



# Minneapolis Water Works

## Monthly Plant Effluent Water Analysis for:

### October 2015

#### Physical and Chemical Water Quality

	<u>Plant Effluent Average Value</u>
Temperature, River Water Average (°C)	15.6
Total Organic Carbon (ppm* as C)	4.03
Total Dissolved Solids (ppm)	156
Turbidity (NTU)	0.07
Alkalinity-Total (ppm as CaCO <sub>3</sub> )	46
Ammonia Nitrogen (ppm as N)	0.9
Chlorine Residual (ppm Cl as Cl <sub>2</sub> )	3.9
Fluoride-F (ppm as F)	0.70
pH	8.88
Nitrate - NO <sub>3</sub> (ppm as N)	0.68
Nitrite - NO <sub>2</sub> (ppm as N)	< 0.015
Phosphate-PO <sub>4</sub> (ppm as PO <sub>4</sub> )	0.82
Sulfate - SO <sub>4</sub> (ppm as SO <sub>4</sub> )	25.3
Total Hardness (grains per gallon) EDTA method	4.4
Total Hardness (ppm as CaCO <sub>3</sub> ) EDTA method	75

#### Chemical Water Quality - Inorganic Metals

<u>Chemical Element</u>	<u>Plant Effluent Average Value</u>
Aluminum-Al (ppm as Al)	0.01
Arsenic-As (ppm as As)	Not Detected
Cadmium-Cd (ppm as Cd)	Not Detected
Calcium-Ca (ppm as Ca)	30.6
Chloride-Cl (ppm as Cl)	29.3
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)	2.5
Manganese-Mn (ppm as Mn)	<0.01
Silica-Si (ppm as Si)	6.5
Sodium-Na (ppm as Na)	15.6
Zinc-Zn (ppm as Zn)	Not Detected

\*ppm = parts per million