

## City of Phoenix Wells Program Management

Phoenix, Arizona

### CLIENT

City of Phoenix

### HIGHLIGHTS

- Large-scale well installation program critical for City's water portfolio
- Design, permitting, construction, and equipping 10 new wells over 3-year period
- Worked closely with CMAR contractors

Clear Creek Associates, a wholly owned subsidiary of Geo-Logic Associates, provided Program Management for a large-scale well installation program in the northeast portion of the City of Phoenix, teamed with an engineering firm. Historically, the City has installed and equipped a single production or aquifer storage and recovery (ASR) well about every three years. That rate of well installation was inadequate to meet the near-term needs of the City, because drought conditions and limitations of surface water supplies made production and ASR wells a critical element of the City's water portfolio. Thus, this aggressive project was undertaken to design, permit, construct, and equip 10 new wells for the City of Phoenix within the 3-year period.



Two to three drilling rigs were running simultaneously for over a year

Clear Creek was responsible for oversight and review of all well design, drilling, permitting, development, testing, and reporting aspects of this program. We prepared guidance technical specification documents for production wells, ASR wells, and monitor wells (required at ASR well sites). After each of the design consultants modified the guidance technical specification for the site-specific conditions of each well site to which they were assigned, Clear Creek provided technical review of all 10 production/ASR well specifications and all monitoring well specifications. To meet the City of Phoenix design standards, all 10 well designs include stainless steel well screens with a dielectric connection to a high-strength, low-alloy upper well casing, and all these wells have manufactured glass bead filter packs. Clear Creek worked closely with the Construction Management-At-Risk (CMAR) contractors and City staff during the well driller bidding process, and provided input on driller selection. Drilling for this program involved running two to three rigs simultaneously for over a year. Clear Creek required all subconsultants to complete zonal groundwater sampling and falling head tests as the basis for well design and trained subconsultant field staff on how to collect samples and analyze falling head test data.