



# Minneapolis Water Works

## Monthly Plant Effluent Water Analysis for:

### March 2015

#### Physical and Chemical Water Quality

	<u>Plant Effluent Average Value</u>
Temperature, River Water Average (°C)	4.8
Total Organic Carbon (ppm* as C)	3.33
Total Dissolved Solids (ppm)	178
Turbidity (NTU)	0.08
Alkalinity-Total (ppm as CaCO <sub>3</sub> )	45
Ammonia Nitrogen (ppm as N)	0.87
Chlorine Residual (ppm Cl as Cl <sub>2</sub> )	3.9
Fluoride-F (ppm as F)	1.00
pH	8.92
Nitrate - NO <sub>3</sub> (ppm as N)	1.34
Nitrite - NO <sub>2</sub> (ppm as N)	Not Detected
Phosphate-PO <sub>4</sub> (ppm as PO <sub>4</sub> )	0.91
Sulfate - SO <sub>4</sub> (ppm as SO <sub>4</sub> )	17.2
Total Hardness (grains per gallon) EDTA method	5.4
Total Hardness (ppm as CaCO <sub>3</sub> ) EDTA method	92

#### Chemical Water Quality - Inorganic Metals

<u>Chemical Element</u>	<u>Plant Effluent Average Value</u>
Aluminum-Al (ppm as Al)	0.02
Arsenic-As (ppm as As)	Not Detected
Cadmium-Cd (ppm as Cd)	Not Detected
Calcium-Ca (ppm as Ca)	31.9
Chloride-Cl (ppm as Cl)	29.0
Chromium (ppm as Cr)	<0.01
Copper-Cu (ppm as Cu)	<0.01
Iron-Fe (ppm as Fe)	Not Detected
Lead-Pb (ppm as Pb)	Not Detected
Magnesium-Mg (ppm as Mg)	2.76
Manganese-Mn (ppm as Mn)	Not Detected
Silica-Si (ppm as Si)	10.1
Sodium-Na (ppm as Na)	12.6
Zinc-Zn (ppm as Zn)	Not Detected

\*ppm = parts per million