

2004 CONVENTIONAL PHYSICAL AND CHEMICAL PARAMETERS - UNTREATED WELLS															
PARAMETERS	NYSDOH MCL	US EPA MCLG	W05			W05A			W50A			W55			Sources in Drinking Water
			# SAMPLES	RANGE	AVG	# SAMPLES	RANGE	AVG	# SAMPLES	RANGE	AVG	# SAMPLES	RANGE	AVG	
Alkalinity (mg/L CaCO <sub>3</sub> )			4	52.4 - 57.2	54.7	3	53.3 - 57.6	55.1	4	145.5 - 154.8	150.3	0	-	-	Erosion of natural deposits
Arsenic (mg/L)			0	-	-	0	-	-	0	-	-	2	ND	ND	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Calcium (mg/L)			4	31.2 - 35.8	34.0	3	32.4 - 33.4	33.1	4	59.0 - 68.5	64.5	0	-	-	Erosion of natural deposits
Chloride (mg/L)	250		4	91 - 101	98	3	74 - 79	77	4	82 - 85	84	0	-	-	Naturally occurring; road salt
Chlorine Residual, free (mg/L)			11	0.00 - 0.06	0.02	10	0.00 - 0.04	0.02	11	0.00 - 0.02	0.01	0	-	-	Water additive for disinfection
Color (color units)			12	2 - 5	4	10	2 - 5	5	12	2 - 6	4	0	-	-	Presence of iron, manganese, and organics in water
Copper (mg/L)	1.3	1.3	4	0.01 - 0.014	0.012	3	0.006	0.006	4	0.01 - 0.017	0.012	0	-	-	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride (mg/L)	2.2		12	ND - 0.11	0.10	10	ND - 0.06	0.01	12	ND - 0.14	0.01	0	-	-	Erosion of natural deposits; water additive which promotes strong teeth; runoff from fertilizer
Hardness (mg/L CaCO <sub>3</sub> )			4	146.7 - 163.9	158.0	3	153.5 - 157.1	155.5	4	276.2 - 313.1	300.2	0	-	-	Erosion of natural deposits
Hardness (grains/gallon[US]CaCO <sub>3</sub> )			4	8.5 - 9.5	9.1	3	8.9 - 9.1	9.0	4	16.0 - 18.1	17.4	0	-	-	Erosion of natural deposits
Iron (mg/L)	0.3		0	-	-	0	-	-	0	-	-	0	-	-	Naturally occurring
Lead (mg/L)	0.015	0	4	ND - 0.001	ND <sup>(a)</sup>	3	ND	ND	4	ND	ND	0	-	-	Corrosion of household plumbing systems; erosion of natural deposits
Magnesium (mg/L)			4	16.7 - 18.5	17.8	3	17.6 - 17.9	17.7	4	31.3 - 35.7	33.8	0	-	-	Erosion of natural deposits
Manganese (mg/L)	0.3		0	-	-	0	-	-	0	-	-	0	-	-	Naturally occurring
Nitrate (mg/L nitrogen)	10	10	4	5.7 - 6.63	6.24	3	4.76 - 5.07	4.89	4	2.81 - 2.94	2.87	0	-	-	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (mg/L nitrogen)	1	1	4	ND - 0.003	0.001	3	ND - 0.003	0.001	4	ND - 0.003	0.002	0	-	-	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
pH (pH units) <sup>(1)</sup>	6.5 - 8.5		12	6.33 - 6.57	6.42	10	6.42 - 6.61	6.45	12	6.87 - 7.06	6.97	2	6.02 - 6.16	-	
Phosphate, Ortho- (mg/L)			11	0.13 - 0.43	0.27	10	0.06 - 0.70	0.28	11	0.07 - 1.10	0.40	0	-	-	Water additive for corrosion control
Phosphate, Total (mg/L)			0	-	-	0	-	-	0	-	-	0	-	-	
Phosphorus, Total (mg/L)			0	-	-	0	-	-	0	-	-	0	-	-	
Potassium (mg/L)			0	-	-	0	-	-	0	-	-	0	-	-	Erosion of natural deposits
Silica (mg/L)			0	-	-	0	-	-	0	-	-	0	-	-	Erosion of natural deposits
Sodium (mg/L)	NDL		0	-	-	0	-	-	0	-	-	0	-	-	Naturally occurring; road salt; water softeners; animal waste
Specific Conductance (µmho/cm)			12	554 - 615	593	10	488 - 534	506	12	720 - 735	728	0	-	-	
Strontium (mg/L)			0	-	-	0	-	-	0	-	-	0	-	-	Erosion of natural deposits
Sulfate (mg/L)	250		4	42.5 - 44.7	43.6	3	37.7 - 40.9	39.2	4	74.7 - 77.1	76.1	0	-	-	Naturally occurring
Temperature (°F)			12	57 - 61	59	10	57 - 61	59	12	55 - 61	58	2	55 - 57	56	
Thallium (ug/L)			0	-	-	0	-	-	0	-	-	0	-	-	
Turbidity (NTU) <sup>(2)</sup>	5		12	0.06 - 0.15	0.09	10	0.06 - 0.76	0.16	12	0.05 - 0.78	0.14	2	0.95	0.95	Soil runoff
Total Dissolved Solids (mg/L)	500		0	-	-	0	-	-	0	-	-	0	-	-	Metals and salts naturally occurring in the soil; organic matter
Zinc (mg/L)	5		0	-	-	0	-	-	0	-	-	0	-	-	Naturally occurring

MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal

NA = Not Applicable

ND = Not Detected

NDL = No Designated Limit

mg/L = milligrams per liter (10<sup>-3</sup> grams per liter)

µg/L = micrograms per liter (10<sup>-6</sup> grams per liter)

(1) The average for pH is the median value.

(2) Data presented are the min, max and average of monthly average.

(3) If a sample and its repeat sample are both positive for coliform bacteria and one of the two samples is positive for E. coli, then an MCL violation has occurred.

(a) One sample from W05 (Sample: 12192; date: 5/11/04) with a value of 0.001 mg/L for Lead.