CITY OF LIVINGSTON

DOMESTIC WATER ANALYSIS EXPLANATIONS AND RESULTS

ALKALINITY-is a measure of the water's capacity to neutralize acid. Water with a high alkalinity (above 300 mg/L), when boiled for an extended period of time, may form a deposit or develop an unpleasant taste. Water with a very low alkalinity (below 30 mg/L) corrodes pipes and plumbing.
CITY OF LIVINGSTON RESULTS: 175 mg/L

BICARBONATE-is a buffer ion in water, derived from carbonate rocks and atmospheric CO2. Water with pH 7.8 will be 60-90% buffered by bicarbonate. If water is heated, bicarbonate can combine with calcium or magnesium to form scale which can clog pipes and precipitate in sinks and laundry.
CITY OF LIVINGSTON RESULTS: pH 7.6

CHLORIDE-less than 250 mg/L is recommended to prevent unpleasant taste. The normal range for drinking water is 5-20 mg/L. High values may be an early indicator of contamination. Chloride also makes water more corrosive towards the distribution system.
CITY OF LIVINGSTON RESULTS: 13 mg/l

HARDNESS-caused mainly by calcium and magnesium, it produces incrustation on pipes, kitchen utensils, and tubs as well as excessive soap consumption. Upon heating, hard water may form scale deposits, alternately, soft water may result in a corrosion of water pipes. In general, 80-100 mg/L is considered acceptable, 200–500 mg/L is considered tolerable, and greater than 500 mg/L is considered unacceptable.
CITY OF LIVINGSTON RESULTS: 192 mg/L

IRON-the level of 0.3 mg/L is a general guideline based on aesthetics and taste. It is an essential human nutrient; however, at levels greater than 0.3 mg/L, it stains laundry and plumbing fixtures, and causes undesirable taste in beverages. When exposed to air, iron precipitates causing a reddish-brown color.
CITY OF LIVINGSTON RESULTS: Non-detectable

MAGNESIUM-is an essential human nutrient for the heart and nervous system. Greater than 50 mg/L may have a laxative effect on first time users. Guidelines are often based on aesthetics (taste). Along with calcium, magnesium contributes to water hardness.
CITY OF LIVINGSTON RESULTS: 13 mg/L

NITRATE + NITRITE AS N-10 mg/L maximum contaminant level. Acutely toxic in infants under 6 months of age, nitrate produces a blood disorder called methemoglobinemia (blue baby syndrome), which limits the amount of oxygen the bloodstream can carry.
CITY OF LIVINGSTON RESULTS: 0.68 mg/L

pH-is an aesthetic parameter. Low pH may cause corrosion of water pipes-while high pH may cause incrustation of pipes.
CITY OF LIVINGSTON RESULTS: pH 7.6

POTASSIUM-is an essential human nutrient. It is necessary for nerve impulses. Moderate concentrations are acceptable, but greater than 2000 mg/L may be harmful to nervous and digestive systems.
CITY OF LIVINGSTON RESULTS: 3 mg/L

SODIUM-is an essential human nutrient necessary for nerve impulses. If a water softener is used to remove hardness,
calcium is replaced by sodium. People on low sodium diets using water softeners should have the sodium level of their
water checked and consult a physician. Less than 20 mg/L is ideal.
CITY OF LIVINGSTON RESULTS: 18 mg/L

SULFATE-is recommended to be below 500 mg/L for health and aesthetic reasons. The major physiological effects when
exceeded are catharsis (laxative effect) and gastrointestinal irritation. Sulfate may produce noticeable taste.
CITY OF LIVINGSTON RESULTS: 32 mg/L

TOTAL DISSOLVED SOLIDS-represents the dissolved minerals in water. High values-above 1500 mg/l – may cause taste, corrosion, scaling and a laxative effect.
CITY OF LIVINGSTON RESULTS: 268 mg/L

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