2024 Consumer Confidence Report for Public Water System BLAIR WSC

This is your water quality report for January 1 to December 31, 2024

BLAIR WSC provides surface water from **Lake Fort Phantom, Lake Ivie and Hubbard Creek Lakes located in Jones, Stephens, Concho, Coleman and Runnels Counties.**

For more information regarding this report contact:

Name Blair Water Supply Corporation

Phone (325) 928-1011 or (325) 669-4320

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (325) 928-1011
or (325) 669-4320

Definitions and Abbreviations

Definitions and Abbreviations	The following 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.
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.
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)

Definitions and Abbreviations

ppb:	micrograms per liter or parts per billion
ppm:	milligrams per liter or parts per million
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.

Information about your Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are responsible for providing high quality drinking water, but we 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.

Information about Source Water

BLAIR WSC purchases transported water from CITY OF MERKEL. CITY OF MERKEL provides purchase surface water from **City of Abilene** located in **Taylor County**.

BLAIR WSC purchases water from CITY OF ABILENE. CITY OF ABILENE provides purchase surface water **from Lake Fort Phantom (Jones County), Lake Hubbard (Stephens County and Lake Ivie (Concho, Coleman and Runnels Counties).**

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact **Blair Water Supply Corporation (325) 928-1011 or Royce Fowler (325) 669-4320.**

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		0	N	Naturally present in the environment.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/21/2023	1.3	1.3	0.209	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

2024 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2024	26	14.5 - 43.6	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2024	55	42.9 - 77.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2024	0.486	0.465 - 0.486	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
	2024			4	4		ppm	Water additive used to control microbes.

Lead Service Line Inventory
Blair Water Supply Corporation has developed an inventory of both Blair Water Supply-owned and customer-owned service lines. This inventory serves as a crucial foundation for water systems to address a significant source of lead in drinking water. To access the inventory, please call our office at (325) 928-1011.

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.
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.
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.
MFL: million fibers per liter (a measure of asbestos)
mrem: millirems per year (a measure of radiation absorbed by the body)
pCi/L: picocuries per liter (a measure of radioactivity)
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)
na: not applicable
NTU: nephelometric turbidity units (a measure of turbidity)
ppb: micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.
ppt: parts per trillion, or nanograms per liter (ng/L)

Disinfectant (Chloramine) levels Testing Results in the City of Merkel Distribution System

Disinfectant	Year of Range	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measurement	Violation	Source of Chemical
Chloramines	2024	2.3	0.42	11.0	4.0	4.0	ppm	N	Disinfectant used to control microbes

Microbiological (Coliforms) Testing Results in the City of Merkel System

Type of Contaminant	Sample Year	Total Coliform Maximum Contaminant Level	E. coli Maximum Contaminant Level	Total Number of Positive E. coli or Total Coliform Samples	Violation	Likely Source of Contaminant
Coliform bacteria	07/08/2024	Two or more samples collected in a Month which are total coliform positive	0	1	N	Naturally present in environment

2024 Water Loss Audit Information

Time Period Covered by Audit	Estimated Gallons of Water Lost During 2024	Comments and/or Explanations
January to December 2024	13,032,729	Most of the water lost during 2024 was the result of flushing to maintain water quality or leaks in the distribution system

Regulated Contaminants Detected Regulated Contaminants in the City of Merkel Distribution System
Regulated Contaminants Detected Lead and Copper
Definitions:
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. Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	08/17/2022	1.3	1.3	0.116	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	08/17/2022	0	15	0	1	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Lead Service Line Inventory
The City of Merkel has developed an inventory of both City-owned and customer-owned service lines. This inventory serves as a crucial foundation for water systems to address a significant source of lead in drinking water. To access the inventory, please visit https://merkeltexas.com/

SUMMARY

# Updated Service Lines	# Total Service Lines in Inventory
33	1,257

Service Line Lead Category	Old Value	New Value
Lead	0	0
GRR	5	12
Unknown	1196	1111
Non-Lead	110	134

	Collection	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination

Disinfectants and Disinfection By-Products	Date	Detected	Detected					
Haloacetic Acids (HAA5)	2024	18	15.5-20.1	No Goal for the Total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	48	34.4-66.9	No Goal for the Total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Nitrate [measured as Nitrogen]	2024	0.392	0.392-0.392	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

City of Merkel purchases water from CITY OF ABILENE. CITY OF ABILENE provides purchase surface water from WEST CENTRAL TEXAS MWD located in STEPHENS county.

Regulated Contaminants in the Source Water – City of Abilene

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/21/2023	1.3	1.3	0.249	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Disinfection By-Products	**Collection Date**	**Highest Level Detected**	**Range of Individual Samples**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Chlorite	2024	0.92	0.000283 – 0.92	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2024	21	12 - 24.9	No Goal for the total	60	ppm	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2024	54	15.9 - 60	No Goal for the total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2024	1	0-1.1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2024	0.18	0.16-0.18	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	2024	1.7	0-1.7	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	2024	206	25.6-206	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2024	0.8	0.822-0.841	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2024	0.247	0.0403-0.247	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Beta/photon emitters	2024	10.7	7.7-10.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.
Uranium	2024	2.9	0-2.9	0	30	Ug/l	N	Erosion of natural deposits.

Turbidity

	Level Detected	Limit (Treatment Technique)	Violation	Likely Source of Contamination
Highest Single measurement	0.19 NTU	1 NTU	N	Soil runoff.
Lowest monthly % meeting Limit	100%	0.3 NTU	N	Soil runoff.

Unregulated Contaminants Detected

Unregulated Contaminant	Collection Date	Results (µg/L)	Health-Based Reference Concentration (µg/L) (recommended, not require the CCR)	Health Information Summary (recommended, not required in the CCR)
Lithium	06/12/2024	28.9	10	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFPeA	06/12/2024	0.0164	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFOA	06/12/2024	0.00714	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFOS	06/12/2024	0.0256	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFHpA	06/12/2024	0.0096	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFHxA	06/12/2024	0.0214	3	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFBS	06/12/2024	0.00688	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.
PFHxS	06/12/2024	0.0202	NA	This data is part of UCMR5 results in relation to minimum reporting levels and available regulatory health-based reference concentrations.