



# MATRIX **NEW** WORLD

Engineering Progress

## WELL DEVELOPMENT & TESTING

### **Matrix passes the test.**

Matrix New World Engineering (Matrix) is a full-service hydrogeological and environmental consulting firm. With more than 25 years of experience in groundwater hydrology, Matrix offers a full complement of well-related services, such as well development and testing, which are critical to the success of each well project. Conducted in both new and old wells to improve performance, well development involves the conditioning of a well. Well testing helps with the well performance evaluation, potential problem identification, and pump requirement recommendations.

Professional oversight of well development during installation optimizes initial well performance and leads to significant client cost savings, including savings in power costs, and extended well life. Well development is critical after the rehabilitation of older wells. The well rehabilitation process often leaves residual solids in the well, however, a thorough well development process ensures that these solids are removed. Matrix oversees work performed by the drilling and pump contractors to ensure that rehabilitation and development activities are optimized for the unique conditions at each well.

Well testing provides answers to specific questions. Testing of new wells provides a performance and water quality baseline, and is initially used to recommend pump setting and capacity. Testing older wells helps to examine specific well issues, including decreased well performance, water quality, or sand and/or air in the discharge. Matrix professionals use a variety of tools to test wells depending on the goals of each project.

Matrix clients have included the State of Arizona, municipalities, Native American Tribal governments, utility companies, law firms, mining companies, master planned communities, engineering firms, private businesses, and individuals.

### **Services provided**

- Pumping and injection tests to evaluate conditions of the aquifer and well;
- Spinner flow meter surveys, temperature surveys, resistivity surveys, and depth-specific sampling;
- Hydrogeochemical analysis, stable isotope analysis, bacteria evaluation, and mass balance calculations;
- Video, televiwer and other geophysical surveys;
- Measurement of discharge parameters, including turbidity, silt, sand, and dissolved and entrained air.

### **Contact**

#### **Matrix New World Engineering**

3033 N. 44 Street, Ste 120

Phoenix, AZ 85018-7226

info@matrixnewworld.com

602.955.5547

800.747.6287 (MATRIX)

matrixnewworld.com

Certified WBE/DBE

