

**SUMMARY OF WATER QUALITY REPORT
November, 2018**

Summary Statement

To West Des Moines Water Works, the quality of water provided to its customers is of vital importance. Therefore, monitoring is conducted at least as often as required by rules of the U.S. Environmental Protection Agency and the Iowa Department of Natural Resources. For many substances, West Des Moines Water Works voluntarily monitors more frequently than is required by the governmental rules.

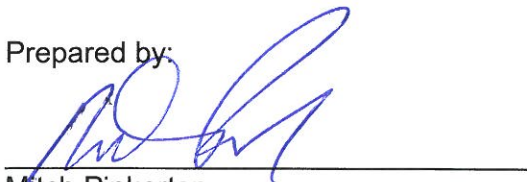
All U.S. Environmental Protection Agency and the Iowa Department of Natural Resources requirements are being met at this time.

For a complete list of all sampling results, please contact the West Des Moines Water Works Treatment Plant at (515) 222-3465.

New Test Results Received Since the Last Report

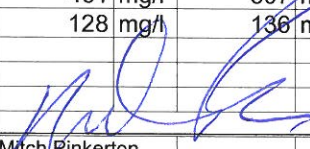
Water samples received during this month met or exceeded water quality standards.

Prepared by:



Mitch Pinkerton
Water Production Manager

WEST DES MOINES WATER WORKS
December 7, 2018

SUBSTANCES FREQUENTLY MONITORED BY						
WEST DES MOINES WATER WORKS						
RAW WATER (BEFORE TREATMENT)						
November 2018						
Substance	Test	Concentration				
	Frequency	Average	High	Low		
Calcium Hardness	1/week	255 mg/l	280 mg/l	240 mg/l		
Copper	1/week	0.07 mg/l	0.07 mg/l	0.05 mg/l		
Fluoride	1/week	1.4 mg/l	1.5 mg/l	1.3 mg/l		
Iron	1/week	0.26 mg/l	0.52 mg/l	0.14 mg/l		
Magnesium Hardness	1/week	93 mg/l	108 mg/l	78 mg/l		
Manganese	1/week	0.19 mg/l	0.19 mg/l	0.18 mg/l		
Nitrate as Nitrogen	1/week	0.24 mg/l	0.25 mg/l	0.21 mg/l		
Orthophosphate	1/week	0.12 mg/l	0.14 mg/l	0.11 mg/l		
Phenolphthalein						
Alkalinity as CaCO3	1/week	0	0	0		
pH (pH units)	1/week	7.2	7.2	7.2		
Sulfate	1/week	249 mg/l	305 mg/l	160 mg/l		
Temperature	1/week	21 ° C	21 ° C	21 ° C		
Total Alkalinity/CaCO3	1/week	279	282	272		
Total Dissolved Solids	1/week	601 mg/l	641 mg/l	557 mg/l		
Total Hardness	1/week	347 mg/l	388 mg/l	330 mg/l		
FINISHED WATER (AFTER TREATMENT)						
(INCLUDES PURCHASED WATER)						
Substance	Test	Concentration				
	Frequency	Average	High	Low		
Calcium Hardness	6/day	63 mg/l	80 mg/l	53 mg/l		
Copper	1/week	0.04 mg/l	0.07 mg/l	0.01 mg/l		
Fluoride	1/day	1.0 mg/l	1.2 mg/l	0.9 mg/l		
Free Chlorine *	6/day	1.0 mg/l	1.5 mg/l	0.8 mg/l		
Iron	1/week	0.02 mg/l	0.03 mg/l	0.01 mg/l		
Magnesium Hardness	1/week	64 mg/l	74 mg/l	56 mg/l		
Manganese	1/week	0.013 mg/l	0.023 mg/l	0.009 mg/l		
Nitrate as Nitrogen	1/week	0.69 mg/l	1.20 mg/l	0.47 mg/l		
Orthophosphate	1/week	0.17 mg/l	0.21 mg/l	0.12 mg/l		
Phenolphthalein						
Alkalinity as CaCO3	6/day	15	20	9		
pH (pH units)	6/day	9.4	9.5	9.2		
Polyphosphate	1/week	0.23 mg/l	0.40 mg/l	0.14 mg/l		
Sulfate	1/week	244 mg/l	265 mg/l	205 mg/l		
Temperature	1/week	20 ° C	22 ° C	19 ° C		
Total Alkalinity/CaCO3	6/day	64	72	58		
Total Chlorine	6/day	1.11 mg/l	1.80 mg/l	0.87 mg/l		
Total Dissolved Solids	2/day	461 mg/l	507 mg/l	412 mg/l		
Total Hardness	6/day	128 mg/l	136 mg/l	118 mg/l		
* at Water Treatment Plant						
Prepared by West Des Moines Water Works		 Mitch Pinkerton Water Production Manager				
December 7, 2018						