

Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL022621\
 Data File : VL036404.D
 Acq On : 26 Feb 2021 16:15
 Operator : SY/AP
 Sample : M1502-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6

Manual Integrations
 APPROVED

MMDadoda
 3/1/2021 10:08:31 AM

Quant Time: Feb 28 17:47:40 2021
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL021021AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed Feb 10
 QLast Update : Wed Feb 10 16:04:02 2021
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1522476	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.14	114	3397382	10.00	ppbv	-0.01
55) Chlorobenzene-d5	12.05	117	3070578	10.00	ppbv	0.00

System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	14.38	95	2521096	9.98	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	99.80%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.02	85	60052	0.264	ppbv	95
4) Chloromethane	3.12	50	27668	0.303	ppbv	90
9) Propene	2.99	41	120361	1.707	ppbv	84
10) Heptane	8.10	43	59787	0.288	ppbv	90
11) Trichlorofluoromethane	3.92	101	162863m	0.732	ppbv	
13) Ethanol	3.59	45	511082	38.580	ppbv	89
15) Acetone	3.83	43	1817022	9.764	ppbv	98
19) Isopropyl Alcohol	3.96	45	132161m	1.282	ppbv	
20) Methylene Chloride	4.32	84	14716173	245.100	ppbv #	67
26) Hexane	5.66	57	2402974	16.278	ppbv #	37
29) Chloroform	5.72	83	33433m	0.141	ppbv	
30) Cyclohexane	7.12	84	44588m	0.363	ppbv	
34) 2-Butanone	5.22	43	167608m	0.743	ppbv	
35) Carbon Tetrachloride	6.99	117	17455m	0.077	ppbv	
36) Benzene	6.86	78	95034	0.329	ppbv	94
38) Trichloroethene	7.81	130	7235m	0.070	ppbv	
44) 2,2,4-Trimethylpentane	7.84	57	108414m	0.207	ppbv	
52) Tetrachloroethene	11.19	164	29524m	0.279	ppbv	
53) Toluene	9.77	91	855442	2.737	ppbv	100
58) Ethyl Benzene	12.68	91	249804	0.594	ppbv	94
59) m/p-Xylene	12.93	91	910249	2.465	ppbv	95
60) o-Xylene	13.65	91	351399	0.995	ppbv	99
61) Styrene	13.49	104	147463m	0.674	ppbv	
72) 4-Ethyltoluene	15.81	105	108224	0.275	ppbv	95
73) 1,3,5-Trimethylbenzene	15.96	105	87474m	0.230	ppbv	
74) 1,2,4-Trimethylbenzene	16.73	105	315102m	0.810	ppbv	

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

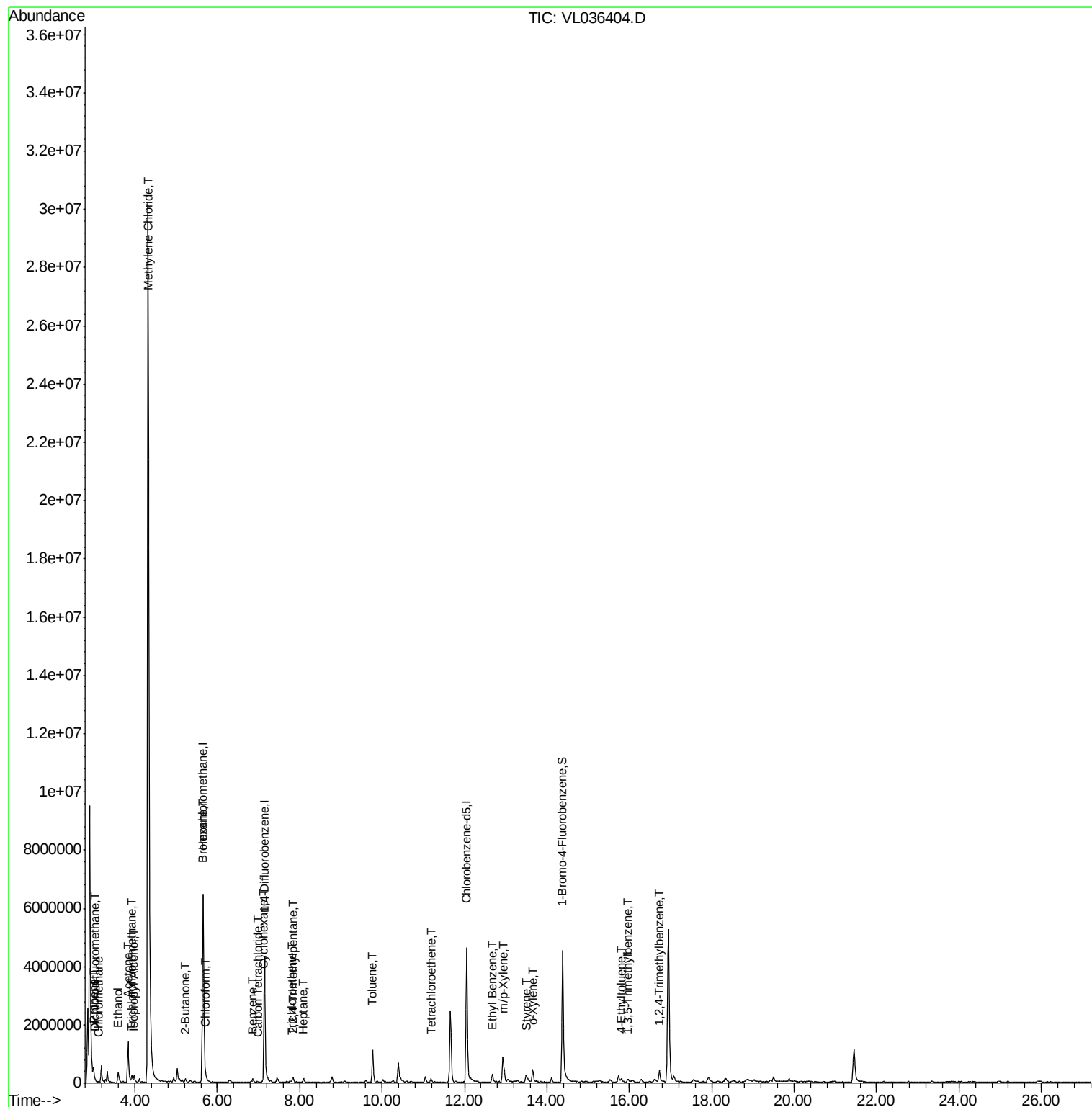
Data Path : Z:\voasrv\HPCHEM1\MSVOA L\Data\VL022621\
Data File : VL036404.D
Acq On : 26 Feb 2021 16:15
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Misc : 400ml/MSVOA L
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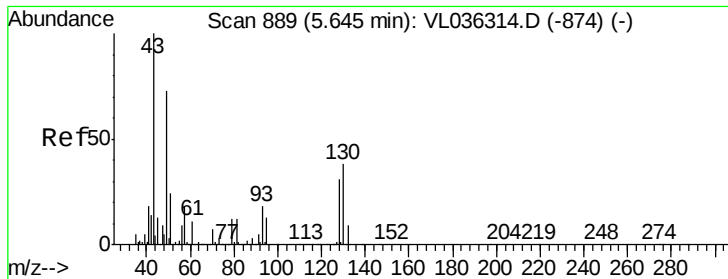
Instrument :
MSVOA_L
ClientSampleId :
SG-6

Manual Integrations
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3/1/2021 10:08:31 AM

Quant Time: Feb 28 17:47:40 2021
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL021021AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Feb
QLast Update : Wed Feb 10 16:04:02 2021
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 887

Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

ClientSampled :

SG-6

Tot Ion: 49 Resp: 1522476

Ion Ratio Lower Upper

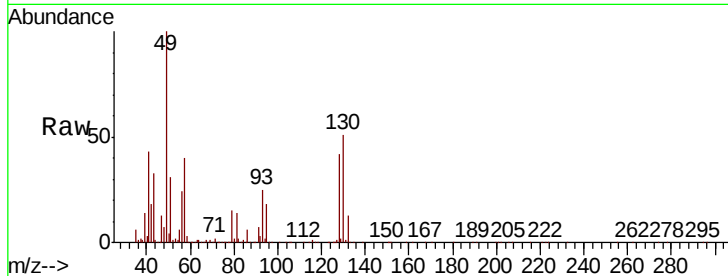
49 100

128 43.4 20.8 62.5

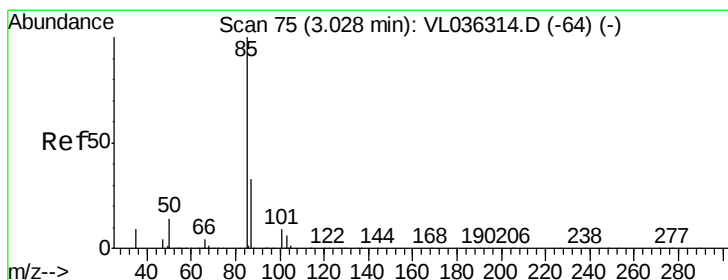
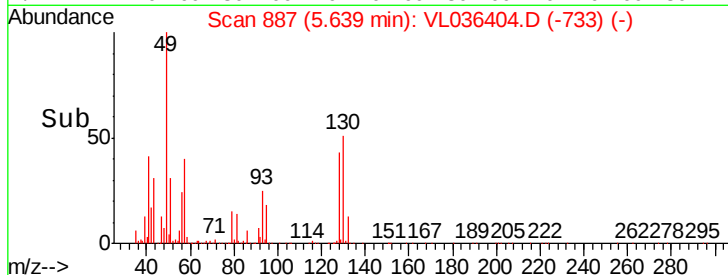
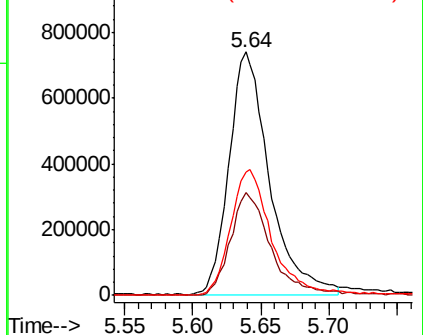
130 54.0 26.7 80.1

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Abundance Ion 49.10 (48.80 to 49.80): VL0
Ion 128.00 (127.70 to 128.70): V
Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.264 ppbv

RT: 3.02 min Scan# 74

Delta R.T. -0.00 min

Lab File: VL036404.D

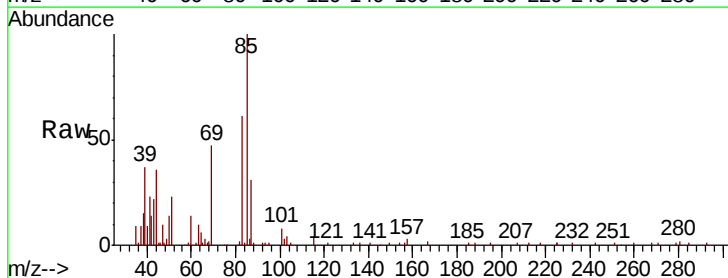
Acq: 26 Feb 2021 16:15

Tgt Ion: 85 Resp: 60052

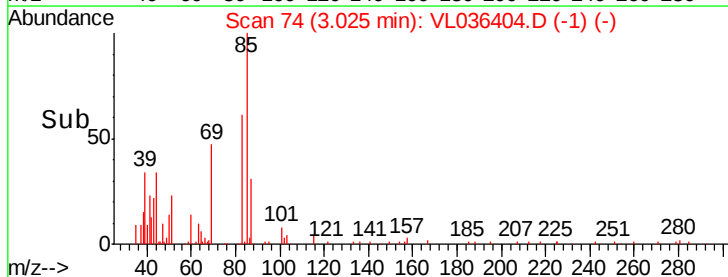
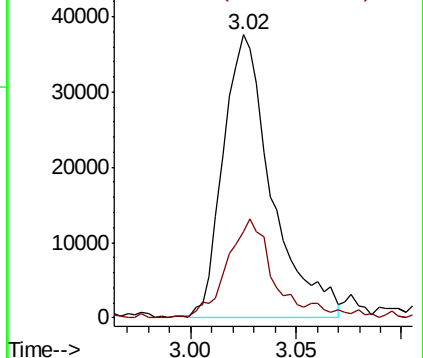
Ion Ratio Lower Upper

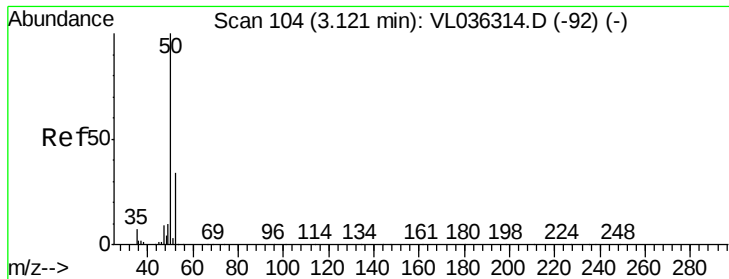
85 100

87 30.2 26.5 39.7



Abundance Ion 85.00 (84.70 to 85.70): VL0
Ion 87.00 (86.70 to 87.70): VL0





#4

Chloromethane

Concen: 0.303 ppbv

RT: 3.12 min Scan# 104

Delta R.T. 0.00 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

ClientSampleId :

SG-6

Tot Ion: 50 Resp: 27668

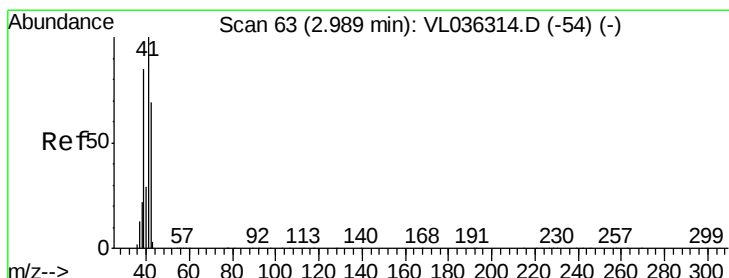
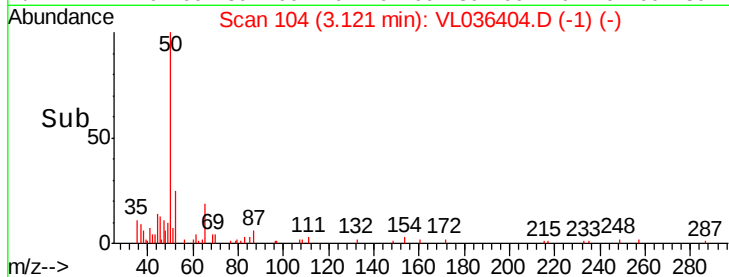
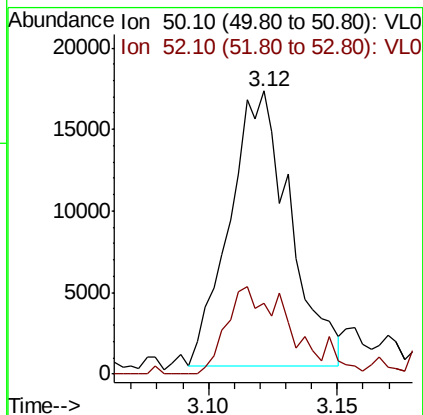
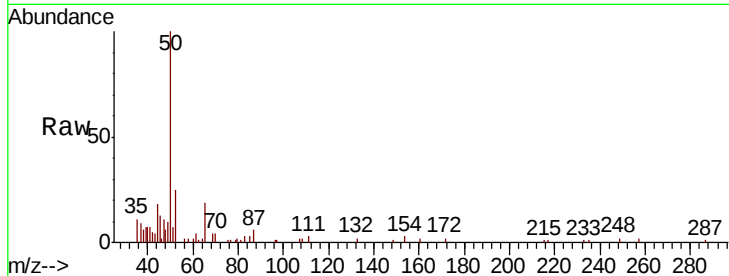
Ion Ratio Lower Upper

50 100

52 27.9 27.0 40.4

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#9

Propene

Concen: 1.707 ppbv

RT: 2.99 min Scan# 63

Delta R.T. 0.00 min

Lab File: VL036404.D

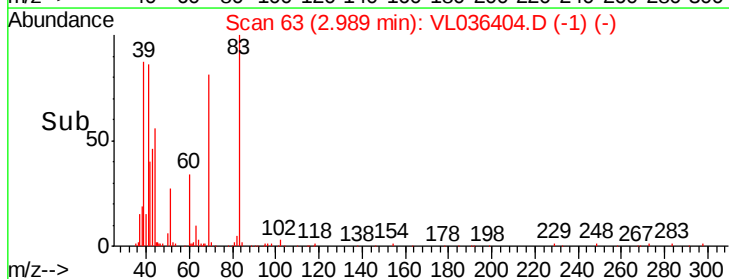
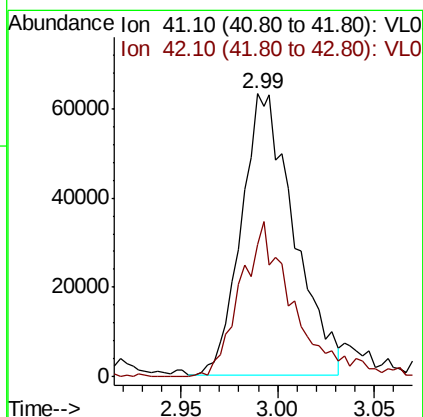
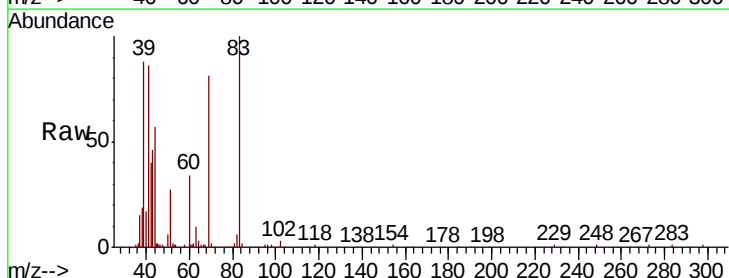
Acq: 26 Feb 2021 16:15

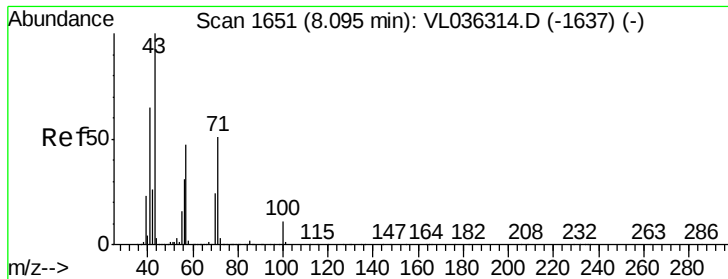
Tgt Ion: 41 Resp: 120361

Ion Ratio Lower Upper

41 100

42 57.4 56.2 84.2





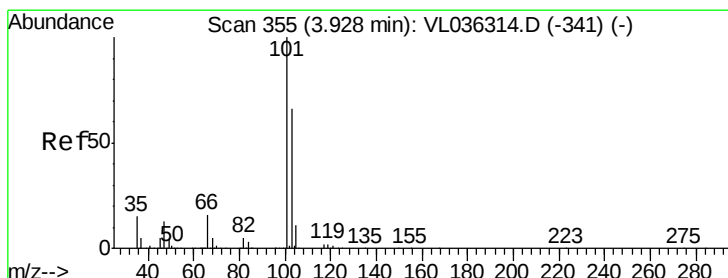
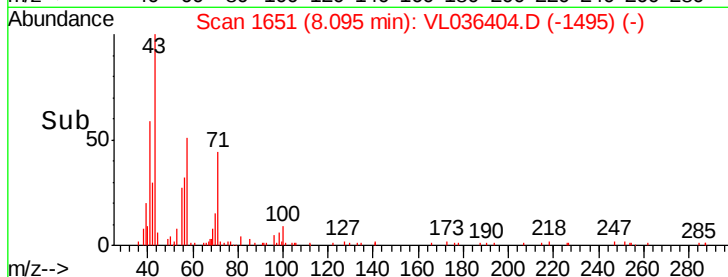
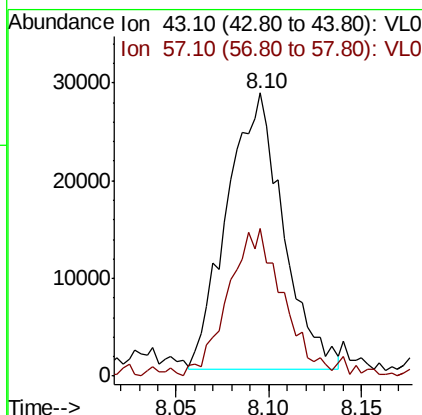
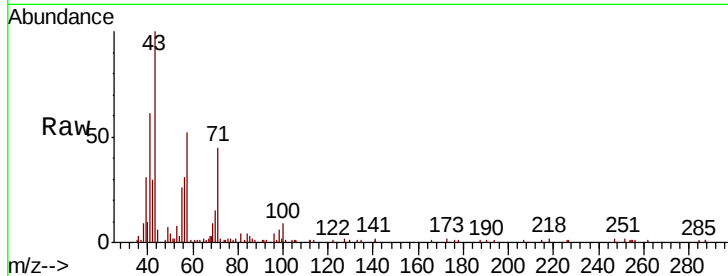
#10
 Heptane
 Concen: 0.288 ppbv
 RT: 8.10 min Scan# 1651
 Delta R.T. 0.00 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6

Tot Ion: 43 Resp: 59787
 Ion Ratio Lower Upper
 43 100
 57 56.4 39.4 59.2

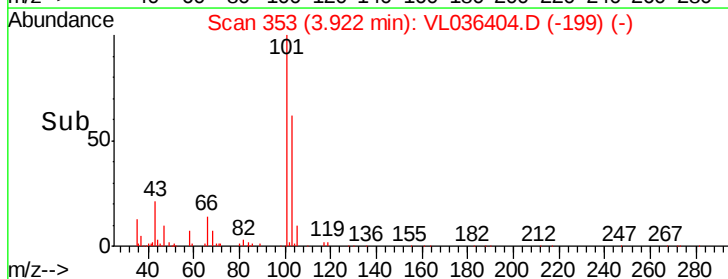
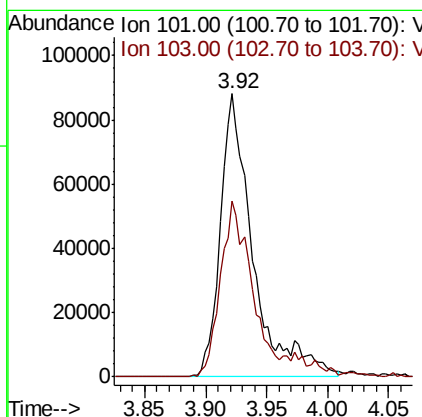
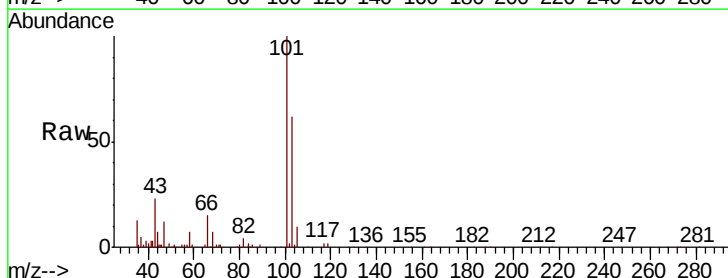
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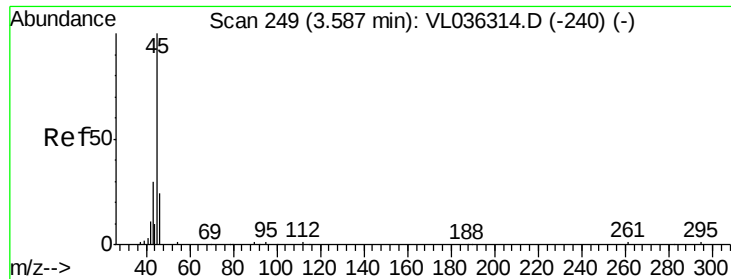
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#11
 Trichlorofluoromethane
 Concen: 0.732 ppbv m
 RT: 3.92 min Scan# 353
 Delta R.T. -0.01 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Tgt Ion: 101 Resp: 162863
 Ion Ratio Lower Upper
 101 100
 103 62.3 52.9 79.3





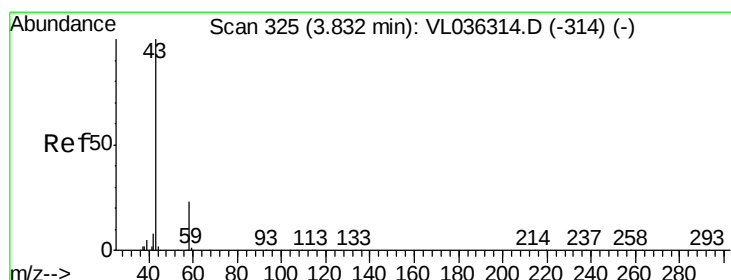
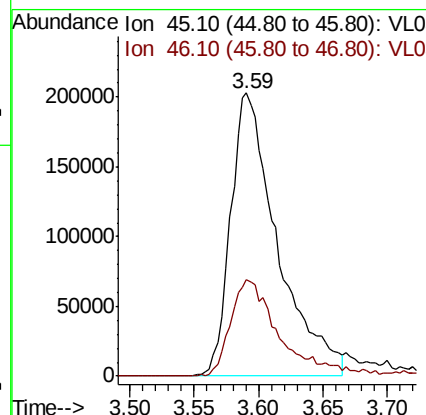
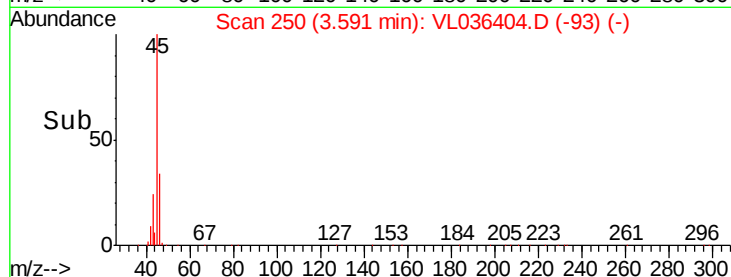
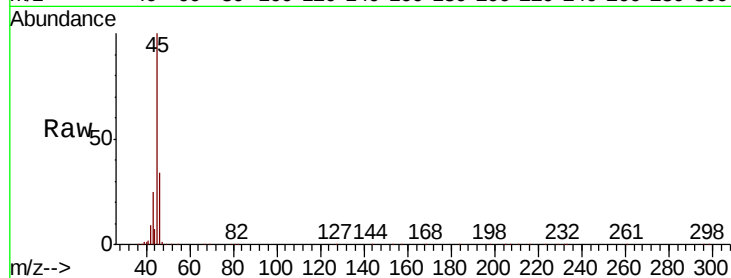
#13
Ethanol
Concen: 38.580 ppbv
RT: 3.59 min Scan# 250
Delta R.T. 0.00 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampleId :
SG-6

Tot Ion: 45 Resp: 511082
Ion Ratio Lower Upper
45 100
46 37.3 17.7 70.7

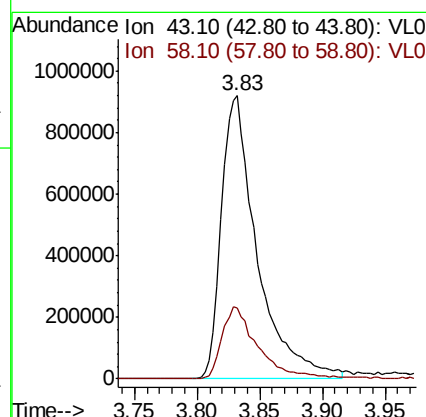
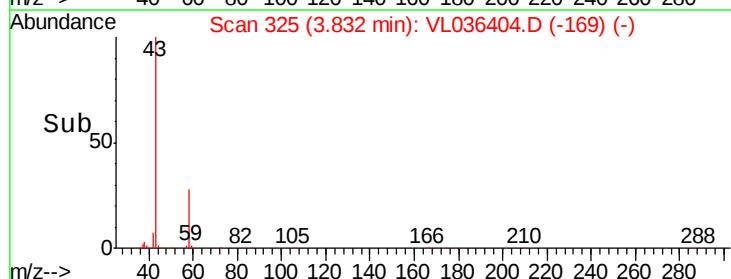
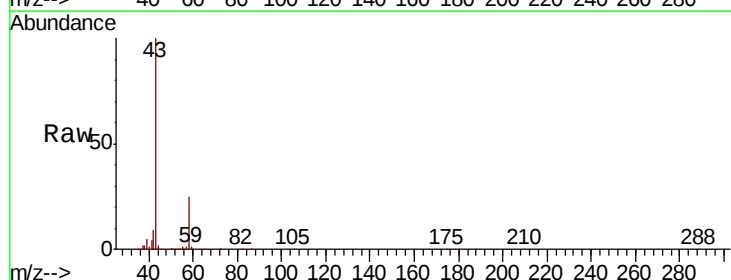
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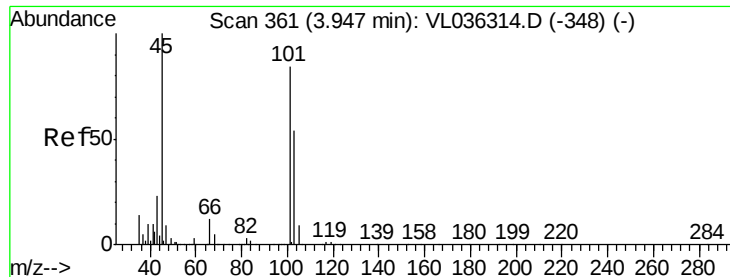
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#15
Acetone
Concen: 9.764 ppbv
RT: 3.83 min Scan# 325
Delta R.T. 0.00 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion: 43 Resp: 1817022
Ion Ratio Lower Upper
43 100
58 26.3 20.3 30.5





#19

Isopropyl Alcohol

Concen: 1.282 ppbv m

RT: 3.96 min Scan# 366

Delta R.T. 0.02 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

ClientSampled :

SG-6

Tot Ion: 45 Resp: 132161

Ion Ratio Lower Upper

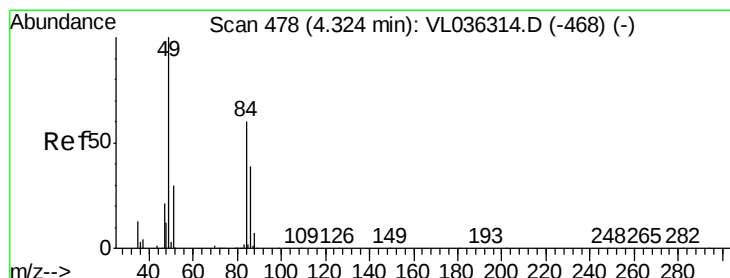
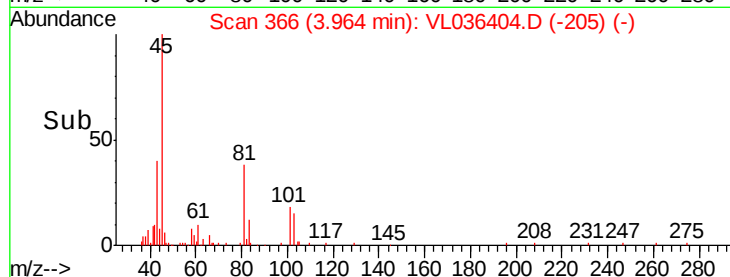
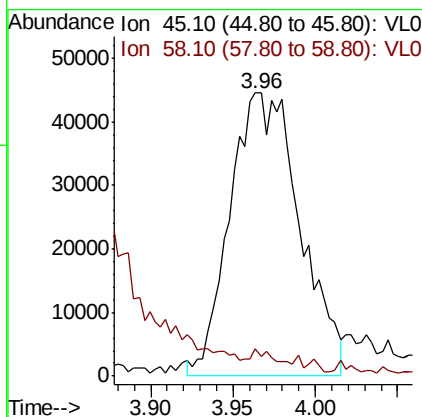
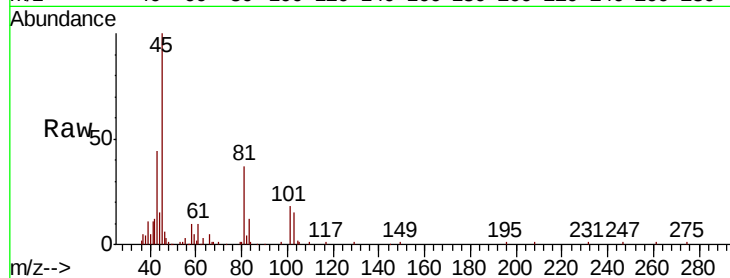
45 100

58 0.0 1.9 2.9#

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#20

Methylene Chloride

Concen: 245.100 ppbv

RT: 4.32 min Scan# 477

Delta R.T. -0.00 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Tgt Ion: 84 Resp: 14716173

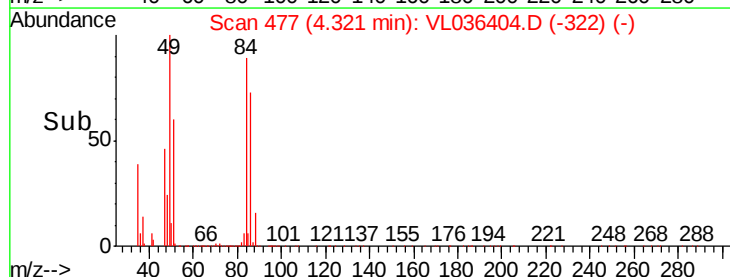
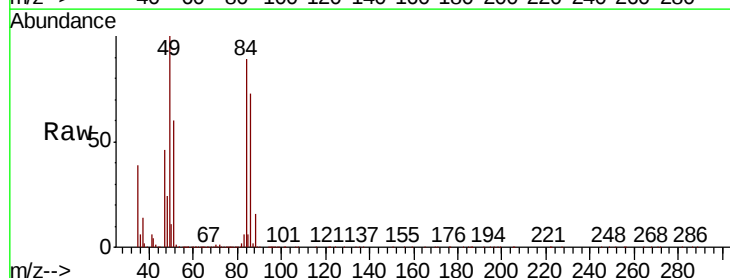
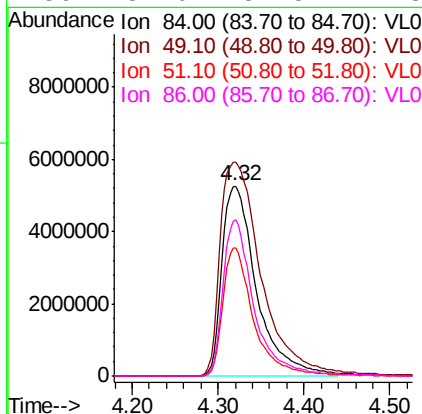
Ion Ratio Lower Upper

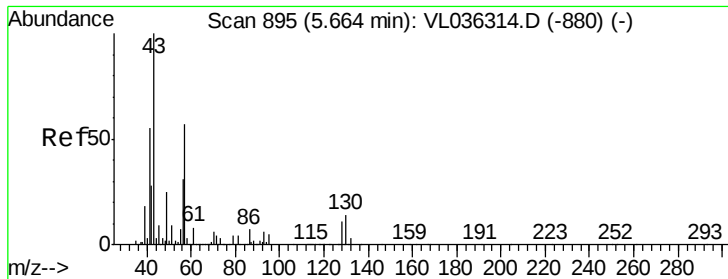
84 100

49 112.2 133.8 200.8#

51 67.1 41.4 62.0#

86 82.0 51.5 77.3#





#26

Hexane

Concen: 16.278 ppbv

RT: 5.66 min Scan# 893

Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

ClientSampleId :

SG-6

Tot Ion: 57 Resp: 2402974

Ion Ratio Lower Upper

57 100

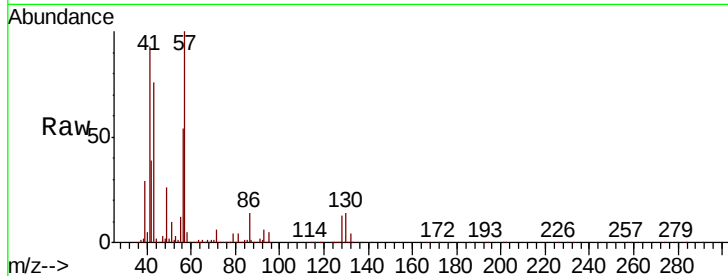
41 95.7 81.7 122.5

43 74.7 199.1 298.7#

56 55.3 44.0 66.0

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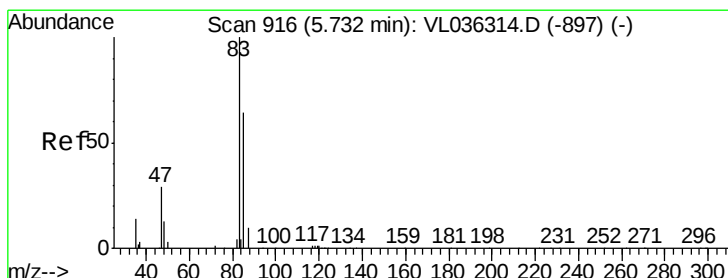
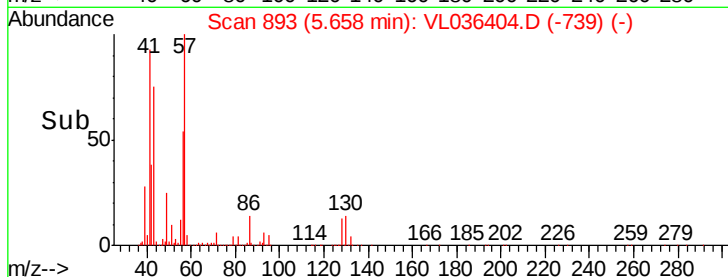
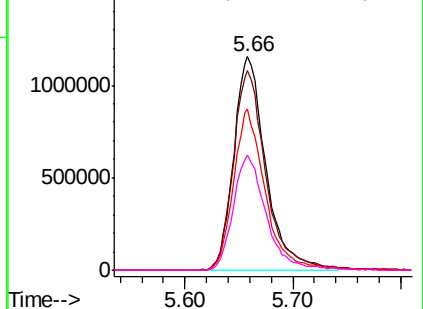


Abundance Ion 57.10 (56.80 to 57.80): VL0

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



#29

Chloroform

Concen: 0.141 ppbv m

RT: 5.72 min Scan# 912

Delta R.T. -0.01 min

Lab File: VL036404.D

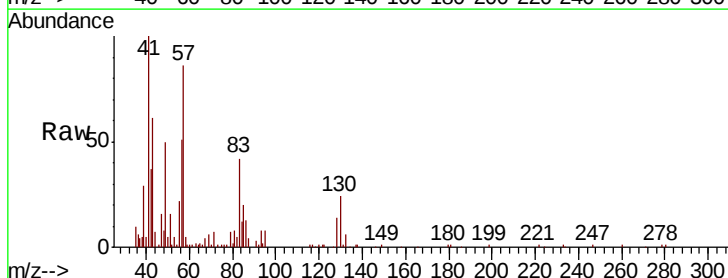
Acq: 26 Feb 2021 16:15

Tgt Ion: 83 Resp: 33433

Ion Ratio Lower Upper

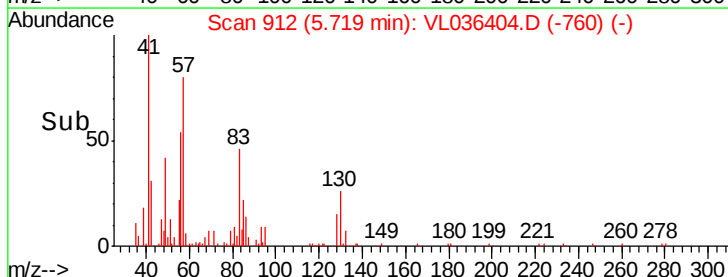
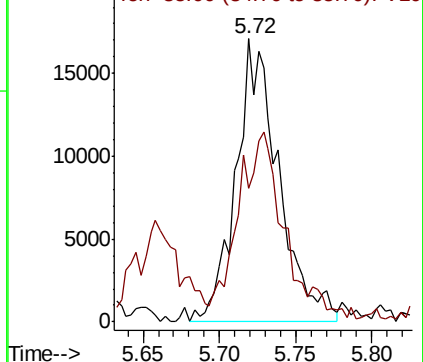
83 100

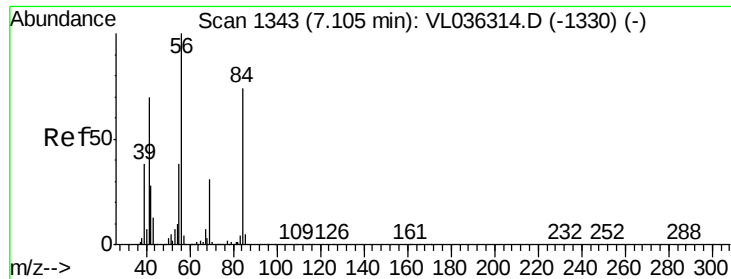
85 47.1 51.4 77.2#



Abundance Ion 83.00 (82.70 to 83.70): VL0

Ion 85.00 (84.70 to 85.70): VL0





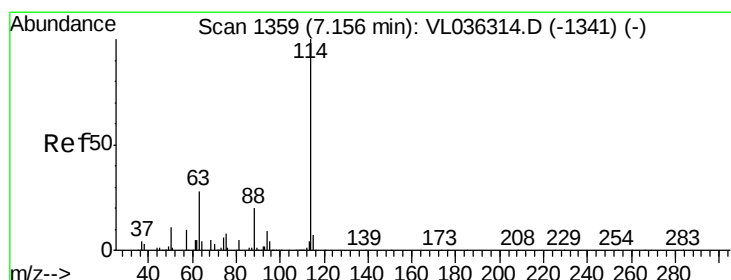
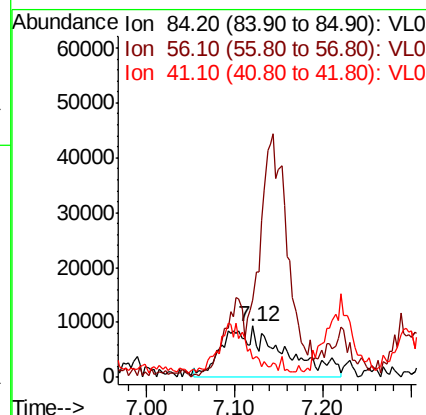
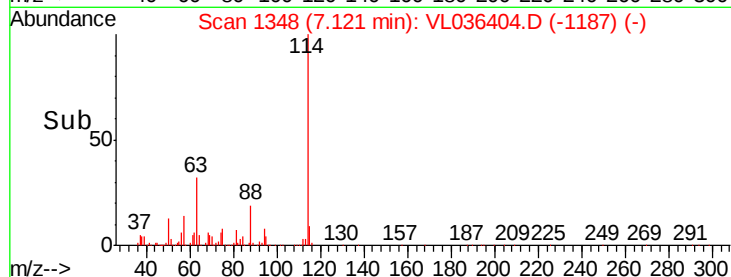
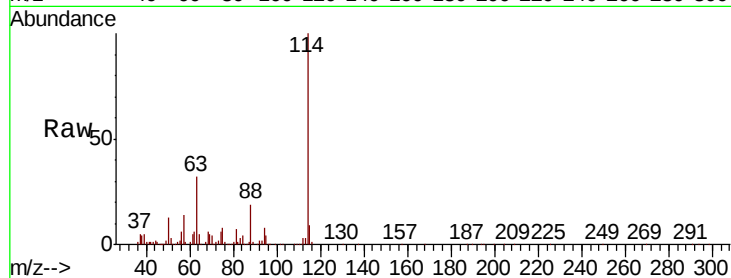
#30
Cvclohexane
Concen: 0.363 ppbv m
RT: 7.12 min Scan# 1348
Delta R.T. 0.02 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampled :
SG-6

Tot Ion	Ratio	Lower	Upper
84	100		
56	0.0	120.2	180.4#
41	0.0	79.7	119.5#

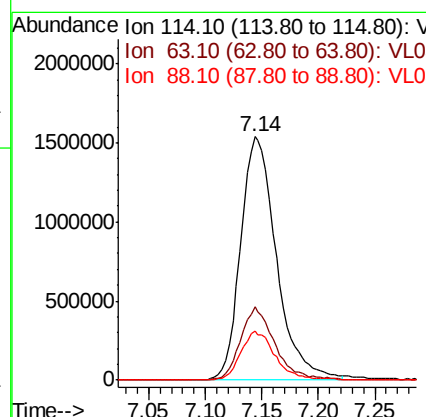
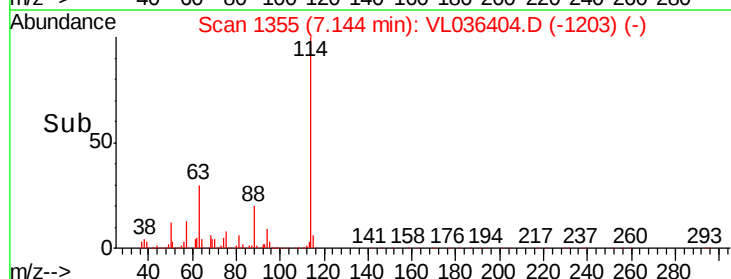
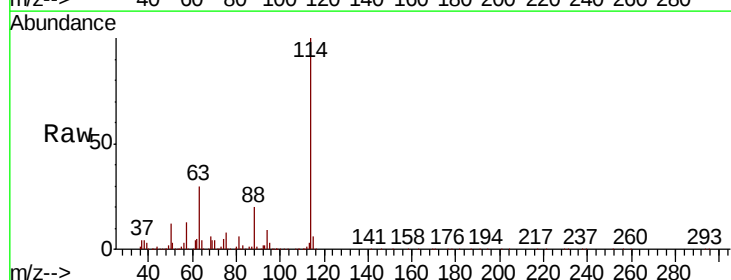
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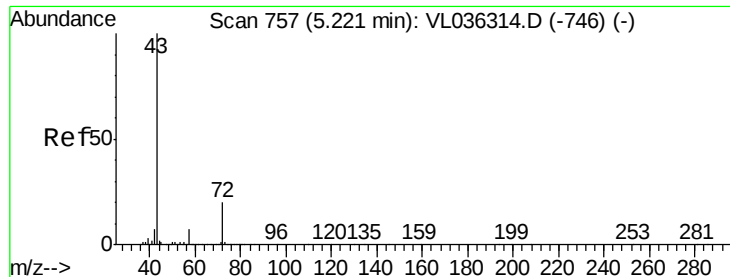
MMDadoda
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.14 min Scan# 1355
Delta R.T. -0.01 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion	Ratio	Lower	Upper
114	100		
63	29.2	24.1	36.1
88	19.6	16.0	24.0





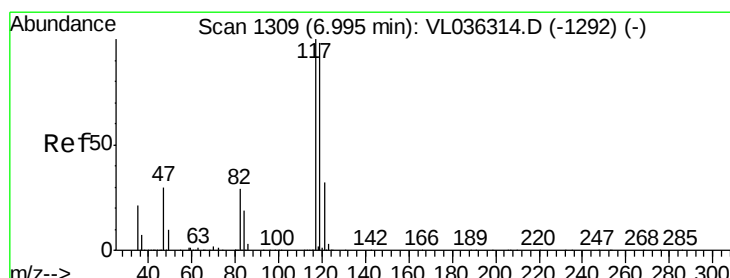
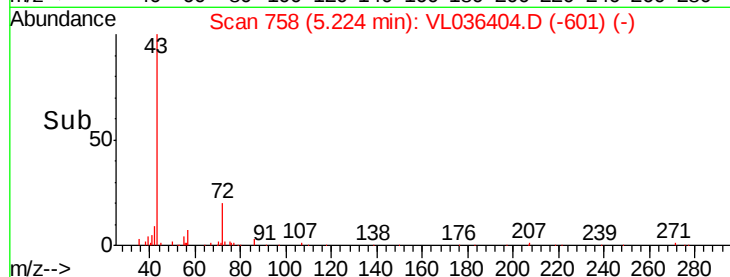
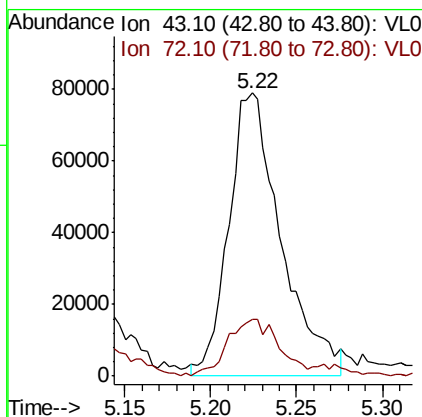
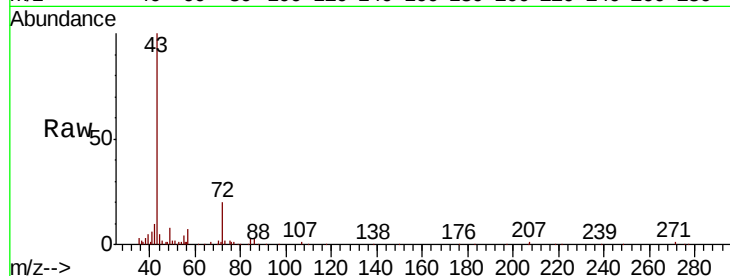
#34
2-Butanone
Concen: 0.743 ppbv m
RT: 5.22 min Scan# 758
Delta R.T. 0.00 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampleId :
SG-6

Tot Ion: 43 Resp: 167608
Ion Ratio Lower Upper
43 100
72 22.1 16.7 25.1

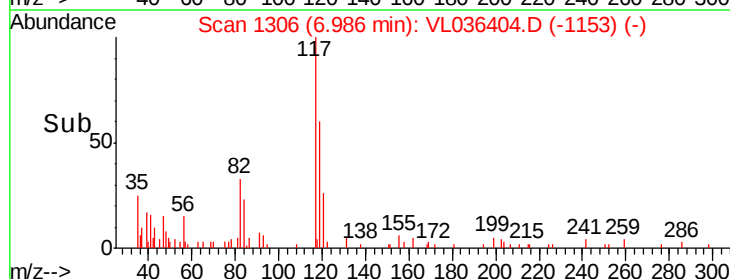
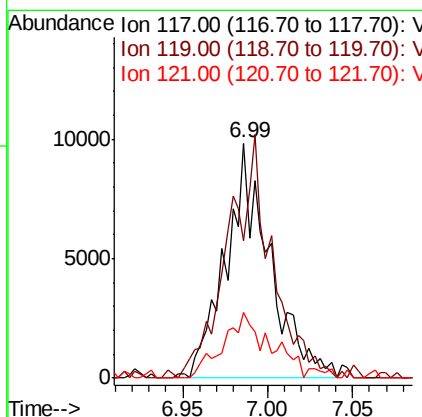
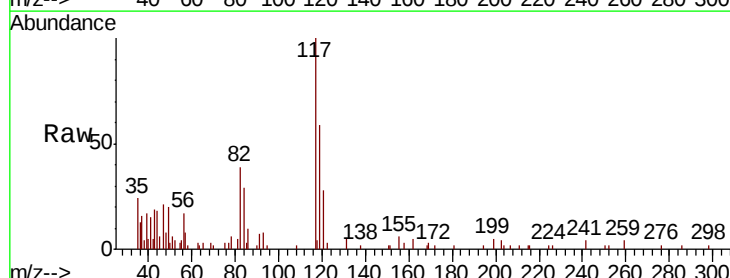
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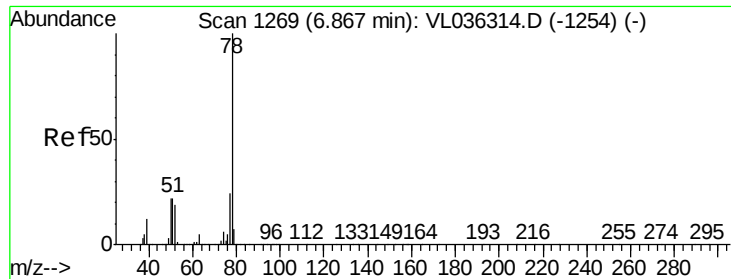
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#35
Carbon Tetrachloride
Concen: 0.077 ppbv m
RT: 6.99 min Scan# 1306
Delta R.T. -0.01 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion: 117 Resp: 17455
Ion Ratio Lower Upper
117 100
119 58.6 78.1 117.1#
121 28.0 25.8 38.8





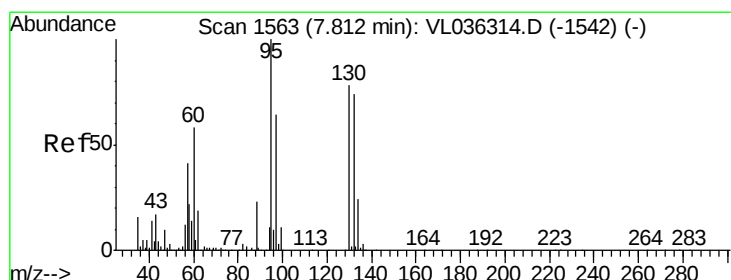
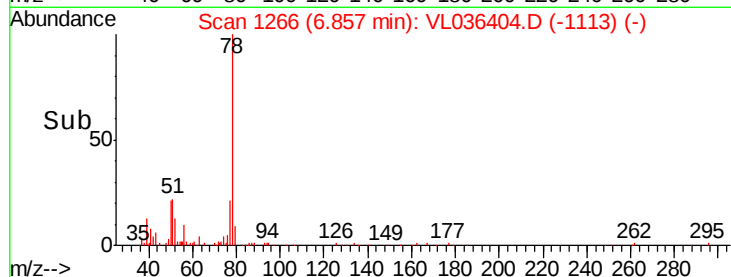
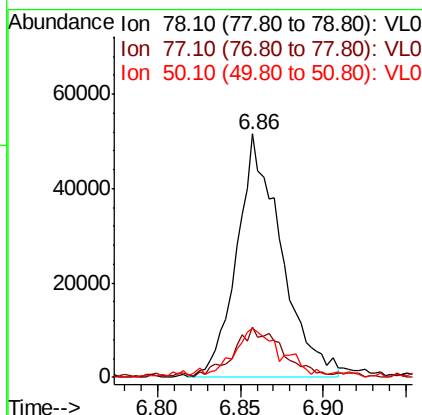
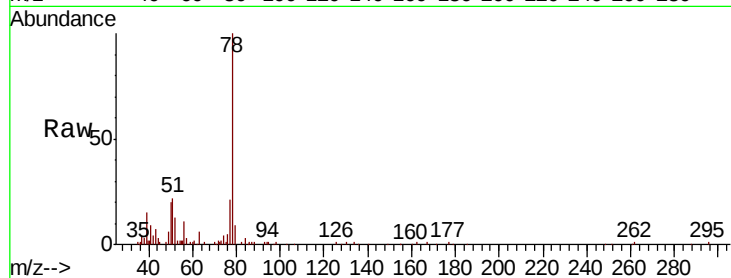
#36
Benzene
Concen: 0.329 ppbv
RT: 6.86 min Scan# 1266
Delta R.T. -0.01 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampled :
SG-6

Tot Ion:	78	Resp:	95034
Ion Ratio	Lower	Upper	
78	100		
77	19.9	18.9	28.3
50	19.3	17.3	25.9

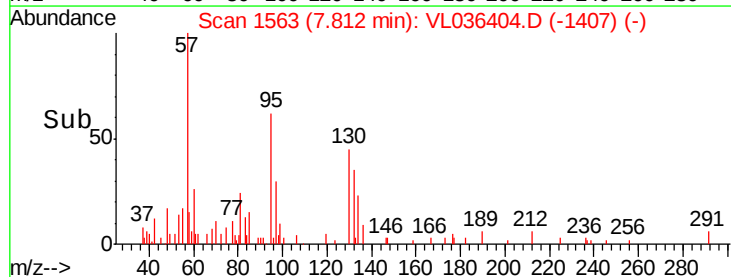
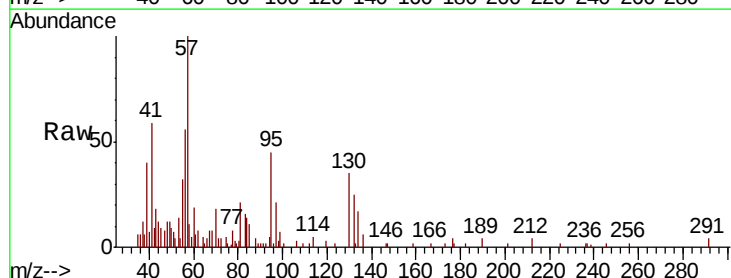
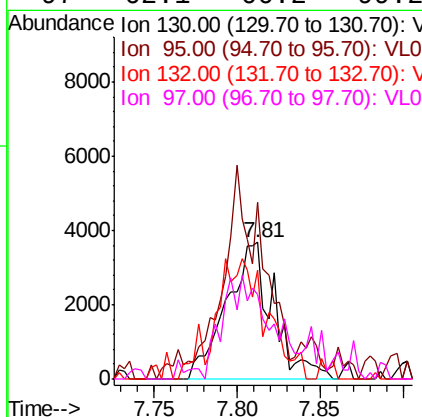
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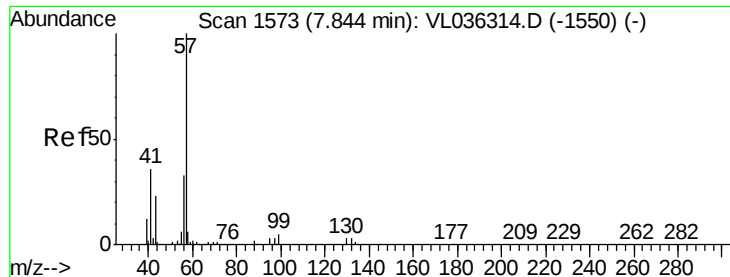
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#38
Trichloroethene
Concen: 0.070 ppbv m
RT: 7.81 min Scan# 1563
Delta R.T. 0.00 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion:	130	Resp:	7235
Ion Ratio	Lower	Upper	
130	100		
95	129.1	102.8	154.2
132	72.4	75.7	113.5#
97	62.1	66.2	99.2#





#44

2,2,4-Trimethylpentane

Concen: 0.207 ppbv m

RT: 7.84 min Scan# 1571

Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

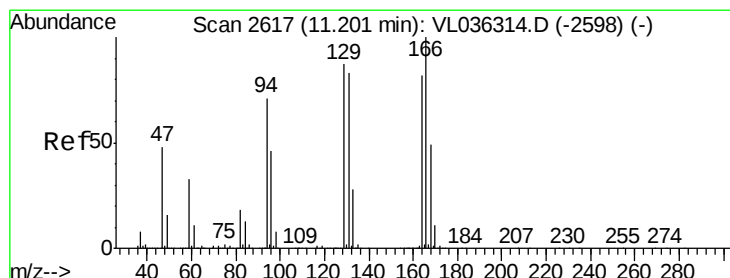
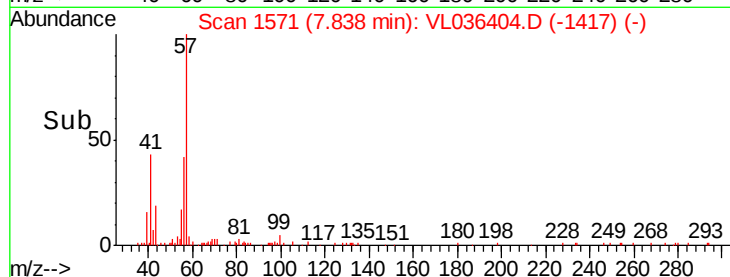
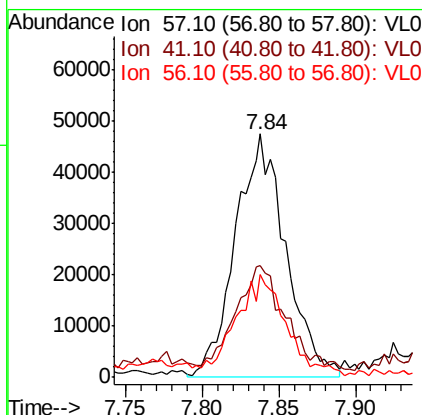
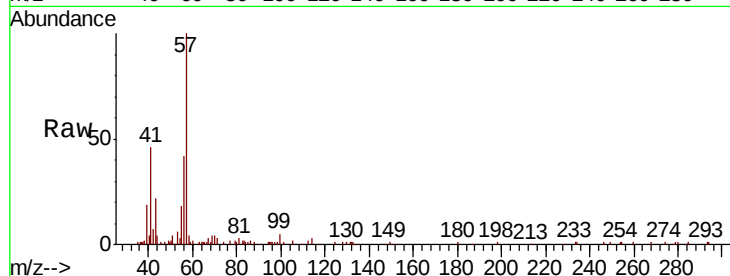
ClientSampled :

SG-6

Tot Ion	57	Resp	108414
Ion Ratio	Lower	Upper	
57	100		
41	48.7	28.8	43.2#
56	43.8	25.8	38.6#

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#52

Tetrachloroethene

Concen: 0.279 ppbv m

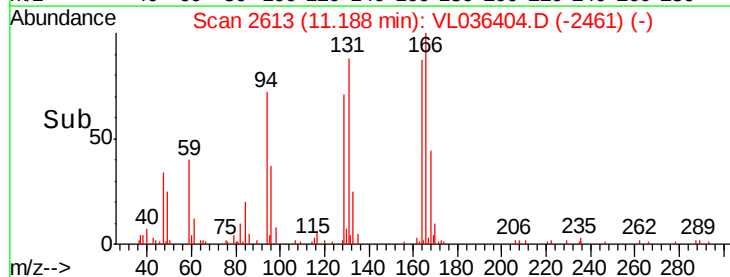
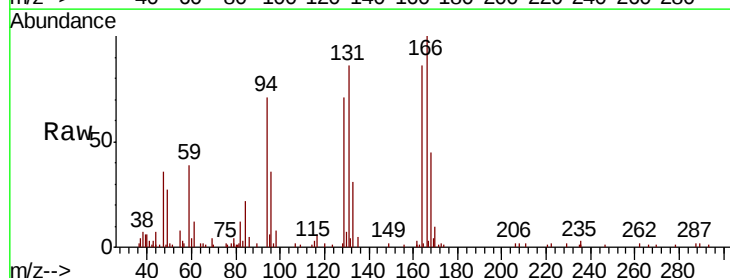
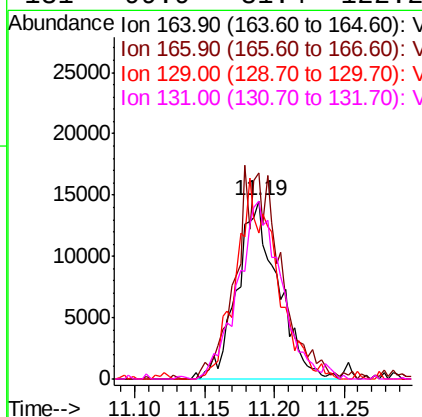
RT: 11.19 min Scan# 2613

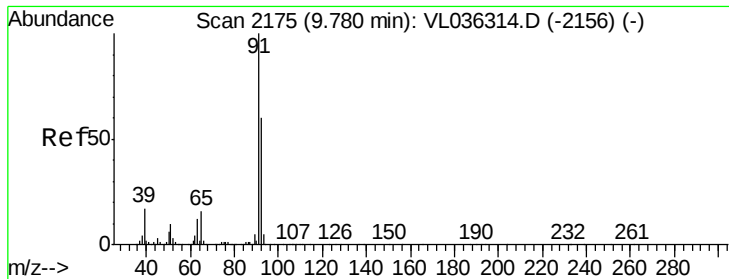
Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Tgt Ion	164	Resp	29524
Ion Ratio	Lower	Upper	
164	100		
166	115.8	97.8	146.8
129	82.1	84.9	127.3#
131	99.9	81.4	122.2





#53

Toluene

Concen: 2.737 ppbv

RT: 9.77 min Scan# 2173

Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

Instrument :

MSVOA_L

ClientSampleId :

SG-6

Tot Ion: 91 Resp: 855442

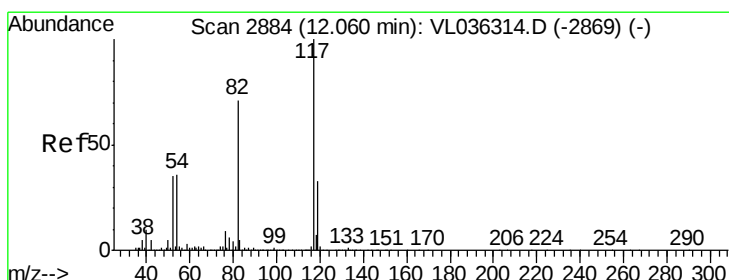
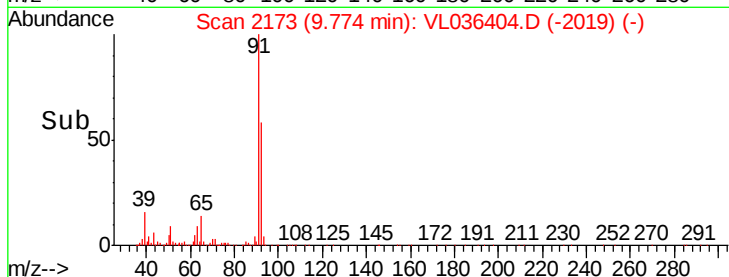
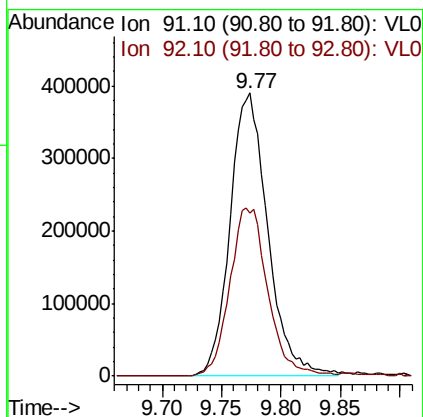
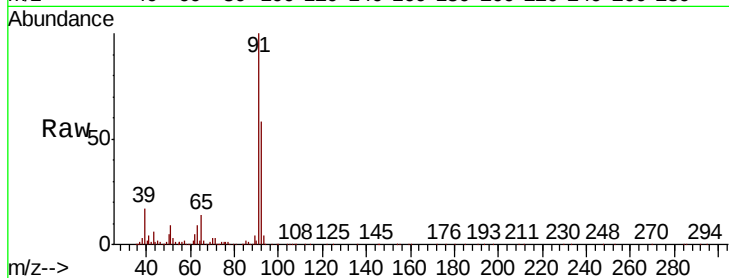
Ion Ratio Lower Upper

91 100

92 60.9 48.6 72.8

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.05 min Scan# 2881

Delta R.T. -0.01 min

Lab File: VL036404.D

Acq: 26 Feb 2021 16:15

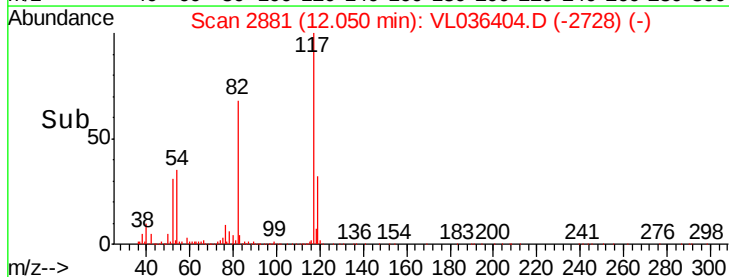
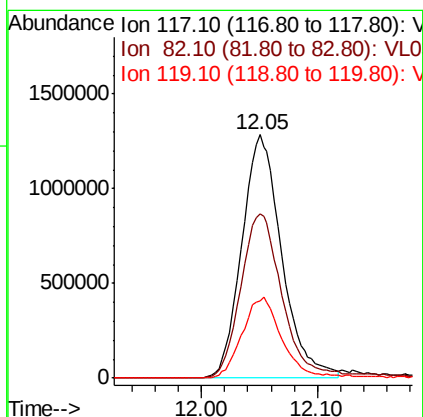
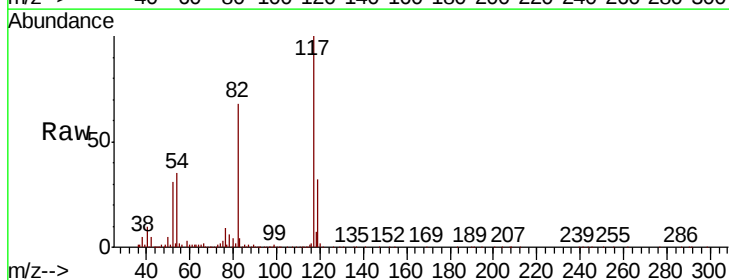
Tgt Ion: 117 Resp: 3070578

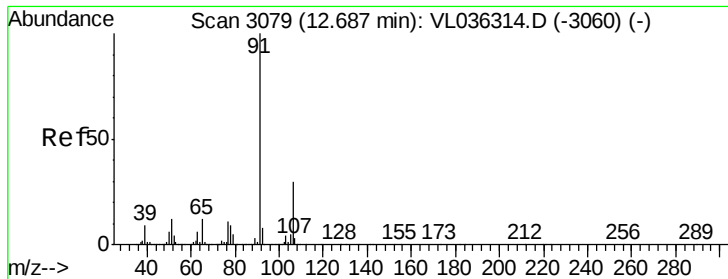
Ion Ratio Lower Upper

117 100

82 72.7 59.1 88.7

119 34.4 46.3 69.5#





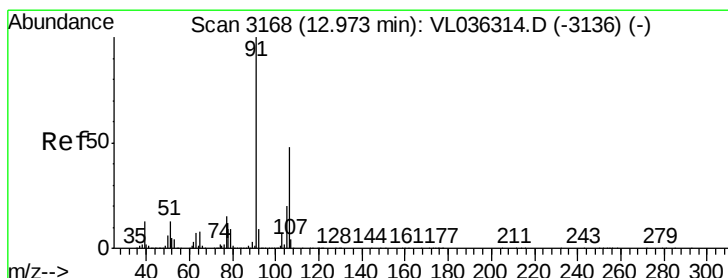
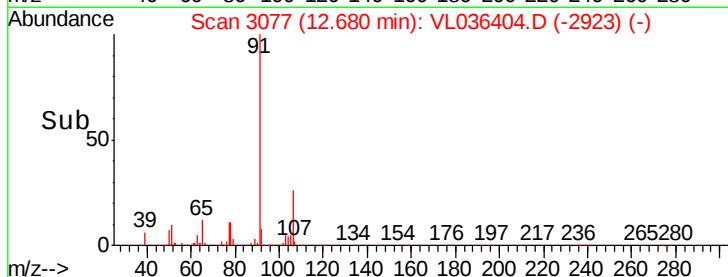
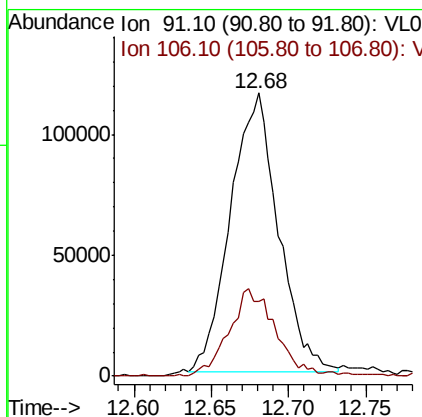
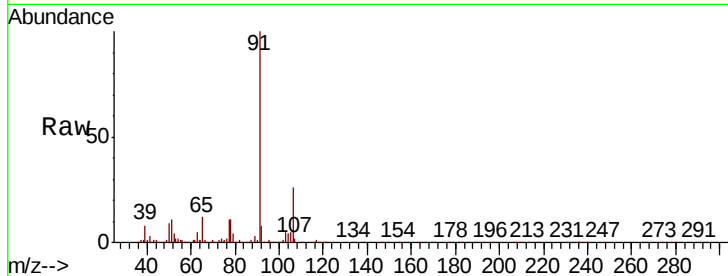
#58
Ethyl Benzene
Concen: 0.594 ppbv
RT: 12.68 min Scan# 3077
Delta R.T. -0.01 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampled :
SG-6

Tot Ion	Ratio	Lower	Upper
91	100		
106	26.4	23.8	35.6

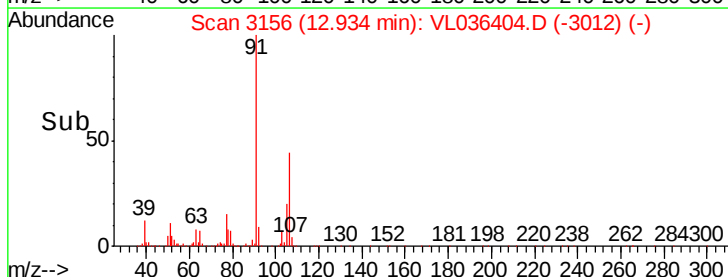
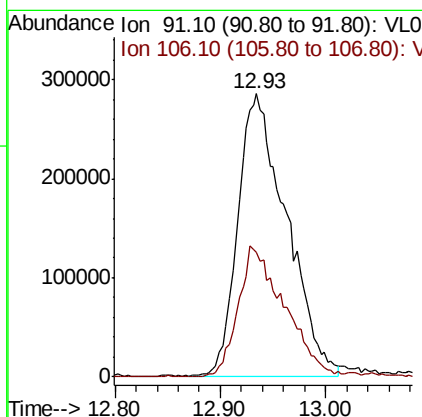
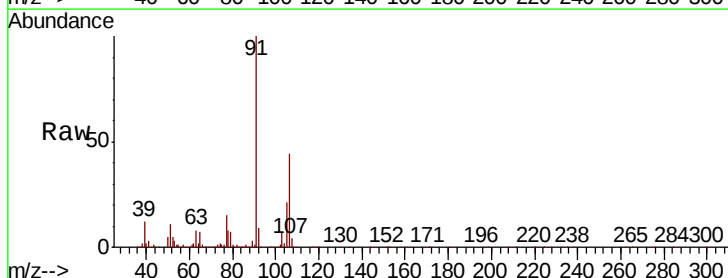
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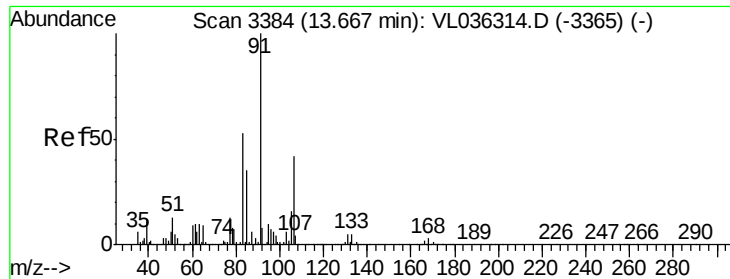
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#59
m/p-Xylene
Concen: 2.465 ppbv
RT: 12.93 min Scan# 3156
Delta R.T. -0.04 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion	Ratio	Lower	Upper
91	100		
106	45.6	34.2	51.2





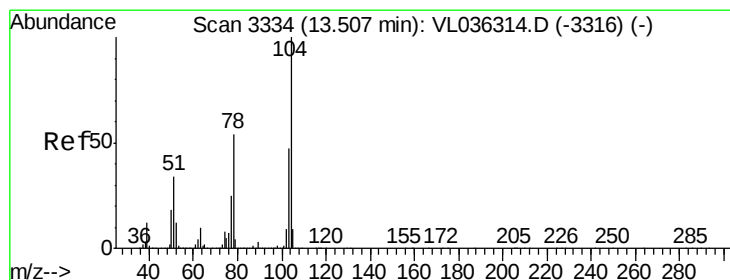
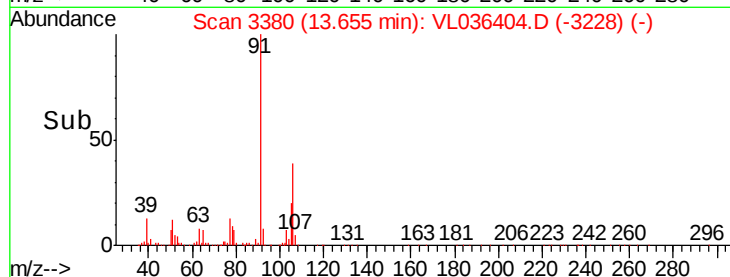
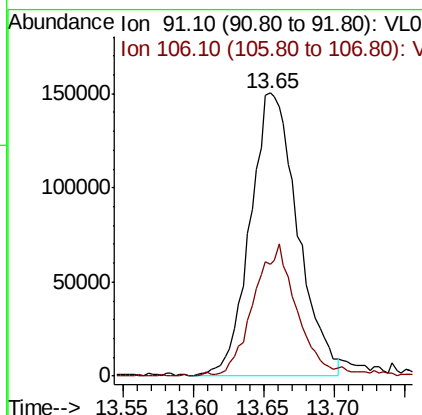
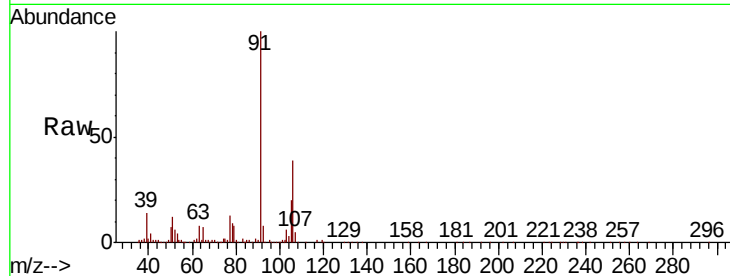
#60
o-Xylene
Concen: 0.995 ppbv
RT: 13.65 min Scan# 3380
Delta R.T. -0.01 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Instrument :
MSVOA_L
ClientSampled :
SG-6

Tot Ion	Ratio	Lower	Upper
91	100		
106	43.6	22.0	66.0

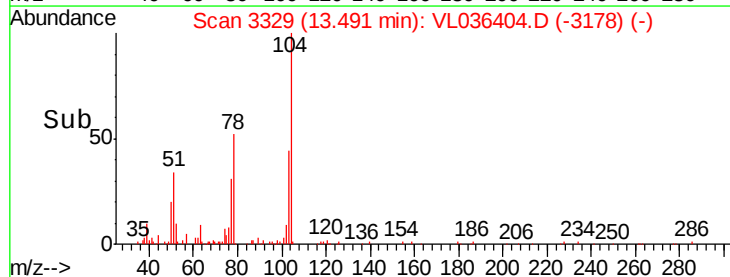
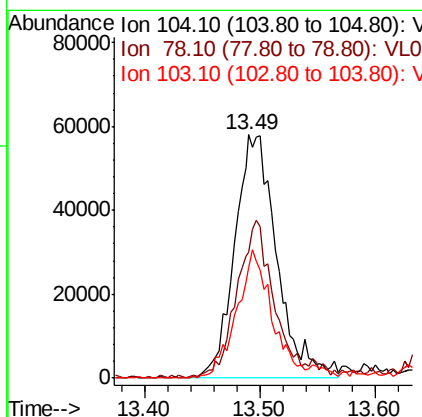
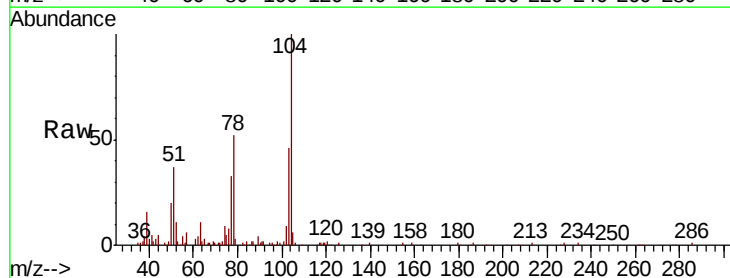
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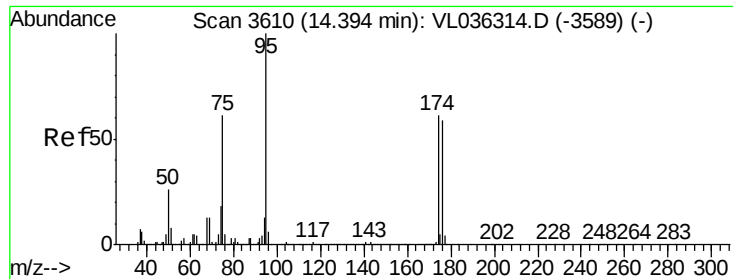
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#61
Styrene
Concen: 0.674 ppbv m
RT: 13.49 min Scan# 3329
Delta R.T. -0.02 min
Lab File: VL036404.D
Acq: 26 Feb 2021 16:15

Tgt Ion	Ratio	Lower	Upper
104	100		
78	60.6	46.2	69.2
103	47.5	38.3	57.5





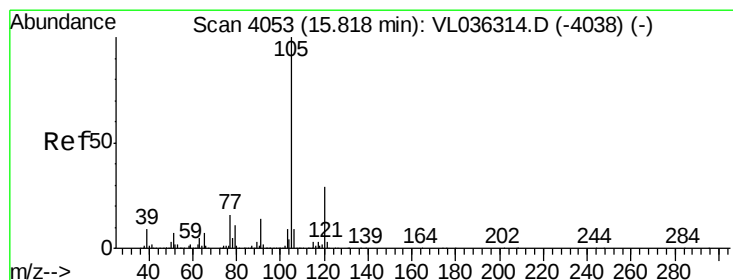
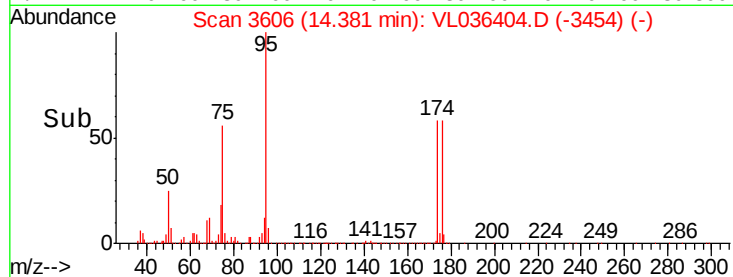
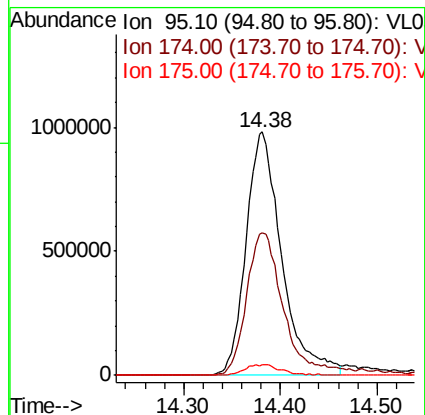
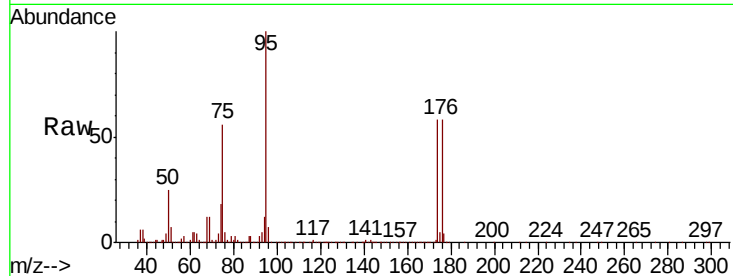
#68
 1-Bromo-4-Fluorobenzene
 Concen: 9.979 ppbv
 RT: 14.38 min Scan# 3606
 Delta R.T. -0.01 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Instrument :
 MSVOA_L
 ClientSampled :
 SG-6

Tot Ion: 95 Resp: 2521096
 Ion Ratio Lower Upper
 95 100
 174 64.0 49.8 74.6
 175 4.7 3.7 5.5

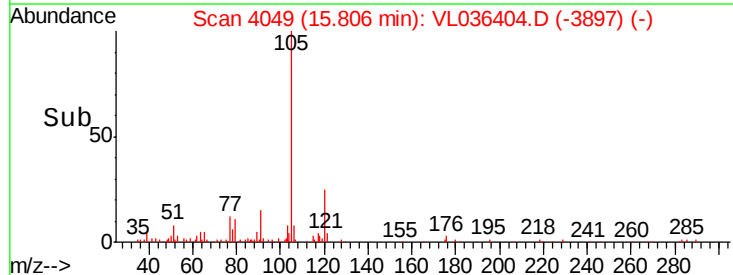
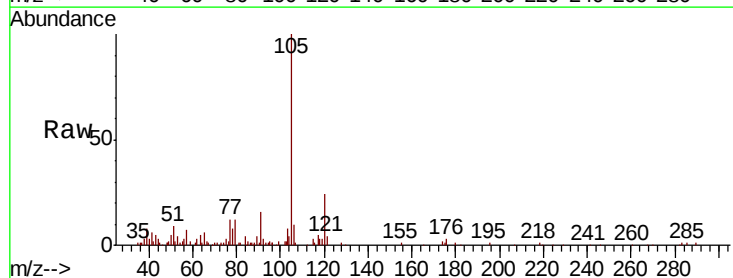
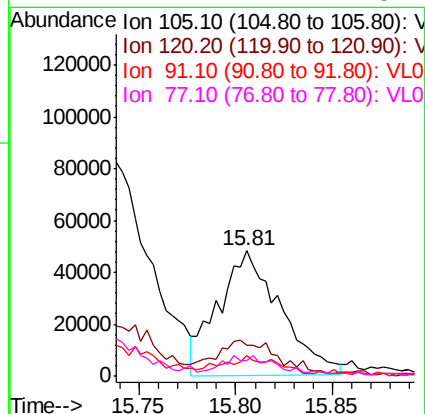
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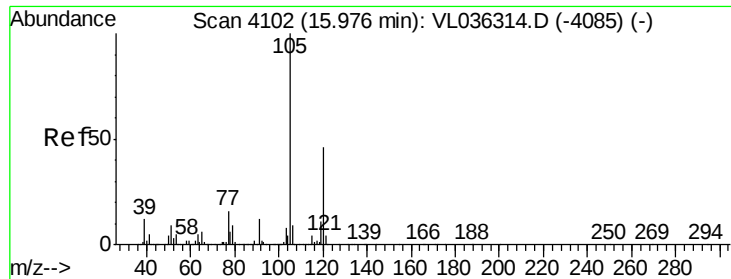
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#72
 4-Ethyltoluene
 Concen: 0.275 ppbv
 RT: 15.81 min Scan# 4049
 Delta R.T. -0.01 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Tgt Ion: 105 Resp: 108224
 Ion Ratio Lower Upper
 105 100
 120 31.8 23.2 34.8
 91 11.5 11.0 16.4
 77 14.1 12.2 18.4





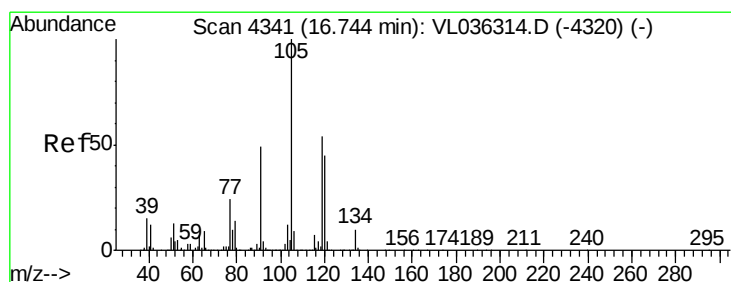
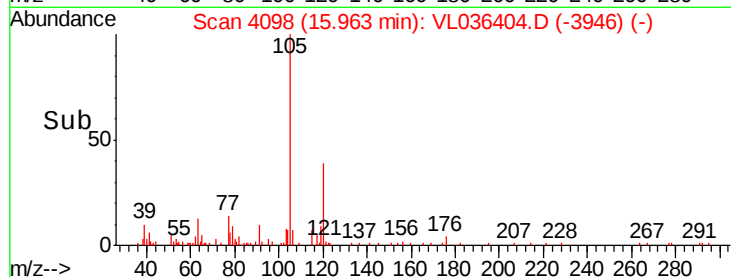
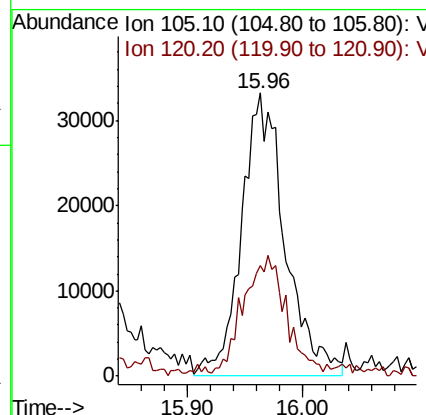
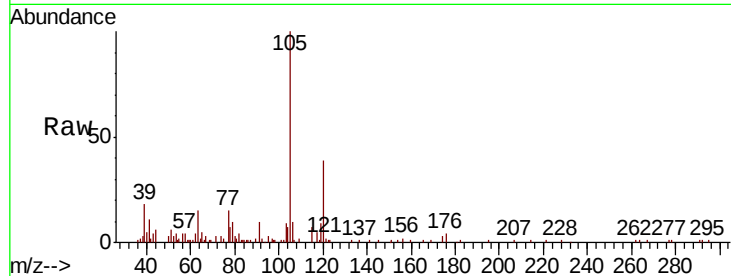
#73
 1,3,5-Trimethylbenzene
 Concen: 0.230 ppbv m
 RT: 15.96 min Scan# 4098
 Delta R.T. -0.01 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Instrument :
 MSVOA_L
 ClientSampled :
 SG-6

Tot Ion	Ratio	Lower	Upper
105	100		
120	39.0	36.9	55.3

Manual Integrations
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.810 ppbv m
 RT: 16.73 min Scan# 4337
 Delta R.T. -0.01 min
 Lab File: VL036404.D
 Acq: 26 Feb 2021 16:15

Tgt Ion	Ratio	Lower	Upper
105	100		
120	37.7	35.8	53.6
91	16.3	39.8	59.6#
77	17.4	19.1	28.7#

