Prein&Newhof
Engineers▪Surveyors▪Environmental▪Laboratory

Interpretation of Common Drinking Water Tests

General guidelines for interpreting results of the most common types of chemical testing are given below.

Contact your local health department for a more detailed evaluation.

Test	Excellent	Satisfactory	May be Objectionable	EPA Max. Contaminant Level (MCL)
Fluoride	1.0 – 1.2	0.07 – 2.0	> 4.0	4
Chloride	< 0.01 – 20	20 – 250	> 250	[250]
Nitrite	< 0.1	0.1 – 1	> 1	1
Nitrate	< 0.1	1 – 10	> 10	10
Nitrite + Nitrate	< 0.1	1 – 10	> 10	10
Sulfate	< 0.2 – 50	50 – 250	> 250	[250]
Iron	< 0.008 – 0.2	0.2 – 0.5	> 0.5	[0.3]
Sodium	< 0.020 – 20	20 – 160	> 160	[20]
Hardness	25 – 100	100 – 250	> 250	

< means less than
> means greater than

All results are in mg/L (parts per million)

MCL'S listed in [ ] brackets are secondary limits for aesthetic qualities

Test	Related Problems
Fluoride	Fluoride is naturally present in some water. Community water fluoridation is the adjustment of the natural fluoride level in public water systems to an optimal level to prevent tooth decay. Mottling of teeth possible at high levels.
Chloride	Taste and Corrosion
Nitrite	May cause methemoglobinemenia in infants.
Nitrate	The largest use of nitrates is in fertilizer. In the body, nitrates are converted to nitrites. Infants below six months of age who drink water containing nitrate in excess of the MCL could become seriously ill. Systems include shortness of breath and blue baby syndrome. The long-term effects of nitrate on adults is still being studied.
Sulfate	Higher levels may have a laxative effect, especially for new supply users.
Iron	Staining, turbidity, taste, color and odor.
Sodium	Taste and special diets may require water of low sodium content.
Hardness	Scaling of water fixtures, laundry problems, water spotting, discoloration at high levels. Corrosion at low levels.

The above information is given for informational purposes only. Prein&Newhof does not make any health-based decisions on water testing results. Contact the local Health Department regarding any potential health-based concerns.