John W. Shomaker, PhD, CPG

President, Senior Principal Hydrogeologist

jshomaker@shomaker.com

Dr. Shomaker has over 50 years of experience in New Mexico geology and hydrogeology, as Hydrologist with the U.S. Geological Survey (1965-1969), as Geologist with the (then) New Mexico Bureau of Mines and Mineral Resources (1969-1973), and with John Shomaker & Associates since 1973. He was Adjunct Associate Professor of Geology (1976-1998) and Adjunct Lecturer in Water Resources Administration (1994-1997) at the University of New Mexico.

Water Resource Development: Groundwater studies have included water-availability studies, well-site selection, consultation as to well-design in support of project engineers, well-construction oversight, interpretation of geophysical logs, aquifer tests and interpretation, prediction of effects of pumping, and design and supervision of monitoring and aquifer-restoration programs. Direct involvement in more than 100 large-capacity water-supply wells, in valley-fill aquifers, Mesozoic-age sedimentary rocks, limestone karst, and fractured igneous rocks, has included wells ranging up to 5,747 ft deep and 4,000 gpm. Clients have included municipalities, investor-owned utilities, federal and state government, tribes and pueblos, mutual domestic water associations, the mining industry, the oil-and-gas industry, manufacturing, and developers.

Groundwater-Flow Modeling: Models have included complex calibrated multi-layer regional models with groundwater and surface-water interaction, and radial-flow models for interpretation of pumping tests in complex aquifers.

Water Planning: Projects have included technical assistance with water-supply plans, and "40-Year Plans" submitted to the New Mexico State Engineer, for municipal and investor-owned utilities.

Water Rights and Permitting: Projects have included hundreds of waterright declarations and applications to the New Mexico State Engineer for new appropriations, transfers of water rights, and replacement wells, supported by hydrogeologic studies, calculations of drawdown and streamflow-depletion effects, and expert testimony.

Coal-Resource Studies: Coal exploration has included design, management, and field geological services for exploration drilling programs, coal mapping and sampling, and reserve calculations.

Expert Testimony: Dr. Shomaker has provided sworn testimony in 34 New Mexico State Engineer water-rights hearings, and in administrative

hearings before the New Mexico Environment Department and Water Quality Control Commission, Oil Conservation Division, Mining and Minerals Division, and Interstate Stream Commission. He has testified in water matters before New Mexico State District Courts, and in interstate litigation before a U.S. Supreme Court Special Master, and before county commissions and committees of the New Mexico Legislature.

EDUCATION

Ph.D., Hydrogeology, 1995 University of Birmingham, England

M.Sc., Hydrogeology, 1985 University of Birmingham, England

M.A., Liberal Arts, 1984 St. John's College, Santa Fe

M.S., Geology, 1965 University of New Mexico

B.S., Geology, 1963 University of New Mexico

Training Program in Hydrology U.S. Geological Survey, 1966

REGISTRATIONS

American Institute of Professional Geologists, CPG-2405

American Institute of Hydrology, Certificate No. 315

Registered Professional Geologist in:

Arizona, No. 16,481 Arkansas, No. 482 Texas, No. 2558 Wyoming, No. 182

(There is no licensing of Geologists in New Mexico.)

AFFILIATIONS

American Water Resources Association (AWRA)

American Water Works Association

International Association of Hydrogeologists

American Society of Civil Engineers (Affiliate)