

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL050720\
 Data File : VL034969.D
 Acq On : 7 May 2020 15:48
 Operator : SY/AP
 Sample : L2524-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SSRG2

Manual Integrations
 APPROVED

MMDadoda
 5/8/2020 5:22:33 PM

Quant Time: May 08 08:50:19 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LWed May 0
 QLast Update : Wed May 06 14:49:39 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	969576	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	2280273	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	2151866	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.47	95	1816044	10.43	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	104.30%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.02	85	22058	0.160 ppbv	92
3) Chlorodifluoromethane	2.96	51	20390	0.184 ppbv	97
4) Chloromethane	3.11	50	10247m	0.162 ppbv	
9) Propene	2.99	41	10894	0.227 ppbv	92
10) Heptane	8.15	43	37909	0.315 ppbv	93
11) Trichlorofluoromethane	3.93	101	41648	0.294 ppbv	98
13) Ethanol	3.58	45	840467	53.024 ppbv	99
15) Acetone	3.83	43	1078435	8.413 ppbv	99
17) tert-Butyl alcohol	4.29	59	37253m	0.327 ppbv	
19) Isopropyl Alcohol	3.95	45	306000	3.580 ppbv #	93
20) Methylene Chloride	4.33	84	331078	7.803 ppbv	95
26) Hexane	5.69	57	461722	4.946 ppbv #	41
29) Chloroform	5.75	83	22052	0.144 ppbv	93
34) 2-Butanone	5.24	43	160290	1.131 ppbv	97
36) Benzene	6.91	78	128927m	0.686 ppbv	
44) 2,2,4-Trimethylpentane	7.89	57	44756	0.134 ppbv #	59
52) Tetrachloroethene	11.27	164	3901m	0.058 ppbv	
53) Toluene	9.84	91	3187463	15.994 ppbv	100
58) Ethyl Benzene	12.76	91	811375	3.049 ppbv	100
59) m/p-Xylene	13.01	91	3001111	12.819 ppbv #	60
60) o-Xylene	13.74	91	1218208	5.273 ppbv	100
61) Styrene	13.57	104	46251	0.316 ppbv	94
62) Isopropylbenzene	14.72	105	54036	0.157 ppbv	97
64) n-propylbenzene	15.61	120	62686	0.709 ppbv	67
70) n-Butylbenzene	18.62	91	95287m	0.259 ppbv	
72) 4-Ethyltoluene	15.89	105	455140	1.766 ppbv	98
73) 1,3,5-Trimethylbenzene	16.05	105	501483	1.999 ppbv	98
74) 1,2,4-Trimethylbenzene	16.82	105	1837575	6.712 ppbv #	75
79) Naphthalene	22.28	128	99925	0.469 ppbv #	94

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

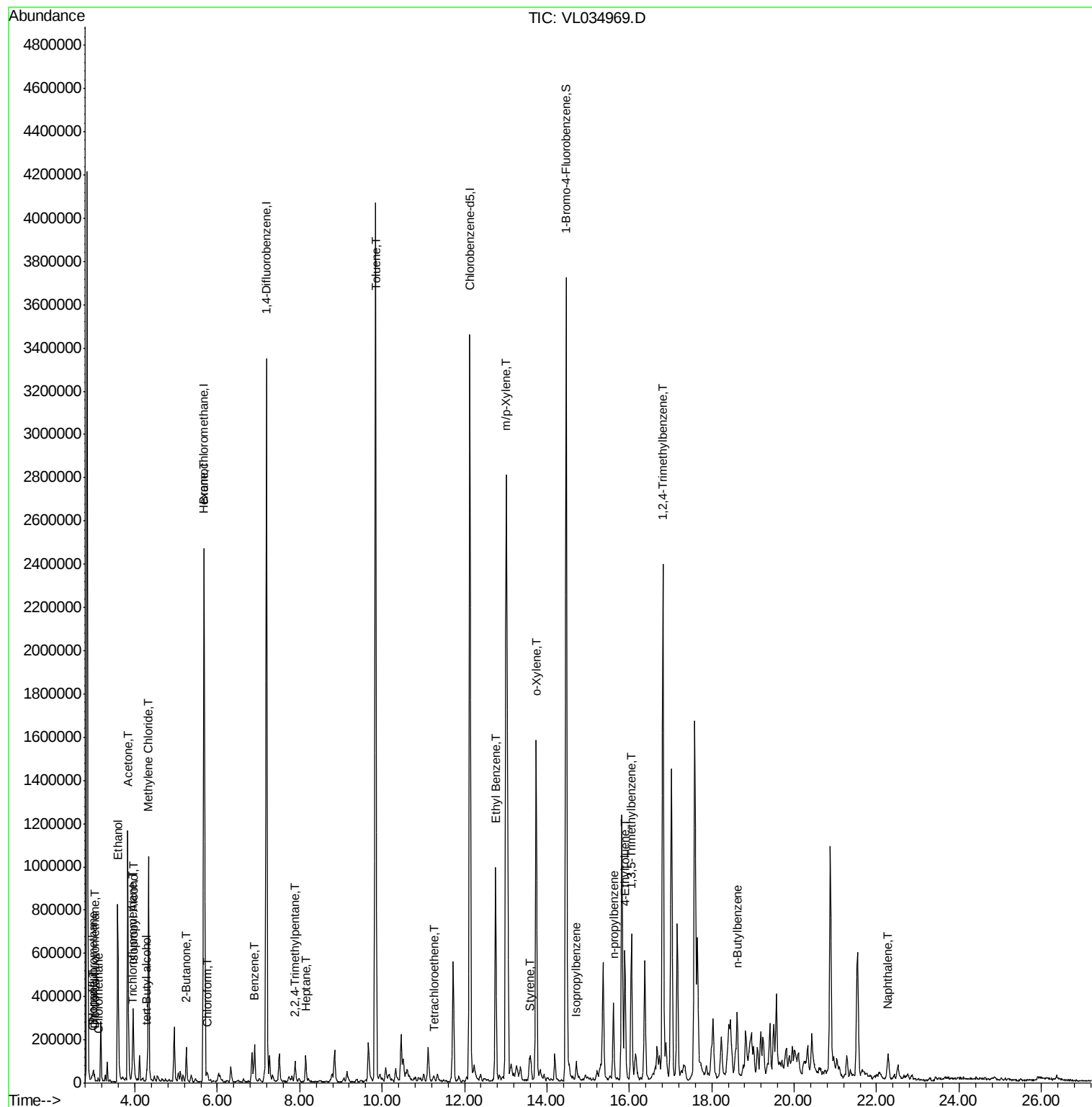
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL050720\
Data File : VL034969.D
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Operator : SY/AP
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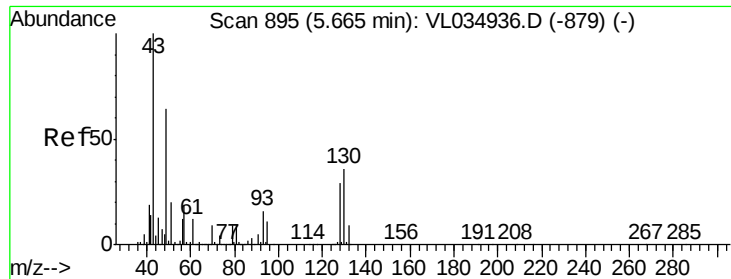
Instrument :
MSVOA_L
ClientSampleId :
SSRG2

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5/8/2020 5:22:33 PM

Quant Time: May 08 08:50:19 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL050620AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed May
QLast Update : Wed May 06 14:49:39 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

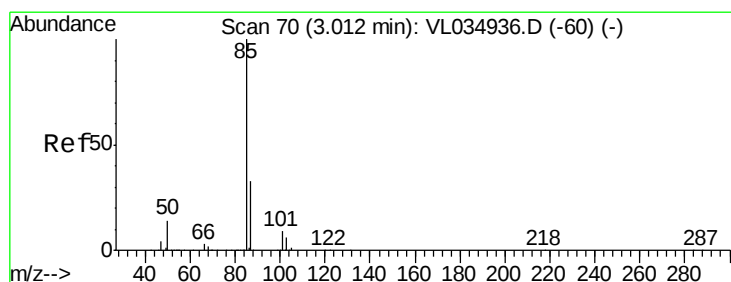
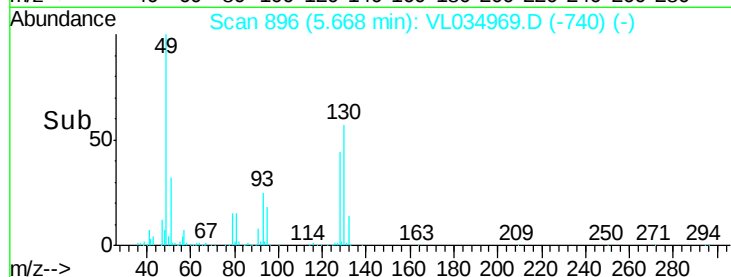
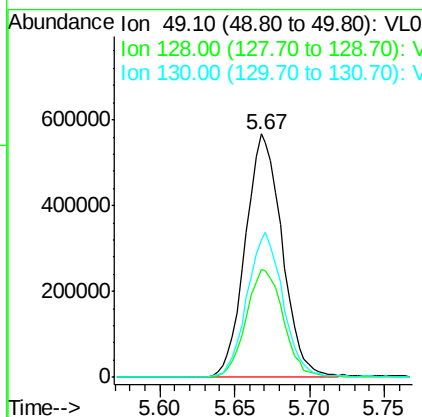
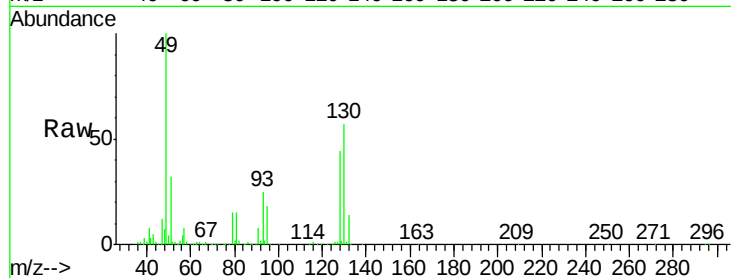
ClientSampled :

SSRG2

Tot Ion:	49	Resp:	969576
Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.1	66.5
130	58.4	29.1	87.3

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#2

Dichlorodifluoromethane

Concen: 0.160 ppbv

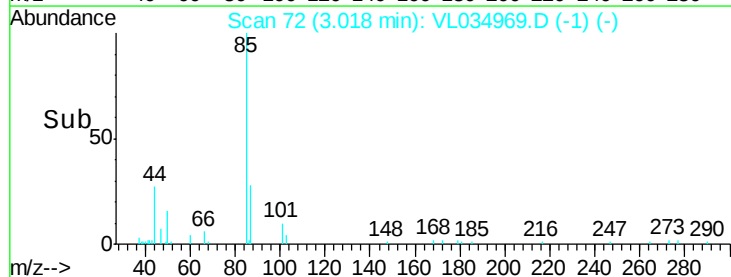
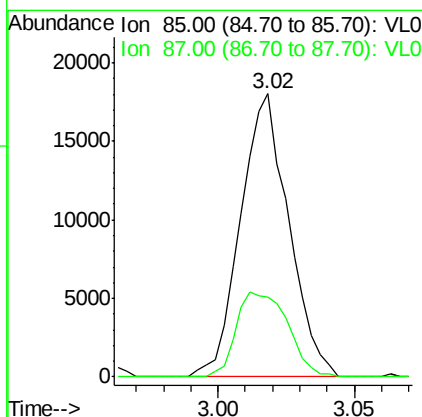
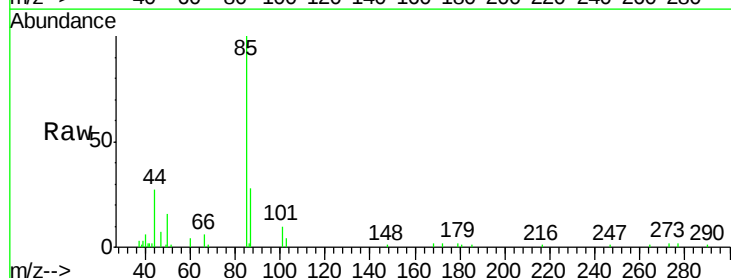
RT: 3.02 min Scan# 72

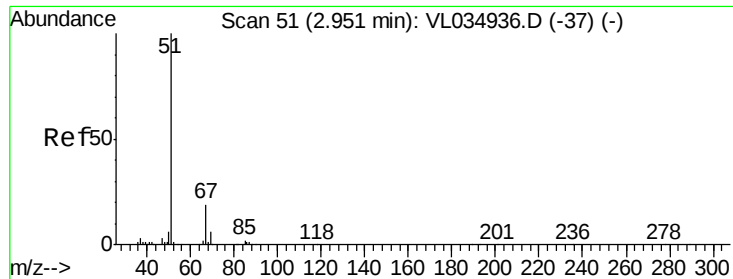
Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Tgt Ion:	85	Resp:	22058
Ion	Ratio	Lower	Upper
85	100		
87	28.3	26.2	39.2





#3

Chlorodifluoromethane

Concen: 0.184 ppbv

RT: 2.96 min Scan# 54

Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

SSRG2

Tot Ion: 51 Resp: 20390

Ion Ratio Lower Upper

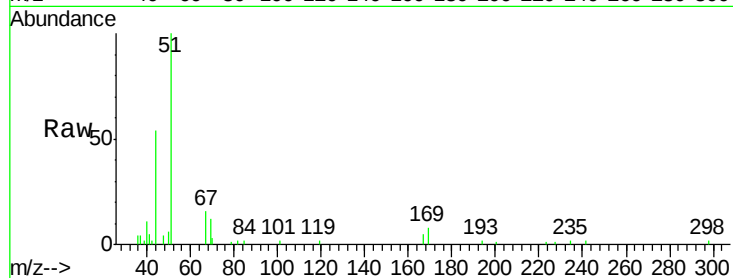
51 100

67 17.3 15.0 22.6

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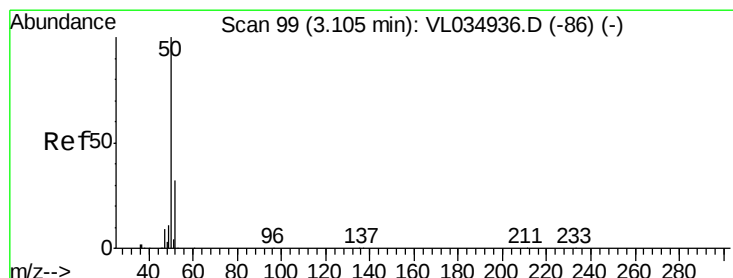
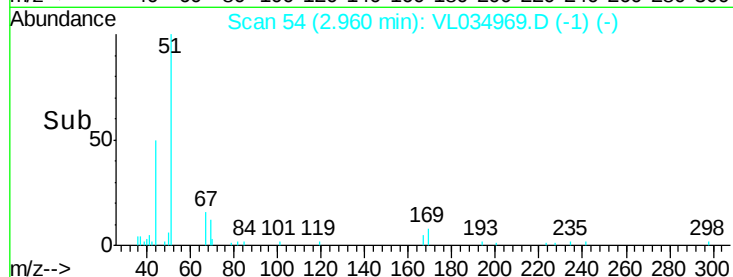
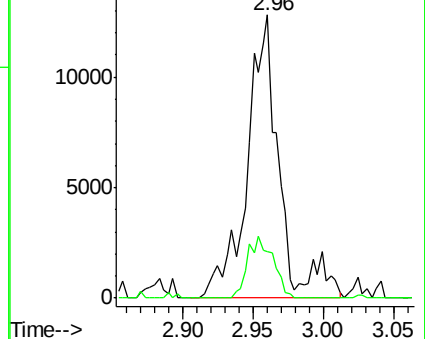
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Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



#4

Chloromethane

Concen: 0.162 ppbv m

RT: 3.11 min Scan# 101

Delta R.T. 0.01 min

Lab File: VL034969.D

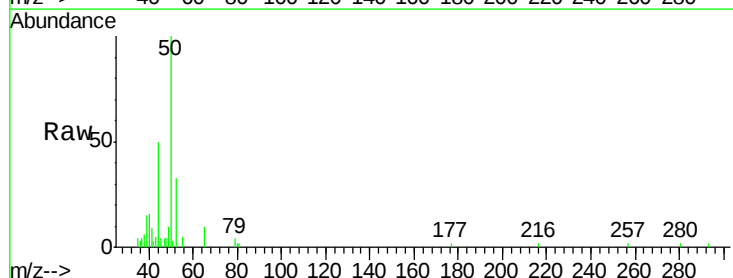
Acq: 7 May 2020 15:48

Tgt Ion: 50 Resp: 10247

Ion Ratio Lower Upper

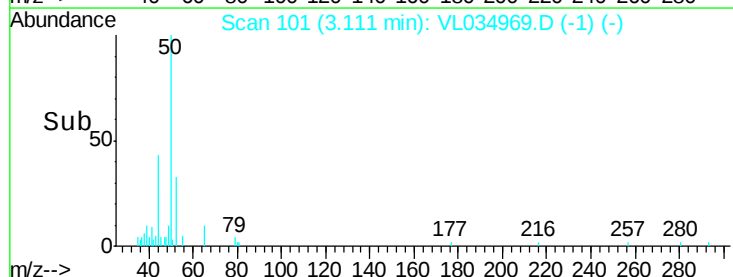
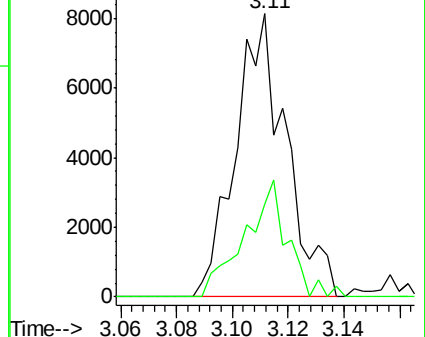
50 100

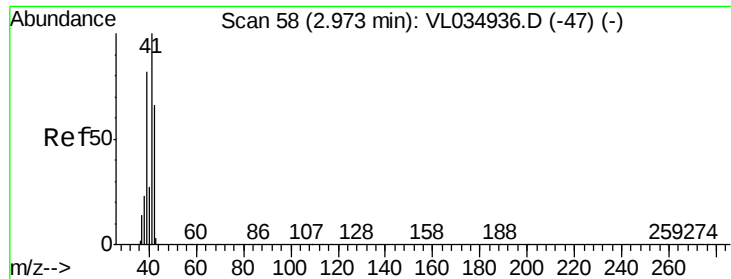
52 33.5 25.4 38.2



Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0





#9

Propene

Concen: 0.227 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

ClientSampled :

SSRG2

Tot Ion: 41 Resp: 10894

Ion Ratio Lower Upper

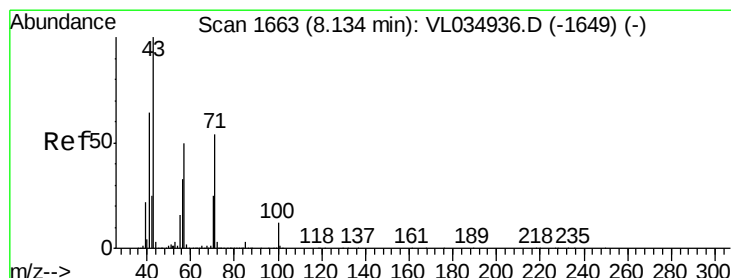
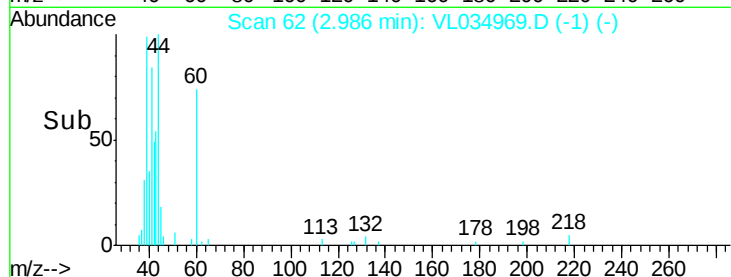
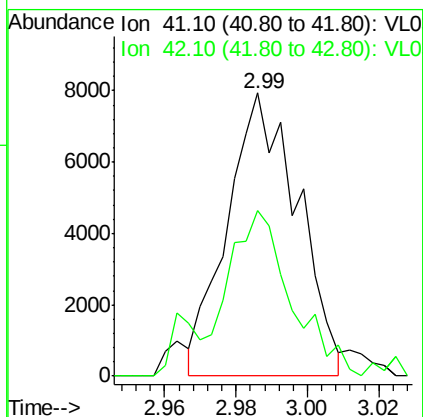
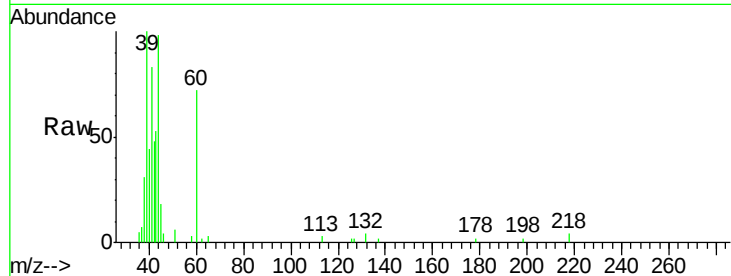
41 100

42 61.6 54.5 81.7

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#10

Heptane

Concen: 0.315 ppbv

RT: 8.15 min Scan# 1667

Delta R.T. 0.01 min

Lab File: VL034969.D

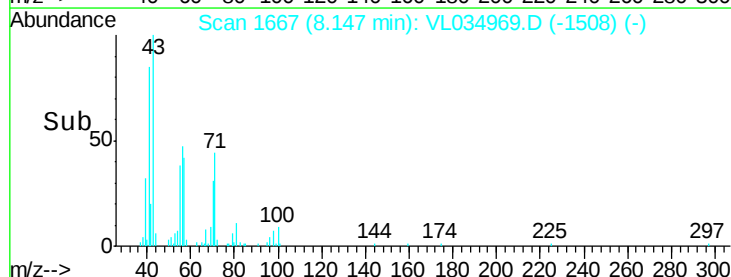
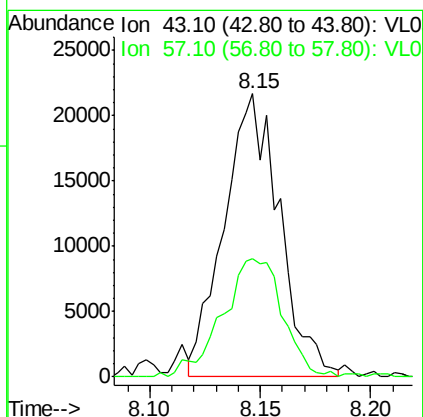
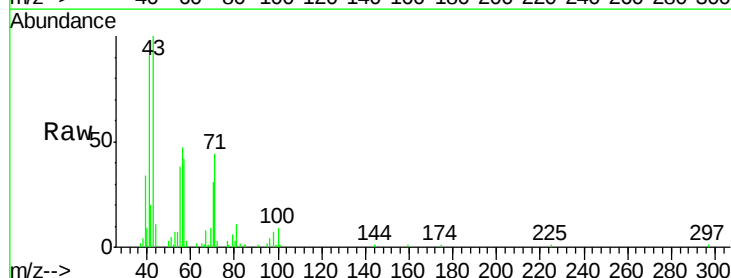
Acq: 7 May 2020 15:48

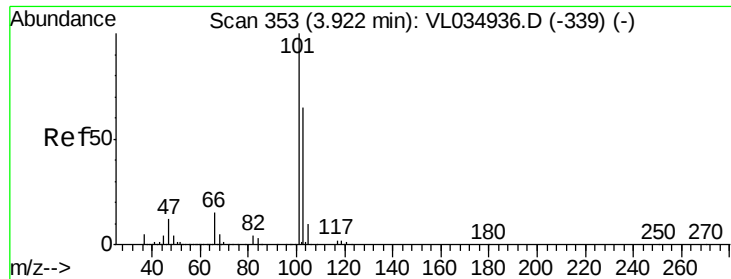
Tgt Ion: 43 Resp: 37909

Ion Ratio Lower Upper

43 100

57 46.2 41.1 61.7





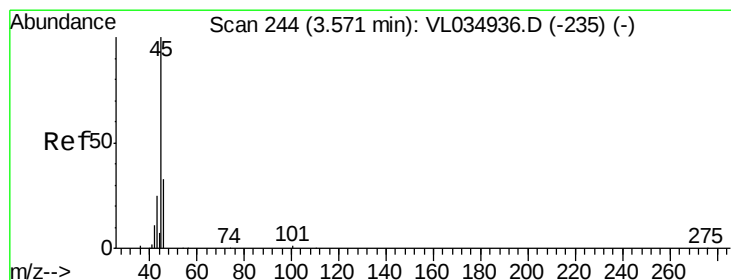
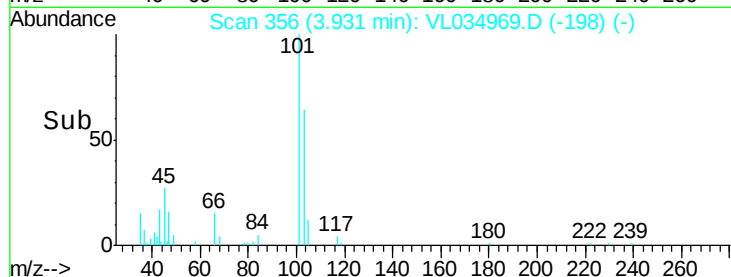
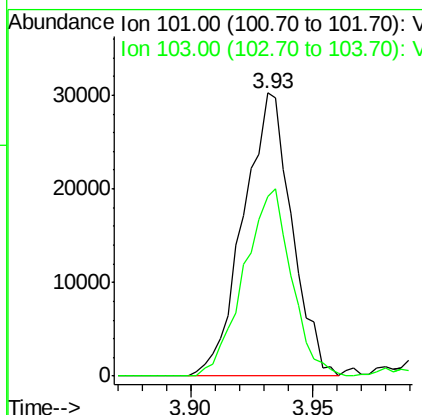
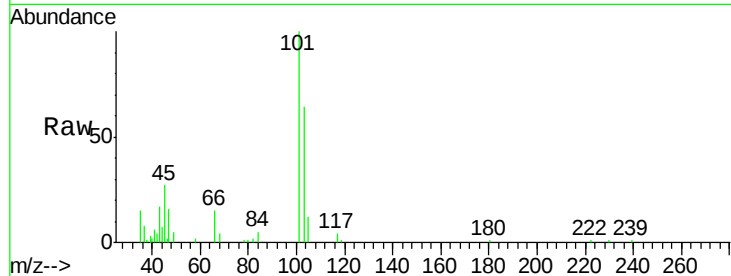
#11
 Trichlorofluoromethane
 Concen: 0.294 ppbv
 RT: 3.93 min Scan# 356
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SSRG2

Tot Ion	Ratio	Lower	Upper
101	100		
103	63.5	51.9	77.9

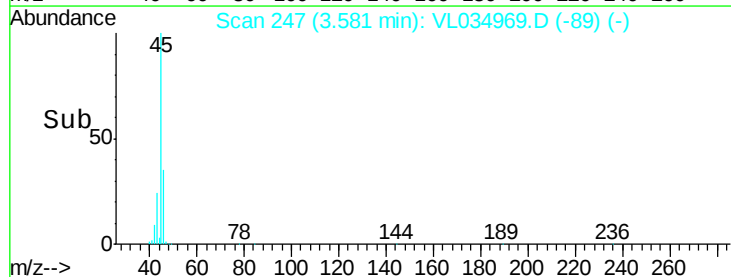
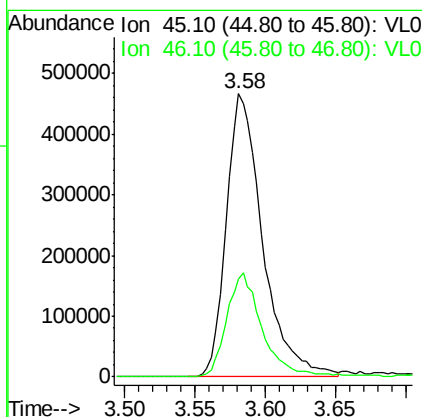
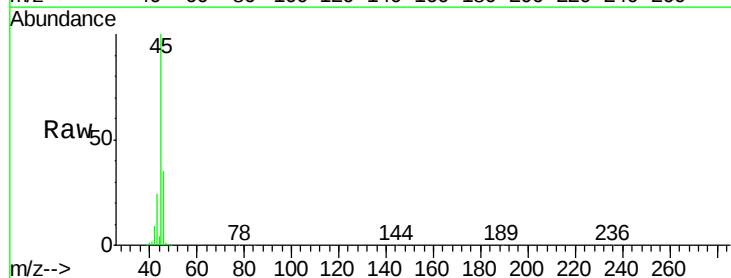
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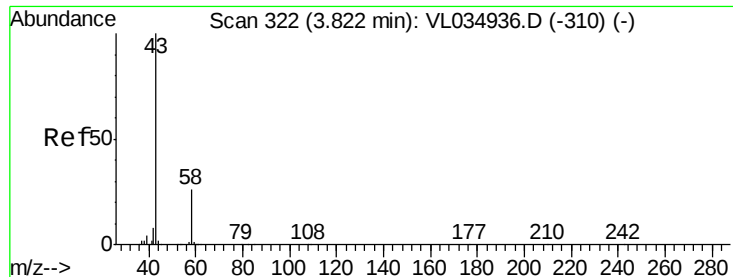
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#13
 Ethanol
 Concen: 53.024 ppbv
 RT: 3.58 min Scan# 247
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.5	14.3	57.3





#15

Acetone

Concen: 8.413 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.00 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

SSRG2

Tot Ion: 43 Resp: 1078435

Ion Ratio Lower Upper

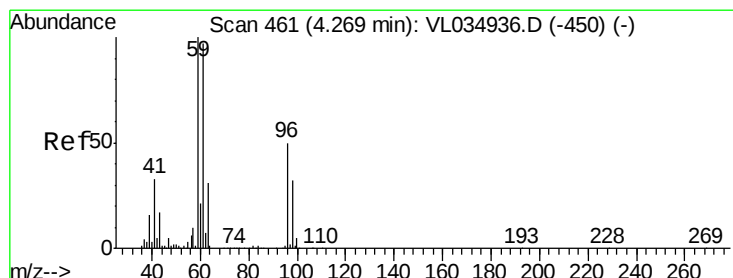
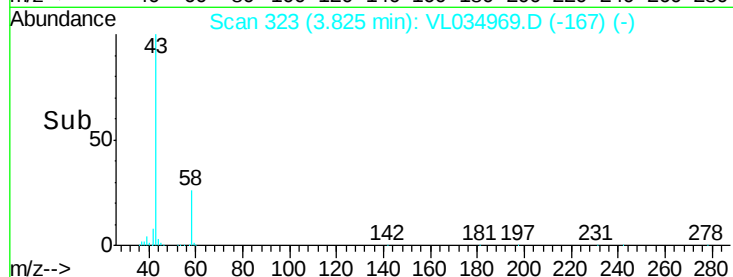
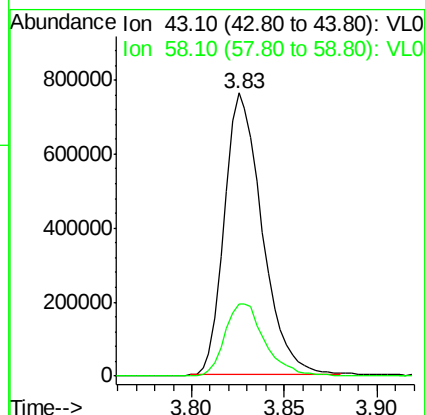
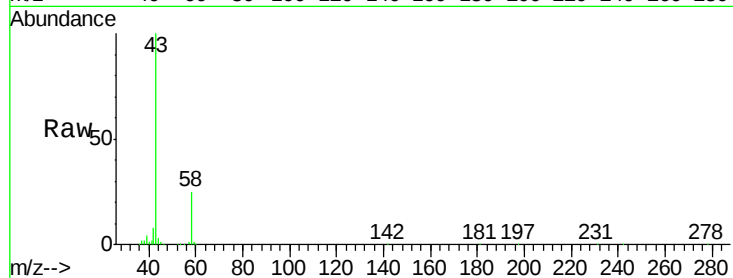
43 100

58 27.4 21.7 32.5

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#17

tert-Butyl alcohol

Concen: 0.327 ppbv m

RT: 4.29 min Scan# 467

Delta R.T. 0.02 min

Lab File: VL034969.D

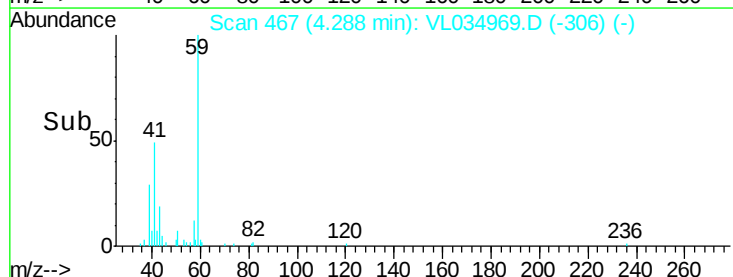
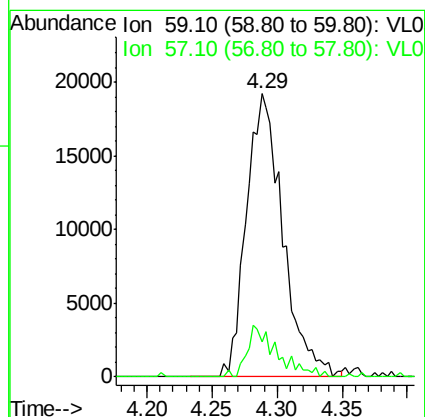
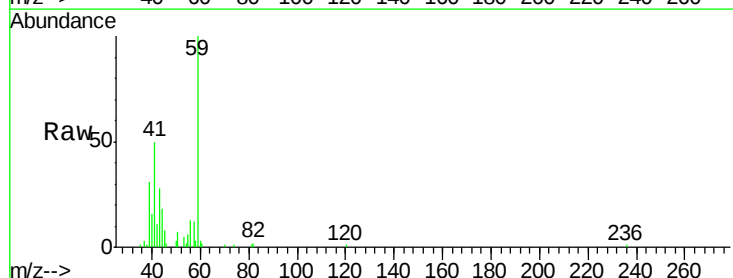
Acq: 7 May 2020 15:48

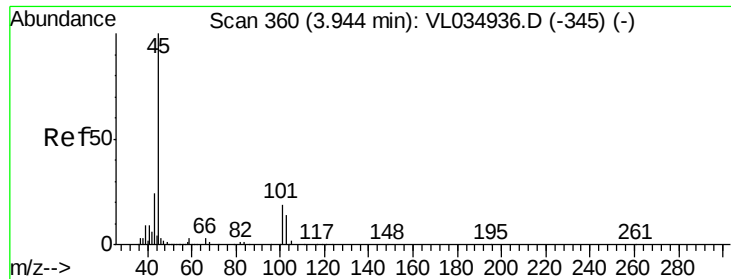
Tgt Ion: 59 Resp: 37253

Ion Ratio Lower Upper

59 100

57 3.0 8.7 13.1#





#19

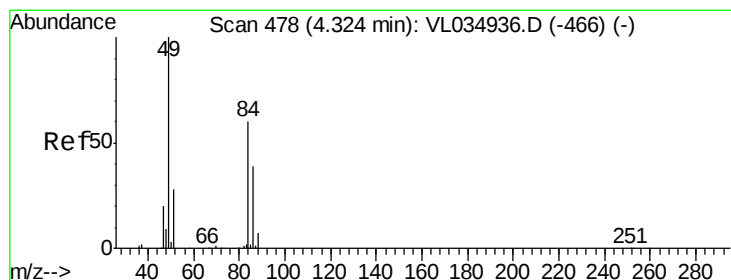
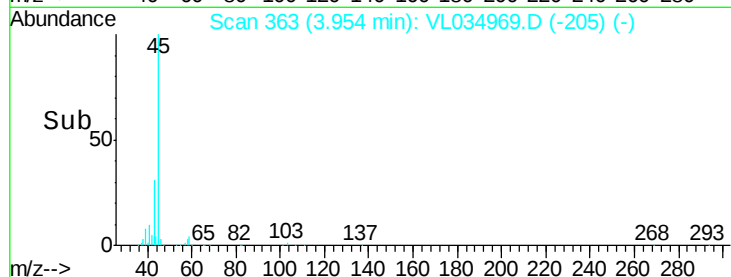
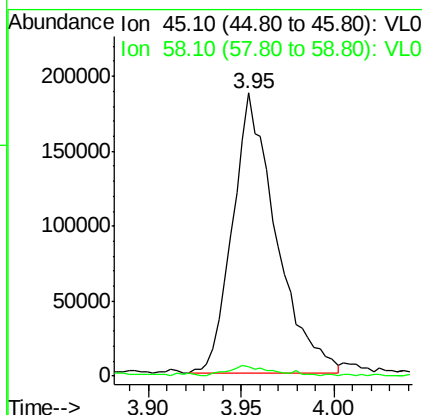
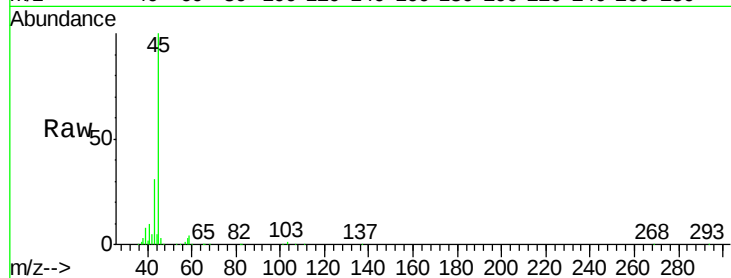
Isopropyl Alcohol
 Concen: 3.580 ppbv
 RT: 3.95 min Scan# 363
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SSRG2

Tot Ion	Ratio	Lower	Upper
45	100		
58	4.6	1.7	2.5#

Manual Integrations
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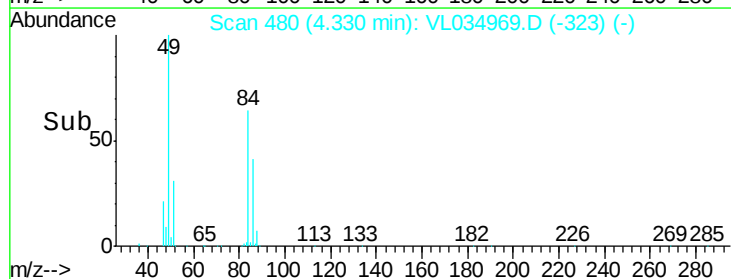
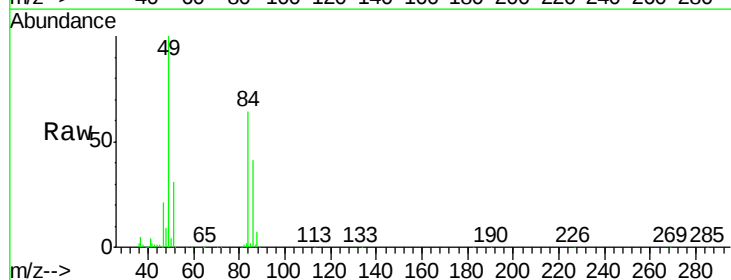
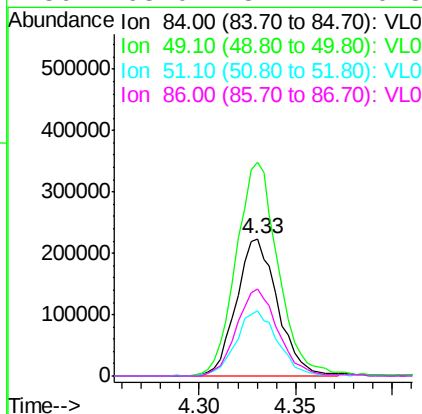
MMDadoda
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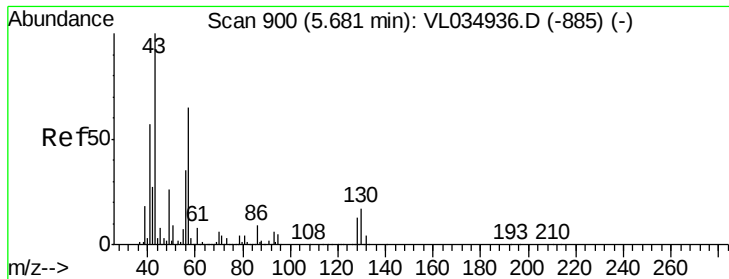


#20

Methylene Chloride
 Concen: 7.803 ppbv
 RT: 4.33 min Scan# 480
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
84	100		
49	155.6	132.5	198.7
51	47.6	38.4	57.6
86	63.0	51.2	76.8





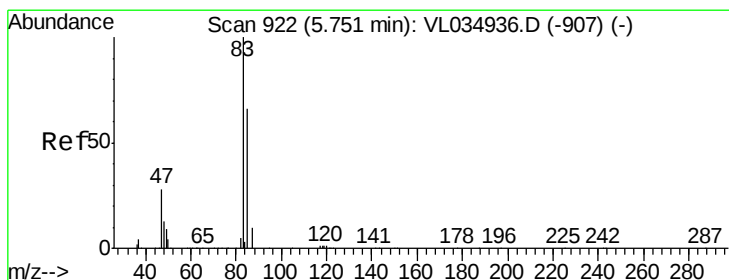
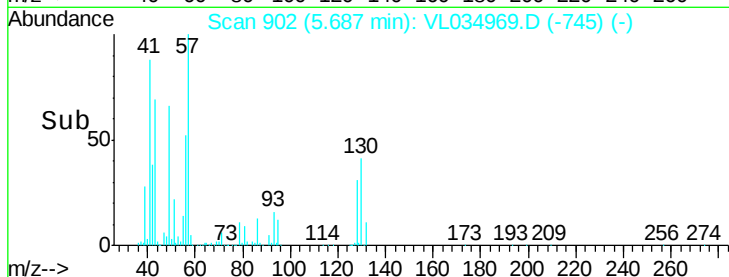
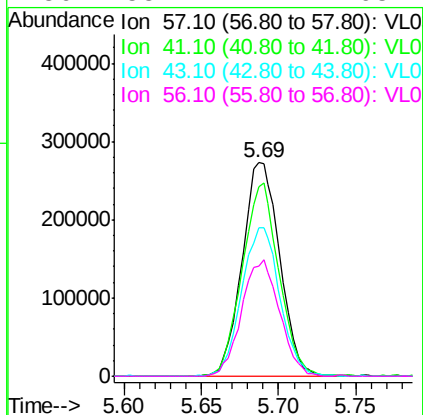
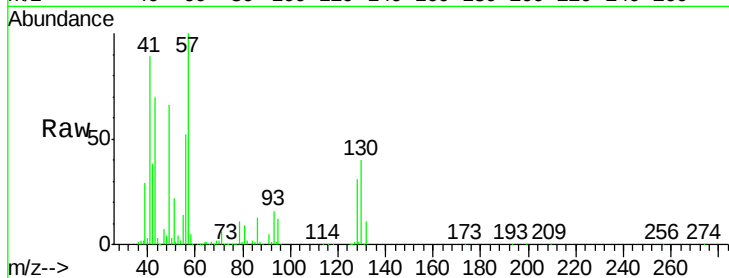
#26
Hexane
Concen: 4.946 ppbv
RT: 5.69 min Scan# 902
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampleId :
SSRG2

Tot Ion	57	Resp	461722
Ion	Ratio	Lower	Upper
57	100		
41	89.2	72.7	109.1
43	70.8	182.1	273.1#
56	55.1	42.2	63.2

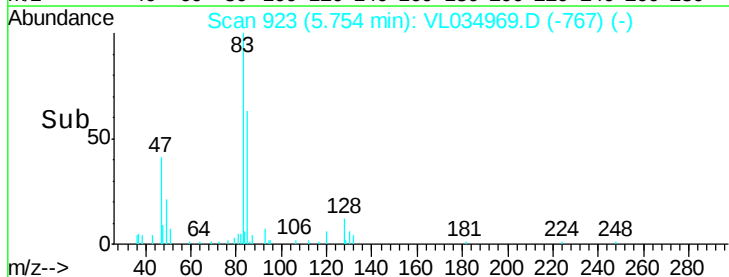
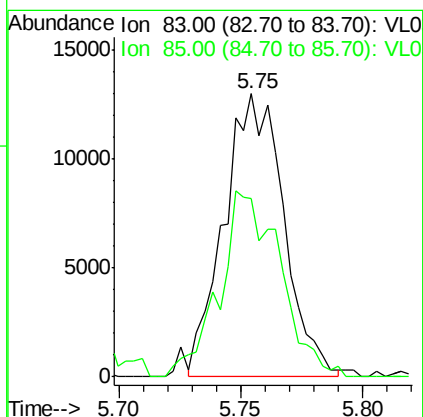
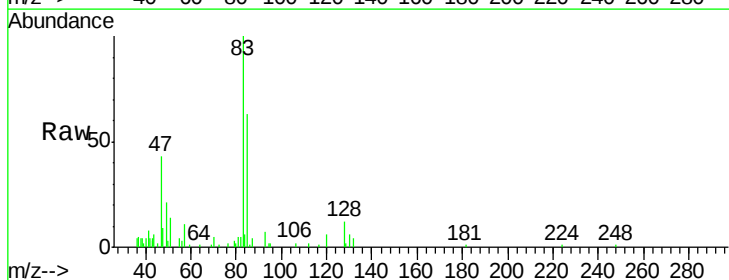
Manual Integrations
APPROVED

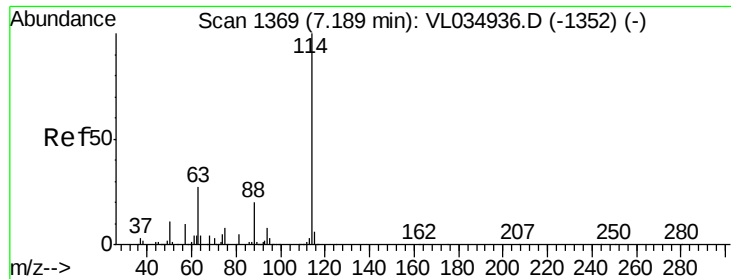
MMDadoda
5/8/2020 5:22:33 PM



#29
Chloroform
Concen: 0.144 ppbv
RT: 5.75 min Scan# 923
Delta R.T. 0.00 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Tgt Ion	83	Resp	22052
Ion	Ratio	Lower	Upper
83	100		
85	60.7	53.0	79.6





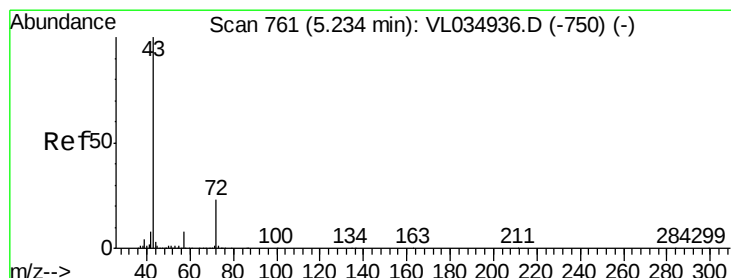
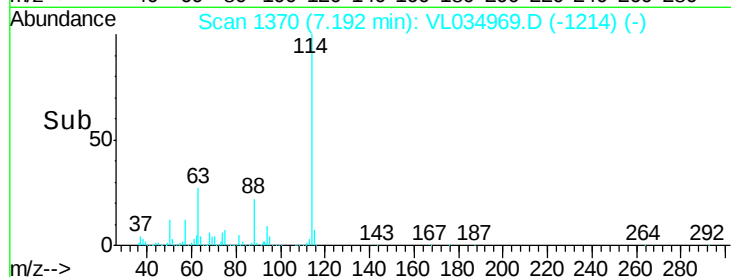
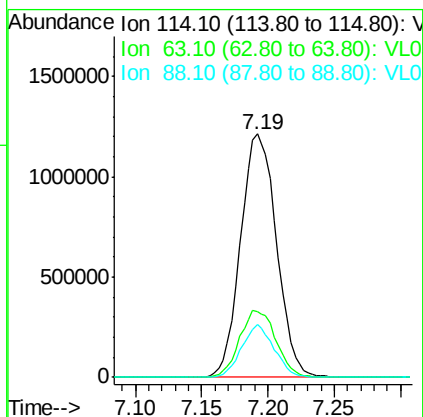
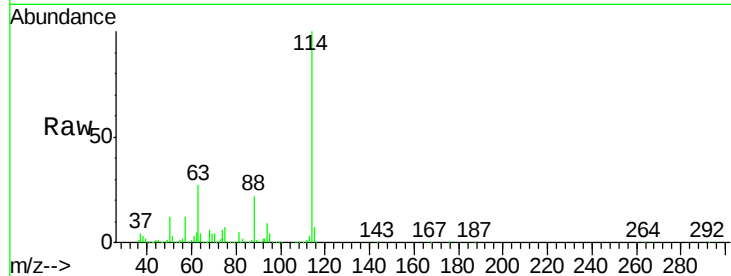
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.00 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Instrument :
 MSVOA_L
 ClientSampleId :
 SSRG2

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.9	22.2	33.4
88	19.7	15.5	23.3

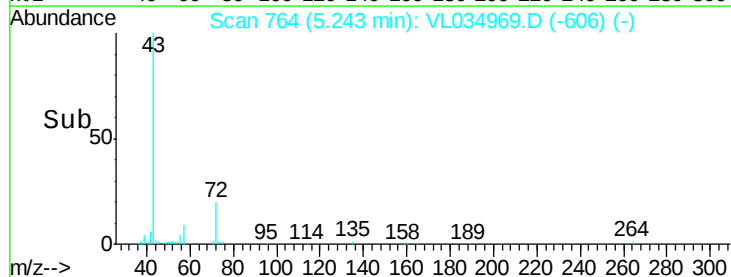
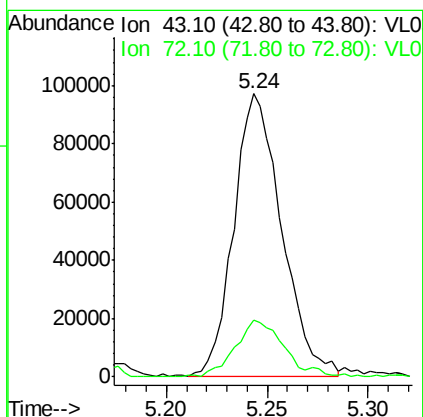
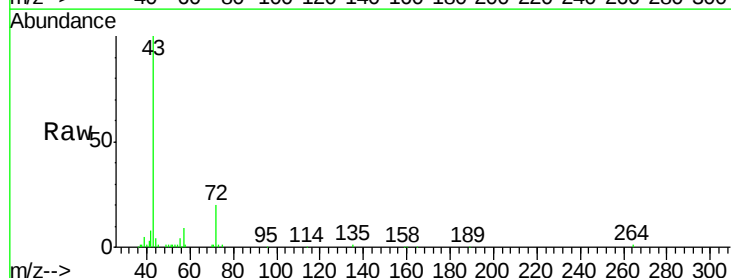
Manual Integrations
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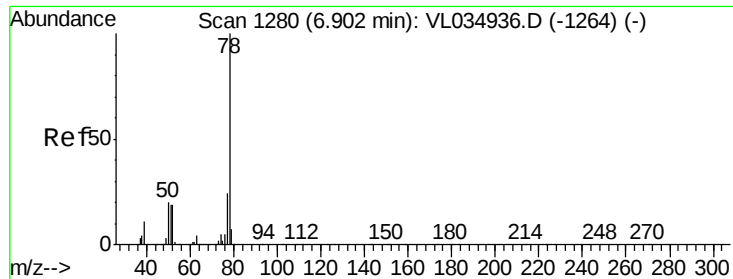
MMDadoda
 5/8/2020 5:22:33 PM



#34
 2-Butanone
 Concen: 1.131 ppbv
 RT: 5.24 min Scan# 764
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.1	18.0	27.0





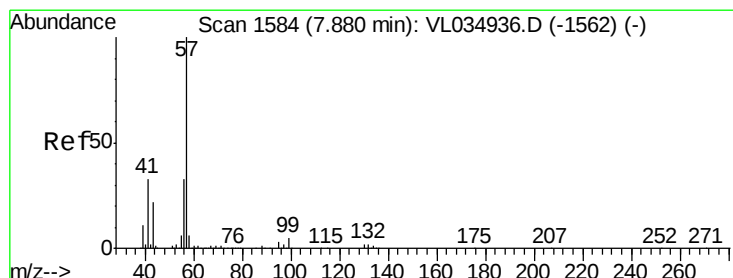
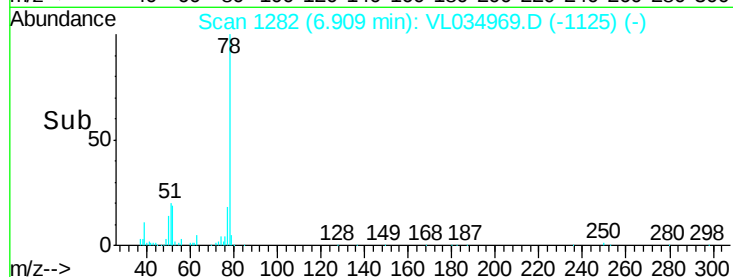
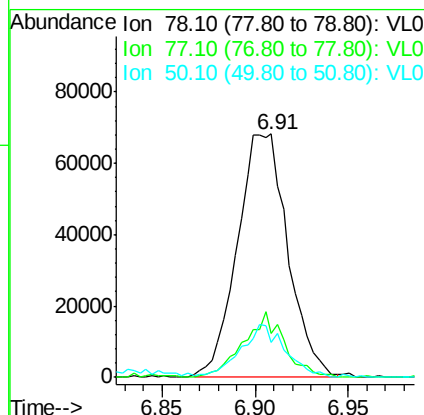
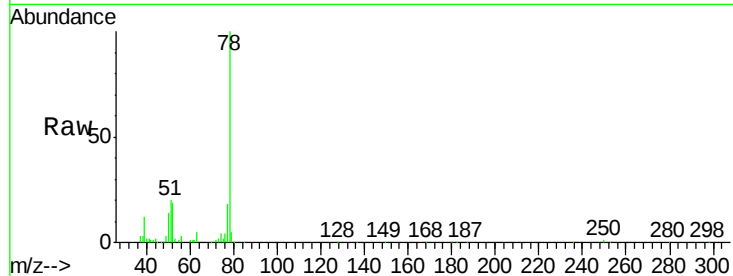
#36
Benzene
Concen: 0.686 ppbv m
RT: 6.91 min Scan# 1282
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampleId :
SSRG2

Tot Ion	Ratio	Lower	Upper
78	100		
77	17.9	19.0	28.6#
50	14.4	15.8	23.8#

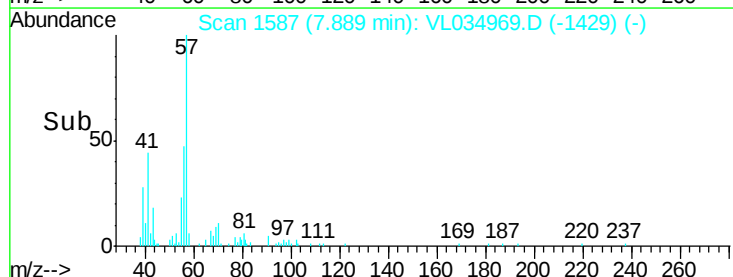
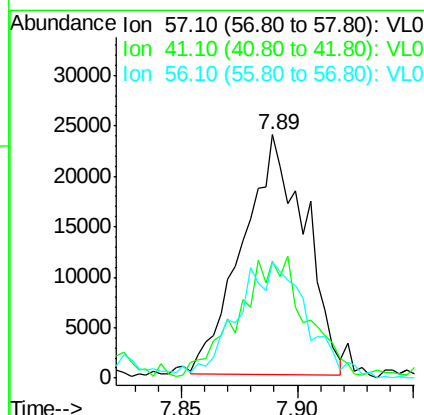
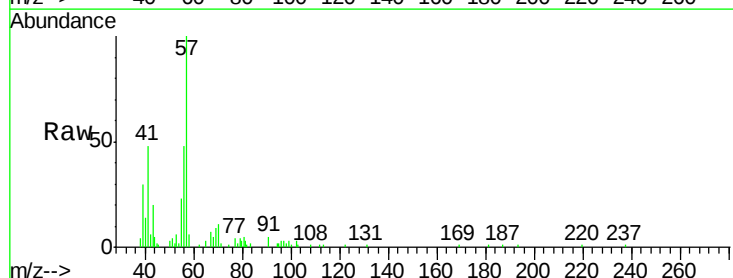
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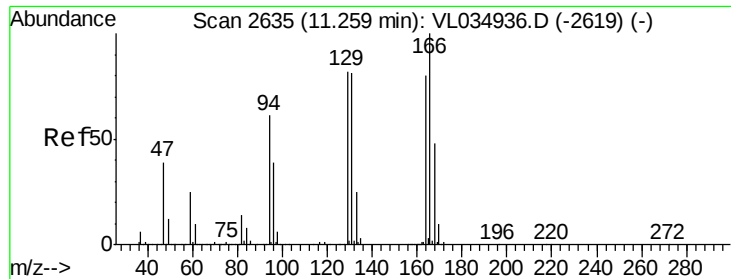
MMDadoda
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#44
2,2,4-Trimethylpentane
Concen: 0.134 ppbv
RT: 7.89 min Scan# 1587
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
57	100		
41	56.7	26.4	39.6#
56	54.4	25.5	38.3#





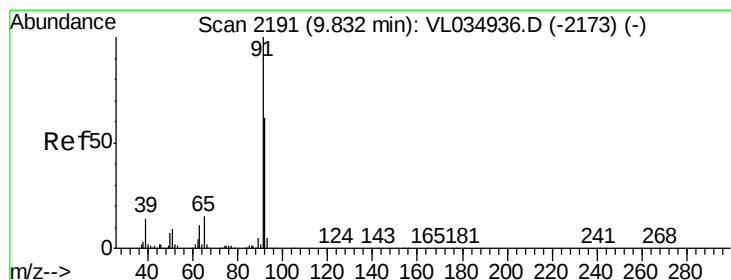
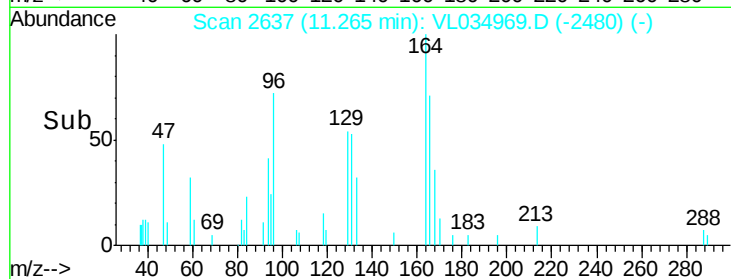
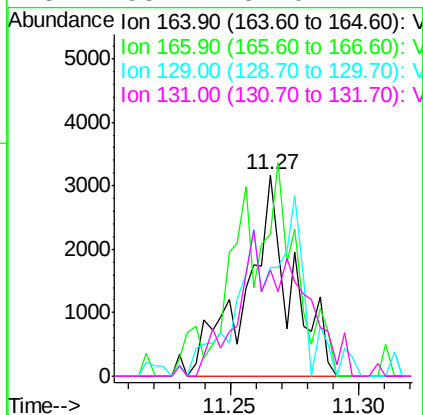
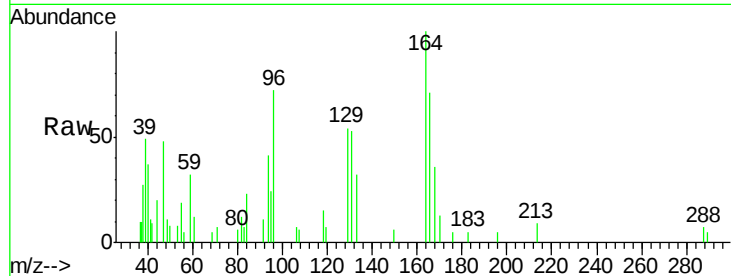
#52
Tetrachloroethene
Concen: 0.058 ppbv m
RT: 11.27 min Scan# 2637
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampled :
SSRG2

Tot Ion	Ratio	Lower	Upper
164	100		
166	71.0	100.7	151.1#
129	53.8	83.0	124.4#
131	53.1	81.0	121.4#

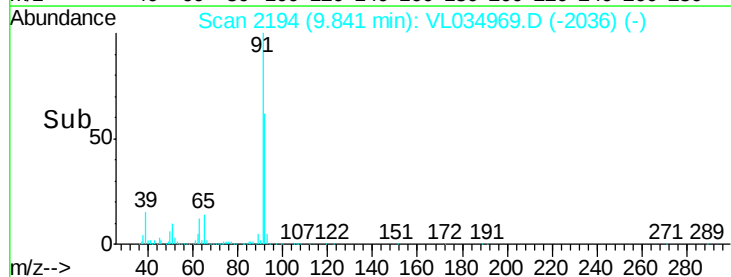
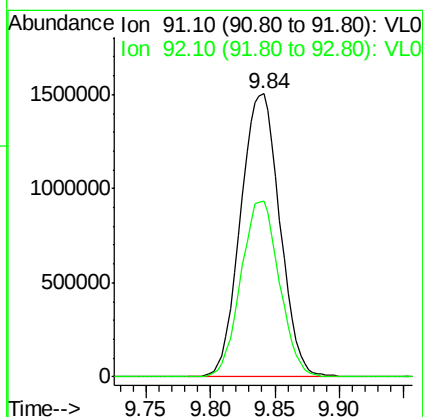
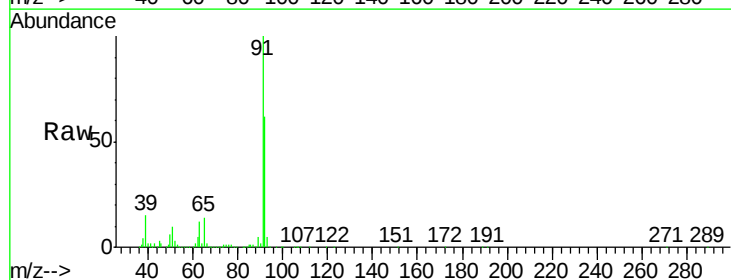
Manual Integrations
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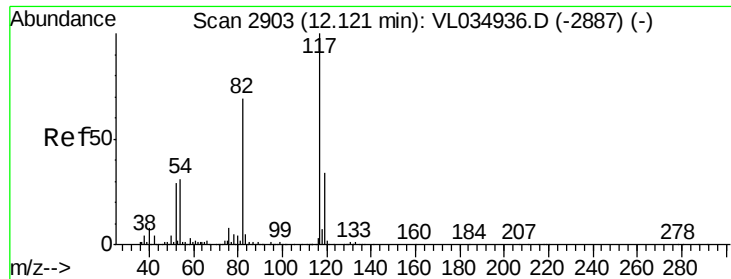
MMDadoda
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#53
Toluene
Concen: 15.994 ppbv
RT: 9.84 min Scan# 2194
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
91	100		
92	61.0	48.6	73.0





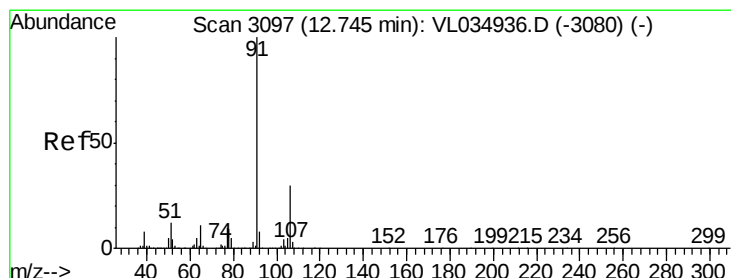
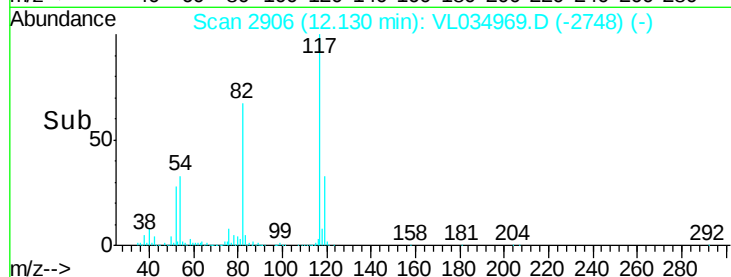
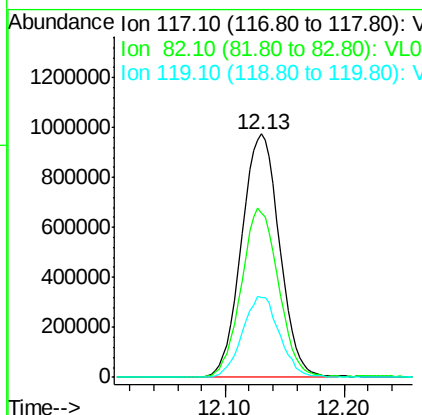
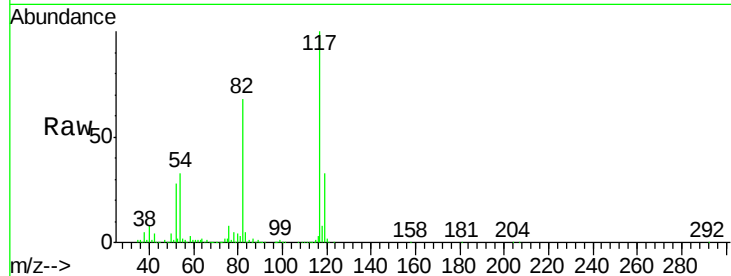
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.13 min Scan# 2906
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampleId :
SSRG2

Tot Ion:117 Resp: 2151866
Ion Ratio Lower Upper
117 100
82 68.2 53.1 79.7
119 32.5 26.7 40.1

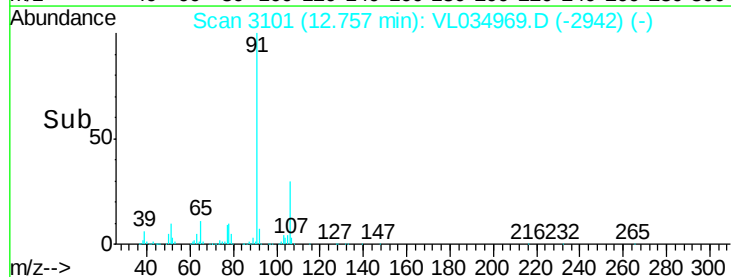
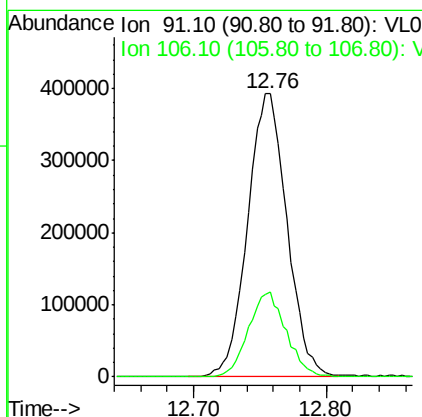
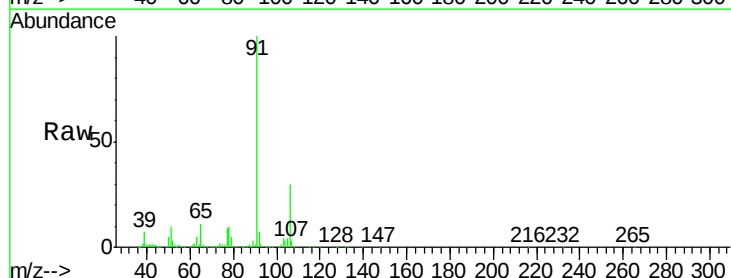
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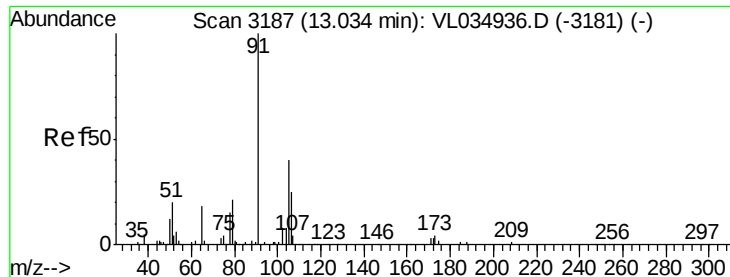
MMDadoda
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#58
Ethyl Benzene
Concen: 3.049 ppbv
RT: 12.76 min Scan# 3101
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Tgt Ion: 91 Resp: 811375
Ion Ratio Lower Upper
91 100
106 30.2 24.2 36.4





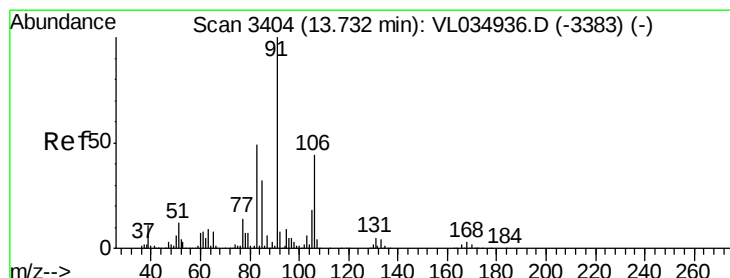
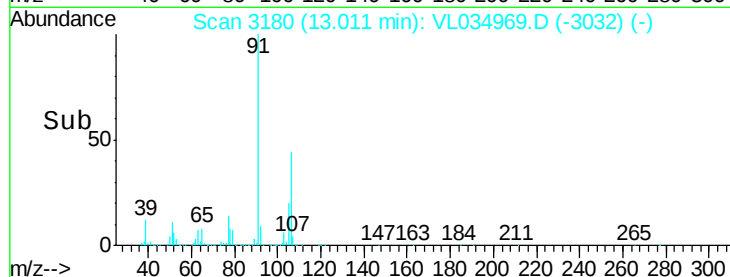
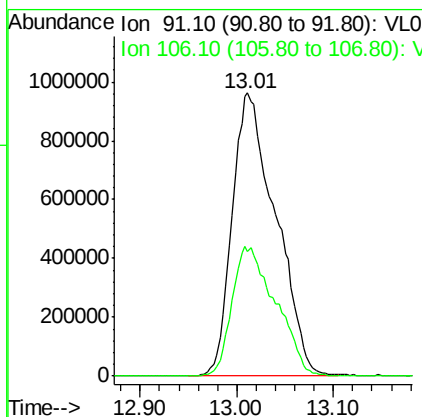
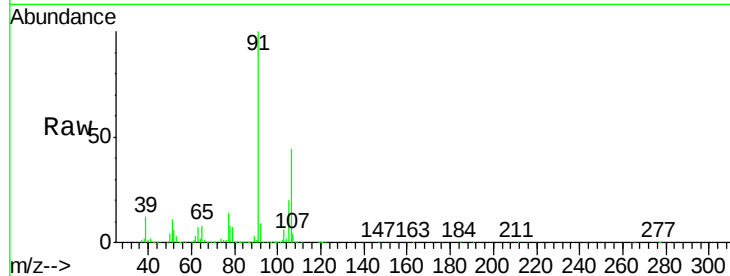
#59
m/p-Xylene
Concen: 12.819 ppbv
RT: 13.01 min Scan# 3180
Delta R.T. -0.02 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampled :
SSRG2

Tot Ion: 91 Resp: 3001111
Ion Ratio Lower Upper
91 100
106 46.2 66.0 99.0#

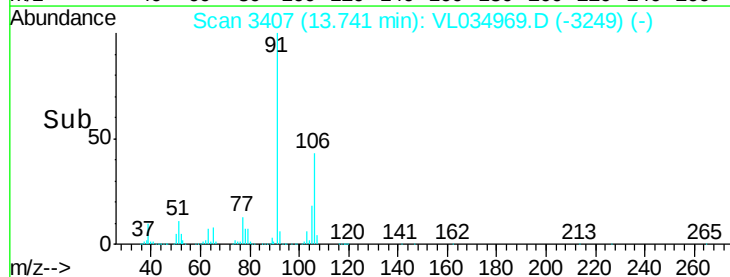
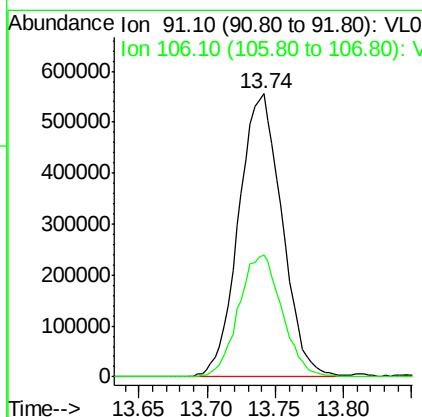
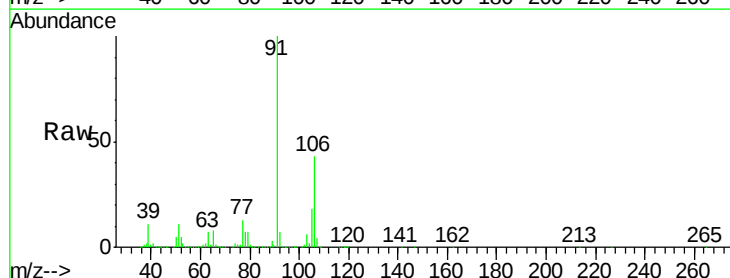
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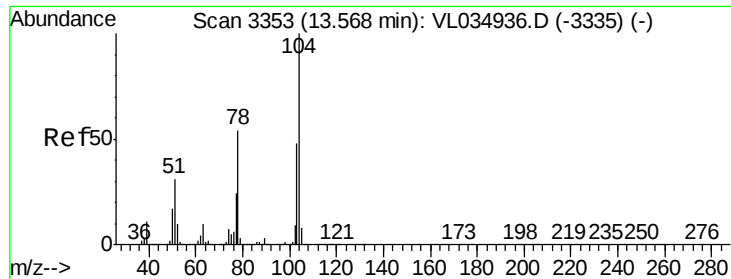
MMDadoda
5/8/2020 5:22:33 PM



#60
o-Xylene
Concen: 5.273 ppbv
RT: 13.74 min Scan# 3407
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Tgt Ion: 91 Resp: 1218208
Ion Ratio Lower Upper
91 100
106 43.5 21.9 65.5





#61

Stvrene

Concen: 0.316 ppbv

RT: 13.57 min Scan# 3355

Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

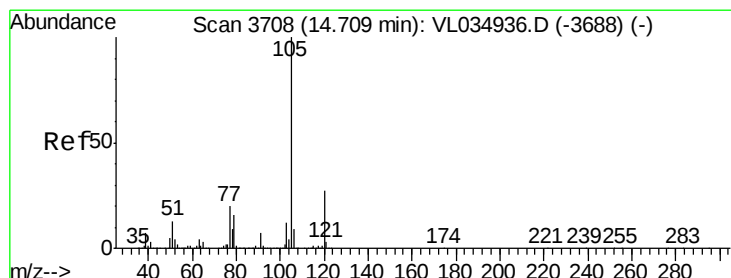
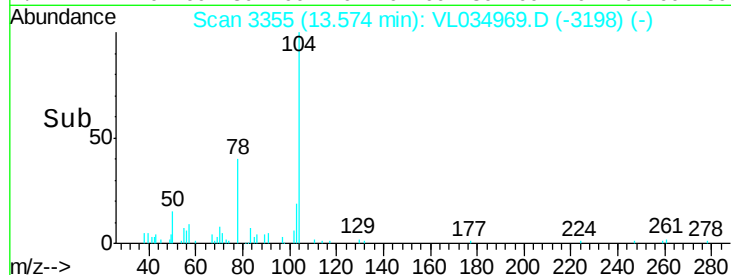
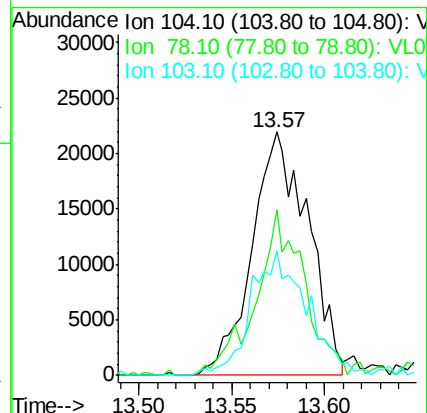
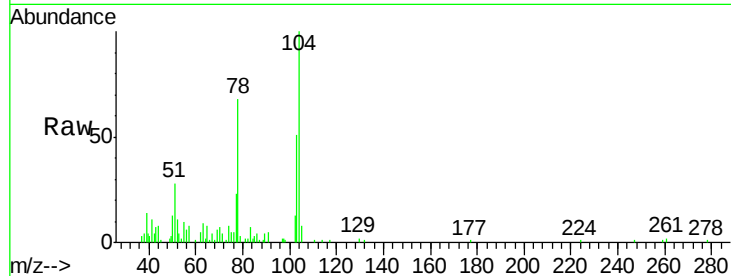
ClientSampled :

SSRG2

Tot Ion:	104	Resp:	46251
Ion Ratio	Lower	Upper	
104	100		
78	60.1	43.7	65.5
103	51.4	38.8	58.2

Manual Integrations
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#62

Isopropylbenzene

Concen: 0.157 ppbv

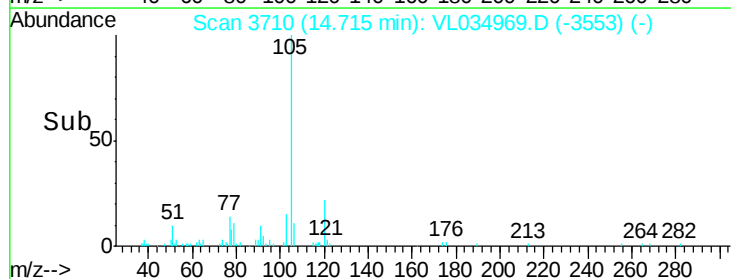
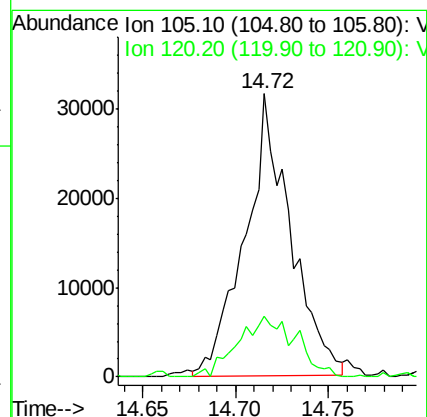
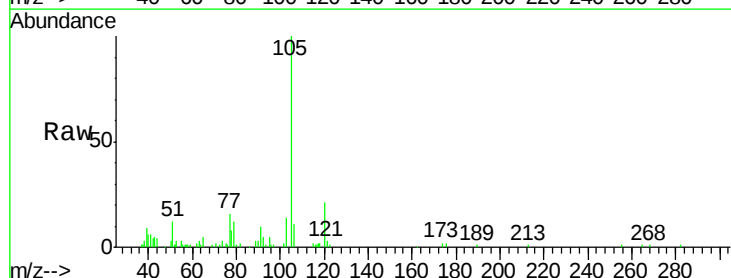
RT: 14.72 min Scan# 3710

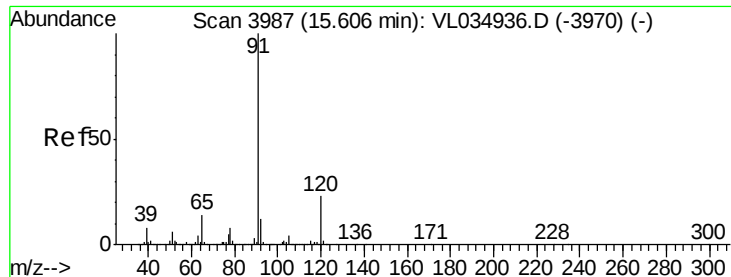
Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Tgt Ion:	105	Resp:	54036
Ion Ratio	Lower	Upper	
105	100		
120	27.4	20.6	31.0





#64

n-propylbenzene

Concen: 0.709 ppbv

RT: 15.61 min Scan# 3989

Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

ClientSampleId :

SSRG2

Tot Ion:120 Resp: 62686

Ion Ratio Lower Upper

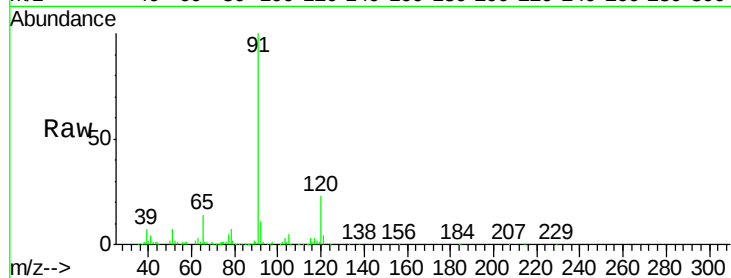
120 100

91 554.3 373.5 560.3

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Abundance Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

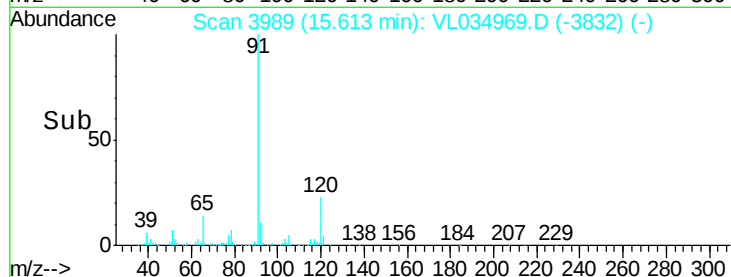
150000

100000

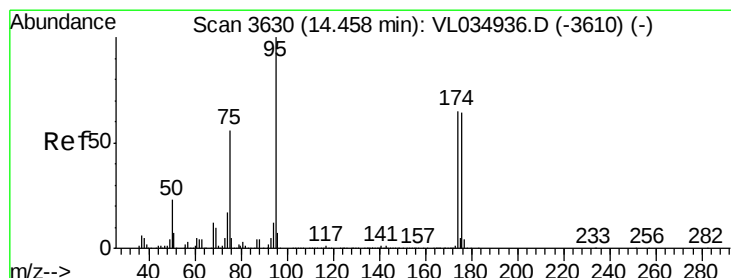
50000

0

Time-->



Time-->



#68

1-Bromo-4-Fluorobenzene

Concen: 10.426 ppbv

RT: 14.47 min Scan# 3633

Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

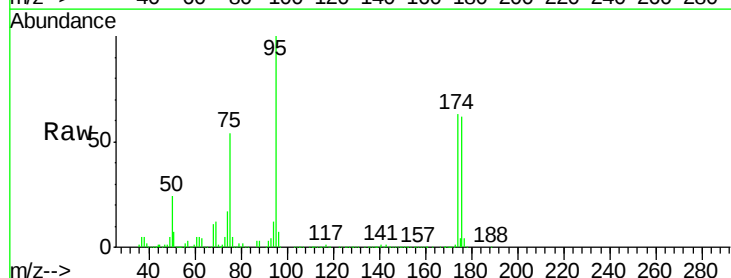
Tgt Ion: 95 Resp: 1816044

Ion Ratio Lower Upper

95 100

174 65.0 51.5 77.3

175 4.8 3.8 5.8



Abundance Ion 95.10 (94.80 to 95.80): VL0

Ion 174.00 (173.70 to 174.70): V

Ion 175.00 (174.70 to 175.70): V

1000000

800000

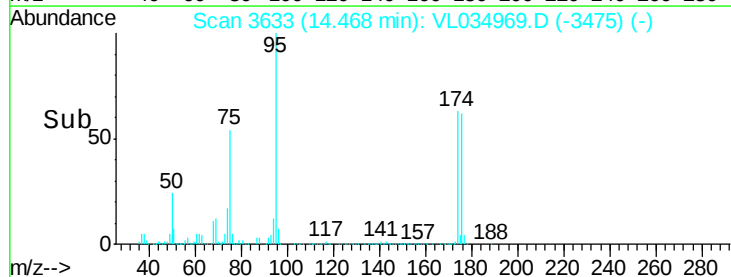
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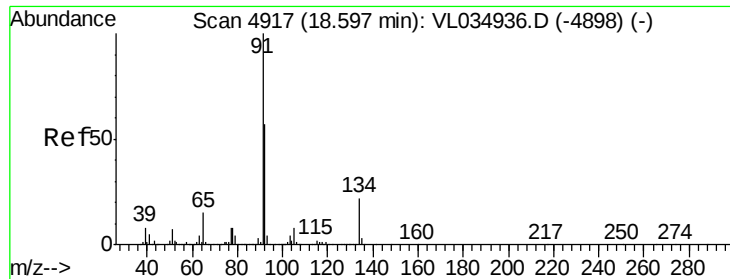
400000

200000

0

Time-->





#70

n-Butylbenzene

Concen: 0.259 ppbv m

RT: 18.62 min Scan# 4923

Delta R.T. 0.02 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Instrument :

MSVOA_L

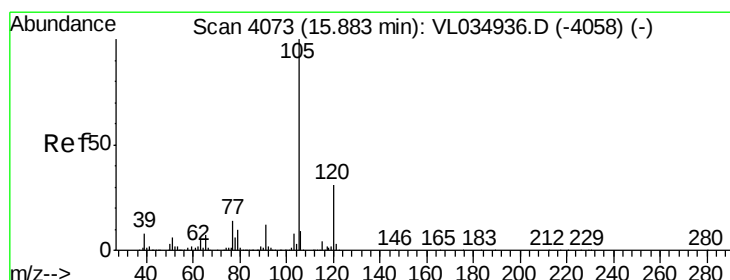
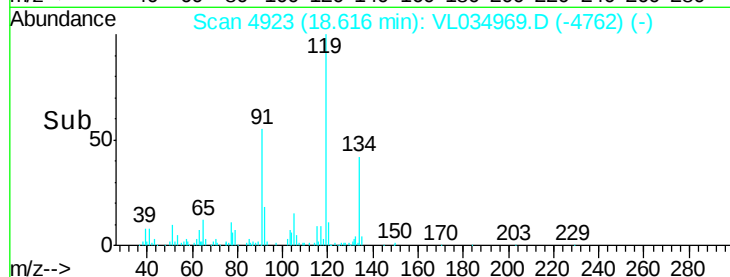
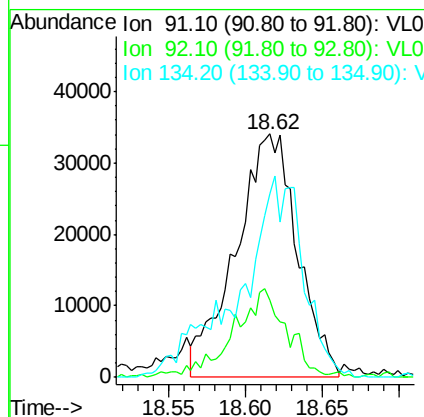
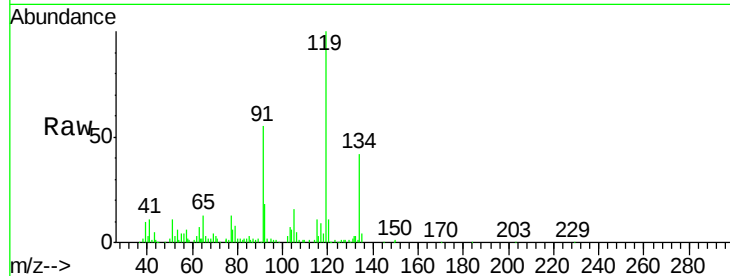
ClientSampleId :

SSRG2

Tot Ion:	91	Resp:	95287
Ion Ratio	Lower	Upper	
91	100		
92	32.2	44.4	66.6#
134	85.9	18.0	27.0#

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#72

4-Ethyltoluene

Concen: 1.766 ppbv

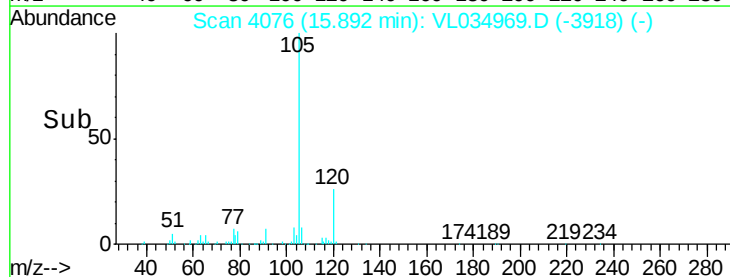
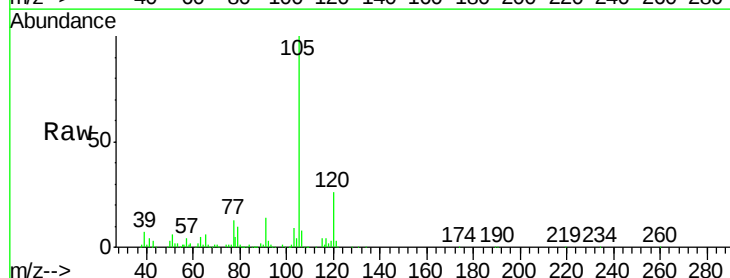
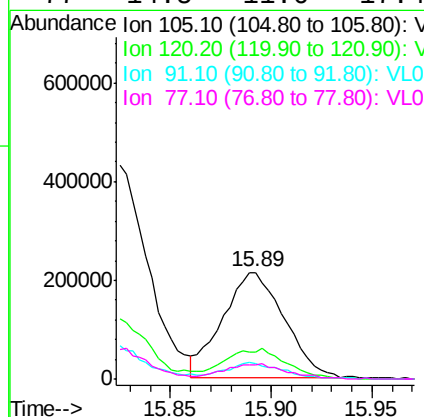
RT: 15.89 min Scan# 4076

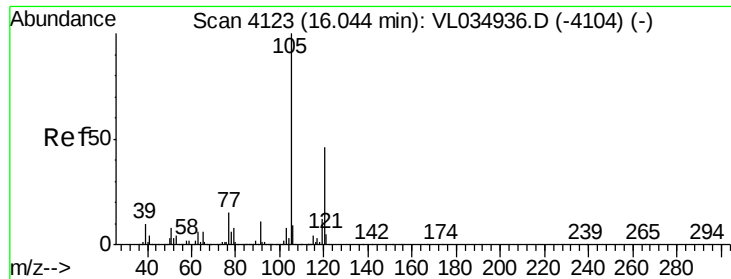
Delta R.T. 0.01 min

Lab File: VL034969.D

Acq: 7 May 2020 15:48

Tgt Ion:	105	Resp:	455140
Ion Ratio	Lower	Upper	
105	100		
120	28.6	23.8	35.8
91	15.0	10.6	15.8
77	14.5	11.6	17.4





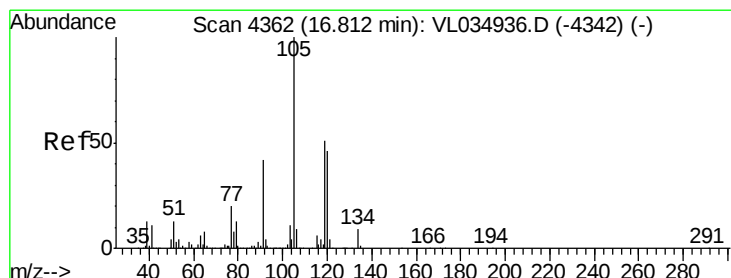
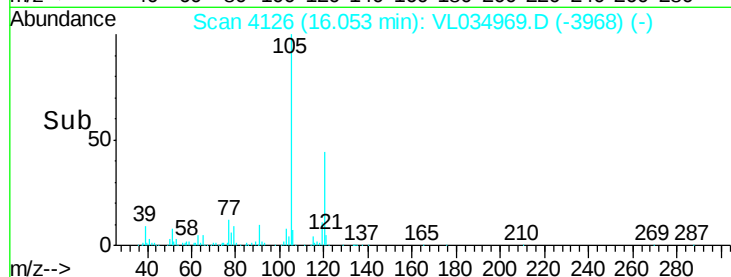
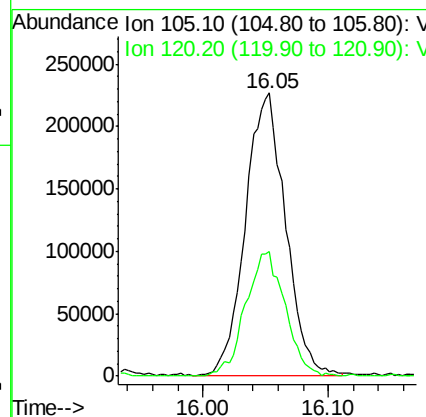
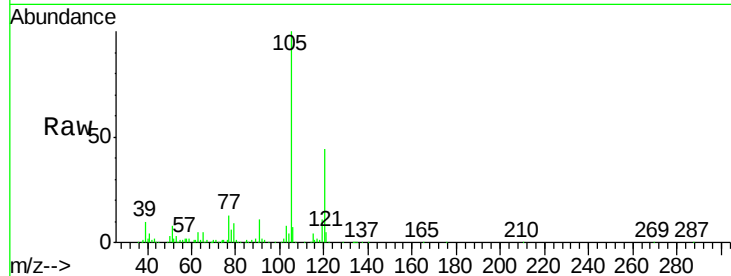
#73
 1,3,5-Trimethylbenzene
 Concen: 1.999 ppbv
 RT: 16.05 min Scan# 4126
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Instrument :
 MSVOA_L
 ClientSampled :
 SSRG2

Tot Ion	Ratio	Lower	Upper
105	100		
120	44.3	36.4	54.6

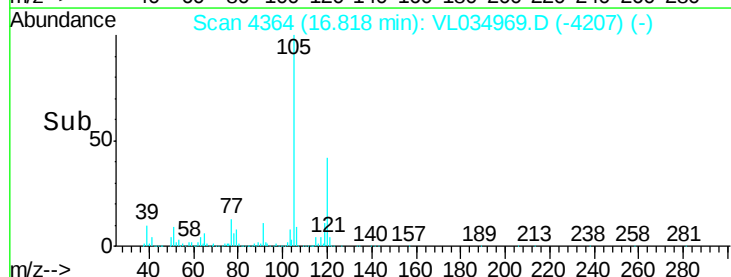
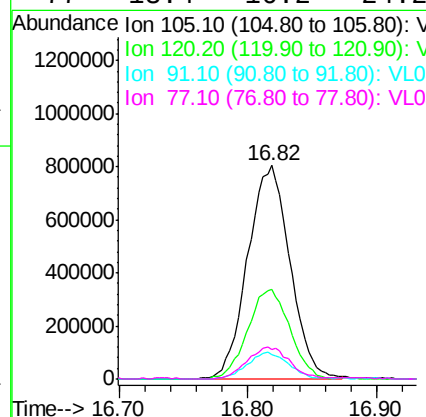
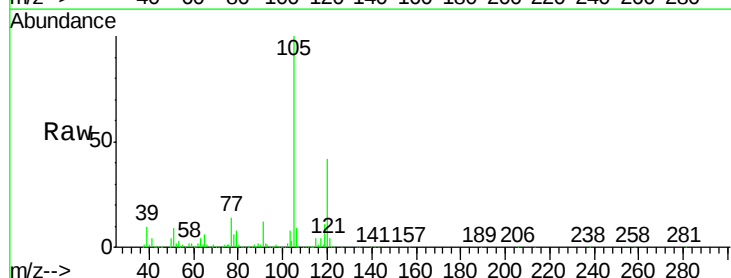
Manual Integrations
 APPROVED

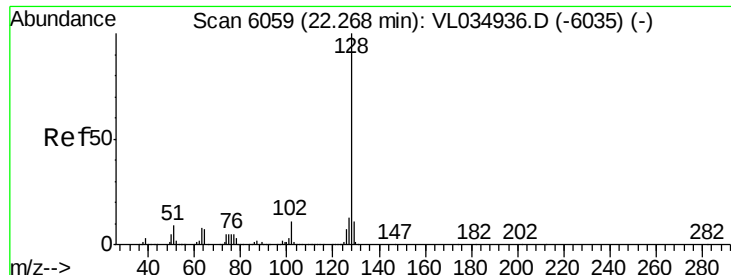
MMDadoda
 5/8/2020 5:22:33 PM



#74
 1,2,4-Trimethylbenzene
 Concen: 6.712 ppbv
 RT: 16.82 min Scan# 4364
 Delta R.T. 0.01 min
 Lab File: VL034969.D
 Acq: 7 May 2020 15:48

Tgt Ion	Ratio	Lower	Upper
105	100		
120	42.1	36.8	55.2
91	11.4	35.4	53.0#
77	13.4	16.2	24.2#





#79
Naphthalene
Concen: 0.469 ppbv
RT: 22.28 min Scan# 6063
Delta R.T. 0.01 min
Lab File: VL034969.D
Acq: 7 May 2020 15:48

Instrument :
MSVOA_L
ClientSampleId :
SSRG2

Tot Ion	Ratio	Lower	Upper
128	100		
127	11.4	10.5	15.7
129	14.1	9.0	13.4

Manual Integrations
APPROVED

MMDadoda
5/8/2020 5:22:33 PM

