In memory of Walter A. Mourant, 1913-2005

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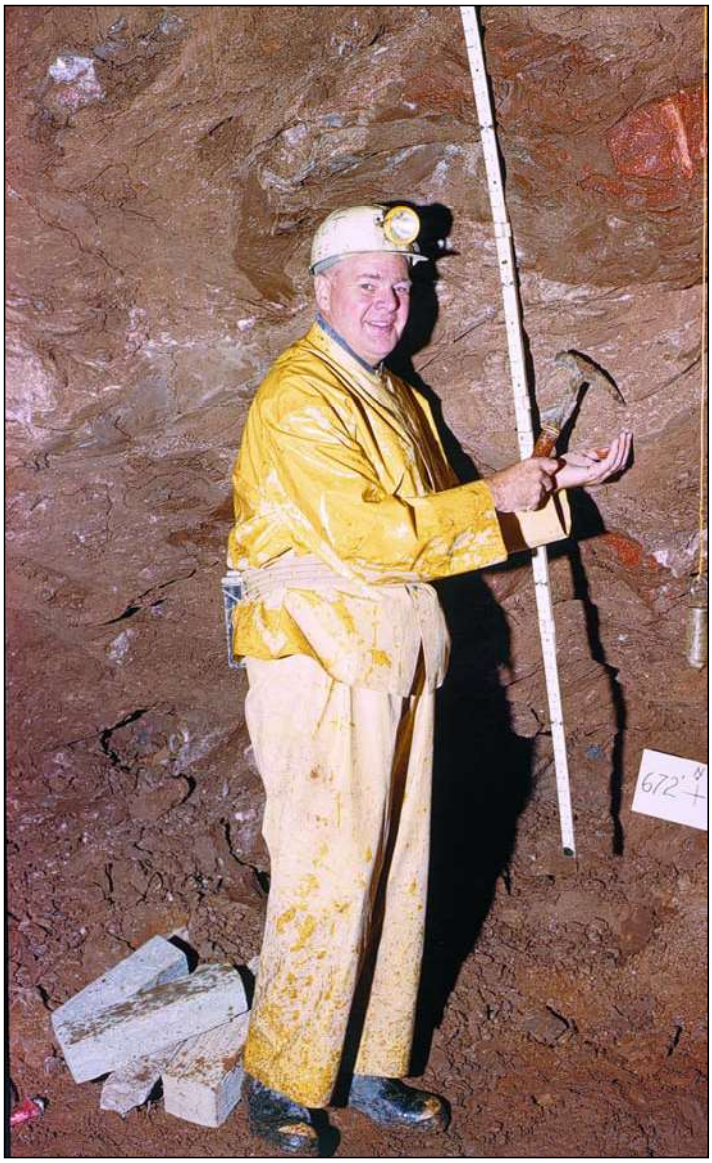

Photo courtesy of Patty Mourant

In Memory of Walter A. Mourant

1913–2005

Walt Mourant, one of the U.S. Geological Survey geologists (turned hydrologists) who added so much to the understanding of water resources in the United States starting in the 1950s, died on January 8, 2005, at 91. He was born on April 5, 1913, in Cleveland, Ohio. The family moved to Hoboken, New Jersey, and Walt started work at 13, first as counterman in a factory lunchroom, then, at 15, as an apprentice in the Western Union Telegraph Company repair shop in Hoboken. The starting salary was $60 per month. After two years testing telegraph instruments, he returned to manage his mother's lunchroom business until late 1936.

His lifelong devotion to observing and recording the world around him began to mature about that time: He became a professional photographer after study at the New York Institute of Photography, and began work as an industrial photographer for Otis Elevator Company. He developed his art and the science of photographic processing, and he pursued both for Otis for about seven years. He married Ruth Hockenbury in 1942; their son Tom is now in San Rafael, California, and daughter Patty lives in Albuquerque. Ruth died in 1996.

Walt enlisted in the Army Air Corps in mid-1943, at the age of 30, and learned the Army way of photography, including aerial photography and the construction of controlled mosaics, at Lowry Field in Denver. He practiced and taught photography at Great Bend Army Air Field in Kansas, then returned to Lowry as an instructor. He was honorably discharged in February 1946.

By the end of his military service at 32, Walt recognized that geology would broaden his view of the natural world and be a satisfying profession at the same time. He took his bachelor's degree from Rutgers University in June of 1950. By that time he had applied to the USGS and joined in that same month. In his application, he indicated that he would accept a salary of $3,100 per year, and, although he would serve anywhere in or outside the United States, and "travel constantly," he would prefer a "warm climate such as southern California." After about five years in Philadelphia, largely devoted to setting up the observation-well network in the Brandywine Valley, he transferred to New Mexico.

In his 25-year career with the New Mexico District of the [then] USGS Ground-Water Branch and Water Resources Division, Walt's principal contributions were to the Gnome Project, to regional ground water studies, and a commitment to answering information requests from the public.

Gnome was the "first nuclear detonation in the Plowshare Program to develop peaceful uses for nuclear explosives." The

Gnome device, equivalent to 3,100 tons of TNT, was set off in 1962 at a depth of 1,184 feet in bedded salt, about 25 miles southeast of Carlsbad. The purposes were to study the possibility of converting the heat produced by a nuclear explosion into steam for production of electric power, and to explore the feasibility of recovering useful radioisotopes. Walt's role was in preparation of the sample log of the shaft, and a photographic record of it.

Walt collected ground water data with real exuberance. That may have been even more fun then than it is now, and he exulted in it. He could do original geologic mapping, investigate wells that had never been visited by a geologist, and talk to ranchers about geological and water-related subjects they hadn't thought about. There were Indian artifacts and caves, historic ruins, and people with long histories. No topographic maps had been completed for much of New Mexico by the 1950s and 1960s, and although aerial photos were available, the best maps were the half-inch-scale New Mexico Highway Department planimetric sheets. A lot of the old West remained, and the work was an adventure.

His study of the ground water resources of the Hondo Valley west of Roswell, published in 1963, is still the standard work. Walt worked with coauthors on comprehensive ground water inventories of Quay County (1966) and De Baca County (1970), and in 1970 he completed a study of the High Plains aquifer in Lea County based on some 32,000 well logs. In the late 1970s he undertook a compilation of basic hydrogeologic data for Santa Fe County, published by the State Engineer in 1980. He authored or coauthored some 24 reports and was the careful reviewer of many technical reports by other authors. Perhaps the most satisfying part of his career with USGS was responding to information requests from the public, and he was so devoted to it that he was occasionally in trouble with the district chief. Walt retired from the USGS in August of 1980.

He was serious about geology as a profession (although most USGS water-resources geologists had become "hydrologists" by the late 1960s), served the Roswell Geological Society, the New Mexico Geological Society, and the Albuquerque Geological Society, and was an early member of the American Institute of Professional Geologists.

Walt was a meticulous organizer, and kept files on everything that interested him—not only geologic and hydrologic data, and information about natural science in general, but the particulars of the great number of people he knew and cared about. He always remembered your birthday, and your kids' birthdays too. Although not a researcher in the conventional sense, inquiry was in his nature; he had participated in a University of New Mexico study of aging for many years and offered his body to the Medical School.

"Accepting the world as it is and people as they are" expressed Walt's guiding principle. He said often that he liked people, and he meant it; he was known for that and for an unfailing smile. He was an authentic optimist, and his continuing pleasure in learning more about the world made him a true polymath. Walt continued eager to see more of his world until late in 2004. After a trip to Alaska following the Water Resources Division retirees' convention in Oregon, he suffered a series of falls, and the resulting complications proved fatal.

—John W. Shomaker
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