

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL121118\
 Data File : VL032962.D
 Acq On : 11 Dec 2018 20:00
 Operator : SY/AP
 Sample : J6264-13
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G2

Manual Integrations
 APPROVED

MMDadoda
 12/13/2018 7:58:43 AM

Quant Time: Dec 12 16:04:11 2018
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL120718AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri Dec 0
 QLast Update : Fri Dec 07 09:35:17 2018
 Response via : Initial Calibration

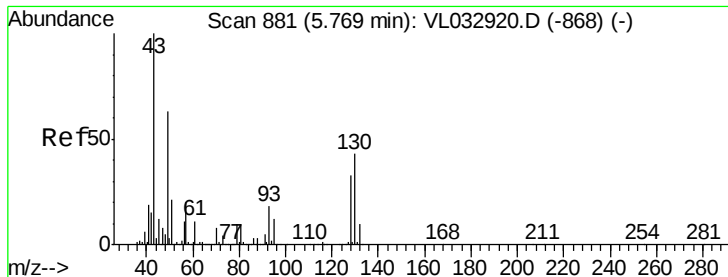
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.78	49	1362705	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.30	114	3435050	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.24	117	3452624	10.00	ppbv	0.00

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.59	95	2641341	10.36	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	103.60%

Target Compounds					Ovalue
2) Dichlorodifluoromethane	3.08	85	22158	0.122 ppbv	91
3) Chlorodifluoromethane	3.02	51	26125m	0.253 ppbv	
4) Chloromethane	3.17	50	37078	0.617 ppbv	98
9) Propene	3.04	41	339743	8.325 ppbv #	77
10) Heptane	8.25	43	718570	4.688 ppbv	100
11) Trichlorofluoromethane	4.01	101	5242206	30.586 ppbv	98
13) Ethanol	3.67	45	266454	18.964 ppbv	97
15) Acetone	3.90	43	17695973	151.293 ppbv #	76
17) tert-Butyl alcohol	4.37	59	807092	27.102 ppbv #	80
19) Isopropyl Alcohol	4.04	45	290773	3.959 ppbv #	95
20) Methylene Chloride	4.42	84	533762	9.337 ppbv	97
26) Hexane	5.79	57	1238637	9.710 ppbv #	45
27) Carbon Disulfide	4.62	76	393175	2.465 ppbv	99
30) Cyclohexane	7.25	84	212057	2.006 ppbv	97
34) 2-Butanone	5.34	43	2314663	15.470 ppbv	100
35) Carbon Tetrachloride	7.14	117	22177m	0.082 ppbv	
36) Benzene	7.02	78	1252870	4.959 ppbv	99
38) Trichloroethene	7.97	130	62773	0.597 ppbv	89
40) 1,4-Dioxane	7.97	88	102403m	2.901 ppbv	
44) 2,2,4-Trimethylpentane	8.00	57	1112871	2.595 ppbv #	86
50) 4-Methyl-2-Pentanone	8.88	43	245875	1.028 ppbv	99
52) Tetrachloroethene	11.38	164	8900m	0.097 ppbv	
53) Toluene	9.96	91	3161641	11.799 ppbv	100
58) Ethyl Benzene	12.87	91	541349	1.470 ppbv	99
59) m/p-Xylene	13.14	91	1025693	3.072 ppbv #	100
60) o-Xylene	13.86	91	345934	1.026 ppbv	98
61) Styrene	13.70	104	245521	1.095 ppbv	98
62) Isopropylbenzene	14.84	105	13607015	28.921 ppbv	96
74) 1,2,4-Trimethylbenzene	16.94	105	137839	0.332 ppbv #	64

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.78 min Scan# 883

Delta R.T. 0.01 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 49 Resp: 1362705

Ion Ratio Lower Upper

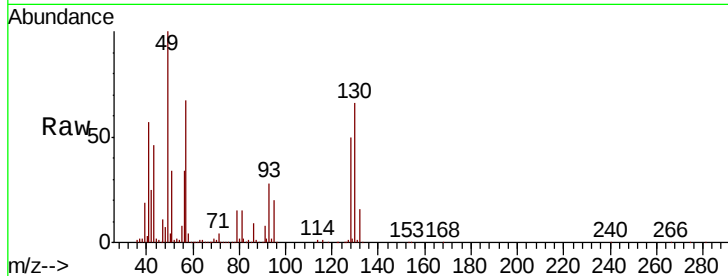
49 100

128 51.4 26.3 78.8

130 66.1 33.9 101.7

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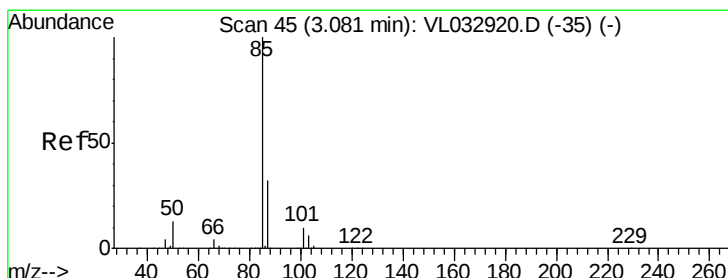
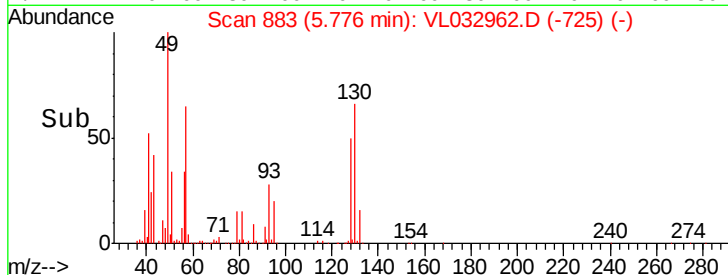
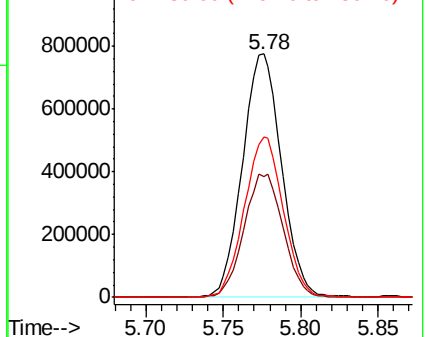


Abundance

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: 0.122 ppbv

RT: 3.08 min Scan# 45

Delta R.T. 0.00 min

Lab File: VL032962.D

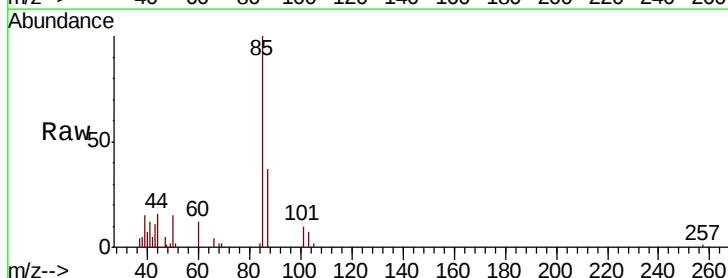
Acq: 11 Dec 2018 20:00

Tgt Ion: 85 Resp: 22158

Ion Ratio Lower Upper

85 100

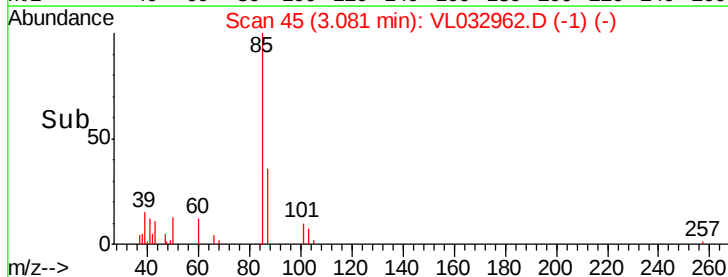
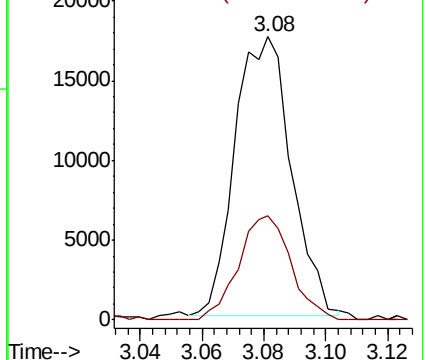
87 37.4 25.7 38.5

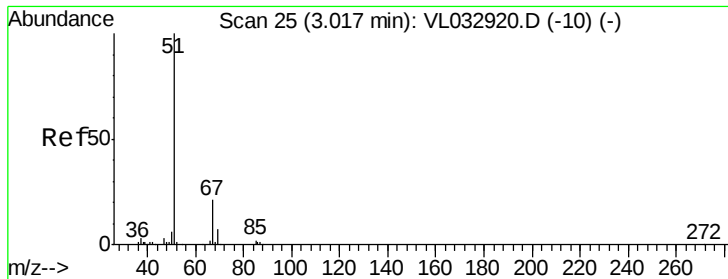


Abundance

Ion 85.00 (84.70 to 85.70): VL0

Ion 87.00 (86.70 to 87.70): VL0





#3

Chlorodifluoromethane

Concen: 0.253 ppbv

RT: 3.02 min Scan# 25

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampled :

A55G2

Tot Ion: 51 Resp: 26125

Ion Ratio Lower Upper

51 100

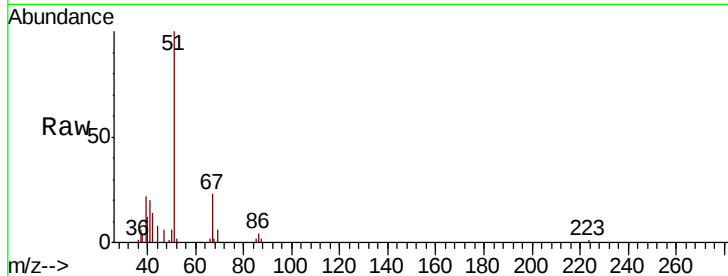
67 19.8 16.8 25.2

Manual Integrations

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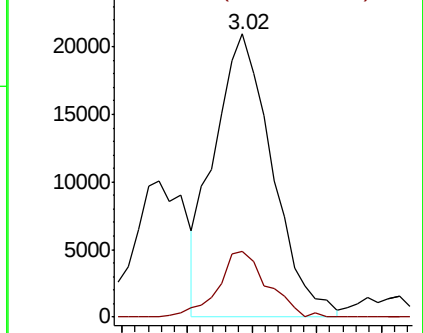
MMDadoda

12/13/2018 7:58:43 AM

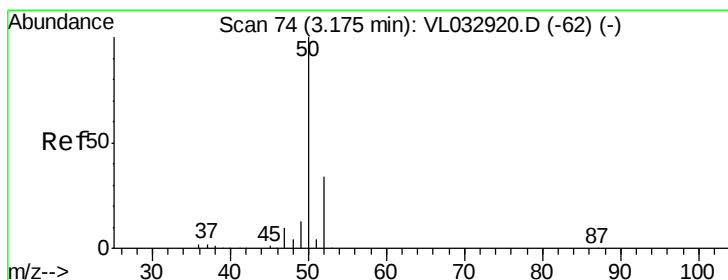
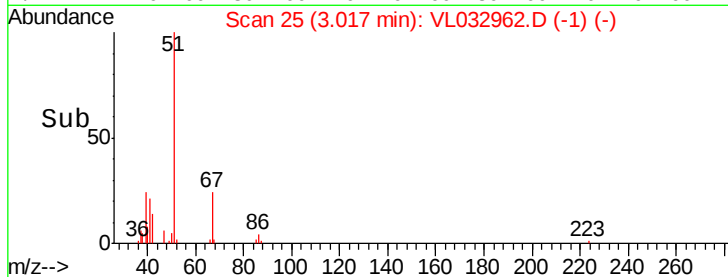


Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0



Time-->



#4

Chloromethane

Concen: 0.617 ppbv

RT: 3.17 min Scan# 74

Delta R.T. 0.00 min

Lab File: VL032962.D

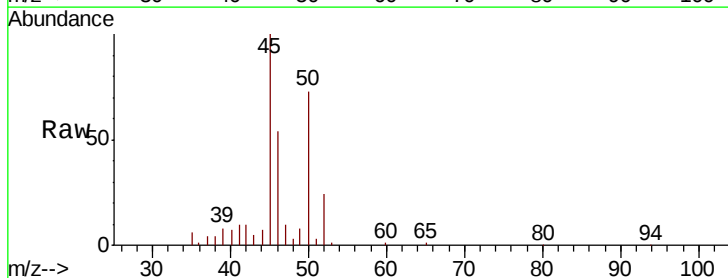
Acq: 11 Dec 2018 20:00

Tgt Ion: 50 Resp: 37078

Ion Ratio Lower Upper

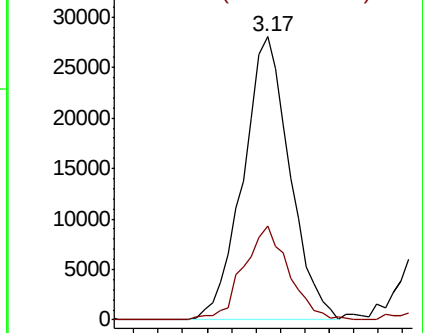
50 100

52 33.0 27.3 40.9

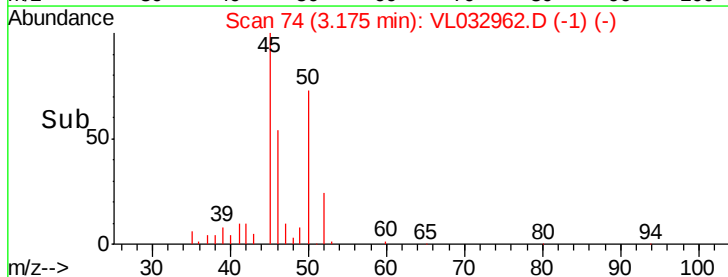


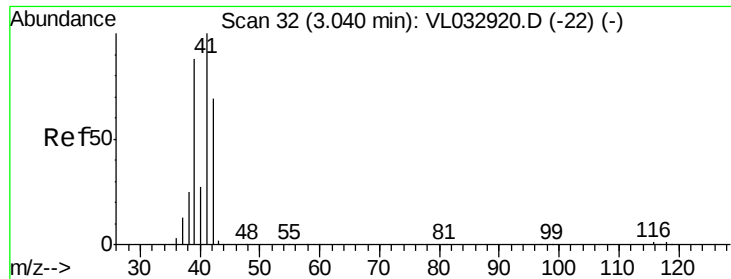
Abundance Ion 50.10 (49.80 to 50.80): VL0

Ion 52.10 (51.80 to 52.80): VL0



Time-->





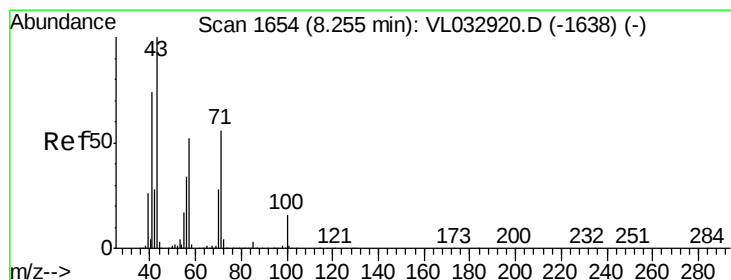
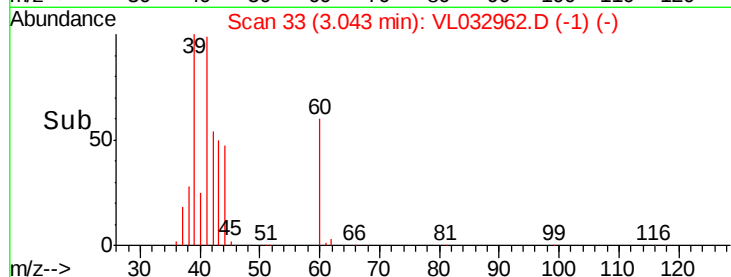
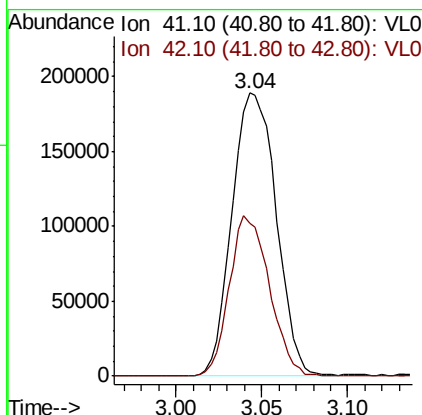
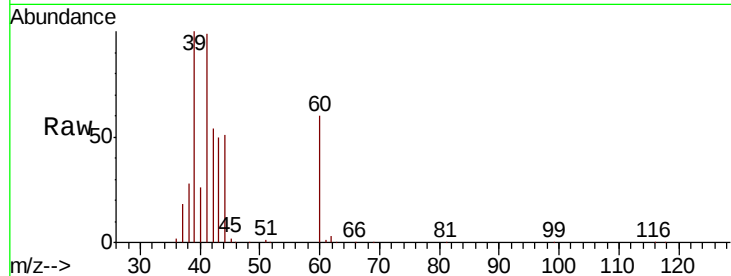
#9
 Propene
 Concen: 8.325 ppbv
 RT: 3.04 min Scan# 33
 Delta R.T. 0.00 min
 Lab File: VL032962.D
 Acq: 11 Dec 2018 20:00

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G2

Tot Ion: 41 Resp: 339743
 Ion Ratio Lower Upper
 41 100
 42 51.5 56.2 84.2#

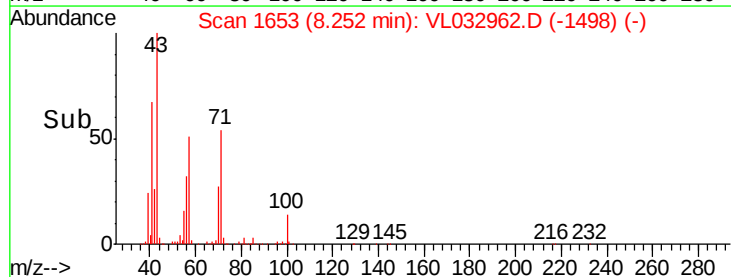
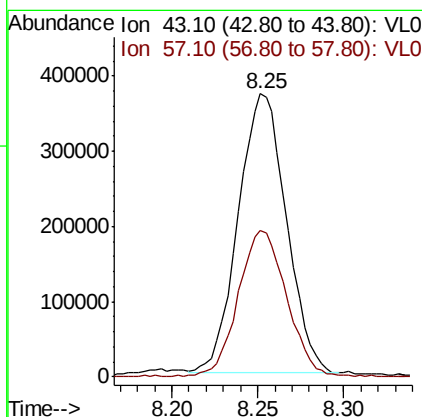
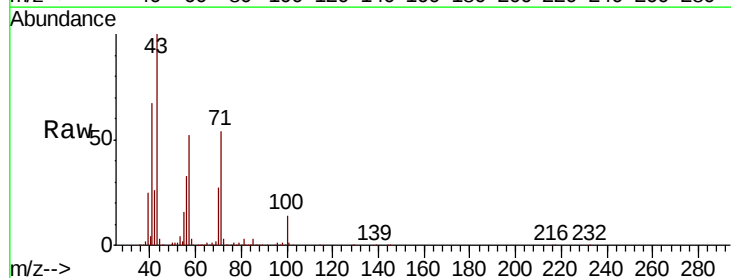
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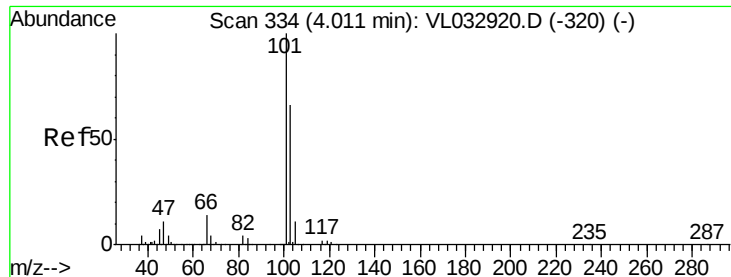
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#10
 Heptane
 Concen: 4.688 ppbv
 RT: 8.25 min Scan# 1653
 Delta R.T. -0.00 min
 Lab File: VL032962.D
 Acq: 11 Dec 2018 20:00

Tgt Ion: 43 Resp: 718570
 Ion Ratio Lower Upper
 43 100
 57 52.4 41.8 62.6





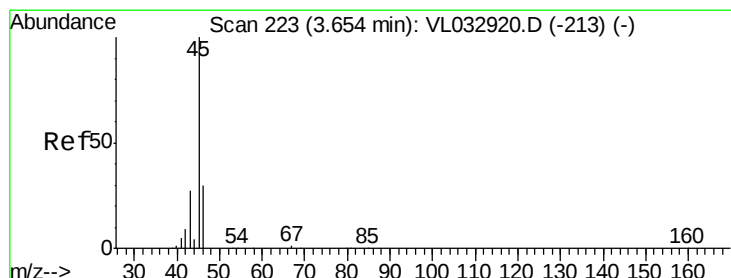
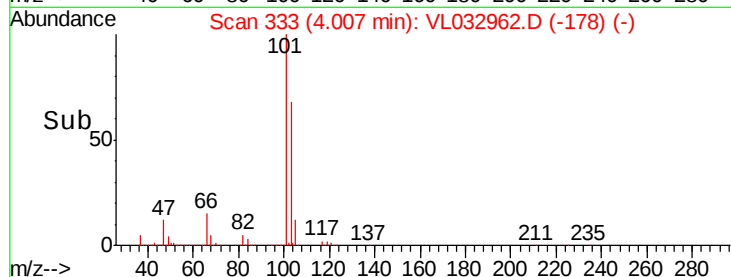
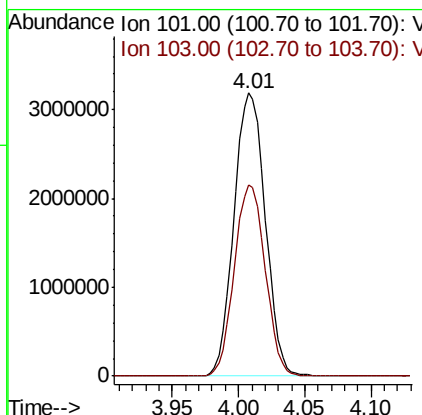
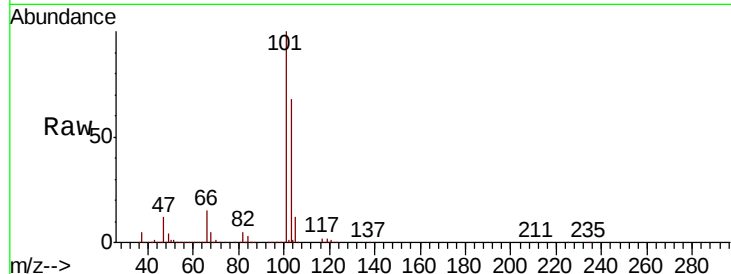
#11
Trichlorofluoromethane
Concen: 30.586 ppbv
RT: 4.01 min Scan# 333
Delta R.T. -0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Instrument :
MSVOA_L
ClientSampleId :
A55G2

Tot Ion:101 Resp: 5242206
Ion Ratio Lower Upper
101 100
103 67.8 52.7 79.1

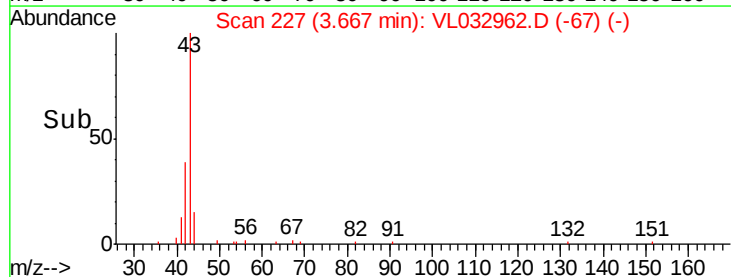
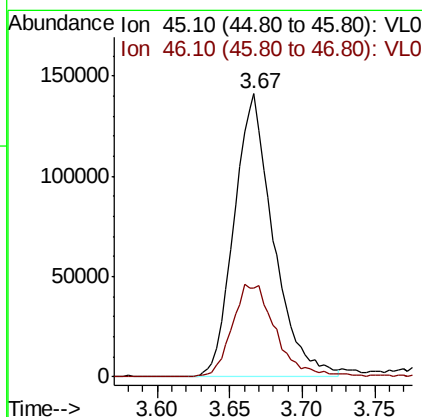
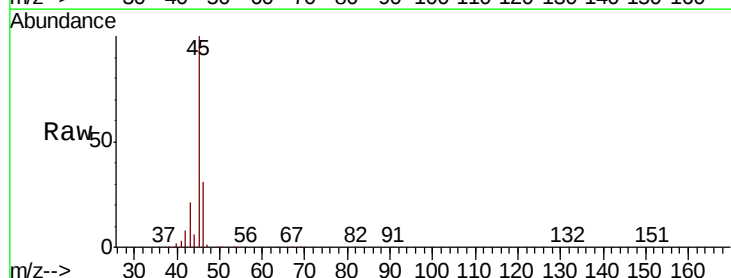
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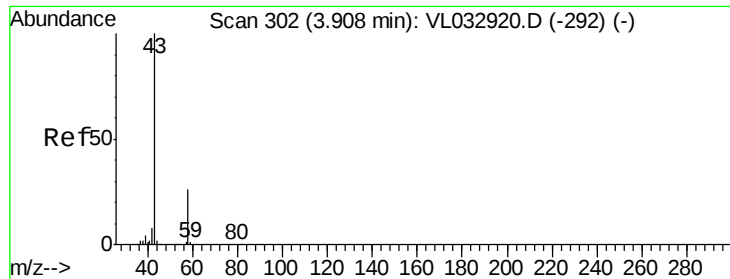
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#13
Ethanol
Concen: 18.964 ppbv
RT: 3.67 min Scan# 227
Delta R.T. 0.01 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Tgt Ion: 45 Resp: 266454
Ion Ratio Lower Upper
45 100
46 36.3 13.8 55.4





#15

Acetone

Concen: 151.293 ppbv

RT: 3.90 min Scan# 301

Delta R.T. -0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 43 Resp:17695973

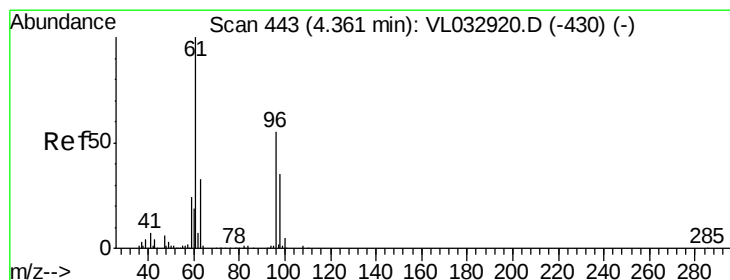
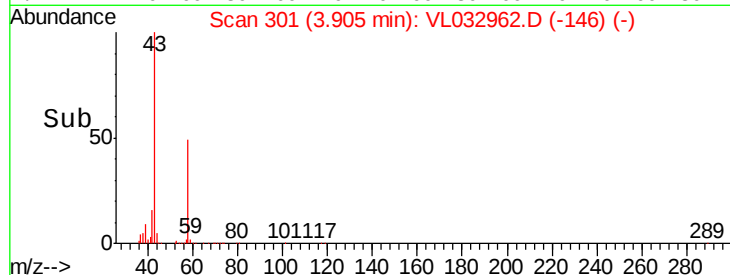
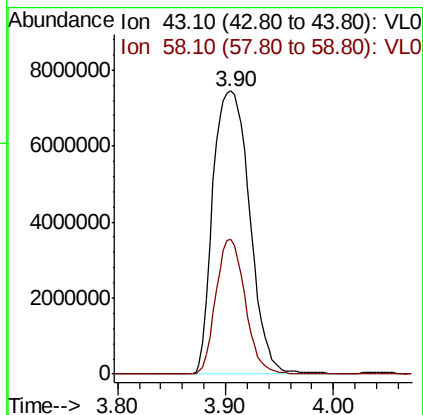
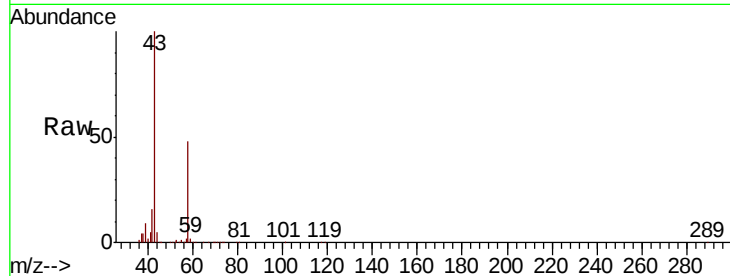
Ion Ratio Lower Upper

43 100

58 38.0 20.6 30.8#

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#17

tert-Butyl alcohol

Concen: 27.102 ppbv

RT: 4.37 min Scan# 446

Delta R.T. 0.01 min

Lab File: VL032962.D

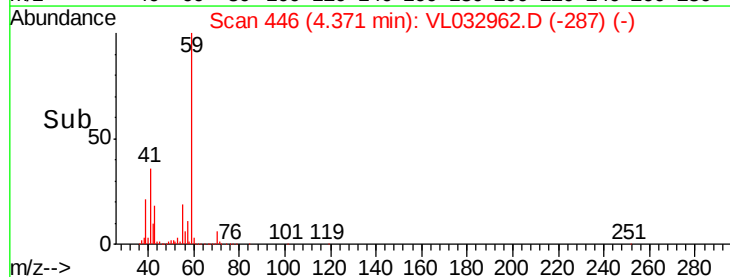
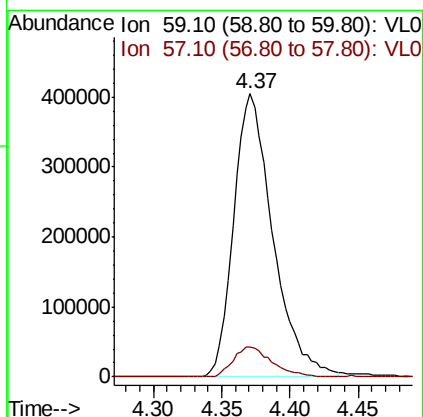
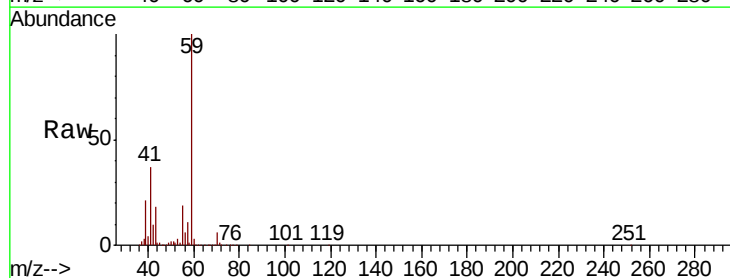
Acq: 11 Dec 2018 20:00

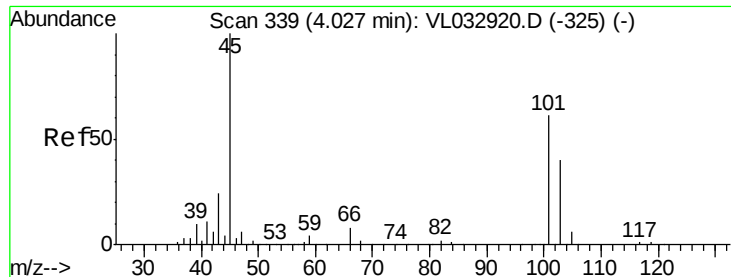
Tgt Ion: 59 Resp: 807092

Ion Ratio Lower Upper

59 100

57 10.5 0.6 1.0#





#19

Isopropyl Alcohol

Concen: 3.959 ppbv

RT: 4.04 min Scan# 344

Delta R.T. 0.02 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 45 Resp: 290773

Ion Ratio Lower Upper

45 100

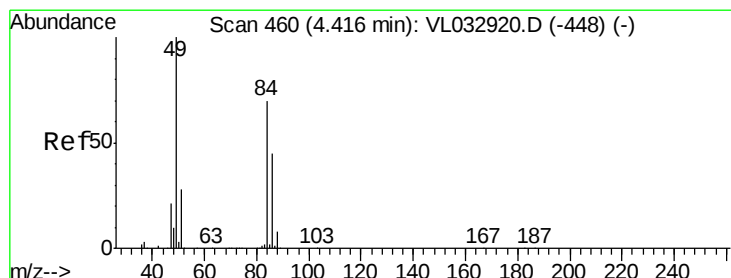
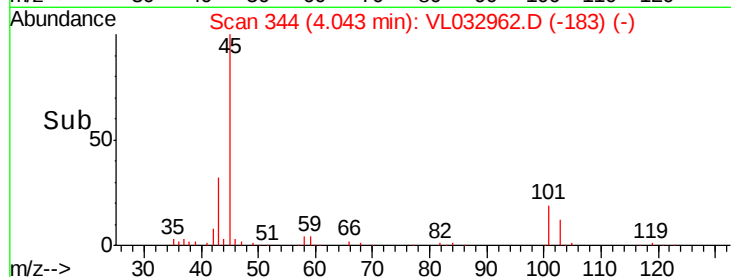
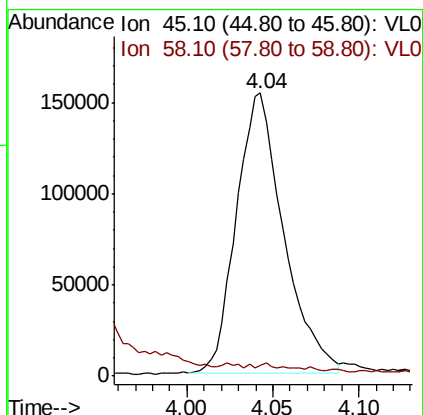
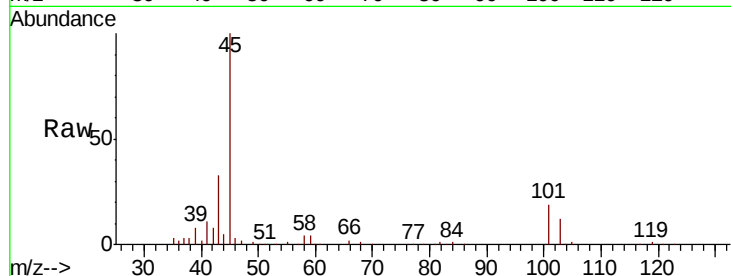
58 0.0 1.4 2.2#

Manual Integrations

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#20

Methylene Chloride

Concen: 9.337 ppbv

RT: 4.42 min Scan# 462

Delta R.T. 0.01 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Tgt Ion: 84 Resp: 533762

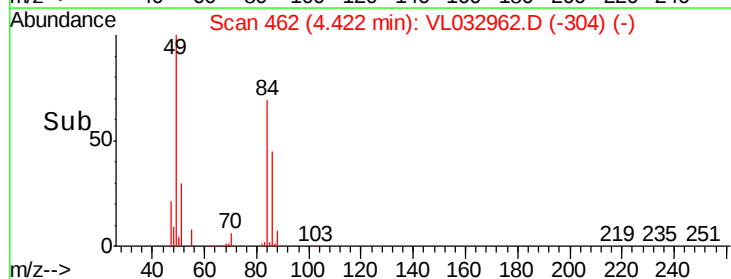
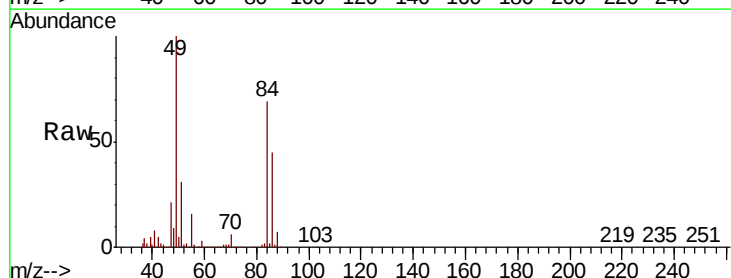
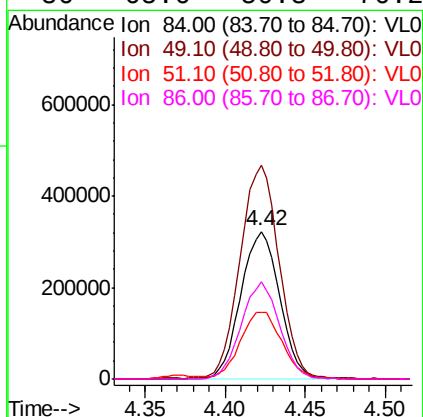
Ion Ratio Lower Upper

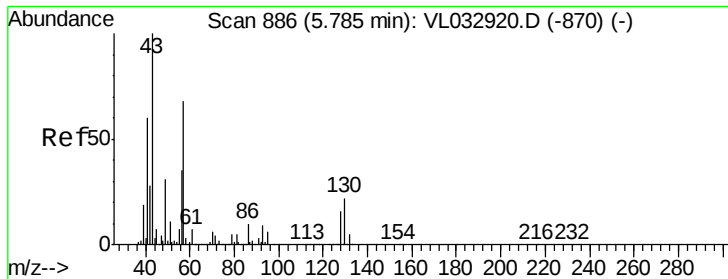
84 100

49 144.1 113.8 170.8

51 44.8 31.8 47.8

86 65.6 50.8 76.2





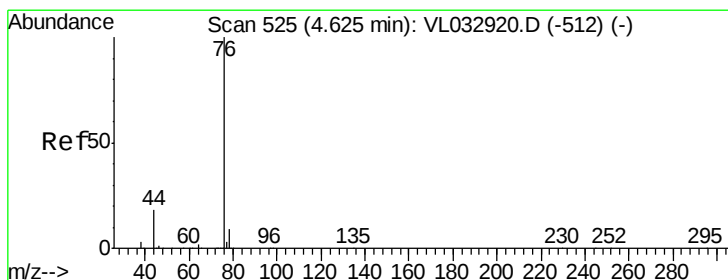
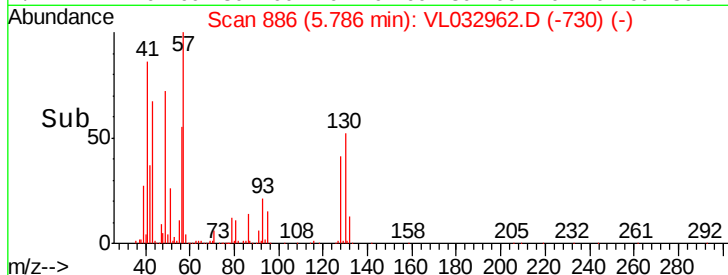
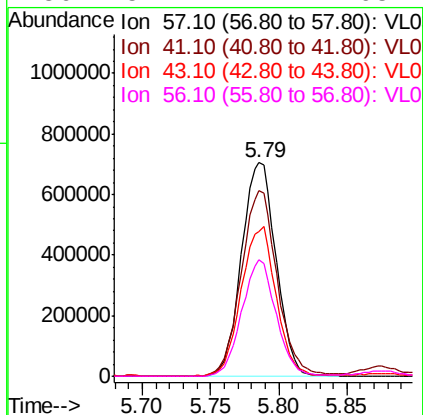
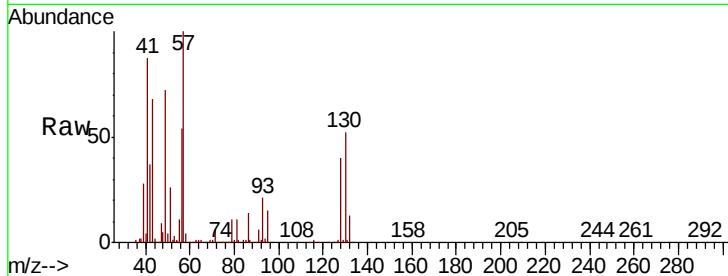
#26
Hexane
Concen: 9.710 ppbv
RT: 5.79 min Scan# 886
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Instrument :
MSVOA_L
ClientSampleId :
A55G2

Tot Ion	57	Resp	1238637
Ion	Ratio	Lower	Upper
57	100		
41	91.3	72.2	108.2
43	70.2	171.9	257.9#
56	54.4	42.2	63.2

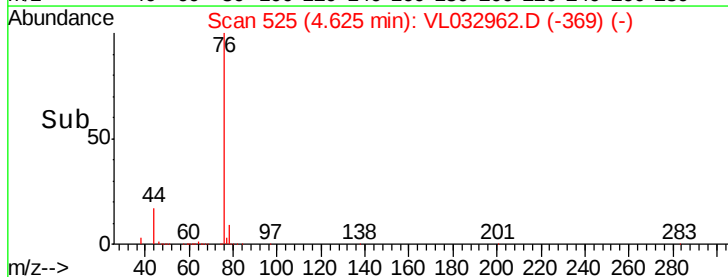
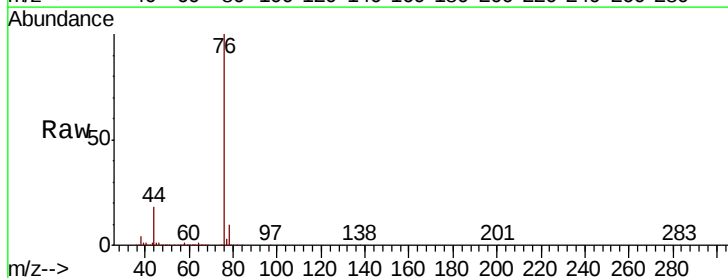
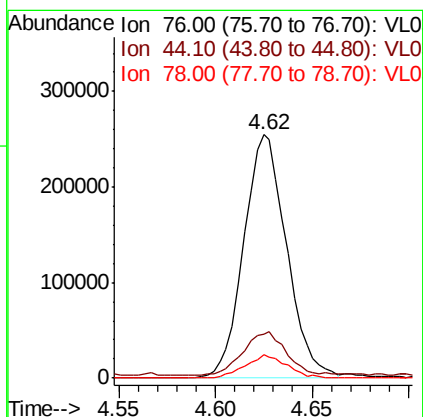
Manual Integrations
APPROVED

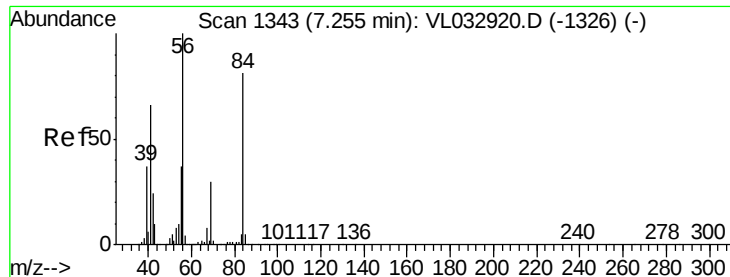
MMDadoda
12/13/2018 7:58:43 AM



#27
Carbon Disulfide
Concen: 2.465 ppbv
RT: 4.62 min Scan# 525
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Tgt Ion	76	Resp	393175
Ion	Ratio	Lower	Upper
76	100		
44	19.1	14.7	22.1
78	9.3	7.4	11.2





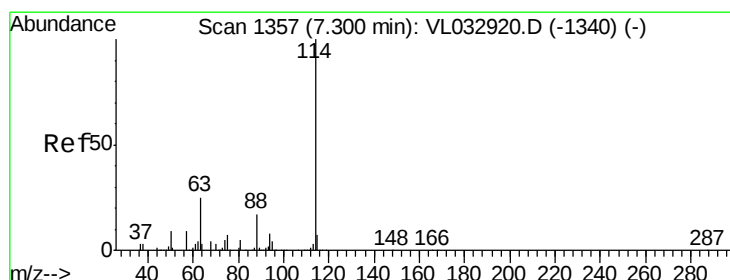
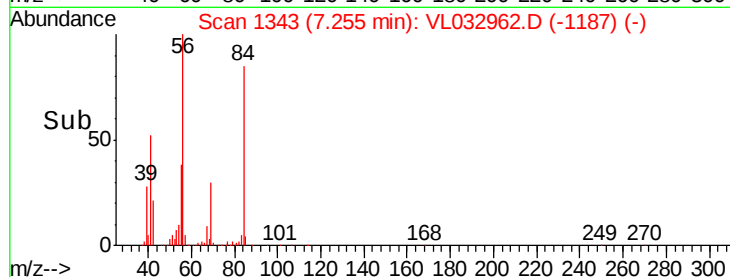
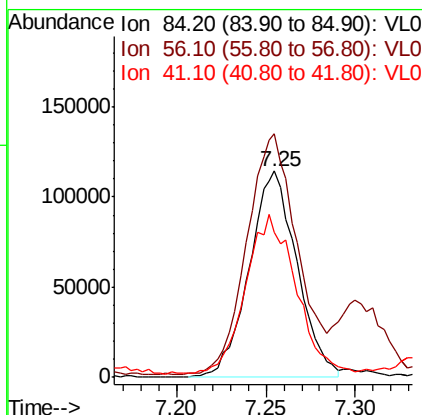
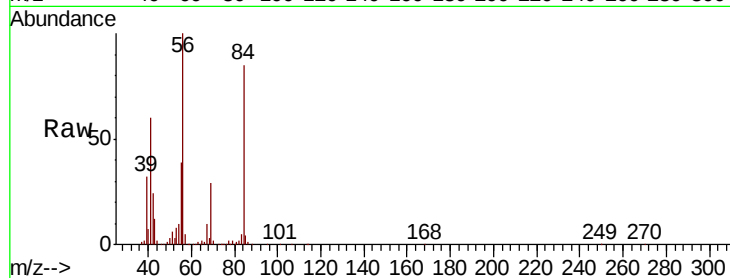
#30
Cyclohexane
Concen: 2.006 ppbv
RT: 7.25 min Scan# 1343
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Instrument :
MSVOA_L
ClientSampleId :
A55G2

Tot Ion	Ratio	Lower	Upper
84	100		
56	125.0	102.5	153.7
41	82.9	64.1	96.1

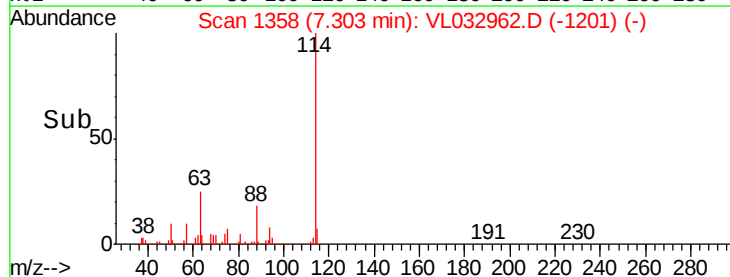
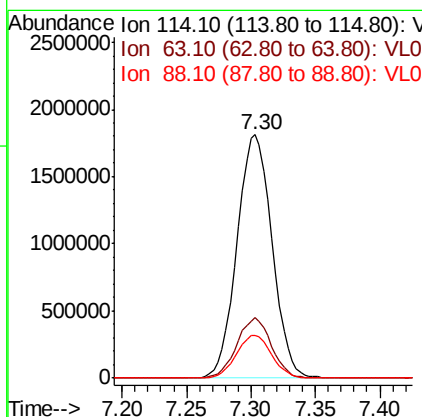
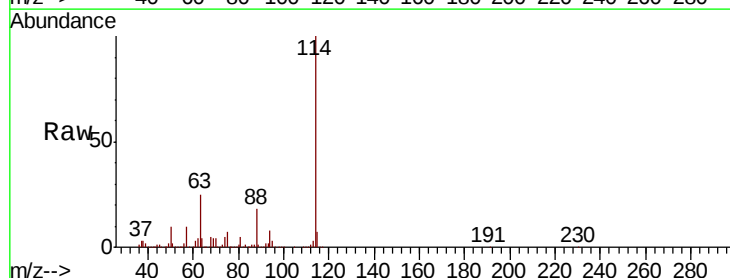
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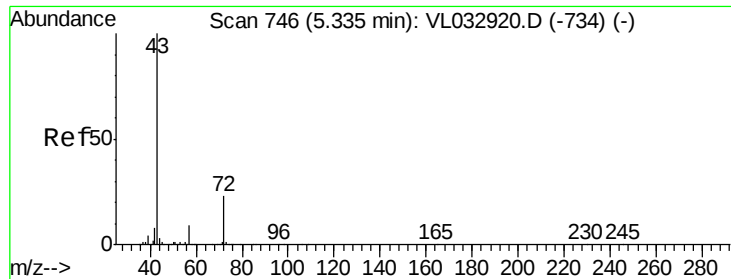
MMDadoda
12/13/2018 7:58:43 AM



#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 7.30 min Scan# 1358
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Tgt Ion	Ratio	Lower	Upper
114	100		
63	24.5	20.1	30.1
88	17.6	14.2	21.4





#34

2-Butanone

Concen: 15.470 ppbv

RT: 5.34 min Scan# 746

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampled :

A55G2

Tot Ion: 43 Resp: 2314663

Ion Ratio Lower Upper

43 100

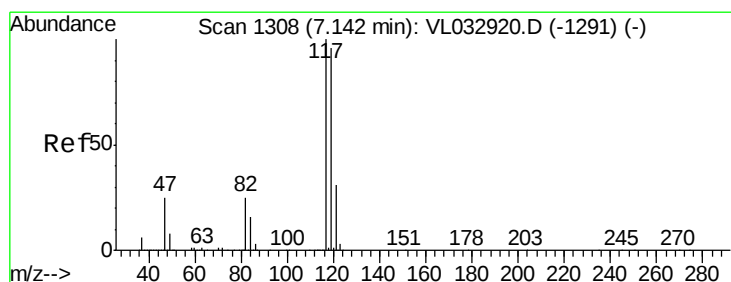
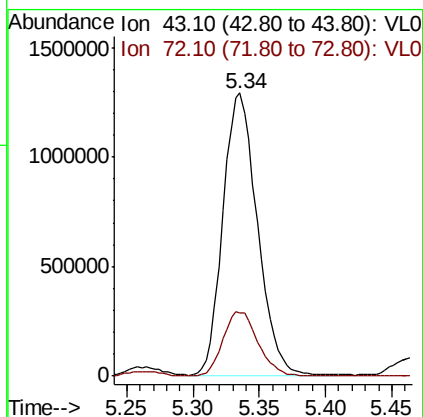
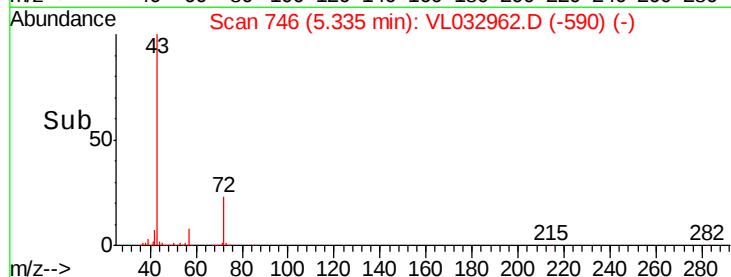
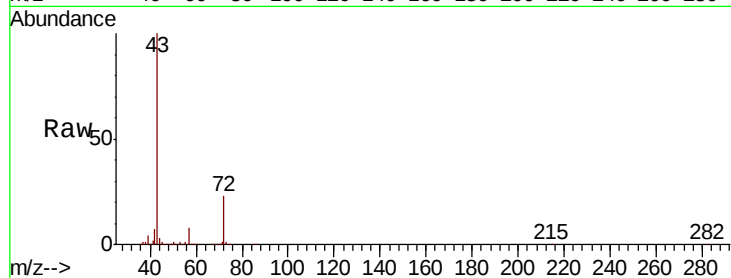
72 23.3 18.8 28.2

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#35

Carbon Tetrachloride

Concen: 0.082 ppbv m

RT: 7.14 min Scan# 1308

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

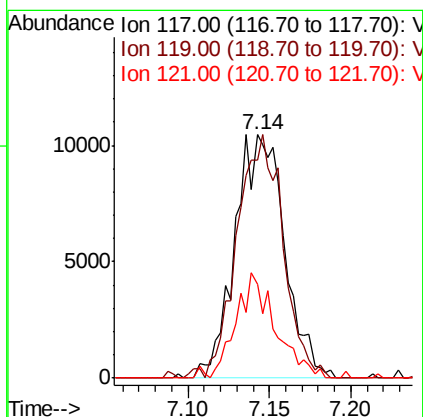
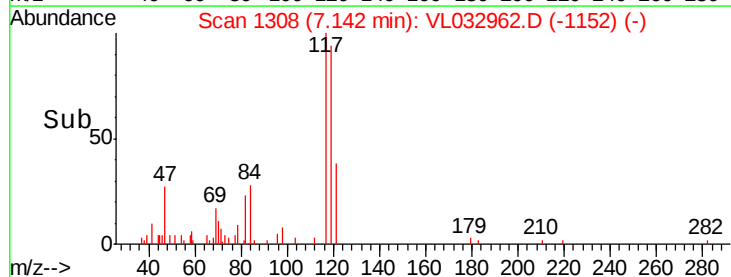
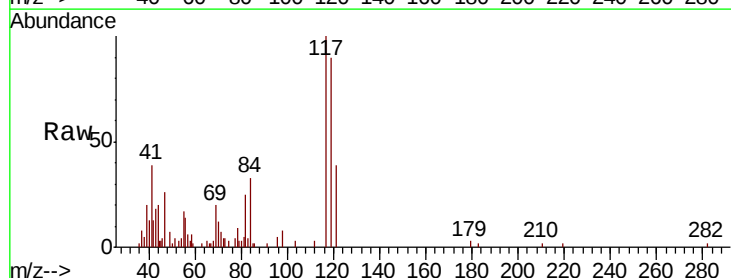
Tgt Ion: 117 Resp: 22177

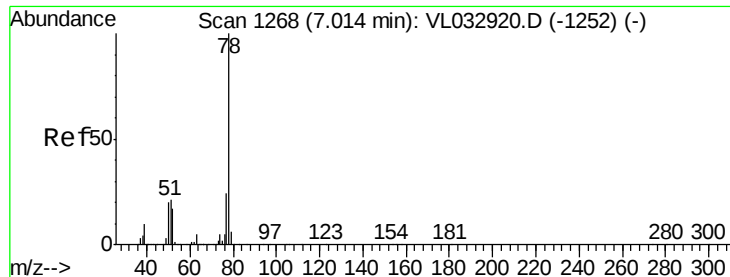
Ion Ratio Lower Upper

117 100

119 89.8 76.5 114.7

121 38.8 24.5 36.7#





#36

Benzene

Concen: 4.959 ppbv

RT: 7.02 min Scan# 1269

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 78 Resp: 1252870

Ion Ratio Lower Upper

78 100

77 23.6 18.9 28.3

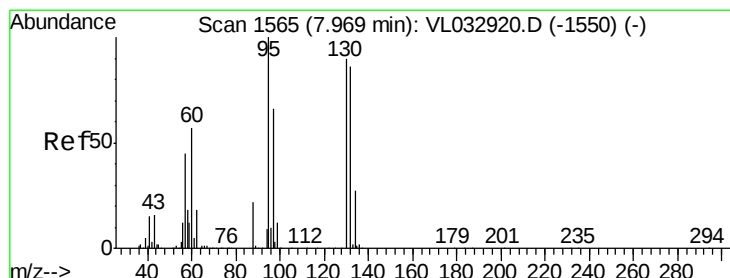
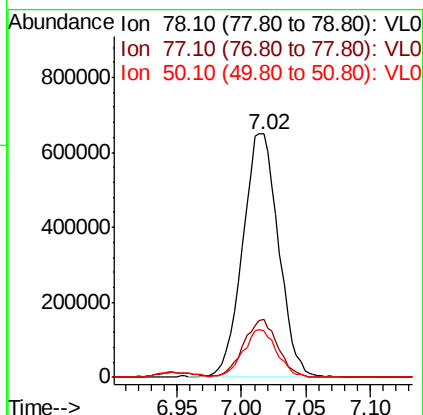
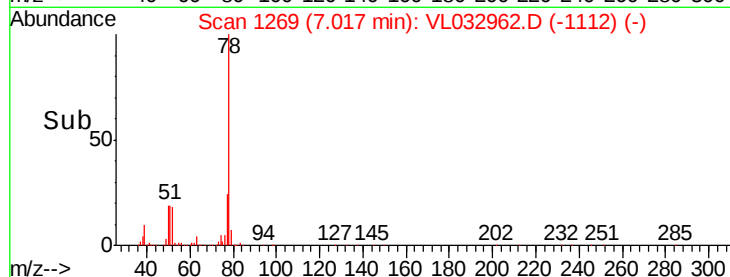
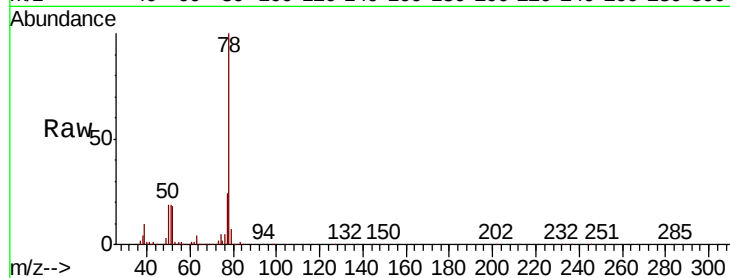
50 19.0 16.1 24.1

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#38

Trichloroethene

Concen: 0.597 ppbv

RT: 7.97 min Scan# 1565

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Tgt Ion: 130 Resp: 62773

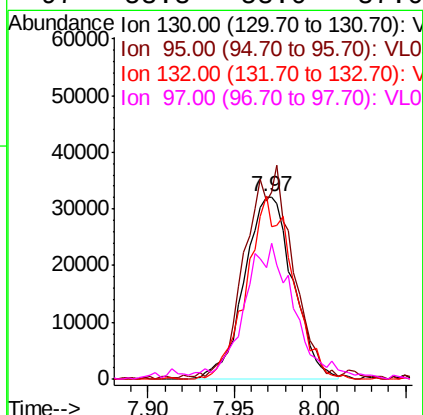
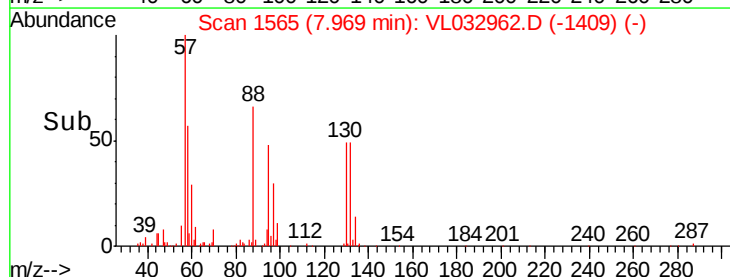
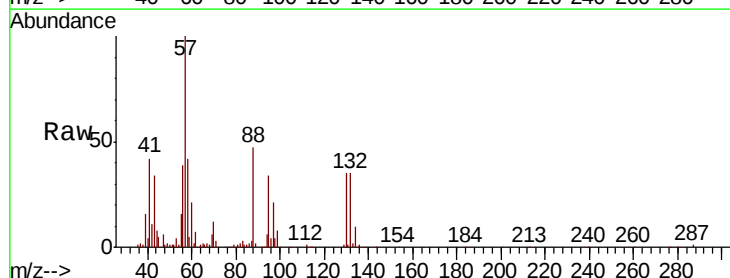
Ion Ratio Lower Upper

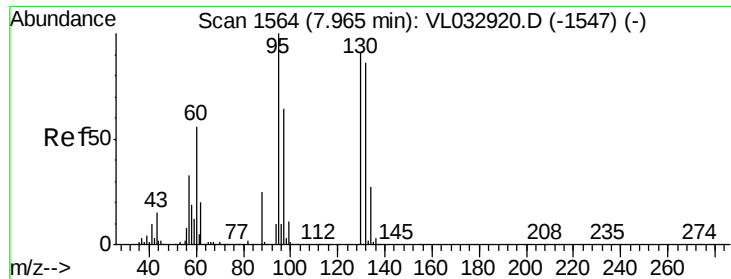
130 100

95 96.9 88.6 132.8

132 100.5 76.1 114.1

97 58.8 58.0 87.0





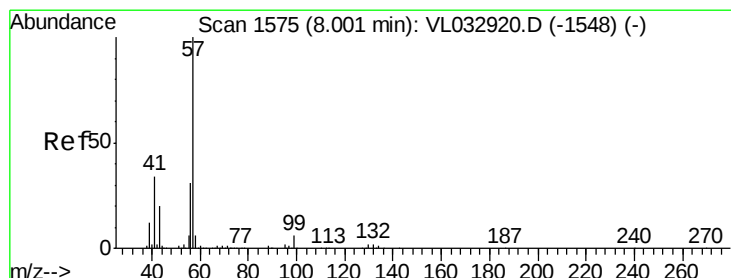
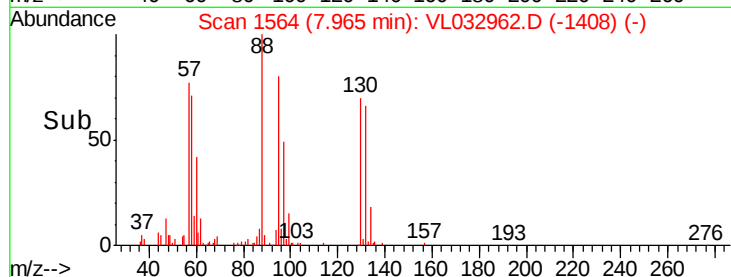
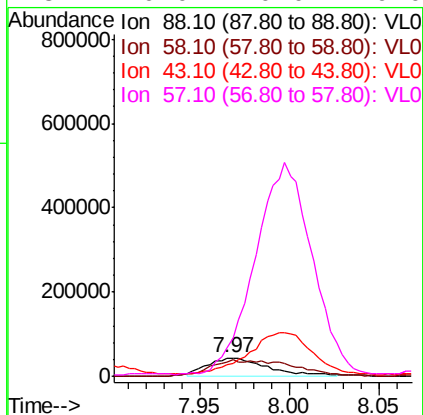
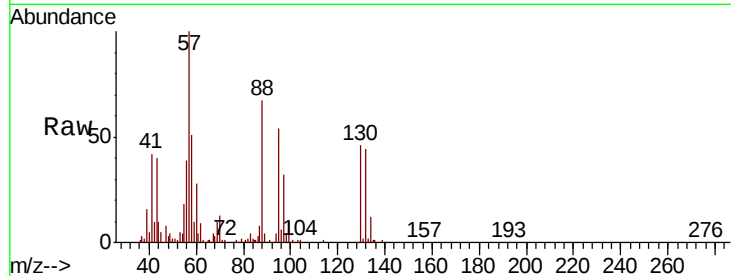
#40
 1,4-Dioxane
 Concen: 2.901 ppbv m
 RT: 7.97 min Scan# 1564
 Delta R.T. 0.00 min
 Lab File: VL032962.D
 Acq: 11 Dec 2018 20:00

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G2

Tot Ion	Ratio	Lower	Upper
88	100		
58	121.3	107.4	161.2
43	77.3	0.0	0.0#
57	0.0	0.0	0.0

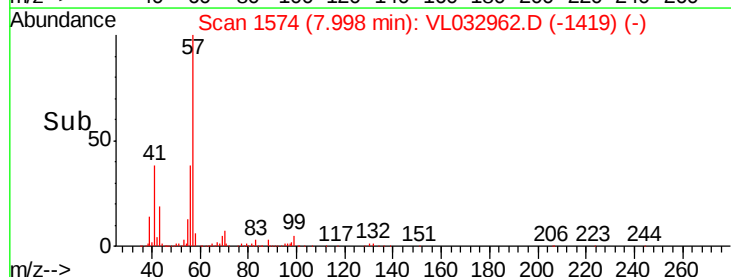
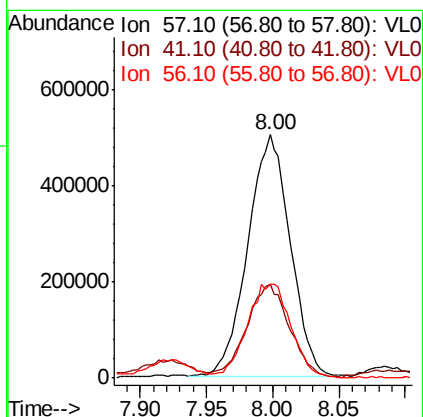
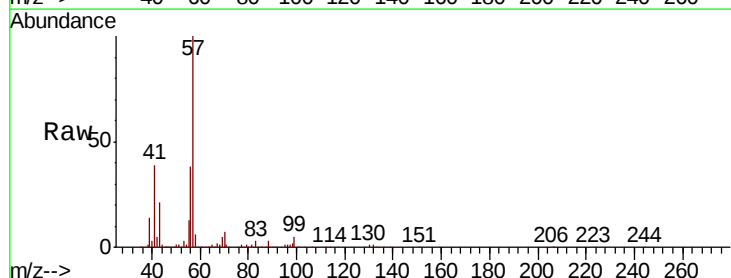
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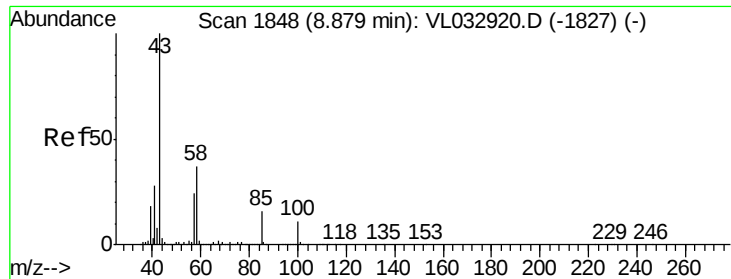
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#44
 2,2,4-Trimethylpentane
 Concen: 2.595 ppbv
 RT: 8.00 min Scan# 1574
 Delta R.T. -0.00 min
 Lab File: VL032962.D
 Acq: 11 Dec 2018 20:00

Tgt Ion	Ratio	Lower	Upper
57	100		
41	39.9	27.0	40.4
56	40.3	24.6	37.0#





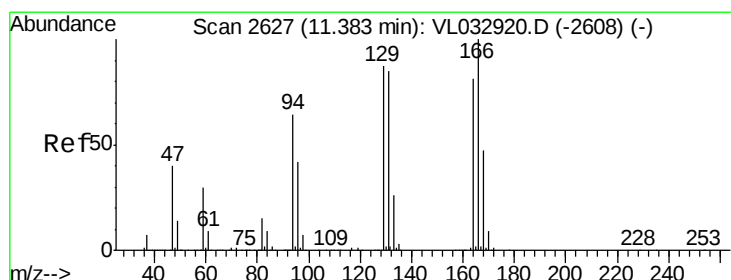
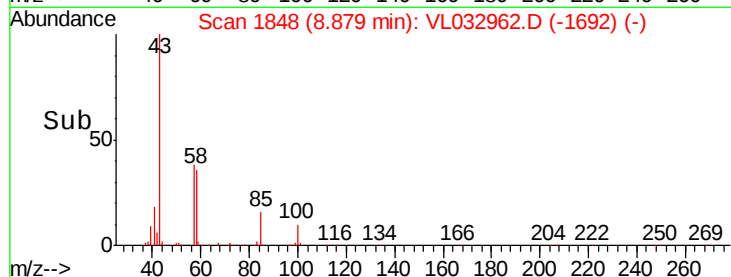
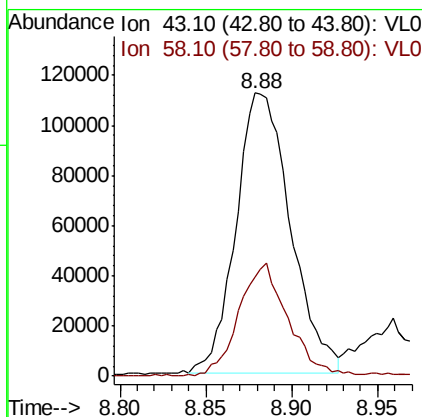
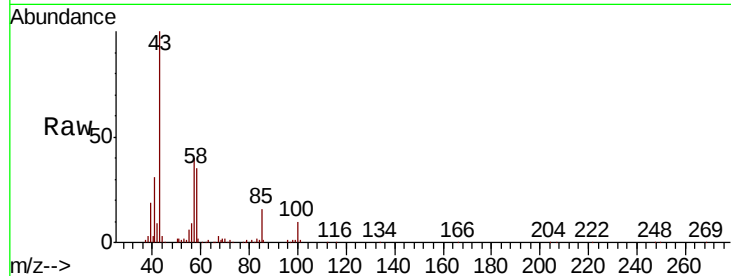
#50
4-Methyl-2-Pentanone
Concen: 1.028 ppbv
RT: 8.88 min Scan# 1848
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Instrument :
MSVOA_L
ClientSampleId :
A55G2

Tot Ion: 43 Resp: 245875
Ion Ratio Lower Upper
43 100
58 37.0 29.0 43.4

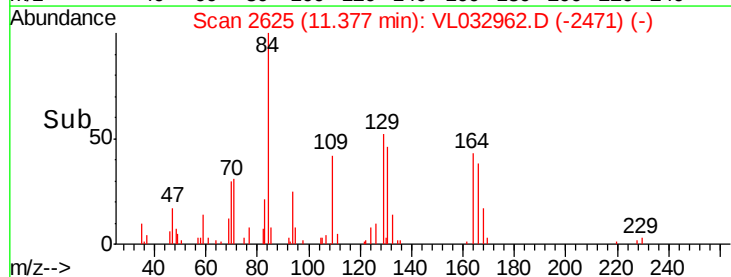
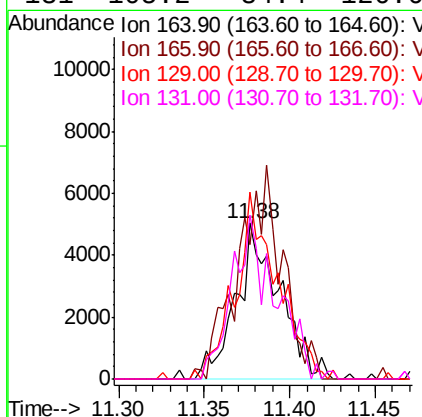
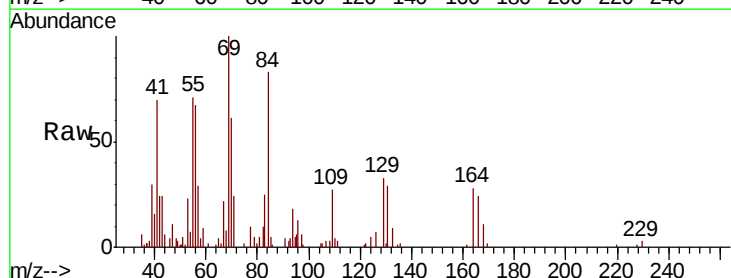
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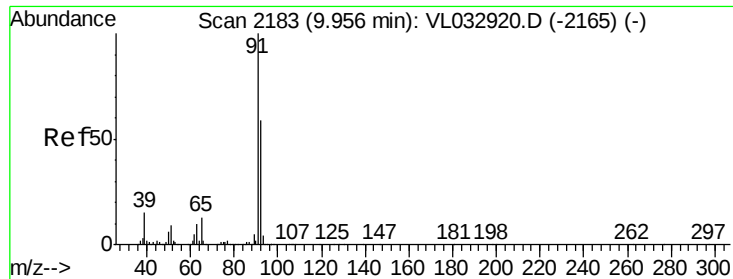
MMDadoda
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#52
Tetrachloroethene
Concen: 0.097 ppbv m
RT: 11.38 min Scan# 2625
Delta R.T. -0.01 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Tgt Ion: 164 Resp: 8900
Ion Ratio Lower Upper
164 100
166 86.6 98.8 148.2#
129 120.3 85.5 128.3
131 105.2 84.4 126.6





#53

Toluene

Concen: 11.799 ppbv

RT: 9.96 min Scan# 2183

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 91 Resp: 3161641

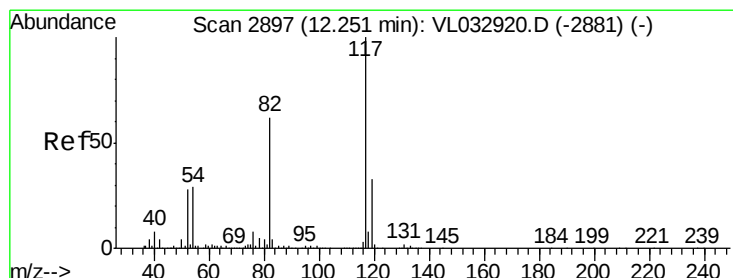
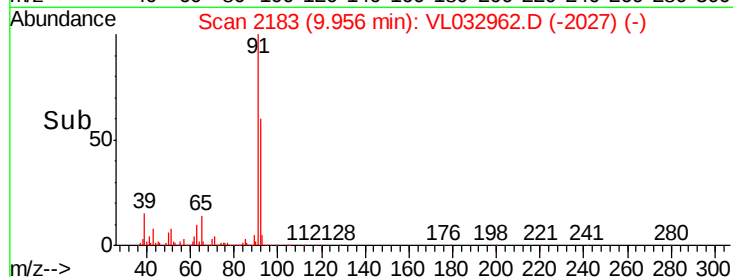
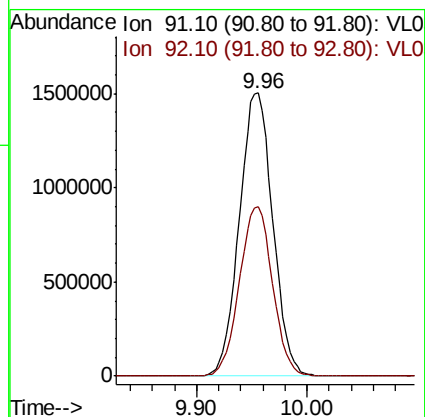
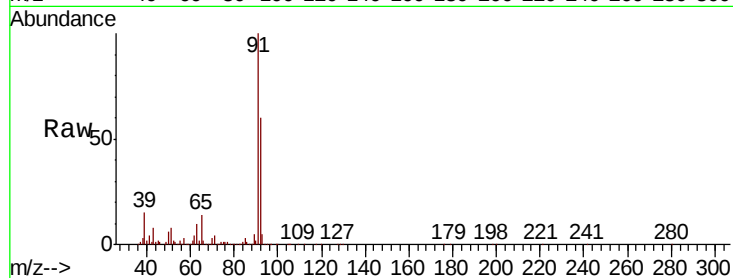
Ion Ratio Lower Upper

91 100

92 59.2 47.4 71.0

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#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.24 min Scan# 2894

Delta R.T. -0.01 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

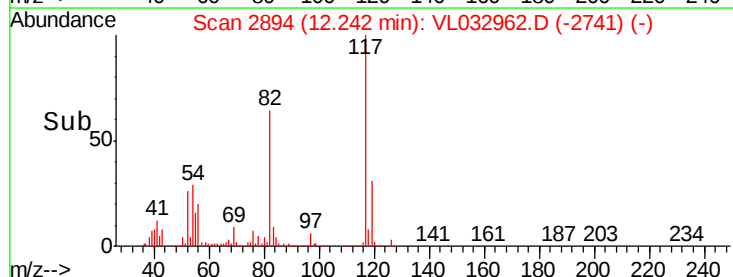
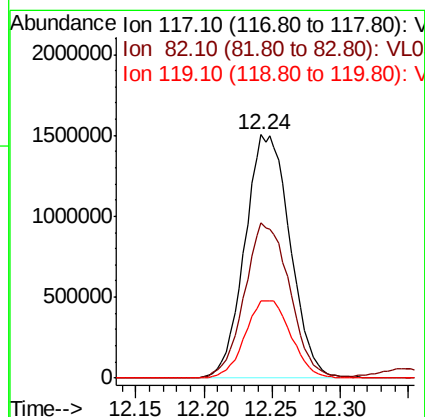
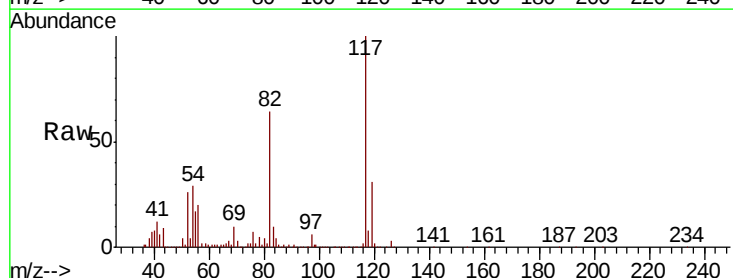
Tgt Ion: 117 Resp: 3452624

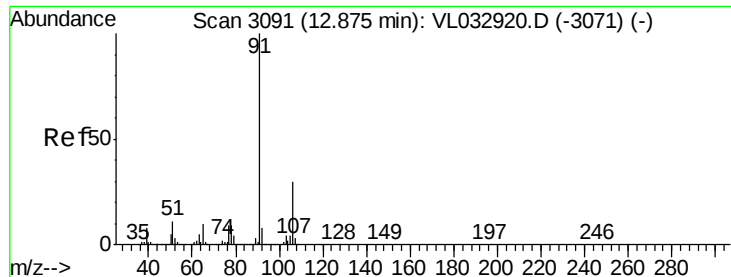
Ion Ratio Lower Upper

117 100

82 63.9 47.8 71.8

119 32.4 43.1 64.7#





#58

Ethyl Benzene

Concen: 1.470 ppbv

RT: 12.87 min Scan# 3090

Delta R.T. -0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampleId :

A55G2

Tot Ion: 91 Resp: 541349

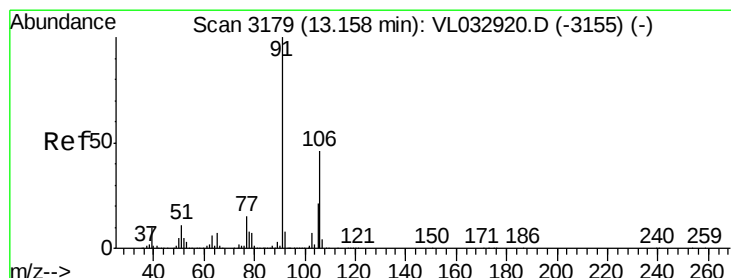
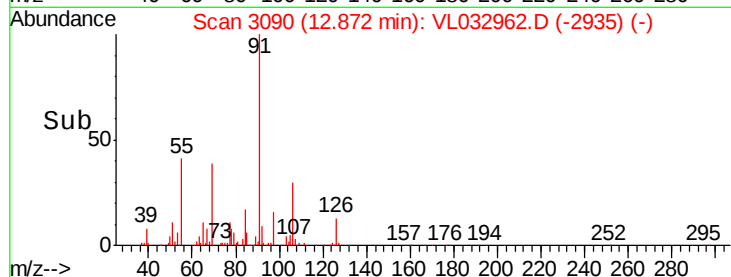
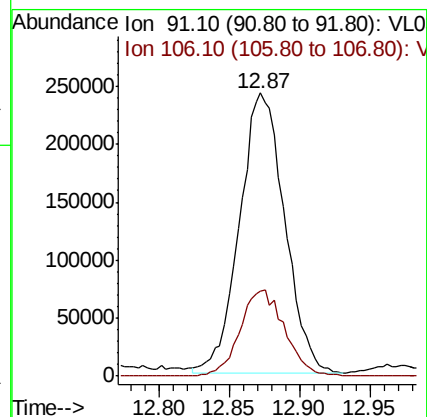
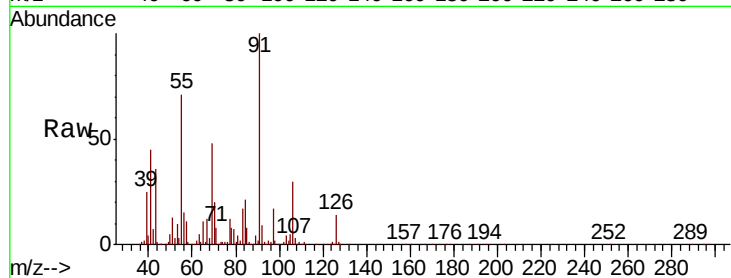
Ion Ratio Lower Upper

91 100

106 30.2 23.9 35.9

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#59

m/p-Xylene

Concen: 3.072 ppbv

RT: 13.14 min Scan# 3172

Delta R.T. -0.02 min

Lab File: VL032962.D

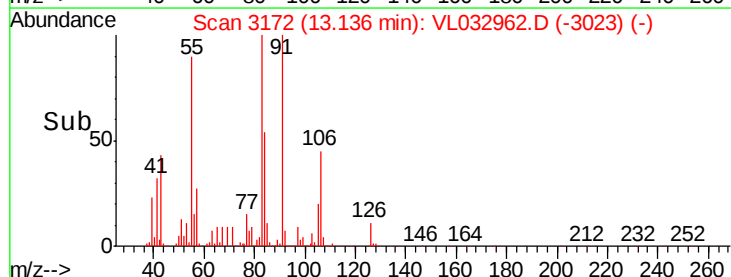
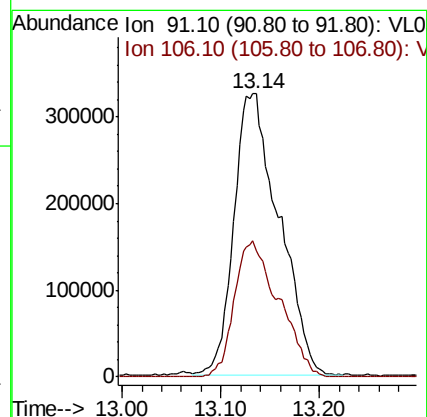
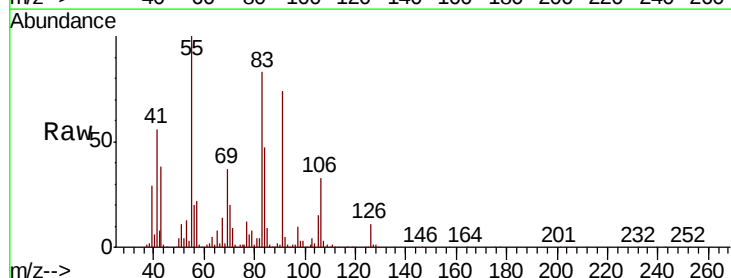
Acq: 11 Dec 2018 20:00

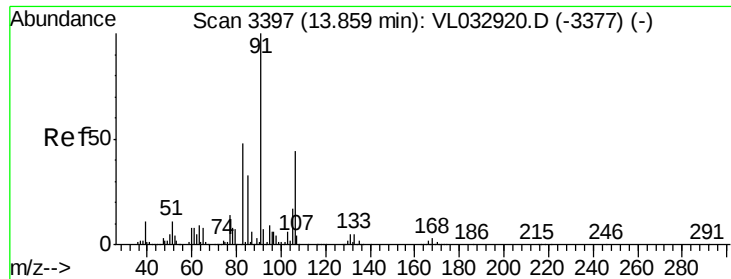
Tgt Ion: 91 Resp: 1025693

Ion Ratio Lower Upper

91 100

106 47.7 0.0 0.0#





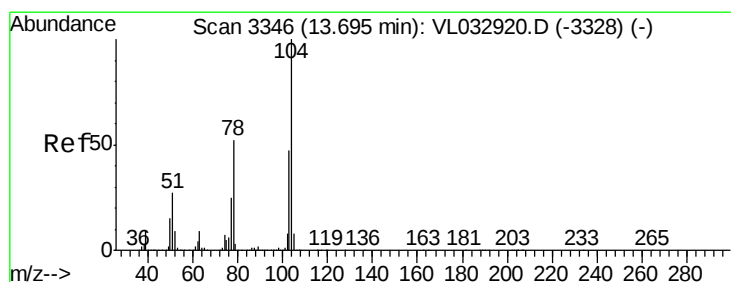
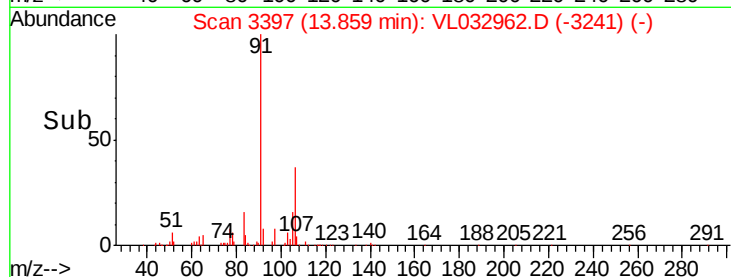
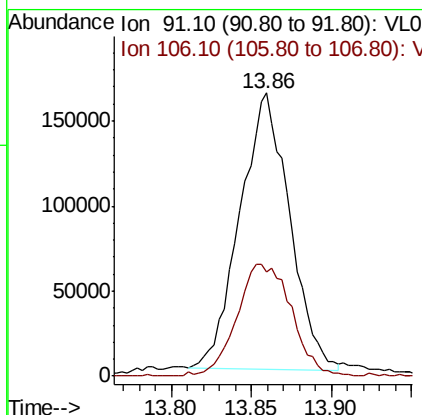
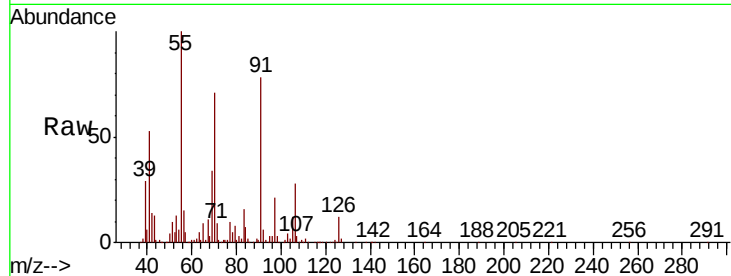
#60
o-Xylene
Concen: 1.026 ppbv
RT: 13.86 min Scan# 3397
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Instrument :
MSVOA_L
ClientSampleId :
A55G2

Tot Ion	Ratio	Lower	Upper
91	100		
106	45.2	21.9	65.8

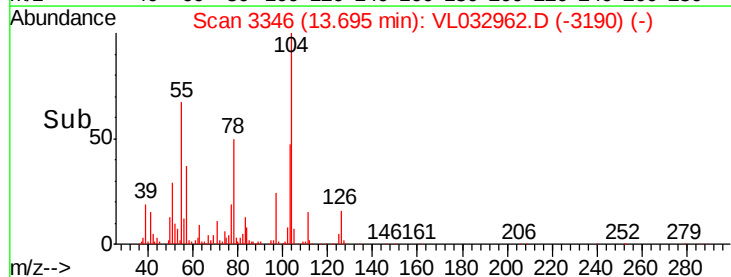
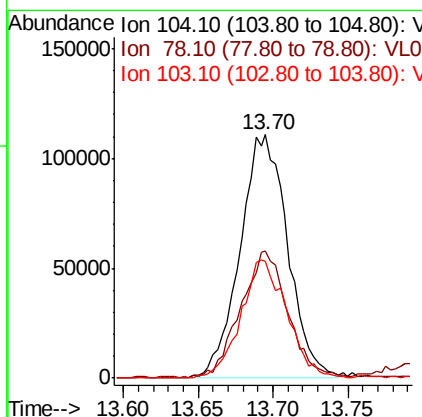
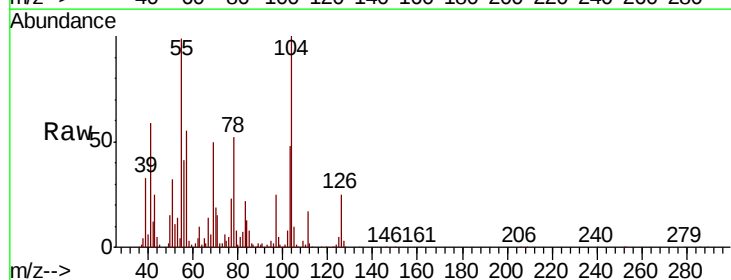
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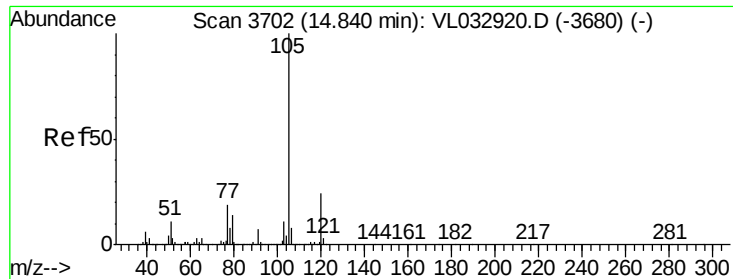
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#61
Styrene
Concen: 1.095 ppbv
RT: 13.70 min Scan# 3346
Delta R.T. 0.00 min
Lab File: VL032962.D
Acq: 11 Dec 2018 20:00

Tgt Ion	Ratio	Lower	Upper
104	100		
78	51.1	42.0	63.0
103	47.1	38.3	57.5





#62

Isopropylbenzene

Concen: 28.921 ppbv

RT: 14.84 min Scan# 3702

Delta R.T. 0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

Instrument :

MSVOA_L

ClientSampled :

A55G2

Tot Ion:105 Resp:13607015

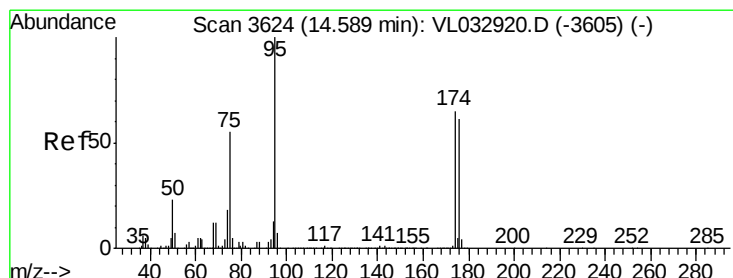
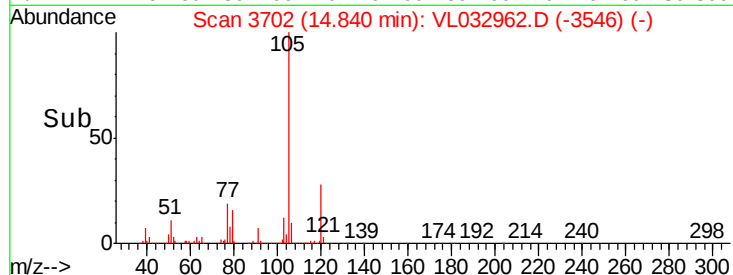
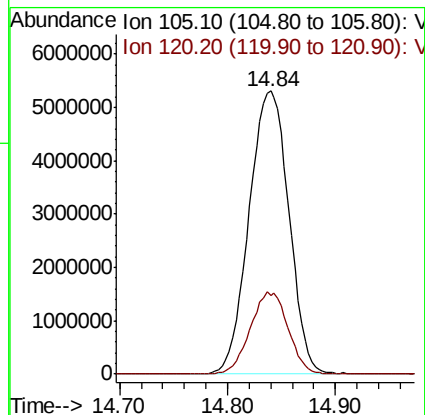
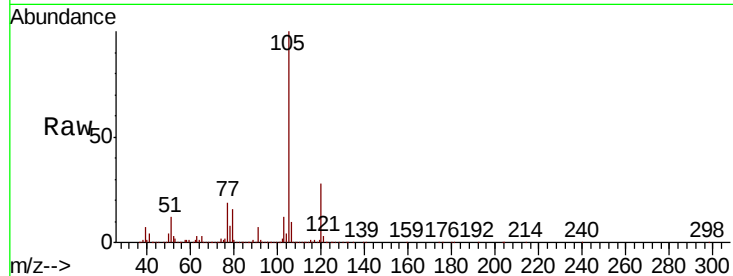
Ion Ratio Lower Upper

105 100

120 27.5 20.3 30.5

Manual Integrations
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MMDadoda
12/13/2018 7:58:43 AM



#68

1-Bromo-4-Fluorobenzene

Concen: 10.355 ppbv

RT: 14.59 min Scan# 3623

Delta R.T. -0.00 min

Lab File: VL032962.D

Acq: 11 Dec 2018 20:00

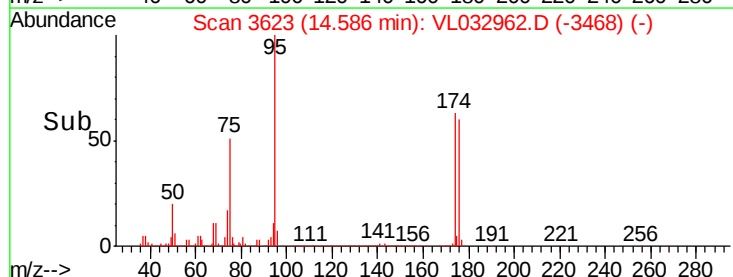
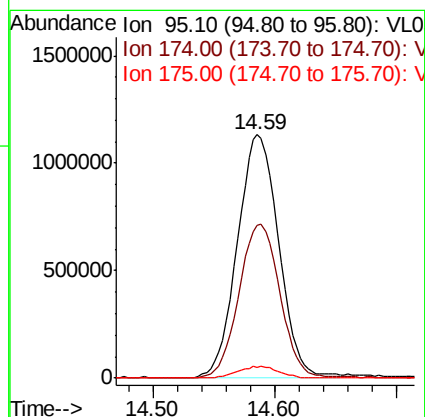
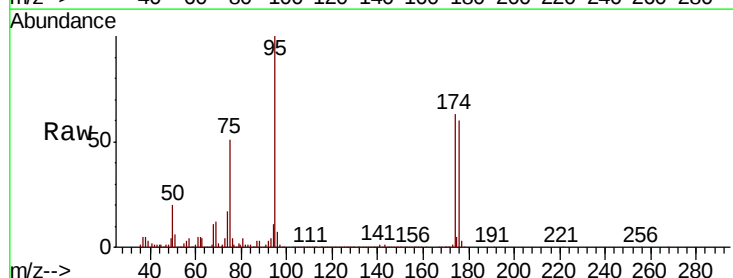
Tgt Ion: 95 Resp: 2641341

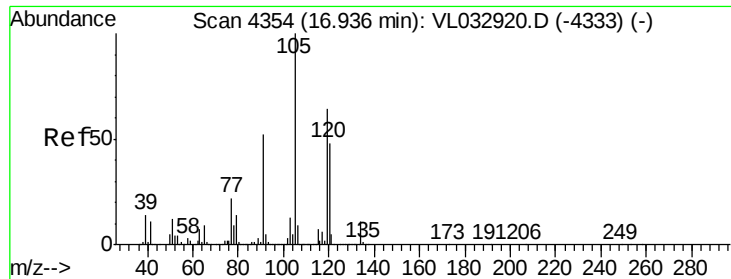
Ion Ratio Lower Upper

95 100

174 63.6 51.4 77.0

175 4.9 3.8 5.6





#74
 1,2,4-Trimethylbenzene
 Concen: 0.332 ppbv
 RT: 16.94 min Scan# 4354
 Delta R.T. 0.00 min
 Lab File: VL032962.D
 Acq: 11 Dec 2018 20:00

Instrument :
 MSVOA_L
 ClientSampleId :
 A55G2

Tot Ion	Ratio	Resp Lower	Upper
105	100		
120	41.3	38.6	58.0
91	7.7	41.7	62.5#
77	9.0	17.4	26.2#

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