

ANALYTICAL TESTING RESULTS
2009

Terms and Abbreviations Used Below

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 MCLGs 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. MCLGs 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.
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
No Detect (ND): The contaminant was not detected in the water by laboratory analysis.
No Determined Limit (NDL): No level has been established for drinking water.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Picocuries per liter (pci/L): A measure of the radioactivity in water.

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max), (Range)		Unit Measurement	MCLG	NYS DOH MCL	Likely Source of Contamination
			Larchmont	Rye Lake				
Regulated Inorganic Contaminants								
Barium	No	12/1/10	0.013	0.022	mg/l	2	2	Erosion of natural deposits.
Chloride	No	12/1/10	9.1	11.2	mg/l	-	250	Naturally occurring; road salt
Color - entry point	No	12/1/10	ND	ND	color units	-	15	Presence of iron, manganese, and organics in water
Copper	No	12/1/10	10.8	4.2	ug/l	-	1300	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Cyanide	No	12/1/10	ND	ND	ug/l	-	-	Erosion of natural deposits.
Fluoride	No	12/1/10	0.340	0.780	mg/l	-	2.2	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	No	12/1/10	38.0	43.0	ug/l	-	300 (a)	Erosion of natural deposits; corrosion of water mains.
Lead	No	12/1/10	ND	ND	ug/l	0	15	Corrosion of household plumbing systems; erosion of natural deposits
Manganese	No	12/1/10	19.6	23.8	ug/l	-	300 (a)	Naturally occurring
Nickel	No	12/1/10	ND	ND	ug/l	-	-	Erosion of natural deposits.
Nitrite	No	12/1/10	ND	ND	mg/l	1	1	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Nitrate	No	12/1/10	0.100	0.140	mg/l	10	10	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
Sodium	No	12/1/10	5.70	7.3	mg/l	-	NDL (b)	Naturally occurring; road salt;
Sulfate	No	12/1/10	4.1	4.0	mg/l	250.0	250.0	Erosion of natural deposits.
Turbidity - entry point	No	12/1/10	0.89	0.85	NTU	N/A	1 (c)	Soil runoff
Turbidity - distribution	No	2009 max	2.0	1.5	NTU	N/A	5 (d)	Soil runoff
Turbidity - distribution	No	2009 range	0.5 to 2.0		NTU	N/A	1 (c)	Soil runoff
Zinc	No	12/1/10	0.003	0.005	mg/l	-	5	Naturally occurring.
Water Quality Parameters								
Alkalinity	No	12/1/10	15.2	14.1	mg/l	-	-	Erosion of natural deposits
Calcium	No	12/1/10	5.4	5.2	mg/l	-	-	Erosion of natural deposits
Free Cl ₂ Res. - distribution	No	2009 range	0.2 - 1.6		mg/l	-	-	Water additive for disinfection
Conductance	No	12/1/10	70	80	umhos/cm	-	-	
Corrosivity	No	12/1/10	-2.09	-2.29	Langelier index	-	0	
pH	No	12/17/2008	7.5	7.6	-	-	-	
Temperature		2009 range	3.6 to 19.5	0.4 to 18.5	degree C	-	-	
Total Dissolved Solids	No	12/1/10	34.0	47.2	mg/l	-	500	Metals and salts naturally occurring in the soil; organic matter
Hardness	No	12/1/10	18	18	mg/l	-	-	Erosion of natural deposits.
Microbiological Contaminants								
Total Coliform - distribution	No	2009	0.00%		samples	0	5%	Naturally present in the environment.
E.Coli	No	2009	0		samples	0	-	Human and animal fecal waste
Contaminants Monitored Under Interim Enhanced Surface Water Treatment Rule (Disinfection Byproducts)								
TTHM's	No	2009	43.0 (e)		ug/l	0	80	Byproduct of drinking water chlorination
Haloacetic Acid 5 (HAA5)	No	2009	29.0 (e)		ug/l	0	60	Byproduct of drinking water chlorination
Radiological Compliance								
Gross Alpha	No	2004	-0.225 +/- 0.3 (e)		pCi/L	-	<15	Erosion of natural deposits
Gross Beta	No	2004	0.125 +/- 1.125 (e)		pCi/L	-	<5	Erosion of natural deposits
Radium 226	No	2004	0.005 +/- 0.09 (e)		pCi/L	-	<5	Erosion of natural deposits
Radium 228	No	2004	-0.15 +/- 1.04 (e)		pCi/L	-	<5	Erosion of natural deposits
Uranium	No	2004	-0.375 +/- 0.7 (e)		pCi/L	-	<30	Erosion of natural deposits
Lead and Copper Rule Sampling Results								
Lead (f)	Yes	6/09 to 9/09	90th Percentile (g) 17.4 Range: ND - 560		ug/l	0	AL - 15	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (f)	No	6/09 to 9/09	266.0 Range: 13.5 - 285.0		ug/l	0	AL - 1,300	Corrosion of household plumbing systems; Erosion of natural deposits.

Undetected Conventional Physical And Chemical Parameters

Antimony, Arsenic, Beryllium, Bromate, Cadmium, Chlorite, Chromium, Mercury, Selenium, Silver and Thallium

Undetected Organic (Principal, Specified and Unspecified) Contaminants

Carbamate pesticides (EPA method 531.1), Pesticides (EPA method 508), Diquat, Endothall, Glyphosate, MTBE, Nitrobenzene, Herbicides (EPA method 515.1), Microextractables (EPA method 504.1) Volatile organic compounds (EPA method 524.2), Organic chemicals (EPA method 525.2).

- (a) If iron and manganese are present, the total concentration of both should not exceed 500 ppb.
- (b) Water with > 20 mg/l of sodium should not be consumed by those on a severely restricted sodium diet. Water with >270 mg/l of sodium should not be consumed by people on a moderately restricted diet.
- (c) Turbidity is a measure of cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. MCL is the average of two consecutive days. The Larchmont high value occurred on January 30. The Rye Lake high value occurred on June 1.
- (d) Monthly average
- (e) This level represents the annual quarterly average calculated from the data collected.
- (f) The lead and copper testing was performed throughout the water district.
- (g) The level presented represents the 90th percentile 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 values detected at your water system. In the case of lead, 30 samples were collected at your water system and the 90th percentile value was 17.4 ug/l the action level for Lead was exceeded at 4 of the 30 sites tested. In the case of copper, 30 samples were collected from your water system and the 90th value was 266.0 ug/l

The Westchester County Health Department also monitored our system for ethylene and propylene-glycol, deicing agents in the aviation industry. All tests indicated levels below the detectable limit.