



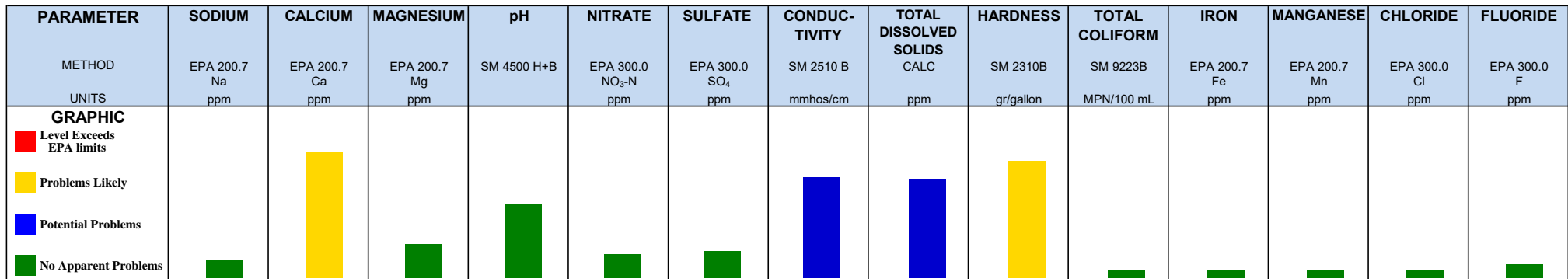
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www.midwestlabs.com

**CITY OF WAYNE  
CASEY JUNCK  
PO BOX 8  
WAYNE NE 68787-1903**

**Domestic Suitability**  
For: (8761) CITY OF WAYNE  
W3 Water Quality

**Analytical Results for 208 South Main Street**

PARAMETER	SODIUM	CALCIUM	MAGNESIUM	pH	NITRATE	SULFATE	CONDUCTIVITY	TOTAL DISSOLVED SOLIDS	HARDNESS	TOTAL COLIFORM	IRON	MANGANESE	CHLORIDE	FLUORIDE
METHOD	EPA 200.7 Na	EPA 200.7 Ca	EPA 200.7 Mg	SM 4500 H+B	EPA 300.0 NO <sub>3</sub> -N	EPA 300.0 SO <sub>4</sub>	SM 2510 B	CALC	CALC	SM 9223B	EPA 200.7 Fe	EPA 200.7 Mn	EPA 300.0 Cl	EPA 300.0 F
UNITS	ppm	ppm	ppm		ppm	ppm	mmhos/cm	ppm	gr/gallon	MPN/100 mL	ppm	ppm	ppm	ppm
LEVEL FOUND	17.3	110	20.1	7.21	3.8	108	0.688	447	20.9	n.d.	n.d.	n.d.	4	0.8
CAUTION LEVEL	100	80	30	6.5/9	10	400	0.75	500	20	1	0.3	0.05	200	4



All results are reported on an AS RECEIVED basis., n.d. = not detected , MPN = most probable number , ppm = parts per million, ppm = mg/kg, ppm = mg/L

For questions please contact:

*Heather Ramig*  
Heather Ramig  
Senior Account Manager

hramig@midwestlabs.com (402)829-9891

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

## SUGGESTED WATER QUALITY GUIDELINES FOR HUMAN CONSUMPTION

Sodium (Na)	Less than 20 ppm: No adverse effects.	20-80 ppm: Persons on restricted sodium diets should consult a physician concerning use.	More than 80 ppm: Should be used sparingly by persons on low-sodium diets.
Calcium (Ca)	Less than 80 ppm: No adverse effects.	80-150 ppm: Hard water problems such as scale formation can be expected.	More than 150 ppm: May be associated with high levels of sulfate (see sulfate below). Extreme hardness is undesirable for household use.
Magnesium (Mg)	Less than 30 ppm: No adverse effects.	30-80 ppm: Contributes to hardness when associated with high calcium levels.	More than 80 ppm: When associated with high sulfate, is likely to have a laxative effect (magnesium sulfate is Epsom Salts).
pH	Less than 6.5: Corrosive to metal.	6.5-8.5: No adverse effects.	Higher than 8.5: Possible bitter taste, and germicidal activity of chlorine is reduced, corrosive to pipes.
Nitrate Nitrogen (NO <sub>3</sub> -N)	Less than 2 ppm: No adverse effects.	2-10 ppm: No acute toxicity. Could have some negative health effects in young children.	More than 10 ppm: Increasing probability of health effect in children under 6 months of age due of reduced oxygen carrying capacity of the blood. EPA MCL standard of < 10 ppm.
Sulfate (SO <sub>4</sub> )	Less than 250 ppm: No adverse effects.	250-500 ppm: Likely to have a laxative effect, especially when first introduced. Diarrhea may or may not persist.	More than 500 ppm: Strongly laxative.
Conductivity	Less than 0.30: Extremely pure water can be corrosive metal.	0.30-1.50: No adverse effects.	Greater than 1.50: High levels of dissolved solids (see below).
Total Dissolved Solids (TDS)	Less than 200 ppm: No adverse health or nutritional effects. May be corrosive if extremely pure.	200-1000 ppm: No adverse effects.	More than 1000 ppm: Increasingly adverse effects, especially diarrhea. Water loses esthetic effect.
Hardness	Less than 6 gr/gal: No adverse effects (17.1 mg/L CaCO <sub>3</sub> = (1 gr/gal).	6-12 gr/gal: Some scale may form in pipes and water heaters. Softening may be desirable.	More than 12 gr/gal: Scale will form rapidly and laundry will not come clean. Softening for household use is desirable.
Total Coliform*	Negative: No coliform bacteria present in 100 mL of water.		Positive: Coliforms are a bacteria that are naturally present in the environment and can be used to indicate the presence of other potentially harmful bacteria such as Fecal Coliform or <i>E. coli</i> . The presence of Fecal and <i>E. coli</i> may indicate a contamination from human or animal waste. The EPA acceptable level is less than one (<1) MPN (most probable number) per 100 mL of water.
Iron (Fe)	Less than 0.3 ppm: No adverse effects.	0.3-1.0 ppm: Some staining will occur.	More than 1.0 ppm: Iron oxide (rust) will cause extensive staining and will precipitate out, forming a red sludge. Taste will be bitter.
Manganese (Mn)	Less than 0.05 ppm: No adverse effects.	0.05-0.30 ppm: May cause black or brown staining of pipes, sinks and laundry.	More than 0.30 ppm: Besides the staining effect, will cause a metallic taste. It is harmful for infants 0-6 months at 0.30 to 1.0 mg/L. Greater than 1.0 mg/L is harmful for adults. May cause neurological issues. Refer to State Health Department.
Chloride (Cl)	Less than 200 ppm: No adverse effects.	200-500 ppm: Increasingly salty taste.	More than 500 ppm: Very salty taste.

\*Holding/Transit time between sampling and analysis cannot exceed 30 hours. If this time has been exceeded, the results might be invalid.

N.D. = Not Detected

EPA Guidelines suggest less than 0.015 ppm (mg/L) for Lead (Pb) and 1.30 ppm (mg/L) for Copper (Cu).

REPORT NUMBER

**22-052-4213**

REPORT DATE  
**Feb 21, 2022**

SEND TO  
**8761**

RECEIVED DATE  
**Feb 17, 2022**



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ISSUE DATE  
**Feb 21, 2022**

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PO BOX 8  
WAYNE NE 68787-1903**

**REPORT OF ANALYSIS**  
For: (8761) CITY OF WAYNE  
W3 Water Quality

Analysis	Level Found	Reporting			Analyst-Date	Verified-Date
	As Received	Units	Limit	Method		
Sample ID: <b>208 South Main Street</b>	Lab Number: <b>70070654</b>	Date Sampled: <b>2022-02-16 1030</b>				
E. coli (generic)	n.d.	MPN/100mL	1	SM 9223 B	cnc6-2022/02/18	elh8-2022/02/18

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