### Red River Aquifer

#### Baseline Sample Period
- **Sampling Sites**: 36
- **Water Level Sites**: 38

#### General
- **Location**: runs along the southern Oklahoma state line
- **Area (km²)**: 3,794
- **Capacity (acre-feet)**: 2,580,000
- **Primary Uses**: Public Supply; Domestic; Agricultural; Irrigation; Industrial
- **Category**: Alluvial & Terrace

#### Parameters

<table>
<thead>
<tr>
<th>General Field</th>
<th>Parameter</th>
<th>Mean</th>
<th>SEM</th>
<th>Minimum</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>Maximum</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Well Depth (ft)</td>
<td>63.8</td>
<td>3.92</td>
<td>28.5</td>
<td>46</td>
<td>55</td>
<td>78</td>
<td>142</td>
<td>n=45</td>
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<tr>
<td></td>
<td>Depth to Water (ft)</td>
<td>27.54</td>
<td>2.63</td>
<td>4.50</td>
<td>14.21</td>
<td>24.42</td>
<td>40.64</td>
<td>57.99</td>
<td>Below ground surface</td>
</tr>
<tr>
<td></td>
<td>Temperature (°C)</td>
<td>20.88</td>
<td>0.298</td>
<td>18.61</td>
<td>19.46</td>
<td>20.08</td>
<td>22.16</td>
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<tr>
<td></td>
<td>Specific Conductance (µS/cm)</td>
<td>610</td>
<td>75.6</td>
<td>73.8</td>
<td>286</td>
<td>498</td>
<td>856</td>
<td>2200</td>
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<tr>
<td></td>
<td>Dissolved Oxygen (mg/L)</td>
<td>4.36</td>
<td>0.484</td>
<td>0.22</td>
<td>1.68</td>
<td>4.34</td>
<td>6.90</td>
<td>9.57</td>
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<tr>
<td></td>
<td>pH (units)</td>
<td>6.61</td>
<td>0.099</td>
<td>5.05</td>
<td>6.12</td>
<td>6.72</td>
<td>7.01</td>
<td>7.53</td>
<td>SMCL: 6.5-8.5; 12 under</td>
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<tr>
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<td>Reduction Potential (mV)</td>
<td>327</td>
<td>14.8</td>
<td>80.9</td>
<td>313</td>
<td>344</td>
<td>380</td>
<td>499</td>
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<td></td>
<td>Alkalinity (mg/L)</td>
<td>159</td>
<td>23.3</td>
<td>12.0</td>
<td>54.7</td>
<td>106</td>
<td>258</td>
<td>521</td>
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<td>Hardness (mg/L)</td>
<td>184</td>
<td>22.0</td>
<td>33.0</td>
<td>79.8</td>
<td>156</td>
<td>240</td>
<td>539</td>
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<td>Calculated Bicarbonate (mg/L)</td>
<td>194</td>
<td>28.4</td>
<td>15.0</td>
<td>66.5</td>
<td>129</td>
<td>315</td>
<td>636</td>
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<tr>
<td></td>
<td>Total Dissolved Solids (mg/L)</td>
<td>360</td>
<td>41.8</td>
<td>65.0</td>
<td>174</td>
<td>296</td>
<td>486</td>
<td>1200</td>
<td>SMCL: 500; 9 over</td>
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<table>
<thead>
<tr>
<th>Nutrient Constituents</th>
<th>Parameter</th>
<th>Mean</th>
<th>SEM</th>
<th>Minimum</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>Maximum</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ammonia (mg/L)</td>
<td>All Values &lt;0.1, except 1 (0.3)</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nitrate &amp; Nitrite (mg/L)</td>
<td>8.70</td>
<td>1.19</td>
<td>&lt;0.05</td>
<td>1.27</td>
<td>8.52</td>
<td>14.9</td>
<td>22.3</td>
<td>MCL: 10; 14 over</td>
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<tr>
<td></td>
<td>Total Dissolved Phosphorus (mg/L)</td>
<td>0.058</td>
<td>0.008</td>
<td>&lt;0.005</td>
<td>0.030</td>
<td>0.046</td>
<td>0.074</td>
<td>0.252</td>
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<table>
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<tr>
<th>Mineral Constituents</th>
<th>Parameter</th>
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<th>SEM</th>
<th>Minimum</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>Maximum</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Bromide (µg/L)</td>
<td>399</td>
<td>65.9</td>
<td>&lt;100</td>
<td>180</td>
<td>271</td>
<td>467</td>
<td>2180</td>
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<tr>
<td></td>
<td>dissolved Calcium (mg/L)</td>
<td>45.7</td>
<td>4.97</td>
<td>5.6</td>
<td>19.6</td>
<td>41.8</td>
<td>67.7</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Chloride (mg/L)</td>
<td>45.8</td>
<td>12.1</td>
<td>&lt;10</td>
<td>&lt;10</td>
<td>18.1</td>
<td>35.4</td>
<td>318</td>
<td>SMCL: 250; 1 over</td>
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<tr>
<td></td>
<td>Fluoride (mg/L)</td>
<td>All Values &lt;0.2, except 7 (0.26, 0.27, 0.33, 0.44, 0.73, 0.87, 1.59)</td>
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<td></td>
<td></td>
<td>MCL: 4; 0 over</td>
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<tr>
<td></td>
<td>dissolved Magnesium (mg/L)</td>
<td>15.5</td>
<td>2.29</td>
<td>1.4</td>
<td>5.4</td>
<td>11.9</td>
<td>22.4</td>
<td>60.8</td>
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<tr>
<td></td>
<td>dissolved Potassium (mg/L)</td>
<td>1.18</td>
<td>0.09</td>
<td>&lt;0.5</td>
<td>0.9</td>
<td>1.1</td>
<td>1.6</td>
<td>2.2</td>
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<tr>
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<td>dissolved Silica (mg/L)</td>
<td>25.3</td>
<td>1.49</td>
<td>11.6</td>
<td>19.5</td>
<td>24.3</td>
<td>28.6</td>
<td>60.3</td>
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<tr>
<td></td>
<td>dissolved Sodium (mg/L)</td>
<td>54.9</td>
<td>12.9</td>
<td>2.7</td>
<td>13.2</td>
<td>21.9</td>
<td>50.6</td>
<td>349</td>
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<td></td>
<td>Sulfate (mg/L)</td>
<td>31.0</td>
<td>5.43</td>
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<td>11.7</td>
<td>18.1</td>
<td>39.2</td>
<td>128</td>
<td>SMCL: 250; 0 over</td>
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### Metal & Trace Element Constituents

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Mean</th>
<th>SEM</th>
<th>Minimum</th>
<th>25%</th>
<th>Median</th>
<th>75%</th>
<th>Maximum</th>
<th>Comments</th>
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</thead>
<tbody>
<tr>
<td>dissolved Arsenic (µg/L)</td>
<td>0.972</td>
<td>0.145</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>1.2</td>
<td>4.1</td>
<td>MCL: 10; 0 over</td>
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<tr>
<td>dissolved Barium (µg/L)</td>
<td>172</td>
<td>20.5</td>
<td>13.4</td>
<td>96.5</td>
<td>147</td>
<td>218</td>
<td>575</td>
<td>MCL: 2000; 0 over</td>
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<td>dissolved Boron (µg/L)</td>
<td>107</td>
<td>47.6</td>
<td>&lt;20</td>
<td>&lt;20</td>
<td>32.7</td>
<td>57.5</td>
<td>1700</td>
<td>HA: 6000; 0 over</td>
</tr>
<tr>
<td>dissolved Chromium (µg/L)</td>
<td>3.59</td>
<td>1.12</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>2.4</td>
<td>31</td>
<td>MCL: 100; 0 over</td>
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<tr>
<td>dissolved Copper (µg/L)</td>
<td>14.7</td>
<td>6.34</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>1.2</td>
<td>2.9</td>
<td>7.4</td>
<td>MCL: 1300; 0 over</td>
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<td>dissolved Iron (µg/L)</td>
<td>61.6</td>
<td>30.8</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>10.5</td>
<td>956</td>
<td>SMCL: 50; 4 over. HA:300; 2 over.</td>
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<td>dissolved Lead (µg/L)</td>
<td>0.914</td>
<td>0.138</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>1.03</td>
<td>4.2</td>
<td>HA: 100; 0 over</td>
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<tr>
<td>dissolved Manganese (µg/L)</td>
<td>3.83</td>
<td>0.632</td>
<td>&lt;1</td>
<td>1.7</td>
<td>2.4</td>
<td>3.3</td>
<td>21.3</td>
<td>MCL: 50; 0 over</td>
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<tr>
<td>dissolved Selenium (µg/L)</td>
<td>1.87</td>
<td>0.424</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>&lt;1</td>
<td>2.6</td>
<td>10.1</td>
<td>MCL: 30; 0 over</td>
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<td>dissolved Vanadium (µg/L)</td>
<td>38.2</td>
<td>16.8</td>
<td>&lt;5</td>
<td>&lt;5</td>
<td>11.1</td>
<td>30.7</td>
<td>606</td>
<td>SMCL: 5000; 0 over</td>
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**Parameters Below Detectable Limits**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Aluminum</th>
<th>Antimony</th>
<th>Beryllium</th>
<th>Cadmium</th>
<th>Cobalt</th>
<th>Mercury</th>
<th>Molybdenum</th>
<th>Silver</th>
<th>Thallium</th>
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</table>

\[ \text{\footnote{Standard Error of the Mean}} \]