



Water Quality Laboratory

Inorganics Analyses

Period of 01/01/2022 TO 12/31/2022

Distribution Site Representing Washington Aqueduct Service Area

Date Report Generated: 1/04/2023

Parameter	MCL ¹	Units ²	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Quant Limit ³
Aggressive Index Number		Units	12	11	11	11	11	12	12	12	11	12	12	-	N/A
Alkalinity, Bicarbonate		mg/L	66	83	58	70	65	78	88	91	88	90	102	-	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	66	83	58	70	65	78	88	91	88	90	102	-	0
Bromide		mg/L	0.05	0.02	0.01	0.01	0.01	0.01	BQL	0.01	0.01	BQL	BQL	-	0.01
Carbon Dioxide		mg/L	2	4	2	3	3	2	4	5	6	4	3	-	N/A
Chloride	250 S	mg/L	66.8	43.8	36.0	40.5	33.4	33.3	37.3	42.7	38.0	38.5	44.1	-	5.0
Chlorine, Free		mg/L	0.1	0.1	0.2	2.6	0.2	0.2	0.2	0.1	0.1	0.1	0.1	-	0.0
Chlorine, Total		mg/L	3.4	3.3	2.8	2.9	3.1	2.9	2.9	2.9	2.9	3.0	3.5	-	0.0
Color	15 S	Units	0	0	0	0	0	0	0	0	0	0	0	-	0
Dissolved Oxygen		mg/L	12.9	13.3	11.9	11.2	10.0	8.3	7.5	8.0	7.9	9.5	10.2	-	0.0
Fluoride	4.0 P / 2.0 S	mg/L	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	-	0.2
Hardness, Calcium		mg/L	89	93	72	82	76	87	94	104	96	104	112	-	10
Hardness, Total		mg/L	119	128	98	111	104	116	128	147	142	146	156	-	10
Methylene Blue Activated Substances	0.5 S	mg/L	-	-	-	-	-	-	BQL	-	-	-	-	-	0.05
N, Ammonia (Ammonia as N)		mg/L	0.96	0.95	0.82	BQL	0.93	0.77	0.78	0.80	0.79	0.81	0.87	-	0.20
N, Nitrate (Nitrate as N)	10 P	mg/L	1.77	2.00	1.66	1.20	1.00	1.13	1.03	0.76	0.42	0.71	0.82	-	0.20
N, Nitrite (Nitrite as N)	1 P	mg/L	0.01	BQL	0.01	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	0.01
pH	6.5 - 8.5 S	Units	7.8	7.6	7.8	7.7	7.7	7.8	7.7	7.6	7.5	7.7	7.8	-	N/A
Phosphate as Phosphorous		mg/L	0.74	0.75	0.74	0.77	0.78	0.78	0.74	0.74	0.76	0.83	0.82	-	0.10
Orthophosphate as PO ₄		mg/L	2.27	2.30	2.27	2.35	2.37	2.38	2.27	2.27	2.33	2.53	2.51	-	0.31
Solids, Total		mg/L	259	237	187	205	196	200	239	271	243	247	266	-	1
Solids, Total Dissolved	500 S	mg/L	268	234	154	196	180	180	238	244	244	230	256	-	1
Solids, Total Suspended		mg/L	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	-	1
Specific Conductivity		µmhos/cm	473	399	317	349	326	350	392	437	414	425	454	-	0
Sulfate	250 S	mg/L	49.0	38.0	36.0	36.5	33.5	35.6	42.4	51.6	51.1	52.5	47.8	-	5.0
Taste		Units	2	2	3	2	2	2	3	2	2	2	2	-	1
Temperature		°C	5.9	4.9	11.6	12.5	17.4	24.5	24.0	26.6	26.7	18.3	16.6	-	N/A
Threshold Odor Number	3 S	Units	8	12	12	8	6	8	6	8	8	6	6	-	0
Total Organic Carbon		mg/L	1.5	1.3	1.4	1.4	1.6	1.6	1.9	1.9	1.7	2.0	1.7	-	0.5
Turbidity	≤ 5 P	NTU	0.35	0.15	0.25	0.10	0.10	0.10	0.10	0.20	0.10	0.10	0.15	-	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



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Metal Analyses

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Aluminum	50 - 200 S	µg/L	116	-	-	45.8	-	-	53.7	-	-	34.6	-	-	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	30.0	-	-	32.3	-	-	42.8	-	-	38.2	-	-	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	34.5	-	-	32.3	-	-	37.7	-	-	42.2	-	-	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	8.3	-	-	7.8	-	-	9.1	-	-	10.6	-	-	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	-	-	BQL	-	-	BQL	-	-	0.50
Nickel	100 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Potassium		mg/L	2.8	-	-	2.8	-	-	3.3	-	-	3.7	-	-	1.0
Selenium	50 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Silicon		mg/L	2.9	-	-	BQL	-	-	2.8	-	-	1.9	-	-	1.0
Silver	100 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	5.0
Sodium		mg/L	38.7	24.1	19.4	21.1	19.2	20.6	22.3	24.1	22.5	24.0	24.2	-	1.0
Thallium	2 P	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	2.0
Zinc	5000 S	µg/L	BQL	-	-	BQL	-	-	BQL	-	-	BQL	-	-	25.0

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