WSSC TAP WATER ANALYSIS - 2006

POTOMAC WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
GENERAL WATER QUALITY					
Alkalinity	mg/L	82	115	35	
Color	Units	0	2	0	
Hardness	mg/L	125	169	54	
pH	S.U.	7.5	7.7	7.3	
Specific Conductance	µSiemens/cm@25ºC	325	432	150	
Temperature	º C	18.0	34.3	5.2	
Threshold Odor	Units	1.0	1.0	1.0	
Turbidity [+]	NTU	0.03	0.06	0.02	TT
METALS					
Aluminum	µg/L	70	300	20	
Antimony	µg/L	n/d	<2	n/d	6
Arsenic	µg/L	n/d	<2	n/d	10 [1]
Barium	µg/L	31	40	19	2000
Beryllium	µg/L	n/d	n/d	n/d	4
Cadmium	µg/L	n/d	n/d	n/d	5
Calcium	mg/L	35.9	50.2	13.3	
Chromium	µg/L	<2	5	n/d	100
Copper	µg/L	2	5	<2	
Iron	µg/L	67	118	17	
Lead	µg/L	n/d	n/d	n/d	
Magnesium	mg/L	8.4	12.6	3.1	
Manganese	µg/L	<2	19	n/d	
Mercury	µg/L	n/d	n/d	n/d	2
Potassium	mg/L	3.0	4.2	2.1	
Selenium	µg/L	n/d	n/d	n/d	50
Sodium	mg/L	16.6	45.1	7.7	
Thallium	µg/L	n/d	<2	n/d	2
Zinc	µg/L	<2	12	n/d	
INORGANICS					
Chloride	mg/L	33.2	73.7	21.0	
Residual Chlorine	mg/L	2.4	3.4	1.6	TT=>0.2
Fluoride	mg/L	0.91	1.28	0.44	4
Nitrate	mg/L	1.71	2.67	0.28	10
Nitrite	mg/L	n/d	<0.02	n/d	1
Phosphorus	mg/L	0.33	0.42	0.26	
Sulfate	mg/L	32.9	71.0	6.6	
DISINFECTION BYPRODUCT PRECURSOR					
Total Organic Carbon	mg/L	1.79	2.73	1.09	TT
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS (SOCs)					
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
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

WSSC TAP WATER ANALYSIS - 2006

POTOMAC WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS (SOCs)					
Di(2-ethylhexyl)phthalate	µg/L	<2	4.37	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
VOLATILE ORGANIC CHEMICALS (VOCs)					
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	<0.5	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	<0.5	n/d	75
Benzene	µg/L	n/d	n/d	n/d	5
Carbon Tetrachloride	µg/L	n/d	n/d	n/d	5
Chlorobenzene	µg/L	n/d	n/d	n/d	100
cis -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
trans -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
1,2,3-Trichlorobenzene	µg/L	n/d	<0.5	n/d	
1,2,3-Trichloropropane	µg/L	n/d	<0.5	n/d	
1,3,5-Trimethylbenzene	µg/L	n/d	<0.5	n/d	
1,3-Dichlorobenzene	µg/L	n/d	<0.5	n/d	
4-Chlorotoluene	µg/L	n/d	<0.5	n/d	
Bromomethane	µg/L	<0.5	<0.5	n/d	
Hexachlorobutadiene	µg/L	<0.5	<0.5	n/d	
Isopropylbenzene	µg/L	n/d	<0.5	n/d	
n-Butylbenzene	µg/L	<0.5	<0.5	n/d	
n-Propylbenzene	µg/L	n/d	<0.5	n/d	
Naphthalene	µg/L	n/d	<0.5	n/d	
p-Isopropyltoluene	µg/L	n/d	<0.5	n/d	
s-Butylbenzene	µg/L	n/d	<0.5	n/d	
RADIONUCLIDES					
Gross Alpha	pCi/L	3	3	2	15

WSSC TAP WATER ANALYSIS - 2006

POTOMAC WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
RADIONUCLIDES					
Gross Beta	pCi/L	<3	4	<3	50 [2]
Radium 228	pCi/L	<1.5	<1.5	<0.8	

CUSTOMER TAP [3]

PARAMETER	UNIT OF MEASURE	90th PERCENTILE	# of SITES [4] ABOVE AL	ACTION LEVEL (AL)	EPA LIMIT
METALS					
Copper	µg/L	123	0 sample	1300	
Lead	µg/L	2.1	1 sample	15	

DISTRIBUTION SYSTEM

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
BACTERIOLOGICAL					
Samples Total Coliform Positive	%/month	0.37	1.73	0	5
Samples *E. coli* Positive	%/month	0.08	0.49	0	
No.of *E. coli* Positive Repeat Samples	Count	0	0	0	0
DISINFECTANT & DISINFECTION BYPRODUCTS					
Residual Chlorine	mg/L	1.44 [5]	3.90	n/d	4 [6]
Haloacetic Acids (HAAs), Total	µg/L	37.8 [7]	106.1	4.68 [++]	60 [8]
Trihalomethanes (THMs), Total	µg/L	44.6 [7]	115.1 [+++]	7.98 [+++]	80 [8]

LEGENDS

mg/L - milligrams per liter, equal to parts per million (ppm). The equivalent of one minute in 2 years or one penny in $10,000.
S.U. - Standard Unit
+ - Filtered water
++ - Previously reported "8.14" as Minimum; amended to include inadvertently excluded special monitoring data.
+++ - Previously reported "9.25" as Minimum and "105.6" as Maximum; amended to include inadvertently excluded special monitoring data.
NTU - Nephelometric Turbidity Unit
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.
µg/L - micrograms per liter, equal to parts per billion (ppb). The equivalent of one minute in 2,000 years or one penny in $10 million.
n/d - not detected
pg/L - picograms per liter
pCi/L - picocuries per liter

[1] - The EPA limit became effective January 23, 2006.
[2] - EPA considers 50 pCi/L to be the level of concern for beta particles.
[3] - Most recent sampling, between July and December 2005.
[4] - If more than 10% of sites exceed action level, system is required to take additional steps to control corrosiveness of their water.
[5] - Running annual average
[6] - Maximum residual disinfectant level (MRDL) based on running annual average. The highest level of a disinfectant allowed in drinking water.
[7] - Highest running annual average
[8] - Based on running annual average

WSSC TAP WATER ANALYSIS - 2006

PATUXENT WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
GENERAL WATER QUALITY					
Alkalinity	mg/L	32	39	27	
Color	Units	1	15	0	
Hardness	mg/L	56	68	44	
pH	S.U.	7.5	7.8	7.2	
Specific Conductance	µSiemens/cm@25ºC	171	425	150	
Temperature	º C	15.4	28.1	4.7	
Threshold Odor	Units	1.1	2.3	1.0	
Turbidity [+]	NTU	0.04	0.07	0.03	TT
METALS					
Aluminum	µg/L	34	507	n/d	
Antimony	µg/L	n/d	<2	n/d	6
Arsenic	µg/L	n/d	<2	n/d	10 [1]
Barium	µg/L	21	25	16	2000
Beryllium	µg/L	n/d	n/d	n/d	4
Cadmium	µg/L	n/d	n/d	n/d	5
Calcium	mg/L	14.9	18.5	12.1	
Chromium	µg/L	<2	<2	n/d	100
Copper	µg/L	20	60	4	
Iron	µg/L	33	78	4	
Lead	µg/L	n/d	n/d	n/d	
Magnesium	mg/L	4.2	5.1	3.2	
Manganese	µg/L	2	9	n/d	
Mercury	µg/L	n/d	n/d	n/d	2
Potassium	mg/L	2.8	3.7	2.0	
Selenium	µg/L	n/d	n/d	n/d	50
Sodium	mg/L	9.8	12.4	6.9	
Thallium	µg/L	n/d	<2	n/d	2
Zinc	µg/L	<2	4	n/d	
INORGANICS					
Chloride	mg/L	26.8	41.4	20.9	
Residual Chlorine	mg/L	1.6	2.3	1.0	TT=>0.2
Fluoride	mg/L	0.99	1.30	0.49	4
Nitrate	mg/L	1.18	2.16	0.27	10
Nitrite	mg/L	n/d	<0.02	n/d	1
Phosphorus	mg/L	0.28	0.52	n/d	
Sulfate	mg/L	7.2	27.9	<5	
DISINFECTION BYPRODUCT PRECURSOR					
Total Organic Carbon	mg/L	1.78	2.61	1.08	TT
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS (SOCs)					
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
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

WSSC TAP WATER ANALYSIS - 2006

PATUXENT WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
PESTICIDES & SYNTHETIC ORGANIC CHEMICALS (SOCs)					
Di(2-ethylhexyl)phthalate	µg/L	<2	3.87	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
VOLATILE ORGANIC CHEMICALS (VOCs)					
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	<0.5	<0.5	n/d	70
1,2-Dichlorobenzene	µg/L	n/d	<0.5	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	<0.5	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	<0.5	n/d	100
cis -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	<0.5	n/d	100
Tetrachloroethene	µg/L	n/d	<0.5	n/d	5
Toluene	µg/L	n/d	n/d	n/d	1000
trans -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
1,2,3-Trichlorobenzene	µg/L	n/d	<0.5	n/d	
1,3,5-Trimethylbenzene	µg/L	n/d	<0.5	n/d	
1,3-Dichlorobenzene	µg/L	n/d	<0.5	n/d	
2-Chlorotoluene	µg/L	n/d	<0.5	n/d	
4-Chlorotoluene	µg/L	n/d	<0.5	n/d	
Bromobenzene	µg/L	n/d	<0.5	n/d	
Bromomethane	µg/L	<0.5	<0.5	n/d	
Chloromethane	µg/L	n/d	<0.5	n/d	
Hexachlorobutadiene	µg/L	n/d	<0.5	n/d	
Isopropylbenzene	µg/L	n/d	<0.5	n/d	
n-Butylbenzene	µg/L	<0.5	<0.5	n/d	
n-Propylbenzene	µg/L	n/d	<0.5	n/d	
Naphthalene	µg/L	<0.5	<0.5	n/d	
s-Butylbenzene	µg/L	<0.5	<0.5	n/d	
t-Butylbenzene	µg/L	n/d	<0.5	n/d	

WSSC TAP WATER ANALYSIS - 2006

PATUXENT WATER FILTRATION PLANT

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
RADIONUCLIDES					
Gross Alpha	pCi/L	3	4	2	15
Gross Beta	pCi/L	5	7	3	50 [2]
Radium 228	pCi/L	<1.5	<1.5	<0.8	

CUSTOMER TAP [3]

PARAMETER	UNIT OF MEASURE	90th PERCENTILE	# of SITES [4] ABOVE AL	ACTION LEVEL (AL)	EPA LIMIT
METALS					
Copper	µg/L	123	0 sample	1300	
Lead	µg/L	2.1	1 sample	15	

DISTRIBUTION SYSTEM

PARAMETER	UNIT OF MEASURE	YEARLY AVERAGE	MAXIMUM	MINIMUM	EPA LIMIT
BACTERIOLOGICAL					
Samples Total Coliform Positive	%/month	0.37	1.73	0	5
Samples *E. coli* Positive	%/month	0.08	0.49	0	
No.of *E. coli* Positive Repeat Samples	Count	0	0	0	0
DISINFECTANT & DISINFECTION BYPRODUCTS					
Residual Chlorine	mg/L	1.44 [5]	3.90	n/d	4 [6]
Haloacetic Acids (HAAs), Total	µg/L	37.8 [7]	106.1	4.68 [++]	60 [8]
Trihalomethanes (THMs), Total	µg/L	44.6 [7]	115.1 [+++]	7.98 [+++]	80 [8]

LEGENDS

mg/L - milligrams per liter, equal to parts per million (ppm). The equivalent of one minute in 2 years or one penny in $10,000.
S.U. - Standard Unit
+ - Filtered water
++ - Previously reported "8.14" as Minimum; amended to include inadvertently excluded special monitoring data.
+++ - Previously reported "9.25" as Minimum and "105.6" as Maximum; amended to include inadvertently excluded special monitoring data.
NTU - Nephelometric Turbidity Unit
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.
µg/L - micrograms per liter, equal to parts per billion (ppb). The equivalent of one minute in 2,000 years or one penny in $10 million.
n/d - not detected
pg/L - picograms per liter
pCi/L - picocuries per liter

[1] - The EPA limit became effective January 23, 2006.
[2] - EPA considers 50 pCi/L to be the level of concern for beta particles.
[3] - Most recent sampling, between July and December 2005.
[4] - If more than 10% of sites exceed action level, system is required to take additional steps to control corrosiveness of their water.
[5] - Running annual average
[6] - Maximum residual disinfectant level (MRDL) based on running annual average. The highest level of a disinfectant allowed in drinking water.
[7] - Highest running annual average
[8] - Based on running annual average