

Milwaukee Water Works

Safe, Abundant Drinking Water.

tests of Lake Michigan water - source of Milwaukee Drinking Water 2008 Annual Water Quality Report

Milwaukee Water Works fully complies with all Federal and State drinking water quality regulations.

	MAXIMUM (mg/L)	MINIMUM (mg/L)	MEDIAN (mg/L)
Clarity			
Turbidity , NTU	72.0	0.16	0.96
Microbiological			
Coliform, Total, Presence in 100mL	2419	<1	8.5
<i>Cryptosporidium</i> spp., oocysts/1L*	<0.020	<0.020	<0.020
<i>Giardia</i> spp., cysts/1L**	0.020	<0.020	<0.020
Heterotrophic Plate Count, cfu/1mL	1612.0	<1	6.6
Viruses (IFU/100 L)			
Adenovirus	<1.03	<1.03	<1.03
Coxsackie A	<1.03	<1.03	<1.03
Coxsackie B	<1.03	<1.03	<1.03
Echovirus	<1.03	<1.03	<1.03
Polio virus	<1.03	<1.03	<1.03
Reovirus	<1.03	<1.03	<1.03
Chemical & Physical Parameters			
Alkalinity, as CaCO ₃	140	103	108
Carbon dioxide, free, calc.	2.07	0.8	1.22
Conductivity, uS/cm	335	254	295
Hardness, Total, as CaCO ₃	155	130	135
Hardness, Calcium, as CaCO ₃	129	83	92
Hardness, Magnesium, as CaCO ₃	56	9	45
Odor (Threshold Odor Number)	2	1	1
pH	8.70	7.65	8.20
Saturation Index	0.55	-0.12	0.21
Specific UV absorbance, mg/m-L, calc.	1.7	0.4	1.1
Temperature, degrees Celsius	21.7	-0.17	6.6
Total Dissolved Solids (TDS)	194	147	171
Total Solids	180	160	170
Total Suspended Solids	<10	<10	<10
Total Organic Carbon	7.1	1.5	1.7
UV-254 (cm-1)	0.037	0.013	0.019

Inorganic Chemicals

Aluminum	0.079	<0.003	0.011
Ammonia, as Nitrogen	0.11	<0.10	<0.10
Antimony	<0.0010	<0.0010	<0.0010
Arsenic	<0.0020	<0.0020	<0.0020
Barium	0.021	0.020	0.021
Beryllium	<0.0003	<0.0003	<0.0003
Boron	0.021	0.021	0.021
Bromate	<0.005	<0.005	<0.005
Bromide	0.035	0.018	0.030
Cadmium	<0.0010	<0.0010	<0.0010
Calcium	38	34	35.5
Cerium	<0.0010	<0.0010	<0.0010
Cesium	<0.0010	<0.0010	<0.0010
Chlorate	0.028	0.006	0.015
Chloride	26.1	10.7	11.7
Chlorite	<0.005	<0.005	<0.005
Chromium	0.0049	0.0031	0.0041
Cobalt	<0.0010	<0.0010	<0.0010
Copper	0.031	<0.002	0.003
Cyanide	<0.0020	<0.0020	<0.0020
Dysprosium	<0.0010	<0.0010	<0.0010
Erbium	<0.0010	<0.0010	<0.0010
Europium	<0.0010	<0.0010	<0.0010
Fluoride	0.15	0.08	0.10
Gadolinium	<0.001	<0.001	<0.001
Gallium	0.0036	0.0015	0.0024
Germanium	0.0017	<0.0010	0.0012
Gold	0.0017	<0.0010	0.0014
Hafnium	<0.0010	<0.0010	<0.0010
Holmium	<0.0010	<0.0010	<0.0010
Iridium	<0.0010	<0.0010	<0.0010
Iron	0.037	<0.003	0.006
Lanthanum	<0.0010	<0.0010	<0.0010
Lead	<0.002	<0.002	<0.002
Lithium	0.0023	0.002	0.0022
Lutetium	0.002	<0.0020	<0.0020
Magnesium	13.0	12.0	12.0
Manganese	<0.0020	<0.0020	<0.0020
Mercury	<0.0001	<0.0001	<0.0001
Molybdenum	<0.0020	<0.0020	<0.0020
Neodymium	<0.0010	<0.0010	<0.0010
Nickel	0.0060	0.0018	0.0038
Niobium	<0.0010	<0.0010	<0.0010
Nitrate, as Nitrogen	0.350	0.300	0.350
Nitrate and Nitrite, Total, as Nitrogen	0.350	0.300	0.350
Nitrite, as Nitrogen	<0.010	<0.010	<0.010
Nitrogen, Kjeldahl	<0.500	<0.500	<0.500
Osmium	0.0020	<0.0010	0.0020
Palladium	0.0050	0.0050	0.0050
Perchlorate	0.00011	0.00010	0.00011
Phosphate, Ortho	<0.10	<0.10	<0.10
Phosphorous	<0.050	<0.050	<0.050
Platinum	0.0013	<0.0010	0.0012
Potassium	1.6	1.0	1.4

Praseodymium	<0.0010	<0.0010	<0.0010
Protactinium	<0.0010	<0.0010	<0.0010
Rhenium	<0.0010	<0.0010	<0.0010
Rhodium	<0.0010	<0.0010	<0.0010
Rubidium	0.0013	0.0011	0.0012
Ruthenium	<0.0010	<0.0010	<0.0010
Samarium	<0.0010	<0.0010	<0.0010
Selenium	<0.0020	<0.0020	<0.0020
Silicon	1.90	1.40	1.65
Silver	<0.0020	<0.0020	<0.0020
Sodium	11.64	4.48	6.96
Strontium	0.130	0.120	0.125
Sulfate	22.0	20.0	21.0
Tantalum	<0.0010	<0.0010	<0.0010
Tellurium	0.0045	<0.0010	0.0025
Thallium	<0.0040	<0.0040	<0.0040
Thorium	0.0020	<0.0020	<0.0020
Thulium	<0.0010	<0.0010	<0.0010
Tin	0.0050	<0.0050	<0.0050
Titanium	0.0014	<0.0010	<0.0010
Tungsten	<0.0010	<0.0010	<0.0010
Uranium	<0.0010	<0.0010	<0.0010
Vanadium	<0.0010	<0.0010	<0.0010
Ytterbium	<0.0010	<0.0010	<0.0010
Zinc	<0.0050	<0.0050	<0.0050
Zirconium	<0.0010	<0.0010	<0.0010

Organic Chemicals

Acenaphthene	<0.0001	<0.0001	<0.0001
Acenaphthylene	<0.0001	<0.0001	<0.0001
Acetaldehyde	<0.0054	<0.0054	<0.0054
Acetochlor	<0.0001	<0.0001	<0.0001
Acetone	<0.0050	<0.0050	<0.0050
Acrylonitrile	<0.0010	<0.0010	<0.0010
Adipate, di(2-ethylhexyl)	<0.0006	<0.0006	<0.0006
Alachlor	<0.0001	<0.0001	<0.0001
Aldehydes, Total	<0.0054	<0.0054	<0.0054
Aldicarb (Temik)	<0.0005	<0.0005	<0.0005
Aldicarb sulfone	<0.0007	<0.0007	<0.0007
Aldicarb sulfoxide	<0.0005	<0.0005	<0.0005
Aldrin	<0.0001	<0.0001	<0.0001
Allyl chloride	<0.0050	<0.0050	<0.0050
tert-Amyl Methyl ether	<0.0030	<0.0030	<0.0030
Ametryn	<0.0001	<0.0001	<0.0001
Anilazine	<0.0010	<0.0010	<0.0010
Anthracene	<0.0001	<0.0001	<0.0001
Aspon	<0.0001	<0.0001	<0.0001
Atraton	<0.0001	<0.0001	<0.0001
Atrazine	<0.0001	<0.0001	<0.0001
Azinphos-ethyl	<0.0005	<0.0005	<0.0005
Azinphos-methyl	<0.0005	<0.0005	<0.0005
Bendiocarb	<0.0005	<0.0005	<0.0005
Benfluralin	<0.0001	<0.0001	<0.0001
Benzaldehyde	<0.0054	<0.0054	<0.0054
Benzene	<0.0005	<0.0005	<0.0005

alpha-Benzene hexachloride	<0.0001	<0.0001	<0.0001
beta-Benzene hexachloride	<0.0001	<0.0001	<0.0001
delta-Benzene hexachloride	<0.0001	<0.0001	<0.0001
gamma-Benzene hexachloride (Lindane)	<0.00002	<0.00002	<0.00002
Benzo(a)anthracene	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	<0.0001	<0.0001	<0.0001
Benzo(g, h, l)perylene	<0.0001	<0.0001	<0.0001
Benzo(a)pyrene	<0.00002	<0.00002	<0.00002
Bolstar	<0.0001	<0.0001	<0.0001
Bromacil	<0.0001	<0.0001	<0.0001
Bromobenzene	<0.0005	<0.0005	<0.0005
Bromochloromethane	<0.0005	<0.0005	<0.0005
Bromodichloromethane	0.0025	<0.0005	<0.0005
Bromoform	<0.0005	<0.0005	<0.0005
Bromomethane	<0.0005	<0.0005	<0.0005
Butachlor	<0.0001	<0.0001	<0.0001
2-Butanone (MEK)	<0.0050	<0.0050	<0.0050
tert-Butyl alcohol	<0.0020	<0.0020	<0.0020
n-Butylacrylate	<0.0010	<0.0010	<0.0010
Butylate	<0.0001	<0.0001	<0.0001
n-Butylbenzene	<0.0005	<0.0005	<0.0005
sec-Butylbenzene	<0.0005	<0.0005	<0.0005
tert-Butylbenzene	<0.0005	<0.0005	<0.0005
Butylbenzylphthalate	<0.0010	<0.0010	<0.0010
Butyraldehyde (Butanal)	<0.0054	<0.0054	<0.0054
Carbaryl	<0.0005	<0.0005	<0.0005
Carbofuran	<0.0009	<0.0009	<0.0009
Carbon disulfide	<0.0050	<0.0050	<0.0050
Carbon Tetrachloride	<0.0005	<0.0005	<0.0005
Carbophenothion	<0.0005	<0.0005	<0.0005
Carboxin	<0.0001	<0.0001	<0.0001
Chlordane	<0.0001	<0.0001	<0.0001
Chlordane, alpha	<0.0001	<0.0001	<0.0001
Chlordane, gamma	<0.0001	<0.0001	<0.0001
Chlorfenvinphos	<0.0050	<0.0050	<0.0050
Chloroacetonitrile	<0.0050	<0.0050	<0.0050
Chlorobenzene	<0.0050	<0.0050	<0.0050
Chlorobenzilate	<0.0001	<0.0001	<0.0001
2-Chlorobiphenyl	<0.0001	<0.0001	<0.0001
1-Chlorobutane	<0.0050	<0.0050	<0.0050
Chloroethane	<0.0005	<0.0005	<0.0005
Chloroform	0.0036	<0.0005	<0.0005
Chloromethane	<0.0005	<0.0005	<0.0005
Chloroneb	<0.0001	<0.0001	<0.0001
Chloroprene	<0.0050	<0.0050	<0.0050
Chloropropylate	<0.0001	<0.0001	<0.0001
Chlorothalonil	<0.0001	<0.0001	<0.0001
o-Chlorotoluene	<0.0005	<0.0005	<0.0005
p-Chlorotoluene	<0.0005	<0.0005	<0.0005
Chlorpropham	<0.0001	<0.0001	<0.0001
Chlorpyrifos	<0.0001	<0.0001	<0.0001
Chlorpyrifos methyl	<0.0005	<0.0005	<0.0005
Chrysene	<0.0001	<0.0001	<0.0001
Clomazone	<0.0001	<0.0001	<0.0001

Clopyralid	<0.010	<0.010	<0.010
Coumaphos	<0.0001	<0.0001	<0.0001
Crotonaldehyde	<0.0054	<0.0054	<0.0054
Crotoxyphos	<0.0005	<0.0005	<0.0005
Cyanazine	<0.0001	<0.0001	<0.0001
Cycloate	<0.0001	<0.0001	<0.0001
Cyclohexanone	<0.0054	<0.0054	<0.0054
2,4-D	<0.0001	<0.0001	<0.0001
DCPA	<0.0001	<0.0001	<0.0001
4,4'-DDD	<0.0001	<0.0001	<0.0001
4,4'-DDE	<0.0001	<0.0001	<0.0001
4,4'-DDT	<0.0001	<0.0001	<0.0001
Dalapon	<0.0001	<0.0001	<0.0001
Decanal	<0.0054	<0.0054	<0.0054
Deethylatrazine	<0.0010	<0.0010	<0.0010
Deisopropylatrazine	<0.0010	<0.0010	<0.0010
Demeton O	<0.0005	<0.0005	<0.0005
Demeton S	<0.0005	<0.0005	<0.0005
Desethylatrazine	<0.0010	<0.0010	<0.0010
Desisopropylatrazine	<0.0010	<0.0010	<0.0010
Diazinon	<0.0001	<0.0001	<0.0001
Dibenzo(a,h)anthracene	<0.0001	<0.0001	<0.0001
1,2-Dibromoethane (EDB)	<0.0002	<0.0002	<0.0002
Dibromochloromethane	0.0014	<0.0005	<0.0005
Dibromomethane	<0.0005	<0.0005	<0.0005
1-2 Dibromo 3 chloropropane (DBCP)	<0.0002	<0.0002	<0.0002
Di-n-butylphthalate	<0.0020	<0.0020	<0.0020
Dicamba	<0.0001	<0.0001	<0.0001
Dichlobenil	<0.0001	<0.0001	<0.0001
Dichlofenthion	<0.0001	<0.0001	<0.0001
Dichloran	<0.0005	<0.0005	<0.0005
2,3-Dichlorobiphenyl	<0.0001	<0.0001	<0.0001
Dichlorvos	<0.0001	<0.0001	<0.0001
1,2-Dichlorobenzene	<0.0005	<0.0005	<0.0005
1,3-Dichlorobenzene	<0.0005	<0.0005	<0.0005
1,4-Dichlorobenzene	<0.0005	<0.0005	<0.0005
trans-1,2-Dichloro-2-butylene	<0.0005	<0.0005	<0.0005
Dichlorodifluoromethane	<0.0005	<0.0005	<0.0005
1,1-Dichloroethane	<0.0005	<0.0005	<0.0005
1,2-Dichloroethane	<0.0005	<0.0005	<0.0005
Di (2-chloroethyl) ether	<0.0020	<0.0020	<0.0020
1,1-Dichloroethylene	<0.0005	<0.0005	<0.0005
1,2-Dichloroethylene, cis	<0.0005	<0.0005	<0.0005
1,2-Dichloroethylene, trans	<0.0005	<0.0005	<0.0005
Dichloromethane (methylene chloride)	<0.0005	<0.0005	<0.0005
1,2-Dichloropropane	<0.0005	<0.0005	<0.0005
1,3-Dichloropropane	<0.0005	<0.0005	<0.0005
2,2-Dichloropropane	<0.0005	<0.0005	<0.0005
1,1-Dichloropropanone	<0.0050	<0.0050	<0.0050
1,1-Dichloropropene	<0.0005	<0.0005	<0.0005
1,3-Dichloropropene	<0.0005	<0.0005	<0.0005
1,1-Dichloropropylene	<0.0005	<0.0005	<0.0005
cis 1,3-Dichloropropylene	<0.0005	<0.0005	<0.0005
trans 1,3-Dichloropropylene	<0.0005	<0.0005	<0.0005
Dicrotophos	<0.0005	<0.0005	<0.0005

Dieldrin	<0.0001	<0.0001	<0.0001
Di (2-ethylhexyl) adipate	<0.0006	<0.0006	<0.0006
Di (2-ethylhexyl) phthalate	<0.0006	<0.0006	<0.0006
Diethylether (2005)	<0.002	<0.002	<0.002
Diethylphthalate	<0.0010	<0.0010	<0.0010
Dimethoate	<0.0005	<0.0005	<0.0005
Dimethylphthalate	<0.0010	<0.0010	<0.0010
2,4-Dinitrotoluene	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	<0.0005	<0.0005	<0.0005
Di-n-octylphthathate	<0.0020	<0.0020	<0.0020
Dinoseb	<0.0001	<0.0001	<0.0001
1,4-Dioxane	<0.0050	<0.0050	<0.0050
Dioxathion	<0.0005	<0.0005	<0.0005
Dioxin (2,3,7,8-TCDD)	<0.000000005	<0.000000005	<0.000000005
Diphenamid	<0.0001	<0.0001	<0.0001
Diquat	<0.0004	<0.0004	<0.0004
Disulfoton	<0.0001	<0.0001	<0.0001
Disulfoton sulfone	<0.0001	<0.0001	<0.0001
Disulfoton sulfoxide	<0.010	<0.010	<0.010
Endosulfan I	<0.0001	<0.0001	<0.0001
Endosulfan II	<0.0001	<0.0001	<0.0001
Endosulfan sulfate	<0.0001	<0.0001	<0.0001
Endothall	<0.0090	<0.0090	<0.0090
Endrin	<0.00001	<0.00001	<0.00001
Endrin aldehyde	<0.0005	<0.0005	<0.0005
Epichlorohydrin	<0.0010	<0.0010	<0.0010
EPN	<0.0005	<0.0005	<0.0005
EPTC	<0.0001	<0.0001	<0.0001
Erucylamide	<0.005	<0.005	<0.005
Esfenvalerate	<0.0005	<0.0005	<0.0005
Ethalfuralin	<0.0001	<0.0001	<0.0001
Ethion	<0.0050	<0.0050	<0.0050
Ethofumesate	<0.0005	<0.0005	<0.0005
Ethoprop	<0.0001	<0.0001	<0.0001
Ethylacrylate	<0.0010	<0.0010	<0.0010
Ethylbenzene	<0.0005	<0.0005	<0.0005
Ethylene dibromide (EDB)	<0.00001	<0.00001	<0.00001
Ethyl ether	<0.0020	<0.0020	<0.0020
Ethyl methacrylate	<0.0010	<0.0010	<0.0010
Ethyl tert-butyl ether	<0.0030	<0.0030	<0.0030
Etridiazole	<0.0001	<0.0001	<0.0001
Famphur	<0.0001	<0.0001	<0.0001
Fenamiphos	<0.0001	<0.0001	<0.0001
Fenarimol	<0.0010	<0.0010	<0.0010
Fenitroton	<0.0005	<0.0005	<0.0005
Fenoxypop-ethyl	<0.0010	<0.0010	<0.0010
Fensulfothion	<0.0005	<0.0005	<0.0005
Fenthion	<0.0001	<0.0001	<0.0001
Fluazifop-butyl	<0.0001	<0.0001	<0.0001
Fluchloralin	<0.0001	<0.0001	<0.0001
Fluometuron	<0.0005	<0.0005	<0.0005
Fluoranthene	<0.0001	<0.0001	<0.0001
Fluorene	<0.0001	<0.0001	<0.0001
Fluridone	<0.0010	<0.0010	<0.0010
Fonofos	<0.0001	<0.0001	<0.0001

Formaldehyde	<0.0054	<0.0054	<0.0054
Glyoxal	<0.0054	<0.0054	<0.0054
Glyphosate (Round-up)	<0.0060	<0.0060	<0.0060
Heptachlor	<0.00004	<0.00004	<0.00004
Heptachlor epoxide	<0.00002	<0.00002	<0.00002
2,2',3,3',4,4',6-Heptachlorobiphenyl	<0.0005	<0.0005	<0.0005
Heptanal	<0.0054	<0.0054	<0.0054
Hexachlorobenzene	<0.0001	<0.0001	<0.0001
2,2',4,4',5,6'-Hexachlorobiphenyl	<0.0001	<0.0001	<0.0001
Hexachlorobutadiene	<0.0005	<0.0005	<0.0005
Hexachloroethane	<0.002	<0.002	<0.002
Hexachlorocyclopentadiene	<0.0001	<0.0001	<0.0001
Hexanal	<0.0054	<0.0054	<0.0054
2-Hexanone	<0.0050	<0.0050	<0.0050
Hexazione	<0.0001	<0.0001	<0.0001
3-Hydroxycarbofuran	<0.0005	<0.0005	<0.0005
Indeno(1,2,3-cd)pyrene	<0.0001	<0.0001	<0.0001
Iprodione	<0.0005	<0.0005	<0.0005
Isofenphos	<0.0005	<0.0005	<0.0005
Isophorone	<0.0001	<0.0001	<0.0001
Isopropylbenzene	<0.0005	<0.0005	<0.0005
4-Isopropyltoluene (p-) (2006)	<0.0005	<0.0005	<0.0005
Leptophos	<0.0005	<0.0005	<0.0005
Lindane	<0.00002	<0.00002	<0.00002
Malathion	<0.0001	<0.0001	<0.0001
Merphos (2004)	<0.002	<0.002	<0.002
Metalazyl	<0.0005	<0.0005	<0.0005
Methacrylonitrile	<0.0050	<0.0050	<0.0050
Methomyl	<0.0005	<0.0005	<0.0005
Methoxychlor	<0.0001	<0.0001	<0.0001
Methylacrylate	<0.0010	<0.0010	<0.0010
Methyl iodide (Iodomethane)	<0.0020	<0.0020	<0.0020
Methylmethacrylate	<0.0010	<0.0010	<0.0010
1-Methyl naphthalene	<0.0001	<0.0001	<0.0001
2-Methyl naphthalene	<0.0001	<0.0001	<0.0001
Methyl paraoxon	<0.0005	<0.0005	<0.0005
Methyl parathion	<0.0005	<0.0005	<0.0005
4-Methyl-2-pentanone (MIBK)	<0.0020	<0.0020	<0.0020
2-Methyl-2-propanol (2006)	<0.0020	<0.0020	<0.0020
Methyl-t-butyl ether (MBTE)	<0.0005	<0.0005	<0.0005
Metolachlor (Dual)	<0.0001	<0.0001	<0.0001
Metribuzin (Sencor)	<0.0001	<0.0001	<0.0001
Metsulfuron methyl	<0.010	<0.010	<0.010
Mevinphos	<0.0001	<0.0001	<0.0001
MGK-264 isomer a	<0.0001	<0.0001	<0.0001
MGK-264 isomer b	<0.0001	<0.0001	<0.0001
MGK-326	<0.0001	<0.0001	<0.0001
Mirex	<0.0005	<0.0005	<0.0005
Molinate	<0.0001	<0.0001	<0.0001
Monocrotophos	<0.0005	<0.0005	<0.0005
Naled	<0.0005	<0.0005	<0.0005
Naphthalene	<0.0005	<0.0005	<0.0005
Napropamide	<0.0001	<0.0001	<0.0001
Nitrobenzene	<0.0050	<0.0050	<0.0050
2-Nitropropane	<0.0020	<0.0020	<0.0020

Norflurazon	<0.0010	<0.0010	<0.0010
cis-Nonachlor	<0.0001	<0.0001	<0.0001
trans-Nonachlor	<0.0001	<0.0001	<0.0001
Nonanal	<0.0054	<0.0054	<0.0054
2,2',3,3',4,5',6,6'-Octachlorobiphenyl	<0.0005	<0.0005	<0.0005
Octanal	<0.0054	<0.0054	<0.0054
Oryzalin	<0.010	<0.010	<0.010
Oxadiazon	<0.0001	<0.0001	<0.0001
Oxamyl (Vydate)	<0.0010	<0.0010	<0.0010
Oxychlorane	<0.0001	<0.0001	<0.0001
Oxyfluorfen	<0.0005	<0.0005	<0.0005
Parathion	<0.0005	<0.0005	<0.0005
Pebulate	<0.0001	<0.0001	<0.0001
Pendimethalin	<0.0001	<0.0001	<0.0001
Pentachlorobenzene	<0.0005	<0.0005	<0.0005
Pentachloronitrobenzene	<0.0005	<0.0005	<0.0005
2,2',3',4,6-Pentachlorobiphenyl	<0.0001	<0.0001	<0.0001
Pentachloroethane	<0.0020	<0.0020	<0.0020
Pentachlorophenol	<0.00004	<0.00004	<0.00004
PAHs(benzo(a)-pyrene)	<0.00002	<0.00002	<0.00002
cis-Permethrin	<0.0001	<0.0001	<0.0001
trans-Permethrin	<0.0001	<0.0001	<0.0001
Phthalate, (di(2-ethylhexyl))	<0.0006	<0.0006	<0.0006
Phenanthrene	<0.0001	<0.0001	<0.0001
Phorate	<0.0001	<0.0001	<0.0001
Phosmet	<0.0005	<0.0005	<0.0005
E-Phosphamidon	<0.0005	<0.0005	<0.0005
Z-Phosphamidon	<0.0005	<0.0005	<0.0005
Picloram (Tordon)	<0.0001	<0.0001	<0.0001
Polychlorinated Biphenyls (PCB's), Total***			
Aroclor 1016	<0.00008	<0.00008	<0.00008
Aroclor 1221	<0.00019	<0.00019	<0.00019
Aroclor 1232	<0.00023	<0.00023	<0.00023
Aroclor 1242	<0.00026	<0.00026	<0.00026
Aroclor 1248	<0.0001	<0.0001	<0.0001
Aroclor 1254	<0.0001	<0.0001	<0.0001
Aroclor 1260	<0.0002	<0.0002	<0.0002
Profluralin	<0.0001	<0.0001	<0.0001
Prometon	<0.0010	<0.0010	<0.0010
Prometryn	<0.0001	<0.0001	<0.0001
Pronamide	<0.0001	<0.0001	<0.0001
Propachlor	<0.0001	<0.0001	<0.0001
Propanil	<0.0005	<0.0005	<0.0005
Propazine	<0.0001	<0.0001	<0.0001
Propiconazole isomer a	<0.0050	<0.0050	<0.0050
Propiconazole isomer b	<0.0050	<0.0050	<0.0050
Propionaldehyde (Propanal)	<0.0054	<0.0054	<0.0054
Propionitrile	<0.0050	<0.0050	<0.0050
n-Propylbenzene	<0.0005	<0.0005	<0.0005
Prothiofos	<0.0005	<0.0005	<0.0005
Pyrene	<0.0001	<0.0001	<0.0001
Pyruvaldehyde (Methylglyoxal)	<0.0054	<0.0054	<0.0054
Simazine	<0.00007	<0.00007	<0.00007
Simetryn	<0.0001	<0.0001	<0.0001
Stirofos	<0.0001	<0.0001	<0.0001

Styrene	<0.0005	<0.0005	<0.0005
Sulfotep	<0.0005	<0.0005	<0.0005
Tebuthiuron	<0.010	<0.010	<0.010
TEPP	<0.001	<0.001	<0.001
Terbacil	<0.0001	<0.0001	<0.0001
Terbufos	<0.0005	<0.0005	<0.0005
Terbutryn	<0.0001	<0.0001	<0.0001
1,2,4,5-Tetrachlorobenzene	<0.0005	<0.0005	<0.0005
2,2',4,4'-Tetrachlorobiphenyl	<0.0001	<0.0001	<0.0001
1,1,1,2-Tetrachloroethane	<0.0005	<0.0005	<0.0005
1,1,2,2-Tetrachloroethane	<0.0005	<0.0005	<0.0005
Tetrachloroethylene	<0.0005	<0.0005	<0.0005
Tetrahydrofuran	<0.0050	<0.0050	<0.0050
Thiabendazole	<0.010	<0.010	<0.010
Thiobencarb	<0.0001	<0.0001	<0.0001
Thionazin	<0.0005	<0.0005	<0.0005
Toluene	<0.0005	<0.0005	<0.0005
Toxaphene	<0.0010	<0.0010	<0.0010
2,4,5-TP (Silvex)	<0.0001	<0.0001	<0.0001
Triademefon	<0.0005	<0.0005	<0.0005
Tribufos (DEF)	<0.0001	<0.0001	<0.0001
Trichlorfon(2005)	<0.010	<0.010	<0.010
1,2,3-Trichlorobenzene	<0.0005	<0.0005	<0.0005
1,2,4-Trichlorobenzene	<0.0005	<0.0005	<0.0005
2,4,5-Trichlorobiphenyl	<0.0001	<0.0001	<0.0001
1,1,1-Trichloroethane	<0.0005	<0.0005	<0.0005
1,1,2-Trichloroethane	<0.0005	<0.0005	<0.0005
Trichloroethylene	<0.0005	<0.0005	<0.0005
Trichlorofluoromethane	<0.0005	<0.0005	<0.0005
Trichlonate	<0.0001	<0.0001	<0.0001
1,2,3-Trichloropropane	<0.0005	<0.0005	<0.0005
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.0005	<0.0005	<0.0005
Tricyclazole	<0.0010	<0.0010	<0.0010
1,2,3-Trimethylbenzene	<0.0005	<0.0005	<0.0005
1,2,4-Trimethylbenzene	<0.0005	<0.0005	<0.0005
1,3,5-Trimethylbenzene	<0.0005	<0.0005	<0.0005
Trifluralin	<0.0001	<0.0001	<0.0001
Trihalomethanes, total	0.0065	<0.0005	<0.0005
n-Valeraldehyde (Pentanal)	<0.0054	<0.0054	<0.0054
Vernolate	<0.0001	<0.0001	<0.0001
Vinclozolin	<0.0005	<0.0005	<0.0005
Vinyl acetate	<0.0050	<0.0050	<0.0050
Vinyl Chloride	<0.0002	<0.0002	<0.0002
Xylene, total	<0.0005	<0.0005	<0.0005

Estrogens and Other Hormones (EDCs)

Diethylstilbestrol (DES)	<0.0000005	<0.0000005	<0.0000005
17alpha-Estradiol	<0.0000005	<0.0000005	<0.0000005
17beta-Estradiol	<0.0000005	<0.0000005	<0.0000005
Estriol	<0.0000005	<0.0000005	<0.0000005
Estrone	<0.0000005	<0.0000005	<0.0000005
17alpha-Ethynl estradiol	<0.0000005	<0.0000005	<0.0000005
Progesterone	<0.0000001	<0.0000001	<0.0000001
cis-Testosterone	<0.0000001	<0.0000001	<0.0000001
trans-Testosterone	<0.0000001	<0.0000001	<0.0000001

Explosives and Related Compounds (2006)

2-Amino-4,6-dinitrotoluene	<0.0005	<0.0005	<0.0005
4-Amino-2,6-dinitrotoluene	<0.0005	<0.0005	<0.0005
3,5-Dinitroaniline	<0.0005	<0.0005	<0.0005
1,3-Dinitrobenzene	<0.0005	<0.0005	<0.0005
2,4-Dinitrotoluene	<0.0005	<0.0005	<0.0005
2,6-Dinitrotoluene	<0.0005	<0.0005	<0.0005
Nitrobenzene	<0.0005	<0.0005	<0.0005
2-Nitrotoluene	<0.0005	<0.0005	<0.0005
3-Nitrotoluene	<0.0005	<0.0005	<0.0005
4-Nitrotoluene	<0.0005	<0.0005	<0.0005
RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	<0.0005	<0.0005	<0.0005
Tetryl (2,4,6-Trinitrophenylmethyl nitramine)	<0.0010	<0.0010	<0.0010
TNT (2,4,6 Trinitrotoluene)	<0.0005	<0.0005	<0.0005
1,3,5-Trinitrobenzene	<0.0005	<0.0005	<0.0005

Flame Retardants and Selected Pesticides**** (2006)

Atrazine	<0.00025	<0.00025	<0.00025
Bifenthrin	<0.00025	<0.00025	<0.00025
Bromacil	<0.00025	<0.00025	<0.00025
Chlorpyrifos	<0.00025	<0.00025	<0.00025
Dimethoate	<0.00025	<0.00025	<0.00025
Esbiol	<0.00025	<0.00025	<0.00025
Esfenvalerate	<0.00025	<0.00025	<0.00025
Fenvalerate	<0.00025	<0.00025	<0.00025
Hexabromobiphenyl	<0.00025	<0.00025	<0.00025
2,2',4,4',4,4'-Hexabromodiphenyl ether (BDE-153)	<0.00025	<0.00025	<0.00025
Hexazinone	<0.00025	<0.00025	<0.00025
Kepone	<0.00025	<0.00025	<0.00025
Malathion	<0.00025	<0.00025	<0.00025
Mirex	<0.00025	<0.00025	<0.00025
Nitrofen	<0.00025	<0.00025	<0.00025
Norflurazon	<0.00025	<0.00025	<0.00025
Oxychlorane	<0.00025	<0.00025	<0.00025
Parathion	<0.00025	<0.00025	<0.00025
2,2',4,4',5-Pentabromodiphenyl ether (BDE-99)	<0.00025	<0.00025	<0.00025
2,2',4,4',6-Pentabromodiphenyl ether (BDE-100)	<0.00025	<0.00025	<0.00025
Prometryn	<0.00025	<0.00025	<0.00025
Propazine	<0.00025	<0.00025	<0.00025
Terbufos-sulfone	<0.00025	<0.00025	<0.00025
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	<0.00025	<0.00025	<0.00025
Thiobencarb	<0.00025	<0.00025	<0.00025
Vinclozolin	<0.00025	<0.00025	<0.00025

Fluoropolymers

Perfluorooctane sulfonate (PFOS)	0.0000018	0.0000015	0.0000017
Perfluorocanoic acid (PFOA)	<0.000010	<0.000010	<0.000010
Perfluorobutanoic acid (PFBA)	<0.0000002	<0.0000002	<0.0000002

Phosphate Flame Retardants

Diphenylcresyl phosphate	<0.0001	<0.0001	<0.0001
2-Ethylhexyldiphenyl phosphate	<0.0001	<0.0001	<0.0001
Tributyl phosphate	<0.0001	<0.0001	<0.0001
Triethyl phosphate	<0.0001	<0.0001	<0.0001

Tri-m-cresyl phosphate	<0.0001	<0.0001	<0.0001
Tri-o-cresyl phosphate	<0.0001	<0.0001	<0.0001
Tri-p-cresyl phosphate	<0.0001	<0.0001	<0.0001
Trimethyl phosphate (Semi-Quantitative)	<0.0001	<0.0001	<0.0001
Tripenyl phosphate	<0.0001	<0.0001	<0.0001
Triphenyl phosphate	<0.0001	<0.0001	<0.0001
Tris(2-butoxyethyl) phosphate	<0.0005	<0.0005	<0.0005
Tris(2-chloroethyl) phosphate	<0.0001	<0.0001	<0.0001
Tris(chloropropyl) phosphate	<0.0001	<0.0001	<0.0001
Tris(2,3-dibromopropyl) phosphate	<0.0010	<0.0010	<0.0010
Tris(1,3-dichloro-2-propyl) phosphate	<0.0001	<0.0001	<0.0001
Tris(2-ethylhexyl) phosphate	<0.0001	<0.0001	<0.0001

Nitrosamines

N-Nitropyrrolidine (NPYR)	<0.0000020	<0.0000020	<0.0000020
N-Nitrosodi-N-butylamine (NDBA)	<0.0000040	<0.0000040	<0.0000040
N-Nitrosodiethylamine (NDEA)	<0.0000050	<0.0000050	<0.0000050
N-Nitrosodimethylamine (NDMA)	<0.0000020	<0.0000020	<0.0000020
N-Nitrosodi-N-propylamine (NDPA)	<0.0000070	<0.0000070	<0.0000070
N-Nitrosomethylethylamine (NMEA)	<0.0000030	<0.0000030	<0.0000030
N-Nitrosopiperidine (2006)	<0.0000020	<0.0000020	<0.0000020

Phenolic Endocrine Disruptors (EDCs)

Bisphenol A	<0.0001	<0.0001	<0.0001
Nonylphenol diethoxylate, isomer mix (2006)	<0.0010	<0.0010	<0.0010
Nonylphenol monoethoxylate, isomer mix (2006)	<0.010	<0.010	<0.010
Nonylphenol, isomer mix	<0.0005	<0.0005	<0.0005
4-n-Octylphenol	<0.0005	<0.0005	<0.0005
4-tert-Octylphenol	<0.0005	<0.0005	<0.0005
Pentachlorophenol	<0.0001	<0.0001	<0.0001
Phenylphenol, Total	<0.0001	<0.0001	<0.0001
Tetrabromobisphenol A	<0.0001	<0.0001	<0.0001
2, 4, 6-Trichlorophenol	<0.0001	<0.0001	<0.0001

Pharmaceuticals & Personal Care Products

Acetaminophen	<0.000005	<0.000005	<0.000005
Amoxicillin	<0.00005	<0.00005	<0.00005
Antipyrine	<0.000001	<0.000001	<0.000001
Aspirin	<0.00005	<0.00005	<0.00005
Azithromycin	<0.000001	<0.000001	<0.000001
Bacitracin	<0.0005	<0.0005	<0.0005
Bezafibrate	<0.0000005	<0.0000005	<0.0000005
Caffeine	<0.00005	<0.00005	<0.00005
Carbadox	<0.00005	<0.00005	<0.00005
Carbamazepine	<0.000001	<0.000001	<0.000001
Chloramphenicol	<0.000005	<0.000005	<0.000005
Chlorotetracycline	<0.00005	<0.00005	<0.00005
Ciprofloxacin	<0.00005	<0.00005	<0.00005
Clofibric acid	<0.0000005	<0.0000005	<0.0000005
Cotinine	0.000002	<0.000001	0.000002
1, 7-Dimethylxanthine (2006)	<0.00000050	<0.00000050	<0.00000050
DEET	<0.000005	<0.000005	<0.000005
Diclofenac	<0.0000005	<0.0000005	<0.0000005
Dilantin	<0.00005	<0.00005	<0.00005
Diltiazem	<0.000001	<0.000001	<0.000001
Doxycycline	<0.00005	<0.00005	<0.00005

Enrofloxacin	<0.0005	<0.0005	<0.0005
Erythromycin	<0.000001	<0.000001	<0.000001
Fluoxetine (Prozac)	<0.000001	<0.000001	<0.000001
Gemfibrozil	0.0000008	<0.0000005	0.0000006
Ibuprofen	<0.00005	<0.00005	<0.00005
Lasalocid	<0.000001	<0.000001	<0.000001
Levothyroxine (Synthroid)	<0.00005	<0.00005	<0.00005
Lincomycin	<0.0000001	<0.0000001	<0.0000001
Monensin	<0.0000001	<0.0000001	<0.0000001
Naproxen	<0.000002	<0.000002	<0.000002
Narasin	<0.0000001	<0.0000001	<0.0000001
Nicotine	0.000005	<0.000005	<0.000005
Norfloxacin	<0.0005	<0.0005	<0.0005
Oleandomycin	<0.000001	<0.000001	<0.000001
Oxytetracycline	<0.0005	<0.0005	<0.0005
Paraxanthine	<0.000005	<0.000005	<0.000005
Penicillin G	<0.000002	<0.000002	<0.000002
Penicillin V	<0.000002	<0.000002	<0.000002
Prednisone	<0.000005	<0.000005	<0.000005
Roxithromycin	<0.000001	<0.000001	<0.000001
Salinomycin	<0.000002	<0.000002	<0.000002
Simvastatin	<0.000001	<0.000001	<0.000001
Sulfachloropyridazine	<0.00005	<0.00005	<0.00005
Sulfadiazine	<0.00005	<0.00005	<0.00005
Sulfadimethoxine	<0.000005	<0.000005	<0.000005
Sulfamerazine	<0.0005	<0.0005	<0.0005
Sulfamethazine	<0.005	<0.005	<0.005
Sulfamethizole	<0.000005	<0.000005	<0.000005
Sulfamethoxazole	<0.000005	<0.000005	<0.000005
Sulthiazole	<0.00005	<0.00005	<0.00005
Theobromine	<0.00005	<0.00005	<0.00005
Theophylline	<0.000005	<0.000005	<0.000005
Triclosan	<0.000005	<0.000005	<0.000005
Trimethoprim	<0.000001	<0.000001	<0.000001
Tylosin	<0.00005	<0.00005	<0.00005
Virginiamycin M1	<0.000001	<0.000001	<0.000001

UCMR-2

Acetochlor	<0.0020	<0.0020	<0.0020
Alachlor	<0.0020	<0.0020	<0.0020
Metolachlor	<0.0010	<0.0010	<0.0010
Acetochlor ESA	<0.0010	<0.0010	<0.0010
Acetochlor OA	<0.0020	<0.0020	<0.0020
Alachlor ESA	<0.0010	<0.0010	<0.0010
Alachlor OA	<0.0010	<0.0010	<0.0010
Metolachlor ESA	<0.0010	<0.0010	<0.0010
Metolachlor OA	<0.0020	<0.0020	<0.0020
Dimethoate	<0.0007	<0.0007	<0.0007
2,2',4,4',5,5'-Hexabromobiphenyl (HBB)	<0.0007	<0.0007	<0.0007
2,2',4,4',5,5'-Hexabromobiphenyl ether (BDE-153)	<0.0008	<0.0008	<0.0008
2,2',4,4',5-Pentabromodiphenyl ether (BDE-99)	<0.0009	<0.0009	<0.0009
2,2',4,4',6-Pentabromodiphenyl ether (BDE-100)	<0.0005	<0.0005	<0.0005
Terbufos-sulfone	<0.0004	<0.0004	<0.0004
2,2',4,4'-Tetrabromodiphenyl ether (BDE-47)	<0.0003	<0.0003	<0.0003
1,3-Dinitrobenzene	<0.0008	<0.0008	<0.0008

RDX (Hexahydro-1,3,5-trinitro-1,3,5-triazine)	<0.0010	<0.0010	<0.0010
TNT (2,4,6-Trinitrotoluene)	<0.0008	<0.0008	<0.0008

D = Sample collected in distribution system NR = Not Regulated R = Not Regulated in raw water, only finished water
IFU = Inclusion forming unit

**Cryptosporidium* spp. was detected in 0 of 54 tests.

***Giardia* spp. was detected in 1 of 54 tests.

***PCBs are summation of Aroclor 1016, 1221, 1232, 1242, 1248, 1254, 1260. None were detected.

****The list of Flame Retardants and Selected Pesticides is tested using EPA Method 527. These chemicals are included in the Unregulated Contaminant Monitoring Rule-2.

Revised: February 20, 2009

For more information, call the Milwaukee Water Works Water Quality section, (414) 286-2585.