Substance (Units)	MCL or {MRDL}	MCLG or {MRDLG}	SMCL	HAL	Level Found	Range/ Comments	Year Test	Violation	Typical Source of Contaminant
Microbiological Results †									
Total Coliform Bacteria (% positive)	< 5% of monthly samples	0	N/A	N/A	0%	0%	2023	No	Naturally present in the environment; E.coli is a type of coliform that is present in human and animal waste.
Disinfection Results †									
Free Chlorine (ppm)	{ 4 }	{ 4 }	N/A	N/A	1.14	0.97 – 1.26	2023	No	Drinking water disinfectant
Haloacetic Acids (ppb)	60	0	N/A	N/A	12.5 (avg.)	8.0 – 18.0	2023	No	By-product of drinking water chlorination
Tot. Trihalomethanes (ppb)	80	0	N/A	N/A	29.7 (avg.)	14.7 – 53.6	2023	No	By-product of drinking water chlorination
Bromodichloromethane (ppb)	80	0	N/A	N/A	9.7	5.7 – 15.0	2023	No	By-product of drinking water chlorination
Bromoform (ppb)	80	0	N/A	N/A	0.34	0.24 – 0.43	2023	No	By-product of drinking water chlorination
Chloroform (ppb)	80	0	N/A	N/A	14.7	5.1 – 32.0	2023	No	By-product of drinking water chlorination
Dibromochloromethane (ppb)	80	0	N/A	N/A	4.9	2.9 – 6.6	2023	No	By-product of drinking water chlorination
† - Microbiological and Disinfection Results are for KWU's distribution system, provided as an informational item. These results are not applicable to other distribution systems.									
Cryptosporidium	TT	0	N/A	N/A	0	0	2015-2017	No	Microbial parasite found in surface water throughout the USA
Regulated Inorganic Results									
Antimony (ppb)	6	6	N/A	N/A	ND	ND	2023	No	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder
Arsenic (ppb)	10	0	N/A	N/A	ND	ND	2023	No	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	2	2	N/A	N/A	0.02	0.02	2023	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	4	4	N/A	N/A	ND	ND	2023	No	Discharge from metal refineries and coal burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	N/A	N/A	ND	ND	2023	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	100	100	N/A	N/A	ND	ND	2023	No	Erosion of natural deposits, Discharge from steel and pulp mills
Copper (ppm)	1.3 (AL)	1.3	N/A	N/A	0.17 (90th percentile)	0.002 – 0.43	2020	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide (ppb)	200	200	N/A	N/A	ND	ND	2023	No	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride (ppm)	4	4	N/A	N/A	0.74 (avg.)	0.63 – 0.79	2023	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (ppb)	15 (AL)	0	N/A	N/A	7.80 (90th percentile)	0.62 – 11.0	2020	No	Corrosion of household plumbing systems; erosion of natural deposits
Mercury (ppb)	2	2	N/A	N/A	ND	ND	2023	No	Erosion of natural deposits; Discharge from Refineries and factories ; runoff from landfills and croplands

Nickel (ppb)	100	N/A	N/A	N/A	ND	ND	2023	No	Occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products
Nitrate as N (ppm)	10	10	N/A	N/A	0.34	0.34	2023	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	50	50	N/A	N/A	ND	ND	2023	No	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N/A	N/A	N/A	N/A	10	10	2023	No	Naturally Occuring, enhanced by road salt runoff
Thallium (ppb)	2	0.5	N/A	N/A	ND	ND	2023	No	Erosion of natural deposits; Leaching from ore processing sites
Regulated Synthetic Organic Results									
Atrazine (ppb)	3	0	N/A	N/A	0.031	0.031	2023	No	Herbicide – Agricultural Runoff
Dual (Metolachlor) (ppb)	N/A	0	N/A	N/A	0.0081	0.0081	2023	No	Herbicide – Agricultural Runoff
Radioactive result									
Radioactivity, Gross Alpha (pCi/L)	15	0	N/A	N/A	ND	ND	2020	No	Erosion of natural deposits
Radium 226 (pCi/L)	5	0	N/A	N/A	ND	ND	2020	No	Erosion of natural deposits
Radium 228 (pCi/L)	5	0	N/A	N/A	ND	ND	2020	No	Erosion of natural deposits
Uranium (ug/l)	30	0	N/A	N/A	0.33	0.33	2020	No	Erosion of natural deposits
PFAS Contaminants *									
PFBS (ppt)	N/A	N/A	N/A	450000	0.45	0.45	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFHXS (ppt)	N/A	N/A	N/A	40	0.84	0.84	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFHXA (ppt)	N/A	N/A	N/A	150000	1.80	1.80	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFNA (ppt)	N/A	N/A	N/A	30	ND	ND	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFOS (ppt)	N/A	N/A	N/A	20	1.30	1.30	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFOA (ppt)	N/A	N/A	N/A	20	2.10	2.10	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFOA and PFOS Total (ppt)	N/A	N/A	N/A	20	3.40	3.40	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFHPA (ppt)	N/A	N/A	N/A	N/A	1.00	1.00	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.

*Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950s. The above table list PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services.									
UCMR-4									
10 Cyanotoxins	N/A	N/A	N/A	N/A	ND	ND	2018	N/A	Freshwater Cyanobacterial (Blue-Green Algae) Blooms
Germanium (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	Naturally-occuring element; commercially available in combination with other elements and minerals; a byproduct of zinc ore processing; used in infrared optics, fiber optics, electronics and solar applications
Manganese (ppb)	N/A	N/A	N/A	N/A	0.67	N.D. - 0.67	2018-2019	N/A	Naturally occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment chemical
8 Pesticides	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	Agricultural/Residential Run-off (includes insecticides, herbicides and fungicides)
1 Pesticide Byproduct (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	Agricultural Run-off
3 Alcohols (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	Solvents, food additives,production of flavorings, consumer products such as synthetic cosmetics, perfumes, fragrances, hair preparations, and skin lotions
3 Semi-Volatile Organic Compounds (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	Food additives (antioxidants), production of dyes, rubber, pharmaceuticals and pesticides. Used as pharmaceuticals, flavoring agents. Component of coal. Produced as chemical intermediates
Total Organic Carbon (TOC) (ppb)	N/A	N/A	N/A	N/A	1850 (avg.)	1700 – 2000	2018-2019	N/A	N/A
Bromide (ppb)	N/A	N/A	N/A	N/A	34.8 (avg.)	33 – 36	2018-2019	N/A	Occurs naturally in the environment in low levels. Concentrated sources include wastewater discharges from fossil fuel production and coal fired power plants, mining operations, and pestcides
3-Brominated Haloacetic Acid (HAA) Disinfection Byproduct Groups	N/A	N/A	N/A	N/A	See Below	See Below	2018-2019	N/A	By-product of drinking water chlorination
HAA-5 (ppb)	N/A	N/A	N/A	N/A	13.8	9.0 – 18.7	2018-2019	N/A	By-product of drinking water chlorination
HAA-6Br (ppb)	N/A	N/A	N/A	N/A	10.4	7.0 – 13.2	2018-2019	N/A	By-product of drinking water chlorination
HAA-9 (ppb)	N/A	N/A	N/A	N/A	23	15.6 – 29.2	2018-2019	N/A	By-product of drinking water chlorination
Dichloroacetic acid (DCAA) (ppb)	N/A	N/A	N/A	N/A	6.3 (avg.)	3.0 – 9.5	2018-2019	N/A	By-product of drinking water chlorination
Monochloroacetic acid (MCAA) (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	By-product of drinking water chlorination
Trichloroacetic acid (TCAA) (ppb)	N/A	N/A	N/A	N/A	6.3 (avg.)	4.0 – 8.4	2018-2019	N/A	By-product of drinking water chlorination
Bromochloroacetic acid (BCAA) (ppb)	N/A	N/A	N/A	N/A	3.3 (avg.)	1.7 - 4.2	2018-2019	N/A	By-product of drinking water chlorination
Bromodichloroacetic acid (BDCAA) (ppb)	N/A	N/A	N/A	N/A	4.8 (avg.)	3.5 – 6.4	2018-2019	N/A	By-product of drinking water chlorination
Chlorodibromoacetic acid (CDBAA) (ppb)	N/A	N/A	N/A	N/A	1.2 (avg.)	0.96 – 1.6	2018-2019	N/A	By-product of drinking water chlorination

Tribromoacetic acid (TBAA) (ppb)	N/A	N/A	N/A	N/A	ND	ND	2018-2019	N/A	By-product of drinking water chlorination
Monobromoacetic acid (MBAA) (ppb)	N/A	N/A	N/A	N/A	0.5 (avg.)	N.D. - 0.65	2018-2019	N/A	By-product of drinking water chlorination
Dibromoacetic acid (DBAA) (ppb)	N/A	N/A	N/A	N/A	0.71 (avg.)	0.40 – 0.93	2018-2019	N/A	By-product of drinking water chlorination
UCMR-5 - 29 PFAS Contaminants and Lithium (Sampling Event-SE-1)									
Lithium (ppb)	N/A	N/A	N/A	N/A	ND	ND	2023	No	Naturally Occuring in mineral deposits, battery manufacturing and recycling
29 PFA's Compounds	N/A	N/A	N/A	N/A	ND	ND	2023	No	Drinking water is one way that people can be exposed to PFAS. PFAS can get in groundwater and surface water from places that make or use PFAS and release from consumer products in landfills.
PFBA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFMPA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (4 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFPeA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFBS (ppt)	N/A	N/A	N/A	2000	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFMBA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFEESA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
NFDHA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (20ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
(4:2FTS)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFHxA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFPeS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (4 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
HFPO DA (ppt)	N/A	N/A	N/A	10	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFHpA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFHxS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
ADONA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
6:2FTS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFHpS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFOA (ppt)	N/A	N/A	N/A	< MRL (4 ppt)	ND	< MRL (4 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFNA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (4 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFOS (ppt)	N/A	N/A	N/A	< MRL (4 ppt)	ND	< MRL (4 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
9CL-PF3ONS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (2 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFDA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
8:2FTS (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFUnA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (2 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
11CL-PF3OUdS	N/A	N/A	N/A	N/A	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFDoA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (3 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
NMeFOSAA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (6 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
NEtFOSAA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (5 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFTrDA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (7 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams
PFTA (ppt)	N/A	N/A	N/A	N/A	ND	< MRL (8 ppt)	2023	No	Industrial/PFAS manufacturing Sources, Airport/Military Fire fighting Foams

Other Monitored Parameters									
Aluminum (ppm)	N/A	N/A	0.05	0.2	0.068	0.068	2023	N/A	Runoff/leaching from natural deposits, water treatment plant chemical (alum)
Chloride (ppm)	N/A	N/A	250	N/A	15	15	2023	N/A	Runoff/leaching from natural deposits, road salt, water softeners
Sulfate (ppm)	N/A	N/A	250	N/A	25	25	2023	N/A	Runoff/leaching from natural deposits, industrial wastes
Ortho-phosphate (ppm)	N/A	N/A	N/A	N/A	1.02 (avg.)	0.85 - 1.40	2023	N/A	Water additive to reduce corrosion of household plumbing systems
Total Organic Carbon (ppm)	TT	N/A	N/A	N/A	1.9 (avg.)	1.6 - 2.1	2023	N/A	Naturally Occurring, enhanced by runoff containing dissolved organics
Turbidity (ppm)	<0.30	N/A	N/A	N/A	0.022 (avg.)	0.015 - 0.061	2023	N/A	Erosion of natural deposits
Alkalinity (ppm)	N/A	N/A	N/A	N/A	104 (avg.)	100 - 112	2023	N/A	Naturally Occurring from dissolved Carbonates
Conductivity (us/cm)	N/A	N/A	N/A	N/A	314 (avg.)	297 - 352	2023	N/A	Naturally Occurring, enhanced by road salt runoff
Total Hardness (ppm)	N/A	N/A	N/A	N/A	139 (avg.)	134 - 146	2023	N/A	Naturally Occurring from eroded minerals (Calcium and Magnesium)
Temperature (degrees F)	N/A	N/A	N/A	N/A	53.2 (avg.)	37.2 - 71.6	2023	N/A	N/A
pH (pH Units)	N/A	N/A	N/A	N/A	7.74 (avg.)	7.49 - 8.01	2023	N/A	N/A
Calcium (ppm)	N/A	N/A	N/A	N/A	35	35	2023	N/A	Naturally Occuring Element
Magnesium (ppm)	N/A	N/A	N/A	N/A	14	14	2023	N/A	Naturally Occuring Element

DEFINITIONS

AL: Action Level The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. Action levels are reported at the 90th percentile from homes at greatest risk.
HAL: Health Advisory Level: The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
MCL: Maximum Contaminant Level The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG: Maximum Contaminant Level Goal The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
{MRDL}: Maximum Residual Disinfectant Level The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
{MRDLG}: Maximum Residual Disinfectant Level Goal The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
SMCL: Secondary Maximum Contaminant Level: Secondary drinking water standards for contaminants that affect taste, odor, or appearance of the drinking water. Yje SMCLs do not represent health standards.
TT: Treatment Technique A required process intended to reduce the level of a contaminant in drinking water.
MRL: Method Reporting Limit: The minimum quantitation level that, with 95 percent confidence, can be achieved by capable analysts at 75 percent of more of the laboratories using a specified analytical method (recognizing that individual laboratories may be able to quantify at lower levels).

Abbreviations:
avg: average
µS/cm: microsiemens per centimeter
N/A: Not Applicable
ND: Not Detected
NTU: Nephelometric Turbidity Units
pCi/L: picocuries per liter
ppb: parts per billion (µg/L)
ppm: parts per million (mg/L)
ppt: parts per trillion (ng/L)