



## COMPREHENSIVE WATER ANALYSIS 2020

| <u>PARAMETER</u>  | <u>YWC Sample</u>                     | <u>EPA/DEP DRINKING WATER STANDARDS</u> |
|---|---------------------------------------|---|
| <b>Primary Inorganics (Results in PPM)<sup>1</sup></b>          |                                       |   |
| Antimony  | <0.000500                             | 0.006                                   |
| Arsenic   | <0.000500                             | 0.010                                   |
| Asbestos  | N.D.                                  | < 7 MFL                                 |
| Barium  | 0.016                                 | 2.00                                    |
| Beryllium   | <0.000300                             | 0.004                                   |
| Cadmium   | <0.000500                             | 0.005                                   |
| Chromium  | <0.00200                              | 0.100                                   |
| Cyanide (total)   | <0.0100                               | 0.200                                   |
| Fluoride  | <0.100                                | 2.00                                    |
| Lead (customer tap)   | 0.0035 (90th percentile) <sup>4</sup> | 0.015                                   |
| Mercury   | <0.0001                               | 0.002                                   |
| Nickel  | <0.00139                              | 0.100                                   |
| Nitrate Nitrogen  | 3.3                                   | 10.0                                    |
| Nitrite Nitrogen  | N.D.                                  | 1.00                                    |
| Total Nitrate & Nitrite   | 3.3                                   | 10.0                                    |
| Selenium  | <0.00300                              | 0.050                                   |
| Thallium  | <0.000500                             | 0.002                                   |
| Turbidity   | 0.034                                 | 0.30                                    |
| <b>Herbicides/Pesticides/SOC's (Results in PPM)<sup>1</sup></b> |                                       |   |
| Alachlor  | N.D.                                  | 0.002                                   |
| Atrazine  | 0.00033                               | 0.003                                   |
| Benzo (a) Pyrene  | N.D.                                  | 0.0002                                  |
| Carbofuran  | N.D.                                  | 0.040                                   |
| Chlordane   | N.D.                                  | 0.002                                   |
| Dalapon   | N.D.                                  | 0.20                                    |
| Dibromochloropropane (DBCP)                                     | N.D.                                  | 0.0002                                  |
| Di (2-Ethylhexyl) Adipate                                       | N.D.                                  | 0.40                                    |
| Di (2-Ethylhexyl) Phthalate                                     | N.D.                                  | 0.006                                   |
| Dioxin  | N.D.                                  | 0.00000003                              |
| Dinoseb   | N.D.                                  | 0.007                                   |
| Diquat  | N.D.                                  | 0.02                                    |
| Endothall   | N.D.                                  | 0.10                                    |
| Endrin  | N.D.                                  | 0.002                                   |
| Ethylene Dibromide (EDB)  | N.D.                                  | 0.00005                                 |
| Glyphosphate  | N.D.                                  | 0.70                                    |
| Heptachlor  | N.D.                                  | 0.0004                                  |
| Heptachlor Epoxide  | N.D.                                  | 0.0002                                  |
| Hexachlorobenzene   | N.D.                                  | 0.001                                   |
| Hexachlorocyclopentadiene                                       | N.D.                                  | 0.05                                    |
| Lindane   | N.D.                                  | 0.0002                                  |
| Methoxychlor  | N.D.                                  | 0.04                                    |
| Oxymal  | N.D.                                  | 0.20                                    |
| PCB's   | N.D.                                  | 0.0005                                  |
| Pentachlorophenol   | N.D.                                  | 0.001                                   |
| Piclorem  | N.D.                                  | 0.50                                    |
| Simazine  | N.D.                                  | 0.004                                   |
| Toxaphene   | N.D.                                  | 0.003                                   |
| 2,4-D   | N.D.                                  | 0.07                                    |
| 2,4,5TP (Silvex)  | N.D.                                  | 0.05                                    |

| <u>PARAMETER</u>   | <u>SAMPLE</u> | <u>WATER STANDARDS</u> |
|--|---------------|------------------------|
| <b>Haloacetic Acids (Results in PPB)<sup>2</sup></b>                     |               |                        |
| First Quarter 2020   | 12.65         | 60                     |
| Second Quarter 2020  | 17.50         | 60                     |
| Third Quarter 2020   | 44.36         | 60                     |
| Fourth Quarter 2020  | 18.23         | 60                     |
| <b>Total Trihalomethanes (Results in PPB)<sup>2</sup></b>                |               |                        |
| First Quarter 2020   | 13.70         | 80                     |
| Second Quarter 2020  | 20.41         | 80                     |
| Third Quarter 2020   | 61.72         | 80                     |
| Fourth Quarter 2020  | 27.44         | 80                     |
| <b>Radiological Characteristics (Results in pCi/L)<sup>3</sup></b>       |               |                        |
| Gross Alpha  | N.D.          | <15.0                  |
| Radium-226   | N.D.          | <5.0                   |
| Radium-228   | N.D.          | <5.0                   |
| Uranium  | N.D.          | <30.0                  |
| <b>Microbiological (Results in units)<sup>5</sup></b>                    |               |                        |
| Coliform Bacteria (% of positive samples) <sup>5</sup>                   | < 0.1%        | 5.00%                  |
| Number of Acute Violations   | 0             | 0                      |
| Heterotrophic Plate Count (Bac/ml.) <sup>5</sup>                         | 0.05          | *(previously 500)      |
| <b>Regulated Volatile Organic Chemicals (Results in PPM)<sup>1</sup></b> |               |                        |
| Benzene  | N.D.          | 0.005                  |
| Carbon Tetrachloride   | N.D.          | 0.005                  |
| Chlorobenzene  | N.D.          | 0.10                   |
| 1,2-Dichloroethane   | N.D.          | 0.005                  |
| o-Dichlorobenzene  | N.D.          | 0.60                   |
| p-Dichlorobenzene  | N.D.          | 0.075                  |
| 1,1-Dichloroethylene   | N.D.          | 0.007                  |
| cis-1,2-Dichloroethylene   | N.D.          | 0.07                   |
| trans-1,2-Dichloroethylene   | N.D.          | 0.10                   |
| Dichloromethane  | N.D.          | 0.005                  |
| 1,2-Dichloropropane  | N.D.          | 0.005                  |
| Ethylbenzene   | N.D.          | 0.70                   |
| Styrene  | N.D.          | 0.10                   |
| Tetrachloroethylene  | N.D.          | 0.005                  |
| Toluene  | N.D.          | 1.0                    |
| 1,2,4-Trichlorobenzene   | N.D.          | 0.07                   |
| 1,1,1-Trichloroethane  | N.D.          | 0.20                   |
| 1,1,2-Trichloroethane  | N.D.          | 0.005                  |
| Trichloroethylene  | N.D.          | 0.005                  |
| Vinyl Chloride   | N.D.          | 0.002                  |
| Xylenes (Total)  | N.D.          | 10.0                   |

PARAMETERSAMPLEWATER STANDARDS**Unregulated Contaminant Monitoring (Results in PPB)<sup>2</sup> UCMR Round #4, thru 3rd qtr. 2020**

| <u>PARAMETER</u>            | <u>SAMPLE</u> | <u>WATER STANDARDS</u> |
|-----------------------------|---------------|------------------------|
| Entry Point                 |               |                        |
| Anatoxin-a                  | <0.0300       | *                      |
| Cylindrospermopsin          | <0.0900       | *                      |
| Total Microcystin           | <0.300        | *                      |
| Manganese                   | 2.82          | 50                     |
| Germanium                   | <0.1          | *                      |
| Chlorpyrifos                | <0.01         | *                      |
| Total permethrin            | <0.013        | *                      |
| Alpha-hexachlorocyclohexane | <0.0033       | *                      |
| Dimethipin                  | <0.067        | *                      |
| Oxyfluorfen                 | <0.017        | *                      |
| Profenofos                  | <0.1          | *                      |
| Tebuconazole                | <0.067        | *                      |
| Tribufos                    | <0.023        | *                      |
| Ethoprop                    | <0.01         | *                      |
| Butylated hydroxyanisole    | <0.01         | *                      |
| o-toluidine                 | <0.0023       | *                      |
| Quinoline                   | <0.0067       | *                      |
| 1-butanol                   | <0.67         | *                      |
| 2-methoxyethanol            | <0.13         | *                      |
| 2-propen-1-ol               | <0.17         | *                      |
| Customer Tap                |               |                        |
| HAA5                        | 26.929        | *                      |
| HAA6Br                      | 5.501         | *                      |
| HAA9                        | 32.013        | *                      |
| Raw Water                   |               |                        |
| Bromide                     | 41.8          | *                      |
| Total Organic Carbon        | 2117          | *                      |

**Secondary Inorganics (Results in PPM)<sup>1</sup>**

|                              |                                      |             |
|------------------------------|--------------------------------------|-------------|
| Alkalinity                   | 48                                   | *           |
| Aluminum                     | N.D.                                 | 0.05 - 0.20 |
| Calcium                      | 21.0                                 | *           |
| Chloride                     | 26.6                                 | 250         |
| Conductivity                 | 266                                  | *           |
| Color                        | 0                                    | 15          |
| Copper (customer tap)        | 0.029 (90th percentile) <sup>4</sup> | 1.3         |
| Copper (distribution system) | N.D.                                 | 1           |
| Corrosivity (Langlier Index) | 0.1                                  | *           |
| Hardness                     | 92                                   | *           |
| Total Iron                   | 0.02                                 | 0.3         |
| Lead (distribution system)   | N.D.                                 | 0.005       |
| Magnesium                    | 6.4                                  | *           |
| Manganese                    | 0.007                                | 0.05        |
| Total Phosphorus             | N.D.                                 | *           |
| pH Value                     | 8.6                                  | 7.4 - 9.0   |
| Silver                       | N.D.                                 | 0.1         |
| Sodium                       | 15                                   | *           |
| Sulfate                      | 22.9                                 | 250         |
| Foaming Agents (MBAS)        | N.D.                                 | 0.5         |
| Total Dissolved Solids       | 172                                  | 500         |
| Zinc                         | N.D.                                 | 5           |

> Greater than

< Less than

N.D. Not detected

\* No EPA/DEP Standard at present time

<sup>1</sup> Part per million = 1 milligram per liter

<sup>2</sup> Part per billion = 1 microgram per liter

<sup>3</sup> pCi/L = 1 picocurie per liter = 1-trillionth of a curie per liter

<sup>4</sup> Action level = 90% of tier 1 customer tap samples must meet the stated action levels for lead and copper.

- Lead Action Level at customer tap after minimum 6 hr. residence, 90<sup>th</sup> percentile sample >0.015 mg/L.

- Copper Action Level at customer tap after minimum 6 hr. residence, 90<sup>th</sup> percentile sample >1.300 mg/L.

<sup>5</sup> Based on 1,440 distribution tap samples collected during 2020.

(DEP requires 1,440).