



Minneapolis Water Works

Monthly Plant Effluent Water Analysis for: July 2015

Physical and Chemical Water Quality

	<u>Plant Effluent Average Value</u>
Temperature, River Water Average (°C)	27.2
Total Organic Carbon (ppm* as C)	5.08
Total Dissolved Solids (ppm)	164
Turbidity (NTU)	0.08
Alkalinity-Total (ppm as CaCO ₃)	38
Ammonia Nitrogen (ppm as N)	0.91
Chlorine Residual (ppm Cl as Cl ₂)	3.4
Fluoride-F (ppm as F)	0.76
pH	8.97
Nitrate - NO ₃ (ppm as N)	0.55
Nitrite - NO ₂ (ppm as N)	0.012
Phosphate-PO ₄ (ppm as PO ₄)	0.85
Sulfate - SO ₄ (ppm as SO ₄)	25.2
Total Hardness (grains per gallon) EDTA method	1.2
Total Hardness (ppm as CaCO ₃) EDTA method	72

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)	27.6
Chloride-Cl (ppm as Cl)	29.4
Chromium (ppm as Cr)	<0.01
Copper-Cu (ppm as Cu)	0.02
Iron-Fe (ppm as Fe)	Not Detected
Lead-Pb (ppm as Pb)	Not Detected
Magnesium-Mg (ppm as Mg)	1.23
Manganese-Mn (ppm as Mn)	<0.01
Silica-Si (ppm as Si)	8.41
Sodium-Na (ppm as Na)	15.1
Zinc-Zn (ppm as Zn)	Not Detected

*ppm = parts per million