



FREEPORT

WATER QUALITY REPORT 2023

The Village of Freeport is pleased to present this year's Water Quality Report. The report is required to be delivered to all residents of our Village in compliance with Federal and State Regulations. We are happy to report that the Village's water quality meets or exceeds all Federal, State and County parameters.* In 2023 no detections were observed for the 30 UCMR5 contaminants that were sampled.** The Water Department's goal is to provide you with a safe and dependable supply of drinking water every day of the year. We also want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. The Mayor, Board of Trustees and Village employees are committed to ensuring that you and your family always receive the highest quality of water.



Mommy, Where Does Our Water Come From?

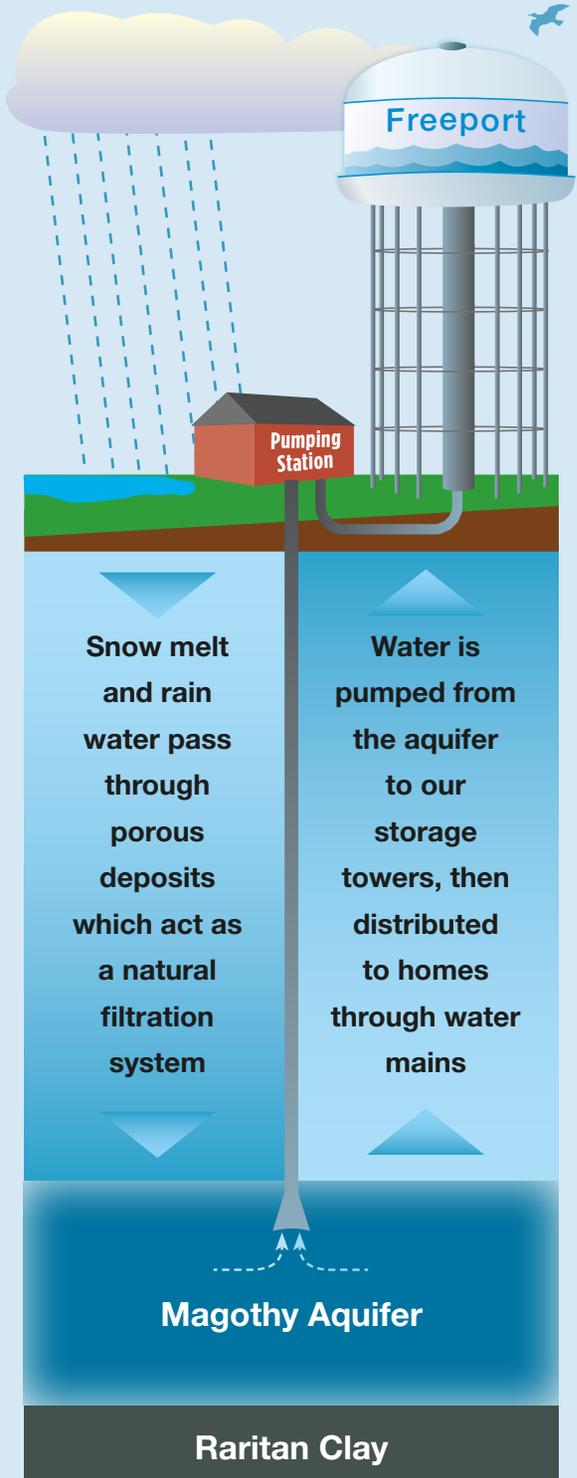
If you're like most of us, your first impulse is probably to go type this question into your favorite search engine. Well, not so fast, because we've got everything you need to know right here!

Freeport's water is pumped from an underground aquifer – a kind of reservoir that runs deep below the village. The water in our aquifer was once rain and snowmelt, but it has been filtered through layers of rock and sediment, refining out impurities. It's very much like the water filtering pitchers a lot of folks have in their kitchens, except you could say that ours works on more of a geological scale. The end result is pure, great-tasting water right out of every tap in Freeport.

Most other municipalities rely on ground water from lakes, rivers or surface reservoirs. Unfortunately, surface water is susceptible to evaporation, periods of drought, and exposure to various pollutants and contamination like run-off from industrial plants, retail outlets or farms. Water from surface reservoirs can sometimes require as many as a dozen different stages of treatment before it's safely drinkable. Depending on the location, water from lakes or reservoirs may need complicated systems of tunnels or aqueducts to bring it to consumers.

In contrast, water in underground aquifers is the result of a slow filtration process. Snow melt and rainfall are refined by passing through layers of porous sediment over many years. This natural filtration removes the contaminants and bacteria that can affect surface water. Because this water source is replenished steadily over long periods of time, it isn't dependent on seasonal precipitation, and it's protected from evaporation by layers of rock and sediment. As a result, Freeport's water needs only the minimal treatment required by state regulations. And we constantly monitor water quality through a rigorous testing process to ensure it's delivered to you naturally safe and pristine.

So there you go, that's all you need know while you turn on the tap and enjoy a fresh glass of Freeport water!



Water Quality Report Summary

The NY State Department of Health has completed a source water assessment for this system, based on available information. Possible and actual threats to this drinking water source were evaluated. The state source water assessment includes a susceptibility rating based on the risk posed by each potential source of contamination and how easily contaminants can move through the subsurface to the wells. The susceptibility rating is an estimate of the potential for contamination of the source water, it does not mean that the water delivered to consumers is, or will become contaminated. See the Table of Detected Parameters for a list of the contaminants that have been detected (if any). The source water assessments provide resource managers with additional information for protecting source waters into the future.

Freeport's water is derived from 11 drilled wells. The source water assessment has rated most of the wells as having a very high susceptibility to industrial solvents and nitrates. The very high susceptibility to industrial solvents is due primarily to point sources of contamination related to the proximity of transportation routes to the wells in the assessment area. The high susceptibility to nitrate contamination is attributable to high density residential land use practices in the assessment area, such as fertilizing lawns.

A copy of the assessment, including a map of the assessment area, can be obtained by contacting the Village.

Dear Freeport Residents and Businesses:

While you are taking some time to read the important information included in this Water Quality Report, let me assure you that the Village of Freeport provides the best possible water for all our customers. We continue to be vigilant in maintaining our water infrastructure by prioritizing and replacing additional mains as needed across the Village. Additionally, our Water Plant Operators monitor and control water production and treatment for our water supply. You will find more information and further details about these and other things within this report.

If you have any questions, please contact the Water Department or my office.

Sincerely,
Robert T. Kennedy, Mayor

* Freeport meets or exceeds all Federal, State and County parameters, except for iron. Iron is naturally occurring; its effects are aesthetic: occasionally a slight coloration. (As a comparison, the highest measured levels at the well are a small fraction of the iron contained in most multivitamins.)

**UCMR 5: Fifth Unregulated Contaminant Monitoring Rule.

Federal Mandatory Health Advisory

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are also available from the Safe Drinking Water Hotline (1-800-426-4791).

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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

We're On It!

In Progress

- Upgrades to Well # 5 – installation of an automatic blow off
- Installation of an automatic blow off and new motor control center at Well # 6

Scheduled for 2024

- Installation of an automatic blow off and new motor control center at Well # 9
- Water main project on North Grove Street and Pearsall Avenue
- Install 1620 linear feet of 8" CLDI* water main as well as 4 fire hydrants
- Transfer approximately 42 water services
- Restoration of disturbed pavement

* CLDI stands for cement-mortar lined ductile iron. The cement-mortar lining provides a barrier between the water and the pipe, reducing its susceptibility to corrosion.



Important Facts About Lead

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. Freeport is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and

taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact the Freeport Water Department at (516) 377-2379. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

Lawn Sprinkling Regulations

Watering is only allowed from midnight to 10AM and from 4PM to midnight on alternate days. If your address is an even number, you may water on even days. Addresses with odd numbers (and addresses without numbers) may water on odd numbered days. From 10AM to 4PM no one may water, hose, sprinkle, or irrigate any outdoor lawn, field, garden, hedge, shrub, or flowers.

Village of Freeport

Robert T. Kennedy	Mayor
Ronald Ellerbe	Deputy Mayor
Jorge Martinez	Trustee
Christopher Squeri	Trustee
Evette Sanchez	Trustee

Contacts

Mark Quinton
 Superintendent of Water and Sewer
 Incorporated Village of Freeport
 46 North Ocean Avenue
 Freeport, NY 11520
 Tel: (516) 377-2379 Fax: (516) 377-2383
 Email: mquinton@freeportny.gov

EPA Safe Drinking Water Hotline:
 (800) 426-4791

Nassau County Department of Health:
 (516) 227-9692

2023 Annual Water Charges

Our rate structure is designed to promote conservation. The more that you use, the higher rate you pay for water:

- Service charge** \$39.00 per quarter
- First 50,000 gallons:** \$2.27 per 1,000 gallons
- 50,001–100,000 gallons:** \$4.51 per thousand gallons
- 100,001 gallons and up:** \$5.80 per thousand gallons

A consumer who averaged 125,000 gallons of water per year would be billed \$640.00.

Freeport population: 45,000

Total gallons pumped: 1,361,921.60 billion gallons

Trend since last report: – 6.8%

Date of highest usage:

July 11, 2023: 5,985.80 million gallons

2023 Monthly Gallons Pumped

Figures in millions

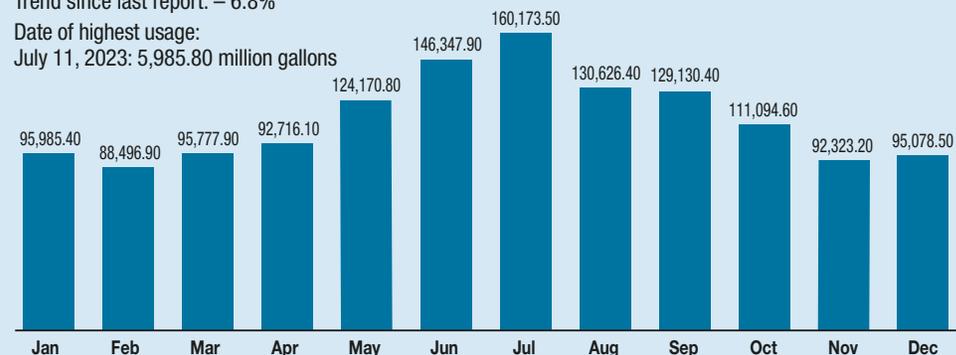


Table of Detected Parameters — 2023 Annual Water Quality Report

Parameter	Violation Yes/No	Date Of Sample	Maximum Level Detected	Range Detected	Unit Measured	MCLG	Limit	Likely Source
INORGANIC PARAMETERS AND PHYSICAL CHARACTERISTICS (These are naturally occurring parameters)								
Iron ¹	Yes	3/22/23	4.5	0.26–4.5	ug/l	N/A	MCL=300	
Magnesium	No	3/22/23	4.6	0.24–4.6	mg/l	N/A	NO MCL	
Chloride	No	3/22/23	23.6	3.3–23.6	mg/l	N/A	MCL=250	
Sodium ²	No	3/22/23	14.3	2.5–14.3	mg/l	N/A	NO MCL	
Calcium	No	3/22/23	5.2	0.32–5.2	mg/l	N/A	NO MCL	
Sulfate	No	3/22/23	41.5	<5.0–41.5	mg/l	N/A	MCL=250	
Zinc	No	3/22/23	0.069	<0.020–0.069	mg/l	N/A	MCL=5	
Hardness, calcium	No	3/22/23	13.0	0.80–13.0	mg/l	N/A	NO MCL	
Total hardness	No	3/22/23	31.8	1.9–31.8	mg/l	N/A	NO MCL	
Alkalinity	No	3/22/23	12.7	<1.0–12.7	mg/l	N/A	NO MCL	
Total dissolved solids	No	3/22/23	108.0	35.0–108.0	mg/l	N/A	NO MCL	
PH	No	7/8/23	8.7	7.0–8.7	PH	N/A	MCL=7.5–8.5	Water acidity or alkalinity
DISINFECTANTS								
Chlorine	No	2/25/23	1.0	0.30–1.0	mg/l	N/A	MCL=4	Measure of disinfection
DISINFECTION BY-PRODUCTS								
Total trihalomethanes	No	9/14/23	1.8	1.2–1.8	ug/l	N/A	MCL=80	By-product of chlorine
RADIONUCLIDES								
Uranium	No	6/23/21	0.194	ND–0.194	ug/L	N/A	MCL=300	
Gross Alpha	No	6/23/21	5.72	ND–5.72	pCi/L	N/A	MCL=15	Naturally occurring or industrial discharge
Gross Beta	No	6/23/21	4.56	ND–4.56	pCi/L	N/A	MCL=50	
Radium 226 & 228 Combined	No	6/23/21	4.35	ND–4.35	pCi/L	N/A	MCL=5	Naturally occurring or industrial discharge
LEAD AND COPPER								
Copper ³	No	Jun–Sep 2023	0.3	0.0058–0.3	mg/l	1.3	AL=1.3	Corrosion of household plumbing systems, erosion of natural deposits
Lead ³	No	Jun–Sep 2023	2.7	1.0–2.7	ug/l	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
UCMR4 – HALOACETIC ACIDS⁴ (Likely source: Disinfection byproducts)								
Dibromoacetic acid	No	1/28/19	0.63	0.33–0.63	ug/l	N/A	0.3	
Dichloroacetic acid	No	1/28/19	0.37	0.33–0.37	ug/l	N/A	0.2	
Monobromo acetic acid	No	1/28/19	0.30	<0.30–0.30	ug/l	N/A	0.3	
Monochloroacetic acid	No	1/28/19	13.4	4.9–13.4	ug/l	N/A	2	
UCMR4 (These are naturally occurring parameters)								
Bromide	No	1/28/19	85.4	<20.0–85.4	ug/l	N/A	20	
Manganese	No	1/28/19	29.4	2.1–29.4	ug/l	N/A	4	
SOCs (Synthetic Organic Compounds)								
1,4 Dioxane ⁵	No	5/4/22	0.084	<0.020–0.084	ug/L	N/A	1.0	Used as a solvent in textile processing, printing & detergent preparation
Dapalon	No	10/31/23	0.81	<0.70–0.81	ug/L	N/A	50	

¹ Iron is +A46:H89a naturally occurring parameter in the Magotty Aquifer below Freeport. Many multivitamins may contain 3000 to 4000 ug/l of iron per capsule. Its effects are aesthetic. It can cause discoloration of the water. The Freeport Water Department conducts an annual water main flushing program and adds an iron sequestering agent to keep discoloration to a minimum.

² No MCL has been established for sodium. However, 20 mg/l is a recommended guideline for people on highly restricted diets, and 270 mg/l for those on moderately restricted diets.

³ During 2020, we collected and analyzed 30 samples for lead and copper. The 90th percentile level is presented in the table. The action levels for lead (15 ug/l) and copper (1.3 mg/l) were not exceeded at any sites tested. 90th Percentile Value: The values reported for lead and copper represent the 90th percentile.

⁴ Haloacetic acids were not detected in the Disinfection By Products stage II sampling. However in the UCMR ⁵ NY State MCL notified # 4 sampling, Haloacetic acids were detected as the UCMR # 4 has a lower required detection limit (RDL), in August 2020. UCMR 4 was published in the Federal Register on December 20, 2016. UCMR 4 required monitoring for 30 chemical contaminants between 2018 and 2020 using analytical methods developed by the EPA and consensus organizations. This monitoring provides a basis for future actions to protect public health

Definitions

90th percentile. The level presented represents the 90th percentile and the range of values of the 30 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. For the 30 samples tested in 2020, the 90th percentile for both Lead and copper were below the Action levels for the water system. The action levels for Lead (15 ug/l) and Copper (1.3 mg/l) were not exceeded at any of the sites tested.

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

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contamination.

Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion-ppb).

Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million-ppm).

N/A: Not available. No value assigned by regulatory authorities as on date.

Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.

Picocuries Per liter (pCi/l): Corresponds to picoCuries per liter of air. A Currie is a unit of radioactivity to 1 gram of radium. Pico means a trillionth.

Non-Detected Parameters

All parameters listed below were tested for in the Village of Freeport Water Distribution System and were Not detected at the Reporting Level (RL).

BARIIUM, BERYLIUM, CADMIUM, CHROMIUM, MANGANESE, NICKEL, SILVER, ZINC, ARSENIC, ANTIMONY, SELENIUM, THALLIUM, MERCURY, FREE CYANIDE, COLOR, FLUORIDE, DETERGENTS, NITRITE, NITRATE, ODOR, TURBIDITY, PFOS, PFOA and COLIFORM BACTERIA.

DICHLOROFUORMETHANE, CHLOROMETHANE, VINYL CHLORIDE, BROMOMETHANE, CHLOROMETHANE, TRICHLOROFLUOROMETHANE, 1-1 DICHLOROETHENE, METHYLENE CHLORIDE, TRANS-1-2 DICHLOROETHENE, CIS-1-2-DICHLOROETHENE, 2-2 DICHLOROPROPANE, BROMOCHLOROMETHANE, CHLOROFORM, 1-1-1-TRICHLOROETHANE, CARBON TETRACHLORIDE, 1-1 DICHLOROPROPENE, 1-2 DICHLOROETHANE, TRICHLOROETHENE, 1-2 DICHLOROPROPANE, DIBROMOMETHANE, BROMODICHLOROMETHANE, TRANS-1-3-DICHLOROPROPENE, CIS-1-3 DICHLOROPROPENE, 1-1-2 TRICHLOROETHANE, TETRACHLOROETHENE, 1-3- DICHLOROPROPANE, DIBROMOCHLOROMETHANE, 1-1-1-2-TETRACHLOROETHANE, BROMOFORM, BROMOBENZENE, 1-1-2-2-TETRACHLOROETHANE, 1-2-3-TRICHLOROPROPANE, 2-CHLOROTOLUENE, 4- CHLOROTOLUENE, 1-2-DICHLOROBENZENE, 1-3-DICHLOROBENZENE, 1-4-DICHLOROBENZENE, 1-2-4-TRICHLOROBENZENE, HEXACHLOROBUTADIENE, 1-2-3-TRICHLOROBENZENE, BENZENE, TOLUENE, ETHYLBENZENE, M-P-XYLENE, O-XYLENE, STYRENE, ISOPROPYLBENZENE, N-PROPYLBENZENE, 1-3-5-TRIMETHYLBENZENE, METHYL TERT-BUTYL ETHER, TERT-BUTYLBENZENE, 1-2-4-TRIMETHYLBENZENE,

4-ISOPROPYLTOLUENE, SEC-BUTYLBENZENE, N-BUTYLBENZENE, CHLOROFORM, BROMODICHLOROMETHANE, DIBROMOCHLOROMETHANE, BROMOFORM, TOTAL TRIHALOMETHANES, PESTICIDES AND HERBICIDES, TOTAL COLIFORM BACTERIA, ECOLI.

1-2-DIBROMOETHANE, 1-2-DIBROMO-3-CHLOROPROPANE, ALDRIN, LINDANE, HEPTACHLOR, HEPTACHLOR EPOXIDE, DIELDRIN, ENDRIN, METHOXYCHLOR, CHLORDANE, TOTAL PCB'S, TOXAPHENE, DICAMBA, PENTACHLOROPHENAL, 2-4-5-TP (SILVEX), DINOSEB, PICLORAM, ALDICARB SULFOXIDE, ALDICARB SULFONE, OXAMYL, 3-HYDROXYCARBOFURAN, ALDICARB, CARBOFURAN, CARBARYL, GLPHOSATE, DIQUAT, HEXACHLOROCYCLOPENTADIENE, PROPACHLOR, HEXACHLOROBENZENE, HEXACHLOROBENZENE, SIMAZINE, ATRAZINE, METRIBUZIN, ALACHLOR, METOLACHLOR, BURACHLOR, BIS(2-ETHYLHEXYL) ADIPATE, 2-4 D, BIS(2-ETHYLHEXYL) PHTHALATE, BENZOAPYRENE, ENDOTHALL, DIOXIN.

Since 2001, the Federal Government required the Freeport Water Department to sample and analyze all of our wells twice for parameters that are presently not regulated. Each well was sampled during the peak pumping season. This would insure the most accurate results. The constituents tested for are listed below. None of these parameters were detected in Freeport's wells: 2-4-DINITROTOLUENE, 2-6-DINITROTOLUENE, 4-4 DDE, ACETOCHLOR, EPTC, MOLINATE, TERBACIL, METHYL TERT-BUTYL ETHER, NITROBENZENE, PERCHLORATE, DCPA-MONOAND DI-ACIDS.