

The Metropolitan Water District of Southern California

GENERAL MINERAL AND PHYSICAL ANALYSIS OF METROPOLITAN'S WATER SUPPLIES

TABLE D

February 2016

| CONSTITUENTS | UNITS | SOURCE WATERS | | | | | | | | TREATMENT PLANT EFFLUENTS | | | | |
|---------------------------------------|-------|---------------|--------------------|--------------|--------------|------------------|-------------|---------------------|--------------|---------------------------|--------|--------|---------|-------|
| | | LAKE HAVASU | SAN JACINTO TUNNEL | LAKE MATHEWS | CASTAIC LAKE | SILVER-WOOD LAKE | LAKE PERRIS | DIAMOND VALLEY LAKE | LAKE SKINNER | WEY-MOUTH | DIEMER | JENSEN | SKINNER | MILLS |
| SILICA | mg/L | 7.4 | 7.6 | 7.9 | 14.7 | 12.2 | 10.1 | 9.8 | 7.4 | 9.6 | 9.3 | 14.5 | 7.4 | 11.8 |
| CALCIUM | mg/L | 78 | 78 | 74 | 36 | 30 | 30 | 29 | 75 | 56 | 64 | 36 | 77 | 31 |
| MAGNESIUM | mg/L | 26 | 26 | 27 | 12 | 9 | 13 | 15 | 27 | 18 | 22 | 12 | 27 | 9 |
| SODIUM | mg/L | 96 | 98 | 98 | 80 | 82 | 85 | 61 | 98 | 97 | 98 | 93 | 106 | 91 |
| POTASSIUM | mg/L | 4.8 | 4.8 | 4.9 | 3.0 | 2.5 | 3.4 | 3.8 | 4.8 | 3.8 | 4.3 | 3.0 | 5.1 | 2.6 |
| CARBONATE | mg/L | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BICARBONATE | mg/L | 165 | 163 | 160 | 111 | 100 | 115 | 115 | 157 | 122 | 133 | 116 | 155 | 98 |
| SULFATE | mg/L | 249 | 250 | 252 | 84 | 77 | 74 | 70 | 254 | 182 | 202 | 102 | 251 | 81 |
| CHLORIDE | mg/L | 95 | 96 | 97 | 94 | 95 | 104 | 79 | 97 | 102 | 102 | 95 | 106 | 100 |
| NITRATE | mg/L | 1.7 | 1.4 | 1.0 | 3.3 | 3.2 | 0.3 | 0.6 | 1.0 | 1.0 | 1.0 | 3.4 | 1.1 | 4.3 |
| FLUORIDE | mg/L | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.7 | 0.7 | 0.7 | 0.7 | 0.8 |
| TOTAL DISSOLVED SOLIDS (TDS) | mg/L | 641 | 644 | 642 | 383 | 361 | 378 | 326 | 643 | 531 | 570 | 418 | 659 | 380 |
| TOTAL HARDNESS AS CaCO ₃ | mg/L | 298 | 298 | 297 | 130 | 108 | 124 | 132 | 296 | 216 | 246 | 132 | 300 | 109 |
| TOTAL ALKALINITY AS CaCO ₃ | mg/L | 135 | 134 | 131 | 91 | 82 | 94 | 94 | 129 | 100 | 109 | 95 | 127 | 80 |
| FREE CARBON DIOXIDE | mg/L | 2.1 | 2.1 | 2.6 | 2.8 | 2.1 | 3.0 | 3.8 | 1.5 | 1.5 | 1.9 | 0.8 | 2.0 | 0.7 |
| pH | pH | 8.11 | 8.11 | 8.01 | 7.82 | 7.89 | 7.80 | 7.70 | 8.25 | 8.13 | 8.07 | 8.39 | 8.10 | 8.37 |
| SPECIFIC CONDUCTANCE | µS/cm | 1030 | 1050 | 1030 | 677 | 646 | 681 | 583 | 1050 | 900 | 932 | 722 | 1060 | 672 |
| COLOR | CU | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| TURBIDITY | NTU | 0.89 | 0.34 | 1.3 | 3.0 | 1.5 | 0.88 | 0.39 | 0.46 | 0.05 | 0.04 | 0.04 | 0.05 | 0.06 |
| TEMPERATURE | °C | 12 | 12 | 13 | 12 | 9 | 11 | 13 | 14 | 14 | 15 | 16 | 16 | 14 |
| BROMIDE | mg/L | 0.09 | 0.06 | 0.07 | 0.32 | 0.35 | 0.36 | 0.24 | 0.07 | -- | -- | -- | -- | -- |
| TOTAL ORGANIC CARBON | mg/L | 3.06 | 3.04 | 3.02 | 2.98 | 3.00 | 3.78 | 2.60 | 3.16 | -- | -- | -- | -- | -- |
| SATURATION INDEX | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.32 | 0.37 | 0.44 | 0.55 | 0.25 |
| STATE PROJECT WATER | % | 0 | 0 | 0 | 100 | 100 | 100 | 100 | 0 | 45 | 34 | 100 | 2 | 100 |