

### WATER QUALITY LABORATORY INORGANIC ANALYSES PERIOD OF 01/01/2011 TO 12/31/2011

## **Distribution Site Representing Corbalis Treatment Plant**

																		Quant	
Parameter	MCL 1	Units <sup>2</sup>	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Limit <sup>3</sup>	# of Tests
Aggressive Index Number		Units	12	11	11	11	11		12	11	11	11	11	11	11	12	11	-	11
Alkalinity, Bicarbonate		mg/L	101	72	64	44	72		105	97	95	104	92	63	83	105	44	-	11
Alkalinity, Carbonate		mg/L	0	0	0	0	0		0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	-	11
Alkalinity, Total		mg/L	101	72	64	44	72		105	97	95	104	92	63	83	105	44	-	11
Bromide		mg/L	0.02	0.01	0.01	BQL	0.01		BQL	0.02	BQL	0.01	0.01	BQL	0.01	0.02	BQL	0.01	11
Carbon Dioxide		mg/L	3	9	8	4	6		7	8	8	8	7	10	7	10	3	-	11
Chloride	250.0 S	mg/L	30.8	32.1	28.1	23.7	24.0		28.1	38.6	31.2	23.8	18.5	13.1	26.5	38.6	13.1	5.0	11
Chlorine, Free		mg/L	0.1	0.0	0.1	3.2	2.8		0.2	0.2	0.1	0.2	0.1	0.2	0.7	3.2	0.0	0.0	11
Chlorine, Total		mg/L	3.2	2.9	3.2	3.3	3.0		2.9	2.5	3.1	3.0	3.1	3.1	3.0	3.3	2.5	0.0	11
Color	15 S	Units	1	0	0	1	1		1	1	0	0	0	1	1	1	0	0	11
Dissolved Oxygen		mg/L	16.3	15.0	13.7	12.4	13.9		11.3	10.1	12.1	12.8	15.0	14.0	13.3	16.3	10.1	0.0	11
Fluoride	4.0/2.0 P/S	mg/L	0.8	0.7	0.6	0.6	0.6		0.6	0.7	8.0	0.7	0.6	0.7	0.7	8.0	0.6	0.2	11
Hardness, Calcium		mg/L	103	85	65	41	71		108	101	103	114	101	78	88	114	41	-	11
Hardness, Total		mg/L	158	132	101	65	95		156	158	136	156	143	103	128	158	65	-	11
Methylene Blue Activated Substances	0.5 S	mg/L							BQL						BQL	BQL	BQL	0.05	1
N, Ammonia (Ammonia as N)		mg/L	0.85		0.85	BQL	BQL		0.67	0.59	0.70	0.69	0.71	0.71	0.58	0.85	BQL	0.20	10
N, Nitrate (Nitrate as N)	10 P	mg/L	1.5	1.6	1.1	0.8	0.9	-	1.0	0.6	2.0	1.4	1.1	1.2	1.2	2.0	0.6	0.2	11
N, Nitrite (Nitrite as N)	1 P	mg/L	0.02	0.08	0.01	BQL	BQL		0.01	BQL	0.01	0.01	BQL	0.02	0.01	0.08	BQL	0.01	11
рН	6.5-8.5 S	Units	7.8	7.2	7.2	7.3	7.4	-	7.5	7.4	7.4	7.4	7.4	7.1	7.4	7.8	7.1	-	11
Phosphate as Phosphorous		mg/L	0.41	0.40	0.35	0.43	0.41		0.26	0.30	0.34	0.37	0.35	0.36	0.36	0.43	0.26	0.10	11
Solids, Total		mg/L	245	228	179	124	194	-	246	280	242	224	222	194	216	280	124	1	11
Solids, Total Dissolved	500 S	mg/L	250	182	165	112	165		237	278	199	221	218	129	196	278	112	1	11
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	-	BQL	1	11								
Specific Conductivity		µmhos/cm	436	379	323	206	296		414	492	378	383		260	357	492	206	0	10
Sulfate	250.0 S	mg/L	56.3	48.5	29.2	13.1	24.4	-	55.8	65.5	35.7	47.9	49.4	38.4	42.2	65.5	13.1	5.0	11
Taste		Units	3	2	2	3	3		2	2	3	2	2	3	2	3	2	1	11
Temperature		°C	2.8	4.8	9.8	14.3	18.0		29.3	28.4	22.5	18.2	13.9	11.8	15.8	29.3	2.8	-	11
Threshold Odor Number	3 S	Units	4	4	5	7	7		1	1	3	3	3	3	4	7	1	0	11
Total Organic Carbon		mg/L	1.6	1.9	1.6	1.8	1.5		1.7	1.9	1.9	1.6	1.7	1.8	1.7	1.9	1.5	0.5	11
Turbidity	≤ 5 P	NTU	0.05	0.05	0.05	0.20	0.10		0.10	0.05	0.05	0.05	0.05	0.10	0.08	0.20	0.05	0.00	11

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

Report No: 011212121700

<sup>&</sup>lt;sup>1</sup> Environmental Protection Agency/Virginia Department of Health established levels for drinking water at points of entry to the water distribution system P=Primary-enforceable, S=Secondary-non-enforceable, AL=Action Level on specific taps, MCL=Maximum Contaminant Level.

<sup>&</sup>lt;sup>2</sup> mg/L = milligrams per liter, μg/L = micrograms per liter, μmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

<sup>&</sup>lt;sup>3</sup> Quant Limit = Quantitation Limit = lowest level of measurement



# WATER QUALITY LABORATORY METAL ANALYSES

### PERIOD OF 01/01/2011 TO 12/31/2011

### **Distribution Site Representing Corbalis Treatment Plant**

																		Quant	
Parameter	MCL 1	Units 2	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Avg	Max	Min	Limit <sup>3</sup>	# of Tests
Aluminum	50-200 S	μg/L	BQL			BQL			59.2			BQL			BQL	59.2	BQL	25.0	4
Antimony	6 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	2.0	4
Arsenic	10 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	2.0	4
Barium	2000 P	μg/L	41.0			39.4			53.3			39.6			43.3	53.3	39.4	25.0	4
Beryllium	4 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	2.0	4
Cadmium	5 P	μg/L	BQL			BQL			BQL	-		BQL			BQL	BQL	BQL	2.0	4
Calcium		mg/L	46.3			19.3			42.7	-		43.8			38.0	46.3	19.3	1.0	4
Chromium	100 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	5.0	4
Copper	1300 AL	μg/L	BQL	BQL	BQL	BQL	BQL		BQL	25.0	11								
Iron	300 S	μg/L	BQL	BQL	BQL	BQL	BQL		BQL	25.0	11								
Lead	15 AL	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	2.0	4
Magnesium		mg/L	11.7			4.3			12.0			10.1			9.5	12.0	4.3	1.0	4
Manganese	50 S	μg/L	BQL	BQL	BQL	BQL	BQL		BQL	25.0	11								
Mercury	2 P	μg/L	BQL				BQL								BQL	BQL	BQL	0.50	2
Nickel	100 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	5.0	4
Potassium		mg/L	2.9			2.3			3.1			2.8			2.8	3.1	2.3	1.0	4
Selenium	50 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	5.0	4
Silicon		mg/L	1.6			3.1			2.7			2.2			2.4	3.1	1.6	1.0	4
Silver	100 S	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	5.0	4
Sodium		mg/L	21.3	18.0	16.1	13.9	15.5		22.1	27.4	19.2	18.2	13.8	11.7	17.9	27.4	11.7	1.0	11
Thallium	2 P	μg/L	BQL			BQL			BQL			BQL			BQL	BQL	BQL	2.0	4
Zinc	5000 S	μg/L	BQL		-	BQL			BQL			BQL			BQL	BQL	BQL	25.0	4

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

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 $<sup>^{2}</sup>$  mg/L = milligrams per liter,  $\mu$ g/L = micrograms per liter

<sup>&</sup>lt;sup>3</sup> Quant Limit = Quantitation Limit = lowest level of measurement