

Data Path : Z:\VOASRV\HPCHEM1\MSVOA W\DATA\VW092420\
 Data File : VW016632.D
 Acq On : 23 Sep 2020 15:37
 Operator : SY/VA
 Sample : L4109-13
 Misc : 5.84G/10ML/MSVOA W/SOIL
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 MSVOA_W
 ClientSampleId :
 BG3X3

Quant Time: Sep 24 04:42:50 2020
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\SOM2WLM091520S.M
 Quant Title : VOC Analysis
 QLast Update : Thu Sep 24 04:34:20 2020
 Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	8.85	114	594297	25.00	ug/L	0.00
28) Chlorobenzene-d5	11.63	117	437526	25.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	13.56	152	127726	25.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	2.37	65	140945	24.50	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	98.00%
7) Chloroethane-d5	2.91	69	120995	25.76	ug/L	0.00
Spiked Amount	25.000	Range	30 - 150	Recovery	=	103.04%
10) 1,1-Dichloroethene-d2	4.03	63	209882	16.32	ug/L	0.00
Spiked Amount	25.000	Range	45 - 110	Recovery	=	65.28%
20) 2-Butanone-d5	7.10	46	50702	32.33	ug/L	0.02
Spiked Amount	50.000	Range	20 - 135	Recovery	=	64.66%
24) Chloroform-d	7.65	84	294102	23.66	ug/L	0.00
Spiked Amount	25.000	Range	40 - 150	Recovery	=	94.64%
26) 1,2-Dichloroethane-d4	8.31	65	146340	22.93	ug/L	0.00
Spiked Amount	25.000	Range	70 - 130	Recovery	=	91.72%
29) Benzene-d6	8.28	84	571341	29.12	ug/L	0.00
Spiked Amount	25.000	Range	20 - 135	Recovery	=	116.48%
33) 1,2-Dichloropropane-d6	9.28	67	155447	29.23	ug/L	0.00
Spiked Amount	25.000	Range	70 - 120	Recovery	=	116.92%
37) Toluene-d8	10.33	98	486769	25.22	ug/L	0.00
Spiked Amount	25.000	Range	30 - 130	Recovery	=	100.88%
38) trans-1,3-Dichloropropene-	10.59	79	64346	24.00	ug/L	0.00
Spiked Amount	25.000	Range	30 - 135	Recovery	=	96.00%
39) 2-Hexanone-d5	10.93	63	43864	45.35	ug/L	0.00
Spiked Amount	50.000	Range	20 - 135	Recovery	=	90.70%
48) 1,1,2,2-Tetrachloroethane-	12.69	84	96439	21.31	ug/L	0.00
Spiked Amount	25.000	Range	45 - 120	Recovery	=	85.24%
61) 1,2-Dichlorobenzene-d4	13.86	152	99423	24.36	ug/L	0.00
Spiked Amount	25.000	Range	75 - 120	Recovery	=	97.44%

Target Compounds

Target Compounds	R.T.	QIon	Response	Conc	Units	Ovalue
12) 1,1-Dichloroethene	4.03	96	1975	0.262	ug/L #	1
13) Acetone	4.15	43	17137	13.949	ug/L	99
16) Methylene chloride	4.93	84	38466	4.197	ug/L	95
21) 2-Butanone	7.18	43	14862	7.111	ug/L #	51
30) Cyclohexane	7.96	56	41141	4.303	ug/L	94
36) Methylcyclohexane	9.34	83	9865	0.857	ug/L #	55
42) cis-1,3-Dichloropropene	10.04	75	5597	0.601	ug/L #	77
44) Toluene	10.39	91	202132	7.665	ug/L	97
46) 1,1,2-Trichloroethane	10.77	97	29767	6.478	ug/L #	29
49) 2-Hexanone	10.94	43	30062	13.669	ug/L #	35
52) Chlorobenzene	11.66	112	5695	0.322	ug/L	91
53) Ethylbenzene	11.73	91	312465	10.437	ug/L	97
54) m,p-Xylene	11.83	106	680118	58.016	ug/L	100
55) o-xylene	12.17	106	400025	35.618	ug/L	99
56) Styrene	12.17	104	20430	1.095	ug/L #	1
57) Isopropylbenzene	12.46	105	136851	4.459	ug/L	100
58) 1,1,2,2-Tetrachloroethane	12.71	83	1677	0.326	ug/L #	4

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Quant Title : VOC Analysis
QLast Update : Thu Sep 24 04:34:20 2020
Response via : Initial Calibration

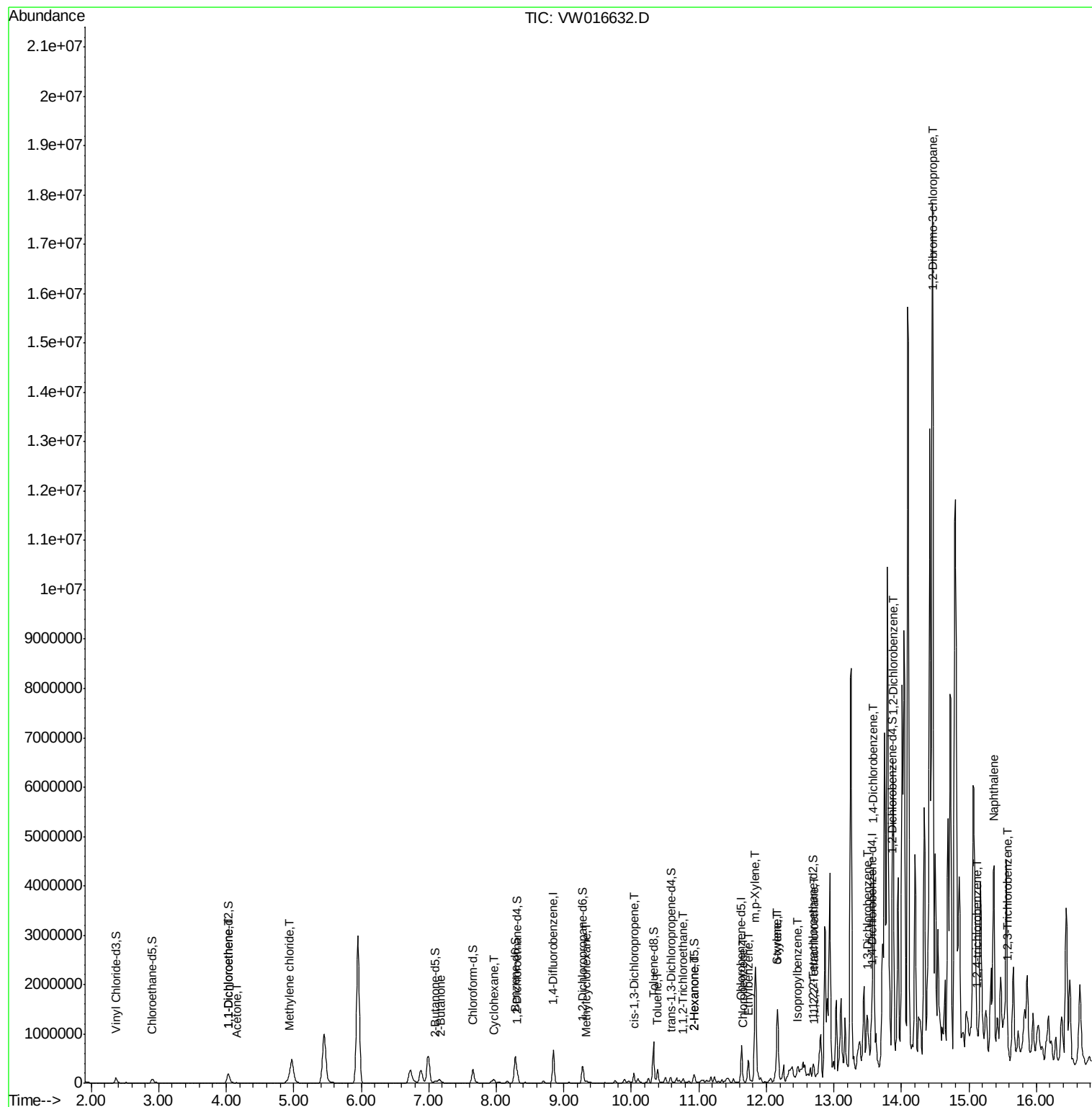
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
63) 1,3-Dichlorobenzene	13.50	146	11969	1.441	ug/L #	6
64) 1,4-Dichlorobenzene	13.58	146	79112	9.724	ug/L #	67
65) 1,2-Dichlorobenzene	13.87	146	94668	12.753	ug/L #	81
66) 1,2-Dibromo-3-chloropropan	14.46	75	132011	248.092	ug/L #	1
68) 1,2,4-trichlorobenzene	15.13	180	3118	0.634	ug/L #	1
69) Naphthalene	15.37	128	3433087	394.020	ug/L	99
70) 1,2,3-Trichlorobenzene	15.58	180	3074	0.727	ug/L #	78

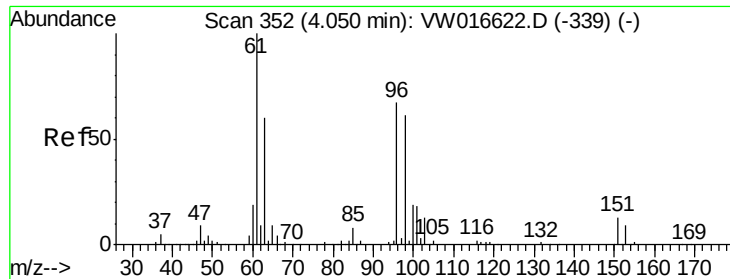
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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#12

1,1-Dichloroethene

Concen: 0.262 ug/L

RT: 4.03 min Scan# 349

Delta R.T. -0.02 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampled :

BG3X3

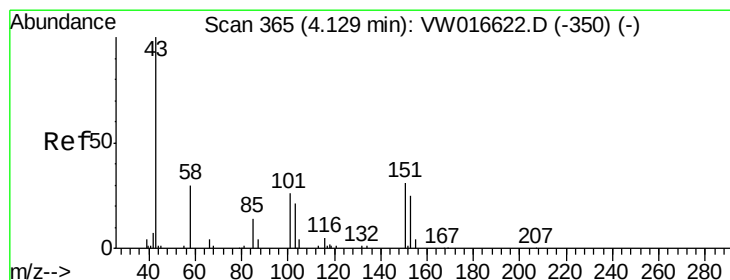
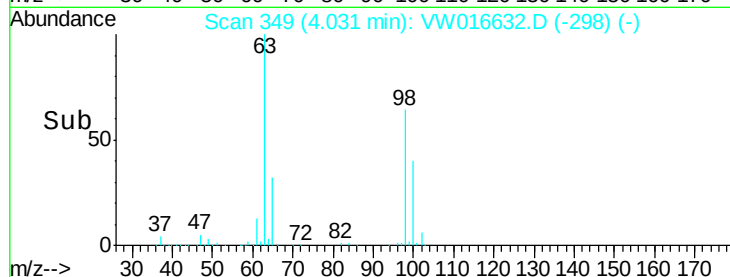
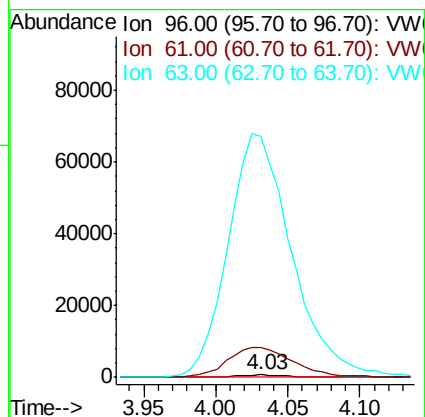
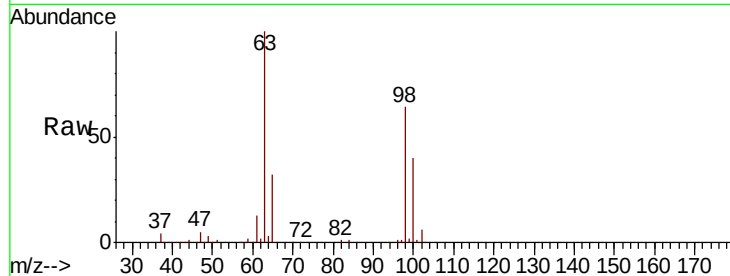
Tot Ion: 96 Resp: 1975

Ion Ratio Lower Upper

96 100

61 1198.7 111.4 206.8#

63 9482.3 73.0 135.6#



#13

Acetone

Concen: 13.949 ug/L

RT: 4.15 min Scan# 369

Delta R.T. 0.02 min

Lab File: VW016632.D

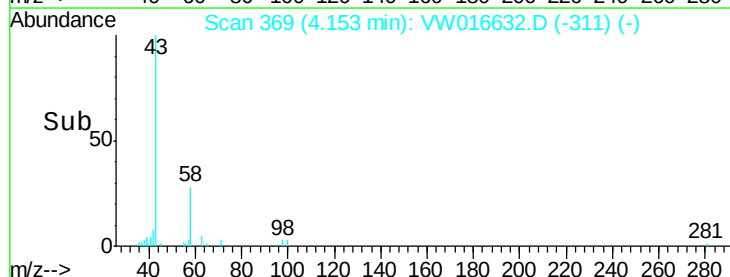
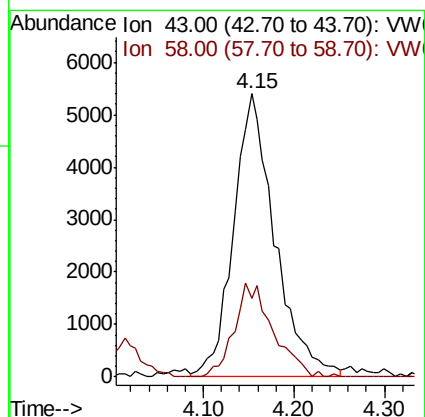
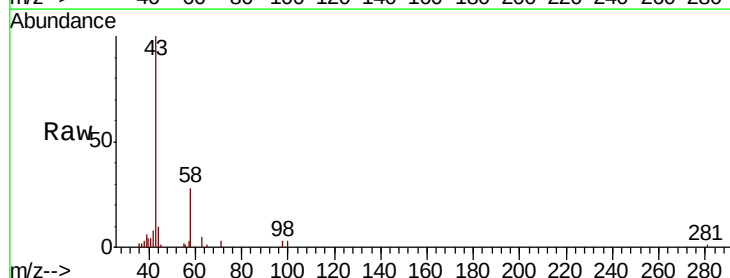
Acq: 23 Sep 2020 15:37

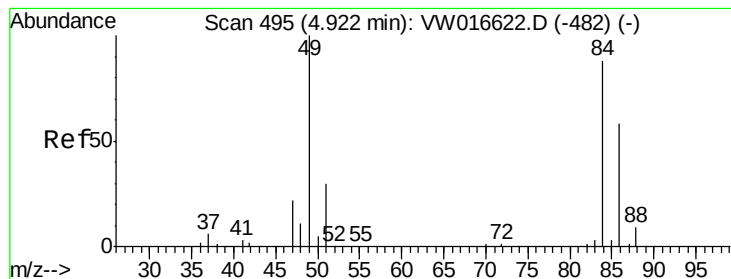
Tgt Ion: 43 Resp: 17137

Ion Ratio Lower Upper

43 100

58 30.6 0.0 60.2





#16

Methylene chloride

Concen: 4.197 ug/L

RT: 4.93 min Scan# 496

Delta R.T. 0.01 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

BG3X3

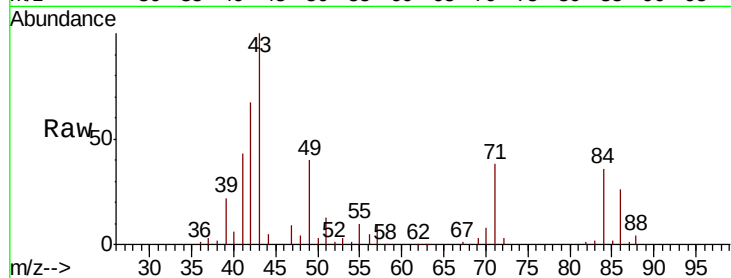
Tot Ion: 84 Resp: 38466

Ion Ratio Lower Upper

84 100

49 110.1 76.0 141.2

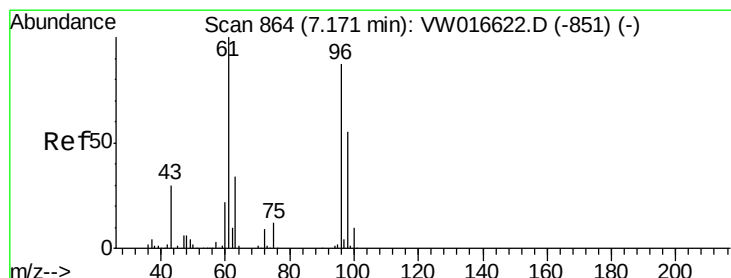
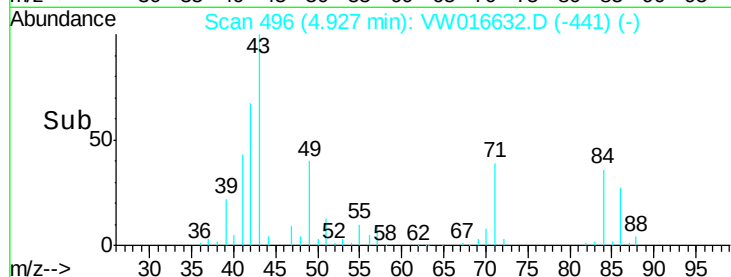
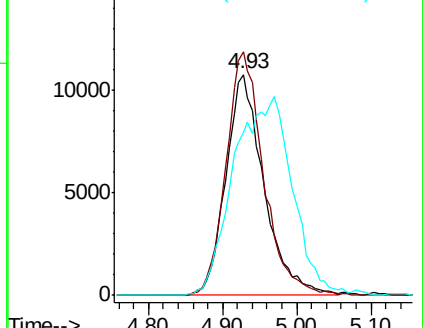
86 73.4 45.6 84.6



Abundance Ion 84.00 (83.70 to 84.70): VW

Ion 49.00 (48.70 to 49.70): VW

Ion 86.00 (85.70 to 86.70): VW



#21

2-Butanone

Concen: 7.111 ug/L

RT: 7.18 min Scan# 866

Delta R.T. 0.01 min

Lab File: VW016632.D

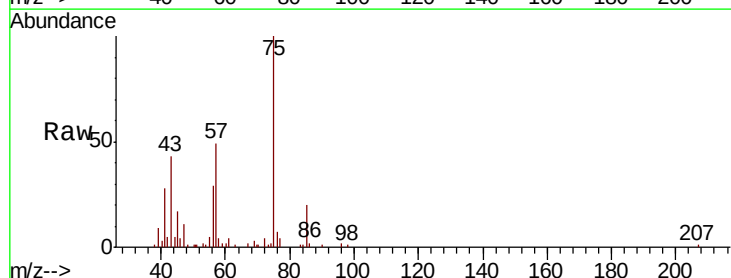
Acq: 23 Sep 2020 15:37

Tgt Ion: 43 Resp: 14862

Ion Ratio Lower Upper

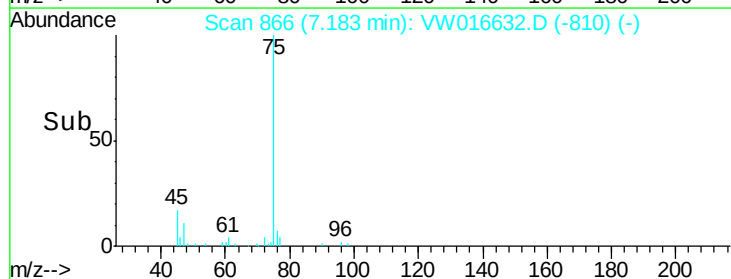
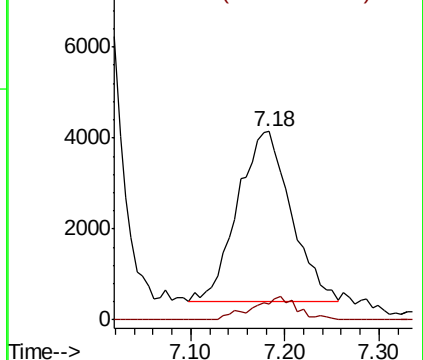
43 100

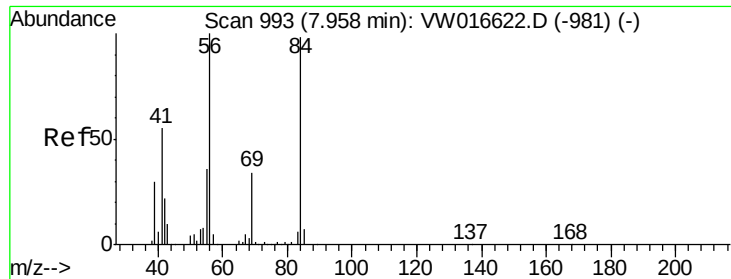
72 3.2 14.6 43.8#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW

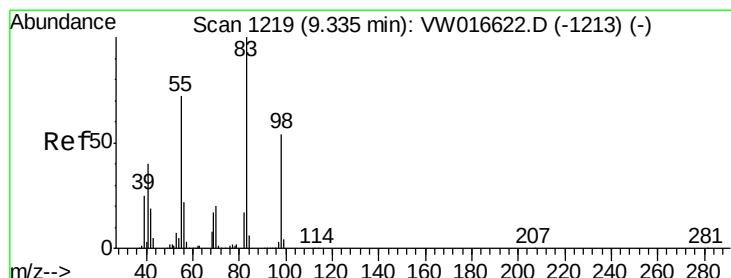
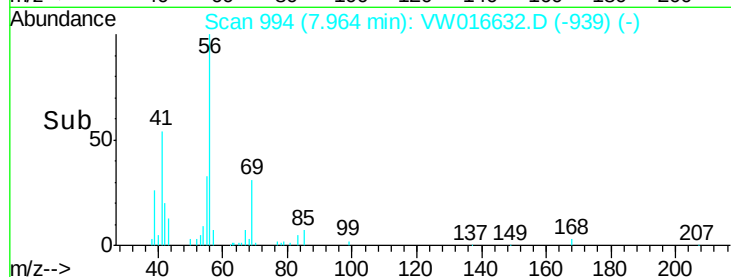
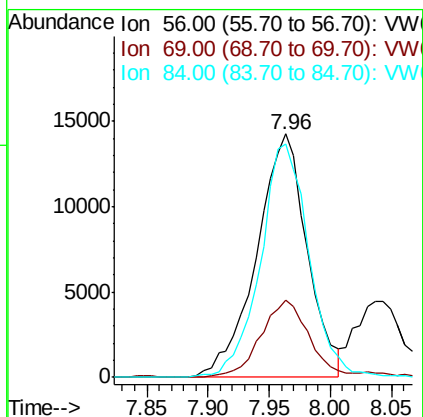
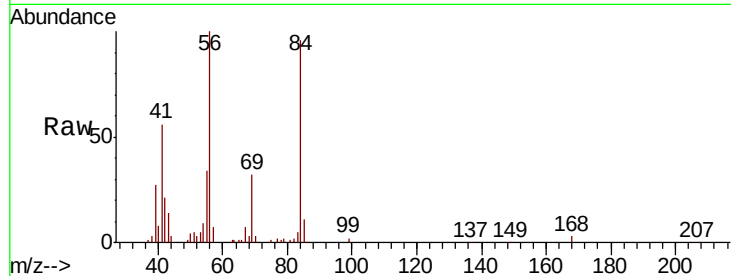




#30
Cyclohexane
Concen: 4.303 ug/L
RT: 7.96 min Scan# 994
Delta R.T. 0.01 min
Lab File: VW016632.D
Acq: 23 Sep 2020 15:37

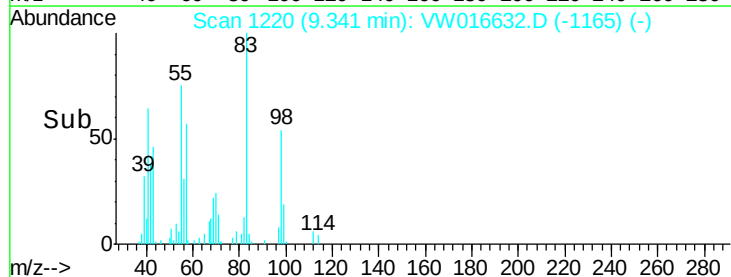
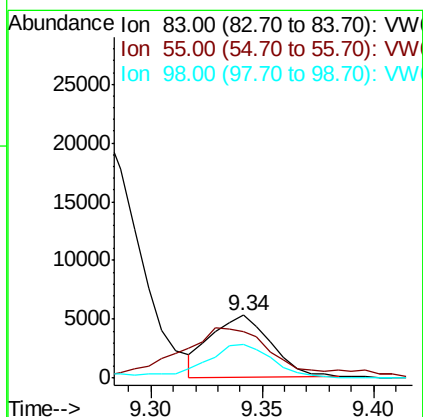
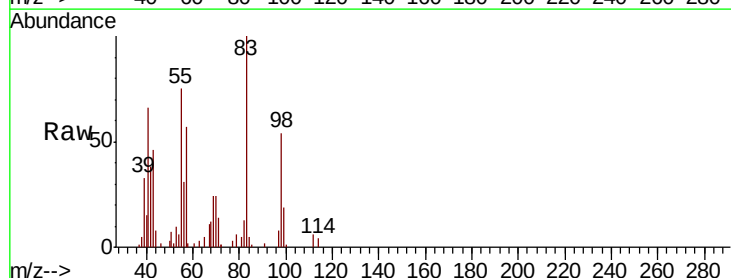
Instrument :
MSVOA_W
ClientSampled :
BG3X3

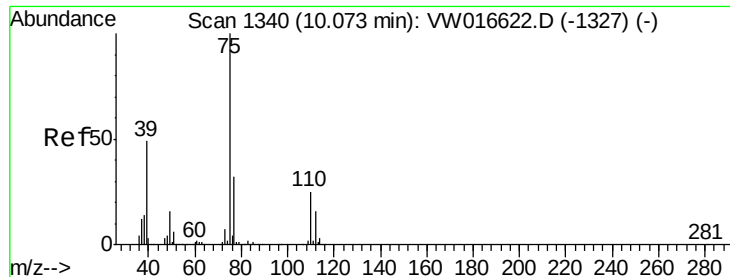
Tot Ion: 56 Resp: 41141
Ion Ratio Lower Upper
56 100
69 30.4 26.5 39.7
84 92.6 79.0 118.6



#36
Methylcyclohexane
Concen: 0.857 ug/L
RT: 9.34 min Scan# 1220
Delta R.T. 0.01 min
Lab File: VW016632.D
Acq: 23 Sep 2020 15:37

Tgt Ion: 83 Resp: 9865
Ion Ratio Lower Upper
83 100
55 127.7 55.9 83.9#
98 59.7 42.1 63.1





#42

cis-1,3-Dichloropropene

Concen: 0.601 ug/L

RT: 10.04 min Scan# 1334

Delta R.T. -0.04 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

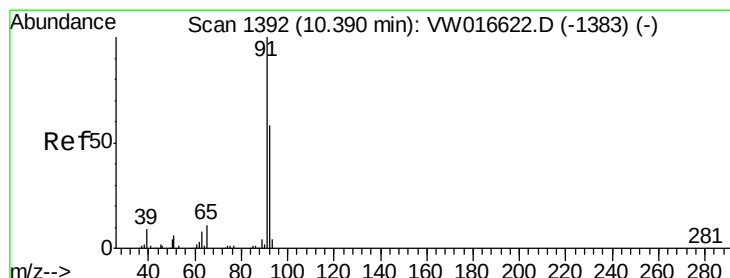
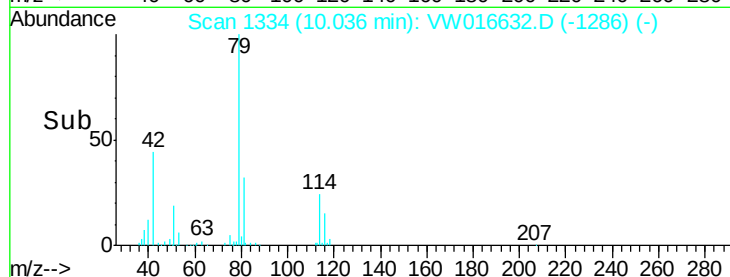
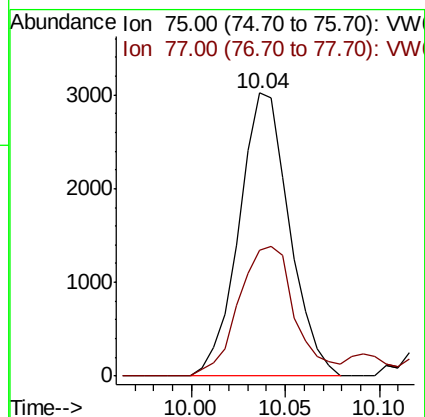
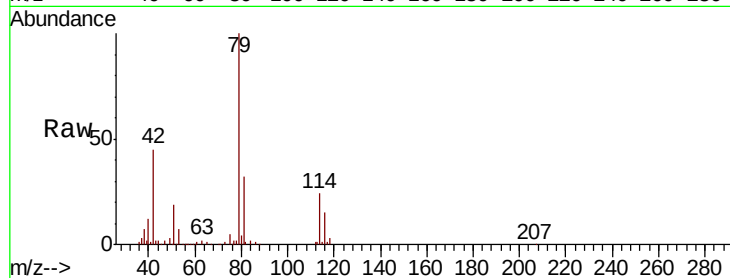
BG3X3

Tot Ion: 75 Resp: 5597

Ion Ratio Lower Upper

75 100

77 44.3 22.2 41.2#



#44

Toluene

Concen: 7.665 ug/L

RT: 10.39 min Scan# 1392

Delta R.T. -0.00 min

Lab File: VW016632.D

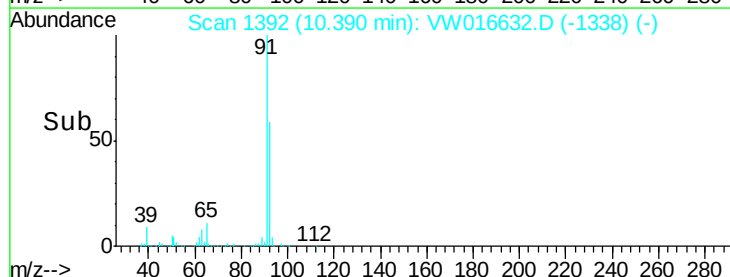
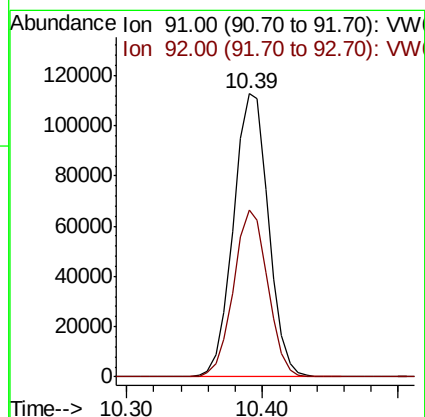
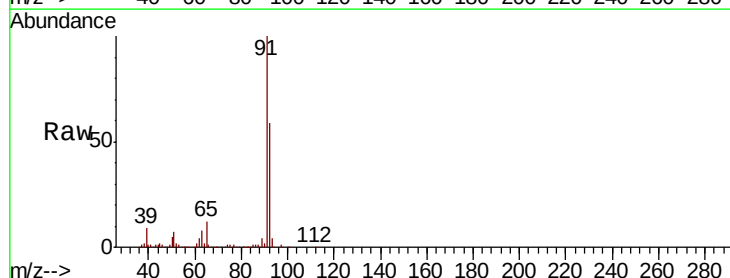
Acq: 23 Sep 2020 15:37

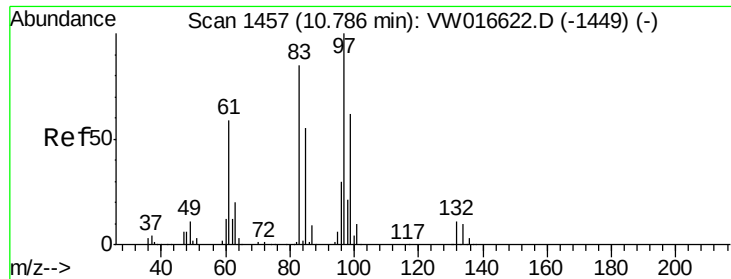
Tgt Ion: 91 Resp: 202132

Ion Ratio Lower Upper

91 100

92 59.1 39.6 73.6





#46

1,1,2-Trichloroethane

Concen: 6.478 ug/L

RT: 10.77 min Scan# 1454

Delta R.T. -0.02 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

BG3X3

Tot Ion: 97 Resp: 29767

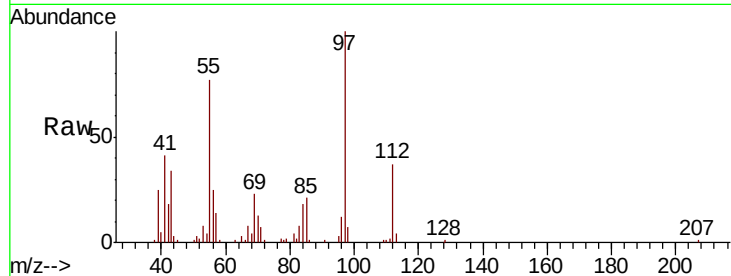
Ion Ratio Lower Upper

97 100

83 7.9 55.7 103.5#

85 21.0 36.8 68.4#

99 0.0 43.7 81.1#

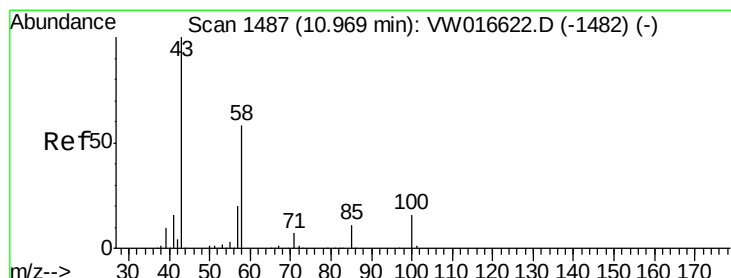
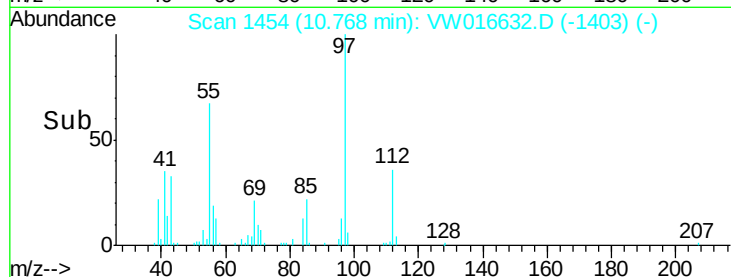
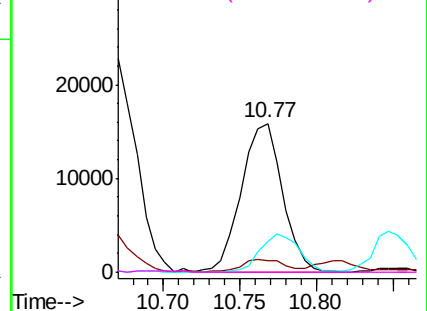


Abundance Ion 97.00 (96.70 to 97.70): VW

Ion 83.00 (82.70 to 83.70): VW

Ion 85.00 (84.70 to 85.70): VW

Ion 99.00 (98.70 to 99.70): VW



#49

2-Hexanone

Concen: 13.669 ug/L

RT: 10.94 min Scan# 1482

Delta R.T. -0.03 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Tgt Ion: 43 Resp: 30062

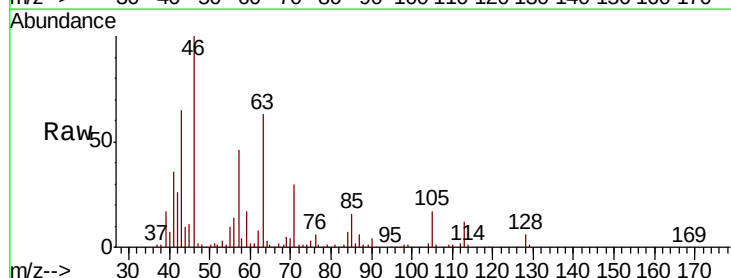
Ion Ratio Lower Upper

43 100

58 7.2 44.2 66.2#

57 59.4 16.3 24.5#

100 0.0 12.4 18.6#

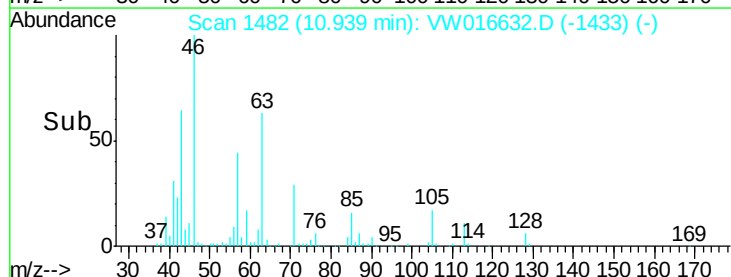
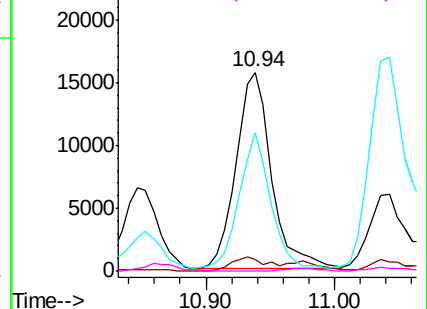


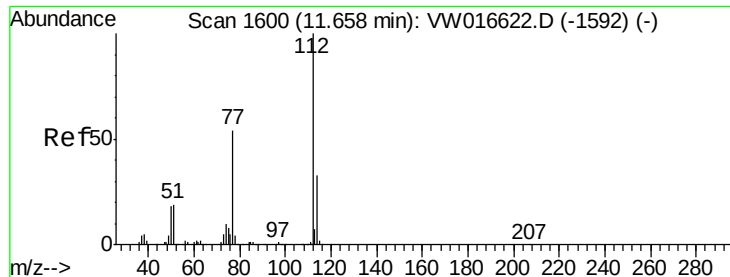
Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 58.00 (57.70 to 58.70): VW

Ion 57.00 (56.70 to 57.70): VW

Ion 100.00 (99.70 to 100.70): VW





#52

Chlorobenzene

Concen: 0.322 ug/L

RT: 11.66 min Scan# 1600

Delta R.T. -0.00 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

BG3X3

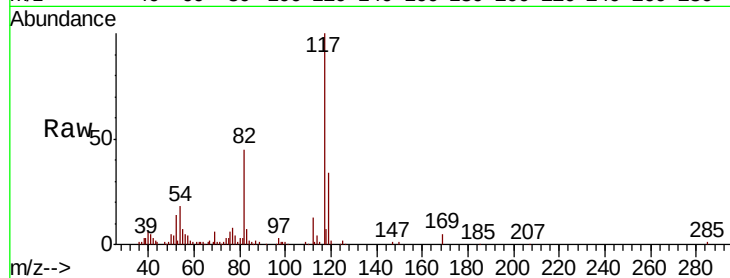
Tot Ion:112 Resp: 5695

Ion Ratio Lower Upper

112 100

77 63.8 43.1 64.7

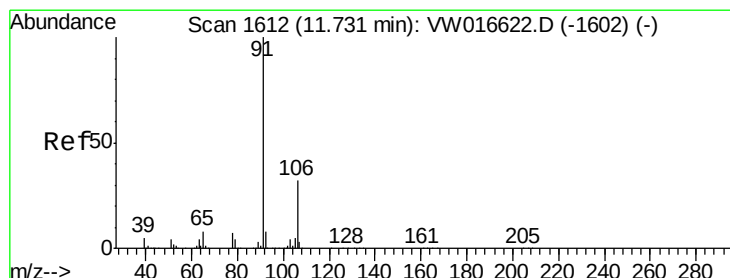
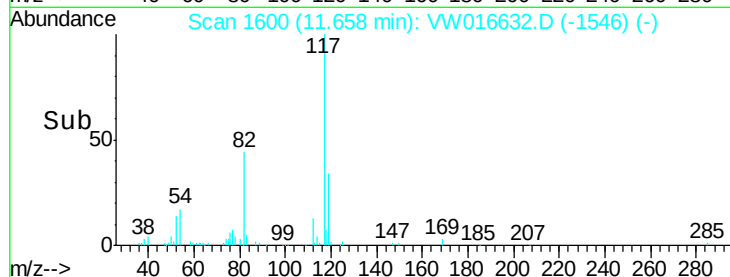
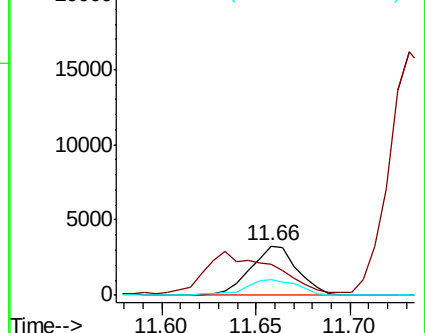
114 31.3 22.3 41.3



Abundance Ion 112.00 (111.70 to 112.70): V

Ion 77.00 (76.70 to 77.70): VW

Ion 114.00 (113.70 to 114.70): V



#53

Ethylbenzene

Concen: 10.437 ug/L

RT: 11.73 min Scan# 1612

Delta R.T. -0.00 min

Lab File: VW016632.D

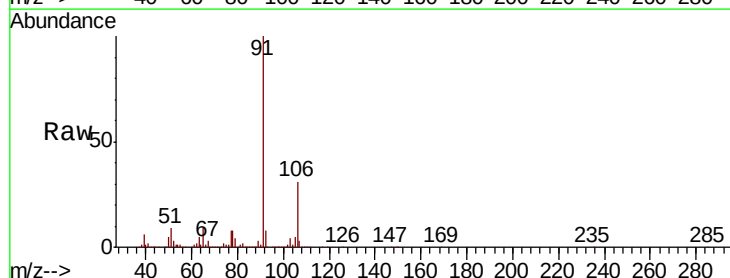
Acq: 23 Sep 2020 15:37

Tgt Ion: 91 Resp: 312465

Ion Ratio Lower Upper

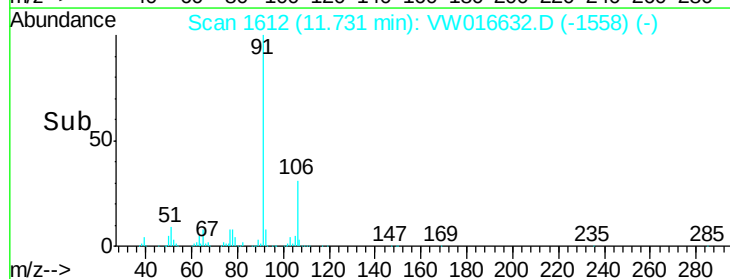
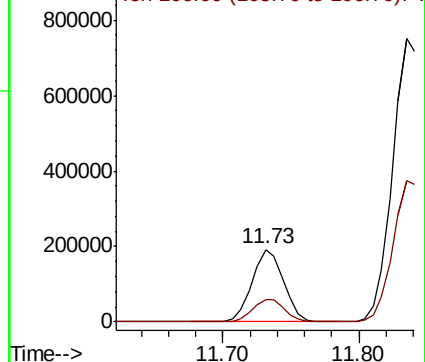
91 100

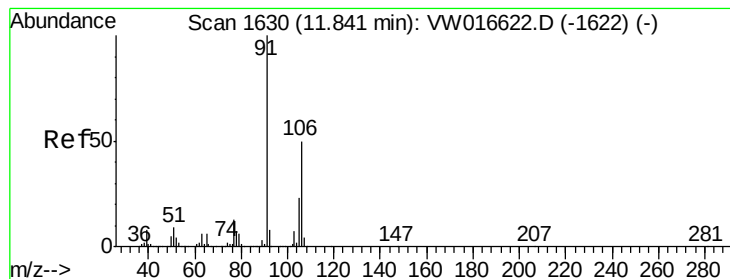
106 31.4 20.7 38.5



Abundance Ion 91.00 (90.70 to 91.70): VW

Ion 106.00 (105.70 to 106.70): V





#54

m,p-Xylene

Concen: 58.016 ug/L

RT: 11.83 min Scan# 1629

Delta R.T. -0.01 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

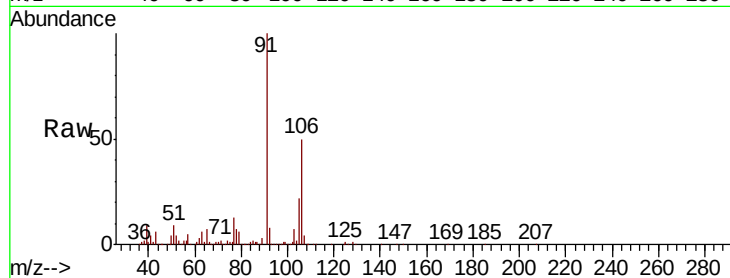
BG3X3

Tot Ion:106 Resp: 680118

Ion Ratio Lower Upper

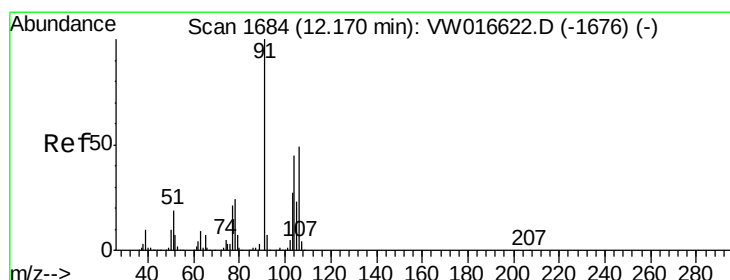
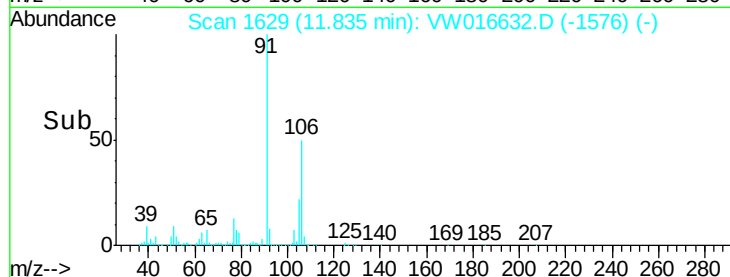
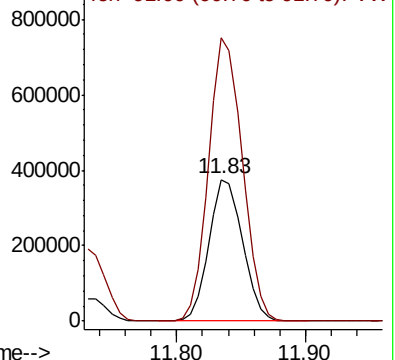
106 100

91 199.8 139.7 259.5



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW



#55

o-xylene

Concen: 35.618 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. -0.00 min

Lab File: VW016632.D

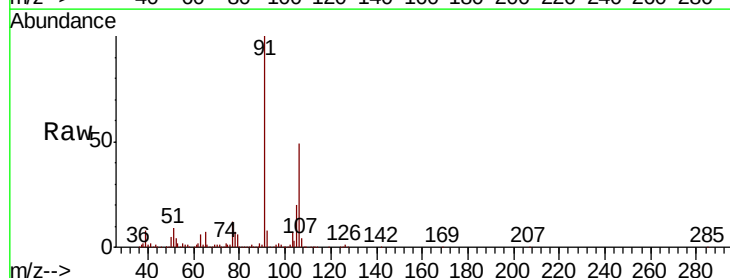
Acq: 23 Sep 2020 15:37

Tgt Ion:106 Resp: 400025

Ion Ratio Lower Upper

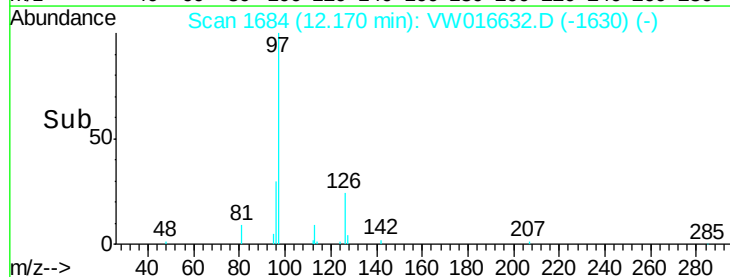
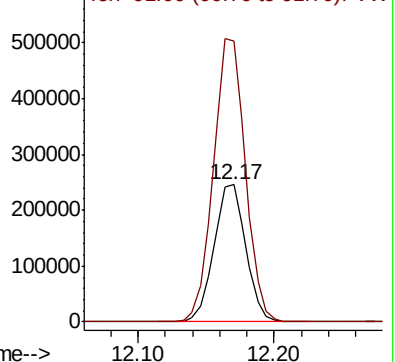
106 100

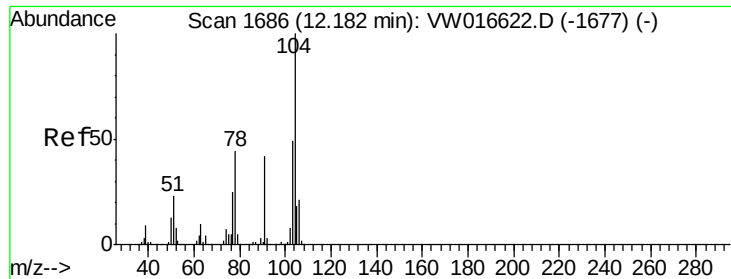
91 204.9 144.8 268.8



Abundance Ion 106.00 (105.70 to 106.70): V

Ion 91.00 (90.70 to 91.70): VW





#56

Stvrene

Concen: 1.095 ug/L

RT: 12.17 min Scan# 1684

Delta R.T. -0.01 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampleId :

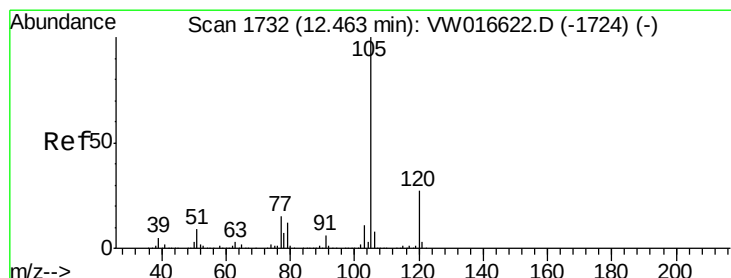
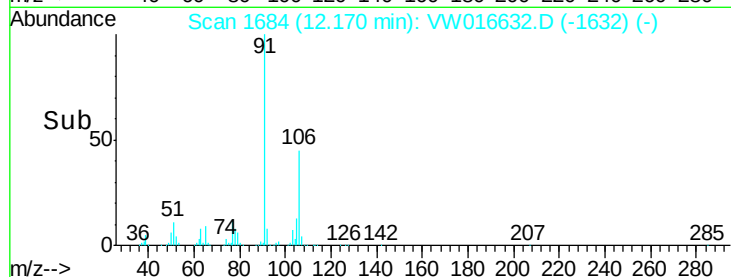
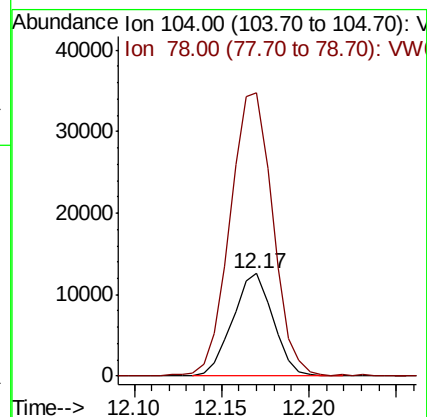
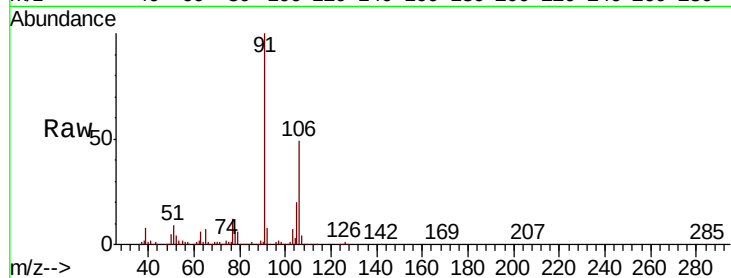
BG3X3

Tot Ion:104 Resp: 20430

Ion Ratio Lower Upper

104 100

78 275.2 31.4 58.2#



#57

Isopropylbenzene

Concen: 4.459 ug/L

RT: 12.46 min Scan# 1732

Delta R.T. -0.00 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

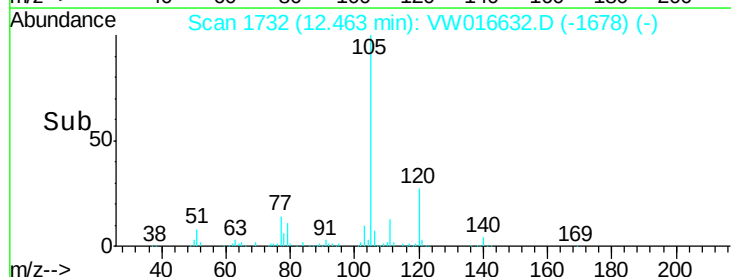
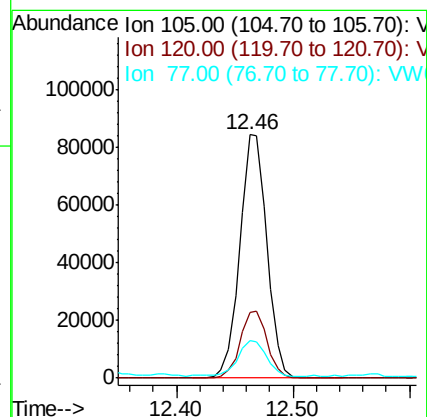
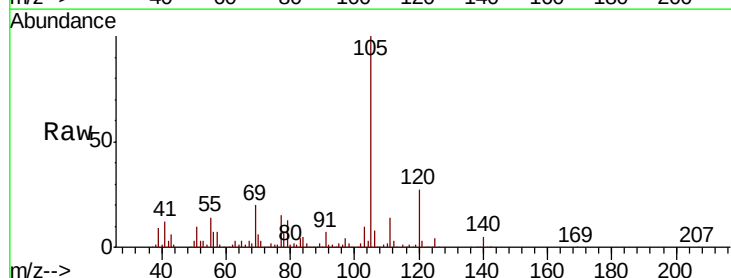
Tgt Ion:105 Resp: 136851

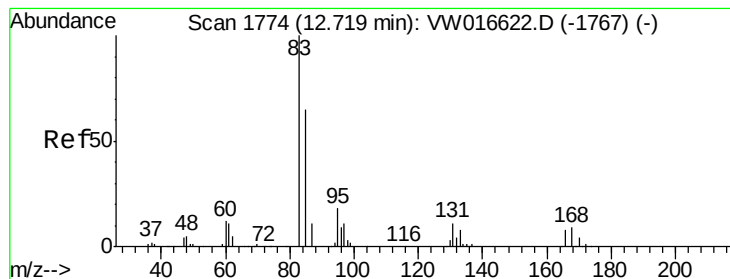
Ion Ratio Lower Upper

105 100

120 27.3 21.8 32.8

77 15.4 12.2 18.2





#58

1,1,2,2-Tetrachloroethane

Concen: 0.326 ug/L

RT: 12.71 min Scan# 1773

Delta R.T. -0.01 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampled :

BG3X3

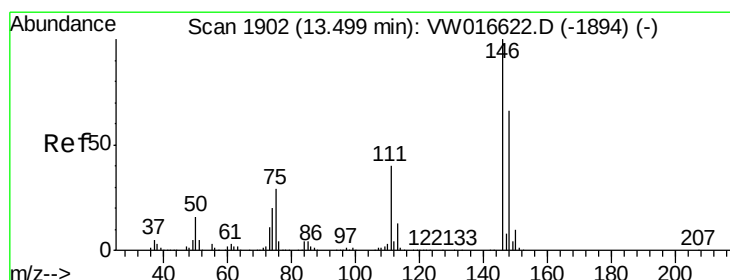
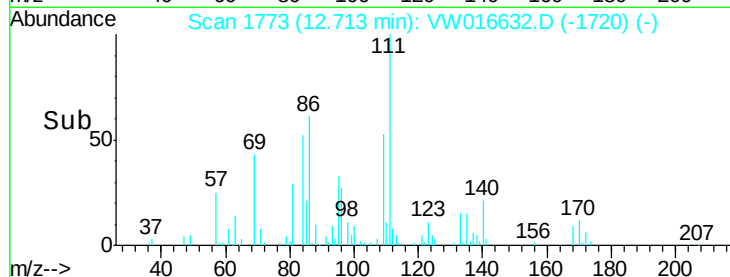
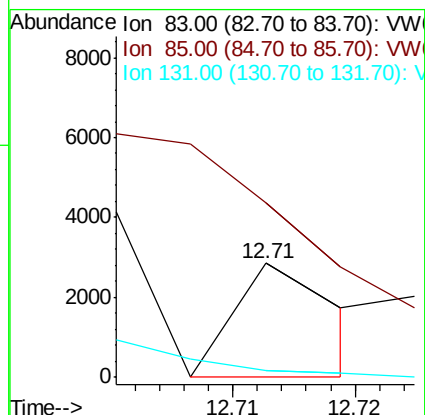
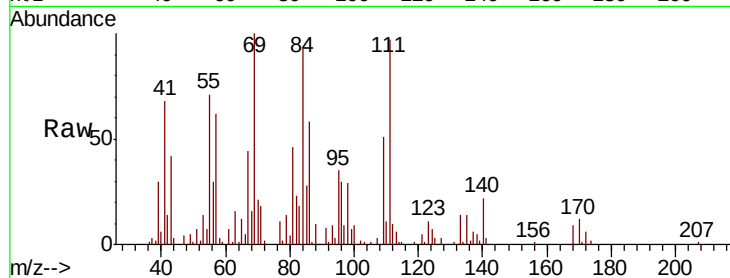
Tot Ion: 83 Resp: 1677

Ion Ratio Lower Upper

83 100

85 152.8 46.0 85.4#

131 6.0 9.0 13.6#



#63

1,3-Dichlorobenzene

Concen: 1.441 ug/L

RT: 13.50 min Scan# 1902

Delta R.T. -0.00 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

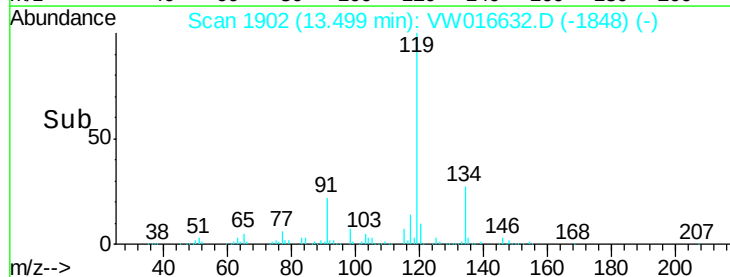
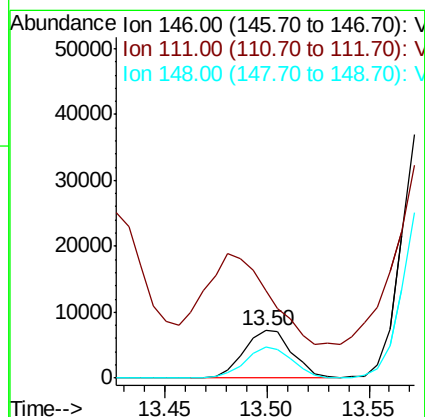
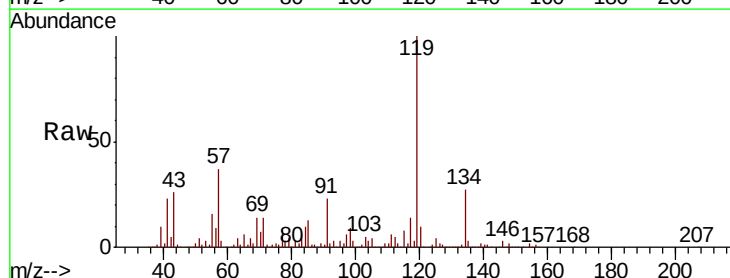
Tgt Ion: 146 Resp: 11969

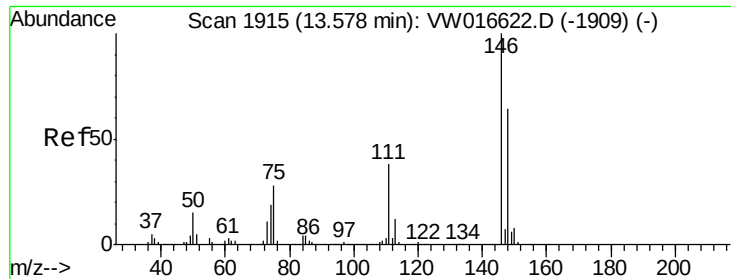
Ion Ratio Lower Upper

146 100

111 185.1 25.0 46.4#

148 65.4 44.0 81.8

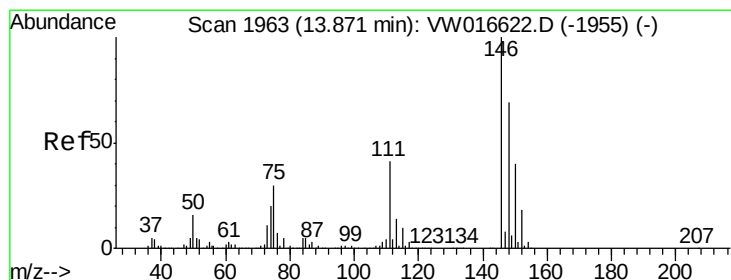
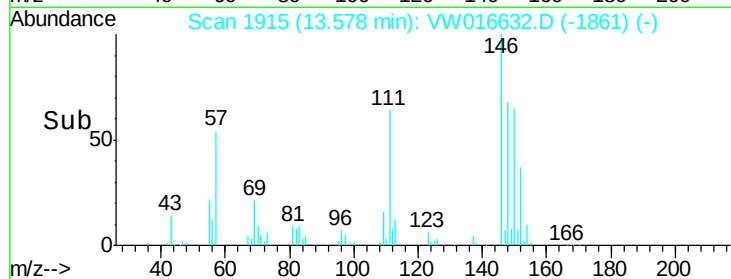
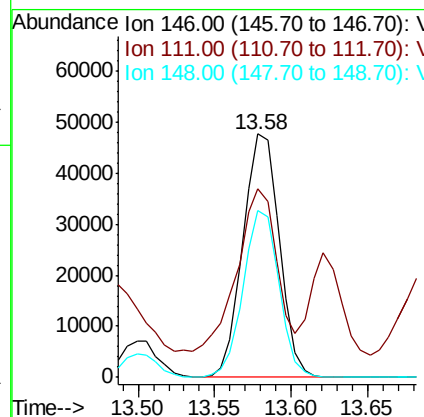
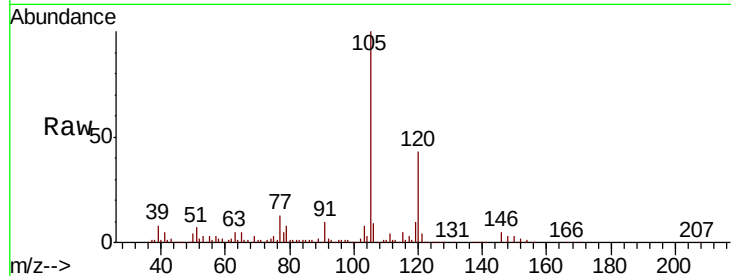




#64
 1,4-Dichlorobenzene
 Concen: 9.724 ug/L
 RT: 13.58 min Scan# 1915
 Delta R.T. -0.00 min
 Lab File: VW016632.D
 Acq: 23 Sep 2020 15:37

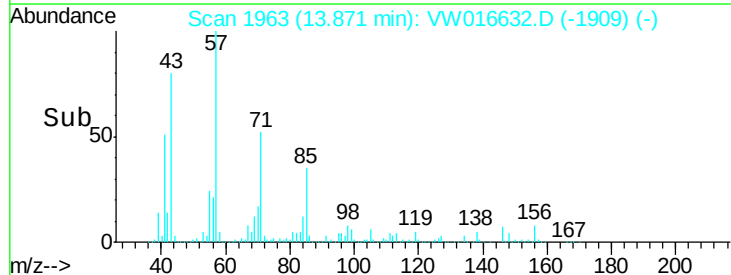
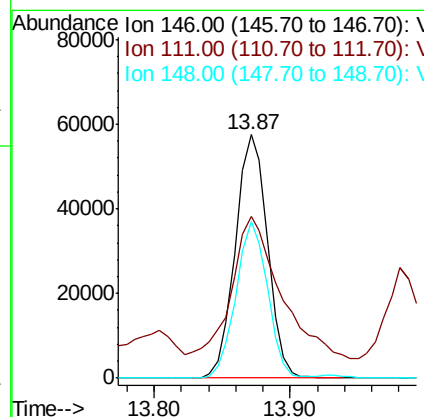
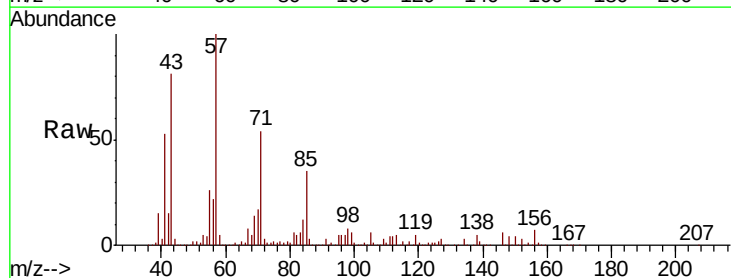
Instrument :
 MSVOA_W
 ClientSampleId :
 BG3X3

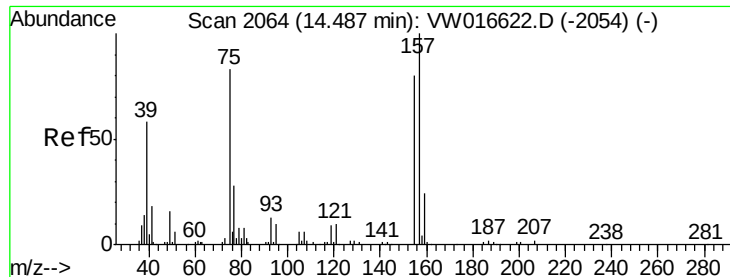
Tot Ion:146 Resp: 79112
 Ion Ratio Lower Upper
 146 100
 111 77.6 25.1 46.5#
 148 68.5 42.3 78.5



#65
 1,2-Dichlorobenzene
 Concen: 12.753 ug/L
 RT: 13.87 min Scan# 1963
 Delta R.T. -0.00 min
 Lab File: VW016632.D
 Acq: 23 Sep 2020 15:37

Tgt Ion:146 Resp: 94668
 Ion Ratio Lower Upper
 146 100
 111 66.5 31.4 47.0#
 148 64.2 49.3 73.9

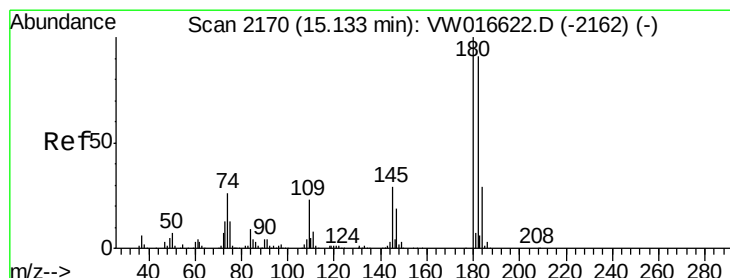
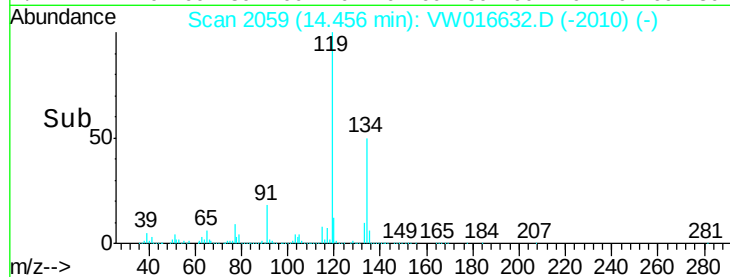
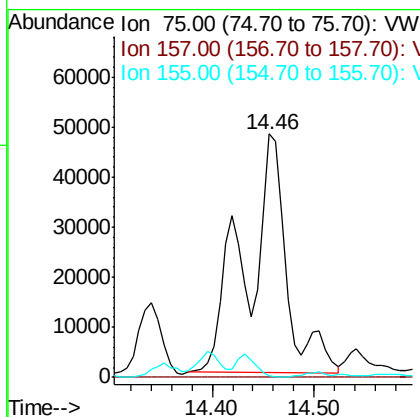
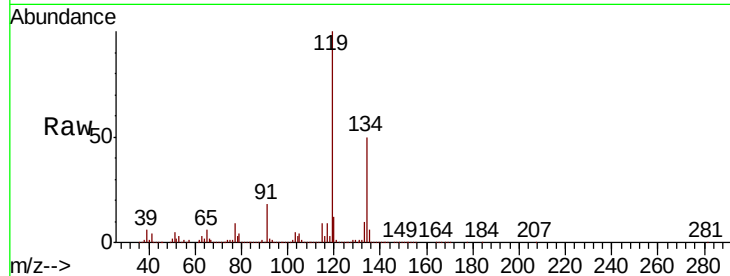




#66
 1,2-Dibromo-3-chloropropane
 Concen: 248.092 ug/L
 RT: 14.46 min Scan# 2059
 Delta R.T. -0.03 min
 Lab File: VW016632.D
 Acq: 23 Sep 2020 15:37

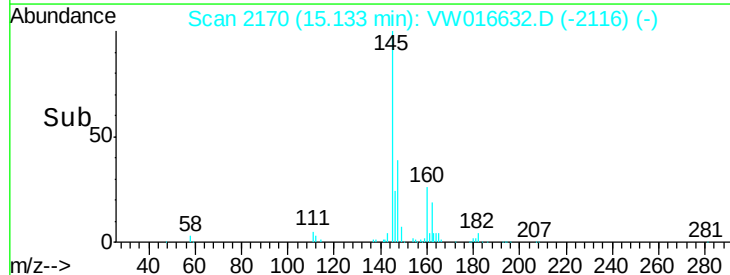
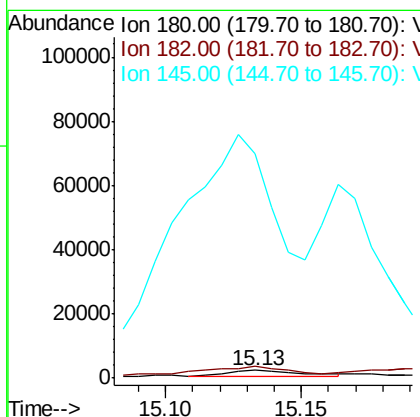
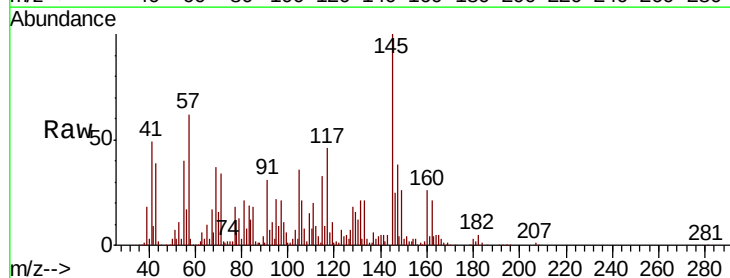
Instrument :
 MSVOA_W
 ClientSampleId :
 BG3X3

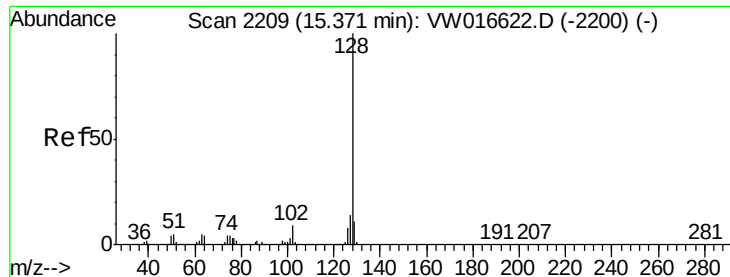
Tot Ion: 75 Resp: 132011
 Ion Ratio Lower Upper
 75 100
 157 0.0 92.2 138.4#
 155 0.8 73.5 110.3#



#68
 1,2,4-trichlorobenzene
 Concen: 0.634 ug/L
 RT: 15.13 min Scan# 2170
 Delta R.T. -0.00 min
 Lab File: VW016632.D
 Acq: 23 Sep 2020 15:37

Tgt Ion: 180 Resp: 3118
 Ion Ratio Lower Upper
 180 100
 182 206.1 74.5 111.7#
 145 6120.0 23.1 34.7#





#69

Naphthalene

Concen: 394.020 ug/L

RT: 15.37 min Scan# 2209

Delta R.T. -0.00 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

Instrument :

MSVOA_W

ClientSampled :

BG3X3

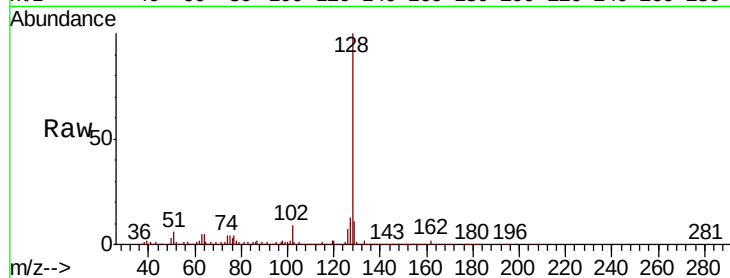
Tot Ion:128 Resp: 3433087

Ion Ratio Lower Upper

128 100

129 10.9 8.9 13.3

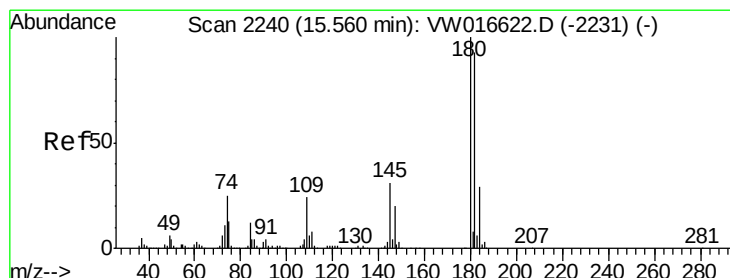
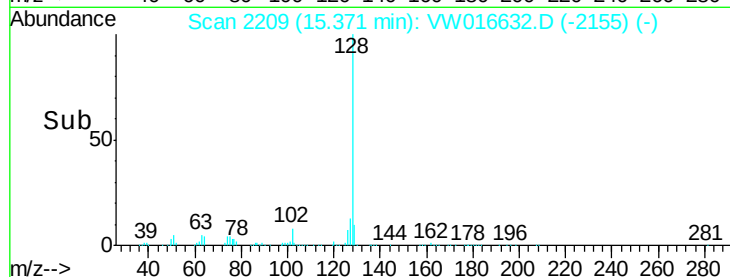
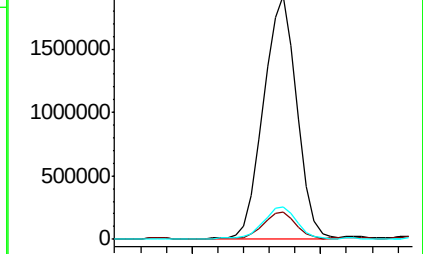
127 13.7 10.8 16.2



Abundance Ion 128.00 (127.70 to 128.70): V

Ion 129.00 (128.70 to 129.70): V

Ion 127.00 (126.70 to 127.70): V



#70

1,2,3-Trichlorobenzene

Concen: 0.727 ug/L

RT: 15.58 min Scan# 2243

Delta R.T. 0.02 min

Lab File: VW016632.D

Acq: 23 Sep 2020 15:37

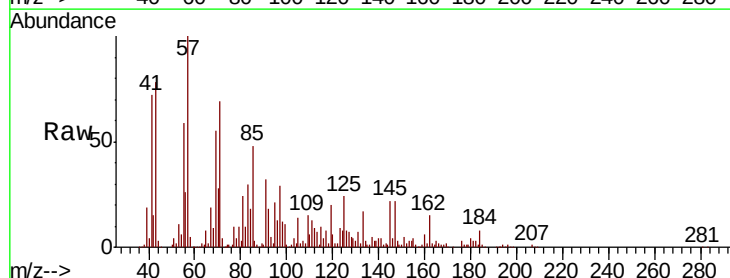
Tgt Ion:180 Resp: 3074

Ion Ratio Lower Upper

180 100

182 106.3 76.3 114.5

145 0.0 24.1 36.1#



Abundance Ion 180.00 (179.70 to 180.70): V

Ion 182.00 (181.70 to 182.70): V

Ion 145.00 (144.70 to 145.70): V

