

## Minneapolis Water Works Monthly Plant Effluent Water Analysis for: August 2018

Phys	sical	and	Chemical	W	ater (	С	)uali	tv
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I hysical and Chemical Water Quanty				
	Plant Effluent Average Value			
Temperature, River Water Average (°C)	26.2			
Total Organic Carbon (ppm* as C)	4.97			
Total Dissolved Solids (ppm)	161			
Turbidity (NTU)	0.04			
Alkalinity-Total (ppm as CaCO <sub>3</sub> )	50			
Ammonia Nitrogen (ppm as N)	0.90			
Chlorine Residual (ppm Cl as Cl <sub>2</sub> )	3.9			
Fluoride-F (ppm as F)	0.77			
pH	8.90			
Nitrate - NO <sub>3</sub> (ppm as N)	0.53			
Nitrite - NO <sub>2</sub> (ppm as N)	< 0.015			
Phosphate-PO <sub>4</sub> (ppm as PO <sub>4</sub> )	0.82			
Sulfate - $SO_4$ (ppm as $SO_4$ )	28.4			
Total Hardness (grains per gallon) EDTA method	4.97			
Total Hardness (ppm as CaCO <sub>3</sub> ) EDTA method	85			
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## Chemical Water Quality - Inorganic Metals

## **Plant Effluent Average Value**

## **Chemical Element**

Aluminum-Al (ppm as Al)	0.05
Arsenic-As (ppm as As)	Not Detected
Cadmium-Cd (ppm as Cd)	Not Detected
Calcium-Ca (ppm as Ca)	34.8
Chloride-Cl (ppm as Cl)	27.0
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)	1.21
Manganese-Mn (ppm as Mn)	< 0.01
Sillca-Si (ppm as Si)	9.45
Sodium-Na (ppm as Na)	15.15
Zinc-Zn (ppm as Zn)	Not Detected
*ppm = parts per million	

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