

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL031620\
 Data File : VL034894.D
 Acq On : 16 Mar 2020 17:26
 Operator : SY/AP
 Sample : L1924-03DUP
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-01DUP

Manual Integrations
 APPROVED

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 3/17/2020 12:15:58 PM

Quant Time: Mar 17 05:15:40 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	913667	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	1978474	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.10	117	1894574	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.44	95	1570356	10.63	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	106.30%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	75395	0.603	ppbv	97
3) Chlorodifluoromethane	2.95	51	36373m	0.356	ppbv	
4) Chloromethane	3.10	50	29800	0.517	ppbv	92
9) Propene	2.98	41	66179m	1.358	ppbv	
10) Heptane	8.13	43	22212m	0.185	ppbv	
11) Trichlorofluoromethane	3.92	101	35537	0.267	ppbv	93
12) 1,1,2-Trichlorotrifluoroet	4.45	101	15194m	0.163	ppbv	
13) Ethanol	3.57	45	549120	37.066	ppbv	92
15) Acetone	3.81	43	567947m	4.796	ppbv	
19) Isopropyl Alcohol	3.94	45	156334m	2.091	ppbv	
20) Methylene Chloride	4.31	84	161061	4.302	ppbv	98
26) Hexane	5.67	57	194550	2.141	ppbv #	55
30) Cyclohexane	7.12	84	11939m	0.158	ppbv	
34) 2-Butanone	5.23	43	53006	0.403	ppbv	97
35) Carbon Tetrachloride	7.01	117	7972m	0.065	ppbv	
36) Benzene	6.89	78	76628m	0.435	ppbv	
38) Trichloroethene	7.83	130	5635m	0.084	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	114506	0.384	ppbv #	83
52) Tetrachloroethene	11.23	164	6942m	0.100	ppbv	
53) Toluene	9.81	91	755542	3.710	ppbv	98
59) m/p-Xylene	12.98	91	46189m	0.215	ppbv	
61) Styrene	13.54	104	16501m	0.112	ppbv	

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

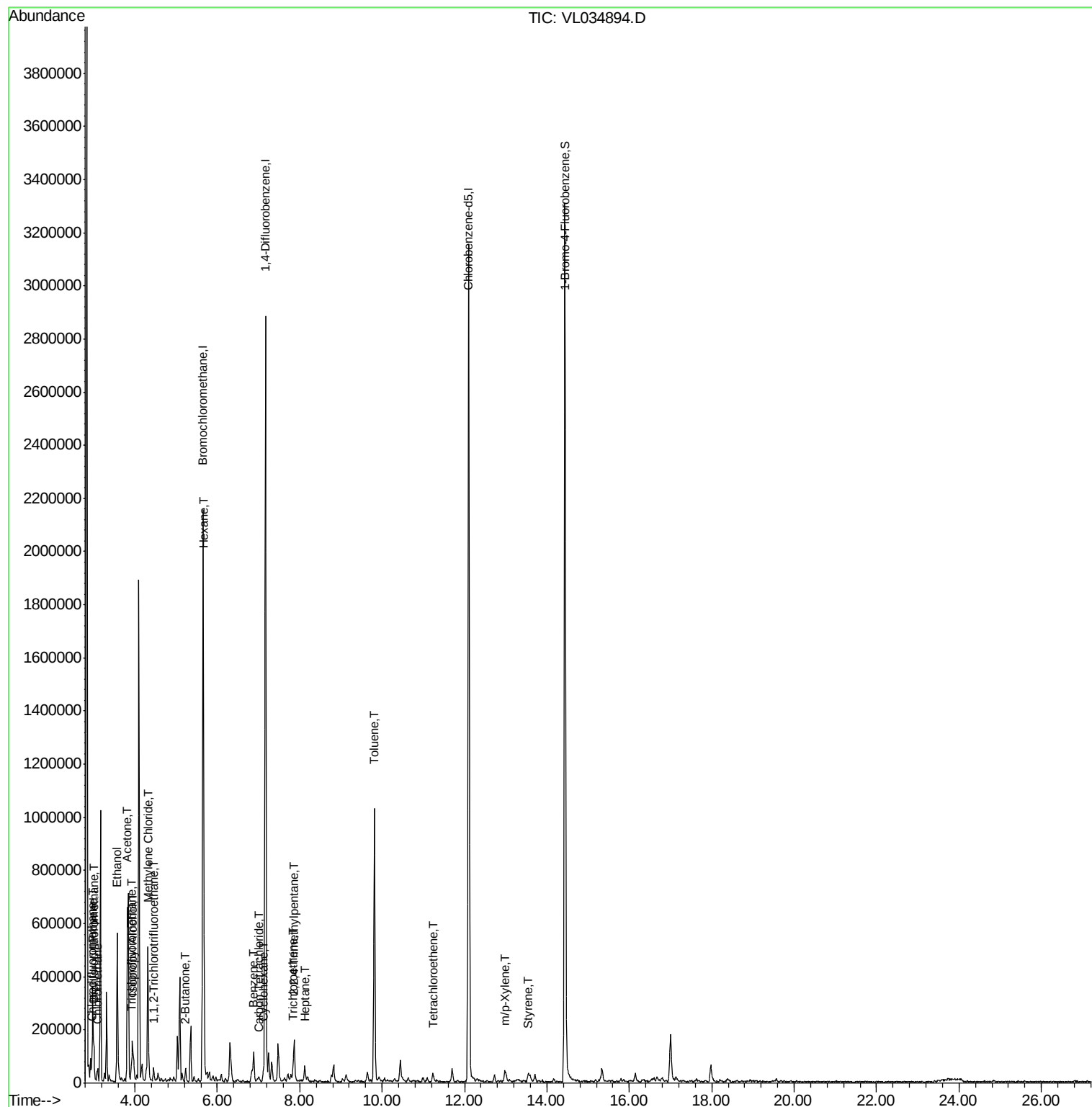
Data Path : Z:\V0ASRV\HPCHEM1\MSVOA L\DATA\VL031620\
Data File : VL034894.D
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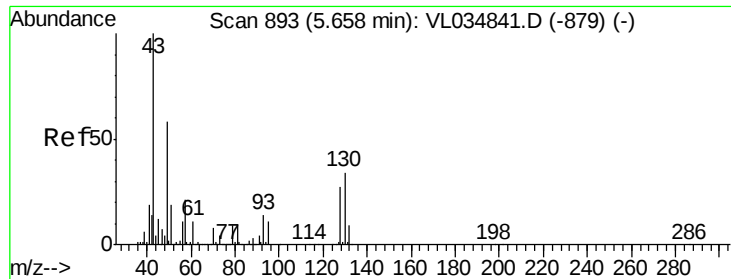
Instrument :
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Quant Time: Mar 17 05:15:40 2020
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA L\METHODS\VL030920AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Mon Mar
QLast Update : Mon Mar 09 16:42:53 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.65 min Scan# 889

Delta R.T. -0.01 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

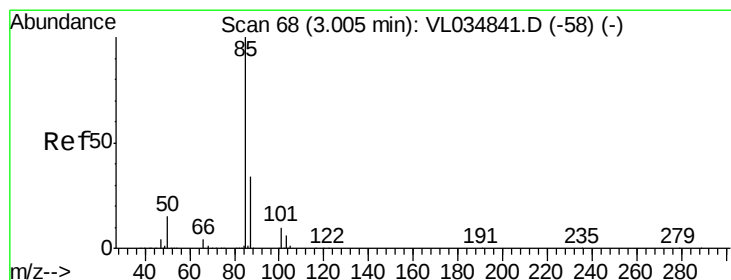
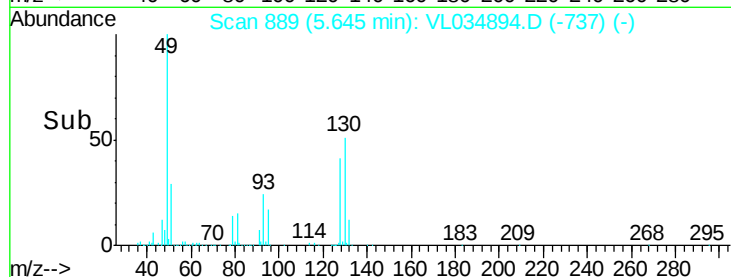
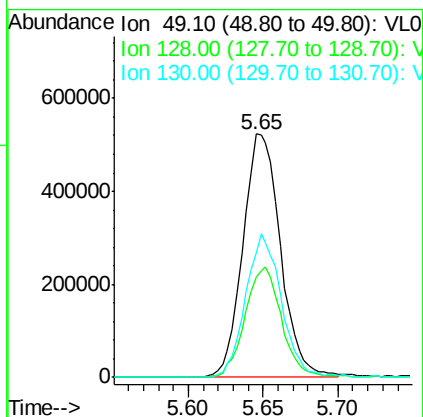
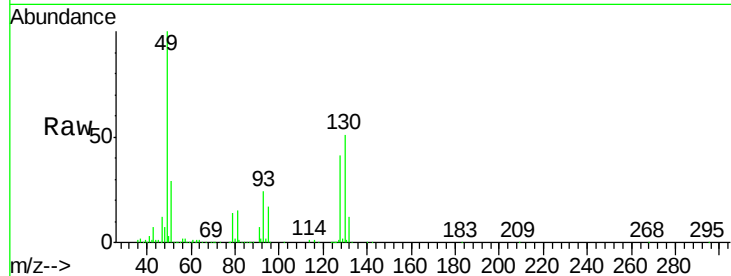
ClientSampleId :

IA-01DUP

Tot Ion:	49	Resp:	913667
Ion	Ratio	Lower	Upper
49	100		
128	44.6	23.4	70.3
130	56.5	30.0	90.0

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#2

Dichlorodifluoromethane

Concen: 0.603 ppbv

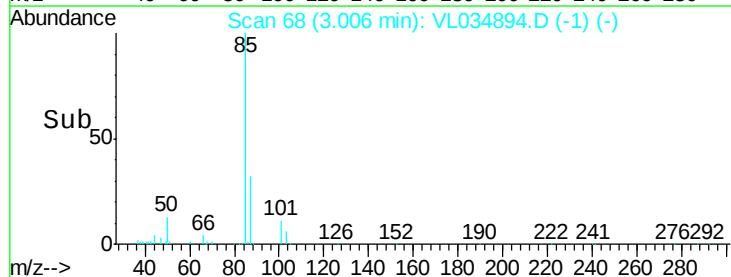
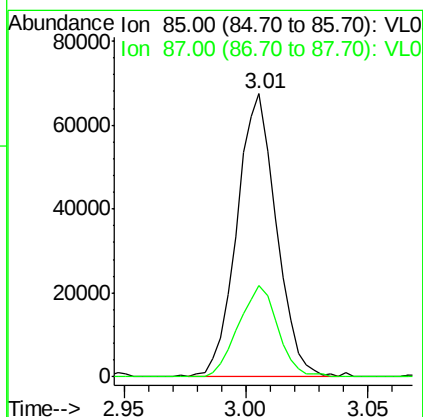
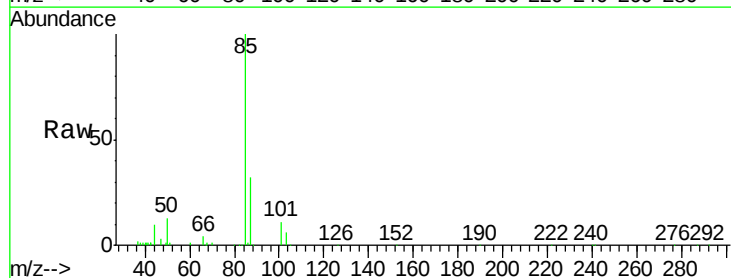
RT: 3.01 min Scan# 68

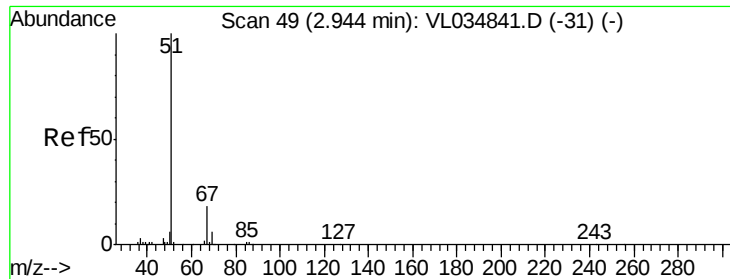
Delta R.T. 0.00 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Tgt Ion:	85	Resp:	75395
Ion	Ratio	Lower	Upper
85	100		
87	32.2	26.9	40.3





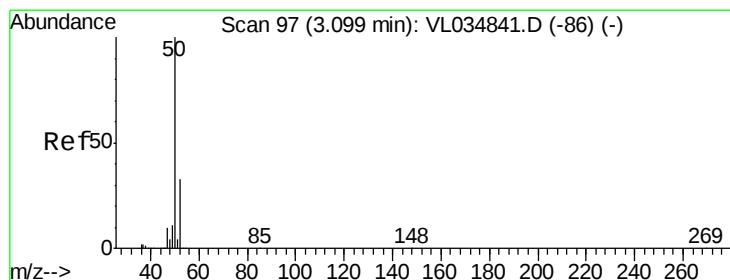
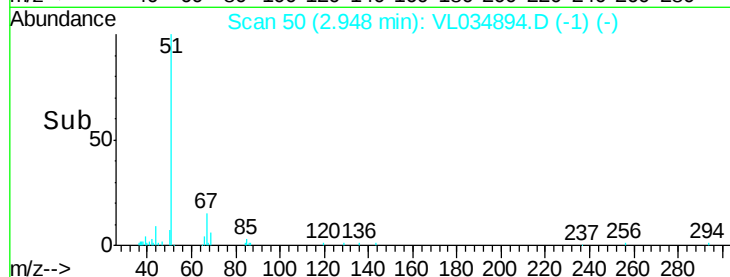
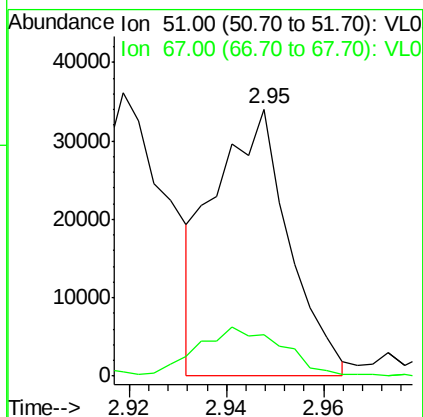
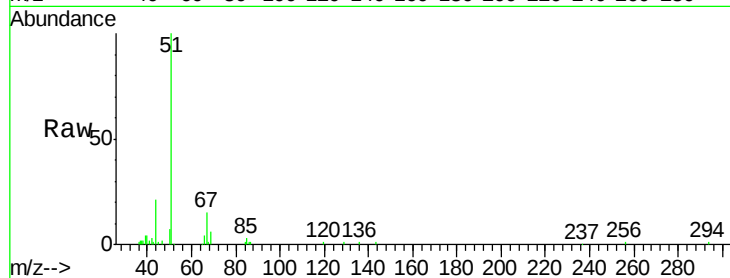
#3
Chlorodifluoromethane
Concen: 0.356 ppbv
RT: 2.95 min Scan# 50
Delta R.T. 0.00 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA-01DUP

Tot Ion: 51 Resp: 36373
Ion Ratio Lower Upper
51 100
67 22.8 14.3 21.5#

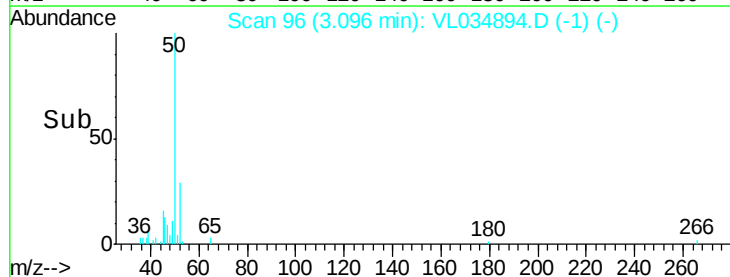
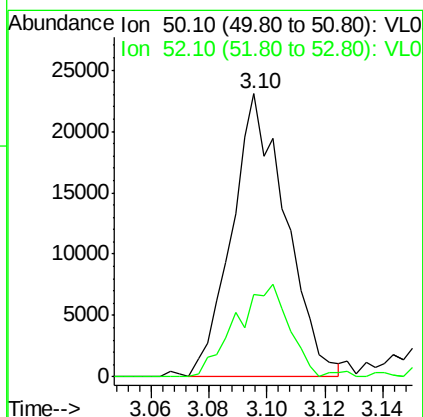
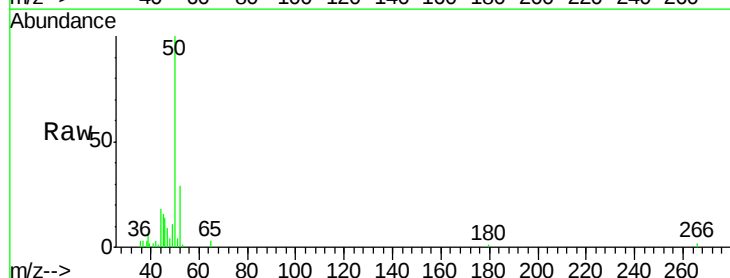
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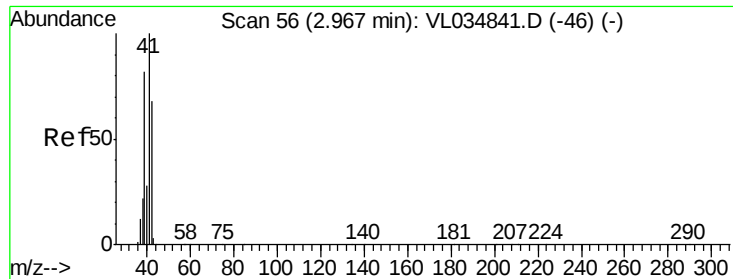
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#4
Chloromethane
Concen: 0.517 ppbv
RT: 3.10 min Scan# 96
Delta R.T. -0.00 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Tgt Ion: 50 Resp: 29800
Ion Ratio Lower Upper
50 100
52 29.1 26.8 40.2





#9

Propene

Concen: 1.358 ppbv m

RT: 2.98 min Scan# 59

Delta R.T. 0.01 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA-01DUP

Tot Ion: 41 Resp: 66179

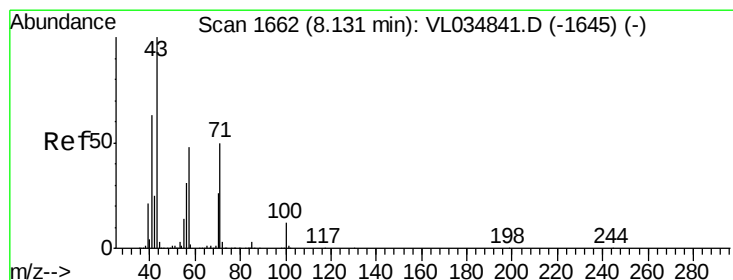
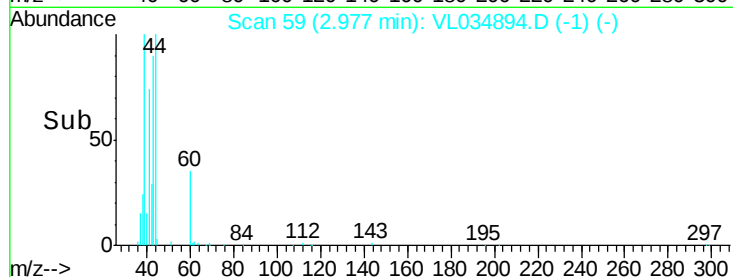
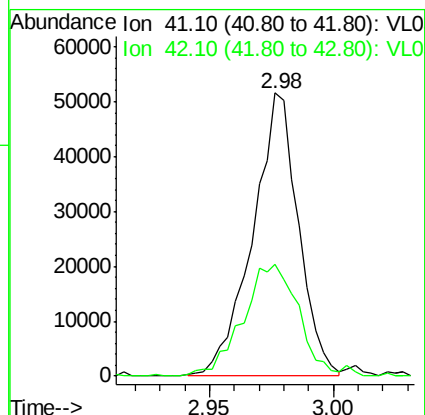
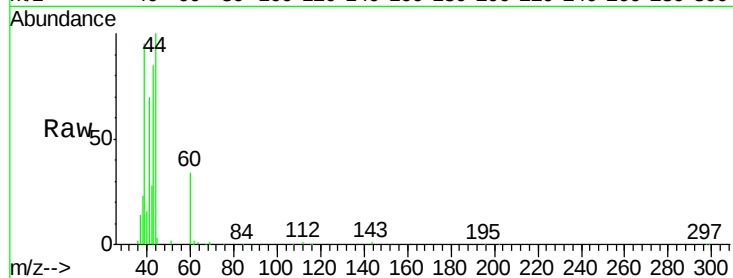
Ion Ratio Lower Upper

41 100

42 265.0 55.2 82.8#

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#10

Heptane

Concen: 0.185 ppbv m

RT: 8.13 min Scan# 1661

Delta R.T. -0.00 min

Lab File: VL034894.D

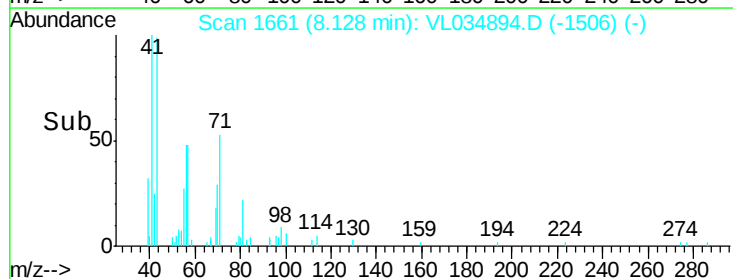
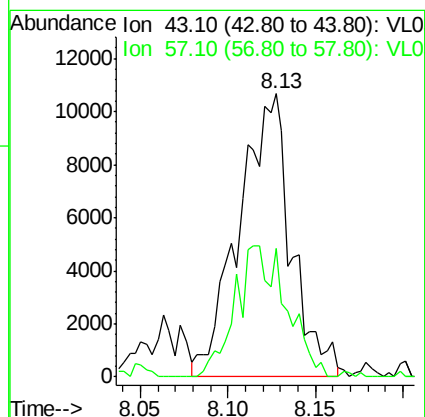
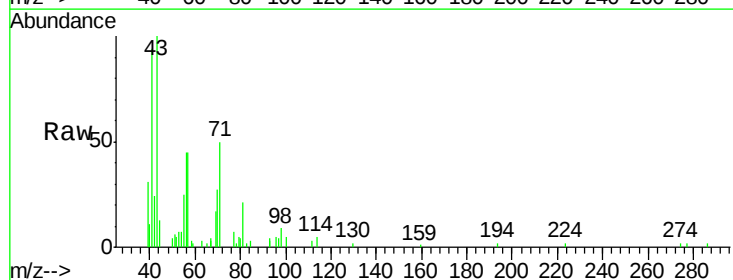
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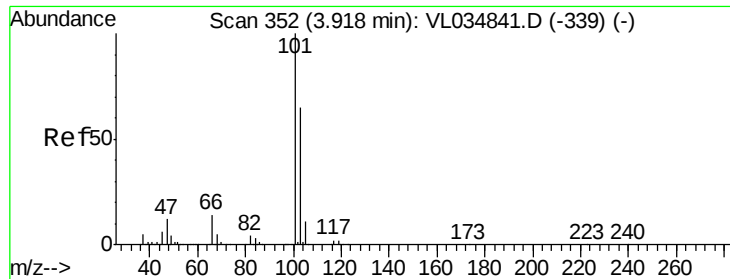
Tgt Ion: 43 Resp: 22212

Ion Ratio Lower Upper

43 100

57 45.0 39.7 59.5





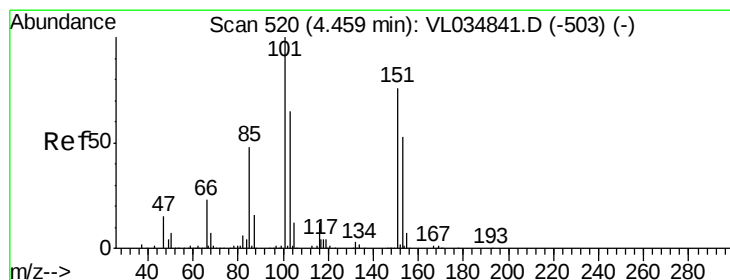
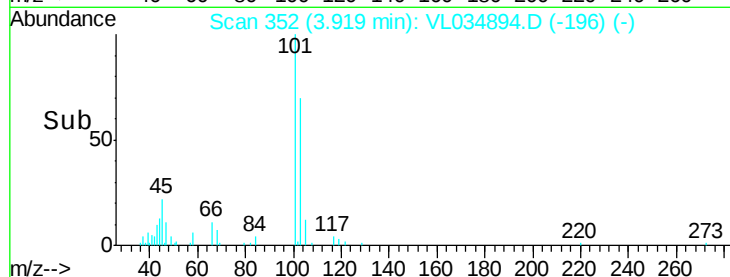
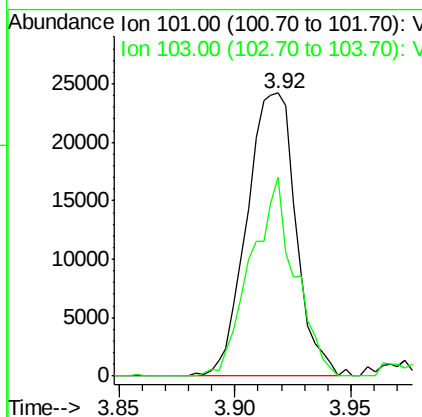
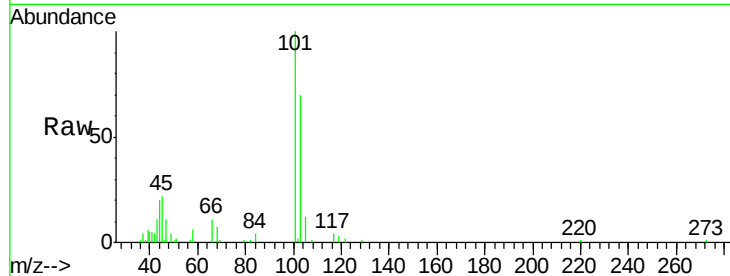
#11
 Trichlorofluoromethane
 Concen: 0.267 ppbv
 RT: 3.92 min Scan# 352
 Delta R.T. 0.00 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Instrument :
 MSVOA_L
 ClientSampled :
 IA-01DUP

Tot Ion	Ratio	Lower	Upper
101	100		
103	70.4	51.8	77.8

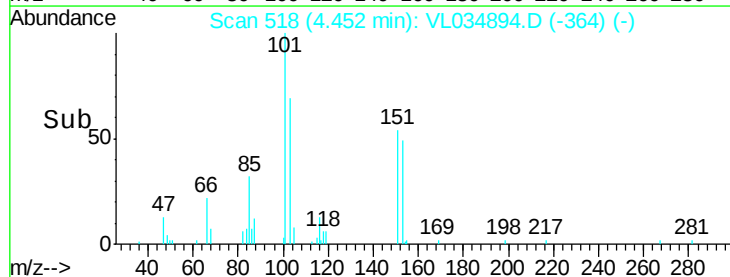
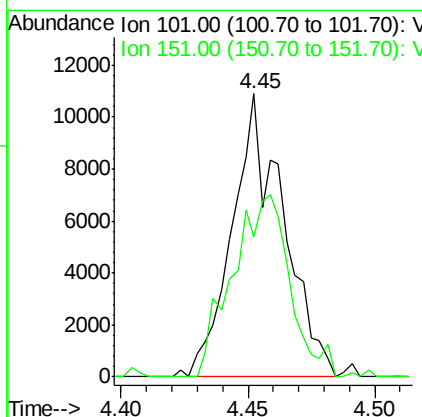
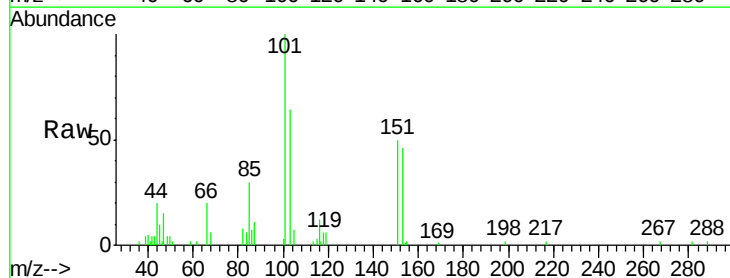
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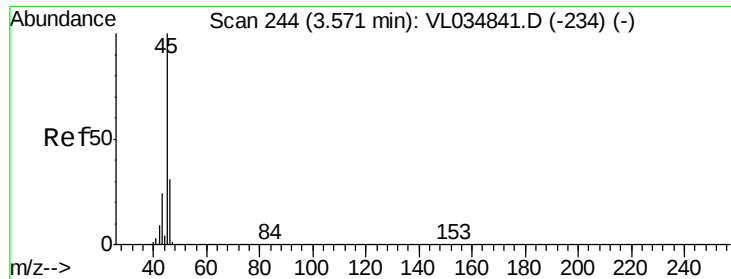
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#12
 1,1,2-Trichlorotrifluoroethane
 Concen: 0.163 ppbv m
 RT: 4.45 min Scan# 518
 Delta R.T. -0.01 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Tgt Ion	Ratio	Lower	Upper
101	100		
151	0.0	60.8	91.2#





#13

Ethanol

Concen: 37.066 ppbv

RT: 3.57 min Scan# 243

Delta R.T. -0.00 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA-01DUP

Tot Ion: 45 Resp: 549120

Ion Ratio Lower Upper

45 100

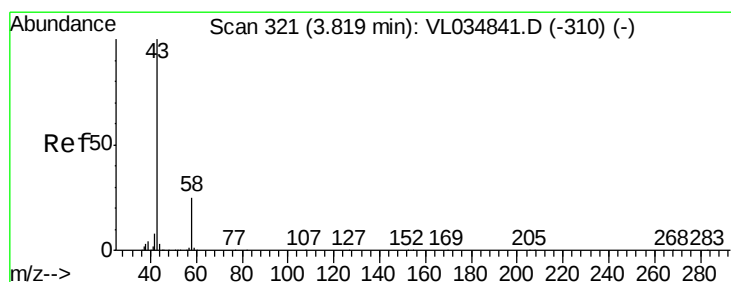
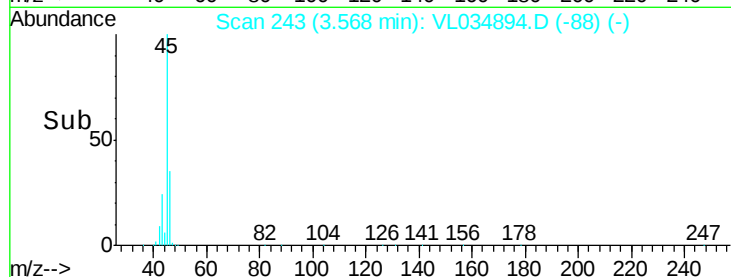
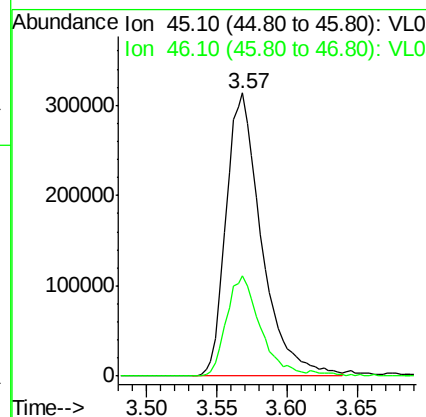
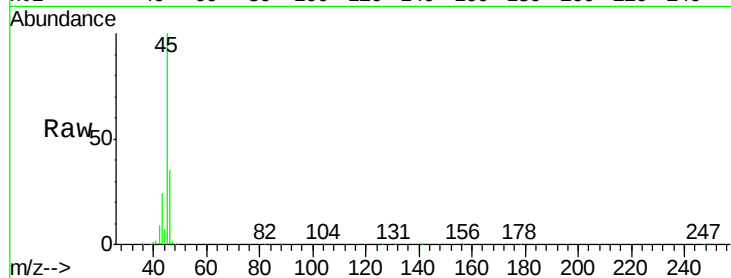
46 35.2 16.0 64.0

Manual Integrations

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#15

Acetone

Concen: 4.796 ppbv m

RT: 3.81 min Scan# 319

Delta R.T. -0.01 min

Lab File: VL034894.D

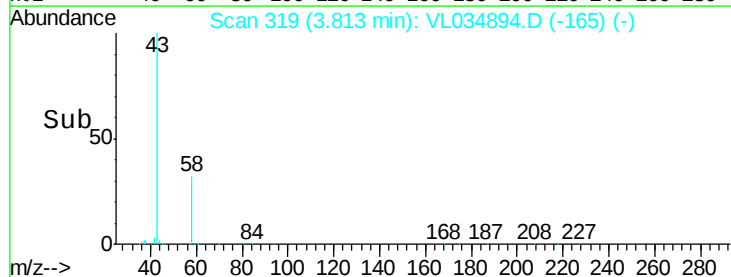
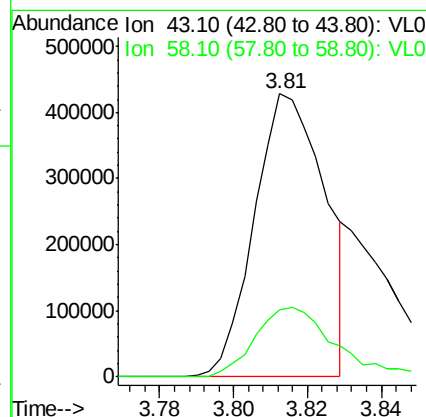
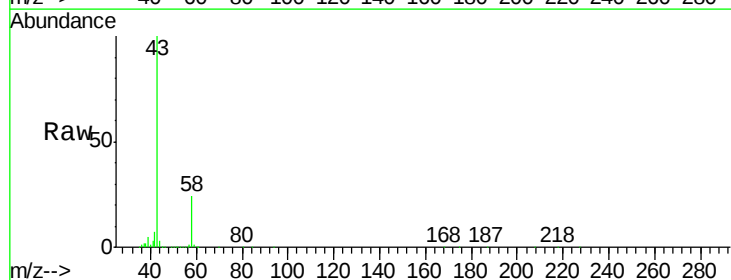
Acq: 16 Mar 2020 17:26

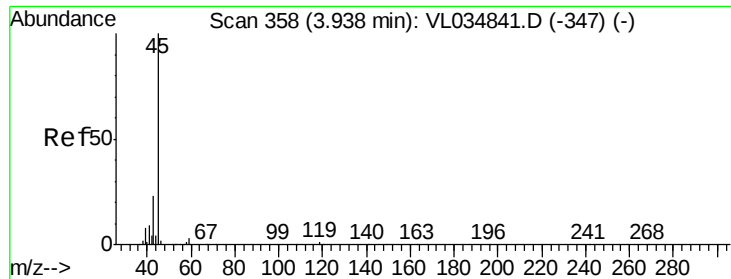
Tgt Ion: 43 Resp: 567947

Ion Ratio Lower Upper

43 100

58 28.7 21.0 31.6





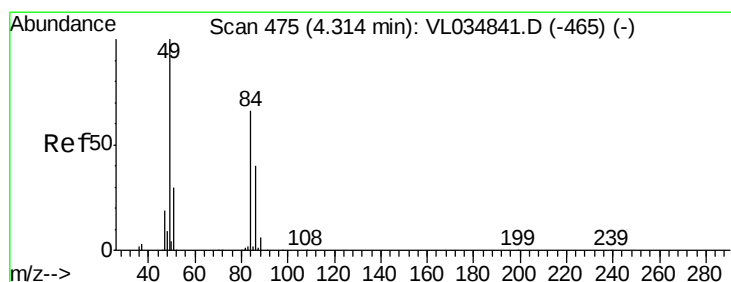
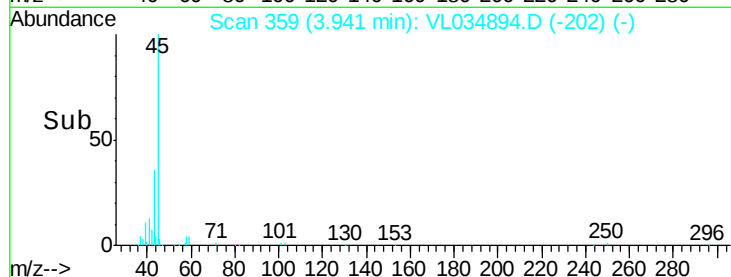
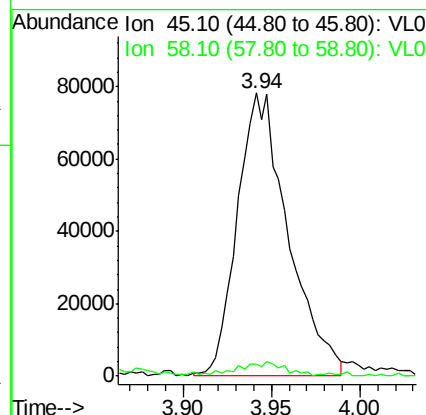
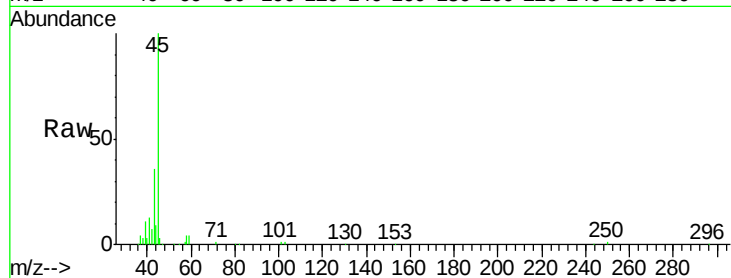
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Isopropyl Alcohol
Concen: 2.091 ppbv m
RT: 3.94 min Scan# 359
Delta R.T. 0.00 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA-01DUP

Tot Ion	Ratio	Lower	Upper
45	100		
58	5.1	30.5	45.7#

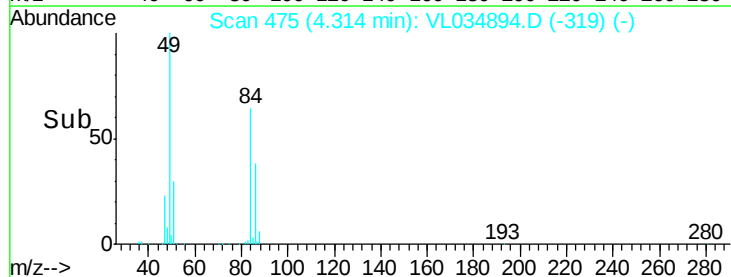
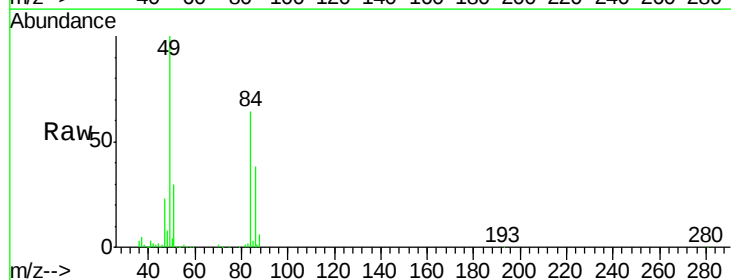
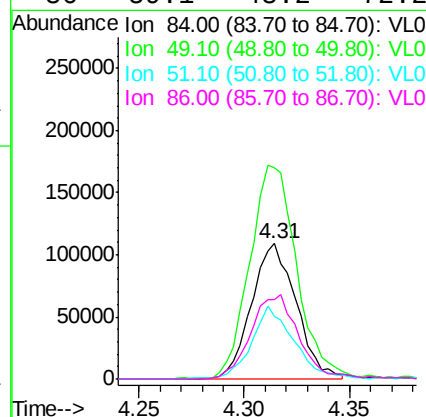
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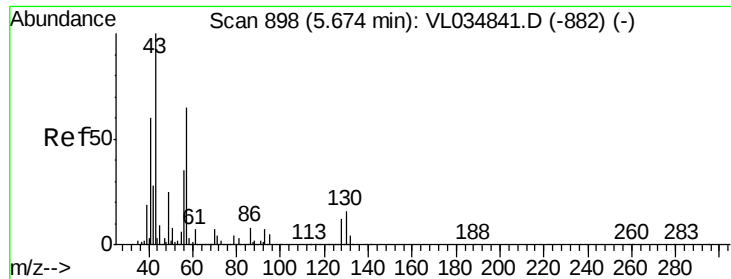
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#20
Methylene Chloride
Concen: 4.302 ppbv
RT: 4.31 min Scan# 475
Delta R.T. 0.00 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Tgt Ion	Ratio	Lower	Upper
84	100		
49	155.9	121.5	182.3
51	45.3	36.6	55.0
86	59.1	48.2	72.2





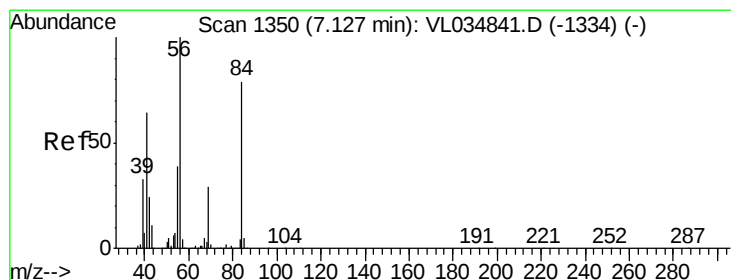
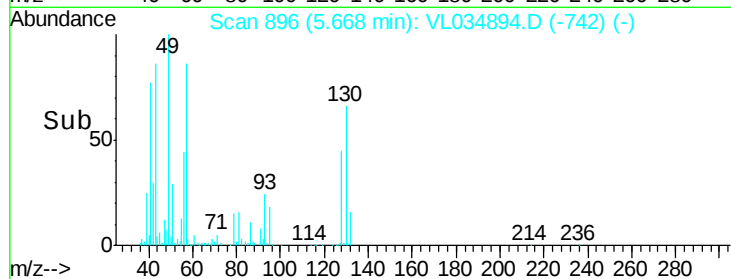
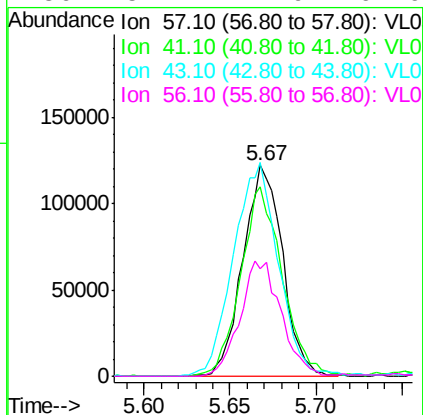
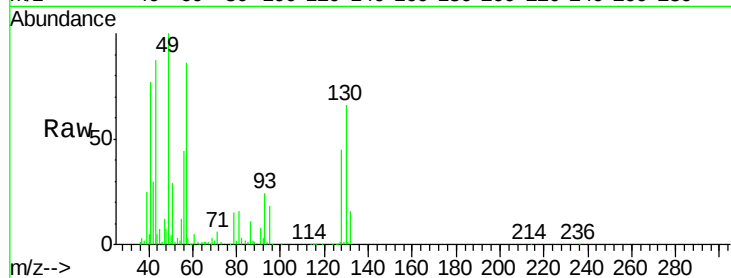
#26
Hexane
Concen: 2.141 ppbv
RT: 5.67 min Scan# 896
Delta R.T. -0.01 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Instrument :
MSVOA_L
ClientSampleId :
IA-01DUP

Tot Ion	Ratio	Lower	Upper
57	100		
41	94.7	72.6	109.0
43	115.6	183.8	275.6#
56	57.4	41.9	62.9

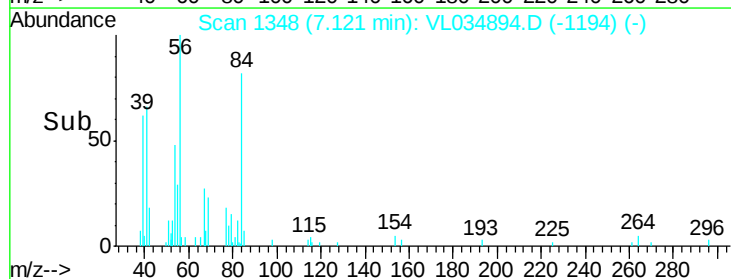
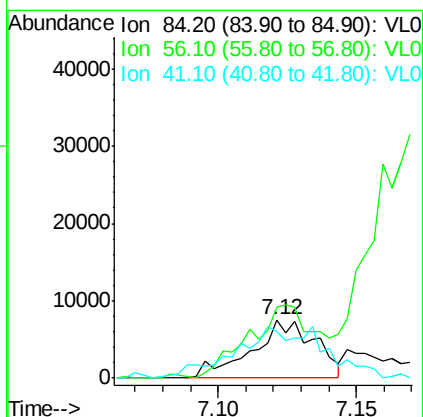
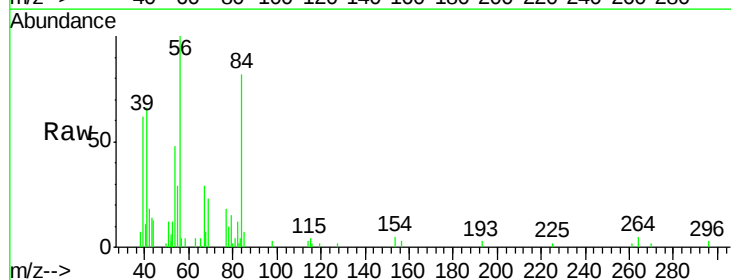
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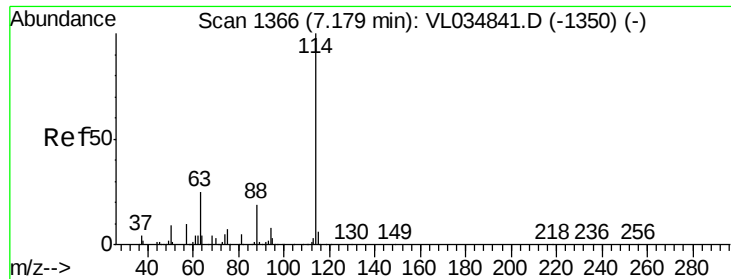
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#30
Cyclohexane
Concen: 0.158 ppbv m
RT: 7.12 min Scan# 1348
Delta R.T. -0.01 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Tgt Ion	Ratio	Lower	Upper
84	100		
56	0.0	110.5	165.7#
41	127.7	68.2	102.4#





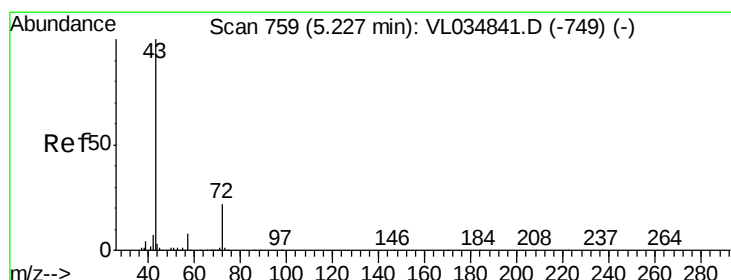
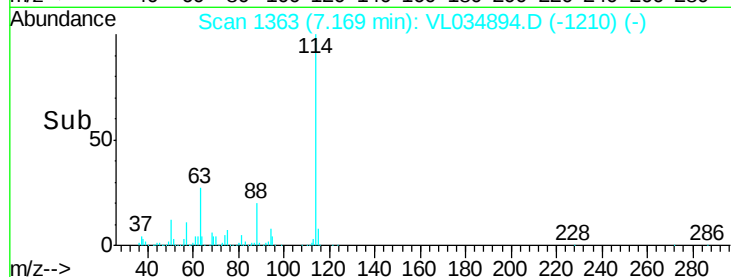
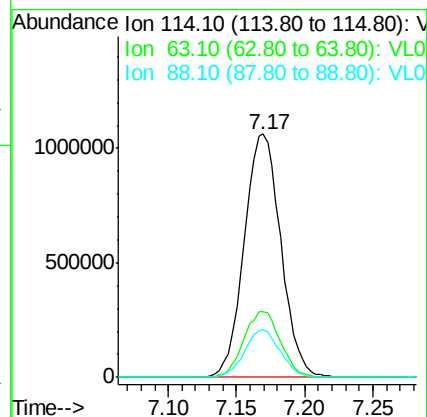
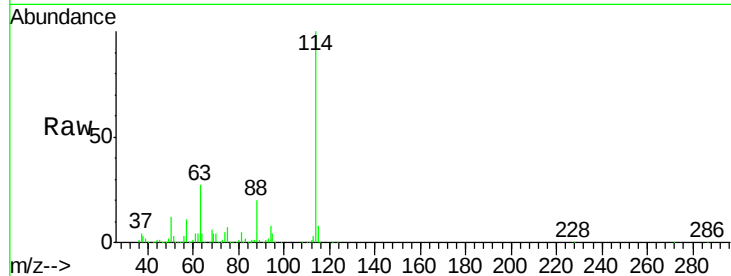
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.17 min Scan# 1363
 Delta R.T. -0.01 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-01DUP

Tot Ion	Ratio	Lower	Upper
114	100		
63	27.3	20.6	31.0
88	19.0	15.0	22.6

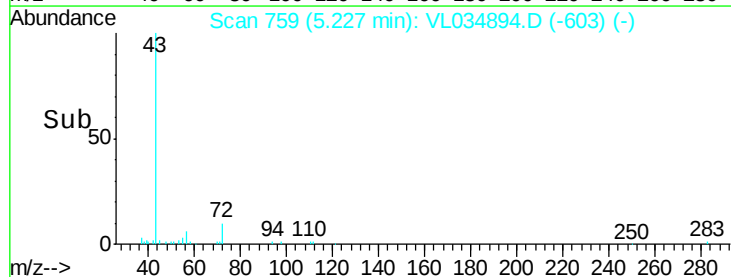
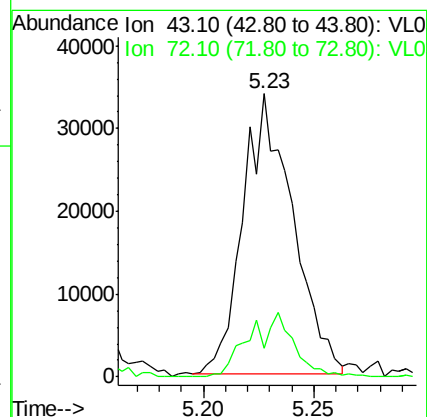
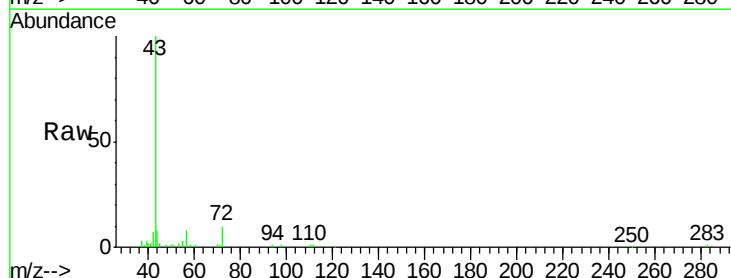
Manual Integrations
 APPROVED

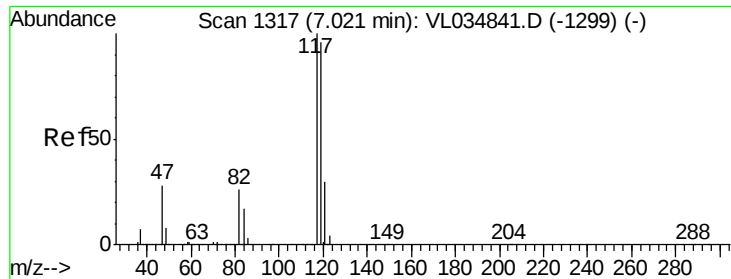
MMDadoda
 3/17/2020 12:15:58 PM



#34
 2-Butanone
 Concen: 0.403 ppbv
 RT: 5.23 min Scan# 759
 Delta R.T. 0.00 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Tgt Ion	Ratio	Lower	Upper
43	100		
72	20.6	17.6	26.4





#35

Carbon Tetrachloride

Concen: 0.065 ppbv m

RT: 7.01 min Scan# 1312

Delta R.T. -0.02 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

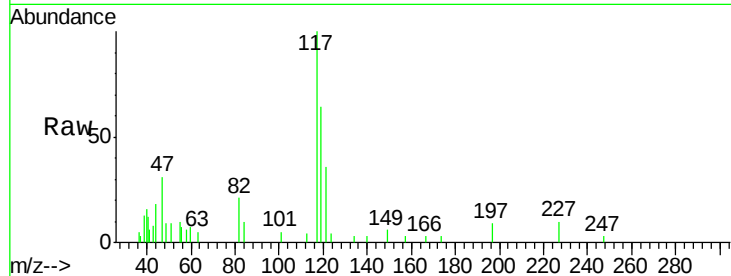
ClientSampleId :

IA-01DUP

Tot Ion	Ratio	Lower	Upper
117	100		
119	64.0	77.0	115.4#
121	35.8	24.0	36.0

Manual Integrations
APPROVED

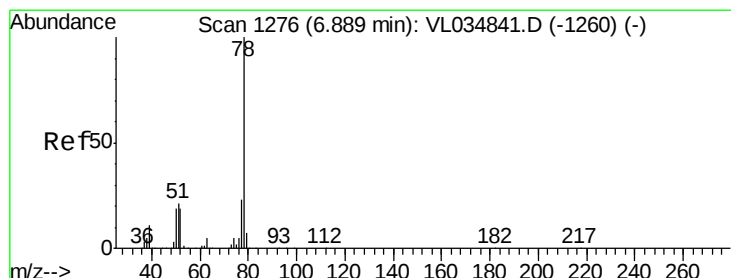
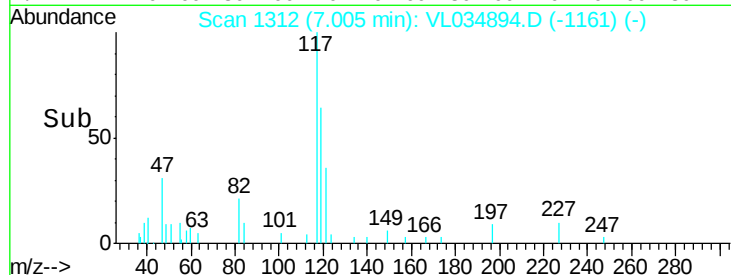
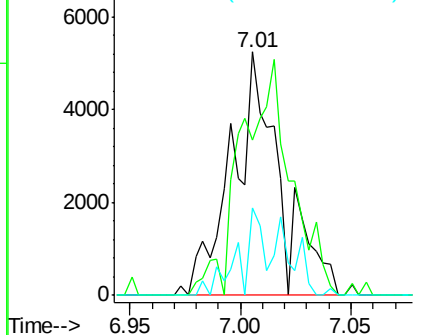
MMDadoda
3/17/2020 12:15:58 PM



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V

Ion 121.00 (120.70 to 121.70): V



#36

Benzene

Concen: 0.435 ppbv m

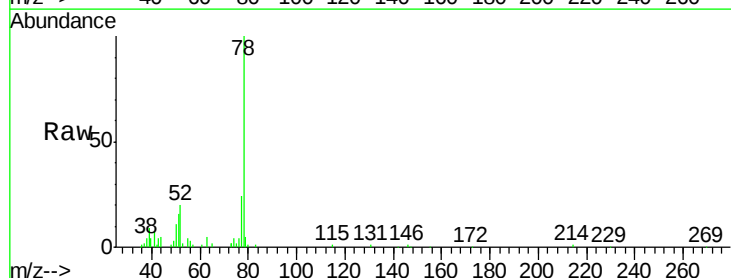
RT: 6.89 min Scan# 1275

Delta R.T. -0.00 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

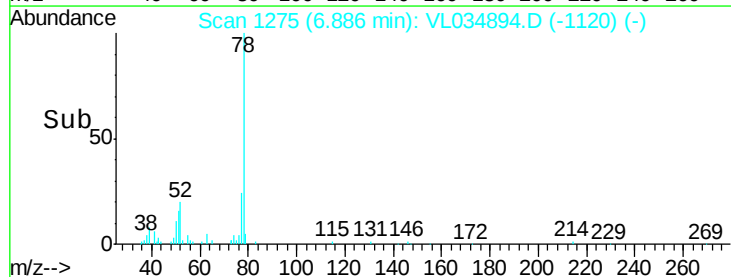
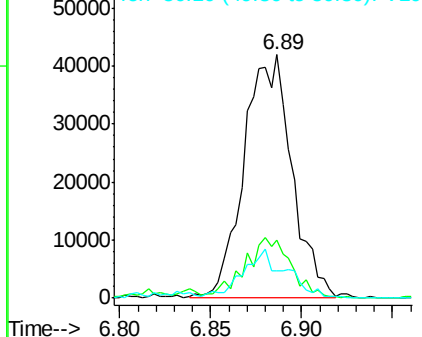
Tgt Ion	Ratio	Lower	Upper
78	100		
77	23.7	18.2	27.2
50	11.1	15.2	22.8#

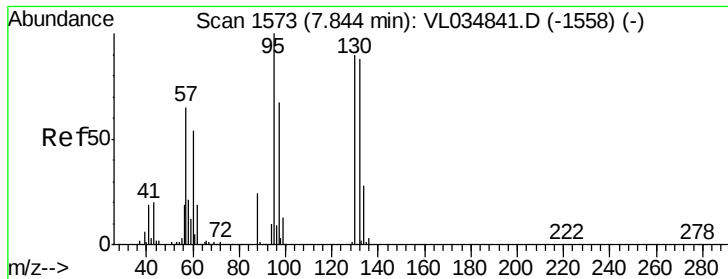


Abundance Ion 78.10 (77.80 to 78.80): VL0

Ion 77.10 (76.80 to 77.80): VL0

Ion 50.10 (49.80 to 50.80): VL0





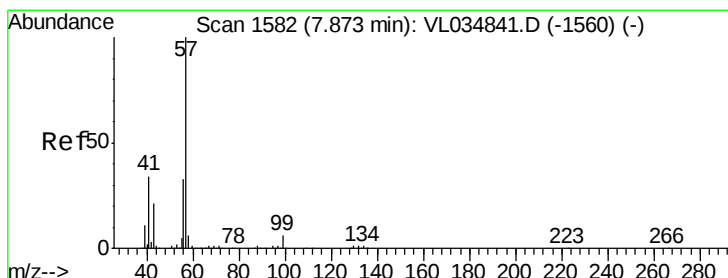
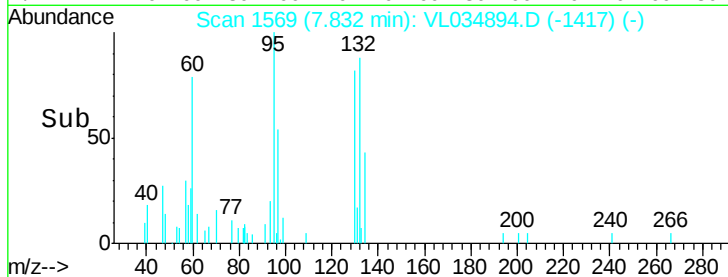
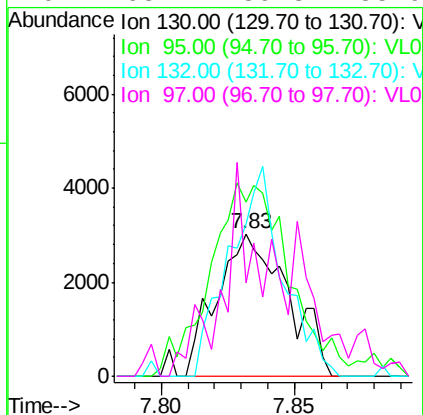
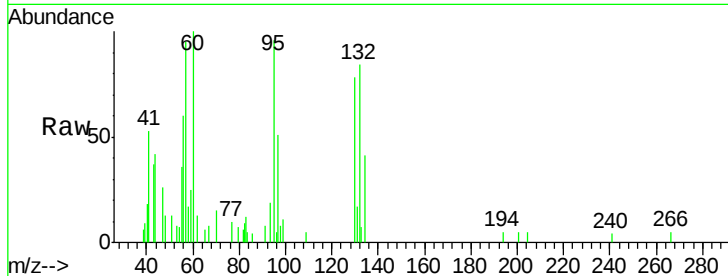
#38
 Trichloroethene
 Concen: 0.084 ppbv m
 RT: 7.83 min Scan# 1569
 Delta R.T. -0.01 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Instrument :
 MSVOA_L
 ClientSampleID :
 IA-01DUP

Tot Ion	Ratio	Lower	Upper
130	100		
95	122.0	88.5	132.7
132	107.2	78.0	117.0
97	65.7	59.3	88.9

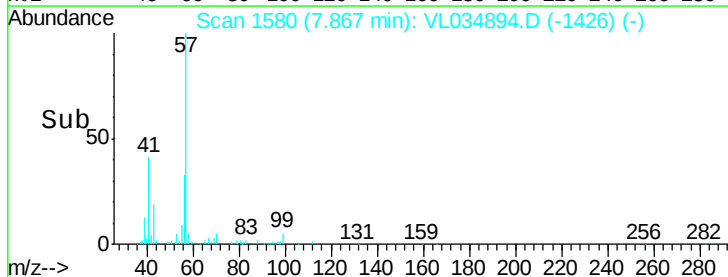
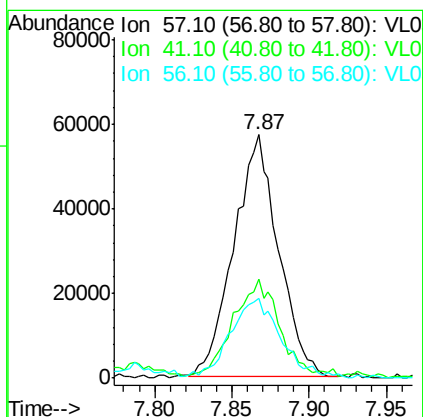
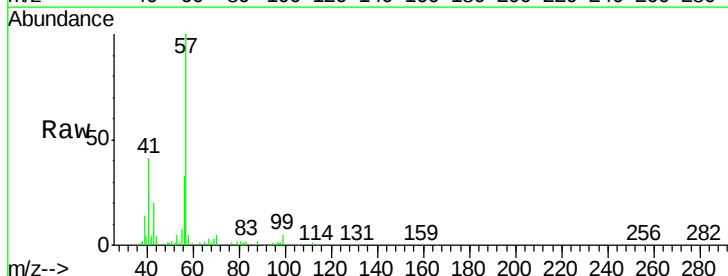
Manual Integrations
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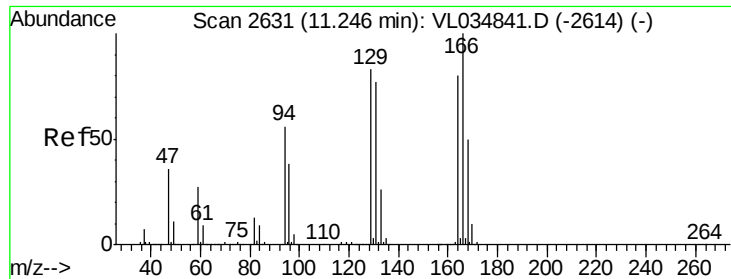
MMDadoda
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#44
 2,2,4-Trimethylpentane
 Concen: 0.384 ppbv
 RT: 7.87 min Scan# 1580
 Delta R.T. -0.01 min
 Lab File: VL034894.D
 Acq: 16 Mar 2020 17:26

Tgt Ion	Ratio	Lower	Upper
57	100		
41	45.1	26.2	39.4#
56	37.8	25.0	37.4#





#52

Tetrachloroethene

Concen: 0.100 ppbv m

RT: 11.23 min Scan# 2625

Delta R.T. -0.02 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

ClientSampleId :

IA-01DUP

Tot Ion:164 Resp: 6942

Ion Ratio Lower Upper

164 100

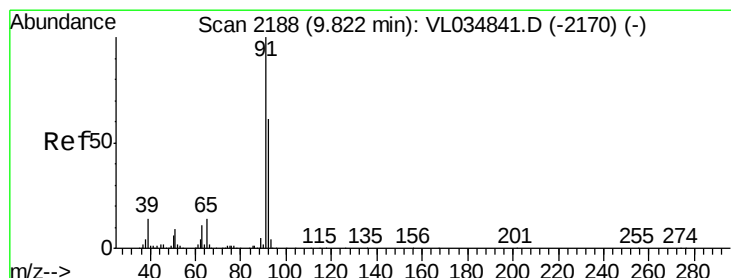
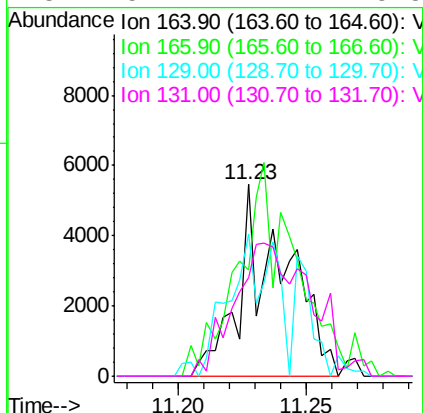
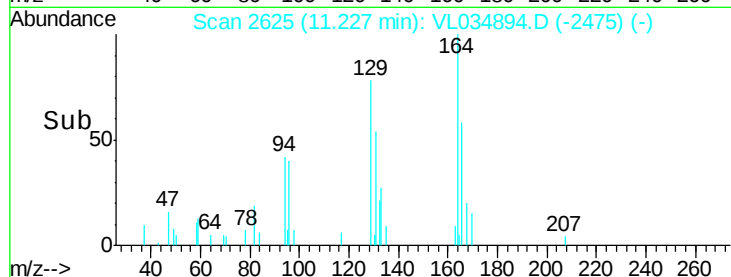
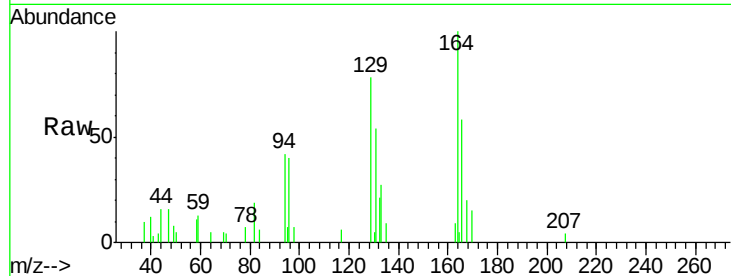
166 58.2 100.0 150.0#

129 77.9 83.1 124.7#

131 54.2 77.2 115.8#

Manual Integrations
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3/17/2020 12:15:58 PM



#53

Toluene

Concen: 3.710 ppbv

RT: 9.81 min Scan# 2185

Delta R.T. -0.01 min

Lab File: VL034894.D

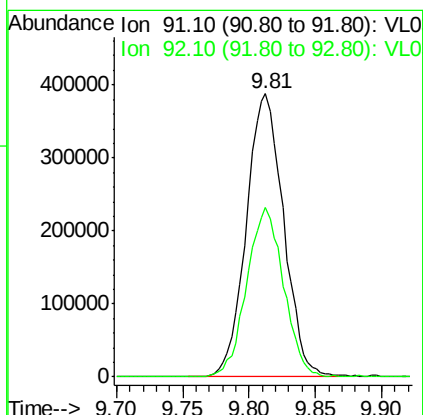
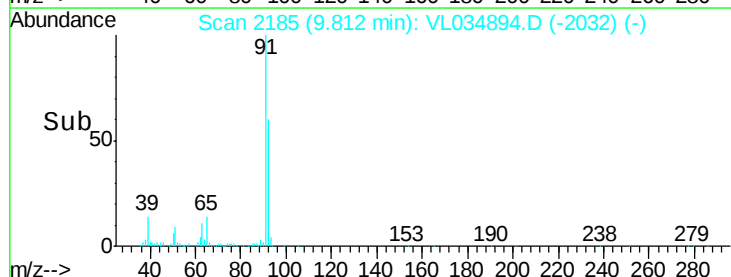
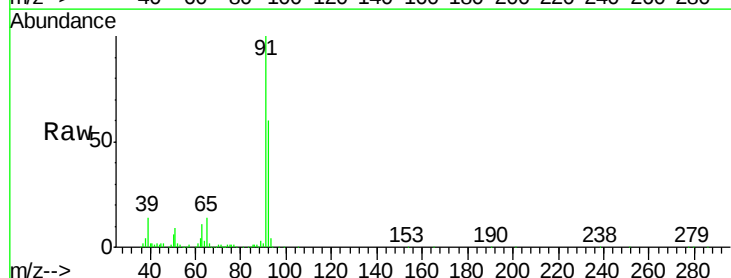
Acq: 16 Mar 2020 17:26

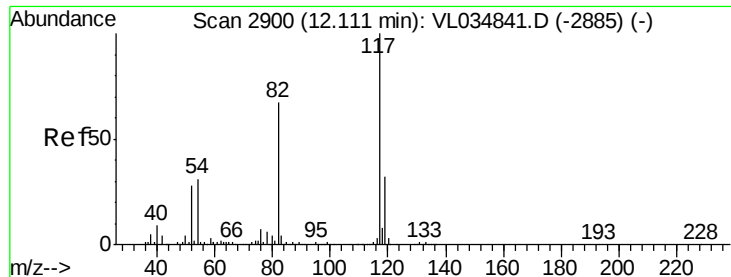
Tgt Ion: 91 Resp: 755542

Ion Ratio Lower Upper

91 100

92 59.3 48.6 72.8





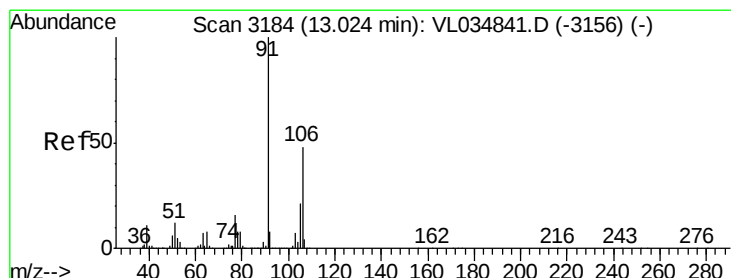
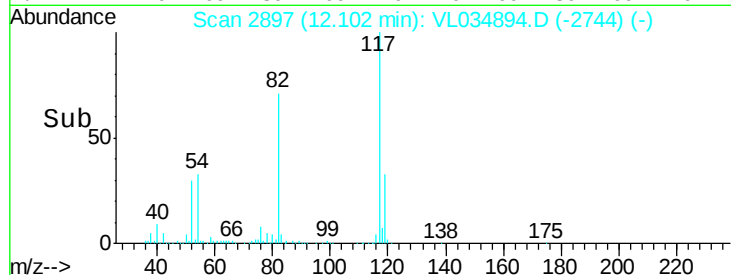
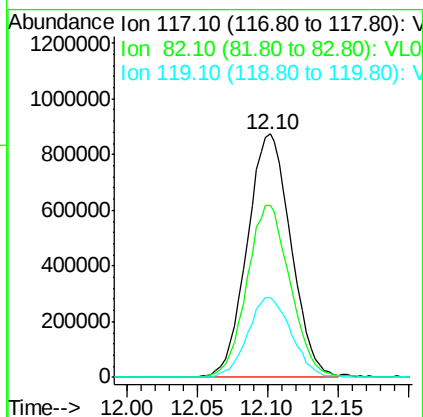
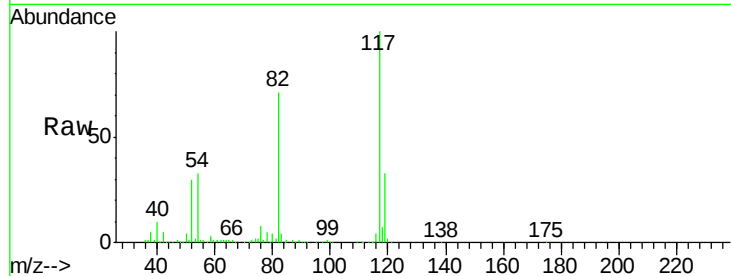
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2897
Delta R.T. -0.01 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Instrument :
MSVOA_L
ClientSampled :
IA-01DUP

Tot Ion:117 Resp: 1894574
Ion Ratio Lower Upper
117 100
82 70.5 51.1 76.7
119 32.9 27.3 40.9

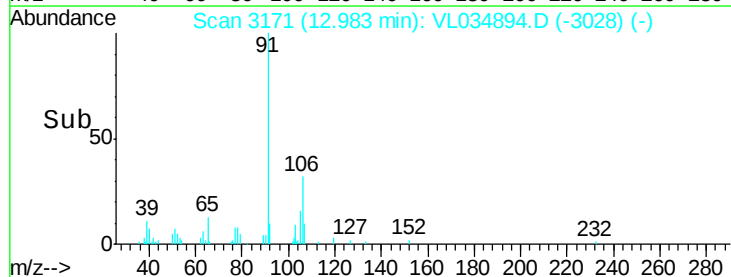
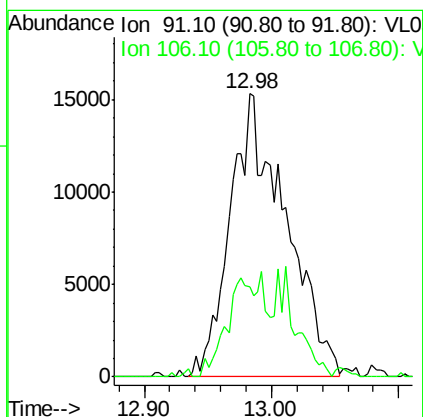
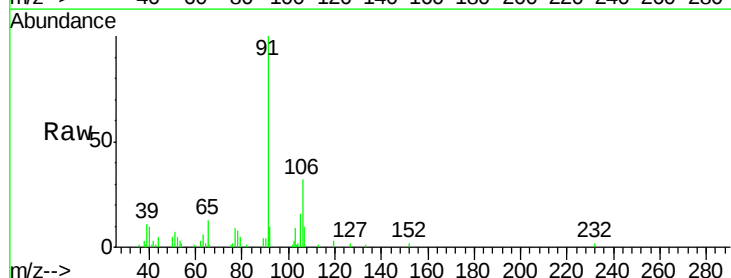
Manual Integrations
APPROVED

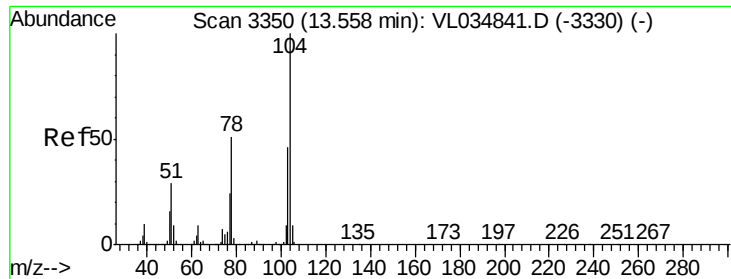
MMDadoda
3/17/2020 12:15:58 PM



#59
m/p-Xylene
Concen: 0.215 ppbv m
RT: 12.98 min Scan# 3171
Delta R.T. -0.04 min
Lab File: VL034894.D
Acq: 16 Mar 2020 17:26

Tgt Ion: 91 Resp: 46189
Ion Ratio Lower Upper
91 100
106 39.6 37.1 55.7





#61

Stvrene

Concen: 0.112 ppbv m

RT: 13.54 min Scan# 3345

Delta R.T. -0.02 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Instrument :

MSVOA_L

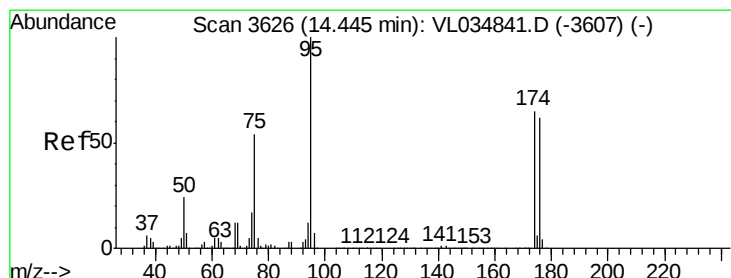
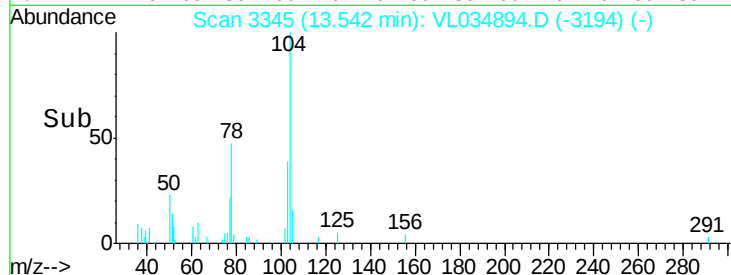
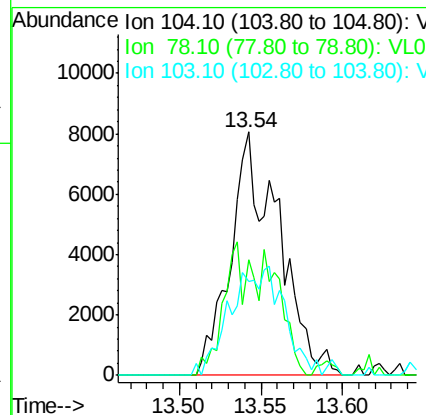
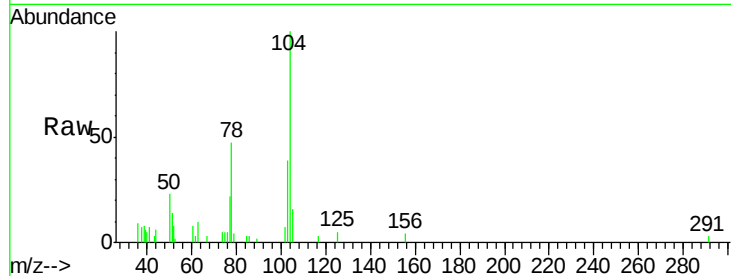
ClientSampleId :

IA-01DUP

Tot Ion:	104	Resp:	16501
Ion Ratio	Lower	Upper	
104	100		
78	0.0	41.8	62.6#
103	51.5	37.8	56.6

Manual Integrations
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3/17/2020 12:15:58 PM



#68

1-Bromo-4-Fluorobenzene

Concen: 10.628 ppbv

RT: 14.44 min Scan# 3624

Delta R.T. -0.01 min

Lab File: VL034894.D

Acq: 16 Mar 2020 17:26

Tgt Ion:	95	Resp:	1570356
Ion Ratio	Lower	Upper	
95	100		
174	65.4	55.2	82.8
175	4.7	4.3	6.5

