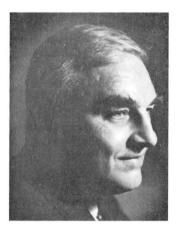
Memorial to Maurice Lyman Brashears 1908–1975

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On December 7, 1975, the science of hydrogeology lost one of its outstanding leaders when a heart attack ended the long and productive career of Maurice Lyman Brashears. Three days earlier, Brash, as he had always been known by family and associates alike, had returned to his home in Tampa, Florida, from a brief field inspection of a mine-dewatering project in North Carolina, where he had expressed his usual enthusiasm for a challenging problem and enjoyed the friendly personal contacts that always attended his travels. His passing came peacefully and without warning; he was 67.

Brash was born in Washington, D.C., on October 4, 1908; he was the only child of Maurice and Marguerite Brashears. His technical training began at the Univer-

sity of Maryland, but he received his B.S. degree in geology from the Massachusetts Institute of Technology in 1933.

Brash did not enter the field of geology immediately following his graduation. He worked as an air-conditioning engineer in Boston until 1936, when he joined the small U.S. Geological Survey group, headed by Oscar Meinzer, that was to become the foundation and training ground for hydrogeologists in the United States for many years to come. His Survey appointment initiated his lifelong friendship and professional association with R. M. (Max) Leggette; Brash was assigned to the New York-New England Federal State Cooperative Ground-Water Program under the supervision of Leggette. The region presented a variety of challenges to ground-water investigators, particularly on Long Island, where the Survey staff initiated or expanded studies that have contributed greatly to the understanding of fresh-water-salt-water relationships, natural and artificial recharge, and the hydraulic properties of porous media, to mention a few.

Brash succeeded Max Leggette as district geologist for the Ground-Water Branch of the Survey in New York and New England in 1942 when Leggette joined a group of water-supply specialists in the U.S. Army Corps of Engineers. Brash held the post until 1952, although he undertook a number of special assignments at the request of the chief of the Ground-Water Branch.

One of the last of his special assignments before he left the Survey was a visit of several months to Japan to plan and establish procedures for a country-wide ground-water program. For this effort, he received an Achievement Citation from General Headquarters, Supreme Commander for the Allied Powers, Tokyo, in 1951.

In 1952, Brash entered consulting practice by joining Max Leggette who, upon leaving military service in late 1944, was recognized as the first geologist in the United States to specialize as a consulting ground-water geologist. It was a natural and most harmonious alliance, as Max had served as best man when Brash and Margaret Wilson were married in 1937. The work of Brash and Max for the Survey had proven that there would be no personal problems, and their professional concepts and objectives were compatible. The partnership of Leggette & Brashears, established in New York City, found that there was a growing need for their services. In 1955, the firm was reorganized as Leggette, Brashears & Graham, and in 1974 a regional office in Tampa, Florida, was opened. Brash elected to live in Tampa so that he might more easily direct the longduration aquifer studies that he had initiated a decade earlier.

Brash's scope of professional activities and the application of his consulting services were diverse and widespread. Much of his work in the United States was related to locating and planning the development of large-scale ground-water supplies for industry and municipalities. In some instances, such studies became the basis for his service as an expert witness in litigation. His solid technical background, together with his unflappable temperament, combined to make him a highly competent and effective expert witness. The key to this phase of activity was his thoroughness of preparation.

In recent years, mining activities related to ground water engaged his attention to an increasing degree. He directed studies to determine the potential for leakage from a new surface-water reservoir in the Pacific Northwest into deep underground metal mines. Large open-pit mines in consolidated formations in Alberta, Quebec, and the Northwest Territory of Canada were studied to determine the magnitude of dewatering and the feasibility of alternative methods. Brash planned and participated in detailed field studies for the dewatering of major surface-mining projects in unconsolidated deposits, as in the tar sands of northern Alberta and the phosphate beds of North Carolina.

As a principal in his firm, Brash could follow his own inclinations as to the nature, location, and duration of foreign activity that he would undertake personally. Like most of his colleagues, however, he was able to combine his role as a devoted and attentive husband and father with his interest in exploration in foreign countries. His enthusiasm for travel never waned, and he maintained contacts with friends and professional associates in many countries throughout the world.

Just prior to the conflict in South Vietnam, Brash evaluated the potential for developing new ground-water sources to supplement the Saigon supply. His work in Africa included a test-drilling program for dewatering control of a proposed potash mine in the Danakil area of Ethiopia. In the Orange Free State of South Africa, he established a pumping schedule for the dewatering of a deep gold mine that flooded.

He had a particular fondness for activities in Australia. Several visits to the state of Western Australia for industrial water projects kept his interest high. He conducted extensive drilling and aquifer testing near Anglesea in Victoria and studied the watersupply potential for a proposed nickel-mining project in Queensland. Interspersed with the more distant projects were visits to Puerto Rico, where he was involved with both municipal and industrial ground-water developments for several years.

Brash had an active interest in all aspects of geological activity. He was a member of the American Association of Petroleum Geologists, the American Geophysical Union, the Association of Professional Geological Scientists, the American Society of Civil Engineers (member, Ground-Water Hydrology Committee, 1964–1969), the American Water Works Association (member, Task Group—Artificial Ground-Water Recharge, 1958–1975), Fellow of the Geological Society of America, the International Association of Hydrogeologists, the National Water Well Association (Technical Division), the New England Water Works Association (member, Ground-Water Survey Committee, 1947– 1974), and the Society of Economic Geologists.

Brash is survived by his wife, Margaret Wilson Brashears, of Tampa, Florida; one son, Richard Lyman Brashears of Sayville, New York; four daughters, Mary Louise (Mrs. Clifford Coughlin) of Levittown, New York, Elizabeth Anne (Mrs. Gale Garvin) of Rockville, Maryland, Patricia Jo (Mrs. Patrick Orsini) of Huntington Station, New York, and Jean Marie of Hicksville, New York; and nine grandchildren.

His friends and associates will long remember Brash's amiable disposition, his zest for life, and his love for his family and his professional work.

SELECTED BIBLIOGRAPHY OF M. L. BRASHEARS

- 1938 (and Leggette, R. M.) Ground water for air conditioning on Long Island, New York: Am. Geophys. Union Trans., v. 19, pt. 1, p. 412–418.
- 1941 Ground water temperature on Long Island, New York, as affected by recharge of warm water: Econ. Geology, v. 36, no. 8, p. 811-828.
- 1942 Cooperative ground water investigation in Massachusetts: New England Water Works Assoc. Jour., v. 56, p. 142-156.
- 1945 (and Roberts, C. M.) Progress report on the ground water resources of Providence, Rhode Island: Rhode Island Industrial Comm. Geol. Bull. 1.
- 1946 Artificial recharge of ground water on Long Island, New York: Econ. Geology, v. 41, p. 503-516.
- 1946 (and de Laguna, Wallace) The configuration of the rock floor of western Long Island, New York: New York Water Power and Control Comm. Bull. GW-13.
- 1953 Recharging ground water reservoirs with wells and basins: Mining Eng., v. 5, no. 10, p. 1029-1032.
- 1972 (and Slayback, R. G.) Pumping-test methods applied to dewatering investigations at Pine Point Mines, N.W.T., Canada: Am. Inst. Mining Engineers, Soc. Mining Engineers Trans., v. 252, no. 2, p. 185-186.