



Fluoridation & Chlorination

WSSN 2310

Feb-17

| D A T E | Fluoride Applied F mg/l | Fluoride Analyses mg/l | | | Chlorine App. Mg/l | | | Chlorine Residual mg/l | | | | | | | | |
|------------------|-------------------------------|---------------------------|------|------|------------------------------|--|--------------------------|------------------------|------|-------------|------|----|----|----|-----|----|
| | | Raw | Tap | Dist | Chlori ne App. Mg/l | Chlorine (prior to filtration) mg/L OCl ⁻ | Post Chlorine mg/L | Sta II | Dort | 3MG Well | Tap | | | | | |
| | | | | | | | | Free | Free | Free | Free | | | | | |
| | | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 1 | | | 0.79 | | 1.08 | | | | 0.8 | | | | | | 1.8 | |
| 2 | | | 0.79 | | 1.04 | | | | 0.9 | | | | | | 1.7 | |
| 3 | | | 0.89 | | 0.98 | | | | 0.9 | | | | | | 1.7 | |
| 4 | | | 0.81 | | 1.03 | | | | 0.7 | | | | | | 1.7 | |
| 5 | | | 0.80 | | 1.06 | | | | 0.9 | | | | | | 1.7 | |
| 6 | | | 0.86 | | 1.05 | | | | 0.9 | | | | | | 1.8 | |
| 7 | | | 0.89 | | 1.03 | | | | 0.9 | | | | | | 1.8 | |
| 8 | | | 0.80 | | 1.03 | | | | 0.8 | | | | | | 1.7 | |
| 9 | | | 0.89 | | 0.99 | | | | 0.9 | | | | | | 1.7 | |
| 10 | | | 0.97 | | 1.01 | | | | 0.8 | | | | | | 1.7 | |
| 11 | | | 0.75 | | 1.01 | | | | 0.9 | | | | | | 1.8 | |
| 12 | | | 0.85 | | 0.98 | | | | 1.0 | | | | | | 1.8 | |
| 13 | | | 0.78 | | 0.95 | | | | 1.0 | | | | | | 1.9 | |
| 14 | | | 0.84 | | 0.95 | | | | 1.0 | | | | | | 1.7 | |
| 15 | | | 0.87 | | 1.06 | | | | 0.9 | | | | | | 1.7 | |
| 16 | | | 0.86 | | 1.04 | | | | 1.0 | | | | | | 1.8 | |
| 17 | | | 0.80 | | 1.11 | | | | 0.8 | | | | | | 1.8 | |
| 18 | | | 0.81 | | 1.04 | | | | 0.9 | | | | | | 1.9 | |
| 19 | | | 0.78 | | 1.01 | | | | 1.0 | | | | | | 1.8 | |
| 20 | | | 0.74 | | 0.97 | | | | 1.0 | | | | | | 1.6 | |
| 21 | | | 0.83 | | 1.01 | | | | 1.0 | | | | | | 1.8 | |
| 22 | | | 1.03 | | 0.96 | | | | 1.0 | | | | | | 1.8 | |
| 23 | | | 1.00 | | 1.00 | | | | 1.0 | | | | | | 1.8 | |
| 24 | | | 0.76 | | 0.96 | | | | 1.0 | | | | | | 1.8 | |
| 25 | | | 0.86 | | 1.12 | | | | 0.9 | | | | | | 1.8 | |
| 26 | | | 0.84 | | 1.07 | | | | 0.9 | | | | | | 1.8 | |
| 27 | | | 0.82 | | 1.15 | | | | 0.9 | | | | | | 1.7 | |
| 28 | | | 0.95 | | 1.02 | | | | 0.9 | | | | | | 1.8 | |
| AVG | | | 0.84 | | 1.03 | | | | 0.9 | | | | | | 1.8 | |
| MAX | | | 1.03 | | 1.15 | | | | 1.0 | | | | | | 1.9 | |
| MIN | | | 0.74 | | 0.95 | | | | 0.7 | | | | | | 1.6 | |



Chemical Analyses WSSN 2310 Feb-17

| D A T E | pH | | Total Hardness as CaCO ₃ mg/l | | Total Alkalinity as CaCO ₃ mg/l | | NonCarbonate Hardness as CaCO ₃ mg/l | | Iron mg/L | | Calcium Ca ²⁺ mg/l | | Magnesium as Mg ²⁺ mg/l | | Chloride as Cl ⁻ mg/l | |
|------------------|------|------|--|-----|--|-----|---|-----|-----------|------|-------------------------------|------|------------------------------------|-----|----------------------------------|------|
| | CSII | Tap | Raw | Tap | Raw | Tap | Raw | Tap | Raw | Tap | Raw | Tap | Raw | Tap | Raw | Tap |
| | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 |
| 1 | 7.26 | 7.24 | | 102 | | 70 | | 32 | | 0.01 | | 33.7 | | 4.4 | | 13 |
| 2 | 7.26 | 7.25 | | 100 | | 70 | | 30 | | 0.01 | | 31.3 | | 5.3 | | 13 |
| 3 | 7.25 | 7.21 | | 98 | | 68 | | 30 | | 0.02 | | 31.3 | | 4.9 | | 13 |
| 4 | 7.31 | 7.25 | | 96 | | 68 | | 28 | | 0.01 | | 32.1 | | 3.9 | | 12 |
| 5 | 7.22 | 7.17 | | 100 | | 66 | | 34 | | 0.02 | | 30.5 | | 5.4 | | 13 |
| 6 | 7.28 | 7.29 | | 98 | | 72 | | 26 | | 0.00 | | 30.5 | | 5.3 | | 13 |
| 7 | 7.24 | 7.17 | | 100 | | 68 | | 32 | | 0.01 | | 32.1 | | 4.9 | | 13 |
| 8 | 7.26 | 7.25 | | 98 | | 68 | | 32 | | 0.02 | | 31.3 | | 5.3 | | 13 |
| 9 | 7.30 | 7.20 | | 98 | | 68 | | 30 | | 0.02 | | 30.5 | | 5.8 | | 13 |
| 10 | 7.26 | 7.23 | | 100 | | 68 | | 32 | | 0.01 | | 32.1 | | 4.9 | | 13 |
| 11 | 7.16 | 7.29 | | 98 | | 70 | | 28 | | 0.01 | | 32.1 | | 4.4 | | 13 |
| 12 | 7.24 | 7.13 | | 98 | | 72 | | 26 | | 0 | | 30.5 | | 5.3 | | 13 |
| 13 | 7.18 | 7.22 | | 98 | | 68 | | 30 | | 0.01 | | 30.5 | | 5.3 | | 12 |
| 14 | 7.23 | 7.19 | | 98 | | 72 | | 26 | | 0.01 | | 31.3 | | 4.9 | | 13 |
| 15 | 7.38 | 7.21 | | 96 | | 68 | | 28 | | 0.02 | | 30.5 | | 4.9 | | 13 |
| 16 | 7.40 | 7.22 | | 98 | | 72 | | 26 | | 0.01 | | 31.3 | | 4.9 | | 13 |
| 17 | 7.32 | 7.40 | | 98 | | 70 | | 28 | | 0.03 | | 30.5 | | 5.3 | | 13 |
| 18 | 7.32 | 7.24 | | 98 | | 74 | | 24 | | 0.02 | | 30.5 | | 5.3 | | 13 |
| 19 | 7.31 | 7.25 | | 96 | | 70 | | 26 | | 0.01 | | 31.3 | | 4.4 | | 12 |
| 20 | 7.32 | 7.27 | | 100 | | 70 | | 30 | | 0 | | 31.1 | | 5.3 | | 13 |
| 21 | 7.33 | 7.23 | | 98 | | 72 | | 26 | | 0.02 | | 32.1 | | 4.4 | | 12 |
| 22 | 7.29 | 7.22 | | 98 | | 68 | | 30 | | 0.03 | | 32.1 | | 4.4 | | 12 |
| 23 | 7.19 | 7.22 | | 98 | | 68 | | 30 | | 0.01 | | 32.1 | | 4.4 | | 12 |
| 24 | 7.23 | 7.28 | | 100 | | 72 | | 28 | | 0.02 | | 30.5 | | 5.8 | | 13 |
| 25 | 7.18 | 7.24 | | 98 | | 74 | | 24 | | 0 | | 32.9 | | 3.9 | | 13 |
| 26 | 7.44 | 7.23 | | 96 | | 68 | | 28 | | 0 | | 31.3 | | 4.4 | | 12 |
| 27 | 7.43 | 7.30 | | 100 | | 70 | | 30 | | 0 | | 31.3 | | 5.3 | | 13 |
| 28 | 7.29 | 7.17 | | 98 | | 70 | | 28 | | 0.04 | | 32.1 | | 4.4 | | 12 |
| AVG | 7.28 | 7.23 | | 98 | | 70 | | 29 | | 0.01 | | 31.4 | | 4.9 | | 13 |
| MAX | 7.44 | 7.40 | | 102 | | 74 | | 34 | | 0.04 | | 33.7 | | 5.8 | | 13.0 |
| MIN | 7.16 | 7.13 | | 96 | | 66 | | 24 | | 0.00 | | 30.5 | | 3.9 | | 12.0 |



WSSN 2310

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| D A T E | Total Coliform | | | | | | 66 | Standard Plate Count | | Conductivity (mS) | Temp deg.C | Color | | Odor | |
|------------------|----------------|----|------|----------|--------|---------|----|----------------------|------|-------------------|------------|-------|-----|------|-----|
| | Plant Tap | | | | | | | Raw | Tap | | | Raw | Tap | Raw | Tap |
| | | | Dort | 3MG Well | Sta II | Lab Tap | | | | | | | | | |
| | 60 | 61 | 62 | 63 | 64 | 65 | | | | | | | | | |
| 1 | | | | | 2/0 | 2/0 | | | 0.21 | 6.3 | | | | | |
| 2 | | | | | 2/0 | 2/0 | | | 0.21 | 6.3 | | | | | |
| 3 | | | | | 2/0 | 2/0 | | | 0.21 | 6.0 | | | | | |
| 4 | | | | | 2/0 | 2/0 | | | 0.21 | 6.8 | | | | | |
| 5 | | | | | 2/0 | 2/0 | | | 0.21 | 6.2 | | | | | |
| 6 | | | | | 2/0 | 2/0 | | | 0.21 | 6.0 | | | | | |
| 7 | | | | | 2/0 | 2/0 | | | 0.21 | 5.7 | | | | | |
| 8 | | | | | 2/0 | 2/0 | | <2 | 0.21 | 6.4 | | | | | |
| 9 | | | | | 2/0 | 2/0 | | | 0.21 | 5.9 | | | | | |
| 10 | | | | | 2/0 | 2/0 | | | 0.21 | 6.0 | | | | | |
| 11 | | | | | 2/0 | 2/0 | | | 0.21 | 6.2 | | | | | |
| 12 | | | | | 2/0 | 2/0 | | | 0.21 | 6.7 | | | | | |
| 13 | | | | | 2/0 | 2/0 | | | 0.20 | 6.4 | | | | | |
| 14 | | | | | 2/0 | 2/0 | | <2 | 0.21 | 6.0 | | | | | |
| 15 | | | | | 2/0 | 2/0 | | | 0.21 | 6.0 | | | | | |
| 16 | | | | | 2/0 | 2/0 | | | 0.21 | 6.1 | | | | | |
| 17 | | | | | 2/0 | 2/0 | | | 0.21 | 6.9 | | | | | |
| 18 | | | | | 2/0 | 2/0 | | | 0.21 | 6.6 | | | | | |
| 19 | | | | | 2/0 | 2/0 | | | 0.21 | 6.3 | | | | | |
| 20 | | | | | 2/0 | 2/0 | | | 0.21 | 6.2 | | | | | |
| 21 | | | | | 2/0 | 2/0 | | <2 | 0.21 | 6.5 | | | | | |
| 22 | | | | | 2/0 | 2/0 | | | 0.21 | 5.2 | | | | | |
| 23 | | | | | 2/0 | 2/0 | | | 0.21 | 5.2 | | | | | |
| 24 | | | | | 2/0 | 2/0 | | | 0.21 | 5.0 | | | | | |
| 25 | | | | | 2/0 | 2/0 | | | 0.20 | 6.8 | | | | | |
| 26 | | | | | 2/0 | 2/0 | | | 0.21 | 7.3 | | | | | |
| 27 | | | | | 2/0 | 2/0 | | | 0.21 | 7.0 | | | | | |
| 28 | | | | | 2/0 | 2/0 | | <2 | 0.21 | 6.7 | | | | | |
| AVG | | | | | | | | | 0.21 | 6.2 | | | | | |
| MAX | | | | | | | | | 0.21 | 7.3 | | | | | |
| MIN | | | | | | | | | 0.20 | 5.0 | | | | | |



Distribution System Monitoring WSSN 2310

Feb-17

| DATE | Free Chlorine Residual at Bacteriological Monitoring Stations mg/l | | | | | | | | | | | | | | | | | | | | | | | | | Number of Samples | | | | |
|------------------------------------|--|------|------|-------------|------|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------------------|--|--|--|--|
| | 1 | 2 | 3 | 4 | CS | 6 | 7 | 8 | 9 | 10 | WR** | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | | | | |
| 1 | | | | | | | | | | | | | 1.44 | 1.54 | 1.27 | 1.68 | 1.67 | 1.09 | | | | | 1.78 | | | 7 | | | | |
| 2 | | | | | | | 1.59 | 1.66 | 1.32 | 1.66 | | | | | | | | | 0.73 | 1.43 | | | | 1.47 | | 7 | | | | |
| 3 | 1.26 | | 1.60 | 1.60 | | | | | | | 1.08 | 1.30 | | | | | | | 0.99 | | | | | | 1.25 | 7 | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 6 | 1.35 | 1.32 | 1.47 | 1.47 | 1.36 | 1.28 | | | | | | | | | | | | | | | 0.86 | | | | | 7 | | | | |
| 7 | | | | | | | 1.63 | 1.56 | 1.69 | 1.68 | | 1.54 | | | | | | | | | | 1.52 | | | | 6 | | | | |
| 8 | | | | | | | | | | | | | 1.56 | 1.63 | 1.15 | 1.65 | 1.64 | 1.21 | | | | | 1.70 | | | 7 | | | | |
| 9 | | | | | | | 1.69 | 1.72 | 1.76 | 1.76 | | | | | | | | | 0.84 | 1.37 | | | | 1.48 | | 7 | | | | |
| 10 | 1.31 | 1.04 | 1.39 | 1.55 | | | | | | | | | | | | | | | 0.79 | 1.46 | | | | | 1.36 | 7 | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 13 | 1.42 | 1.17 | 1.55 | 1.48 | 1.55 | 1.27 | | | | | | | | | | | | | | | | 1.02 | | | | 7 | | | | |
| 14 | | | | | | | 1.31 | 1.72 | 1.49 | 1.70 | 1.07 | 1.49 | | | | | | | | | | | 1.37 | | | 7 | | | | |
| 15 | | | | | | | | | | | | | 1.45 | 1.68 | 1.09 | 1.62 | 1.52 | 1.18 | | | | | 1.73 | | | 7 | | | | |
| 16 | | | | | | | 1.45 | 1.64 | 1.63 | 1.55 | | | | | | | | | 0.81 | 1.34 | | | | 1.40 | | 7 | | | | |
| 17 | 1.32 | | 1.53 | 1.55 | | | | | | | 1.19 | 1.58 | | | | | | | 1.00 | | | | | | 1.48 | 7 | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | 1.24 | 1 | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 20 | 1.40 | 1.19 | 1.36 | 1.48 | 1.58 | 1.33 | | | | | | | | | | | | | | | 0.86 | | | | | 7 | | | | |
| 21 | | | | | | | 1.37 | 1.66 | 1.59 | 1.66 | 1.20 | 1.50 | | | | | | | | | | 1.36 | | | | 7 | | | | |
| 22 | | | | | | | | | | | | | 1.50 | 1.60 | 1.14 | 1.63 | 1.58 | 1.16 | | | | | 1.61 | | | 7 | | | | |
| 23 | | | | | | | 1.47 | 1.67 | 1.48 | 1.59 | | | | | | | | | 0.81 | 1.39 | | | | 1.47 | | 7 | | | | |
| 24 | 1.34 | 1.27 | 1.49 | 1.57 | | | | | | | | | | | | | | | 0.90 | 1.26 | | | | | 1.46 | 7 | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 27 | 1.34 | 1.27 | 1.52 | 1.50 | 1.61 | 1.32 | | | | | | | | | | | | | | | 1.11 | | | | | 7 | | | | |
| 28 | | | | | | | 1.35 | 1.68 | 1.56 | 1.64 | 1.11 | 1.44 | | | | | | | | | | 1.31 | | | | 7 | | | | |
| Monthly Cl₂ Avg. | | | | 1.41 | | **SITE NAME is being used until West Side Reservoir activities are complete and until further notice (11/15/2016) | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Samples | | | | 140 | | | | | | | | | | | | | | | | | | | | | | | | | | |



Distribution System Monitoring

WSSN 2310

Feb-17

| DATE | Total Chlorine Residual at Bacteriological Monitoring Stations mg/l | | | | | | | | | | | | | | | | | | | | | | | | | Number of Samples | | | | |
|------------------------------------|---|------|------|------|-------------|---|------|------|------|------|----------|------|------|------|------|------|------|------|----|------|------|------|------|------|------|-------------------|--|--|--|--|
| | 1 | 2 | 3 | 4 | CS | 6 | 7 | 8 | 9 | 10 | WR* * | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | | | | |
| 1 | | | | | | | | | | | | | 1.60 | 1.72 | 1.48 | 1.79 | 1.78 | 1.21 | | | | | 1.92 | | | 7 | | | | |
| 2 | | | | | | | 1.71 | 1.83 | 1.46 | 1.83 | | | | | | | | | | 0.90 | 1.57 | | | | 1.61 | 7 | | | | |
| 3 | 1.54 | | 1.80 | 1.80 | | | | | | | 1.38 | 1.50 | | | | | | | | 1.09 | | | | | 1.39 | 7 | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 6 | 1.53 | 1.42 | 1.67 | 1.68 | 1.50 | 1.46 | | | | | | | | | | | | | | | 0.99 | | | | | 7 | | | | |
| 7 | | | | | | | 1.75 | 1.76 | 1.81 | 1.82 | | 1.72 | | | | | | | | | | | 1.62 | | | 6 | | | | |
| 8 | | | | | | | | | | | | | 1.67 | 1.73 | 1.43 | 1.76 | 1.78 | 1.38 | | | | | | 1.79 | | 7 | | | | |
| 9 | | | | | | | 1.79 | 1.88 | 1.89 | 1.89 | | | | | | | | | | 0.93 | 1.49 | | | | 1.61 | 7 | | | | |
| 10 | 1.54 | 1.23 | 1.69 | 1.73 | | | | | | | | | | | | | | | | 0.90 | 1.61 | | | | 1.54 | 7 | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 13 | 1.54 | 1.37 | 1.67 | 1.67 | 1.71 | 1.43 | | | | | | | | | | | | | | | | 1.14 | | | | 7 | | | | |
| 14 | | | | | | | 1.43 | 1.86 | 1.62 | 1.82 | 1.33 | 1.72 | | | | | | | | | | | 1.52 | | | 7 | | | | |
| 15 | | | | | | | | | | | | | 1.58 | 1.81 | 1.23 | 1.72 | 1.73 | 1.36 | | | | | | 1.86 | | 7 | | | | |
| 16 | | | | | | | 1.55 | 1.80 | 1.74 | 1.77 | | | | | | | | | | 1.01 | 1.47 | | | | 1.55 | 7 | | | | |
| 17 | 1.50 | | 1.66 | 1.63 | | | | | | | 1.40 | 1.68 | | | | | | | | 1.12 | | | | | 1.60 | 7 | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | | | | | | 1.38 | 1 | | | | |
| 19 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 20 | 1.51 | 1.27 | 1.64 | 1.64 | 1.69 | 1.45 | | | | | | | | | | | | | | | | 1.00 | | | | 7 | | | | |
| 21 | | | | | | | 1.52 | 1.79 | 1.70 | 1.76 | 1.32 | 1.64 | | | | | | | | | | | 1.47 | | | 7 | | | | |
| 22 | | | | | | | | | | | | | 1.63 | 1.76 | 1.32 | 1.75 | 1.74 | 1.27 | | | | | | 1.72 | | 7 | | | | |
| 23 | | | | | | | 1.56 | 1.80 | 1.80 | 1.79 | | | | | | | | | | 0.92 | 1.55 | | | | 1.60 | 7 | | | | |
| 24 | 1.49 | 1.39 | 1.65 | 1.65 | | | | | | | | | | | | | | | | 1.09 | 1.51 | | | | 1.55 | 7 | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 27 | 1.48 | 1.36 | 1.63 | 1.61 | 1.73 | 1.46 | | | | | | | | | | | | | | | | 1.26 | | | | 7 | | | | |
| 28 | | | | | | | 1.51 | 1.79 | 1.71 | 1.80 | 1.35 | 1.64 | | | | | | | | | | | 1.47 | | | 7 | | | | |
| Monthly Cl₂ Avg. | | | | | 1.56 | **SITE NAME is being used until West Side Reservoir activities are complete and until further notice (11/15/2016) | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Samples | | | | | 140 | | | | | | | | | | | | | | | | | | | | | | | | | |



ROUTINE POSITIVE DISTRIBUTION SAMPLES

Feb-17

| Total number of positive routine samples: | | | | Total Coliform: <u>0</u> | | | E.coli Bacteria: <u>0</u> | | Chlorine Residual (mg/L) | |
|--|--------------------|----------------|-----------------|--------------------------|------|--|---------------------------|-----------------|--------------------------|-------|
| Date | Monitoring Station | Total Coliform | E.coli Bacteria | Date | Time | Retest of Station, Upstream & Downstream | Total Coliform | E.coli Bacteria | Free | Total |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Total number of routine distribution samples analyzed: | | | | 140 | | | | | | |
| Total number of routine distribution samples required: | | | | 100 | | | | | | |