Cobb County- Marietta Water Authority
Drinking Water
All Water Tests - 2022

updated-
1/11/2023

Other Parameters	Quarles WTP mg/L average	Wyckoff WTP mg/L average	Maximum Limit MCL mg/L	Aesthetic Standards SMCL mg/L	EPA Limit Met by CCMWA?	Sources of Parameter in Drinking Water	Frequency of Test
Alkalinity	20.5	24.9	No EPA Limit	No EPA Limit	n/a	Natural from rocks and soils; addition from drinking water treatment	Hourly
Aluminum	0.052	Not detected	No EPA Limit	0.05-0.2	**yes**	Natural dissolution from rocks; addition from drinking water treatment	Annually
Calcium	9.0	10.6	No EPA Limit	No EPA Limit	n/a	Natural dissolution from rocks	Biweekly
Hardness	30.3	35.3	No EPA Limit	No EPA Limit	n/a	Natural dissolution from rocks	Biweekly
Hardness, grains per gallon	1.77	2.06	No EPA Limit	No EPA Limit	n/a	Natural dissolution from rocks	Biweekly
Magnesium	Not tested	Not tested	No EPA Limit	No EPA Limit	n/a	Natural dissolution from rocks	As needed
Nickel	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leaching from pipes and fittings, power plant discharges	Annually
pH	7.9	7.7	No EPA Limit	6.5-8.5	**yes**	Natural sources; addition from drinking water treatment	Hourly
Sodium	8.8	8.1	No EPA Limit	No EPA Limit	n/a	Natural sources; addition from drinking water treatment	Annually
Zinc	Not detected	Not detected	No EPA Limit	5	**yes**	Power plant discharges	Annually
Chloride	8.80	12.23	No EPA Limit	250	**yes**	Deicing of roads; leachate from landfill; natural leaching from rocks; addition from drinking water treatment	Weekly
Sulfate	14.60	14.41	No EPA Limit	250	**yes**	Natural leaching from rocks; addition from drinking water treatment; industrial discharges	Weekly
Conductivity	128	121	No EPA Limit	No EPA Limit	n/a	Natural minerals dissolved in water; wastewater discharges; addition from drinking water treatment	Biweekly
Total Dissolved Solids	81.52	78.41	No EPA Limit	500	**yes**	Natural minerals dissolved in water; wastewater discharges; addition from drinking water treatment	Biweekly
Total Organic Carbon	1.3 Filtered	1.6 Filtered	TT average removal ratio between Filtered and Raw	No EPA Limit	**yes**	Decaying natural organic matter (NOM); discharges of fertilizers, pesticides herbicides and industrial chemicals	Continuus Online Monitoring
	2.0 Raw	2.7 Raw					
Turbidity	0.05	0.07	TT = 1 NTU	No EPA Limit	**yes**	Natural sediment- clay and silt; organic compounds; algae; microscopic organisms	Hourly
	100% meet standard	100% meet standard	TT = percentage of samples <0.3 NTU				

Inorganic Chemicals	Quarles WTP mg/L	Wyckoff WTP mg/L	Maximum Limit MCL mg/L	Aesthetic Standards SMCL mg/L	EPA Limit Met by CCMWA?	Sources of Contaminant in Drinking Water	Frequency of Test
Antimony	Not detected	Not detected	0.85	No EPA Limit	**yes**	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Annually
Arsenic	Not detected	Not detected	0.010	No EPA Limit	**yes**	Erosion of natural deposits; runoff from orchards, runoff from glass and electronicsproduction wastes	Annually
Barium	Not detected	Not detected	2	No EPA Limit	**yes**	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Annually

Beryllium	Not detected	Not detected	0.004	No EPA Limit	**yes**	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	Annually
Cadmium	Not detected	Not detected	0.005	No EPA Limit	**yes**	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	Annually
Chromium (Total)	Not detected	Not detected	0.1	No EPA Limit	**yes**	Discharge from steel and pulp mills; erosion of natural deposits	Annually
Fluoride	0.67	0.64	4.0	2.0	**yes**	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	Annually/ 3 times daily
Iron	Not detected	Not detected	No EPA Limit	0.3	**yes**	Erosion of natural deposits	Annually/ 2 times daily
Manganese	Not detected	Not detected	No EPA Limit	0.05	**yes**	Erosion of natural deposits	Annually/ 2 times daily
Mercury	Not detected	Not detected	0.002	No EPA Limit	**yes**	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and croplands	Annually
Nitrate/Nitrite	0.59	0.29	10	No EPA Limit	**yes**	Runoff from fertilizer use; leaking from septic tanks, sewage; erosion of natural deposits	Annually
Potassium	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Erosion of natural deposits	Annually
Selenium	Not detected	Not detected	0.05	No EPA Limit	**yes**	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines	Annually
Thallium	Not detected	Not detected	0.002	No EPA Limit	**yes**	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories	Annually

Disinfectants and Disinfection Byproducts at treatment plant	**Quarles WTP mg/L**	**Wyckoff WTP mg/L**	**Maximum Limit MCL mg/L**	**Aesthetic Standards SMCL mg/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Chlorite	0.21	0.28	1.0	No EPA Limit	**yes**	Byproduct of drinking water disinfection	Daily
Chlorine Dioxide	0.07	0.04	0.8	No EPA Limit	**yes**	Byproduct of drinking water disinfection	Daily
Chlorate	0.42	0.33	No EPA Limit	No EPA Limit	**n/a**	Byproduct of drinking water disinfection; pesticide runoff; papermill discharges	Weekly
Chlorine as free chlorine residual	1.94	1.85	4.0	No EPA Limit	**yes**	Byproduct of drinking water disinfection	Continuus Online Monitoring

Disinfectants and Disinfection Byproducts in the Distribution System	**Site(S) in Distribution System**		**Maximum Limit MCL mg/L**	**Aesthetic Standards SMCL mg/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Chlorine average as free chlorine residual[1]			4.0	No EPA Limit	**yes**	Byproduct of drinking water disinfection	Daily
Chlorite average of 3 samples in distribution system[1]	0.203	0.232	1.0	No EPA Limit	**yes**	Byproduct of drinking water disinfection	Monthly
Haloacetic Acids (HAA5) locational running annual average in distribution system[2]	Site 503	Site 504	0.06	n/a	**yes**	Byproduct of drinking water disinfection	Quarterly
	0.018	0.023					
Total Trihalomethanes (TTHMs) locational running annual average in distribution system[2]	Site 503	Site 504	0.08	n/a	**yes**	Byproduct of drinking water disinfection	Quarterly
	0.04	0.03					

[1]Average free chlorine measured in our wholesale customer's distribution systems.

[2]Samples from sites in CCMWA transmission system.

Volatile Organic Chemicals	**Quarles WTP mg/L**	**Wyckoff WTP mg/L**	**Maximum Limit MCL mg/L**	**Aesthetic Standards SMCL mg/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Vinyl chloride	Not detected	Not detected	0.002	No EPA Limit	yes	Leaching from PVC pipes; discharge from plastic factories	Annually

1,1-Dichloroethylene	Not detected	Not detected	0.007	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
Dichloromethane	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
trans -1,2-Dichloroethylene	Not detected	Not detected	0.1	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
cis -1,2-Dichloroethylene	Not detected	Not detected	0.07	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
1,1,1-Trichloroethane	Not detected	Not detected	0.02	No EPA Limit	yes	Discharge from metal degreasing sites and other factories	Annually
Carbon tetrachloride	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from chemical plants and other industrial activities	Annually
Benzene	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from factories; leaching from gas storage tanks and landfills	Annually
1,2-Dichloroethane	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
Trichloroethylene	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from metal degreasing sites and other factories	Annually
1,2-Dichloropropane	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
Toluene	Not detected	Not detected	1	No EPA Limit	yes	Discharge from petroleum factories	Annually
1,1,2-Trichloroethane	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
Tetrachloroethylene	Not detected	Not detected	0.005	No EPA Limit	yes	Discharge from factories and dry cleaners	Annually
Chlorobenzene	Not detected	Not detected	0.1	No EPA Limit	yes	Discharge from chemical and agricultural chemical factories	Annually
Ethylbenzene	Not detected	Not detected	0.7	No EPA Limit	yes	Discharge from petroleum refineries	Annually
Total Xylenes	Not detected	Not detected	1010	No EPA Limit	yes	Discharge from petroleum factories; discharge from chemical factories	Annually
Styrene	Not detected	Not detected	0.1	No EPA Limit	yes	Discharge from rubber and plastic factories; leaching from landfills	Annually
p-Dichlorobenzene	Not detected	Not detected	0.075	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
o-Dichlorobenzene	Not detected	Not detected	0.6	No EPA Limit	yes	Discharge from industrial chemical factories	Annually
1,2,4-Trichlorobenzene	Not detected	Not detected	0.07	No EPA Limit	yes	Discharge from textile finishing factories	Annually
Dichlorodifluoromethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from landfills	Annually
Chloromethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories; environmental from natural sources	Annually
Bromomethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leaching into groundwater from chemical treatment of soils; dischage from agricultural factories	Annually
Chloroethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
Fluorotrichloromethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into groundwater, Leachate from agricultural sites	Annually
1,1-Dichloroethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into surface and groundwater	Annually
2,2-Dichloropropane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leaching into groundwater from chemical treatment of soils into groundwater	Annually
Bromochloromethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Formed naturally by algae in oceans; Byproduct of drinking water disinfection	Annually
Chloroform	5.7	8.6	No EPA Limit	No EPA Limit	n/a	Byproduct of drinking water disinfection; Regulated under TTHMs	Annually
1,1-Dichloropropene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
Dibromomethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
Bromodichloromethane	2.8	4.7	No EPA Limit	No EPA Limit	n/a	Byproduct of drinking water disinfection; Regulated under TTHMs	Annually
cis -1,3-Dichloropropene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into surface and groundwater	Annually
trans -1,3-Dichloropropene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into surface and groundwater	Annually
1,3-Dichloropropane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from agricultural sites	Annually
Chlorodibromomethane	0.8	1.5	No EPA Limit	No EPA Limit	n/a	Byproduct of drinking water disinfection; Regulated under TTHMs	Annually
1,2-Dibromoethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into groundwater; Leaching into groundwater from agrcultural treatment of soils into groundwater	Annually
1,1,1,2-Tetrachloroethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into groundwater	Annually
Bromoform	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Byproduct of drinking water disinfection; Regulated under TTHMs	Annually
Isopropylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
1,1,2,2-Tetrachloroethane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leaching into groundwater from chemical factories	Annually

Bromobenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories;	Annually
1,2,3-Trichloropropane	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into groundwater	Annually
n-Propylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories; Leachate from landfills	Annually
o-Chlorotoluene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
1,3,5-Trimethylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite into groundwater	Annually
p-Chlorotoluene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
tert-Butylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
1,2,4-Trimethylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from petroleum factories; discharge from chemical factories	Annually
sec-Butylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from landfills	Annually
p-Isopropyltoluene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from petroleum factories	Annually
m-Dichlorobenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
1,2-Dibromo-3-chloropropane	Not detected	Not detected	0.0002	No EPA Limit	n/a	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	Annually
Hexachloro-1,3-butadiene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from industrial chemical factories	Annually
Naphthalene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite and from landfills; Discharge from industrial chemical factories	Annually
1,2,3-Trichlorobenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Leachate from wastesite; Discharge from industrial chemical factories	Annually
2-Methoxy-2-methylbenzene	Not detected	Not detected	No EPA Limit	No EPA Limit	n/a	Discharge from chemical factories	Annually

Microbiology Total Coliform and *E. coli* Plant Finished Water	**Quarles WTP mg/L**	**Wyckoff WTP mg/L**	**Maximum Limit MCL mg/L**	**Aesthetic Standards SMCL mg/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Total Coliform	0% positive	0% positive	No more than 5% positive per month	n/a	**yes**	Coliforms are naturally present in the environment; as well as feces	Daily
E. coli	0% positive	0% positive	0	n/a	**yes**	*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Disease-causing microbes (pathogens) in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. These pathogens may pose a special health risk for infants, young children, and people with severely compromised immune systems.	Daily

The RTCR requires PWSs that have an indication of coliform contamination (e.g., as a result of TC+ samples, E. coli MCL violations, performance failure) to assess the problem and take corrective action. There are two levels of assessments (i.e., Level 1 and Level 2) based on the severity or frequency of the problem.

Special Samples Tested Triennially Lead and Copper 2020	**Average Level mg/L**	**90% Level of All Samples**	**Maximum Limit MCL mg/L**	**Aesthetic Standards SMCL mg/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Lead	0.0042	0.002	TT AL= 0.015	No EPA Limit	yes	Corrosion of household plumbing systems; erosion of natural deposits	Triennielly
Copper	0.0239	0.04	TT AL= 1.3	1	yes	Corrosion of household plumbing systems; erosion of natural deposits	Triennielly

Reduced monitoring schedule due to low levels of detection and ability to meet the action levels for both lead and copper.

Special Samples every 9 years Radionuclides 2018	**Quarles WTP pCi/L**	**Wyckoff WTP pCi/L**	**Maximum Limit MCL pCi/L**	**Aesthetic Standards SMCL pCi/L**	**EPA Limit Met by CCMWA?**	**Sources of Contaminant in Drinking Water**	**Frequency of Test**
Gross Alpha particles	n/a	-0.010 (± 0.571)	15	No EPA Limit	**yes**	Erosion of natural deposits	Every 9 years
Radium 226	n/a	0.397 (± 0.397)	5	No EPA Limit	**yes**	Erosion of natural deposits	
Radium 228	n/a	0.319 (± 0.368)				Erosion of natural deposits	

values. When a sample has little radioactivity, the analytical results should have a normal distribution of positive and

Special Samples every 9 years Radionuclides 2019	Quarles WTP pCi/L	Wyckoff WTP pCi/L	Maximum Limit MCL pCi/L	Aesthetic Standards SMCL pCi/L	EPA Limit Met by CCMWA?	Sources of Contaminant in Drinking Water	Frequency of Test
Gross Alpha particles	-0.252 (± 0.480)	n/a	15	No EPA Limit	**yes**	Erosion of natural deposits	Every 9 years
Radium 226	0.434 (± 0.149)	n/a	5	No EPA Limit	**yes**	Erosion of natural deposits	
Radium 228	-0.0557 (± 0.3038)	n/a				Erosion of natural deposits	

Reported values are sometimes negative values. When a sample has little radioactivity, the analytical results should have a normal distribution of positive and negative results around zero. When a sample result is subtracted from that of the system's background and the sample value is less than the background, the result is a negative value. The level of uncertainty is reported as (± a number).

Definitions and Terms

Action Level (AL)	The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.
Maximum Contaminant Level (MCL)	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology. These are enforcible standards.
Secondary MCL (SMCL)	A nonenforceable numerical limit set by the USEPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor, or appearance.
Maximum Contaminant Level Goal (MCLG)	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 and are non-enforceable public health goals.
N/A	Not Applicable
NTU	Nephelometric Turbidity Unit (a measure of particles held in suspension in water.)
Parts per Million (ppm) or Milligrams per Liter (mg/L)	Are units of measurement for concentration of a contaminant. A part per million corresponds to one second in roughly 11.5 days.
Grains per Gallon (gpg)	A non-metric unit of measurement for hardness used in North America.
The ">" symbol	This symbol means "greater than."
The "<" symbol	This symbol means "less than." For example, a result of < 5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
Treatment Technique (TT)	A required process intended to reduce the level of a contaminant in drinking water. For Total Organic Carbon (TOC) the level must be above 1. For turbidity the level must be under 0.3 NTU 95% of the time, and always < 1 NTU. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional steps. For copper, the action level is 1.3 mg/L, and for lead is 0.015 mg/L.
Turbidity	A measurement of the cloudiness of the water. We monitor turbidity because it is a good indication of water quality and the effectiveness of our treatment process.
Reporting Limit (RL)	Defined as the smallest concentration of a chemical that can be reported by a laboratory.
RTCR	Revised Total Coliform Rule
Inorganic Chemicals (IOCs)	Consist of salts and metals, which may be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
Volatile Organic Compounds (VOCs)	Volatile Organic Compounds include both regulated and unregulated compounds which are listed in the National Primary Drinking Water Regulations.
Picocuries per liter (pCi/L)	A unit for measuring radioactive concentrations.
CCMWA	Cobb County-Marietta Water Authority- is a regional public utility that provides potable (drinking and fire protection) water on a wholesale basis to 11 retail water suppliers, one industrial customer and one institutional customer.