

Data File : VL034593.D
Acq On : 4 Feb 2020 23:51
Operator : SY/AP
Sample : L1359-01
Misc : 400ml/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
SG-1

Quant Time: Feb 05 05:46:39 2020
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LThu Jan 30 17:16:44 2020
QLast Update : Thu Jan 30 17:16:44 2020
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Bromochloromethane	5.67	49	900548	10.00	ppbv	0.00
33) 1,4-Difluorobenzene	7.19	114	1862805	10.00	ppbv	0.00
55) Chlorobenzene-d5	12.13	117	1906635	10.00	ppbv	0.01

System Monitoring Compounds

68) 1-Bromo-4-Fluorobenzene	14.46	95	1727849	10.72	ppbv	0.00
Spiked Amount	10.000	Range	65 - 135	Recovery	=	107.20%

Target Compounds					Qvalue
3) Chlorodifluoromethane	2.95	51	79044	0.726 ppbv	# 83
4) Chloromethane	3.11	50	3858	0.058 ppbv	99
9) Propene	2.99	41	9893	0.234 ppbv	# 82
10) Heptane	8.14	43	134312	1.260 ppbv	96
11) Trichlorofluoromethane	3.93	101	46113	0.256 ppbv	# 81
12) 1,1,2-Trichlorotrifluoroet	4.47	101	8196	0.070 ppbv	95
13) Ethanol	3.58	45	162973	14.361 ppbv	96
15) Acetone	3.83	43	1103006	8.334 ppbv	98
17) tert-Butyl alcohol	4.29	59	91687	0.942 ppbv	# 92
19) Isopropyl Alcohol	3.96	45	16933	0.219 ppbv	# 94
20) Methylene Chloride	4.33	84	49108	0.974 ppbv	# 89
23) Vinyl Acetate	5.06	43	42650	0.282 ppbv	# 84
25) Ethyl Acetate	5.68	43	39402	0.184 ppbv	# 90
26) Hexane	5.69	57	41567	0.463 ppbv	# 44
27) Carbon Disulfide	4.54	76	68009	0.562 ppbv	# 82
34) 2-Butanone	5.24	43	236940	1.752 ppbv	97
36) Benzene	6.90	78	40579	0.245 ppbv	# 89
39) 1,2-Dichloropropane	7.19	63	552997	8.053 ppbv	# 19
44) 2,2,4-Trimethylpentane	7.88	57	11654	0.039 ppbv	# 1
51) 2-Hexanone	10.14	43	36311	0.239 ppbv	# 30
53) Toluene	9.83	91	488152	2.682 ppbv	97
58) Ethyl Benzene	12.75	91	161006	0.631 ppbv	91
59) m/p-Xylene	13.00	91	625701	2.774 ppbv	95
60) o-Xylene	13.73	91	252461	1.115 ppbv	95
64) n-propylbenzene	15.62	120	3094	0.041 ppbv	# 1
65) tert-Butylbenzene	16.81	119	12962	0.049 ppbv	# 14
72) 4-Ethyltoluene	15.90	105	17040	0.068 ppbv	# 54
73) 1,3,5-Trimethylbenzene	16.04	105	48011	0.197 ppbv	95
74) 1,2,4-Trimethylbenzene	16.81	105	242164	0.900 ppbv	# 78

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

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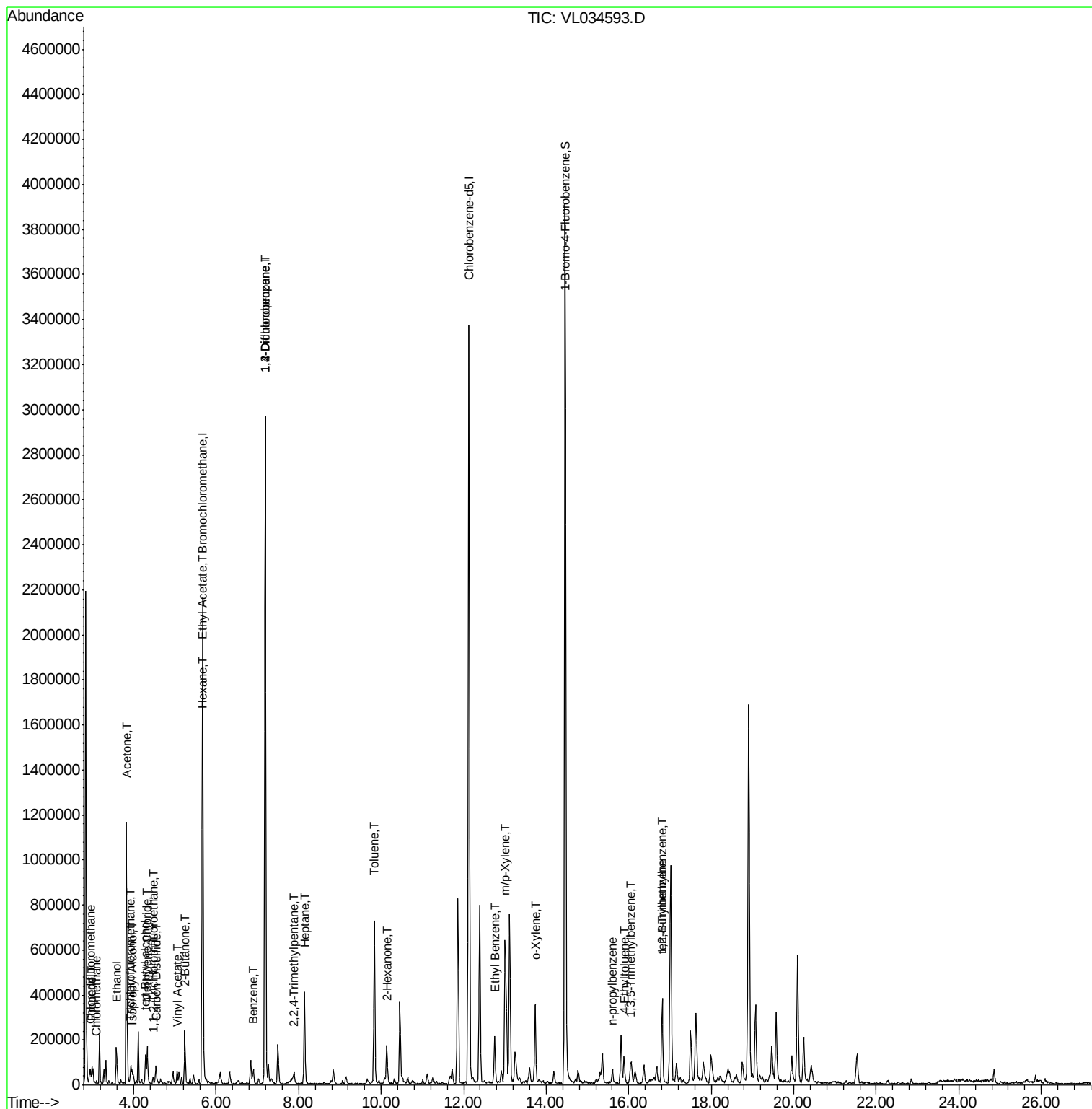
Quant Time: Feb 05 05:46:39 2020

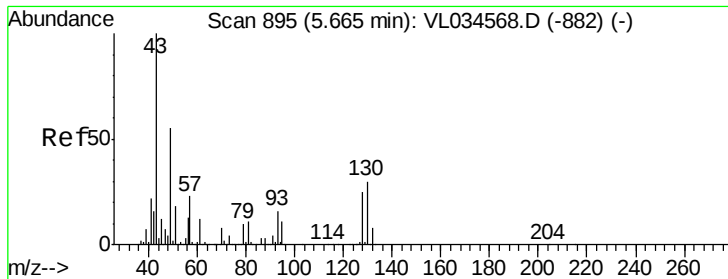
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_L\METHODS\VL013020AIR.M

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#1

Bromochloromethane

Concen: 10.000 ppbv

RT: 5.67 min Scan# 896

Delta R.T. 0.00 min

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SG-1

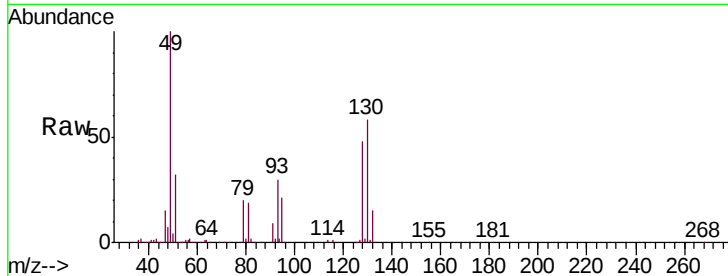
Tgt Ion: 49 Resp: 900548

Ion Ratio Lower Upper

49 100

128 45.7 22.7 68.1

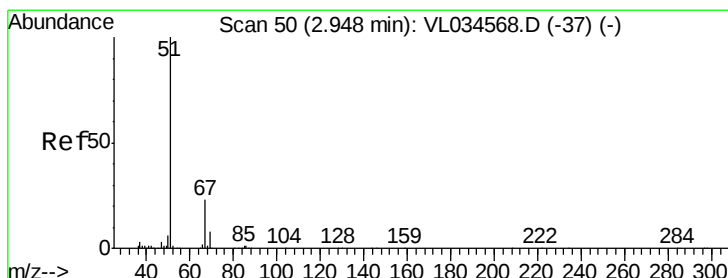
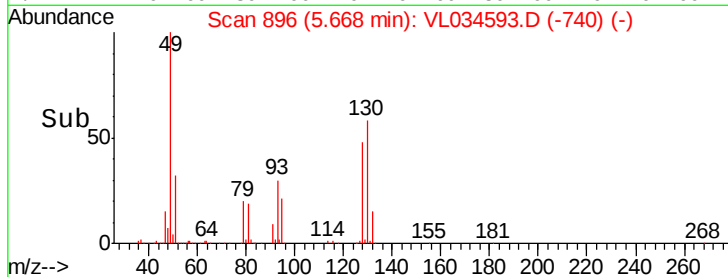
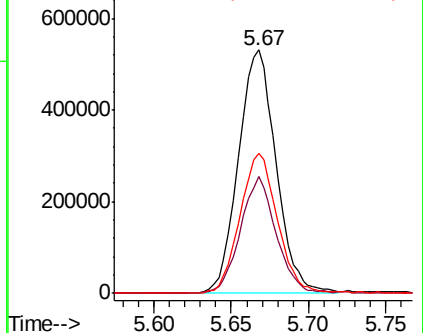
130 57.9 28.6 85.8



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



#3

Chlorodifluoromethane

Concen: 0.726 ppbv

RT: 2.95 min Scan# 52

Delta R.T. 0.01 min

Lab File: VL034593.D

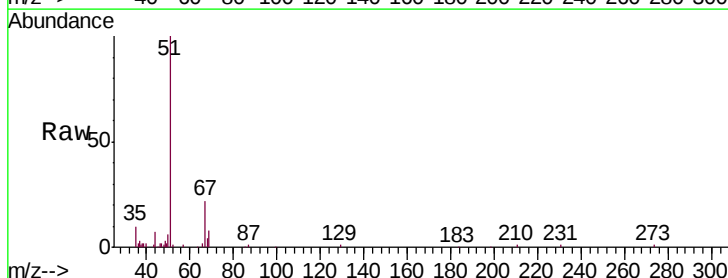
Acq: 4 Feb 2020 23:51

Tgt Ion: 51 Resp: 79044

Ion Ratio Lower Upper

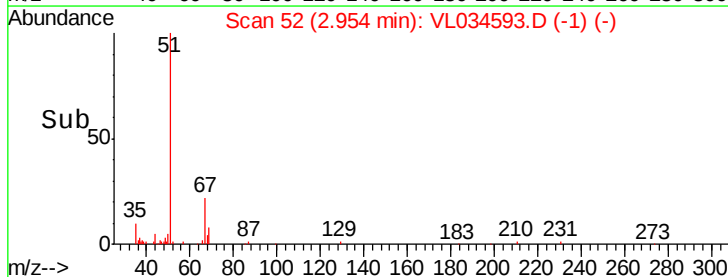
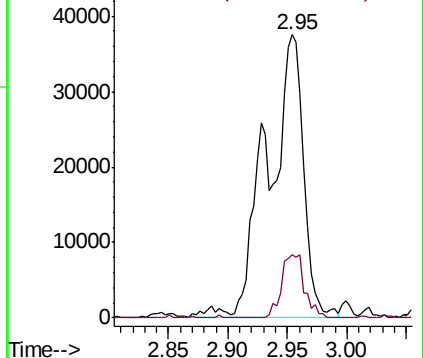
51 100

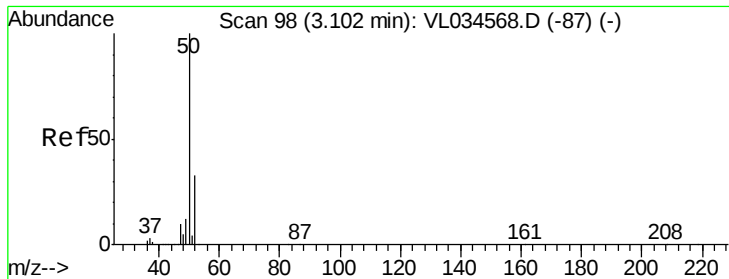
67 14.2 17.8 26.8#



Abundance Ion 51.00 (50.70 to 51.70): VL0

Ion 67.00 (66.70 to 67.70): VL0





#4

Chloromethane

Concen: 0.058 ppbv

RT: 3.11 min Scan# 100

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

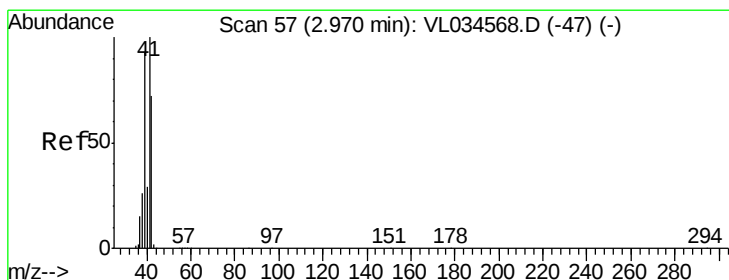
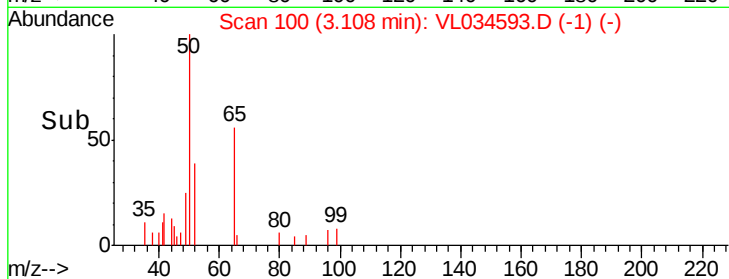
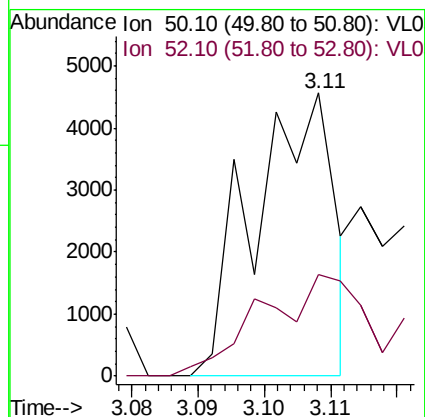
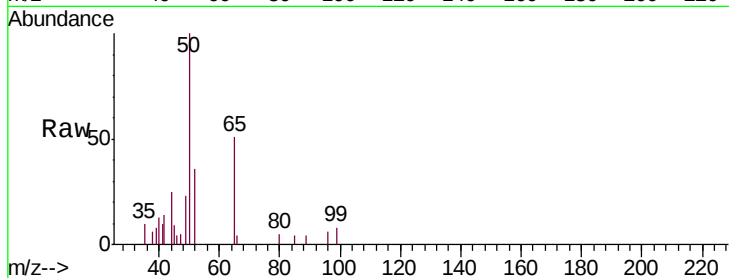
SG-1

Tgt Ion: 50 Resp: 3858

Ion Ratio Lower Upper

50 100

52 32.5 26.6 39.8



#9

Propene

Concen: 0.234 ppbv

RT: 2.99 min Scan# 62

Delta R.T. 0.02 min

Lab File: VL034593.D

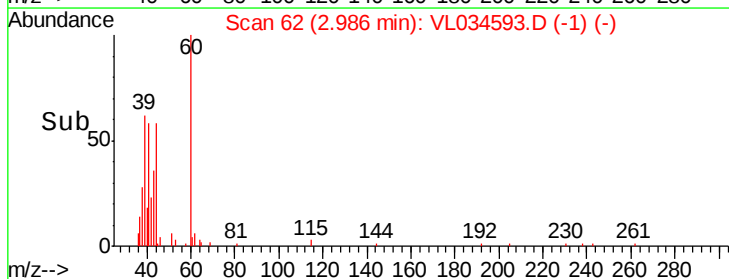
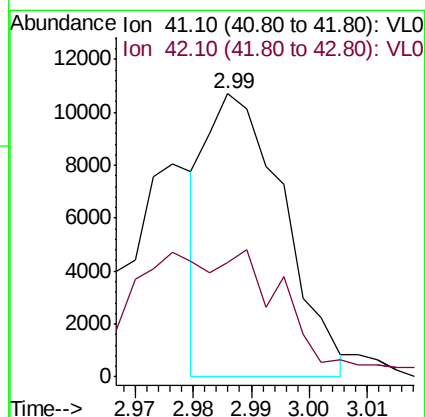
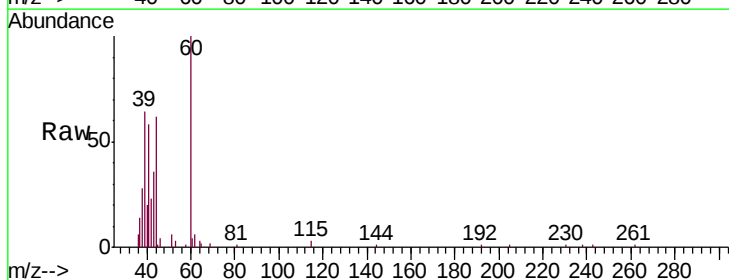
Acq: 4 Feb 2020 23:51

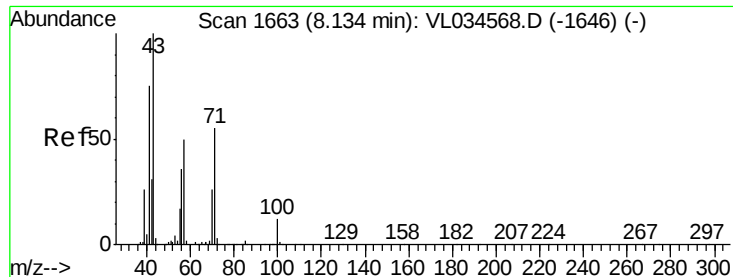
Tgt Ion: 41 Resp: 9893

Ion Ratio Lower Upper

41 100

42 85.9 57.0 85.4#

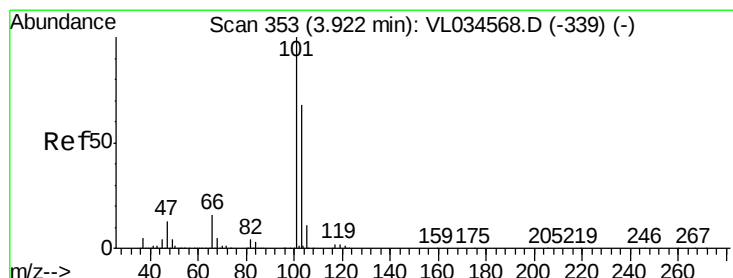
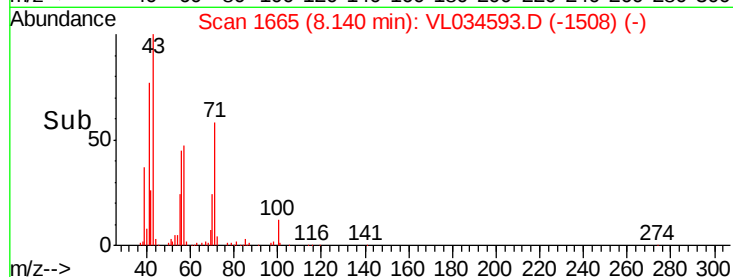
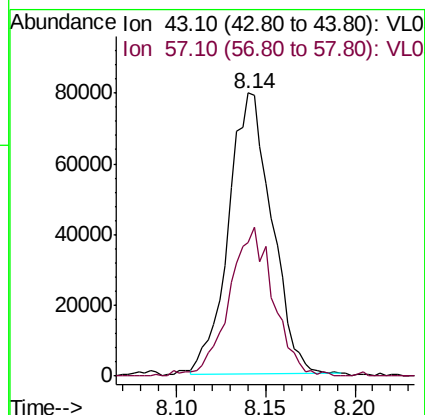
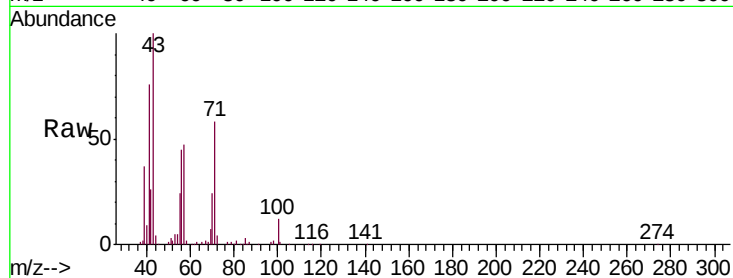




#10
Heptane
Concen: 1.260 ppbv
RT: 8.14 min Scan# 1665
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

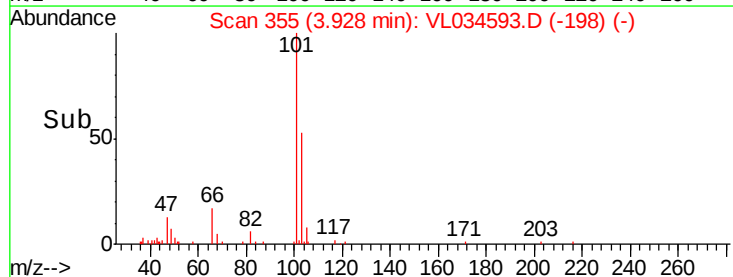
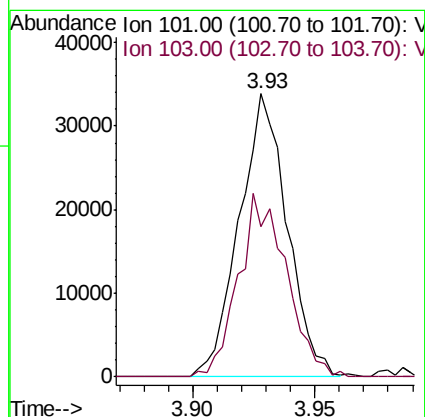
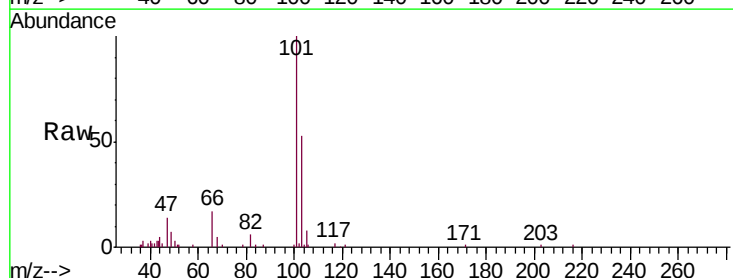
Instrument :
MSVOA_L
ClientSampleId :
SG-1

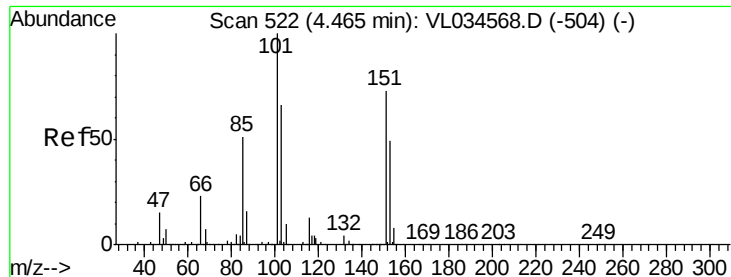
Tgt Ion: 43 Resp: 134312
Ion Ratio Lower Upper
43 100
57 54.6 41.2 61.8



#11
Trichlorofluoromethane
Concen: 0.256 ppbv
RT: 3.93 min Scan# 355
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 101 Resp: 46113
Ion Ratio Lower Upper
101 100
103 52.9 54.4 81.6#





#12

1,1,2-Trichlorotrifluoroethane

Concen: 0.070 ppbv

RT: 4.47 min Scan# 523

Delta R.T. 0.00 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

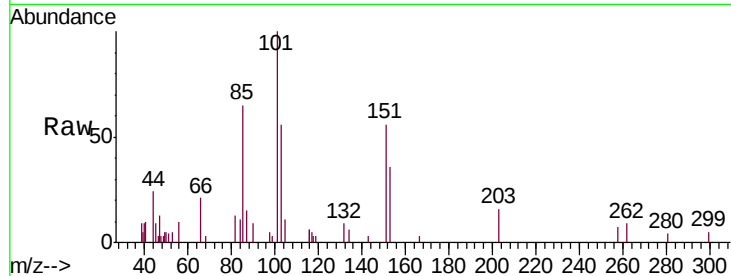
SG-1

Tgt Ion: 101 Resp: 8196

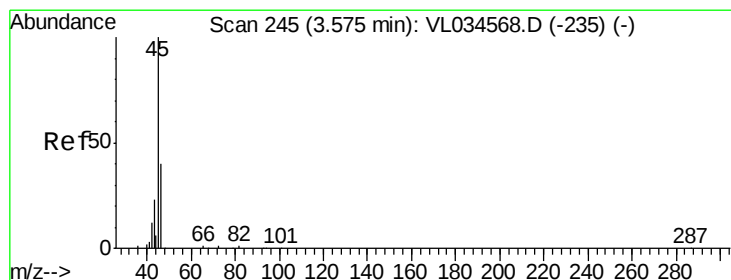
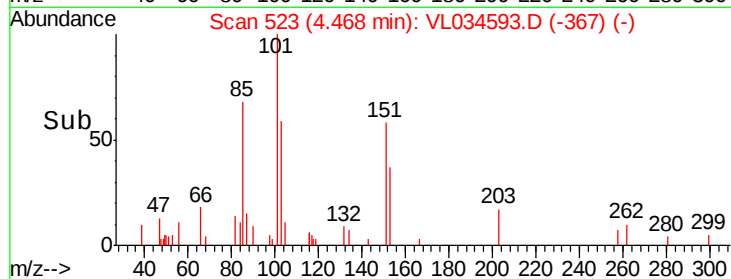
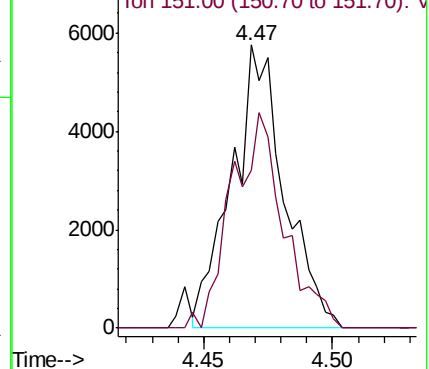
Ion Ratio Lower Upper

101 100

151 75.2 57.0 85.6



Abundance Ion 101.00 (100.70 to 101.70): V



#13

Ethanol

Concen: 14.361 ppbv

RT: 3.58 min Scan# 247

Delta R.T. 0.01 min

Lab File: VL034593.D

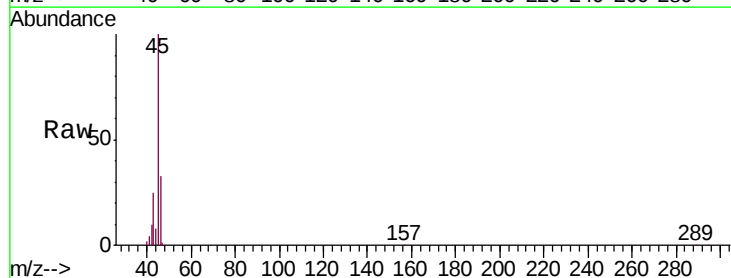
Acq: 4 Feb 2020 23:51

Tgt Ion: 45 Resp: 162973

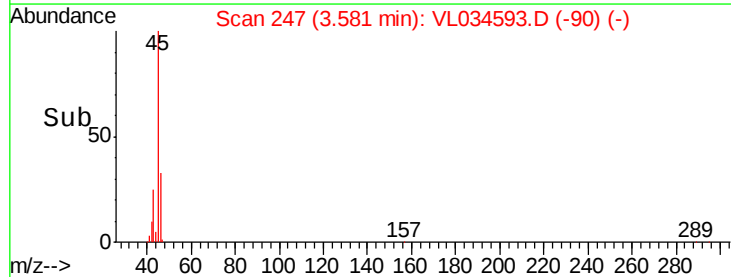
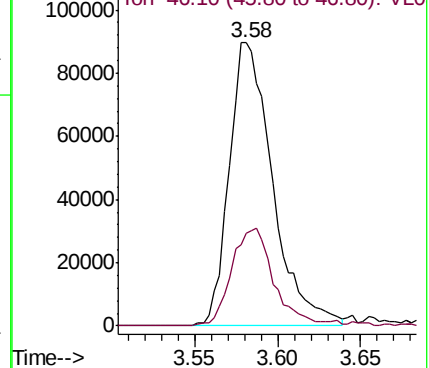
Ion Ratio Lower Upper

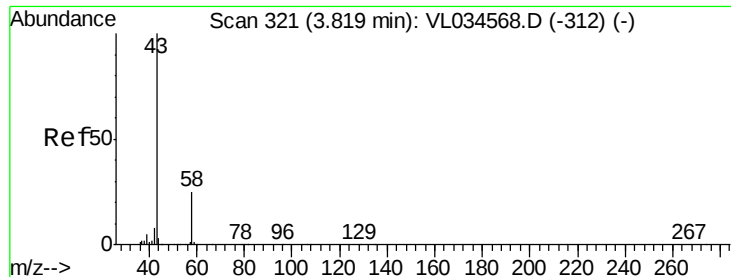
45 100

46 34.8 14.8 59.2



Abundance Ion 45.10 (44.80 to 45.80): VL0





#15

Acetone

Concen: 8.334 ppbv

RT: 3.83 min Scan# 323

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

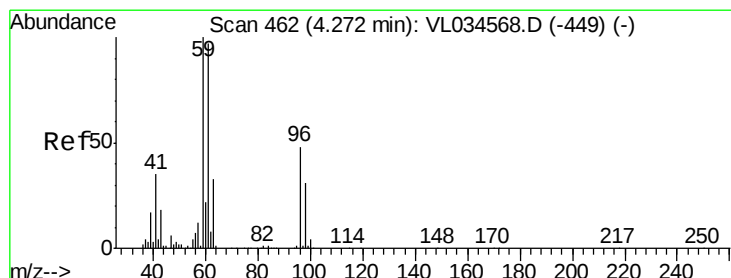
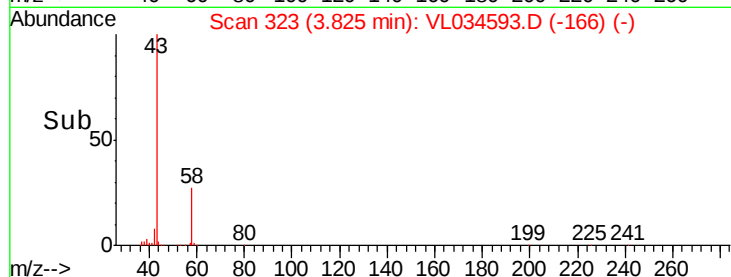
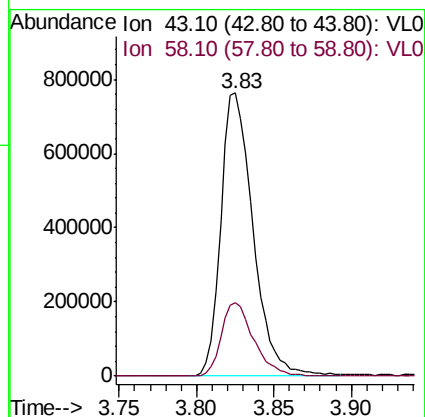
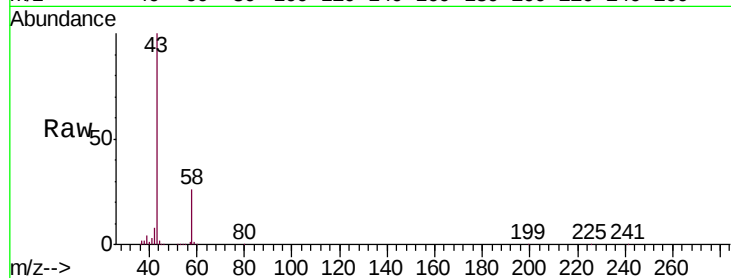
SG-1

Tgt Ion: 43 Resp: 1103006

Ion Ratio Lower Upper

43 100

58 26.5 20.3 30.5



#17

tert-Butyl alcohol

Concen: 0.942 ppbv

RT: 4.29 min Scan# 467

Delta R.T. 0.02 min

Lab File: VL034593.D

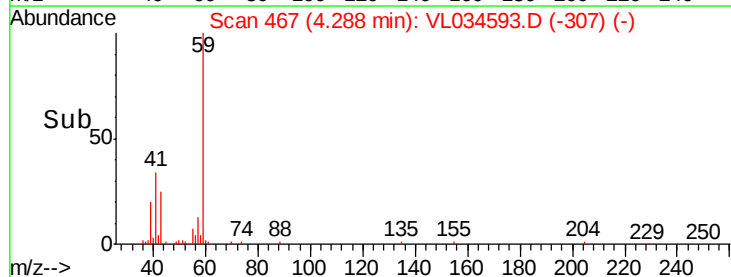
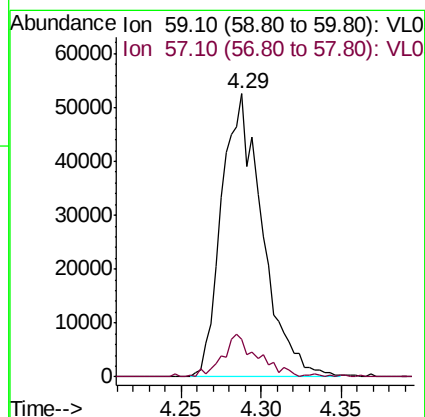
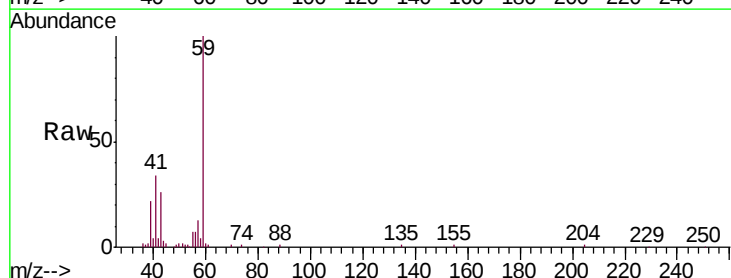
Acq: 4 Feb 2020 23:51

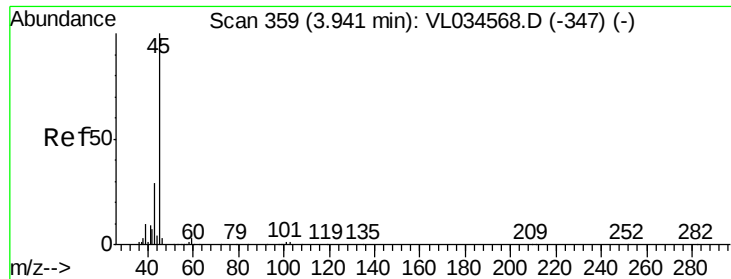
Tgt Ion: 59 Resp: 91687

Ion Ratio Lower Upper

59 100

57 13.8 8.7 13.1#

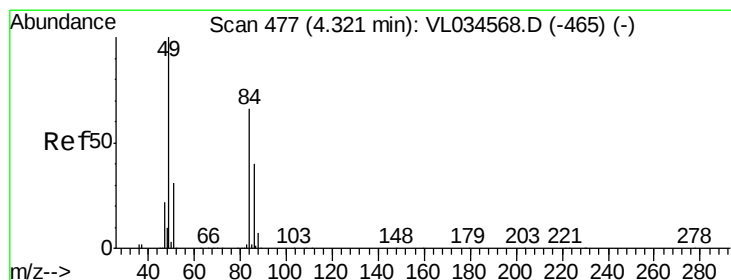
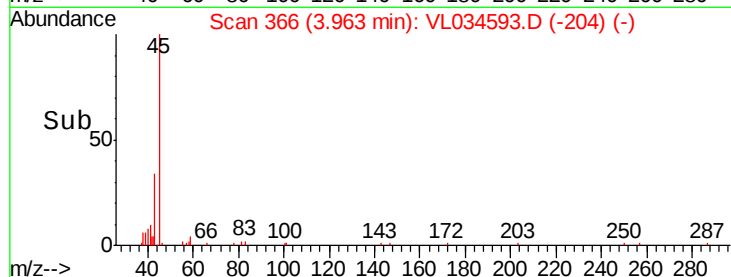
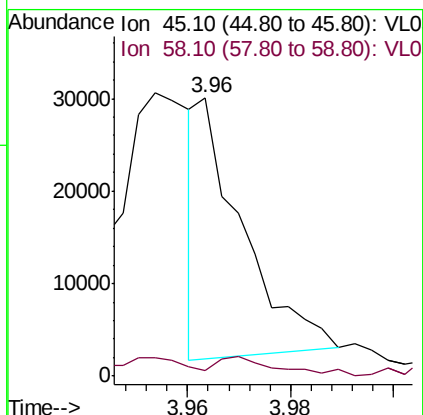
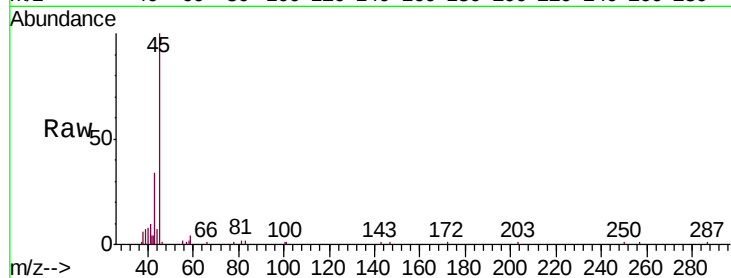




#19
Isopropyl Alcohol
Concen: 0.219 ppbv
RT: 3.96 min Scan# 366
Delta R.T. 0.02 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

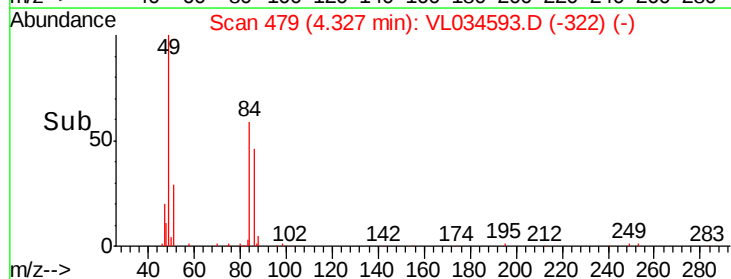
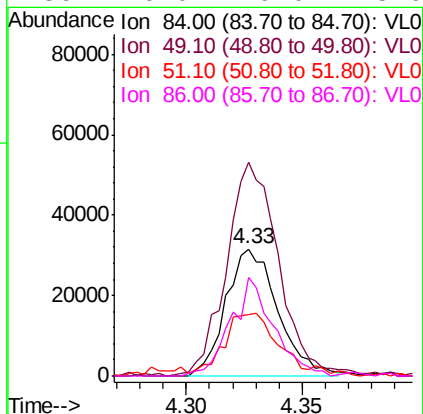
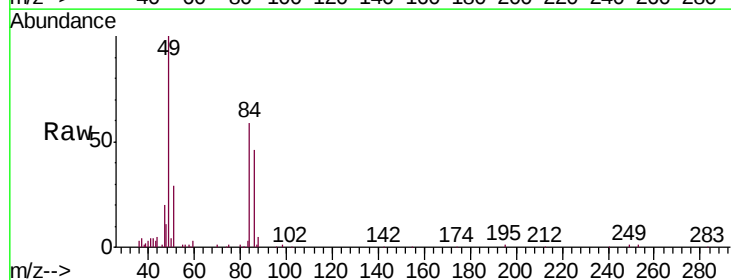
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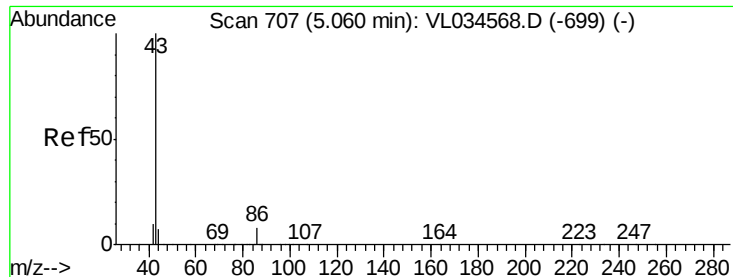
Tgt Ion: 45 Resp: 16933
Ion Ratio Lower Upper
45 100
58 0.0 1.7 2.5#



#20
Methylene Chloride
Concen: 0.974 ppbv
RT: 4.33 min Scan# 479
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 84 Resp: 49108
Ion Ratio Lower Upper
84 100
49 165.5 122.4 183.6
51 45.5 38.6 57.8
86 76.0 49.0 73.6#





#23

Vinyl Acetate

Concen: 0.282 ppbv

RT: 5.06 min Scan# 707

Delta R.T. -0.00 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

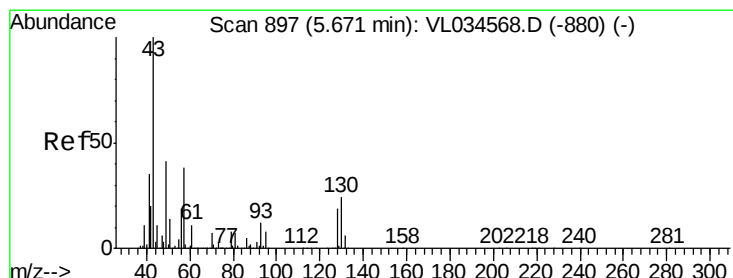
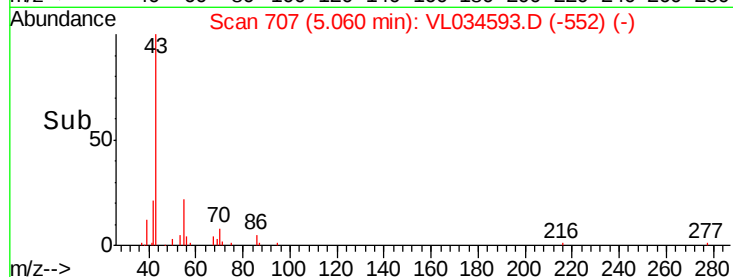
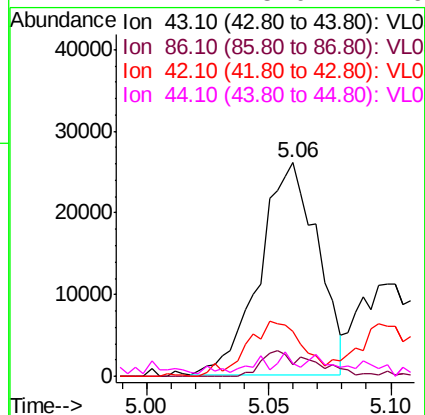
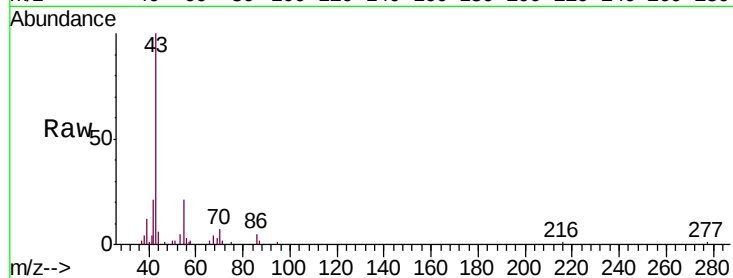
Instrument :

MSVOA_L

ClientSampleId :

SG-1

Tgt Ion:	43	Resp:	42650
Ion	Ratio	Lower	Upper
43	100		
86	5.3	5.9	8.9#
42	21.8	8.8	13.2#
44	4.2	5.0	7.6#



#25

Ethyl Acetate

Concen: 0.184 ppbv

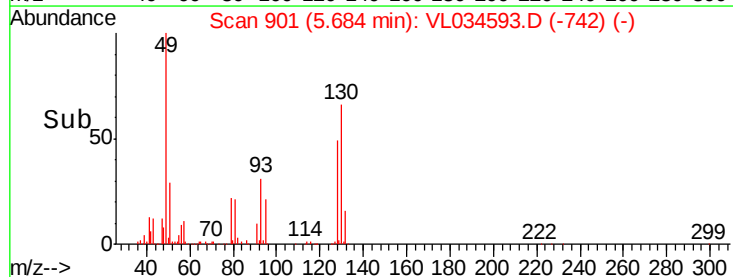
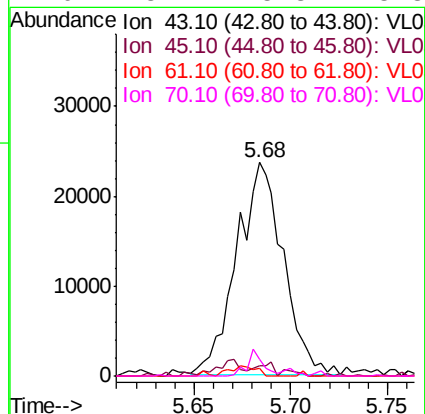
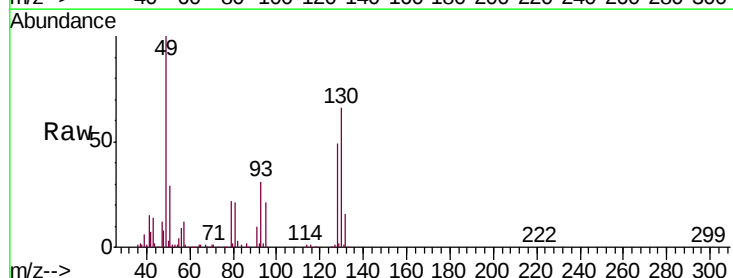
RT: 5.68 min Scan# 901

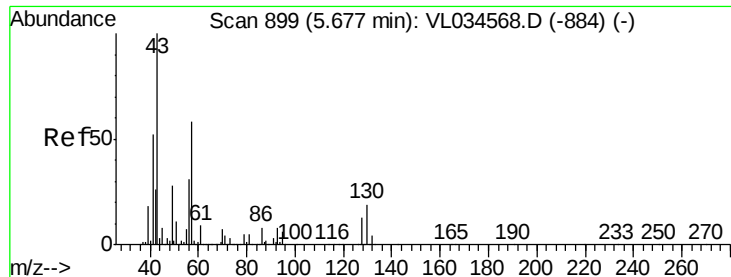
Delta R.T. 0.01 min

Lab File: VL034593.D

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Tgt Ion:	43	Resp:	39402
Ion	Ratio	Lower	Upper
43	100		
45	7.9	8.5	12.7#
61	3.1	7.8	11.6#
70	5.4	5.8	8.8#





#26

Hexane

Concen: 0.463 ppbv

RT: 5.69 min Scan# 902

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

SG-1

Tgt Ion: 57 Resp: 41567

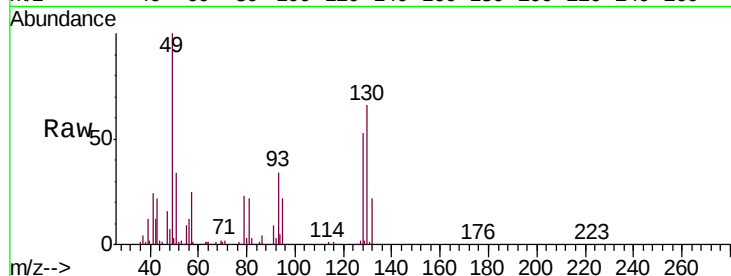
Ion Ratio Lower Upper

57 100

41 110.0 76.2 114.2

43 100.3 189.9 284.9#

56 64.7 43.6 65.4

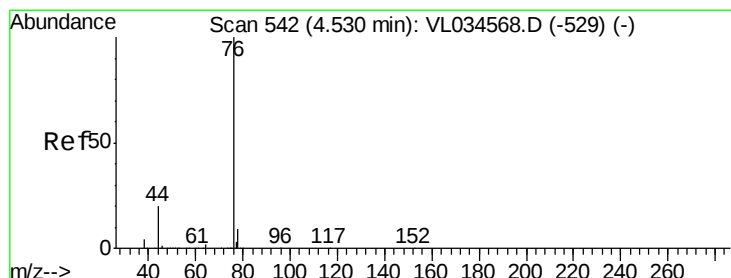
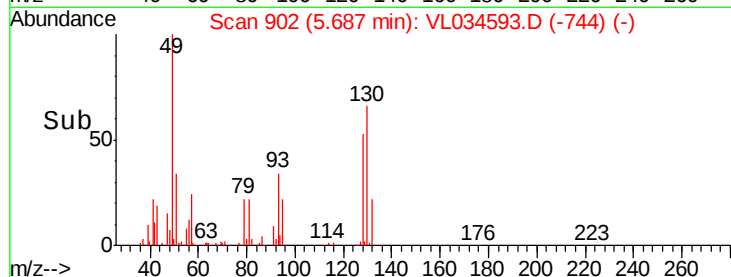
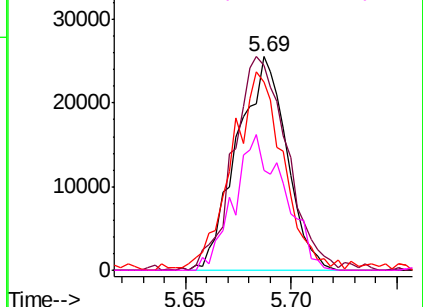


Abundance Ion 57.10 (56.80 to 57.80): VL0

Ion 41.10 (40.80 to 41.80): VL0

Ion 43.10 (42.80 to 43.80): VL0

Ion 56.10 (55.80 to 56.80): VL0



#27

Carbon Disulfide

Concen: 0.562 ppbv

RT: 4.54 min Scan# 546

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

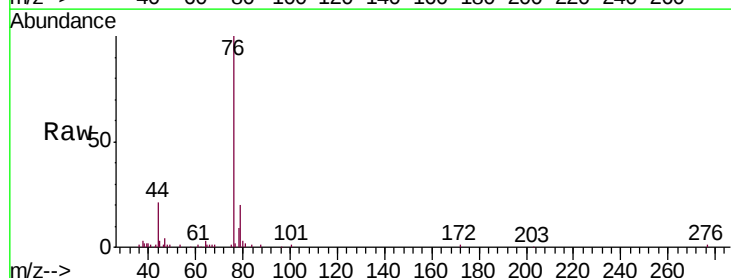
Tgt Ion: 76 Resp: 68009

Ion Ratio Lower Upper

76 100

44 31.6 16.3 24.5#

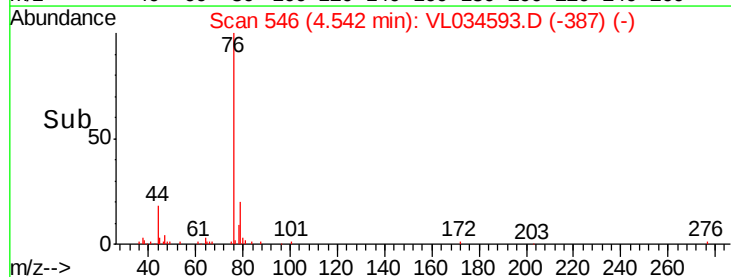
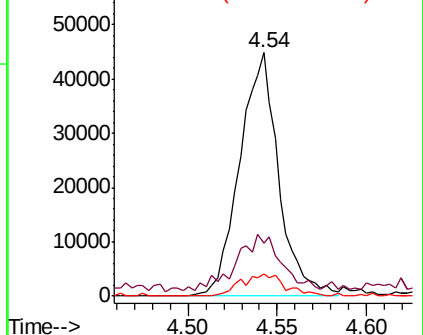
78 10.5 7.4 11.2

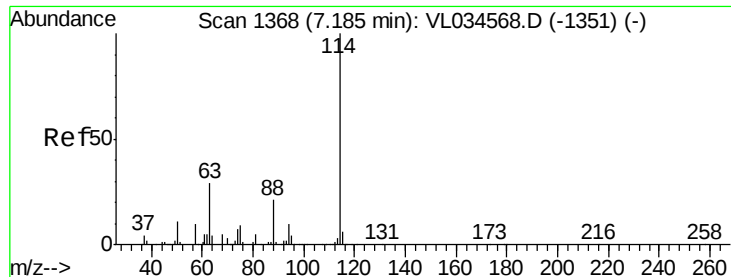


Abundance Ion 76.00 (75.70 to 76.70): VL0

Ion 44.10 (43.80 to 44.80): VL0

Ion 78.00 (77.70 to 78.70): VL0

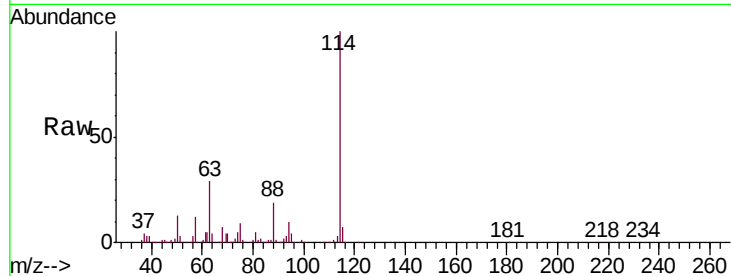




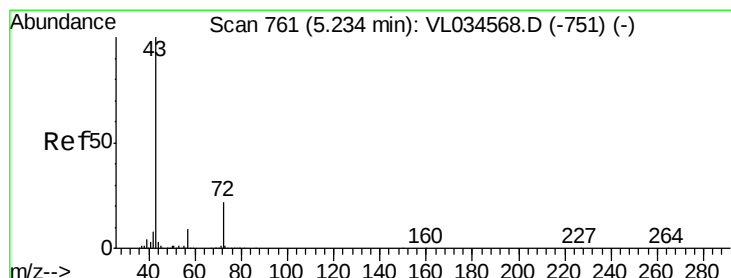
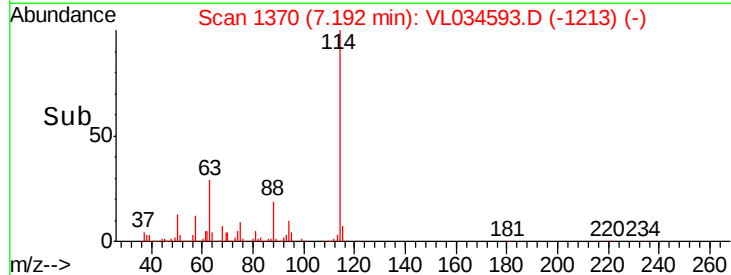
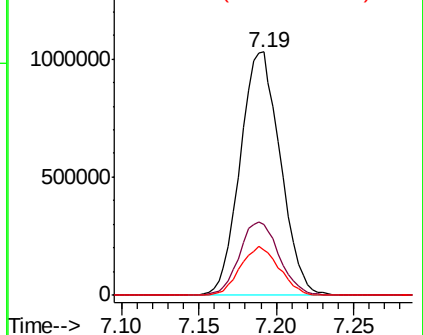
#33
 1,4-Difluorobenzene
 Concen: 10.000 ppbv
 RT: 7.19 min Scan# 1370
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Tgt Ion: 114 Resp: 1862805
 Ion Ratio Lower Upper
 114 100
 63 29.8 24.1 36.1
 88 19.5 15.9 23.9

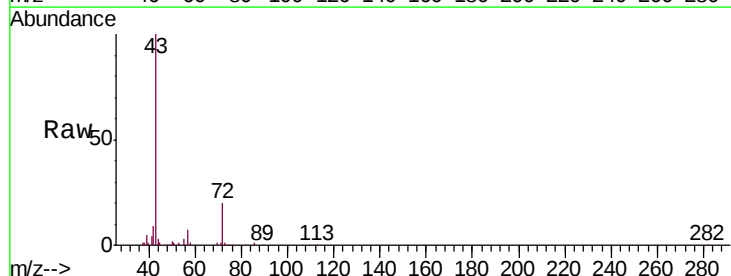


Abundance Ion 114.10 (113.80 to 114.80): VL0
 Ion 63.10 (62.80 to 63.80): VL0
 Ion 88.10 (87.80 to 88.80): VL0

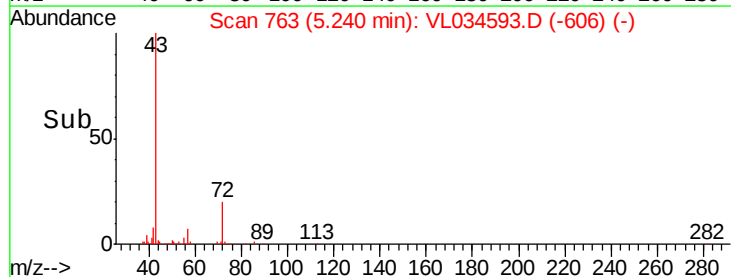
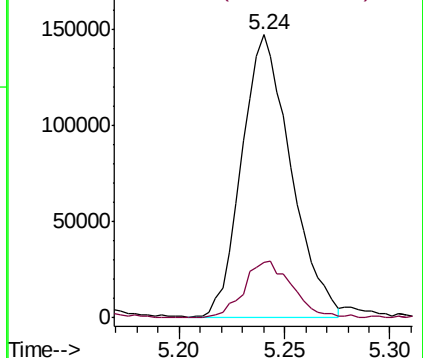


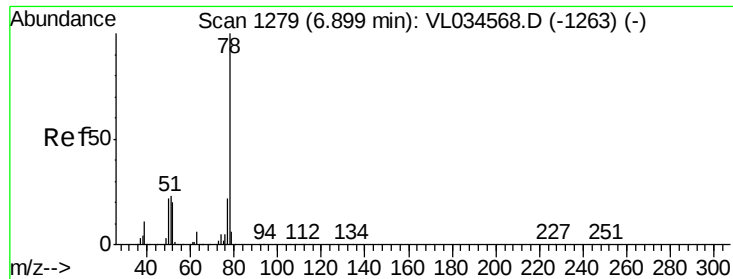
#34
 2-Butanone
 Concen: 1.752 ppbv
 RT: 5.24 min Scan# 763
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Tgt Ion: 43 Resp: 236940
 Ion Ratio Lower Upper
 43 100
 72 20.2 17.2 25.8



Abundance Ion 43.10 (42.80 to 43.80): VL0
 Ion 72.10 (71.80 to 72.80): VL0





#36

Benzene

Concen: 0.245 ppbv

RT: 6.90 min Scan# 1280

Delta R.T. 0.00 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampleId :

SG-1

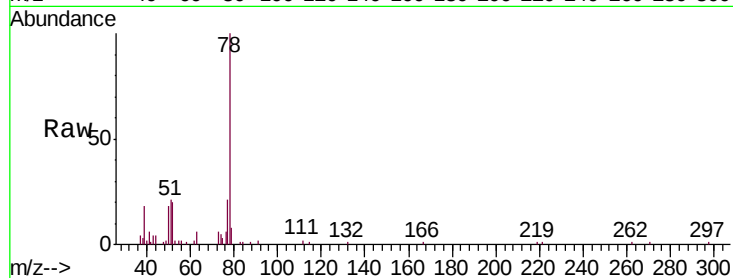
Tgt Ion: 78 Resp: 40579

Ion Ratio Lower Upper

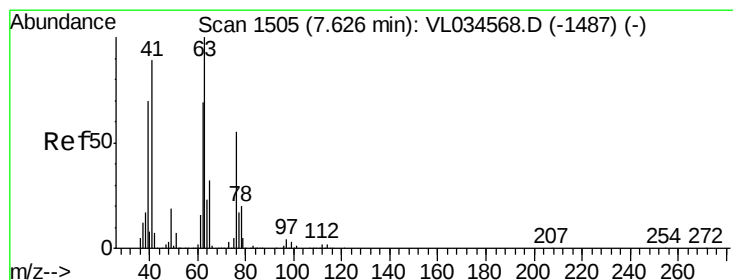
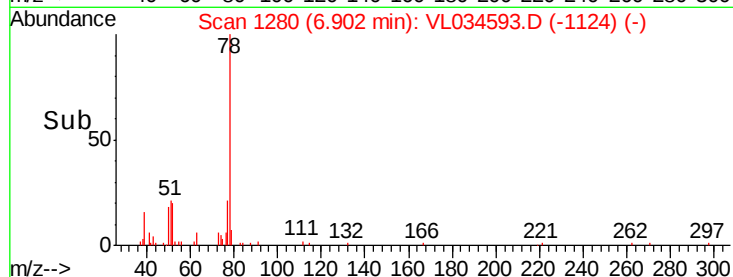
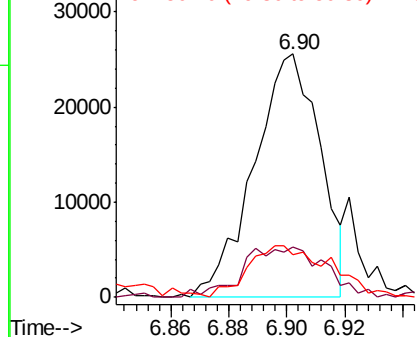
78 100

77 17.1 17.3 25.9#

50 15.7 17.4 26.2#



Abundance Ion 78.10 (77.80 to 78.80): VL0
Ion 77.10 (76.80 to 77.80): VL0
Ion 50.10 (49.80 to 50.80): VL0



#39

1,2-Dichloropropane

Concen: 8.053 ppbv

RT: 7.19 min Scan# 1369

Delta R.T. -0.44 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

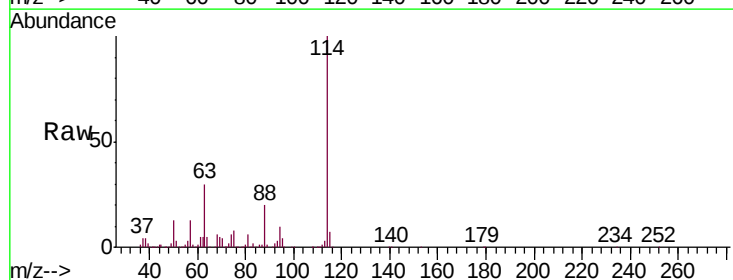
Tgt Ion: 63 Resp: 552997

Ion Ratio Lower Upper

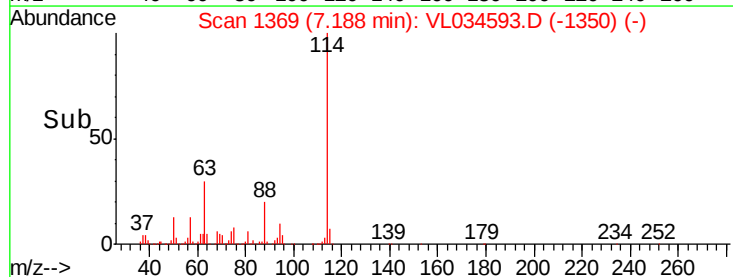
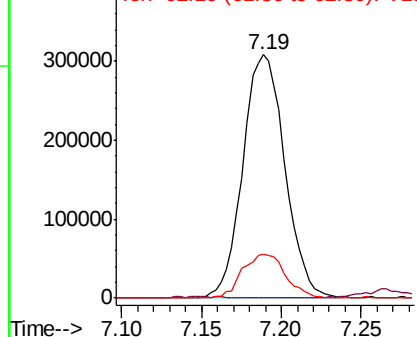
63 100

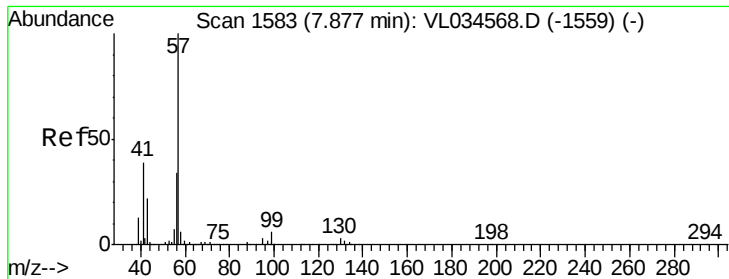
41 0.0 71.0 106.4#

62 17.8 55.4 83.0#



Abundance Ion 63.10 (62.80 to 63.80): VL0
Ion 41.10 (40.80 to 41.80): VL0
Ion 62.10 (61.80 to 62.80): VL0

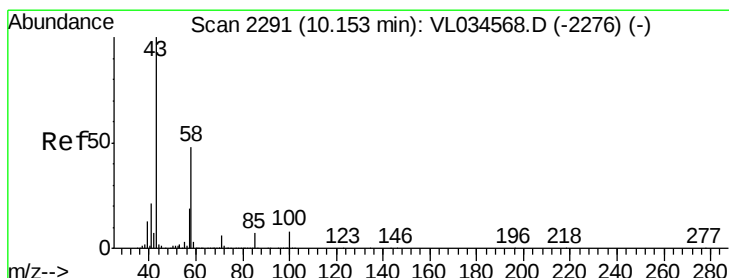
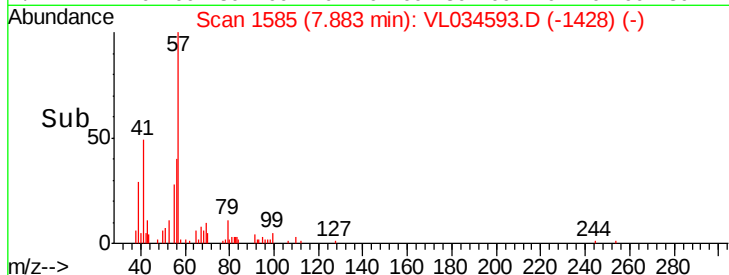
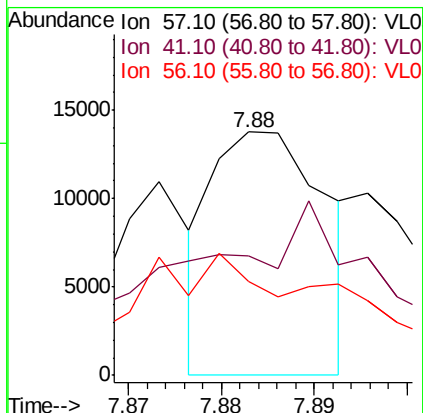
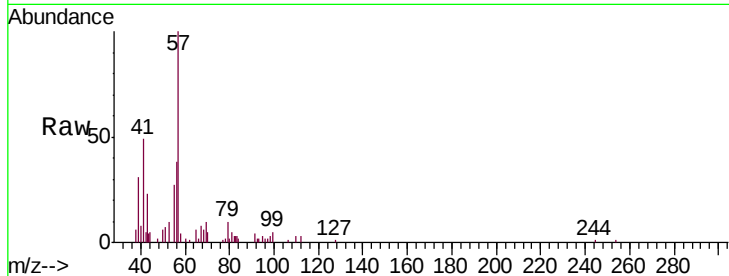




#44
 2,2,4-Trimethylpentane
 Concen: 0.039 ppbv
 RT: 7.88 min Scan# 1585
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

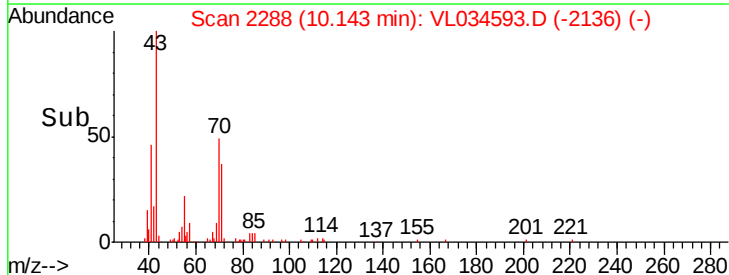
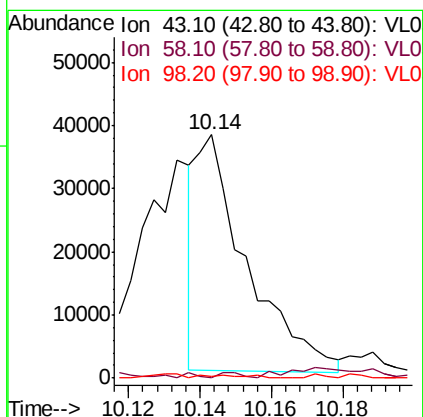
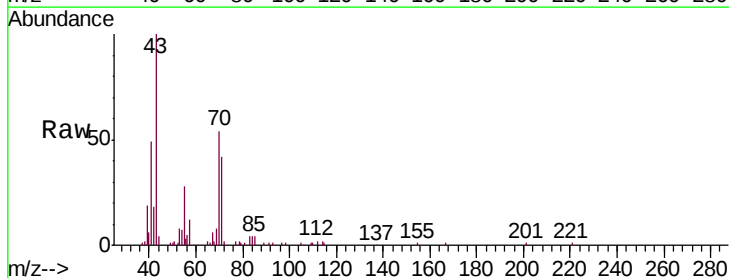
Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

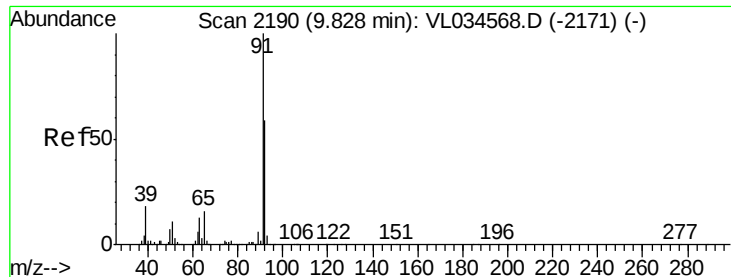
Tgt Ion: 57 Resp: 11654
 Ion Ratio Lower Upper
 57 100
 41 0.0 28.9 43.3#
 56 119.1 25.5 38.3#



#51
 2-Hexanone
 Concen: 0.239 ppbv
 RT: 10.14 min Scan# 2288
 Delta R.T. -0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Tgt Ion: 43 Resp: 36311
 Ion Ratio Lower Upper
 43 100
 58 0.0 37.9 56.9#
 98 0.0 0.3 0.5#





#53

Toluene

Concen: 2.682 ppbv

RT: 9.83 min Scan# 2192

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampled :

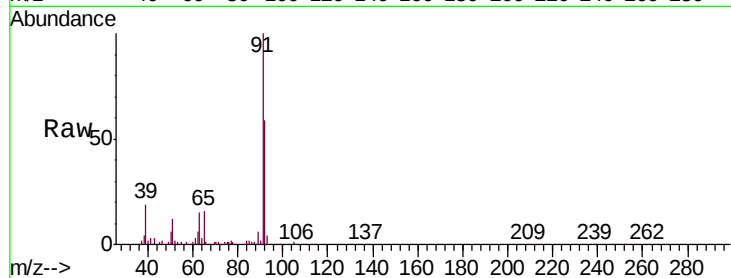
SG-1

Tgt Ion: 91 Resp: 488152

Ion Ratio Lower Upper

91 100

92 57.6 48.2 72.2



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 92.10 (91.80 to 92.80): VL0

9.83

250000

200000

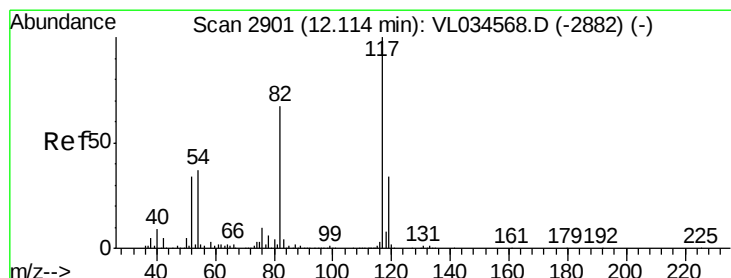
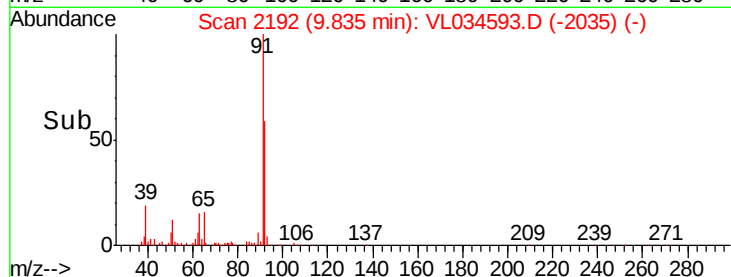
150000

100000

50000

0

Time--> 9.75 9.80 9.85 9.90



#55

Chlorobenzene-d5

Concen: 10.000 ppbv

RT: 12.13 min Scan# 2905

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

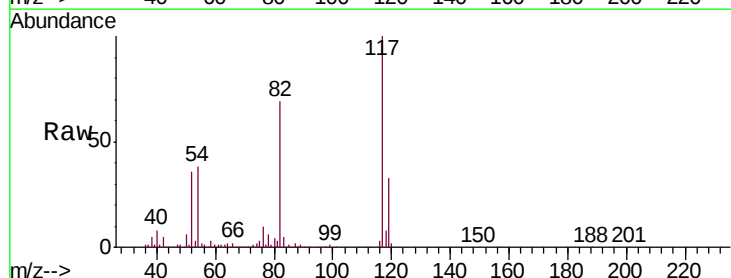
Tgt Ion: 117 Resp: 1906635

Ion Ratio Lower Upper

117 100

82 70.1 54.2 81.4

119 33.2 26.1 39.1



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

1200000

1000000

800000

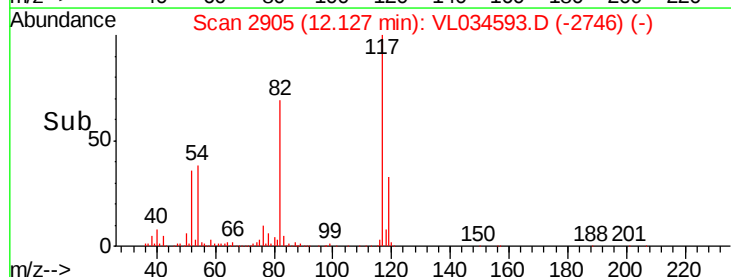
600000

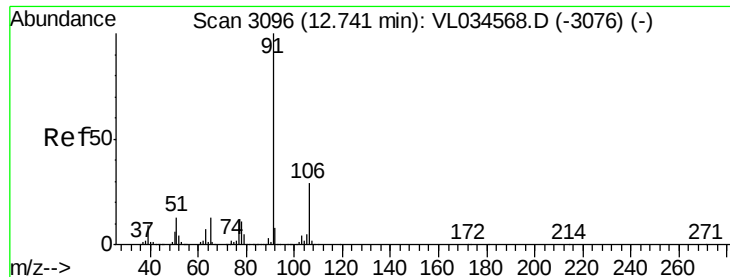
400000

200000

0

Time--> 12.10 12.20





#58

Ethyl Benzene

Concen: 0.631 ppbv

RT: 12.75 min Scan# 3099

Delta R.T. 0.01 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

Instrument :

MSVOA_L

ClientSampled :

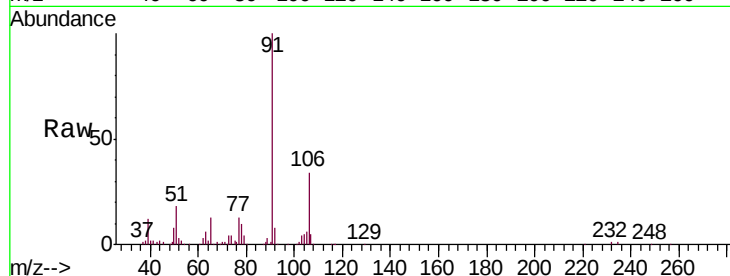
SG-1

Tgt Ion: 91 Resp: 161006

Ion Ratio Lower Upper

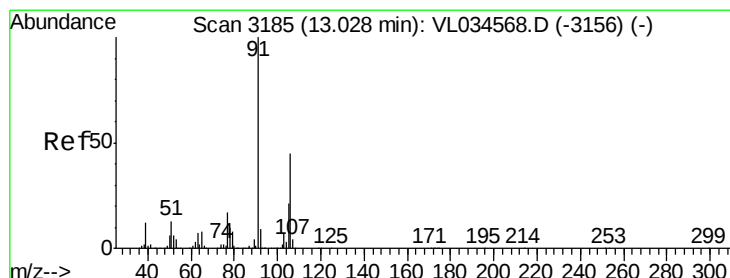
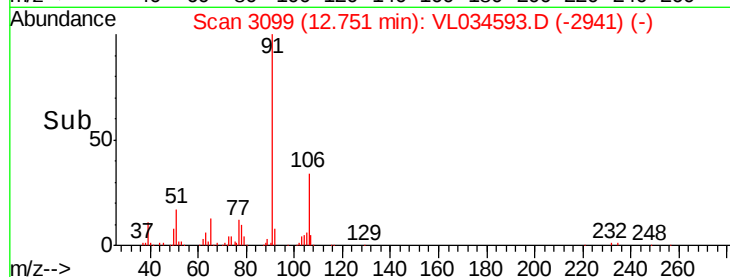
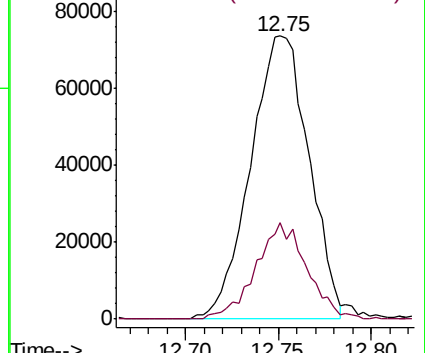
91 100

106 34.0 23.3 34.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V



#59

m/p-Xylene

Concen: 2.774 ppbv

RT: 13.00 min Scan# 3178

Delta R.T. -0.02 min

Lab File: VL034593.D

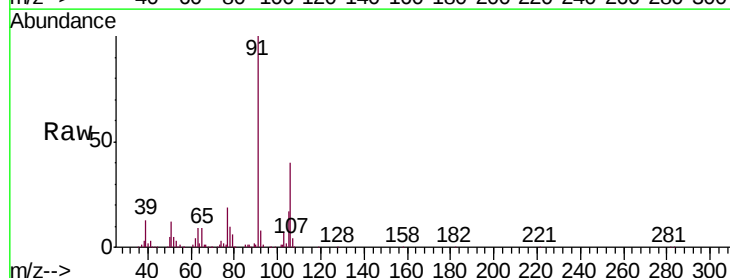
Acq: 4 Feb 2020 23:51

Tgt Ion: 91 Resp: 625701

Ion Ratio Lower Upper

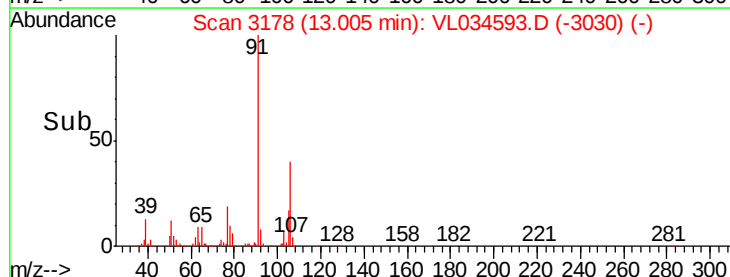
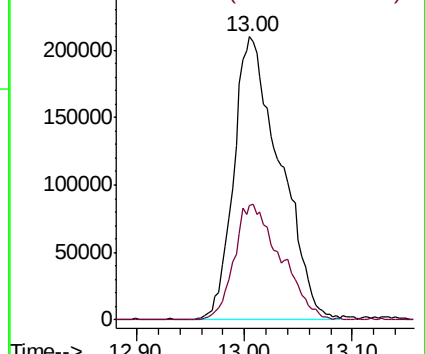
91 100

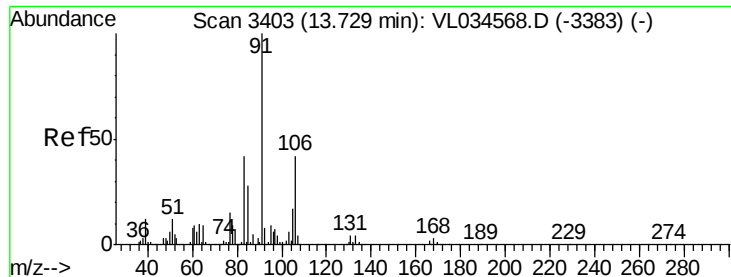
106 41.1 35.3 52.9



Abundance Ion 91.10 (90.80 to 91.80): VL0

Ion 106.10 (105.80 to 106.80): V

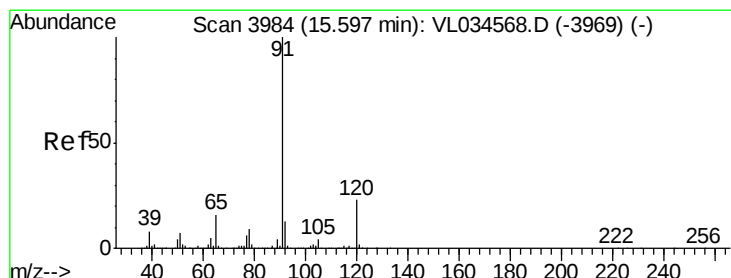
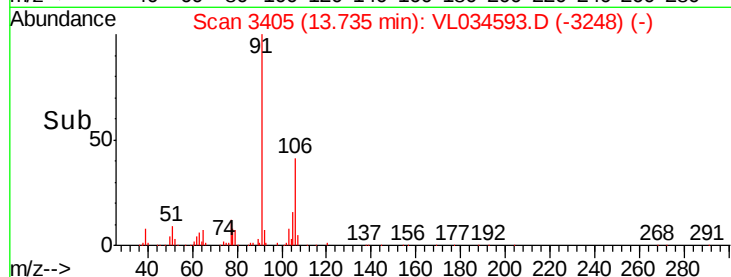
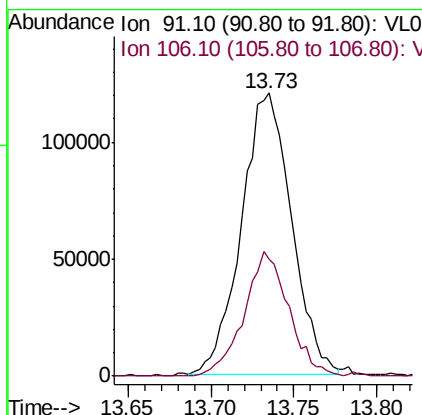
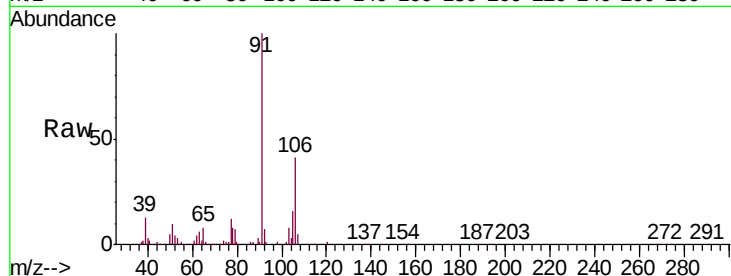




#60
o-Xylene
Concen: 1.115 ppbv
RT: 13.73 min Scan# 3405
Delta R.T. 0.01 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

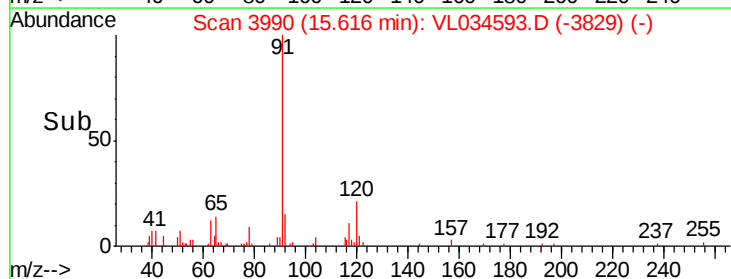
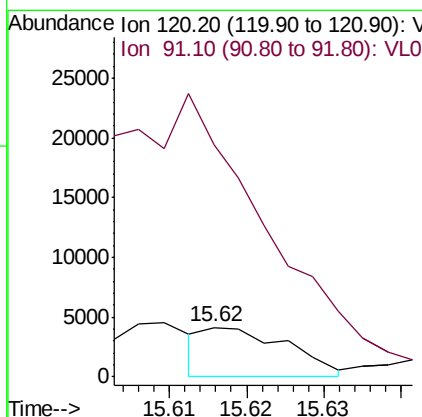
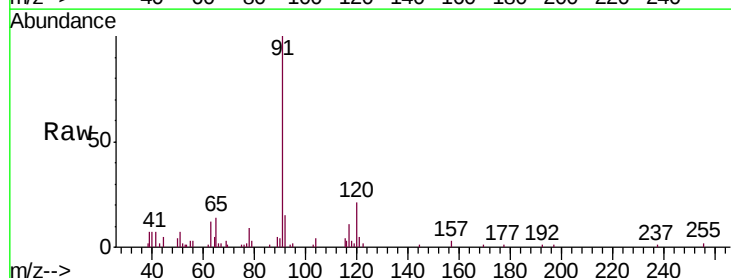
Instrument :
MSVOA_L
ClientSampleId :
SG-1

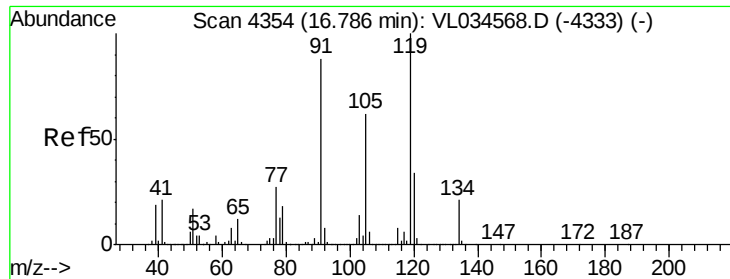
Tgt Ion: 91 Resp: 252461
Ion Ratio Lower Upper
91 100
106 39.9 21.6 65.0



#64
n-propylbenzene
Concen: 0.041 ppbv
RT: 15.62 min Scan# 3990
Delta R.T. 0.02 min
Lab File: VL034593.D
Acq: 4 Feb 2020 23:51

Tgt Ion: 120 Resp: 3094
Ion Ratio Lower Upper
120 100
91 1656.7 365.3 547.9#

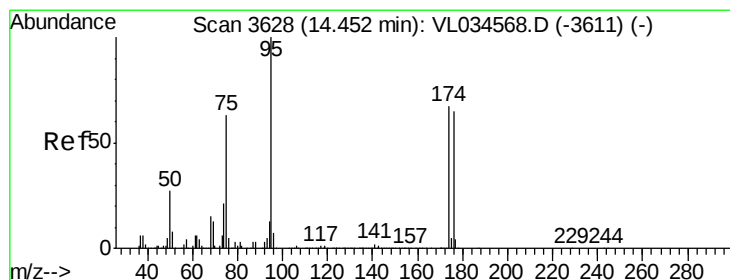
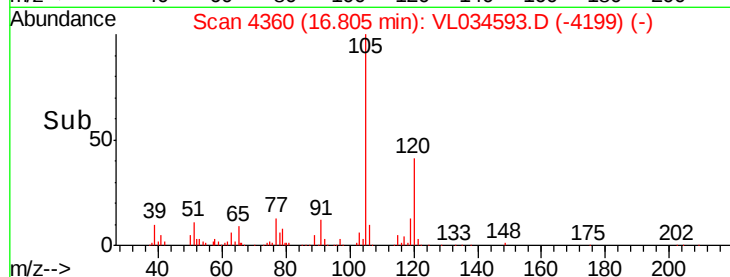
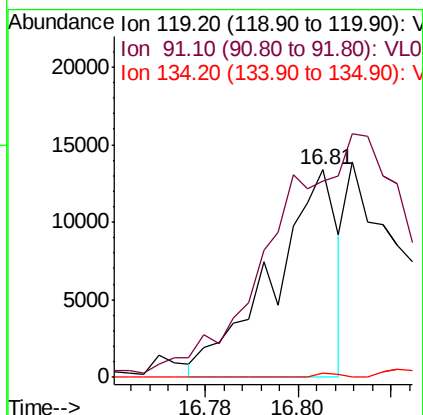
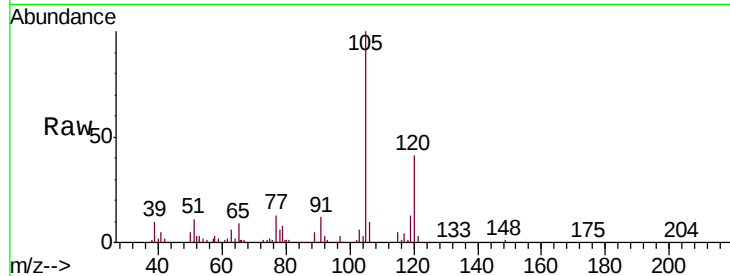




#65
 tert-Butylbenzene
 Concen: 0.049 ppbv
 RT: 16.81 min Scan# 4360
 Delta R.T. 0.02 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

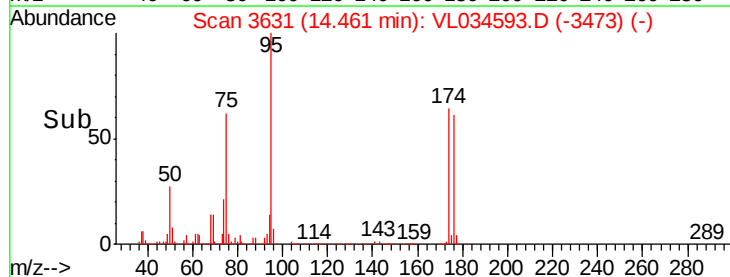
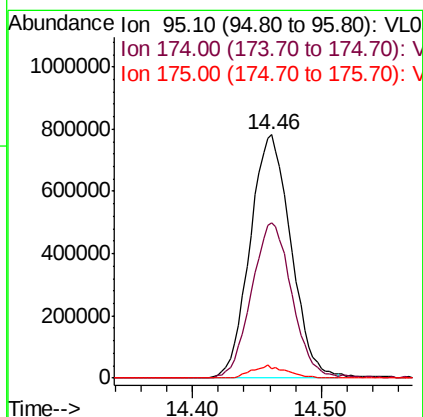
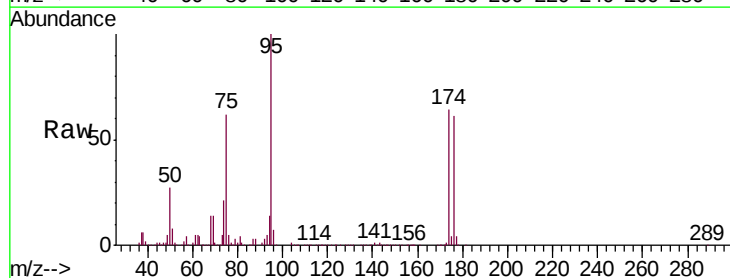
Instrument :
 MSVOA_L
 ClientSampled :
 SG-1

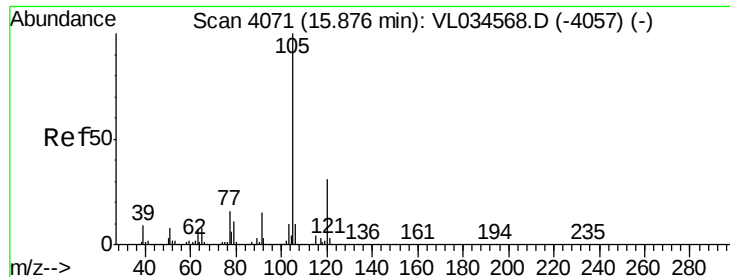
Tgt Ion: 119 Resp: 12962
 Ion Ratio Lower Upper
 119 100
 91 0.0 72.2 108.4#
 134 0.0 15.9 23.9#



#68
 1-Bromo-4-Fluorobenzene
 Concen: 10.723 ppbv
 RT: 14.46 min Scan# 3631
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Tgt Ion: 95 Resp: 1727849
 Ion Ratio Lower Upper
 95 100
 174 63.8 52.3 78.5
 175 4.6 3.8 5.6





#72

4-Ethyltoluene

Concen: 0.068 ppbv

RT: 15.90 min Scan# 4078

Delta R.T. 0.02 min

Lab File: VL034593.D

Acq: 4 Feb 2020 23:51

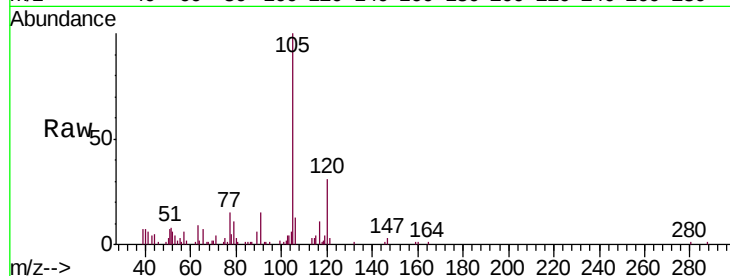
Instrument :

MSVOA_L

ClientSampled :

SG-1

Tgt Ion:	105	Resp:	17040
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.8	35.6#
91	0.0	11.8	17.8#
77	0.0	13.0	19.6#

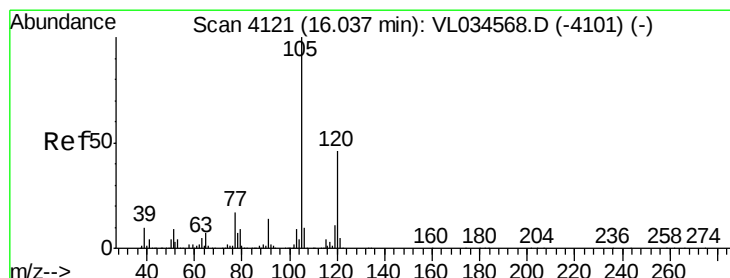
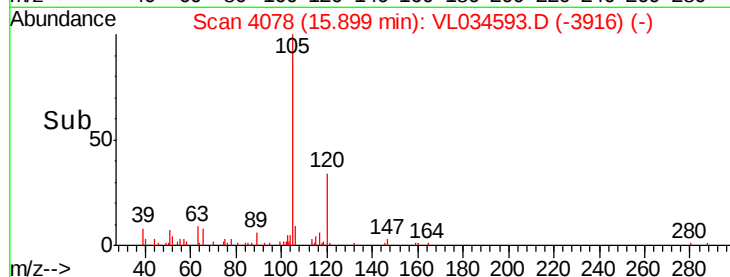
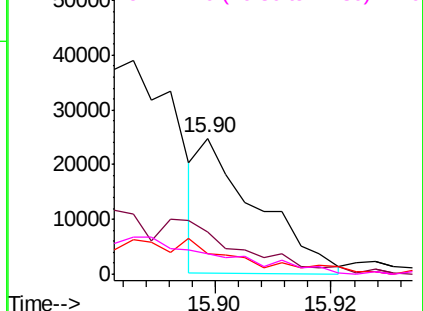


Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V

Ion 91.10 (90.80 to 91.80): VL0

Ion 77.10 (76.80 to 77.80): VL0



#73

1,3,5-Trimethylbenzene

Concen: 0.197 ppbv

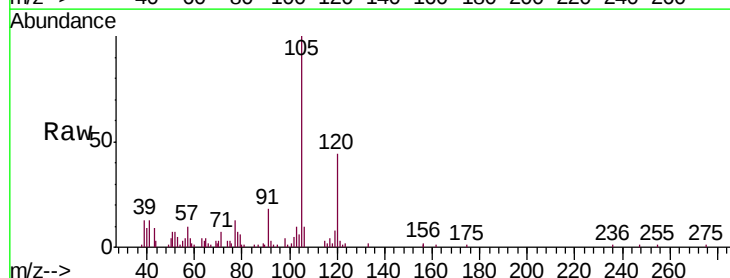
RT: 16.04 min Scan# 4123

Delta R.T. 0.01 min

Lab File: VL034593.D

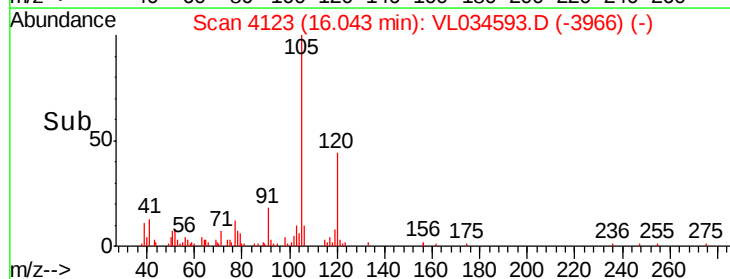
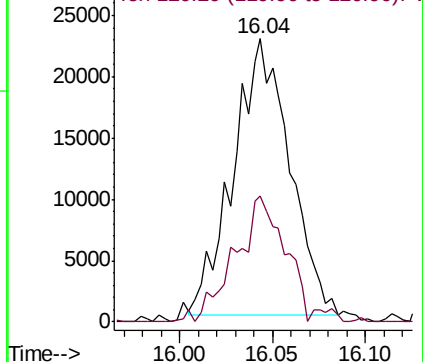
Acq: 4 Feb 2020 23:51

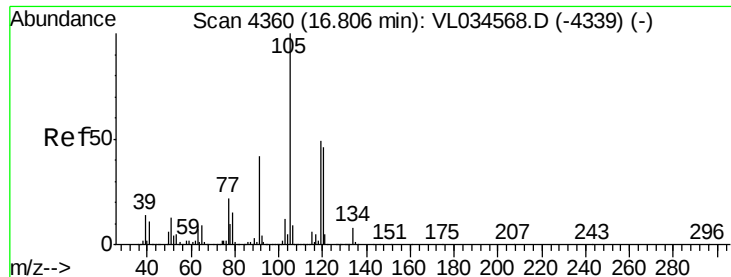
Tgt Ion:	105	Resp:	48011
Ion	Ratio	Lower	Upper
105	100		
120	42.7	37.0	55.6



Abundance Ion 105.10 (104.80 to 105.80): V

Ion 120.20 (119.90 to 120.90): V





#74
 1,2,4-Trimethylbenzene
 Concen: 0.900 ppbv
 RT: 16.81 min Scan# 4362
 Delta R.T. 0.01 min
 Lab File: VL034593.D
 Acq: 4 Feb 2020 23:51

Instrument :
 MSVOA_L
 ClientSampleId :
 SG-1

Tgt Ion:	105	Resp:	242164
Ion	Ratio	Lower	Upper
105	100		
120	42.0	37.1	55.7
91	13.4	34.3	51.5#
77	18.6	17.5	26.3

