

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

WATER ANALYSIS REPORT

	2019	2020	2021	2022	2023	2024
Date Received:	01-15-19	01-09-20	01-05-21	01-04-22	01-05-23	01-11-24
Report Date:	01-28-19	01-18-20	01-14-21	01-10-22	01-13-23	01-23-24
Lab Number:	2886103	8712852	8848130	70048556	70226999	70401681
	Reservoir	Reservoir	Reservoir	Reservoir	Reservoir	Reservoir
Conductivity	0.894 mmhos/cm	0.684 mmhos/cm	0.684 mmhos/cm	0.841 mmhos/cm	0.927 mmhos/cm	0.708 mmhos/cm
Total Hardness	241.11 mg/L	203.49 mg/L	208.62 mg/L	208.62 mg/L	237.69 mg/L	201.78 mg/L
Grain/U.S. Gallon	14.1 gr/gal	11.9 gr/gal	12.2 gr/gal	12.2 gr/gal	13.9 gr/gal	11.8 gr/gal
Calcium	73.9 ppm	61.8 ppm	63.1 ppm	64.2 ppm	72.5 ppm	61.2 ppm
Magnesium	13.9 ppm	12.1 ppm	12.5 ppm	11.8 ppm	13.7 ppm	11.7 ppm
Sodium	87.2 ppm	61.7 ppm	59.8 ppm	68.2 ppm	78.5 ppm	59.4 ppm
Sodium absorption ration	2.523	1.874	1.795	2.048	2.211	1.818
Potassium	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Iron	N.D.	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	.700 mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L
Bicarbonate	223 mg/L	181 mg/L	193 mg/L	221 mg/L	227 mg/L	186 mg/L
Chloride	109.0 ppm	109.0 ppm	60.0 ppm	93.0 ppm	98.0 ppm	57.6 ppm
Sulfate	44.0 ppm	44.0 ppm	44.0 ppm	43.0 ppm	42.0 ppm	42.6 ppm
Fluoride	.2 ppm	.2 ppm	.2 ppm	.2 ppm	.2 ppm	.2 ppm
Nitrate Nitrogen	3.6 ppm	5.8 ppm	6.9 ppm	5.0 ppm	4.6 ppm	5.3 ppm
pH	7.12	7.00	7.57	7.06	6.95	6.67
Total Dissolved Solids	581 mg/L	445 mg/L	445 mg/L	547 mg/L	602 mg/L	460 mg/L
Total Suspended Solids	N.D.	N.D.	4 mg/L	10 mg/L	N.D.	6 mg/L
Total Alkalinity	223.0 mgCaCo3/L	182.0 mgCaCo3/L	182.0 mgCaCo3/L	221 mgCaCo3/L	227 mgCaCo3/L	186 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	N.D mg/L	N.D mg/L	N.D mg/L
Boron	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	N.D. mg/L	.06 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	N.D. mg/L	N.D. 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