

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080620\
 Data File : VL035347.D
 Acq On : 6 Aug 2020 13:03
 Operator : SY/AP
 Sample : L3557-02
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Manual Integrations
 APPROVED

MMDadoda
 8/7/2020 12:53:37 PM

Quant Time: Aug 07 10:06:16 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080520AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug 0
 QLast Update : Wed Aug 05 13:04:46 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.64	49	1284802	10.00	ppbv	-0.01
33) 1,4-Difluorobenzene	7.17	114	3193842	10.00	ppbv	-0.02
55) Chlorobenzene-d5	12.10	117	3033131	10.00	ppbv	-0.02

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.43	95	2567397	10.15	ppbv	-0.02
Spiked Amount	10.000	Range	65 - 135	Recovery	=	101.50%

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.00	85	44705	0.262	ppbv	91
3) Chlorodifluoromethane	2.93	51	61265m	0.418	ppbv	
4) Chloromethane	3.09	50	56466	0.680	ppbv	95
9) Propene	2.97	41	39521	0.756	ppbv	88
10) Heptane	8.12	43	22855m	0.171	ppbv	
11) Trichlorofluoromethane	3.91	101	55406	0.250	ppbv #	80
13) Ethanol	3.56	45	1461322	81.073	ppbv	97
15) Acetone	3.80	43	2274731m	12.468	ppbv	
17) tert-Butyl alcohol	4.26	59	35877m	0.214	ppbv	
20) Methylene Chloride	4.31	84	473752	6.367	ppbv	98
26) Hexane	5.66	57	345709	2.875	ppbv #	54
27) Carbon Disulfide	4.51	76	27075	0.161	ppbv #	55
34) 2-Butanone	5.22	43	164066	1.043	ppbv	99
35) Carbon Tetrachloride	7.01	117	15275m	0.070	ppbv	
36) Benzene	6.88	78	48520m	0.225	ppbv	
37) 1,2-Dichloroethane	6.29	62	15200	0.101	ppbv #	90
38) Trichloroethene	7.83	130	4728m	0.048	ppbv	
44) 2,2,4-Trimethylpentane	7.86	57	37413	0.098	ppbv #	58
50) 4-Methyl-2-Pentanone	8.74	43	29534m	0.123	ppbv	
52) Tetrachloroethene	11.23	164	5211m	0.061	ppbv	
53) Toluene	9.81	91	1246544	5.313	ppbv	100
58) Ethyl Benzene	12.73	91	94030	0.298	ppbv #	84
59) m/p-Xylene	12.99	91	179926m	0.612	ppbv	
60) o-Xylene	13.71	91	71392m	0.245	ppbv	
61) Styrene	13.55	104	32122m	0.180	ppbv	
74) 1,2,4-Trimethylbenzene	16.78	105	53723m	0.147	ppbv	
79) Naphthalene	22.24	128	132736m	0.473	ppbv	

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

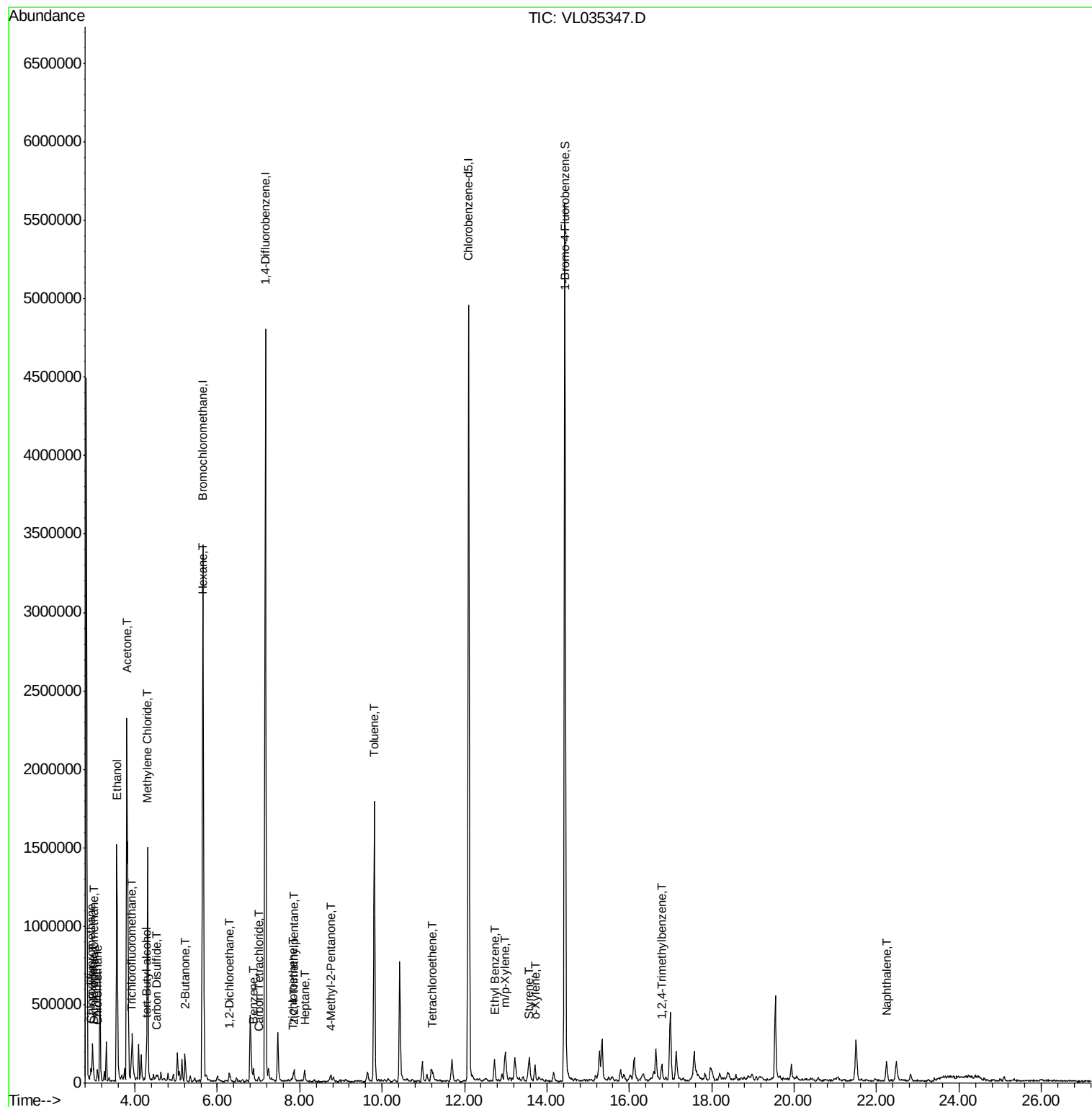
Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL080620\
Data File : VL035347.D
Acq On : 6 Aug 2020 13:03
Operator : SY/AP
Sample : L3557-02
Misc : 400ml/MSVOA L
ALS Vial : 1 Sample Multiplier: 1

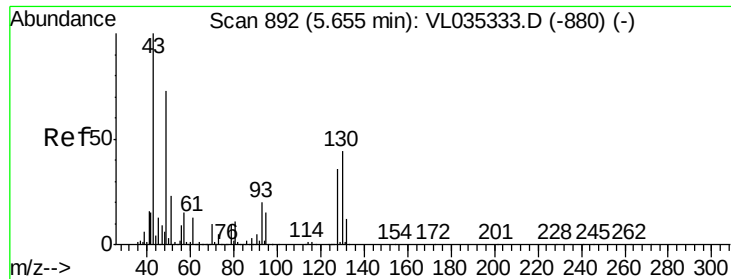
Instrument :
MSVOA_L
ClientSampleId :
IA-2

Manual Integrations
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8/7/2020 12:53:37 PM

Quant Time: Aug 07 10:06:16 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL080520AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Wed Aug
QLast Update : Wed Aug 05 13:04:46 2020
Response via : Initial Calibration





#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.64 min Scan# 888

Delta R.T. -0.01 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Instrument :

MSVOA_L

ClientSampled :

IA-2

Tot Ion: 49 Resp: 1284802

Ion Ratio Lower Upper

49 100

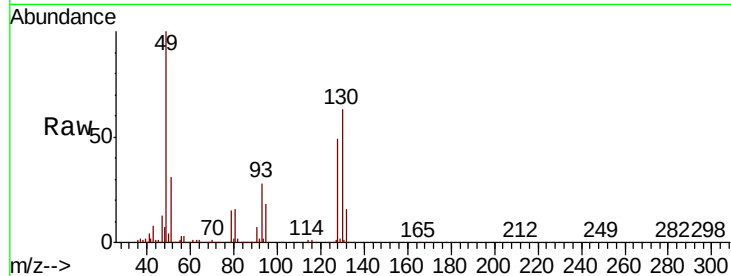
128 51.4 25.4 76.0

130 65.9 32.1 96.3

Manual Integrations
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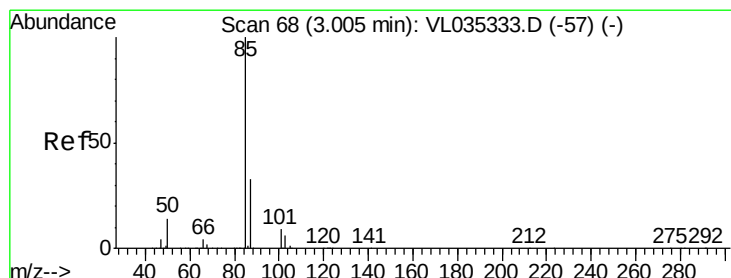
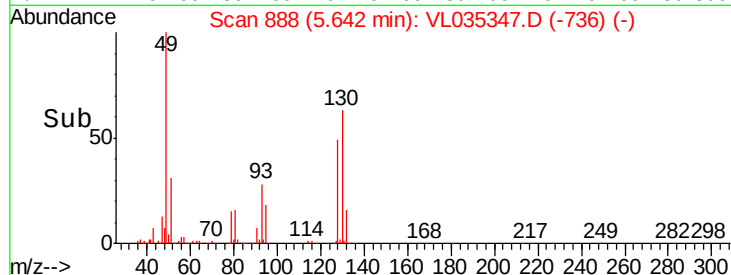
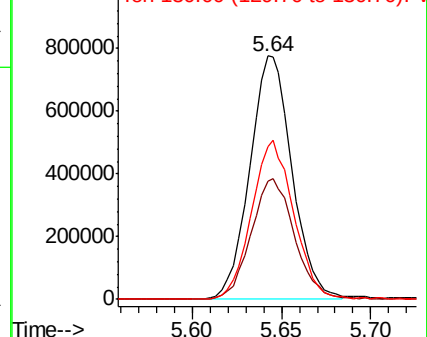


Abundance

Ion 49.10 (48.80 to 49.80): VL0

Ion 128.00 (127.70 to 128.70): V

Ion 130.00 (129.70 to 130.70): V



#2

Dichlorodifluoromethane

Concen: 0.262 ppbv

RT: 3.00 min Scan# 65

Delta R.T. -0.01 min

Lab File: VL035347.D

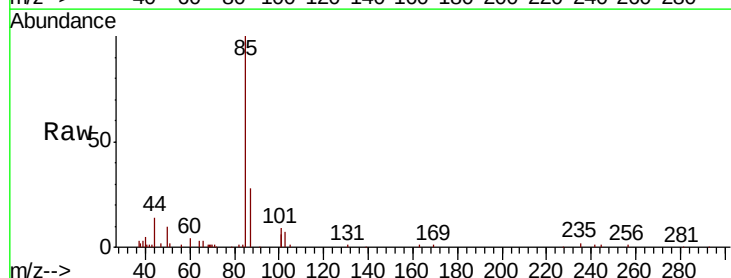
Acq: 6 Aug 2020 13:03

Tgt Ion: 85 Resp: 44705

Ion Ratio Lower Upper

85 100

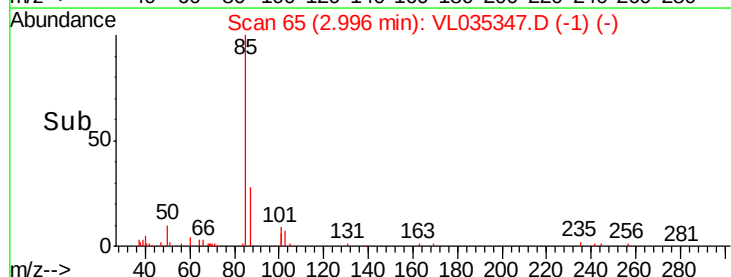
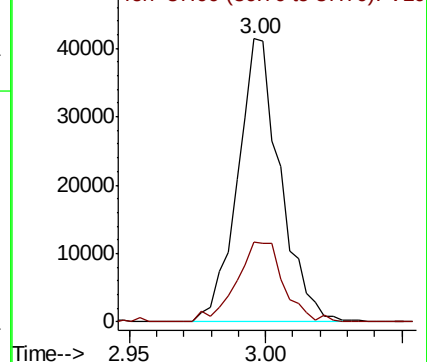
87 28.2 26.7 40.1

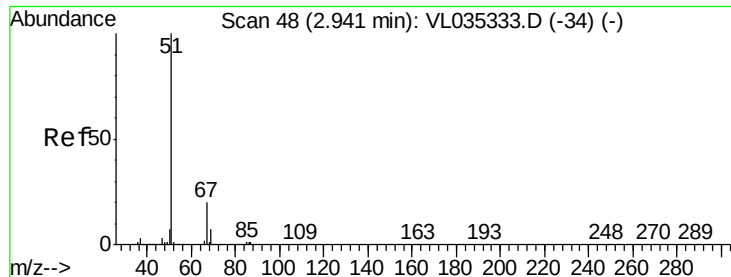


Abundance

Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.418 ppbv m

RT: 2.93 min Scan# 46

Delta R.T. -0.01 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Instrument :

MSVOA_L

ClientSampled :

IA-2

Tot Ion: 51 Resp: 61265

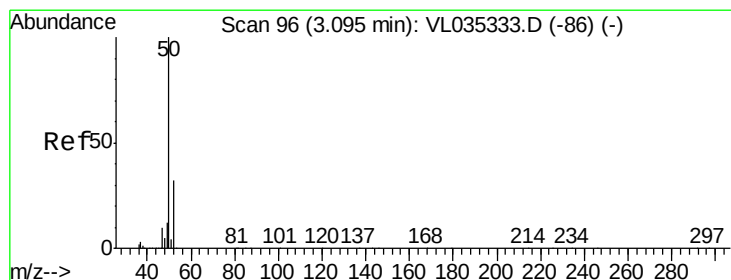
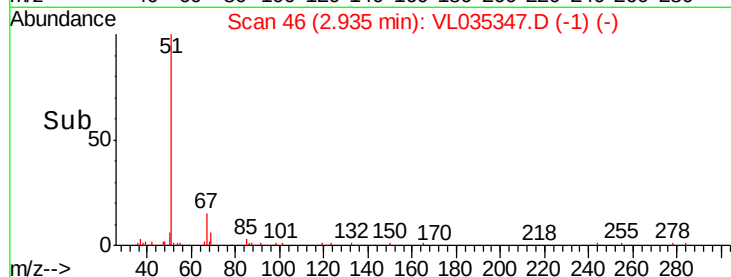
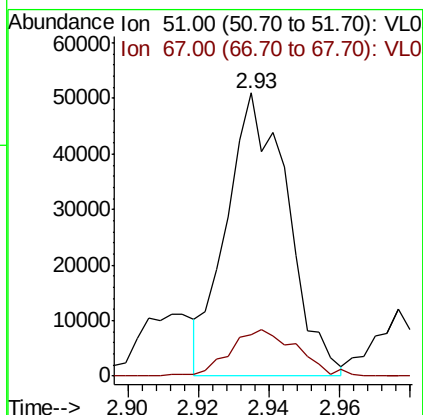
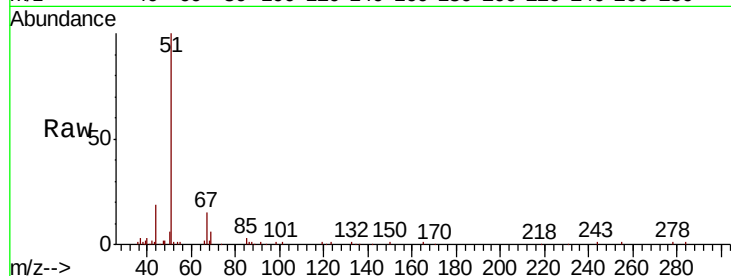
Ion Ratio Lower Upper

51 100

67 18.2 16.6 25.0

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#4

Chloromethane

Concen: 0.680 ppbv

RT: 3.09 min Scan# 94

Delta R.T. -0.01 min

Lab File: VL035347.D

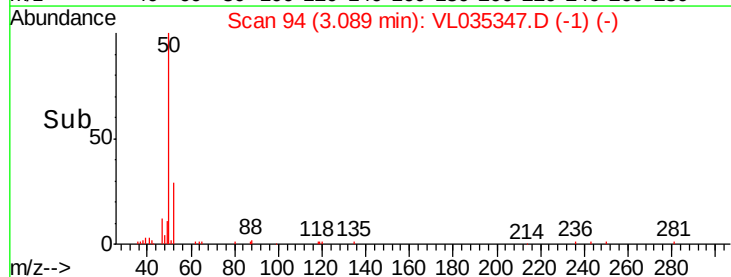
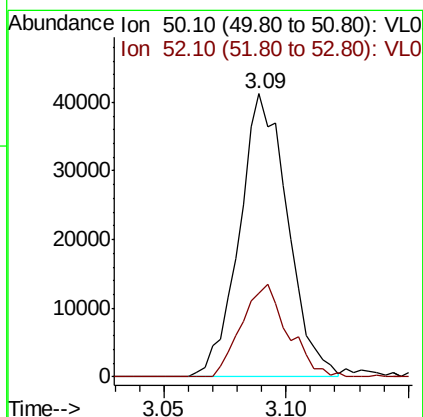
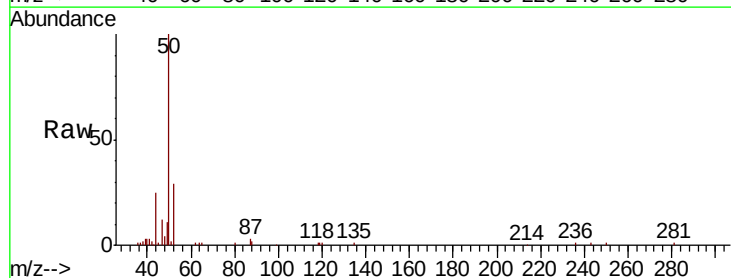
Acq: 6 Aug 2020 13:03

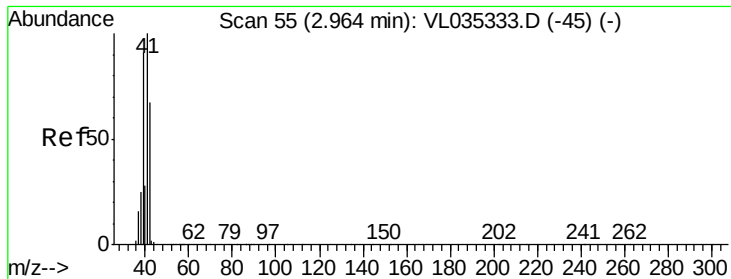
Tgt Ion: 50 Resp: 56466

Ion Ratio Lower Upper

50 100

52 29.4 26.0 39.0





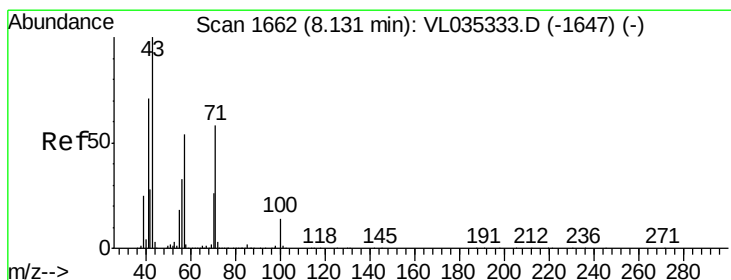
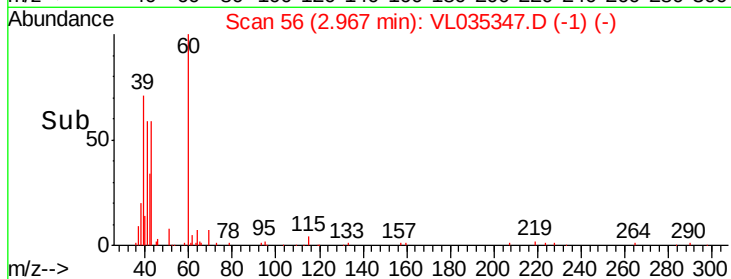
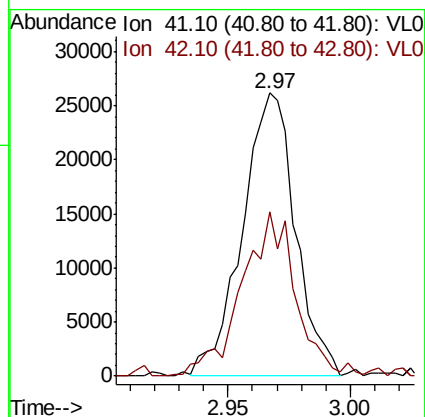
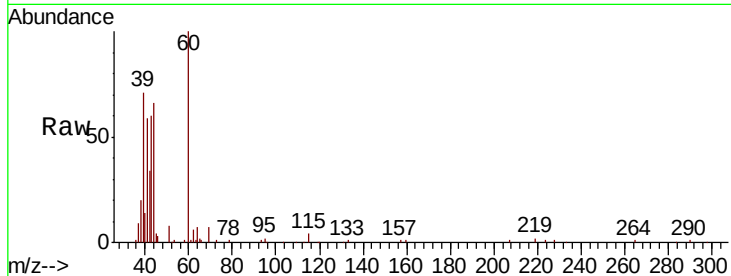
#9
 Propene
 Concen: 0.756 ppbv
 RT: 2.97 min Scan# 56
 Delta R.T. 0.00 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion	Ratio	Lower	Upper
41	100		
42	59.3	55.3	82.9

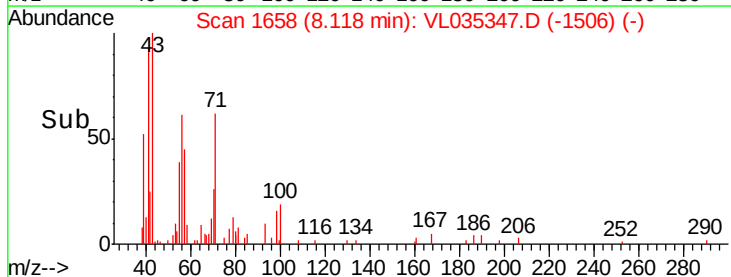
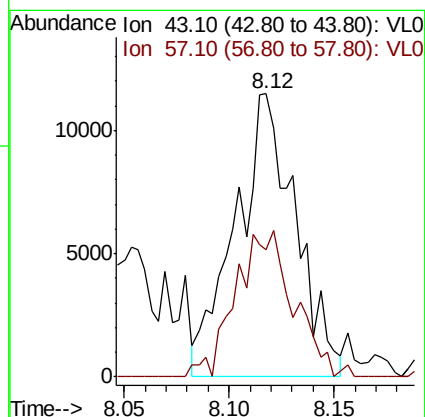
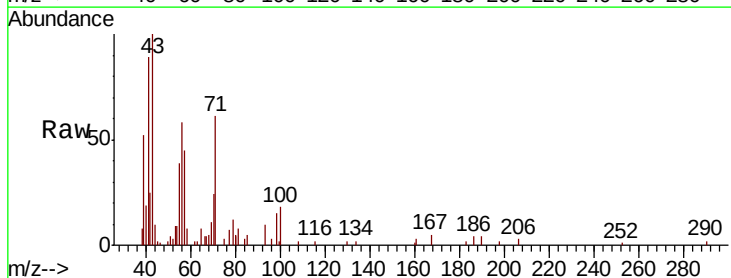
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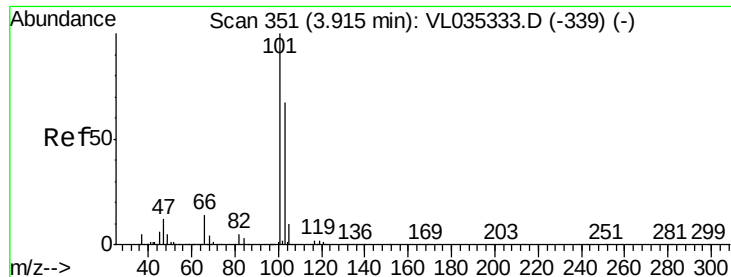
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#10
 Heptane
 Concen: 0.171 ppbv m
 RT: 8.12 min Scan# 1658
 Delta R.T. -0.01 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Tgt Ion	Ratio	Lower	Upper
43	100		
57	50.2	43.0	64.6





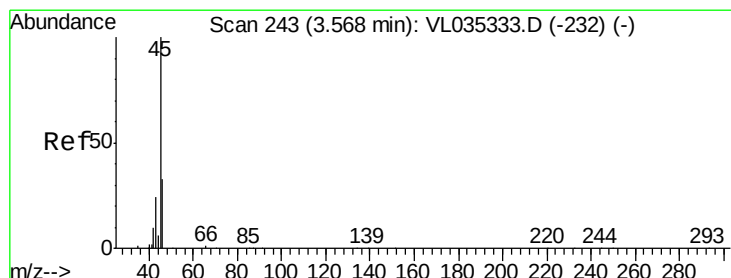
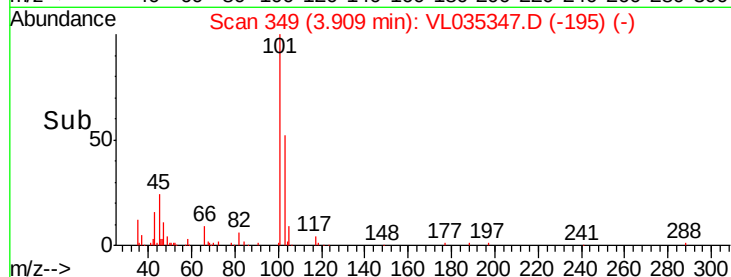
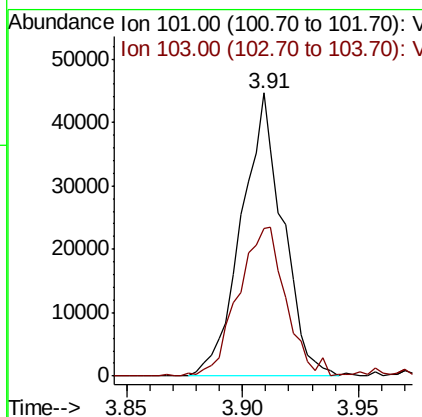
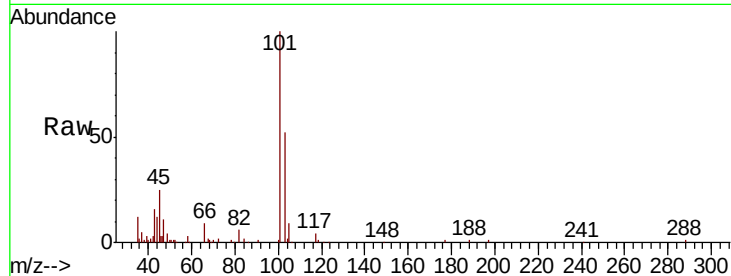
#11
 Trichlorofluoromethane
 Concen: 0.250 ppbv
 RT: 3.91 min Scan# 349
 Delta R.T. -0.01 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion: 101 Resp: 55406
 Ion Ratio Lower Upper
 101 100
 103 51.4 53.8 80.8#

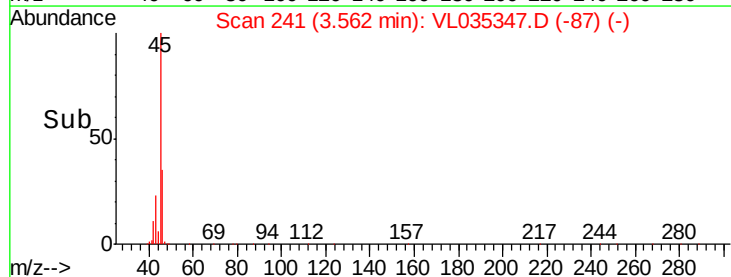
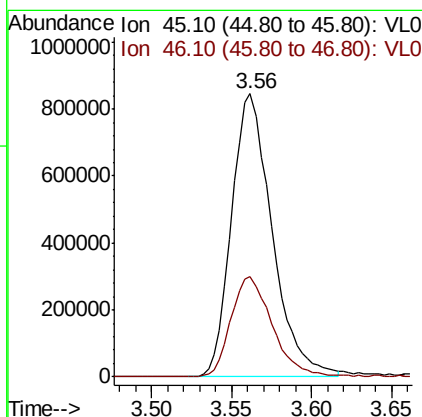
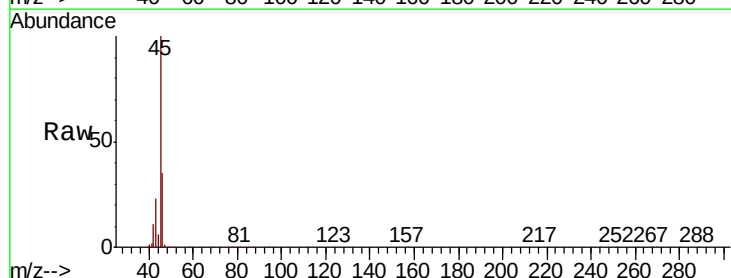
Manual Integrations
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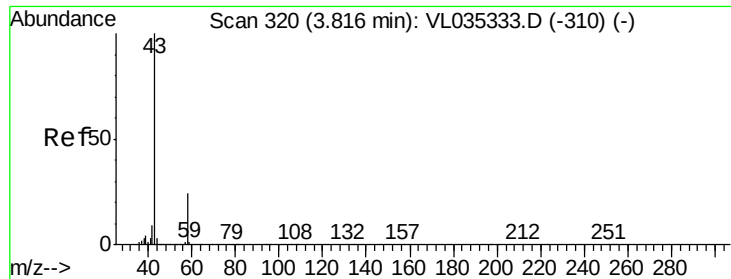
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#13
 Ethanol
 Concen: 81.073 ppbv
 RT: 3.56 min Scan# 241
 Delta R.T. -0.01 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Tgt Ion: 45 Resp: 1461322
 Ion Ratio Lower Upper
 45 100
 46 36.5 15.2 61.0





#15

Acetone

Concen: 12.468 ppbv m

RT: 3.80 min Scan# 316

Delta R.T. -0.01 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Instrument :

MSVOA_L

ClientSampled :

IA-2

Tot Ion: 43 Resp: 2274731

Ion Ratio Lower Upper

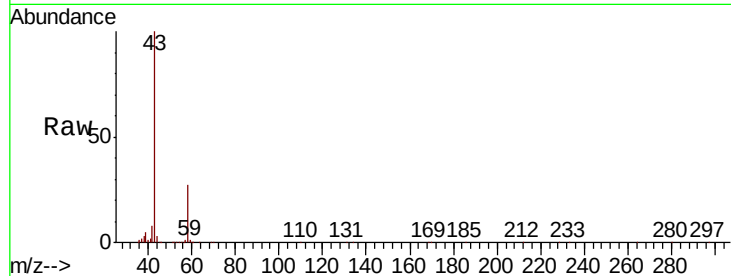
43 100

58 28.6 21.0 31.4

Manual Integrations
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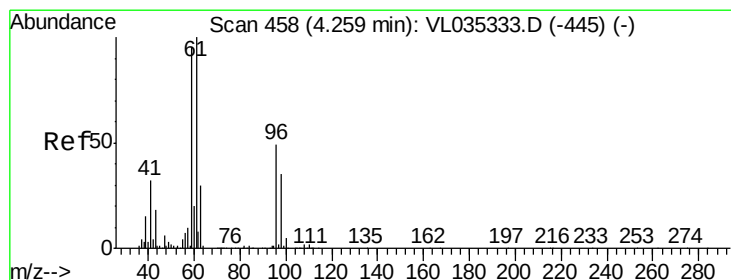
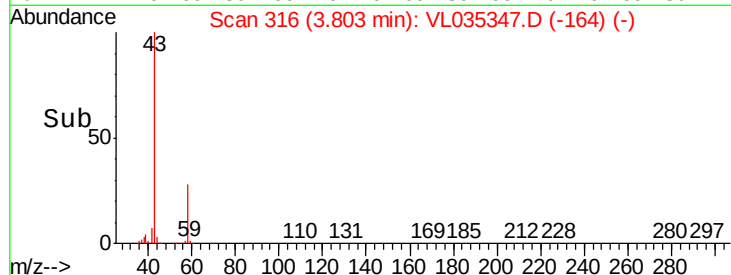
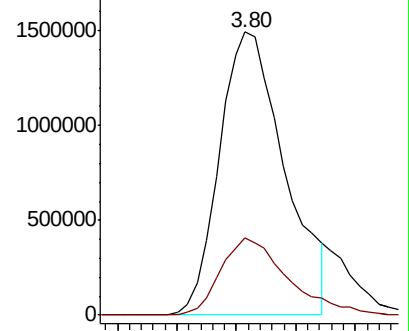
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Abundance Ion 43.10 (42.80 to 43.80): VL0

Ion 58.10 (57.80 to 58.80): VL0



#17

tert-Butyl alcohol

Concen: 0.214 ppbv m

RT: 4.26 min Scan# 459

Delta R.T. 0.00 min

Lab File: VL035347.D

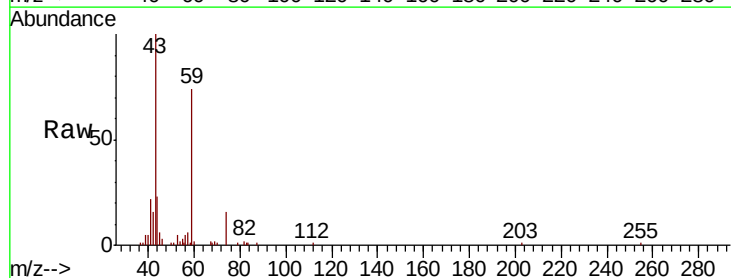
Acq: 6 Aug 2020 13:03

Tgt Ion: 59 Resp: 35877

Ion Ratio Lower Upper

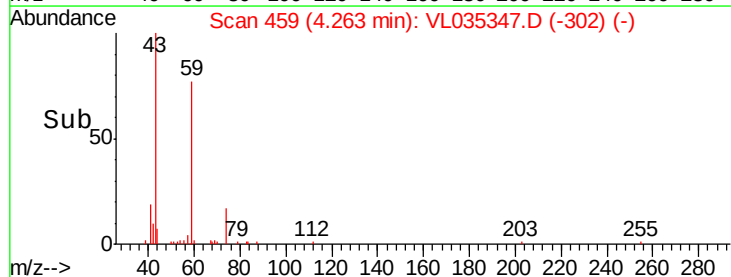
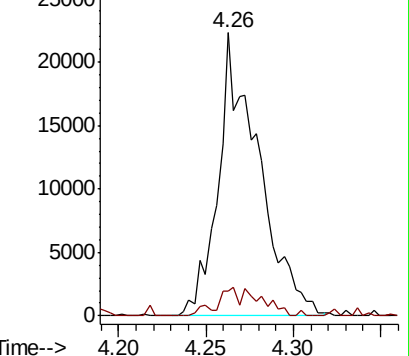
59 100

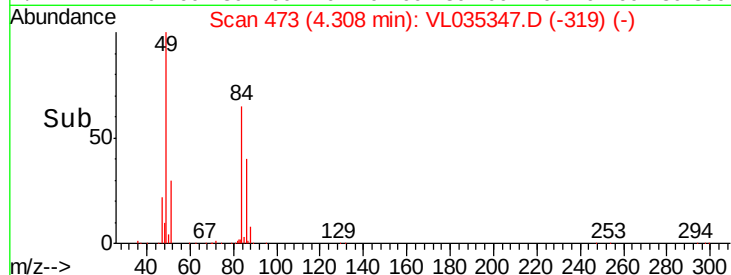
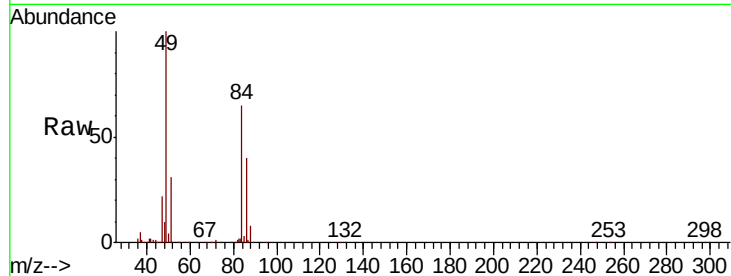
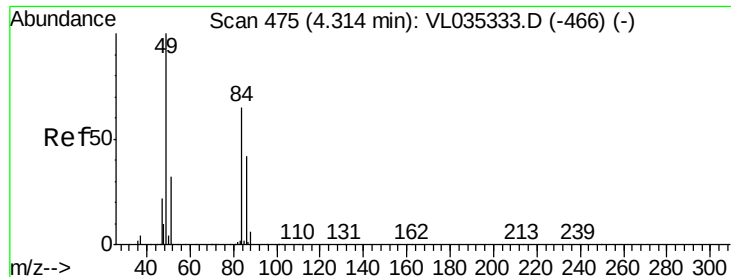
57 0.0 8.8 13.2#



Abundance Ion 59.10 (58.80 to 59.80): VL0

Ion 57.10 (56.80 to 57.80): VL0





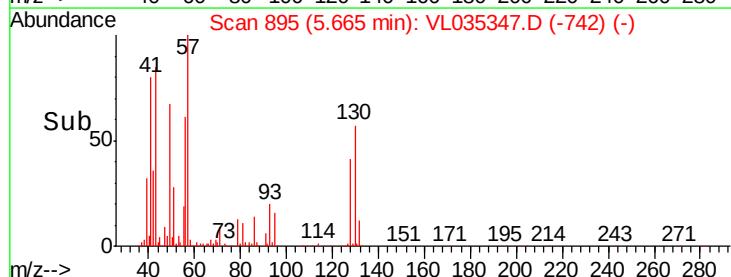
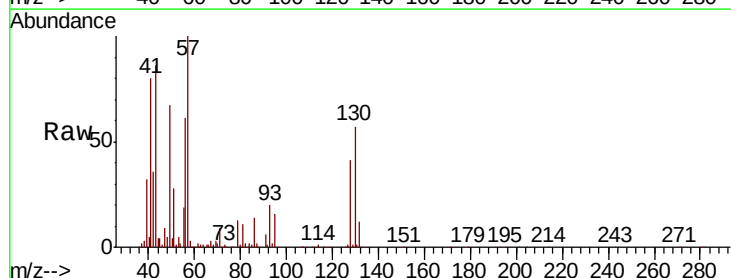
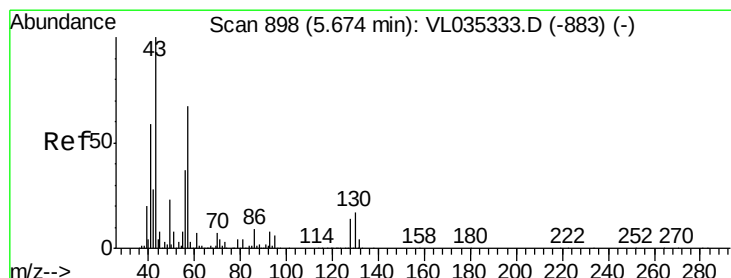
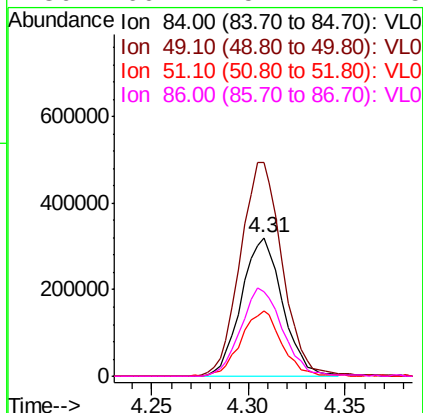
#20
Methvlene Chloride
Concen: 6.367 ppbv
RT: 4.31 min Scan# 473
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tot Ion	84	Resp	473752
Ion	Ratio	Lower	Upper
84	100		
49	154.0	122.8	184.2
51	46.9	40.1	60.1
86	60.7	51.7	77.5

Instrument :
MSVOA_L
ClientSampled :
IA-2

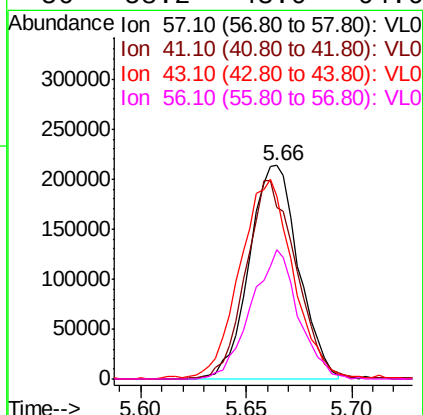
Manual Integrations
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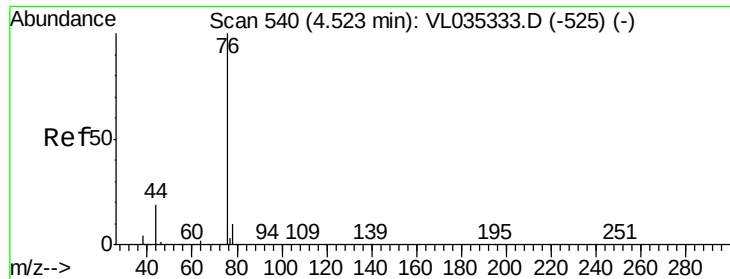
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#26
Hexane
Concen: 2.875 ppbv
RT: 5.66 min Scan# 895
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion	57	Resp	345709
Ion	Ratio	Lower	Upper
57	100		
41	95.1	75.2	112.8
43	103.2	180.6	270.8#
56	58.2	43.0	64.6





#27

Carbon Disulfide

Concen: 0.161 ppbv

RT: 4.51 min Scan# 537

Delta R.T. -0.01 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Instrument :

MSVOA_L

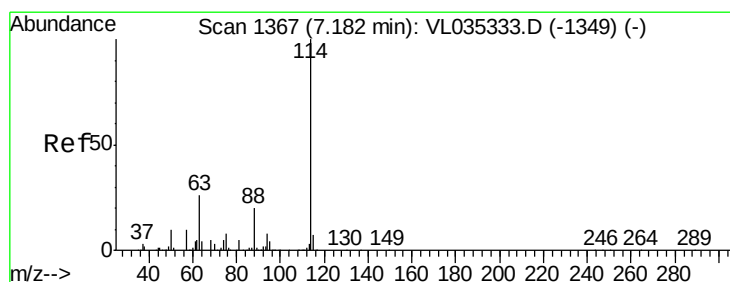
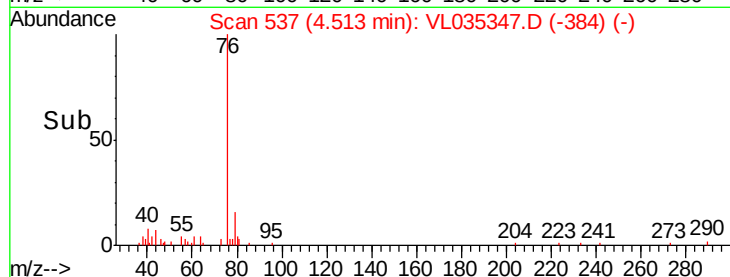
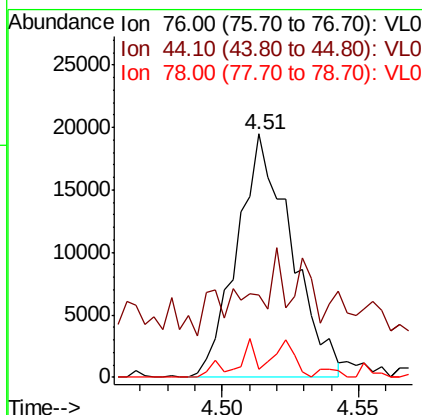
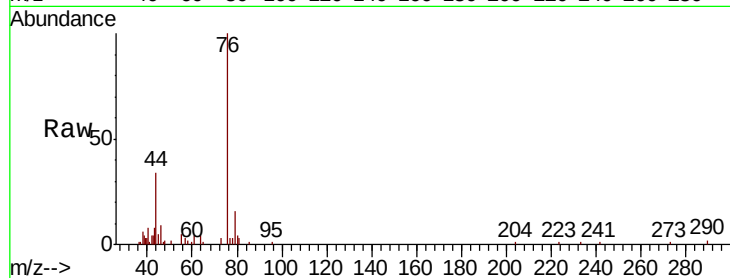
ClientSampled :

IA-2

Tot Ion:	76	Resp:	27075
Ion Ratio	Lower	Upper	
76	100		
44	46.9	15.4	23.2#
78	14.0	7.7	11.5#

Manual Integrations
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#33

1,4-Difluorobenzene

Concen: 10.000 ppbv

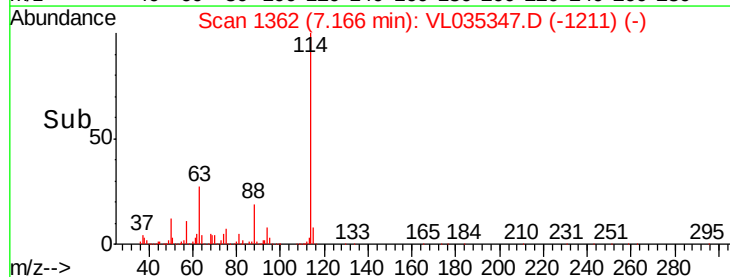
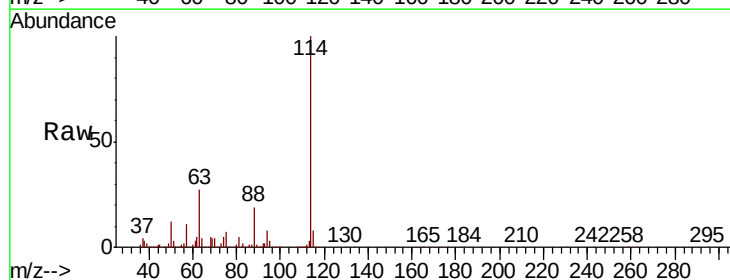
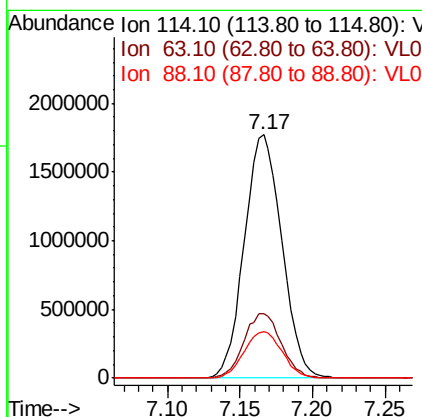
RT: 7.17 min Scan# 1362

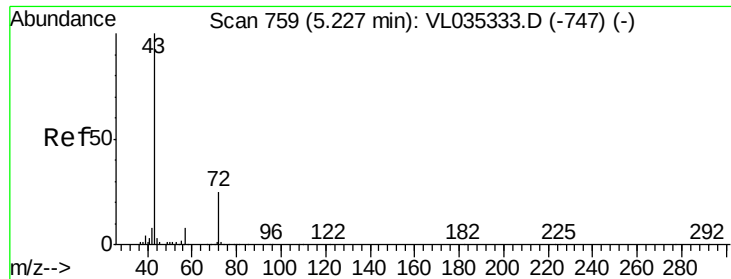
Delta R.T. -0.02 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Tgt Ion:	114	Resp:	3193842
Ion Ratio	Lower	Upper	
114	100		
63	26.6	21.3	31.9
88	19.5	15.3	22.9





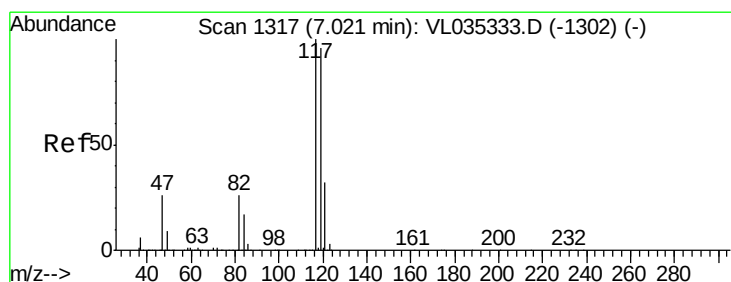
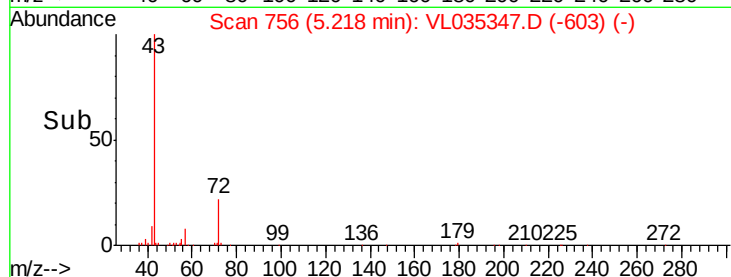
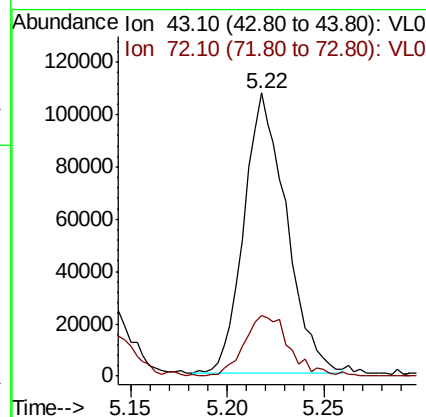
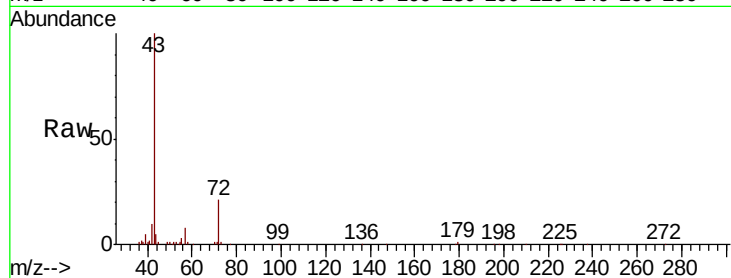
#34
2-Butanone
Concen: 1.043 ppbv
RT: 5.22 min Scan# 756
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	43	Resp	164066
Ion Ratio	43	100	
Lower	72	23.0	18.9
Upper			28.3

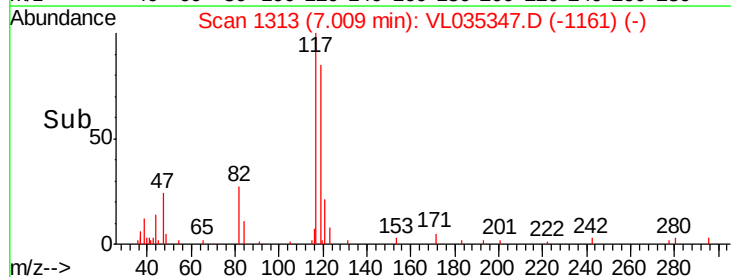
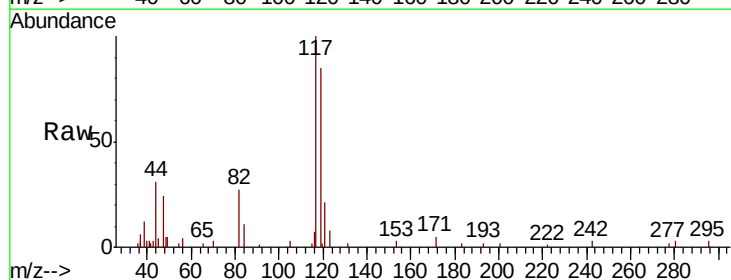
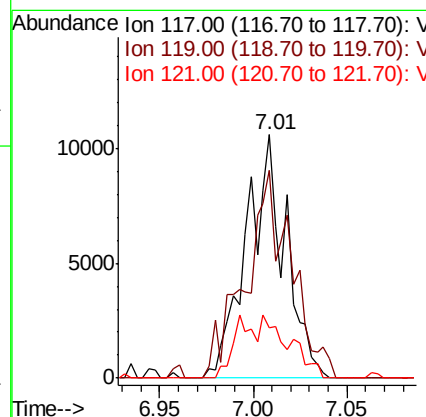
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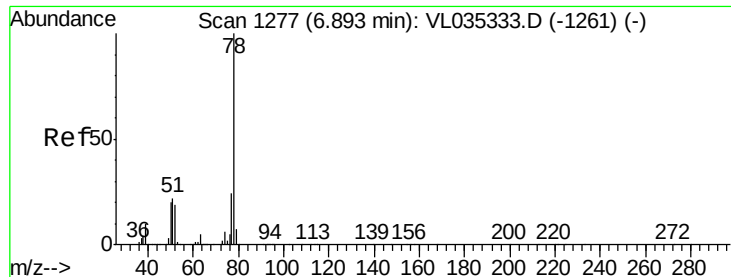
MMDadoda
8/7/2020 12:53:37 PM



#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 7.01 min Scan# 1313
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion	117	Resp	15275
Ion Ratio	117	100	
Lower	119	85.3	77.0
Upper	121	20.8	26.0





#36

Benzene

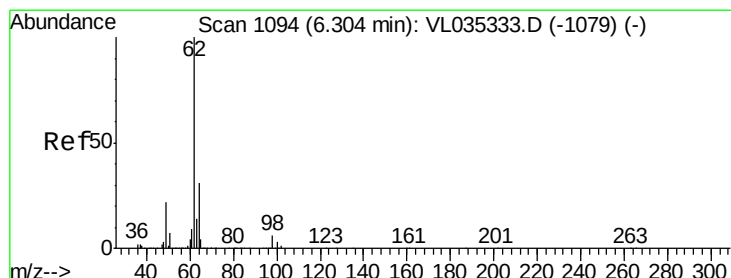
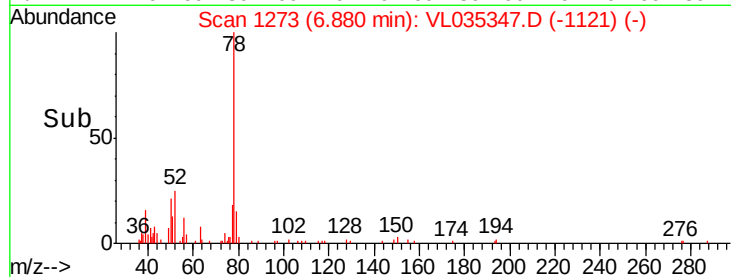
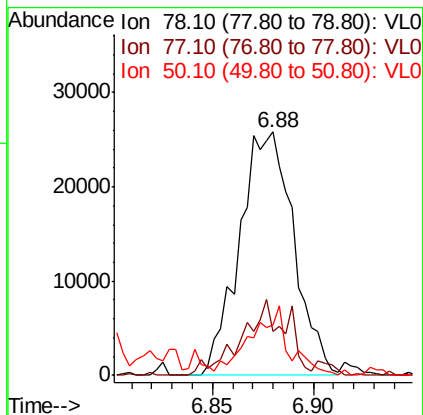
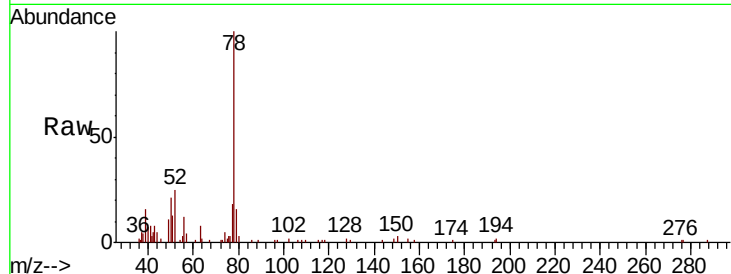
Concen: 0.225 ppbv m
RT: 6.88 min Scan# 1273
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
78	100		
77	17.8	19.3	28.9#
50	20.9	16.3	24.5

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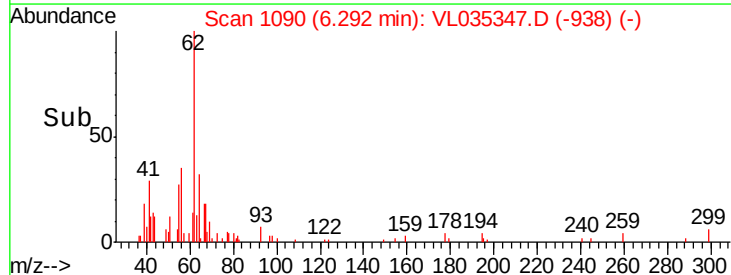
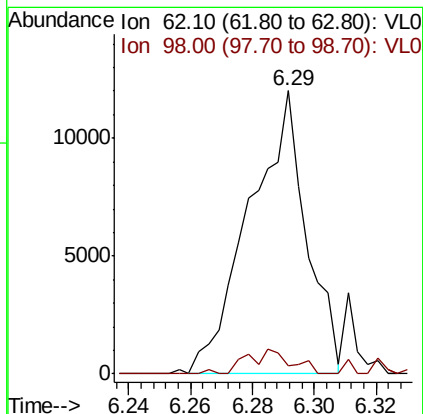
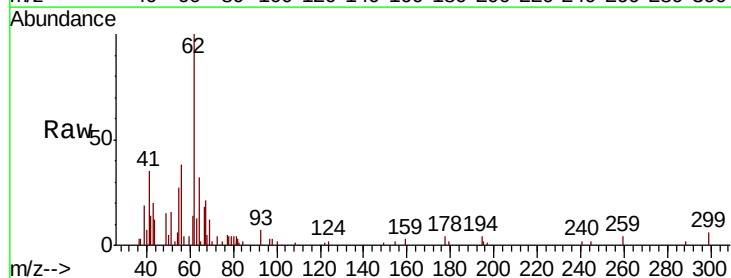


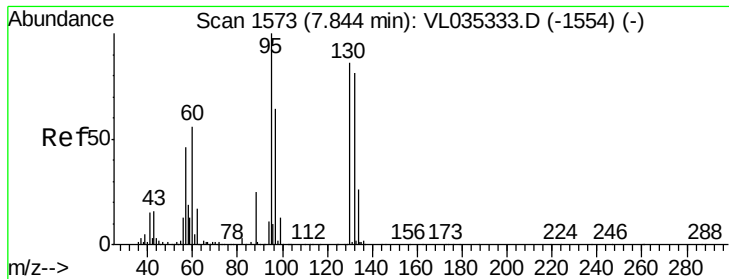
#37

1,2-Dichloroethane

Concen: 0.101 ppbv
RT: 6.29 min Scan# 1090
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion	Ratio	Lower	Upper
62	100		
98	9.2	4.6	7.0#





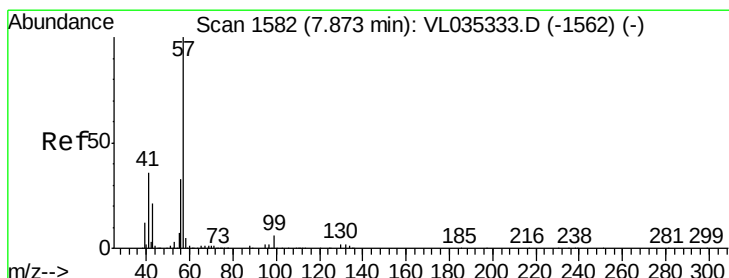
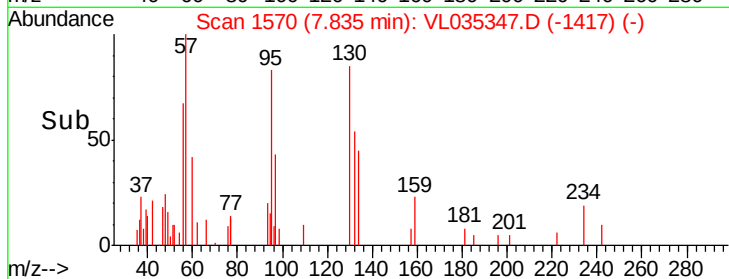
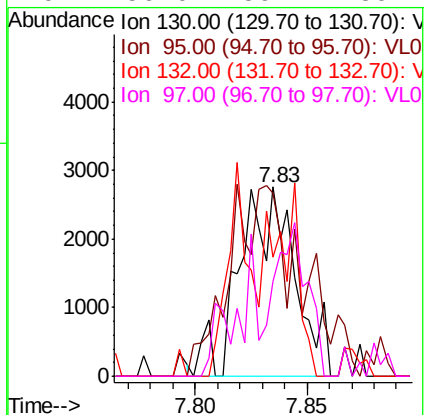
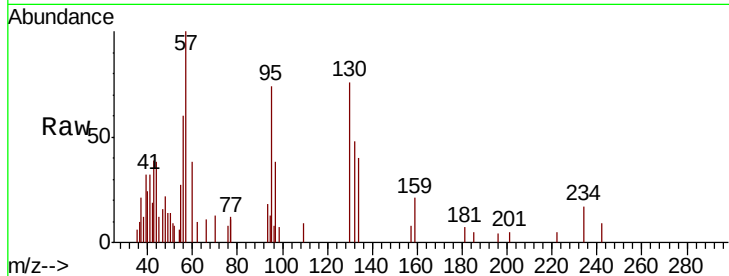
#38
 Trichloroethene
 Concen: 0.048 ppbv m
 RT: 7.83 min Scan# 1570
 Delta R.T. -0.01 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Instrument :
 MSVOA_L
 ClientSampleId :
 IA-2

Tot Ion:	130	Resp:	4728
Ion Ratio	Lower	Upper	
130	100		
95	97.0	93.4	140.2
132	63.2	76.1	114.1#
97	50.0	59.4	89.2#

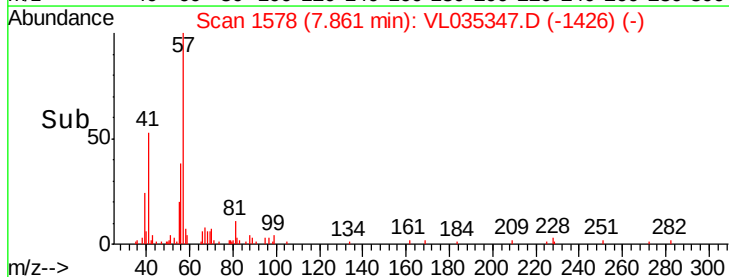
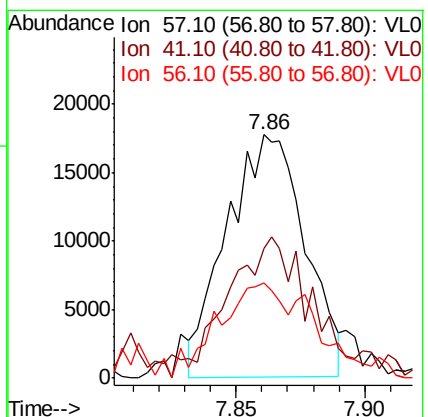
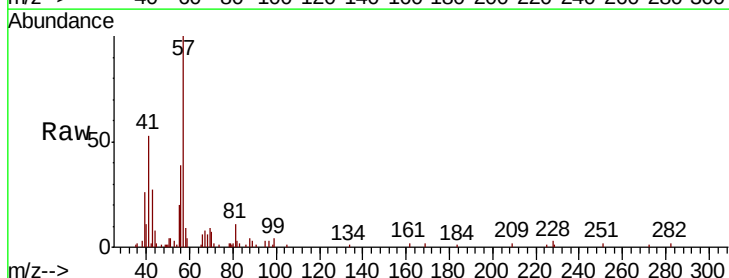
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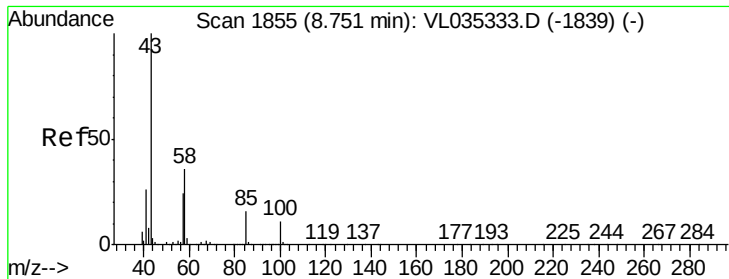
MMDadoda
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#44
 2,2,4-Trimethylpentane
 Concen: 0.098 ppbv
 RT: 7.86 min Scan# 1578
 Delta R.T. -0.01 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Tgt Ion:	57	Resp:	37413
Ion Ratio	Lower	Upper	
57	100		
41	63.8	27.9	41.9#
56	50.1	25.4	38.0#





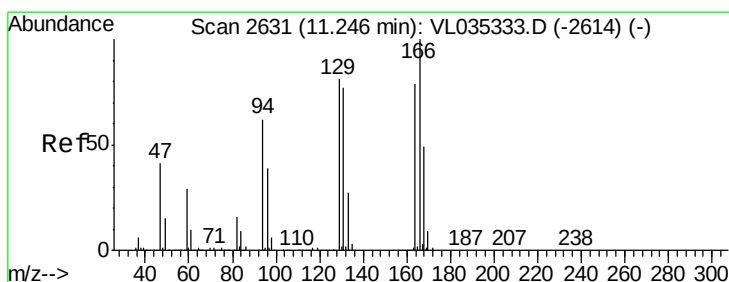
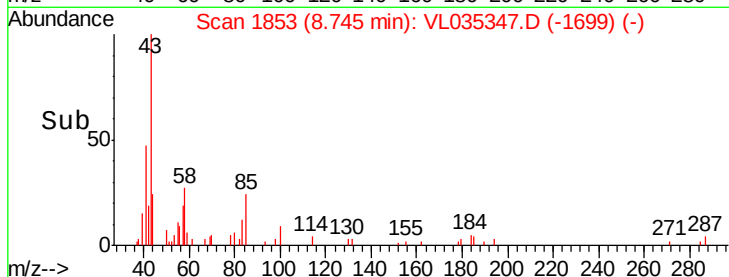
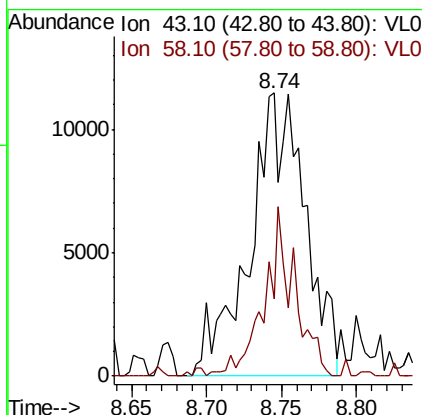
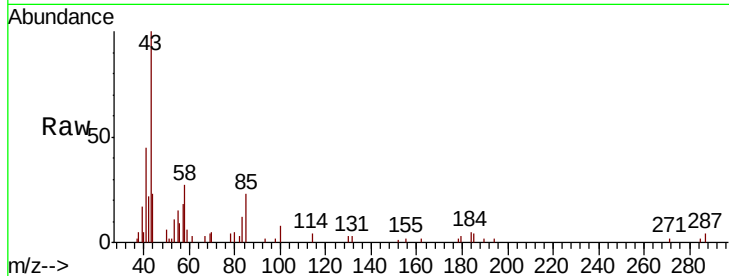
#50
4-Methyl-2-Pentanone
Concen: 0.123 ppbv m
RT: 8.74 min Scan# 1853
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampled :
IA-2

Tot Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.2	43.8#

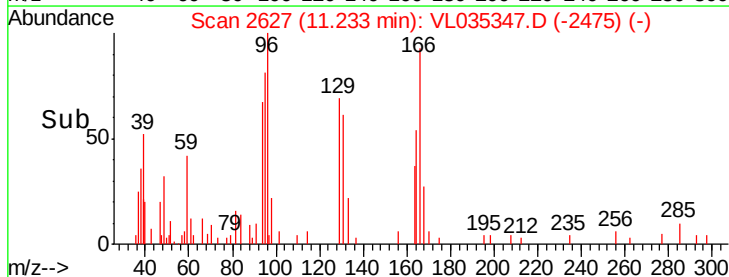
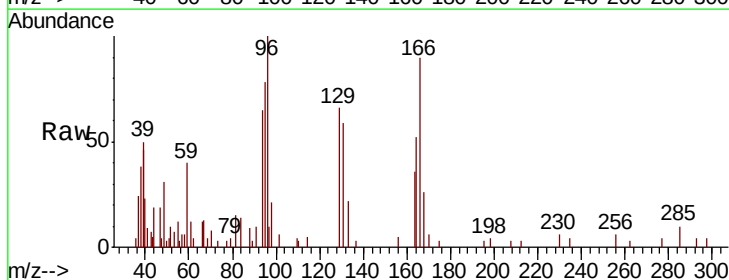
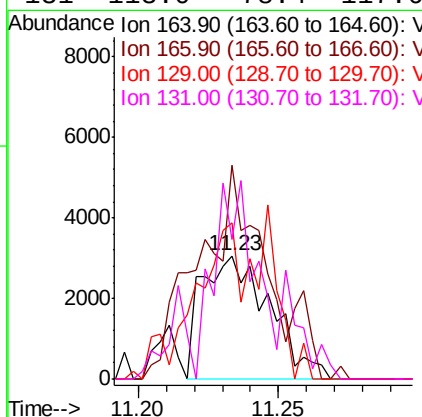
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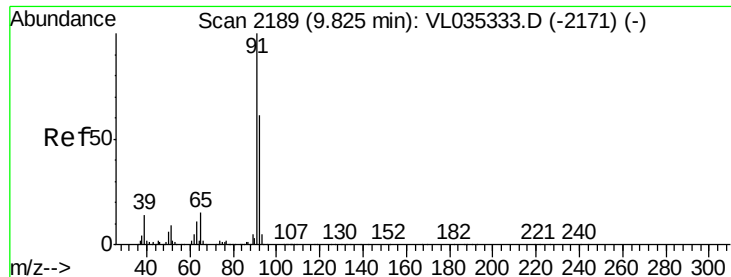
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#52
Tetrachloroethene
Concen: 0.061 ppbv m
RT: 11.23 min Scan# 2627
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion	Ratio	Lower	Upper
164	100		
166	173.1	101.4	152.0#
129	127.0	82.1	123.1#
131	113.0	78.4	117.6





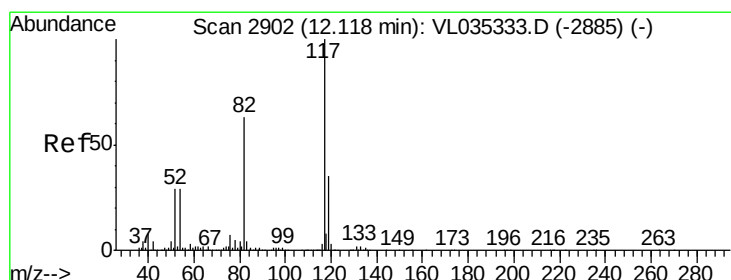
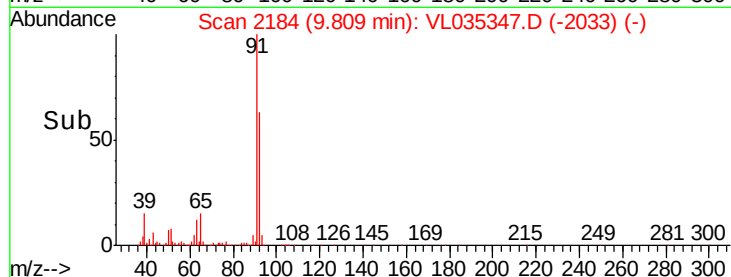
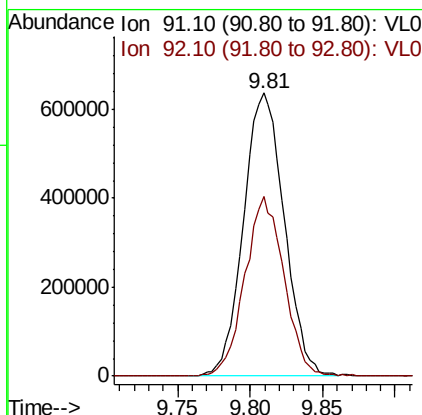
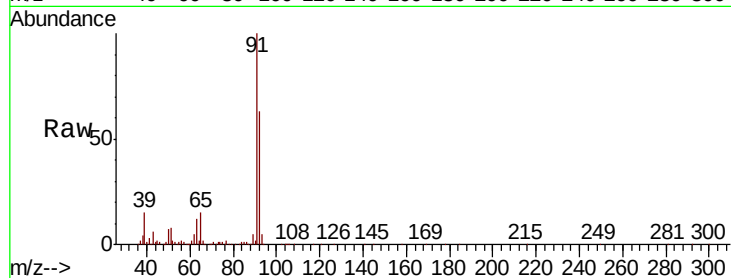
#53
Toluene
Concen: 5.313 ppbv
RT: 9.81 min Scan# 2184
Delta R.T. -0.02 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion: 91 Resp: 1246544
Ion Ratio Lower Upper
91 100
92 60.8 48.5 72.7

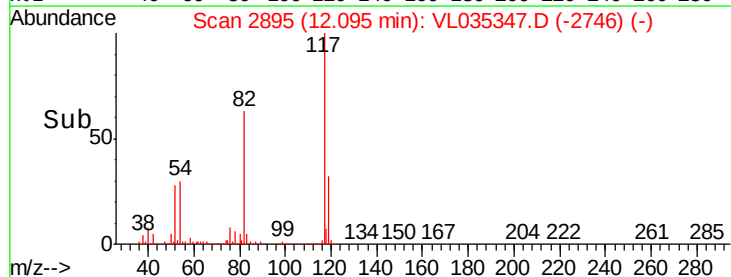
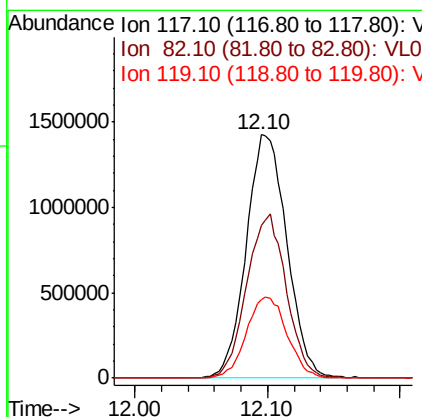
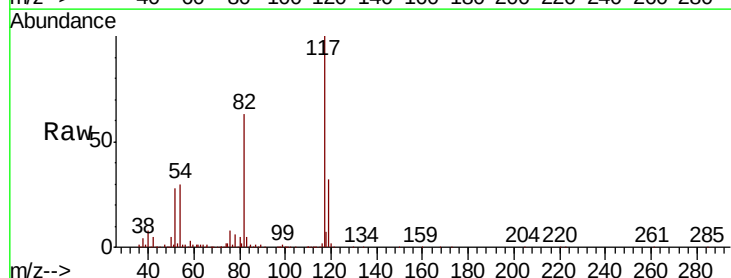
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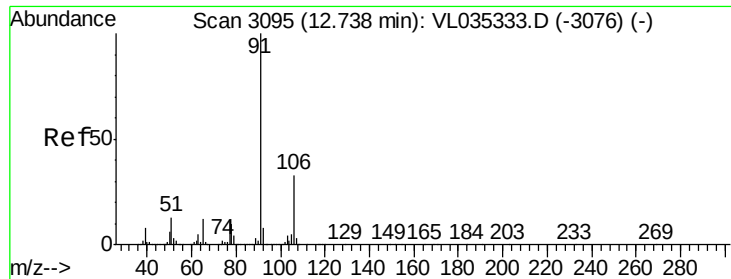
MMDadoda
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#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.10 min Scan# 2895
Delta R.T. -0.02 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion: 117 Resp: 3033131
Ion Ratio Lower Upper
117 100
82 66.0 51.0 76.4
119 33.4 24.7 37.1





#58

Ethyl Benzene

Concen: 0.298 ppbv

RT: 12.73 min Scan# 3091

Delta R.T. -0.01 min

Lab File: VL035347.D

Acq: 6 Aug 2020 13:03

Instrument :

MSVOA_L

ClientSampled :

IA-2

Tot Ion: 91 Resp: 94030

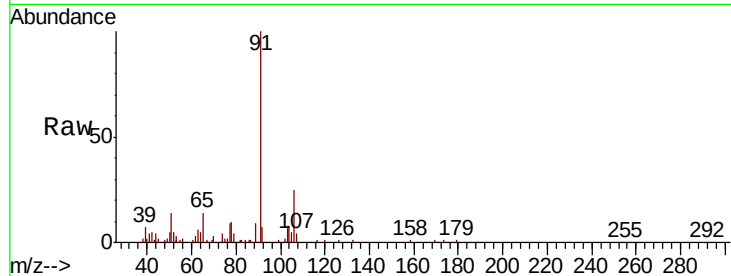
Ion Ratio Lower Upper

91 100

106 24.5 26.8 40.2#

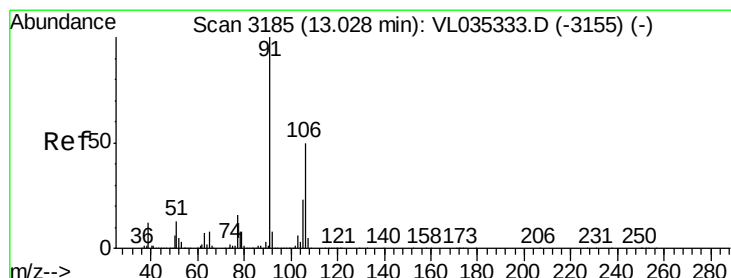
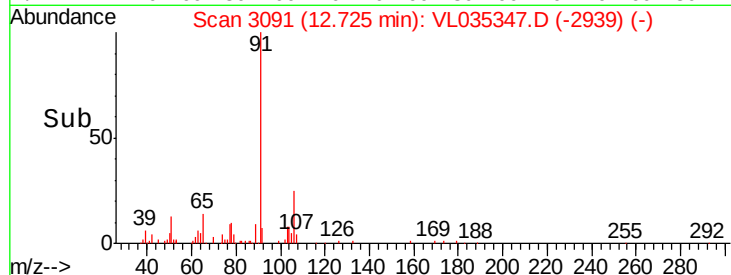
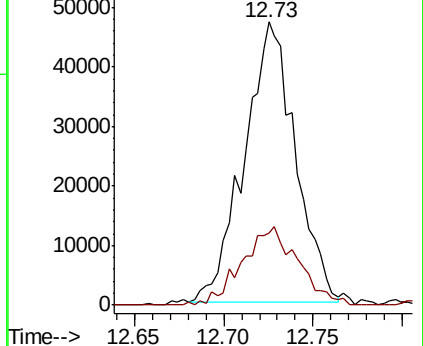
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Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 0.612 ppbv m

RT: 12.99 min Scan# 3172

Delta R.T. -0.04 min

Lab File: VL035347.D

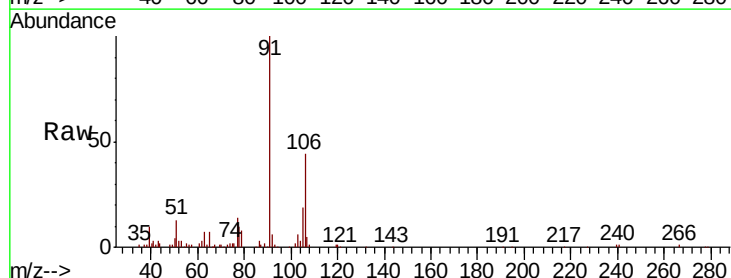
Acq: 6 Aug 2020 13:03

Tgt Ion: 91 Resp: 179926

Ion Ratio Lower Upper

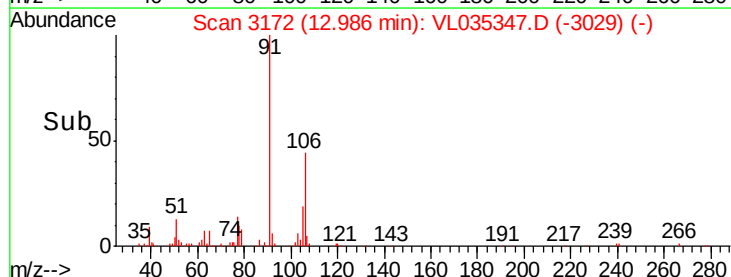
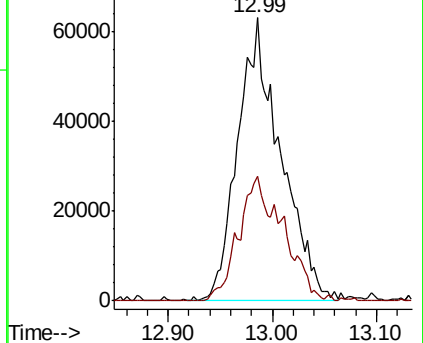
91 100

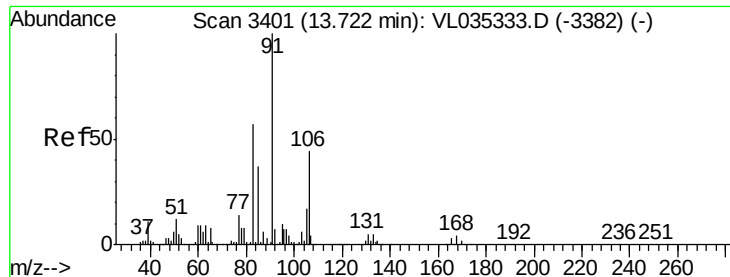
106 0.0 37.8 56.8#



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V





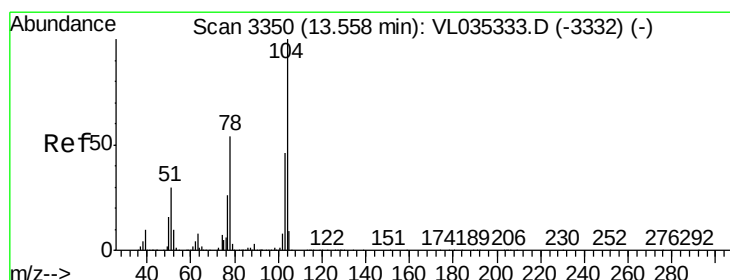
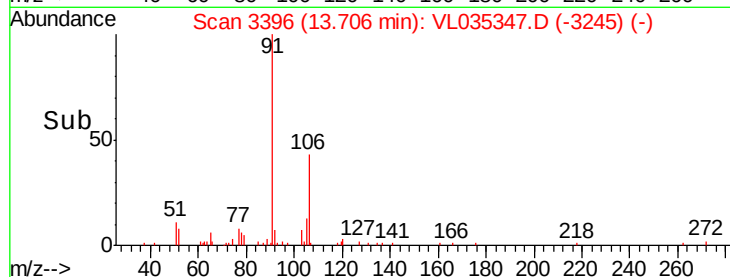
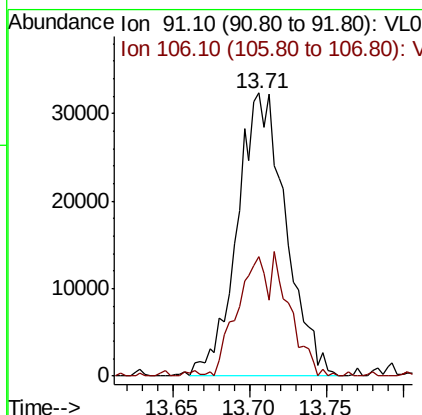
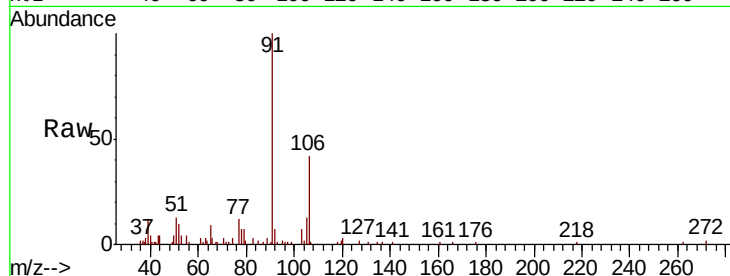
#60
o-Xylene
Concen: 0.245 ppbv m
RT: 13.71 min Scan# 3396
Delta R.T. -0.02 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion: 91 Resp: 71392
Ion Ratio Lower Upper
91 100
106 0.0 22.7 68.0#

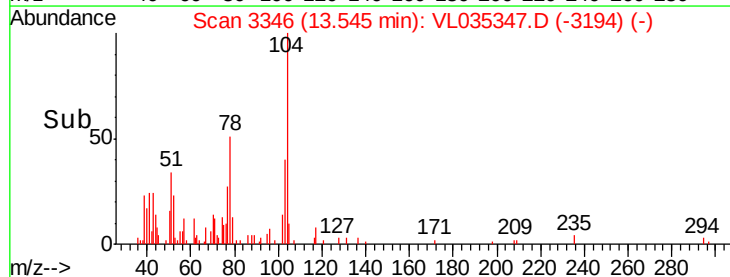
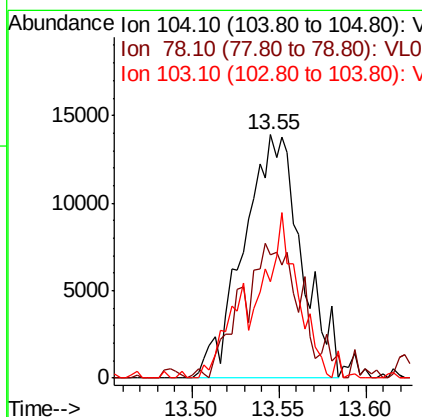
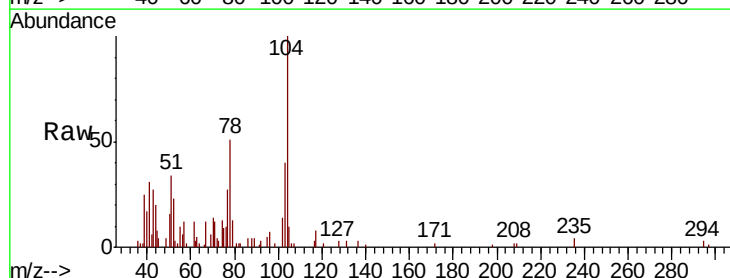
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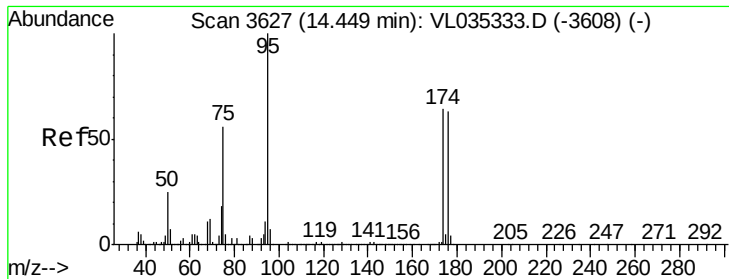
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#61
Styrene
Concen: 0.180 ppbv m
RT: 13.55 min Scan# 3346
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Tgt Ion: 104 Resp: 32122
Ion Ratio Lower Upper
104 100
78 60.1 42.6 63.8
103 0.0 38.1 57.1#





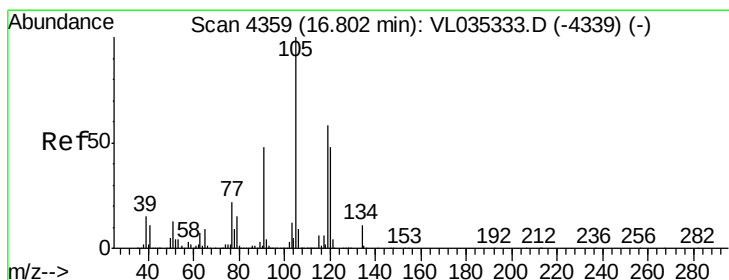
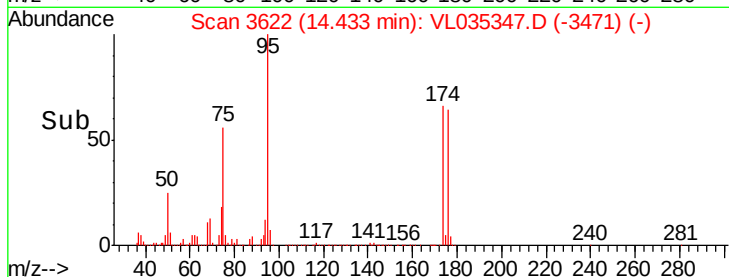
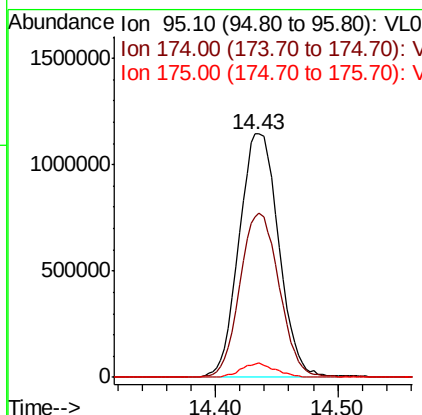
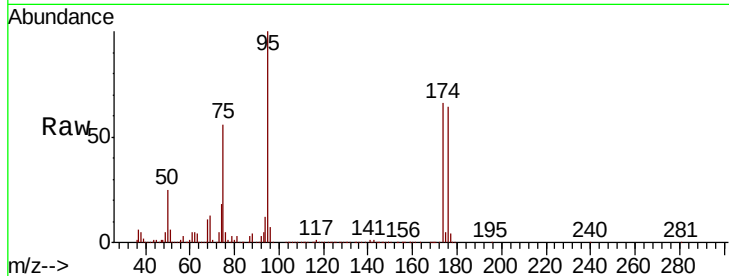
#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.150 ppbv
 RT: 14.43 min Scan# 3622
 Delta R.T. -0.02 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Instrument :
 MSVOA_L
 ClientSampled :
 IA-2

Tot Ion: 95 Resp: 2567397
 Ion Ratio Lower Upper
 95 100
 174 67.5 53.5 80.3
 175 5.1 4.2 6.2

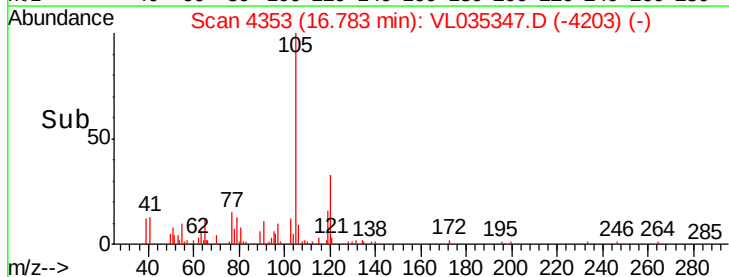
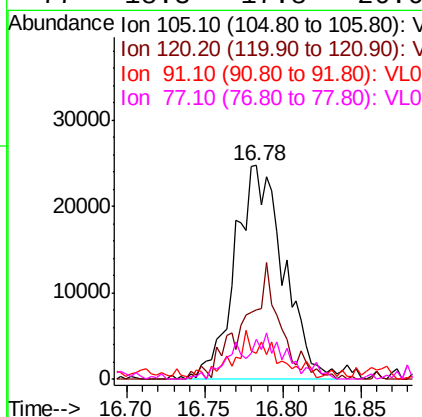
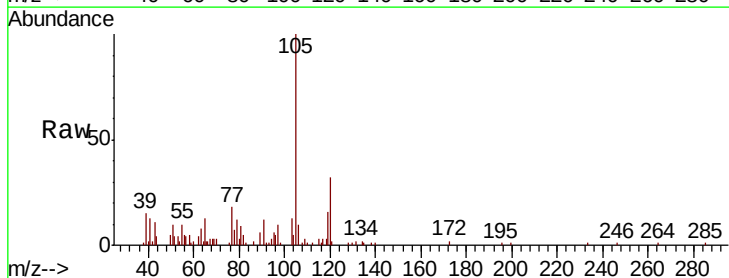
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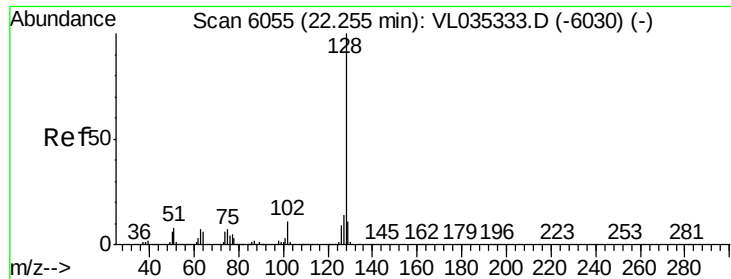
MMDadoda
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#74
 1,2,4-Trimethylbenzene
 Concen: 0.147 ppbv m
 RT: 16.78 min Scan# 4353
 Delta R.T. -0.02 min
 Lab File: VL035347.D
 Acq: 6 Aug 2020 13:03

Tgt Ion:105 Resp: 53723
 Ion Ratio Lower Upper
 105 100
 120 32.3 38.5 57.7#
 91 12.3 39.0 58.6#
 77 18.3 17.8 26.6





#79
Naphthalene
Concen: 0.473 ppbv m
RT: 22.24 min Scan# 6051
Delta R.T. -0.01 min
Lab File: VL035347.D
Acq: 6 Aug 2020 13:03

Instrument :
MSVOA_L
ClientSampleId :
IA-2

Tot Ion	Ratio	Resp Lower	Upper
128	100		
127	19.0	11.1	16.7#
129	7.2	8.7	13.1#

Manual Integrations
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MMDadoda
8/7/2020 12:53:37 PM

