WATER QUALITY DATA

A summary of test results is provided in the table below. The majority of data in this table are from 2007. If after reading this report you need additional information or service, please feel free to call our water quality experts at 428-3647 during normal business hours.

Terms and abbreviations used below:

Maximum Contaminant Level (MCL): the highest level of a contaminant set that is allowed in drinking water. EPA sets MCLs as close to the MCLGs as feasible using the best available treatment technology.

Action Level (AL): the concentration of a contaminant prescribed by the EPA, which when exceeded, triggers treatment or other requirements that a water system must follow.

NTU: nephelometric turbidity units **ppm**: parts per million or milligrams per liter **pCi/L**: picocurries per liter (a measure of radiation) **NA**: not applicable **nd** not detected at testing limit

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Inorganic contaminants							
Aluminum (ppb)	NA	5	Not found		4	57	31-97
Antimony (ppb)	6	1	Not found		4	Not found	
Arsenic (ppb)	50	1	Not found		4	Not found	
Barium (ppm)	2.00	1	0.0.18		4	.020	.02-.021
Beryllium (ppb)	4	1	Not found		4	Not found	
Cadmium (ppb)	5	1	Not found		4	Not found	
Calcium (ppm)	NA	12	24.4	24-25	4	36	34-37
Chromium (ppb)	100	1	1.1		4	Not found	
Copper(ppb '06 data)	AL=1300	50	98 (=90%tile)	4.3-240			
Cyanide (ppb)	200	1	Not found		4	Not found	
Fluoride (ppm)	2.2	1058	0.90	ND-1.1	2159	0.85	.05-1.2
Iron (ppb)	300	1	Not found		4	Not found	
Lead (ppb '06 data)	AL=15	50	9.1 (=90%tile)	ND-24 (3 samples >15)			
Magnesium (ppm)	NA	1	6.1		4	9.3	8.9-9.7
Manganese (ppb)	300	1	Not found		4	Not found	
Mercury	2	1	Not found		4	Not found	
Nickel (ppb)+++++++	100	1	1.1		4	Not found	
Nitrate (ppm)	10	12	0.22	0.15-0.33	4	.34	0.1-0.31
Nitrite (ppm)	1	1	Not found		4	Not found	
Potassium (ppm)	NA	1	1.7		1	1.6	
Selenium (ppb)	50	1	Not found		4	Not found	
Silver (ppb)	100	1	Not found		4	Not found	0-.75
Sodium (ppm)	NA	1	17		3	14	13-14
Sulfate (ppm)	250	12	15.6	15-17	22	29	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Surfactants (ppm)	NA	1	Not found		4	Not found	
Thallium (ppb)	2	1	Not found		4	Not found	
Zinc (ppb)	5000	1	Not found		4	Not found	
Alkalinity (ppm)	NA	24	63	58-67	4	86	84-90
Chlorides (ppm)	250	10	31	28-33	4	25	21-26
Color (Pt color unit)	15	12	ND	ND	4	Not found	
pH (pH unit)	NA	358	7.5	6.9-8.1	365	7.4	7.0-7.7
Total Hardness (ppm)	NA	1	86		3	127	120-130
Total Organic Carbon (ppm)	NA	1	2.1		4	1.7	1.0-1.8
Surfactants (mg/L)	NA	1	Not found		4	Not found	
Turbidity – entry point (NTU)	**	2190	0.07	0.05-0.22	2190	0.06	0.03-0.10
Turbidity distribution system (NTU)	***	22234	0.22	0.04-14.9	3443	0.12	.03-6.5
Chlorine residual – entry point (ppm)	****	2180	0.87	0.31-1.1	2190	1.0	0.6-1.3
Chlorine residual – distribution (ppm)	*****	2224	0.67	ND-1.6	3616	0.6	ND-2.1
Odor (threshold odor unit)	NA	6	1	ND-4			
Coliform – entry point (% positive)	NA	360	0	0			
Coliform – distribution system (% pos) [1]	5%	2224	0.5%	0-2.4%			
Asbestos (million fibers/L)	7	1	Not found				
Volatile Organics (ppb)							
Benzene	5	1	Not found		4	Not found	
Bromobenzene	5	1	Not found		4	Not found	
Bromochloromethane	5	1	Not found		4	Not found	
Bromomethane	5	1	Not found		4	Not found	
n-Butylbenzene	5	1	Not found		4	Not found	
Carbon tetrachloride	5	1	Not found		4	Not found	
Chlorobenzene	5	1	Not found		4	Not found	
Chloroethane	5	1	Not found		4	Not found	
Chloromethane	5	1	Not found		4	Not found	
2-Chlorotoluene	5	1	Not found		4	Not found	
4-Chlorotoluene	5	1	Not found		4	Not found	
Dibormomethane	5	1	Not found		4	Not found	
1,2-Dichlorobenzene	5	1	Not found		4	Not found	
1,3-Dichlorobenzene	5	1	Not found		4	Not found	
1,4-Dichlorobenzene	5	1	Not found		4	Not found	
Dichlorodifluoromethane	5	1	Not found		4	Not found	
1,1-Dichloroethane	5	1	Not found		4	Not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
1,2-Dichloroethane	5	1	Not found		4	Not found	
1,1-Dichloroethene	5	1	Not found		4	Not found	
Cis-1,2-Dichloroethene	5	1	Not found		4	Not found	
Trans-1,2-Dichloroethene	5	1	Not found		4	Not found	
1,2-Dichloropropane	5	1	Not found		4	Not found	
1,3-Dichloropropane	5	1	Not found		4	Not found	
2,2-Dichloropropane	5	1	Not found		4	Not found	
1,1-Dichloropropene	5	1	Not found		4	Not found	
Cis-1,3-Dichloropropene	5	1	Not found				
Trans-1,3-Dichloropropene	5	1	Not found		4	Not found	
Ethyl benzene	5	1	Not found		4	Not found	
Hexachlorobutadiene	5	1	Not found		4	Not found	
Isopropylbenzene	5	1	Not found		4	Not found	
p-Isopropyltoluene	5	1	Not found		4	Not found	
Methylene chloride	5	1	Not found		4	Not found	
Naphthalene	NA	NA			4	Not found	
n-Propylbenzene	5	1	Not found		4	Not found	
Styrene	5	1	Not found		4	Not found	
1,1,1,2-tetrachloroethane	5	1	Not found		4	Not found	
1,1,2,2-tetrachloroethane	5	1	Not found		4	Not found	
Tetrachloroethene	5	1	Not found		4	Not found	
Toluene	5	1	Not found		4	Not found	
1,2,3-Trichlorobenzene	5	1	Not found		4	Not found	
1,2,4-Trichlorobenzene	5	1	Not found		4	Not found	
1,1,1-Trichloroethane	5	1	Not found		4	Not found	
1,1,2-Trichloroethane	5	1	Not found		4	Not found	
Trichloroethene	5	1	Not found		4	Not found	
Trichlorofluoromethane	5	1	Not found		4	Not found	
1,2,3-Trichloropropane	5	1	Not found		4	Not found	
1,2,4-trimethylbenzene	5	1	Not found		4	Not found	
1,3,5-trimethylbenzene	5	1	Not found		4	Not found	
Xylenes	5	1	Not found		4	Not found	
Vinyl chloride	5	1	Not found		4	Not found	
MTBE	NA	1	Not found				
Organics, Pesticides, PCBs (ppb)							
1,2-Dibromo-3-Chloropropane	0.05	1	Not found		4	Not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
1,2-Dibromoethane (EDB)	0.05	1	Not found		4	Not found	
2,4,5-TP (Silvex)	10	1	Not found		4	Not found	
2,4-D	50	1	Not found		4	Not found	
3-Hydroxycarbofuran	50	1	Not found		1	Not found	
Alachlor	2	1	Not found		1	Not found	
Aldicarb	3	1	Not found		1	Not found	
Aldicarb Sulfoxide	4	1	Not found		1	Not found	
Aldrin	50	1	Not found		4	Not found	
Atrazine	3	1	Not found		1	Not found	
Benzo(a)pyrene	0.2	1	Not found		1	Not found	
Bis(2-Ethylhexyl)Phthalate	6	1	Not found		1	Not found	
Butachlor	50	1	Not found		1	Not found	
Carbaryl	50	1	Not found		1	Not found	
Carbofuran	40	1	Not found		1	Not found	
Dalapon	50	1	Not found		1	Not found	
Bis(2-Ethylhexyl) Adipate	50	1	Not found		1	Not found	
Dicamba	50	1	Not found		1	Not found	
Dieldrin	50	1	Not found		4	Not found	
Dinoseb	7	1	Not found		1	Not found	
Dioxin	0.03	1	Not found		1	Not found	
Diquat	20	1	Not found		1	Not found	
Endothall	50	1	Not found		1	Not found	
Endrin	2	1	Not found		4	Not found	
Glyphosate	50	1	Not found		4	Not found	
Heptachlor	0.4	1	Not found		4	Not found	
Heptachlor Epoxide	0.2	1	Not found		4	Not found	
Hexachlorobenzene	1	1	Not found		1	Not found	
Hexachlorocyclopentadiene	50	1	Not found		1	Not found	
Lindane	0.2	1	Not found		4	Not found	
Methomyl	50	1	Not found		1	Not found	
Methoxychlor	40	1	Not found		4	Not found	
Metolachlor	50	1	Not found		1	Not found	
Metribuzin	50	1	Not found		1	Not found	
Oxamyl	50	1	Not found		1	Not found	
PCB's Total	0.5	1	Not found		4	Not found	
Pentachlorophenol	1	1	Not found		1	Not found	

Contaminant	MCL	Hemlock Lake			Lake Ontario		
		# Tests	avg	range	# Tests	avg	range
Pichloram	50	1	Not found		1	Not found	
Propachlor	50	1	Not found		4	Not found	
Simazine	4	1	Not found		1	Not found	
Total Chlordane	2	1	Not found		4	Not found	
Propylene glycol (2005)	1000	1	Not found				
Toxaphene	3	1	Not found		4	Not found	
4,4'-DDT	NA	1	Not found		4	Not found	
Mirex	NA	1	Not found		4	Not found	
Disinfectant Byproducts (ppb)							
Total THMs	80	16	38	14-55			
Total HAAs	60	16	26	3.4-44			
TOX	NA	1	280				
Unregulated Contaminants Monitoring (ppb)(2002 data)							
2,4-dinitrotoluene	NA	3	Not found				
2,6-dinitrotoluene	NA	3	Not found				
Acetochlor	NA	3	Not found				
DCPA mono-acid degradate	NA	3	Not found				
DCPA di-acid degradate	NA	3	Not found				
4,4'-DDE	NA	3	Not found				
EPTC	NA	3	Not found				
Molinate	NA	3	Not found				
Nitrobenzene	NA	3	Not found				
Perchlorate	NA	3	Not found				
Terbacil	NA	3	Not found				
Radionuclides (pCi/L)							
Gross alpha (2004 data)	15	1	Not found		1(1997)	Not found	
Radon (2005 data)	NA	1	20 pCi/L				
Gross Beta (2004 data)	50	1	Not found		1(1997)	Not found	
Taste and Odor Compounds							
Geosmin (ng/L******)	NA	1	2.22				
MIB (ng/L)	NA	1	ND				

Table footnotes:

1) In 1993, the New York State Department of health granted the city what is known as a biofilm variance to the total coliform bacteria MCL. Biofilm refers to a layer of bacteria that can be found on water pipe surfaces. A biofilm variance is only allowed where the coliform bacteria recovered from a water system are identified as non-disease causing environmental strains originating from the pipeline biofilm and not from an external source of contamination. The city of Rochester is one of several large suppliers nationwide holding a biofilm variance.

** = 95% of measurements within a given month must be less than 0.5 ntu.
*** = Average of monthly distribution system samples must be less than 5.0 ntu.
****=Water entering the distribution must have a chlorine residual greater than 0.2 and less than 4 ppm.
*****=95% of monthly distribution system samples must have a measureable chlorine residual.
******=nanograms/liter or parts per trillion
Note: Total Hardness is also expressed in grains per gallon. The grains of hardness in the Ontario and Hemlock supplies are 7.6 & 5.6 respectively.