

FOR BOARD OF PUBLIC WORKS
P O BOX 279
BEATRICE NE 68310

WATER ANALYSIS REPORT

	2016	2017	2018	2019	2020	2021
Date Received:	01-20-16	01-18-17	01-17-18	01-15-19	01-09-20	01-05-21
Report Date:	01-28-16	01-26-17	01-24-18	01-28-19	01-18-20	01-14-21
Lab Number:	2884783	2621202	2766136	2886103	8712852	8848130
	Reservoir	Reservoir	Reservoir	Reservoir	Reservoir	Reservoir
Conductivity	0.781 mmhos/cm	0.704 mmhos/cm	0.629 mmhos/cm	0.894 mmhos/cm	0.684 mmhos/cm	0.684 mmhos/cm
Total Hardness	251.37 mg/L	198.36 mg/L	201.78 mg/L	241.11 mg/L	203.49 mg/L	208.62 mg/L
Grain/U.S. Gallon	14.7 gr/gal	11.6 gr/gal	11.8 gr/gal	14.1 gr/gal	11.9 gr/gal	12.2 gr/gal
Calcium	77.5 ppm	60.4 ppm	62.8 ppm	73.9 ppm	61.8 ppm	63.1 ppm
Magnesium	14.2 ppm	11.7 ppm	10.8 ppm	13.9 ppm	12.1 ppm	12.5 ppm
Sodium	85.0 ppm	68.4 ppm	56.3 ppm	87.2 ppm	61.7 ppm	59.8 ppm
Sodium absorption ration	2.324	2.104	1.722	2.523	1.874	1.795
Potassium	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Iron	0.0 ppm	N.D.	N.D.	N.D.	N.D.	N.D.
Manganese	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Carbonate	N.D mg/L	N.D mg/L	N.D mg/L	N.D mg/L	N.D mg/L	.700 mg/L
Bicarbonate	214.0 mg/L	198.0 mg/L	173.0 mg/L	223 mg/L	181 mg/L	193 mg/L
Chloride	94.0 ppm	77.0 ppm	59.0 ppm	109.0 ppm	109.0 ppm	60.0 ppm
Sulfate	44.0 ppm	45.0 ppm	47.0 ppm	44.0 ppm	44.0 ppm	44.0 ppm
Fluoride	.3 ppm	.2 ppm	.3 ppm	.2 ppm	.2 ppm	.2 ppm
Nitrate Nitrogen	5.6 ppm	4.2 ppm	4.1 ppm	3.6 ppm	5.8 ppm	6.9 ppm
pH	7.17	7.15	7.40	7.12	7.00	7.57
Total Dissolved Solids	508 mg/L	458 mg/L	409 mg/L	581 mg/L	445 mg/L	445 mg/L
Total Suspended Solids	N.D.	11 mg/L	6 mg/L	N.D.	N.D.	4 mg/L
Total Alkalinity	215.0 mgCaCo3/L	198.0 mgCaCo3/L	173.0 mgCaCo3/L	223.0 mgCaCo3/L	182.0 mgCaCo3/L	182.0 mgCaCo3/L
Phosphorus	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested	Not Tested
Zinc	0.01 mg/L	N.D. mg/L	N.D. mg/L	0.01 mg/L	N.D mg/L	N.D mg/L
Boron	0.05 mg/L	0.05 mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L
Chromium	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L
Lead	.0008 mg/L	.0009 mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L
Copper	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Nitrite Nitrogen	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Note:

mg/L = parts per million
ug/L = parts per billion
< = less than
RL = Reporting Limit
N.D. = Not Detected