

**SUMMARY OF WELL WATER WATER QUALITY
CITY OF ANN ARBOR**

Ann Arbor Water Treatment Plant
919 Sunset Road, Ann Arbor, MI 48103

Year Analyzed	Compound	Results	MDL
2002	Alkalinity	310 mg/L	1 mg/L
2002	Ammonia	0.09 mg/L	0.01 mg/L
1998	Bromide	0.09 mg/L	0.002 mg/L
2002	Calcium	158 mg/L	1 mg/L
2002	Chloride	112 mg/L	1 mg/L
2002	Conductivity	1013 μ S	1 μ S
2002	Fluoride	0.39 mg/L	0.01 mg/L
2000	Fuel Oil/Diesel Fuel	ND	0.2 mg/l
2000	Gasoline	ND	1.0 mg/l
2000	Kerosene	ND	0.2 mg/l
2002	Hardness	545 mg/L	1 mg/L
2000	Motor Oil	ND	1.0 mg/l
2000	Heterotrophic Plate Count	9 cfu/mL	1 cfu/L
2002	Magnesium	30 mg/L	1 mg/L
2002	Nitrate	0.19 mg/L	0.01 mg/L
2002	Nitrite	1.3 μ g/L	0.1 μ g/L
1998	Organic Nitrogen	2.2 mg/l	0.1 mg/l
2002	pH	7.3	0.1
2001	Phosphorus (total)	0.02 mg/L	0.01 mg/L
1996	Radon (SF 741)	111.7 pCi/L	
1996	Radon (SF 21W)	103.1 pCi/L	
1996	Radon (Monty)	65.0 pCi/L	
2000	Gross Alpha	7.7 pCi/L	3.0 pCi/L
2000	Gross Beta	6.2 pCi/L	2.6 pCi/L

ND = not detected; MDL = method detection limit

1996	Silica	14.1 mg/L	0.1 mg/L
2002	Sodium	46.60 mg/L	0.1mg/L
2002	Sulfate	201 mg/L	1 mg/L
2002	Total Solids	857 mg/L	1 mg/L
2002	Total Organic Carbon	1.6 mg/L	0.2 mg/L
1996	TOX	45 µg/L	25 µg/L
2002	Total Coliform	ND	1/100 mL
2001	Total Hydrocarbons (Petroleum hydrocarbons)	ND	5.0 mg/L
2002	Temperature (at plant)	15.6 °C	0.1 °C
2002	UV254	0.040 cm ⁻¹	0.009 cm ⁻¹
METALS			
2002	Aluminum	2.5 ug/L	2.0 ug/L
2002	Antimony	ND	2.0 ug/L
2002	Beryllium	ND	1.0 ug/L
2002	Thallium	ND	1.0 ug/L
2002	Arsenic	1.2 ug/L	1.0 ug/L
2002	Barium	84 ug/L	10 ug/L
2002	Cadmium	ND	0.2 ug/L
2002	Chromium	0.6 ug/l	0.3 ug/L
2002	Copper	ND	0.04 mg/L
2002	Iron	2.187 mg/L	0.05 mg/L
2002	Lead	1.3 ug/l	0.5 ug/L
2002	Mercury	ND	0.2 ug/L
2002	Manganese	110 ug/L	10 ug/L
2002	Nickel	ND	1.0 ug/L
2002	Selenium	ND	2.0 ug/L
2002	Silver	ND	0.2 ug/L
2002	Zinc	ND	20 ug/L

ND = not detected; MDL = method detection limit

VOLATILE ORGANICS			
1998	Acetone	ND	5.0 µg/L
1998	Acrolein	ND	5.0 µg/L
1998	Acrylonitrile	ND	1.0 µg/L
1998	Allyl chloride	ND	5.0 µg/L
1998	butyl-Acrylate	ND	1.0 µg/L
1998	ethyl-Acrylate	ND	1.0 µg/L
2001	Ethylene Glycol	ND	10mg/L
2001	Benzene	ND	0.5 µg/L
1997	Bis (2-chloroethoxy) methane	ND	10.0 µg/L
1997	Bis (2-chloroethyl) ether	ND	5.0 µg/L
1997	Bis (2-chloroisopropyl) ether	ND	5.0 µg/L
2001	Bromobenzene	ND	0.5 µg/L
2001	Bromochloromethane	ND	0.5 µg/L
2001	Bromodichloromethane	ND	0.5 µg/L
2001	1,2-Bromoethane	ND	0.5 µg/L
2001	Bromoform	ND	0.5 µg/L
2001	Bromomethane	ND	0.5 µg/L
1998	2-Butanone (methyl ethyl ketone, MEK)	ND	5.0 µg/L
1998	Carbon disulfide	ND	5.0 µg/L
2001	Carbon tetrachloride	ND	0.5 µg/L
1998	Chloroacetonitrile	ND	5.0 µg/L
2001	Chlorobenzene	ND	0.5 µg/L
1998	1-Chlorobutane	ND	5.0 µg/L
2001	Chloroethane	ND	0.5 µg/L
1996	2-Chloroethyl vinyl ether	ND	1 µg/L
2001	Chloroform	ND	0.5 µg/L
2001	Chloromethane	ND	0.5 µg/L

ND = not detected; MDL = method detection limit

1998	Chloroprene	ND	5.0 µg/L
2001	2-Chlorotoulene (o-)	ND	0.5 µg/L
2001	4-Chlorotoulene (p-)	ND	0.5 µg/L
1998	Cyanogen Chloride	ND	0.2 µg/L
1998	Cyclohexanone	ND	5.0 µg/L
2001	Dibromochloromethane	ND	0.5 µg/L
2001	1,2-Dibromo-3-chloropropane	ND	0.5 µg/L
2001	Dibromomethane	ND	0.5 µg/L
2001	1,2-Dichlorobenzene	ND	0.5 µg/L
2001	1,3-Dichlorobenzene	ND	0.5 µg/L
2001	1,4-Dichlorobenzene	ND	0.5 µg/L
2001	1,1-Dichloroethane	ND	0.5 µg/L
2001	1,2-Dichloroethane	ND	0.5 µg/L
2001	cis-1,2-Dichloroeth(yl)ene	ND	0.5 µg/L
2000	1,2-Dibromoethane (Ethylene dibromide, EDB)	ND	0.1 µg/L
2001	1,1-Dichloroeth(yl)ene	ND	0.5 µg/L
2001	1,2-Dichloropropane	ND	0.5 µg/L
2001	1,3-Dichloropropane	ND	0.5 µg/L
2001	2,2-Dichloropropane	ND	0.5 µg/L
1998	1,1-Dichloropropanone	ND	10.0 µg/L
2001	1,1-Dichloroprop(yl)ene	ND	0.5 µg/L
2001	cis-1,3-Dichloroprop(yl)ene	ND	0.5 µg/L
2001	trans-1,2-Dichloroeth(yl)ene	ND	0.5 µg/L
1998	1,2-Dichloroprop(yl)ene	ND	5.0 µg/L
2001	trans-1,3-Dichloroprop(yl)ene	ND	0.5 µg/L
1998	trans-1,4-Dichloro-2-but(yl)ene	ND	0.5 µg/L
2001	Dichlorodifluoromethane	ND	0.5 µg/L
2000	Dichloromethane	ND	0.5 µg/L

ND = not detected; MDL = method detection limit

1998	Diethyl ether	ND	5.0 µg/L
1998	1,4-Dioxane	ND	1.0 µg/L
1998	Epichlorohydrin	ND	1.0 µg/L
1998	Ethyl methacrylate	ND	5.0 µg/L
2001	Ethylbenzene	ND	0.5 µg/L
2001	Hexachlorobutadiene	ND	0.5 µg/L
1998	Hexachloroethane	ND	5.0 µg/L
1998	2-Hexanone	ND	5.0 µg/L
1998	Isobutyl alcohol	ND	10.0 µg/L
1998	Isopropyl alcohol	ND	10.0 µg/L
2001	Isopropylbenzene	ND	0.5 µg/L
2001	4-Isopropyltoluene (p-)	ND	0.5 µg/L
1998	Methacrylonitrile	ND	5.0 µg/L
2001	Methylene chloride	ND	0.5 µg/L
1998	Methyl iodide (Iodomethane)	ND	5.0 µg/L
2000	Methyl-t-butyl ether (MTBE)	ND	0.5 µg/L
1998	Methylacrylate	ND	5.0 µg/L
1998	Methylmethacrylate	ND	5.0 µg/L
1998	4-Methyl-2-pentanone (MIBK)	ND	5.0 µg/L
2001	n-Butylbenzene	ND	0.2 µg/L
2001	n-Propylbenzene	ND	0.5 µg/L
2001	Napthalene	ND	0.5 µg/L
1998	Nitrobenzene	ND	5.0 µg/L
1998	2-Nitropropane	ND	10.0 µg/L
1998	Pentachloroethane	ND	5.0 µg/L
1998	Propionitrile	ND	5.0 µg/L
20001	sec-Butylbenzene	ND	0.5 µg/L
2001	Styrene	ND	0.5 µg/L

ND = not detected; MDL = method detection limit

2001	tert-Butylbenzene	ND	0.2 µg/L
1998	tert-Butyl alcohol	ND	5.0 µg/L
2001	1,1,1,2-Tetrachloroethane	ND	0.5 µg/L
2001	1,1,2,2,-Tetrachloroethane	ND	0.5 µg/L
2001	Tetrachloroeth(yl)ene	ND	0.5 µg/L
1998	Tetrahydrofuran	ND	5.0 µg/L
2001	Toluene	ND	0.5 µg/L
2001	1,2,3-Trichlorobenzene	ND	0.5 µg/L
2001	1,2,4-Trichlorobenzene	ND	0.5 µg/L
2001	1,1,1-Trichloroethane	ND	0.5 µg/L
2001	1,1,2-Trichloroethane	ND	0.5 µg/L
2001	Trichloroeth(yl)ene	ND	0.5 µg/L
2001	1,2,3-Trichloropropane	ND	0.5 µg/L
2001	Trichlorofluoromethane	ND	0.5 µg/L
2000	Trichlorotrifluoromethane	ND	0.5 µg/L
1998	1,2,3-Trimethylbenzene	ND	0.1 µg/L
2001	1,2,4-Trimethylbenzene	ND	0.5 µg/L
2001	1,3,5-Trimethylbenzene	ND	0.5 µg/L
1998	Vinyl acetate	ND	10.0 µg/L
2001	Vinyl chloride	ND	0.5 µg/L
2001	Total Xylenes (1,2-Xylene; 1,3-Xylene; & 1,4-Xylene)	ND	0.5 µg/L
PESTICIDES/ HERBICIDES			
2001	Acenaphthylene	ND	0.1 µg/L
2001	Acenaphthene	ND	0.1 µg/L
1997	Acetochlor	ND	0.1 µg/L
2001	Alachlor (Lasso)	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

2000	Aldicarb	ND	0.5 µg/L
2000	Aldicarb Sulfoxide	ND	0.4 µg/L
2000	Aldicarb Sulfone	ND	0.5µg/L
2001	Aldrin	ND	0.1µg/L
1999	alpha-BHC	ND	0.05 µg/L
2000	alpha-Chlordane	ND	0.1 µg/L
1997	Ametryn	ND	0.1 µg/L
1997	Anilazine	ND	0.5 µg/L
1999	Anthracene	ND	0.1 µg/L
1997	Aroclor 1016	ND	5.0 µg/L
1997	Aroclor 1221	ND	1.0 µg/L
1997	Aroclor 1232	ND	5.0 µg/L
1997	Aroclor 1242	ND	1.0 µg/L
1997	Aroclor 1248	ND	1.0 µg/L
1997	Aroclor 1254	ND	1.0 µg/L
1997	Aroclor 1260	ND	1.0 µg/L
1997	Aspon	ND	0.1 µg/L
1997	Atraton	ND	0.1 µg/L
2001	Atrazine	ND	0.1 µg/L
1997	Azinphos-ethyl	ND	0.5 µg/L
1997	Azinphos-methyl	ND	0.1 µg/L
1997	Azobenzene	ND	0.2 µg/L
1997	Bendiocarb	ND	0.5 µg/L
1999	Benfluralin	ND	0.1 µg/L
2001	Benzo(a)anthracene	ND	0.1 µg/L
2001	Benzo(a)pyrene	ND	0.02 µg/L
2001	Benzo(b)fluoranthene	ND	0.1 µg/L
2001	Benzo(k)fluoranthene	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

2001	Benzo(g,h,i)perylene	ND	0.1 µg/L
1998	beta-BHC	ND	0.05 µg/L
1997	Bolstar	ND	0.1 µg/L
1997	Bromacil	ND	0.1 µg/L
2001	Butachlor	ND	0.1 µg/L
1997	Butylate	ND	0.1 µg/L
1997	Butylbenzylphthalate	ND	1.0 µg/L
2000	Carbaryl	ND	0.5 ug/L
2000	Carbofuran	ND	0.9 µg/L
1997	Carbophenothion	ND	0.5 µg/L
1997	Carboxin	ND	0.1 µg/L
1997	Chlorfenvinphos	ND	0.5 µg/L
1997	Chlorneb	ND	0.1 µg/L
1997	Chlorbenzilate	ND	0.1 µg/L
1998	Chlordane	ND	0.5 µg/L
1997	Chlorpropylate	ND	0.1 µg/L
1997	2-Chlorobipheyl (PCB-1016)	ND	0.1 µg/L
1997	2-Chloronaphthalene	ND	0.2 µg/L
1997	Chlorothalonil	ND	0.1 µg/L
1997	Chloroprotham	ND	0.1 µg/L
1997	Chlorpyrifos	ND	0.1 µg/L
1997	Chlorpyrifos methyl	ND	0.5 µg/L
1997	Chrysene	ND	0.1 µg/L
1997	Clomazone	ND	0.1 µg/L
1997	Clopyralid	ND	10.0 µg/L
1997	Coumaphos	ND	0.1 µg/L
1997	Crotoxypfos	ND	0.5 µg/L
1997	Cyanazine	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

1997	Cycloate	ND	0.1 µg/L
1997	DCPA	ND	0.1 µg/L
1998	4,4'-DDD	ND	0.1 µg/L
1998	4,4'-DDE	ND	0.1 µg/L
1998	4,4'-DDT	ND	0.1 µg/L
1998	delta-BHC	ND	0.05 µg/L
2001	Dalapon	ND	1.0 µg/L
1997	Demeton	ND	0.1 µg/L
1997	Desethylatrazine	ND	1.0 µg/L
1997	Desisopropylatrazine	ND	1.0 µg/L
1997	Diazinon	ND	0.1 µg/L
2001	Dibenzo(a,h)anthracene	ND	0.1 µg/L
2001	Dicamba	ND	0.1 µg/L
1997	Dichlobenil	ND	0.1 µg/L
1997	Dichlofenthion	ND	0.1 µg/L
1997	Dichloran	ND	0.1 µg/L
1997	2,3-Dichlorobiphenyl	ND	0.1 µg/L
2000	2,4-Dichlorophenoxy acetic acid	ND	0.1 µg/L
1997	Dichlorovos	ND	0.1 µg/L
1997	Dicrotophos	ND	0.5 µg/L
2001	Dieldrin	ND	0.1 µg/L
2001	Di (2-ethylhexyl) adipate	ND	0.6 µg/L
2001	Di (2-ethylhexyl) phthalate	ND	0.6 µg/L
1997	Diethylphthalate	ND	1.0 µg/L
1997	Dimethoate	ND	0.1 µg/L
1997	Dimethylphthalate	ND	1.0 µg/L
1997	Di-n-butylphthalate	ND	1.0 µg/L
1997	2,4-Dinitrotoulene	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

1997	2,6-Dinitrotoulene	ND	0.1 µg/L
1997	Di-n-octylphthalate	ND	1.0 µg/L
2001	Dinoseb	ND	0.1 µg/L
1997	Dioxation	ND	0.5 µg/L
1997	Diphenamid	ND	0.1 µg/L
1997	Disulfoton	ND	0.1 µg/L
1997	Disulfoton sulfone	ND	0.1 µg/L
1997	Disulfoton sulfoxide	ND	1.0 µg/L
1997	Dyfonate	ND	0.1 µg/L
1998	alpha-Endosulfan (Endosulfan I)	ND	0.05 µg/L
1998	beta-Endosulfan (Endofulfan II)	ND	0.1 µg/L
1998	Endosulfan sulfate	ND	0.1 µg/L
2001	Endrin	ND	0.01 µg/L
1998	Endrin aldehyde	ND	0.1 µg/L
1997	EPN	ND	0.5 µg/L
1997	EPTC	ND	0.1 µg/L
1997	Esfenvalerate	ND	0.5 µg/L
1997	Ethalfuralin	ND	0.1 µg/L
1997	Ethion	ND	5.0 µg/L
1997	Ethoprop	ND	0.1 µg/L
1997	Etridiazole	ND	0.1 µg/L
1997	Famphur	ND	0.1 µg/L
1997	Fenamiphos	ND	0.1 µg/L
1997	Fenarimol	ND	0.1 µg/L
1997	Fenitrothion	ND	0.5 µg/L
1997	Fenoxypop-ethyl	ND	5.0 µg/L
1997	Fensulfothion	ND	0.5 µg/L
1997	Fenthion	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

1997	Fluazifop-butyl	ND	0.1 µg/L
1997	Fluchloralin	ND	0.1 µg/L
1997	Fluometuron	ND	0.1 µg/L
1997	Fluoranthene	ND	0.1 µg/L
2001	Fluorene	ND	0.1 µg/L
1997	Fluridone	ND	0.1 µg/L
2001	gamma-BHC (Lindane)	ND	0.02 µg/L
2000	gamma-Chlordane	ND	0.1 µg/L
2001	Heptachlor	ND	0.04 µg/L
2001	Heptachlor epoxide	ND	0.02 µg/L
1997	2,2',3,3',4,4',6-Heptachlorobiphenyl	ND	0.1 µg/L
2001	Hexachlorobenzene	ND	0.1 µg/L
1997	2,2',4,4',5,6'-Hexachlorobiphenyl	ND	0.1 µg/L
1997	Hexachlorobutadiene	ND	0.2 µg/L
2001	Hexachlorocyclopentadiene	ND	0.1 µg/L
1997	Hexachloroethane	ND	0.2 µg/L
1997	Hexazinone	ND	0.1 µg/L
2000	3-Hydroxycarbofuran	ND	1.0ug/L/L
2001	Indeno(1,2,3-cd)pyrene	ND	0.1 µg/L
1997	Iprodione	ND	0.5 µg/L
1998	Isodrin	ND	0.050 µg/L
1997	Isofenphos	ND	0.5 µg/L
1997	Isophorone	ND	0.1 µg/L
1998	Kepone	ND	0.1 µg/L
1997	Leptophos	ND	0.5 µg/L
1997	Malathion	ND	0.1 µg/L
1997	Merphos	ND	0.1 µg/L
1997	Metalaxyl	ND	0.5 µg/L

ND = not detected; MDL = method detection limit

2000	Methomyl	ND	0.5ug/L
2001	Methoxychlor	ND	0.1 µg/L
2001	1-Methyl naphthalene	ND	0.1 µg/L
1997	2-Methyl naphthalene	ND	0.1 µg/L
1997	Methyl paraoxon	ND	0.1 µg/L
1997	Methyl parathion	ND	0.5 µg/L
2001	Metolachlor (Dual)	ND	0.1 µg/L
2001	Metribuzin (Sencor)	ND	0.1 µg/L
1997	Metsulfuron-methyl	ND	0.5 µg/L
1997	Mevinphos	ND	0.1 µg/L
1997	MGK-264	ND	0.1 µg/L
1997	MGK-326	ND	0.1 µg/L
1997	Mirex	ND	0.5 µg/L
1997	Molinate	ND	0.1 µg/L
1997	Monocrotophos	ND	0.5 µg/L
1997	Naled	ND	0.5 µg/L
1997	Napropamide	ND	0.1 µg/L
1993	cis-Nonachlor	ND	0.02 µg/L
1997	trans-Nonachlor	ND	0.1 µg/L
1997	Norflurazon	ND	0.1 µg/L
1997	2,2',3,3',4,5',6,6'-Octachlorobiphenyl	ND	0.1 µg/L
1997	Oryzalin	ND	0.5 µg/L
1997	Oxadiazon	ND	0.1 µg/L
2000	Oxamyl (Vydate)	ND	1.0ug/L
1997	Oxyfluorfen	ND	0.5 µg/L
1997	Parathion	ND	0.5 µg/L
1997	Pebulate	ND	0.1 µg/L
1997	Pendimethalin	ND	0.1 µg/L

ND = not detected; MDL = method detection limit

1997	Pentachlorobenzene	ND	0.5 µg/L
1997	2,2',3',4,5-Pentachlorobiphenyl	ND	0.1 µg/L
2001	Pentachlorophenol	ND	0.04 µg/L
1997	cis-Permethrin	ND	0.1 µg/L
1997	trans-Permethrin	ND	0.1 µg/L
2001	Phenanthrene	ND	0.1 µg/L
1997	Phorate	ND	0.1 µg/L
1997	Phosmet	ND	0.5 µg/L
1997	Phosphamidon	ND	0.5 µg/L
2001	Picloram (Tordon)	ND	0.1 µg/L
1997	Profluralin	ND	0.1 µg/L
1997	Prometon	ND	0.1 µg/L
1997	Prometryn	ND	0.1 µg/L
1997	Pronamide	ND	0.1 µg/L
2001	Propachlor	ND	0.1 µg/L
1997	Propanil	ND	0.1 µg/L
1997	Propazine	ND	0.1 µg/L
1997	Propiconazole	ND	0.5 µg/L
1997	Prothiofos	ND	0.5 µg/L
1997	Pyrene	ND	0.1 µg/L
2001	Simazine	ND	0.07 µg/L
1997	Simetryn	ND	0.1 µg/L
1997	Stirofos	ND	0.1 µg/L
1997	Sulfotep	ND	0.5 µg/L
1998	2,4,5-T	ND	0.20 µg/L
2001	2,4,5-TP (Silvex)	ND	0.1 µg/L
1997	Tebuthiuron	ND	1.0 µg/L
1997	TEPP	ND	5.0 µg/L

ND = not detected; MDL = method detection limit

1997	Terbacil	ND	0.1 µg/L
1997	Terbufos	ND	0.1 µg/L
1997	Terbutryn	ND	0.1 µg/L
1997	1,2,4,5-Tetrachlorobenzene	ND	1.0 µg/L
1997	2,2',4,4'-Tetrachlorobiphenyl	ND	0.1 µg/L
1997	Thiabendazole	ND	5.0 µg/L
1997	Thiobencarb	ND	0.1 µg/L
1997	Thionazin	ND	0.5 µg/L
1998	Toxaphene	ND	1.0 µg/L
1997	Triademefon	ND	0.1 µg/L
1997	Tribufos (DEF)	ND	0.1 µg/L
1997	Trichlorfon	ND	5.0 µg/L
1997	2,4,5-Trichlorobiphenyl	ND	0.1 µg/L
1997	Trichloronate	ND	0.5 µg/L
1997	Tricyclazole	ND	0.1 µg/L
1997	Trifluralin	ND	0.1 µg/L
1997	Vernolate	ND	0.1 µg/L
1997	Vinclozolin	ND	0.5 µg/L

ND = not detected

MDL = method detection limit

Analyses performed by Ann Arbor Water Treatment Plant, Michigan Department of Public Health, and private labs.

Revised: 8/21/01 js