

2025 City of Fairfax CCR Test Results

Test Results

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	

Disinfection By-Products

Total Trihalomethanes (ppb) [TTHM]	80 (N/A)	LRAA	<.002 (<.0005-<.0005)	8/11/2025	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60 (N/A)	LRAA	<.006 (<.001 - .003)	8/11/2025	No	By-products of drinking water disinfection

Inorganic Contaminants

Lead (ppb)	AL=15 (0)	90th	.002 (ND-.005)	Jul-24	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.640 (0.06-.74)	Jul-24	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Residual Disinfectants 950 - Distribution System

Chlorine (ppm)	MRDL=4.0 (MRDLG=4.0)	RAA	2.71 (1.97-3.43)	12/31/2025	No	Water additive used to control microbes
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Water Characteristics 950 - Distribution System

Iron (ppm)	SMCL 0.3	AA	0.084	2025	No	Rusty color; sediment; metallic taste; reddish or orange staining
Manganese (ppm)	SMCL 0.05	AA	0.006	2020	No	Black to brown color; black staining; bitter metallic taste
pH	SMCL 6.5-8.5	AA	7.34	2020	No	<u>LOW pH</u> : Bitter metallic taste; corrosion <u>HIGH pH</u> : Slippery feel; soda taste; deposits
Hardness-mg CaCO3/L	N/A (N/A)	AA	440 25.7 Grains	2020	N/A	Soft: 0-17.1 Slightly Hard: 17.1-60 Mod Hard: 60-120 Hard: 120-180 Very Hard: 180 & over
Ammonia - Free (ppm)	N/A (N/A)	AA	0.413 (0.0 1.10) 52 samples	2025	N/A	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrate (ppm)	10 (10)	AA	0.253 (0.23 - 0.38) 104 samples	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrite (ppm)	1 (1)	AA	0.024 (0.0 0.12) 106 samples	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Phosphate PO4 (ppm)	10	AA	1.49	2018	No	Added for corrosion control and metals sequestering

Test Results

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	

01 - Finished Water Sample Tap, #1

Combined Radium (pCi/L)	5 (0)	SGL	3.9 (0.670-2.91)	10/25/2022	No	Erosion of natural deposits
Gross Alpha, inc (pCi/L)	15 (0)	SGL	4.4	2/16/2021	No	Erosion of natural deposits
Ammonia (ppm)	N/A (N/A)	AA	4.632 (4.52-5.32.)	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrite (ppm)	1 (1)	AA	<.015 ND	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrate (ppm)	10 (10)	SGL	<.1	4/3/2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Chromium (ppb)	100 (100)	SGL	2.9	4/14/2020	No	Discharge from steel and pulp mills; Erosion of natural deposits.
Organic Chemicals (ppb) Volatile Organic Compounds Synthetic Organic Compounds	0.2 - 700 (ND-700)	SGL	ND	7/18/2022	No	Runoff from industrial sites, herbicides, petroleum sites, insecticides and PVC factories
Fluoride (ppm)	4 (4)	SGL	0.4	4/14/2020	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and
Sodium (ppm)	N/A (N/A)	SGL	55.5	4/14/2020	No	Erosion of natural deposits; Added to water during treatment process

02 - Finished Water Sample Tap, #2

Gross Alpha, inc (pCi/L)	15 (0)	SGL	5.1	2/16/2021	No	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	AA	3.7 (1.5-2.7)	4/1/2025	No	Erosion of natural deposits
Ammonia (ppm)	N/A (N/A)	AA	4.472 (4.0 - 5.07)	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrite (ppm)	1 (1)	AA	<.015 ND	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrate (ppm)	10 (10)	SGL	<.1	4/3/2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Organic Chemicals (ppb) Volatile Organic Compounds Synthetic Organic Compounds	0.2 - 700 (ND-700)	SGL	ND	7/18/2022	No	Runoff from industrial sites, herbicides, petroleum sites, insecticides and PVC factories
Selenium (ppb)	50 (50)	SGL	1.7	10/30/2019	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.0213	10/30/2019	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4 (4)	SGL	0.5	10/30/2019	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and
Sodium (ppm)	N/A (N/A)	SGL	50	10/13/2025	No	Erosion of natural deposits; Added to water during treatment process

Test Results

CONTAMINANT	MCL - (MCLG)	Compliance		Date	Violation	Source
		Type	Value & (Range)		Yes/No	

03 - Finished Water Sample Tap, #3

Gross Alpha, inc (pCi/L)	15 (0)	SGL	4.4	8/20/2020	No	Erosion of natural deposits
Combined Radium (pCi/L)	5 (0)	SGL	0.52	10/25/2021	No	Erosion of natural deposits
Ammonia (ppm)	N/A (N/A)	AA	3.15 (2.7 - 3.63)	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Manganese (ppm)	HAL 0.3 SMCL 0.05	AA	0.059 (0.025-0.4)	2021	No	Black to brown color; black staining; bitter metallic taste
Nitrate (ppm)	10 (10)	SGL	<.1 (ND)	7/2/2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Nitrite (ppm)	1 (1)	AA	<.015 (ND)	2025	No	Runoff from fertilizer use; leaching of septic tanks, sewage; erosion of natural deposits.
Fluoride (ppm)	4 (4)	SGL	0.3	10/30/2019	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Selenium (ppb)	50 (50)	SGL	1.7	10/30/2019	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Barium (ppm)	2 (2)	SGL	0.378	10/30/2019	No	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Sodium (ppm)	N/A (N/A)	SGL	29	10/13/2025	No	Erosion of natural deposits; Added to water during treatment process
Organic Chemicals (ppb) Volatile Organic Compounds Synthetic Organic Compounds	0.2 - 700 (ND-700)	SGL	ND	7/2/2025	No	Runoff from industrial sites, herbicides, petroleum sites, insecticides and PVC factories
Chlorides (as Cl) (ppm)	SMCL 250	SGL	6.7	5/8/2018	No	Erosion of natural deposits
Sulfates (ppm)	SMCL 250	SGL	19.8	5/8/2018	No	Erosion of natural deposits

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

Definitions:

- Maximum Contaminant Level (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.
- Secondary Maximum Contaminant Level (SMCL) - They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor. These contaminants are not considered to present a risk to human health at the SMCL.
- Maximum Contaminant Level Goal (MCLG)— The level of the contaminant in drinking water below which there is no known or expected risk to health. MCLG allow for a margin of safety.
- ppb—parts per billion.
- ppm—parts per million.
- pCi/L—picocuries per liter.
- N/A—Not applicable
- ND—Not detected
- RAA—Running Annual Average
- AA— Annual Average
- LRAA—Locational Running Annual Average
- Treatment Technique (TT)—A required process intended to reduce the level of a contaminant in drinking water.
- Action Level (AL)— The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum Residual Disinfectant Level Goal (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.
- Maximum Residual Disinfectant Level (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.
- SGL— Single Sample Result
- RTCR— Revised Total Coliform Rule
- NTU— Nephelometric Turbidity Units
- HAL - Health Advisory Level