

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034891.D
 Acq On : 16 Mar 2020 15:26
 Operator : SY/AP
 Sample : L1924-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-02

Manual Integrations
 APPROVED

MMDadoda
 3/17/2020 12:15:50 PM

Quant Time: Mar 17 05:04:25 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar 0
 QLast Update : Mon Mar 09 16:42:53 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.65	49	920158	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	1997706	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1945932	10.00	ppbv	-0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1595410	10.51	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	105.10%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	87842	0.697	ppbv	93
3) Chlorodifluoromethane	2.94	51	40026m	0.389	ppbv	
4) Chloromethane	3.10	50	29976	0.516	ppbv #	85
9) Propene	2.98	41	70798m	1.443	ppbv	
10) Heptane	8.11	43	25383m	0.210	ppbv	
11) Trichlorofluoromethane	3.92	101	36573	0.273	ppbv	98
12) 1,1,2-Trichlorotrifluoroet	4.46	101	17826	0.190	ppbv	92
13) Ethanol	3.57	45	550662	36.908	ppbv	94
15) Acetone	3.82	43	644303m	5.402	ppbv	
19) Isopropyl Alcohol	3.94	45	175288	2.327	ppbv #	45
20) Methylene Chloride	4.31	84	110751	2.937	ppbv	91
26) Hexane	5.67	57	178610	1.952	ppbv #	62
30) Cyclohexane	7.12	84	12294m	0.161	ppbv	
34) 2-Butanone	5.22	43	50412	0.380	ppbv #	91
35) Carbon Tetrachloride	7.01	117	9898m	0.080	ppbv	
36) Benzene	6.88	78	76544	0.430	ppbv	97
38) Trichloroethene	7.83	130	6329m	0.094	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	132126	0.439	ppbv #	83
52) Tetrachloroethene	11.24	164	7498m	0.106	ppbv	
53) Toluene	9.81	91	862152	4.193	ppbv	100
59) m/p-Xylene	12.98	91	60497m	0.274	ppbv	
60) o-Xylene	13.70	91	26167	0.121	ppbv	98
61) Styrene	13.55	104	19507m	0.129	ppbv	

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

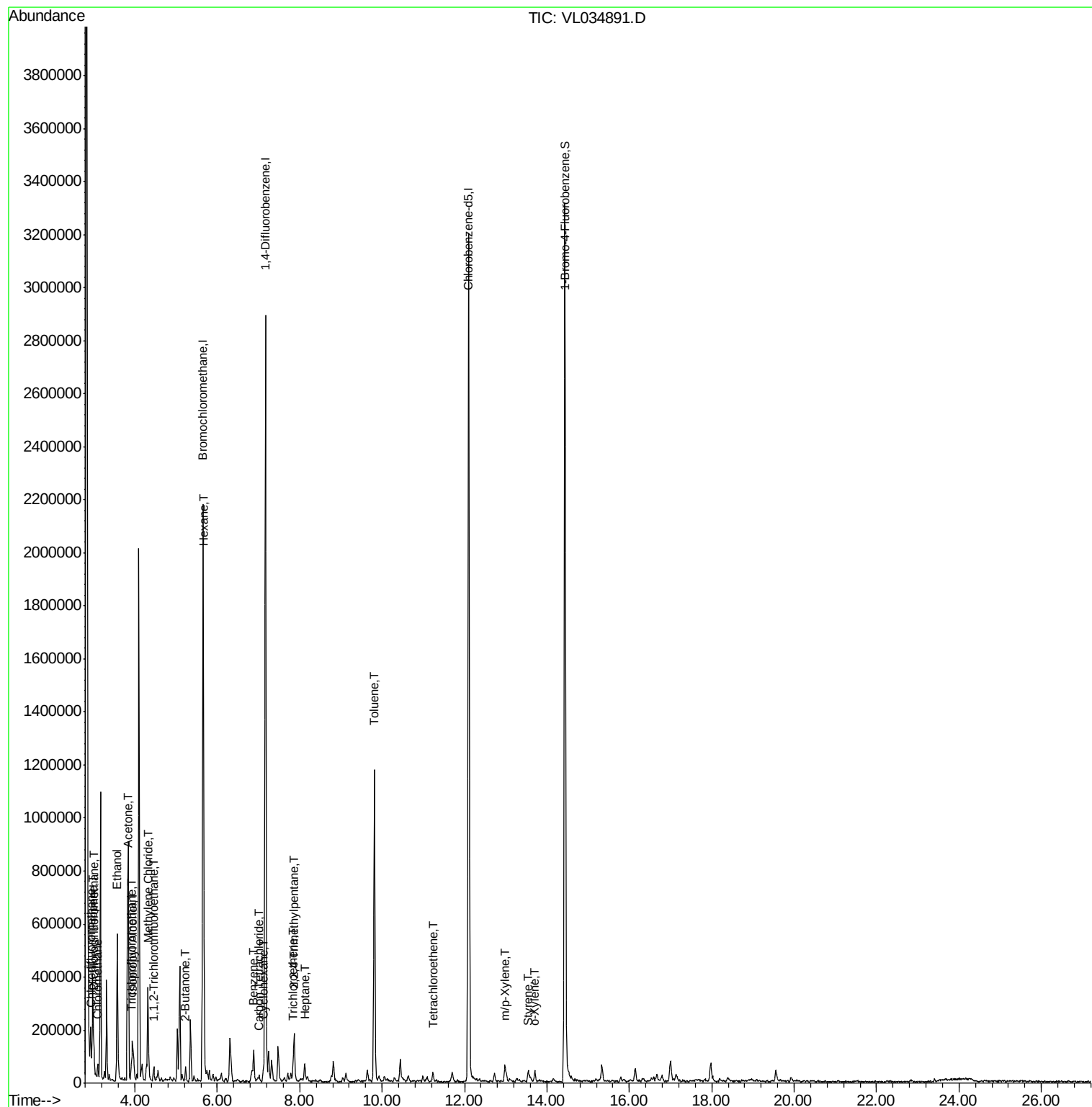
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL031620\
Data File : VL034891.D
Acq On : 16 Mar 2020 15:26
Operator : SY/AP
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Misc : 400ml/MSVOA L
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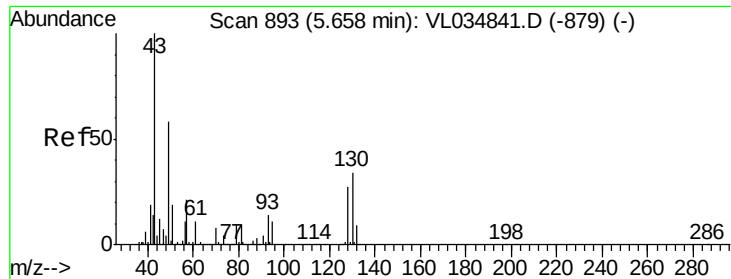
Instrument :
MSVOA_L
ClientSampleId :
IA-02

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Quant Time: Mar 17 05:04:25 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar
QLast Update : Mon Mar 09 16:42:53 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 890

Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

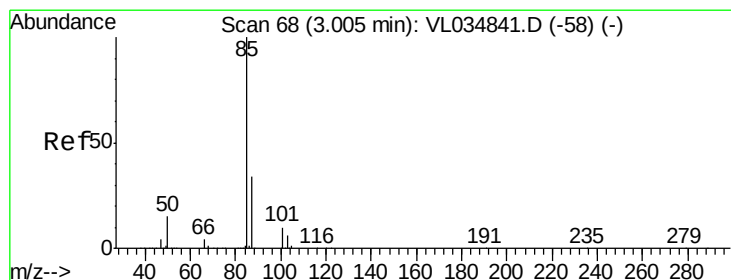
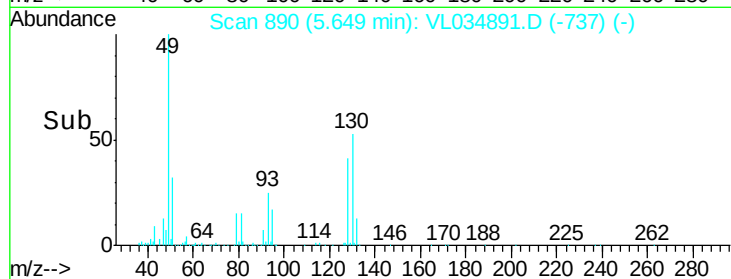
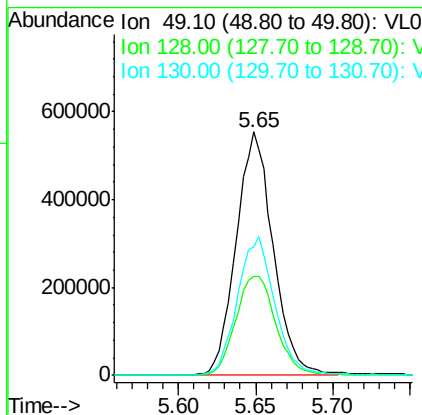
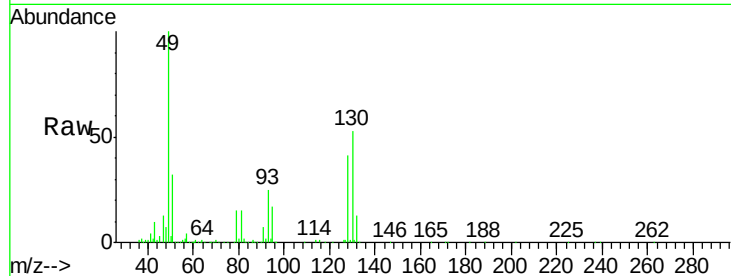
ClientSampled :

IA-02

Tot Ion	Ratio	Lower	Upper
49	100		
128	44.5	23.4	70.3
130	58.2	30.0	90.0

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#2

Dichlorodifluoromethane

Concen: 0.697 ppbv

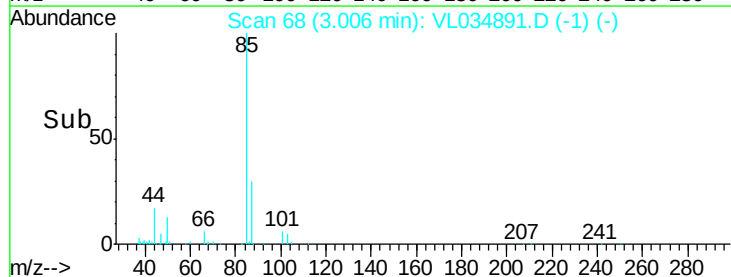
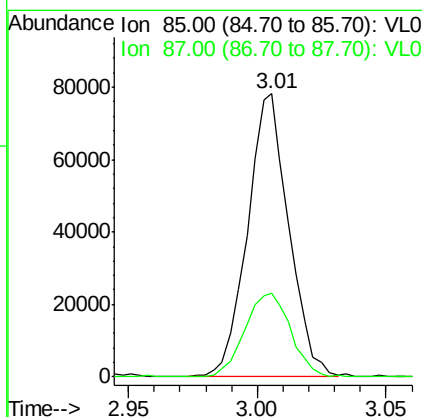
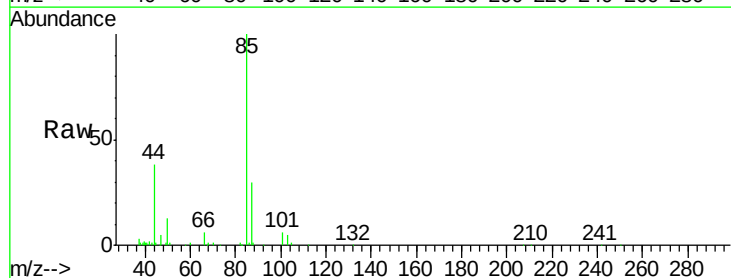
RT: 3.01 min Scan# 68

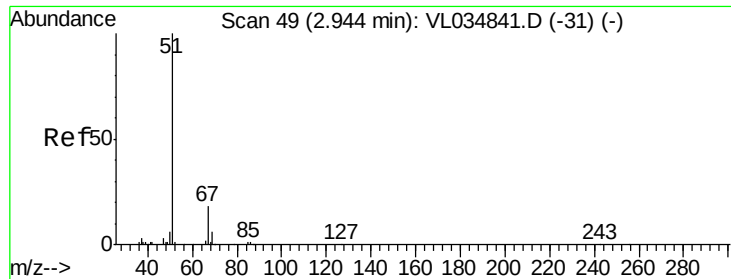
Delta R.T. 0.00 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Tgt Ion	Ratio	Lower	Upper
85	100		
87	29.6	26.9	40.3





#3

Chlorodifluoromethane

Concen: 0.389 ppbv

RT: 2.94 min Scan# 48

Delta R.T. -0.00 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

ClientSampled :

IA-02

Tot Ion: 51 Resp: 40026

Ion Ratio Lower Upper

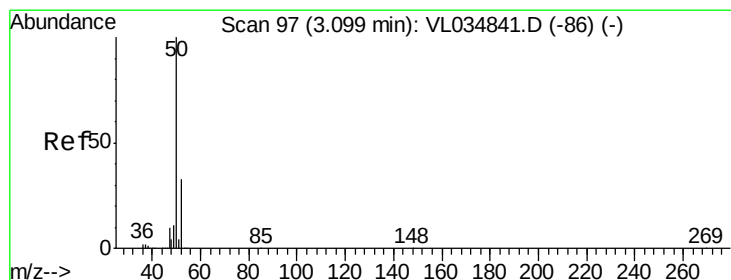
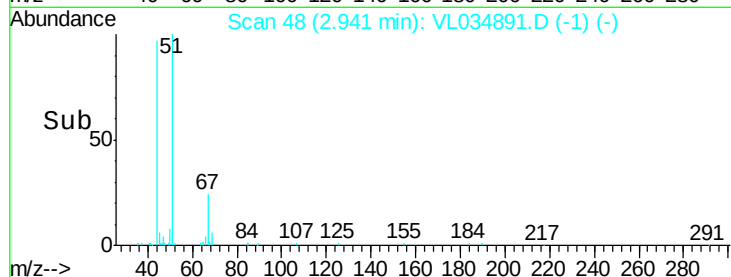
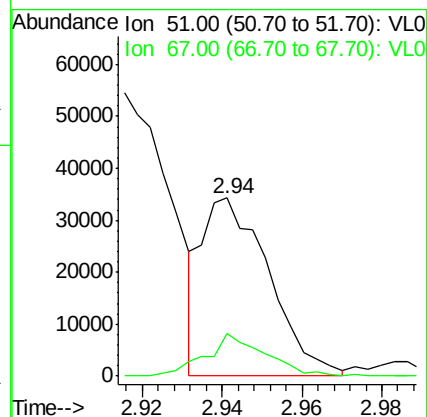
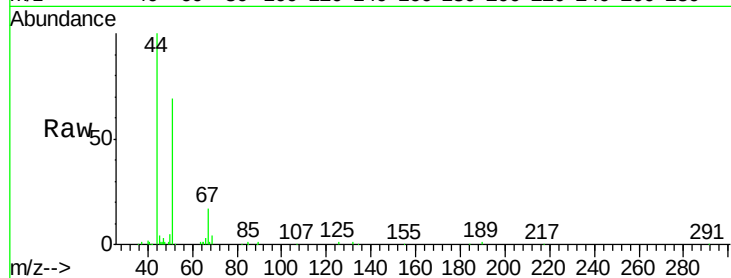
51 100

67 12.7 14.3 21.5#

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#4

Chloromethane

Concen: 0.516 ppbv

RT: 3.10 min Scan# 96

Delta R.T. -0.00 min

Lab File: VL034891.D

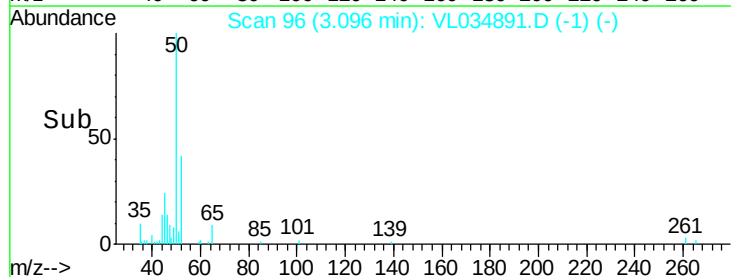
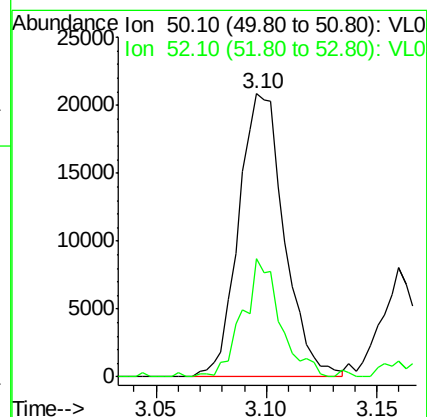
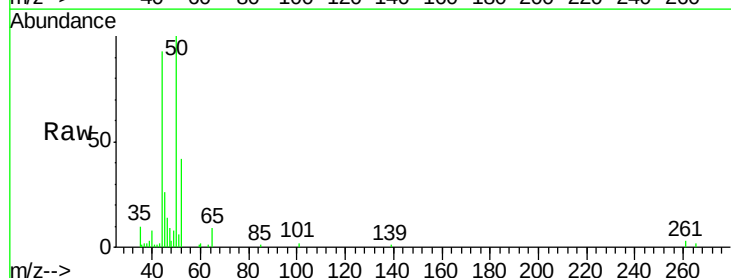
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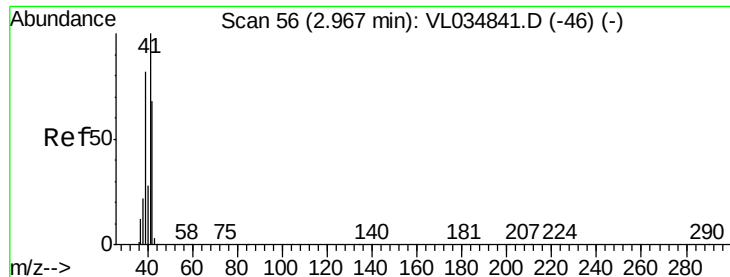
Tgt Ion: 50 Resp: 29976

Ion Ratio Lower Upper

50 100

52 42.0 26.8 40.2#





#9

Propene

Concen: 1.443 ppbv m

RT: 2.98 min Scan# 59

Delta R.T. 0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

ClientSampleId :

IA-02

Tot Ion: 41 Resp: 70798

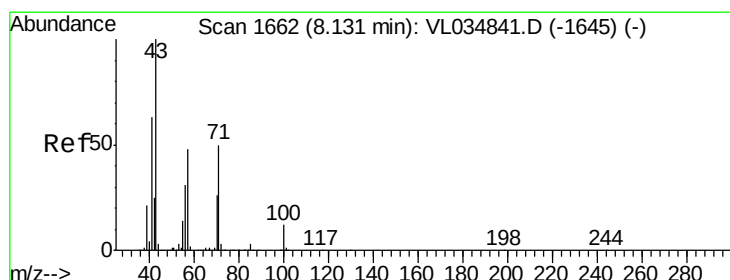
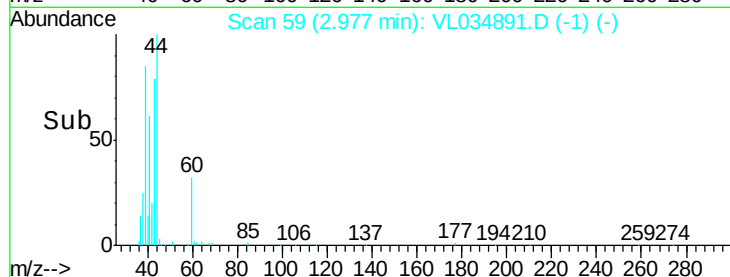
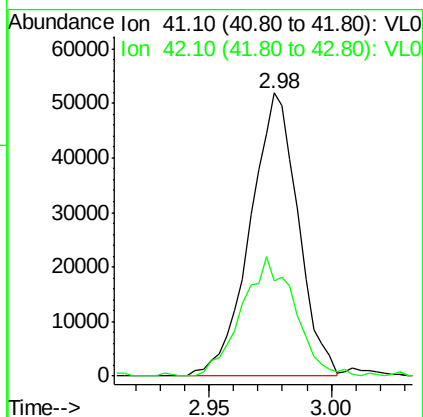
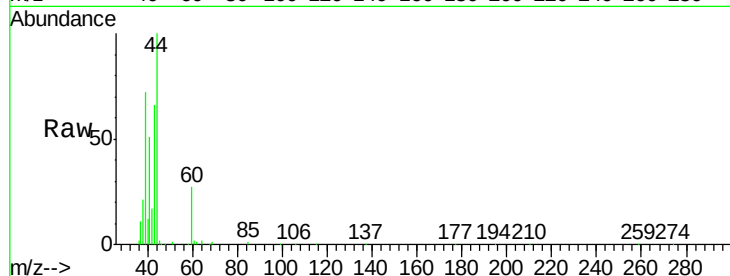
Ion Ratio Lower Upper

41 100

42 256.3 55.2 82.8#

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#10

Heptane

Concen: 0.210 ppbv m

RT: 8.11 min Scan# 1657

Delta R.T. -0.02 min

Lab File: VL034891.D

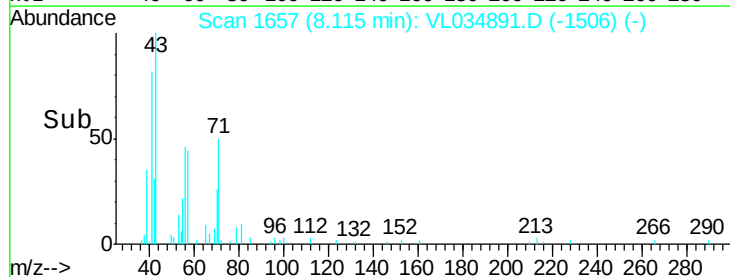
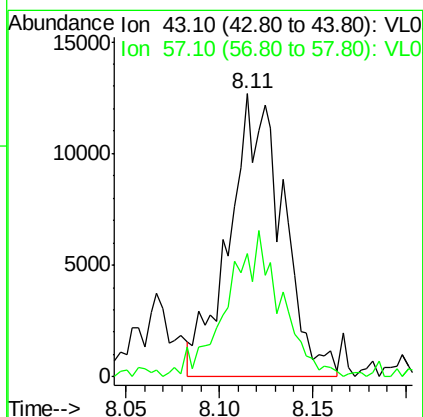
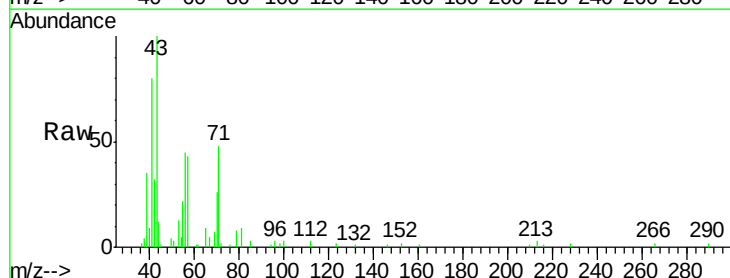
Acq: 16 Mar 2020 15:26

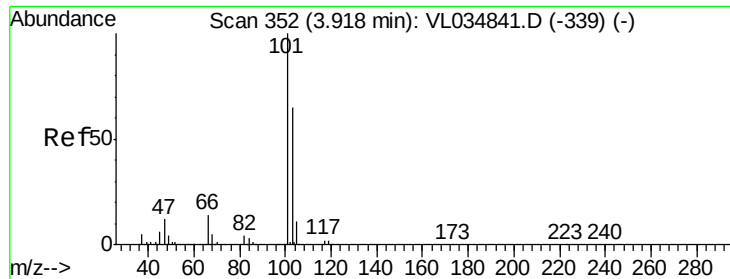
Tgt Ion: 43 Resp: 25383

Ion Ratio Lower Upper

43 100

57 0.0 39.7 59.5#





#11

Trichlorofluoromethane

Concen: 0.273 ppbv

RT: 3.92 min Scan# 352

Delta R.T. 0.00 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

ClientSampleId :

IA-02

Tot Ion:101 Resp: 36573

Ion Ratio Lower Upper

101 100

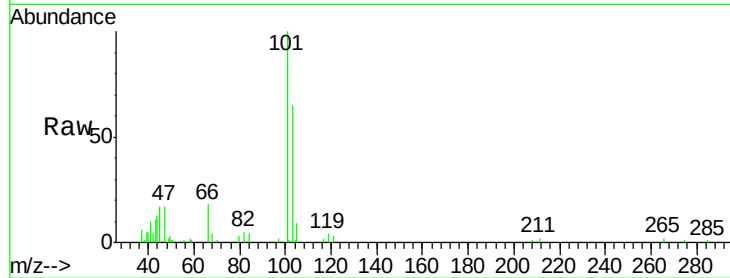
103 63.3 51.8 77.8

Manual Integrations

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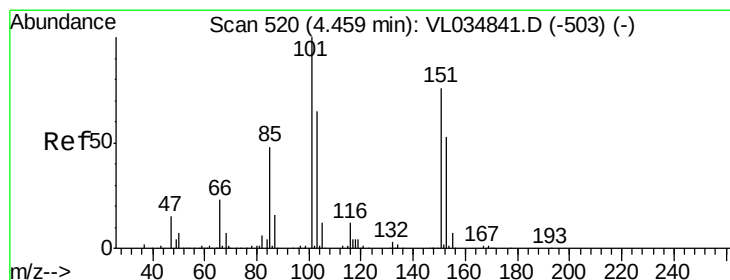
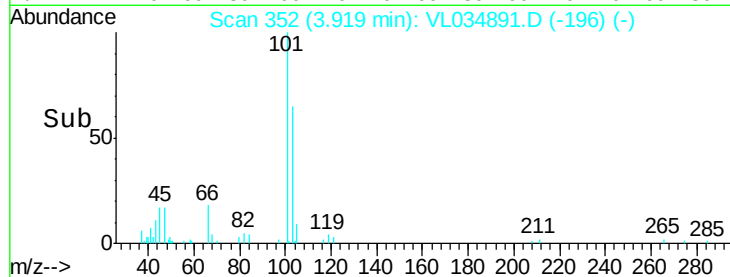
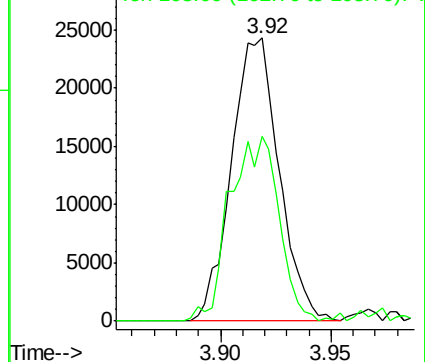
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Abundance Ion 101.00 (100.70 to 101.70): V

Ion 103.00 (102.70 to 103.70): V



#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.190 ppbv

RT: 4.46 min Scan# 519

Delta R.T. -0.00 min

Lab File: VL034891.D

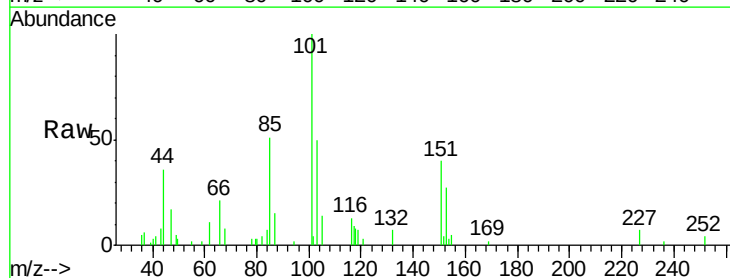
Acq: 16 Mar 2020 15:26

Tgt Ion:101 Resp: 17826

Ion Ratio Lower Upper

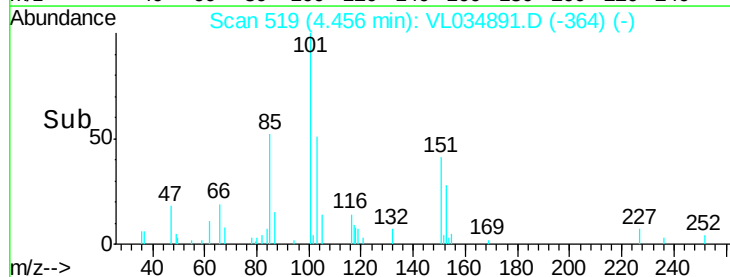
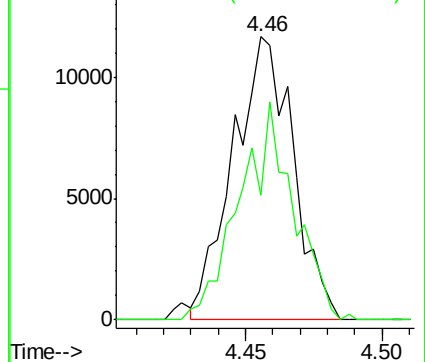
101 100

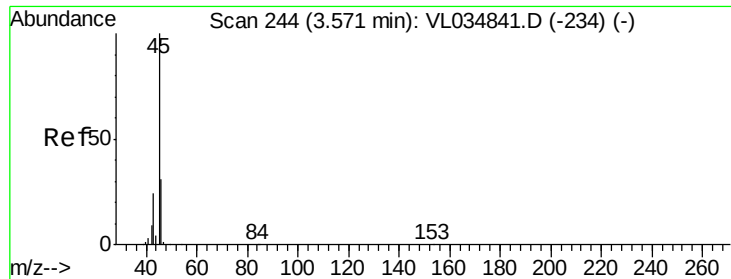
151 69.1 60.8 91.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 151.00 (150.70 to 151.70): V





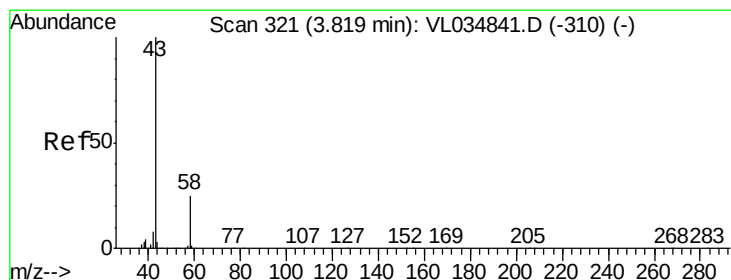
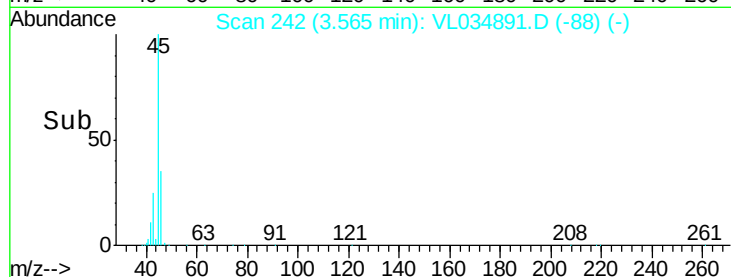
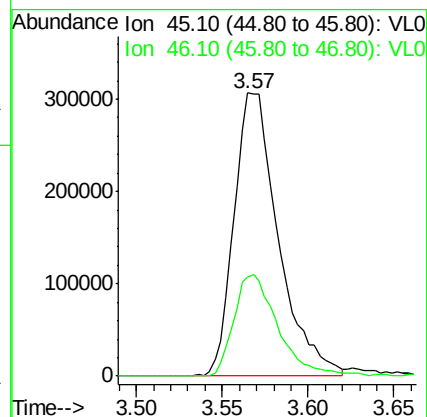
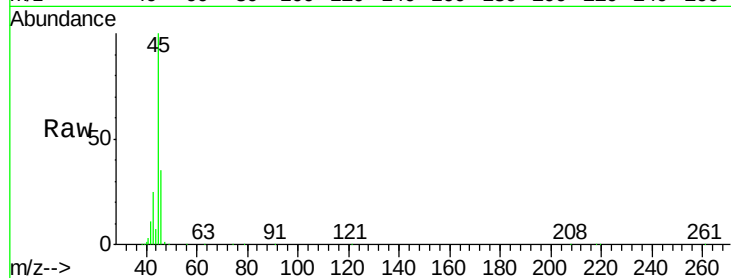
#13
Ethanol
Concen: 36.908 ppbv
RT: 3.57 min Scan# 242
Delta R.T. -0.01 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Instrument :
MSVOA_L
ClientSampleId :
IA-02

Tot Ion	45	Resp	550662
Ion Ratio	100	Lower	Upper
46	36.3	16.0	64.0

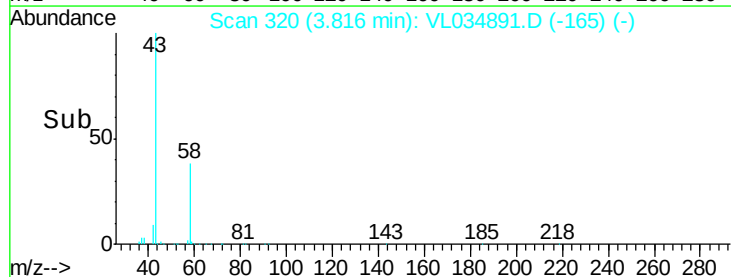
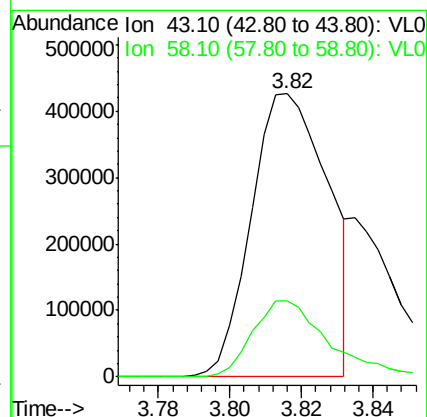
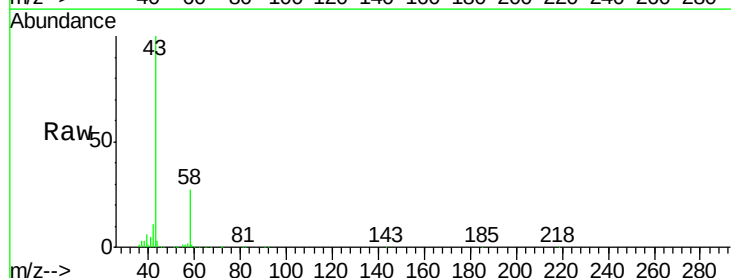
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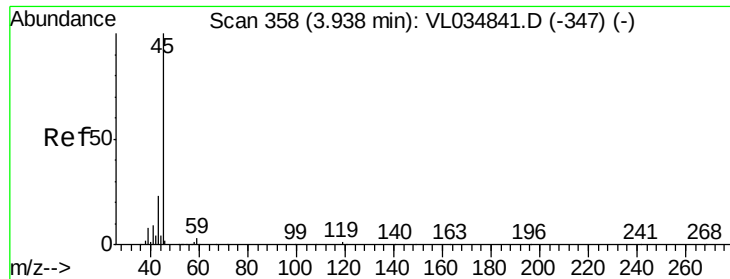
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#15
Acetone
Concen: 5.402 ppbv m
RT: 3.82 min Scan# 320
Delta R.T. -0.00 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Tgt Ion	43	Resp	644303
Ion Ratio	100	Lower	Upper
58	27.3	21.0	31.6





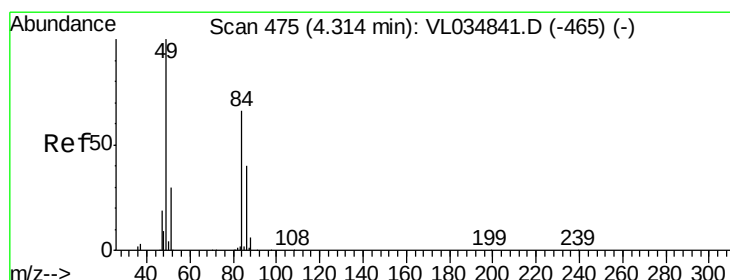
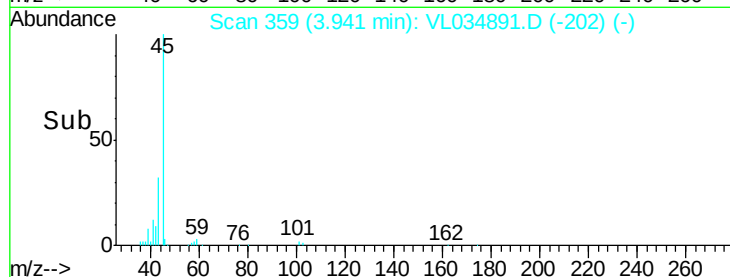
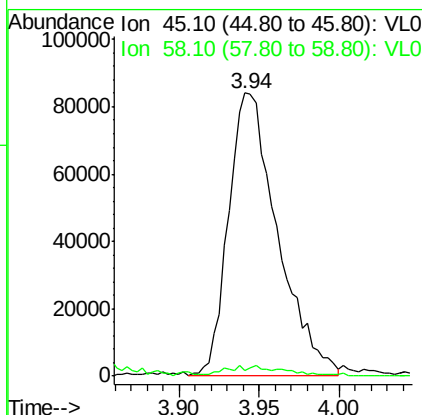
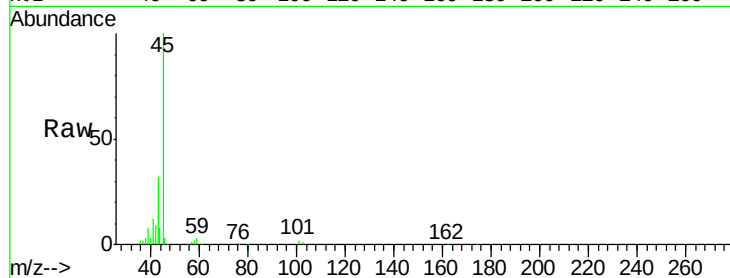
#19
Isopropyl Alcohol
Concen: 2.327 ppbv
RT: 3.94 min Scan# 359
Delta R.T. 0.00 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Instrument :
MSVOA_L
ClientSampleId :
IA-02

Tot Ion	Ratio	Lower	Upper
45	100		
58	5.0	30.5	45.7#

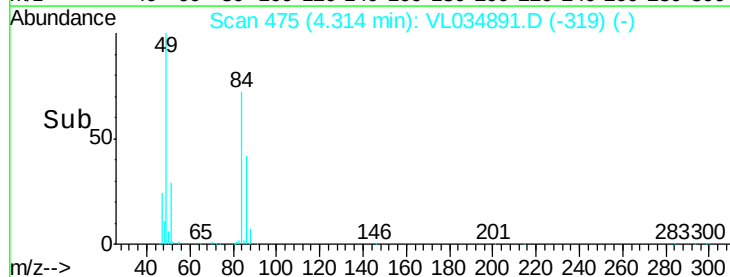
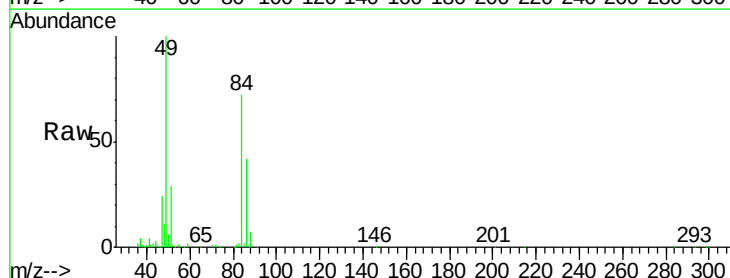
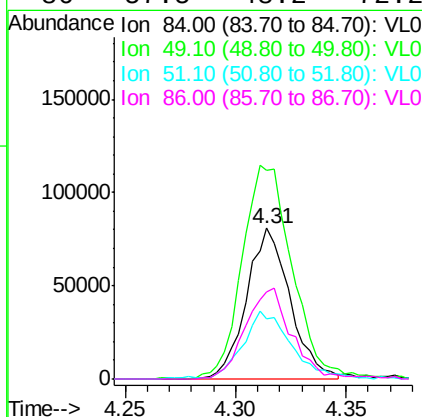
Manual Integrations
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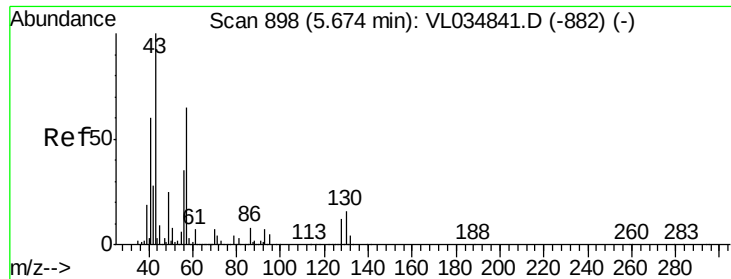
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#20
Methylene Chloride
Concen: 2.937 ppbv
RT: 4.31 min Scan# 475
Delta R.T. 0.00 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Tgt Ion	Ratio	Lower	Upper
84	100		
49	138.2	121.5	182.3
51	38.9	36.6	55.0
86	57.5	48.2	72.2





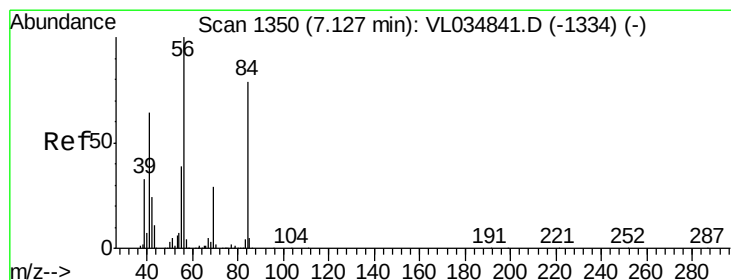
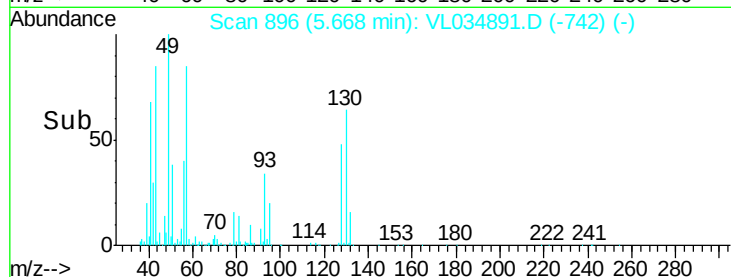
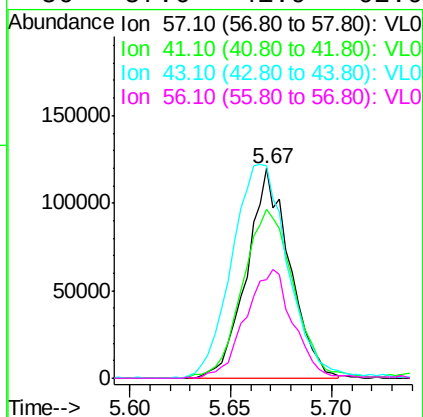
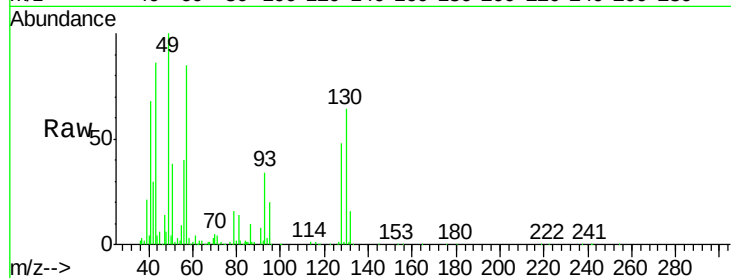
#26
Hexane
Concen: 1.952 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Instrument :
MSVOA_L
ClientSampled :
IA-02

Tot Ion	57	Resp	178610
Ion	Ratio	Lower	Upper
57	100		
41	96.2	72.6	109.0
43	133.6	183.8	275.6#
56	57.6	41.9	62.9

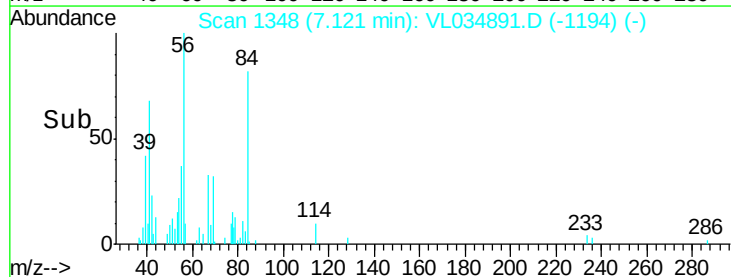
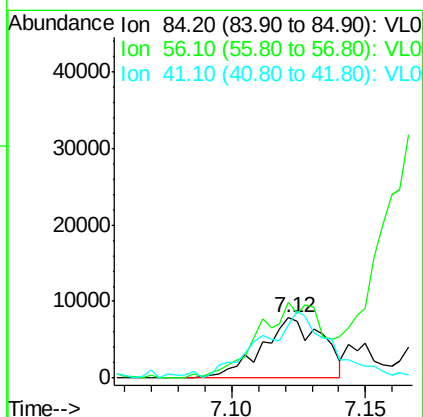
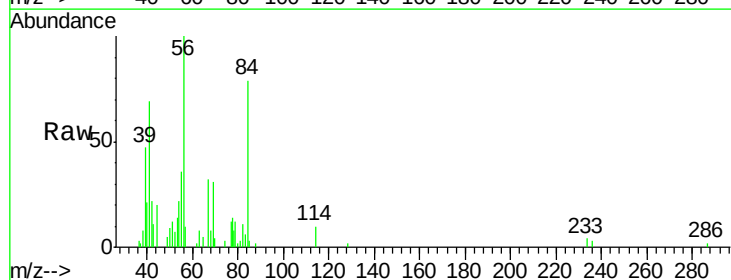
Manual Integrations
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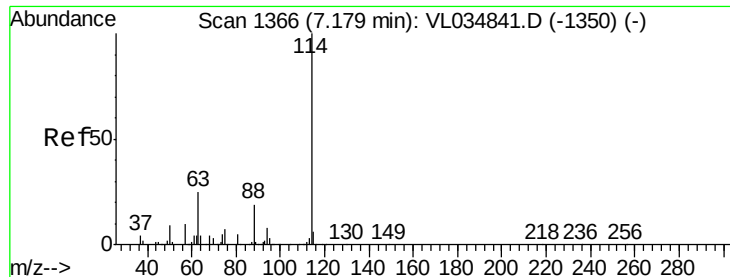
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#30
Cyclohexane
Concen: 0.161 ppbv m
RT: 7.12 min Scan# 1348
Delta R.T. -0.01 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Tgt Ion	84	Resp	12294
Ion	Ratio	Lower	Upper
84	100		
56	0.0	110.5	165.7#
41	128.9	68.2	102.4#





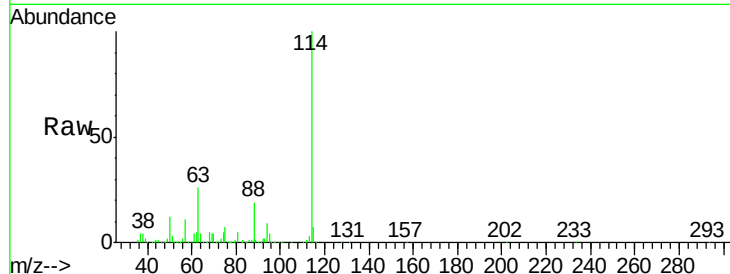
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1363
 Delta R.T. -0.01 min
 Lab File: VL034891.D
 Acq: 16 Mar 2020 15:26

Instrument :
 MSVOA_L
 ClientSampled :
 IA-02

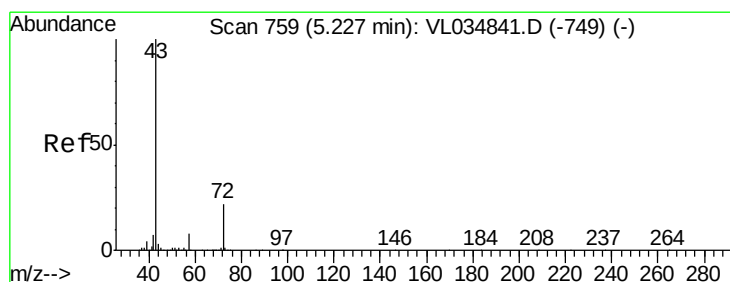
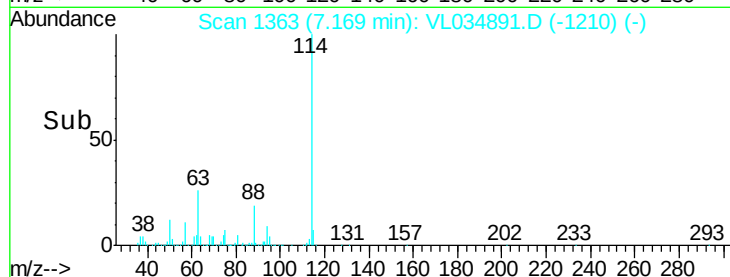
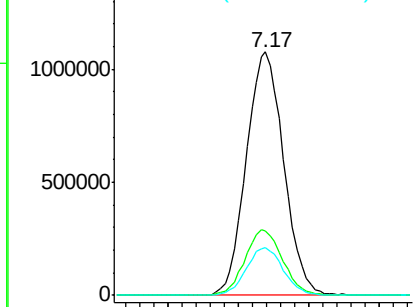
Tot Ion	Ratio	Lower	Upper
114	100		
63	27.0	20.6	31.0
88	19.4	15.0	22.6

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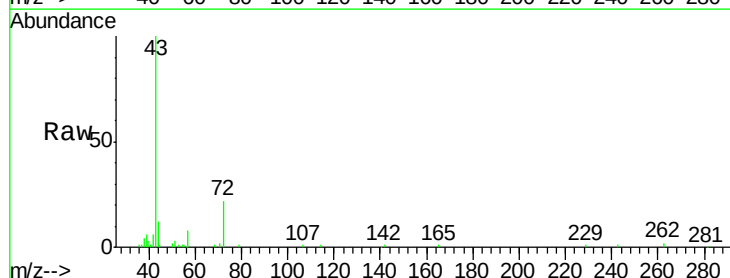


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

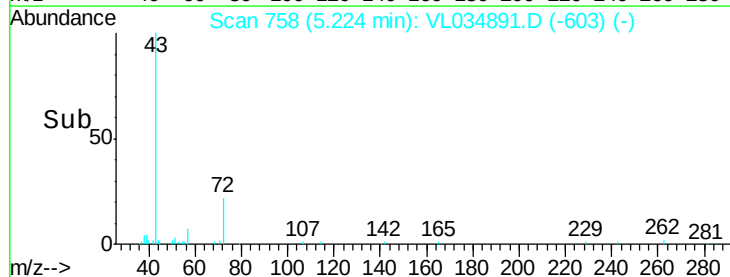
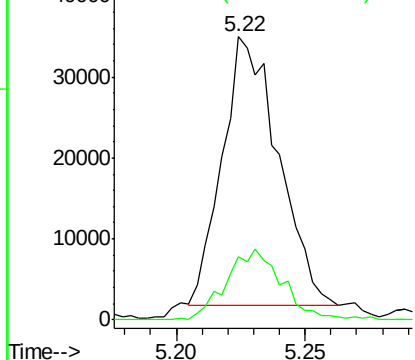


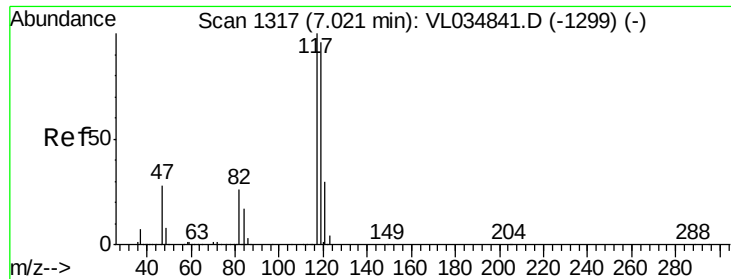
#34
 2-Butanone
 Concen: 0.380 ppbv
 RT: 5.22 min Scan# 758
 Delta R.T. -0.00 min
 Lab File: VL034891.D
 Acq: 16 Mar 2020 15:26

Tgt Ion	Ratio	Lower	Upper
43	100		
72	26.4	17.6	26.4#



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#35

Carbon Tetrachloride

Concen: 0.080 ppbv m

RT: 7.01 min Scan# 1314

Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

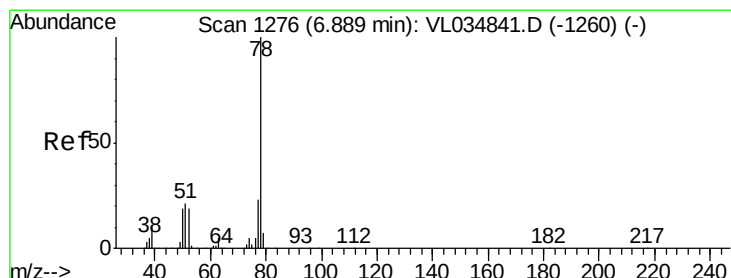
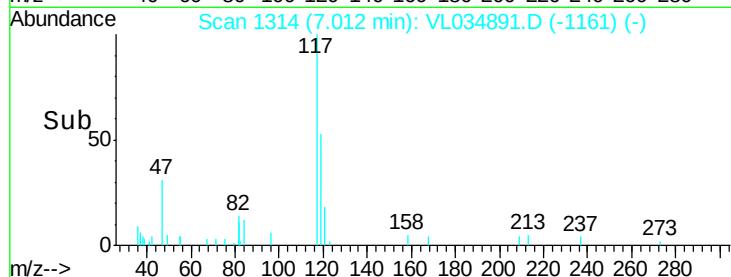
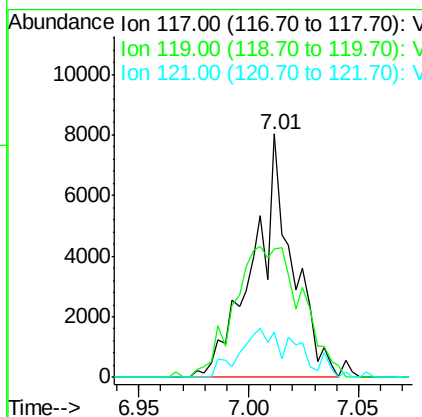
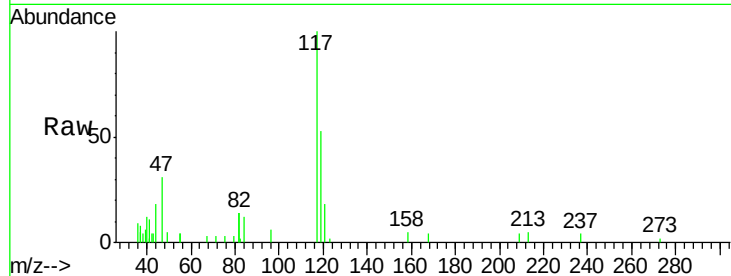
ClientSampleId :

IA-02

Tot Ion	Ratio	Lower	Upper
117	100		
119	52.5	77.0	115.4#
121	18.5	24.0	36.0#

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#36

Benzene

Concen: 0.430 ppbv

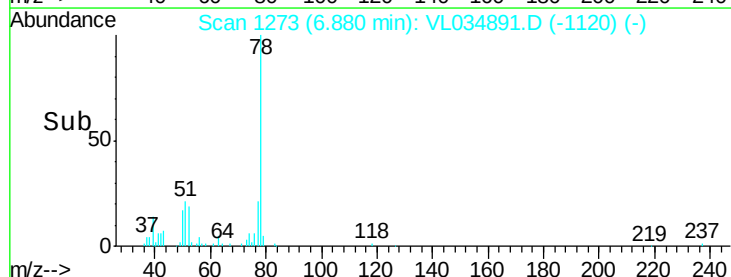
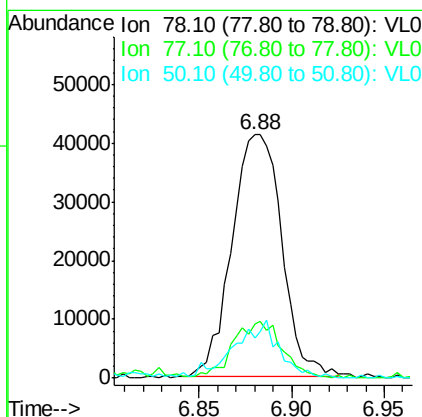
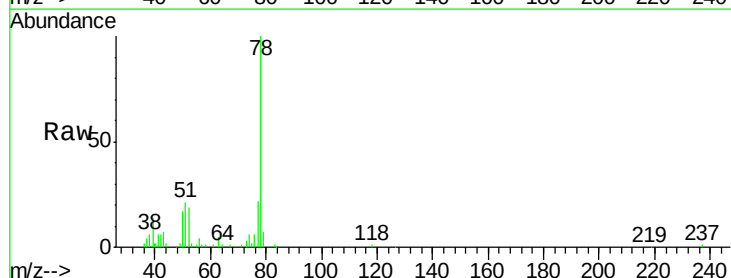
RT: 6.88 min Scan# 1273

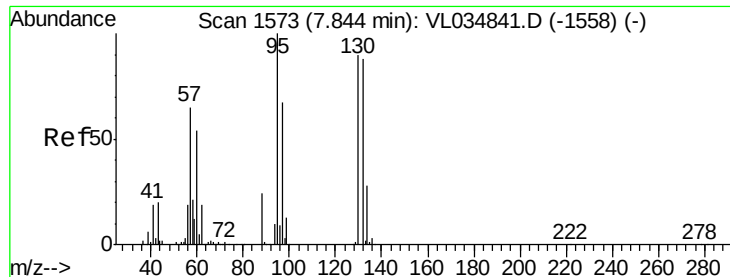
Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Tgt Ion	Ratio	Lower	Upper
78	100		
77	21.6	18.2	27.2
50	16.8	15.2	22.8





#38

Trichloroethene

Concen: 0.094 ppbv m

RT: 7.83 min Scan# 1568

Delta R.T. -0.02 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

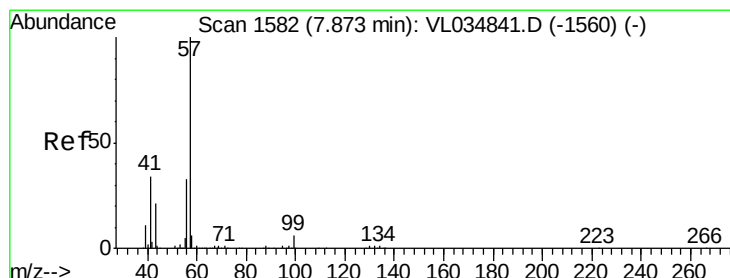
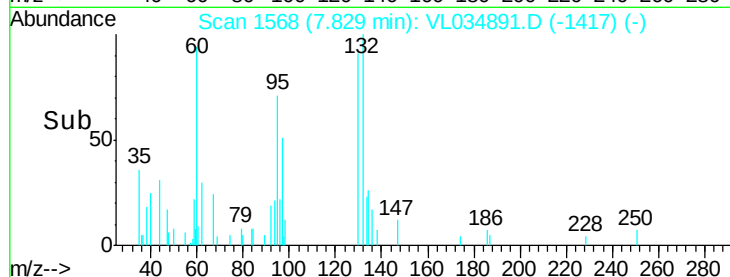
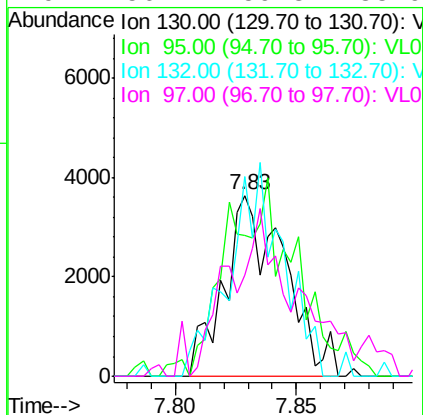
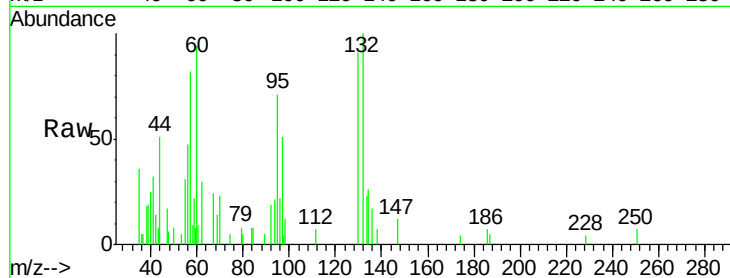
ClientSampleId :

IA-02

Tot Ion:	130	Resp:	6329
Ion Ratio	Lower	Upper	
130	100		
95	78.2	88.5	132.7#
132	110.3	78.0	117.0
97	56.1	59.3	88.9#

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#44

2,2,4-Trimethylpentane

Concen: 0.439 ppbv

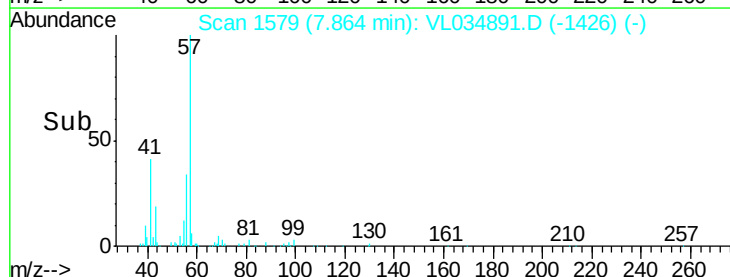
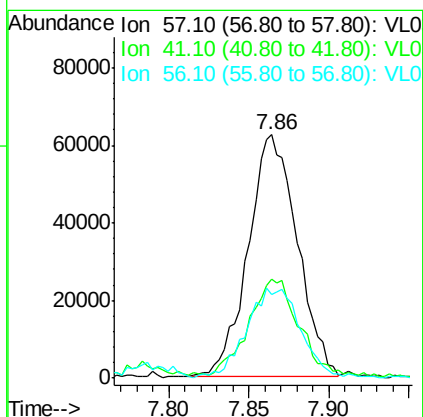
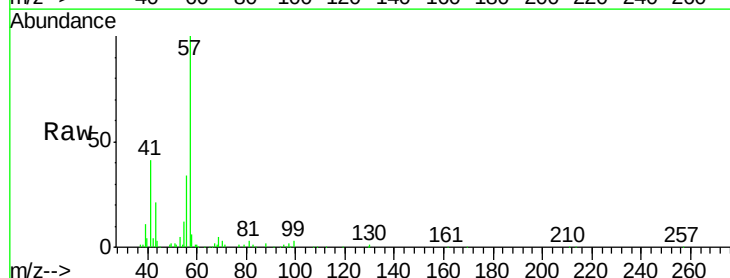
RT: 7.86 min Scan# 1579

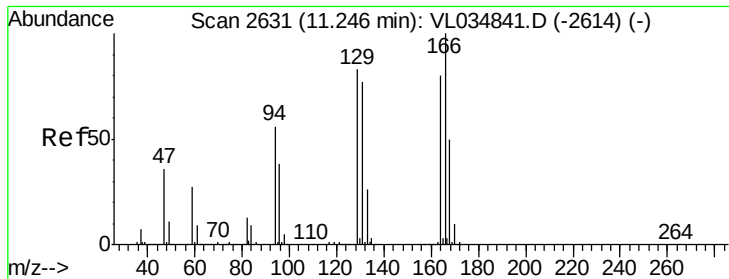
Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Tgt Ion:	57	Resp:	132126
Ion Ratio	Lower	Upper	
57	100		
41	41.9	26.2	39.4#
56	41.3	25.0	37.4#





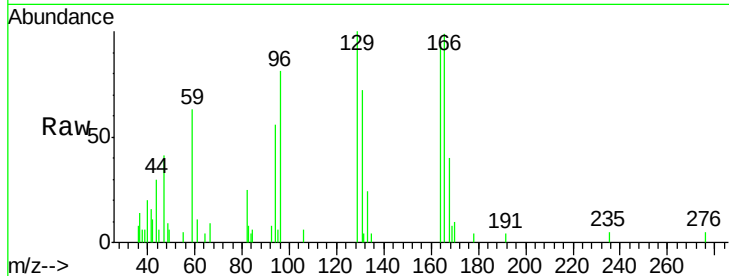
#52
Tetrachloroethene
Concen: 0.106 ppbv m
RT: 11.24 min Scan# 2628
Delta R.T. -0.01 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

Instrument :
MSVOA_L
ClientSampleId :
IA-02

Tot Ion	Ratio	Lower	Upper
164	100		
166	105.6	100.0	150.0
129	106.6	83.1	124.7
131	76.7	77.2	115.8

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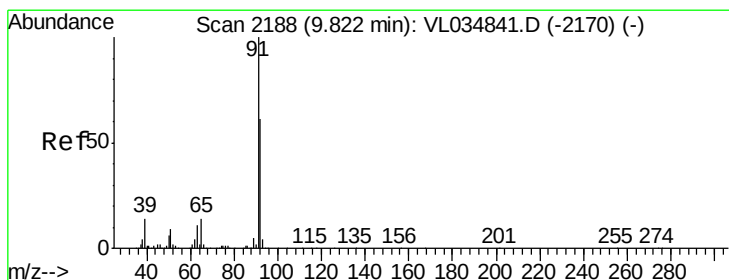
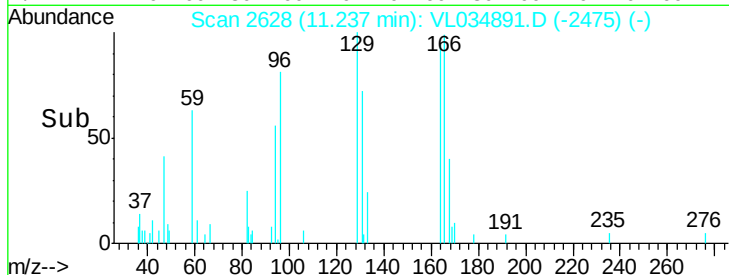
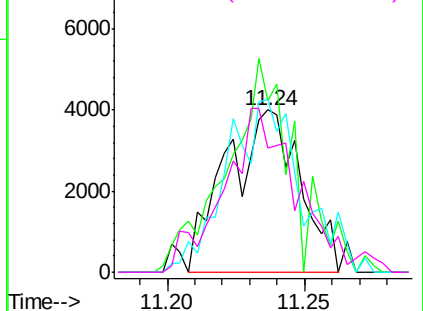
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

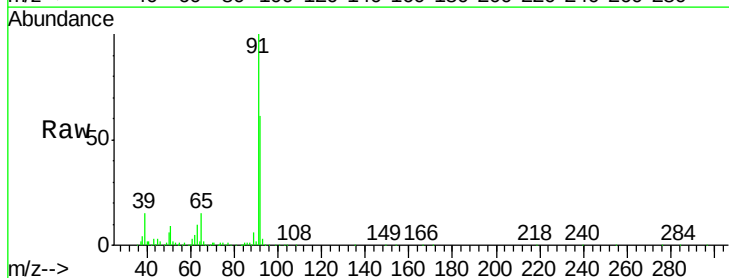
Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53
Toluene
Concen: 4.193 ppbv
RT: 9.81 min Scan# 2185
Delta R.T. -0.01 min
Lab File: VL034891.D
Acq: 16 Mar 2020 15:26

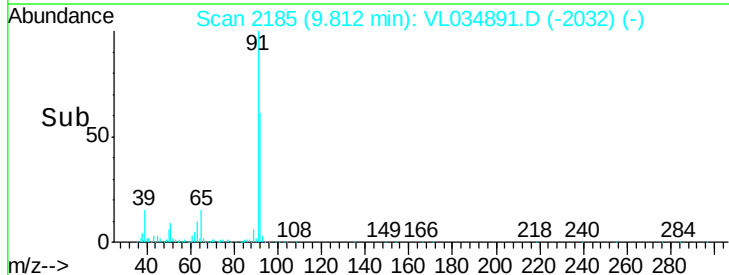
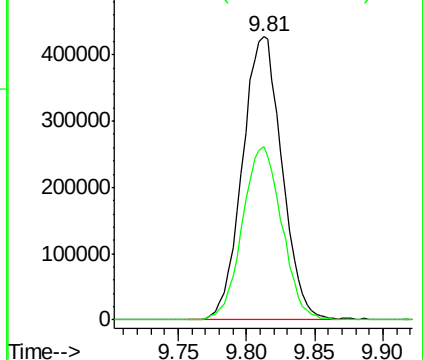
Tgt Ion	Ratio	Lower	Upper
91	100		
92	60.9	48.6	72.8

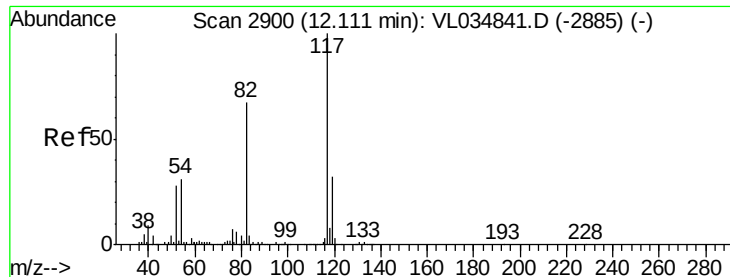


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.10 min Scan# 2896

Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

ClientSampleId :

IA-02

Tot Ion:117 Resp: 1945932

Ion Ratio Lower Upper

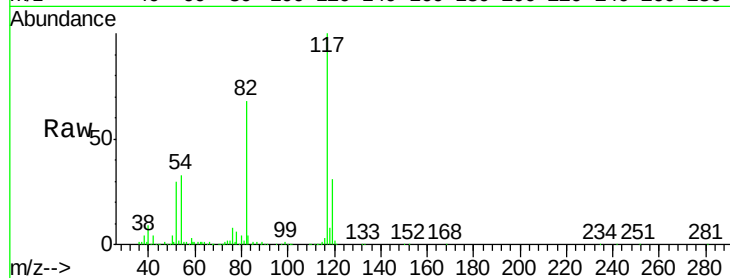
117 100

82 69.1 51.1 76.7

119 33.3 27.3 40.9

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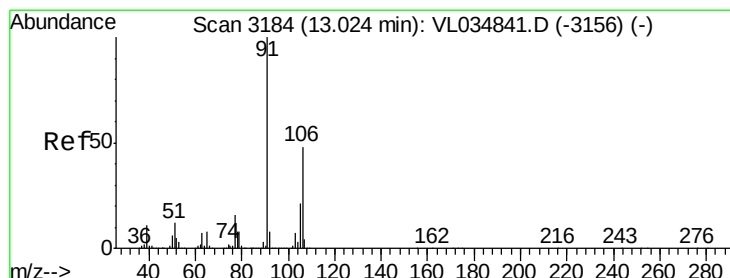
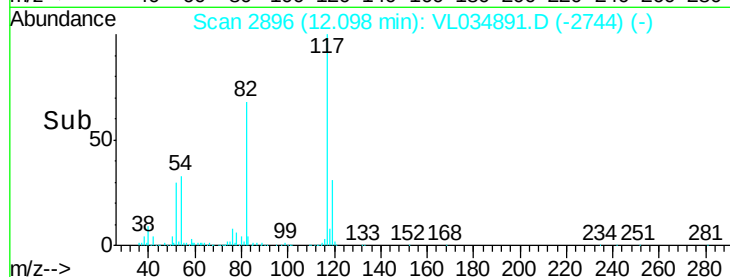
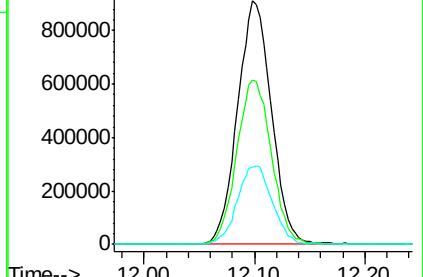
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Abundance Ion 117.10 (116.80 to 117.80): V

Ion 82.10 (81.80 to 82.80): VL0

Ion 119.10 (118.80 to 119.80): V



#59

m/p-Xylene

Concen: 0.274 ppbv m

RT: 12.98 min Scan# 3171

Delta R.T. -0.04 min

Lab File: VL034891.D

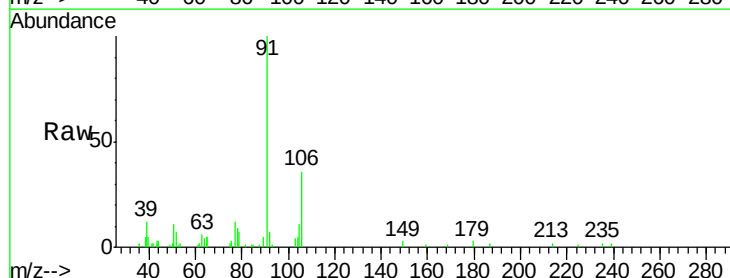
Acq: 16 Mar 2020 15:26

Tgt Ion: 91 Resp: 60497

Ion Ratio Lower Upper

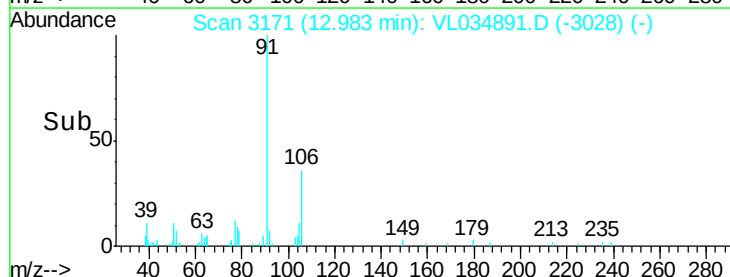
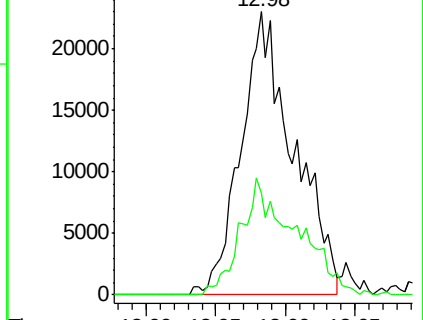
91 100

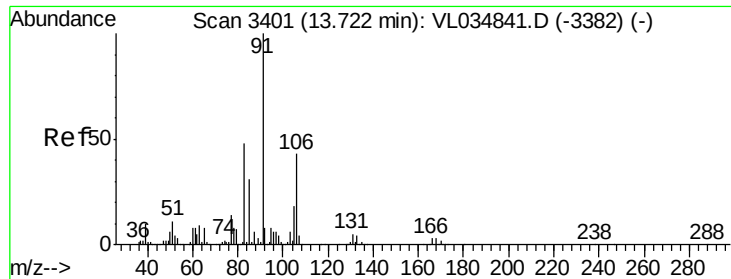
106 0.0 37.1 55.7#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





#60

o-Xylene

Concen: 0.121 ppbv

RT: 13.70 min Scan# 3395

Delta R.T. -0.02 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

Instrument :

MSVOA_L

ClientSampled :

IA-02

Tot Ion: 91 Resp: 26167

Ion Ratio Lower Upper

91 100

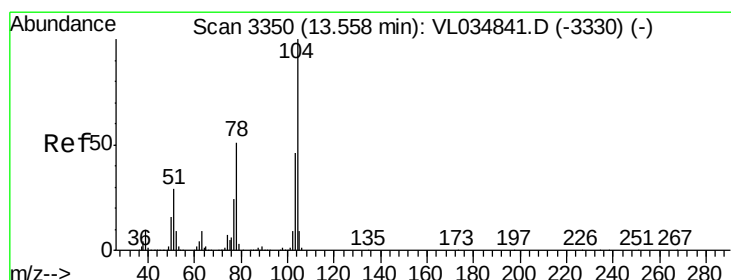
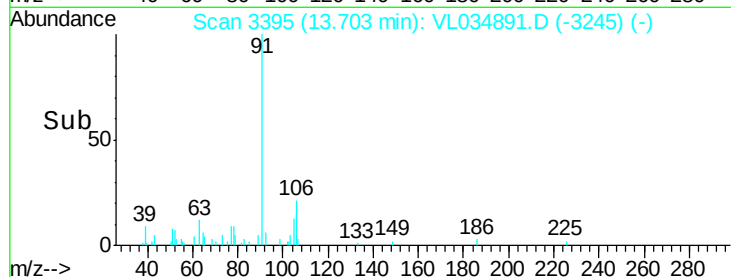
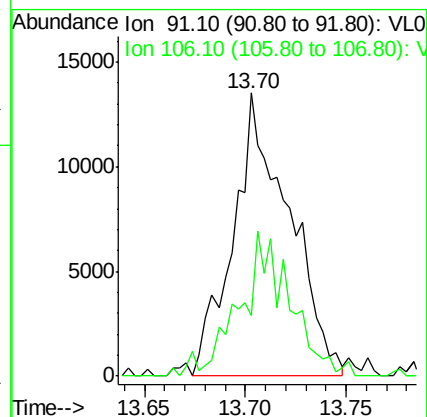
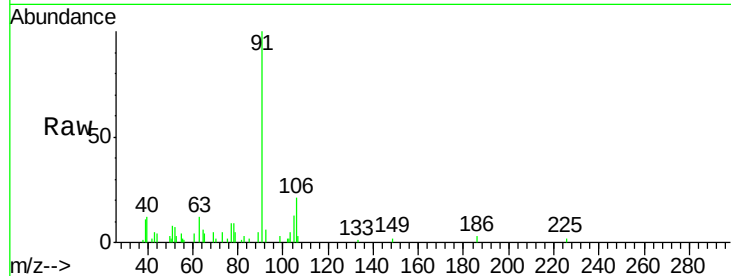
106 46.4 22.5 67.5

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#61

Styrene

Concen: 0.129 ppbv m

RT: 13.55 min Scan# 3347

Delta R.T. -0.01 min

Lab File: VL034891.D

Acq: 16 Mar 2020 15:26

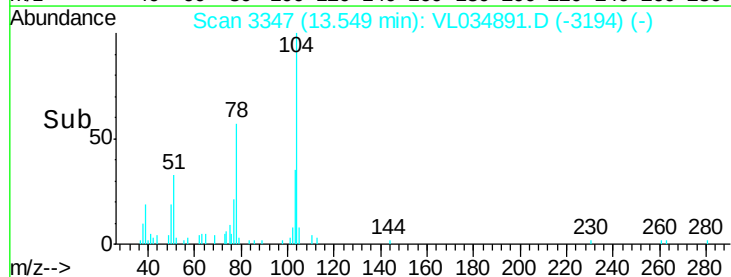
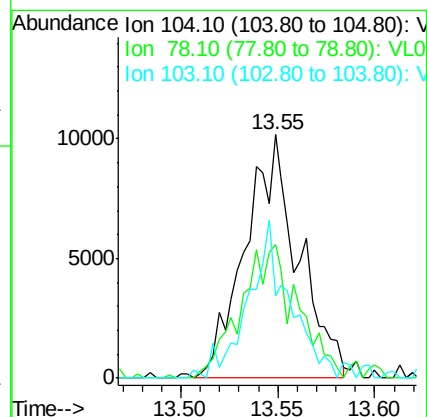
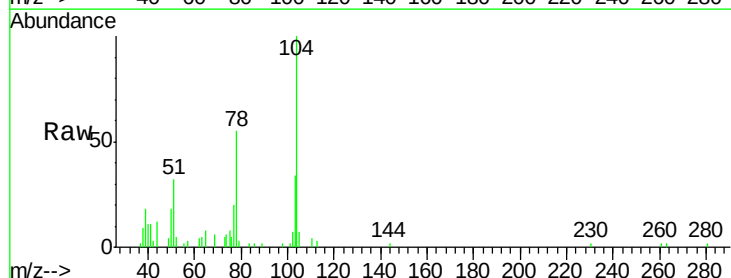
Tgt Ion: 104 Resp: 19507

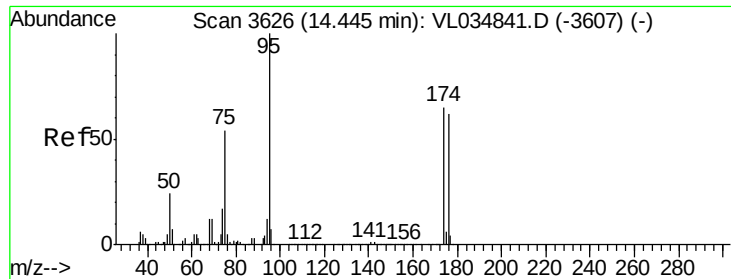
Ion Ratio Lower Upper

104 100

78 59.3 41.8 62.6

103 51.9 37.8 56.6





#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.513 ppbv
 RT: 14.44 min Scan# 3623
 Delta R.T. -0.01 min
 Lab File: VL034891.D
 Acq: 16 Mar 2020 15:26

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-02

Tot Ion: 95 Resp: 1595410
 Ion Ratio Lower Upper
 95 100
 174 65.4 55.2 82.8
 175 5.0 4.3 6.5

Manual Integrations
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