



## Washington Aqueduct

## U.S. Army Corps of Engineers

# Annual Report of Water Analysis 2004

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MARCH 4, 2005





WASHINGTON AQUEDUCT, US ARMY CORPS OF ENGINEERS  
ANNUAL REPORT OF WATER ANALYSIS (2004)

Potomac River Raw Water Supply

	Miscellaneous Physical Parameters										Inorganic Ions								Microorganisms						
	pH	ALKALINITY	CONDUCTIVITY	DISSOLVED SOLIDS	SUSPENDED SOLIDS	TEMPERATURE	TOTAL HARDNESS	TOTAL ORG. CARBON	TOTAL SOLIDS	TURBIDITY	TOTAL AMMONIA	BROMIDE	CHLORIDE	FLUORIDE	NITRATE	NITRITE	ORTHOPHOSPHATE as PO4	PERCHLORATE	SULFATE	ALGAE COUNT	TOTAL COLIFORM	E. COLI	GIARDIA	CRYPTOSPORIDIUM	VIRUS
		ppm	uS/cm	ppm	ppm	F	ppm	ppm	ppm	NTU	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	org/mL	MPN/100mL	MPN/100mL	cysts/10L	oocysts/10L	MPN/100L
Jan	7.3	75	270	199	13	34	124	1.39	212	3	ND	ND	26	0.08	2.82	ND	ND	< 4	27	16	1037	29	ND	ND	----
Feb	7.5	64	243	152	28	39	105	2.55	180	10	0.11	ND	21	0.11	1.77	ND	ND	< 4	22	168	4091	111	ND	ND	70.7
Mar	7.7	61	259	136	18	49	98	2.13	154	4	ND	ND	19	0.11	1.80	ND	ND	< 4	24	304	906	28	ND	ND	----
Apr	7.6	57	233	128	173	54	91	2.59	301	41	ND	ND	18	0.10	1.71	ND	ND	< 4	19	425	3743	601	ND	ND	----
May	7.7	72	268	159	41	70	99	2.74	200	37	ND	ND	17	0.13	1.62	ND	ND	< 4	19	457	6120	840	ND	ND	66.0
Jun	7.7	77	283	196	70	74	107	3.64	266	45	ND	ND	18	0.14	2.00	ND	ND	< 4	23	211	10596	238	ND	ND	----
Jul	7.8	94	324	226	13	76	129	2.88	239	9	0.05	ND	25	0.16	1.50	ND	0.06	< 4	31	201	6777	118	ND	ND	----
Aug	7.9	92	316	218	11	79	128	3.20	229	13	ND	ND	22	0.15	1.70	ND	0.06	< 4	29	155	4838	197	ND	ND	----
Sep	7.9	78	272	141	152	73	108	4.08	293	65	0.05	ND	15	0.14	1.50	ND	0.16	< 4	25	90	4774	1510	ND	ND	22.2
Oct	8.1	98	340	221	7	60	128	2.67	228	13	ND	ND	20	0.15	2.11	ND	0.31	< 4	29	48	1753	41	ND	ND	----
Nov	8.0	88	289	213	5	53	125	2.94	218	7	ND	ND	19	0.14	1.61	ND	0.32	< 4	33	80	1200	53	ND	ND	33.8
Dec	7.9	69	243	162	32	43	95	2.49	194	14	ND	ND	14	0.10	2.07	ND	0.13	< 4	24	80	3282	1160	ND	ND	----
Avg	7.8	77	278	179	47	59	111	2.78	226	22	ND	ND	20	0.13	1.85	ND	0.08	< 4	25	186	4093	411	ND	ND	48.2
Max	8.1	98	340	226	173	79	129	4.08	301	65	0.11	ND	26	0.16	2.82	ND	0.32	< 4	33	457	10596	1510	ND	ND	70.7
Min	7.3	57	233	128	5	34	91	1.39	154	3	ND	ND	14	0.08	1.50	ND	ND	< 4	19	16	906	28	ND	ND	22.2

	Metals																												
	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	CADMIUM	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	LITHIUM	MAGNESIUM	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	POTASSIUM	SELENIUM	SILVER	SODIUM	STRONTIUM	THALLIUM	THORIUM	URANIUM	VANADIUM	ZINC	
	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Jan	205	ND	ND	34.0	ND	ND	36	ND	ND	1.7	133	ND	1.9	8	43	ND	ND	2.0	2.3	ND	ND	19.0	123	ND	ND	ND	ND	ND	2.0
Feb	309	ND	ND	40.3	ND	ND	30	ND	ND	2.6	71	0.5	2.7	7	27	0.3	1.0	1.2	----	0.5	ND	----	181	ND	ND	ND	ND	ND	2.5
Mar	182	ND	ND	29.9	ND	ND	28	ND	ND	2.4	171	ND	1.8	7	42	ND	ND	1.2	----	ND	ND	----	120	ND	ND	ND	ND	ND	2.0
Apr	196	ND	ND	34.9	ND	ND	25	ND	ND	2.5	212	ND	2.1	6	71	ND	0.7	1.1	1.8	0.5	ND	9.8	122	ND	ND	ND	ND	0.5	5.6
May	284	ND	0.5	38.3	ND	ND	29	0.7	ND	3.0	385	ND	1.7	7	84	ND	0.5	1.4	----	0.5	ND	----	114	ND	ND	ND	ND	1.1	3.2
Jun	253	ND	0.7	44.7	ND	ND	31	2.3	ND	3.1	273	ND	2.3	7	75	ND	0.5	1.1	----	0.7	ND	----	165	ND	ND	ND	ND	1.1	1.8
Jul	225	ND	0.5	42.1	ND	ND	37	ND	ND	3.5	ND	ND	2.1	9	71	ND	1.3	1.2	3.3	ND	ND	13.0	180	ND	ND	ND	ND	1.2	1.8
Aug	374	ND	0.8	37.7	ND	ND	37	1.7	ND	4.6	441	0.8	1.9	9	102	ND	1.1	1.7	----	ND	ND	----	124	ND	ND	ND	ND	2.2	6.2
Sep	204	ND	0.7	46.2	ND	ND	31	0.8	ND	4.5	99	ND	3.0	8	35	ND	1.7	1.1	----	ND	ND	----	224	ND	ND	ND	ND	1.5	1.5
Oct	427	ND	0.6	43.1	ND	ND	37	ND	ND	6.5	529	0.9	1.3	8	49	ND	ND	1.5	3.3	ND	ND	15.0	117	ND	ND	ND	ND	1.3	3.1
Nov	283	ND	ND	49.3	ND	ND	37	ND	ND	5.7	226	ND	2.6	8	50	ND	1.2	1.2	----	ND	ND	----	216	ND	ND	ND	ND	0.7	2.0
Dec	260	ND	ND	31.6	ND	ND	27	ND	ND	4.4	318	0.6	ND	7	33	ND	ND	1.2	----	ND	ND	----	104	ND	ND	ND	ND	0.7	3.4
Avg	267	ND	ND	39.3	ND	ND	32	0.5	ND	3.7	238	ND	1.9	8	57	ND	0.6	1.3	2.7	ND	ND	14.2	149	ND	ND	ND	ND	0.8	2.9
Max	427	ND	0.8	49.3	ND	ND	37	1.7	ND	6.5	529	0.9	3.0	9	102	0.3	1.7	2.0	3.3	0.7	ND	19.0	224	ND	ND	ND	ND	2.2	6.2
Min	182	ND	ND	29.9	ND	ND	25	ND	ND	1.7	ND	ND	ND	6	27	ND	ND	1.1	1.8	ND	ND	9.8	104	ND	ND	ND	ND	ND	1.5

ppb = Parts Per Billion

ppm = Parts Per Million

ND = Not Detected

"----" = No Analysis Required









