

Data File : VW007310.D
Acq On : 07 Dec 2018 15:24
Operator : SY/AP
Sample : VSTD10096
Misc : 5.00G/10ML/MSVOA_W/SOIL
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_W
ClientSampleId :
VSTD10096

Quant Time: Dec 07 15:46:07 2018
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\SOM2WLM120718S.M
Quant Title : VOC Analysis
QLast Update : Fri Dec 07 15:11:04 2018
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Difluorobenzene	8.84	114	136475	25.00	ug/L	0.00
28) Chlorobenzene-d5	11.63	117	115688	25.00	ug/L	0.00
60) 1,4-Dichlorobenzene-d4	13.57	152	56635	25.00	ug/L	0.00

System Monitoring Compounds

4) Vinyl Chloride-d3	2.36	65	103482	89.12	ug/L	0.00
7) Chloroethane-d5	2.89	69	76324	91.66	ug/L	0.00
10) 1,1-Dichloroethene-d2	4.01	63	324297	107.21	ug/L	0.00
20) 2-Butanone-d5	7.07	46	106535	226.59	ug/L	0.00
24) Chloroform-d	7.65	84	314277	109.94	ug/L	0.00
26) 1,2-Dichloroethane-d4	8.31	65	176267	106.52	ug/L	0.00
29) Benzene-d6	8.27	84	620707	112.92	ug/L	0.00
33) 1,2-Dichloropropane-d6	9.27	67	174339	110.70	ug/L	0.00
37) Toluene-d8	10.32	98	587043	100.97	ug/L	0.00
38) trans-1,3-Dichloropropene-	10.58	79	91971	119.46	ug/L	0.00
39) 2-Hexanone-d5	10.93	63	79511	215.42	ug/L	0.00
48) 1,1,2,2-Tetrachloroethane-	12.69	84	152756	106.47	ug/L	0.00
61) 1,2-Dichlorobenzene-d4	13.86	152	191159	89.94	ug/L	0.00

Target Compounds

						Qvalue
2) Dichlorodifluoromethane	2.01	85	157982	63.338	ug/L	99
3) Chloromethane	2.22	50	121298	69.627	ug/L	99
5) Vinyl chloride	2.37	62	132498	84.962	ug/L	100
6) Bromomethane	2.78	94	82036	91.696	ug/L	99
8) Chloroethane	2.93	64	71280	84.818	ug/L	98
9) Trichlorofluoromethane	3.26	101	147231	50.390	ug/L	100
11) 1,1,2-Trichloro-1,2,2-trif	4.06	101	181170	105.072	ug/L	95
12) 1,1-Dichloroethene	4.03	96	169004	111.242	ug/L	100
13) Acetone	4.12	43	99682	302.614	ug/L	99
14) Carbon disulfide	4.37	76	517384	96.228	ug/L	99
15) Methyl Acetate	4.67	43	92507	113.256	ug/L	# 89
16) Methylene chloride	4.91	84	167619	76.824	ug/L	97
17) Methyl tert-butyl Ether	5.43	73	257507	65.948	ug/L	99
18) trans-1,2-Dichloroethene	5.42	96	176643	105.157	ug/L	98
19) 1,1-Dichloroethane	6.21	63	302444	108.846	ug/L	99
21) 2-Butanone	7.17	43	128563	254.238	ug/L	99
22) cis-1,2-Dichloroethene	7.17	96	194534	108.302	ug/L	98
23) Bromochloromethane	7.51	128	87329	111.736	ug/L	96
25) Chloroform	7.68	83	327623	108.678	ug/L	100
27) 1,2-Dichloroethane	8.40	62	227715	113.864	ug/L	98
30) Cyclohexane	7.95	56	288468	114.399	ug/L	100
31) 1,1,1-Trichloroethane	7.87	97	284283	118.673	ug/L	99
32) Carbon tetrachloride	8.07	117	281015	129.251	ug/L	99
34) Benzene	8.32	78	683494	114.013	ug/L	100
35) Trichloroethene	9.09	95	197140	121.291	ug/L	99
36) Methylcyclohexane	9.34	83	335461	111.154	ug/L	99
40) 1,2-Dichloropropane	9.37	63	166292	115.645	ug/L	100
41) Bromodichloromethane	9.65	83	242167	128.633	ug/L	97
42) cis-1,3-Dichloropropene	10.07	75	288321	126.243	ug/L	100
43) 4-Methyl-2-pentanone	10.21	43	258646	243.079	ug/L	99

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Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) Toluene	10.39	91	738087	102.752	ug/L	97
45) trans-1,3-Dichloropropene	10.61	75	255129	127.147	ug/L	94
46) 1,1,2-Trichloroethane	10.79	97	137391	121.327	ug/L	93
47) Tetrachloroethene	10.87	164	146074	102.881	ug/L	92
49) 2-Hexanone	10.97	43	176063	244.440	ug/L	96
50) Dibromochloromethane	11.13	129	170324	123.486	ug/L	95
51) 1,2-Dibromoethane	11.24	107	132538	115.503	ug/L	94
52) Chlorobenzene	11.66	112	470811	99.419	ug/L	99
53) Ethylbenzene	11.73	91	815934	97.976	ug/L	96
54) m,p-Xylene	11.84	106	310201	95.463	ug/L	96
55) o-xylene	12.17	106	281760	93.503	ug/L	97
56) Styrene	12.18	104	484461	95.069	ug/L	94
57) Isopropylbenzene	12.47	105	813116	97.038	ug/L	99
58) 1,1,2,2-Tetrachloroethane	12.72	83	158101	109.869	ug/L #	95
59) 1,2,3-Trichloropropane	12.77	75	126634	112.604	ug/L	100
62) Bromoform	12.35	173	101236	130.546	ug/L	98
63) 1,3-Dichlorobenzene	13.51	146	365768	98.143	ug/L	94
64) 1,4-Dichlorobenzene	13.58	146	367359	97.997	ug/L	99
65) 1,2-Dichlorobenzene	13.88	146	324785	95.237	ug/L	100
66) 1,2-Dibromo-3-chloropropan	14.49	75	34216	123.722	ug/L	96
67) 1,3,5-Trichlorobenzene	14.63	180	264419	94.471	ug/L	99
68) 1,2,4-trichlorobenzene	15.14	180	224105	94.185	ug/L	99
69) Naphthalene	15.38	128	547147	107.998	ug/L	100
70) 1,2,3-Trichlorobenzene	15.57	180	203646	98.082	ug/L	99

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

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ClientSampleId :
VSTD10096

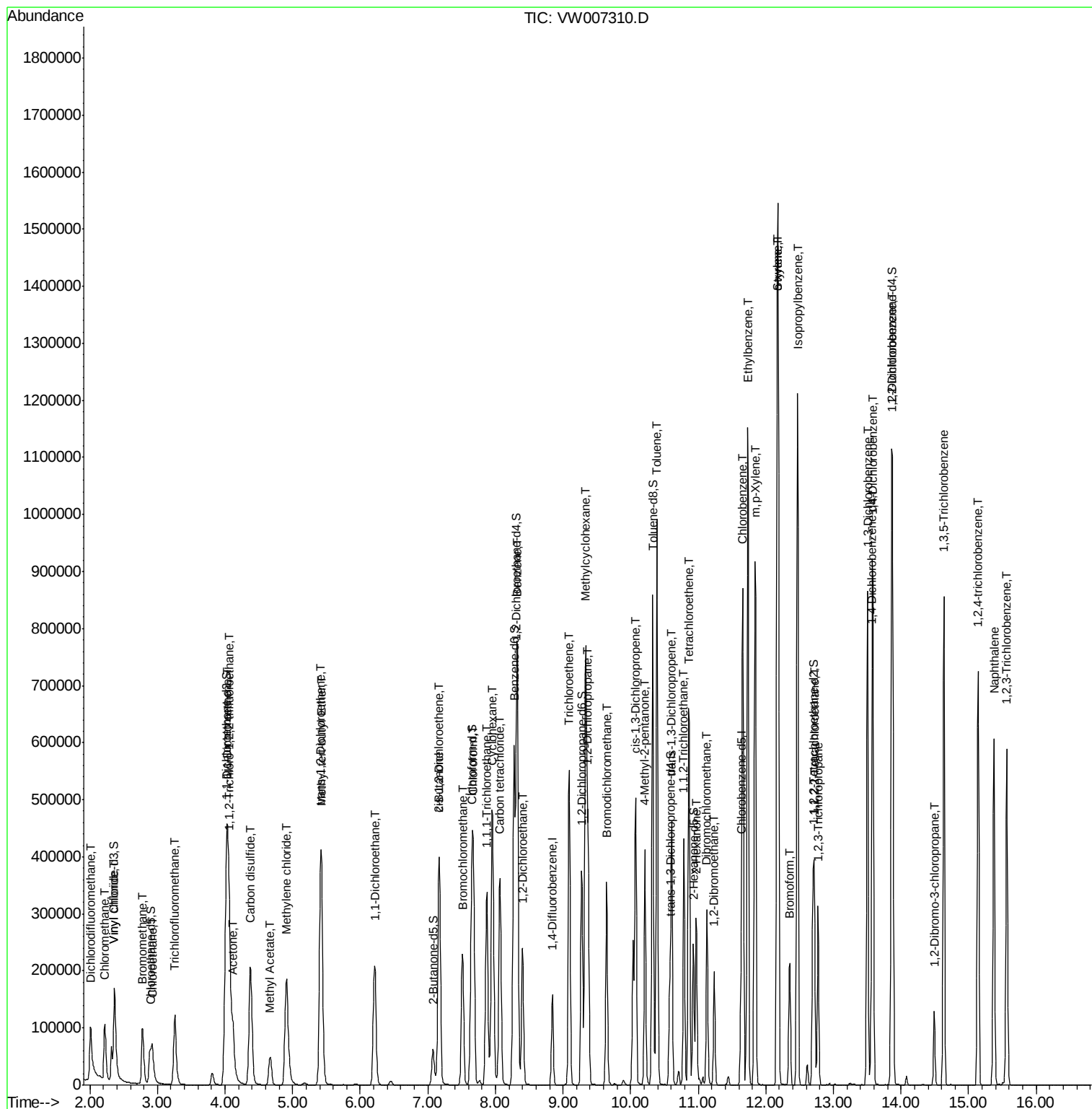
Quant Time: Dec 07 15:46:07 2018

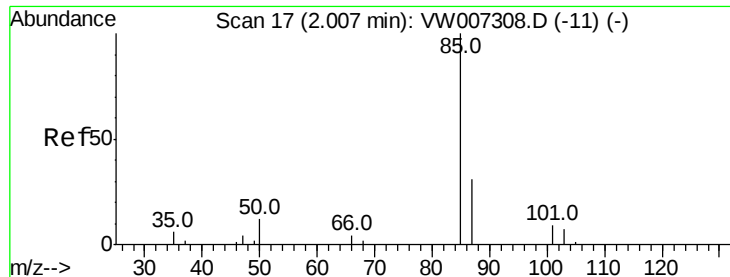
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA_W\METHOD\SOM2WLM120718S.M

Quant Title : VOC Analysis

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#2

Dichlorodifluoromethane

Concen: 63.338 ug/L

RT: 2.01 min Scan# 17

Delta R.T. 0.00 min

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Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

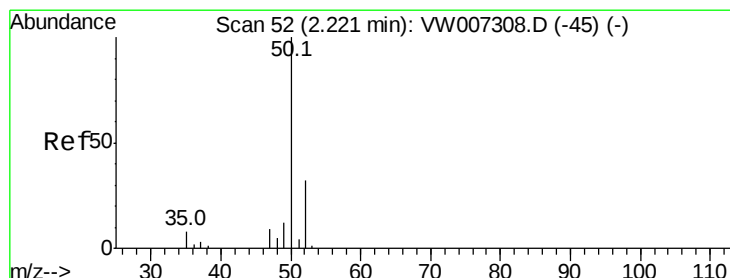
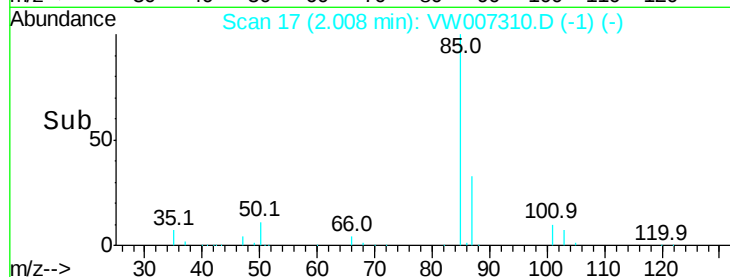
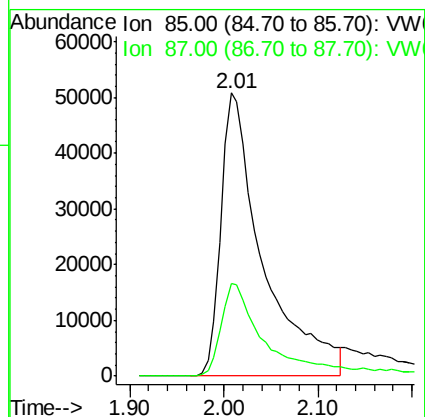
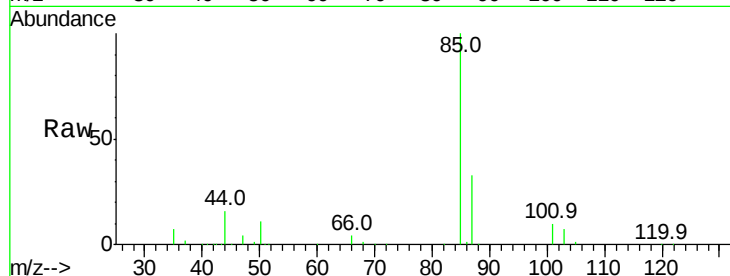
VSTD10096

Tgt Ion: 85 Resp: 157982

Ion Ratio Lower Upper

85 100

87 33.6 23.2 43.0



#3

Chloromethane

Concen: 69.627 ug/L

RT: 2.22 min Scan# 52

Delta R.T. 0.00 min

Lab File: VW007310.D

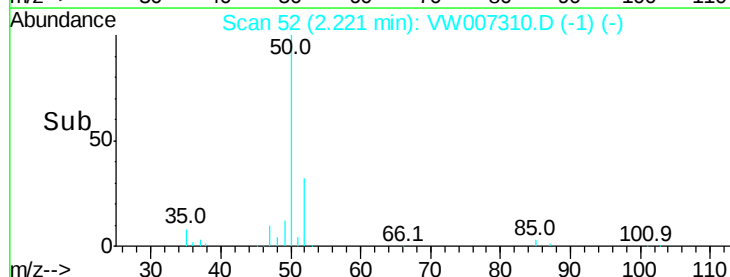
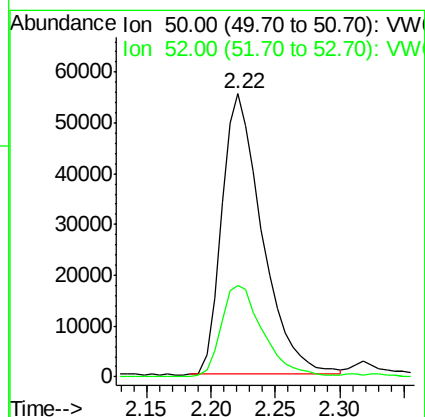
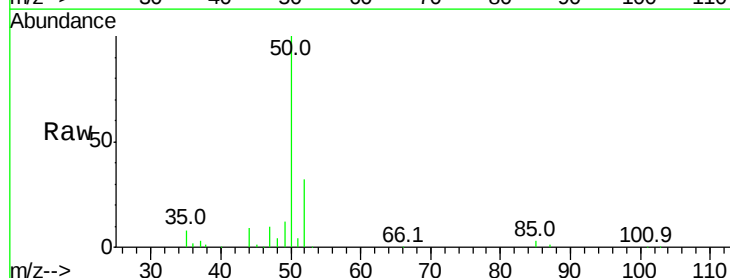
Acq: 07 Dec 2018 15:24

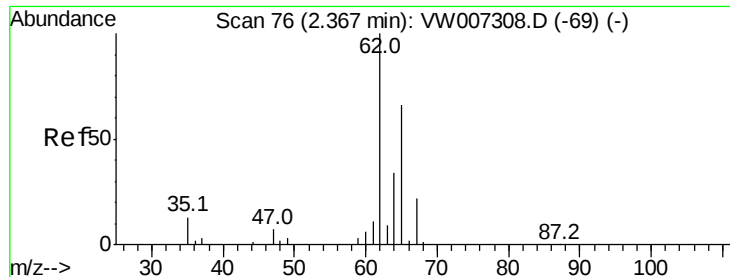
Tgt Ion: 50 Resp: 121298

Ion Ratio Lower Upper

50 100

52 32.5 22.2 41.2





#5

Vinyl chloride

Concen: 84.962 ug/L

RT: 2.37 min Scan# 76

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

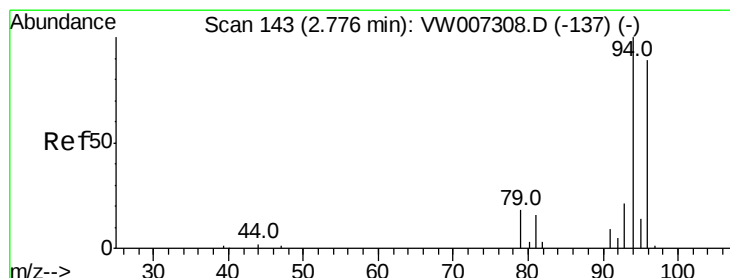
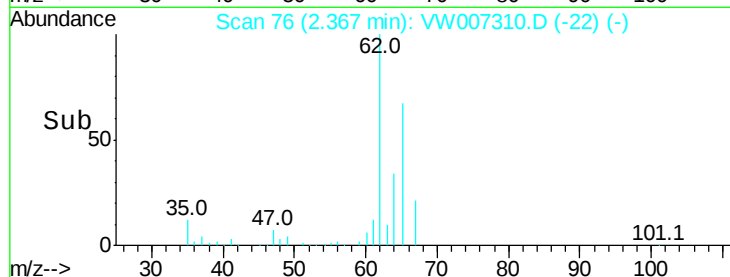
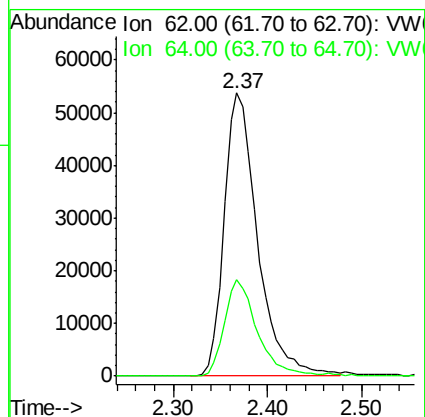
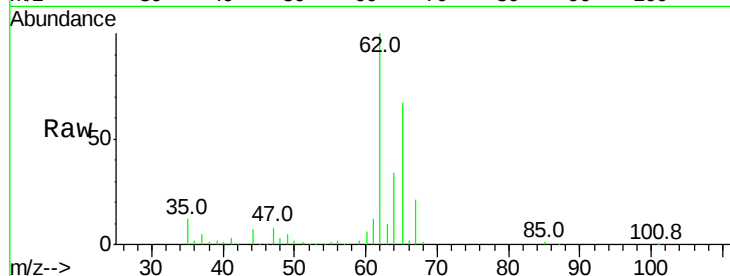
VSTD10096

Tgt Ion: 62 Resp: 132498

Ion Ratio Lower Upper

62 100

64 34.3 23.9 44.3



#6

Bromomethane

Concen: 91.696 ug/L

RT: 2.78 min Scan# 143

Delta R.T. 0.00 min

Lab File: VW007310.D

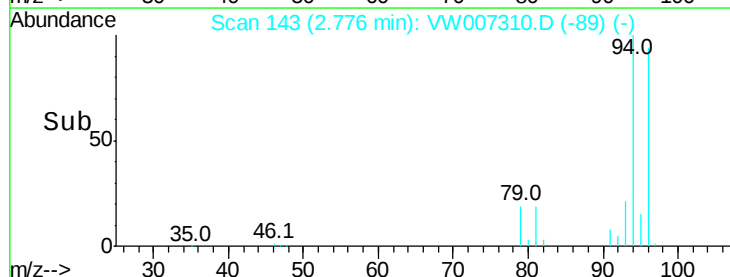
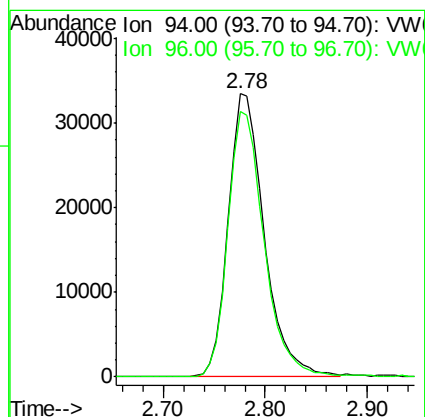
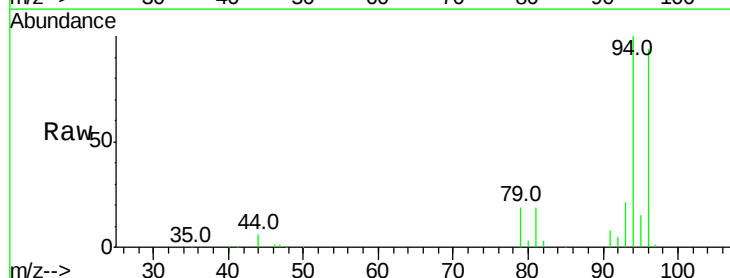
Acq: 07 Dec 2018 15:24

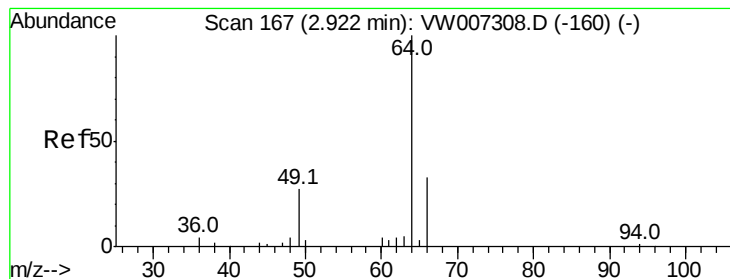
Tgt Ion: 94 Resp: 82036

Ion Ratio Lower Upper

94 100

96 94.7 9.6 181.8





#8

Chloroethane

Concen: 84.818 ug/L

RT: 2.93 min Scan# 168

Delta R.T. 0.01 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

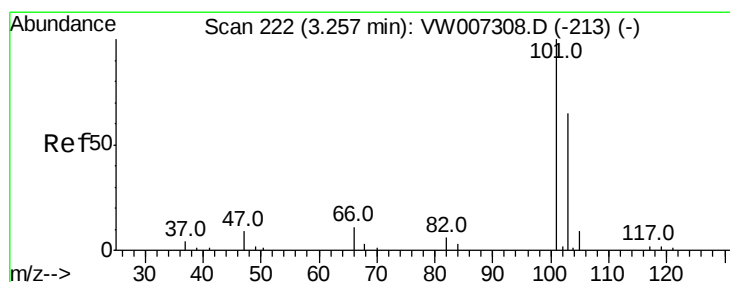
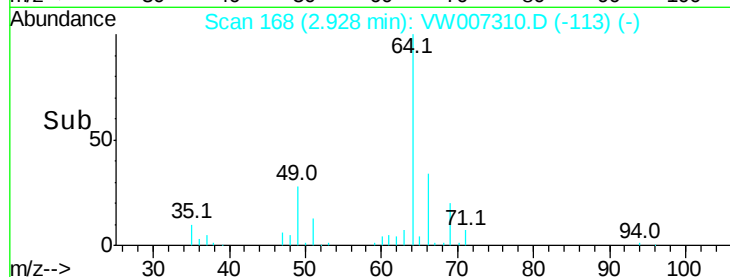
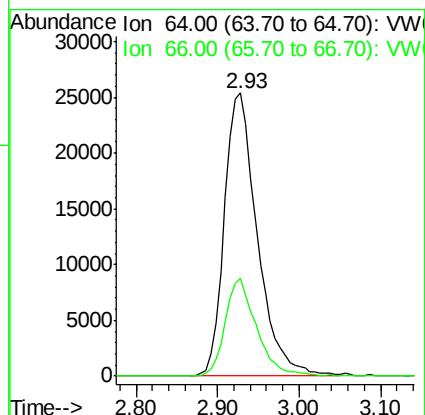
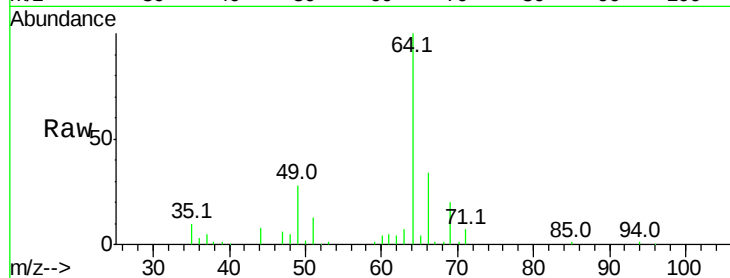
VSTD10096

Tgt Ion: 64 Resp: 71280

Ion Ratio Lower Upper

64 100

66 34.3 23.2 43.2



#9

Trichlorofluoromethane

Concen: 50.390 ug/L

RT: 3.26 min Scan# 222

Delta R.T. 0.00 min

Lab File: VW007310.D

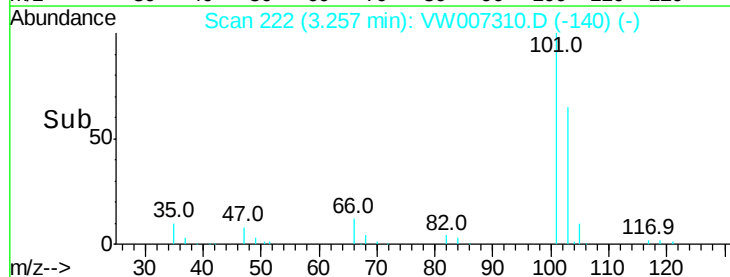
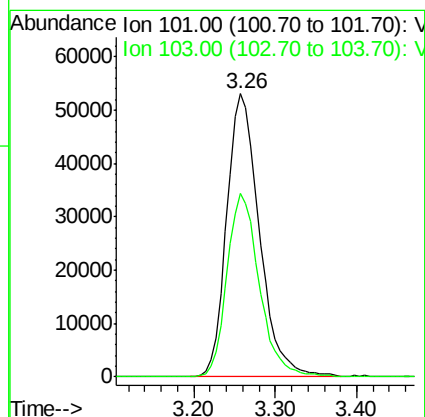
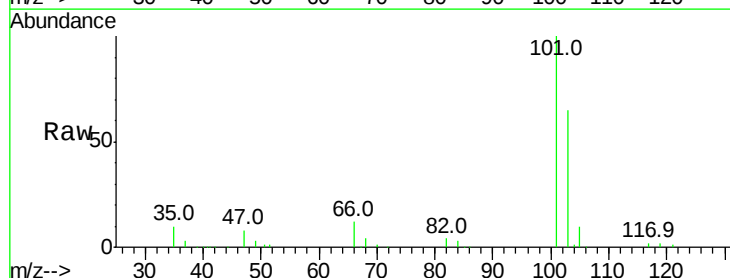
Acq: 07 Dec 2018 15:24

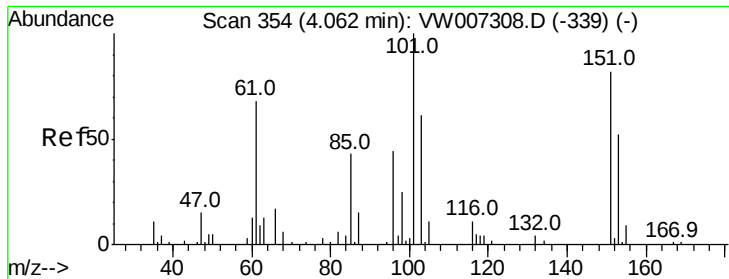
Tgt Ion: 101 Resp: 147231

Ion Ratio Lower Upper

101 100

103 64.1 44.7 82.9





#11

1,1,2-Trichloro-1,2,2-trifluoroethane

Concen: 105.072 ug/L

RT: 4.06 min Scan# 354

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

VSTD10096

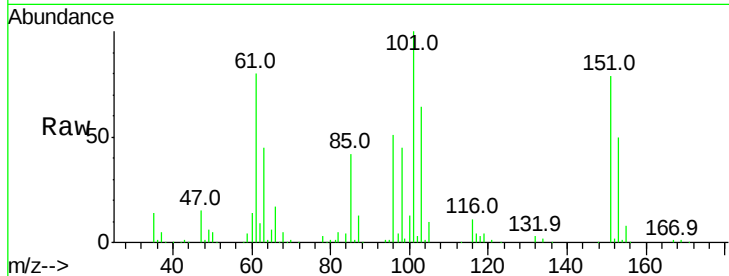
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Ion Ratio Lower Upper

101 100

85 42.3 35.4 53.2

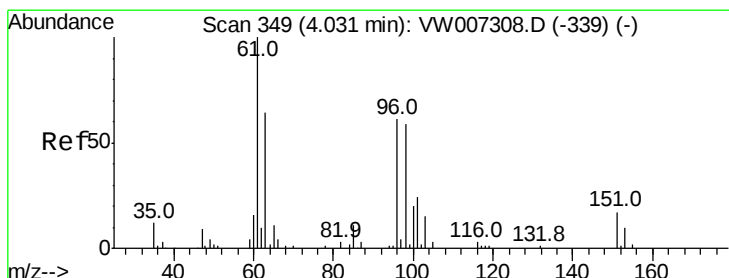
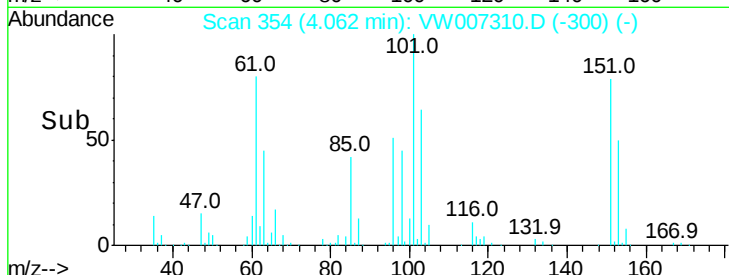
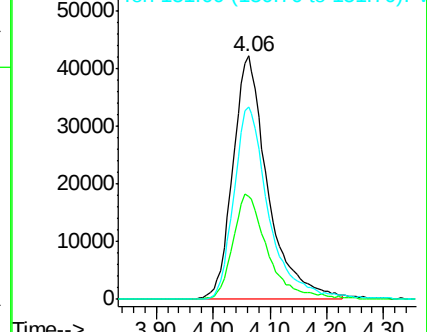
151 76.0 64.8 97.2



Abundance Ion 101.00 (100.70 to 101.70): V

Ion 85.00 (84.70 to 85.70): VW

Ion 151.00 (150.70 to 151.70): V



#12

1,1-Dichloroethene

Concen: 111.242 ug/L

RT: 4.03 min Scan# 349

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

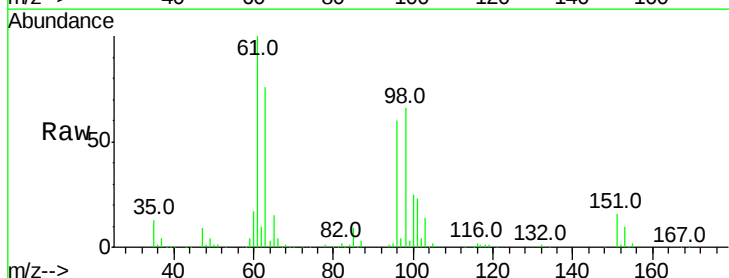
Tgt Ion: 96 Resp: 169004

Ion Ratio Lower Upper

96 100

61 167.1 117.2 217.8

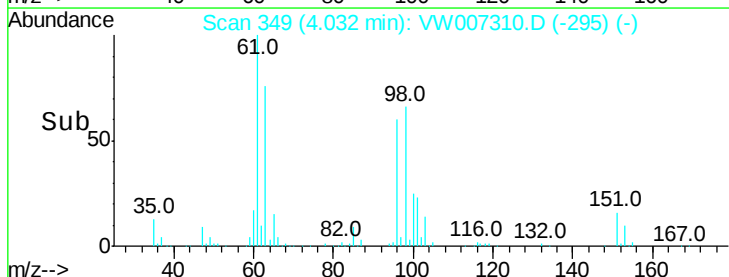
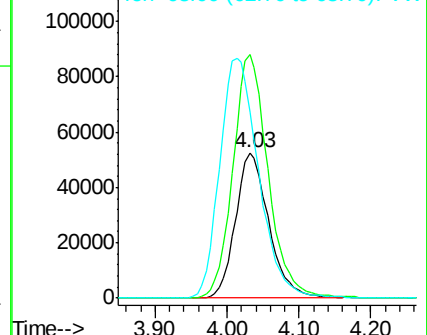
63 127.5 89.7 166.7

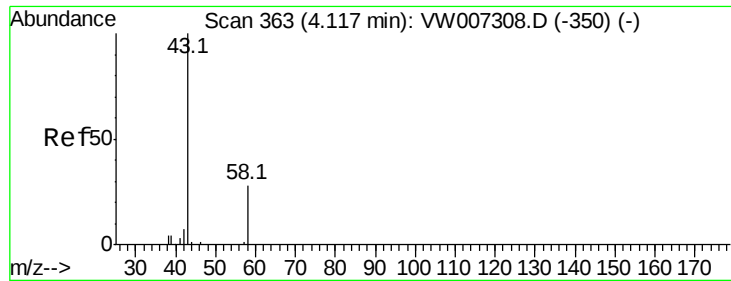


Abundance Ion 96.00 (95.70 to 96.70): VW

Ion 61.00 (60.70 to 61.70): VW

Ion 63.00 (62.70 to 63.70): VW





#13

Acetone

Concen: 302.614 ug/L

RT: 4.12 min Scan# 363

Delta R.T. 0.00 min

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Acq: 07 Dec 2018 15:24

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ClientSampleId :

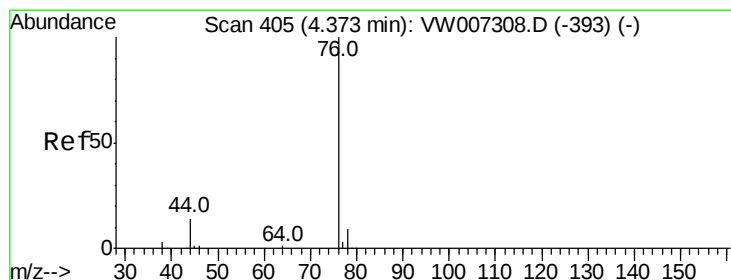
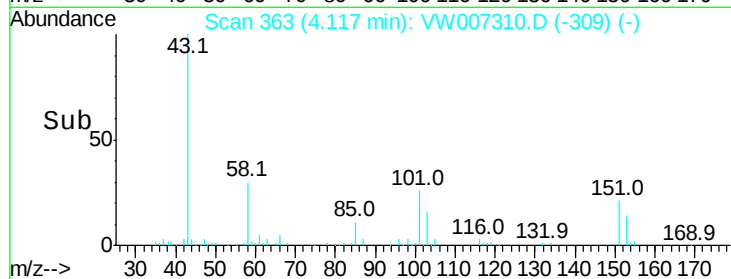
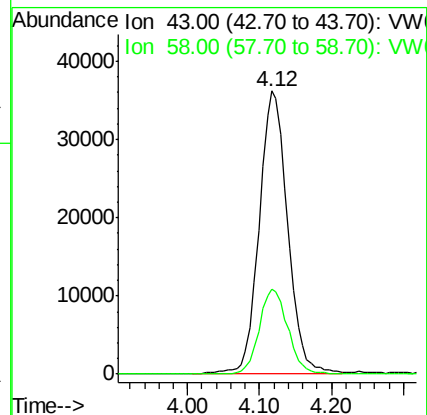
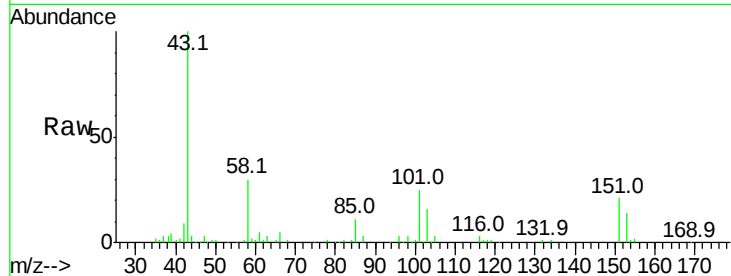
VSTD10096

Tgt Ion: 43 Resp: 99682

Ion Ratio Lower Upper

43 100

58 29.0 0.0 59.2



#14

Carbon disulfide

Concen: 96.228 ug/L

RT: 4.37 min Scan# 405

Delta R.T. 0.00 min

Lab File: VW007310.D

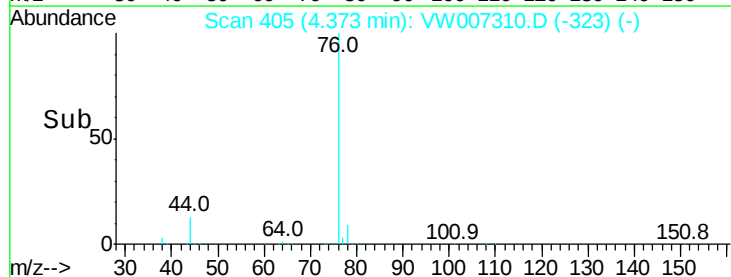
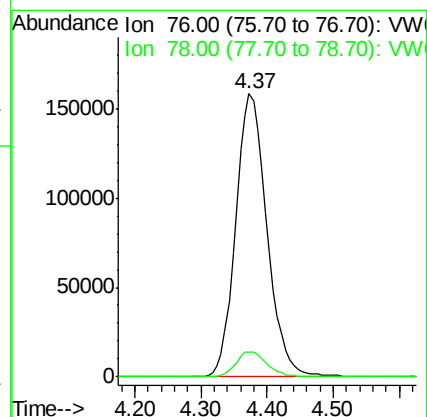
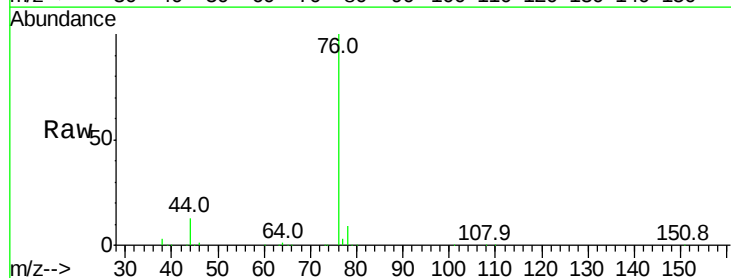
Acq: 07 Dec 2018 15:24

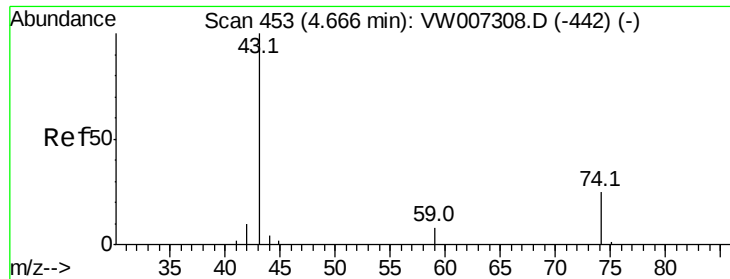
Tgt Ion: 76 Resp: 517384

Ion Ratio Lower Upper

76 100

78 8.8 7.3 10.9





#15

Methyl Acetate

Concen: 113.256 ug/L

RT: 4.67 min Scan# 453

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

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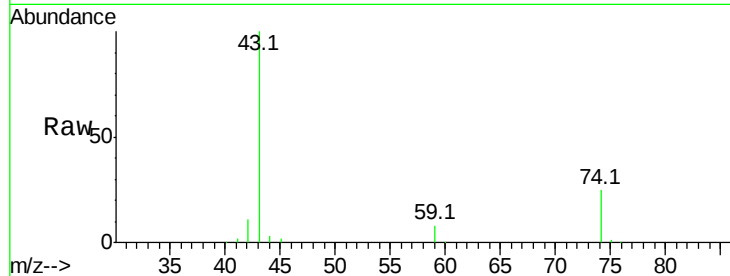
VSTD10096

Tgt Ion: 43 Resp: 92507

Ion Ratio Lower Upper

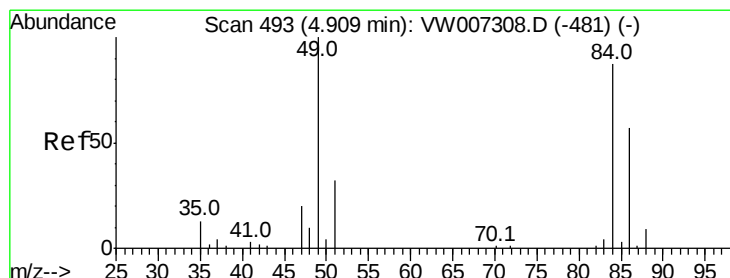
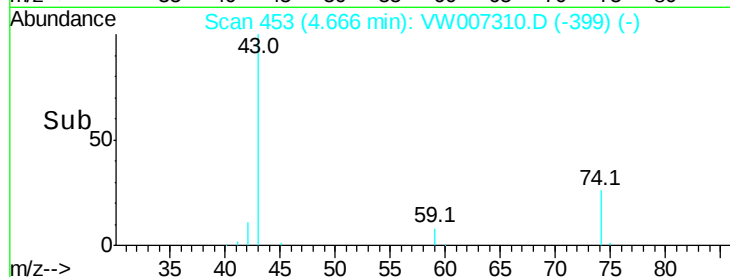
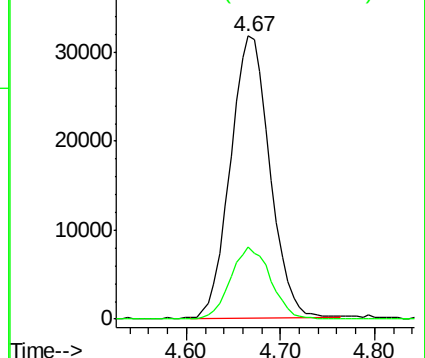
43 100

74 26.1 0.1 0.1#



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 74.00 (73.70 to 74.70): VW



#16

Methylene chloride

Concen: 76.824 ug/L

RT: 4.91 min Scan# 493

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

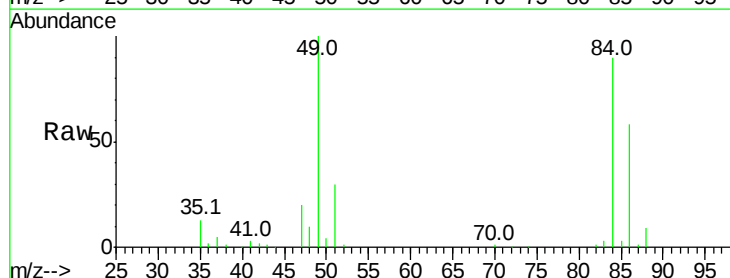
Tgt Ion: 84 Resp: 167619

Ion Ratio Lower Upper

84 100

49 111.6 80.8 150.2

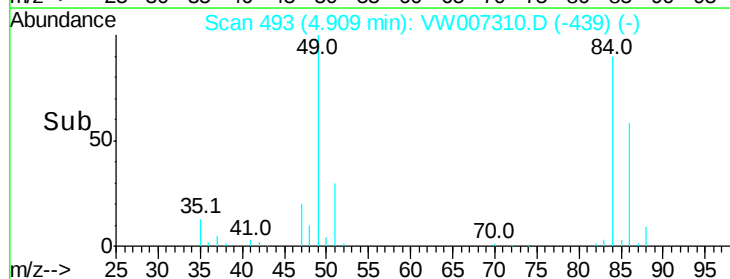
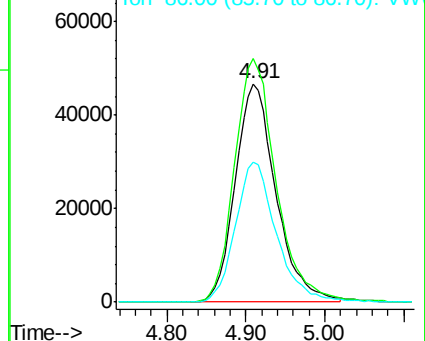
86 64.3 45.8 85.2

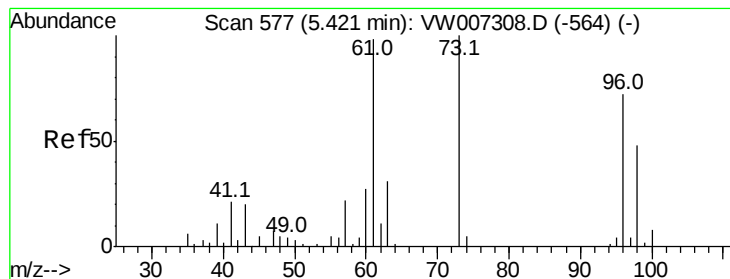


Abundance Ion 84.00 (83.70 to 84.70): VW

Ion 49.00 (48.70 to 49.70): VW

Ion 86.00 (85.70 to 86.70): VW



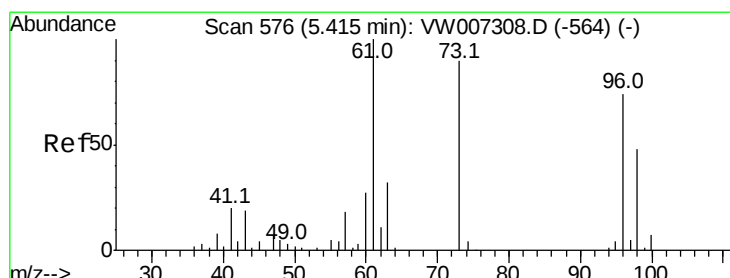
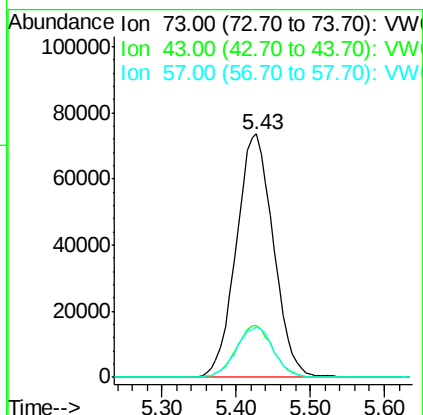
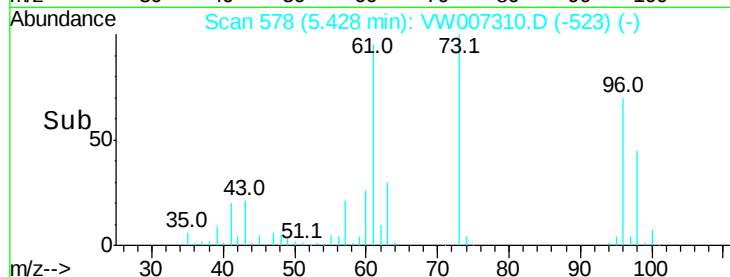
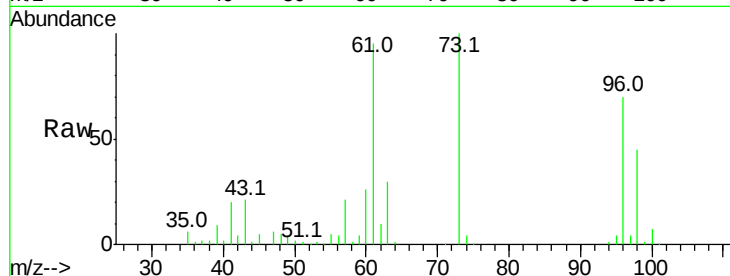


#17

Methyl tert-butyl Ether
 Concen: 65.948 ug/L
 RT: 5.43 min Scan# 578
 Delta R.T. 0.01 min
 Lab File: VW007310.D
 Acq: 07 Dec 2018 15:24

Instrument :
 MSVOA_W
 ClientSampleId :
 VSTD10096

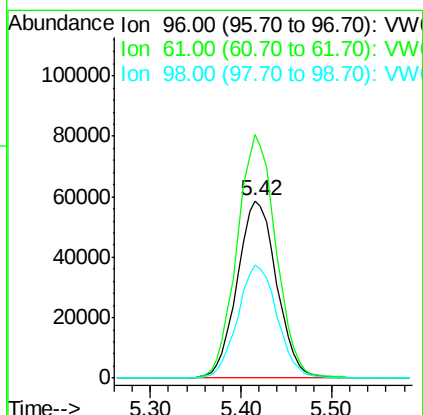
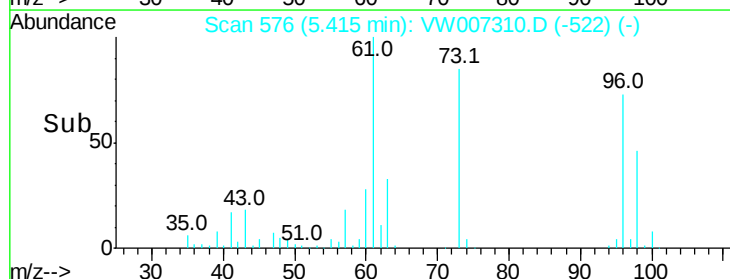
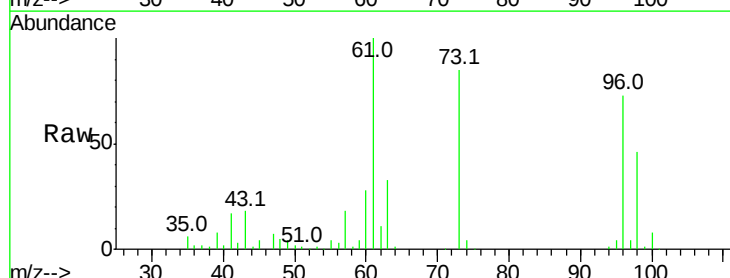
Tgt Ion: 73 Resp: 257507
 Ion Ratio Lower Upper
 73 100
 43 21.2 17.3 25.9
 57 20.9 17.0 25.6

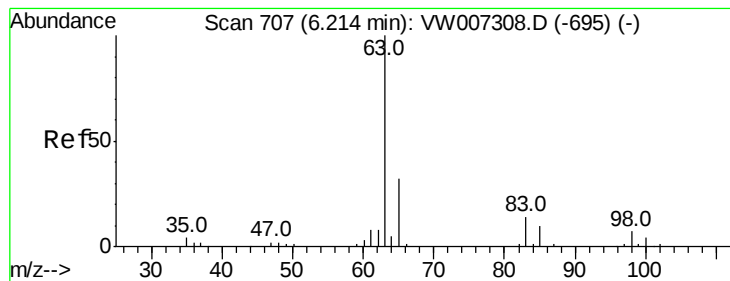


#18

trans-1,2-Dichloroethene
 Concen: 105.157 ug/L
 RT: 5.42 min Scan# 576
 Delta R.T. 0.00 min
 Lab File: VW007310.D
 Acq: 07 Dec 2018 15:24

Tgt Ion: 96 Resp: 176643
 Ion Ratio Lower Upper
 96 100
 61 137.4 94.6 175.8
 98 63.5 45.1 83.7





#19

1,1-Dichloroethane

Concen: 108.846 ug/L

RT: 6.21 min Scan# 707

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampled :

VSTD10096

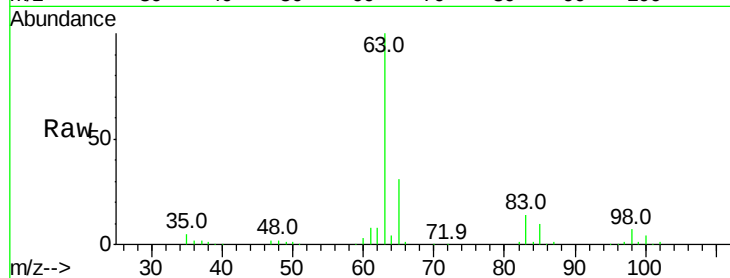
Tgt Ion: 63 Resp: 302444

Ion Ratio Lower Upper

63 100

65 31.1 22.1 41.1

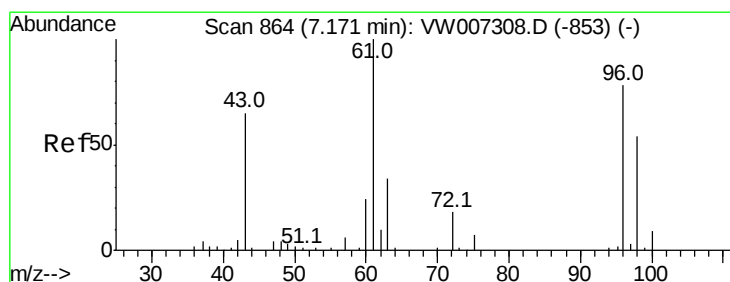
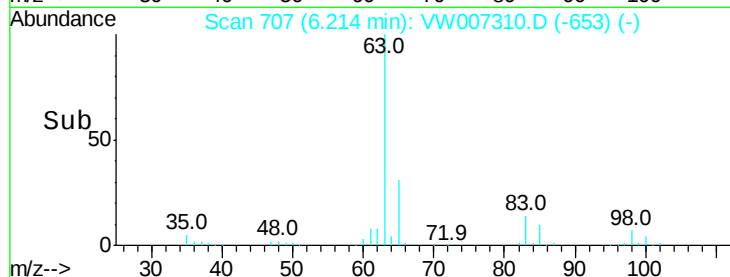
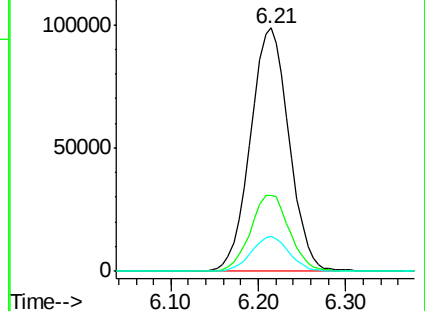
83 14.1 9.8 18.2



Abundance Ion 63.00 (62.70 to 63.70): VW

Ion 65.00 (64.70 to 65.70): VW

Ion 83.00 (82.70 to 83.70): VW



#21

2-Butanone

Concen: 254.238 ug/L

RT: 7.17 min Scan# 864

Delta R.T. 0.00 min

Lab File: VW007310.D

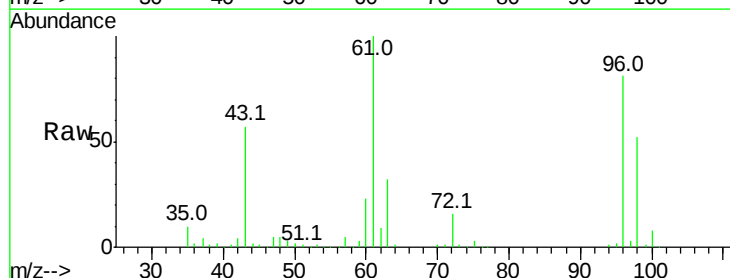
Acq: 07 Dec 2018 15:24

Tgt Ion: 43 Resp: 128563

Ion Ratio Lower Upper

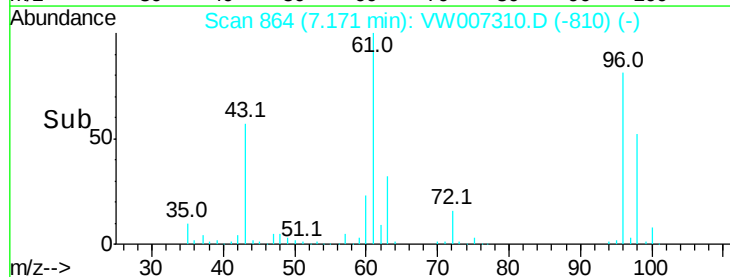
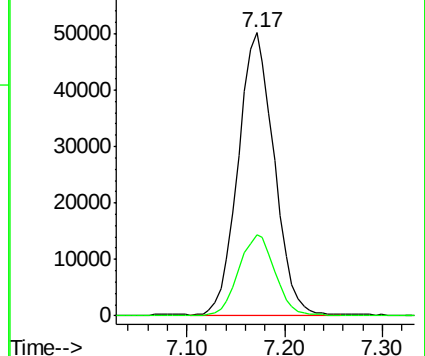
43 100

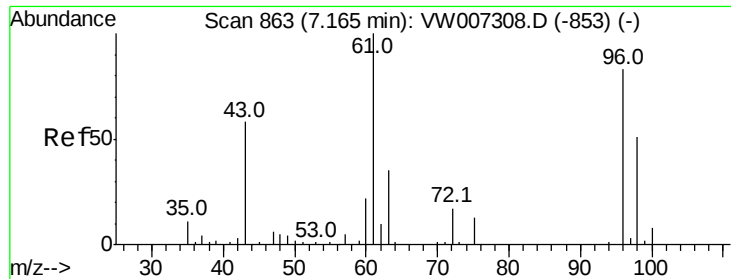
72 29.1 14.7 44.1



Abundance Ion 43.00 (42.70 to 43.70): VW

Ion 72.00 (71.70 to 72.70): VW

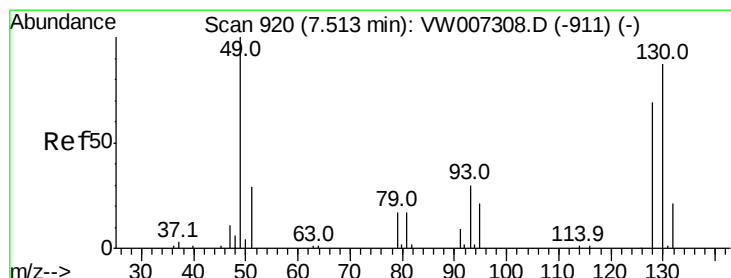
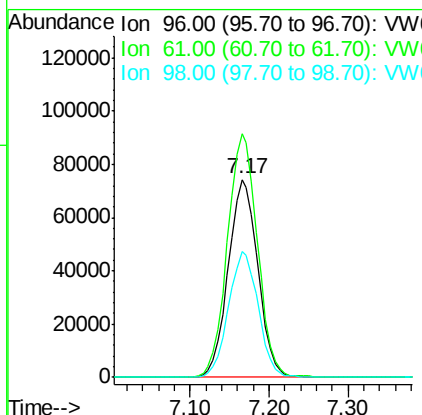
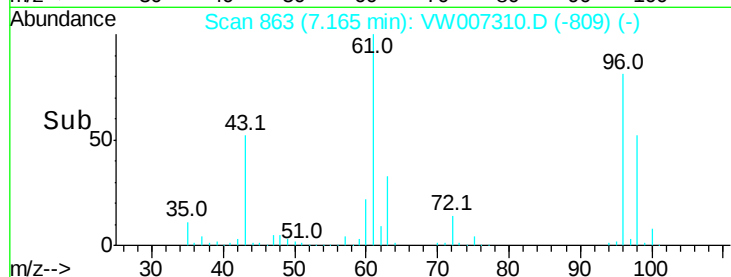
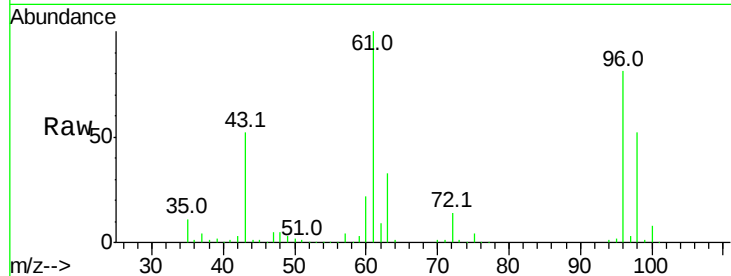




#22
 cis-1,2-Dichloroethene
 Concen: 108.302 ug/L
 RT: 7.17 min Scan# 863
 Delta R.T. 0.00 min
 Lab File: VW007310.D
 Acq: 07 Dec 2018 15:24

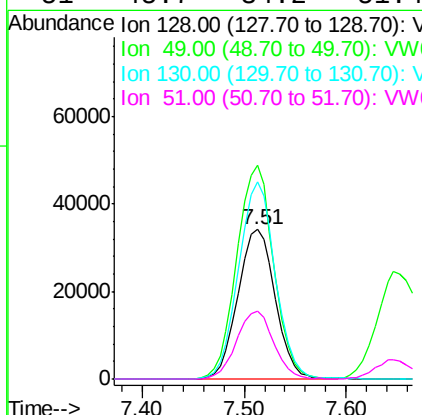
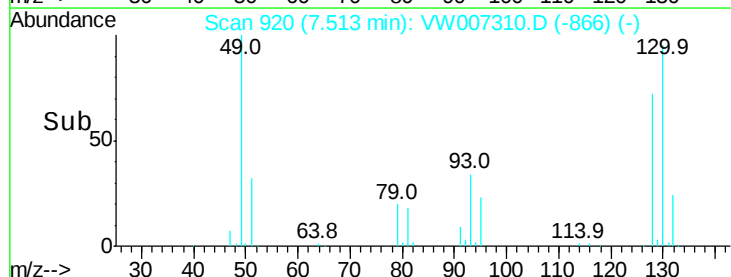
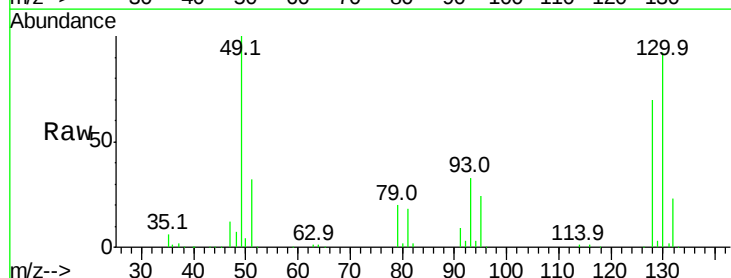
Instrument :
 MSVOA_W
 ClientSampleId :
 VSTD10096

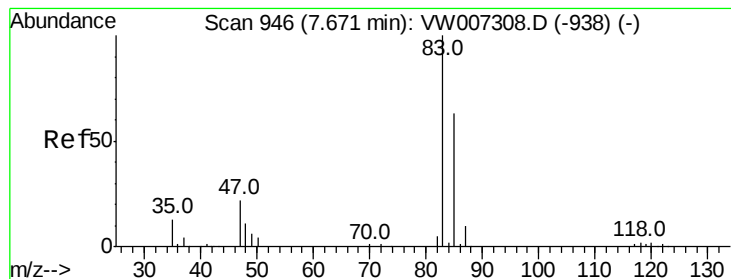
Tgt Ion: 96 Resp: 194534
 Ion Ratio Lower Upper
 96 100
 61 123.1 84.6 157.2
 98 63.9 42.9 79.7



#23
 Bromochloromethane
 Concen: 111.736 ug/L
 RT: 7.51 min Scan# 920
 Delta R.T. 0.00 min
 Lab File: VW007310.D
 Acq: 07 Dec 2018 15:24

Tgt Ion:128 Resp: 87329
 Ion Ratio Lower Upper
 128 100
 49 142.8 102.3 190.1
 130 131.5 88.0 163.4
 51 45.7 34.2 51.4





#25

Chloroform

Concen: 108.678 ug/L

RT: 7.68 min Scan# 947

Delta R.T. 0.01 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

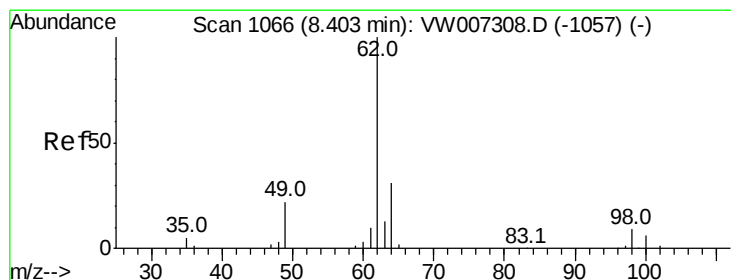
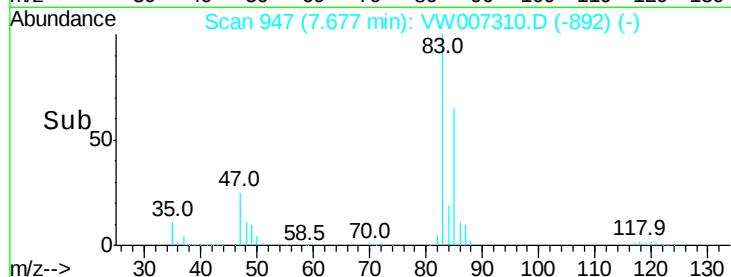
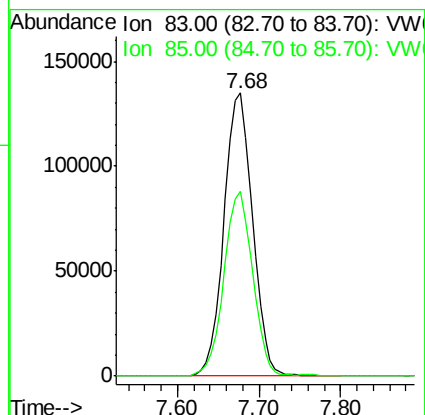
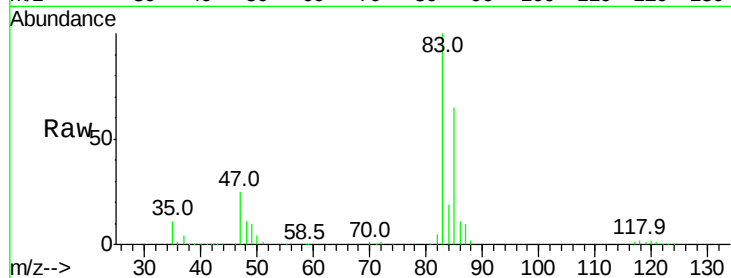
VSTD10096

Tgt Ion: 83 Resp: 327623

Ion Ratio Lower Upper

83 100

85 65.5 46.0 85.4



#27

1,2-Dichloroethane

Concen: 113.864 ug/L

RT: 8.40 min Scan# 1066

Delta R.T. 0.00 min

Lab File: VW007310.D

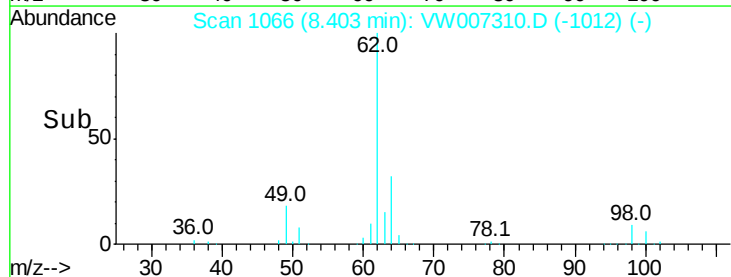
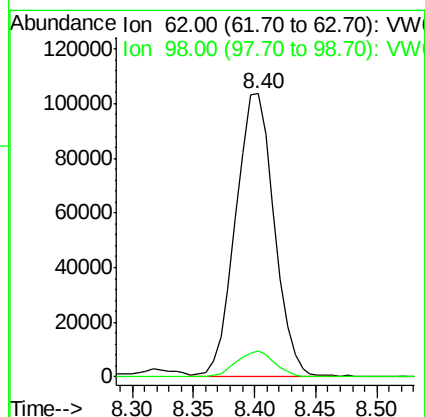
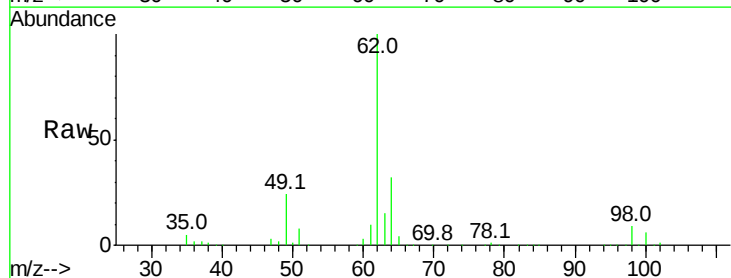
Acq: 07 Dec 2018 15:24

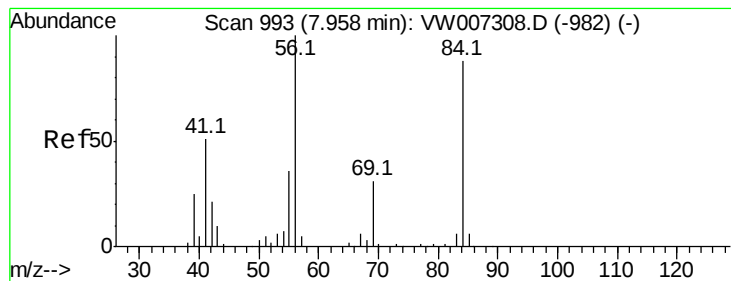
Tgt Ion: 62 Resp: 227715

Ion Ratio Lower Upper

62 100

98 9.3 6.9 10.3





#30

Cyclohexane

Concen: 114.399 ug/L

RT: 7.95 min Scan# 992

Delta R.T. -0.01 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

VSTD10096

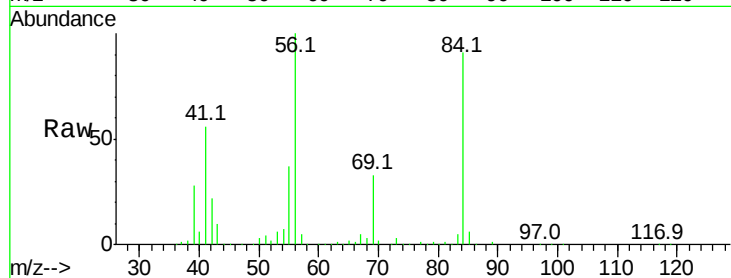
Tgt Ion: 56 Resp: 288468

Ion Ratio Lower Upper

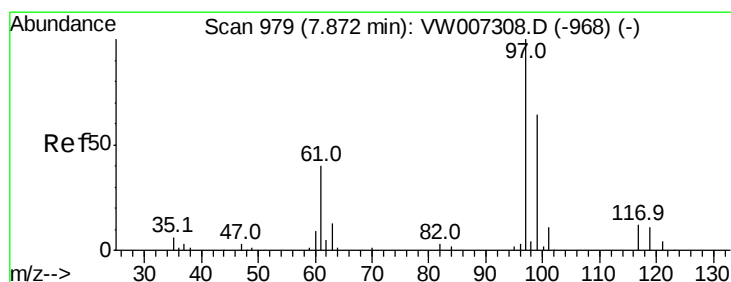
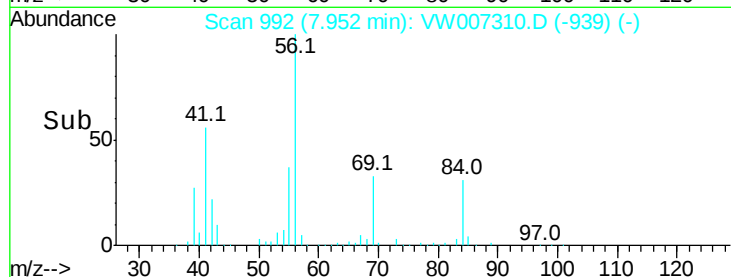
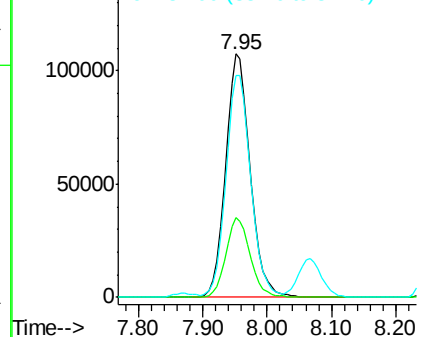
56 100

69 32.7 26.0 39.0

84 92.3 73.6 110.4



Abundance Ion 56.00 (55.70 to 56.70): VW
Ion 69.00 (68.70 to 69.70): VW
Ion 84.00 (83.70 to 84.70): VW



#31

1,1,1-Trichloroethane

Concen: 118.673 ug/L

RT: 7.87 min Scan# 979

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

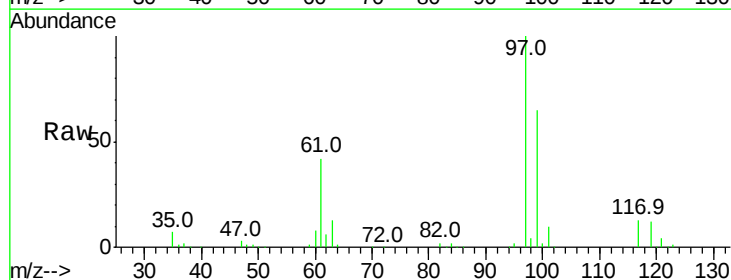
Tgt Ion: 97 Resp: 284283

Ion Ratio Lower Upper

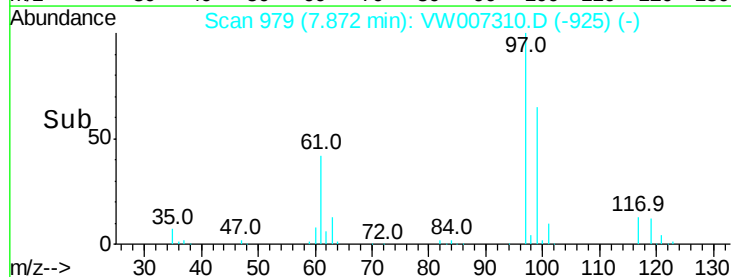
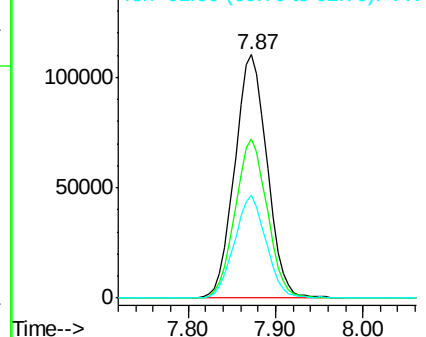
97 100

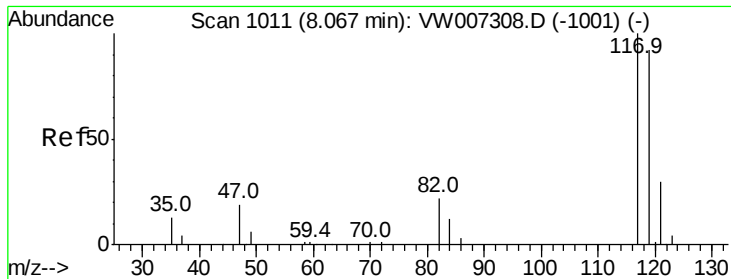
99 64.7 51.3 76.9

61 41.3 33.2 49.8



Abundance Ion 97.00 (96.70 to 97.70): VW
Ion 99.00 (98.70 to 99.70): VW
Ion 61.00 (60.70 to 61.70): VW





#32

Carbon tetrachloride

Concen: 129.251 ug/L

RT: 8.07 min Scan# 1011

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

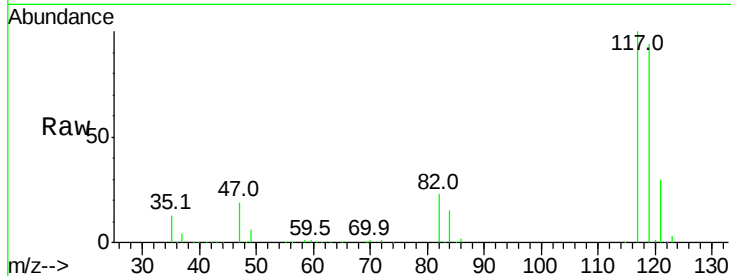
VSTD10096

Tgt Ion:117 Resp: 281015

Ion Ratio Lower Upper

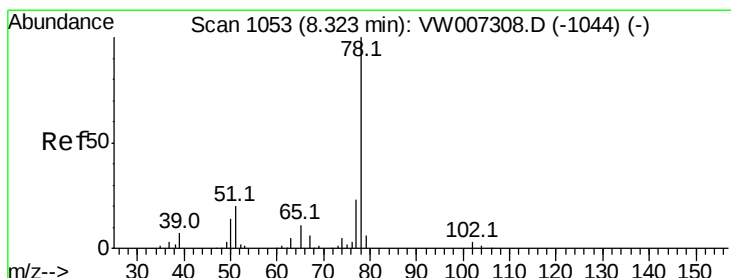
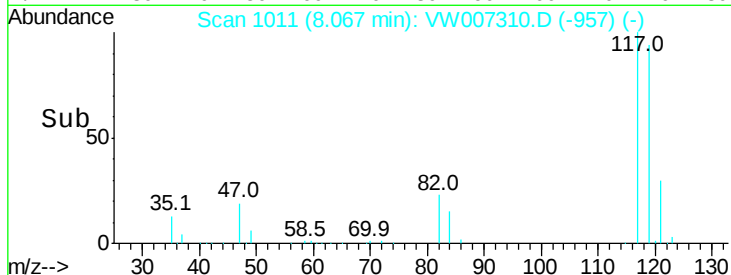
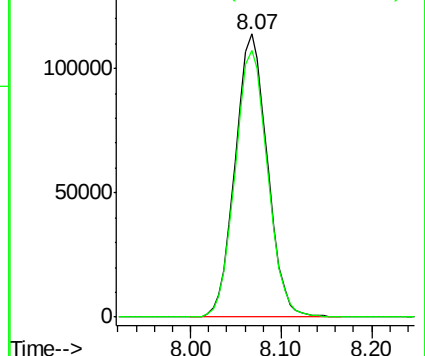
117 100

119 95.3 75.3 112.9



Abundance Ion 117.00 (116.70 to 117.70): V

Ion 119.00 (118.70 to 119.70): V



#34

Benzene

Concen: 114.013 ug/L

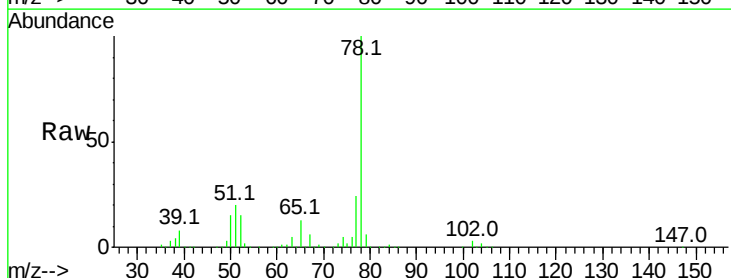
RT: 8.32 min Scan# 1053

Delta R.T. 0.00 min

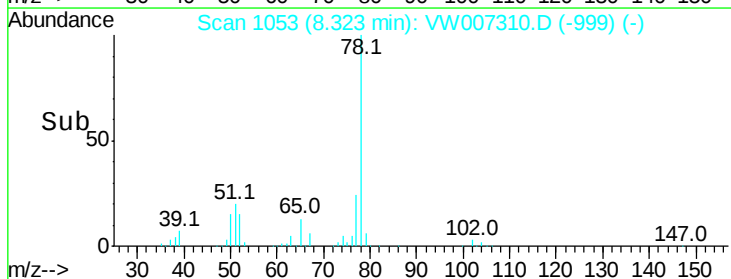
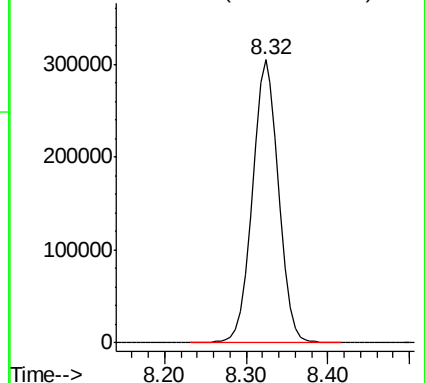
Lab File: VW007310.D

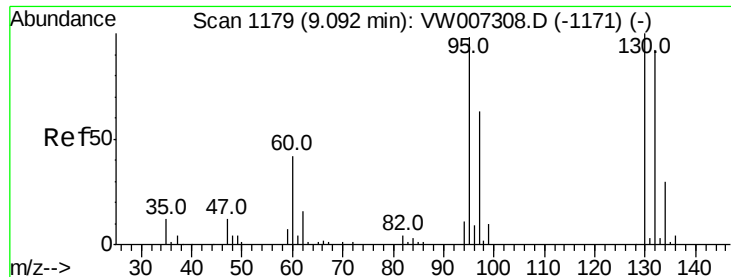
Acq: 07 Dec 2018 15:24

Tgt Ion: 78 Resp: 683494



Abundance Ion 78.00 (77.70 to 78.70): VW





#35

Trichloroethene

Concen: 121.291 ug/L

RT: 9.09 min Scan# 1179

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

Instrument :

MSVOA_W

ClientSampleId :

VSTD10096

Tgt Ion: 95 Resp: 197140

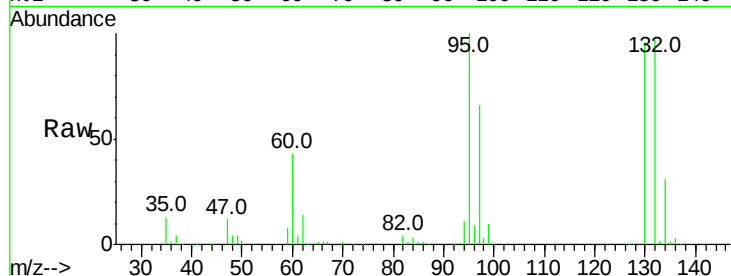
Ion Ratio Lower Upper

95 100

97 65.3 45.8 85.0

132 96.6 68.0 126.4

130 99.9 71.6 133.0



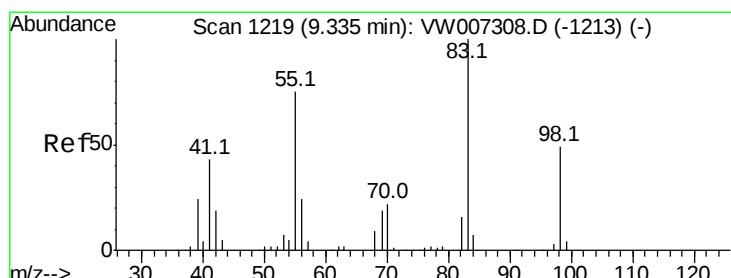
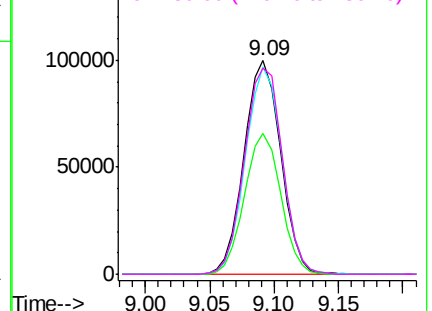
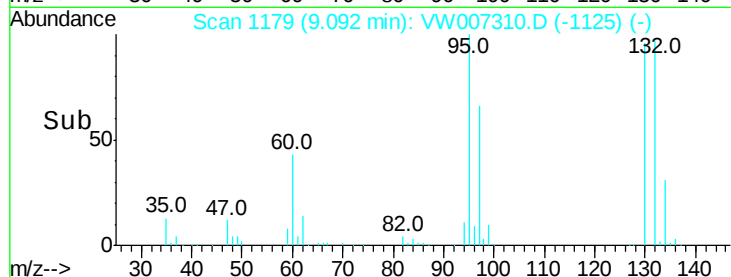
Abundance

Ion 95.00 (94.70 to 95.70): VW

Ion 97.00 (96.70 to 97.70): VW

Ion 132.00 (131.70 to 132.70): V

Ion 130.00 (129.70 to 130.70): V



#36

Methylcyclohexane

Concen: 111.154 ug/L

RT: 9.34 min Scan# 1219

Delta R.T. 0.00 min

Lab File: VW007310.D

Acq: 07 Dec 2018 15:24

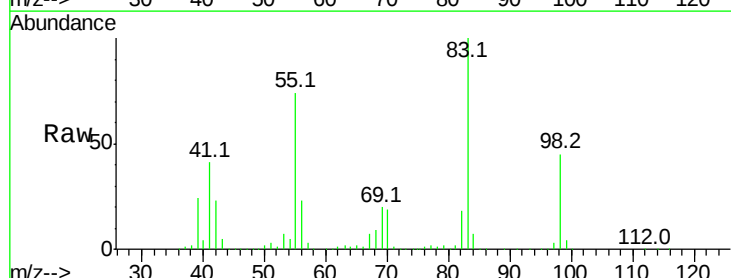
Tgt Ion: 83 Resp: 335461

Ion Ratio Lower Upper

83 100

55 73.4 59.4 89.2

98 48.0 38.1 57.1



Abundance

Ion 83.00 (82.70 to 83.70): VW

Ion 55.00 (54.70 to 55.70): VW

Ion 98.00 (97.70 to 98.70): VW

