

Water Treatment Report

21/01/2009 12:10:41



Water Treatment Process

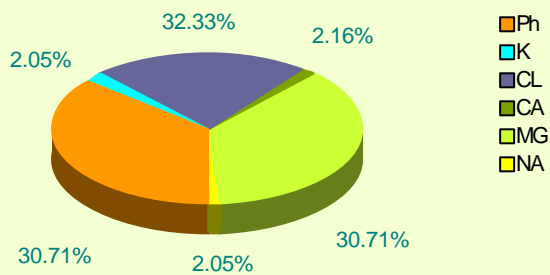
The first step in the water treatment process is to aerate the water. This is done to remove any dissolved gases in the water such as hydrogen sulfide. This also oxidizes Iron and Manganese in the water making the water appear brown in color.

In the next step the water is pumped into a detention tank where potassium permanganate is added. This helps oxidize the remaining manganese and iron. Oxidization is a process where oxygen molecules are stripped from the molecule and changes its properties, in this case changing the manganese and iron from a soluble to an insoluble which can be filtered.

Water Factory Status on:



Last Values measured on: 21/01/2009 12:10:41



After detention and just prior to filtration, a polymer chemical is added. This aids in the filtering out of iron and manganese.

The water is then pumped under pressure, through giant sand pressure filters which detain the iron, manganese (with help from the filter aid) and Turbidity (suspended particles). Water treated in the filters goes through at minimum of one meter of sand with the sand being no coarser than 0.5mm. During routine maintenance these filters are back washed to remove the iron, manganese deposits caught during the filtering process.

The final step is the addition of chlorine to the water for disinfection.

Major Indicator Report and Comparison

Description	Unit	Current	Previous	Variation	Comments
Ph Potential of Hydrogen	-	1425	1350	75	High variation
K Potassium	mg/L	95	90	5	Good
CL Chloride	mg/L	1350	825	525	Abnormal variation - Please verify
CA Calcium	mg/L	90	55	35	High variation
MG Magnesium	mg/L	1200	75	1125	1125.00
NA Sodium	mg/L	80	5	75	High variation



Weekly PH & CL Average

Bar Settings	
Time Period:	Last week
Step	1 day
Value	PH & CL
type	Average

