,2,4-Trimethylpentane	7.85	57	70721m	0.124	ppbv	
53) Toluene	9.79	91	487573	1.416	ppbv	100
58) Ethyl Benzene	12.69	91	70709m	0.157	ppbv	
59) m/p-Xylene	12.96	91	263021m	0.669	ppbv	
60) o-Xylene	13.68	91	110912m	0.292	ppbv	
61) Styrene	13.52	104	1269284	6.639	ppbv	97

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

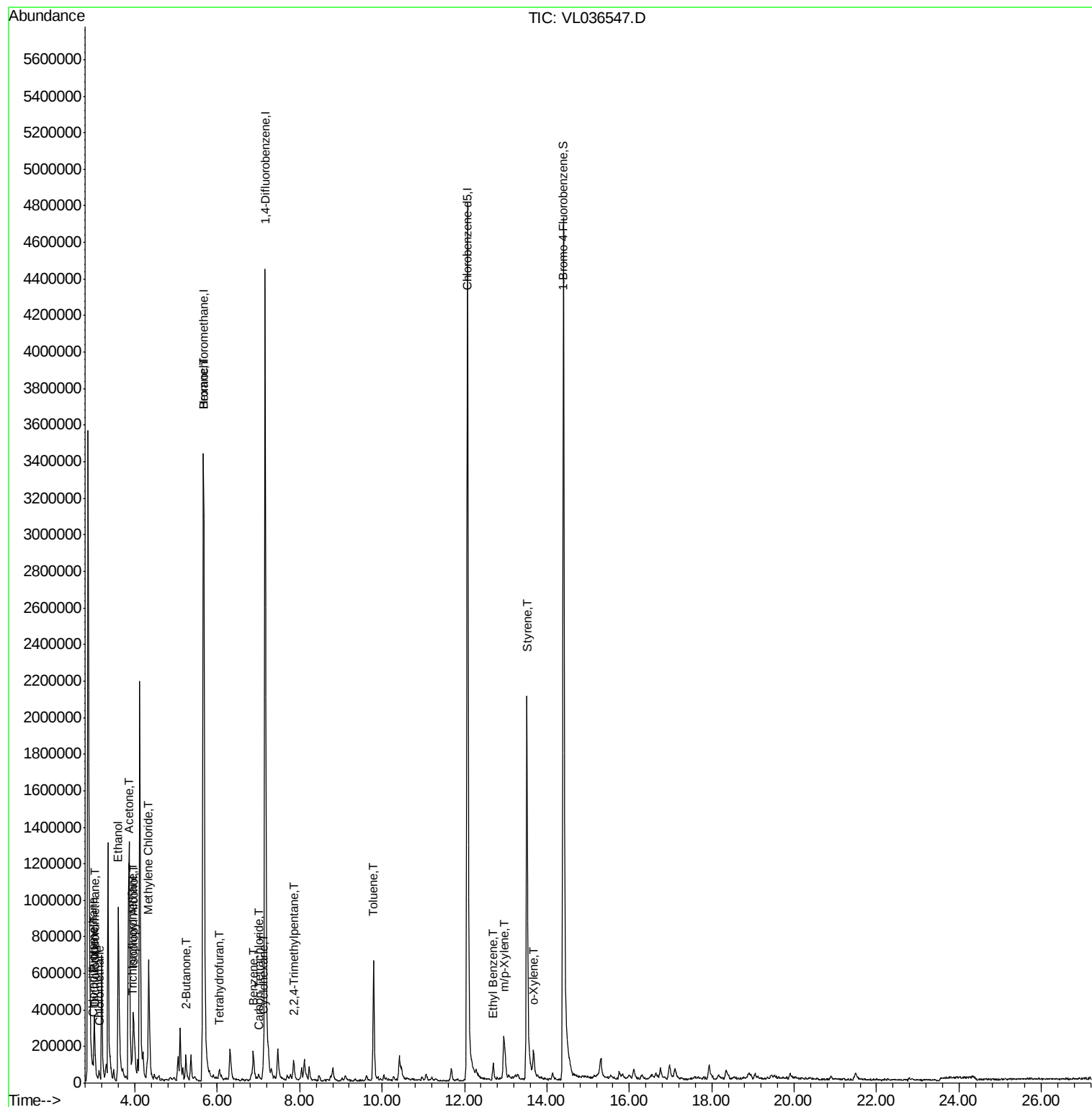
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL032921\
Data File : VL036547.D
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Operator : SY/AP
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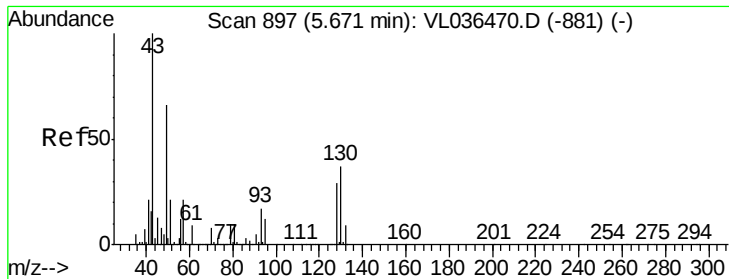
Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Manual Integrations
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Quant Time: Mar 30 11:32:41 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: 5.65 min Scan# 892

Delta R.T. -0.02 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Instrument :

MSVOA_L

ClientSampleId :

IAS-1-MAIN-ELECT-RM

Tot Ion: 49 Resp: 1576267

Ion Ratio Lower Upper

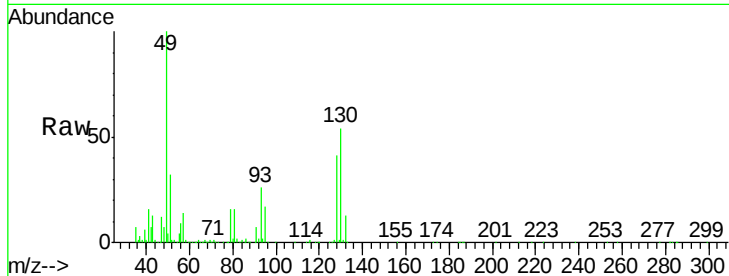
49 100

128 43.5 23.5 70.6

130 56.1 29.1 87.4

Manual Integrations
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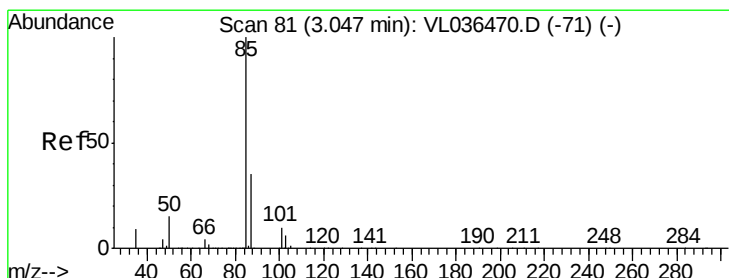
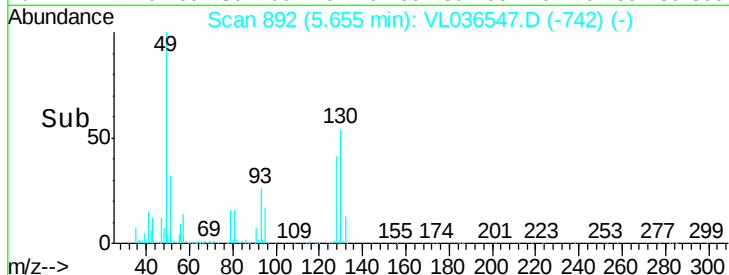
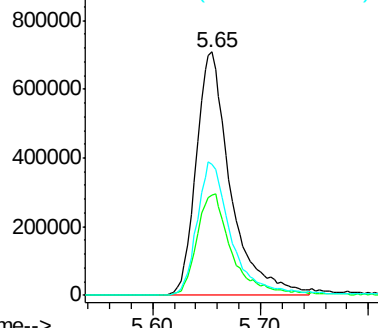
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Abundance Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): VL0

Ion 130.00 (129.70 to 130.70): VL0



#2

Dichlorodifluoromethane

Concen: 0.223 ppbv

RT: 3.04 min Scan# 79

Delta R.T. -0.01 min

Lab File: VL036547.D

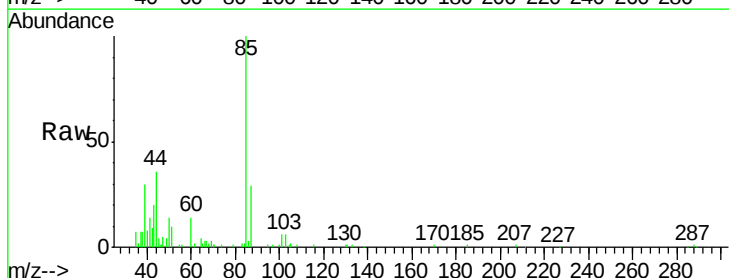
Acq: 29 Mar 2021 20:11

Tgt Ion: 85 Resp: 57314

Ion Ratio Lower Upper

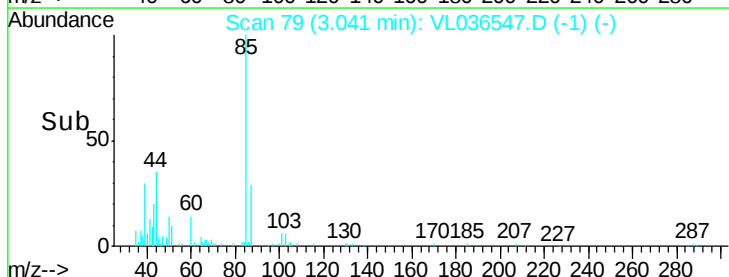
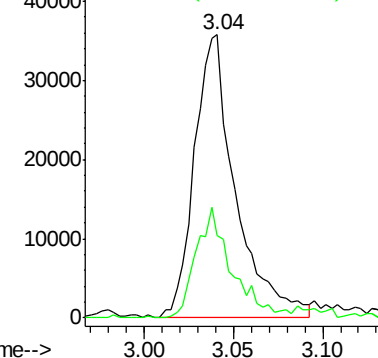
85 100

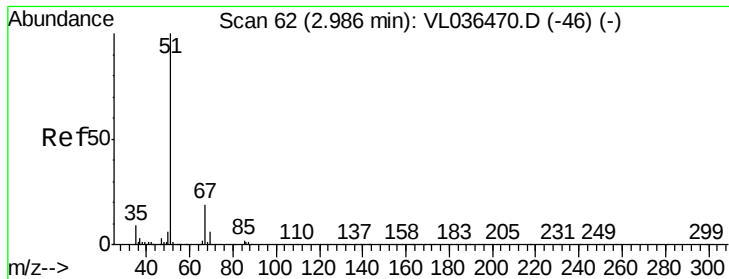
87 29.0 27.8 41.8



Abundance Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

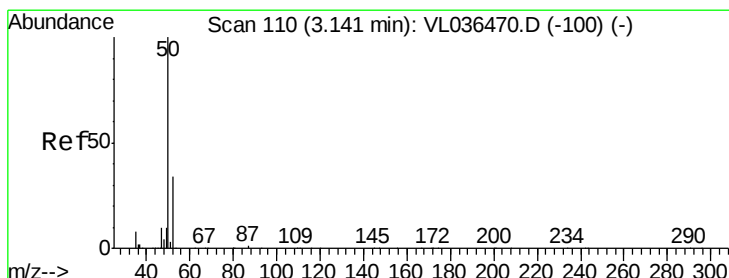
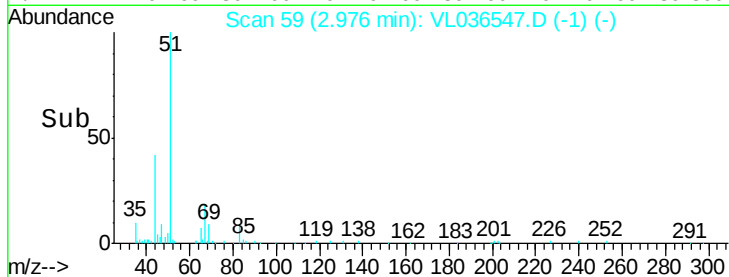
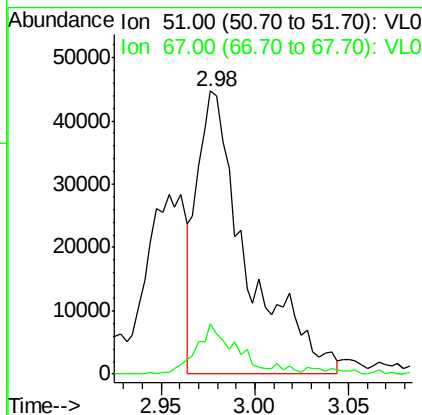
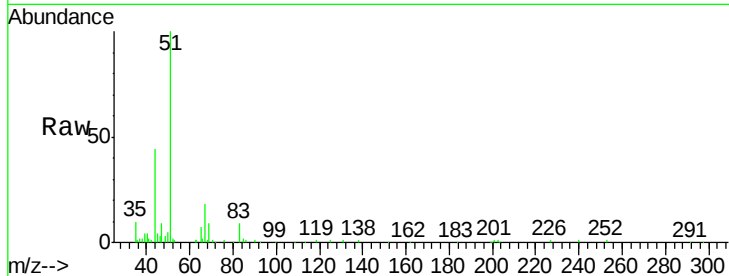
Chlorodifluoromethane
 Concen: 0.282 ppbv
 RT: 2.98 min Scan# 59
 Delta R.T. -0.01 min
 Lab File: VL036547.D
 Acq: 29 Mar 2021 20:11

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1-MAIN-ELECT-RM

Tot Ion	Ratio	Lower	Upper
51	100		
67	16.7	14.7	22.1

Manual Integrations
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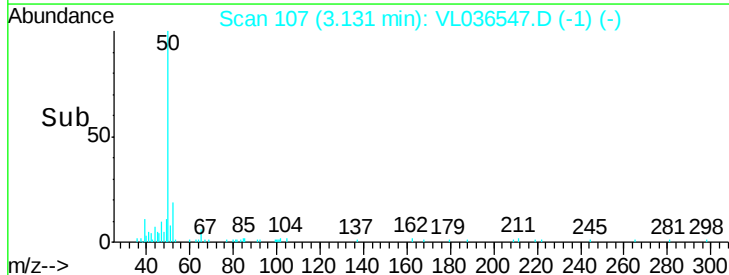
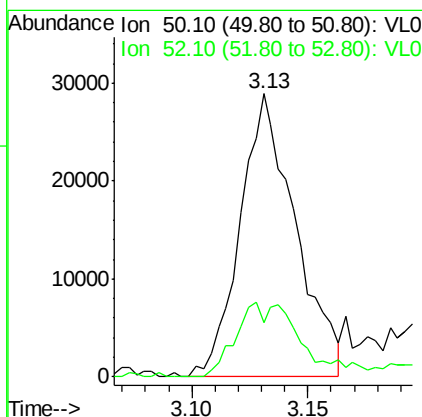
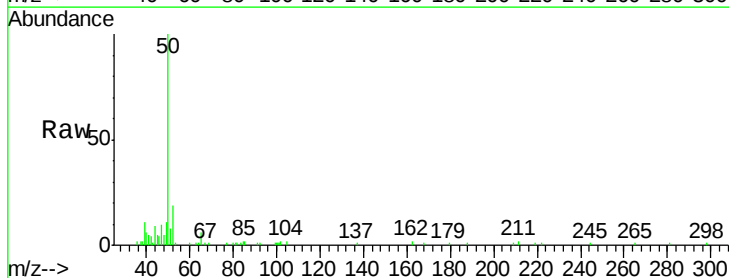
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#4

Chloromethane
 Concen: 0.460 ppbv
 RT: 3.13 min Scan# 107
 Delta R.T. -0.01 min
 Lab File: VL036547.D
 Acq: 29 Mar 2021 20:11

Tgt Ion	Ratio	Lower	Upper
50	100		
52	19.4	27.0	40.6





#9

Propene

Concen: 1.091 ppbv m

RT: 3.01 min Scan# 69

Delta R.T. -0.00 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Instrument :

MSVOA_L

ClientSampleId :

IAS-1-MAIN-ELECT-RM

Tot Ion: 41 Resp: 102385

Ion Ratio Lower Upper

41 100

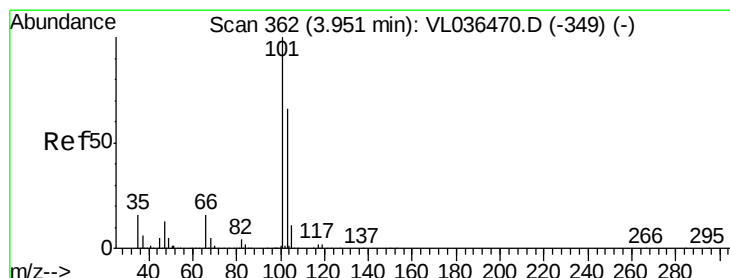
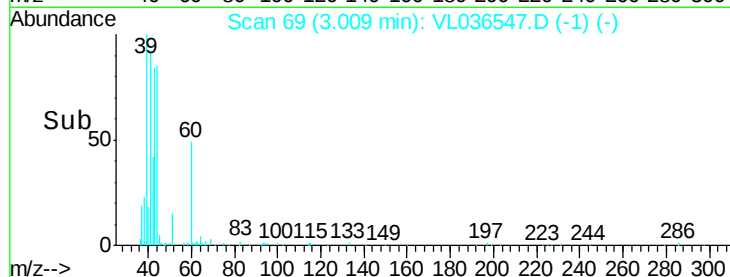
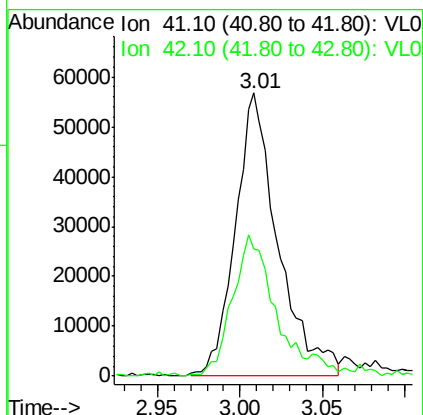
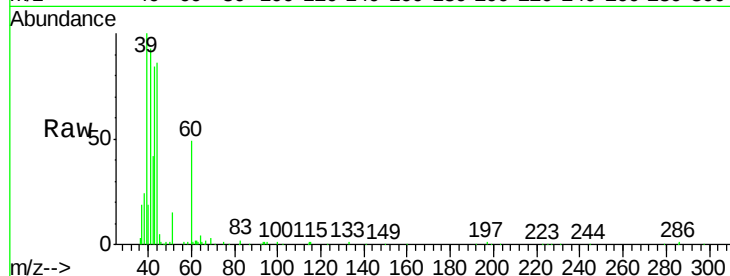
42 150.9 57.0 85.4#

Manual Integrations

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#11

Trichlorofluoromethane

Concen: 0.196 ppbv m

RT: 3.94 min Scan# 358

Delta R.T. -0.01 min

Lab File: VL036547.D

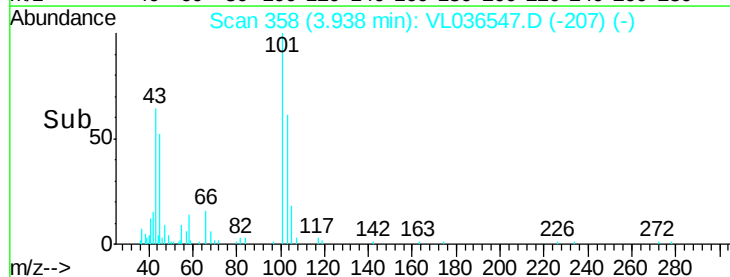
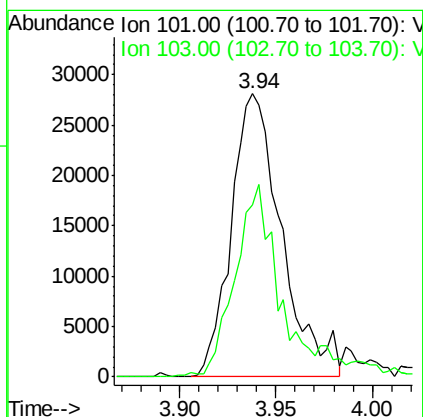
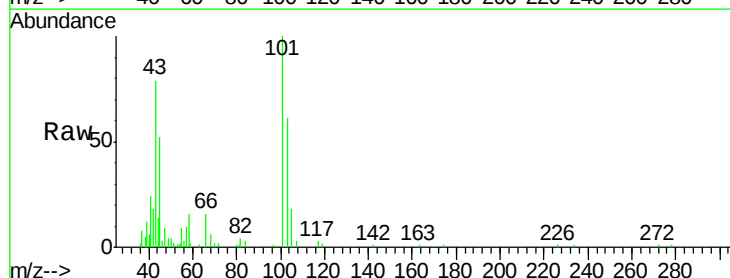
Acq: 29 Mar 2021 20:11

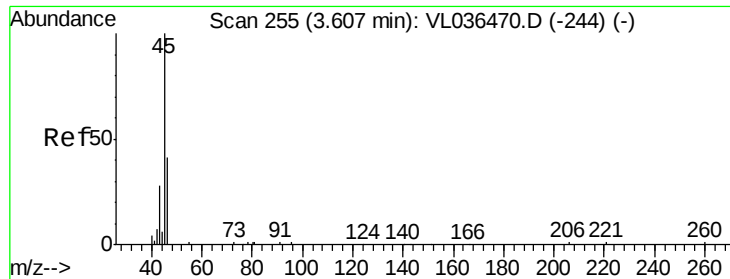
Tgt Ion: 101 Resp: 51228

Ion Ratio Lower Upper

101 100

103 60.6 52.5 78.7





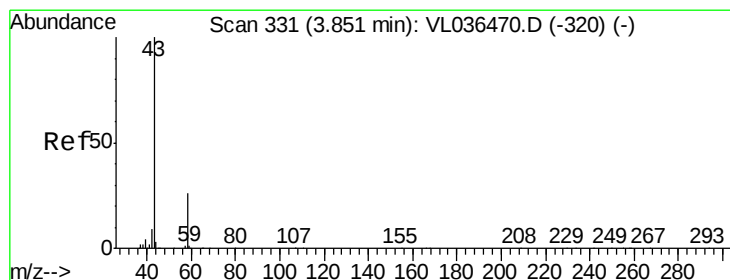
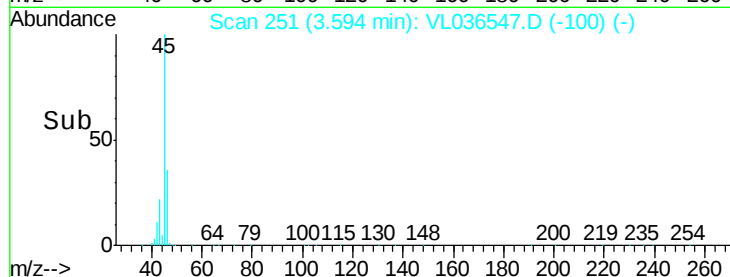
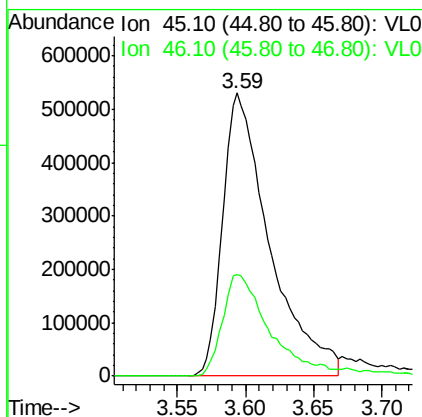
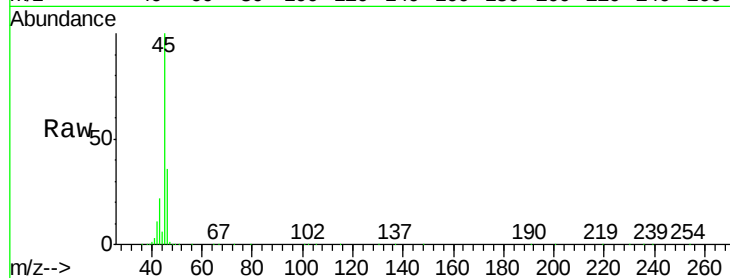
#13
Ethanol
Concen: 112.928 ppbv
RT: 3.59 min Scan# 251
Delta R.T. -0.01 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Tot Ion: 45 Resp: 1262574
Ion Ratio Lower Upper
45 100
46 38.9 16.6 66.2

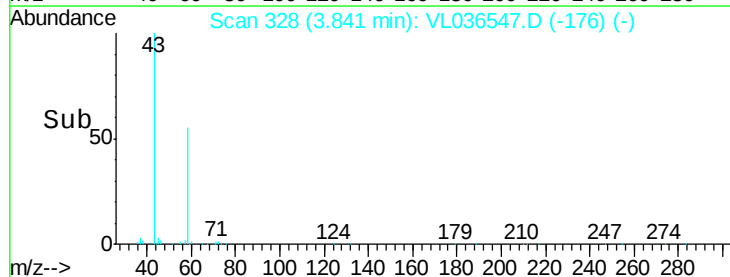
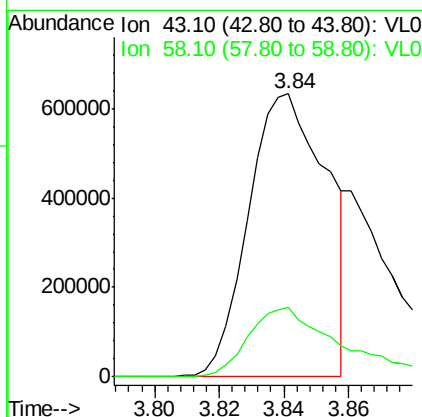
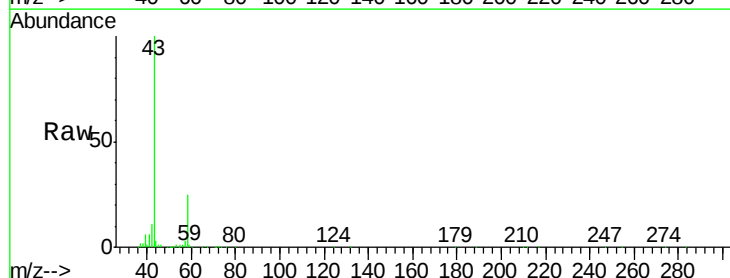
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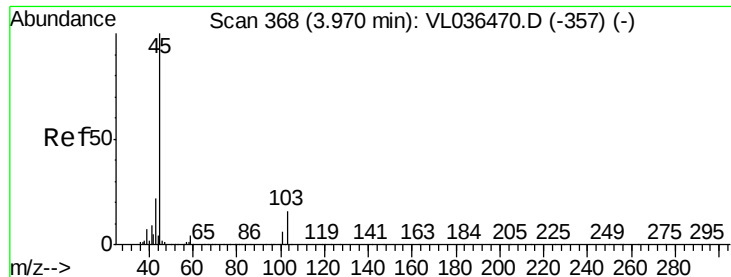
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#15
Acetone
Concen: 6.866 ppbv m
RT: 3.84 min Scan# 328
Delta R.T. -0.01 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Tgt Ion: 43 Resp: 1065130
Ion Ratio Lower Upper
43 100
58 30.8 21.2 31.8





#19

Isopropyl Alcohol

Concen: 5.170 ppbv

RT: 3.97 min Scan# 367

Delta R.T. -0.00 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Instrument :

MSVOA_L

ClientSampleId :

IAS-1-MAIN-ELECT-RM

Tot Ion: 45 Resp: 441259

Ion Ratio Lower Upper

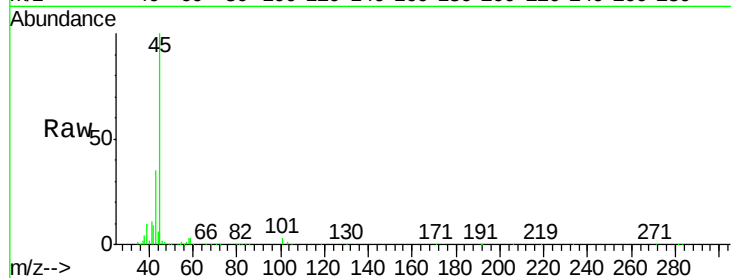
45 100

58 6.7 2.9 4.3#

Manual Integrations
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Abundance Ion 45.10 (44.80 to 45.80): VL0

Ion 58.10 (57.80 to 58.80): VL0

3.97

200000

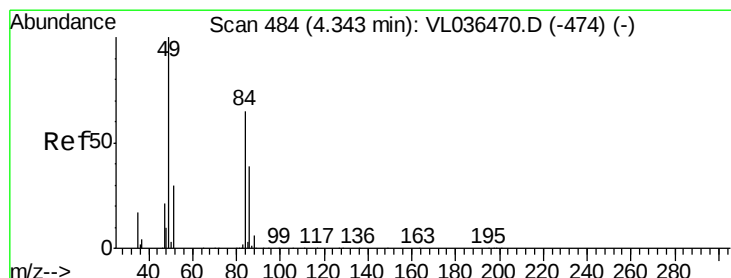
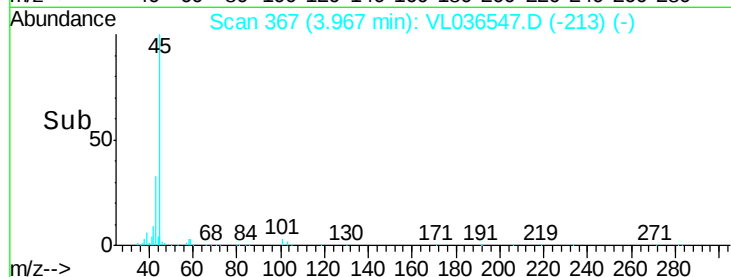
150000

100000

50000

0

Time-->



#20

Methylene Chloride

Concen: 3.181 ppbv

RT: 4.33 min Scan# 481

Delta R.T. -0.01 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Tgt Ion: 84 Resp: 231051

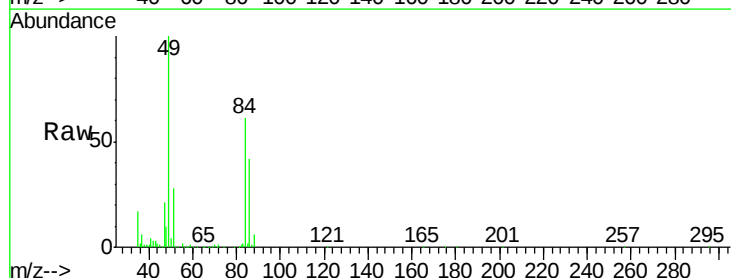
Ion Ratio Lower Upper

84 100

49 164.7 122.9 184.3

51 44.5 36.9 55.3

86 69.4 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

300000

250000

200000

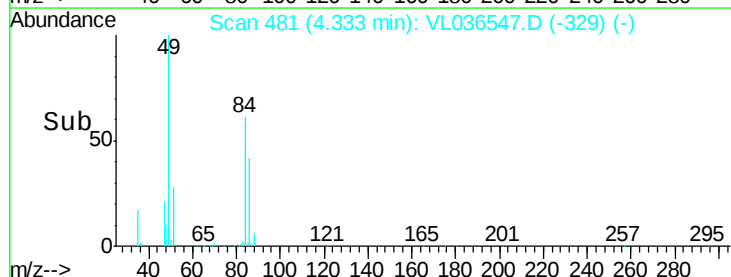
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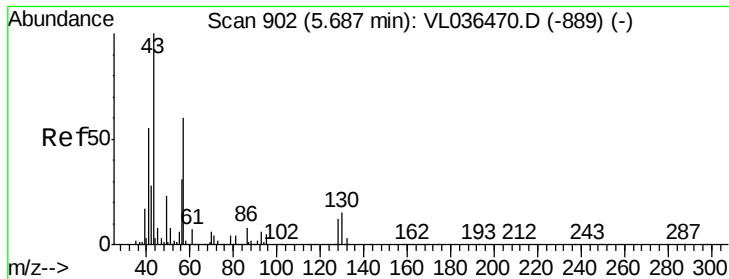
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Time-->





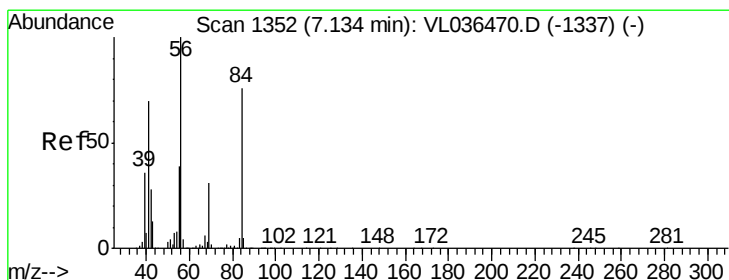
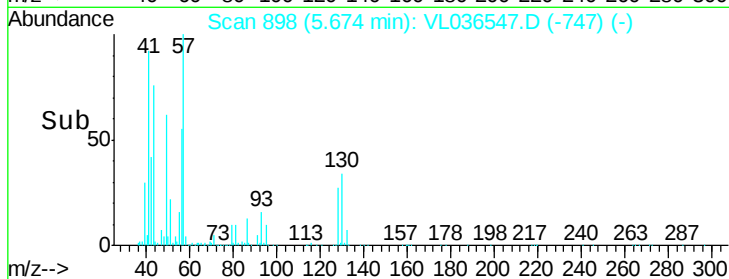
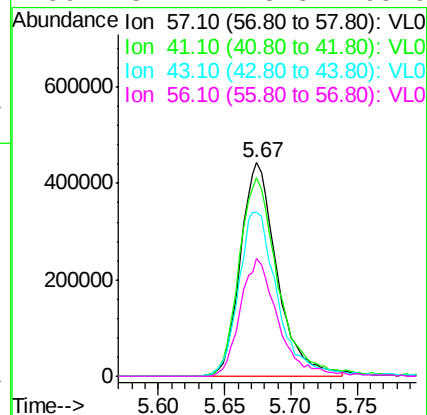
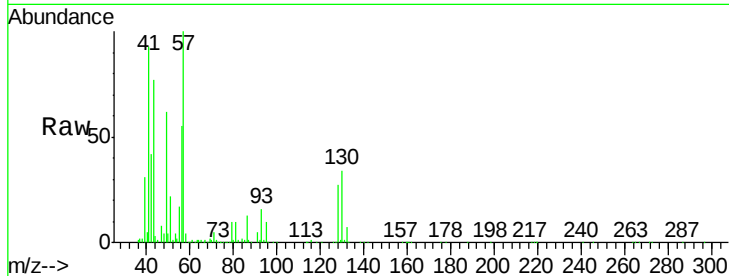
#26
Hexane
Concen: 4.949 ppbv
RT: 5.67 min Scan# 898
Delta R.T. -0.01 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Tot Ion	57	Resp	847144
Ion	Ratio	Lower	Upper
57	100		
41	99.9	77.2	115.8
43	83.6	173.8	260.6#
56	57.4	43.8	65.6

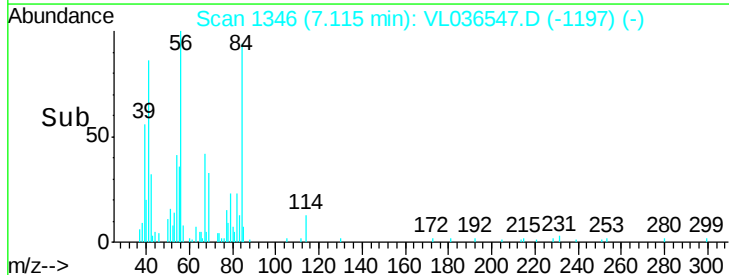
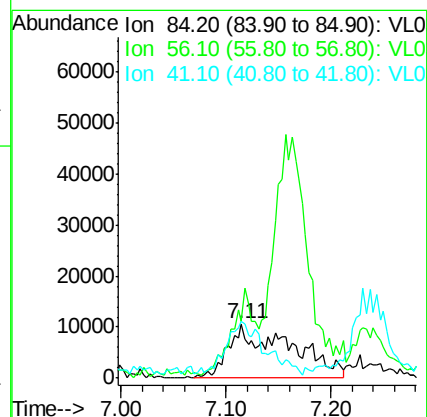
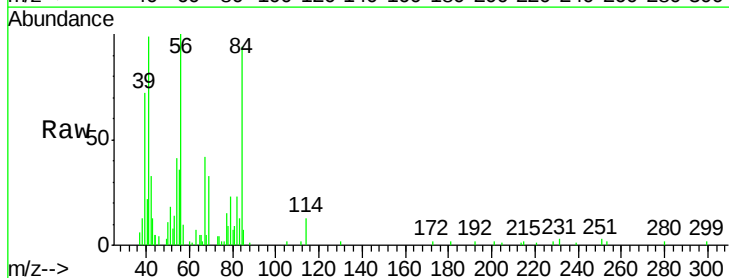
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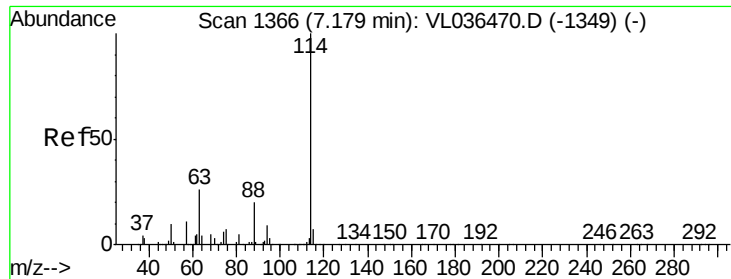
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#30
Cyclohexane
Concen: 0.306 ppbv m
RT: 7.11 min Scan# 1346
Delta R.T. -0.02 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Tgt Ion	84	Resp	42438
Ion	Ratio	Lower	Upper
84	100		
56	0.0	114.6	171.8#
41	70.3	75.3	112.9#





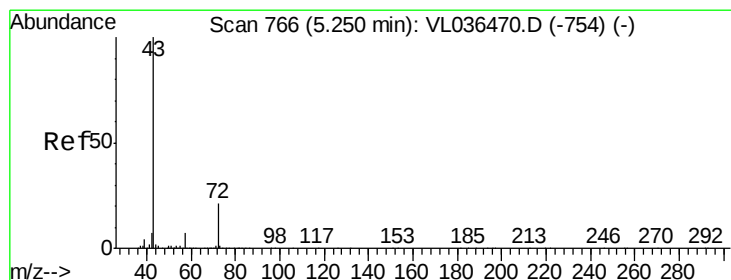
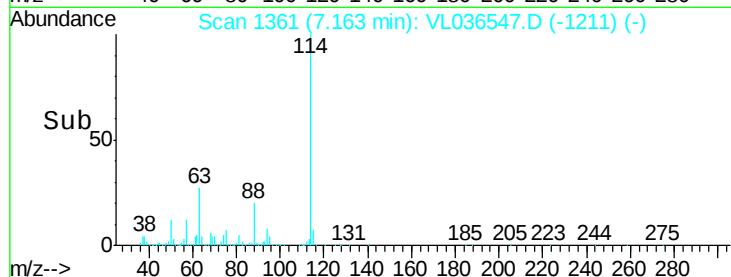
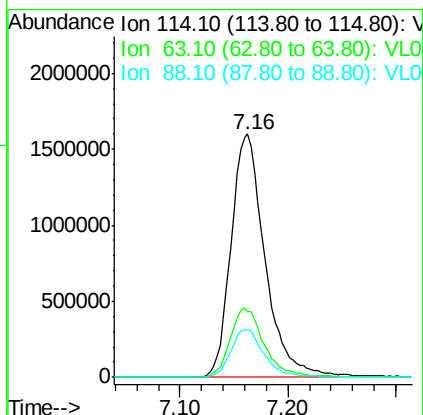
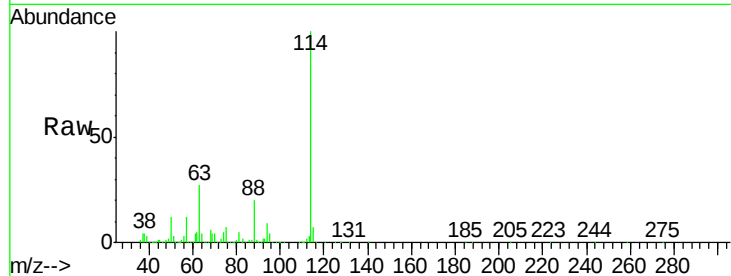
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.16 min Scan# 1361
 Delta R.T. -0.02 min
 Lab File: VL036547.D
 Acq: 29 Mar 2021 20:11

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1-MAIN-ELECT-RM

Tot Ion	Ratio	Lower	Upper
114	100		
63	28.7	22.4	33.6
88	19.7	15.4	23.0

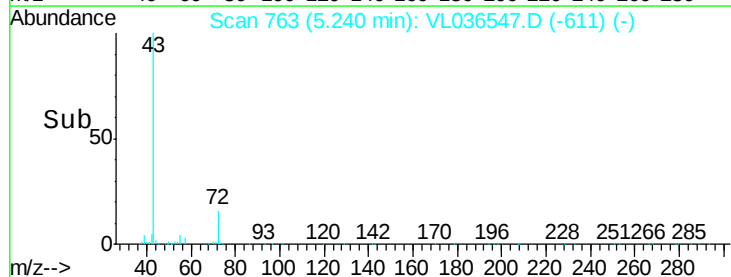
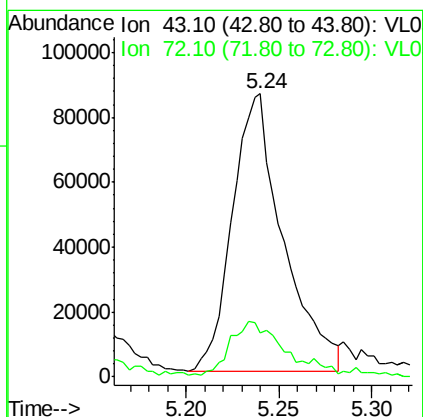
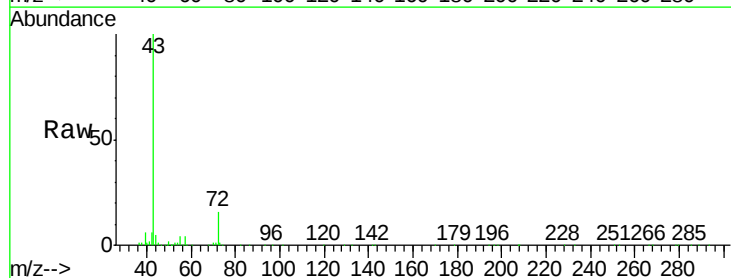
Manual Integrations
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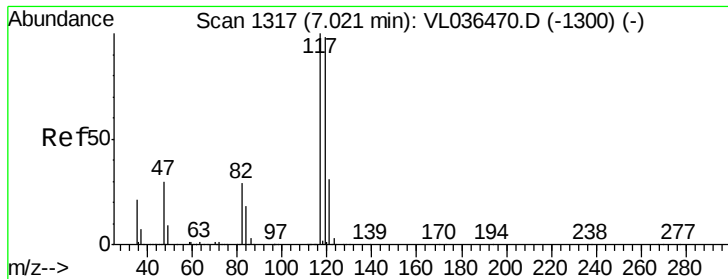
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 3/30/2021 7:44:18 PM



#34
 2-Butanone
 Concen: 0.954 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. -0.01 min
 Lab File: VL036547.D
 Acq: 29 Mar 2021 20:11

Tgt Ion	Ratio	Lower	Upper
43	100		
72	23.3	17.0	25.6





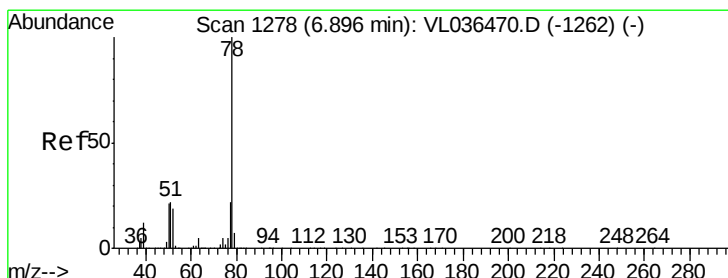
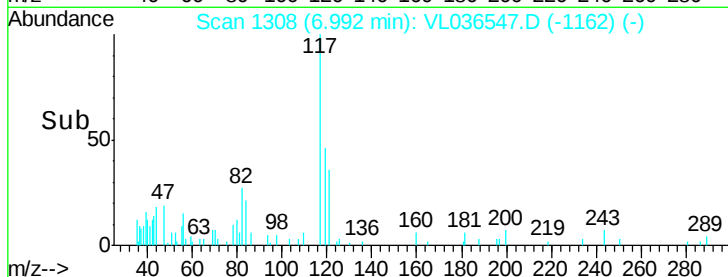
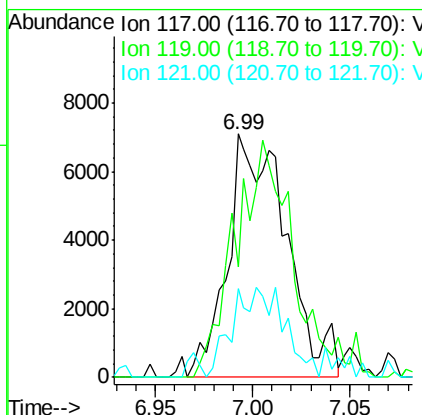
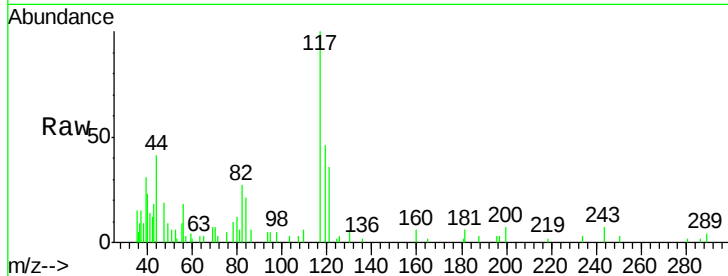
#35
Carbon Tetrachloride
Concen: 0.055 ppbv m
RT: 6.99 min Scan# 1308
Delta R.T. -0.03 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Tot Ion	Ratio	Lower	Upper
117	100		
119	45.6	78.2	117.2#
121	36.2	24.5	36.7

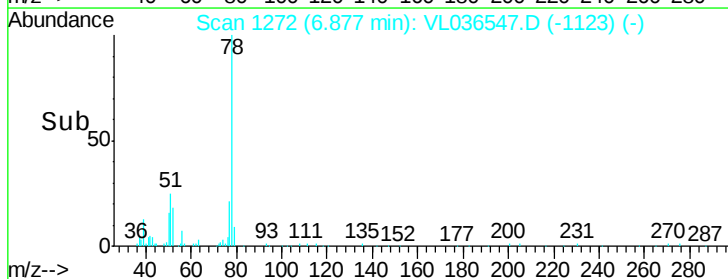
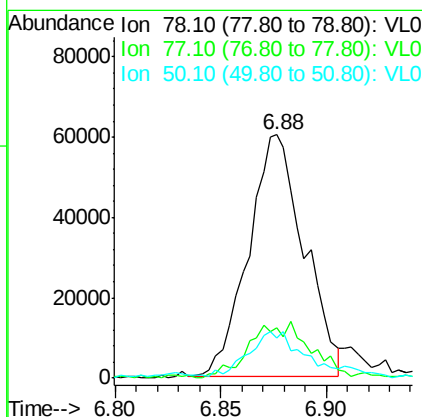
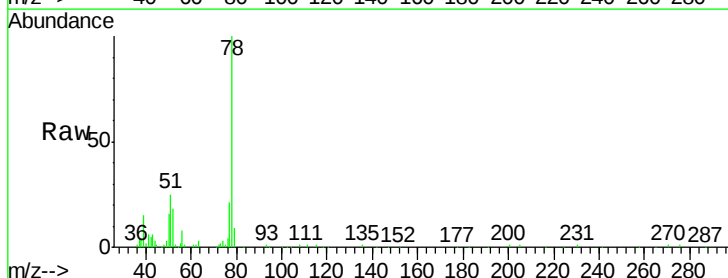
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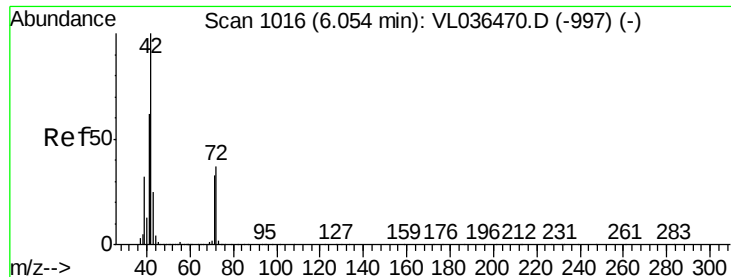
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#36
Benzene
Concen: 0.342 ppbv
RT: 6.88 min Scan# 1272
Delta R.T. -0.02 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Tgt Ion	Ratio	Lower	Upper
78	100		
77	20.2	18.0	27.0
50	15.3	16.5	24.7#





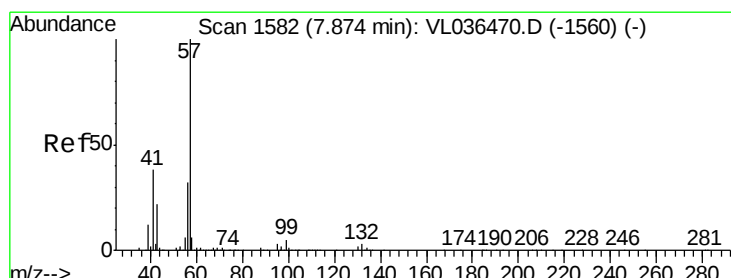
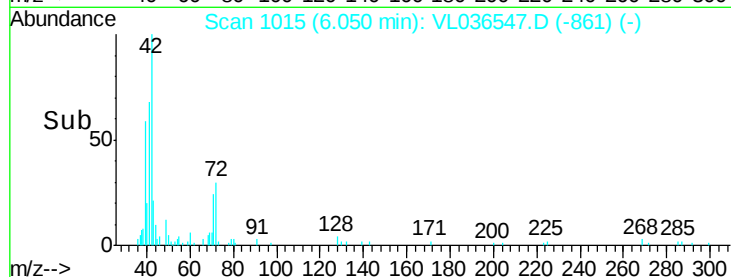
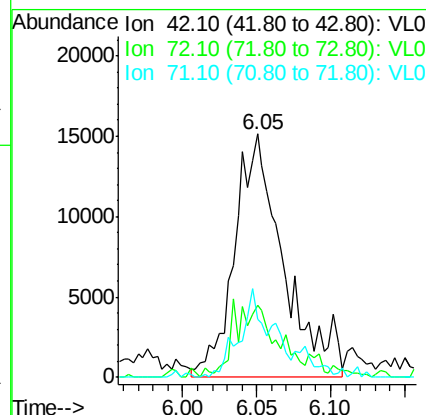
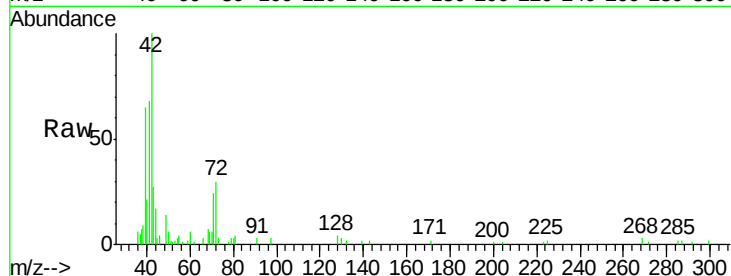
#41
Tetrahydrofuran
Concen: 0.445 ppbv m
RT: 6.05 min Scan# 1015
Delta R.T. -0.00 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Tot Ion	Ratio	Lower	Upper
42	100		
72	32.1	27.6	41.4
71	0.0	27.0	40.4

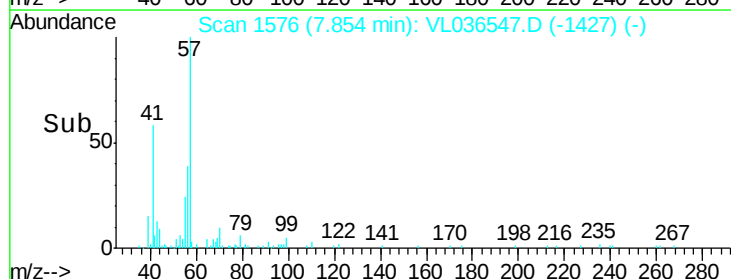
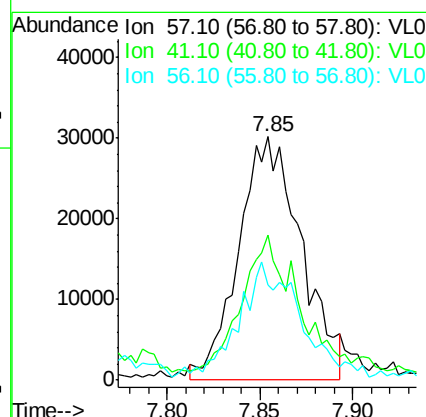
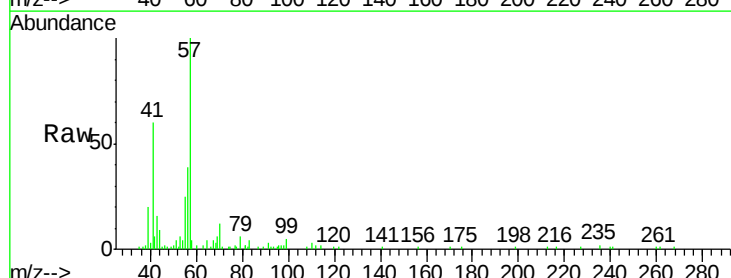
Manual Integrations
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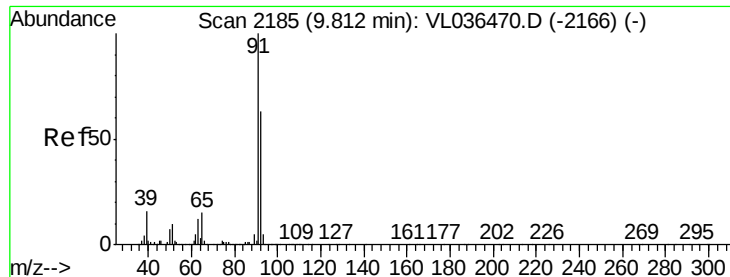
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#44
2,2,4-Trimethylpentane
Concen: 0.124 ppbv m
RT: 7.85 min Scan# 1576
Delta R.T. -0.02 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Tgt Ion	Ratio	Lower	Upper
57	100		
41	61.5	28.8	43.2
56	52.4	26.1	39.1





#53

Toluene

Concen: 1.416 ppbv

RT: 9.79 min Scan# 2179

Delta R.T. -0.02 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Instrument :

MSVOA_L

ClientSampleId :

IAS-1-MAIN-ELECT-RM

Tot Ion: 91 Resp: 487573

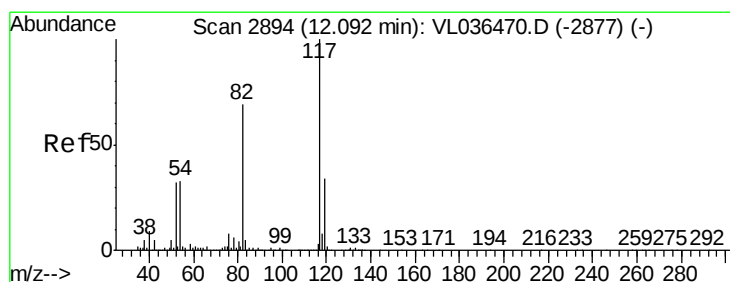
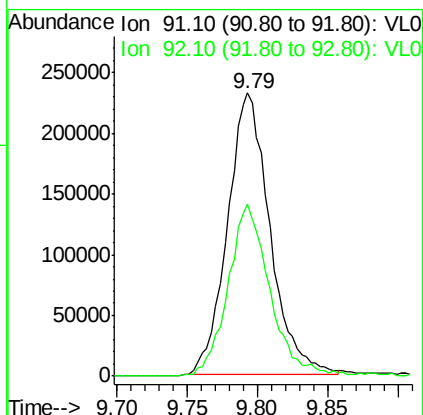
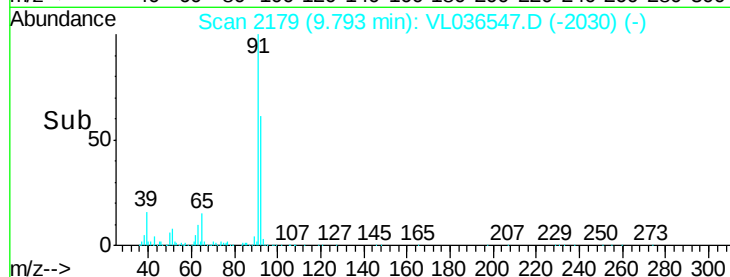
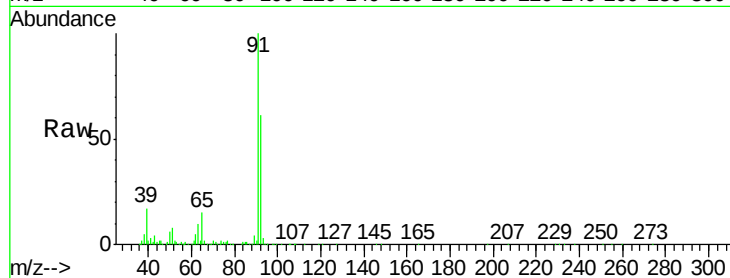
Ion Ratio Lower Upper

91 100

92 60.9 48.8 73.2

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3/30/2021 7:44:18 PM



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.07 min Scan# 2888

Delta R.T. -0.02 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

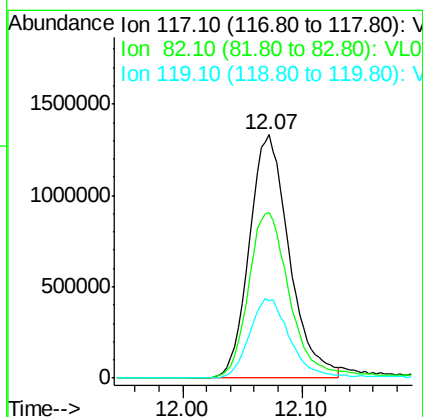
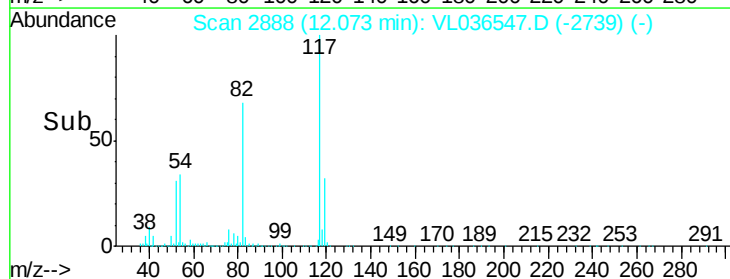
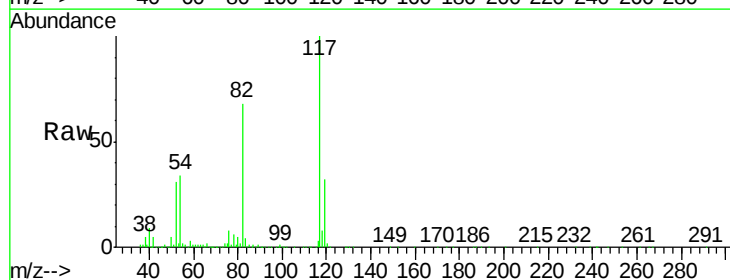
Tgt Ion: 117 Resp: 3097310

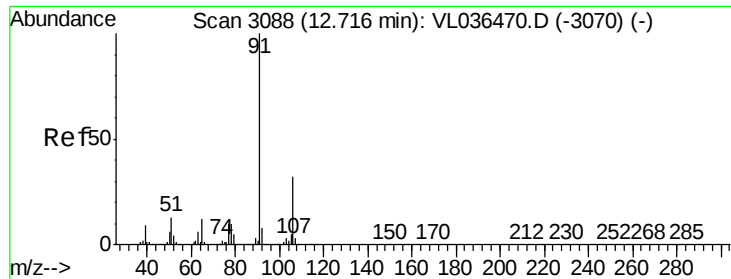
Ion Ratio Lower Upper

117 100

82 72.7 57.4 86.0

119 34.5 47.4 71.0#





#58

Ethyl Benzene

Concen: 0.157 ppbv m

RT: 12.69 min Scan# 3081

Delta R.T. -0.02 min

Lab File: VL036547.D

Acq: 29 Mar 2021 20:11

Instrument :

MSVOA_L

ClientSampleId :

IAS-1-MAIN-ELECT-RM

Tot Ion: 91 Resp: 70709

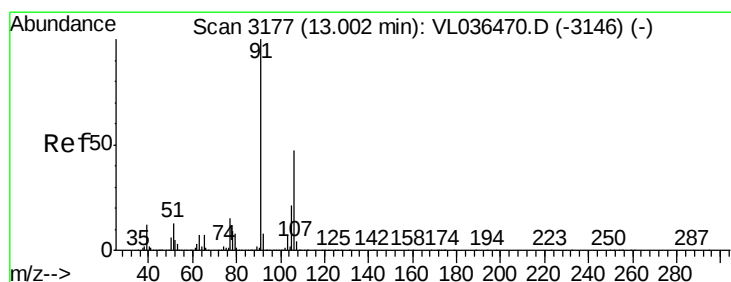
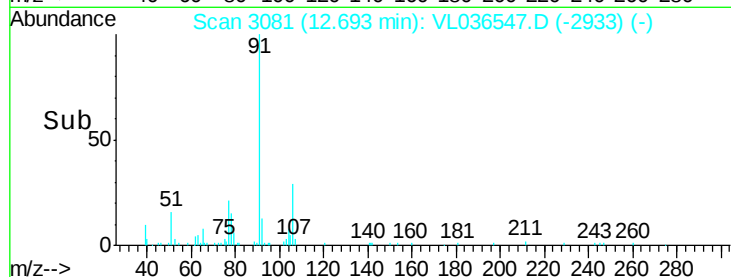
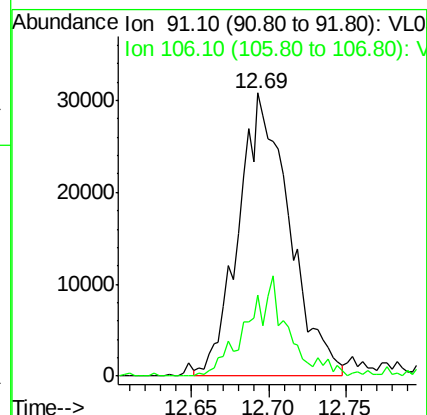
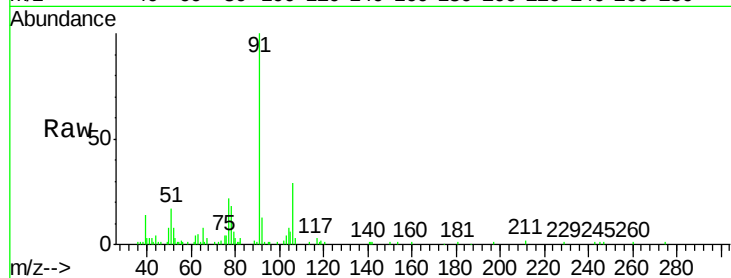
Ion Ratio Lower Upper

91 100

106 28.5 25.3 37.9

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#59

m/p-Xylene

Concen: 0.669 ppbv m

RT: 12.96 min Scan# 3163

Delta R.T. -0.05 min

Lab File: VL036547.D

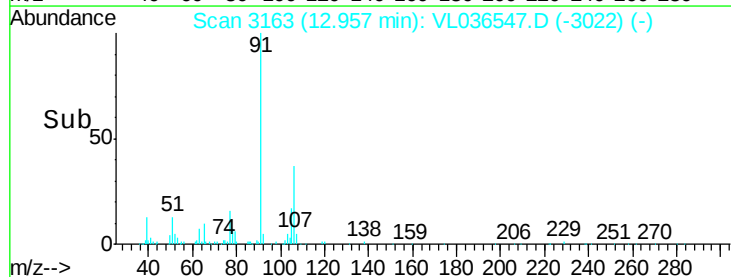
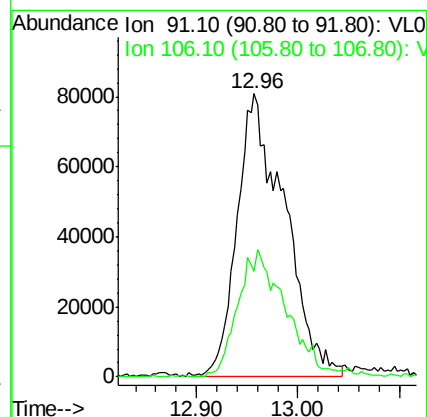
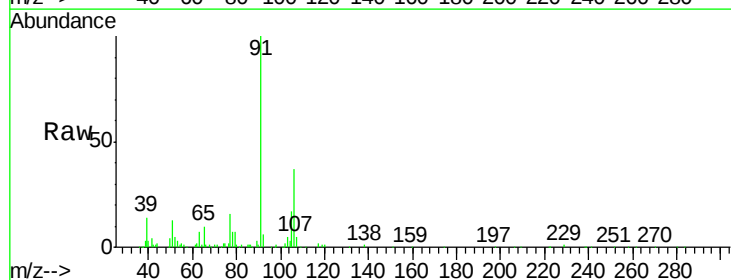
Acq: 29 Mar 2021 20:11

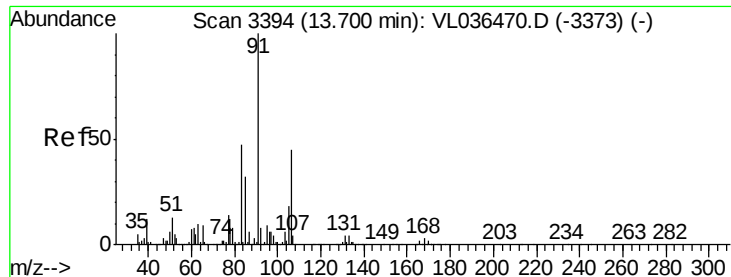
Tgt Ion: 91 Resp: 263021

Ion Ratio Lower Upper

91 100

106 0.0 35.3 52.9#





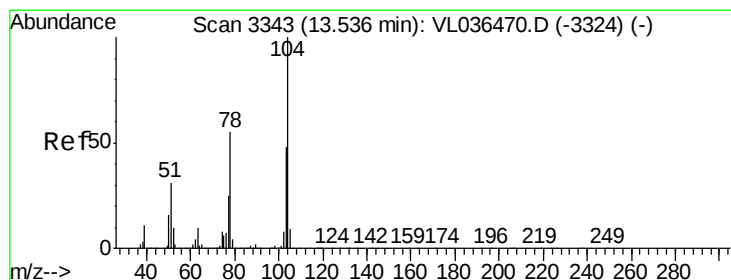
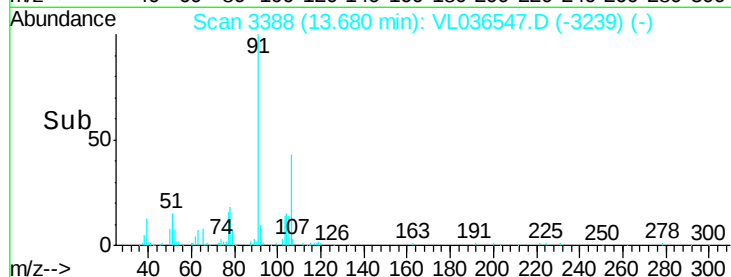
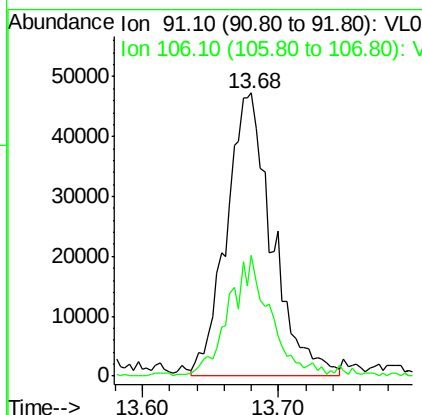
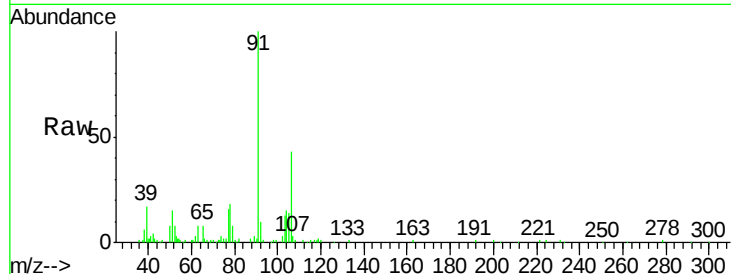
#60
o-Xylene
Concen: 0.292 ppbv m
RT: 13.68 min Scan# 3388
Delta R.T. -0.02 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Instrument :
MSVOA_L
ClientSampleId :
IAS-1-MAIN-ELECT-RM

Tot Ion: 91 Resp: 110912
Ion Ratio Lower Upper
91 100
106 40.5 22.3 66.9

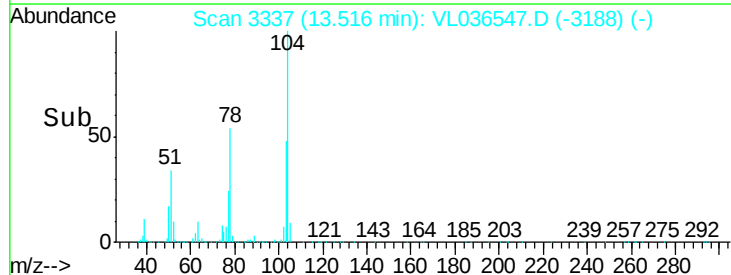
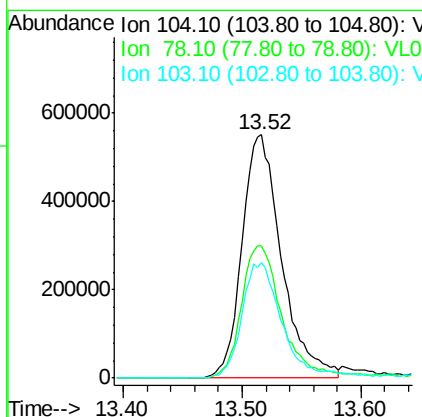
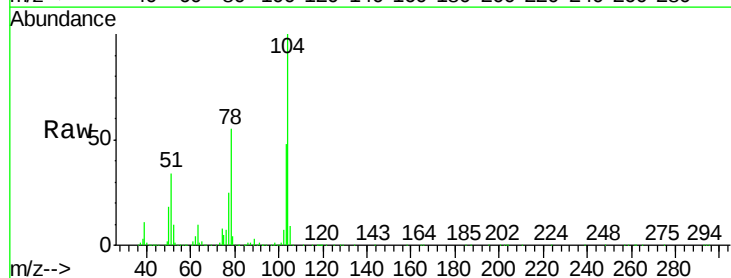
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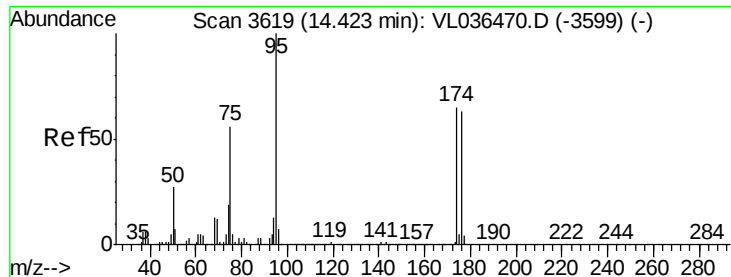
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#61
Styrene
Concen: 6.639 ppbv
RT: 13.52 min Scan# 3337
Delta R.T. -0.02 min
Lab File: VL036547.D
Acq: 29 Mar 2021 20:11

Tgt Ion: 104 Resp: 1269284
Ion Ratio Lower Upper
104 100
78 57.5 43.8 65.8
103 49.1 38.3 57.5





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.518 ppbv
 RT: 14.40 min Scan# 3612
 Delta R.T. -0.02 min
 Lab File: VL036547.D
 Acq: 29 Mar 2021 20:11

Instrument :
 MSVOA_L
 ClientSampleId :
 IAS-1-MAIN-ELECT-RM

Tot Ion	Ratio	Lower	Upper
95	100		
174	65.6	51.0	76.6
175	4.9	3.9	5.9

Manual Integrations
 APPROVED

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