

WATER QUALITY LABORATORY INORGANIC ANALYSES PERIOD OF 01/01/2006 TO 12/31/2006 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		Units	11	11	11		11	11	10	11	11	11	11		11	11	10	-	39 *
Alkalinity, Bicarbonate		mg/L	63	61	64		86	103	75	111	105	90	104		86	112	60	-	39 *
Alkalinity, Carbonate		mg/L	0	0	0		0	0	0	0	0	0	0		0	0	0	-	39 *
Alkalinity, Hydroxyl		mg/L	0	0	0		0	0	0	0	0	0	0		0	0	0	-	39 *
Alkalinity, Phenolphthalein		mg/L	0	0	0		0	0	0	0	0	0	0		0	0	0	-	39 *
Alkalinity, Total		mg/L	63	61	64		86	103	75	111	105	90	104		86	112	60	-	39 *
Bromate	10 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	10	16 *
Bromide		mg/L	BQL	BQL	0.02		BQL	BQL	BQL	0.02	BQL	0.01	0.02		BQL	0.02	BQL	0.01	39 *
Carbon Dioxide		mg/L	7	8	9		4	11	24	15	7	6	14		10	24	4	-	39 *
Chloride	250.0 S	mg/L	28.1	33.0	38.1		25.0	26.8	26.2	33.9	23.4	26.1	26.5		28.8	38.4	23.3	5.0	39 *
Chlorine, Free		mg/L	0.2	0.2	0.0		4.0	3.6	4.0	0.5	0.3	0.3	0.4		1.4	4.1	0.0	0.0	39 *
Chlorine, Total		mg/L	3.9	3.9	3.6		4.2	3.9	4.2	4.0	4.0	3.8	3.7		3.9	4.3	3.2	0.0	39 *
Color	15 S	Units	1	2	1		2	1	3	2	0	2	0		1	5	0	0	39 *
Cyanide (as free cyanide)	0.2 P	mg/L						BQL							BQL	BQL	BQL	0.025	4 *
Dissolved Oxygen		mg/L	17.5	15.7	18.6		13.6	14.1	13.1	13.3	12.6	15.4	15.9		14.9	18.7	12.3	0.0	39 *
Fluoride	4.0/2.0 P/S	mg/L	0.7	0.7	0.7		0.9	1.2	1.0	0.9	1.1	0.9	0.7		0.9	1.2	0.7	0.2	39 *
Hardness, Calcium		mg/L	75	70	74		78	88	84	99	87	82	94		83	101	67	-	39 *
Hardness, Total		mg/L	101	95	106		103	130	114	156	126	116	133		118	158	94	-	39 *
Methylene Blue Activated Substances	0.5 S	mg/L							BQL						BQL	BQL	BQL	0.050	4 *
N, Ammonia (Ammonia as N)		mg/L	0.93	1.13	0.97		BQL	BQL		1.10		0.78	0.95		0.73	1.23	BQL	0.05	31 *
N, Nitrate (Nitrate as N)	10 P	mg/L	1.4	1.3	1.0		0.9	0.4	0.8	0.8	1.2	1.1	1.0	1.2	1.0	1.4	0.4	0.2	43 *
N, Nitrite (Nitrite as N)	1 P	mg/L	BQL	BQL	BQL		BQL	BQL	BQL	0.02		BQL	BQL	BQL	BQL	0.03	BQL	0.01	35 *
pH	6.5-8.5 S	Units	7.3	7.2	7.2		7.6	7.3	6.8	7.2	7.5	7.5	7.2		7.3	7.6	6.8	-	39 *
Phosphate as Phosphorous		mg/L	0.55	0.57	0.56		0.62	0.43	0.52	0.48	0.40	0.43	0.36		0.49	0.77	0.35	0.20	39 *
Solids, Fixed		mg/L	103	105	127		138	171	148	205	162		164		146	214	69	1	35 *
Solids, Total		mg/L	208	153	173		189	241	251	294	241		241		221	324	137	1	35 *
Solids, Total Dissolved	500 S	mg/L	156	152	173		159	196	193	249	190	160	197		182	252	148	1	39 *
Solids, Total Suspended		mg/L	BQL	BQL	BQL		BQL		BQL	BQL	BQL	1	39 *						
Solids, Volatile		mg/L	105	48	47		50	70	104	89	80		77		74	133	23	1	35 *
Specific Conductivity		µmhos/cm	271	264	259		274	291		404	308	302	305		297	408	258	0	35 *
Sulfate	250.0 S	mg/L	20.4	19.6	18.5		18.0	25.5	33.2	45.1	22.2	18.7	22.1		24.4	46.4	17.9	5.0	39 *
Taste		Units	2	2	2		2	2	3	2	2	1	2		2	3	1	1	39 *
Temperature		°C	11.1	9.9	8.8		17.6	24.5	26.1	26.8	22.9	17.3	14.0		18.0	27.5	8.2	-	39 *
Threshold Odor Number	3 S	Units	7	4	1		12	7	5	7	5	3	2		5	12	1	1	39 *
Total Organic Carbon		mg/L	1.7	1.6	1.6		1.8	2.0	2.0	2.3	2.5	2.1	2.5		2.0	2.5	1.6	0.5	39 *
Turbidity	≤5 P	NTU	0.10	0.13	0.43		0.13	0.45	0.11	0.14	0.20	0.15	0.12		0.20	1.00	0.05	0.00	39 *

^{*} 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.

¹ 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 01/01/2006 TO 12/31/2006 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
Aluminum	50-200 S	μg/L		BQL			57.0	224.3		87.4		51.6			84.1	330.0	BQL	25.0	20 *
Antimony	6 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Arsenic	10 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Barium	2000 P	μg/L		34.4			34.3	38.3		43.6		31.5			36.4	44.2	31.1	25.0	20 *
Beryllium	4 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Cadmium	5 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Calcium		mg/L		26.5			29.7	35.6		43.1	37.6	34.0			34.4	43.6	26.0	0.5	24 *
Chromium	100 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	5.0	20 *
Copper	1300 AL	μg/L	BQL	BQL	BQL		BQL	BQL	BQL	BQL	BQL	BQL	BQL		BQL	72	BQL	25.0	39 *
Iron	300 S	μg/L	BQL	BQL	BQL		BQL	BQL	BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	60	39 *
Lead	15 AL	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Magnesium		mg/L		6.7			8.0	10.3		12.9	8.9	7.8			9.1	13.0	6.7	0.5	24 *
Manganese	50 S	μg/L	BQL	BQL	BQL		BQL	BQL	BQL	BQL	BQL	BQL	BQL		BQL	BQL	BQL	25.0	39 *
Mercury	2 P	μg/L		BQL					BQL						BQL	0.7	BQL	0.5	8 *
Nickel	100 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	5.0	20 *
Potassium		mg/L		2.1			2.2	3.0		3.4		2.6			2.7	3.4	2.1	0.5	20 *
Selenium	50 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	5.0	20 *
Silicon		mg/L		BQL			4	BQL		4		4			BQL	4	BQL	4	20 *
Silver	100 S	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	5.0	20 *
Sodium		mg/L	14.0	17.2	15.6		16.8	16.1	14.5	23.2	15.7	13.2	13.6		16.0	23.4	13.0	5.0	39 *
Thallium	2 P	μg/L		BQL			BQL	BQL		BQL		BQL			BQL	BQL	BQL	2.0	20 *
Zinc	5000 S	μg/L		214			146	153		153		159			165	220	140	25	20 *

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