



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2015 TO 12/31/2015

Distribution Site Representing Washington Aqueduct Service Area

Date Report Generated: 12/28/2015

Parameter	MCL ¹	Units ²	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Quant Limit ³
Aggressive Index Number		Units	12	12	12	12	11	12	12	12	12	11	12	-	N/A
Alkalinity, Bicarbonate		mg/L	68	64	67	56	58	72	54	83	86	73	84	-	0
Alkalinity, Carbonate		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Hydroxyl		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Phenolphthalein		mg/L	0	0	0	0	0	0	0	0	0	0	0	-	0
Alkalinity, Total		mg/L	68	64	67	56	58	72	54	83	86	73	84	-	0
Bromide		mg/L	0.02	0.02	0.04	BQL	0.01	0.01	0.02	0.02	0.03	0.02	0.02	-	0.01
Carbon Dioxide		mg/L	1	1	1	1	2	2	1	1	3	4	3	-	N/A
Chloride	250 S	mg/L	49.9	67.0	105.1	46.6	30.3	43.7	31.7	39.3	37.0	33.3	38.4	-	5.0
Chlorine, Free		mg/L	0.0	0.1	0.0	2.8	0.6	0.2	0.2	0.4	0.3	0.1	0.1	-	0.0
Chlorine, Total		mg/L	3.5	3.7	3.4	3.0	3.3	3.5	3.2	3.8	3.9	3.0	3.2	-	0.0
Color	15 S	Units	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0	2.5	0.0	0.0	-	0
Dissolved Oxygen		mg/L	13.6	13.6	13.2	11.6	9.7	8.1	7.9	8.7	8.2	9.4	9.5	-	0.0
Fluoride	4.0/2.0 P/S	mg/L	0.7	0.7	0.7	0.7	0.8	0.8	0.7	0.7	0.6	0.7	0.7	-	0.2
Hardness, Calcium		mg/L	89	87	92	92	77	88	69	89	103	97	101	-	10
Hardness, Total		mg/L	119	121	120	105	101	117	89	127	145	123	135	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.86	0.97	0.85	BQL	0.80	0.88	0.77	0.78	0.86	0.82	0.84	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	2.03	2.10	1.81	1.67	1.18	1.35	1.40	0.70	0.42	1.37	1.43	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	0.01	0.01	0.02	BQL	BQL	BQL	BQL	BQL	BQL	-	BQL	-	0.01
pH	6.5 - 8.5 S	Units	8.0	8.0	8.3	8.1	7.8	7.9	8.0	8.2	7.8	7.6	7.7	-	N/A
Phosphate as Phosphorous		mg/L	0.80	0.81	0.79	-	0.82	0.80	0.81	0.82	0.71	0.75	0.78	-	0.10
Orthophosphate as PO ₄		mg/L	2.45	2.47	2.42	-	2.51	2.44	2.48	2.49	2.17	2.29	2.39	-	0.31
Solids, Total		mg/L	241	257	312	215	185	-	207	243	275	236	257	-	1
Solids, Total Dissolved	500 S	mg/L	240	-	310	220	208	-	212	292	266	250	284	-	1
Solids, Total Suspended		mg/L	BQL	-	BQL	BQL	BQL	-	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	422	451	589	363	316	386	312	415	469	408	434	-	0
Sulfate	250 S	mg/L	40.5	43.4	41.3	35.5	40.6	45.0	44.7	52.1	65.1	56.5	57.4	-	5.0
Taste		Units	2	2	3	2	3	2	2	3	3	2	3	-	1
Temperature		°C	5.1	4.8	4.8	13.2	18.2	23.9	24.8	27.8	27.5	18.1	15.8	-	N/A
Threshold Odor Number	3 S	Units	1	4	7	7	7	1	1	7	9	7	2	-	0
Total Organic Carbon		mg/L	1.5	1.4	-	1.4	1.6	2.2	2.1	1.9	1.8	2.2	2.2	-	0.5
Turbidity	≤ 5 P	NTU	0.10	0.10	0.10	0.10	0.05	0.10	0.05	0.10	0.20	0.10	0.10	-	0.05

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

¹Environmental 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

²mg/L = milligrams per liter, µg/L = micrograms per liter, µmhos/cm = micromhos per centimeter, NTU = Nephelometric Turbidity Units

³Quant Limit = Quantitation Limit : lowest level of measurement, N/A = not applicable

- Not sampled

* Analysis pending



Water Quality Laboratory

Metal Analyses

Period of 01/01/2015 TO 12/31/2015

Distribution Site Representing Washington Aqueduct Service Area

Date Report Generated: 12/28/2015

Parameter	MCL ¹	Units ²	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Quant Limit ³
Aluminum	50 - 200 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0
Antimony	6 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Arsenic	10 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Barium	2000 P	µg/L	32.1	-	-	31.6	-	-	32.6	-	-	37.6	-	-	25.0
Beryllium	4 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Cadmium	5 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Calcium		mg/L	36.3	-	-	31.1	-	-	27.0	-	-	38.1	-	-	1.0
Chromium	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Copper	1300 AL	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Iron	300 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Lead	15 AL	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Magnesium		mg/L	8.5	-	-	7.3	-	-	5.9	-	-	8.9	-	-	1.0
Manganese	50 S	µg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	25.0
Mercury	2 P	µg/L	BQL	-	-	-	-	-	BQL	-	-	-	-	-	0.50
Nickel	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium		mg/L	2.6	-	-	2.3	-	-	2.9	-	-	4.0	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	1.8	-	-	2.4	-	-	3.5	-	-	2.9	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	31.3	39.6	67.8	26.8	20.6	26.9	23.2	26.9	23.6	24.6	27.0	-	1.0
Thallium	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	5000 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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

¹Environmental 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

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

³Quant Limit = Quantitation Limit : lowest level of measurement

- Not sampled

* Analysis pending