



CONSUMER CONFIDENCE REPORT

JAN 1 - DEC 31 2023

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (972) 623-8836.

City of Melissa Public Water Supply
(PWS0430040)

**For more information regarding this report,
contact Public Works Director**

Jeff Cartwright at (469) 853-9788
jcartwright@cityofmelissa.com

Superior drinking water in Melissa

Melissa residents enjoy a clean, safe, plentiful water supply, thanks in part to the work of City of Melissa management and employees as well as members the Melissa City Council who oversee the financial and operational aspects of the Public Works Department. The dedication and commitment of personnel who work in the Public Works Department is evident each time residents and business owners open their faucets, operate their water-based appliances, and irrigate their property. Water is an important resource and ensuring that the water meets the highest standards of safety and usability is a responsibility that the City of Melissa takes very seriously. Together, residents, business owners, and the City of Melissa exercise a partnership that maintains water as a critical resource that benefits everyone.

- City of Melissa Water System obtains water from the North Texas Municipal Water District in Collin County.
- The Country Ridge Water Well obtains water from the Woodbine Aquifer in Collin County.
- The City's system maintains 123.7 miles of distribution water lines.
- During this reporting period, 7,281 residential connections were active.
- The Melissa Fire Department maintains 1,326 fire hydrants within the City.

2023 Water Loss Report

In the water loss audit submitted to the Texas Water Development Board for the time period January – December 2023, our system had an estimated water loss of 20.00 gallons per connection per day.

A Focus on Water

Water is, of course, necessary for life, but it is also a critically important component for the growth and development of cities. In addition to the usual considerations like the quality of schools and the general welcoming attitude of a community, individuals and families, whether consciously or not, also take into consideration the availability and accessibility of a good, clean water supply. At the same time, businesses and commercial prospects carefully look at a community's approach to the management of water before deciding on whether or not to invest in that community. For Melissa, attaining the highest level of efficiencies in the distribution, storage, and management of water are a priority. Our North Elevated Storage Tower, our Leak Detection and Repair program, along with our plan to invest in a new water intake site, all serve to reinforce and strengthen the skills and dedication of our water professionals on staff. Water is indeed necessary for life, and that includes the life of our community.

NTMWD Leonard Water Treatment Plants
Water Quality Data for Year 2023

Coliform Bacteria						
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1.00	0	1	NO	Naturally present in the environment.

NOTE: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

Regulated Contaminants								
Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAA5)	2023	19.7	7.1 - 19.7	No goal for the total	60	ppb	NO	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	31.2	9.34 - 31.2	No goal for the total	80	ppb	NO	By-product of drinking water disinfection.
Bromate	2023	Levels lower than detect level	0 - 0	5	10	ppb	No	By-product of drinking water ozonation.

NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. As a wholesale water provider with less than 500 direct customers, TCEQ only requires one sample annually for Disinfection By Products (DBPs) compliance testing. In addition to TCEQ required testing on the NTMWD regional system, over 300 samples of water initially treated by NTMWD are tested for DBPs each year within the city/local water systems to comply with TCEQ regulations. For Bromate, compliance is based on the running annual average.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	2023	Levels lower than detect level	0 - 0	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.
Arsenic	2023	Levels lower than detect level	0 - 0	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2023	0.044	0.044 - 0.044	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	2023	Levels lower than detect level	0 - 0	4	4	ppb	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.
Cadmium	2023	Levels lower than detect level	0 - 0	5	5	ppb	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Cyanide	2023	28.7	28.7 - 28.7	200	200	ppb	No	Discharge from steel/metal factories; Discharge from plastics and fertilizer factories.
Fluoride	2023	0.19	0.19 - 0.19	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Mercury	2023	Levels lower than detect level	0 - 0	2	2	ppb	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (measured as Nitrogen)	2023	0.674	0.396 - 0.674	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	2023	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Thallium	2023	Levels lower than detect level	0 - 0	0.5	2	ppb	No	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories.

Nitrate Advisory: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2023	4.1	4.1 - 4.1	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2023	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.
Radium	2023	Levels lower than detect level	0 - 0	0	5	pCi/L	No	Erosion of natural deposits.

NTMWD Leonard Water Treatment Plants
Water Quality Data for Year 2023 (Cont.)

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2, 4, 5 - TP (Silvex)	2023	Levels lower than detect level	0 - 0	50	50	ppb	No	Residue of banned herbicide.
2, 4 - D	2023	Levels lower than detect level	0 - 0	70	70	ppb	No	Runoff from herbicide used on row crops.
Alachlor	2023	Levels lower than detect level	0 - 0	0	2	ppb	No	Runoff from herbicide used on row crops.
Aldicarb	2023	Levels lower than detect level	0 - 0	1	3	ppb	No	Runoff from agricultural pesticide.
Aldicarb Sulfone	2023	Levels lower than detect level	0 - 0	1	2	ppb	No	Runoff from agricultural pesticide.
Aldicarb Sulfoxide	2023	Levels lower than detect level	0 - 0	1	4	ppb	No	Runoff from agricultural pesticide.
Atrazine	2023	0.2	0.2 - 0.2	3	3	ppb	No	Runoff from herbicide used on row crops.
Benzo (a) pyrene	2023	Levels lower than detect level	0 - 0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	2023	Levels lower than detect level	0 - 0	40	40	ppb	No	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	2023	Levels lower than detect level	0 - 0	0	2	ppb	No	Residue of banned termiticide.
Dalapon	2023	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	2023	Levels lower than detect level	0 - 0	400	400	ppb	No	Discharge from chemical factories.
Di (2-ethylhexyl) phthalate	2023	Levels lower than detect level	0 - 0	0	6	ppb	No	Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	2023	Levels lower than detect level	0 - 0	0	200	ppt	No	Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Dinoseb	2023	Levels lower than detect level	0 - 0	7	7	ppb	No	Runoff from herbicide used on soybeans and vegetables.
Endrin	2023	Levels lower than detect level	0 - 0	2	2	ppb	No	Residue of banned insecticide.
Ethylene dibromide	2023	Levels lower than detect level	0 - 0	0	50	ppt	No	Discharge from petroleum refineries.
Heptachlor	2023	Levels lower than detect level	0 - 0	0	400	ppt	No	Residue of banned termiticide.
Heptachlor epoxide	2023	Levels lower than detect level	0 - 0	0	200	ppt	No	Breakdown of heptachlor.
Hexachlorobenzene	2023	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2023	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from chemical factories.
Lindane	2023	Levels lower than detect level	0 - 0	200	200	ppt	No	Runoff / leaching from insecticide used on cattle, lumber, and gardens.
Methoxychlor	2023	Levels lower than detect level	0 - 0	40	40	ppb	No	Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.
Oxamyl [Vydate]	2023	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff / leaching from insecticide used on apples, potatoes, and tomatoes.
Pentachlorophenol	2023	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from wood preserving factories.
Picloram	2023	Levels lower than detect level	0 - 0	500	500	ppb	No	Herbicide runoff.
Simazine	2023	Levels lower than detect level	0 - 0	4	4	ppb	No	Herbicide runoff.
Toxaphene	2023	Levels lower than detect level	0 - 0	0	3	ppb	No	Runoff / leaching from insecticide used on cotton and cattle.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1, 1, 1 - Trichloroethane	2023	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factories.
1, 1, 2 - Trichloroethane	2023	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factories.
1, 1 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factories.
1, 2, 4 - Trichlorobenzene	2023	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factories.
1, 2 - Dichloroethane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
1, 2 - Dichloropropane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
Benzene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories; leaching from gas storage tanks and landfills.
Carbon Tetrachloride	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from chemical plants and other industrial activities.

NTMWD Leonard Water Treatment Plants
Water Quality Data for Year 2023 (Cont.)

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorobenzene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural chemical factories.
Dichloromethane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2023	Levels lower than detect level	0 - 0	0	700	ppb	No	Discharge from petroleum refineries.
Styrene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories and dry cleaners.
Toluene	2023	Levels lower than detect level	0 - 0	1	1	ppm	No	Discharge from petroleum factories.
Trichloroethylene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	2023	Levels lower than detect level	0 - 0	0	2	ppb	No	Leaching from PVC piping; discharge from plastics factories.
Xylenes	2023	Levels lower than detect level	0 - 0	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.
cis - 1, 2 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from industrial chemical factories.
o - Dichlorobenzene	2023	Levels lower than detect level	0 - 0	600	600	ppb	No	Discharge from industrial chemical factories.
p - Dichlorobenzene	2023	Levels lower than detect level	0 - 0	75	75	ppb	No	Discharge from industrial chemical factories.
trans - 1, 2 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from industrial chemical factories.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.25	No	Soil runoff.
Lowest monthly percentage (%) meeting limit	0.3 NTU	100%	No	Soil runoff.

NOTE: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Maximum Residual Disinfectant Level

Disinfectant Type	Year	Average Level of Quarterly Data	Lowest Result of Single Sample	Highest Result of Single Sample	MRDL	MRDLG	Units	Source of Chemical
Chlorine Residual (Chloramines)	2023	2.45	0.50	3.70	4.00	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2023	0.02	0	0.58	0.80	0.80	ppm	Disinfectant.
Chlorite	2023	0.17	0	0.81	1.00	N/A	ppm	Disinfectant.

NOTE: Water providers are required to maintain a minimum chlorine disinfection residual level of 0.5 parts per million (ppm) for systems disinfecting with chloramines and an annual average chlorine disinfection residual level of between 0.5 ppm and 4 ppm.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

Cryptosporidium and Giardia

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Cryptosporidium	2023	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste. Naturally present in the environment.
Giardia	2023	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste. Naturally present in the environment.

NTMWD Leonard Water Treatment Plants
Water Quality Data for Year 2023 (Cont.)

Lead and Copper							
Lead and Copper	Date Sampled	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Likely Source of Contamination
Lead	2021	15	0.4847	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	2021	1.30	0.00142	0	1.3	ppm	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
LEAD AND COPPER RULE: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity.							
Lead and Copper enter drinking water mainly from corrosion of plumbing materials containing lead and copper.							
ADDITIONAL HEALTH INFORMATION FOR LEAD: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Melissa is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead .							

Unregulated Contaminants					
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2023	12.3	2.65 - 12.3	ppb	By-product of drinking water disinfection.
Bromoform	2023	9.44	<1.0 - 9.44	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2023	11.9	3.53 - 11.9	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2023	8.92	3.03 - 8.92	ppb	By-product of drinking water disinfection.

NOTE: Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution. These contaminants are included in the Disinfection By-Products TTHM compliance data.

Secondary and Other Constituents Not Regulated					
Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Aluminum	2023	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits.
Calcium	2023	51.6	46.8 - 51.6	ppm	Abundant naturally occurring element.
Chloride	2023	14.4	10.3 - 14.4	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Iron	2023	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Magnesium	2023	2.58	2.58 - 2.58	ppm	Abundant naturally occurring element.
Manganese	2023	0.107	0.024 - 0.107	ppm	Abundant naturally occurring element.
Nickel	2023	0.0039	0.0039 - 0.0039	ppm	Erosion of natural deposits.
pH	2023	8.6	7.6 - 8.6	units	Measure of corrosivity of water.
Silver	2023	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits.
Sodium	2023	34.9	24.2 - 34.9	ppm	Erosion of natural deposits; by-product of oil field activity.
Sulfate	2023	81.1	60.4 - 81.1	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
Total Alkalinity as CaCO ₃	2023	137	111 - 137	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2023	263	223 - 263	ppm	Total dissolved mineral constituents in water.
Total Hardness as CaCO ₃	2023	138	104 - 138	ppm	Naturally occurring calcium.
Zinc	2023	Levels lower than detect level	0 - 0	ppm	Moderately abundant naturally occurring element used in the metal industry.

Violations Table				
Violation Type	Violation Begin	Violation End	Violation Explanation	

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2023

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1.00	0	1	NO	Naturally present in the environment.

NOTE: Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

Regulated Contaminants

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Haloacetic Acids (HAA5)	2023	19.7	7.1 - 19.7	No goal for the total	60	ppb	NO	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	31.2	9.34 - 31.2	No goal for the total	80	ppb	NO	By-product of drinking water disinfection.
Bromate	2023	Levels lower than detect level	0 - 0	5	10	ppb	No	By-product of drinking water ozonation.

NOTE: Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future. TCEQ only requires one sample annually for compliance testing. For Bromate, compliance is based on the running annual average.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Antimony	2023	Levels lower than detect level	0 - 0	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.
Arsenic	2023	Levels lower than detect level	0 - 0	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2023	0.048	0.041 - 0.048	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beryllium	2023	Levels lower than detect level	0 - 0	4	4	ppb	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.
Cadmium	2023	Levels lower than detect level	0 - 0	5	5	ppb	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.
Chromium	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.
Cyanide	2023	199	28 - 199	0 - 0	200	ppb	No	Discharge from steel/metal factories; Discharge from plastics and fertilizer factories.
Fluoride	2023	0.968	0.537 - 0.968	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Mercury	2023	Levels lower than detect level	0 - 0	2	2	ppb	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrate (measured as Nitrogen)	2023	0.674	0.0396 - 0.674	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	2023	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
Thallium	2023	Levels lower than detect level	0 - 0	0.5	2	ppb	No	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories.

Nitrate Advisory: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2022	4.7	4.7 - 4.7	0	50	pCi/L	No	Decay of natural and man-made deposits.
Gross alpha excluding radon and uranium	2022	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.
Radium	2022	Levels lower than detect level	0 - 0	0	5	pCi/L	No	Erosion of natural deposits.

**NTMWD Wylie Water Treatment Plants
Water Quality Data for Year 2023 (Cont.)**

Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
2, 4, 5 - TP (Silvex)	2022	Levels lower than detect level	0 - 0	50	50	ppb	No	Residue of banned herbicide.
2, 4 - D	2022	Levels lower than detect level	0 - 0	70	70	ppb	No	Runoff from herbicide used on row crops.
Alachlor	2023	Levels lower than detect level	0 - 0	0	2	ppb	No	Runoff from herbicide used on row crops.
Aldicarb	2022	Levels lower than detect level	0 - 0	1	3	ppb	No	Runoff from agricultural pesticide.
Aldicarb Sulfone	2022	Levels lower than detect level	0 - 0	1	2	ppb	No	Runoff from agricultural pesticide.
Aldicarb Sulfoxide	2022	Levels lower than detect level	0 - 0	1	4	ppb	No	Runoff from agricultural pesticide.
Atrazine	2023	0.2	0.1 - 0.2	3	3	ppb	No	Runoff from herbicide used on row crops.
Benzo (a) pyrene	2023	Levels lower than detect level	0 - 0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines.
Carbofuran	2022	Levels lower than detect level	0 - 0	40	40	ppb	No	Leaching of soil fumigant used on rice and alfalfa.
Chlordane	2022	Levels lower than detect level	0 - 0	0	2	ppb	No	Residue of banned termiticide.
Dalapon	2022	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff from herbicide used on rights of way.
Di (2-ethylhexyl) adipate	2023	Levels lower than detect level	0 - 0	400	400	ppb	No	Discharge from chemical factories.
Di (2-ethylhexyl) phthalate	2023	Levels lower than detect level	0 - 0	0	6	ppb	No	Discharge from rubber and chemical factories.
Dibromochloropropane (DBCP)	2022	Levels lower than detect level	0 - 0	0	200	ppt	No	Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.
Dinoseb	2022	Levels lower than detect level	0 - 0	7	7	ppb	No	Runoff from herbicide used on soybeans and vegetables.
Endrin	2023	Levels lower than detect level	0 - 0	2	2	ppb	No	Residue of banned insecticide.
Ethylene dibromide	2022	Levels lower than detect level	0 - 0	0	50	ppt	No	Discharge from petroleum refineries.
Heptachlor	2023	Levels lower than detect level	0 - 0	0	400	ppt	No	Residue of banned termiticide.
Heptachlor epoxide	2023	Levels lower than detect level	0 - 0	0	200	ppt	No	Breakdown of heptachlor.
Hexachlorobenzene	2023	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from metal refineries and agricultural chemical factories.
Hexachlorocyclopentadiene	2022	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from chemical factories.
Lindane	2023	Levels lower than detect level	0 - 0	200	200	ppt	No	Runoff / leaching from insecticide used on cattle, lumber, and gardens.
Methoxychlor	2023	Levels lower than detect level	0 - 0	40	40	ppb	No	Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.
Oxamyl [Vydate]	2022	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff / leaching from insecticide used on apples, potatoes, and tomatoes.
Pentachlorophenol	2022	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from wood preserving factories.
Picloram	2022	Levels lower than detect level	0 - 0	500	500	ppb	No	Herbicide runoff.
Simazine	2023	0.12	0.06 - 0.12	4	4	ppb	No	Herbicide runoff.
Toxaphene	2023	Levels lower than detect level	0 - 0	0	3	ppb	No	Runoff / leaching from insecticide used on cotton and cattle.
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
1, 1, 1 - Trichloroethane	2023	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factories.
1, 1, 2 - Trichloroethane	2023	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factories.
1, 1 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factories.
1, 2, 4 - Trichlorobenzene	2023	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factories.

1, 2 - Dichloroethane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
1, 2 - Dichloropropane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.
Benzene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories; leaching from gas storage tanks and landfills.
Carbon Tetrachloride	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from chemical plants and other industrial activities.

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2023 (Cont.)

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorobenzene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural chemical factories.
Dichloromethane	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2023	Levels lower than detect level	0 - 0	0	700	ppb	No	Discharge from petroleum refineries.
Styrene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories and dry cleaners.
Toluene	2023	Levels lower than detect level	0 - 0	1	1	ppm	No	Discharge from petroleum factories.
Trichloroethylene	2023	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	2023	Levels lower than detect level	0 - 0	0	2	ppb	No	Leaching from PVC piping; discharge from plastics factories.
Xylenes	2023	Levels lower than detect level	0 - 0	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.
cis - 1, 2 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from industrial chemical factories.
o - Dichlorobenzene	2023	Levels lower than detect level	0 - 0	600	600	ppb	No	Discharge from industrial chemical factories.
p - Dichlorobenzene	2023	Levels lower than detect level	0 - 0	75	75	ppb	No	Discharge from industrial chemical factories.
trans - 1, 2 - Dichloroethylene	2023	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from industrial chemical factories.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.73	No	Soil runoff.
Lowest monthly percentage (%) meeting limit	0.3 NTU	98.0%	No	Soil runoff.

NOTE: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Maximum Residual Disinfectant Level

Disinfectant Type	Year	Average Level of Quarterly Data	Lowest Result of Single Sample	Highest Result of Single Sample	MRDL	MRDLG	Units	Source of Chemical
Chlorine Residual (Chloramines)	2023	2.45	0.50	3.70	4.00	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2023	0.01	0	0.59	0.80	0.80	ppm	Disinfectant.
Chlorite	2023	0.16	0	0.88	1.00	N/A	ppm	Disinfectant.

NOTE: Water providers are required to maintain a minimum chlorine disinfection residual level of 0.5 parts per million (ppm) for systems disinfecting with chloramines and an annual average chlorine disinfection residual level of between 0.5 ppm and 4 ppm.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set.

Cryptosporidium and Giardia

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Cryptosporidium	2023	0	0 - 0	(Oo) Cysts/L	Human and animal fecal waste. Naturally present in the environment.
Giardia	2023	0.18	0.09 - 0.18	(Oo) Cysts/L	Human and animal fecal waste. Naturally present in the environment.

NOTE: Levels detected are for source water, not for drinking water. No cryptosporidium or giardia were found in drinking water.

NTMWD Wylie Water Treatment Plants Water Quality Data for Year 2023 (Cont.)

Lead and Copper

Lead and Copper	Date Sampled	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	2021	15	0.4847	0	ppb		Corrosion of household plumbing systems; erosion of natural deposits.
Copper	2021	1.30	0.00142	0	ppm		Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
LEAD AND COPPER RULE: The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity.							
Lead and Copper enter drinking water mainly from corrosion of plumbing materials containing lead and copper.							
ADDITIONAL HEALTH INFORMATION FOR LEAD: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Melissa is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead .							

Unregulated Contaminants

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2023	12.3	2.65 - 12.3	ppb	By-product of drinking water disinfection.
Bromoform	2023	9.44	<1.0 - 9.44	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2023	11.9	3.53 - 11.9	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2023	8.92	3.03 - 8.92	ppb	By-product of drinking water disinfection.

NOTE: Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution. These contaminants are included in the Disinfection By-Products TTHM compliance data.

Secondary and Other Constituents Not Regulated

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Aluminum	2023	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits.
Calcium	2023	69.8	26.5 - 69.8	ppm	Abundant naturally occurring element.
Chloride	2023	107	30 - 107	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Iron	2023	0.516	0.061 - 0.516	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Magnesium	2023	9.77	4.90 - 9.77	ppm	Abundant naturally occurring element.
Manganese	2023	0.158	0.0068 - 0.158	ppm	Abundant naturally occurring element.
Nickel	2023	0.0048	0.0047 - 0.0048	ppm	Erosion of natural deposits.
pH	2023	9.17	6.39 - 9.17	units	Measure of corrosivity of water.
Silver	2023	Levels lower than detect level	0 - 0	ppm	Erosion of natural deposits.
Sodium	2023	95.4	26.5 - 95.4	ppm	Erosion of natural deposits; by-product of oil field activity.
Sulfate	2023	171	76.8 - 171	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
Total Alkalinity as CaCO ₃	2023	139	51 - 139	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2023	492	263 - 492	ppm	Total dissolved mineral constituents in water.
Total Hardness as CaCO ₃	2023	312	82 - 312	ppm	Naturally occurring calcium.
Zinc	2023	Levels lower than detect level	0 - 0	ppm	Moderately abundant naturally occurring element used in the metal industry.

Violations Table

Violation Type	Violation Begin	Violation End	Violation Explanation
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NITRATE MONITORING, ROUTINE MAJOR	Jan-23	Mar-23	<p>The North Texas MWD Wylie WTP water system PWS ID TX0430044 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Chapter 30, Section 290< Subchapter F. Public water systems are required to collect and submit chemical samples to the TCEQ on a regular basis.</p> <p>We failed to monitor and/or report the following constituents: Nitrate□</p> <p>This/These violation(s) occurred in the monitoring period(s): First Quarter 01/01/2023 - 3/31/2023□</p> <p>Results of regular monitoring are an indicator of whether or not your drinking water is safe from chemical contamination. We did not complete all monitoring and/or reporting for chemical constituents, and therefore TCEQ cannot be sure of the safety of your drinking water during that time. □</p> <p>We are taking the following actions to address the issue: The sample was taken during the required sampling period and results are within compliance criteria. The violation was due to a delay in receiving lab results from a third-party lab. Once the results were released to TCEQ the violation was resolved. □</p> <p>Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.</p> <p>If you have questions concerning this matter you may contact NTMWD Water System Manager - Treatment Mr. Gabriel Bowden at (972) 608- 7009□</p> <p>Posted/Delivered on: 3-28-2024</p>
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UCMR5 Results for PFBA

Unregulated Contaminants	Collection Data	Avg. Level	Range Level
PFBA	4/3/2023	0.0058	0.0058 - 0.0058
PFBA	7/12/2023	< MRL	< MRL
PFBA	10/23/2023	0.008	0.008 - 0.008
PFBA	1/23/2024	0.0071	0.0071 - 0.0071

Definitions and Abbreviations

The tables contain scientific terms and measures, some of which may require explanation.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

The Level 1 and Level 2 Assessment are an evaluation of a public water system to identify potential or actual causes of microbial contamination, also called a sanitary defect. If a sanitary defect is identified during an assessment, it should be corrected as soon as possible to protect public health.

Maximum Contaminant Level or MCL: 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.

Maximum Contaminant Level Goal or 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.

Maximum residual disinfectant level or MRDL: 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.

Maximum residual disinfectant level goal or MRDLG: 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 contaminants.

MFL: million fibers per liter (a measure of asbestos)

mrem: millirems per year (a measure of radiation absorbed by the body)

na: not applicable.

NTU: nephelometric turbidity units (a measure of turbidity)

pCi/L: picocuries per liter (a measure of radioactivity)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water

ppq: parts per quadrillion, or picograms per liter (pg/L)

ppt: parts per trillion, or nanograms per liter (ng/L)

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water