

TABLE 1

Contaminant	Violation Yes / No	Date of Sample	Level Detected: Avg / Max (Range) (1)	Unit Measurement	MCLG or MRDLG	Regulatory Limit (MAL, MCL, or MRDL)	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform	No	10/29/2019	1 Positive Sample	n/a	0	MCL - 2	Naturally present in the environment.
Inorganic Contaminants							
Barium	No	3/12/2019	0.015 (0.0023 - 0.015)	mg/L	2	MCL - 2	Discharge of drilling wastes; Erosion of natural deposits
Calcium	No	3/12/2019	17.3 (4.7 - 17.3)	mg/L	n/a	n/a	Naturally occurring
Chloride	No	3/12/2019	65 (6.7 - 65)	mg/L	n/a	MCL - 250	Naturally occurring or indicative of road salt contamination
Iron	No	3/12/2019	26 (ND - 26)	ug/L	n/a	MCL - 300	Naturally occurring
Magnesium	No	3/12/2019	7.1 (2.3 - 7.1)	mg/L	n/a	n/a	Naturally occurring
Nickel	No	2/26/2019	0.0021 (0.00084 - 0.0021)	mg/L	n/a	n/a	Naturally occurring
Nitrogen, Ammonia	No	3/12/2019	0.13 (ND - 0.13)	mg/L	n/a	n/a	Naturally occurring
Sodium	No	3/12/2019	41.2 (6.3 - 41.2)	mg/L	n/a	20 / 270 (2)	Naturally occurring
Sulfate	No	3/12/2019	32.1 (7.7 - 32.1)	mg/L	n/a	MCL - 250	Naturally occurring
Zinc	No	2/5/2019	0.02 (ND - 0.02)	mg/L	n/a	MCL - 5	Naturally occurring
Inorganic Contaminants - Nitrates							
Nitrate	No	2/26/2019	6.5 (2.9 - 6.5)	mg/L	10	MCL - 10	Runoff from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Nitrate-Nitrite (as N)	No	2/26/2019	6.5 (2.9 - 6.5)	mg/L	10	MCL - 10	Runoff from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Physical Characteristics							
Calcium Hardness	No	3/12/2019	72.3 (11.8 - 72.3)	mg/L	n/a	n/a	Naturally occurring
Corrosivity	No	7/2/2019	-1.11 [-4.14 - (-1.11)]	units	n/a	n/a	Naturally occurring
pH	No	3/12/2019	7.8 (5 - 7.8)	units	n/a	n/a	Naturally occurring
Total Alkalinity	No	7/2/2019	47.1 (5.2 - 47.1)	mg/L	n/a	n/a	Naturally occurring
Total Dissolved Solids	No	3/12/2019	218 (61 - 218)	mg/L	n/a	n/a	Naturally occurring
Total Hardness	No	3/12/2019	72.3 (21.4 - 72.3)	mg/L	n/a	n/a	Naturally occurring
Disinfectant							
Chlorine Residual	No	12/10/2019	0.8 (0.03 - 1.3)	mg/L	n/a	MRDL - 4 (3)	Water additive used to control microbes
Other Contaminant							
Perchlorate	No	2/5/2019	2.4 (ND - 2.4)	ug/L	n/a	18 (4)	Oxygen additive in solid fuel propellant for rockets, missiles, and fireworks
Other Principal Organic Contaminant							
1,1 - Dichloroethane	No	5/7/2019	0.57 (ND - 0.66)	ug/L	n/a	MCL - 5	Released into the environment as fugitive emissions and in wastewater during production and use as a chemical intermediate solvent
Unregulated Contaminant Monitoring Rule 3 Contaminants (5)							
1,4 - Dioxane	No	7/16/2019	0.88 (ND - 0.88)	ug/L (ppb)	n/a	Current HAL - 35; Proposed MCL - 1 (6)	Used as a solvent for cellulose formulations, resins, oils, waxes, and other organic substances. Also used in wood-pulping, textile processing, de-greasing, in lacquers, paints, varnishes, and stains, and in paint and varnish removers
Perfluorooctanoic Acid (PFHPA)	No	7/16/2019	10.5 (ND - 10.5)	ng/L	n/a	70 (7)	Released into the environment through consumer products and industrial processes
Perfluorohexanesulfonic Acid (PFHxS)	No	9/10/2019	21.9 (ND - 21.9)	ng/L	n/a	70 (7)	Released into the environment through consumer products and industrial processes
Perfluorononanoic Acid (PFNA)	No	5/7/2019	4.25 (ND - 4.25)	ng/L	n/a	70 (7)	Released into the environment through consumer products and industrial processes
Perfluorooctanoic Acid (PFOA)	No	3/26/2019	23.5 (ND - 23.5)	ng/L (ppt)	n/a	Current HAL - 70; Proposed MCL - 10 (8)	Used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams at airports. Many of these uses are being phased out by U.S. manufacturers; however, there are still some ongoing uses.
Perfluorooctanesulfonic Acid (PFOS)	No	9/10/2019	11.5 (ND - 11.5)	ng/L (ppt)	n/a	Current HAL - 70; Proposed MCL - 10 (8)	Used to make carpets, leathers, textiles, fabrics for furniture, paper packaging, and other materials that are resistant to water, grease, or stains. It is also used in firefighting foams at airports. Many of these uses are being phased out by U.S. manufacturers; however, there are still some ongoing uses.
Perfluorobutane Sulfonate (PFBS)	No	6/18/2019	2.12 (ND - 2.12)	ng/L	n/a	70 (7)	Released into the environment through consumer products and industrial processes
Radioactive Contaminants							
Gross Alpha Activity	No	8/15/2017	2.87 (0.91 - 2.87)	pCi/L	0	MCL - 15	Erosion of natural deposits
Gross Beta Activity	No	8/15/2017	3.16 (1.36 - 3.16)	pCi/L	0	50 (9)	Decay of natural deposits and man-made emissions
Combined Radium 226/228	No	8/15/2017	2.762 (0.491 - 1.88)	pCi/L	0	MCL - 5	Erosion of natural deposits
Uranium	No	8/15/2017	1.435 (0.455 - 1.435)	ug/L	0	MCL - 30	Erosion of natural deposits
Contaminant	Violation Yes / No	Date of Sample	90 th Percentile and Range	Unit Measurement	MCLG	Regulatory Limit (AL)	Likely Source of Contamination
Lead and Copper Contaminants							
Copper	No	7/8/2019	0.11 (0.018 - 0.23) (10)	mg/L	1.3	AL - 1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	Yes	8/27/2019	6.3 (ND - 12.1) (11)	ug/L	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits

Notes:
(1) When compliance with the MCL is determined more frequently than annually, the data reported is the highest average or maximum of any of the sampling points used to determine compliance and the range of detected values.
(2) Water containing more than 20 mg/L of sodium should not be used for drinking by people on severely-restricted sodium diets. Water containing more than 270 mg/L of sodium should not be used for drinking by people on moderately-restricted sodium diets.
(3) The value presented represents the Maximum Residual Disinfectant Level (MRDL). MRDLs are not currently regulated, but in the future they will be enforceable in the same manner as MCLs.
(4) An MCL has not been established for this contaminant. The value presented represents a State Guidance level.
(5) The Unregulated Contaminant Monitoring Rule 3 (UCMR3) is a US Environmental Protection Agency (EPA) water quality sampling program which monitors unregulated but emerging contaminants in drinking water. The results of the sampling will determine if such contaminants will need to be regulated in the future. In 2019, the Village of Minerva voluntarily sampled for UCMR3 contaminants at their facilities in anticipation of proposed New York State standards taking effect. The values indicated in the table above for UCMR3 contaminants comply with existing MCL recommendations provided by the EPA and NYSDOH.
These results were utilized for the design and construction of system improvement facilities of the Village which will include treatment of UCMR3 contaminants moving forward.
(6) The level represents a health advisory level (HAL) for 1,4-dioxane as a UCMR3 contaminant. A health advisory is an estimate of acceptable drinking water levels for a chemical substance based on health effects information; a health advisory is not a legally enforceable Federal standard, but serves as technical guidance to assist Federal, State, and local officials, and is non-regulatory. The New York State (NYS) proposed MCL for 1,4-dioxane is 1 part per billion (ppb).
(7) The levels represent health advisories for polyfluoroalkyl substances (PFAS) as UCMR3 contaminants.
(8) The US EPA has established a lifetime health advisory level (HAL) of 70 parts per trillion (ppt) for PFOA and PFOS combined. The NYS proposed MCL is 10 ppt for PFOA and 10 ppt for PFOS.
(9) The State considers 50 µg/L to be the level of concern for beta particles.
(10) The levels represent 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. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, thirty samples were collected at your water system and the 90th percentile value was 0.11 mg/L. The action level for copper was not exceeded at any of the sites tested.
(11) The levels represent the 90th percentile and the range of values of the 30 sites tested. The action level for lead was not exceeded at any of the sites tested.

Definitions:
MCL: Maximum Contaminant Level, the highest level of a contaminant that is allowed in drinking water; MCLs are set as close to the MCLGs as feasible.
MCLG: Maximum Contaminant Level Goal, 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.
MRDL: Maximum Residual Disinfectant Level, 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.
MRDLG: Maximum Residual Disinfectant Level Goal: 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 contamination.
ND: Non-Detects, laboratory analysis indicates that the contaminant is not present.
AL: Action Level, the concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.
mg/L: Milligrams per Liter. Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
ng/L: Nanograms per Liter. Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
ug/L: Micrograms per Liter. Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
pCi/L: Picocuries Per Liter. A measure of the radioactivity in water.
n/a: not applicable, i.e., no value is assigned by regulatory authorities.