

Data Path : Z:\VOASRV\HPCHEM1\MSVOA L\DATA\VL052919\
 Data File : VL033848.D
 Acq On : 29 May 2019 23:32
 Operator : SY/AP
 Sample : K3067-03
 Misc : 400ml/MSVOA L
 ALS Vial : 1 Sample Multiplier: 1

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6-20190523-0

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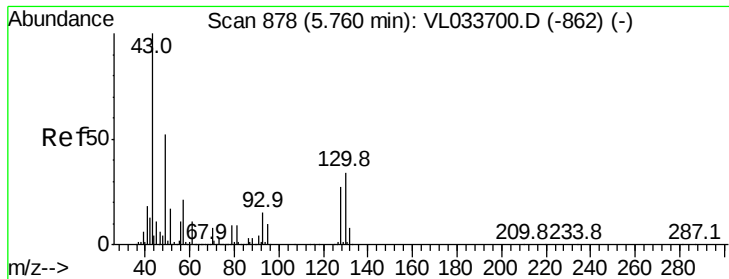
Quant Time: May 30 02:47:00 2019
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA L\METHODS\VL051719AIR.M
 Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_L Fri May 1
 QLast Update : Fri May 17 08:15:41 2019
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.76	49	763127	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.28	114	1721219	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.23	117	1816149	10.00	ppbv	0.00

System Monitoring Compounds		R.T.	QIon	Response	Conc	Units	Dev(Min)
68) 1-Bromo-4-Fluorobenzene	14.56	95	1432014	9.73	ppbv	-0.01	
Spiked Amount	10.000	Range	65 - 135	Recovery	=	97.30%	

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
2) Dichlorodifluoromethane	3.07	85	17371m	0.108	ppbv	
3) Chlorodifluoromethane	3.01	51	24114m	0.276	ppbv	
4) Chloromethane	3.17	50	7495m	0.150	ppbv	
11) Trichlorofluoromethane	4.00	101	44750	0.292	ppbv	96
13) Ethanol	3.65	45	222490	18.514	ppbv	100
15) Acetone	3.89	43	657880	6.213	ppbv	97
17) tert-Butyl alcohol	4.36	59	20235	0.236	ppbv	95
19) Isopropyl Alcohol	4.03	45	262008	3.838	ppbv #	95
20) Methylene Chloride	4.40	84	29261	0.718	ppbv #	95
26) Hexane	5.77	57	109718	1.372	ppbv #	44
27) Carbon Disulfide	4.62	76	19823	0.181	ppbv #	83
29) Chloroform	5.84	83	157536	1.070	ppbv	99
32) 1,1,1-Trichloroethane	6.61	97	5724m	0.039	ppbv	
34) 2-Butanone	5.33	43	143918	1.349	ppbv	98
35) Carbon Tetrachloride	7.12	117	5826m	0.042	ppbv	
36) Benzene	7.00	78	34423m	0.220	ppbv	
38) Trichloroethene	7.95	130	39014	0.672	ppbv	88
44) 2,2,4-Trimethylpentane	7.98	57	25616m	0.097	ppbv	
52) Tetrachloroethene	11.37	164	212780	3.866	ppbv	99
53) Toluene	9.94	91	396925	2.350	ppbv	97
59) m/p-Xylene	13.11	91	85597m	0.407	ppbv	
60) o-Xylene	13.84	91	45974	0.217	ppbv	95
74) 1,2,4-Trimethylbenzene	16.91	105	61629	0.240	ppbv #	77

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



#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.76 min Scan# 877

Delta R.T. -0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

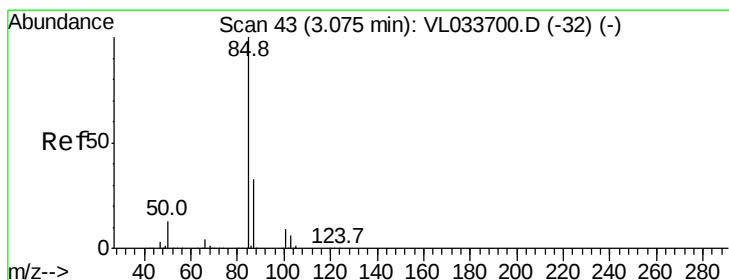
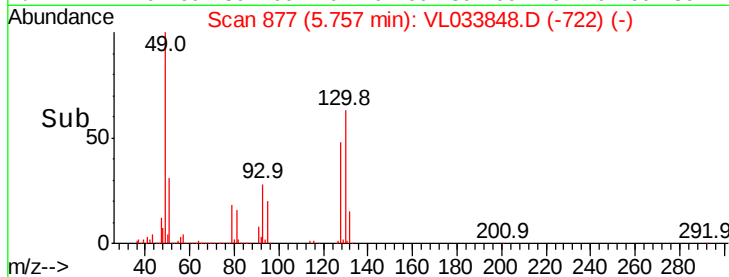
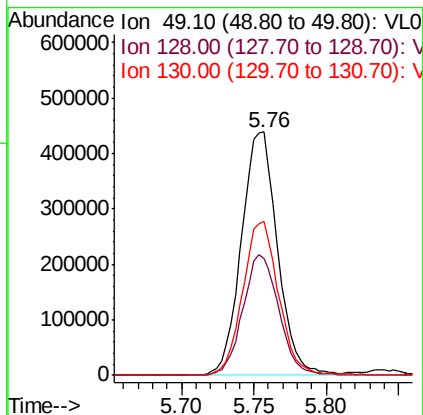
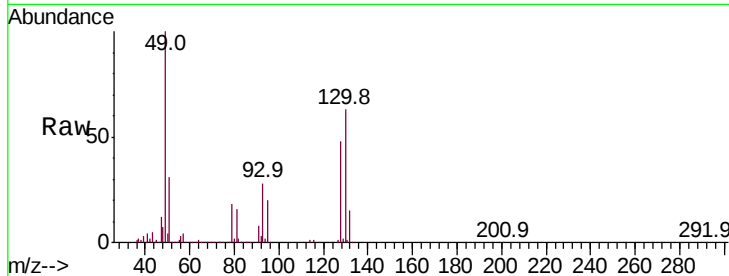
ClientSampleId :

SG-6-20190523-0

Tot Ion:	49	Resp:	763127
Ion Ratio	Lower	Upper	
49	100		
128	49.5	25.2	75.6
130	63.3	32.5	97.5

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#2

Dichlorodifluoromethane

Concen: 0.108 ppbv m

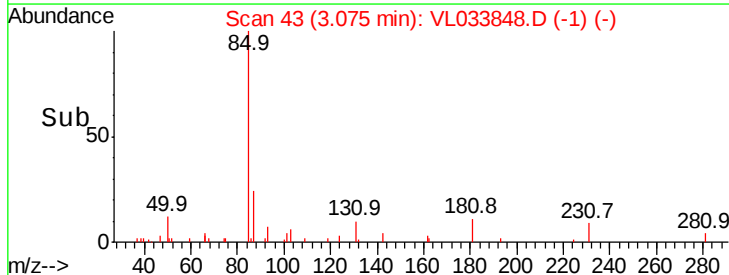
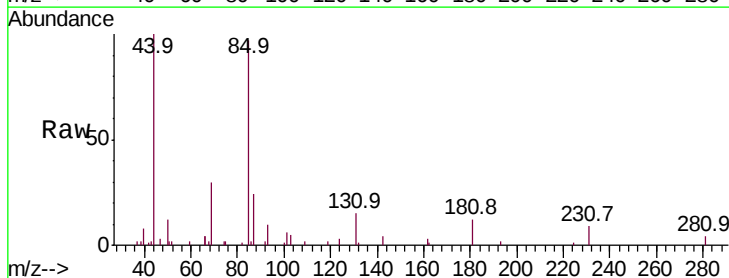
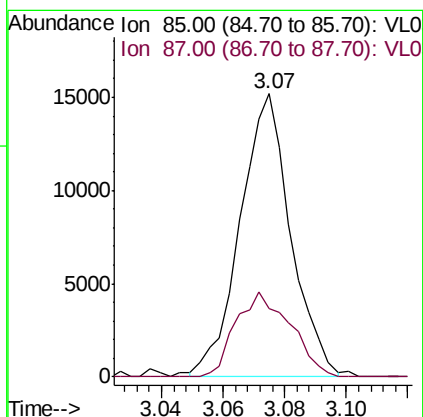
RT: 3.07 min Scan# 43

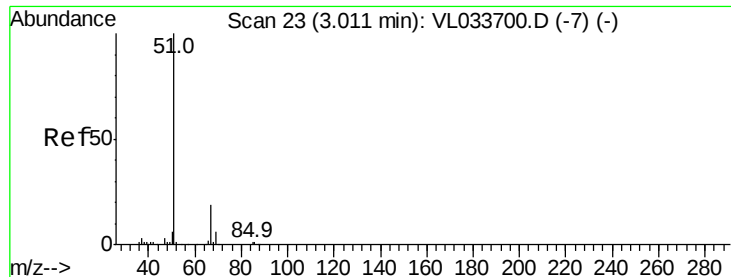
Delta R.T. 0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Tgt Ion:	85	Resp:	17371
Ion Ratio	Lower	Upper	
85	100		
87	24.2	26.3	39.5#





#3

Chlorodifluoromethane

Concen: 0.276 ppbv m

RT: 3.01 min Scan# 23

Delta R.T. 0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion: 51 Resp: 24114

Ion Ratio Lower Upper

51 100

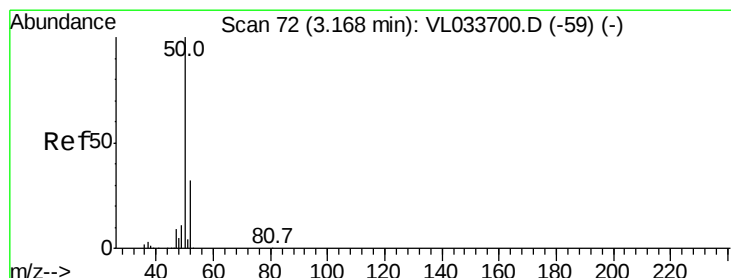
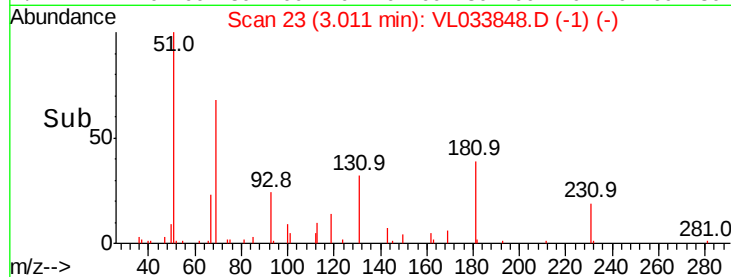
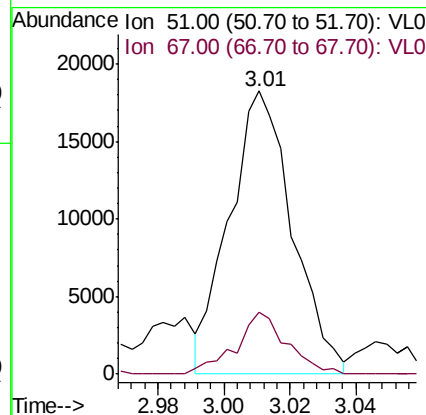
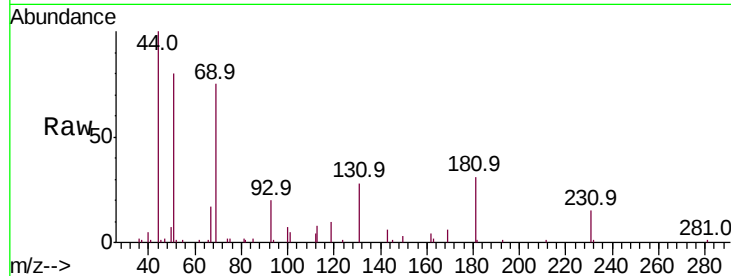
67 17.7 15.6 23.4

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#4

Chloromethane

Concen: 0.150 ppbv m

RT: 3.17 min Scan# 73

Delta R.T. 0.00 min

Lab File: VL033848.D

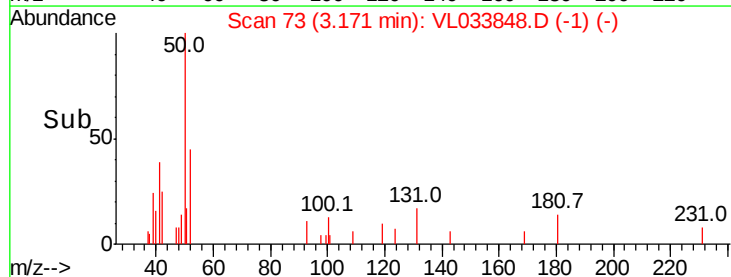
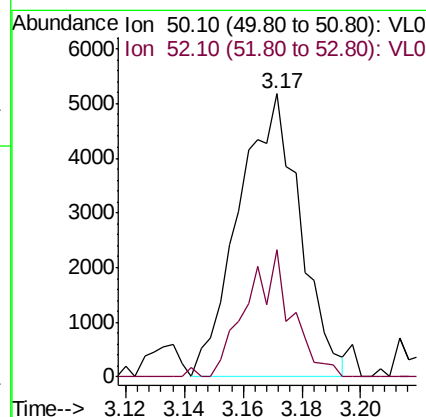
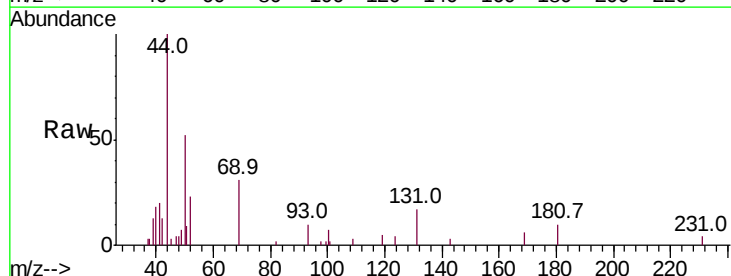
Acq: 29 May 2019 23:32

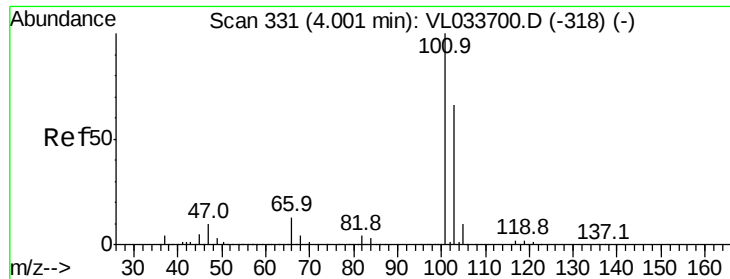
Tgt Ion: 50 Resp: 7495

Ion Ratio Lower Upper

50 100

52 45.1 25.7 38.5#





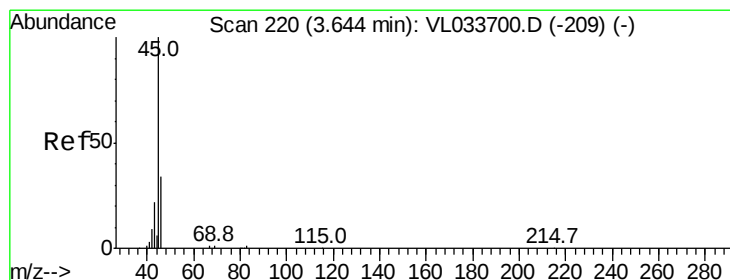
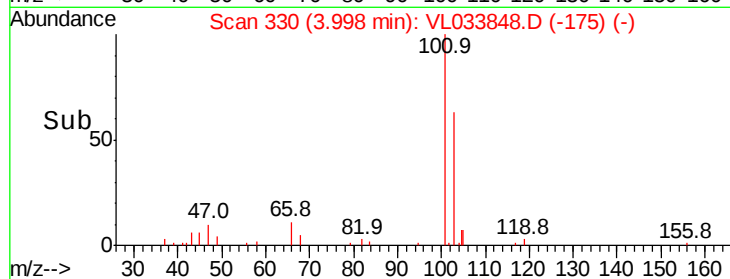
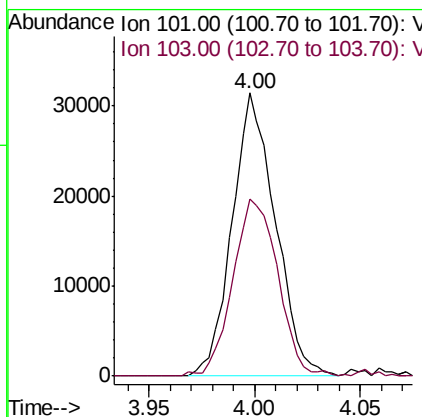
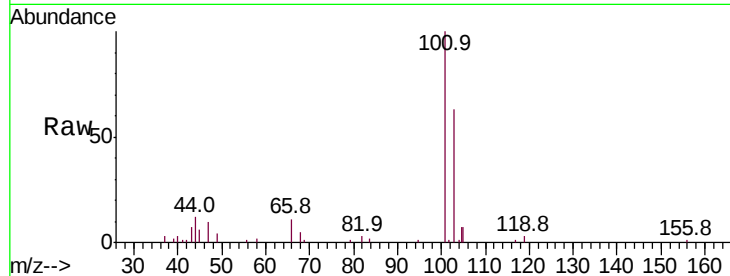
#11
 Trichlorofluoromethane
 Concen: 0.292 ppbv
 RT: 4.00 min Scan# 330
 Delta R.T. -0.00 min
 Lab File: VL033848.D
 Acq: 29 May 2019 23:32

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6-20190523-0

Tot Ion	Ratio	Lower	Upper
101	100		
103	62.8	52.6	78.8

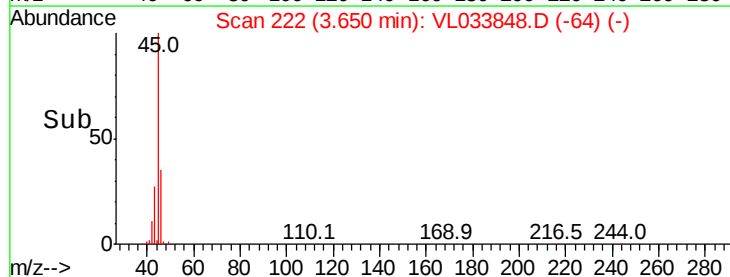
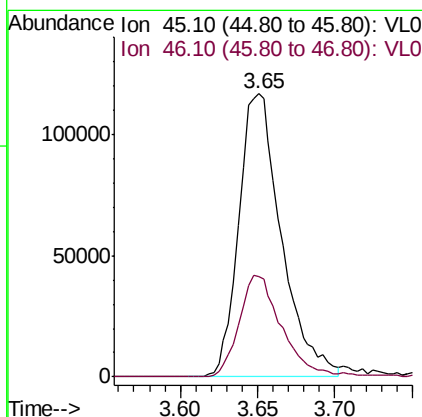
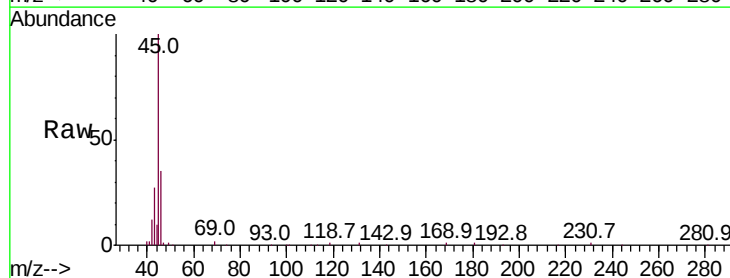
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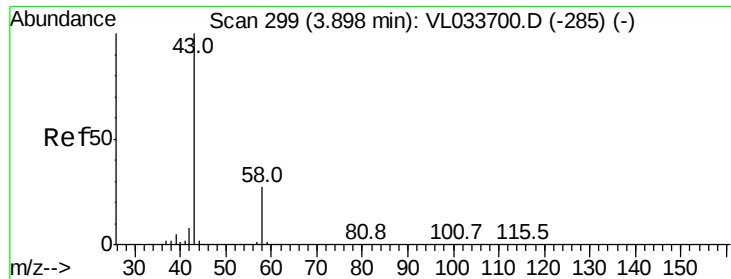
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#13
 Ethanol
 Concen: 18.514 ppbv
 RT: 3.65 min Scan# 222
 Delta R.T. 0.01 min
 Lab File: VL033848.D
 Acq: 29 May 2019 23:32

Tgt Ion	Ratio	Lower	Upper
45	100		
46	36.9	14.8	59.0





#15

Acetone

Concen: 6.213 ppbv

RT: 3.89 min Scan# 298

Delta R.T. -0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion: 43 Resp: 657880

Ion Ratio Lower Upper

43 100

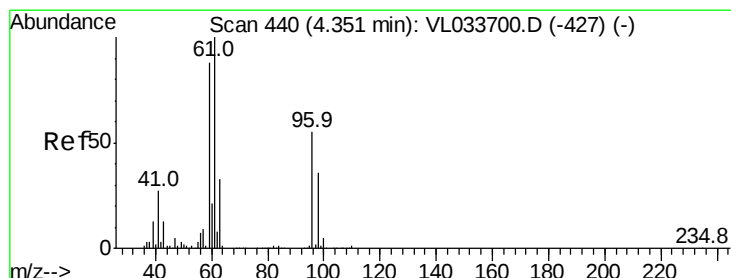
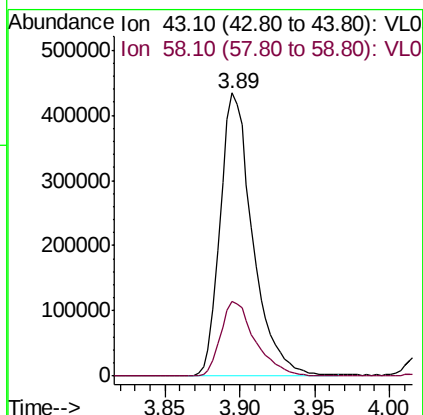
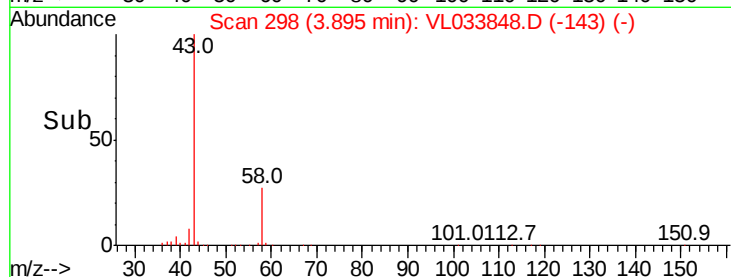
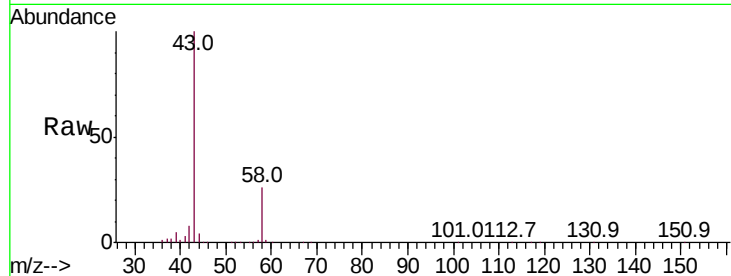
58 28.0 21.3 31.9

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5/31/2019 12:45:32 PM



#17

tert-Butyl alcohol

Concen: 0.236 ppbv

RT: 4.36 min Scan# 444

Delta R.T. 0.01 min

Lab File: VL033848.D

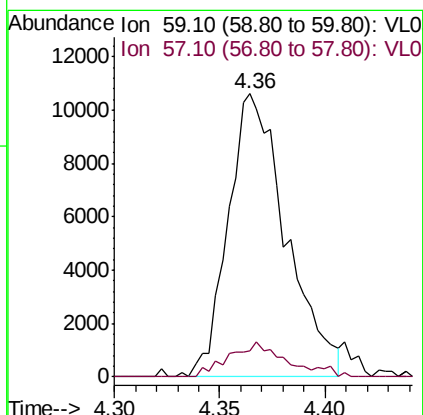
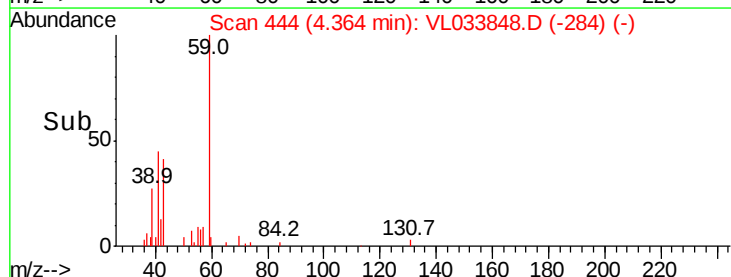
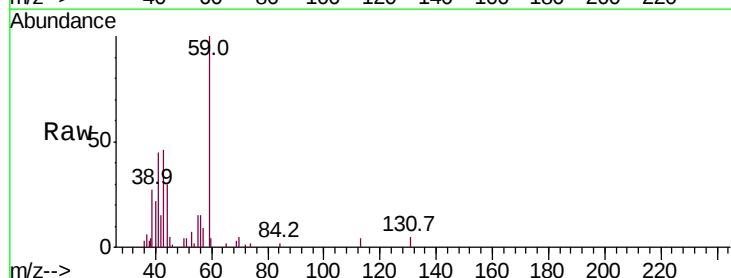
Acq: 29 May 2019 23:32

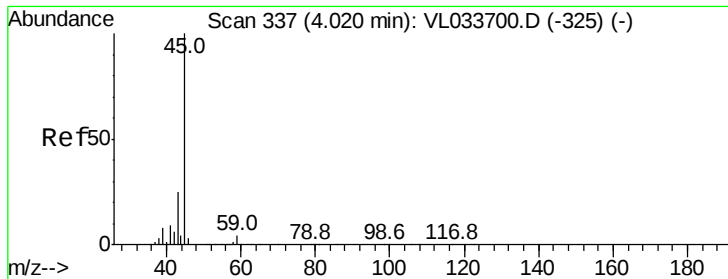
Tgt Ion: 59 Resp: 20235

Ion Ratio Lower Upper

59 100

57 12.2 8.4 12.6





#19

Isopropyl Alcohol

Concen: 3.838 ppbv

RT: 4.03 min Scan# 339

Delta R.T. 0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion: 45 Resp: 262008

Ion Ratio Lower Upper

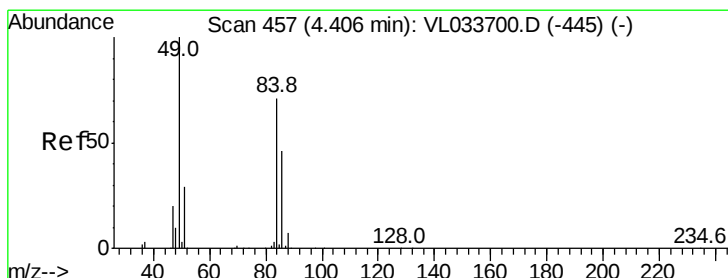
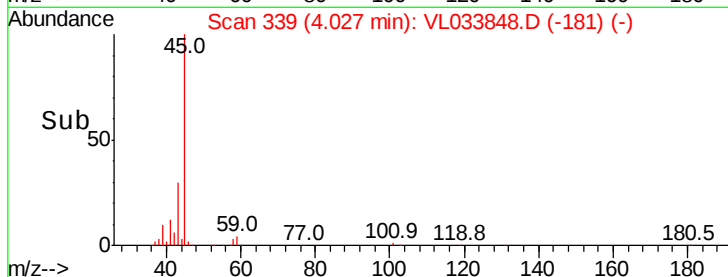
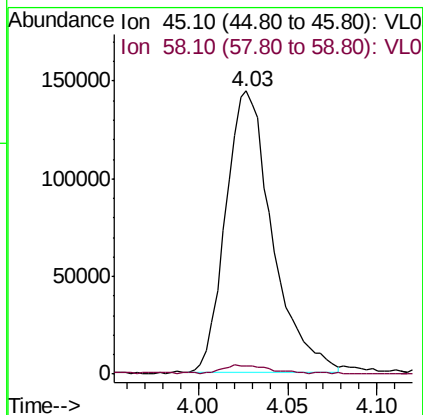
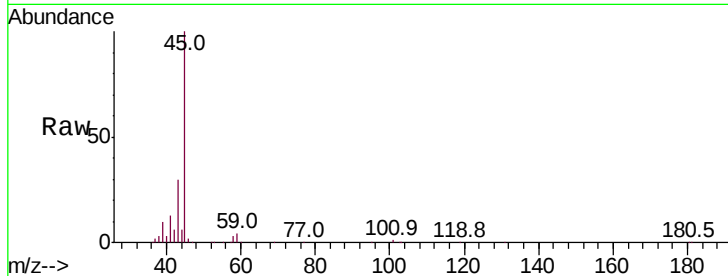
45 100

58 3.7 1.6 2.4#

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5/31/2019 12:45:32 PM



#20

Methylene Chloride

Concen: 0.718 ppbv

RT: 4.40 min Scan# 456

Delta R.T. -0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Tgt Ion: 84 Resp: 29261

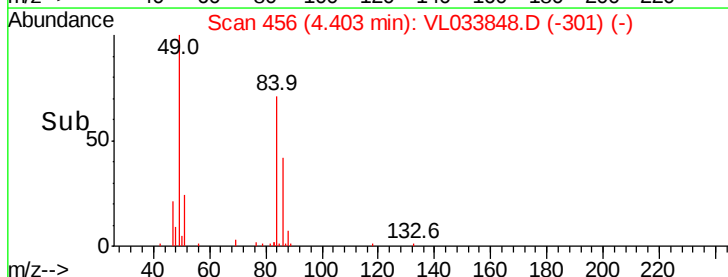
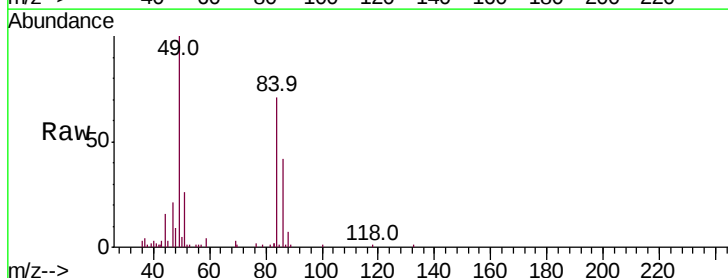
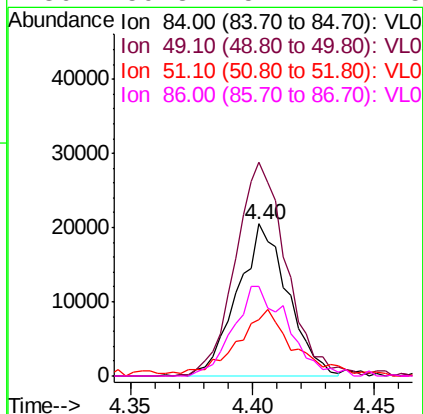
Ion Ratio Lower Upper

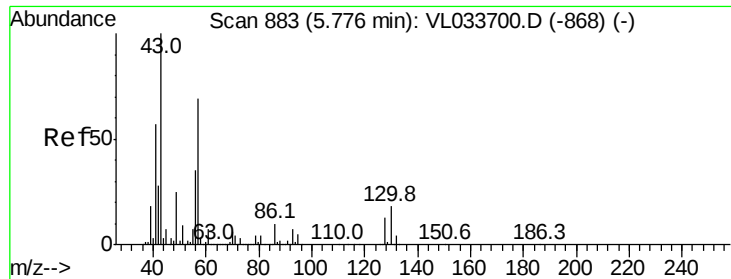
84 100

49 139.5 112.8 169.2

51 32.5 33.4 50.0#

86 59.3 51.7 77.5





#26

Hexane

Concen: 1.372 ppbv

RT: 5.77 min Scan# 881

Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion: 57 Resp: 109718

Ion Ratio Lower Upper

57 100

41 98.4 69.8 104.6

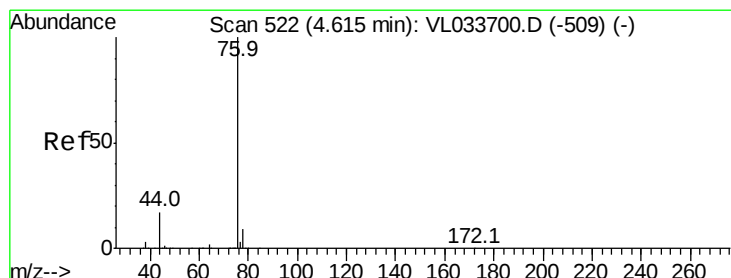
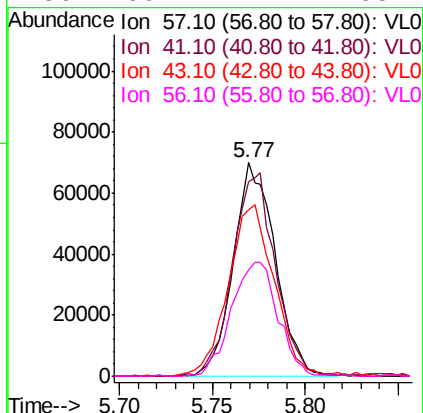
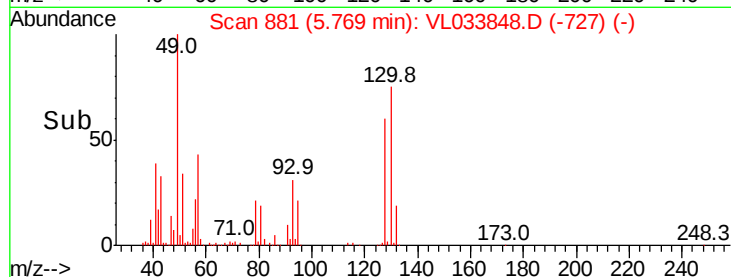
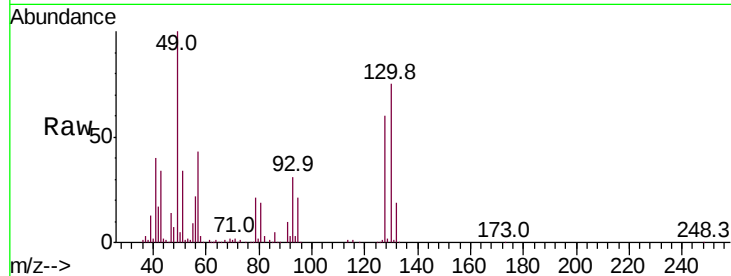
43 89.5 181.8 272.6#

56 60.1 42.1 63.1

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5/31/2019 12:45:32 PM



#27

Carbon Disulfide

Concen: 0.181 ppbv

RT: 4.62 min Scan# 524

Delta R.T. 0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

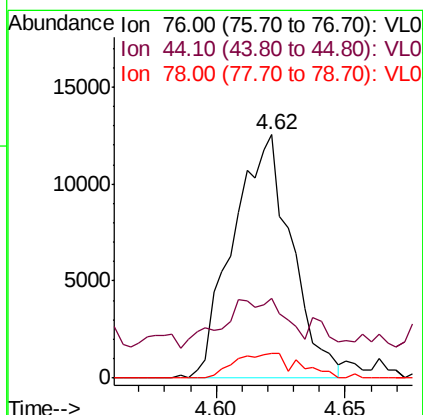
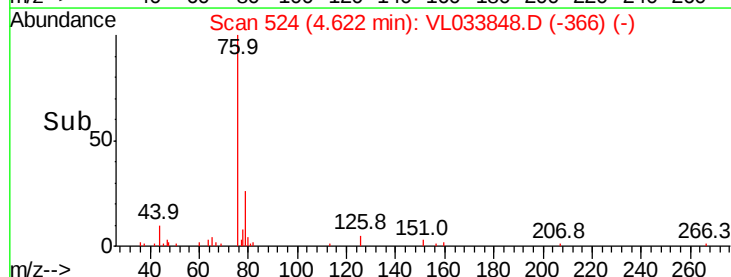
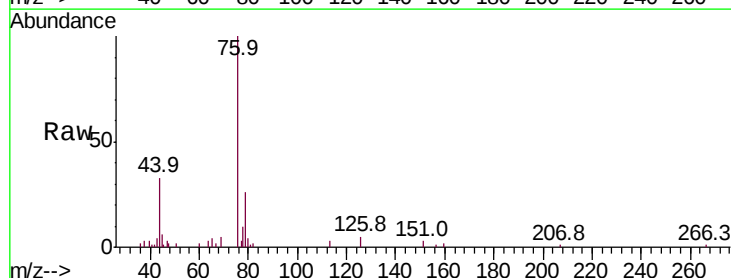
Tgt Ion: 76 Resp: 19823

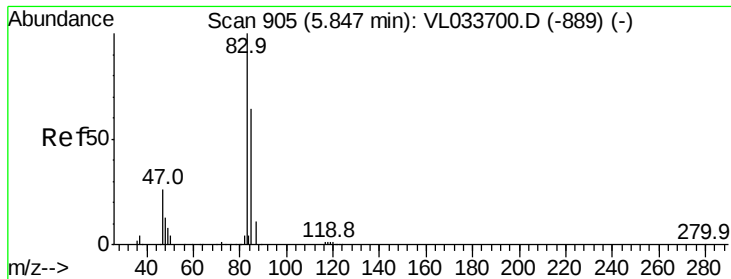
Ion Ratio Lower Upper

76 100

44 27.7 13.8 20.8#

78 11.1 7.4 11.0#





#29

Chloroform

Concen: 1.070 ppbv

RT: 5.84 min Scan# 903

Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion: 83 Resp: 157536

Ion Ratio Lower Upper

83 100

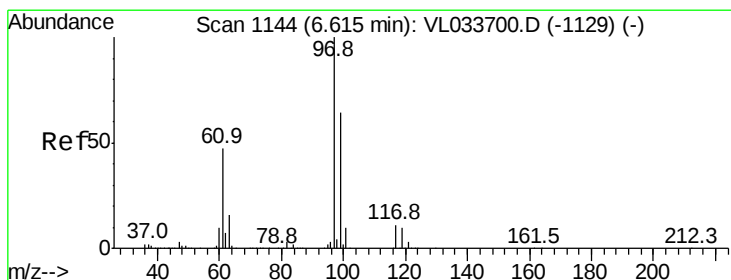
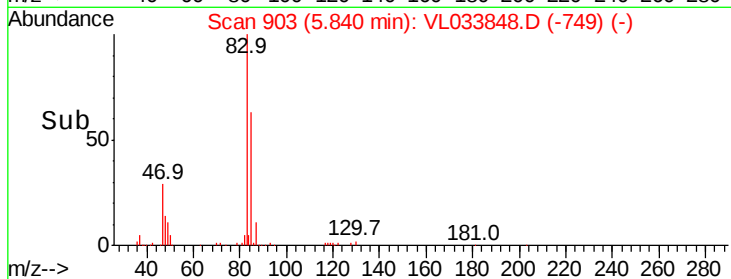
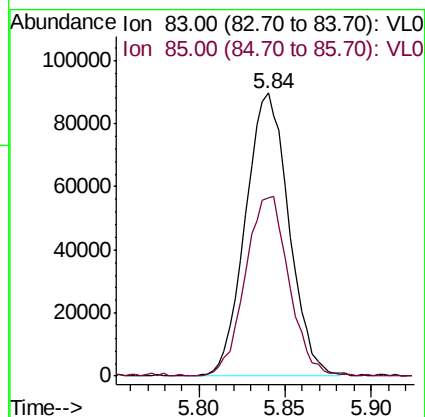
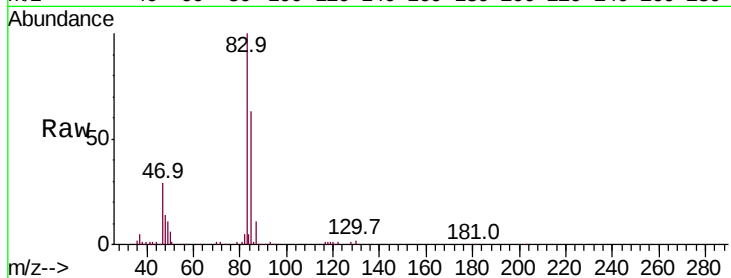
85 63.3 51.5 77.3

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#32

1,1,1-Trichloroethane

Concen: 0.039 ppbv m

RT: 6.61 min Scan# 1142

Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

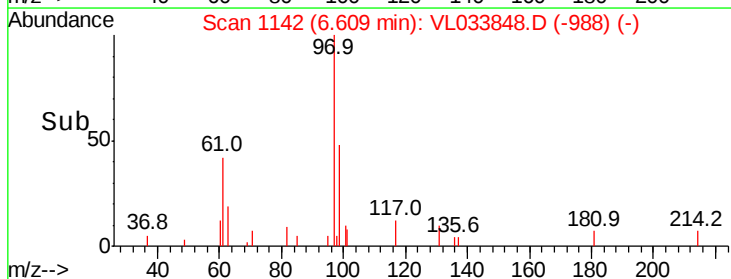
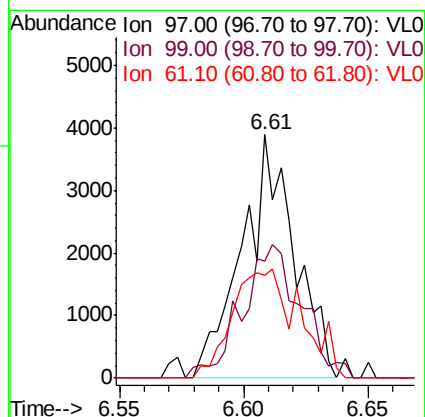
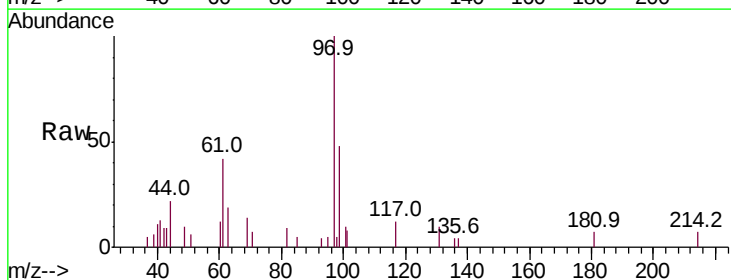
Tgt Ion: 97 Resp: 5724

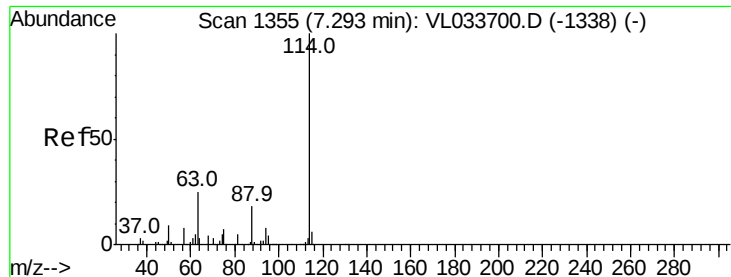
Ion Ratio Lower Upper

97 100

99 61.1 51.5 77.3

61 57.8 37.8 56.8#





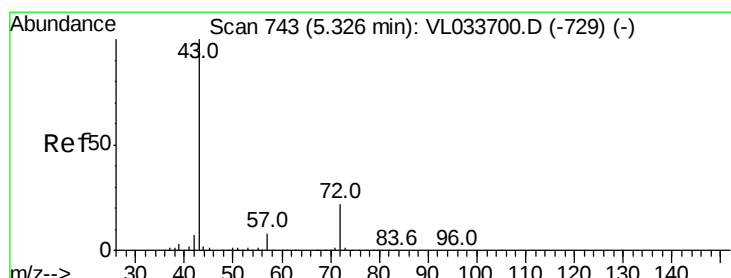
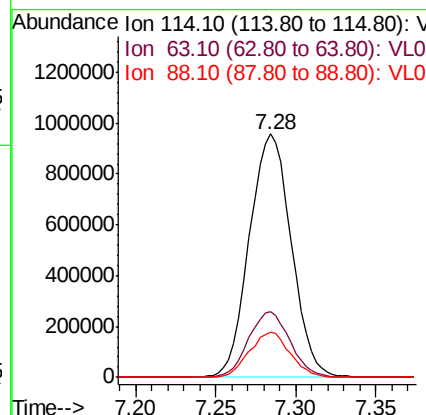
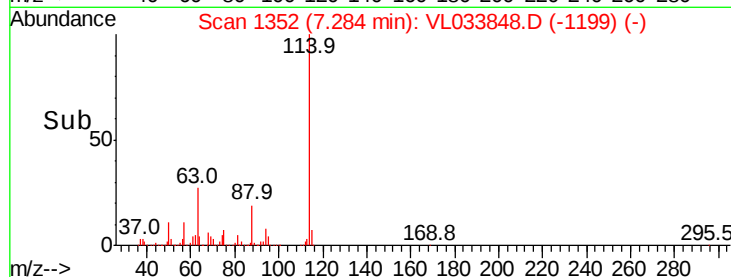
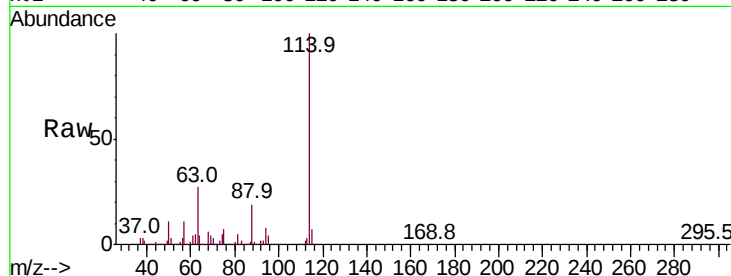
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.28 min Scan# 1352
 Delta R.T. -0.01 min
 Lab File: VL033848.D
 Acq: 29 May 2019 23:32

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6-20190523-0

Tot Ion	Ratio	Lower	Upper
114	100		
63	26.8	20.9	31.3
88	18.2	14.3	21.5

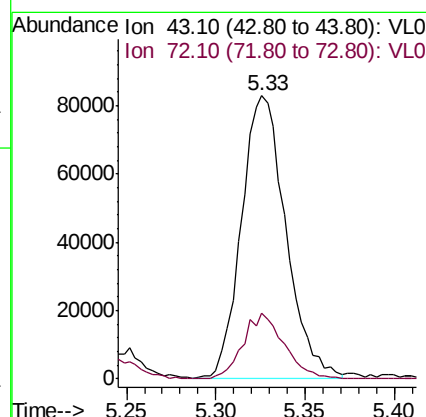
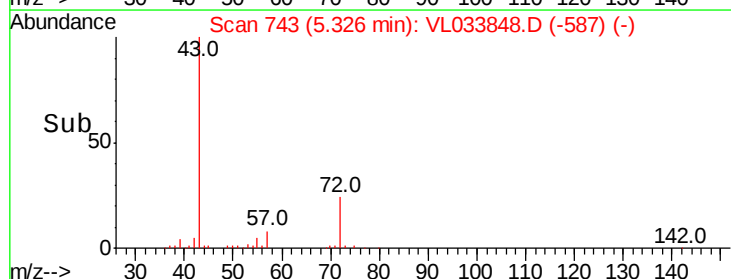
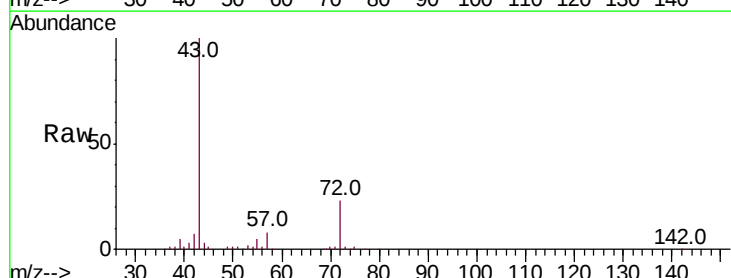
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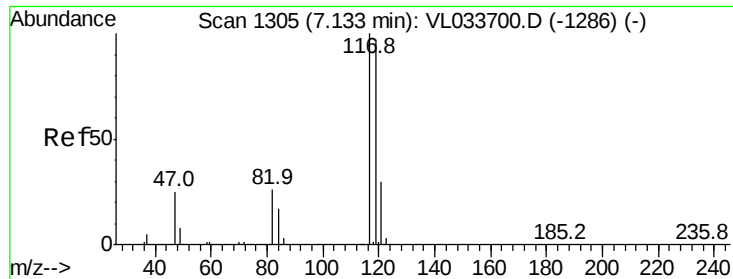
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#34
 2-Butanone
 Concen: 1.349 ppbv
 RT: 5.33 min Scan# 743
 Delta R.T. 0.00 min
 Lab File: VL033848.D
 Acq: 29 May 2019 23:32

Tgt Ion	Ratio	Lower	Upper
43	100		
72	21.5	17.8	26.6





#35

Carbon Tetrachloride

Concen: 0.042 ppbv m

RT: 7.12 min Scan# 1300

Delta R.T. -0.02 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

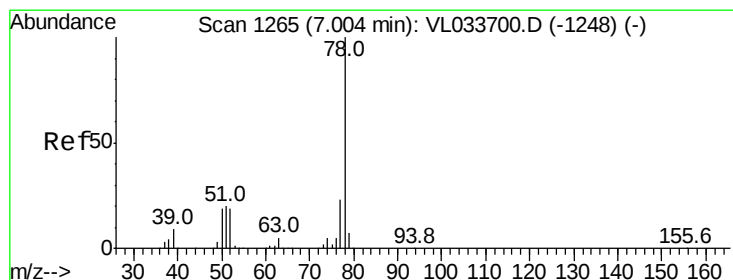
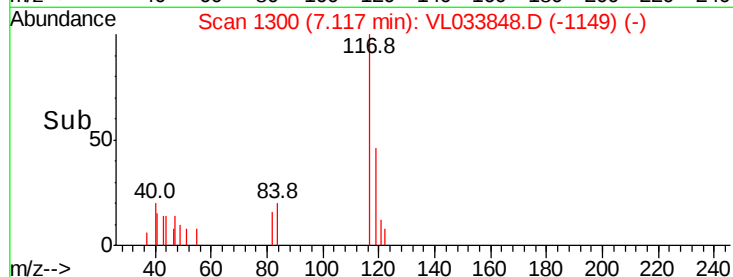
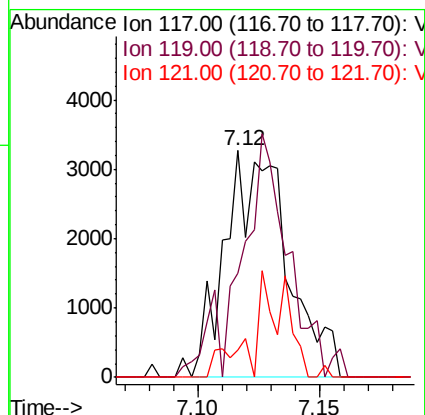
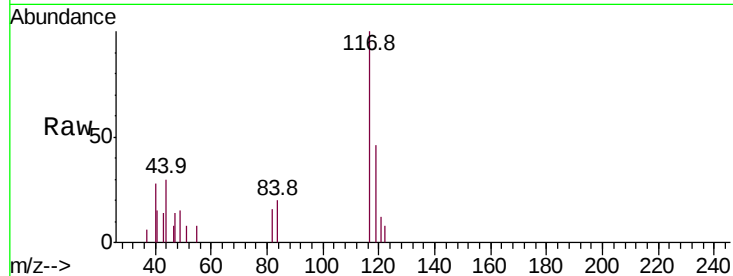
ClientSampleId :

SG-6-20190523-0

Tot Ion	Ratio	Resp	Lower	Upper
117	100	5826		
119	45.7	77.2	115.8#	
121	12.0	24.1	36.1#	

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#36

Benzene

Concen: 0.220 ppbv m

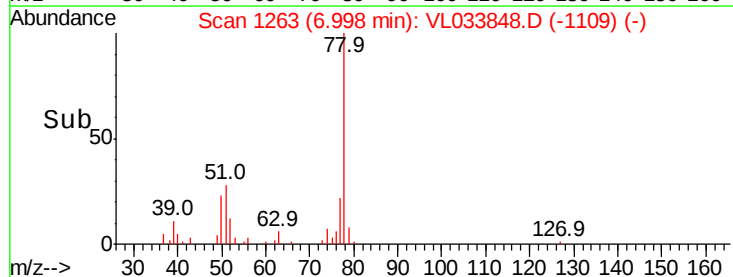
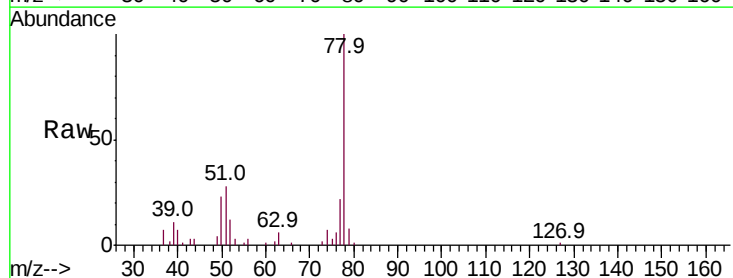
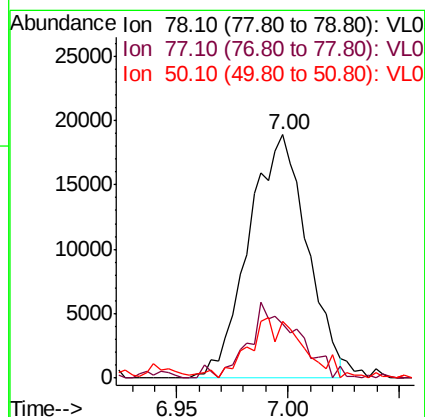
RT: 7.00 min Scan# 1263

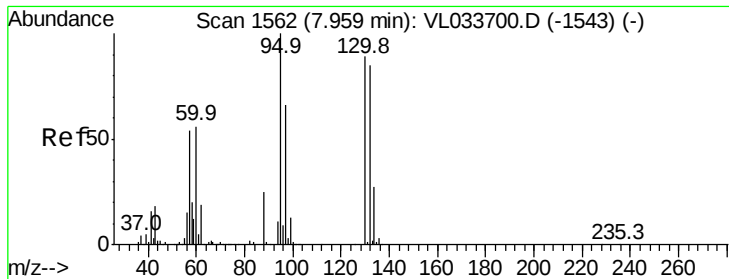
Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Tgt Ion	Ratio	Resp	Lower	Upper
78	100	34423		
77	22.4	18.4	27.6	
50	23.2	15.5	23.3	





#38

Trichloroethene

Concen: 0.672 ppbv

RT: 7.95 min Scan# 1559

Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

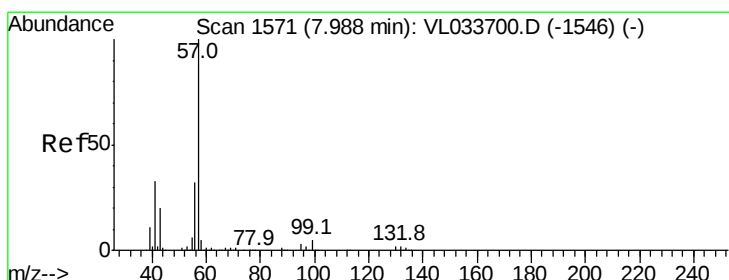
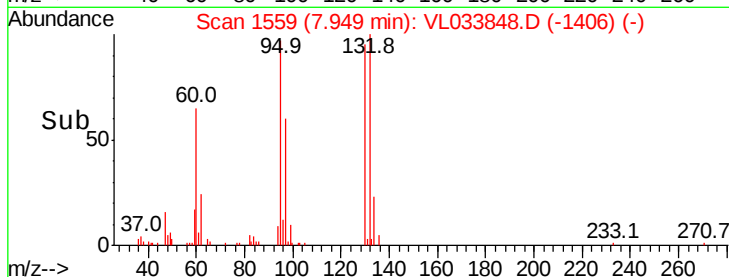
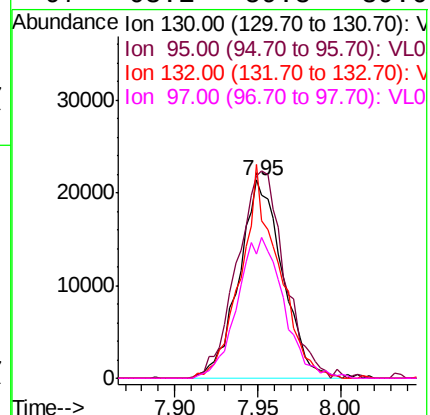
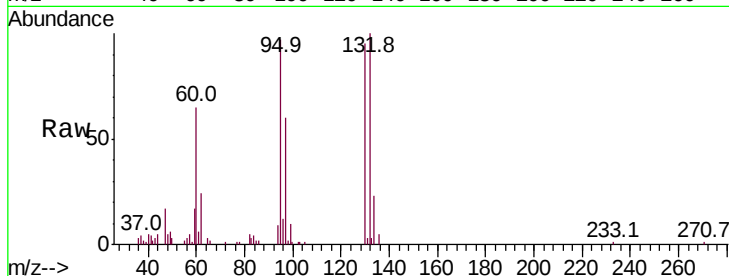
ClientSampled :

SG-6-20190523-0

Tot Ion	130	Resp	39014
Ion	Ratio	Lower	Upper
130	100		
95	101.6	90.2	135.4
132	107.9	76.4	114.6
97	63.1	59.8	89.6

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#44

2,2,4-Trimethylpentane

Concen: 0.097 ppbv m

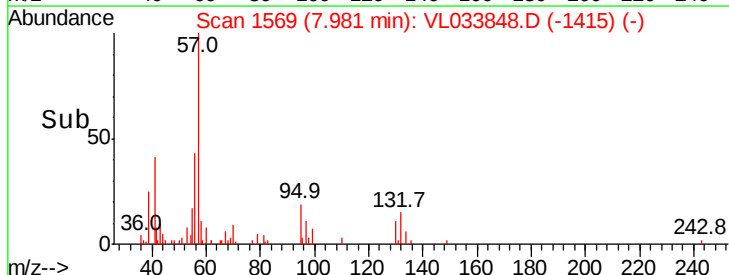
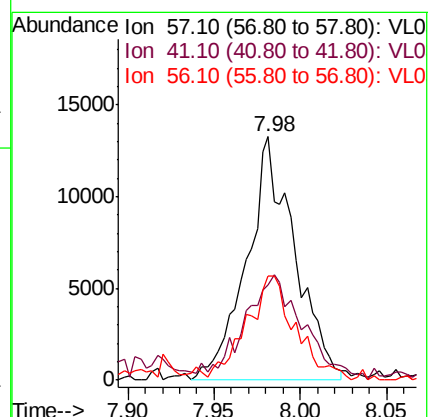
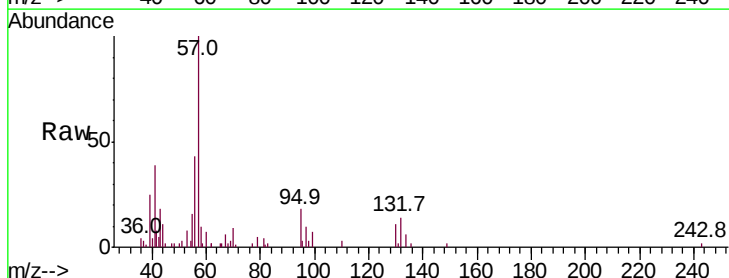
RT: 7.98 min Scan# 1569

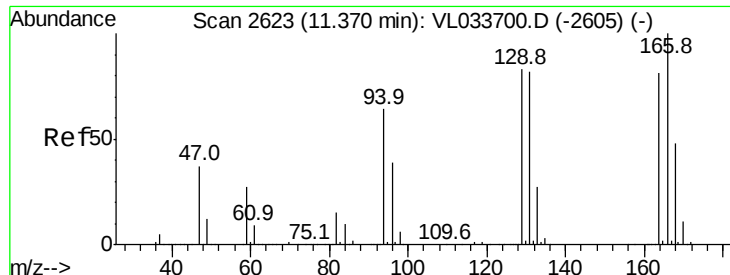
Delta R.T. -0.01 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Tgt Ion	57	Resp	25616
Ion	Ratio	Lower	Upper
57	100		
41	56.2	25.4	38.0#
56	44.5	24.7	37.1#





#52

Tetrachloroethene

Concen: 3.866 ppbv

RT: 11.37 min Scan# 2622

Delta R.T. -0.00 min

Lab File: VL033848.D

Acq: 29 May 2019 23:32

Instrument :

MSVOA_L

ClientSampleId :

SG-6-20190523-0

Tot Ion:164 Resp: 212780

Ion Ratio Lower Upper

164 100

166 122.0 98.9 148.3

129 102.9 81.8 122.6

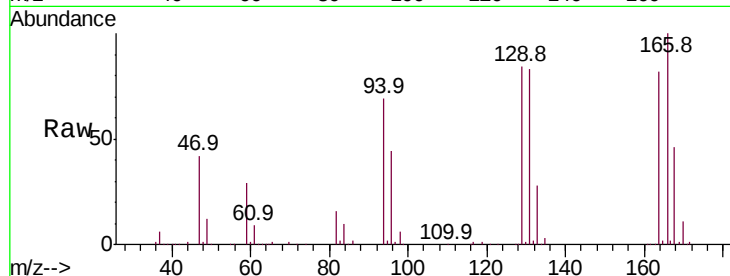
131 100.6 81.1 121.7

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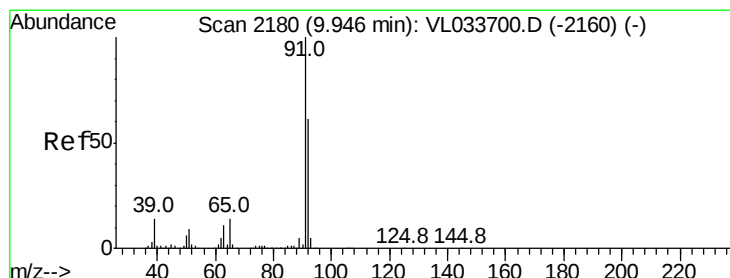
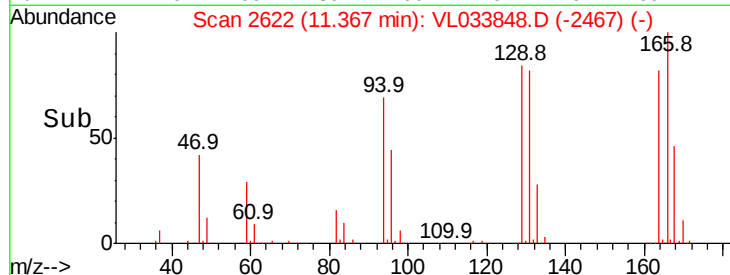
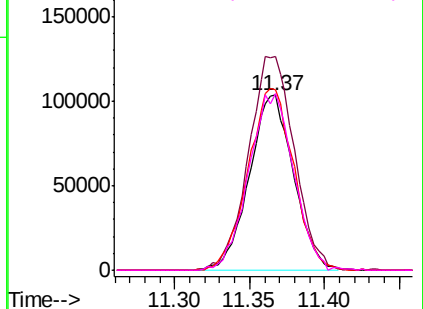
Abundance

Ion 163.90 (163.60 to 164.60): V

Ion 165.90 (165.60 to 166.60): V

Ion 129.00 (128.70 to 129.70): V

Ion 131.00 (130.70 to 131.70): V



#53

Toluene

Concen: 2.350 ppbv

RT: 9.94 min Scan# 2178

Delta R.T. -0.01 min

Lab File: VL033848.D

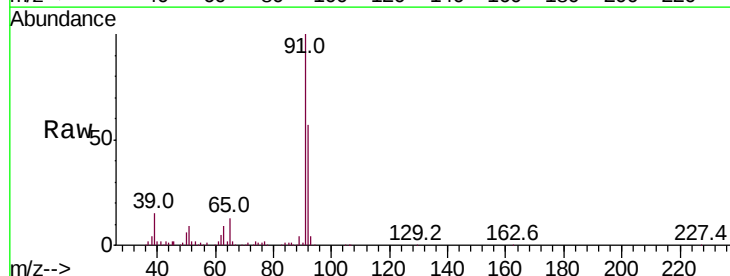
Acq: 29 May 2019 23:32

Tgt Ion: 91 Resp: 396925

Ion Ratio Lower Upper

91 100

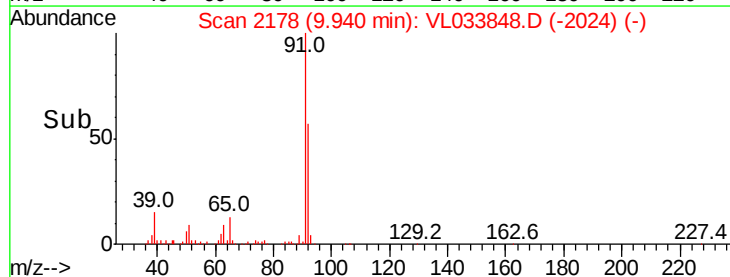
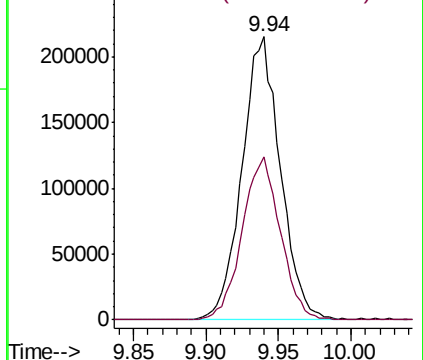
92 57.5 47.6 71.4

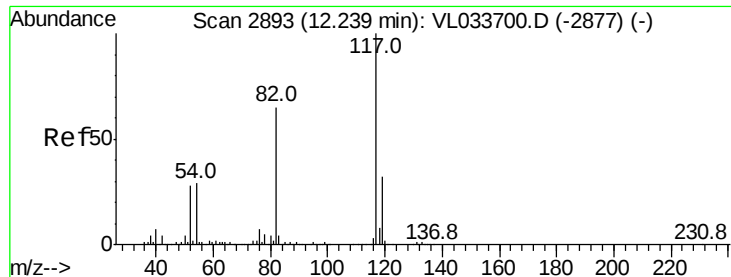


Abundance

Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0





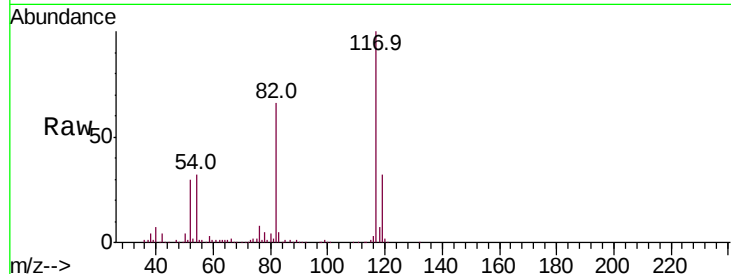
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 12.23 min Scan# 2890
Delta R.T. -0.01 min
Lab File: VL033848.D
Acq: 29 May 2019 23:32

Instrument :
MSVOA_L
ClientSampleId :
SG-6-20190523-0

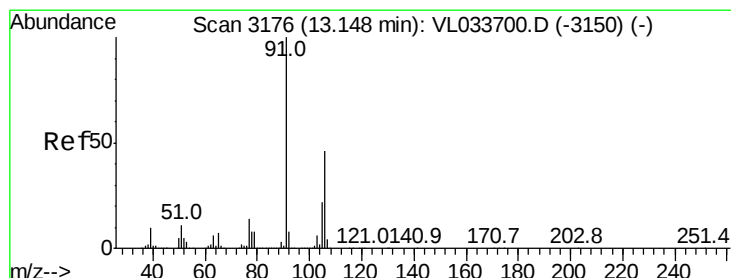
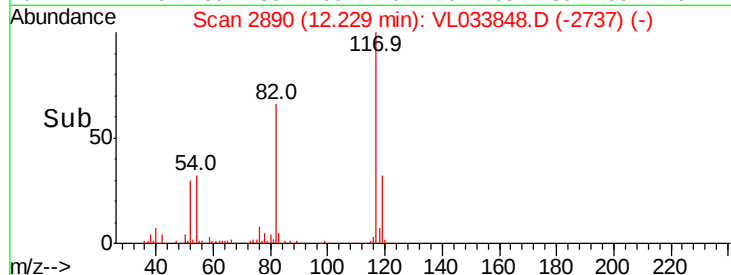
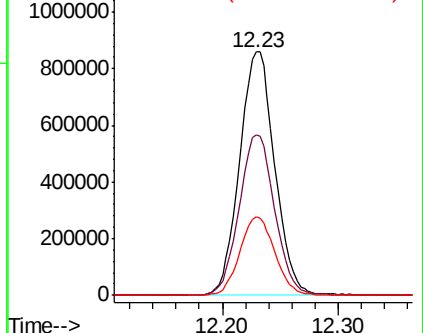
Tot Ion	Ratio	Lower	Upper
117	100		
82	66.8	49.4	74.0
119	32.3	24.9	37.3

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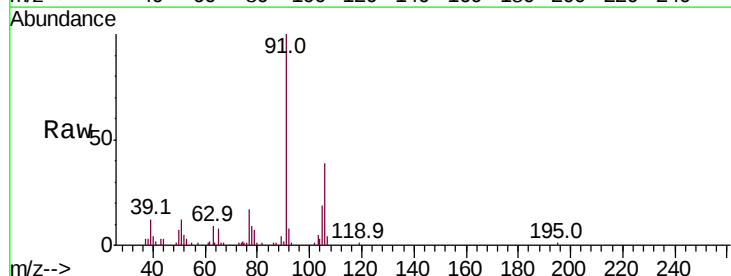


Abundance Ion 117.10 (116.80 to 117.80): V
Ion 82.10 (81.80 to 82.80): VL0
Ion 119.10 (118.80 to 119.80): V

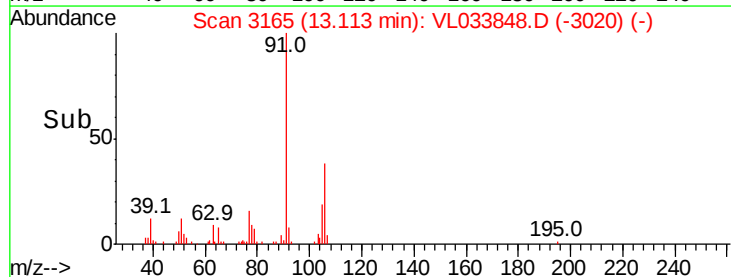
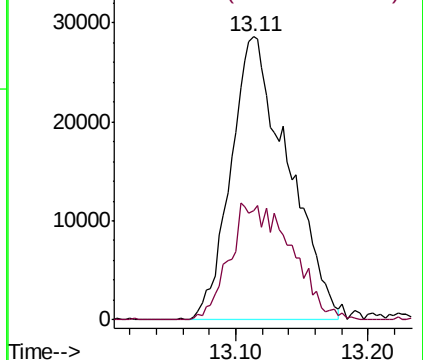


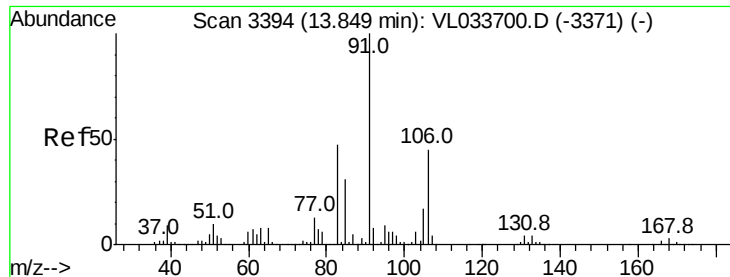
#59
m/p-Xylene
Concen: 0.407 ppbv m
RT: 13.11 min Scan# 3165
Delta R.T. -0.04 min
Lab File: VL033848.D
Acq: 29 May 2019 23:32

Tgt Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.8	53.6#



Abundance Ion 91.10 (90.80 to 91.80): VL0
Ion 106.10 (105.80 to 106.80): V





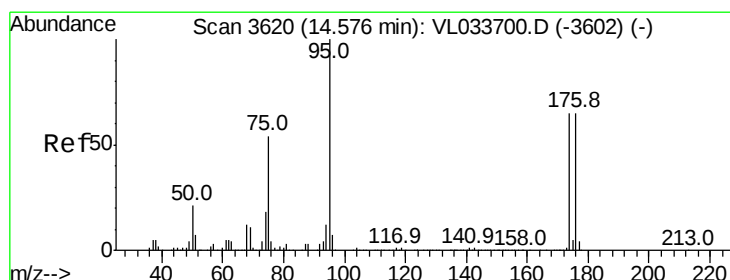
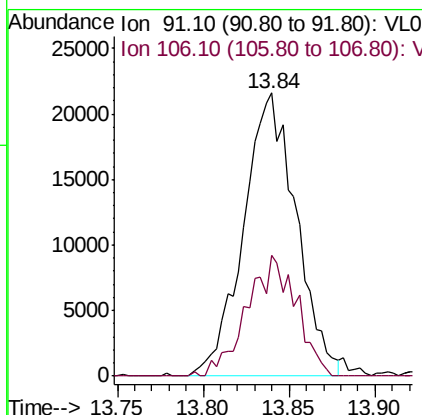
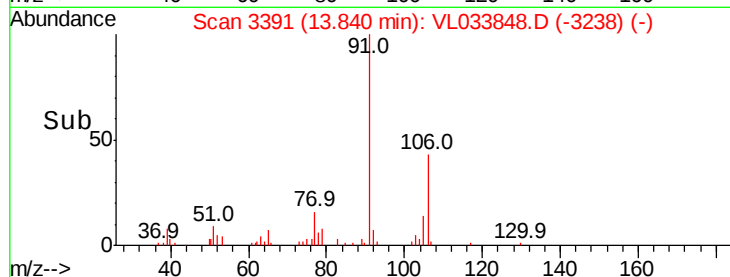
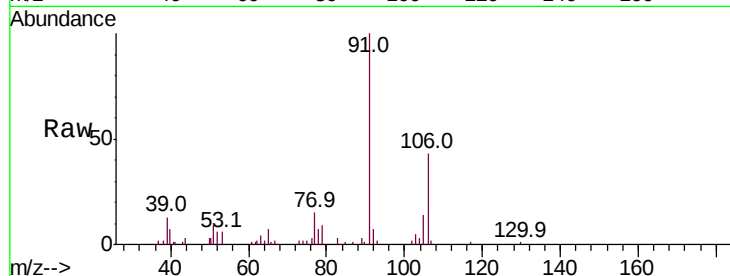
#60
o-Xylene
Concen: 0.217 ppbv
RT: 13.84 min Scan# 3391
Delta R.T. -0.01 min
Lab File: VL033848.D
Acq: 29 May 2019 23:32

Instrument :
MSVOA_L
ClientSampled :
SG-6-20190523-0

Tot Ion: 91 Resp: 45974
Ion Ratio Lower Upper
91 100
106 39.7 21.6 64.8

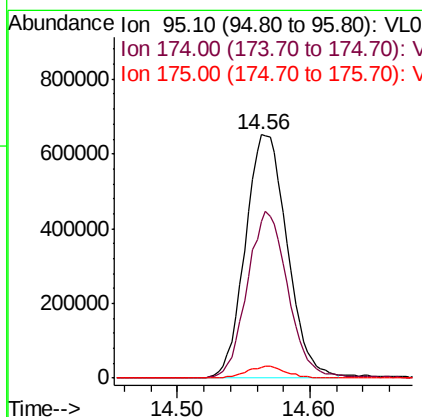
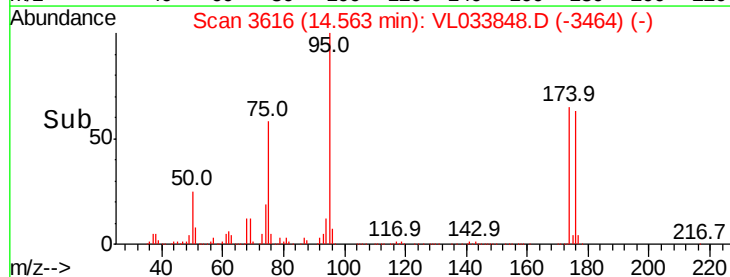
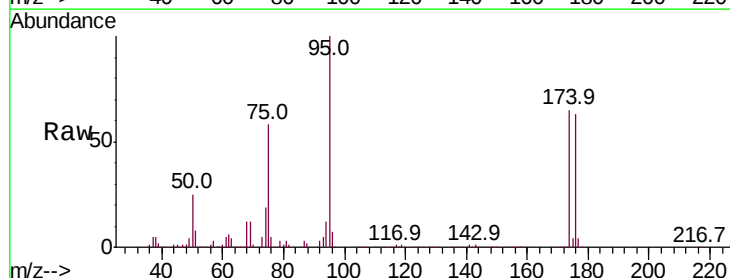
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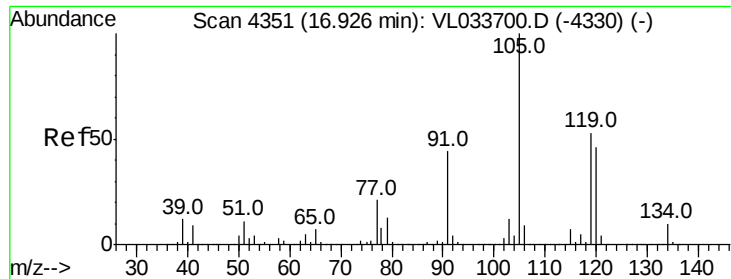
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#68
1-Bromo-4-Fluorobenzene
Concen: 9.726 ppbv
RT: 14.56 min Scan# 3616
Delta R.T. -0.01 min
Lab File: VL033848.D
Acq: 29 May 2019 23:32

Tgt Ion: 95 Resp: 1432014
Ion Ratio Lower Upper
95 100
174 66.6 53.9 80.9
175 4.7 3.8 5.8





#74
 1,2,4-Trimethylbenzene
 Concen: 0.240 ppbv
 RT: 16.91 min Scan# 4347
 Delta R.T. -0.01 min
 Lab File: VL033848.D
 Acq: 29 May 2019 23:32

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-6-20190523-0

Tot Ion	Ratio	Resp Lower	Resp Upper
105	100		
120	44.9	36.8	55.2
91	12.3	35.4	53.0
77	15.2	16.8	25.2

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