



**WATER QUALITY LABORATORY  
INORGANIC ANALYSES  
PERIOD OF 01/01/2009 TO 12/31/2009  
Potomac River-Corbais Water Treatment Plant Source**

Parameter	Units <sup>1</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aggressive Index Number	Units	11	--	12	11	--	12	12	13	13	11	12	12	12	13	11	-	10
Alkalinity, Bicarbonate	mg/L	86	61	103	62	--	68	104	89	97	78	98	90	85	104	61	-	11
Alkalinity, Carbonate	mg/L	0	0	0	0	--	0	0	16	12	0	0	0	3	16	0	-	11
Alkalinity, Hydroxyl	mg/L	0	0	0	0	--	0	0	0	0	0	0	0	0	0	0	-	11
Alkalinity, Phenolphthalein	mg/L	0	0	0	0	--	0	0	8	6	0	0	0	1	8	0	-	11
Alkalinity, Total	mg/L	86	61	103	62	--	68	104	105	109	78	98	90	88	109	61	-	11
Bromide	mg/L	0.03	0.02	0.03	0.02	0.03	0.02	0.03	0.03	0.03	0.02	BQL	0.02	0.02	0.03	BQL	0.01	12
Carbon Dioxide	mg/L	4	2	2	4	--	2	5	0	0	3	4	4	3	5	0	-	11
Chloride	mg/L	20.4	18.1	19.0	27.3	--	16.2	19.7	20.2	29.6	20.8	16.0	14.1	20.1	29.6	14.1	5.0	11
Color	Units	15	20	42	37	--	46	17	33	14	73	26	21	31	73	14	0	11
Dissolved Oxygen	mg/L	11.0	12.9	9.7	9.5	--	6.8	7.0	8.6	10.1	8.8	8.7	--	9.3	12.9	6.8	0.0	10
Fluoride	mg/L	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.2	11
Hardness, Calcium	mg/L	82	76	108	62	--	78	98	92	108	78	96	88	88	108	62	-	11
Hardness, Total	mg/L	124	109	170	100	--	101	158	145	175	106	148	116	132	175	100	-	11
Methylene Blue Activated Substances	mg/L	--	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.050	1
N, Ammonia (Ammonia as N)	mg/L	BQL	BQL	BQL	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.20	11
N, Nitrate (Nitrate as N)	mg/L	1.2	1.0	0.8	0.7	--	--	0.8	0.6	0.8	--	1.1	1.2	0.9	1.2	0.6	0.2	9
N, Nitrite (Nitrite as N)	mg/L	BQL	BQL	--	0.01	--	BQL	0.01	BQL	BQL	0.01	0.01	0.01	BQL	0.01	BQL	0.01	10
pH	Units	7.6	7.8	8.1	7.5	--	7.8	7.6	8.9	8.8	7.7	7.7	7.7	7.9	8.9	7.5	-	11
Phosphate as Phosphorous	mg/L	--	BQL	BQL	--	--	BQL	--	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	0.10	8
Solids, Total	mg/L	191	163	222	162	--	158	225	209	252	191	185	184	195	252	158	1	11
Solids, Total Dissolved	mg/L	179	160	205	152	--	141	215	202	258	172	181	165	185	258	141	1	11
Solids, Total Suspended	mg/L	1	2	4	11	--	8	5	4	1	8	1	3	4	11	1	1	11
Specific Conductivity	µmhos/cm	295	268	347	254	--	216	344	317	397	290	302	278	301	397	216	0	11
Sulfate	mg/L	28.7	37.4	44.4	17.0	--	16.2	39.4	37.3	45.0	23.6	33.8	28.4	31.9	45.0	16.2	10.0	11
Temperature	°C	5.1	5.9	10.5	11.9	--	23.9	26.0	28.8	22.9	10.9	13.4	7.1	15.1	28.8	5.1	-	11
Threshold Odor Number	Units	4	9	5	8	--	6	6	3	5	7	6	7	6	9	3	0	11
Total Organic Carbon	mg/L	2.1	2.3	2.7	3.3	--	4.0	2.4	3.0	2.9	6.7	3.3	2.6	3.2	6.7	2.1	0.5	11
Turbidity	NTU	3.9	5.0	3.0	11	--	12	5.0	2.9	1.5	20	2.9	4.0	6.5	20	1.5	0.00	11

BQL = The lowest quantitation limit of all analyses for the particular parameter, Below Quantitation Limit.

<sup>1</sup>mg/L=milligrams per liter, µg/L=micrograms per liter



**WATER QUALITY LABORATORY  
METAL ANALYSES  
PERIOD OF 01/01/2009 TO 12/31/2009  
Potomac River-Corbais Water Treatment Plant Source**

Parameter	Units <sup>1</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aluminum	µg/L	81.3	--	--	418	--	--	80.8	--	--	850	--	--	358	850	80.8	25.0	4
Antimony	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Arsenic	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Barium	µg/L	36.8	--	--	37.5	--	--	49.5	--	--	31.7	--	--	38.9	49.5	31.7	25.0	4
Beryllium	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Cadmium	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	0.9	4
Calcium	mg/L	35.9	--	--	23.6	--	--	39.2	--	--	31.4	--	--	32.5	39.2	23.6	1.0	4
Chromium	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Copper	µg/L	BQL	BQL	BQL	27.5	--	33.0	BQL	BQL	BQL	BQL	BQL	BQL	BQL	33.0	BQL	25.0	11
Iron	µg/L	218	161	129	654	--	763	111	121	33.7	880	130	146	304	880	33.7	25.0	11
Lead	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Magnesium	mg/L	9.4	--	--	6.4	--	--	12.5	--	--	8.0	--	--	9.1	12.5	6.4	1.0	4
Manganese	µg/L	30.1	BQL	31.5	65.1	--	65.4	BQL	BQL	BQL	BQL	BQL	BQL	BQL	65.4	BQL	25.0	11
Mercury	µg/L	BQL	--	--	--	--	--	BQL	--	--	--	--	--	BQL	BQL	BQL	0.50	2
Nickel	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Potassium	mg/L	3.0	--	--	2.2	--	--	2.6	--	--	6.2	--	--	3.5	6.2	2.2	1.0	4
Selenium	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Silicon	mg/L	3.1	--	--	4.6	--	--	1.4	--	--	5.2	--	--	3.6	5.2	1.4	1.0	4
Silver	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	5.0	4
Sodium	mg/L	11.8	11.2	14.1	15.4	--	10.4	13.9	14.9	20.3	12.8	12.2	10.1	13.4	20.3	10.1	1.0	11
Thallium	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	2.0	4
Zinc	µg/L	BQL	--	--	BQL	--	--	BQL	--	--	BQL	--	--	BQL	BQL	BQL	25.0	4

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