

**POTOMAC WATER FILTRATION PLANT**  
**TAP WATER ANALYSIS - 2005**

<b>PARAMETER</b>	<b>UNIT OF MEASURE</b>	<b>YEARLY AVERAGE</b>	<b>MAXIMUM</b>	<b>MINIMUM</b>	<b>EPA LIMIT</b>
<b><u>GENERAL WATER QUALITY</u></b>					
Alkalinity	mg/L	85	116	38	
Color	Units	0	2	0	
Hardness	mg/L	128	176	44	
pH	S.U.	7.5	7.6	7.2	
Specific Conductance	µSiemens/cm@25°C	327	570	138	
Temperature	° C	17.0	33.7	1.2	
Threshold Odor	Units	1.0	1.0	1.0	
Turbidity <sup>+</sup>	NTU	0.04	0.06	0.02	TT
<b><u>METALS</u></b>					
Aluminum	µg/L	70	340	10	
Antimony	µg/L	n/d	2	n/d	6
Arsenic	µg/L	n/d	<2	n/d	10 <sup>1</sup>
Barium	µg/L	34	41	27	2000
Beryllium	µg/L	n/d	n/d	n/d	4
Cadmium	µg/L	n/d	n/d	n/d	5
Calcium	mg/L	37.1	53.7	25.5	
Chromium	µg/L	2	5	n/d	100
Copper (customer taps)	µg/L	123 (90% value)	0 samples >AL		1300 <sup>2</sup>
Iron	µg/L	79	398	34	
Lead (customer taps)	µg/L	2.1 (90% value)	1 sample >AL		15 <sup>2</sup>
Magnesium	mg/L	8.9	15.4	4.9	
Manganese	µg/L	2	9	n/d	
Mercury	µg/L	n/d	0.9	n/d	2
Potassium	mg/L	3.1	7.1	1.9	
Selenium	µg/L	n/d	<2	n/d	50
Sodium	mg/L	19.3	55.0	9.0	
Thallium	µg/L	n/d	n/d	n/d	2
Zinc	µg/L	3	39	<2	
<b><u>INORGANICS</u></b>					
Chloride	mg/L	35.1	100.6	23.3	
Chlorine	mg/L	2.7	3.9	1.9	4 <sup>3</sup>
Fluoride	mg/L	0.95	1.32	0.29	4
Nitrate	mg/L	1.8	3.06	0.72	10
Phosphorus	mg/L	0.32	1.56	0.16	
Sulfate	mg/L	34.9	70.9	11.3	
<b><u>BACTERIOLOGICAL *</u></b>					
Samples Total Coliform Positive	%/month	0.42	2.24	0	5
Samples <i>E. coli</i> Positive	%/month	0	0	0	n/a
No. of <i>E. coli</i> Positive Repeat Samples	Count	0			0
<b><u>DISINFECTION BYPRODUCTS &amp; PRECURSOR</u></b>					
Organic Carbon, Total	mg/L	1.76	5.45	1.05	TT
Haloacetic Acids (HAAs), Total *	µg/L	40.5 <sup>5</sup>	82.1	9.02	60 <sup>4</sup>
Trihalomethanes (THMs), Total *	µg/L	44.1 <sup>5</sup>	114	9.29	80 <sup>4</sup>
<b><u>PESTICIDES &amp; SYNTHETIC ORGANIC CHEMICALS (SOCs)</u></b>					
2,3,7,8-TCDD (Dioxin)	pg/L	n/d	n/d	n/d	30
2,4,5 TP (Silvex)	µg/L	n/d	n/d	n/d	50
2,4-D	µg/L	n/d	n/d	n/d	70
Alachlor	µg/L	n/d	n/d	n/d	2
Aldicarb	µg/L	n/d	n/d	n/d	3
Aldicarb sulfone	µg/L	n/d	n/d	n/d	2
Aldicarb sulfoxide	µg/L	n/d	n/d	n/d	4
Atrazine	µg/L	n/d	n/d	n/d	3
Benzo(a)pyrene	µg/L	n/d	n/d	n/d	0.2
Carbofuran	µg/L	n/d	n/d	n/d	40
Chlorinated biphenyls (PCBs)	µg/L	n/d	n/d	n/d	0.5
Chlordane	µg/L	n/d	n/d	n/d	2
Dalapon	µg/L	n/d	n/d	n/d	200

# POTOMAC WATER FILTRATION PLANT

## TAP WATER ANALYSIS - 2005

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
<b><u>PESTICIDES &amp; SYNTHETIC ORGANIC CHEMICALS (SOCs)</u></b>					
1,2-Dibromo3-chloropropane (DBCP)	µg/L	n/d	n/d	n/d	0.2
Di(2-ethylhexyl)adipate	µg/L	n/d	n/d	n/d	400
Di(2-ethylhexyl)phthalate	µg/L	0.78	2.84	n/d	6
Dinoseb	µg/L	n/d	n/d	n/d	7
Diquat	µg/L	n/d	n/d	n/d	20
1,2-Dibromoethane (EDB)	µg/L	n/d	n/d	n/d	0.05
Endothall	µg/L	n/d	n/d	n/d	100
Endrin	µg/L	n/d	n/d	n/d	2
Glyphosate	µg/L	n/d	n/d	n/d	700
Heptachlor	µg/L	n/d	n/d	n/d	0.4
Heptachlor epoxide	µg/L	n/d	n/d	n/d	0.2
Hexachlorobenzene	µg/L	n/d	n/d	n/d	1
Hexachlorocyclopentadiene	µg/L	n/d	n/d	n/d	50
Lindane	µg/L	n/d	n/d	n/d	0.2
Methoxychlor	µg/L	n/d	n/d	n/d	40
Oxamyl (vydate)	µg/L	n/d	n/d	n/d	200
Pentachlorophenol	µg/L	n/d	n/d	n/d	1
Picloram	µg/L	n/d	n/d	n/d	500
Simazine	µg/L	n/d	n/d	n/d	4
Toxaphene	µg/L	n/d	n/d	n/d	3
<b><u>VOLATILE ORGANIC CHEMICALS (VOCs)</u></b>					
1,1,1-Trichloroethane	µg/L	n/d	n/d	n/d	200
1,1,2-Trichloroethane	µg/L	n/d	n/d	n/d	5
1,1-Dichloroethene	µg/L	n/d	n/d	n/d	7
1,2,4-Trichlorobenzene	µg/L	n/d	n/d	n/d	70
1,2-Dichlorobenzene	µg/L	n/d	n/d	n/d	600
1,2-Dichloroethane	µg/L	n/d	n/d	n/d	5
1,2-Dichloropropane	µg/L	n/d	n/d	n/d	5
1,4-Dichlorobenzene	µg/L	n/d	n/d	n/d	75
Benzene	µg/L	n/d	<0.5	n/d	5
Carbon Tetrachloride	µg/L	n/d	<0.5	n/d	5
Chlorobenzene	µg/L	n/d	n/d	n/d	100
<i>cis</i> -1,2-Dichloroethene	µg/L	n/d	n/d	n/d	70
Dichloromethane	µg/L	n/d	n/d	n/d	5
Ethylbenzene	µg/L	n/d	n/d	n/d	700
Total Xylenes	µg/L	n/d	n/d	n/d	10000
Styrene	µg/L	n/d	n/d	n/d	100
Tetrachloroethene	µg/L	n/d	n/d	n/d	5
Toluene	µg/L	n/d	n/d	n/d	1000
<i>trans</i> -1,2-Dichloroethene	µg/L	n/d	n/d	n/d	100
Trichloroethene	µg/L	n/d	n/d	n/d	5
Vinyl Chloride	µg/L	n/d	n/d	n/d	2
<b><u>RADIONUCLIDES</u></b>					
Gross Alpha	pCi/L	<1	1	<1	15
Gross Beta	pCi/L	<3	4	<3	50 <sup>6</sup>
Combined Radium	pCi/L	<0.9	<0.9	<0.9	5

### **LEGENDS**

mg/L - milligrams per liter, equivalent to parts per million (ppm)  
 NTU - Nephelometric Turbidity Unit  
 TT - Treatment Technique  
 µg/L - micrograms per liter, equivalent to parts per billion (ppb)

n/d - not detected  
 pg/L - picograms per liter  
 pCi/L - picocuries per liter  
 \* - Distribution system samples  
 + - Filtered water  
 S.U. - Standard Unit

<sup>1</sup> - The EPA limit is effective January 23, 2006.

<sup>2</sup> - Action level for copper and lead. If more than 10% of tap water samples exceed the action level, water system is required to take additional steps to control corrosiveness of their water.

<sup>3</sup> - Maximum residual disinfectant level (MRDL)

<sup>4</sup> - Based on a running annual average of distribution system samples.

<sup>5</sup> - Highest running annual average

<sup>6</sup> - EPA considers 50 pCi/L to be the level of concern for beta particles.

**PATUXENT WATER FILTRATION PLANT**  
**TAP WATER ANALYSIS - 2005**

<b>PARAMETER</b>	<b>UNIT OF MEASURE</b>	<b>YEARLY AVERAGE</b>	<b>MAXIMUM</b>	<b>MINIMUM</b>	<b>EPA LIMIT</b>
<b><u>GENERAL WATER QUALITY</u></b>					
Alkalinity	mg/L	32	41	25	
Color	Units	2	50	0	
Hardness	mg/L	56	114	41	
pH	S.U.	7.5	7.8	7.2	
Specific Conductance	µSiemens/cm@25°C	166	297	117	
Temperature	° C	15.4	27.4	3.7	
Threshold Odor	Units	1.1	2.6	1.0	
Turbidity <sup>+</sup>	NTU	0.04	0.06	0.03	TT
<b><u>METALS</u></b>					
Aluminum	µg/L	27	331	9	
Antimony	µg/L	n/d	<2	n/d	6
Arsenic	µg/L	n/d	<2	n/d	10 <sup>1</sup>
Barium	µg/L	21	26	17	2000
Beryllium	µg/L	n/d	n/d	n/d	4
Cadmium	µg/L	n/d	n/d	n/d	5
Calcium	mg/L	15.1	20.3	11.0	
Chromium	µg/L	<2	3	n/d	100
Copper (customer taps)	µg/L	123 (90% value)	0 samples >AL		1300 <sup>2</sup>
Iron	µg/L	35	146	12	
Lead (customer taps)	µg/L	2.1 (90% value)	1 sample >AL		15 <sup>2</sup>
Magnesium	mg/L	4.2	4.7	3.6	
Manganese	µg/L	4	164	n/d	
Mercury	µg/L	n/d	<0.2	n/d	2
Potassium	mg/L	2.7	3.7	2.2	
Selenium	µg/L	n/d	<2	n/d	50
Sodium	mg/L	10.4	13.9	8.6	
Thallium	µg/L	n/d	n/d	n/d	2
Zinc	µg/L	<2	4	<2	
<b><u>INORGANICS</u></b>					
Chloride	mg/L	25.3	36.3	18.9	
Chlorine	mg/L	1.8	2.3	1.1	4 <sup>3</sup>
Fluoride	mg/L	1.03	1.46	0.01	4
Nitrate	mg/L	1.16	2.18	0.75	10
Phosphorus	mg/L	0.26	0.39	n/d	
Sulfate	mg/L	6.7	10.6	<5	
<b><u>BACTERIOLOGICAL *</u></b>					
Samples Total Coliform Positive	%/month	0.42	2.24	0	5
Samples <i>E. coli</i> Positive	%/month	0	0	0	n/a
No.of <i>E. coli</i> Positive Repeat Samples	Count	0			0
<b><u>DISINFECTION BYPRODUCTS &amp; PRECURSOR</u></b>					
Organic Carbon, Total	mg/L	1.55	2.40	1.18	TT
Haloacetic Acids (HAAs), Total *	µg/L	40.5 <sup>5</sup>	82.1	9.02	60 <sup>4</sup>
Trihalomethanes (THMs), Total *	µg/L	44.1 <sup>5</sup>	114	9.29	80 <sup>4</sup>
<b><u>PESTICIDES &amp; SYNTHETIC ORGANIC CHEMICALS (SOCs)</u></b>					
2,3,7,8-TCDD (Dioxin)	pg/L	n/d	n/d	n/d	30
2,4,5 TP (Silvex)	µg/L	n/d	n/d	n/d	50
2,4-D	µg/L	n/d	n/d	n/d	70
Alachlor	µg/L	n/d	n/d	n/d	2
Aldicarb	µg/L	n/d	n/d	n/d	3
Aldicarb sulfone	µg/L	n/d	n/d	n/d	2
Aldicarb sulfoxide	µg/L	n/d	n/d	n/d	4
Atrazine	µg/L	n/d	n/d	n/d	3
Benzo(a)pyrene	µg/L	n/d	n/d	n/d	0.2
Carbofuran	µg/L	n/d	n/d	n/d	40
Chlorinated biphenyls (PCBs)	µg/L	n/d	n/d	n/d	0.5
Chlordane	µg/L	n/d	n/d	n/d	2
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1,2-Dibromo3-chloropropane (DBCP)	µg/L	n/d	n/d	n/d	0.2
Di(2-ethylhexyl)adipate	µg/L	n/d	n/d	n/d	400
Di(2-ethylhexyl)phthalate	µg/L	0.64	1.62	n/d	6
Dinoseb	µg/L	n/d	n/d	n/d	7
Diquat	µg/L	n/d	n/d	n/d	20
1,2-Dibromoethane (EDB)	µg/L	n/d	n/d	n/d	0.05
Endothall	µg/L	n/d	n/d	n/d	100
Endrin	µg/L	n/d	n/d	n/d	2
Glyphosate	µg/L	n/d	n/d	n/d	700
Heptachlor	µg/L	n/d	n/d	n/d	0.4
Heptachlor epoxide	µg/L	n/d	n/d	n/d	0.2
Hexachlorobenzene	µg/L	n/d	n/d	n/d	1
Hexachlorocyclopentadiene	µg/L	n/d	n/d	n/d	50
Lindane	µg/L	n/d	n/d	n/d	0.2
Methoxychlor	µg/L	n/d	n/d	n/d	40
Oxamyl (vydate)	µg/L	n/d	n/d	n/d	200
Pentachlorophenol	µg/L	n/d	n/d	n/d	1
Picloram	µg/L	n/d	n/d	n/d	500
Simazine	µg/L	n/d	n/d	n/d	4
Toxaphene	µg/L	n/d	n/d	n/d	3
<b><u>VOLATILE ORGANIC CHEMICALS (VOCs)</u></b>					
1,1,1-Trichloroethane	µg/L	n/d	n/d	n/d	200
1,1,2-Trichloroethane	µg/L	n/d	n/d	n/d	5
1,1-Dichloroethene	µg/L	n/d	n/d	n/d	7
1,2,4-Trichlorobenzene	µg/L	n/d	<0.5	n/d	70
1,2-Dichlorobenzene	µg/L	n/d	n/d	n/d	600
1,2-Dichloroethane	µg/L	n/d	n/d	n/d	5
1,2-Dichloropropane	µg/L	n/d	n/d	n/d	5
1,4-Dichlorobenzene	µg/L	n/d	n/d	n/d	75
Benzene	µg/L	n/d	<0.5	n/d	5
Carbon Tetrachloride	µg/L	n/d	n/d	n/d	5
Chlorobenzene	µg/L	n/d	n/d	n/d	100
<i>cis</i> -1,2-Dichloroethene	µg/L	n/d	n/d	n/d	70
Dichloromethane	µg/L	n/d	n/d	n/d	5
Ethylbenzene	µg/L	n/d	n/d	n/d	700
Total Xylenes	µg/L	n/d	n/d	n/d	10000
Styrene	µg/L	n/d	n/d	n/d	100
Tetrachloroethene	µg/L	n/d	<0.5	n/d	5
Toluene	µg/L	n/d	n/d	n/d	1000
<i>trans</i> -1,2-Dichloroethene	µg/L	n/d	n/d	n/d	100
Trichloroethene	µg/L	n/d	n/d	n/d	5
Vinyl Chloride	µg/L	n/d	n/d	n/d	2
<b><u>RADIONUCLIDES</u></b>					
Gross Alpha	pCi/L	<1	1	<1	15
Gross Beta	pCi/L	4	5	<3	50 <sup>6</sup>
Combined Radium	pCi/L	<1	<1	<1	5

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