



**Monroe County Water Authority**  
2007 Water Quality Monitoring Program Summary

If you have any questions on this report, please call our Customer Service Department at (585) 442-7200.

Parameter	Shoremont WTP Lake Ontario			Corfu WTP Well			Hemlock WTP Hemlock Lake			ECWA Lake Erie			City of Batavia WTP Ground Water			Town of Ontario WTP Lake Ontario			1		
	EPA/NYS MCL	EPA/NYS MCLG	UNITS	Average	Range	Samples in 2007	Average	Range	Samples in 2007	Average	Range	Samples in 2007	Average	Range	Samples in 2007	Average	Range	Samples in 2007		Average	Range
<b>Inorganics, Metals, Physical Parameters</b>																					
Aluminum	NS	NS	ug/L	57	31-97	4	ND		4	56	38-80	4	177	49-350	4	NR				NR	
Antimony	6	6	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Arsenic	10	NA	ug/L	ND	ND-1.1	4	ND		4	ND		4	ND		4	ND		1		ND	1
Barium	2	2	mg/L	0.020	0.020-0.021	4	0.069	0.041-0.140	4	0.016		4	0.02	0.019-0.020	4	0.015		1		0.019	1
Beryllium	4	4	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Cadmium	5	5	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Calcium	NS	NS	mg/L	36	34-37	4	37	22-78	4	26	24-29	4	35	34-35	3	12		1		NR	1
Chromium	100	100	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Copper (Distribution System)	NS	NS	mg/L	ND		4	0.041	0.033-0.046	4	ND	ND-0.002	4	ND	ND-0.002	4	ND		1		ND	1
Copper (Customer Tap Samples)	AL* = 1.3	1.3	mg/L	54	.008-0.270	50(2006)	0.142	0.1 - 0.69	20(2006)	0.054	0.008-0.270	50(2006)	0.142	0.1 - 0.69	20(2006)	0.036	ND-0.061	30	0.106	0.008-0.119	11(2005)
Cyanide	200	200	ug/l	ND		4	ND		3	ND		4	ND		4	ND		1		ND	1
Fluoride	2.2	NA	mg/L	0.85	0.2-1.2	2159	0.7	0.1 - 1.1	174	0.8	0.14-1.2	146	0.7	0.1 - 1.1	174	1.00	ND-1.46	365	1	0.9 - 1.0	365
Iron	300	NA	ug/L	ND		4	ND	ND-38	4	ND		4	ND		4	ND		1		NR	1
Lead (Distribution System)	NS	NS	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Lead (Customer Tap Samples)	AL* = 15	0	ug/L	1.8	ND-9	50(2006)	ND	ND-4.8	ND	1.8	ND-9	50(2006)	ND	ND-4.8	ND	3.8	ND-26	30	6	3.5-6.3	11(2005)
Magnesium	NS	NS	mg/L	9.3	8.8-9.7	3	22.0	12-31	2	7.0	6.5-7.1	3	NA		NA	20		1		NR	
Manganese	300	NA	ug/L	ND		4	6.2	3.2-13	4	ND		4	4.8	ND-11	4	ND		1		NR	1(2005)
Mercury	2	2	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Nickel	100	NA	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		2	1
Nitrate	10	10	mg/L	0.34	0.28-0.40	4	ND	ND-0.10	4	0.20	0.1-0.31	4	0.19	0.11-0.33	4	0.65		1		0.47	1
Nitrite	1	1	mg/L	ND		4	ND		4	ND		4	ND		4	ND		1		NR	1
Potassium	NS	NS	mg/L	1.6		1	2.1	ND-2.9	4	0.8	ND-1.5	2	1.5		1	NR		1		NR	
Selenium	50	50	ug/L	ND		4	ND		4	ND		2	ND		4	ND		1		ND	1
Silica	NS	NS	mg/L	1.2	0.72-1.6	4	18		4	2.2	1.7-2.7	4	1.0	0.52-1.8	4	NR		1		NR	
Silver	100	NA	ug/L	ND	ND-0.75	4	ND		4	ND		4	ND		4	ND		1		NR	
Sodium	NS	NS	mg/L	14	13-14	3	99	27-130	4	19	18-20	3	14.0	13-15	2	39		1		NR	1
Sulfate	250	NA	mg/L	29		2	61		1	15		2	23		1	29		1		NR	1
Thallium	2	0.5	ug/L	ND		4	ND		4	ND		4	ND		4	ND		1		ND	1
Zinc	5	NA	mg/L	ND		4	ND		4	ND		4	ND	ND-0.008	4	ND		1		NR	
Alkalinity	NS	NA	mg/L	86	84-90	4	241	234-245	4	64	62-66	4	94	88-100	4	48	42-125	365	90		1
Chlorides	250	NA	mg/L	25	21-26	4	44	39-49	4	32	30-34	4	22	21-24	4	80		1		NR	1
Color	15	NA	Color Units	ND		4	ND		4	ND		4	ND	ND-3	4	ND		1		NR	1
Conductivity	NS	NS	umhos/cm	300	290-320	44	660	600 - 750	35	260	220-330	1408	290	280-300	44	NR		1		NR	1
pH	NS	NS	pH units	7.4	7.0-7.7	365	7.5	7.3 - 8.5	141	7.5	6.9-8.1	360	7.9		1	9.2	8.3-10.1	2190		NR	1
Total Dissolved Solids	NS	NS	mg/L	173	138-204	4	412	380-444	4	155	138-180	4	175	126-210	4	260		1		NR	1
Total Hardness	NS	NS	mg/L	127	120-130	3	215	110-320	2	93	89-100	3	122		1	118	90 - 188	2190		NR	1
Total Organic Carbon	NS	NS	mg/L	1.7	1.0-1.8	4	1	ND-1.7	4	2.3	2.2-2.3	4	2	1.9-2.2	4	1.0	ND-1.5	12	1.6	ND - 2.3	4
Surfactants	NS	NS	mg/L	ND		4	ND		4	ND		4	ND		4	NR		1		NR	1
Turbidity - Entry Point	TT **	NA	NTUs	0.06	0.03-0.10	8760	0.28	0.05 - 4.0	35	0.08	0.05-0.22	8760	0.11	0.05-0.35	8760	0.02	0.02-0.04	2190	0.05	0.028-0.071	8760
Turbidity - Distribution System	TT ***	NA	NTUs	0.12	0.3-6.5	3443	0.13	0.04 - 1.1	174	0.13	0.05-7.6	1410	0.11	0.07-0.30	52	0.43	.02-.43	263	NA		1
Chlorine Residual - Entry Point	NA	NA	mg/L	1.0	0.6-1.3	8760	0.7	0.2 - 1.2	165	0.87	0.31-1.1	8760	1	0.4-1.4	52	0.95	0.6-1.44	8760	0.8	0.7 - 1.0	8760
Chlorine Residual - Retail Dist.Sys	TT ****	NA	mg/L	0.6	ND-2.1	3616	0.6	ND - 1.4	175	0.5	ND-2.1	1543	1.0	0.4-1.0	52	0.74	0.10-1.10	263	NA		1
Coliform - Retail Dist. System	TT *****	0	%Positive	0.15%		3416	0.6%		174	0.0		1409	ND		52	ND	0.0% Pos.	263	NA		1
Cryptosporidium	NS	NS	#Positive	ND		6	NR		ND	ND		1	ND		24	NR		1		ND	1
Giardia	NS	NS	#Positive	ND		6	NR		ND	ND		1	ND		24	NR		1		ND	1
Asbestos (Distribution System)	7	7	MFL	ND		1	ND		1	ND		1	ND		1	NR		1		NR	1
<b>Radionuclides</b>																					
Gross Alpha	15	0	pCi/L	ND		1(2003)	ND		1(2003)	ND		1(2005)	0.4		4(2003)	0.029		1(2000)		ND	1
Gross Beta	50	0	pCi/L	ND		1(2003)	ND		1(2003)	ND		1(2005)	1.7		4(2003)	1.2		1(2000)		ND	1
Tritium	NS	NS	pCi/L	ND		1(2003)	ND		1(2003)	NR		NR	NR		NR			1		NR	1
Combined Radium226/228	5	0	pCi/L	ND		1(2003)	ND		1(2003)	NR		NR	0.45	ND - 1.4	8(2004)	0.15		1(2000)		NR	1
Uranium	30	0	ug/L	ND		4(2004)	ND		3(2003)	NR		NR	0.4	0.3 - 0.5	8(2004)	NR		1		NR	1
<b>Volatile Organics</b>																					
Benzene	5	0	ug/L			4			1			4			1			1			1
Bromobenzene	5	NA	ug/L			4			1			4			1			1			1
Bromochloromethane	5	NA	ug/L			4			1			4			1			1			1
Bromomethane	5	NA	ug/L			4			1			4			1			1			1
n-Butylbenzene	5	NA	ug/L			4			1			4			1			1			1
sec-Butylbenzene	5	NA	ug/L			4			1			4			1			1			1
tert-Butylbenzene	5	NA	ug/L			4			1			4			1			1			1
Carbon Tetrachloride	5	0	ug/L			4			1			4			1			1			1
Chlorobenzene	5	NA	ug/L			4			1			4			1			1			1
Chloroethane	5	NA	ug/L			4			1			4			1			1			1
Chloromethane	5	NA	ug/L			4			1			4			1			1			1
2-Chlorotoluene	5	NA	ug/L			4			1			4			1			1			1
4-Chlorotoluene	5	NA	ug/L			4			1			4			1			1			1
Dibromomethane	5	NA	ug/L			4			1			4			1			1			1
1,2-Dichlorobenzene	5	NA	ug/L			4			1			4			1			1			1
1,3-Dichlorobenzene	5	NA	ug/L			4			1			4			1			1			1
1,4-Dichlorobenzene	5	NA	ug/L			4			1			4			1			1			1
Dichlorodifluoromethane	5	NA	ug/L			4			1			4			1			1			1
1,1-Dichloroethane	5	NA	ug/L		</																

**Key**

**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 possible.

**MCLG** = Maximum Contaminant Level Goal, the level of a contaminant below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**TT** = Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.

**AL** = Action Level, the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Not Detected = ND** = absent or present at less than testing method detection level. All testing methods are EPA approved with detection limits much less than the MCL.

**NA** = Not applicable    **NR** = Not required    **NS** = No standard    **NT** = Not Tested

**mg/l** = milligram (1/1,000 of a gram) per liter = **ppm** = parts per million

**ug/l** = microgram (1/1,000,000 of a gram) per liter = **ppb** = parts per billion

**ng/L** = nanogram (1/1,000,000,000 of a gram) per liter = **ppt** = parts per trillion

**pg/L** = picogram (1/1,000,000,000,000 of a gram) per liter = **ppq** = parts per quadrillion

**pCi/L** = picoCuries per liter

**NTU** = Nephelometric turbidity Unit, a measure of the clarity of water.

**MF/L** = million fibers per liter, a measure of the presence of asbestos fibers longer than 10

**(year)** = Most recent testing. Monitoring frequency requirements vary depending on

**\*Action level:** If >10% of results are greater than 15 ug/l for lead or 1.3 mg/L for copper, remediate steps are required. In MCWA's combined retail area, 90% of the samples were less than 7 ug/L for lead and 0.140 mg/L for copper.

**\*\*** = 95% of measurements within a given month must be less than <0.3 NTUs.

**\*\*\*** = Average of monthly distribution system turbidity samples must be less than 5.0 NTUs.

**\*\*\*\*** = 95% of monthly distribution system samples must have a measurable chlorine residual.

**Note:** Total Hardness is also expressed in grains per gallon. The Total Hardness of the Ontario and Hemlock supplies are 7.6 and 5.6 grains per gallon respectively.