**INTRODUCTION**

The hydrogeologic cross sections shown in this atlas illustrate the location and extent of aquifers, water age, and water quality, as well as permeability and relative hydraulic conductivity in the ground-water aquifers. The sections provide a framework for understanding the hydrogeology of the ground-water aquifers of Pope County.

**POUR-ON METHOD OF CONSTRUCTING CROSS-SECTIONS**

The 36 cross sections contained in this atlas were constructed using a method called the "Pour-on method". This method involves pouring a mixture of water and gelatin into a mold and allowing it to set. The resulting mold is then used to create a model of the ground-water aquifers. The models are then photographed and digitized to create the cross sections shown in the atlas.

**STATE OF MINNESOTA**

The State of Minnesota Water Resources Board is responsible for the production of this atlas.

**REFERENCE CITATION**


**ACKNOWLEDGMENTS**

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**TABLE 1: Aquifer Conditions and Elevations**

<table>
<thead>
<tr>
<th>Aquifer</th>
<th>Conditions</th>
<th>Elevations</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT</td>
<td>Good</td>
<td>100-200 ft</td>
</tr>
<tr>
<td>CW</td>
<td>Poor</td>
<td>200-300 ft</td>
</tr>
<tr>
<td>TO</td>
<td>Excellent</td>
<td>300-400 ft</td>
</tr>
</tbody>
</table>

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**EXPLANATION**

Cross sections and figures:

- **True easting and northing:** These are the grid coordinates used to locate the cross sections.
- **Satellite imagery:** This is used to provide a topographic view of the area.
- **Geologic and hydrogeologic units:** These are the different types of rock and water-bearing materials encountered.
- **Water samples:** These are used to determine water quality.
- **Ground-water flow:** This is represented by arrows indicating the direction of water movement.

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**FIGURE 1:** Aquifer conditions and elevations of the OT aquifer. See also Plate 7, page 36.

**FIGURE 2:** Aquifer conditions and elevations of the CW aquifer. See also Plate 7, page 36.

**FIGURE 3:** Aquifer conditions and elevations of the TO aquifer. See also Plate 7, page 36.