

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
 Data File : VL034987.D
 Acq On : 12 May 2020 15:03
 Operator : SY/AP
 Sample : L2567-01
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4

Manual Integrations
 APPROVED

MMDadoda
 5/13/2020 5:11:42 PM

Quant Time: May 14 13:02:37 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	5.65	49	1022033	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.17	114	2389257	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.11	117	2246055	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.45	95	1888354	10.39	ppbv	-0.01
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.90%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.01	85	41870	0.289	ppbv	94
3) Chlorodifluoromethane	2.94	51	32411m	0.278	ppbv	
4) Chloromethane	3.10	50	35636	0.533	ppbv #	84
9) Propene	2.98	41	130336m	2.574	ppbv	
10) Heptane	8.12	43	106461m	0.839	ppbv	
11) Trichlorofluoromethane	3.92	101	40054	0.268	ppbv #	81
13) Ethanol	3.57	45	298077	17.840	ppbv	97
15) Acetone	3.81	43	1050792m	7.777	ppbv	
19) Isopropyl Alcohol	3.94	45	398886	4.427	ppbv #	96
20) Methylene Chloride	4.31	84	186822	4.177	ppbv	88
26) Hexane	5.67	57	350429	3.561	ppbv #	58
30) Cyclohexane	7.13	84	32352	0.426	ppbv #	90
34) 2-Butanone	5.23	43	53865	0.363	ppbv	100
35) Carbon Tetrachloride	7.02	117	8935m	0.059	ppbv	
36) Benzene	6.89	78	113650m	0.577	ppbv	
38) Trichloroethene	7.84	130	171049	2.241	ppbv	92
41) Tetrahydrofuran	6.06	42	18473m	0.236	ppbv	
44) 2,2,4-Trimethylpentane	7.87	57	183860m	0.525	ppbv	
52) Tetrachloroethene	11.25	164	1177523	16.811	ppbv	98
53) Toluene	9.82	91	2720503	13.028	ppbv	99
58) Ethyl Benzene	12.74	91	200639	0.722	ppbv	100
59) m/p-Xylene	12.99	91	678318m	2.776	ppbv	
60) o-Xylene	13.72	91	227762	0.945	ppbv	100
61) Styrene	13.55	104	44811m	0.294	ppbv	
72) 4-Ethyltoluene	15.87	105	51066m	0.190	ppbv	
73) 1,3,5-Trimethylbenzene	16.03	105	41642m	0.159	ppbv	
74) 1,2,4-Trimethylbenzene	16.80	105	169049	0.592	ppbv #	73

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

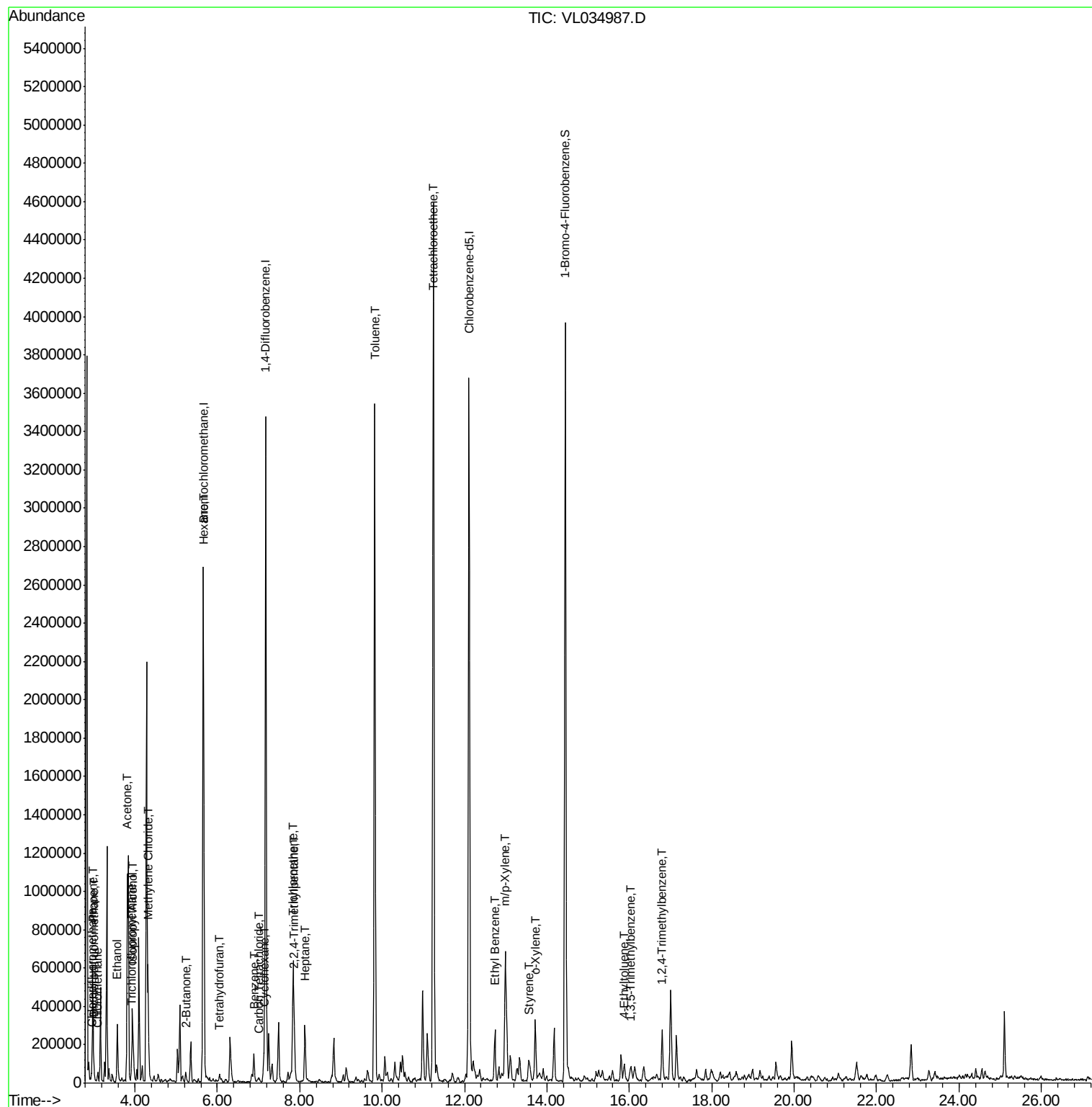
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL051220\
Data File : VL034987.D
Acq On : 12 May 2020 15:03
Operator : SY/AP
Sample : L2567-01
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

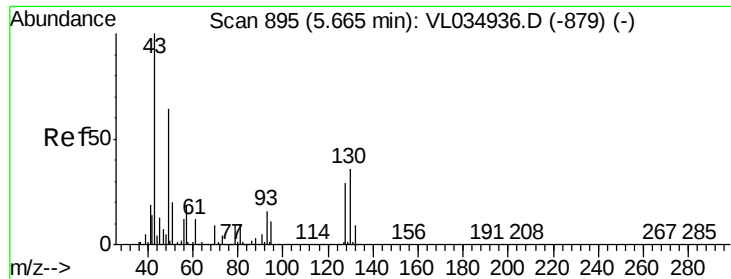
Instrument :
MSVOA_L
ClientSampleId :
IA-4

Manual Integrations
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Quant Time: May 14 13:02:37 2020
Quant Method : Z:\VOASRV\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

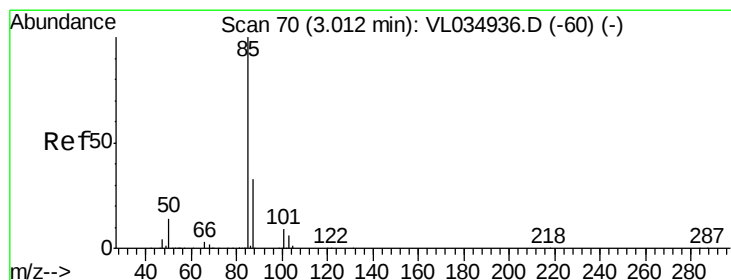
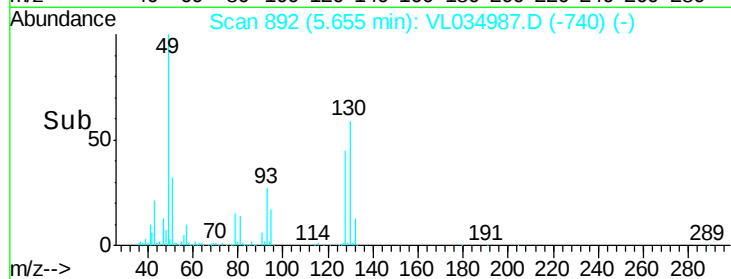
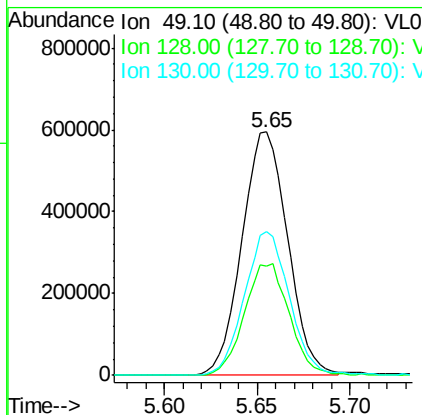
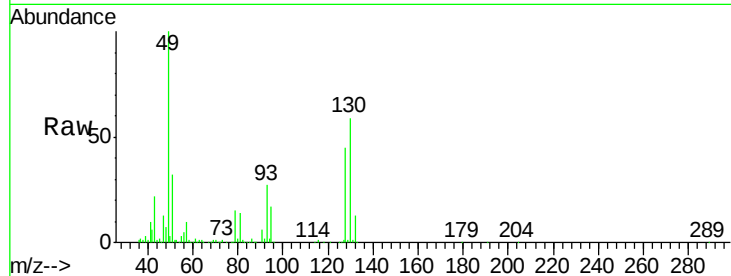
Bromochloromethane
 Concen: 10.000 ppbv
 RT: 5.65 min Scan# 892
 Delta R.T. -0.01 min
 Lab File: VL034987.D
 Acq: 12 May 2020 15:03

Instrument :
 MSVOA_L
 ClientSampled :
 IA-4

Tot Ion	Ratio	Lower	Upper
49	100		
128	45.5	22.1	66.5
130	58.4	29.1	87.3

Manual Integrations
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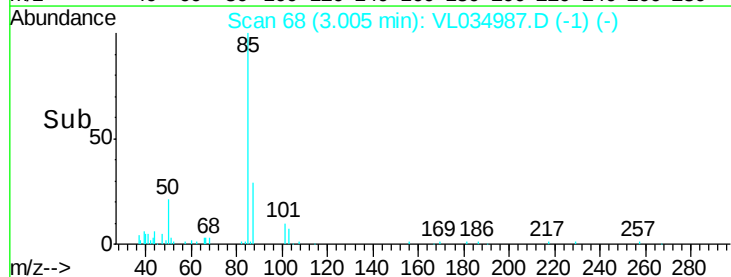
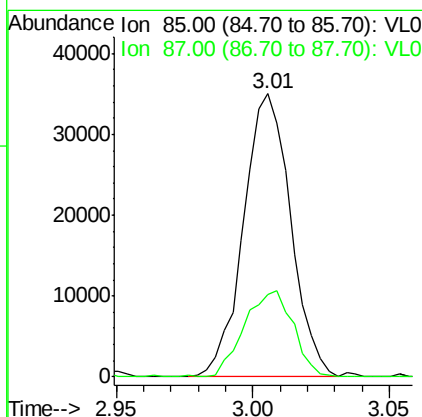
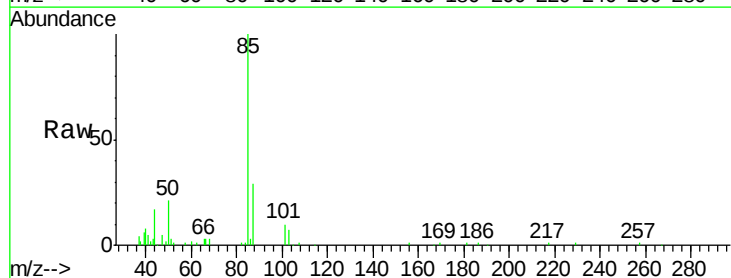
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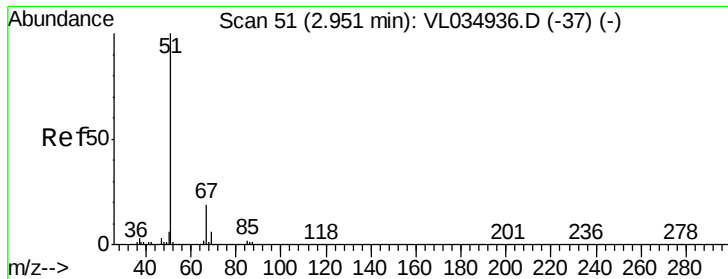


#2

Dichlorodifluoromethane
 Concen: 0.289 ppbv
 RT: 3.01 min Scan# 68
 Delta R.T. -0.01 min
 Lab File: VL034987.D
 Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
85	100		
87	29.3	26.2	39.2





#3

Chlorodifluoromethane

Concen: 0.278 ppbv

RT: 2.94 min Scan# 49

Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

ClientSampleId :

IA-4

Tot Ion: 51 Resp: 32411

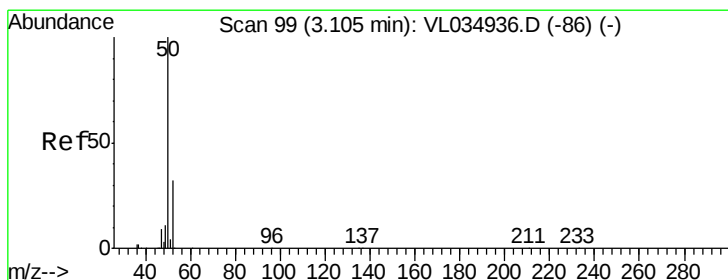
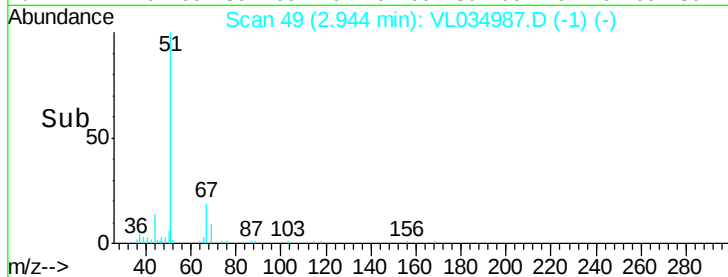
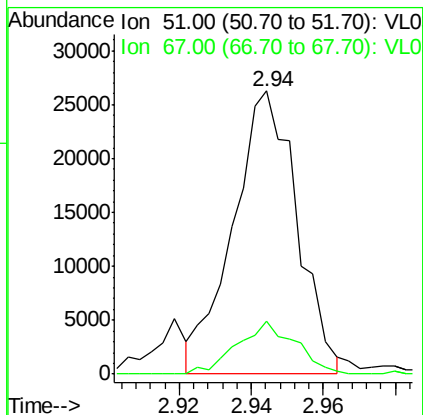
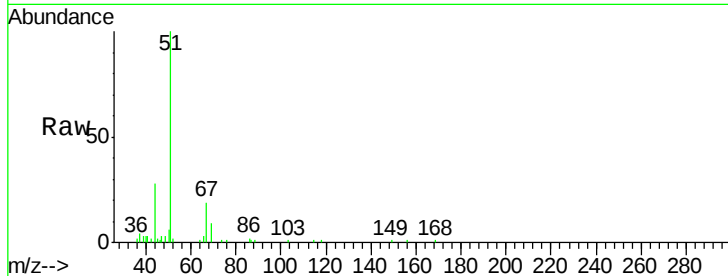
Ion Ratio Lower Upper

51 100

67 17.2 15.0 22.6

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#4

Chloromethane

Concen: 0.533 ppbv

RT: 3.10 min Scan# 97

Delta R.T. -0.01 min

Lab File: VL034987.D

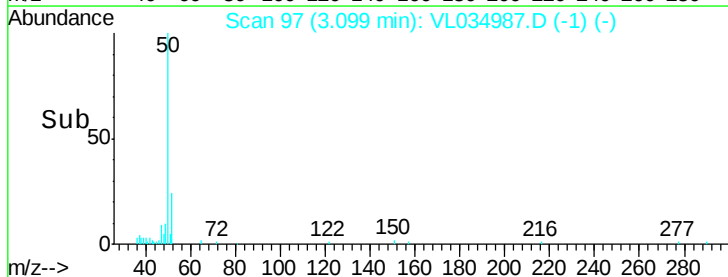
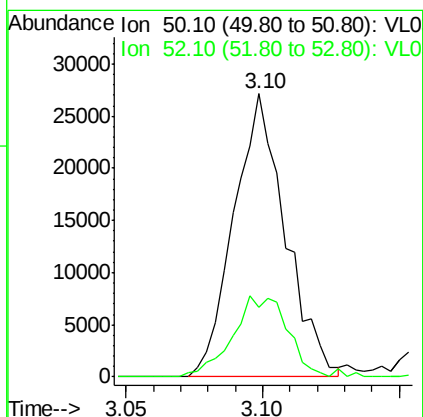
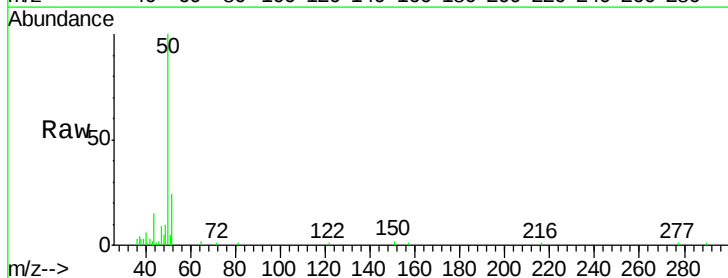
Acq: 12 May 2020 15:03

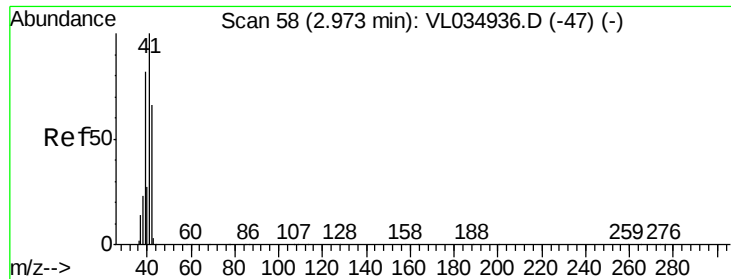
Tgt Ion: 50 Resp: 35636

Ion Ratio Lower Upper

50 100

52 23.0 25.4 38.2#





#9

Propene

Concen: 2.574 ppbv m

RT: 2.98 min Scan# 59

Delta R.T. 0.00 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

ClientSampled :

IA-4

Tot Ion: 41 Resp: 130336

Ion Ratio Lower Upper

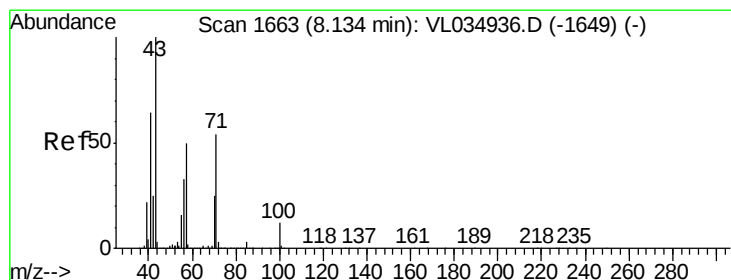
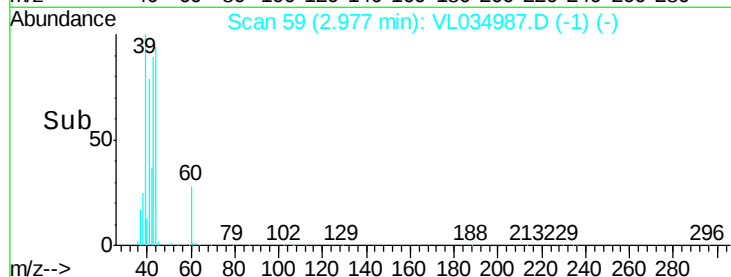
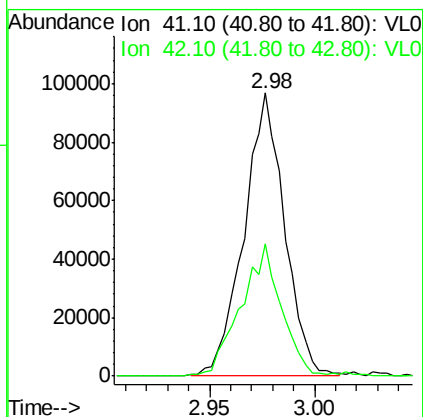
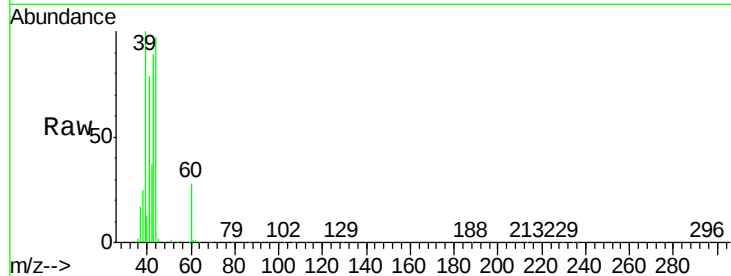
41 100

42 61.7 54.5 81.7

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#10

Heptane

Concen: 0.839 ppbv m

RT: 8.12 min Scan# 1660

Delta R.T. -0.01 min

Lab File: VL034987.D

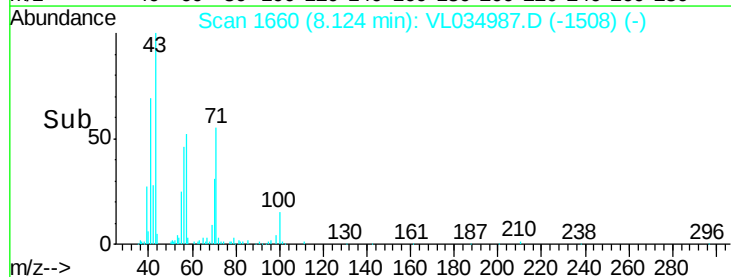
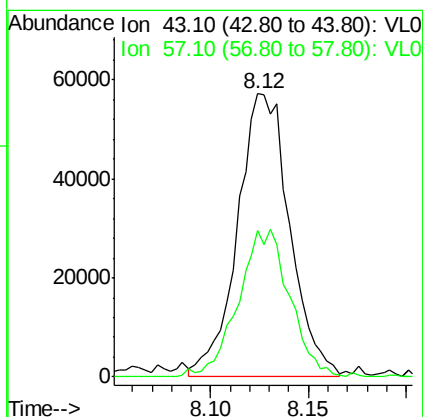
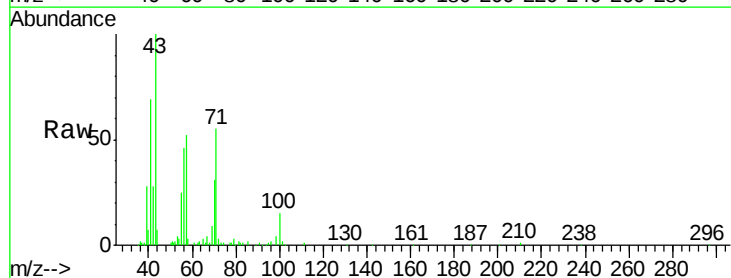
Acq: 12 May 2020 15:03

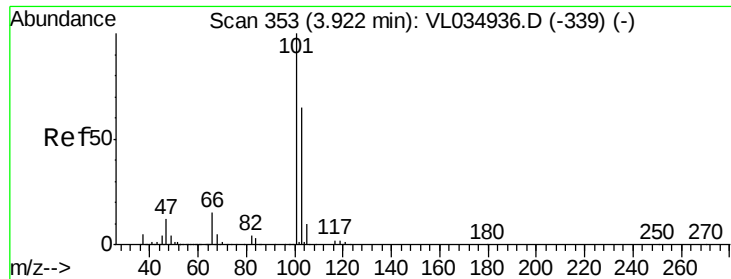
Tgt Ion: 43 Resp: 106461

Ion Ratio Lower Upper

43 100

57 0.0 41.1 61.7#





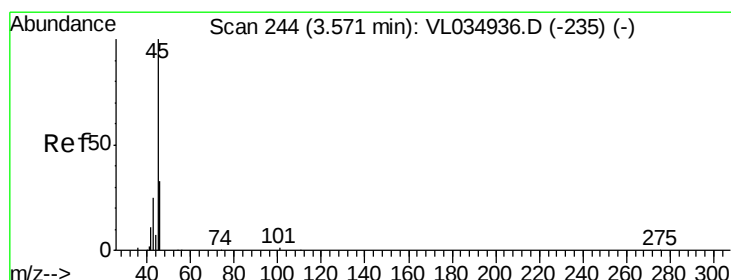
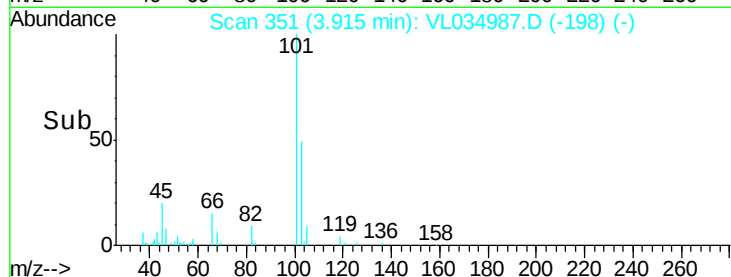
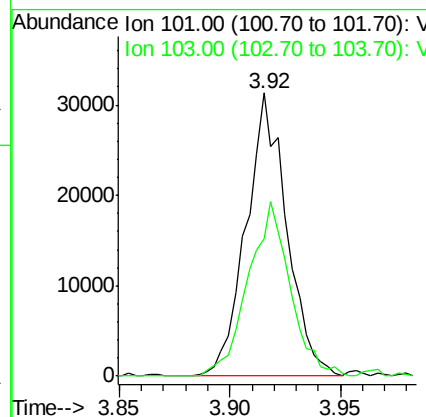
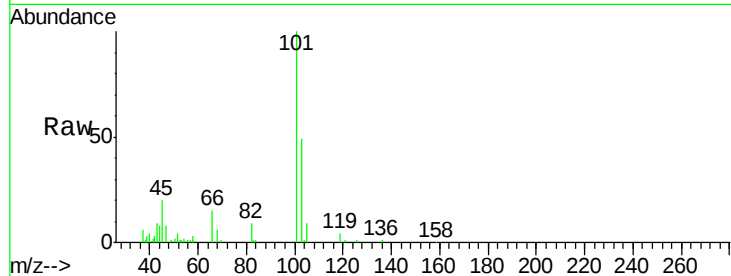
#11
 Trichlorofluoromethane
 Concen: 0.268 ppbv
 RT: 3.92 min Scan# 351
 Delta R.T. -0.01 min
 Lab File: VL034987.D
 Acq: 12 May 2020 15:03

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4

Tot Ion	Ratio	Lower	Upper
101	100		
103	49.9	51.9	77.9#

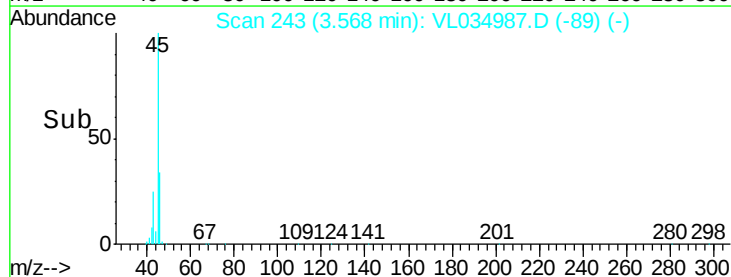
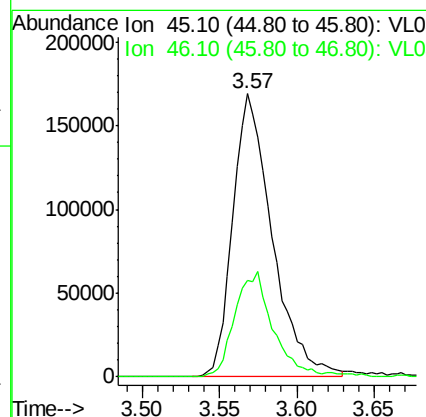
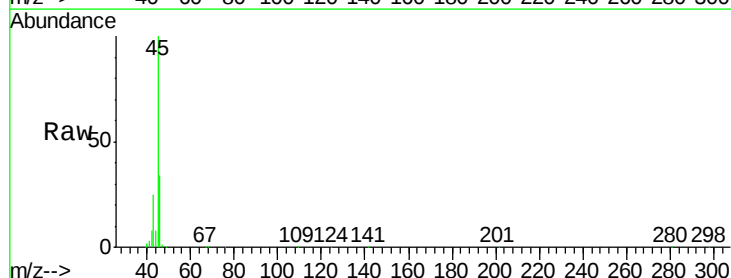
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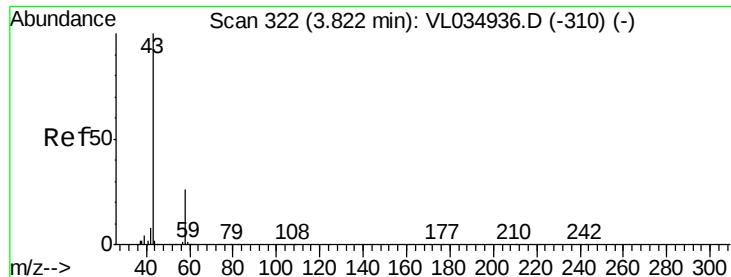
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#13
 Ethanol
 Concen: 17.840 ppbv
 RT: 3.57 min Scan# 243
 Delta R.T. -0.00 min
 Lab File: VL034987.D
 Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
45	100		
46	37.5	14.3	57.3





#15

Acetone

Concen: 7.777 ppbv m

RT: 3.81 min Scan# 319

Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

ClientSampled :

IA-4

Tot Ion: 43 Resp: 1050792

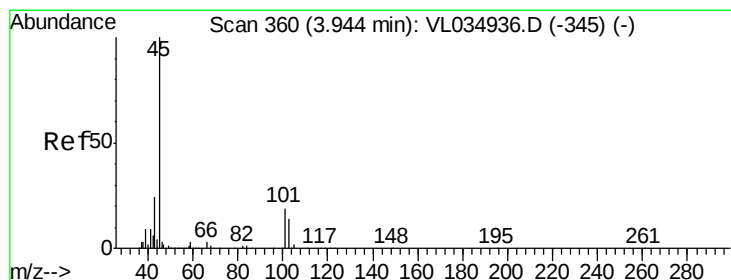
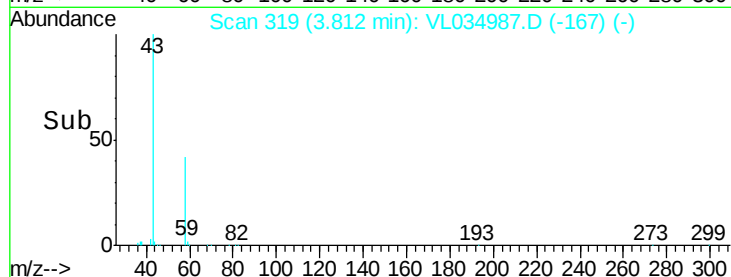
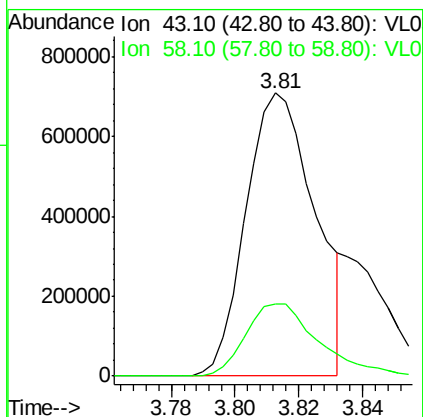
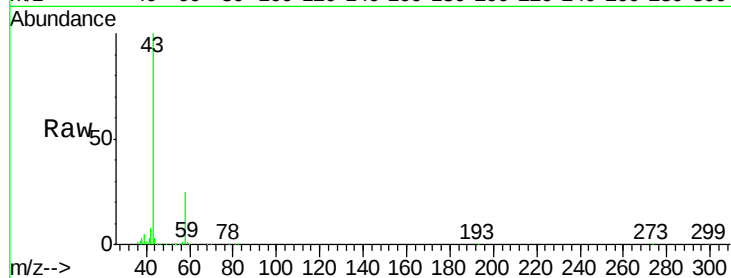
Ion Ratio Lower Upper

43 100

58 27.6 21.7 32.5

Manual Integrations
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#19

Isopropyl Alcohol

Concen: 4.427 ppbv

RT: 3.94 min Scan# 359

Delta R.T. -0.00 min

Lab File: VL034987.D

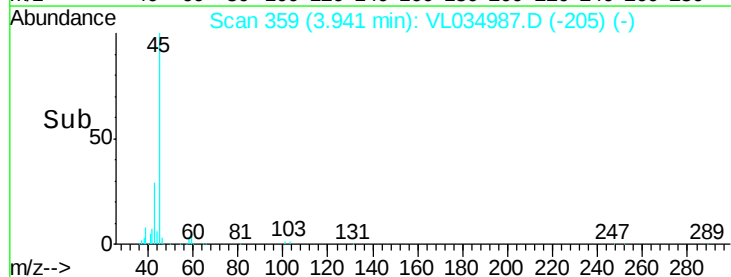
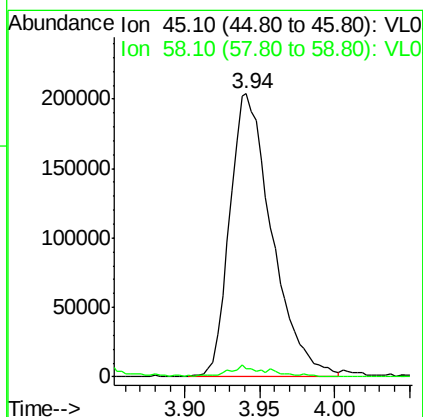
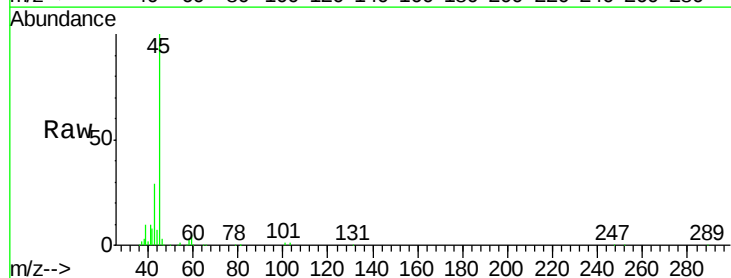
Acq: 12 May 2020 15:03

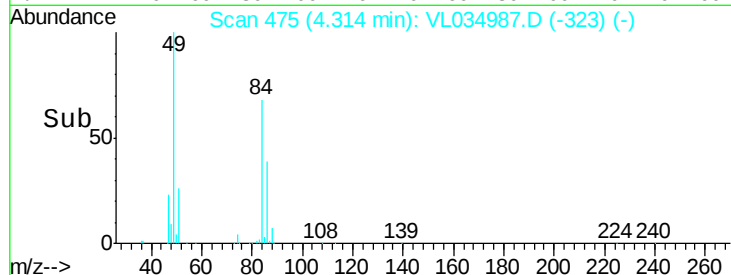
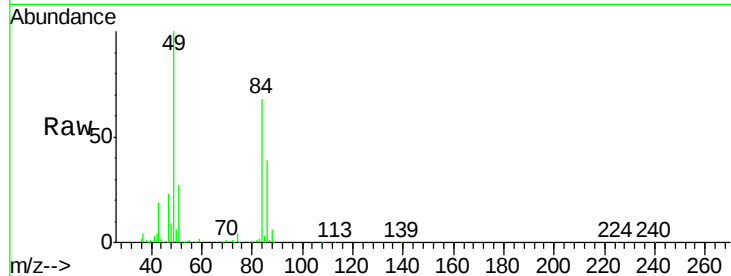
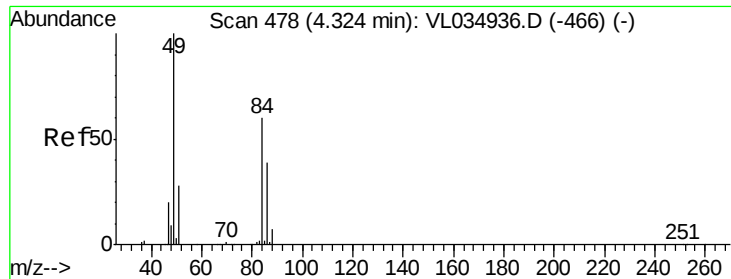
Tgt Ion: 45 Resp: 398886

Ion Ratio Lower Upper

45 100

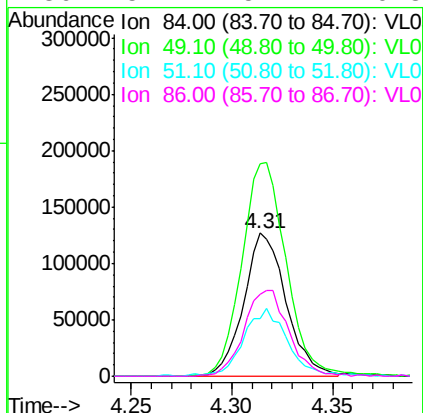
58 3.4 1.7 2.5#





#20
Methvlene Chloride
Concen: 4.177 ppbv
RT: 4.31 min Scan# 475
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

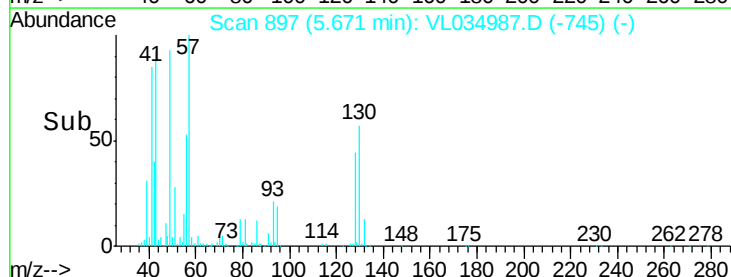
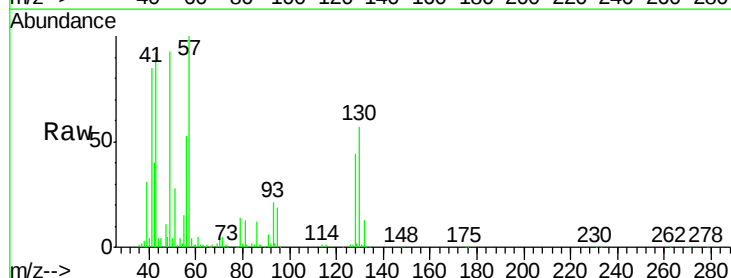
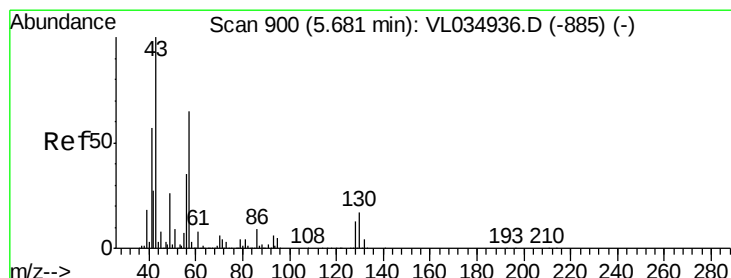
Tot Ion	Ratio	Lower	Upper
84	100		
49	147.5	132.5	198.7
51	39.4	38.4	57.6
86	57.1	51.2	76.8



Instrument :
MSVOA_L
ClientSampled :
IA-4

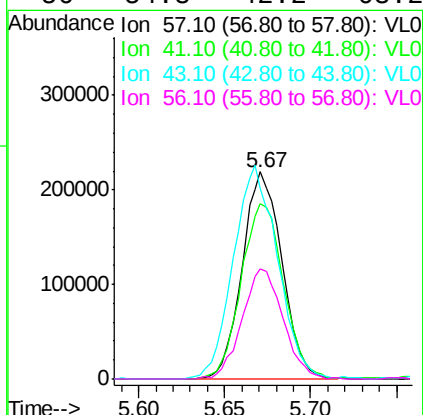
Manual Integrations
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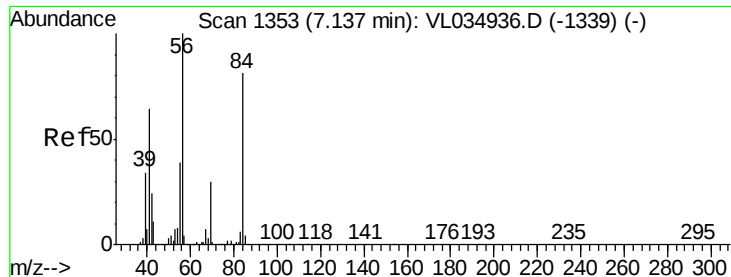
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#26
Hexane
Concen: 3.561 ppbv
RT: 5.67 min Scan# 897
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
57	100		
41	90.9	72.7	109.1
43	115.8	182.1	273.1#
56	54.8	42.2	63.2





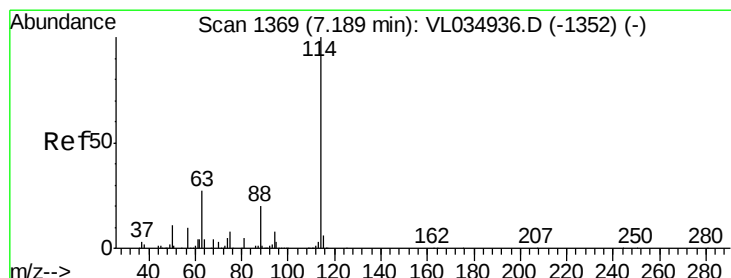
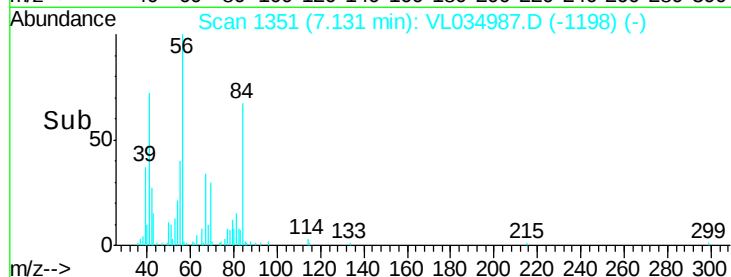
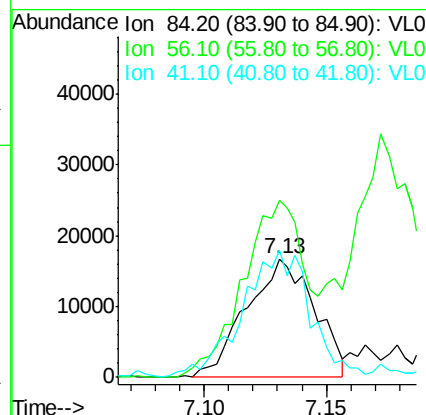
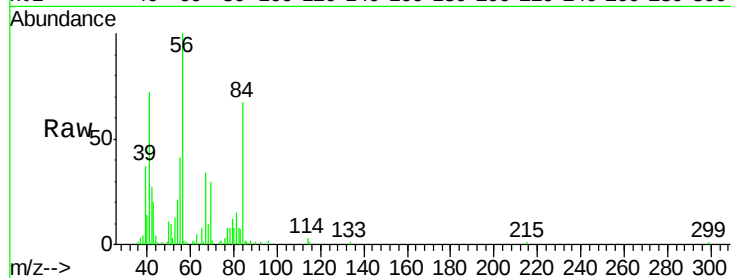
#30
Cyclohexane
Concen: 0.426 ppbv
RT: 7.13 min Scan# 1351
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion	Ratio	Lower	Upper
84	100		
56	137.0	111.4	167.2
41	105.8	66.7	100.1#

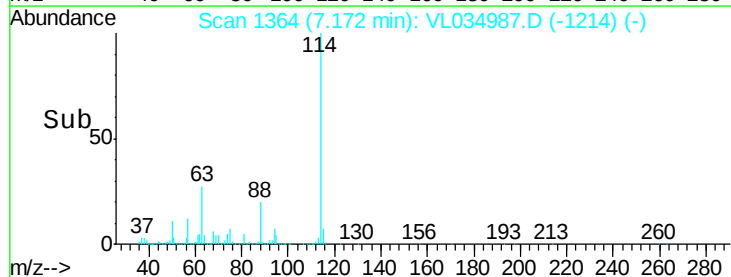
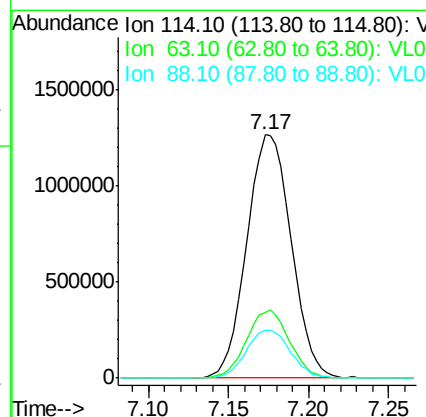
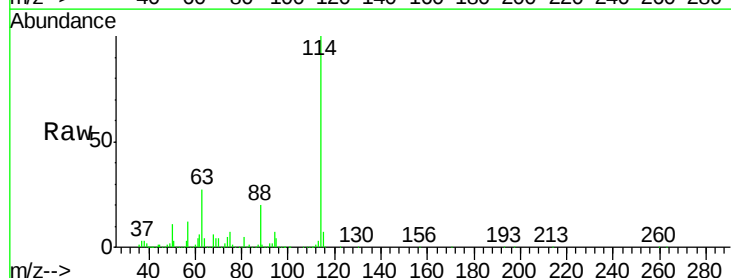
Manual Integrations
APPROVED

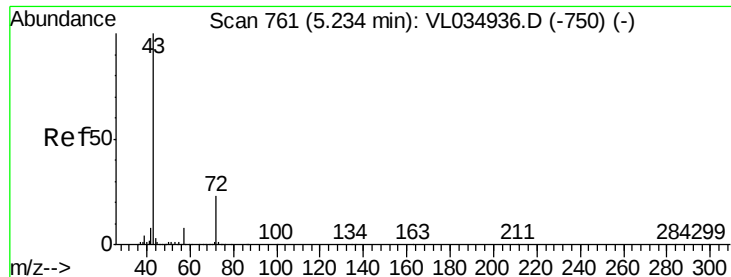
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#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.17 min Scan# 1364
Delta R.T. -0.02 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
114	100		
63	27.2	22.2	33.4
88	19.9	15.5	23.3





#34

2-Butanone

Concen: 0.363 ppbv

RT: 5.23 min Scan# 760

Delta R.T. -0.00 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

ClientSampleId :

IA-4

Tot Ion: 43 Resp: 53865

Ion Ratio Lower Upper

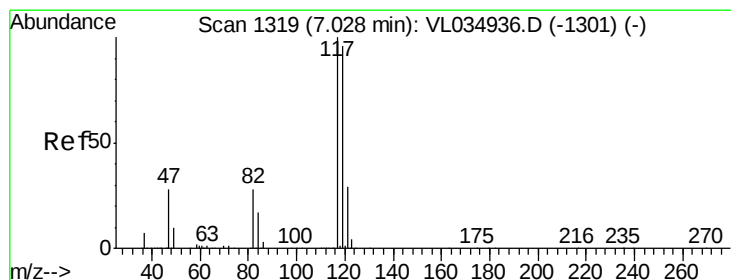
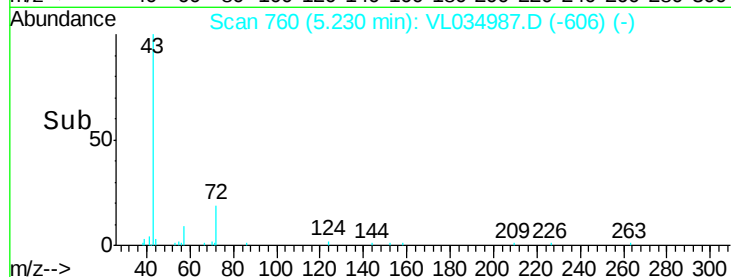
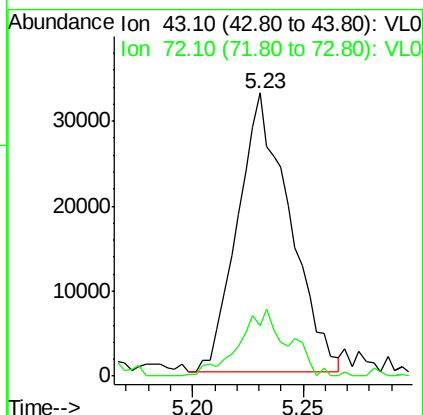
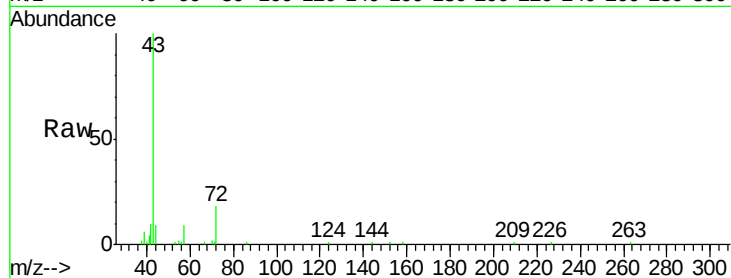
43 100

72 22.5 18.0 27.0

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#35

Carbon Tetrachloride

Concen: 0.059 ppbv m

RT: 7.02 min Scan# 1317

Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

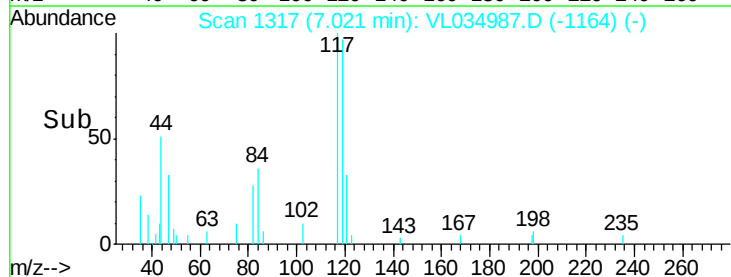
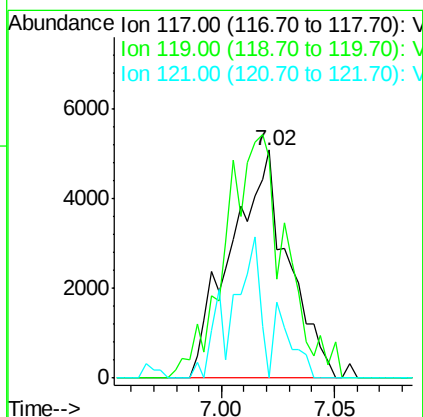
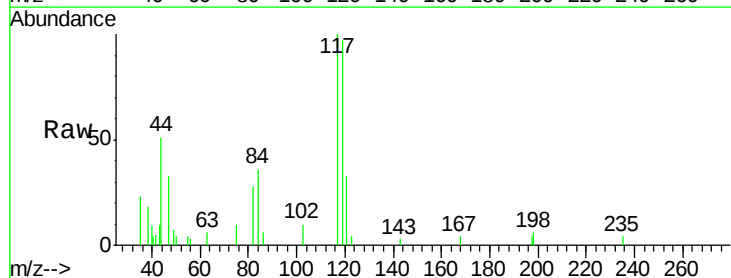
Tgt Ion: 117 Resp: 8935

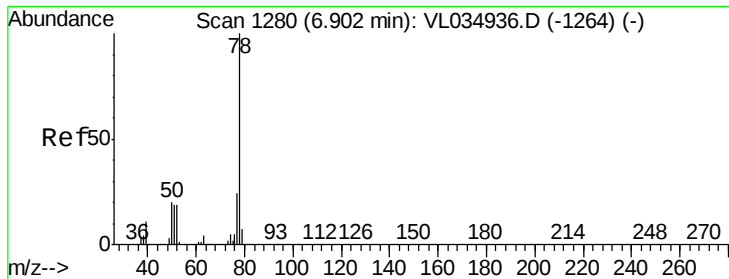
Ion Ratio Lower Upper

117 100

119 96.9 77.0 115.6

121 0.0 23.0 34.6#





#36

Benzene

Concen: 0.577 ppbv m

RT: 6.89 min Scan# 1276

Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

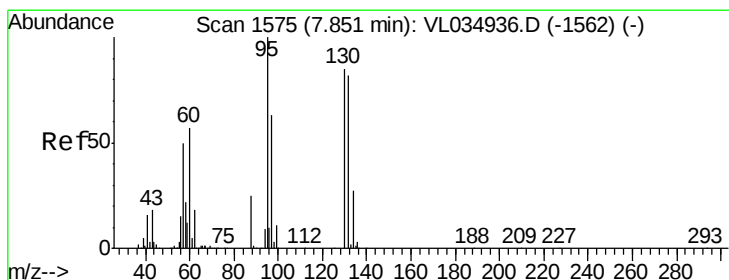
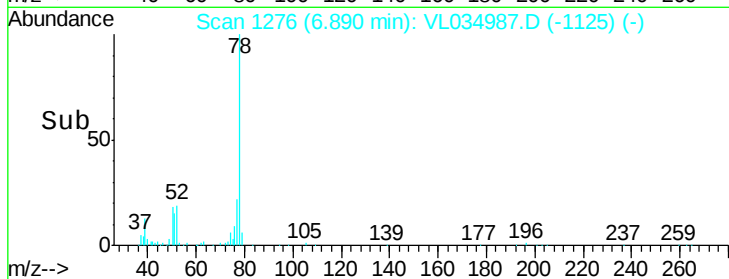
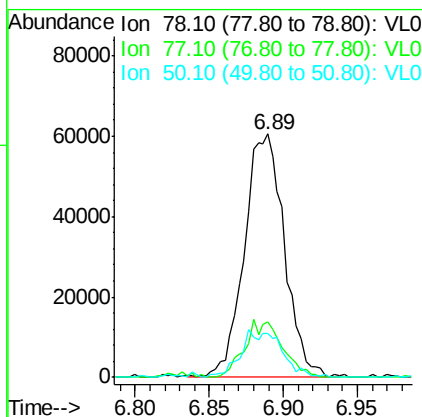
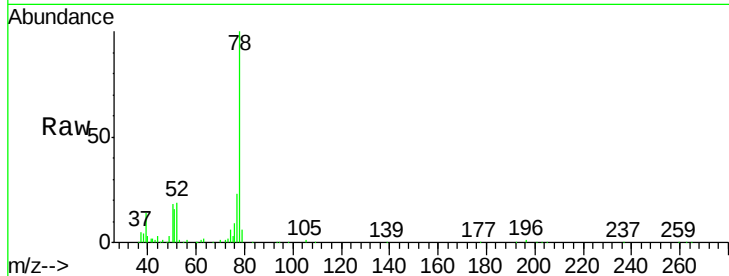
ClientSampleId :

IA-4

Tot Ion:	78	Resp:	113650
Ion	Ratio	Lower	Upper
78	100		
77	22.6	19.0	28.6
50	17.9	15.8	23.8

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#38

Trichloroethene

Concen: 2.241 ppbv

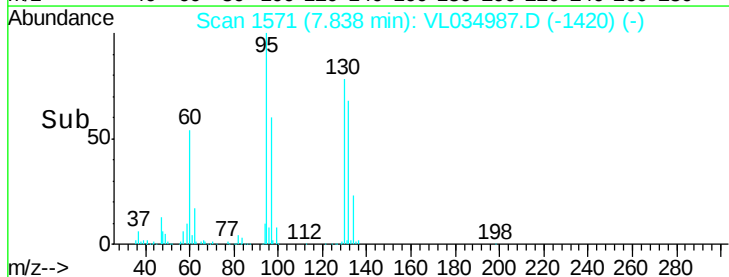
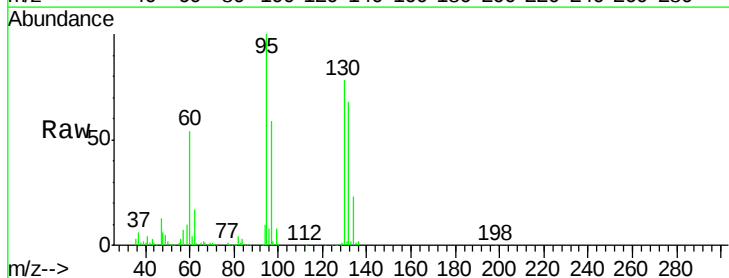
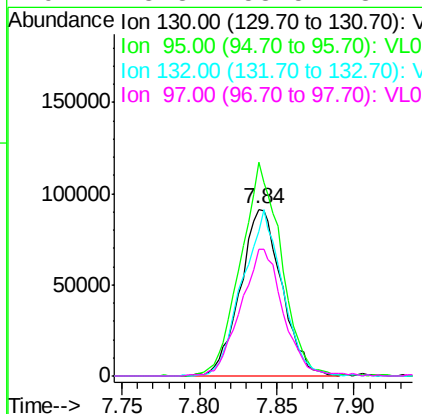
RT: 7.84 min Scan# 1571

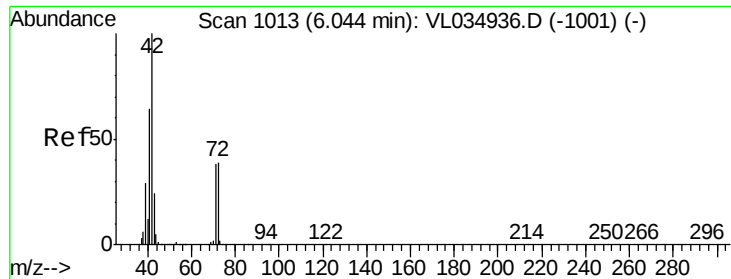
Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Tgt Ion:	130	Resp:	171049
Ion	Ratio	Lower	Upper
130	100		
95	128.2	93.4	140.0
132	86.3	76.4	114.6
97	75.8	58.5	87.7





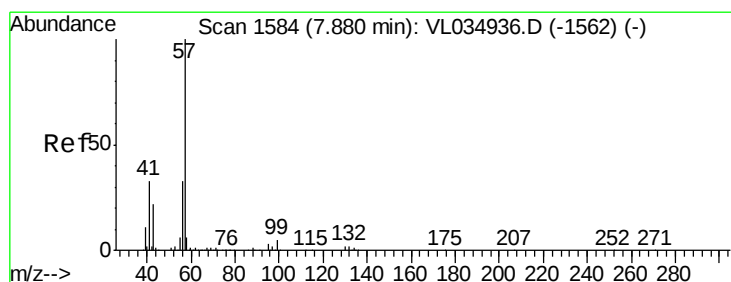
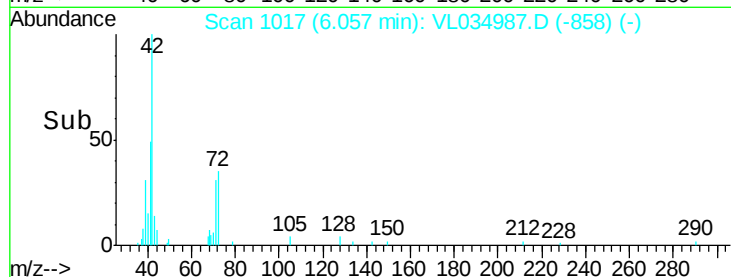
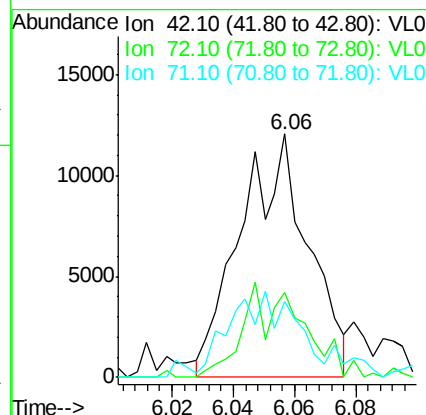
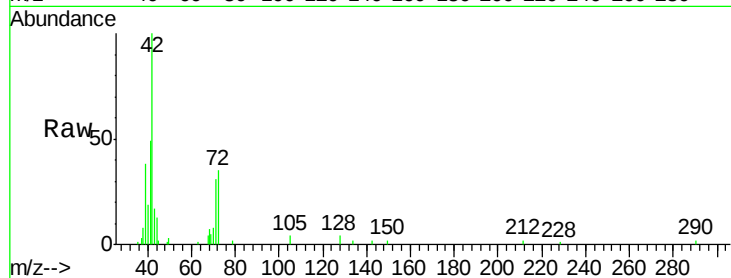
#41
Tetrahydrofuran
Concen: 0.236 ppbv m
RT: 6.06 min Scan# 1017
Delta R.T. 0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	0.0	29.8	44.8#

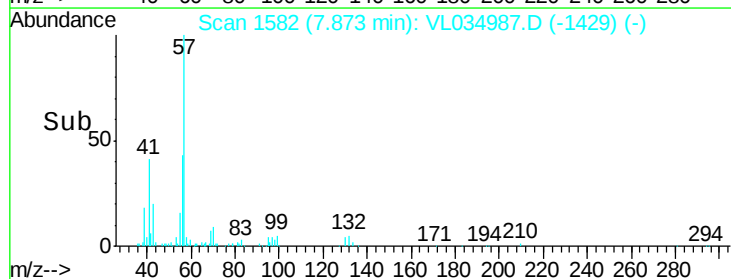
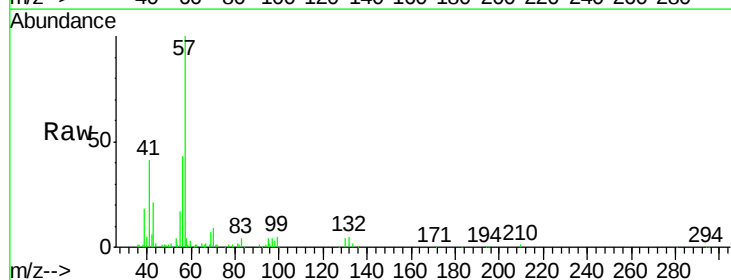
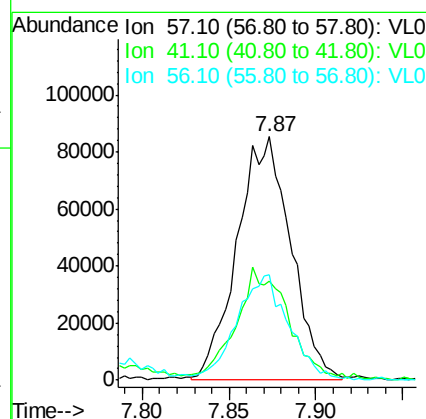
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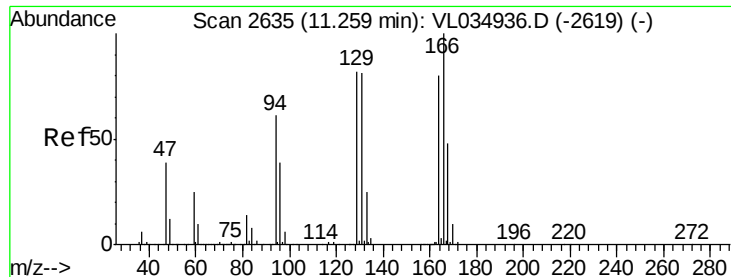
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#44
2,2,4-Trimethylpentane
Concen: 0.525 ppbv m
RT: 7.87 min Scan# 1582
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
57	100		
41	45.8	26.4	39.6#
56	0.0	25.5	38.3#





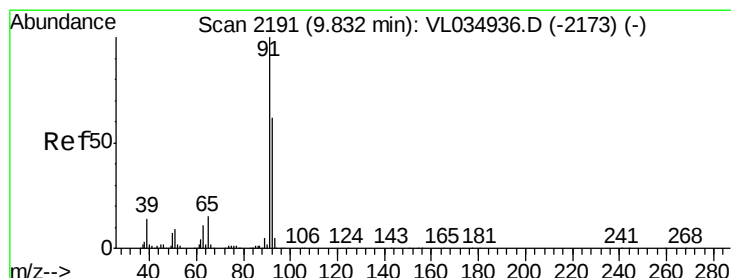
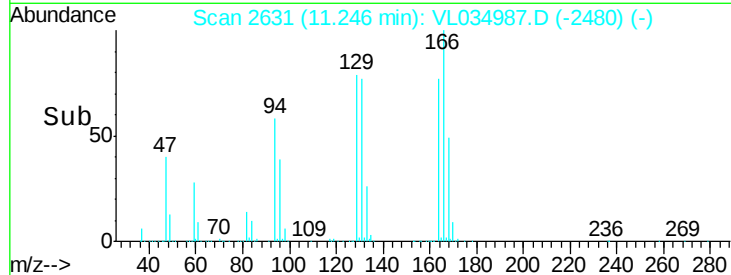
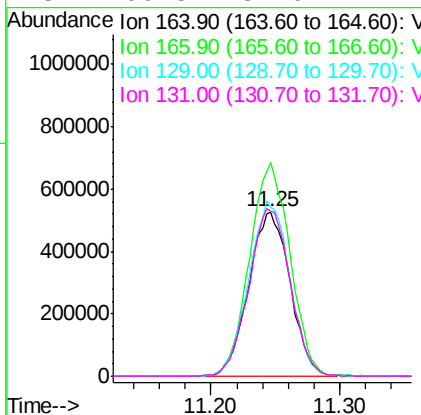
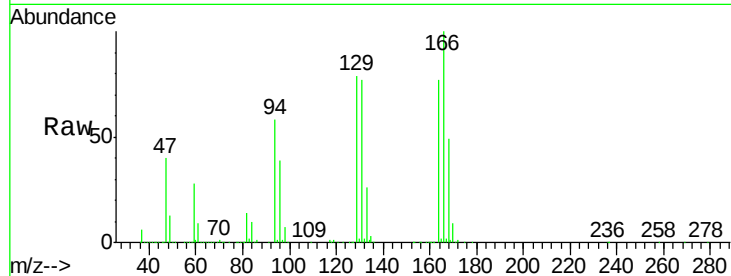
#52
Tetrachloroethene
Concen: 16.811 ppbv
RT: 11.25 min Scan# 2631
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion:164 Resp: 1177523
Ion Ratio Lower Upper
164 100
166 130.3 100.7 151.1
129 103.0 83.0 124.4
131 100.5 81.0 121.4

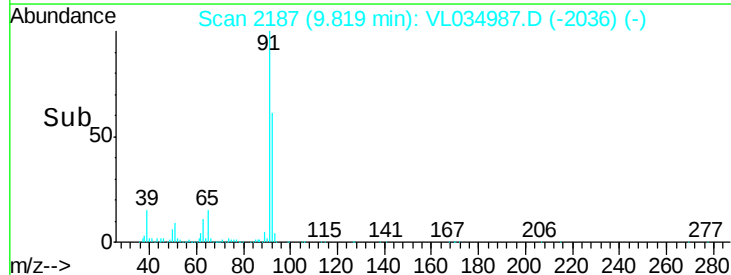
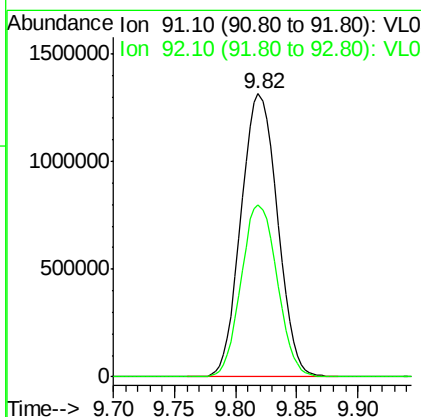
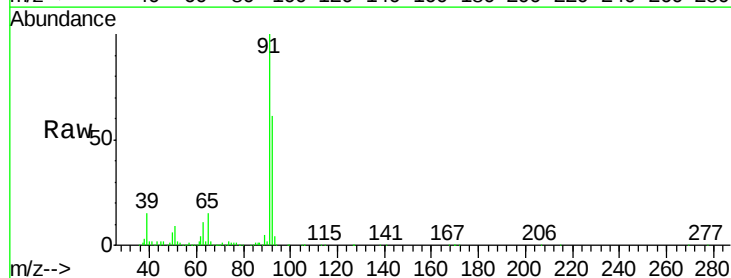
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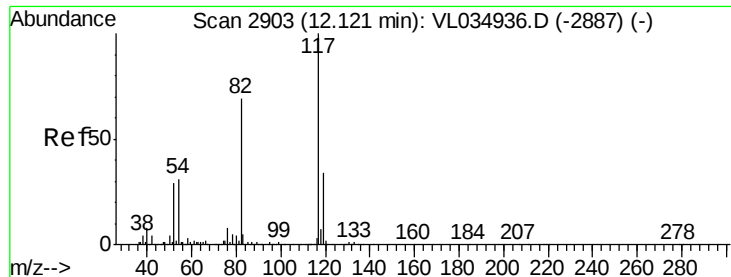
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#53
Toluene
Concen: 13.028 ppbv
RT: 9.82 min Scan# 2187
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion: 91 Resp: 2720503
Ion Ratio Lower Upper
91 100
92 60.2 48.6 73.0





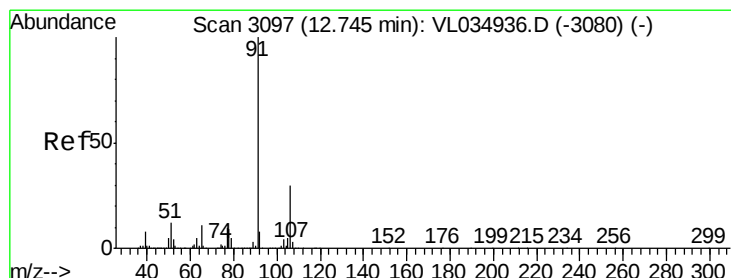
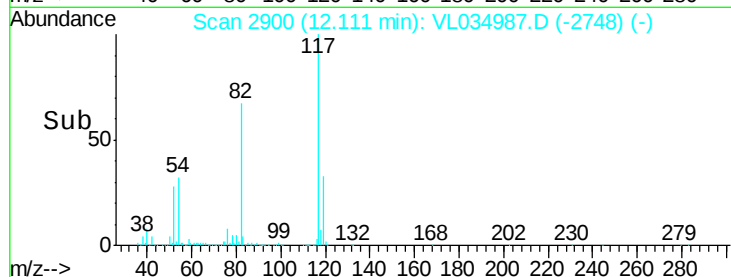
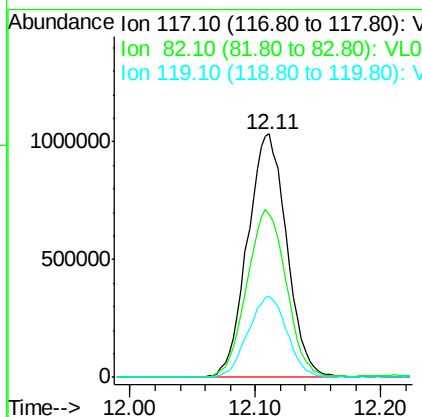
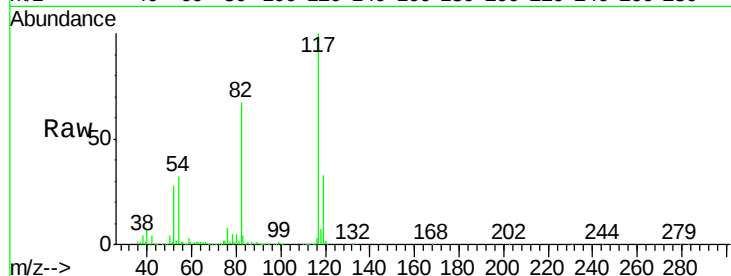
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.11 min Scan# 2900
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Instrument :
MSVOA_L
ClientSampleId :
IA-4

Tot Ion	Ratio	Lower	Upper
117	100		
82	69.4	53.1	79.7
119	33.2	26.7	40.1

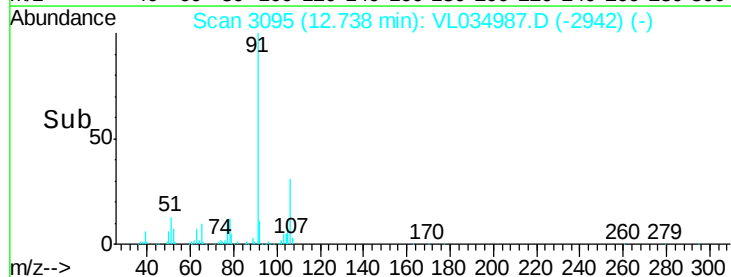
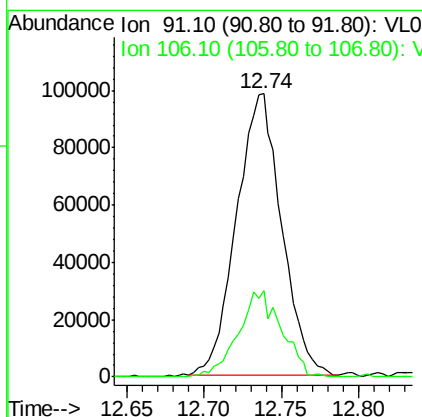
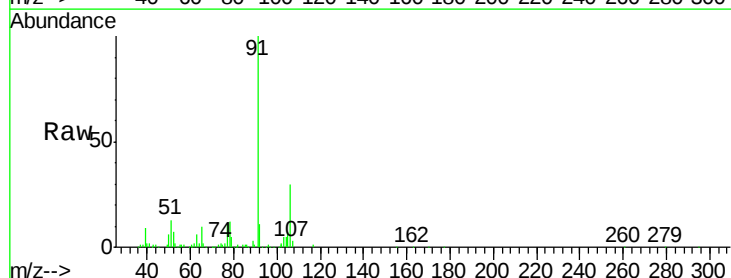
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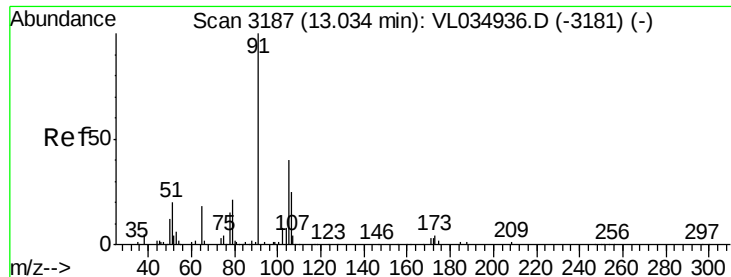
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#58
Ethyl Benzene
Concen: 0.722 ppbv
RT: 12.74 min Scan# 3095
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Lower	Upper
91	100		
106	30.5	24.2	36.4





#59

m/p-Xylene

Concen: 2.776 ppbv m

RT: 12.99 min Scan# 3173

Delta R.T. -0.05 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

ClientSampled :

IA-4

Tot Ion: 91 Resp: 678318

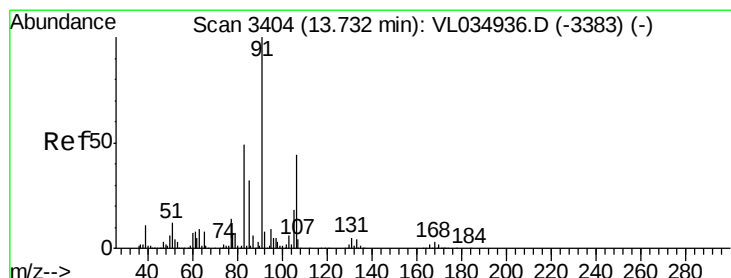
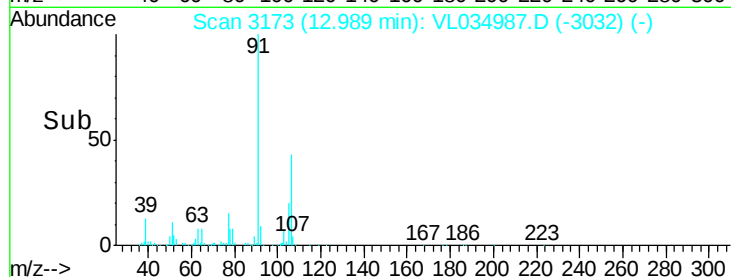
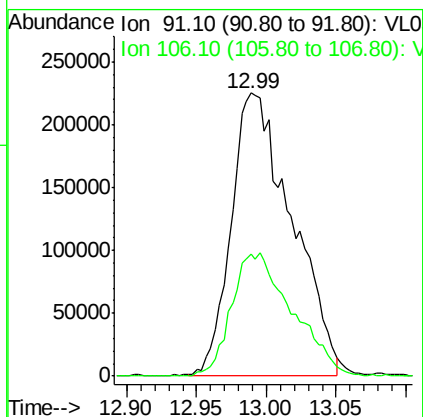
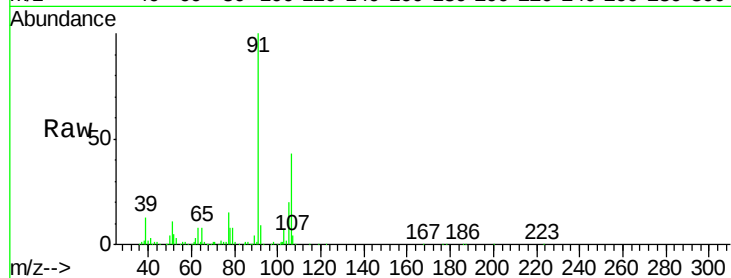
Ion Ratio Lower Upper

91 100

106 0.0 66.0 99.0#

Manual Integrations
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#60

o-Xylene

Concen: 0.945 ppbv

RT: 13.72 min Scan# 3400

Delta R.T. -0.01 min

Lab File: VL034987.D

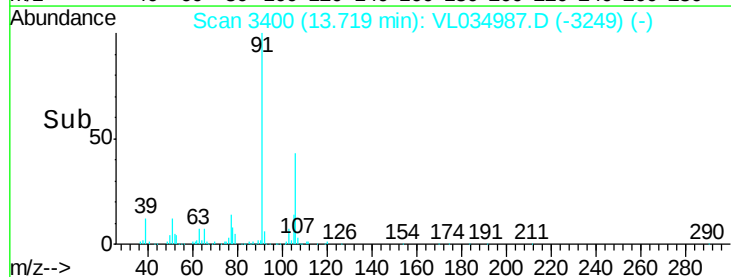
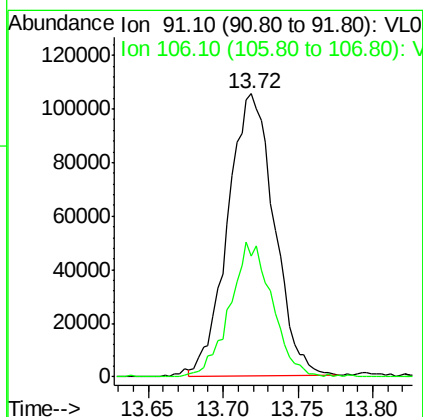
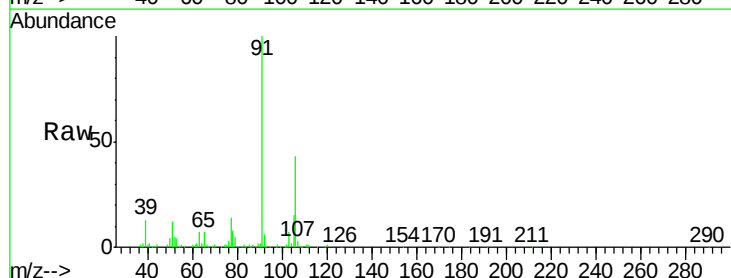
Acq: 12 May 2020 15:03

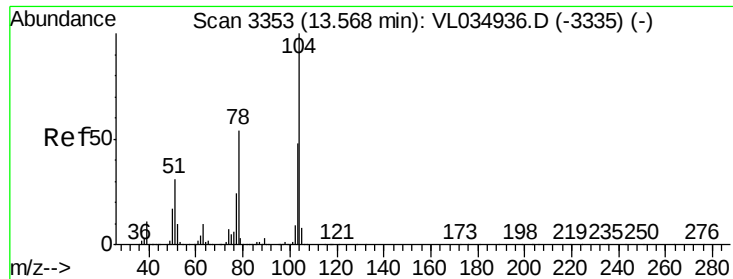
Tgt Ion: 91 Resp: 227762

Ion Ratio Lower Upper

91 100

106 43.6 21.9 65.5





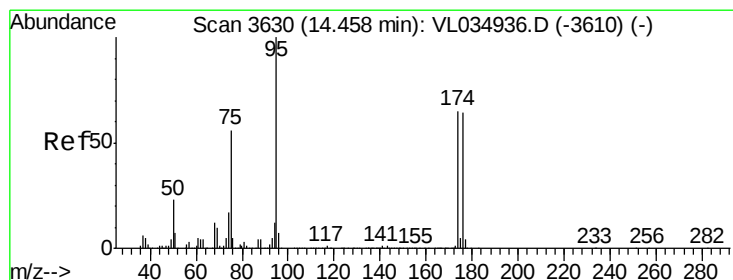
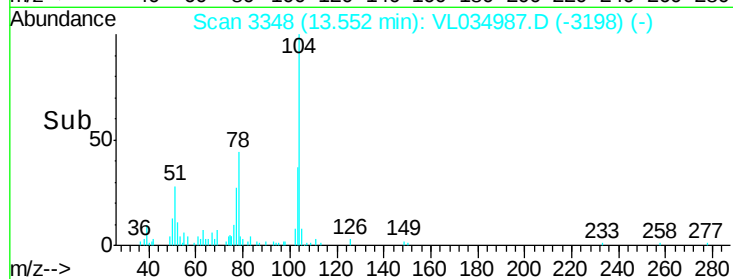
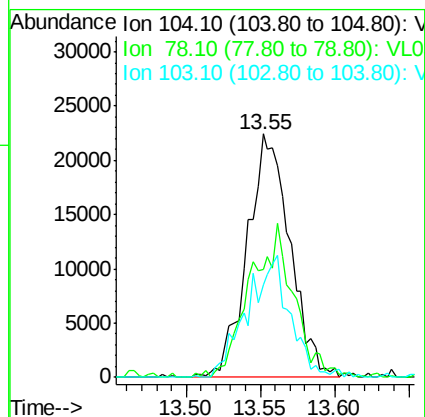
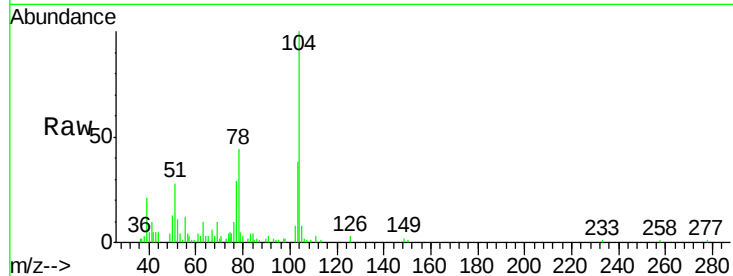
#61
Stvrene
Concen: 0.294 ppbv m
RT: 13.55 min Scan# 3348
Delta R.T. -0.02 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Instrument :
MSVOA_L
ClientSampled :
IA-4

Tot Ion	Ratio	Resp	Lower	Upper
104	100	44811		
78	65.2		43.7	65.5
103	49.9		38.8	58.2

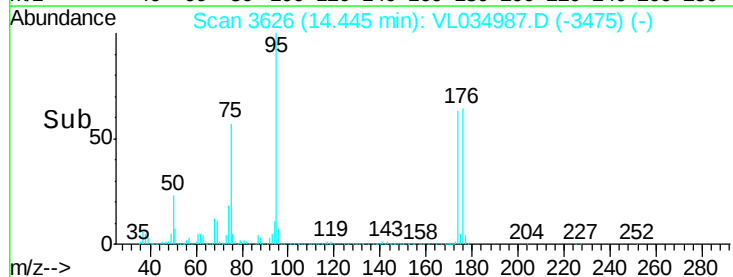
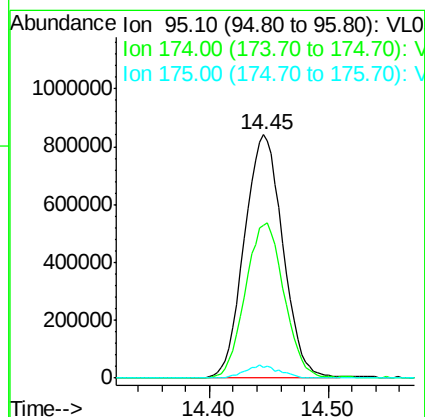
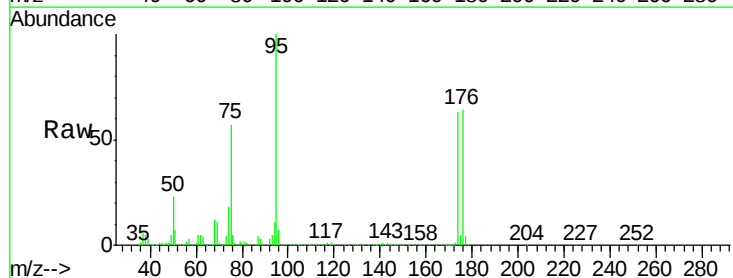
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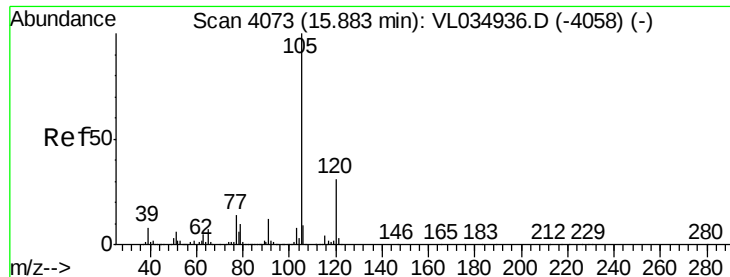
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#68
1-Bromo-4-Fluorobenzene
Concen: 10.387 ppbv
RT: 14.45 min Scan# 3626
Delta R.T. -0.01 min
Lab File: VL034987.D
Acq: 12 May 2020 15:03

Tgt Ion	Ratio	Resp	Lower	Upper
95	100	1888354		
174	64.2		51.5	77.3
175	4.8		3.8	5.8





#72

4-Ethyltoluene

Concen: 0.190 ppbv m

RT: 15.87 min Scan# 4070

Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Instrument :

MSVOA_L

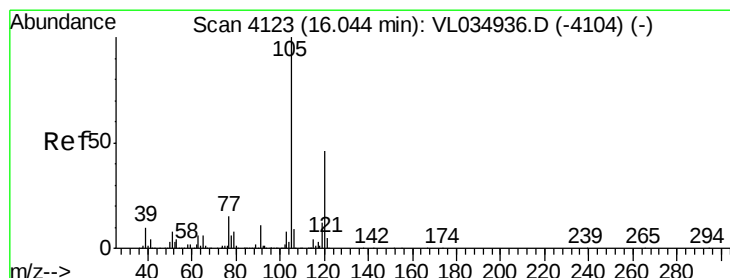
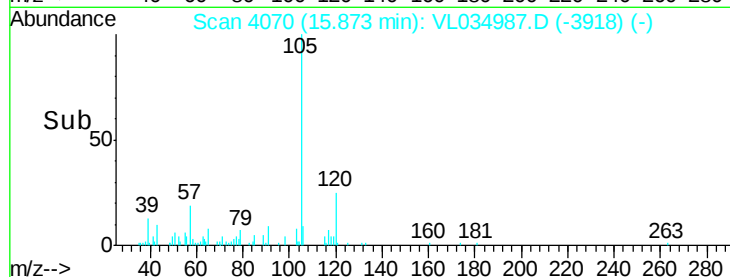
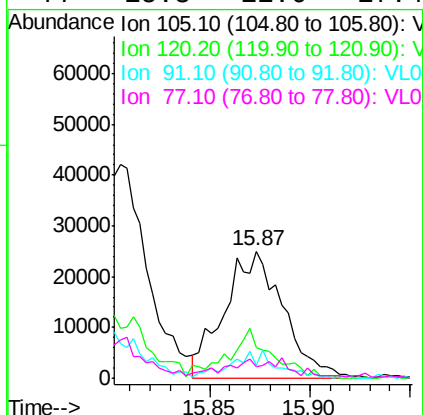
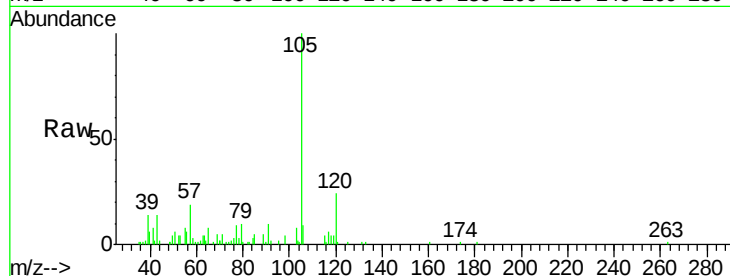
ClientSampled :

IA-4

Tot Ion:	105	Resp:	51066
Ion Ratio	Lower	Upper	
105	100		
120	28.1	23.8	35.8
91	16.7	10.6	15.8#
77	15.3	11.6	17.4

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#73

1,3,5-Trimethylbenzene

Concen: 0.159 ppbv m

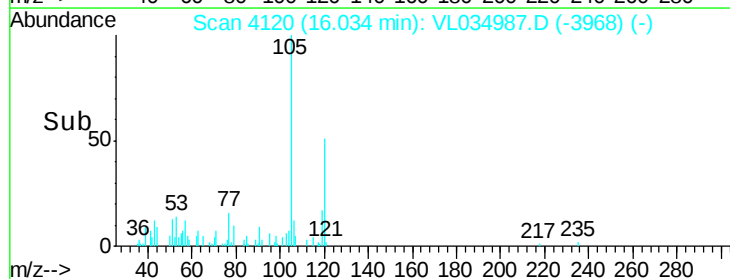
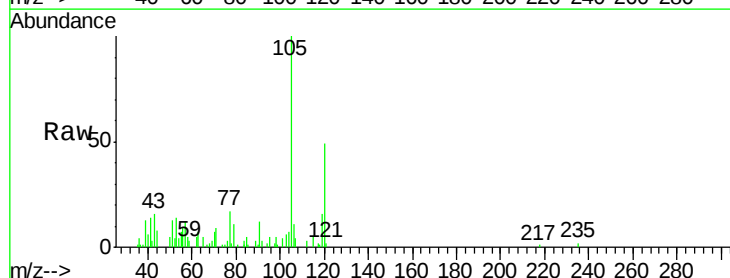
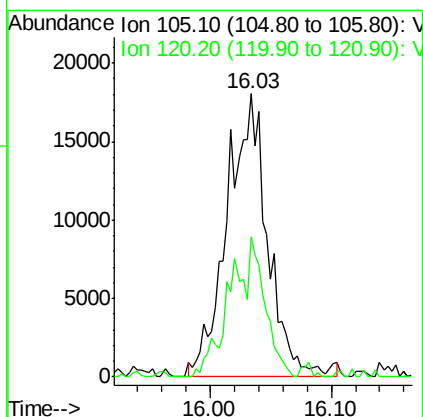
RT: 16.03 min Scan# 4120

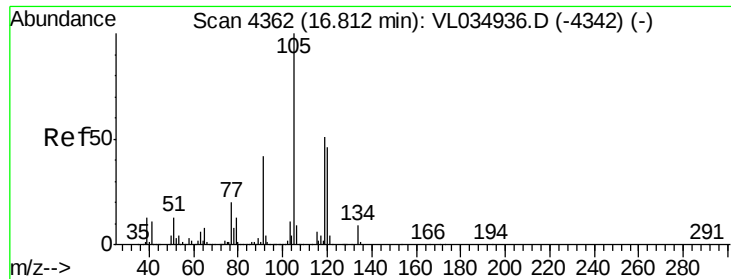
Delta R.T. -0.01 min

Lab File: VL034987.D

Acq: 12 May 2020 15:03

Tgt Ion:	105	Resp:	41642
Ion Ratio	Lower	Upper	
105	100		
120	49.4	36.4	54.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.592 ppbv
 RT: 16.80 min Scan# 4358
 Delta R.T. -0.01 min
 Lab File: VL034987.D
 Acq: 12 May 2020 15:03

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-4

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	38.5	36.8	55.2
91	13.2	35.4	53.0#
77	11.9	16.2	24.2#

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