

WATER QUALITY LABORATORY INORGANIC ANALYSES PERIOD OF 01/01/2004 TO 12/31/2004 Corbalis Treatment Plant Finished Water

Parameter	MCL ¹	Units ²	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Quant Limit	# of Tests
Aggressive Index Number	02	Units		10	11	11	11	11		11	11	11	12		11	12	10	-	31
Alkalinity, Bicarbonate		mg/L		57	52	63	77	90		101	63	101	82		78	102	51	-	31
Alkalinity, Carbonate		mg/L		0	0	0	0	0		0	0	0	0		0	0	0	-	31
Alkalinity, Hydroxyl		mg/L		0	0	0	0	0		0	0	0	0		0	0	0	-	31
Alkalinity, Phenolphthalein		mg/L		0	0	0	0	0		0	0	0	0		0	0	0	-	31
Alkalinity, Total		mg/L		57	52	63	77	90		101	63	101	82		78	102	51	-	31
Bromate	10 P	μg/L	BQL			BQL			BQL	BQL		BQL			BQL	BQL	BQL	5	17
Bromide		mg/L		BQL	0.01	BQL	0.01	BQL		BQL	BQL	BQL	BQL		BQL	0.02	BQL	0.01	31
Carbon Dioxide		mg/L		14	8	4	11	7		6	10	10	4		8	19	3	-	31
Chemical Oxygen Demand		mg/L		BQL				BQL							BQL	BQL	BQL	5.0	6
Chloride	250.0 S	mg/L		37.6	18.2	22.4	23.0	21.1		23.0	21.7	21.8	20.6		23.1	37.7	18.0	5.0	31
Chlorine, Free		mg/L		0.2	0.2	3.9	4.0	3.7		0.3	0.1	0.1	0.1		1.2	4.1	0.0	0.0	31
Chlorine, Total		mg/L		3.6	3.5	4.0	4.1	3.9		3.5	3.3	3.8	3.5		3.7	4.2	3.1	0.0	31
Color	15 S	Units		5	0	1	2	2		1	2	0			2	8	0	0	27
Dissolved Oxygen		mg/L		15.8	15.1	14.4	14.1	13.7		12.4	13.9	14.2	16.0		14.4	16.1	12.0	0.0	31
Fluoride	4.0/2.0 P/S	mg/L		0.9	0.9	0.9	0.9	1.0		0.9	0.9	0.8	0.8		0.9	1.0	0.7	0.2	31
Hardness, Calcium		mg/L		81	71	65	73	80		85	61	90	79		76	91	60	-	31
Hardness, Total		mg/L		103	92	96	101	110		124	82	135			106	141	81	-	27
Methylene Blue Activated Substances	0.5 S	mg/L					BQL								BQL	BQL	BQL	0.050	3
N, Ammonia (Ammonia as N)		mg/L		1.34	0.59		BQL	BQL		0.98	0.99	1.14			0.76	1.45	BQL	0.05	24
N, Nitrate (Nitrate as N)	10 P	mg/L		1.4	1.4	1.2	0.6	1.2		1.2	1.1	1.1	1.1	1.2	1.1	1.4	0.6	0.2	35
N, Nitrite (Nitrite as N)	1 P	mg/L		0.01	BQL	BQL	BQL	BQL		BQL	BQL	BQL	BQL		BQL	0.02	BQL	0.01	31
pH	6.5-8.5 S	Units		6.9	7.1	7.5	7.2	7.4		7.5	7.1	7.3	7.7		7.3	7.7	6.8	-	31
Phosphate as Phosphorous		mg/L		0.97	0.67	0.67	0.51	0.57		0.51	0.62	0.42	0.49		0.59	1.75	0.14	0.02	31
Solids, Fixed		mg/L		135	135	136	148	145		176	131	169	169		151	194	117	1	31
Solids, Total		mg/L		220	210	223	236	235		272	192	225	250		230	291	174	1	31
Solids, Total Dissolved	500 S	mg/L		167	143	127	146	172		186	143	165	135		154	189	123	1	31
Solids, Total Suspended		mg/L		BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	BQL		BQL	BQL	BQL	1	31
Solids, Volatile		mg/L		84	75	87	89	90		96	61	56			79	125	33	1	27
Specific Conductivity		µmhos/cm		291	244	198	256	281		310	221	311	270		266	312	197	0	31
Sulfate	250.0 S	mg/L		29.1	31.6	15.6	16.2	17.1		21.0	15.7	19.1	23.9		20.9	31.9	14.6	5.0	31
Taste		Units		1	1	1	2	1		2	2	1	2		1	2	1	1	29
Temperature		°C		5.3	9.2	16.5	20.9	21.8		24.3	19.9	18.1	12.8		16.8	25.0	4.8	-	31
Threshold Odor Number	3 S	Units		10	4	12	7	8		7	6	9	2		7	14	1	1	31
Total Organic Carbon		mg/L		1.6	1.0	1.2	1.3	1.5		1.9	2.2	1.8	2.3		1.7	2.3	1.0	0.5	31
Turbidity	≤5 P	NTU		0.10	0.12	0.17	0.22	0.10		0.19	0.06	0.10	0.13		0.13	0.25	0.05	0.00	31

Monthly result composed from an average of parameter results for Corbalis Treatment Plant finished water points of entry to distribution system.

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

Environmental Protection Agency/Virginia Department of Health established levels for drinking water

P=Primary-enforceable, S=Secondary-non-enforceable, AL=Action Level on specific taps, MCL=Maximum Contaminant Level.

2 mg/L=milligrams per liter, µg/L=micrograms per liter



WATER QUALITY LABORATORY METAL ANALYSES

PERIOD OF 01/01/2004 TO 12/31/2004 Corbalis Treatment Plant Finished Water

																		Quant	# of
Parameter	MCL ¹	Units ²	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Limit	Tests
Aluminum	50-200 S	μg/L		BQL			74			168					89	187	BQL	20	10
Antimony	6 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	4	10
Arsenic	50 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	2	8
Barium	2000 P	μg/L		48						66					58	71	39	10	7
Beryllium	4 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	1	10
Cadmium	5 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	1	10
Calcium		mg/L		31.9			30.6			34.4			31.7		32.3	34.9	30.3	0.5	14
Chromium	100 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	1	10
Copper	1300 AL	μg/L		BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	BQL		BQL	155	BQL	40	31
Iron	300 S	μg/L		BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	BQL		BQL	BQL	BQL	60	31
Lead	15 AL	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	0.29	10
Magnesium		mg/L		7.2			7.8			10.5					8.7	10.7	7.1	0.5	10
Manganese	50 S	μg/L		BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	BQL		BQL	BQL	BQL	25	31
Mercury	2 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	0.5	7
Nickel	100 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	5	10
Potassium		mg/L		2.7			2.3			3.1					2.7	3.2	2.2	0.5	10
Selenium	50 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	4	10
Silicon		mg/L		BQL			BQL			4					BQL	4	BQL	4	10
Silver	100 S	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	0.5	10
Sodium		mg/L		17.6	10.3	15.6	13.5	15.6		16.1	14.9	12.9	14.8		14.6	18.2	10.2	5.0	31
Thallium	2 P	μg/L		BQL			BQL			BQL					BQL	BQL	BQL	1	10
Zinc	5000 S	μg/L		238			147			190					191	378	130	25	10

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Quant # of

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